SUFFOLK COUNTY FIREMATICS SITE
676 MAPLE STREET
YAPHANK, NEW YORK
SCTM ID: 0200-779.00-01.00-002.000
NYSDEC SITE: 152246

GROUNDWATER MONITORING REPORT

SUBMITTED TO:

New York State Department of Environmental Conservation
Division of Environmental Remediation
50 Circle Road
Stony Brook, New York 11790

PREPARED FOR:

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JUNE 2025

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Acronym/Abbreviation	Definition
6:2FTS	6:2-fluorotelomersulfonic acid
8:2 FTS	8:2 Fluorotelomer sulfonic acid
AFFF	Aqueous film forming foam
ESAs	Environmental Site Assessments
GVs	Guidance Values
GVMR	Groundwater Monitoring Report
GWSLs	Groundwater Screening Levels
HAL	Health Advisory Level
HDPE	High Density Polyethylene
FOSA	Perfluorooctanesulfonamide
LDC	Laboratory Data Consultants, Inc.
LNAPL	Light Non-Aqueous Phase Liquid
MCL	Maximum contaminant level
ng/L	Nanograms per liter
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
PFOA	Perfluorooctanoate
PFOS	Perfluorooctanesulfonic Acid
PFAS	Per- and polyfluoroalkyl substances
PFBA	Perfluorobutanoate
PFBS	Perfluorobutane sulfonate
PFDA	Perfluorodecanoic Acid
PFHpA	Perfluoroheptanoic Acid
PFHpS	Perfluoroheptanesulfonic Acid
PFHxA	Perfluorohexanoate
PFHxS	Perfluorohexane sulfonate
PFNA	Perfluorononanoic Acid
PFPeA	Perfluoropentanoate
PFUnA	Perfluoroundecanoic acid
PVC	Polyvinyl Chloride
PWGC	P.W. Grosser Consulting, Inc.
QA/QC	Quality Assurance/Quality Control
QEP	Qualified Environmental Professional
RI	Remedial Investigation
SCDHS	Suffolk County Department of Health Services
SRIR	Supplemental Remedial Investigation Report
USEPA	United States Environmental Protection Agency
York	York Analytical Laboratories, Inc.

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1.0 INTRODUCTION

P.W. Grosser Consulting, Inc. (PWGC) has prepared the following Groundwater Monitoring Report (GWMR) on behalf of the Suffolk County Department of Health Services (SCDHS) to summarize groundwater monitoring/sampling activities performed at onsite and offsite groundwater monitoring wells associated with the Suffolk County Firematics Site (hereinafter referred to as the "Site") located at 676 Maple Street in Yaphank, New York, Site ID 152246. The purpose of the investigation was to evaluate current per- and polyfluoroalkyl substances (PFAS) concentrations in groundwater associated with historical Site operations. A Site Location Map is included as **Figure 1** and a Site Plan is included as **Figure 2**.

1.1 Site Location and Description

The Site is located at 676 Maple Street in the hamlet of Yaphank, New York in the Town of Brookhaven, Suffolk County (Figure 1). The Site is identified on the Suffolk County Tax Map as: 0200-779.00-01.00-00100-002.000.

The Site consists of several buildings used for firefighting training activities, with and without the use of live fire, or for administrative support (offices, classrooms, etc.). The Site measures approximately 28 acres in size. The buildings located at the Site were constructed between 1959 and 2005 (**Figure 2**).

1.2 Site History

In 1959, the Fire Training Center at Yaphank was commissioned. Its facilities consisted of a training tower, smokehouse and oil pits, and formed the basis for the development of today's training complex. Between 1959 and 1981, the Class A residential burn building, the Railroad Tank Car, Pump Test building, Liquified Propane Gas (LPG) Training facility, maze facility and the classroom/administration building were constructed on the Site. Since then, various improvements to the facility have been undertaken, including a new Class A burn building and a railcar training prop. The old Class A building is being used for training new recruits and firefighter survival courses.

After nearby drinking water wells were found to contain perfluorooctane sulfonate (PFOS) and perfluorooctonoate (PFOA), the New York State Department of Environmental Conservation (NYSDEC) and SCDHS worked quickly to identify the source of contamination and determined the Firematics facility was a likely source. Impacted homes in the area were provided bottled water and Suffolk County has connected over 47 properties to the municipal water supply or provided point of entry treatment systems on impacted homes.

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1.3 Previous Environmental Investigations

Environmental Site Assessments (ESAs) were performed at the subject property to evaluate subsurface conditions. Results of the ESAs identified that subsurface soils and groundwater had been impacted with PFAS. Two hotspots of PFAS contamination appear to be present at the Site. One is located in the north-central portion, centered over a former HAZMAT Response training area, which was also used as a Foam Training Area from 2008 to 2016. The other hotspot is located farther to the west, located beneath a Flammable Liquids Pit and Car Fire Training Area. Both hotspots are located in areas where aqueous film forming foam (AFFF) was likely stored and/or implemented. Additionally, an unlined recharge basin is present in the southwestern portion of the Site, which receives water from the Foam Training Area as well as other locations on the site. This basin has been impacted by discharges containing PFAS or other compounds used on-site. A summary of the ESAs is presented below:

- "Suffolk County Department of Health Services Investigation" prepared by SCDHS and dated April 2016.
- "Remedial Investigation Report" prepared by PWGC and dated January 2021.
    - A "Supplemental Remedial Investigation Report" (SRIR) prepared by PWGC and dated June 2020 was included as an appendix to the Remedial Investigation Report.
- "Soil Delineation Investigation Report" prepared by PWGC and dated October 2023.

1.3.1 Groundwater Monitoring Well Installation – Remedial Investigation

As part of PWGC's Remedial Investigation (RI), a total of twelve shallow (MW001 – MW012) monitoring wells (water table wells) and four deep (MW005D, MW006D, MW009D, & MW012D) monitoring wells (well cluster) were constructed on/in close proximity to the Site between April 3 and May 21, 2018. A rotary drill rig and/or Geoprobe® direct-push drill rig outfitted for rotary drilling were used to install the wells using standard drilling methods with hollow-stem augers. The wells were constructed of two-inch diameter, schedule 80 PVC casing and screen with 0.010-inch slot, except where access was limited and a track-mounted Geoprobe® was required. For these three locations (MW003, MW010, & MW011), the wells were constructed with one-inch diameter, schedule 80 PVC casing and screen with 0.010-inch slot.

The monitoring wells were constructed with a 10' screen section and riser to grade. The well annulus was filled with #2 Morie sand to 2' above the well screen. A 2' fine sand layer was installed above the well screen followed by a 2' bentonite seal (hydrated with PFAS free water). Above the bentonite layer, the annulus around the well was backfilled with soil cuttings (discussed and approved by the NYSDEC prior to backfilling). A concrete surface pad (2' by 2' by 6" and mixed with PFAS free water) was installed. The wells were finished with lockable test plugs and properly color-coded flush mount curb boxes (white circle

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with black triangle), except for the three 1" pop-up wells which were finished with a 5' stainless-steel well casing cover and fitted with a padlock.

1.3.2 Groundwater Monitoring Well Sample Results – Remedial Investigation

PFOS and PFOA results were compared to the New York State (NYS) Maximum Contaminant Level (MCL) of 10 ng/L (individually), NYSDEC Groundwater Screening Levels (GWSLs) of 100 ng/L for individual PFAS (not PFOA or PFOS) and 500 ng/L for total PFAS, and the United States Environmental Protection Agency (USEPA) Health Advisory Level (HAL) of 70 ng/l (individually or combined).

Individual PFOA and/or individual PFOS exceeded the NYS MCL of 10 ng/L in 13 of the 16 groundwater monitoring wells. Individual PFOS exceeded the USEPA HAL of 70 ng/L in 11 wells and individual PFOA exceeded the USEPA HAL of 70 ng/L in 7 wells. Combined PFOS/PFOA exceeded the USEPA HAL of 70 ng/L in 11 of the 16 groundwater monitoring wells.

PFOS results ranged from 2.31 ng/L in MW002 to 18,800 ng/L in MW009S. PFOA results ranged from 0.92 ng/L in MW009D to 6,450 ng/L in MW004.

Other PFAS compounds detected at or above the NYSDEC GWSL of 100 ng/L in the groundwater samples collected include: 6:2FTS, 8:2FTS, PFBS, PFBA, PFHpS, PFHpA, PFHxS, PFHxA, PFNA, PFPeA, and PFUnA.

Total PFAS concentrations ranged from 23.5 ng/L in MW009-Deep to 142,029 ng/L in MW004. Total PFAS concentrations at or above the NYSDEC GWSL of 500 ng/L were detected in samples MW004, MW005S, MW005D, MW006S, MW006D, MW008, MW009S, MW010, MW011, and MW-012S.

1.3.3 Groundwater Monitoring Well Installation – Supplemental Remedial Investigation

Following review of the Remedial Investigation Report, NYSDEC provided comments which requested additional activities to further delineate the offsite extent of groundwater impacted PFAS in the vicinity of the Carmans River, Yaphank, New York. A total of six shallow monitoring wells (MW013 – MW018) and two deep wells (MW014D & MW015D) were installed between October 25, 2019 and March 26, 2020 using the same methods as the onsite monitoring wells.

1.3.4 Groundwater Monitoring Well Sample Results – Supplemental Remedial Investigation

Groundwater monitoring well analytical results for PFOS and PFOA were compared to the NYSDEC May 2019 proposed MCL of 10 ng/L (individually) and USEPA HAL of 70 ng/L (individually or combined).

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PFOS were detected above laboratory MDLs in each of the 8 groundwater monitoring well samples. PFOS concentrations exceed the NYSDEC proposed MCL in three of the eight groundwater monitoring wells. Concentrations of PFOS ranged from 1.03 ng/L (MW013) to 23.9 ng/L (MW014S). PFOS concentrations did not exceed the USEPA HAL.

PFOA were detected above laboratory MDLs in each of the 8 groundwater monitoring well samples. PFOA concentrations exceeded the NYSDEC proposed MCL in one (MW016, located east of the Carmans River) of the eight groundwater monitoring wells. Concentrations of PFOA ranged from 1.73 ng/L (MW015D) to 16.8 ng/L (MW016). PFOA concentrations did not exceed the USEPA HAL.

Combined PFOS/PFOA results ranged from 3.72 ng/L (MW013) to 31.4 ng/L (MW014S). Other PFAS compounds detected in the groundwater monitoring well samples collected include: 6:2FTS, PFBS, PFBA, PFDA, PFHpS, PFHpA, PFHxS, PFHxA, PFNA, FOSA, PFPeA, and PFUnA. Total PFAS concentrations ranged from 20.8 ng/L (MW013) to 135 ng/L (MW014S).

Groundwater monitoring well sampling results from the RI and SRI are included on **Table 3.**

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2.0 GROUNDWATER MONITORING & SAMPLING

Between April 22 and April24, 2025, PWGC mobilized to the Site to collect groundwater samples from the onsite shallow and deep groundwater monitoring wells, and from the four monitoring wells located on the western side of Carmans River (MW013, MW014 (shallow and deep), & MW017), to assess the current PFAS concentrations in groundwater.

2.1 Groundwater Monitoring Activities

Groundwater monitoring consisted of collecting and recording depth to water and total well depth measurements for the monitoring wells sampled. Water levels were collected using a Solinst Oil/Water Interface Probe. Depth to water and groundwater elevation data are summarized on **Table 1** and a groundwater flow map is included as **Figure 2**. Based upon the field measurements, groundwater flows southeast towards the Carmans River.

2.2 Groundwater Sampling

The groundwater samples from eleven of the twelve shallow onsite groundwater monitoring wells and four deep monitoring wells were collected between April 22 and April24, 2025. One monitoring well, MW001, was destroyed or paved over during construction/maintenance of the Tech Rescue Training Area. The four monitoring wells west of the Carmans River, between the river and the Site, were sampled to determine if PFAS concentrations approaching the river from the Site had changed since the last sampling event. The monitoring wells east of the river were not sampled.

2.2.1 Sampling Protocol

Groundwater samples were collected using a peristaltic pump fitted with dedicated high-density polyethylene (HDPE) tubing. Samples were collected in accordance with USEPA's Low Stress (Low Flow) Purging and Sampling Procedure for The Collection of Groundwater Samples from Monitoring Wells (September 2017) and the NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), April 2023 guidance. A Horiba U-22 multi-parameter water quality meter outfitted with a flow through cell was utilized to monitor field parameters (turbidity, pH, temperature, and conductivity) at three-minute intervals. Upon stabilization of field parameters (three consecutive readings within allowable tolerances) groundwater samples were collected. Upon collection, groundwater samples were placed in pre-cleaned laboratory-supplied glassware and packed in a cooler on ice. Copies of the groundwater sampling data sheets containing the field parameters recorded and purge volumes for each sampling point are attached as **Appendix A**.

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Samples were placed into pre-cleaned, laboratory-supplied glassware provided by SGS Analytical Laboratories (SGS). Samples were packed in coolers with ice and shipped to SGS under chain-of-custody seal.

The samples were analyzed for the presence of:

- PFAS by USEPA Method 1633.

2.2.2 *Analytical Results*

PFAS in groundwater are compared to the Guidance Values (GVs) and MCLs specified in the April 2023 update to Sampling, Analysis, and Assessment of PFAS and the MCLs Under NYSDEC's part 375 Remedial Programs. A total of 19 groundwater samples were collected. Analytical data are summarized in **Table 2**; laboratory reports are included as **Appendix B**.

PFOS was detected at concentrations that exceeded the NYSDEC GV (2.7 nanogram per liter (ng/L)) in each of the 19 groundwater samples with the exception of MW002, MW09D, and MW013. Of these, 14 also exceeded the MCL of 10 ng/L. PFOS concentrations ranged from non-detect (MW013) to 13,200 ng/L (MW008).

PFOA was detected at concentrations that exceeded the NYSDEC GV (6.7 ng/L) in twelve of the 19 groundwater samples. Each of these concentrations were also greater than the MCL. PFOA concentrations ranged from non-detect (MW002) to 1,350 ng/L (MW008).

2.2.3 *Discussion of Results*

PFOS and PFOA were detected at elevated concentrations in the groundwater samples collected during the April 2025 sampling event. The highest concentrations were located in the central and central eastern portions of the Site (**Figure 3A**). Concentrations of PFOS and PFOA in samples collected from near the Carmans River did not change significantly from the previous sampling event (**Figure 3B**) .

PFOS and PFOA concentrations increased significantly in five of the sampled wells (MW004, MW006S, MW008, MW009S, and MW012S) within, and downgradient of the source area, and decreased in three of the wells (MW002, MW005S and MW011) located down and cross gradient of the source area (Appendix C).

2.3 Waste Management

Non-hazardous purge water generated during groundwater sampling was containerized into one 55-gallon drum and staged adjacent to the existing soil stockpile located at the northern end of the Site for future disposal.

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3.0 QUALITY ASSURANCE/QUALITY CONTROL

The overall quality assurance/quality control (QA/QC) objective for the field investigation was to develop and implement procedures that provide data of known and documented quality. QA/QC characteristics for data include precision, accuracy, representativeness, completeness, and comparability. The purpose of the QA/QC activities developed for this Site was to verify the integrity of the work performed at the Site to ensure that the data collected are of the appropriate type and quality needed for the intended use.

The QA/QC program included the preparation and analysis of field QA/QC samples including a field blank, field duplicate, and matrix spike duplicate. One field blank was collected, one field duplicate sample was collected alongside MW008, and a matrix spike duplicate was collected with MW005D. Third-party data validation was performed by Laboratory Data Consultants, Inc. (LDC) of Carlsbad, California. Full data validation was performed on 10% of the data. Copies of the Data Validation Reports/Data Usability Summary Reports are included as **Appendix D**. **Table 2** has been updated, as appropriate, based upon the data validator's review.

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4.0 CONCLUSIONS AND RECOMMENDATIONS

The purpose of the monitoring event was to evaluate the current groundwater concentrations of PFAS associated with historical Site operations both at the Site and downgradient of the Site towards the Carmans River. To perform this work, the following tasks were completed:

- Eleven of the twelve groundwater monitoring wells previously installed at the Site were sampled using USEPA's Low Stress (Low Flow) Purging and Sampling Procedure for The Collection of Groundwater Samples from Monitoring Wells (September 2017) and the NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), April 2023 guidance document.
- The four previously installed groundwater monitoring wells located downgradient of the Site near Carmans River (on the west side of the river) were sampled using USEPA's low flow sampling guidelines for PFAS.
- A total of 19 groundwater samples were collected and analyzed.
    - PFOA was not detected in three of the 19 groundwater samples (MW002, MW009D, and MW013); PFOS was not detected in one of the 19 groundwater samples (MW013)
    - PFOS was detected above its GV of 2.7 ng/L (and below the MCL of 10 ng/L) in two of the 19 groundwater samples.
    - PFOS was detected above the MCL of 10 ng/L in fourteen of the 19 groundwater samples.
    - PFOA was detected but did not exceed its GV (6.7 ng/L) or MCL (10 ng/L), in four of the 19 groundwater samples.
    - PFOA was detected above the MCL of 10 ng/L in eleven of the 19 groundwater samples.
- Analytical results of the 19 groundwater samples were compared to analytical results previously reported in 2018, and 2020 during the RI and SRI, respectively, and the previous OM&M sampling event in 2023.
    - Analytical results for combined PFOS and PFOA concentrations are trending up in 10 of the 19 sampled monitoring wells (MW003, MW005S, MW006S, MW007, MW008, MW010, MW011, MW012S, MW012D, and MW014S) as seen in Graphs 1-19.
    - Analytical results for combined PFOS and PFOA concentrations are trending down in 9 of the 19 sampled monitoring wells (MW002, MW004, MW005D, MW006D, MW009S, MW009D, MW013, MW014D and MW017) as seen in Graphs 1-19.

The highest concentrations of PFOS and PFOA were located in the central and central eastern portions of the Site (Figure 3A). Concentrations of PFOS and PFOA in samples collected from near the Carmans River did not change significantly from the previous sampling event (Figure 3B).

PFOS and PFOA concentrations increased in wells within the source area and decreased in the wells located cross gradient of the source area.

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PWGC recommends that annual groundwater monitoring be performed at the site until a final remedy is implemented.

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5.0 REFERENCES

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PWGC, Remedial Investigation Report, January 2021.

PWGC, Supplemental Remedial Investigation Report, June 2020.

PWGC, Soil Delineation Investigation Report, October 2023.

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FIGURES

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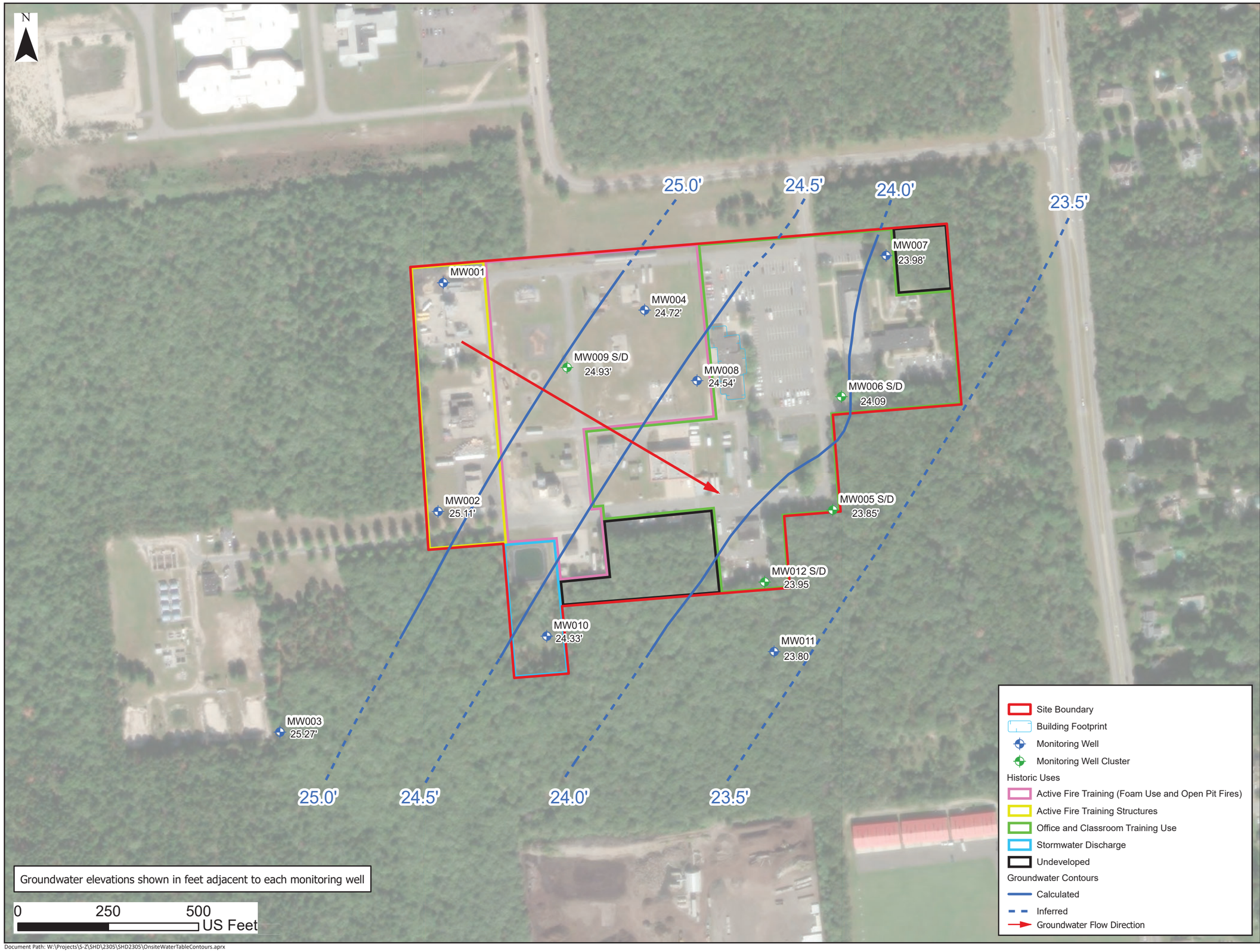
Project:	SHD2503
Date:	5/8/2025
Designed by:	KB
Drawn by:	KM
Approved by:	KB
Figure No:	1

Document Path: W:\Projects\S-Z\SHD\2503\MapFiles\SitePlan\SitePlan.aprx



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DRAWING PREPARED FOR:

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REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION:

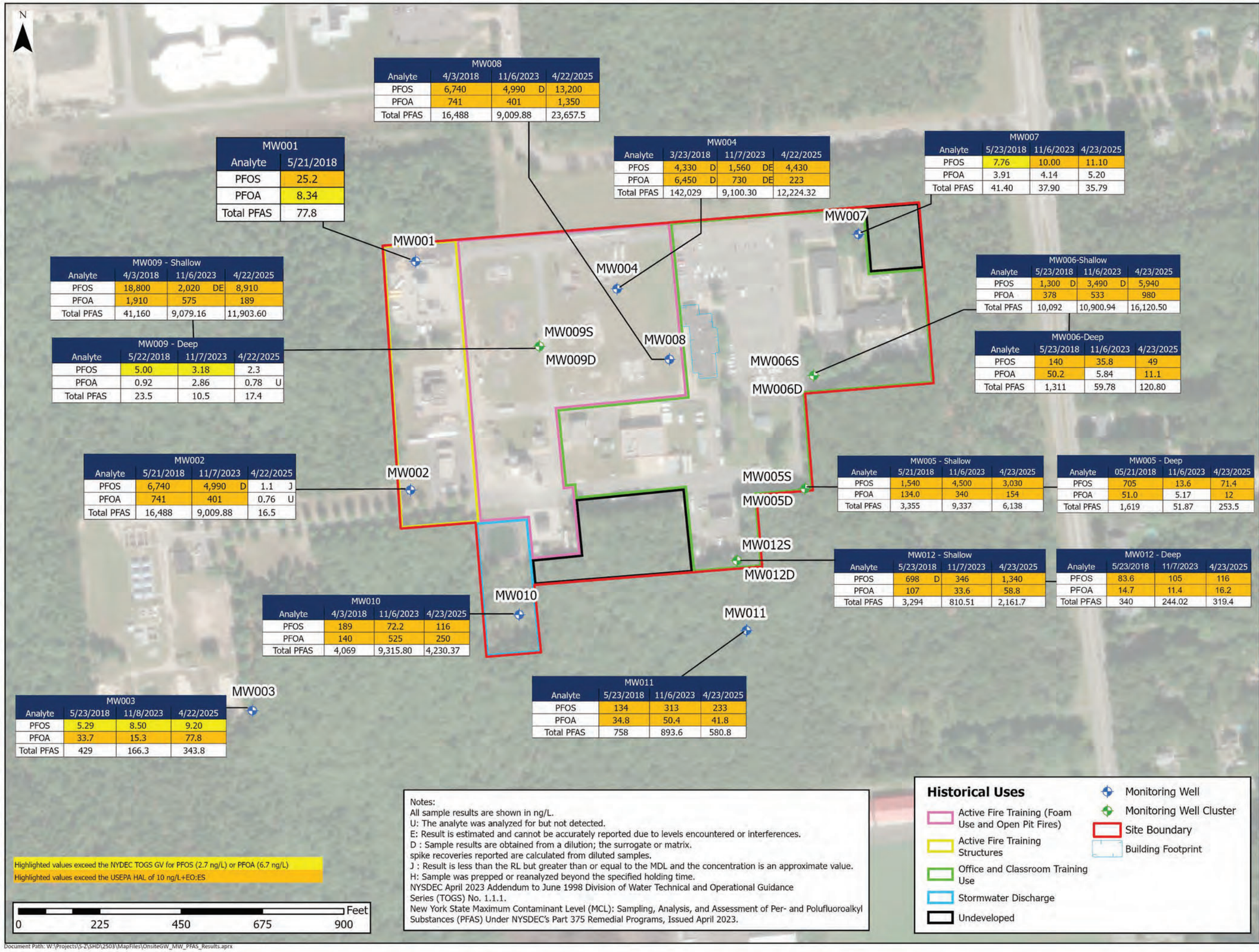
Project:	SHD2503	Designed by:	MP
Date:	4/25/2025	Drawn by:	KM
Scale:	AS SHOWN	Approved by:	MP

Site Plan

Suffolk County Firematics
676 Maple St
Yaphank, NY

FIGURE NO:

2



MW008			
Analyte	4/3/2018	11/6/2023	4/22/2025
PFOS	6,740	4,990 D	13,200
PFOA	741	401	1,350
Total PFAS	16,488	9,009.88	23,657.5

MW001	
Analyte	5/21/2018
PFOS	25.2
PFOA	8.34
Total PFAS	77.8

MW004			
Analyte	3/23/2018	11/7/2023	4/22/2025
PFOS	4,330 D	1,560 DE	4,430
PFOA	6,450 D	730 DE	223
Total PFAS	142,029	9,100.30	12,224.32

MW007			
Analyte	5/23/2018	11/6/2023	4/23/2025
PFOS	7.76	10.00	11.10
PFOA	3.91	4.14	5.20
Total PFAS	41.40	37.90	35.79

MW009 - Shallow			
Analyte	4/3/2018	11/6/2023	4/22/2025
PFOS	18,800	2,020 DE	8,910
PFOA	1,910	575	189
Total PFAS	41,160	9,079.16	11,903.60

MW009 - Deep			
Analyte	5/22/2018	11/7/2023	4/22/2025
PFOS	5.00	3.18	2.3
PFOA	0.92	2.86	0.78 U
Total PFAS	23.5	10.5	17.4

MW006-Shallow			
Analyte	5/23/2018	11/6/2023	4/23/2025
PFOS	1,300 D	3,490 D	5,940
PFOA	378	533	980
Total PFAS	10,092	10,900.94	16,120.50

MW006-Deep			
Analyte	5/23/2018	11/6/2023	4/23/2025
PFOS	140	35.8	49
PFOA	50.2	5.84	11.1
Total PFAS	1,311	59.78	120.80

MW002			
Analyte	5/21/2018	11/7/2023	4/22/2025
PFOS	6,740	4,990 D	1.1 J
PFOA	741	401	0.76 U
Total PFAS	16,488	9,009.88	16.5

MW005 - Shallow			
Analyte	5/21/2018	11/6/2023	4/23/2025
PFOS	1,540	4,500	3,030
PFOA	134.0	340	154
Total PFAS	3,355	9,337	6,138

MW005 - Deep			
Analyte	05/21/2018	11/6/2023	4/23/2025
PFOS	705	13.6	71.4
PFOA	51.0	5.17	12
Total PFAS	1,619	51.87	253.5

MW012 - Shallow			
Analyte	5/23/2018	11/7/2023	4/23/2025
PFOS	698 D	346	1,340
PFOA	107	33.6	58.8
Total PFAS	3,294	810.51	2,161.7

MW012 - Deep			
Analyte	5/23/2018	11/7/2023	4/23/2025
PFOS	83.6	105	116
PFOA	14.7	11.4	16.2
Total PFAS	340	244.02	319.4

MW010			
Analyte	4/3/2018	11/6/2023	4/23/2025
PFOS	189	72.2	116
PFOA	140	525	250
Total PFAS	4,069	9,315.80	4,230.37

MW011			
Analyte	5/23/2018	11/6/2023	4/23/2025
PFOS	134	313	233
PFOA	34.8	50.4	41.8
Total PFAS	758	893.6	580.8

MW003			
Analyte	5/23/2018	11/8/2023	4/22/2025
PFOS	5.29	8.50	9.20
PFOA	33.7	15.3	77.8
Total PFAS	429	166.3	343.8

Highlighted values exceed the NYDEC TOGS GV for PFOS (2.7 ng/L) or PFOA (6.7 ng/L)
Highlighted values exceed the USEPA HAL of 10 ng/L+EO:ES

0 225 450 675 900 Feet

Notes:
All sample results are shown in ng/L.
U: The analyte was analyzed for but not detected.
E: Result is estimated and cannot be accurately reported due to levels encountered or interferences.
D : Sample results are obtained from a dilution; the surrogate or matrix.
spike recoveries reported are calculated from diluted samples.
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
H: Sample was prepped or reanalyzed beyond the specified holding time.
NYSDEC April 2023 Addendum to June 1998 Division of Water Technical and Operational Guidance Series (TOGS) No. 1.1.1.
New York State Maximum Contaminant Level (MCL): Sampling, Analysis, and Assessment of Per- and Polufluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs, Issued April 2023.

Historical Uses

- Active Fire Training (Foam Use and Open Pit Fires)
- Active Fire Training Structures
- Office and Classroom Training Use
- Stormwater Discharge
- Undeveloped

- Monitoring Well
- Monitoring Well Cluster
- Site Boundary
- Building Footprint

Document Path: W:\Projects\S-Z\SHD\2503\MapFiles\OnsiteGW_MW_PFAS_Results.aprx

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DRAWING PREPARED FOR:

Suffolk County
H. Lee Dennison Building
100 Veterans Hwy.
Hauppauge, New York 11788

REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION:

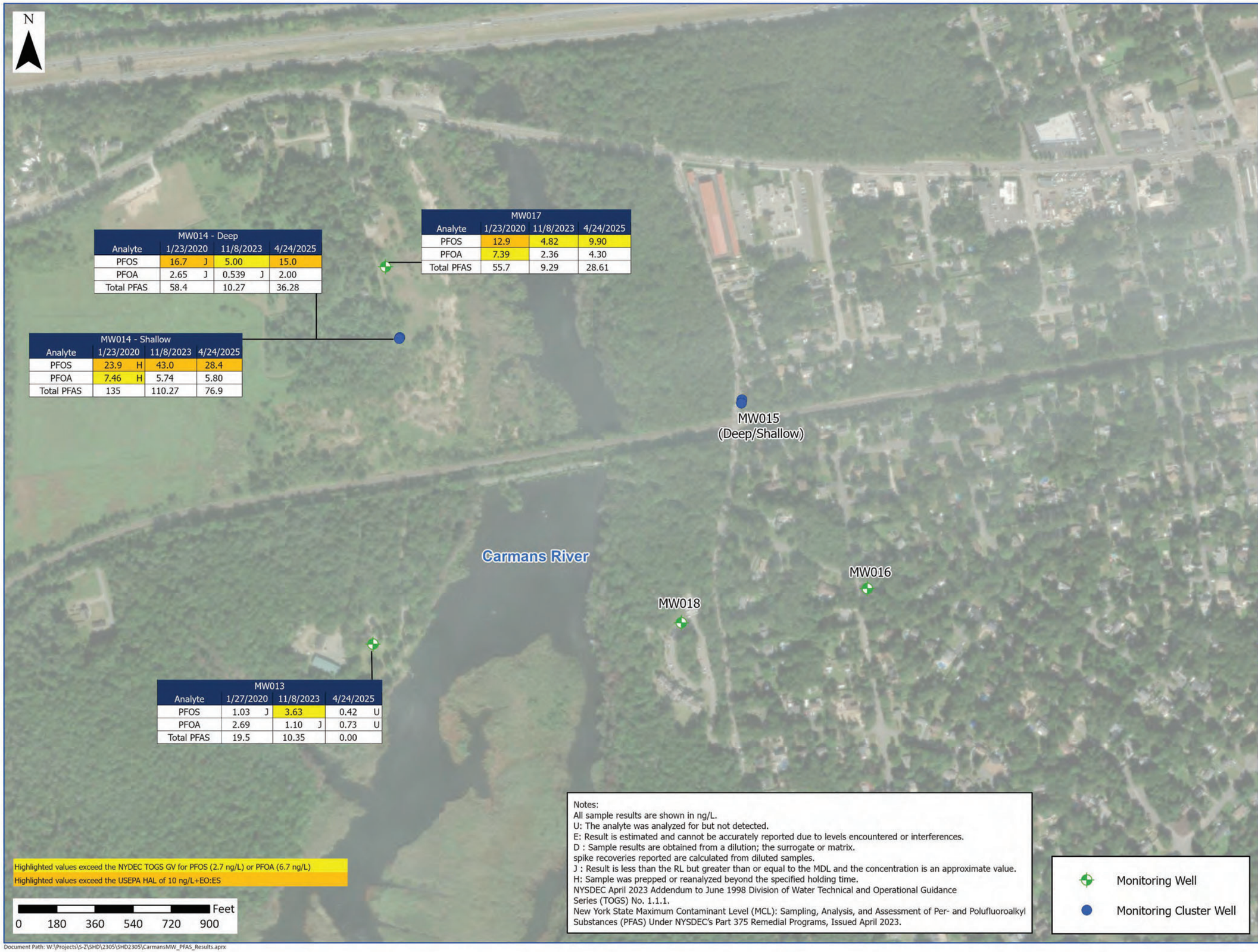
Project:	SHD2503	Designed by:	MP
Date:	5/22/2025	Drawn by:	AM
Scale:	AS SHOWN	Approved by:	MP

Groundwater Sampling Results (Onsite)

Suffolk County Firematics
676 Maple St
Yaphank, NY

FIGURE NO:

3A



Document Path: W:\Projects\S-Z\SHD\2305\SHD2305\CarmansMW_PFAS_Results.aprx

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DRAWING INFORMATION:

Project:	SHD2503	Designed by:	MP
Date:	5/19/2025	Drawn by:	AM
Scale:	AS SHOWN	Approved by:	MP

Groundwater Sampling Results (Carmans River)

Supplemental Remedial Investigation
Yaphank, NY

FIGURE NO:

3B

TABLES

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Table 1
Groundwater Monitoring Well
Monitoring and Survey Data

Station	Surface Elevation	Casing Elevation	Depth of Screen (bgs)		10-Nov-23		4-Jan-24		22-Apr-25	
			Top	Bottom	DTW	GW Elevation	DTW	GW Elevation	DTW	GW Elevation
MW001	42.43	42.30	15.00	25.00	N/A	N/A	N/A	N/A	N/A	N/A
MW002	42.20	42.01	17.00	27.00	18.60	23.41	17.95	24.06	16.90	25.11
MW003	42.90	46.37	15.00	25.00	22.77	23.60	22.08	24.29	21.10	25.27
MW004	41.16	40.92	14.00	24.00	17.86	23.06	17.26	23.66	16.20	24.72
MW005S	39.48	39.23	15.00	25.00	17.02	22.21	16.40	22.83	15.35	23.88
MW005D	39.48	39.13	34.00	44.00	16.95	22.18	16.38	22.75	15.28	23.85
MW006S	41.00	40.79	14.00	24.00	18.44	22.35	17.81	22.98	16.78	24.01
MW006D	41.00	40.61	35.00	45.00	18.26	22.35	17.65	22.96	16.52	24.09
MW007	40.50	40.23	16.00	26.00	17.89	22.34	17.32	22.91	16.25	23.98
MW008	41.76	41.44	14.00	24.00	18.60	22.84	18.01	23.43	16.90	24.54
MW009S	41.88	41.62	14.00	24.00	18.36	23.26	17.79	23.83	16.99	24.63
MW009D	42.00	41.81	35.00	45.00	18.57	23.24	17.96	23.85	16.88	24.93
MW010	25.86	29.28	2.00	12.00	6.54	22.74	5.92	23.36	4.95	24.33
MW011	40.36	42.46	13.00	23.00	20.40	22.06	19.80	22.66	18.66	23.80
MW012S	40.05	39.82	14.00	24.00	17.55	22.27	16.92	22.90	15.87	23.95
MW012D	40.05	39.79	35.00	45.00	17.52	22.27	16.90	22.89	15.83	23.96
MW013	8.13	7.95	5.00	15.00	5.69	2.26	5.80	2.15	6.00	1.95
MW014S	15.64	17.32	14.00	24.00	14.33	2.99	14.05	3.27	14.36	2.96
MW014D	15.60	15.39	80.00	90.00	12.41	2.98	12.15	3.24	12.42	2.97
MW017	16.19	16.19	9.00	19.00	12.42	3.77	12.12	4.07	12.40	3.79

Table 2

Groundwater Monitoring Well Sample Results
Per- and Polyfluoroalkyl Subtances (PFAS)
Groundwater Monitoring Report
Suffolk County Fire Training Facility

Client Sample ID: Laboratory ID: Sampling Date:	NYSDEC TOGS Standards and Guidance Values - GA [1]	NYDEC Part 375 PFAS Remedial Program Water Apr 2023 [2]	MW002 JE10205-8 4/22/2025	MW003 JE10205-6 4/22/2025	MW004 JE10205-01 4/22/2025	MW005S JE10205-13 4/23/2025	MW005D JE10205-14 4/23/2025	MW006S JE10205-15 4/23/2025	MW006D JE10205-16 4/23/2025	MW007 JE10205-17 4/23/2025	MW008 JE10205-02 4/22/2025	DUP001 JE10205-05 4/22/2025	MW009S JE10205-3 4/22/2025
PFAS, EPA 1633 Target List (ng/L)													
11Cl-PF3OUdS (F-53B Minor)	NS	NS	1.8 U	1.9 U	8.2 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	8.2 U	8.3 U	1.9 U
3:3 Fluorotelomer carboxylate	NS	NS	2.5 U	2.5 U	4.5 J	2.4 U	2.3 U	2.4 U	2.4 U	2.5 U	10 U	10 U	2.5 U
4:2 Fluorotelomer sulfonate	NS	NS	2.3 U	2.4 U	5.2 J	2.2 U	2.2 U	2.2 U	2.2 U	2.3 U	8.2 U	8.3 U	2.3 U
5:3 Fluorotelomer carboxylate	NS	NS	7.2 U	7.5 U	51 U	7 U	6.9 U	7.1 U	7.1 U	7.3 U	51 U	52 U	7.4 U
6:2 Fluorotelomer sulfonate	NS	NS	10.9	0.95 U	1720	114	5.5 J	3210	23	0.93 U	326	323	528
7:3 Fluorotelomer carboxylate	NS	NS	6.3 U	6.5 U	51 U	6.1 U	6 U	6.1 U	6.2 U	6.3 U	51 U	52 U	6.4 U
8:2 Fluorotelomer sulfonate	NS	NS	1.5 U	1.5 U	199	2.6 J	1.4 U	92.8	1.4 U	1.5 U	299	287	61
9Cl-PF3ONS (F-53B Major)	NS	NS	2.5 U	2.6 U	8.2 U	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	8.2 U	8.3 U	2.5 U
ADONA	NS	NS	1.2 U	1.3 U	8.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	8.2 U	8.3 U	1.3 U
EtFOSA	NS	NS	0.54 U	0.56 U	2.1 U	0.52 U	0.51 U	0.53 U	0.53 U	0.54 U	2.1 b U	2.1 U	0.55 U
EtFOSAA	NS	NS	0.92 U	0.95 U	2.1 U	0.9 U	0.88 U	0.9 U	0.91 U	0.93 U	2.1 b U	2.1 U	0.95 U
EtFOSE	NS	NS	3.8 U	3.9 U	21 U	3.7 U	3.6 U	3.7 U	3.7 U	3.8 U	21 b U	21 U	3.9 U
HFPO-DA (GenX)	NS	NS	1.8 U	1.9 U	8.2 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	8.2 U	8.3 U	1.9 U
MeFOSA	NS	NS	0.65 U	0.67 U	2.1 U	0.63 U	0.62 U	0.64 U	0.64 U	0.65 U	2.1 b U	2.1 U	0.67 U
MeFOSAA	NS	NS	0.52 U	3.2	2.1 U	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	2.1 U	2.1 U	0.53 U
MeFOSE	NS	NS	2.8 U	2.9 U	21 U	2.7 U	2.7 U	2.8 U	2.8 U	2.8 U	21 b U	21 U	2.9 U
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	NS	NS	1.3 U	1.3 U	4.1 U	1.3 U	1.2 U	1.3 U	1.3 U	1.3 U	4.1 U	4.2 U	1.3 U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NS	NS	0.27 U	0.28 U	4.1 U	0.27 U	0.26 U	0.27 U	0.27 U	0.28 U	4.1 U	4.2 U	0.28 U
Perfluoro-5-oxahexanoic acid (PFMBA)	NS	NS	0.57 U	0.59 U	4.1 U	0.55 U	0.54 U	0.56 U	0.56 U	0.57 U	4.1 U	4.2 U	0.58 U
Perfluoro-4-oxapentanoic acid (PFMPA)	NS	NS	0.3 U	0.31 U	4.1 U	0.3 U	0.29 U	0.3 U	0.3 U	0.31 U	4.1 U	4.2 U	0.31 U
Perfluoro-1-octanesulfonamide (PFOSA)	NS	NS	0.7 U	0.72 U	11.1	0.84 J	0.67 U	2.9	0.69 U	0.71 U	4.8 b	4.8 b	5.7
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.67 U	6	40.6	94.5	13	16.8	0.73 U	0.99 J	47.1	44.1	42.8
Perfluorobutanoic acid (PFBA)	NS	NS	0.94 U	39.9	289	76.6	7 J	362	3.4 J	2.4 J	131	125	79.4
Perfluorodecanesulfonic acid (PFDS)	NS	NS	1.1 U	1.1 U	2.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.1 U	2.1 U	1.1 U
Perfluorodecanoic acid (PFDA)	NS	NS	0.63 U	0.65 U	22.9	2.5	0.6 U	16.3	0.62 U	0.63 U	22.2	21.3	7
Perfluorododecanesulfonic acid (PEDoS)	NS	NS	0.41 U	0.42 U	2.1 U	0.4 U	0.39 U	0.4 U	0.4 U	0.41 U	2.1 U	2.1 U	0.42 U
Perfluorododecanoic acid (PFDoA)	NS	NS	0.78 U	0.81 U	2.1 U	0.76 U	0.75 U	0.77 U	0.77 U	0.79 U	2.1 U	2.1 U	0.8 U
Perfluoroheptanesulfonic acid (PFHpS)	NS	NS	0.99 U	1 U	54.1	27.8	0.95 U	30.9	0.98 U	1 U	198	176	66
Perfluoroheptanoic acid (PFHpA)	NS	NS	0.51 U	15	338	106	7.2	572	3.4	3.7	411	380	150
Perfluorohexanesulfonic acid (PFHxS)	NS	NS	3.1	5.6	569	1720	68.8	512	13.4	3.6	4050	3850	825
Perfluorohexanoic acid (PFHxA)	NS	NS	0.29 U	58.1	1060	294	30.7	922	4.9	3.8	602	566	364
Perfluorononanesulfonic acid (PFNS)	NS	NS	1.5 U	1.5 U	2.1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.5 U	2.1 U	2.1 U	1.9 J
Perfluorononanoic acid (PFNA)	NS	NS	1.4 J	5	1770	125	4	1940	6.3	1.7 J	2470	2460	291
Perfluorooctanesulfonic acid (PFOS)	2.7	10	1.1 J	9.2	4430	3030	71.4	5940	49.3	11.1	13200	13900	8910
Perfluorooctanoic acid (PFOA)	6.7	10	0.76 U	77.8	223	154	12	980	11.1	5.2	1350	1300	189
Perfluoropentanesulfonic acid (PFPeS)	NS	NS	1 U	1.1 U	68.4	129	11.5	26.9	1 U	1 U	93.8	88.4	60.2
Perfluoropentanoic acid (PFPeA)	NS	NS	0.74 U	124	1390	261	22.4	1480	6	3.3 J	409	392	310
Perfluorotetradecanoic acid (PFTA)	NS	NS	0.77 U	0.8 U	2.1 U	0.75 U	0.74 U	0.76 U	0.76 U	0.78 U	2.1 U	2.1 U	0.79 U
Perfluorotridecanoic acid (PFTrDA)	NS	NS	0.8 U	0.83 U	0.82 J	0.78 U	0.77 U	0.79 U	0.79 U	0.81 U	2.1 U	2.1 U	0.82 U
Perfluoroundecanoic acid (PFUnA)	NS	NS	0.56 U	0.58 U	28.7	0.54 U	0.53 U	15.9	0.55 U	0.56 U	48.4	49.3	12.6
Total PFAS			16.5	343.8	12224.32	6137.84	253.5	16120.5	120.8	35.79	23657.5	23962.1	11903.6

Notes:

(1) - NYSDEC April 2023 Addendum to June 1998 Division of Water Technical and Operational Guidance Series (TOGS) No. 1.1.1

(2) New York State Maximum Contaminant Level (MCL): Sampling, Analysis, and Assessment of Per- and Polufluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs, Issued April 2023.

NS - No Standard

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U - Indicates the analyte was analyzed for but not detected.

(a) - Outside control limits. Outside contr Outsi Outside control limits.

(b) - Associated EIS outside control limits. Associated EIS Assoc Associated EIS outside control limits.

(c) - Associated CCV outside control limits high, sample was ND. Associated CCV outside of control limits Associated C Assoc Associated CCV outside control limits high, sample was ND. Associated CCV outside of control limits high, sample was ND.

Highlighted values exceed NYSDEC TOGS Guidance Value

Highlighted values exceed NYS MCL of 10 ng/L

Table 2

Groundwater Monitoring Well Sample Results
Per- and Polyfluoroalkyl Subtances (PFAS)
Groundwater Monitoring Report
Suffolk County Fire Training Facility

Client Sample ID: Laboratory ID: Sampling Date:	NYSDEC TOGS Standards and Guidance Values - GA [1]	NYDEC Part 375 PFAS Remedial Program Water Apr 2023 [2]	MW009D JE10205-4 4/22/2025		MW010 JE10205-9 4/23/2025		MW011 JE10205-12 4/23/2025		MW012S JE10205-10 4/23/2025		MW012D JE10205-11 4/23/2025		MW013 JE10205-18 4/24/2025		MW014S JE10205-19 4/24/2025		MW014D JE10205 4/24/2025		MW017 JE10205-21 4/24/2025		Field Blank JE10205-7 4/22/2025	
PFAS, EPA 1633 Target List (ng/L)																						
11Cl-PF3OUdS (F-53B Minor)	NS	NS	1.9	U	1.9	U	1.7	U	8.7	U	1.8	U	1.8	U	1.8	U	7.7	U	1.8	U	1.8	U
3:3 Fluorotelomer carboxylate	NS	NS	2.5	U	2.6	U	2.3	U	11	U	2.4	U	2.4	U	2.4	U	9.6	U	2.4	U	2.4	U
4:2 Fluorotelomer sulfonate	NS	NS	2.3	U	2.4	U	2.2	U	8.7 b	U	2.2	U	2.2	U	2.3	U	7.7	U	2.2	U	2.3	U
5:3 Fluorotelomer carboxylate	NS	NS	7.4	U	7.6	U	6.8	U	54	U	7.1	U	7	U	7.2	U	48	U	7	U	7.2	U
6:2 Fluorotelomer sulfonate	NS	NS	15.1		553		4.9	J	3.7	J	11.8		0.89	U	0.92	U	22.3		0.9	U	0.92	U
7:3 Fluorotelomer carboxylate	NS	NS	6.4	U	6.6	U	5.9	U	54	U	6.2	U	6	U	6.2	U	48	U	6.1	U	6.3	U
8:2 Fluorotelomer sulfonate	NS	NS	1.5	U	1750		1.4	U	8.7	U	1.4	U	1.4	U	1.5	U	7.7	U	1.4	U	1.5	U
9Cl-PF3ONS (F-53B Major)	NS	NS	2.5	U	2.6	U	2.3	U	8.7	U	2.4	U	2.4	U	2.5	U	7.7	U	2.4	U	2.5	U
ADONA	NS	NS	1.3	U	1.3	U	1.2	U	8.7	U		U	1.2	U	1.2	U	7.7	U	1.2	U	1.2	U
EtFOSA	NS	NS	0.55	U	0.57	U	0.51	U	2.2	U	0.53	U	0.52	U	0.54	U	1.9	U	0.52	U	0.54	U
EtFOSAA	NS	NS	0.94	U	1.5	J	0.87	U	2.2	U	0.91	U	0.89	U	0.92	U	1.9	U	0.9	U	0.92	U
EtFOSE	NS	NS	3.9	U	4	U	3.6	U	22	U	3.7	U	3.7	U	3.8	U	19	U	3.7	U	3.8	U
HFPO-DA (GenX)	NS	NS	1.9	U	1.9	U	1.7	U	8.7	U	1.8	U	1.8	U	1.8	U	7.7	U	1.8	U	1.8	U
MeFOSA	NS	NS	0.66	U	0.69	U	0.62	U	2.2	U	0.64	U	0.63	U	0.65	U	1.9	U	0.63	U	0.65	U
MeFOSAA	NS	NS	0.53	U	0.55	U	0.49	U	2.2	U	0.51	U	0.5	U	0.52	U	1.9	U	0.5	U	0.52	U
MeFOSE	NS	NS	2.9	U	3	U	2.7	U	22	U	2.8	U	2.7	U	2.8	U	19	U	2.7	U	2.8	U
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	NS	NS	1.3	U	1.4	U	1.2	U	4.3	U	1.3	U	1.3	U	1.3	U	3.8	U	1.3	U	1.3	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NS	NS	0.28	U	0.29	U	0.26	U	4.3	U	0.27	U	0.26	U	0.27	U	3.8	U	0.27	U	0.27	U
Perfluoro-5-oxahexanoic acid (PFMBA)	NS	NS	0.58	U	0.6	U	0.54	U	4.3	U	0.56	U	0.55	U	0.57	U	3.8	U	0.55	U	0.57	U
Perfluoro-4-oxapentanoic acid (PFMPA)	NS	NS	0.31	U	0.32	U	0.29	U	4.3	U	0.3	U	0.29	U	0.3	U	3.8	U	0.3	U	0.3	U
Perfluoro-1-octanesulfonamide (PFOSA)	NS	NS	0.71	U	52.6		6.6		15.8		0.69	U	0.68	U	0.7	U	1.9 b	U	0.68	U	0.7	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.68	U	2.9		4		16.5		7.9		0.65	U	4.5		1.8	J	3.1		0.67	U
Perfluorobutanoic acid (PFBA)	NS	NS	0.96	U	116		24.2		41.6		9.7		0.91	U	2.9	J	7.7	U	0.92	U	0.94	U
Perfluorodecanesulfonic acid (PFDS)	NS	NS	1.1	U	1.2	U	1	U	2.2	U	1.1	U	1.1	U	1.1	U	1.9	U	1.1	U	1.1	U
Perfluorodecanoic acid (PFDA)	NS	NS	0.64	U	257		1.5	J	5.1		0.62	U	0.61	U	0.63	U	1.9 b	U	0.61	U	0.63	U
Perfluorododecanesulfonic acid (PEDoS)	NS	NS	0.41	U	0.47	J	0.38	U	2.2	U	0.4	U	0.39	U	0.4	U	1.9 b	U	0.39	U	0.4	U
Perfluorododecanoic acid (PFDoA)	NS	NS	0.8	U	21.8		0.74	U	2.2	U	0.77	U	0.75	U	0.78	U	1.9	U	0.76	U	0.78	U
Perfluoroheptanesulfonic acid (PFHpS)	NS	NS	1	U	1.1	U	1.7	J	7.8		2.4		0.96	U	0.99	U	1.9 b	U	0.96	U	0.99	U
Perfluoroheptanoic acid (PFHpA)	NS	NS	0.52	U	191		34.9		45.6		13.8		0.49	U	3.1		1.4	J	0.77	J	0.51	U
Perfluorohexanesulfonic acid (PFHxS)	NS	NS	1.1	U	35.8		78.4		317		111		1.1	U	15.1		6.7 b		7.5		1.1	U
Perfluorohexanoic acid (PFHxA)	NS	NS	0.3	U	230		47.8		88.2		8.6		0.28	U	4.5		2.6		1.2	J	0.29	U
Perfluorononanesulfonic acid (PFNS)	NS	NS	1.5	U	1.5	U	1.4	U	2.2	U	1.4	U	1.4	U	1.5	U	1.9 b	U	1.4	U	1.5	U
Perfluorononanoic acid (PFNA)	NS	NS	0.41	U	80		24.5		96.7		3.6		0.39	U	2.5		1.4	J	0.96	J	0.4	U
Perfluorooctanesulfonic acid (PFOS)	2.7	10	2.3		116		233		1340		116		0.42	U	28.4		15 b		9.9		0.44	U
Perfluorooctanoic acid (PFOA)	6.7	10	0.78	U	250		41.8		58.8		16.2		0.73	U	5.8		2		4.3		0.76	U
Perfluoropentanesulfonic acid (PFPeS)	NS	NS	1	U	3		3.9		21.6		9		0.99	U	1.3	J	1.9	U	0.99	U	1	U
Perfluoropentanoic acid (PFPeA)	NS	NS	0.76	U	449		65.8		98.7		9.4		0.71	U	6.6		3.8		0.88	J	0.74	U
Perfluorotetradecanoic acid (PFTA)	NS	NS	0.79	U	1.8	J	0.73	U	2.2	U	0.76	U	0.74	U	0.77	U	1.9	U	0.75	U	0.77	U
Perfluorotridecanoic acid (PFTrDA)	NS	NS	0.82	U	58.3		0.76	U	2.2	U	0.79	U	0.77	U	0.8	U	1.9	U	0.78	U	0.8	U
Perfluoroundecanoic acid (PFUnA)	NS	NS	0.57	U	60.2		7.8		4.6		0.55	U	0.54	U	2.2		0.98	J	0.54	U	0.56	U
Total PFAS			17.4		4230.37		580.8		2161.7		319.4		0		76.9		36.28		28.61		0	

Notes:

(1) - NYSDEC April 2023 Addendum to June 1998 Division of Water Technical and Operational Guidance

(2) New York State Maximum Contaminant Level (MCL): Sampling, Analysis, and Assessment of Per- and P
Under NYSDEC's Part 375 Remedial Programs, Issued April 2023.

NS - No Standard

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximat

U - Indicates the analyte was analyzed for but not detected.

(a) - Outside control limits.

(b) - Associated EIS outside control limits.

(c) - Associated CCV outside control limits high, sample was ND. Associated CCV outside of control limits

Highlighted values exceed NYSDEC TOGS Guidance Value

Highlighted values exceed NYS MCL of 10 ng/L

Table 3

Groundwater Monitoring Well Sample Results
Per- and Polyfluoroalkyl Subtances (PFAS)
Remedial Investigation (RI) and Supplemental RI
Suffolk County Fire Training Facility

Client Sample ID:	NYSDEC AWQS (1)	NYSDEC GWSL (4)	MW001		MW002		MW003		MW004		MW005S		MW005D		MW006S		MW006D		MW007	
Laboratory ID:			320-39607-1		320-39607-2		320-39741-1		320-37506-2		320-39607-3		320-37450-1		320-39741-3		320-39741-2		320-39741-4	
Sampling Date:			05/21/2018		05/21/2018		5/23/2018		03/23/2018		05/21/2018		03/20/2018		5/23/2018		5/23/2018		5/23/2018	
PFAS by EPA 537 (modified) (ng/L)																				
6:2FTS	NS	100	1.96	U	8.75	J	6.88	J	98,700	D	108		66.1		4,110	D	574	D	1.90	U
8:2FTS	NS	100	1.96	U	1.87	U	2.00	U	255		5.42	J	4.98	J	24.5		3.08	J	1.90	U
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	NS	100	1.86	U	1.78	U	1.90	U	1.82	U	1.82	U	1.83	U	1.89	U	1.80	U	1.81	U
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	NS	100	3.03	U	2.90	U	3.10	U	2.97	U	2.96	U	2.98	U	3.08	U	2.93	U	2.95	U
Perfluorobutanesulfonic acid (PFBS)	NS	100	1.03	J	0.57	J	6.24		121		43.5		38.4		45.8		5.91		1.32	J
Perfluorobutanoic acid (PFBA)	NS	100	3.28		0.47	J	29.2	B	805	D	72.7		34.9		250	B	34.4	B	2.94	B
Perfluorodecanesulfonic acid (PFDS)	NS	100	0.31	U	0.30	U	0.43	J	0.31	U	0.31	U	0.31	U	0.32	U	0.30	U	0.30	U
Perfluorodecanoic acid (PFDA)	NS	100	1.36	J	0.29	U	1.29	J	25.4		2.37		0.97	J	0.31	U	0.29	U	0.29	U
Perfluorododecanoic acid (PFDoA)	NS	100	0.54	U	0.51	U	0.55	U	0.53	U	0.53	U	0.53	U	0.55	U	0.52	U	0.52	U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	100	0.31	J	0.18	U	0.19	U	263		36.1		11.3		31.1		5.40		0.18	U
Perfluoroheptanoic acid (PFHpA)	NS	100	4.38		0.75	J	20.0		2,530	D	113		45.4		374		48.1		1.61	J
Perfluorohexanesulfonic acid (PFHxS)	NS	100	8.70	B	7.39	B	3.86		10,100	D B	662	B	308	B	687	D	86.4		8.12	
Perfluorohexanoic acid (PFHxA)	NS	100	4.94		1.38	J	152		4,230	D	274		175		1,140	D	141		0.55	U
Perfluorononanoic acid (PFNA)	NS	100	3.11		22.3		1.38	J	10,400	D	117		31.9		574	D	61.9		1.23	J
Perfluorooctane Sulfonamide (FOSA)	NS	100	0.34	U	0.33	U	0.35	U	8.14		1.48	J	1.34	J	1.04	J B	0.40	J B	0.33	U
Perfluorooctanesulfonic acid (PFOS)	70[2]	10[3]	25.2		2.31		5.29		4,330	D	1,540		705		1,300	D	140		7.76	
Perfluorooctanoic acid (PFOA)	70[2]	10[3]	8.34		2.53		33.7		6,450	D	134		51.0		378		50.2		3.91	
Perfluoropentanoic acid (PFPeA)	NS	100	4.50		1.03	J	158		3,790	D	234		136		1,150	D	152		1.24	J
Perfluorotetradecanoic acid (PFTeA)	NS	100	0.28	U	0.27	U	0.46	J	0.28	U	0.31	J	0.28	U	0.29	U	0.27	U	0.28	U
Perfluorotridecanoic Acid (PFTriA)	NS	100	1.27	U	1.21	U	1.30	U	1.24	U	1.24	U	1.25	U	1.29	U	1.23	U	1.24	U
Perfluoroundecanoic acid (PFUnA)	NS	100	1.08	U	1.03	U	1.10	U	14.4		4.01		1.06	U	18.5		1.04	U	1.05	U
Combined PFOS / PFOA	70[2]	NS	33.5		4.84		39.0		10,780		1,674		756		1,678		190		11.7	
Total PFAS	NS	500	77.8		58.2		429		142,029		3,355		1,619		10,092		1,311		41.4	

Notes:

(1) NYSDEC TOGS 1.1.1, Class GA Ambient Water Quality Standards and Guidance Values, Table 1, June 1998

(2) USEPA Health Advisory Level (HAL) of 70 ng/L combined or 70 ng/L individual

(3) NYS Maximum Contaminant Level (MCL) of 10 ng/L, August 2020

(4) NYSDEC Sampling, Analysis, and Assessment of PFAS Groundwater Screening Levels, October 2020.

NS - No Standard

B - Compound was found in the blank and sample.

CI - The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias.

D - Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U - Indicates the analyte was analyzed for but not detected.

Highlighted values exceed USEPA HAL of 70 ng/L

Highlighted values exceed NYS MCL of 10 ng/L

Highlighted indicates individual PFAS (not PFOA or PFOS) concentrations at or above 100 ng/L

Highlighted indicates total PFAS (including PFOA and PFOS) concentrations at or above 500 ng/L

Table 3

Groundwater Monitoring Well Sample Results
Per- and Polyfluoroalkyl Subtances (PFAS)
Remedial Investigation (RI) and Supplemental RI
Suffolk County Fire Training Facility

Client Sample ID:	NYSDEC AWQS (1)	NYSDEC GWSL (4)	MW008		MW009S		MW009D		MW010		MW011		MW012S		MW012-Deep		MW013		MW014S	
Laboratory ID:			320-37872-5		320-37872-6		320-39711-1		320-39741-5		320-39741-8		320-39741-6		320-39741-7		320-58150-1		320-58098-1	
Sampling Date:			04/03/2018		04/03/2018		05/22/2018		5/23/2018		5/23/2018		5/23/2018		5/23/2018		1/27/2020		1/23/2020	
PFAS by EPA 537 (modified) (ng/L)																				
6:2FTS	NS	100	1,550		8,340		2.85	J	1,240	D	78.0		6.81	J	1.91	U	1.90	U	21.8	H
8:2FTS	NS	100	72.1		449		1.81	U	902	D	1.90	U	2.04	U	1.91	U	1.90	U	1.79	U H
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	NS	100	1.76	U	1.98	U	1.72	U	7.73	J B	1.81	U	1.94	U	1.82	U	1.80	U	1.70	U H
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	NS	100	2.87	U	3.23	U	2.81	U	50.0	U	2.95	U	3.16	U	2.96	U	2.94	U	2.78	U H
Perfluorobutanesulfonic acid (PFBS)	NS	100	70.5		266		0.18	U	7.36		4.67		35.1		11.5		0.19	U	3.02	H
Perfluorobutanoic acid (PFBA)	NS	100	242		243		0.47	J	81.4		74.6	B	302	B CI	11.6	B	0.33	***U***	4.47	H B
Perfluorodecanesulfonic acid (PFDS)	NS	100	0.30	U	1.04	J	0.29	U	5.00	U	0.30	U	0.33	U	0.31	U	0.30	U	0.29	U H
Perfluorodecanoic acid (PFDA)	NS	100	18.7		41.1		0.28	U	59.7		0.29	U	2.72		1.38	J	0.29	U	0.44	J H
Perfluorododecanoic acid (PFDoA)	NS	100	0.51	U	0.57	U	0.50	U	22.2		0.52	U	0.56	U	0.53	U	0.52	U	0.49	U H
Perfluoroheptanesulfonic Acid (PFHpS)	NS	100	119		749		0.17	U	4.49		1.88	J	25.4		2.26		0.18	U	0.70	J H
Perfluoroheptanoic acid (PFHpA)	NS	100	532		481		0.36	J	110		73.3		69.1		17.3		0.56	J	5.76	H
Perfluorohexanesulfonic acid (PFHxS)	NS	100	2,580	B	6,960	B	2.00	B	67.1		69.1		416	D	112		0.16	***U***	22.1	H B
Perfluorohexanoic acid (PFHxA)	NS	100	980		1,410		0.53	U	262		90.6		112		28.9		0.55	U	12.0	H
Perfluorononanoic acid (PFNA)	NS	100	1,820		441		0.39	J	71.8		10.5		1,370	D	6.31		0.55	J	7.85	H
Perfluorooctane Sulfonamide (FOSA)	NS	100	4.48		6.39		0.32	U	98.9		1.08	J B	3.06	B	0.33	U	0.33	U	0.31	U H
Perfluorooctanesulfonic acid (PFOS)	70[2]	10[3]	6,740		18,800		5.00		189		134		698	D	83.6		1.03	J	23.9	H
Perfluorooctanoic acid (PFOA)	70[2]	10[3]	741		1,910		0.92	J	140		34.8		107		14.7		2.69		7.46	H
Perfluoropentanoic acid (PFPeA)	NS	100	955		1,020		0.49	J	332		175		134		38.5		0.69	J	12.4	H
Perfluorotetradecanoic acid (PFTeA)	NS	100	0.27	U	0.30	U	0.26	U	1.11	J	0.28	U	0.30	U	0.28	U	0.27	U	0.26	U H
Perfluorotridecanoic Acid (PFTriA)	NS	100	1.21	U	1.36	U	1.18	U	50.8		1.24	U	1.32	U	1.24	U	1.23	U	1.17	U H
Perfluoroundecanoic acid (PFUnA)	NS	100	56.5		35.3		1.00	U	366		1.05	U	3.64		1.05	U	1.04	U	4.50	H
Combined PFOS / PFOA	70[2]	NS	7,481		20,710		5.92		329		169		805		98.3		3.72		31.4	
Total PFAS	NS	500	16,488		41,160		23.5		4,069		758		3,294		340		19.5		135	

Notes:

(1) NYSDEC TOGS 1.1.1, Class GA Ambient Water Quality Standards and Guidance Values, Table 1, J

(2) USEPA Health Advisory Level (HAL) of 70 ng/L combined or 70 ng/L individual

(3) NYS Maximum Contaminant Level (MCL) of 10 ng/L, August 2020

(4) NYSDEC Sampling, Analysis, and Assessment of PFAS Groundwater Screening Levels, October 202

NS - No Standard

B - Compound was found in the blank and sample.

CI - The peak identified by the data system exhibited chromatographic interference that could not b

D - Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approx

U - Indicates the analyte was analyzed for but not detected.

Highlighted values exceed USEPA HAL of 70 ng/L

Highlighted values exceed NYS MCL of 10 ng/L

Highlighted indicates individual PFAS (not PFOA or PFOS) concentrations at or above 100 ng/L

Highlighted indicates total PFAS (including PFOA and PFOS) concentrations at or above 500 ng/L

Table 3

Groundwater Monitoring Well Sample Results
Per- and Polyfluoroalkyl Subtances (PFAS)
Remedial Investigation (RI) and Supplemental RI
Suffolk County Fire Training Facility

Client Sample ID: Laboratory ID: Sampling Date:	NYSDEC AWQS (1)	NYSDEC GWSL (4)	MW014D 320-58098-2 1/23/2020		DUPE005 320-58098-6 1/23/2020		MW015S 320-58098-4 1/23/2020		MW015D 320-58098-5 1/23/2020		MW016 320-58150-2 1/27/2020		MW017 320-58098-3 1/23/2020		MW018 320-59987-2 4/2/2020	
PFAS by EPA 537 (modified) (ng/L)																
6:2FTS	NS	100	1.86	***UJ***	1.86	U	1.78	U	1.81	U	8.56	J	1.86	U	1.80	U
8:2FTS	NS	100	1.86	***UJ***	1.86	U	1.78	U	1.81	U	1.82	U	1.86	U	1.80	U
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	NS	100	1.76	***UJ***	1.77	U	1.69	U	1.72	U	1.73	U	1.76	U	1.71	U
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	NS	100	2.88	***UJ***	2.89	U	2.75	U	2.81	U	2.82	U	2.88	U	2.79	U
Perfluorobutanesulfonic acid (PFBS)	NS	100	1.22	J	1.22	J	5.48		0.65	J	2.23		3.56		0.61	J
Perfluorobutanoic acid (PFBA)	NS	100	2.48	***J***	1.80	J B	8.31	B	1.41	J B	2.46	B	1.93	B	1.80	***U***
Perfluorodecanesulfonic acid (PFDS)	NS	100	0.30	***UJ***	0.30	U	0.28	U	0.29	U	0.29	U	0.30	U	0.29	U
Perfluorodecanoic acid (PFDA)	NS	100	0.29	***UJ***	0.29	U	0.62	J	0.28	U	0.28	U	0.29	U	0.28	U
Perfluorododecanoic acid (PFDoA)	NS	100	0.51	***UJ***	0.51	U	0.49	U	0.50	U	0.50	U	0.51	U	0.5	U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	100	0.31	J	0.31	J	0.20	J	0.17	U	0.17	U	0.36	J	0.17	U
Perfluoroheptanoic acid (PFHpA)	NS	100	2.15	***J***	1.92		8.13		1.33	J	2.06		1.58	J	1.09	J
Perfluorohexanesulfonic acid (PFHxS)	NS	100	7.15	***J***	7.58	B	5.77	B	1.88	B	1.45	J B	10.5	B	1.80	***U***
Perfluorohexanoic acid (PFHxA)	NS	100	3.47	***J***	3.75		18.9		3.36		4.57		1.72	J	1.59	J
Perfluorononanoic acid (PFNA)	NS	100	3.26	***J***	2.95		0.56	J	0.41	J	0.49	J	1.71	J	0.33	J
Perfluorooctane Sulfonamide (FOSA)	NS	100	0.56	J	0.38	J B	0.31	U	0.32	U	0.32	U	0.32	U	0.32	U
Perfluorooctanesulfonic acid (PFOS)	70[2]	10[3]	16.7	***J***	16.9		4.47		3.05		4.97		12.9		4.67	***J***
Perfluorooctanoic acid (PFOA)	70[2]	10[3]	2.65	***J***	2.59		9.15		1.73	J	16.8		7.39		2.92	
Perfluoropentanoic acid (PFPeA)	NS	100	4.58	***J***	4.42		29.7		3.93		3.80		1.78	J	1.42	J
Perfluorotetradecanoic acid (PFTeA)	NS	100	0.27	***UJ***	0.27	U	0.26	U	0.26	U	0.26	U	0.27	U	0.26	U
Perfluorotridecanoic Acid (PFTriA)	NS	100	1.21	***UJ***	1.21	U	1.15	U	1.18	U	1.18	U	1.21	U	1.17	U
Perfluoroundecanoic acid (PFUnA)	NS	100	2.95	***J***	1.77	J	0.98	U	1.00	U	1.00	U	1.02	U	0.99	U
Combined PFOS / PFOA	70[2]	NS	19.4		19.5		13.6		4.78		21.8		20.3		7.59	
Total PFAS	NS	500	58.4		56.6		103		29.9		57.8		55.7		28.3	

Notes:

(1) NYSDEC TOGS 1.1.1, Class GA Ambient Water Quality Standards and Guidance Values, Table 1, J

(2) USEPA Health Advisory Level (HAL) of 70 ng/L combined or 70 ng/L individual

(3) NYS Maximum Contaminant Level (MCL) of 10 ng/L, August 2020

(4) NYSDEC Sampling, Analysis, and Assessment of PFAS Groundwater Screening Levels, October 202

NS - No Standard

B - Compound was found in the blank and sample.

CI - The peak identified by the data system exhibited chromatographic interference that could not b

D - Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approx

U - Indicates the analyte was analyzed for but not detected.

Highlighted values exceed USEPA HAL of 70 ng/L

Highlighted values exceed NYS MCL of 10 ng/L

Highlighted indicates individual PFAS (not PFOA or PFOS) concentrations at or above 100 ng/L

Highlighted indicates total PFAS (including PFOA and PFOS) concentrations at or above 500 ng/L

APPENDIX A

Date:	4/22/25-4/24/25
Project Number:	SHD2503
Interface Probe #:	3
Geologist:	KB + KM

Well ID	Well Diameter (in)	Depth to Product (ft)	Depth to Water (ft)	Depth to Bottom (ft)	Height of Water Column (ft)	Volume of Water Column (gal)	PID
MW002	2		16.9	27.81	10.91	1.78	
MW003	1		21.1	28.37	7.27	0.30	
MW004	2		16.2	24.49	8.29	1.35	
MW005S	2		15.35	25.41	10.06	1.64	
MW005D	2		15.28	44.06	28.78	4.69	
MW006S	2		16.78	24.42	7.64	1.25	
MW006D	2		16.52	45.36	28.84	4.70	
MW007	2		16.25	26.71	10.46	1.71	
MW008	2		16.9	24.52	7.62	1.24	
MW009S	2		16.99	24.6	7.61	1.24	
MW009D	2		16.88	45.87	28.99	4.73	
MW010	1		4.95	14.9	9.95	0.41	
MW011	1		18.66	25.02	6.36	0.26	

Notes:

Conversion for 2 in Diameter to Volume in gal: height of Water Column (ft) x 0.163

Conversion for 4 in Diameter to Volume in gal: height of Water Column (ft) x 0.658

Date:	4/22/25-4/24/25
Project Number:	SHD2503
Interface Probe #:	3
Geologist:	KB + KM

Well ID	Well Diameter (in)	Depth to Product (ft)	Depth to Water (ft)	Depth to Bottom (ft)	Height of Water Column (ft)	Volume of Water Column (gal)	PID
MW012S	2		15.87	24.36	8.49	1.38	
MW012D	2		15.83	45.77	29.94	4.88	
MW013	2		6.00	15.56	9.56	1.56	
MW014S	2		14.36	25.34	10.98	1.79	
MW014D	2		12.42	90.29	77.87	12.70	
MW017	2		12.40	19.66	7.26	1.18	

Notes:

Conversion for 2 in Diameter to Volume in gal: height of Water Column (ft) x 0.163

Conversion for 4 in Diameter to Volume in gal: height of Water Column (ft) x 0.658

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW001**	**Sampled By:**	
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**
Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):		**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):		**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**0**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**0**	**Calculated Purge Volume (gal):**	**0**
Sample Date:		**Start Purge Time:**	
Sample Time:		**End Purge Time:**	
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):		**Purge Time (min):**	**0**
Actual Purge Volume (gal):		**Casing Volumes Removed:**	**#DIV/0!**
Sample Appearance:		**Odors Observed:**	
Analytical Laboratory:		**Notes:**	
Date Shipped:			
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW002**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**

Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**16.9**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**27.91**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**11.01**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**1.7960322**	**Calculated Purge Volume (gal):**	**1.9812913**
Sample Date:	**4/22/2025**	**Start Purge Time:**	**14:30**
Sample Time:	**15:05**	**End Purge Time:**	**15:00**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**30**
Actual Purge Volume (gal):	**2**	**Casing Volumes Removed:**	**1.1135658**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	14:30	20.09	8.69	158.0	20	0.041	7.84
1	14:35	18.58	7.87	106.0	92	0.040	6.87
2	14:40	18.06	7.70	92.5	108	0.041	6.94
3	14:45	17.27	7.62	75.2	122	0.041	7.10
4	14:50	17.38	7.57	60.2	129	0.041	6.87
5	14:55	17.55	7.52	44.4	138	0.042	7.61
6	15:00	17.34	7.44	47.2	146	0.042	7.43
7							
8							
9							
10							
11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW003**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**

Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**21.1**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**28.37**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**7.27**	**Well Diameter (in):**	**1**
Standing Water Volume (gal):	**0.296484**	**Calculated Purge Volume (gal):**	**1.9812913**
Sample Date:	**4/22/2025**	**Start Purge Time:**	**13:20**
Sample Time:	**13:55**	**End Purge Time:**	**13:50**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**30**
Actual Purge Volume (gal):	**2**	**Casing Volumes Removed:**	**6.7457271**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	13:20	18.37	8.61	406.0	-73	0.259	2.75
1	13:25	15.41	8.50	157.0	-105	0.202	0.92
2	13:30	14.90	8.40	91.5	-100	0.198	0.73
3	13:35	15.71	8.33	83.1	-98	0.199	0.65
4	13:40	15.43	8.25	56.0	-93	0.202	0.64
5	13:45	15.64	8.24	40.9	-92	0.198	0.61
6	13:50	15.67	8.20	32.2	-91	0.199	0.59
7							
8							
9							
10							
11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW004MSMSD**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**
Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**16.2**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**24.49**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**8.29**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**1.3523258**	**Calculated Purge Volume (gal):**	**1.0566887**
Sample Date:	**4/22/2025**	**Start Purge Time:**	**9:10**
Sample Time:	**9:35**	**End Purge Time:**	**9:30**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**200**	**Purge Time (min):**	**20**
Actual Purge Volume (gal):	**1**	**Casing Volumes Removed:**	**0.7394668**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	9:10	12.59	9.26	162.0	109	0.105	6.93
1	9:15	12.71	8.93	96.6	119	0.105	6.64
2	9:20	12.82	8.77	67.3	111	0.106	6.55
3	9:25	12.81	8.64	52.9	108	0.106	6.49
4	9:30	12.81	8.55	46.6	99	0.105	6.27
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW005S**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**

Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**15.35**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**25.41**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**10.06**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**1.6410613**	**Calculated Purge Volume (gal):**	**2.3115065**
Sample Date:	**4/23/2025**	**Start Purge Time:**	**12:25**
Sample Time:	**13:05**	**End Purge Time:**	**13:00**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**35**
Actual Purge Volume (gal):	**2**	**Casing Volumes Removed:**	**1.2187236**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	12:25	19.56	8.03	333.0	83	0.745	9.63
1	12:30	18.52	7.90	138.0	124	0.739	9.54
2	12:35	16.45	7.84	110.0	138	0.753	6.07
3	12:40	15.31	7.87	89.2	138	0.758	5.00
4	12:45	15.16	7.79	94.5	153	0.738	4.90
5	12:50	14.73	7.74	76.5	160	0.737	4.90
6	12:55	14.56	7.71	66.2	164	0.735	4.93
7	13:00	14.82	7.69	51.3	168	0.726	4.97
8							
9							
10							
11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW005D**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**
Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**15.28**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**44.06**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**28.78**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**4.6948055**	**Calculated Purge Volume (gal):**	**1.6510761**
Sample Date:	**4/23/2025**	**Start Purge Time:**	**13:10**
Sample Time:	**13:40**	**End Purge Time:**	**13:35**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**25**
Actual Purge Volume (gal):	**1.5**	**Casing Volumes Removed:**	**0.3195021**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	13:10	17.24	8.07	9.3	117	0.067	5.75
1	13:15	15.65	7.32	7.5	192	0.056	5.20
2	13:20	15.64	7.06	12.0	216	0.055	5.13
3	13:25	15.47	6.96	8.2	225	0.056	5.07
4	13:30	15.47	6.90	8.9	230	0.056	5.01
5	13:35	15.63	6.84	11.3	234	0.055	5.11
6							
7							
8							
9							
10							
11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW006S**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**

Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**16.7**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**24.42**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**7.72**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**1.2593432**	**Calculated Purge Volume (gal):**	**2.3115065**
Sample Date:	**4/23/2025**	**Start Purge Time:**	**14:30**
Sample Time:	**15:10**	**End Purge Time:**	**15:05**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**35**
Actual Purge Volume (gal):	**2.25**	**Casing Volumes Removed:**	**1.7866456**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	14:30	20.19	7.82	79.5	153	0.620	7.02
1	14:35	19.26	7.87	67.8	165	0.658	6.47
2	14:40	18.06	7.87	46.6	174	0.688	6.46
3	14:45	17.26	7.86	40.8	178	0.726	6.48
4	14:50	16.63	7.85	31.8	179	0.754	7.07
5	14:55	16.86	7.84	37.9	181	0.857	7.03
6	15:00	17.65	7.82	31.9	183	0.817	6.47
7	15:05	17.90	7.82	26.4	184	0.807	6.54
8							
9							
10							
11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW006D**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**
Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**16.52**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**45.36**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**28.84**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**4.7045931**	**Calculated Purge Volume (gal):**	**1.3208609**
Sample Date:	**4/23/2025**	**Start Purge Time:**	**14:00**
Sample Time:	**14:25**	**End Purge Time:**	**14:20**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**20**
Actual Purge Volume (gal):	**1**	**Casing Volumes Removed:**	**0.2125582**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	14:00	20.31	7.73	22.0	149	0.125	4.18
1	14:05	19.12	7.56	18.8	183	0.125	2.46
2	14:10	18.74	7.52	17.3	191	0.126	2.35
3	14:15	18.56	7.52	17.9	191	0.128	2.21
4	14:20	18.65	7.52	21.3	192	0.128	2.28
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW007**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**

Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**16.25**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**26.71**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**10.46**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**1.7063122**	**Calculated Purge Volume (gal):**	**1.9812913**
Sample Date:	**4/24/2025**	**Start Purge Time:**	**7:35**
Sample Time:	**8:10**	**End Purge Time:**	**8:05**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**30**
Actual Purge Volume (gal):	**2**	**Casing Volumes Removed:**	**1.1721184**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	7:35	10.05	8.38	90.8	152	0.312	4.63
1	7:40	10.60	8.04	60.2	179	0.305	4.04
2	7:45	10.80	7.91	45.0	187	0.308	3.79
3	7:50	10.99	7.82	37.3	189	0.299	3.60
4	7:55	11.10	7.80	24.8	188	0.298	3.49
5	8:00	11.28	7.77	22.3	189	0.295	3.52
6	8:05	11.40	7.73	16.0	192	0.292	3.35
7							
8							
9							
10							
11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW008DUP001**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**
Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**16.9**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**24.52**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**7.62**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**1.2430305**	**Calculated Purge Volume (gal):**	**1.3208609**
Sample Date:	**4/22/2025**	**Start Purge Time:**	**10:10**
Sample Time:	**10:40**	**End Purge Time:**	**10:35**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**200**	**Purge Time (min):**	**25**
Actual Purge Volume (gal):	**1**	**Casing Volumes Removed:**	**0.8044855**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	10:10	14.38	8.62	41.8	138	0.122	5.76
1	10:15	13.09	8.11	26.0	185	0.124	4.85
2	10:20	13.38	7.90	21.8	201	0.123	4.52
3	10:25	13.48	7.84	19.2	206	0.123	4.53
4	10:30	13.66	7.77	22.0	212	0.121	4.65
5	10:35	13.74	7.73	24.2	214	0.120	4.68
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14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW009S**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**

Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**16.99**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**24.6**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**7.61**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**1.2413992**	**Calculated Purge Volume (gal):**	**1.5850331**
Sample Date:	**4/22/2025**	**Start Purge Time:**	**11:20**
Sample Time:	**11:55**	**End Purge Time:**	**11:50**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**200**	**Purge Time (min):**	**30**
Actual Purge Volume (gal):	**1.5**	**Casing Volumes Removed:**	**1.208314**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	11:20	17.72	8.13	1000.0	89	0.105	5.56
1	11:25	17.51	8.07	437.0	109	0.105	5.55
2	11:30	17.64	7.98	97.3	140	0.106	5.38
3	11:35	16.19	7.94	160.0	155	0.106	4.49
4	11:40	16.47	7.89	145.0	162	0.106	5.09
5	11:45	16.48	7.87	49.6	169	0.104	5.08
6	11:50	16.32	7.83	35.1	175	0.102	5.27
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14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

P.W. GROSSER CONSULTING, Inc

Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW009D**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**
Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**16.88**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**45.87**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**28.99**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**4.7290622**	**Calculated Purge Volume (gal):**	**1.9812913**
Sample Date:	**4/22/2025**	**Start Purge Time:**	**12:05**
Sample Time:	**12:40**	**End Purge Time:**	**12:35**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**30**
Actual Purge Volume (gal):	**2**	**Casing Volumes Removed:**	**0.4229168**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	12:05	15.27	8.54	14.0	112	0.043	9.78
1	12:10	14.38	8.24	39.3	153	0.043	9.31
2	12:15	14.48	8.06	10.2	187	0.043	9.90
3	12:20	14.78	7.93	10.9	207	0.043	10.42
4	12:25	14.48	7.89	11.0	216	0.044	10.33
5	12:30	15.34	7.84	9.6	223	0.045	10.18
6	12:35	15.63	7.88	9.9	223	0.045	10.05
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- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW010**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**

Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**4.95**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**14.9**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**9.95**	**Well Diameter (in):**	**1**
Standing Water Volume (gal):	**0.4057793**	**Calculated Purge Volume (gal):**	**2.7738079**
Sample Date:	**4/23/2025**	**Start Purge Time:**	**8:25**
Sample Time:	**9:10**	**End Purge Time:**	**9:00**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**300**	**Purge Time (min):**	**35**
Actual Purge Volume (gal):	**3**	**Casing Volumes Removed:**	**7.3931813**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	8:25	10.32	9.06	374.0	69	0.075	5.15
1	8:30	9.63	8.56	205.0	22	0.078	3.03
2	8:35	9.57	8.37	127.0	34	0.080	2.64
3	8:40	9.68	8.27	76.0	52	0.081	2.46
4	8:45	9.81	8.21	55.4	65	0.082	2.37
5	8:50	9.86	8.14	44.2	78	0.082	2.29
6	8:55	9.83	8.07	33.5	89	0.082	2.29
7	9:00	9.88	8.04	29.6	97	0.082	2.24
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12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW011**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**

Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**18.66**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**25.02**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**6.36**	**Well Diameter (in):**	**1**
Standing Water Volume (gal):	**0.2593725**	**Calculated Purge Volume (gal):**	**1.9812913**
Sample Date:	**4/23/2025**	**Start Purge Time:**	**11:15**
Sample Time:	**11:50**	**End Purge Time:**	**11:45**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**30**
Actual Purge Volume (gal):	**1.5**	**Casing Volumes Removed:**	**5.7831882**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	11:15	17.60	8.42	143.0	78	0.038	9.23
1	11:20	14.58	7.83	107.0	71	0.060	9.58
2	11:25	14.40	7.64	82.0	29	0.071	8.89
3	11:30	14.53	7.57	46.5	13	0.076	8.24
4	11:35	14.33	7.56	25.8	17	0.078	7.97
5	11:40	13.80	7.55	17.8	11	0.080	7.92
6	11:45	13.90	7.55	12.6	13	0.081	7.71
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12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW012S**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**

Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**15.87**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**24.36**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**8.49**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**1.3849513**	**Calculated Purge Volume (gal):**	**1.6510761**
Sample Date:	**4/23/2025**	**Start Purge Time:**	**9:30**
Sample Time:	**10:00**	**End Purge Time:**	**9:55**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**25**
Actual Purge Volume (gal):	**1.75**	**Casing Volumes Removed:**	**1.2635823**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	9:30	12.30	8.09	806.0	3	0.213	3.01
1	9:35	12.24	7.97	458.0	-44	0.220	0.00
2	9:40	12.60	7.95	287.0	-50	0.221	0.00
3	9:45	12.76	8.00	247.0	-55	0.220	0.00
4	9:50	12.91	8.02	180.0	-59	0.220	0.00
5	9:55	12.85	8.05	142.0	-62	0.221	0.00
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- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW012D**	**Sampled By:**	**KB + KM**
Site Address:	**676 Maple St Yaphank**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**

Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**15.83**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**45.77**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**29.94**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**4.8840332**	**Calculated Purge Volume (gal):**	**1.9812913**
Sample Date:	**4/23/2025**	**Start Purge Time:**	**10:05**
Sample Time:	**10:40**	**End Purge Time:**	**10:35**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**30**
Actual Purge Volume (gal):	**2**	**Casing Volumes Removed:**	**0.4094976**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	10:05	13.92	8.04	28.8	4	0.093	4.17
1	10:10	13.31	7.81	9.9	34	0.092	3.61
2	10:15	13.31	7.74	8.7	52	0.092	3.51
3	10:25	13.36	7.70	8.7	65	0.092	3.35
4	10:30	13.43	7.67	8.7	77	0.092	3.28
5	10:35	13.67	7.67	8.3	87	0.092	3.31
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11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW013**	**Sampled By:**	**KB + KM**
Site Address:	**Wertheim NWR**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**

Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**6**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**15.56**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**9.56**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**1.5594976**	**Calculated Purge Volume (gal):**	**1.3208609**
Sample Date:	**4/24/2025**	**Start Purge Time:**	**8:55**
Sample Time:	**9:20**	**End Purge Time:**	**9:15**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**20**
Actual Purge Volume (gal):	**1.5**	**Casing Volumes Removed:**	**0.9618482**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	8:55	11.42	7.69	121.0	146	0.064	0.25
1	9:00	11.24	7.05	74.9	189	0.061	0.00
2	9:05	11.12	6.95	41.0	194	0.061	0.00
3	9:10	11.41	6.91	30.8	194	0.060	0.00
4	9:15	11.68	6.87	22.6	194	0.060	0.00
5							
6							
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9							
10							
11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW014S**	**Sampled By:**	**KB + KM**
Site Address:	**15 Private Rd**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**
Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**14.36**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**25.34**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**10.98**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**1.7911384**	**Calculated Purge Volume (gal):**	**1.6510761**
Sample Date:	**4/24/2025**	**Start Purge Time:**	**9:50**
Sample Time:	**10:20**	**End Purge Time:**	**10:15**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**25**
Actual Purge Volume (gal):	**1.5**	**Casing Volumes Removed:**	**0.8374562**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	9:50	16.79	7.34	121.0	182	0.234	2.23
1	9:55	16.15	7.28	60.0	208	0.235	4.00
2	10:00	14.43	7.26	29.8	212	0.245	0.00
3	10:05	14.27	7.25	16.1	214	0.246	0.00
4	10:10	14.28	7.25	10.5	214	0.244	0.00
5	10:15	14.40	7.25	7.5	215	0.243	0.00
6							
7							
8							
9							
10							
11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW014D**	**Sampled By:**	**KB + KM**
Site Address:	**15 Private Rd**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**

Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**12.42**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**90.29**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**77.87**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**12.702728**	**Calculated Purge Volume (gal):**	**2.6417218**
Sample Date:	**4/24/2025**	**Start Purge Time:**	**10:45**
Sample Time:	**11:30**	**End Purge Time:**	**11:25**
Purge Method:	**Bladder Pump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**40**
Actual Purge Volume (gal):	**2.5**	**Casing Volumes Removed:**	**0.1968081**
Sample Appearance:	**Turbid**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	10:45	16.30	7.74	723.0	180	0.144	2.71
1	10:50	14.50	7.69	1000.0	100	0.129	0.25
2	10:55	14.40	7.66	1000.0	55	0.111	0.00
3	11:00	15.70	7.56	1000.0	83	0.147	0.53
4	11:05	16.51	7.57	408.0	99	0.149	0.68
5	11:10	17.01	7.60	817.0	110	0.150	0.74
6	11:15	17.22	7.61	698.0	119	0.150	0.81
7	11:20	17.70	7.62	682.0	123	0.150	0.80
8	11:25	17.85	7.63	670.0	127	0.149	0.87
9							
10							
11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

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Groundwater Monitoring Well - Low Flow Sampling Log

Well Designation:	**MW017**	**Sampled By:**	**KB + KM**
Site Address:	**15 Private Rd**	**Project Manager:**	**AL**
Project Name:	**Firematics**	**Project Number:**	**SHD2503**

Reference Elevation (ft):		**Well Use:**	**Monitoring**
Depth to Product (ft):		**Product Elevation (ft):**	**NA**
Depth to Water (ft):	**12.4**	**Groundwater Elevation (ft):**	**NA**
Depth to Bottom (ft):	**19.66**	**Bottom Elevation (ft):**	**NA**
Height of Water Column (ft):	**7.26**	**Well Diameter (in):**	**2**
Standing Water Volume (gal):	**1.1843046**	**Calculated Purge Volume (gal):**	**1.9812913**
Sample Date:	**4/24/2025**	**Start Purge Time:**	**12:10**
Sample Time:	**12:45**	**End Purge Time:**	**12:40**
Purge Method:	**PeriPump**	**Sample Method:**	**Low Flow**
Purge Rate (mL/min):	**250**	**Purge Time (min):**	**30**
Actual Purge Volume (gal):	**2**	**Casing Volumes Removed:**	**1.6887547**
Sample Appearance:	**Clear**	**Odors Observed:**	**None**
Analytical Laboratory:	**SGS**	**Notes:**	
Date Shipped:	**4/25/2025**		
Analyses Requested: PFAS (EPA1633)			

Field Indicator Parameters

Interval	Time	Temp. (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Initial	12:10	17.66	7.70	226.0	151	0.208	3.83
1	12:15	13.50	7.42	51.0	168	0.233	0.00
2	12:20	13.45	7.25	25.3	173	0.229	0.00
3	12:25	13.52	7.14	26.0	170	0.225	0.00
4	12:30	13.40	7.16	31.1	162	0.220	0.00
5	12:35	13.43	7.15	7.8	166	0.218	0.00
6	12:40	13.46	7.15	2.4	170	0.213	0.00
7							
8							
9							
10							
11							
12							
13							
14							

- Take readings every 5 minutes until well stabilized
- Flow Rate - between 200-500 mL/min
- NM = Not Measured
- Stabilized Parameters

Temperature: ±3% **pH**: ±0.1
Turbidity: ±10% **ORP**: ±10 mV
Conductivity: ±3% **DO**: ±10%

APPENDIX B

P.W. GROSSER CONSULTING, INC • P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, PC
631.589.6353 • WWW.PWGROSSER.COM • PWGC.INFO@PWGROSSER.COM
BOHEMIA • MANHATTAN • SARATOGA SPRINGS • MONTICELLO, NY • SYRACUSE • SHELTON, CT

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

PW Grosser Consulting

Firematics, 676 Maple St, Yaphank, NY

SHD2503

SGS Job Number: JE10205

Sampling Dates: 04/22/25 - 04/24/25

Report to:

PW Grosser Consulting
630 Johnson Avenue #7
Bohemia, NY 11716
kbenz@pwgrosser.com

ATTN: Kylie Benz

Total number of pages in report: 2757

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Olga Azarian
Technical Director

Client Service contact: Marie Meidhof 732-329-0200
Certifications: NJ(12129),NY(10983),CA,CO,CT,FL,HI,IL,IN,KY,LA (120428),MA,MD,ME,MN,NC,NH,NV, AK (UST-103),AZ (AZ0786),PA(68-00408),RI,SC,TX (T104704234),UT,VA,WA,WV

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Sample Summary

PW Grosser Consulting

Job No: JE10205

Firematics, 676 Maple St, Yaphank, NY
Project No: SHD2503

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JE10205-1	04/22/25	09:35	KB	04/25/25	AQ	Ground Water	MW004
JE10205-1D	04/22/25	09:35	KB	04/25/25	AQ	Water Dup/MSD	MW004/MSD
JE10205-1S	04/22/25	09:35	KB	04/25/25	AQ	Water Matrix Spike	MW004/MS
JE10205-2	04/22/25	10:40	KB	04/25/25	AQ	Ground Water	MW008
JE10205-3	04/22/25	11:55	KB	04/25/25	AQ	Ground Water	MW009S
JE10205-4	04/22/25	12:40	KB	04/25/25	AQ	Ground Water	MW009D
JE10205-5	04/22/25	00:00	KB	04/25/25	AQ	Ground Water	DUP001
JE10205-6	04/22/25	13:55	KB	04/25/25	AQ	Ground Water	MW003
JE10205-7	04/22/25	14:25	KB	04/25/25	AQ	Field Blank Water	FIELD BLANK
JE10205-8	04/22/25	15:05	KB	04/25/25	AQ	Ground Water	MW002
JE10205-9	04/23/25	09:10	KB	04/25/25	AQ	Ground Water	MW010
JE10205-10	04/23/25	10:00	KB	04/25/25	AQ	Ground Water	MW012S

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Sample Summary
(continued)

PW Grosser Consulting

Job No: JE10205

Firematics, 676 Maple St, Yaphank, NY
Project No: SHD2503

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JE10205-11	04/23/25	10:40	KB	04/25/25	AQ	Ground Water	MW012D
JE10205-12	04/23/25	11:50	KB	04/25/25	AQ	Ground Water	MW011
JE10205-13	04/23/25	13:05	KB	04/25/25	AQ	Ground Water	MW005S
JE10205-14	04/23/25	13:40	KB	04/25/25	AQ	Ground Water	MW005D
JE10205-15	04/23/25	15:10	KB	04/25/25	AQ	Ground Water	MW006S
JE10205-16	04/23/25	14:25	KB	04/25/25	AQ	Ground Water	MW006D
JE10205-17	04/24/25	08:10	KB	04/25/25	AQ	Ground Water	MW007
JE10205-18	04/24/25	09:20	KB	04/25/25	AQ	Ground Water	MW013
JE10205-19	04/24/25	10:20	KB	04/25/25	AQ	Ground Water	MW014S
JE10205-20	04/24/25	11:30	KB	04/25/25	AQ	Ground Water	MW014D
JE10205-21	04/24/25	12:45	KB	04/25/25	AQ	Ground Water	MW017

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: PW Grosser Consulting **Job No:** JE10205

Site: Firematics, 676 Maple St, Yaphank, NY **Report Date** 5/16/2025 10:50:19 A

On 04/25/2025, 20 sample(s), 0 Trip Blank(s), 0 Equip. Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. (SGS) at a temperature of 2.4 °C. The samples were intact and properly preserved, unless noted below. An SGS Job Number of JE10205 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Semi-volatiles By Method EPA 1633

Matrix: AQ **Batch ID:** OP63161

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) JE10205-1MS, JE10205-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- The matrix spike (MS) recovery(s) of Perfluorobutanoic acid are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- The matrix spike duplicate (MSD) recovery(s) of Perfluorobutanoic acid are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- The matrix spike (MS) recovery(s) of 6:2 Fluorotelomer sulfonate, Perfluoroheptanesulfonic acid, Perfluoroheptanoic acid, Perfluorohexanesulfonic acid, Perfluorohexanoic acid, Perfluorononanoic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid, Perfluoropentanoic acid are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JE10205-3: Diluted due to high concentration of target compound.
- JE10205-2 for EtFOSE: Associated EIS outside control limits.
- JE10205-4 for PFOSA: Associated CCV outside control limits high, sample was ND. Associated CCV outside of control limits high, sample was ND.
- JE10205-2 for EtFOSAA: Associated EIS outside control limits.
- JE10205-2 for MeFOSA: Associated EIS outside control limits.
- JE10205-2 for d7-MeFOSE: Outside control limits.
- JE10205-10 for 13C2-4:2FTS: Outside control limits.
- JE10205-10 for 4:2 Fluorotelomer sulfonate: Associated EIS outside control limits.
- JE10205-5 for 13C8-FOSA: Outside control limits.
- JE10205-2 for EtFOSA: Associated EIS outside control limits.
- JE10205-2 for d9-EtFOSE: Outside control limits.
- JE10205-2 for MeFOSE: Associated EIS outside control limits.
- JE10205-2 for d5-EtFOSAA: Outside control limits.
- JE10205-2 for d5-EtFOSA: Outside control limits.
- JE10205-2 for d3-MeFOSA: Outside control limits.
- JE10205-2 for 13C8-FOSA: Outside control limits.
- JE10205-2 for PFOSA: Associated EIS outside control limits.
- JE10205-5 for PFOSA: Associated EIS outside control limits.

Matrix: AQ **Batch ID:** OP63163

MS Semi-volatiles By Method EPA 1633

Matrix: AQ **Batch ID:** OP63163

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JE10205-15: Diluted due to high concentration of target compound.
- JE10205-13: Diluted due to high concentration of target compound.
- JE10205-20 for PFOSA: Associated EIS outside control limits.
- JE10205-20 for Perfluorohexanesulfonic acid: Associated EIS outside control limits.
- JE10205-16 for PFOSA: Associated CCV outside control limits high, sample was ND. Associated CCV outside of control limits high, sample was ND.
- JE10205-20 for 13C8-PFOS: Outside control limits.
- JE10205-20 for 13C8-FOSA: Outside control limits.
- JE10205-20 for 13C6-PFDA: Outside control limits.
- JE10205-20 for Perfluorononanesulfonic acid: Associated EIS outside control limits.
- JE10205-20 for Perfluorooctanesulfonic acid: Associated EIS outside control limits.
- JE10205-20 for Perfluoroheptanesulfonic acid: Associated EIS outside control limits.
- JE10205-20 for Perfluorododecanesulfonic acid: Associated EIS outside control limits.
- JE10205-20 for Perfluorodecanoic acid: Associated EIS outside control limits.
- JE10205-20 for 13C3-PFHxS: Outside control limits.

Matrix: AQ **Batch ID:** OP63419

- The data for EPA 1633 meets quality control requirements.
- JE10205-20: Confirmation run.

Matrix: AQ **Batch ID:** OP63534

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

SGS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting SGS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by SGS indicated via signature on the report cover.

Summary of Hits

Job Number: JE10205
Account: PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Collected: 04/22/25 thru 04/24/25

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JE10205-1	**MW004**					
Perfluorobutanoic acid		0.289	0.0082	0.00095	ug/l	EPA 1633
Perfluoropentanoic acid		1.39	0.082	0.015	ug/l	EPA 1633
Perfluorohexanoic acid		1.06	0.041	0.0060	ug/l	EPA 1633
Perfluoroheptanoic acid		0.338	0.0021	0.00051	ug/l	EPA 1633
Perfluorooctanoic acid		0.223	0.0021	0.00077	ug/l	EPA 1633
Perfluorononanoic acid		1.77	0.041	0.0082	ug/l	EPA 1633
Perfluorodecanoic acid		0.0229	0.0021	0.00064	ug/l	EPA 1633
Perfluoroundecanoic acid		0.0287	0.0021	0.00056	ug/l	EPA 1633
Perfluorotridecanoic acid		0.00082 J	0.0021	0.00081	ug/l	EPA 1633
Perfluorobutanesulfonic acid		0.0406	0.0021	0.00068	ug/l	EPA 1633
Perfluoropentanesulfonic acid		0.0684	0.0021	0.0010	ug/l	EPA 1633
Perfluorohexanesulfonic acid		0.569	0.041	0.023	ug/l	EPA 1633
Perfluoroheptanesulfonic acid		0.0541	0.0021	0.0010	ug/l	EPA 1633
Perfluorooctanesulfonic acid		4.43	0.041	0.0088	ug/l	EPA 1633
4:2 Fluorotelomer sulfonate		0.0052 J	0.0082	0.0023	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate		1.72	0.0082	0.00093	ug/l	EPA 1633
8:2 Fluorotelomer sulfonate		0.199	0.0082	0.0015	ug/l	EPA 1633
PFOSA		0.0111	0.0021	0.00071	ug/l	EPA 1633
3:3 Fluorotelomer carboxylate		0.0045 J	0.010	0.0025	ug/l	EPA 1633
JE10205-2	**MW008**					
Perfluorobutanoic acid		0.131	0.0082	0.00095	ug/l	EPA 1633
Perfluoropentanoic acid		0.409	0.0041	0.00075	ug/l	EPA 1633
Perfluorohexanoic acid		0.602	0.0021	0.00030	ug/l	EPA 1633
Perfluoroheptanoic acid		0.411	0.0021	0.00051	ug/l	EPA 1633
Perfluorooctanoic acid		1.35	0.081	0.030	ug/l	EPA 1633
Perfluorononanoic acid		2.47	0.081	0.016	ug/l	EPA 1633
Perfluorodecanoic acid		0.0222	0.0021	0.00064	ug/l	EPA 1633
Perfluoroundecanoic acid		0.0484	0.0021	0.00056	ug/l	EPA 1633
Perfluorobutanesulfonic acid		0.0471	0.0021	0.00068	ug/l	EPA 1633
Perfluoropentanesulfonic acid		0.0938	0.0021	0.0010	ug/l	EPA 1633
Perfluorohexanesulfonic acid		4.05	0.081	0.045	ug/l	EPA 1633
Perfluoroheptanesulfonic acid		0.198	0.0021	0.0010	ug/l	EPA 1633
Perfluorooctanesulfonic acid		13.2	0.081	0.017	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate		0.326	0.0082	0.00093	ug/l	EPA 1633
8:2 Fluorotelomer sulfonate		0.299	0.0082	0.0015	ug/l	EPA 1633
PFOSA [a]		0.0048	0.0021	0.00071	ug/l	EPA 1633
JE10205-3	**MW009S**					
Perfluorobutanoic acid		0.0794	0.0083	0.00097	ug/l	EPA 1633
Perfluoropentanoic acid		0.310	0.0042	0.00076	ug/l	EPA 1633

Summary of Hits

Job Number: JE10205
Account: PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Collected: 04/22/25 thru 04/24/25

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Perfluorohexanoic acid		0.364	0.0021	0.00030	ug/l	EPA 1633
Perfluoroheptanoic acid		0.150	0.0021	0.00052	ug/l	EPA 1633
Perfluorooctanoic acid		0.189	0.0021	0.00078	ug/l	EPA 1633
Perfluorononanoic acid		0.291	0.0021	0.00042	ug/l	EPA 1633
Perfluorodecanoic acid		0.0070	0.0021	0.00064	ug/l	EPA 1633
Perfluoroundecanoic acid		0.0126	0.0021	0.00057	ug/l	EPA 1633
Perfluorobutanesulfonic acid		0.0428	0.0021	0.00069	ug/l	EPA 1633
Perfluoropentanesulfonic acid		0.0602	0.0021	0.0010	ug/l	EPA 1633
Perfluorohexanesulfonic acid [b]		0.825	0.042	0.023	ug/l	EPA 1633
Perfluoroheptanesulfonic acid		0.0660	0.0021	0.0010	ug/l	EPA 1633
Perfluorooctanesulfonic acid [b]		8.91	0.042	0.0089	ug/l	EPA 1633
Perfluorononanesulfonic acid		0.0019 J	0.0021	0.0015	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate		0.528	0.0083	0.00095	ug/l	EPA 1633
8:2 Fluorotelomer sulfonate		0.0610	0.0083	0.0015	ug/l	EPA 1633
PFOSA		0.0057	0.0021	0.00072	ug/l	EPA 1633
JE10205-4	**MW009D**					
Perfluorooctanesulfonic acid		0.0023	0.0021	0.00045	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate		0.0151	0.0083	0.00094	ug/l	EPA 1633
JE10205-5	**DUP001**					
Perfluorobutanoic acid		0.125	0.0083	0.00097	ug/l	EPA 1633
Perfluoropentanoic acid		0.392	0.0042	0.00076	ug/l	EPA 1633
Perfluorohexanoic acid		0.566	0.0021	0.00030	ug/l	EPA 1633
Perfluoroheptanoic acid		0.380	0.0021	0.00052	ug/l	EPA 1633
Perfluorooctanoic acid		1.30	0.077	0.029	ug/l	EPA 1633
Perfluorononanoic acid		2.46	0.077	0.015	ug/l	EPA 1633
Perfluorodecanoic acid		0.0213	0.0021	0.00064	ug/l	EPA 1633
Perfluoroundecanoic acid		0.0493	0.0021	0.00057	ug/l	EPA 1633
Perfluorobutanesulfonic acid		0.0441	0.0021	0.00069	ug/l	EPA 1633
Perfluoropentanesulfonic acid		0.0884	0.0021	0.0010	ug/l	EPA 1633
Perfluorohexanesulfonic acid		3.85	0.077	0.043	ug/l	EPA 1633
Perfluoroheptanesulfonic acid		0.176	0.0021	0.0010	ug/l	EPA 1633
Perfluorooctanesulfonic acid		13.9	0.077	0.017	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate		0.323	0.0083	0.00095	ug/l	EPA 1633
8:2 Fluorotelomer sulfonate		0.287	0.0083	0.0015	ug/l	EPA 1633
PFOSA [a]		0.0048	0.0021	0.00072	ug/l	EPA 1633
JE10205-6	**MW003**					
Perfluorobutanoic acid		0.0399	0.0084	0.00097	ug/l	EPA 1633
Perfluoropentanoic acid		0.124	0.0042	0.00077	ug/l	EPA 1633
Perfluorohexanoic acid		0.0581	0.0021	0.00030	ug/l	EPA 1633

Summary of Hits

Job Number: JE10205
Account: PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Collected: 04/22/25 thru 04/24/25

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Perfluoroheptanoic acid		0.0150	0.0021	0.00052	ug/l	EPA 1633
Perfluorooctanoic acid		0.0778	0.0021	0.00079	ug/l	EPA 1633
Perfluorononanoic acid		0.0050	0.0021	0.00042	ug/l	EPA 1633
Perfluorobutanesulfonic acid		0.0060	0.0021	0.00069	ug/l	EPA 1633
Perfluorohexanesulfonic acid		0.0056	0.0021	0.0012	ug/l	EPA 1633
Perfluorooctanesulfonic acid		0.0092	0.0021	0.00045	ug/l	EPA 1633
MeFOSAA		0.0032	0.0021	0.00053	ug/l	EPA 1633
JE10205-7	**FIELD BLANK**					
No hits reported in this sample.						
JE10205-8	**MW002**					
Perfluorononanoic acid		0.0014 J	0.0020	0.00041	ug/l	EPA 1633
Perfluorohexanesulfonic acid		0.0031	0.0020	0.0011	ug/l	EPA 1633
Perfluorooctanesulfonic acid		0.0011 J	0.0020	0.00044	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate		0.0109	0.0081	0.00092	ug/l	EPA 1633
JE10205-9	**MW010**					
Perfluorobutanoic acid		0.116	0.0086	0.0010	ug/l	EPA 1633
Perfluoropentanoic acid		0.449	0.0043	0.00078	ug/l	EPA 1633
Perfluorohexanoic acid		0.230	0.0021	0.00031	ug/l	EPA 1633
Perfluoroheptanoic acid		0.191	0.0021	0.00054	ug/l	EPA 1633
Perfluorooctanoic acid		0.250	0.0021	0.00080	ug/l	EPA 1633
Perfluorononanoic acid		0.0800	0.0021	0.00043	ug/l	EPA 1633
Perfluorodecanoic acid		0.257	0.0021	0.00067	ug/l	EPA 1633
Perfluoroundecanoic acid		0.0602	0.0021	0.00059	ug/l	EPA 1633
Perfluorododecanoic acid		0.0218	0.0021	0.00083	ug/l	EPA 1633
Perfluorotridecanoic acid		0.0583	0.0021	0.00085	ug/l	EPA 1633
Perfluorotetradecanoic acid		0.0018 J	0.0021	0.00082	ug/l	EPA 1633
Perfluorobutanesulfonic acid		0.0029	0.0021	0.00071	ug/l	EPA 1633
Perfluoropentanesulfonic acid		0.0030	0.0021	0.0011	ug/l	EPA 1633
Perfluorohexanesulfonic acid		0.0358	0.0021	0.0012	ug/l	EPA 1633
Perfluorooctanesulfonic acid		0.116	0.0021	0.00046	ug/l	EPA 1633
Perfluorododecanesulfonic acid		0.00047 J	0.0021	0.00043	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate		0.553	0.0086	0.00098	ug/l	EPA 1633
8:2 Fluorotelomer sulfonate		1.75	0.086	0.016	ug/l	EPA 1633
PFOSA		0.0526	0.0021	0.00074	ug/l	EPA 1633
EtFOSAA		0.0015 J	0.0021	0.00098	ug/l	EPA 1633
JE10205-10	**MW012S**					
Perfluorobutanoic acid		0.0416	0.0087	0.0010	ug/l	EPA 1633

Summary of Hits

Job Number: JE10205
Account: PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Collected: 04/22/25 thru 04/24/25

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
Perfluoropentanoic acid	0.0987	0.0043	0.00079	ug/l	EPA 1633
Perfluorohexanoic acid	0.0882	0.0022	0.00031	ug/l	EPA 1633
Perfluoroheptanoic acid	0.0456	0.0022	0.00054	ug/l	EPA 1633
Perfluorooctanoic acid	0.0588	0.0022	0.00081	ug/l	EPA 1633
Perfluorononanoic acid	0.0967	0.0022	0.00043	ug/l	EPA 1633
Perfluorodecanoic acid	0.0051	0.0022	0.00067	ug/l	EPA 1633
Perfluoroundecanoic acid	0.0046	0.0022	0.00060	ug/l	EPA 1633
Perfluorobutanesulfonic acid	0.0165	0.0022	0.00072	ug/l	EPA 1633
Perfluoropentanesulfonic acid	0.0216	0.0022	0.0011	ug/l	EPA 1633
Perfluorohexanesulfonic acid	0.317	0.0022	0.0012	ug/l	EPA 1633
Perfluoroheptanesulfonic acid	0.0078	0.0022	0.0011	ug/l	EPA 1633
Perfluorooctanesulfonic acid	1.34	0.011	0.0023	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate	0.0037 J	0.0087	0.00099	ug/l	EPA 1633
PFOSA	0.0158	0.0022	0.00075	ug/l	EPA 1633
JE10205-11 MW012D					
Perfluorobutanoic acid	0.0097	0.0080	0.00093	ug/l	EPA 1633
Perfluoropentanoic acid	0.0094	0.0040	0.00073	ug/l	EPA 1633
Perfluorohexanoic acid	0.0086	0.0020	0.00029	ug/l	EPA 1633
Perfluoroheptanoic acid	0.0138	0.0020	0.00050	ug/l	EPA 1633
Perfluorooctanoic acid	0.0162	0.0020	0.00075	ug/l	EPA 1633
Perfluorononanoic acid	0.0036	0.0020	0.00040	ug/l	EPA 1633
Perfluorobutanesulfonic acid	0.0079	0.0020	0.00066	ug/l	EPA 1633
Perfluoropentanesulfonic acid	0.0090	0.0020	0.0010	ug/l	EPA 1633
Perfluorohexanesulfonic acid	0.111	0.0020	0.0011	ug/l	EPA 1633
Perfluoroheptanesulfonic acid	0.0024	0.0020	0.00098	ug/l	EPA 1633
Perfluorooctanesulfonic acid	0.116	0.0020	0.00043	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate	0.0118	0.0080	0.00091	ug/l	EPA 1633
JE10205-12 MW011					
Perfluorobutanoic acid	0.0242	0.0077	0.00089	ug/l	EPA 1633
Perfluoropentanoic acid	0.0658	0.0038	0.00070	ug/l	EPA 1633
Perfluorohexanoic acid	0.0478	0.0019	0.00028	ug/l	EPA 1633
Perfluoroheptanoic acid	0.0349	0.0019	0.00048	ug/l	EPA 1633
Perfluorooctanoic acid	0.0418	0.0019	0.00072	ug/l	EPA 1633
Perfluorononanoic acid	0.0245	0.0019	0.00038	ug/l	EPA 1633
Perfluorodecanoic acid	0.0015 J	0.0019	0.00060	ug/l	EPA 1633
Perfluoroundecanoic acid	0.0078	0.0019	0.00053	ug/l	EPA 1633
Perfluorobutanesulfonic acid	0.0040	0.0019	0.00063	ug/l	EPA 1633
Perfluoropentanesulfonic acid	0.0039	0.0019	0.00097	ug/l	EPA 1633
Perfluorohexanesulfonic acid	0.0784	0.0019	0.0011	ug/l	EPA 1633
Perfluoroheptanesulfonic acid	0.0017 J	0.0019	0.00094	ug/l	EPA 1633
Perfluorooctanesulfonic acid	0.233	0.0019	0.00041	ug/l	EPA 1633

Summary of Hits

Job Number: JE10205
Account: PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Collected: 04/22/25 thru 04/24/25

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
6:2 Fluorotelomer sulfonate		0.0049 J	0.0077	0.00087	ug/l	EPA 1633
PFOSA		0.0066	0.0019	0.00066	ug/l	EPA 1633
JE10205-13	**MW005S**					
Perfluorobutanoic acid		0.0766	0.0079	0.00092	ug/l	EPA 1633
Perfluoropentanoic acid		0.261	0.0040	0.00072	ug/l	EPA 1633
Perfluorohexanoic acid		0.294	0.0020	0.00029	ug/l	EPA 1633
Perfluoroheptanoic acid		0.106	0.0020	0.00049	ug/l	EPA 1633
Perfluorooctanoic acid		0.154	0.0020	0.00074	ug/l	EPA 1633
Perfluorononanoic acid		0.125	0.0020	0.00040	ug/l	EPA 1633
Perfluorodecanoic acid		0.0025	0.0020	0.00061	ug/l	EPA 1633
Perfluorobutanesulfonic acid		0.0945	0.0020	0.00065	ug/l	EPA 1633
Perfluoropentanesulfonic acid		0.129	0.0020	0.0010	ug/l	EPA 1633
Perfluorohexanesulfonic acid [b]		1.72	0.020	0.011	ug/l	EPA 1633
Perfluoroheptanesulfonic acid		0.0278	0.0020	0.00097	ug/l	EPA 1633
Perfluorooctanesulfonic acid [b]		3.03	0.020	0.0042	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate		0.114	0.0079	0.00090	ug/l	EPA 1633
8:2 Fluorotelomer sulfonate		0.0026 J	0.0079	0.0014	ug/l	EPA 1633
PFOSA		0.00084 J	0.0020	0.00068	ug/l	EPA 1633
JE10205-14	**MW005D**					
Perfluorobutanoic acid		0.0070 J	0.0078	0.00090	ug/l	EPA 1633
Perfluoropentanoic acid		0.0224	0.0039	0.00071	ug/l	EPA 1633
Perfluorohexanoic acid		0.0307	0.0019	0.00028	ug/l	EPA 1633
Perfluoroheptanoic acid		0.0072	0.0019	0.00049	ug/l	EPA 1633
Perfluorooctanoic acid		0.0120	0.0019	0.00073	ug/l	EPA 1633
Perfluorononanoic acid		0.0040	0.0019	0.00039	ug/l	EPA 1633
Perfluorobutanesulfonic acid		0.0130	0.0019	0.00064	ug/l	EPA 1633
Perfluoropentanesulfonic acid		0.0115	0.0019	0.00098	ug/l	EPA 1633
Perfluorohexanesulfonic acid		0.0688	0.0019	0.0011	ug/l	EPA 1633
Perfluorooctanesulfonic acid		0.0714	0.0019	0.00042	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate		0.0055 J	0.0078	0.00088	ug/l	EPA 1633
JE10205-15	**MW006S**					
Perfluorobutanoic acid		0.362	0.0080	0.00092	ug/l	EPA 1633
Perfluoropentanoic acid [b]		1.48	0.080	0.015	ug/l	EPA 1633
Perfluorohexanoic acid [b]		0.922	0.040	0.0058	ug/l	EPA 1633
Perfluoroheptanoic acid		0.572	0.0020	0.00050	ug/l	EPA 1633
Perfluorooctanoic acid [b]		0.980	0.040	0.015	ug/l	EPA 1633
Perfluorononanoic acid [b]		1.94	0.040	0.0080	ug/l	EPA 1633
Perfluorodecanoic acid		0.0163	0.0020	0.00062	ug/l	EPA 1633
Perfluoroundecanoic acid		0.0159	0.0020	0.00055	ug/l	EPA 1633

Summary of Hits

Job Number: JE10205
Account: PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Collected: 04/22/25 thru 04/24/25

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Perfluorobutanesulfonic acid		0.0168	0.0020	0.00066	ug/l	EPA 1633
Perfluoropentanesulfonic acid		0.0269	0.0020	0.0010	ug/l	EPA 1633
Perfluorohexanesulfonic acid		0.512	0.0020	0.0011	ug/l	EPA 1633
Perfluoroheptanesulfonic acid		0.0309	0.0020	0.00097	ug/l	EPA 1633
Perfluorooctanesulfonic acid [b]		5.94	0.040	0.0085	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate [b]		3.21	0.16	0.018	ug/l	EPA 1633
8:2 Fluorotelomer sulfonate		0.0928	0.0080	0.0014	ug/l	EPA 1633
PFOSA		0.0029	0.0020	0.00069	ug/l	EPA 1633
JE10205-16	**MW006D**					
Perfluorobutanoic acid		0.0034 J	0.0080	0.00093	ug/l	EPA 1633
Perfluoropentanoic acid		0.0060	0.0040	0.00073	ug/l	EPA 1633
Perfluorohexanoic acid		0.0049	0.0020	0.00029	ug/l	EPA 1633
Perfluoroheptanoic acid		0.0034	0.0020	0.00050	ug/l	EPA 1633
Perfluorooctanoic acid		0.0111	0.0020	0.00075	ug/l	EPA 1633
Perfluorononanoic acid		0.0063	0.0020	0.00040	ug/l	EPA 1633
Perfluorobutanesulfonic acid		0.00073 J	0.0020	0.00066	ug/l	EPA 1633
Perfluorohexanesulfonic acid		0.0134	0.0020	0.0011	ug/l	EPA 1633
Perfluorooctanesulfonic acid		0.0493	0.0020	0.00043	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate		0.0230	0.0080	0.00091	ug/l	EPA 1633
JE10205-17	**MW007**					
Perfluorobutanoic acid		0.0024 J	0.0082	0.00095	ug/l	EPA 1633
Perfluoropentanoic acid		0.0033 J	0.0041	0.00075	ug/l	EPA 1633
Perfluorohexanoic acid		0.0038	0.0020	0.00030	ug/l	EPA 1633
Perfluoroheptanoic acid		0.0037	0.0020	0.00051	ug/l	EPA 1633
Perfluorooctanoic acid		0.0052	0.0020	0.00077	ug/l	EPA 1633
Perfluorononanoic acid		0.0017 J	0.0020	0.00041	ug/l	EPA 1633
Perfluorobutanesulfonic acid		0.00099 J	0.0020	0.00067	ug/l	EPA 1633
Perfluorohexanesulfonic acid		0.0036	0.0020	0.0011	ug/l	EPA 1633
Perfluorooctanesulfonic acid		0.0111	0.0020	0.00044	ug/l	EPA 1633
JE10205-18	**MW013**					
No hits reported in this sample.						
JE10205-19	**MW014S**					
Perfluorobutanoic acid		0.0029 J	0.0081	0.00094	ug/l	EPA 1633
Perfluoropentanoic acid		0.0066	0.0040	0.00074	ug/l	EPA 1633
Perfluorohexanoic acid		0.0045	0.0020	0.00029	ug/l	EPA 1633
Perfluoroheptanoic acid		0.0031	0.0020	0.00051	ug/l	EPA 1633
Perfluorooctanoic acid		0.0058	0.0020	0.00076	ug/l	EPA 1633

Summary of Hits

Job Number: JE10205
Account: PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Collected: 04/22/25 thru 04/24/25

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Perfluorononanoic acid		0.0025	0.0020	0.00040	ug/l	EPA 1633
Perfluoroundecanoic acid		0.0022	0.0020	0.00056	ug/l	EPA 1633
Perfluorobutanesulfonic acid		0.0045	0.0020	0.00067	ug/l	EPA 1633
Perfluoropentanesulfonic acid		0.0013 J	0.0020	0.0010	ug/l	EPA 1633
Perfluorohexanesulfonic acid		0.0151	0.0020	0.0011	ug/l	EPA 1633
Perfluorooctanesulfonic acid		0.0284	0.0020	0.00043	ug/l	EPA 1633
JE10205-20	**MW014D**					
Perfluoropentanoic acid		0.0038	0.0038	0.00070	ug/l	EPA 1633
Perfluorohexanoic acid		0.0026	0.0019	0.00028	ug/l	EPA 1633
Perfluoroheptanoic acid		0.0014 J	0.0019	0.00048	ug/l	EPA 1633
Perfluorooctanoic acid		0.0020	0.0019	0.00072	ug/l	EPA 1633
Perfluorononanoic acid		0.0014 J	0.0019	0.00038	ug/l	EPA 1633
Perfluoroundecanoic acid		0.00098 J	0.0019	0.00053	ug/l	EPA 1633
Perfluorobutanesulfonic acid		0.0018 J	0.0019	0.00063	ug/l	EPA 1633
Perfluorohexanesulfonic acid [a]		0.0067	0.0019	0.0011	ug/l	EPA 1633
Perfluorooctanesulfonic acid [a]		0.0150	0.0019	0.00041	ug/l	EPA 1633
6:2 Fluorotelomer sulfonate		0.0223	0.0077	0.00087	ug/l	EPA 1633
JE10205-21	**MW017**					
Perfluoropentanoic acid		0.00088 J	0.0039	0.00072	ug/l	EPA 1633
Perfluorohexanoic acid		0.0012 J	0.0020	0.00029	ug/l	EPA 1633
Perfluoroheptanoic acid		0.00077 J	0.0020	0.00049	ug/l	EPA 1633
Perfluorooctanoic acid		0.0043	0.0020	0.00074	ug/l	EPA 1633
Perfluorononanoic acid		0.00096 J	0.0020	0.00039	ug/l	EPA 1633
Perfluorobutanesulfonic acid		0.0031	0.0020	0.00065	ug/l	EPA 1633
Perfluorohexanesulfonic acid		0.0075	0.0020	0.0011	ug/l	EPA 1633
Perfluorooctanesulfonic acid		0.0099	0.0020	0.00042	ug/l	EPA 1633

(a) Associated EIS outside control limits.
(b) Diluted due to high concentration of target compound.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW004		
Lab Sample ID:	JE10205-1	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8161.D	1	04/30/25 21:57	MH	04/29/25 17:00	OP63161	T4Q138
Run #2	4Q8255.D	20	05/02/25 19:25	MH	04/29/25 17:00	OP63161	T4Q140

	Initial Volume	Final Volume
Run #1	487 ml	5.0 ml
Run #2	487 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.289	0.0082	0.00095	ug/l	
2706-90-3	Perfluoropentanoic acid	1.39 [a]	0.082	0.015	ug/l	
307-24-4	Perfluorohexanoic acid	1.06 [a]	0.041	0.0060	ug/l	
375-85-9	Perfluoroheptanoic acid	0.338	0.0021	0.00051	ug/l	
335-67-1	Perfluorooctanoic acid	0.223	0.0021	0.00077	ug/l	
375-95-1	Perfluorononanoic acid	1.77 [a]	0.041	0.0082	ug/l	
335-76-2	Perfluorodecanoic acid	0.0229	0.0021	0.00064	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0287	0.0021	0.00056	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0021	0.00079	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.00082	0.0021	0.00081	ug/l	J
376-06-7	Perfluorotetradecanoic acid	ND	0.0021	0.00078	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0406	0.0021	0.00068	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0684	0.0021	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.569 [a]	0.041	0.023	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.0541	0.0021	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	4.43 [a]	0.041	0.0088	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0021	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0021	0.00041	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	0.0052	0.0082	0.0023	ug/l	J
27619-97-2	6:2 Fluorotelomer sulfonate	1.72	0.0082	0.00093	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.199	0.0082	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.0111	0.0021	0.00071	ug/l	
31506-32-8	MeFOSA	ND	0.0021	0.00066	ug/l	
4151-50-2	EtFOSA	ND	0.0021	0.00054	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW004		
Lab Sample ID:	JE10205-1	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0021	0.00052	ug/l	
2991-50-6	EtFOSAA	ND	0.0021	0.00093	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.021	0.0029	ug/l	
1691-99-2	EtFOSE	ND	0.021	0.0039	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0082	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0082	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0041	0.00031	ug/l	
863090-89-5	PFMBA	ND	0.0041	0.00057	ug/l	
151772-58-6	NFDHA	ND	0.0041	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0082	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0082	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0041	0.00028	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	0.0045	0.010	0.0025	ug/l	J
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.051	0.0073	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.051	0.0063	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	91%	88%	5-130%
	13C5-PFPeA	80%	86%	40-130%
	13C5-PFHxA	90%	89%	40-130%
	13C4-PFHpA	88%	88%	40-130%
	13C8-PFOA	89%	86%	40-130%
	13C9-PFNA	92%	89%	40-130%
	13C6-PFDA	89%	86%	40-130%
	13C7-PFUnDA	93%	88%	30-130%
	13C2-PFDoDA	89%	79%	10-130%
	13C2-PFTeDA	87%	79%	10-130%
	13C3-PFBS	100%	87%	40-135%
	13C3-PFHxS	94%	86%	40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW004		
Lab Sample ID:	JE10205-1	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%	92%	40-130%
	13C8-FOSA	103%	88%	40-130%
	d3-MeFOSA	94%	78%	10-130%
	d5-EtFOSA	95%	69%	10-130%
	d3-MeFOSAA	94%	84%	40-170%
	d5-EtFOSAA	95%	81%	25-135%
	d7-MeFOSE	95%	83%	10-130%
	d9-EtFOSE	95%	77%	10-130%
	13C2-4:2FTS	123%	103%	40-200%
	13C2-6:2FTS	87%	110%	40-200%
	13C2-8:2FTS	94%	100%	40-300%
	13C3-HFPO-DA	89%	87%	40-130%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW008		
Lab Sample ID:	JE10205-2	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8162.D	1	04/30/25 22:10	MH	04/29/25 17:00	OP63161	T4Q138
Run #2	1Q26074.D	5	05/15/25 14:40	MH	05/13/25 11:00	OP63534	T1Q362

	Initial Volume	Final Volume
Run #1	487 ml	5.0 ml
Run #2	62.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.131	0.0082	0.00095	ug/l	
2706-90-3	Perfluoropentanoic acid	0.409	0.0041	0.00075	ug/l	
307-24-4	Perfluorohexanoic acid	0.602	0.0021	0.00030	ug/l	
375-85-9	Perfluoroheptanoic acid	0.411	0.0021	0.00051	ug/l	
335-67-1	Perfluorooctanoic acid	1.35 [a]	0.081	0.030	ug/l	
375-95-1	Perfluorononanoic acid	2.47 [a]	0.081	0.016	ug/l	
335-76-2	Perfluorodecanoic acid	0.0222	0.0021	0.00064	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0484	0.0021	0.00056	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0021	0.00079	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0021	0.00081	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0021	0.00078	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0471	0.0021	0.00068	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0938	0.0021	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	4.05 [a]	0.081	0.045	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.198	0.0021	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	13.2 [a]	0.081	0.017	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0021	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0021	0.00041	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0082	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.326	0.0082	0.00093	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.299	0.0082	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA [b]	0.0048	0.0021	0.00071	ug/l	
31506-32-8	MeFOSA [b]	ND	0.0021	0.00066	ug/l	
4151-50-2	EtFOSA [b]	ND	0.0021	0.00054	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW008		
Lab Sample ID:	JE10205-2	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0021	0.00052	ug/l	
2991-50-6	EtFOSAA [b]	ND	0.0021	0.00093	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE [b]	ND	0.021	0.0029	ug/l	
1691-99-2	EtFOSE [b]	ND	0.021	0.0039	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0082	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0082	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0041	0.00031	ug/l	
863090-89-5	PFMBA	ND	0.0041	0.00057	ug/l	
151772-58-6	NFDHA	ND	0.0041	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0082	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0082	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0041	0.00028	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0025	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.051	0.0073	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.051	0.0063	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	91%	97%	5-130%
	13C5-PFPeA	76%	100%	40-130%
	13C5-PFHxA	89%	93%	40-130%
	13C4-PFHpA	83%	97%	40-130%
	13C8-PFOA	92%	103%	40-130%
	13C9-PFNA	91%	93%	40-130%
	13C6-PFDA	88%	108%	40-130%
	13C7-PFUnDA	97%	104%	30-130%
	13C2-PFDoDA	91%	100%	10-130%
	13C2-PFTeDA	87%	106%	10-130%
	13C3-PFBS	106%	94%	40-135%
	13C3-PFHxS	83%	86%	40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW008		
Lab Sample ID:	JE10205-2	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%	92%	40-130%
	13C8-FOSA	146% [c]	99%	40-130%
	d3-MeFOSA	132% [c]	83%	10-130%
	d5-EtFOSA	136% [c]	78%	10-130%
	d3-MeFOSAA	128%	91%	40-170%
	d5-EtFOSAA	138% [c]	100%	25-135%
	d7-MeFOSE	138% [c]	91%	10-130%
	d9-EtFOSE	137% [c]	91%	10-130%
	13C2-4:2FTS	139%	117%	40-200%
	13C2-6:2FTS	108%	113%	40-200%
	13C2-8:2FTS	99%	97%	40-300%
	13C3-HFPO-DA	85%	83%	40-130%

(a) Result is from Run# 2
(b) Associated EIS outside control limits.
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW009S		
Lab Sample ID:	JE10205-3	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8163.D	1	04/30/25 22:24	MH	04/29/25 17:00	OP63161	T4Q138
Run #2 [a]	4Q8188.D	20	05/01/25 14:33	MH	04/29/25 17:00	OP63161	T4Q139

	Initial Volume	Final Volume
Run #1	481 ml	5.0 ml
Run #2	481 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0794	0.0083	0.00097	ug/l	
2706-90-3	Perfluoropentanoic acid	0.310	0.0042	0.00076	ug/l	
307-24-4	Perfluorohexanoic acid	0.364	0.0021	0.00030	ug/l	
375-85-9	Perfluoroheptanoic acid	0.150	0.0021	0.00052	ug/l	
335-67-1	Perfluorooctanoic acid	0.189	0.0021	0.00078	ug/l	
375-95-1	Perfluorononanoic acid	0.291	0.0021	0.00042	ug/l	
335-76-2	Perfluorodecanoic acid	0.0070	0.0021	0.00064	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0126	0.0021	0.00057	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0021	0.00080	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0021	0.00082	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0021	0.00079	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0428	0.0021	0.00069	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0602	0.0021	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.825 [b]	0.042	0.023	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.0660	0.0021	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	8.91 [b]	0.042	0.0089	ug/l	
68259-12-1	Perfluorononanesulfonic acid	0.0019	0.0021	0.0015	ug/l	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0021	0.00042	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0083	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.528	0.0083	0.00095	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0610	0.0083	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.0057	0.0021	0.00072	ug/l	
31506-32-8	MeFOSA	ND	0.0021	0.00067	ug/l	
4151-50-2	EtFOSA	ND	0.0021	0.00055	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW009S		
Lab Sample ID:	JE10205-3	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0021	0.00053	ug/l	
2991-50-6	EtFOSAA	ND	0.0021	0.00095	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.021	0.0029	ug/l	
1691-99-2	EtFOSE	ND	0.021	0.0039	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0083	0.0019	ug/l	
919005-14-4	ADONA	ND	0.0083	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0042	0.00031	ug/l	
863090-89-5	PFMBA	ND	0.0042	0.00058	ug/l	
151772-58-6	NFDHA	ND	0.0042	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0083	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0083	0.0019	ug/l	
113507-82-7	PFEESA	ND	0.0042	0.00028	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0025	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.052	0.0074	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.052	0.0064	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	90%	94%	5-130%
	13C5-PFPeA	82%	97%	40-130%
	13C5-PFHxA	93%	101%	40-130%
	13C4-PFHpA	89%	91%	40-130%
	13C8-PFOA	92%	92%	40-130%
	13C9-PFNA	89%	84%	40-130%
	13C6-PFDA	92%	87%	40-130%
	13C7-PFUnDA	100%	89%	30-130%
	13C2-PFDoDA	94%	88%	10-130%
	13C2-PFTeDA	89%	78%	10-130%
	13C3-PFBS	96%	72%	40-135%
	13C3-PFHxS	90%	76%	40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW009S		
Lab Sample ID:	JE10205-3	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	86%	88%	40-130%
	13C8-FOSA	114%	73%	40-130%
	d3-MeFOSA	106%	60%	10-130%
	d5-EtFOSA	107%	70%	10-130%
	d3-MeFOSAA	103%	66%	40-170%
	d5-EtFOSAA	109%	68%	25-135%
	d7-MeFOSE	105%	65%	10-130%
	d9-EtFOSE	110%	69%	10-130%
	13C2-4:2FTS	102%	114%	40-200%
	13C2-6:2FTS	86%	105%	40-200%
	13C2-8:2FTS	97%	93%	40-300%
	13C3-HFPO-DA	88%	94%	40-130%

(a) Diluted due to high concentration of target compound.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW009D		
Lab Sample ID:	JE10205-4	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8186.D	1	05/01/25 14:06	MH	04/29/25 17:00	OP63161	T4Q139
Run #2							

	Initial Volume	Final Volume
Run #1	483 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0083	0.00096	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0041	0.00076	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0021	0.00030	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0021	0.00052	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0021	0.00078	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0021	0.00041	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0021	0.00064	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0021	0.00057	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0021	0.00080	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0021	0.00082	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0021	0.00079	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0021	0.00068	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0021	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0021	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0021	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0023	0.0021	0.00045	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0021	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0021	0.00041	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0083	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0151	0.0083	0.00094	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0083	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA [a]	ND	0.0021	0.00071	ug/l	
31506-32-8	MeFOSA	ND	0.0021	0.00066	ug/l	
4151-50-2	EtFOSA	ND	0.0021	0.00055	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW009D		
Lab Sample ID:	JE10205-4	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0021	0.00053	ug/l	
2991-50-6	EtFOSAA	ND	0.0021	0.00094	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.021	0.0029	ug/l	
1691-99-2	EtFOSE	ND	0.021	0.0039	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0083	0.0019	ug/l	
919005-14-4	ADONA	ND	0.0083	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0041	0.00031	ug/l	
863090-89-5	PFMBA	ND	0.0041	0.00058	ug/l	
151772-58-6	NFDHA	ND	0.0041	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0083	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0083	0.0019	ug/l	
113507-82-7	PFEESA	ND	0.0041	0.00028	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0025	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.052	0.0074	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.052	0.0064	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	93%		5-130%
	13C5-PFPeA	90%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	91%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW009D		
Lab Sample ID:	JE10205-4	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	87%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	79%		10-130%
	d3-MeFOSAA	90%		40-170%
	d5-EtFOSAA	84%		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	102%		40-200%
	13C2-6:2FTS	103%		40-200%
	13C2-8:2FTS	103%		40-300%
	13C3-HFPO-DA	91%		40-130%

(a) Associated CCV outside control limits high, sample was ND. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DUP001		
Lab Sample ID:	JE10205-5	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8165.D	1	04/30/25 22:51	MH	04/29/25 17:00	OP63161	T4Q138
Run #2	1Q26076.D	5	05/15/25 15:09	MH	05/13/25 11:00	OP63534	T1Q362

	Initial Volume	Final Volume
Run #1	481 ml	5.0 ml
Run #2	65.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.125	0.0083	0.00097	ug/l	
2706-90-3	Perfluoropentanoic acid	0.392	0.0042	0.00076	ug/l	
307-24-4	Perfluorohexanoic acid	0.566	0.0021	0.00030	ug/l	
375-85-9	Perfluoroheptanoic acid	0.380	0.0021	0.00052	ug/l	
335-67-1	Perfluorooctanoic acid	1.30 [a]	0.077	0.029	ug/l	
375-95-1	Perfluorononanoic acid	2.46 [a]	0.077	0.015	ug/l	
335-76-2	Perfluorodecanoic acid	0.0213	0.0021	0.00064	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0493	0.0021	0.00057	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0021	0.00080	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0021	0.00082	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0021	0.00079	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0441	0.0021	0.00069	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0884	0.0021	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	3.85 [a]	0.077	0.043	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.176	0.0021	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	13.9 [a]	0.077	0.017	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0021	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0021	0.00042	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0083	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.323	0.0083	0.00095	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.287	0.0083	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA [b]	0.0048	0.0021	0.00072	ug/l	
31506-32-8	MeFOSA	ND	0.0021	0.00067	ug/l	
4151-50-2	EtFOSA	ND	0.0021	0.00055	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP001		
Lab Sample ID:	JE10205-5	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0021	0.00053	ug/l	
2991-50-6	EtFOSAA	ND	0.0021	0.00095	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.021	0.0029	ug/l	
1691-99-2	EtFOSE	ND	0.021	0.0039	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0083	0.0019	ug/l	
919005-14-4	ADONA	ND	0.0083	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0042	0.00031	ug/l	
863090-89-5	PFMBA	ND	0.0042	0.00058	ug/l	
151772-58-6	NFDHA	ND	0.0042	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0083	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0083	0.0019	ug/l	
113507-82-7	PFEESA	ND	0.0042	0.00028	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0025	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.052	0.0074	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.052	0.0064	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	93%	95%	5-130%
	13C5-PFPeA	78%	103%	40-130%
	13C5-PFHxA	91%	100%	40-130%
	13C4-PFHpA	87%	99%	40-130%
	13C8-PFOA	94%	98%	40-130%
	13C9-PFNA	92%	87%	40-130%
	13C6-PFDA	92%	95%	40-130%
	13C7-PFUnDA	98%	81%	30-130%
	13C2-PFDoDA	93%	84%	10-130%
	13C2-PFTeDA	87%	88%	10-130%
	13C3-PFBS	110%	94%	40-135%
	13C3-PFHxS	91%	86%	40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP001		
Lab Sample ID:	JE10205-5	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%	83%	40-130%
	13C8-FOSA	135% [c]	88%	40-130%
	d3-MeFOSA	124%	90%	10-130%
	d5-EtFOSA	120%	89%	10-130%
	d3-MeFOSAA	115%	91%	40-170%
	d5-EtFOSAA	123%	98%	25-135%
	d7-MeFOSE	122%	90%	10-130%
	d9-EtFOSE	122%	86%	10-130%
	13C2-4:2FTS	156%	119%	40-200%
	13C2-6:2FTS	115%	104%	40-200%
	13C2-8:2FTS	112%	97%	40-300%
	13C3-HFPO-DA	88%	83%	40-130%

(a) Result is from Run# 2
(b) Associated EIS outside control limits.
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW003		
Lab Sample ID:	JE10205-6	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8166.D	1	04/30/25 23:05	MH	04/29/25 17:00	OP63161	T4Q138
Run #2							

	Initial Volume	Final Volume
Run #1	477 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0399	0.0084	0.00097	ug/l	
2706-90-3	Perfluoropentanoic acid	0.124	0.0042	0.00077	ug/l	
307-24-4	Perfluorohexanoic acid	0.0581	0.0021	0.00030	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0150	0.0021	0.00052	ug/l	
335-67-1	Perfluorooctanoic acid	0.0778	0.0021	0.00079	ug/l	
375-95-1	Perfluorononanoic acid	0.0050	0.0021	0.00042	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0021	0.00065	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0021	0.00058	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0021	0.00081	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0021	0.00083	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0021	0.00080	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0060	0.0021	0.00069	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0021	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0056	0.0021	0.0012	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0021	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0092	0.0021	0.00045	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0021	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0021	0.00042	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0084	0.0024	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0084	0.00095	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0084	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0021	0.00072	ug/l	
31506-32-8	MeFOSA	ND	0.0021	0.00067	ug/l	
4151-50-2	EtFOSA	ND	0.0021	0.00056	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW003		
Lab Sample ID:	JE10205-6	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	0.0032	0.0021	0.00053	ug/l	
2991-50-6	EtFOSAA	ND	0.0021	0.00095	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.021	0.0029	ug/l	
1691-99-2	EtFOSE	ND	0.021	0.0039	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0084	0.0019	ug/l	
919005-14-4	ADONA	ND	0.0084	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0042	0.00031	ug/l	
863090-89-5	PFMBA	ND	0.0042	0.00059	ug/l	
151772-58-6	NFDHA	ND	0.0042	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0084	0.0026	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0084	0.0019	ug/l	
113507-82-7	PFEESA	ND	0.0042	0.00028	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0025	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.052	0.0075	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.052	0.0065	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	93%		5-130%
	13C5-PFPeA	81%		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	87%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	91%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	63%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	91%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW003		
Lab Sample ID:	JE10205-6	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	86%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	69%		10-130%
	d3-MeFOSAA	84%		40-170%
	d5-EtFOSAA	82%		25-135%
	d7-MeFOSE	74%		10-130%
	d9-EtFOSE	71%		10-130%
	13C2-4:2FTS	115%		40-200%
	13C2-6:2FTS	108%		40-200%
	13C2-8:2FTS	107%		40-300%
	13C3-HFPO-DA	88%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	JE10205-7	**Date Sampled:**	04/22/25
Matrix:	AQ - Field Blank Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8167.D	1	04/30/25 23:18	MH	04/29/25 17:00	OP63161	T4Q138
Run #2							

	Initial Volume	Final Volume
Run #1	494 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0081	0.00094	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00074	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00051	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00076	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00063	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00056	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00078	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00080	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00077	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00067	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00099	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00044	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0081	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0081	0.00092	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0081	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00070	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00065	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00054	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	JE10205-7	**Date Sampled:**	04/22/25
Matrix:	AQ - Field Blank Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00052	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00092	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0081	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0081	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00057	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0081	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0081	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.051	0.0072	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.051	0.0063	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	94%		5-130%
	13C5-PFPeA	93%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	89%		40-130%
	13C6-PFDA	90%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	JE10205-7	**Date Sampled:**	04/22/25
Matrix:	AQ - Field Blank Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	85%		40-130%
	d3-MeFOSA	77%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	90%		40-170%
	d5-EtFOSAA	84%		25-135%
	d7-MeFOSE	79%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	115%		40-200%
	13C2-6:2FTS	101%		40-200%
	13C2-8:2FTS	98%		40-300%
	13C3-HFPO-DA	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW002		
Lab Sample ID:	JE10205-8	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8168.D	1	04/30/25 23:32	MH	04/29/25 17:00	OP63161	T4Q138
Run #2							

	Initial Volume	Final Volume
Run #1	493 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0081	0.00094	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0041	0.00074	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00051	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00076	ug/l	
375-95-1	Perfluorononanoic acid	0.0014	0.0020	0.00041	ug/l	J
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00063	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00056	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00078	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00080	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00077	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00067	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0031	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00099	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0011	0.0020	0.00044	ug/l	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00041	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0081	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0109	0.0081	0.00092	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0081	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00070	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00065	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00054	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW002		
Lab Sample ID:	JE10205-8	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00052	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00092	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0081	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0081	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0041	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0041	0.00057	ug/l	
151772-58-6	NFDHA	ND	0.0041	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0081	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0081	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0041	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0025	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.051	0.0072	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.051	0.0063	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	95%		5-130%
	13C5-PFPeA	90%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	88%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	88%		40-130%
	13C7-PFUnDA	83%		30-130%
	13C2-PFDoDA	74%		10-130%
	13C2-PFTeDA	71%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW002		
Lab Sample ID:	JE10205-8	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		40-130%
	13C8-FOSA	86%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	68%		40-170%
	d5-EtFOSAA	66%		25-135%
	d7-MeFOSE	79%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	100%		40-200%
	13C2-6:2FTS	98%		40-200%
	13C2-8:2FTS	100%		40-300%
	13C3-HFPO-DA	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW010		
Lab Sample ID:	JE10205-9	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8169.D	1	04/30/25 23:45	MH	04/29/25 17:00	OP63161	T4Q138
Run #2	4Q8190.D	10	05/01/25 15:00	MH	04/29/25 17:00	OP63161	T4Q139

	Initial Volume	Final Volume
Run #1	466 ml	5.0 ml
Run #2	466 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.116	0.0086	0.0010	ug/l	
2706-90-3	Perfluoropentanoic acid	0.449	0.0043	0.00078	ug/l	
307-24-4	Perfluorohexanoic acid	0.230	0.0021	0.00031	ug/l	
375-85-9	Perfluoroheptanoic acid	0.191	0.0021	0.00054	ug/l	
335-67-1	Perfluorooctanoic acid	0.250	0.0021	0.00080	ug/l	
375-95-1	Perfluorononanoic acid	0.0800	0.0021	0.00043	ug/l	
335-76-2	Perfluorodecanoic acid	0.257	0.0021	0.00067	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0602	0.0021	0.00059	ug/l	
307-55-1	Perfluorododecanoic acid	0.0218	0.0021	0.00083	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0583	0.0021	0.00085	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0018	0.0021	0.00082	ug/l	J
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0029	0.0021	0.00071	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0030	0.0021	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0358	0.0021	0.0012	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0021	0.0011	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.116	0.0021	0.00046	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0021	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0012	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	0.00047	0.0021	0.00043	ug/l	J
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0086	0.0024	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.553	0.0086	0.00098	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	1.75 [a]	0.086	0.016	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.0526	0.0021	0.00074	ug/l	
31506-32-8	MeFOSA	ND	0.0021	0.00069	ug/l	
4151-50-2	EtFOSA	ND	0.0021	0.00057	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW010		
Lab Sample ID:	JE10205-9	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0021	0.00055	ug/l	
2991-50-6	EtFOSAA	0.0015	0.0021	0.00098	ug/l	J
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.021	0.0030	ug/l	
1691-99-2	EtFOSE	ND	0.021	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0086	0.0019	ug/l	
919005-14-4	ADONA	ND	0.0086	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0043	0.00032	ug/l	
863090-89-5	PFMBA	ND	0.0043	0.00060	ug/l	
151772-58-6	NFDHA	ND	0.0043	0.0014	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0086	0.0026	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0086	0.0019	ug/l	
113507-82-7	PFEESA	ND	0.0043	0.00029	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.011	0.0026	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.054	0.0076	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.054	0.0066	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	91%	93%	5-130%
	13C5-PFPeA	80%	85%	40-130%
	13C5-PFHxA	87%	87%	40-130%
	13C4-PFHpA	87%	82%	40-130%
	13C8-PFOA	87%	89%	40-130%
	13C9-PFNA	87%	81%	40-130%
	13C6-PFDA	84%	88%	40-130%
	13C7-PFUnDA	88%	88%	30-130%
	13C2-PFDoDA	82%	78%	10-130%
	13C2-PFTeDA	70%	70%	10-130%
	13C3-PFBS	90%	105%	40-135%
	13C3-PFHxS	87%	106%	40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW010		
Lab Sample ID:	JE10205-9	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	85%	92%	40-130%
	13C8-FOSA	82%	88%	40-130%
	d3-MeFOSA	72%	77%	10-130%
	d5-EtFOSA	70%	76%	10-130%
	d3-MeFOSAA	82%	89%	40-170%
	d5-EtFOSAA	83%	97%	25-135%
	d7-MeFOSE	75%	84%	10-130%
	d9-EtFOSE	73%	80%	10-130%
	13C2-4:2FTS	124%	117%	40-200%
	13C2-6:2FTS	90%	109%	40-200%
	13C2-8:2FTS	86%	112%	40-300%
	13C3-HFPO-DA	87%	85%	40-130%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW012S		
Lab Sample ID:	JE10205-10	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8172.D	1	05/01/25 00:26	MH	04/29/25 17:00	OP63161	T4Q138
Run #2	2Q33790.D	5	05/13/25 01:48	VL	04/29/25 17:00	OP63161	T2Q345

	Initial Volume	Final Volume
Run #1	461 ml	5.0 ml
Run #2	461 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0416	0.0087	0.0010	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0987	0.0043	0.00079	ug/l	
307-24-4	Perfluorohexanoic acid	0.0882	0.0022	0.00031	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0456	0.0022	0.00054	ug/l	
335-67-1	Perfluorooctanoic acid	0.0588	0.0022	0.00081	ug/l	
375-95-1	Perfluorononanoic acid	0.0967	0.0022	0.00043	ug/l	
335-76-2	Perfluorodecanoic acid	0.0051	0.0022	0.00067	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0046	0.0022	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0022	0.00084	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0022	0.00086	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0022	0.00082	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0165	0.0022	0.00072	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0216	0.0022	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.317	0.0022	0.0012	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.0078	0.0022	0.0011	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	1.34 [a]	0.011	0.0023	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0022	0.0016	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0022	0.0012	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0022	0.00043	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate [b]	ND	0.0087	0.0024	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0037	0.0087	0.00099	ug/l	J
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0087	0.0016	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.0158	0.0022	0.00075	ug/l	
31506-32-8	MeFOSA	ND	0.0022	0.00069	ug/l	
4151-50-2	EtFOSA	ND	0.0022	0.00057	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW012S		
Lab Sample ID:	JE10205-10	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0022	0.00055	ug/l	
2991-50-6	EtFOSAA	ND	0.0022	0.00099	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.022	0.0030	ug/l	
1691-99-2	EtFOSE	ND	0.022	0.0041	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0087	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0087	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0043	0.00033	ug/l	
863090-89-5	PFMBA	ND	0.0043	0.00061	ug/l	
151772-58-6	NFDHA	ND	0.0043	0.0014	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0087	0.0026	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0087	0.0020	ug/l	
113507-82-7	PFEESA	ND	0.0043	0.00029	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.011	0.0026	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.054	0.0077	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.054	0.0067	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	91%	92%	5-130%
	13C5-PFPeA	76%	90%	40-130%
	13C5-PFHxA	92%	98%	40-130%
	13C4-PFHpA	92%	102%	40-130%
	13C8-PFOA	91%	88%	40-130%
	13C9-PFNA	89%	99%	40-130%
	13C6-PFDA	96%	92%	40-130%
	13C7-PFUnDA	100%	93%	30-130%
	13C2-PFDoDA	85%	76%	10-130%
	13C2-PFTeDA	85%	93%	10-130%
	13C3-PFBS	97%	107%	40-135%
	13C3-PFHxS	90%	92%	40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW012S		
Lab Sample ID:	JE10205-10	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%	93%	40-130%
	13C8-FOSA	92%	82%	40-130%
	d3-MeFOSA	73%	76%	10-130%
	d5-EtFOSA	73%	75%	10-130%
	d3-MeFOSAA	90%	88%	40-170%
	d5-EtFOSAA	84%	77%	25-135%
	d7-MeFOSE	75%	72%	10-130%
	d9-EtFOSE	75%	73%	10-130%
	13C2-4:2FTS	201% [c]	113%	40-200%
	13C2-6:2FTS	157%	120%	40-200%
	13C2-8:2FTS	126%	103%	40-300%
	13C3-HFPO-DA	84%	85%	40-130%

(a) Result is from Run# 2
(b) Associated EIS outside control limits.
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW012D		
Lab Sample ID:	JE10205-11	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8143.D	1	04/30/25 17:53	MH	04/29/25 16:00	OP63163	T4Q138
Run #2							

	Initial Volume	Final Volume
Run #1	501 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0097	0.0080	0.00093	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0094	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	0.0086	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0138	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	0.0162	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	0.0036	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0079	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0090	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.111	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.0024	0.0020	0.00098	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.116	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0118	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW012D		
Lab Sample ID:	JE10205-11	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0037	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	95%		5-130%
	13C5-PFPeA	84%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	88%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW012D		
Lab Sample ID:	JE10205-11	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	89%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	93%		40-170%
	d5-EtFOSAA	90%		25-135%
	d7-MeFOSE	86%		10-130%
	d9-EtFOSE	86%		10-130%
	13C2-4:2FTS	115%		40-200%
	13C2-6:2FTS	108%		40-200%
	13C2-8:2FTS	107%		40-300%
	13C3-HFPO-DA	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW011		
Lab Sample ID:	JE10205-12	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8144.D	1	04/30/25 18:06	MH	04/29/25 16:00	OP63163	T4Q138
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0242	0.0077	0.00089	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0658	0.0038	0.00070	ug/l	
307-24-4	Perfluorohexanoic acid	0.0478	0.0019	0.00028	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0349	0.0019	0.00048	ug/l	
335-67-1	Perfluorooctanoic acid	0.0418	0.0019	0.00072	ug/l	
375-95-1	Perfluorononanoic acid	0.0245	0.0019	0.00038	ug/l	
335-76-2	Perfluorodecanoic acid	0.0015	0.0019	0.00060	ug/l	J
2058-94-8	Perfluoroundecanoic acid	0.0078	0.0019	0.00053	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00074	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00076	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00073	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0040	0.0019	0.00063	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0039	0.0019	0.00097	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0784	0.0019	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.0017	0.0019	0.00094	ug/l	J
1763-23-1	Perfluorooctanesulfonic acid	0.233	0.0019	0.00041	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00038	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0077	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0049	0.0077	0.00087	ug/l	J
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0077	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.0066	0.0019	0.00066	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00062	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00051	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW011		
Lab Sample ID:	JE10205-12	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00049	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00087	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0036	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0077	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0077	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0038	0.00029	ug/l	
863090-89-5	PFMBA	ND	0.0038	0.00054	ug/l	
151772-58-6	NFDHA	ND	0.0038	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0077	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0077	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0038	0.00026	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0096	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.048	0.0068	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.048	0.0059	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	92%		5-130%
	13C5-PFPeA	78%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	88%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	82%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW011		
Lab Sample ID:	JE10205-12	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	84%		40-170%
	d5-EtFOSAA	81%		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	81%		10-130%
	13C2-4:2FTS	158%		40-200%
	13C2-6:2FTS	125%		40-200%
	13C2-8:2FTS	106%		40-300%
	13C3-HFPO-DA	84%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW005S		
Lab Sample ID:	JE10205-13	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8145.D	1	04/30/25 18:20	MH	04/29/25 16:00	OP63163	T4Q138
Run #2 [a]	4Q8192.D	10	05/01/25 15:27	MH	04/29/25 16:00	OP63163	T4Q139

	Initial Volume	Final Volume
Run #1	506 ml	5.0 ml
Run #2	506 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0766	0.0079	0.00092	ug/l	
2706-90-3	Perfluoropentanoic acid	0.261	0.0040	0.00072	ug/l	
307-24-4	Perfluorohexanoic acid	0.294	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	0.106	0.0020	0.00049	ug/l	
335-67-1	Perfluorooctanoic acid	0.154	0.0020	0.00074	ug/l	
375-95-1	Perfluorononanoic acid	0.125	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	0.0025	0.0020	0.00061	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00054	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00076	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00078	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00075	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0945	0.0020	0.00065	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.129	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	1.72 [b]	0.020	0.011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.0278	0.0020	0.00097	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	3.03 [b]	0.020	0.0042	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0079	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.114	0.0079	0.00090	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0026	0.0079	0.0014	ug/l	J
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.00084	0.0020	0.00068	ug/l	J
31506-32-8	MeFOSA	ND	0.0020	0.00063	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00052	ug/l	

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW005S		
Lab Sample ID:	JE10205-13	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00050	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00090	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0037	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0079	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0079	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00055	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0079	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0079	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0099	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.049	0.0070	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.049	0.0061	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	96%	96%	5-130%
	13C5-PFPeA	87%	88%	40-130%
	13C5-PFHxA	96%	96%	40-130%
	13C4-PFHpA	96%	91%	40-130%
	13C8-PFOA	97%	94%	40-130%
	13C9-PFNA	95%	89%	40-130%
	13C6-PFDA	94%	97%	40-130%
	13C7-PFUnDA	96%	89%	30-130%
	13C2-PFDoDA	94%	85%	10-130%
	13C2-PFTeDA	89%	81%	10-130%
	13C3-PFBS	96%	103%	40-135%
	13C3-PFHxS	94%	91%	40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW005S		
Lab Sample ID:	JE10205-13	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%	92%	40-130%
	13C8-FOSA	103%	83%	40-130%
	d3-MeFOSA	85%	65%	10-130%
	d5-EtFOSA	87%	71%	10-130%
	d3-MeFOSAA	91%	83%	40-170%
	d5-EtFOSAA	93%	77%	25-135%
	d7-MeFOSE	94%	77%	10-130%
	d9-EtFOSE	96%	77%	10-130%
	13C2-4:2FTS	133%	119%	40-200%
	13C2-6:2FTS	117%	124%	40-200%
	13C2-8:2FTS	111%	118%	40-300%
	13C3-HFPO-DA	92%	91%	40-130%

(a) Diluted due to high concentration of target compound.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW005D		
Lab Sample ID:	JE10205-14	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8146.D	1	04/30/25 18:33	MH	04/29/25 16:00	OP63163	T4Q138
Run #2							

	Initial Volume	Final Volume
Run #1	515 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0070	0.0078	0.00090	ug/l	J
2706-90-3	Perfluoropentanoic acid	0.0224	0.0039	0.00071	ug/l	
307-24-4	Perfluorohexanoic acid	0.0307	0.0019	0.00028	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0072	0.0019	0.00049	ug/l	
335-67-1	Perfluorooctanoic acid	0.0120	0.0019	0.00073	ug/l	
375-95-1	Perfluorononanoic acid	0.0040	0.0019	0.00039	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00060	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00053	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00075	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00077	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00074	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0130	0.0019	0.00064	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0115	0.0019	0.00098	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0688	0.0019	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00095	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0714	0.0019	0.00042	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00039	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0078	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0055	0.0078	0.00088	ug/l	J
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0078	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00062	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00051	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW005D		
Lab Sample ID:	JE10205-14	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00050	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00088	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0036	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0078	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0078	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0039	0.00029	ug/l	
863090-89-5	PFMBA	ND	0.0039	0.00054	ug/l	
151772-58-6	NFDHA	ND	0.0039	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0078	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0078	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0039	0.00026	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0097	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.049	0.0069	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.049	0.0060	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	97%		5-130%
	13C5-PFPeA	90%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	92%		30-130%
	13C2-PFDoDA	91%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW005D		
Lab Sample ID:	JE10205-14	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	91%		40-130%
	d3-MeFOSA	77%		10-130%
	d5-EtFOSA	79%		10-130%
	d3-MeFOSAA	90%		40-170%
	d5-EtFOSAA	86%		25-135%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	91%		10-130%
	13C2-4:2FTS	110%		40-200%
	13C2-6:2FTS	106%		40-200%
	13C2-8:2FTS	105%		40-300%
	13C3-HFPO-DA	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW006S		
Lab Sample ID:	JE10205-15	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8147.D	1	04/30/25 18:47	MH	04/29/25 16:00	OP63163	T4Q138
Run #2 [a]	4Q8193.D	20	05/01/25 15:41	MH	04/29/25 16:00	OP63163	T4Q139

	Initial Volume	Final Volume
Run #1	503 ml	5.0 ml
Run #2	503 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.362	0.0080	0.00092	ug/l	
2706-90-3	Perfluoropentanoic acid	1.48 [b]	0.080	0.015	ug/l	
307-24-4	Perfluorohexanoic acid	0.922 [b]	0.040	0.0058	ug/l	
375-85-9	Perfluoroheptanoic acid	0.572	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	0.980 [b]	0.040	0.015	ug/l	
375-95-1	Perfluorononanoic acid	1.94 [b]	0.040	0.0080	ug/l	
335-76-2	Perfluorodecanoic acid	0.0163	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0159	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0168	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0269	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.512	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.0309	0.0020	0.00097	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	5.94 [b]	0.040	0.0085	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	3.21 [b]	0.16	0.018	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0928	0.0080	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.0029	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW006S		
Lab Sample ID:	JE10205-15	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00090	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0037	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0099	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0061	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	93%	96%	5-130%
	13C5-PFPeA	79%	100%	40-130%
	13C5-PFHxA	92%	98%	40-130%
	13C4-PFHpA	93%	98%	40-130%
	13C8-PFOA	93%	97%	40-130%
	13C9-PFNA	91%	90%	40-130%
	13C6-PFDA	99%	87%	40-130%
	13C7-PFUnDA	99%	87%	30-130%
	13C2-PFDoDA	95%	84%	10-130%
	13C2-PFTeDA	87%	85%	10-130%
	13C3-PFBS	106%	93%	40-135%
	13C3-PFHxS	93%	103%	40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW006S		
Lab Sample ID:	JE10205-15	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%	103%	40-130%
	13C8-FOSA	117%	92%	40-130%
	d3-MeFOSA	103%	84%	10-130%
	d5-EtFOSA	104%	80%	10-130%
	d3-MeFOSAA	103%	90%	40-170%
	d5-EtFOSAA	110%	90%	25-135%
	d7-MeFOSE	117%	83%	10-130%
	d9-EtFOSE	116%	85%	10-130%
	13C2-4:2FTS	134%	144%	40-200%
	13C2-6:2FTS	79%	109%	40-200%
	13C2-8:2FTS	113%	125%	40-300%
	13C3-HFPO-DA	89%	95%	40-130%

(a) Diluted due to high concentration of target compound.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW006D		
Lab Sample ID:	JE10205-16	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8185.D	1	05/01/25 13:52	MH	04/29/25 16:00	OP63163	T4Q139
Run #2							

	Initial Volume	Final Volume
Run #1	502 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0034	0.0080	0.00093	ug/l	J
2706-90-3	Perfluoropentanoic acid	0.0060	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	0.0049	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0034	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	0.0111	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	0.0063	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.00073	0.0020	0.00066	ug/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0134	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00098	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0493	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0230	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA [a]	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW006D		
Lab Sample ID:	JE10205-16	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0037	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	94%		5-130%
	13C5-PFPeA	92%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	85%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW006D		
Lab Sample ID:	JE10205-16	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	85%		40-170%
	d5-EtFOSAA	86%		25-135%
	d7-MeFOSE	86%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	113%		40-200%
	13C2-6:2FTS	112%		40-200%
	13C2-8:2FTS	115%		40-300%
	13C3-HFPO-DA	91%		40-130%

(a) Associated CCV outside control limits high, sample was ND. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW007		
Lab Sample ID:	JE10205-17	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8149.D	1	04/30/25 19:14	MH	04/29/25 16:00	OP63163	T4Q138
Run #2							

	Initial Volume	Final Volume
Run #1	489 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0024	0.0082	0.00095	ug/l	J
2706-90-3	Perfluoropentanoic acid	0.0033	0.0041	0.00075	ug/l	J
307-24-4	Perfluorohexanoic acid	0.0038	0.0020	0.00030	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0037	0.0020	0.00051	ug/l	
335-67-1	Perfluorooctanoic acid	0.0052	0.0020	0.00077	ug/l	
375-95-1	Perfluorononanoic acid	0.0017	0.0020	0.00041	ug/l	J
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00063	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00056	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00079	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00081	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00078	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.00099	0.0020	0.00067	ug/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0036	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0111	0.0020	0.00044	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00041	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0082	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0082	0.00093	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0082	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00071	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00065	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00054	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW007		
Lab Sample ID:	JE10205-17	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00052	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00093	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0082	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0082	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0041	0.00031	ug/l	
863090-89-5	PFMBA	ND	0.0041	0.00057	ug/l	
151772-58-6	NFDHA	ND	0.0041	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0082	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0082	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0041	0.00028	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0025	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.051	0.0073	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.051	0.0063	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	95%		5-130%
	13C5-PFPeA	86%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	91%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW007		
Lab Sample ID:	JE10205-17	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	94%		40-130%
	d3-MeFOSA	82%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	96%		40-170%
	d5-EtFOSAA	94%		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	90%		10-130%
	13C2-4:2FTS	112%		40-200%
	13C2-6:2FTS	104%		40-200%
	13C2-8:2FTS	106%		40-300%
	13C3-HFPO-DA	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW013		
Lab Sample ID:	JE10205-18	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8150.D	1	04/30/25 19:28	MH	04/29/25 16:00	OP63163	T4Q138
Run #2							

	Initial Volume	Final Volume
Run #1	511 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0078	0.00091	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0039	0.00071	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00028	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00049	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00073	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00039	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00061	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00054	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00075	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00077	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00074	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00065	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.00099	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00096	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00042	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00039	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0078	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0078	0.00089	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0078	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00068	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00063	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00052	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW013		
Lab Sample ID:	JE10205-18	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00050	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00089	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0037	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0078	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0078	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0039	0.00029	ug/l	
863090-89-5	PFMBA	ND	0.0039	0.00055	ug/l	
151772-58-6	NFDHA	ND	0.0039	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0078	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0078	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0039	0.00026	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0098	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.049	0.0070	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.049	0.0060	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	95%		5-130%
	13C5-PFPeA	88%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	89%		40-130%
	13C7-PFUnDA	85%		30-130%
	13C2-PFDoDA	78%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW013		
Lab Sample ID:	JE10205-18	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	89%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	79%		40-170%
	d5-EtFOSAA	77%		25-135%
	d7-MeFOSE	85%		10-130%
	d9-EtFOSE	84%		10-130%
	13C2-4:2FTS	94%		40-200%
	13C2-6:2FTS	100%		40-200%
	13C2-8:2FTS	96%		40-300%
	13C3-HFPO-DA	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW014S		
Lab Sample ID:	JE10205-19	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8151.D	1	04/30/25 19:41	MH	04/29/25 16:00	OP63163	T4Q138
Run #2							

	Initial Volume	Final Volume
Run #1	495 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0029	0.0081	0.00094	ug/l	J
2706-90-3	Perfluoropentanoic acid	0.0066	0.0040	0.00074	ug/l	
307-24-4	Perfluorohexanoic acid	0.0045	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0031	0.0020	0.00051	ug/l	
335-67-1	Perfluorooctanoic acid	0.0058	0.0020	0.00076	ug/l	
375-95-1	Perfluorononanoic acid	0.0025	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00063	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0022	0.0020	0.00056	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00078	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00080	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00077	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0045	0.0020	0.00067	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0013	0.0020	0.0010	ug/l	J
355-46-4	Perfluorohexanesulfonic acid	0.0151	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00099	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0284	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0081	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0081	0.00092	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0081	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00070	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00065	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00054	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW014S		
Lab Sample ID:	JE10205-19	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00052	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00092	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0081	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0081	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00057	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0081	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0081	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.051	0.0072	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.051	0.0062	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	94%		5-130%
	13C5-PFPeA	87%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW014S		
Lab Sample ID:	JE10205-19	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	92%		40-170%
	d5-EtFOSAA	94%		25-135%
	d7-MeFOSE	90%		10-130%
	d9-EtFOSE	90%		10-130%
	13C2-4:2FTS	109%		40-200%
	13C2-6:2FTS	103%		40-200%
	13C2-8:2FTS	98%		40-300%
	13C3-HFPO-DA	91%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW014D		
Lab Sample ID:	JE10205-20	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8152.D	1	04/30/25 19:55	MH	04/29/25 16:00	OP63163	T4Q138
Run #2 [a]	2Q33757.D	1	05/12/25 18:14	VL	05/08/25 17:00	OP63419	T2Q345

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2	70.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0077	0.00089	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0038	0.0038	0.00070	ug/l	
307-24-4	Perfluorohexanoic acid	0.0026	0.0019	0.00028	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0014	0.0019	0.00048	ug/l	J
335-67-1	Perfluorooctanoic acid	0.0020	0.0019	0.00072	ug/l	
375-95-1	Perfluorononanoic acid	0.0014	0.0019	0.00038	ug/l	J
335-76-2	Perfluorodecanoic acid [b]	ND	0.0019	0.00060	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.00098	0.0019	0.00053	ug/l	J
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00074	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00076	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00073	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0018	0.0019	0.00063	ug/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00097	ug/l	
355-46-4	Perfluorohexanesulfonic acid [b]	0.0067	0.0019	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic aci [b]	ND	0.0019	0.00094	ug/l	
1763-23-1	Perfluorooctanesulfonic acid [b]	0.0150	0.0019	0.00041	ug/l	
68259-12-1	Perfluorononanesulfonic acid [b]	ND	0.0019	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic ac [b]	ND	0.0019	0.00038	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0077	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0223	0.0077	0.00087	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0077	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA [b]	ND	0.0019	0.00066	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00062	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00051	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW014D		
Lab Sample ID:	JE10205-20	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00049	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00087	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0036	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0077	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0077	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0038	0.00029	ug/l	
863090-89-5	PFMBA	ND	0.0038	0.00054	ug/l	
151772-58-6	NFDHA	ND	0.0038	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0077	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0077	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0038	0.00026	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0096	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.048	0.0068	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.048	0.0059	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	45%	90%	5-130%
	13C5-PFPeA	40%	93%	40-130%
	13C5-PFHxA	42%	89%	40-130%
	13C4-PFHpA	41%	96%	40-130%
	13C8-PFOA	41%	85%	40-130%
	13C9-PFNA	40%	92%	40-130%
	13C6-PFDA	39% [c]	82%	40-130%
	13C7-PFUnDA	40%	84%	30-130%
	13C2-PFDoDA	40%	74%	10-130%
	13C2-PFTeDA	40%	74%	10-130%
	13C3-PFBS	40%	96%	40-135%
	13C3-PFHxS	37% [c]	95%	40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW014D		
Lab Sample ID:	JE10205-20	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	38% [c]	90%	40-130%
	13C8-FOSA	38% [c]	74%	40-130%
	d3-MeFOSA	39%	60%	10-130%
	d5-EtFOSA	41%	58%	10-130%
	d3-MeFOSAA	40%	74%	40-170%
	d5-EtFOSAA	37%	70%	25-135%
	d7-MeFOSE	45%	73%	10-130%
	d9-EtFOSE	46%	72%	10-130%
	13C2-4:2FTS	42%	105%	40-200%
	13C2-6:2FTS	43%	101%	40-200%
	13C2-8:2FTS	40%	94%	40-300%
	13C3-HFPO-DA	41%	108%	40-130%

(a) Confirmation run.
(b) Associated EIS outside control limits.
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW017		
Lab Sample ID:	JE10205-21	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8155.D	1	04/30/25 20:35	MH	04/29/25 16:00	OP63163	T4Q138
Run #2							

	Initial Volume	Final Volume
Run #1	508 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0079	0.00092	ug/l	
2706-90-3	Perfluoropentanoic acid	0.00088	0.0039	0.00072	ug/l	J
307-24-4	Perfluorohexanoic acid	0.0012	0.0020	0.00029	ug/l	J
375-85-9	Perfluoroheptanoic acid	0.00077	0.0020	0.00049	ug/l	J
335-67-1	Perfluorooctanoic acid	0.0043	0.0020	0.00074	ug/l	
375-95-1	Perfluorononanoic acid	0.00096	0.0020	0.00039	ug/l	J
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00061	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00054	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00076	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00078	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00075	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0031	0.0020	0.00065	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.00099	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0075	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00096	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0099	0.0020	0.00042	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00039	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0079	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0079	0.00090	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0079	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00068	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00063	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00052	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW017		
Lab Sample ID:	JE10205-21	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00050	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00090	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0037	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0079	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0079	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0039	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0039	0.00055	ug/l	
151772-58-6	NFDHA	ND	0.0039	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0079	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0079	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0039	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0098	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.049	0.0070	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.049	0.0061	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	95%		5-130%
	13C5-PFPeA	86%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	104%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW017		
Lab Sample ID:	JE10205-21	**Date Sampled:**	04/24/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	88%		40-130%
	d3-MeFOSA	74%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	92%		40-170%
	d5-EtFOSAA	90%		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	83%		10-130%
	13C2-4:2FTS	108%		40-200%
	13C2-6:2FTS	108%		40-200%
	13C2-8:2FTS	103%		40-300%
	13C3-HFPO-DA	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

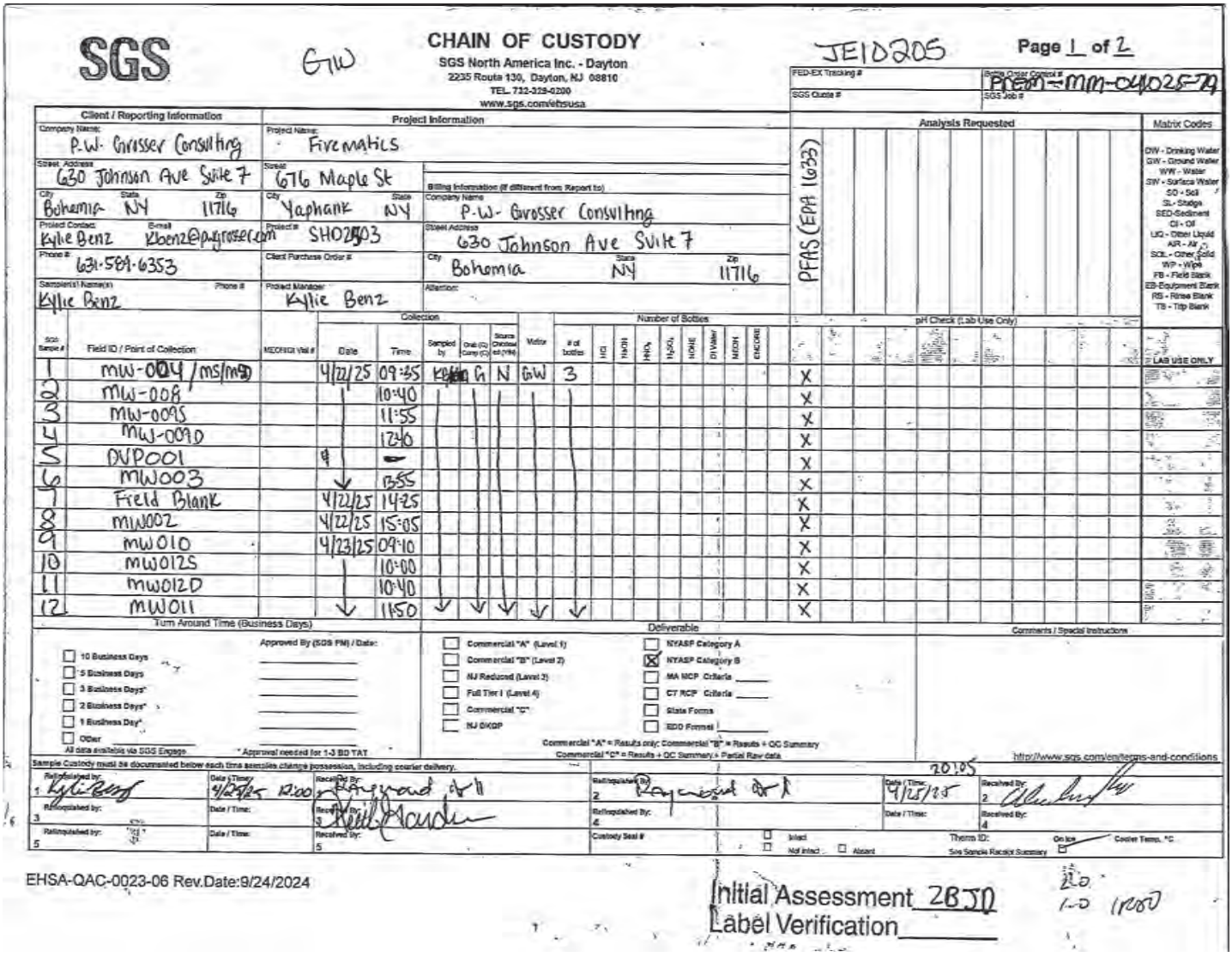
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



SGS

GW

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200
www.sgs.com/ehsusa

JE10205

Page 1 of 2

FED-EX Tracking #:
SGS Quote #:
Purchase Order Control #: PREM-MM-04025-24
SGS Job #:

Client / Reporting Information

Company Name: P.W. Grosser Consulting
Street Address: 630 Johnson Ave Suite 7
City: Bohemia State: NY Zip: 11716
Project Contact: Kylie Benz E-mail: kbenz@pwgrosser.com
Phone #: 631-589-6353
Sampler(s) Name(s): Kylie Benz Phone #:

Project Information

Project Name: Firematics
Street: 676 Maple St
City: Yaphank State: NY
Project #: SH02503
Client Purchase Order #:
Project Manager: Kylie Benz

Billing Information (if different from Report to)

Company Name: P.W. Grosser Consulting
Street Address: 630 Johnson Ave Suite 7
City: Bohemia State: NY Zip: 11716
Attention:

Analysis Requested

PFAS (EPA 1633)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RS - Rinse Blank
TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	# of Grab (G) Comp (C)	Source Code (Potable/NPW/SW/SO/WW/OW/WP/AIR/OIL)	Matrix	Number of Bottles: # of bottles	HCl	HNO3	NaOH	H2SO4	NONE	DI Water	MEOH	ENCORE	pH Check (Lab Use Only)	LAB USE ONLY
1	MW-004 /MS/MSD		4/22/25	09:35	KB/GH	G	N	GW	3									X	
2	MW-008			10:40														X	
3	MW-009S			11:55														X	
4	MW-009D			12:40														X	
5	DUP001			-														X	
6	MW003			13:55														X	
7	Field Blank		4/22/25	14:25														X	
8	MW002		4/22/25	15:05														X	
9	MW010		4/23/25	09:10														X	
10	MW012S			10:00														X	
11	MW012D			10:40														X	
12	MW011			11:50														X	

Turn Around Time (Business Days)

Approved By (SGS PM) / Date:

- 10 Business Days
- 5 Business Days
- 3 Business Days*
- 2 Business Days*
- 1 Business Day*
- Other

All data available via SGS Engage. * Approval needed for 1-3 BD TAT

Deliverable

- Commercial "A" (Level 1)
- Commercial "B" (Level 2)
- NJ Reduced (Level 2)
- Full Tier I (Level 4)
- Commercial "C"
- NJ DKQP
- NYASP Category A
- NYASP Category B
- MA MCP Criteria
- CT RCP Criteria
- State Forms
- EDD Format

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

http://www.sgs.com/en/terms-and-conditions

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

	Relinquished by:	Date / Time:	Received By:
1	Kylie Benz	4/23/25 12:00	Raymond Ort II
2	Raymond Ort II	4/23/25 20:05	
3			Kelli Maurer
4			
5			

Custody Seal #: Intact / Not Intact / Absent

Therm ID: SGS Sample Receipt Summary

On Ice / Cooler Temp. °C

EHSA-QAC-0023-06 Rev.Date:9/24/2024

Initial Assessment ZBJD
Label Verification

CHAIN OF CUSTODY

JE10205 Page 2 of 2

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #:

Client / Reporting Information

Company Name: P.W. Grosser Consulting
Street Address: 630 Johnson Ave Suite 7
City: Bohemia State: NY Zip: 11716
Project Contact: Kylie Benz E-mail: kbenz@pwgrosser.com
Phone #: 631-589-6353
Sampler(s) Name(s): Kylie Benz Phone #:

Project Information

Project Name: Firematics
Street: 676 Maple Street
City: Yaphank State: NY
Project #: SHO2503
Client Purchase Order #:
Project Manager: Kylie Benz

Billing Information (if different from Report to)

Company Name: P.W. Grosser Consulting
Street Address: 630 Johnson Ave Suite 7
City: Bohemia State: NY Zip: 11716
Attention:

Requested Analysis

PFAS (EPA 1633)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED - Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB - Equipment Blank
RB - Rinse Blank
TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NaHSO4	DI Water	MeOH	ENCORE	PFAS (EPA 1633)	LAB USE ONLY
13	MW005S		4/23/25	13:05	KB	G	GW	3									X	
14	MW005D			13:40													X	
15	MW006S			15:10													X	
16	MW006D			14:25													X	
17	MW007		4/24/25	08:10													X	
18	MW013			09:20													X	
19	MW014S			10:20													X	
20	MW014D			11:30													X	
21	MW017			12:45													X	

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [ ] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [ ] EDD Format
- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

http://www.sgs.com/en/terms-and-conditions

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

	Relinquished by:	Date / Time:	Received By:
1	Kylie Benz	4/24/25 12:00	Raymond BK 11
2	Raymond BK 11	4/25/25	Mahyar
3			Keith Kruse
4			
5			
6			

Custody Seal # | Intact / Not Intact | Preserved where applicable / Absent | Therm. ID: | Cooler Temp. °C: 2.0°C mean

FHSA-DAC-0023-02-PCRM-Firefront - Standard DOC

SGS Sample Receipt Summary

Job Number: JE10205 **Client:** PW GROSSER CONSULTING **Project:** SHD2403, NY

Date / Time Received: 4/25/2025 8:05:00 PM **Delivery Method:** IMP **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0); Cooler 2: (1.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.4); Cooler 2: (1.4);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR-50		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	2		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

5.1 5

Job Change Order: JE10205

Requested Date:	4/29/2025	**Received Date:**	4/25/2025
Account Name:	PW Grosser Consulting	**Due Date:**	5/8/2025
Project Description:	Firematics, 676 Maple St, Yaphank, NY	**Deliverable:**	NYASPB
C/O Initiated By:	MARIE_MEI **PM:** MM	**TAT (Days):**	13

Sample #: JE10205-1 **Dept:**
Client ID: MW-004 **TAT:** 13
Change: Revised ID to MW004

Sample #: JE10205-1D **Dept:**
Client ID: MW-004/MSD **TAT:** 13
Change: Revised ID to MW004/MSD

Sample #: JE10205-1S **Dept:**
Client ID: MW-004/MS **TAT:** 13
Change: Revised ID to MW004/MS

Sample #: JE10205-2 **Dept:**
Client ID: MW-008 **TAT:** 13
Change: Revised ID to MW008

Above Changes Per: Kylie B **Date/Time:** 4/29/2025

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

Job Change Order: JE10205

Requested Date:	4/29/2025	**Received Date:**	4/25/2025
Account Name:	PW Grosser Consulting	**Due Date:**	5/8/2025
Project Description:	Firematics, 676 Maple St, Yaphank, NY	**Deliverable:**	NYASPB
C/O Initiated By:	MARIE_MEI **PM:** MM	**TAT (Days):**	13

Sample #: JE10205-3 **Dept:**
Client ID: MW-009S **TAT:** 13
Change: Revised ID to MW009S

Sample #: JE10205-4 **Dept:**
Client ID: MW-009D **TAT:** 13
Change: Revised ID to MW009D

Above Changes Per: Kylie B **Date/Time:** 4/29/2025

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

Internal Sample Tracking Chronicle

PW Grosser Consulting

Job No: JE10205

Firematics, 676 Maple St, Yaphank, NY
Project No: SHD2503

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JE10205-1 MW004	Collected: 22-APR-25 09:35 By: KB			Received: 25-APR-25 By: KG		
JE10205-1	EPA 1633	30-APR-25 21:57	MH	29-APR-25	MK	LCID1633LIST40
JE10205-1	EPA 1633	02-MAY-25 19:25	MH	29-APR-25	MK	LCID1633LIST40
JE10205-2 MW008	Collected: 22-APR-25 10:40 By: KB			Received: 25-APR-25 By: KG		
JE10205-2	EPA 1633	30-APR-25 22:10	MH	29-APR-25	MK	LCID1633LIST40
JE10205-2	EPA 1633	15-MAY-25 14:40	MH	13-MAY-25	BE	LCID1633LIST40
JE10205-3 MW009S	Collected: 22-APR-25 11:55 By: KB			Received: 25-APR-25 By: KG		
JE10205-3	EPA 1633	30-APR-25 22:24	MH	29-APR-25	MK	LCID1633LIST40
JE10205-3	EPA 1633	01-MAY-25 14:33	MH	29-APR-25	MK	LCID1633LIST40
JE10205-4 MW009D	Collected: 22-APR-25 12:40 By: KB			Received: 25-APR-25 By: KG		
JE10205-4	EPA 1633	01-MAY-25 14:06	MH	29-APR-25	MK	LCID1633LIST40
JE10205-5 DUP001	Collected: 22-APR-25 00:00 By: KB			Received: 25-APR-25 By: KG		
JE10205-5	EPA 1633	30-APR-25 22:51	MH	29-APR-25	MK	LCID1633LIST40
JE10205-5	EPA 1633	15-MAY-25 15:09	MH	13-MAY-25	BE	LCID1633LIST40
JE10205-6 MW003	Collected: 22-APR-25 13:55 By: KB			Received: 25-APR-25 By: KG		
JE10205-6	EPA 1633	30-APR-25 23:05	MH	29-APR-25	MK	LCID1633LIST40
JE10205-7 FIELD BLANK	Collected: 22-APR-25 14:25 By: KB			Received: 25-APR-25 By: KG		
JE10205-7	EPA 1633	30-APR-25 23:18	MH	29-APR-25	MK	LCID1633LIST40

Internal Sample Tracking Chronicle

PW Grosser Consulting

Job No: JE10205

Firematics, 676 Maple St, Yaphank, NY
Project No: SHD2503

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JE10205-8	Collected: 22-APR-25 15:05 By: KB			Received: 25-APR-25 By: KG		
MW002						
JE10205-8	EPA 1633	30-APR-25 23:32	MH	29-APR-25	MK	LCID1633LIST40
JE10205-9	Collected: 23-APR-25 09:10 By: KB			Received: 25-APR-25 By: KG		
MW010						
JE10205-9	EPA 1633	30-APR-25 23:45	MH	29-APR-25	MK	LCID1633LIST40
JE10205-9	EPA 1633	01-MAY-25 15:00	MH	29-APR-25	MK	LCID1633LIST40
JE10205-10	Collected: 23-APR-25 10:00 By: KB			Received: 25-APR-25 By: KG		
MW012S						
JE10205-10	EPA 1633	01-MAY-25 00:26	MH	29-APR-25	MK	LCID1633LIST40
JE10205-10	EPA 1633	13-MAY-25 01:48	VL	29-APR-25	MK	LCID1633LIST40
JE10205-11	Collected: 23-APR-25 10:40 By: KB			Received: 25-APR-25 By: KG		
MW012D						
JE10205-11	EPA 1633	30-APR-25 17:53	MH	29-APR-25	AA	LCID1633LIST40
JE10205-12	Collected: 23-APR-25 11:50 By: KB			Received: 25-APR-25 By: KG		
MW011						
JE10205-12	EPA 1633	30-APR-25 18:06	MH	29-APR-25	AA	LCID1633LIST40
JE10205-13	Collected: 23-APR-25 13:05 By: KB			Received: 25-APR-25 By: KG		
MW005S						
JE10205-13	EPA 1633	30-APR-25 18:20	MH	29-APR-25	AA	LCID1633LIST40
JE10205-13	EPA 1633	01-MAY-25 15:27	MH	29-APR-25	AA	LCID1633LIST40
JE10205-14	Collected: 23-APR-25 13:40 By: KB			Received: 25-APR-25 By: KG		
MW005D						
JE10205-14	EPA 1633	30-APR-25 18:33	MH	29-APR-25	AA	LCID1633LIST40

Internal Sample Tracking Chronicle

PW Grosser Consulting

Job No: JE10205

Firematics, 676 Maple St, Yaphank, NY
Project No: SHD2503

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JE10205-15 Collected: 23-APR-25 15:10 By: KB MW006S				Received: 25-APR-25 By: KG		
JE10205-15	EPA 1633	30-APR-25 18:47	MH	29-APR-25	AA	LCID1633LIST40
JE10205-15	EPA 1633	01-MAY-25 15:41	MH	29-APR-25	AA	LCID1633LIST40
JE10205-16 Collected: 23-APR-25 14:25 By: KB MW006D				Received: 25-APR-25 By: KG		
JE10205-16	EPA 1633	01-MAY-25 13:52	MH	29-APR-25	AA	LCID1633LIST40
JE10205-17 Collected: 24-APR-25 08:10 By: KB MW007				Received: 25-APR-25 By: KG		
JE10205-17	EPA 1633	30-APR-25 19:14	MH	29-APR-25	AA	LCID1633LIST40
JE10205-18 Collected: 24-APR-25 09:20 By: KB MW013				Received: 25-APR-25 By: KG		
JE10205-18	EPA 1633	30-APR-25 19:28	MH	29-APR-25	AA	LCID1633LIST40
JE10205-19 Collected: 24-APR-25 10:20 By: KB MW014S				Received: 25-APR-25 By: KG		
JE10205-19	EPA 1633	30-APR-25 19:41	MH	29-APR-25	AA	LCID1633LIST40
JE10205-20 Collected: 24-APR-25 11:30 By: KB MW014D				Received: 25-APR-25 By: KG		
JE10205-20	EPA 1633	30-APR-25 19:55	MH	29-APR-25	AA	LCID1633LIST40
JE10205-20	EPA 1633	12-MAY-25 18:14	VL	08-MAY-25	MK	LCID1633LIST40
JE10205-21 Collected: 24-APR-25 12:45 By: KB MW017				Received: 25-APR-25 By: KG		
JE10205-21	EPA 1633	30-APR-25 20:35	MH	29-APR-25	AA	LCID1633LIST40

SGS Internal Chain of Custody

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Received: 04/25/25

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JE10205-1.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-1.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-1.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-1.4	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-1.4	Secured Storage	Maxwell Kowalak@sgs	04/29/25 15:30	Retrieve from Storage
JE10205-1.4	Maxwell Kowalak@sgs		04/29/25 15:31	Depleted
JE10205-1.4.1	Maxwell Kowalak@sgs	Organics Prep	04/29/25 15:30	Extract from JE10205-1.4
JE10205-1.4.1	Organics Prep	Maxwell Kowalak@sgs	04/29/25 15:31	Extract from JE10205-1.4
JE10205-1.4.1	Maxwell Kowalak@sgs	Extract Storage	04/29/25 15:31	Return to Storage
JE10205-1.5	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-1.6	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-1.6	Secured Storage	Maxwell Kowalak@sgs	04/29/25 15:30	Retrieve from Storage
JE10205-1.6	Maxwell Kowalak@sgs		04/29/25 15:31	Depleted
JE10205-1.6.1	Maxwell Kowalak@sgs	Organics Prep	04/29/25 15:30	Extract from JE10205-1.6
JE10205-1.6.1	Organics Prep	Maxwell Kowalak@sgs	04/29/25 15:31	Extract from JE10205-1.6
JE10205-1.6.1	Maxwell Kowalak@sgs	Extract Storage	04/29/25 15:31	Return to Storage
JE10205-1.7	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-1.7	Secured Storage	Maxwell Kowalak@sgs	04/29/25 15:30	Retrieve from Storage
JE10205-1.7	Maxwell Kowalak@sgs		04/29/25 15:31	Depleted
JE10205-1.7.1	Maxwell Kowalak@sgs	Organics Prep	04/29/25 15:30	Extract from JE10205-1.7
JE10205-1.7.1	Organics Prep	Maxwell Kowalak@sgs	04/29/25 15:31	Extract from JE10205-1.7
JE10205-1.7.1	Maxwell Kowalak@sgs	Extract Storage	04/29/25 15:31	Return to Storage
JE10205-1.8	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-1.9	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-2.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-2.1	Secured Storage	Maxwell Kowalak@sgs	04/29/25 15:30	Retrieve from Storage
JE10205-2.1	Maxwell Kowalak@sgs		04/29/25 15:31	Depleted
JE10205-2.1.1	Maxwell Kowalak@sgs	Organics Prep	04/29/25 15:30	Extract from JE10205-2.1
JE10205-2.1.1	Organics Prep	Maxwell Kowalak@sgs	04/29/25 15:31	Extract from JE10205-2.1
JE10205-2.1.1	Maxwell Kowalak@sgs	Extract Storage	04/29/25 15:31	Return to Storage

SGS Internal Chain of Custody

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Received: 04/25/25

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JE10205-2.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-2.2	Secured Storage	Ben Esposito	05/02/25 14:15	Retrieve from Storage
JE10205-2.2	Ben Esposito		05/02/25 14:16	Depleted
JE10205-2.2.1	Ben Esposito	Organics Prep	05/02/25 14:15	Extract from JE10205-2.2
JE10205-2.2.1	Organics Prep	Ben Esposito	05/02/25 14:16	Extract from JE10205-2.2
JE10205-2.2.1	Ben Esposito	Extract Storage	05/02/25 14:16	Return to Storage
JE10205-2.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-2.3	Secured Storage	Ben Esposito	05/13/25 13:30	Retrieve from Storage
JE10205-2.3	Ben Esposito		05/13/25 13:31	Depleted
JE10205-2.3.1	Ben Esposito	Organics Prep	05/13/25 13:31	Extract from JE10205-2.3
JE10205-2.3.1	Organics Prep	Ben Esposito	05/13/25 13:31	Extract from JE10205-2.3
JE10205-2.3.1	Ben Esposito	Extract Storage	05/13/25 13:31	Return to Storage
JE10205-3.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-3.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-3.2	Secured Storage	Maxwell Kowalak@sgs	04/29/25 15:30	Retrieve from Storage
JE10205-3.2	Maxwell Kowalak@sgs		04/29/25 15:31	Depleted
JE10205-3.2.1	Maxwell Kowalak@sgs	Organics Prep	04/29/25 15:30	Extract from JE10205-3.2
JE10205-3.2.1	Organics Prep	Maxwell Kowalak@sgs	04/29/25 15:31	Extract from JE10205-3.2
JE10205-3.2.1	Maxwell Kowalak@sgs	Extract Storage	04/29/25 15:31	Return to Storage
JE10205-3.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-4.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-4.1	Secured Storage	Maxwell Kowalak@sgs	04/29/25 15:30	Retrieve from Storage
JE10205-4.1	Maxwell Kowalak@sgs		04/29/25 15:31	Depleted
JE10205-4.1.1	Maxwell Kowalak@sgs	Organics Prep	04/29/25 15:30	Extract from JE10205-4.1
JE10205-4.1.1	Organics Prep	Maxwell Kowalak@sgs	04/29/25 15:31	Extract from JE10205-4.1
JE10205-4.1.1	Maxwell Kowalak@sgs	Extract Storage	04/29/25 15:31	Return to Storage
JE10205-4.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-4.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-5.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-5.1	Secured Storage	Maxwell Kowalak@sgs	04/29/25 15:30	Retrieve from Storage
JE10205-5.1	Maxwell Kowalak@sgs		04/29/25 15:31	Depleted

SGS Internal Chain of Custody

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Received: 04/25/25

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JE10205-5.1.1	Maxwell Kowalak@sgs	Organics Prep	04/29/25 15:30	Extract from JE10205-5.1
JE10205-5.1.1	Organics Prep	Maxwell Kowalak@sgs	04/29/25 15:31	Extract from JE10205-5.1
JE10205-5.1.1	Maxwell Kowalak@sgs	Extract Storage	04/29/25 15:31	Return to Storage
JE10205-5.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-5.2	Secured Storage	Ben Esposito	05/02/25 14:15	Retrieve from Storage
JE10205-5.2	Ben Esposito		05/02/25 14:16	Depleted
JE10205-5.2.1	Ben Esposito	Organics Prep	05/02/25 14:15	Extract from JE10205-5.2
JE10205-5.2.1	Organics Prep	Ben Esposito	05/02/25 14:16	Extract from JE10205-5.2
JE10205-5.2.1	Ben Esposito	Extract Storage	05/02/25 14:16	Return to Storage
JE10205-5.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-5.3	Secured Storage	Ben Esposito	05/13/25 13:30	Retrieve from Storage
JE10205-5.3	Ben Esposito		05/13/25 13:31	Depleted
JE10205-5.3.1	Ben Esposito	Organics Prep	05/13/25 13:31	Extract from JE10205-5.3
JE10205-5.3.1	Organics Prep	Ben Esposito	05/13/25 13:31	Extract from JE10205-5.3
JE10205-5.3.1	Ben Esposito	Extract Storage	05/13/25 13:31	Return to Storage
JE10205-6.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-6.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-6.2	Secured Storage	Maxwell Kowalak@sgs	04/29/25 15:30	Retrieve from Storage
JE10205-6.2	Maxwell Kowalak@sgs		04/29/25 15:31	Depleted
JE10205-6.2.1	Maxwell Kowalak@sgs	Organics Prep	04/29/25 15:30	Extract from JE10205-6.2
JE10205-6.2.1	Organics Prep	Maxwell Kowalak@sgs	04/29/25 15:31	Extract from JE10205-6.2
JE10205-6.2.1	Maxwell Kowalak@sgs	Extract Storage	04/29/25 15:31	Return to Storage
JE10205-6.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-7.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-7.1	Secured Storage	Maxwell Kowalak@sgs	04/29/25 15:30	Retrieve from Storage
JE10205-7.1	Maxwell Kowalak@sgs		04/29/25 15:31	Depleted
JE10205-7.1.1	Maxwell Kowalak@sgs	Organics Prep	04/29/25 15:30	Extract from JE10205-7.1
JE10205-7.1.1	Organics Prep	Maxwell Kowalak@sgs	04/29/25 15:31	Extract from JE10205-7.1
JE10205-7.1.1	Maxwell Kowalak@sgs	Extract Storage	04/29/25 15:31	Return to Storage
JE10205-7.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-7.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage

SGS Internal Chain of Custody

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Received: 04/25/25

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JE10205-8.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-8.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-8.2	Secured Storage	Maxwell Kowalak@sgs	04/29/25 15:30	Retrieve from Storage
JE10205-8.2	Maxwell Kowalak@sgs		04/29/25 15:31	Depleted
JE10205-8.2.1	Maxwell Kowalak@sgs	Organics Prep	04/29/25 15:30	Extract from JE10205-8.2
JE10205-8.2.1	Organics Prep	Maxwell Kowalak@sgs	04/29/25 15:31	Extract from JE10205-8.2
JE10205-8.2.1	Maxwell Kowalak@sgs	Extract Storage	04/29/25 15:31	Return to Storage
JE10205-8.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-9.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-9.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-9.2	Secured Storage	Maxwell Kowalak@sgs	04/29/25 15:30	Retrieve from Storage
JE10205-9.2	Maxwell Kowalak@sgs		04/29/25 15:31	Depleted
JE10205-9.2.1	Maxwell Kowalak@sgs	Organics Prep	04/29/25 15:30	Extract from JE10205-9.2
JE10205-9.2.1	Organics Prep	Maxwell Kowalak@sgs	04/29/25 15:31	Extract from JE10205-9.2
JE10205-9.2.1	Maxwell Kowalak@sgs	Extract Storage	04/29/25 15:31	Return to Storage
JE10205-9.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-10.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-10.1	Secured Storage	Maxwell Kowalak@sgs	04/29/25 15:30	Retrieve from Storage
JE10205-10.1	Maxwell Kowalak@sgs		04/29/25 15:31	Depleted
JE10205-10.1.1	Maxwell Kowalak@sgs	Organics Prep	04/29/25 15:30	Extract from JE10205-10.1
JE10205-10.1.1	Organics Prep	Maxwell Kowalak@sgs	04/29/25 15:31	Extract from JE10205-10.1
JE10205-10.1.1	Maxwell Kowalak@sgs	Extract Storage	04/29/25 15:31	Return to Storage
JE10205-10.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-10.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-11.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-11.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-11.2	Secured Storage	Aysegul Aldemir	04/29/25 16:04	Retrieve from Storage
JE10205-11.2	Aysegul Aldemir		04/29/25 16:05	Depleted
JE10205-11.2.1	Aysegul Aldemir	Organics Prep	04/29/25 16:04	Extract from JE10205-11.2
JE10205-11.2.1	Organics Prep	Aysegul Aldemir	04/29/25 16:05	Extract from JE10205-11.2

SGS Internal Chain of Custody

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Received: 04/25/25

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JE10205-11.2.1	Aysegul Aldemir	Extract Storage	04/29/25 16:05	Return to Storage
JE10205-11.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-12.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-12.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-12.2	Secured Storage	Aysegul Aldemir	04/29/25 16:04	Retrieve from Storage
JE10205-12.2	Aysegul Aldemir		04/29/25 16:05	Depleted
JE10205-12.2.1	Aysegul Aldemir	Organics Prep	04/29/25 16:04	Extract from JE10205-12.2
JE10205-12.2.1	Organics Prep	Aysegul Aldemir	04/29/25 16:05	Extract from JE10205-12.2
JE10205-12.2.1	Aysegul Aldemir	Extract Storage	04/29/25 16:05	Return to Storage
JE10205-12.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-13.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-13.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-13.2	Secured Storage	Aysegul Aldemir	04/29/25 16:04	Retrieve from Storage
JE10205-13.2	Aysegul Aldemir		04/29/25 16:05	Depleted
JE10205-13.2.1	Aysegul Aldemir	Organics Prep	04/29/25 16:04	Extract from JE10205-13.2
JE10205-13.2.1	Organics Prep	Aysegul Aldemir	04/29/25 16:05	Extract from JE10205-13.2
JE10205-13.2.1	Aysegul Aldemir	Extract Storage	04/29/25 16:05	Return to Storage
JE10205-13.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-14.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-14.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-14.2	Secured Storage	Aysegul Aldemir	04/29/25 16:04	Retrieve from Storage
JE10205-14.2	Aysegul Aldemir		04/29/25 16:05	Depleted
JE10205-14.2.1	Aysegul Aldemir	Organics Prep	04/29/25 16:04	Extract from JE10205-14.2
JE10205-14.2.1	Organics Prep	Aysegul Aldemir	04/29/25 16:05	Extract from JE10205-14.2
JE10205-14.2.1	Aysegul Aldemir	Extract Storage	04/29/25 16:05	Return to Storage
JE10205-14.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-15.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-15.1	Secured Storage	Aysegul Aldemir	04/29/25 16:04	Retrieve from Storage
JE10205-15.1	Aysegul Aldemir		04/29/25 16:05	Depleted

SGS Internal Chain of Custody

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Received: 04/25/25

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JE10205-15.1.1	Aysegul Aldemir	Organics Prep	04/29/25 16:04	Extract from JE10205-15.1
JE10205-15.1.1	Organics Prep	Aysegul Aldemir	04/29/25 16:05	Extract from JE10205-15.1
JE10205-15.1.1	Aysegul Aldemir	Extract Storage	04/29/25 16:05	Return to Storage
JE10205-15.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-15.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-16.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-16.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-16.2	Secured Storage	Aysegul Aldemir	04/29/25 16:04	Retrieve from Storage
JE10205-16.2	Aysegul Aldemir		04/29/25 16:05	Depleted
JE10205-16.2.1	Aysegul Aldemir	Organics Prep	04/29/25 16:04	Extract from JE10205-16.2
JE10205-16.2.1	Organics Prep	Aysegul Aldemir	04/29/25 16:05	Extract from JE10205-16.2
JE10205-16.2.1	Aysegul Aldemir	Extract Storage	04/29/25 16:05	Return to Storage
JE10205-16.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-17.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-17.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-17.2	Secured Storage	Aysegul Aldemir	04/29/25 16:04	Retrieve from Storage
JE10205-17.2	Aysegul Aldemir		04/29/25 16:05	Depleted
JE10205-17.2.1	Aysegul Aldemir	Organics Prep	04/29/25 16:04	Extract from JE10205-17.2
JE10205-17.2.1	Organics Prep	Aysegul Aldemir	04/29/25 16:05	Extract from JE10205-17.2
JE10205-17.2.1	Aysegul Aldemir	Extract Storage	04/29/25 16:05	Return to Storage
JE10205-17.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-18.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-18.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-18.2	Secured Storage	Aysegul Aldemir	04/29/25 16:04	Retrieve from Storage
JE10205-18.2	Aysegul Aldemir		04/29/25 16:05	Depleted
JE10205-18.2.1	Aysegul Aldemir	Organics Prep	04/29/25 16:04	Extract from JE10205-18.2
JE10205-18.2.1	Organics Prep	Aysegul Aldemir	04/29/25 16:05	Extract from JE10205-18.2
JE10205-18.2.1	Aysegul Aldemir	Extract Storage	04/29/25 16:05	Return to Storage
JE10205-18.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage

SGS Internal Chain of Custody

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Received: 04/25/25

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JE10205-19.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-19.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-19.2	Secured Storage	Aysegul Aldemir	04/29/25 16:04	Retrieve from Storage
JE10205-19.2	Aysegul Aldemir		04/29/25 16:05	Depleted
JE10205-19.2.1	Aysegul Aldemir	Organics Prep	04/29/25 16:04	Extract from JE10205-19.2
JE10205-19.2.1	Organics Prep	Aysegul Aldemir	04/29/25 16:05	Extract from JE10205-19.2
JE10205-19.2.1	Aysegul Aldemir	Extract Storage	04/29/25 16:05	Return to Storage
JE10205-19.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-20.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-20.1	Secured Storage	Aysegul Aldemir	04/29/25 16:04	Retrieve from Storage
JE10205-20.1	Aysegul Aldemir		04/29/25 16:05	Depleted
JE10205-20.1.1	Aysegul Aldemir	Organics Prep	04/29/25 16:04	Extract from JE10205-20.1
JE10205-20.1.1	Organics Prep	Aysegul Aldemir	04/29/25 16:05	Extract from JE10205-20.1
JE10205-20.1.1	Aysegul Aldemir	Extract Storage	04/29/25 16:05	Return to Storage
JE10205-20.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-20.2	Secured Storage	Ben Esposito	05/02/25 14:15	Retrieve from Storage
JE10205-20.2	Ben Esposito		05/02/25 14:16	Depleted
JE10205-20.2.1	Ben Esposito	Organics Prep	05/02/25 14:15	Extract from JE10205-20.2
JE10205-20.2.1	Organics Prep	Ben Esposito	05/02/25 14:16	Extract from JE10205-20.2
JE10205-20.2.1	Ben Esposito	Extract Storage	05/02/25 14:16	Return to Storage
JE10205-20.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage
JE10205-20.3	Secured Storage	Maxwell Kowalak@sgs	05/08/25 16:19	Retrieve from Storage
JE10205-20.3	Maxwell Kowalak@sgs		05/08/25 16:20	Depleted
JE10205-20.3.1	Maxwell Kowalak@sgs	Organics Prep	05/08/25 16:19	Extract from JE10205-20.3
JE10205-20.3.1	Organics Prep	Maxwell Kowalak@sgs	05/08/25 16:20	Extract from JE10205-20.3
JE10205-20.3.1	Maxwell Kowalak@sgs	Extract Storage	05/08/25 16:20	Return to Storage
JE10205-21.1	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-21.2	Jabaery Ellis	Secured Storage	04/28/25 18:06	Return to Storage
JE10205-21.2	Secured Storage	Aysegul Aldemir	04/29/25 16:04	Retrieve from Storage
JE10205-21.2	Aysegul Aldemir		04/29/25 16:05	Depleted
JE10205-21.2.1	Aysegul Aldemir	Organics Prep	04/29/25 16:04	Extract from JE10205-21.2
JE10205-21.2.1	Organics Prep	Aysegul Aldemir	04/29/25 16:05	Extract from JE10205-21.2

SGS Internal Chain of Custody

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY
Received: 04/25/25

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JE10205-21.2.1	Aysegul Aldemir	Extract Storage	04/29/25 16:05	Return to Storage
JE10205-21.3	Jabaery Ellis	Secured Storage	04/28/25 18:09	Return to Storage

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Injection Standard Area Summaries
- Ion Ratio Summaries
- Isotope Dilution Standard Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4Q137-IBLK	4Q8089.D	1	04/29/25	MH	n/a	n/a	T4Q137

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-3, JE10205-4, JE10205-9, JE10205-13, JE10205-15, JE10205-16

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00093	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00098	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0015	ug/l	
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4Q137-IBLK	4Q8089.D	1	04/29/25	MH	n/a	n/a	T4Q137

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-3, JE10205-4, JE10205-9, JE10205-13, JE10205-15, JE10205-16

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	5-130%
	13C5-PFPeA	100%	40-130%
	13C5-PFHxA	101%	40-130%
	13C4-PFHpA	100%	40-130%
	13C8-PFOA	101%	40-130%
	13C9-PFNA	99%	40-130%
	13C6-PFDA	99%	40-130%
	13C7-PFUnDA	96%	30-130%
	13C2-PFDoDA	95%	10-130%
	13C2-PFTeDA	94%	10-130%
	13C3-PFBS	102%	40-135%
	13C3-PFHxS	102%	40-130%
	13C8-PFOS	95%	40-130%
	13C8-FOSA	98%	40-130%
	d3-MeFOSA	96%	10-130%
	d5-EtFOSA	99%	10-130%
	d3-MeFOSAA	104%	40-170%
	d5-EtFOSAA	105%	25-135%
	d7-MeFOSE	97%	10-130%
	d9-EtFOSE	97%	10-130%
	13C2-4:2FTS	108%	40-200%
	13C2-6:2FTS	112%	40-200%
	13C2-8:2FTS	105%	40-300%
	13C3-HFPO-DA	100%	40-130%

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4Q138-IBLK	4Q8136.D	1	04/30/25	MH	n/a	n/a	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-1, JE10205-2, JE10205-3, JE10205-5, JE10205-6, JE10205-7, JE10205-8, JE10205-9, JE10205-10, JE10205-11, JE10205-12, JE10205-13, JE10205-14, JE10205-15, JE10205-17, JE10205-18, JE10205-19, JE10205-20, JE10205-21

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00093	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00098	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0015	ug/l	
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4Q138-IBLK	4Q8136.D	1	04/30/25	MH	n/a	n/a	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-1, JE10205-2, JE10205-3, JE10205-5, JE10205-6, JE10205-7, JE10205-8, JE10205-9, JE10205-10, JE10205-11, JE10205-12, JE10205-13, JE10205-14, JE10205-15, JE10205-17, JE10205-18, JE10205-19, JE10205-20, JE10205-21

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	5-130%
	13C5-PFPeA	104%	40-130%
	13C5-PFHxA	104%	40-130%
	13C4-PFHpA	104%	40-130%
	13C8-PFOA	102%	40-130%
	13C9-PFNA	101%	40-130%
	13C6-PFDA	105%	40-130%
	13C7-PFUnDA	105%	30-130%
	13C2-PFDoDA	101%	10-130%
	13C2-PFTeDA	106%	10-130%
	13C3-PFBS	101%	40-135%
	13C3-PFHxS	109%	40-130%
	13C8-PFOS	97%	40-130%
	13C8-FOSA	101%	40-130%
	d3-MeFOSA	94%	10-130%
	d5-EtFOSA	101%	10-130%
	d3-MeFOSAA	100%	40-170%
	d5-EtFOSAA	98%	25-135%
	d7-MeFOSE	98%	10-130%
	d9-EtFOSE	102%	10-130%
	13C2-4:2FTS	122%	40-200%
	13C2-6:2FTS	111%	40-200%
	13C2-8:2FTS	109%	40-300%
	13C3-HFPO-DA	100%	40-130%

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4Q139-IBLK	4Q8181.D	1	05/01/25	MH	n/a	n/a	T4Q139

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-3, JE10205-4, JE10205-9, JE10205-13, JE10205-15, JE10205-16

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00093	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00098	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0015	ug/l	
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4Q139-IBLK	4Q8181.D	1	05/01/25	MH	n/a	n/a	T4Q139

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-3, JE10205-4, JE10205-9, JE10205-13, JE10205-15, JE10205-16

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	5-130%
	13C5-PFPeA	102%	40-130%
	13C5-PFHxA	102%	40-130%
	13C4-PFHpA	101%	40-130%
	13C8-PFOA	101%	40-130%
	13C9-PFNA	99%	40-130%
	13C6-PFDA	102%	40-130%
	13C7-PFUnDA	103%	30-130%
	13C2-PFDoDA	101%	10-130%
	13C2-PFTeDA	101%	10-130%
	13C3-PFBS	100%	40-135%
	13C3-PFHxS	100%	40-130%
	13C8-PFOS	94%	40-130%
	13C8-FOSA	98%	40-130%
	d3-MeFOSA	96%	10-130%
	d5-EtFOSA	98%	10-130%
	d3-MeFOSAA	98%	40-170%
	d5-EtFOSAA	94%	25-135%
	d7-MeFOSE	94%	10-130%
	d9-EtFOSE	96%	10-130%
	13C2-4:2FTS	116%	40-200%
	13C2-6:2FTS	107%	40-200%
	13C2-8:2FTS	98%	40-300%
	13C3-HFPO-DA	102%	40-130%

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4Q140-IBLK	4Q8239.D	1	05/02/25	MH	n/a	n/a	T4Q140

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-1

CAS No.	Compound	Result	RL	MDL	Units	Q
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	111%	5-130%
	13C5-PFPeA	107%	40-130%
	13C5-PFHxA	105%	40-130%
	13C4-PFHpA	106%	40-130%
	13C8-PFOA	107%	40-130%
	13C9-PFNA	106%	40-130%
	13C6-PFDA	106%	40-130%
	13C7-PFUnDA	109%	30-130%
	13C2-PFDoDA	104%	10-130%
	13C2-PFTeDA	101%	10-130%
	13C3-PFBS	115%	40-135%
	13C3-PFHxS	109%	40-130%
	13C8-PFOS	109%	40-130%
	13C8-FOSA	105%	40-130%
	d3-MeFOSA	105%	10-130%
	d5-EtFOSA	107%	10-130%
	d3-MeFOSAA	105%	40-170%
	d5-EtFOSAA	107%	25-135%
	d7-MeFOSE	102%	10-130%
	d9-EtFOSE	104%	10-130%
	13C2-4:2FTS	118%	40-200%
	13C2-6:2FTS	120%	40-200%
	13C2-8:2FTS	111%	40-300%
	13C3-HFPO-DA	107%	40-130%

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T1Q361-IBLK	1Q26037.D	1	05/14/25	MH	n/a	n/a	T1Q361

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-2, JE10205-5

CAS No.	Compound	Result	RL	MDL	Units	Q
335-67-1	Perfluorooctanoic acid	ND	0.20	0.075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.20	0.040	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.20	0.11	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.20	0.043	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	5-130%
	13C5-PFPeA	104%	40-130%
	13C5-PFHxA	100%	40-130%
	13C4-PFHpA	102%	40-130%
	13C8-PFOA	100%	40-130%
	13C9-PFNA	108%	40-130%
	13C6-PFDA	100%	40-130%
	13C7-PFUnDA	104%	30-130%
	13C2-PFDoDA	102%	10-130%
	13C2-PFTeDA	98%	10-130%
	13C3-PFBS	93%	40-135%
	13C3-PFHxS	97%	40-130%
	13C8-PFOS	107%	40-130%
	13C8-FOSA	103%	40-130%
	d3-MeFOSA	98%	10-130%
	d5-EtFOSA	107%	10-130%
	d3-MeFOSAA	105%	40-170%
	d5-EtFOSAA	103%	25-135%
	d7-MeFOSE	108%	10-130%
	d9-EtFOSE	104%	10-130%
	13C2-4:2FTS	84%	40-200%
	13C2-6:2FTS	94%	40-200%
	13C2-8:2FTS	91%	40-300%
	13C3-HFPO-DA	98%	40-130%

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T1Q362-IBLK	1Q26062.D	1	05/15/25	MH	n/a	n/a	T1Q362

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-2, JE10205-5

CAS No.	Compound	Result	RL	MDL	Units	Q
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	5-130%
	13C5-PFPeA	105%	40-130%
	13C5-PFHxA	101%	40-130%
	13C4-PFHpA	94%	40-130%
	13C8-PFOA	101%	40-130%
	13C9-PFNA	108%	40-130%
	13C6-PFDA	105%	40-130%
	13C7-PFUnDA	103%	30-130%
	13C2-PFDoDA	103%	10-130%
	13C2-PFTeDA	101%	10-130%
	13C3-PFBS	104%	40-135%
	13C3-PFHxS	105%	40-130%
	13C8-PFOS	109%	40-130%
	13C8-FOSA	113%	40-130%
	d3-MeFOSA	112%	10-130%
	d5-EtFOSA	109%	10-130%
	d3-MeFOSAA	108%	40-170%
	d5-EtFOSAA	106%	25-135%
	d7-MeFOSE	119%	10-130%
	d9-EtFOSE	119%	10-130%
	13C2-4:2FTS	104%	40-200%
	13C2-6:2FTS	94%	40-200%
	13C2-8:2FTS	92%	40-300%
	13C3-HFPO-DA	86%	40-130%

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4Q138-ICCB	4Q8154.D	1	04/30/25	MH	n/a	n/a	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-1, JE10205-2, JE10205-3, JE10205-5, JE10205-6, JE10205-7, JE10205-8, JE10205-9, JE10205-21

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00093	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00098	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0015	ug/l	
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4Q138-ICCB	4Q8154.D	1	04/30/25	MH	n/a	n/a	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-1, JE10205-2, JE10205-3, JE10205-5, JE10205-6, JE10205-7, JE10205-8, JE10205-9, JE10205-21

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	5-130%
	13C5-PFPeA	99%	40-130%
	13C5-PFHxA	102%	40-130%
	13C4-PFHpA	98%	40-130%
	13C8-PFOA	104%	40-130%
	13C9-PFNA	103%	40-130%
	13C6-PFDA	106%	40-130%
	13C7-PFUnDA	108%	30-130%
	13C2-PFDoDA	97%	10-130%
	13C2-PFTeDA	99%	10-130%
	13C3-PFBS	112%	40-135%
	13C3-PFHxS	105%	40-130%
	13C8-PFOS	106%	40-130%
	13C8-FOSA	98%	40-130%
	d3-MeFOSA	96%	10-130%
	d5-EtFOSA	101%	10-130%
	d3-MeFOSAA	101%	40-170%
	d5-EtFOSAA	103%	25-135%
	d7-MeFOSE	99%	10-130%
	d9-EtFOSE	101%	10-130%
	13C2-4:2FTS	114%	40-200%
	13C2-6:2FTS	109%	40-200%
	13C2-8:2FTS	107%	40-300%
	13C3-HFPO-DA	99%	40-130%

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4Q138-ICCB	4Q8171.D	1	05/01/25	MH	n/a	n/a	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00093	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00098	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0015	ug/l	
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4Q138-ICCB	4Q8171.D	1	05/01/25	MH	n/a	n/a	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-10

CAS No.	Compound	Result	RL	MDL	Units	Q
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	97%	5-130%
	13C5-PFPeA	102%	40-130%
	13C5-PFHxA	101%	40-130%
	13C4-PFHpA	99%	40-130%
	13C8-PFOA	102%	40-130%
	13C9-PFNA	101%	40-130%
	13C6-PFDA	101%	40-130%
	13C7-PFUnDA	105%	30-130%
	13C2-PFDoDA	99%	10-130%
	13C2-PFTeDA	97%	10-130%
	13C3-PFBS	103%	40-135%
	13C3-PFHxS	107%	40-130%
	13C8-PFOS	105%	40-130%
	13C8-FOSA	99%	40-130%
	d3-MeFOSA	99%	10-130%
	d5-EtFOSA	99%	10-130%
	d3-MeFOSAA	100%	40-170%
	d5-EtFOSAA	100%	25-135%
	d7-MeFOSE	96%	10-130%
	d9-EtFOSE	97%	10-130%
	13C2-4:2FTS	107%	40-200%
	13C2-6:2FTS	109%	40-200%
	13C2-8:2FTS	105%	40-300%
	13C3-HFPO-DA	103%	40-130%

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4Q138-ICCB	4Q8174.D	1	05/01/25	MH	n/a	n/a	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00093	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00098	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0015	ug/l	
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T4Q138-ICCB	4Q8174.D	1	05/01/25	MH	n/a	n/a	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-10

CAS No.	Compound	Result	RL	MDL	Units	Q
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	5-130%
	13C5-PFPeA	100%	40-130%
	13C5-PFHxA	102%	40-130%
	13C4-PFHpA	99%	40-130%
	13C8-PFOA	101%	40-130%
	13C9-PFNA	104%	40-130%
	13C6-PFDA	102%	40-130%
	13C7-PFUnDA	105%	30-130%
	13C2-PFDoDA	99%	10-130%
	13C2-PFTeDA	94%	10-130%
	13C3-PFBS	111%	40-135%
	13C3-PFHxS	106%	40-130%
	13C8-PFOS	106%	40-130%
	13C8-FOSA	98%	40-130%
	d3-MeFOSA	99%	10-130%
	d5-EtFOSA	101%	10-130%
	d3-MeFOSAA	101%	40-170%
	d5-EtFOSAA	98%	25-135%
	d7-MeFOSE	96%	10-130%
	d9-EtFOSE	97%	10-130%
	13C2-4:2FTS	117%	40-200%
	13C2-6:2FTS	107%	40-200%
	13C2-8:2FTS	105%	40-300%
	13C3-HFPO-DA	100%	40-130%

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T2Q345-ICCB	2Q33785.D	1	05/13/25	VL	n/a	n/a	T2Q345

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-10

CAS No.	Compound	Result	RL	MDL	Units	Q
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	93%	5-130%
	13C5-PFPeA	94%	40-130%
	13C5-PFHxA	96%	40-130%
	13C4-PFHpA	98%	40-130%
	13C8-PFOA	93%	40-130%
	13C9-PFNA	91%	40-130%
	13C6-PFDA	97%	40-130%
	13C7-PFUnDA	98%	30-130%
	13C2-PFDoDA	89%	10-130%
	13C2-PFTeDA	89%	10-130%
	13C3-PFBS	101%	40-135%
	13C3-PFHxS	100%	40-130%
	13C8-PFOS	95%	40-130%
	13C8-FOSA	92%	40-130%
	d3-MeFOSA	96%	10-130%
	d5-EtFOSA	98%	10-130%
	d3-MeFOSAA	102%	40-170%
	d5-EtFOSAA	100%	25-135%
	d7-MeFOSE	87%	10-130%
	d9-EtFOSE	85%	10-130%
	13C2-4:2FTS	99%	40-200%
	13C2-6:2FTS	112%	40-200%
	13C2-8:2FTS	96%	40-300%
	13C3-HFPO-DA	102%	40-130%

Instrument Blank

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T2Q345-ICCB	2Q33799.D	1	05/13/25	VL	n/a	n/a	T2Q345

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-10

CAS No.	Compound	Result	RL	MDL	Units	Q
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	95%	5-130%
	13C5-PFPeA	97%	40-130%
	13C5-PFHxA	100%	40-130%
	13C4-PFHpA	103%	40-130%
	13C8-PFOA	98%	40-130%
	13C9-PFNA	104%	40-130%
	13C6-PFDA	96%	40-130%
	13C7-PFUnDA	97%	30-130%
	13C2-PFDoDA	97%	10-130%
	13C2-PFTeDA	87%	10-130%
	13C3-PFBS	103%	40-135%
	13C3-PFHxS	101%	40-130%
	13C8-PFOS	106%	40-130%
	13C8-FOSA	100%	40-130%
	d3-MeFOSA	101%	10-130%
	d5-EtFOSA	101%	10-130%
	d3-MeFOSAA	107%	40-170%
	d5-EtFOSAA	103%	25-135%
	d7-MeFOSE	89%	10-130%
	d9-EtFOSE	89%	10-130%
	13C2-4:2FTS	109%	40-200%
	13C2-6:2FTS	104%	40-200%
	13C2-8:2FTS	92%	40-300%
	13C3-HFPO-DA	104%	40-130%

Method Blank Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63163-MB	4Q8140.D	1	04/30/25	MH	04/29/25	OP63163	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-11, JE10205-12, JE10205-13, JE10205-14, JE10205-15, JE10205-16, JE10205-17, JE10205-18, JE10205-19, JE10205-20, JE10205-21

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00093	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00098	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0015	ug/l	
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Method Blank Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63163-MB	4Q8140.D	1	04/30/25	MH	04/29/25	OP63163	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-11, JE10205-12, JE10205-13, JE10205-14, JE10205-15, JE10205-16, JE10205-17, JE10205-18, JE10205-19, JE10205-20, JE10205-21

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	5-130%
	13C5-PFPeA	100%	40-130%
	13C5-PFHxA	100%	40-130%
	13C4-PFHpA	98%	40-130%
	13C8-PFOA	100%	40-130%
	13C9-PFNA	98%	40-130%
	13C6-PFDA	101%	40-130%
	13C7-PFUnDA	100%	30-130%
	13C2-PFDoDA	95%	10-130%
	13C2-PFTeDA	94%	10-130%
	13C3-PFBS	101%	40-135%
	13C3-PFHxS	100%	40-130%
	13C8-PFOS	100%	40-130%
	13C8-FOSA	96%	40-130%
	d3-MeFOSA	81%	10-130%
	d5-EtFOSA	86%	10-130%
	d3-MeFOSAA	102%	40-170%
	d5-EtFOSAA	97%	25-135%
	d7-MeFOSE	92%	10-130%
	d9-EtFOSE	96%	10-130%
	13C2-4:2FTS	114%	40-200%
	13C2-6:2FTS	108%	40-200%
	13C2-8:2FTS	107%	40-300%
	13C3-HFPO-DA	99%	40-130%

Method Blank Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63161-MB	4Q8156.D	1	04/30/25	MH	04/29/25	OP63161	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-1, JE10205-2, JE10205-3, JE10205-4, JE10205-5, JE10205-6, JE10205-7, JE10205-8, JE10205-9, JE10205-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00093	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00098	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0015	ug/l	
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Method Blank Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63161-MB	4Q8156.D	1	04/30/25	MH	04/29/25	OP63161	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-1, JE10205-2, JE10205-3, JE10205-4, JE10205-5, JE10205-6, JE10205-7, JE10205-8, JE10205-9, JE10205-10

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	92%	5-130%
	13C5-PFPeA	91%	40-130%
	13C5-PFHxA	90%	40-130%
	13C4-PFHpA	91%	40-130%
	13C8-PFOA	94%	40-130%
	13C9-PFNA	89%	40-130%
	13C6-PFDA	92%	40-130%
	13C7-PFUnDA	90%	30-130%
	13C2-PFDoDA	82%	10-130%
	13C2-PFTeDA	76%	10-130%
	13C3-PFBS	94%	40-135%
	13C3-PFHxS	96%	40-130%
	13C8-PFOS	87%	40-130%
	13C8-FOSA	83%	40-130%
	d3-MeFOSA	72%	10-130%
	d5-EtFOSA	75%	10-130%
	d3-MeFOSAA	87%	40-170%
	d5-EtFOSAA	83%	25-135%
	d7-MeFOSE	78%	10-130%
	d9-EtFOSE	79%	10-130%
	13C2-4:2FTS	108%	40-200%
	13C2-6:2FTS	98%	40-200%
	13C2-8:2FTS	96%	40-300%
	13C3-HFPO-DA	90%	40-130%

Method Blank Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63534-MB	1Q26069.D	1	05/15/25	MH	05/13/25	OP63534	T1Q362

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-2, JE10205-5

CAS No.	Compound	Result	RL	MDL	Units	Q
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.00066	0.0020	0.00043	ug/l	J

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	96%	5-130%
	13C5-PFPeA	100%	40-130%
	13C5-PFHxA	94%	40-130%
	13C4-PFHpA	93%	40-130%
	13C8-PFOA	93%	40-130%
	13C9-PFNA	94%	40-130%
	13C6-PFDA	100%	40-130%
	13C7-PFUnDA	103%	30-130%
	13C2-PFDoDA	92%	10-130%
	13C2-PFTeDA	83%	10-130%
	13C3-PFBS	110%	40-135%
	13C3-PFHxS	102%	40-130%
	13C8-PFOS	97%	40-130%
	13C8-FOSA	99%	40-130%
	d3-MeFOSA	77%	10-130%
	d5-EtFOSA	77%	10-130%
	d3-MeFOSAA	98%	40-170%
	d5-EtFOSAA	97%	25-135%
	d7-MeFOSE	98%	10-130%
	d9-EtFOSE	96%	10-130%
	13C2-4:2FTS	110%	40-200%
	13C2-6:2FTS	103%	40-200%
	13C2-8:2FTS	111%	40-300%
	13C3-HFPO-DA	77%	40-130%

Blank Spike Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63163-LLBS	4Q8141.D	1	04/30/25	MH	04/29/25	OP63163	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-11, JE10205-12, JE10205-13, JE10205-14, JE10205-15, JE10205-16, JE10205-17, JE10205-18, JE10205-19, JE10205-20, JE10205-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0154	96	70-140
2706-90-3	Perfluoropentanoic acid	0.008	0.0079	99	65-135
307-24-4	Perfluorohexanoic acid	0.004	0.0040	100	70-145
375-85-9	Perfluoroheptanoic acid	0.004	0.0037	93	70-150
335-67-1	Perfluorooctanoic acid	0.004	0.0039	98	70-150
375-95-1	Perfluorononanoic acid	0.004	0.0041	103	70-150
335-76-2	Perfluorodecanoic acid	0.004	0.0043	108	70-140
2058-94-8	Perfluoroundecanoic acid	0.004	0.0038	95	70-145
307-55-1	Perfluorododecanoic acid	0.004	0.0041	103	70-140
72629-94-8	Perfluorotridecanoic acid	0.004	0.0040	100	65-140
376-06-7	Perfluorotetradecanoic acid	0.004	0.0040	100	60-140
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0036	101	60-145
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0036	96	65-140
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0038	104	65-145
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0036	94	70-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0042	113	55-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0039	101	65-145
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0036	93	60-145
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0034	88	50-145
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0159	106	70-145
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0149	98	65-155
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0156	102	60-150
754-91-6	PFOSA	0.004	0.0041	103	70-145
31506-32-8	MeFOSA	0.004	0.0039	98	60-150
4151-50-2	EtFOSA	0.004	0.0039	98	65-145
2355-31-9	MeFOSAA	0.004	0.0039	98	50-140
2991-50-6	EtFOSAA	0.004	0.0037	93	70-145
24448-09-7	MeFOSE	0.04	0.0387	97	70-145
1691-99-2	EtFOSE	0.04	0.0379	95	70-135
13252-13-6	HFPO-DA (GenX)	0.016	0.0162	101	70-140
919005-14-4	ADONA	0.0151	0.0141	93	65-145
377-73-1	PFMPA	0.008	0.0078	98	55-140
863090-89-5	PFMBA	0.008	0.0078	98	60-150
151772-58-6	NFDHA	0.008	0.0074	93	50-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.015	0.0150	100	70-155
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0151	0.0149	99	55-160

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63163-LLBS	4Q8141.D	1	04/30/25	MH	04/29/25	OP63163	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-11, JE10205-12, JE10205-13, JE10205-14, JE10205-15, JE10205-16, JE10205-17, JE10205-18, JE10205-19, JE10205-20, JE10205-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0072	101	70-140
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0175	88	65-130
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0947	95	70-135
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0921	92	50-145

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	95%	5-130%
	13C5-PFPeA	98%	40-130%
	13C5-PFHxA	97%	40-130%
	13C4-PFHpA	97%	40-130%
	13C8-PFOA	94%	40-130%
	13C9-PFNA	91%	40-130%
	13C6-PFDA	92%	40-130%
	13C7-PFUnDA	93%	30-130%
	13C2-PFDoDA	89%	10-130%
	13C2-PFTeDA	86%	10-130%
	13C3-PFBS	95%	40-135%
	13C3-PFHxS	94%	40-130%
	13C8-PFOS	95%	40-130%
	13C8-FOSA	89%	40-130%
	d3-MeFOSA	72%	10-130%
	d5-EtFOSA	75%	10-130%
	d3-MeFOSAA	92%	40-170%
	d5-EtFOSAA	89%	25-135%
	d7-MeFOSE	89%	10-130%
	d9-EtFOSE	91%	10-130%
	13C2-4:2FTS	105%	40-200%
	13C2-6:2FTS	107%	40-200%
	13C2-8:2FTS	102%	40-300%
	13C3-HFPO-DA	97%	40-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63161-LLBS	4Q8157.D	1	04/30/25	MH	04/29/25	OP63161	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-1, JE10205-2, JE10205-3, JE10205-4, JE10205-5, JE10205-6, JE10205-7, JE10205-8, JE10205-9, JE10205-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0150	94	70-140
2706-90-3	Perfluoropentanoic acid	0.008	0.0077	96	65-135
307-24-4	Perfluorohexanoic acid	0.004	0.0037	93	70-145
375-85-9	Perfluoroheptanoic acid	0.004	0.0038	95	70-150
335-67-1	Perfluorooctanoic acid	0.004	0.0039	98	70-150
375-95-1	Perfluorononanoic acid	0.004	0.0039	98	70-150
335-76-2	Perfluorodecanoic acid	0.004	0.0037	93	70-140
2058-94-8	Perfluoroundecanoic acid	0.004	0.0036	90	70-145
307-55-1	Perfluorododecanoic acid	0.004	0.0038	95	70-140
72629-94-8	Perfluorotridecanoic acid	0.004	0.0039	98	65-140
376-06-7	Perfluorotetradecanoic acid	0.004	0.0038	95	60-140
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0034	96	60-145
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0037	98	65-140
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0036	98	65-145
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0035	92	70-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0041	110	55-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0038	99	65-145
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0037	96	60-145
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0034	88	50-145
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0134	89	70-145
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0155	102	65-155
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0151	98	60-150
754-91-6	PFOSA	0.004	0.0038	95	70-145
31506-32-8	MeFOSA	0.004	0.0041	103	60-150
4151-50-2	EtFOSA	0.004	0.0037	93	65-145
2355-31-9	MeFOSAA	0.004	0.0037	93	50-140
2991-50-6	EtFOSAA	0.004	0.0035	88	70-145
24448-09-7	MeFOSE	0.04	0.0374	94	70-145
1691-99-2	EtFOSE	0.04	0.0376	94	70-135
13252-13-6	HFPO-DA (GenX)	0.016	0.0147	92	70-140
919005-14-4	ADONA	0.0151	0.0129	85	65-145
377-73-1	PFMPA	0.008	0.0074	93	55-140
863090-89-5	PFMBA	0.008	0.0073	91	60-150
151772-58-6	NFDHA	0.008	0.0073	91	50-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.015	0.0138	92	70-155
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0151	0.0137	91	55-160

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63161-LLBS	4Q8157.D	1	04/30/25	MH	04/29/25	OP63161	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-1, JE10205-2, JE10205-3, JE10205-4, JE10205-5, JE10205-6, JE10205-7, JE10205-8, JE10205-9, JE10205-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0070	98	70-140
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0178	89	65-130
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0865	87	70-135
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0821	82	50-145

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	95%	5-130%
	13C5-PFPeA	97%	40-130%
	13C5-PFHxA	97%	40-130%
	13C4-PFHpA	96%	40-130%
	13C8-PFOA	95%	40-130%
	13C9-PFNA	92%	40-130%
	13C6-PFDA	96%	40-130%
	13C7-PFUnDA	96%	30-130%
	13C2-PFDoDA	91%	10-130%
	13C2-PFTeDA	86%	10-130%
	13C3-PFBS	93%	40-135%
	13C3-PFHxS	96%	40-130%
	13C8-PFOS	96%	40-130%
	13C8-FOSA	90%	40-130%
	d3-MeFOSA	73%	10-130%
	d5-EtFOSA	81%	10-130%
	d3-MeFOSAA	95%	40-170%
	d5-EtFOSAA	92%	25-135%
	d7-MeFOSE	85%	10-130%
	d9-EtFOSE	87%	10-130%
	13C2-4:2FTS	105%	40-200%
	13C2-6:2FTS	98%	40-200%
	13C2-8:2FTS	97%	40-300%
	13C3-HFPO-DA	97%	40-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63534-LLBS	1Q26070.D	1	05/15/25	MH	05/13/25	OP63534	T1Q362

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-2, JE10205-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
335-67-1	Perfluorooctanoic acid	0.004	0.0043	108	70-150
375-95-1	Perfluorononanoic acid	0.004	0.0043	108	70-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0040	109	65-145
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0045	121	55-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	94%	5-130%
	13C5-PFPeA	99%	40-130%
	13C5-PFHxA	96%	40-130%
	13C4-PFHpA	97%	40-130%
	13C8-PFOA	95%	40-130%
	13C9-PFNA	96%	40-130%
	13C6-PFDA	89%	40-130%
	13C7-PFUnDA	106%	30-130%
	13C2-PFDoDA	90%	10-130%
	13C2-PFTeDA	85%	10-130%
	13C3-PFBS	91%	40-135%
	13C3-PFHxS	87%	40-130%
	13C8-PFOS	101%	40-130%
	13C8-FOSA	102%	40-130%
	d3-MeFOSA	82%	10-130%
	d5-EtFOSA	84%	10-130%
	d3-MeFOSAA	105%	40-170%
	d5-EtFOSAA	102%	25-135%
	d7-MeFOSE	106%	10-130%
	d9-EtFOSE	104%	10-130%
	13C2-4:2FTS	101%	40-200%
	13C2-6:2FTS	97%	40-200%
	13C2-8:2FTS	104%	40-300%
	13C3-HFPO-DA	77%	40-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63163-BS	4Q8142.D	1	04/30/25	MH	04/29/25	OP63163	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-11, JE10205-12, JE10205-13, JE10205-14, JE10205-15, JE10205-16, JE10205-17, JE10205-18, JE10205-19, JE10205-20, JE10205-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.103	103	70-140
2706-90-3	Perfluoropentanoic acid	0.05	0.0513	103	65-135
307-24-4	Perfluorohexanoic acid	0.025	0.0253	101	70-145
375-85-9	Perfluoroheptanoic acid	0.025	0.0250	100	70-150
335-67-1	Perfluorooctanoic acid	0.025	0.0250	100	70-150
375-95-1	Perfluorononanoic acid	0.025	0.0254	102	70-150
335-76-2	Perfluorodecanoic acid	0.025	0.0252	101	70-140
2058-94-8	Perfluoroundecanoic acid	0.025	0.0258	103	70-145
307-55-1	Perfluorododecanoic acid	0.025	0.0258	103	70-140
72629-94-8	Perfluorotridecanoic acid	0.025	0.0246	98	65-140
376-06-7	Perfluorotetradecanoic acid	0.025	0.0255	102	60-140
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0224	101	60-145
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0240	102	65-140
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0226	99	65-145
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0228	96	70-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0232	100	55-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0242	101	65-145
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0233	97	60-145
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0225	93	50-145
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.0912	97	70-145
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.0979	103	65-155
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.105	109	60-150
754-91-6	PFOSA	0.025	0.0258	103	70-145
31506-32-8	MeFOSA	0.025	0.0252	101	60-150
4151-50-2	EtFOSA	0.025	0.0247	99	65-145
2355-31-9	MeFOSAA	0.025	0.0249	100	50-140
2991-50-6	EtFOSAA	0.025	0.0255	102	70-145
24448-09-7	MeFOSE	0.25	0.249	100	70-145
1691-99-2	EtFOSE	0.25	0.248	99	70-135
13252-13-6	HFPO-DA (GenX)	0.1	0.104	104	70-140
919005-14-4	ADONA	0.0945	0.0882	93	65-145
377-73-1	PFMPA	0.05	0.0515	103	55-140
863090-89-5	PFMBA	0.05	0.0502	100	60-150
151772-58-6	NFDHA	0.05	0.0501	100	50-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0935	0.0958	102	70-155
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0945	0.0945	100	55-160

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63163-BS	4Q8142.D	1	04/30/25	MH	04/29/25	OP63163	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-11, JE10205-12, JE10205-13, JE10205-14, JE10205-15, JE10205-16, JE10205-17, JE10205-18, JE10205-19, JE10205-20, JE10205-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0452	102	70-140
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.122	98	65-130
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.588	94	70-135
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.571	91	50-145

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	98%	5-130%
	13C5-PFPeA	97%	40-130%
	13C5-PFHxA	99%	40-130%
	13C4-PFHpA	97%	40-130%
	13C8-PFOA	97%	40-130%
	13C9-PFNA	99%	40-130%
	13C6-PFDA	97%	40-130%
	13C7-PFUnDA	98%	30-130%
	13C2-PFDoDA	94%	10-130%
	13C2-PFTeDA	91%	10-130%
	13C3-PFBS	96%	40-135%
	13C3-PFHxS	98%	40-130%
	13C8-PFOS	99%	40-130%
	13C8-FOSA	91%	40-130%
	d3-MeFOSA	75%	10-130%
	d5-EtFOSA	76%	10-130%
	d3-MeFOSAA	102%	40-170%
	d5-EtFOSAA	96%	25-135%
	d7-MeFOSE	92%	10-130%
	d9-EtFOSE	93%	10-130%
	13C2-4:2FTS	110%	40-200%
	13C2-6:2FTS	104%	40-200%
	13C2-8:2FTS	98%	40-300%
	13C3-HFPO-DA	96%	40-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63161-BS	4Q8158.D	1	04/30/25	MH	04/29/25	OP63161	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-1, JE10205-2, JE10205-3, JE10205-4, JE10205-5, JE10205-6, JE10205-7, JE10205-8, JE10205-9, JE10205-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.102	102	70-140
2706-90-3	Perfluoropentanoic acid	0.05	0.0523	105	65-135
307-24-4	Perfluorohexanoic acid	0.025	0.0258	103	70-145
375-85-9	Perfluoroheptanoic acid	0.025	0.0253	101	70-150
335-67-1	Perfluorooctanoic acid	0.025	0.0258	103	70-150
375-95-1	Perfluorononanoic acid	0.025	0.0258	103	70-150
335-76-2	Perfluorodecanoic acid	0.025	0.0255	102	70-140
2058-94-8	Perfluoroundecanoic acid	0.025	0.0259	104	70-145
307-55-1	Perfluorododecanoic acid	0.025	0.0264	106	70-140
72629-94-8	Perfluorotridecanoic acid	0.025	0.0256	102	65-140
376-06-7	Perfluorotetradecanoic acid	0.025	0.0261	104	60-140
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0226	102	60-145
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0240	102	65-140
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0233	102	65-145
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0243	102	70-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0262	113	55-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0258	107	65-145
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0242	100	60-145
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0244	101	50-145
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.0960	102	70-145
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.0999	105	65-155
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.104	108	60-150
754-91-6	PFOSA	0.025	0.0256	102	70-145
31506-32-8	MeFOSA	0.025	0.0250	100	60-150
4151-50-2	EtFOSA	0.025	0.0252	101	65-145
2355-31-9	MeFOSAA	0.025	0.0252	101	50-140
2991-50-6	EtFOSAA	0.025	0.0258	103	70-145
24448-09-7	MeFOSE	0.25	0.257	103	70-145
1691-99-2	EtFOSE	0.25	0.252	101	70-135
13252-13-6	HFPO-DA (GenX)	0.1	0.105	105	70-140
919005-14-4	ADONA	0.0945	0.0894	95	65-145
377-73-1	PFMPA	0.05	0.0517	103	55-140
863090-89-5	PFMBA	0.05	0.0512	102	60-150
151772-58-6	NFDHA	0.05	0.0531	106	50-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0935	0.0933	100	70-155
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0945	0.0942	100	55-160

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63161-BS	4Q8158.D	1	04/30/25	MH	04/29/25	OP63161	T4Q138

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-1, JE10205-2, JE10205-3, JE10205-4, JE10205-5, JE10205-6, JE10205-7, JE10205-8, JE10205-9, JE10205-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0452	102	70-140
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.121	97	65-130
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.581	93	70-135
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.566	91	50-145

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	94%	5-130%
	13C5-PFPeA	94%	40-130%
	13C5-PFHxA	95%	40-130%
	13C4-PFHpA	92%	40-130%
	13C8-PFOA	91%	40-130%
	13C9-PFNA	91%	40-130%
	13C6-PFDA	93%	40-130%
	13C7-PFUnDA	93%	30-130%
	13C2-PFDoDA	89%	10-130%
	13C2-PFTeDA	85%	10-130%
	13C3-PFBS	91%	40-135%
	13C3-PFHxS	91%	40-130%
	13C8-PFOS	88%	40-130%
	13C8-FOSA	90%	40-130%
	d3-MeFOSA	79%	10-130%
	d5-EtFOSA	77%	10-130%
	d3-MeFOSAA	94%	40-170%
	d5-EtFOSAA	88%	25-135%
	d7-MeFOSE	83%	10-130%
	d9-EtFOSE	84%	10-130%
	13C2-4:2FTS	96%	40-200%
	13C2-6:2FTS	96%	40-200%
	13C2-8:2FTS	94%	40-300%
	13C3-HFPO-DA	93%	40-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63534-BS	1Q26071.D	1	05/15/25	MH	05/13/25	OP63534	T1Q362

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-2, JE10205-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
335-67-1	Perfluorooctanoic acid	0.025	0.0269	108	70-150
375-95-1	Perfluorononanoic acid	0.025	0.0281	112	70-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0243	106	65-145
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0253	109	55-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	96%	5-130%
	13C5-PFPeA	101%	40-130%
	13C5-PFHxA	98%	40-130%
	13C4-PFHpA	93%	40-130%
	13C8-PFOA	100%	40-130%
	13C9-PFNA	94%	40-130%
	13C6-PFDA	97%	40-130%
	13C7-PFUnDA	107%	30-130%
	13C2-PFDoDA	95%	10-130%
	13C2-PFTeDA	87%	10-130%
	13C3-PFBS	106%	40-135%
	13C3-PFHxS	100%	40-130%
	13C8-PFOS	93%	40-130%
	13C8-FOSA	103%	40-130%
	d3-MeFOSA	78%	10-130%
	d5-EtFOSA	80%	10-130%
	d3-MeFOSAA	104%	40-170%
	d5-EtFOSAA	97%	25-135%
	d7-MeFOSE	99%	10-130%
	d9-EtFOSE	95%	10-130%
	13C2-4:2FTS	117%	40-200%
	13C2-6:2FTS	109%	40-200%
	13C2-8:2FTS	107%	40-300%
	13C3-HFPO-DA	81%	40-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63161-MS	4Q8159.D	1	04/30/25	MH	04/29/25	OP63161	T4Q138
OP63161-MSD	4Q8160.D	1	04/30/25	MH	04/29/25	OP63161	T4Q138
JE10205-1	4Q8161.D	1	04/30/25	MH	04/29/25	OP63161	T4Q138
JE10205-1	4Q8255.D	20	05/02/25	MH	04/29/25	OP63161	T4Q140

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-1, JE10205-2, JE10205-3, JE10205-4, JE10205-5, JE10205-6, JE10205-7, JE10205-8, JE10205-9, JE10205-10

CAS No.	Compound	JE10205-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
375-22-4	Perfluorobutanoic acid	0.289		0.102	0.433	141* [a]	0.102	0.445	152* [a]	3	70-140/30
2706-90-3	Perfluoropentanoic acid	1.39 [b]		0.0512	1.50	410* [a]	0.0512	1.60	605* [a]	6	65-135/30
307-24-4	Perfluorohexanoic acid	1.06 [b]		0.0256	1.15	508* [a]	0.0256	1.23	820* [a]	7	70-145/30
375-85-9	Perfluoroheptanoic acid	0.338		0.0256	0.410	281* [a]	0.0256	0.432	367* [a]	5	70-150/30
335-67-1	Perfluorooctanoic acid	0.223		0.0256	0.276	207* [a]	0.0256	0.278	215* [a]	1	70-150/30
375-95-1	Perfluorononanoic acid	1.77 [b]		0.0256	2.38	1835* [a]	0.0256	2.45	2108* [a]	3	70-150/30
335-76-2	Perfluorodecanoic acid	0.0229		0.0256	0.0532	118	0.0256	0.0522	114	2	70-140/30
2058-94-8	Perfluoroundecanoic acid	0.0287		0.0256	0.0645	140	0.0256	0.0632	135	2	70-145/30
307-55-1	Perfluorododecanoic acid	ND		0.0256	0.0280	109	0.0256	0.0271	106	3	70-140/30
72629-94-8	Perfluorotridecanoic acid	0.00082	J	0.0256	0.0290	110	0.0256	0.0287	109	1	65-140/30
376-06-7	Perfluorotetradecanoic acid	ND		0.0256	0.0259	101	0.0256	0.0277	108	7	60-140/30
375-73-5	Perfluorobutanesulfonic acid	0.0406		0.0227	0.0704	131	0.0227	0.0725	140	3	60-145/30
2706-91-4	Perfluoropentanesulfonic acid	0.0684		0.0241	0.0987	126	0.0241	0.106	156* [a]	7	65-140/30
355-46-4	Perfluorohexanesulfonic acid	0.569 [b]		0.0234	0.674	359* [a]	0.0234	0.655	278* [a]	3	65-145/30
375-92-8	Perfluoroheptanesulfonic acid	0.0541		0.0244	0.0965	174* [a]	0.0244	0.0927	158* [a]	4	70-150/30
1763-23-1	Perfluorooctanesulfonic acid	4.43 [b]		0.0238	5.20	1977* [a]	0.0238	4.88	631* [a]	6	55-150/30
68259-12-1	Perfluorononanesulfonic acid	ND		0.0246	0.0347	141	0.0246	0.0353	143	2	65-145/30
335-77-3	Perfluorodecanesulfonic acid	ND		0.0247	0.0232	94	0.0247	0.0244	99	5	60-145/30
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0248	0.0294	118	0.0248	0.0292	118	1	50-145/30
757124-72-4	4:2 Fluorotelomer sulfonate	0.0052	J	0.0961	0.106	105	0.0961	0.107	106	1	70-145/30
27619-97-2	6:2 Fluorotelomer sulfonate	1.72		0.0973	1.94	226* [a]	0.0973	2.09	380* [a]	7	65-155/30
39108-34-4	8:2 Fluorotelomer sulfonate	0.199		0.0984	0.342	145	0.0984	0.351	155* [a]	3	60-150/30
754-91-6	PFOSA	0.0111		0.0256	0.0396	111	0.0256	0.0404	114	2	70-145/30
31506-32-8	MeFOSA	ND		0.0256	0.0271	106	0.0256	0.0275	107	1	60-150/30
4151-50-2	EtFOSA	ND		0.0256	0.0262	102	0.0256	0.0266	104	2	65-145/30
2355-31-9	MeFOSAA	ND		0.0256	0.0266	104	0.0256	0.0256	100	4	50-140/30
2991-50-6	EtFOSAA	ND		0.0256	0.0257	100	0.0256	0.0260	102	1	70-145/30
24448-09-7	MeFOSE	ND		0.256	0.260	102	0.256	0.266	104	2	70-145/30
1691-99-2	EtFOSE	ND		0.256	0.259	101	0.256	0.264	103	2	70-135/30
13252-13-6	HFPO-DA (GenX)	ND		0.102	0.105	102	0.102	0.108	105	3	70-140/30
919005-14-4	ADONA	ND		0.0968	0.0913	94	0.0968	0.0911	94	0	65-145/30
377-73-1	PFMPA	ND		0.0512	0.0582	114	0.0512	0.0598	117	3	55-140/30
863090-89-5	PFMBA	ND		0.0512	0.0575	112	0.0512	0.0580	113	1	60-150/30
151772-58-6	NFDHA	ND		0.0512	0.0538	105	0.0512	0.0534	104	1	50-150/30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0958	0.0998	104	0.0958	0.104	109	4	70-155/30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0968	0.0983	102	0.0968	0.100	103	2	55-160/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63161-MS	4Q8159.D	1	04/30/25	MH	04/29/25	OP63161	T4Q138
OP63161-MSD	4Q8160.D	1	04/30/25	MH	04/29/25	OP63161	T4Q138
JE10205-1	4Q8161.D	1	04/30/25	MH	04/29/25	OP63161	T4Q138
JE10205-1	4Q8255.D	20	05/02/25	MH	04/29/25	OP63161	T4Q140

The QC reported here applies to the following samples: **Method:** EPA 1633

JE10205-1, JE10205-2, JE10205-3, JE10205-4, JE10205-5, JE10205-6, JE10205-7, JE10205-8, JE10205-9, JE10205-10

CAS No.	Compound	JE10205-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
113507-82-7	PFEESA	ND		0.0456	0.0486	107	0.0456	0.0490	107	1	70-140/30
356-02-5	3:3 Fluorotelomer carboxylate	0.0045	J	0.128	0.140	106	0.128	0.148	112	6	65-130/30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.64	0.626	98	0.64	0.622	97	1	70-135/30
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.64	0.592	92	0.64	0.593	93	0	50-145/30

CAS No.	ID Standard Recoveries	MS	MSD	JE10205-1	JE10205-1	Limits
	13C4-PFBA	91%	92%	91%	88%	5-130%
	13C5-PFPeA	78%	78%	80%	86%	40-130%
	13C5-PFHxA	90%	90%	90%	89%	40-130%
	13C4-PFHpA	85%	88%	88%	88%	40-130%
	13C8-PFOA	91%	90%	89%	86%	40-130%
	13C9-PFNA	87%	87%	92%	89%	40-130%
	13C6-PFDA	89%	88%	89%	86%	40-130%
	13C7-PFUnDA	92%	93%	93%	88%	30-130%
	13C2-PFDoDA	82%	85%	89%	79%	10-130%
	13C2-PFTeDA	86%	82%	87%	79%	10-130%
	13C3-PFBS	102%	98%	100%	87%	40-135%
	13C3-PFHxS	92%	94%	94%	86%	40-130%
	13C8-PFOS	90%	91%	88%	92%	40-130%
	13C8-FOSA	108%	106%	103%	88%	40-130%
	d3-MeFOSA	95%	91%	94%	78%	10-130%
	d5-EtFOSA	98%	91%	95%	69%	10-130%
	d3-MeFOSAA	102%	100%	94%	84%	40-170%
	d5-EtFOSAA	101%	100%	95%	81%	25-135%
	d7-MeFOSE	101%	95%	95%	83%	10-130%
	d9-EtFOSE	102%	95%	95%	77%	10-130%
	13C2-4:2FTS	121%	121%	123%	103%	40-200%
	13C2-6:2FTS	88%	86%	87%	110%	40-200%
	13C2-8:2FTS	92%	91%	94%	100%	40-300%
	13C3-HFPO-DA	89%	88%	89%	87%	40-130%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.

* = Outside of Control Limits.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T1Q362-CC361	**Injection Date:**	05/15/25
Lab File ID:	1Q26063.D	**Injection Time:**	11:31
Instrument ID:	GCMS1Q	**Method:**	EPA 1633

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [b]	76094	3.25	60838	5.76	94536	7.15	30276	7.66	25287	8.14
Check Std [c]	84360	3.26	63019	5.76	93896	7.15	28777	7.66	23096	8.14
Upper Limit [d]	152188	3.66	121676	6.16	189072	7.55	60552	8.06	50574	8.54
Lower Limit [e]	38047	2.86	30419	5.36	47268	6.75	15138	7.26	12644	7.74

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	DF [a]
ZZZZZZ	66520	3.29	51900	5.77	81200	7.16	24380	7.67	25000	8.15	20
ZZZZZZ	75820	3.26	51840	5.76	80740	7.15	28920	7.66	25940	8.14	20
OP63534-MB	83030	3.28	61057	5.76	89711	7.15	28355	7.66	23837	8.14	1
OP63534-LLBS	84691	3.28	61820	5.77	91274	7.15	28062	7.67	25122	8.14	1
OP63534-BS	85431	3.28	63431	5.76	91399	7.15	30866	7.67	25371	8.14	1
JE10205-2	76375	3.26	56080	5.76	79165	7.15	26025	7.66	21145	8.14	5
JE10205-5	73900	3.28	52885	5.76	78265	7.15	26255	7.66	21155	8.14	5
OP63465-MB	81668	3.28	58600	5.76	88591	7.15	27096	7.66	23434	8.14	1
OP63465-LLBS	85998	3.28	61830	5.76	90418	7.15	30982	7.66	25418	8.14	1
OP63465-LB	82839	3.28	59724	5.76	88807	7.15	29495	7.66	25189	8.14	1
OP63465-BS	81398	3.28	58826	5.76	88592	7.15	26663	7.66	23424	8.14	1
ZZZZZZ	75964	3.28	59261	5.76	87160	7.15	27290	7.66	25701	8.14	1
ZZZZZZ	78185	3.28	60179	5.76	88041	7.15	28704	7.66	24823	8.14	1

IS 1 = 13C3-PFBA
IS 2 = 13C2-PFHxA
IS 3 = 13C4-PFOA
IS 4 = 13C5-PFNA
IS 5 = 13C2-PFDA

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T1Q361-ICC361 1Q26032.D 05/14/25 17:23. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T1Q362-CC361	**Injection Date:**	05/15/25
Lab File ID:	1Q26063.D	**Injection Time:**	11:31
Instrument ID:	GCMS1Q	**Method:**	EPA 1633

	IS 6 AREA	RT	IS 7 AREA	RT
Initial Cal [b]	8608	7.27	13105	8.30
Check Std [c]	8312	7.27	13025	8.32
Upper Limit [d]	17216	7.67	26210	8.72
Lower Limit [e]	4304	6.87	6553	7.92

Lab Sample ID	IS 6 AREA	RT	IS 7 AREA	RT	DF [a]
ZZZZZZ	6620	7.29	11160	8.32	20
ZZZZZZ	9800	7.27	9960	8.32	20
OP63534-MB	8013	7.27	12697	8.32	1
OP63534-LLBS	8964	7.27	12180	8.32	1
OP63534-BS	8419	7.27	13611	8.32	1
JE10205-2	8805	7.27	13145	8.30	5
JE10205-5	7765	7.27	12010	8.32	5
OP63465-MB	7983	7.27	13568	8.30	1
OP63465-LLBS	8672	7.27	12810	8.32	1
OP63465-LB	8502	7.27	13078	8.32	1
OP63465-BS	8554	7.26	13066	8.30	1
ZZZZZZ	7694	7.27	13112	8.30	1
ZZZZZZ	8358	7.26	12380	8.30	1

IS 6 = 18O2-PFHXS
IS 7 = 13C4-PFOS

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T1Q361-ICC361 1Q26032.D 05/14/25 17:23. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T2Q345-CC344	**Injection Date:**	05/12/25
Lab File ID:	2Q33745.D	**Injection Time:**	14:21
Instrument ID:	GCMS2Q	**Method:**	EPA 1633

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [b]	49530	3.27	33688	5.75	63221	7.12	23618	7.64	17065	8.14
Check Std [c]	49085	3.28	33371	5.75	64071	7.12	23031	7.63	17253	8.13
Upper Limit [d]	99060	3.68	67376	6.15	126442	7.52	47236	8.03	34130	8.53
Lower Limit [e]	24765	2.88	16844	5.35	31611	6.72	11809	7.23	8533	7.73

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	DF [a]
OP63419-MB	51381	3.29	34159	5.75	60741	7.12	23303	7.63	17001	8.12	1
OP63419-LLBS	49681	3.27	33894	5.73	63205	7.11	22421	7.63	17476	8.12	1
OP63419-BS	43991	3.27	29478	5.73	57353	7.11	21039	7.63	16458	8.13	1
ZZZZZZ	44409	3.27	30835	5.71	64414	7.10	22806	7.62	18579	8.12	1
ZZZZZZ	43463	3.27	30233	5.73	59310	7.11	20830	7.63	16083	8.12	1
ZZZZZZ	47276	3.27	31816	5.73	57956	7.11	22985	7.63	16535	8.12	1
ZZZZZZ	45338	3.27	29911	5.73	60791	7.11	21486	7.62	16773	8.12	1
ZZZZZZ	44061	3.27	29000	5.73	59218	7.11	21142	7.63	16128	8.12	1
ZZZZZZ	41713	3.27	27834	5.73	57361	7.11	20567	7.63	14920	8.12	1
ZZZZZZ	45435	3.27	30103	5.73	61428	7.11	21119	7.62	16236	8.12	1
JE10205-20 [f]	42659	3.27	27930	5.73	58437	7.11	20033	7.63	16003	8.12	1
ZZZZZZ	46180	3.27	31119	5.73	58901	7.11	23087	7.63	16118	8.12	1
ZZZZZZ	35857	3.24	28745	5.71	57957	7.10	21985	7.62	15064	8.12	1

IS 1 = 13C3-PFBA
IS 2 = 13C2-PFHxA
IS 3 = 13C4-PFOA
IS 4 = 13C5-PFNA
IS 5 = 13C2-PFDA

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T2Q344-ICC344 2Q33665.D 05/09/25 15:49. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.
(f) Confirmation run.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T2Q345-CC344	**Injection Date:**	05/12/25
Lab File ID:	2Q33745.D	**Injection Time:**	14:21
Instrument ID:	GCMS2Q	**Method:**	EPA 1633

	IS 6 AREA	RT	IS 7 AREA	RT
Initial Cal [b]	8023	7.26	11745	8.32
Check Std [c]	7802	7.25	11767	8.30
Upper Limit [d]	16046	7.65	23490	8.70
Lower Limit [e]	4012	6.85	5873	7.90

Lab Sample ID	IS 6 AREA	RT	IS 7 AREA	RT	DF [a]
OP63419-MB	7025	7.25	10704	8.30	1
OP63419-LLBS	7293	7.24	10962	8.30	1
OP63419-BS	7058	7.25	11081	8.30	1
ZZZZZZ	6894	7.22	11745	8.29	1
ZZZZZZ	7036	7.24	10871	8.29	1
ZZZZZZ	7592	7.24	12096	8.29	1
ZZZZZZ	7807	7.24	11148	8.29	1
ZZZZZZ	7213	7.24	10914	8.29	1
ZZZZZZ	7311	7.24	10513	8.29	1
ZZZZZZ	7999	7.24	11515	8.29	1
JE10205-20 [f]	7132	7.24	10934	8.29	1
ZZZZZZ	7579	7.24	11057	8.29	1
ZZZZZZ	7075	7.22	10384	8.29	1

IS 6 = 18O2-PFHXS
IS 7 = 13C4-PFOS

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T2Q344-ICC344 2Q33665.D 05/09/25 15:49. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.
(f) Confirmation run.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T2Q345-CC344	**Injection Date:**	05/13/25
Lab File ID:	2Q33784.D	**Injection Time:**	00:25
Instrument ID:	GCMS2Q	**Method:**	EPA 1633

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [b]	49530	3.27	33688	5.75	63221	7.12	23618	7.64	17065	8.14
Check Std [c]	49413	3.25	33609	5.73	65379	7.11	24245	7.63	18611	8.12
Upper Limit [d]	99060	3.65	67376	6.13	126442	7.51	47236	8.03	34130	8.52
Lower Limit [e]	24765	2.85	16844	5.33	31611	6.71	11809	7.23	8533	7.72

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	DF [a]
T2Q345-ICCB	48770	3.25	32550	5.73	63116	7.11	23761	7.63	17533	8.13	1
OP63379-MB	44476	3.27	30150	5.73	54765	7.12	20648	7.64	15467	8.13	1
ZZZZZZ	42314	3.25	28879	5.73	56156	7.11	22378	7.63	14765	8.12	1
JE10205-10	38870	3.25	26710	5.73	54175	7.11	18270	7.63	14725	8.13	5
ZZZZZZ	47968	3.27	31756	5.73	61950	7.11	23512	7.63	18133	8.13	1
ZZZZZZ	50580	3.25	36400	5.73	66260	7.12	25720	7.64	15600	8.14	20
ZZZZZZ	50240	3.25	80260*	5.73	68720	7.11	19420	7.63	20060	8.13	20
T2Q345-ECC344	50022	3.25	34218	5.73	68183	7.12	25461	7.63	19071	8.13	1

IS 1 = 13C3-PFBA
IS 2 = 13C2-PFHxA
IS 3 = 13C4-PFOA
IS 4 = 13C5-PFNA
IS 5 = 13C2-PFDA

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T2Q344-ICC344 2Q33665.D 05/09/25 15:49. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T2Q345-CC344	**Injection Date:**	05/13/25
Lab File ID:	2Q33784.D	**Injection Time:**	00:25
Instrument ID:	GCMS2Q	**Method:**	EPA 1633

	IS 6 AREA	RT	IS 7 AREA	RT
Initial Cal [b]	8023	7.26	11745	8.32
Check Std [c]	8571	7.24	12166	8.30
Upper Limit [d]	16046	7.64	23490	8.70
Lower Limit [e]	4012	6.84	5873	7.90

Lab Sample ID	IS 6 AREA	RT	IS 7 AREA	RT	DF [a]
T2Q345-ICCB	7678	7.24	11630	8.29	1
OP63379-MB	7586	7.25	11050	8.30	1
ZZZZZZ	7362	7.24	9070	8.29	1
JE10205-10	7440	7.25	10295	8.29	5
ZZZZZZ	7945	7.24	12254	8.30	1
ZZZZZZ	8940	7.25	14600	8.30	20
ZZZZZZ	6960	7.24	9560	8.30	20
T2Q345-ECC344	8044	7.24	12434	8.30	1

IS 6 = 18O2-PFHXS
IS 7 = 13C4-PFOS

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T2Q344-ICC344 2Q33665.D 05/09/25 15:49. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T4Q138-CC138	**Injection Date:**	04/30/25
Lab File ID:	4Q8138.D	**Injection Time:**	16:45
Instrument ID:	GCMS4Q	**Method:**	EPA 1633

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [b]	385504	2.87	293948	5.45	493756	6.90	194470	7.42	168745	7.86
Check Std [c]	400894	2.89	300558	5.45	512548	6.90	203849	7.40	171406	7.86
Upper Limit [d]	771008	3.29	587896	5.85	987512	7.30	388940	7.80	337490	8.26
Lower Limit [e]	192752	2.49	146974	5.05	246878	6.50	97235	7.00	84373	7.46

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	DF [a]
OP63163-MB	459001	2.86	338882	5.45	570292	6.90	230979	7.40	199905	7.86	1
OP63163-LLBS	458349	2.86	333828	5.45	581415	6.90	225114	7.40	199788	7.86	1
OP63163-BS	455449	2.86	346052	5.45	573760	6.90	222035	7.40	204362	7.86	1
JE10205-11	416423	2.86	328010	5.45	543767	6.90	215608	7.40	190950	7.86	1
JE10205-12	419820	2.86	308781	5.45	502562	6.90	214849	7.40	184041	7.86	1
JE10205-13	396635	2.86	304271	5.45	510334	6.90	208499	7.40	181208	7.86	1
JE10205-14	403401	2.86	321136	5.45	535453	6.90	205119	7.40	190639	7.86	1
JE10205-15	417301	2.86	333756	5.45	510412	6.90	204901	7.40	194288	7.86	1
JE10205-17	424794	2.86	340382	5.45	547379	6.90	223394	7.40	193037	7.86	1
JE10205-18	376075	2.86	297914	5.45	482569	6.90	198094	7.40	175893	7.86	1
JE10205-19	425860	2.86	335568	5.45	542635	6.90	224503	7.40	189058	7.86	1
JE10205-20	412445	2.87	340438	5.45	558951	6.90	220680	7.40	198039	7.86	1

IS 1 = 13C3-PFBA
IS 2 = 13C2-PFHxA
IS 3 = 13C4-PFOA
IS 4 = 13C5-PFNA
IS 5 = 13C2-PFDA

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T4Q138-ICC138 4Q8131.D 04/30/25 15:10. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T4Q138-CC138	**Injection Date:**	04/30/25
Lab File ID:	4Q8138.D	**Injection Time:**	16:45
Instrument ID:	GCMS4Q	**Method:**	EPA 1633

	IS 6 AREA	RT	IS 7 AREA	RT
Initial Cal [b]	44673	7.00	70759	8.00
Check Std [c]	48276	6.99	72860	8.00
Upper Limit [d]	89346	7.39	141518	8.40
Lower Limit [e]	22337	6.59	35380	7.60

Lab Sample ID	IS 6 AREA	RT	IS 7 AREA	RT	DF [a]
OP63163-MB	52863	6.99	82144	8.00	1
OP63163-LLBS	52296	6.99	83160	8.00	1
OP63163-BS	53060	6.99	83267	8.00	1
JE10205-11	49136	6.99	80188	8.00	1
JE10205-12	44976	6.99	76931	8.00	1
JE10205-13	45996	6.99	71258	8.00	1
JE10205-14	49776	6.99	78721	8.00	1
JE10205-15	48121	6.99	63889	8.00	1
JE10205-17	50118	6.99	81243	8.00	1
JE10205-18	45312	6.99	72253	8.00	1
JE10205-19	51681	6.99	80893	8.00	1
JE10205-20	52213	6.99	81118	8.00	1

IS 6 = 18O2-PFHXS
IS 7 = 13C4-PFOS

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T4Q138-ICC138 4Q8131.D 04/30/25 15:10. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T4Q138-CC138	**Injection Date:**	04/30/25
Lab File ID:	4Q8153.D	**Injection Time:**	20:08
Instrument ID:	GCMS4Q	**Method:**	EPA 1633

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [b]	385504	2.87	293948	5.45	493756	6.90	194470	7.42	168745	7.86
Check Std [c]	390667	2.87	307871	5.45	508777	6.90	192668	7.40	175479	7.86
Upper Limit [d]	771008	3.27	587896	5.85	987512	7.30	388940	7.80	337490	8.26
Lower Limit [e]	192752	2.47	146974	5.05	246878	6.50	97235	7.00	84373	7.46

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	DF [a]
T4Q138-ICCB	392557	2.89	302487	5.46	481425	6.90	190822	7.42	165575	7.86	1
JE10205-21	386443	2.86	315991	5.46	512548	6.90	209950	7.42	183426	7.86	1
OP63161-MB	429945	2.87	330705	5.46	519522	6.90	208749	7.40	188139	7.86	1
OP63161-LLBS	409672	2.86	301930	5.46	509349	6.90	197425	7.40	170288	7.86	1
OP63161-BS	460487	2.87	346525	5.46	588877	6.90	229784	7.42	192674	7.86	1
OP63161-MS	394274	2.87	303637	5.46	478680	6.90	191383	7.40	170639	7.86	1
OP63161-MSD	384391	2.86	294373	5.46	471026	6.90	184819	7.40	164936	7.86	1
JE10205-1	378418	2.87	287852	5.45	476385	6.90	179408	7.40	158096	7.86	1
JE10205-2	409669	2.87	314157	5.45	475210	6.90	194981	7.40	163795	7.86	1
JE10205-3	373387	2.86	284017	5.46	471955	6.90	179629	7.40	152715	7.86	1
JE10205-5	375649	2.87	292070	5.45	443740	6.90	173092	7.40	155364	7.86	1
JE10205-6	370261	2.86	287306	5.45	467111	6.90	178474	7.40	155817	7.86	1
JE10205-7	448647	2.86	329955	5.45	541160	6.90	212718	7.40	182654	7.86	1
JE10205-8	389361	2.86	294787	5.45	469235	6.90	189076	7.40	164803	7.86	1
JE10205-9	401812	2.87	290416	5.45	473688	6.90	184033	7.40	166961	7.86	1

IS 1 = 13C3-PFBA
IS 2 = 13C2-PFHxA
IS 3 = 13C4-PFOA
IS 4 = 13C5-PFNA
IS 5 = 13C2-PFDA

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T4Q138-ICC138 4Q8131.D 04/30/25 15:10. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T4Q138-CC138	**Injection Date:**	04/30/25
Lab File ID:	4Q8153.D	**Injection Time:**	20:08
Instrument ID:	GCMS4Q	**Method:**	EPA 1633

	IS 6 AREA	RT	IS 7 AREA	RT
Initial Cal [b]	44673	7.00	70759	8.00
Check Std [c]	44292	6.99	74964	8.00
Upper Limit [d]	89346	7.39	141518	8.40
Lower Limit [e]	22337	6.59	35380	7.60

Lab Sample ID	IS 6 AREA	RT	IS 7 AREA	RT	DF [a]
T4Q138-ICCB	43020	7.00	70824	8.00	1
JE10205-21	45246	7.00	78840	8.00	1
OP63161-MB	47760	7.00	79606	8.00	1
OP63161-LLBS	45978	7.00	72407	8.00	1
OP63161-BS	53970	7.00	81189	8.00	1
OP63161-MS	42346	7.00	57872	8.00	1
OP63161-MSD	41033	7.00	56440	8.00	1
JE10205-1	40743	7.00	57679	8.00	1
JE10205-2	40942	7.00	42737	8.00	1
JE10205-3	42421	7.00	52436	8.00	1
JE10205-5	36706	6.99	45599	8.00	1
JE10205-6	42073	7.00	67626	8.00	1
JE10205-7	49605	6.99	78807	8.00	1
JE10205-8	44995	6.99	66923	8.00	1
JE10205-9	44096	7.00	70447	8.00	1

IS 6 = 18O2-PFHXS
IS 7 = 13C4-PFOS

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T4Q138-ICC138 4Q8131.D 04/30/25 15:10. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T4Q138-CC138	**Injection Date:**	04/30/25
Lab File ID:	4Q8170.D	**Injection Time:**	23:59
Instrument ID:	GCMS4Q	**Method:**	EPA 1633

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [b]	385504	2.87	293948	5.45	493756	6.90	194470	7.42	168745	7.86
Check Std [c]	391891	2.87	304267	5.46	477004	6.90	182212	7.40	160274	7.86
Upper Limit [d]	771008	3.27	587896	5.86	987512	7.30	388940	7.80	337490	8.26
Lower Limit [e]	192752	2.47	146974	5.06	246878	6.50	97235	7.00	84373	7.46

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	DF [a]
T4Q138-ICCB	368161	2.87	281197	5.46	460548	6.90	175153	7.40	154274	7.86	1
JE10205-10	375838	2.86	268416	5.45	453025	6.90	190437	7.40	163460	7.86	1
T4Q138-ECC138	390206	2.87	297117	5.46	487788	6.90	186635	7.40	158459	7.86	1

IS 1 = 13C3-PFBA
IS 2 = 13C2-PFHxA
IS 3 = 13C4-PFOA
IS 4 = 13C5-PFNA
IS 5 = 13C2-PFDA

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T4Q138-ICC138 4Q8131.D 04/30/25 15:10. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T4Q138-CC138	**Injection Date:**	04/30/25
Lab File ID:	4Q8170.D	**Injection Time:**	23:59
Instrument ID:	GCMS4Q	**Method:**	EPA 1633

	IS 6 AREA	RT	IS 7 AREA	RT
Initial Cal [b]	44673	7.00	70759	8.00
Check Std [c]	43250	7.00	68890	8.00
Upper Limit [d]	89346	7.40	141518	8.40
Lower Limit [e]	22337	6.60	35380	7.60

Lab Sample ID	IS 6 AREA	RT	IS 7 AREA	RT	DF [a]
T4Q138-ICCB	41152	7.00	65206	8.00	1
JE10205-10	40357	6.99	68062	8.00	1
T4Q138-ECC138	45272	7.00	71297	8.00	1

IS 6 = 18O2-PFHXS
IS 7 = 13C4-PFOS

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T4Q138-ICC138 4Q8131.D 04/30/25 15:10. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T4Q139-CC137	**Injection Date:**	05/01/25
Lab File ID:	4Q8183.D	**Injection Time:**	12:49
Instrument ID:	GCMS4Q	**Method:**	EPA 1633

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [b]	318738	2.91	241037	5.49	428780	6.93	171944	7.44	152768	7.89
Check Std [c]	386245	2.87	285519	5.46	472535	6.90	184773	7.40	157058	7.86
Upper Limit [d]	637476	3.27	482074	5.86	857560	7.30	343888	7.80	305536	8.26
Lower Limit [e]	159369	2.47	120519	5.06	214390	6.50	85972	7.00	76384	7.46

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	DF [a]
JE10205-16	481421	2.94	321818	5.49	535249	6.92	219117	7.43	198353	7.87	1
JE10205-4	397626	2.85	288051	5.45	491363	6.90	194946	7.40	171341	7.86	1
JE10205-3 [f]	332300	2.86	241180	5.45	432920	6.90	156560	7.40	150400	7.86	20
JE10205-9	367370	2.86	297420	5.45	467210	6.90	186730	7.40	155110	7.86	10
JE10205-13 [f]	363720	2.87	273240	5.46	437540	6.90	177600	7.40	152590	7.86	10
JE10205-15 [f]	393920	2.86	281640	5.46	525000	6.90	202240	7.42	173160	7.86	20
OP63229-MB	450805	2.85	329290	5.45	558959	6.90	213845	7.40	194098	7.86	1
OP63229-LLBS	455417	2.85	346433	5.45	554490	6.90	231832	7.40	195414	7.86	1
OP63229-BS	459623	2.86	344749	5.45	577800	6.90	228286	7.40	185425	7.86	1
ZZZZZZ	397748	2.86	297340	5.45	506629	6.90	204021	7.40	186496	7.86	1

IS 1 = 13C3-PFBA
IS 2 = 13C2-PFHxA
IS 3 = 13C4-PFOA
IS 4 = 13C5-PFNA
IS 5 = 13C2-PFDA

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T4Q137-ICC137 4Q8084.D 04/29/25 17:53. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.
(f) Diluted due to high concentration of target compound.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T4Q139-CC137	**Injection Date:**	05/01/25
Lab File ID:	4Q8183.D	**Injection Time:**	12:49
Instrument ID:	GCMS4Q	**Method:**	EPA 1633

	IS 6 AREA	RT	IS 7 AREA	RT
Initial Cal [b]	39087	7.02	64287	8.02
Check Std [c]	43038	6.99	69301	8.00
Upper Limit [d]	78174	7.39	128574	8.40
Lower Limit [e]	19544	6.59	32144	7.60

Lab Sample ID	IS 6 AREA	RT	IS 7 AREA	RT	DF [a]
JE10205-16	49193	7.01	81573	8.01	1
JE10205-4	44379	6.99	72639	8.00	1
JE10205-3 [f]	49040	6.99	76440	8.00	20
JE10205-9	41770	6.99	63710	8.00	10
JE10205-13 [f]	40240	7.00	70180	8.00	10
JE10205-15 [f]	47320	7.00	71480	8.00	20
OP63229-MB	50013	6.99	82503	8.00	1
OP63229-LLBS	51462	6.99	84189	8.00	1
OP63229-BS	53867	6.99	83713	8.00	1
ZZZZZZ	47726	6.99	78197	8.00	1

IS 6 = 18O2-PFHXS
IS 7 = 13C4-PFOS

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T4Q137-ICC137 4Q8084.D 04/29/25 17:53. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.
(f) Diluted due to high concentration of target compound.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T4Q140-CC140	**Injection Date:**	05/02/25
Lab File ID:	4Q8241.D	**Injection Time:**	16:15
Instrument ID:	GCMS4Q	**Method:**	EPA 1633

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [b]	337239	2.89	264518	5.46	467447	6.92	186729	7.43	163056	7.88
Check Std [c]	362735	2.89	281223	5.46	496253	6.91	192712	7.42	164698	7.87
Upper Limit [d]	674478	3.29	529036	5.86	934894	7.31	373458	7.82	326112	8.27
Lower Limit [e]	168620	2.49	132259	5.06	233724	6.51	93365	7.02	81528	7.47

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	DF [a]
OP63199-MB	464393	2.92	343376	5.48	606031	6.92	233060	7.43	222076	7.87	1
OP63199-LLBS	446514	2.92	329718	5.48	596903	6.92	238820	7.43	216683	7.87	1
OP63199-BS	461439	2.92	352403	5.48	609810	6.92	238541	7.43	222883	7.87	1
OP63199-MS	468610	2.92	361791	5.48	606113	6.92	249136	7.43	232970	7.87	1
OP63199-MSD	446616	2.92	350596	5.48	582893	6.92	239029	7.43	223404	7.87	1
ZZZZZZ	433100	2.92	339910	5.48	581834	6.92	225596	7.43	208545	7.87	1
ZZZZZZ	452922	2.92	336099	5.48	574989	6.92	227441	7.43	214965	7.87	1
ZZZZZZ	452624	2.92	344237	5.48	593871	6.92	234786	7.43	222258	7.87	1
ZZZZZZ	449618	2.92	349217	5.48	595044	6.92	232425	7.43	221226	7.87	1
JE10279-7B	450468	2.92	349763	5.48	595391	6.92	236345	7.43	213225	7.87	1
ZZZZZZ	443918	2.92	338182	5.48	577921	6.92	229282	7.43	217019	7.87	1
JE10205-1	310260	2.90	244020	5.48	435700	6.92	165540	7.43	142540	7.87	20

IS 1 = 13C3-PFBA
IS 2 = 13C2-PFHxA
IS 3 = 13C4-PFOA
IS 4 = 13C5-PFNA
IS 5 = 13C2-PFDA

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T4Q140-ICC140 4Q8234.D 05/02/25 14:40. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.

Injection Standard Area Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Check Std:	T4Q140-CC140	**Injection Date:**	05/02/25
Lab File ID:	4Q8241.D	**Injection Time:**	16:15
Instrument ID:	GCMS4Q	**Method:**	EPA 1633

	IS 6 AREA	RT	IS 7 AREA	RT
Initial Cal [b]	41003	7.00	67143	8.01
Check Std [c]	41638	7.00	71296	8.01
Upper Limit [d]	82006	7.40	134286	8.41
Lower Limit [e]	20502	6.60	33572	7.61

Lab Sample ID	IS 6 AREA	RT	IS 7 AREA	RT	DF [a]
OP63199-MB	53705	7.01	86464	8.01	1
OP63199-LLBS	50141	7.01	83316	8.01	1
OP63199-BS	53332	7.01	84162	8.01	1
OP63199-MS	53474	7.01	87370	8.01	1
OP63199-MSD	51088	7.01	87328	8.01	1
ZZZZZZ	51354	7.01	81713	8.01	1
ZZZZZZ	51769	7.01	84476	8.01	1
ZZZZZZ	52966	7.01	84291	8.01	1
ZZZZZZ	54102	7.01	84447	8.01	1
JE10279-7B	54054	7.01	86197	8.01	1
ZZZZZZ	49829	7.01	82569	8.01	1
JE10205-1	40280	7.01	59180	8.01	20

IS 6 = 18O2-PFHXS
IS 7 = 13C4-PFOS

(a) Sample areas corrected for dilution where applicable.
(b) Initial Cal is: T4Q140-ICC140 4Q8234.D 05/02/25 14:40. Area is AVERAGE of initial cal points.
(c) Check Std Limit = -50 to + 100% of initial cal area.
(d) Upper Limit = + 100% of initial standard area; Retention time + 0.4 minutes of check standard.
(e) Lower Limit = -50% of initial standard area; Retention time -0.4 minutes of check standard.

Ion Ratio Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T1Q362 **Method:** EPA 1633

Lab Sample ID	Lab File ID	Ion Ratios PFOA	PFNA	PFHxS	PFOS
T1Q361-ICC361	1Q26032.D	20.9	28.9	51.1	45.6
JE10205-2	1Q26074.D	20.7	21	48	45.7
JE10205-5	1Q26076.D	20.3	21.1	50.4	44.8

Ion Ratio Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T2Q345 **Method:** EPA 1633

Lab Sample ID	Lab File ID	Ion Ratios PFOS
T2Q344-ICC344	2Q33665.D	46.9
JE10205-20	2Q33757.D	
JE10205-10	2Q33790.D	47

Ion Ratio Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T4Q138 **Method:** EPA 1633

Lab Sample ID	Lab File ID	Ion Ratios (Set 1) PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA
T4Q138-ICC138	4Q8131.D	0	0	3.3	20.8	29.2	37.4	23.4
JE10205-11	4Q8143.D	0	0	3	20	27.6	26.4	
JE10205-12	4Q8144.D	0	0	3.1	19.7	28.2	27.6	21.3
JE10205-13	4Q8145.D	0	0	3.4	20.7	27.8	28.8	23.9
JE10205-14	4Q8146.D	0	0	3.2	20.9	27.5	30.1	
JE10205-15	4Q8147.D	0			19.7			22.3
JE10205-17	4Q8149.D	0	0	3.6	19.1	27.1	29.8	
JE10205-18	4Q8150.D							
JE10205-19	4Q8151.D	0	0	3.4	21.1	27.1	28.3	
JE10205-20	4Q8152.D		0	3.9	22.9	30.9	28.5	
JE10205-21	4Q8155.D		0	4.2	21.8	27.8	29.9	
JE10205-1	4Q8161.D	0			20.8	27.3		21.9
JE10205-2	4Q8162.D	0	0	3.4	20.3			23.8
JE10205-3	4Q8163.D	0	0	3.4	20.2	27.8	29.4	22.7
JE10205-5	4Q8165.D	0	0	3.4	20.5			23.1
JE10205-6	4Q8166.D	0	0	3.2	20.1	27.8	29.2	
JE10205-7	4Q8167.D							
JE10205-8	4Q8168.D						29.4	
JE10205-9	4Q8169.D	0	0	3.4	20.6	27.3	28.6	23.8
JE10205-10	4Q8172.D	0	0	3.1	22.8	27.4	28.7	21.4

Ion Ratio Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T4Q138 **Method:** EPA 1633

Lab Sample ID	Lab File ID	Ion Ratios (Set 2) PFUnDA	PFDoDA	PFTrDA	PFTeDA	PFBS	PFPeS	PFHxS
T4Q138-ICC138	4Q8131.D	20.1	13	6.2	7.4	40.9	50.7	53.7
JE10205-11	4Q8143.D					42.6	49.9	50.4
JE10205-12	4Q8144.D	20.2				47	46.5	51.1
JE10205-13	4Q8145.D					41.8	51.1	
JE10205-14	4Q8146.D					41.5	52.7	51.4
JE10205-15	4Q8147.D	18.4				41.2	48.1	50.2
JE10205-17	4Q8149.D					45.2		43
JE10205-18	4Q8150.D							
JE10205-19	4Q8151.D	17.6				42	46.8	50.7
JE10205-20	4Q8152.D	24.8				51.2		54.9
JE10205-21	4Q8155.D					41.5		49.1
JE10205-1	4Q8161.D	19.3		7.2		43.3	49.5	
JE10205-2	4Q8162.D	17.8				40.4	48.3	
JE10205-3	4Q8163.D	18.3				43.9	49.7	
JE10205-5	4Q8165.D	18.1				42.1	51.3	
JE10205-6	4Q8166.D					41.1		54.9
JE10205-7	4Q8167.D							
JE10205-8	4Q8168.D							50.9
JE10205-9	4Q8169.D	21.1	13.7	6.2	7.8	44.3	53.3	50.3
JE10205-10	4Q8172.D	17.8				43.1	50.1	51.6

Ion Ratio Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T4Q138 **Method:** EPA 1633

Lab Sample ID	Lab File ID	Ion Ratios (Set 3) PFHpS	PFOS	PFNS	PFDoDS	4:2FTS	6:2FTS	8:2FTS
T4Q138-ICC138	4Q8131.D	55	51.5	58.4	62.5	46.8	46.9	37.8
JE10205-11	4Q8143.D	57	44.4				45.2	
JE10205-12	4Q8144.D	56.3	54.7				49.6	
JE10205-13	4Q8145.D	55.2					46.1	42.2
JE10205-14	4Q8146.D		48.7				47.6	
JE10205-15	4Q8147.D	59.5						38.4
JE10205-17	4Q8149.D		49.3					
JE10205-18	4Q8150.D							
JE10205-19	4Q8151.D		45.2					
JE10205-20	4Q8152.D		47.8				47.7	
JE10205-21	4Q8155.D		46.2					
JE10205-1	4Q8161.D	58.3				45.5	45.7	39.3
JE10205-2	4Q8162.D	57.7					47	38.6
JE10205-3	4Q8163.D	55.3		64.1			46.9	40.4
JE10205-5	4Q8165.D	55.2					46.9	38.5
JE10205-6	4Q8166.D		30.4					
JE10205-7	4Q8167.D							
JE10205-8	4Q8168.D		38.7				47.4	
JE10205-9	4Q8169.D		59		116.9		46.2	
JE10205-10	4Q8172.D	58.4					44.4	

Ion Ratio Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T4Q138 **Method:** EPA 1633

Lab Sample ID	Lab File ID	Ion Ratios (Set 4) FOSA	MeFOSAA	EtFOSAA	3:3FTCA
T4Q138-ICC138	4Q8131.D	3	36.7	56.4	8.1
JE10205-11	4Q8143.D				
JE10205-12	4Q8144.D	3.9			
JE10205-13	4Q8145.D	5.9			
JE10205-14	4Q8146.D				
JE10205-15	4Q8147.D	4.7			
JE10205-17	4Q8149.D				
JE10205-18	4Q8150.D				
JE10205-19	4Q8151.D				
JE10205-20	4Q8152.D				
JE10205-21	4Q8155.D				
JE10205-1	4Q8161.D	3.8			9.7
JE10205-2	4Q8162.D	5.6			
JE10205-3	4Q8163.D	3.2			
JE10205-5	4Q8165.D	4.5			
JE10205-6	4Q8166.D		31.3		
JE10205-7	4Q8167.D				
JE10205-8	4Q8168.D				
JE10205-9	4Q8169.D	2.8		75.4	
JE10205-10	4Q8172.D	3.1			

Ion Ratio Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T4Q139 **Method:** EPA 1633

Lab Sample ID	Lab File ID	Ion Ratios (Set 1) PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFBS
T4Q137-ICC137	4Q8084.D	0	0	3.1	19.9	28.6	35.3	42.5
JE10205-16	4Q8185.D	0	0	3.5	19.4	28.3	30.1	41.1
JE10205-4	4Q8186.D							
JE10205-3	4Q8188.D							
JE10205-9	4Q8190.D							
JE10205-13	4Q8192.D							
JE10205-15	4Q8193.D		0	3.2		26.4	29.7	

Ion Ratio Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T4Q139 **Method:** EPA 1633

Lab Sample ID	Lab File ID	Ion Ratios (Set 2) PFHxS	PFOS	6:2FTS	8:2FTS
T4Q137-ICC137	4Q8084.D	52	54.1	47.8	38.4
JE10205-16	4Q8185.D	51.2	48.6	46.9	
JE10205-4	4Q8186.D		44	47.6	
JE10205-3	4Q8188.D	50.5	48.5		
JE10205-9	4Q8190.D				38.6
JE10205-13	4Q8192.D	48.2	49.9		
JE10205-15	4Q8193.D		52.9	45.5	

Ion Ratio Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T4Q140 **Method:** EPA 1633

Lab Sample ID	Lab File ID	Ion Ratios PFPeA	PFHxA	PFNA	PFHxS	PFOS
T4Q140-ICC140	4Q8234.D	0	3.4	35.5	52.5	55.7
JE10205-1	4Q8255.D	0	3.4	28.4	51.2	50.4

Isotope Dilution Standard Recovery Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Method: EPA 1633 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6	S7	S8
JE10205-1	4Q8255.D	88	86	89	88	86	89	86	88
JE10205-1	4Q8161.D	91	80	90	88	89	92	89	93
JE10205-2	1Q26074.D	97	100	93	97	103	93	108	104
JE10205-2	4Q8162.D	91	76	89	83	92	91	88	97
JE10205-3	4Q8163.D	90	82	93	89	92	89	92	100
JE10205-3	4Q8188.D	94	97	101	91	92	84	87	89
JE10205-4	4Q8186.D	93	90	93	91	91	93	93	91
JE10205-5	1Q26076.D	95	103	100	99	98	87	95	81
JE10205-5	4Q8165.D	93	78	91	87	94	92	92	98
JE10205-6	4Q8166.D	93	81	90	87	90	91	91	90
JE10205-7	4Q8167.D	94	93	95	92	91	89	90	90
JE10205-8	4Q8168.D	95	90	95	88	93	92	88	83
JE10205-9	4Q8169.D	91	80	87	87	87	87	84	88
JE10205-9	4Q8190.D	93	85	87	82	89	81	88	88
JE10205-10	4Q8172.D	91	76	92	92	91	89	96	100
JE10205-10	2Q33790.D	92	90	98	102	88	99	92	93
JE10205-11	4Q8143.D	95	84	95	93	94	93	96	98
JE10205-12	4Q8144.D	92	78	93	91	95	91	88	90
JE10205-13	4Q8145.D	96	87	96	96	97	95	94	96
JE10205-13	4Q8192.D	96	88	96	91	94	89	97	89
JE10205-14	4Q8146.D	97	90	97	94	96	95	94	92
JE10205-15	4Q8193.D	96	100	98	98	97	90	87	87
JE10205-15	4Q8147.D	93	79	92	93	93	91	99	99
JE10205-16	4Q8185.D	94	92	96	94	95	94	96	99
JE10205-17	4Q8149.D	95	86	97	91	95	93	97	99
JE10205-18	4Q8150.D	95	88	95	91	97	95	89	85
JE10205-19	4Q8151.D	94	87	95	91	95	93	96	98
JE10205-20	2Q33757.D	90	93	89	96	85	92	82	84
JE10205-20	4Q8152.D	45	40	42	41	41	40	39* [a]	40
JE10205-21	4Q8155.D	95	86	97	93	95	94	94	97
OP63161-BS	4Q8158.D	94	94	95	92	91	91	93	93
OP63161-LLBS	4Q8157.D	95	97	97	96	95	92	96	96
OP63161-MB	4Q8156.D	92	91	90	91	94	89	92	90
OP63161-MS	4Q8159.D	91	78	90	85	91	87	89	92
OP63161-MSD	4Q8160.D	92	78	90	88	90	87	88	93
OP63163-BS	4Q8142.D	98	97	99	97	97	99	97	98
OP63163-LLBS	4Q8141.D	95	98	97	97	94	91	92	93
OP63163-MB	4Q8140.D	99	100	100	98	100	98	101	100
OP63534-BS	1Q26071.D	96	101	98	93	100	94	97	107
OP63534-LLBS	1Q26070.D	94	99	96	97	95	96	89	106

Isotope Dilution Standard Recovery Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Method: EPA 1633 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6	S7	S8
OP63534-MB	1Q26069.D	96	100	94	93	93	94	100	103
T1Q361-IBLK	1Q26037.D	102	104	100	102	100	108	100	104
T1Q362-IBLK	1Q26062.D	102	105	101	94	101	108	105	103
T2Q345-ICCB	2Q33785.D	93	94	96	98	93	91	97	98
T2Q345-ICCB	2Q33799.D	95	97	100	103	98	104	96	97
T4Q137-IBLK	4Q8089.D	99	100	101	100	101	99	99	96
T4Q138-IBLK	4Q8136.D	101	104	104	104	102	101	105	105
T4Q138-ICCB	4Q8154.D	102	99	102	98	104	103	106	108
T4Q138-ICCB	4Q8171.D	97	102	101	99	102	101	101	105
T4Q138-ICCB	4Q8174.D	102	100	102	99	101	104	102	105
T4Q139-IBLK	4Q8181.D	102	102	102	101	101	99	102	103
T4Q140-IBLK	4Q8239.D	111	107	105	106	107	106	106	109

Isotope Dilution Standards	Recovery Limits
S1 = 13C4-PFBA	5-130%
S2 = 13C5-PFPeA	40-130%
S3 = 13C5-PFHxA	40-130%
S4 = 13C4-PFHpA	40-130%
S5 = 13C8-PFOA	40-130%
S6 = 13C9-PFNA	40-130%
S7 = 13C6-PFDA	40-130%
S8 = 13C7-PFUnDA	30-130%

(a) Outside control limits.

Isotope Dilution Standard Recovery Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Method: EPA 1633 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S9	S10	S11	S12	S13	S14	S15	S16
JE10205-1	4Q8255.D	79	79	87	86	92	88	78	69
JE10205-1	4Q8161.D	89	87	100	94	88	103	94	95
JE10205-2	1Q26074.D	100	106	94	86	92	99	83	78
JE10205-2	4Q8162.D	91	87	106	83	99	146* [a]	132* [a]	136* [a]
JE10205-3	4Q8163.D	94	89	96	90	86	114	106	107
JE10205-3	4Q8188.D	88	78	72	76	88	73	60	70
JE10205-4	4Q8186.D	87	88	97	94	92	87	76	79
JE10205-5	1Q26076.D	84	88	94	86	83	88	90	89
JE10205-5	4Q8165.D	93	87	110	91	93	135* [a]	124	120
JE10205-6	4Q8166.D	86	63	98	91	90	86	72	69
JE10205-7	4Q8167.D	86	79	100	98	91	85	77	80
JE10205-8	4Q8168.D	74	71	97	92	98	86	79	78
JE10205-9	4Q8169.D	82	70	90	87	85	82	72	70
JE10205-9	4Q8190.D	78	70	105	106	92	88	77	76
JE10205-10	4Q8172.D	85	85	97	90	92	92	73	73
JE10205-10	2Q33790.D	76	93	107	92	93	82	76	75
JE10205-11	4Q8143.D	88	91	96	94	91	89	71	71
JE10205-12	4Q8144.D	82	80	100	97	91	90	68	65
JE10205-13	4Q8145.D	94	89	96	94	91	103	85	87
JE10205-13	4Q8192.D	85	81	103	91	92	83	65	71
JE10205-14	4Q8146.D	91	88	99	92	97	91	77	79
JE10205-15	4Q8193.D	84	85	93	103	103	92	84	80
JE10205-15	4Q8147.D	95	87	106	93	94	117	103	104
JE10205-16	4Q8185.D	85	83	100	93	94	93	73	71
JE10205-17	4Q8149.D	91	89	103	101	93	94	82	81
JE10205-18	4Q8150.D	78	84	93	97	97	89	76	75
JE10205-19	4Q8151.D	90	90	101	95	96	92	80	80
JE10205-20	2Q33757.D	74	74	96	95	90	74	60	58
JE10205-20	4Q8152.D	40	40	40	37* [a]	38* [a]	38* [a]	39	41
JE10205-21	4Q8155.D	89	82	104	98	94	88	74	72
OP63161-BS	4Q8158.D	89	85	91	91	88	90	79	77
OP63161-LLBS	4Q8157.D	91	86	93	96	96	90	73	81
OP63161-MB	4Q8156.D	82	76	94	96	87	83	72	75
OP63161-MS	4Q8159.D	82	86	102	92	90	108	95	98
OP63161-MSD	4Q8160.D	85	82	98	94	91	106	91	91
OP63163-BS	4Q8142.D	94	91	96	98	99	91	75	76
OP63163-LLBS	4Q8141.D	89	86	95	94	95	89	72	75
OP63163-MB	4Q8140.D	95	94	101	100	100	96	81	86
OP63534-BS	1Q26071.D	95	87	106	100	93	103	78	80
OP63534-LLBS	1Q26070.D	90	85	91	87	101	102	82	84

Isotope Dilution Standard Recovery Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Method: EPA 1633 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S9	S10	S11	S12	S13	S14	S15	S16
OP63534-MB	1Q26069.D	92	83	110	102	97	99	77	77
T1Q361-IBLK	1Q26037.D	102	98	93	97	107	103	98	107
T1Q362-IBLK	1Q26062.D	103	101	104	105	109	113	112	109
T2Q345-ICCB	2Q33785.D	89	89	101	100	95	92	96	98
T2Q345-ICCB	2Q33799.D	97	87	103	101	106	100	101	101
T4Q137-IBLK	4Q8089.D	95	94	102	102	95	98	96	99
T4Q138-IBLK	4Q8136.D	101	106	101	109	97	101	94	101
T4Q138-ICCB	4Q8154.D	97	99	112	105	106	98	96	101
T4Q138-ICCB	4Q8171.D	99	97	103	107	105	99	99	99
T4Q138-ICCB	4Q8174.D	99	94	111	106	106	98	99	101
T4Q139-IBLK	4Q8181.D	101	101	100	100	94	98	96	98
T4Q140-IBLK	4Q8239.D	104	101	115	109	109	105	105	107

Isotope Dilution Standards	Recovery Limits
S9 = 13C2-PFDoDA	10-130%
S10 = 13C2-PFTeDA	10-130%
S11 = 13C3-PFBS	40-135%
S12 = 13C3-PFHxS	40-130%
S13 = 13C8-PFOS	40-130%
S14 = 13C8-FOSA	40-130%
S15 = d3-MeFOSA	10-130%
S16 = d5-EtFOSA	10-130%

(a) Outside control limits.

Isotope Dilution Standard Recovery Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Method: EPA 1633 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S17	S18	S19	S20	S21	S22	S23	S24
JE10205-1	4Q8255.D	84	81	83	77	103	110	100	87
JE10205-1	4Q8161.D	94	95	95	95	123	87	94	89
JE10205-2	1Q26074.D	91	100	91	91	117	113	97	83
JE10205-2	4Q8162.D	128	138* [a]	138* [a]	137* [a]	139	108	99	85
JE10205-3	4Q8163.D	103	109	105	110	102	86	97	88
JE10205-3	4Q8188.D	66	68	65	69	114	105	93	94
JE10205-4	4Q8186.D	90	84	82	82	102	103	103	91
JE10205-5	1Q26076.D	91	98	90	86	119	104	97	83
JE10205-5	4Q8165.D	115	123	122	122	156	115	112	88
JE10205-6	4Q8166.D	84	82	74	71	115	108	107	88
JE10205-7	4Q8167.D	90	84	79	82	115	101	98	95
JE10205-8	4Q8168.D	68	66	79	80	100	98	100	94
JE10205-9	4Q8169.D	82	83	75	73	124	90	86	87
JE10205-9	4Q8190.D	89	97	84	80	117	109	112	85
JE10205-10	4Q8172.D	90	84	75	75	201* [a]	157	126	84
JE10205-10	2Q33790.D	88	77	72	73	113	120	103	85
JE10205-11	4Q8143.D	93	90	86	86	115	108	107	89
JE10205-12	4Q8144.D	84	81	82	81	158	125	106	84
JE10205-13	4Q8145.D	91	93	94	96	133	117	111	92
JE10205-13	4Q8192.D	83	77	77	77	119	124	118	91
JE10205-14	4Q8146.D	90	86	89	91	110	106	105	93
JE10205-15	4Q8193.D	90	90	83	85	144	109	125	95
JE10205-15	4Q8147.D	103	110	117	116	134	79	113	89
JE10205-16	4Q8185.D	85	86	86	82	113	112	115	91
JE10205-17	4Q8149.D	96	94	88	90	112	104	106	89
JE10205-18	4Q8150.D	79	77	85	84	94	100	96	89
JE10205-19	4Q8151.D	92	94	90	90	109	103	98	91
JE10205-20	2Q33757.D	74	70	73	72	105	101	94	108
JE10205-20	4Q8152.D	40	37	45	46	42	43	40	41
JE10205-21	4Q8155.D	92	90	84	83	108	108	103	93
OP63161-BS	4Q8158.D	94	88	83	84	96	96	94	93
OP63161-LLBS	4Q8157.D	95	92	85	87	105	98	97	97
OP63161-MB	4Q8156.D	87	83	78	79	108	98	96	90
OP63161-MS	4Q8159.D	102	101	101	102	121	88	92	89
OP63161-MSD	4Q8160.D	100	100	95	95	121	86	91	88
OP63163-BS	4Q8142.D	102	96	92	93	110	104	98	96
OP63163-LLBS	4Q8141.D	92	89	89	91	105	107	102	97
OP63163-MB	4Q8140.D	102	97	92	96	114	108	107	99
OP63534-BS	1Q26071.D	104	97	99	95	117	109	107	81
OP63534-LLBS	1Q26070.D	105	102	106	104	101	97	104	77

Isotope Dilution Standard Recovery Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Method: EPA 1633 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S17	S18	S19	S20	S21	S22	S23	S24
OP63534-MB	1Q26069.D	98	97	98	96	110	103	111	77
T1Q361-IBLK	1Q26037.D	105	103	108	104	84	94	91	98
T1Q362-IBLK	1Q26062.D	108	106	119	119	104	94	92	86
T2Q345-ICCB	2Q33785.D	102	100	87	85	99	112	96	102
T2Q345-ICCB	2Q33799.D	107	103	89	89	109	104	92	104
T4Q137-IBLK	4Q8089.D	104	105	97	97	108	112	105	100
T4Q138-IBLK	4Q8136.D	100	98	98	102	122	111	109	100
T4Q138-ICCB	4Q8154.D	101	103	99	101	114	109	107	99
T4Q138-ICCB	4Q8171.D	100	100	96	97	107	109	105	103
T4Q138-ICCB	4Q8174.D	101	98	96	97	117	107	105	100
T4Q139-IBLK	4Q8181.D	98	94	94	96	116	107	98	102
T4Q140-IBLK	4Q8239.D	105	107	102	104	118	120	111	107

Isotope Dilution Standards	Recovery Limits
S17 = d3-MeFOSAA	40-170%
S18 = d5-EtFOSAA	25-135%
S19 = d7-MeFOSE	10-130%
S20 = d9-EtFOSE	10-130%
S21 = 13C2-4:2FTS	40-200%
S22 = 13C2-6:2FTS	40-200%
S23 = 13C2-8:2FTS	40-300%
S24 = 13C3-HFPO-DA	40-130%

(a) Outside control limits.

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q361-ICC361
Lab FileID: 1Q26032.D

Initial Calibration Report

Method Path	D:\MassHunter\Methods
Method File	051425_1633_T1Q361.quantmethod.xml
Batch Name	D:\MassHunter\Data\1633\T1Q361\QuantResults\t1q361.batch.bin
Last Calib Update	5/14/2025 10:58:12 PM

Level Name	Calibration Files	Acq. Date-Time	Level Last Update Time
1	D:\MassHunter\Data\1633\T1Q361\1q26029.d	5/14/2025 4:38:33 PM	5/14/2025 10:58:12 PM
2	D:\MassHunter\Data\1633\T1Q361\1q26030.d	5/14/2025 4:53:27 PM	5/14/2025 10:58:12 PM
3	D:\MassHunter\Data\1633\T1Q361\1q26031.d	5/14/2025 5:08:21 PM	5/14/2025 10:58:12 PM
4	D:\MassHunter\Data\1633\T1Q361\1q26032.d	5/14/2025 5:23:15 PM	5/14/2025 10:58:12 PM
5	D:\MassHunter\Data\1633\T1Q361\1q26033.d	5/14/2025 5:38:09 PM	5/14/2025 10:58:12 PM
6	D:\MassHunter\Data\1633\T1Q361\1q26034.d	5/14/2025 5:53:07 PM	5/14/2025 10:58:12 PM
7	D:\MassHunter\Data\1633\T1Q361\1q26035.d	5/14/2025 6:08:04 PM	5/14/2025 10:58:12 PM
8	D:\MassHunter\Data\1633\T1Q361\1q26036.d	5/14/2025 6:22:58 PM	5/14/2025 10:58:12 PM

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
I M4-PFBA						ISTD					
T PFBA	Avg RF	0.2526	0.2336	0.2739	0.2811	0.2829	0.2841	0.3000	0.3289	0.2796	10.259
I M5-PFPeA						ISTD					
T PFMPA	Avg RF	0.4702	0.4534	0.5131	0.5280	0.5320	0.5517	0.5695	0.6481	0.5332	11.348
T 3:3FTCA	Avg RF	0.0466	0.0412	0.0445	0.0446	0.0446	0.0475	0.0504	0.0597	0.0474	11.897
T PFPeA	Avg RF	0.7723	0.7310	0.8413	0.8667	0.8638	0.9111	0.9289	1.0505	0.8707	11.274
T PFMBA	Avg RF	0.4392	0.3954	0.4611	0.4612	0.4668	0.4870	0.5055	0.5692	0.4732	10.711
I M5-PFHxA						ISTD					
T NFDHA	Avg RF	0.0528	0.0535	0.0692	0.0595	0.0585	0.0641	0.0645	0.0657	0.0610	9.656
T PFHxA	Avg RF	0.9019	0.8013	0.8811	0.8860	0.8788	0.9442	0.9927	1.0444	0.9163	8.250
T PFEESA	Avg RF	0.8018	0.7419	0.8590	0.8841	0.8735	0.9138	0.9394	0.9533	0.8709	8.126
T 5:3FTCA	Avg RF	0.1529	0.1389	0.1603	0.1568	0.1624	0.1678	0.1763	0.1810	0.1620	8.226
T 7:3FTCA	Avg RF	0.1655	0.1580	0.1803	0.1776	0.1793	0.1907	0.1998	0.2125	0.1830	9.672
I M4-PFHpA						ISTD					
T PFHpA	Avg RF	1.2350	1.1778	1.3516	1.4434	1.3975	1.4052	1.4807	1.7038	1.3994	11.448
I M8-PFOA						ISTD					
T PFOA	Avg RF	0.8458	0.7405	0.7960	0.8373	0.8446	0.9007	0.9320	1.0115	0.8635	9.692
I M9-PFNA						ISTD					
T PFNA	Avg RF	0.5820	0.5274	0.5943	0.5838	0.6373	0.6449	0.6824	0.7636	0.6270	11.604
I M6-PFDA						ISTD					
T PFDA	Avg RF	0.7972	0.6159	0.8235	0.8947	0.8736	0.8868	0.9166	1.0573	0.8582	14.547
I M7-PFUnDA						ISTD					
T PFUnDA	Avg RF	0.7158	0.7284	0.7772	0.8286	0.8636	0.8400	0.8761	0.9857	0.8269	10.591
T PFDS	Avg RF	0.0895	0.0893	0.1045	0.1003	0.1086	0.1069	0.1104	0.1227	0.1040	10.669

Generated at 10:58 PM on 5/14/2025

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q361-ICC361
Lab FileID: 1Q26032.D

Initial Calibration Report

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
I M2-PFDoDA						ISTD					
T PFDoDA	Avg RF	0.8776	0.7550	0.8537	0.9320	0.9192	0.9429	0.9741	1.0124	0.9084	8.776
T PFTrDA	Avg RF	0.8493	0.7088	0.8517	0.9088	0.8930	0.9316	0.9521	0.9798	0.8844	9.530
I M2-PFTeDA						ISTD					
T PFTeDA	Avg RF	1.3647	1.1866	1.2267	1.3664	1.3307	1.3861	1.3498	1.5595	1.3463	8.320
I M8-FOSA						ISTD					
T FOSA	Avg RF	0.7401	0.7540	0.8552	0.8754	0.8996	0.8659	0.9008	1.0405	0.8664	10.809
I M3-PFBS						ISTD					
T PFBS	Avg RF	2.7073	2.8043	2.8211	2.7902	2.7406	2.9345	3.0072	3.3659	2.8964	7.378
T PFPeS	Avg RF	1.3191	1.1694	1.3026	1.2655	1.2248	1.2702	1.3341	1.4775	1.2954	7.007
I M3-PFHxS						ISTD					
T PFHxS	Avg RF	1.9278	1.5524	1.8256	1.9515	1.9269	1.9971	2.1102	2.2881	1.9475	10.922
T PFHpS	Avg RF	1.7345	1.2831	1.6559	1.7810	1.6402	1.8524	1.8890	1.9924	1.7286	12.465
I M8-PFOS						ISTD					
T PFOS	Avg RF	2.3600	1.8664	1.9510	2.0574	2.0342	1.9692	2.0953	2.4405	2.0967	9.599
T PFNS	Avg RF	0.8144	0.7664	0.9244	0.9457	0.9280	0.8665	0.9112	1.0452	0.9002	9.478
T PFDoDS	Avg RF	0.9860	1.0798	1.0755	1.1783	1.1706	1.0994	1.1801	1.3125	1.1353	8.601
I M2-4:2FTS						ISTD					
T 4:2FTS	Avg RF	8.0365	8.8383	8.1315	9.5421	9.7577	10.16	9.7658	10.34	9.3212	9.486
I M2-6:2FTS						ISTD					
T 6:2FTS	Avg RF	5.1731	5.4667	6.0893	6.5700	6.8645	6.4179	6.9323	7.6899	6.4005	12.755
I M2-8:2FTS						ISTD					
T 8:2FTS	Avg RF	4.0580	4.2033	4.2424	4.7926	4.7732	5.2078			4.5462	9.828
I M3-MeFOSAA						ISTD					
T MeFOSAA	Avg RF	0.7187	0.7109	0.7200	0.7989	0.8290	0.7756	0.8388	0.9539	0.7932	10.355
I M3-HFPO-DA						ISTD					
T HFPO-DA	Avg RF	0.8446	0.7623	0.9754	0.9410	0.9838	1.0220	1.0454	1.1717	0.9683	12.886
T ADONA	Avg RF	19.42	19.13	21.43	23.26	22.59	22.66	22.80	24.87	22.02	8.827
T 9Cl-PF3ONS	Avg RF	8.1407	7.4779	9.0608	9.4997	9.3394	9.2028	8.9355	9.0354	8.8365	7.719
T 11Cl-PF3OUdS	Avg RF	9.4778	9.2679	10.82	11.73	11.39	11.23	11.05	11.29	10.78	8.434
I M5-EtFOSAA						ISTD					
T EtFOSAA	Avg RF	0.6395	0.5652	0.8699	0.7959	0.7377	0.7976	0.8722	0.9602	0.7798	16.599
I M7-MeFOSE						ISTD					
T MeFOSE	Avg RF	0.9359	0.8694	0.9862	1.0016	1.0238	1.0402	1.0964	1.1929	1.0183	9.633
I M9-EtFOSE						ISTD					

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Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q361-ICC361
Lab FileID: 1Q26032.D

Initial Calibration Report

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
T EtFOSE	Avg RF	0.9526	0.9245	1.0759	1.1038	1.1020	1.1161	1.1616	1.2780	1.0893	10.290
I M5-EtFOSA						ISTD					
T EtFOSA	Avg RF	0.9635	0.8693	1.0259	1.0018	1.0130	1.0579	1.1052	1.3102	1.0433	12.278
I M3-MeFOSA						ISTD					
T MeFOSA	Avg RF	1.2385	1.1463	1.2083	1.2882	1.3274	1.2818	1.3882	1.4230	1.2877	7.114
I 13C4-PFOS						ISTD					
S d3-MeFOSAA	Avg RF	1.4645	1.5733	1.4934	1.5637	1.5142	1.5656	1.5051	1.4986	1.5223	2.637
S 13C8-PFOS	Avg RF	0.5675	0.5897	0.5592	0.5693	0.5664	0.6071	0.5756	0.5665	0.5752	2.734
S d5-EtFOSAA	Avg RF	1.2016	1.3166	1.1487	1.2018	1.2583	1.2666	1.2358	1.2855	1.2394	4.340
S 13C8-FOSA	Avg RF	1.4874	1.5639	1.4289	1.5346	1.4664	1.5840	1.5505	1.5952	1.5264	3.894
S d7-MeFOSE	Avg RF	0.7430	0.7927	0.7618	0.7940	0.7910	0.8010	0.7740	0.8037	0.7827	2.716
S d3-MeFOSA	Avg RF	1.1471	1.1457	1.1186	1.1692	1.1518	1.2045	1.1705	1.3576	1.1831	6.316
S d9-EtFOSE	Avg RF	0.9110	0.9421	0.8979	0.9383	0.9433	0.9409	0.9134	0.9292	0.9270	1.870
S d5-EtFOSA	Avg RF	1.1681	1.2004	1.1456	1.2519	1.2369	1.2243	1.2246	1.2195	1.2089	2.960
I 13C3-PFBA						ISTD					
S 13C4-PFBA	Avg RF	1.1636	1.1901	1.1992	1.1975	1.1712	1.2154	1.1750	1.2005	1.1891	1.480
I 18O2-PFHxS						ISTD					
S 13C2-4:2FTS	Avg RF	0.0923	0.0792	0.0967	0.0890	0.0769	0.0799	0.0779	0.0757	0.0835	9.604
S 13C3-PFBS	Avg RF	0.8412	0.7870	0.8419	0.9044	0.8421	0.8606	0.8190	0.7778	0.8342	4.846
S 13C2-6:2FTS	Avg RF	0.1584	0.1659	0.1813	0.1697	0.1539	0.1739	0.1512	0.1402	0.1618	8.292
S 13C3-PFHxS	Avg RF	0.8042	0.8888	0.8554	0.8718	0.8042	0.8605	0.7989	0.8048	0.8361	4.385
S 13C2-8:2FTS	Avg RF	0.2418	0.2530	0.2876	0.2560	0.2408	0.2342	0.2546	0.2691	0.2546	6.766
I 13C4-PFOA						ISTD					
S 13C8-PFOA	Avg RF	0.9347	0.9194	0.9035	0.9304	0.8927	0.9075	0.8638	0.9283	0.9100	2.604
I 13C2-PFDA						ISTD					
S 13C6-PFDA	Avg RF	1.1402	1.2475	1.3510	1.2439	1.1801	1.2293	1.2332	1.0623	1.2109	7.043
S 13C7-PFUnDA	Avg RF	1.6604	1.7253	1.9788	1.8405	1.6783	1.8165	1.7791	1.5832	1.7578	7.031
S 13C2-PFDoDA	Avg RF	1.5421	1.6469	1.8538	1.7249	1.6547	1.7326	1.7150	1.6974	1.6959	5.237
S 13C2-PFTeDA	Avg RF	0.6547	0.6950	0.7842	0.7063	0.7098	0.7246	0.7644	0.6698	0.7136	6.152
I 13C5-PFNA						ISTD					
S 13C9-PFNA	Avg RF	0.9374	1.0197	1.0295	1.0425	1.0082	1.0344	1.0130	1.0749	1.0199	3.857
I 13C2-PFHxA						ISTD					
S 13C5-PFPeA	Avg RF	0.9015	0.9541	0.9321	0.9199	0.9013	0.9187	0.9015	0.9028	0.9165	2.080
S 13C5-PFHxA	Avg RF	1.0040	1.1058	1.0614	1.0870	1.0358	1.0683	1.0250	1.1212	1.0635	3.808
S 13C3-HFPO-DA	Avg RF	0.0918	0.0980	0.0951	0.0905	0.0898	0.0949	0.0926	0.0932	0.0932	2.876
S 13C4-PFHpA	Avg RF	0.8521	0.9065	0.8569	0.8485	0.8401	0.9022	0.8647	0.8669	0.8672	2.823

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Generated at 10:58 PM on 5/14/2025

Initial Calibration Verification

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q361-ICV361
Lab FileID: 1Q26038.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T1Q361\t1q361.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T1Q361\1q26029.d
2:D:\MassHunter\Data\1633\T1Q361\1q26030.d
3:D:\MassHunter\Data\1633\T1Q361\1q26031.d
4:D:\MassHunter\Data\1633\T1Q361\1q26032.d
5:D:\MassHunter\Data\1633\T1Q361\1q26033.d
6:D:\MassHunter\Data\1633\T1Q361\1q26034.d
7:D:\MassHunter\Data\1633\T1Q361\1q26035.d
8:D:\MassHunter\Data\1633\T1Q361\1q26036.d

Data File: 1q26038
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	4.603	-7.9	92.1
13C2-6:2FTS	5.000	5.014	0.3	100.3
13C2-8:2FTS	5.000	4.236	-15.3	84.7
13C2-PFDoDA	1.250	1.170	-6.4	93.6
13C2-PFTeDA	1.250	1.213	-3.0	97.0
13C3-PFBS	2.500	2.477	-0.9	99.1
13C3-PFHxS	2.500	2.561	2.5	102.5
13C4-PFBA	10.000	9.873	-1.3	98.7
13C4-PFHpA	2.500	2.519	0.7	100.7
13C5-PFHxA	2.500	2.511	0.4	100.4
13C5-PFPeA	5.000	5.078	1.6	101.6
13C6-PFDA	1.250	1.224	-2.1	97.9
13C7-PFUnDA	1.250	1.297	3.8	103.8
13C8-FOSA	2.500	2.589	3.5	103.5
13C8-PFOA	2.500	2.467	-1.3	98.7
13C8-PFOS	2.500	2.509	0.4	100.4
13C9-PFNA	1.250	1.317	5.4	105.4
4:2FTS	9.375	9.770	4.2	104.2
6:2FTS	9.500	9.452	-0.5	99.5
8:2FTS	9.600	10.529	9.7	109.7
d3-MeFOSAA	5.000	5.214	4.3	104.3
EtFOSAA	2.500	2.401	-4.0	96.0
FOSA	2.500	2.429	-2.8	97.2
MeFOSAA	2.500	2.264	-9.4	90.6
PFBA	10.000	9.908	-0.9	99.1
PFBS	2.218	2.118	-4.5	95.5
PFDA	2.500	2.510	0.4	100.4
PFDoDA	2.500	2.625	5.0	105.0
PFDS	2.413	2.370	-1.8	98.2
PFHpA	2.500	2.483	-0.7	99.3
PFHpS	2.383	2.343	-1.7	98.3
PFHxA	2.500	2.514	0.6	100.6
PFHxS	2.285	2.108	-7.8	92.2
PFNA	2.500	2.484	-0.6	99.4
PFNS	2.405	2.369	-1.5	98.5
PFOA	2.500	2.535	1.4	101.4
PFOS	2.320	2.259	-2.6	97.4

Initial Calibration Verification

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q361-ICV361
Lab FileID: 1Q26038.D

PFPeA	5.000	5.146	2.9	102.9
PFPeS	2.353	2.185	-7.1	92.9
PFTeDA	2.500	2.478	-0.9	99.1
PFTrDA	2.500	2.744	9.8	109.8
PFUnDA	2.500	2.462	-1.5	98.5
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	10.213	8.1	108.1
13C3-HFPO-DA	10.000	9.809	-1.9	98.1
9Cl-PF3ONS	9.350	10.259	9.7	109.7
ADONA	9.450	9.946	5.3	105.3
HFPO-DA	10.000	10.686	6.9	106.9
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	12.016	-3.9	96.1
5:3FTCA	62.500	62.741	0.4	100.4
7:3FTCA	62.500	62.640	0.2	100.2
d3-MeFOSA	2.500	2.416	-3.4	96.6
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.537	1.5	101.5
EtFOSE	25.000	26.029	4.1	104.1
MeFOSA	2.500	2.452	-1.9	98.1
MeFOSE	25.000	25.262	1.0	101.0
PFDoDS	2.425	2.448	1.0	101.0
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	5.059	1.2	101.2
d7-MeFOSE	25.000	25.104	0.4	100.4
d9-EtFOSE	25.000	24.907	-0.4	99.6
d5-EtFOSA	2.500	2.419	-3.3	96.7
NFDHA	5.000	5.391	7.8	107.8
PFMBA	5.000	5.018	0.4	100.4
PFMPA	5.000	5.032	0.6	100.6
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.665	4.8	104.8

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q361-CC361
Lab FileID: 1Q26039.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T1Q361\t1q361.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T1Q361\1q26029.d
2:D:\MassHunter\Data\1633\T1Q361\1q26030.d
3:D:\MassHunter\Data\1633\T1Q361\1q26031.d
4:D:\MassHunter\Data\1633\T1Q361\1q26032.d
5:D:\MassHunter\Data\1633\T1Q361\1q26033.d
6:D:\MassHunter\Data\1633\T1Q361\1q26034.d
7:D:\MassHunter\Data\1633\T1Q361\1q26035.d
8:D:\MassHunter\Data\1633\T1Q361\1q26036.d

Data File: 1q26039
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	4.671	-6.6	93.4
13C2-6:2FTS	5.000	5.230	4.6	104.6
13C2-8:2FTS	5.000	4.591	-8.2	91.8
13C2-PFDoDA	1.250	1.261	0.9	100.9
13C2-PFTeDA	1.250	1.257	0.6	100.6
13C3-PFBS	2.500	2.589	3.6	103.6
13C3-PFHxS	2.500	2.878	15.1	115.1
13C4-PFBA	10.000	10.122	1.2	101.2
13C4-PFHpA	2.500	2.475	-1.0	99.0
13C5-PFHxA	2.500	2.613	4.5	104.5
13C5-PFPeA	5.000	5.058	1.2	101.2
13C6-PFDA	1.250	1.284	2.7	102.7
13C7-PFUnDA	1.250	1.308	4.6	104.6
13C8-FOSA	2.500	2.498	-0.1	99.9
13C8-PFOA	2.500	2.430	-2.8	97.2
13C8-PFOS	2.500	2.326	-7.0	93.0
13C9-PFNA	1.250	1.227	-1.9	98.1
4:2FTS	9.375	10.611	13.2	113.2
6:2FTS	9.500	9.333	-1.8	98.2
8:2FTS	9.600	10.392	8.3	108.3
d3-MeFOSAA	5.000	5.146	2.9	102.9
EtFOSAA	2.500	2.527	1.1	101.1
FOSA	2.500	2.531	1.2	101.2
MeFOSAA	2.500	2.338	-6.5	93.5
PFBA	10.000	9.788	-2.1	97.9
PFBS	2.218	2.182	-1.6	98.4
PFDA	2.500	2.482	-0.7	99.3
PFDoDA	2.500	2.547	1.9	101.9
PFDS	2.413	2.329	-3.5	96.5
PFHpA	2.500	2.558	2.3	102.3
PFHpS	2.383	2.117	-11.2	88.8
PFHxA	2.500	2.387	-4.5	95.5
PFHxS	2.285	2.086	-8.7	91.3
PFNA	2.500	2.485	-0.6	99.4
PFNS	2.405	2.588	7.6	107.6
PFOA	2.500	2.637	5.5	105.5
PFOS	2.320	2.470	6.4	106.4

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q361-CC361
Lab FileID: 1Q26039.D

PFPeA	5.000	5.086	1.7	101.7
PFPeS	2.353	2.303	-2.1	97.9
PFTeDA	2.500	2.479	-0.8	99.2
PFTrDA	2.500	2.665	6.6	106.6
PFUnDA	2.500	2.385	-4.6	95.4
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	10.366	9.7	109.7
13C3-HFPO-DA	10.000	9.981	-0.2	99.8
9Cl-PF3ONS	9.350	9.837	5.2	105.2
ADONA	9.450	9.860	4.3	104.3
HFPO-DA	10.000	10.850	8.5	108.5
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	11.778	-5.8	94.2
5:3FTCA	62.500	59.980	-4.0	96.0
7:3FTCA	62.500	61.983	-0.8	99.2
d3-MeFOSA	2.500	2.602	4.1	104.1
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.622	4.9	104.9
EtFOSE	25.000	25.456	1.8	101.8
MeFOSA	2.500	2.347	-6.1	93.9
MeFOSE	25.000	25.432	1.7	101.7
PFDoDS	2.425	2.644	9.0	109.0
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	5.088	1.8	101.8
d7-MeFOSE	25.000	24.652	-1.4	98.6
d9-EtFOSE	25.000	25.023	0.1	100.1
d5-EtFOSA	2.500	2.320	-7.2	92.8
NFDHA	5.000	5.038	0.8	100.8
PFMBA	5.000	5.058	1.2	101.2
PFMPA	5.000	5.039	0.8	100.8
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.500	1.1	101.1

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q361-CC361
Lab FileID: 1Q26040.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T1Q361\t1q361.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T1Q361\1q26029.d
2:D:\MassHunter\Data\1633\T1Q361\1q26030.d
3:D:\MassHunter\Data\1633\T1Q361\1q26031.d
4:D:\MassHunter\Data\1633\T1Q361\1q26032.d
5:D:\MassHunter\Data\1633\T1Q361\1q26033.d
6:D:\MassHunter\Data\1633\T1Q361\1q26034.d
7:D:\MassHunter\Data\1633\T1Q361\1q26035.d
8:D:\MassHunter\Data\1633\T1Q361\1q26036.d

Data File: 1q26040
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	6.388	27.8	127.8
13C2-6:2FTS	5.000	5.816	16.3	116.3
13C2-8:2FTS	5.000	5.365	7.3	107.3
13C2-PFDoDA	1.250	1.231	-1.5	98.5
13C2-PFTeDA	1.250	1.247	-0.3	99.7
13C3-PFBS	2.500	2.741	9.6	109.6
13C3-PFHxS	2.500	2.754	10.2	110.2
13C4-PFBA	10.000	9.817	-1.8	98.2
13C4-PFHpA	2.500	2.415	-3.4	96.6
13C5-PFHxA	2.500	2.426	-3.0	97.0
13C5-PFPeA	5.000	4.951	-1.0	99.0
13C6-PFDA	1.250	1.207	-3.4	96.6
13C7-PFUnDA	1.250	1.263	1.1	101.1
13C8-FOSA	2.500	2.269	-9.2	90.8
13C8-PFOA	2.500	2.518	0.7	100.7
13C8-PFOS	2.500	2.222	-11.1	88.9
13C9-PFNA	1.250	1.212	-3.0	97.0
4:2FTS	0.750	0.557	-25.8	74.2
6:2FTS	0.760	0.629	-17.2	82.8
8:2FTS	0.768	0.910	18.5	118.5
d3-MeFOSAA	5.000	4.624	-7.5	92.5
EtFOSAA	0.200	0.174	-12.8	87.2
FOSA	0.200	0.205	2.6	102.6
MeFOSAA	0.200	0.173	-13.4	86.6
PFBA	0.800	0.745	-6.9	93.1
PFBS	0.177	0.166	-6.4	93.6
PFDA	0.200	0.178	-10.9	89.1
PFDoDA	0.200	0.199	-0.7	99.3
PFDS	0.193	0.143	-25.8	74.2
PFHpA	0.200	0.167	-16.7	83.3
PFHpS	0.191	0.206	7.8	107.8
PFHxA	0.200	0.190	-5.1	94.9
PFHxS	0.183	0.194	6.0	106.0
PFNA	0.200	0.188	-6.1	93.9
PFNS	0.192	0.206	7.3	107.3
PFOA	0.200	0.187	-6.3	93.7
PFOS	0.186	0.205	10.1	110.1

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q361-CC361
Lab FileID: 1Q26040.D

PFPeA	0.400	0.360	-9.9	90.1
PFPeS	0.188	0.194	3.0	103.0
PFTeDA	0.200	0.158	-20.8	79.2
PFTrDA	0.200	0.182	-9.2	90.8
PFUnDA	0.200	0.188	-5.9	94.1
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	0.756	0.757	0.1	100.1
13C3-HFPO-DA	10.000	9.247	-7.5	92.5
9Cl-PF3ONS	0.748	0.738	-1.3	98.7
ADONA	0.756	0.699	-7.5	92.5
HFPO-DA	0.800	0.746	-6.7	93.3
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	1.000	0.905	-9.5	90.5
5:3FTCA	5.000	4.270	-14.6	85.4
7:3FTCA	5.000	4.183	-16.3	83.7
d3-MeFOSA	2.500	2.258	-9.7	90.3
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	0.200	0.194	-3.1	96.9
EtFOSE	2.000	1.850	-7.5	92.5
MeFOSA	0.200	0.179	-10.7	89.3
MeFOSE	2.000	1.844	-7.8	92.2
PFDoDS	0.194	0.159	-18.1	81.9
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.531	-9.4	90.6
d7-MeFOSE	25.000	23.296	-6.8	93.2
d9-EtFOSE	25.000	23.160	-7.4	92.6
d5-EtFOSA	2.500	2.212	-11.5	88.5
NFDHA	0.400	0.327	-18.3	81.7
PFMBA	0.400	0.366	-8.4	91.6
PFMPA	0.400	0.350	-12.5	87.5
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	0.356	0.313	-12.1	87.9

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q362-CC361
Lab FileID: 1Q26063.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T1Q362\T1Q362.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T1Q361\1q26029.d
2:D:\MassHunter\Data\1633\T1Q361\1q26030.d
3:D:\MassHunter\Data\1633\T1Q361\1q26031.d
4:D:\MassHunter\Data\1633\T1Q361\1q26032.d
5:D:\MassHunter\Data\1633\T1Q361\1q26033.d
6:D:\MassHunter\Data\1633\T1Q361\1q26034.d
7:D:\MassHunter\Data\1633\T1Q361\1q26035.d
8:D:\MassHunter\Data\1633\T1Q361\1q26036.d

Data File: 1q26063
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.928	18.6	118.6
13C2-6:2FTS	5.000	5.360	7.2	107.2
13C2-8:2FTS	5.000	4.897	-2.1	97.9
13C2-PFDoDA	1.250	1.376	10.1	110.1
13C2-PFTeDA	1.250	1.316	5.3	105.3
13C3-PFBS	2.500	2.814	12.6	112.6
13C3-PFHxS	2.500	2.647	5.9	105.9
13C4-PFBA	10.000	10.097	1.0	101.0
13C4-PFHpA	2.500	2.466	-1.4	98.6
13C5-PFHxA	2.500	2.543	1.7	101.7
13C5-PFPeA	5.000	5.272	5.4	105.4
13C6-PFDA	1.250	1.307	4.6	104.6
13C7-PFUnDA	1.250	1.395	11.6	111.6
13C8-FOSA	2.500	2.773	10.9	110.9
13C8-PFOA	2.500	2.505	0.2	100.2
13C8-PFOS	2.500	2.344	-6.2	93.8
13C9-PFNA	1.250	1.289	3.1	103.1
4:2FTS	9.375	8.578	-8.5	91.5
6:2FTS	9.500	9.816	3.3	103.3
8:2FTS	9.600	10.244	6.7	106.7
d3-MeFOSAA	5.000	5.256	5.1	105.1
EtFOSAA	2.500	2.719	8.8	108.8
FOSA	2.500	2.521	0.8	100.8
MeFOSAA	2.500	2.587	3.5	103.5
PFBA	10.000	9.719	-2.8	97.2
PFBS	2.218	2.098	-5.4	94.6
PFDA	2.500	2.511	0.4	100.4
PFDoDA	2.500	2.506	0.2	100.2
PFDS	2.413	2.524	4.6	104.6
PFHpA	2.500	2.533	1.3	101.3
PFHpS	2.383	2.474	3.8	103.8
PFHxA	2.500	2.487	-0.5	99.5
PFHxS	2.285	2.237	-2.1	97.9
PFNA	2.500	2.481	-0.8	99.2
PFNS	2.405	2.665	10.8	110.8
PFOA	2.500	2.498	-0.1	99.9
PFOS	2.320	2.411	3.9	103.9

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q362-CC361
Lab FileID: 1Q26063.D

PFPeA	5.000	5.059	1.2	101.2
PFPeS	2.353	2.125	-9.7	90.3
PFTeDA	2.500	2.482	-0.7	99.3
PFTrDA	2.500	2.562	2.5	102.5
PFUnDA	2.500	2.470	-1.2	98.8
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	11.888	25.8	125.8
13C3-HFPO-DA	10.000	8.422	-15.8	84.2
9Cl-PF3ONS	9.350	11.670	24.8	124.8
ADONA	9.450	11.241	19.0	119.0
HFPO-DA	10.000	10.241	2.4	102.4
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	13.798	10.4	110.4
5:3FTCA	62.500	74.952	19.9	119.9
7:3FTCA	62.500	72.547	16.1	116.1
d3-MeFOSA	2.500	2.740	9.6	109.6
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.478	-0.9	99.1
EtFOSE	25.000	25.465	1.9	101.9
MeFOSA	2.500	2.423	-3.1	96.9
MeFOSE	25.000	25.013	0.1	100.1
PFDoDS	2.425	2.879	18.7	118.7
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	5.113	2.3	102.3
d7-MeFOSE	25.000	28.491	14.0	114.0
d9-EtFOSE	25.000	28.505	14.0	114.0
d5-EtFOSA	2.500	2.638	5.5	105.5
NFDHA	5.000	3.896	-22.1	77.9
PFMBA	5.000	4.933	-1.3	98.7
PFMPA	5.000	5.061	1.2	101.2
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.490	0.9	100.9

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q362-CC361
Lab FileID: 1Q26064.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T1Q362\T1Q362.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T1Q361\1q26029.d
2:D:\MassHunter\Data\1633\T1Q361\1q26030.d
3:D:\MassHunter\Data\1633\T1Q361\1q26031.d
4:D:\MassHunter\Data\1633\T1Q361\1q26032.d
5:D:\MassHunter\Data\1633\T1Q361\1q26033.d
6:D:\MassHunter\Data\1633\T1Q361\1q26034.d
7:D:\MassHunter\Data\1633\T1Q361\1q26035.d
8:D:\MassHunter\Data\1633\T1Q361\1q26036.d

Data File: 1q26064
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.155	3.1	103.1
13C2-6:2FTS	5.000	5.117	2.3	102.3
13C2-8:2FTS	5.000	5.917	18.3	118.3
13C2-PFDoDA	1.250	1.235	-1.2	98.8
13C2-PFTeDA	1.250	1.231	-1.5	98.5
13C3-PFBS	2.500	2.306	-7.7	92.3
13C3-PFHxS	2.500	2.346	-6.2	93.8
13C4-PFBA	10.000	9.873	-1.3	98.7
13C4-PFHpA	2.500	2.401	-4.0	96.0
13C5-PFHxA	2.500	2.507	0.3	100.3
13C5-PFPeA	5.000	5.135	2.7	102.7
13C6-PFDA	1.250	1.171	-6.3	93.7
13C7-PFUnDA	1.250	1.259	0.7	100.7
13C8-FOSA	2.500	2.417	-3.3	96.7
13C8-PFOA	2.500	2.401	-4.0	96.0
13C8-PFOS	2.500	2.215	-11.4	88.6
13C9-PFNA	1.250	1.230	-1.6	98.4
4:2FTS	0.750	0.554	-26.1	73.9
6:2FTS	0.760	0.613	-19.3	80.7
8:2FTS	0.768	0.630	-17.9	82.1
d3-MeFOSAA	5.000	4.553	-8.9	91.1
EtFOSAA	0.200	0.178	-10.8	89.2
FOSA	0.200	0.152	-24.0	76.0
MeFOSAA	0.200	0.178	-11.1	88.9
PFBA	0.800	0.713	-10.9	89.1
PFBS	0.177	0.152	-14.4	85.6
PFDA	0.200	0.161	-19.6	80.4
PFDoDA	0.200	0.164	-18.1	81.9
PFDS	0.193	0.184	-4.8	95.2
PFHpA	0.200	0.187	-6.3	93.7
PFHpS	0.191	0.213	11.6	111.6
PFHxA	0.200	0.201	0.5	100.5
PFHxS	0.183	0.216	18.0	118.0
PFNA	0.200	0.180	-10.1	89.9
PFNS	0.192	0.252	# 31.2	131.2
PFOA	0.200	0.188	-5.9	94.1
PFOS	0.186	0.231	24.0	124.0

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q362-CC361
Lab FileID: 1Q26064.D

PFPeA	0.400	0.355	-11.2	88.8
PFPeS	0.188	0.209	11.3	111.3
PFTeDA	0.200	0.175	-12.5	87.5
PFTrDA	0.200	0.200	-0.1	99.9
PFUnDA	0.200	0.183	-8.7	91.3
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	0.756	0.900	19.1	119.1
13C3-HFPO-DA	10.000	7.446	-25.5	74.5
9Cl-PF3ONS	0.748	0.917	22.6	122.6
ADONA	0.756	0.857	13.4	113.4
HFPO-DA	0.800	0.909	13.6	113.6
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	1.000	1.028	2.8	102.8
5:3FTCA	5.000	5.304	6.1	106.1
7:3FTCA	5.000	5.038	0.8	100.8
d3-MeFOSA	2.500	2.374	-5.0	95.0
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	0.200	0.189	-5.7	94.3
EtFOSE	2.000	1.791	-10.5	89.5
MeFOSA	0.200	0.177	-11.5	88.5
MeFOSE	2.000	1.909	-4.6	95.4
PFDoDS	0.194	0.200	3.3	103.3
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.671	-6.6	93.4
d7-MeFOSE	25.000	25.230	0.9	100.9
d9-EtFOSE	25.000	25.540	2.2	102.2
d5-EtFOSA	2.500	2.296	-8.2	91.8
NFDHA	0.400	0.325	-18.7	81.3
PFMBA	0.400	0.331	-17.2	82.8
PFMPA	0.400	0.370	-7.5	92.5
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	0.356	0.296	-16.8	83.2

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q362-CC361
Lab FileID: 1Q26085.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T1Q362\T1Q362.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T1Q361\1q26029.d
2:D:\MassHunter\Data\1633\T1Q361\1q26030.d
3:D:\MassHunter\Data\1633\T1Q361\1q26031.d
4:D:\MassHunter\Data\1633\T1Q361\1q26032.d
5:D:\MassHunter\Data\1633\T1Q361\1q26033.d
6:D:\MassHunter\Data\1633\T1Q361\1q26034.d
7:D:\MassHunter\Data\1633\T1Q361\1q26035.d
8:D:\MassHunter\Data\1633\T1Q361\1q26036.d

Data File: 1q26085
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.181	3.6	103.6
13C2-6:2FTS	5.000	5.549	11.0	111.0
13C2-8:2FTS	5.000	5.190	3.8	103.8
13C2-PFDoDA	1.250	1.252	0.2	100.2
13C2-PFTeDA	1.250	1.195	-4.4	95.6
13C3-PFBS	2.500	2.764	10.5	110.5
13C3-PFHxS	2.500	2.557	2.3	102.3
13C4-PFBA	10.000	10.029	0.3	100.3
13C4-PFHpA	2.500	2.427	-2.9	97.1
13C5-PFHxA	2.500	2.536	1.5	101.5
13C5-PFPeA	5.000	5.200	4.0	104.0
13C6-PFDA	1.250	1.173	-6.2	93.8
13C7-PFUnDA	1.250	1.213	-3.0	97.0
13C8-FOSA	2.500	2.838	13.5	113.5
13C8-PFOA	2.500	2.584	3.4	103.4
13C8-PFOS	2.500	2.729	9.2	109.2
13C9-PFNA	1.250	1.220	-2.4	97.6
4:2FTS	9.375	10.133	8.1	108.1
6:2FTS	9.500	9.935	4.6	104.6
8:2FTS	9.600	10.508	9.5	109.5
d3-MeFOSAA	5.000	5.416	8.3	108.3
EtFOSAA	2.500	2.631	5.2	105.2
FOSA	2.500	2.343	-6.3	93.7
MeFOSAA	2.500	2.566	2.6	102.6
PFBA	10.000	9.247	-7.5	92.5
PFBS	2.218	2.079	-6.3	93.7
PFDA	2.500	2.621	4.8	104.8
PFDoDA	2.500	2.476	-1.0	99.0
PFDS	2.413	2.547	5.5	105.5
PFHpA	2.500	2.590	3.6	103.6
PFHpS	2.383	2.360	-1.0	99.0
PFHxA	2.500	2.514	0.5	100.5
PFHxS	2.285	2.301	0.7	100.7
PFNA	2.500	2.542	1.7	101.7
PFNS	2.405	2.377	-1.2	98.8
PFOA	2.500	2.446	-2.1	97.9
PFOS	2.320	2.214	-4.6	95.4

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T1Q362-CC361
Lab FileID: 1Q26085.D

PFPeA	5.000	5.151	3.0	103.0
PFPeS	2.353	1.994	-15.2	84.8
PFTeDA	2.500	2.460	-1.6	98.4
PFTrDA	2.500	2.577	3.1	103.1
PFUnDA	2.500	2.532	1.3	101.3
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	12.232	29.4	129.4
13C3-HFPO-DA	10.000	8.282	-17.2	82.8
9Cl-PF3ONS	9.350	12.160	# 30.0	130.0
ADONA	9.450	11.521	21.9	121.9
HFPO-DA	10.000	10.659	6.6	106.6
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	14.024	12.2	112.2
5:3FTCA	62.500	74.749	19.6	119.6
7:3FTCA	62.500	72.646	16.2	116.2
d3-MeFOSA	2.500	2.630	5.2	105.2
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.412	-3.5	96.5
EtFOSE	25.000	26.314	5.3	105.3
MeFOSA	2.500	2.474	-1.1	98.9
MeFOSE	25.000	25.079	0.3	100.3
PFDoDS	2.425	2.227	-8.1	91.9
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	5.329	6.6	106.6
d7-MeFOSE	25.000	28.419	13.7	113.7
d9-EtFOSE	25.000	28.048	12.2	112.2
d5-EtFOSA	2.500	2.660	6.4	106.4
NFDHA	5.000	4.493	-10.1	89.9
PFMBA	5.000	4.972	-0.6	99.4
PFMPA	5.000	5.150	3.0	103.0
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.451	0.0	100.0

CC Criteria: +/- 30%

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q344-ICC344
Lab FileID: 2Q33665.D

Initial Calibration Report

Method Path	D:\MassHunter\Methods
Method File	050925_1633_T2Q344.quantmethod.xml
Batch Name	D:\MassHunter\Data\1633\T2Q344\QuantResults\T2Q344.batch.bin
Last Calib Update	5/15/2025 12:20:25 PM

Level Name	Calibration Files	Acq. Date-Time	Level Last Update Time
1	D:\MassHunter\Data\1633\T2Q344\2q33662.d	5/9/2025 3:09:12 PM	5/15/2025 12:20:25 PM
2	D:\MassHunter\Data\1633\T2Q344\2q33663.d	5/9/2025 3:22:35 PM	5/15/2025 12:20:25 PM
3	D:\MassHunter\Data\1633\T2Q344\2q33664.d	5/9/2025 3:35:59 PM	5/15/2025 12:20:25 PM
4	D:\MassHunter\Data\1633\T2Q344\2q33665.d	5/9/2025 3:49:23 PM	5/15/2025 12:20:25 PM
5	D:\MassHunter\Data\1633\T2Q344\2q33666.d	5/9/2025 4:02:47 PM	5/15/2025 12:20:25 PM
6	D:\MassHunter\Data\1633\T2Q344\2q33667.d	5/9/2025 4:16:11 PM	5/15/2025 12:20:25 PM
7	D:\MassHunter\Data\1633\T2Q344\2q33668.d	5/9/2025 4:29:37 PM	5/15/2025 12:20:25 PM
8	D:\MassHunter\Data\1633\T2Q344\2q33669.d	5/9/2025 4:43:00 PM	5/15/2025 12:20:25 PM

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
I M4-PFBA						ISTD					
T PFBA	Quadratic	0.2465	0.2533	0.2522	0.2586	0.2546	0.2645	0.2806	0.3016	0.2640	6.969
I M5-PFPeA						ISTD					
T PFMPA	Avg RF	0.6646	0.6742	0.7166	0.7507	0.7343	0.7629	0.8003	0.8558	0.7449	8.503
T 3:3FTCA	Avg RF	0.0675	0.0658	0.0689	0.0713	0.0692	0.0722	0.0772	0.0866	0.0723	9.275
T PFPeA	Avg RF	0.8014	0.7562	0.8496	0.8831	0.8819	0.9175	0.9591	1.0251	0.8843	9.656
T PFMBA	Avg RF	0.4892	0.4601	0.5036	0.5122	0.5111	0.5317	0.5520	0.5942	0.5193	7.842
I M5-PFHxA						ISTD					
T NFDHA	Avg RF	0.0663	0.0704	0.0618	0.0727	0.0668	0.0712	0.0717	0.0784	0.0699	7.130
T PFHxA	Avg RF	0.8439	0.7254	0.8041	0.8326	0.8113	0.9069	0.8712	0.9780	0.8467	8.867
T PFEESA	Avg RF	0.9698	0.9322	1.0251	1.0554	1.0260	1.1063	1.0875	1.1450	1.0434	6.755
T 5:3FTCA	Avg RF	0.1975	0.1876	0.2134	0.2130	0.2126	0.2264	0.2204	0.2340	0.2131	7.008
T 7:3FTCA	Avg RF	0.2371	0.2423	0.2679	0.2744	0.2789	0.2973	0.2926	0.3279	0.2773	10.681
I M4-PFHpA						ISTD					
T PFHpA	Avg RF	1.7221	1.3235	1.5675	1.5144	1.5735	1.5893	1.7572	1.7295	1.5971	8.917
I M8-PFOA						ISTD					
T PFOA	Avg RF	0.7347	0.6906	0.7171	0.7335	0.7187	0.7727	0.8130	0.9095	0.7612	9.292
I M9-PFNA						ISTD					
T PFNA	Avg RF	0.5896	0.5299	0.5206	0.5173	0.5488	0.5760	0.6079	0.6459	0.5670	8.118
I M6-PFDA						ISTD					
T PFDA	Avg RF	0.9092	0.7975	0.8846	0.9516	0.9467	0.9799	1.0507	1.2006	0.9651	12.462
I M7-PFUnDA						ISTD					
T PFUnDA	Avg RF	0.7889	0.7179	0.8494	0.8288	0.8222	0.8468	0.9269	1.0066	0.8484	10.239
T PFDS	Avg RF	0.1694	0.1427	0.1575	0.1423	0.1483	0.1465	0.1638	0.1870	0.1572	9.939

Generated at 12:20 PM on 5/15/2025

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q344-ICC344
Lab FileID: 2Q33665.D

Initial Calibration Report

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
I M2-PFDoDA						ISTD					
T PFDoDA	Avg RF	0.7944	0.7827	0.8618	0.8885	0.9384	0.9652	0.9652	1.0074	0.9004	9.198
T PFTrDA	Avg RF	0.9295	0.9552	1.0243	1.1050	1.0957	1.1280	1.1205	1.1213	1.0599	7.533
I M2-PFTeDA						ISTD					
T PFTeDA	Avg RF	1.0752	0.8553	1.0337	1.0570	1.0949	1.0972	1.0638	1.1442	1.0527	8.196
I M8-FOSA						ISTD					
T FOSA	Avg RF	0.7500	0.7897	0.8807	0.8626	0.8684	0.8924	0.9162	0.9861	0.8683	8.385
I M3-PFBS						ISTD					
T PFBS	Avg RF	2.9286	2.8283	3.2822	2.8918	3.1286	3.1867	3.3915	3.5776	3.1519	8.305
T PFPeS	Avg RF	1.0678	0.9584	1.1681	1.0241	1.1461	1.1458	1.2377	1.3480	1.1370	10.784
I M3-PFHxS						ISTD					
T PFHxS	Avg RF	2.0848	1.8258	1.9539	1.7647	1.9183	1.8578	1.8791	1.9611	1.9057	5.130
T PFHpS	Avg RF	1.8525	1.4904	1.7905	1.6532	1.7838	1.8208	1.7849	1.8726	1.7561	7.171
I M8-PFOS						ISTD					
T PFOS	Avg RF	2.8307	2.1219	2.1073	2.1172	2.1952	2.3966	2.3648	2.5368	2.3338	10.928
T PFNS	Avg RF	0.8671	0.8278	0.8711	0.7175	0.8289	0.9095	0.8835	0.9105	0.8520	7.360
T PFDoDS	Avg RF	1.2218	1.1366	1.3900	1.2910	1.3047	1.4333	1.4611	1.5423	1.3476	9.930
I M2-4:2FTS						ISTD					
T 4:2FTS	Avg RF	6.3831	7.0601	6.9724	6.4163	6.9150	7.5127	8.4488	8.1449	7.2316	10.422
I M2-6:2FTS						ISTD					
T 6:2FTS	Avg RF	6.3383	5.2739	5.6554	5.9260	6.1809	5.7948	5.8475	6.4472	5.9330	6.459
I M2-8:2FTS						ISTD					
T 8:2FTS	Avg RF	2.9673	3.5035	3.8632	3.7074	3.8013	3.9746	3.6989	3.5408	3.6321	8.557
I M3-MeFOSAA						ISTD					
T MeFOSAA	Avg RF	0.7705	0.6904	0.6720	0.7041	0.7276	0.7782	0.8015	0.8541	0.7498	8.276
I M3-HFPO-DA						ISTD					
T HFPO-DA	Avg RF	0.8624	0.8269	0.9257	1.0281	1.0366	0.9958	1.0553	1.0800	0.9763	9.603
T ADONA	Avg RF	12.83	11.99	15.47	15.44	16.36	15.43	16.09	15.96	14.95	10.818
T 9Cl-PF3ONS	Avg RF	6.1084	6.0176	7.2037	7.4292	7.9338	7.3520	7.4122	6.9457	7.0503	9.491
T 11Cl-PF3OUdS	Avg RF	7.7657	7.1885	8.8789	9.1738	9.9317	9.2189	9.2646	8.8387	8.7826	10.078
I M5-EtFOSAA						ISTD					
T EtFOSAA	Avg RF	0.8098	0.6942	0.7300	0.7935	0.8110	0.7869	0.8071	0.9268	0.7949	8.565
I M7-MeFOSE						ISTD					
T MeFOSE	Avg RF	0.8384	0.8209	0.8732	0.9609	0.9568	0.9807	1.0138	1.0882	0.9416	9.727
I M9-EtFOSE						ISTD					

Generated at 12:20 PM on 5/15/2025

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q344-ICC344
Lab FileID: 2Q33665.D

Initial Calibration Report

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
T EtFOSE	Avg RF	0.8545	0.8345	0.9461	0.9906	0.9807	0.9882	1.0258	1.1381	0.9698	9.898
I M5-EtFOSA						ISTD					
T EtFOSA	Avg RF	0.9894	0.9780	1.0612	1.0166	1.0224	1.0785	1.1550	1.2152	1.0645	7.801
I M3-MeFOSA						ISTD					
T MeFOSA	Avg RF	1.1052	1.1113	1.2195	1.2371	1.2293	1.2485	1.3195	1.3055	1.2220	6.442
I 13C4-PFOS						ISTD					
S d3-MeFOSAA	Avg RF	1.8100	1.8564	1.7692	1.8574	1.8049	1.7042	1.8005	1.6789	1.7852	3.645
S 13C8-PFOS	Avg RF	0.5525	0.5335	0.5450	0.5784	0.5666	0.4981	0.5445	0.5434	0.5453	4.367
S d5-EtFOSAA	Avg RF	1.4896	1.4403	1.4164	1.5036	1.4374	1.3936	1.4697	1.3729	1.4404	3.171
S 13C8-FOSA	Avg RF	1.6723	1.7639	1.6713	1.7972	1.7313	1.6765	1.7230	1.7967	1.7290	3.076
S d7-MeFOSE	Avg RF	1.4950	1.5346	1.4635	1.5227	1.4972	1.4114	1.4459	1.3890	1.4699	3.538
S d3-MeFOSA	Avg RF	1.3591	1.3085	1.2838	1.4033	1.3318	1.3084	1.3115	1.4534	1.3450	4.266
S d9-EtFOSE	Avg RF	2.1569	2.1996	2.0821	2.1482	2.1179	1.9940	2.0082	1.7986	2.0632	6.234
S d5-EtFOSA	Avg RF	1.3995	1.4067	1.3006	1.3826	1.3850	1.3056	1.3138	1.3561	1.3562	3.226
I 13C3-PFBA						ISTD					
S 13C4-PFBA	Avg RF	1.1666	1.1735	1.1800	1.1980	1.1805	1.2112	1.1444	1.1537	1.1760	1.859
I 18O2-PFHxS						ISTD					
S 13C2-4:2FTS	Avg RF	0.0878	0.0905	0.1023	0.1112	0.0946	0.0915	0.0734	0.0720	0.0904	14.646
S 13C3-PFBS	Avg RF	0.7157	0.6883	0.6801	0.7868	0.7094	0.7486	0.6611	0.6415	0.7039	6.698
S 13C2-6:2FTS	Avg RF	0.2022	0.1909	0.2158	0.2125	0.1919	0.2093	0.1843	0.1574	0.1955	9.755
S 13C3-PFHxS	Avg RF	0.8344	0.8280	0.8424	0.8958	0.8246	0.8770	0.8523	0.8617	0.8520	2.931
S 13C2-8:2FTS	Avg RF	0.3408	0.2862	0.3349	0.3183	0.3044	0.3192	0.3042	0.3169	0.3156	5.550
I 13C4-PFOA						ISTD					
S 13C8-PFOA	Avg RF	0.9770	1.0551	1.0433	1.0269	1.0405	1.0518	0.9934	0.9997	1.0235	2.891
I 13C2-PFDA						ISTD					
S 13C6-PFDA	Avg RF	1.0337	1.0252	1.0835	1.0230	1.0981	1.0927	1.0398	0.9323	1.0410	5.158
S 13C7-PFUnDA	Avg RF	1.5567	1.5421	1.6869	1.6754	1.7048	1.8000	1.6346	1.4580	1.6323	6.648
S 13C2-PFDoDA	Avg RF	1.6818	1.5564	1.7903	1.6979	1.7184	1.7758	1.7512	1.6884	1.7075	4.288
S 13C2-PFTeDA	Avg RF	1.2720	1.1634	1.3949	1.3130	1.3206	1.3792	1.4283	1.3320	1.3254	6.223
I 13C5-PFNA						ISTD					
S 13C9-PFNA	Avg RF	1.0699	1.0945	1.0508	1.1251	1.0490	1.1370	1.1137	1.0915	1.0915	3.025
I 13C2-PFHxA						ISTD					
S 13C5-PFPeA	Avg RF	0.9622	0.9422	0.9388	0.9632	0.9174	0.9560	0.9034	0.8841	0.9334	3.116
S 13C5-PFHxA	Avg RF	1.1045	1.0939	1.0991	1.1455	1.0853	1.0924	1.0959	1.0447	1.0952	2.510
S 13C3-HFPO-DA	Avg RF	0.1802	0.1831	0.1706	0.1757	0.1565	0.1757	0.1663	0.1665	0.1718	5.031
S 13C4-PFHpA	Avg RF	0.8685	0.8784	0.8420	0.9200	0.8510	0.9067	0.8304	0.8759	0.8716	3.534

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Generated at 12:20 PM on 5/15/2025

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q344-ICC344
Lab FileID: 2Q33665.D

Initial Calibration Report

Compounds with Curve fitting not using Avg Response Factor:

Compound	Curve Fit	Curve Fit Formula	%RSE
T PFBA	Quadratic	y = 0.001584 * x ^ 2 + 0.262131 * x	4.2218

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Generated at 12:20 PM on 5/15/2025

Initial Calibration Verification

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q344-ICV344
Lab FileID: 2Q33671.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T2Q344\T2Q344.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T2Q344\2q33662.d
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3:D:\MassHunter\Data\1633\T2Q344\2q33664.d
4:D:\MassHunter\Data\1633\T2Q344\2q33665.d
5:D:\MassHunter\Data\1633\T2Q344\2q33666.d
6:D:\MassHunter\Data\1633\T2Q344\2q33667.d
7:D:\MassHunter\Data\1633\T2Q344\2q33668.d
8:D:\MassHunter\Data\1633\T2Q344\2q33669.d

Data File: 2q33671
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.259	5.2	105.2
13C2-6:2FTS	5.000	5.008	0.2	100.2
13C2-8:2FTS	5.000	5.231	4.6	104.6
13C2-PFDoDA	1.250	1.328	6.2	106.2
13C2-PFTeDA	1.250	1.269	1.5	101.5
13C3-PFBS	2.500	2.721	8.9	108.9
13C3-PFHxS	2.500	2.792	11.7	111.7
13C4-PFBA	10.000	10.124	1.2	101.2
13C4-PFHpA	2.500	2.394	-4.2	95.8
13C5-PFHxA	2.500	2.457	-1.7	98.3
13C5-PFPeA	5.000	4.730	-5.4	94.6
13C6-PFDA	1.250	1.364	9.2	109.2
13C7-PFUnDA	1.250	1.356	8.5	108.5
13C8-FOSA	2.500	2.520	0.8	100.8
13C8-PFOA	2.500	2.472	-1.1	98.9
13C8-PFOS	2.500	2.487	-0.5	99.5
13C9-PFNA	1.250	1.219	-2.5	97.5
4:2FTS	9.375	9.528	1.6	101.6
6:2FTS	9.500	10.652	12.1	112.1
8:2FTS	9.600	8.977	-6.5	93.5
d3-MeFOSAA	5.000	5.151	3.0	103.0
EtFOSAA	2.500	2.423	-3.1	96.9
FOSA	2.500	2.545	1.8	101.8
MeFOSAA	2.500	2.407	-3.7	96.3
PFBA	10.000	9.851	-1.5	98.5
PFBS	2.218	2.117	-4.6	95.4
PFDA	2.500	2.290	-8.4	91.6
PFDoDA	2.500	2.254	-9.9	90.1
PFDS	2.413	2.151	-10.9	89.1
PFHpA	2.500	2.364	-5.4	94.6
PFHpS	2.383	2.324	-2.5	97.5
PFHxA	2.500	2.347	-6.1	93.9
PFHxS	2.285	2.069	-9.5	90.5
PFNA	2.500	2.442	-2.3	97.7
PFNS	2.405	2.519	4.8	104.8
PFOA	2.500	2.454	-1.8	98.2
PFOS	2.320	2.359	1.7	101.7

Initial Calibration Verification

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q344-ICV344
Lab FileID: 2Q33671.D

PFPeA	5.000	4.935	-1.3	98.7
PFPeS	2.353	2.437	3.6	103.6
PFTeDA	2.500	2.363	-5.5	94.5
PFTrDA	2.500	2.416	-3.4	96.6
PFUnDA	2.500	2.297	-8.1	91.9
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	9.966	5.5	105.5
13C3-HFPO-DA	10.000	9.306	-6.9	93.1
9Cl-PF3ONS	9.350	9.793	4.7	104.7
ADONA	9.450	9.913	4.9	104.9
HFPO-DA	10.000	10.074	0.7	100.7
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	12.142	-2.9	97.1
5:3FTCA	62.500	61.614	-1.4	98.6
7:3FTCA	62.500	60.962	-2.5	97.5
d3-MeFOSA	2.500	2.422	-3.1	96.9
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.465	-1.4	98.6
EtFOSE	25.000	25.228	0.9	100.9
MeFOSA	2.500	2.632	5.3	105.3
MeFOSE	25.000	26.573	6.3	106.3
PFDoDS	2.425	2.458	1.4	101.4
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.976	-0.5	99.5
d7-MeFOSE	25.000	24.803	-0.8	99.2
d9-EtFOSE	25.000	25.325	1.3	101.3
d5-EtFOSA	2.500	2.530	1.2	101.2
NFDHA	5.000	5.079	1.6	101.6
PFMBA	5.000	4.985	-0.3	99.7
PFMPA	5.000	4.959	-0.8	99.2
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.298	-3.4	96.6

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q345-CC344
Lab FileID: 2Q33745.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T2Q345\T2Q345.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T2Q344\2q33662.d
2:D:\MassHunter\Data\1633\T2Q344\2q33663.d
3:D:\MassHunter\Data\1633\T2Q344\2q33664.d
4:D:\MassHunter\Data\1633\T2Q344\2q33665.d
5:D:\MassHunter\Data\1633\T2Q344\2q33666.d
6:D:\MassHunter\Data\1633\T2Q344\2q33667.d
7:D:\MassHunter\Data\1633\T2Q344\2q33668.d
8:D:\MassHunter\Data\1633\T2Q344\2q33669.d

Data File: 2q33745
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.531	10.6	110.6
13C2-6:2FTS	5.000	5.312	6.2	106.2
13C2-8:2FTS	5.000	5.017	0.3	100.3
13C2-PFDoDA	1.250	1.205	-3.6	96.4
13C2-PFTeDA	1.250	1.277	2.2	102.2
13C3-PFBS	2.500	2.427	-2.9	97.1
13C3-PFHxS	2.500	2.622	4.9	104.9
13C4-PFBA	10.000	10.179	1.8	101.8
13C4-PFHpA	2.500	2.431	-2.7	97.3
13C5-PFHxA	2.500	2.521	0.9	100.9
13C5-PFPeA	5.000	5.108	2.2	102.2
13C6-PFDA	1.250	1.248	-0.1	99.9
13C7-PFUnDA	1.250	1.251	0.1	100.1
13C8-FOSA	2.500	2.482	-0.7	99.3
13C8-PFOA	2.500	2.486	-0.6	99.4
13C8-PFOS	2.500	2.406	-3.8	96.2
13C9-PFNA	1.250	1.287	3.0	103.0
4:2FTS	9.375	9.204	-1.8	98.2
6:2FTS	9.500	9.480	-0.2	99.8
8:2FTS	9.600	10.323	7.5	107.5
d3-MeFOSAA	5.000	4.909	-1.8	98.2
EtFOSAA	2.500	2.410	-3.6	96.4
FOSA	2.500	2.556	2.2	102.2
MeFOSAA	2.500	2.533	1.3	101.3
PFBA	10.000	9.726	-2.7	97.3
PFBS	2.218	2.225	0.3	100.3
PFDA	2.500	2.620	4.8	104.8
PFDoDA	2.500	2.628	5.1	105.1
PFDS	2.413	2.311	-4.2	95.8
PFHpA	2.500	2.613	4.5	104.5
PFHpS	2.383	2.322	-2.6	97.4
PFHxA	2.500	2.570	2.8	102.8
PFHxS	2.285	2.132	-6.7	93.3
PFNA	2.500	2.482	-0.7	99.3
PFNS	2.405	2.494	3.7	103.7
PFOA	2.500	2.473	-1.1	98.9
PFOS	2.320	2.241	-3.4	96.6

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q345-CC344
Lab FileID: 2Q33745.D

PFPeA	5.000	5.019	0.4	100.4
PFPeS	2.353	2.703	14.9	114.9
PFTeDA	2.500	2.418	-3.3	96.7
PFTrDA	2.500	2.622	4.9	104.9
PFUnDA	2.500	2.544	1.8	101.8
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	10.240	8.4	108.4
13C3-HFPO-DA	10.000	9.815	-1.8	98.2
9Cl-PF3ONS	9.350	10.151	8.6	108.6
ADONA	9.450	10.173	7.7	107.7
HFPO-DA	10.000	10.884	8.8	108.8
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	10.640	-14.9	85.1
5:3FTCA	62.500	57.678	-7.7	92.3
7:3FTCA	62.500	58.859	-5.8	94.2
d3-MeFOSA	2.500	2.349	-6.0	94.0
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.312	-7.5	92.5
EtFOSE	25.000	25.448	1.8	101.8
MeFOSA	2.500	2.571	2.8	102.8
MeFOSE	25.000	25.625	2.5	102.5
PFDoDS	2.425	2.580	6.4	106.4
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	5.132	2.6	102.6
d7-MeFOSE	25.000	23.425	-6.3	93.7
d9-EtFOSE	25.000	23.809	-4.8	95.2
d5-EtFOSA	2.500	2.461	-1.6	98.4
NFDHA	5.000	5.486	9.7	109.7
PFMBA	5.000	5.001	0.0	100.0
PFMPA	5.000	4.755	-4.9	95.1
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.496	1.0	101.0

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q345-CC344
Lab FileID: 2Q33746.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T2Q345\T2Q345.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T2Q344\2q33662.d
2:D:\MassHunter\Data\1633\T2Q344\2q33663.d
3:D:\MassHunter\Data\1633\T2Q344\2q33664.d
4:D:\MassHunter\Data\1633\T2Q344\2q33665.d
5:D:\MassHunter\Data\1633\T2Q344\2q33666.d
6:D:\MassHunter\Data\1633\T2Q344\2q33667.d
7:D:\MassHunter\Data\1633\T2Q344\2q33668.d
8:D:\MassHunter\Data\1633\T2Q344\2q33669.d

Data File: 2q33746
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.367	7.3	107.3
13C2-6:2FTS	5.000	5.292	5.8	105.8
13C2-8:2FTS	5.000	5.098	2.0	102.0
13C2-PFDoDA	1.250	1.207	-3.5	96.5
13C2-PFTeDA	1.250	1.224	-2.1	97.9
13C3-PFBS	2.500	2.506	0.2	100.2
13C3-PFHxS	2.500	2.691	7.7	107.7
13C4-PFBA	10.000	9.708	-2.9	97.1
13C4-PFHpA	2.500	2.579	3.1	103.1
13C5-PFHxA	2.500	2.428	-2.9	97.1
13C5-PFPeA	5.000	4.937	-1.3	98.7
13C6-PFDA	1.250	1.219	-2.5	97.5
13C7-PFUnDA	1.250	1.253	0.2	100.2
13C8-FOSA	2.500	2.342	-6.3	93.7
13C8-PFOA	2.500	2.354	-5.8	94.2
13C8-PFOS	2.500	2.419	-3.2	96.8
13C9-PFNA	1.250	1.253	0.2	100.2
4:2FTS	0.750	0.812	8.2	108.2
6:2FTS	0.760	0.753	-1.0	99.0
8:2FTS	0.768	0.816	6.3	106.3
d3-MeFOSAA	5.000	4.604	-7.9	92.1
EtFOSAA	0.200	0.223	11.3	111.3
FOSA	0.200	0.194	-2.8	97.2
MeFOSAA	0.200	0.192	-3.9	96.1
PFBA	0.800	0.760	-5.0	95.0
PFBS	0.177	0.160	-9.5	90.5
PFDA	0.200	0.221	10.7	110.7
PFDoDA	0.200	0.189	-5.5	94.5
PFDS	0.193	0.205	6.0	106.0
PFHpA	0.200	0.179	-10.4	89.6
PFHpS	0.191	0.205	7.3	107.3
PFHxA	0.200	0.201	0.4	100.4
PFHxS	0.183	0.179	-2.1	97.9
PFNA	0.200	0.182	-8.8	91.2
PFNS	0.192	0.194	0.9	100.9
PFOA	0.200	0.183	-8.5	91.5
PFOS	0.186	0.175	-6.1	93.9

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q345-CC344
Lab FileID: 2Q33746.D

PFPeA	0.400	0.380	-5.1	94.9
PFPeS	0.188	0.188	-0.1	99.9
PFTeDA	0.200	0.174	-13.0	87.0
PFTrDA	0.200	0.174	-13.1	86.9
PFUnDA	0.200	0.186	-6.8	93.2
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	0.756	0.651	-13.9	86.1
13C3-HFPO-DA	10.000	10.505	5.1	105.1
9Cl-PF3ONS	0.748	0.711	-5.0	95.0
ADONA	0.756	0.651	-13.9	86.1
HFPO-DA	0.800	0.750	-6.3	93.7
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	1.000	0.848	-15.2	84.8
5:3FTCA	5.000	4.266	-14.7	85.3
7:3FTCA	5.000	4.320	-13.6	86.4
d3-MeFOSA	2.500	2.303	-7.9	92.1
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	0.200	0.175	-12.5	87.5
EtFOSE	2.000	1.867	-6.6	93.4
MeFOSA	0.200	0.208	3.9	103.9
MeFOSE	2.000	1.880	-6.0	94.0
PFDoDS	0.194	0.183	-5.5	94.5
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.975	-0.5	99.5
d7-MeFOSE	25.000	22.669	-9.3	90.7
d9-EtFOSE	25.000	23.174	-7.3	92.7
d5-EtFOSA	2.500	2.403	-3.9	96.1
NFDHA	0.400	0.435	8.7	108.7
PFMBA	0.400	0.361	-9.9	90.1
PFMPA	0.400	0.367	-8.3	91.7
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	0.356	0.353	-0.9	99.1

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q345-CC344
Lab FileID: 2Q33760.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T2Q345\T2Q345.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T2Q344\2q33662.d
2:D:\MassHunter\Data\1633\T2Q344\2q33663.d
3:D:\MassHunter\Data\1633\T2Q344\2q33664.d
4:D:\MassHunter\Data\1633\T2Q344\2q33665.d
5:D:\MassHunter\Data\1633\T2Q344\2q33666.d
6:D:\MassHunter\Data\1633\T2Q344\2q33667.d
7:D:\MassHunter\Data\1633\T2Q344\2q33668.d
8:D:\MassHunter\Data\1633\T2Q344\2q33669.d

Data File: 2q33760
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	4.958	-0.8	99.2
13C2-6:2FTS	5.000	5.230	4.6	104.6
13C2-8:2FTS	5.000	5.008	0.2	100.2
13C2-PFDoDA	1.250	1.222	-2.2	97.8
13C2-PFTeDA	1.250	1.217	-2.6	97.4
13C3-PFBS	2.500	2.535	1.4	101.4
13C3-PFHxS	2.500	2.481	-0.7	99.3
13C4-PFBA	10.000	10.145	1.5	101.5
13C4-PFHpA	2.500	2.487	-0.5	99.5
13C5-PFHxA	2.500	2.460	-1.6	98.4
13C5-PFPeA	5.000	5.052	1.0	101.0
13C6-PFDA	1.250	1.195	-4.4	95.6
13C7-PFUnDA	1.250	1.318	5.5	105.5
13C8-FOSA	2.500	2.518	0.7	100.7
13C8-PFOA	2.500	2.534	1.4	101.4
13C8-PFOS	2.500	2.474	-1.0	99.0
13C9-PFNA	1.250	1.328	6.3	106.3
4:2FTS	9.375	9.780	4.3	104.3
6:2FTS	9.500	9.736	2.5	102.5
8:2FTS	9.600	9.855	2.7	102.7
d3-MeFOSAA	5.000	5.038	0.8	100.8
EtFOSAA	2.500	2.560	2.4	102.4
FOSA	2.500	2.553	2.1	102.1
MeFOSAA	2.500	2.825	13.0	113.0
PFBA	10.000	9.848	-1.5	98.5
PFBS	2.218	2.250	1.5	101.5
PFDA	2.500	2.681	7.2	107.2
PFDoDA	2.500	2.580	3.2	103.2
PFDS	2.413	2.248	-6.8	93.2
PFHpA	2.500	2.490	-0.4	99.6
PFHpS	2.383	2.422	1.6	101.6
PFHxA	2.500	2.673	6.9	106.9
PFHxS	2.285	2.258	-1.2	98.8
PFNA	2.500	2.343	-6.3	93.7
PFNS	2.405	2.570	6.9	106.9
PFOA	2.500	2.478	-0.9	99.1
PFOS	2.320	2.405	3.7	103.7

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q345-CC344
Lab FileID: 2Q33760.D

PFPeA	5.000	5.070	1.4	101.4
PFPeS	2.353	2.231	-5.2	94.8
PFTeDA	2.500	2.542	1.7	101.7
PFTrDA	2.500	2.586	3.4	103.4
PFUnDA	2.500	2.510	0.4	100.4
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	9.044	-4.3	95.7
13C3-HFPO-DA	10.000	11.689	16.9	116.9
9Cl-PF3ONS	9.350	9.043	-3.3	96.7
ADONA	9.450	8.707	-7.9	92.1
HFPO-DA	10.000	10.041	0.4	100.4
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	11.540	-7.7	92.3
5:3FTCA	62.500	61.101	-2.2	97.8
7:3FTCA	62.500	64.152	2.6	102.6
d3-MeFOSA	2.500	2.453	-1.9	98.1
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.466	-1.4	98.6
EtFOSE	25.000	25.805	3.2	103.2
MeFOSA	2.500	2.643	5.7	105.7
MeFOSE	25.000	25.021	0.1	100.1
PFDoDS	2.425	2.506	3.3	103.3
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	5.088	1.8	101.8
d7-MeFOSE	25.000	24.311	-2.8	97.2
d9-EtFOSE	25.000	24.388	-2.4	97.6
d5-EtFOSA	2.500	2.545	1.8	101.8
NFDHA	5.000	5.472	9.4	109.4
PFMBA	5.000	5.007	0.1	100.1
PFMPA	5.000	4.887	-2.3	97.7
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.744	6.6	106.6

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q345-CC344
Lab FileID: 2Q33784.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T2Q345\T2Q345.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T2Q344\2q33662.d
2:D:\MassHunter\Data\1633\T2Q344\2q33663.d
3:D:\MassHunter\Data\1633\T2Q344\2q33664.d
4:D:\MassHunter\Data\1633\T2Q344\2q33665.d
5:D:\MassHunter\Data\1633\T2Q344\2q33666.d
6:D:\MassHunter\Data\1633\T2Q344\2q33667.d
7:D:\MassHunter\Data\1633\T2Q344\2q33668.d
8:D:\MassHunter\Data\1633\T2Q344\2q33669.d

Data File: 2q33784
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	4.667	-6.7	93.3
13C2-6:2FTS	5.000	4.931	-1.4	98.6
13C2-8:2FTS	5.000	4.849	-3.0	97.0
13C2-PFDoDA	1.250	1.166	-6.7	93.3
13C2-PFTeDA	1.250	1.217	-2.6	97.4
13C3-PFBS	2.500	2.646	5.8	105.8
13C3-PFHxS	2.500	2.642	5.7	105.7
13C4-PFBA	10.000	10.073	0.7	100.7
13C4-PFHpA	2.500	2.604	4.2	104.2
13C5-PFHxA	2.500	2.559	2.4	102.4
13C5-PFPeA	5.000	5.096	1.9	101.9
13C6-PFDA	1.250	1.211	-3.2	96.8
13C7-PFUnDA	1.250	1.257	0.6	100.6
13C8-FOSA	2.500	2.502	0.1	100.1
13C8-PFOA	2.500	2.522	0.9	100.9
13C8-PFOS	2.500	2.585	3.4	103.4
13C9-PFNA	1.250	1.320	5.6	105.6
4:2FTS	9.375	10.576	12.8	112.8
6:2FTS	9.500	10.205	7.4	107.4
8:2FTS	9.600	10.111	5.3	105.3
d3-MeFOSAA	5.000	5.155	3.1	103.1
EtFOSAA	2.500	2.274	-9.0	91.0
FOSA	2.500	2.535	1.4	101.4
MeFOSAA	2.500	2.508	0.3	100.3
PFBA	10.000	9.785	-2.1	97.9
PFBS	2.218	2.075	-6.5	93.5
PFDA	2.500	2.364	-5.4	94.6
PFDoDA	2.500	2.578	3.1	103.1
PFDS	2.413	2.163	-10.4	89.6
PFHpA	2.500	2.449	-2.0	98.0
PFHpS	2.383	2.332	-2.2	97.8
PFHxA	2.500	2.431	-2.8	97.2
PFHxS	2.285	2.050	-10.3	89.7
PFNA	2.500	2.398	-4.1	95.9
PFNS	2.405	2.541	5.6	105.6
PFOA	2.500	2.444	-2.2	97.8
PFOS	2.320	2.321	0.1	100.1

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q345-CC344
Lab FileID: 2Q33784.D

PFPeA	5.000	5.054	1.1	101.1
PFPeS	2.353	2.251	-4.3	95.7
PFTeDA	2.500	2.413	-3.5	96.5
PFTrDA	2.500	2.668	6.7	106.7
PFUnDA	2.500	2.476	-1.0	99.0
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	9.404	-0.5	99.5
13C3-HFPO-DA	10.000	11.249	12.5	112.5
9Cl-PF3ONS	9.350	9.488	1.5	101.5
ADONA	9.450	9.298	-1.6	98.4
HFPO-DA	10.000	10.288	2.9	102.9
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	11.624	-7.0	93.0
5:3FTCA	62.500	60.302	-3.5	96.5
7:3FTCA	62.500	61.743	-1.2	98.8
d3-MeFOSA	2.500	2.493	-0.3	99.7
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.493	-0.3	99.7
EtFOSE	25.000	25.329	1.3	101.3
MeFOSA	2.500	2.539	1.5	101.5
MeFOSE	25.000	25.546	2.2	102.2
PFDoDS	2.425	2.336	-3.7	96.3
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	5.207	4.1	104.1
d7-MeFOSE	25.000	24.155	-3.4	96.6
d9-EtFOSE	25.000	23.775	-4.9	95.1
d5-EtFOSA	2.500	2.550	2.0	102.0
NFDHA	5.000	5.714	14.3	114.3
PFMBA	5.000	4.960	-0.8	99.2
PFMPA	5.000	4.993	-0.1	99.9
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.640	4.3	104.3

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q345-ECC344
Lab FileID: 2Q33798.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T2Q345\T2Q345.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T2Q344\2q33662.d
2:D:\MassHunter\Data\1633\T2Q344\2q33663.d
3:D:\MassHunter\Data\1633\T2Q344\2q33664.d
4:D:\MassHunter\Data\1633\T2Q344\2q33665.d
5:D:\MassHunter\Data\1633\T2Q344\2q33666.d
6:D:\MassHunter\Data\1633\T2Q344\2q33667.d
7:D:\MassHunter\Data\1633\T2Q344\2q33668.d
8:D:\MassHunter\Data\1633\T2Q344\2q33669.d

Data File: 2q33798
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.126	2.5	102.5
13C2-6:2FTS	5.000	5.600	12.0	112.0
13C2-8:2FTS	5.000	4.968	-0.6	99.4
13C2-PFDoDA	1.250	1.200	-4.0	96.0
13C2-PFTeDA	1.250	1.148	-8.1	91.9
13C3-PFBS	2.500	2.752	10.1	110.1
13C3-PFHxS	2.500	2.714	8.5	108.5
13C4-PFBA	10.000	10.094	0.9	100.9
13C4-PFHpA	2.500	2.633	5.3	105.3
13C5-PFHxA	2.500	2.473	-1.1	98.9
13C5-PFPeA	5.000	5.106	2.1	102.1
13C6-PFDA	1.250	1.166	-6.7	93.3
13C7-PFUnDA	1.250	1.207	-3.4	96.6
13C8-FOSA	2.500	2.422	-3.1	96.9
13C8-PFOA	2.500	2.474	-1.0	99.0
13C8-PFOS	2.500	2.607	4.3	104.3
13C9-PFNA	1.250	1.183	-5.4	94.6
4:2FTS	9.375	10.285	9.7	109.7
6:2FTS	9.500	9.696	2.1	102.1
8:2FTS	9.600	10.776	12.2	112.2
d3-MeFOSAA	5.000	4.950	-1.0	99.0
EtFOSAA	2.500	2.520	0.8	100.8
FOSA	2.500	2.543	1.7	101.7
MeFOSAA	2.500	2.600	4.0	104.0
PFBA	10.000	10.059	0.6	100.6
PFBS	2.218	2.119	-4.5	95.5
PFDA	2.500	2.544	1.8	101.8
PFDoDA	2.500	2.496	-0.2	99.8
PFDS	2.413	2.305	-4.5	95.5
PFHpA	2.500	2.427	-2.9	97.1
PFHpS	2.383	2.298	-3.6	96.4
PFHxA	2.500	2.504	0.2	100.2
PFHxS	2.285	2.071	-9.4	90.6
PFNA	2.500	2.543	1.7	101.7
PFNS	2.405	2.458	2.2	102.2
PFOA	2.500	2.502	0.1	100.1
PFOS	2.320	2.290	-1.3	98.7

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T2Q345-ECC344
Lab FileID: 2Q33798.D

PFPeA	5.000	4.972	-0.6	99.4
PFPeS	2.353	2.323	-1.3	98.7
PFTeDA	2.500	2.578	3.1	103.1
PFTrDA	2.500	2.560	2.4	102.4
PFUnDA	2.500	2.558	2.3	102.3
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	9.411	-0.4	99.6
13C3-HFPO-DA	10.000	11.000	10.0	110.0
9Cl-PF3ONS	9.350	9.507	1.7	101.7
ADONA	9.450	9.338	-1.2	98.8
HFPO-DA	10.000	10.612	6.1	106.1
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	11.651	-6.8	93.2
5:3FTCA	62.500	61.646	-1.4	98.6
7:3FTCA	62.500	63.704	1.9	101.9
d3-MeFOSA	2.500	2.468	-1.3	98.7
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.598	3.9	103.9
EtFOSE	25.000	25.558	2.2	102.2
MeFOSA	2.500	2.479	-0.8	99.2
MeFOSE	25.000	25.434	1.7	101.7
PFDoDS	2.425	2.325	-4.1	95.9
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	5.352	7.0	107.0
d7-MeFOSE	25.000	23.341	-6.6	93.4
d9-EtFOSE	25.000	23.151	-7.4	92.6
d5-EtFOSA	2.500	2.441	-2.4	97.6
NFDHA	5.000	5.221	4.4	104.4
PFMBA	5.000	4.969	-0.6	99.4
PFMPA	5.000	4.922	-1.6	98.4
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.809	8.1	108.1

CC Criteria: +/- 30%

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q137-ICC137
Lab FileID: 4Q8084.D

Initial Calibration Report

Method Path	D:\MassHunter\Methods
Method File	042925_1633_T4Q137.quantmethod.xml
Batch Name	D:\MassHunter\Data\1633\T4Q137\QuantResults\t4q137.batch.bin
Last Calib Update	4/29/2025 9:20:39 PM

Level Name	Calibration Files	Acq. Date-Time	Level Last Update Time
1	D:\MassHunter\Data\1633\T4Q137\4Q8081.d	4/29/2025 5:12:30 PM	4/29/2025 9:20:39 PM
2	D:\MassHunter\Data\1633\T4Q137\4Q8082.d	4/29/2025 5:26:04 PM	4/29/2025 9:20:39 PM
3	D:\MassHunter\Data\1633\T4Q137\4Q8083.d	4/29/2025 5:39:38 PM	4/29/2025 9:20:39 PM
4	D:\MassHunter\Data\1633\T4Q137\4Q8084.d	4/29/2025 5:53:12 PM	4/29/2025 9:20:39 PM
5	D:\MassHunter\Data\1633\T4Q137\4Q8085.d	4/29/2025 6:06:47 PM	4/29/2025 9:20:39 PM
6	D:\MassHunter\Data\1633\T4Q137\4Q8086.d	4/29/2025 6:20:23 PM	4/29/2025 9:20:39 PM
7	D:\MassHunter\Data\1633\T4Q137\4Q8087.d	4/29/2025 6:33:56 PM	4/29/2025 9:20:39 PM
8	D:\MassHunter\Data\1633\T4Q137\4Q8088.d	4/29/2025 6:47:31 PM	4/29/2025 9:20:39 PM

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
I M4-PFBA						ISTD					
T PFBA	Avg RF	0.2291	0.2434	0.2576	0.2676	0.2717	0.2958	0.3080	0.3207	0.2742	11.596
I M5-PFPeA						ISTD					
T PFMPA	Avg RF	0.3321	0.3516	0.3621	0.3785	0.3869	0.4169	0.4324	0.4786	0.3924	12.214
T 3:3FTCA	Avg RF	0.0304	0.0334	0.0319	0.0337	0.0347	0.0382	0.0408	0.0463	0.0362	14.596
T PFPeA	Avg RF	0.5448	0.6064	0.6277	0.6468	0.6541	0.6916	0.7288	0.8049	0.6631	11.961
T PFMBA	Avg RF	0.3760	0.4115	0.4216	0.4446	0.4442	0.4778	0.4952	0.5487	0.4525	11.914
I M5-PFHxA						ISTD					
T NFDHA	Avg RF	0.1052	0.1176	0.1048	0.1143	0.1126	0.1205	0.1293	0.1409	0.1182	10.321
T PFHxA	Avg RF	0.7739	0.8254	0.8295	0.9184	0.8793	0.9486	0.9906	1.1128	0.9098	11.918
T PFEESA	Avg RF	0.6932	0.7935	0.8280	0.8673	0.8327	0.9096	0.9317	1.0342	0.8613	11.773
T 5:3FTCA	Quadratic	0.1187	0.1365	0.1345	0.1442	0.1391	0.1511	0.1641	0.2078	0.1495	18.036
T 7:3FTCA	Quadratic	0.1713	0.1928	0.1931	0.2084	0.1984	0.2192	0.2427	0.3091	0.2169	19.722
I M4-PFHpA						ISTD					
T PFHpA	Avg RF	1.0217	1.1447	1.2383	1.2601	1.2582	1.3713	1.3688	1.6205	1.2854	13.777
I M8-PFOA						ISTD					
T PFOA	Avg RF	0.5643	0.6749	0.6538	0.6823	0.6882	0.7402	0.7675	0.8522	0.7029	12.129
I M9-PFNA						ISTD					
T PFNA	Avg RF	0.5215	0.5688	0.6103	0.6341	0.6430	0.6709	0.7078	0.7834	0.6425	12.632
I M6-PFDA						ISTD					
T PFDA	Avg RF	0.5979	0.7337	0.7641	0.7874	0.7662	0.8616	0.8614	0.9891	0.7952	14.336
I M7-PFUnDA						ISTD					
T PFUnDA	Avg RF	0.5035	0.5726	0.6129	0.6460	0.6312	0.6917	0.6862	0.7920	0.6420	13.413
T PFDS	Avg RF	0.0874	0.0888	0.0884	0.0922	0.0926	0.1093	0.1072	0.1231	0.0986	13.230

Generated at 9:20 PM on 4/29/2025

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q137-ICC137
Lab FileID: 4Q8084.D

Initial Calibration Report

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
I M2-PFDoDA						ISTD					
T PFDoDA	Avg RF	0.6893	0.7739	0.8189	0.8046	0.8239	0.9084	0.9042	1.0215	0.8431	11.920
T PFTrDA	Avg RF	0.7956	0.9062	0.9565	0.9218	0.9369	1.0195	1.0155	1.0819	0.9543	9.131
I M2-PFTeDA						ISTD					
T PFTeDA	Avg RF	0.9993	1.1525	1.2092	1.2230	1.2121	1.3150	1.3278	1.5147	1.2442	12.008
I M8-FOSA						ISTD					
T FOSA	Avg RF	0.6400	0.7350	0.7537	0.7712	0.7720	0.8338	0.8403	0.9171	0.7829	10.544
I M3-PFBS						ISTD					
T PFBS	Avg RF	2.0414	2.1734	2.2163	2.2589	2.2655	2.4781	2.5899	2.7483	2.3465	10.088
T PFPeS	Avg RF	2.2188	2.4583	2.4868	2.5395	2.4775	2.7456	2.9190	3.0636	2.6136	10.561
I M3-PFHxS						ISTD					
T PFHxS	Avg RF	1.7285	1.7158	1.7179	1.8136	1.8167	2.0128	2.0144	2.2509	1.8838	10.187
T PFHpS	Avg RF	1.5881	1.7074	1.6864	1.8150	1.8525	2.0099	2.0116	2.2504	1.8652	11.590
I M8-PFOS						ISTD					
T PFOS	Avg RF	1.5110	1.7727	1.4786	1.6713	1.6947	1.7975	1.7960	2.2151	1.7421	13.030
T PFNS	Avg RF	1.2770	1.4699	1.3239	1.4710	1.4864	1.5863	1.5955	1.8898	1.5125	12.492
T PFDoDS	Avg RF	0.8871	0.9922	0.9206	0.9586	0.9912	1.0525	1.0681	1.2823	1.0191	12.024
I M2-4:2FTS						ISTD					
T 4:2FTS	Avg RF	6.5253	7.2271	7.5028	7.8087	7.4427	8.3588	8.4637	8.2864	7.7019	8.615
I M2-6:2FTS						ISTD					
T 6:2FTS	Avg RF	3.4174	3.8400	4.2051	4.4047	4.2145	4.6377	4.4388	4.5009	4.2074	9.519
I M2-8:2FTS						ISTD					
T 8:2FTS	Avg RF	2.7656	2.8924	3.4214	3.4014	3.2045	3.6531	3.2677	3.3395	3.2432	8.932
I M3-MeFOSAA						ISTD					
T MeFOSAA	Avg RF	0.7644	0.6891	0.6975	0.7286	0.7241	0.8004	0.8213	0.8796	0.7631	8.699
I M3-HFPO-DA						ISTD					
T HFPO-DA	Avg RF	0.7827	0.8556	0.8914	0.8700	0.9043	0.9390	0.9766	1.0308	0.9063	8.433
T ADONA	Avg RF	5.5214	6.2748	6.3474	6.3694	6.4440	7.3270	8.6044	7.3988	6.7859	14.001
T 9Cl-PF3ONS	Avg RF	1.7650	1.9776	2.0724	2.0362	2.0621	2.1453	2.1952	2.3334	2.0734	8.018
T 11Cl-PF3OUdS	Avg RF	1.6038	1.8910	1.9287	1.8842	1.9262	1.9964	2.0792	2.2339	1.9429	9.283
I M5-EtFOSAA						ISTD					
T EtFOSAA	Avg RF	0.6456	0.7534	0.7520	0.7828	0.7777	0.8886	0.9476	0.9713	0.8149	13.625
I M7-MeFOSE						ISTD					
T MeFOSE	Avg RF	0.7438	0.8327	0.8605	0.8864	0.8922	0.9680	0.9923	1.1100	0.9107	12.245
I M9-EtFOSE						ISTD					

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q137-ICC137
Lab FileID: 4Q8084.D

Initial Calibration Report

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
T EtFOSE	Avg RF	0.7863	0.8688	0.8964	0.9191	0.9059	0.9827	1.0254	1.1779	0.9453	12.497
I M5-EtFOSA						ISTD					
T EtFOSA	Avg RF	0.7871	0.8197	0.8373	0.8605	0.8715	0.9680	1.0025	1.0879	0.9043	11.506
I M3-MeFOSA						ISTD					
T MeFOSA	Avg RF	1.0710	1.0606	1.1704	1.1625	1.1745	1.3126	1.3164	1.3181	1.1983	8.874
I 13C4-PFOS						ISTD					
S d3-MeFOSAA	Avg RF	1.4507	1.5599	1.5795	1.4485	1.6966	1.6525	1.4280	1.6952	1.5639	7.152
S 13C8-PFOS	Avg RF	0.6411	0.6223	0.6672	0.5818	0.6643	0.6743	0.5928	0.6287	0.6341	5.426
S d5-EtFOSAA	Avg RF	1.1353	1.2136	1.2584	1.1195	1.3488	1.2527	1.0897	1.3075	1.2157	7.673
S 13C8-FOSA	Avg RF	2.5844	2.7122	2.7444	2.4124	2.8655	2.7627	2.4558	2.8910	2.6786	6.649
S d7-MeFOSE	Avg RF	1.4423	1.6940	1.6686	1.3485	1.5786	1.4981	1.3057	1.5198	1.5070	9.259
S d3-MeFOSA	Avg RF	1.3524	1.4942	1.4567	1.3035	1.5305	1.4723	1.3160	1.6821	1.4510	8.710
S d9-EtFOSE	Avg RF	1.9153	2.2752	2.1944	1.7463	2.0664	1.9393	1.6714	1.8787	1.9609	10.621
S d5-EtFOSA	Avg RF	1.5137	1.6188	1.5944	1.4298	1.6721	1.5922	1.4104	1.6546	1.5608	6.345
I 13C3-PFBA						ISTD					
S 13C4-PFBA	Avg RF	1.2157	1.2723	1.2549	1.1511	1.2933	1.2723	1.1057	1.3151	1.2350	5.895
I 18O2-PFHxS						ISTD					
S 13C2-4:2FTS	Avg RF	0.1272	0.1349	0.1359		0.1407	0.1289	0.1086	0.1203	0.1281	8.486
S 13C3-PFBS	Avg RF	0.6103	0.6724	0.6558	0.5864	0.6832	0.6805	0.5977	0.7089	0.6494	6.984
S 13C2-6:2FTS	Avg RF	0.2728	0.2852	0.2824	0.2432	0.2820	0.2632	0.2379	0.2544	0.2651	6.962
S 13C3-PFHxS	Avg RF	0.9295	0.9888	0.9820	0.8643	0.9705	0.9658	0.9043	0.9936	0.9498	4.866
S 13C2-8:2FTS	Avg RF	0.3279	0.3443	0.3259	0.3028	0.3462	0.3174	0.3025	0.3360	0.3254	5.211
I 13C4-PFOA						ISTD					
S 13C8-PFOA	Avg RF	1.0541	1.0951	1.0948	1.0244	1.1497	1.1265	0.9982	1.1431	1.0857	5.120
I 13C2-PFDA						ISTD					
S 13C6-PFDA	Avg RF	1.2407	1.2857	1.2935	1.1272	1.3408	1.2532	1.1445	1.2484	1.2418	5.868
S 13C7-PFUnDA	Avg RF	1.6280	1.6800	1.7184	1.4690	1.7584	1.6114	1.4661	1.4826	1.6017	7.284
S 13C2-PFDoDA	Avg RF	1.5218	1.5787	1.5687	1.4473	1.6390	1.5498	1.4331	1.6086	1.5434	4.723
S 13C2-PFTeDA	Avg RF	1.3151	1.3877	1.3722	1.1937	1.3888	1.3124	1.2238	1.3716	1.3207	5.723
I 13C5-PFNA						ISTD					
S 13C9-PFNA	Avg RF	1.1078	1.1790	1.1209	1.0433	1.1663	1.1846	1.0058	1.2019	1.1262	6.303
I 13C2-PFHxA						ISTD					
S 13C5-PFPeA	Avg RF	0.8373	0.8713	0.8751	0.7900	0.8929	0.8725	0.7512	0.8411	0.8414	5.760
S 13C5-PFHxA	Avg RF	1.1300	1.1707	1.1884	1.0412	1.2338	1.1855	1.0314	1.1678	1.1436	6.312
S 13C3-HFPO-DA	Avg RF	0.4259	0.4348	0.4335	0.4035	0.4522	0.4468	0.3894	0.4605	0.4308	5.618
S 13C4-PFHpA	Avg RF	1.2467	1.2992	1.2639	1.1793	1.3225	1.2631	1.1520	1.2842	1.2514	4.659

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q137-ICC137
Lab FileID: 4Q8084.D

Initial Calibration Report

Compounds with Curve fitting not using Avg Response Factor:

Compound	Curve Fit	Curve Fit Formula	%RSE
T 5:3FTCA	Quadratic	y = 1.155287E-004 * x ^ 2 + 0.135549 * x	6.0105
T 7:3FTCA	Quadratic	y = 1.787265E-004 * x ^ 2 + 0.197396 * x	6.6270

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Initial Calibration Verification

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q137-ICV137
Lab FileID: 4Q8090.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q137\t4q137.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q137\4Q8081.d
2:D:\MassHunter\Data\1633\T4Q137\4Q8082.d
3:D:\MassHunter\Data\1633\T4Q137\4Q8083.d
4:D:\MassHunter\Data\1633\T4Q137\4Q8084.d
5:D:\MassHunter\Data\1633\T4Q137\4Q8085.d
6:D:\MassHunter\Data\1633\T4Q137\4Q8086.d
7:D:\MassHunter\Data\1633\T4Q137\4Q8087.d
8:D:\MassHunter\Data\1633\T4Q137\4Q8088.d

Data File: 4Q8090
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	4.966	-0.7	99.3
13C2-6:2FTS	5.000	4.712	-5.8	94.2
13C2-8:2FTS	5.000	4.405	-11.9	88.1
13C2-PFDoDA	1.250	1.080	-13.6	86.4
13C2-PFTeDA	1.250	1.051	-15.9	84.1
13C3-PFBS	2.500	2.171	-13.2	86.8
13C3-PFHxS	2.500	2.160	-13.6	86.4
13C4-PFBA	10.000	8.801	-12.0	88.0
13C4-PFHpA	2.500	2.210	-11.6	88.4
13C5-PFHxA	2.500	2.210	-11.6	88.4
13C5-PFPeA	5.000	4.331	-13.4	86.6
13C6-PFDA	1.250	1.090	-12.8	87.2
13C7-PFUnDA	1.250	1.088	-13.0	87.0
13C8-FOSA	2.500	2.121	-15.2	84.8
13C8-PFOA	2.500	2.165	-13.4	86.6
13C8-PFOS	2.500	2.135	-14.6	85.4
13C9-PFNA	1.250	1.056	-15.6	84.4
4:2FTS	9.375	9.040	-3.6	96.4
6:2FTS	9.500	9.817	3.3	103.3
8:2FTS	9.600	10.175	6.0	106.0
d3-MeFOSAA	5.000	4.410	-11.8	88.2
EtFOSAA	2.500	2.294	-8.2	91.8
FOSA	2.500	2.471	-1.2	98.8
MeFOSAA	2.500	2.452	-1.9	98.1
PFBA	10.000	10.001	0.0	100.0
PFBS	2.218	2.210	-0.3	99.7
PFDA	2.500	2.529	1.2	101.2
PFDoDA	2.500	2.525	1.0	101.0
PFDS	2.413	2.390	-1.0	99.0
PFHpA	2.500	2.452	-1.9	98.1
PFHpS	2.383	2.449	2.8	102.8
PFHxA	2.500	2.485	-0.6	99.4
PFHxS	2.285	2.240	-2.0	98.0
PFNA	2.500	2.549	1.9	101.9
PFNS	2.405	2.470	2.7	102.7
PFOA	2.500	2.444	-2.3	97.7
PFOS	2.320	2.283	-1.6	98.4

Initial Calibration Verification

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q137-ICV137
Lab FileID: 4Q8090.D

PFPeA	5.000	4.990	-0.2	99.8
PFPeS	2.353	2.278	-3.2	96.8
PFTeDA	2.500	2.536	1.4	101.4
PFTrDA	2.500	2.548	1.9	101.9
PFUnDA	2.500	2.581	3.2	103.2
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	9.330	-1.3	98.7
13C3-HFPO-DA	10.000	8.750	-12.5	87.5
9Cl-PF3ONS	9.350	9.387	0.4	100.4
ADONA	9.450	8.831	-6.6	93.4
HFPO-DA	10.000	10.153	1.5	101.5
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	12.082	-3.3	96.7
5:3FTCA	62.500	64.112	2.6	102.6
7:3FTCA	62.500	63.285	1.3	101.3
d3-MeFOSA	2.500	2.059	-17.6	82.4
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.405	-3.8	96.2
EtFOSE	25.000	24.709	-1.2	98.8
MeFOSA	2.500	2.472	-1.1	98.9
MeFOSE	25.000	24.289	-2.8	97.2
PFDoDS	2.425	2.358	-2.8	97.2
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.443	-11.1	88.9
d7-MeFOSE	25.000	20.495	-18.0	82.0
d9-EtFOSE	25.000	21.120	-15.5	84.5
d5-EtFOSA	2.500	2.151	-14.0	86.0
NFDHA	5.000	4.732	-5.4	94.6
PFMBA	5.000	5.052	1.0	101.0
PFMPA	5.000	4.995	-0.1	99.9
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.404	-1.0	99.0

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q137-CC137
Lab FileID: 4Q8091.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q137\t4q137.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q137\4Q8081.d
2:D:\MassHunter\Data\1633\T4Q137\4Q8082.d
3:D:\MassHunter\Data\1633\T4Q137\4Q8083.d
4:D:\MassHunter\Data\1633\T4Q137\4Q8084.d
5:D:\MassHunter\Data\1633\T4Q137\4Q8085.d
6:D:\MassHunter\Data\1633\T4Q137\4Q8086.d
7:D:\MassHunter\Data\1633\T4Q137\4Q8087.d
8:D:\MassHunter\Data\1633\T4Q137\4Q8088.d

Data File: 4Q8091
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	4.861	-2.8	97.2
13C2-6:2FTS	5.000	4.874	-2.5	97.5
13C2-8:2FTS	5.000	4.531	-9.4	90.6
13C2-PFDoDA	1.250	1.136	-9.1	90.9
13C2-PFTeDA	1.250	1.090	-12.8	87.2
13C3-PFBS	2.500	2.371	-5.2	94.8
13C3-PFHxS	2.500	2.331	-6.8	93.2
13C4-PFBA	10.000	9.458	-5.4	94.6
13C4-PFHpA	2.500	2.384	-4.6	95.4
13C5-PFHxA	2.500	2.382	-4.7	95.3
13C5-PFPeA	5.000	4.691	-6.2	93.8
13C6-PFDA	1.250	1.161	-7.2	92.8
13C7-PFUnDA	1.250	1.174	-6.1	93.9
13C8-FOSA	2.500	2.246	-10.1	89.9
13C8-PFOA	2.500	2.312	-7.5	92.5
13C8-PFOS	2.500	2.289	-8.5	91.5
13C9-PFNA	1.250	1.163	-6.9	93.1
4:2FTS	9.375	9.634	2.8	102.8
6:2FTS	9.500	9.496	0.0	100.0
8:2FTS	9.600	10.165	5.9	105.9
d3-MeFOSAA	5.000	4.777	-4.5	95.5
EtFOSAA	2.500	2.269	-9.2	90.8
FOSA	2.500	2.447	-2.1	97.9
MeFOSAA	2.500	2.271	-9.2	90.8
PFBA	10.000	9.679	-3.2	96.8
PFBS	2.218	2.127	-4.1	95.9
PFDA	2.500	2.422	-3.1	96.9
PFDoDA	2.500	2.447	-2.1	97.9
PFDS	2.413	2.340	-3.0	97.0
PFHpA	2.500	2.400	-4.0	96.0
PFHpS	2.383	2.340	-1.8	98.2
PFHxA	2.500	2.383	-4.7	95.3
PFHxS	2.285	2.277	-0.3	99.7
PFNA	2.500	2.413	-3.5	96.5
PFNS	2.405	2.310	-4.0	96.0
PFOA	2.500	2.444	-2.2	97.8
PFOS	2.320	2.073	-10.7	89.3

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q137-CC137
Lab FileID: 4Q8091.D

PFPeA	5.000	4.863	-2.7	97.3
PFPeS	2.353	2.192	-6.8	93.2
PFTeDA	2.500	2.447	-2.1	97.9
PFTrDA	2.500	2.449	-2.0	98.0
PFUnDA	2.500	2.411	-3.6	96.4
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	9.098	-3.7	96.3
13C3-HFPO-DA	10.000	9.455	-5.4	94.6
9Cl-PF3ONS	9.350	8.967	-4.1	95.9
ADONA	9.450	8.692	-8.0	92.0
HFPO-DA	10.000	9.736	-2.6	97.4
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	11.944	-4.4	95.6
5:3FTCA	62.500	63.129	1.0	101.0
7:3FTCA	62.500	60.400	-3.4	96.6
d3-MeFOSA	2.500	2.185	-12.6	87.4
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.311	-7.6	92.4
EtFOSE	25.000	23.916	-4.3	95.7
MeFOSA	2.500	2.448	-2.1	97.9
MeFOSE	25.000	24.230	-3.1	96.9
PFDoDS	2.425	2.299	-5.2	94.8
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.763	-4.7	95.3
d7-MeFOSE	25.000	22.102	-11.6	88.4
d9-EtFOSE	25.000	22.478	-10.1	89.9
d5-EtFOSA	2.500	2.325	-7.0	93.0
NFDHA	5.000	4.841	-3.2	96.8
PFMBA	5.000	4.893	-2.1	97.9
PFMPA	5.000	4.882	-2.4	97.6
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.350	-2.3	97.7

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q137-CC137
Lab FileID: 4Q8092.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q137\t4q137.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q137\4Q8081.d
2:D:\MassHunter\Data\1633\T4Q137\4Q8082.d
3:D:\MassHunter\Data\1633\T4Q137\4Q8083.d
4:D:\MassHunter\Data\1633\T4Q137\4Q8084.d
5:D:\MassHunter\Data\1633\T4Q137\4Q8085.d
6:D:\MassHunter\Data\1633\T4Q137\4Q8086.d
7:D:\MassHunter\Data\1633\T4Q137\4Q8087.d
8:D:\MassHunter\Data\1633\T4Q137\4Q8088.d

Data File: 4Q8092
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.658	13.2	113.2
13C2-6:2FTS	5.000	5.060	1.2	101.2
13C2-8:2FTS	5.000	4.999	0.0	100.0
13C2-PFDoDA	1.250	1.161	-7.1	92.9
13C2-PFTeDA	1.250	1.143	-8.5	91.5
13C3-PFBS	2.500	2.296	-8.2	91.8
13C3-PFHxS	2.500	2.405	-3.8	96.2
13C4-PFBA	10.000	9.823	-1.8	98.2
13C4-PFHpA	2.500	2.440	-2.4	97.6
13C5-PFHxA	2.500	2.483	-0.7	99.3
13C5-PFPeA	5.000	4.909	-1.8	98.2
13C6-PFDA	1.250	1.200	-4.0	96.0
13C7-PFUnDA	1.250	1.242	-0.6	99.4
13C8-FOSA	2.500	2.301	-8.0	92.0
13C8-PFOA	2.500	2.419	-3.2	96.8
13C8-PFOS	2.500	2.331	-6.8	93.2
13C9-PFNA	1.250	1.239	-0.9	99.1
4:2FTS	0.750	0.570	-24.0	76.0
6:2FTS	0.760	0.630	-17.1	82.9
8:2FTS	0.768	0.600	-21.8	78.2
d3-MeFOSAA	5.000	4.891	-2.2	97.8
EtFOSAA	0.200	0.160	-19.9	80.1
FOSA	0.200	0.174	-12.9	87.1
MeFOSAA	0.200	0.171	-14.3	85.7
PFBA	0.800	0.700	-12.5	87.5
PFBS	0.177	0.152	-14.0	86.0
PFDA	0.200	0.157	-21.4	78.6
PFDoDA	0.200	0.173	-13.5	86.5
PFDS	0.193	0.155	-19.7	80.3
PFHpA	0.200	0.171	-14.7	85.3
PFHpS	0.191	0.159	-16.5	83.5
PFHxA	0.200	0.163	-18.7	81.3
PFHxS	0.183	0.159	-12.9	87.1
PFNA	0.200	0.164	-18.0	82.0
PFNS	0.192	0.173	-10.1	89.9
PFOA	0.200	0.179	-10.7	89.3
PFOS	0.186	0.183	-1.4	98.6

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q137-CC137
Lab FileID: 4Q8092.D

PFPeA	0.400	0.328	-18.1	81.9
PFPeS	0.188	0.141	-25.0	75.0
PFTeDA	0.200	0.161	-19.5	80.5
PFTrDA	0.200	0.169	-15.7	84.3
PFUnDA	0.200	0.158	-20.8	79.2
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	0.756	0.610	-19.4	80.6
13C3-HFPO-DA	10.000	9.773	-2.3	97.7
9Cl-PF3ONS	0.748	0.588	-21.4	78.6
ADONA	0.756	0.610	-19.3	80.7
HFPO-DA	0.800	0.624	-22.0	78.0
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	1.000	0.835	-16.5	83.5
5:3FTCA	5.000	4.298	-14.0	86.0
7:3FTCA	5.000	4.100	-18.0	82.0
d3-MeFOSA	2.500	2.283	-8.7	91.3
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	0.200	0.157	-21.4	78.6
EtFOSE	2.000	1.651	-17.4	82.6
MeFOSA	0.200	0.190	-5.2	94.8
MeFOSE	2.000	1.619	-19.0	81.0
PFDoDS	0.194	0.153	-21.0	79.0
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.886	-2.3	97.7
d7-MeFOSE	25.000	22.793	-8.8	91.2
d9-EtFOSE	25.000	22.936	-8.3	91.7
d5-EtFOSA	2.500	2.368	-5.3	94.7
NFDHA	0.400	0.303	-24.3	75.7
PFMBA	0.400	0.323	-19.1	80.9
PFMPA	0.400	0.327	-18.2	81.8
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	0.356	0.285	-20.0	80.0

CC Criteria: +/- 30%

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-ICC138
Lab FileID: 4Q8131.D

Initial Calibration Report

Method Path	D:\MassHunter\Methods
Method File	043025_1633_T4Q138.quantmethod.xml
Batch Name	D:\MassHunter\Data\1633\T4Q138\QuantResults\T4Q138.batch.bin
Last Calib Update	4/30/2025 9:57:12 PM

Level Name	Calibration Files	Acq. Date-Time	Level Last Update Time
1	D:\MassHunter\Data\1633\T4Q138\4Q8128.d	4/30/2025 2:29:23 PM	4/30/2025 9:57:12 PM
2	D:\MassHunter\Data\1633\T4Q138\4Q8129.d	4/30/2025 2:42:57 PM	4/30/2025 9:57:12 PM
3	D:\MassHunter\Data\1633\T4Q138\4Q8130.d	4/30/2025 2:56:32 PM	4/30/2025 9:57:12 PM
4	D:\MassHunter\Data\1633\T4Q138\4Q8131.d	4/30/2025 3:10:07 PM	4/30/2025 9:57:12 PM
5	D:\MassHunter\Data\1633\T4Q138\4Q8132.d	4/30/2025 3:23:43 PM	4/30/2025 9:57:12 PM
6	D:\MassHunter\Data\1633\T4Q138\4Q8133.d	4/30/2025 3:37:17 PM	4/30/2025 9:57:12 PM
7	D:\MassHunter\Data\1633\T4Q138\4Q8134.d	4/30/2025 3:50:52 PM	4/30/2025 9:57:12 PM
8	D:\MassHunter\Data\1633\T4Q138\4Q8135.d	4/30/2025 4:04:27 PM	4/30/2025 9:57:12 PM

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
I M4-PFBA						ISTD					
T PFBA	Avg RF	0.2634	0.2646	0.2843	0.3118	0.3079	0.3176	0.3498	0.3463	0.3057	10.863
I M5-PFPeA						ISTD					
T PFMPA	Avg RF	0.3769	0.3926	0.4157	0.4549	0.4543	0.4771	0.5237	0.5313	0.4533	12.521
T 3:3FTCA	Avg RF	0.0394	0.0406	0.0423	0.0462	0.0468	0.0501	0.0554	0.0572	0.0472	13.939
T PFPeA	Avg RF	0.6485	0.6763	0.7418	0.8146	0.7940	0.8162	0.9075	0.9255	0.7906	12.536
T PFMBA	Avg RF	0.4675	0.4697	0.5053	0.5384	0.5264	0.5530	0.6172	0.6371	0.5393	11.548
I M5-PFHxA						ISTD					
T NFDHA	Avg RF	0.1314	0.1134	0.1322	0.1417	0.1417	0.1499	0.1658	0.1560	0.1415	11.497
T PFHxA	Avg RF	0.9155	0.9412	1.0100	1.1211	1.0769	1.1000	1.2118	1.2435	1.0775	10.945
T PFEESA	Avg RF	0.8649	0.8439	0.9280	1.0405	1.0073	1.0131	1.1176	1.1017	0.9896	10.319
T 5:3FTCA	Quadratic	0.1522	0.1580	0.1684	0.1882	0.1817	0.1871	0.2176	0.2442	0.1872	16.450
T 7:3FTCA	Avg RF	0.2093	0.2091	0.2234	0.2402	0.2358	0.2470	0.2979	0.3203	0.2479	16.392
I M4-PFHpA						ISTD					
T PFHpA	Avg RF	1.2974	1.2916	1.4149	1.5395	1.4968	1.5432	1.7551	1.8301	1.5211	12.807
I M8-PFOA						ISTD					
T PFOA	Avg RF	0.7284	0.7259	0.7707	0.8458	0.8135	0.8553	0.9508	0.9664	0.8321	11.033
I M9-PFNA						ISTD					
T PFNA	Avg RF	0.6188	0.6352	0.7004	0.7683	0.7462	0.7863	0.8808	0.8788	0.7519	13.130
I M6-PFDA						ISTD					
T PFDA	Avg RF	0.7623	0.7865	0.8988	0.9626	0.9344	1.0064	1.1151	1.1346	0.9501	14.315
I M7-PFUnDA						ISTD					
T PFUnDA	Avg RF	0.6171	0.6172	0.6891	0.7617	0.7574	0.7596	0.8440	0.8649	0.7389	12.565
T PFDS	Avg RF	0.0999	0.0983	0.0974	0.1101	0.1118	0.1116	0.1302	0.1343	0.1117	12.584

Generated at 9:57 PM on 4/30/2025

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-ICC138
Lab FileID: 4Q8131.D

Initial Calibration Report

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
I M2-PFDoDA						ISTD					
T PFDoDA	Avg RF	0.8501	0.8011	0.8931	0.9882	0.9705	1.0396	1.0642	1.0909	0.9622	10.901
T PFTrDA	Avg RF	0.9413	0.9413	1.0135	1.1027	1.0846	1.1418	1.1955	1.1634	1.0730	9.128
I M2-PFTeDA						ISTD					
T PFTeDA	Avg RF	1.2605	1.2208	1.3851	1.5343	1.4746	1.4988	1.6410	1.6280	1.4554	10.729
I M8-FOSA						ISTD					
T FOSA	Avg RF	0.8400	0.7827	0.8267	0.9286	0.8975	0.9554	0.9966	1.0335	0.9076	9.616
I M3-PFBS						ISTD					
T PFBS	Avg RF	2.5229	2.5290	2.5114	2.8924	2.8050	3.0013	3.3198	3.2850	2.8584	11.533
T PFPeS	Avg RF	2.7219	2.7001	2.8230	3.2538	3.1220	3.2344	3.5322	3.5898	3.1221	11.125
I M3-PFHxS						ISTD					
T PFHxS	Avg RF	1.9051	1.9782	1.9601	2.1566	2.2464	2.2779	2.4744	2.4170	2.1770	9.852
T PFHpS	Avg RF	1.9297	1.7906	1.9325	2.1985	2.3067	2.3003	2.4791	2.3570	2.1618	11.391
I M8-PFOS						ISTD					
T PFOS	Avg RF	1.7841	1.8060	1.8023	2.0836	1.9877	2.1381	2.2671	2.2499	2.0148	9.954
T PFNS	Avg RF	1.3584	1.4180	1.5347	1.8313	1.7543	1.8094	1.8794	1.8637	1.6812	12.555
T PFDoDS	Avg RF	1.0123	0.9691	0.9971	1.0984	1.0643	1.1495	1.2354	1.2263	1.0940	9.343
I M2-4:2FTS						ISTD					
T 4:2FTS	Avg RF	8.0513	7.9557	8.4471	9.9946	9.8051	9.2647	10.06	9.8799	9.1826	9.775
I M2-6:2FTS						ISTD					
T 6:2FTS	Avg RF	4.7548	4.6125	4.7580	5.2426	5.1459	5.3061	5.3904	4.9035	5.0142	5.853
I M2-8:2FTS						ISTD					
T 8:2FTS	Avg RF	3.0580	3.3689	3.8928	4.3437	4.3281	4.1629	4.2894	3.8608	3.9131	12.188
I M3-MeFOSAA						ISTD					
T MeFOSAA	Avg RF	0.7541	0.7106	0.8182	0.8535	0.8317	0.9077	1.0079	1.0085	0.8615	12.587
I M3-HFPO-DA						ISTD					
T HFPO-DA	Avg RF	0.9042	0.9089	1.0183	1.0700	1.0658	1.0561	1.2135	1.1733	1.0513	10.469
T ADONA	Linear	6.2427	6.5178	6.9036	7.3614	7.3744	8.0284	10.16	6.9742	7.4453	16.483
T 9Cl-PF3ONS	Avg RF	1.8288	1.8837	1.9944	2.1821	2.1414	2.0959	2.3655	2.2501	2.0927	8.710
T 11Cl-PF3OUdS	Avg RF	1.6611	1.7265	1.8744	1.9445	1.9044	1.8847	2.1346	2.0897	1.9025	8.452
I M5-EtFOSAA						ISTD					
T EtFOSAA	Avg RF	0.8386	0.8791	0.8363	0.9403	0.9226	0.9737	1.1059	1.0810	0.9472	10.795
I M7-MeFOSE						ISTD					
T MeFOSE	Avg RF	0.9528	0.9258	1.0153	1.1250	1.0885	1.1195	1.2483	1.2951	1.0963	11.954
I M9-EtFOSE						ISTD					

Generated at 9:57 PM on 4/30/2025

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-ICC138
Lab FileID: 4Q8131.D

Initial Calibration Report

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
T EtFOSE	Avg RF	0.9612	1.0041	1.0926	1.1790	1.1407	1.1883	1.3301	1.4071	1.1629	12.995
I M5-EtFOSA						ISTD					
T EtFOSA	Avg RF	0.9092	0.8976	0.9341	1.0142	0.9922	1.0830	1.2506	1.2161	1.0371	13.074
I M3-MeFOSA						ISTD					
T MeFOSA	Avg RF	1.1264	1.1789	1.1808	1.3272	1.3233	1.3993	1.5262	1.4109	1.3091	10.527
I 13C4-PFOS						ISTD					
S d3-MeFOSAA	Avg RF	1.6806	1.7069	1.7204	1.5735	1.8011	1.5721	1.4878	1.6303	1.6466	6.095
S 13C8-PFOS	Avg RF	0.6162	0.6135	0.6343	0.5615	0.6364	0.5571	0.5663	0.6308	0.6020	5.729
S d5-EtFOSAA	Avg RF	1.2911	1.2603	1.3545	1.2001	1.3679	1.2173	1.1499	1.2723	1.2642	5.910
S 13C8-FOSA	Avg RF	2.6188	2.6036	2.6941	2.3791	2.7053	2.3730	2.4016	2.7702	2.5682	6.260
S d7-MeFOSE	Avg RF	1.2981	1.2910	1.3290	1.2232	1.3483	1.1845	1.1361	1.2628	1.2591	5.802
S d3-MeFOSA	Avg RF	1.3172	1.2964	1.3718	1.2489	1.3813	1.2267	1.2107	1.4976	1.3188	7.263
S d9-EtFOSE	Avg RF	1.5978	1.5744	1.6577	1.4904	1.6587	1.4099	1.3493	1.4758	1.5267	7.465
S d5-EtFOSA	Avg RF	1.4034	1.3763	1.4563	1.3170	1.4719	1.2718	1.1932	1.3826	1.3591	6.918
I 13C3-PFBA						ISTD					
S 13C4-PFBA	Avg RF	1.1438	1.1682	1.1864	1.0925	1.1801	1.1130	1.1320	1.1549	1.1463	2.858
I 18O2-PFHxS						ISTD					
S 13C2-4:2FTS	Avg RF	0.1420	0.1478	0.1483		0.1231	0.1134	0.1089	0.0940	0.1254	16.951
S 13C3-PFBS	Avg RF	0.6247	0.6441	0.6704	0.5843	0.6317	0.5802	0.6115	0.5890	0.6170	5.163
S 13C2-6:2FTS	Avg RF	0.2803	0.3046	0.3168	0.2836	0.2840	0.2378	0.2444	0.2249	0.2720	12.085
S 13C3-PFHxS	Avg RF	0.8602	0.8835	0.9537	0.8528	0.8697	0.8072	0.8800	0.8765	0.8729	4.663
S 13C2-8:2FTS	Avg RF	0.3305	0.3611	0.3571	0.3163	0.3134	0.2957	0.3053	0.2811	0.3200	8.800
I 13C4-PFOA						ISTD					
S 13C8-PFOA	Avg RF	1.0001	0.9926	1.0552	0.9433	1.0391	0.9848	0.9580	1.0192	0.9990	3.821
I 13C2-PFDA						ISTD					
S 13C6-PFDA	Avg RF	1.1322	1.1739	1.1729	1.0500	1.1351	1.0639	1.0365	1.0718	1.1045	5.019
S 13C7-PFUnDA	Avg RF	1.5651	1.5643	1.6603	1.4421	1.4797	1.4454	1.3343	1.3113	1.4753	8.061
S 13C2-PFDoDA	Avg RF	1.3490	1.4211	1.5049	1.2985	1.3521	1.2470	1.2548	1.3833	1.3513	6.407
S 13C2-PFTeDA	Avg RF	1.0518	1.1256	1.1108	0.9212	1.0180	0.9978	0.9806	1.1051	1.0389	6.963
I 13C5-PFNA						ISTD					
S 13C9-PFNA	Avg RF	1.0243	1.0888	1.0845	0.9632	1.0674	0.9647	1.0135	1.0881	1.0368	5.138
I 13C2-PFHxA						ISTD					
S 13C5-PFPeA	Avg RF	0.8374	0.8248	0.8657	0.7856	0.8581	0.7416	0.7573	0.7537	0.8030	6.176
S 13C5-PFHxA	Avg RF	1.0607	1.0808	1.1253	0.9969	1.1126	0.9990	1.0291	1.0616	1.0583	4.533
S 13C3-HFPO-DA	Avg RF	0.4219	0.4145	0.4365	0.4023	0.4353	0.3975	0.3982	0.4184	0.4156	3.732
S 13C4-PFHpA	Avg RF	1.1532	1.1422	1.1919	1.0951	1.2030	1.0489	1.0649	1.0995	1.1249	5.051

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Generated at 9:57 PM on 4/30/2025

6.7.19

6

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-ICC138
Lab FileID: 4Q8131.D

Initial Calibration Report

Compounds with Curve fitting not using Avg Response Factor:

Compound	Curve Fit	Curve Fit Formula	%RSE
T 5:3FTCA	Quadratic	y = 8.661071E-005 * x ^ 2 + 0.190326 * x	13.6837
T ADONA	Linear	y = 7.846333 * x	17.8947

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Generated at 9:57 PM on 4/30/2025

6.7.19

6

Initial Calibration Verification

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-ICV138
Lab FileID: 4Q8137.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q138\T4Q138.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q138\4Q8128.d
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3:D:\MassHunter\Data\1633\T4Q138\4Q8130.d
4:D:\MassHunter\Data\1633\T4Q138\4Q8131.d
5:D:\MassHunter\Data\1633\T4Q138\4Q8132.d
6:D:\MassHunter\Data\1633\T4Q138\4Q8133.d
7:D:\MassHunter\Data\1633\T4Q138\4Q8134.d
8:D:\MassHunter\Data\1633\T4Q138\4Q8135.d

Data File: 4Q8137
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.581	11.6	111.6
13C2-6:2FTS	5.000	5.648	13.0	113.0
13C2-8:2FTS	5.000	5.193	3.9	103.9
13C2-PFDoDA	1.250	1.259	0.7	100.7
13C2-PFTeDA	1.250	1.303	4.3	104.3
13C3-PFBS	2.500	2.695	7.8	107.8
13C3-PFHxS	2.500	2.694	7.8	107.8
13C4-PFBA	10.000	10.152	1.5	101.5
13C4-PFHpA	2.500	2.660	6.4	106.4
13C5-PFHxA	2.500	2.610	4.4	104.4
13C5-PFPeA	5.000	5.319	6.4	106.4
13C6-PFDA	1.250	1.307	4.5	104.5
13C7-PFUnDA	1.250	1.360	8.8	108.8
13C8-FOSA	2.500	2.571	2.8	102.8
13C8-PFOA	2.500	2.634	5.3	105.3
13C8-PFOS	2.500	2.466	-1.4	98.6
13C9-PFNA	1.250	1.323	5.8	105.8
4:2FTS	9.375	9.220	-1.7	98.3
6:2FTS	9.500	9.345	-1.6	98.4
8:2FTS	9.600	9.923	3.4	103.4
d3-MeFOSAA	5.000	5.041	0.8	100.8
EtFOSAA	2.500	2.439	-2.4	97.6
FOSA	2.500	2.303	-7.9	92.1
MeFOSAA	2.500	2.289	-8.4	91.6
PFBA	10.000	9.478	-5.2	94.8
PFBS	2.218	1.926	-13.2	86.8
PFDA	2.500	2.290	-8.4	91.6
PFDoDA	2.500	2.411	-3.6	96.4
PFDS	2.413	2.156	-10.6	89.4
PFHpA	2.500	2.345	-6.2	93.8
PFHpS	2.383	2.149	-9.8	90.2
PFHxA	2.500	2.375	-5.0	95.0
PFHxS	2.285	2.101	-8.1	91.9
PFNA	2.500	2.317	-7.3	92.7
PFNS	2.405	2.391	-0.6	99.4
PFOA	2.500	2.276	-8.9	91.1
PFOS	2.320	2.184	-5.9	94.1

Initial Calibration Verification

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-ICV138
Lab FileID: 4Q8137.D

PFPeA	5.000	4.769	-4.6	95.4
PFPeS	2.353	2.135	-9.3	90.7
PFTeDA	2.500	2.381	-4.7	95.3
PFTrDA	2.500	2.553	2.1	102.1
PFUnDA	2.500	2.343	-6.3	93.7
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	9.348	-1.1	98.9
13C3-HFPO-DA	10.000	10.465	4.6	104.6
9Cl-PF3ONS	9.350	8.901	-4.8	95.2
ADONA	9.450	8.357	-11.6	88.4
HFPO-DA	10.000	9.463	-5.4	94.6
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	11.244	-10.1	89.9
5:3FTCA	62.500	55.735	-10.8	89.2
7:3FTCA	62.500	56.828	-9.1	90.9
d3-MeFOSA	2.500	2.535	1.4	101.4
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.253	-9.9	90.1
EtFOSE	25.000	23.752	-5.0	95.0
MeFOSA	2.500	2.328	-6.9	93.1
MeFOSE	25.000	23.511	-6.0	94.0
PFDoDS	2.425	2.379	-1.9	98.1
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.907	-1.9	98.1
d7-MeFOSE	25.000	25.320	1.3	101.3
d9-EtFOSE	25.000	25.888	3.6	103.6
d5-EtFOSA	2.500	2.603	4.1	104.1
NFDHA	5.000	4.746	-5.1	94.9
PFMBA	5.000	4.701	-6.0	94.0
PFMPA	5.000	4.571	-8.6	91.4
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.259	-4.3	95.7

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-CC138
Lab FileID: 4Q8138.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q138\T4Q138.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q138\4Q8128.d
2:D:\MassHunter\Data\1633\T4Q138\4Q8129.d
3:D:\MassHunter\Data\1633\T4Q138\4Q8130.d
4:D:\MassHunter\Data\1633\T4Q138\4Q8131.d
5:D:\MassHunter\Data\1633\T4Q138\4Q8132.d
6:D:\MassHunter\Data\1633\T4Q138\4Q8133.d
7:D:\MassHunter\Data\1633\T4Q138\4Q8134.d
8:D:\MassHunter\Data\1633\T4Q138\4Q8135.d

Data File: 4Q8138
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	4.528	-9.4	90.6
13C2-6:2FTS	5.000	4.908	-1.8	98.2
13C2-8:2FTS	5.000	4.600	-8.0	92.0
13C2-PFDoDA	1.250	1.207	-3.5	96.5
13C2-PFTeDA	1.250	1.187	-5.1	94.9
13C3-PFBS	2.500	2.423	-3.1	96.9
13C3-PFHxS	2.500	2.279	-8.8	91.2
13C4-PFBA	10.000	9.513	-4.9	95.1
13C4-PFHpA	2.500	2.469	-1.2	98.8
13C5-PFHxA	2.500	2.421	-3.2	96.8
13C5-PFPeA	5.000	4.910	-1.8	98.2
13C6-PFDA	1.250	1.246	-0.3	99.7
13C7-PFUnDA	1.250	1.277	2.2	102.2
13C8-FOSA	2.500	2.345	-6.2	93.8
13C8-PFOA	2.500	2.392	-4.3	95.7
13C8-PFOS	2.500	2.421	-3.2	96.8
13C9-PFNA	1.250	1.178	-5.8	94.2
4:2FTS	9.375	10.279	9.6	109.6
6:2FTS	9.500	9.852	3.7	103.7
8:2FTS	9.600	10.781	12.3	112.3
d3-MeFOSAA	5.000	4.715	-5.7	94.3
EtFOSAA	2.500	2.497	-0.1	99.9
FOSA	2.500	2.514	0.5	100.5
MeFOSAA	2.500	2.595	3.8	103.8
PFBA	10.000	10.274	2.7	102.7
PFBS	2.218	2.108	-4.9	95.1
PFDA	2.500	2.512	0.5	100.5
PFDoDA	2.500	2.673	6.9	106.9
PFDS	2.413	2.322	-3.8	96.2
PFHpA	2.500	2.499	0.0	100.0
PFHpS	2.383	2.427	1.8	101.8
PFHxA	2.500	2.567	2.7	102.7
PFHxS	2.285	2.357	3.1	103.1
PFNA	2.500	2.527	1.1	101.1
PFNS	2.405	2.495	3.7	103.7
PFOA	2.500	2.483	-0.7	99.3
PFOS	2.320	2.208	-4.8	95.2

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-CC138
Lab FileID: 4Q8138.D

PFPeA	5.000	5.134	2.7	102.7
PFPeS	2.353	2.261	-3.9	96.1
PFTeDA	2.500	2.584	3.4	103.4
PFTrDA	2.500	2.628	5.1	105.1
PFUnDA	2.500	2.562	2.5	102.5
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	9.719	2.8	102.8
13C3-HFPO-DA	10.000	9.666	-3.3	96.7
9Cl-PF3ONS	9.350	9.715	3.9	103.9
ADONA	9.450	8.943	-5.4	94.6
HFPO-DA	10.000	10.239	2.4	102.4
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	12.054	-3.6	96.4
5:3FTCA	62.500	60.427	-3.3	96.7
7:3FTCA	62.500	60.151	-3.8	96.2
d3-MeFOSA	2.500	2.314	-7.4	92.6
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.431	-2.8	97.2
EtFOSE	25.000	25.343	1.4	101.4
MeFOSA	2.500	2.641	5.6	105.6
MeFOSE	25.000	25.425	1.7	101.7
PFDoDS	2.425	2.391	-1.4	98.6
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.816	-3.7	96.3
d7-MeFOSE	25.000	24.289	-2.8	97.2
d9-EtFOSE	25.000	24.885	-0.5	99.5
d5-EtFOSA	2.500	2.462	-1.5	98.5
NFDHA	5.000	4.991	-0.2	99.8
PFMBA	5.000	4.984	-0.3	99.7
PFMPA	5.000	5.003	0.1	100.1
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.620	3.8	103.8

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-CC138
Lab FileID: 4Q8139.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q138\T4Q138.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q138\4Q8128.d
2:D:\MassHunter\Data\1633\T4Q138\4Q8129.d
3:D:\MassHunter\Data\1633\T4Q138\4Q8130.d
4:D:\MassHunter\Data\1633\T4Q138\4Q8131.d
5:D:\MassHunter\Data\1633\T4Q138\4Q8132.d
6:D:\MassHunter\Data\1633\T4Q138\4Q8133.d
7:D:\MassHunter\Data\1633\T4Q138\4Q8134.d
8:D:\MassHunter\Data\1633\T4Q138\4Q8135.d

Data File: 4Q8139
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.746	14.9	114.9
13C2-6:2FTS	5.000	5.427	8.5	108.5
13C2-8:2FTS	5.000	5.241	4.8	104.8
13C2-PFDoDA	1.250	1.159	-7.3	92.7
13C2-PFTeDA	1.250	1.196	-4.3	95.7
13C3-PFBS	2.500	2.607	4.3	104.3
13C3-PFHxS	2.500	2.501	0.0	100.0
13C4-PFBA	10.000	9.957	-0.4	99.6
13C4-PFHpA	2.500	2.448	-2.1	97.9
13C5-PFHxA	2.500	2.542	1.7	101.7
13C5-PFPeA	5.000	4.934	-1.3	98.7
13C6-PFDA	1.250	1.220	-2.4	97.6
13C7-PFUnDA	1.250	1.224	-2.1	97.9
13C8-FOSA	2.500	2.473	-1.1	98.9
13C8-PFOA	2.500	2.478	-0.9	99.1
13C8-PFOS	2.500	2.570	2.8	102.8
13C9-PFNA	1.250	1.254	0.4	100.4
4:2FTS	0.750	0.612	-18.4	81.6
6:2FTS	0.760	0.639	-16.0	84.0
8:2FTS	0.768	0.694	-9.6	90.4
d3-MeFOSAA	5.000	5.055	1.1	101.1
EtFOSAA	0.200	0.167	-16.7	83.3
FOSA	0.200	0.188	-5.9	94.1
MeFOSAA	0.200	0.182	-9.0	91.0
PFBA	0.800	0.702	-12.3	87.7
PFBS	0.177	0.148	-16.2	83.8
PFDA	0.200	0.179	-10.6	89.4
PFDoDA	0.200	0.170	-14.9	85.1
PFDS	0.193	0.168	-12.8	87.2
PFHpA	0.200	0.165	-17.5	82.5
PFHpS	0.191	0.155	-19.1	80.9
PFHxA	0.200	0.171	-14.5	85.5
PFHxS	0.183	0.171	-6.5	93.5
PFNA	0.200	0.168	-16.2	83.8
PFNS	0.192	0.150	-21.9	78.1
PFOA	0.200	0.186	-7.2	92.8
PFOS	0.186	0.160	-14.2	85.8

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-CC138
Lab FileID: 4Q8139.D

PFPeA	0.400	0.331	-17.2	82.8
PFPeS	0.188	0.152	-19.4	80.6
PFTeDA	0.200	0.174	-12.8	87.2
PFTrDA	0.200	0.177	-11.6	88.4
PFUnDA	0.200	0.176	-11.8	88.2
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	0.756	0.631	-16.5	83.5
13C3-HFPO-DA	10.000	9.824	-1.8	98.2
9Cl-PF3ONS	0.748	0.625	-16.4	83.6
ADONA	0.756	0.608	-19.5	80.5
HFPO-DA	0.800	0.706	-11.7	88.3
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	1.000	0.800	-20.0	80.0
5:3FTCA	5.000	4.012	-19.8	80.2
7:3FTCA	5.000	4.018	-19.6	80.4
d3-MeFOSA	2.500	2.471	-1.2	98.8
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	0.200	0.169	-15.3	84.7
EtFOSE	2.000	1.743	-12.9	87.1
MeFOSA	0.200	0.181	-9.5	90.5
MeFOSE	2.000	1.682	-15.9	84.1
PFDoDS	0.194	0.160	-17.7	82.3
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	5.199	4.0	104.0
d7-MeFOSE	25.000	25.568	2.3	102.3
d9-EtFOSE	25.000	25.585	2.3	102.3
d5-EtFOSA	2.500	2.533	1.3	101.3
NFDHA	0.400	0.315	-21.4	78.6
PFMBA	0.400	0.329	-17.6	82.4
PFMPA	0.400	0.345	-13.7	86.3
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	0.356	0.287	-19.3	80.7

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-CC138
Lab FileID: 4Q8153.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q138\T4Q138.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q138\4Q8128.d
2:D:\MassHunter\Data\1633\T4Q138\4Q8129.d
3:D:\MassHunter\Data\1633\T4Q138\4Q8130.d
4:D:\MassHunter\Data\1633\T4Q138\4Q8131.d
5:D:\MassHunter\Data\1633\T4Q138\4Q8132.d
6:D:\MassHunter\Data\1633\T4Q138\4Q8133.d
7:D:\MassHunter\Data\1633\T4Q138\4Q8134.d
8:D:\MassHunter\Data\1633\T4Q138\4Q8135.d

Data File: 4Q8153
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.224	4.5	104.5
13C2-6:2FTS	5.000	4.878	-2.4	97.6
13C2-8:2FTS	5.000	5.209	4.2	104.2
13C2-PFDoDA	1.250	1.115	-10.8	89.2
13C2-PFTeDA	1.250	1.167	-6.6	93.4
13C3-PFBS	2.500	2.463	-1.5	98.5
13C3-PFHxS	2.500	2.472	-1.1	98.9
13C4-PFBA	10.000	9.542	-4.6	95.4
13C4-PFHpA	2.500	2.297	-8.1	91.9
13C5-PFHxA	2.500	2.408	-3.7	96.3
13C5-PFPeA	5.000	4.548	-9.0	91.0
13C6-PFDA	1.250	1.172	-6.3	93.7
13C7-PFUnDA	1.250	1.198	-4.2	95.8
13C8-FOSA	2.500	2.282	-8.7	91.3
13C8-PFOA	2.500	2.309	-7.7	92.3
13C8-PFOS	2.500	2.410	-3.6	96.4
13C9-PFNA	1.250	1.210	-3.2	96.8
4:2FTS	9.375	9.636	2.8	102.8
6:2FTS	9.500	10.338	8.8	108.8
8:2FTS	9.600	10.095	5.2	105.2
d3-MeFOSAA	5.000	4.584	-8.3	91.7
EtFOSAA	2.500	2.600	4.0	104.0
FOSA	2.500	2.551	2.0	102.0
MeFOSAA	2.500	2.556	2.2	102.2
PFBA	10.000	10.011	0.1	100.1
PFBS	2.218	2.316	4.4	104.4
PFDA	2.500	2.579	3.2	103.2
PFDoDA	2.500	2.634	5.4	105.4
PFDS	2.413	2.322	-3.8	96.2
PFHpA	2.500	2.513	0.5	100.5
PFHpS	2.383	2.449	2.8	102.8
PFHxA	2.500	2.493	-0.3	99.7
PFHxS	2.285	2.293	0.4	100.4
PFNA	2.500	2.632	5.3	105.3
PFNS	2.405	2.406	0.1	100.1
PFOA	2.500	2.560	2.4	102.4
PFOS	2.320	2.249	-3.1	96.9

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-CC138
Lab FileID: 4Q8153.D

PFPeA	5.000	5.181	3.6	103.6
PFPeS	2.353	2.323	-1.3	98.7
PFTeDA	2.500	2.526	1.0	101.0
PFTrDA	2.500	2.618	4.7	104.7
PFUnDA	2.500	2.564	2.6	102.6
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	9.373	-0.8	99.2
13C3-HFPO-DA	10.000	9.431	-5.7	94.3
9Cl-PF3ONS	9.350	9.291	-0.6	99.4
ADONA	9.450	8.651	-8.5	91.5
HFPO-DA	10.000	10.407	4.1	104.1
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	12.584	0.7	100.7
5:3FTCA	62.500	58.240	-6.8	93.2
7:3FTCA	62.500	57.805	-7.5	92.5
d3-MeFOSA	2.500	2.255	-9.8	90.2
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.435	-2.6	97.4
EtFOSE	25.000	25.317	1.3	101.3
MeFOSA	2.500	2.615	4.6	104.6
MeFOSE	25.000	25.332	1.3	101.3
PFDoDS	2.425	2.286	-5.7	94.3
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.524	-9.5	90.5
d7-MeFOSE	25.000	23.086	-7.7	92.3
d9-EtFOSE	25.000	23.351	-6.6	93.4
d5-EtFOSA	2.500	2.332	-6.7	93.3
NFDHA	5.000	5.104	2.1	102.1
PFMBA	5.000	5.228	4.6	104.6
PFMPA	5.000	5.219	4.4	104.4
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.525	1.7	101.7

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-CC138
Lab FileID: 4Q8170.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q138\T4Q138.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q138\4Q8128.d
2:D:\MassHunter\Data\1633\T4Q138\4Q8129.d
3:D:\MassHunter\Data\1633\T4Q138\4Q8130.d
4:D:\MassHunter\Data\1633\T4Q138\4Q8131.d
5:D:\MassHunter\Data\1633\T4Q138\4Q8132.d
6:D:\MassHunter\Data\1633\T4Q138\4Q8133.d
7:D:\MassHunter\Data\1633\T4Q138\4Q8134.d
8:D:\MassHunter\Data\1633\T4Q138\4Q8135.d

Data File: 4Q8170
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	4.941	-1.2	98.8
13C2-6:2FTS	5.000	4.932	-1.4	98.6
13C2-8:2FTS	5.000	5.068	1.4	101.4
13C2-PFDoDA	1.250	1.195	-4.4	95.6
13C2-PFTeDA	1.250	1.147	-8.2	91.8
13C3-PFBS	2.500	2.440	-2.4	97.6
13C3-PFHxS	2.500	2.517	0.7	100.7
13C4-PFBA	10.000	9.662	-3.4	96.6
13C4-PFHpA	2.500	2.289	-8.4	91.6
13C5-PFHxA	2.500	2.328	-6.9	93.1
13C5-PFPeA	5.000	4.593	-8.1	91.9
13C6-PFDA	1.250	1.207	-3.4	96.6
13C7-PFUnDA	1.250	1.273	1.8	101.8
13C8-FOSA	2.500	2.335	-6.6	93.4
13C8-PFOA	2.500	2.388	-4.5	95.5
13C8-PFOS	2.500	2.453	-1.9	98.1
13C9-PFNA	1.250	1.185	-5.2	94.8
4:2FTS	9.375	10.069	7.4	107.4
6:2FTS	9.500	9.994	5.2	105.2
8:2FTS	9.600	10.251	6.8	106.8
d3-MeFOSAA	5.000	4.734	-5.3	94.7
EtFOSAA	2.500	2.530	1.2	101.2
FOSA	2.500	2.539	1.6	101.6
MeFOSAA	2.500	2.575	3.0	103.0
PFBA	10.000	9.817	-1.8	98.2
PFBS	2.218	2.296	3.5	103.5
PFDA	2.500	2.454	-1.8	98.2
PFDoDA	2.500	2.581	3.2	103.2
PFDS	2.413	2.251	-6.7	93.3
PFHpA	2.500	2.553	2.1	102.1
PFHpS	2.383	2.281	-4.3	95.7
PFHxA	2.500	2.566	2.7	102.7
PFHxS	2.285	2.264	-0.9	99.1
PFNA	2.500	2.593	3.7	103.7
PFNS	2.405	2.482	3.2	103.2
PFOA	2.500	2.523	0.9	100.9
PFOS	2.320	2.252	-2.9	97.1

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-CC138
Lab FileID: 4Q8170.D

PFPeA	5.000	5.206	4.1	104.1
PFPeS	2.353	2.413	2.5	102.5
PFTeDA	2.500	2.614	4.6	104.6
PFTrDA	2.500	2.564	2.6	102.6
PFUnDA	2.500	2.435	-2.6	97.4
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	9.414	-0.4	99.6
13C3-HFPO-DA	10.000	9.261	-7.4	92.6
9Cl-PF3ONS	9.350	9.283	-0.7	99.3
ADONA	9.450	8.709	-7.8	92.2
HFPO-DA	10.000	10.633	6.3	106.3
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	12.159	-2.7	97.3
5:3FTCA	62.500	58.692	-6.1	93.9
7:3FTCA	62.500	55.745	-10.8	89.2
d3-MeFOSA	2.500	2.327	-6.9	93.1
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.422	-3.1	96.9
EtFOSE	25.000	25.551	2.2	102.2
MeFOSA	2.500	2.574	2.9	102.9
MeFOSE	25.000	25.606	2.4	102.4
PFDoDS	2.425	2.430	0.2	100.2
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.765	-4.7	95.3
d7-MeFOSE	25.000	22.581	-9.7	90.3
d9-EtFOSE	25.000	22.534	-9.9	90.1
d5-EtFOSA	2.500	2.381	-4.8	95.2
NFDHA	5.000	5.448	9.0	109.0
PFMBA	5.000	5.069	1.4	101.4
PFMPA	5.000	5.224	4.5	104.5
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.656	4.6	104.6

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-ECC138
Lab FileID: 4Q8173.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q138\T4Q138.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q138\4Q8128.d
2:D:\MassHunter\Data\1633\T4Q138\4Q8129.d
3:D:\MassHunter\Data\1633\T4Q138\4Q8130.d
4:D:\MassHunter\Data\1633\T4Q138\4Q8131.d
5:D:\MassHunter\Data\1633\T4Q138\4Q8132.d
6:D:\MassHunter\Data\1633\T4Q138\4Q8133.d
7:D:\MassHunter\Data\1633\T4Q138\4Q8134.d
8:D:\MassHunter\Data\1633\T4Q138\4Q8135.d

Data File: 4Q8173
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	4.767	-4.7	95.3
13C2-6:2FTS	5.000	4.579	-8.4	91.6
13C2-8:2FTS	5.000	4.386	-12.3	87.7
13C2-PFDoDA	1.250	1.169	-6.5	93.5
13C2-PFTeDA	1.250	1.128	-9.8	90.2
13C3-PFBS	2.500	2.458	-1.7	98.3
13C3-PFHxS	2.500	2.353	-5.9	94.1
13C4-PFBA	10.000	9.583	-4.2	95.8
13C4-PFHpA	2.500	2.343	-6.3	93.7
13C5-PFHxA	2.500	2.384	-4.6	95.4
13C5-PFPeA	5.000	4.728	-5.4	94.6
13C6-PFDA	1.250	1.191	-4.7	95.3
13C7-PFUnDA	1.250	1.253	0.2	100.2
13C8-FOSA	2.500	2.243	-10.3	89.7
13C8-PFOA	2.500	2.384	-4.7	95.3
13C8-PFOS	2.500	2.249	-10.0	90.0
13C9-PFNA	1.250	1.142	-8.7	91.3
4:2FTS	9.375	9.806	4.6	104.6
6:2FTS	9.500	10.410	9.6	109.6
8:2FTS	9.600	11.052	15.1	115.1
d3-MeFOSAA	5.000	4.621	-7.6	92.4
EtFOSAA	2.500	2.594	3.8	103.8
FOSA	2.500	2.548	1.9	101.9
MeFOSAA	2.500	2.488	-0.5	99.5
PFBA	10.000	9.894	-1.1	98.9
PFBS	2.218	2.191	-1.2	98.8
PFDA	2.500	2.627	5.1	105.1
PFDoDA	2.500	2.558	2.3	102.3
PFDS	2.413	2.378	-1.5	98.5
PFHpA	2.500	2.525	1.0	101.0
PFHpS	2.383	2.307	-3.2	96.8
PFHxA	2.500	2.606	4.2	104.2
PFHxS	2.285	2.346	2.7	102.7
PFNA	2.500	2.653	6.1	106.1
PFNS	2.405	2.582	7.4	107.4
PFOA	2.500	2.550	2.0	102.0
PFOS	2.320	2.391	3.1	103.1

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q138-ECC138
Lab FileID: 4Q8173.D

PFPeA	5.000	5.164	3.3	103.3
PFPeS	2.353	2.335	-0.8	99.2
PFTeDA	2.500	2.624	5.0	105.0
PFTrDA	2.500	2.653	6.1	106.1
PFUnDA	2.500	2.528	1.1	101.1
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	9.299	-1.6	98.4
13C3-HFPO-DA	10.000	9.475	-5.3	94.7
9Cl-PF3ONS	9.350	9.304	-0.5	99.5
ADONA	9.450	8.842	-6.4	93.6
HFPO-DA	10.000	10.197	2.0	102.0
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	12.281	-1.8	98.2
5:3FTCA	62.500	58.192	-6.9	93.1
7:3FTCA	62.500	55.797	-10.7	89.3
d3-MeFOSA	2.500	2.233	-10.7	89.3
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.498	-0.1	99.9
EtFOSE	25.000	25.576	2.3	102.3
MeFOSA	2.500	2.541	1.6	101.6
MeFOSE	25.000	25.134	0.5	100.5
PFDoDS	2.425	2.515	3.7	103.7
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.427	-11.5	88.5
d7-MeFOSE	25.000	21.978	-12.1	87.9
d9-EtFOSE	25.000	21.595	-13.6	86.4
d5-EtFOSA	2.500	2.233	-10.7	89.3
NFDHA	5.000	5.358	7.2	107.2
PFMBA	5.000	5.111	2.2	102.2
PFMPA	5.000	5.224	4.5	104.5
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.523	1.6	101.6

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q139-CC137
Lab FileID: 4Q8183.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q139\T4Q139.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q138\4Q8128.d
2:D:\MassHunter\Data\1633\T4Q138\4Q8129.d
3:D:\MassHunter\Data\1633\T4Q138\4Q8130.d
4:D:\MassHunter\Data\1633\T4Q138\4Q8131.d
5:D:\MassHunter\Data\1633\T4Q138\4Q8132.d
6:D:\MassHunter\Data\1633\T4Q138\4Q8133.d
7:D:\MassHunter\Data\1633\T4Q138\4Q8134.d
8:D:\MassHunter\Data\1633\T4Q138\4Q8135.d

Data File: 4Q8183
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.301	6.0	106.0
13C2-6:2FTS	5.000	5.236	4.7	104.7
13C2-8:2FTS	5.000	5.044	0.9	100.9
13C2-PFDoDA	1.250	1.288	3.0	103.0
13C2-PFTeDA	1.250	1.241	-0.7	99.3
13C3-PFBS	2.500	2.532	1.3	101.3
13C3-PFHxS	2.500	2.596	3.9	103.9
13C4-PFBA	10.000	9.874	-1.3	98.7
13C4-PFHpA	2.500	2.511	0.4	100.4
13C5-PFHxA	2.500	2.495	-0.2	99.8
13C5-PFPeA	5.000	4.986	-0.3	99.7
13C6-PFDA	1.250	1.297	3.7	103.7
13C7-PFUnDA	1.250	1.333	6.6	106.6
13C8-FOSA	2.500	2.364	-5.5	94.5
13C8-PFOA	2.500	2.524	1.0	101.0
13C8-PFOS	2.500	2.650	6.0	106.0
13C9-PFNA	1.250	1.252	0.1	100.1
4:2FTS	0.750	0.630	-16.0	84.0
6:2FTS	0.760	0.645	-15.2	84.8
8:2FTS	0.768	0.679	-11.6	88.4
d3-MeFOSAA	5.000	4.834	-3.3	96.7
EtFOSAA	0.200	0.160	-20.0	80.0
FOSA	0.200	0.257	28.5	128.5
MeFOSAA	0.200	0.158	-20.9	79.1
PFBA	0.800	0.688	-14.0	86.0
PFBS	0.177	0.148	-16.4	83.6
PFDA	0.200	0.173	-13.6	86.4
PFDoDA	0.200	0.166	-16.8	83.2
PFDS	0.193	0.157	-18.6	81.4
PFHpA	0.200	0.187	-6.7	93.3
PFHpS	0.191	0.153	-20.0	80.0
PFHxA	0.200	0.164	-17.8	82.2
PFHxS	0.183	0.193	5.7	105.7
PFNA	0.200	0.177	-11.5	88.5
PFNS	0.192	0.148	-22.8	77.2
PFOA	0.200	0.233	16.6	116.6
PFOS	0.186	0.238	28.2	128.2

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q139-CC137
Lab FileID: 4Q8183.D

PFPeA	0.400	0.343	-14.3	85.7
PFPeS	0.188	0.153	-18.4	81.6
PFTeDA	0.200	0.174	-13.2	86.8
PFTrDA	0.200	0.170	-14.9	85.1
PFUnDA	0.200	0.167	-16.5	83.5
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	0.756	0.651	-13.9	86.1
13C3-HFPO-DA	10.000	9.859	-1.4	98.6
9Cl-PF3ONS	0.748	0.674	-9.9	90.1
ADONA	0.756	0.643	-14.9	85.1
HFPO-DA	0.800	0.686	-14.3	85.7
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	1.000	0.812	-18.8	81.2
5:3FTCA	5.000	3.948	-21.0	79.0
7:3FTCA	5.000	3.860	-22.8	77.2
d3-MeFOSA	2.500	2.427	-2.9	97.1
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	0.200	0.170	-15.0	85.0
EtFOSE	2.000	1.702	-14.9	85.1
MeFOSA	0.200	0.183	-8.4	91.6
MeFOSE	2.000	2.066	3.3	103.3
PFDoDS	0.194	0.155	-20.2	79.8
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.896	-2.1	97.9
d7-MeFOSE	25.000	24.156	-3.4	96.6
d9-EtFOSE	25.000	25.145	0.6	100.6
d5-EtFOSA	2.500	2.540	1.6	101.6
NFDHA	0.400	0.351	-12.2	87.8
PFMBA	0.400	0.323	-19.2	80.8
PFMPA	0.400	0.325	-18.6	81.4
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	0.356	0.301	-15.5	84.5

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q139-CC137
Lab FileID: 4Q8184.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q139\T4Q139.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q138\4Q8128.d
2:D:\MassHunter\Data\1633\T4Q138\4Q8129.d
3:D:\MassHunter\Data\1633\T4Q138\4Q8130.d
4:D:\MassHunter\Data\1633\T4Q138\4Q8131.d
5:D:\MassHunter\Data\1633\T4Q138\4Q8132.d
6:D:\MassHunter\Data\1633\T4Q138\4Q8133.d
7:D:\MassHunter\Data\1633\T4Q138\4Q8134.d
8:D:\MassHunter\Data\1633\T4Q138\4Q8135.d

Data File: 4Q8184
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	4.774	-4.5	95.5
13C2-6:2FTS	5.000	5.003	0.1	100.1
13C2-8:2FTS	5.000	4.661	-6.8	93.2
13C2-PFDoDA	1.250	1.195	-4.4	95.6
13C2-PFTeDA	1.250	1.168	-6.6	93.4
13C3-PFBS	2.500	2.390	-4.4	95.6
13C3-PFHxS	2.500	2.264	-9.4	90.6
13C4-PFBA	10.000	9.522	-4.8	95.2
13C4-PFHpA	2.500	2.431	-2.7	97.3
13C5-PFHxA	2.500	2.385	-4.6	95.4
13C5-PFPeA	5.000	4.983	-0.3	99.7
13C6-PFDA	1.250	1.190	-4.8	95.2
13C7-PFUnDA	1.250	1.216	-2.7	97.3
13C8-FOSA	2.500	2.349	-6.0	94.0
13C8-PFOA	2.500	2.365	-5.4	94.6
13C8-PFOS	2.500	2.344	-6.3	93.7
13C9-PFNA	1.250	1.192	-4.7	95.3
4:2FTS	9.375	9.783	4.4	104.4
6:2FTS	9.500	9.975	5.0	105.0
8:2FTS	9.600	10.255	6.8	106.8
d3-MeFOSAA	5.000	4.643	-7.1	92.9
EtFOSAA	2.500	2.670	6.8	106.8
FOSA	2.500	3.621	# 44.8	144.8
MeFOSAA	2.500	2.582	3.3	103.3
PFBA	10.000	10.118	1.2	101.2
PFBS	2.218	2.139	-3.6	96.4
PFDA	2.500	2.550	2.0	102.0
PFDoDA	2.500	2.547	1.9	101.9
PFDS	2.413	2.431	0.8	100.8
PFHpA	2.500	2.570	2.8	102.8
PFHpS	2.383	2.505	5.1	105.1
PFHxA	2.500	2.582	3.3	103.3
PFHxS	2.285	2.840	24.3	124.3
PFNA	2.500	2.927	17.1	117.1
PFNS	2.405	2.504	4.1	104.1
PFOA	2.500	3.206	28.3	128.3
PFOS	2.320	2.932	26.4	126.4

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q139-CC137
Lab FileID: 4Q8184.D

PFPeA	5.000	5.178	3.6	103.6
PFPeS	2.353	2.369	0.7	100.7
PFTeDA	2.500	2.573	2.9	102.9
PFTrDA	2.500	2.539	1.6	101.6
PFUnDA	2.500	2.531	1.2	101.2
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	10.045	6.3	106.3
13C3-HFPO-DA	10.000	9.365	-6.3	93.7
9Cl-PF3ONS	9.350	10.008	7.0	107.0
ADONA	9.450	9.777	3.5	103.5
HFPO-DA	10.000	10.332	3.3	103.3
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	11.730	-6.2	93.8
5:3FTCA	62.500	60.734	-2.8	97.2
7:3FTCA	62.500	59.446	-4.9	95.1
d3-MeFOSA	2.500	2.297	-8.1	91.9
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.496	-0.2	99.8
EtFOSE	25.000	25.232	0.9	100.9
MeFOSA	2.500	2.605	4.2	104.2
MeFOSE	25.000	31.826	27.3	127.3
PFDoDS	2.425	2.470	1.8	101.8
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.550	-9.0	91.0
d7-MeFOSE	25.000	22.950	-8.2	91.8
d9-EtFOSE	25.000	23.678	-5.3	94.7
d5-EtFOSA	2.500	2.381	-4.7	95.3
NFDHA	5.000	5.185	3.7	103.7
PFMBA	5.000	4.957	-0.9	99.1
PFMPA	5.000	5.084	1.7	101.7
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.551	2.3	102.3

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q139-CC137
Lab FileID: 4Q8200.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q139\T4Q139.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q138\4Q8128.d
2:D:\MassHunter\Data\1633\T4Q138\4Q8129.d
3:D:\MassHunter\Data\1633\T4Q138\4Q8130.d
4:D:\MassHunter\Data\1633\T4Q138\4Q8131.d
5:D:\MassHunter\Data\1633\T4Q138\4Q8132.d
6:D:\MassHunter\Data\1633\T4Q138\4Q8133.d
7:D:\MassHunter\Data\1633\T4Q138\4Q8134.d
8:D:\MassHunter\Data\1633\T4Q138\4Q8135.d

Data File: 4Q8200
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.039	0.8	100.8
13C2-6:2FTS	5.000	5.070	1.4	101.4
13C2-8:2FTS	5.000	4.856	-2.9	97.1
13C2-PFDoDA	1.250	1.150	-8.0	92.0
13C2-PFTeDA	1.250	1.194	-4.5	95.5
13C3-PFBS	2.500	2.379	-4.8	95.2
13C3-PFHxS	2.500	2.363	-5.5	94.5
13C4-PFBA	10.000	9.572	-4.3	95.7
13C4-PFHpA	2.500	2.456	-1.7	98.3
13C5-PFHxA	2.500	2.424	-3.0	97.0
13C5-PFPeA	5.000	4.749	-5.0	95.0
13C6-PFDA	1.250	1.199	-4.0	96.0
13C7-PFUnDA	1.250	1.238	-1.0	99.0
13C8-FOSA	2.500	2.270	-9.2	90.8
13C8-PFOA	2.500	2.391	-4.4	95.6
13C8-PFOS	2.500	2.373	-5.1	94.9
13C9-PFNA	1.250	1.166	-6.8	93.2
4:2FTS	9.375	9.967	6.3	106.3
6:2FTS	9.500	9.564	0.7	100.7
8:2FTS	9.600	10.861	13.1	113.1
d3-MeFOSAA	5.000	4.667	-6.7	93.3
EtFOSAA	2.500	2.507	0.3	100.3
FOSA	2.500	3.575	# 43.0	143.0
MeFOSAA	2.500	2.570	2.8	102.8
PFBA	10.000	10.054	0.5	100.5
PFBS	2.218	2.236	0.8	100.8
PFDA	2.500	2.550	2.0	102.0
PFDoDA	2.500	2.647	5.9	105.9
PFDS	2.413	2.268	-6.0	94.0
PFHpA	2.500	2.480	-0.8	99.2
PFHpS	2.383	2.450	2.8	102.8
PFHxA	2.500	2.546	1.8	101.8
PFHxS	2.285	2.801	22.6	122.6
PFNA	2.500	2.953	18.1	118.1
PFNS	2.405	2.481	3.2	103.2
PFOA	2.500	3.184	27.3	127.3
PFOS	2.320	2.915	25.7	125.7

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q139-CC137
Lab FileID: 4Q8200.D

PFPeA	5.000	5.161	3.2	103.2
PFPeS	2.353	2.376	1.0	101.0
PFTeDA	2.500	2.524	1.0	101.0
PFTrDA	2.500	2.591	3.7	103.7
PFUnDA	2.500	2.601	4.0	104.0
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	9.171	-3.0	97.0
13C3-HFPO-DA	10.000	9.747	-2.5	97.5
9Cl-PF3ONS	9.350	9.756	4.3	104.3
ADONA	9.450	9.204	-2.6	97.4
HFPO-DA	10.000	10.492	4.9	104.9
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	12.126	-3.0	97.0
5:3FTCA	62.500	59.796	-4.3	95.7
7:3FTCA	62.500	57.007	-8.8	91.2
d3-MeFOSA	2.500	2.311	-7.6	92.4
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.463	-1.5	98.5
EtFOSE	25.000	25.475	1.9	101.9
MeFOSA	2.500	2.580	3.2	103.2
MeFOSE	25.000	31.199	24.8	124.8
PFDoDS	2.425	2.379	-1.9	98.1
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.692	-6.2	93.8
d7-MeFOSE	25.000	24.073	-3.7	96.3
d9-EtFOSE	25.000	24.579	-1.7	98.3
d5-EtFOSA	2.500	2.408	-3.7	96.3
NFDHA	5.000	4.906	-1.9	98.1
PFMBA	5.000	4.956	-0.9	99.1
PFMPA	5.000	5.201	4.0	104.0
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.599	3.4	103.4

CC Criteria: +/- 30%

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q140-ICC140
Lab FileID: 4Q8234.D

Initial Calibration Report

Method Path	D:\MassHunter\Methods
Method File	050225_1633_T4Q140.quantmethod.xml
Batch Name	D:\MassHunter\Data\1633\T4Q140\QuantResults\T4Q140.batch.bin
Last Calib Update	5/5/2025 1:16:15 AM

Level Name	Calibration Files	Acq. Date-Time	Level Last Update Time
1	D:\MassHunter\Data\1633\T4Q140\4Q8231.d	5/2/2025 2:00:12 PM	5/5/2025 1:16:15 AM
2	D:\MassHunter\Data\1633\T4Q140\4Q8232.d	5/2/2025 2:13:45 PM	5/5/2025 1:16:15 AM
3	D:\MassHunter\Data\1633\T4Q140\4Q8233.d	5/2/2025 2:27:20 PM	5/5/2025 1:16:15 AM
4	D:\MassHunter\Data\1633\T4Q140\4Q8234.d	5/2/2025 2:40:52 PM	5/5/2025 1:16:15 AM
5	D:\MassHunter\Data\1633\T4Q140\4Q8235.d	5/2/2025 2:54:26 PM	5/5/2025 1:16:15 AM
6	D:\MassHunter\Data\1633\T4Q140\4Q8236.d	5/2/2025 3:07:59 PM	5/5/2025 1:16:15 AM
7	D:\MassHunter\Data\1633\T4Q140\4Q8237.d	5/2/2025 3:21:33 PM	5/5/2025 1:16:15 AM
8	D:\MassHunter\Data\1633\T4Q140\4Q8238.d	5/2/2025 3:35:08 PM	5/5/2025 1:16:15 AM

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
I M4-PFBA						ISTD					
T PFBA	Avg RF	0.2744	0.2838	0.3211	0.3236	0.3311	0.3349	0.3797	0.3628	0.3264	10.878
I M5-PFPeA						ISTD					
T PFMPA	Avg RF	0.3698	0.3888	0.4357	0.4412	0.4464	0.4813	0.5329	0.5140	0.4513	12.536
T 3:3FTCA	Avg RF	0.0388	0.0408	0.0443	0.0451	0.0451	0.0515	0.0574	0.0567	0.0475	14.723
T PFPeA	Avg RF	0.6263	0.6699	0.7569	0.7723	0.7627	0.8344	0.9199	0.8903	0.7791	12.956
T PFMBA	Avg RF	0.4224	0.4523	0.5109	0.5284	0.5250	0.5624	0.6236	0.5986	0.5279	12.908
I M5-PFHxA						ISTD					
T NFDHA	Avg RF	0.0854	0.0932	0.1104	0.1081	0.1098	0.1279	0.1412	0.1295	0.1132	16.636
T PFHxA	Avg RF	0.8187	0.8971	0.9536	0.9907	0.9877	1.0906	1.2097	1.1566	1.0131	12.988
T PFEESA	Avg RF	0.7463	0.8498	0.9789	0.9610	0.9222	1.0302	1.1255	1.0639	0.9597	12.620
T 5:3FTCA	Avg RF	0.1608	0.1723	0.1881	0.1832	0.1793	0.2002	0.2301	0.2526	0.1958	15.787
T 7:3FTCA	Avg RF	0.2343	0.2492	0.2710	0.2587	0.2548	0.2851	0.3435	0.3492	0.2807	15.379
I M4-PFHpA						ISTD					
T PFHpA	Avg RF	1.1094	1.2182	1.4070	1.3804	1.3993	1.5502	1.7163	1.6801	1.4326	14.701
I M8-PFOA						ISTD					
T PFOA	Avg RF	0.7487	0.6882	0.7813	0.7806	0.7945	0.8801	0.9791	0.9002	0.8191	11.443
I M9-PFNA						ISTD					
T PFNA	Avg RF	0.5635	0.6383	0.6805	0.7112	0.7237	0.7930	0.8371	0.8211	0.7210	13.062
I M6-PFDA						ISTD					
T PFDA	Avg RF	0.7319	0.7371	0.8439	0.8693	0.8645	0.9901	1.0822	1.0075	0.8908	14.222
I M7-PFUnDA						ISTD					
T PFUnDA	Avg RF	0.5942	0.6426	0.7318	0.7425	0.7474	0.8075	0.8751	0.8521	0.7491	12.917
T PFDS	Avg RF	0.1034	0.0866	0.1052	0.1041	0.1059	0.1193	0.1325	0.1304	0.1109	13.930

Generated at 1:16 AM on 5/5/2025

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q140-ICC140
Lab FileID: 4Q8234.D

Initial Calibration Report

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
I M2-PFDoDA						ISTD					
T PFDoDA	Avg RF	0.7930	0.8635	0.9734	0.9794	0.9575	1.0609	1.1597	1.0745	0.9827	11.966
T PFTrDA	Avg RF	0.8743	0.9577	1.1076	1.1044	1.0823	1.1808	1.2393	1.1143	1.0826	10.776
I M2-PFTeDA						ISTD					
T PFTeDA	Avg RF	1.0903	1.1962	1.3098	1.3500	1.3287	1.4466	1.5911	1.5496	1.3578	12.448
I M8-FOSA						ISTD					
T FOSA	Avg RF	0.7717	0.7876	0.8673	0.8855	0.8516	0.9802	1.0770	0.9999	0.9026	11.874
I M3-PFBS						ISTD					
T PFBS	Avg RF	2.2618	2.3294	2.6662	2.7117	2.8636	2.9899	3.4125	3.1545	2.7987	14.020
T PFPeS	Avg RF	2.4140	2.5869	2.9599	3.0260	3.2084	3.2776	3.8337	3.5603	3.1083	15.148
I M3-PFHxS						ISTD					
T PFHxS	Avg RF	1.9242	1.8485	2.0636	2.1510	2.1868	2.3210	2.6063	2.3549	2.1820	11.252
T PFHpS	Avg RF	1.8661	1.8271	2.0853	2.0565	2.1566	2.3370	2.5631	2.3413	2.1541	11.637
I M8-PFOS						ISTD					
T PFOS	Avg RF	1.7941	1.7581	1.9753	1.8549	1.9303	2.1096	2.3747	2.1797	1.9971	10.572
T PFNS	Avg RF	1.3707	1.5593	1.6338	1.7558	1.7474	1.8050	2.0967	1.8388	1.7259	12.393
T PFDoDS	Avg RF	0.9369	1.0216	1.0875	1.0687	1.0733	1.1453	1.3163	1.1764	1.1033	10.231
I M2-4:2FTS						ISTD					
T 4:2FTS	Avg RF	7.1197	7.7319	8.7514	8.4292	8.3733	9.4415	9.4143	9.1305	8.5490	9.565
I M2-6:2FTS						ISTD					
T 6:2FTS	Avg RF	3.7652	4.3429	4.7392	4.8389	5.2550	5.3165	5.5401	4.8563	4.8318	11.868
I M2-8:2FTS						ISTD					
T 8:2FTS	Avg RF	2.9342	3.1665	3.4213	4.1356	3.6344	4.0885	4.2373	3.5372	3.6444	13.053
I M3-MeFOSAA						ISTD					
T MeFOSAA	Avg RF	0.6190	0.7568	0.8122	0.7891	0.8234	0.9189	1.0083	0.9380	0.8332	14.574
I M3-HFPO-DA						ISTD					
T HFPO-DA	Avg RF	0.8573	0.9063	0.9810	1.0643	1.0333	1.1153	1.1904	1.1432	1.0364	11.193
T ADONA	Avg RF	6.8849	6.9662	7.6066	7.7837	7.7654	8.7652	10.82	8.0566	8.0808	15.543
T 9Cl-PF3ONS	Avg RF	2.0920	2.2465	2.3357	2.4026	2.3327	2.4544	2.6239	2.4957	2.3729	6.823
T 11Cl-PF3OUdS	Avg RF	1.8015	1.9097	2.0892	2.1365	2.0793	2.1967	2.3442	2.2369	2.0992	8.346
I M5-EtFOSAA						ISTD					
T EtFOSAA	Avg RF	0.7465	0.7712	0.8511	0.8624	0.8816	0.9852	1.0927	1.0394	0.9038	13.744
I M7-MeFOSE						ISTD					
T MeFOSE	Avg RF	0.8513	0.9522	1.0213	1.0445	1.0447	1.1315	1.2421	1.2338	1.0652	12.564
I M9-EtFOSE						ISTD					

Generated at 1:16 AM on 5/5/2025

Initial Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q140-ICC140
Lab FileID: 4Q8234.D

Initial Calibration Report

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
T EtFOSE	Avg RF	0.8934	0.9741	1.0638	1.0901	1.0677	1.1764	1.3156	1.3359	1.1146	13.868
I M5-EtFOSA						ISTD					
T EtFOSA	Avg RF	0.8198	0.8567	0.9295	0.9671	1.0021	1.1016	1.2398	1.1581	1.0093	14.561
I M3-MeFOSA						ISTD					
T MeFOSA	Avg RF	1.1777	1.1324	1.2732	1.3137	1.3184	1.4485	1.5532	1.3833	1.3251	10.378
I 13C4-PFOS						ISTD					
S d3-MeFOSAA	Avg RF	1.7065	1.7464	1.6454	1.6309	1.7087	1.6263	1.5768	1.8050	1.6808	4.423
S 13C8-PFOS	Avg RF	0.5904	0.6096	0.5730	0.5739	0.6014	0.5892	0.5475	0.6652	0.5938	5.838
S d5-EtFOSAA	Avg RF	1.3403	1.3827	1.2998	1.3153	1.3668	1.3015	1.2776	1.4516	1.3420	4.231
S 13C8-FOSA	Avg RF	2.7255	2.8048	2.6216	2.5794	2.6939	2.5650	2.5064	3.0025	2.6874	5.938
S d7-MeFOSE	Avg RF	1.5238	1.5357	1.4359	1.3744	1.4223	1.3298	1.2997	1.4675	1.4236	6.011
S d3-MeFOSA	Avg RF	1.2747	1.3163	1.2481	1.1997	1.2625	1.2022	1.2410	1.5406	1.2856	8.539
S d9-EtFOSE	Avg RF	1.8691	1.8916	1.7764	1.6898	1.7802	1.6478	1.5590	1.6946	1.7386	6.464
S d5-EtFOSA	Avg RF	1.3997	1.4440	1.3804	1.3438	1.3784	1.3269	1.2874	1.5242	1.3856	5.300
I 13C3-PFBA						ISTD					
S 13C4-PFBA	Avg RF	1.1988	1.2283	1.1682	1.1304	1.1918	1.1247	1.1167	1.2844	1.1804	4.895
I 18O2-PFHxS						ISTD					
S 13C2-4:2FTS	Avg RF	0.1587	0.1593	0.1441		0.1577	0.1241	0.1177	0.1113	0.1390	15.026
S 13C3-PFBS	Avg RF	0.6341	0.6707	0.5931	0.5865	0.6249	0.5923	0.5639	0.6515	0.6146	5.937
S 13C2-6:2FTS	Avg RF	0.3615	0.3439	0.3173	0.3033	0.3012	0.2670	0.2501	0.2623	0.3008	13.188
S 13C3-PFHxS	Avg RF	0.8599	0.9501	0.8413	0.8466	0.9343	0.8290	0.8269	0.9757	0.8830	6.822
S 13C2-8:2FTS	Avg RF	0.3964	0.3939	0.3878	0.3293	0.3979	0.3197	0.3074	0.3472	0.3599	10.595
I 13C4-PFOA						ISTD					
S 13C8-PFOA	Avg RF	1.0557	1.0677	1.0013	0.9940	1.0419	0.9860	0.9684	1.1208	1.0295	4.970
I 13C2-PFDA						ISTD					
S 13C6-PFDA	Avg RF	1.2216	1.2864	1.2645	1.1943	1.2355	1.1160	1.0728	1.2774	1.2086	6.409
S 13C7-PFUnDA	Avg RF	1.5144	1.6176	1.5511	1.4880	1.5293	1.4010	1.3349	1.4014	1.4797	6.317
S 13C2-PFDoDA	Avg RF	1.4592	1.4661	1.4193	1.3444	1.4223	1.2927	1.2648	1.5012	1.3962	6.159
S 13C2-PFTeDA	Avg RF	1.2416	1.2541	1.2136	1.1455	1.1741	1.1101	1.0709	1.2288	1.1798	5.624
I 13C5-PFNA						ISTD					
S 13C9-PFNA	Avg RF	1.1275	1.1270	1.0842	1.0247	1.0951	1.0154	1.0241	1.1759	1.0842	5.414
I 13C2-PFHxA						ISTD					
S 13C5-PFPeA	Avg RF	0.8239	0.8364	0.7940	0.7607	0.8324	0.7817	0.7518	0.8353	0.8020	4.320
S 13C5-PFHxA	Avg RF	1.1142	1.1462	1.0693	1.0478	1.1391	1.0690	1.0255	1.1778	1.0986	4.875
S 13C3-HFPO-DA	Avg RF	0.3830	0.4040	0.3897	0.3639	0.4003	0.3825	0.3786	0.4294	0.3914	5.069
S 13C4-PFHpA	Avg RF	1.2058	1.2690	1.1853	1.1544	1.2170	1.1338	1.0990	1.2551	1.1899	4.940

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Generated at 1:16 AM on 5/5/2025

Initial Calibration Verification

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q140-ICV140
Lab FileID: 4Q8240.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q140\T4Q140.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q140\4Q8231.d
2:D:\MassHunter\Data\1633\T4Q140\4Q8232.d
3:D:\MassHunter\Data\1633\T4Q140\4Q8233.d
4:D:\MassHunter\Data\1633\T4Q140\4Q8234.d
5:D:\MassHunter\Data\1633\T4Q140\4Q8235.d
6:D:\MassHunter\Data\1633\T4Q140\4Q8236.d
7:D:\MassHunter\Data\1633\T4Q140\4Q8237.d
8:D:\MassHunter\Data\1633\T4Q140\4Q8238.d

Data File: 4Q8240
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.222	4.4	104.4
13C2-6:2FTS	5.000	5.293	5.9	105.9
13C2-8:2FTS	5.000	5.218	4.4	104.4
13C2-PFDoDA	1.250	1.286	2.9	102.9
13C2-PFTeDA	1.250	1.207	-3.4	96.6
13C3-PFBS	2.500	2.589	3.6	103.6
13C3-PFHxS	2.500	2.509	0.3	100.3
13C4-PFBA	10.000	10.245	2.4	102.4
13C4-PFHpA	2.500	2.507	0.3	100.3
13C5-PFHxA	2.500	2.544	1.8	101.8
13C5-PFPeA	5.000	5.183	3.7	103.7
13C6-PFDA	1.250	1.293	3.5	103.5
13C7-PFUnDA	1.250	1.270	1.6	101.6
13C8-FOSA	2.500	2.519	0.8	100.8
13C8-PFOA	2.500	2.537	1.5	101.5
13C8-PFOS	2.500	2.690	7.6	107.6
13C9-PFNA	1.250	1.314	5.1	105.1
4:2FTS	9.375	9.211	-1.7	98.3
6:2FTS	9.500	9.207	-3.1	96.9
8:2FTS	9.600	9.855	2.7	102.7
d3-MeFOSAA	5.000	5.226	4.5	104.5
EtFOSAA	2.500	2.292	-8.3	91.7
FOSA	2.500	2.339	-6.4	93.6
MeFOSAA	2.500	2.469	-1.2	98.8
PFBA	10.000	9.197	-8.0	92.0
PFBS	2.218	2.014	-9.2	90.8
PFDA	2.500	2.343	-6.3	93.7
PFDoDA	2.500	2.278	-8.9	91.1
PFDS	2.413	2.270	-5.9	94.1
PFHpA	2.500	2.368	-5.3	94.7
PFHpS	2.383	2.248	-5.7	94.3
PFHxA	2.500	2.311	-7.5	92.5
PFHxS	2.285	2.168	-5.1	94.9
PFNA	2.500	2.256	-9.8	90.2
PFNS	2.405	2.111	-12.2	87.8
PFOA	2.500	2.303	-7.9	92.1
PFOS	2.320	2.000	-13.8	86.2

Initial Calibration Verification

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q140-ICV140
Lab FileID: 4Q8240.D

PFPeA	5.000	4.673	-6.5	93.5
PFPeS	2.353	2.091	-11.1	88.9
PFTeDA	2.500	2.444	-2.2	97.8
PFTrDA	2.500	2.340	-6.4	93.6
PFUnDA	2.500	2.422	-3.1	96.9
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	8.542	-9.6	90.4
13C3-HFPO-DA	10.000	10.388	3.9	103.9
9Cl-PF3ONS	9.350	8.366	-10.5	89.5
ADONA	9.450	8.149	-13.8	86.2
HFPO-DA	10.000	9.460	-5.4	94.6
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	11.262	-9.9	90.1
5:3FTCA	62.500	54.300	-13.1	86.9
7:3FTCA	62.500	52.493	-16.0	84.0
d3-MeFOSA	2.500	2.520	0.8	100.8
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.337	-6.5	93.5
EtFOSE	25.000	23.258	-7.0	93.0
MeFOSA	2.500	2.381	-4.8	95.2
MeFOSE	25.000	23.355	-6.6	93.4
PFDoDS	2.425	2.111	-13.0	87.0
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	5.127	2.5	102.5
d7-MeFOSE	25.000	24.801	-0.8	99.2
d9-EtFOSE	25.000	25.067	0.3	100.3
d5-EtFOSA	2.500	2.596	3.9	103.9
NFDHA	5.000	4.836	-3.3	96.7
PFMBA	5.000	4.564	-8.7	91.3
PFMPA	5.000	4.587	-8.3	91.7
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.160	-6.5	93.5

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q140-CC140
Lab FileID: 4Q8241.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q140\T4Q140.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q140\4Q8231.d
2:D:\MassHunter\Data\1633\T4Q140\4Q8232.d
3:D:\MassHunter\Data\1633\T4Q140\4Q8233.d
4:D:\MassHunter\Data\1633\T4Q140\4Q8234.d
5:D:\MassHunter\Data\1633\T4Q140\4Q8235.d
6:D:\MassHunter\Data\1633\T4Q140\4Q8236.d
7:D:\MassHunter\Data\1633\T4Q140\4Q8237.d
8:D:\MassHunter\Data\1633\T4Q140\4Q8238.d

Data File: 4Q8241
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.027	0.5	100.5
13C2-6:2FTS	5.000	5.185	3.7	103.7
13C2-8:2FTS	5.000	5.077	1.5	101.5
13C2-PFDoDA	1.250	1.203	-3.7	96.3
13C2-PFTeDA	1.250	1.125	-10.0	90.0
13C3-PFBS	2.500	2.533	1.3	101.3
13C3-PFHxS	2.500	2.478	-0.9	99.1
13C4-PFBA	10.000	9.541	-4.6	95.4
13C4-PFHpA	2.500	2.376	-5.0	95.0
13C5-PFHxA	2.500	2.373	-5.1	94.9
13C5-PFPeA	5.000	4.759	-4.8	95.2
13C6-PFDA	1.250	1.204	-3.7	96.3
13C7-PFUnDA	1.250	1.219	-2.5	97.5
13C8-FOSA	2.500	2.262	-9.5	90.5
13C8-PFOA	2.500	2.389	-4.4	95.6
13C8-PFOS	2.500	2.387	-4.5	95.5
13C9-PFNA	1.250	1.182	-5.4	94.6
4:2FTS	9.375	9.708	3.6	103.6
6:2FTS	9.500	9.459	-0.4	99.6
8:2FTS	9.600	10.229	6.5	106.5
d3-MeFOSAA	5.000	4.793	-4.1	95.9
EtFOSAA	2.500	2.575	3.0	103.0
FOSA	2.500	2.462	-1.5	98.5
MeFOSAA	2.500	2.426	-3.0	97.0
PFBA	10.000	9.607	-3.9	96.1
PFBS	2.218	2.106	-5.1	94.9
PFDA	2.500	2.497	-0.1	99.9
PFDoDA	2.500	2.475	-1.0	99.0
PFDS	2.413	2.369	-1.8	98.2
PFHpA	2.500	2.473	-1.1	98.9
PFHpS	2.383	2.392	0.4	100.4
PFHxA	2.500	2.488	-0.5	99.5
PFHxS	2.285	2.305	0.9	100.9
PFNA	2.500	2.545	1.8	101.8
PFNS	2.405	2.466	2.5	102.5
PFOA	2.500	2.422	-3.1	96.9
PFOS	2.320	2.202	-5.1	94.9

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q140-CC140
Lab FileID: 4Q8241.D

PFPeA	5.000	5.011	0.2	100.2
PFPeS	2.353	2.225	-5.4	94.6
PFTeDA	2.500	2.578	3.1	103.1
PFTrDA	2.500	2.505	0.2	100.2
PFUnDA	2.500	2.533	1.3	101.3
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	8.886	-6.0	94.0
13C3-HFPO-DA	10.000	9.781	-2.2	97.8
9Cl-PF3ONS	9.350	8.944	-4.3	95.7
ADONA	9.450	8.696	-8.0	92.0
HFPO-DA	10.000	9.869	-1.3	98.7
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	12.170	-2.6	97.4
5:3FTCA	62.500	58.386	-6.6	93.4
7:3FTCA	62.500	55.822	-10.7	89.3
d3-MeFOSA	2.500	2.281	-8.8	91.2
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.429	-2.8	97.2
EtFOSE	25.000	24.594	-1.6	98.4
MeFOSA	2.500	2.471	-1.2	98.8
MeFOSE	25.000	24.716	-1.1	98.9
PFDoDS	2.425	2.258	-6.9	93.1
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	4.601	-8.0	92.0
d7-MeFOSE	25.000	22.200	-11.2	88.8
d9-EtFOSE	25.000	22.605	-9.6	90.4
d5-EtFOSA	2.500	2.348	-6.1	93.9
NFDHA	5.000	5.181	3.6	103.6
PFMBA	5.000	4.941	-1.2	98.8
PFMPA	5.000	4.905	-1.9	98.1
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.538	2.0	102.0

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q140-CC140
Lab FileID: 4Q8242.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q140\T4Q140.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q140\4Q8231.d
2:D:\MassHunter\Data\1633\T4Q140\4Q8232.d
3:D:\MassHunter\Data\1633\T4Q140\4Q8233.d
4:D:\MassHunter\Data\1633\T4Q140\4Q8234.d
5:D:\MassHunter\Data\1633\T4Q140\4Q8235.d
6:D:\MassHunter\Data\1633\T4Q140\4Q8236.d
7:D:\MassHunter\Data\1633\T4Q140\4Q8237.d
8:D:\MassHunter\Data\1633\T4Q140\4Q8238.d

Data File: 4Q8242
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	5.936	18.7	118.7
13C2-6:2FTS	5.000	5.643	12.9	112.9
13C2-8:2FTS	5.000	5.506	10.1	110.1
13C2-PFDoDA	1.250	1.194	-4.5	95.5
13C2-PFTeDA	1.250	1.155	-7.6	92.4
13C3-PFBS	2.500	2.813	12.5	112.5
13C3-PFHxS	2.500	2.631	5.2	105.2
13C4-PFBA	10.000	10.034	0.3	100.3
13C4-PFHpA	2.500	2.544	1.8	101.8
13C5-PFHxA	2.500	2.506	0.2	100.2
13C5-PFPeA	5.000	5.232	4.6	104.6
13C6-PFDA	1.250	1.257	0.5	100.5
13C7-PFUnDA	1.250	1.298	3.8	103.8
13C8-FOSA	2.500	2.616	4.6	104.6
13C8-PFOA	2.500	2.525	1.0	101.0
13C8-PFOS	2.500	2.658	6.3	106.3
13C9-PFNA	1.250	1.259	0.7	100.7
4:2FTS	0.750	0.584	-22.1	77.9
6:2FTS	0.760	0.619	-18.6	81.4
8:2FTS	0.768	0.639	-16.8	83.2
d3-MeFOSAA	5.000	5.511	10.2	110.2
EtFOSAA	0.200	0.175	-12.3	87.7
FOSA	0.200	0.173	-13.6	86.4
MeFOSAA	0.200	0.172	-14.1	85.9
PFBA	0.800	0.676	-15.5	84.5
PFBS	0.177	0.138	-22.1	77.9
PFDA	0.200	0.166	-16.8	83.2
PFDoDA	0.200	0.164	-18.2	81.8
PFDS	0.193	0.151	-21.8	78.2
PFHpA	0.200	0.167	-16.3	83.7
PFHpS	0.191	0.148	-22.6	77.4
PFHxA	0.200	0.178	-11.1	88.9
PFHxS	0.183	0.145	-20.6	79.4
PFNA	0.200	0.169	-15.7	84.3
PFNS	0.192	0.147	-23.5	76.5
PFOA	0.200	0.180	-9.9	90.1
PFOS	0.186	0.140	-24.8	75.2

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q140-CC140
Lab FileID: 4Q8242.D

PFPeA	0.400	0.321	-19.7	80.3
PFPeS	0.188	0.145	-22.6	77.4
PFTeDA	0.200	0.167	-16.3	83.7
PFTrDA	0.200	0.172	-14.0	86.0
PFUnDA	0.200	0.160	-19.9	80.1
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	0.756	0.576	-23.8	76.2
13C3-HFPO-DA	10.000	10.435	4.4	104.4
9Cl-PF3ONS	0.748	0.589	-21.3	78.7
ADONA	0.756	0.583	-22.9	77.1
HFPO-DA	0.800	0.665	-16.9	83.1
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	1.000	0.808	-19.2	80.8
5:3FTCA	5.000	4.005	-19.9	80.1
7:3FTCA	5.000	3.820	-23.6	76.4
d3-MeFOSA	2.500	2.607	4.3	104.3
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	0.200	0.168	-16.2	83.8
EtFOSE	2.000	1.605	-19.7	80.3
MeFOSA	0.200	0.170	-15.2	84.8
MeFOSE	2.000	1.671	-16.4	83.6
PFDoDS	0.194	0.153	-21.3	78.7
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	5.402	8.0	108.0
d7-MeFOSE	25.000	25.229	0.9	100.9
d9-EtFOSE	25.000	25.635	2.5	102.5
d5-EtFOSA	2.500	2.671	6.8	106.8
NFDHA	0.400	0.398	-0.6	99.4
PFMBA	0.400	0.323	-19.2	80.8
PFMPA	0.400	0.313	-21.7	78.3
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	0.356	0.302	-15.3	84.7

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q140-CC140
Lab FileID: 4Q8258.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1633\T4Q140\T4Q140.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1633\T4Q140\4Q8231.d
2:D:\MassHunter\Data\1633\T4Q140\4Q8232.d
3:D:\MassHunter\Data\1633\T4Q140\4Q8233.d
4:D:\MassHunter\Data\1633\T4Q140\4Q8234.d
5:D:\MassHunter\Data\1633\T4Q140\4Q8235.d
6:D:\MassHunter\Data\1633\T4Q140\4Q8236.d
7:D:\MassHunter\Data\1633\T4Q140\4Q8237.d
8:D:\MassHunter\Data\1633\T4Q140\4Q8238.d

Data File: 4Q8258
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-4:2FTS	5.000	4.774	-4.5	95.5
13C2-6:2FTS	5.000	5.091	1.8	101.8
13C2-8:2FTS	5.000	4.771	-4.6	95.4
13C2-PFDoDA	1.250	1.206	-3.5	96.5
13C2-PFTeDA	1.250	1.108	-11.3	88.7
13C3-PFBS	2.500	2.633	5.3	105.3
13C3-PFHxS	2.500	2.560	2.4	102.4
13C4-PFBA	10.000	9.441	-5.6	94.4
13C4-PFHpA	2.500	2.444	-2.3	97.7
13C5-PFHxA	2.500	2.413	-3.5	96.5
13C5-PFPeA	5.000	4.818	-3.6	96.4
13C6-PFDA	1.250	1.168	-6.6	93.4
13C7-PFUnDA	1.250	1.247	-0.3	99.7
13C8-FOSA	2.500	2.401	-4.0	96.0
13C8-PFOA	2.500	2.362	-5.5	94.5
13C8-PFOS	2.500	2.398	-4.1	95.9
13C9-PFNA	1.250	1.179	-5.6	94.4
4:2FTS	9.375	10.402	11.0	111.0
6:2FTS	9.500	9.516	0.2	100.2
8:2FTS	9.600	10.932	13.9	113.9
d3-MeFOSAA	5.000	5.112	2.2	102.2
EtFOSAA	2.500	2.421	-3.2	96.8
FOSA	2.500	2.448	-2.1	97.9
MeFOSAA	2.500	2.514	0.5	100.5
PFBA	10.000	9.344	-6.6	93.4
PFBS	2.218	2.047	-7.7	92.3
PFDA	2.500	2.541	1.7	101.7
PFDoDA	2.500	2.351	-6.0	94.0
PFDS	2.413	2.259	-6.4	93.6
PFHpA	2.500	2.469	-1.3	98.7
PFHpS	2.383	2.143	-10.1	89.9
PFHxA	2.500	2.499	0.0	100.0
PFHxS	2.285	2.218	-2.9	97.1
PFNA	2.500	2.587	3.5	103.5
PFNS	2.405	2.476	3.0	103.0
PFOA	2.500	2.461	-1.5	98.5
PFOS	2.320	2.272	-2.1	97.9

Continuing Calibration Summary

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Sample: T4Q140-CC140
Lab FileID: 4Q8258.D

PFPeA	5.000	5.076	1.5	101.5
PFPeS	2.353	2.153	-8.5	91.5
PFTeDA	2.500	2.643	5.7	105.7
PFTrDA	2.500	2.462	-1.5	98.5
PFUnDA	2.500	2.464	-1.5	98.5
M4-PFBA	---	--ISTD--		
M5-PFPeA	---	--ISTD--		
M5-PFHxA	---	--ISTD--		
M4-PFHpA	---	--ISTD--		
M8-PFOA	---	--ISTD--		
M9-PFNA	---	--ISTD--		
M6-PFDA	---	--ISTD--		
M7-PFUnDA	---	--ISTD--		
M2-PFDoDA	---	--ISTD--		
M2-PFTeDA	---	--ISTD--		
M8-FOSA	---	--ISTD--		
M3-PFBS	---	--ISTD--		
M3-PFHxS	---	--ISTD--		
M8-PFOS	---	--ISTD--		
M2-4:2FTS	---	--ISTD--		
M2-6:2FTS	---	--ISTD--		
M2-8:2FTS	---	--ISTD--		
M3-MeFOSAA	---	--ISTD--		
11Cl-PF3OUdS	9.450	8.802	-6.9	93.1
13C3-HFPO-DA	10.000	9.955	-0.4	99.6
9Cl-PF3ONS	9.350	8.745	-6.5	93.5
ADONA	9.450	8.398	-11.1	88.9
HFPO-DA	10.000	10.031	0.3	100.3
M3-HFPO-DA	---	--ISTD--		
3:3FTCA	12.500	12.197	-2.4	97.6
5:3FTCA	62.500	57.310	-8.3	91.7
7:3FTCA	62.500	52.230	-16.4	83.6
d3-MeFOSA	2.500	2.426	-3.0	97.0
M5-EtFOSAA	---	--ISTD--		
M7-MeFOSE	---	--ISTD--		
M9-EtFOSE	---	--ISTD--		
M5-EtFOSA	---	--ISTD--		
EtFOSA	2.500	2.474	-1.0	99.0
EtFOSE	25.000	24.950	-0.2	99.8
MeFOSA	2.500	2.460	-1.6	98.4
MeFOSE	25.000	24.674	-1.3	98.7
PFDoDS	2.425	2.390	-1.4	98.6
M3-MeFOSA	---	--ISTD--		
d5-EtFOSAA	5.000	5.090	1.8	101.8
d7-MeFOSE	25.000	23.059	-7.8	92.2
d9-EtFOSE	25.000	23.202	-7.2	92.8
d5-EtFOSA	2.500	2.354	-5.8	94.2
NFDHA	5.000	5.536	10.7	110.7
PFMBA	5.000	4.889	-2.2	97.8
PFMPA	5.000	4.934	-1.3	98.7
13C4-PFOS	---	--ISTD--		
13C3-PFBA	---	--ISTD--		
18O2-PFHxS	---	--ISTD--		
13C4-PFOA	---	--ISTD--		
13C2-PFDA	---	--ISTD--		
13C5-PFNA	---	--ISTD--		
13C2-PFHxA	---	--ISTD--		
PFEESA	4.450	4.414	-0.8	99.2

CC Criteria: +/- 30%

Run Sequence Report

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T1Q361 **Method:** EPA 1633 **Instrument ID:** GCMS1Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
T1Q361-RT	1Q26026.D	05/14/25 15:53	n/a	Retention Time Marker
T1Q361-RT	1Q26027.D	05/14/25 16:08	n/a	Retention Time Marker
T1Q361-IC361	1Q26028.D	05/14/25 16:23	n/a	Mass Calibration Verification
T1Q361-IC361	1Q26029.D	05/14/25 16:38	n/a	Initial cal 1
T1Q361-IC361	1Q26030.D	05/14/25 16:53	n/a	Initial cal 2
T1Q361-IC361	1Q26031.D	05/14/25 17:08	n/a	Initial cal 3
T1Q361-ICC361	1Q26032.D	05/14/25 17:23	n/a	Initial cal 4
T1Q361-IC361	1Q26033.D	05/14/25 17:38	n/a	Initial cal 5
T1Q361-IC361	1Q26034.D	05/14/25 17:53	n/a	Initial cal 6
T1Q361-IC361	1Q26035.D	05/14/25 18:08	n/a	Initial cal 7
T1Q361-IC361	1Q26036.D	05/14/25 18:22	n/a	Initial cal 8
T1Q361-IBLK	1Q26037.D	05/14/25 18:37	n/a	Instrument Blank
T1Q361-ICV361	1Q26038.D	05/14/25 18:52	n/a	Initial cal verification 4
T1Q361-CC361	1Q26039.D	05/14/25 19:07	n/a	Continuing cal 4
T1Q361-CC361	1Q26040.D	05/14/25 19:22	n/a	Continuing cal 1.0LL
OP63461-MB	1Q26041.D	05/14/25 19:37	OP63461	Method Blank
OP63461-LLBS	1Q26042.D	05/14/25 19:52	OP63461	Blank Spike
OP63461-BS	1Q26043.D	05/14/25 20:07	OP63461	Blank Spike
ZZZZZZ	1Q26044.D	05/14/25 20:22	OP63461	(unrelated sample)
ZZZZZZ	1Q26045.D	05/14/25 20:37	OP63461	(unrelated sample)
ZZZZZZ	1Q26046.D	05/14/25 20:52	OP63461	(unrelated sample)
ZZZZZZ	1Q26047.D	05/14/25 21:07	OP63461	(unrelated sample)
ZZZZZZ	1Q26048.D	05/14/25 21:21	OP63461	(unrelated sample)
ZZZZZZ	1Q26049.D	05/14/25 21:36	OP63461	(unrelated sample)
ZZZZZZ	1Q26050.D	05/14/25 21:51	OP63461	(unrelated sample)
ZZZZZZ	1Q26052.D	05/14/25 22:21	OP63461	(unrelated sample)
T1Q361-ECC361	1Q26054.D	05/14/25 22:51	n/a	Ending cal 4
T1Q361-ICCB	1Q26055.D	05/14/25 23:06	n/a	Instrument Blank

Run Sequence Report

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T1Q362 **Method:** EPA 1633 **Instrument ID:** GCMS1Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
T1Q362-RT	1Q26059.D	05/15/25 10:31	n/a	Retention Time Marker
T1Q362-RT	1Q26060.D	05/15/25 10:46	n/a	Retention Time Marker
T1Q362-IBLK	1Q26062.D	05/15/25 11:16	n/a	Instrument Blank
T1Q362-CC361	1Q26063.D	05/15/25 11:31	n/a	Continuing cal 4
T1Q362-CC361	1Q26064.D	05/15/25 11:46	n/a	Continuing cal 1.0LL
ZZZZZZ	1Q26065.D	05/15/25 12:25	OP63379	(unrelated sample)
ZZZZZZ	1Q26066.D	05/15/25 12:40	OP63379	(unrelated sample)
OP63534-MB	1Q26069.D	05/15/25 13:25	OP63534	Method Blank
OP63534-LLBS	1Q26070.D	05/15/25 13:40	OP63534	Blank Spike
OP63534-BS	1Q26071.D	05/15/25 13:55	OP63534	Blank Spike
JE10205-2	1Q26074.D	05/15/25 14:40	OP63534	MW008
JE10205-5	1Q26076.D	05/15/25 15:09	OP63534	DUP001
OP63465-MB	1Q26079.D	05/15/25 15:54	OP63465	Method Blank
OP63465-LLBS	1Q26080.D	05/15/25 16:09	OP63465	Blank Spike
OP63465-LB	1Q26081.D	05/15/25 16:24	OP63465	Leachate Blank
OP63465-BS	1Q26082.D	05/15/25 16:39	OP63465	Blank Spike
ZZZZZZ	1Q26083.D	05/15/25 16:54	OP63465	(unrelated sample)
ZZZZZZ	1Q26084.D	05/15/25 17:09	OP63465	(unrelated sample)
T1Q362-CC361	1Q26085.D	05/15/25 17:23	n/a	Continuing cal 4
T1Q362-ICCB	1Q26086.D	05/15/25 17:38	n/a	Instrument Blank
ZZZZZZ	1Q26087.D	05/15/25 17:53	OP63465	(unrelated sample)
OP63578-MB	1Q26088.D	05/15/25 18:08	OP63578	Method Blank
OP63578-LLBS	1Q26089.D	05/15/25 18:23	OP63578	Blank Spike
OP63578-BS	1Q26090.D	05/15/25 18:38	OP63578	Blank Spike
ZZZZZZ	1Q26091.D	05/15/25 18:53	OP63578	(unrelated sample)
ZZZZZZ	1Q26092.D	05/15/25 19:08	OP63578	(unrelated sample)
ZZZZZZ	1Q26093.D	05/15/25 19:23	OP63578	(unrelated sample)
ZZZZZZ	1Q26094.D	05/15/25 19:38	OP63578	(unrelated sample)
T1Q362-ECC361	1Q26095.D	05/15/25 19:52	n/a	Ending cal 4
T1Q362-ICCB	1Q26096.D	05/15/25 20:07	n/a	Instrument Blank

Run Sequence Report

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T2Q344 **Method:** EPA 1633 **Instrument ID:** GCMS2Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
T2Q344-RT	2Q33660.D	05/09/25 14:42	n/a	Retention Time Marker
T2Q344-IC344	2Q33661.D	05/09/25 14:55	n/a	Mass Calibration Verification
T2Q344-IC344	2Q33662.D	05/09/25 15:09	n/a	Initial cal 1
T2Q344-IC344	2Q33663.D	05/09/25 15:22	n/a	Initial cal 2
T2Q344-IC344	2Q33664.D	05/09/25 15:35	n/a	Initial cal 3
T2Q344-ICC344	2Q33665.D	05/09/25 15:49	n/a	Initial cal 4
T2Q344-IC344	2Q33666.D	05/09/25 16:02	n/a	Initial cal 5
T2Q344-IC344	2Q33667.D	05/09/25 16:16	n/a	Initial cal 6
T2Q344-IC344	2Q33668.D	05/09/25 16:29	n/a	Initial cal 7
T2Q344-IC344	2Q33669.D	05/09/25 16:43	n/a	Initial cal 8
T2Q344-IBLK	2Q33670.D	05/09/25 16:56	n/a	Instrument Blank
T2Q344-ICV344	2Q33671.D	05/09/25 17:09	n/a	Initial cal verification 4
T2Q344-CC344	2Q33672.D	05/09/25 17:23	n/a	Continuing cal 4
T2Q344-CC344	2Q33673.D	05/09/25 17:36	n/a	Continuing cal 1.0LL
OP63459-MB	2Q33676.D	05/09/25 18:16	OP63459	Method Blank
OP63459-LLBS	2Q33677.D	05/09/25 18:30	OP63459	Blank Spike
OP63459-BS	2Q33678.D	05/09/25 18:43	OP63459	Blank Spike
OP63459-MS	2Q33679.D	05/09/25 18:56	OP63459	Matrix Spike
OP63459-MSD	2Q33680.D	05/09/25 19:10	OP63459	Matrix Spike Duplicate
JE10913-10B	2Q33681.D	05/09/25 19:23	OP63459	(used for QC only; not part of job JE10205)
ZZZZZZ	2Q33682.D	05/09/25 19:37	OP63459	(unrelated sample)
ZZZZZZ	2Q33683.D	05/09/25 19:50	OP63459	(unrelated sample)
ZZZZZZ	2Q33684.D	05/09/25 20:04	OP63459	(unrelated sample)
ZZZZZZ	2Q33685.D	05/09/25 20:17	OP63459	(unrelated sample)
ZZZZZZ	2Q33686.D	05/09/25 20:30	OP63459	(unrelated sample)
ZZZZZZ	2Q33687.D	05/09/25 20:44	OP63459	(unrelated sample)
ZZZZZZ	2Q33688.D	05/09/25 20:57	OP63459	(unrelated sample)
ZZZZZZ	2Q33689.D	05/09/25 21:11	OP63459	(unrelated sample)
T2Q344-CC344	2Q33690.D	05/09/25 21:24	n/a	Continuing cal 4
T2Q344-ICCB	2Q33691.D	05/09/25 21:37	n/a	Instrument Blank
T2Q344-ICCB	2Q33691.D	05/09/25 21:37	n/a	Instrument Blank
ZZZZZZ	2Q33692.D	05/09/25 21:51	OP63459	(unrelated sample)
ZZZZZZ	2Q33693.D	05/09/25 22:04	OP63459	(unrelated sample)
ZZZZZZ	2Q33694.D	05/09/25 22:18	OP63459	(unrelated sample)
ZZZZZZ	2Q33695.D	05/09/25 22:31	OP63459	(unrelated sample)
ZZZZZZ	2Q33696.D	05/09/25 22:44	OP63459	(unrelated sample)
ZZZZZZ	2Q33697.D	05/09/25 22:58	OP63459	(unrelated sample)
OP63380-MB	2Q33698.D	05/09/25 23:11	OP63380	Method Blank
OP63380-LLBS	2Q33699.D	05/09/25 23:25	OP63380	Blank Spike
OP63380-BS	2Q33700.D	05/09/25 23:38	OP63380	Blank Spike
ZZZZZZ	2Q33701.D	05/09/25 23:51	OP63380	(unrelated sample)
ZZZZZZ	2Q33702.D	05/10/25 00:05	OP63380	(unrelated sample)
ZZZZZZ	2Q33703.D	05/10/25 00:18	OP63380	(unrelated sample)
ZZZZZZ	2Q33704.D	05/10/25 00:32	OP63380	(unrelated sample)
T2Q344-CC344	2Q33705.D	05/10/25 00:45	n/a	Continuing cal 4
T2Q344-ICCB	2Q33706.D	05/10/25 00:58	n/a	Instrument Blank

Run Sequence Report

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T2Q344	**Method:** EPA 1633	**Instrument ID:** GCMS2Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
T2Q344-ICCB	2Q33706.D	05/10/25 00:58	n/a	Instrument Blank
ZZZZZZ	2Q33707.D	05/10/25 01:12	OP63380	(unrelated sample)
ZZZZZZ	2Q33708.D	05/10/25 01:25	OP63380	(unrelated sample)
ZZZZZZ	2Q33709.D	05/10/25 01:38	OP63380	(unrelated sample)
ZZZZZZ	2Q33710.D	05/10/25 01:52	OP63380	(unrelated sample)
ZZZZZZ	2Q33711.D	05/10/25 02:05	OP63380	(unrelated sample)
ZZZZZZ	2Q33712.D	05/10/25 02:19	OP63380	(unrelated sample)
ZZZZZZ	2Q33713.D	05/10/25 02:32	OP63380	(unrelated sample)
ZZZZZZ	2Q33714.D	05/10/25 02:45	OP63380	(unrelated sample)
ZZZZZZ	2Q33715.D	05/10/25 02:59	OP63380	(unrelated sample)
ZZZZZZ	2Q33716.D	05/10/25 03:12	OP63380	(unrelated sample)
T2Q344-CC344	2Q33717.D	05/10/25 03:26	n/a	Continuing cal 4
T2Q344-ICCB	2Q33718.D	05/10/25 03:39	n/a	Instrument Blank
ZZZZZZ	2Q33719.D	05/10/25 03:52	OP63380	(unrelated sample)
ZZZZZZ	2Q33720.D	05/10/25 04:06	OP63380	(unrelated sample)
ZZZZZZ	2Q33721.D	05/10/25 04:19	OP63380	(unrelated sample)
ZZZZZZ	2Q33723.D	05/10/25 04:46	OP63347	(unrelated sample)
ZZZZZZ	2Q33725.D	05/10/25 05:13	OP63347	(unrelated sample)
ZZZZZZ	2Q33726.D	05/10/25 05:26	OP63347	(unrelated sample)
ZZZZZZ	2Q33727.D	05/10/25 05:40	OP63347	(unrelated sample)
ZZZZZZ	2Q33728.D	05/10/25 05:53	OP63347	(unrelated sample)
T2Q344-CC344	2Q33729.D	05/10/25 06:07	n/a	Continuing cal 4
T2Q344-ICCB	2Q33730.D	05/10/25 06:20	n/a	Instrument Blank
ZZZZZZ	2Q33731.D	05/10/25 06:33	OP63347	(unrelated sample)
T2Q344-ECC344	2Q33733.D	05/10/25 06:47	n/a	Ending cal 4
T2Q344-ICCB	2Q33734.D	05/10/25 07:00	n/a	Instrument Blank

Run Sequence Report

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T2Q345 **Method:** EPA 1633 **Instrument ID:** GCMS2Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
T2Q345-RT	2Q33738.D	05/12/25 12:34	n/a	Retention Time Marker
T2Q345-RT	2Q33739.D	05/12/25 12:48	n/a	Retention Time Marker
T2Q345-IBLK	2Q33744.D	05/12/25 14:04	n/a	Instrument Blank
T2Q345-CC344	2Q33745.D	05/12/25 14:21	n/a	Continuing cal 4
T2Q345-CC344	2Q33746.D	05/12/25 14:34	n/a	Continuing cal 1.0LL
OP63419-MB	2Q33747.D	05/12/25 15:56	OP63419	Method Blank
OP63419-LLBS	2Q33748.D	05/12/25 16:10	OP63419	Blank Spike
OP63419-BS	2Q33749.D	05/12/25 16:24	OP63419	Blank Spike
ZZZZZZ	2Q33750.D	05/12/25 16:37	OP63419	(unrelated sample)
ZZZZZZ	2Q33751.D	05/12/25 16:51	OP63419	(unrelated sample)
ZZZZZZ	2Q33752.D	05/12/25 17:05	OP63419	(unrelated sample)
ZZZZZZ	2Q33753.D	05/12/25 17:19	OP63419	(unrelated sample)
ZZZZZZ	2Q33754.D	05/12/25 17:32	OP63419	(unrelated sample)
ZZZZZZ	2Q33755.D	05/12/25 17:46	OP63419	(unrelated sample)
ZZZZZZ	2Q33756.D	05/12/25 18:00	OP63419	(unrelated sample)
JE10205-20	2Q33757.D	05/12/25 18:14	OP63419	MW014D
ZZZZZZ	2Q33758.D	05/12/25 18:27	OP63419	(unrelated sample)
ZZZZZZ	2Q33759.D	05/12/25 18:41	OP63419	(unrelated sample)
T2Q345-CC344	2Q33760.D	05/12/25 18:55	n/a	Continuing cal 4
T2Q345-ICCB	2Q33761.D	05/12/25 19:09	n/a	Instrument Blank
ZZZZZZ	2Q33762.D	05/12/25 19:22	OP63419	(unrelated sample)
ZZZZZZ	2Q33763.D	05/12/25 19:36	OP63419	(unrelated sample)
ZZZZZZ	2Q33764.D	05/12/25 19:50	OP63419	(unrelated sample)
ZZZZZZ	2Q33766.D	05/12/25 20:17	OP63419	(unrelated sample)
ZZZZZZ	2Q33767.D	05/12/25 20:31	OP63419	(unrelated sample)
T2Q345-CC344	2Q33772.D	05/12/25 21:40	n/a	Continuing cal 4
T2Q345-ICCB	2Q33773.D	05/12/25 21:54	n/a	Instrument Blank
ZZZZZZ	2Q33775.D	05/12/25 22:21	OP63347	(unrelated sample)
ZZZZZZ	2Q33776.D	05/12/25 22:35	OP63347	(unrelated sample)
ZZZZZZ	2Q33777.D	05/12/25 22:49	OP63347	(unrelated sample)
ZZZZZZ	2Q33778.D	05/12/25 23:02	OP63379	(unrelated sample)
ZZZZZZ	2Q33780.D	05/12/25 23:30	OP63379	(unrelated sample)
ZZZZZZ	2Q33781.D	05/12/25 23:43	OP63379	(unrelated sample)
ZZZZZZ	2Q33782.D	05/12/25 23:57	OP63379	(unrelated sample)
ZZZZZZ	2Q33783.D	05/13/25 00:11	OP63379	(unrelated sample)
T2Q345-CC344	2Q33784.D	05/13/25 00:25	n/a	Continuing cal 4
T2Q345-ICCB	2Q33785.D	05/13/25 00:38	n/a	Instrument Blank
OP63379-MB	2Q33786.D	05/13/25 00:52	OP63379	Method Blank
ZZZZZZ	2Q33787.D	05/13/25 01:06	OP63379	(unrelated sample)
JE10205-10	2Q33790.D	05/13/25 01:48	OP63161	MW012S
ZZZZZZ	2Q33791.D	05/13/25 02:01	OP63267	(unrelated sample)
ZZZZZZ	2Q33792.D	05/13/25 02:15	OP63380	(unrelated sample)
ZZZZZZ	2Q33796.D	05/13/25 03:10	OP63380	(unrelated sample)
T2Q345-ECC344	2Q33798.D	05/13/25 03:38	n/a	Ending cal 4
T2Q345-ICCB	2Q33799.D	05/13/25 03:51	n/a	Instrument Blank

Run Sequence Report

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T4Q137 **Method:** EPA 1633 **Instrument ID:** GCMS4Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
T4Q137-RT	4Q8078.D	04/29/25 16:31	n/a	Retention Time Marker
T4Q137-RT	4Q8079.D	04/29/25 16:45	n/a	Retention Time Marker
T4Q137-IC137	4Q8080.D	04/29/25 16:58	n/a	Mass Calibration Verification
T4Q137-IC137	4Q8081.D	04/29/25 17:12	n/a	Initial cal 1
T4Q137-IC137	4Q8082.D	04/29/25 17:26	n/a	Initial cal 2
T4Q137-IC137	4Q8083.D	04/29/25 17:39	n/a	Initial cal 3
T4Q137-ICC137	4Q8084.D	04/29/25 17:53	n/a	Initial cal 4
T4Q137-IC137	4Q8085.D	04/29/25 18:06	n/a	Initial cal 5
T4Q137-IC137	4Q8086.D	04/29/25 18:20	n/a	Initial cal 6
T4Q137-IC137	4Q8087.D	04/29/25 18:33	n/a	Initial cal 7
T4Q137-IC137	4Q8088.D	04/29/25 18:47	n/a	Initial cal 8
T4Q137-IBLK	4Q8089.D	04/29/25 19:01	n/a	Instrument Blank
T4Q137-IBLK	4Q8089.D	04/29/25 19:01	n/a	Instrument Blank
T4Q137-ICV137	4Q8090.D	04/29/25 19:14	n/a	Initial cal verification 4
T4Q137-CC137	4Q8091.D	04/29/25 19:28	n/a	Continuing cal 4
T4Q137-CC137	4Q8092.D	04/29/25 19:41	n/a	Continuing cal 1.0
OP63077-MB	4Q8093.D	04/29/25 19:55	OP63077	Method Blank
OP63077-LLBS	4Q8094.D	04/29/25 20:08	OP63077	Blank Spike
OP63077-BS	4Q8095.D	04/29/25 20:22	OP63077	Blank Spike
OP63077-MS	4Q8096.D	04/29/25 20:36	OP63077	Matrix Spike
OP63077-MSD	4Q8097.D	04/29/25 20:49	OP63077	Matrix Spike Duplicate
ZZZZZZ	4Q8098.D	04/29/25 21:03	OP63077	(unrelated sample)
ZZZZZZ	4Q8099.D	04/29/25 21:16	OP63077	(unrelated sample)
ZZZZZZ	4Q8100.D	04/29/25 21:30	OP63077	(unrelated sample)
ZZZZZZ	4Q8101.D	04/29/25 21:43	OP63077	(unrelated sample)
ZZZZZZ	4Q8102.D	04/29/25 21:57	OP63077	(unrelated sample)
ZZZZZZ	4Q8103.D	04/29/25 22:11	OP63077	(unrelated sample)
ZZZZZZ	4Q8104.D	04/29/25 22:24	OP63077	(unrelated sample)
ZZZZZZ	4Q8105.D	04/29/25 22:38	OP63077	(unrelated sample)
ZZZZZZ	4Q8106.D	04/29/25 22:51	OP63077	(unrelated sample)
ZZZZZZ	4Q8107.D	04/29/25 23:05	OP63077	(unrelated sample)
T4Q137-CC137	4Q8108.D	04/29/25 23:18	n/a	Continuing cal 4
T4Q137-ICCB	4Q8109.D	04/29/25 23:32	n/a	Instrument Blank
ZZZZZZ	4Q8110.D	04/29/25 23:46	OP63077	(unrelated sample)
JE9984-3A	4Q8111.D	04/29/25 23:59	OP63077	(used for QC only; not part of job JE10205)
T4Q137-ECC137	4Q8112.D	04/30/25 00:13	n/a	Ending cal 4
T4Q137-ICCB	4Q8113.D	04/30/25 00:26	n/a	Instrument Blank

Run Sequence Report

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T4Q138 **Method:** EPA 1633 **Instrument ID:** GCMS4Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
T4Q138-RT	4Q8125.D	04/30/25 13:48	n/a	Retention Time Marker
T4Q138-RT	4Q8126.D	04/30/25 14:02	n/a	Retention Time Marker
T4Q138-IC138	4Q8127.D	04/30/25 14:15	n/a	Mass Calibration Verification
T4Q138-IC138	4Q8128.D	04/30/25 14:29	n/a	Initial cal 1
T4Q138-IC138	4Q8129.D	04/30/25 14:42	n/a	Initial cal 2
T4Q138-IC138	4Q8130.D	04/30/25 14:56	n/a	Initial cal 3
T4Q138-ICC138	4Q8131.D	04/30/25 15:10	n/a	Initial cal 4
T4Q138-IC138	4Q8132.D	04/30/25 15:23	n/a	Initial cal 5
T4Q138-IC138	4Q8133.D	04/30/25 15:37	n/a	Initial cal 6
T4Q138-IC138	4Q8134.D	04/30/25 15:50	n/a	Initial cal 7
T4Q138-IC138	4Q8135.D	04/30/25 16:04	n/a	Initial cal 8
T4Q138-IBLK	4Q8136.D	04/30/25 16:18	n/a	Instrument Blank
T4Q138-IBLK	4Q8136.D	04/30/25 16:18	n/a	Instrument Blank
T4Q138-ICV138	4Q8137.D	04/30/25 16:31	n/a	Initial cal verification 4
T4Q138-CC138	4Q8138.D	04/30/25 16:45	n/a	Continuing cal 4
T4Q138-CC138	4Q8139.D	04/30/25 16:58	n/a	Continuing cal 1.0
OP63163-MB	4Q8140.D	04/30/25 17:12	OP63163	Method Blank
OP63163-LLBS	4Q8141.D	04/30/25 17:25	OP63163	Blank Spike
OP63163-BS	4Q8142.D	04/30/25 17:39	OP63163	Blank Spike
JE10205-11	4Q8143.D	04/30/25 17:53	OP63163	MW012D
JE10205-12	4Q8144.D	04/30/25 18:06	OP63163	MW011
JE10205-13	4Q8145.D	04/30/25 18:20	OP63163	MW005S
JE10205-14	4Q8146.D	04/30/25 18:33	OP63163	MW005D
JE10205-15	4Q8147.D	04/30/25 18:47	OP63163	MW006S
JE10205-17	4Q8149.D	04/30/25 19:14	OP63163	MW007
JE10205-18	4Q8150.D	04/30/25 19:28	OP63163	MW013
JE10205-19	4Q8151.D	04/30/25 19:41	OP63163	MW014S
JE10205-20	4Q8152.D	04/30/25 19:55	OP63163	MW014D
T4Q138-CC138	4Q8153.D	04/30/25 20:08	n/a	Continuing cal 4
T4Q138-ICCB	4Q8154.D	04/30/25 20:22	n/a	Instrument Blank
JE10205-21	4Q8155.D	04/30/25 20:35	OP63161	MW017
OP63161-MB	4Q8156.D	04/30/25 20:49	OP63161	Method Blank
OP63161-LLBS	4Q8157.D	04/30/25 21:03	OP63161	Blank Spike
OP63161-BS	4Q8158.D	04/30/25 21:16	OP63161	Blank Spike
OP63161-MS	4Q8159.D	04/30/25 21:30	OP63161	Matrix Spike
OP63161-MSD	4Q8160.D	04/30/25 21:43	OP63161	Matrix Spike Duplicate
JE10205-1	4Q8161.D	04/30/25 21:57	OP63161	MW004
JE10205-2	4Q8162.D	04/30/25 22:10	OP63161	MW008
JE10205-3	4Q8163.D	04/30/25 22:24	OP63161	MW009S
JE10205-5	4Q8165.D	04/30/25 22:51	OP63161	DUP001
JE10205-6	4Q8166.D	04/30/25 23:05	OP63161	MW003
JE10205-7	4Q8167.D	04/30/25 23:18	OP63161	FIELD BLANK
JE10205-8	4Q8168.D	04/30/25 23:32	OP63161	MW002
JE10205-9	4Q8169.D	04/30/25 23:45	OP63161	MW010
T4Q138-CC138	4Q8170.D	04/30/25 23:59	n/a	Continuing cal 4
T4Q138-ICCB	4Q8171.D	05/01/25 00:13	n/a	Instrument Blank

Run Sequence Report

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T4Q138	**Method:** EPA 1633	**Instrument ID:** GCMS4Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
JE10205-10	4Q8172.D	05/01/25 00:26	OP63161	MW012S
T4Q138-ECC138	4Q8173.D	05/01/25 00:40	n/a	Ending cal 4
T4Q138-ICCB	4Q8174.D	05/01/25 00:53	n/a	Instrument Blank

Run Sequence Report

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T4Q139 **Method:** EPA 1633 **Instrument ID:** GCMS4Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
T4Q139-RT	4Q8178.D	05/01/25 11:41	n/a	Retention Time Marker
T4Q139-RT	4Q8179.D	05/01/25 11:55	n/a	Retention Time Marker
T4Q139-IBLK	4Q8181.D	05/01/25 12:22	n/a	Instrument Blank
T4Q139-IBLK	4Q8181.D	05/01/25 12:22	n/a	Instrument Blank
T4Q139-CC137	4Q8183.D	05/01/25 12:49	n/a	Continuing cal 1.0
T4Q139-CC137	4Q8184.D	05/01/25 13:04	n/a	Continuing cal 4
JE10205-16	4Q8185.D	05/01/25 13:52	OP63163	MW006D
JE10205-4	4Q8186.D	05/01/25 14:06	OP63161	MW009D
JE10205-3	4Q8188.D	05/01/25 14:33	OP63161	MW009S
JE10205-9	4Q8190.D	05/01/25 15:00	OP63161	MW010
JE10205-13	4Q8192.D	05/01/25 15:27	OP63163	MW005S
JE10205-15	4Q8193.D	05/01/25 15:41	OP63163	MW006S
OP63229-MB	4Q8196.D	05/01/25 15:54	OP63229	Method Blank
OP63229-LLBS	4Q8197.D	05/01/25 16:08	OP63229	Blank Spike
OP63229-BS	4Q8198.D	05/01/25 16:22	OP63229	Blank Spike
ZZZZZZ	4Q8199.D	05/01/25 16:35	OP63229	(unrelated sample)
T4Q139-CC137	4Q8200.D	05/01/25 16:49	n/a	Continuing cal 4
T4Q139-ICCB	4Q8201.D	05/01/25 17:02	n/a	Instrument Blank
T4Q139-ICCB	4Q8201.D	05/01/25 17:02	n/a	Instrument Blank
ZZZZZZ	4Q8202.D	05/01/25 17:16	OP63229	(unrelated sample)
ZZZZZZ	4Q8203.D	05/01/25 17:29	OP63229	(unrelated sample)
OP63227-MB	4Q8204.D	05/01/25 17:43	OP63227	Method Blank
OP63227-LLBS	4Q8205.D	05/01/25 17:57	OP63227	Blank Spike
OP63227-BS	4Q8206.D	05/01/25 18:10	OP63227	Blank Spike
OP63227-MS	4Q8207.D	05/01/25 18:24	OP63227	Matrix Spike
OP63227-MSD	4Q8208.D	05/01/25 18:37	OP63227	Matrix Spike Duplicate
JE10368-10B	4Q8209.D	05/01/25 18:51	OP63227	(used for QC only; not part of job JE10205)
ZZZZZZ	4Q8210.D	05/01/25 19:04	OP63227	(unrelated sample)
ZZZZZZ	4Q8211.D	05/01/25 19:18	OP63227	(unrelated sample)
ZZZZZZ	4Q8212.D	05/01/25 19:32	OP63227	(unrelated sample)
ZZZZZZ	4Q8213.D	05/01/25 19:45	OP63227	(unrelated sample)
ZZZZZZ	4Q8214.D	05/01/25 19:59	OP63227	(unrelated sample)
ZZZZZZ	4Q8215.D	05/01/25 20:12	OP63227	(unrelated sample)
ZZZZZZ	4Q8216.D	05/01/25 20:26	OP63227	(unrelated sample)
T4Q139-CC137	4Q8217.D	05/01/25 20:39	n/a	Continuing cal 4
T4Q139-ICCB	4Q8218.D	05/01/25 20:53	n/a	Instrument Blank
T4Q139-ECC137	4Q8220.D	05/01/25 21:20	n/a	Ending cal 4
T4Q139-ICCB	4Q8221.D	05/01/25 21:34	n/a	Instrument Blank

Run Sequence Report

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T4Q140 **Method:** EPA 1633 **Instrument ID:** GCMS4Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
T4Q140-RT	4Q8228.D	05/02/25 13:19	n/a	Retention Time Marker
T4Q140-RT	4Q8229.D	05/02/25 13:33	n/a	Retention Time Marker
T4Q140-IC140	4Q8230.D	05/02/25 13:46	n/a	Mass Calibration Verification
T4Q140-IC140	4Q8231.D	05/02/25 14:00	n/a	Initial cal 1
T4Q140-IC140	4Q8232.D	05/02/25 14:13	n/a	Initial cal 2
T4Q140-IC140	4Q8233.D	05/02/25 14:27	n/a	Initial cal 3
T4Q140-ICC140	4Q8234.D	05/02/25 14:40	n/a	Initial cal 4
T4Q140-IC140	4Q8235.D	05/02/25 14:54	n/a	Initial cal 5
T4Q140-IC140	4Q8236.D	05/02/25 15:07	n/a	Initial cal 6
T4Q140-IC140	4Q8237.D	05/02/25 15:21	n/a	Initial cal 7
T4Q140-IC140	4Q8238.D	05/02/25 15:35	n/a	Initial cal 8
T4Q140-IBLK	4Q8239.D	05/02/25 15:48	n/a	Instrument Blank
T4Q140-IBLK	4Q8239.D	05/02/25 15:48	n/a	Instrument Blank
T4Q140-ICV140	4Q8240.D	05/02/25 16:02	n/a	Initial cal verification 4
T4Q140-CC140	4Q8241.D	05/02/25 16:15	n/a	Continuing cal 4
T4Q140-CC140	4Q8242.D	05/02/25 16:29	n/a	Continuing cal 1.0LL
OP63199-MB	4Q8243.D	05/02/25 16:43	OP63199	Method Blank
OP63199-LLBS	4Q8244.D	05/02/25 16:56	OP63199	Blank Spike
OP63199-BS	4Q8245.D	05/02/25 17:10	OP63199	Blank Spike
OP63199-MS	4Q8246.D	05/02/25 17:23	OP63199	Matrix Spike
OP63199-MSD	4Q8247.D	05/02/25 17:37	OP63199	Matrix Spike Duplicate
ZZZZZZ	4Q8248.D	05/02/25 17:50	OP63199	(unrelated sample)
ZZZZZZ	4Q8249.D	05/02/25 18:04	OP63199	(unrelated sample)
ZZZZZZ	4Q8250.D	05/02/25 18:18	OP63199	(unrelated sample)
ZZZZZZ	4Q8251.D	05/02/25 18:31	OP63199	(unrelated sample)
JE10279-7B	4Q8252.D	05/02/25 18:45	OP63199	(used for QC only; not part of job JE10205)
ZZZZZZ	4Q8253.D	05/02/25 18:58	OP63199	(unrelated sample)
JE10205-1	4Q8255.D	05/02/25 19:25	OP63161	MW004
T4Q140-CC140	4Q8258.D	05/02/25 20:06	n/a	Continuing cal 4
T4Q140-ICCB	4Q8259.D	05/02/25 20:20	n/a	Instrument Blank
T4Q140-ICCB	4Q8259.D	05/02/25 20:20	n/a	Instrument Blank
OP63162-MB	4Q8260.D	05/02/25 20:33	OP63162	Method Blank
OP63162-LLBS	4Q8261.D	05/02/25 20:47	OP63162	Blank Spike
OP63162-BS	4Q8262.D	05/02/25 21:00	OP63162	Blank Spike
OP63162-MS	4Q8263.D	05/02/25 21:14	OP63162	Matrix Spike
OP63162-MSD	4Q8264.D	05/02/25 21:28	OP63162	Matrix Spike Duplicate
JE10073-3A	4Q8265.D	05/02/25 21:41	OP63162	(used for QC only; not part of job JE10205)
ZZZZZZ	4Q8266.D	05/02/25 21:55	OP63162	(unrelated sample)
ZZZZZZ	4Q8267.D	05/02/25 22:08	OP63162	(unrelated sample)
ZZZZZZ	4Q8268.D	05/02/25 22:22	OP63162	(unrelated sample)
OP63082-LLBS	4Q8269.D	05/02/25 22:36	OP63082	Blank Spike
ZZZZZZ	4Q8275.D	05/02/25 23:57	OP63227	(unrelated sample)
T4Q140-CC140	4Q8276.D	05/03/25 00:11	n/a	Continuing cal 4
T4Q140-ICCB	4Q8277.D	05/03/25 00:24	n/a	Instrument Blank
T4Q140-ICCB	4Q8277.D	05/03/25 00:24	n/a	Instrument Blank
ZZZZZZ	4Q8278.D	05/03/25 00:38	OP63022	(unrelated sample)

Run Sequence Report

Job Number: JE10205
Account: PWGNYB PW Grosser Consulting
Project: Firematics, 676 Maple St, Yaphank, NY

Run ID: T4Q140	**Method:** EPA 1633	**Instrument ID:** GCMS4Q

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
OP63266-MB	4Q8281.D	05/03/25 01:18	OP63266	Method Blank
OP63266-LLBS	4Q8282.D	05/03/25 01:32	OP63266	Blank Spike
OP63266-BS	4Q8283.D	05/03/25 01:46	OP63266	Blank Spike
OP63266-MS	4Q8284.D	05/03/25 01:59	OP63266	Matrix Spike
OP63266-MSD	4Q8285.D	05/03/25 02:13	OP63266	Matrix Spike Duplicate
JE10442-10B	4Q8286.D	05/03/25 02:26	OP63266	(used for QC only; not part of job JE10205)
ZZZZZZ	4Q8287.D	05/03/25 02:40	OP63266	(unrelated sample)
ZZZZZZ	4Q8288.D	05/03/25 02:53	OP63266	(unrelated sample)
ZZZZZZ	4Q8289.D	05/03/25 03:07	OP63266	(unrelated sample)
ZZZZZZ	4Q8290.D	05/03/25 03:21	OP63266	(unrelated sample)
ZZZZZZ	4Q8291.D	05/03/25 03:34	OP63266	(unrelated sample)
T4Q140-ECC140	4Q8292.D	05/03/25 03:48	n/a	Ending cal 4
T4Q140-ICCB	4Q8293.D	05/03/25 04:01	n/a	Instrument Blank
T4Q140-ICCB	4Q8293.D	05/03/25 04:01	n/a	Instrument Blank

MS Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/12/25 14:58

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8161.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 9:57:24 PM
Sample Name : JE10205-1
Vial : P1-D4
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,487,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	791756	10.00	µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	370289	5.00	µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	274310	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	285716	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	422904	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	171280	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	155917	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	217300	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	189359	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	142885	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	151939	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	25049	2.50	µg/L	0.000
		302.0 -> 80.0	63553			
M3-PFHxS	6.999	402.0 -> 99.0	33548	2.50	µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	30429	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	12545	5.00	µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	19192	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	24451	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	178925	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	423889	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	139248	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	689196	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	834646	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	74732	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	71703	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	57679	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	378418	5.00	µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	40743	2.50	µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	476385	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	158096	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	179408	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	287852	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	12545	6.14	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 122.8%		
13C2-6:2FTS	6.684	429.0 -> 81.0	19192	4.33	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 86.6%		
13C2-8:2FTS	7.671	529.0 -> 81.0	24451	4.69	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.8%		
13C2-PFDoDA	8.666	615.0 -> 570.0	189359	1.11	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.6%		
13C2-PFTeDA	9.368	715.0 -> 670.0	142885	1.09	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.0%		
13C3-PFBS	5.368	302.0 -> 99.0	25049	2.49	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.6%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	33548	2.36	µg/L		0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.3%			
13C4-PFBA	2.871	217.0 -> 172.0	791756	9.13	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 91.3%			
13C4-PFHpA	6.291	367.0 -> 322.0	285716	2.21	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 88.2%			
13C5-PFHxA	5.452	318.0 -> 273.0	274310	2.25	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.0%			
13C5-PFPeA	4.319	268.0 -> 223.0	370289	4.00	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 80.1%			
13C6-PFDA	7.858	519.0 -> 474.0	155917	1.12	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.3%			
13C7-PFUnDA	8.273	570.0 -> 525.0	217300	1.16	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.2%			
13C8-FOSA	9.279	506.0 -> 78.0	151939	2.56	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.6%			
13C8-PFOA	6.897	421.0 -> 376.0	422904	2.22	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 88.9%			
13C8-PFOS	7.995	507.0 -> 99.0	30429	2.19	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 87.6%			
13C9-PFNA	7.403	472.0 -> 427.0	171280	1.15	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.1%			
d3-MeFOSAA	7.915	573.0 -> 419.0	178925	4.71	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.2%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	423889	8.86	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 88.6%			
d3-MeFOSA	10.567	515.0 -> 169.0	71703	2.36	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.3%			
d5-EtFOSAA	8.098	589.0 -> 419.0	139248	4.77	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.5%			
d7-MeFOSE	10.462	623.0 -> 59.0	689196	23.72	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 94.9%			
d9-EtFOSE	10.734	639.0 -> 59.0	834646	23.70	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 94.8%			
d5-EtFOSA	10.825	531.0 -> 169.0	74732	2.38	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.3%			
Target Compounds							QValue
4:2FTS	5.154	327.0 -> 307.0	11719	0.51	µg/L		98
		327.0 -> 81.0	5334				
6:2FTS	6.684	427.0 -> 407.0	3219606	167.28	µg/L		98
		427.0 -> 81.0	1472885				
8:2FTS	7.671	527.0 -> 507.0	371436	19.41	µg/L		97
		527.0 -> 81.0	146060				
EtFOSAA	-	584.0 -> 419.0	-	N.D.			
		584.0 -> 483.0					
FOSA	9.269	498.0 -> 78.0	59565	1.08	µg/L	m	98
		498.0 -> 478.0	2265				
MeFOSAA	-	570.0 -> 419.0	-	N.D.			
		570.0 -> 512.0					
PFBA	2.877	213.0 -> 169.0	681779	28.17	µg/L		100
PFBS	5.369	299.0 -> 80.0	113293	3.96	µg/L		96
		299.0 -> 99.0	49027				
PFDA	7.859	513.0 -> 469.0	264735	2.23	µg/L	m	97
		513.0 -> 219.0	57870				
PFDoDA	-	613.0 -> 569.0	-	N.D.			
		613.0 -> 319.0					

Perfluorinated Compounds by LC/MS/MS

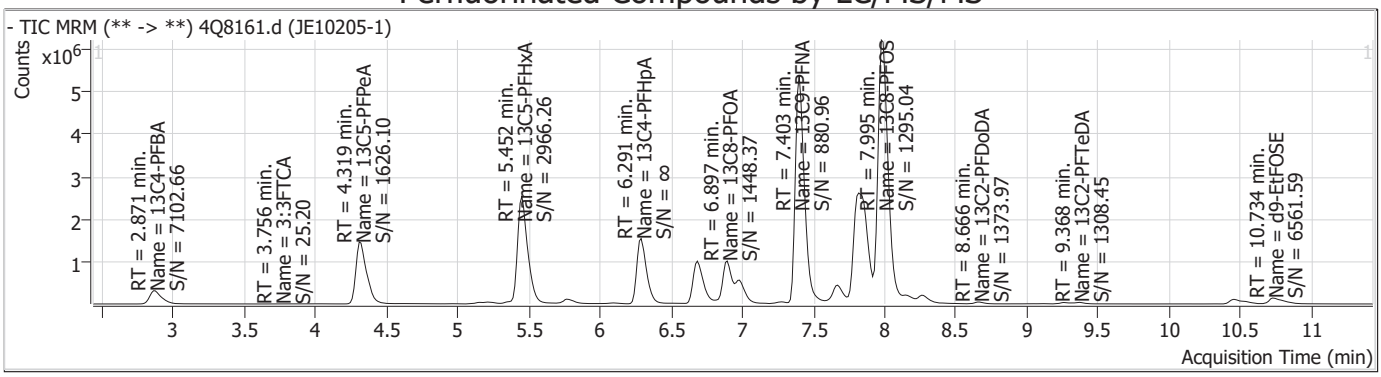
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.804	599.0 -> 80.0	360	0.02	µg/L	#m	4
		599.0 -> 99.0	458				
PFHpA	6.292	363.0 -> 319.0	5719569	32.90	µg/L		100
		363.0 -> 169.0	1188967				
PFHpS	7.529	449.0 -> 80.0	152874	5.27	µg/L	m	96
		449.0 -> 99.0	89050				
PFHxA	5.455	313.0 -> 269.0	11759397	99.46	µg/L		100
		313.0 -> 119.0	394488				
PFHxS	6.987	399.0 -> 80.0	1677941	57.44	µg/L	m	94
		399.0 -> 99.0	833376				
PFNA	7.404	463.0 -> 419.0	19131992	185.71	µg/L		82
		463.0 -> 219.0	5047933				
PFNS	8.412	549.0 -> 80.0	2613	0.13	µg/L	#m	58
		549.0 -> 99.0	2349				
PFOA	6.898	413.0 -> 369.0	3052002	21.68	µg/L	m	96
		413.0 -> 169.0	832956				
PFOS	7.996	499.0 -> 80.0	11299270	460.74	µg/L	m	94
		499.0 -> 99.0	5355115				
PFPeA	4.321	263.0 -> 219.0	7336617	125.31	µg/L		100
PFPeS	6.331	349.0 -> 80.0	208360	6.66	µg/L		98
		349.0 -> 99.0	103079				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	9.038	663.0 -> 619.0	13022	0.08	µg/L	m	97
		663.0 -> 369.0	941				
PFUnDA	8.275	563.0 -> 519.0	359411	2.80	µg/L		98
		563.0 -> 269.0	69297				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	3.756	241.0 -> 177.0	1538	0.44	µg/L		96
		241.0 -> 117.0	149				
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

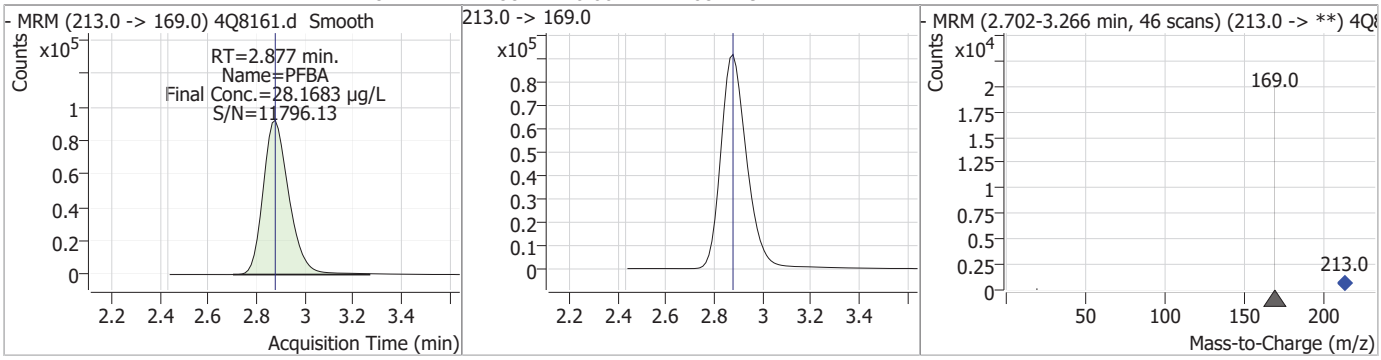
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

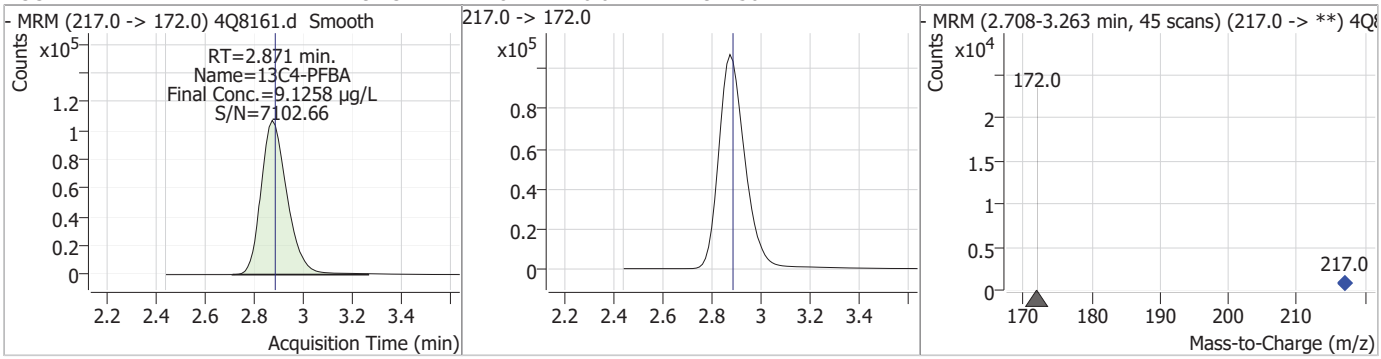
Perfluorinated Compounds by LC/MS/MS



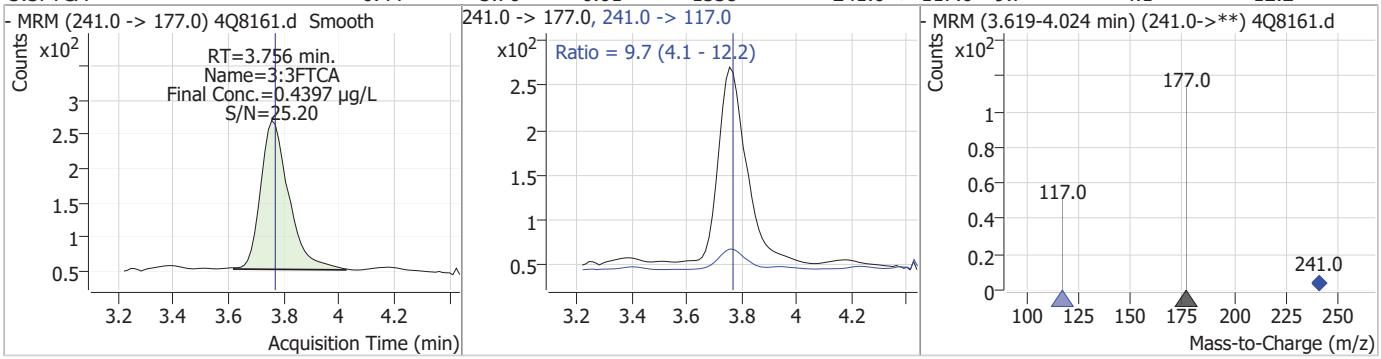
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	28.17	2.88	0.00	681779				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.13	2.87	-0.01	791756				

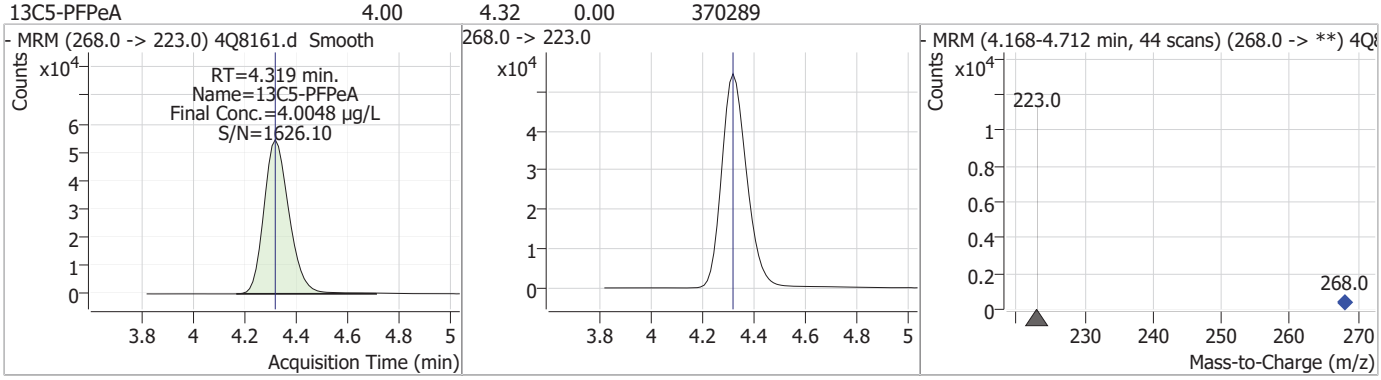


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	0.44	3.76	-0.01	1538	241.0 -> 117.0	9.7	4.1	12.2

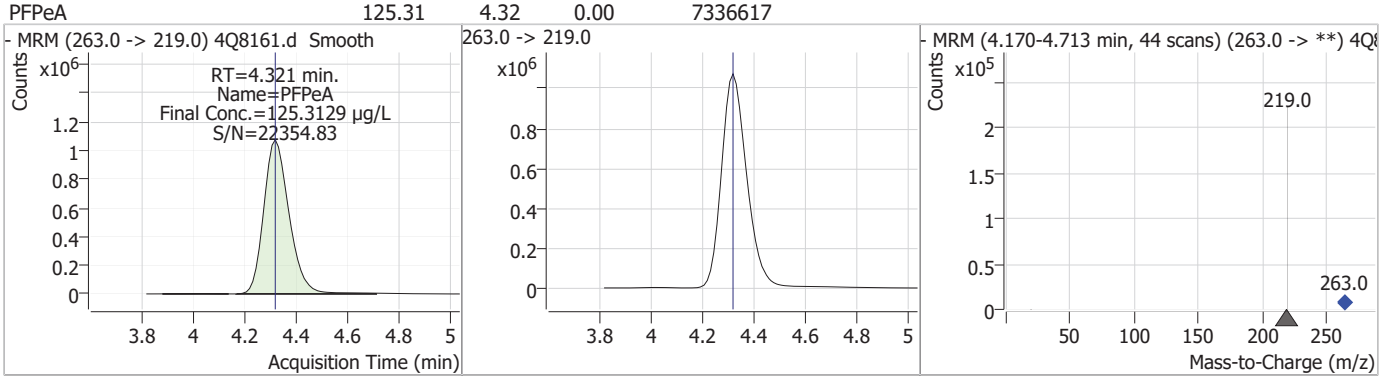


Perfluorinated Compounds by LC/MS/MS

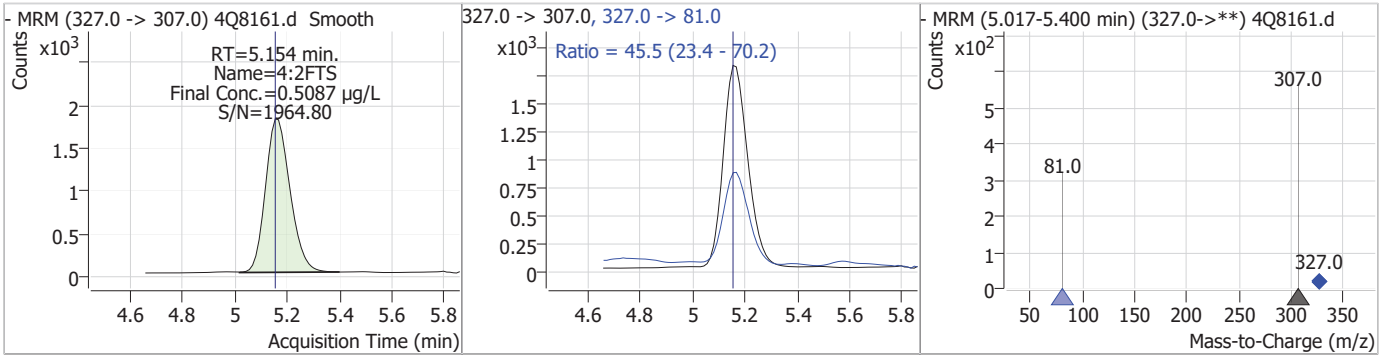
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.00	4.32	0.00	370289				



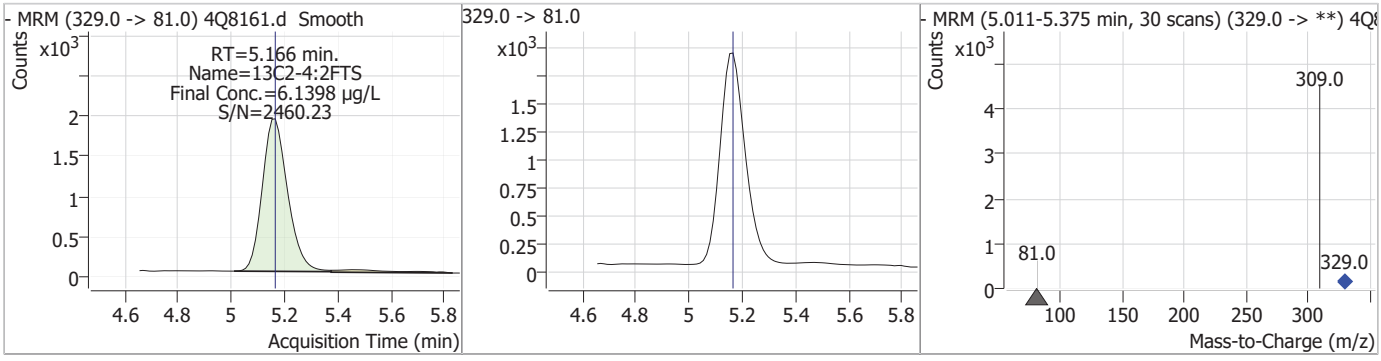
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	125.31	4.32	0.00	7336617				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	0.51	5.15	0.00	11719	327.0 -> 81.0	45.5	23.4	70.2

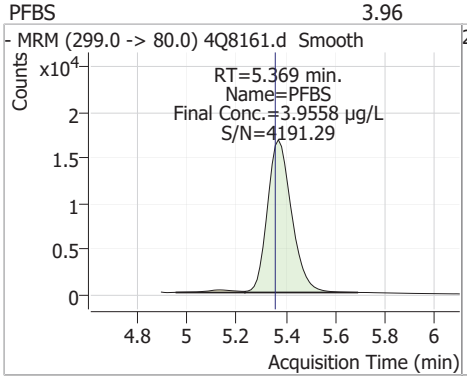


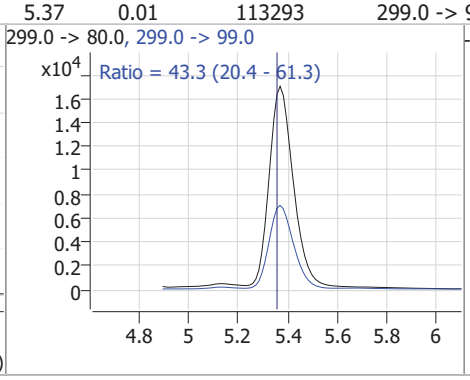
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	6.14	5.17	0.00	12545				

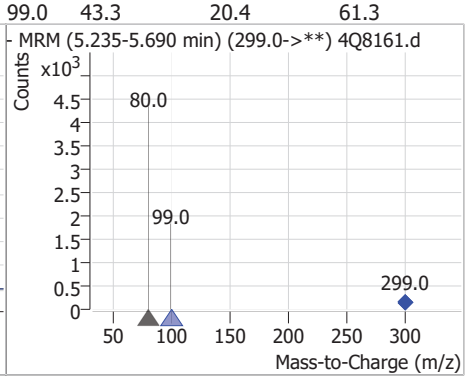


Perfluorinated Compounds by LC/MS/MS

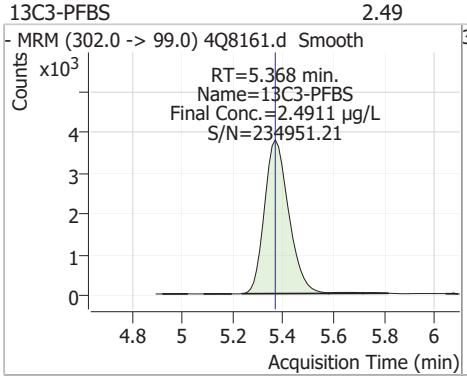
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	3.96	5.37	0.01	113293	299.0 -> 99.0	43.3	20.4	61.3

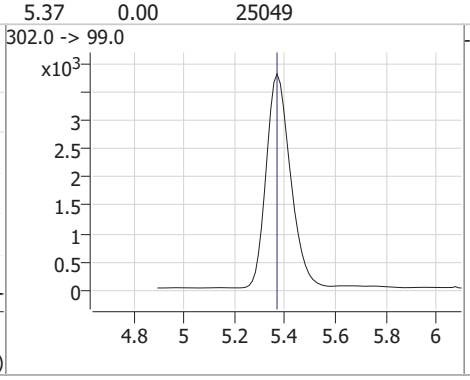


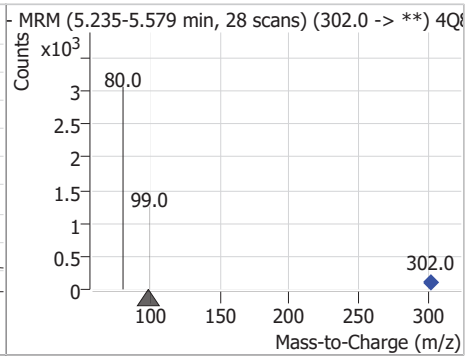




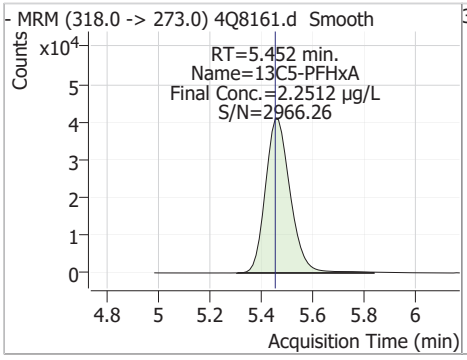
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.49	5.37	0.00	25049				

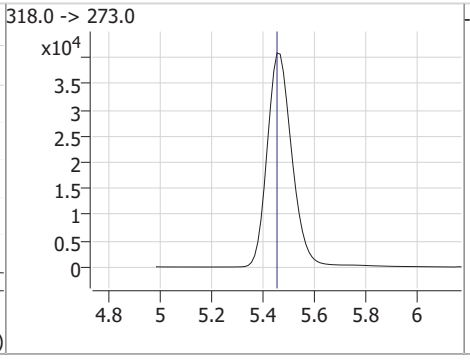


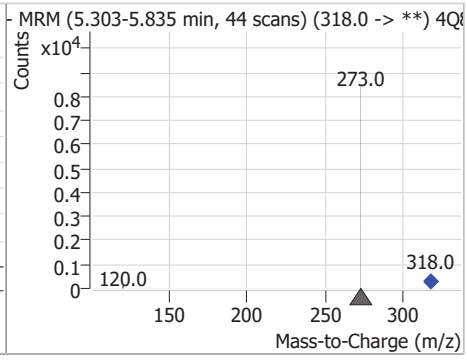




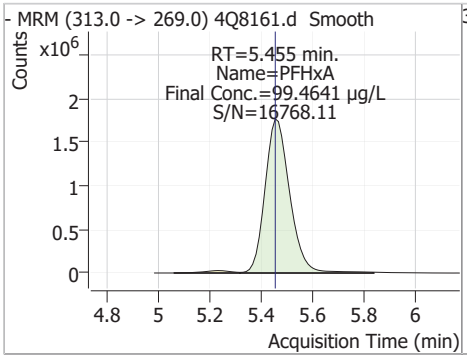
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.25	5.45	0.00	274310				

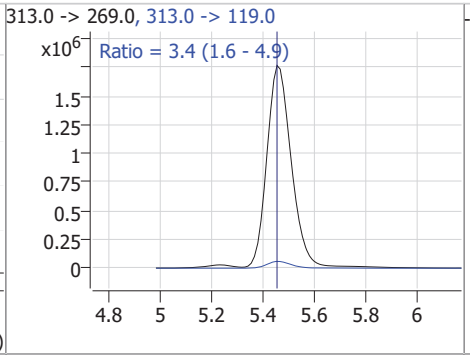


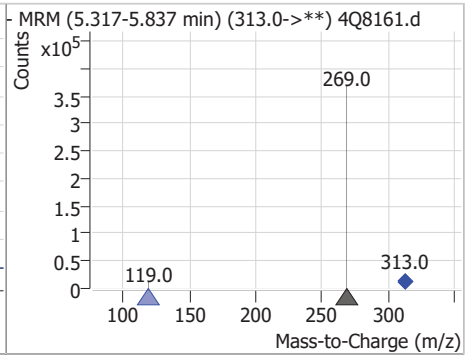




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	99.46	5.45	0.00	11759397	313.0 -> 119.0	3.4	1.6	4.9

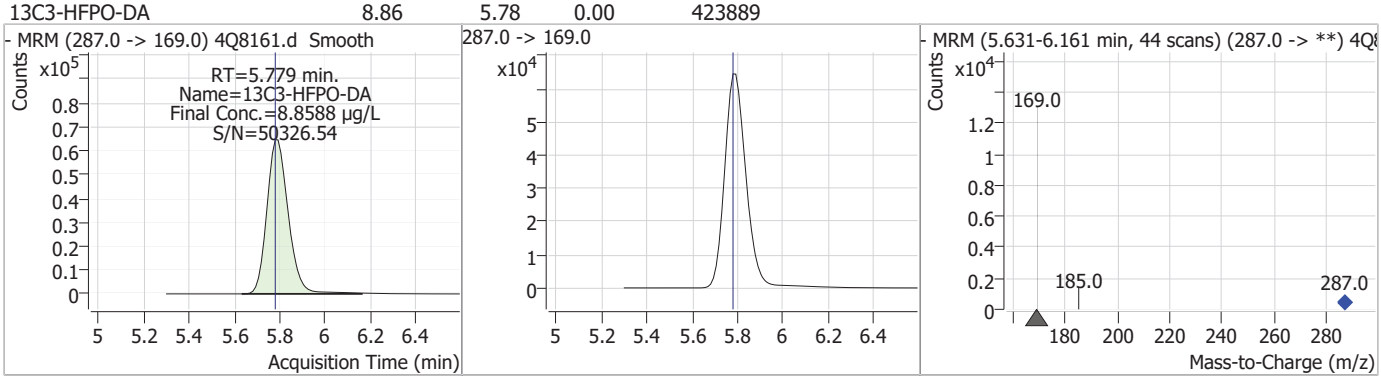




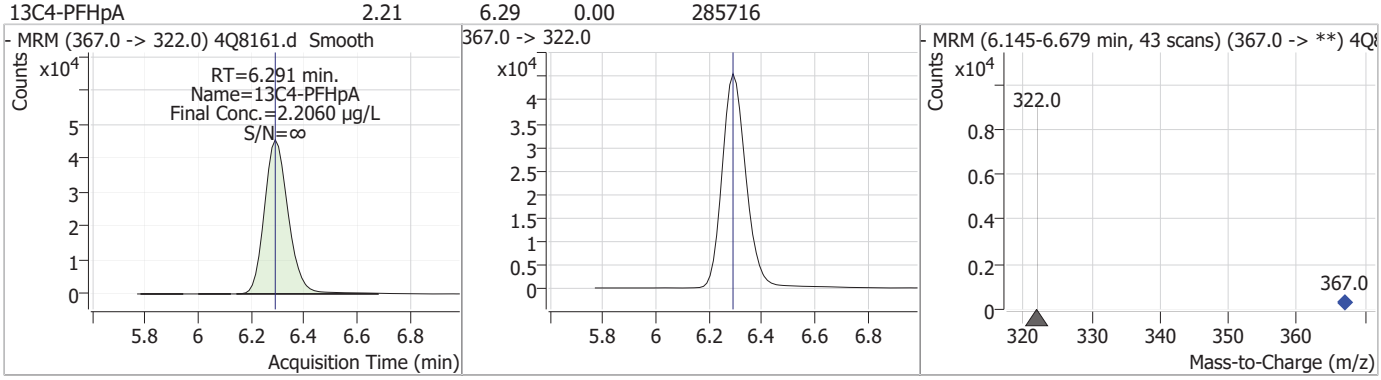


Perfluorinated Compounds by LC/MS/MS

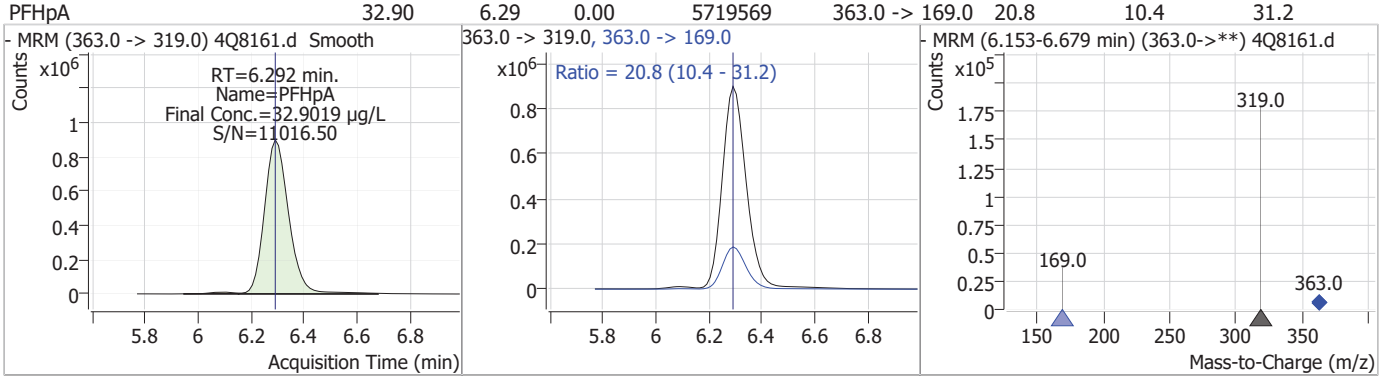
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.86	5.78	0.00	423889				



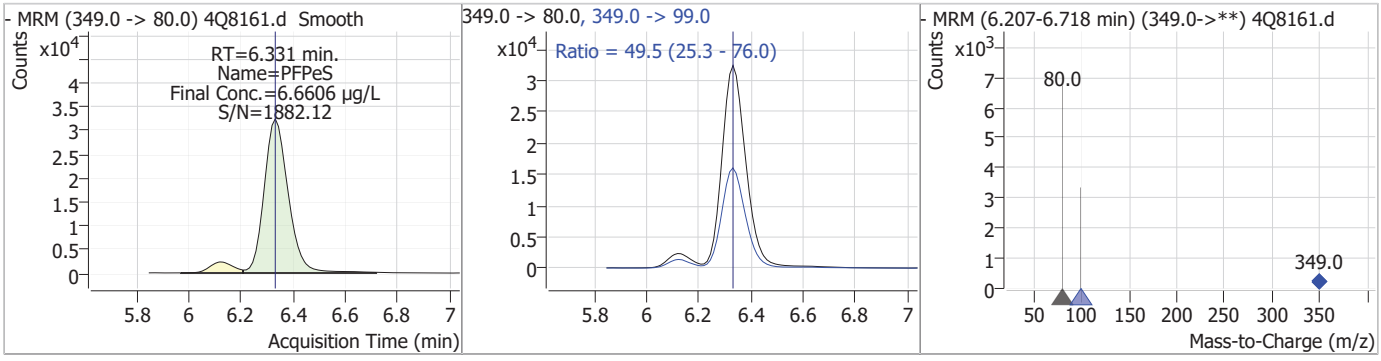
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.21	6.29	0.00	285716				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	32.90	6.29	0.00	5719569	363.0 -> 169.0	20.8	10.4	31.2

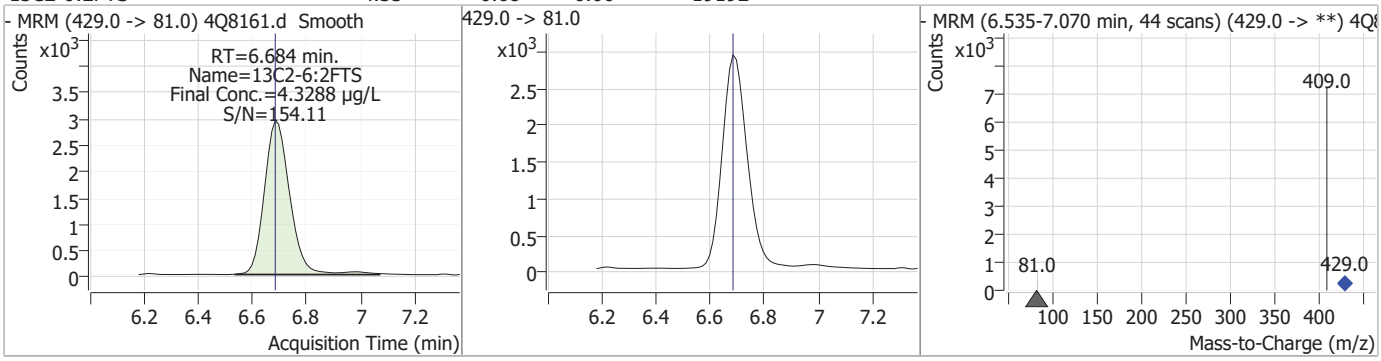


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	6.66	6.33	0.00	208360	349.0 -> 99.0	49.5	25.3	76.0

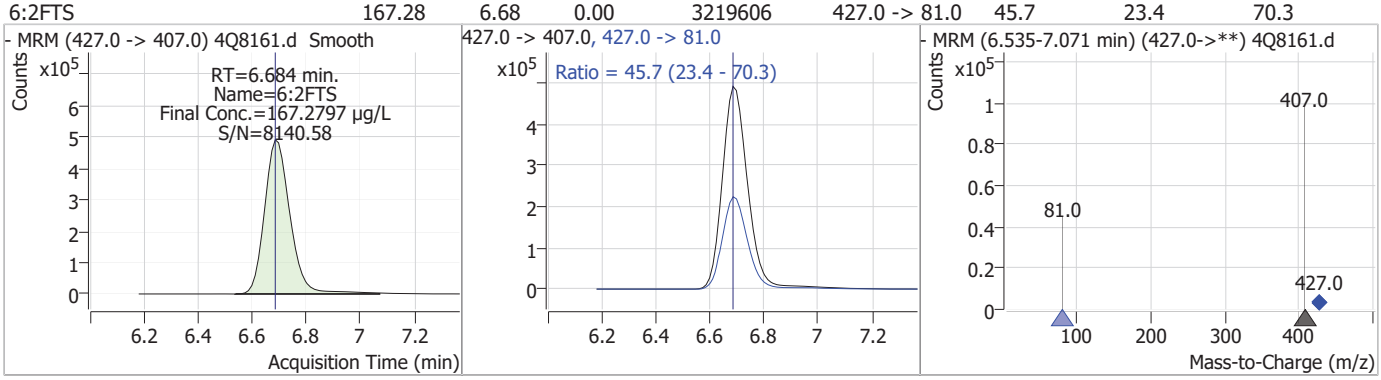


Perfluorinated Compounds by LC/MS/MS

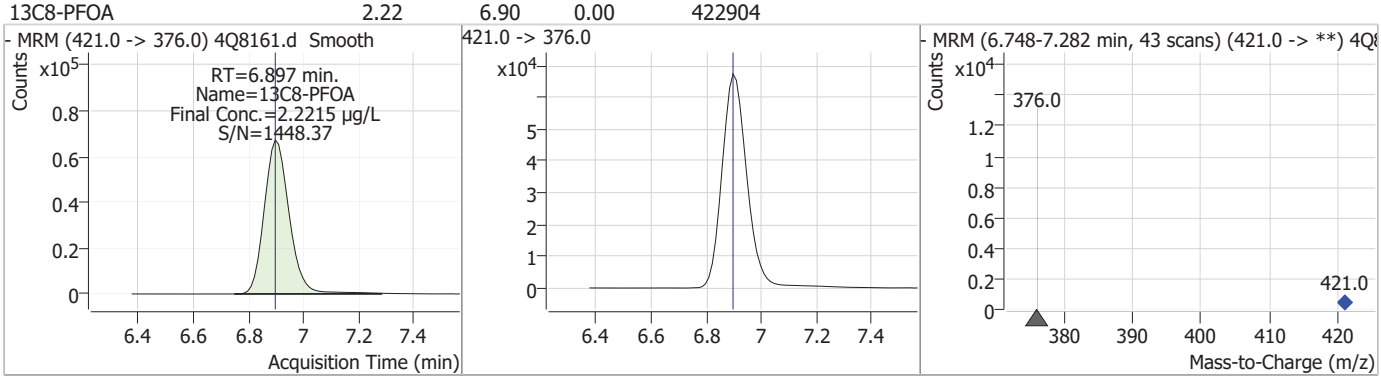
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.33	6.68	0.00	19192				



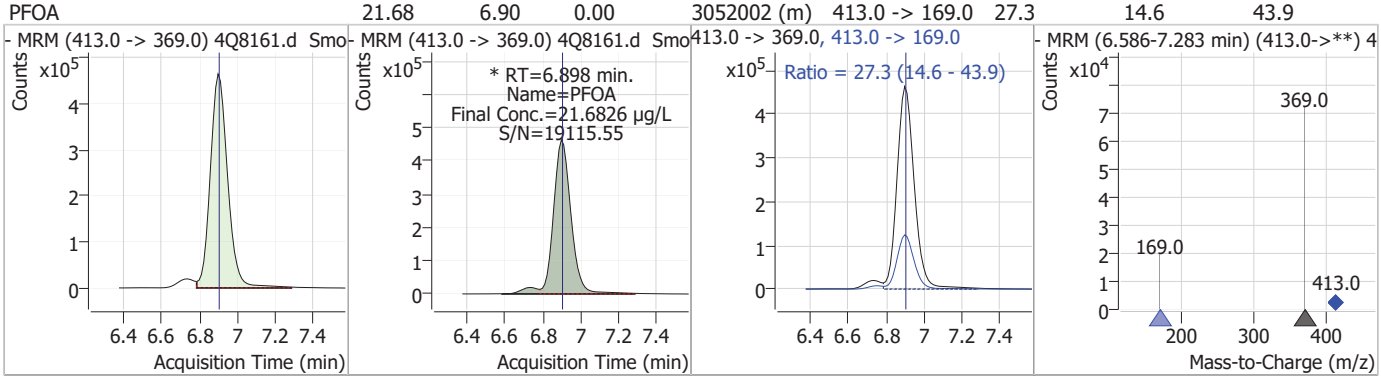
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	167.28	6.68	0.00	3219606	427.0 -> 81.0	45.7	23.4	70.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.22	6.90	0.00	422904				

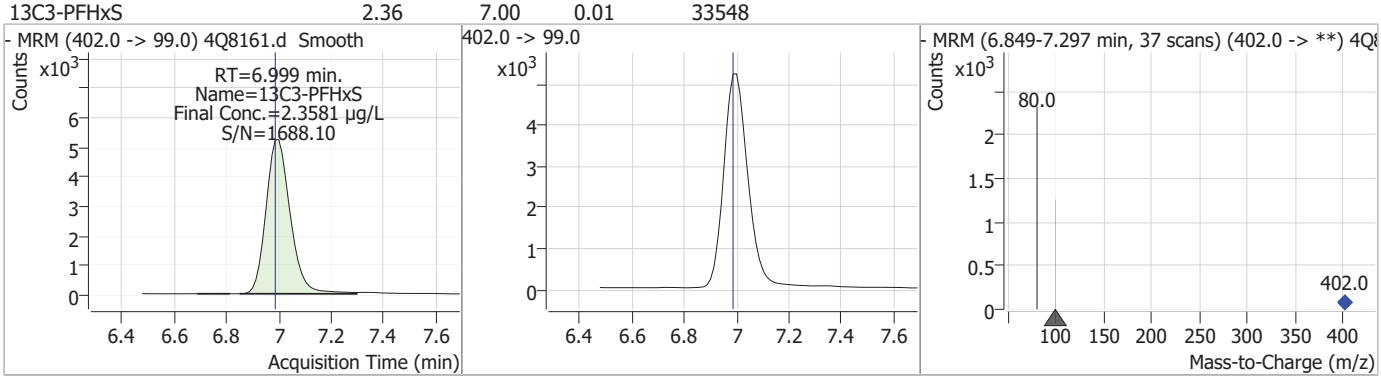


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	21.68	6.90	0.00	3052002 (m)	413.0 -> 169.0	27.3	14.6	43.9

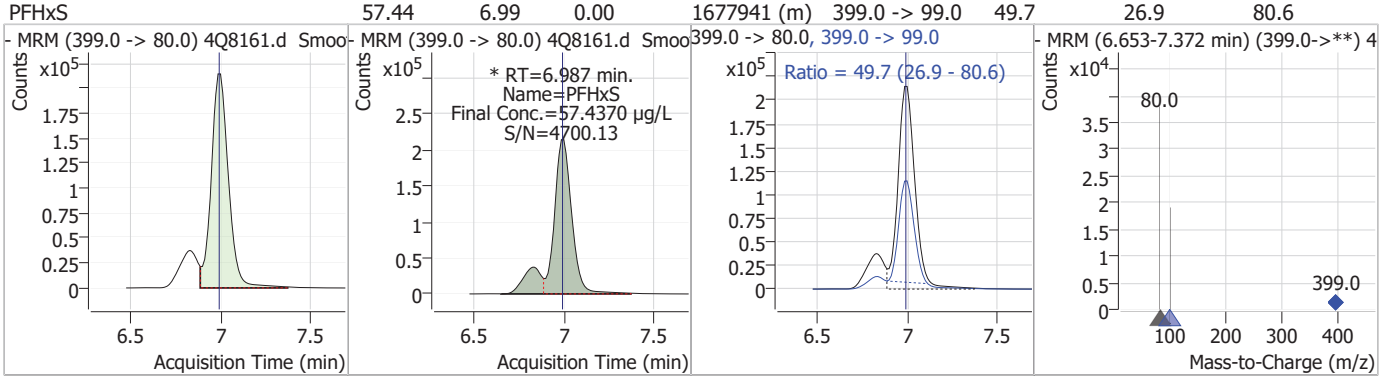


Perfluorinated Compounds by LC/MS/MS

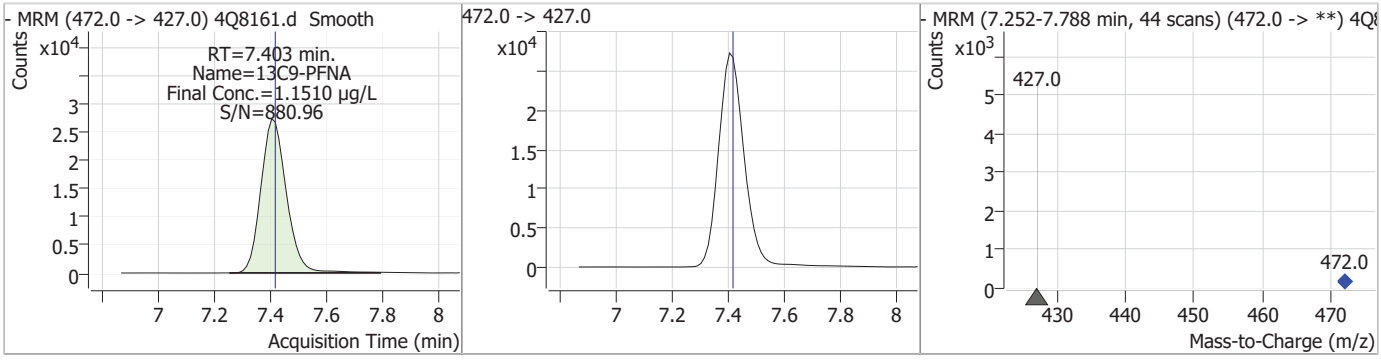
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.36	7.00	0.01	33548				



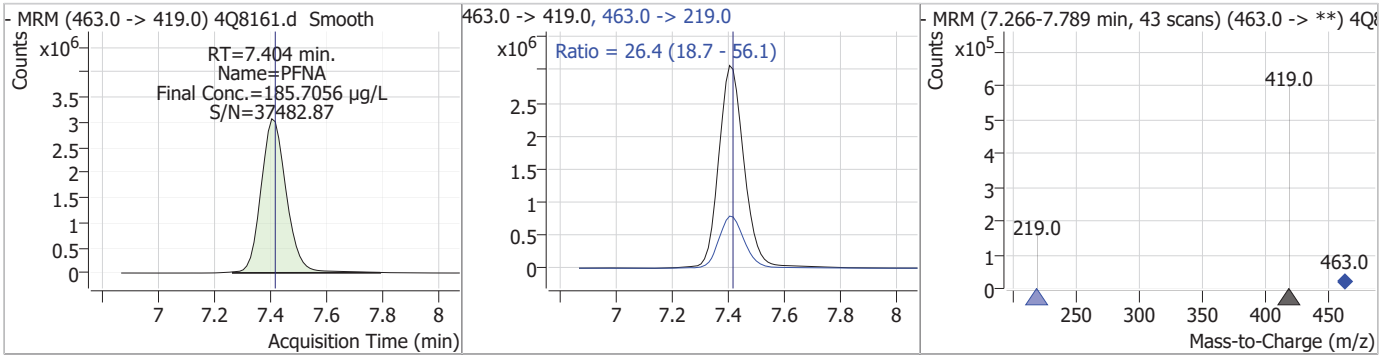
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	57.44	6.99	0.00	1677941 (m)	399.0 -> 99.0	49.7	26.9	80.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.15	7.40	-0.01	171280				

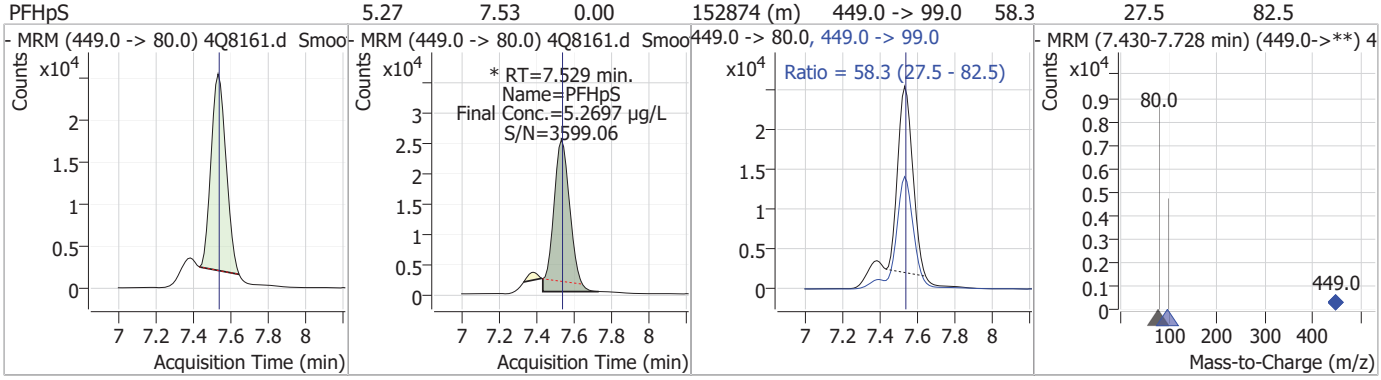


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	185.71	7.40	-0.01	19131992	463.0 -> 219.0	26.4	18.7	56.1

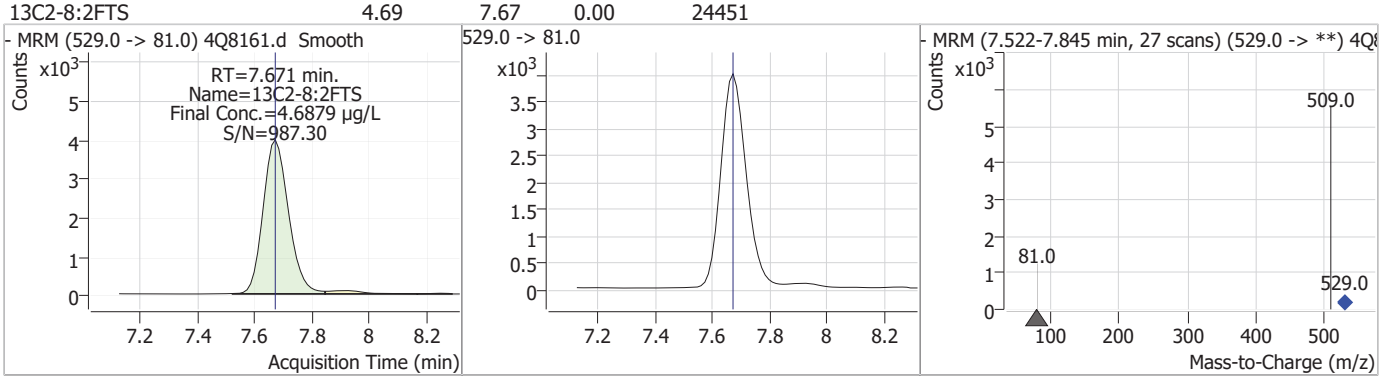


Perfluorinated Compounds by LC/MS/MS

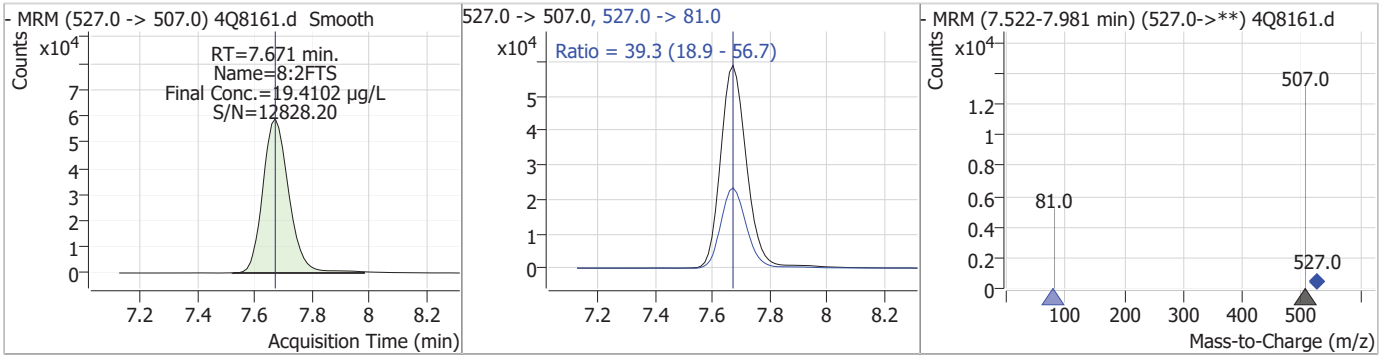
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	5.27	7.53	0.00	152874 (m)	449.0 -> 99.0	58.3	27.5	82.5



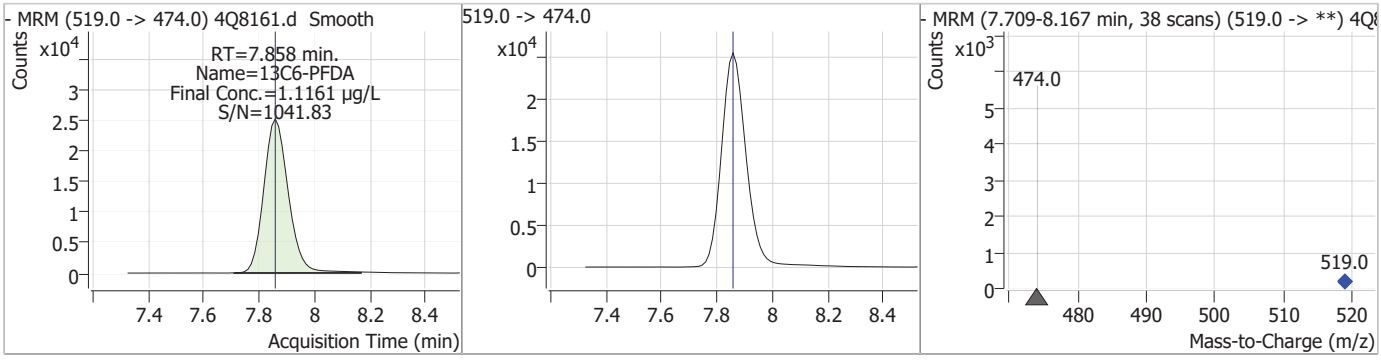
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.69	7.67	0.00	24451				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	19.41	7.67	0.00	371436	527.0 -> 81.0	39.3	18.9	56.7

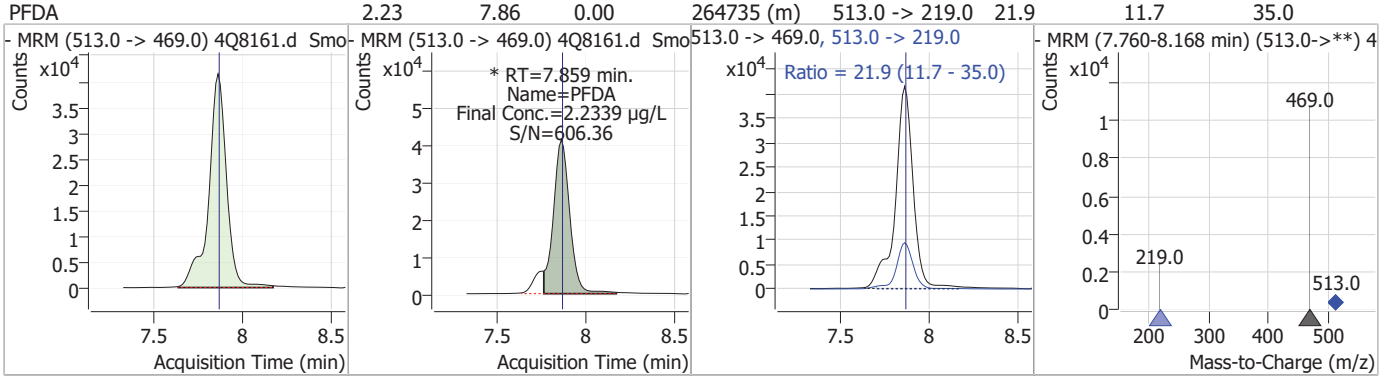


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.12	7.86	0.00	155917				

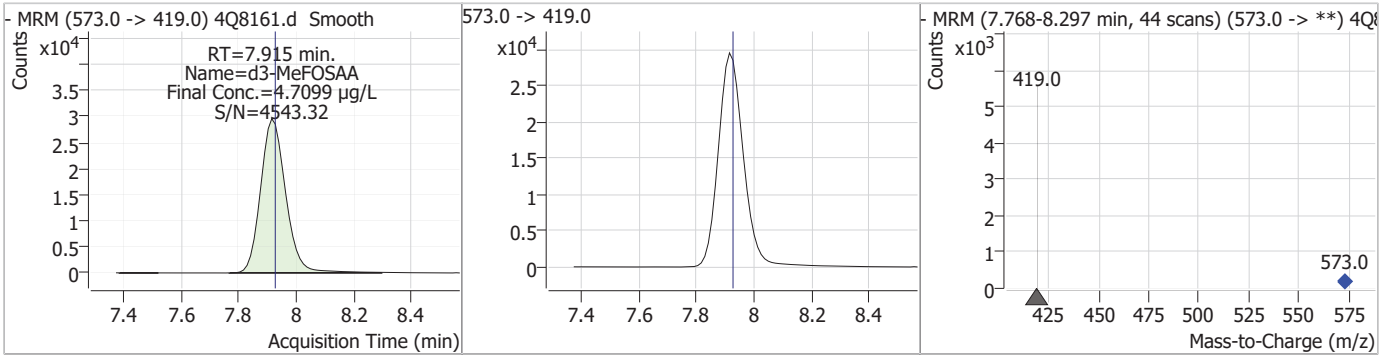


Perfluorinated Compounds by LC/MS/MS

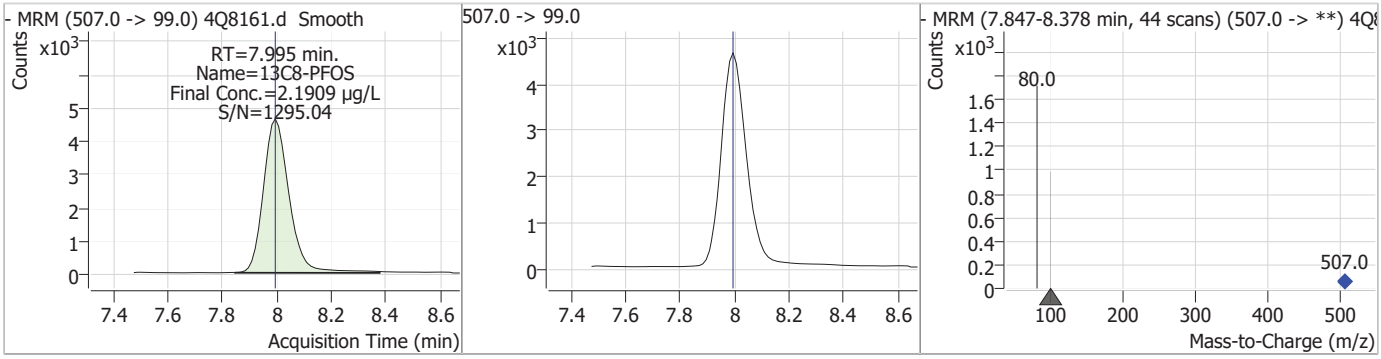
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.23	7.86	0.00	264735 (m)	513.0 -> 219.0	21.9	11.7	35.0



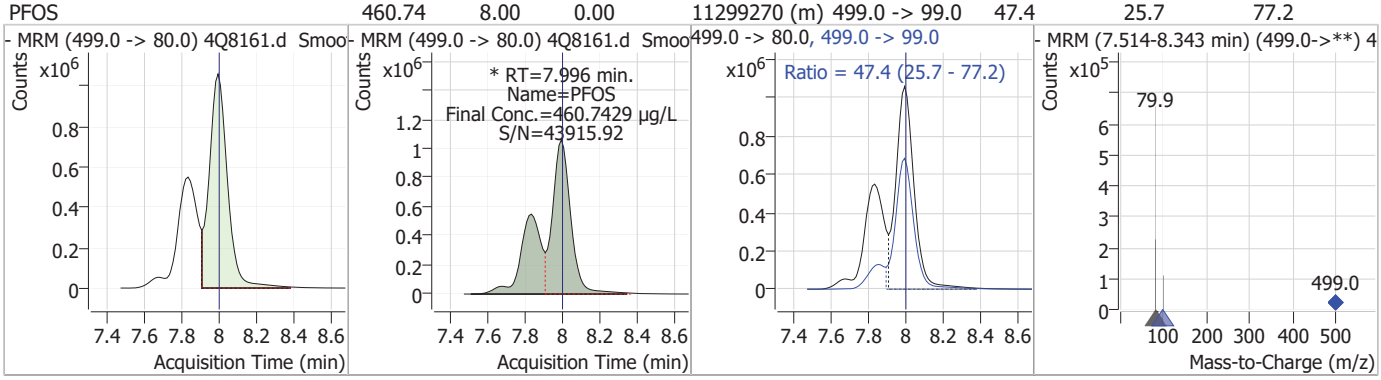
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.71	7.92	-0.01	178925				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.19	7.99	0.00	30429				

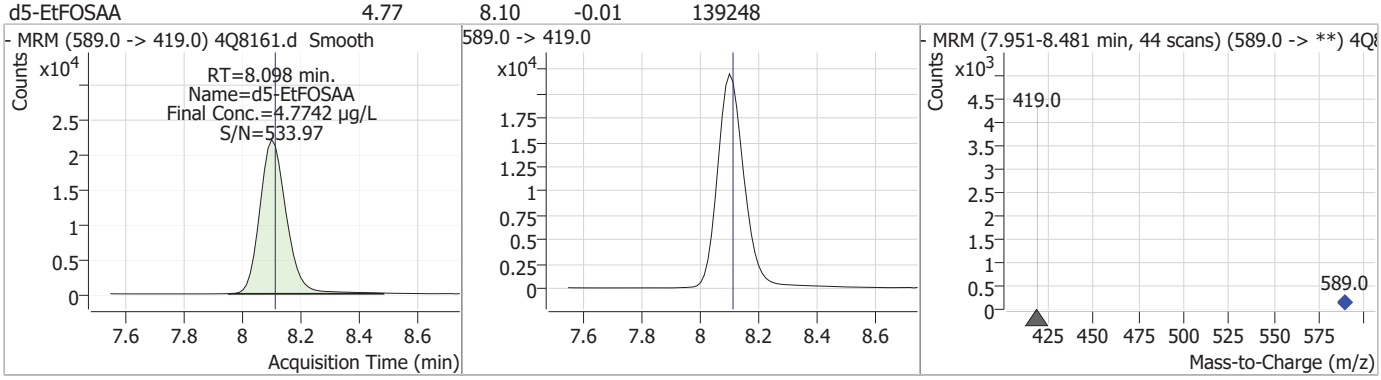


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	460.74	8.00	0.00	11299270 (m)	499.0 -> 99.0	47.4	25.7	77.2

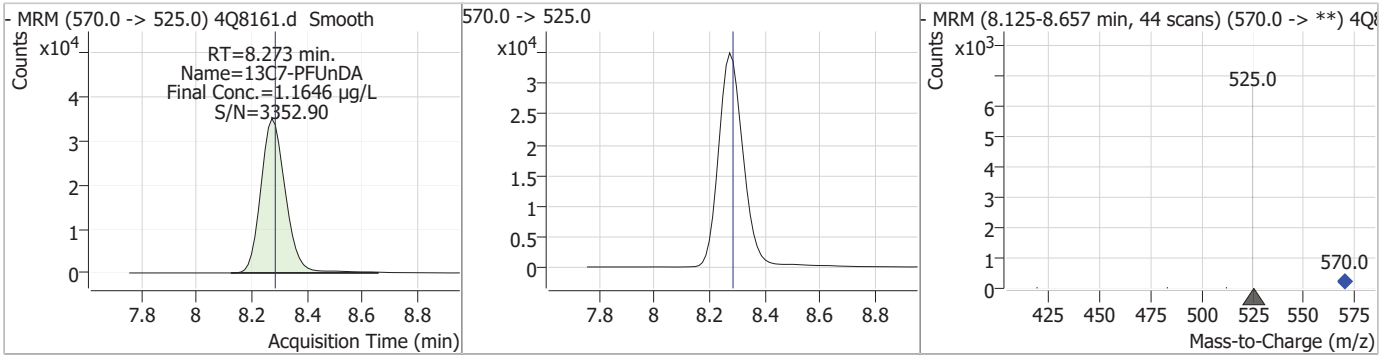


Perfluorinated Compounds by LC/MS/MS

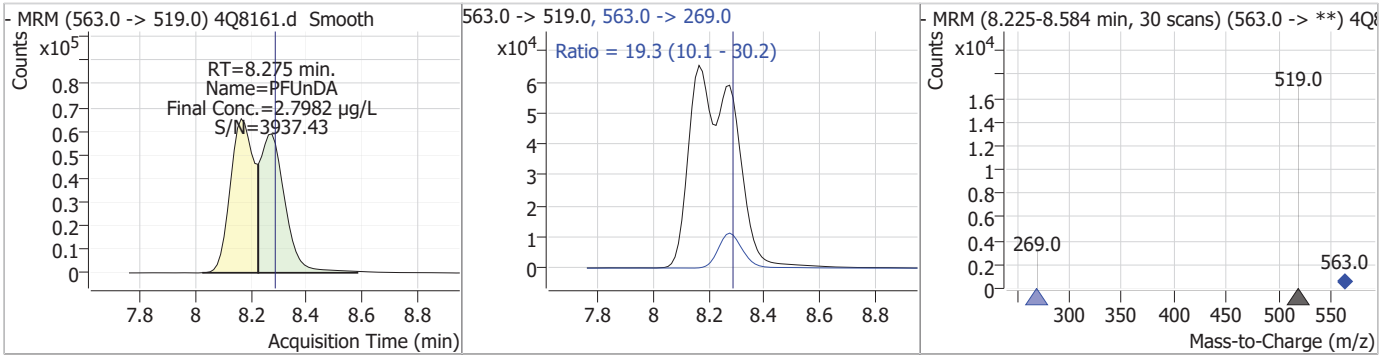
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.77	8.10	-0.01	139248				



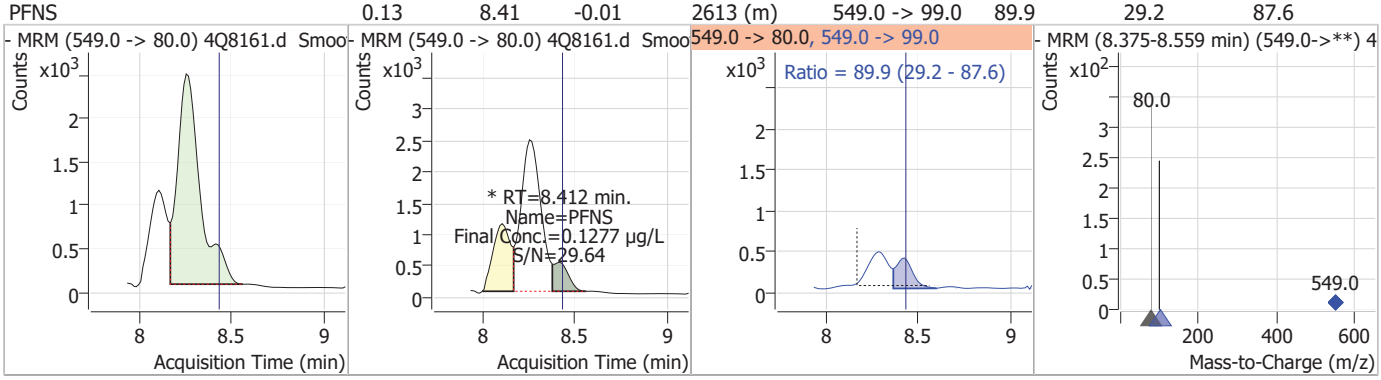
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.16	8.27	-0.01	217300				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.80	8.27	-0.01	359411	563.0 -> 269.0	19.3	10.1	30.2

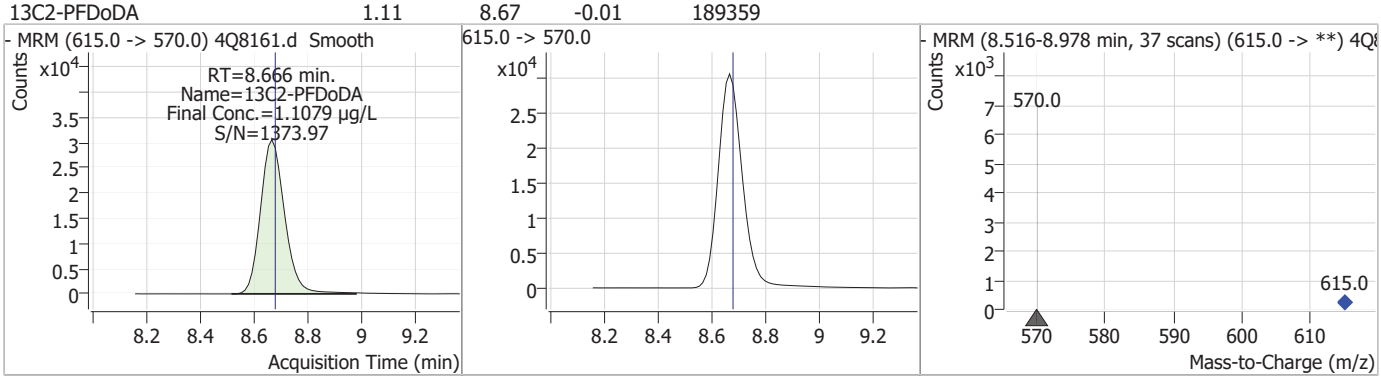


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.13	8.41	-0.01	2613 (m)	549.0 -> 99.0	89.9	29.2	87.6

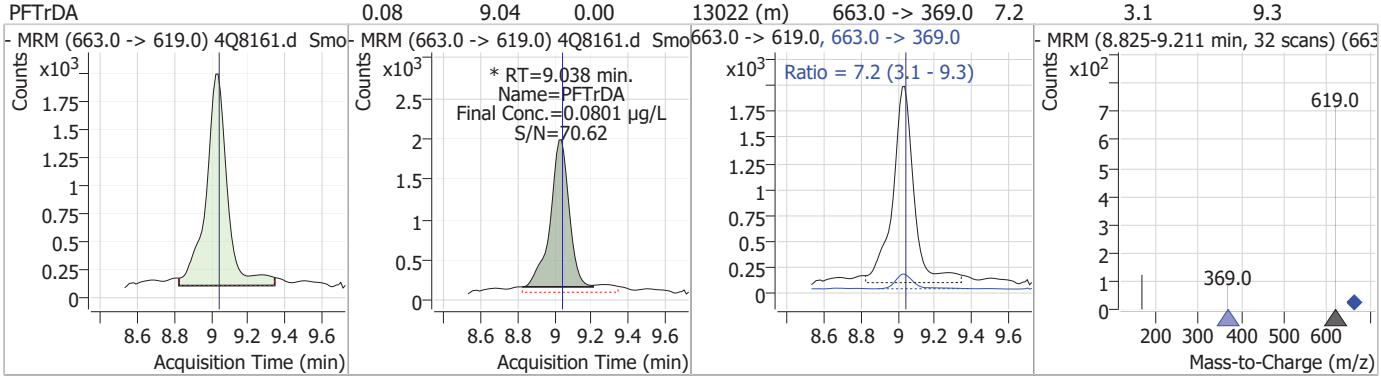


Perfluorinated Compounds by LC/MS/MS

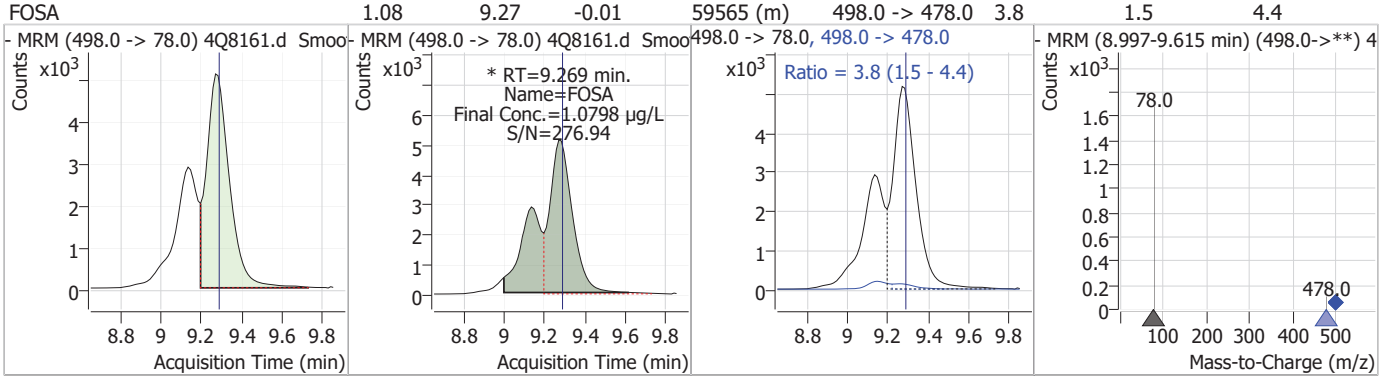
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.11	8.67	-0.01	189359				



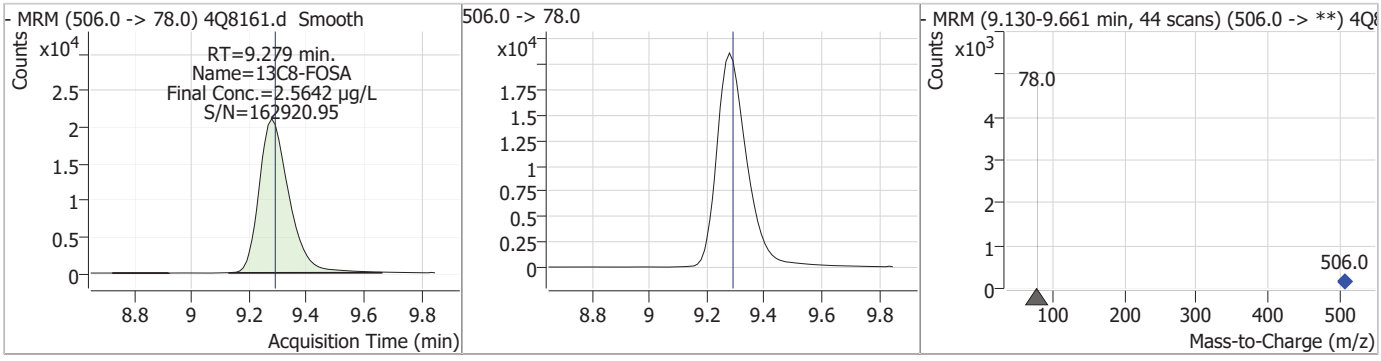
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.08	9.04	0.00	13022 (m)	663.0 -> 369.0	7.2	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	1.08	9.27	-0.01	59565 (m)	498.0 -> 478.0	3.8	1.5	4.4

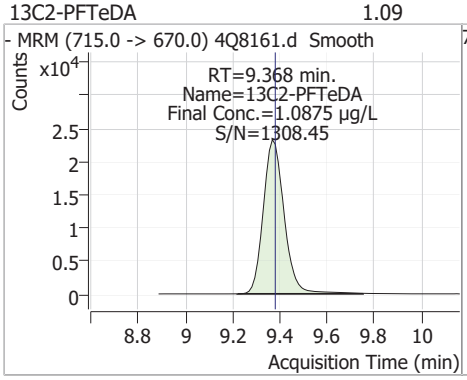


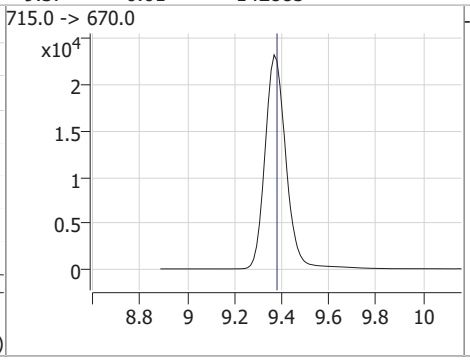
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.56	9.28	-0.01	151939				

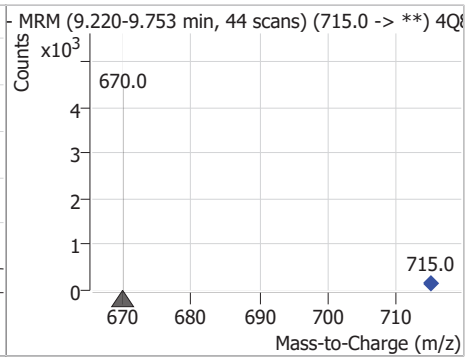


Perfluorinated Compounds by LC/MS/MS

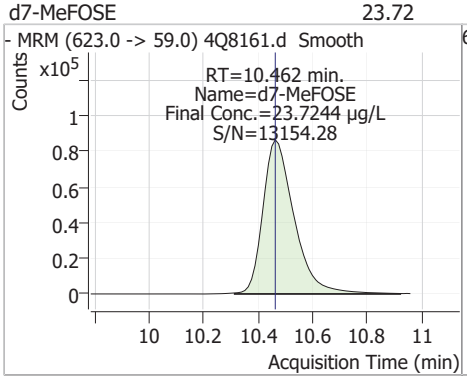
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.09	9.37	-0.01	142885				

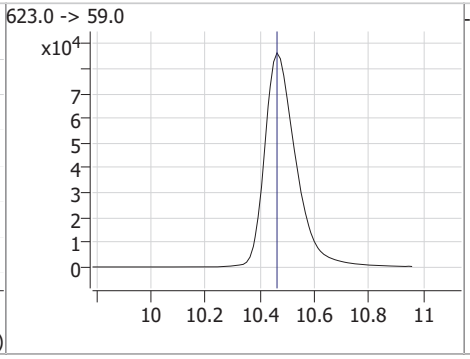


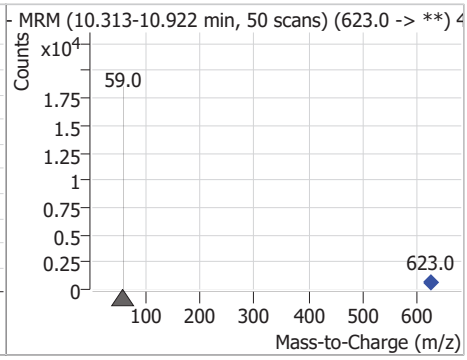




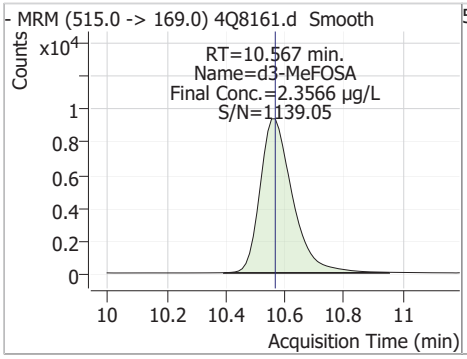
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.72	10.46	0.00	689196				

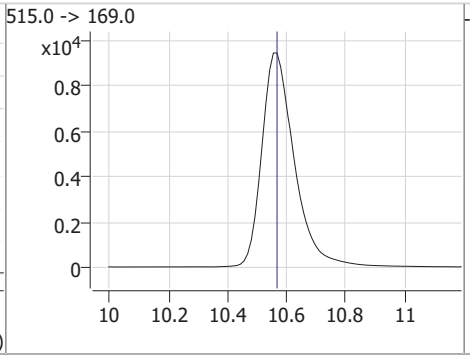


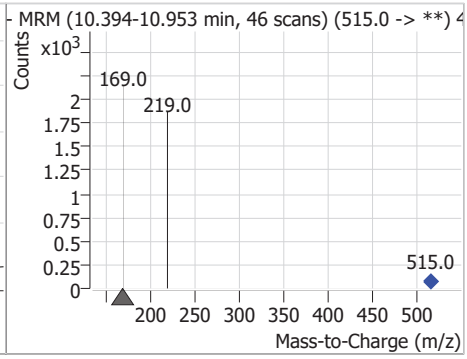




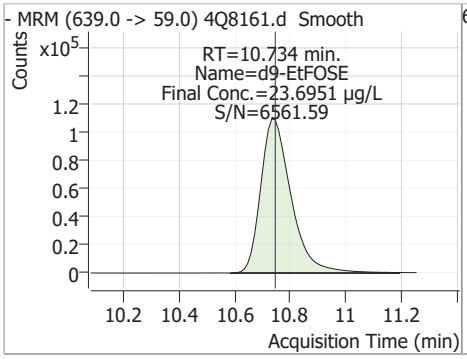
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.36	10.57	0.00	71703				

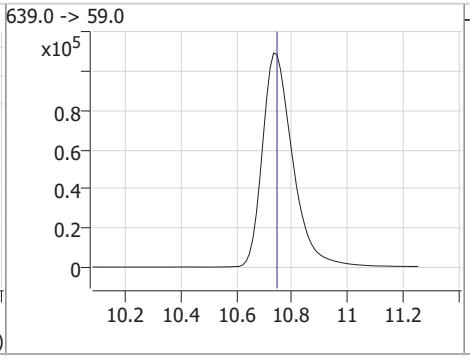


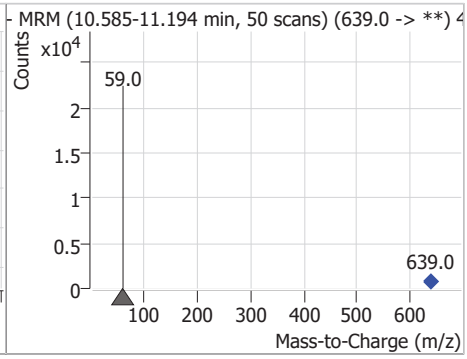




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.70	10.73	-0.01	834646				

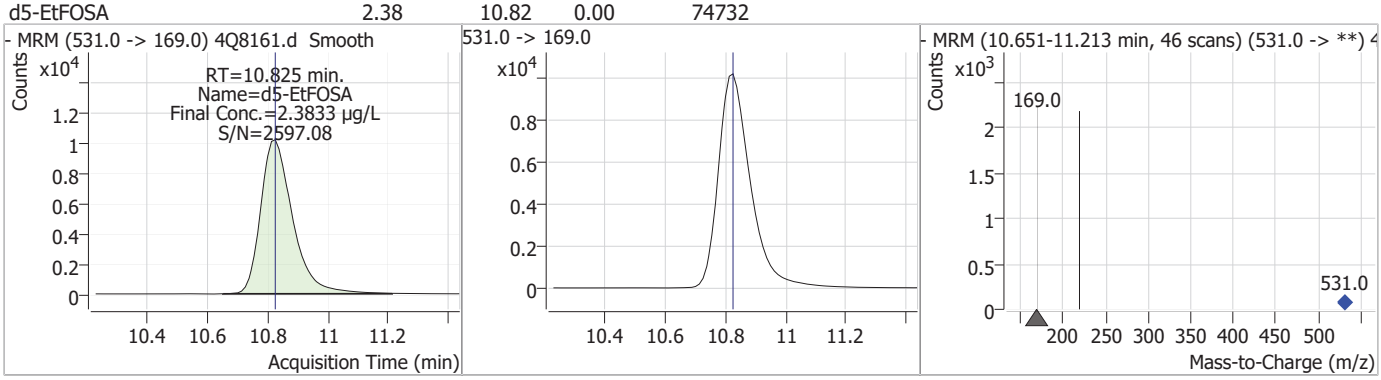






Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.38	10.82	0.00	74732				



7.1.1

7

Manual Integration Approval Summary

Sample Number: JE10205-1
Lab FileID: 4Q8161.D
Injection Time: 04/30/25 21:57
Method: EPA 1633
Analyst approved: 05/01/25 11:50 Maksud Haque
Supervisor approved: 05/12/25 14:58 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluoroheptanesulfonic acid	375-92-8		7.53	Poor instrument integration
Perfluorodecanoic acid	335-76-2		7.86	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
Perfluorononanesulfonic acid	68259-12-1		8.41	Poor instrument integration
Perfluorodecanesulfonic acid	335-77-3		8.80	Poor instrument integration
Perfluorotridecanoic acid	72629-94-8		9.04	Poor instrument integration
PFOSA	754-91-6		9.27	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/12/25 14:58

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8255.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 7:25:55 PM
Sample Name : JE10205-1
Vial : P1-C6
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63161,T4Q140,487,,,5,20,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.896	217.0 -> 172.0	32254	0.50	µg/L	0.012
M5-PFPeA	4.332	268.0 -> 223.0	16820	0.25	µg/L	0.012
M5-PFHxA	5.476	318.0 -> 273.0	11972	0.13	µg/L	0.012
M4-PFHpA	6.304	367.0 -> 322.0	12744	0.13	µg/L	0.000
M8-PFOA	6.922	421.0 -> 376.0	19239	0.13	µg/L	0.000
M9-PFNA	7.428	472.0 -> 427.0	8014	0.06	µg/L	0.000
M6-PFDA	7.883	519.0 -> 474.0	7377	0.06	µg/L	0.000
M7-PFUnDA	8.298	570.0 -> 525.0	9333	0.06	µg/L	-0.012
M2-PFDoDA	8.691	615.0 -> 570.0	7813	0.06	µg/L	-0.012
M2-PFTeDA	9.406	715.0 -> 670.0	6600	0.06	µg/L	-0.012
M8-FOSA	9.303	506.0 -> 78.0	7004	0.13	µg/L	-0.012
M3-PFBS	5.381	302.0 -> 99.0	1082	0.13	µg/L	0.013
		302.0 -> 80.0	2347			
M3-PFHxS	7.011	402.0 -> 99.0	1533	0.13	µg/L	0.012
M8-PFOS	8.007	507.0 -> 99.0	1625	0.13	µg/L	0.000
M2-4:2FTS	5.178	329.0 -> 81.0	577	0.25	µg/L	0.012
M2-6:2FTS	6.708	429.0 -> 81.0	1332	0.25	µg/L	0.000
M2-8:2FTS	7.683	529.0 -> 81.0	1455	0.25	µg/L	0.000
M3-MeFOSAA	7.940	573.0 -> 419.0	8325	0.25	µg/L	0.000
M3-HFPO-DA	5.804	287.0 -> 169.0	16553	0.50	µg/L	0.012
M5-EtFOSAA	8.123	589.0 -> 419.0	6396	0.25	µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	35090	1.25	µg/L	-0.012
M9-EtFOSE	10.746	639.0 -> 59.0	39691	1.25	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	2837	0.13	µg/L	-0.012
M3-MeFOSA	10.567	515.0 -> 169.0	2986	0.13	µg/L	-0.012
13C4-PFOS	8.008	503.0 -> 80.0	2959	0.13	µg/L	0.000
13C3-PFBA	2.899	216.0 -> 172.0	15513	0.25	µg/L	0.012
18O2-PFHxS	7.011	403.0 -> 84.0	2014	0.13	µg/L	0.012
13C4-PFOA	6.922	417.0 -> 372.0	21785	0.13	µg/L	0.000
13C2-PFDA	7.871	515.0 -> 470.0	7127	0.06	µg/L	-0.012
13C5-PFNA	7.428	468.0 -> 423.0	8277	0.06	µg/L	0.000
13C2-PFHxA	5.477	315.0 -> 270.0	12201	0.13	µg/L	0.012
System Monitoring Compounds						
13C2-4:2FTS	5.178	329.0 -> 81.0	577	0.26	µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 5.2%		
13C2-6:2FTS	6.708	429.0 -> 81.0	1332	0.27	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 5.5%		
13C2-8:2FTS	7.683	529.0 -> 81.0	1455	0.25	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 5.0%		
13C2-PFDoDA	8.691	615.0 -> 570.0	7813	0.05	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 3.9%		
13C2-PFTeDA	9.406	715.0 -> 670.0	6600	0.05	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 3.9%		
13C3-PFBS	5.381	302.0 -> 99.0	1082	0.11	µg/L	0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.4%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
13C3-PFHxS	7.011	402.0 -> 99.0	1533	0.11 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.3%		
13C4-PFBA	2.896	217.0 -> 172.0	32254	0.44 µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 4.4%		
13C4-PFHpA	6.304	367.0 -> 322.0	12744	0.11 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.4%		
13C5-PFHxA	5.476	318.0 -> 273.0	11972	0.11 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.5%		
13C5-PFPeA	4.332	268.0 -> 223.0	16820	0.21 µg/L		0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 4.3%		
13C6-PFDA	7.883	519.0 -> 474.0	7377	0.05 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 4.3%		
13C7-PFUnDA	8.298	570.0 -> 525.0	9333	0.06 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 4.4%		
13C8-FOSA	9.303	506.0 -> 78.0	7004	0.11 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.4%		
13C8-PFOA	6.922	421.0 -> 376.0	19239	0.11 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.3%		
13C8-PFOS	8.007	507.0 -> 99.0	1625	0.12 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.6%		
13C9-PFNA	7.428	472.0 -> 427.0	8014	0.06 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 4.5%		
d3-MeFOSAA	7.940	573.0 -> 419.0	8325	0.21 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 4.2%		
13C3-HFPO-DA	5.804	287.0 -> 169.0	16553	0.43 µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 4.3%		
d3-MeFOSA	10.567	515.0 -> 169.0	2986	0.10 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 3.9%		
d5-EtFOSAA	8.123	589.0 -> 419.0	6396	0.20 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 4.0%		
d7-MeFOSE	10.475	623.0 -> 59.0	35090	1.04 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 4.2%		
d9-EtFOSE	10.746	639.0 -> 59.0	39691	0.96 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 3.9%		
d5-EtFOSA	10.825	531.0 -> 169.0	2837	0.09 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 3.5%		
Target Compounds						QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.		
		327.0 -> 81.0				
6:2FTS	6.709	427.0 -> 407.0	201650	7.83 µg/L		99
		427.0 -> 81.0	91637			
8:2FTS	7.684	527.0 -> 507.0	17948	0.85 µg/L		97
		527.0 -> 81.0	6713			
EtFOSAA	-	584.0 -> 419.0	-	N.D.		
		584.0 -> 483.0				
FOSA	-	498.0 -> 78.0	-	N.D.		
		498.0 -> 478.0				
MeFOSAA	-	570.0 -> 419.0	-	N.D.		
		570.0 -> 512.0				
PFBA	2.889	213.0 -> 169.0	30343	1.44 µg/L		100
PFBS	5.382	299.0 -> 80.0	5368	0.22 µg/L	m	100
		299.0 -> 99.0	2188			
PFDA	7.871	513.0 -> 469.0	10681	0.10 µg/L	m	97
		513.0 -> 219.0	2569			
PFDoDA	-	613.0 -> 569.0	-	N.D.		
		613.0 -> 319.0				

Perfluorinated Compounds by LC/MS/MS

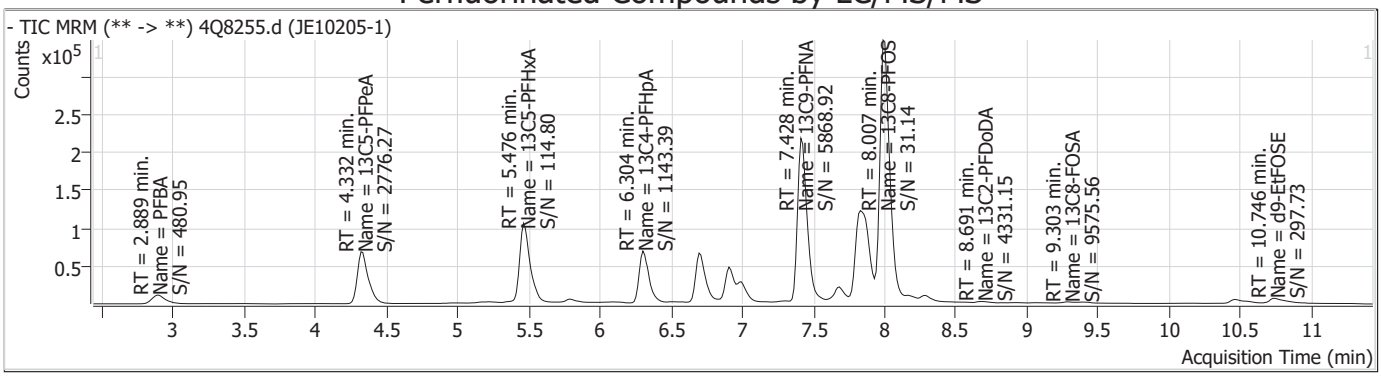
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.304	363.0 -> 319.0	256754	1.76	µg/L		100
		363.0 -> 169.0	51857				
PFHpS	7.541	449.0 -> 80.0	7254	0.27	µg/L		96
		449.0 -> 99.0	4233				
PFHxA	5.479	313.0 -> 269.0	500104	5.15	µg/L		100
		313.0 -> 119.0	17096				
PFHxS	7.013	399.0 -> 80.0	74154	2.77	µg/L	m	98
		399.0 -> 99.0	37934				
PFNA	7.429	463.0 -> 419.0	798560	8.64	µg/L		88
		463.0 -> 219.0	226454				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	6.923	413.0 -> 369.0	139674	1.11	µg/L	m	94
		413.0 -> 169.0	36311				
PFOS	8.008	499.0 -> 80.0	560084	21.58	µg/L	m	93
		499.0 -> 99.0	282426				
PFPeA	4.334	263.0 -> 219.0	354315	6.76	µg/L		100
PFPeS	6.343	349.0 -> 80.0	8711	0.32	µg/L		95
		349.0 -> 99.0	4018				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	8.287	563.0 -> 519.0	19054	0.17	µg/L		99
		563.0 -> 269.0	3490				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

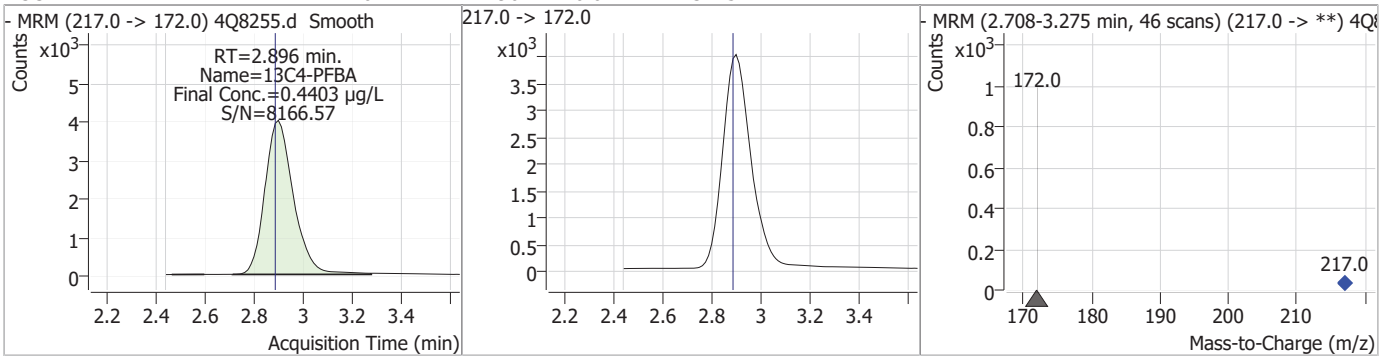
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

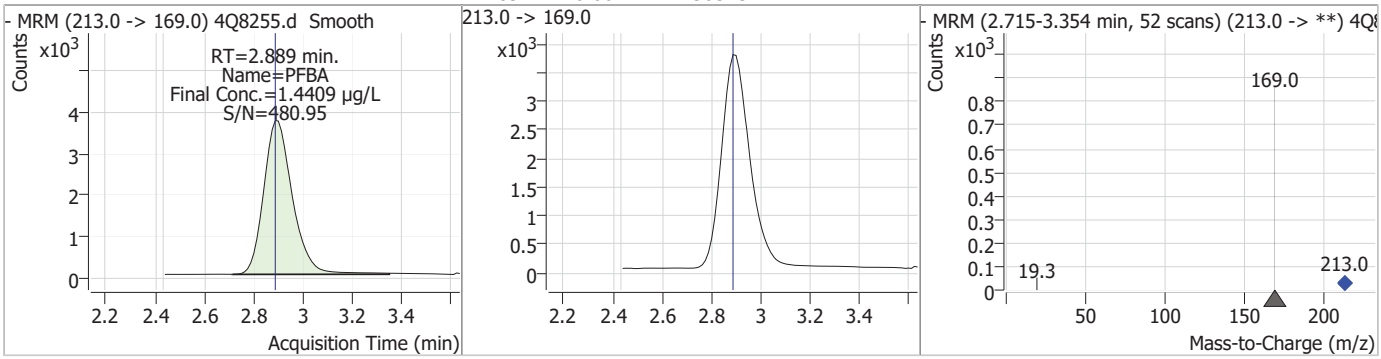
Perfluorinated Compounds by LC/MS/MS



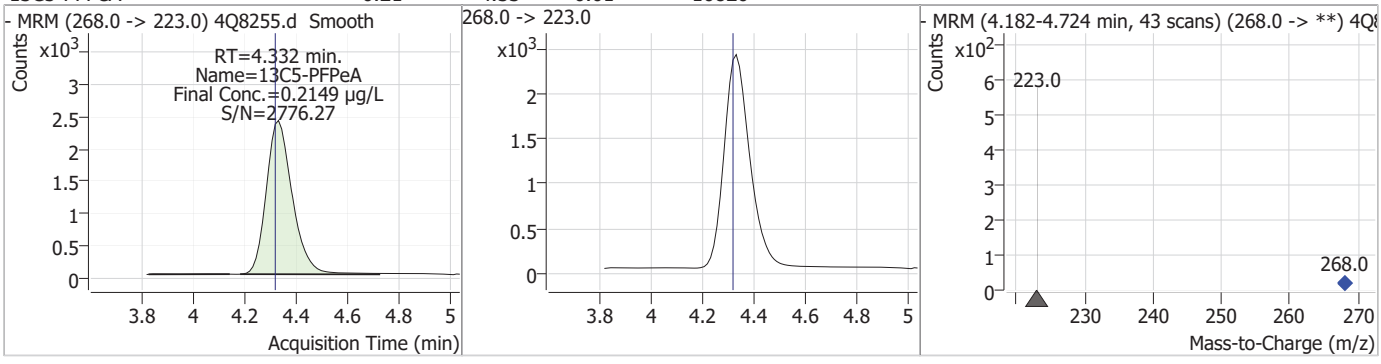
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	0.44	2.90	0.01	32254				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	1.44	2.89	0.00	30343				

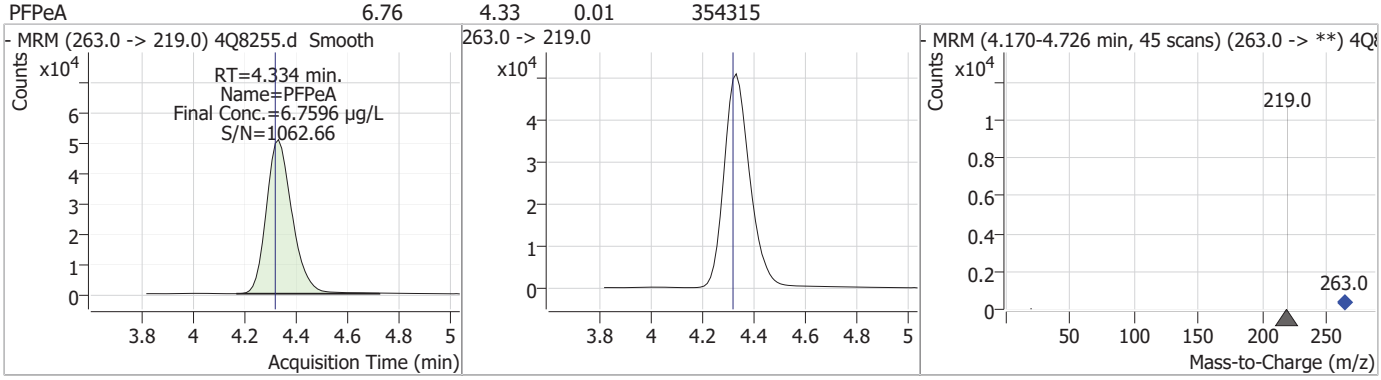


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	0.21	4.33	0.01	16820				

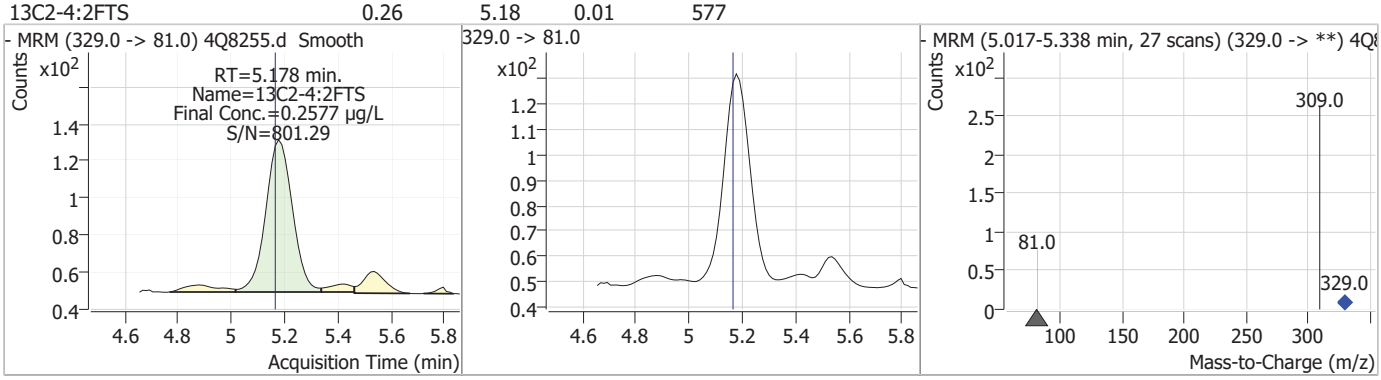


Perfluorinated Compounds by LC/MS/MS

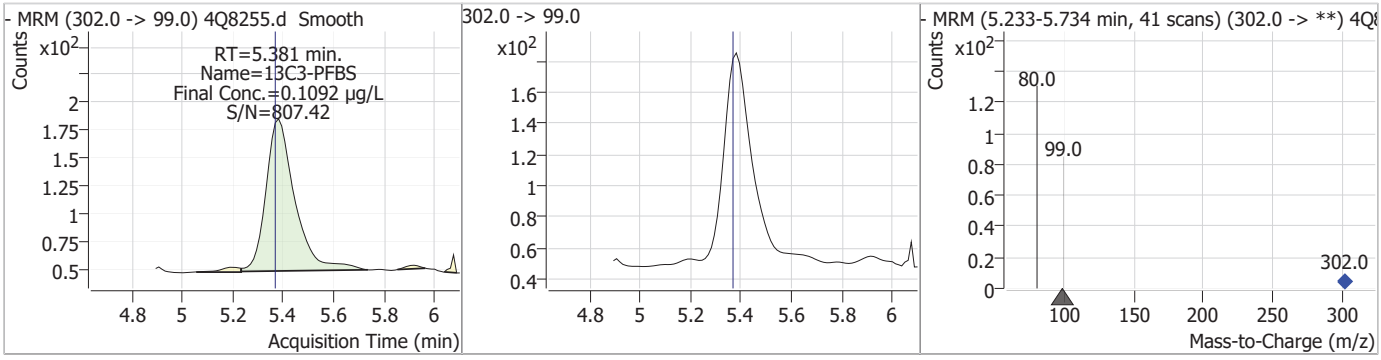
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	6.76	4.33	0.01	354315				



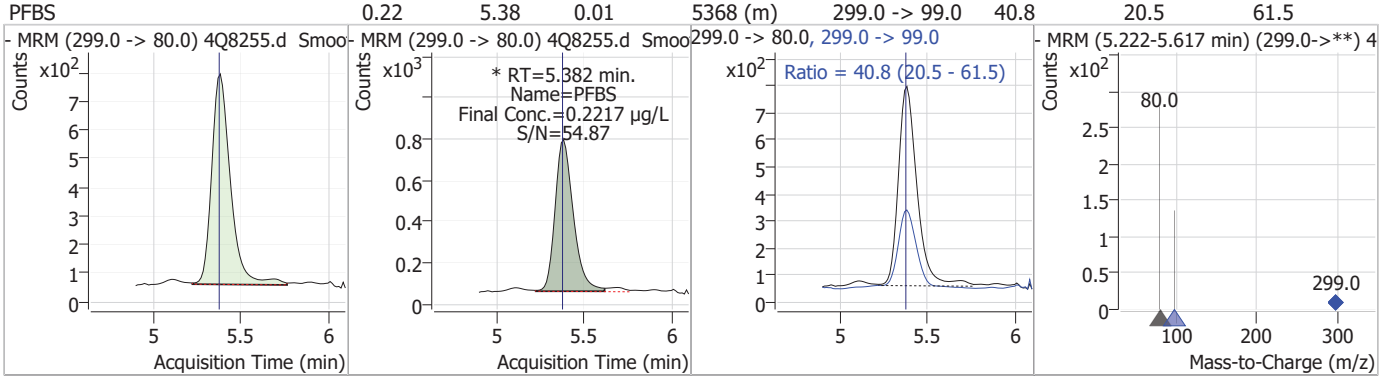
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	0.26	5.18	0.01	577				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	0.11	5.38	0.01	1082				

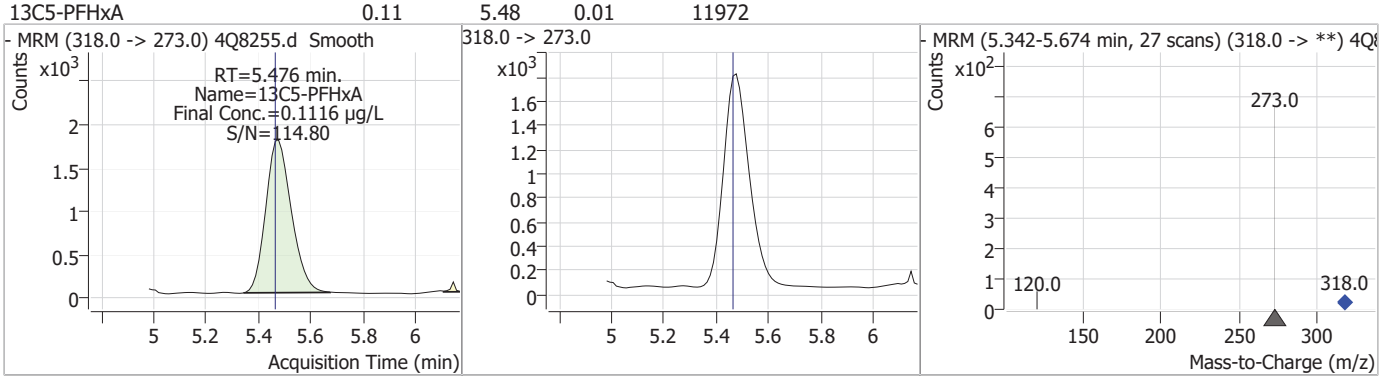


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.22	5.38	0.01	5368 (m)	299.0 -> 99.0	40.8	20.5	61.5

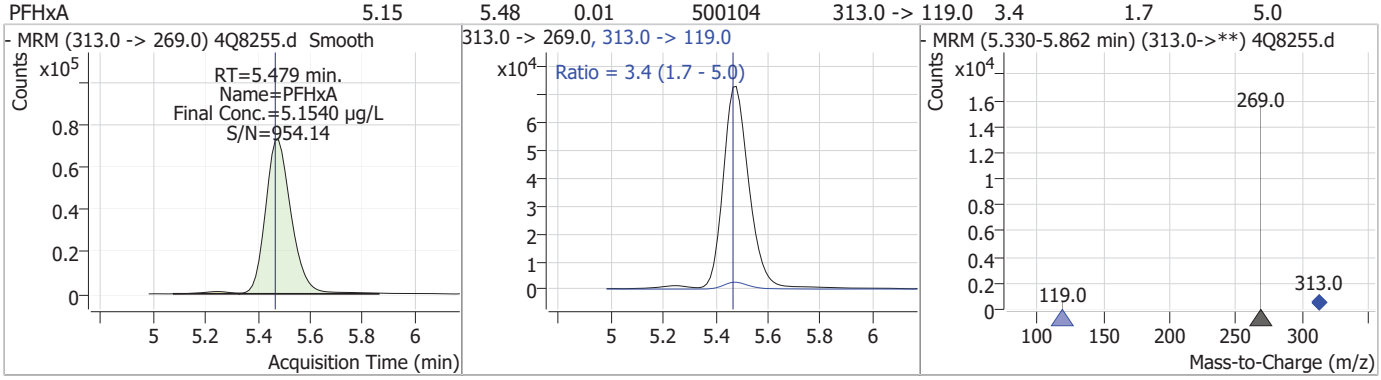


Perfluorinated Compounds by LC/MS/MS

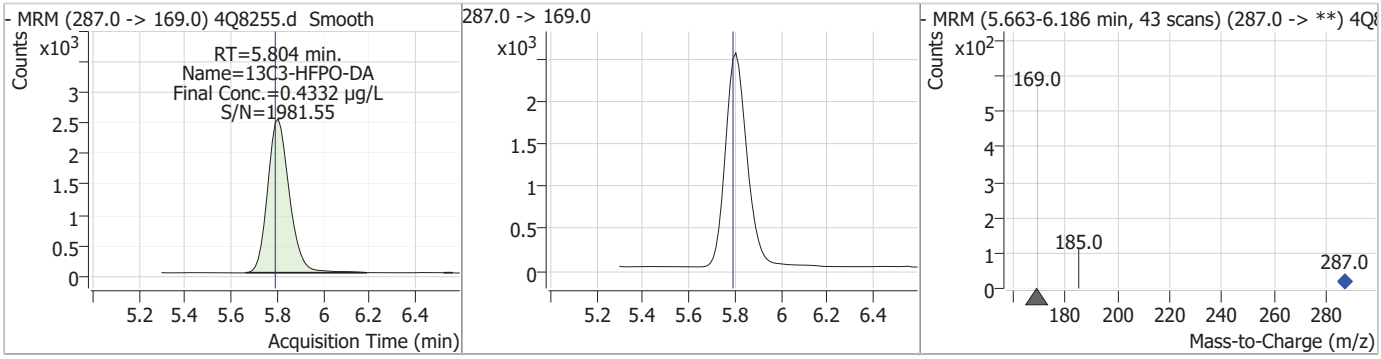
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	0.11	5.48	0.01	11972				



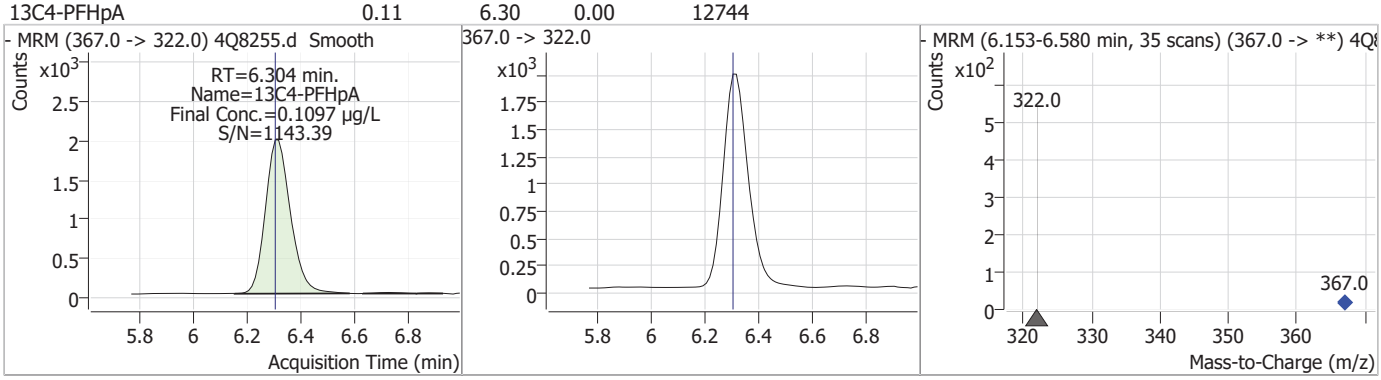
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	5.15	5.48	0.01	500104	313.0 -> 119.0	3.4	1.7	5.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	0.43	5.80	0.01	16553				

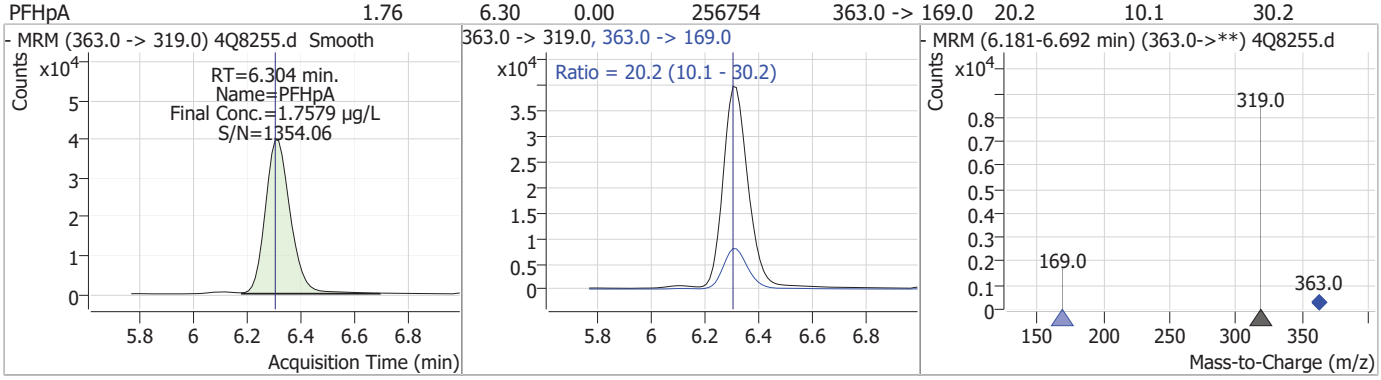


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	0.11	6.30	0.00	12744				

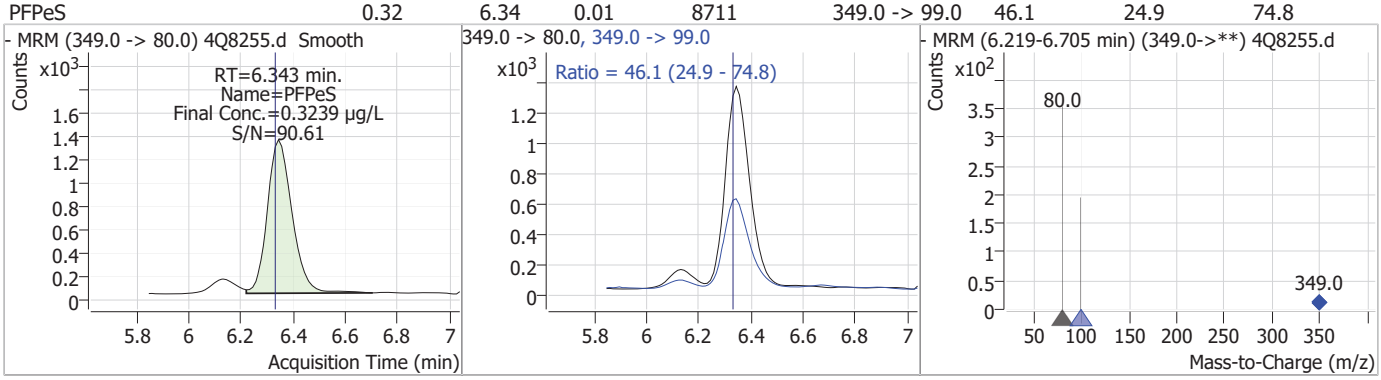


Perfluorinated Compounds by LC/MS/MS

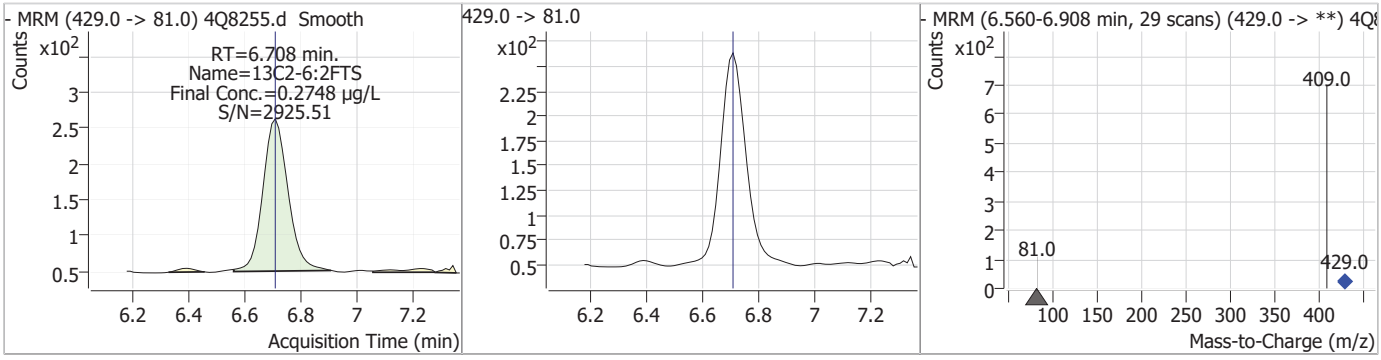
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	1.76	6.30	0.00	256754	363.0 -> 169.0	20.2	10.1	30.2



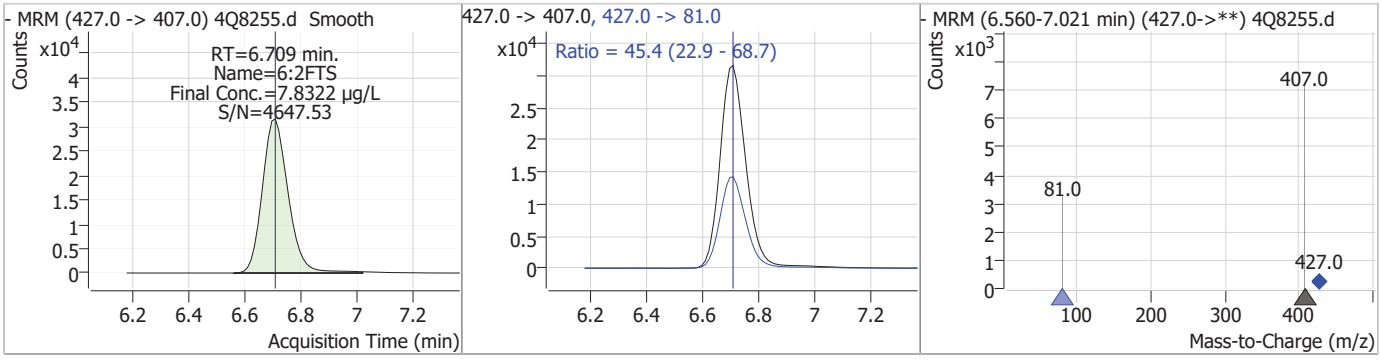
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.32	6.34	0.01	8711	349.0 -> 99.0	46.1	24.9	74.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	0.27	6.71	0.00	1332				

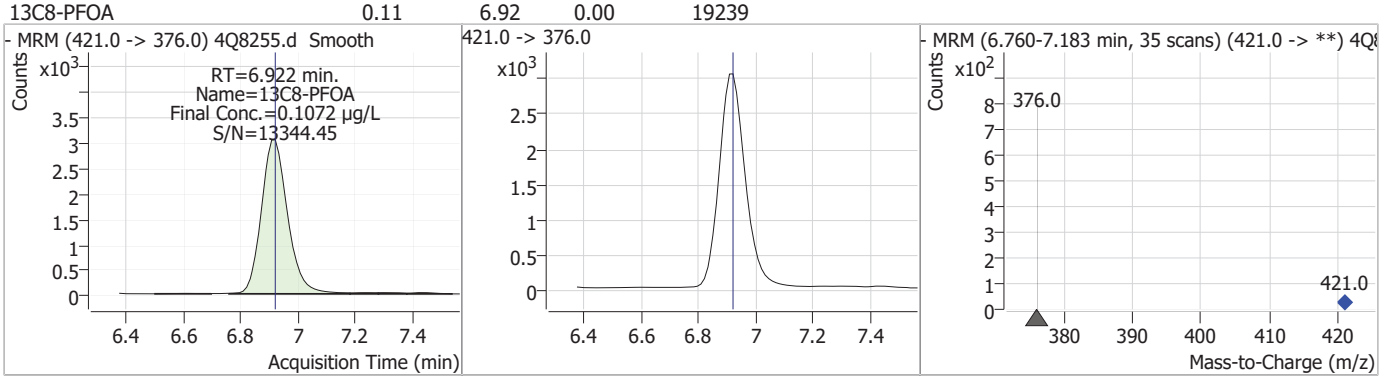


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	7.83	6.71	0.00	201650	427.0 -> 81.0	45.4	22.9	68.7

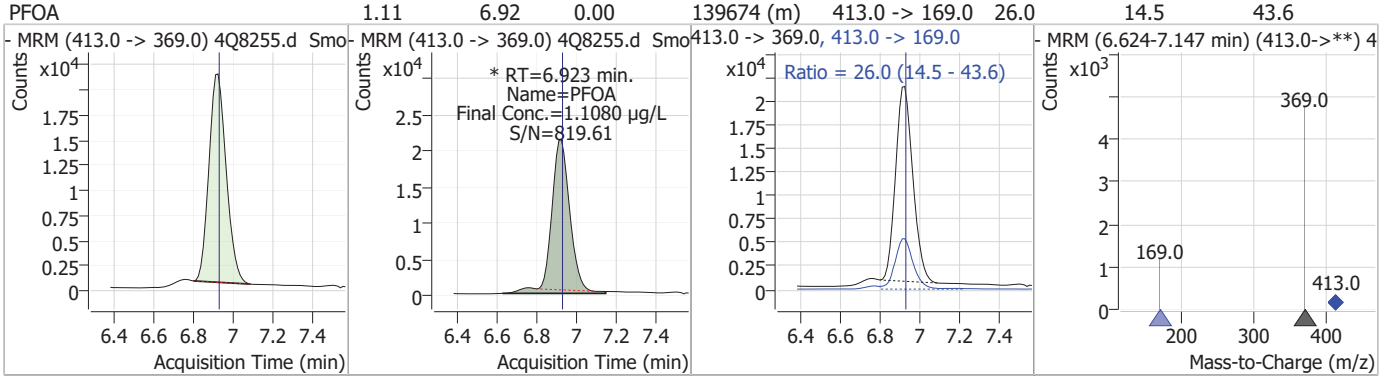


Perfluorinated Compounds by LC/MS/MS

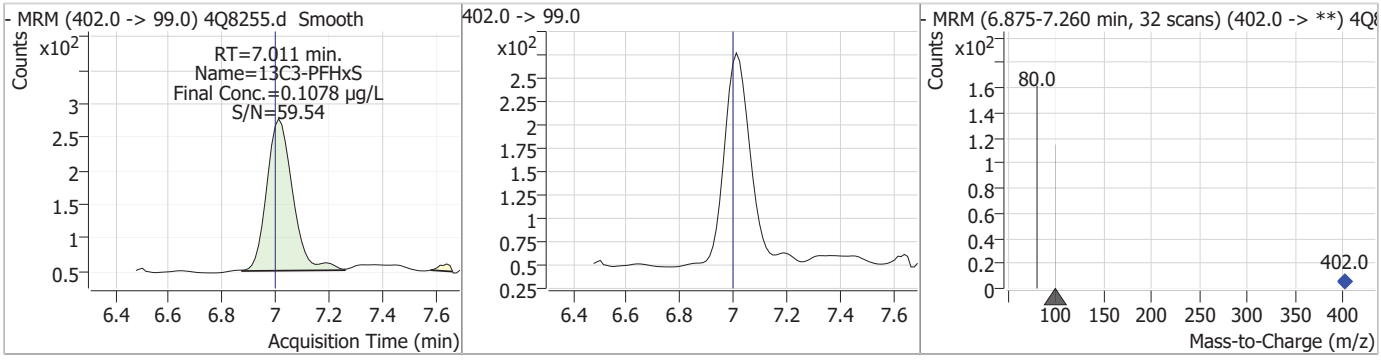
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	0.11	6.92	0.00	19239				



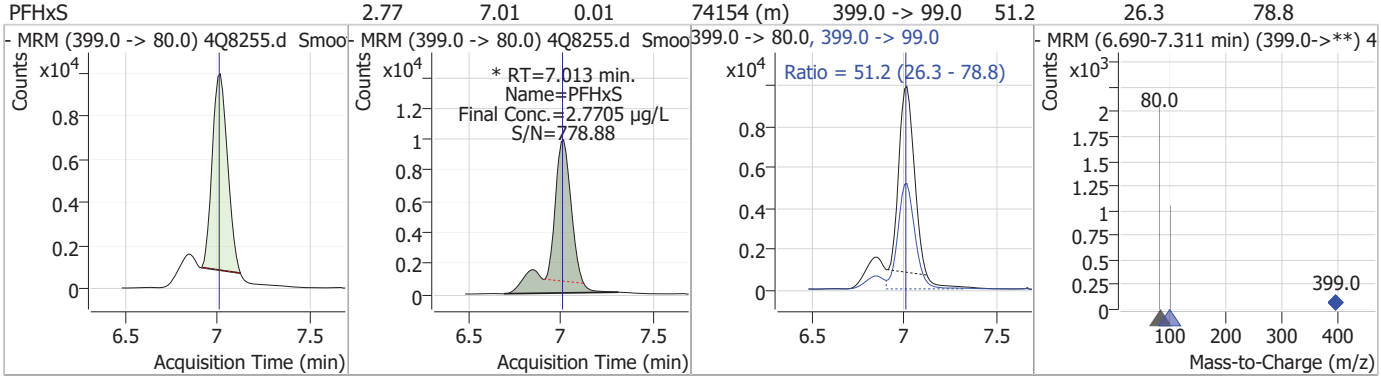
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	1.11	6.92	0.00	139674 (m)	413.0 -> 169.0	26.0	14.5	43.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	0.11	7.01	0.01	1533				

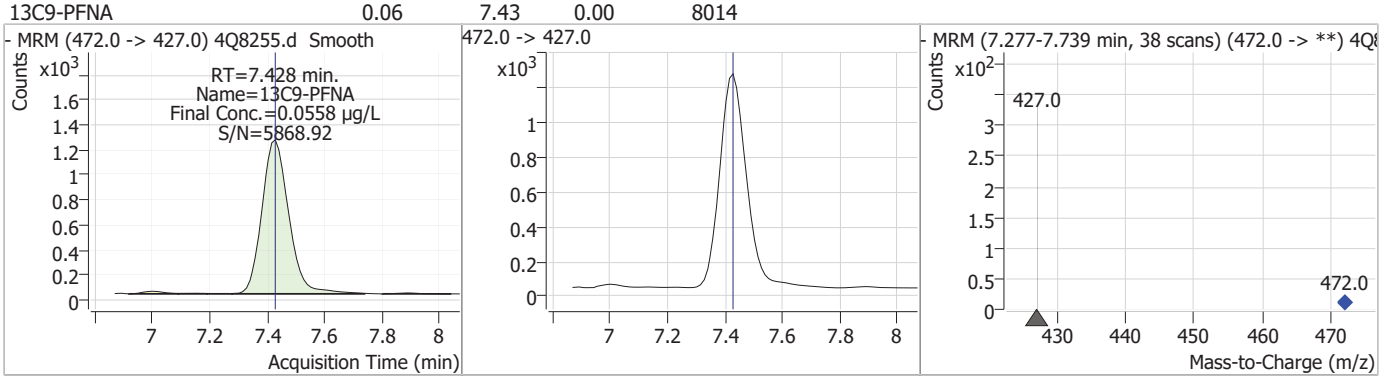


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.77	7.01	0.01	74154 (m)	399.0 -> 99.0	51.2	26.3	78.8

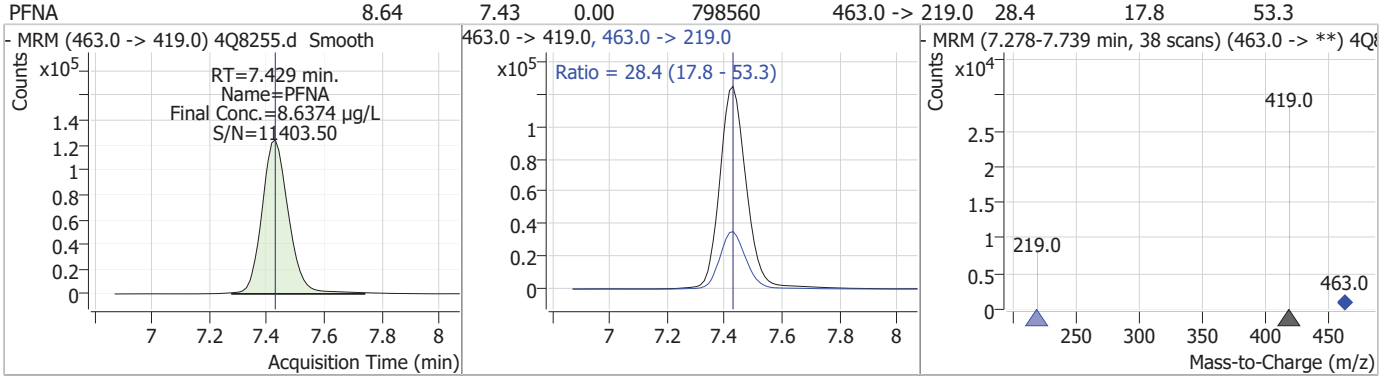


Perfluorinated Compounds by LC/MS/MS

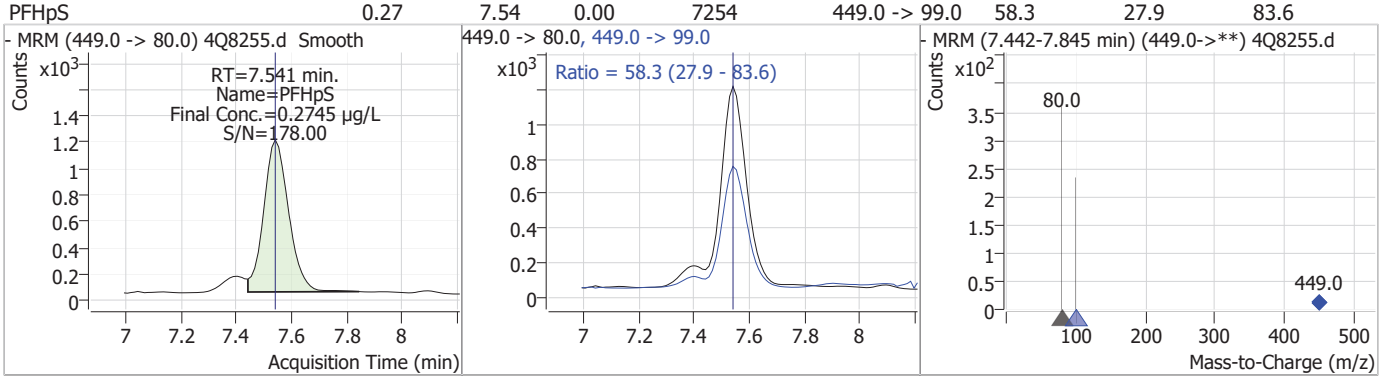
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	0.06	7.43	0.00	8014				



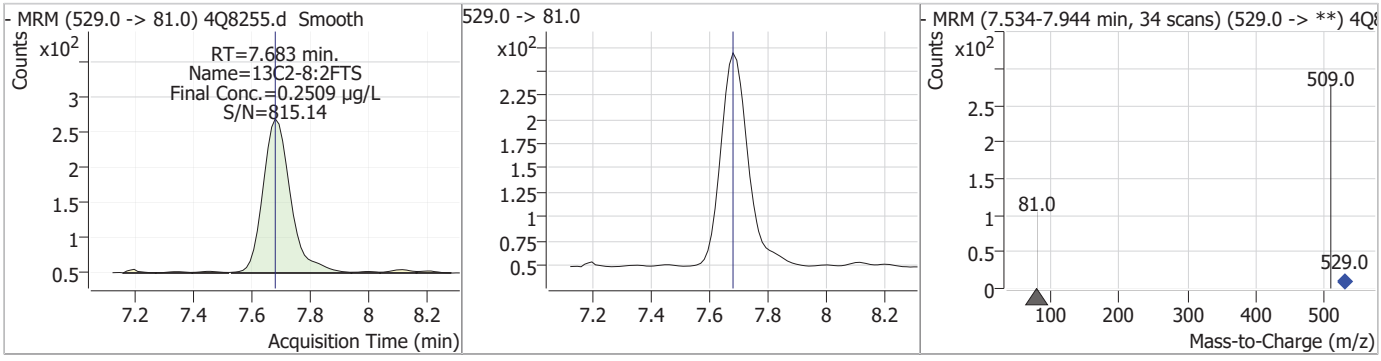
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	8.64	7.43	0.00	798560	463.0 -> 219.0	28.4	17.8	53.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.27	7.54	0.00	7254	449.0 -> 99.0	58.3	27.9	83.6

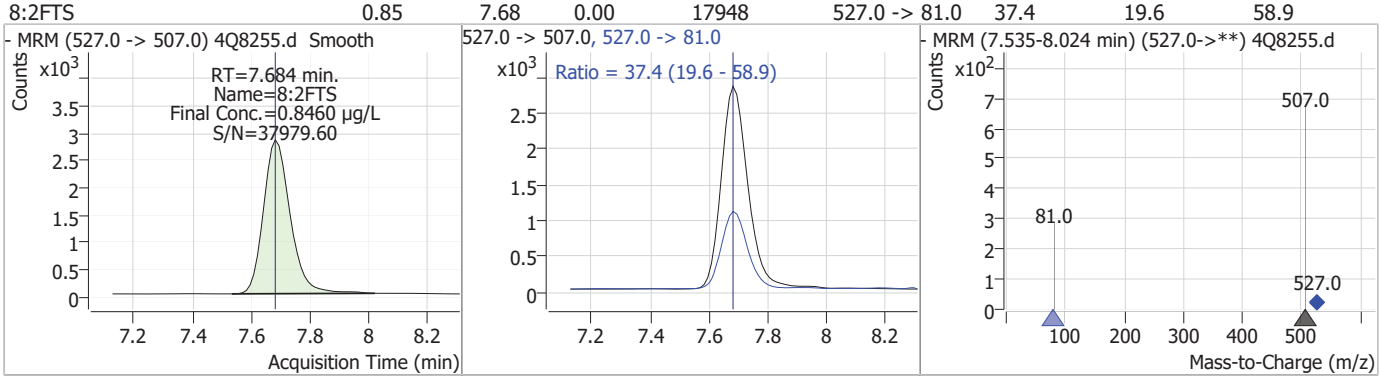


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	0.25	7.68	0.00	1455				

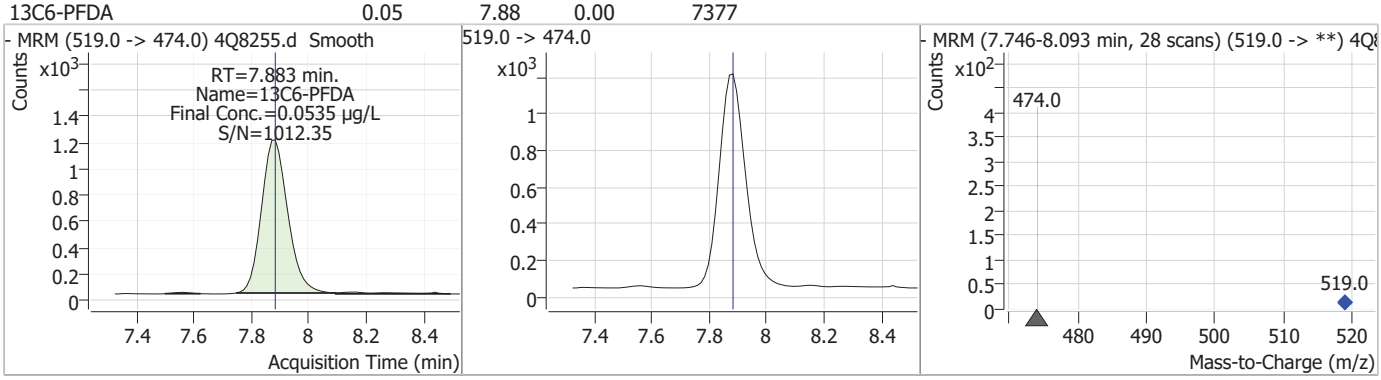


Perfluorinated Compounds by LC/MS/MS

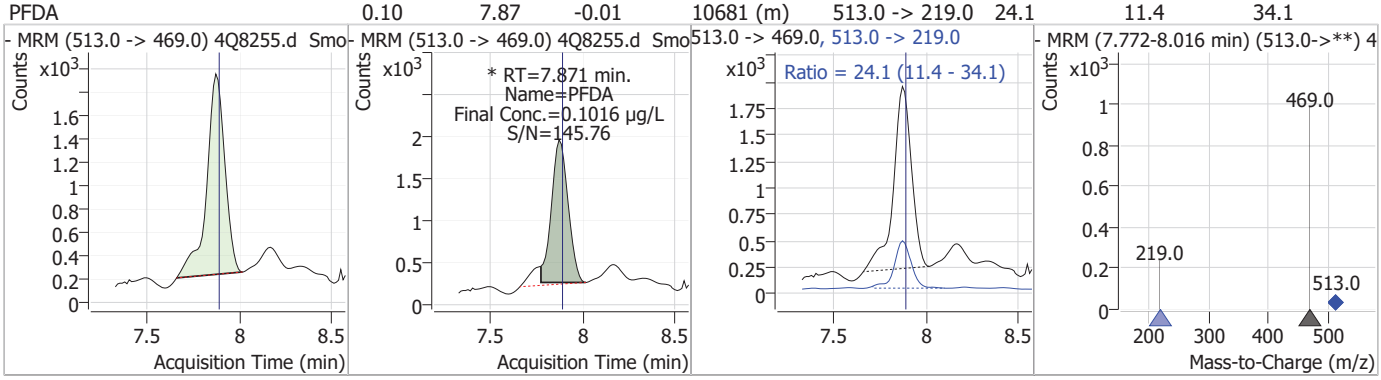
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.85	7.68	0.00	17948	527.0 -> 81.0	37.4	19.6	58.9



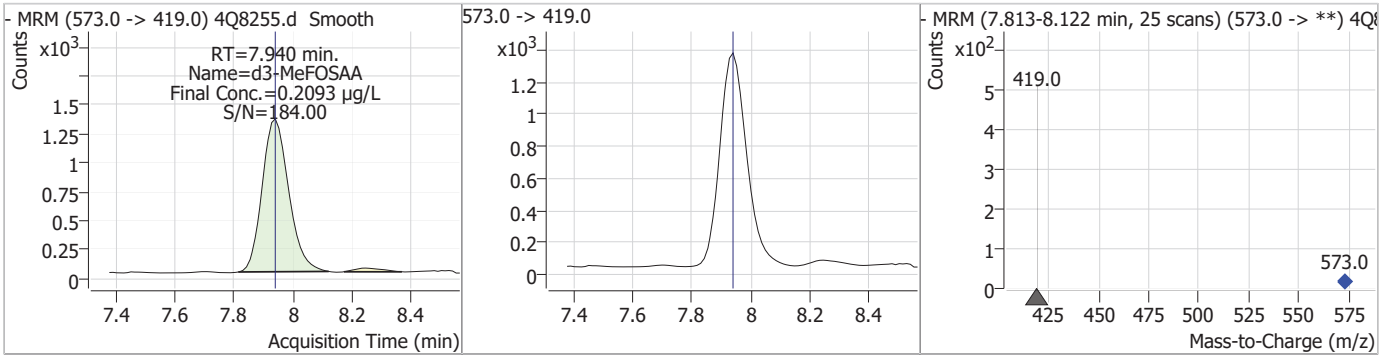
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	0.05	7.88	0.00	7377				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.10	7.87	-0.01	10681 (m)	513.0 -> 219.0	24.1	11.4	34.1

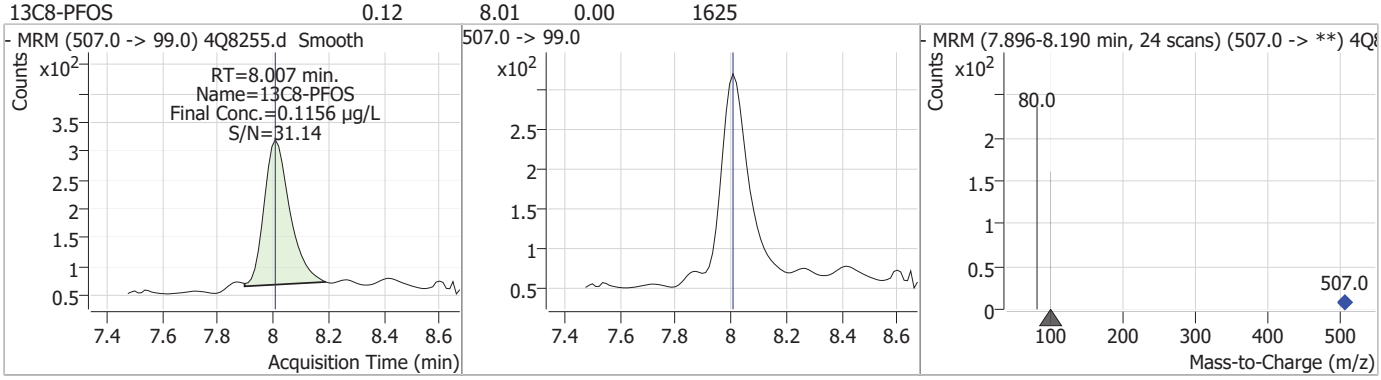


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	0.21	7.94	0.00	8325				

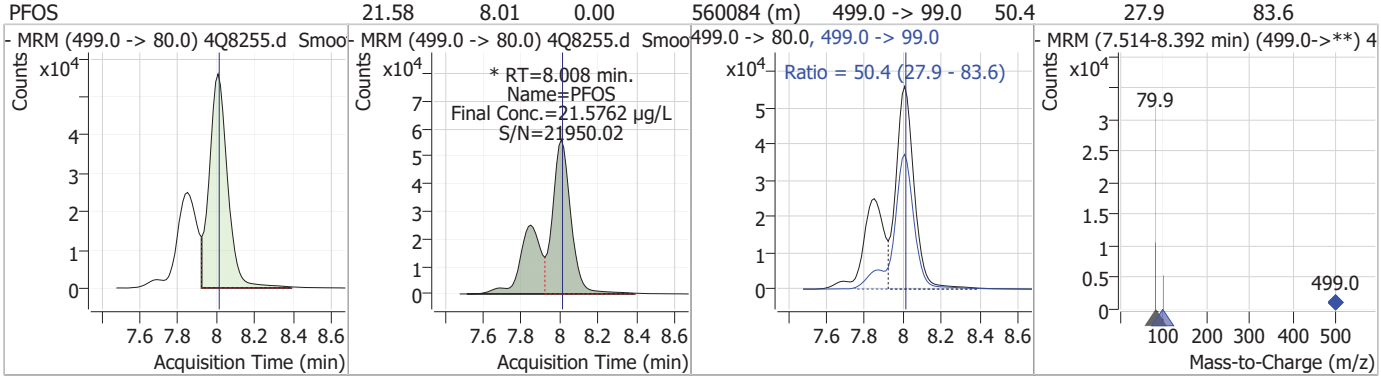


Perfluorinated Compounds by LC/MS/MS

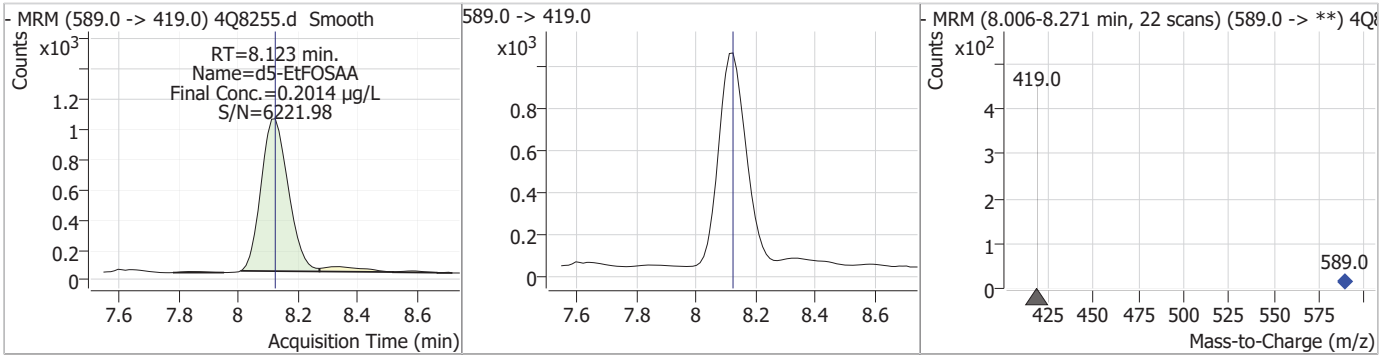
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	0.12	8.01	0.00	1625				



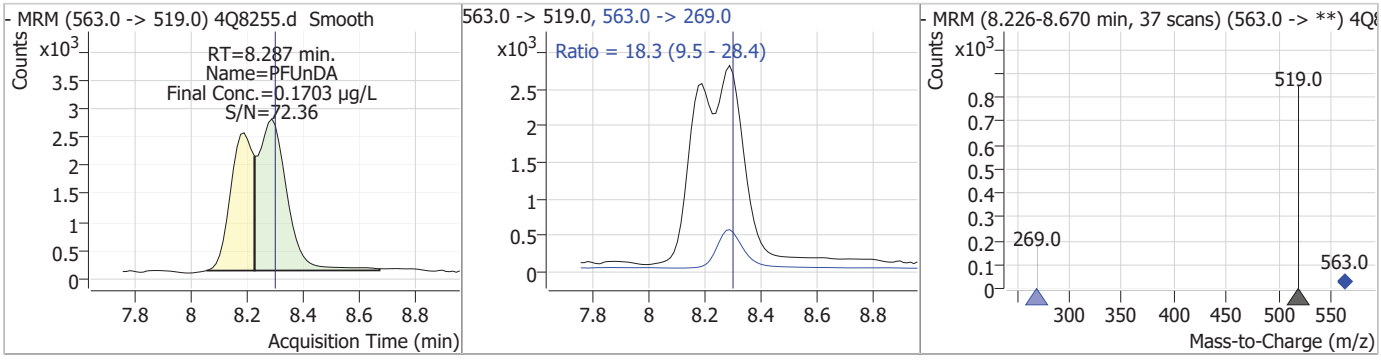
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	21.58	8.01	0.00	560084 (m)	499.0 -> 99.0	50.4	27.9	83.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	0.20	8.12	0.00	6396				

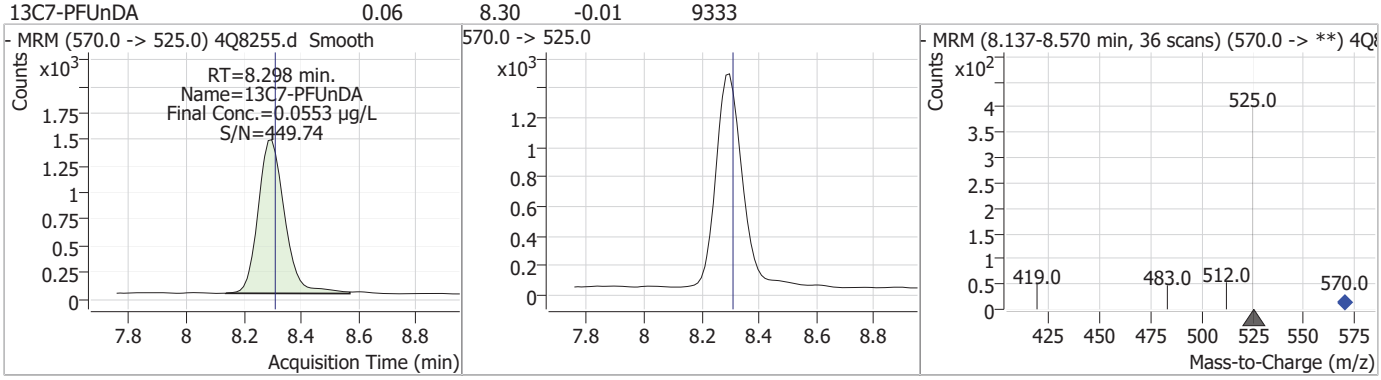


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.17	8.29	-0.01	19054	563.0 -> 269.0	18.3	9.5	28.4

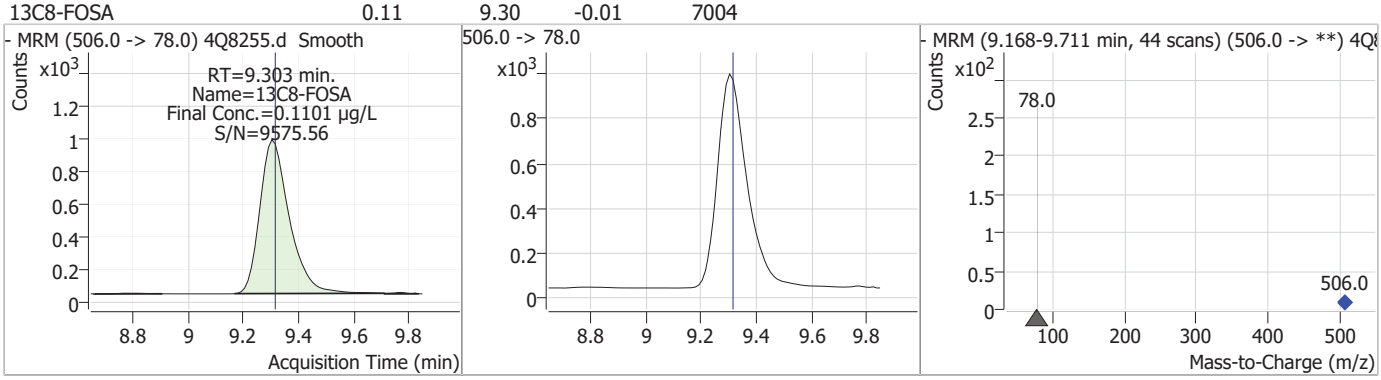


Perfluorinated Compounds by LC/MS/MS

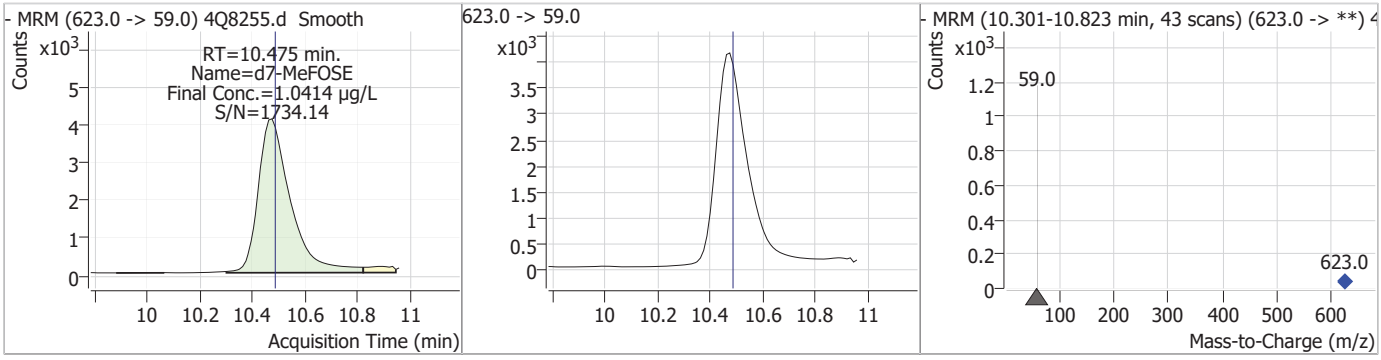
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	0.06	8.30	-0.01	9333				



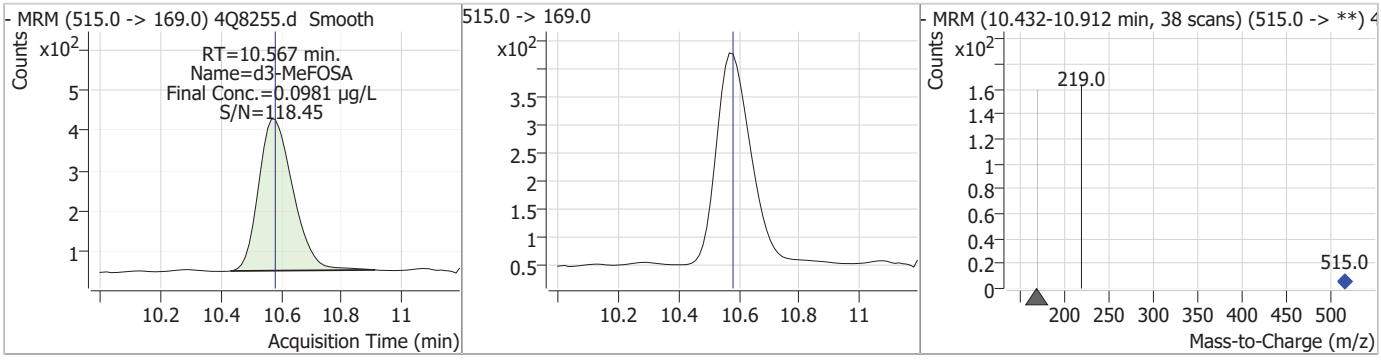
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	0.11	9.30	-0.01	7004				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	1.04	10.47	-0.01	35090				

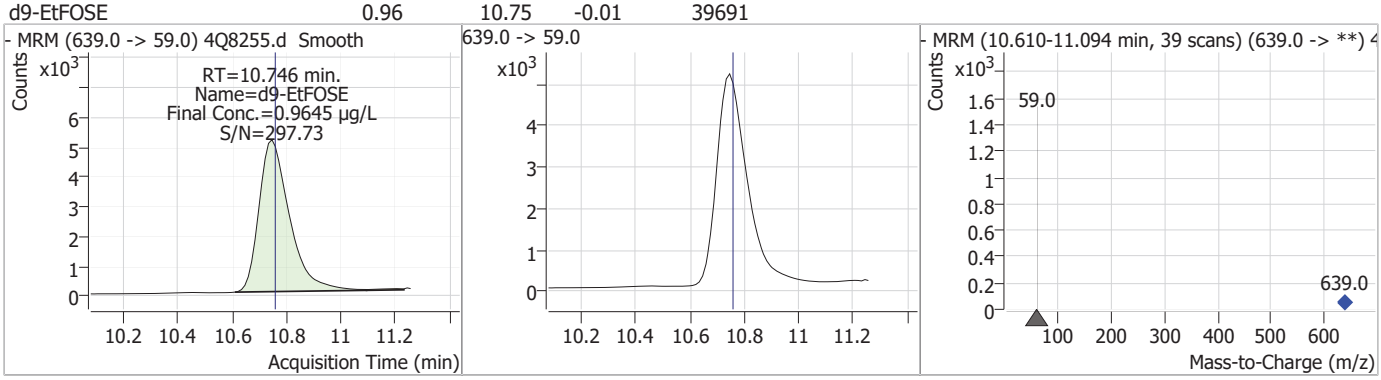


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	0.10	10.57	-0.01	2986				

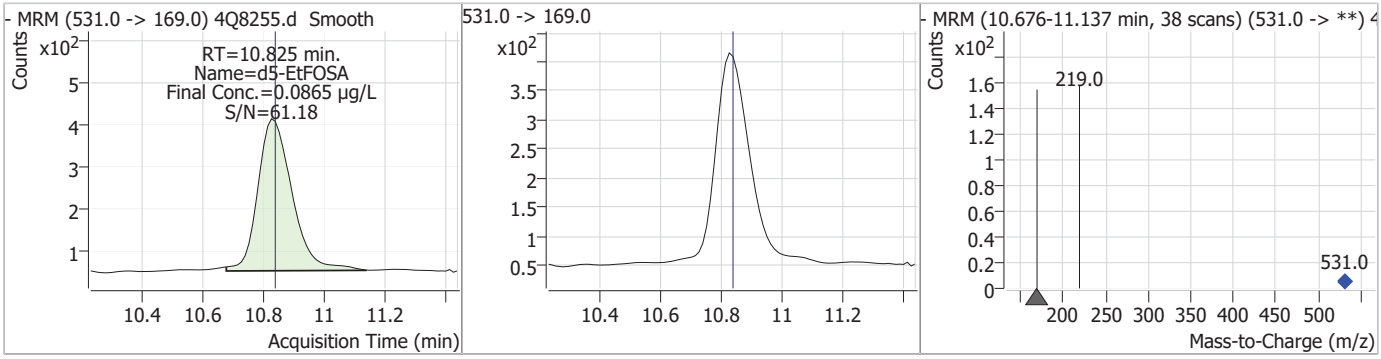


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	0.96	10.75	-0.01	39691				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	0.09	10.82	-0.01	2837				



7.1.2

7

Manual Integration Approval Summary

Sample Number: JE10205-1
Lab FileID: 4Q8255.D
Injection Time: 05/02/25 19:25

Method: EPA 1633
Analyst approved: 05/05/25 05:27 Rensel John Romano
Supervisor approved: 05/12/25 14:58 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorobutanesulfonic acid	375-73-5		5.38	Poorly defined baseline
Perfluorooctanoic acid	335-67-1		6.92	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.01	Split peak
Perfluorodecanoic acid	335-76-2		7.87	Poorly defined baseline
Perfluorooctanesulfonic acid	1763-23-1		8.01	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/16/25 09:55

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26074.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/15/2025 2:40:00 PM
Sample Name : je10205-2
Vial : P1-D7
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : T1Q362.batch.bin
Sample Information : OP63534,T1Q362,62,,,5,5,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.273	217.0 -> 172.0	35214	2.00 µg/L	0.012
M5-PFPeA	4.648	268.0 -> 223.0	20461	1.00 µg/L	0.000
M5-PFHxA	5.759	318.0 -> 273.0	11142	0.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	9471	0.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	14850	0.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	4953	0.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	5541	0.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	7765	0.25 µg/L	0.000
M2-PFDoDA	9.014	615.0 -> 570.0	7184	0.25 µg/L	0.000
M2-PFTeDA	9.772	715.0 -> 670.0	3211	0.25 µg/L	0.000
M8-FOSA	9.346	506.0 -> 78.0	3958	0.50 µg/L	0.012
M3-PFBS	5.711	302.0 -> 99.0	1378	0.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	1264	0.50 µg/L	0.000
M8-PFOS	8.316	507.0 -> 99.0	1386	0.50 µg/L	0.012
M2-4:2FTS	5.446	329.0 -> 81.0	345	1.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	646	1.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	868	1.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	7298	1.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	3481	2.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	6514	1.00 µg/L	0.000
M7-MeFOSE	10.498	623.0 -> 59.0	18720	5.00 µg/L	-0.012
M9-EtFOSE	10.768	639.0 -> 59.0	22225	5.00 µg/L	-0.012
M5-EtFOSA	10.859	531.0 -> 169.0	2488	0.50 µg/L	0.000
M3-MeFOSA	10.589	515.0 -> 169.0	2581	0.50 µg/L	-0.012
13C4-PFOS	8.304	503.0 -> 80.0	2629	0.50 µg/L	0.000
13C3-PFBA	3.263	216.0 -> 172.0	15275	1.00 µg/L	0.013
18O2-PFHxS	7.274	403.0 -> 84.0	1761	0.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	15833	0.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	4229	0.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	5205	0.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	11216	0.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	345	1.17 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 23.5%	
13C2-6:2FTS	6.922	429.0 -> 81.0	646	1.13 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 22.7%	
13C2-8:2FTS	7.927	529.0 -> 81.0	868	0.97 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 19.3%	
13C2-PFDoDA	9.014	615.0 -> 570.0	7184	0.25 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 20.0%	
13C2-PFTeDA	9.772	715.0 -> 670.0	3211	0.27 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 21.3%	
13C3-PFBS	5.711	302.0 -> 99.0	1378	0.47 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 18.8%	
13C3-PFHxS	7.275	402.0 -> 99.0	1264	0.43 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 17.2%	
13C4-PFBA	3.273	217.0 -> 172.0	35214	1.94 µg/L	0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 19.4%	
13C4-PFHpA	6.553	367.0 -> 322.0	9471	0.49 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 19.5%	
13C5-PFHxA	5.759	318.0 -> 273.0	11142	0.47 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 18.7%	
13C5-PFPeA	4.648	268.0 -> 223.0	20461	1.00 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 19.9%	
13C6-PFDA	8.139	519.0 -> 474.0	5541	0.27 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 21.6%	
13C7-PFUnDA	8.595	570.0 -> 525.0	7765	0.26 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 20.9%	
13C8-FOSA	9.346	506.0 -> 78.0	3958	0.49 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 19.7%	
13C8-PFOA	7.148	421.0 -> 376.0	14850	0.52 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 20.6%	
13C8-PFOS	8.316	507.0 -> 99.0	1386	0.46 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 18.3%	
13C9-PFNA	7.656	472.0 -> 427.0	4953	0.23 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 18.7%	
d3-MeFOSAA	8.161	573.0 -> 419.0	7298	0.91 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 18.2%	
13C3-HFPO-DA	6.087	287.0 -> 169.0	3481	1.66 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 16.6%	
d3-MeFOSA	10.589	515.0 -> 169.0	2581	0.41 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 16.6%	
d5-EtFOSAA	8.358	589.0 -> 419.0	6514	1.00 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 20.0%	
d7-MeFOSE	10.498	623.0 -> 59.0	18720	4.55 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 18.2%	
d9-EtFOSE	10.768	639.0 -> 59.0	22225	4.56 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 18.2%	
d5-EtFOSA	10.859	531.0 -> 169.0	2488	0.39 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 15.7%	
Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	6.922	427.0 -> 407.0	3109	0.75 µg/L	94
		427.0 -> 81.0	1013		
8:2FTS	7.915	527.0 -> 507.0	2875	0.73 µg/L	96
		527.0 -> 81.0	903		
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	3.266	213.0 -> 169.0	1832	0.37 µg/L	100
PFBS	5.713	299.0 -> 80.0	713	0.09 µg/L	99
		299.0 -> 99.0	280		
PFDA	8.140	513.0 -> 469.0	1226	0.06 µg/L	90
		513.0 -> 219.0	147		
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			
PFDS	-	599.0 -> 80.0	-	N.D.	

Perfluorinated Compounds by LC/MS/MS

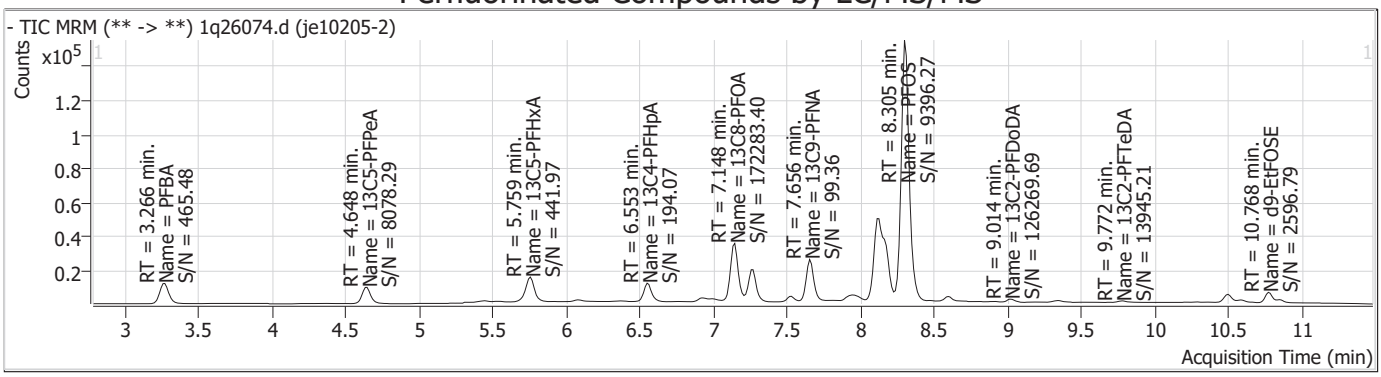
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0					
PFHpA	6.554	363.0 -> 319.0	26798	1.01	µg/L		94
		363.0 -> 169.0	4881				
PFHpS	7.809	449.0 -> 80.0	1653	0.38	µg/L		100
		449.0 -> 99.0	839				
PFHxA	5.761	313.0 -> 269.0	32682	1.60	µg/L		99
		313.0 -> 119.0	1060				
PFHxS	7.276	399.0 -> 80.0	49404	10.03	µg/L	m	96
		399.0 -> 99.0	23729				
PFNA	7.657	463.0 -> 419.0	76012	6.12	µg/L	m	85
		463.0 -> 219.0	15991				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	7.149	413.0 -> 369.0	85875	3.35	µg/L	m	100
		413.0 -> 169.0	17786				
PFOS	8.305	499.0 -> 80.0	190962	32.85	µg/L	m	100
		499.0 -> 99.0	87221				
PFPeA	4.650	263.0 -> 219.0	19073	1.07	µg/L		100
PFPeS	6.630	349.0 -> 80.0	857	0.24	µg/L		99
		349.0 -> 99.0	403				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	8.596	563.0 -> 519.0	2577	0.10	µg/L	#	73
		563.0 -> 269.0	646				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

 # = Qualifier out of range, m = manually integrated, + = Area summed

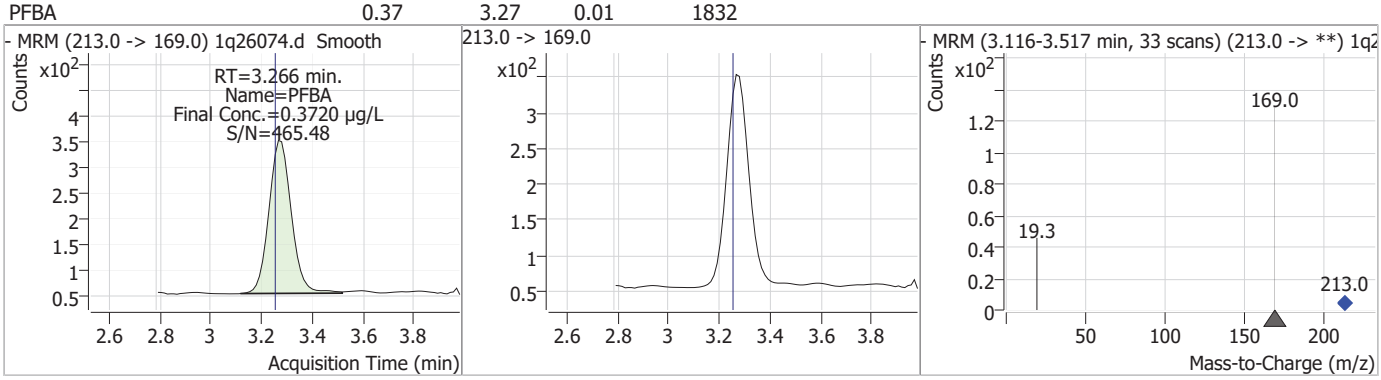
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

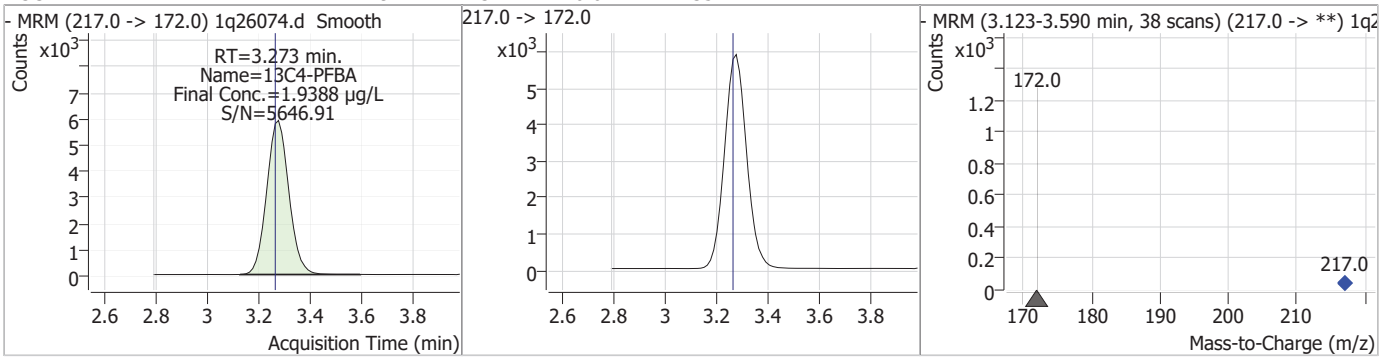
Perfluorinated Compounds by LC/MS/MS



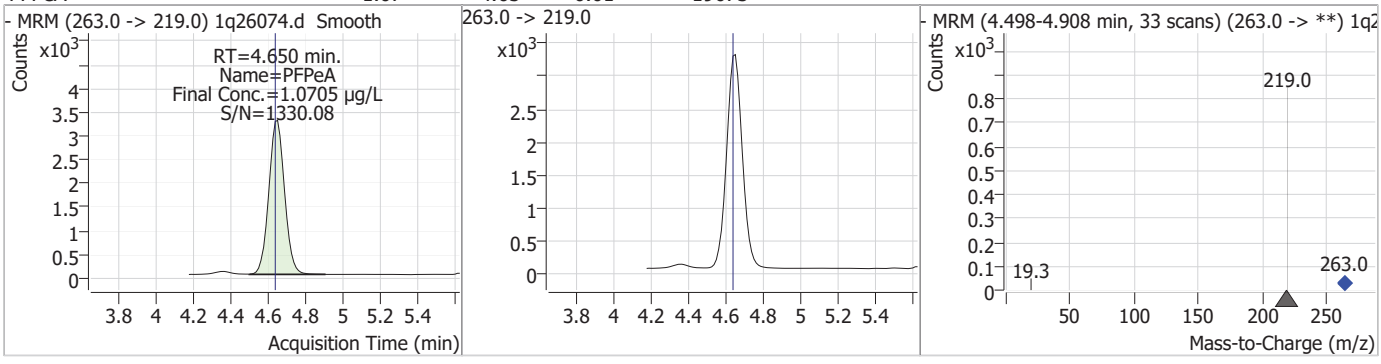
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.37	3.27	0.01	1832				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	1.94	3.27	0.01	35214				

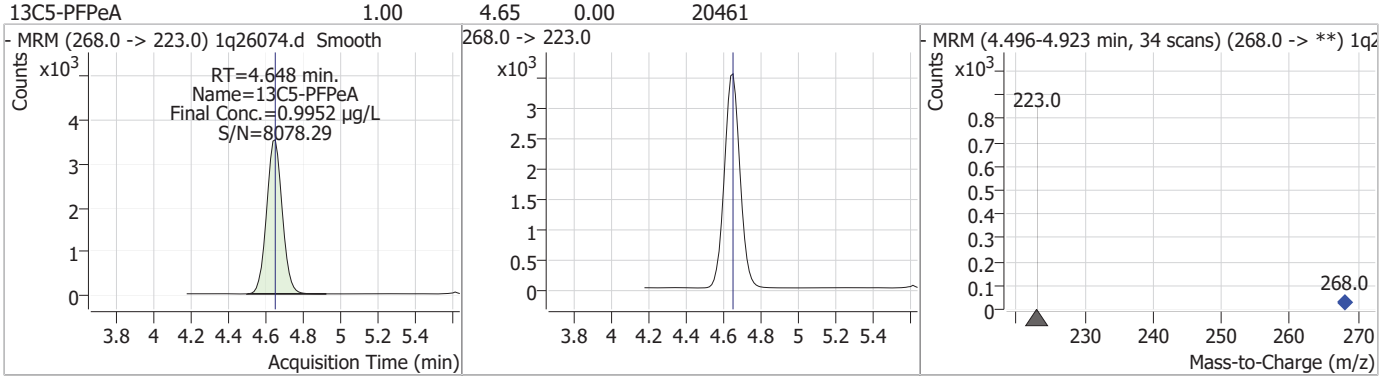


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	1.07	4.65	0.01	19073				

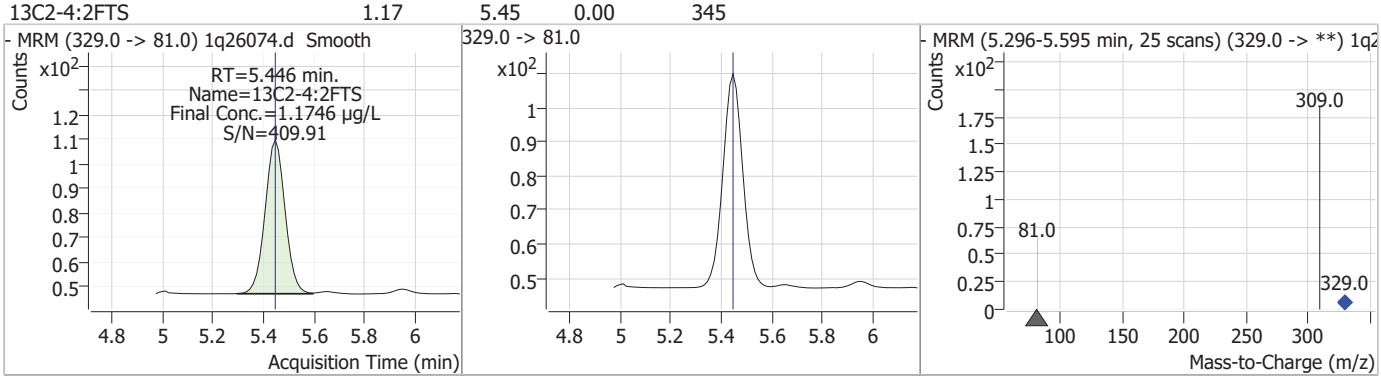


Perfluorinated Compounds by LC/MS/MS

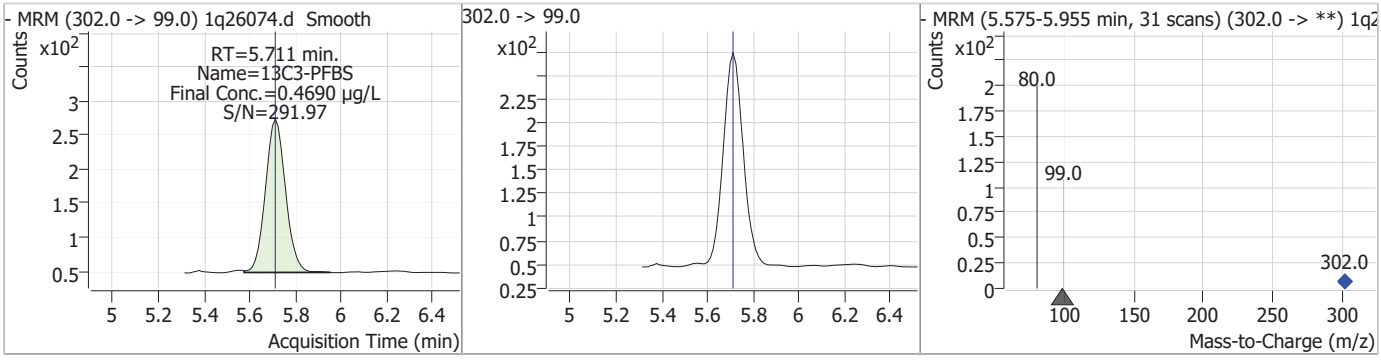
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	1.00	4.65	0.00	20461				



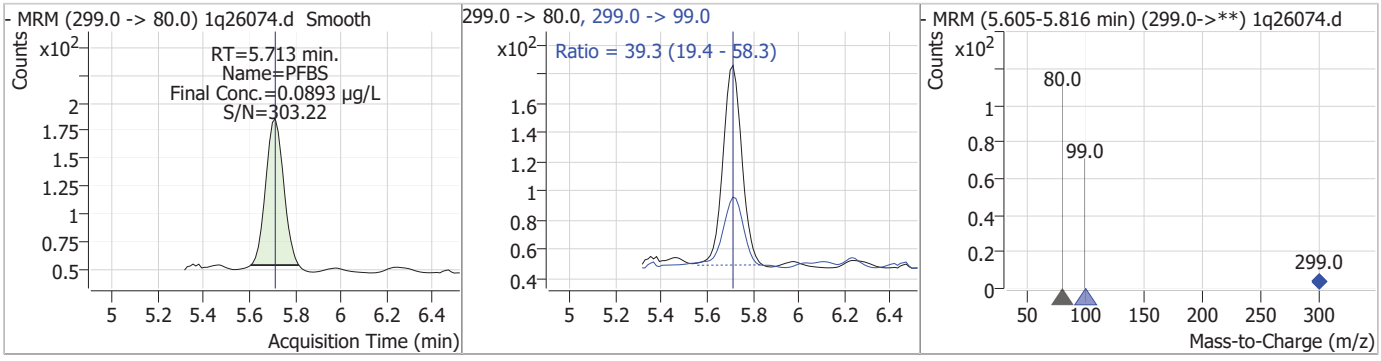
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	1.17	5.45	0.00	345				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	0.47	5.71	0.00	1378				

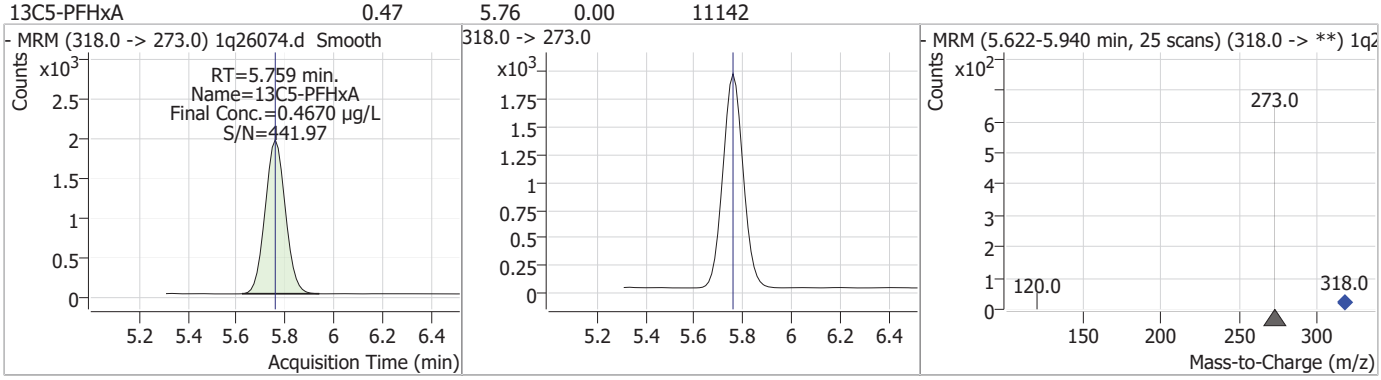


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.09	5.71	0.00	713	299.0 -> 99.0	39.3	19.4	58.3

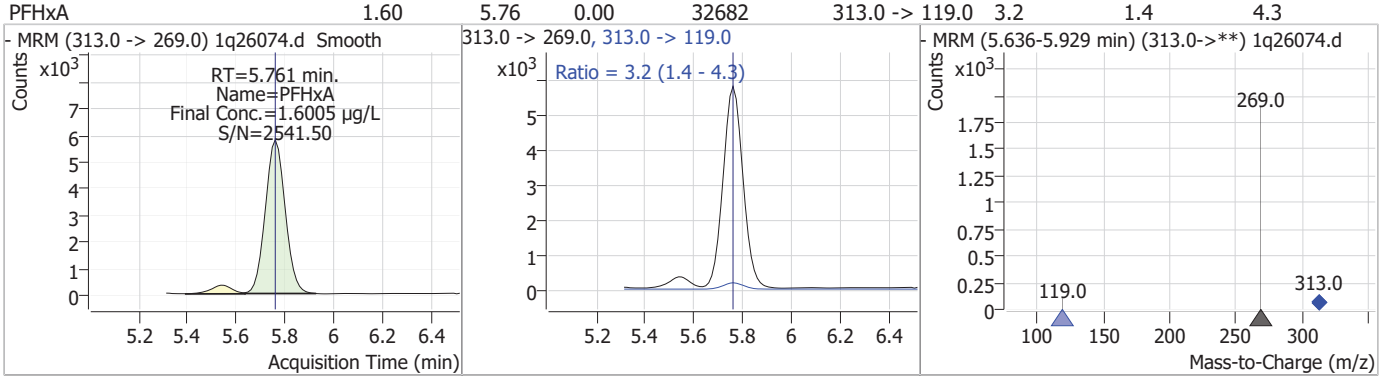


Perfluorinated Compounds by LC/MS/MS

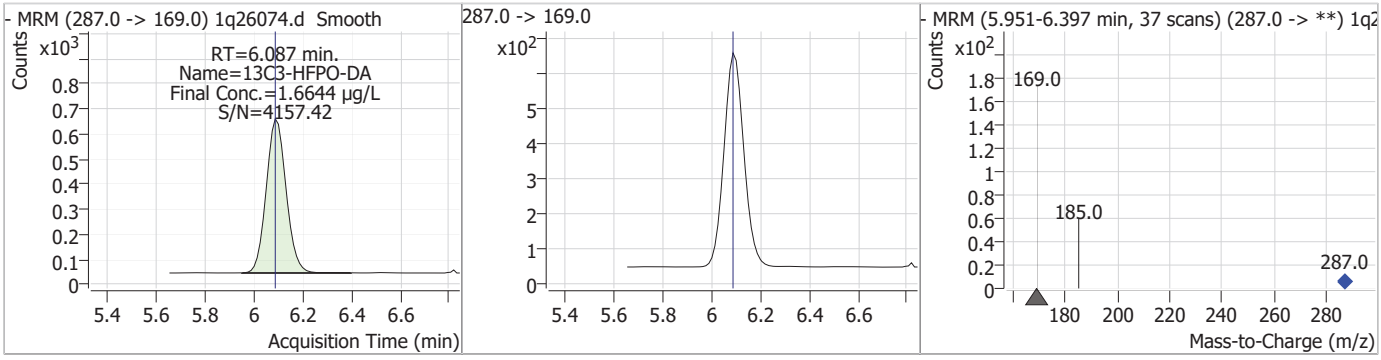
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	0.47	5.76	0.00	11142				



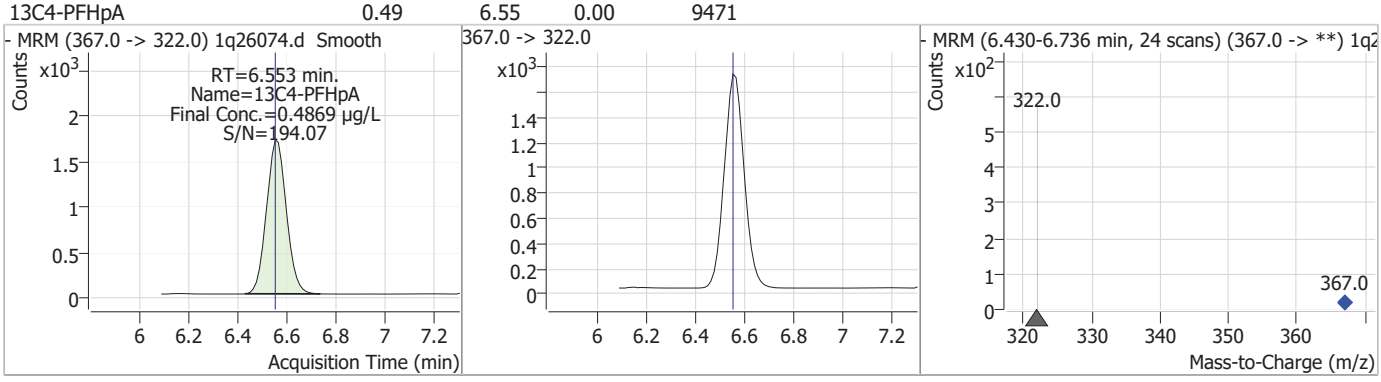
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	1.60	5.76	0.00	32682	313.0 -> 119.0	3.2	1.4	4.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	1.66	6.09	0.00	3481				

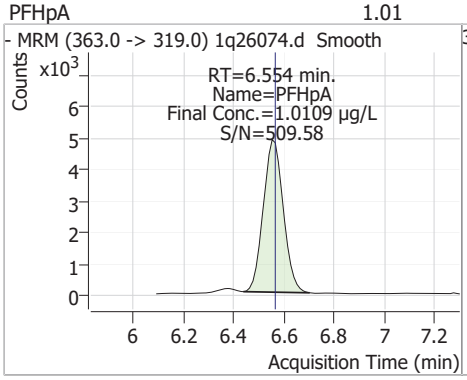


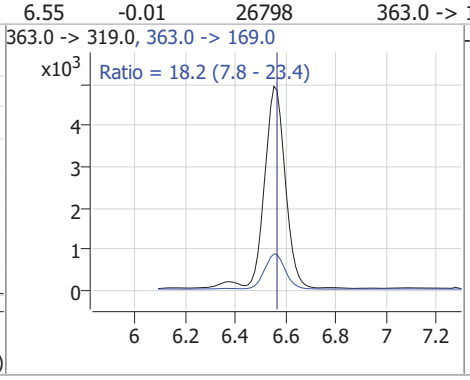
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	0.49	6.55	0.00	9471				

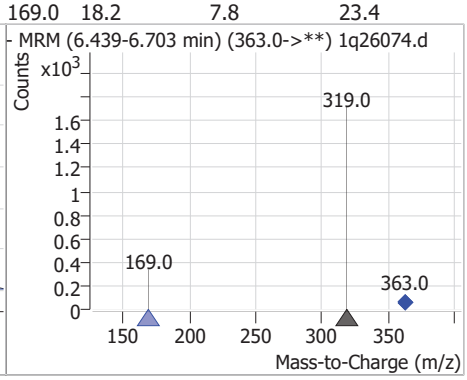


Perfluorinated Compounds by LC/MS/MS

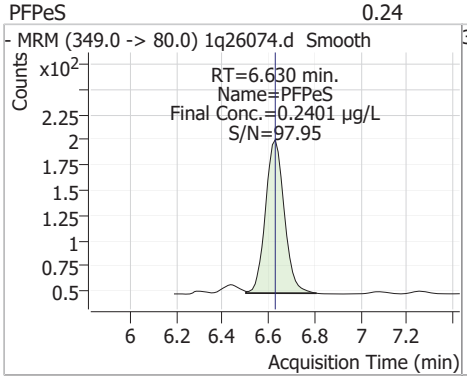
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	1.01	6.55	-0.01	26798	363.0 -> 169.0	18.2	7.8	23.4

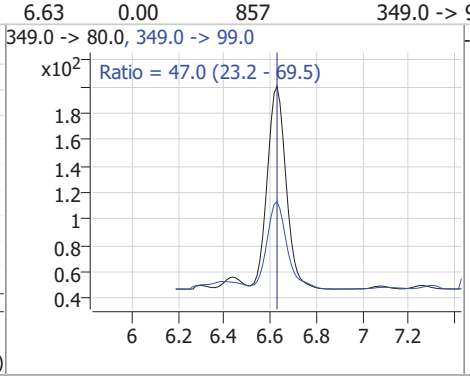


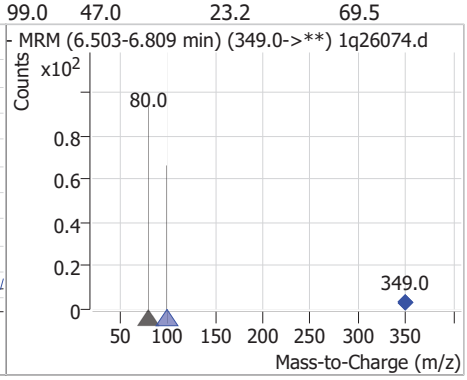




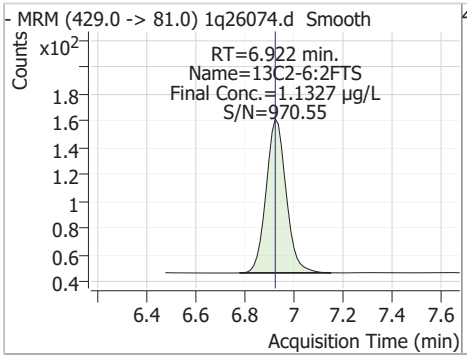
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.24	6.63	0.00	857	349.0 -> 99.0	47.0	23.2	69.5

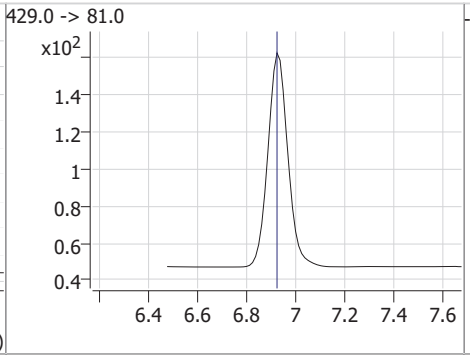


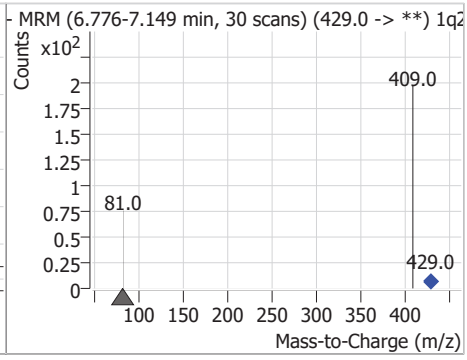




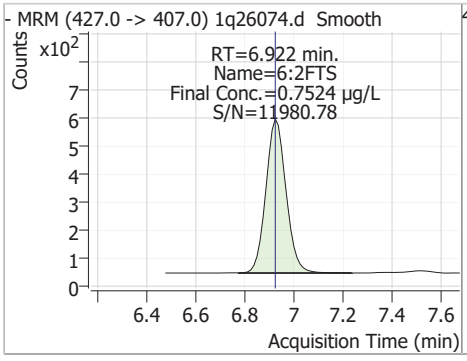
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	1.13	6.92	0.00	646				

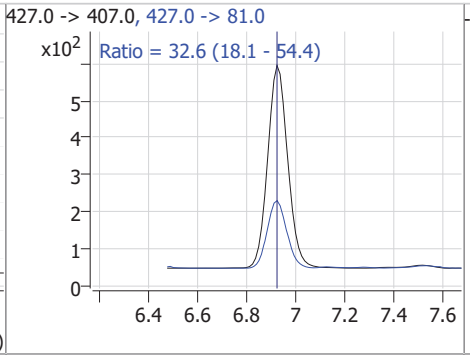


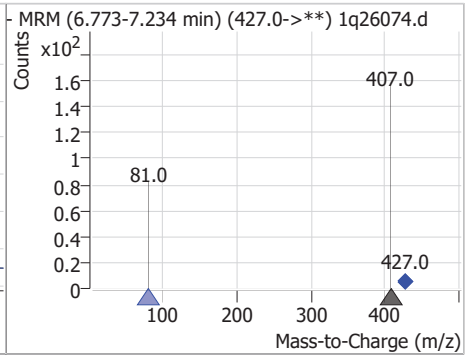




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.75	6.92	0.00	3109	427.0 -> 81.0	32.6	18.1	54.4

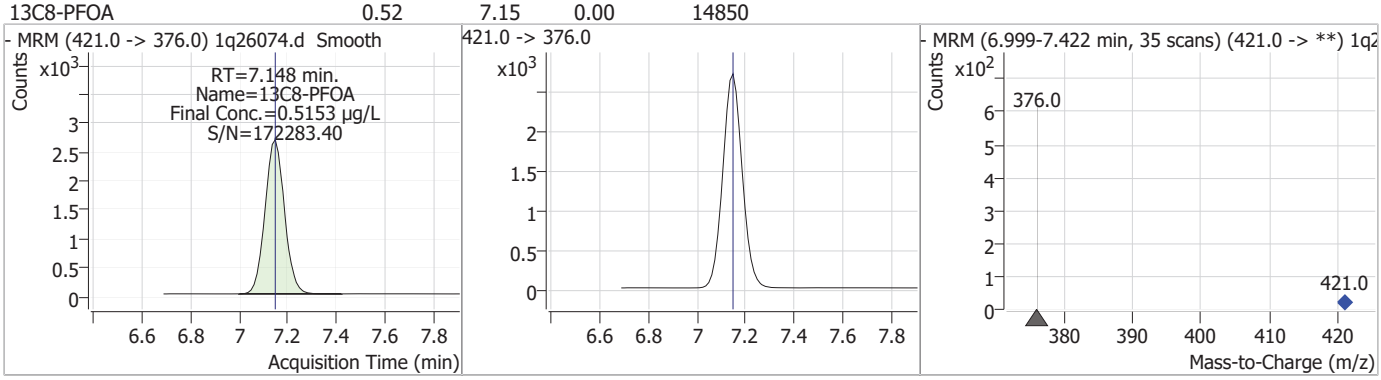




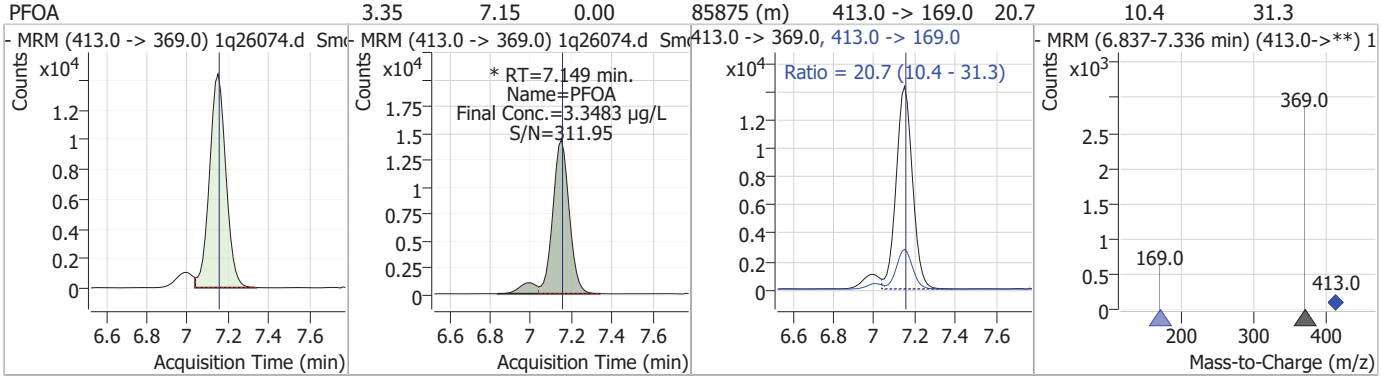


Perfluorinated Compounds by LC/MS/MS

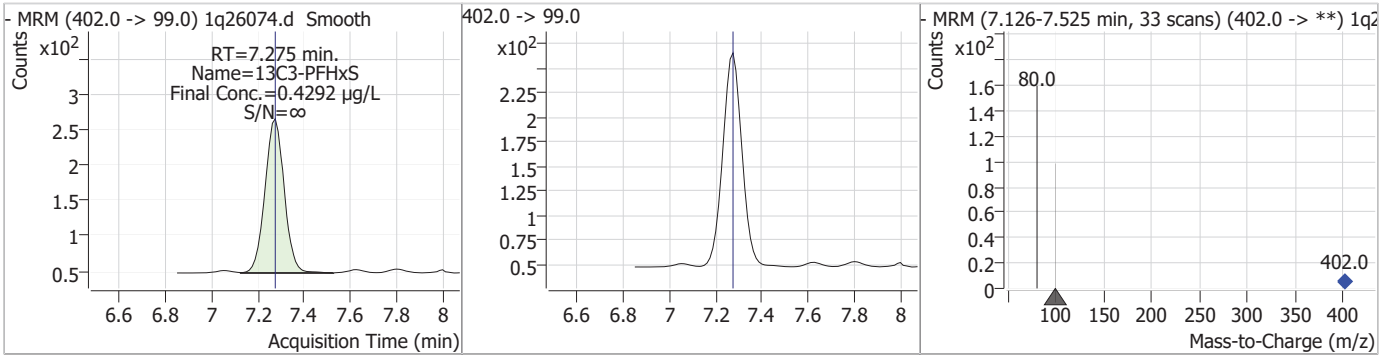
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	0.52	7.15	0.00	14850				



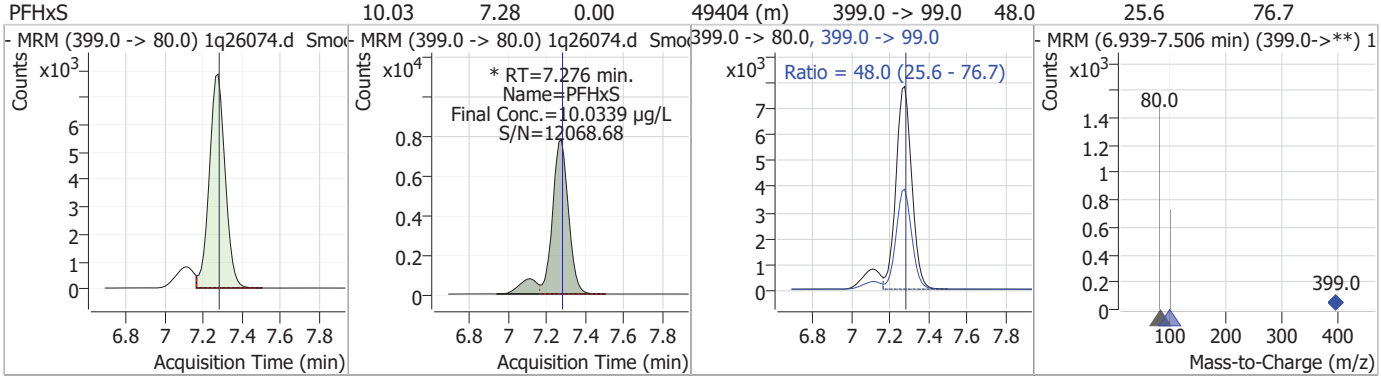
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	3.35	7.15	0.00	85875 (m)	413.0 -> 169.0	20.7	10.4	31.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	0.43	7.27	0.00	1264				

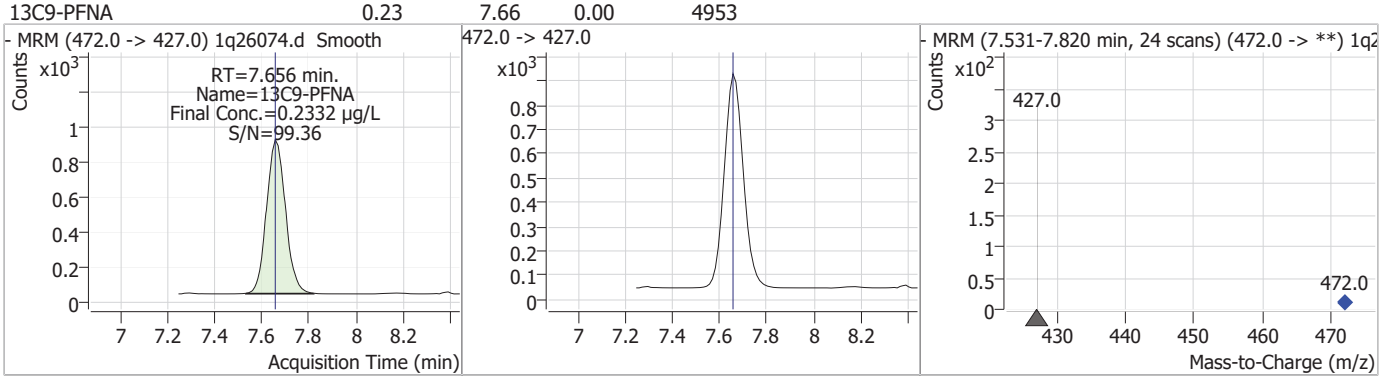


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	10.03	7.28	0.00	49404 (m)	399.0 -> 99.0	48.0	25.6	76.7

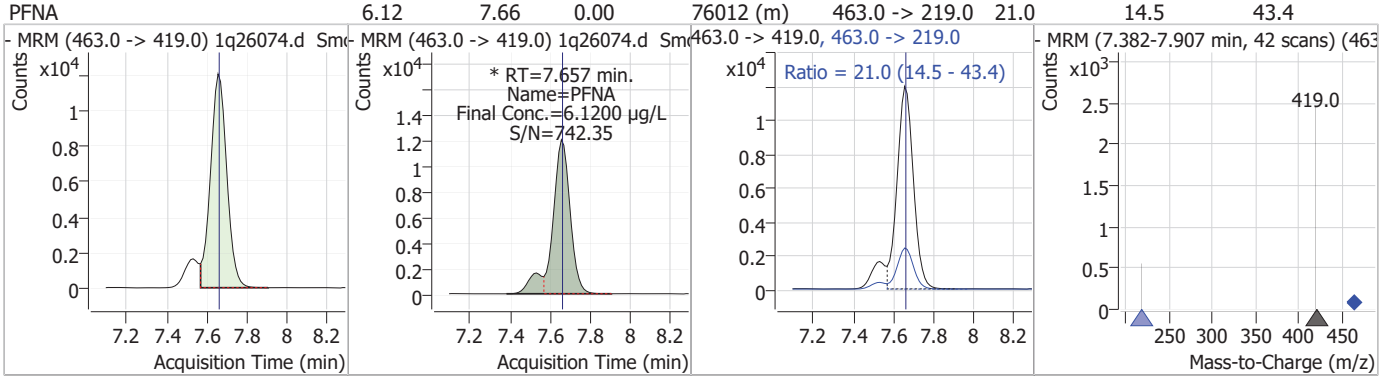


Perfluorinated Compounds by LC/MS/MS

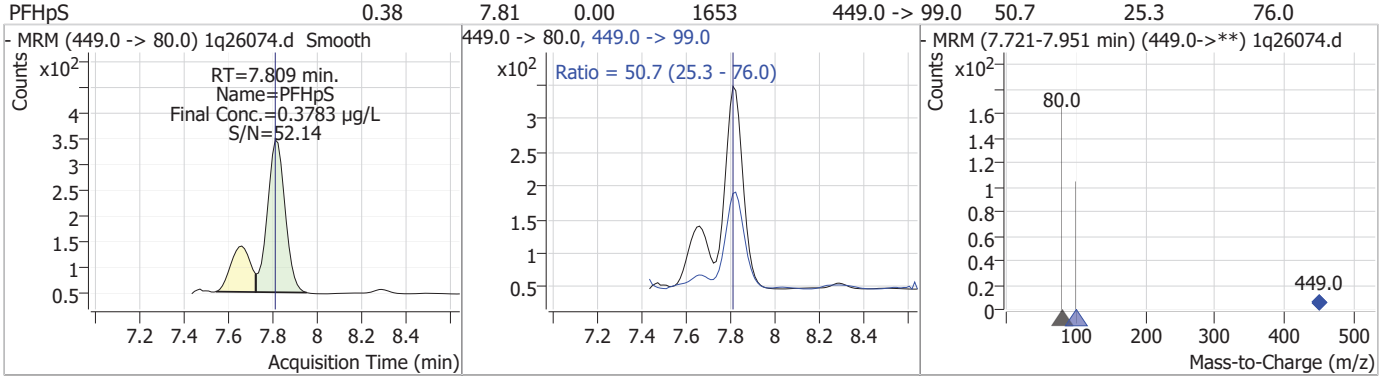
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	0.23	7.66	0.00	4953				



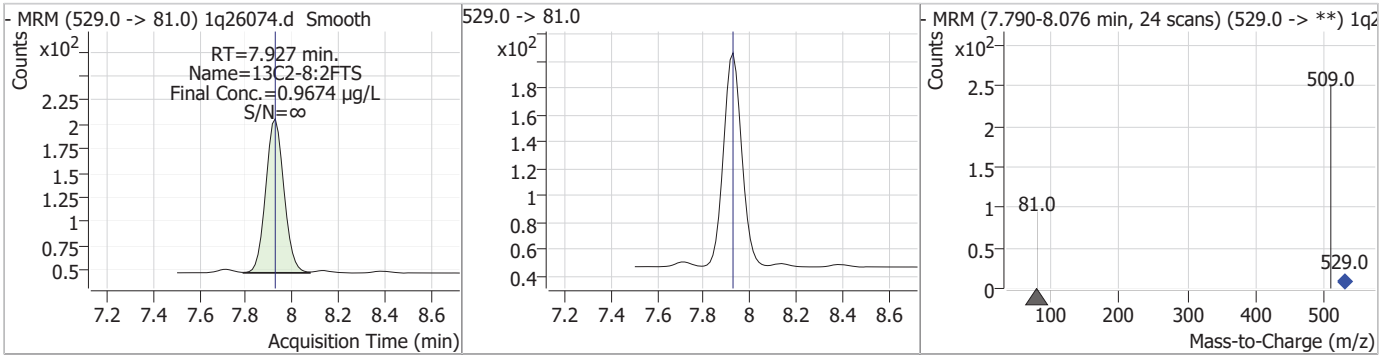
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	6.12	7.66	0.00	76012 (m)	463.0 -> 219.0	21.0	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.38	7.81	0.00	1653	449.0 -> 99.0	50.7	25.3	76.0

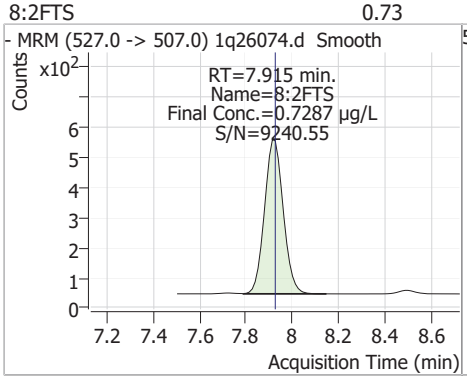


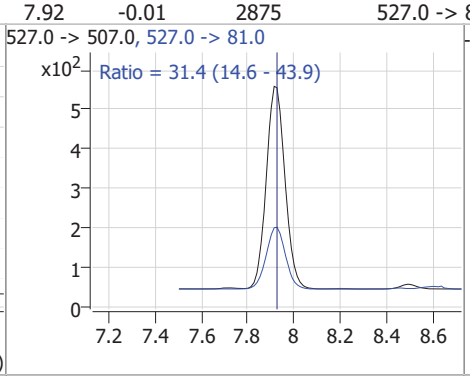
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	0.97	7.93	0.00	868				

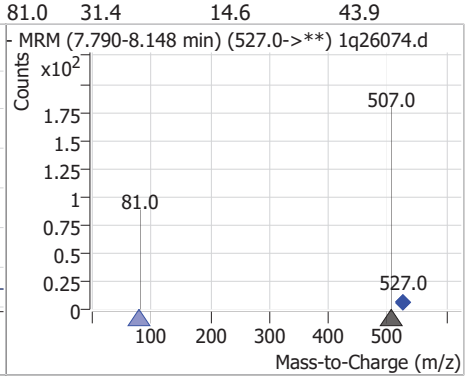


Perfluorinated Compounds by LC/MS/MS

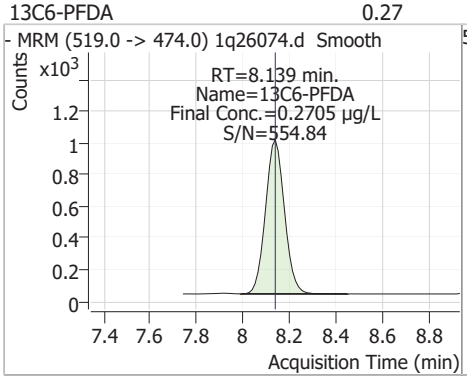
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.73	7.92	-0.01	2875	527.0 -> 81.0	31.4	14.6	43.9

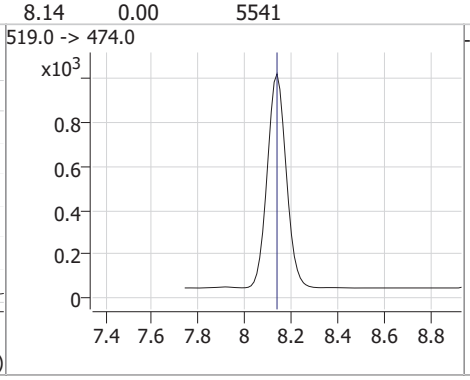


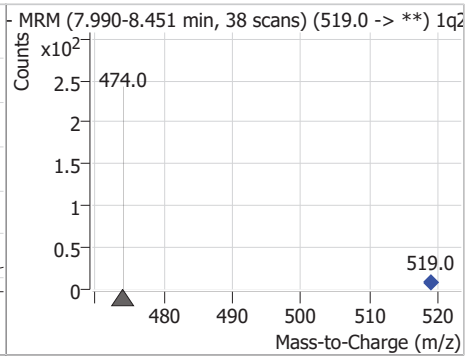




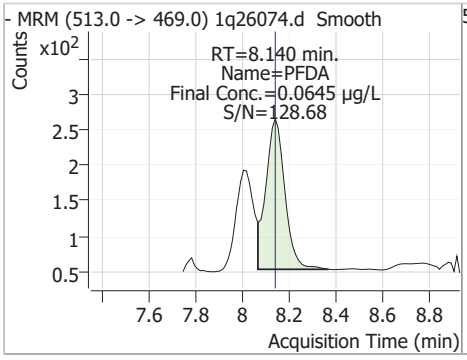
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	0.27	8.14	0.00	5541				

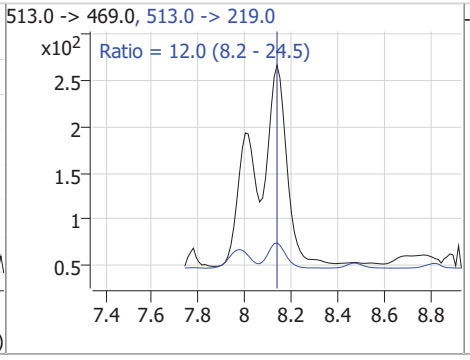


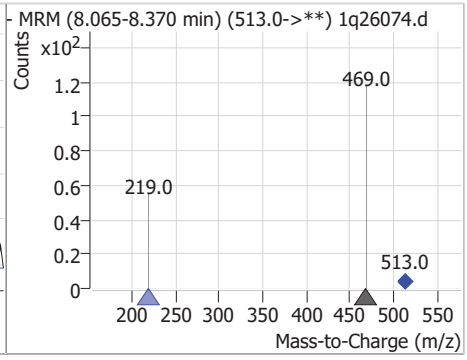




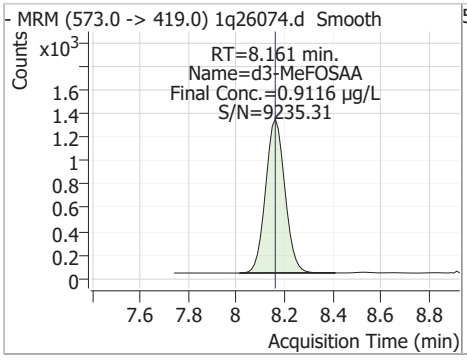
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.06	8.14	0.00	1226	513.0 -> 219.0	12.0	8.2	24.5

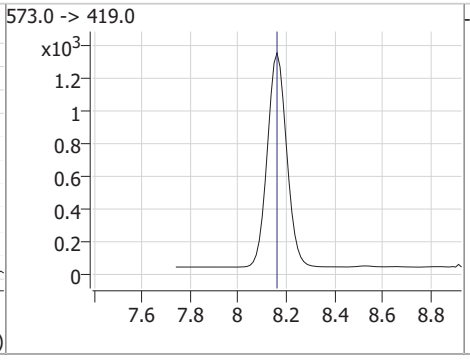


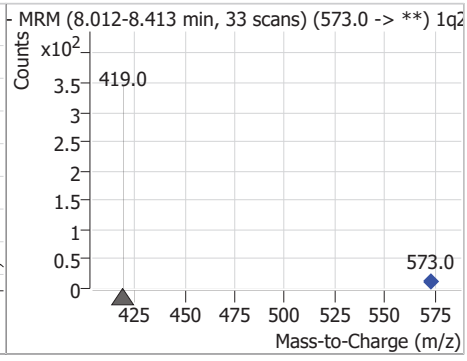




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	0.91	8.16	0.00	7298				

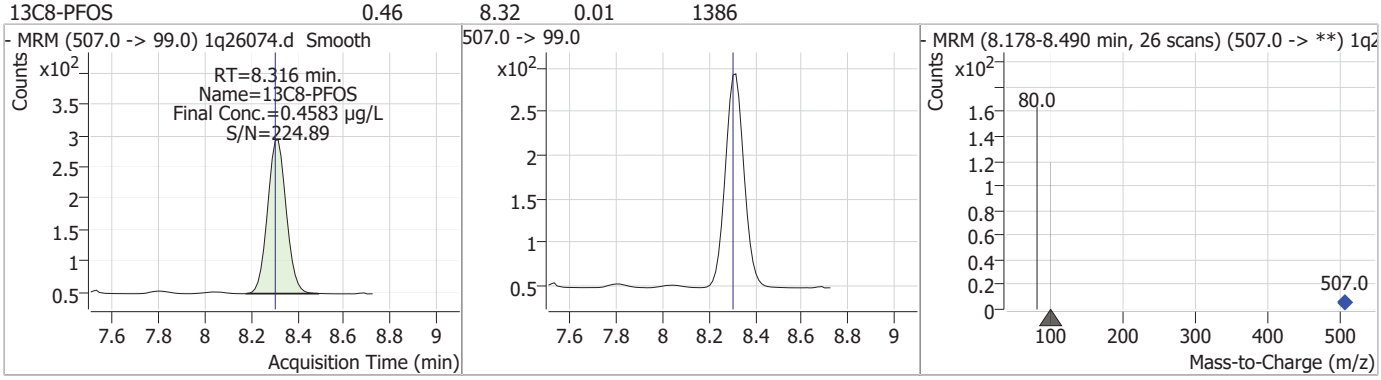




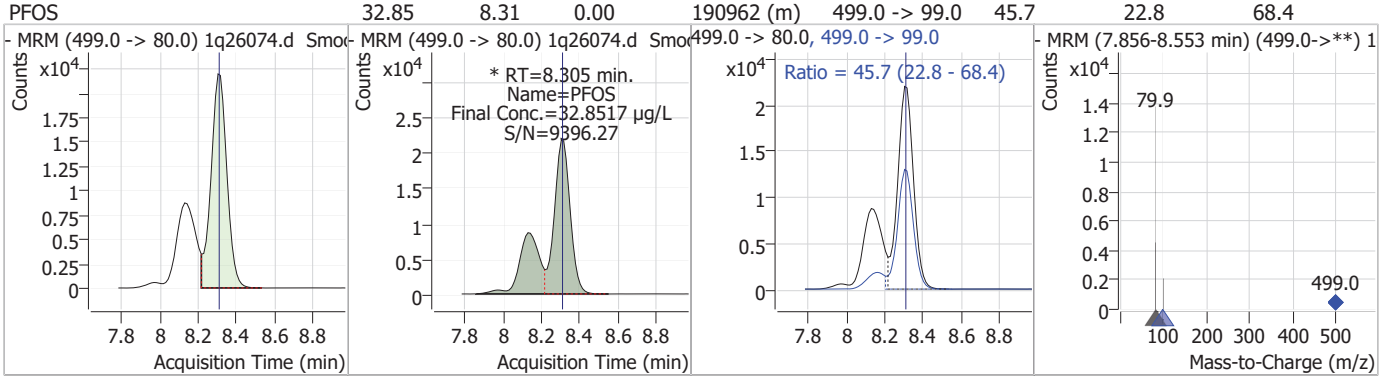


Perfluorinated Compounds by LC/MS/MS

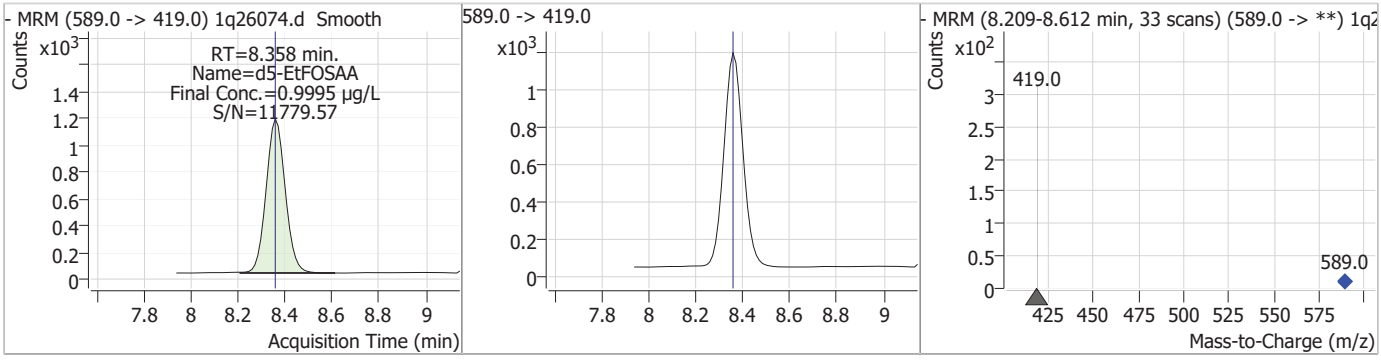
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	0.46	8.32	0.01	1386				



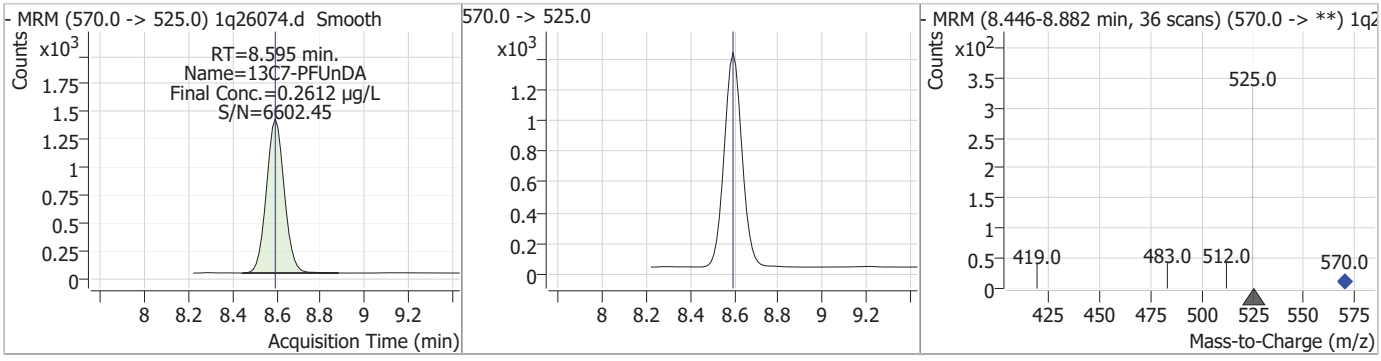
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	32.85	8.31	0.00	190962 (m)	499.0 -> 99.0	45.7	22.8	68.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	1.00	8.36	0.00	6514				

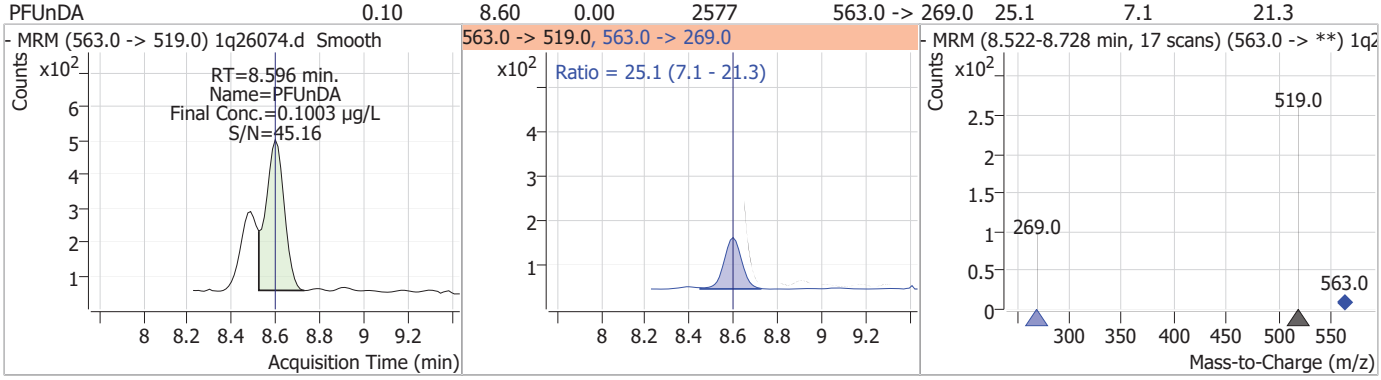


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	0.26	8.59	0.00	7765				

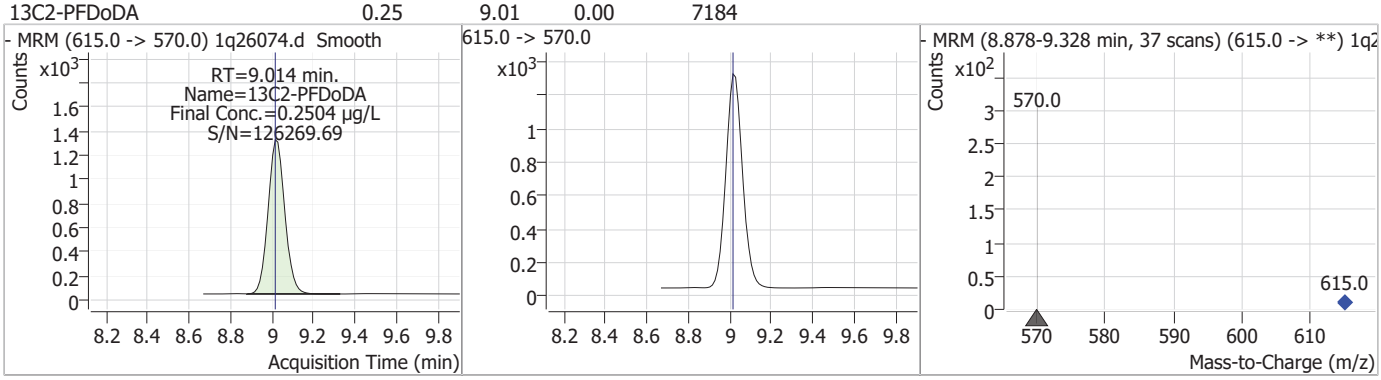


Perfluorinated Compounds by LC/MS/MS

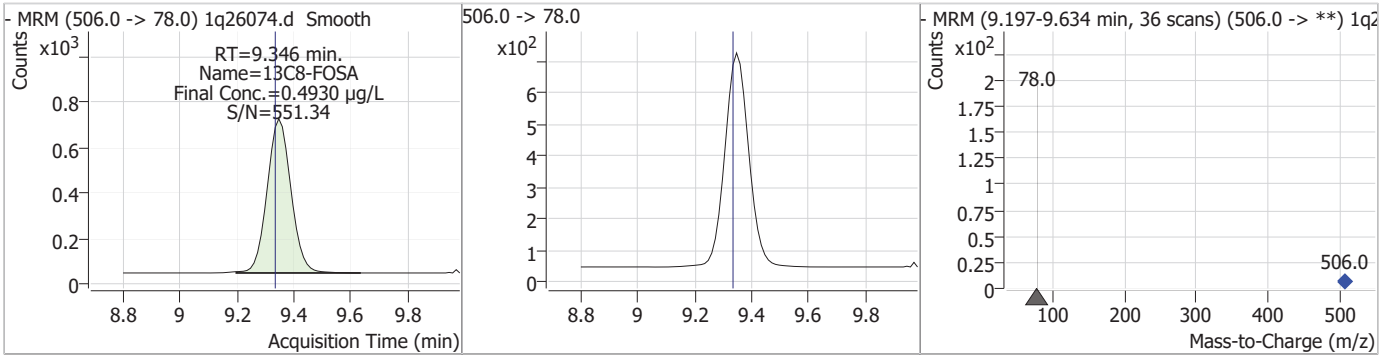
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.10	8.60	0.00	2577	563.0 -> 269.0	25.1	7.1	21.3



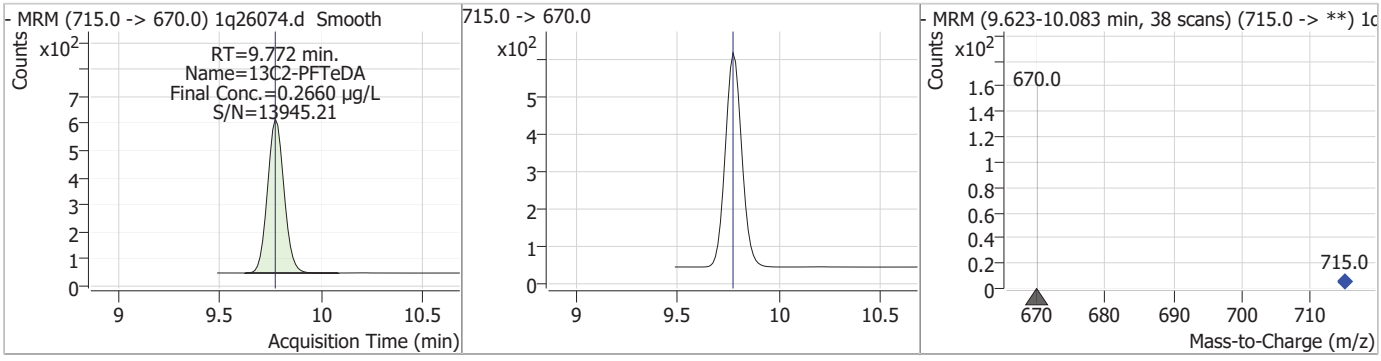
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	0.25	9.01	0.00	7184				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	0.49	9.35	0.01	3958				

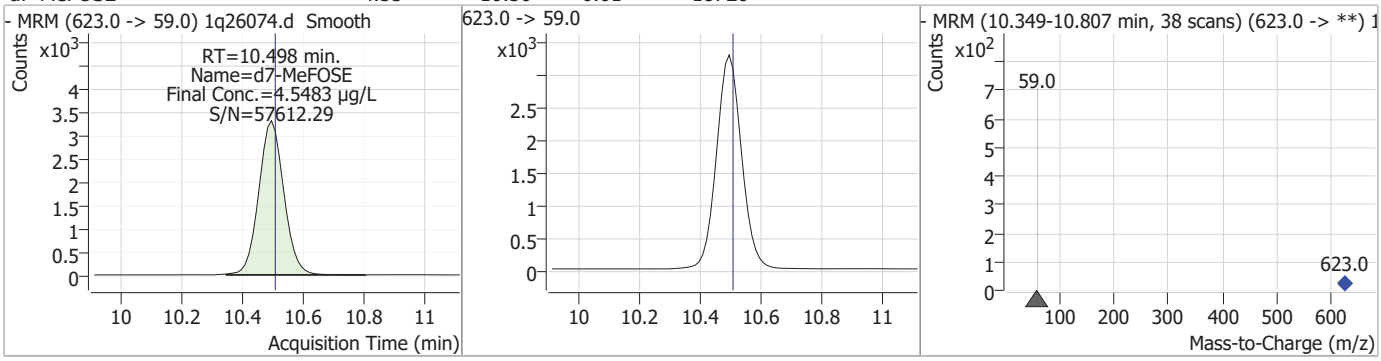


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.27	9.77	0.00	3211				

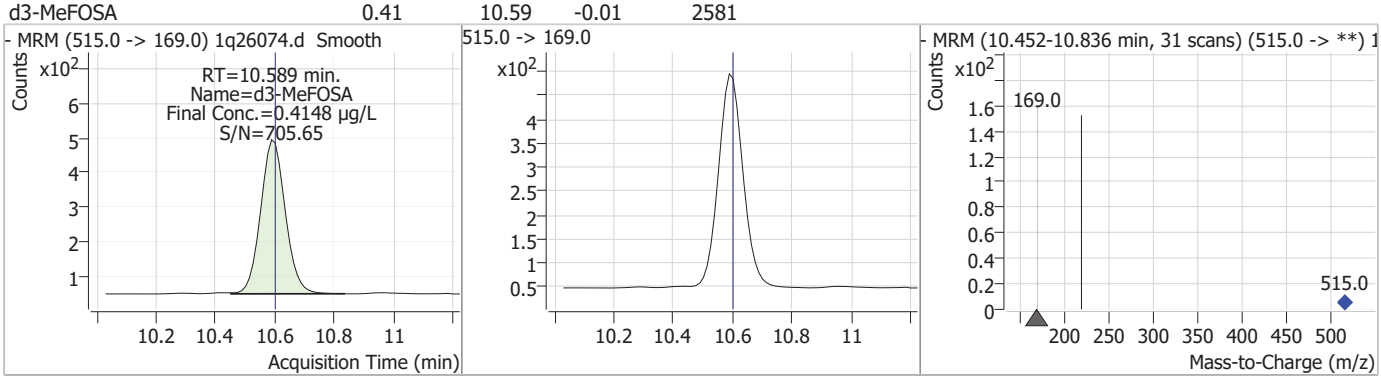


Perfluorinated Compounds by LC/MS/MS

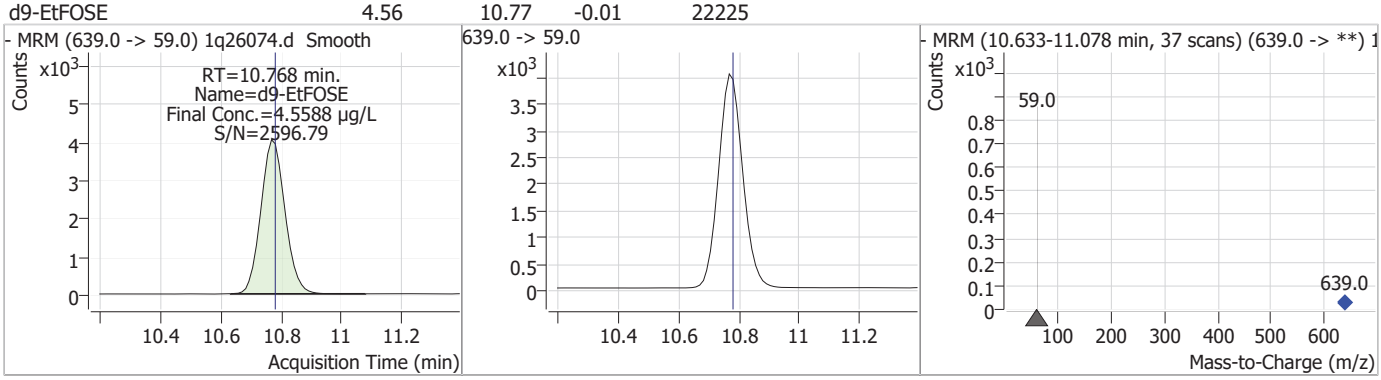
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	4.55	10.50	-0.01	18720				



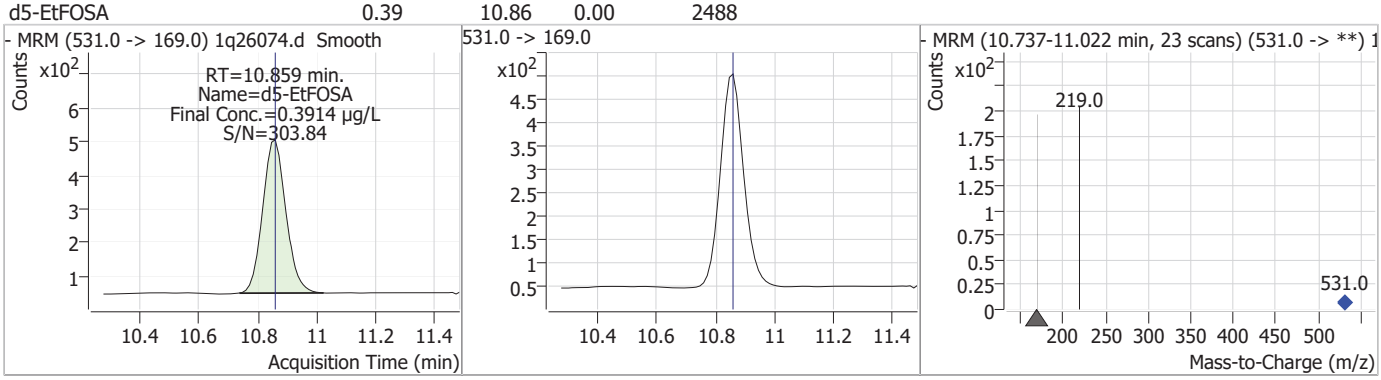
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	0.41	10.59	-0.01	2581				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	4.56	10.77	-0.01	22225				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	0.39	10.86	0.00	2488				



Manual Integration Approval Summary

Sample Number: JE10205-2
Lab FileID: 1Q26074.D
Injection Time: 05/15/25 14:40

Method: EPA 1633
Analyst approved: 05/16/25 08:48 Maksud Haque
Supervisor approved: 05/16/25 09:55 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.66	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.30	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/16/25 09:55

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8162.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 10:10:59 PM
Sample Name : JE10205-2
Vial : P1-D5
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,487,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.871	217.0 -> 172.0	856267	10.00 µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	384504	5.00 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	296234	2.50 µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	293742	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	437621	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	183786	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	158740	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	233962	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	200749	1.25 µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	148042	1.25 µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	160278	2.50 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	26650	2.50 µg/L	0.000
		302.0 -> 80.0	64945		
M3-PFHxS	6.999	402.0 -> 99.0	29488	2.50 µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	25454	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	14266	5.00 µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	24134	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	25819	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	180452	5.00 µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	445072	10.00 µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	148899	5.00 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	743774	25.00 µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	896624	25.00 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	78908	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	74476	2.50 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	42737	2.50 µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	409669	5.00 µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	40942	2.50 µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	475210	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	163795	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	194981	1.25 µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	314157	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	14266	6.95 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 139.0%	
13C2-6:2FTS	6.684	429.0 -> 81.0	24134	5.42 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.3%	
13C2-8:2FTS	7.671	529.0 -> 81.0	25819	4.93 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.5%	
13C2-PFDoDA	8.666	615.0 -> 570.0	200749	1.13 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.7%	
13C2-PFTeDA	9.368	715.0 -> 670.0	148042	1.09 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.0%	
13C3-PFBS	5.368	302.0 -> 99.0	26650	2.64 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.5%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	29488	2.06	µg/L		0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 82.5%			
13C4-PFBA	2.871	217.0 -> 172.0	856267	9.12	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 91.2%			
13C4-PFHpA	6.291	367.0 -> 322.0	293742	2.08	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 83.1%			
13C5-PFHxA	5.464	318.0 -> 273.0	296234	2.23	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 89.1%			
13C5-PFPeA	4.319	268.0 -> 223.0	384504	3.81	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 76.2%			
13C6-PFDA	7.858	519.0 -> 474.0	158740	1.10	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.7%			
13C7-PFUnDA	8.273	570.0 -> 525.0	233962	1.21	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.8%			
13C8-FOSA	9.279	506.0 -> 78.0	160278	3.65	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 146.0%			
13C8-PFOA	6.897	421.0 -> 376.0	437621	2.30	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.2%			
13C8-PFOS	7.995	507.0 -> 99.0	25454	2.47	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.9%			
13C9-PFNA	7.403	472.0 -> 427.0	183786	1.14	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.9%			
d3-MeFOSAA	7.915	573.0 -> 419.0	180452	6.41	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 128.2%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	445072	8.52	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 85.2%			
d3-MeFOSA	10.567	515.0 -> 169.0	74476	3.30	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 132.1%			
d5-EtFOSAA	8.098	589.0 -> 419.0	148899	6.89	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 137.8%			
d7-MeFOSE	10.462	623.0 -> 59.0	743774	34.55	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 138.2%			
d9-EtFOSE	10.734	639.0 -> 59.0	896624	34.35	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 137.4%			
d5-EtFOSA	10.825	531.0 -> 169.0	78908	3.40	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 135.9%			
Target Compounds							**QValue**
4:2FTS	-	327.0 -> 307.0	-	N.D.			
		327.0 -> 81.0					
6:2FTS	6.684	427.0 -> 407.0	768641	31.76	µg/L		100
		427.0 -> 81.0	361233				
8:2FTS	7.671	527.0 -> 507.0	587603	29.08	µg/L		99
		527.0 -> 81.0	227033				
EtFOSAA	-	584.0 -> 419.0	-	N.D.			
		584.0 -> 483.0					
FOSA	9.269	498.0 -> 78.0	27262	0.47	µg/L	#m	92
		498.0 -> 478.0	1539				
MeFOSAA	-	570.0 -> 419.0	-	N.D.			
		570.0 -> 512.0					
PFBA	2.864	213.0 -> 169.0	332988	12.72	µg/L		100
PFBS	5.369	299.0 -> 80.0	139876	4.59	µg/L		99
		299.0 -> 99.0	56548				
PFDA	7.859	513.0 -> 469.0	260354	2.16	µg/L		99
		513.0 -> 219.0	61928				
PFDoDA	-	613.0 -> 569.0	-	N.D.			
		613.0 -> 319.0					

Perfluorinated Compounds by LC/MS/MS

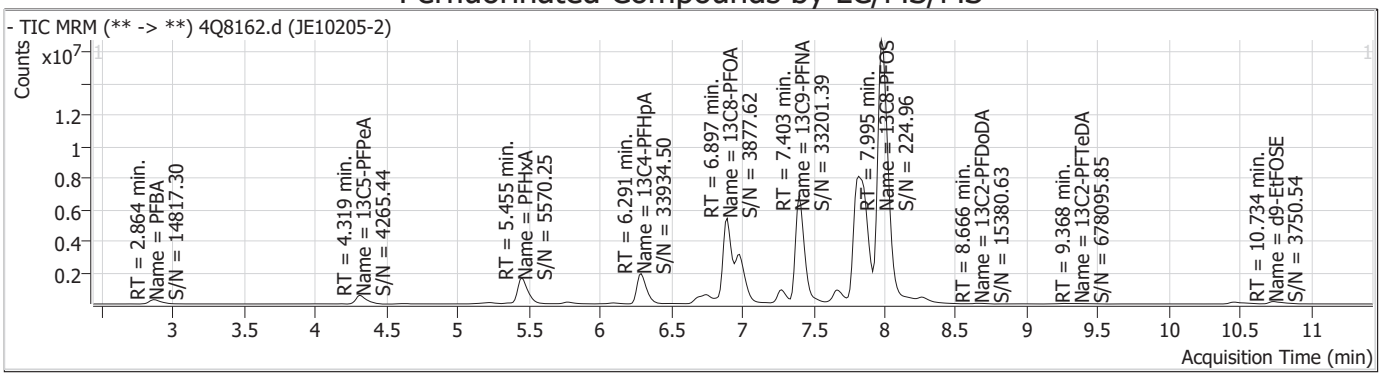
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.804	599.0 -> 80.0	243	0.01	µg/L	m	67
		599.0 -> 99.0	195				
PFHpA	6.292	363.0 -> 319.0	7150638	40.01	µg/L		99
		363.0 -> 169.0	1448095				
PFHpS	7.529	449.0 -> 80.0	492040	19.30	µg/L		96
		449.0 -> 99.0	284110				
PFHxA	5.455	313.0 -> 269.0	7485084	58.63	µg/L		100
		313.0 -> 119.0	255188				
PFHxS	7.000	399.0 -> 80.0	10291630	400.79	µg/L	m	94
		399.0 -> 99.0	5065557				
PFNA	7.404	463.0 -> 419.0	27195669	246.01	µg/L		81
		463.0 -> 219.0	7134973				
PFNS	8.251	549.0 -> 80.0	0		µg/L	m	1
		549.0 -> 99.0	0				
PFOA	6.898	413.0 -> 369.0	20587140	141.34	µg/L	m	94
		413.0 -> 169.0	5337515				
PFOS	7.996	499.0 -> 80.0	33140754	1615.49	µg/L	m	91
		499.0 -> 99.0	15017749				
PFPeA	4.321	263.0 -> 219.0	2419928	39.81	µg/L		100
PFPeS	6.331	349.0 -> 80.0	304134	9.14	µg/L		96
		349.0 -> 99.0	146798				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	8.275	563.0 -> 519.0	652308	4.72	µg/L		95
		563.0 -> 269.0	116121				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

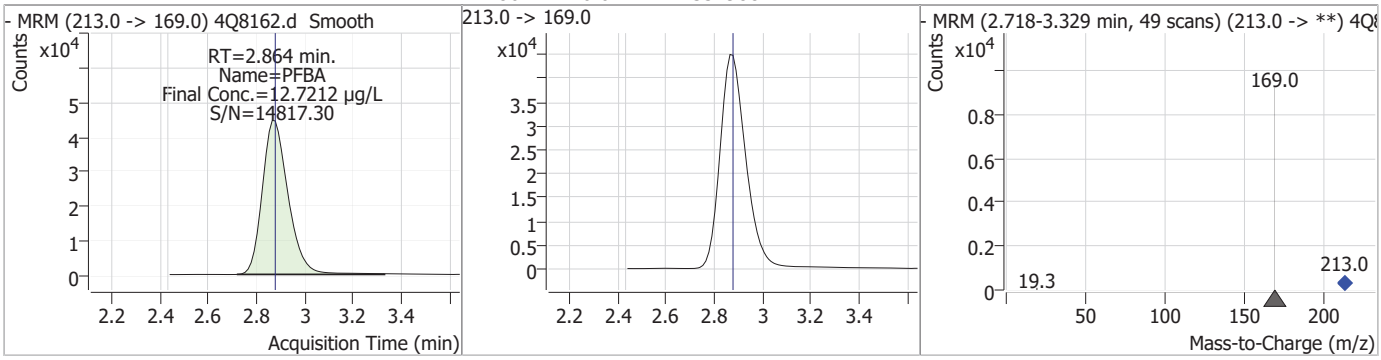
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

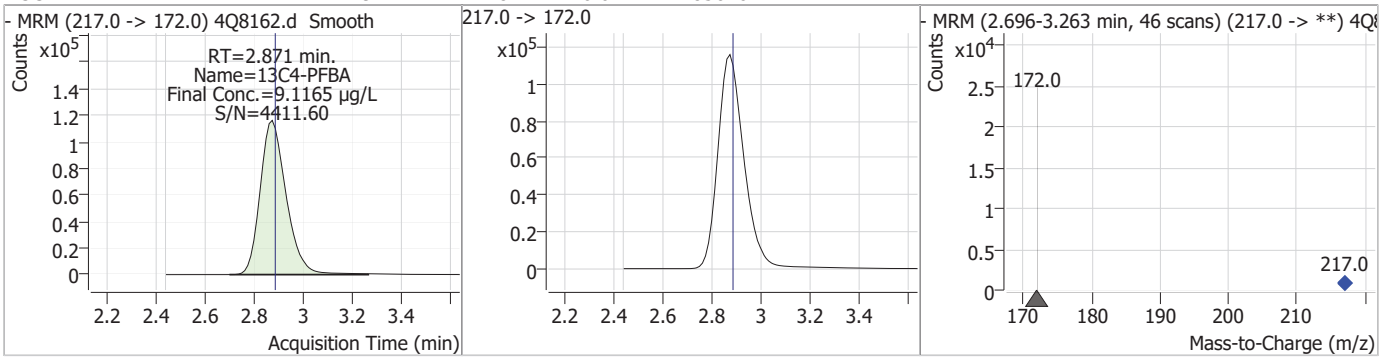
Perfluorinated Compounds by LC/MS/MS



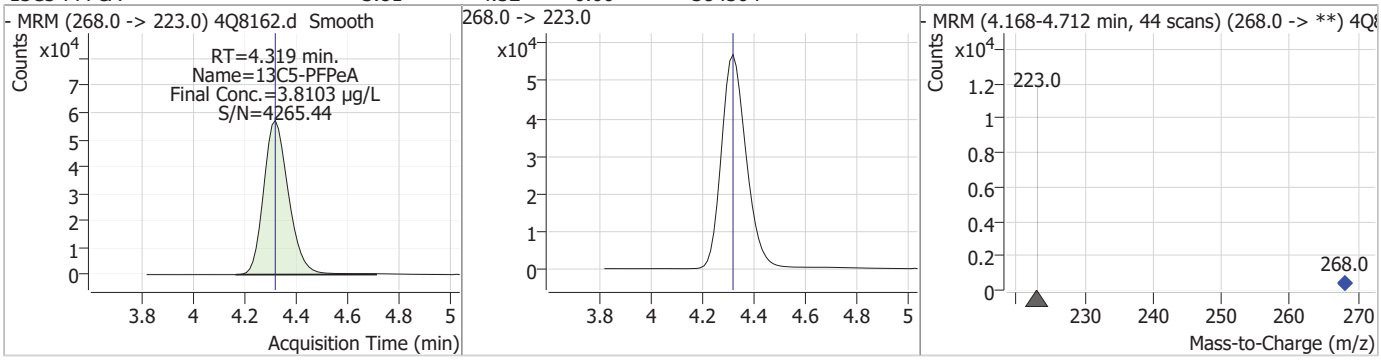
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	12.72	2.86	-0.01	332988				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.12	2.87	-0.01	856267				

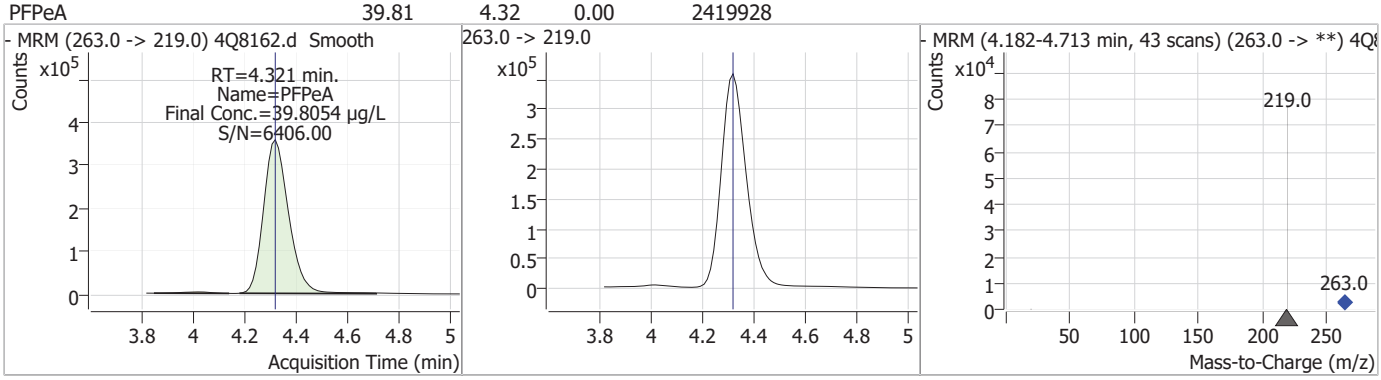


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	3.81	4.32	0.00	384504				

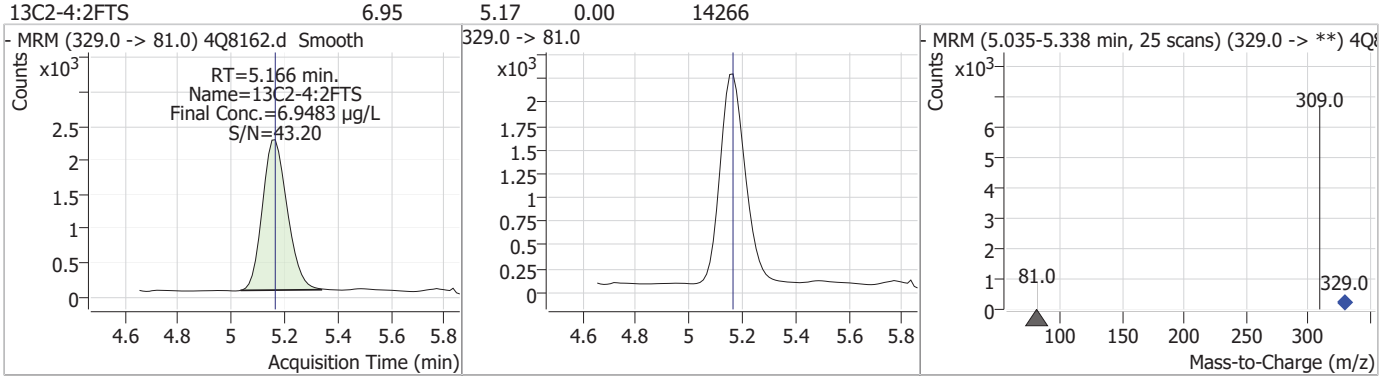


Perfluorinated Compounds by LC/MS/MS

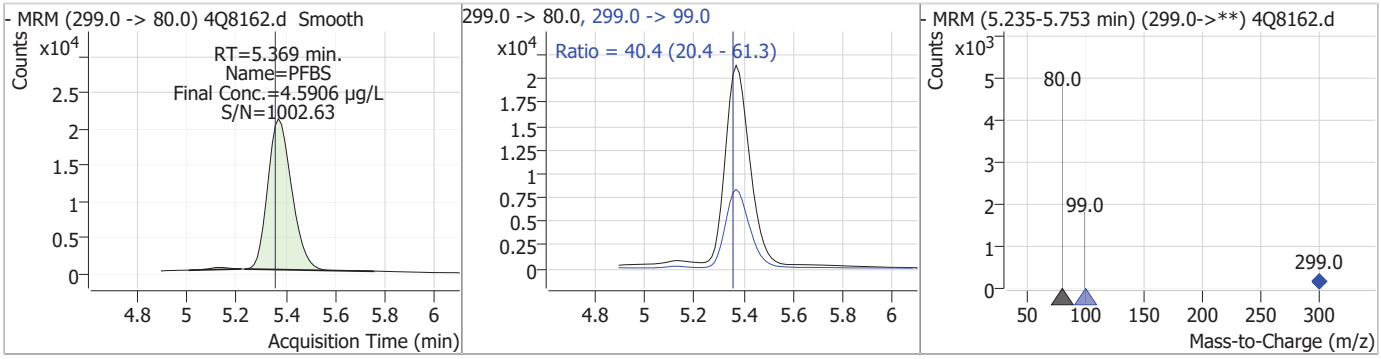
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	39.81	4.32	0.00	2419928				



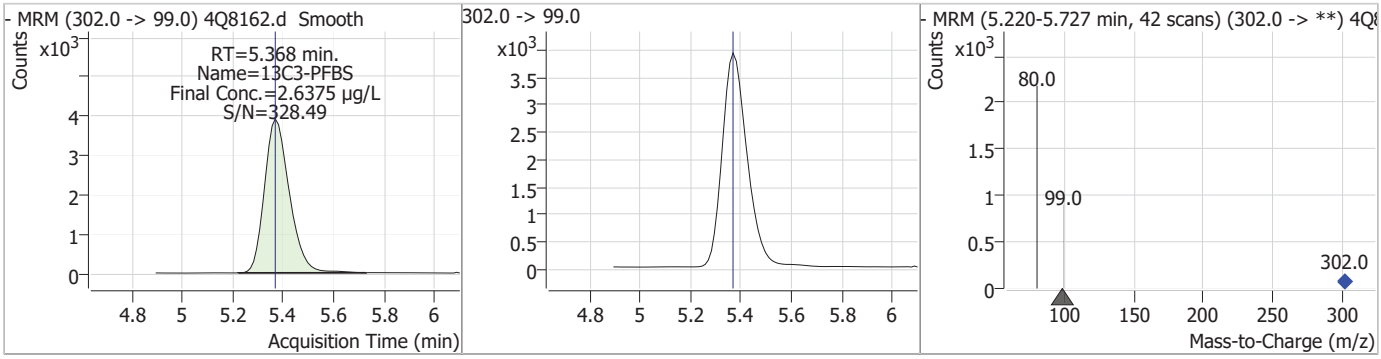
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	6.95	5.17	0.00	14266				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.59	5.37	0.01	139876	299.0 -> 99.0	40.4	20.4	61.3

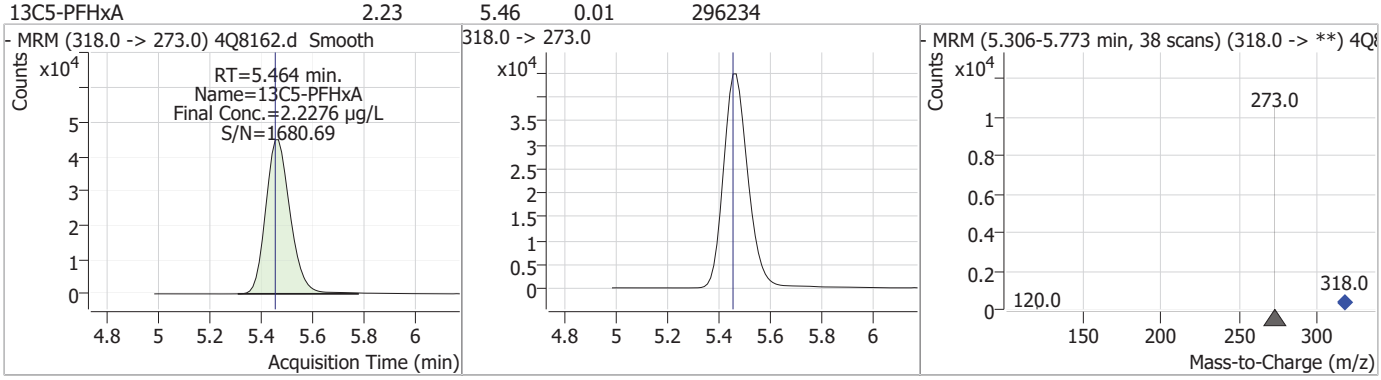


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.64	5.37	0.00	26650				

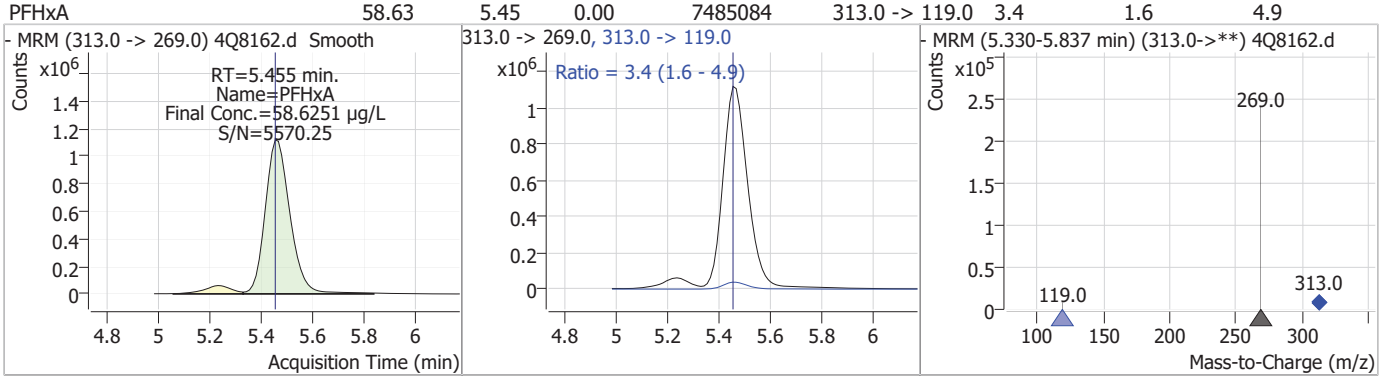


Perfluorinated Compounds by LC/MS/MS

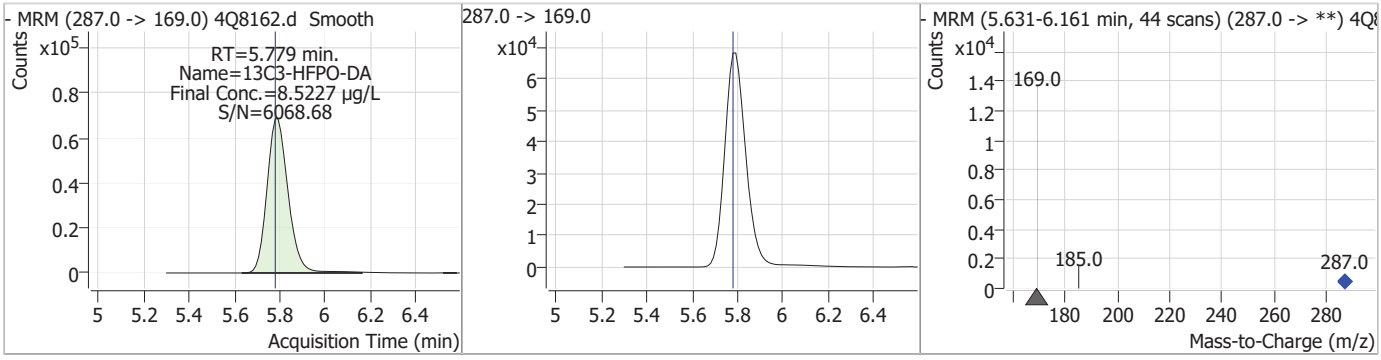
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.23	5.46	0.01	296234				



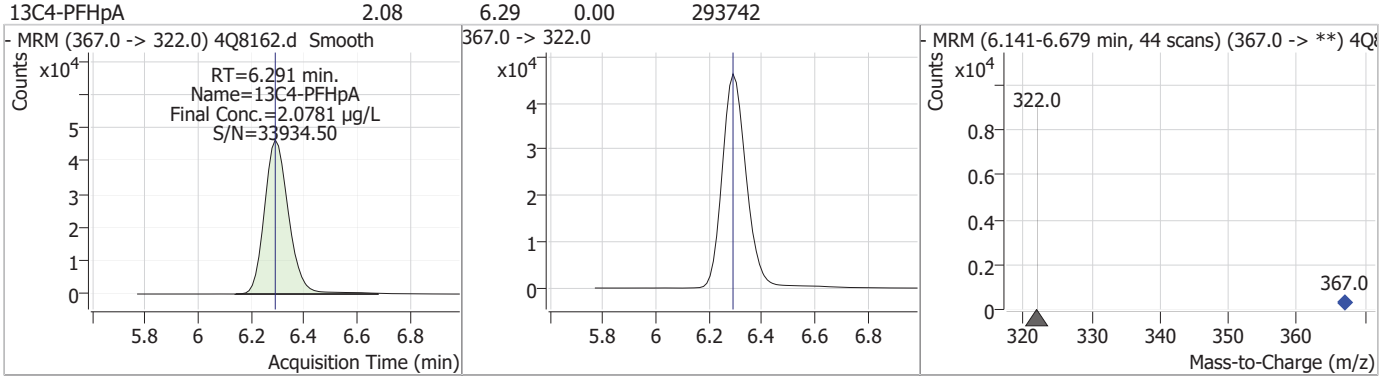
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	58.63	5.45	0.00	7485084	313.0 -> 119.0	3.4	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.52	5.78	0.00	445072				

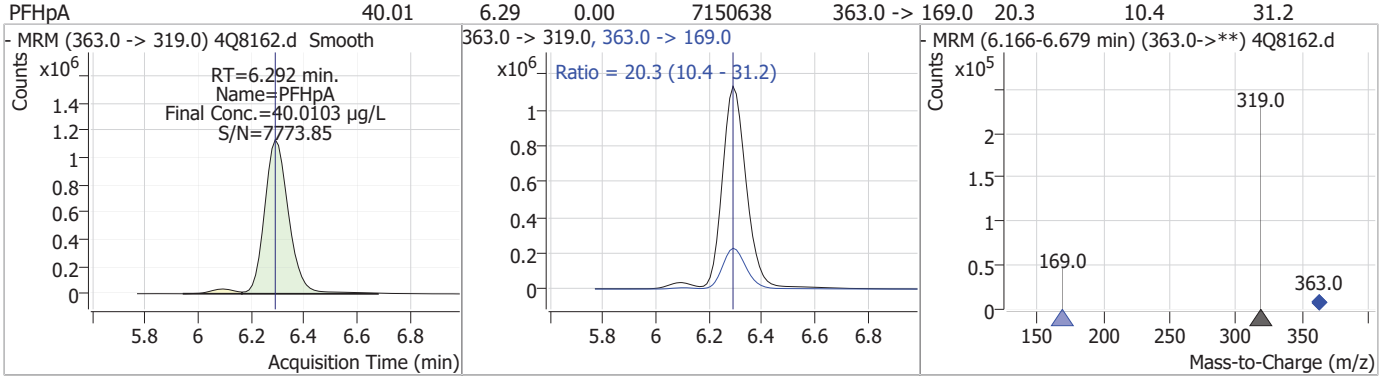


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.08	6.29	0.00	293742				

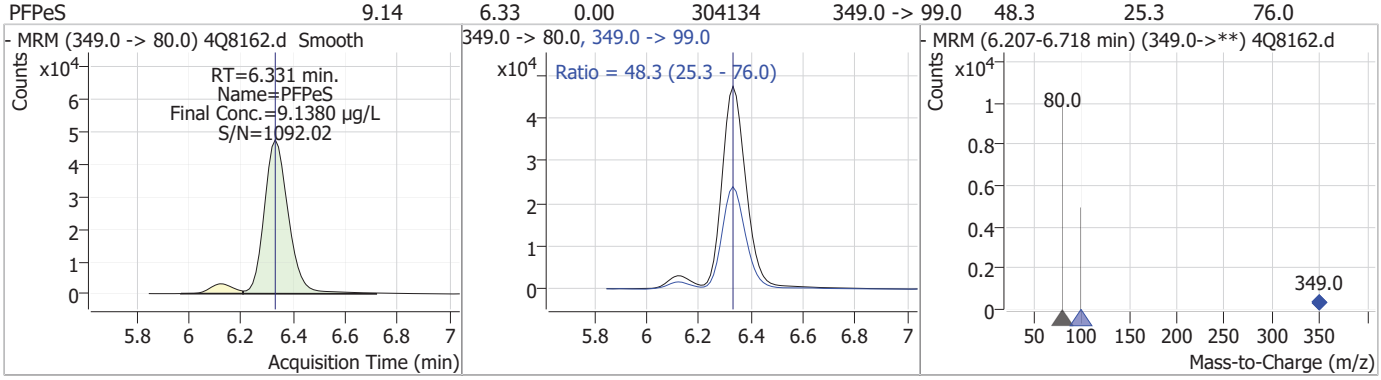


Perfluorinated Compounds by LC/MS/MS

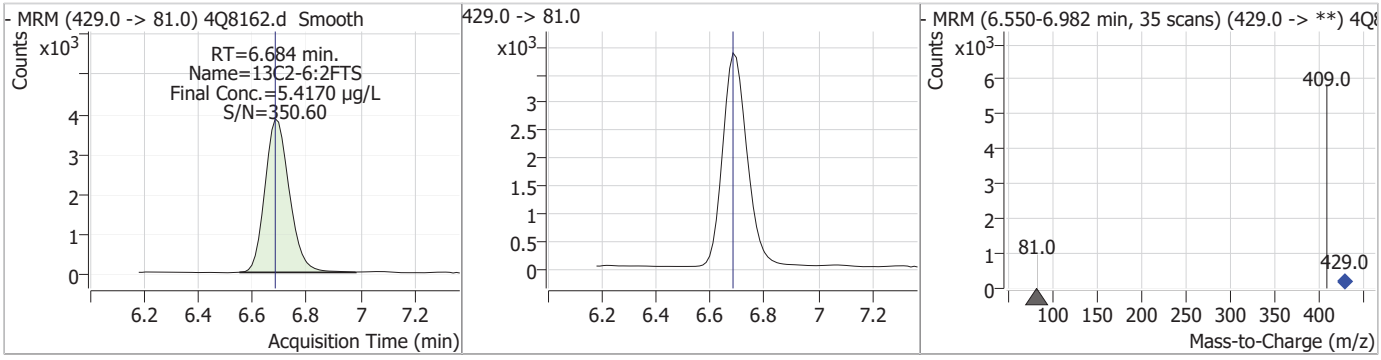
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	40.01	6.29	0.00	7150638	363.0 -> 169.0	20.3	10.4	31.2



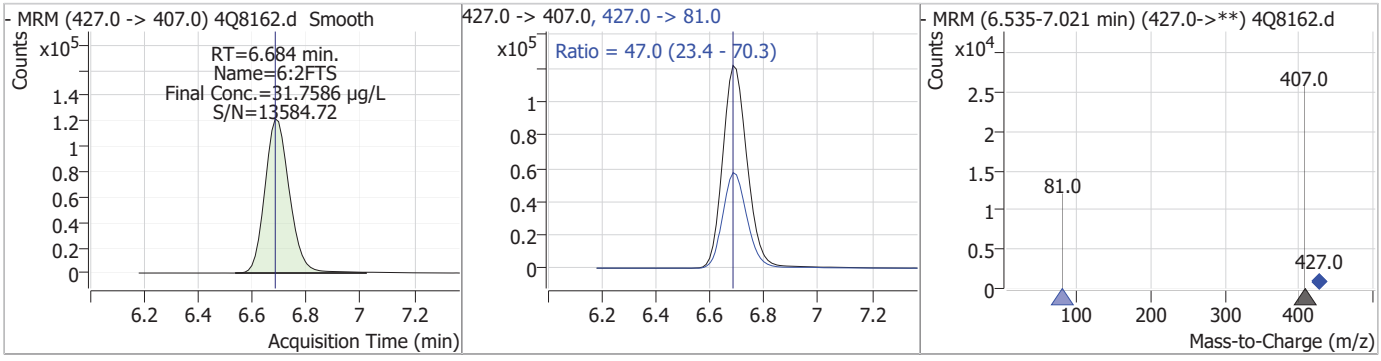
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	9.14	6.33	0.00	304134	349.0 -> 99.0	48.3	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.42	6.68	0.00	24134				

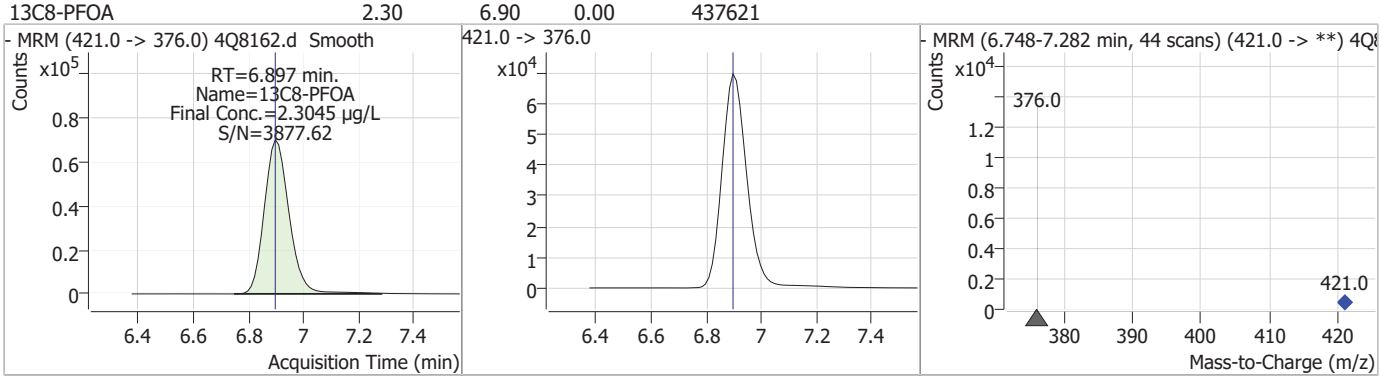


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	31.76	6.68	0.00	768641	427.0 -> 81.0	47.0	23.4	70.3

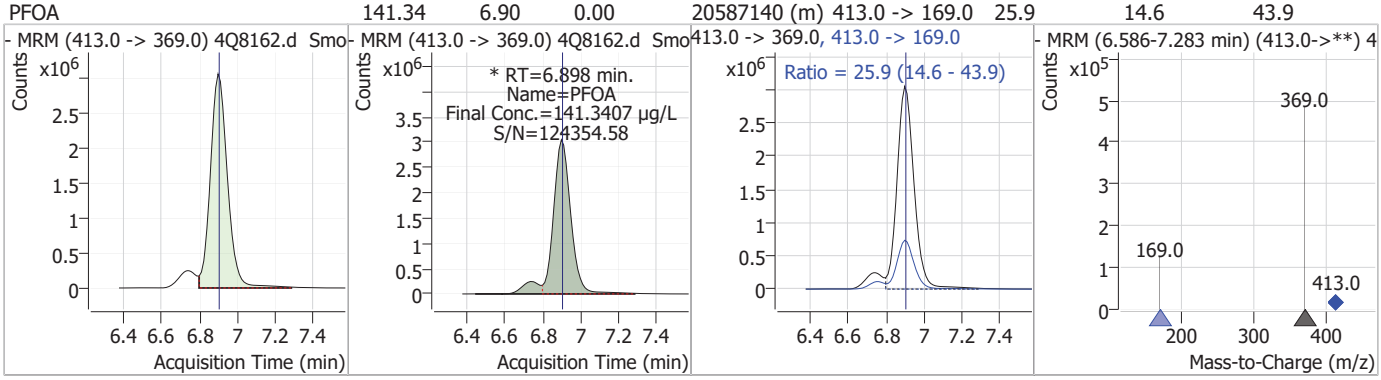


Perfluorinated Compounds by LC/MS/MS

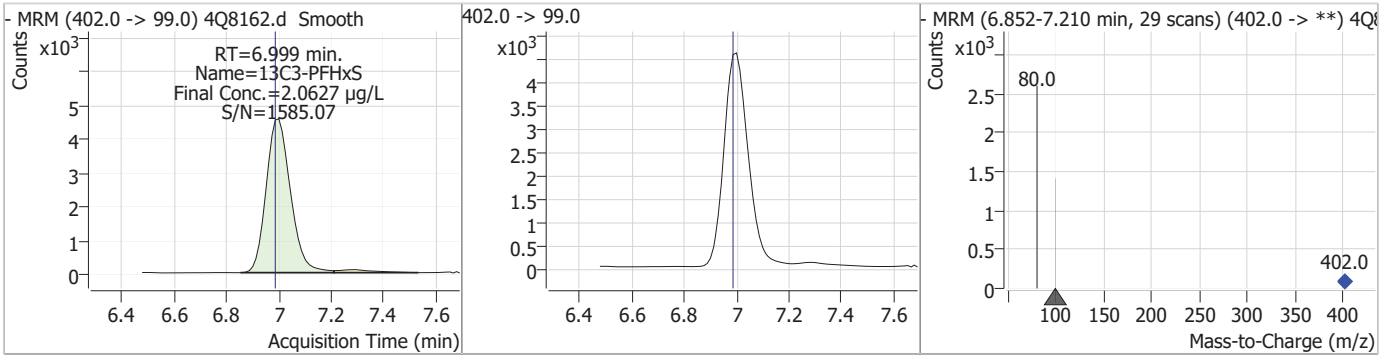
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.30	6.90	0.00	437621				



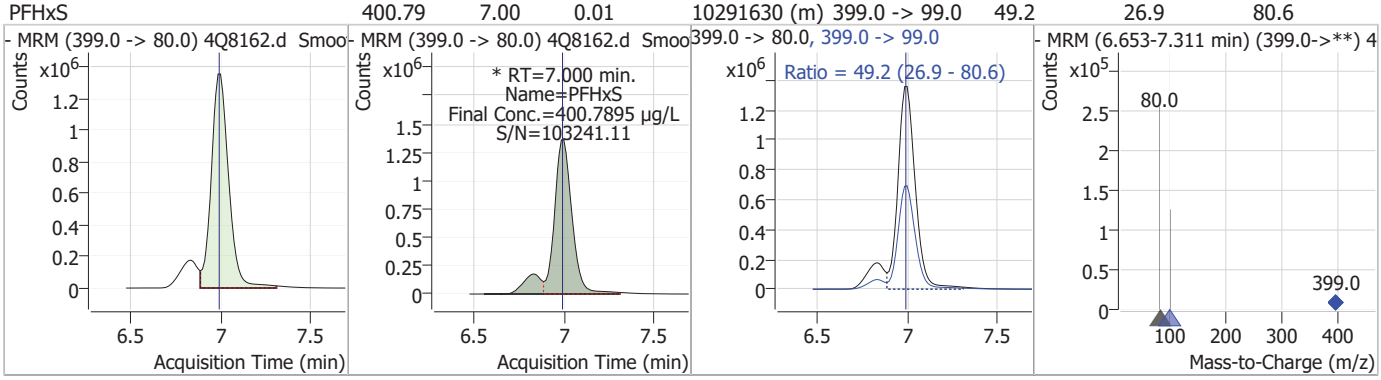
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	141.34	6.90	0.00	20587140 (m)	413.0 -> 169.0	25.9	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.06	7.00	0.01	29488				

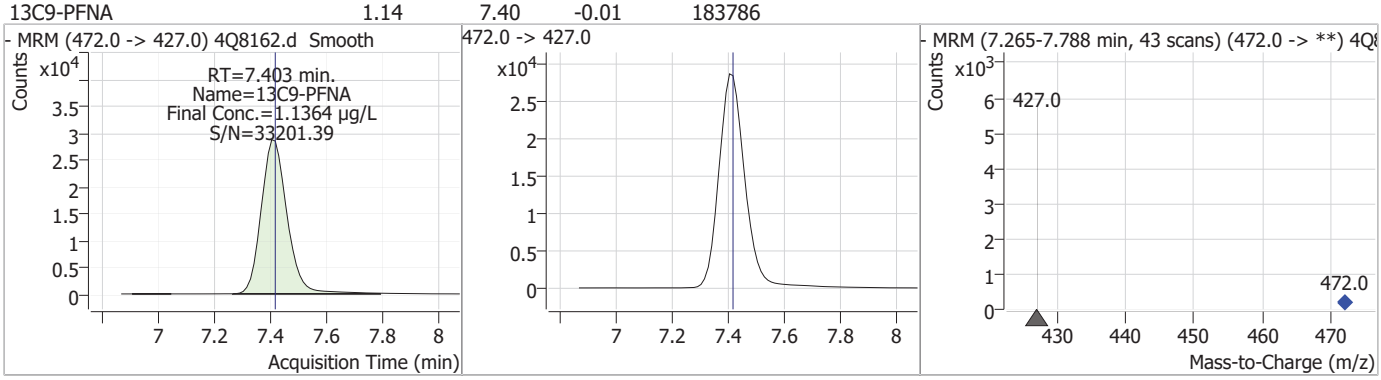


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	400.79	7.00	0.01	10291630 (m)	399.0 -> 99.0	49.2	26.9	80.6

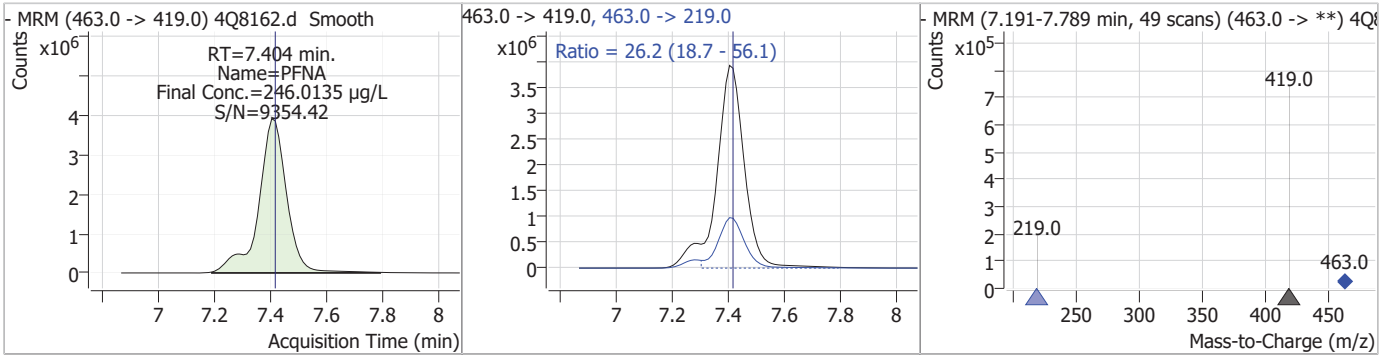


Perfluorinated Compounds by LC/MS/MS

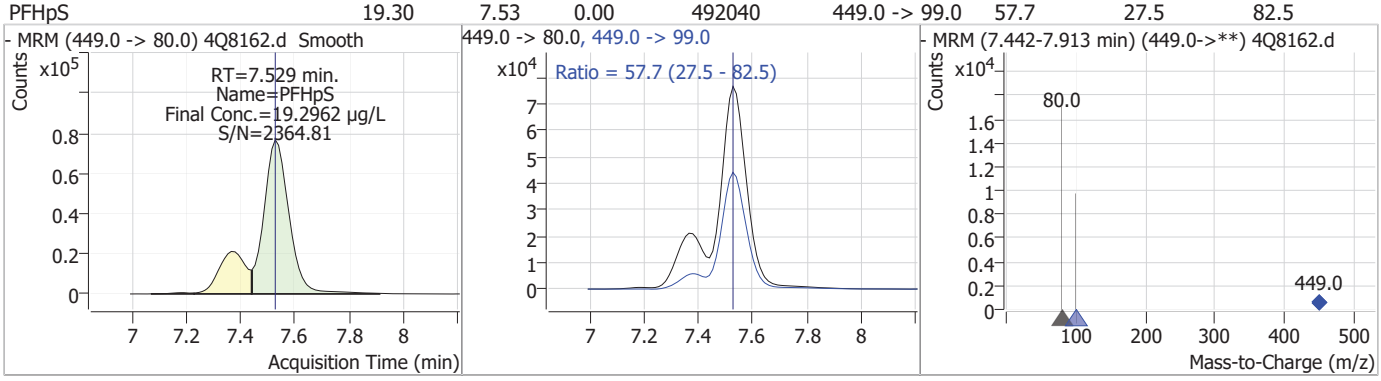
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.14	7.40	-0.01	183786				



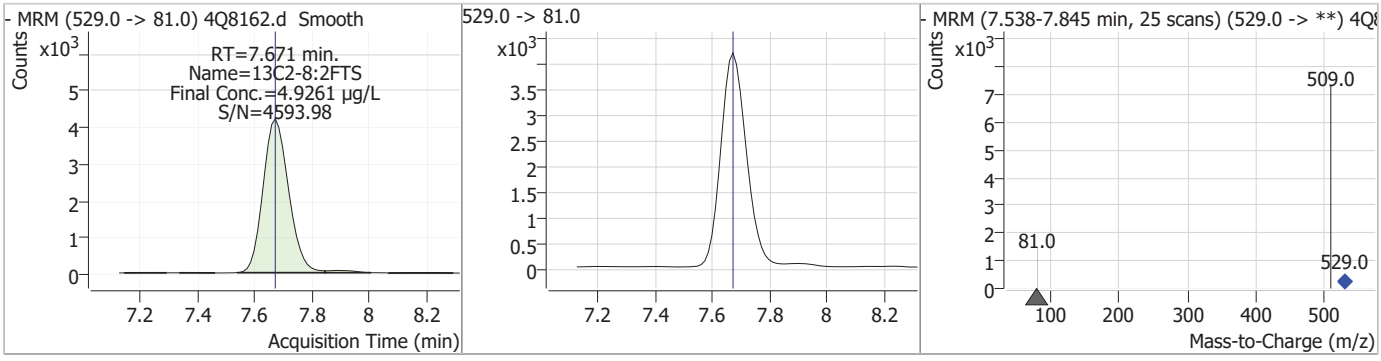
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	246.01	7.40	-0.01	27195669	463.0 -> 219.0	26.2	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	19.30	7.53	0.00	492040	449.0 -> 99.0	57.7	27.5	82.5

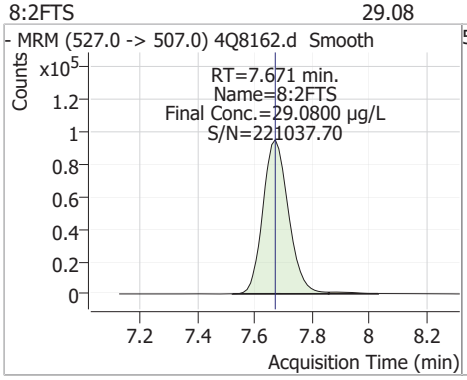


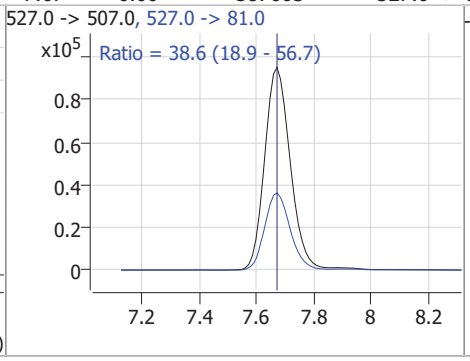
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.93	7.67	0.00	25819				

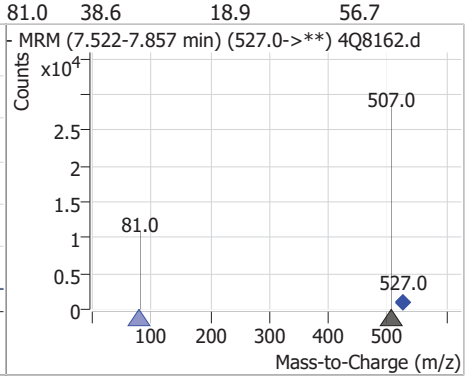


Perfluorinated Compounds by LC/MS/MS

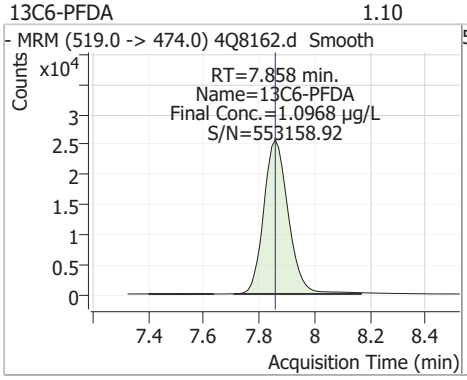
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	29.08	7.67	0.00	587603	527.0 -> 81.0	38.6	18.9	56.7

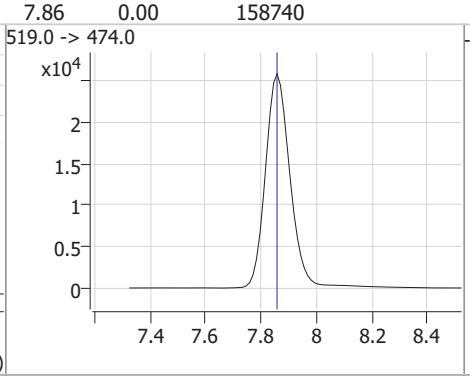


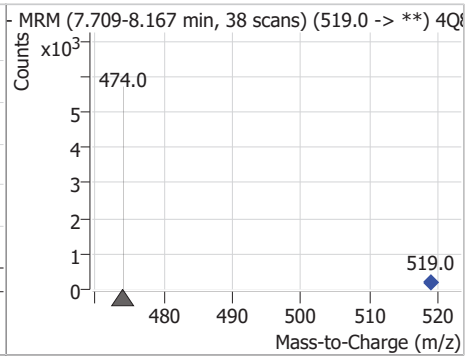




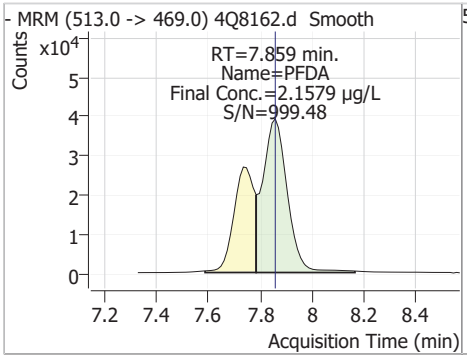
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.10	7.86	0.00	158740				

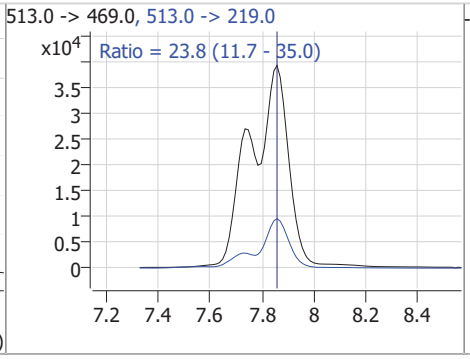


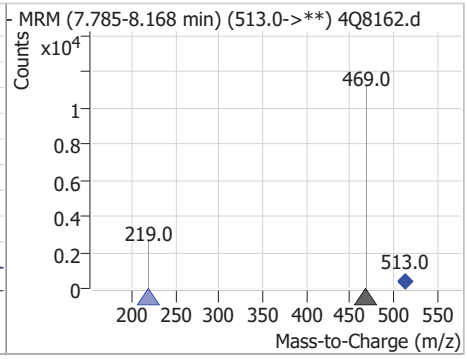




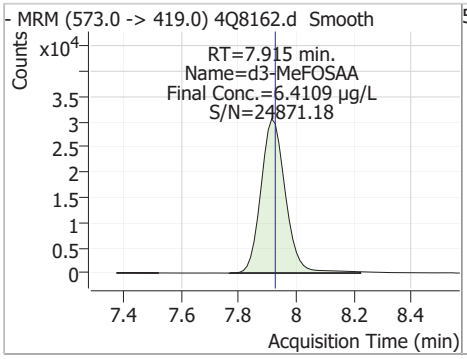
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.16	7.86	0.00	260354	513.0 -> 219.0	23.8	11.7	35.0

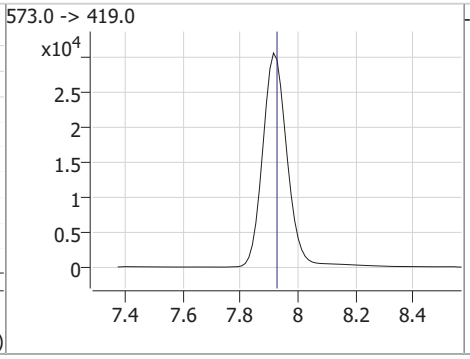


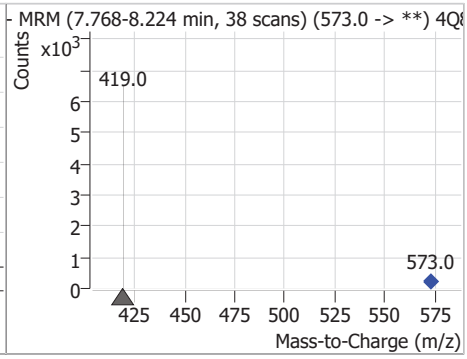




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	6.41	7.92	-0.01	180452				

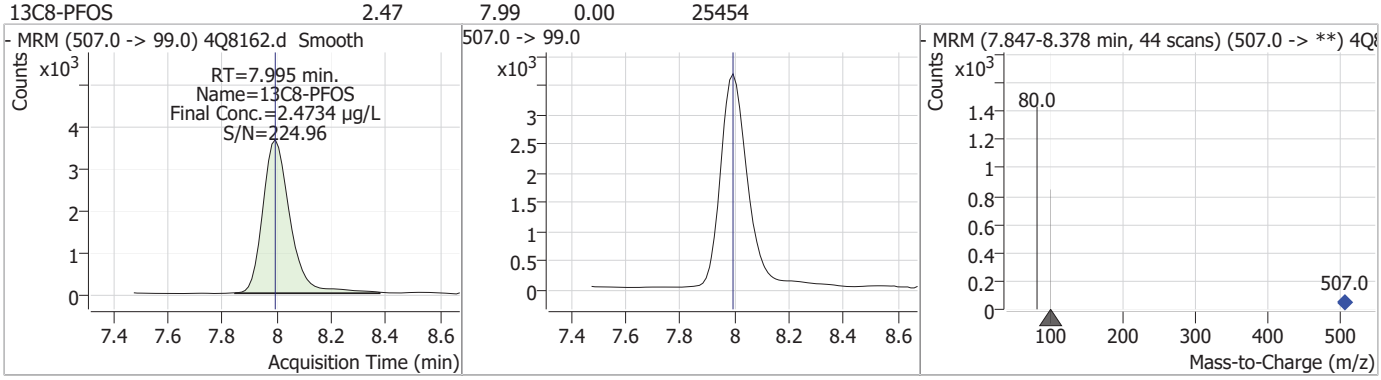




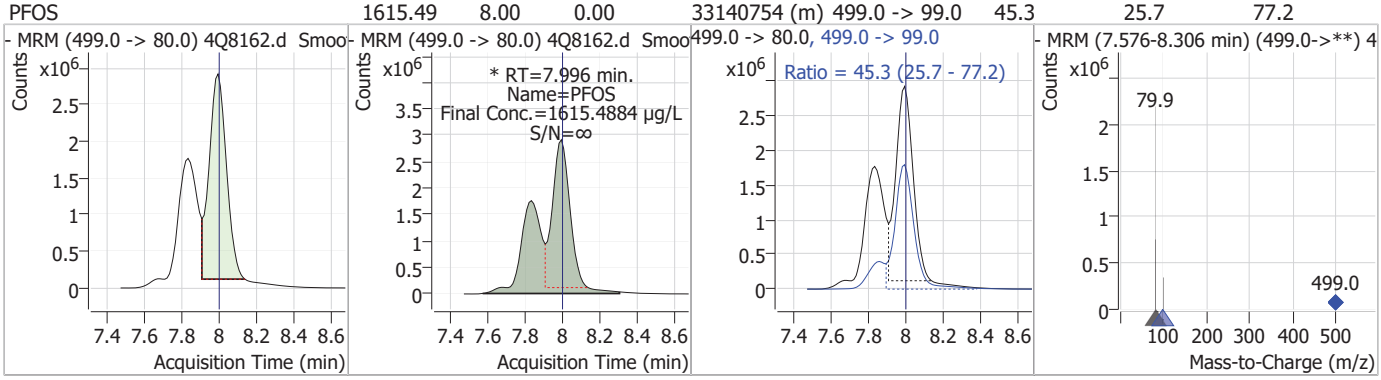


Perfluorinated Compounds by LC/MS/MS

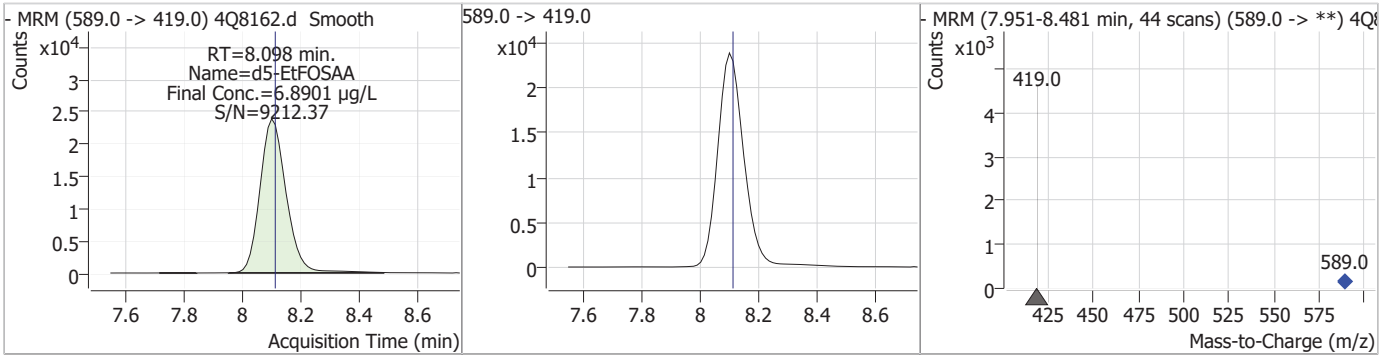
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.47	7.99	0.00	25454				



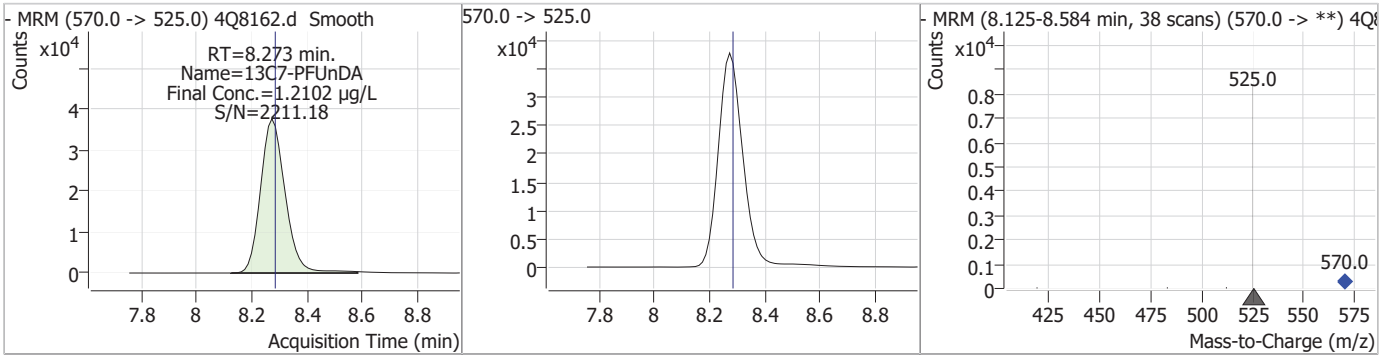
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	1615.49	8.00	0.00	33140754 (m)	499.0 -> 99.0	45.3	25.7	77.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	6.89	8.10	-0.01	148899				

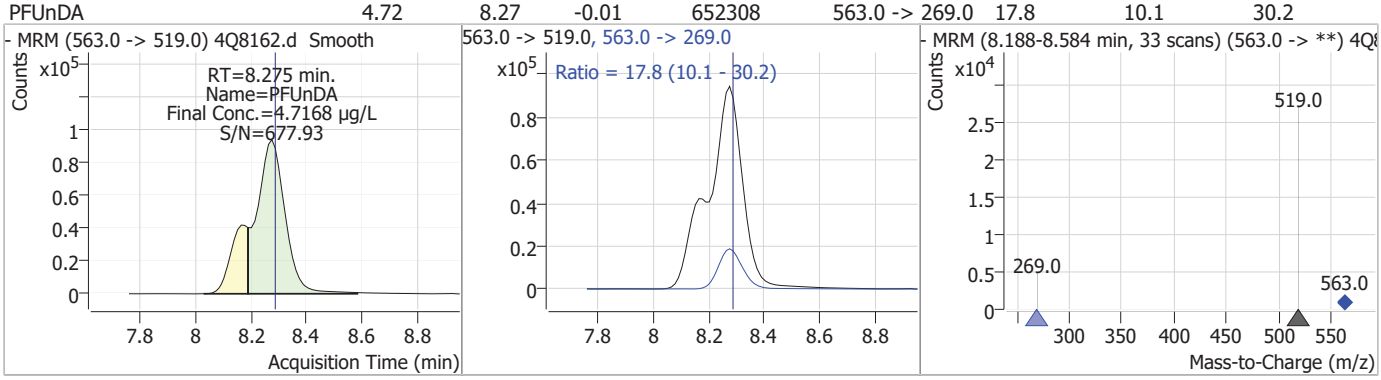


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.21	8.27	-0.01	233962				

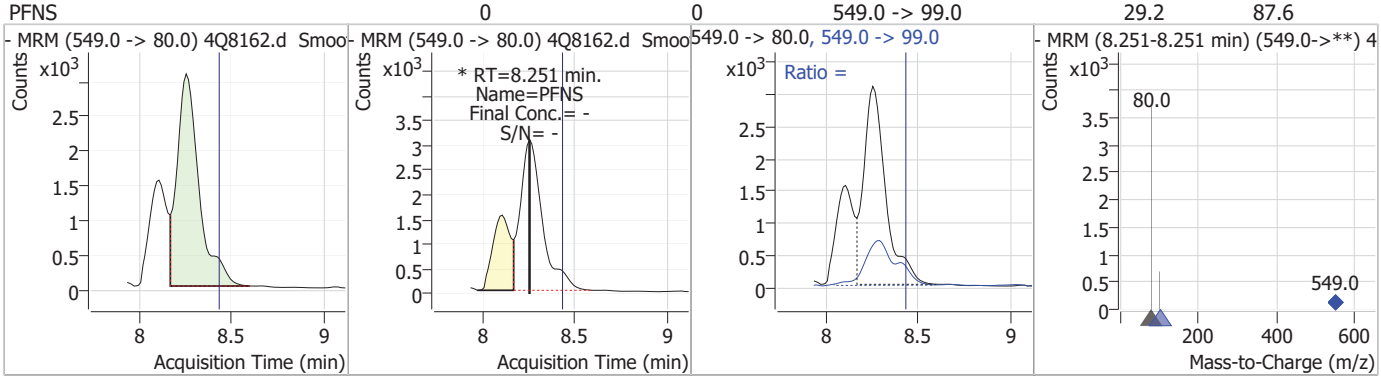


Perfluorinated Compounds by LC/MS/MS

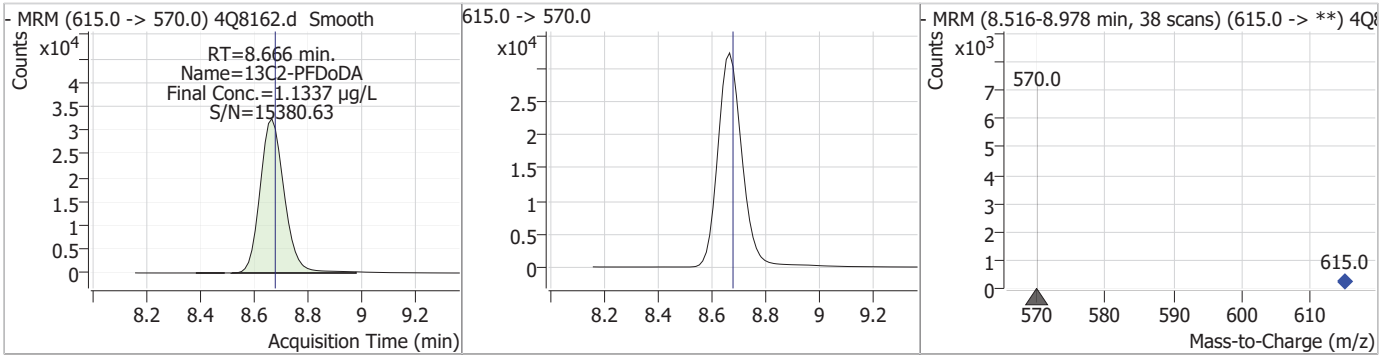
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	4.72	8.27	-0.01	652308	563.0 -> 269.0	17.8	10.1	30.2



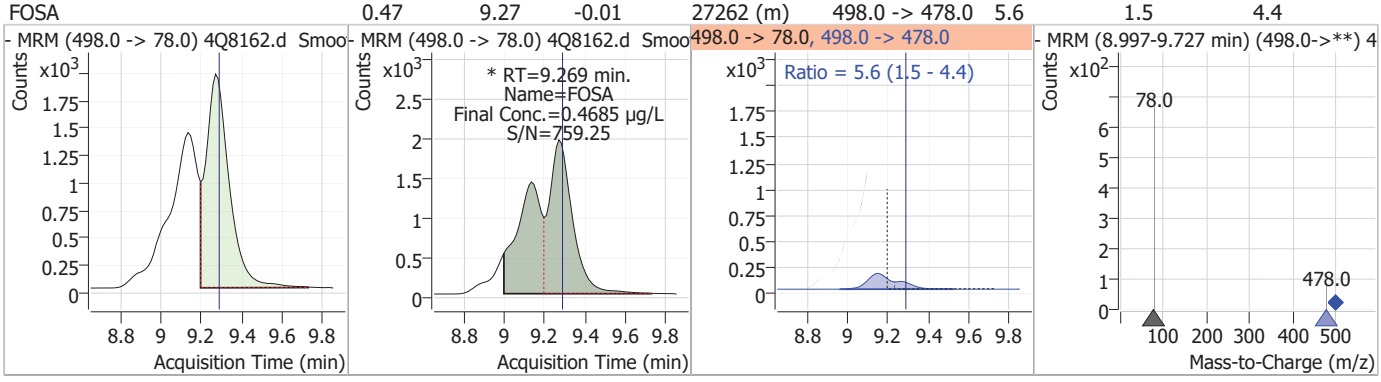
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS		0		0	549.0 -> 99.0		29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.13	8.67	-0.01	200749				

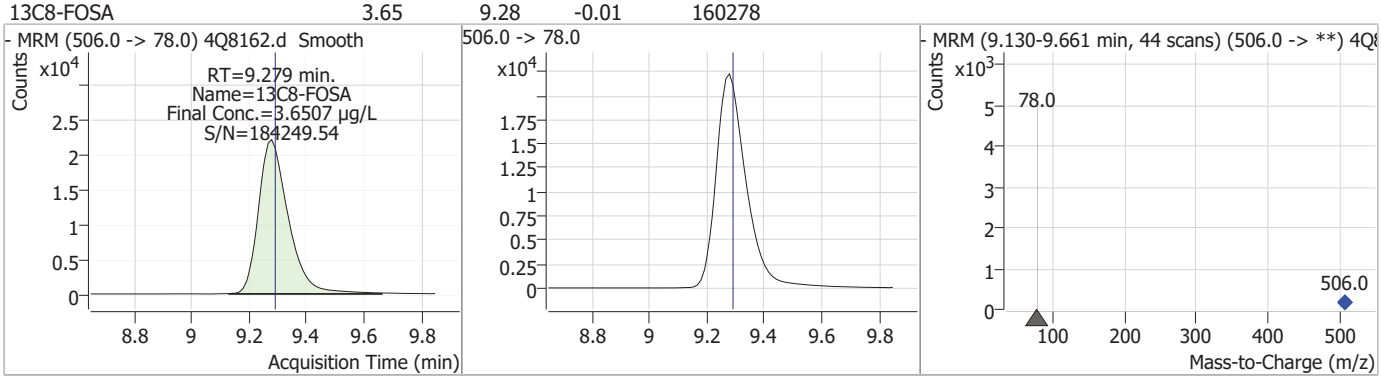


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.47	9.27	-0.01	27262 (m)	498.0 -> 478.0	5.6	1.5	4.4

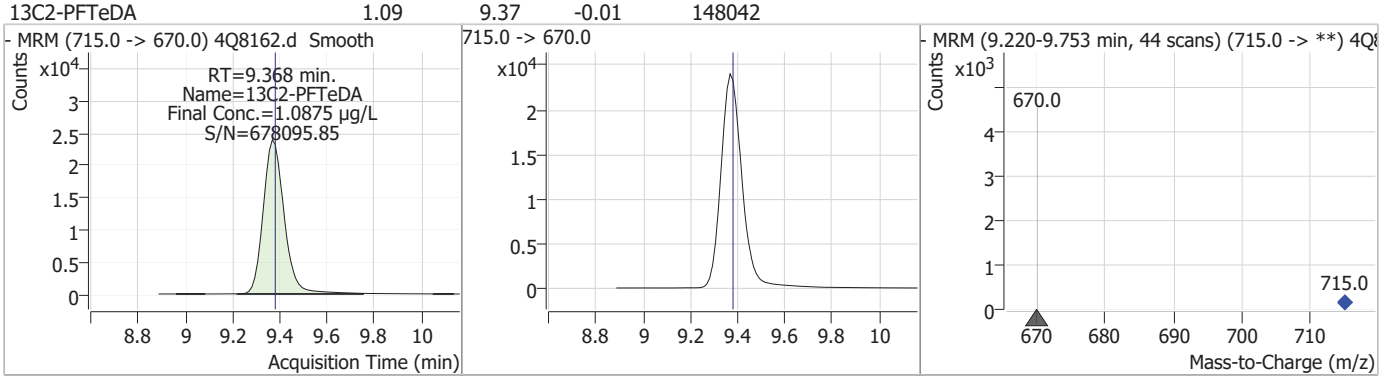


Perfluorinated Compounds by LC/MS/MS

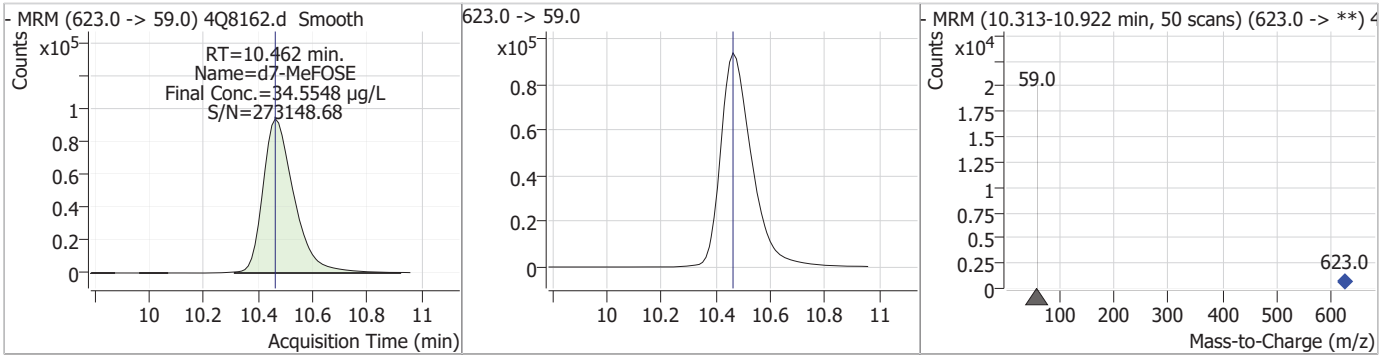
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	3.65	9.28	-0.01	160278				



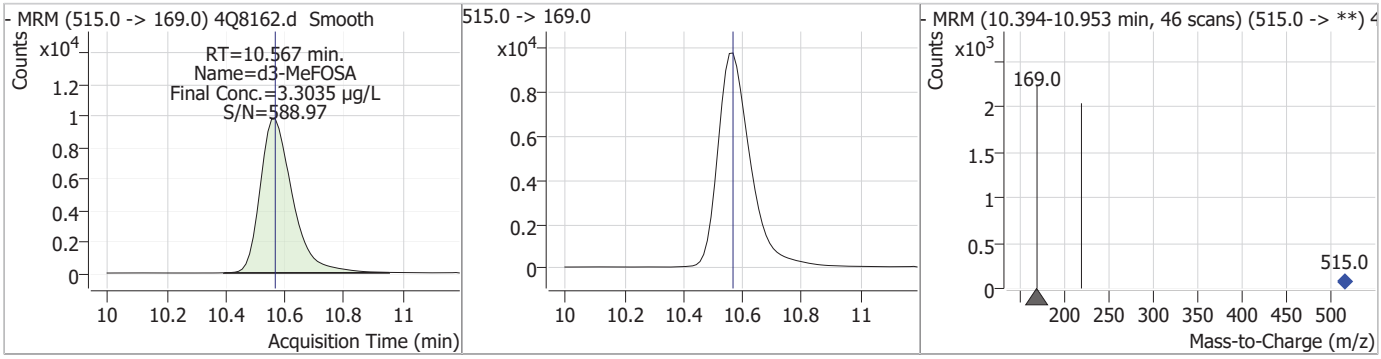
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.09	9.37	-0.01	148042				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	34.55	10.46	0.00	743774				

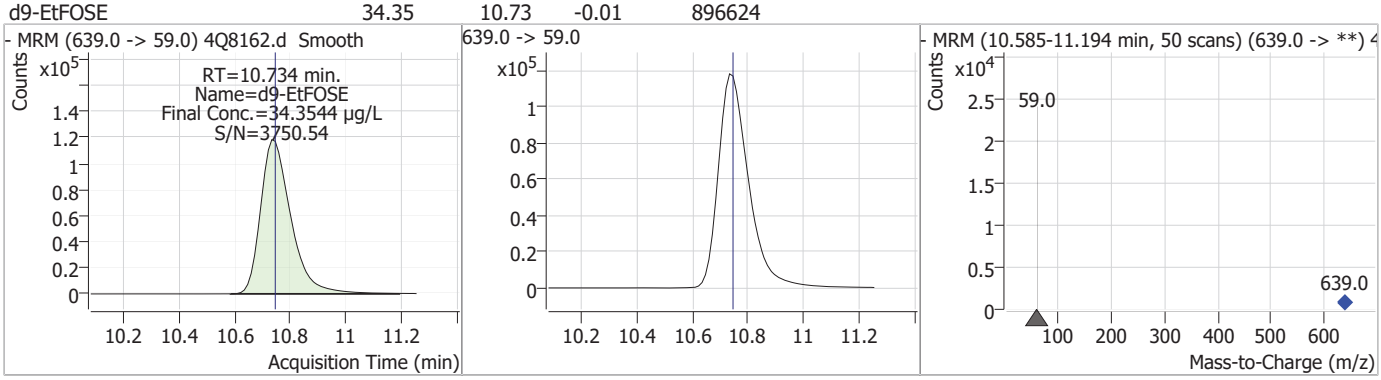


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	3.30	10.57	0.00	74476				

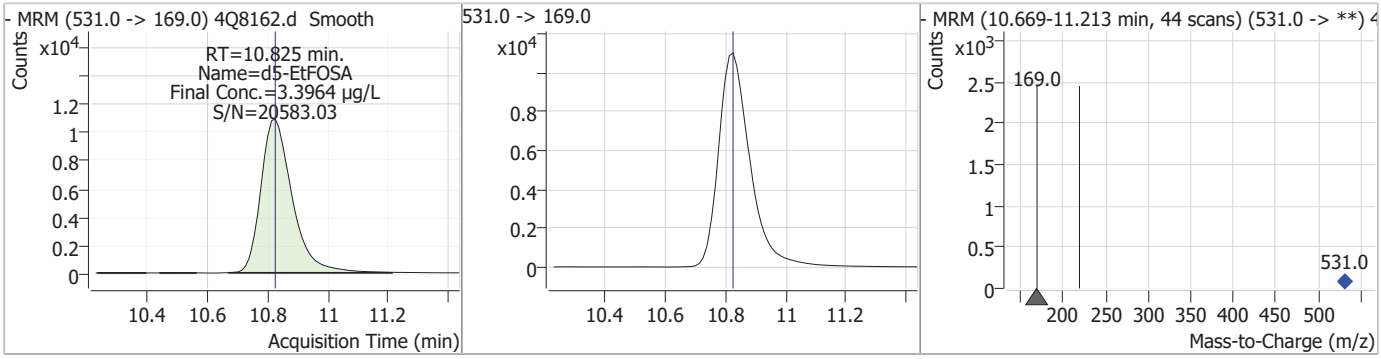


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	34.35	10.73	-0.01	896624				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	3.40	10.82	0.00	78908				



Manual Integration Approval Summary

Sample Number: JE10205-2
Lab FileID: 4Q8162.D
Injection Time: 04/30/25 22:10

Method: EPA 1633
Analyst approved: 05/01/25 11:50 Maksud Haque
Supervisor approved: 05/16/25 09:55 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
Perfluorodecanesulfonic acid	335-77-3		8.80	Poor instrument integration
PFOSA	754-91-6		9.27	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/06/25 06:26

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8163.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 10:24:33 PM
Sample Name : JE10205-3
Vial : P1-D6
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,481,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	770405	10.00	µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	375264	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	278631	2.50	µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	285024	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	431636	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	166435	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	155178	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	224185	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	194467	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	140609	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	153491	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	25174	2.50	µg/L	0.000
		302.0 -> 80.0	60051			
M3-PFHxS	6.999	402.0 -> 99.0	33448	2.50	µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	27264	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	10883	5.00	µg/L	0.000
M2-6:2FTS	6.696	429.0 -> 81.0	19793	5.00	µg/L	0.012
M2-8:2FTS	7.671	529.0 -> 81.0	26325	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	177820	5.00	µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	416706	10.00	µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	144185	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	695541	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	880350	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	76477	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	73182	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	52436	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	373387	5.00	µg/L	-0.012
18O2-PFHxS	6.999	403.0 -> 84.0	42421	2.50	µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	471955	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	152715	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	179629	1.25	µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	284017	2.50	µg/L	0.012
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	10883	5.12	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.3%		
13C2-6:2FTS	6.696	429.0 -> 81.0	19793	4.29	µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 85.8%		
13C2-8:2FTS	7.671	529.0 -> 81.0	26325	4.85	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.0%		
13C2-PFDoDA	8.666	615.0 -> 570.0	194467	1.18	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.2%		
13C2-PFTeDA	9.368	715.0 -> 670.0	140609	1.11	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.6%		
13C3-PFBS	5.368	302.0 -> 99.0	25174	2.40	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.2%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	33448	2.26	µg/L		0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.3%			
13C4-PFBA	2.871	217.0 -> 172.0	770405	9.00	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 90.0%			
13C4-PFHpA	6.291	367.0 -> 322.0	285024	2.23	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 89.2%			
13C5-PFHxA	5.464	318.0 -> 273.0	278631	2.32	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.7%			
13C5-PFPeA	4.319	268.0 -> 223.0	375264	4.11	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 82.3%			
13C6-PFDA	7.858	519.0 -> 474.0	155178	1.15	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.0%			
13C7-PFUnDA	8.273	570.0 -> 525.0	224185	1.24	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.5%			
13C8-FOSA	9.279	506.0 -> 78.0	153491	2.85	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 114.0%			
13C8-PFOA	6.897	421.0 -> 376.0	431636	2.29	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.5%			
13C8-PFOS	7.995	507.0 -> 99.0	27264	2.16	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 86.4%			
13C9-PFNA	7.403	472.0 -> 427.0	166435	1.12	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.4%			
d3-MeFOSAA	7.915	573.0 -> 419.0	177820	5.15	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.0%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	416706	8.83	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 88.3%			
d3-MeFOSA	10.555	515.0 -> 169.0	73182	2.65	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.8%			
d5-EtFOSAA	8.098	589.0 -> 419.0	144185	5.44	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.8%			
d7-MeFOSE	10.462	623.0 -> 59.0	695541	26.34	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 105.3%			
d9-EtFOSE	10.734	639.0 -> 59.0	880350	27.49	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 110.0%			
d5-EtFOSA	10.825	531.0 -> 169.0	76477	2.68	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.3%			
Target Compounds							**QValue**
4:2FTS	-	327.0 -> 307.0	-	N.D.			
		327.0 -> 81.0					
6:2FTS	6.684	427.0 -> 407.0	1009030	50.84	µg/L		100
		427.0 -> 81.0	472880				
8:2FTS	7.671	527.0 -> 507.0	120883	5.87	µg/L		96
		527.0 -> 81.0	48781				
EtFOSAA	-	584.0 -> 419.0	-	N.D.			
		584.0 -> 483.0					
FOSA	9.269	498.0 -> 78.0	30486	0.55	µg/L	m	99
		498.0 -> 478.0	985				
MeFOSAA	-	570.0 -> 419.0	-	N.D.			
		570.0 -> 512.0					
PFBA	2.864	213.0 -> 169.0	179843	7.64	µg/L		100
PFBS	5.369	299.0 -> 80.0	118461	4.12	µg/L		95
		299.0 -> 99.0	51958				
PFDA	7.859	513.0 -> 469.0	79142	0.67	µg/L		99
		513.0 -> 219.0	17966				
PFDoDA	-	613.0 -> 569.0	-	N.D.			
		613.0 -> 319.0					

Perfluorinated Compounds by LC/MS/MS

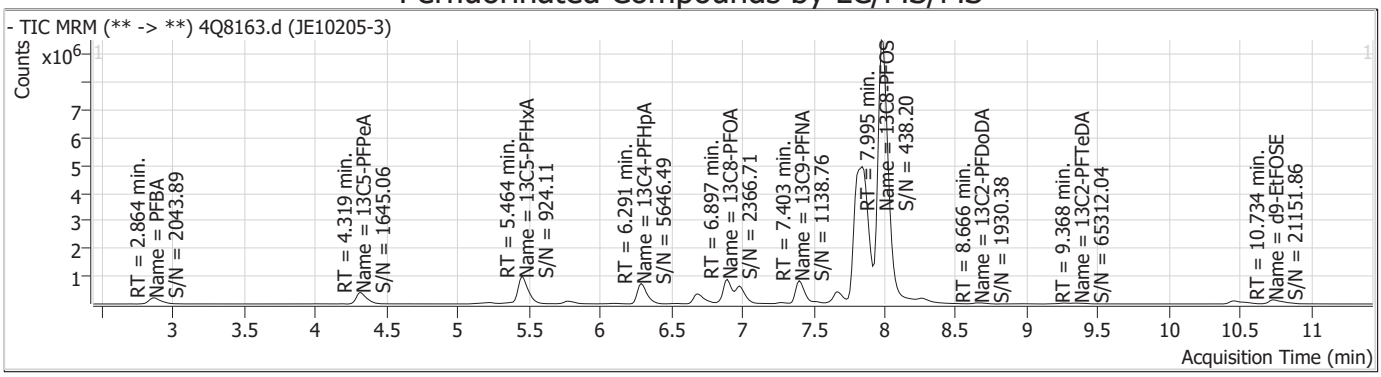
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.792	599.0 -> 80.0	368	0.02	µg/L	#m	51
		599.0 -> 99.0	341				
PFHpA	6.292	363.0 -> 319.0	2507953	14.46	µg/L		99
		363.0 -> 169.0	507790				
PFHpS	7.529	449.0 -> 80.0	183517	6.34	µg/L		100
		449.0 -> 99.0	101440				
PFHxA	5.467	313.0 -> 269.0	4203613	35.00	µg/L		100
		313.0 -> 119.0	141830				
PFHxS	7.000	399.0 -> 80.0	1917034	65.82	µg/L	m	96
		399.0 -> 99.0	970634				
PFNA	7.404	463.0 -> 419.0	2800470	27.97	µg/L	m	87
		463.0 -> 219.0	823811				
PFNS	8.412	549.0 -> 80.0	3312	0.18	µg/L	m	92
		549.0 -> 99.0	2123				
PFOA	6.898	413.0 -> 369.0	2612785	18.19	µg/L	m	97
		413.0 -> 169.0	726262				
PFOS	7.996	499.0 -> 80.0	19435428	884.51	µg/L	m	92
		499.0 -> 99.0	8856168				
PFPeA	4.321	263.0 -> 219.0	1767812	29.79	µg/L		100
PFPeS	6.331	349.0 -> 80.0	182210	5.80	µg/L		99
		349.0 -> 99.0	90617				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	8.938	663.0 -> 619.0	0		µg/L	m	1
		663.0 -> 369.0	0				
PFUnDA	8.275	563.0 -> 519.0	160617	1.21	µg/L	m	96
		563.0 -> 269.0	29406				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

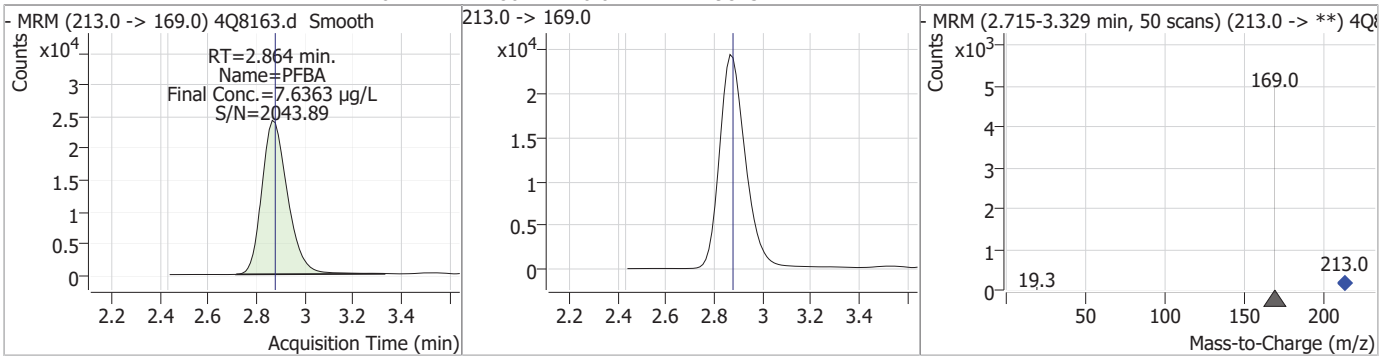
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

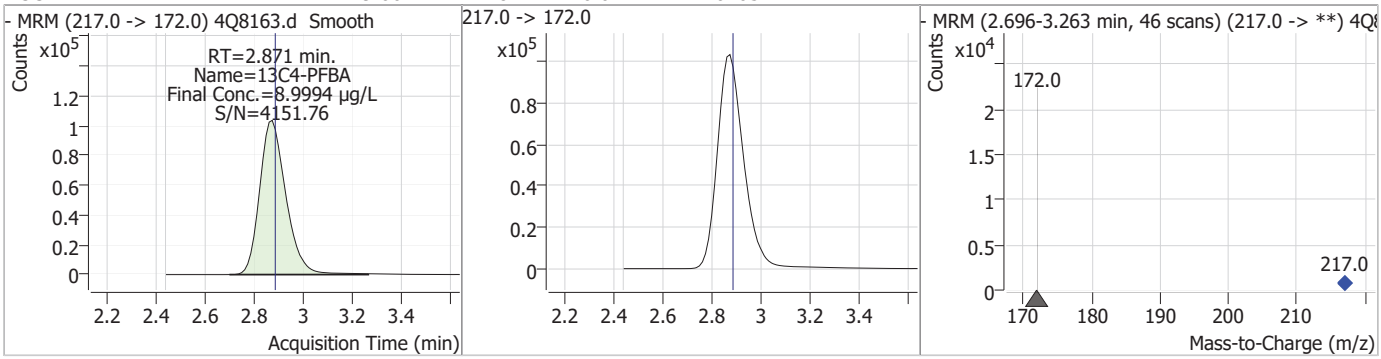
Perfluorinated Compounds by LC/MS/MS



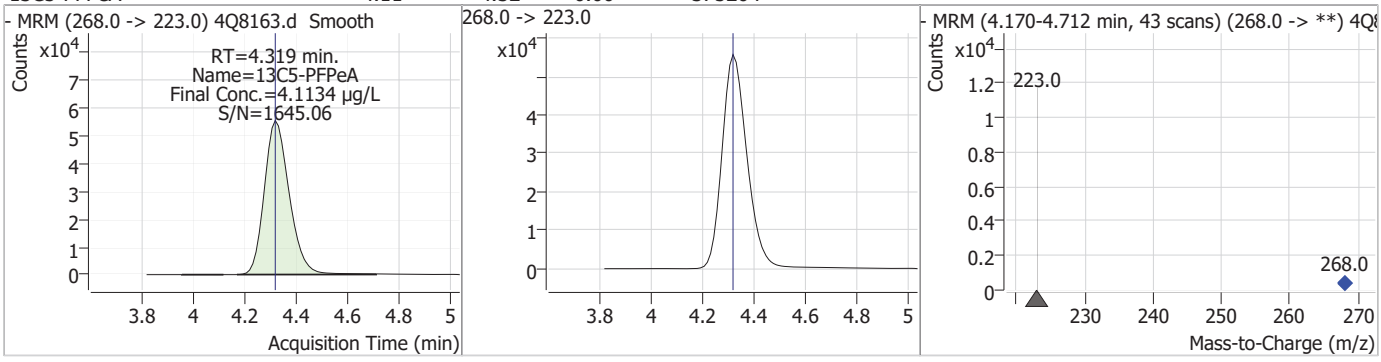
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	7.64	2.86	-0.01	179843				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.00	2.87	-0.01	770405				

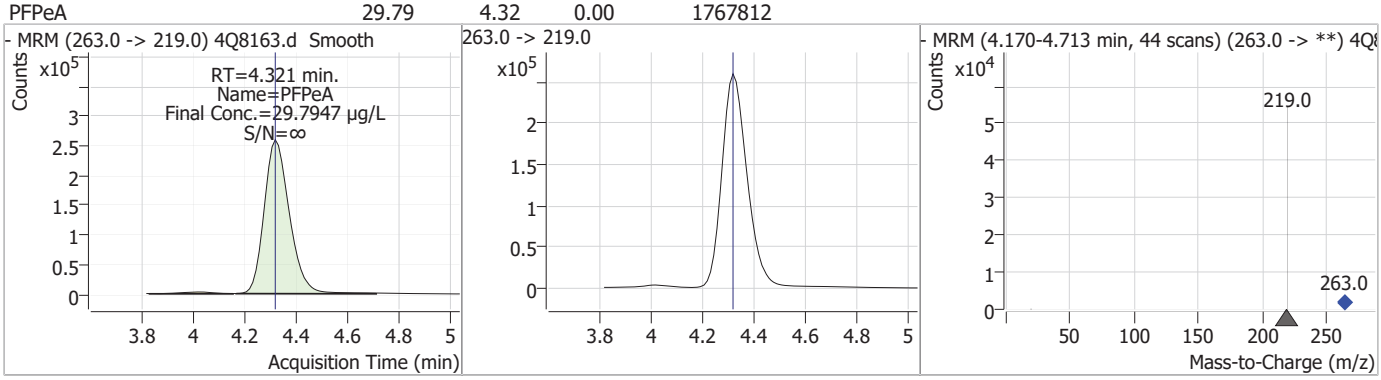


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.11	4.32	0.00	375264				

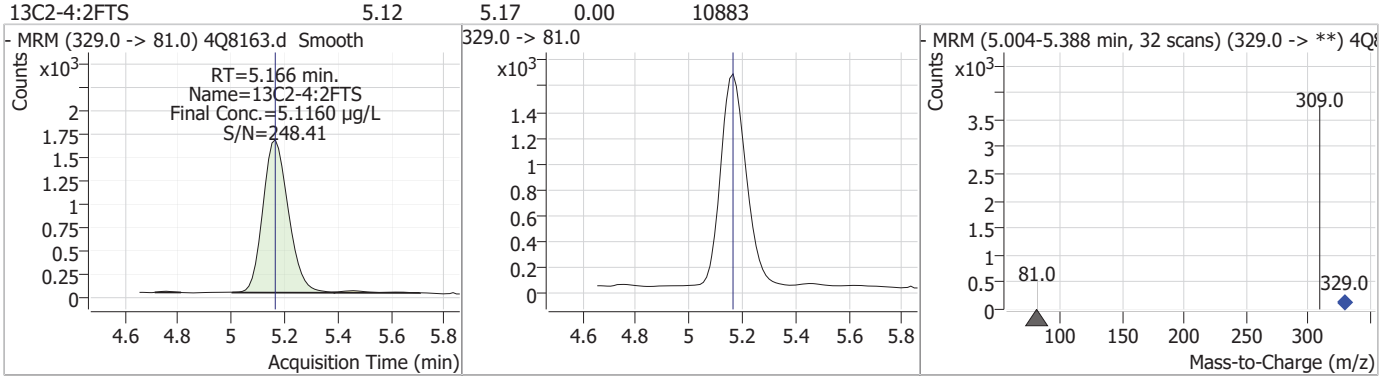


Perfluorinated Compounds by LC/MS/MS

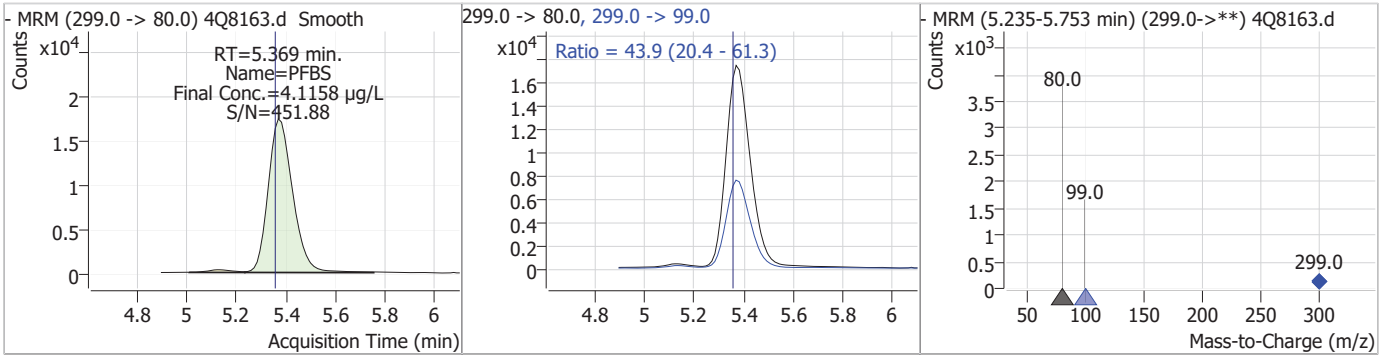
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	29.79	4.32	0.00	1767812				



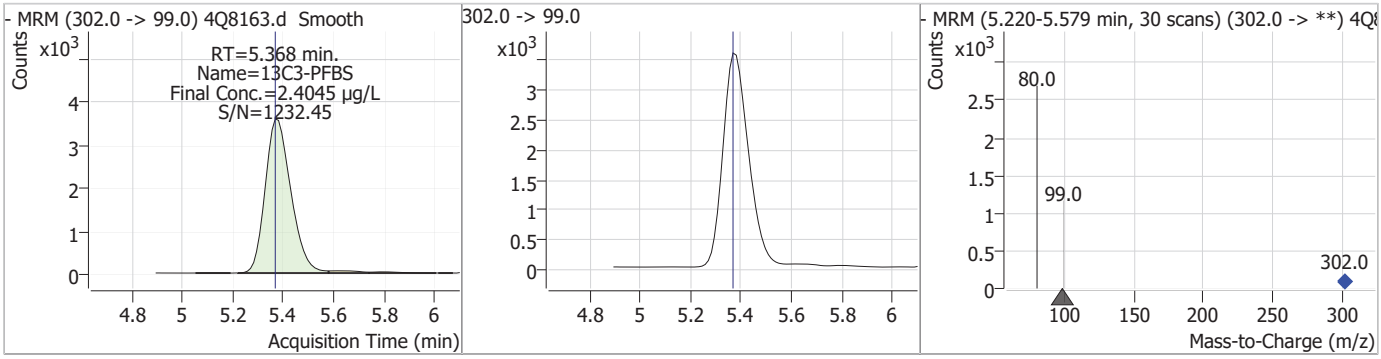
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.12	5.17	0.00	10883				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.12	5.37	0.01	118461	299.0 -> 99.0	43.9	20.4	61.3

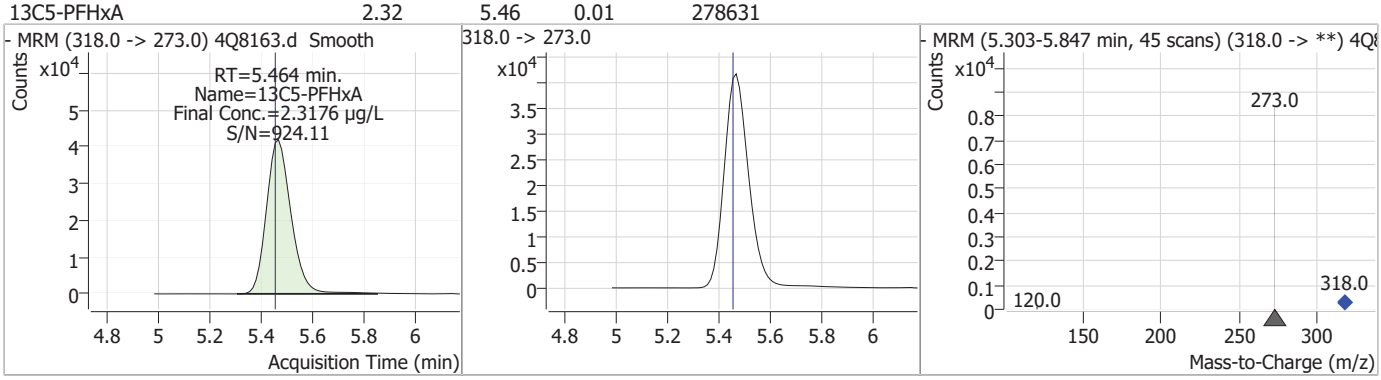


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.40	5.37	0.00	25174				

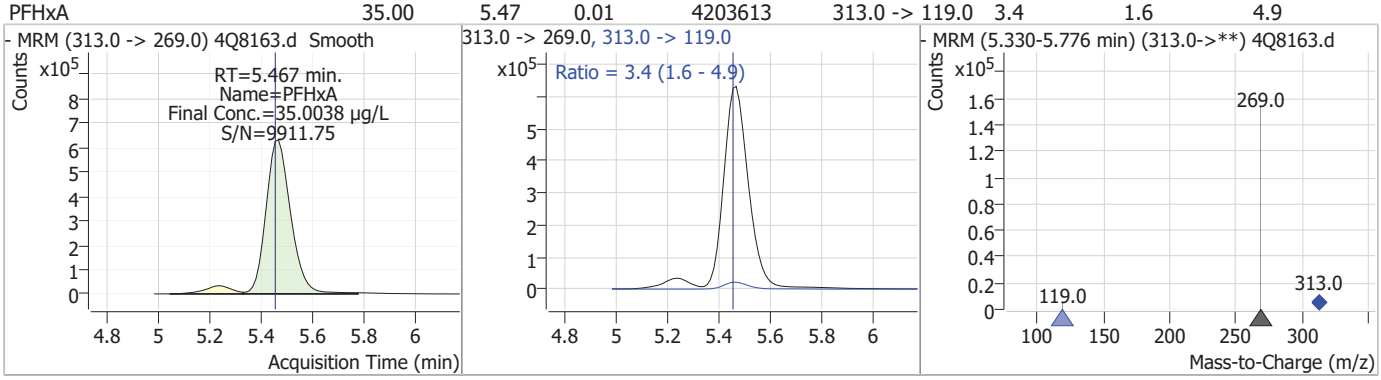


Perfluorinated Compounds by LC/MS/MS

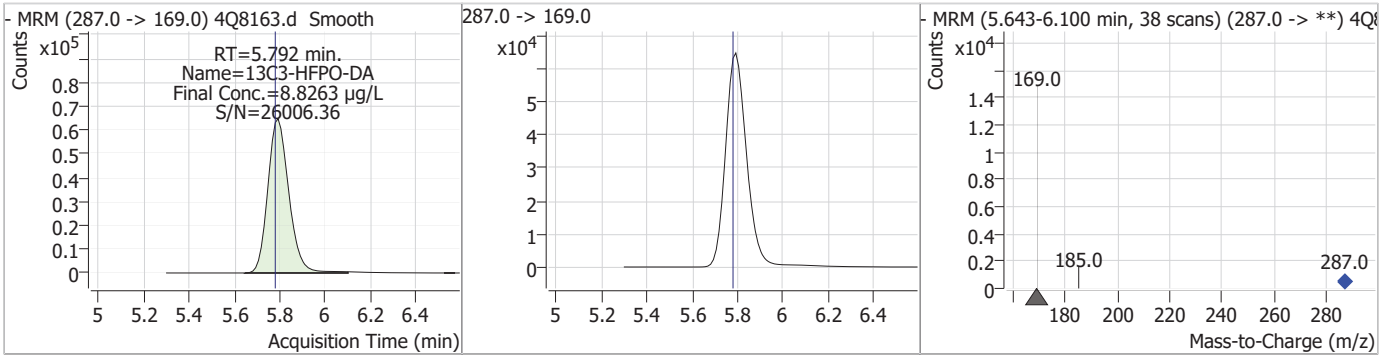
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.32	5.46	0.01	278631				



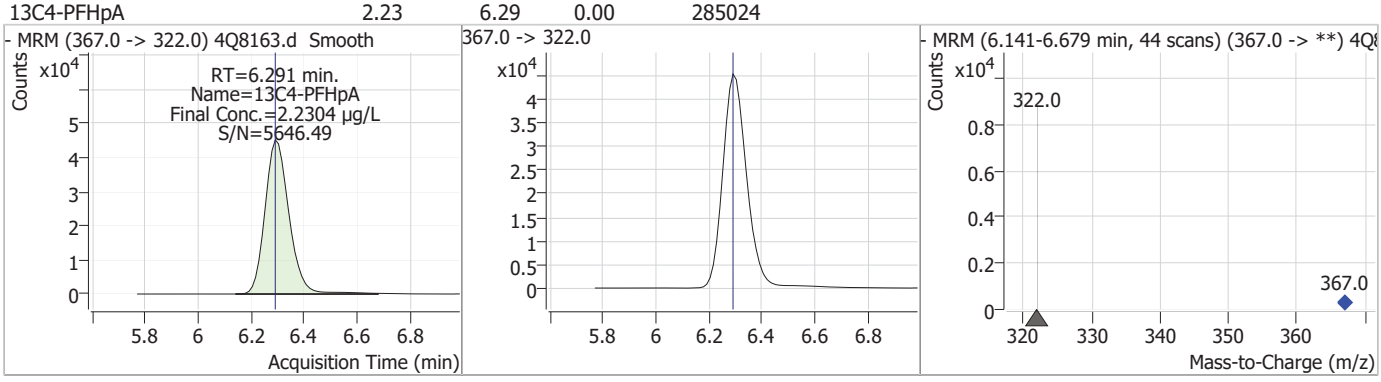
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	35.00	5.47	0.01	4203613	313.0 -> 119.0	3.4	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.83	5.79	0.01	416706				

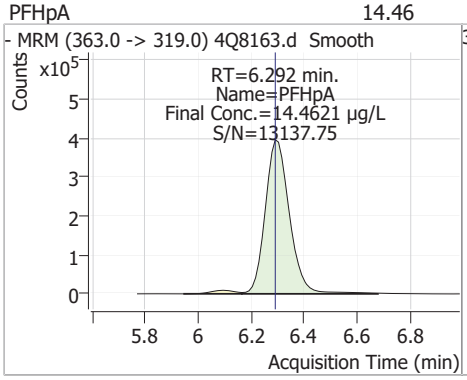


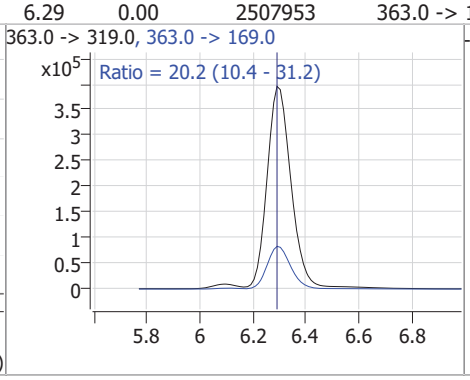
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.23	6.29	0.00	285024				

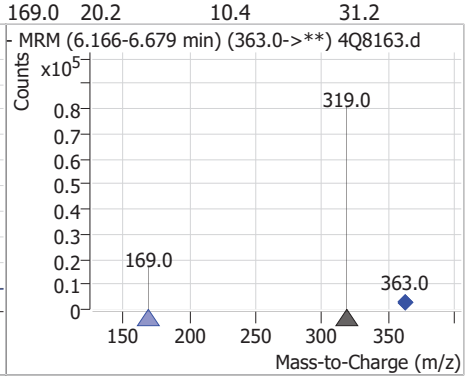


Perfluorinated Compounds by LC/MS/MS

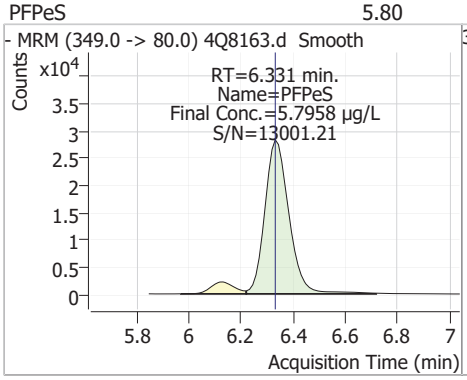
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	14.46	6.29	0.00	2507953	363.0 -> 169.0	20.2	10.4	31.2

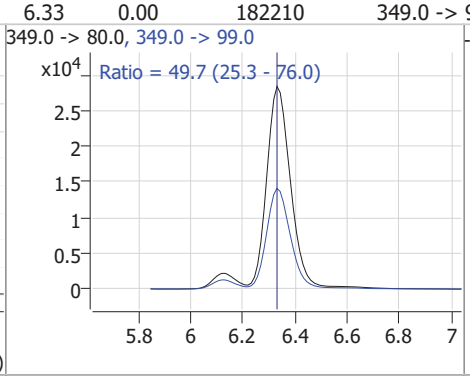


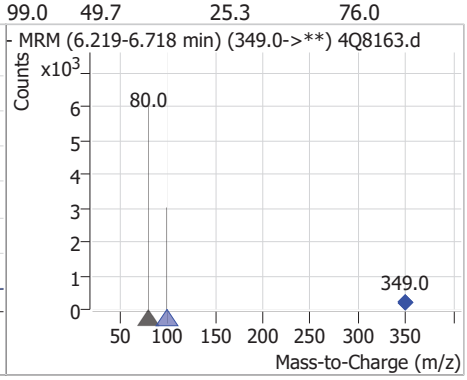




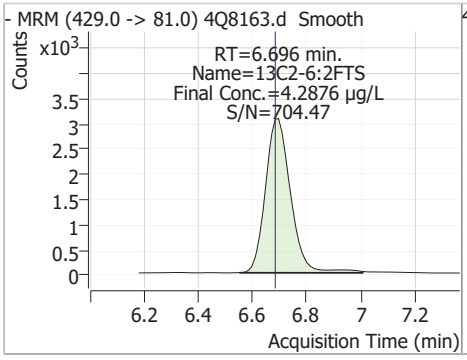
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	5.80	6.33	0.00	182210	349.0 -> 99.0	49.7	25.3	76.0

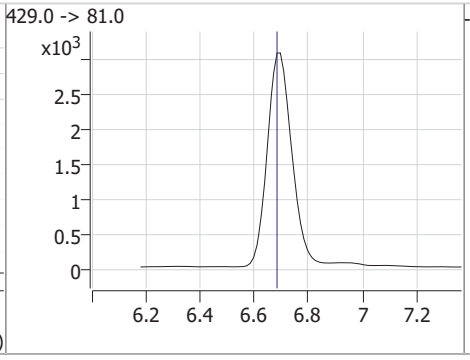


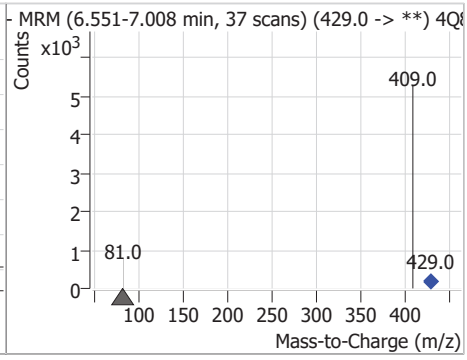




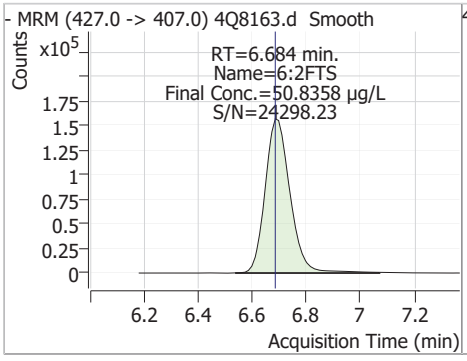
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.29	6.70	0.01	19793				

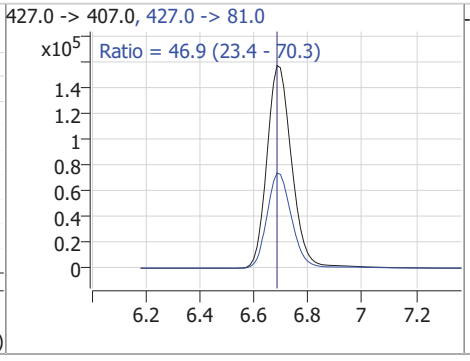


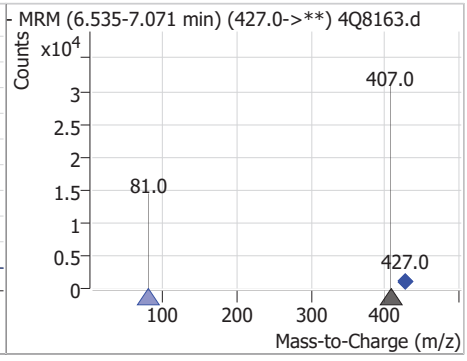




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	50.84	6.68	0.00	1009030	427.0 -> 81.0	46.9	23.4	70.3

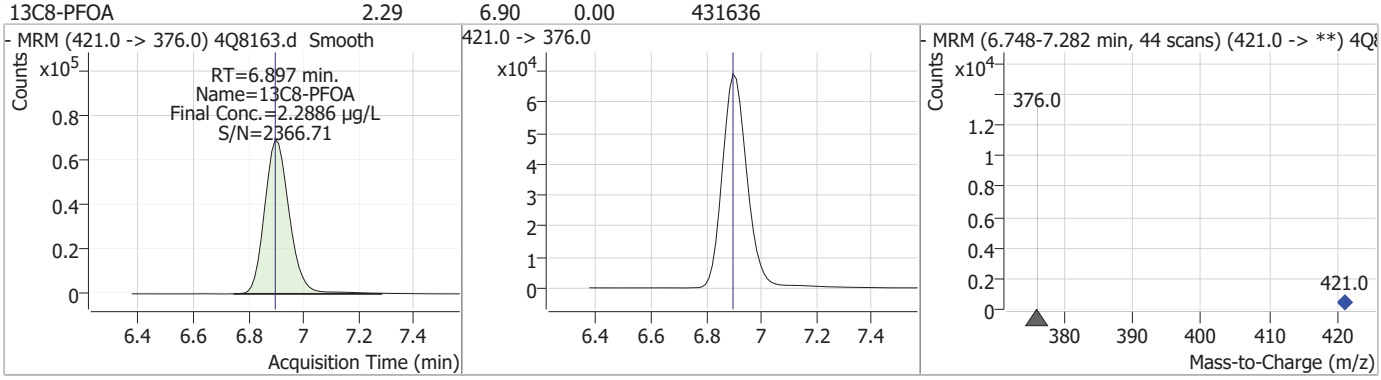




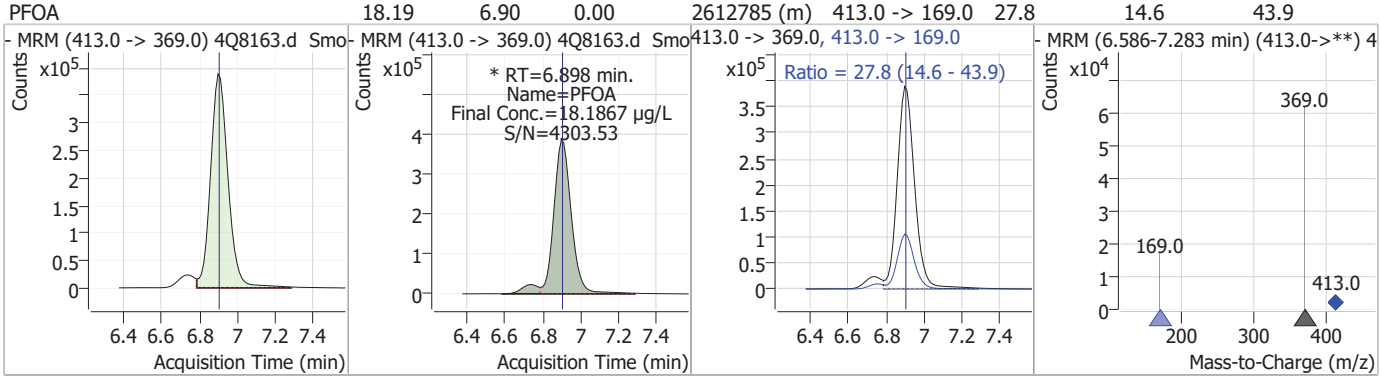


Perfluorinated Compounds by LC/MS/MS

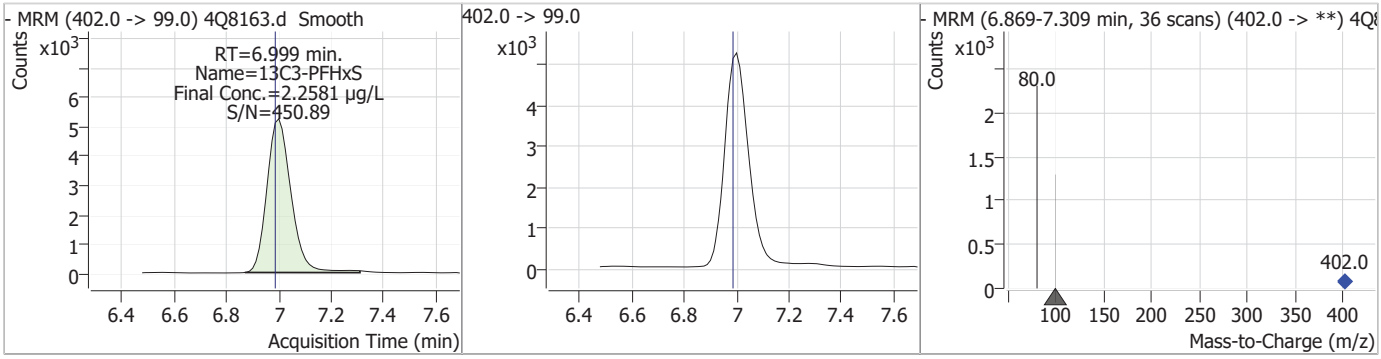
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.29	6.90	0.00	431636				



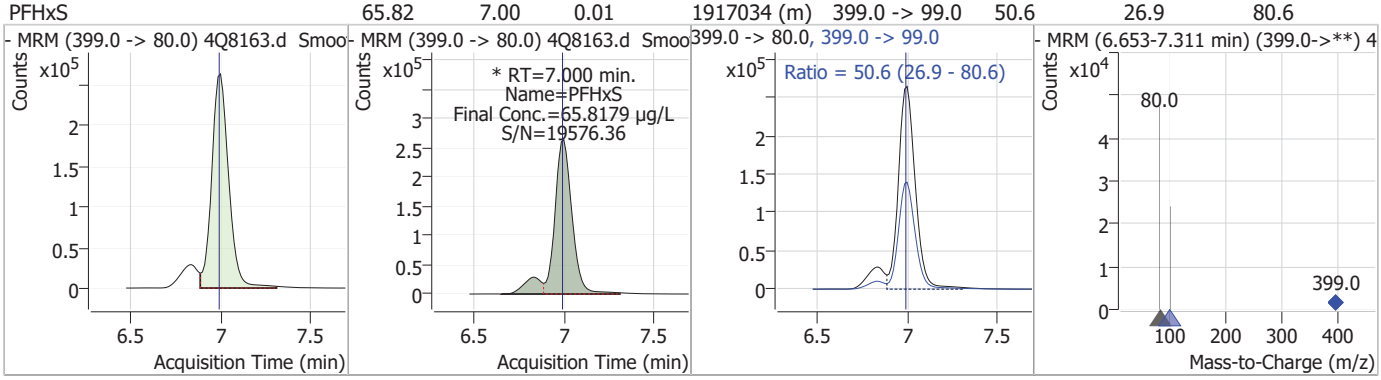
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	18.19	6.90	0.00	2612785 (m)	413.0 -> 169.0	27.8	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.26	7.00	0.01	33448				

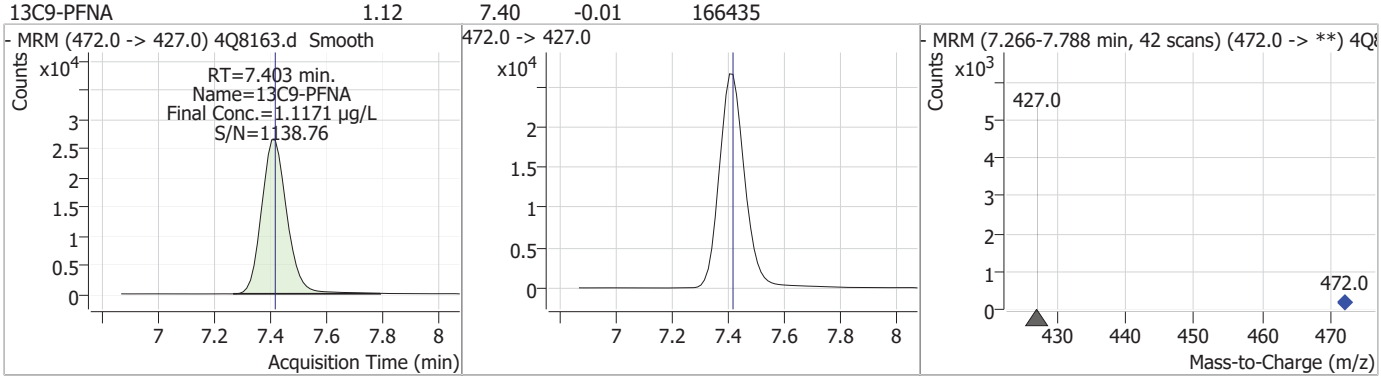


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	65.82	7.00	0.01	1917034 (m)	399.0 -> 99.0	50.6	26.9	80.6

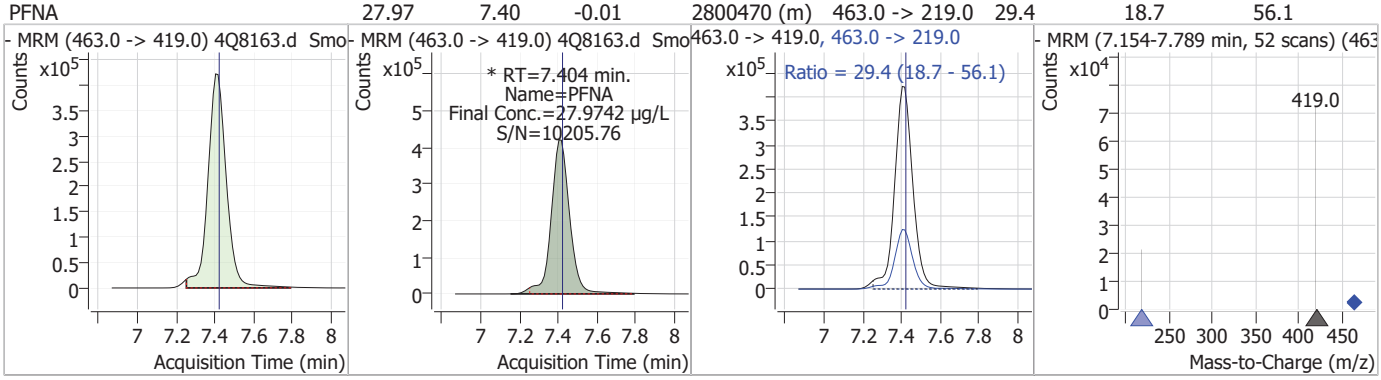


Perfluorinated Compounds by LC/MS/MS

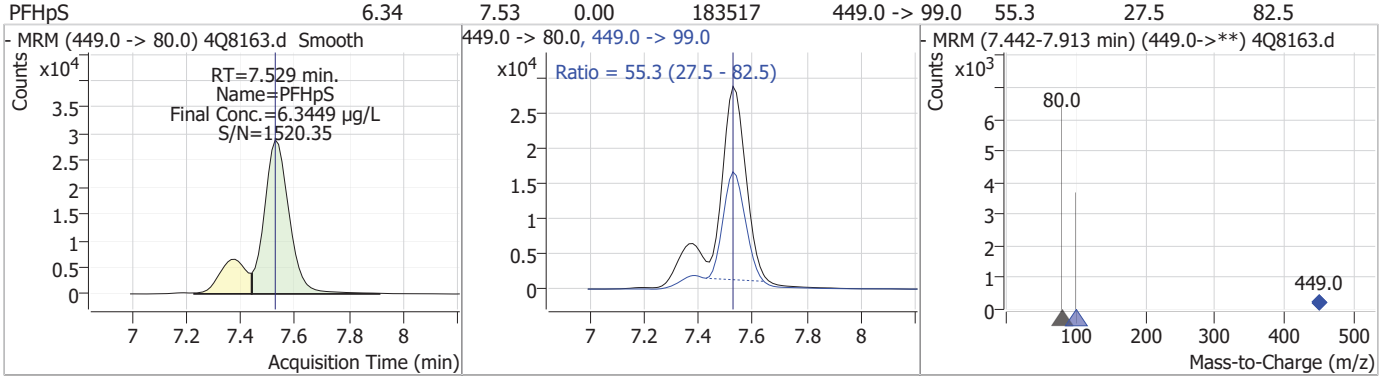
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.12	7.40	-0.01	166435				



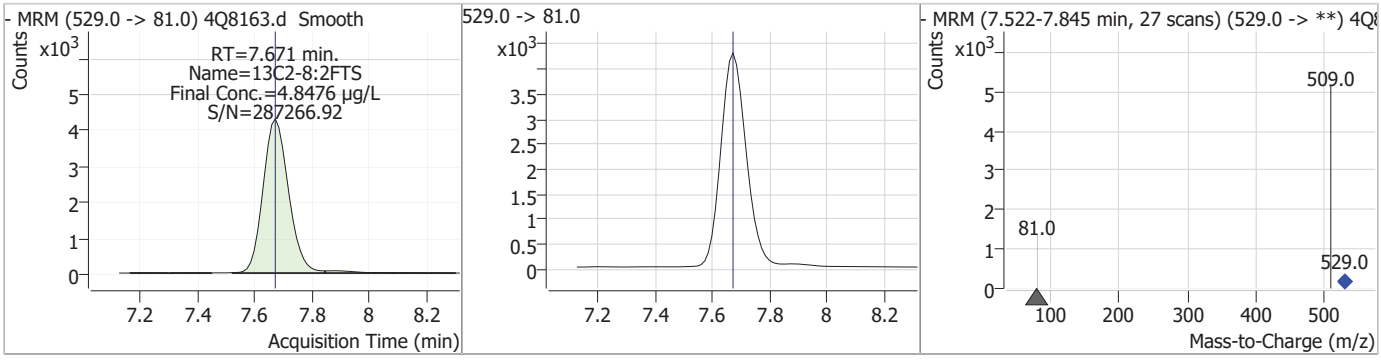
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	27.97	7.40	-0.01	2800470 (m)	463.0 -> 219.0	29.4	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	6.34	7.53	0.00	183517	449.0 -> 99.0	55.3	27.5	82.5

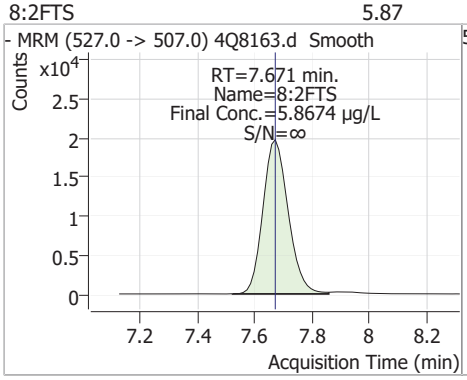


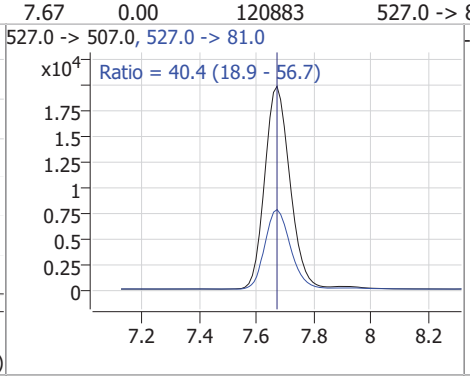
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.85	7.67	0.00	26325				

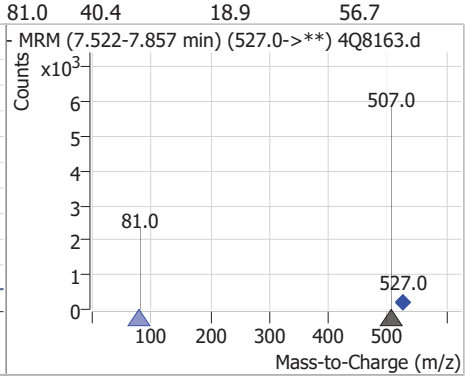


Perfluorinated Compounds by LC/MS/MS

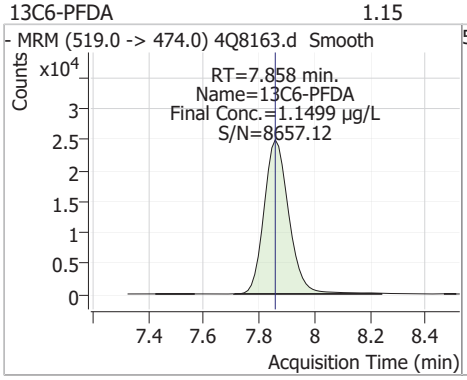
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	5.87	7.67	0.00	120883	527.0 -> 81.0	40.4	18.9	56.7

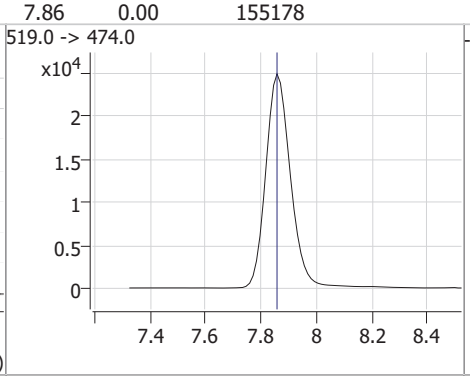


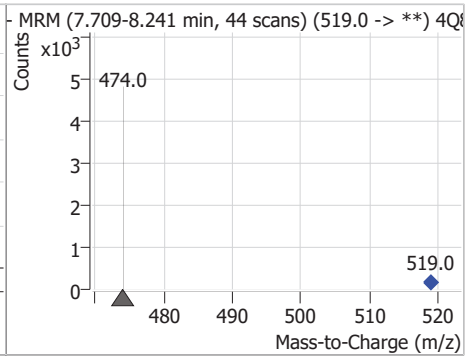




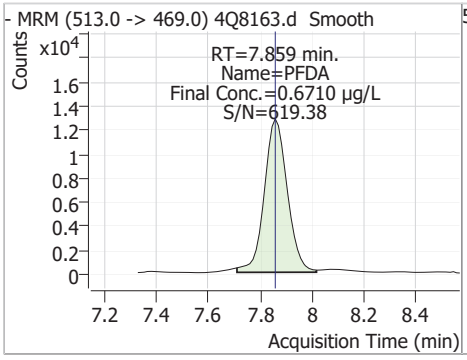
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.15	7.86	0.00	155178				

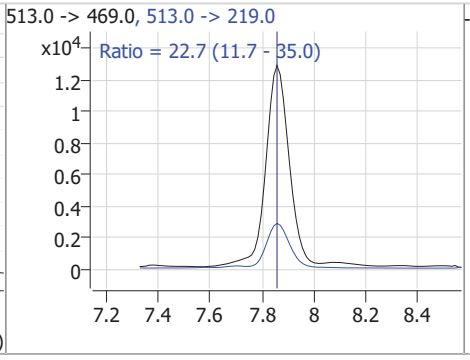


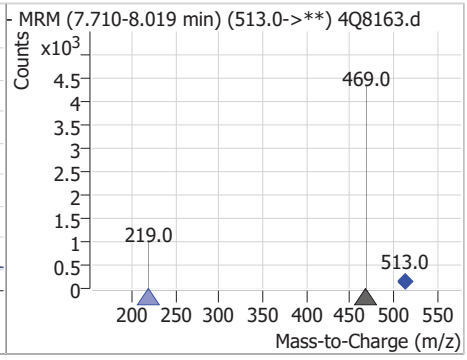




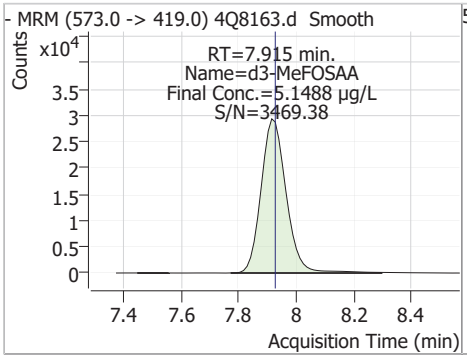
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.67	7.86	0.00	79142	513.0 -> 219.0	22.7	11.7	35.0

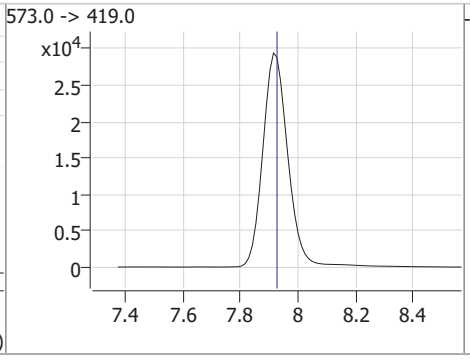


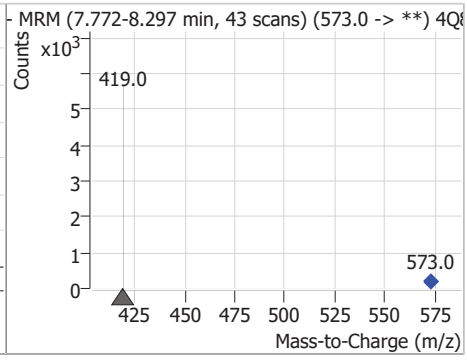




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.15	7.92	-0.01	177820				

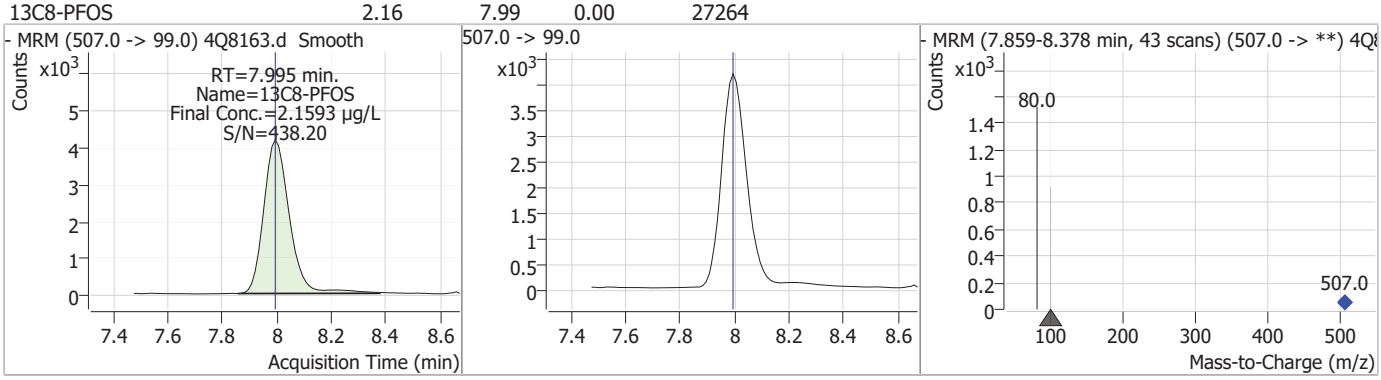




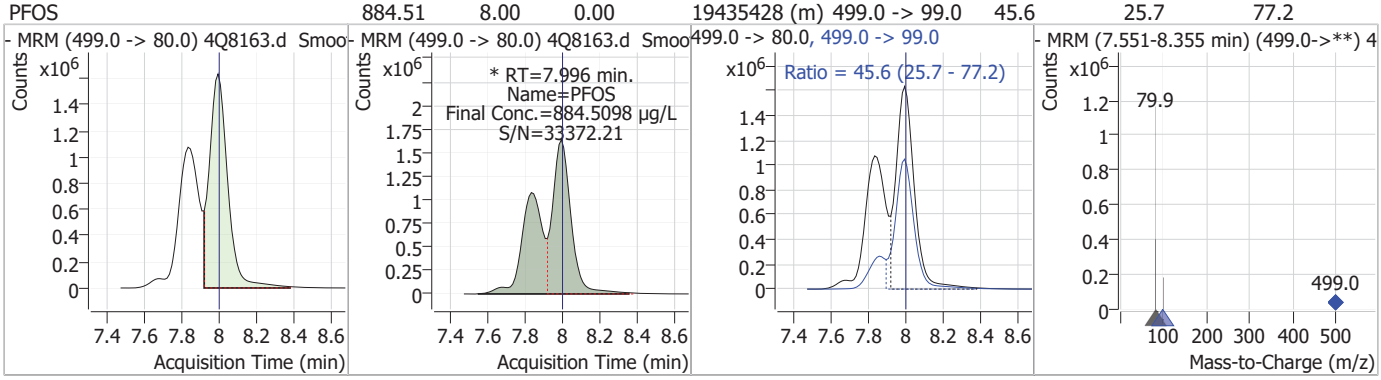


Perfluorinated Compounds by LC/MS/MS

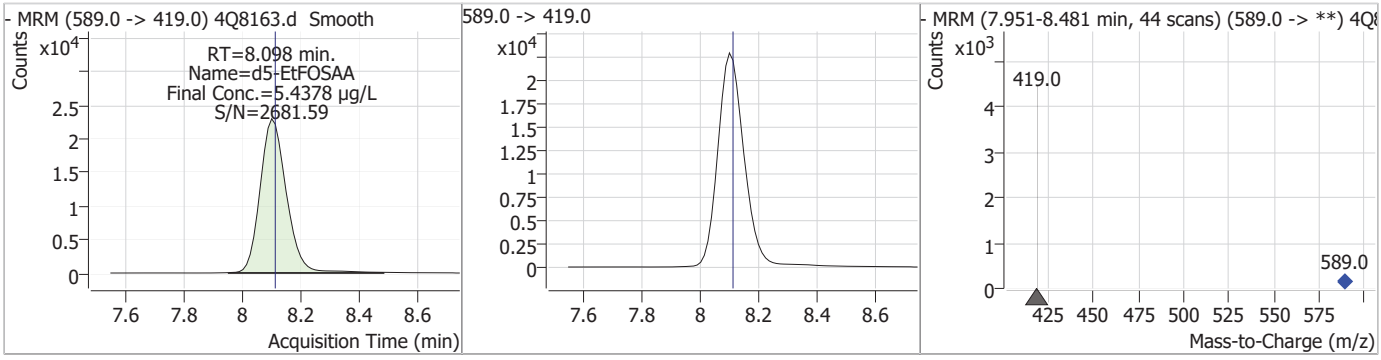
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.16	7.99	0.00	27264				



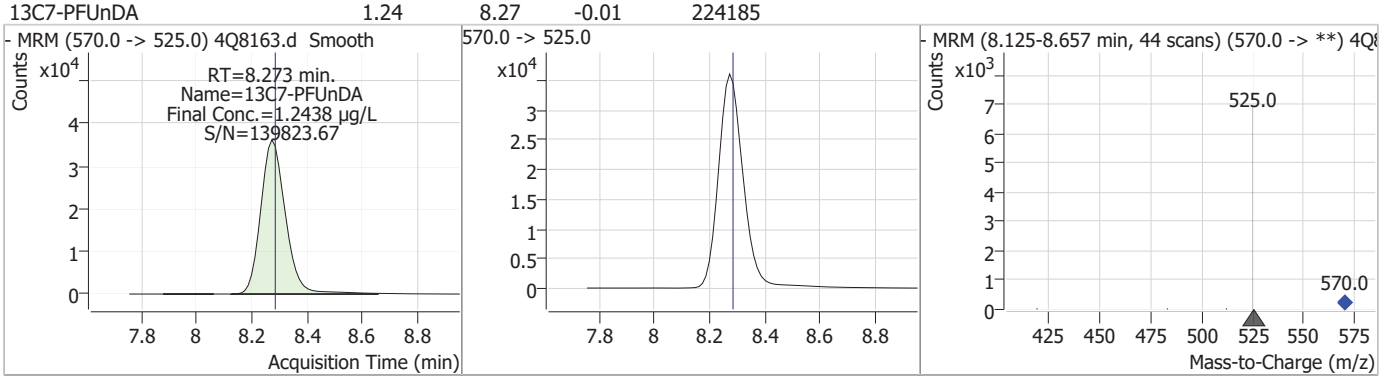
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	884.51	8.00	0.00	19435428 (m)	499.0 -> 99.0	45.6	25.7	77.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.44	8.10	-0.01	144185				

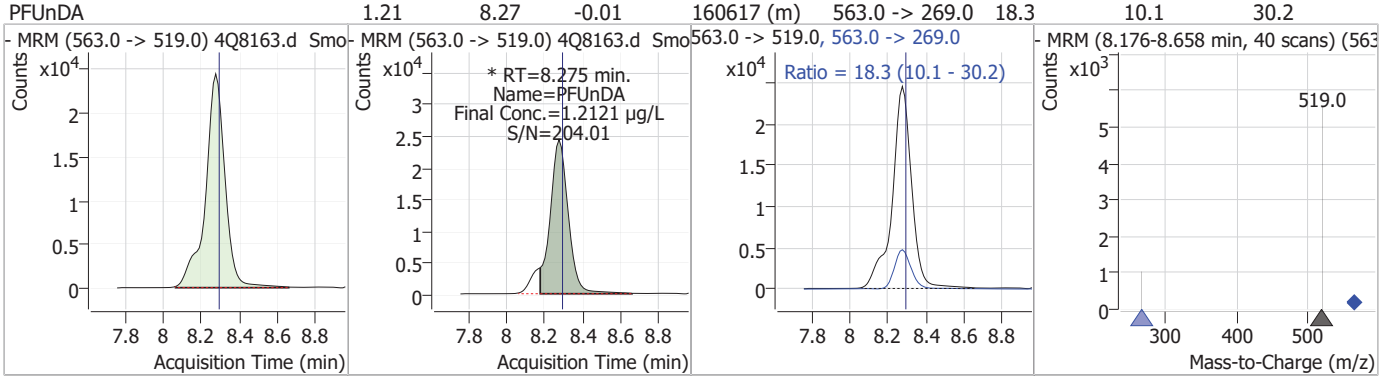


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.24	8.27	-0.01	224185				

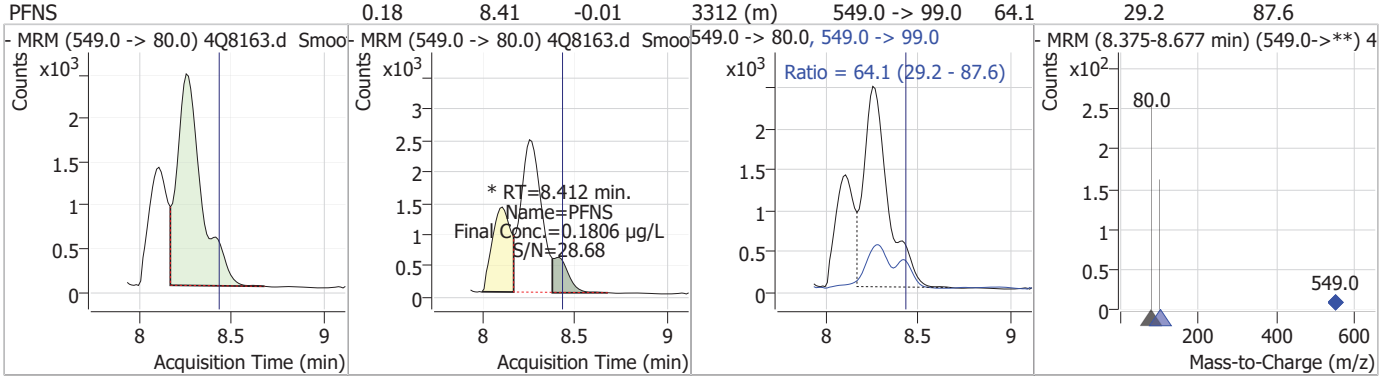


Perfluorinated Compounds by LC/MS/MS

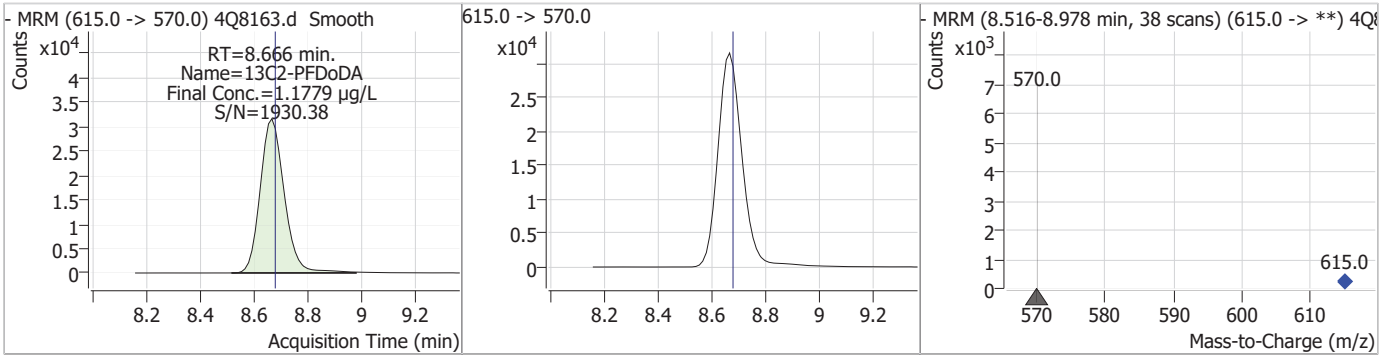
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	1.21	8.27	-0.01	160617 (m)	563.0 -> 269.0	18.3	10.1	30.2



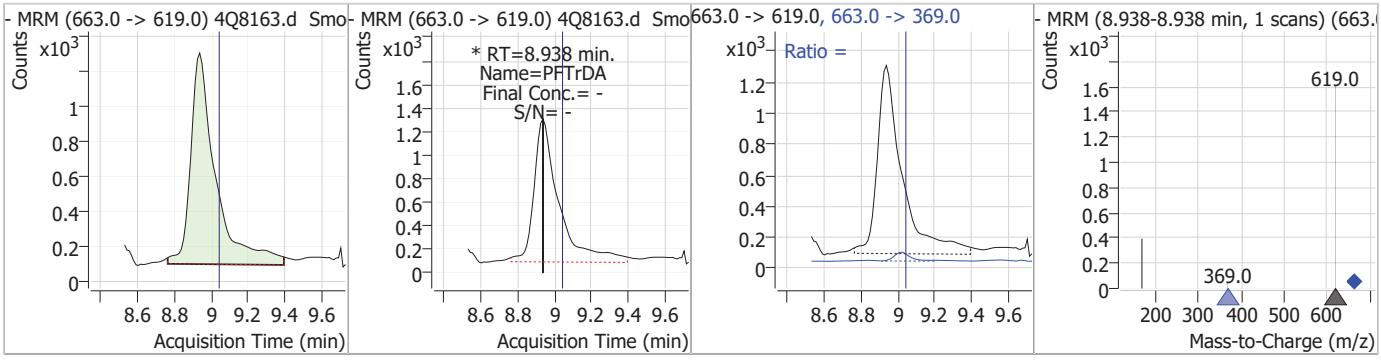
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.18	8.41	-0.01	3312 (m)	549.0 -> 99.0	64.1	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.18	8.67	-0.01	194467				

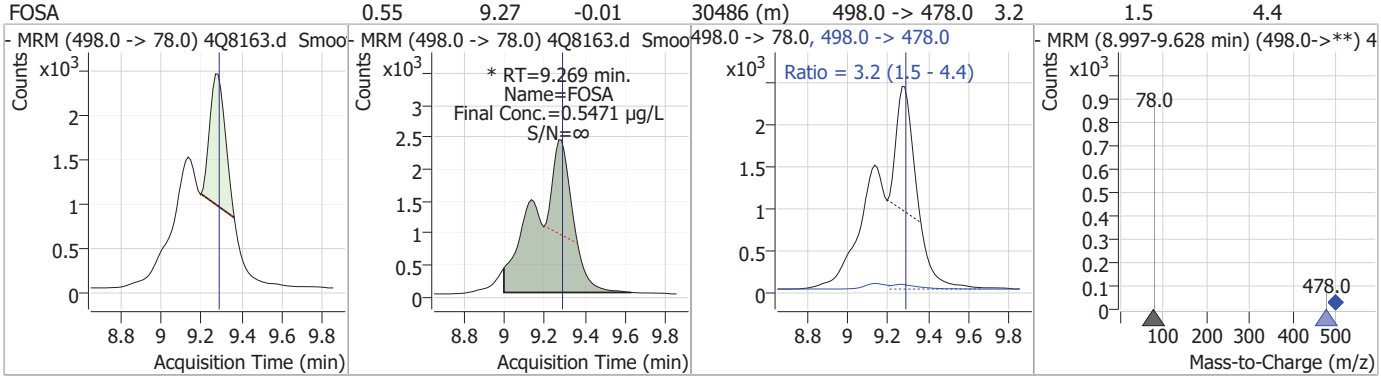


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA		0		0	663.0 -> 369.0		3.1	9.3

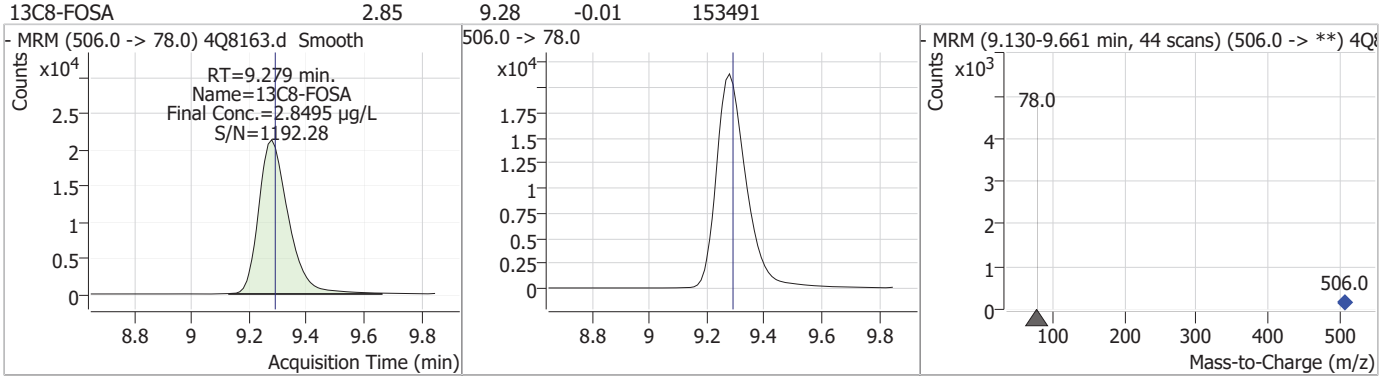


Perfluorinated Compounds by LC/MS/MS

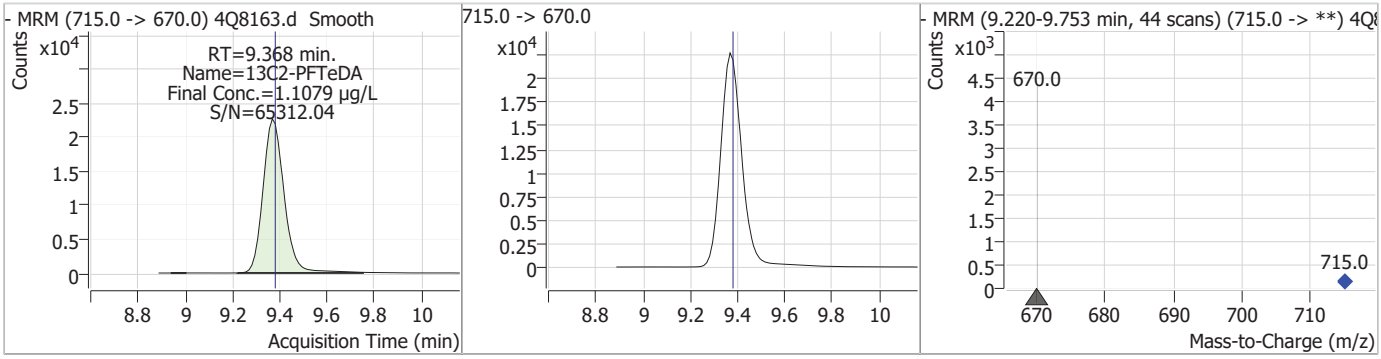
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.55	9.27	-0.01	30486 (m)	498.0 -> 478.0	3.2	1.5	4.4



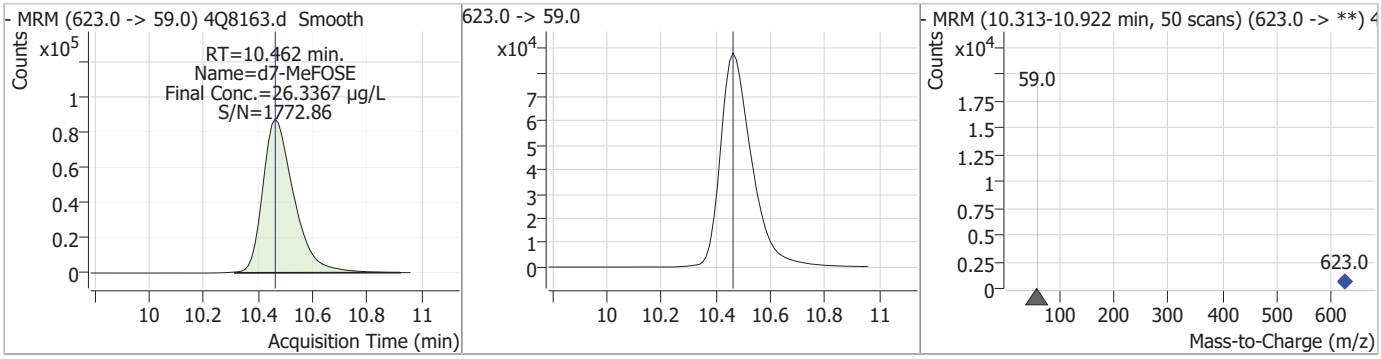
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.85	9.28	-0.01	153491				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.11	9.37	-0.01	140609				

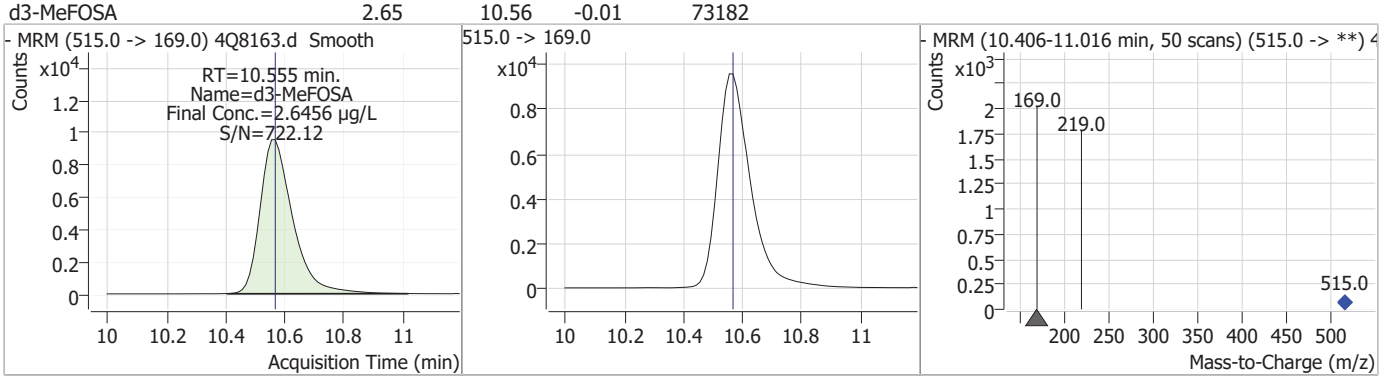


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	26.34	10.46	0.00	695541				

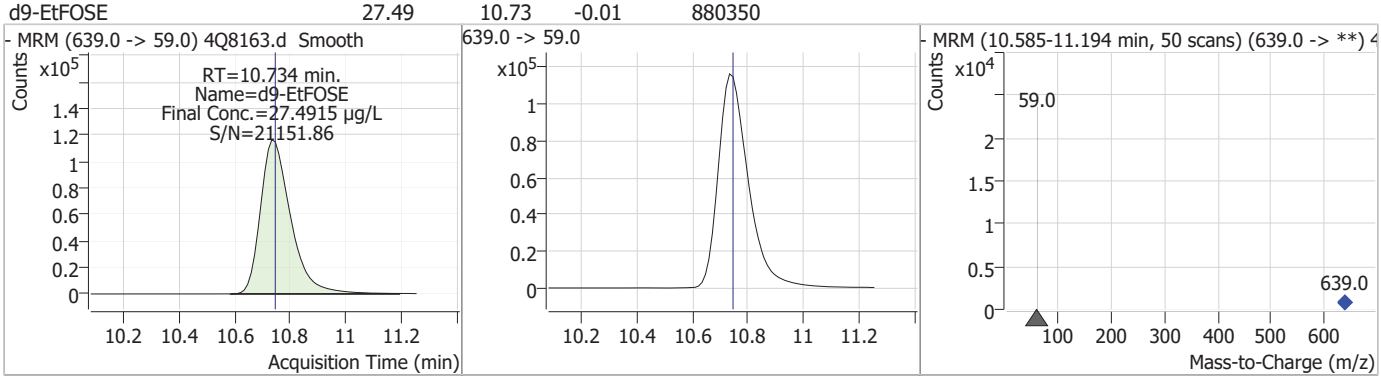


Perfluorinated Compounds by LC/MS/MS

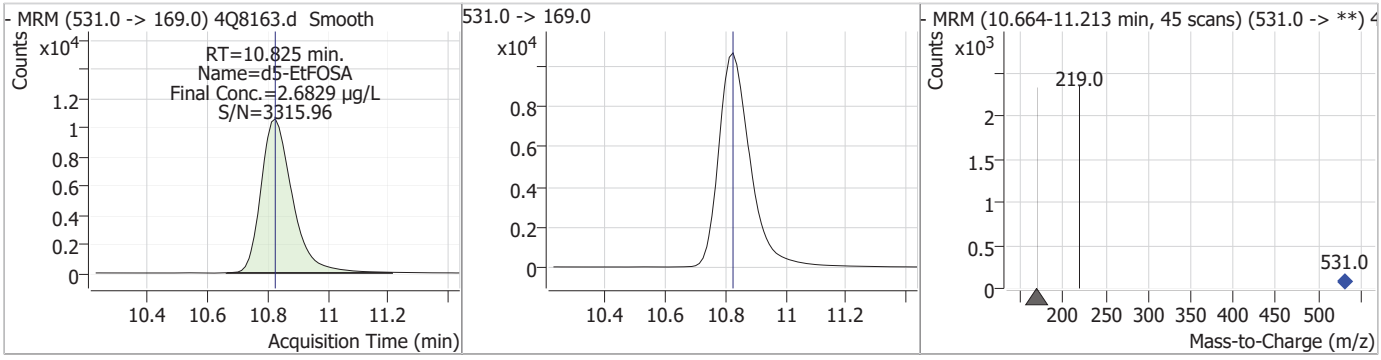
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.65	10.56	-0.01	73182				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	27.49	10.73	-0.01	880350				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.68	10.82	0.00	76477				



Manual Integration Approval Summary

Sample Number: JE10205-3
Lab FileID: 4Q8163.D
Injection Time: 04/30/25 22:24

Method: EPA 1633
Analyst approved: 05/01/25 11:50 Maksud Haque
Supervisor approved: 05/06/25 06:26 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.40	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
Perfluoroundecanoic acid	2058-94-8		8.28	Poor instrument integration
Perfluorononanesulfonic acid	68259-12-1		8.41	Poor instrument integration
Perfluorodecanesulfonic acid	335-77-3		8.79	Poor instrument integration
PFOSA	754-91-6		9.27	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/06/25 06:26

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8188.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 2:33:31 PM
Sample Name : JE10205-3
Vial : P2-A4
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q139.batch.bin
Sample Information : OP63161,T4Q139,481,,,5,20,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.858	217.0 -> 172.0	35843	0.50 µg/L	-0.025
M5-PFPeA	4.319	268.0 -> 223.0	18722	0.25 µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	12909	0.13 µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	12400	0.13 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	19975	0.13 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	6776	0.06 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	7254	0.06 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	9901	0.06 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	8976	0.06 µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	6067	0.06 µg/L	-0.012
M8-FOSA	9.266	506.0 -> 78.0	7175	0.13 µg/L	-0.025
M3-PFBS	5.368	302.0 -> 99.0	1086	0.13 µg/L	0.000
		302.0 -> 80.0	2962		
M3-PFHxS	6.986	402.0 -> 99.0	1620	0.13 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	2031	0.13 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	700	0.25 µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	1398	0.25 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	1464	0.25 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	8265	0.25 µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	18746	0.50 µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	6600	0.25 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	31358	1.25 µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	40266	1.25 µg/L	-0.012
M5-EtFOSA	10.813	531.0 -> 169.0	3656	0.13 µg/L	-0.012
M3-MeFOSA	10.555	515.0 -> 169.0	3042	0.13 µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	3822	0.13 µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	16615	0.25 µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	2452	0.13 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	21646	0.13 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	7520	0.06 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	7828	0.06 µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	12059	0.13 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	700	0.28 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 5.7%	
13C2-6:2FTS	6.684	429.0 -> 81.0	1398	0.26 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 5.2%	
13C2-8:2FTS	7.671	529.0 -> 81.0	1464	0.23 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 4.7%	
13C2-PFDoDA	8.666	615.0 -> 570.0	8976	0.06 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 4.4%	
13C2-PFTeDA	9.368	715.0 -> 670.0	6067	0.05 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 3.9%	
13C3-PFBS	5.368	302.0 -> 99.0	1086	0.09 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 3.6%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	1620	0.09 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 3.8%	
13C4-PFBA	2.858	217.0 -> 172.0	35843	0.47 µg/L	-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 4.7%	
13C4-PFHpA	6.291	367.0 -> 322.0	12400	0.11 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.6%	
13C5-PFHxA	5.452	318.0 -> 273.0	12909	0.13 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 5.1%	
13C5-PFPeA	4.319	268.0 -> 223.0	18722	0.24 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 4.8%	
13C6-PFDA	7.858	519.0 -> 474.0	7254	0.05 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 4.4%	
13C7-PFUnDA	8.273	570.0 -> 525.0	9901	0.06 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 4.5%	
13C8-FOSA	9.266	506.0 -> 78.0	7175	0.09 µg/L	-0.025
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 3.7%	
13C8-PFOA	6.897	421.0 -> 376.0	19975	0.12 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.6%	
13C8-PFOS	7.995	507.0 -> 99.0	2031	0.11 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.4%	
13C9-PFNA	7.403	472.0 -> 427.0	6776	0.05 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 4.2%	
d3-MeFOSAA	7.915	573.0 -> 419.0	8265	0.16 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 3.3%	
13C3-HFPO-DA	5.779	287.0 -> 169.0	18746	0.47 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 4.7%	
d3-MeFOSA	10.555	515.0 -> 169.0	3042	0.08 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 3.0%	
d5-EtFOSAA	8.098	589.0 -> 419.0	6600	0.17 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 3.4%	
d7-MeFOSE	10.462	623.0 -> 59.0	31358	0.81 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 3.3%	
d9-EtFOSE	10.734	639.0 -> 59.0	40266	0.86 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 3.5%	
d5-EtFOSA	10.813	531.0 -> 169.0	3656	0.09 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 3.5%	
Target Compounds					**QValue**
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	6.684	427.0 -> 407.0	54787	1.95 µg/L	99
		427.0 -> 81.0	25449		
8:2FTS	7.671	527.0 -> 507.0	5905	0.26 µg/L	99
		527.0 -> 81.0	2275		
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	2.864	213.0 -> 169.0	8874	0.40 µg/L	100
PFBS	5.369	299.0 -> 80.0	5548	0.22 µg/L	95
		299.0 -> 99.0	2090		
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

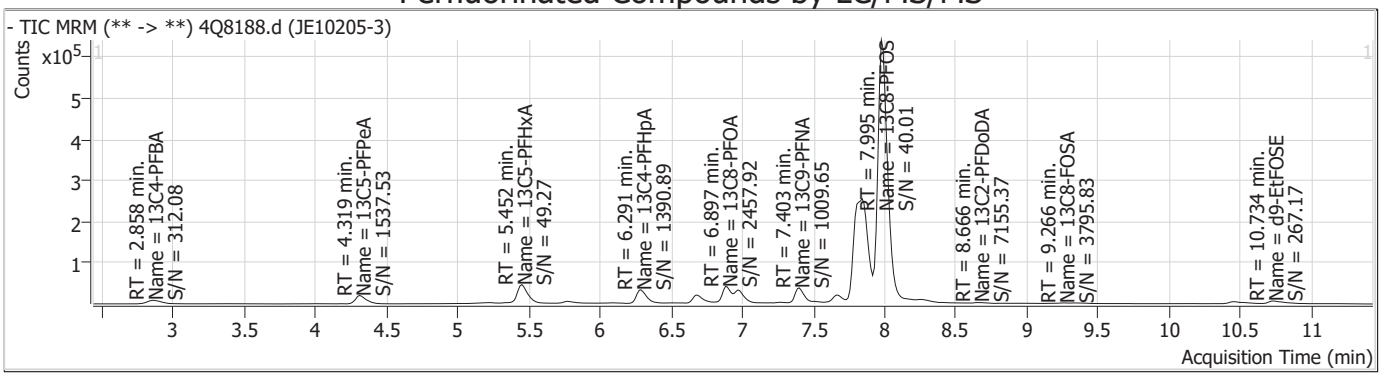
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.292	363.0 -> 319.0	114463	0.76	µg/L		100
		363.0 -> 169.0	23772				
PFHpS	7.529	449.0 -> 80.0	8411	0.30	µg/L		94
		449.0 -> 99.0	4282				
PFHxA	5.455	313.0 -> 269.0	200486	1.80	µg/L		100
		313.0 -> 119.0	6614				
PFHxS	6.987	399.0 -> 80.0	92920	3.97	µg/L	m	95
		399.0 -> 99.0	46890				
PFNA	7.404	463.0 -> 419.0	124478	1.74	µg/L	m	85
		463.0 -> 219.0	35393				
PFNS	8.263	549.0 -> 80.0	0		µg/L	m	1
		549.0 -> 99.0	0				
PFOA	6.898	413.0 -> 369.0	119986	1.15	µg/L	m	95
		413.0 -> 169.0	32100				
PFOS	7.996	499.0 -> 80.0	1082373	42.84	µg/L	m	96
		499.0 -> 99.0	524742				
PFPeA	4.321	263.0 -> 219.0	90251	1.52	µg/L		100
PFPeS	6.318	349.0 -> 80.0	8447	0.31	µg/L		96
		349.0 -> 99.0	4048				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	8.275	563.0 -> 519.0	6890	0.06	µg/L	m	87
		563.0 -> 269.0	1797				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

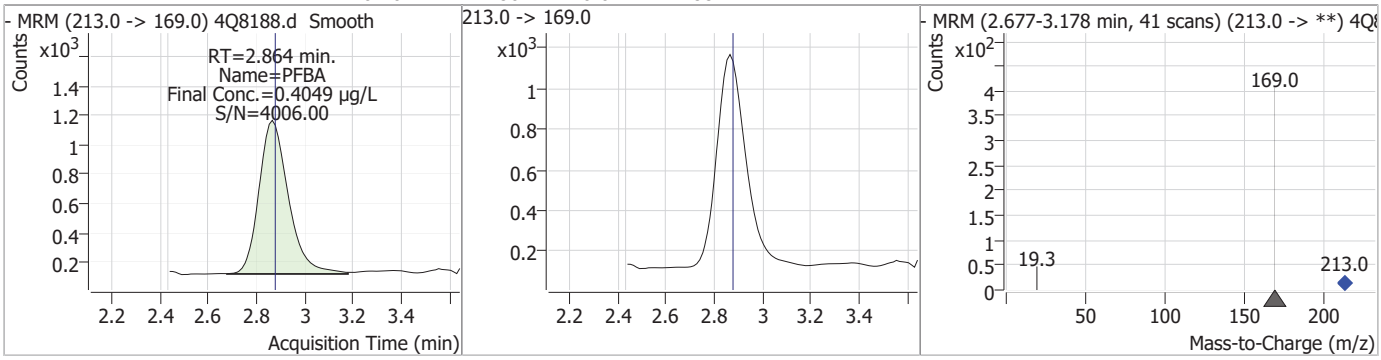
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

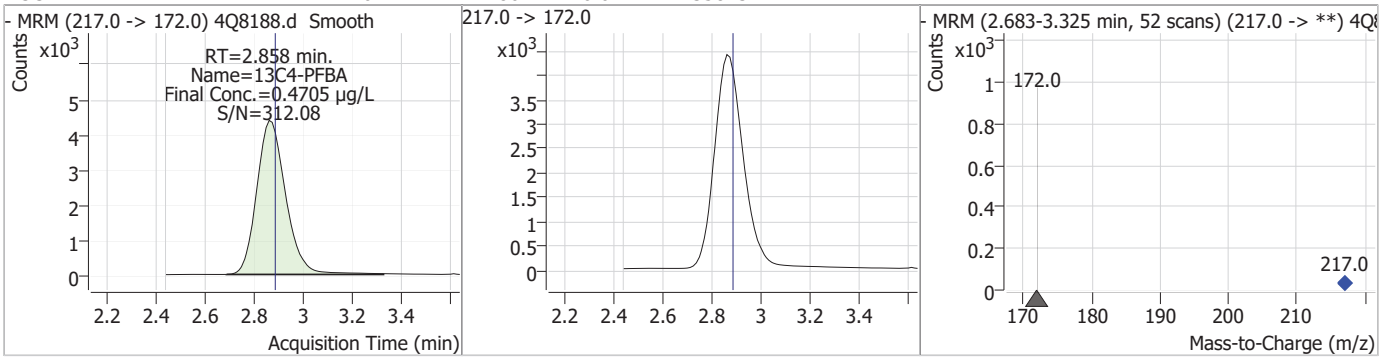
Perfluorinated Compounds by LC/MS/MS



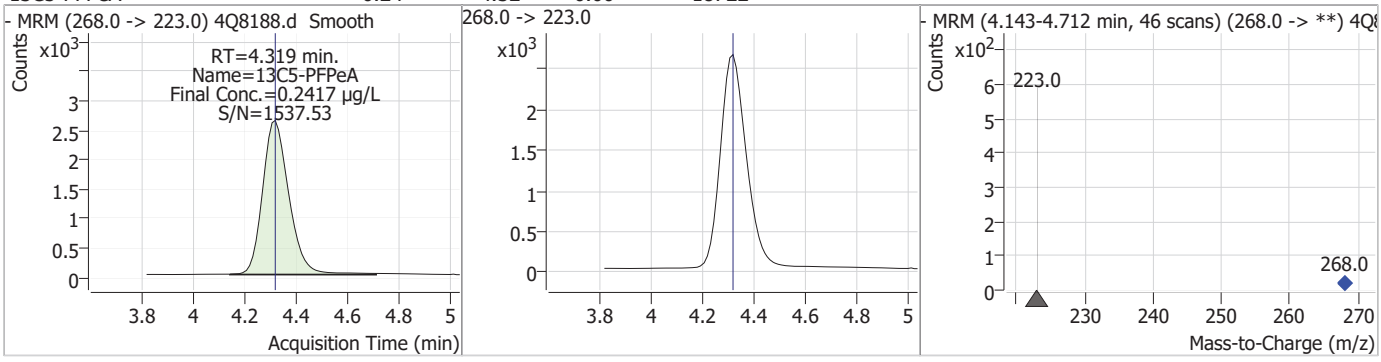
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.40	2.86	-0.01	8874				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	0.47	2.86	-0.02	35843				

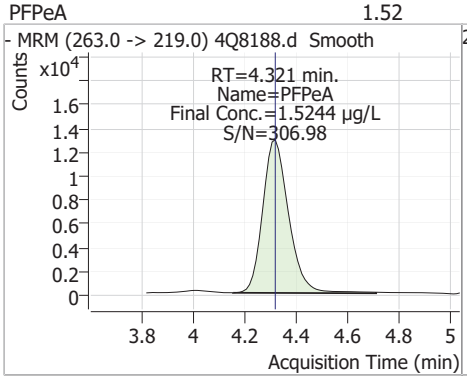


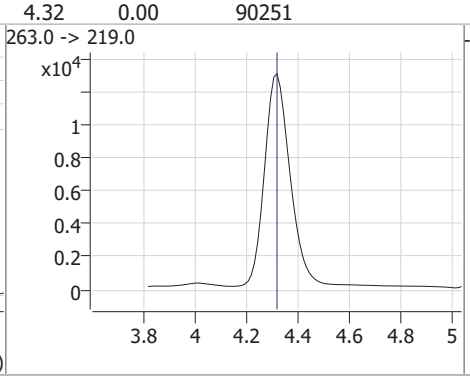
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	0.24	4.32	0.00	18722				

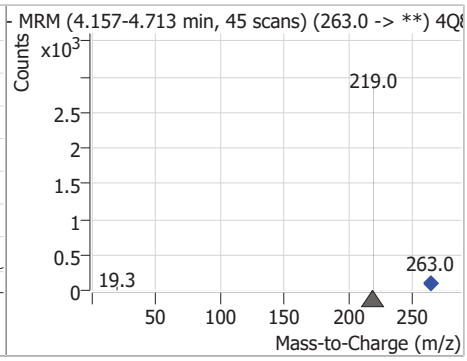


Perfluorinated Compounds by LC/MS/MS

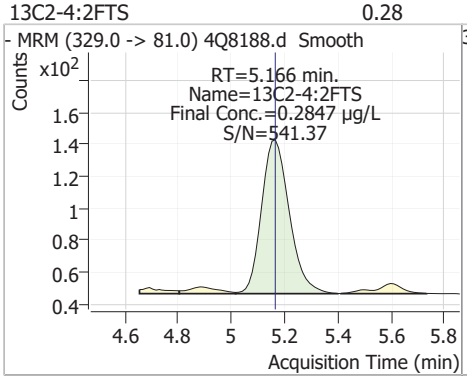
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	1.52	4.32	0.00	90251				

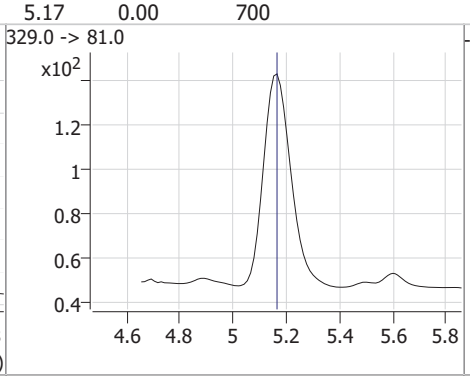


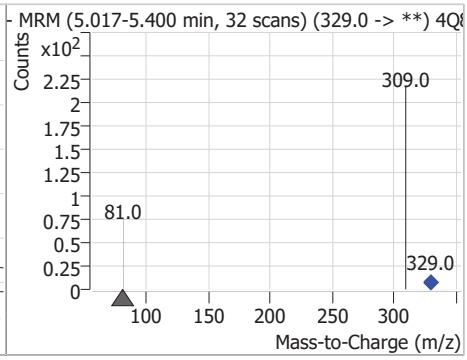




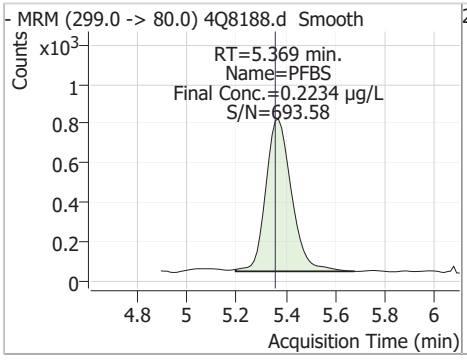
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	0.28	5.17	0.00	700				

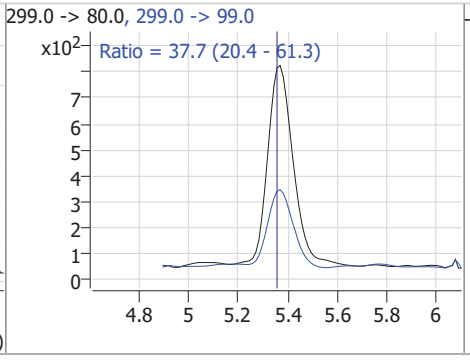


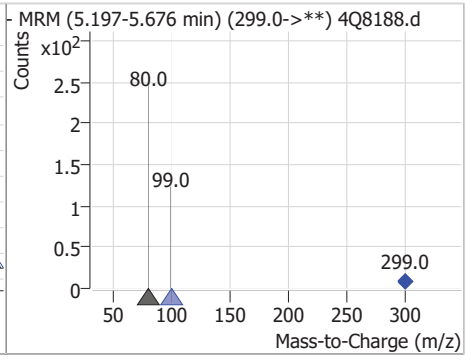




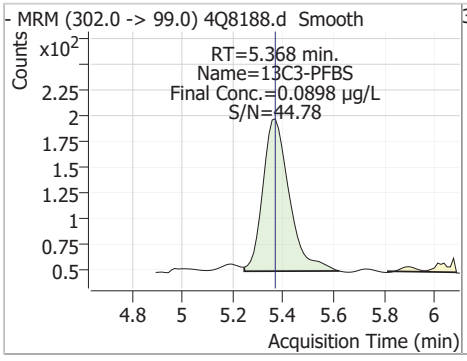
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.22	5.37	0.01	5548	299.0 -> 99.0	37.7	20.4	61.3

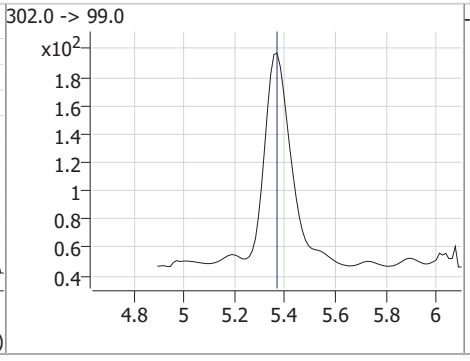


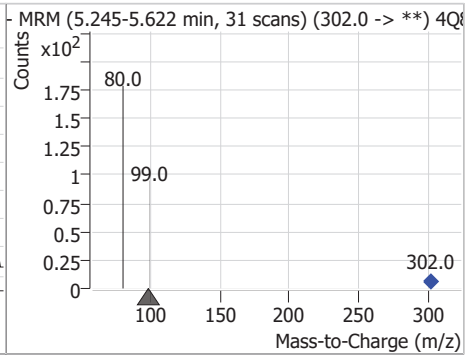




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	0.09	5.37	0.00	1086				

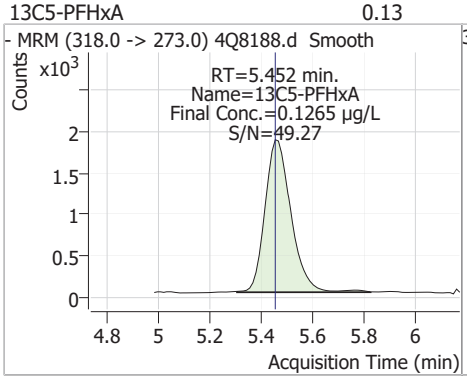


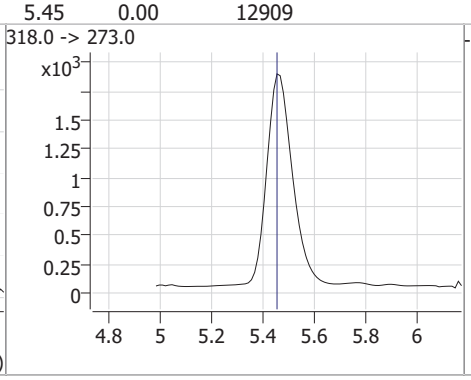


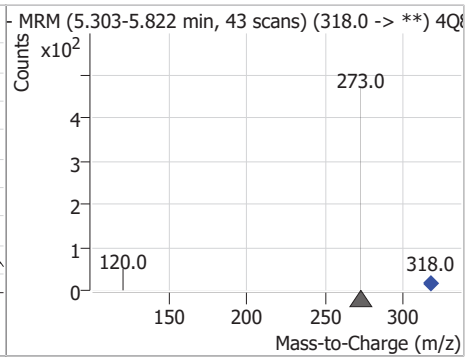


Perfluorinated Compounds by LC/MS/MS

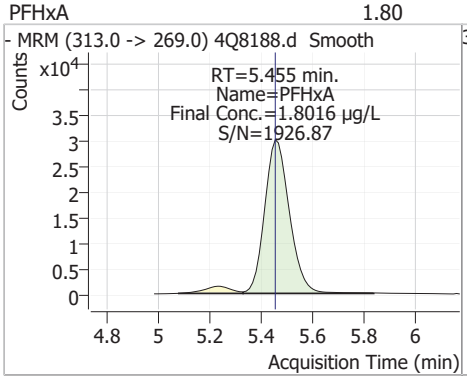
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	0.13	5.45	0.00	12909				

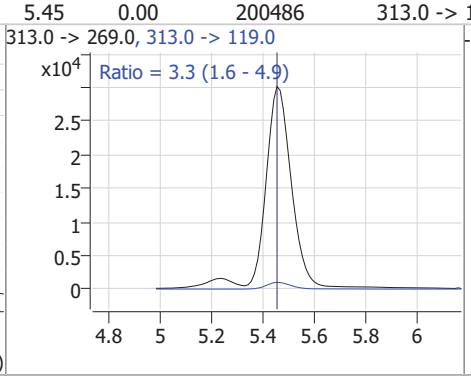


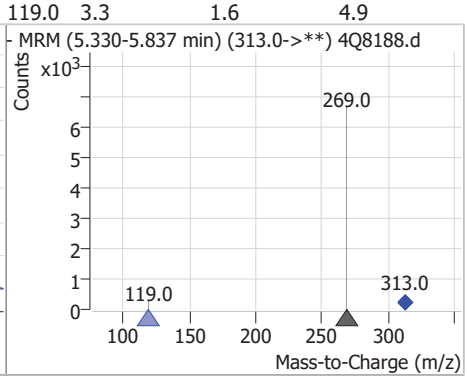




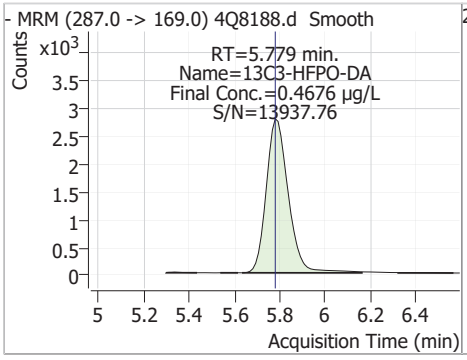
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	1.80	5.45	0.00	200486	313.0 -> 119.0	3.3	1.6	4.9

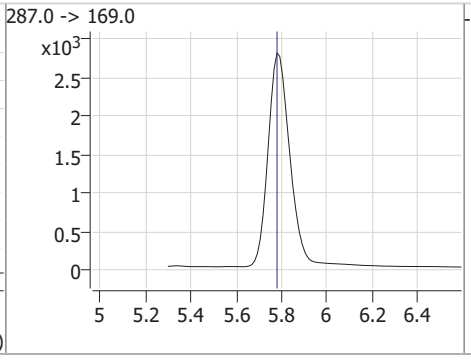


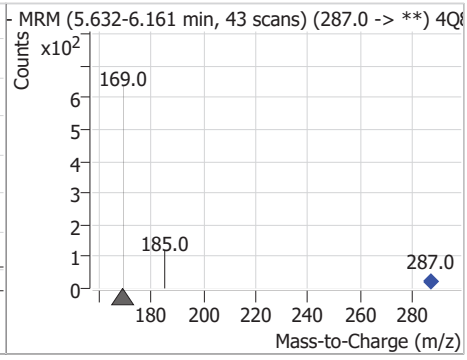




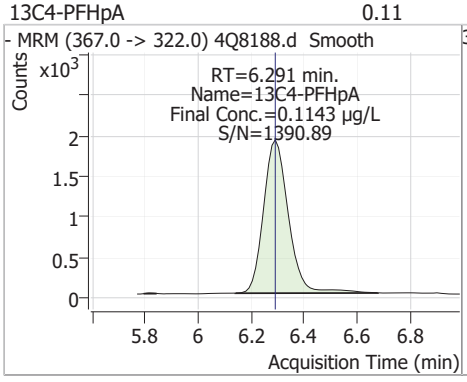
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	0.47	5.78	0.00	18746				

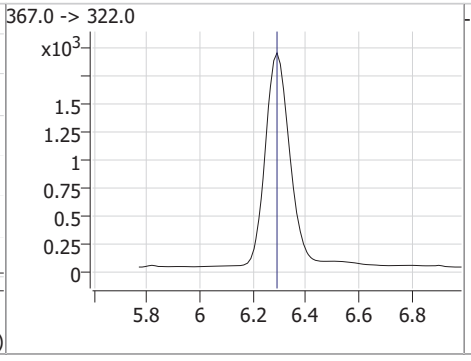


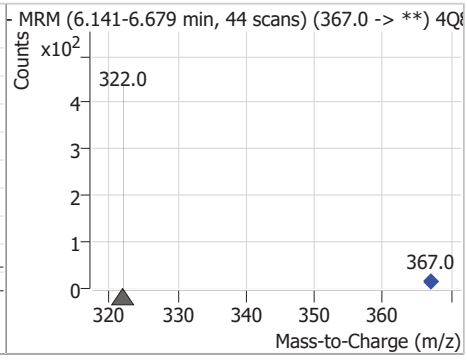




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	0.11	6.29	0.00	12400				

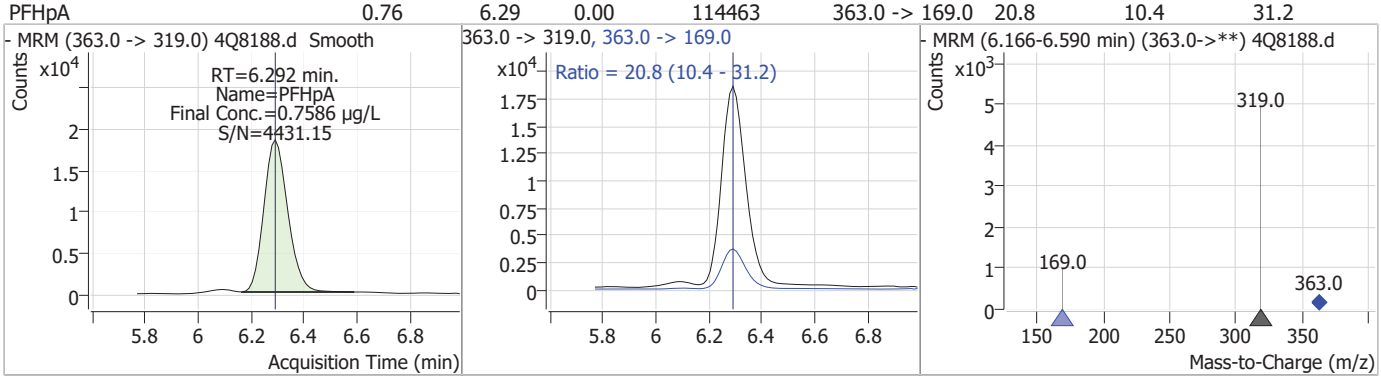




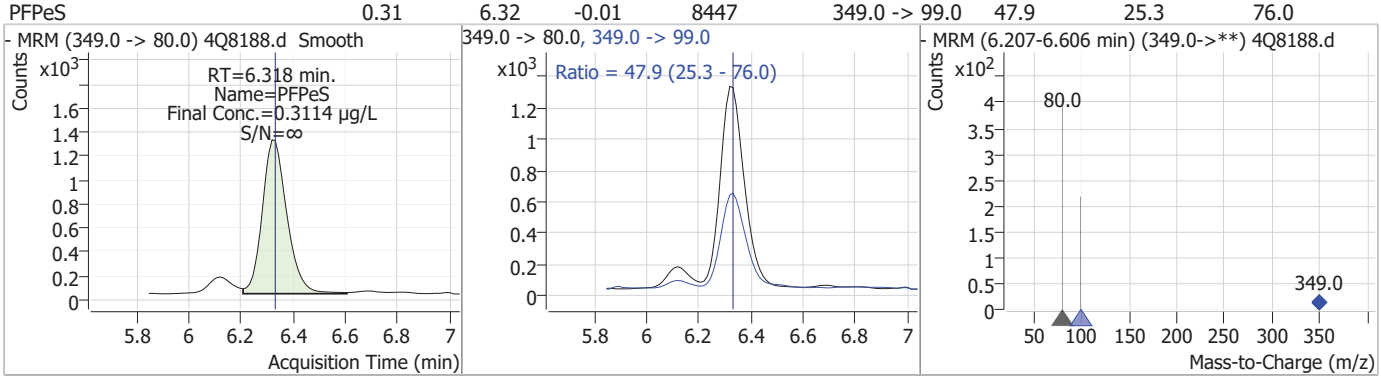


Perfluorinated Compounds by LC/MS/MS

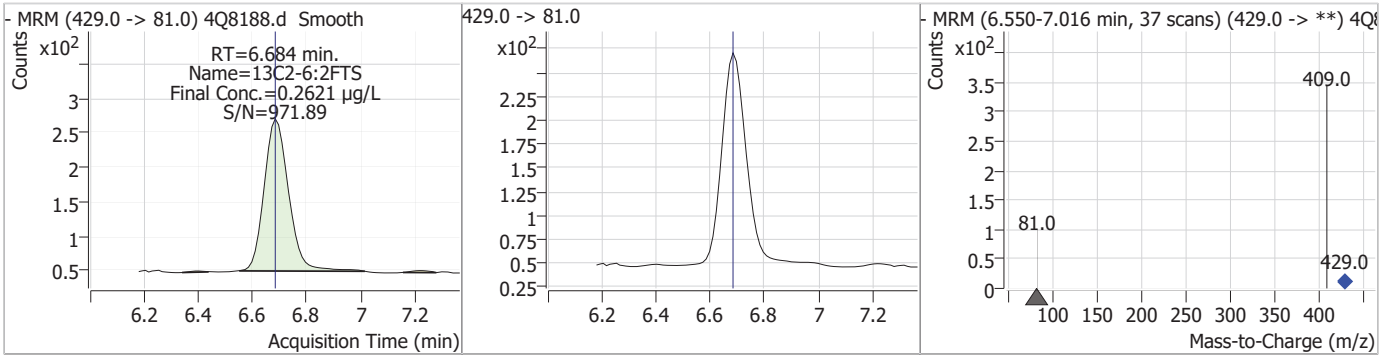
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.76	6.29	0.00	114463	363.0 -> 169.0	20.8	10.4	31.2



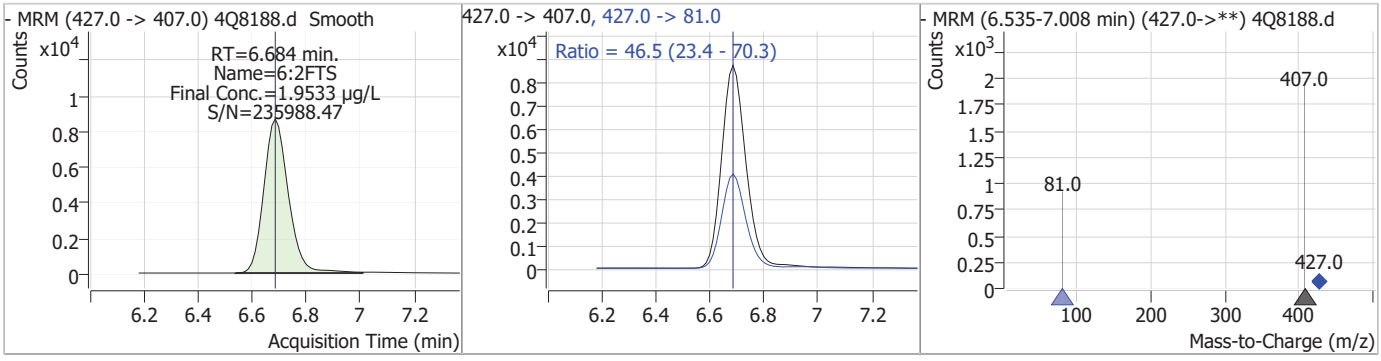
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.31	6.32	-0.01	8447	349.0 -> 99.0	47.9	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	0.26	6.68	0.00	1398				

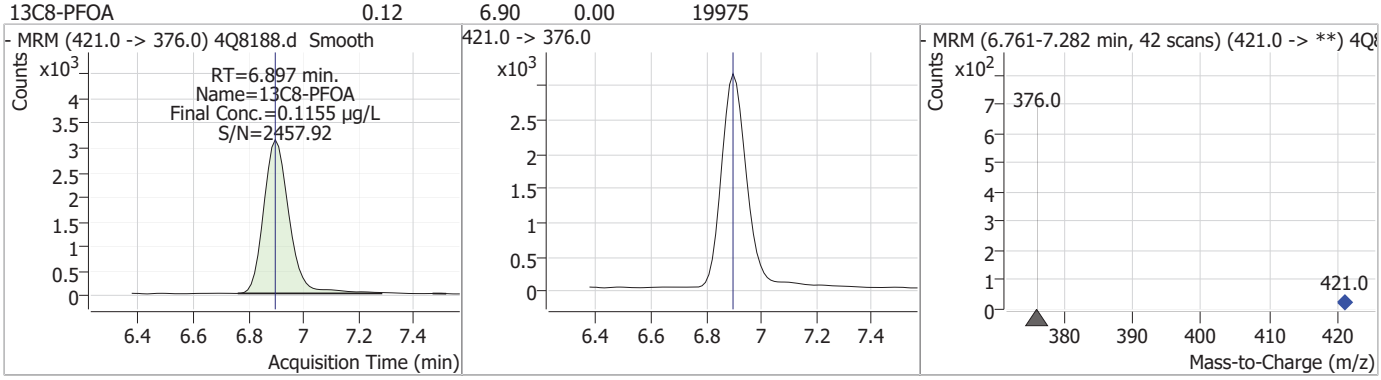


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	1.95	6.68	0.00	54787	427.0 -> 81.0	46.5	23.4	70.3

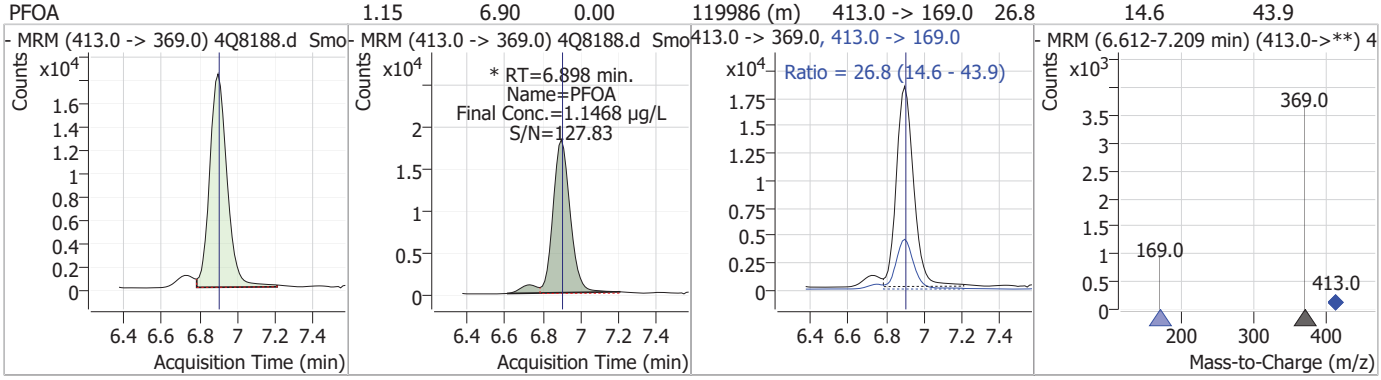


Perfluorinated Compounds by LC/MS/MS

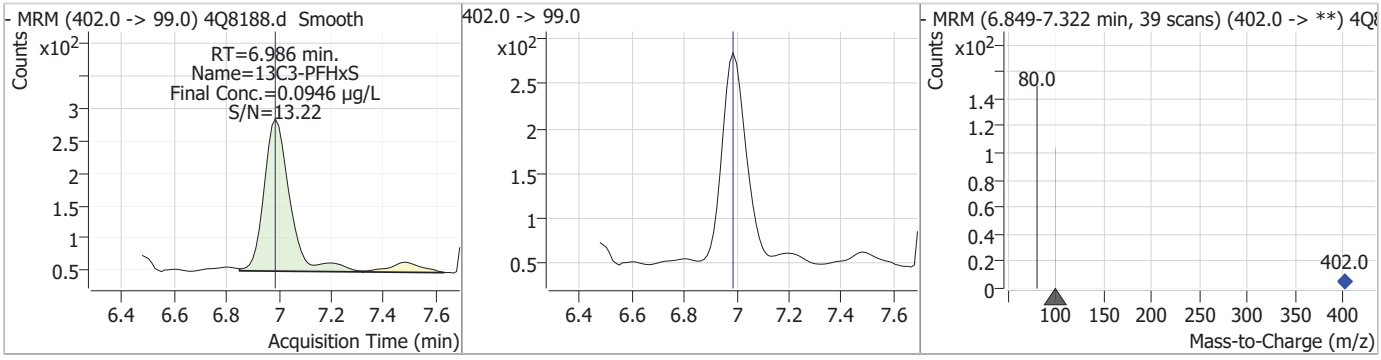
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	0.12	6.90	0.00	19975				



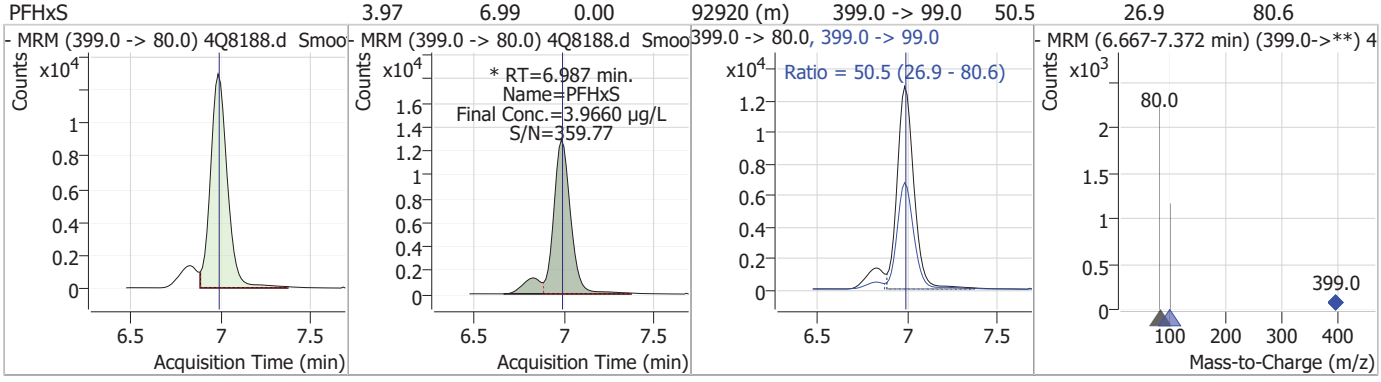
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	1.15	6.90	0.00	119986 (m)	413.0 -> 169.0	26.8	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	0.09	6.99	0.00	1620				

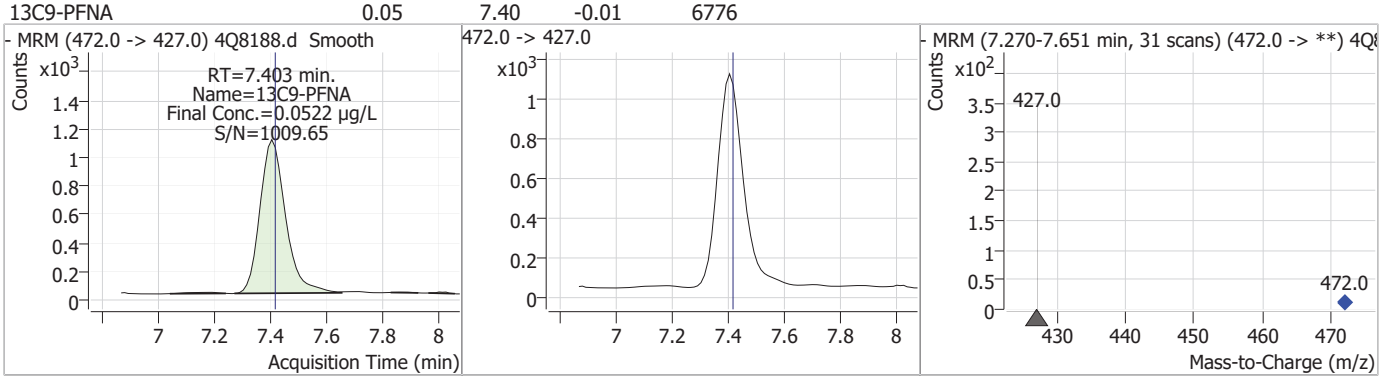


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	3.97	6.99	0.00	92920 (m)	399.0 -> 99.0	50.5	26.9	80.6

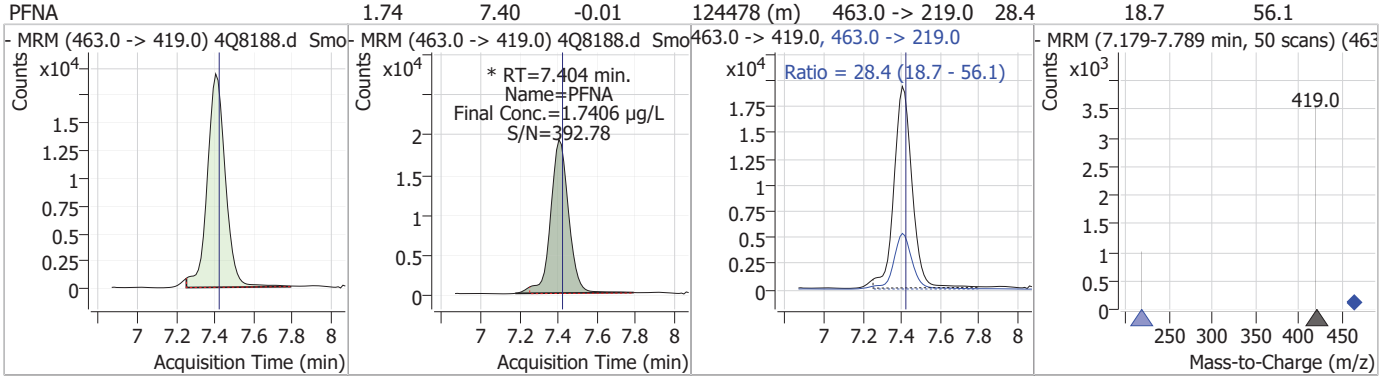


Perfluorinated Compounds by LC/MS/MS

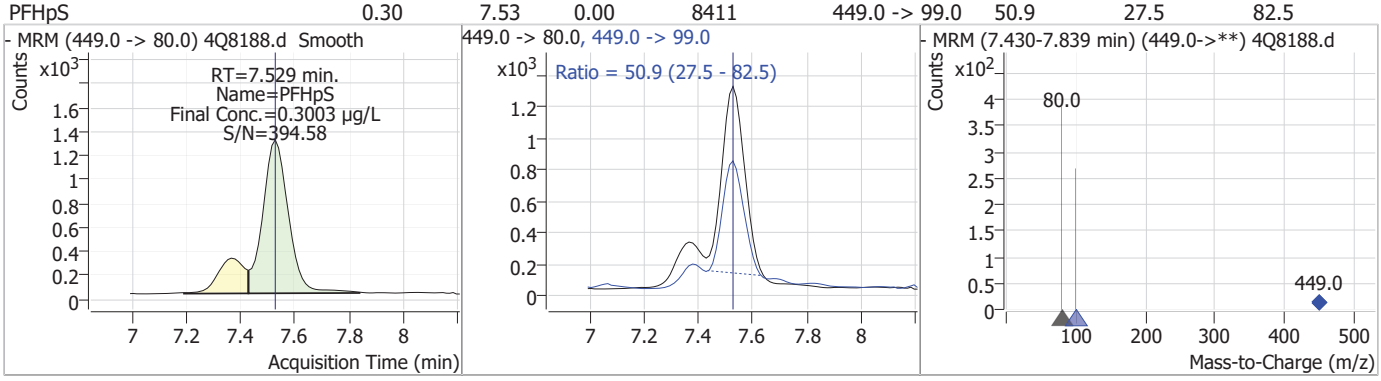
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	0.05	7.40	-0.01	6776				



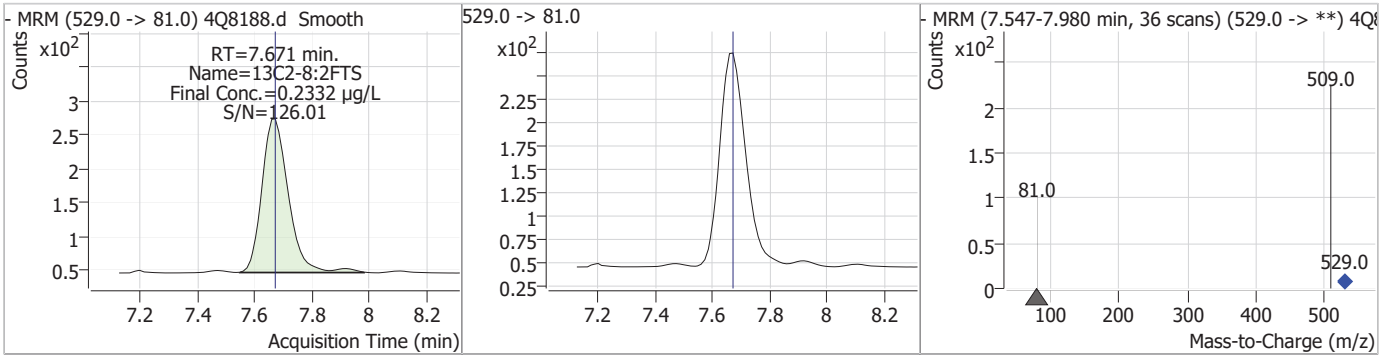
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	1.74	7.40	-0.01	124478 (m)	463.0 -> 219.0	28.4	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.30	7.53	0.00	8411	449.0 -> 99.0	50.9	27.5	82.5

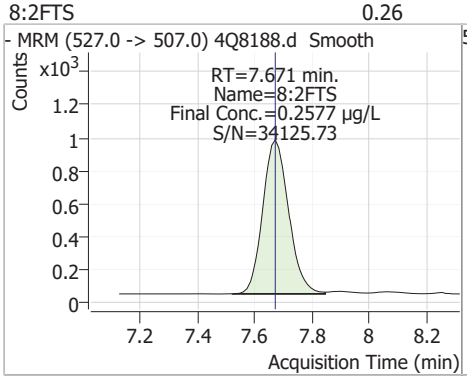


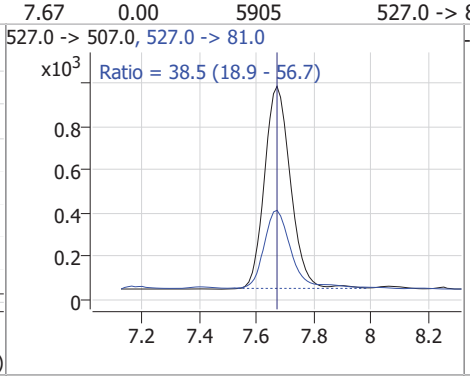
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	0.23	7.67	0.00	1464				

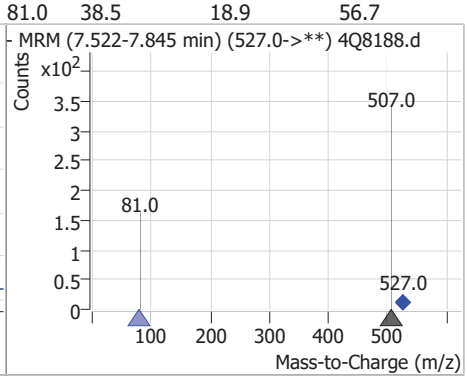


Perfluorinated Compounds by LC/MS/MS

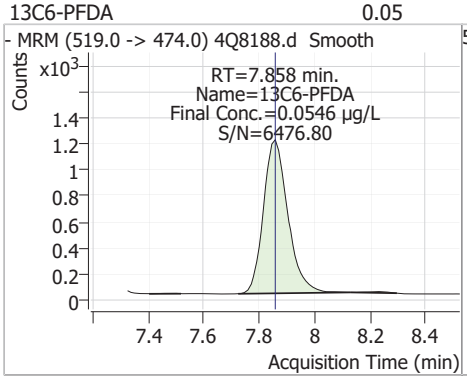
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.26	7.67	0.00	5905	527.0 -> 81.0	38.5	18.9	56.7

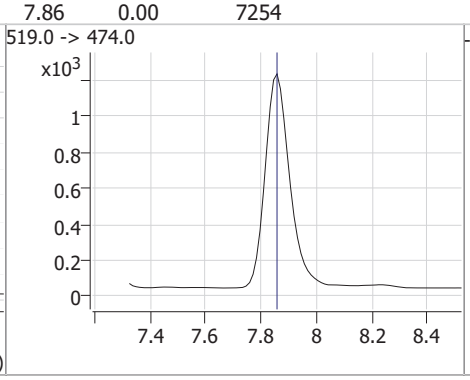


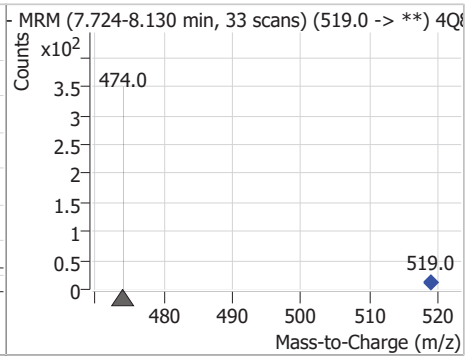




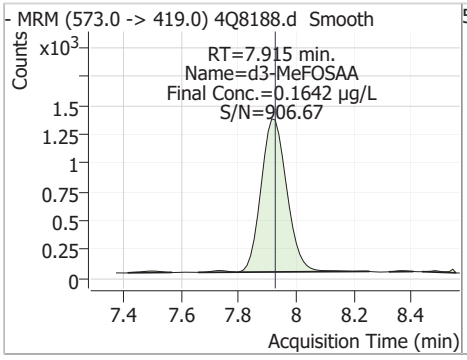
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	0.05	7.86	0.00	7254				

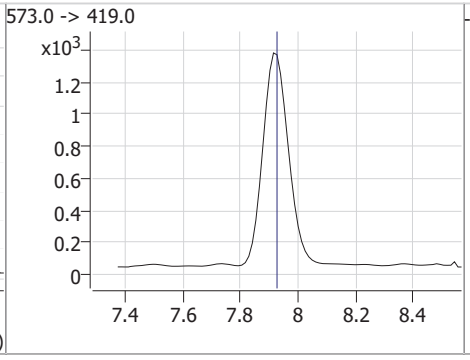


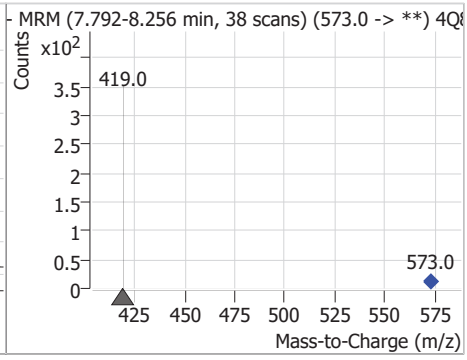




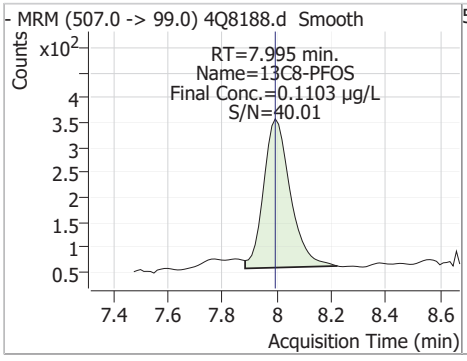
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	0.16	7.92	-0.01	8265				

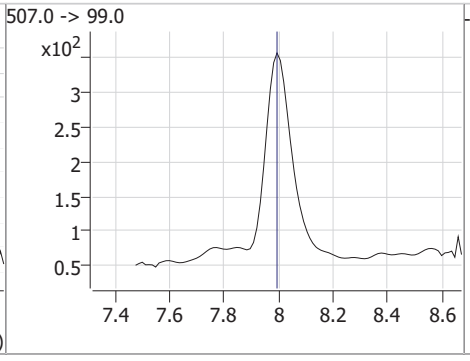


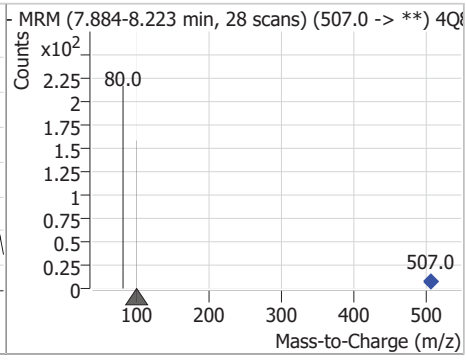




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	0.11	7.99	0.00	2031				





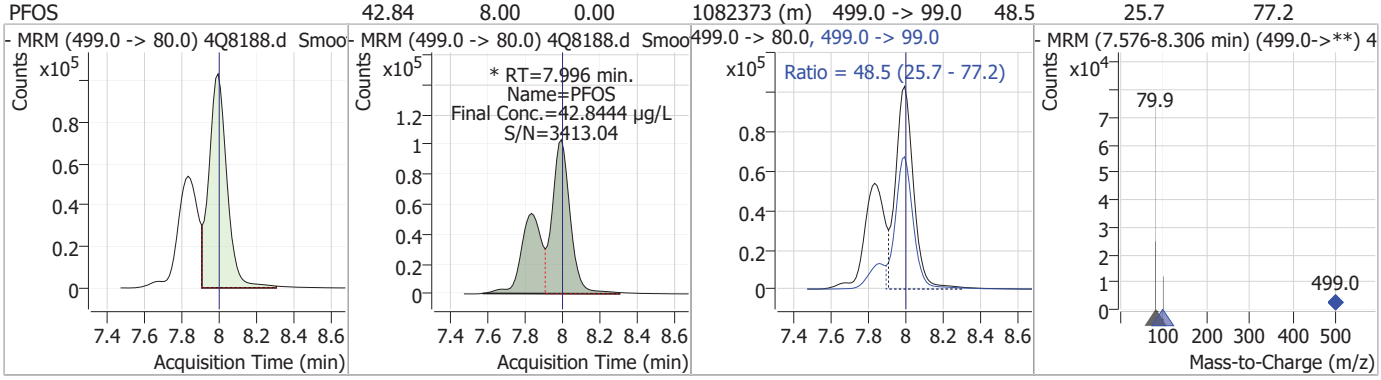


7.1.6

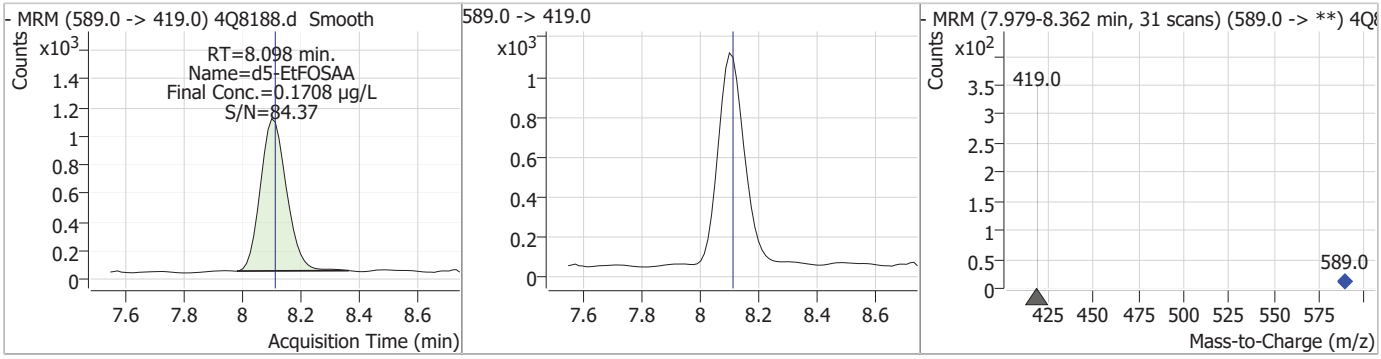
7

Perfluorinated Compounds by LC/MS/MS

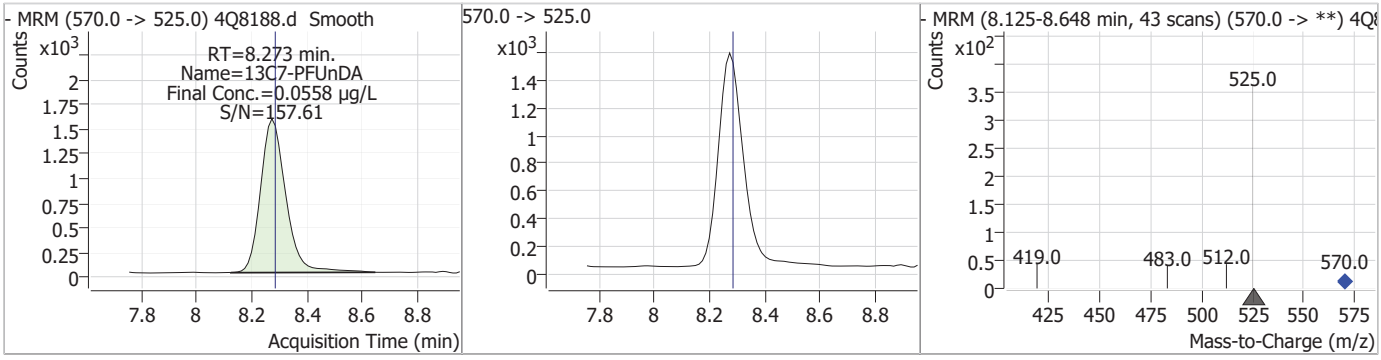
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	42.84	8.00	0.00	1082373 (m)	499.0 -> 99.0	48.5	25.7	77.2



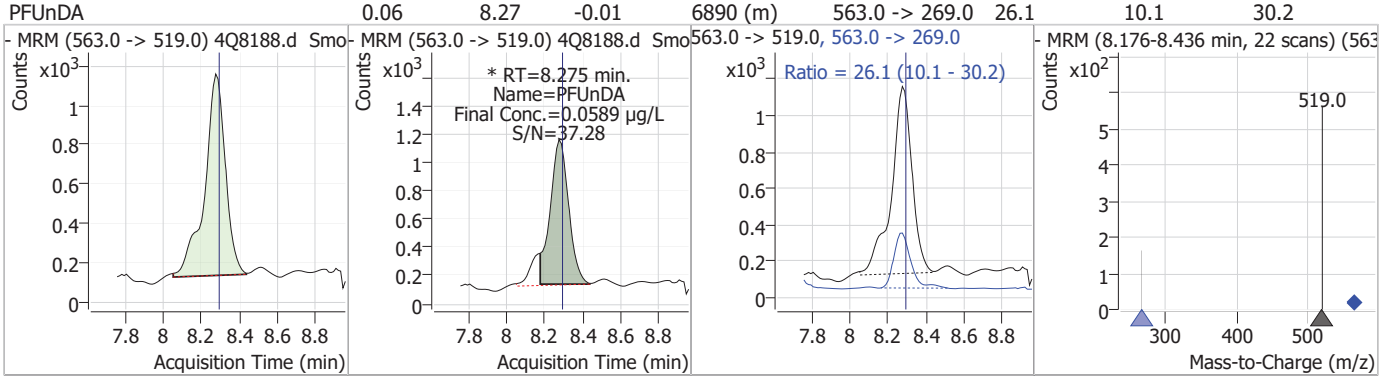
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	0.17	8.10	-0.01	6600				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	0.06	8.27	-0.01	9901				

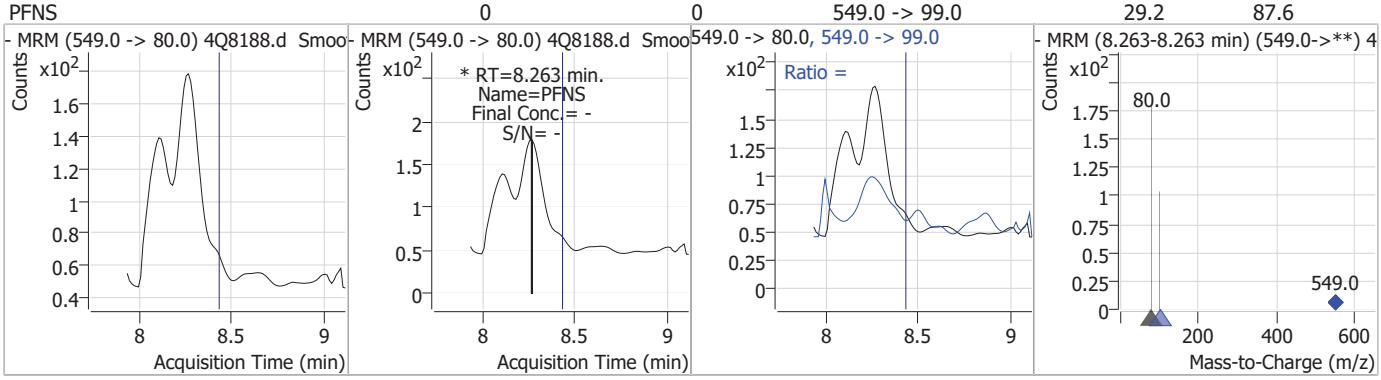


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.06	8.27	-0.01	6890 (m)	563.0 -> 269.0	26.1	10.1	30.2

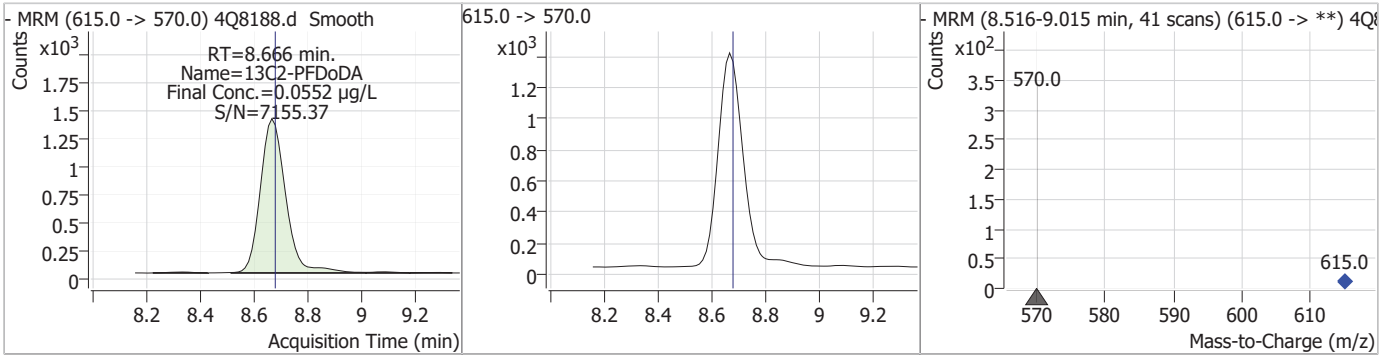


Perfluorinated Compounds by LC/MS/MS

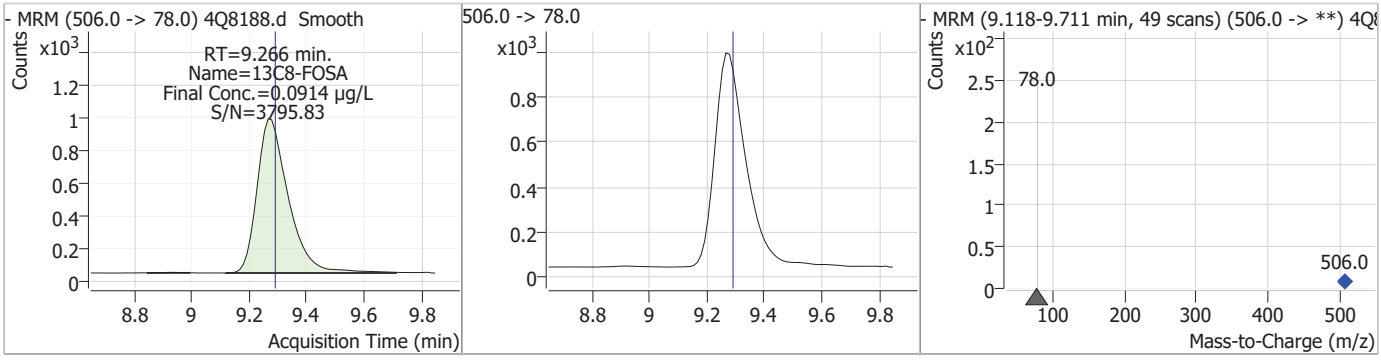
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS		0		0	549.0 -> 99.0		29.2	87.6



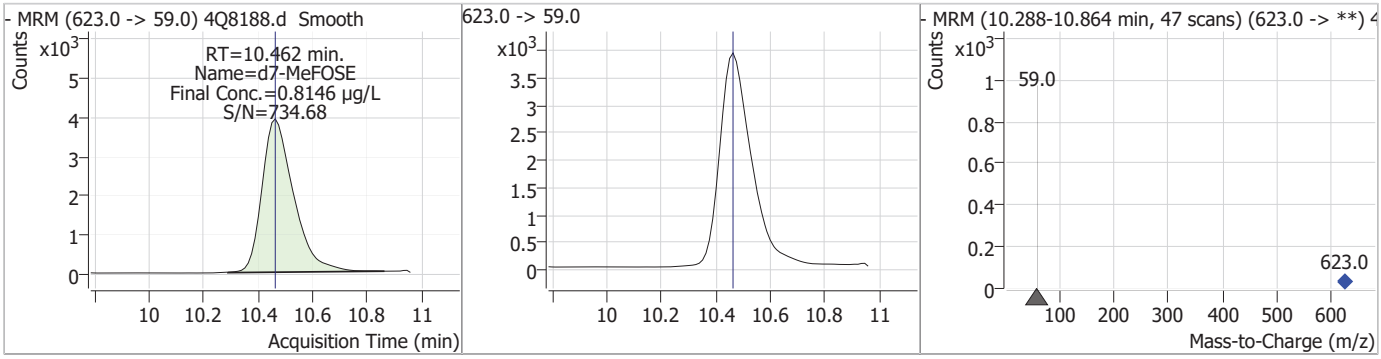
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	0.06	8.67	-0.01	8976				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	0.09	9.27	-0.02	7175				

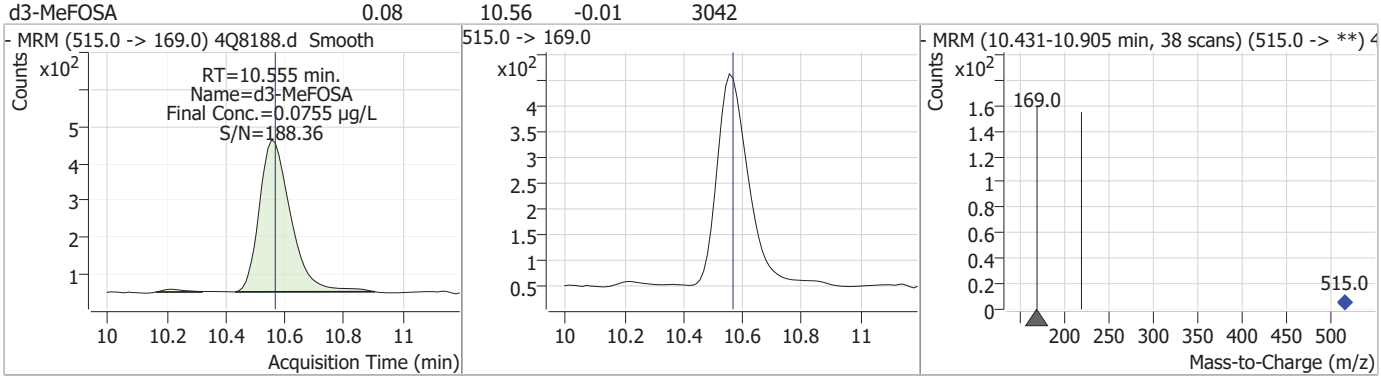


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	0.81	10.46	0.00	31358				

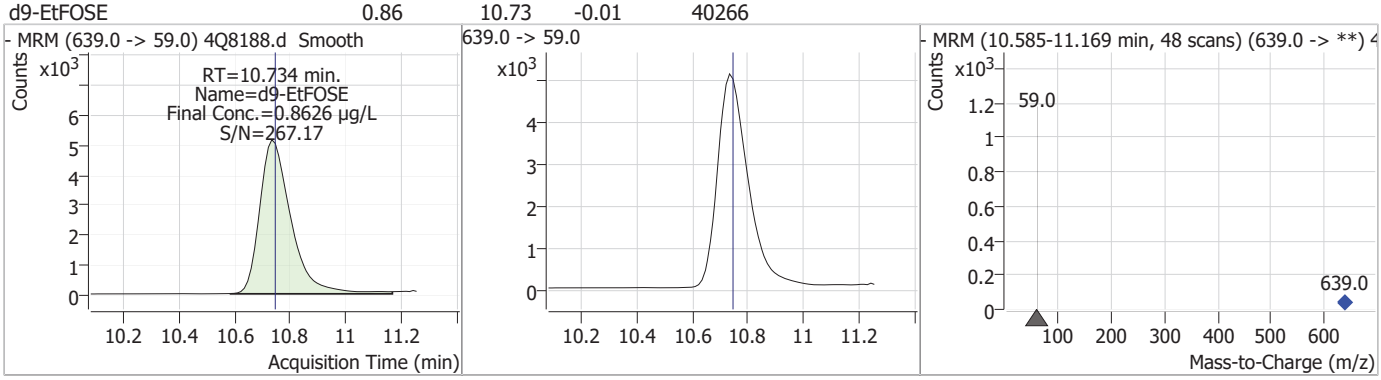


Perfluorinated Compounds by LC/MS/MS

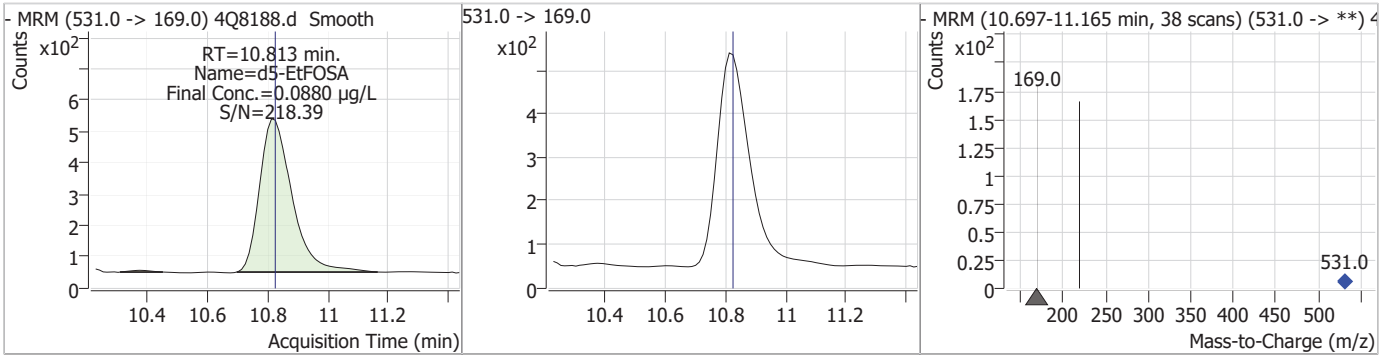
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	0.08	10.56	-0.01	3042				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	0.86	10.73	-0.01	40266				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	0.09	10.81	-0.01	3656				



Manual Integration Approval Summary

Sample Number: JE10205-3
Lab FileID: 4Q8188.D
Injection Time: 05/01/25 14:33
Method: EPA 1633
Analyst approved: 05/02/25 05:01 Josephus Gimenez
Supervisor approved: 05/06/25 06:26 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
Perfluoroundecanoic acid	2058-94-8		8.28	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian 05/02/25 12:31

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8186.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 2:06:22 PM
Sample Name : JE10205-4
Vial : P2-A2
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q139.batch.bin
Sample Information : OP63161,T4Q139,483,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.846	217.0 -> 172.0	851456	10.00	µg/L	-0.037
M5-PFPeA	4.307	268.0 -> 223.0	416887	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	282532	2.50	µg/L	0.000
M4-PFHpA	6.279	367.0 -> 322.0	294770	2.50	µg/L	-0.012
M8-PFOA	6.897	421.0 -> 376.0	445868	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	188927	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	175926	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	228885	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	200315	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	156688	1.25	µg/L	-0.012
M8-FOSA	9.266	506.0 -> 78.0	161522	2.50	µg/L	-0.025
M3-PFBS	5.355	302.0 -> 99.0	26654	2.50	µg/L	-0.012
		302.0 -> 80.0	63107			
M3-PFHxS	6.986	402.0 -> 99.0	36420	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	40332	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	11341	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	24838	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	29209	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	214300	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	433979	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	154287	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	751998	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	904490	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	77992	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	72585	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	72639	2.50	µg/L	0.000
13C3-PFBA	2.849	216.0 -> 172.0	397626	5.00	µg/L	-0.025
18O2-PFHxS	6.985	403.0 -> 84.0	44379	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	491363	2.50	µg/L	0.000
13C2-PFDA	7.859	515.0 -> 470.0	171341	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	194946	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	288051	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	11341	5.10	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.9%		
13C2-6:2FTS	6.684	429.0 -> 81.0	24838	5.14	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.9%		
13C2-8:2FTS	7.671	529.0 -> 81.0	29209	5.14	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.8%		
13C2-PFDoDA	8.666	615.0 -> 570.0	200315	1.08	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 86.5%		
13C2-PFTeDA	9.368	715.0 -> 670.0	156688	1.10	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.0%		
13C3-PFBS	5.355	302.0 -> 99.0	26654	2.43	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.3%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	36420	2.35 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.0%	
13C4-PFBA	2.846	217.0 -> 172.0	851456	9.34 µg/L	-0.037
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 93.4%	
13C4-PFHpA	6.279	367.0 -> 322.0	294770	2.27 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.0%	
13C5-PFHxA	5.452	318.0 -> 273.0	282532	2.32 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.7%	
13C5-PFPeA	4.307	268.0 -> 223.0	416887	4.51 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.1%	
13C6-PFDA	7.858	519.0 -> 474.0	175926	1.16 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.0%	
13C7-PFUnDA	8.273	570.0 -> 525.0	228885	1.13 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.5%	
13C8-FOSA	9.266	506.0 -> 78.0	161522	2.16 µg/L	-0.025
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 86.6%	
13C8-PFOA	6.897	421.0 -> 376.0	445868	2.27 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.8%	
13C8-PFOS	7.995	507.0 -> 99.0	40332	2.31 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.2%	
13C9-PFNA	7.403	472.0 -> 427.0	188927	1.17 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.5%	
d3-MeFOSAA	7.915	573.0 -> 419.0	214300	4.48 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 89.6%	
13C3-HFPO-DA	5.779	287.0 -> 169.0	433979	9.06 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 90.6%	
d3-MeFOSA	10.555	515.0 -> 169.0	72585	1.89 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 75.8%	
d5-EtFOSAA	8.098	589.0 -> 419.0	154287	4.20 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 84.0%	
d7-MeFOSE	10.462	623.0 -> 59.0	751998	20.55 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 82.2%	
d9-EtFOSE	10.734	639.0 -> 59.0	904490	20.39 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 81.6%	
d5-EtFOSA	10.825	531.0 -> 169.0	77992	1.98 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 79.0%	
Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	6.684	427.0 -> 407.0	36351	1.46 µg/L	99
		427.0 -> 81.0	17319		
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0	-	N.D.	
		299.0 -> 99.0			
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

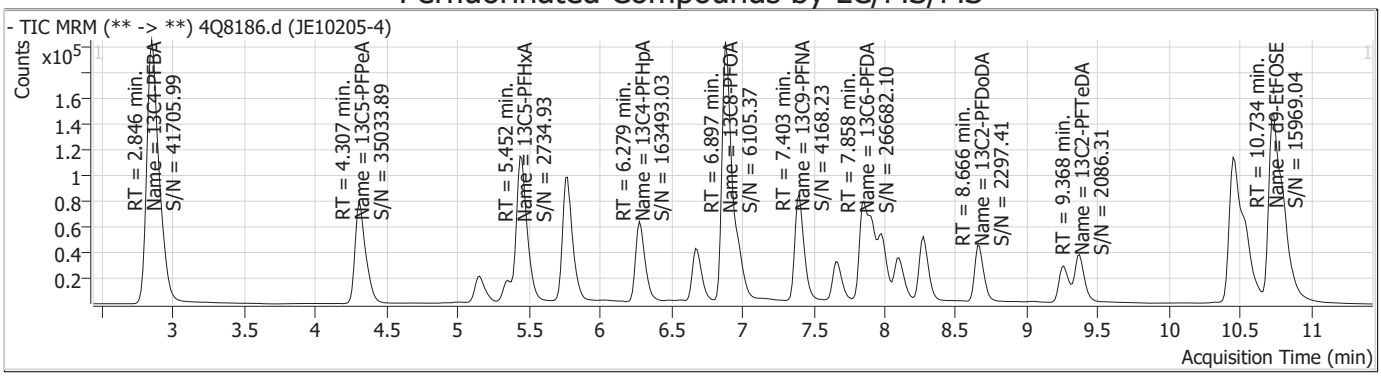
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	-	363.0 -> 319.0	-	N.D.			
		363.0 -> 169.0					
PFHpS	-	449.0 -> 80.0	-	N.D.			
		449.0 -> 99.0					
PFHxA	-	313.0 -> 269.0	-	N.D.			
		313.0 -> 119.0					
PFHxS	-	399.0 -> 80.0	-	N.D.			
		399.0 -> 99.0					
PFNA	-	463.0 -> 419.0	-	N.D.			
		463.0 -> 219.0					
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	6.898	413.0 -> 369.0	6323	0.05	µg/L		98
		413.0 -> 169.0	1778				
PFOS	7.996	499.0 -> 80.0	5571	0.22	µg/L	m	89
		499.0 -> 99.0	2454				
PFPeA	-	263.0 -> 219.0	-	N.D.			
PFPeS	-	349.0 -> 80.0	-	N.D.			
		349.0 -> 99.0					
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	-	563.0 -> 519.0	-	N.D.			
		563.0 -> 269.0					
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

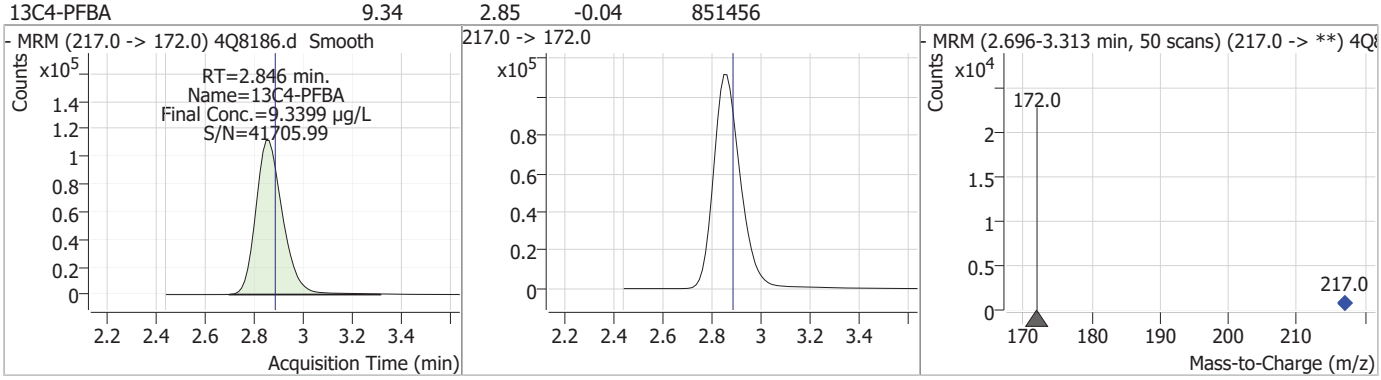
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

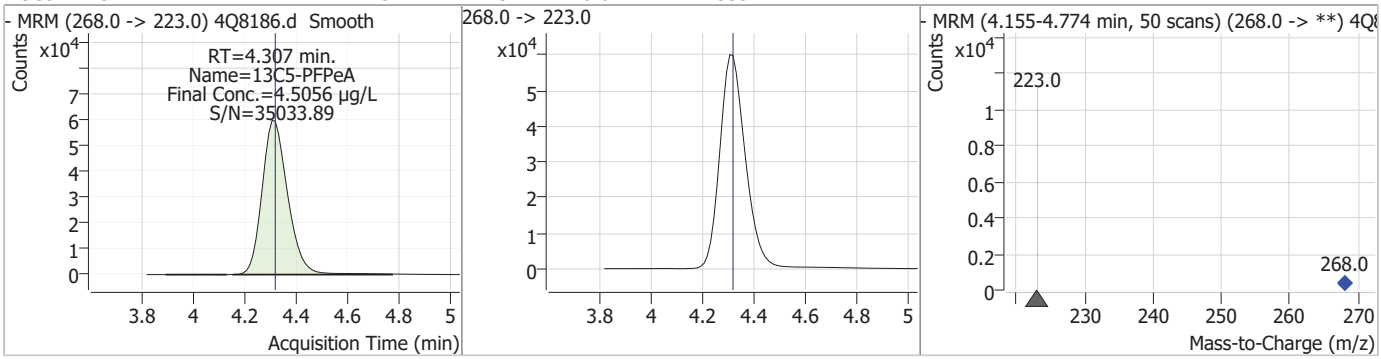
Perfluorinated Compounds by LC/MS/MS



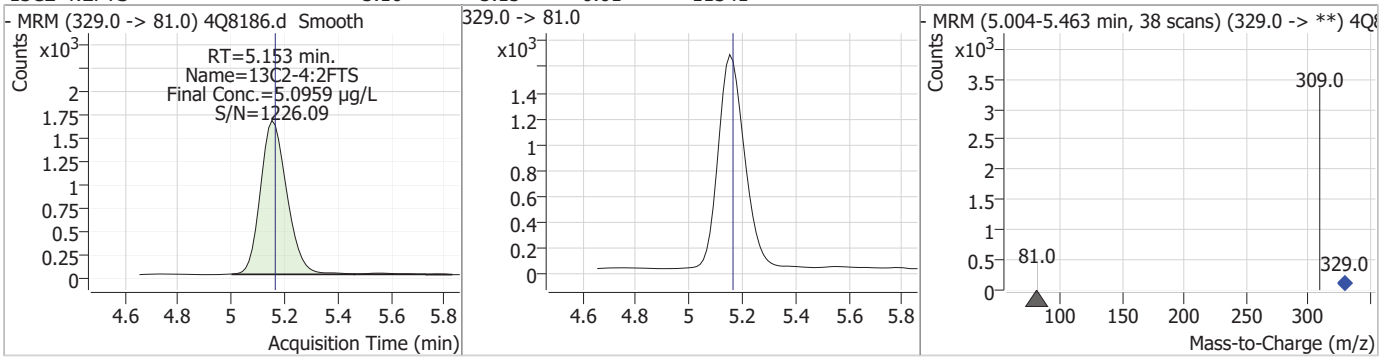
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.34	2.85	-0.04	851456				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.51	4.31	-0.01	416887				

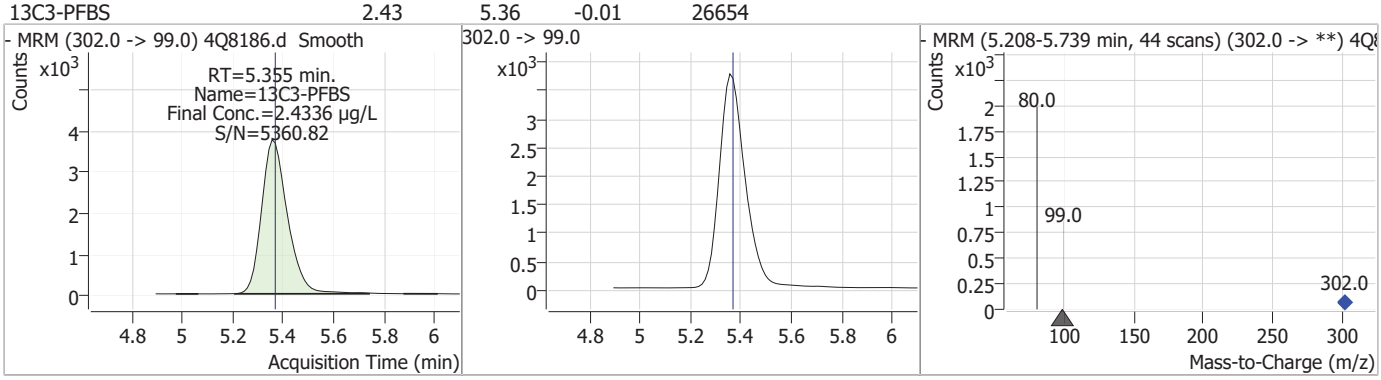


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.10	5.15	-0.01	11341				

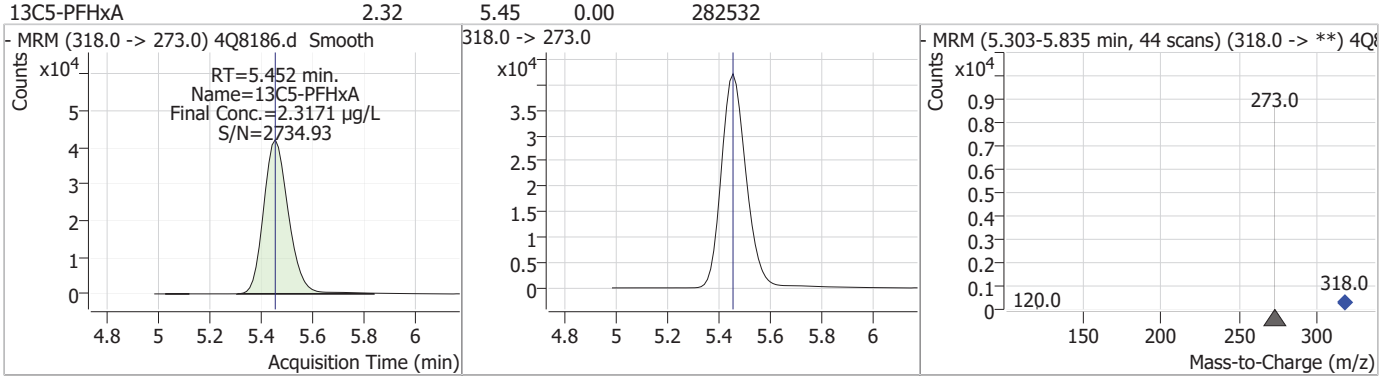


Perfluorinated Compounds by LC/MS/MS

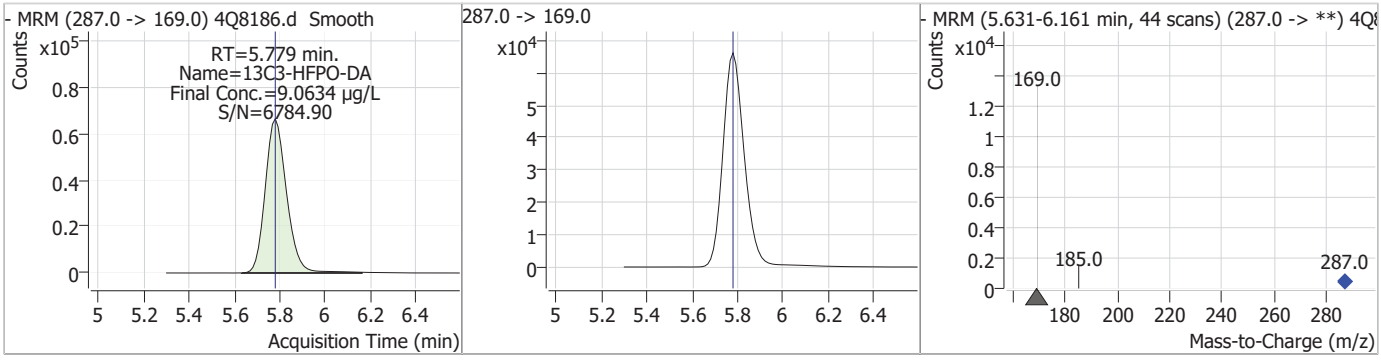
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.43	5.36	-0.01	26654				



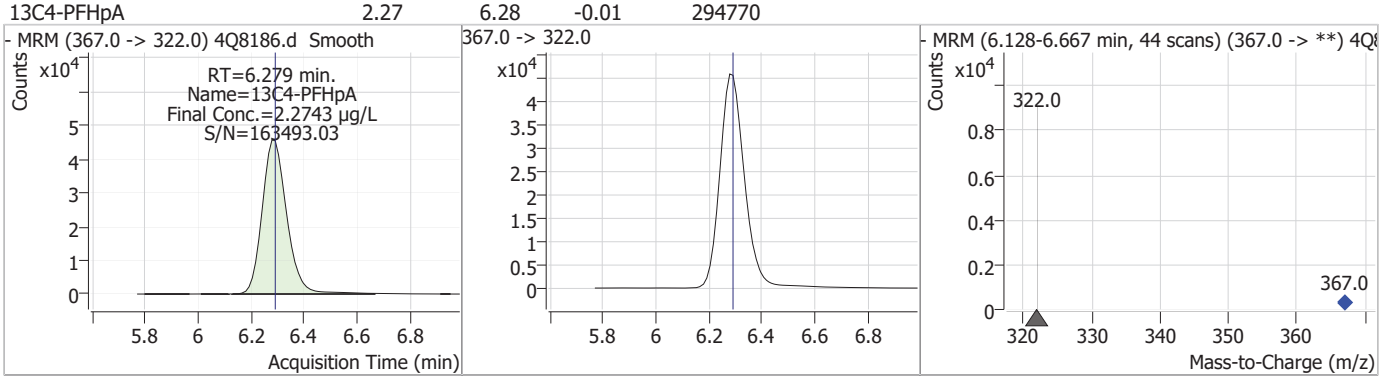
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.32	5.45	0.00	282532				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.06	5.78	0.00	433979				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.27	6.28	-0.01	294770				



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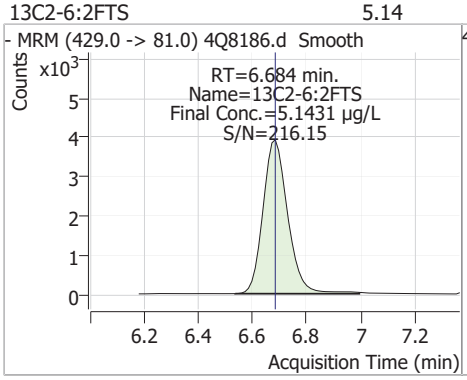
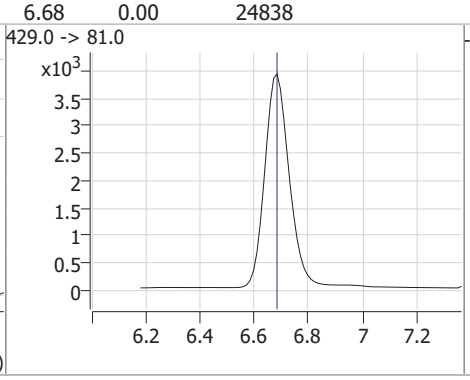
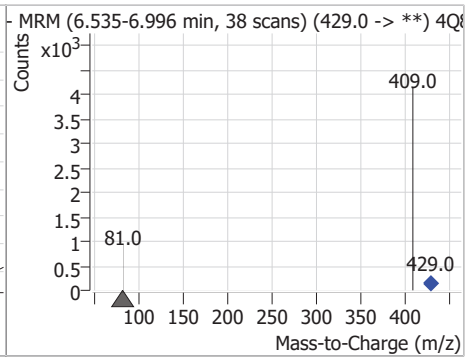
Perfluorinated Compounds by LC/MS/MS

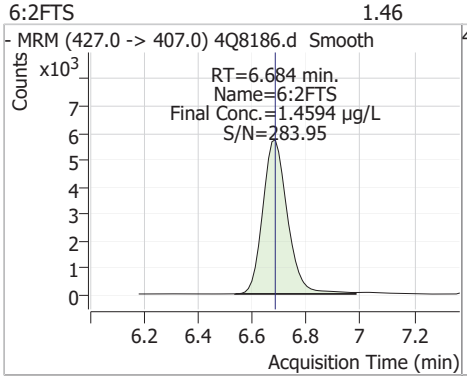
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.14	6.68	0.00	24838				

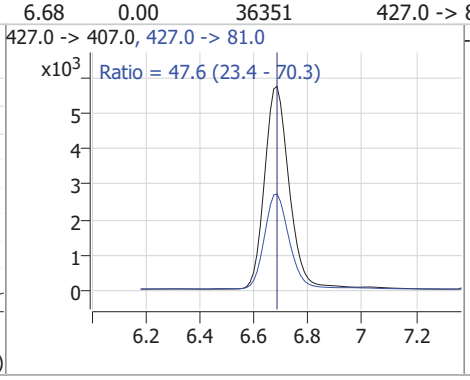


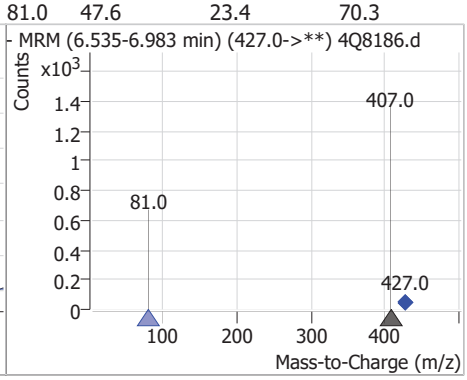




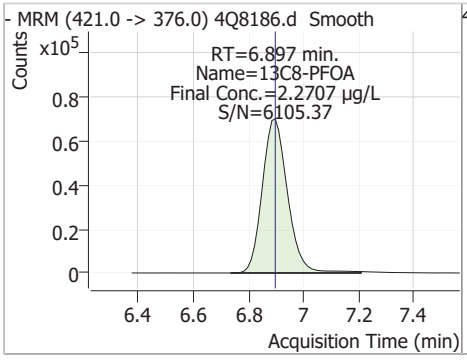
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	1.46	6.68	0.00	36351	427.0 -> 81.0	47.6	23.4	70.3

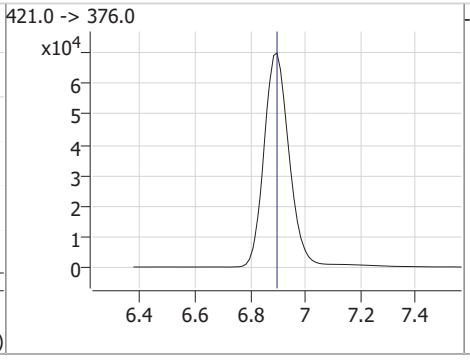


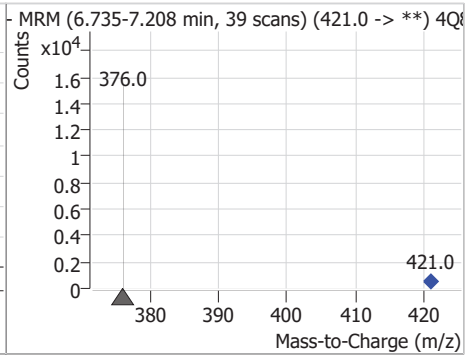




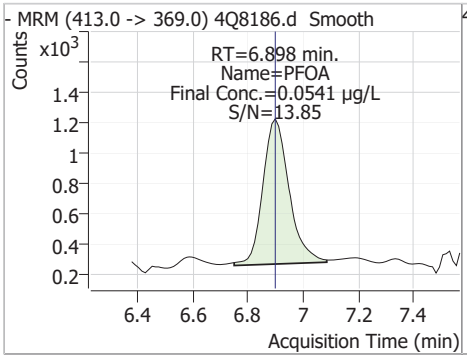
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.27	6.90	0.00	445868				

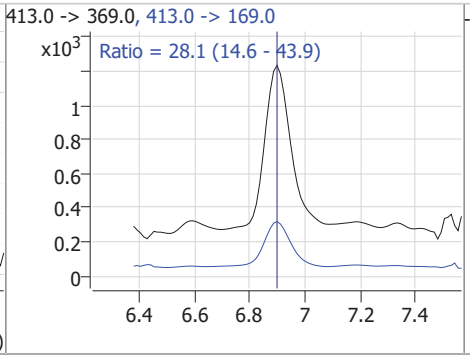


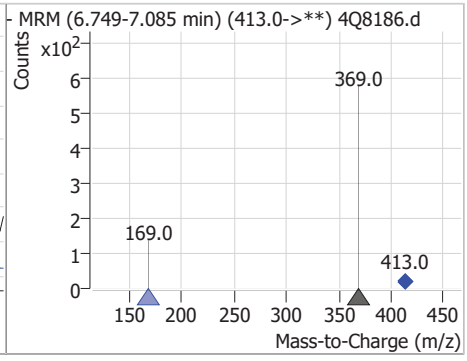




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.05	6.90	0.00	6323	413.0 -> 169.0	28.1	14.6	43.9

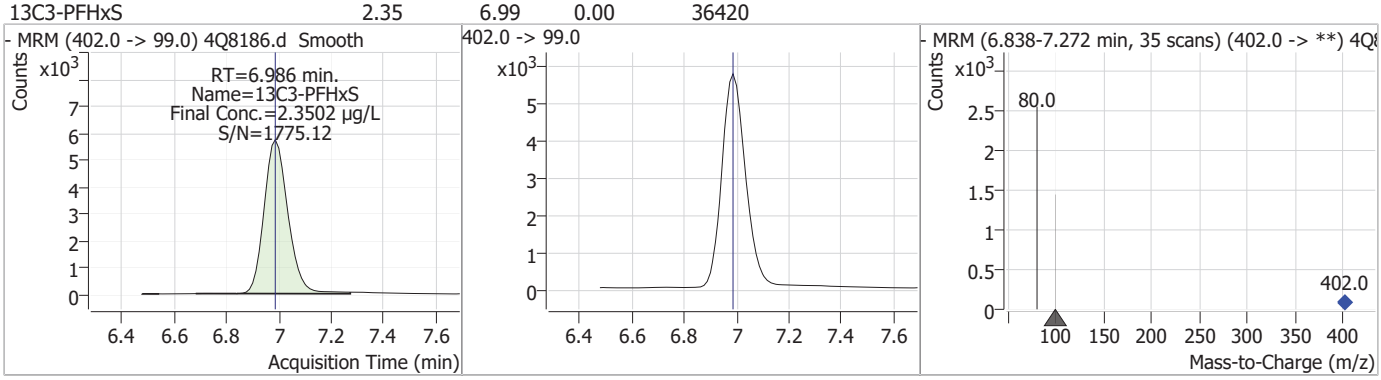




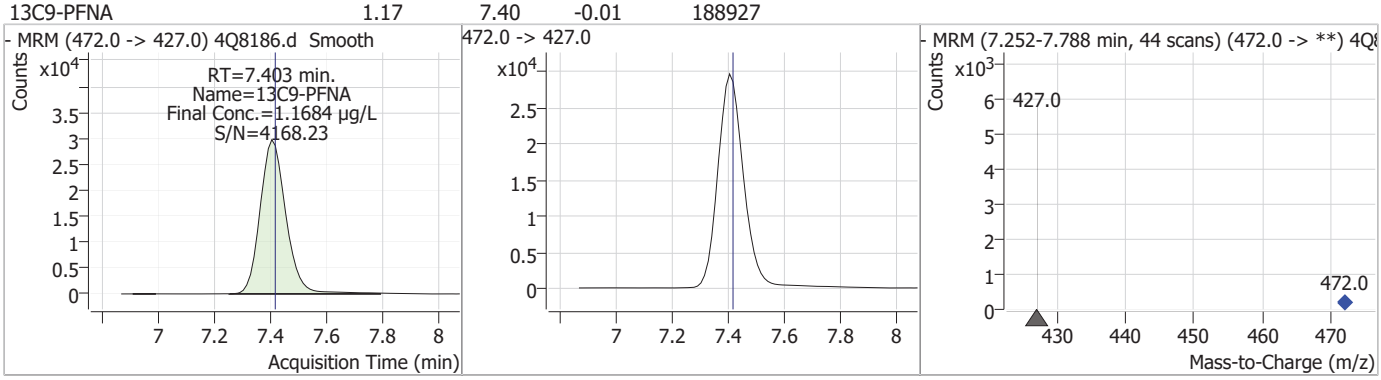


Perfluorinated Compounds by LC/MS/MS

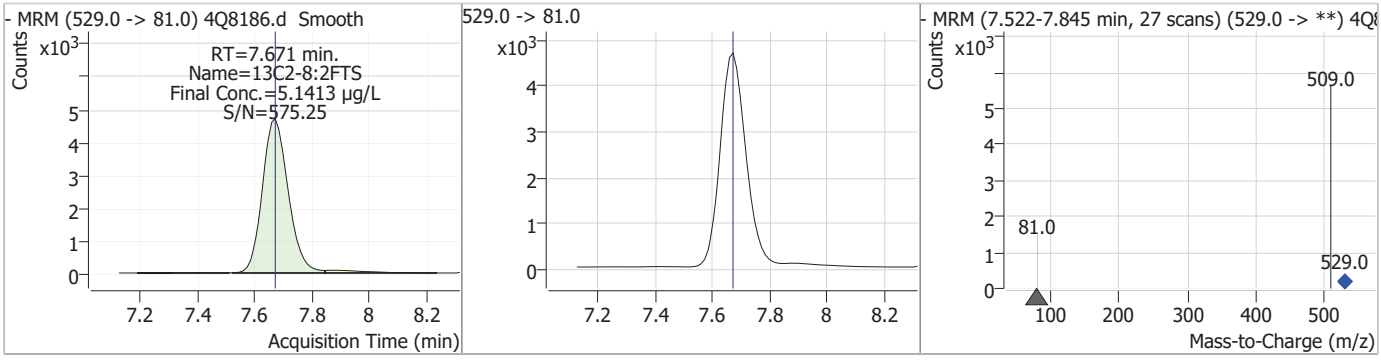
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.35	6.99	0.00	36420				



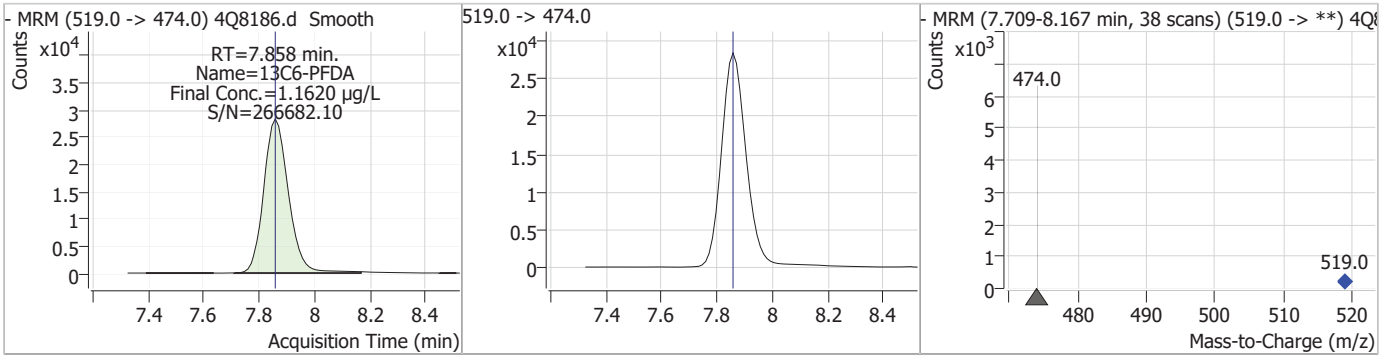
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.17	7.40	-0.01	188927				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.14	7.67	0.00	29209				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.16	7.86	0.00	175926				



7.1.7

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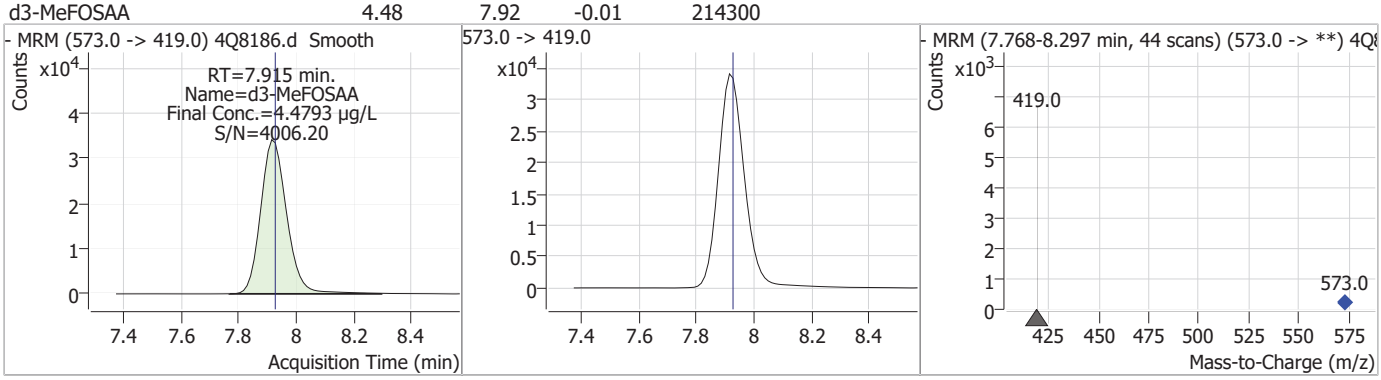
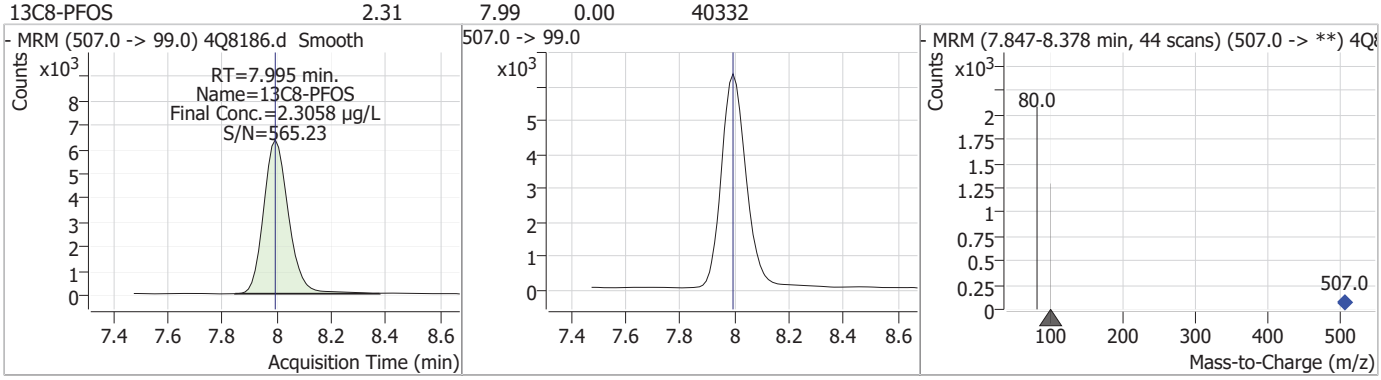
Perfluorinated Compounds by LC/MS/MS

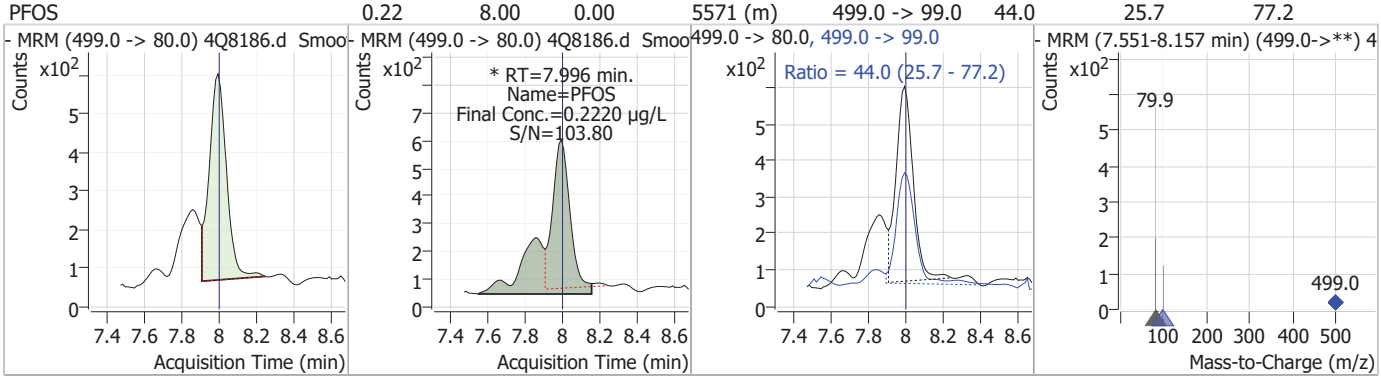
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.48	7.92	-0.01	214300				



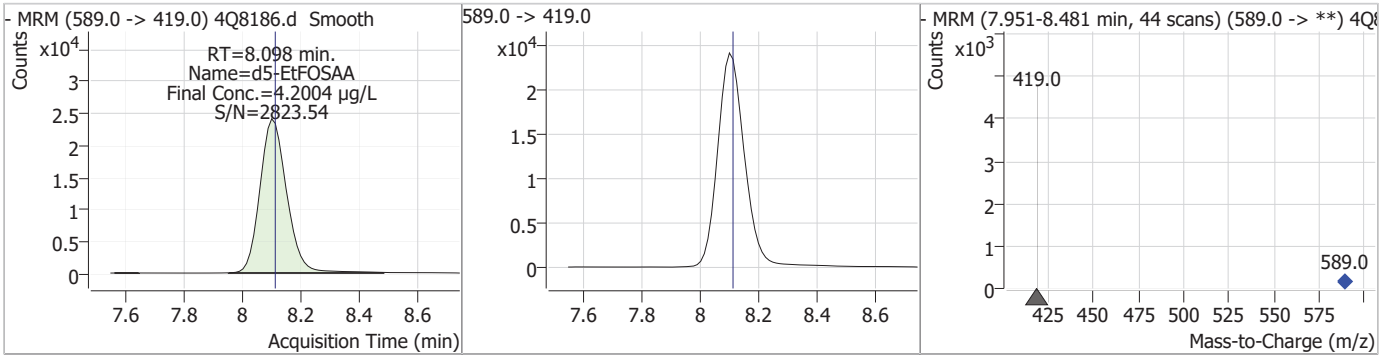
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.31	7.99	0.00	40332				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.22	8.00	0.00	5571 (m)	499.0 -> 99.0	44.0	25.7	77.2

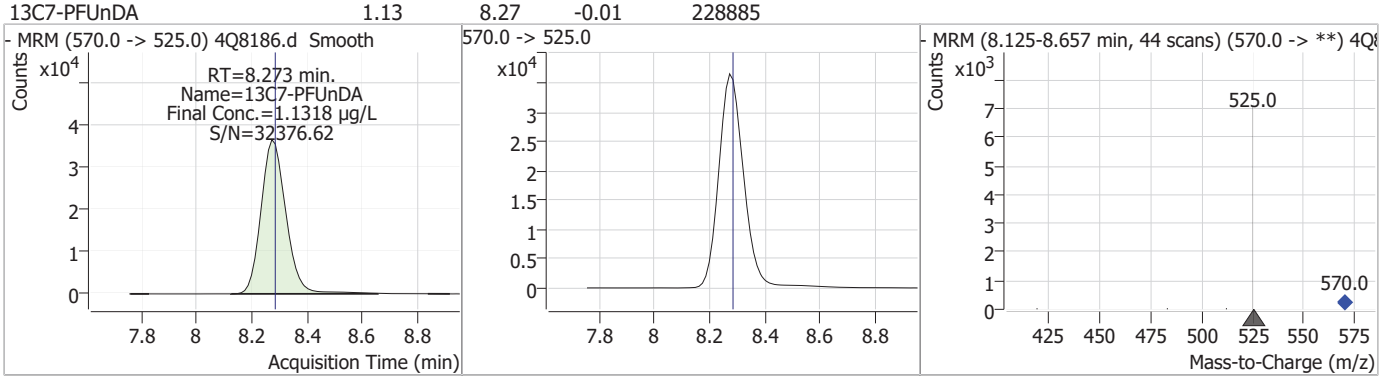


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.20	8.10	-0.01	154287				

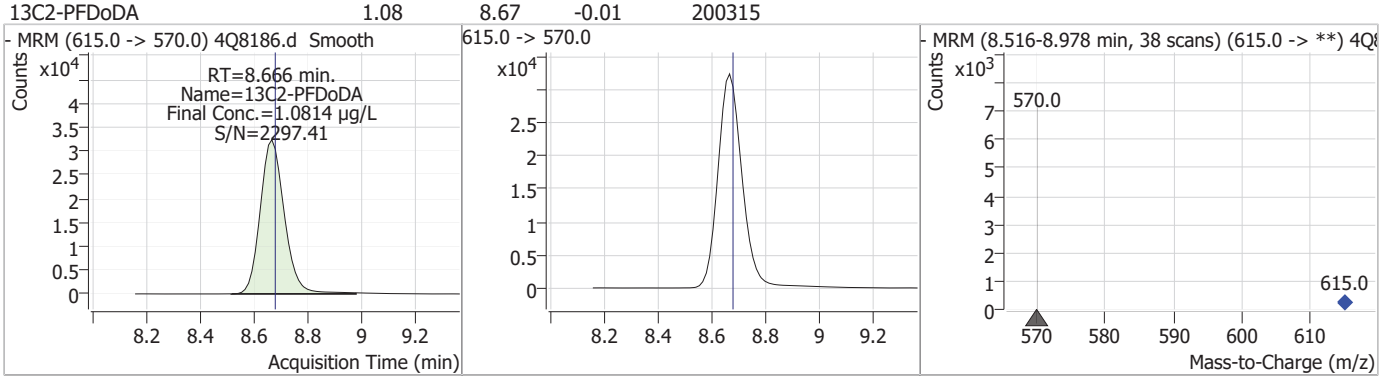


Perfluorinated Compounds by LC/MS/MS

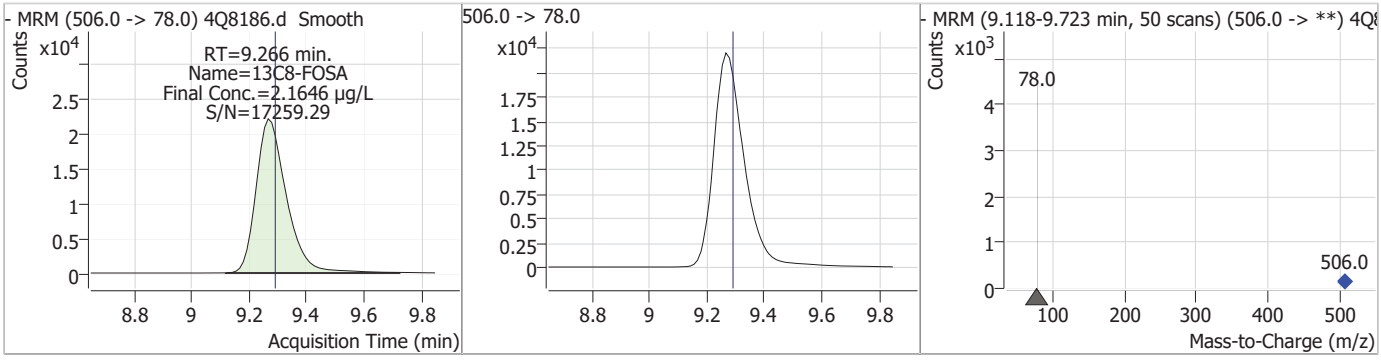
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.13	8.27	-0.01	228885				



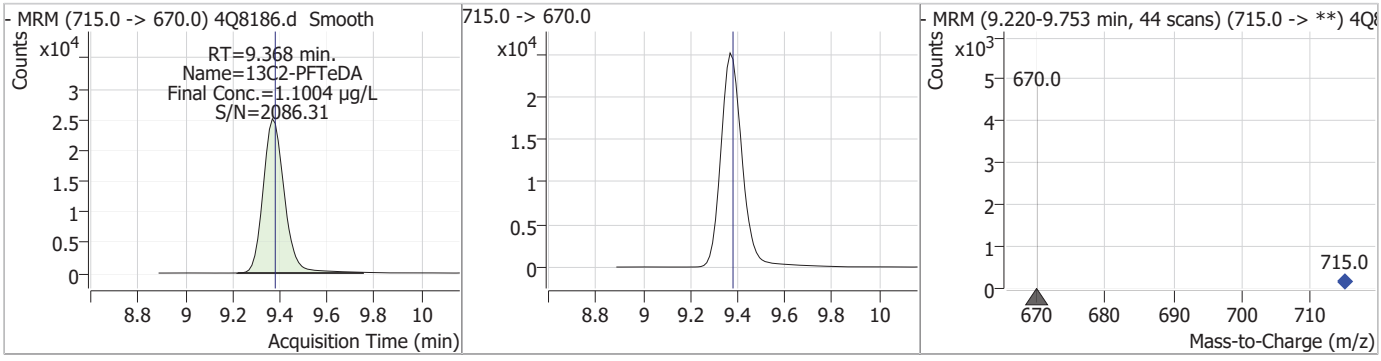
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.08	8.67	-0.01	200315				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.16	9.27	-0.02	161522				

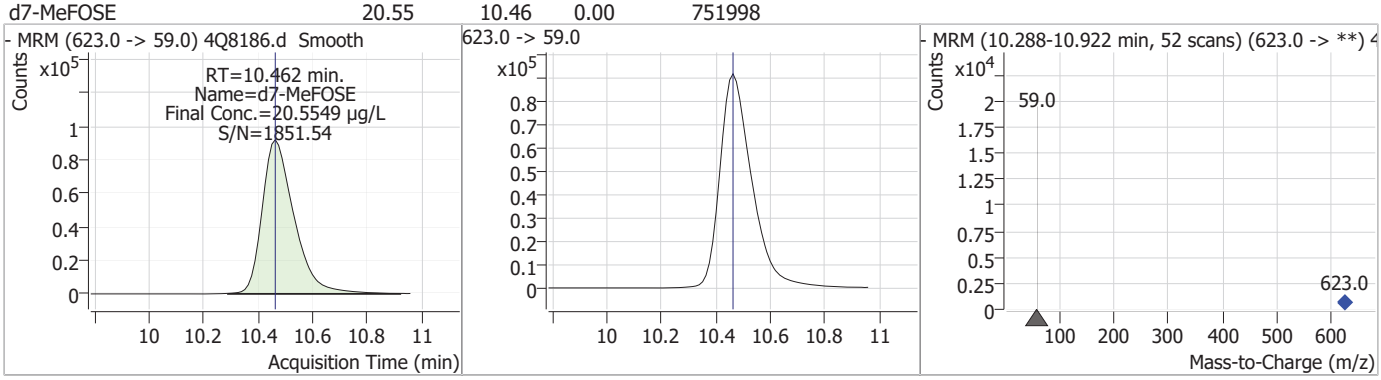


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.10	9.37	-0.01	156688				

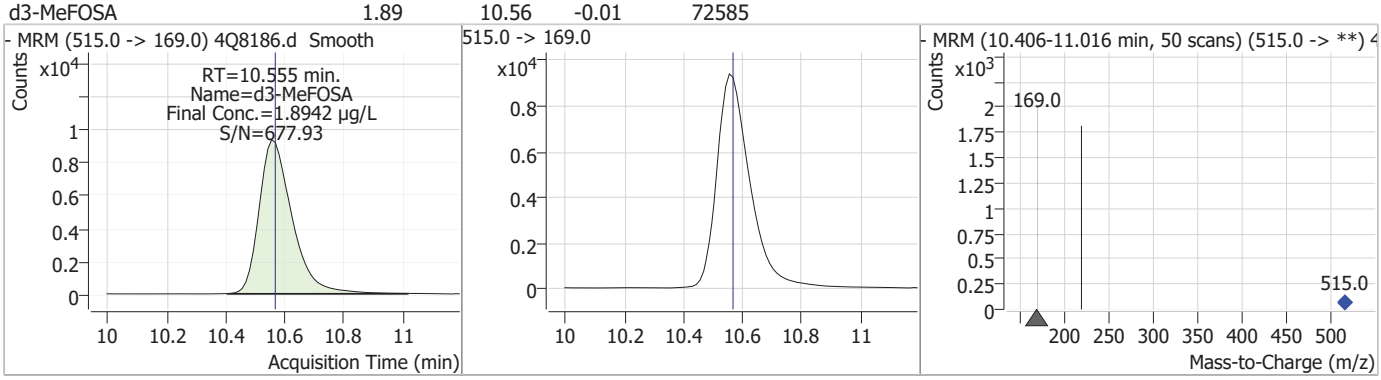


Perfluorinated Compounds by LC/MS/MS

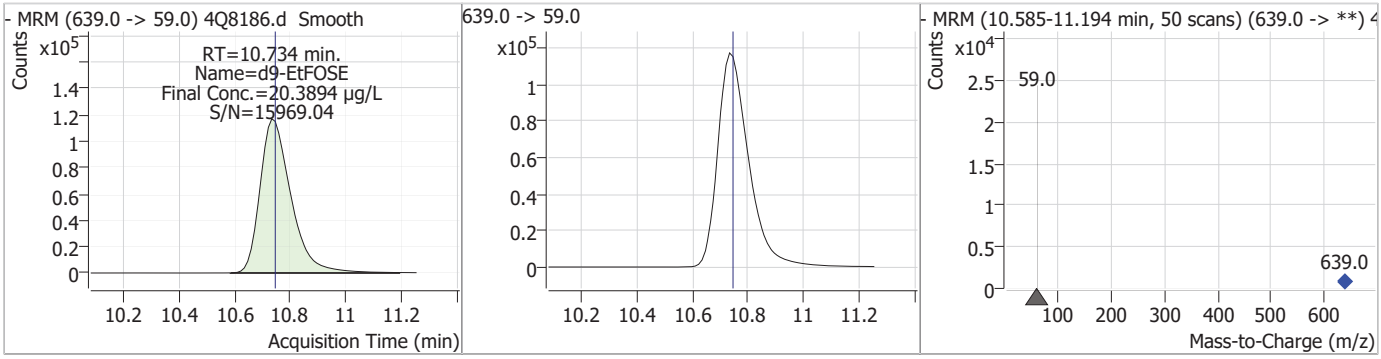
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	20.55	10.46	0.00	751998				



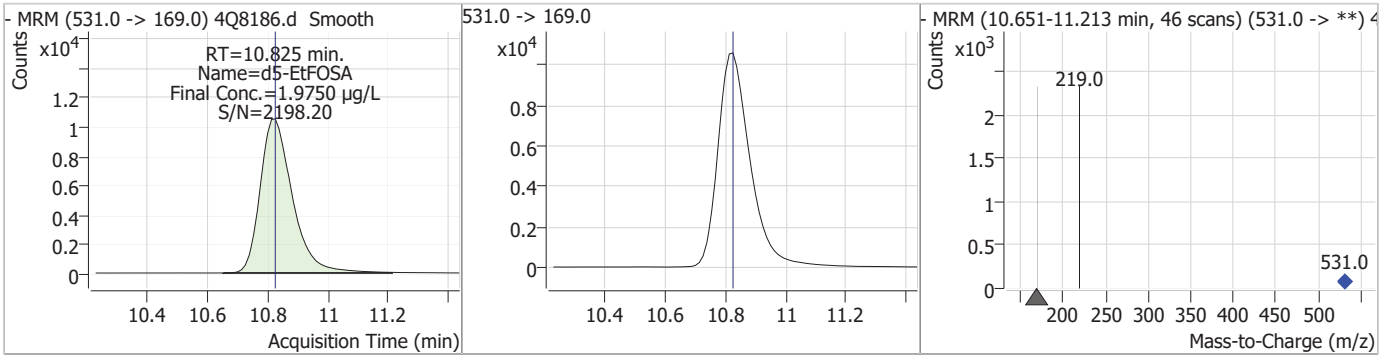
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.89	10.56	-0.01	72585				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	20.39	10.73	-0.01	904490				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.98	10.82	0.00	77992				



Manual Integration Approval Summary

Sample Number: JE10205-4
Lab FileID: 4Q8186.D
Injection Time: 05/01/25 14:06

Method: EPA 1633
Analyst approved: 05/02/25 05:01 Josephus Gimenez
Supervisor approved: 05/02/25 12:31 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/16/25 09:59

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26076.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/15/2025 3:09:48 PM
Sample Name : je10205-5
Vial : P1-D9
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : T1Q362.batch.bin
Sample Information : OP63534,T1Q362,65,,,5,5,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.273	217.0 -> 172.0	33315	2.00 µg/L	0.012
M5-PFPeA	4.648	268.0 -> 223.0	19897	1.00 µg/L	0.000
M5-PFHxA	5.759	318.0 -> 273.0	11246	0.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	9115	0.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	13916	0.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	4661	0.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	4852	0.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	5992	0.25 µg/L	0.000
M2-PFDoDA	9.027	615.0 -> 570.0	5995	0.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	2659	0.25 µg/L	0.000
M8-FOSA	9.346	506.0 -> 78.0	3223	0.50 µg/L	0.012
M3-PFBS	5.711	302.0 -> 99.0	1223	0.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	1117	0.50 µg/L	0.000
M8-PFOS	8.316	507.0 -> 99.0	1148	0.50 µg/L	0.012
M2-4:2FTS	5.446	329.0 -> 81.0	309	1.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	520	1.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	768	1.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	6662	1.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	3270	2.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	5847	1.00 µg/L	0.000
M7-MeFOSE	10.498	623.0 -> 59.0	16885	5.00 µg/L	-0.012
M9-EtFOSE	10.768	639.0 -> 59.0	19214	5.00 µg/L	-0.012
M5-EtFOSA	10.859	531.0 -> 169.0	2593	0.50 µg/L	0.000
M3-MeFOSA	10.589	515.0 -> 169.0	2552	0.50 µg/L	-0.012
13C4-PFOS	8.317	503.0 -> 80.0	2402	0.50 µg/L	0.012
13C3-PFBA	3.276	216.0 -> 172.0	14780	1.00 µg/L	0.025
18O2-PFHxS	7.274	403.0 -> 84.0	1553	0.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	15653	0.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	4231	0.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	5251	0.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	10577	0.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	309	1.19 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 23.8%	
13C2-6:2FTS	6.922	429.0 -> 81.0	520	1.04 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 20.7%	
13C2-8:2FTS	7.927	529.0 -> 81.0	768	0.97 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 19.4%	
13C2-PFDoDA	9.027	615.0 -> 570.0	5995	0.21 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 16.7%	
13C2-PFTeDA	9.772	715.0 -> 670.0	2659	0.22 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 17.6%	
13C3-PFBS	5.711	302.0 -> 99.0	1223	0.47 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 18.9%	
13C3-PFHxS	7.275	402.0 -> 99.0	1117	0.43 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 17.2%	
13C4-PFBA	3.273	217.0 -> 172.0	33315	1.90 µg/L	0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 19.0%	
13C4-PFHpA	6.553	367.0 -> 322.0	9115	0.50 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 19.9%	
13C5-PFHxA	5.759	318.0 -> 273.0	11246	0.50 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 20.0%	
13C5-PFPeA	4.648	268.0 -> 223.0	19897	1.03 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 20.5%	
13C6-PFDA	8.139	519.0 -> 474.0	4852	0.24 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 18.9%	
13C7-PFUnDA	8.595	570.0 -> 525.0	5992	0.20 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 16.1%	
13C8-FOSA	9.346	506.0 -> 78.0	3223	0.44 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 17.6%	
13C8-PFOA	7.148	421.0 -> 376.0	13916	0.49 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 19.5%	
13C8-PFOS	8.316	507.0 -> 99.0	1148	0.42 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 16.6%	
13C9-PFNA	7.656	472.0 -> 427.0	4661	0.22 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 17.4%	
d3-MeFOSAA	8.161	573.0 -> 419.0	6662	0.91 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 18.2%	
13C3-HFPO-DA	6.087	287.0 -> 169.0	3270	1.66 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 16.6%	
d3-MeFOSA	10.589	515.0 -> 169.0	2552	0.45 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 18.0%	
d5-EtFOSAA	8.358	589.0 -> 419.0	5847	0.98 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 19.6%	
d7-MeFOSE	10.498	623.0 -> 59.0	16885	4.49 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 18.0%	
d9-EtFOSE	10.768	639.0 -> 59.0	19214	4.31 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 17.3%	
d5-EtFOSA	10.859	531.0 -> 169.0	2593	0.45 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 17.9%	
Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	6.922	427.0 -> 407.0	2988	0.90 µg/L	96
		427.0 -> 81.0	1020		
8:2FTS	7.927	527.0 -> 507.0	2653	0.76 µg/L	79
		527.0 -> 81.0	1069		
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	3.266	213.0 -> 169.0	1637	0.35 µg/L	100
PFBS	5.713	299.0 -> 80.0	1102	0.16 µg/L	100
		299.0 -> 99.0	427		
PFDA	8.140	513.0 -> 469.0	1066	0.06 µg/L	89
		513.0 -> 219.0	122		
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			
PFDS	-	599.0 -> 80.0	-	N.D.	

Perfluorinated Compounds by LC/MS/MS

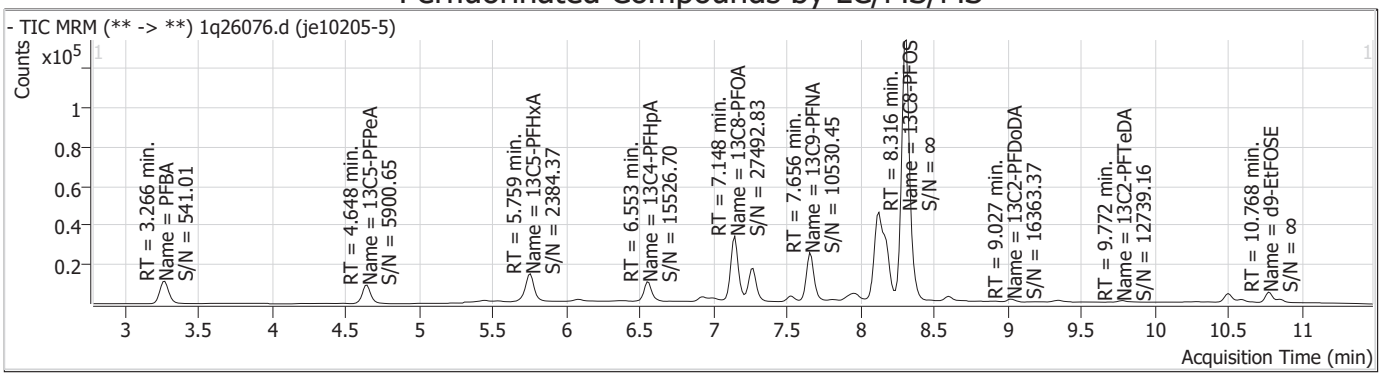
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0					
PFHpA	6.554	363.0 -> 319.0	24330	0.95	µg/L		93
		363.0 -> 169.0	4545				
PFHpS	7.822	449.0 -> 80.0	1541	0.40	µg/L		83
		449.0 -> 99.0	968				
PFHxA	5.761	313.0 -> 269.0	31019	1.51	µg/L		100
		313.0 -> 119.0	879				
PFHxS	7.276	399.0 -> 80.0	43521	10.00	µg/L	m	99
		399.0 -> 99.0	21956				
PFNA	7.657	463.0 -> 419.0	74802	6.40	µg/L	m	85
		463.0 -> 219.0	15779				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	7.149	413.0 -> 369.0	81241	3.38	µg/L	m	99
		413.0 -> 169.0	16462				
PFOS	8.318	499.0 -> 80.0	173979	36.14	µg/L	m	99
		499.0 -> 99.0	77982				
PFPeA	4.650	263.0 -> 219.0	18314	1.06	µg/L		100
PFPeS	6.630	349.0 -> 80.0	827	0.26	µg/L		83
		349.0 -> 99.0	474				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	8.596	563.0 -> 519.0	2727	0.14	µg/L	m	96
		563.0 -> 269.0	432				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

= Qualifier out of range, m = manually integrated, + = Area summed

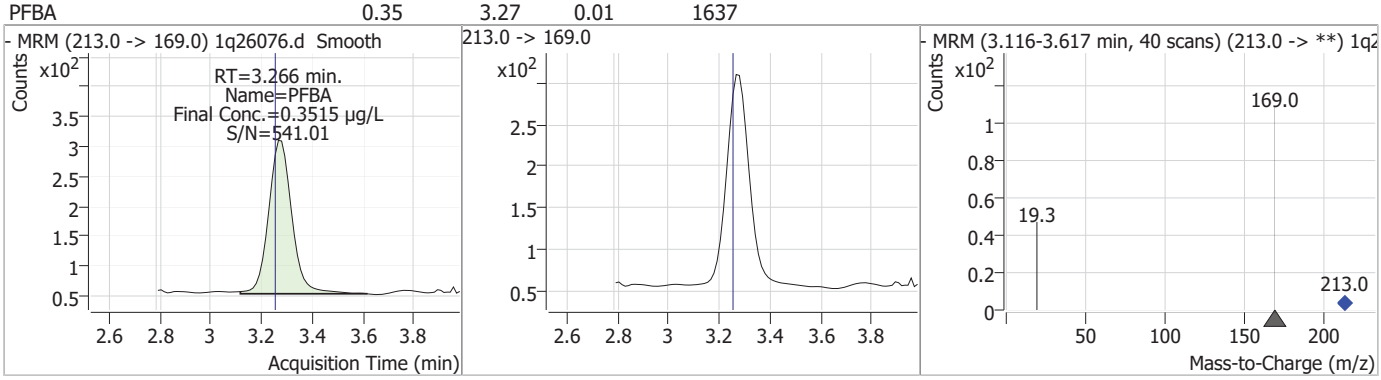
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

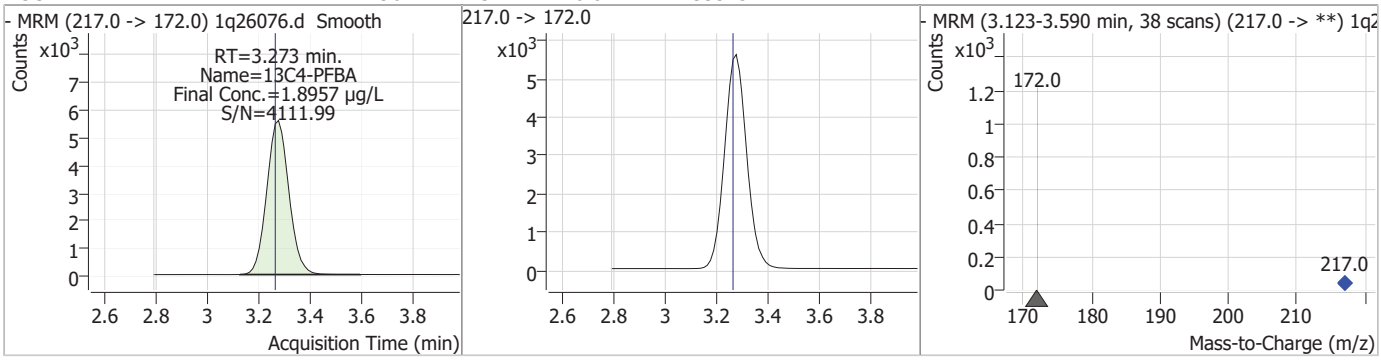
Perfluorinated Compounds by LC/MS/MS



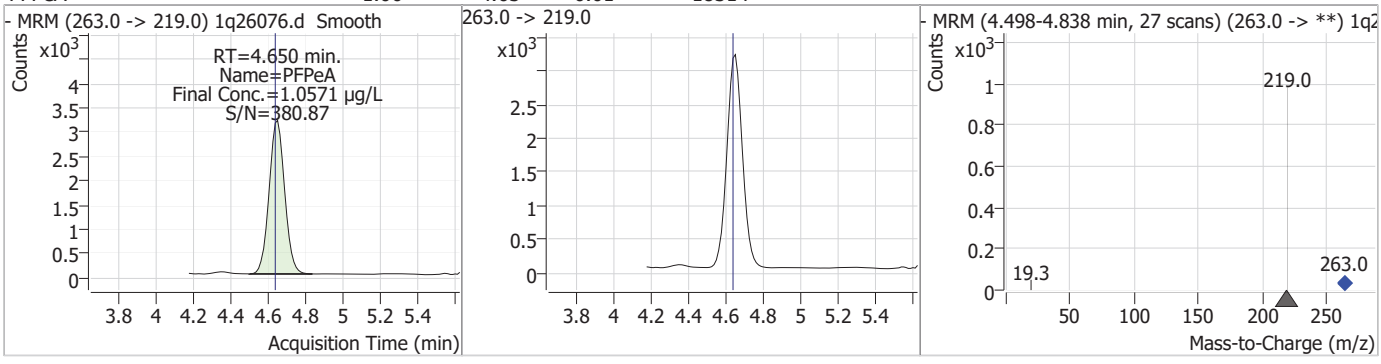
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.35	3.27	0.01	1637				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	1.90	3.27	0.01	33315				

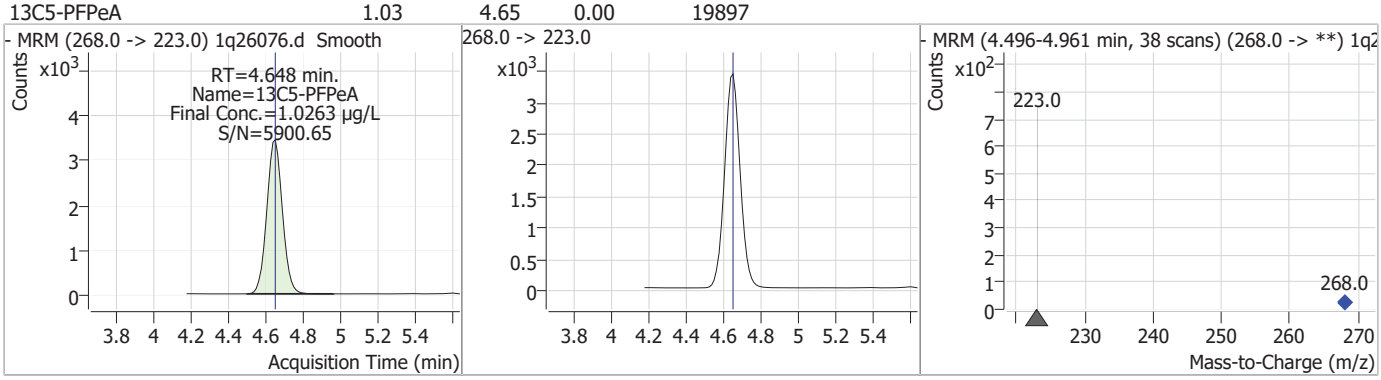


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	1.06	4.65	0.01	18314				

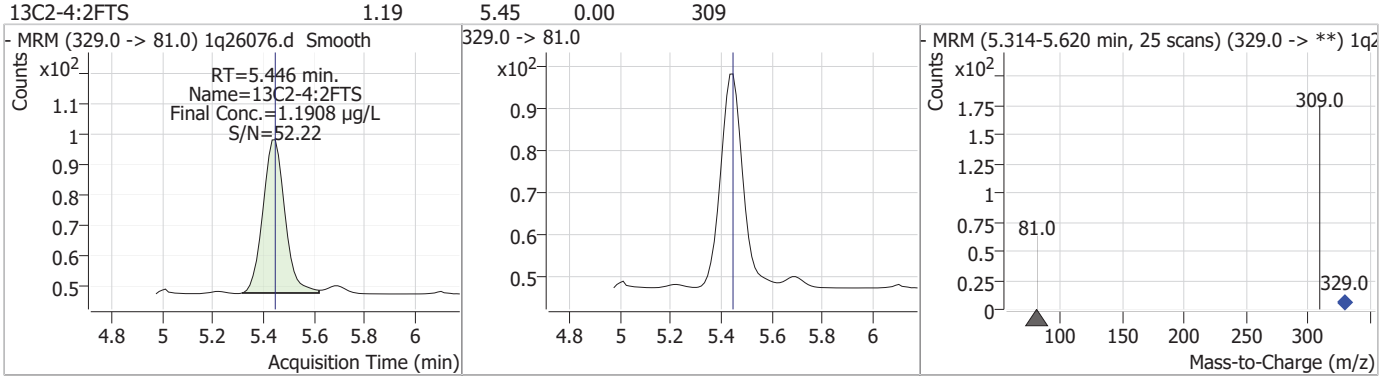


Perfluorinated Compounds by LC/MS/MS

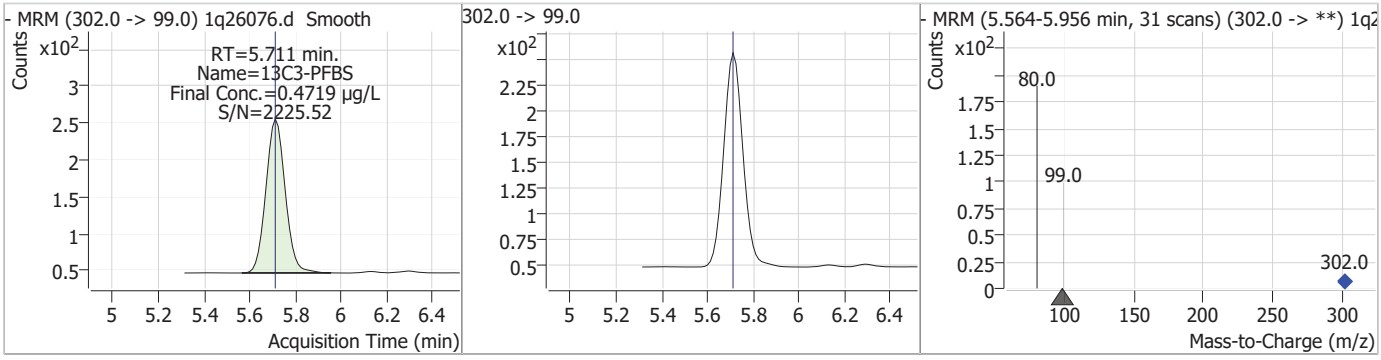
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	1.03	4.65	0.00	19897				



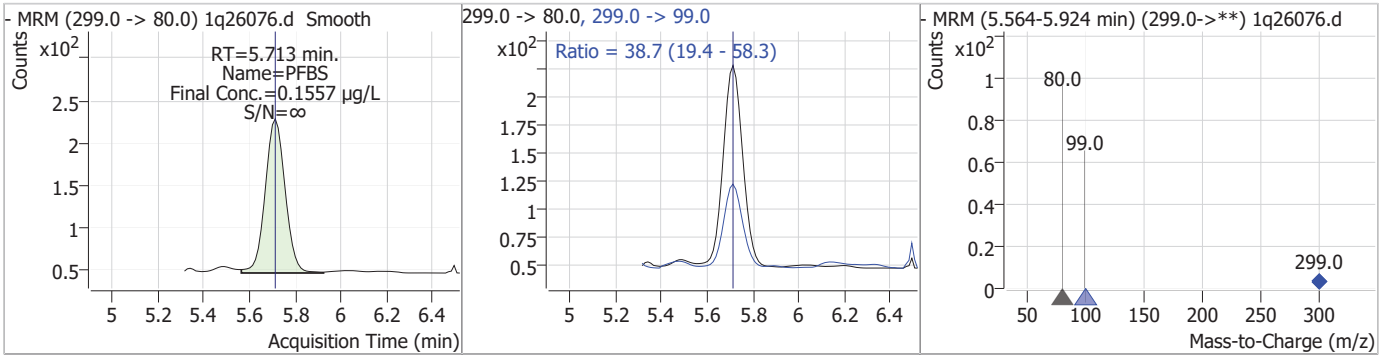
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	1.19	5.45	0.00	309				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	0.47	5.71	0.00	1223				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.16	5.71	0.00	1102	299.0 -> 99.0	38.7	19.4	58.3

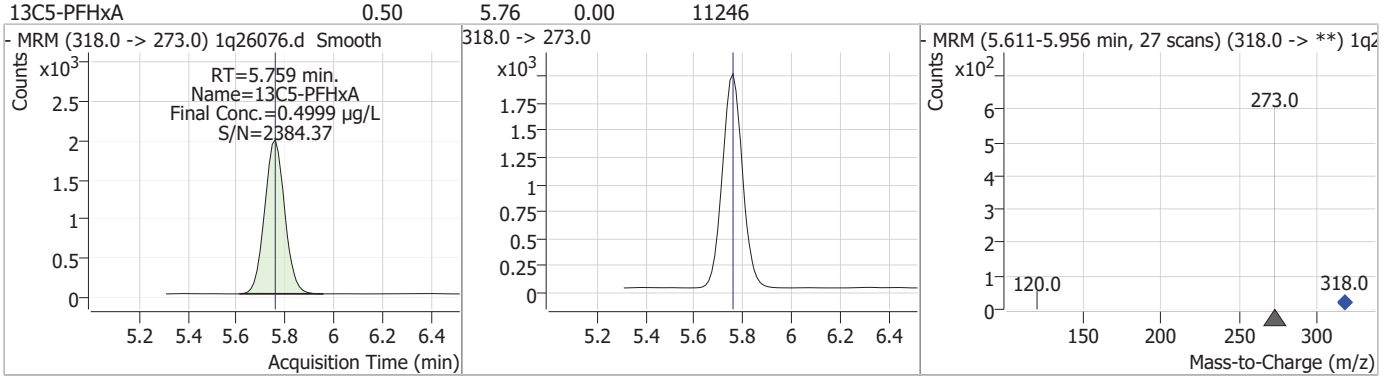


7.1.8

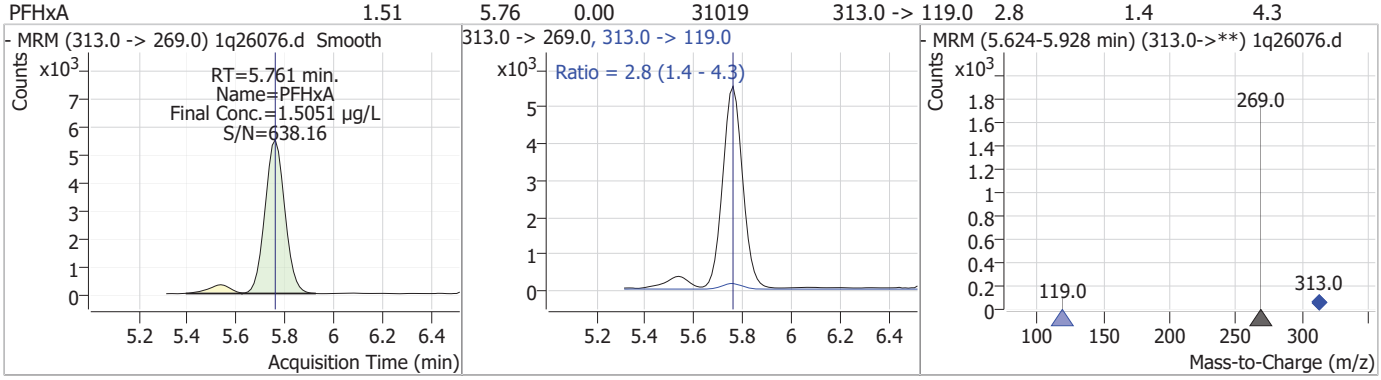
7

Perfluorinated Compounds by LC/MS/MS

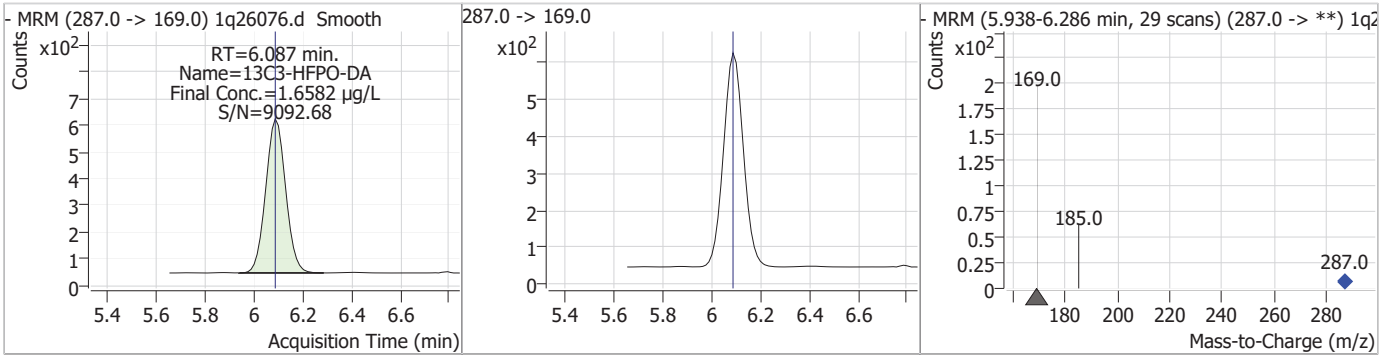
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	0.50	5.76	0.00	11246				



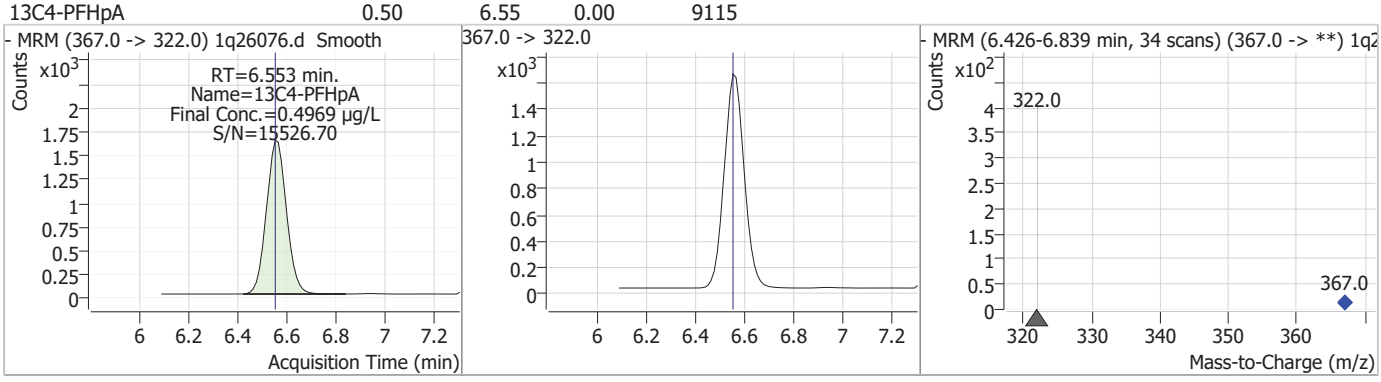
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	1.51	5.76	0.00	31019	313.0 -> 119.0	2.8	1.4	4.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	1.66	6.09	0.00	3270				

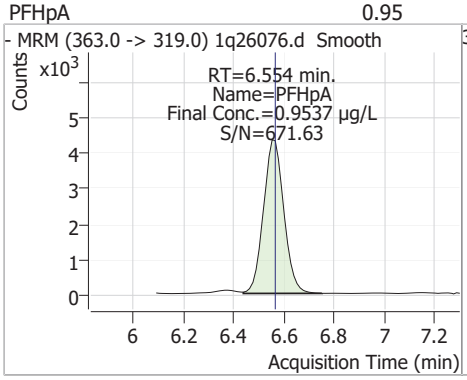


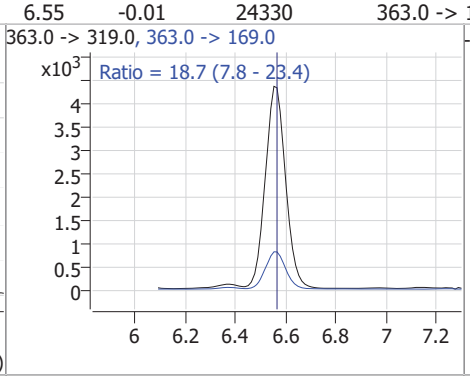
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	0.50	6.55	0.00	9115				

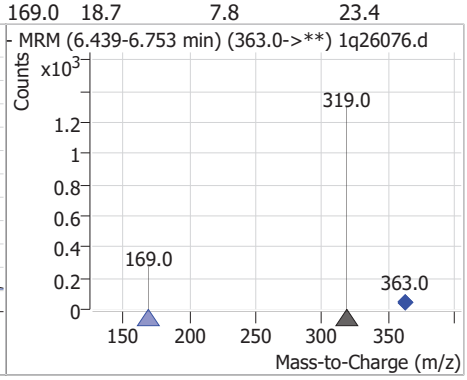


Perfluorinated Compounds by LC/MS/MS

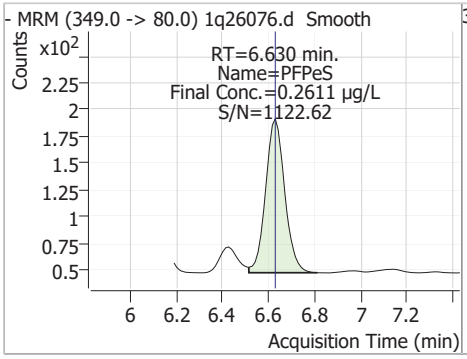
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.95	6.55	-0.01	24330	363.0 -> 169.0	18.7	7.8	23.4

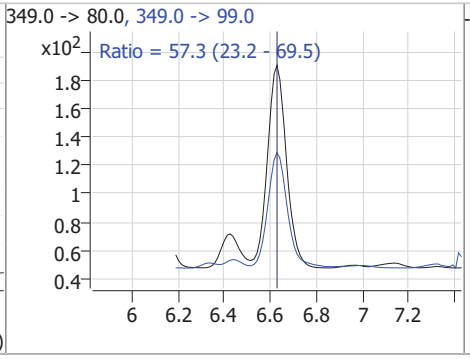


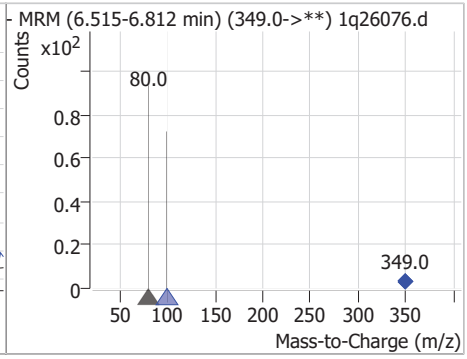




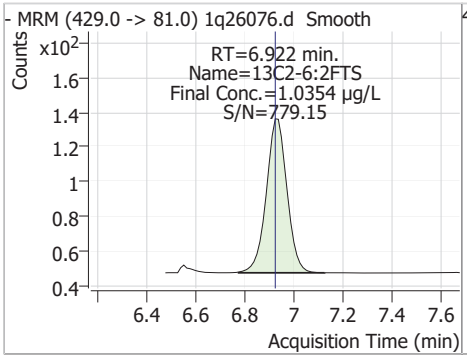
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.26	6.63	0.00	827	349.0 -> 99.0	57.3	23.2	69.5

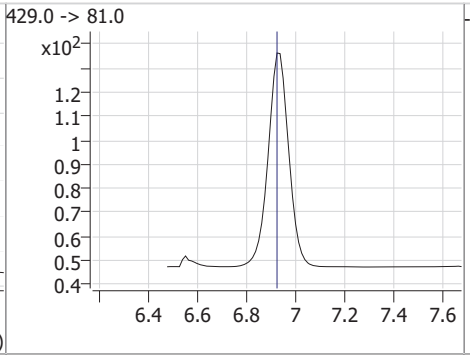


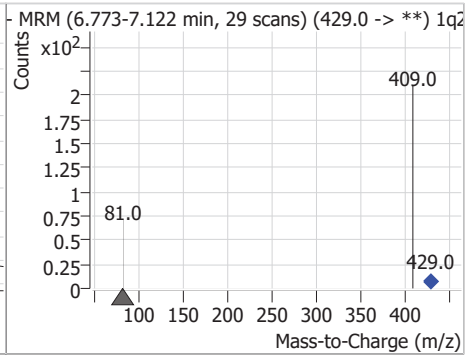




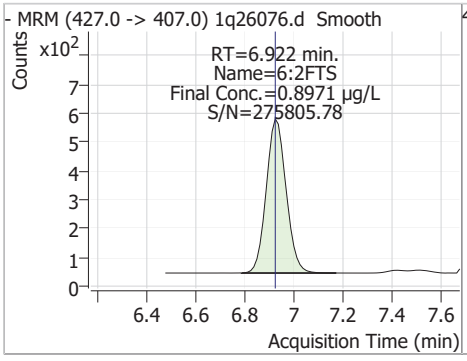
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	1.04	6.92	0.00	520				

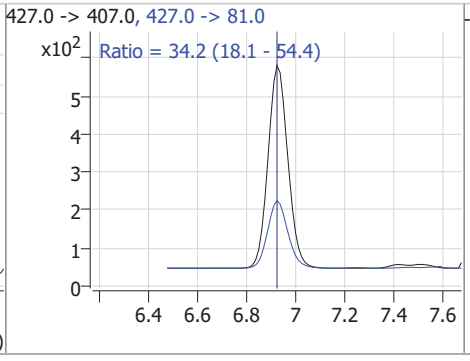


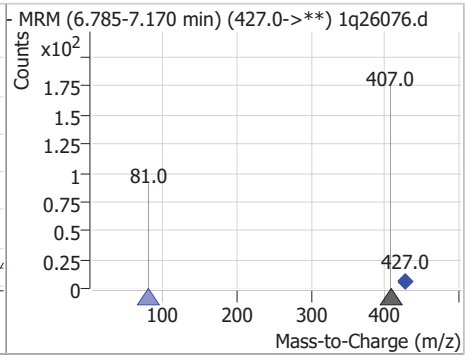




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.90	6.92	0.00	2988	427.0 -> 81.0	34.2	18.1	54.4

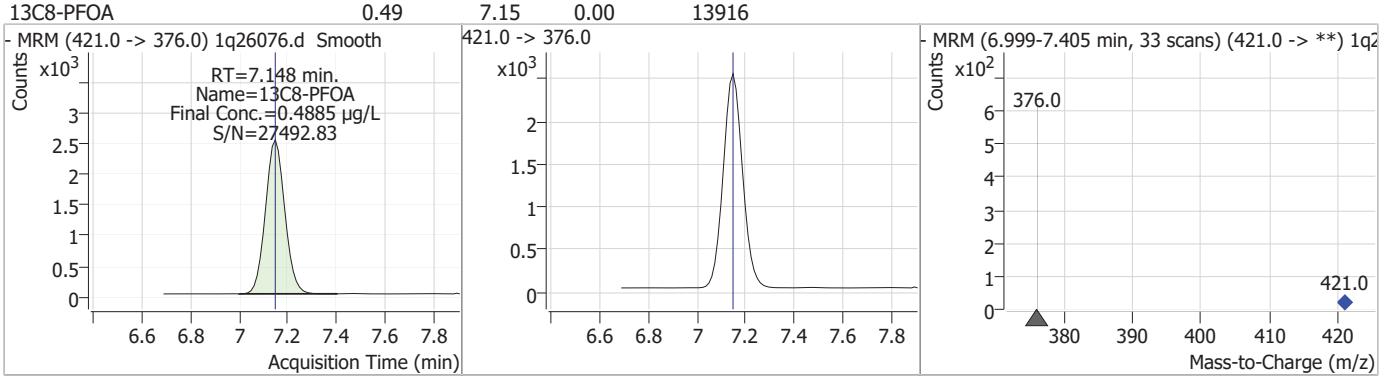




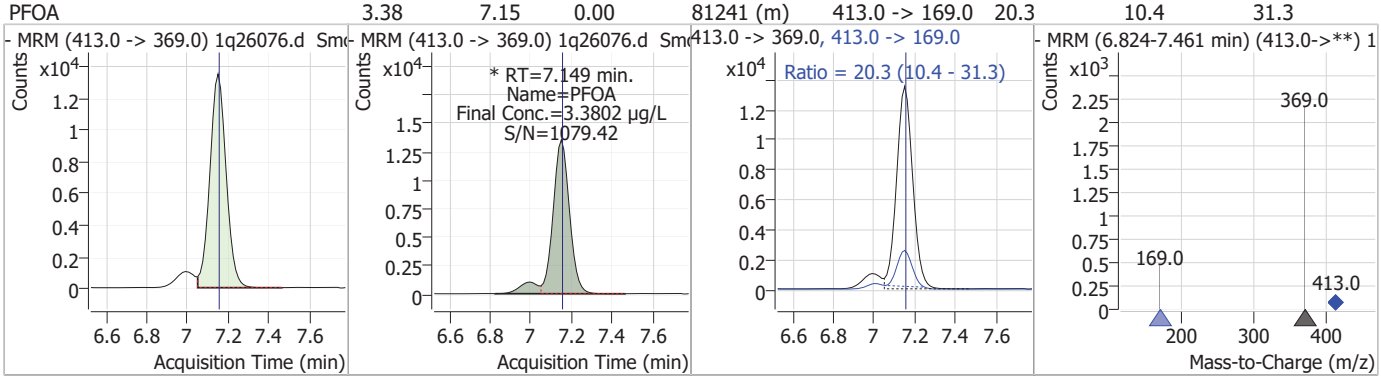


Perfluorinated Compounds by LC/MS/MS

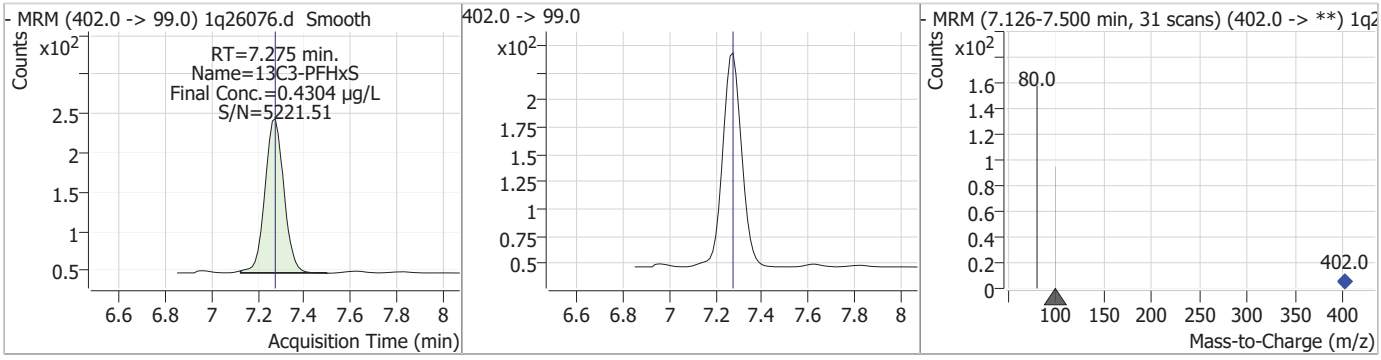
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	0.49	7.15	0.00	13916				



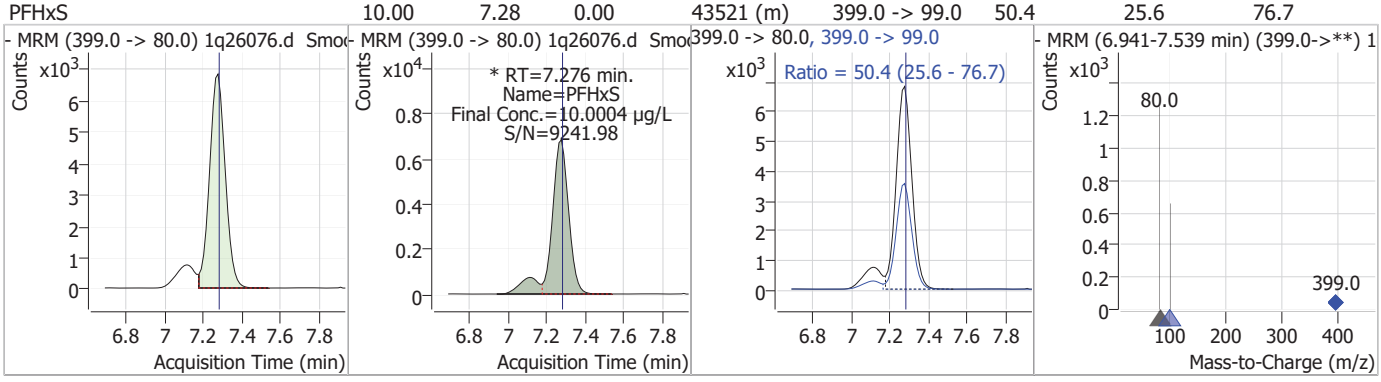
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	3.38	7.15	0.00	81241 (m)	413.0 -> 169.0	20.3	10.4	31.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	0.43	7.27	0.00	1117				

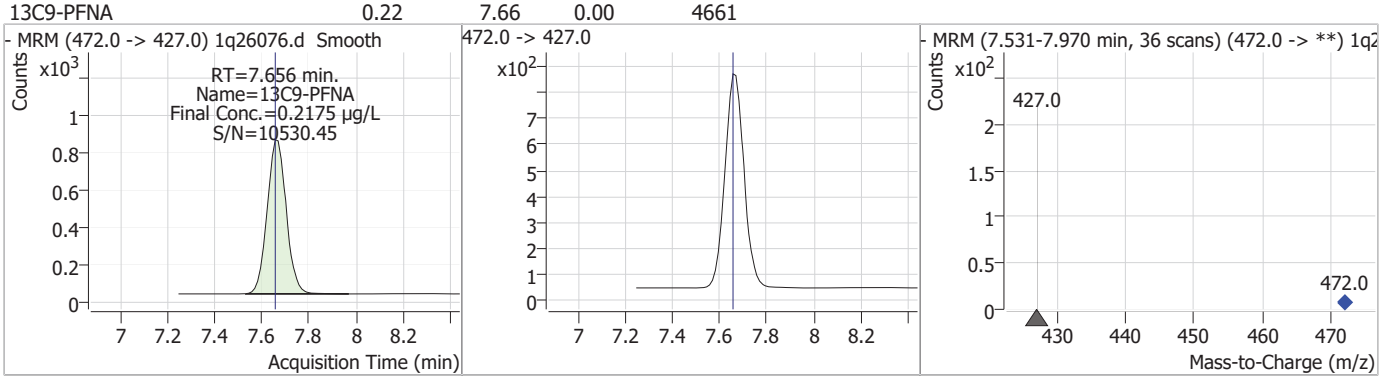


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	10.00	7.28	0.00	43521 (m)	399.0 -> 99.0	50.4	25.6	76.7

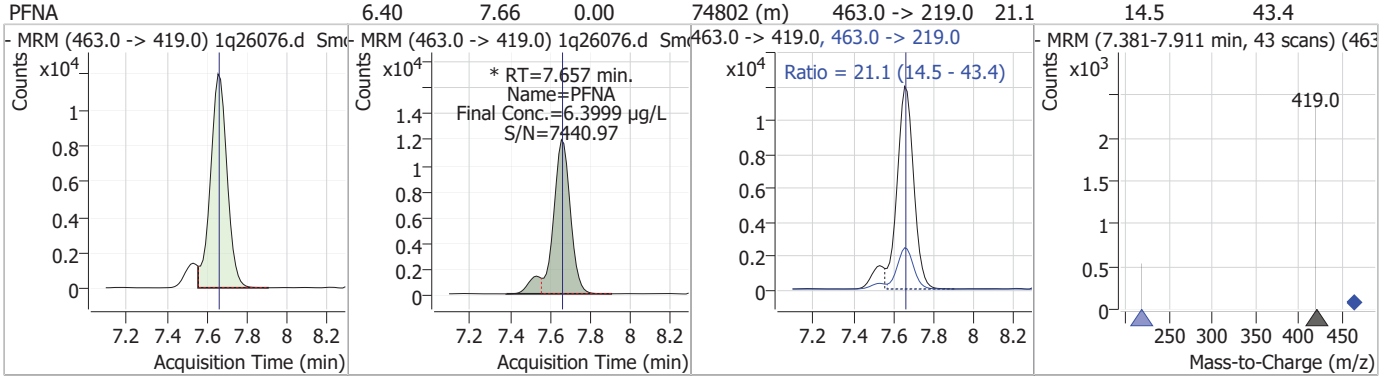


Perfluorinated Compounds by LC/MS/MS

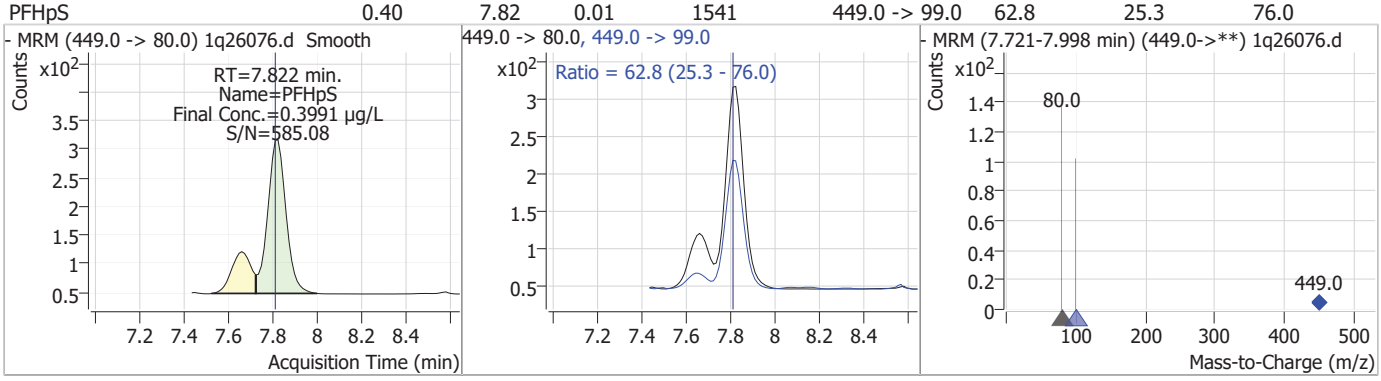
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	0.22	7.66	0.00	4661				



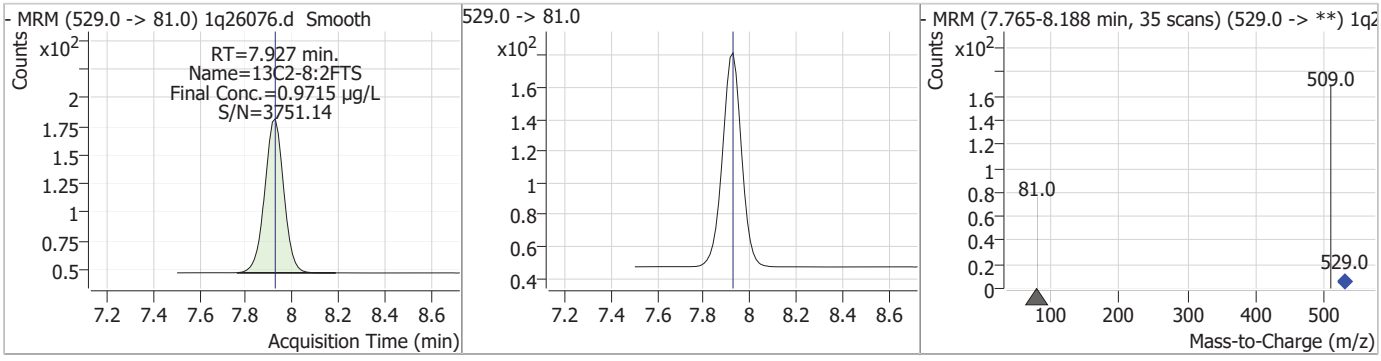
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	6.40	7.66	0.00	74802 (m)	463.0 -> 219.0	21.1	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.40	7.82	0.01	1541	449.0 -> 99.0	62.8	25.3	76.0

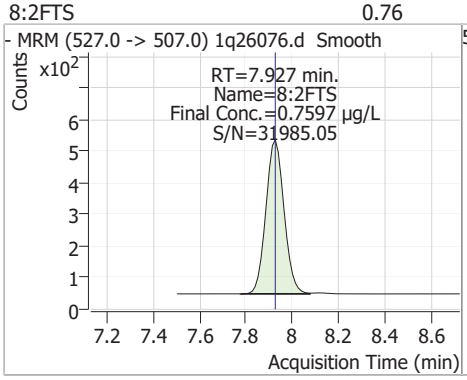


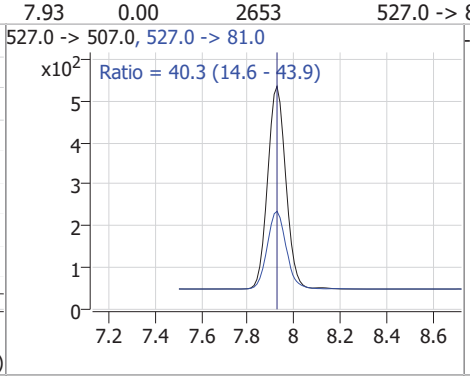
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	0.97	7.93	0.00	768				

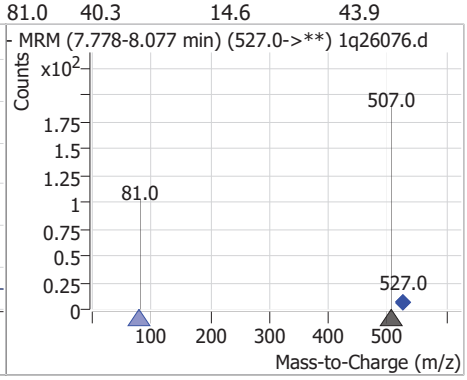


Perfluorinated Compounds by LC/MS/MS

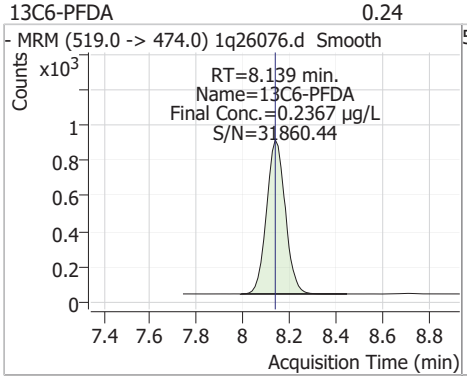
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.76	7.93	0.00	2653	527.0 -> 81.0	40.3	14.6	43.9

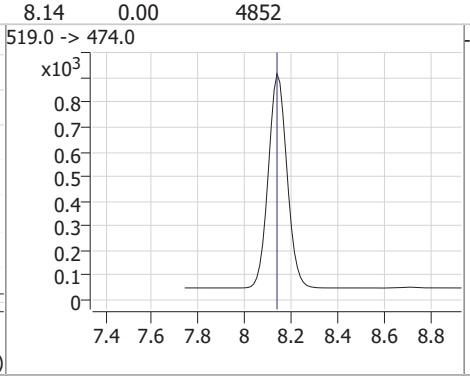


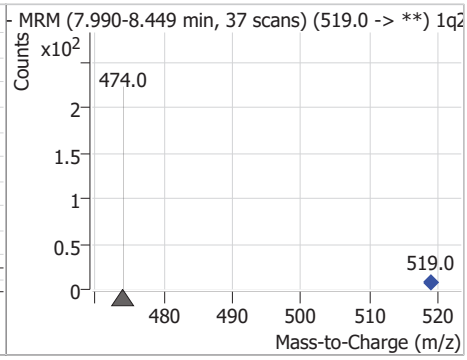




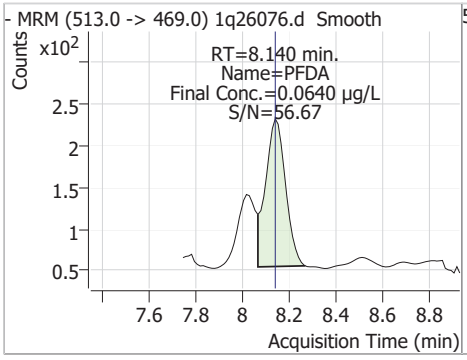
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	0.24	8.14	0.00	4852				

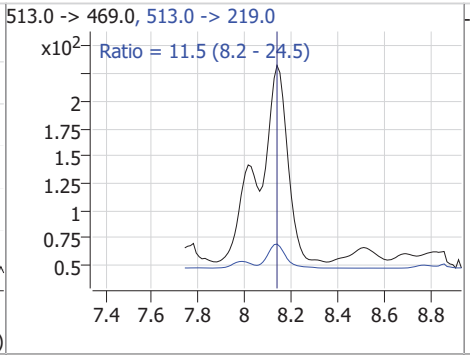


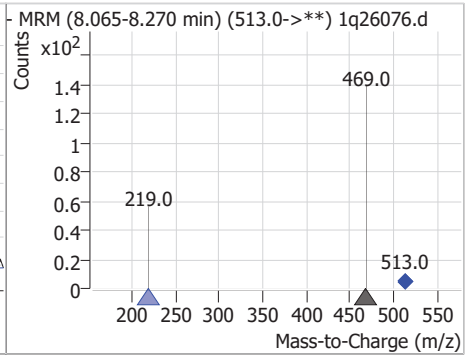




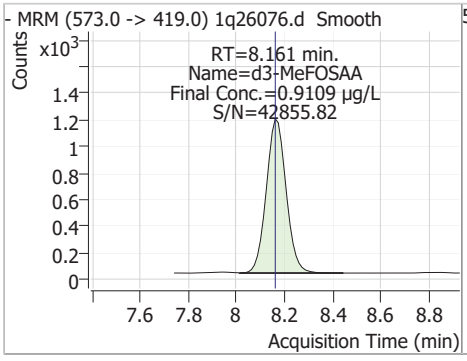
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.06	8.14	0.00	1066	513.0 -> 219.0	11.5	8.2	24.5

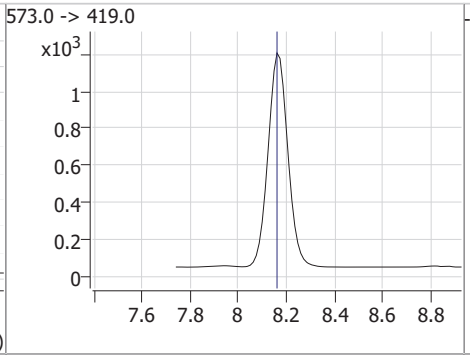


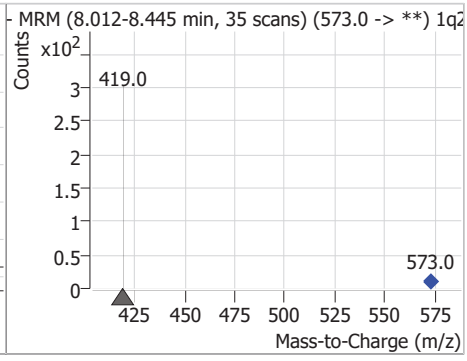




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	0.91	8.16	0.00	6662				

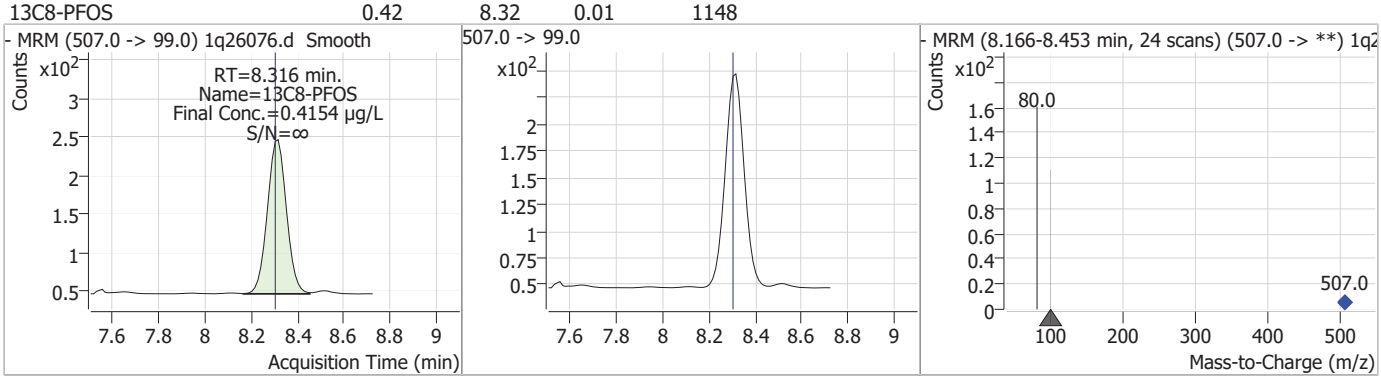




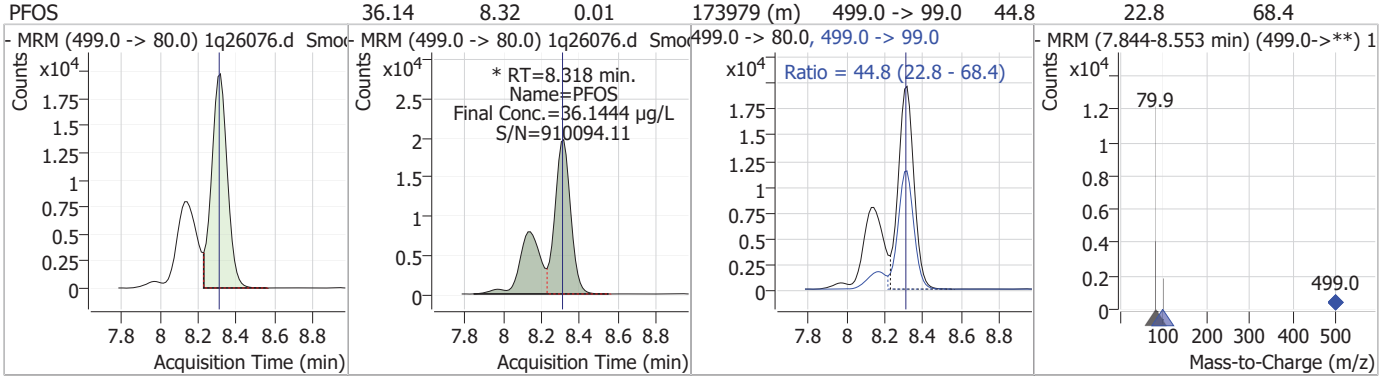


Perfluorinated Compounds by LC/MS/MS

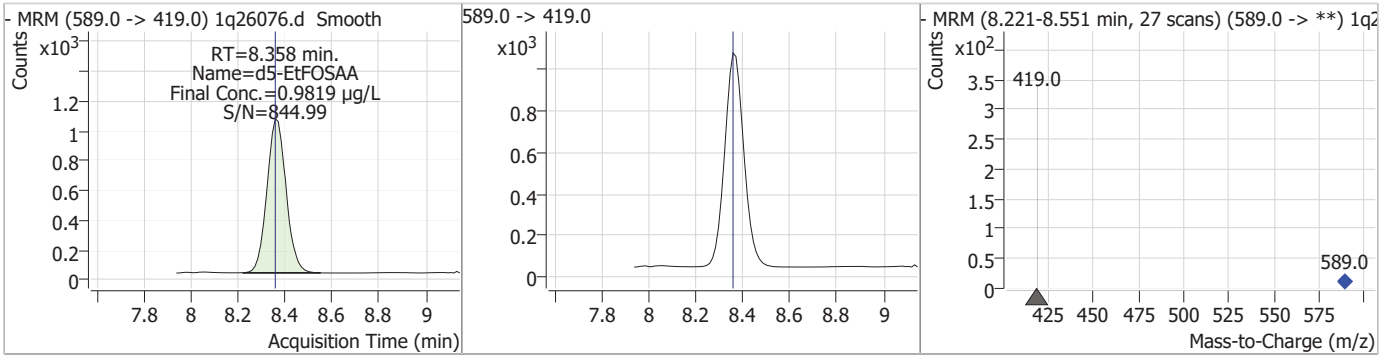
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	0.42	8.32	0.01	1148				



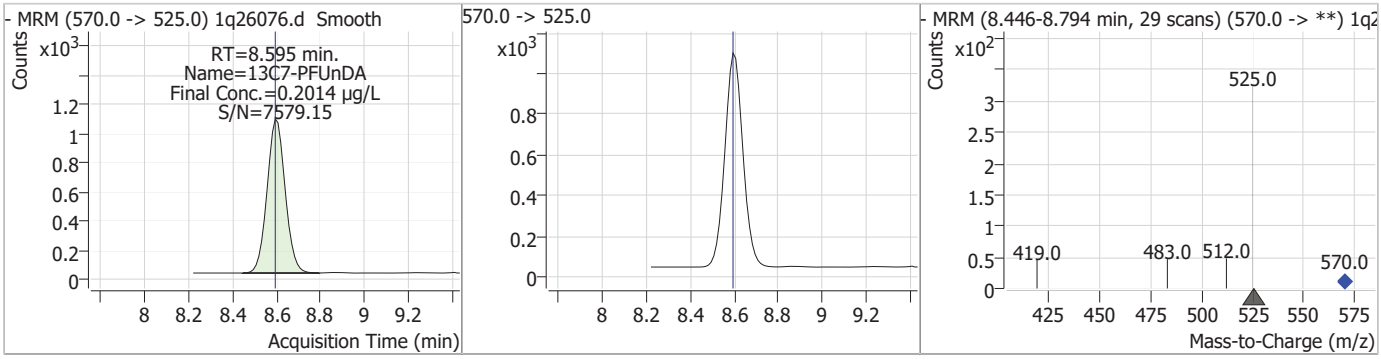
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	36.14	8.32	0.01	173979 (m)	499.0 -> 99.0	44.8	22.8	68.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	0.98	8.36	0.00	5847				

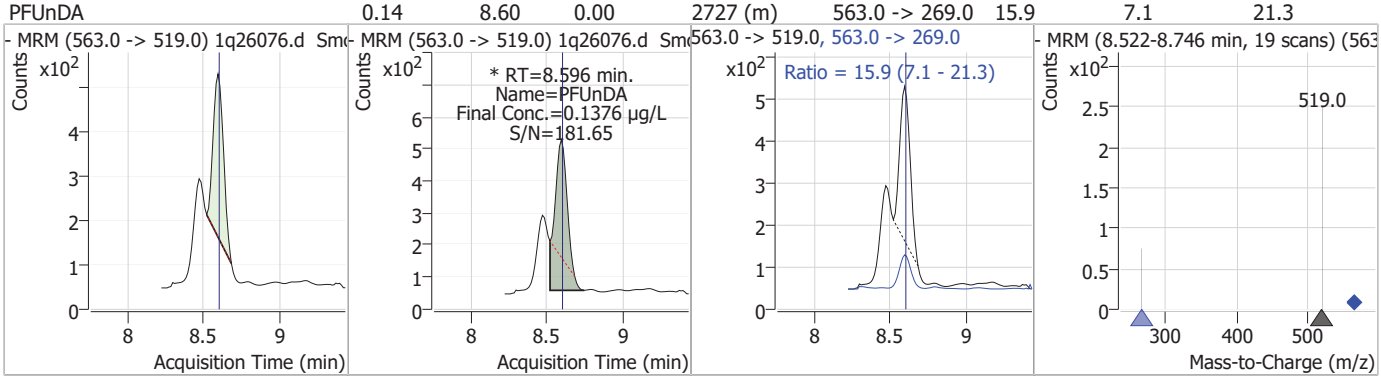


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	0.20	8.59	0.00	5992				

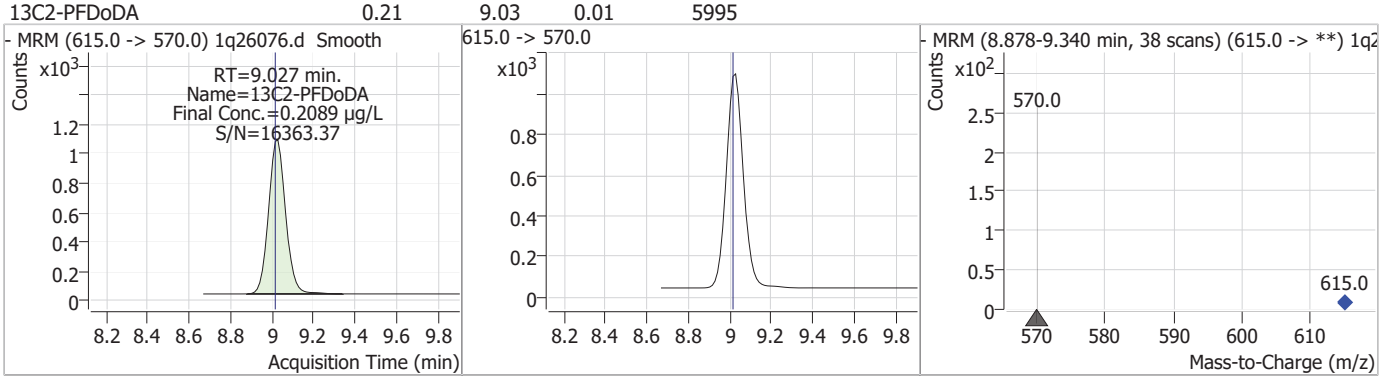


Perfluorinated Compounds by LC/MS/MS

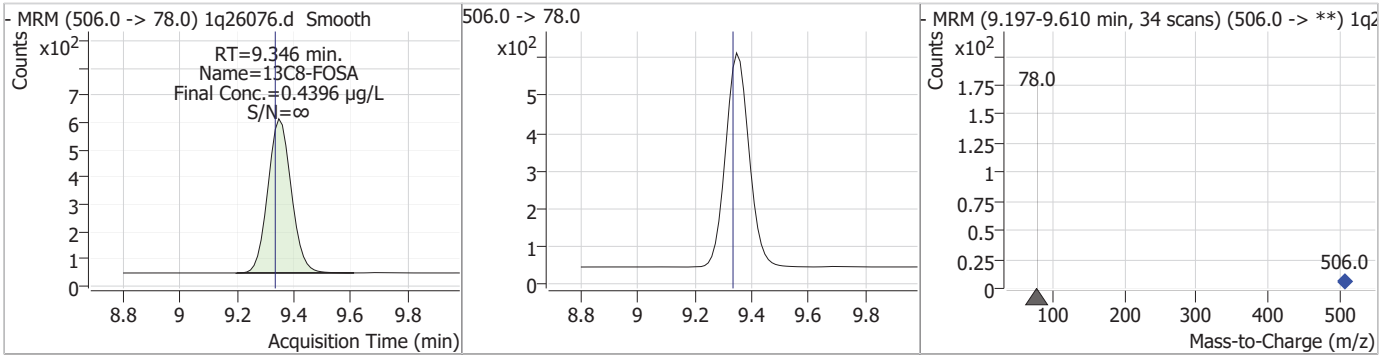
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.14	8.60	0.00	2727 (m)	563.0 -> 269.0	15.9	7.1	21.3



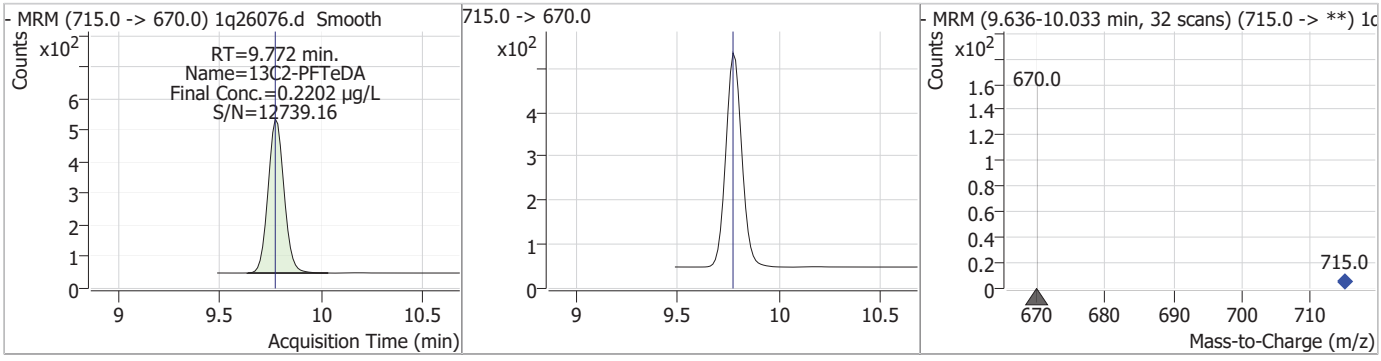
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	0.21	9.03	0.01	5995				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	0.44	9.35	0.01	3223				

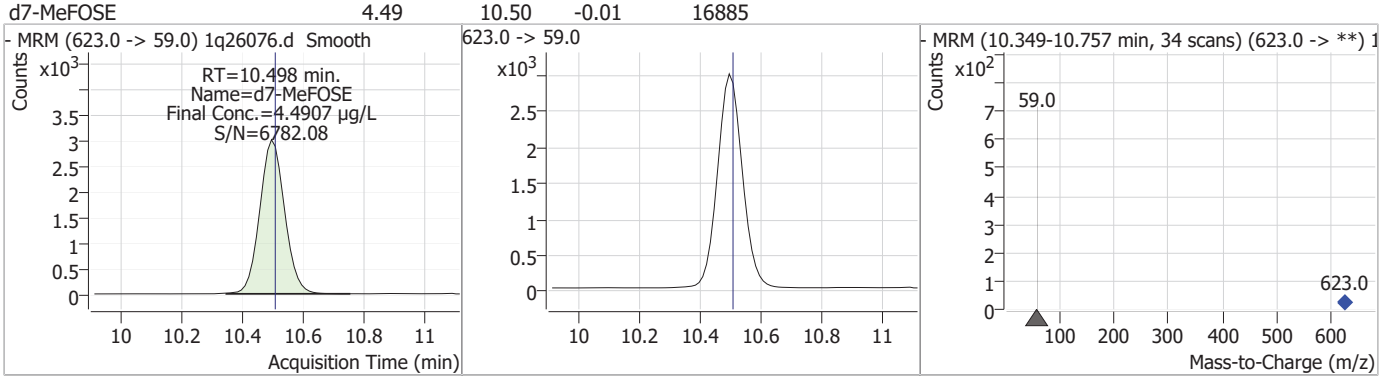


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.22	9.77	0.00	2659				

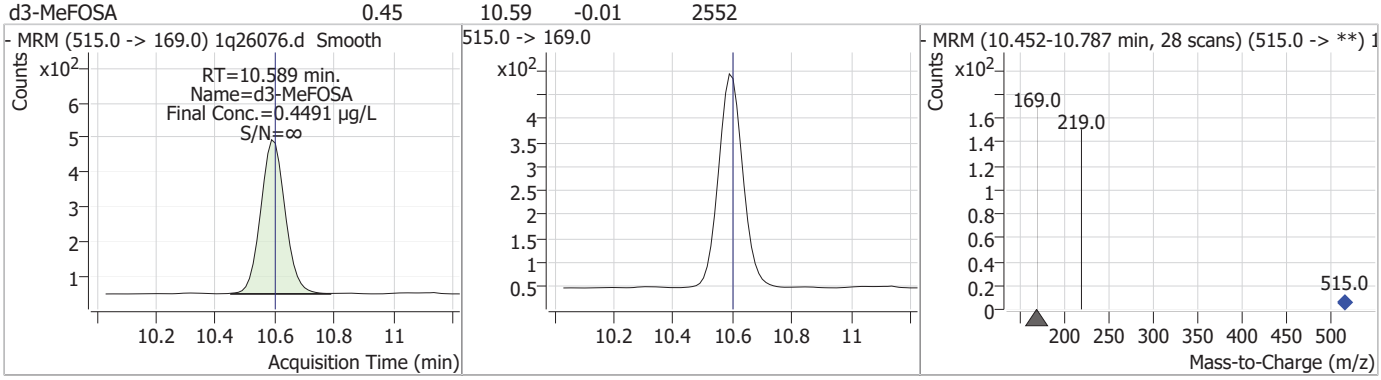


Perfluorinated Compounds by LC/MS/MS

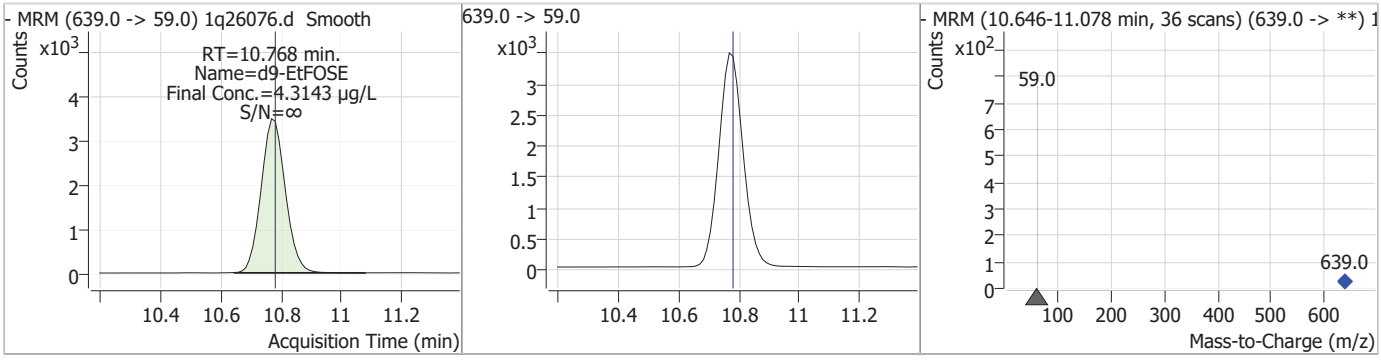
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	4.49	10.50	-0.01	16885				



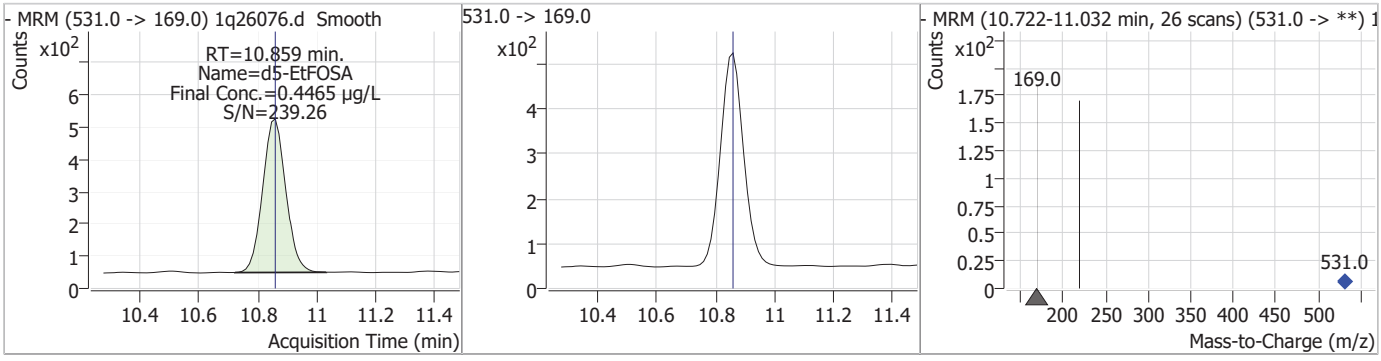
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	0.45	10.59	-0.01	2552				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	4.31	10.77	-0.01	19214				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	0.45	10.86	0.00	2593				



7.1.8

7

Manual Integration Approval Summary

Sample Number: JE10205-5
Lab FileID: 1Q26076.D
Injection Time: 05/15/25 15:09
Method: EPA 1633
Analyst approved: 05/16/25 08:48 Maksud Haque
Supervisor approved: 05/16/25 09:59 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.66	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
Perfluoroundecanoic acid	2058-94-8		8.60	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/16/25 09:59

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8165.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 10:51:41 PM
Sample Name : JE10205-5
Vial : P1-D8
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,481,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.871	217.0 -> 172.0	804560	10.00 µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	366158	5.00 µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	281220	2.50 µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	286647	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	415580	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	165148	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	157058	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	225675	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	194896	1.25 µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	140942	1.25 µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	157842	2.50 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	24838	2.50 µg/L	0.000
		302.0 -> 80.0	64694		
M3-PFHxS	6.986	402.0 -> 99.0	29071	2.50 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	25622	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	14321	5.00 µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	22948	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	26295	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	172431	5.00 µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	425460	10.00 µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	142041	5.00 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	701291	25.00 µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	847611	25.00 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	74551	2.50 µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	74494	2.50 µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	45599	2.50 µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	375649	5.00 µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	36706	2.50 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	443740	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	155364	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	173092	1.25 µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	292070	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	14321	7.78 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 155.6%	
13C2-6:2FTS	6.684	429.0 -> 81.0	22948	5.75 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 114.9%	
13C2-8:2FTS	7.671	529.0 -> 81.0	26295	5.60 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 111.9%	
13C2-PFDoDA	8.666	615.0 -> 570.0	194896	1.16 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.8%	
13C2-PFTeDA	9.368	715.0 -> 670.0	140942	1.09 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.3%	
13C3-PFBS	5.368	302.0 -> 99.0	24838	2.74 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 109.7%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	29071	2.27 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.7%		
13C4-PFBA	2.871	217.0 -> 172.0	804560	9.34 µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 93.4%		
13C4-PFHpA	6.291	367.0 -> 322.0	286647	2.18 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 87.2%		
13C5-PFHxA	5.452	318.0 -> 273.0	281220	2.27 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.0%		
13C5-PFPeA	4.319	268.0 -> 223.0	366158	3.90 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 78.1%		
13C6-PFDA	7.858	519.0 -> 474.0	157058	1.14 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.5%		
13C7-PFUnDA	8.273	570.0 -> 525.0	225675	1.23 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.5%		
13C8-FOSA	9.279	506.0 -> 78.0	157842	3.37 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 134.8%		
13C8-PFOA	6.897	421.0 -> 376.0	415580	2.34 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.7%		
13C8-PFOS	7.995	507.0 -> 99.0	25622	2.33 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.3%		
13C9-PFNA	7.403	472.0 -> 427.0	165148	1.15 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.0%		
d3-MeFOSAA	7.915	573.0 -> 419.0	172431	5.74 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 114.8%		
13C3-HFPO-DA	5.779	287.0 -> 169.0	425460	8.76 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 87.6%		
d3-MeFOSA	10.555	515.0 -> 169.0	74494	3.10 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 123.9%		
d5-EtFOSAA	8.098	589.0 -> 419.0	142041	6.16 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 123.2%		
d7-MeFOSE	10.462	623.0 -> 59.0	701291	30.54 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 122.1%		
d9-EtFOSE	10.734	639.0 -> 59.0	847611	30.44 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 121.8%		
d5-EtFOSA	10.825	531.0 -> 169.0	74551	3.01 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 120.3%		
Target Compounds						QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.		
		327.0 -> 81.0				
6:2FTS	6.684	427.0 -> 407.0	714873	31.06 µg/L		100
		427.0 -> 81.0	335428			
8:2FTS	7.671	527.0 -> 507.0	567985	27.60 µg/L		99
		527.0 -> 81.0	218815			
EtFOSAA	-	584.0 -> 419.0	-	N.D.		
		584.0 -> 483.0				
FOSA	9.269	498.0 -> 78.0	26405	0.46 µg/L	#m	95
		498.0 -> 478.0	1200			
MeFOSAA	-	570.0 -> 419.0	-	N.D.		
		570.0 -> 512.0				
PFBA	2.877	213.0 -> 169.0	295382	12.01 µg/L		100
PFBS	5.369	299.0 -> 80.0	120487	4.24 µg/L		98
		299.0 -> 99.0	50736			
PFDA	7.859	513.0 -> 469.0	244724	2.05 µg/L		99
		513.0 -> 219.0	56603			
PFDoDA	-	613.0 -> 569.0	-	N.D.		
		613.0 -> 319.0				

Perfluorinated Compounds by LC/MS/MS

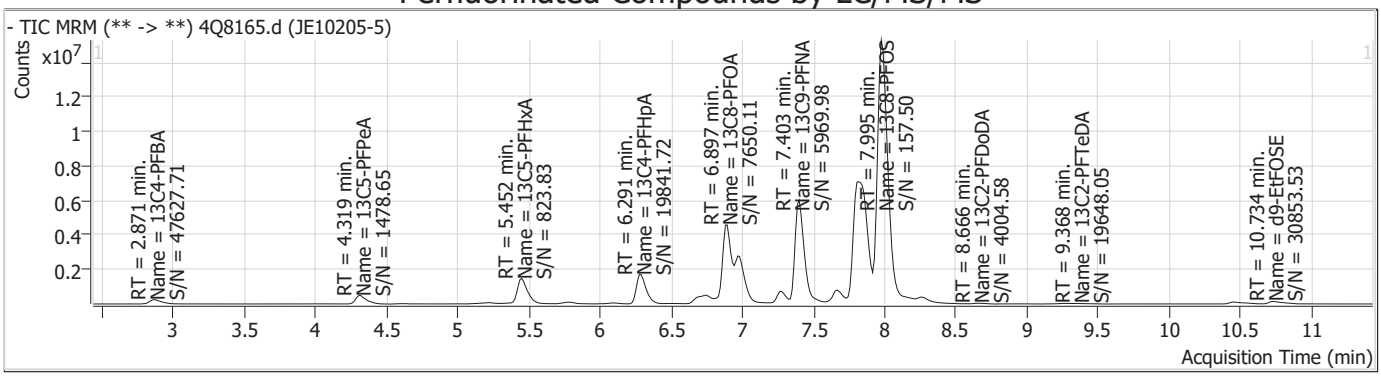
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.792	599.0 -> 80.0	189	0.01	µg/L	#m	1
		599.0 -> 99.0	265				
PFHpA	6.292	363.0 -> 319.0	6368362	36.52	µg/L		99
		363.0 -> 169.0	1303463				
PFHpS	7.529	449.0 -> 80.0	424519	16.89	µg/L		100
		449.0 -> 99.0	234197				
PFHxA	5.455	313.0 -> 269.0	6601022	54.46	µg/L		100
		313.0 -> 119.0	222283				
PFHxS	6.987	399.0 -> 80.0	8907085	351.85	µg/L	m	95
		399.0 -> 99.0	4444383				
PFNA	7.404	463.0 -> 419.0	23770234	239.29	µg/L		83
		463.0 -> 219.0	6431812				
PFNS	8.251	549.0 -> 80.0	0		µg/L	m	1
		549.0 -> 99.0	0				
PFOA	6.898	413.0 -> 369.0	17463742	126.26	µg/L	m	94
		413.0 -> 169.0	4569663				
PFOS	7.996	499.0 -> 80.0	30048696	1455.14	µg/L	m	92
		499.0 -> 99.0	13832400				
PFPeA	4.321	263.0 -> 219.0	2182186	37.69	µg/L		100
PFPeS	6.331	349.0 -> 80.0	263677	8.50	µg/L		99
		349.0 -> 99.0	135232				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	8.275	563.0 -> 519.0	632252	4.74	µg/L		96
		563.0 -> 269.0	114713				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

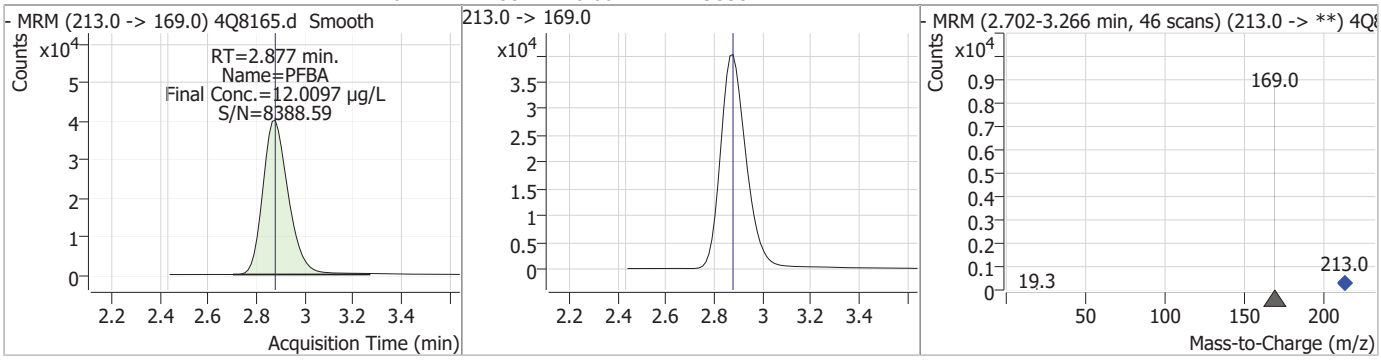
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

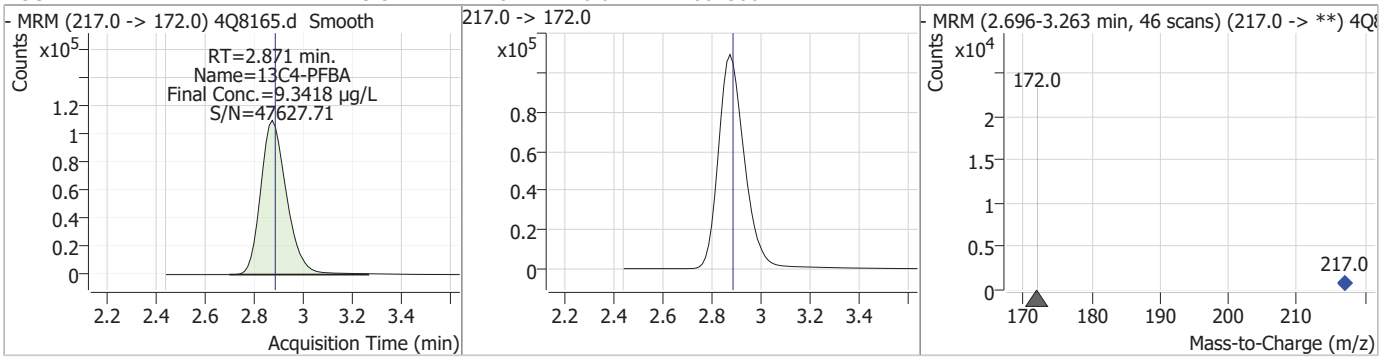
Perfluorinated Compounds by LC/MS/MS



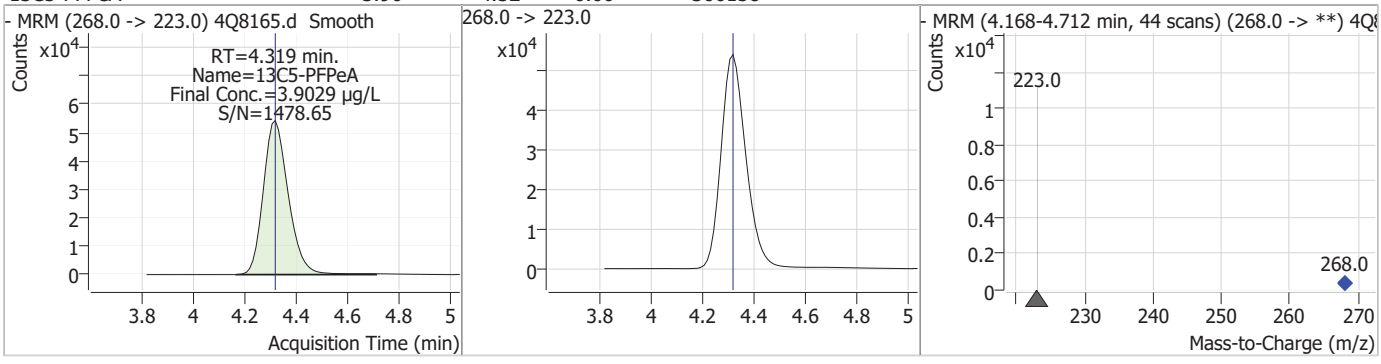
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	12.01	2.88	0.00	295382				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.34	2.87	-0.01	804560				

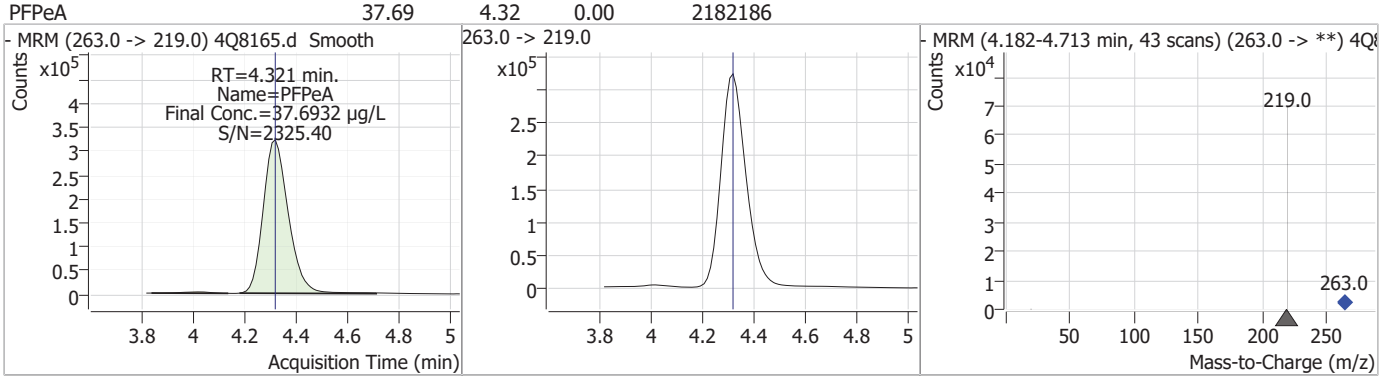


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	3.90	4.32	0.00	366158				

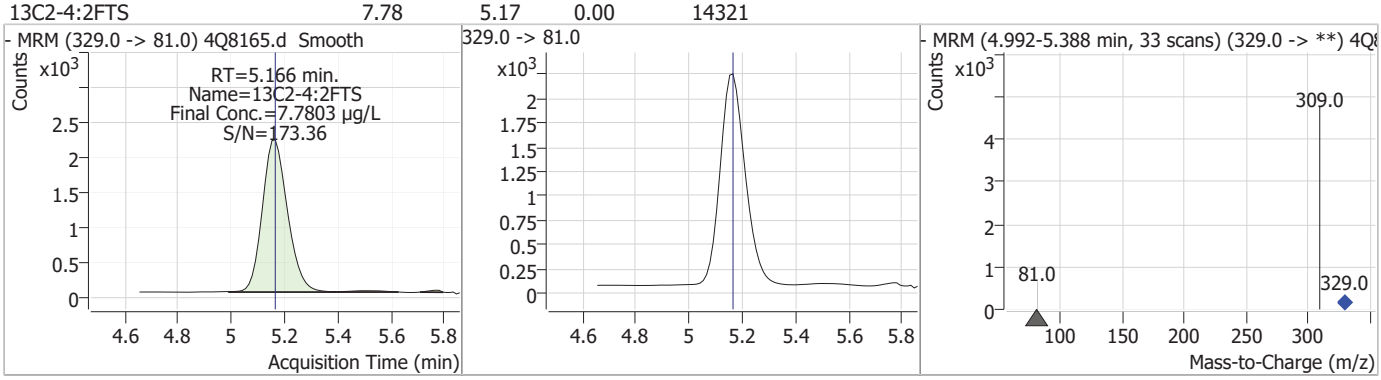


Perfluorinated Compounds by LC/MS/MS

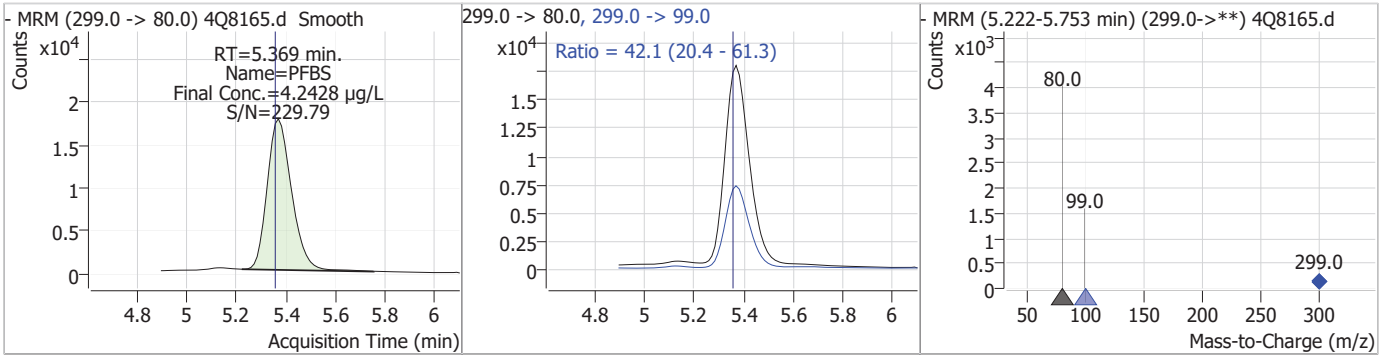
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	37.69	4.32	0.00	2182186				



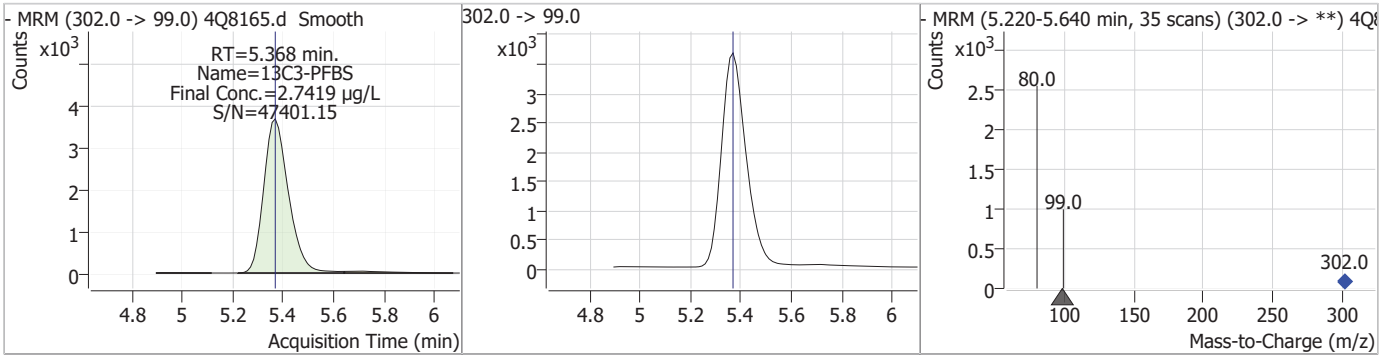
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	7.78	5.17	0.00	14321				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.24	5.37	0.01	120487	299.0 -> 99.0	42.1	20.4	61.3

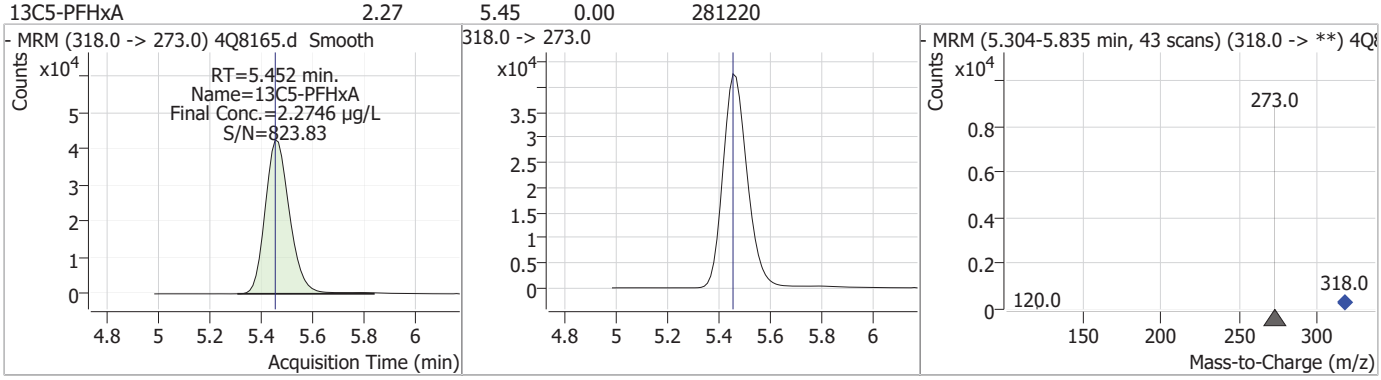


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.74	5.37	0.00	24838				

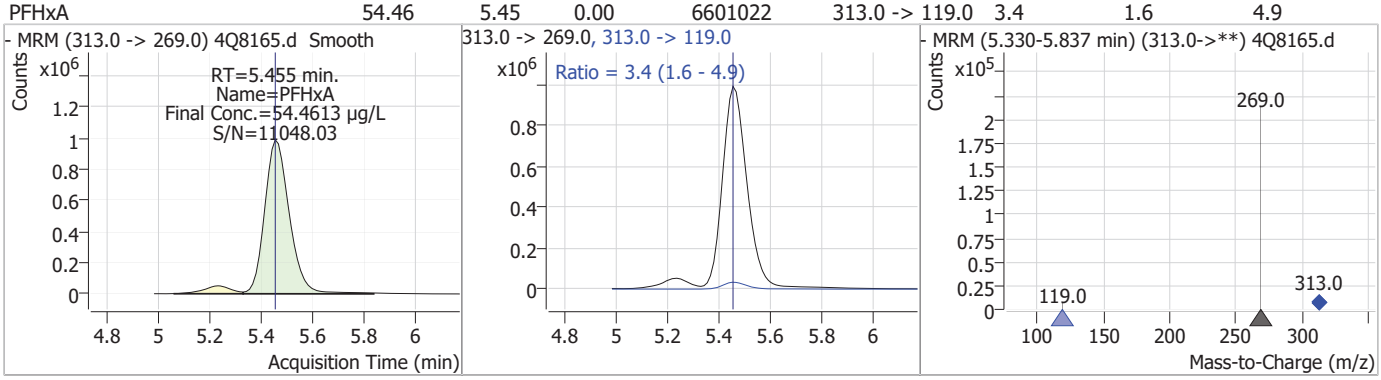


Perfluorinated Compounds by LC/MS/MS

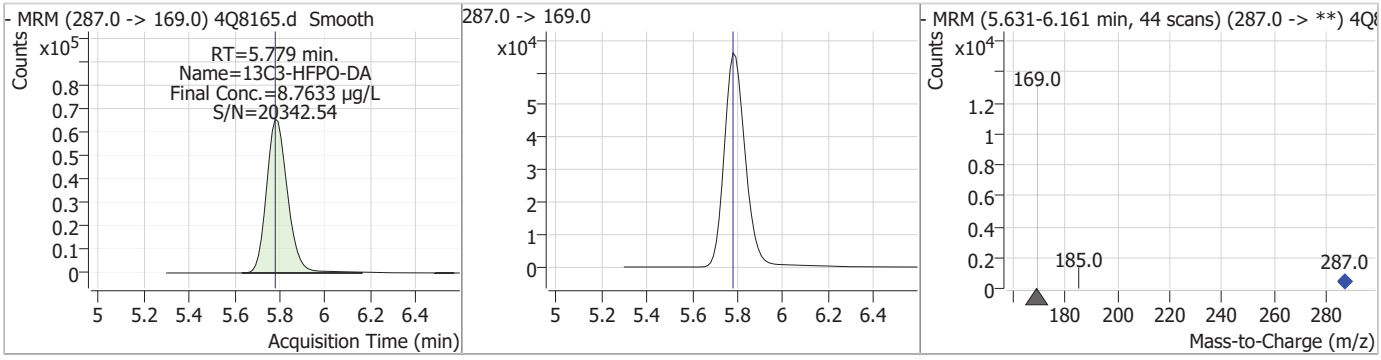
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.27	5.45	0.00	281220				



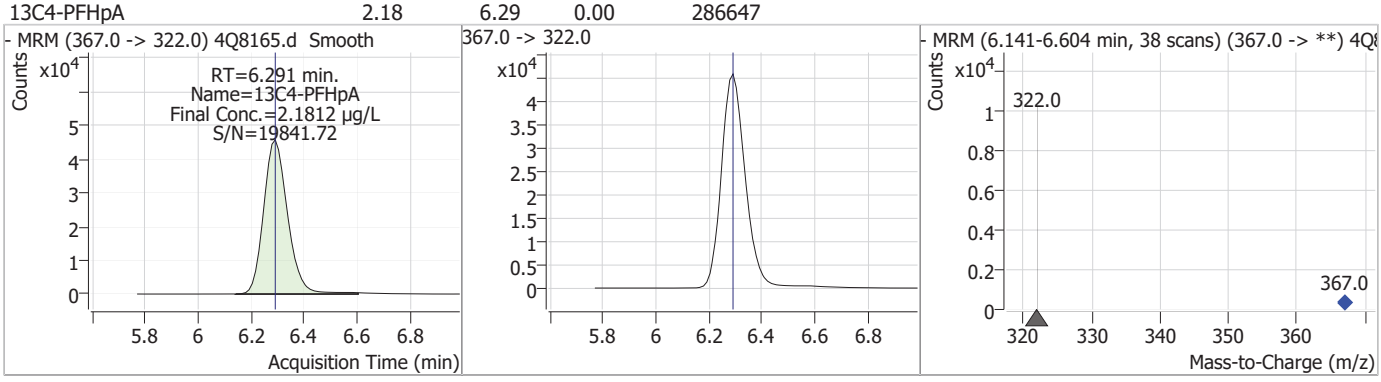
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	54.46	5.45	0.00	6601022	313.0 -> 119.0	3.4	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.76	5.78	0.00	425460				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.18	6.29	0.00	286647				



7.1.9

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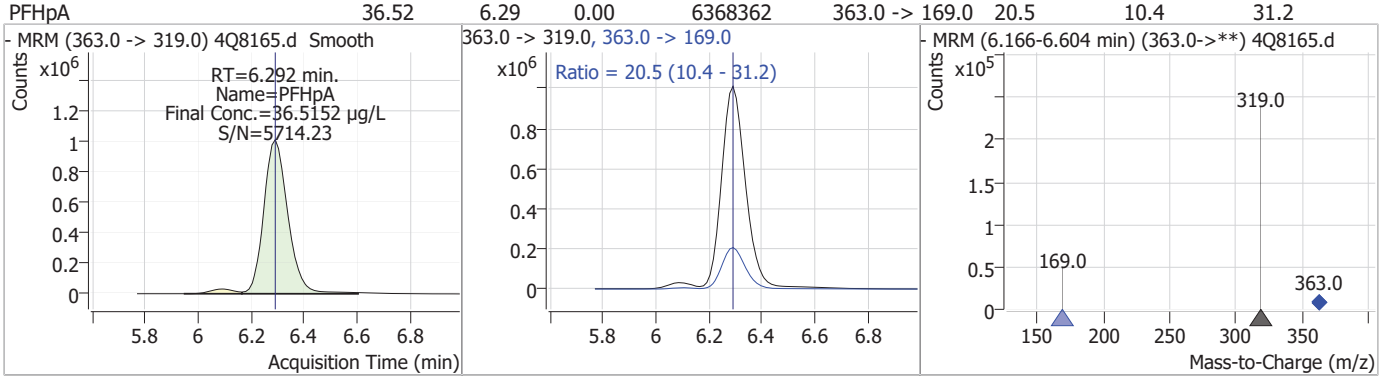
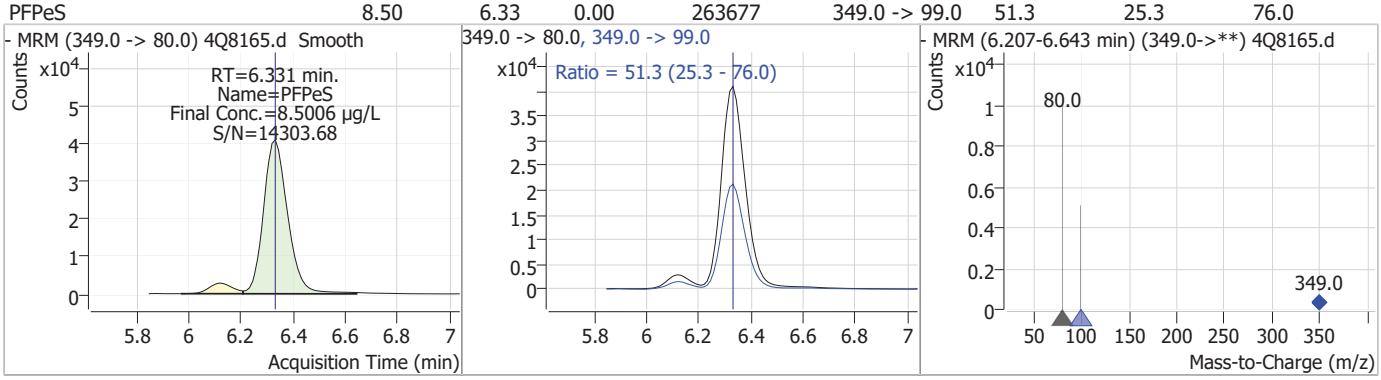
Perfluorinated Compounds by LC/MS/MS

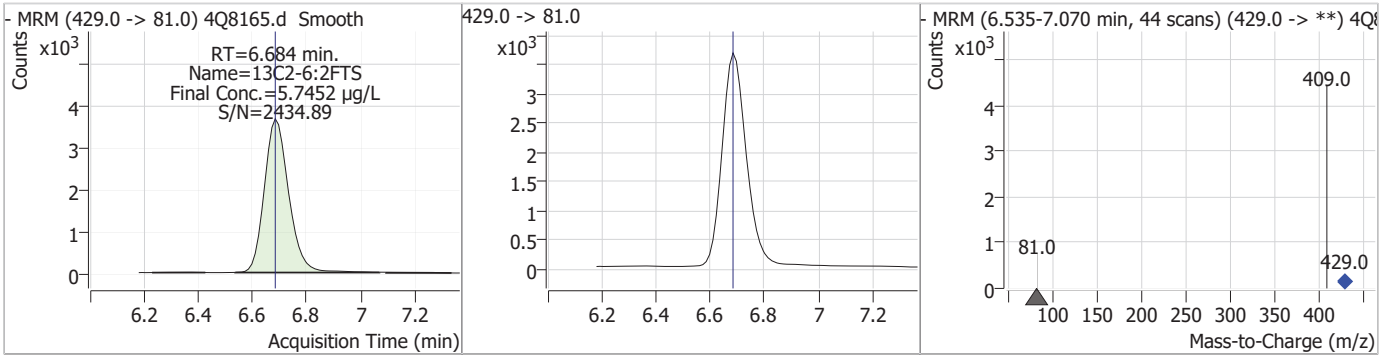
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	36.52	6.29	0.00	6368362	363.0 -> 169.0	20.5	10.4	31.2



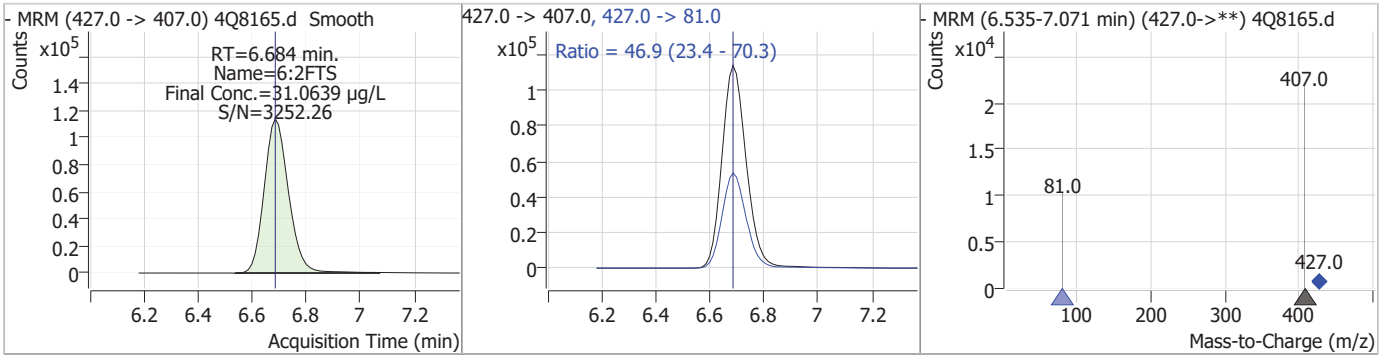
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	8.50	6.33	0.00	263677	349.0 -> 99.0	51.3	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.75	6.68	0.00	22948				

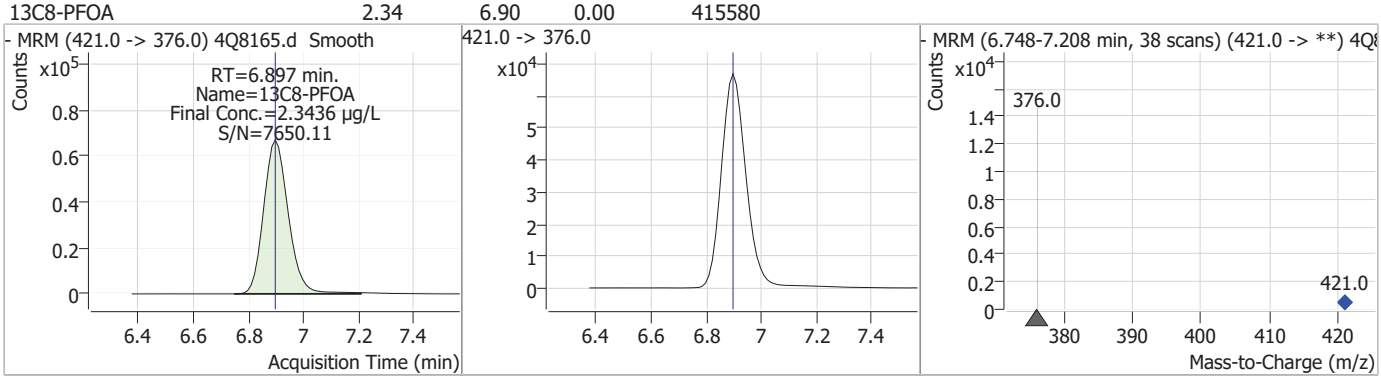


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	31.06	6.68	0.00	714873	427.0 -> 81.0	46.9	23.4	70.3

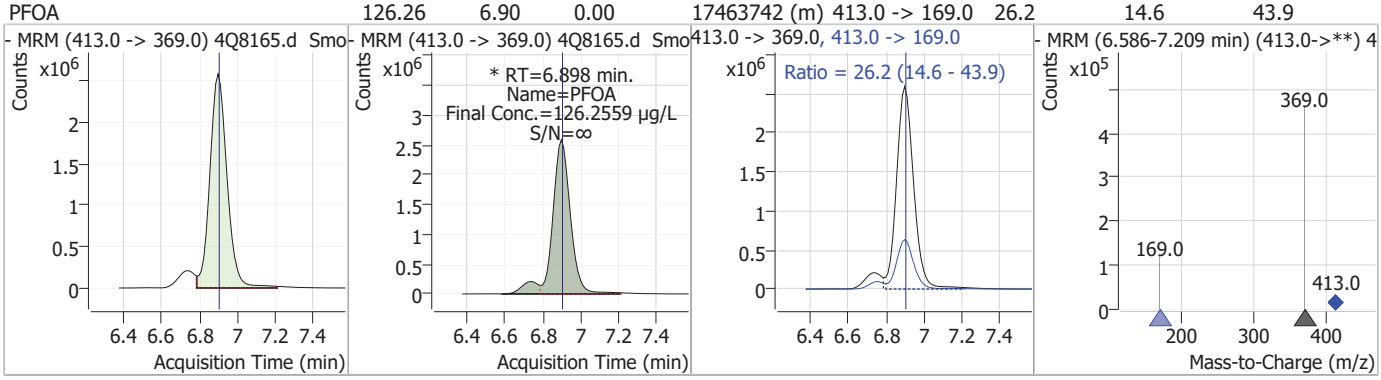


Perfluorinated Compounds by LC/MS/MS

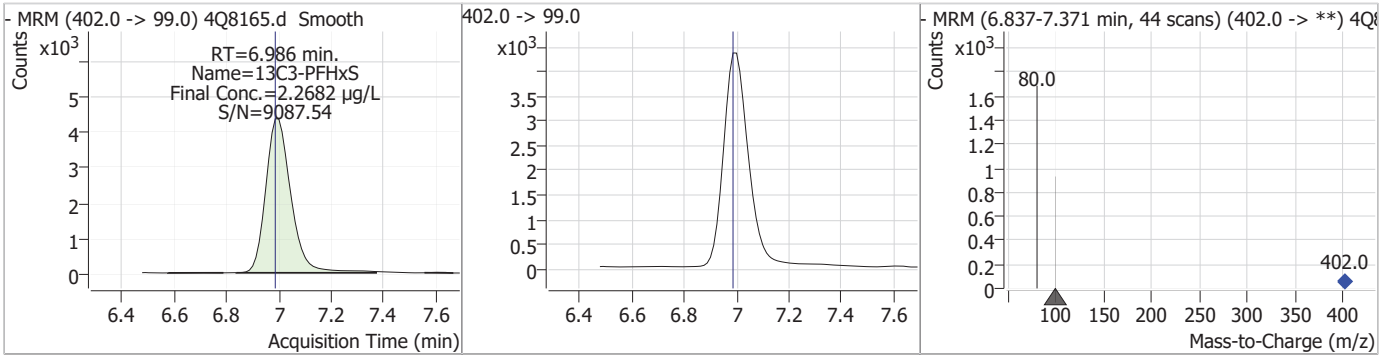
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.34	6.90	0.00	415580				



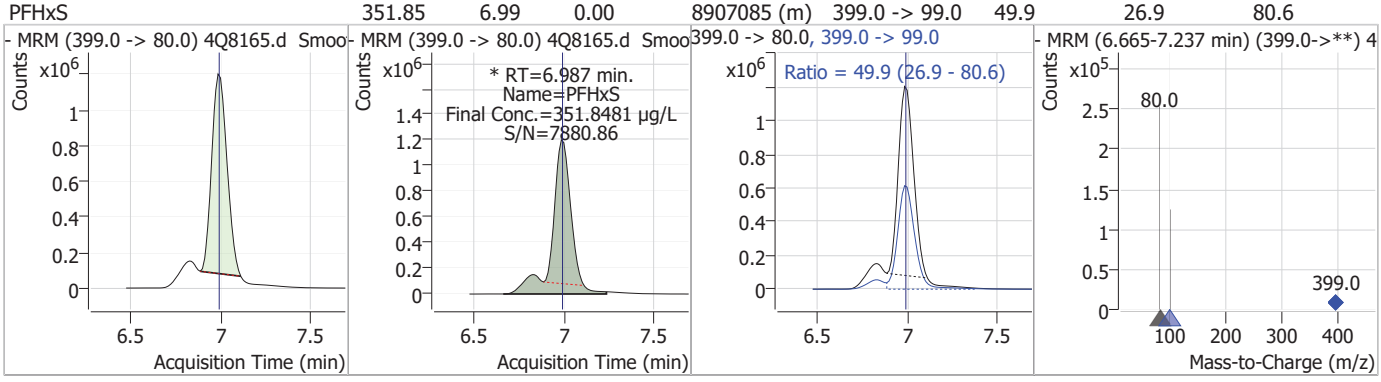
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	126.26	6.90	0.00	17463742 (m)	413.0 -> 169.0	26.2	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.27	6.99	0.00	29071				

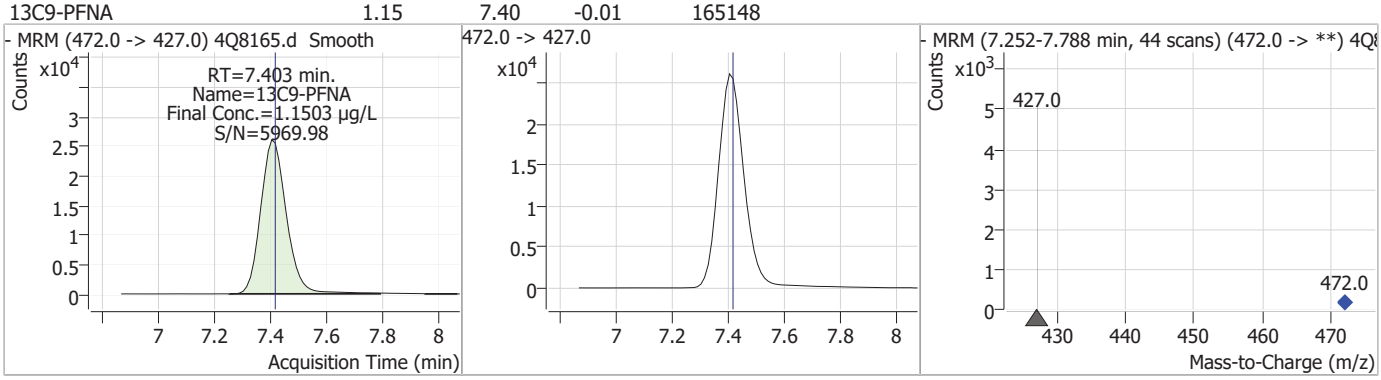


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	351.85	6.99	0.00	8907085 (m)	399.0 -> 99.0	49.9	26.9	80.6

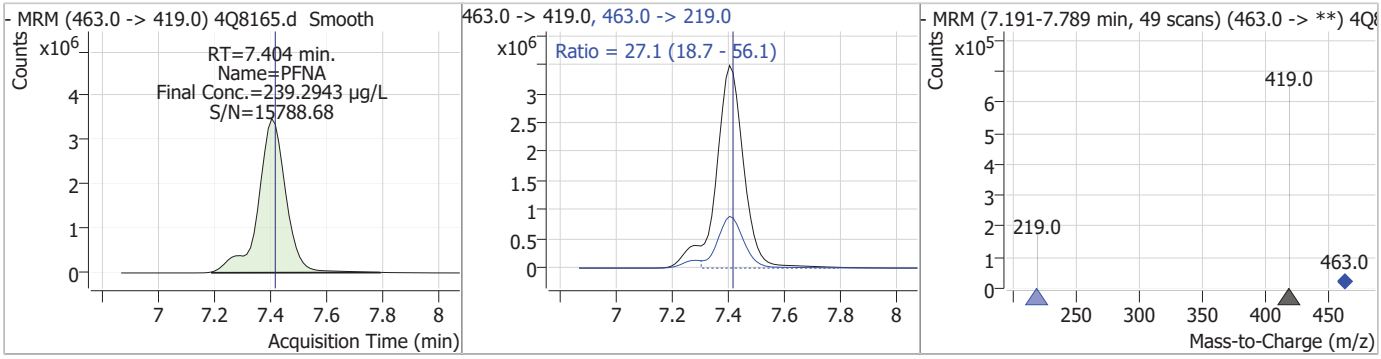


Perfluorinated Compounds by LC/MS/MS

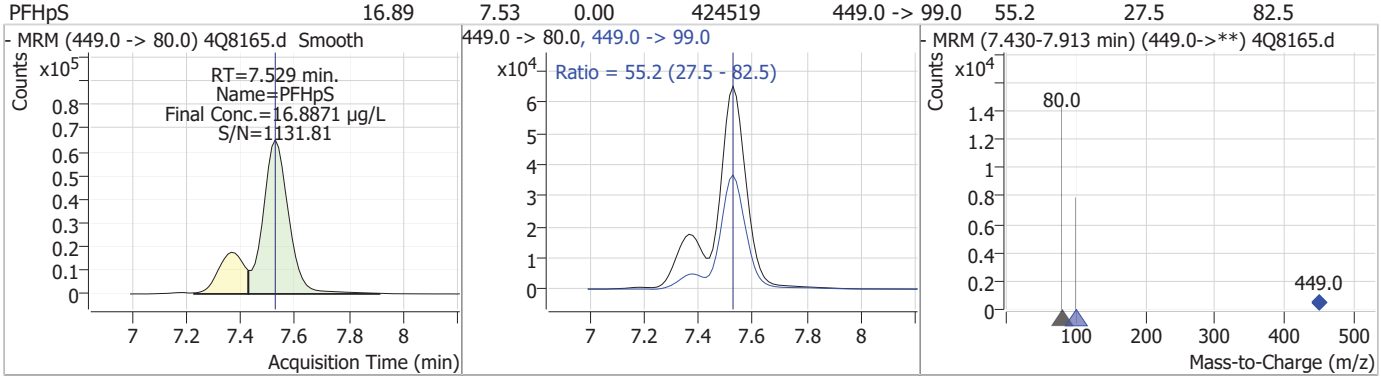
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.15	7.40	-0.01	165148				



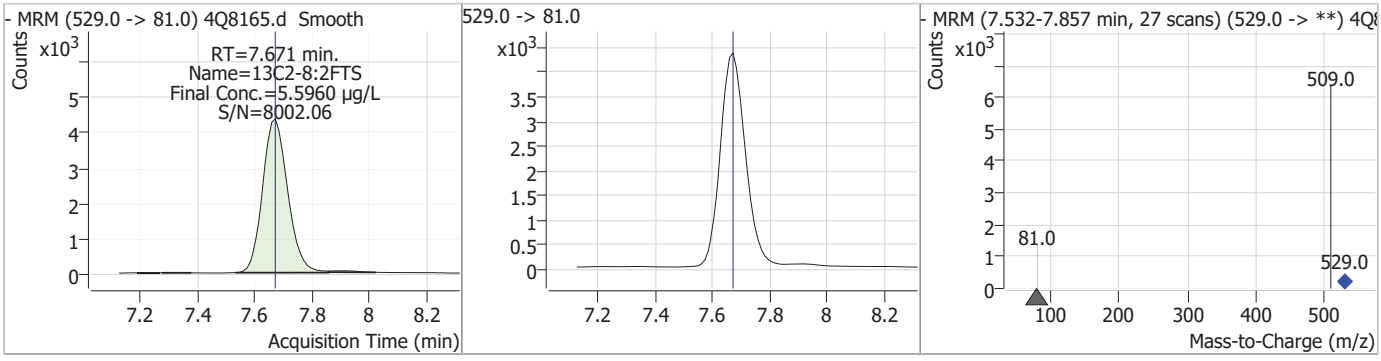
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	239.29	7.40	-0.01	23770234	463.0 -> 219.0	27.1	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	16.89	7.53	0.00	424519	449.0 -> 99.0	55.2	27.5	82.5

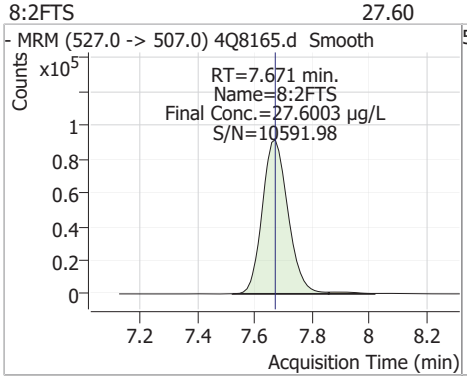


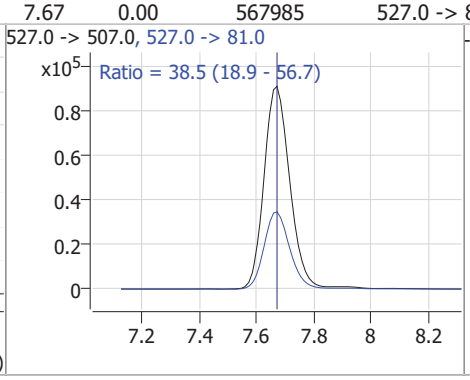
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.60	7.67	0.00	26295				

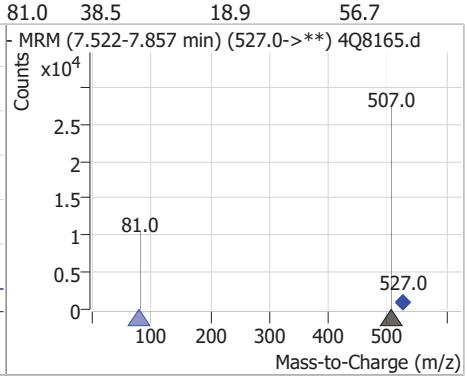


Perfluorinated Compounds by LC/MS/MS

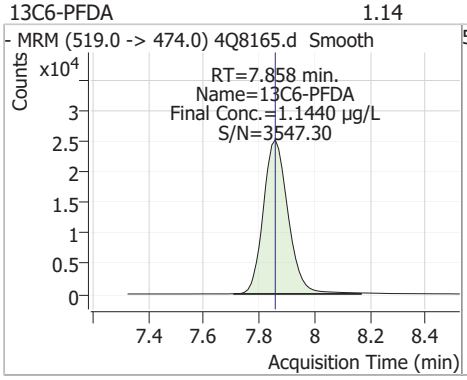
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	27.60	7.67	0.00	567985	527.0 -> 81.0	38.5	18.9	56.7

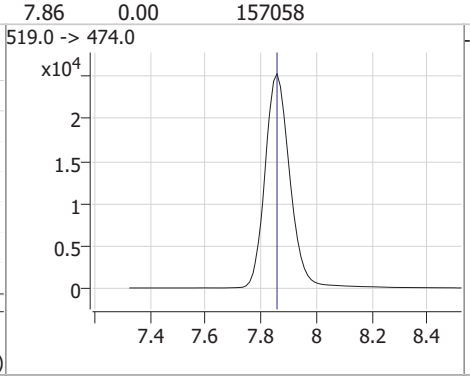


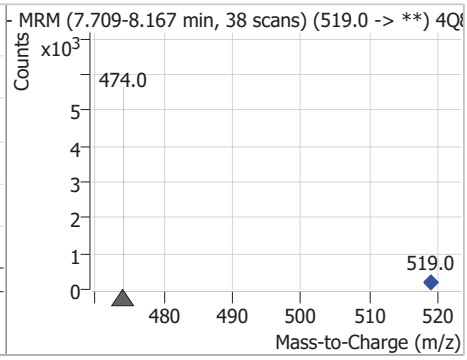




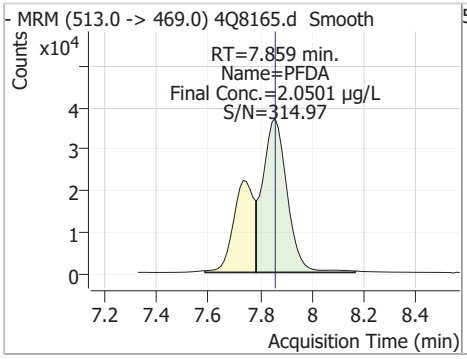
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.14	7.86	0.00	157058				

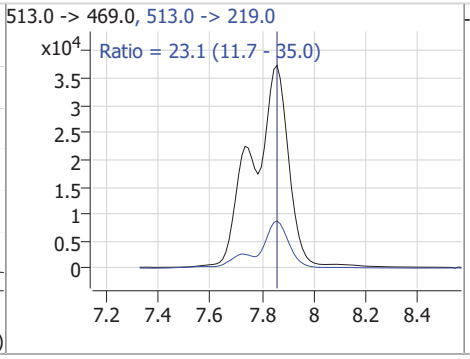


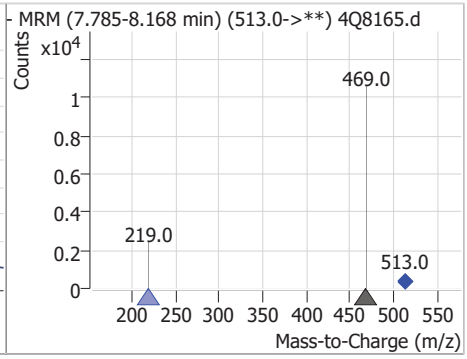




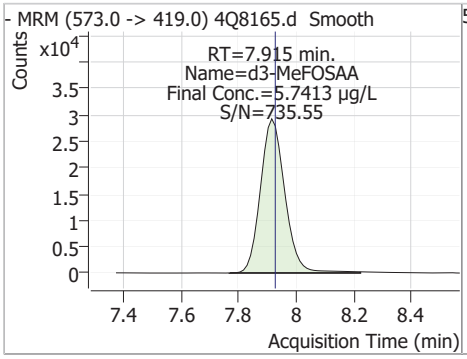
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.05	7.86	0.00	244724	513.0 -> 219.0	23.1	11.7	35.0

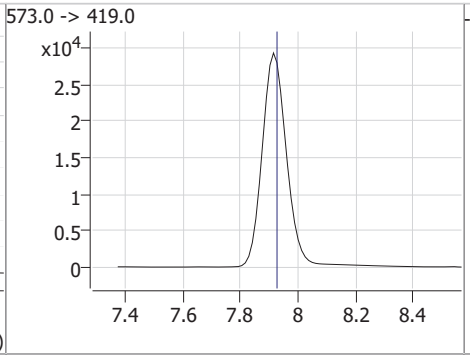


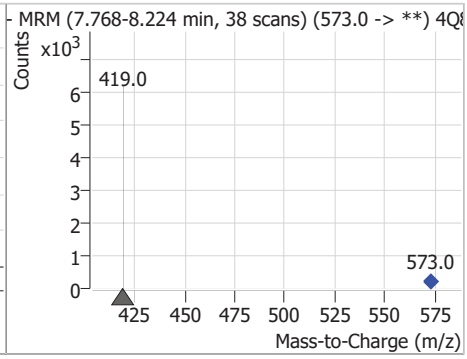




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.74	7.92	-0.01	172431				

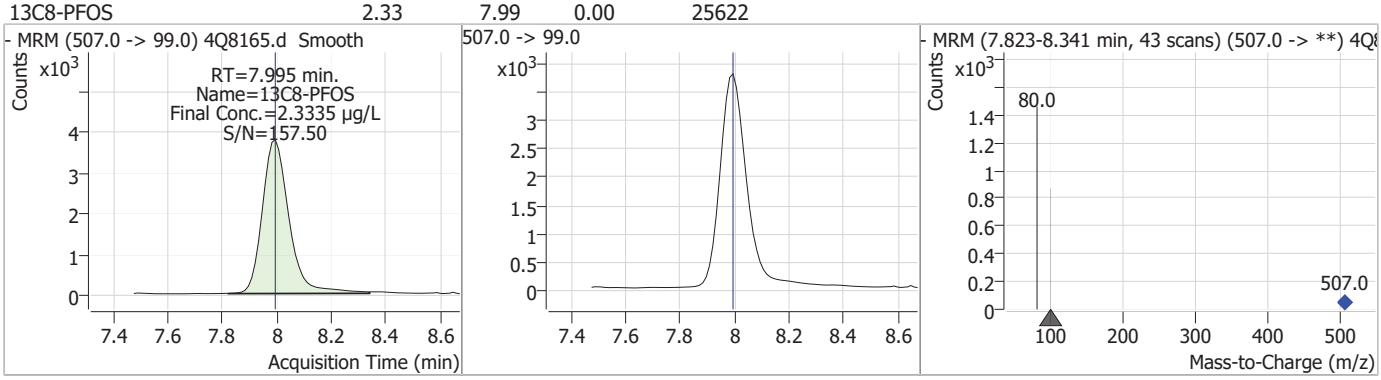




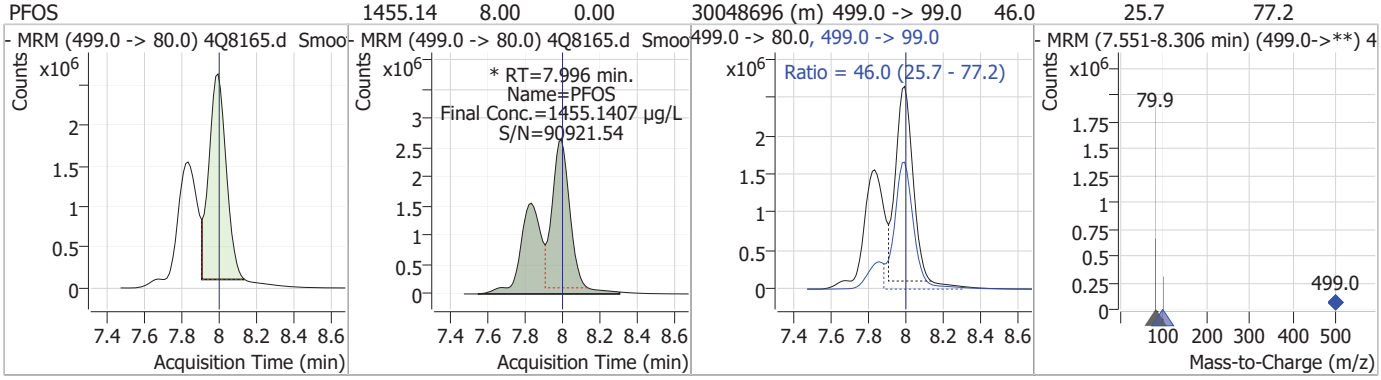


Perfluorinated Compounds by LC/MS/MS

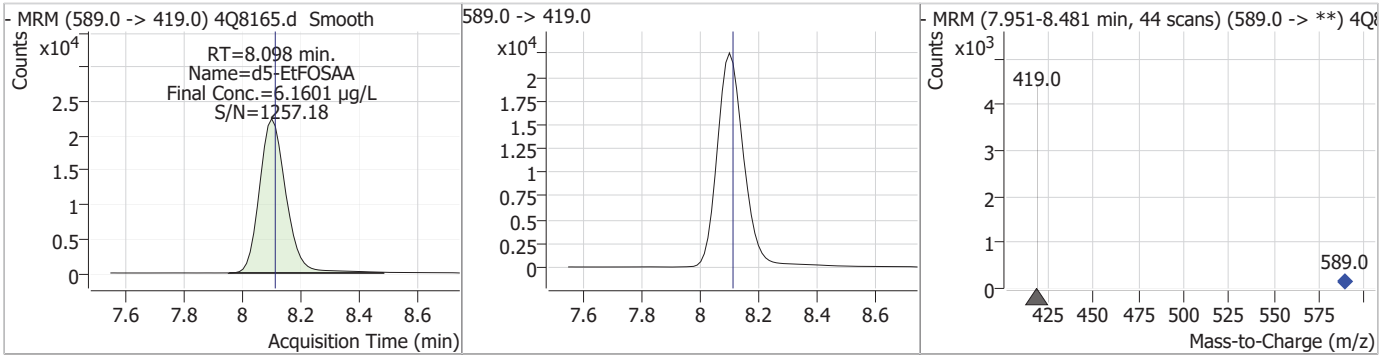
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.33	7.99	0.00	25622				



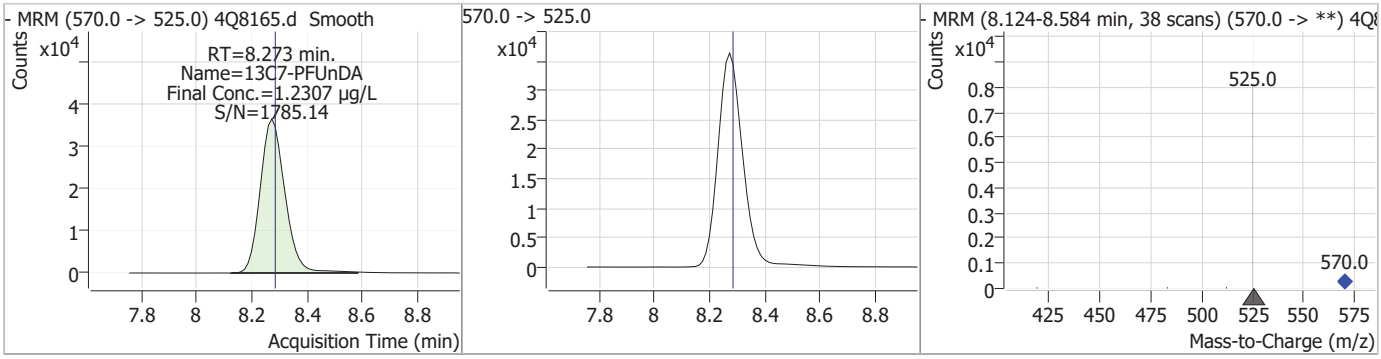
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	1455.14	8.00	0.00	30048696 (m)	499.0 -> 99.0	46.0	25.7	77.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	6.16	8.10	-0.01	142041				

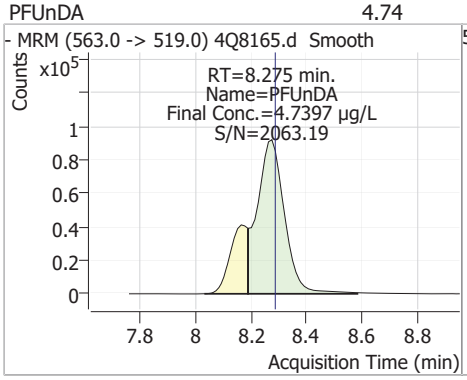


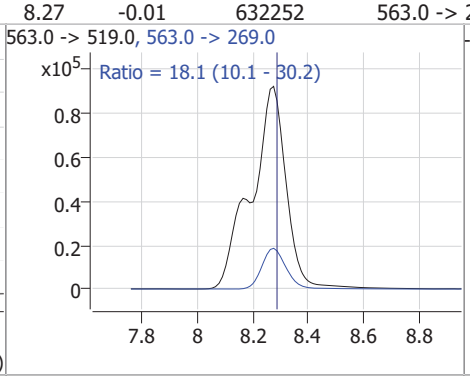
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.23	8.27	-0.01	225675				

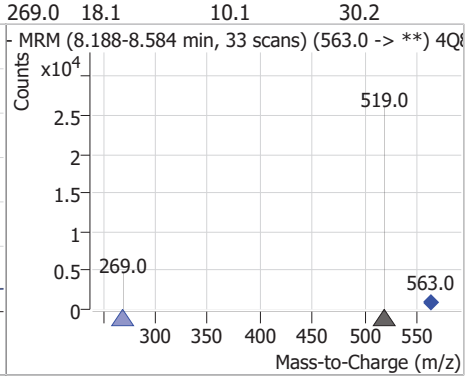


Perfluorinated Compounds by LC/MS/MS

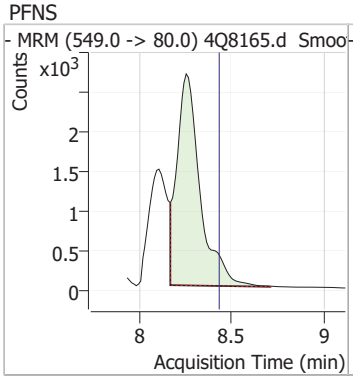
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	4.74	8.27	-0.01	632252	563.0 -> 269.0	18.1	10.1	30.2

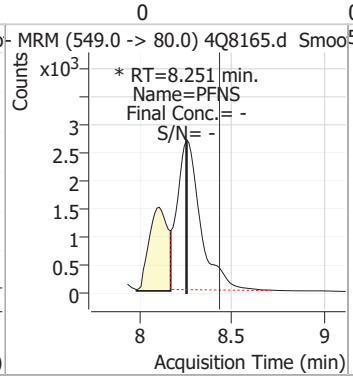


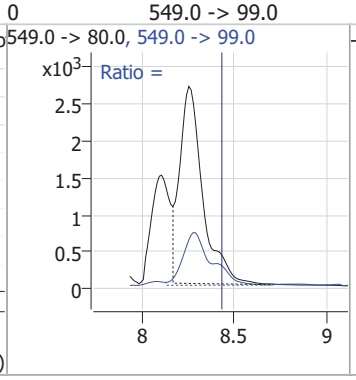


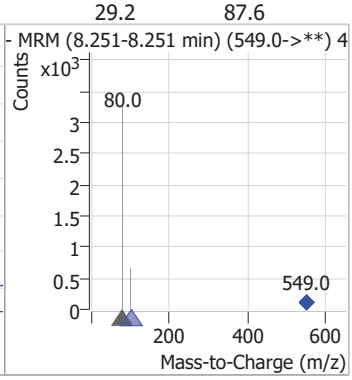


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS		0		0	549.0 -> 99.0		29.2	87.6

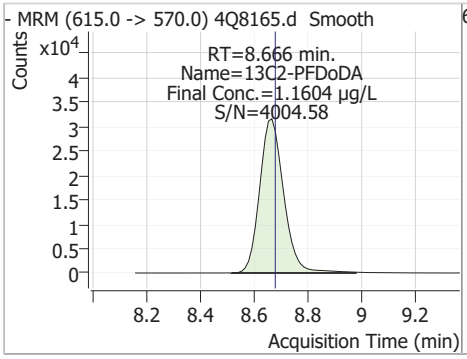


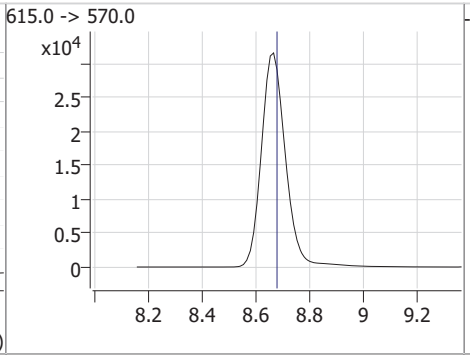


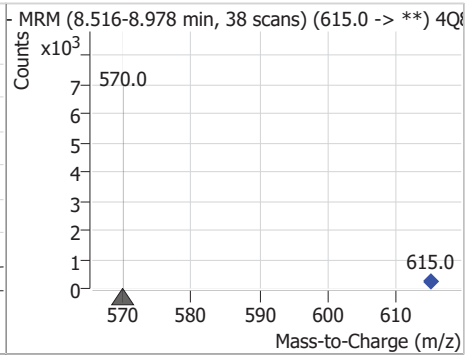




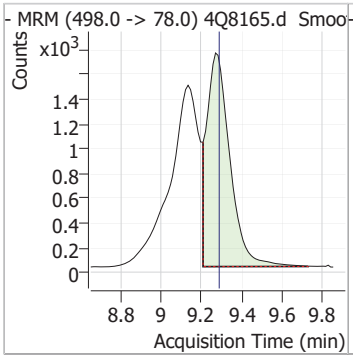
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.16	8.67	-0.01	194896				

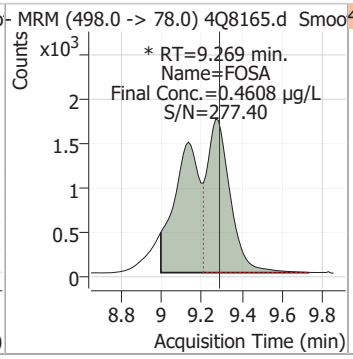


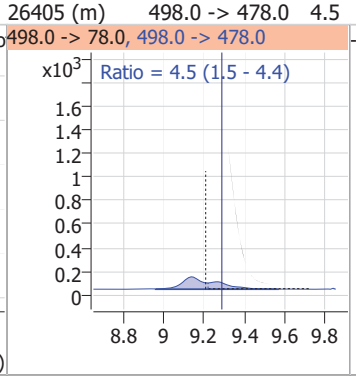


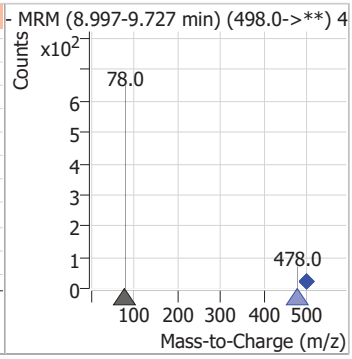


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.46	9.27	-0.01	26405 (m)	498.0 -> 478.0	4.5	1.5	4.4



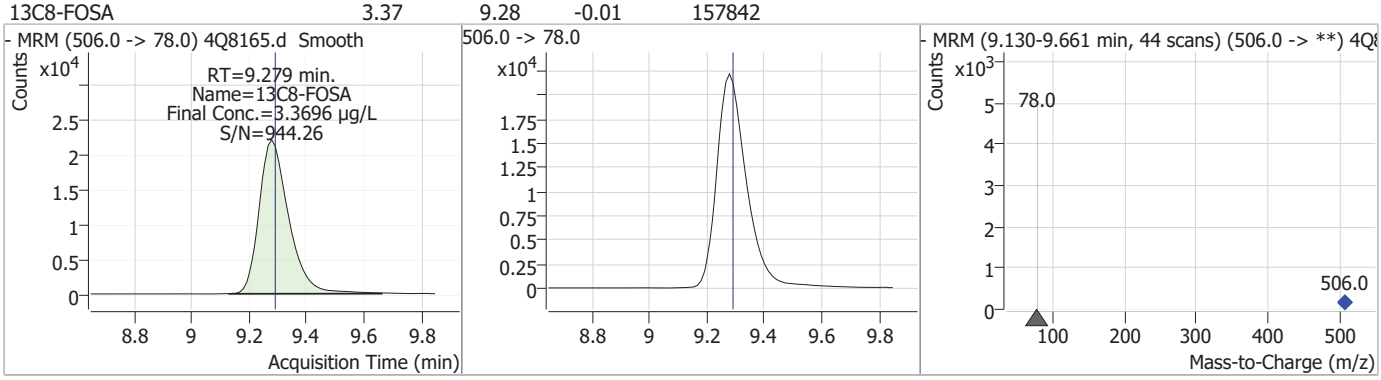




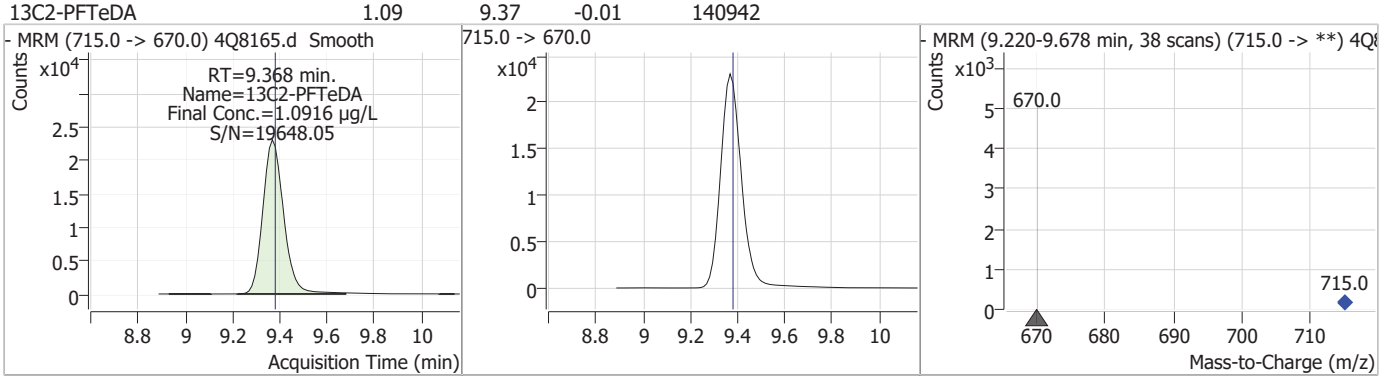


Perfluorinated Compounds by LC/MS/MS

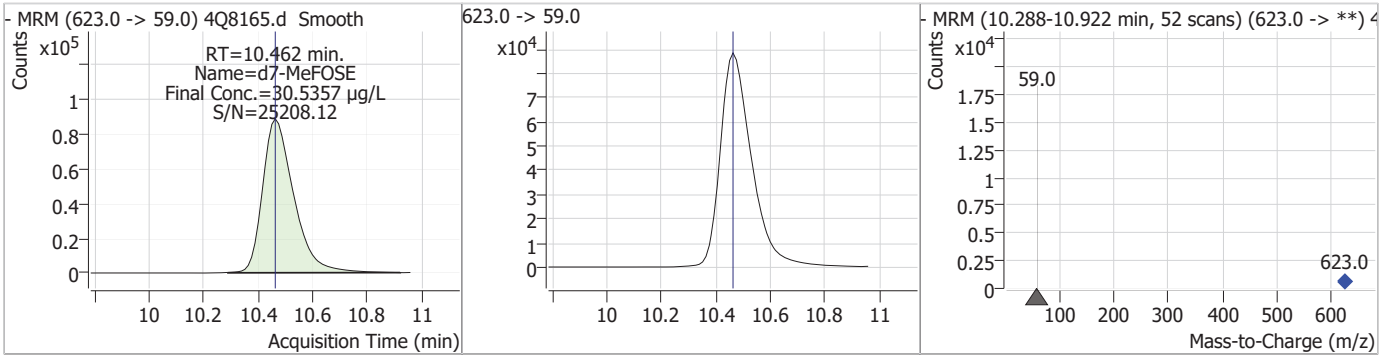
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	3.37	9.28	-0.01	157842				



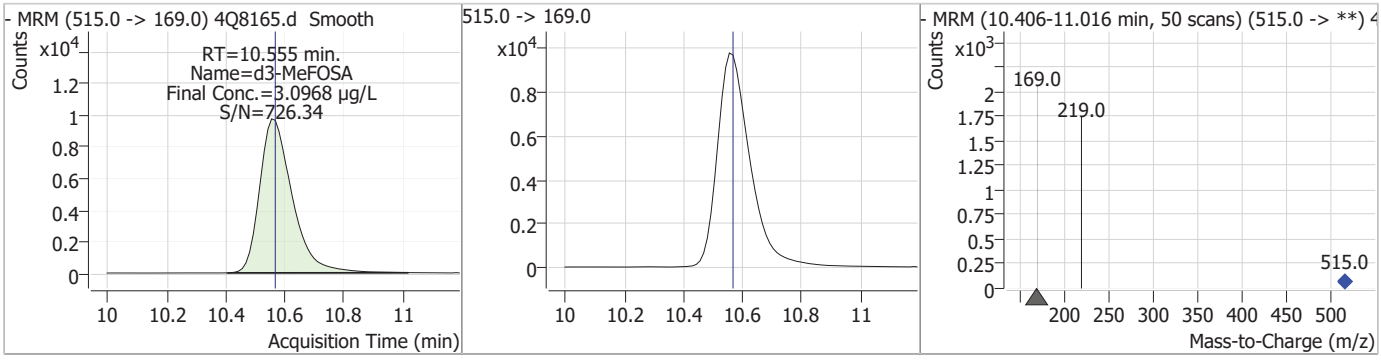
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.09	9.37	-0.01	140942				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	30.54	10.46	0.00	701291				

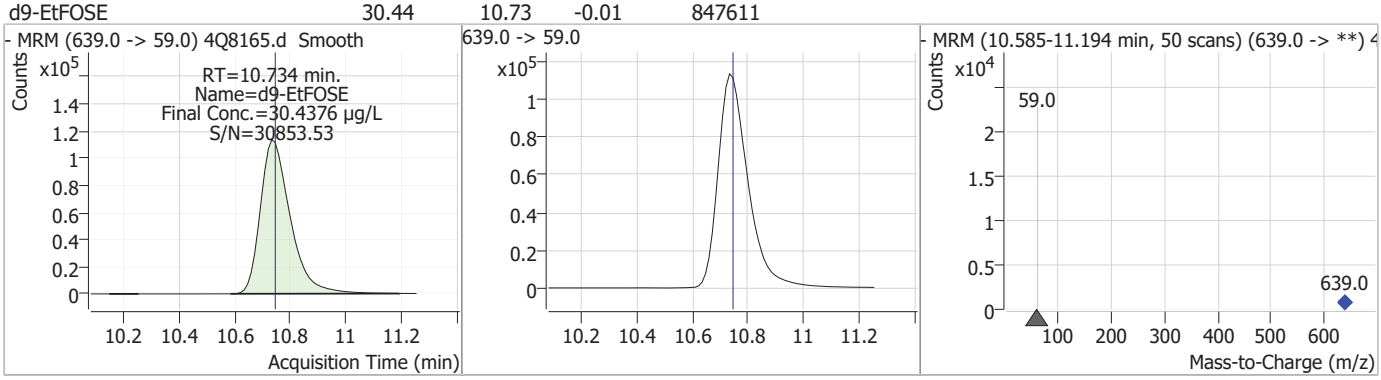


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	3.10	10.56	-0.01	74494				

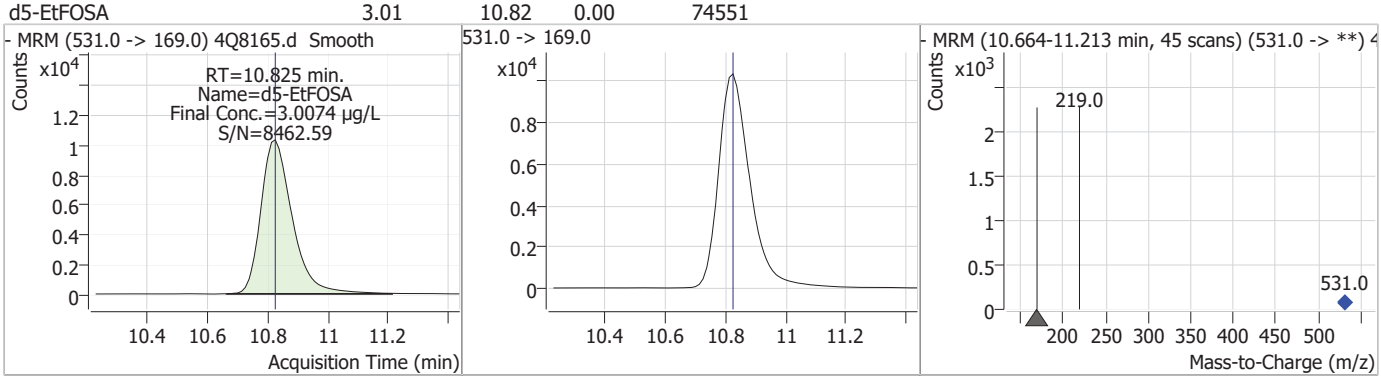


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	30.44	10.73	-0.01	847611				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	3.01	10.82	0.00	74551				



Manual Integration Approval Summary

Sample Number: JE10205-5
Lab FileID: 4Q8165.D
Injection Time: 04/30/25 22:51

Method: EPA 1633
Analyst approved: 05/01/25 11:50 Maksud Haque
Supervisor approved: 05/16/25 09:59 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
Perfluorodecanesulfonic acid	335-77-3		8.79	Poor instrument integration
PFOSA	754-91-6		9.27	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8166.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 11:05:16 PM
Sample Name : JE10205-6
Vial : P1-D9
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,477,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.858	217.0 -> 172.0	786761	10.00	µg/L	-0.025
M5-PFPeA	4.319	268.0 -> 223.0	374087	5.00	µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	274564	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	282165	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	419998	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	169000	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	156771	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	207081	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	180960	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	102335	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	148958	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	25561	2.50	µg/L	0.000
		302.0 -> 80.0	63195			
M3-PFHxS	6.986	402.0 -> 99.0	33514	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	36653	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	12142	5.00	µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	24816	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	28800	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	187642	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	418409	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	140819	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	628867	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	730558	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	63062	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	64007	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	67626	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	370261	5.00	µg/L	-0.012
18O2-PFHxS	6.999	403.0 -> 84.0	42073	2.50	µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	467111	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	155817	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	178474	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	287306	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	12142	5.76	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 115.1%		
13C2-6:2FTS	6.684	429.0 -> 81.0	24816	5.42	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.4%		
13C2-8:2FTS	7.671	529.0 -> 81.0	28800	5.35	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.9%		
13C2-PFDoDA	8.666	615.0 -> 570.0	180960	1.07	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 85.9%		
13C2-PFTeDA	9.368	715.0 -> 670.0	102335	0.79	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 63.2%		
13C3-PFBS	5.368	302.0 -> 99.0	25561	2.46	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.5%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	33514	2.28	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.2%			
13C4-PFBA	2.858	217.0 -> 172.0	786761	9.27	µg/L		-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 92.7%			
13C4-PFHpA	6.291	367.0 -> 322.0	282165	2.18	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 87.3%			
13C5-PFHxA	5.452	318.0 -> 273.0	274564	2.26	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.3%			
13C5-PFPeA	4.319	268.0 -> 223.0	374087	4.05	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 81.1%			
13C6-PFDA	7.858	519.0 -> 474.0	156771	1.14	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.1%			
13C7-PFUnDA	8.273	570.0 -> 525.0	207081	1.13	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.1%			
13C8-FOSA	9.279	506.0 -> 78.0	148958	2.14	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 85.8%			
13C8-PFOA	6.897	421.0 -> 376.0	419998	2.25	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.0%			
13C8-PFOS	7.995	507.0 -> 99.0	36653	2.25	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.0%			
13C9-PFNA	7.403	472.0 -> 427.0	169000	1.14	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.3%			
d3-MeFOSAA	7.915	573.0 -> 419.0	187642	4.21	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 84.3%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	418409	8.76	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 87.6%			
d3-MeFOSA	10.555	515.0 -> 169.0	64007	1.79	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 71.8%			
d5-EtFOSAA	8.098	589.0 -> 419.0	140819	4.12	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 82.4%			
d7-MeFOSE	10.462	623.0 -> 59.0	628867	18.46	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 73.9%			
d9-EtFOSE	10.734	639.0 -> 59.0	730558	17.69	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 70.8%			
d5-EtFOSA	10.825	531.0 -> 169.0	63062	1.72	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 68.6%			
Target Compounds							QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.			
		327.0 -> 81.0					
6:2FTS	-	427.0 -> 407.0	-	N.D.			
		427.0 -> 81.0					
8:2FTS	-	527.0 -> 507.0	-	N.D.			
		527.0 -> 81.0					
EtFOSAA	-	584.0 -> 419.0	-	N.D.			
		584.0 -> 483.0					
FOSA	-	498.0 -> 78.0	-	N.D.			
		498.0 -> 478.0					
MeFOSAA	7.929	570.0 -> 419.0	9758	0.30	µg/L	m	91
		570.0 -> 512.0	3054				
PFBA	2.864	213.0 -> 169.0	91458	3.80	µg/L		100
PFBS	5.369	299.0 -> 80.0	16793	0.57	µg/L		100
		299.0 -> 99.0	6902				
PFDA	7.859	513.0 -> 469.0	5608	0.05	µg/L	m	96
		513.0 -> 219.0	1429				
PFDoDA	-	613.0 -> 569.0	-	N.D.			
		613.0 -> 319.0					

Perfluorinated Compounds by LC/MS/MS

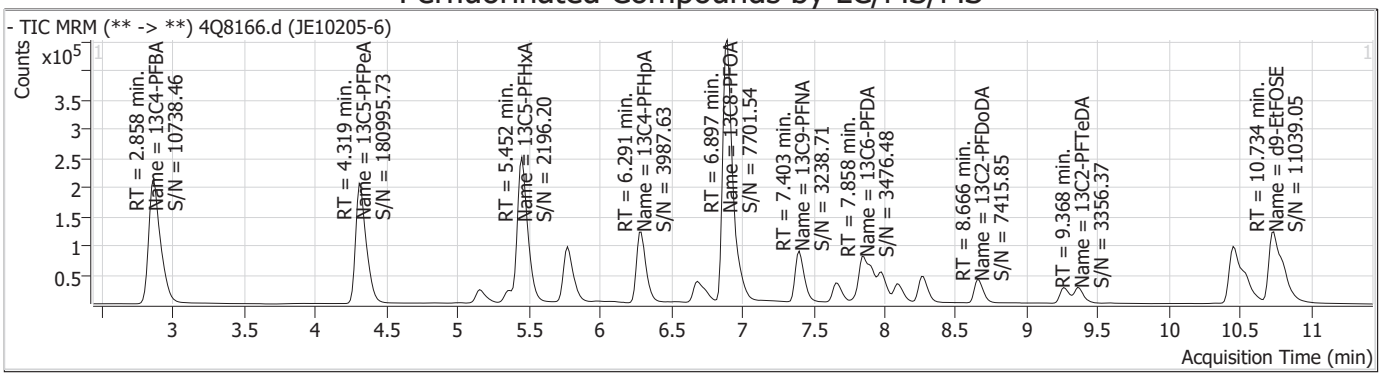
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.292	363.0 -> 319.0	245723	1.43	µg/L		98
		363.0 -> 169.0	49373				
PFHpS	7.529	449.0 -> 80.0	1848	0.06	µg/L	m	100
		449.0 -> 99.0	1014				
PFHxA	5.455	313.0 -> 269.0	655559	5.54	µg/L		100
		313.0 -> 119.0	20759				
PFHxS	7.000	399.0 -> 80.0	15629	0.54	µg/L	m	98
		399.0 -> 99.0	8575				
PFNA	7.404	463.0 -> 419.0	48411	0.48	µg/L	m	86
		463.0 -> 219.0	14132				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	6.898	413.0 -> 369.0	1038074	7.43	µg/L	m	97
		413.0 -> 169.0	288802				
PFOS	7.824	499.0 -> 80.0	25903	0.88	µg/L	m	70
		499.0 -> 99.0	7886				
PFPeA	4.321	263.0 -> 219.0	700922	11.85	µg/L		100
PFPeS	6.331	349.0 -> 80.0	2187	0.07	µg/L	m	80
		349.0 -> 99.0	804				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	-	563.0 -> 519.0	-	N.D.			
		563.0 -> 269.0					
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

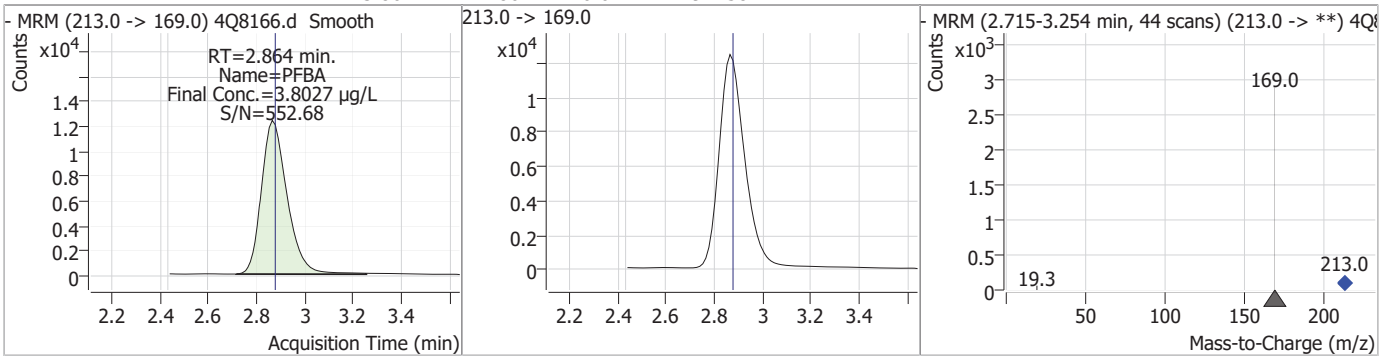
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

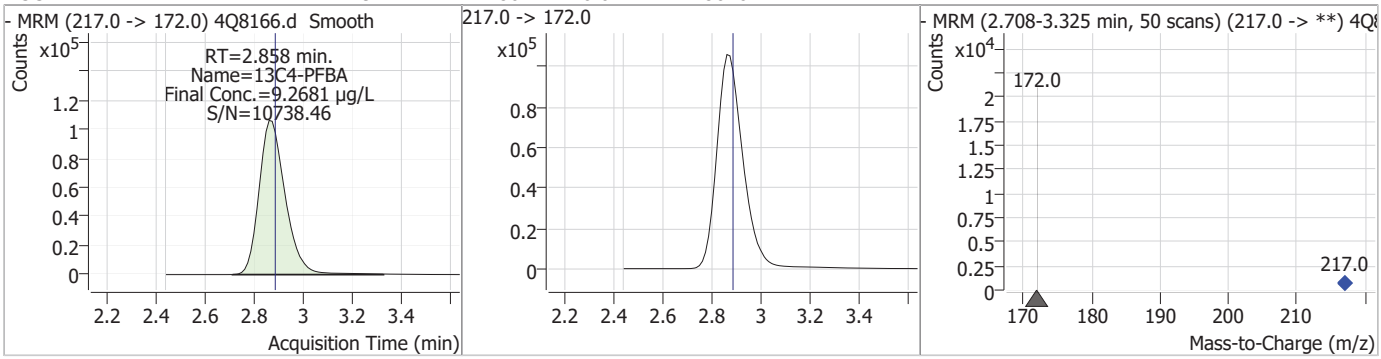
Perfluorinated Compounds by LC/MS/MS



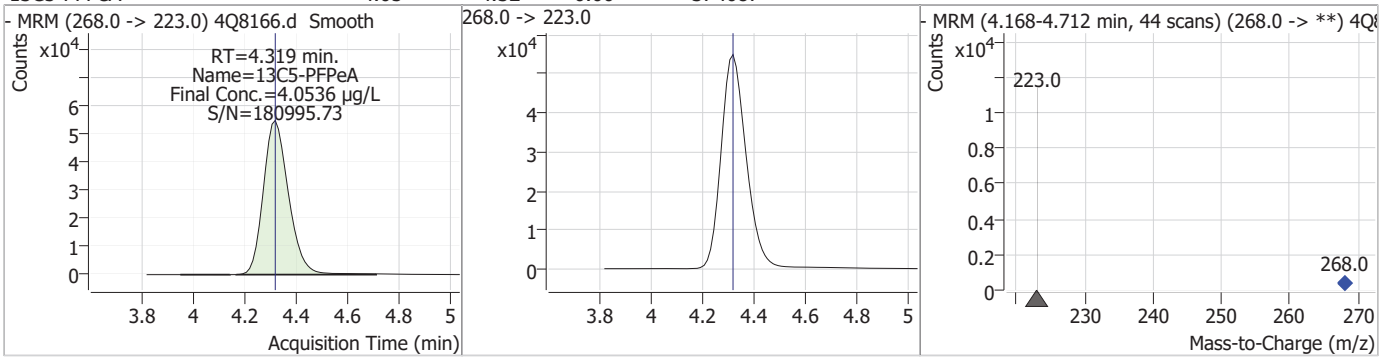
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	3.80	2.86	-0.01	91458				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.27	2.86	-0.02	786761				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.05	4.32	0.00	374087				

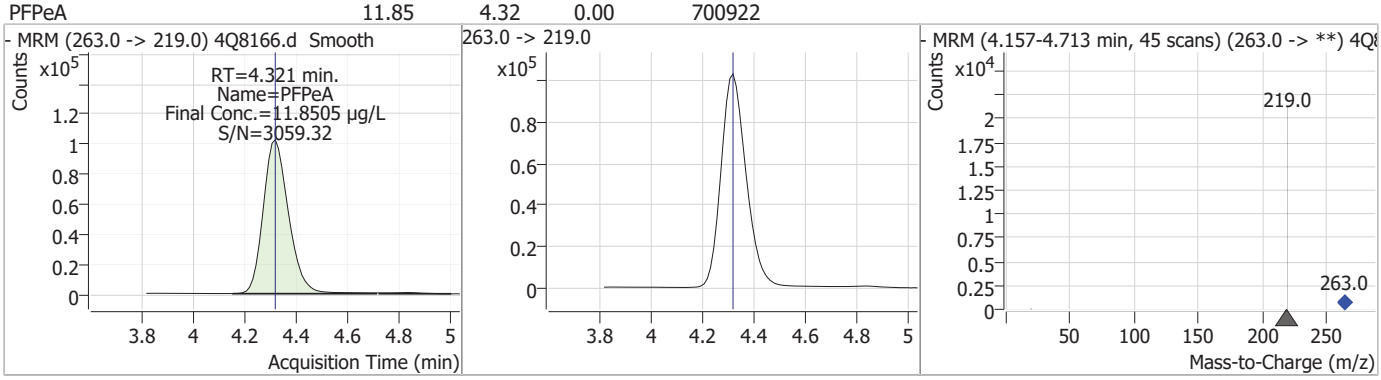


7.1.10

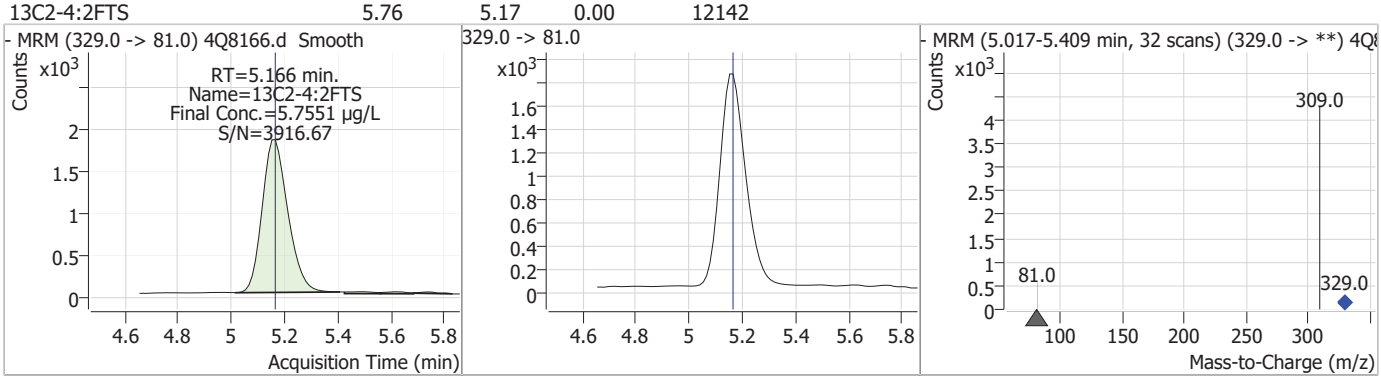
7

Perfluorinated Compounds by LC/MS/MS

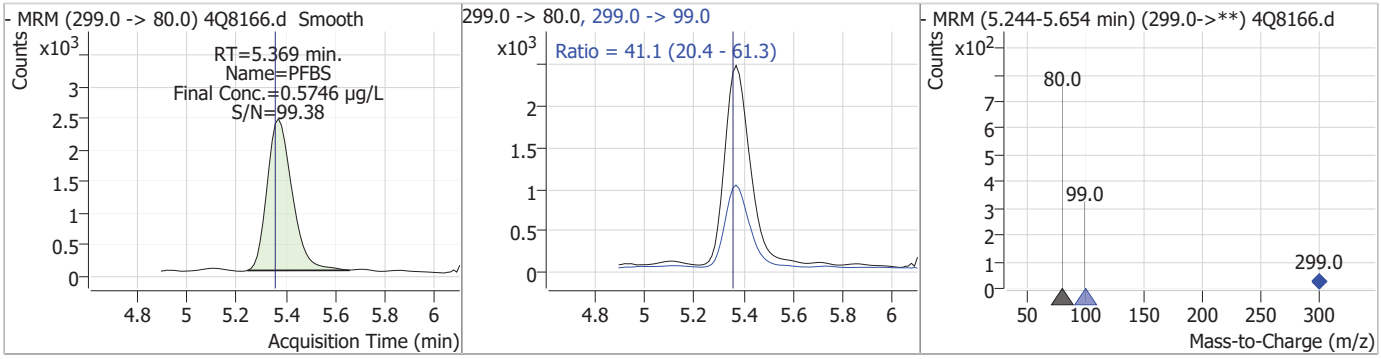
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	11.85	4.32	0.00	700922				



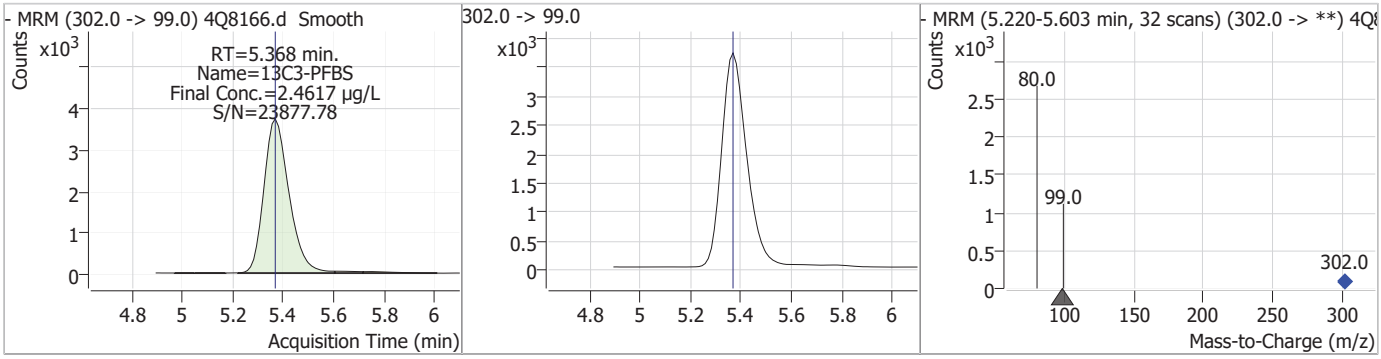
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.76	5.17	0.00	12142				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.57	5.37	0.01	16793	299.0 -> 99.0	41.1	20.4	61.3

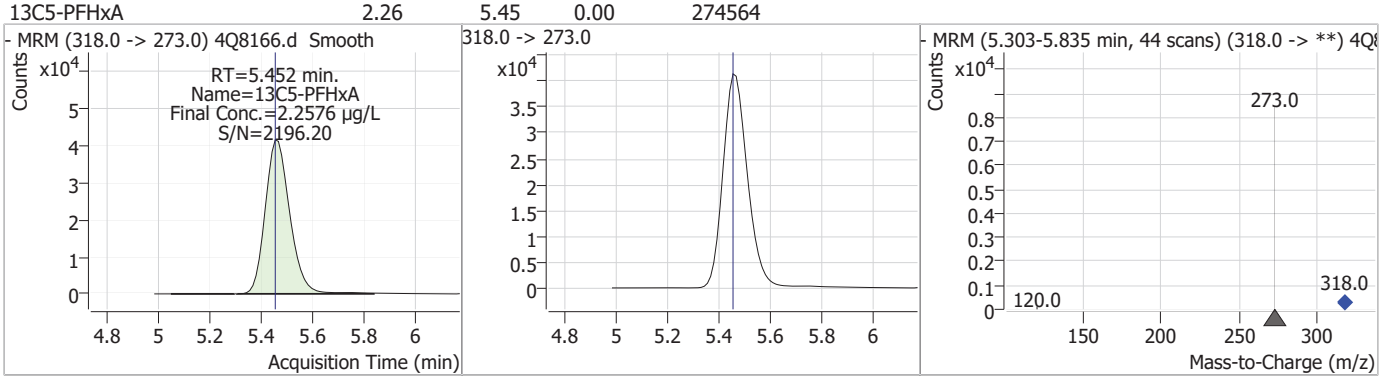


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.46	5.37	0.00	25561				

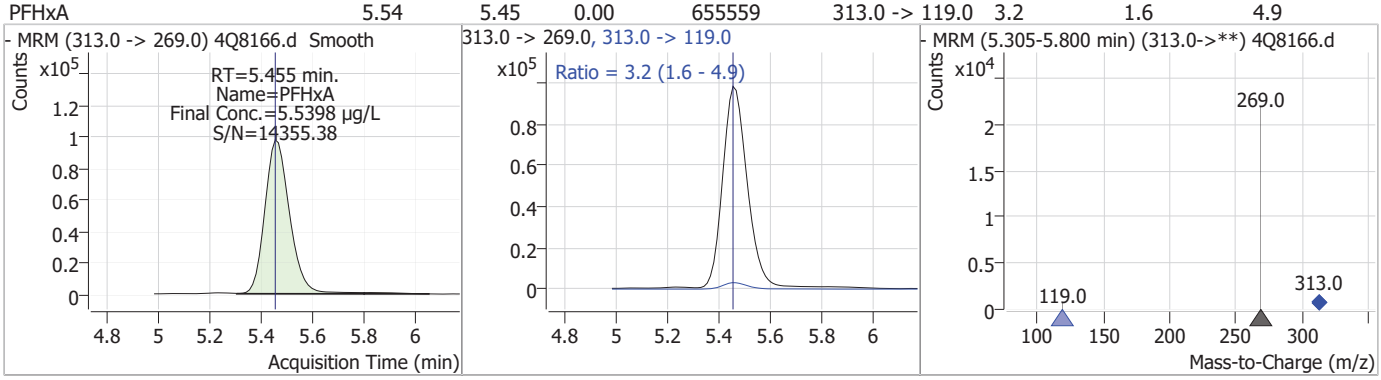


Perfluorinated Compounds by LC/MS/MS

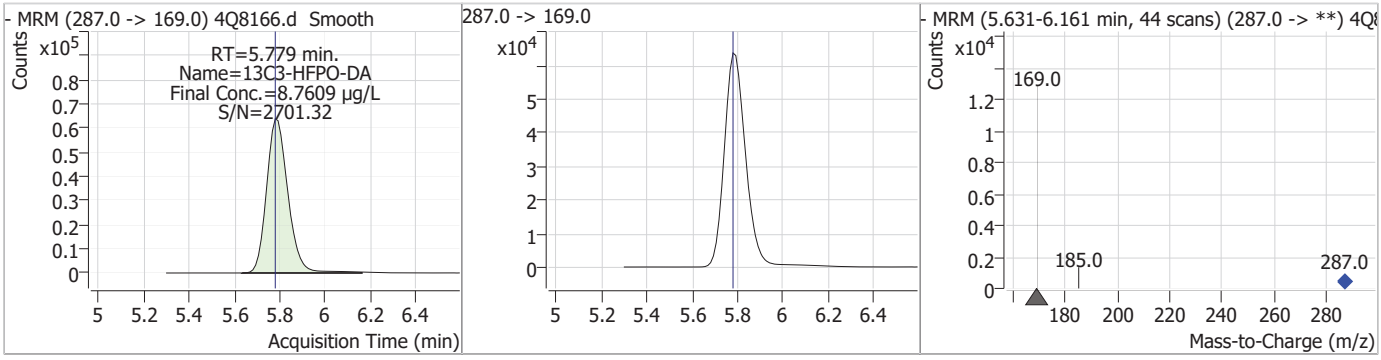
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.26	5.45	0.00	274564				



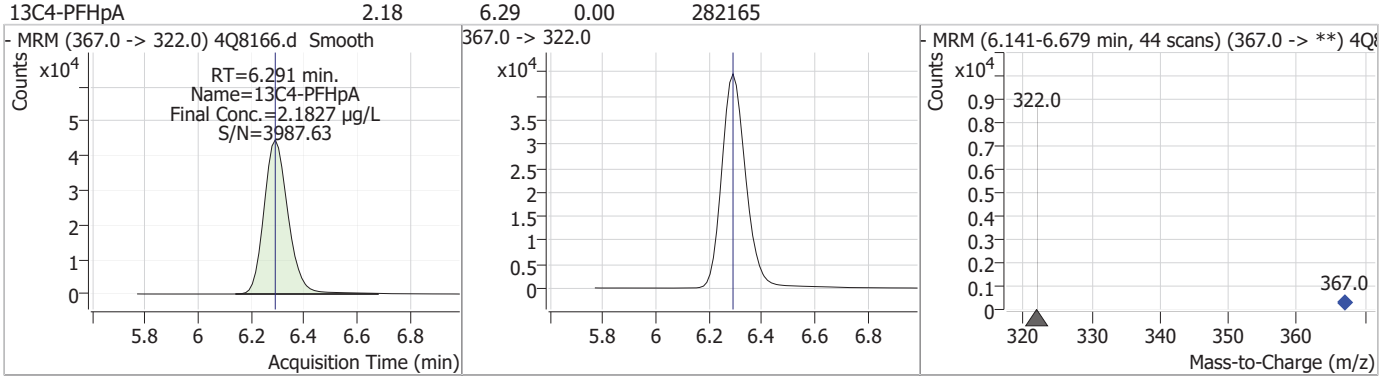
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	5.54	5.45	0.00	655559	313.0 -> 119.0	3.2	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.76	5.78	0.00	418409				

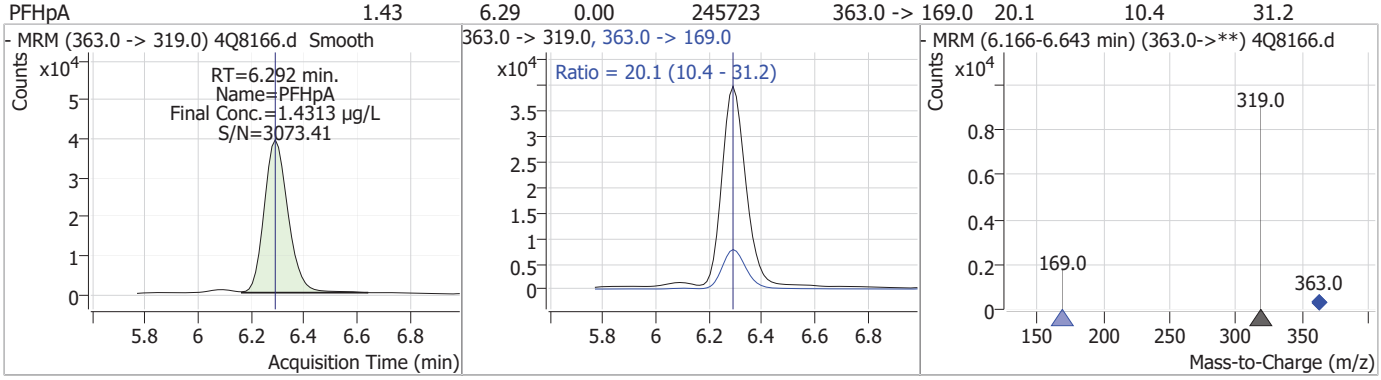


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.18	6.29	0.00	282165				

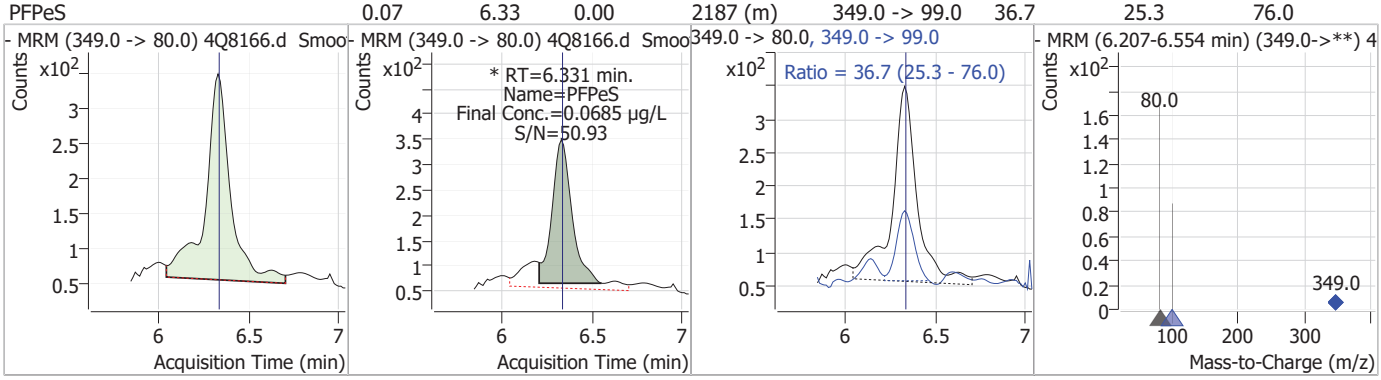


Perfluorinated Compounds by LC/MS/MS

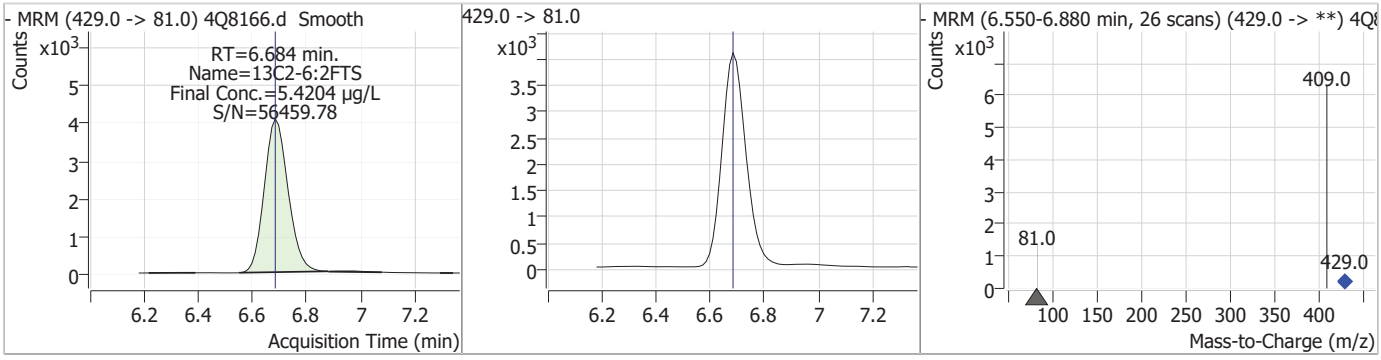
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	1.43	6.29	0.00	245723	363.0 -> 169.0	20.1	10.4	31.2



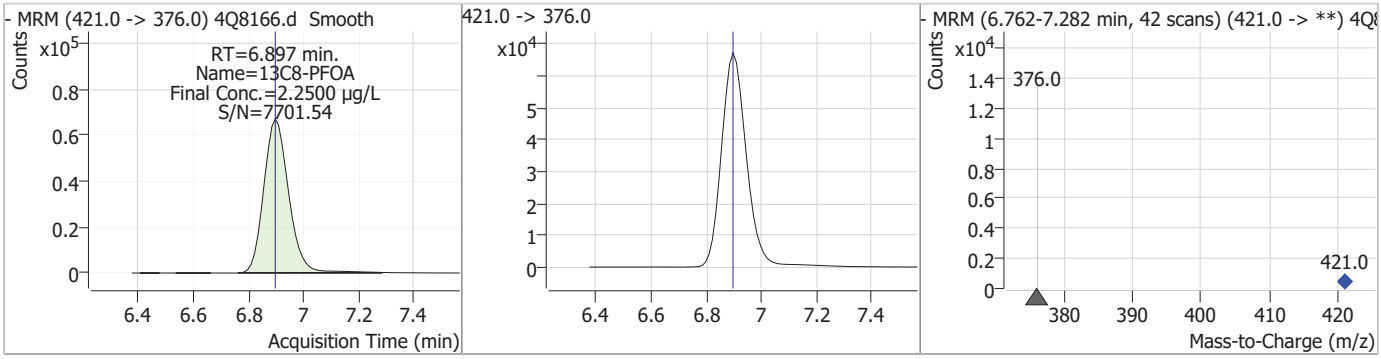
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.07	6.33	0.00	2187 (m)	349.0 -> 99.0	36.7	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.42	6.68	0.00	24816				

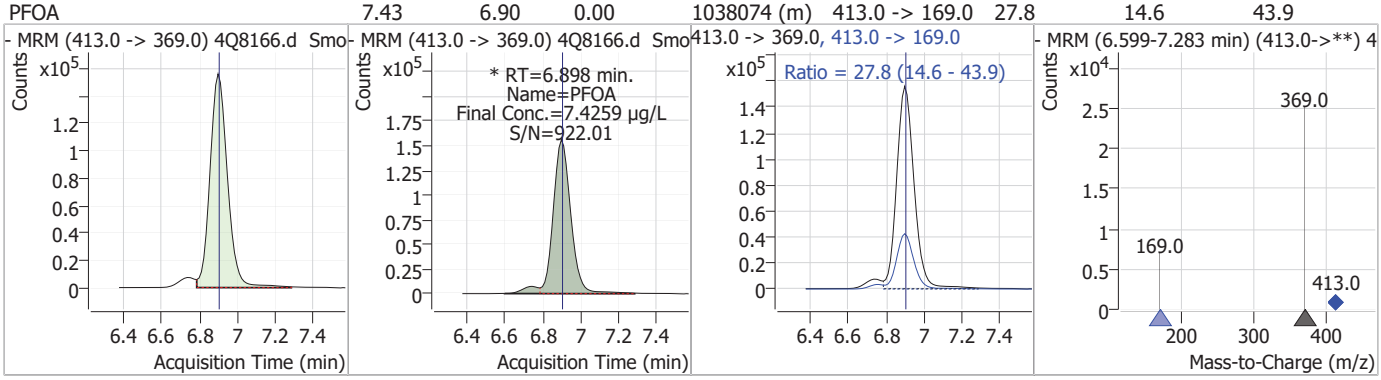


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.25	6.90	0.00	419998				

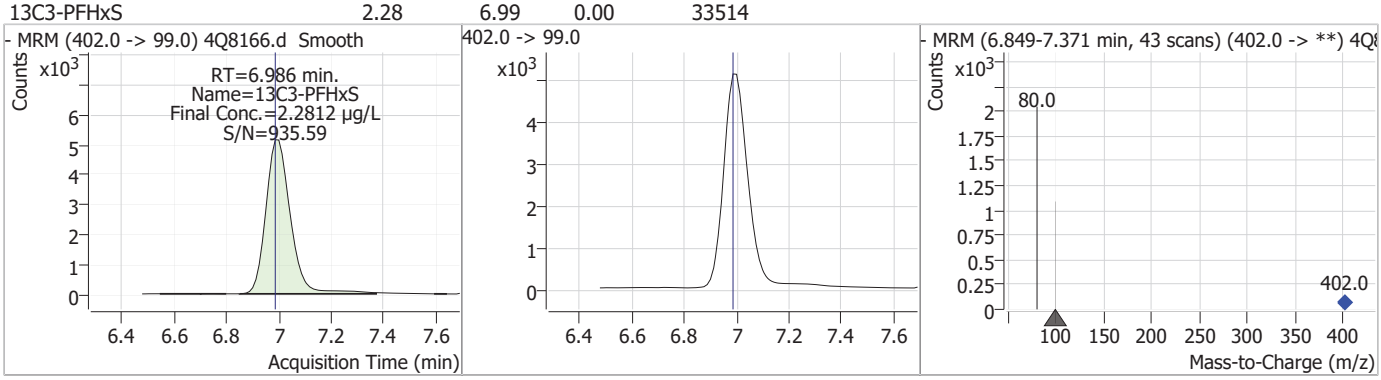


Perfluorinated Compounds by LC/MS/MS

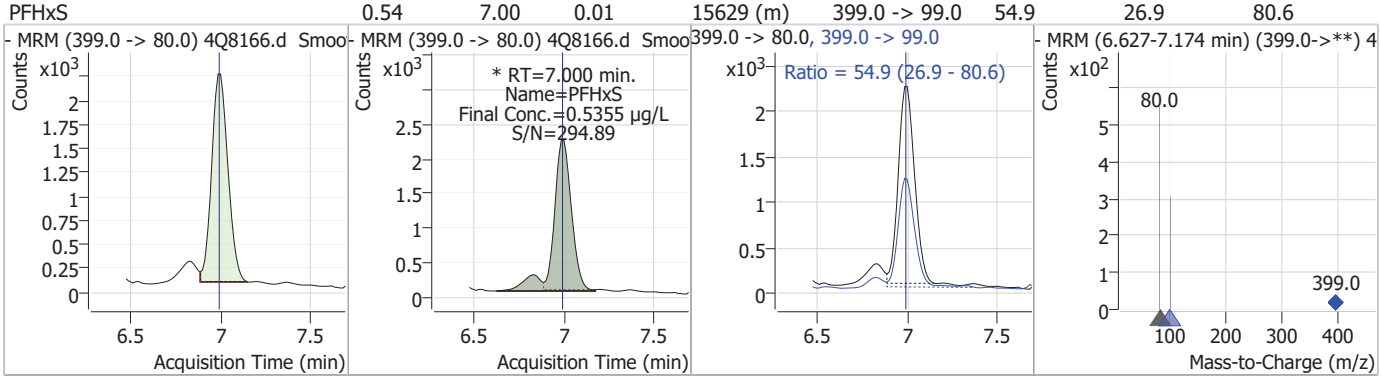
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	7.43	6.90	0.00	1038074 (m)	413.0 -> 169.0	27.8	14.6	43.9



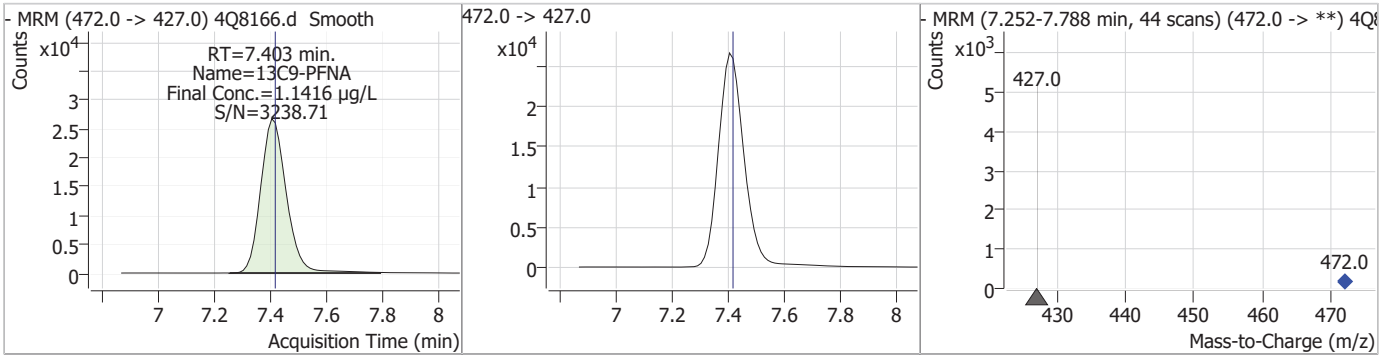
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.28	6.99	0.00	33514				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.54	7.00	0.01	15629 (m)	399.0 -> 99.0	54.9	26.9	80.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.14	7.40	-0.01	169000				

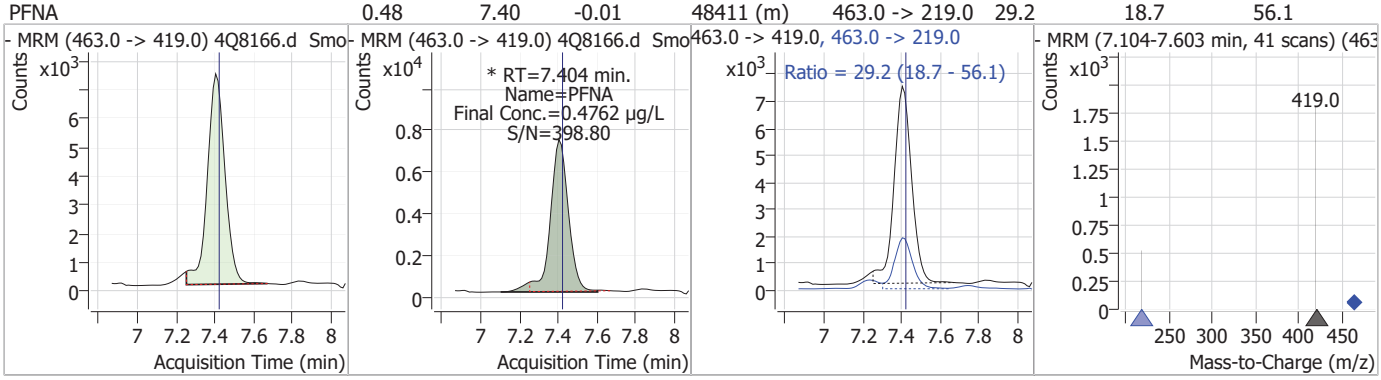


7.1.10

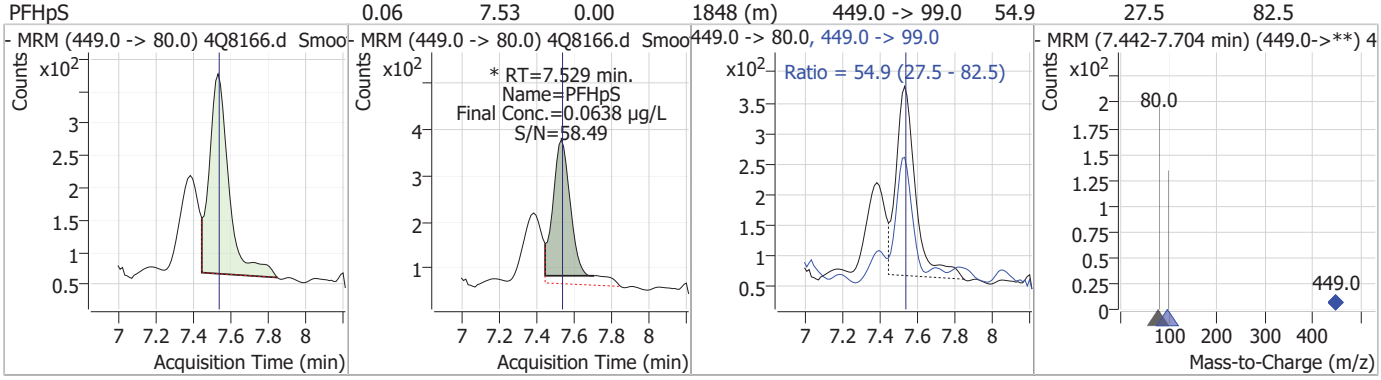
7

Perfluorinated Compounds by LC/MS/MS

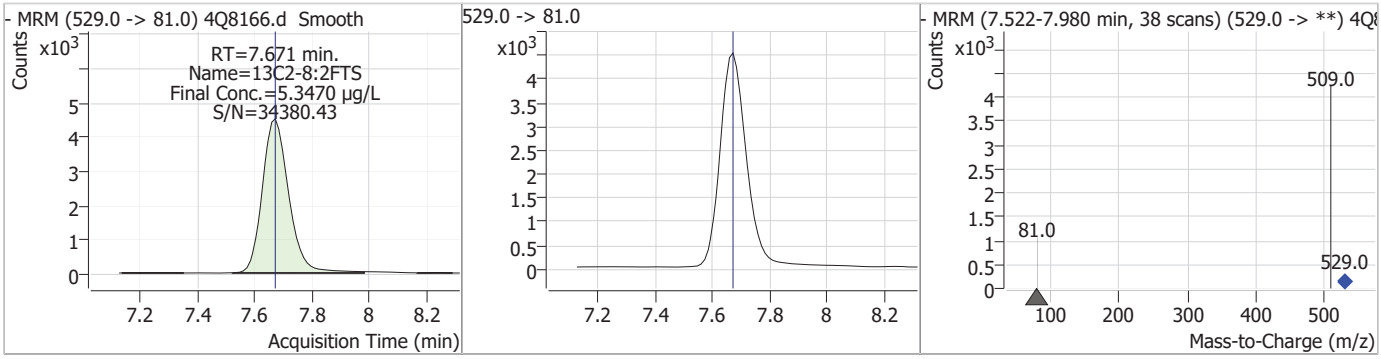
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.48	7.40	-0.01	48411 (m)	463.0 -> 219.0	29.2	18.7	56.1



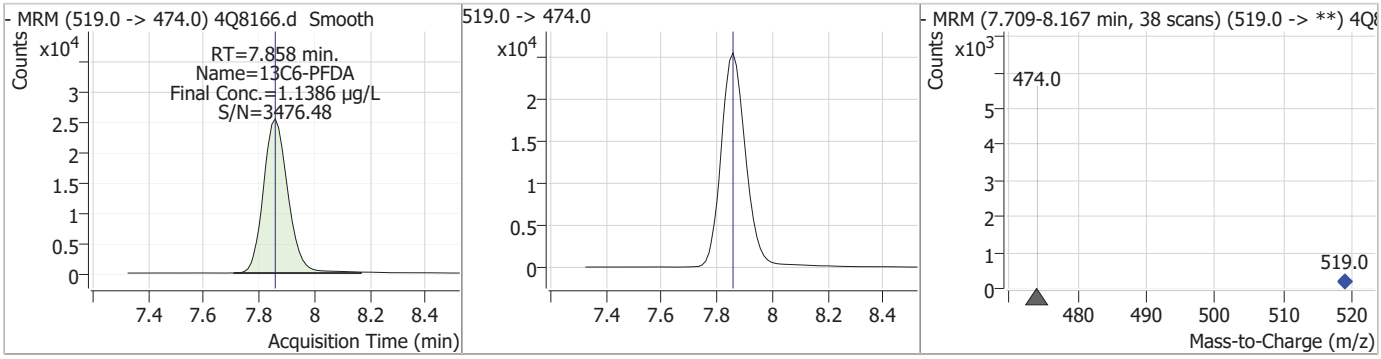
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.06	7.53	0.00	1848 (m)	449.0 -> 99.0	54.9	27.5	82.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.35	7.67	0.00	28800				

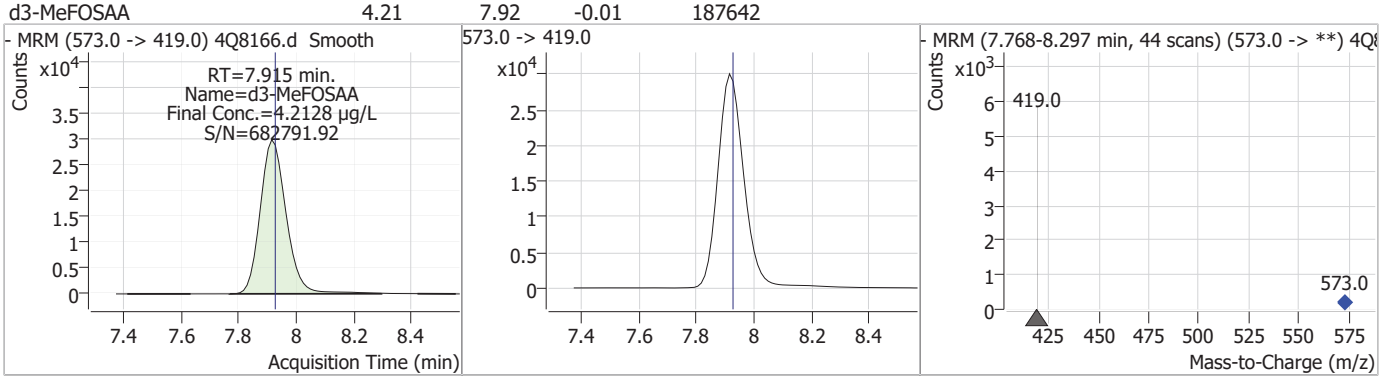


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.14	7.86	0.00	156771				

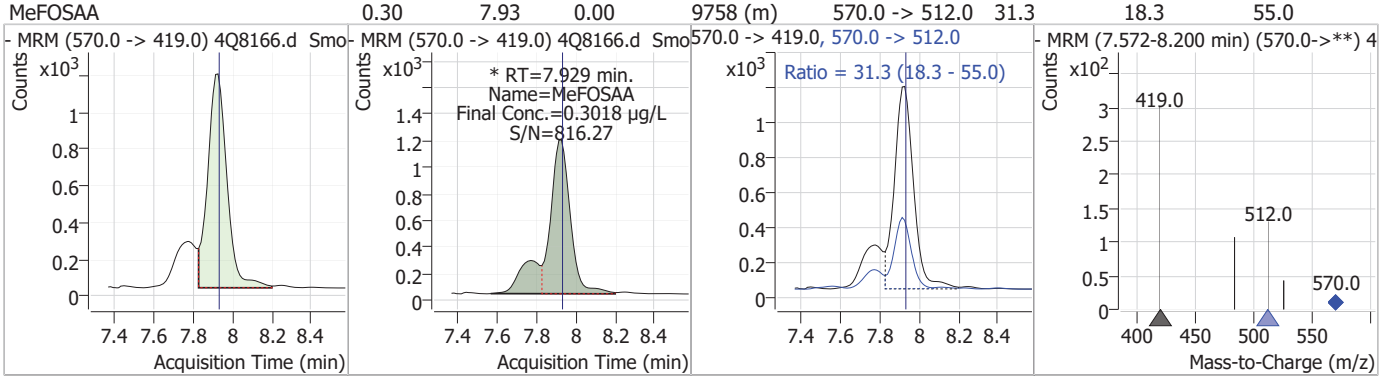


Perfluorinated Compounds by LC/MS/MS

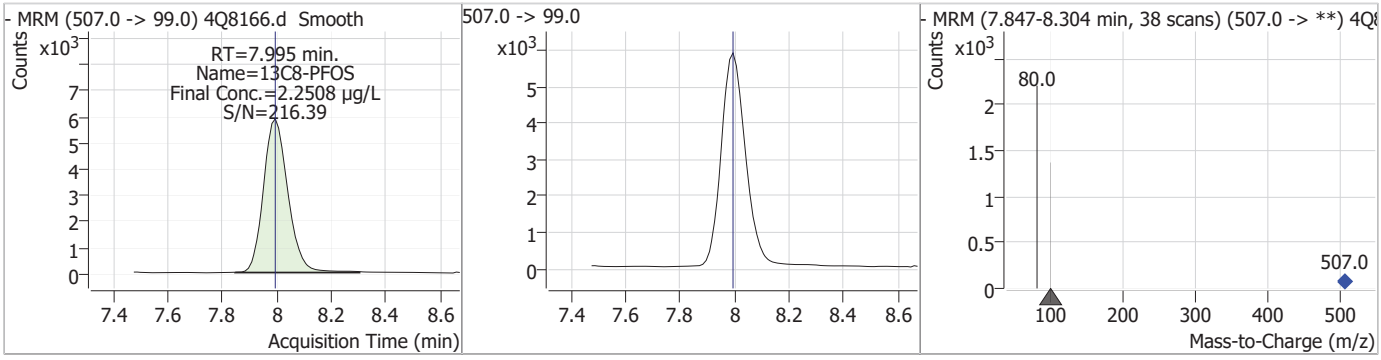
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.21	7.92	-0.01	187642				



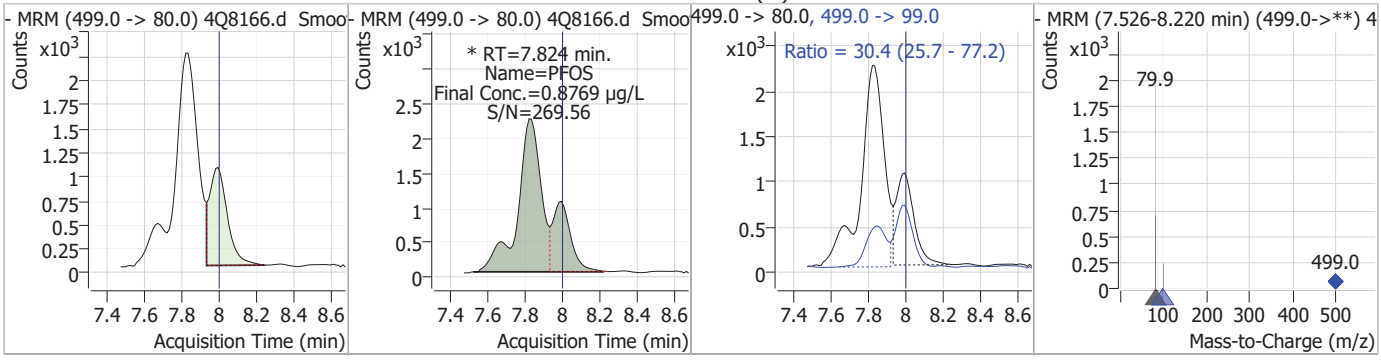
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.30	7.93	0.00	9758 (m)	570.0 -> 512.0	31.3	18.3	55.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.25	7.99	0.00	36653				

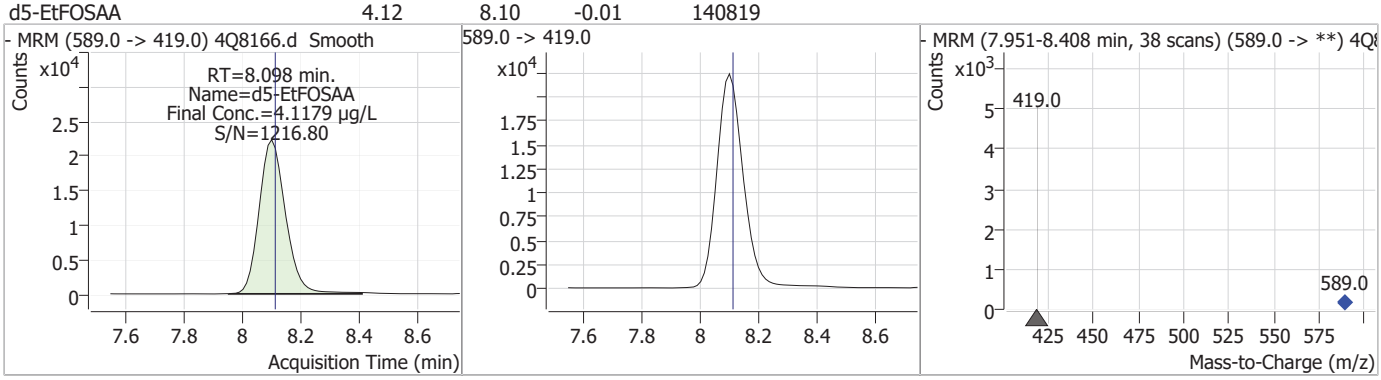


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.88	7.82	-0.17	25903 (m)	499.0 -> 99.0	30.4	25.7	77.2

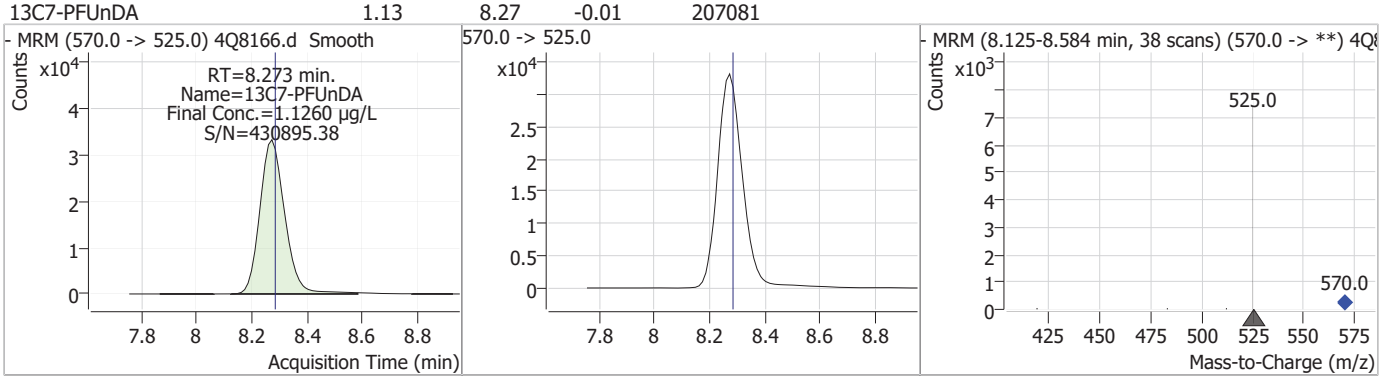


Perfluorinated Compounds by LC/MS/MS

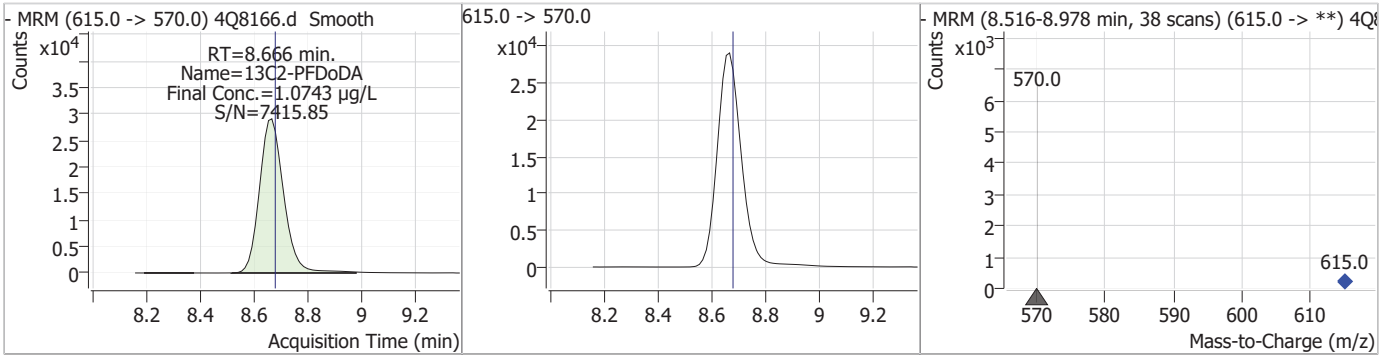
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.12	8.10	-0.01	140819				



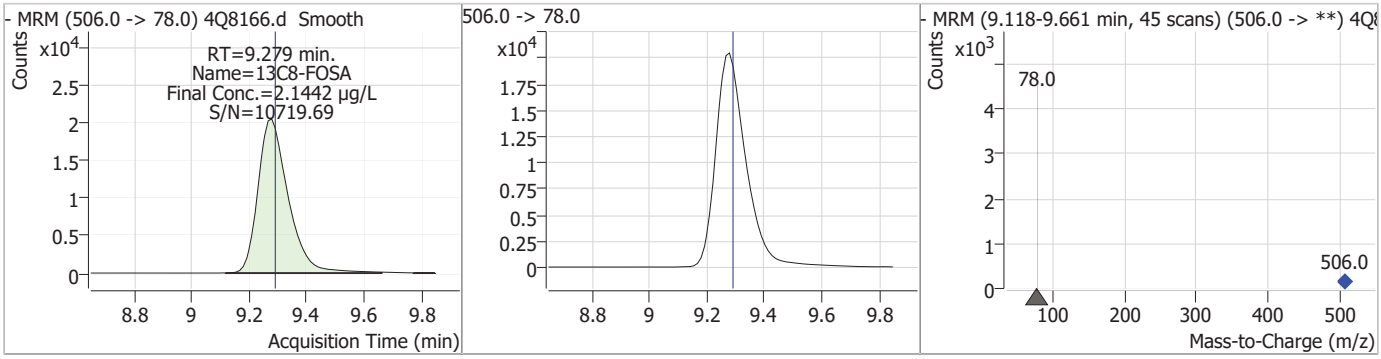
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.13	8.27	-0.01	207081				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.07	8.67	-0.01	180960				

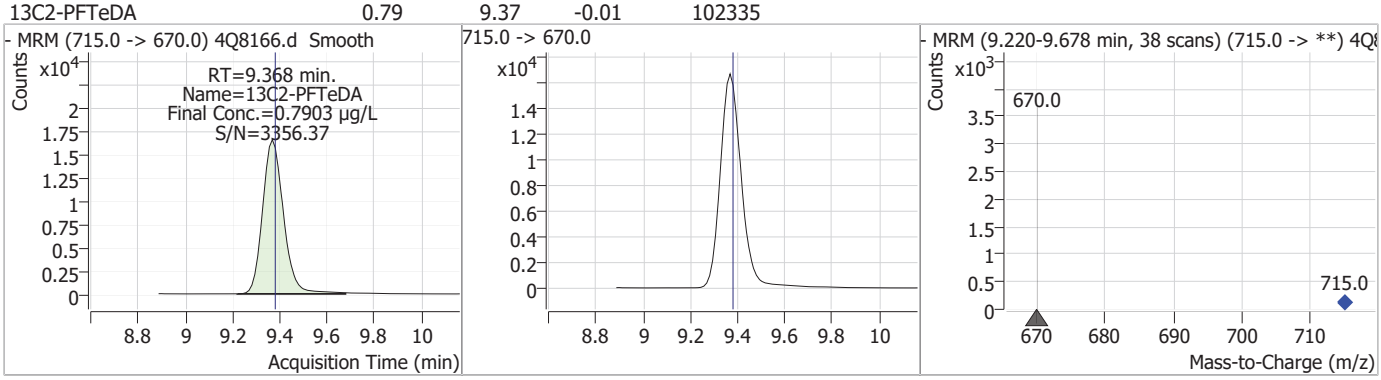


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.14	9.28	-0.01	148958				

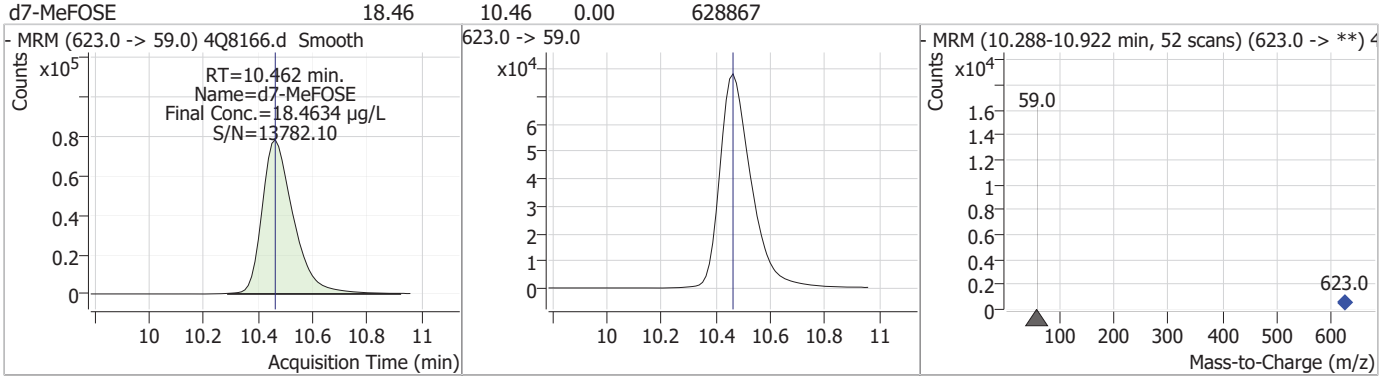


Perfluorinated Compounds by LC/MS/MS

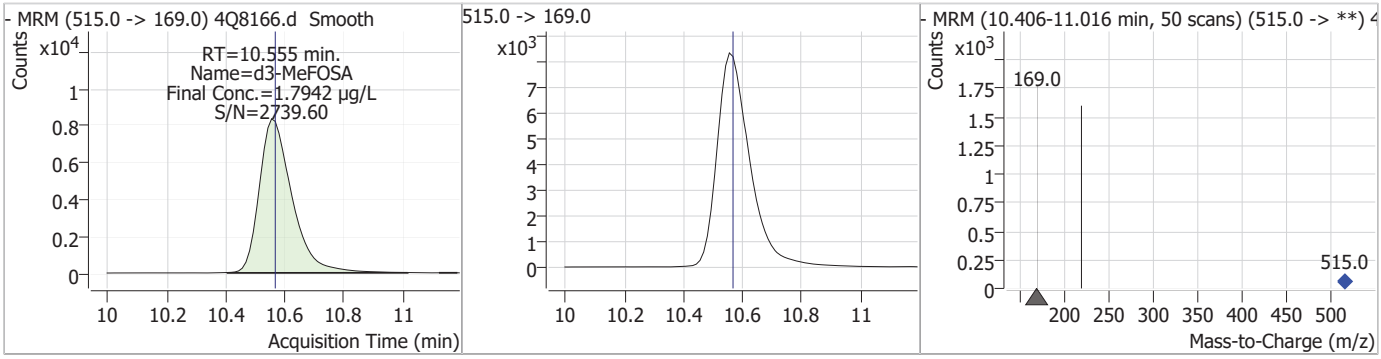
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.79	9.37	-0.01	102335				



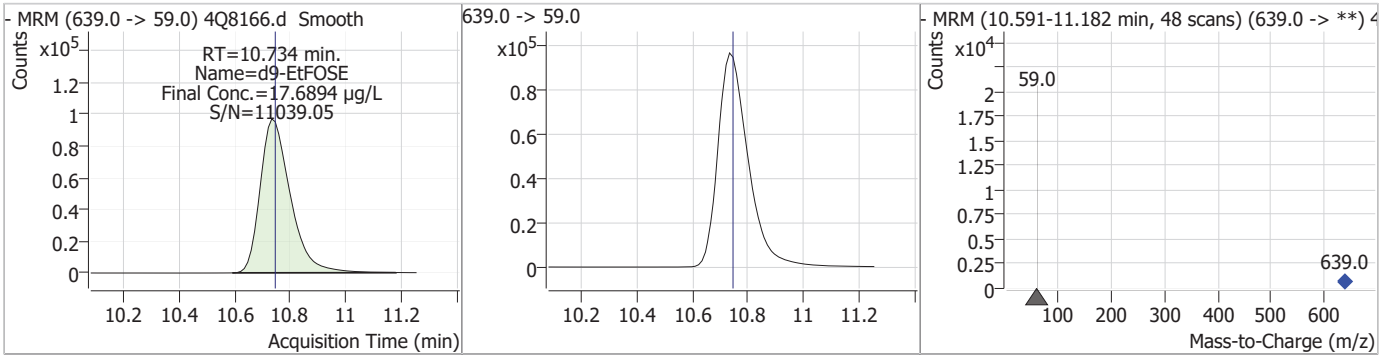
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	18.46	10.46	0.00	628867				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.79	10.56	-0.01	64007				

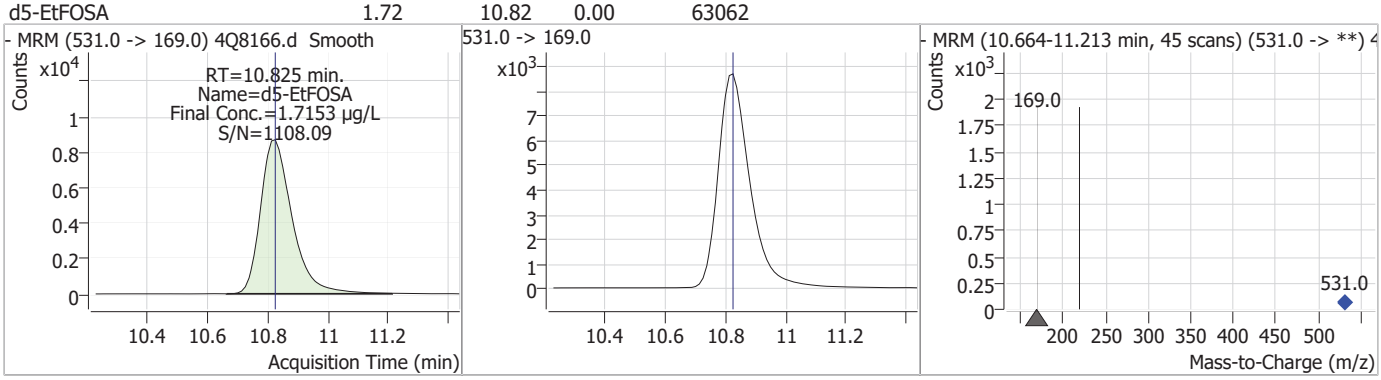


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	17.69	10.73	-0.01	730558				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.72	10.82	0.00	63062				



Manual Integration Approval Summary

Sample Number: JE10205-6
Lab FileID: 4Q8166.D
Injection Time: 04/30/25 23:05
Method: EPA 1633
Analyst approved: 05/01/25 04:52 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluoropentanesulfonic acid	2706-91-4		6.33	Poor instrument integration
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.40	Poor instrument integration
Perfluoroheptanesulfonic acid	375-92-8		7.53	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		7.82	Split peak
Perfluorodecanoic acid	335-76-2		7.86	Poor instrument integration
MeFOSAA	2355-31-9		7.93	Split peak

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8167.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 11:18:51 PM
Sample Name : JE10205-7
Vial : P1-E1
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,494,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.858	217.0 -> 172.0	965772	10.00 µg/L	-0.025
M5-PFPeA	4.319	268.0 -> 223.0	491820	5.00 µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	330493	2.50 µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	341506	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	491139	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	197154	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	182006	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	243221	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	212740	1.25 µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	149849	1.25 µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	172405	2.50 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	30501	2.50 µg/L	0.000
		302.0 -> 80.0	69666		
M3-PFHxS	6.986	402.0 -> 99.0	42448	2.50 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	42997	2.50 µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	14346	5.00 µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	27353	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	31142	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	232321	5.00 µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	520821	10.00 µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	167887	5.00 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	781770	25.00 µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	984291	25.00 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	85633	2.50 µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	79753	2.50 µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	78807	2.50 µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	448647	5.00 µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	49605	2.50 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	541160	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	182654	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	212718	1.25 µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	329955	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.153	329.0 -> 81.0	14346	5.77 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 115.3%	
13C2-6:2FTS	6.684	429.0 -> 81.0	27353	5.07 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.3%	
13C2-8:2FTS	7.671	529.0 -> 81.0	31142	4.90 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.1%	
13C2-PFDoDA	8.666	615.0 -> 570.0	212740	1.08 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 86.2%	
13C2-PFTeDA	9.368	715.0 -> 670.0	149849	0.99 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 79.0%	
13C3-PFBS	5.368	302.0 -> 99.0	30501	2.49 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.7%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	42448	2.45	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.0%		
13C4-PFBA	2.858	217.0 -> 172.0	965772	9.39	µg/L	-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 93.9%		
13C4-PFHpA	6.291	367.0 -> 322.0	341506	2.30	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.0%		
13C5-PFHxA	5.452	318.0 -> 273.0	330493	2.37	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.6%		
13C5-PFPeA	4.319	268.0 -> 223.0	491820	4.64	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.8%		
13C6-PFDA	7.858	519.0 -> 474.0	182006	1.13	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.2%		
13C7-PFUnDA	8.273	570.0 -> 525.0	243221	1.13	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.3%		
13C8-FOSA	9.279	506.0 -> 78.0	172405	2.13	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 85.2%		
13C8-PFOA	6.897	421.0 -> 376.0	491139	2.27	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.8%		
13C8-PFOS	7.995	507.0 -> 99.0	42997	2.27	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.6%		
13C9-PFNA	7.403	472.0 -> 427.0	197154	1.12	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.4%		
d3-MeFOSAA	7.915	573.0 -> 419.0	232321	4.48	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 89.5%		
13C3-HFPO-DA	5.779	287.0 -> 169.0	520821	9.50	µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.0%		
d3-MeFOSA	10.555	515.0 -> 169.0	79753	1.92	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 76.7%		
d5-EtFOSAA	8.098	589.0 -> 419.0	167887	4.21	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 84.3%		
d7-MeFOSE	10.462	623.0 -> 59.0	781770	19.70	µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 78.8%		
d9-EtFOSE	10.734	639.0 -> 59.0	984291	20.45	µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 81.8%		
d5-EtFOSA	10.825	531.0 -> 169.0	85633	2.00	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 80.0%		
Target Compounds						QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.		
		327.0 -> 81.0				
6:2FTS	-	427.0 -> 407.0	-	N.D.		
		427.0 -> 81.0				
8:2FTS	-	527.0 -> 507.0	-	N.D.		
		527.0 -> 81.0				
EtFOSAA	-	584.0 -> 419.0	-	N.D.		
		584.0 -> 483.0				
FOSA	-	498.0 -> 78.0	-	N.D.		
		498.0 -> 478.0				
MeFOSAA	-	570.0 -> 419.0	-	N.D.		
		570.0 -> 512.0				
PFBA	-	213.0 -> 169.0	-	N.D.		
PFBS	-	299.0 -> 80.0	-	N.D.		
		299.0 -> 99.0				
PFDA	-	513.0 -> 469.0	-	N.D.		
		513.0 -> 219.0				
PFDoDA	-	613.0 -> 569.0	-	N.D.		
		613.0 -> 319.0				

Perfluorinated Compounds by LC/MS/MS

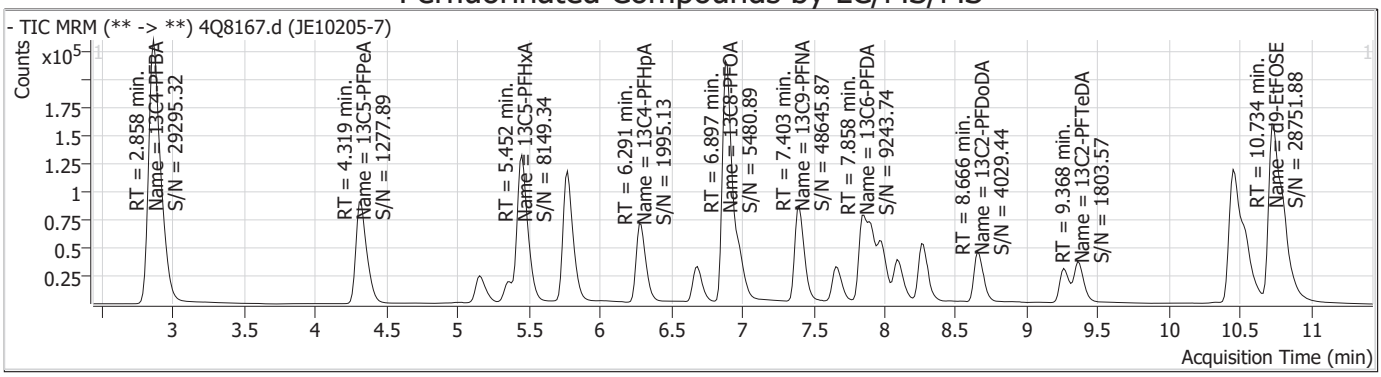
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.		
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 219.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 369.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

Perfluorinated Compounds by LC/MS/MS

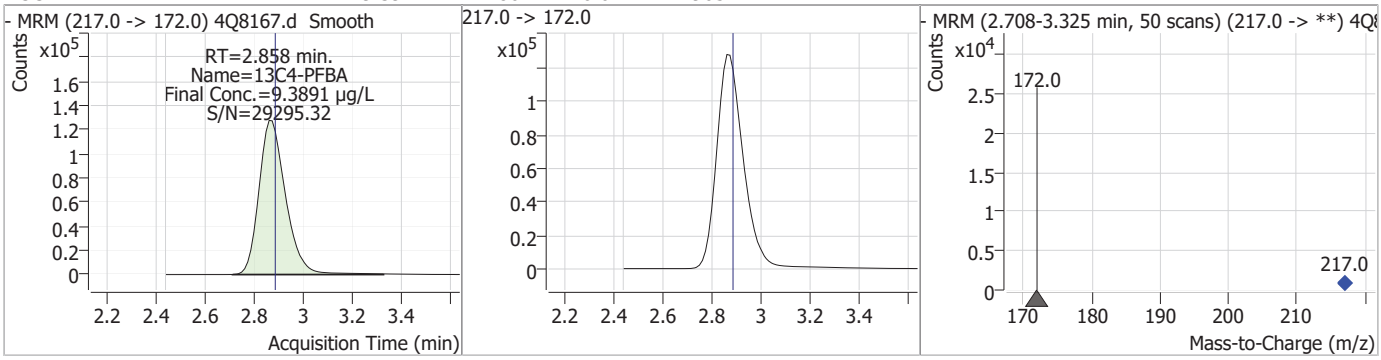
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

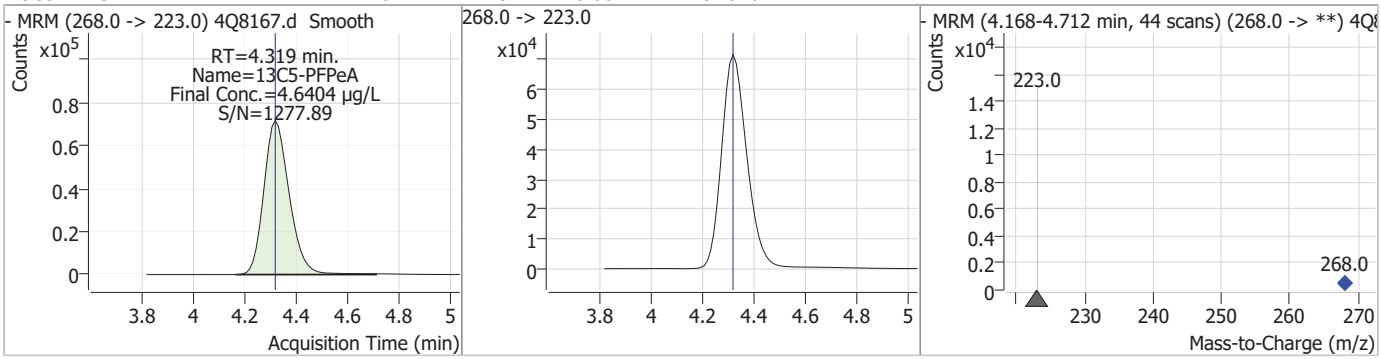
Perfluorinated Compounds by LC/MS/MS



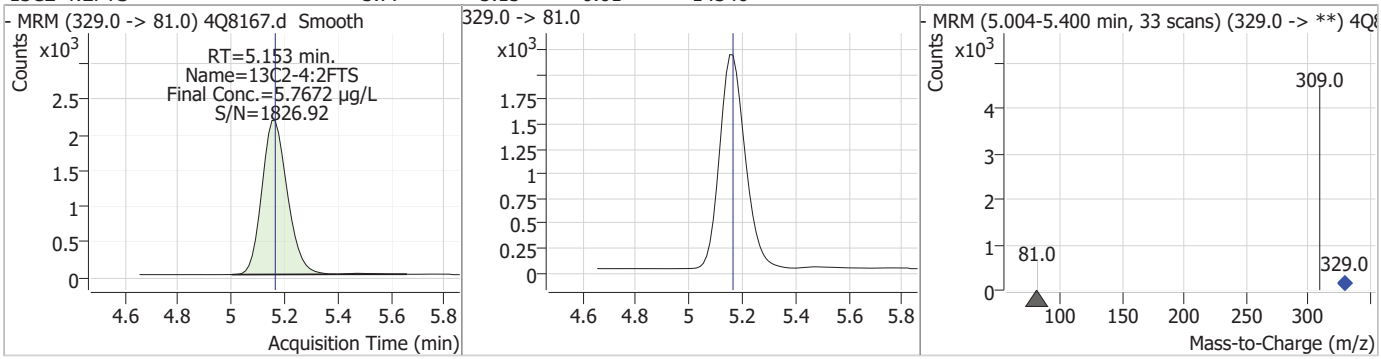
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.39	2.86	-0.02	965772				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.64	4.32	0.00	491820				

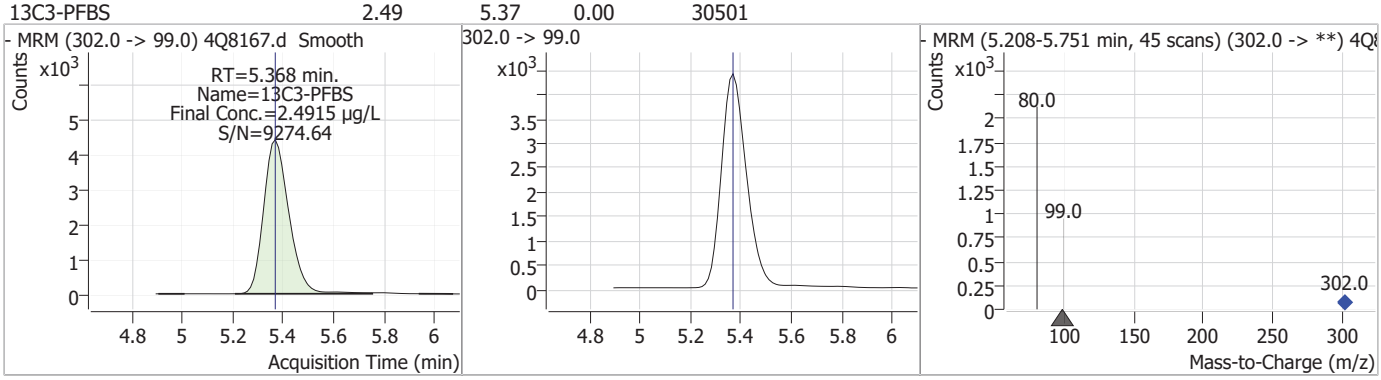


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.77	5.15	-0.01	14346				

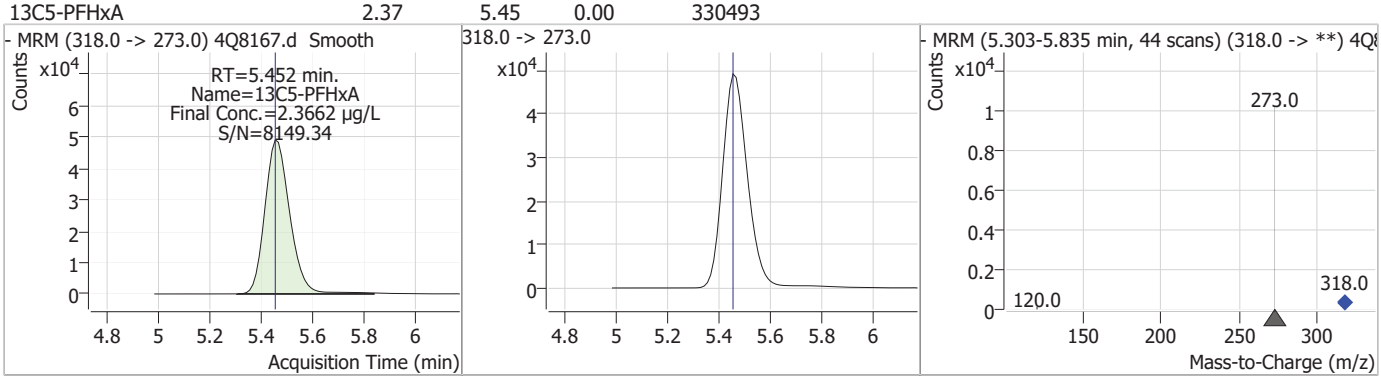


Perfluorinated Compounds by LC/MS/MS

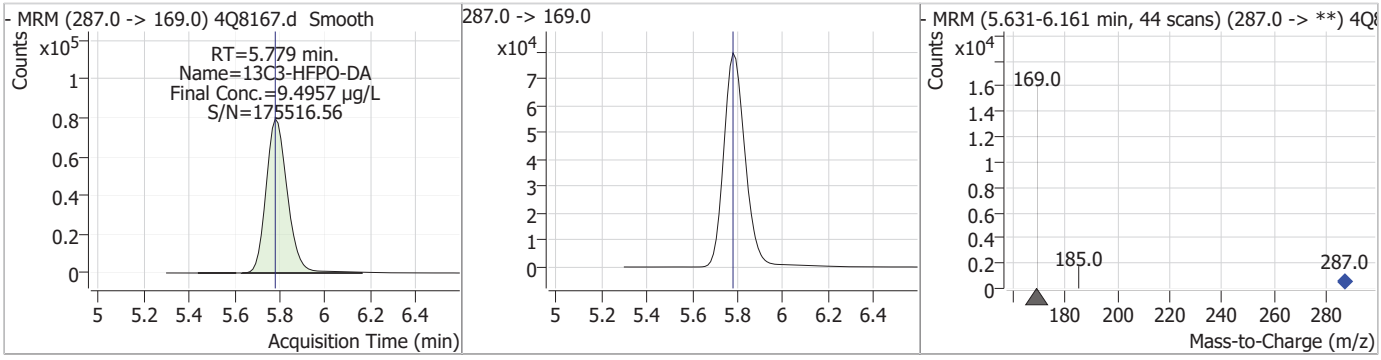
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.49	5.37	0.00	30501				



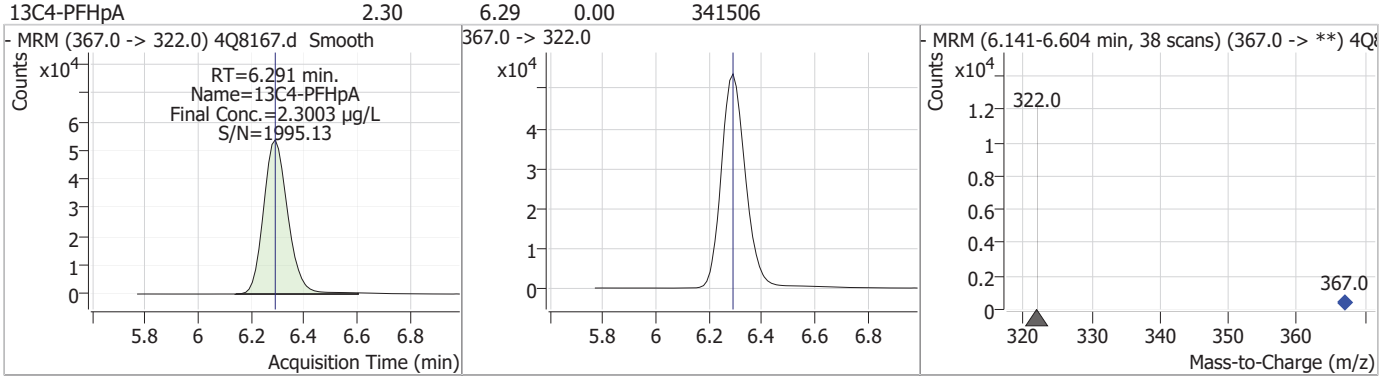
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.37	5.45	0.00	330493				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.50	5.78	0.00	520821				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.30	6.29	0.00	341506				



7.1.11

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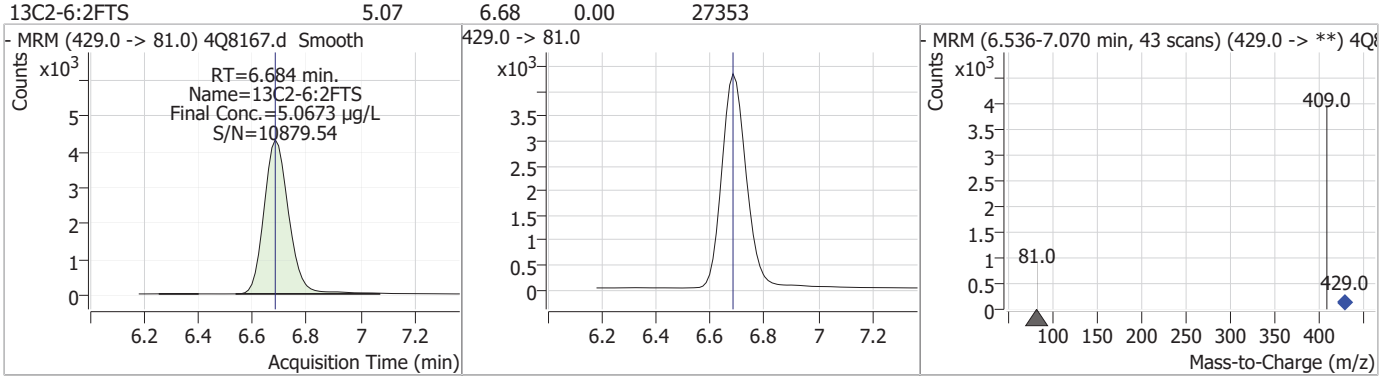
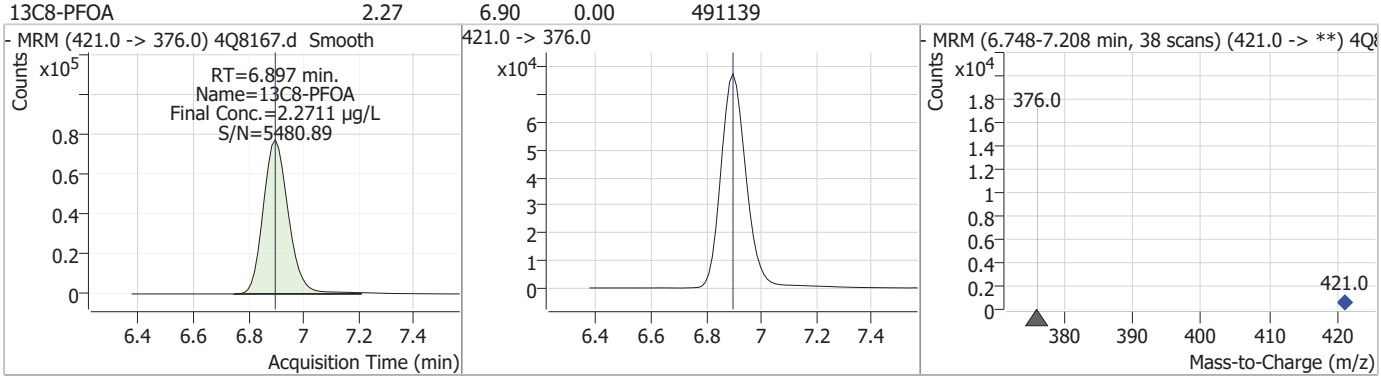
Perfluorinated Compounds by LC/MS/MS

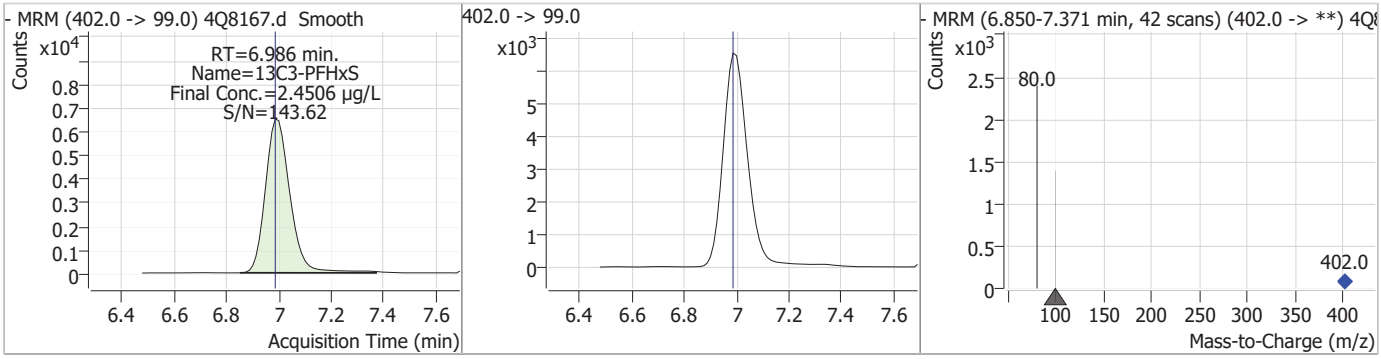
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.07	6.68	0.00	27353				



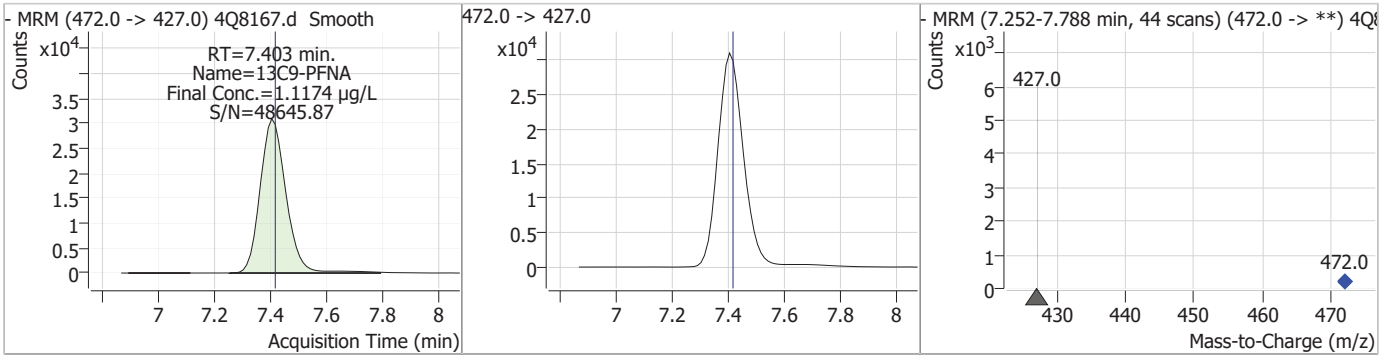
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.27	6.90	0.00	491139				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.45	6.99	0.00	42448				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.12	7.40	-0.01	197154				

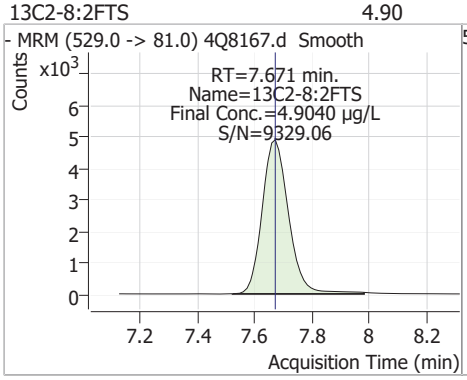


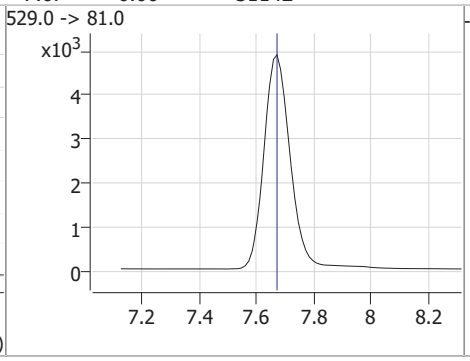
7.1.11

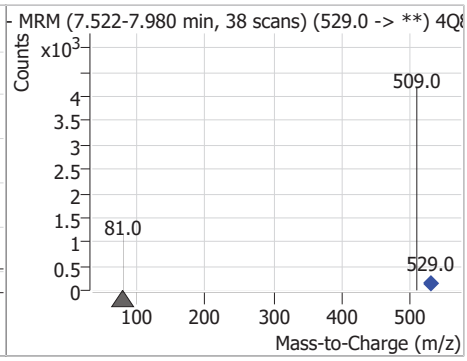
7

Perfluorinated Compounds by LC/MS/MS

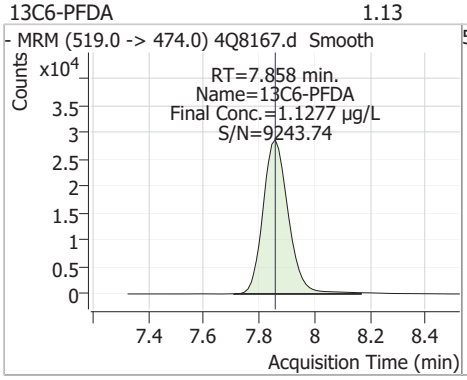
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.90	7.67	0.00	31142				

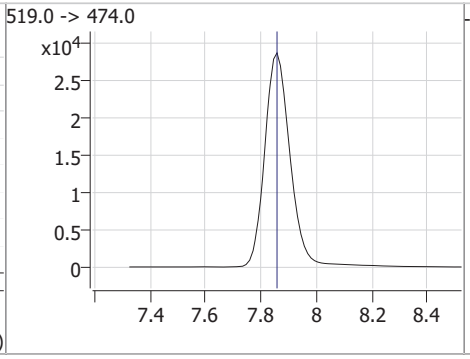


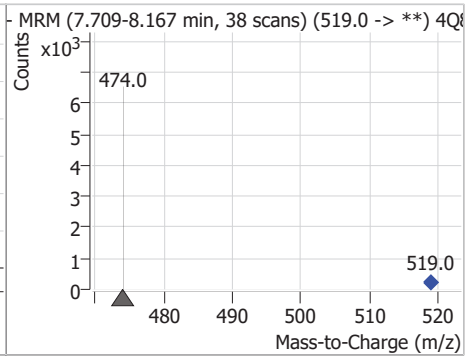




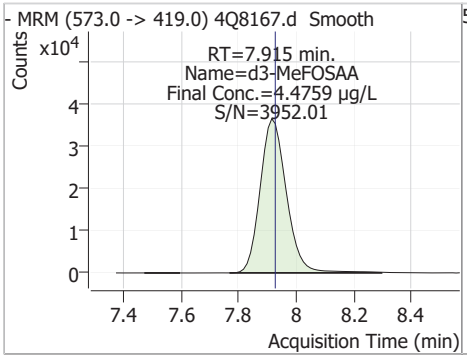
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.13	7.86	0.00	182006				

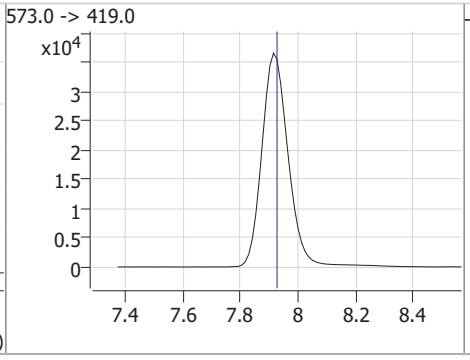


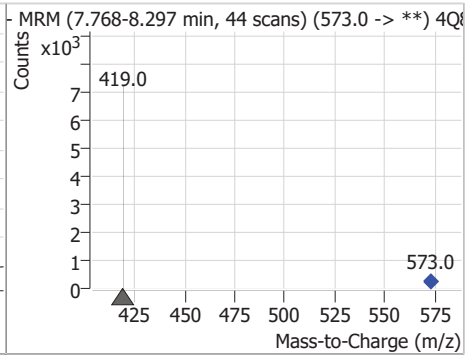




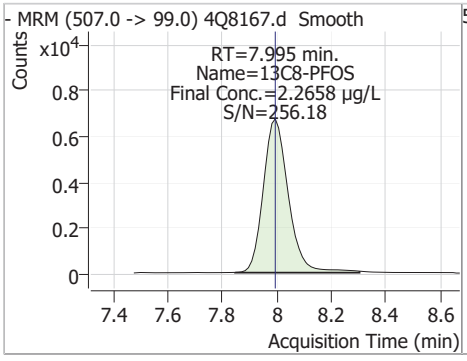
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.48	7.92	-0.01	232321				

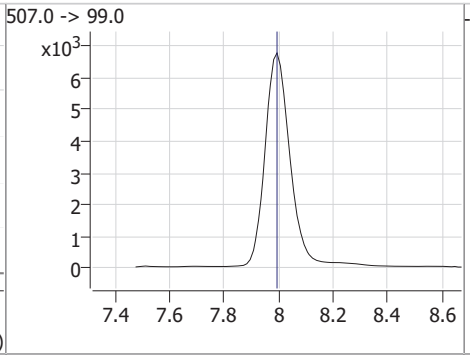


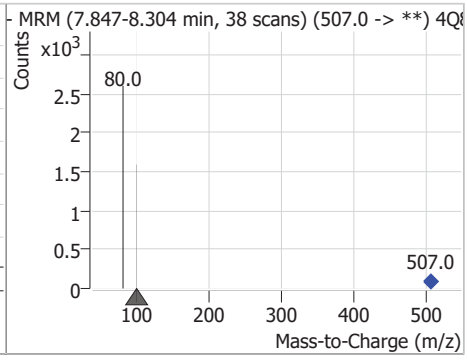




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.27	7.99	0.00	42997				

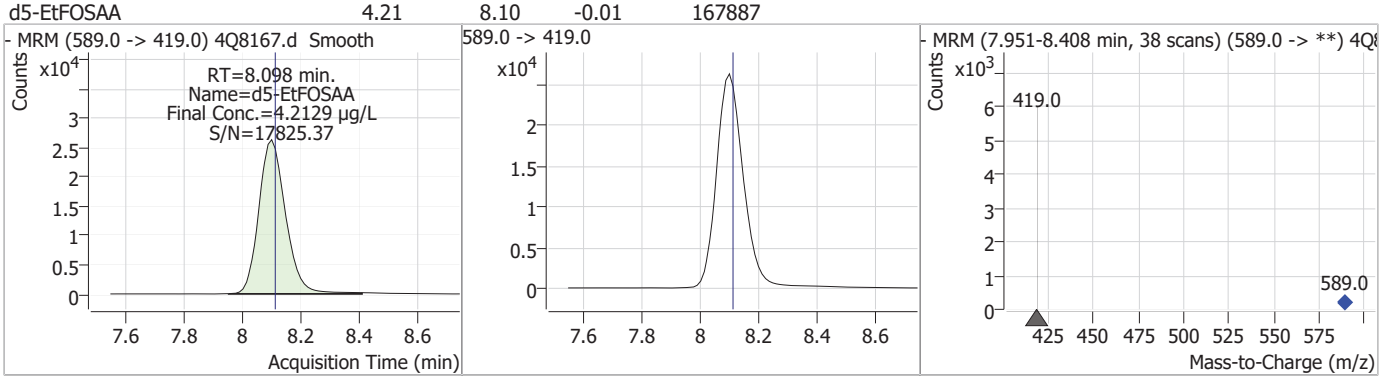




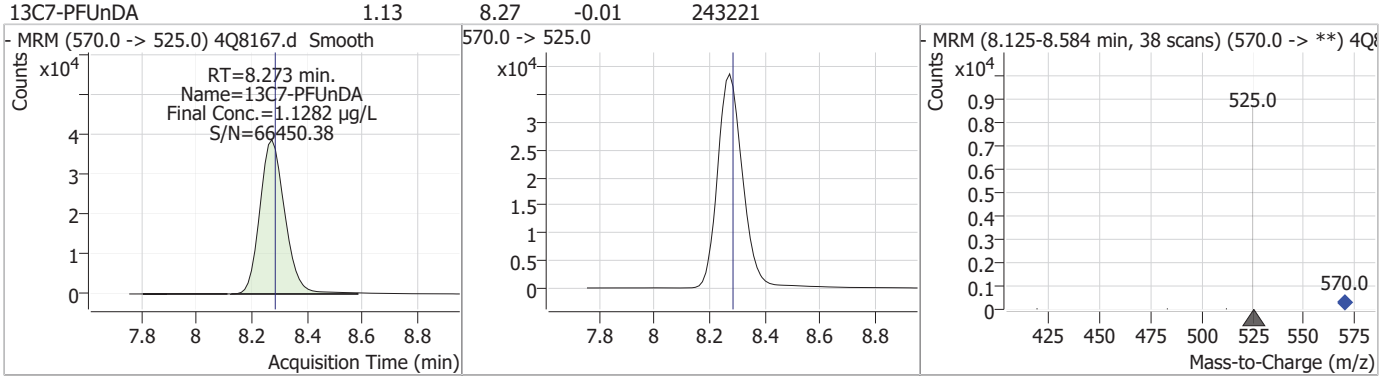


Perfluorinated Compounds by LC/MS/MS

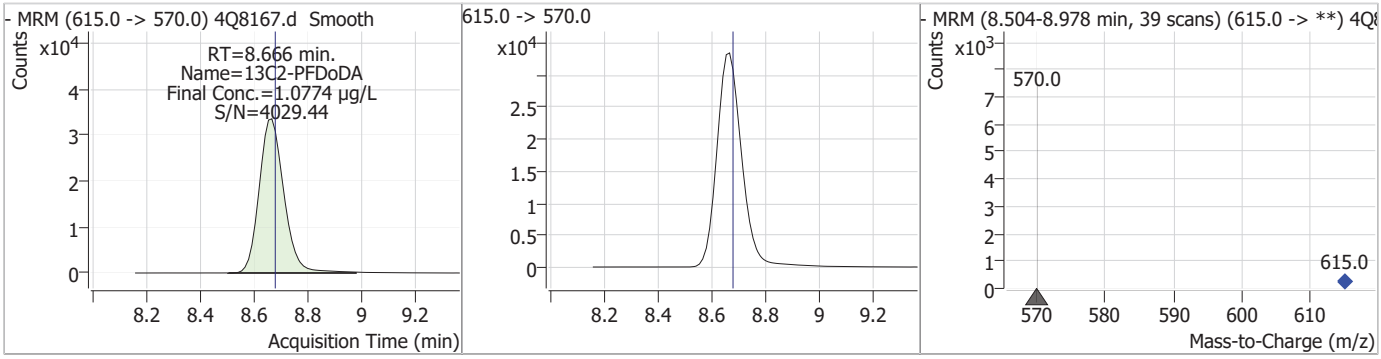
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.21	8.10	-0.01	167887				



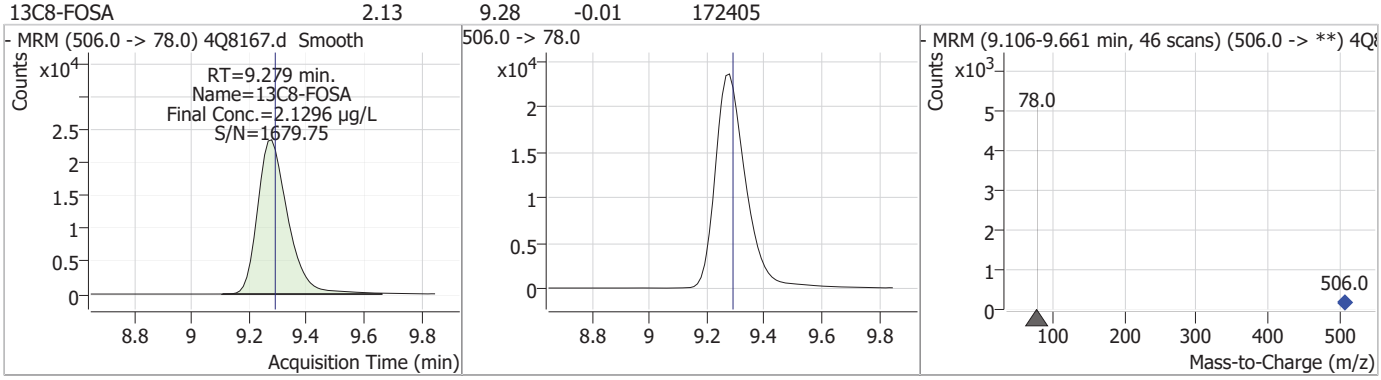
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.13	8.27	-0.01	243221				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.08	8.67	-0.01	212740				

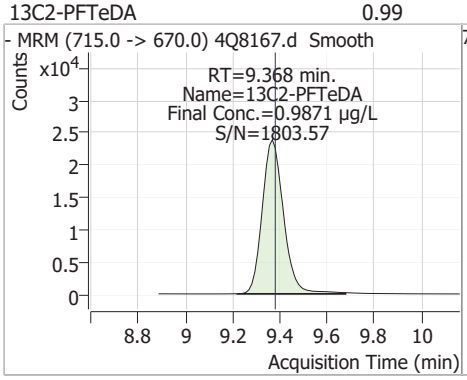


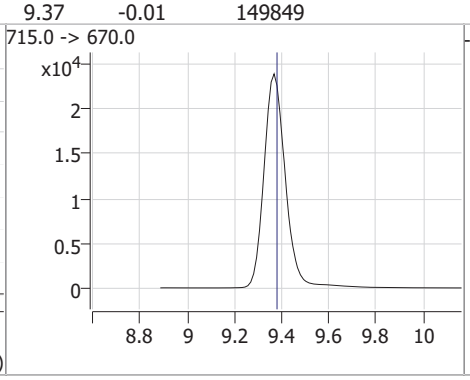
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.13	9.28	-0.01	172405				

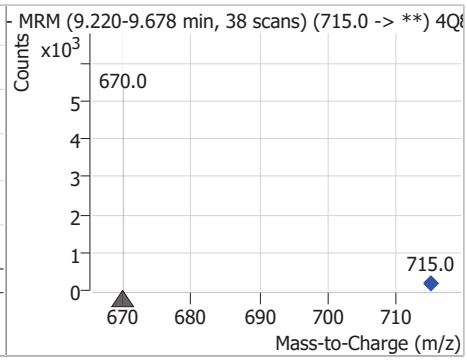


Perfluorinated Compounds by LC/MS/MS

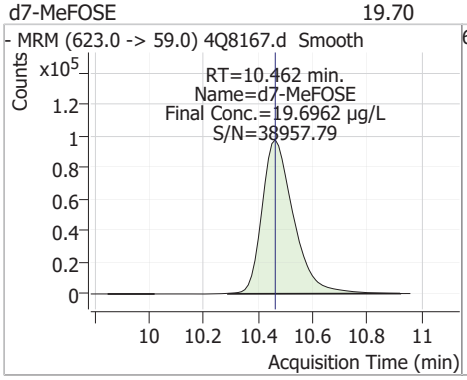
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.99	9.37	-0.01	149849				

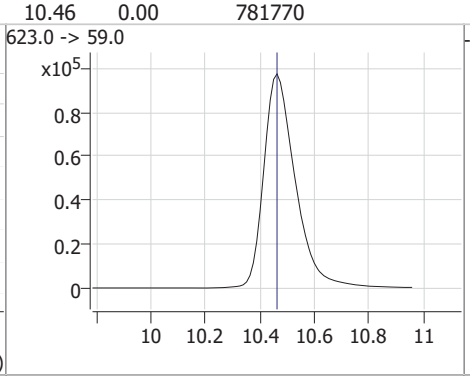


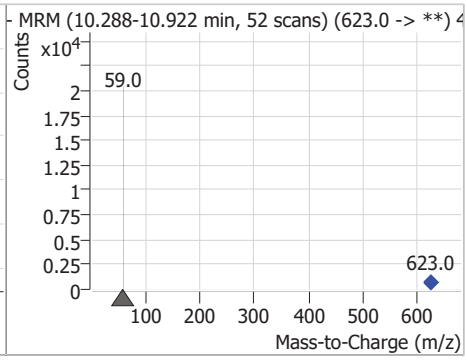




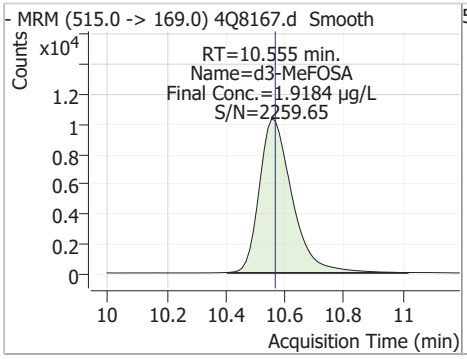
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	19.70	10.46	0.00	781770				

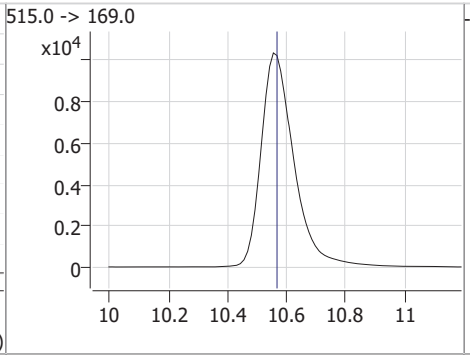


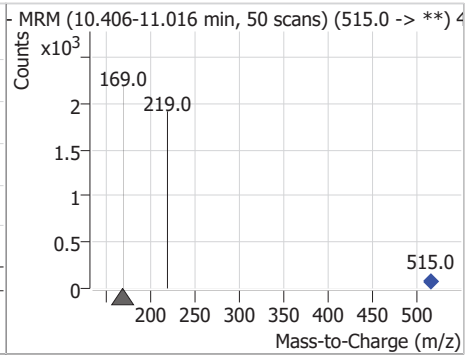




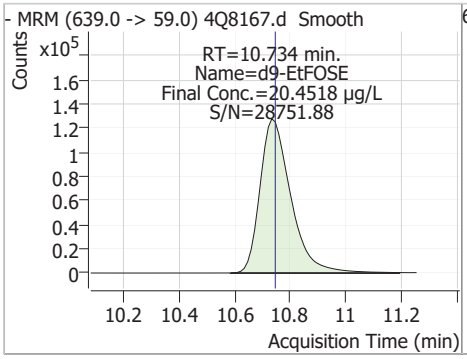
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.92	10.56	-0.01	79753				

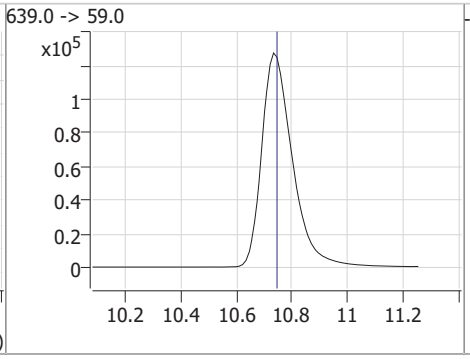


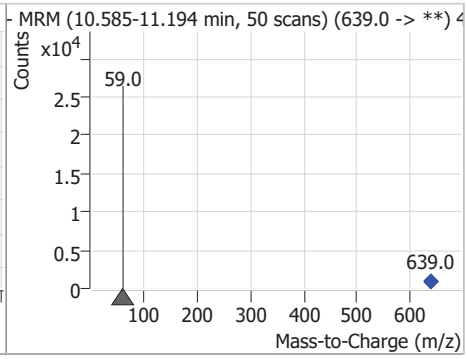




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	20.45	10.73	-0.01	984291				





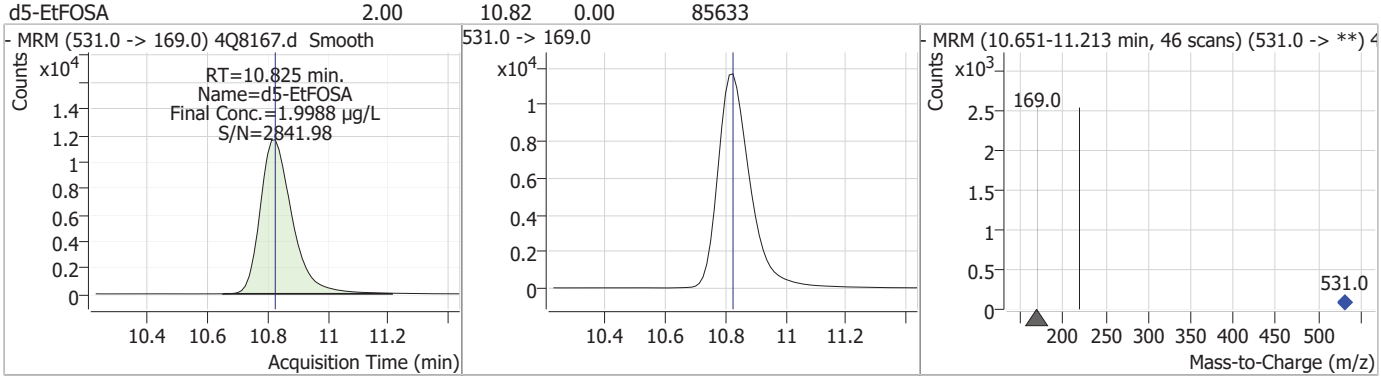


7.1.11

7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.00	10.82	0.00	85633				



7.1.11

7

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8168.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 11:32:24 PM
Sample Name : JE10205-8
Vial : P1-E2
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,493,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.858	217.0 -> 172.0	849372	10.00	µg/L	-0.025
M5-PFPeA	4.319	268.0 -> 223.0	426153	5.00	µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	297644	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	292166	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	434879	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	179423	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	160271	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	201087	1.25	µg/L	-0.012
M2-PFDoDA	8.654	615.0 -> 570.0	163869	1.25	µg/L	-0.025
M2-PFTeDA	9.368	715.0 -> 670.0	122398	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	148129	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	26931	2.50	µg/L	0.000
		302.0 -> 80.0	65278			
M3-PFHxS	6.986	402.0 -> 99.0	36060	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	39334	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	11245	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	23894	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	28657	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	149031	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	460978	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	111665	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	665865	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	819280	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	71181	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	69821	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	66923	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	389361	5.00	µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	44995	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	469235	2.50	µg/L	0.000
13C2-PFDA	7.859	515.0 -> 470.0	164803	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	189076	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	294787	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	11245	4.98	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.7%		
13C2-6:2FTS	6.684	429.0 -> 81.0	23894	4.88	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.6%		
13C2-8:2FTS	7.671	529.0 -> 81.0	28657	4.98	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.5%		
13C2-PFDoDA	8.654	615.0 -> 570.0	163869	0.92	µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 73.6%		
13C2-PFTeDA	9.368	715.0 -> 670.0	122398	0.89	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 71.5%		
13C3-PFBS	5.368	302.0 -> 99.0	26931	2.43	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.0%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	36060	2.30 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.8%	
13C4-PFBA	2.858	217.0 -> 172.0	849372	9.51 µg/L	-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.1%	
13C4-PFHpA	6.291	367.0 -> 322.0	292166	2.20 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 88.1%	
13C5-PFHxA	5.452	318.0 -> 273.0	297644	2.39 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.4%	
13C5-PFPeA	4.319	268.0 -> 223.0	426153	4.50 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.0%	
13C6-PFDA	7.858	519.0 -> 474.0	160271	1.10 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.0%	
13C7-PFUnDA	8.273	570.0 -> 525.0	201087	1.03 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 82.7%	
13C8-FOSA	9.279	506.0 -> 78.0	148129	2.15 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 86.2%	
13C8-PFOA	6.897	421.0 -> 376.0	434879	2.32 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.8%	
13C8-PFOS	7.995	507.0 -> 99.0	39334	2.44 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.6%	
13C9-PFNA	7.403	472.0 -> 427.0	179423	1.14 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.5%	
d3-MeFOSAA	7.915	573.0 -> 419.0	149031	3.38 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 67.6%	
13C3-HFPO-DA	5.779	287.0 -> 169.0	460978	9.41 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.1%	
d3-MeFOSA	10.555	515.0 -> 169.0	69821	1.98 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 79.1%	
d5-EtFOSAA	8.098	589.0 -> 419.0	111665	3.30 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 66.0%	
d7-MeFOSE	10.462	623.0 -> 59.0	665865	19.76 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 79.0%	
d9-EtFOSE	10.734	639.0 -> 59.0	819280	20.05 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 80.2%	
d5-EtFOSA	10.825	531.0 -> 169.0	71181	1.96 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 78.3%	
Target Compounds					**QValue**
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	6.684	427.0 -> 407.0	25752	1.07 µg/L	99
		427.0 -> 81.0	12219		
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	5.369	299.0 -> 80.0	1328	0.04 µg/L	90
		299.0 -> 99.0	457		
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

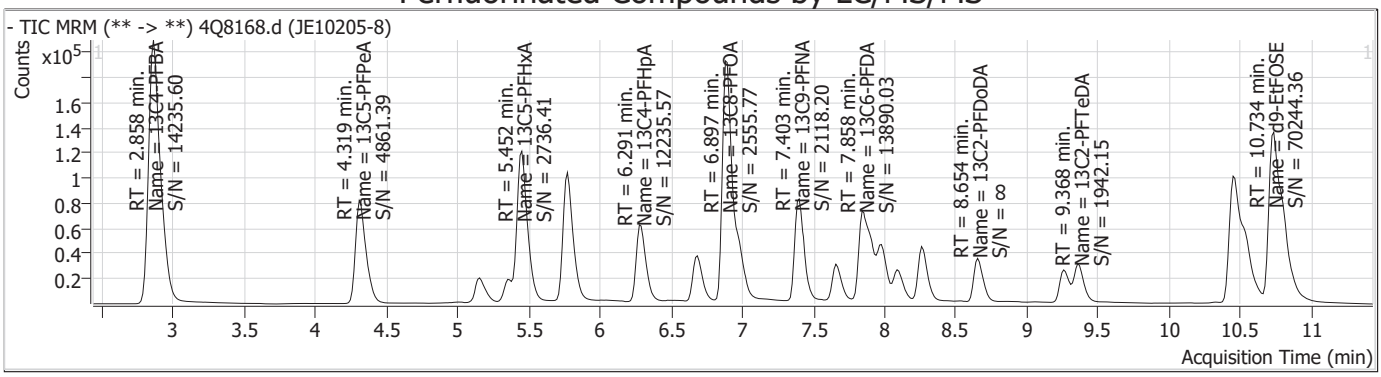
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	-	363.0 -> 319.0	-	N.D.			
		363.0 -> 169.0					
PFHpS	-	449.0 -> 80.0	-	N.D.			
		449.0 -> 99.0					
PFHxA	-	313.0 -> 269.0	-	N.D.			
		313.0 -> 119.0					
PFHxS	6.987	399.0 -> 80.0	9453	0.30	µg/L	m	96
		399.0 -> 99.0	4814				
PFNA	7.404	463.0 -> 419.0	14753	0.14	µg/L		87
		463.0 -> 219.0	4332				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	6.898	413.0 -> 369.0	9365	0.06	µg/L		99
		413.0 -> 169.0	2776				
PFOS	7.984	499.0 -> 80.0	3322	0.10	µg/L	m	82
		499.0 -> 99.0	1285				
PFPeA	-	263.0 -> 219.0	-	N.D.			
PFPeS	-	349.0 -> 80.0	-	N.D.			
		349.0 -> 99.0					
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	-	563.0 -> 519.0	-	N.D.			
		563.0 -> 269.0					
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

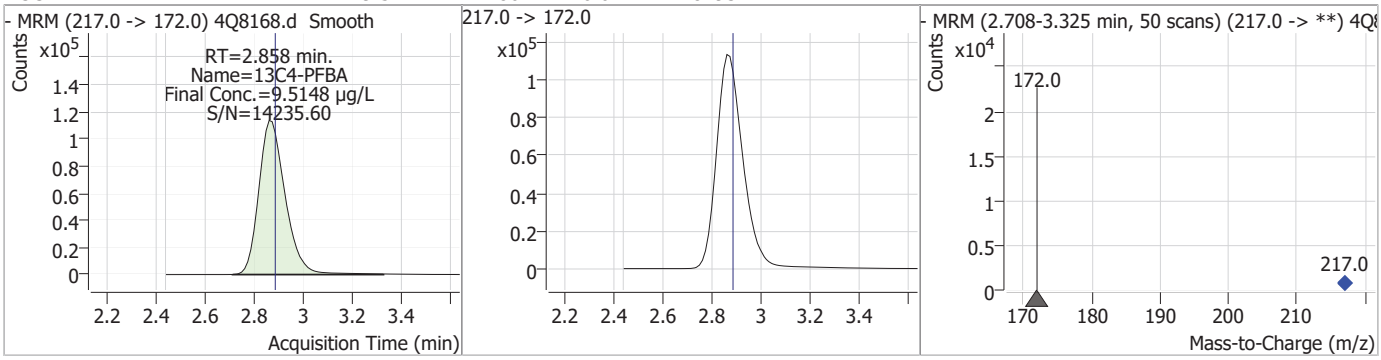
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

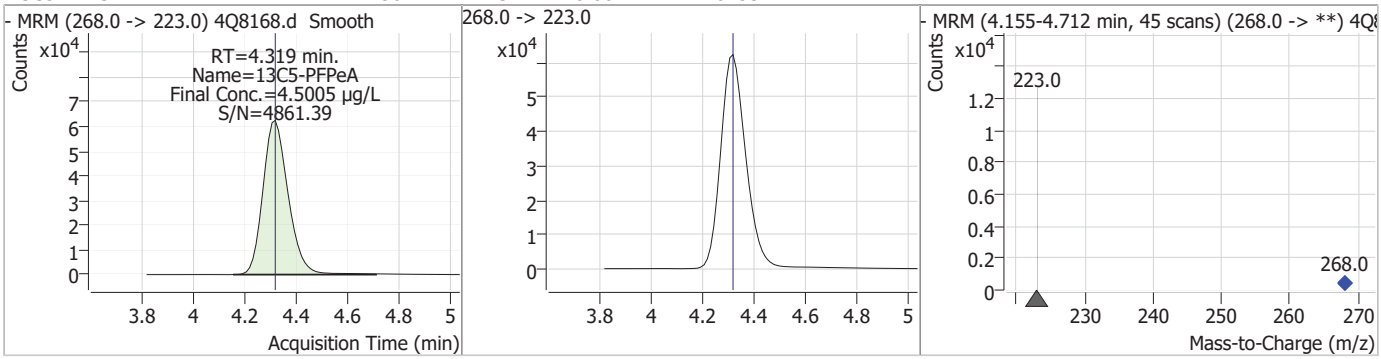
Perfluorinated Compounds by LC/MS/MS



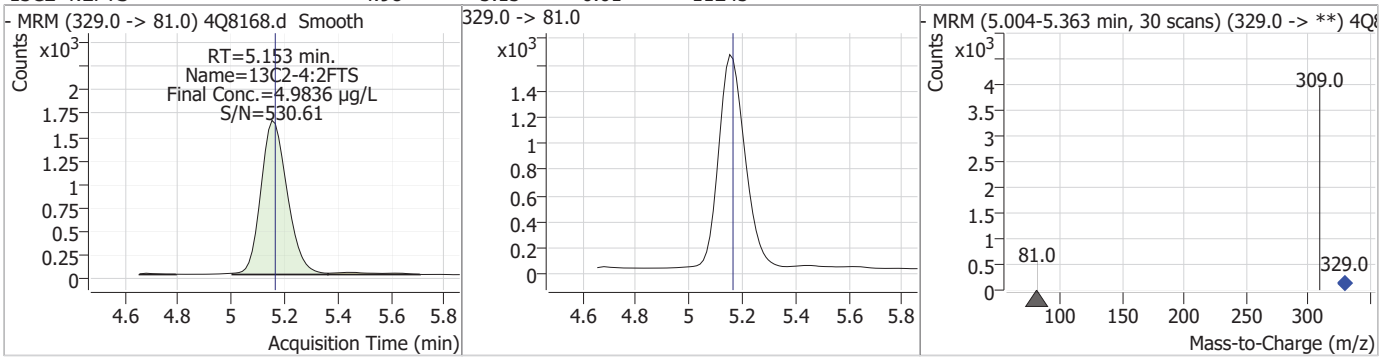
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.51	2.86	-0.02	849372				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.50	4.32	0.00	426153				

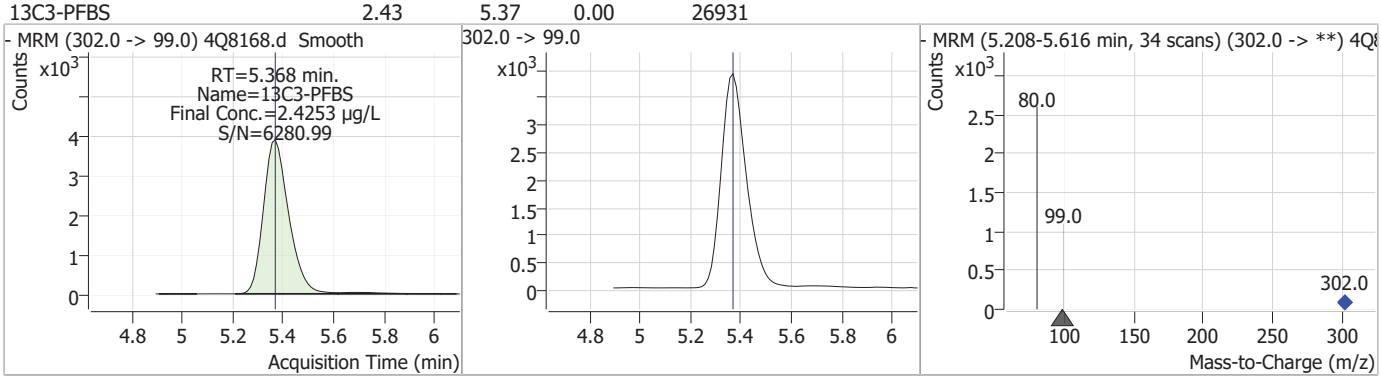


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.98	5.15	-0.01	11245				

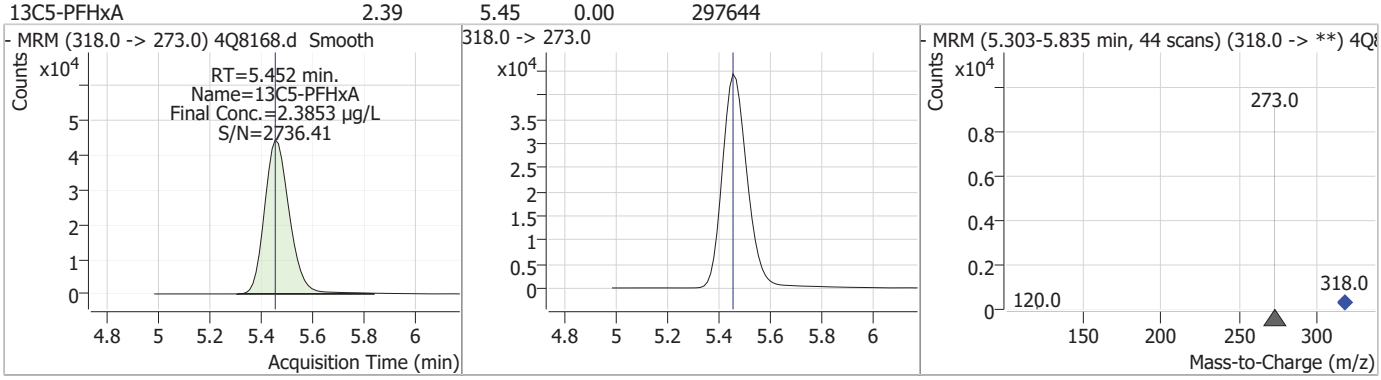


Perfluorinated Compounds by LC/MS/MS

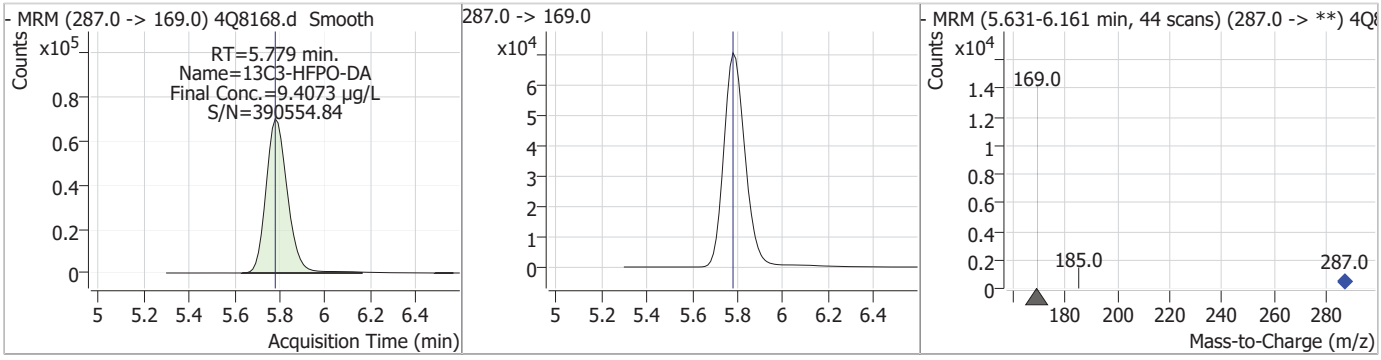
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.43	5.37	0.00	26931				



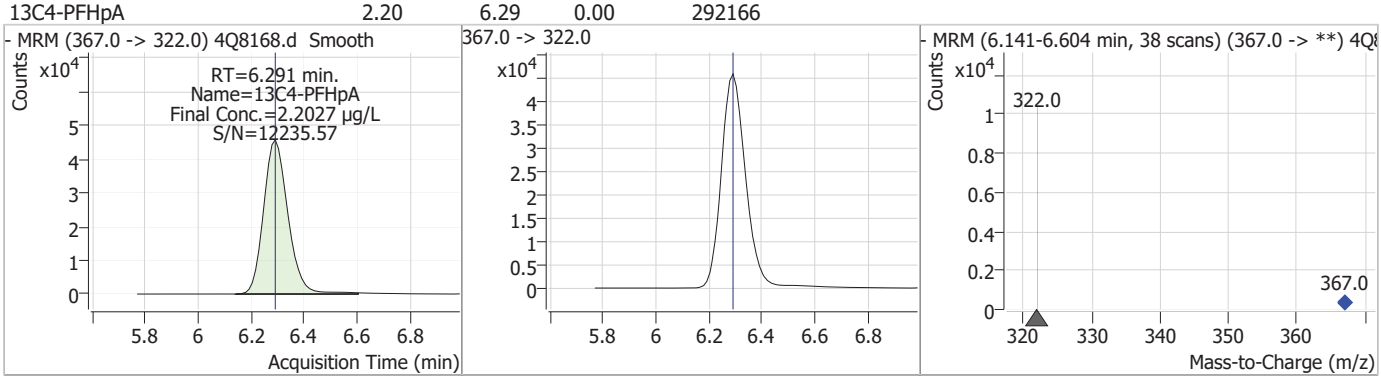
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.39	5.45	0.00	297644				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.41	5.78	0.00	460978				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.20	6.29	0.00	292166				



7.1.12

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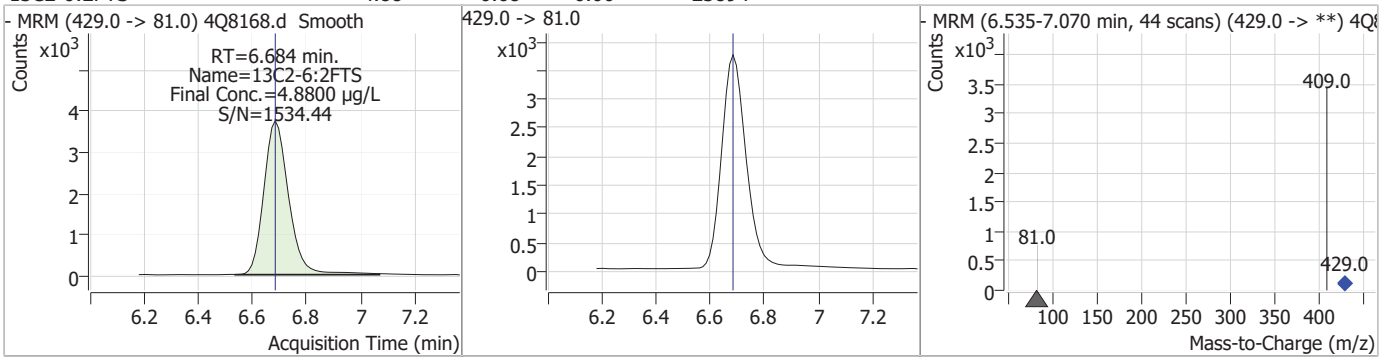
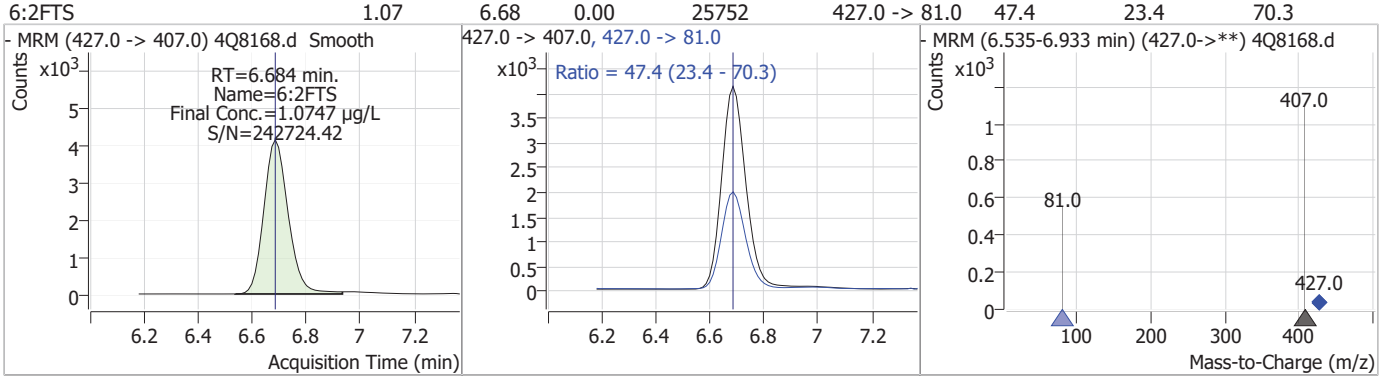
Perfluorinated Compounds by LC/MS/MS

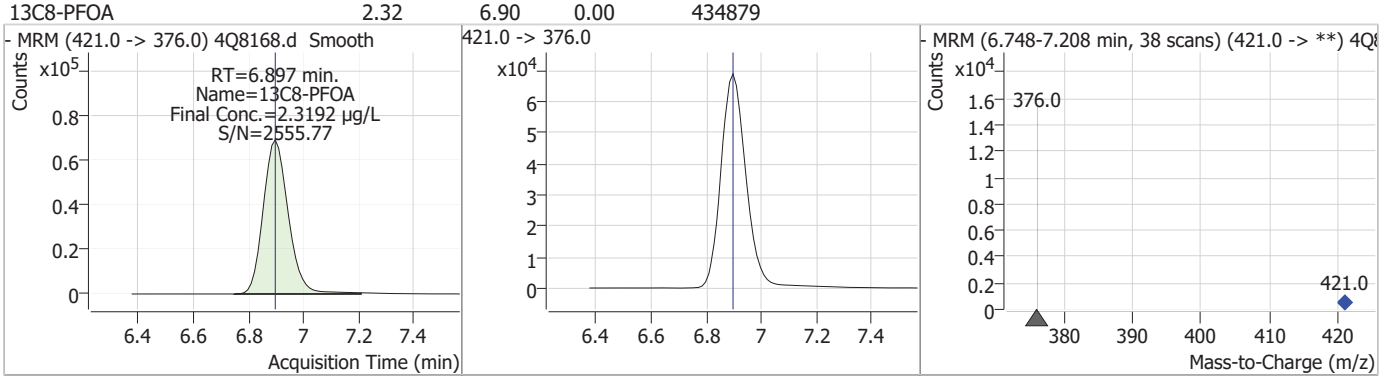
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.88	6.68	0.00	23894				



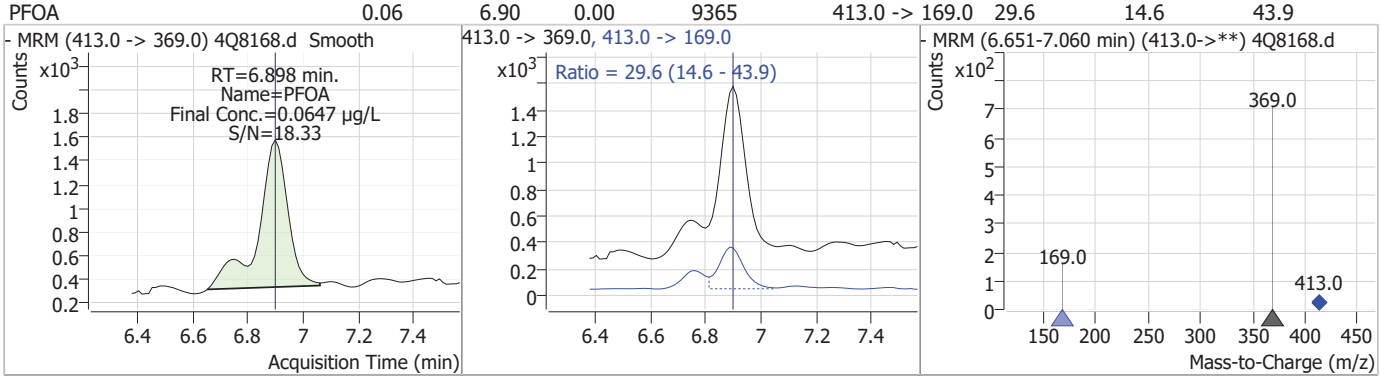
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	1.07	6.68	0.00	25752	427.0 -> 81.0	47.4	23.4	70.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.32	6.90	0.00	434879				

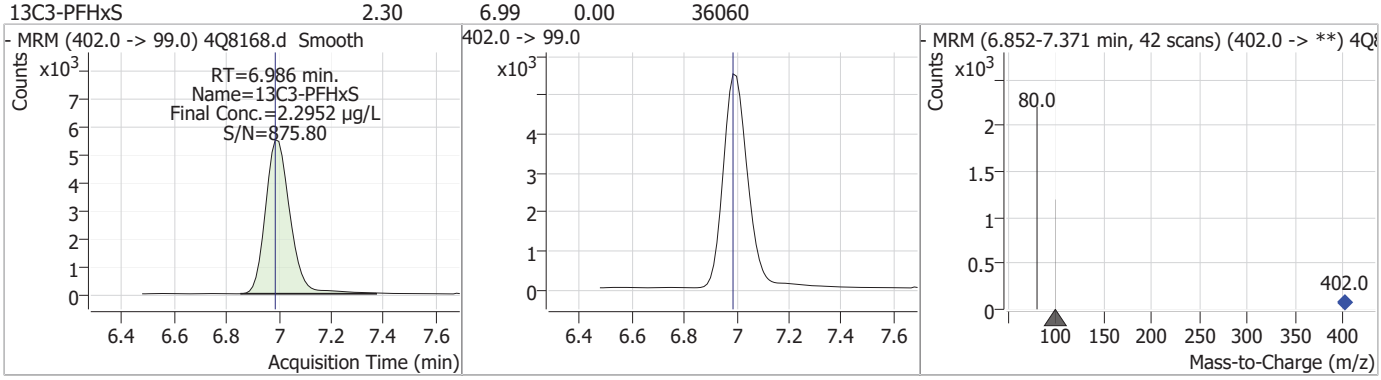


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.06	6.90	0.00	9365	413.0 -> 169.0	29.6	14.6	43.9

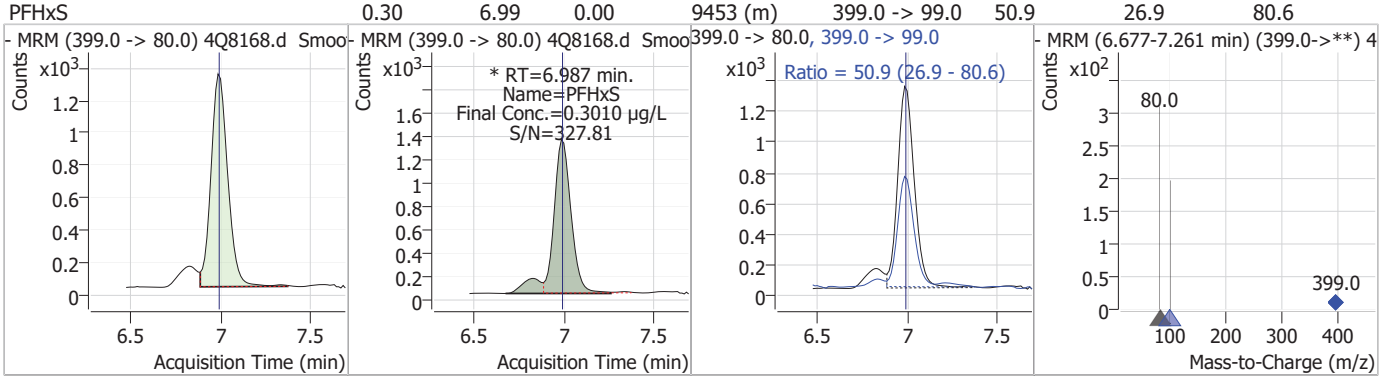


Perfluorinated Compounds by LC/MS/MS

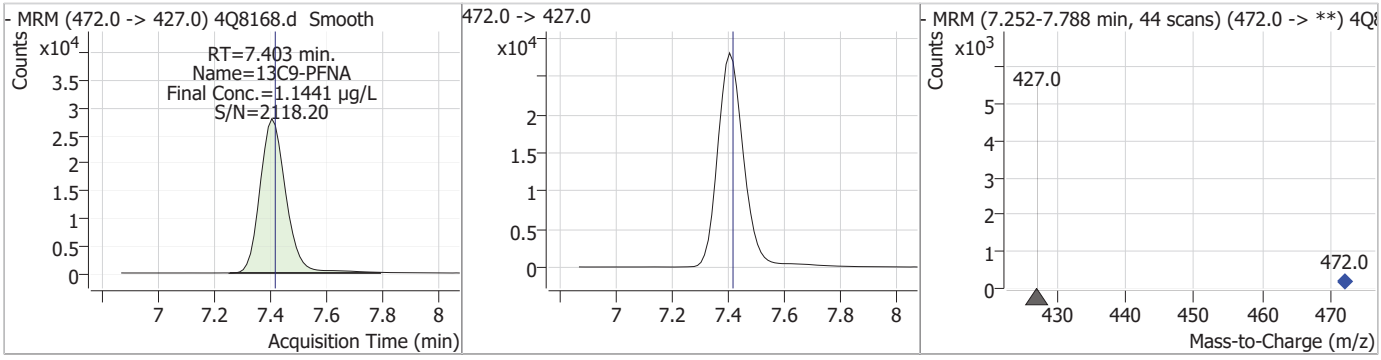
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.30	6.99	0.00	36060				



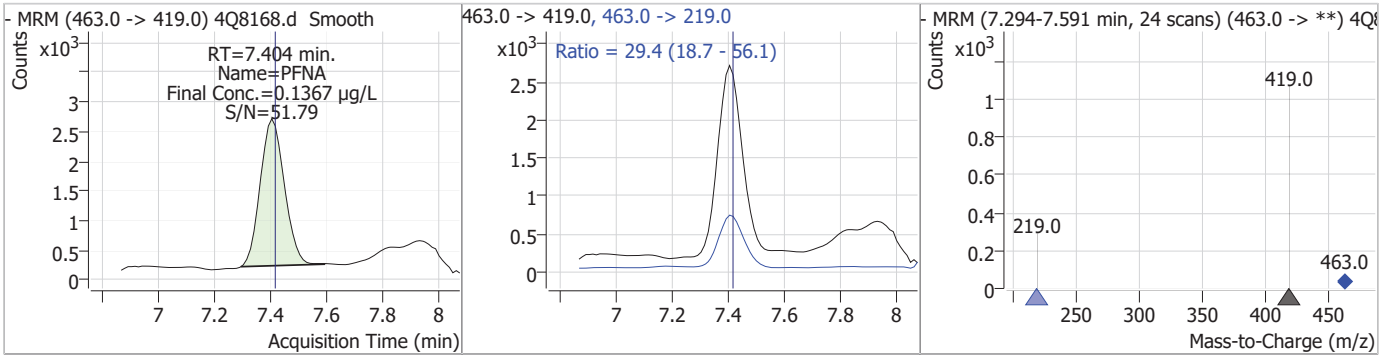
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.30	6.99	0.00	9453 (m)	399.0 -> 99.0	50.9	26.9	80.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.14	7.40	-0.01	179423				

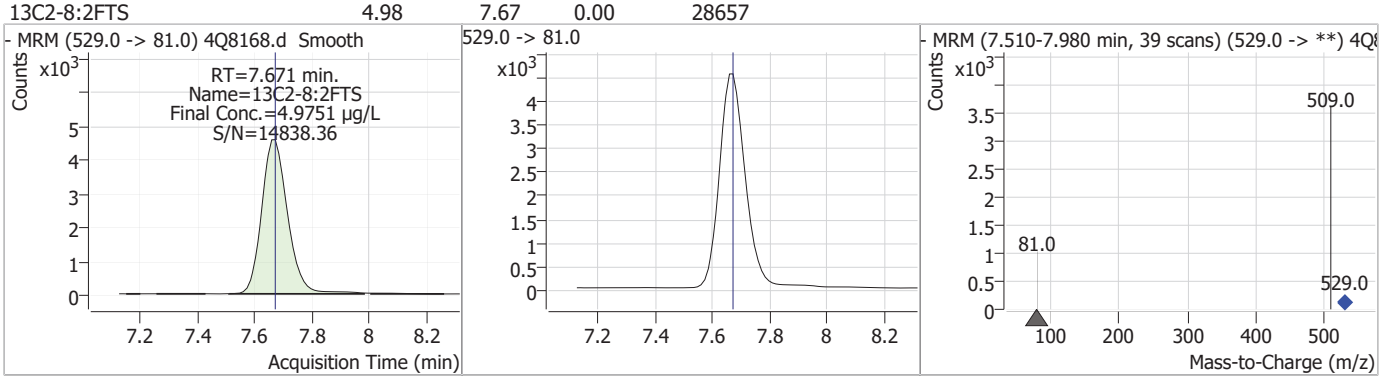


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.14	7.40	-0.01	14753	463.0 -> 219.0	29.4	18.7	56.1

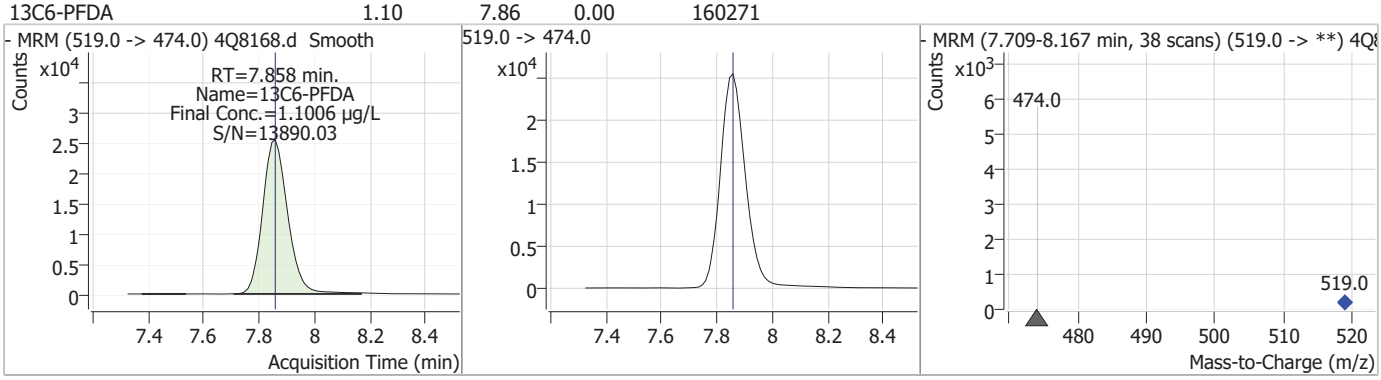


Perfluorinated Compounds by LC/MS/MS

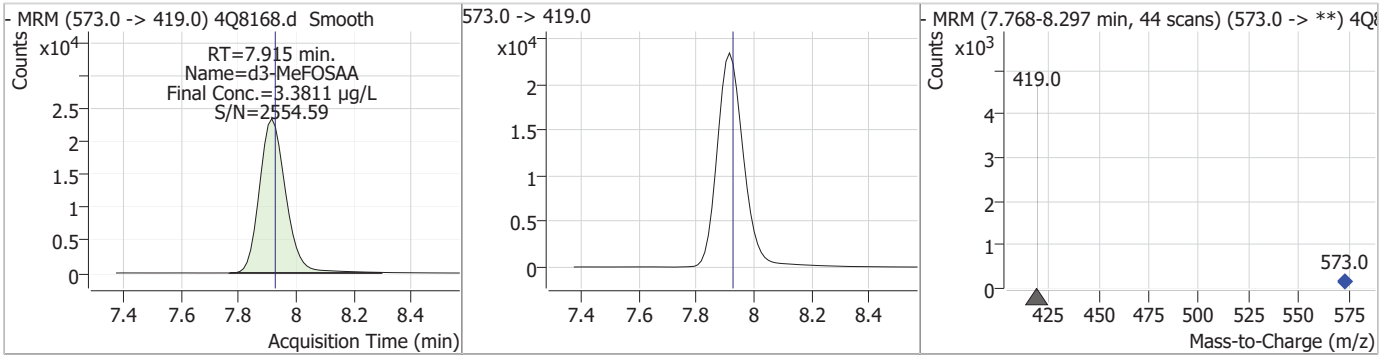
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.98	7.67	0.00	28657				



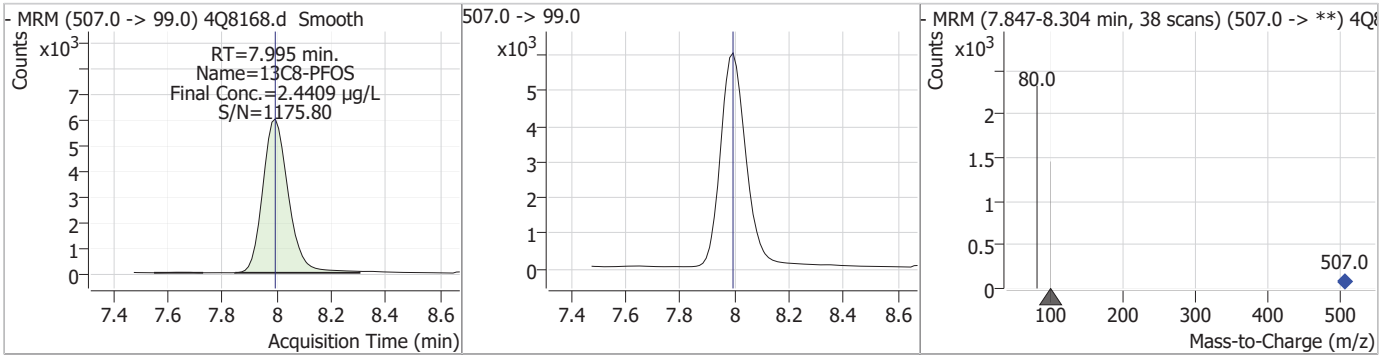
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.10	7.86	0.00	160271				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	3.38	7.92	-0.01	149031				

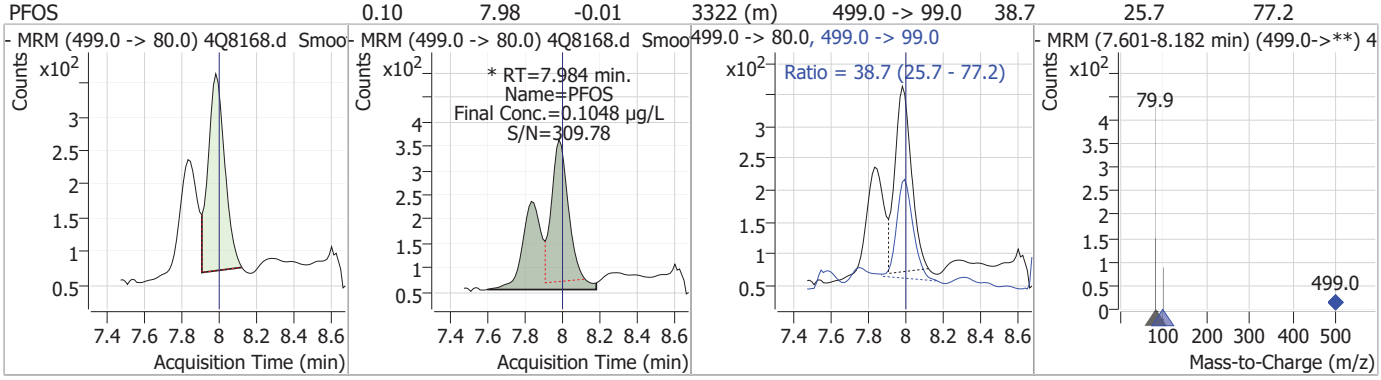


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.44	7.99	0.00	39334				

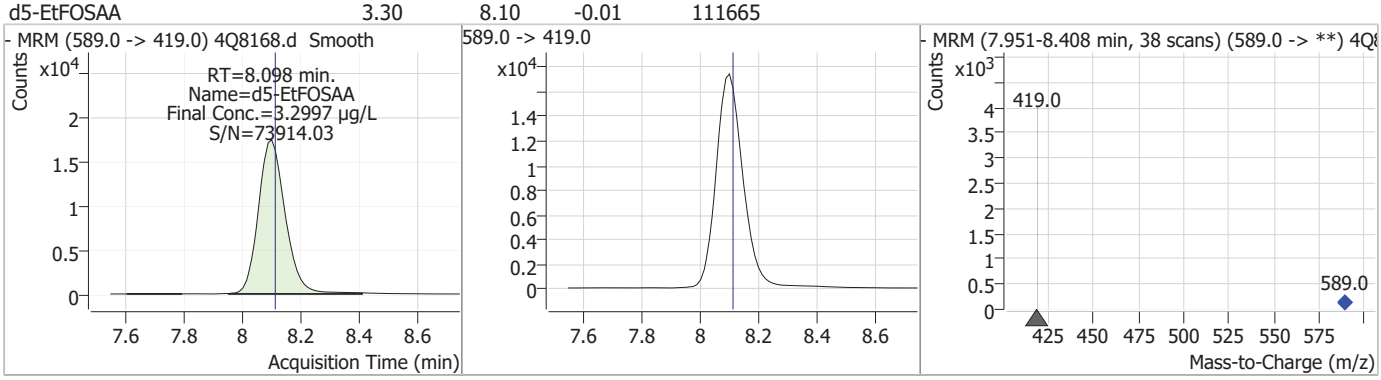


Perfluorinated Compounds by LC/MS/MS

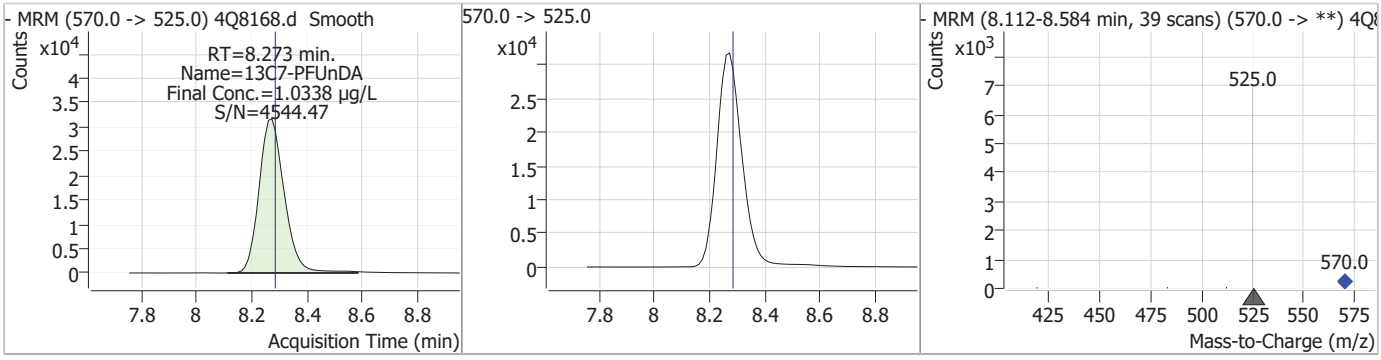
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.10	7.98	-0.01	3322 (m)	499.0 -> 99.0	38.7	25.7	77.2



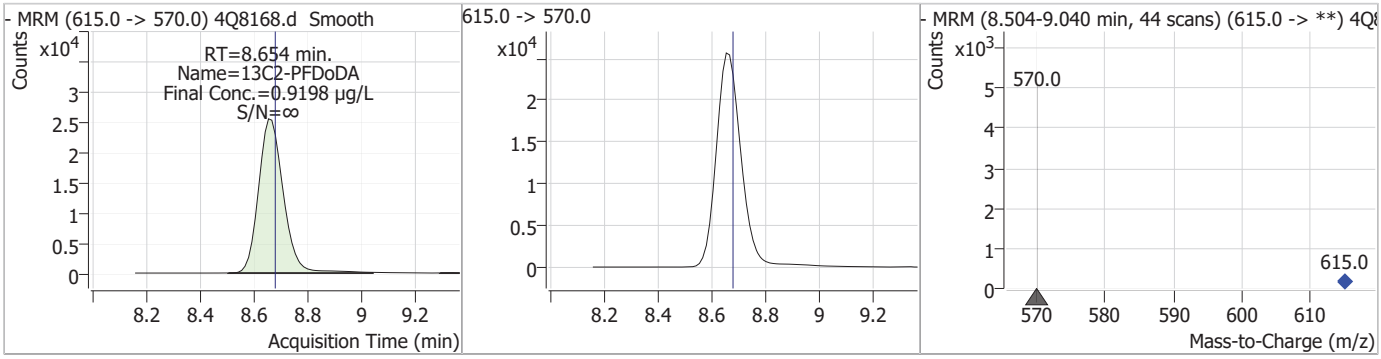
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	3.30	8.10	-0.01	111665				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.03	8.27	-0.01	201087				

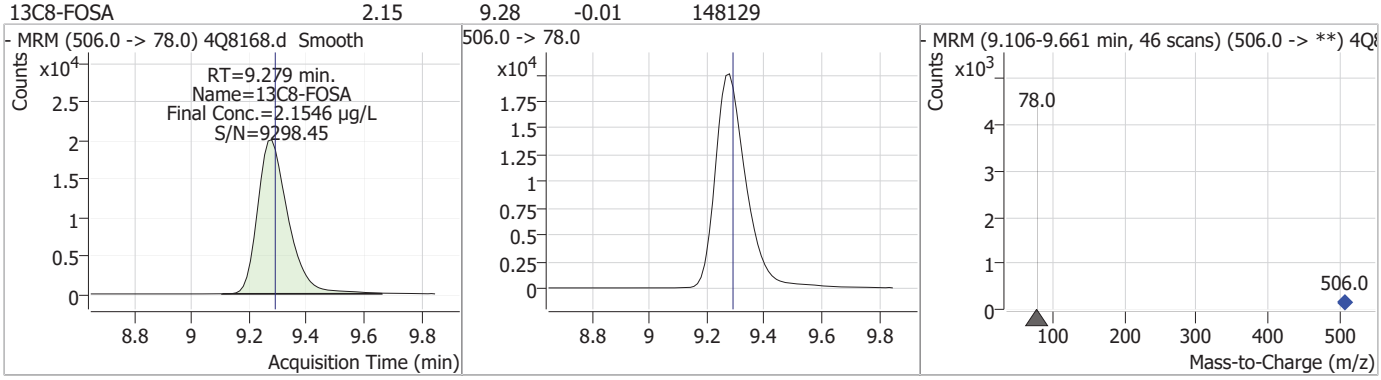


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	0.92	8.65	-0.03	163869				

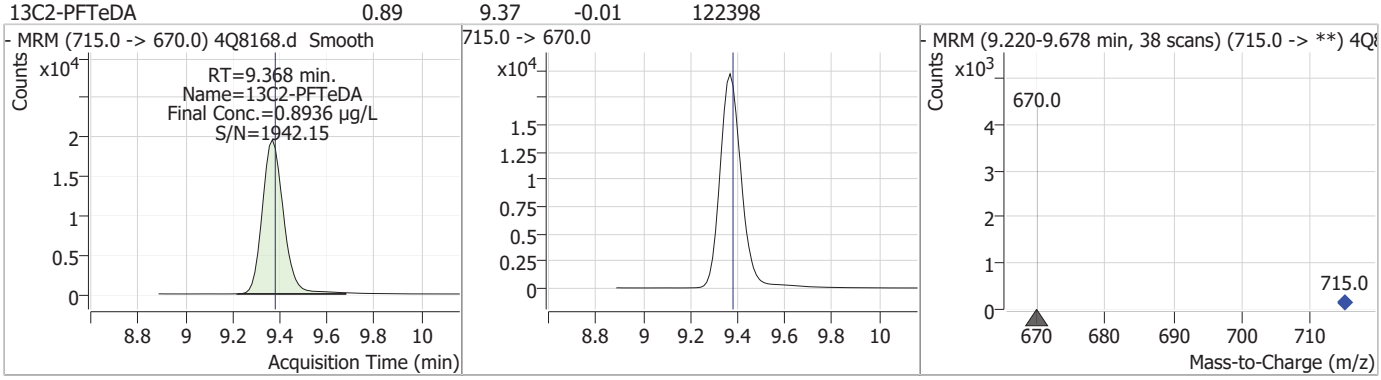


Perfluorinated Compounds by LC/MS/MS

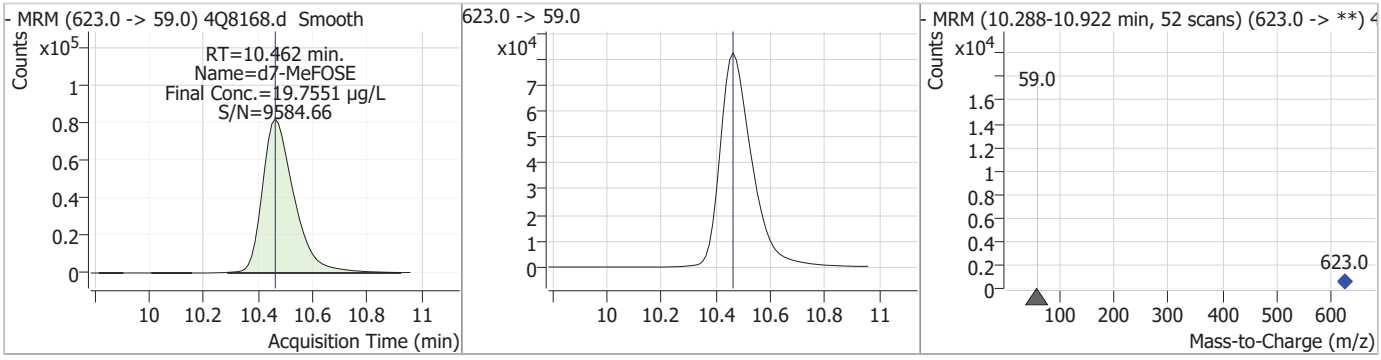
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.15	9.28	-0.01	148129				



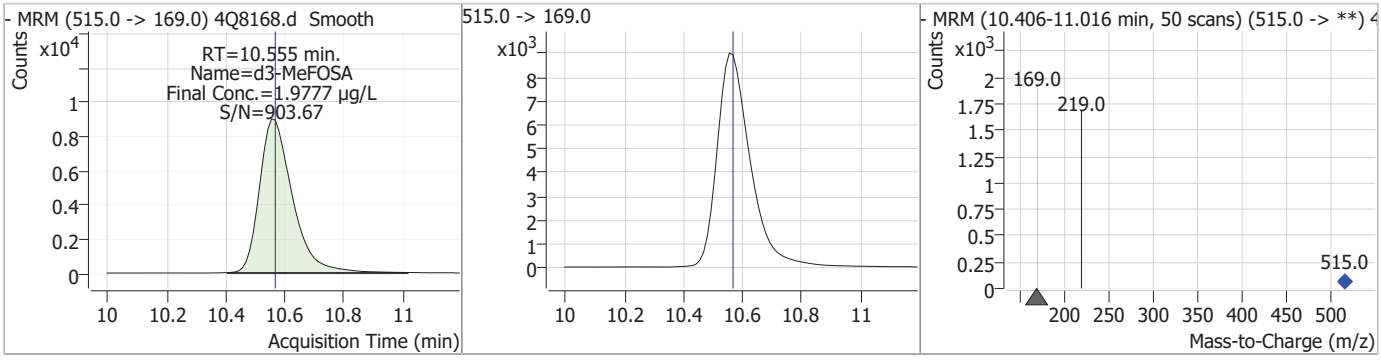
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.89	9.37	-0.01	122398				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	19.76	10.46	0.00	665865				

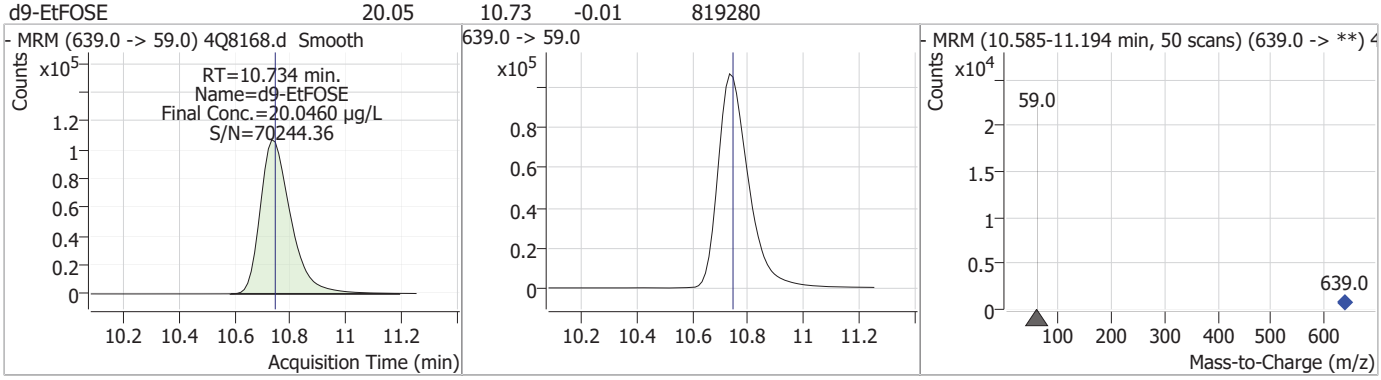


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.98	10.56	-0.01	69821				

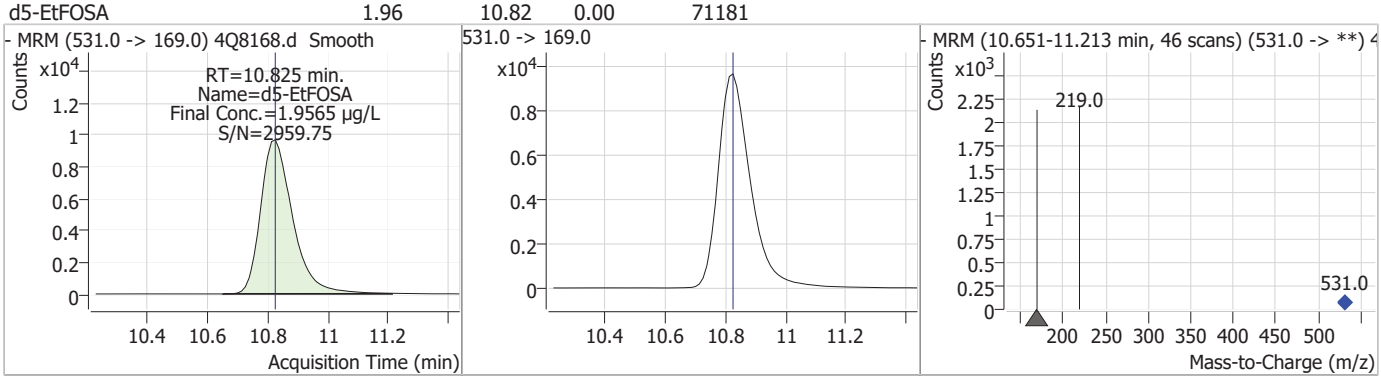


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	20.05	10.73	-0.01	819280				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.96	10.82	0.00	71181				



7.1.12

7

Manual Integration Approval Summary

Sample Number: JE10205-8
Lab FileID: 4Q8168.D
Injection Time: 04/30/25 23:32

Method: EPA 1633
Analyst approved: 05/01/25 04:52 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.98	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8169.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 11:45:59 PM
Sample Name : JE10205-9
Vial : P1-E3
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,466,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	837719	10.00	µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	371364	5.00	µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	267728	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	282795	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	409415	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	166893	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	155381	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	217659	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	184666	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	120679	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	148733	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	24567	2.50	µg/L	0.000
		302.0 -> 80.0	60949			
M3-PFHxS	6.986	402.0 -> 99.0	33572	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	35931	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	13705	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	21519	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	24204	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	189291	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	417657	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	147188	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	667734	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	786914	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	67276	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	66463	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	70447	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	401812	5.00	µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	44096	2.50	µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	473688	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	166961	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	184033	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	290416	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	13705	6.20	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 124.0%		
13C2-6:2FTS	6.684	429.0 -> 81.0	21519	4.48	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 89.7%		
13C2-8:2FTS	7.671	529.0 -> 81.0	24204	4.29	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 85.8%		
13C2-PFDoDA	8.666	615.0 -> 570.0	184666	1.02	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 81.8%		
13C2-PFTeDA	9.368	715.0 -> 670.0	120679	0.87	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 69.6%		
13C3-PFBS	5.368	302.0 -> 99.0	24567	2.26	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.3%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	33572	2.18	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 87.2%			
13C4-PFBA	2.871	217.0 -> 172.0	837719	9.09	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 90.9%			
13C4-PFHpA	6.291	367.0 -> 322.0	282795	2.16	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 86.6%			
13C5-PFHxA	5.452	318.0 -> 273.0	267728	2.18	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 87.1%			
13C5-PFPeA	4.319	268.0 -> 223.0	371364	3.98	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 79.6%			
13C6-PFDA	7.858	519.0 -> 474.0	155381	1.05	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 84.3%			
13C7-PFUnDA	8.273	570.0 -> 525.0	217659	1.10	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.4%			
13C8-FOSA	9.279	506.0 -> 78.0	148733	2.06	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 82.2%			
13C8-PFOA	6.897	421.0 -> 376.0	409415	2.16	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 86.5%			
13C8-PFOS	7.995	507.0 -> 99.0	35931	2.12	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 84.7%			
13C9-PFNA	7.403	472.0 -> 427.0	166893	1.09	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.5%			
d3-MeFOSAA	7.915	573.0 -> 419.0	189291	4.08	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 81.6%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	417657	8.65	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 86.5%			
d3-MeFOSA	10.555	515.0 -> 169.0	66463	1.79	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 71.5%			
d5-EtFOSAA	8.098	589.0 -> 419.0	147188	4.13	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 82.6%			
d7-MeFOSE	10.462	623.0 -> 59.0	667734	18.82	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 75.3%			
d9-EtFOSE	10.734	639.0 -> 59.0	786914	18.29	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 73.2%			
d5-EtFOSA	10.825	531.0 -> 169.0	67276	1.76	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 70.3%			
Target Compounds							**QValue**
4:2FTS	-	327.0 -> 307.0	-	N.D.			
		327.0 -> 81.0					
6:2FTS	6.684	427.0 -> 407.0	1111504	51.51	µg/L		99
		427.0 -> 81.0	514023				
8:2FTS	7.671	527.0 -> 507.0	3015220	159.18	µg/L		98
		527.0 -> 81.0	1169990				
EtFOSAA	8.087	584.0 -> 419.0	3893	0.14	µg/L	m	74
		584.0 -> 483.0	2935				
FOSA	9.269	498.0 -> 78.0	264744	4.90	µg/L	m	100
		498.0 -> 478.0	7515				
MeFOSAA	-	570.0 -> 419.0	-	N.D.			
		570.0 -> 512.0					
PFBA	2.877	213.0 -> 169.0	276993	10.82	µg/L		100
PFBS	5.369	299.0 -> 80.0	7652	0.27	µg/L		95
		299.0 -> 99.0	3390				
PFDA	7.859	513.0 -> 469.0	2826567	23.93	µg/L		99
		513.0 -> 219.0	672122				
PFDoDA	8.667	613.0 -> 569.0	288925	2.03	µg/L		98
		613.0 -> 319.0	39680				

Perfluorinated Compounds by LC/MS/MS

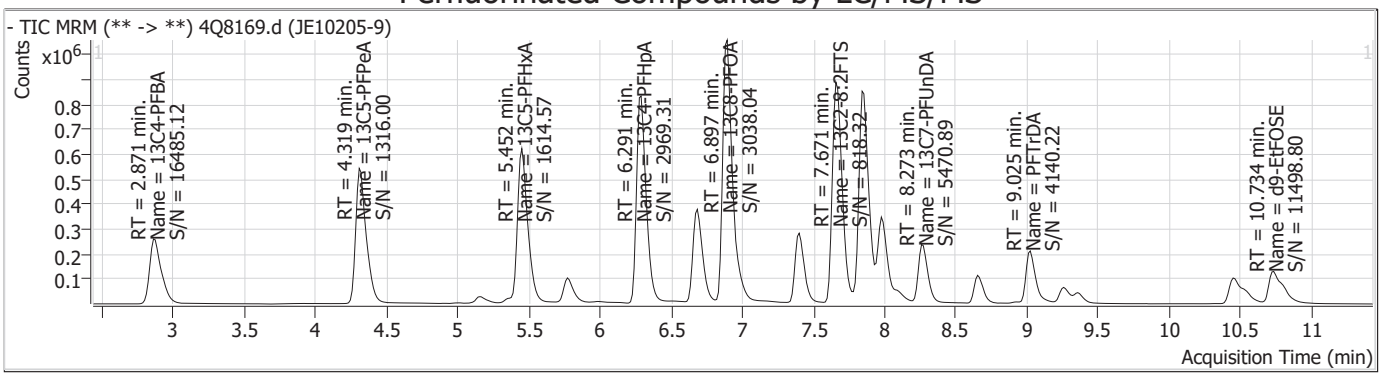
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.804	599.0 -> 80.0	1837	0.09	µg/L		87
		599.0 -> 99.0	861				
PFHpA	6.292	363.0 -> 319.0	3068131	17.83	µg/L		100
		363.0 -> 169.0	632234				
PFHpS	7.529	449.0 -> 80.0	2543	0.09	µg/L		89
		449.0 -> 99.0	1600				
PFHxA	5.455	313.0 -> 269.0	2469984	21.41	µg/L		100
		313.0 -> 119.0	84019				
PFHxS	6.987	399.0 -> 80.0	97632	3.34	µg/L	m	95
		399.0 -> 99.0	49149				
PFNA	7.404	463.0 -> 419.0	748741	7.46	µg/L		85
		463.0 -> 219.0	213834				
PFNS	8.412	549.0 -> 80.0	753	0.03	µg/L	#m	53
		549.0 -> 99.0	705				
PFOA	6.898	413.0 -> 369.0	3170740	23.27	µg/L		96
		413.0 -> 169.0	864841				
PFOS	7.996	499.0 -> 80.0	313913	10.84	µg/L	m	89
		499.0 -> 99.0	185254				
PFPeA	4.321	263.0 -> 219.0	2456721	41.84	µg/L		100
PFPeS	6.331	349.0 -> 80.0	8521	0.28	µg/L		96
		349.0 -> 99.0	4545				
PFTeDA	9.369	713.0 -> 669.0	23267	0.17	µg/L		99
		713.0 -> 219.0	1808				
PFTrDA	9.025	663.0 -> 619.0	860966	5.43	µg/L		100
		663.0 -> 369.0	53307				
PFUnDA	8.275	563.0 -> 519.0	721595	5.61	µg/L		98
		563.0 -> 269.0	152139				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	9.496	699.0 -> 80.0	696	0.04	µg/L	#m	30
		699.0 -> 99.0	813				
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

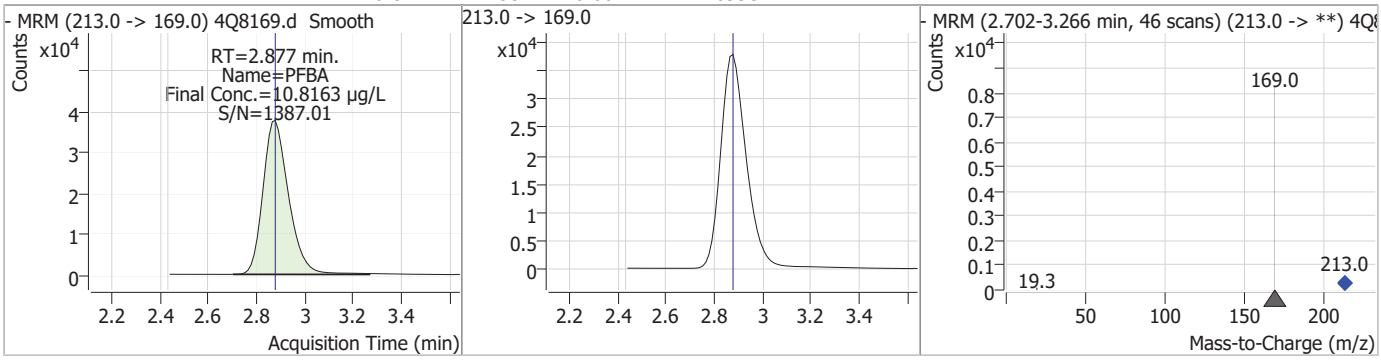
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

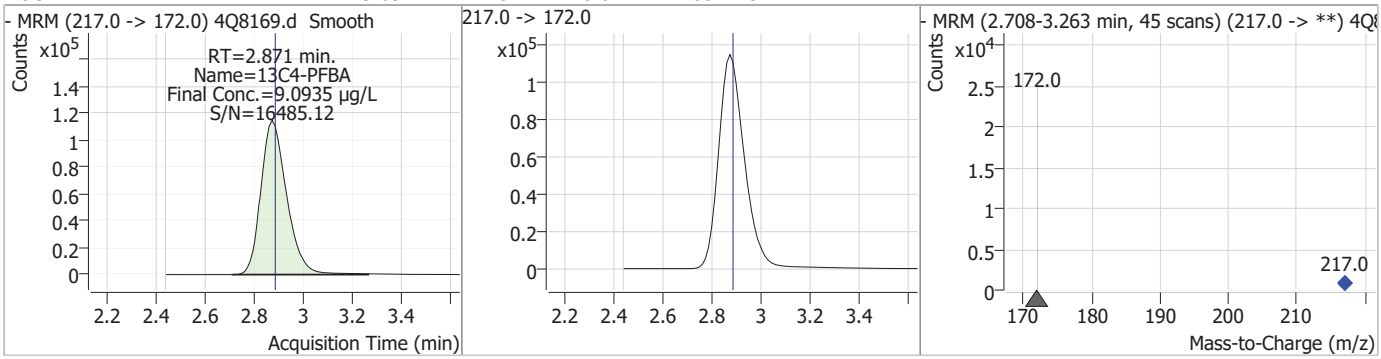
Perfluorinated Compounds by LC/MS/MS



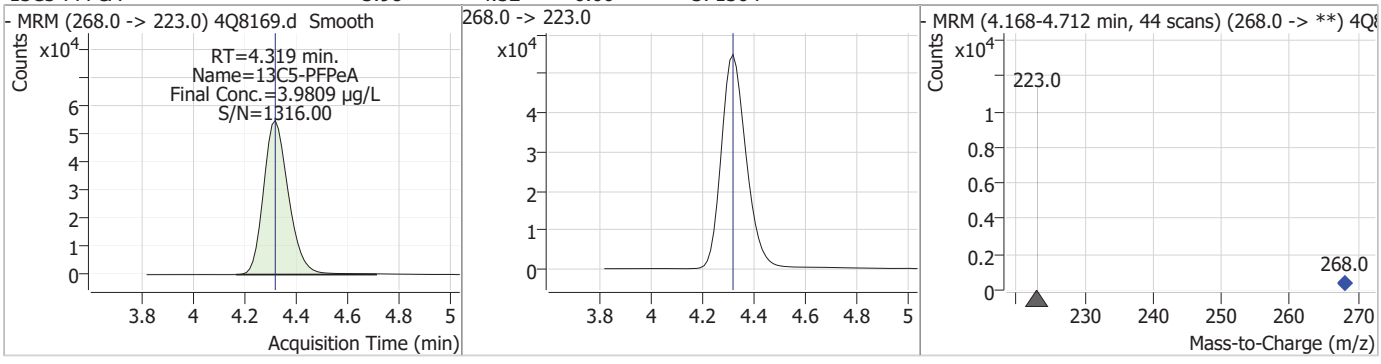
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.82	2.88	0.00	276993				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.09	2.87	-0.01	837719				

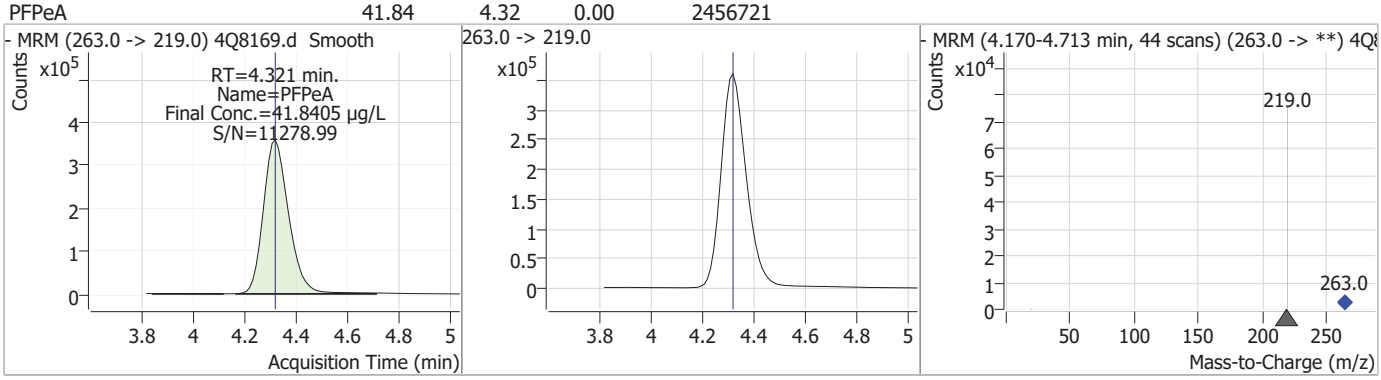


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	3.98	4.32	0.00	371364				

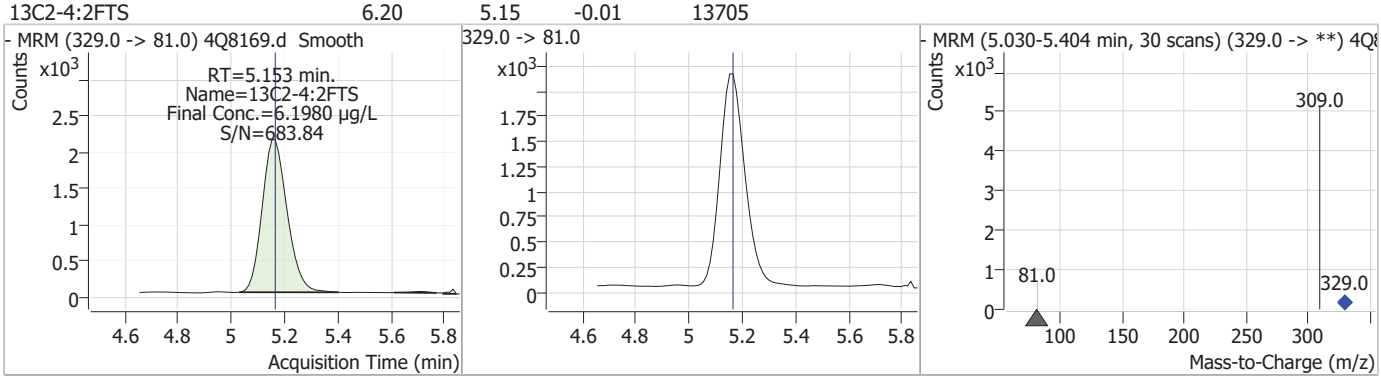


Perfluorinated Compounds by LC/MS/MS

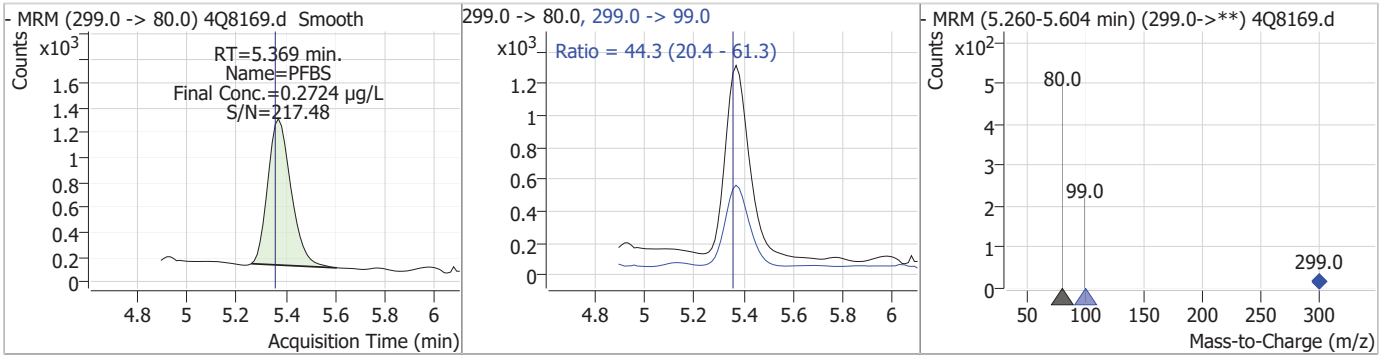
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	41.84	4.32	0.00	2456721				



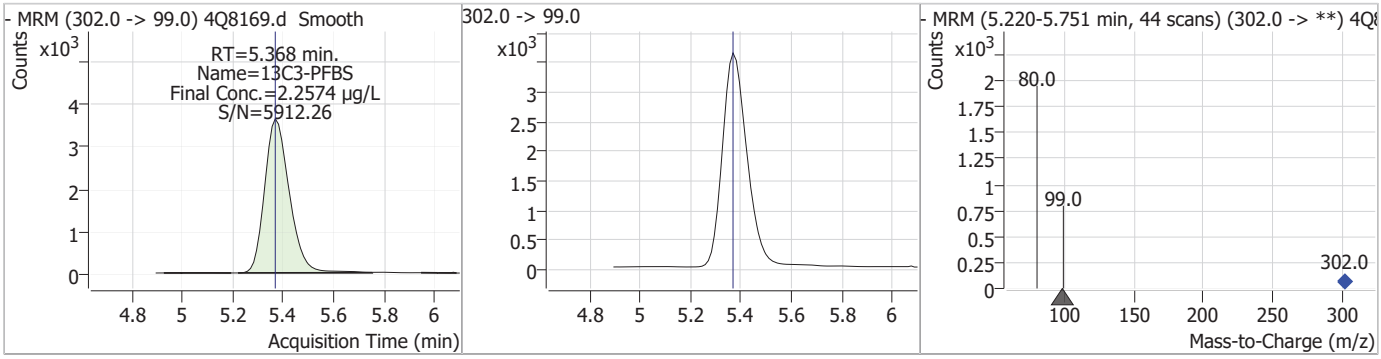
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	6.20	5.15	-0.01	13705				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.27	5.37	0.01	7652	299.0 -> 99.0	44.3	20.4	61.3

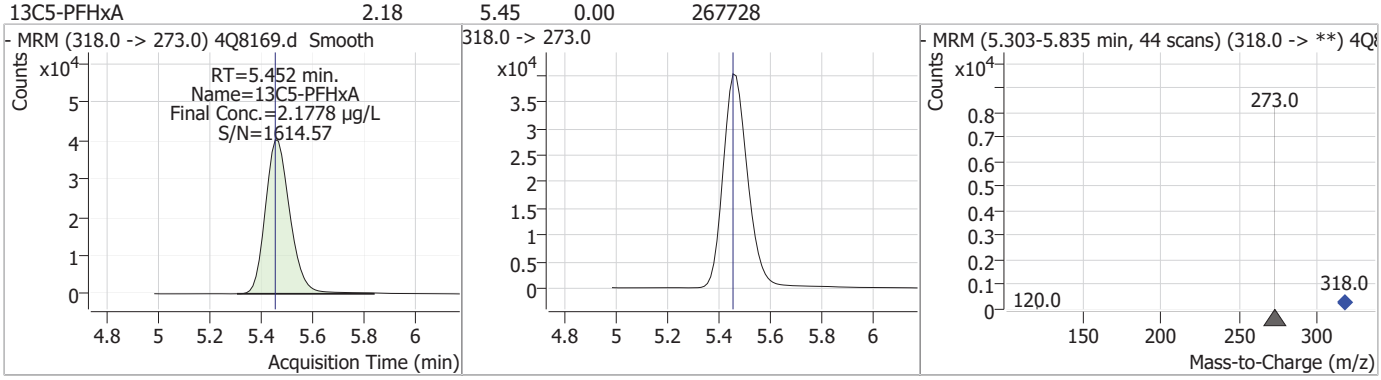


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.26	5.37	0.00	24567				

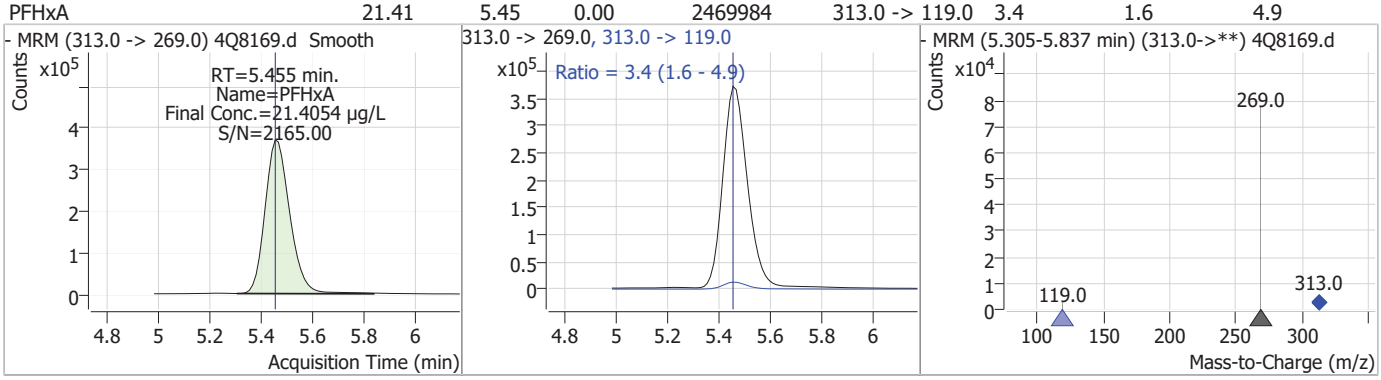


Perfluorinated Compounds by LC/MS/MS

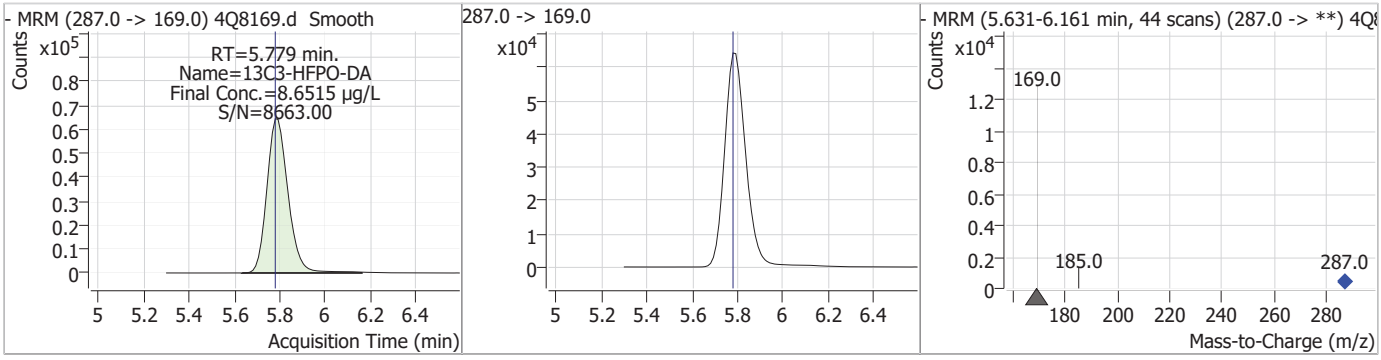
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.18	5.45	0.00	267728				



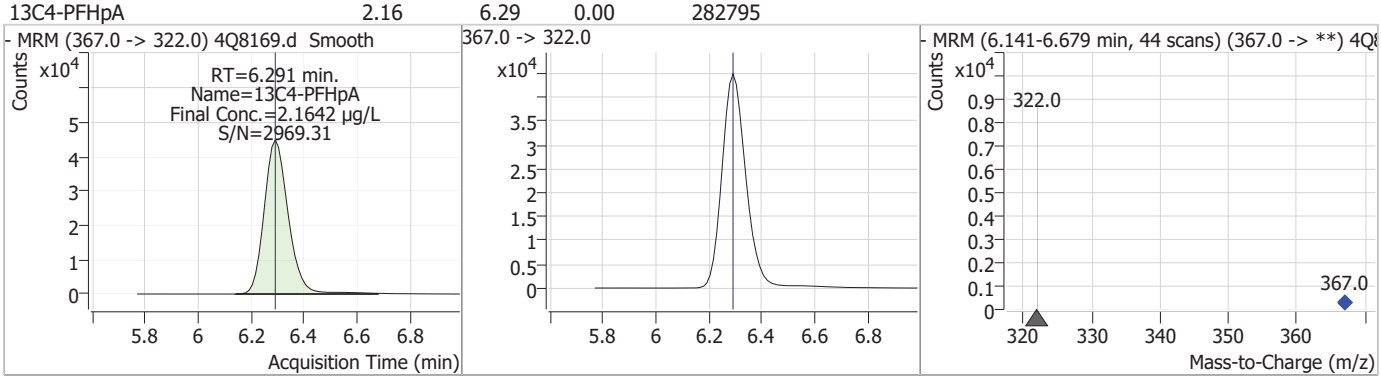
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	21.41	5.45	0.00	2469984	313.0 -> 119.0	3.4	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.65	5.78	0.00	417657				

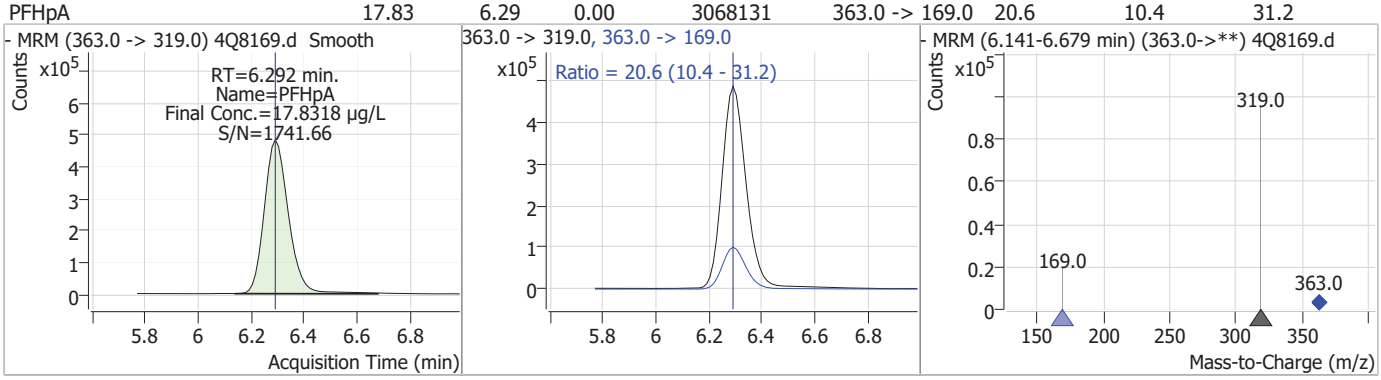


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.16	6.29	0.00	282795				

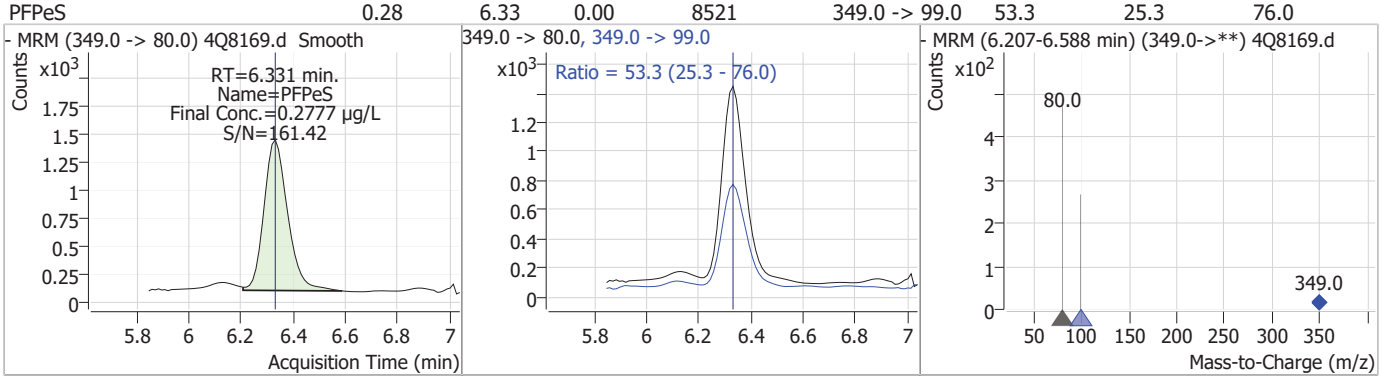


Perfluorinated Compounds by LC/MS/MS

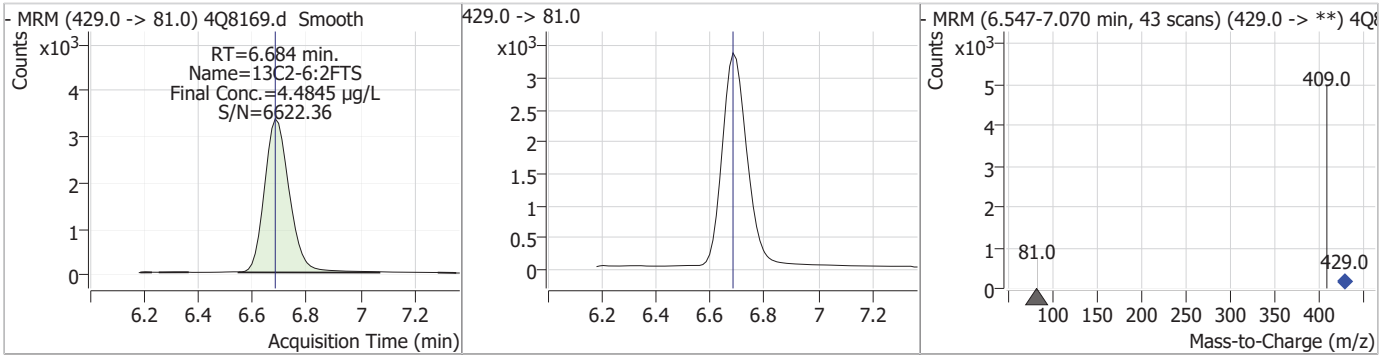
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	17.83	6.29	0.00	3068131	363.0 -> 169.0	20.6	10.4	31.2



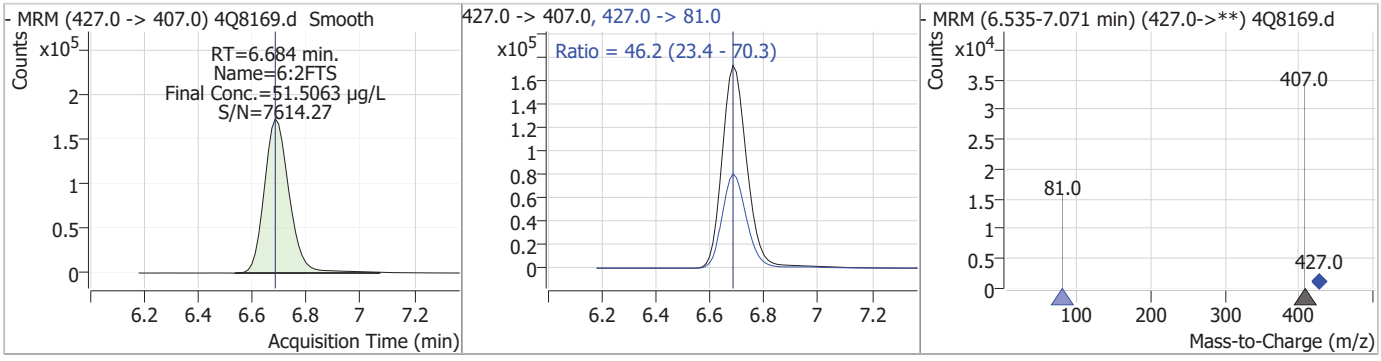
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.28	6.33	0.00	8521	349.0 -> 99.0	53.3	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.48	6.68	0.00	21519				

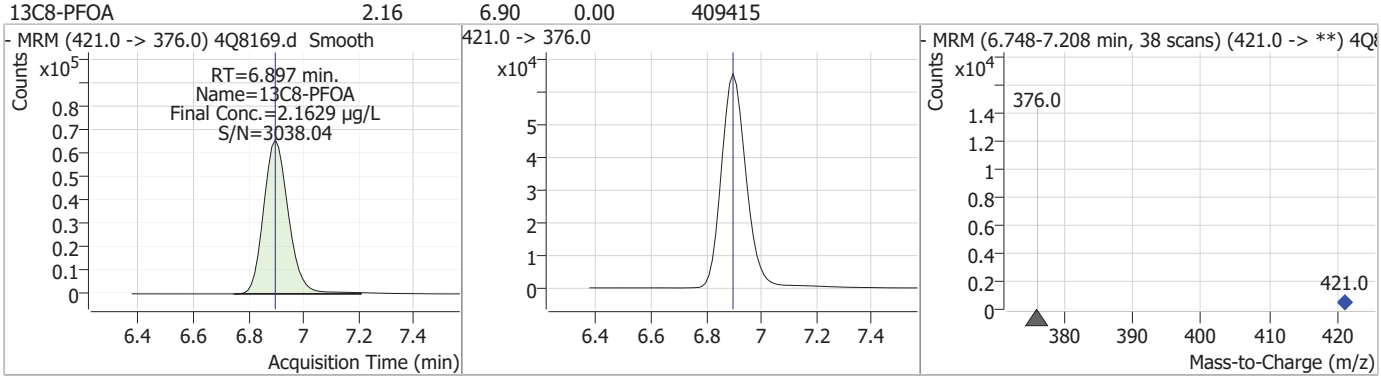


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	51.51	6.68	0.00	1111504	427.0 -> 81.0	46.2	23.4	70.3

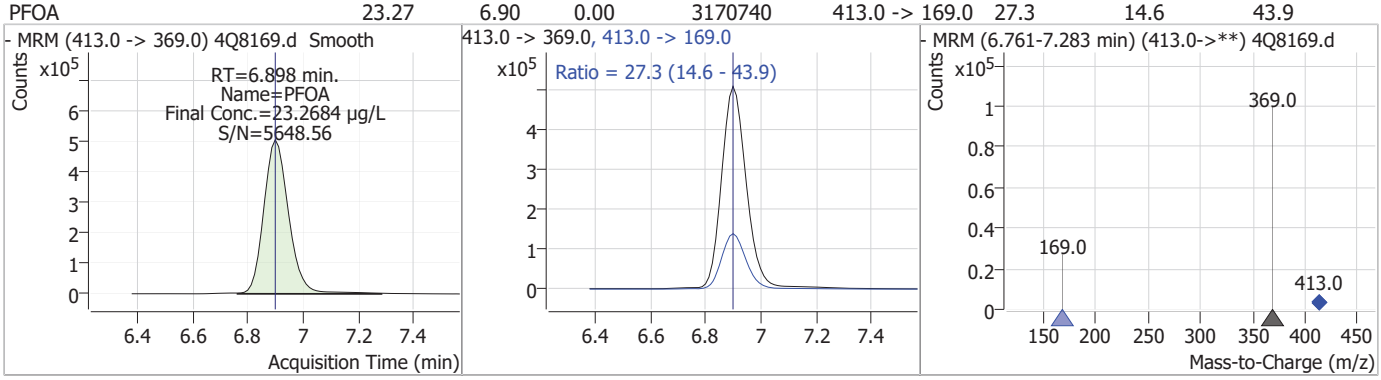


Perfluorinated Compounds by LC/MS/MS

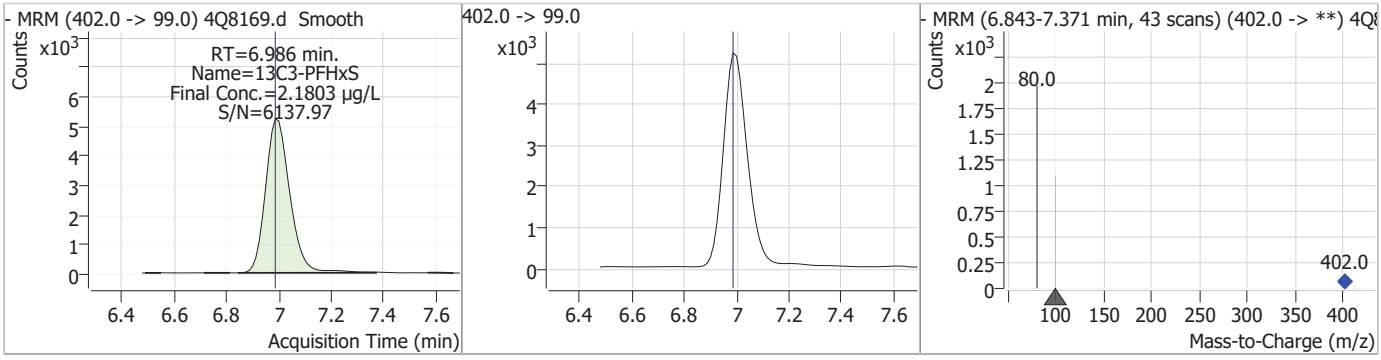
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.16	6.90	0.00	409415				



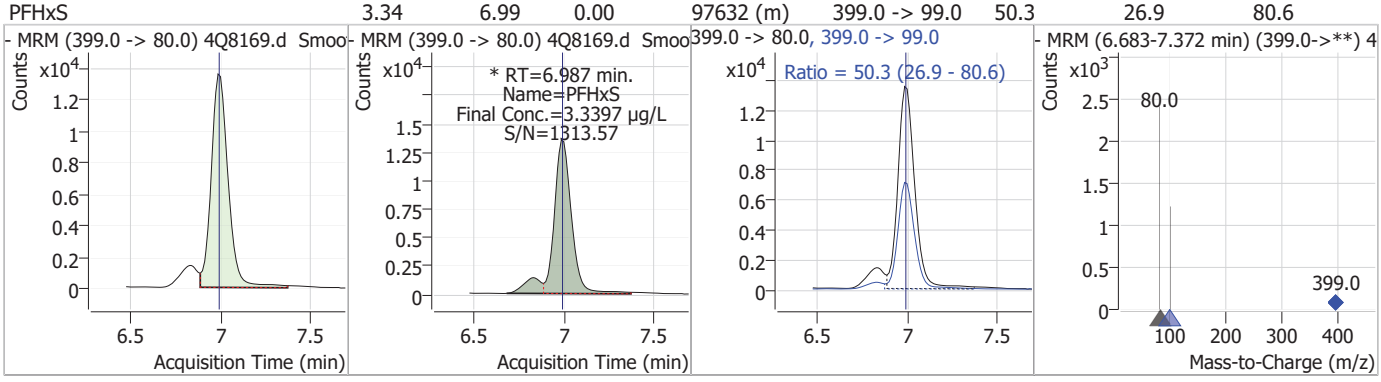
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	23.27	6.90	0.00	3170740	413.0 -> 169.0	27.3	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.18	6.99	0.00	33572				

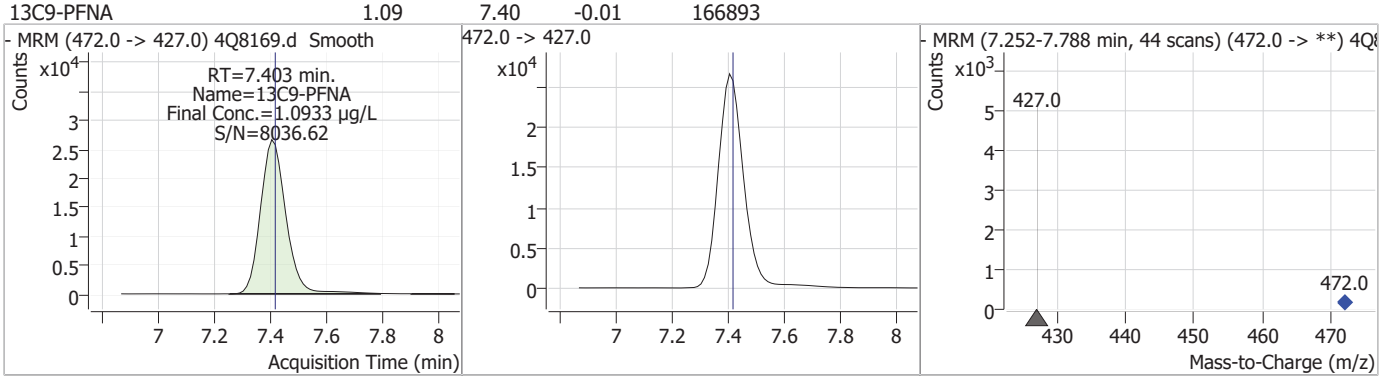


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	3.34	6.99	0.00	97632 (m)	399.0 -> 99.0	50.3	26.9	80.6

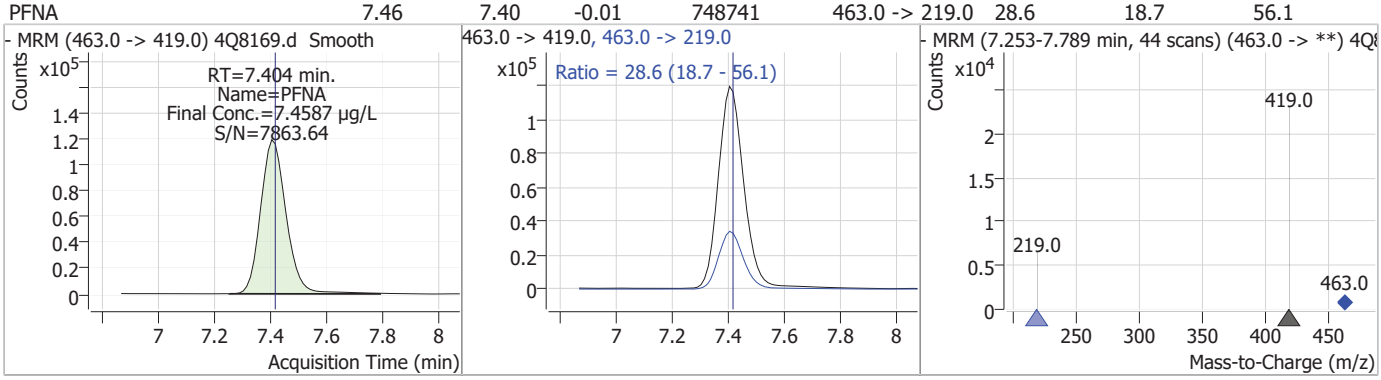


Perfluorinated Compounds by LC/MS/MS

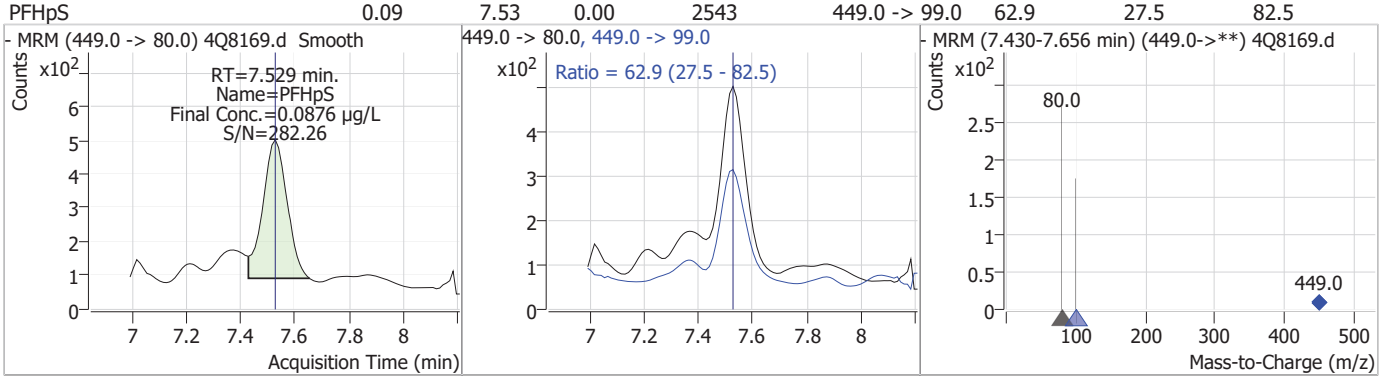
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.09	7.40	-0.01	166893				



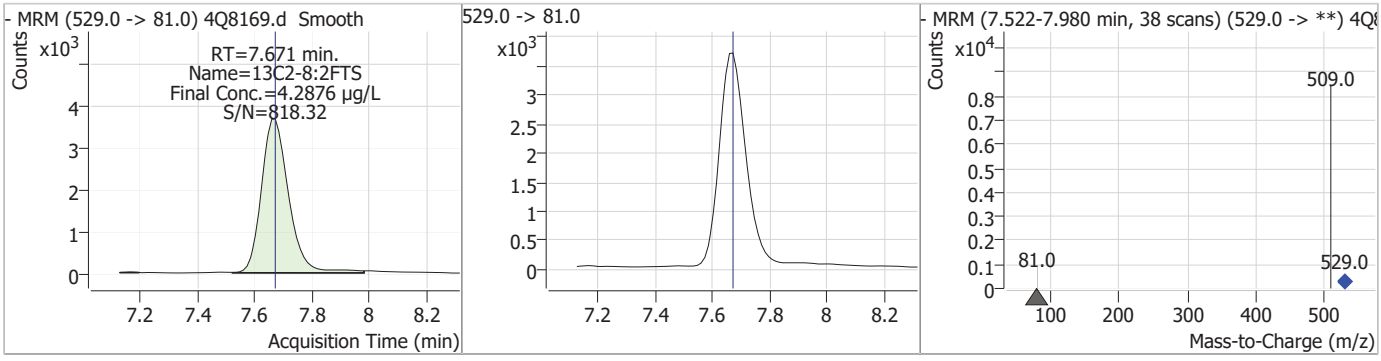
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	7.46	7.40	-0.01	748741	463.0 -> 219.0	28.6	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.09	7.53	0.00	2543	449.0 -> 99.0	62.9	27.5	82.5

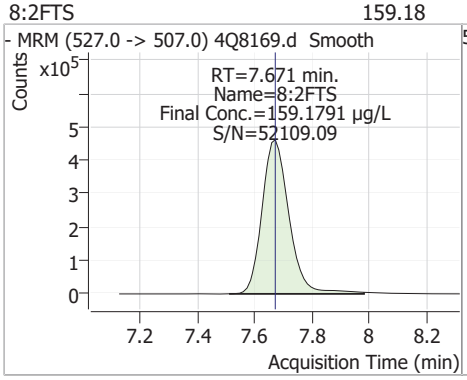


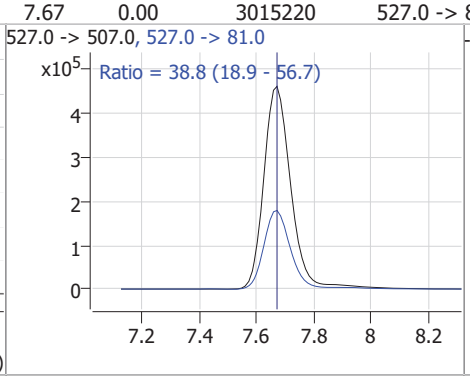
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.29	7.67	0.00	24204				

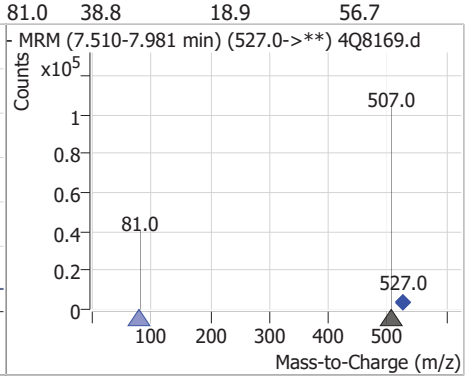


Perfluorinated Compounds by LC/MS/MS

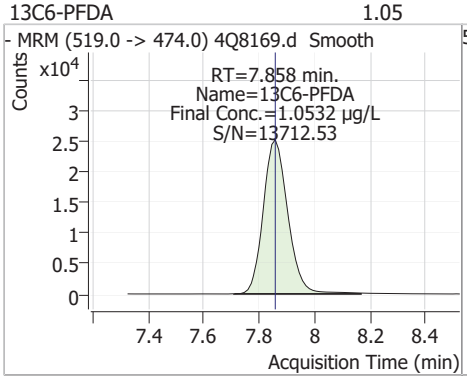
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	159.18	7.67	0.00	3015220	527.0 -> 81.0	38.8	18.9	56.7

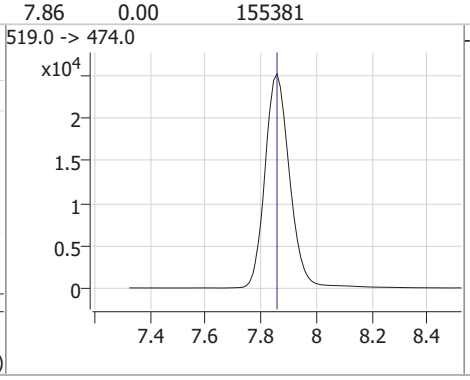


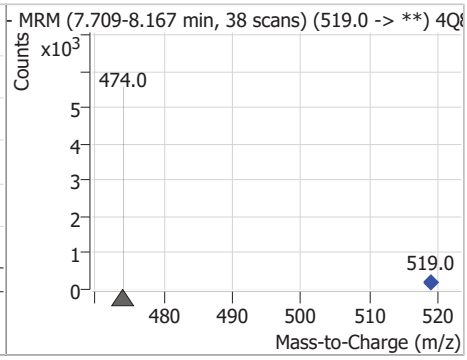




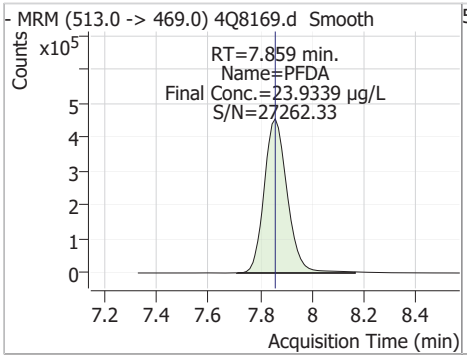
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.05	7.86	0.00	155381				

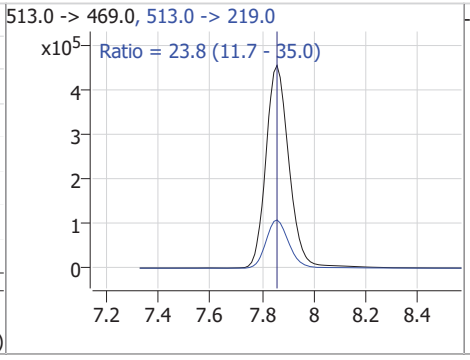


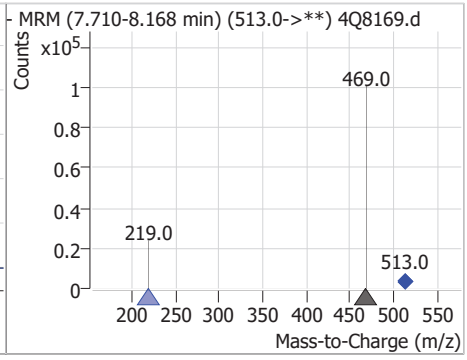




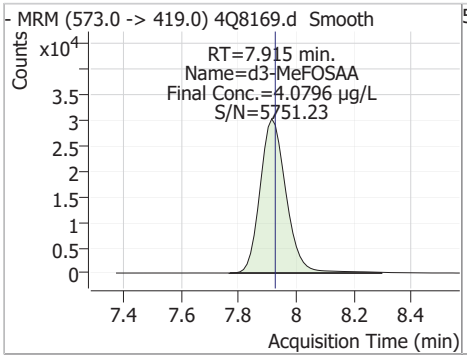
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	23.93	7.86	0.00	2826567	513.0 -> 219.0	23.8	11.7	35.0

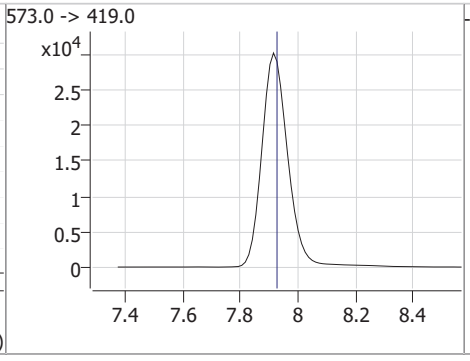


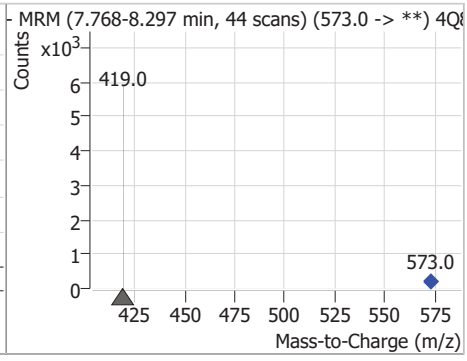




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.08	7.92	-0.01	189291				

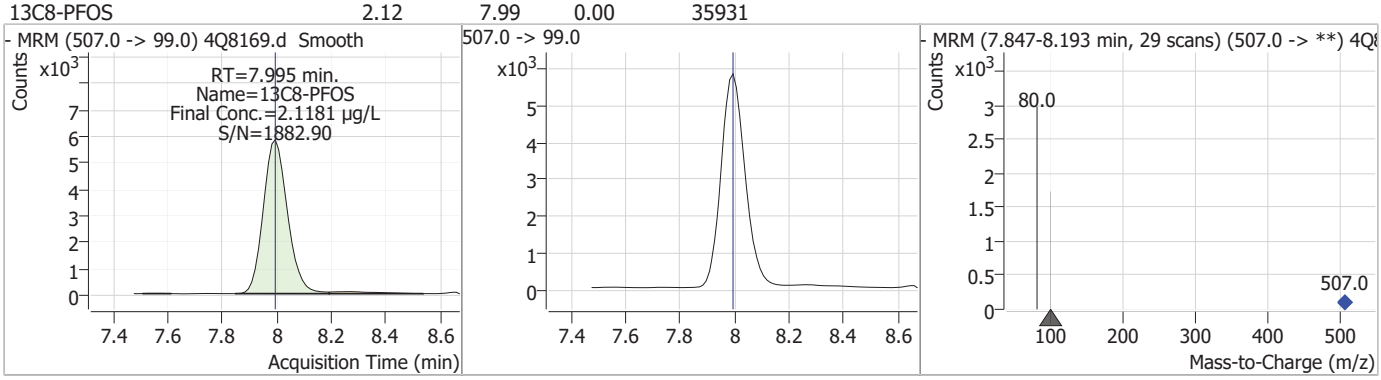




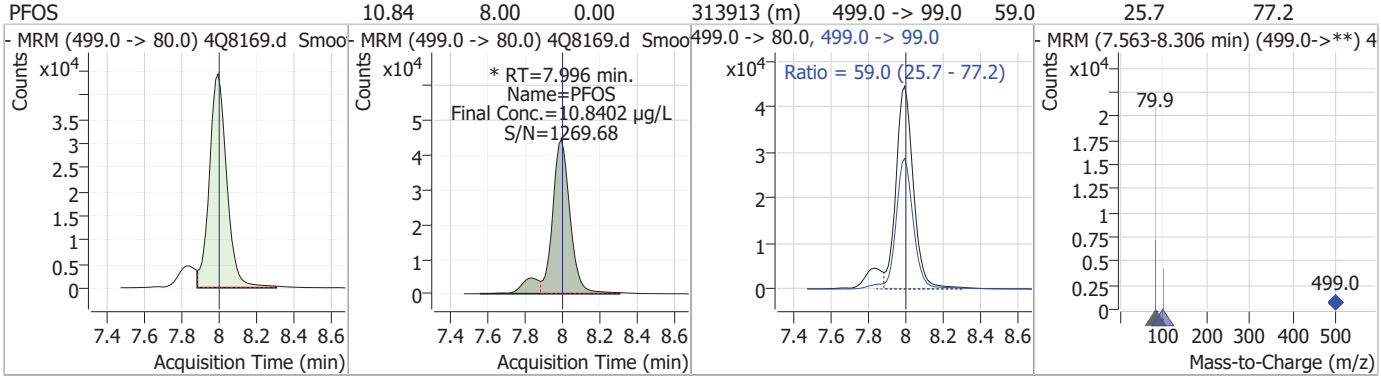


Perfluorinated Compounds by LC/MS/MS

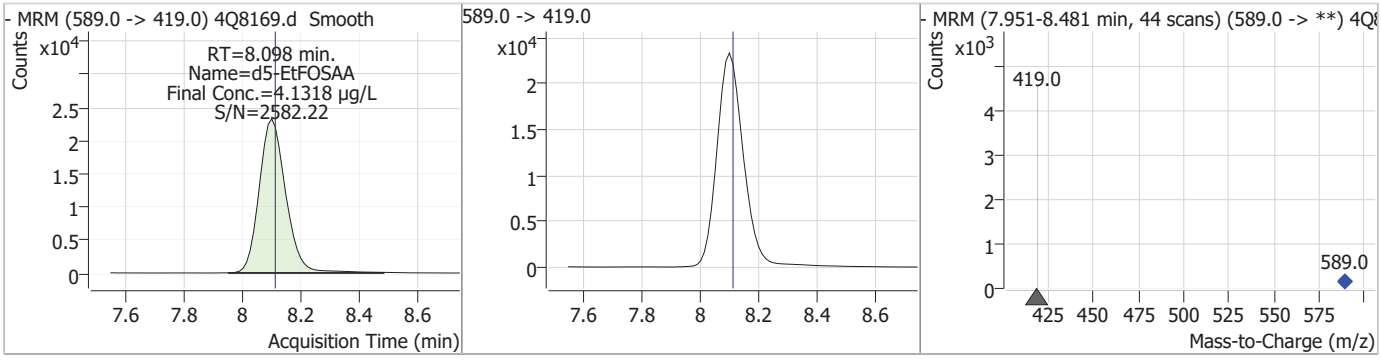
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.12	7.99	0.00	35931				



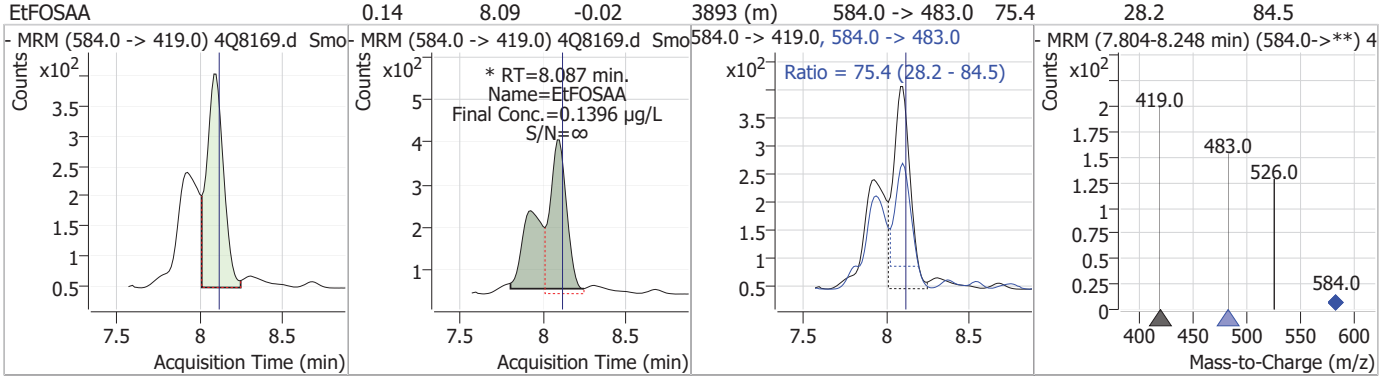
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	10.84	8.00	0.00	313913 (m)	499.0 -> 99.0	59.0	25.7	77.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.13	8.10	-0.01	147188				

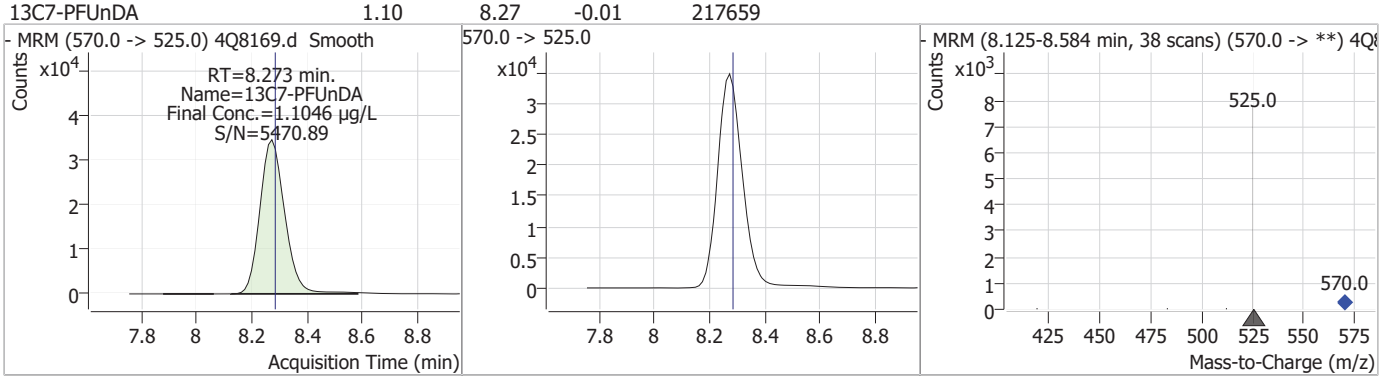


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.14	8.09	-0.02	3893 (m)	584.0 -> 483.0	75.4	28.2	84.5

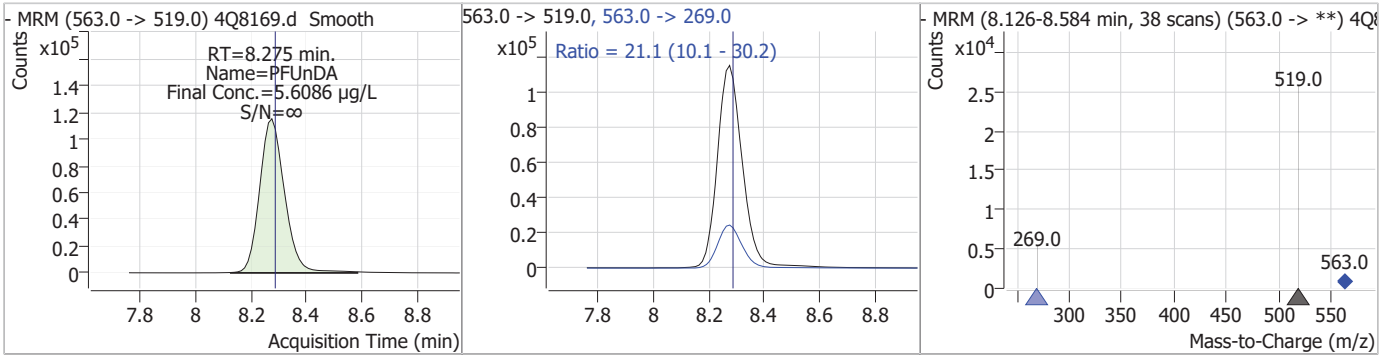


Perfluorinated Compounds by LC/MS/MS

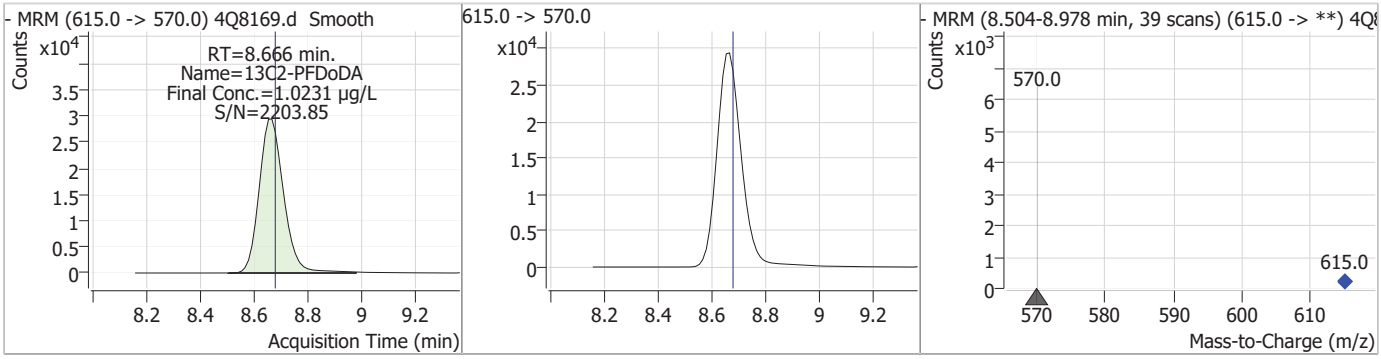
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.10	8.27	-0.01	217659				



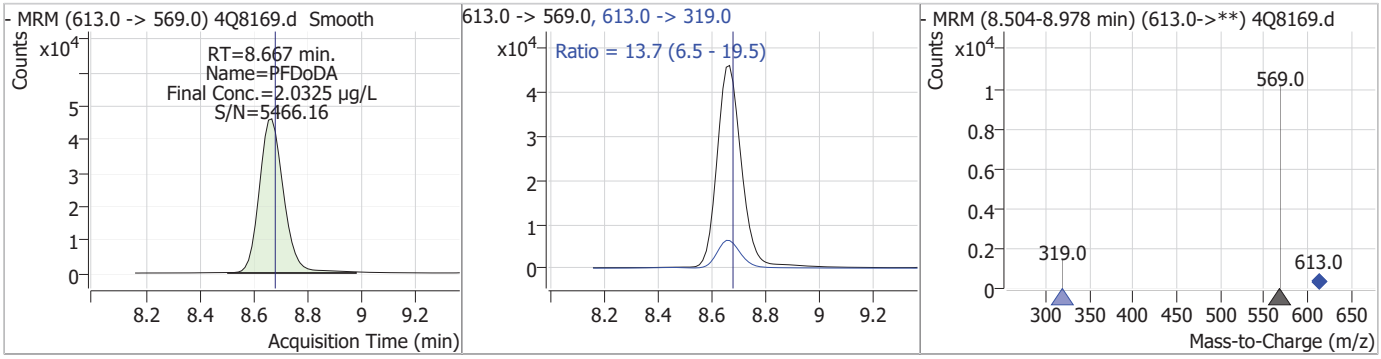
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	5.61	8.27	-0.01	721595	563.0 -> 269.0	21.1	10.1	30.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.02	8.67	-0.01	184666				

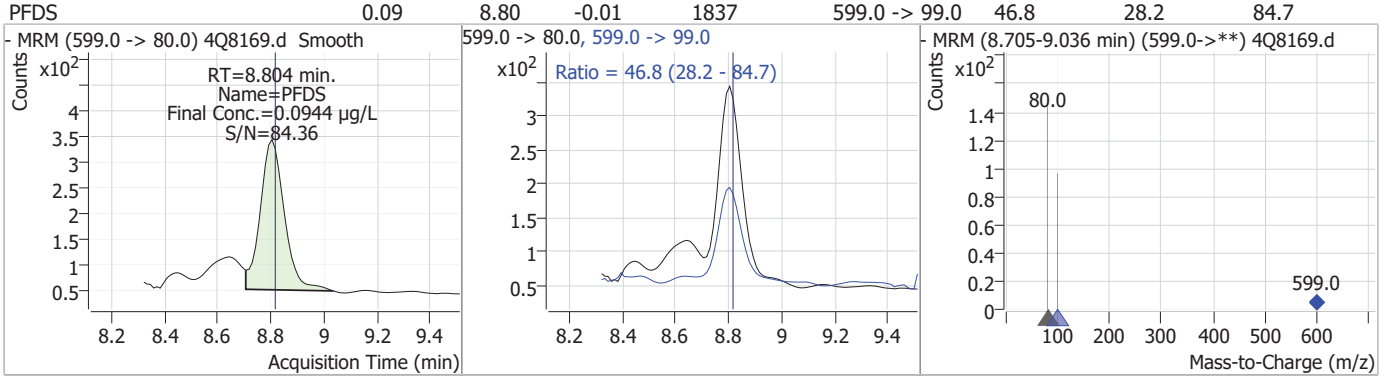


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.03	8.67	-0.01	288925	613.0 -> 319.0	13.7	6.5	19.5

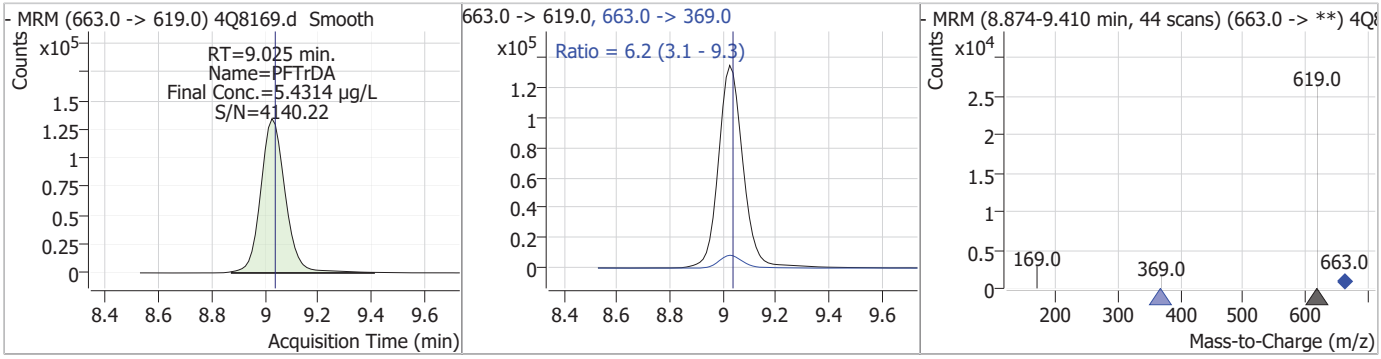


Perfluorinated Compounds by LC/MS/MS

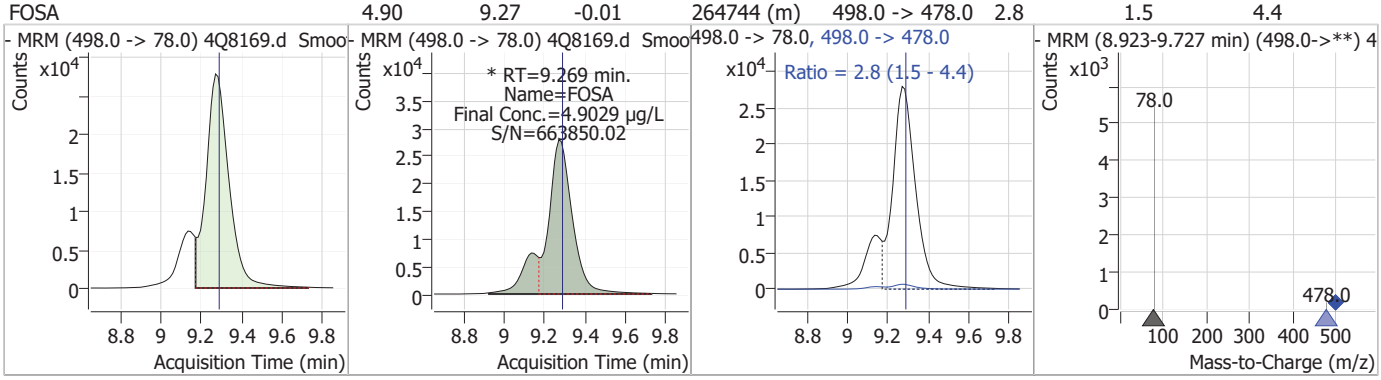
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.09	8.80	-0.01	1837	599.0 -> 99.0	46.8	28.2	84.7



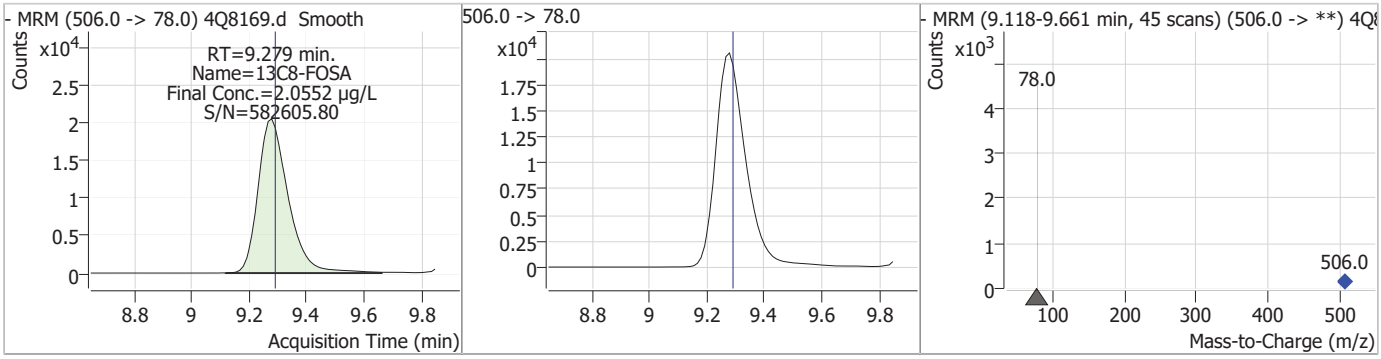
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	5.43	9.03	-0.01	860966	663.0 -> 369.0	6.2	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	4.90	9.27	-0.01	264744 (m)	498.0 -> 478.0	2.8	1.5	4.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.06	9.28	-0.01	148733				

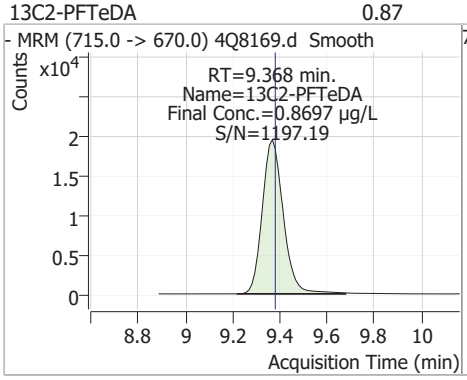


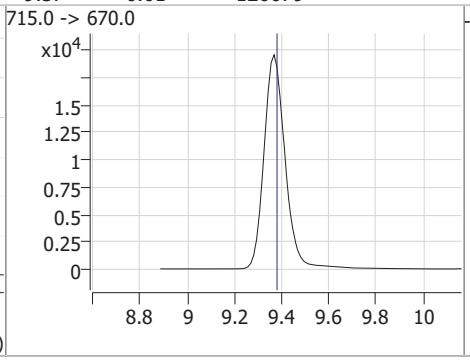
7.1.13

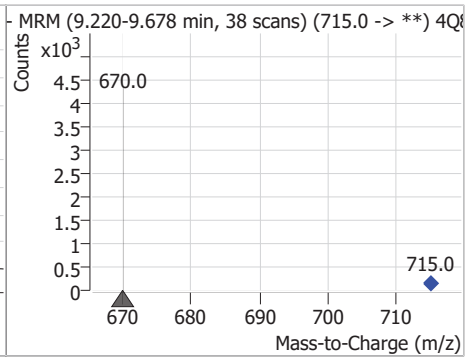
7

Perfluorinated Compounds by LC/MS/MS

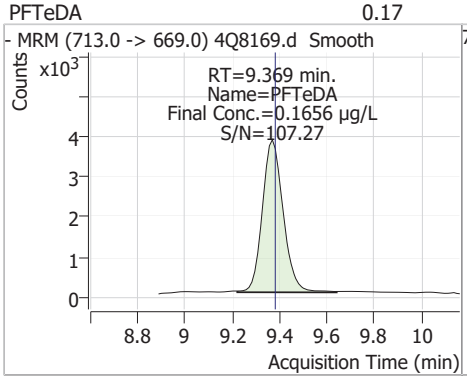
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.87	9.37	-0.01	120679				

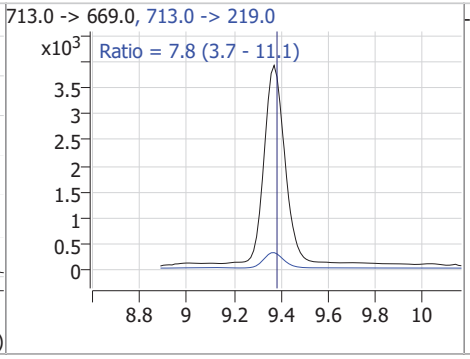


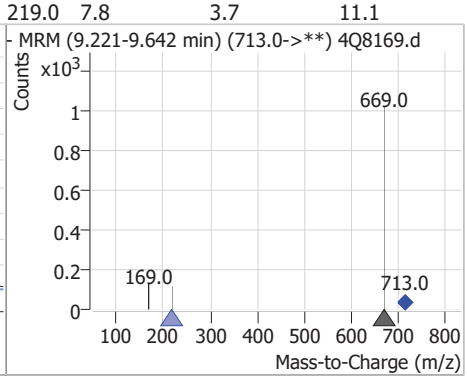




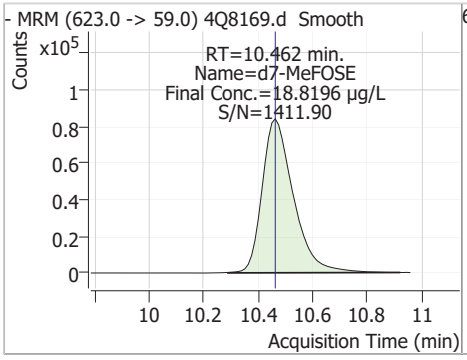
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.17	9.37	-0.01	23267	713.0 -> 219.0	7.8	3.7	11.1

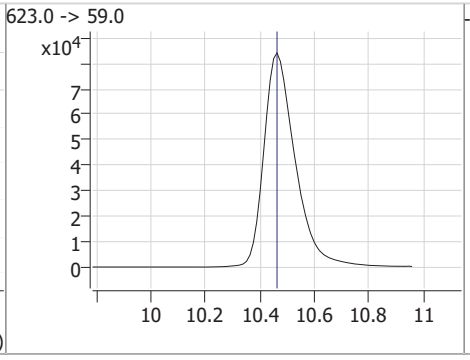


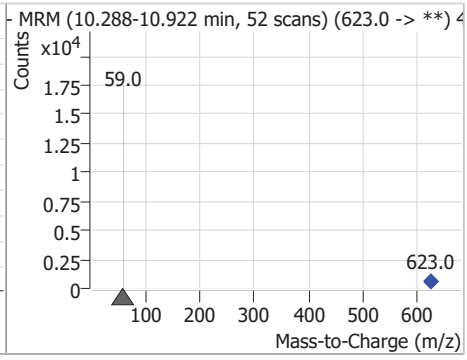




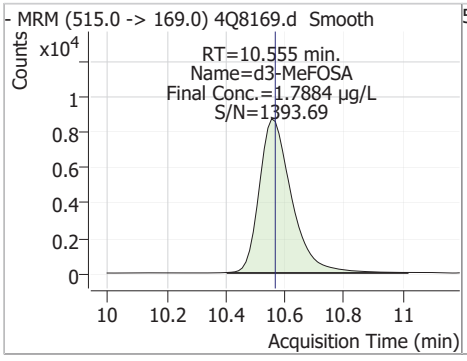
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	18.82	10.46	0.00	667734				

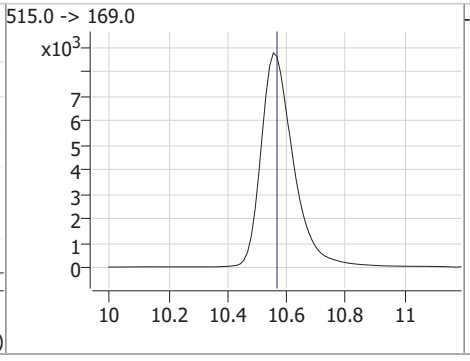


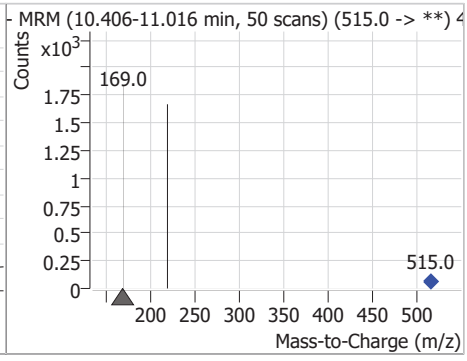




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.79	10.56	-0.01	66463				

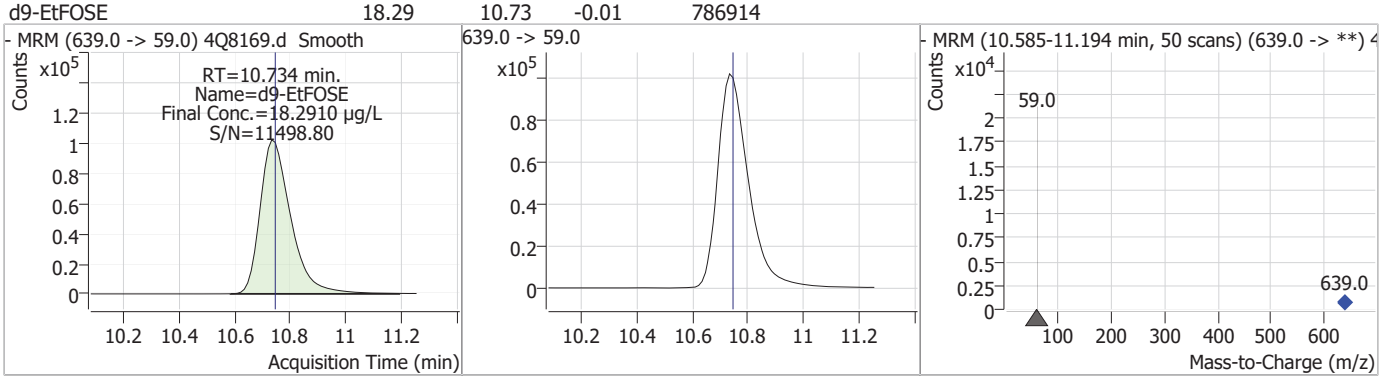




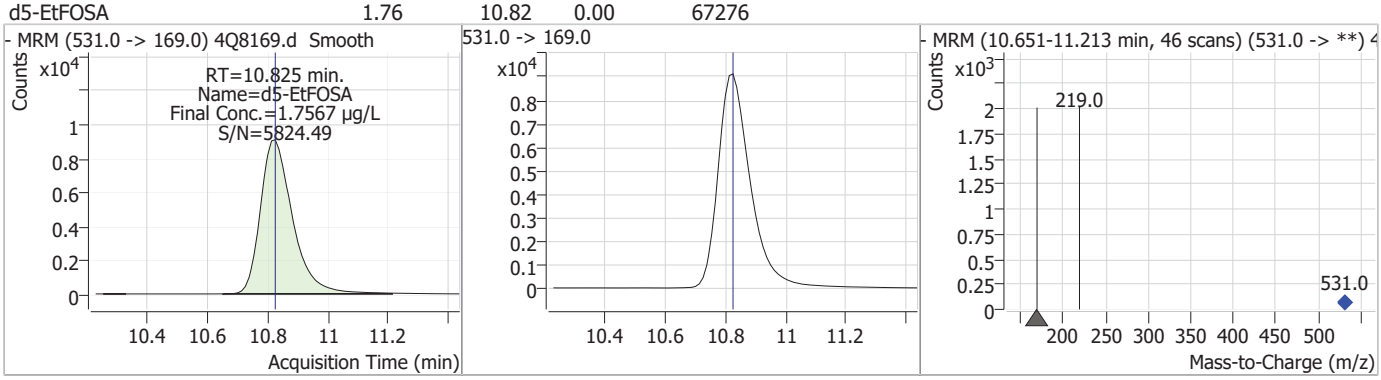


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	18.29	10.73	-0.01	786914				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.76	10.82	0.00	67276				



Manual Integration Approval Summary

Sample Number: JE10205-9
Lab FileID: 4Q8169.D
Injection Time: 04/30/25 23:45
Method: EPA 1633
Analyst approved: 05/01/25 04:52 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.09	Split peak
Perfluorononanesulfonic acid	68259-12-1		8.41	Poor instrument integration
PFOSA	754-91-6		9.27	Split peak
Perfluorododecanesulfonic acid	79780-39-5		9.50	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/02/25 13:12

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8190.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 3:00:40 PM
Sample Name : JE10205-9
Vial : P2-A6
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q139.batch.bin
Sample Information : OP63161,T4Q139,466,,,5,10,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.858	217.0 -> 172.0	78505	1.00 µg/L	-0.025
M5-PFPeA	4.319	268.0 -> 223.0	40619	0.50 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	27443	0.25 µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	27292	0.25 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	41420	0.25 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	15740	0.13 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	15084	0.13 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	20170	0.13 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	16308	0.13 µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	11256	0.13 µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	14471	0.25 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	2703	0.25 µg/L	0.000
		302.0 -> 80.0	6123		
M3-PFHxS	6.986	402.0 -> 99.0	3851	0.25 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	3532	0.25 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	1223	0.50 µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	2467	0.50 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	3006	0.50 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	18705	0.50 µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	42191	1.00 µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	15597	0.50 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	67380	2.50 µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	78241	2.50 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	6608	0.25 µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	6494	0.25 µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	6371	0.25 µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	36737	0.50 µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	4177	0.25 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	46721	0.25 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	15511	0.13 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	18673	0.13 µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	29742	0.25 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	1223	0.58 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 11.7%	
13C2-6:2FTS	6.684	429.0 -> 81.0	2467	0.54 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 10.9%	
13C2-8:2FTS	7.671	529.0 -> 81.0	3006	0.56 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 11.2%	
13C2-PFDoDA	8.666	615.0 -> 570.0	16308	0.10 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 7.8%	
13C2-PFTeDA	9.368	715.0 -> 670.0	11256	0.09 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 7.0%	
13C3-PFBS	5.368	302.0 -> 99.0	2703	0.26 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 10.5%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	3851	0.26	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 10.6%			
13C4-PFBA	2.858	217.0 -> 172.0	78505	0.93	µg/L		-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 9.3%			
13C4-PFHpA	6.291	367.0 -> 322.0	27292	0.20	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 8.2%			
13C5-PFHxA	5.464	318.0 -> 273.0	27443	0.22	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 8.7%			
13C5-PFPeA	4.319	268.0 -> 223.0	40619	0.43	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 8.5%			
13C6-PFDA	7.858	519.0 -> 474.0	15084	0.11	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 8.8%			
13C7-PFUnDA	8.273	570.0 -> 525.0	20170	0.11	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 8.8%			
13C8-FOSA	9.279	506.0 -> 78.0	14471	0.22	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 8.8%			
13C8-PFOA	6.897	421.0 -> 376.0	41420	0.22	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 8.9%			
13C8-PFOS	7.995	507.0 -> 99.0	3532	0.23	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 9.2%			
13C9-PFNA	7.403	472.0 -> 427.0	15740	0.10	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 8.1%			
d3-MeFOSAA	7.915	573.0 -> 419.0	18705	0.45	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 8.9%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	42191	0.85	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 8.5%			
d3-MeFOSA	10.555	515.0 -> 169.0	6494	0.19	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 7.7%			
d5-EtFOSAA	8.098	589.0 -> 419.0	15597	0.48	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 9.7%			
d7-MeFOSE	10.462	623.0 -> 59.0	67380	2.10	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 8.4%			
d9-EtFOSE	10.734	639.0 -> 59.0	78241	2.01	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 8.0%			
d5-EtFOSA	10.825	531.0 -> 169.0	6608	0.19	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 7.6%			
Target Compounds							QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.			
		327.0 -> 81.0					
6:2FTS	6.684	427.0 -> 407.0	119245	4.82	µg/L		100
		427.0 -> 81.0	55883				
8:2FTS	7.671	527.0 -> 507.0	384737	16.35	µg/L		99
		527.0 -> 81.0	148470				
EtFOSAA	-	584.0 -> 419.0	-	N.D.			
		584.0 -> 483.0					
FOSA	9.269	498.0 -> 78.0	26138	0.70	µg/L	m	98
		498.0 -> 478.0	984				
MeFOSAA	-	570.0 -> 419.0	-	N.D.			
		570.0 -> 512.0					
PFBA	2.864	213.0 -> 169.0	27640	1.15	µg/L		100
PFBS	-	299.0 -> 80.0	-	N.D.			
		299.0 -> 99.0					
PFDA	7.859	513.0 -> 469.0	291937	2.55	µg/L		99
		513.0 -> 219.0	66235				
PFDoDA	8.667	613.0 -> 569.0	27230	0.22	µg/L	m	97
		613.0 -> 319.0	3902				

Perfluorinated Compounds by LC/MS/MS

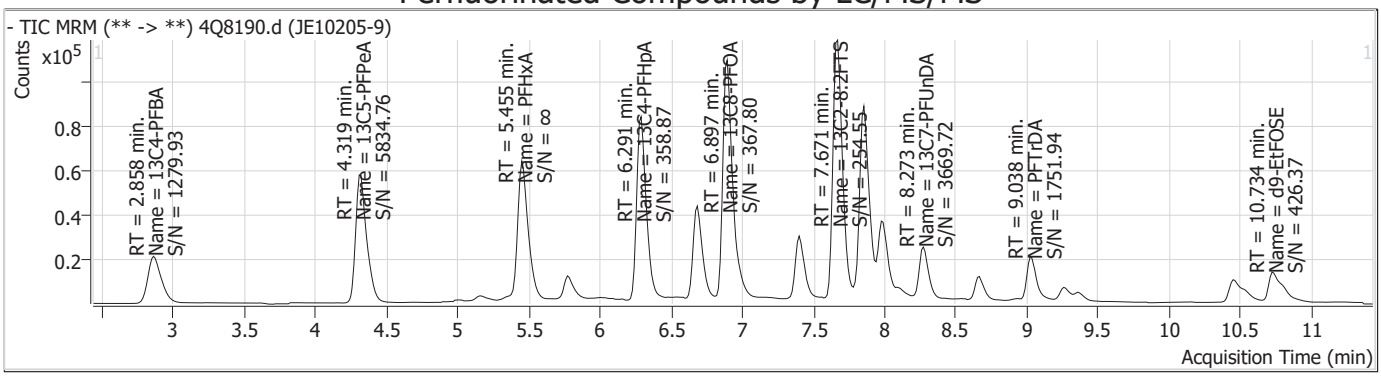
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.292	363.0 -> 319.0	307660	1.85	µg/L		98
		363.0 -> 169.0	60566				
PFHpS	-	449.0 -> 80.0	-	N.D.			
		449.0 -> 99.0					
PFHxA	5.455	313.0 -> 269.0	256632	2.17	µg/L		99
		313.0 -> 119.0	9230				
PFHxS	6.987	399.0 -> 80.0	10710	0.38	µg/L	m	89
		399.0 -> 99.0	4919				
PFNA	7.404	463.0 -> 419.0	75604	0.91	µg/L		83
		463.0 -> 219.0	20457				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	6.898	413.0 -> 369.0	329890	3.04	µg/L		95
		413.0 -> 169.0	86902				
PFOS	7.996	499.0 -> 80.0	32126	1.46	µg/L	m	86
		499.0 -> 99.0	19701				
PFPeA	4.321	263.0 -> 219.0	273649	4.26	µg/L		100
PFPeS	-	349.0 -> 80.0	-	N.D.			
		349.0 -> 99.0					
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	9.038	663.0 -> 619.0	82079	0.59	µg/L		99
		663.0 -> 369.0	5241				
PFUnDA	8.275	563.0 -> 519.0	74055	0.62	µg/L		98
		563.0 -> 269.0	14053				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

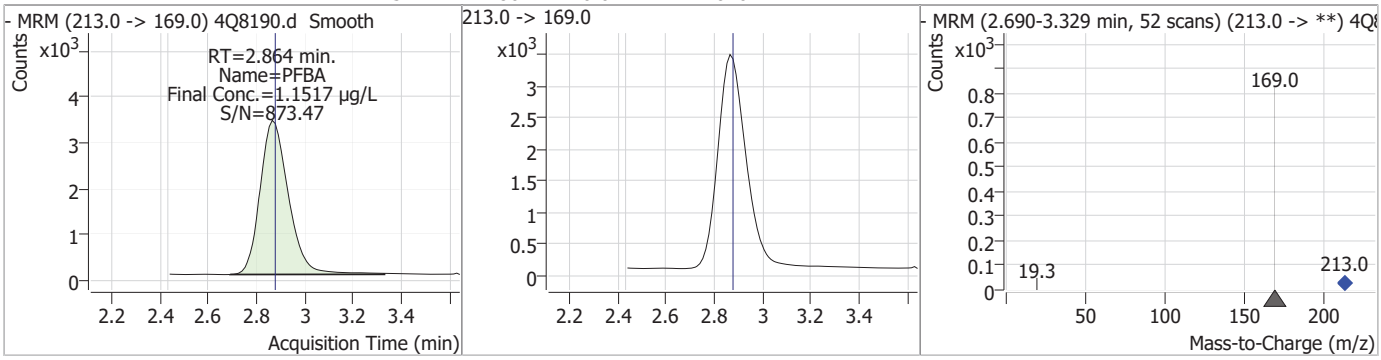
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

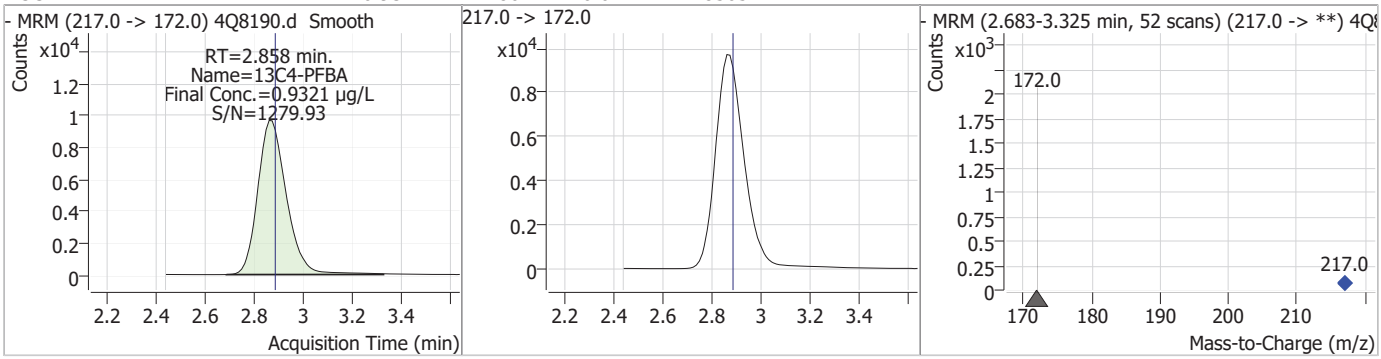
Perfluorinated Compounds by LC/MS/MS



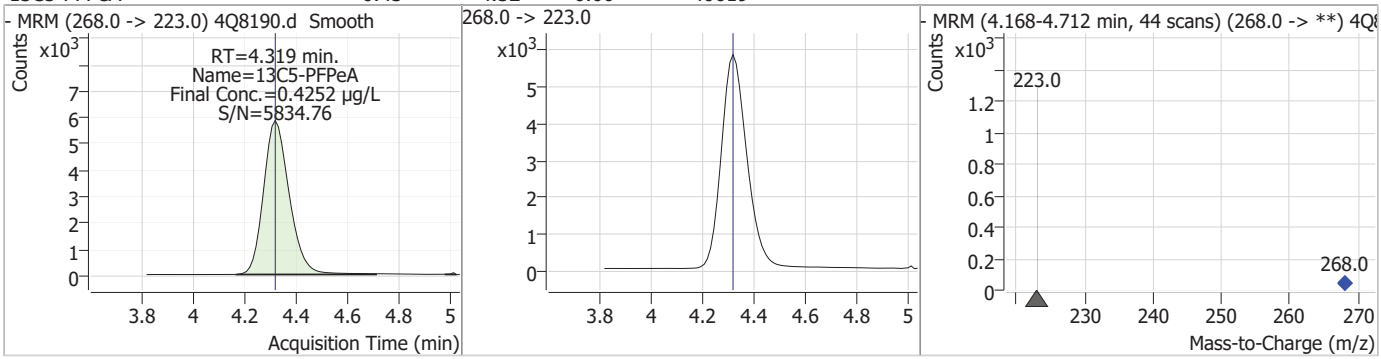
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	1.15	2.86	-0.01	27640				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	0.93	2.86	-0.02	78505				

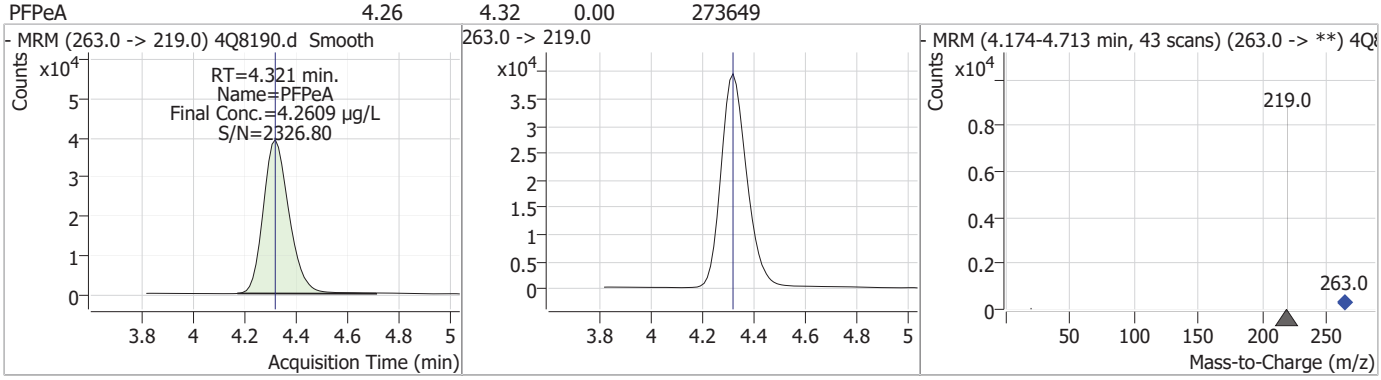


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	0.43	4.32	0.00	40619				

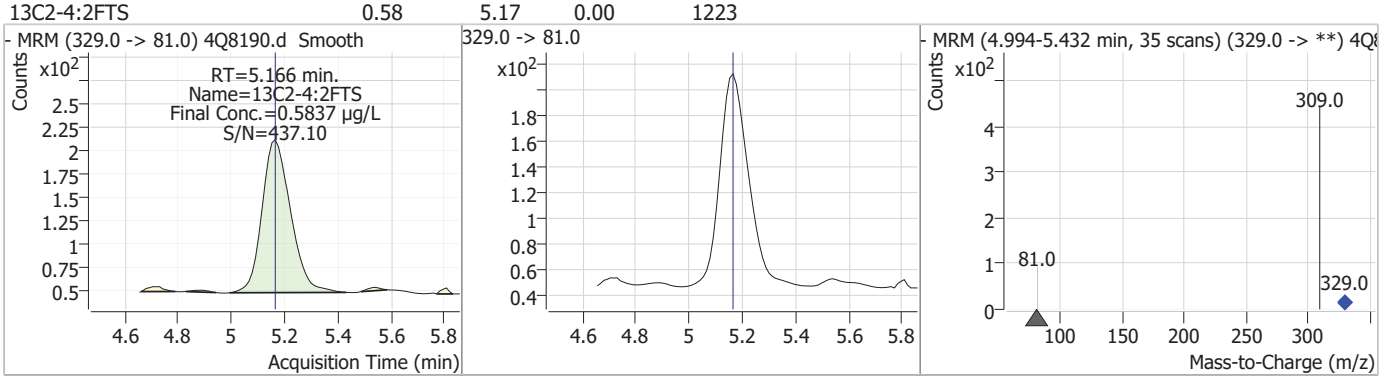


Perfluorinated Compounds by LC/MS/MS

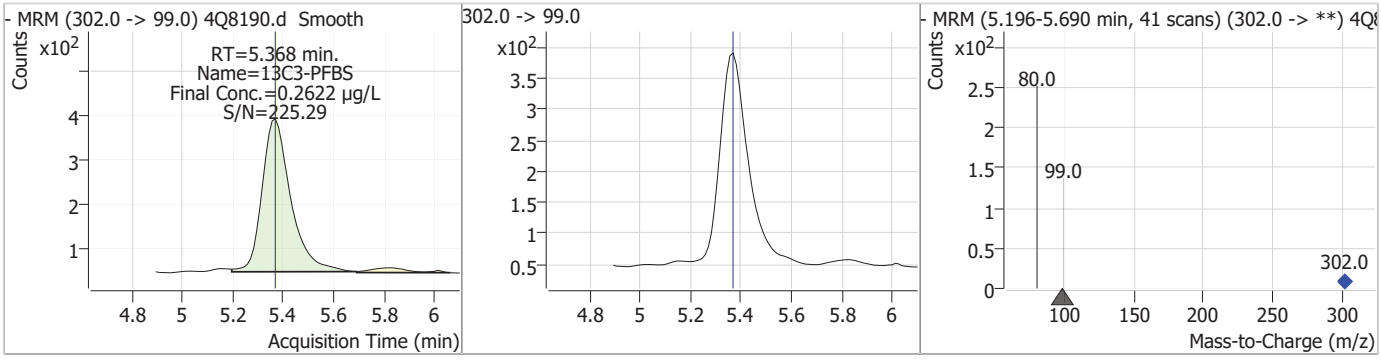
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	4.26	4.32	0.00	273649				



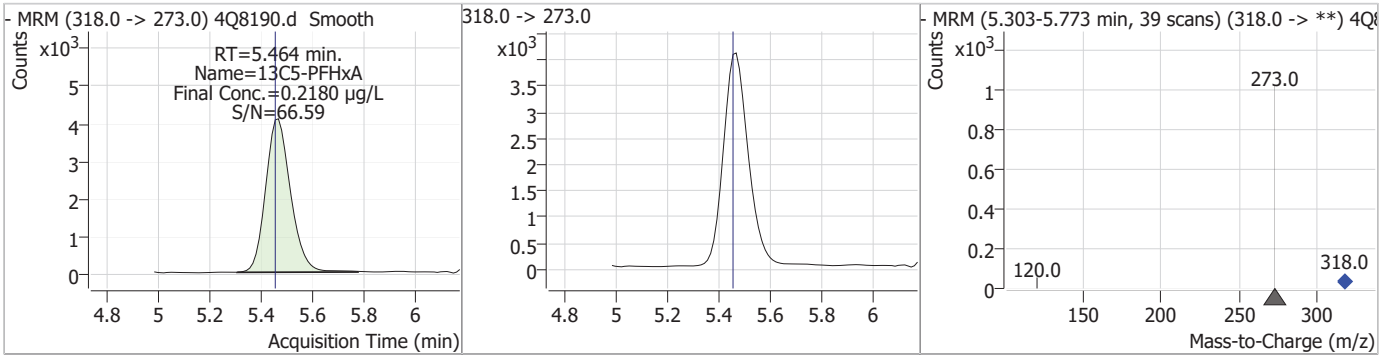
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	0.58	5.17	0.00	1223				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	0.26	5.37	0.00	2703				

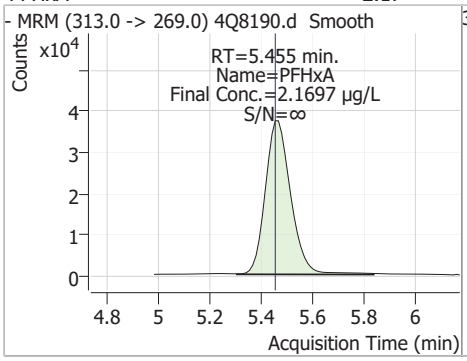


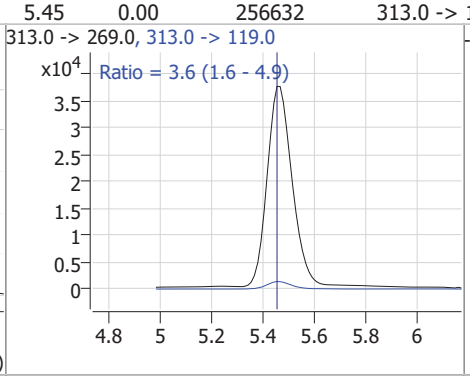
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	0.22	5.46	0.01	27443				

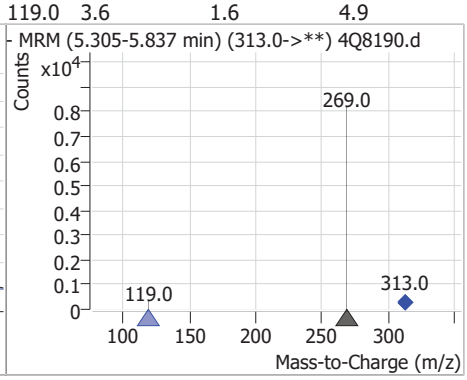


Perfluorinated Compounds by LC/MS/MS

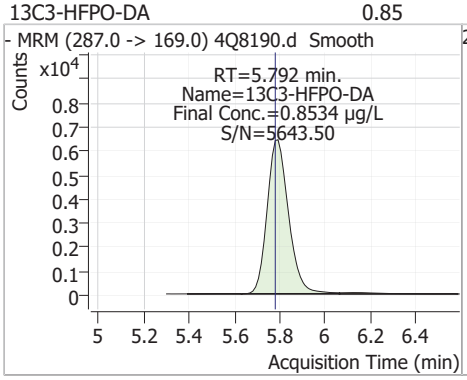
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.17	5.45	0.00	256632	313.0 -> 119.0	3.6	1.6	4.9

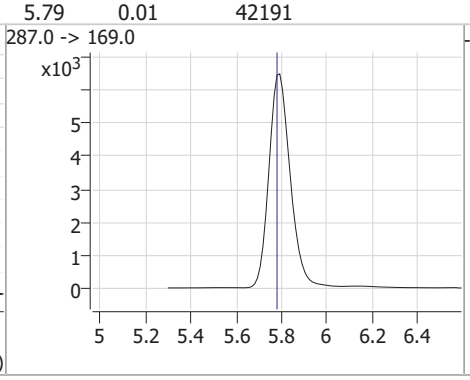


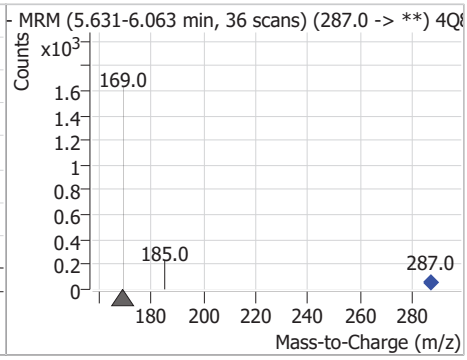




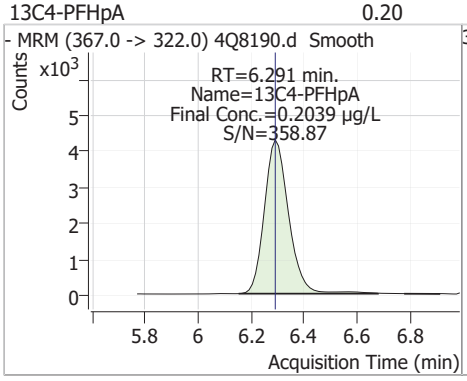
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	0.85	5.79	0.01	42191				

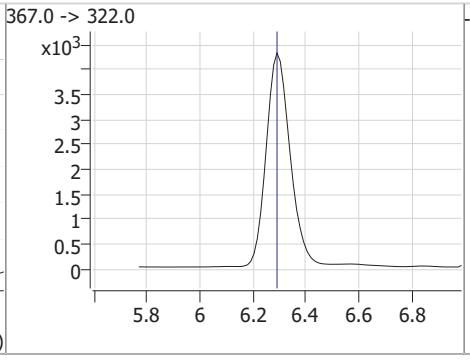


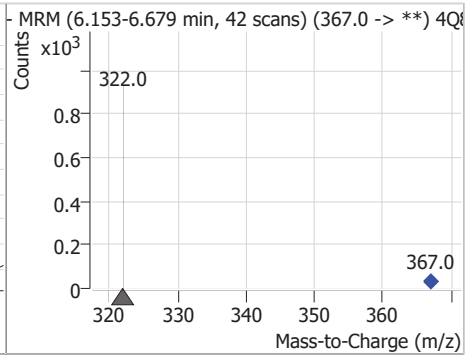




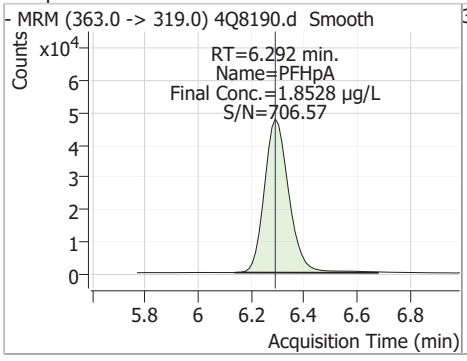
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	0.20	6.29	0.00	27292				

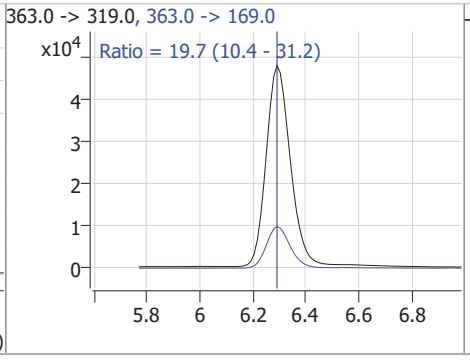


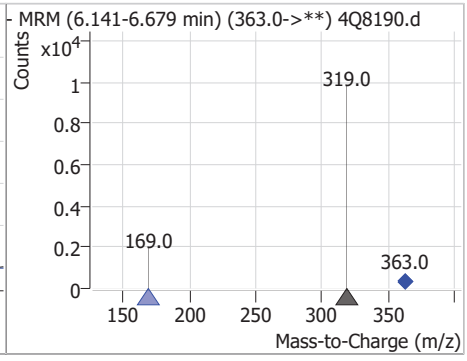




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	1.85	6.29	0.00	307660	363.0 -> 169.0	19.7	10.4	31.2

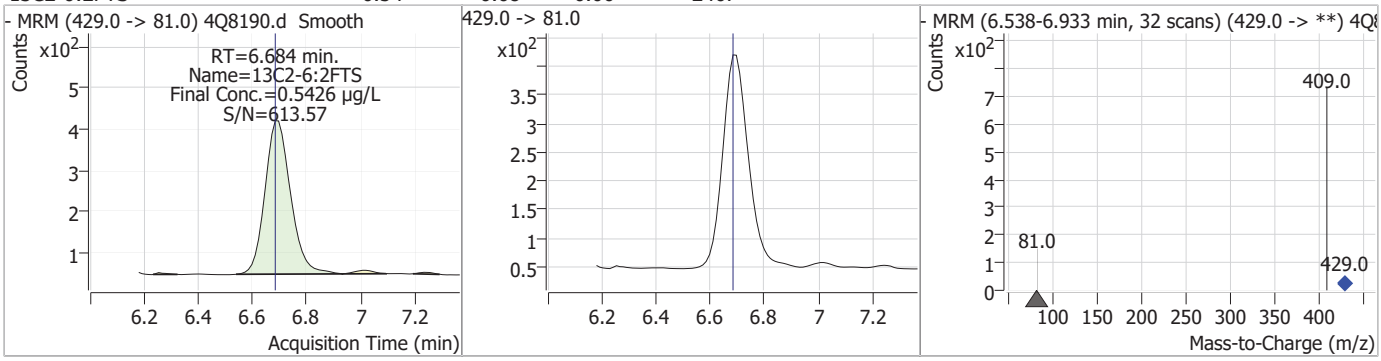




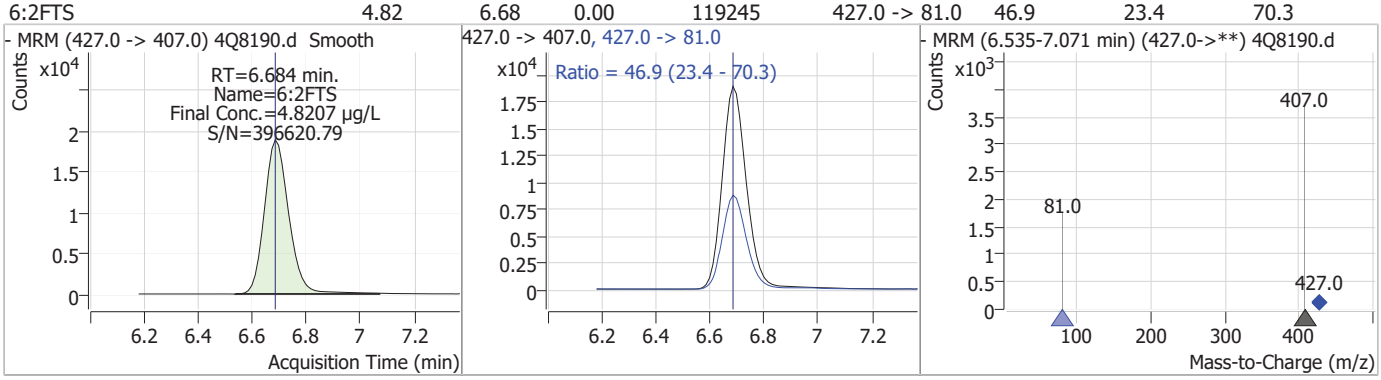


Perfluorinated Compounds by LC/MS/MS

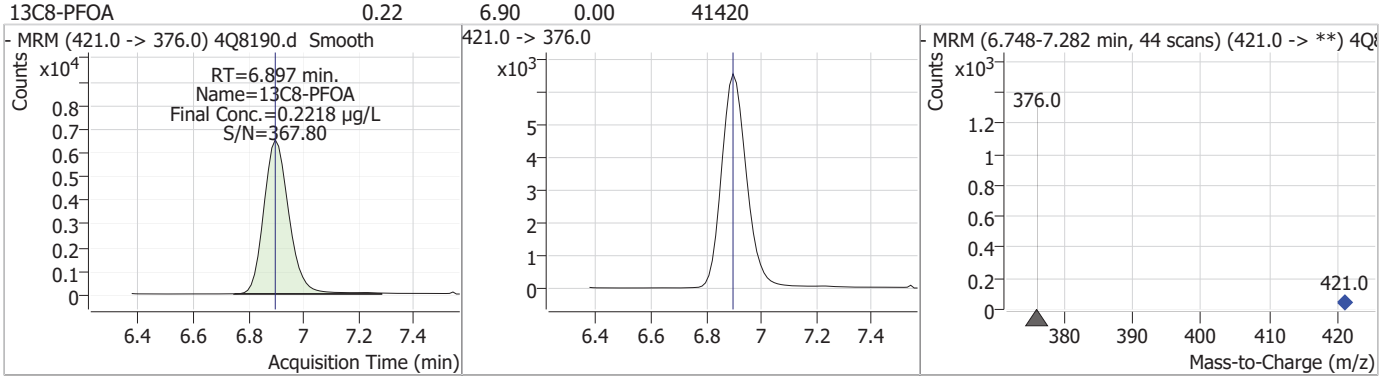
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	0.54	6.68	0.00	2467				



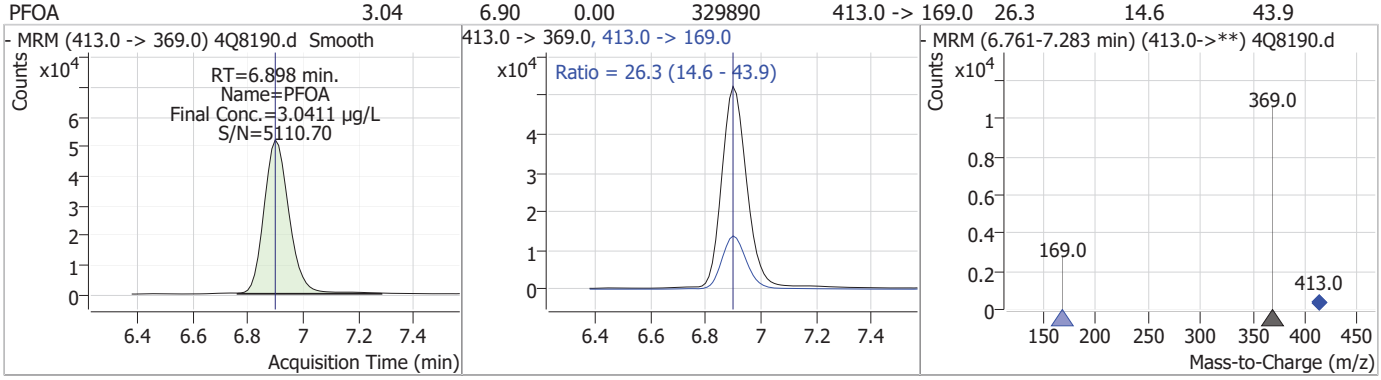
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	4.82	6.68	0.00	119245	427.0 -> 81.0	46.9	23.4	70.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	0.22	6.90	0.00	41420				

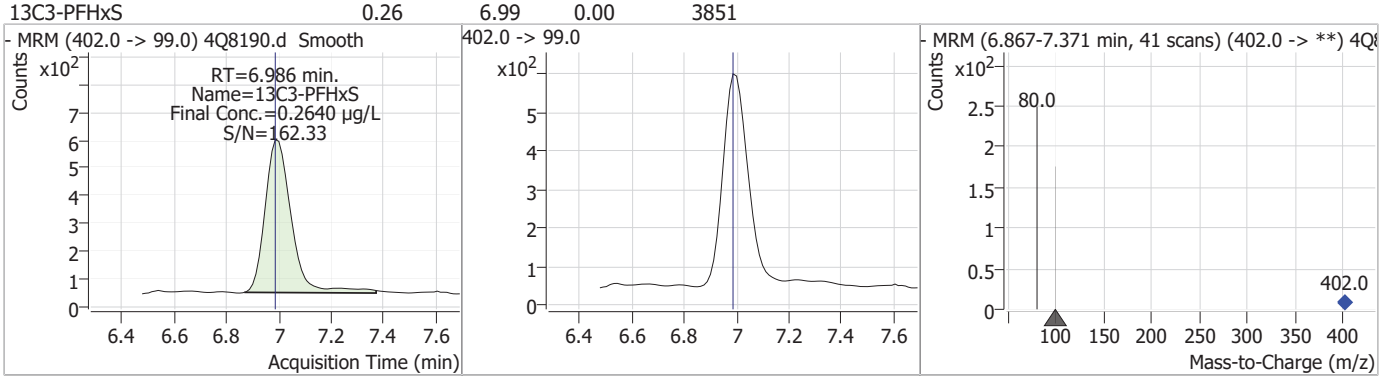


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	3.04	6.90	0.00	329890	413.0 -> 169.0	26.3	14.6	43.9

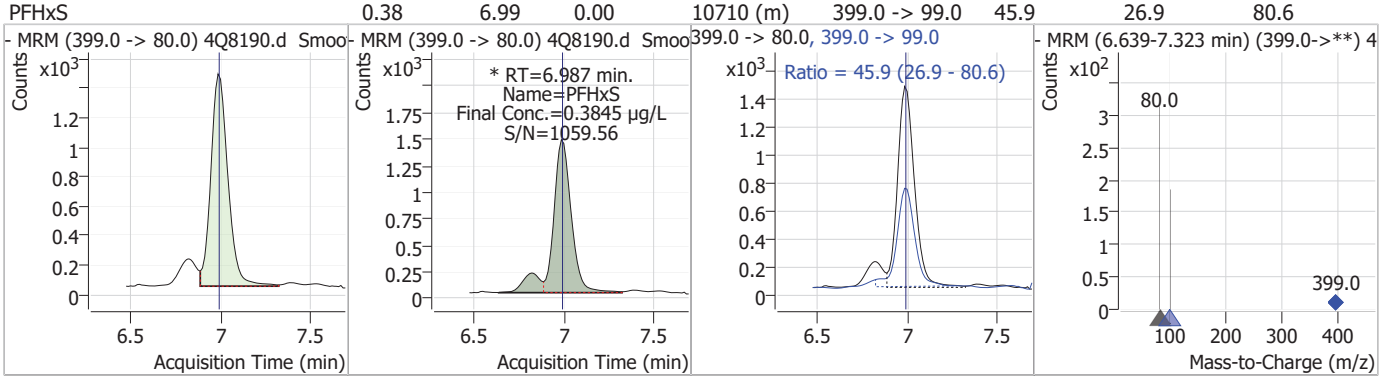


Perfluorinated Compounds by LC/MS/MS

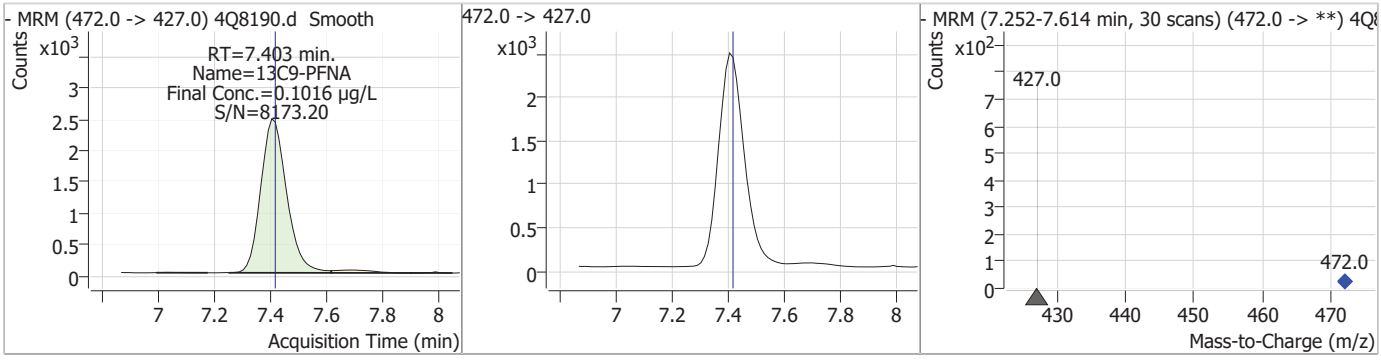
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	0.26	6.99	0.00	3851				



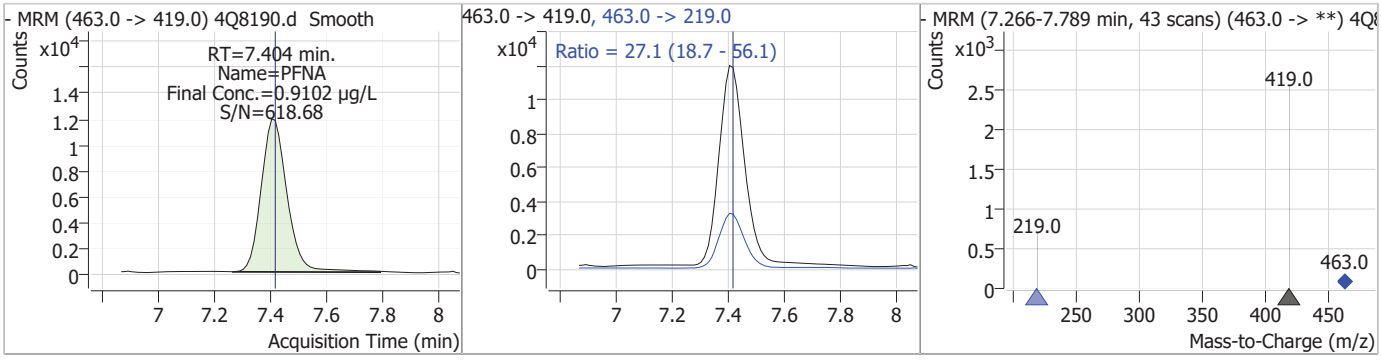
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.38	6.99	0.00	10710 (m)	399.0 -> 99.0	45.9	26.9	80.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	0.10	7.40	-0.01	15740				

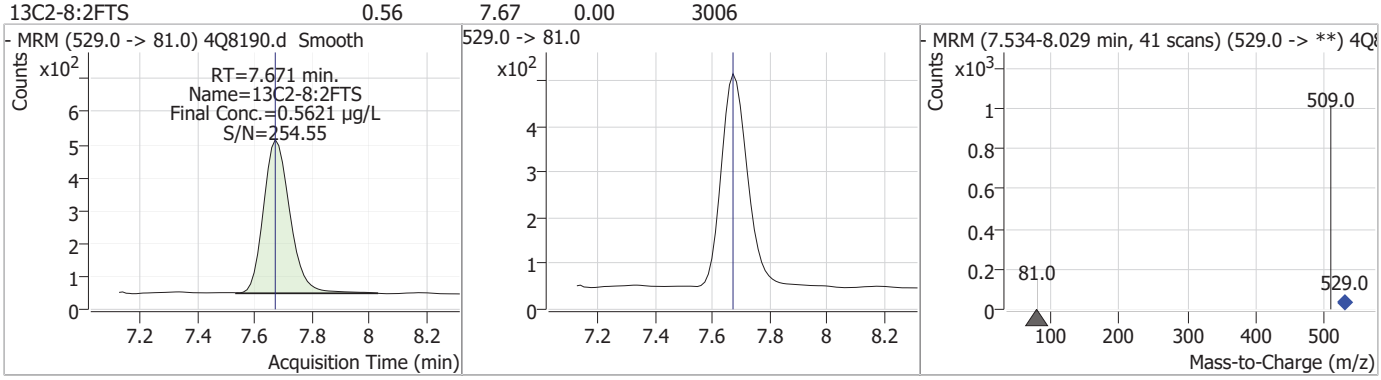


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.91	7.40	-0.01	75604	463.0 -> 219.0	27.1	18.7	56.1

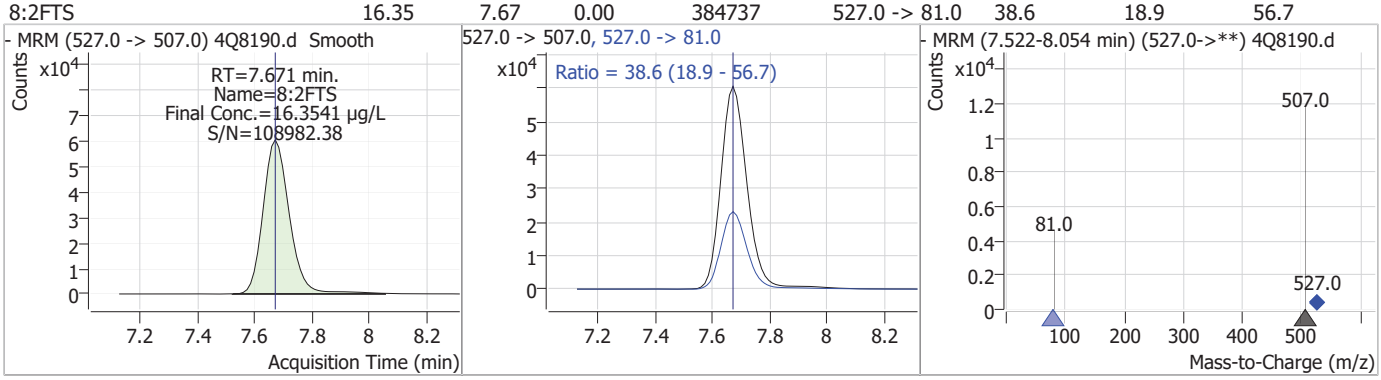


Perfluorinated Compounds by LC/MS/MS

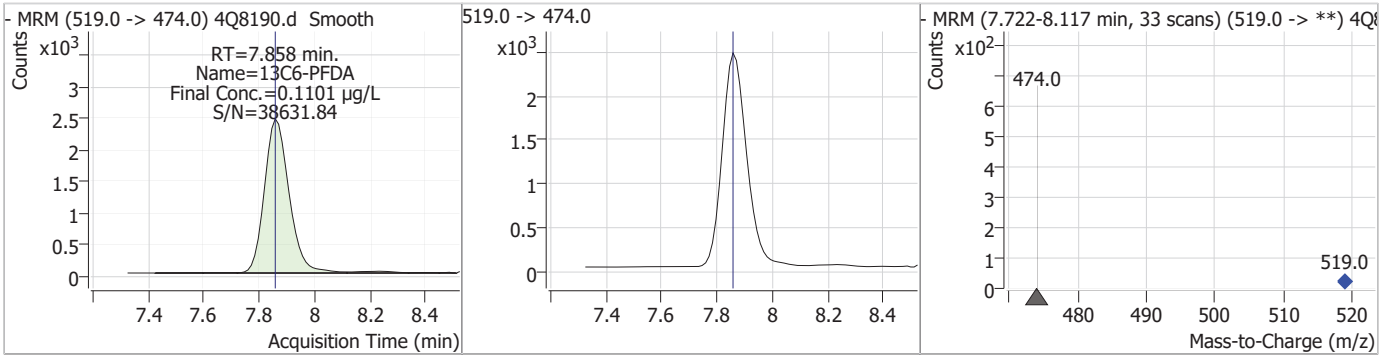
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	0.56	7.67	0.00	3006				



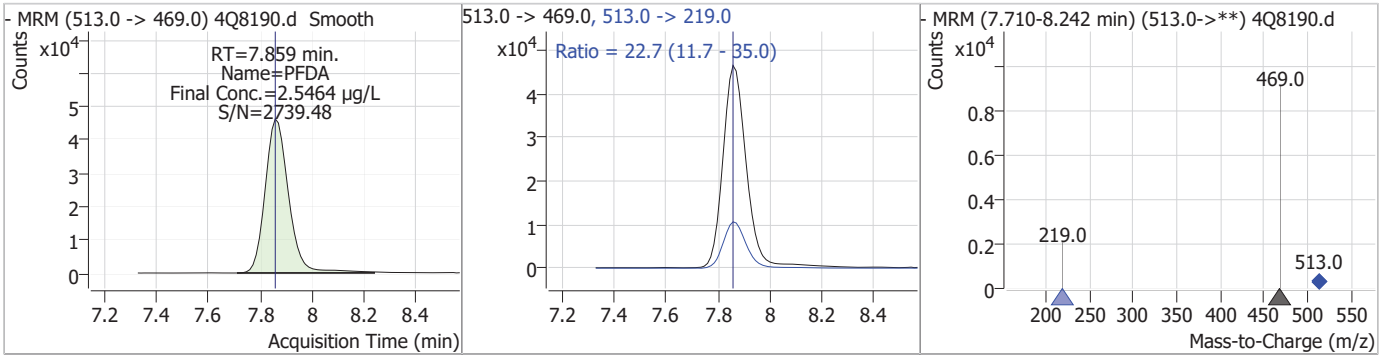
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	16.35	7.67	0.00	384737	527.0 -> 81.0	38.6	18.9	56.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	0.11	7.86	0.00	15084				

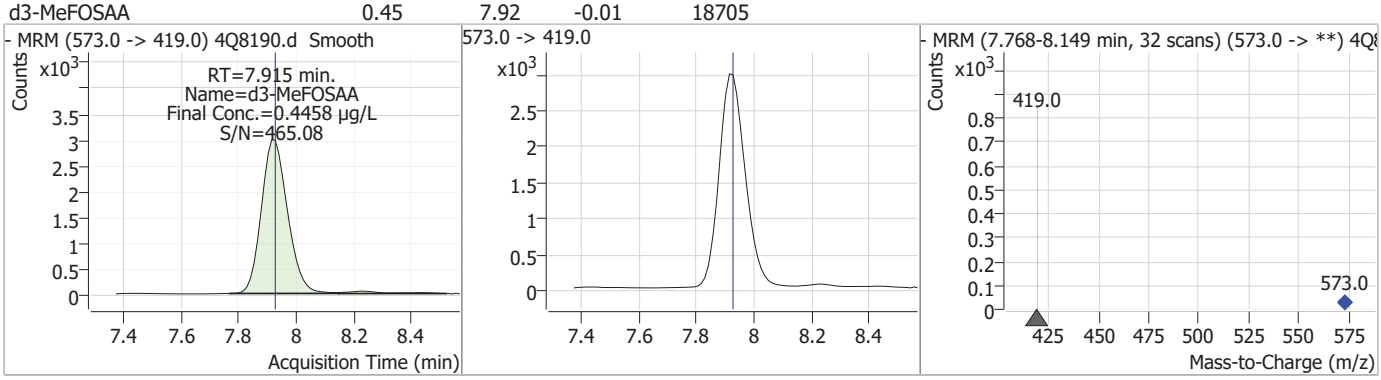


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.55	7.86	0.00	291937	513.0 -> 219.0	22.7	11.7	35.0

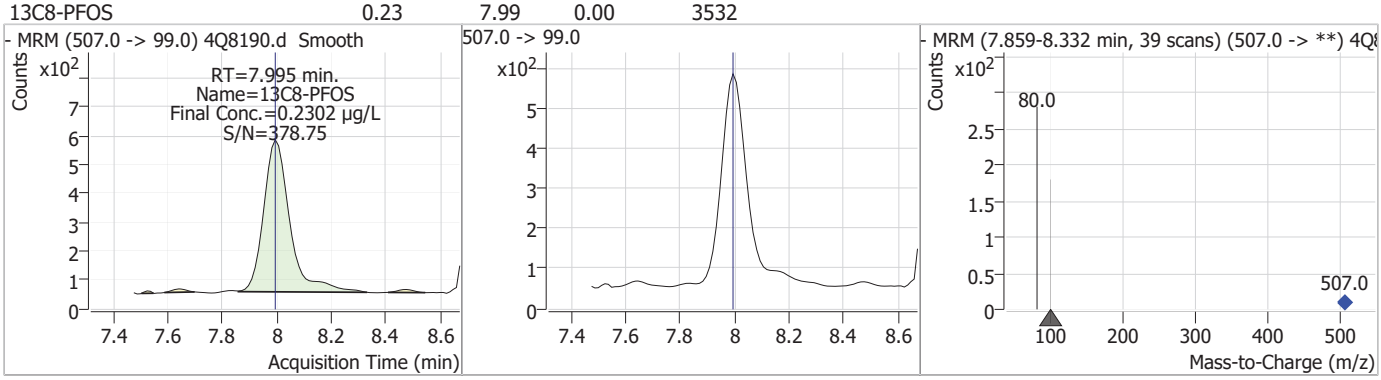


Perfluorinated Compounds by LC/MS/MS

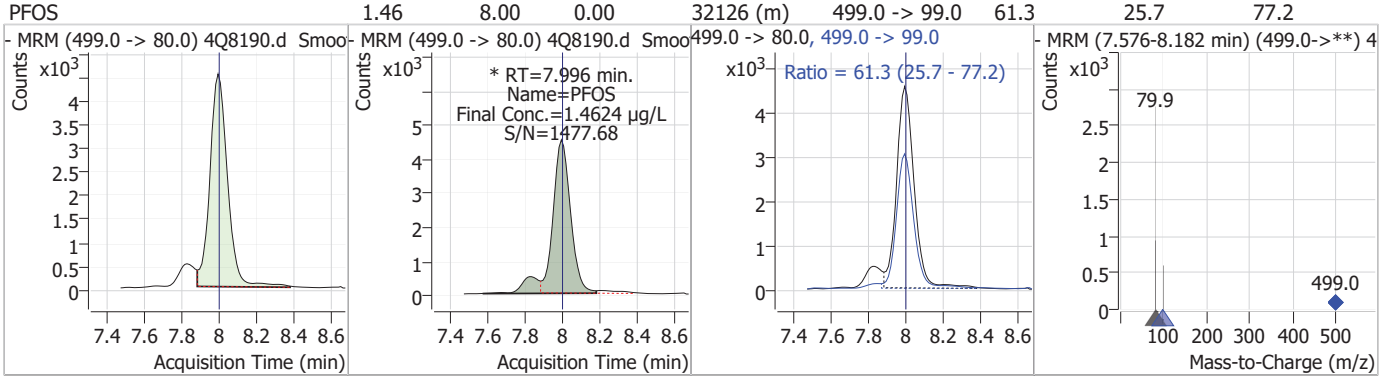
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	0.45	7.92	-0.01	18705				



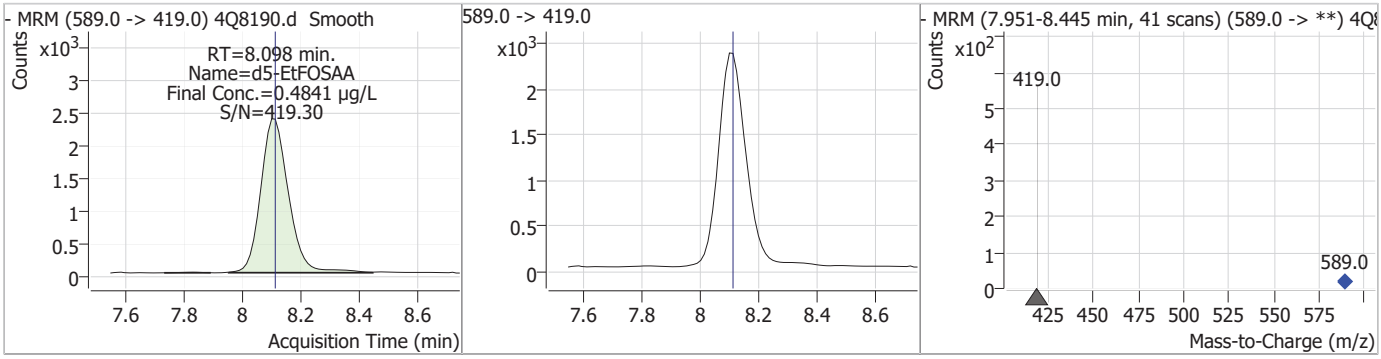
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	0.23	7.99	0.00	3532				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	1.46	8.00	0.00	32126 (m)	499.0 -> 99.0	61.3	25.7	77.2

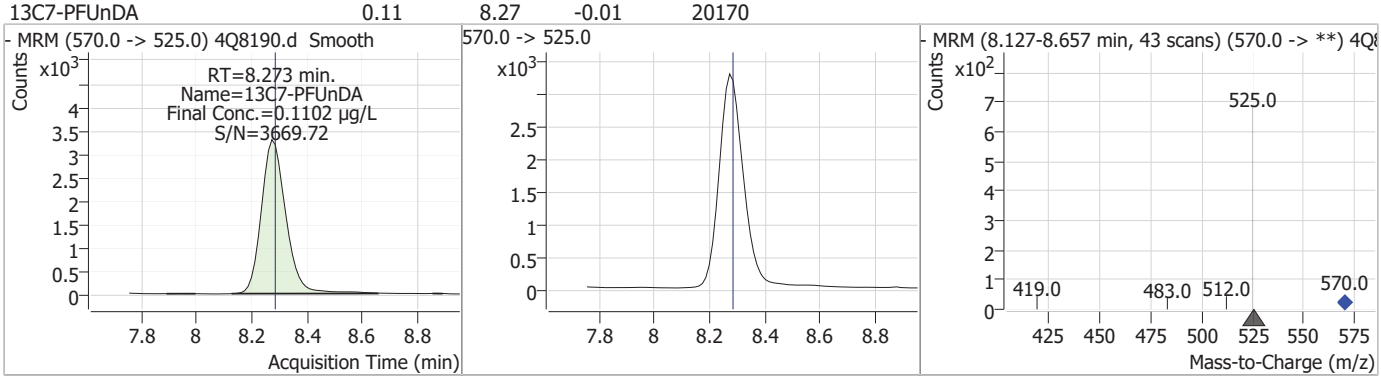


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	0.48	8.10	-0.01	15597				

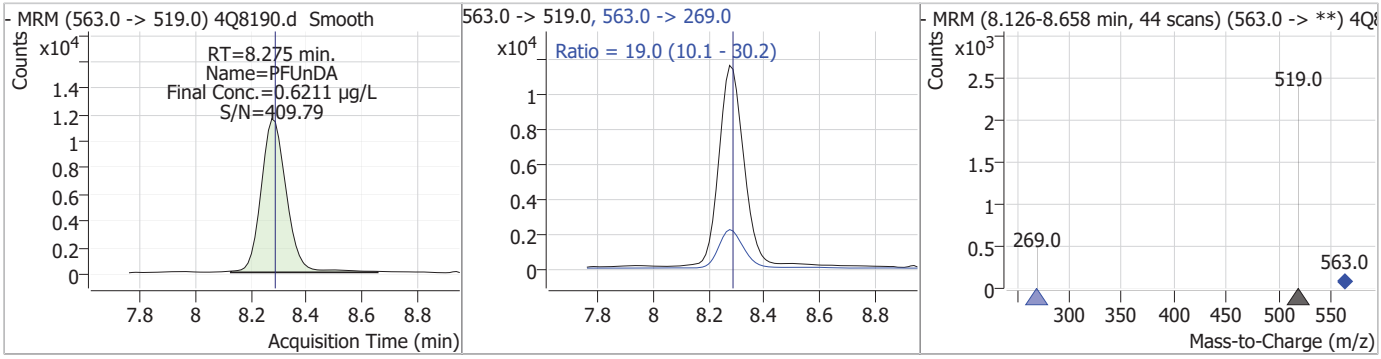


Perfluorinated Compounds by LC/MS/MS

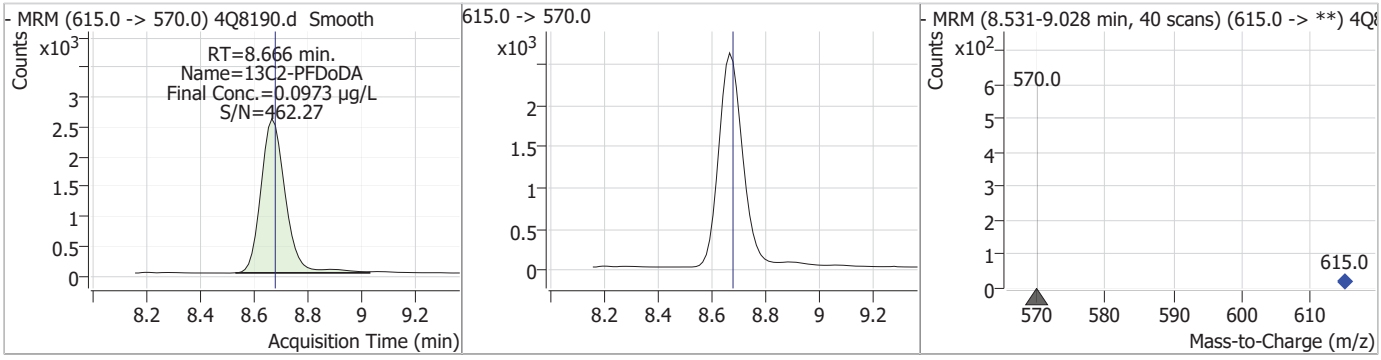
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	0.11	8.27	-0.01	20170				



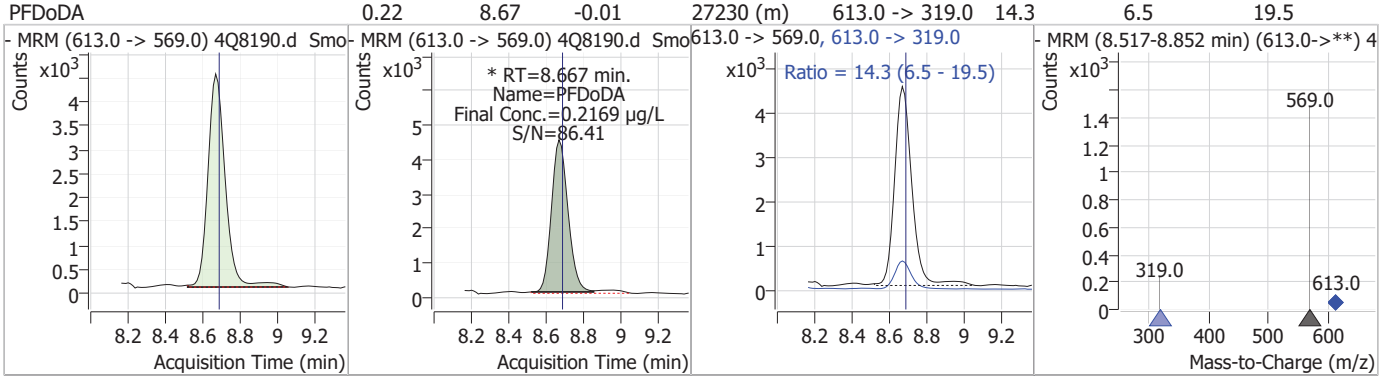
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.62	8.27	-0.01	74055	563.0 -> 269.0	19.0	10.1	30.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	0.10	8.67	-0.01	16308				

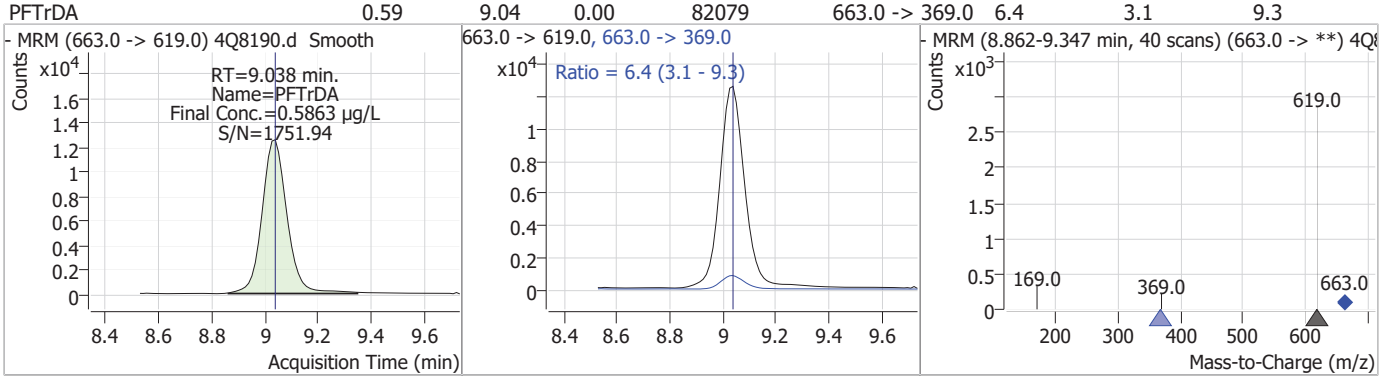


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.22	8.67	-0.01	27230 (m)	613.0 -> 319.0	14.3	6.5	19.5

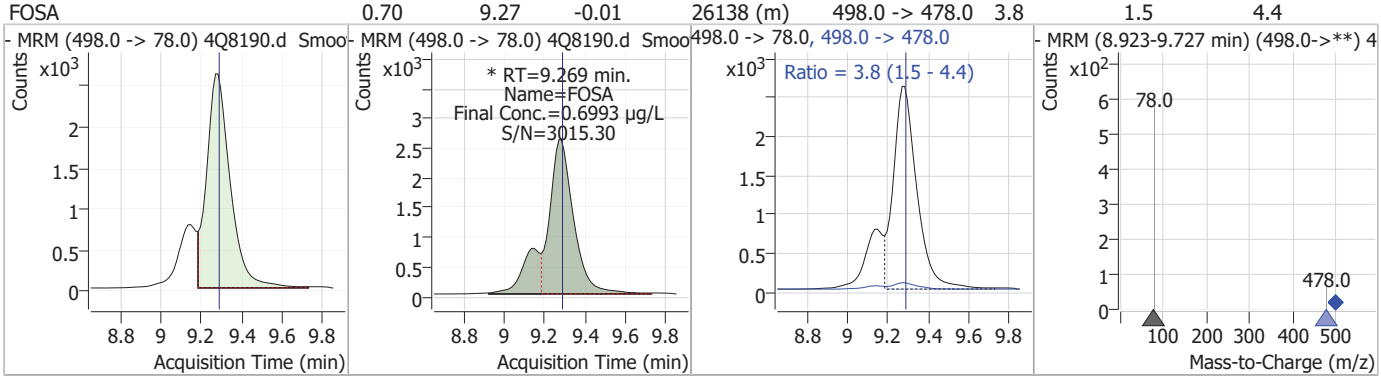


Perfluorinated Compounds by LC/MS/MS

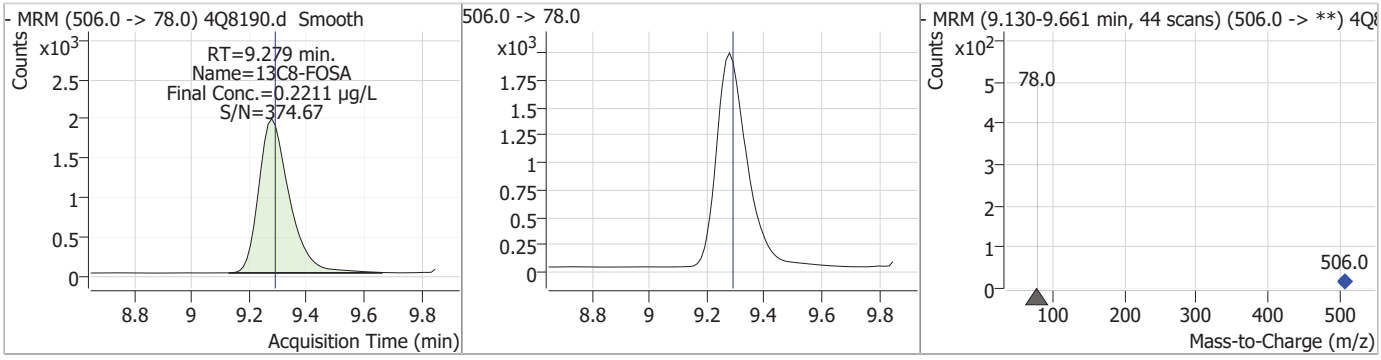
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.59	9.04	0.00	82079	663.0 -> 369.0	6.4	3.1	9.3



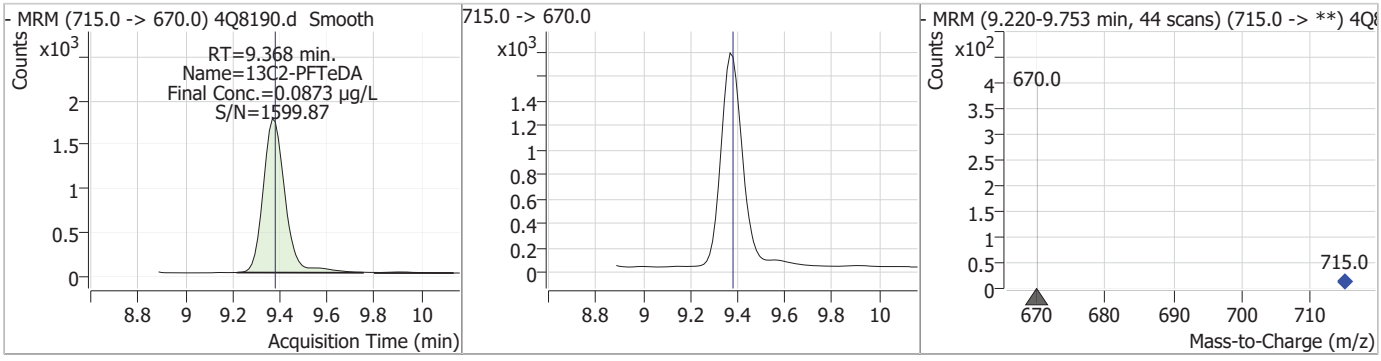
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.70	9.27	-0.01	26138 (m)	498.0 -> 478.0	3.8	1.5	4.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	0.22	9.28	-0.01	14471				

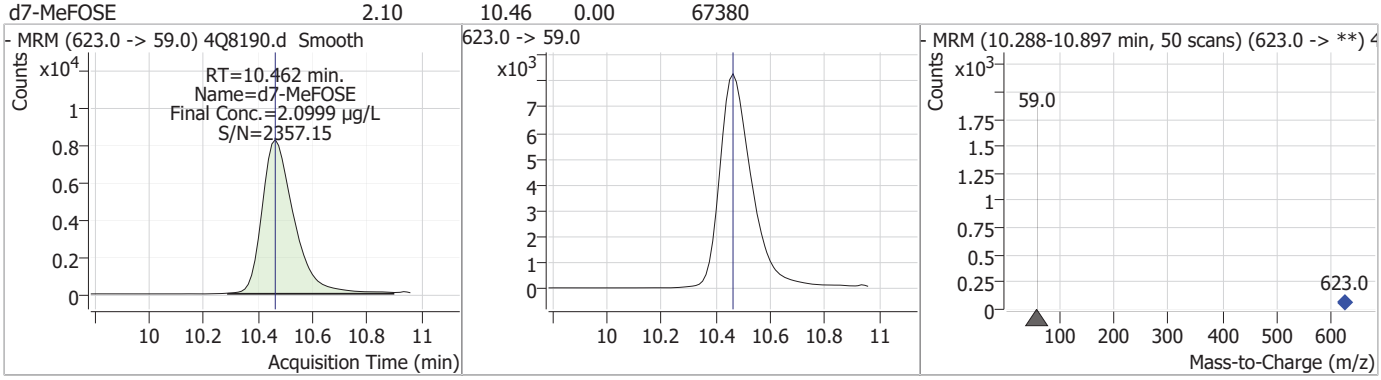


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.09	9.37	-0.01	11256				

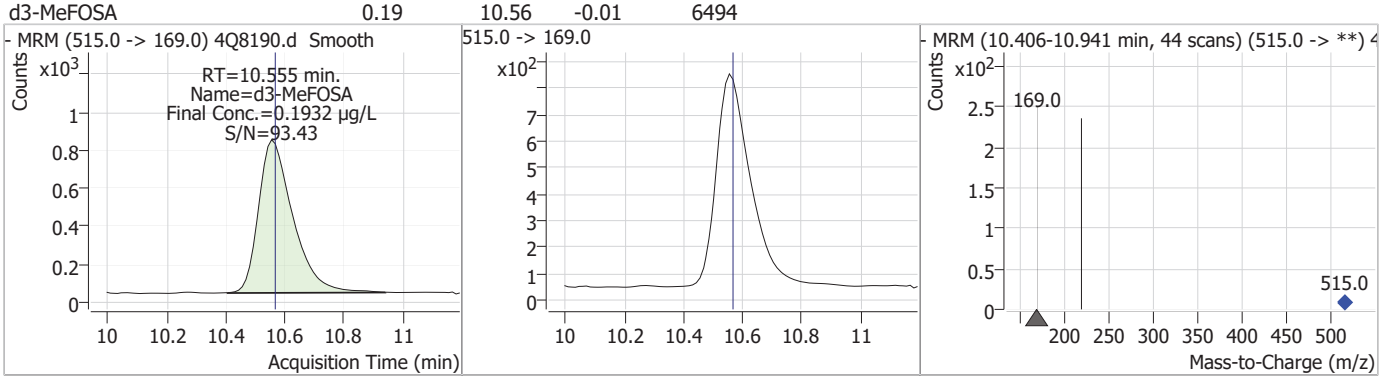


Perfluorinated Compounds by LC/MS/MS

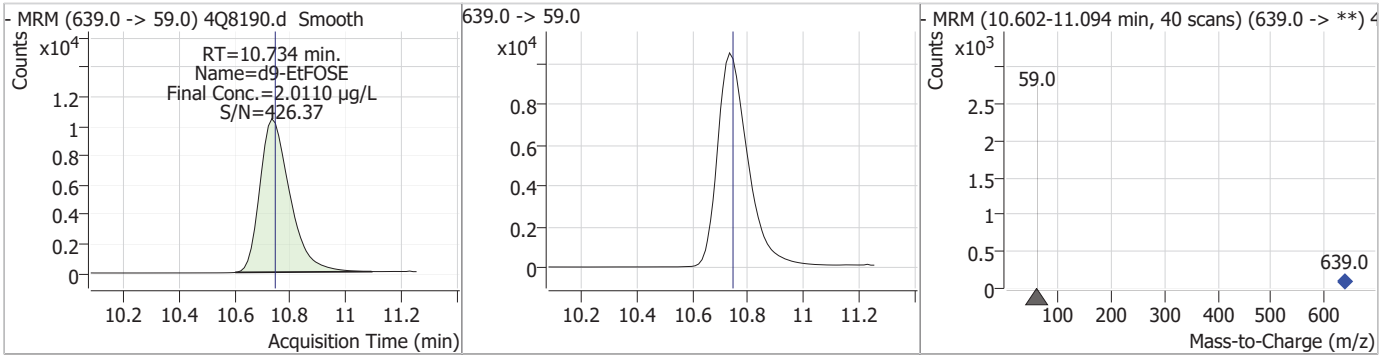
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	2.10	10.46	0.00	67380				



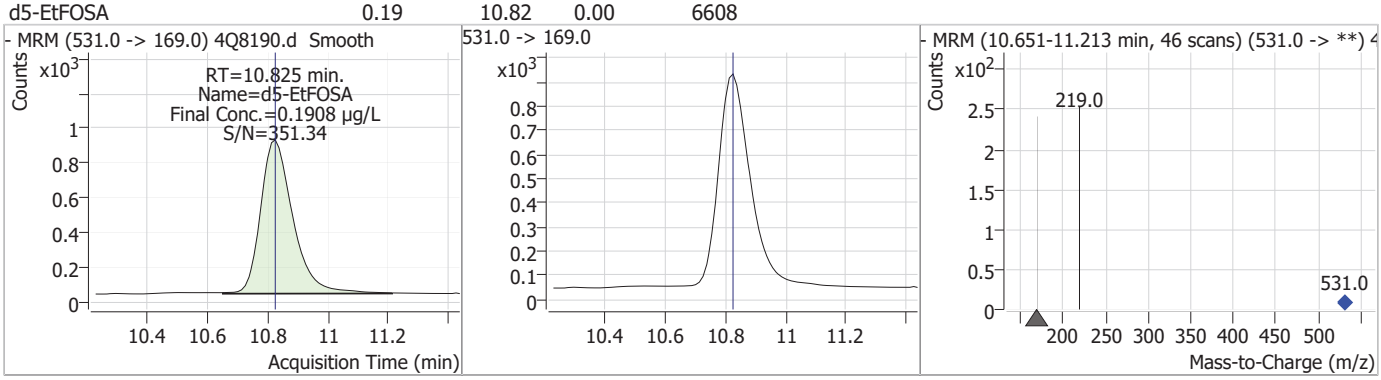
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	0.19	10.56	-0.01	6494				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	2.01	10.73	-0.01	78241				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	0.19	10.82	0.00	6608				



Manual Integration Approval Summary

Sample Number: JE10205-9
Lab FileID: 4Q8190.D
Injection Time: 05/01/25 15:00

Method: EPA 1633
Analyst approved: 05/02/25 13:12 Olga Azarian
Supervisor approved: 05/02/25 13:12 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
Perfluorododecanoic acid	307-55-1		8.67	Poor instrument integration
PFOSA	754-91-6		9.27	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/15/25 12:51

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33790.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/13/2025 1:48:08 AM
Sample Name : JE10205-10
Vial : P1-F6
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q345.batch.bin
Sample Information : OP63161,T2Q345,461,,,5,5,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.250	217.0 -> 172.0	16863	2.00 µg/L	-0.012
M5-PFPeA	4.624	268.0 -> 223.0	9020	1.00 µg/L	-0.012
M5-PFHxA	5.732	318.0 -> 273.0	5760	0.50 µg/L	-0.012
M4-PFHpA	6.528	367.0 -> 322.0	4735	0.50 µg/L	-0.012
M8-PFOA	7.111	421.0 -> 376.0	9740	0.50 µg/L	-0.013
M9-PFNA	7.632	472.0 -> 427.0	3966	0.25 µg/L	-0.012
M6-PFDA	8.127	519.0 -> 474.0	2822	0.25 µg/L	-0.013
M7-PFUnDA	8.583	570.0 -> 525.0	4494	0.25 µg/L	-0.024
M2-PFDoDA	9.016	615.0 -> 570.0	3798	0.25 µg/L	-0.025
M2-PFTeDA	9.783	715.0 -> 670.0	3614	0.25 µg/L	-0.012
M8-FOSA	9.333	506.0 -> 78.0	2923	0.50 µg/L	-0.013
M3-PFBS	5.687	302.0 -> 99.0	1123	0.50 µg/L	-0.012
M3-PFHxS	7.238	402.0 -> 99.0	1167	0.50 µg/L	-0.012
M8-PFOS	8.303	507.0 -> 99.0	1039	0.50 µg/L	-0.012
M2-4:2FTS	5.420	329.0 -> 81.0	304	1.00 µg/L	-0.012
M2-6:2FTS	6.897	429.0 -> 81.0	701	1.00 µg/L	-0.012
M2-8:2FTS	7.902	529.0 -> 81.0	969	1.00 µg/L	-0.012
M3-MeFOSAA	8.147	573.0 -> 419.0	6491	1.00 µg/L	-0.012
M3-HFPO-DA	6.049	287.0 -> 169.0	3117	2.00 µg/L	-0.025
M5-EtFOSAA	8.344	589.0 -> 419.0	4554	1.00 µg/L	-0.012
M7-MeFOSE	10.520	623.0 -> 59.0	21777	5.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	30902	5.00 µg/L	0.000
M5-EtFOSA	10.882	531.0 -> 169.0	2094	0.50 µg/L	-0.012
M3-MeFOSA	10.624	515.0 -> 169.0	2102	0.50 µg/L	0.000
13C4-PFOS	8.291	503.0 -> 80.0	2059	0.50 µg/L	-0.025
13C3-PFBA	3.253	216.0 -> 172.0	7774	1.00 µg/L	-0.012
18O2-PFHxS	7.250	403.0 -> 84.0	1488	0.50 µg/L	-0.012
13C4-PFOA	7.111	417.0 -> 372.0	10835	0.50 µg/L	-0.013
13C2-PFDA	8.127	515.0 -> 470.0	2945	0.25 µg/L	-0.013
13C5-PFNA	7.632	468.0 -> 423.0	3654	0.25 µg/L	-0.012
13C2-PFHxA	5.733	315.0 -> 270.0	5342	0.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.420	329.0 -> 81.0	304	1.13 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 22.6%	
13C2-6:2FTS	6.897	429.0 -> 81.0	701	1.20 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 24.1%	
13C2-8:2FTS	7.902	529.0 -> 81.0	969	1.03 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 20.6%	
13C2-PFDoDA	9.016	615.0 -> 570.0	3798	0.19 µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 15.1%	
13C2-PFTeDA	9.783	715.0 -> 670.0	3614	0.23 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 18.5%	
13C3-PFBS	5.687	302.0 -> 99.0	1123	0.54 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 21.4%	
13C3-PFHxS	7.238	402.0 -> 99.0	1167	0.46 µg/L	-0.012

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 18.4%		
13C4-PFBA	3.250	217.0 -> 172.0	16863	1.84 µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 18.4%		
13C4-PFHpA	6.528	367.0 -> 322.0	4735	0.51 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 20.3%		
13C5-PFHxA	5.732	318.0 -> 273.0	5760	0.49 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 19.7%		
13C5-PFPeA	4.624	268.0 -> 223.0	9020	0.90 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 18.1%		
13C6-PFDA	8.127	519.0 -> 474.0	2822	0.23 µg/L		-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 18.4%		
13C7-PFUnDA	8.583	570.0 -> 525.0	4494	0.23 µg/L		-0.024
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 18.7%		
13C8-FOSA	9.333	506.0 -> 78.0	2923	0.41 µg/L		-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 16.4%		
13C8-PFOA	7.111	421.0 -> 376.0	9740	0.44 µg/L		-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 17.6%		
13C8-PFOS	8.303	507.0 -> 99.0	1039	0.46 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 18.5%		
13C9-PFNA	7.632	472.0 -> 427.0	3966	0.25 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 19.9%		
d3-MeFOSAA	8.147	573.0 -> 419.0	6491	0.88 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 17.7%		
13C3-HFPO-DA	6.049	287.0 -> 169.0	3117	1.70 µg/L		-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 17.0%		
d3-MeFOSA	10.624	515.0 -> 169.0	2102	0.38 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 15.2%		
d5-EtFOSAA	8.344	589.0 -> 419.0	4554	0.77 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 15.4%		
d7-MeFOSE	10.520	623.0 -> 59.0	21777	3.60 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 14.4%		
d9-EtFOSE	10.803	639.0 -> 59.0	30902	3.64 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 14.5%		
d5-EtFOSA	10.882	531.0 -> 169.0	2094	0.38 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 15.0%		
Target Compounds						QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.		
		327.0 -> 81.0				
6:2FTS	-	427.0 -> 407.0	-	N.D.		
		427.0 -> 81.0				
8:2FTS	-	527.0 -> 507.0	-	N.D.		
		527.0 -> 81.0				
EtFOSAA	-	584.0 -> 419.0	-	N.D.		
		584.0 -> 483.0				
FOSA	9.335	498.0 -> 78.0	1675	0.33 µg/L	m	97
		498.0 -> 478.0	53			
MeFOSAA	-	570.0 -> 419.0	-	N.D.		
		570.0 -> 512.0				
PFBA	3.255	213.0 -> 169.0	2446	1.10 µg/L		100
PFBS	5.688	299.0 -> 80.0	2124	0.30 µg/L		99
		299.0 -> 99.0	780			
PFDA	8.128	513.0 -> 469.0	1012	0.09 µg/L		94
		513.0 -> 219.0	204			
PFDoDA	-	613.0 -> 569.0	-	N.D.		
		613.0 -> 319.0				
PFDS	-	599.0 -> 80.0	-	N.D.		

Perfluorinated Compounds by LC/MS/MS

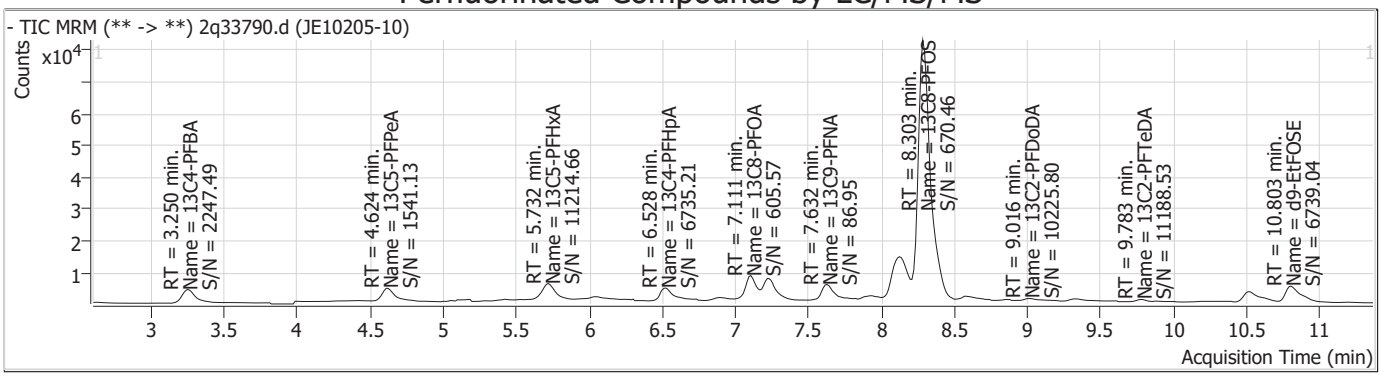
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0					
PFHpA	6.528	363.0 -> 319.0	13513	0.89	µg/L		97
		363.0 -> 169.0	2628				
PFHpS	7.784	449.0 -> 80.0	520	0.13	µg/L		78
		449.0 -> 99.0	344				
PFHxA	5.735	313.0 -> 269.0	15572	1.60	µg/L		98
		313.0 -> 119.0	597				
PFHxS	7.239	399.0 -> 80.0	24122	5.42	µg/L	m	92
		399.0 -> 99.0	11773				
PFNA	7.633	463.0 -> 419.0	15894	1.77	µg/L		84
		463.0 -> 219.0	3100				
PFNS	8.623	549.0 -> 80.0	0		µg/L	m	1
		549.0 -> 99.0	0				
PFOA	7.112	413.0 -> 369.0	17575	1.19	µg/L	m	96
		413.0 -> 169.0	3535				
PFOS	8.305	499.0 -> 80.0	119796	24.70	µg/L	m	100
		499.0 -> 99.0	56339				
PFPeA	4.627	263.0 -> 219.0	18506	2.32	µg/L	m	100
PFPeS	6.604	349.0 -> 80.0	1059	0.41	µg/L		78
		349.0 -> 99.0	296				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 169.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 169.0					
PFUnDA	8.585	563.0 -> 519.0	1264	0.08	µg/L	m	91
		563.0 -> 269.0	199				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

 # = Qualifier out of range, m = manually integrated, + = Area summed

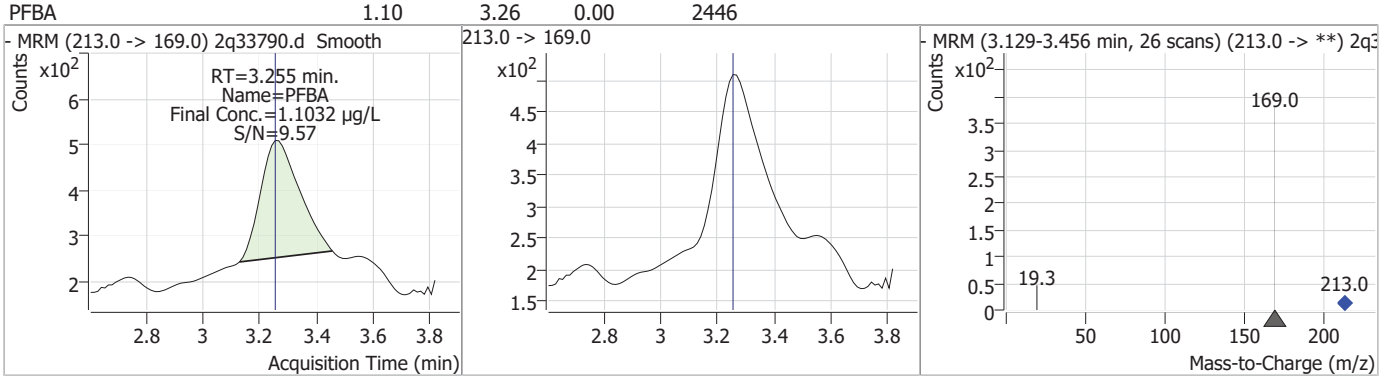
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

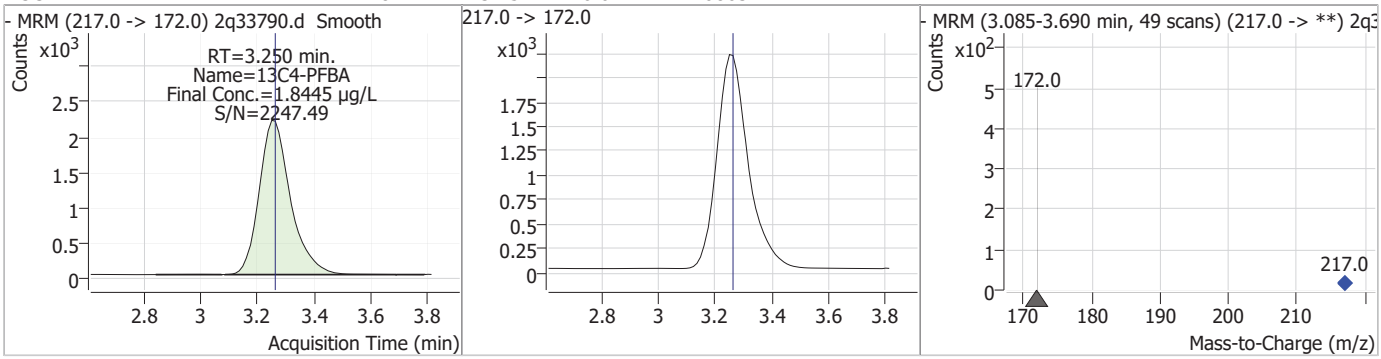
Perfluorinated Compounds by LC/MS/MS



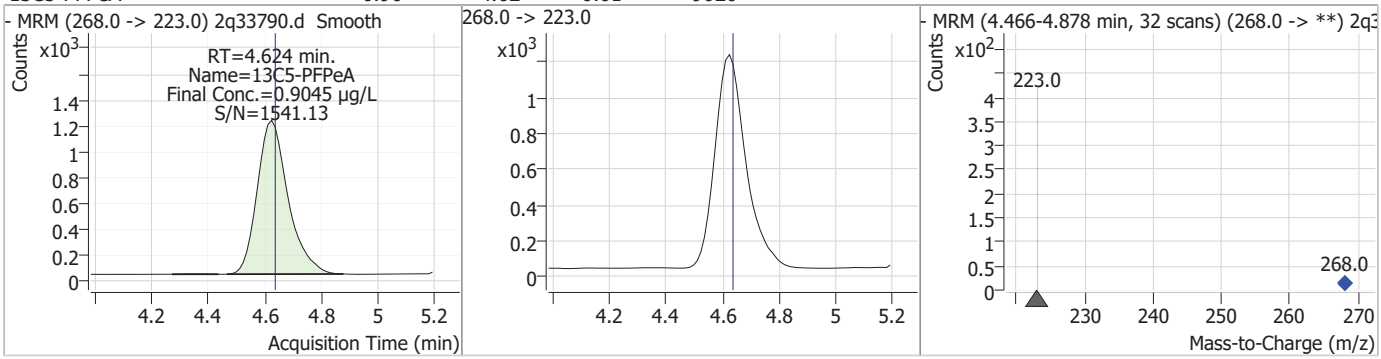
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	1.10	3.26	0.00	2446				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	1.84	3.25	-0.01	16863				

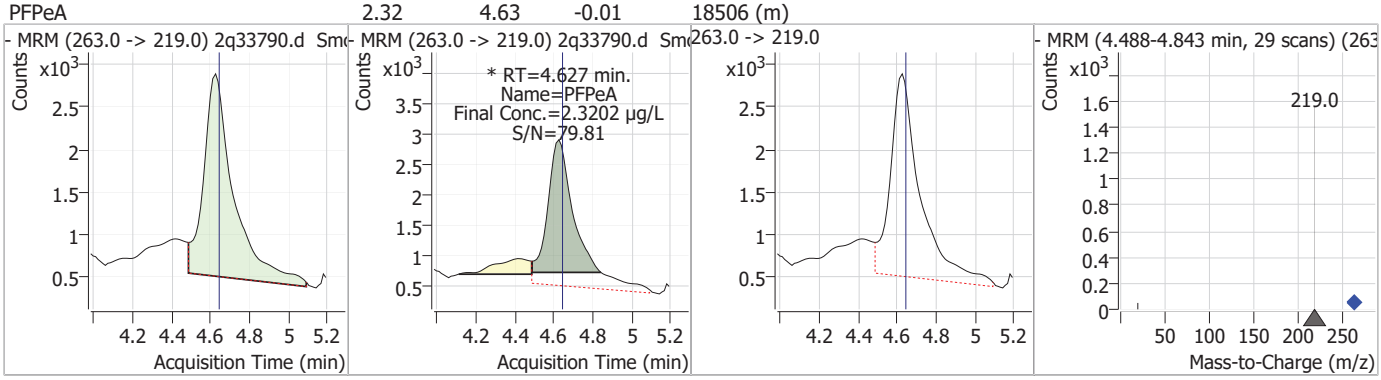


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	0.90	4.62	-0.01	9020				

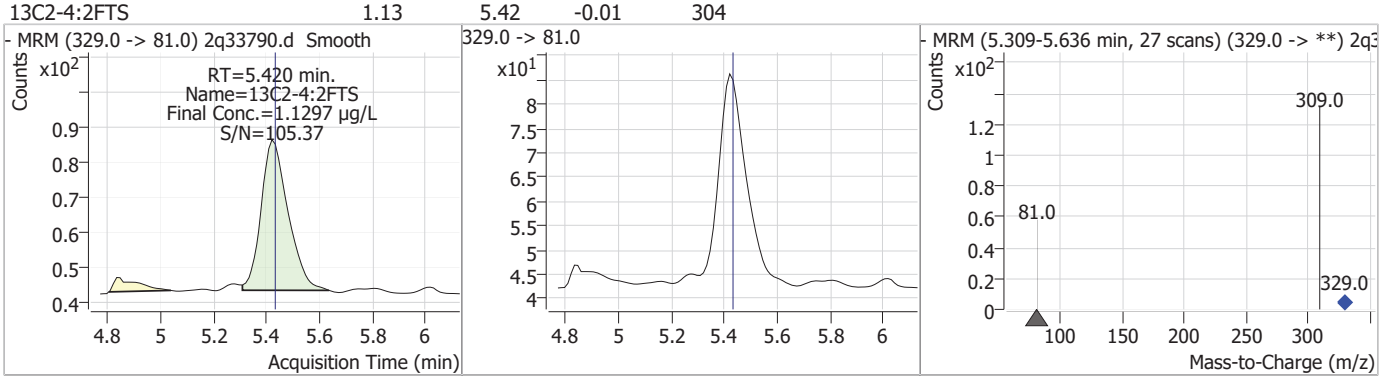


Perfluorinated Compounds by LC/MS/MS

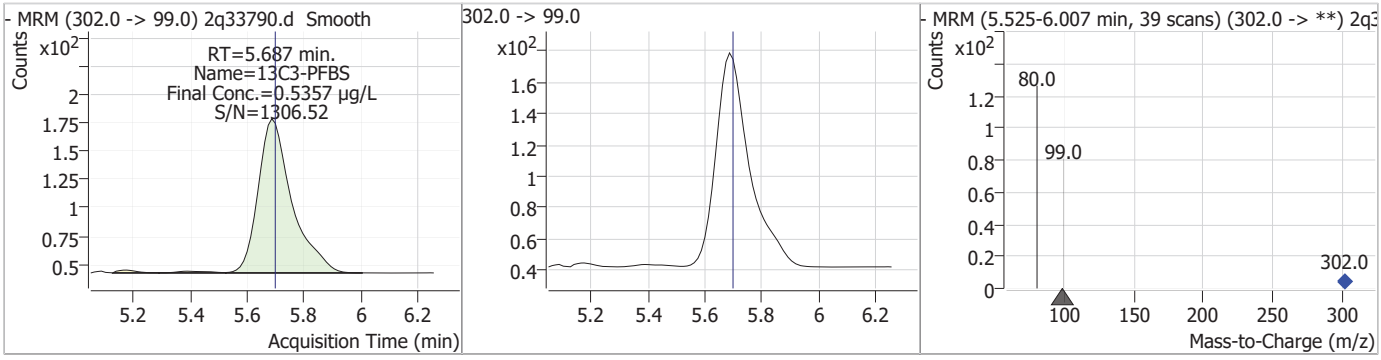
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	2.32	4.63	-0.01	18506 (m)				



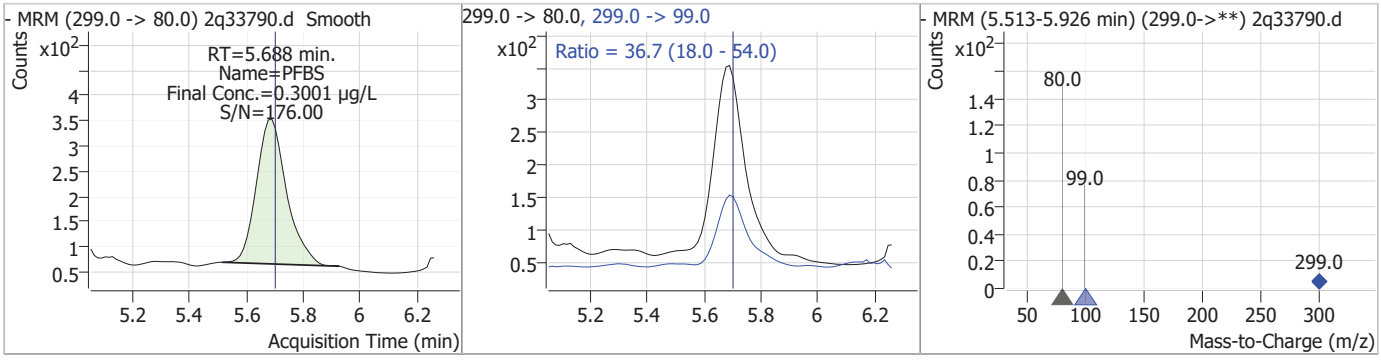
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	1.13	5.42	-0.01	304				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	0.54	5.69	-0.01	1123				

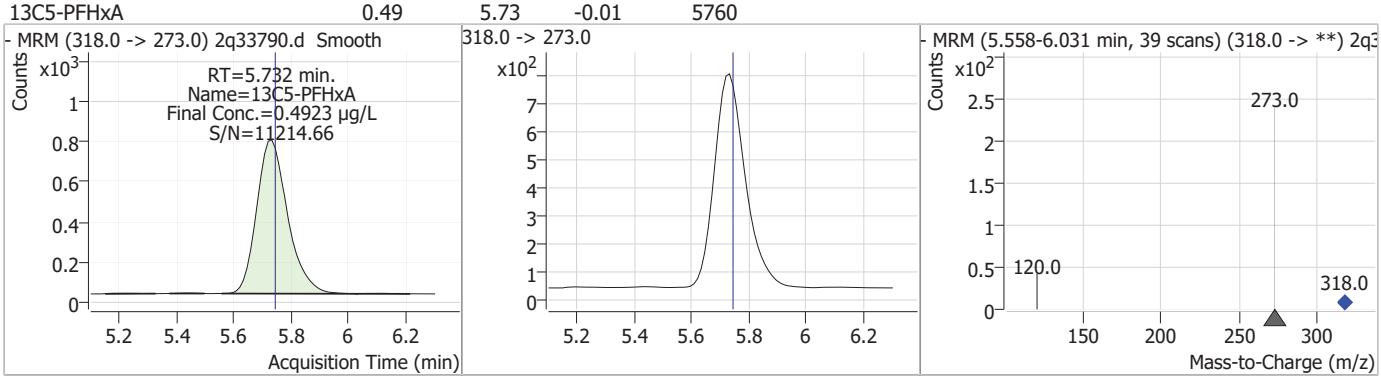


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.30	5.69	-0.01	2124	299.0 -> 99.0	36.7	18.0	54.0

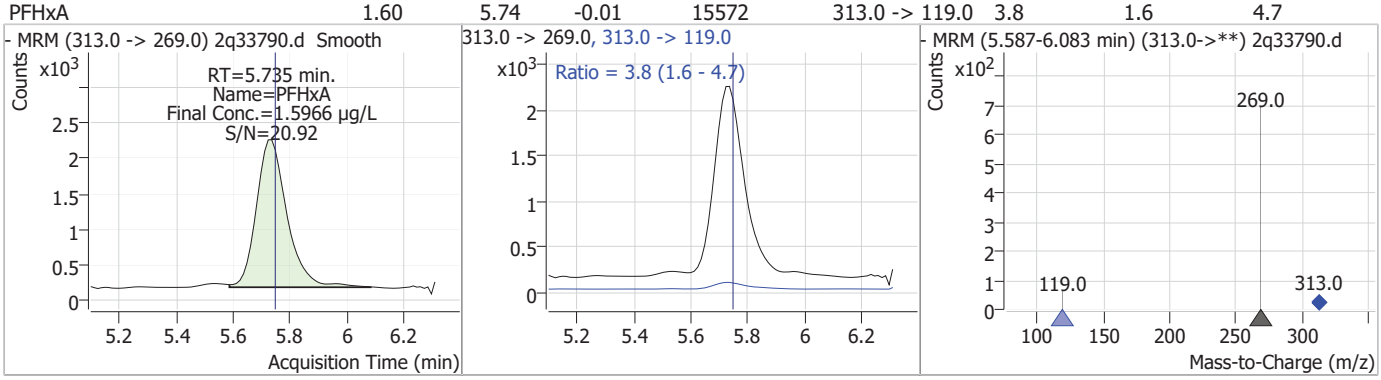


Perfluorinated Compounds by LC/MS/MS

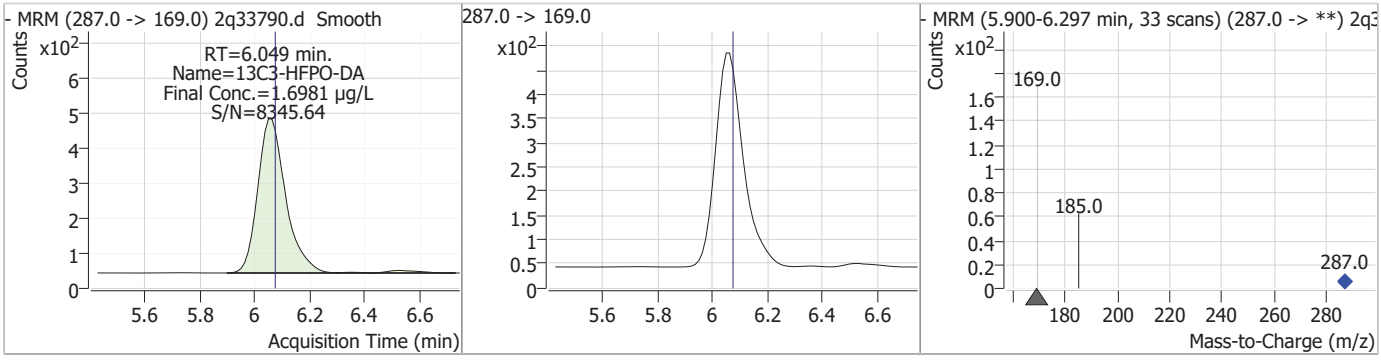
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	0.49	5.73	-0.01	5760				



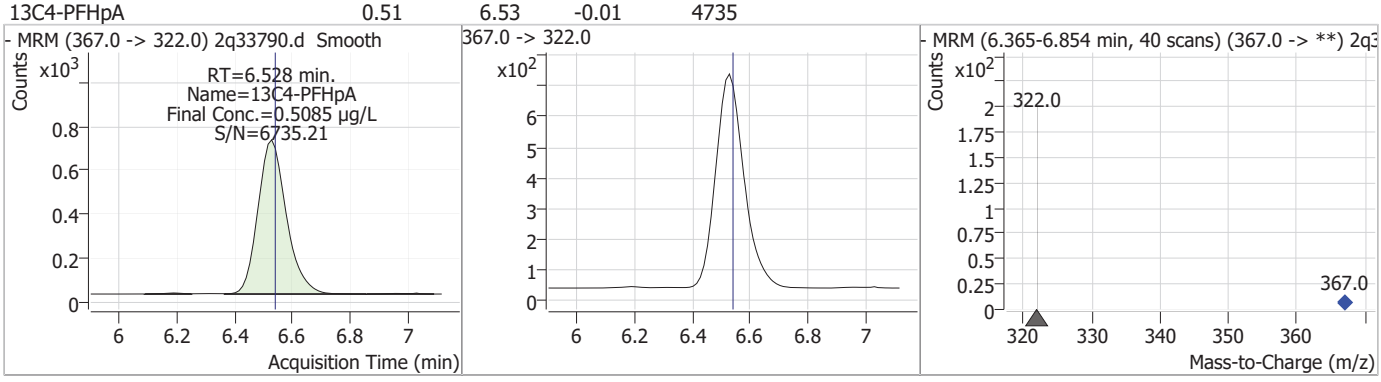
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	1.60	5.74	-0.01	15572	313.0 -> 119.0	3.8	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	1.70	6.05	-0.02	3117				

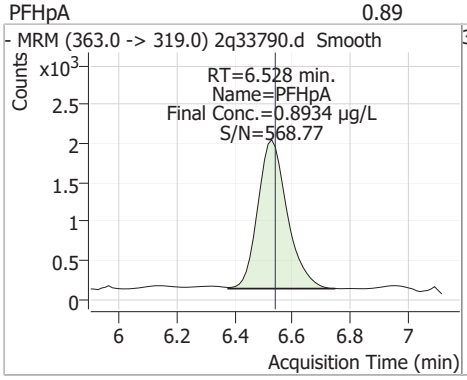


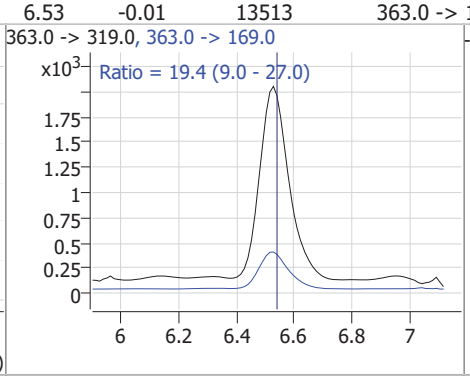
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	0.51	6.53	-0.01	4735				

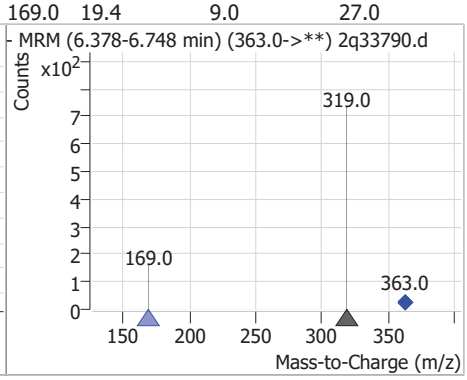


Perfluorinated Compounds by LC/MS/MS

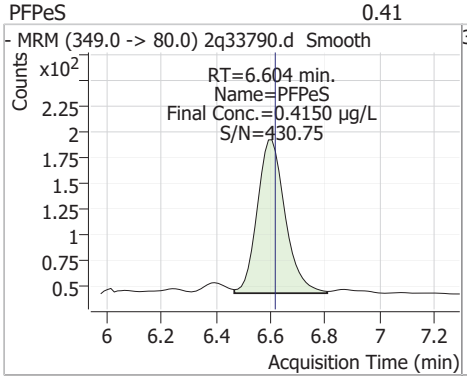
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.89	6.53	-0.01	13513	363.0 -> 169.0	19.4	9.0	27.0

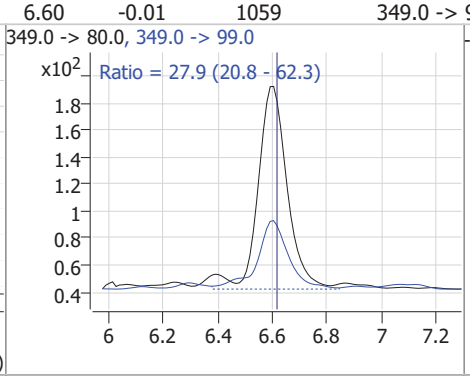


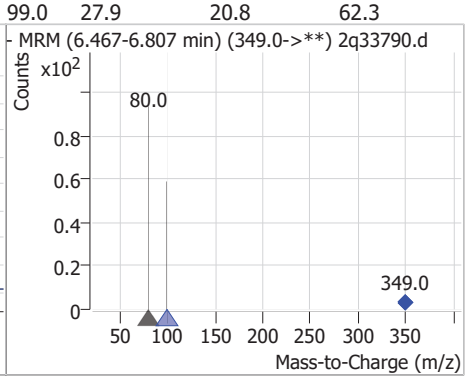




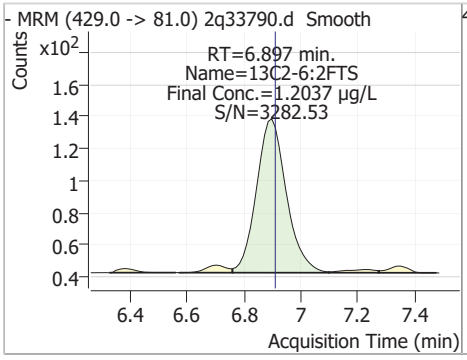
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.41	6.60	-0.01	1059	349.0 -> 99.0	27.9	20.8	62.3

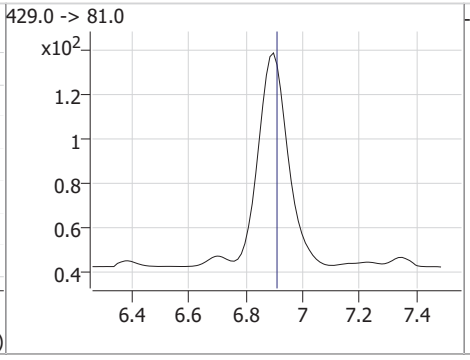


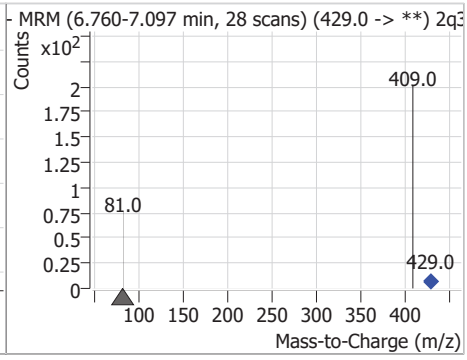




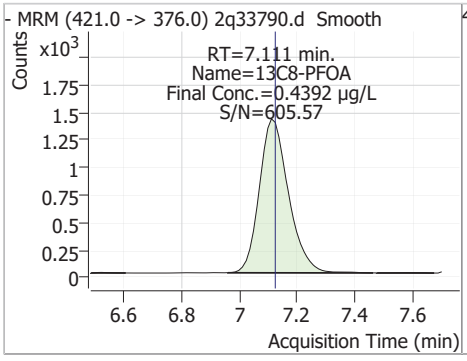
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	1.20	6.90	-0.01	701				

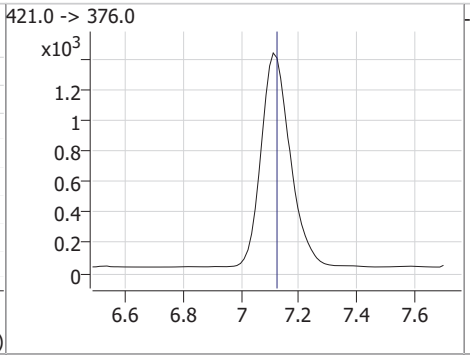


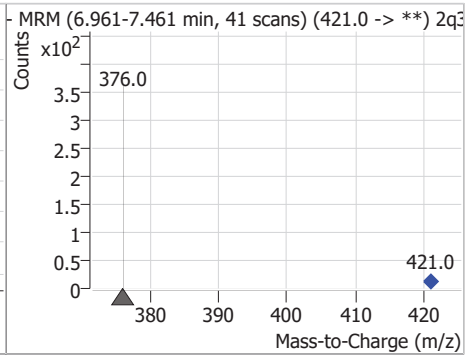




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	0.44	7.11	-0.01	9740				

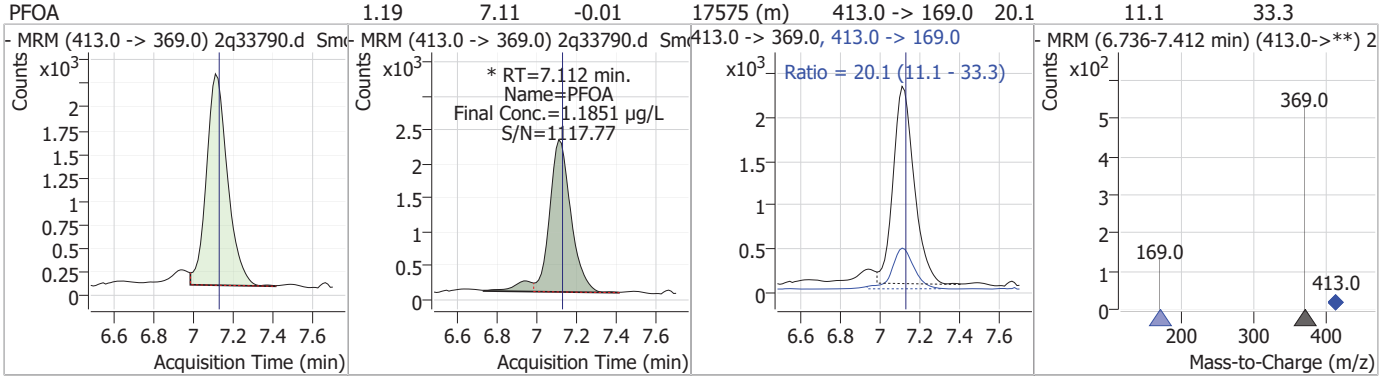




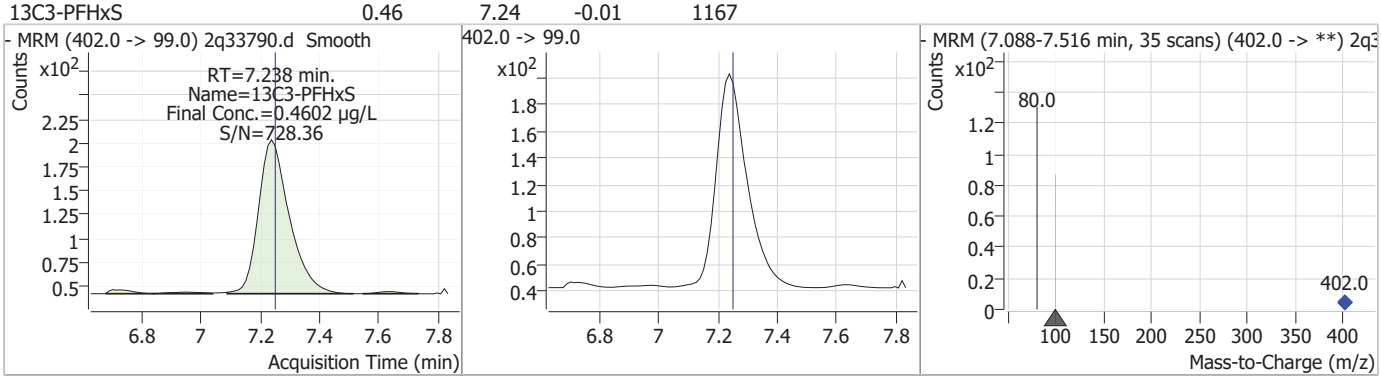


Perfluorinated Compounds by LC/MS/MS

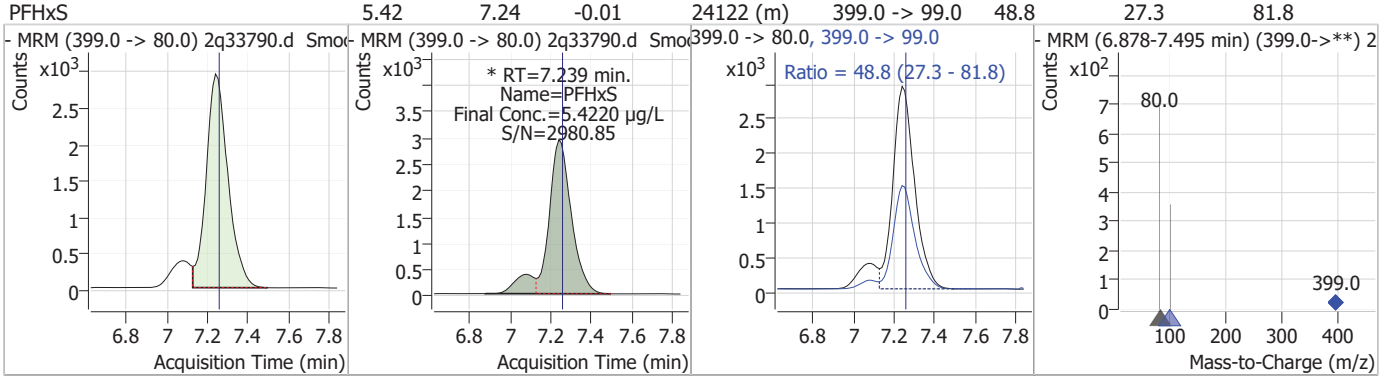
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	1.19	7.11	-0.01	17575 (m)	413.0 -> 169.0	20.1	11.1	33.3



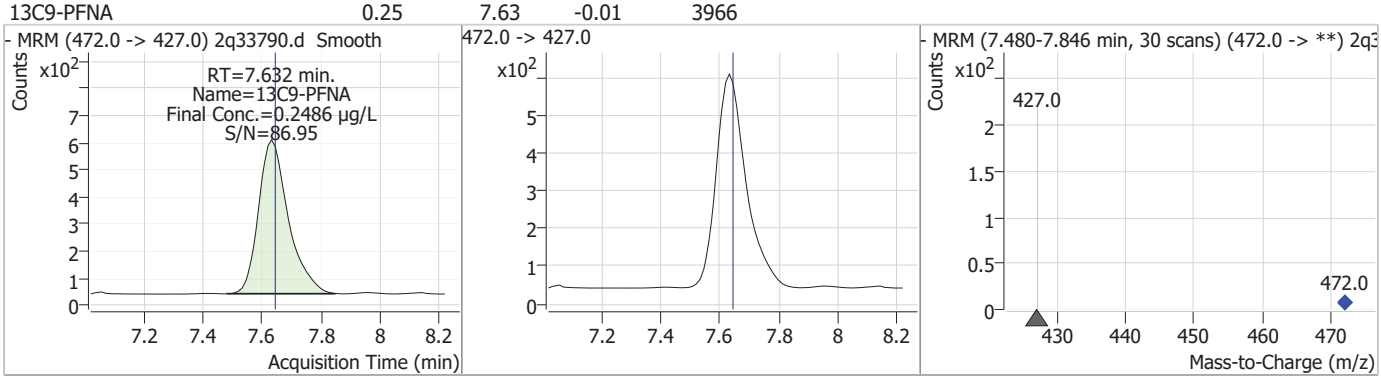
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	0.46	7.24	-0.01	1167				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	5.42	7.24	-0.01	24122 (m)	399.0 -> 99.0	48.8	27.3	81.8

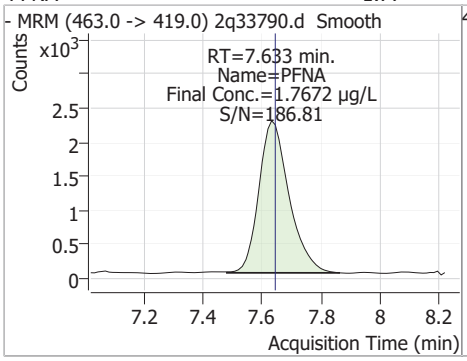


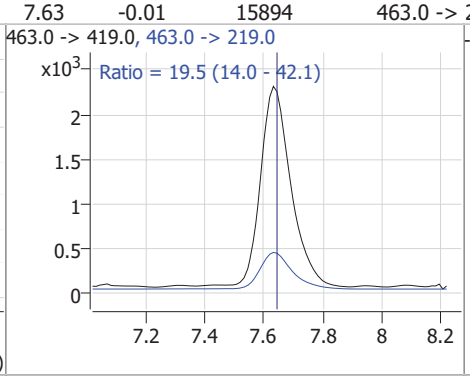
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	0.25	7.63	-0.01	3966				

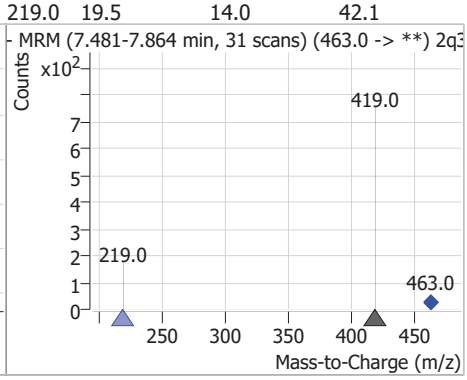


Perfluorinated Compounds by LC/MS/MS

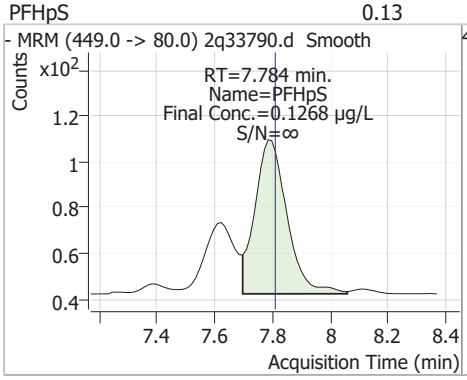
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	1.77	7.63	-0.01	15894	463.0 -> 219.0	19.5	14.0	42.1

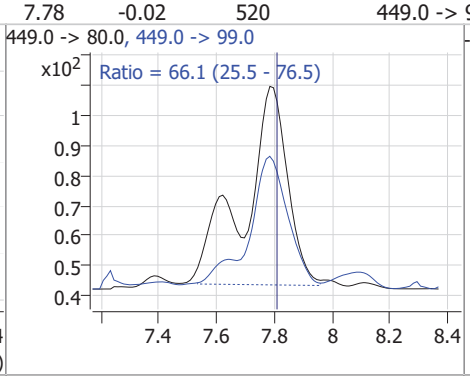


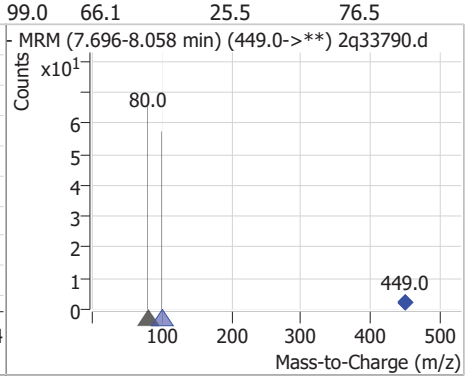




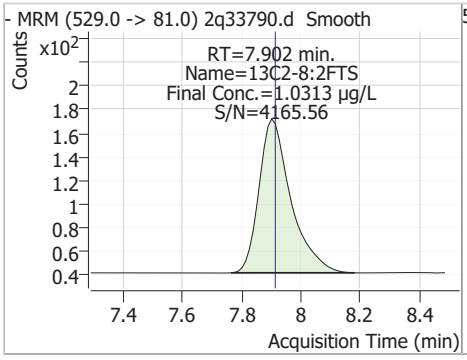
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.13	7.78	-0.02	520	449.0 -> 99.0	66.1	25.5	76.5

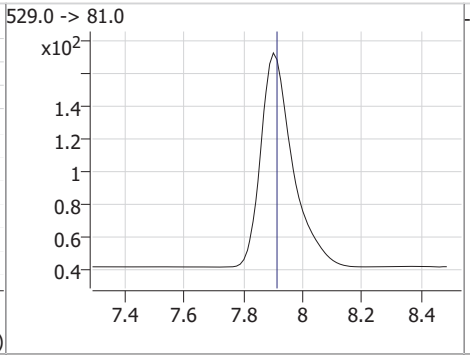


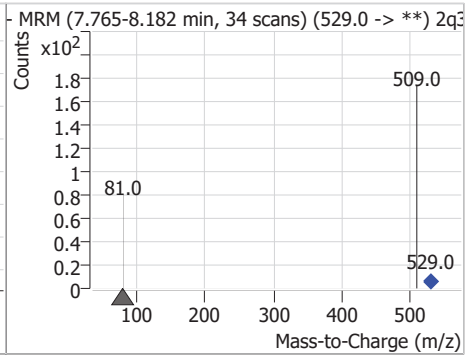




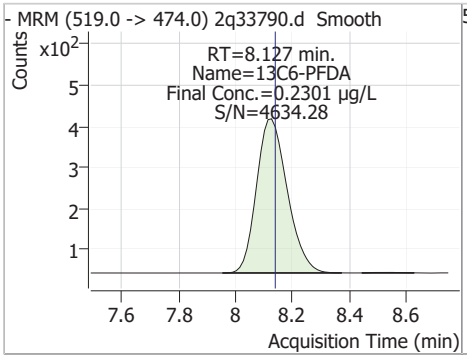
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	1.03	7.90	-0.01	969				

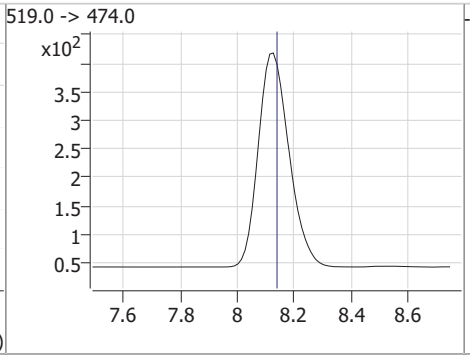


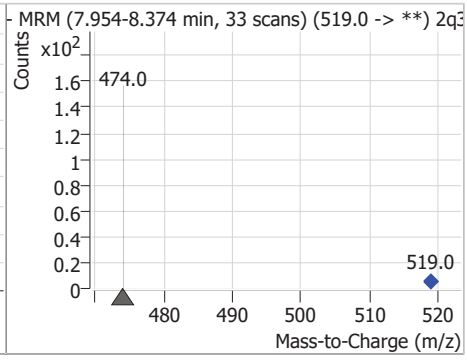




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	0.23	8.13	-0.01	2822				

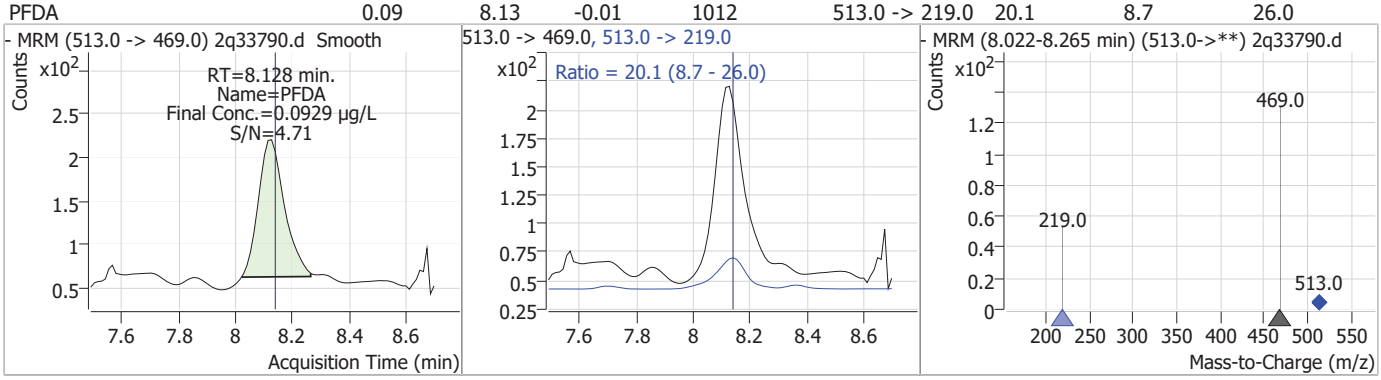




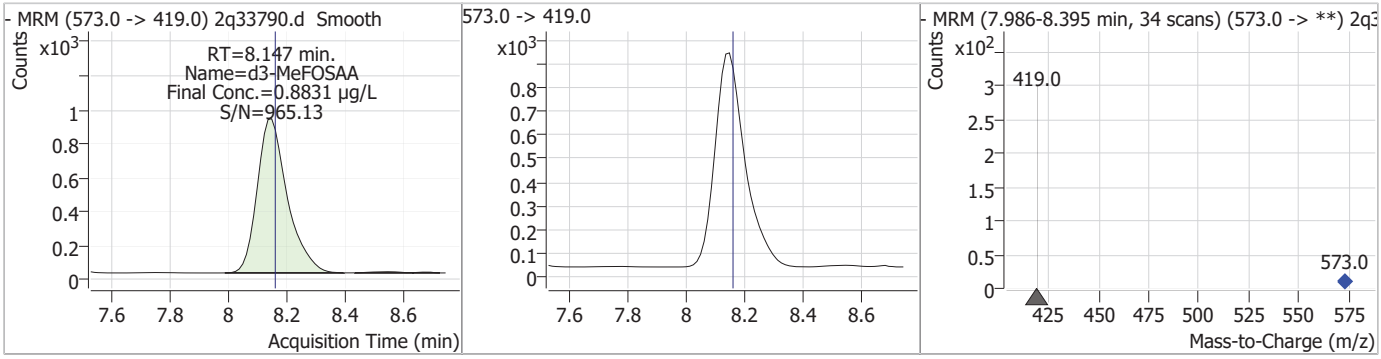


Perfluorinated Compounds by LC/MS/MS

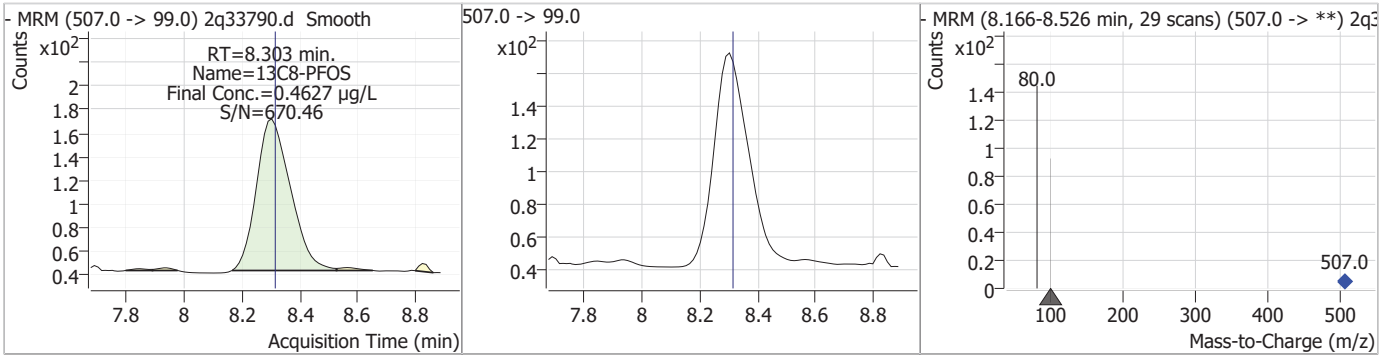
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.09	8.13	-0.01	1012	513.0 -> 219.0	20.1	8.7	26.0



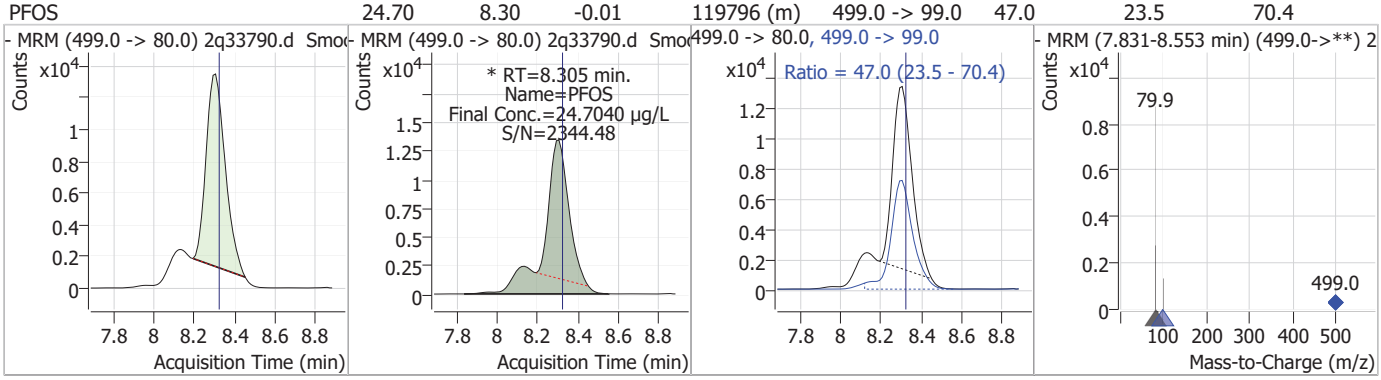
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	0.88	8.15	-0.01	6491				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	0.46	8.30	-0.01	1039				

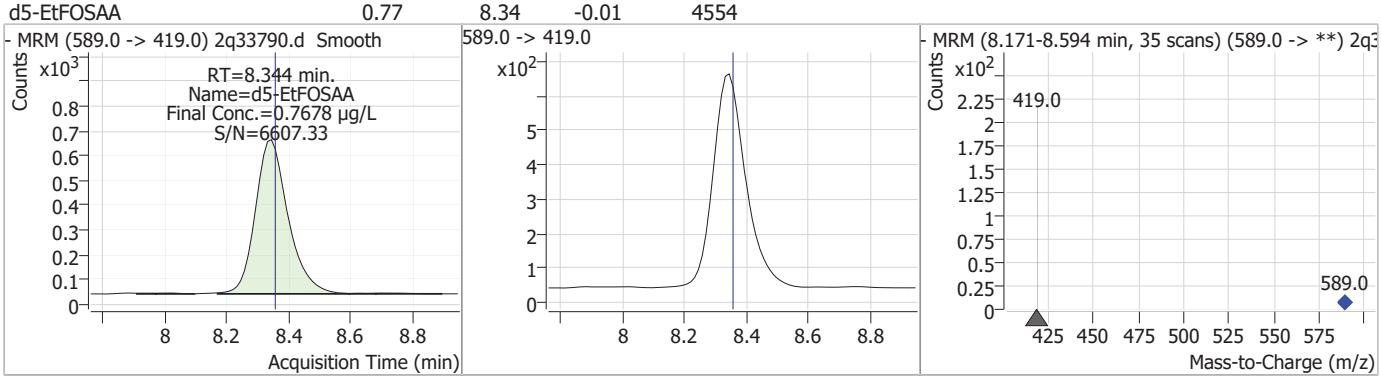


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	24.70	8.30	-0.01	119796 (m)	499.0 -> 99.0	47.0	23.5	70.4

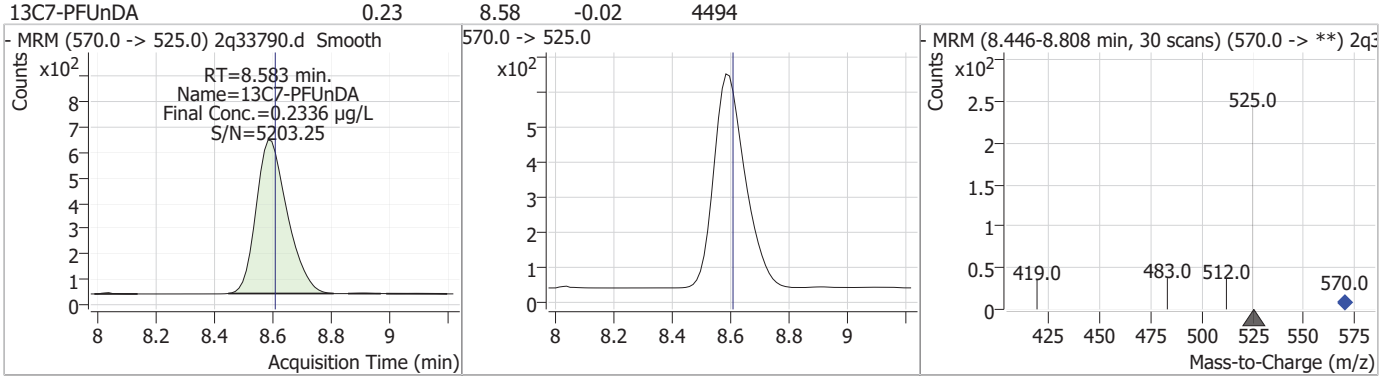


Perfluorinated Compounds by LC/MS/MS

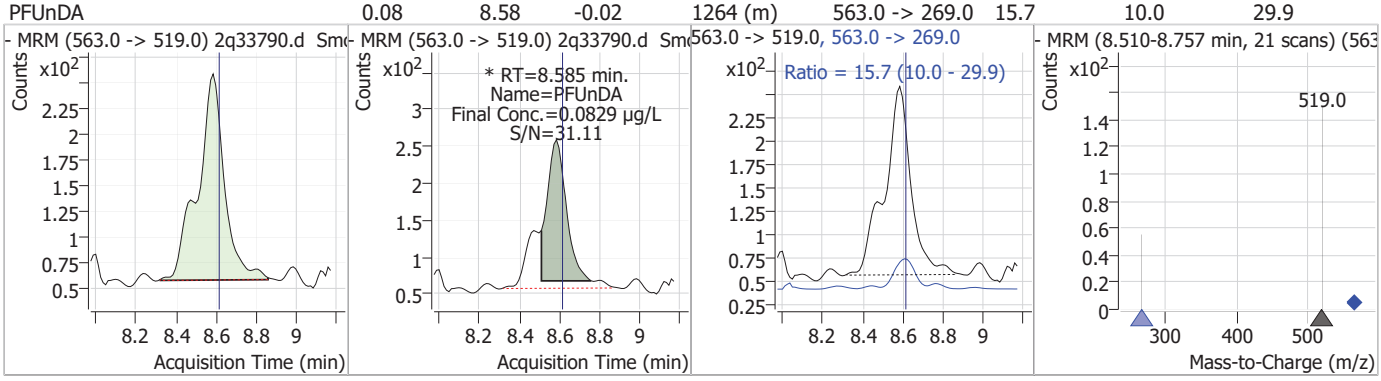
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	0.77	8.34	-0.01	4554				



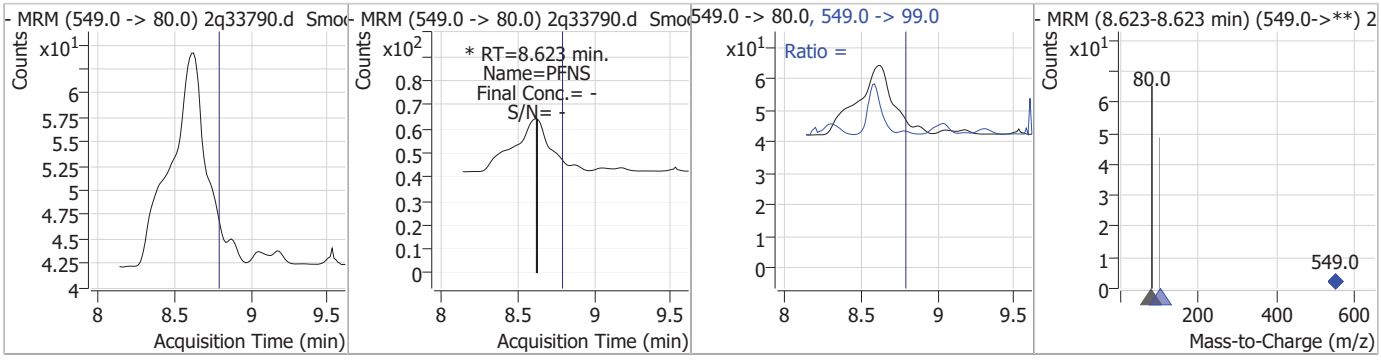
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	0.23	8.58	-0.02	4494				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.08	8.58	-0.02	1264 (m)	563.0 -> 269.0	15.7	10.0	29.9

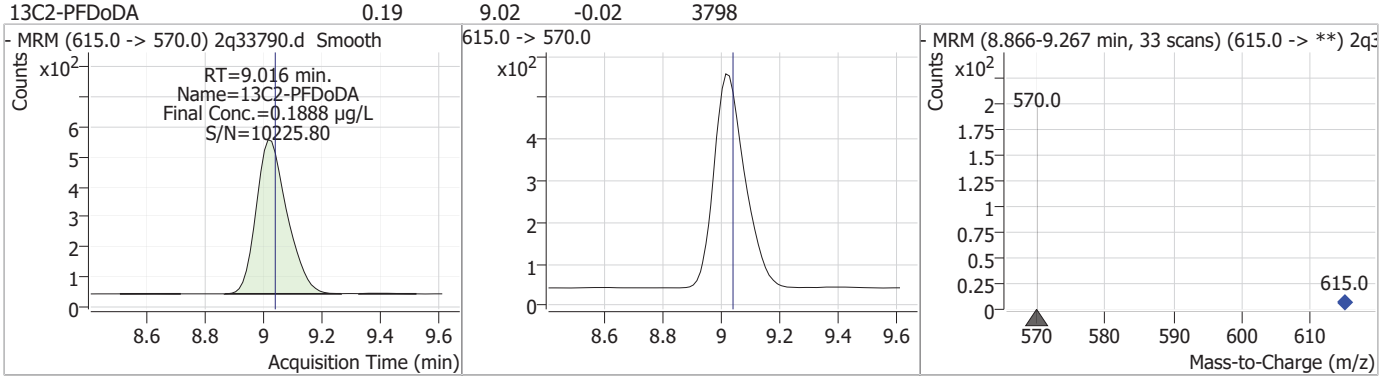


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS		0		0	549.0 -> 99.0		28.8	86.3

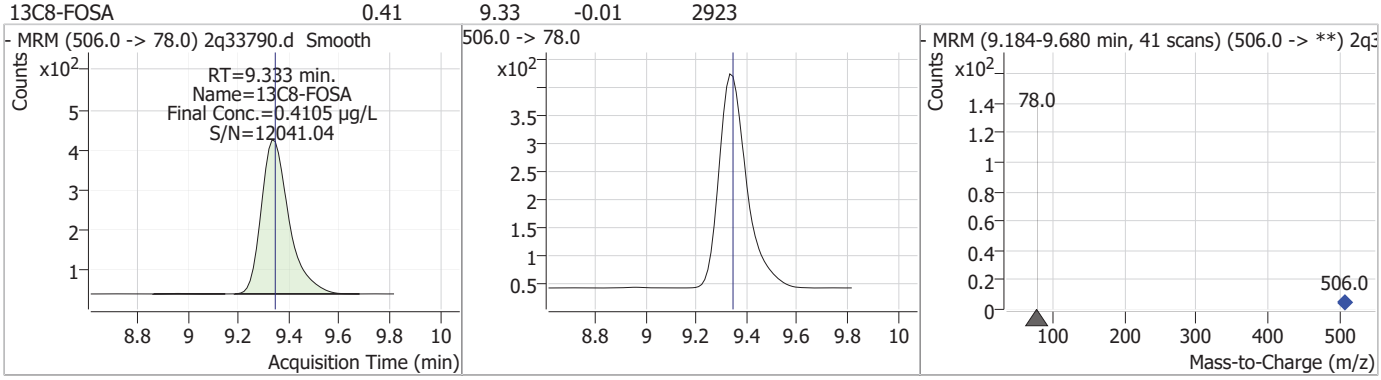


Perfluorinated Compounds by LC/MS/MS

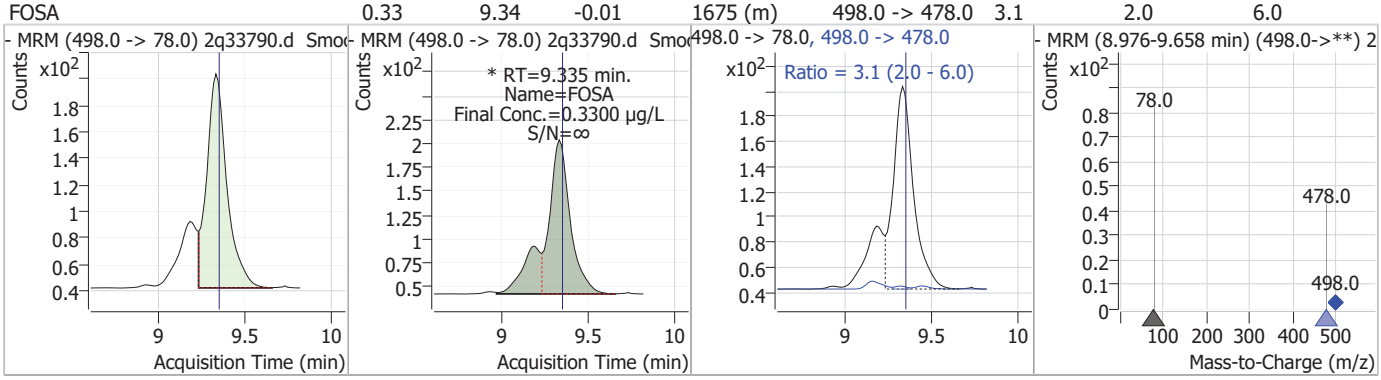
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	0.19	9.02	-0.02	3798				



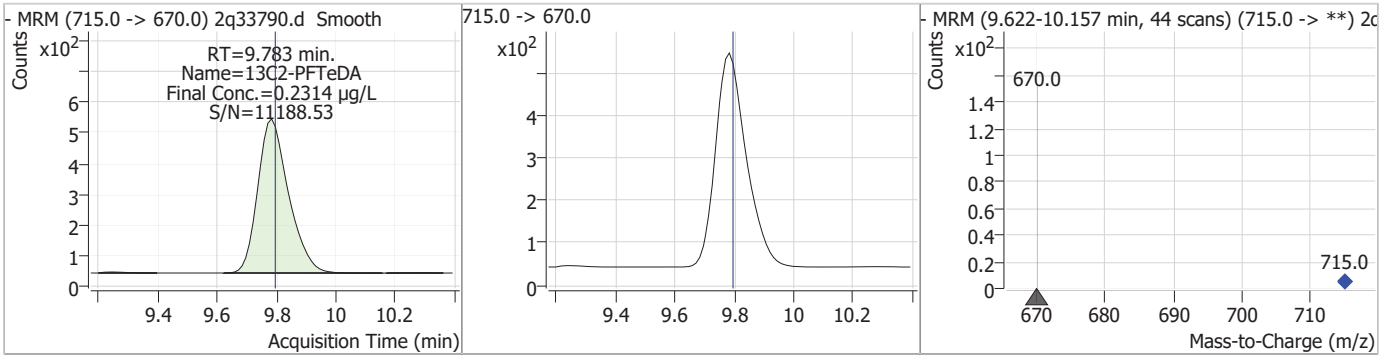
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	0.41	9.33	-0.01	2923				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.33	9.34	-0.01	1675 (m)	498.0 -> 478.0	3.1	2.0	6.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.23	9.78	-0.01	3614				



7.1.15

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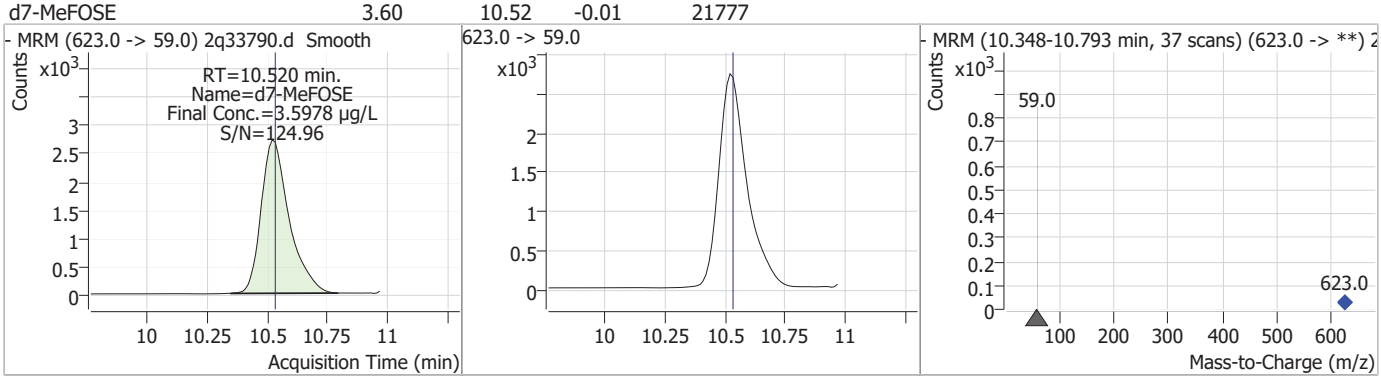
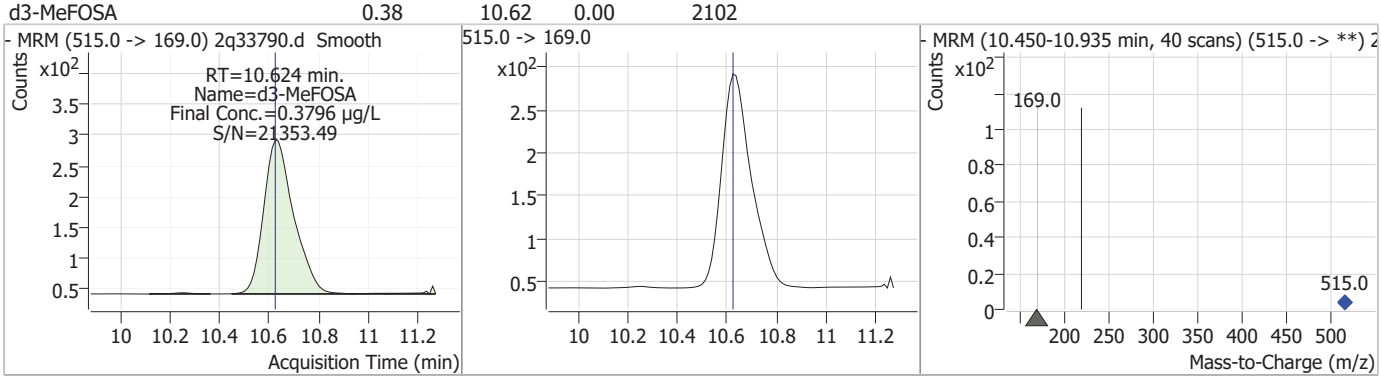
Perfluorinated Compounds by LC/MS/MS

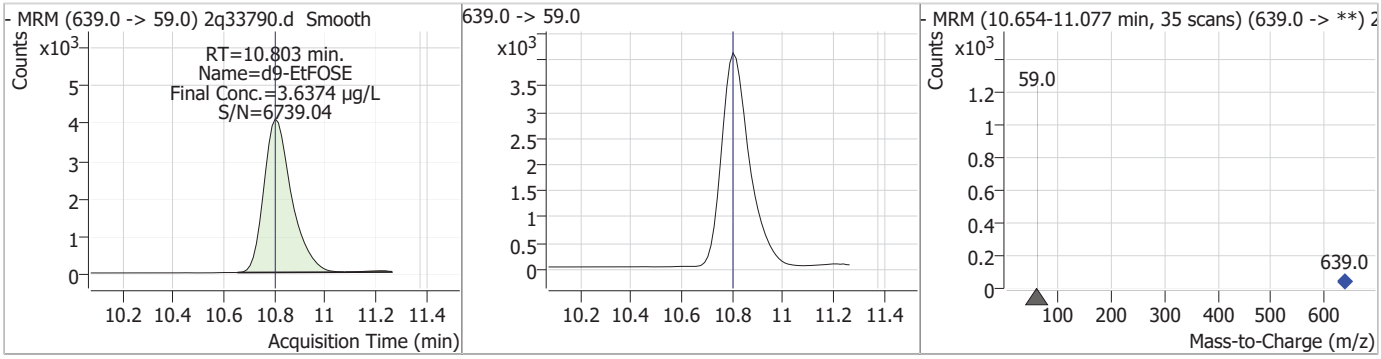
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	3.60	10.52	-0.01	21777				



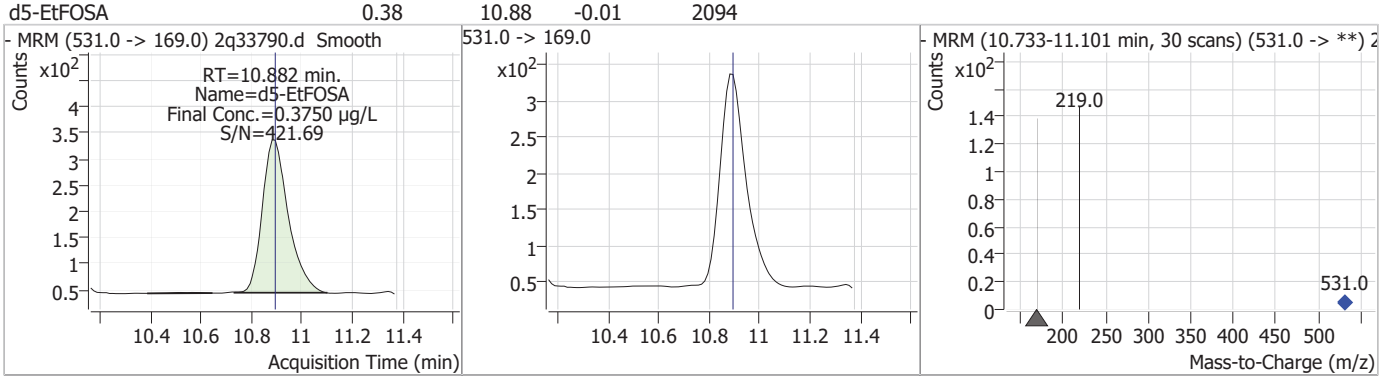
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	0.38	10.62	0.00	2102				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	3.64	10.80	0.00	30902				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	0.38	10.88	-0.01	2094				



Manual Integration Approval Summary

Sample Number: JE10205-10
Lab FileID: 2Q33790.D
Injection Time: 05/13/25 01:48
Method: EPA 1633
Analyst approved: 05/13/25 16:28 Victoria Londregan
Supervisor approved: 05/15/25 12:51 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluoropentanoic acid	2706-90-3		4.63	Poor instrument integration
Perfluorooctanoic acid	335-67-1		7.11	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.24	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.30	Split peak
Perfluoroundecanoic acid	2058-94-8		8.59	Poor instrument integration
PFOSA	754-91-6		9.34	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/15/25 12:50

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8172.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 12:26:40 AM
Sample Name : JE10205-10
Vial : P1-E4
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,461,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.858	217.0 -> 172.0	780700	10.00	µg/L	-0.025
M5-PFPeA	4.307	268.0 -> 223.0	329654	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	260767	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	277940	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	413231	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	175395	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	173579	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	241987	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	187514	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	144634	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	161265	2.50	µg/L	-0.012
M3-PFBS	5.355	302.0 -> 99.0	24103	2.50	µg/L	-0.012
		302.0 -> 80.0	61151			
M3-PFHxS	6.986	402.0 -> 99.0	31537	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	37626	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	20300	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	34373	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	32466	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	201003	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	374138	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	144997	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	638614	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	784392	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	67879	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	65237	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	68062	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	375838	5.00	µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	40357	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	453025	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	163460	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	190437	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	268416	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	20300	10.03	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 200.6%		
13C2-6:2FTS	6.684	429.0 -> 81.0	34373	7.83	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 156.5%		
13C2-8:2FTS	7.671	529.0 -> 81.0	32466	6.28	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 125.7%		
13C2-PFDoDA	8.666	615.0 -> 570.0	187514	1.06	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 84.9%		
13C2-PFTeDA	9.368	715.0 -> 670.0	144634	1.06	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 85.2%		
13C3-PFBS	5.355	302.0 -> 99.0	24103	2.42	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.8%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	31537	2.24	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 89.5%			
13C4-PFBA	2.858	217.0 -> 172.0	780700	9.06	µg/L		-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 90.6%			
13C4-PFHpA	6.291	367.0 -> 322.0	277940	2.30	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.1%			
13C5-PFHxA	5.452	318.0 -> 273.0	260767	2.30	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.8%			
13C5-PFPeA	4.307	268.0 -> 223.0	329654	3.82	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 76.5%			
13C6-PFDA	7.858	519.0 -> 474.0	173579	1.20	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.1%			
13C7-PFUnDA	8.273	570.0 -> 525.0	241987	1.25	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.3%			
13C8-FOSA	9.279	506.0 -> 78.0	161265	2.31	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.3%			
13C8-PFOA	6.897	421.0 -> 376.0	413231	2.28	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.3%			
13C8-PFOS	7.995	507.0 -> 99.0	37626	2.30	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.8%			
13C9-PFNA	7.403	472.0 -> 427.0	175395	1.11	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.8%			
d3-MeFOSAA	7.915	573.0 -> 419.0	201003	4.48	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 89.7%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	374138	8.39	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 83.9%			
d3-MeFOSA	10.555	515.0 -> 169.0	65237	1.82	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 72.7%			
d5-EtFOSAA	8.098	589.0 -> 419.0	144997	4.21	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 84.3%			
d7-MeFOSE	10.462	623.0 -> 59.0	638614	18.63	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 74.5%			
d9-EtFOSE	10.734	639.0 -> 59.0	784392	18.87	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 75.5%			
d5-EtFOSA	10.825	531.0 -> 169.0	67879	1.83	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 73.4%			
Target Compounds							QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.			
		327.0 -> 81.0					
6:2FTS	6.684	427.0 -> 407.0	11818	0.34	µg/L		96
		427.0 -> 81.0	5252				
8:2FTS	7.671	527.0 -> 507.0	3620	0.14	µg/L		88
		527.0 -> 81.0	1637				
EtFOSAA	-	584.0 -> 419.0	-	N.D.			
		584.0 -> 483.0					
FOSA	9.269	498.0 -> 78.0	85050	1.45	µg/L	m	100
		498.0 -> 478.0	2658				
MeFOSAA	-	570.0 -> 419.0	-	N.D.			
		570.0 -> 512.0					
PFBA	2.864	213.0 -> 169.0	91489	3.83	µg/L	m	100
PFBS	5.357	299.0 -> 80.0	41836	1.52	µg/L		96
		299.0 -> 99.0	18041				
PFDA	7.859	513.0 -> 469.0	61792	0.47	µg/L		96
		513.0 -> 219.0	13243				
PFDoDA	-	613.0 -> 569.0	-	N.D.			
		613.0 -> 319.0					

Perfluorinated Compounds by LC/MS/MS

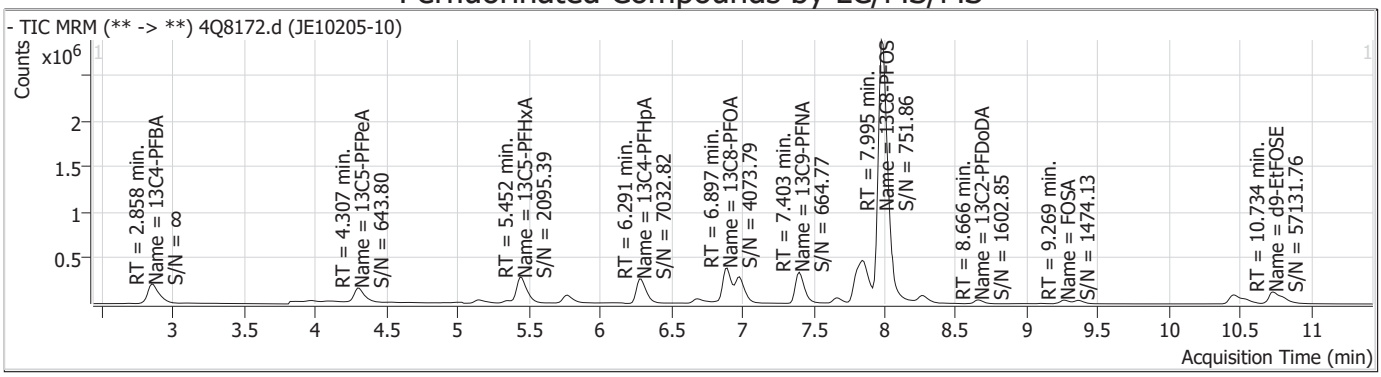
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.804	599.0 -> 80.0	111	0.01	µg/L	#m	8
		599.0 -> 99.0	137				
PFHpA	6.292	363.0 -> 319.0	710342	4.20	µg/L		96
		363.0 -> 169.0	162173				
PFHpS	7.529	449.0 -> 80.0	19537	0.72	µg/L		95
		449.0 -> 99.0	11404				
PFHxA	5.455	313.0 -> 269.0	913843	8.13	µg/L		99
		313.0 -> 119.0	28018				
PFHxS	6.987	399.0 -> 80.0	803067	29.24	µg/L	m	97
		399.0 -> 99.0	414604				
PFNA	7.404	463.0 -> 419.0	940109	8.91	µg/L		85
		463.0 -> 219.0	269494				
PFNS	8.412	549.0 -> 80.0	2315	0.09	µg/L		88
		549.0 -> 99.0	1146				
PFOA	6.898	413.0 -> 369.0	745057	5.42	µg/L	m	97
		413.0 -> 169.0	204387				
PFOS	7.996	499.0 -> 80.0	3583055	118.16	µg/L	m	93
		499.0 -> 99.0	2014349				
PFPeA	4.309	263.0 -> 219.0	474438	9.10	µg/L		100
PFPeS	6.331	349.0 -> 80.0	60077	2.00	µg/L		99
		349.0 -> 99.0	30098				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	8.988	663.0 -> 619.0	4611	0.03	µg/L	m	98
		663.0 -> 369.0	262				
PFUnDA	8.275	563.0 -> 519.0	60235	0.42	µg/L	m	95
		563.0 -> 269.0	10723				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

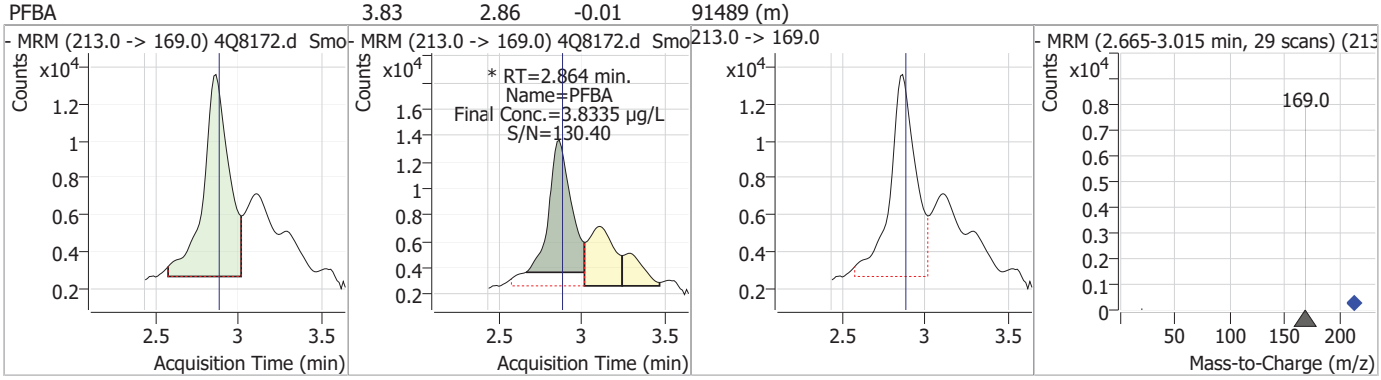
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

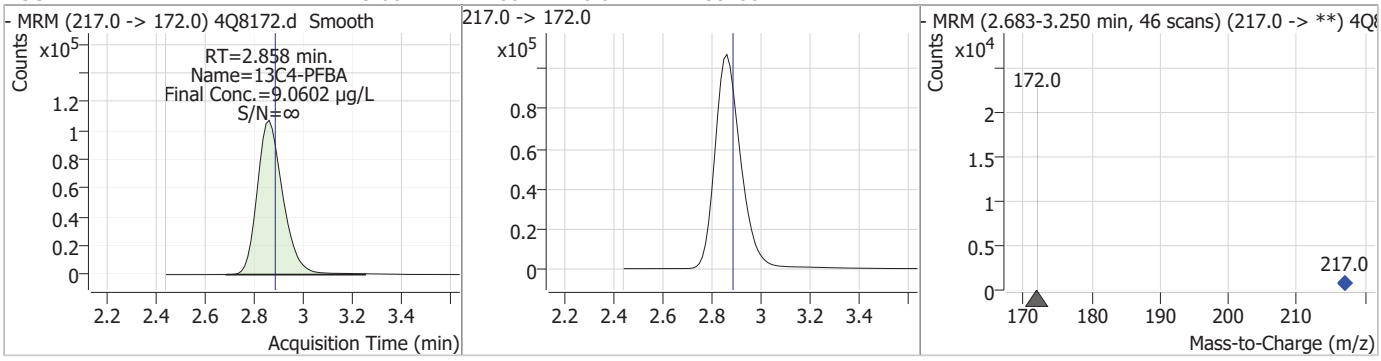
Perfluorinated Compounds by LC/MS/MS



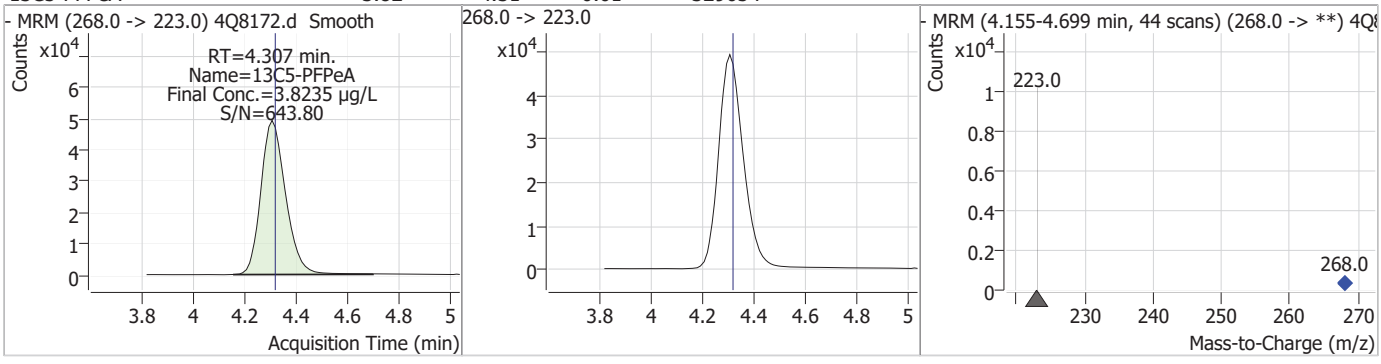
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	3.83	2.86	-0.01	91489 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.06	2.86	-0.02	780700				

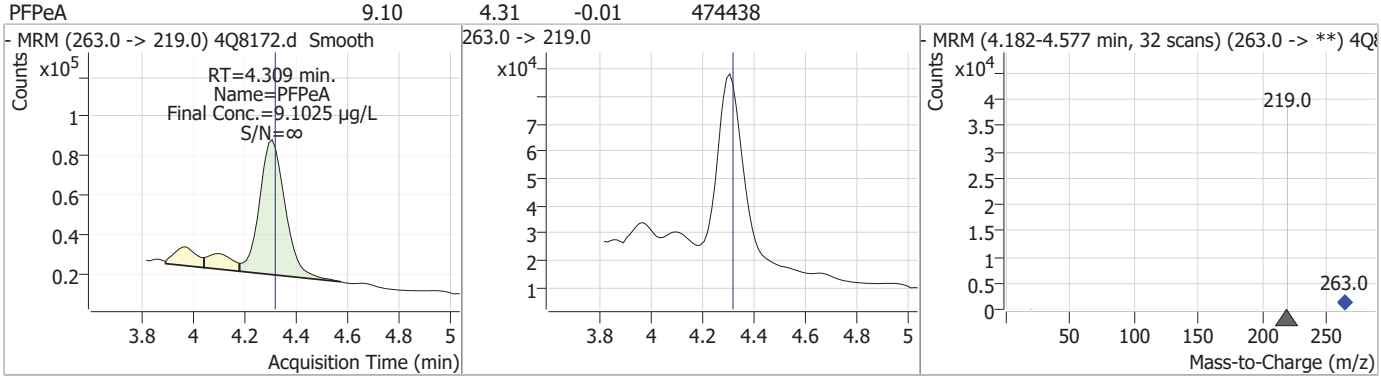


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	3.82	4.31	-0.01	329654				

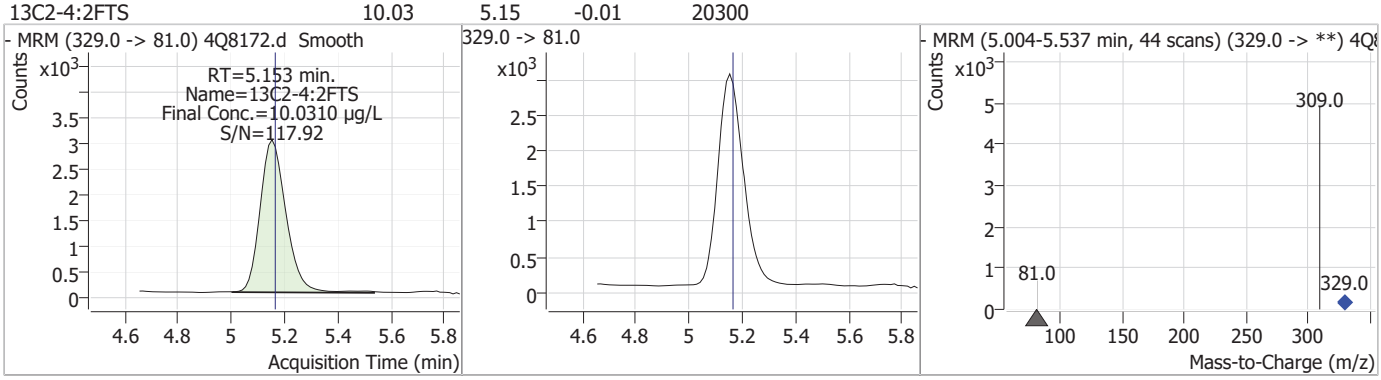


Perfluorinated Compounds by LC/MS/MS

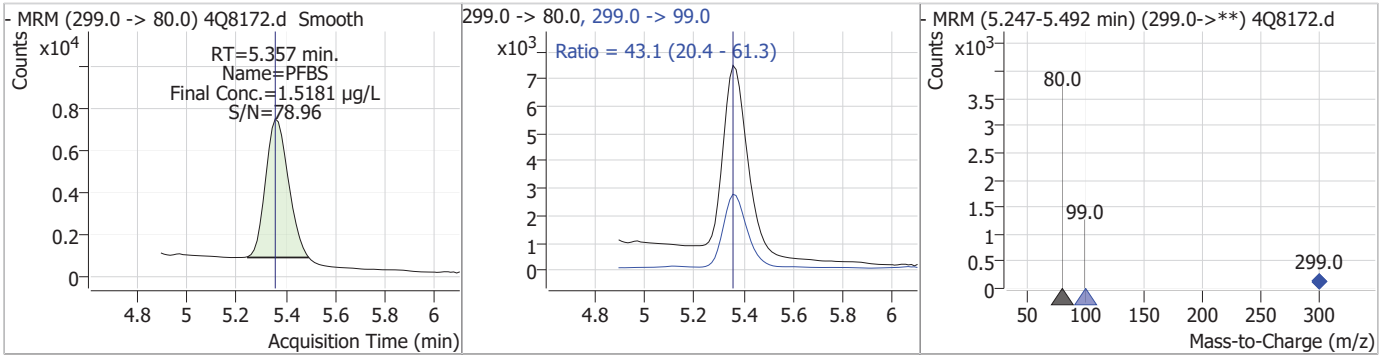
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	9.10	4.31	-0.01	474438				



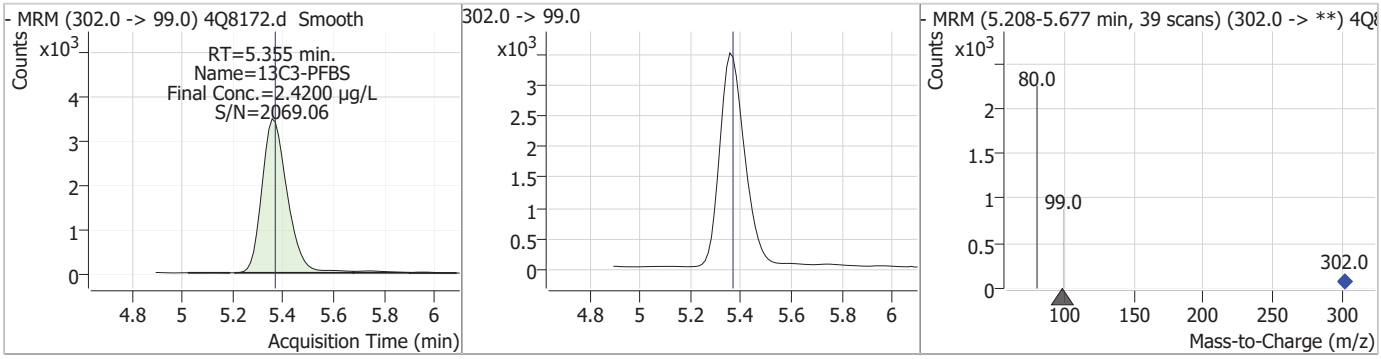
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	10.03	5.15	-0.01	20300				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	1.52	5.36	0.00	41836	299.0 -> 99.0	43.1	20.4	61.3

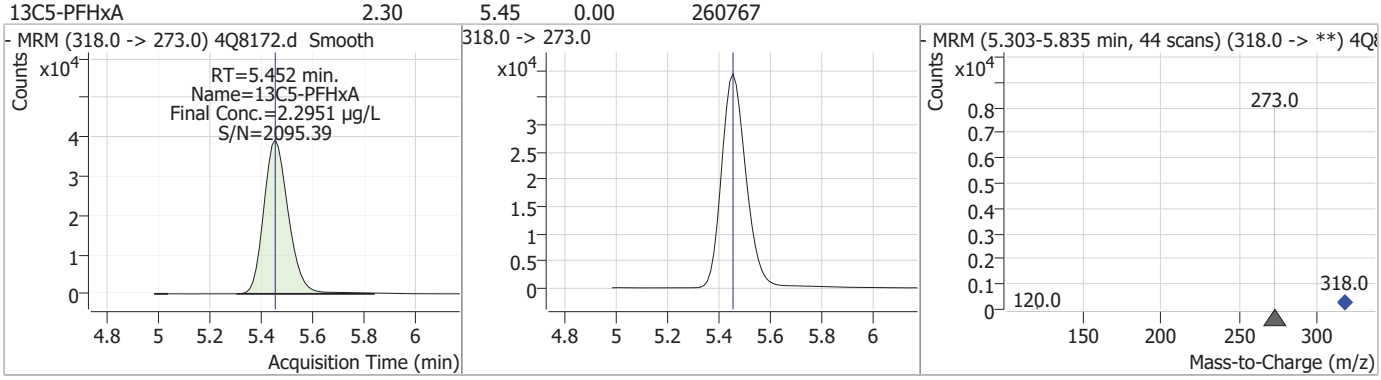


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.42	5.36	-0.01	24103				

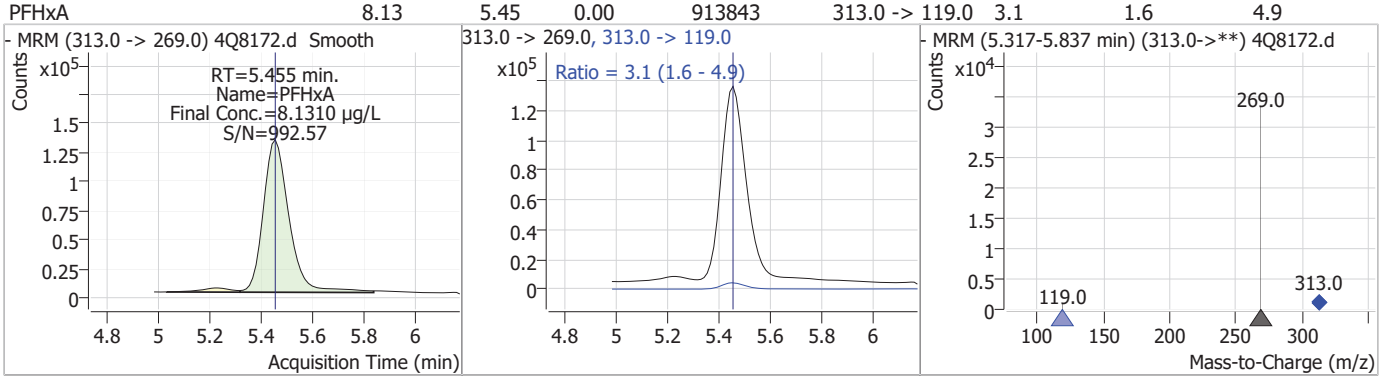


Perfluorinated Compounds by LC/MS/MS

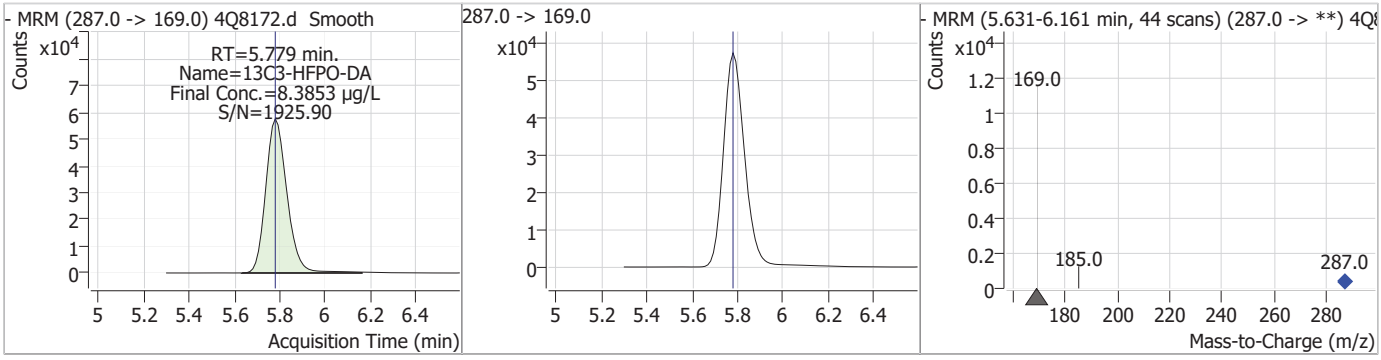
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.30	5.45	0.00	260767				



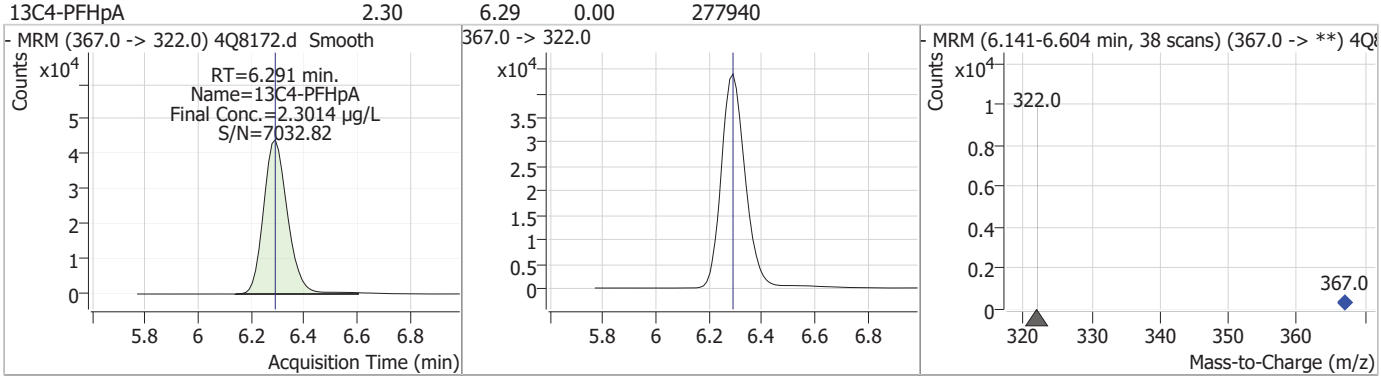
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	8.13	5.45	0.00	913843	313.0 -> 119.0	3.1	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.39	5.78	0.00	374138				

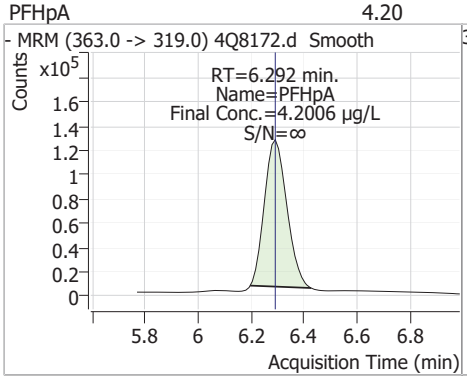


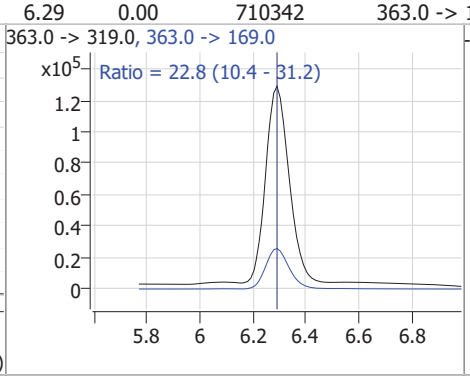
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.30	6.29	0.00	277940				

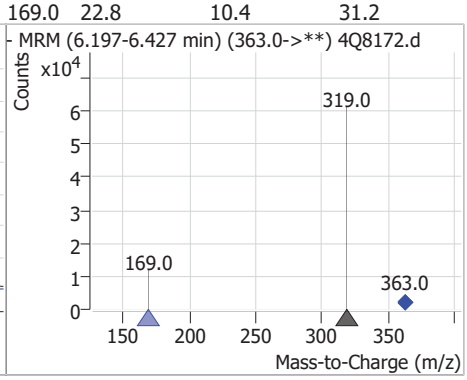


Perfluorinated Compounds by LC/MS/MS

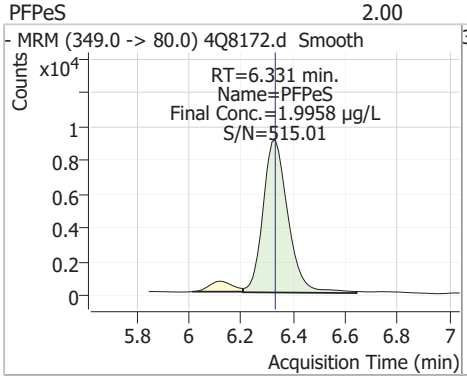
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	4.20	6.29	0.00	710342	363.0 -> 169.0	22.8	10.4	31.2

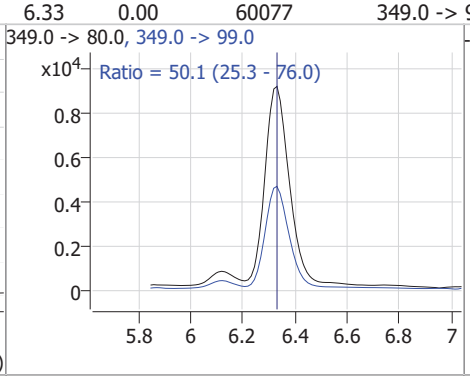


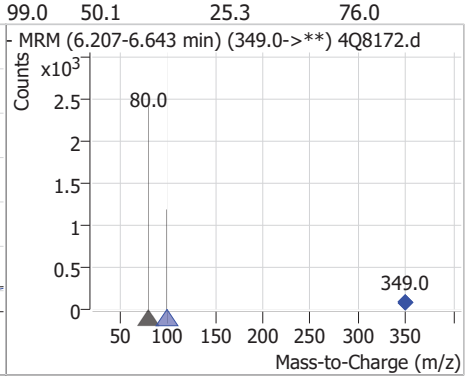




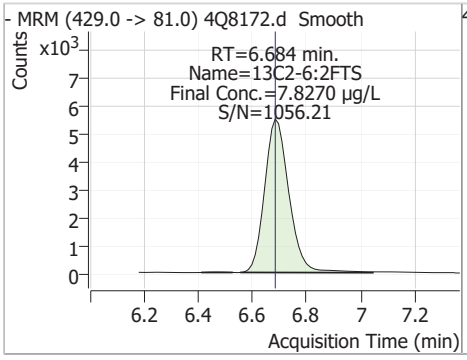
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.00	6.33	0.00	60077	349.0 -> 99.0	50.1	25.3	76.0

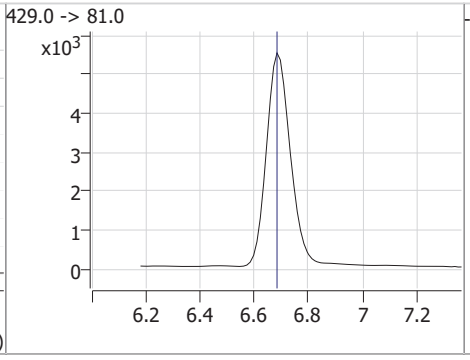


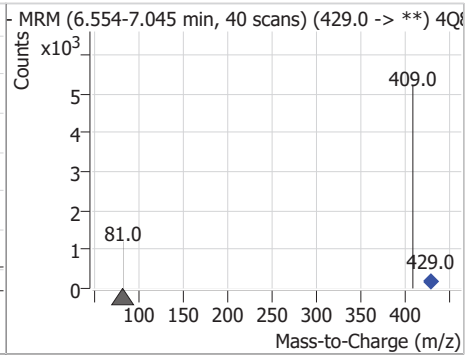




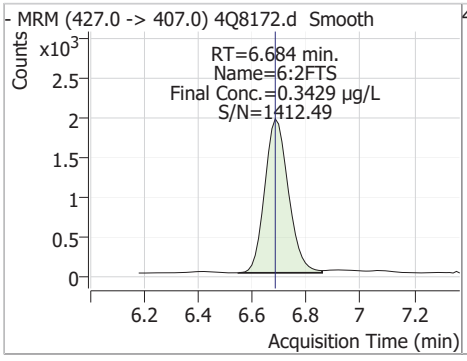
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	7.83	6.68	0.00	34373				

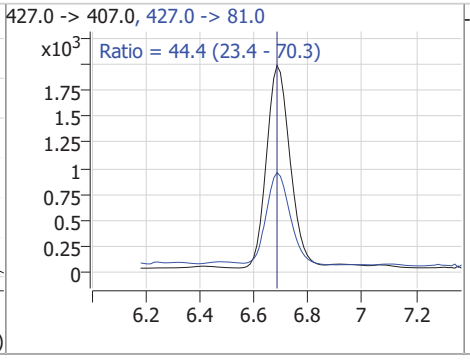


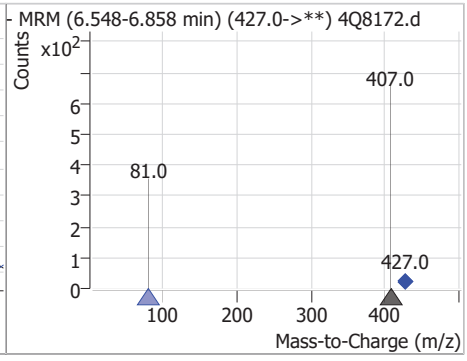




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.34	6.68	0.00	11818	427.0 -> 81.0	44.4	23.4	70.3

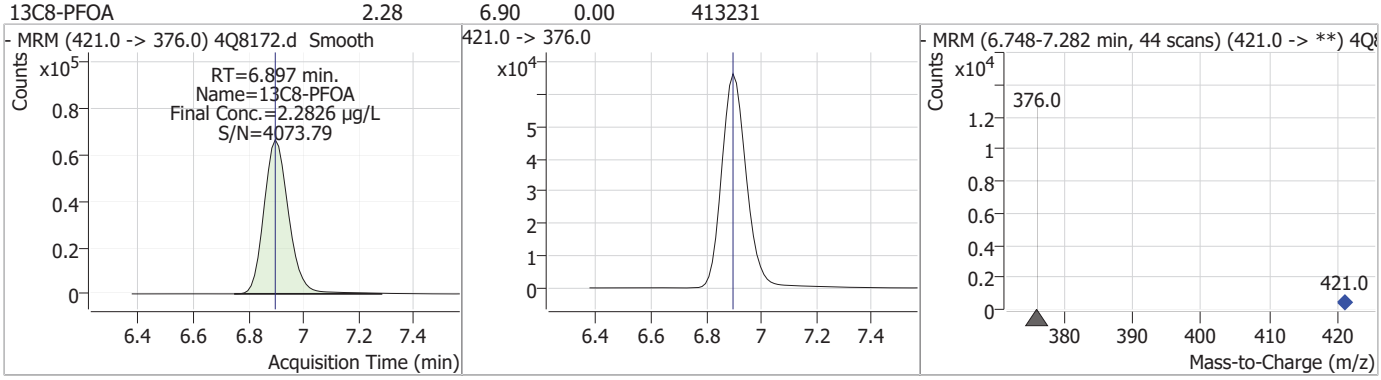




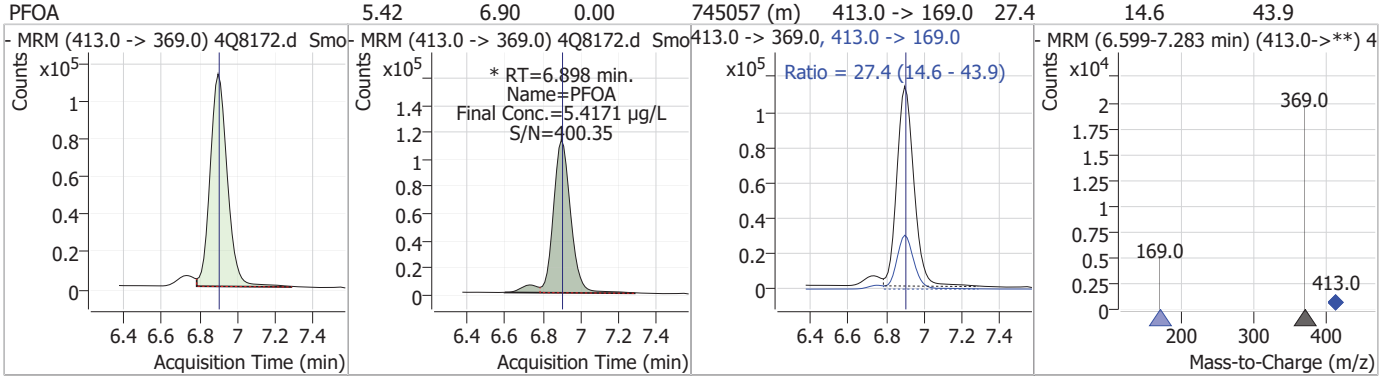


Perfluorinated Compounds by LC/MS/MS

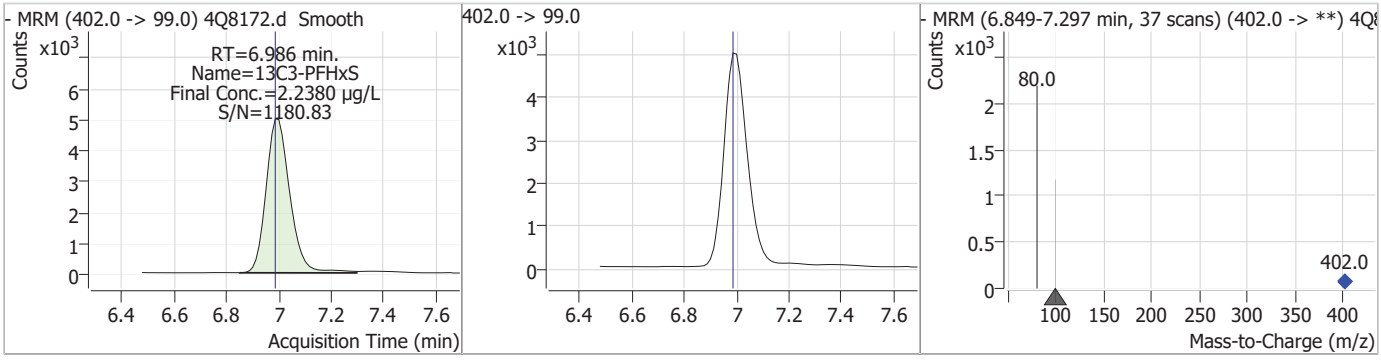
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.28	6.90	0.00	413231				



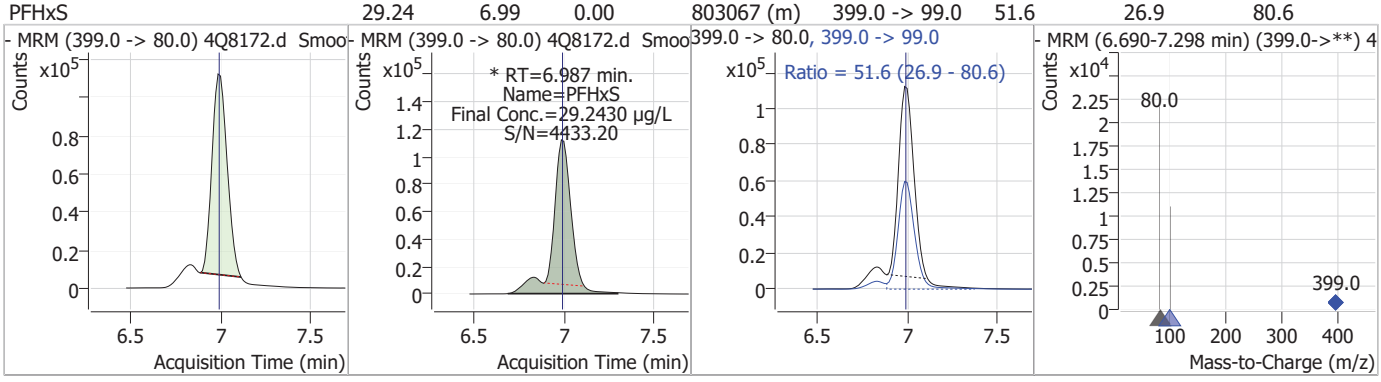
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	5.42	6.90	0.00	745057 (m)	413.0 -> 169.0	27.4	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.24	6.99	0.00	31537				

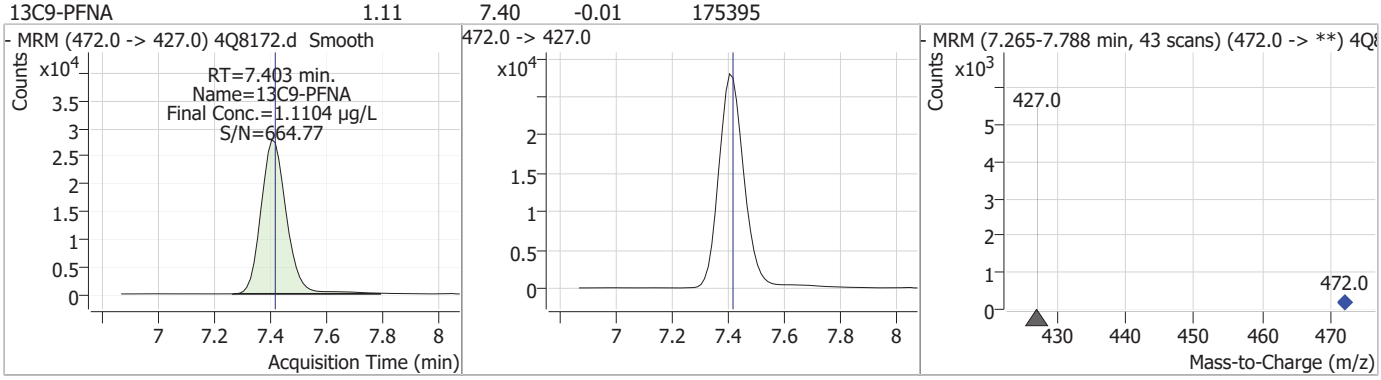


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	29.24	6.99	0.00	803067 (m)	399.0 -> 99.0	51.6	26.9	80.6

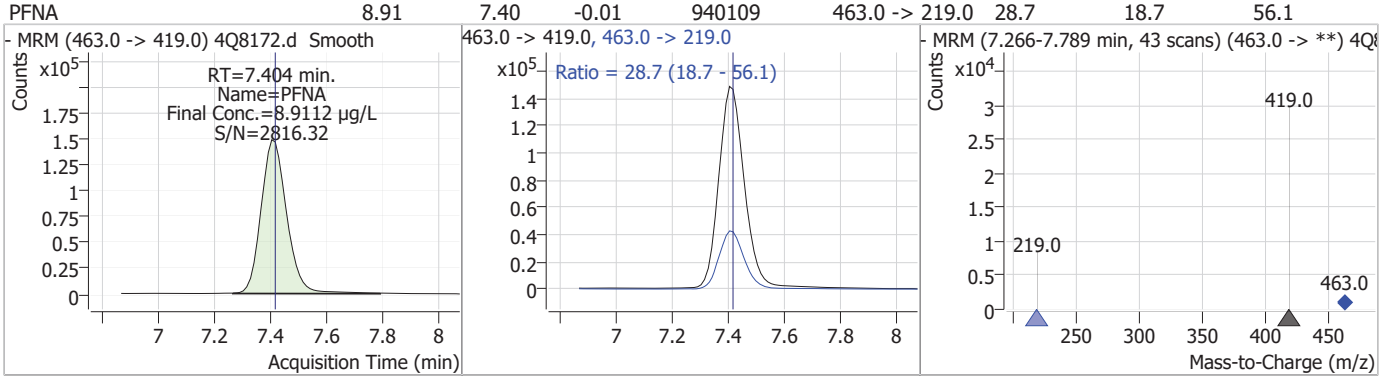


Perfluorinated Compounds by LC/MS/MS

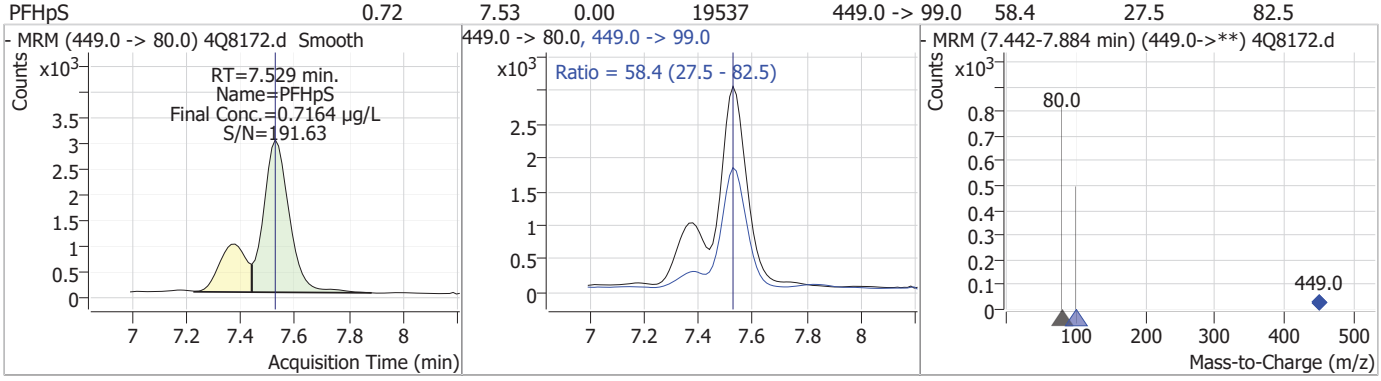
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.11	7.40	-0.01	175395				



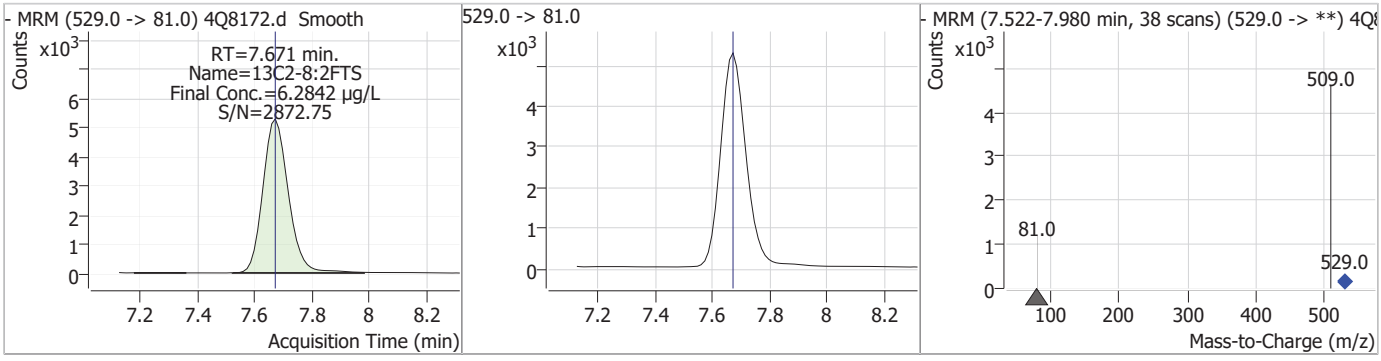
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	8.91	7.40	-0.01	940109	463.0 -> 219.0	28.7	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.72	7.53	0.00	19537	449.0 -> 99.0	58.4	27.5	82.5

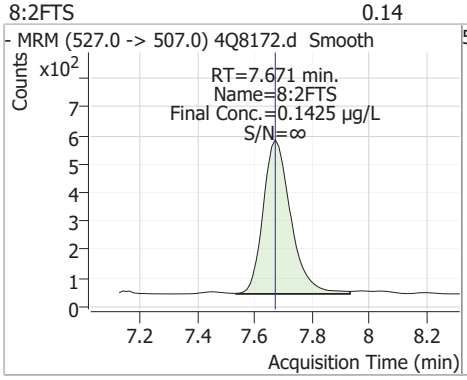


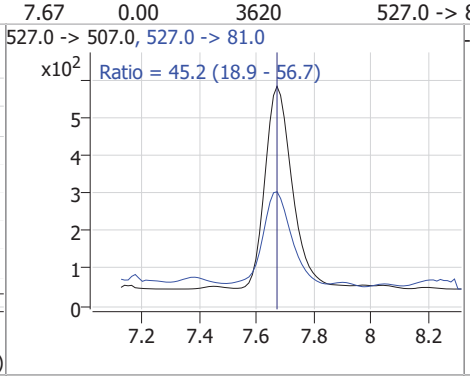
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	6.28	7.67	0.00	32466				

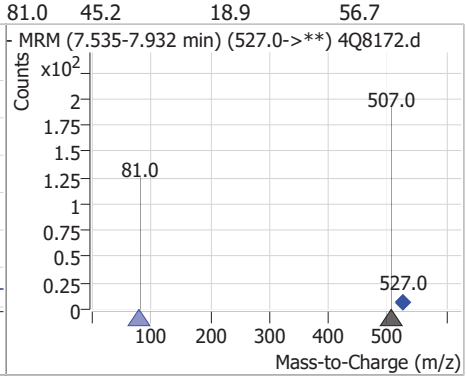


Perfluorinated Compounds by LC/MS/MS

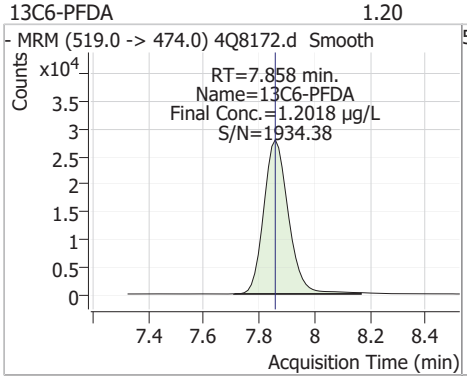
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.14	7.67	0.00	3620	527.0 -> 81.0	45.2	18.9	56.7

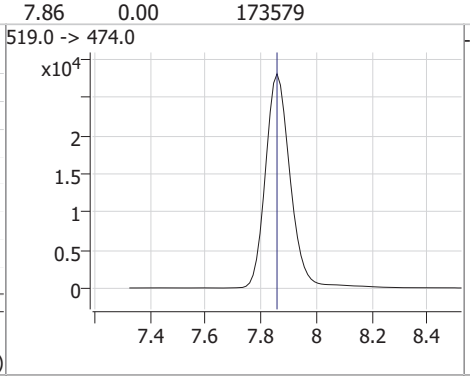


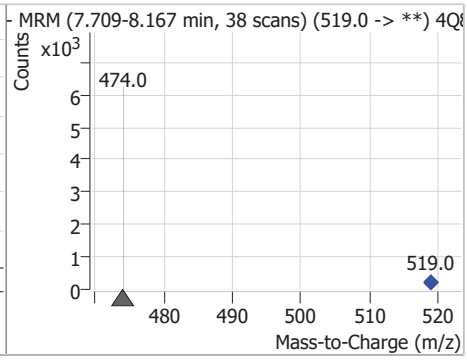




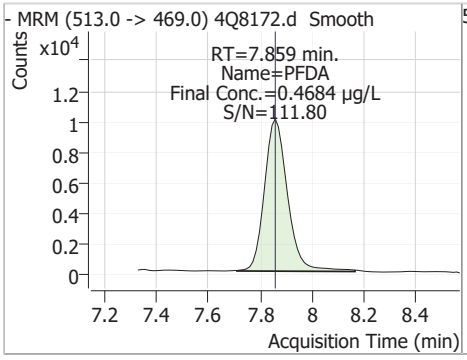
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.20	7.86	0.00	173579				

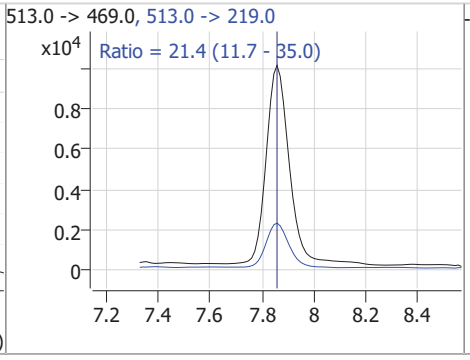


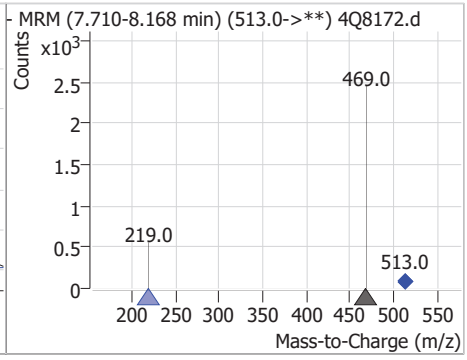




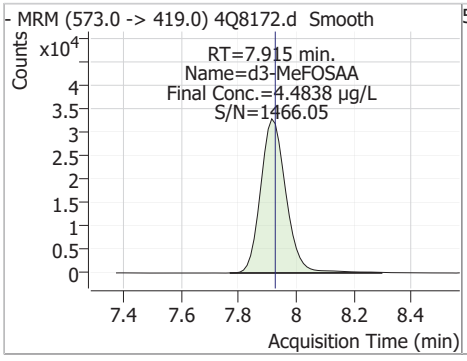
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.47	7.86	0.00	61792	513.0 -> 219.0	21.4	11.7	35.0

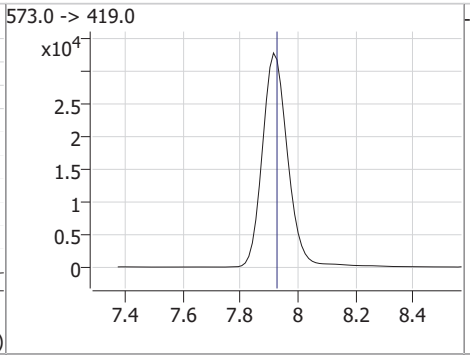


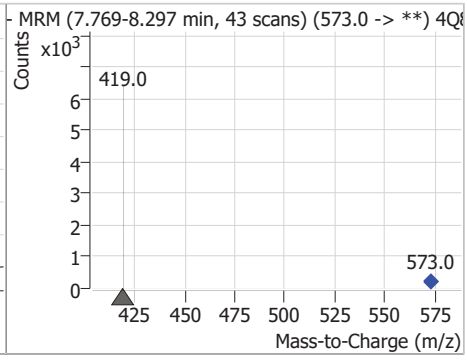




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.48	7.92	-0.01	201003				

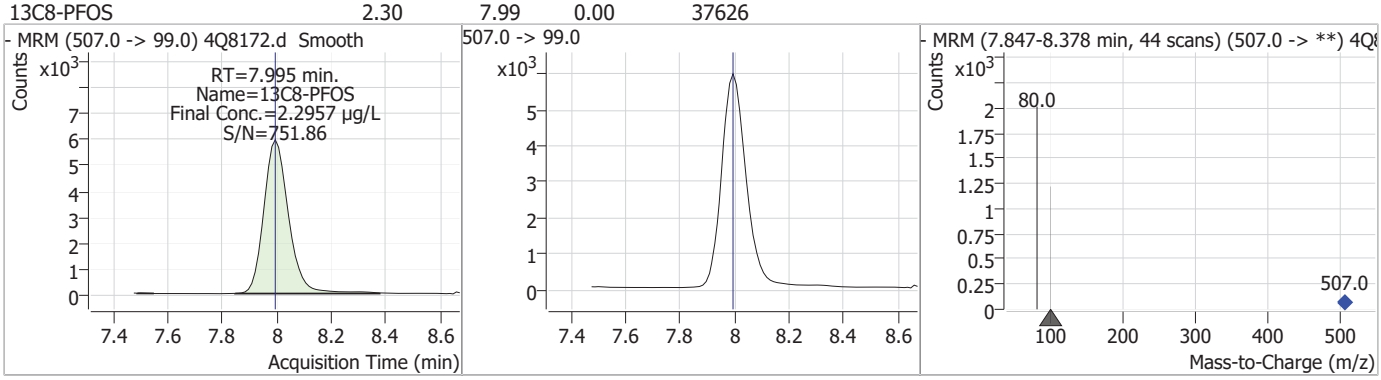




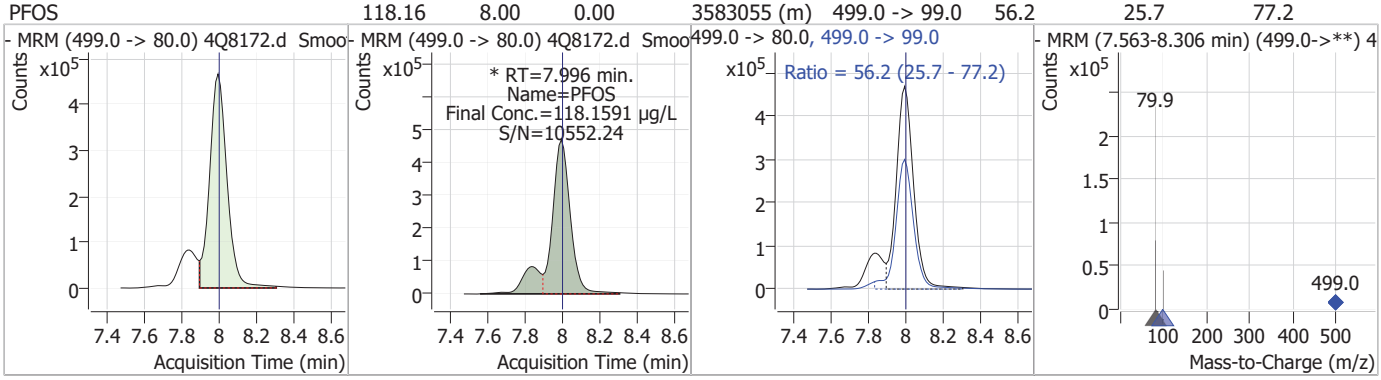


Perfluorinated Compounds by LC/MS/MS

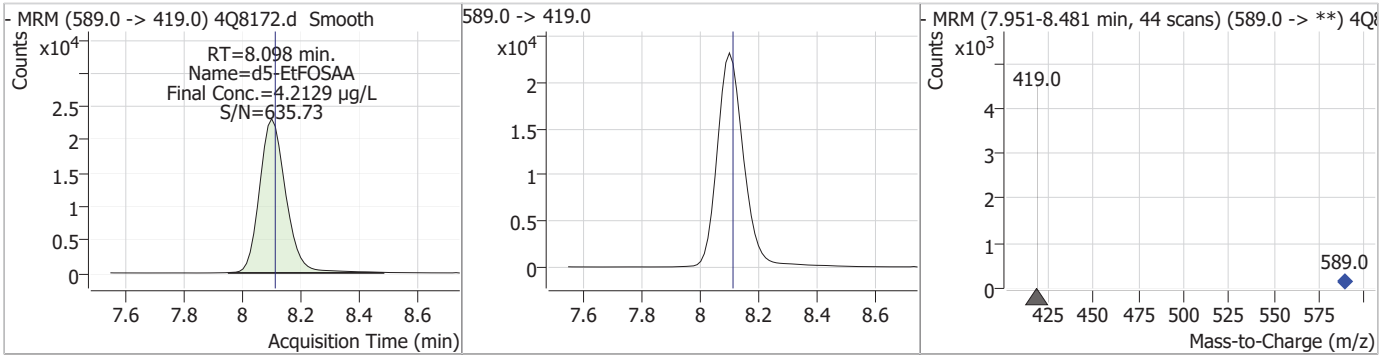
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.30	7.99	0.00	37626				



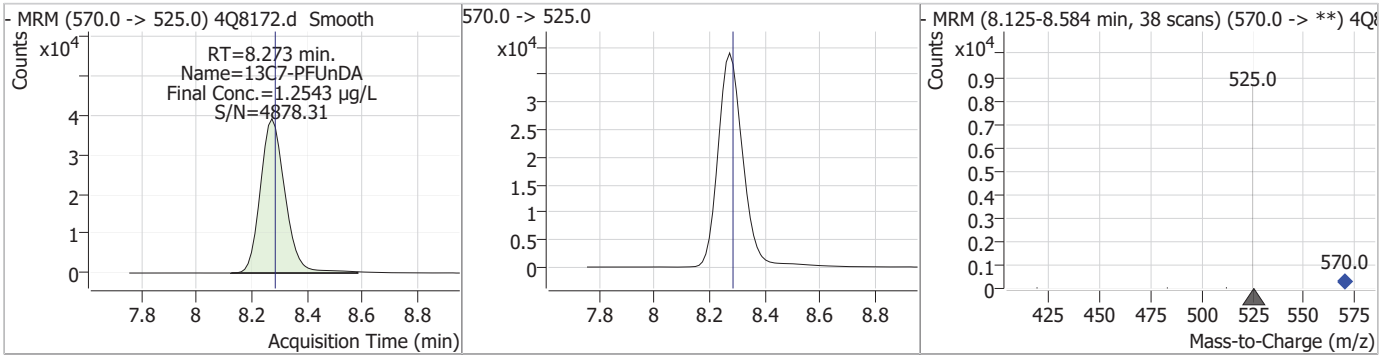
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	118.16	8.00	0.00	3583055 (m)	499.0 -> 99.0	56.2	25.7	77.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.21	8.10	-0.01	144997				

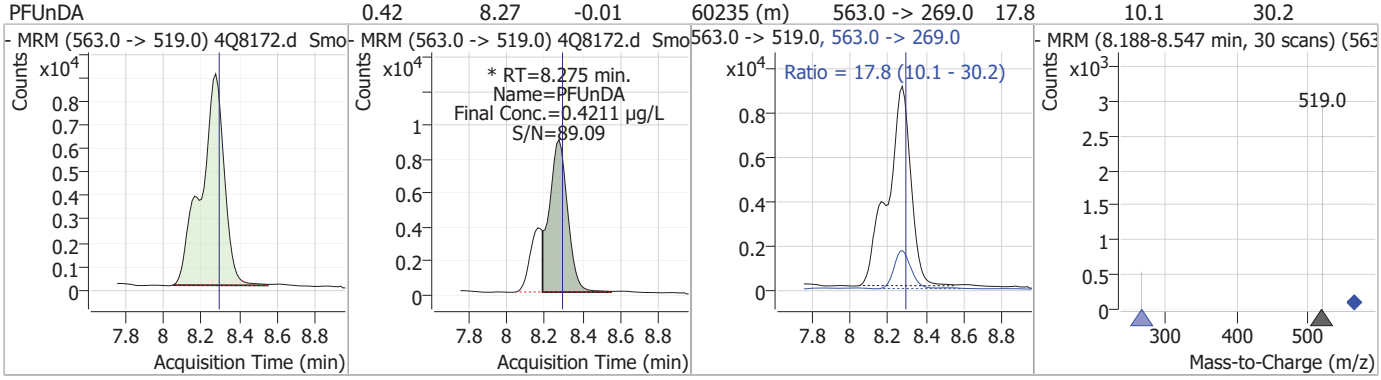


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.25	8.27	-0.01	241987				

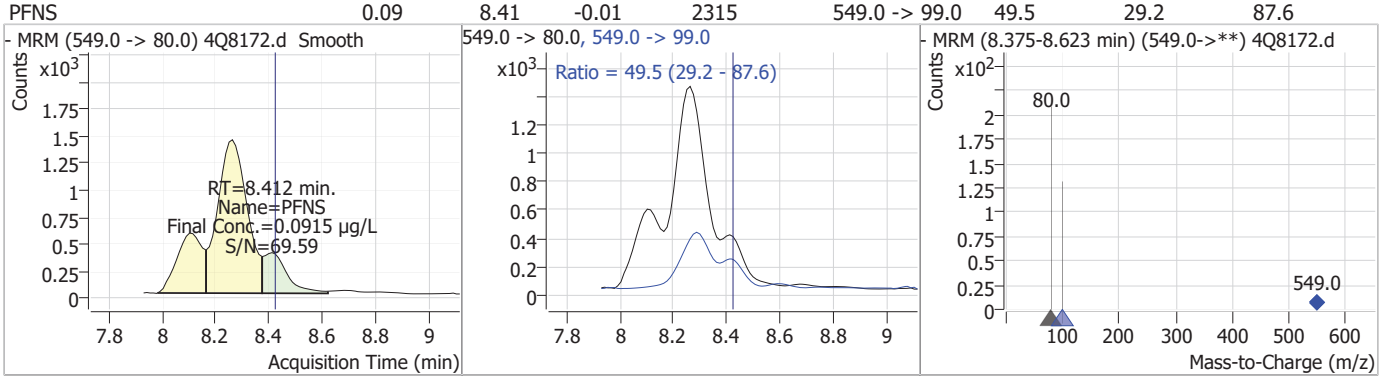


Perfluorinated Compounds by LC/MS/MS

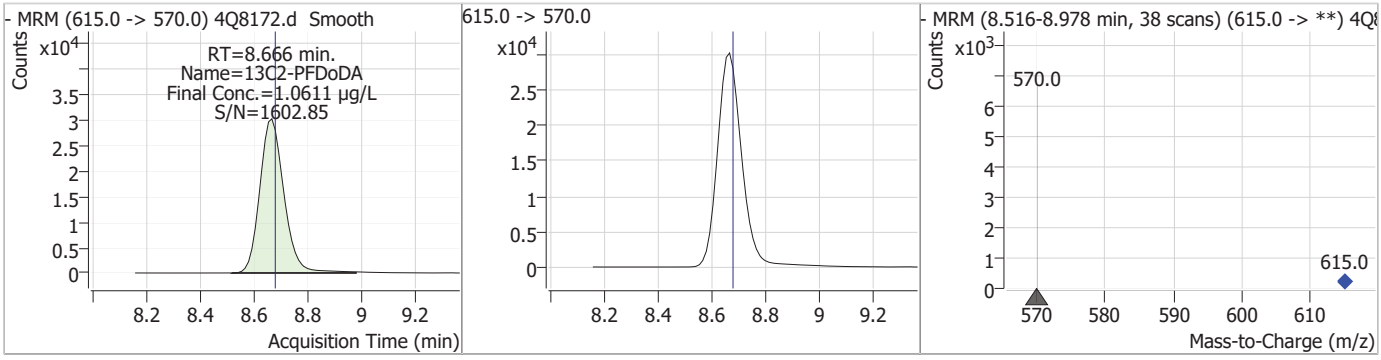
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.42	8.27	-0.01	60235 (m)	563.0 -> 269.0	17.8	10.1	30.2



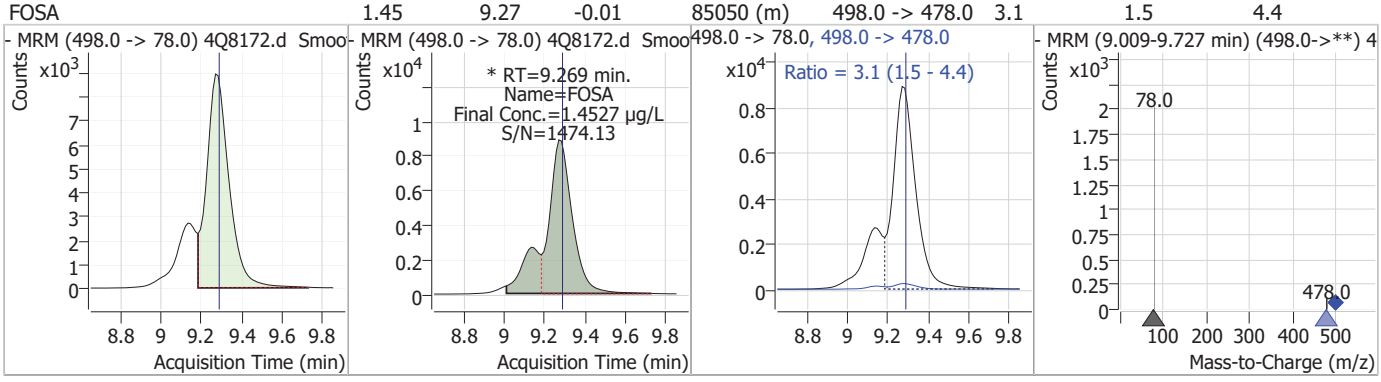
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.09	8.41	-0.01	2315	549.0 -> 99.0	49.5	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.06	8.67	-0.01	187514				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	1.45	9.27	-0.01	85050 (m)	498.0 -> 478.0	3.1	1.5	4.4



7.1.16

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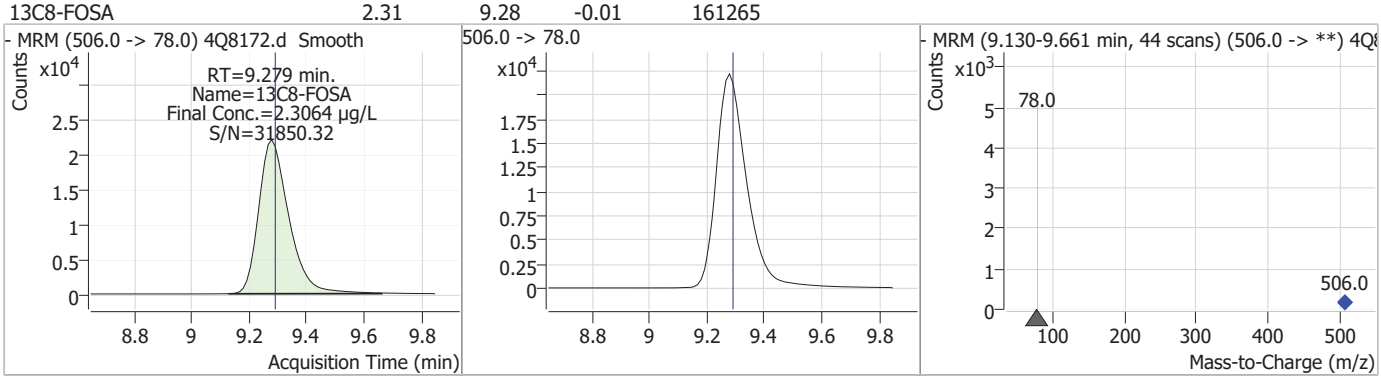
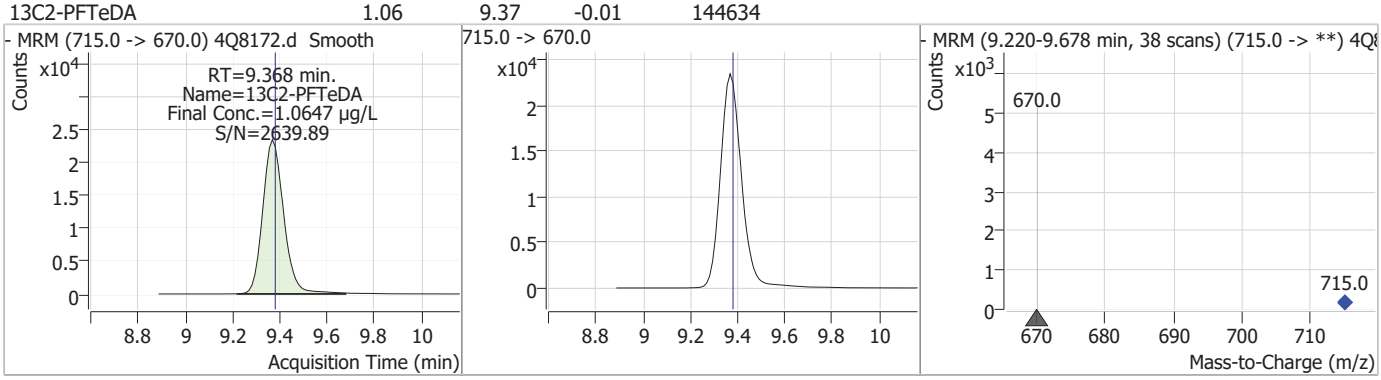
Perfluorinated Compounds by LC/MS/MS

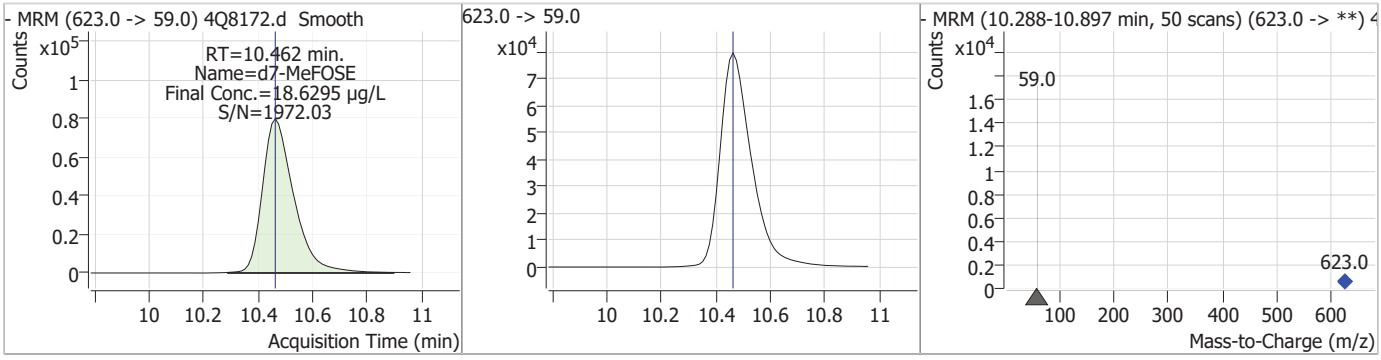
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.31	9.28	-0.01	161265				



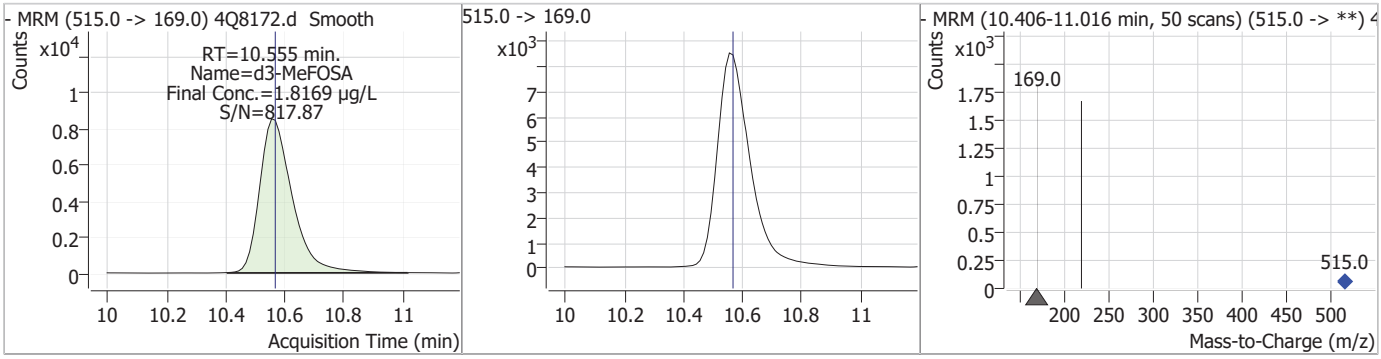
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.06	9.37	-0.01	144634				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	18.63	10.46	0.00	638614				

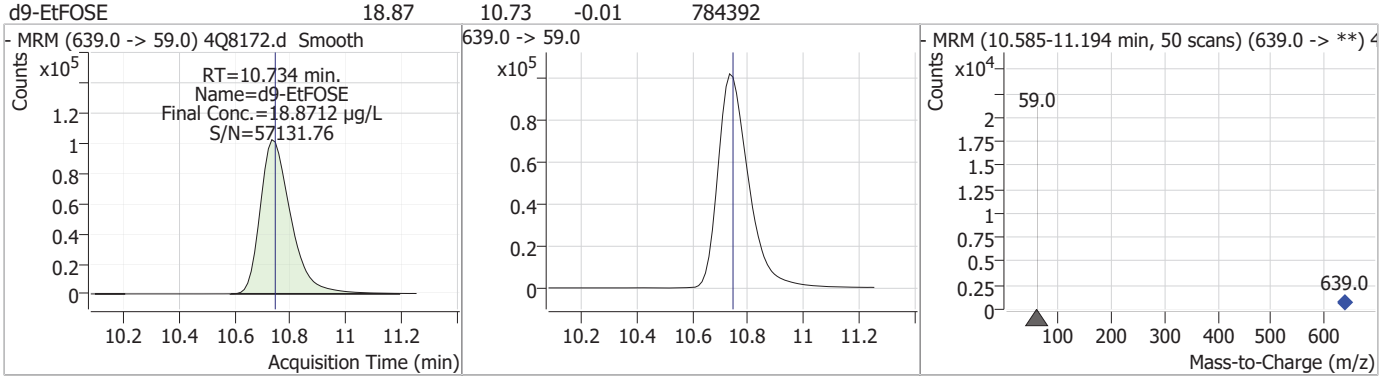


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.82	10.56	-0.01	65237				

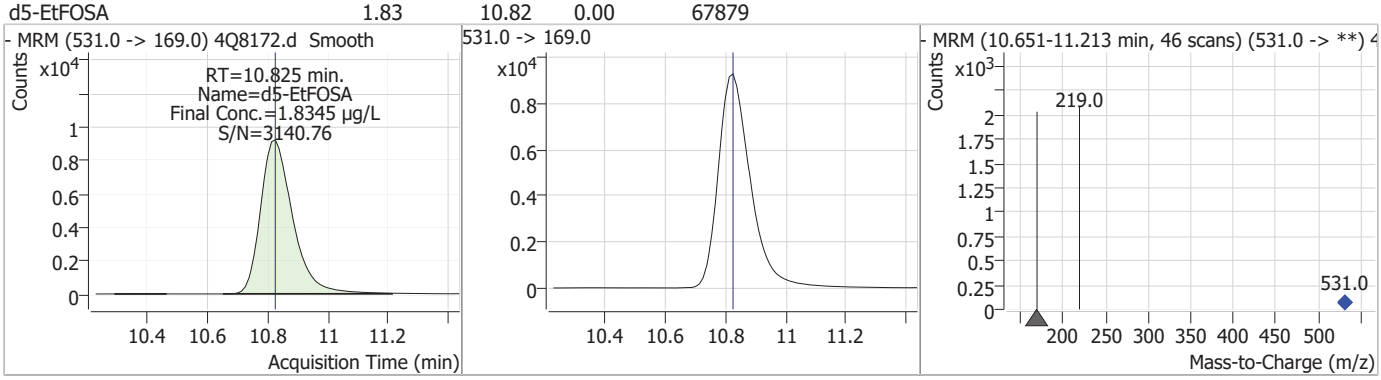


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	18.87	10.73	-0.01	784392				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.83	10.82	0.00	67879				



Manual Integration Approval Summary

Sample Number: JE10205-10
Lab FileID: 4Q8172.D
Injection Time: 05/01/25 00:26
Method: EPA 1633
Analyst approved: 05/01/25 11:50 Maksud Haque
Supervisor approved: 05/15/25 12:50 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorobutanoic acid	375-22-4		2.86	Poor instrument integration
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
Perfluoroundecanoic acid	2058-94-8		8.28	Poor instrument integration
Perfluorodecanesulfonic acid	335-77-3		8.80	Poor instrument integration
Perfluorotridecanoic acid	72629-94-8		8.99	Poor instrument integration
PFOSA	754-91-6		9.27	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8143.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 5:53:05 PM
Sample Name : JE10205-11
Vial : P1-B6
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,501,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.858	217.0 -> 172.0	903661	10.00	µg/L	-0.025
M5-PFPeA	4.307	268.0 -> 223.0	443228	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	328397	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	344865	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	509229	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	207275	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	201521	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	276497	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	226524	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	180101	1.25	µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	182333	2.50	µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	28996	2.50	µg/L	-0.012
		302.0 -> 80.0	72169			
M3-PFHxS	6.986	402.0 -> 99.0	40440	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	43713	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	14140	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	28817	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	33636	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	244282	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	484621	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	182200	5.00	µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	869400	25.00	µg/L	0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1055145	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	76963	2.50	µg/L	0.000
M3-MeFOSA	10.568	515.0 -> 169.0	75192	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	80188	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	416423	5.00	µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	49136	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	543767	2.50	µg/L	0.000
13C2-PFDA	7.859	515.0 -> 470.0	190950	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	215608	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	328010	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	14140	5.74	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 114.8%		
13C2-6:2FTS	6.684	429.0 -> 81.0	28817	5.39	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.8%		
13C2-8:2FTS	7.671	529.0 -> 81.0	33636	5.35	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.9%		
13C2-PFDoDA	8.666	615.0 -> 570.0	226524	1.10	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.8%		
13C2-PFTeDA	9.381	715.0 -> 670.0	180101	1.13	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.8%		
13C3-PFBS	5.355	302.0 -> 99.0	28996	2.39	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.6%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	40440	2.36 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.3%	
13C4-PFBA	2.858	217.0 -> 172.0	903661	9.47 µg/L	-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.7%	
13C4-PFHpA	6.291	367.0 -> 322.0	344865	2.34 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.5%	
13C5-PFHxA	5.452	318.0 -> 273.0	328397	2.37 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.6%	
13C5-PFPeA	4.307	268.0 -> 223.0	443228	4.21 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 84.1%	
13C6-PFDA	7.858	519.0 -> 474.0	201521	1.19 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.5%	
13C7-PFUnDA	8.273	570.0 -> 525.0	276497	1.23 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.1%	
13C8-FOSA	9.291	506.0 -> 78.0	182333	2.21 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 88.5%	
13C8-PFOA	6.897	421.0 -> 376.0	509229	2.34 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.7%	
13C8-PFOS	7.995	507.0 -> 99.0	43713	2.26 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.6%	
13C9-PFNA	7.403	472.0 -> 427.0	207275	1.16 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.7%	
d3-MeFOSAA	7.915	573.0 -> 419.0	244282	4.63 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.5%	
13C3-HFPO-DA	5.779	287.0 -> 169.0	484621	8.89 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 88.9%	
d3-MeFOSA	10.568	515.0 -> 169.0	75192	1.78 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 71.1%	
d5-EtFOSAA	8.098	589.0 -> 419.0	182200	4.49 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 89.9%	
d7-MeFOSE	10.475	623.0 -> 59.0	869400	21.53 µg/L	0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 86.1%	
d9-EtFOSE	10.746	639.0 -> 59.0	1055145	21.55 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 86.2%	
d5-EtFOSA	10.825	531.0 -> 169.0	76963	1.77 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 70.6%	
Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	6.684	427.0 -> 407.0	34256	1.19 µg/L	97
		427.0 -> 81.0	15484		
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	2.864	213.0 -> 169.0	26763	0.97 µg/L	100
PFBS	5.357	299.0 -> 80.0	26330	0.79 µg/L	97
		299.0 -> 99.0	11211		
PFDA	7.859	513.0 -> 469.0	6107	0.04 µg/L	95
		513.0 -> 219.0	1280		
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

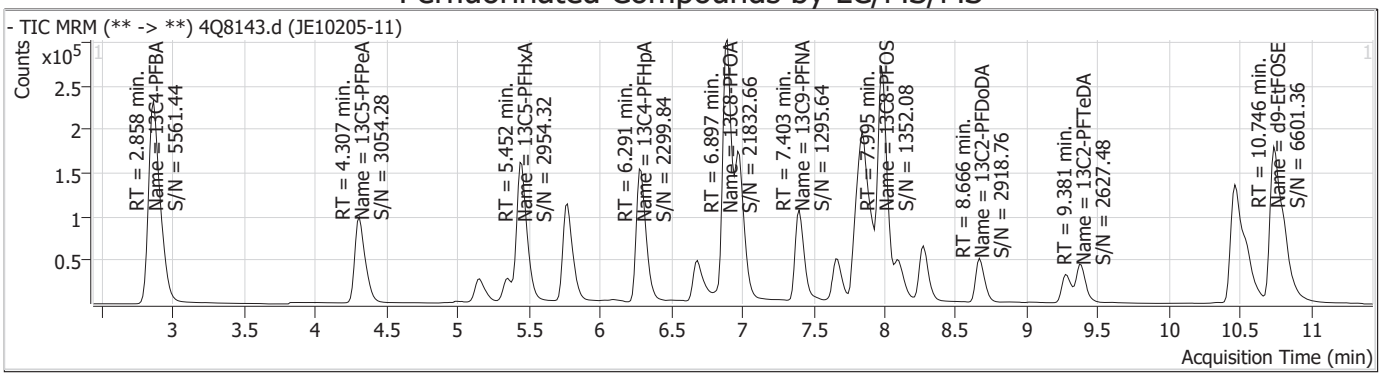
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.292	363.0 -> 319.0	289589	1.38	µg/L		98
		363.0 -> 169.0	57957				
PFHpS	7.529	449.0 -> 80.0	8498	0.24	µg/L		97
		449.0 -> 99.0	4844				
PFHxA	5.455	313.0 -> 269.0	122176	0.86	µg/L		99
		313.0 -> 119.0	3611				
PFHxS	6.987	399.0 -> 80.0	392193	11.14	µg/L	m	95
		399.0 -> 99.0	197845				
PFNA	7.404	463.0 -> 419.0	45023	0.36	µg/L	m	82
		463.0 -> 219.0	11866				
PFNS	8.251	549.0 -> 80.0	0		µg/L	m	1
		549.0 -> 99.0	0				
PFOA	6.898	413.0 -> 369.0	274318	1.62	µg/L	m	97
		413.0 -> 169.0	75812				
PFOS	7.996	499.0 -> 80.0	411178	11.67	µg/L	m	90
		499.0 -> 99.0	182634				
PFPeA	4.309	263.0 -> 219.0	66007	0.94	µg/L		100
PFPeS	6.318	349.0 -> 80.0	32806	0.91	µg/L		99
		349.0 -> 99.0	16385				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	-	563.0 -> 519.0	-	N.D.			
		563.0 -> 269.0					
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

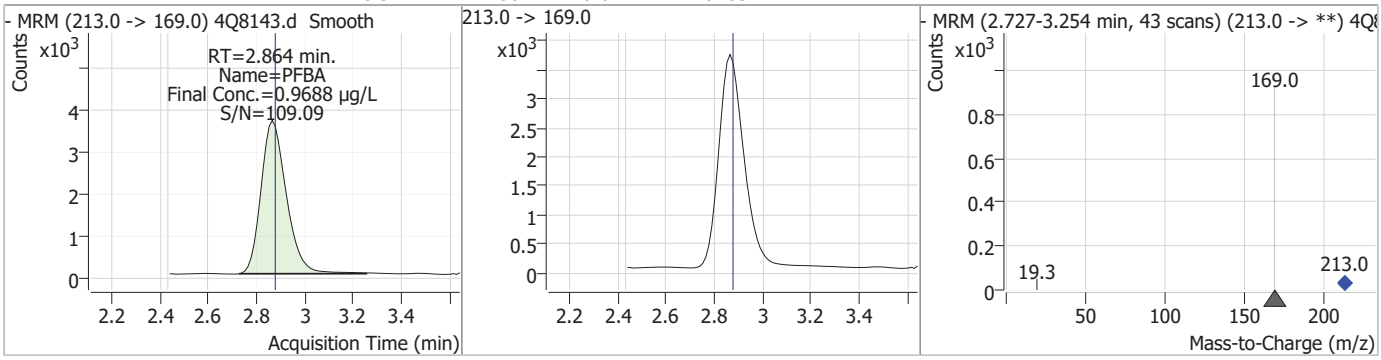
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

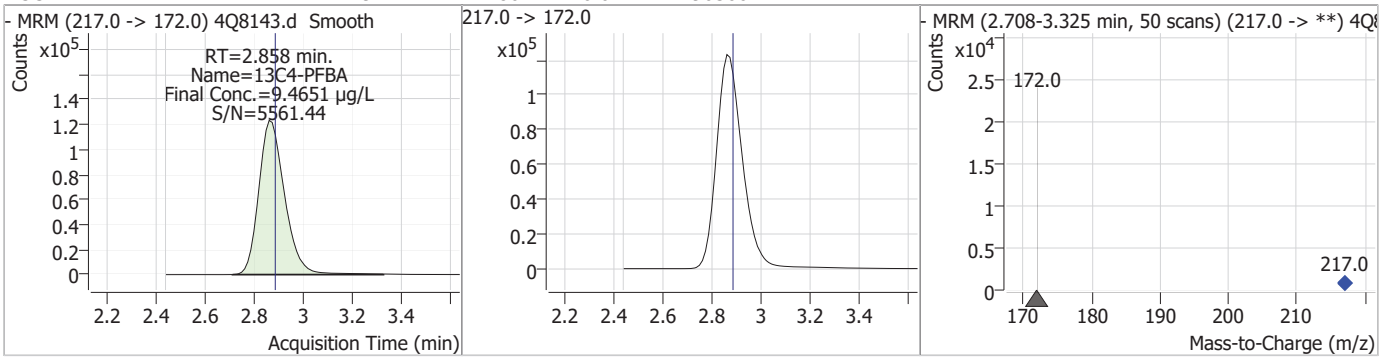
Perfluorinated Compounds by LC/MS/MS



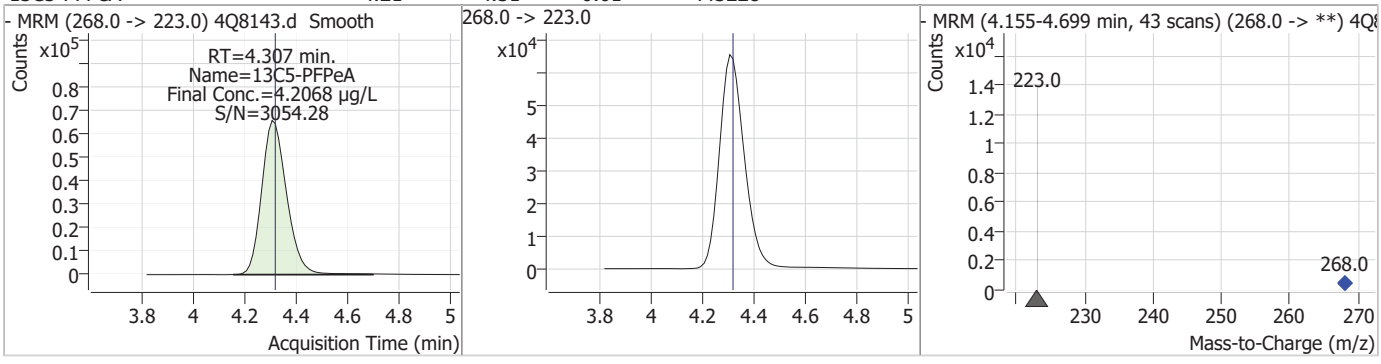
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.97	2.86	-0.01	26763				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.47	2.86	-0.02	903661				

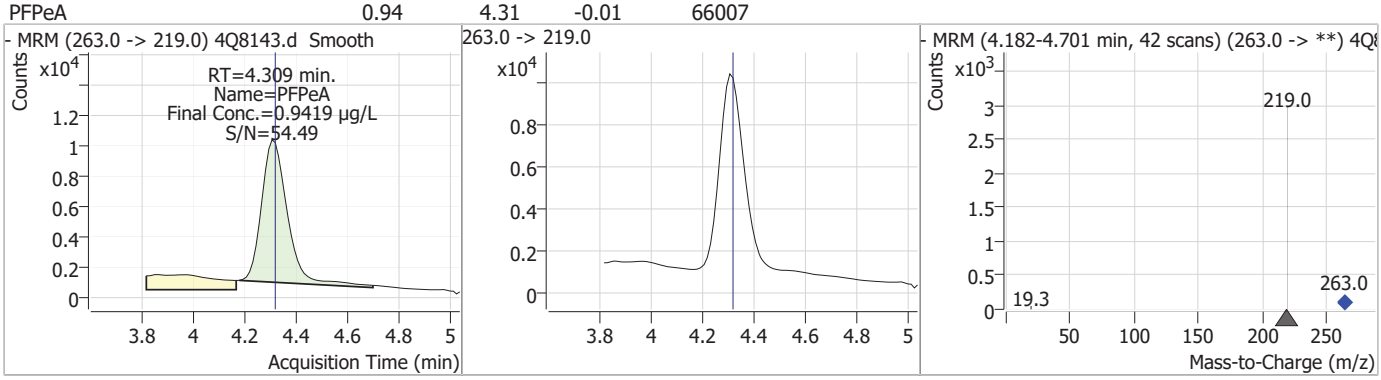


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.21	4.31	-0.01	443228				

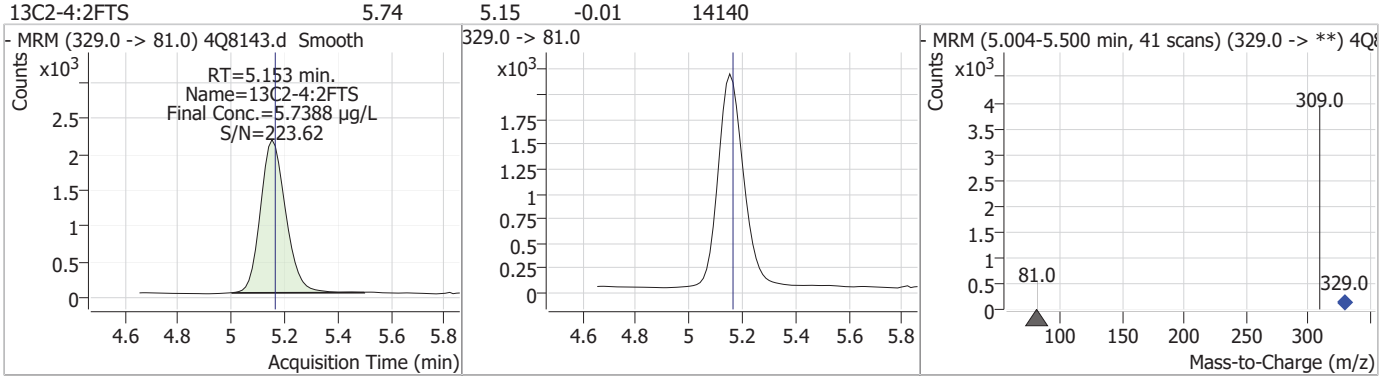


Perfluorinated Compounds by LC/MS/MS

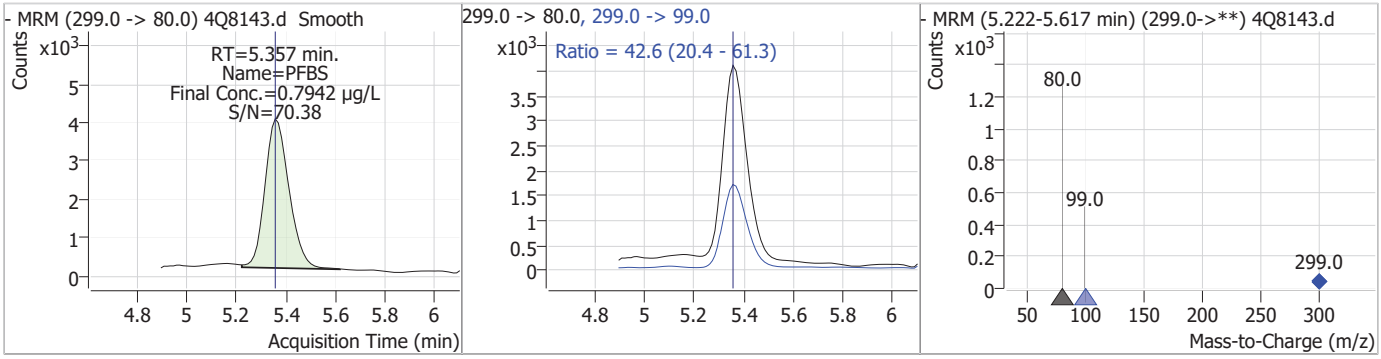
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.94	4.31	-0.01	66007				



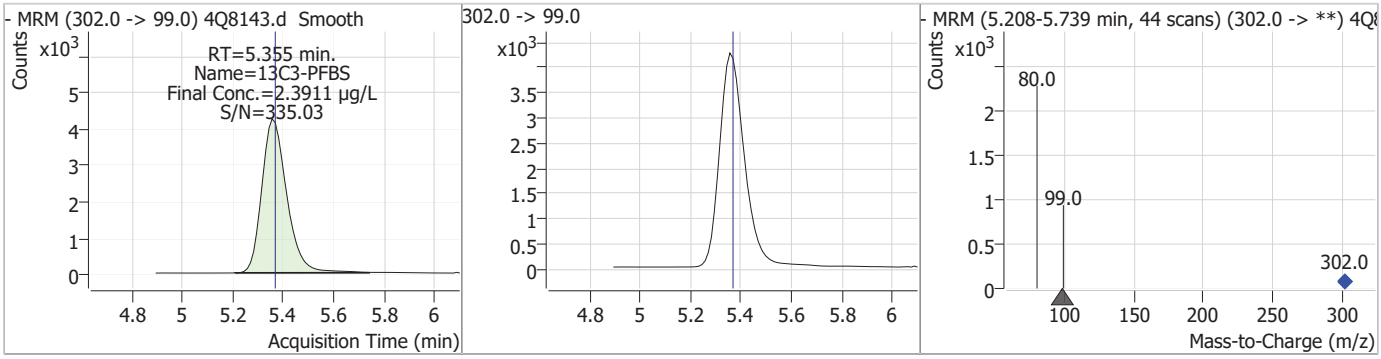
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.74	5.15	-0.01	14140				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.79	5.36	0.00	26330	299.0 -> 99.0	42.6	20.4	61.3

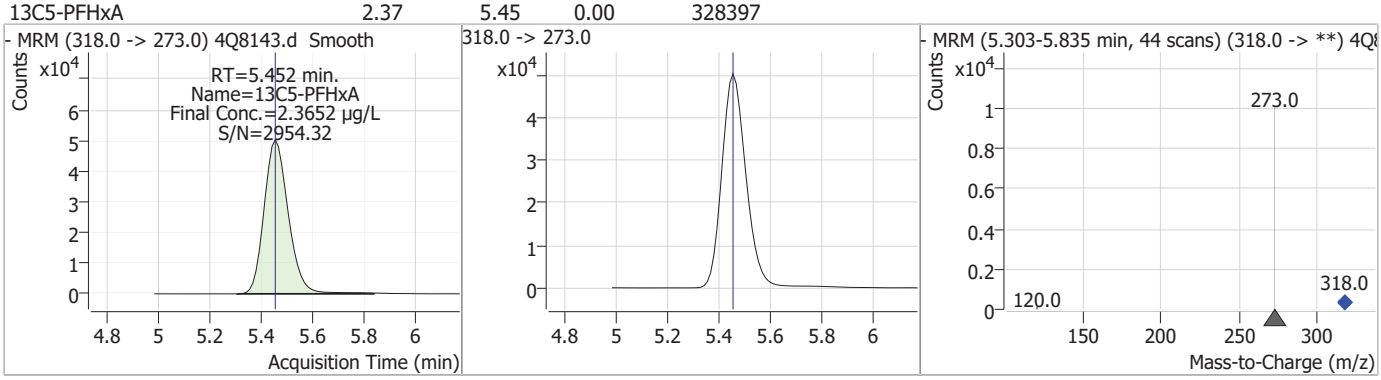


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.39	5.36	-0.01	28996				

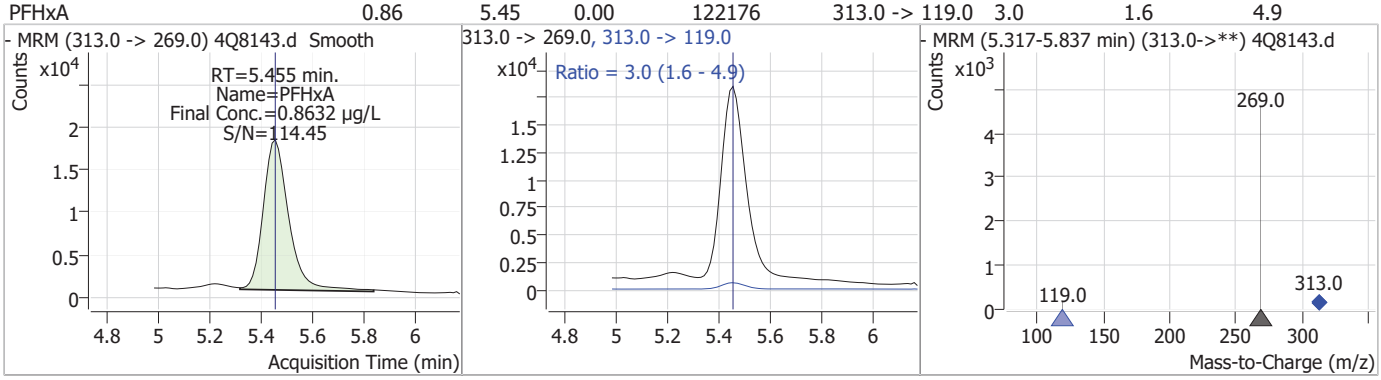


Perfluorinated Compounds by LC/MS/MS

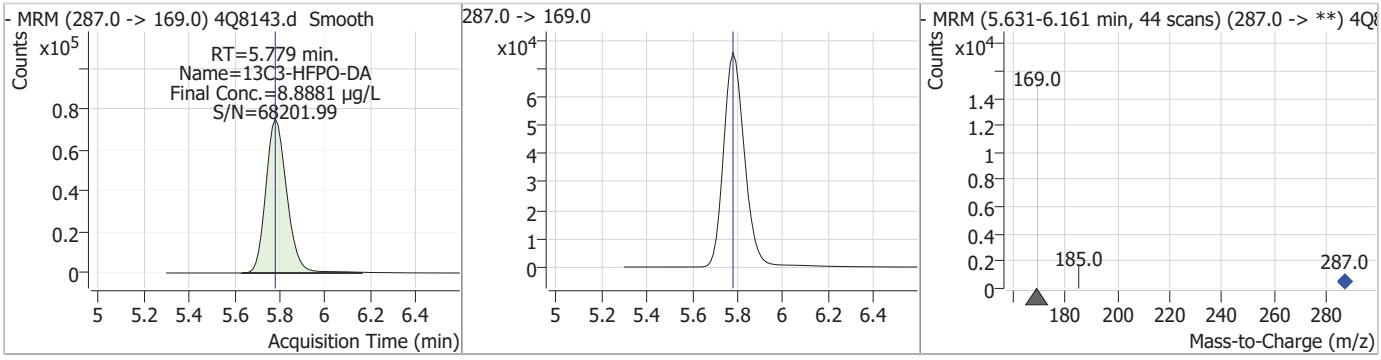
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.37	5.45	0.00	328397				



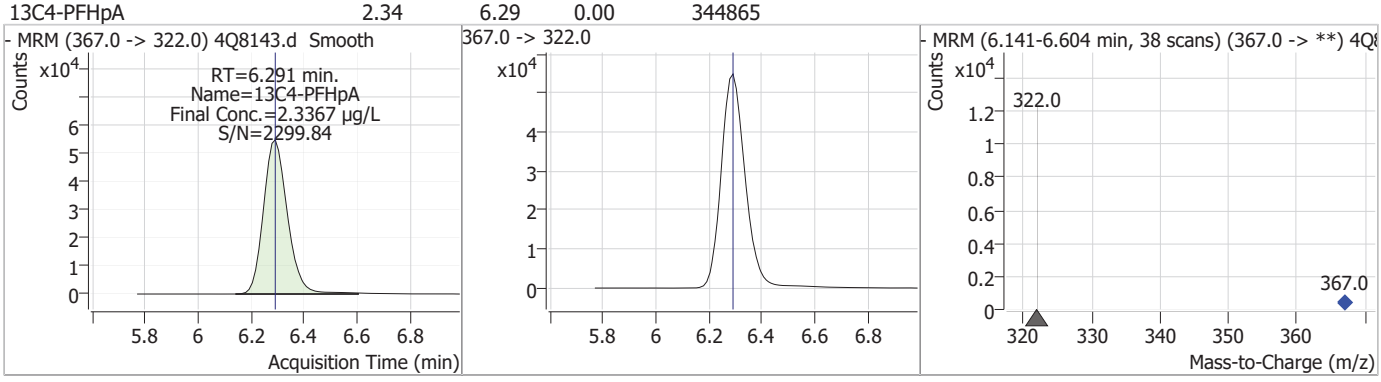
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.86	5.45	0.00	122176	313.0 -> 119.0	3.0	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.89	5.78	0.00	484621				

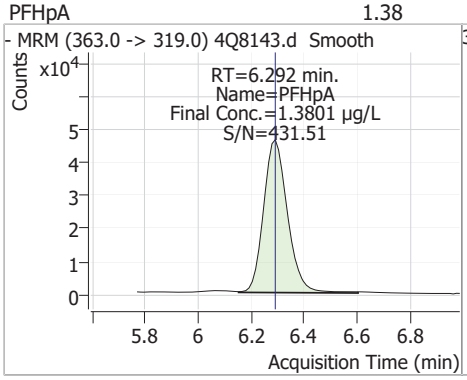


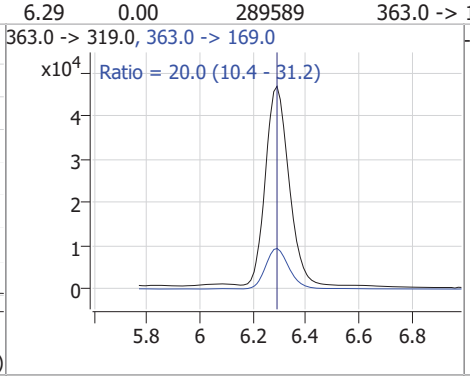
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.34	6.29	0.00	344865				

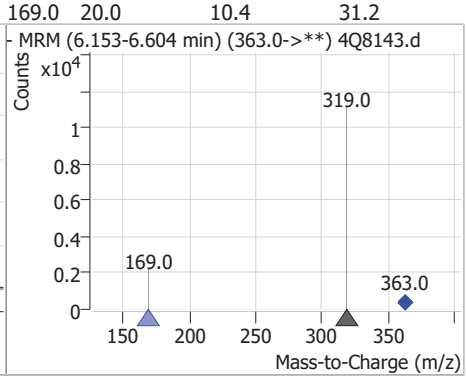


Perfluorinated Compounds by LC/MS/MS

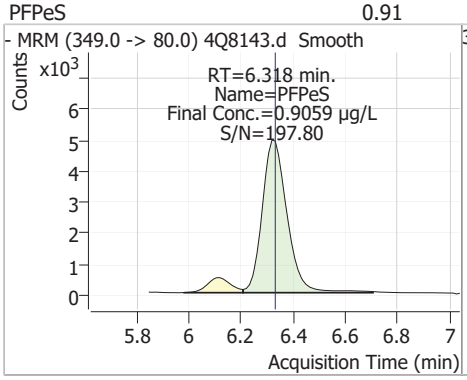
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	1.38	6.29	0.00	289589	363.0 -> 169.0	20.0	10.4	31.2

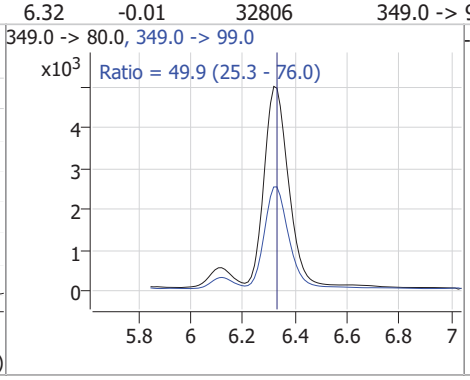


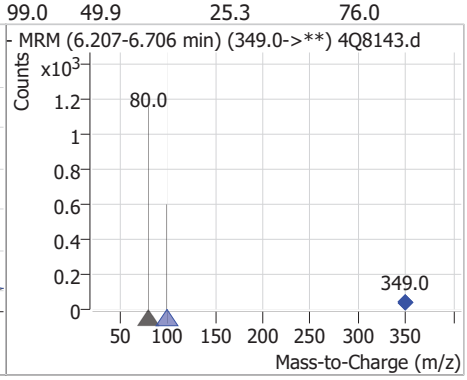




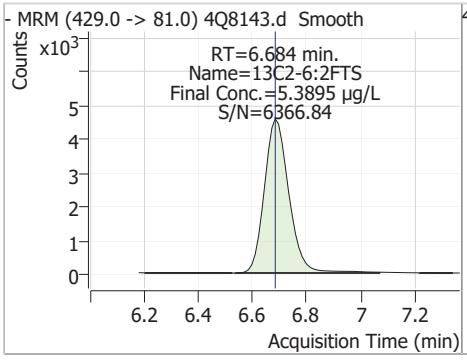
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.91	6.32	-0.01	32806	349.0 -> 99.0	49.9	25.3	76.0

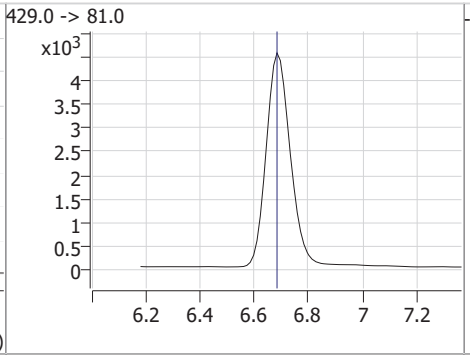


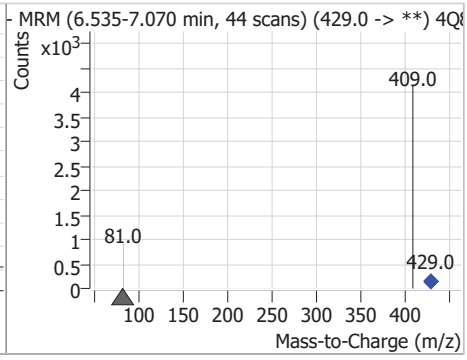




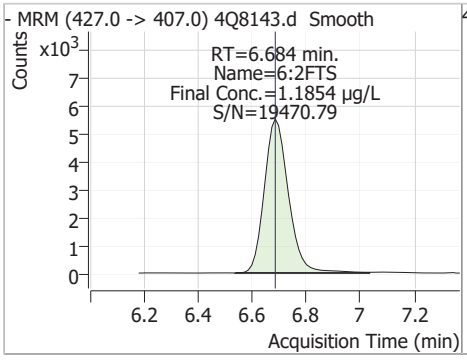
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.39	6.68	0.00	28817				

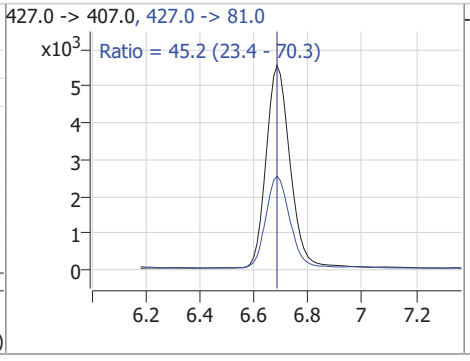


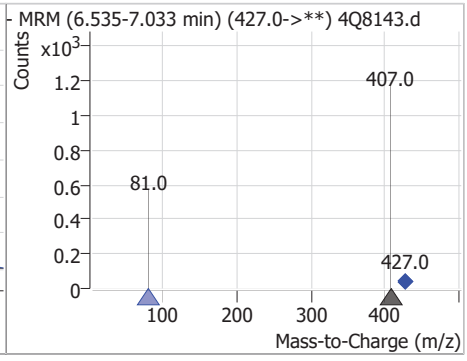




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	1.19	6.68	0.00	34256	427.0 -> 81.0	45.2	23.4	70.3

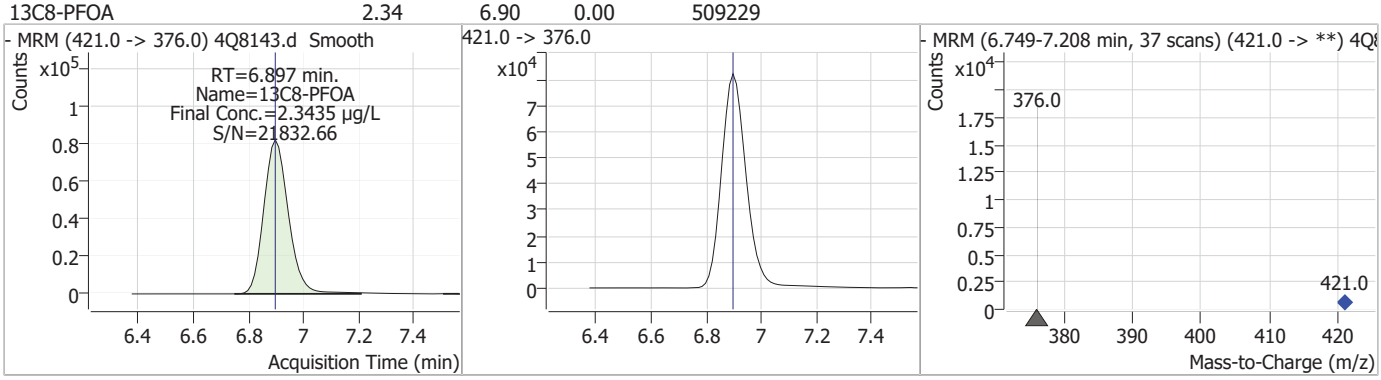




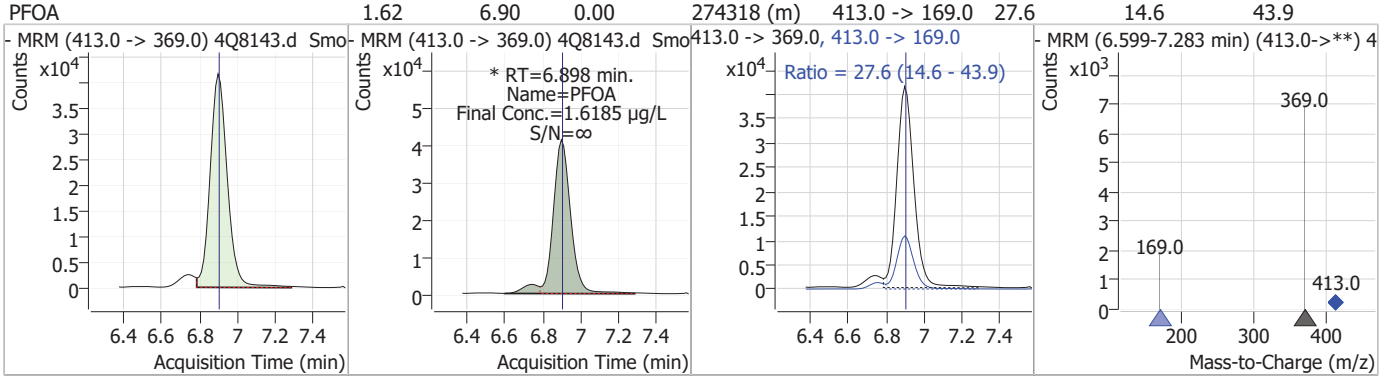


Perfluorinated Compounds by LC/MS/MS

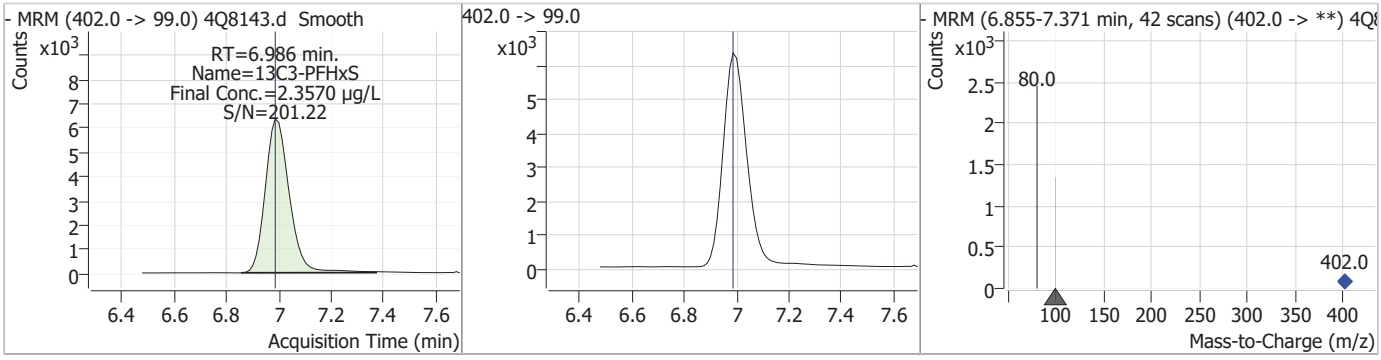
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.34	6.90	0.00	509229				



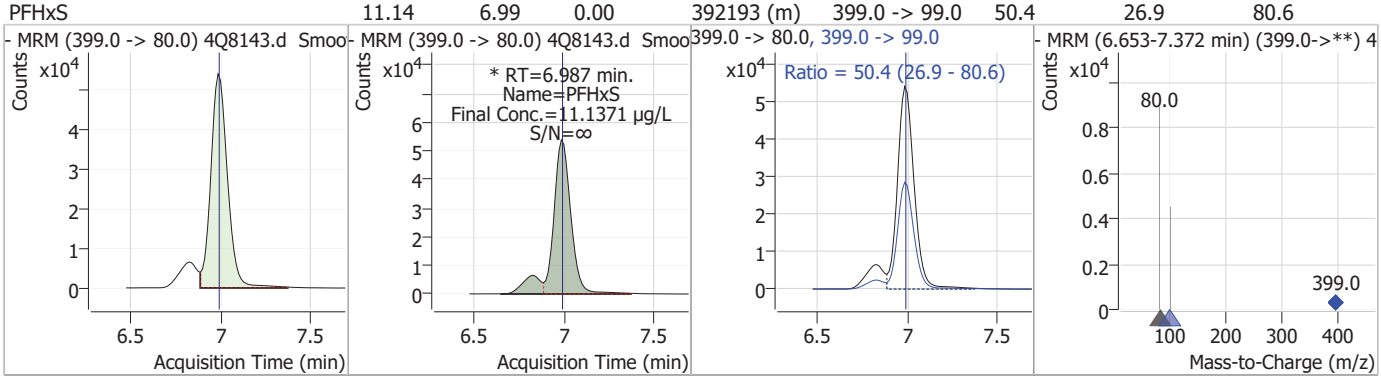
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	1.62	6.90	0.00	274318 (m)	413.0 -> 169.0	27.6	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.36	6.99	0.00	40440				

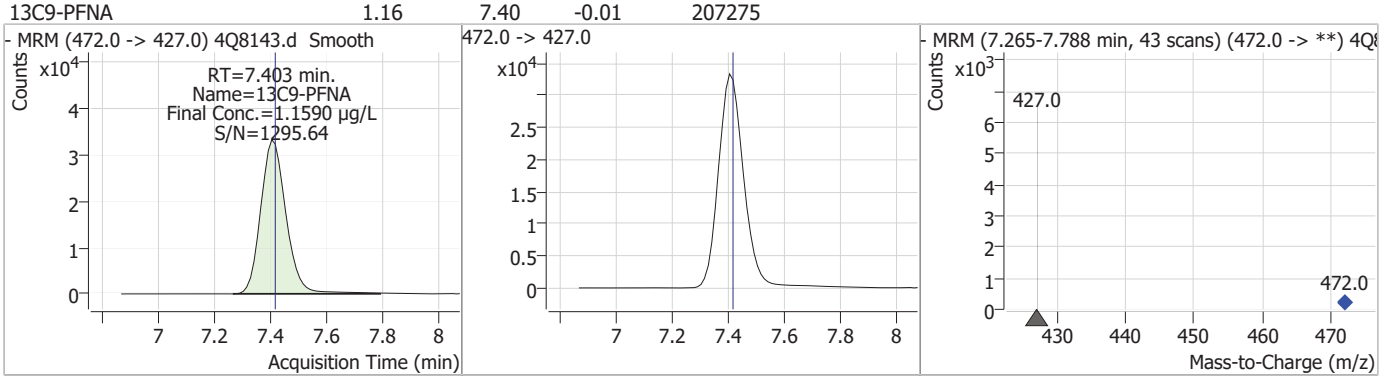


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	11.14	6.99	0.00	392193 (m)	399.0 -> 99.0	50.4	26.9	80.6

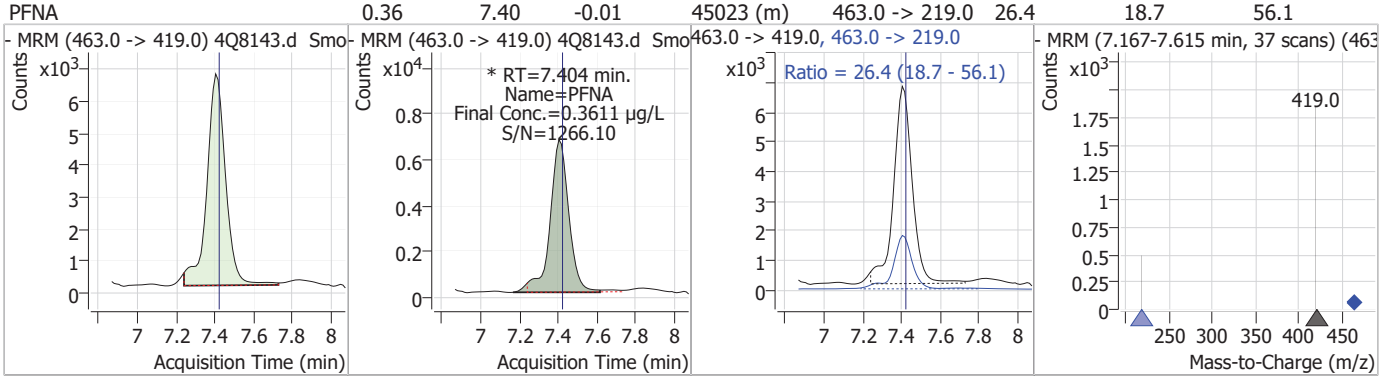


Perfluorinated Compounds by LC/MS/MS

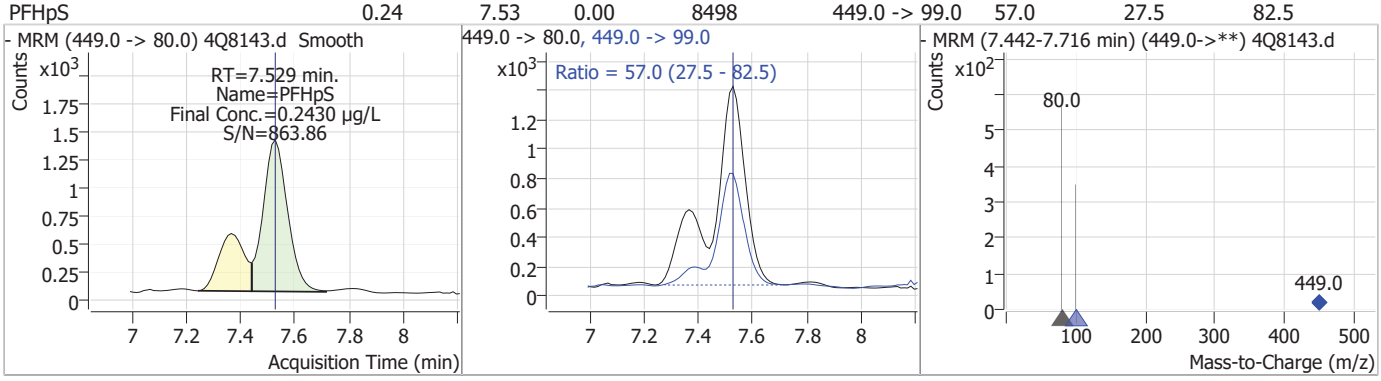
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.16	7.40	-0.01	207275				



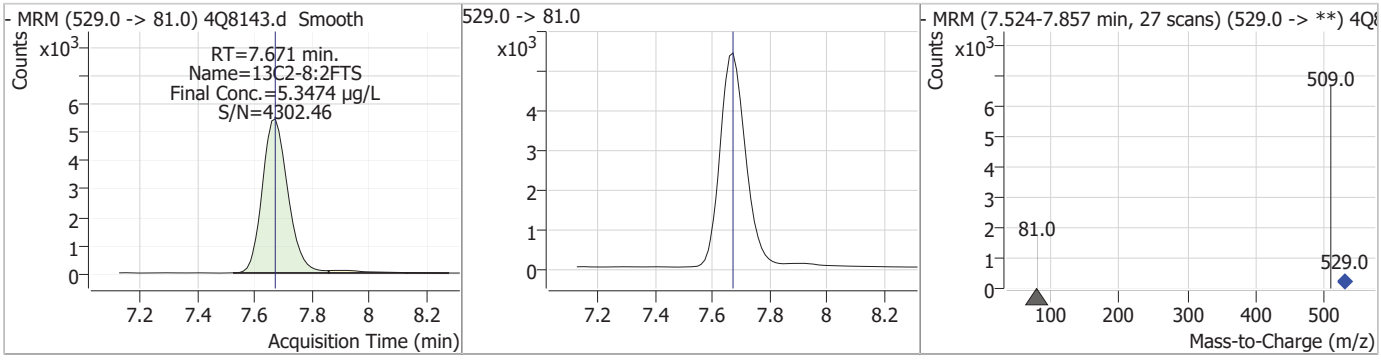
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.36	7.40	-0.01	45023 (m)	463.0 -> 219.0	26.4	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.24	7.53	0.00	8498	449.0 -> 99.0	57.0	27.5	82.5

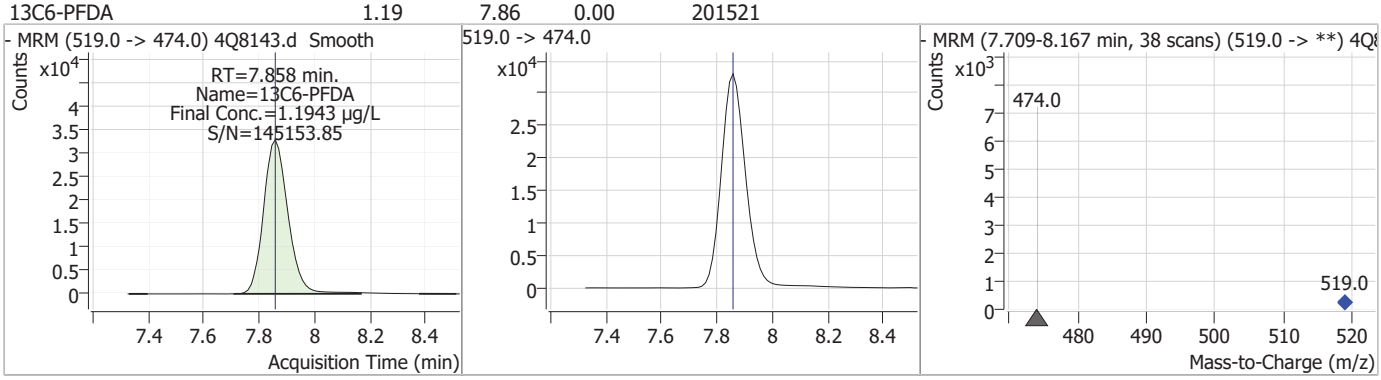


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.35	7.67	0.00	33636				

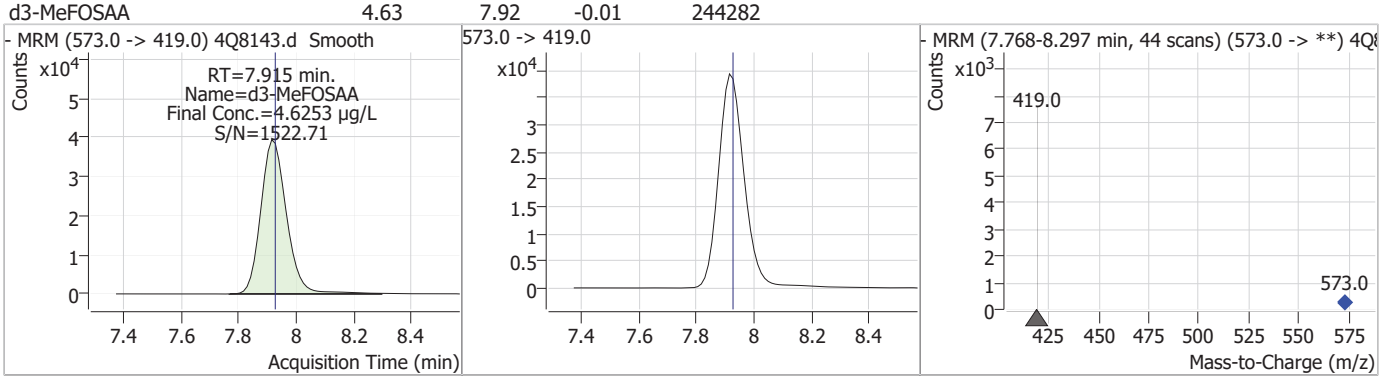


Perfluorinated Compounds by LC/MS/MS

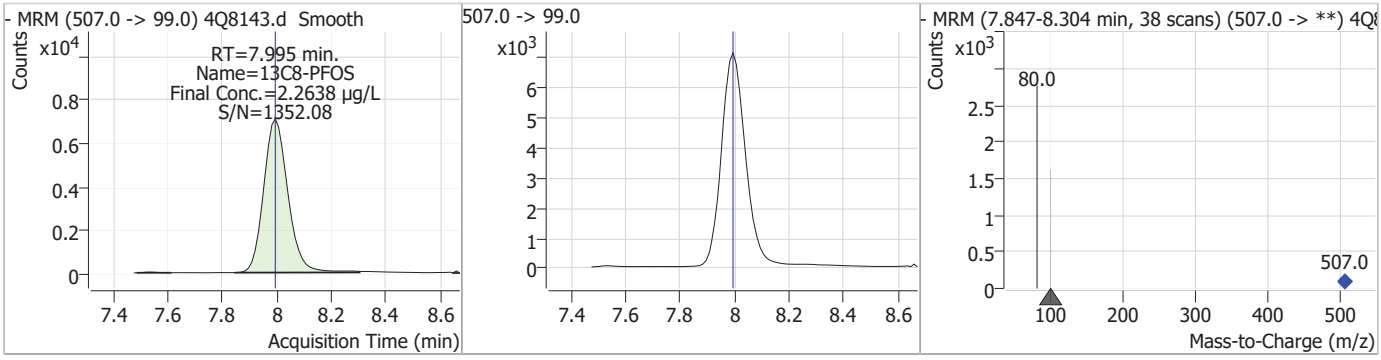
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.19	7.86	0.00	201521				



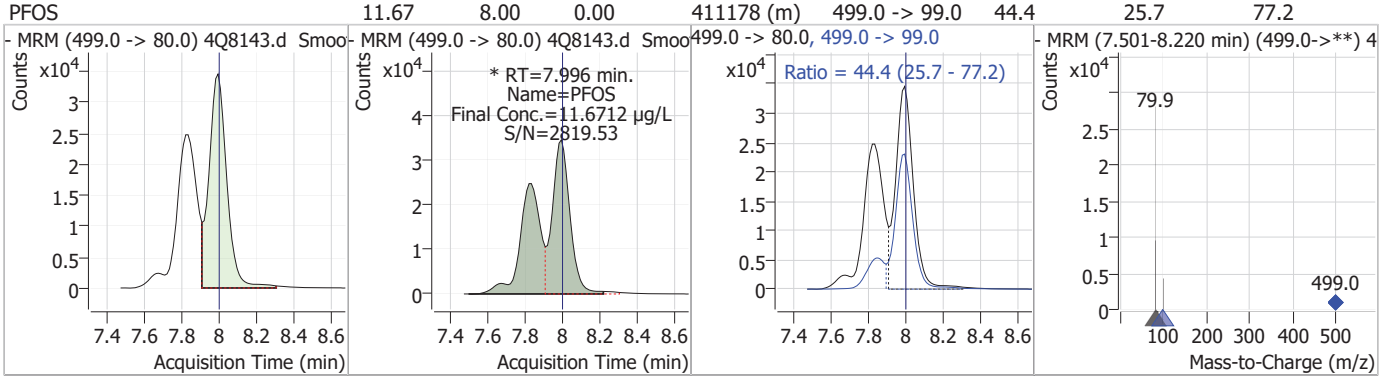
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.63	7.92	-0.01	244282				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.26	7.99	0.00	43713				

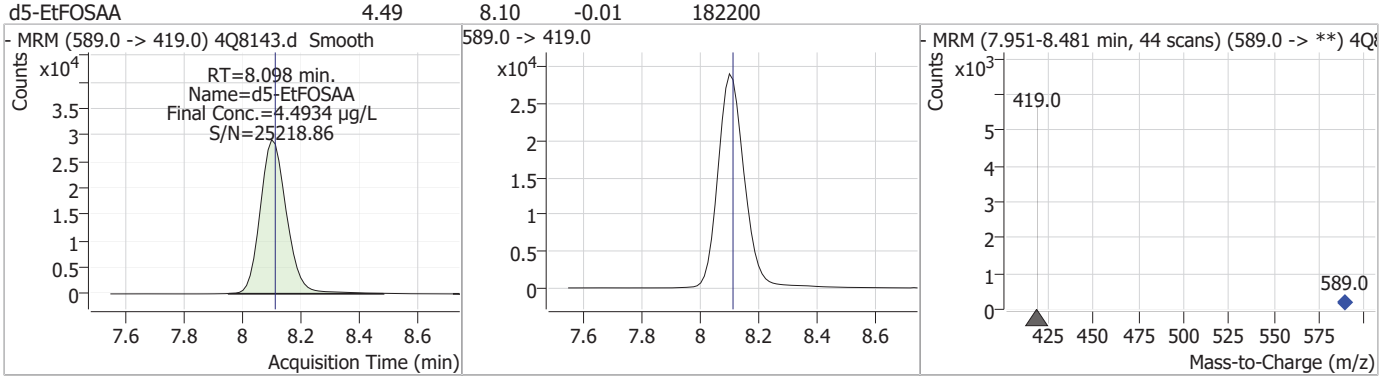


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	11.67	8.00	0.00	411178 (m)	499.0 -> 99.0	44.4	25.7	77.2

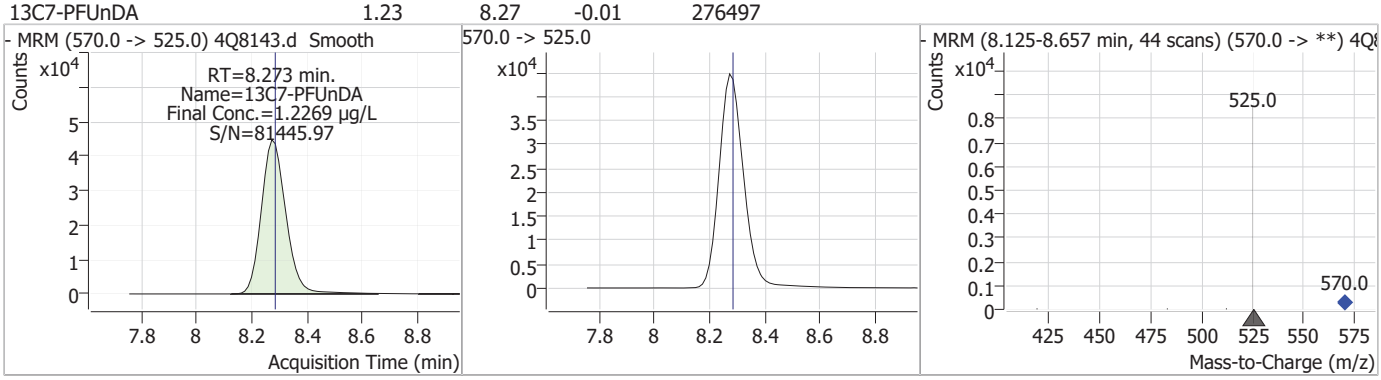


Perfluorinated Compounds by LC/MS/MS

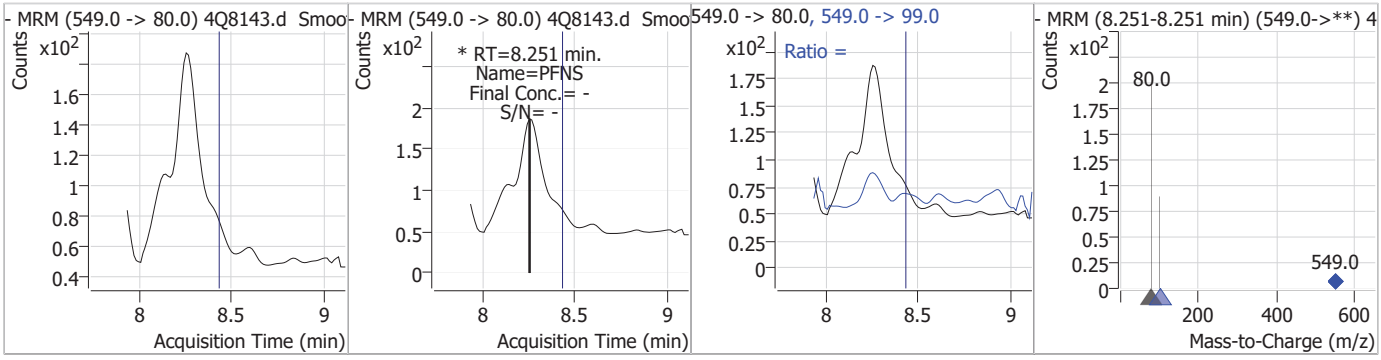
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.49	8.10	-0.01	182200				



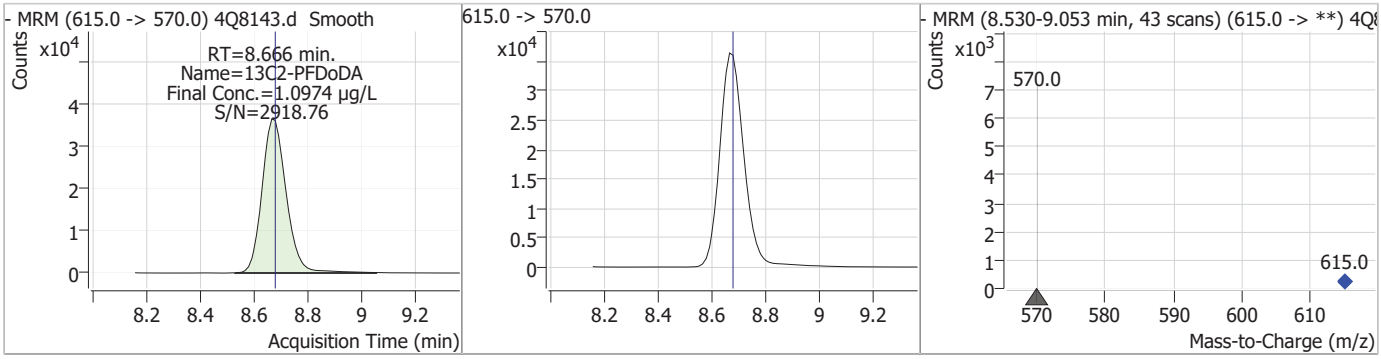
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.23	8.27	-0.01	276497				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS		0		0	549.0 -> 99.0		29.2	87.6

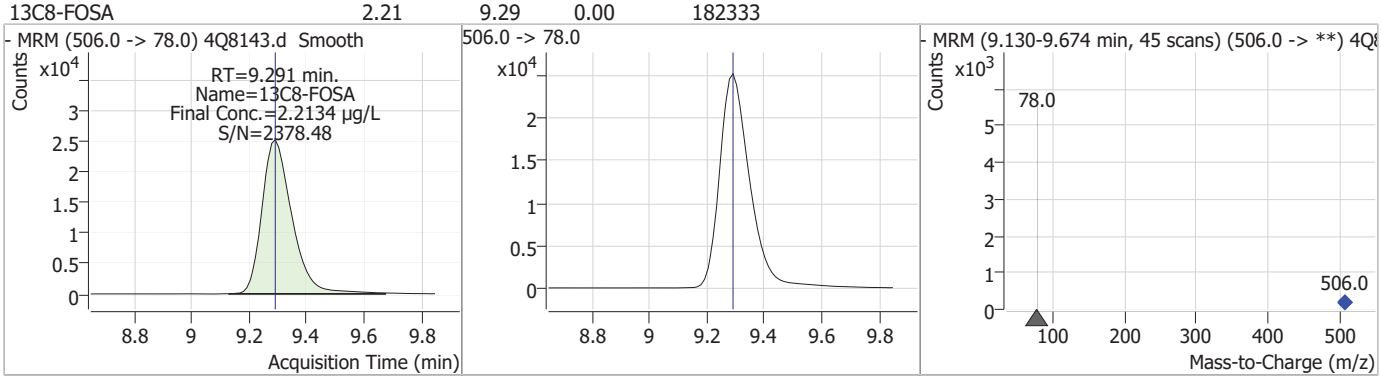


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.10	8.67	-0.01	226524				

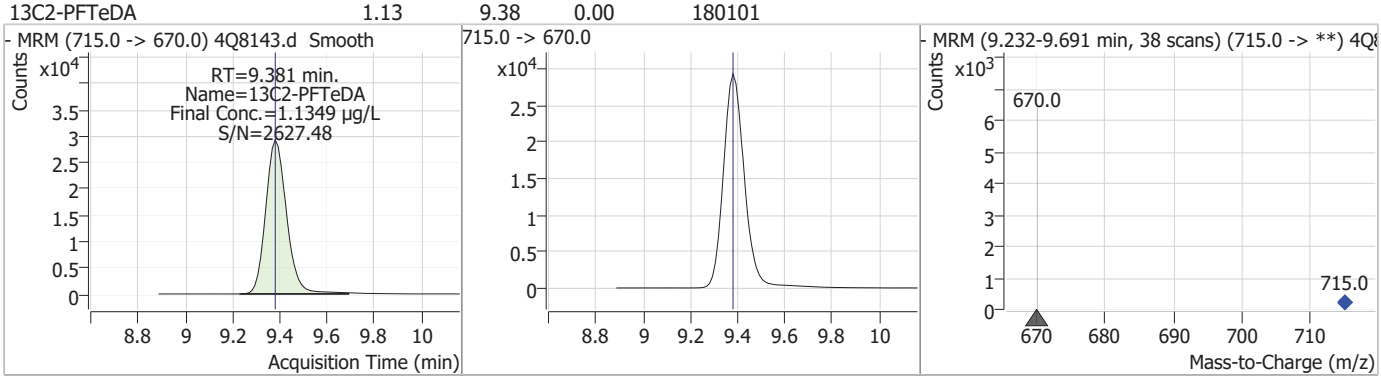


Perfluorinated Compounds by LC/MS/MS

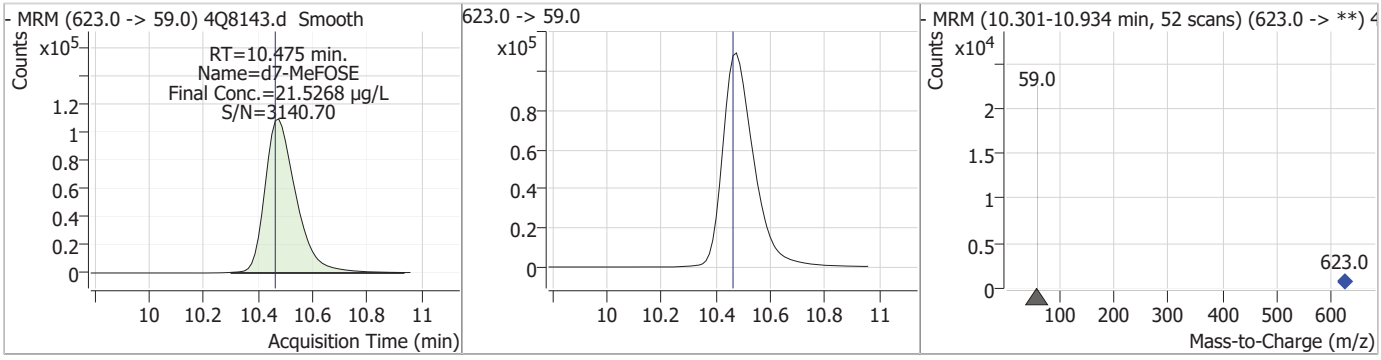
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.21	9.29	0.00	182333				



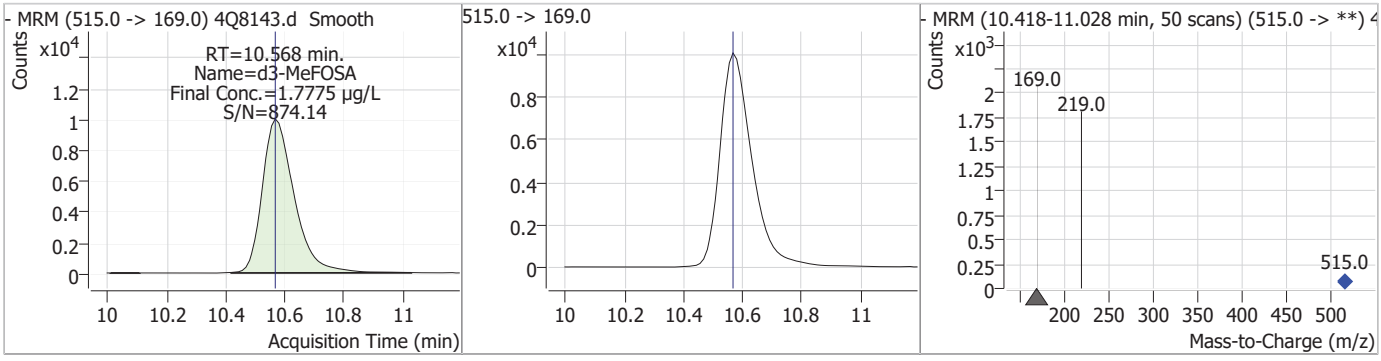
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.13	9.38	0.00	180101				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	21.53	10.47	0.01	869400				

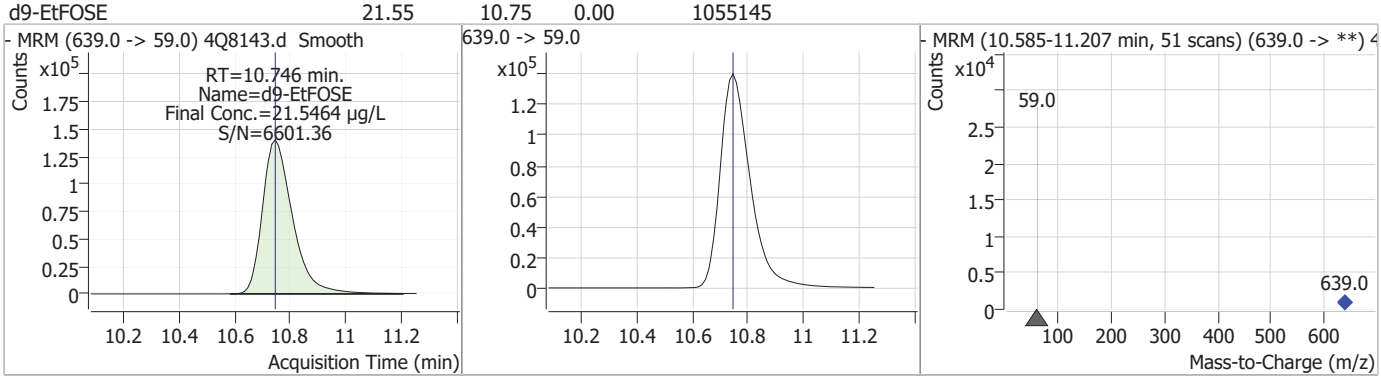


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.78	10.57	0.00	75192				

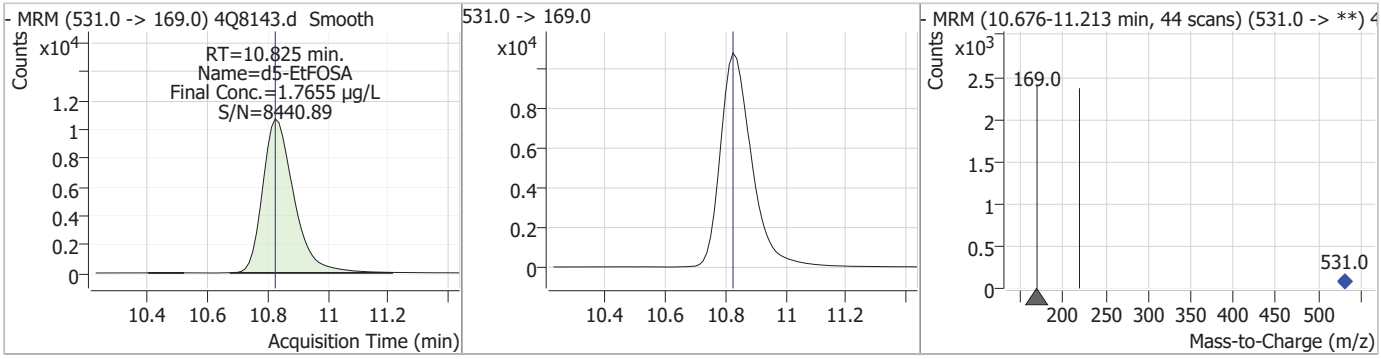


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	21.55	10.75	0.00	1055145				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.77	10.83	0.00	76963				



7.1.17

7

Manual Integration Approval Summary

Sample Number: JE10205-11
Lab FileID: 4Q8143.D
Injection Time: 04/30/25 17:53
Method: EPA 1633
Analyst approved: 05/01/25 04:45 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8144.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 6:06:40 PM
Sample Name : JE10205-12
Vial : P1-B7
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,520,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.858	217.0 -> 172.0	887497	10.00	µg/L	-0.025
M5-PFPeA	4.307	268.0 -> 223.0	387397	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	305180	2.50	µg/L	0.000
M4-PFHpA	6.279	367.0 -> 322.0	316529	2.50	µg/L	-0.012
M8-PFOA	6.897	421.0 -> 376.0	479363	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	202087	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	179525	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	245492	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	205096	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	152165	1.25	µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	178287	2.50	µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	27796	2.50	µg/L	-0.012
		302.0 -> 80.0	69236			
M3-PFHxS	6.986	402.0 -> 99.0	38183	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	42324	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	17807	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	30649	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	30626	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	213500	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	433108	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	158277	5.00	µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	795164	25.00	µg/L	0.012
M9-EtFOSE	10.746	639.0 -> 59.0	947743	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	68479	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	68596	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	76931	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	419820	5.00	µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	44976	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	502562	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	184041	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	214849	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	308781	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	17807	7.90	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 157.9%		
13C2-6:2FTS	6.684	429.0 -> 81.0	30649	6.26	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 125.2%		
13C2-8:2FTS	7.671	529.0 -> 81.0	30626	5.32	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.4%		
13C2-PFDoDA	8.666	615.0 -> 570.0	205096	1.03	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 82.5%		
13C2-PFTeDA	9.381	715.0 -> 670.0	152165	0.99	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 79.6%		
13C3-PFBS	5.355	302.0 -> 99.0	27796	2.50	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.2%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	38183	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.3%			
13C4-PFBA	2.858	217.0 -> 172.0	887497	9.22	µg/L		-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 92.2%			
13C4-PFHpA	6.279	367.0 -> 322.0	316529	2.28	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.1%			
13C5-PFHxA	5.452	318.0 -> 273.0	305180	2.33	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.4%			
13C5-PFPeA	4.307	268.0 -> 223.0	387397	3.91	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 78.1%			
13C6-PFDA	7.858	519.0 -> 474.0	179525	1.10	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.3%			
13C7-PFUnDA	8.273	570.0 -> 525.0	245492	1.13	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.4%			
13C8-FOSA	9.291	506.0 -> 78.0	178287	2.26	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.2%			
13C8-PFOA	6.897	421.0 -> 376.0	479363	2.39	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.5%			
13C8-PFOS	7.995	507.0 -> 99.0	42324	2.28	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.4%			
13C9-PFNA	7.403	472.0 -> 427.0	202087	1.13	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.7%			
d3-MeFOSAA	7.915	573.0 -> 419.0	213500	4.21	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 84.3%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	433108	8.44	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 84.4%			
d3-MeFOSA	10.567	515.0 -> 169.0	68596	1.69	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 67.6%			
d5-EtFOSAA	8.098	589.0 -> 419.0	158277	4.07	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 81.4%			
d7-MeFOSE	10.475	623.0 -> 59.0	795164	20.52	µg/L		0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 82.1%			
d9-EtFOSE	10.746	639.0 -> 59.0	947743	20.17	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 80.7%			
d5-EtFOSA	10.825	531.0 -> 169.0	68479	1.64	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 65.5%			
Target Compounds							QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.			
		327.0 -> 81.0					
6:2FTS	6.684	427.0 -> 407.0	15593	0.51	µg/L		96
		427.0 -> 81.0	7740				
8:2FTS	-	527.0 -> 507.0	-	N.D.			
		527.0 -> 81.0					
EtFOSAA	-	584.0 -> 419.0	-	N.D.			
		584.0 -> 483.0					
FOSA	9.281	498.0 -> 78.0	44753	0.69	µg/L	m	97
		498.0 -> 478.0	1766				
MeFOSAA	-	570.0 -> 419.0	-	N.D.			
		570.0 -> 512.0					
PFBA	2.864	213.0 -> 169.0	68242	2.52	µg/L	m	100
PFBS	5.357	299.0 -> 80.0	13161	0.41	µg/L		90
		299.0 -> 99.0	6182				
PFDA	7.859	513.0 -> 469.0	21370	0.16	µg/L		96
		513.0 -> 219.0	4555				
PFDoDA	-	613.0 -> 569.0	-	N.D.			
		613.0 -> 319.0					

Perfluorinated Compounds by LC/MS/MS

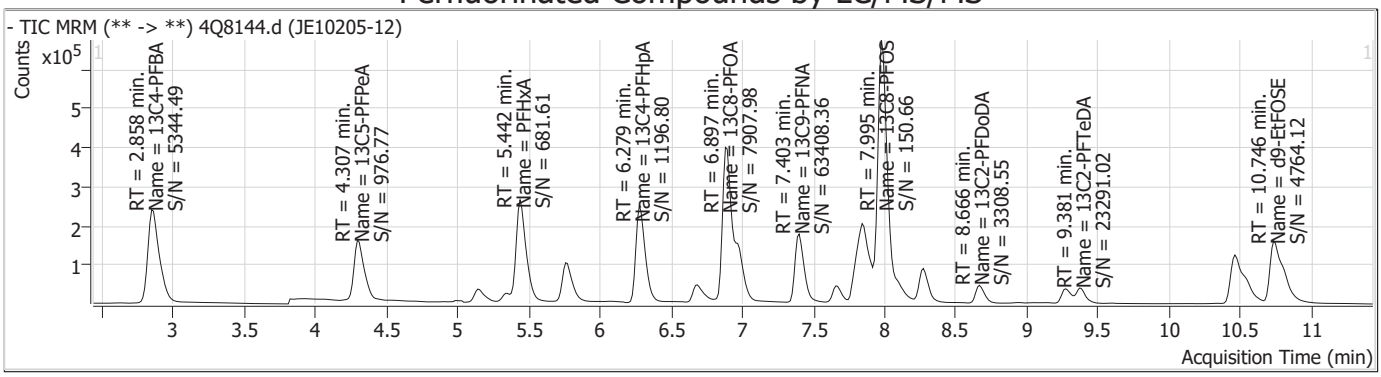
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.292	363.0 -> 319.0	698300	3.63	µg/L		98
		363.0 -> 169.0	137736				
PFHpS	7.529	449.0 -> 80.0	5942	0.18	µg/L		98
		449.0 -> 99.0	3345				
PFHxA	5.442	313.0 -> 269.0	654173	4.97	µg/L		99
		313.0 -> 119.0	20090				
PFHxS	6.987	399.0 -> 80.0	271235	8.16	µg/L	m	96
		399.0 -> 99.0	138517				
PFNA	7.404	463.0 -> 419.0	310155	2.55	µg/L		84
		463.0 -> 219.0	85688				
PFNS	8.412	549.0 -> 80.0	330	0.01	µg/L	m	72
		549.0 -> 99.0	262				
PFOA	6.898	413.0 -> 369.0	693370	4.35	µg/L	m	98
		413.0 -> 169.0	195281				
PFOS	7.996	499.0 -> 80.0	826787	24.24	µg/L	m	95
		499.0 -> 99.0	452006				
PFPeA	4.309	263.0 -> 219.0	419432	6.85	µg/L		100
PFPeS	6.318	349.0 -> 80.0	14119	0.41	µg/L		94
		349.0 -> 99.0	6569				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	9.025	663.0 -> 619.0	5633	0.03	µg/L	m	97
		663.0 -> 369.0	284				
PFUnDA	8.275	563.0 -> 519.0	117250	0.81	µg/L	m	100
		563.0 -> 269.0	23690				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

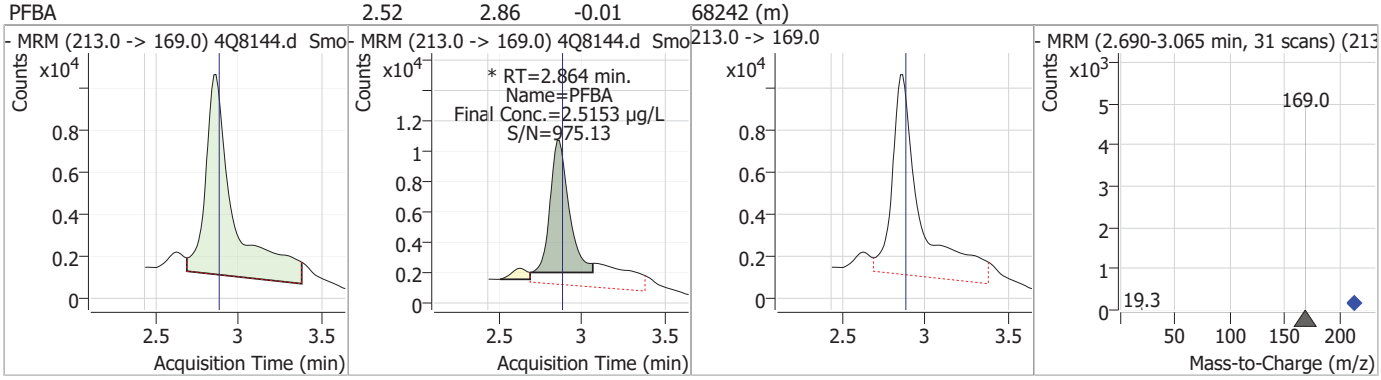
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

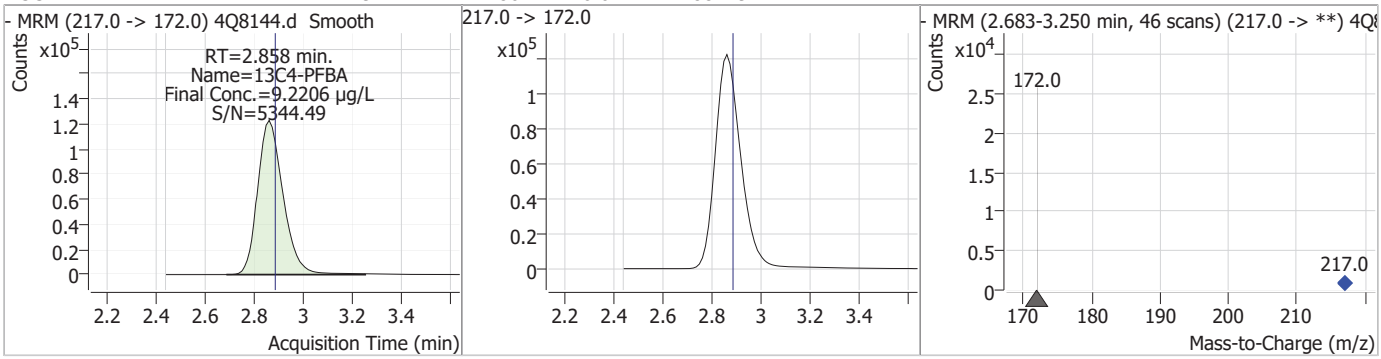
Perfluorinated Compounds by LC/MS/MS



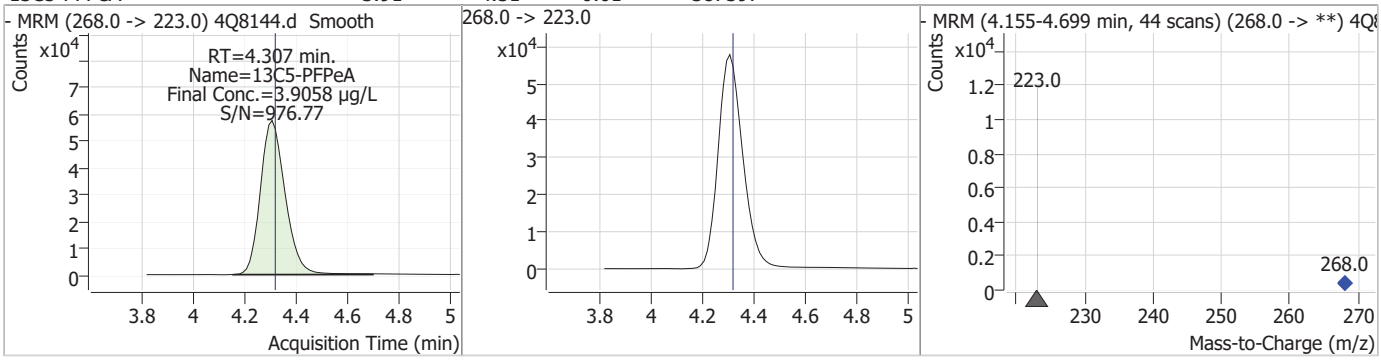
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	2.52	2.86	-0.01	68242 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.22	2.86	-0.02	887497				

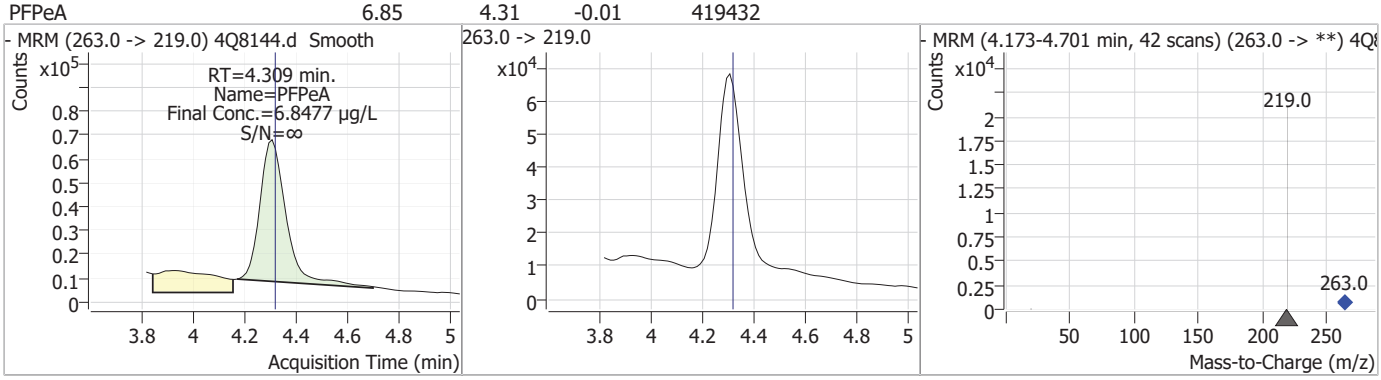


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	3.91	4.31	-0.01	387397				

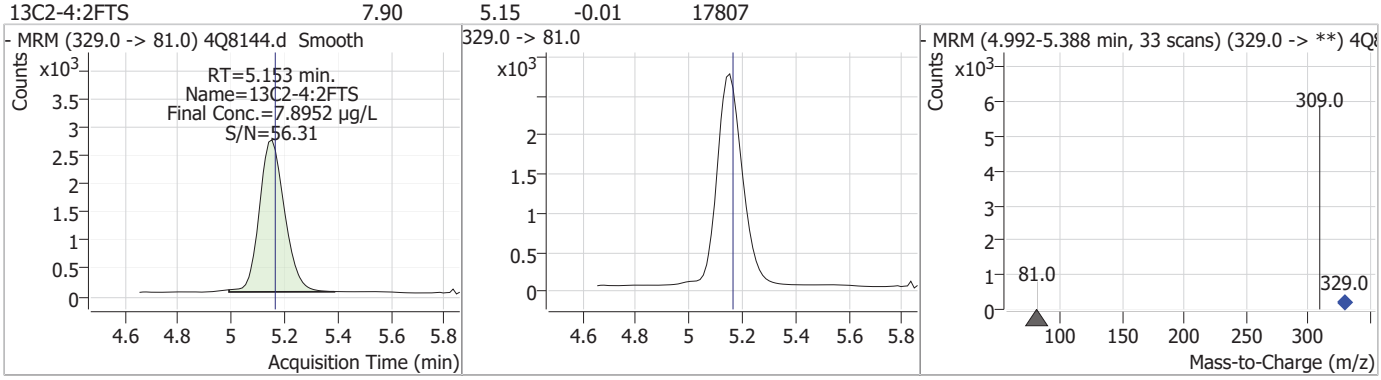


Perfluorinated Compounds by LC/MS/MS

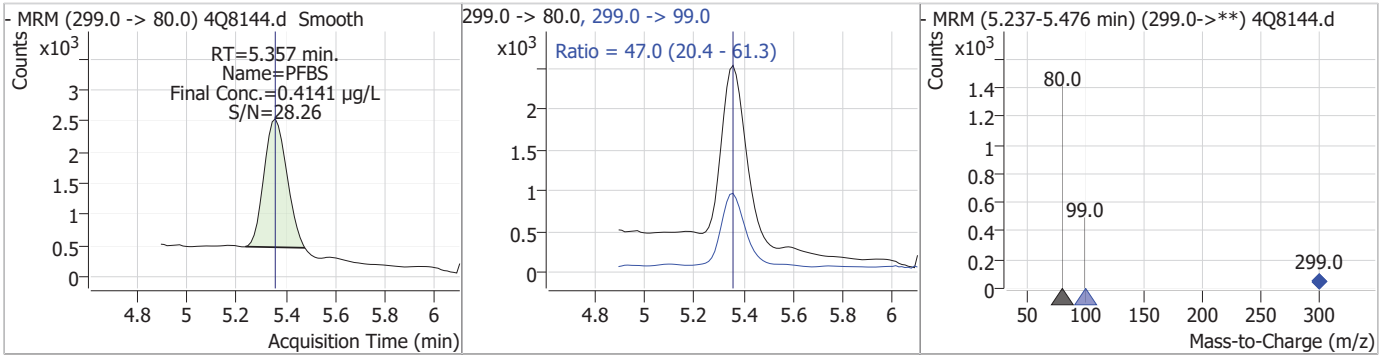
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	6.85	4.31	-0.01	419432				



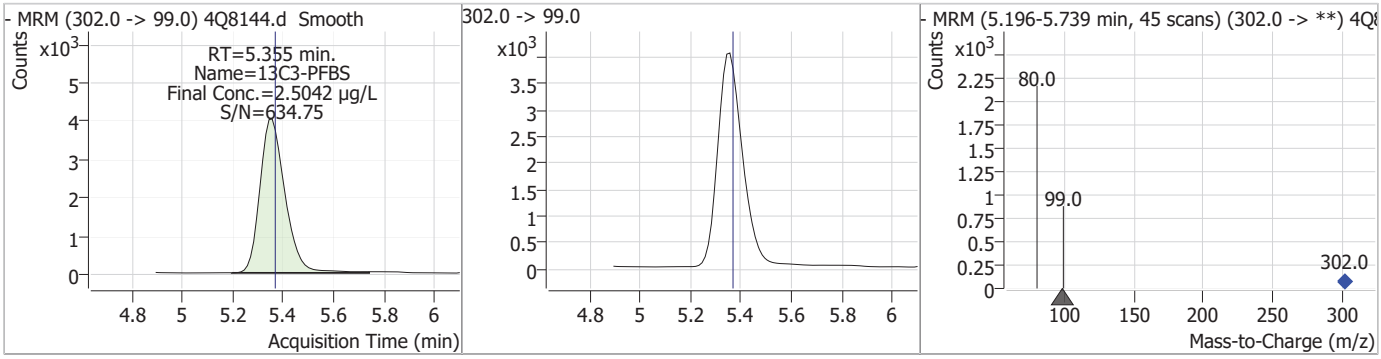
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	7.90	5.15	-0.01	17807				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.41	5.36	0.00	13161	299.0 -> 99.0	47.0	20.4	61.3

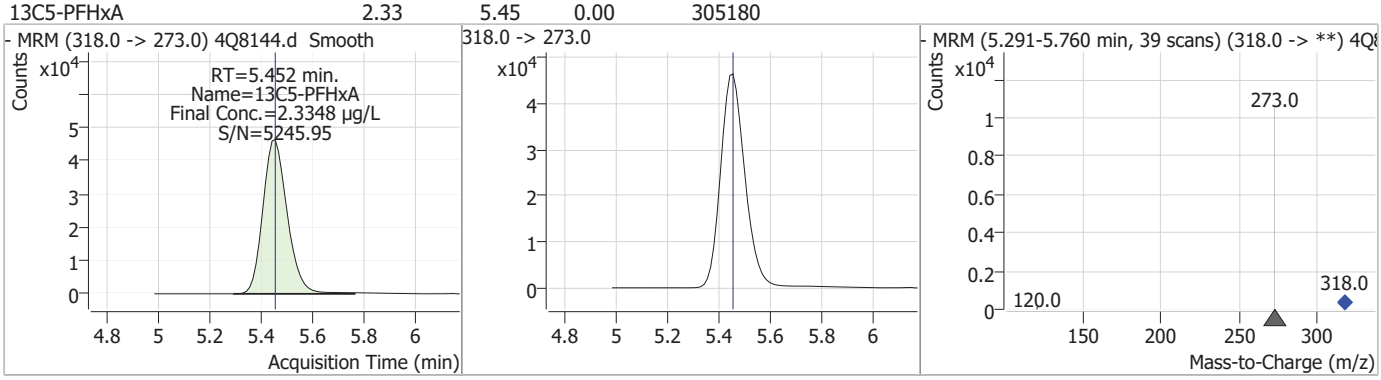


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.50	5.36	-0.01	27796				

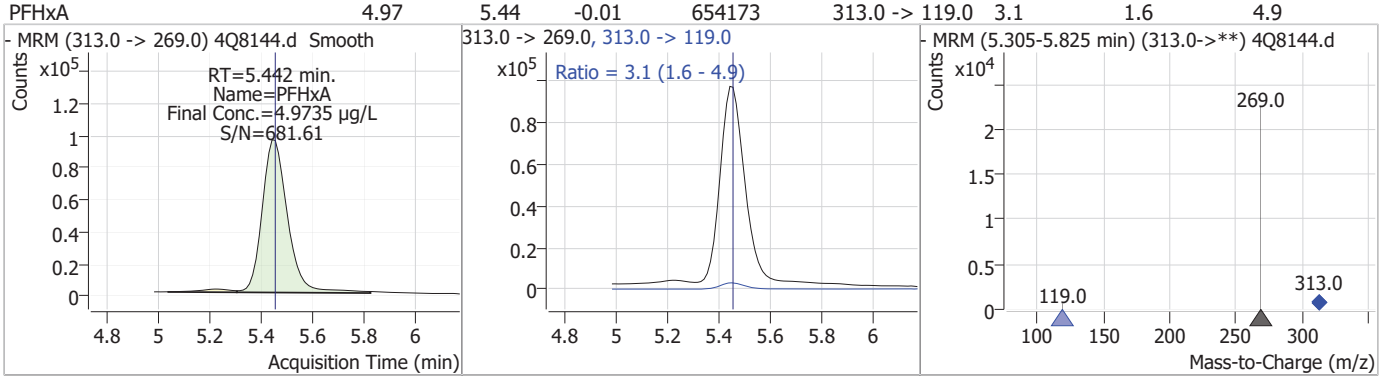


Perfluorinated Compounds by LC/MS/MS

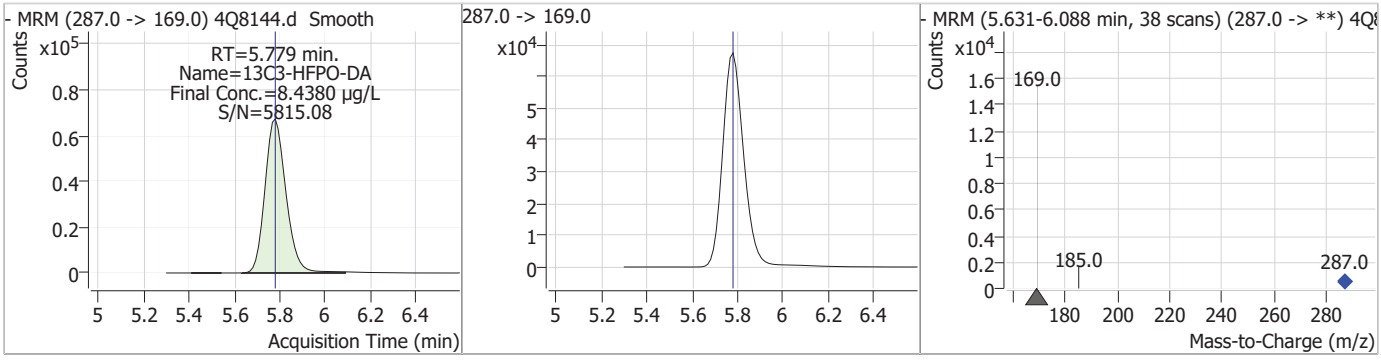
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.33	5.45	0.00	305180				



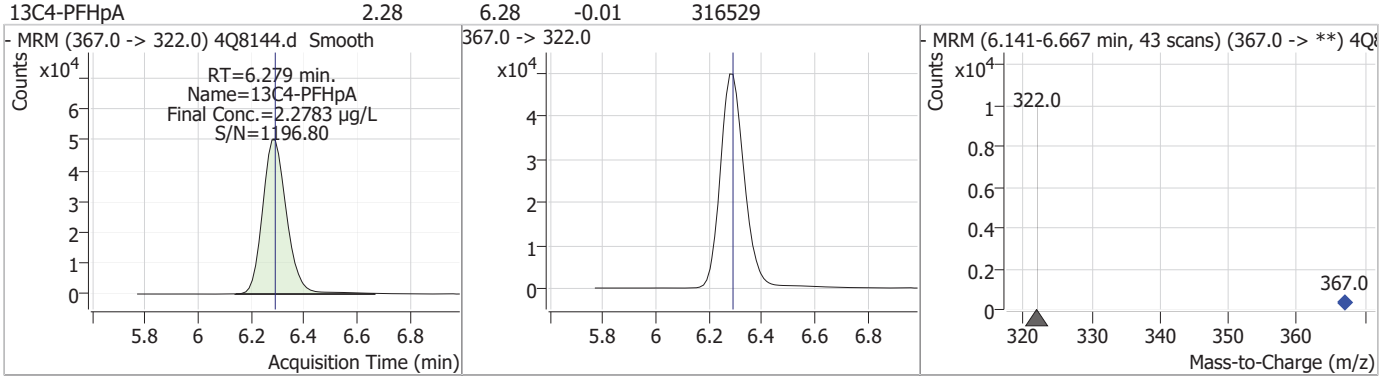
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	4.97	5.44	-0.01	654173	313.0 -> 119.0	3.1	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.44	5.78	0.00	433108				

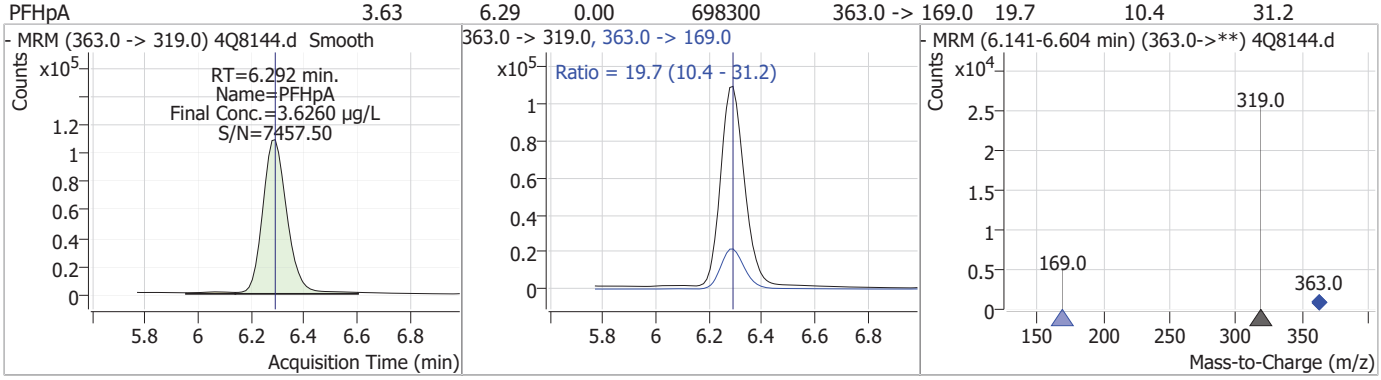


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.28	6.28	-0.01	316529				

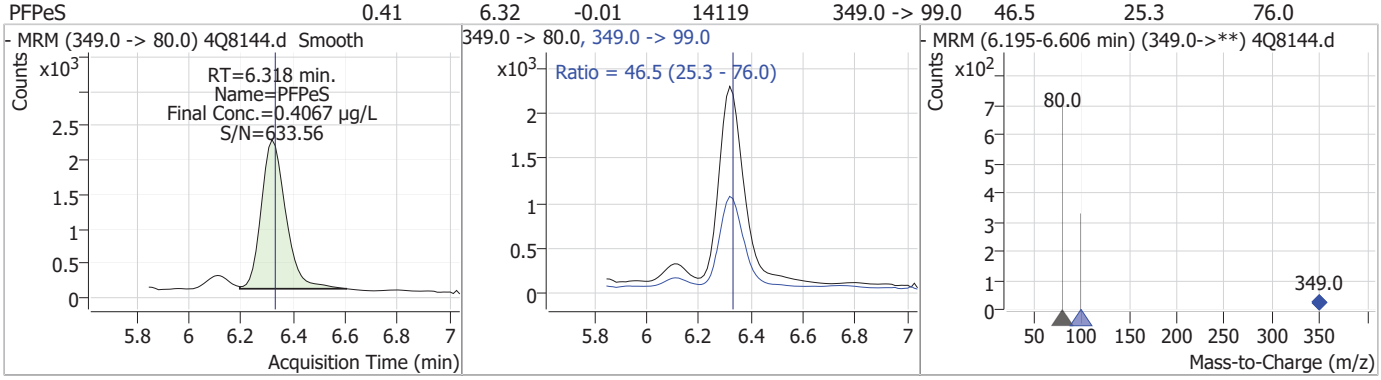


Perfluorinated Compounds by LC/MS/MS

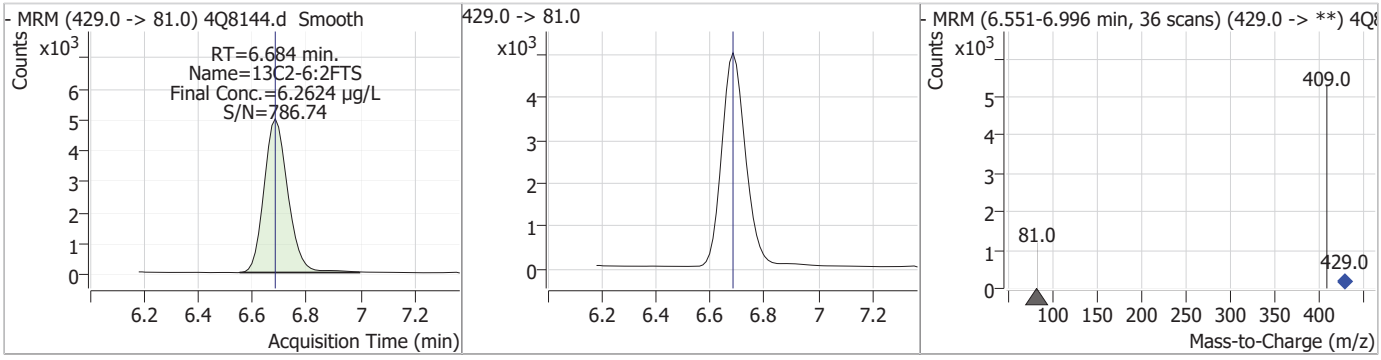
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	3.63	6.29	0.00	698300	363.0 -> 169.0	19.7	10.4	31.2



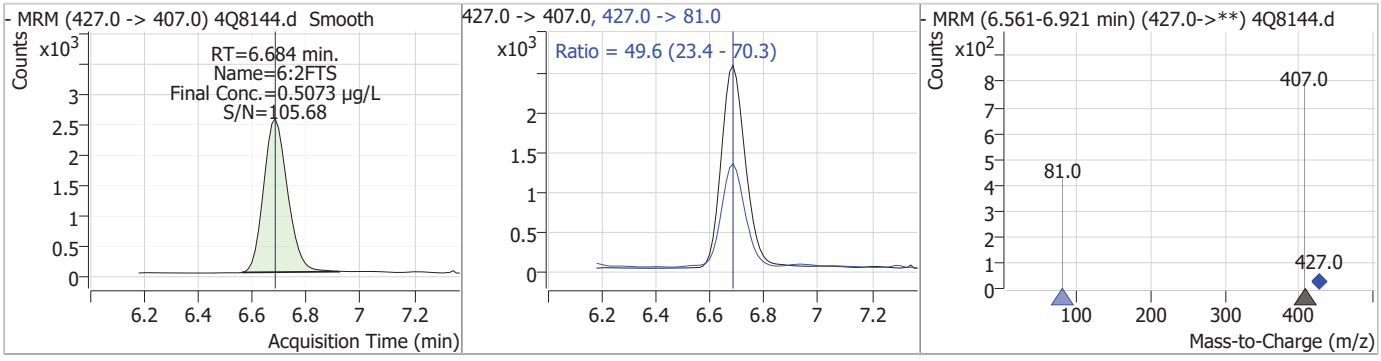
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.41	6.32	-0.01	14119	349.0 -> 99.0	46.5	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	6.26	6.68	0.00	30649				

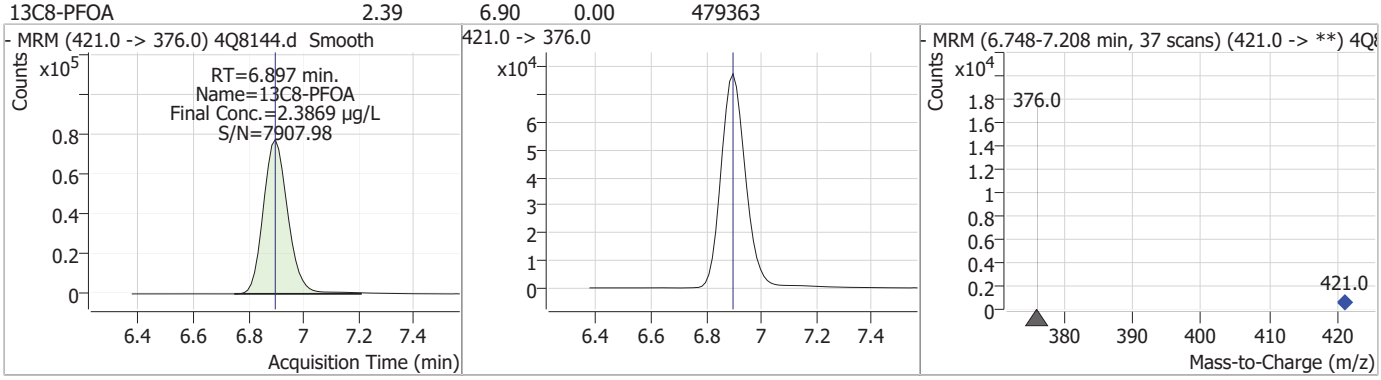


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.51	6.68	0.00	15593	427.0 -> 81.0	49.6	23.4	70.3

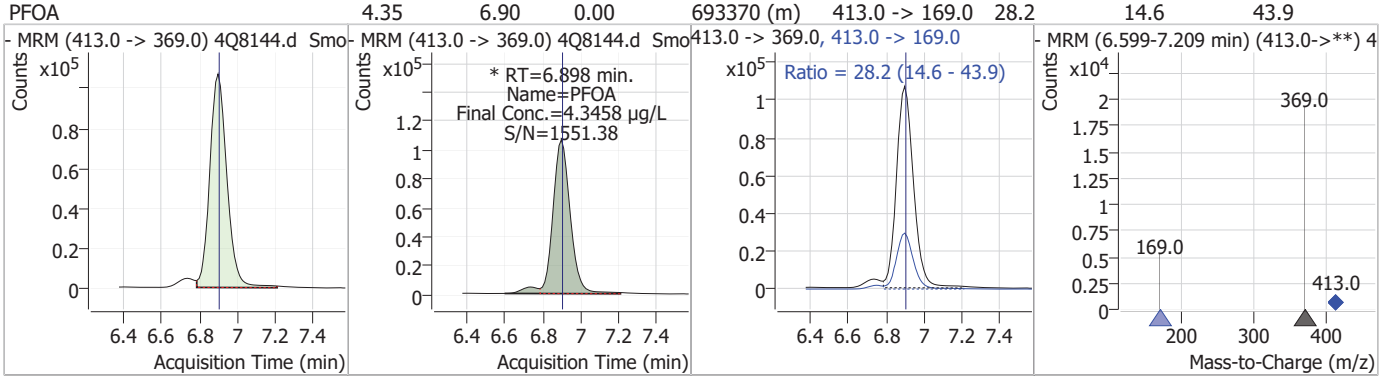


Perfluorinated Compounds by LC/MS/MS

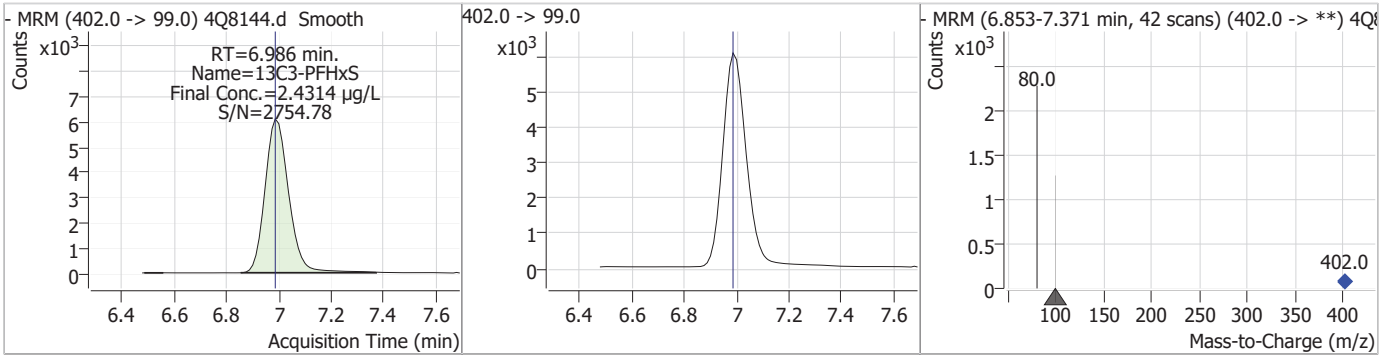
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.39	6.90	0.00	479363				



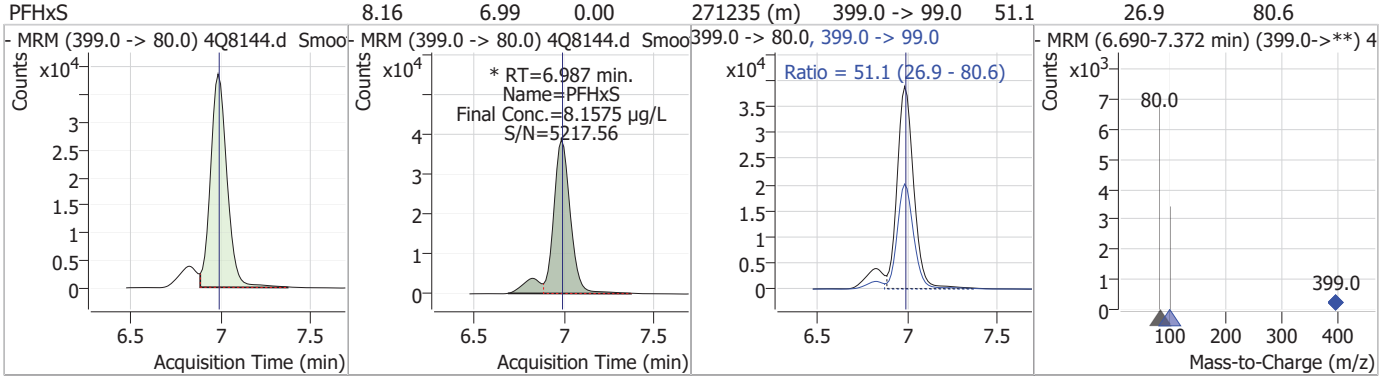
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	4.35	6.90	0.00	693370 (m)	413.0 -> 169.0	28.2	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.43	6.99	0.00	38183				

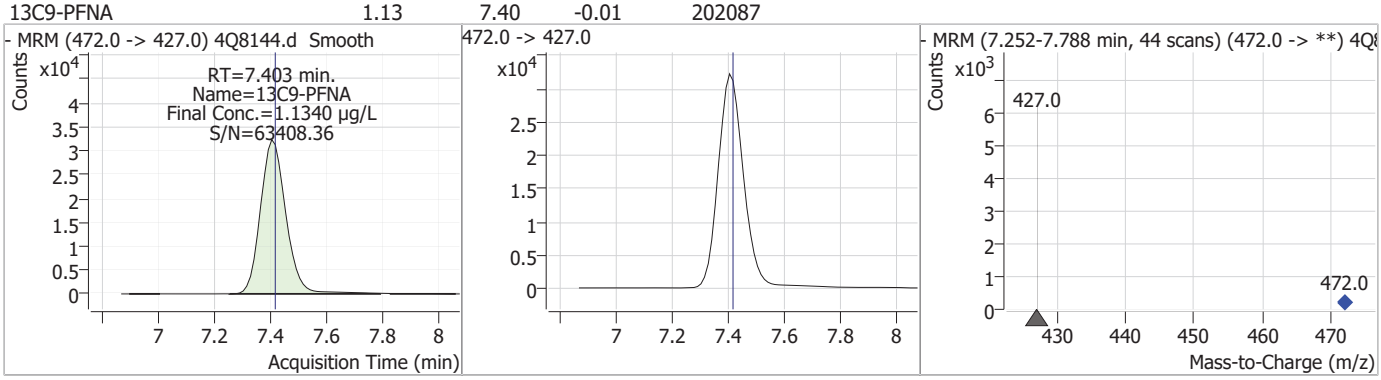


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	8.16	6.99	0.00	271235 (m)	399.0 -> 99.0	51.1	26.9	80.6

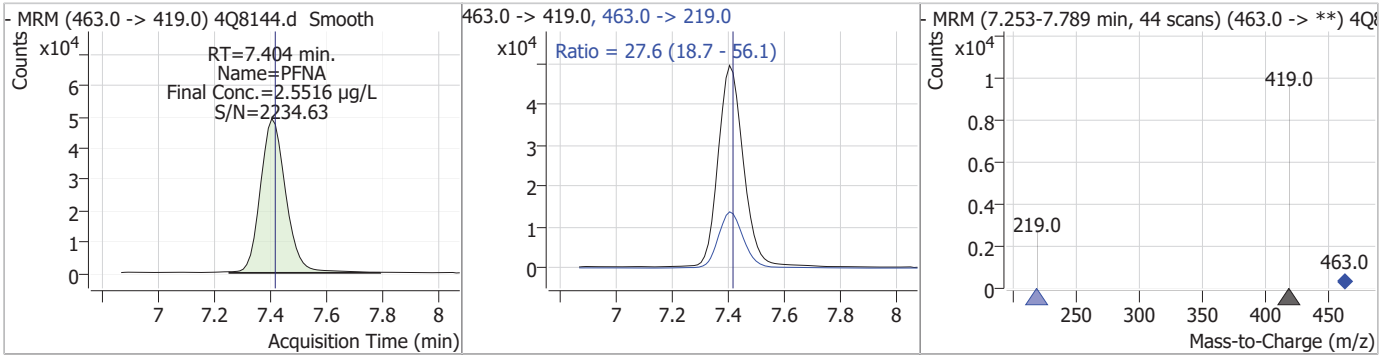


Perfluorinated Compounds by LC/MS/MS

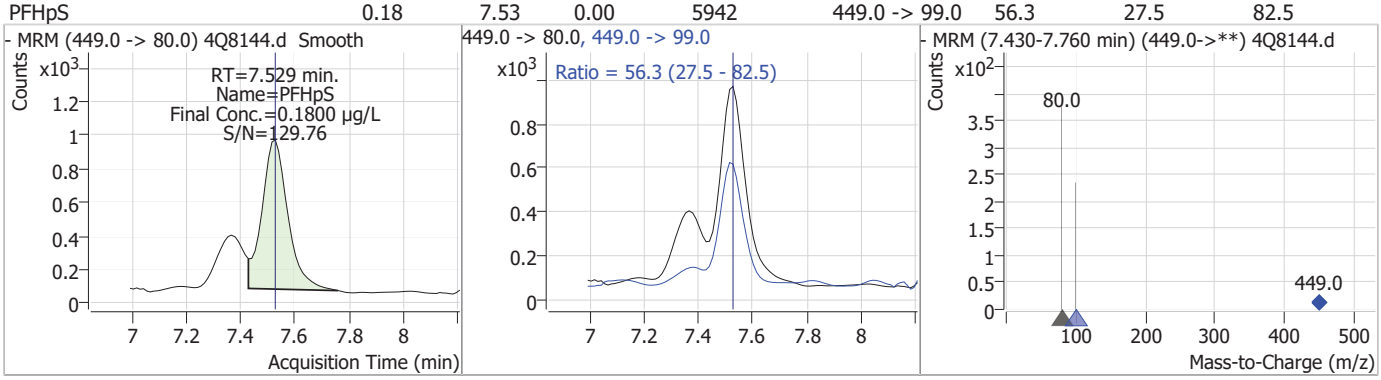
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.13	7.40	-0.01	202087				



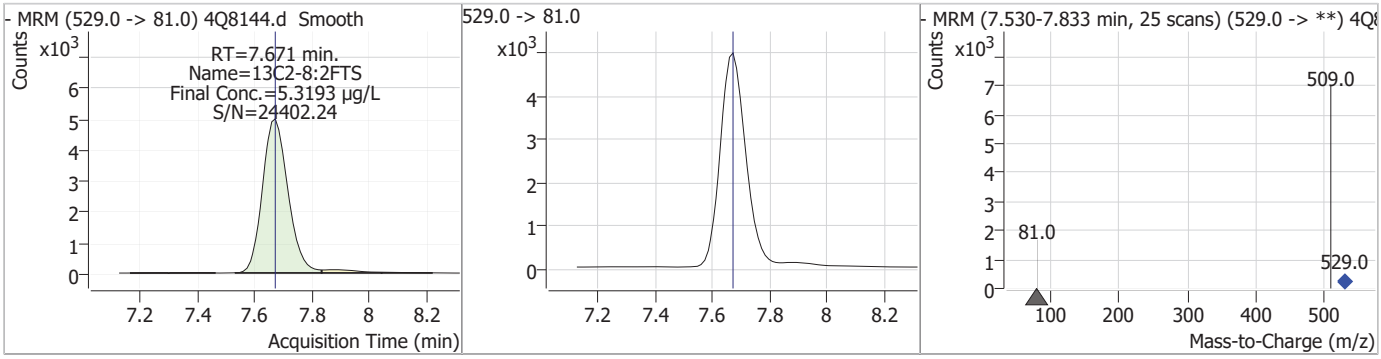
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.55	7.40	-0.01	310155	463.0 -> 219.0	27.6	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.18	7.53	0.00	5942	449.0 -> 99.0	56.3	27.5	82.5

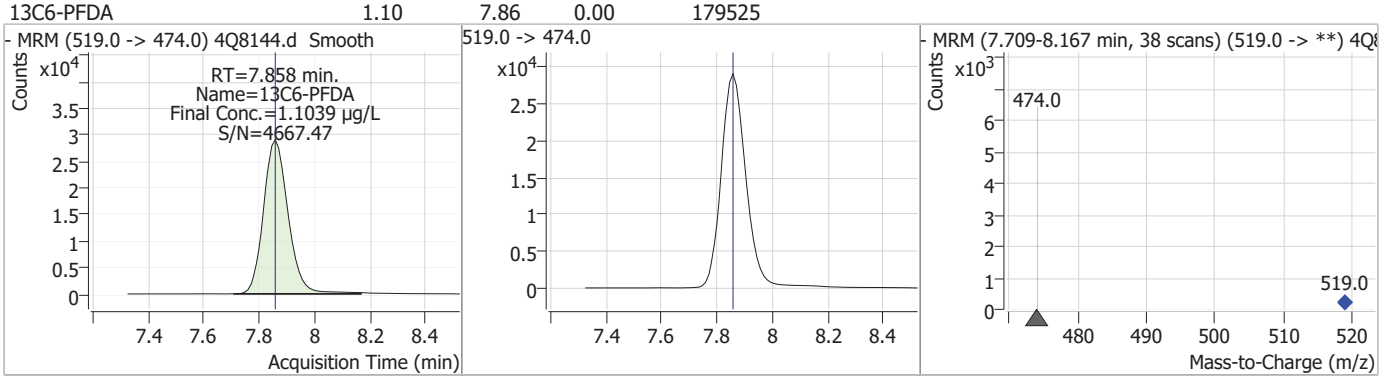


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.32	7.67	0.00	30626				

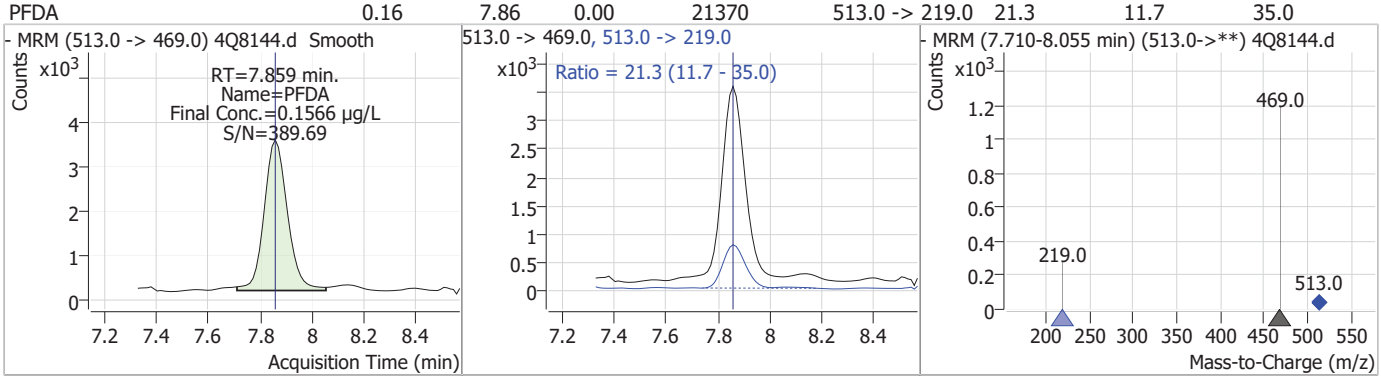


Perfluorinated Compounds by LC/MS/MS

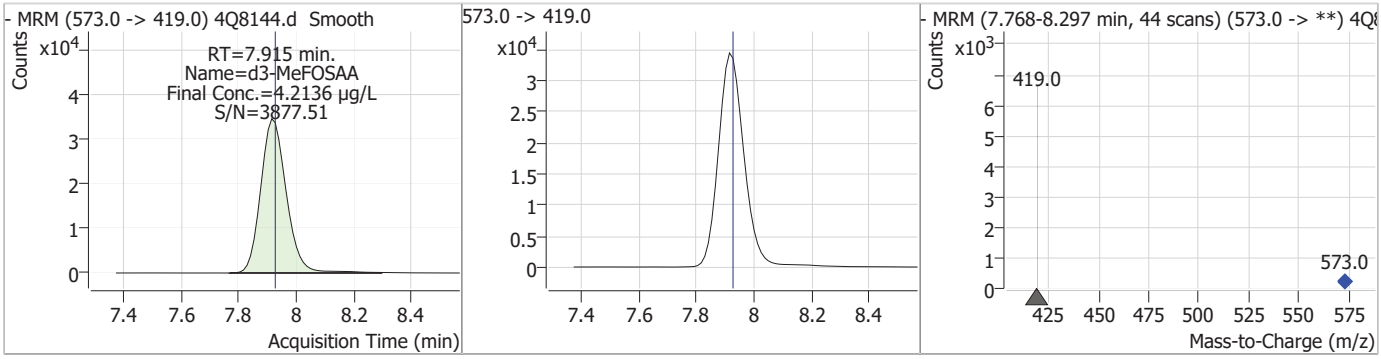
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.10	7.86	0.00	179525				



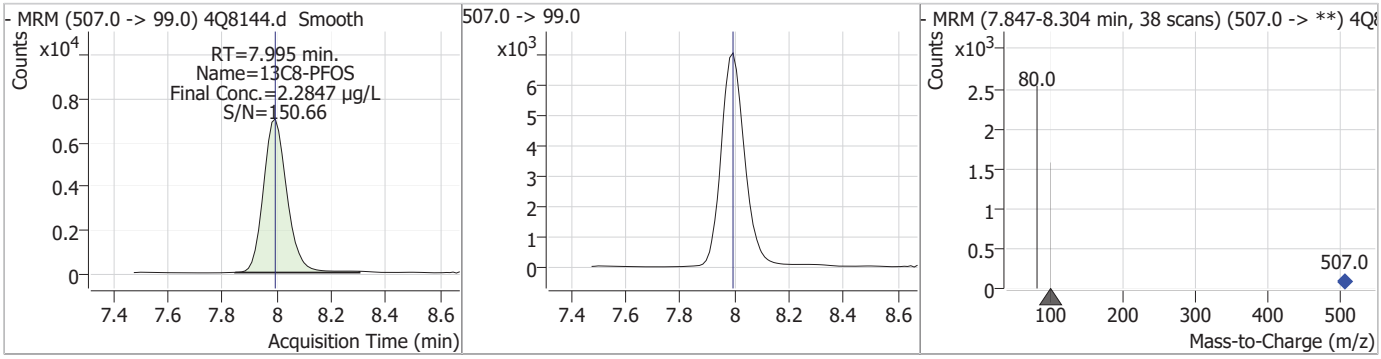
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.16	7.86	0.00	21370	513.0 -> 219.0	21.3	11.7	35.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.21	7.92	-0.01	213500				

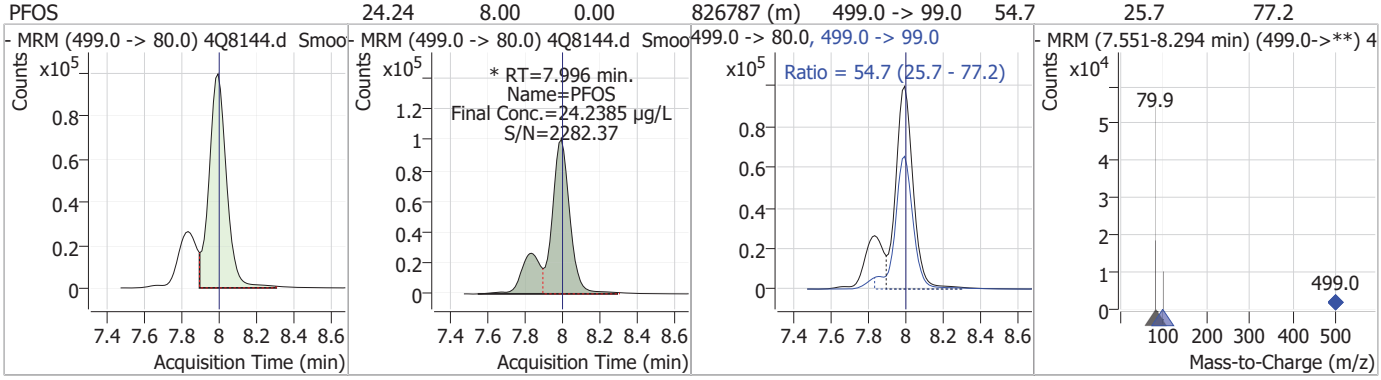


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.28	7.99	0.00	42324				

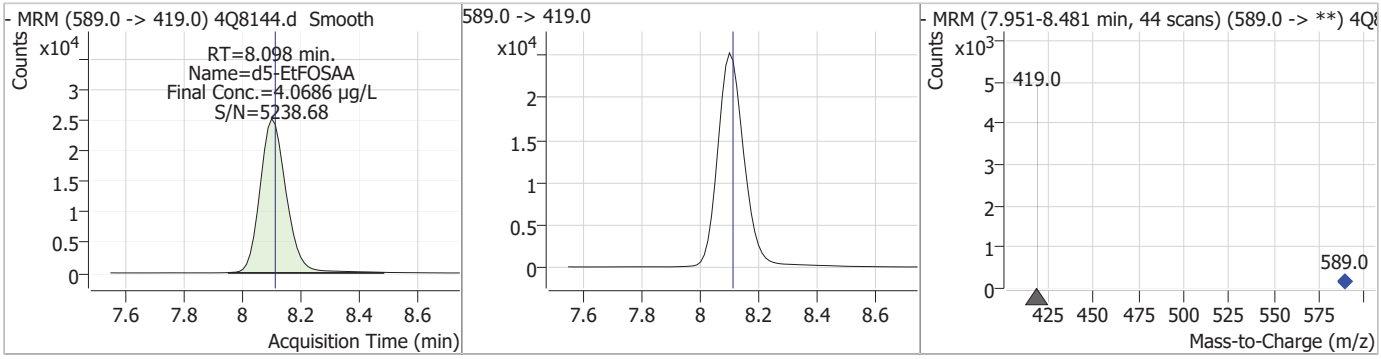


Perfluorinated Compounds by LC/MS/MS

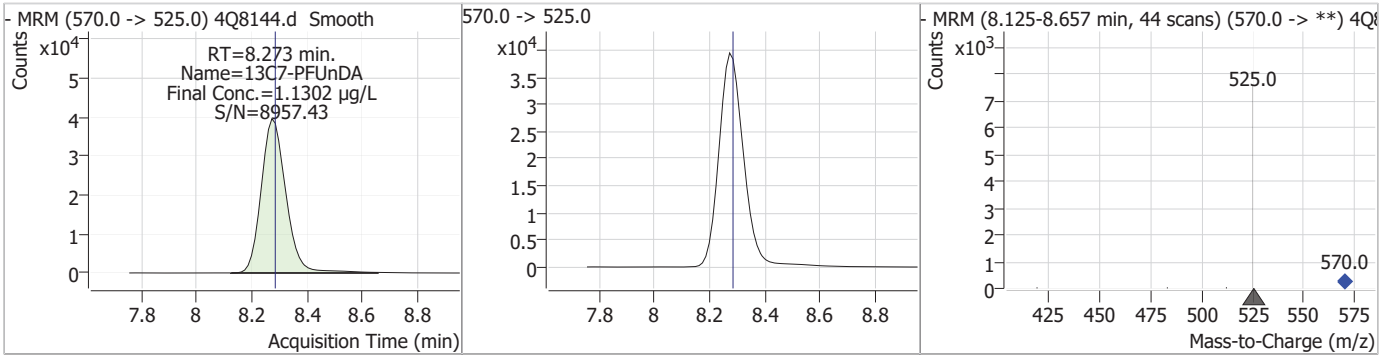
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	24.24	8.00	0.00	826787 (m)	499.0 -> 99.0	54.7	25.7	77.2



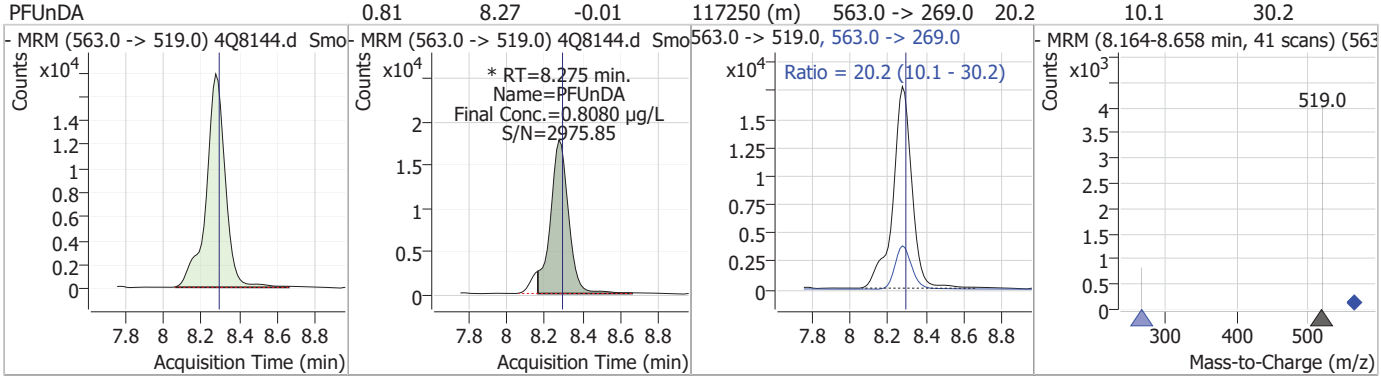
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.07	8.10	-0.01	158277				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.13	8.27	-0.01	245492				

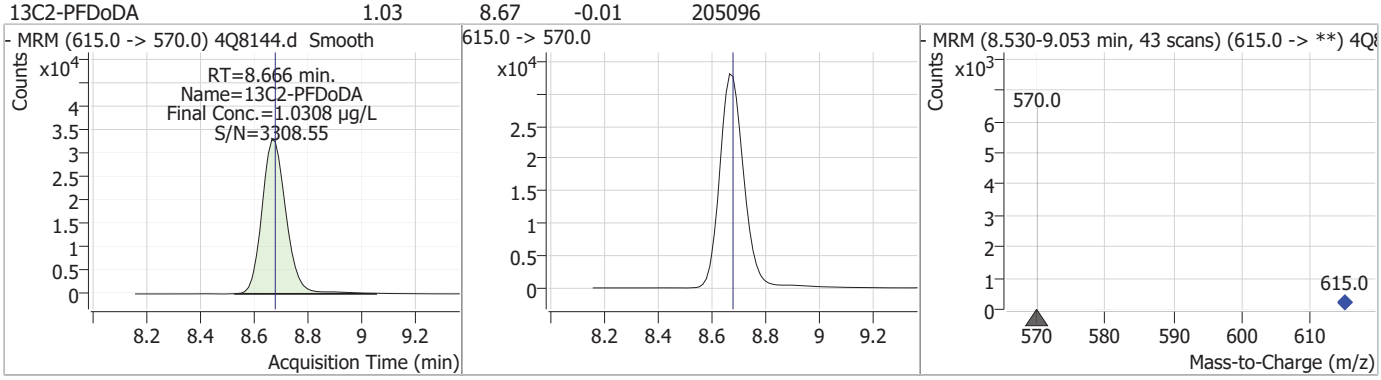


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.81	8.27	-0.01	117250 (m)	563.0 -> 269.0	20.2	10.1	30.2

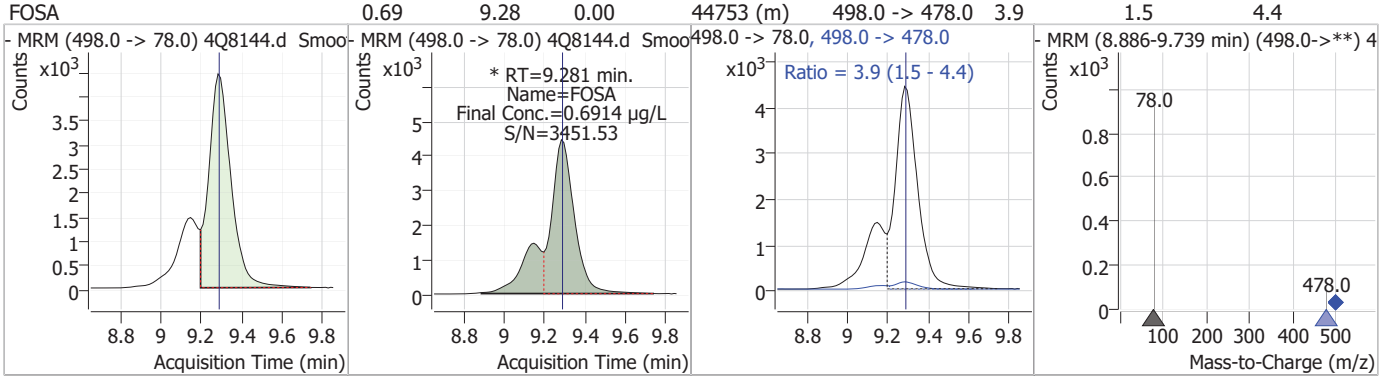


Perfluorinated Compounds by LC/MS/MS

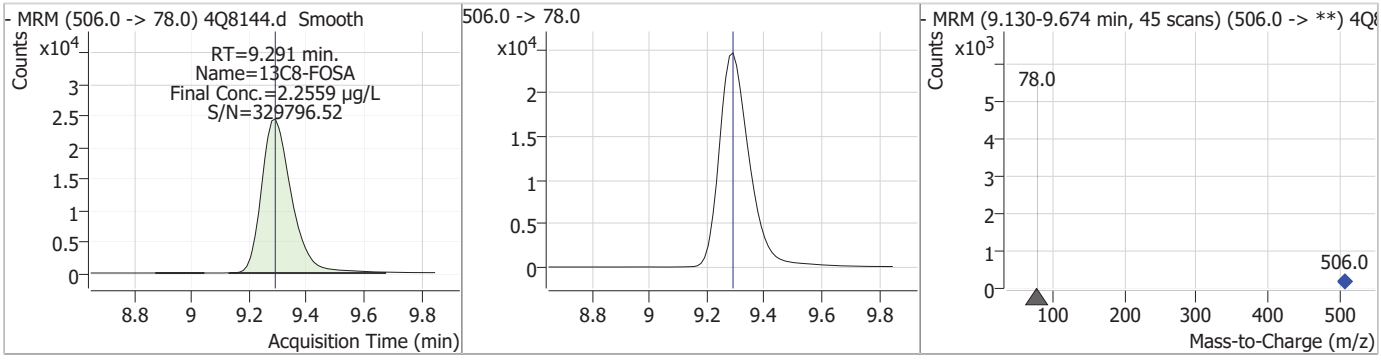
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.03	8.67	-0.01	205096				



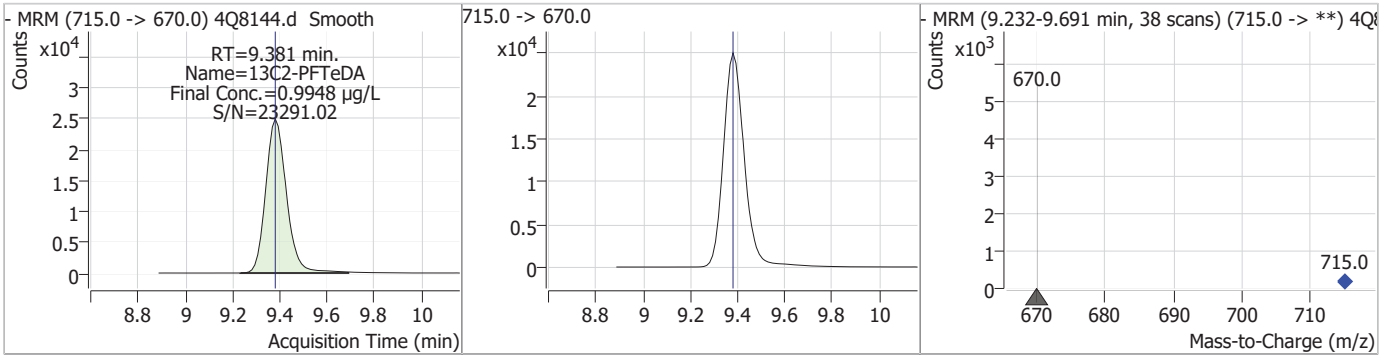
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.69	9.28	0.00	44753 (m)	498.0 -> 478.0	3.9	1.5	4.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.26	9.29	0.00	178287				

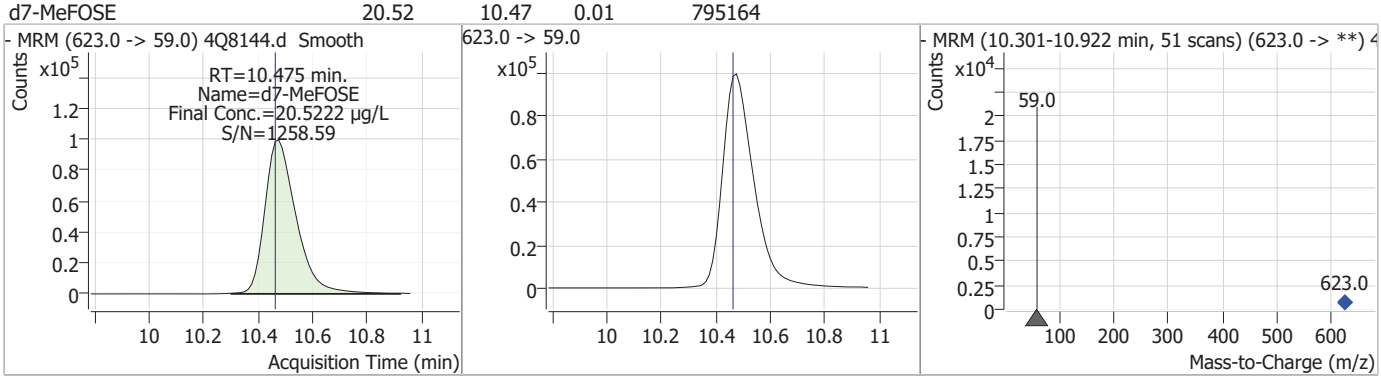


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.99	9.38	0.00	152165				

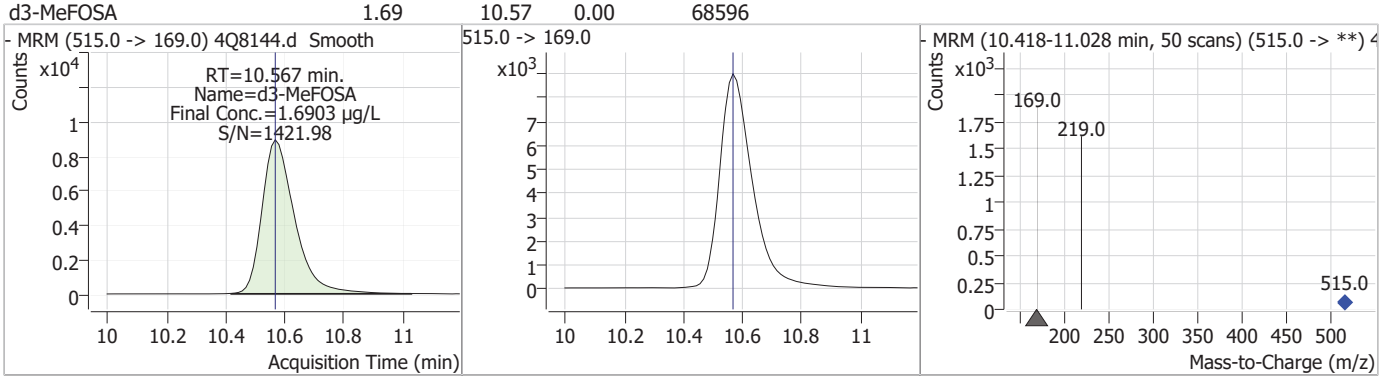


Perfluorinated Compounds by LC/MS/MS

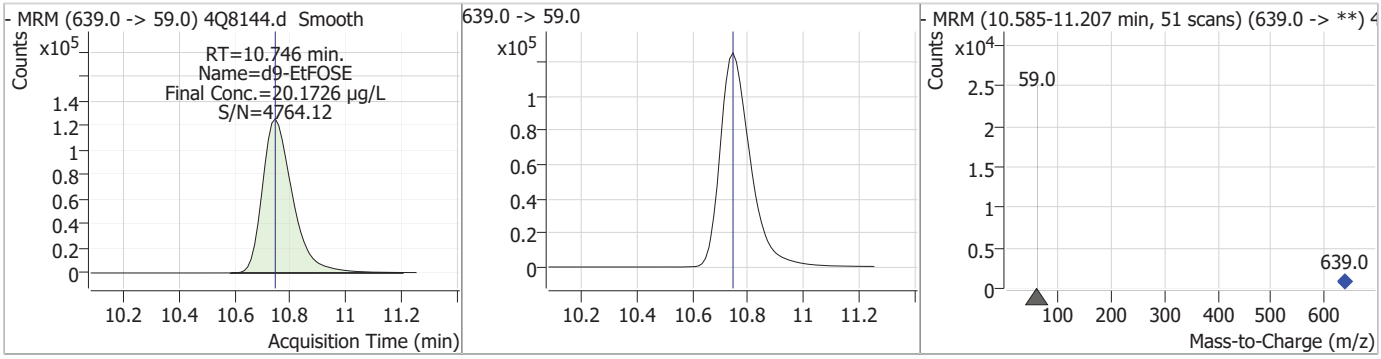
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	20.52	10.47	0.01	795164				



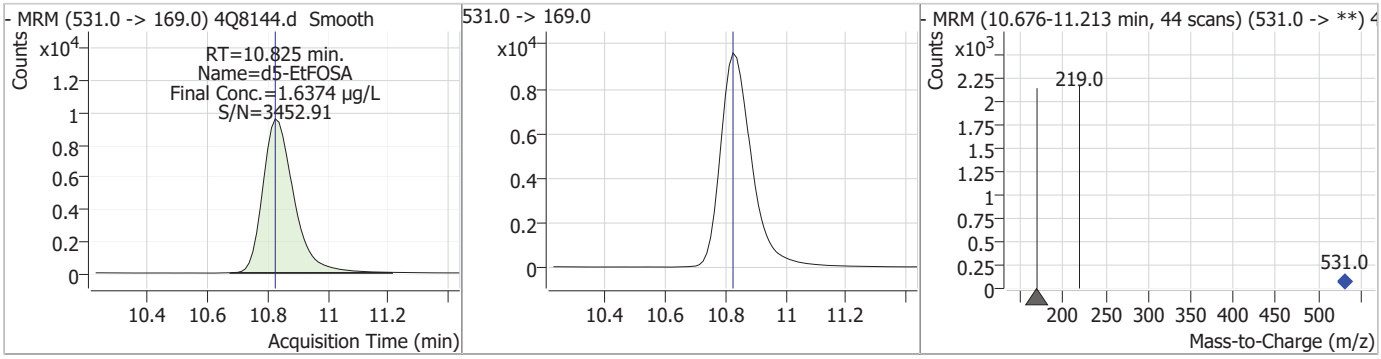
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.69	10.57	0.00	68596				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	20.17	10.75	0.00	947743				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.64	10.82	0.00	68479				



Manual Integration Approval Summary

Sample Number: JE10205-12
Lab FileID: 4Q8144.D
Injection Time: 04/30/25 18:06
Method: EPA 1633
Analyst approved: 05/01/25 04:45 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorobutanoic acid	375-22-4		2.86	Poor instrument integration
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
Perfluoroundecanoic acid	2058-94-8		8.28	Poor instrument integration
Perfluorononanesulfonic acid	68259-12-1		8.41	Poor instrument integration
Perfluorotridecanoic acid	72629-94-8		9.03	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/06/25 06:20

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8145.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 6:20:15 PM
Sample Name : JE10205-13
Vial : P1-B8
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,506,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.858	217.0 -> 172.0	869016	10.00	µg/L	-0.025
M5-PFPeA	4.307	268.0 -> 223.0	425837	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	310437	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	327470	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	495578	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	205454	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	187884	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	256125	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	230975	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	166622	1.25	µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	189166	2.50	µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	27207	2.50	µg/L	-0.012
		302.0 -> 80.0	70144			
M3-PFHxS	6.986	402.0 -> 99.0	37612	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	38885	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	15291	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	29214	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	32543	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	214620	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	464400	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	168323	5.00	µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	846826	25.00	µg/L	0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1043462	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	84581	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	79499	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	71258	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	396635	5.00	µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	45996	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	510334	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	181208	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	208499	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	304271	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	15291	6.63	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 132.6%		
13C2-6:2FTS	6.684	429.0 -> 81.0	29214	5.84	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 116.7%		
13C2-8:2FTS	7.671	529.0 -> 81.0	32543	5.53	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 110.5%		
13C2-PFDoDA	8.666	615.0 -> 570.0	230975	1.18	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.3%		
13C2-PFTeDA	9.381	715.0 -> 670.0	166622	1.11	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.5%		
13C3-PFBS	5.355	302.0 -> 99.0	27207	2.40	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.9%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	37612	2.34 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.7%		
13C4-PFBA	2.858	217.0 -> 172.0	869016	9.56 µg/L		-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.6%		
13C4-PFHpA	6.291	367.0 -> 322.0	327470	2.39 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.7%		
13C5-PFHxA	5.452	318.0 -> 273.0	310437	2.41 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.4%		
13C5-PFPeA	4.307	268.0 -> 223.0	425837	4.36 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 87.1%		
13C6-PFDA	7.858	519.0 -> 474.0	187884	1.17 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.9%		
13C7-PFUnDA	8.273	570.0 -> 525.0	256125	1.20 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.8%		
13C8-FOSA	9.291	506.0 -> 78.0	189166	2.58 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.4%		
13C8-PFOA	6.897	421.0 -> 376.0	495578	2.43 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.2%		
13C8-PFOS	7.995	507.0 -> 99.0	38885	2.27 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.6%		
13C9-PFNA	7.403	472.0 -> 427.0	205454	1.19 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.0%		
d3-MeFOSAA	7.915	573.0 -> 419.0	214620	4.57 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.5%		
13C3-HFPO-DA	5.779	287.0 -> 169.0	464400	9.18 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 91.8%		
d3-MeFOSA	10.567	515.0 -> 169.0	79499	2.11 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 84.6%		
d5-EtFOSAA	8.098	589.0 -> 419.0	168323	4.67 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.4%		
d7-MeFOSE	10.475	623.0 -> 59.0	846826	23.60 µg/L		0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 94.4%		
d9-EtFOSE	10.746	639.0 -> 59.0	1043462	23.98 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 95.9%		
d5-EtFOSA	10.825	531.0 -> 169.0	84581	2.18 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 87.3%		
Target Compounds						QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.		
		327.0 -> 81.0				
6:2FTS	6.684	427.0 -> 407.0	338811	11.56 µg/L		99
		427.0 -> 81.0	156087			
8:2FTS	7.671	527.0 -> 507.0	6604	0.26 µg/L		93
		527.0 -> 81.0	2790			
EtFOSAA	-	584.0 -> 419.0	-	N.D.		
		584.0 -> 483.0				
FOSA	9.281	498.0 -> 78.0	5861	0.09 µg/L	#m	91
		498.0 -> 478.0	348			
MeFOSAA	-	570.0 -> 419.0	-	N.D.		
		570.0 -> 512.0				
PFBA	2.864	213.0 -> 169.0	205865	7.75 µg/L		100
PFBS	5.357	299.0 -> 80.0	297449	9.56 µg/L		99
		299.0 -> 99.0	124235			
PFDA	7.859	513.0 -> 469.0	36708	0.26 µg/L		99
		513.0 -> 219.0	8786			
PFDoDA	-	613.0 -> 569.0	-	N.D.		
		613.0 -> 319.0				

Perfluorinated Compounds by LC/MS/MS

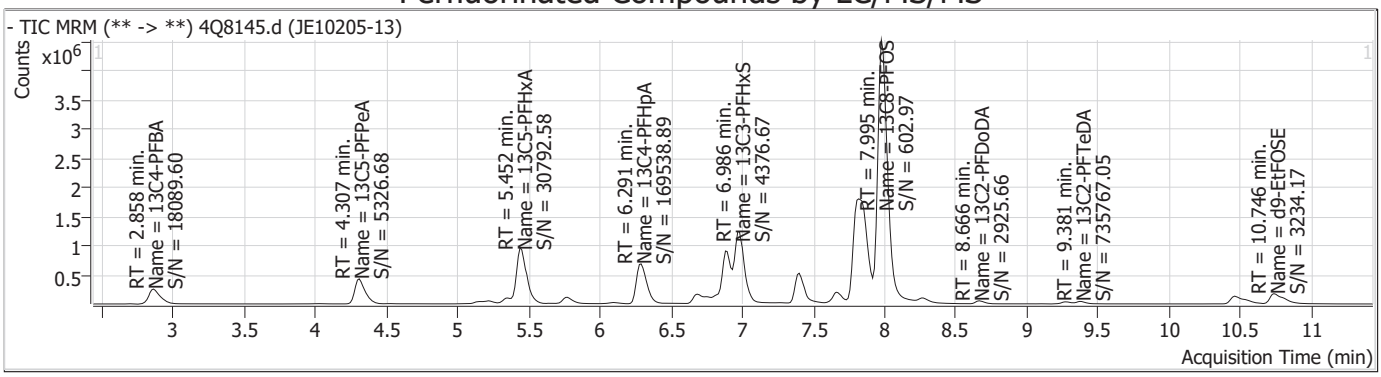
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.292	363.0 -> 319.0	2141735	10.75	µg/L		100
		363.0 -> 169.0	443159				
PFHpS	7.529	449.0 -> 80.0	91509	2.81	µg/L		100
		449.0 -> 99.0	50557				
PFHxA	5.455	313.0 -> 269.0	3986695	29.80	µg/L		100
		313.0 -> 119.0	136333				
PFHxS	6.987	399.0 -> 80.0	4239395	129.44	µg/L	m	96
		399.0 -> 99.0	2157700				
PFNA	7.404	463.0 -> 419.0	1563637	12.65	µg/L	m	86
		463.0 -> 219.0	449623				
PFNS	8.251	549.0 -> 80.0	0		µg/L	m	1
		549.0 -> 99.0	0				
PFOA	6.898	413.0 -> 369.0	2572089	15.59	µg/L	m	97
		413.0 -> 169.0	713867				
PFOS	7.996	499.0 -> 80.0	7720102	246.34	µg/L	m	97
		499.0 -> 99.0	3821748				
PFPeA	4.309	263.0 -> 219.0	1776557	26.39	µg/L		100
PFPeS	6.318	349.0 -> 80.0	443861	13.06	µg/L		99
		349.0 -> 99.0	226783				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	-	563.0 -> 519.0	-	N.D.			
		563.0 -> 269.0					
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

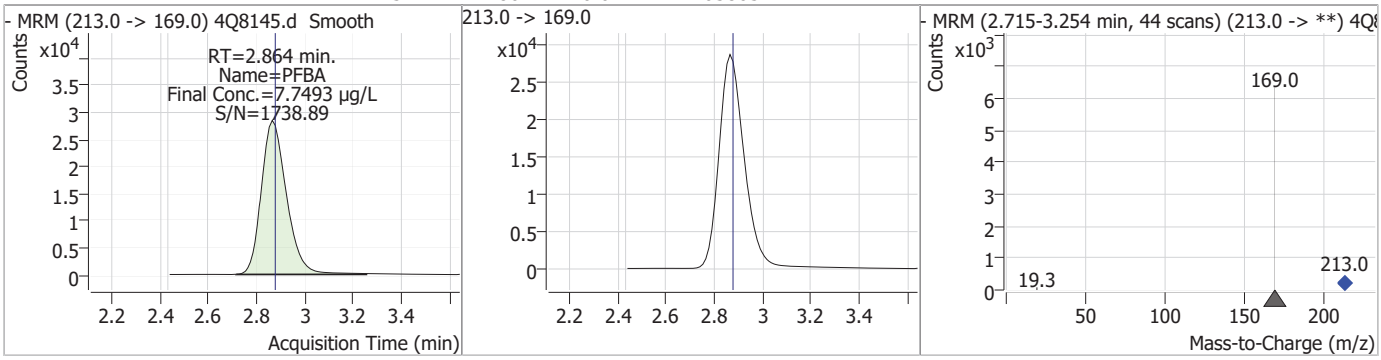
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

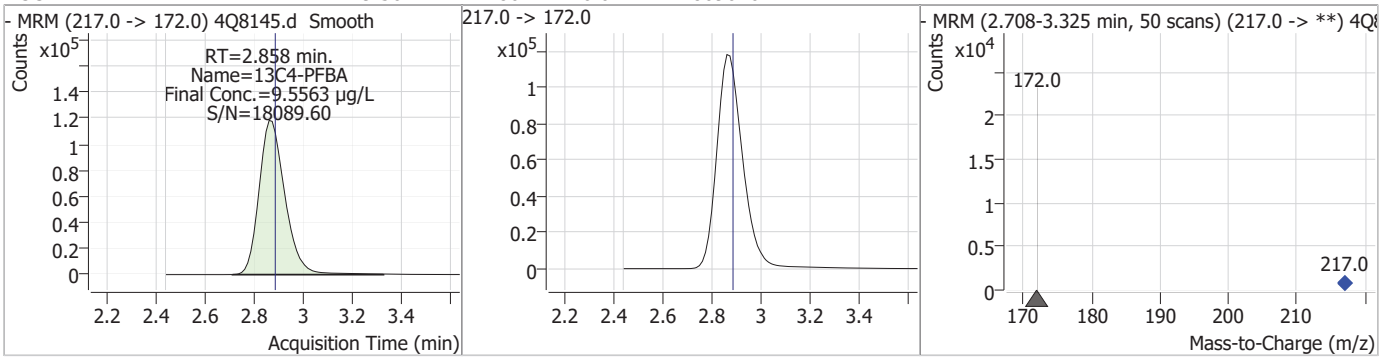
Perfluorinated Compounds by LC/MS/MS



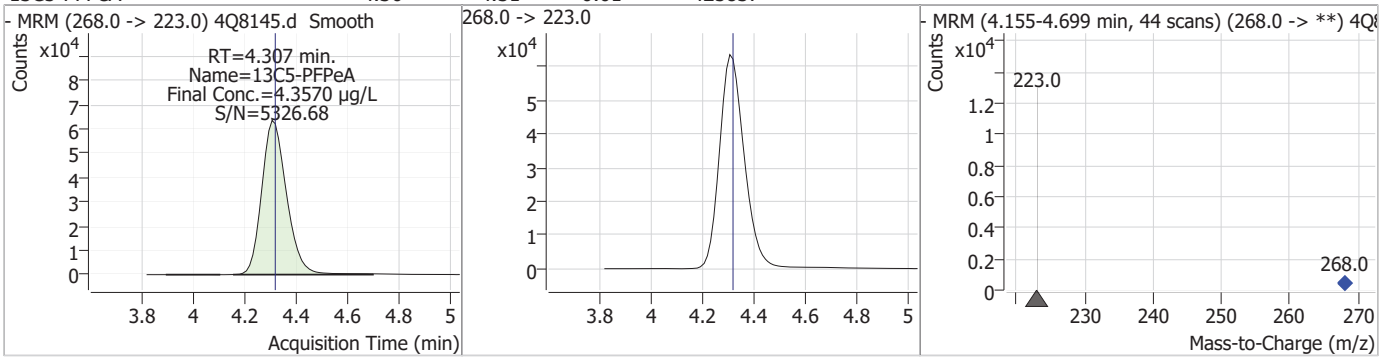
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	7.75	2.86	-0.01	205865				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.56	2.86	-0.02	869016				

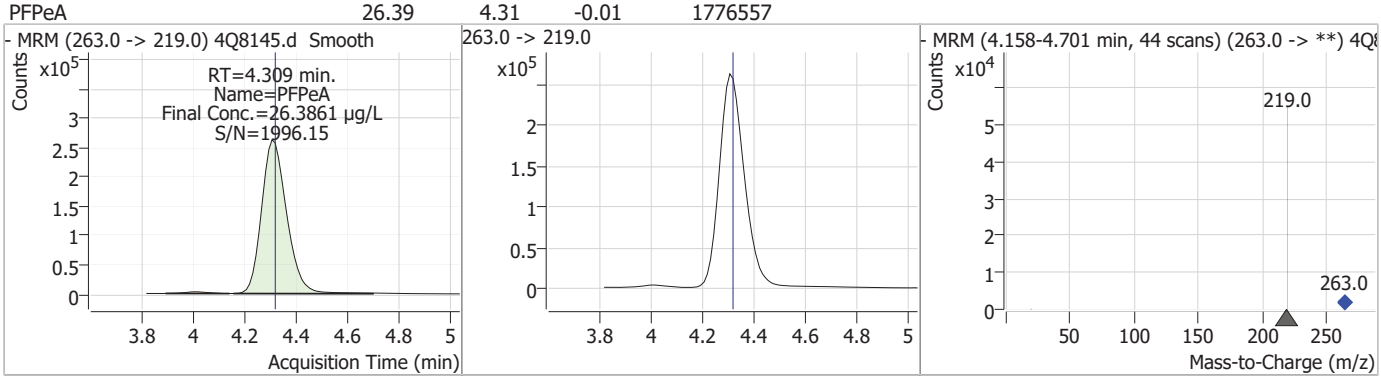


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.36	4.31	-0.01	425837				

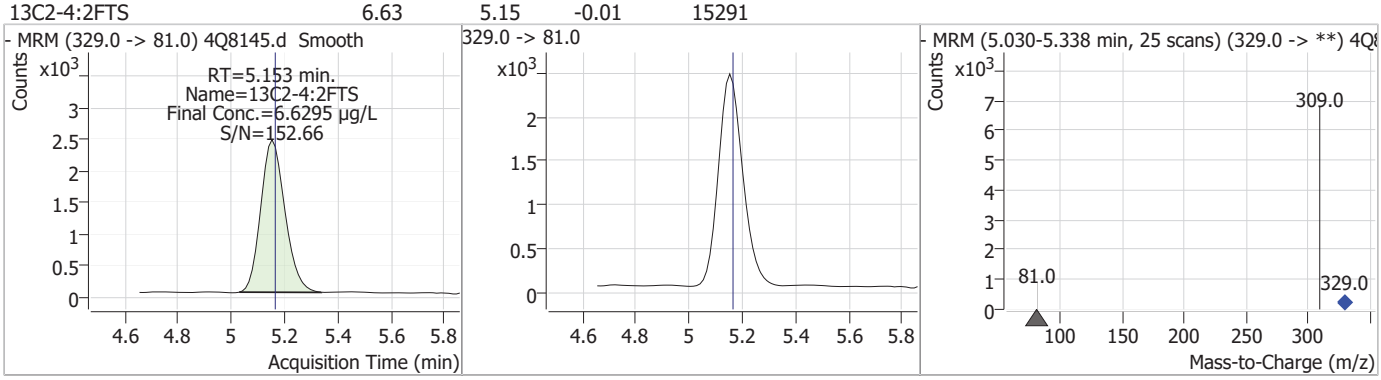


Perfluorinated Compounds by LC/MS/MS

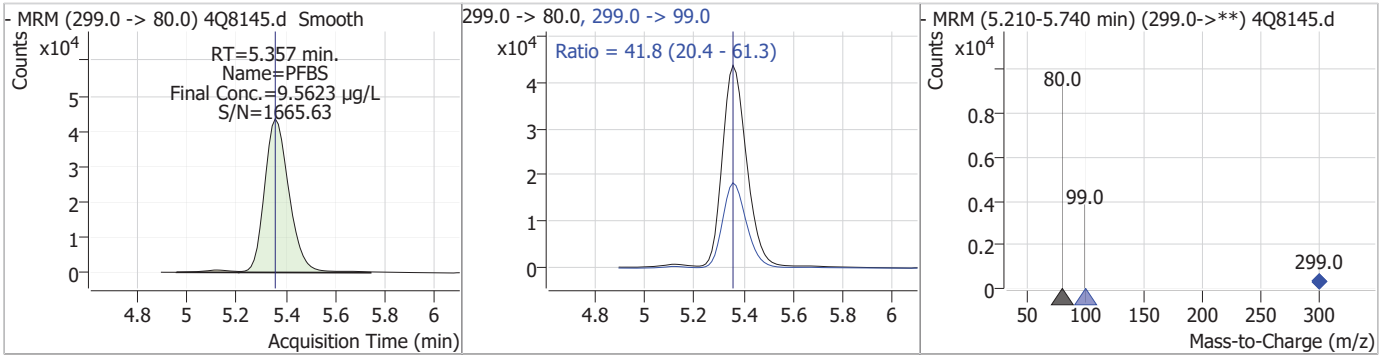
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	26.39	4.31	-0.01	1776557				



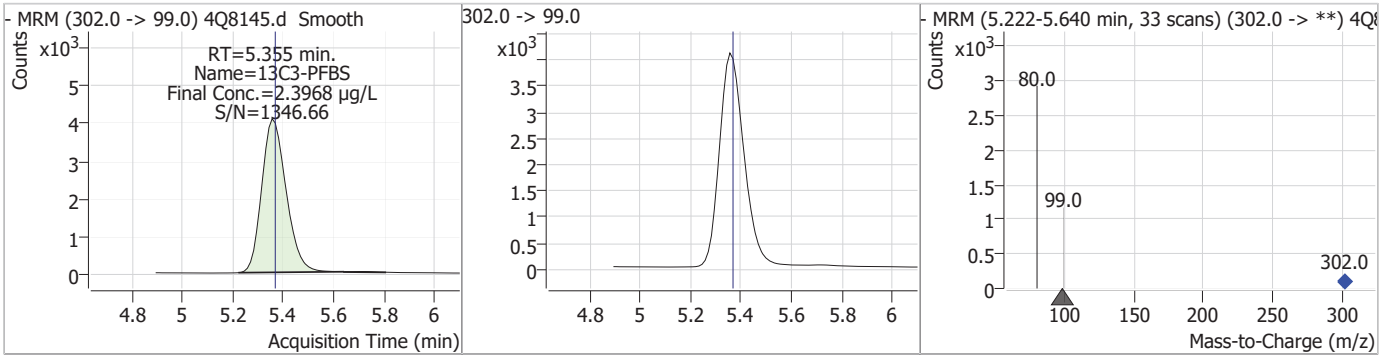
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	6.63	5.15	-0.01	15291				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	9.56	5.36	0.00	297449	299.0 -> 99.0	41.8	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.40	5.36	-0.01	27207				

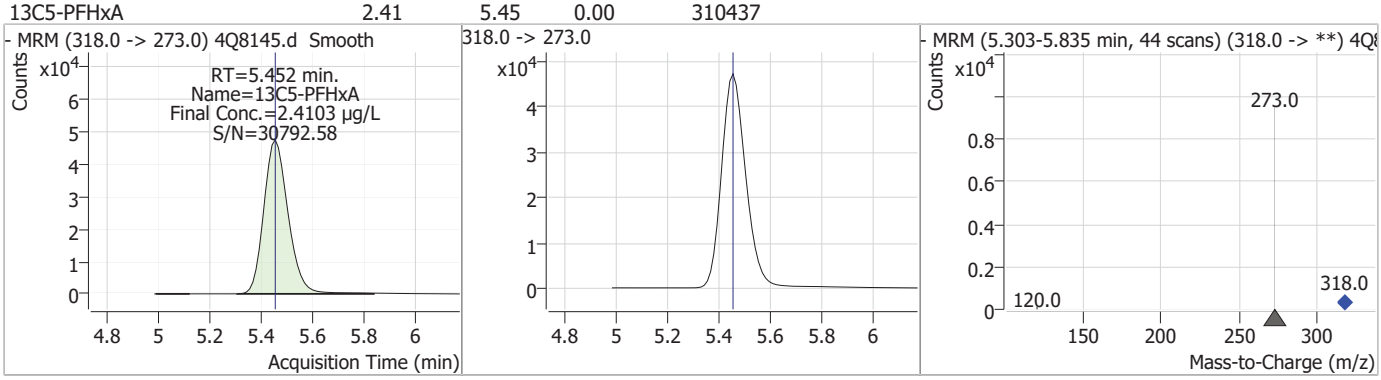


7.1.19

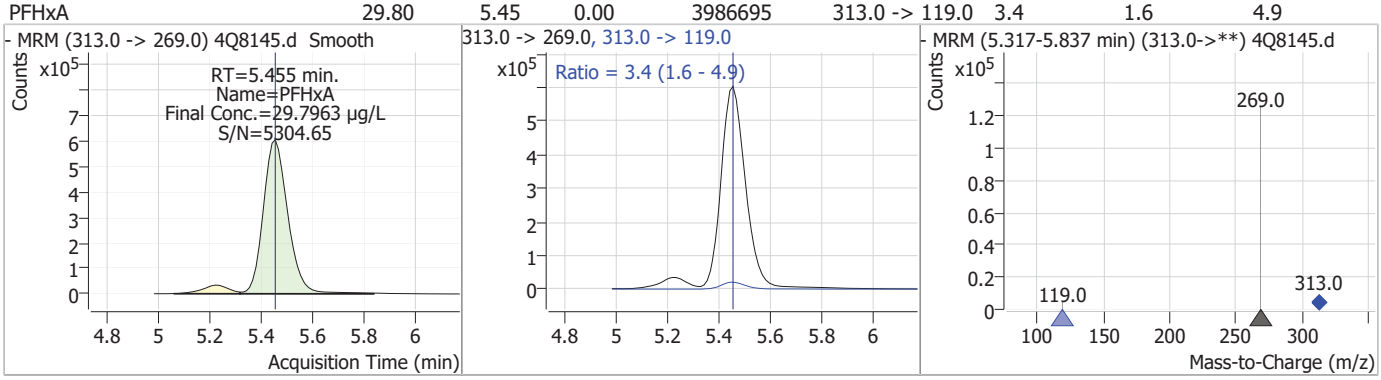
7

Perfluorinated Compounds by LC/MS/MS

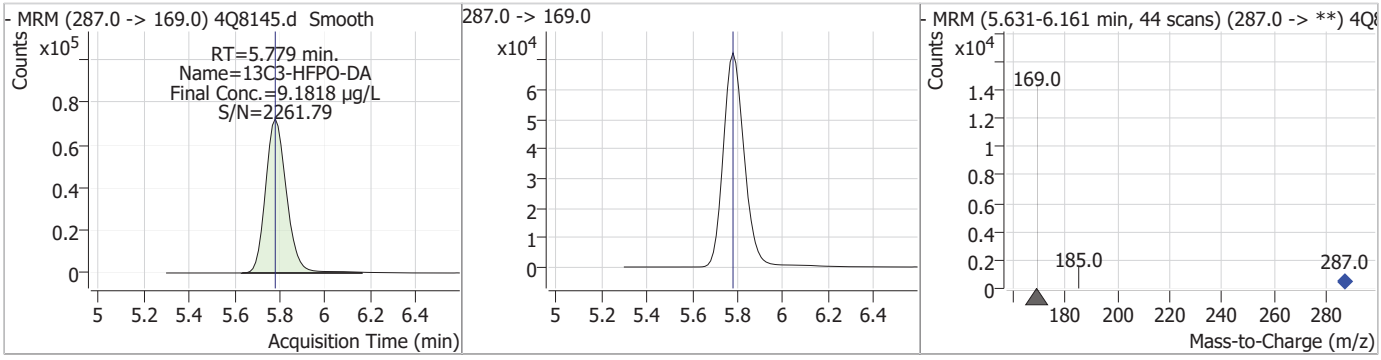
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.41	5.45	0.00	310437				



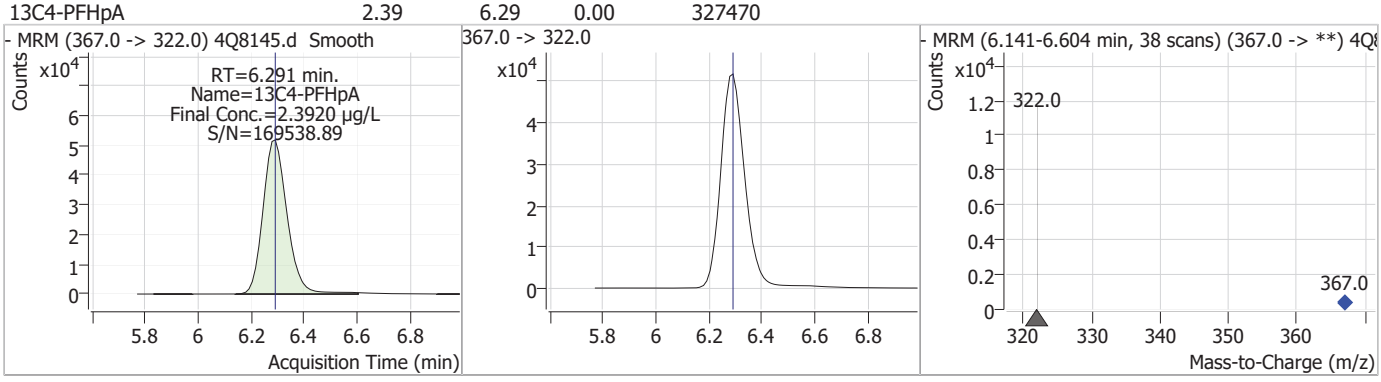
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	29.80	5.45	0.00	3986695	313.0 -> 119.0	3.4	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.18	5.78	0.00	464400				

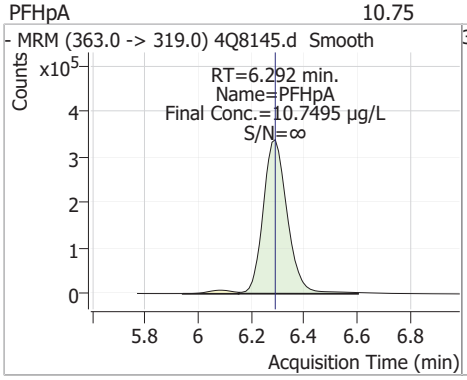


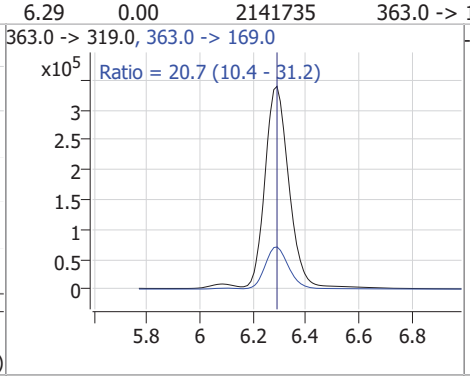
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.39	6.29	0.00	327470				

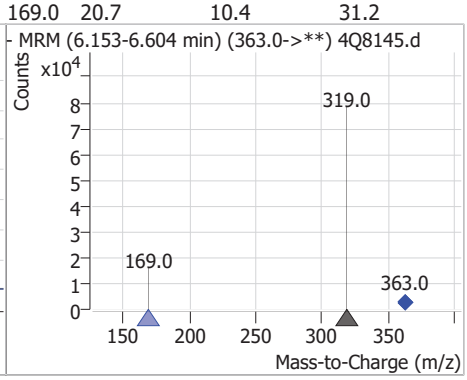


Perfluorinated Compounds by LC/MS/MS

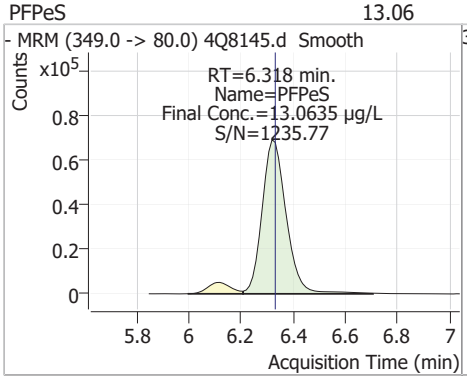
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	10.75	6.29	0.00	2141735	363.0 -> 169.0	20.7	10.4	31.2

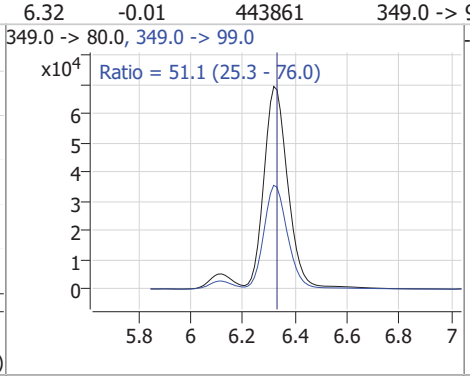


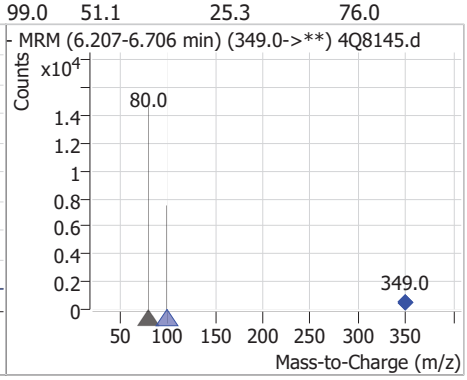




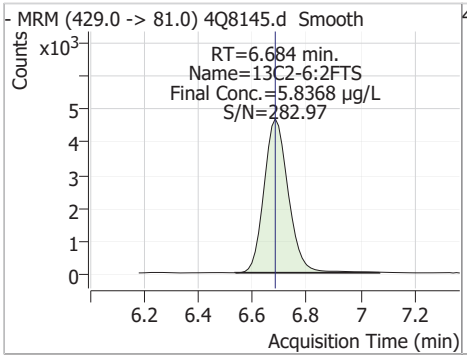
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	13.06	6.32	-0.01	443861	349.0 -> 99.0	51.1	25.3	76.0

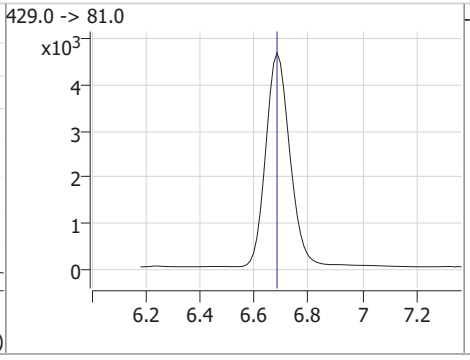


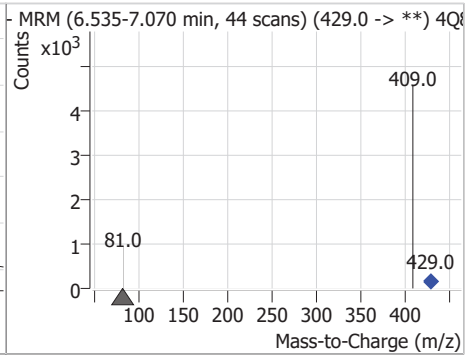




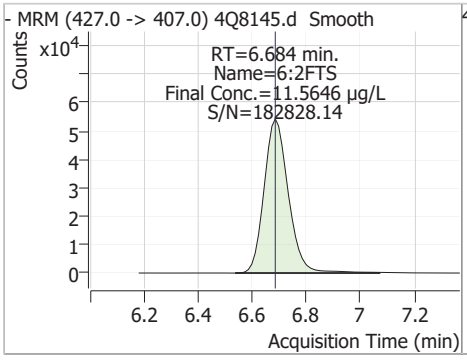
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.84	6.68	0.00	29214				

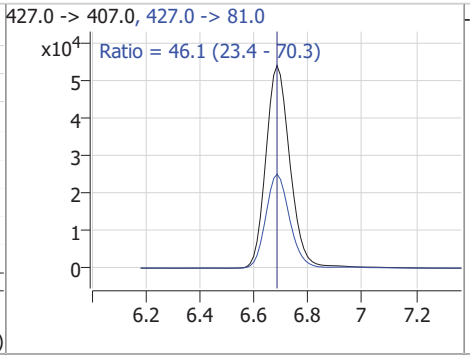


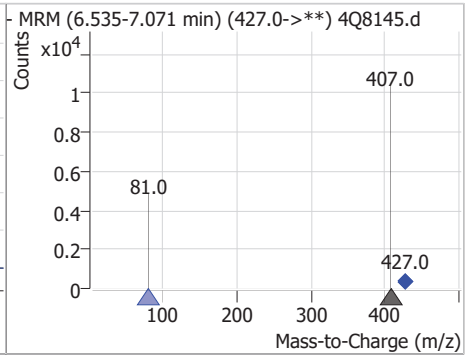




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	11.56	6.68	0.00	338811	427.0 -> 81.0	46.1	23.4	70.3

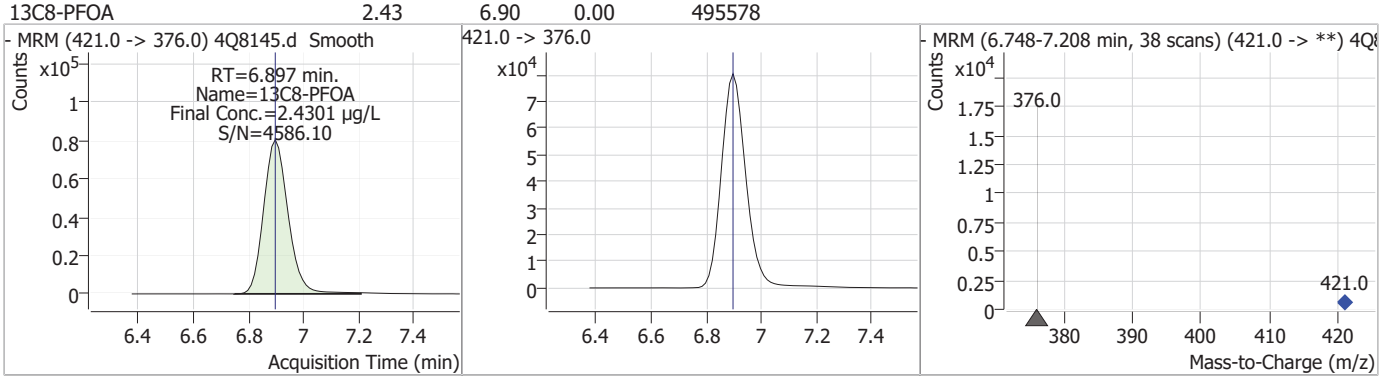




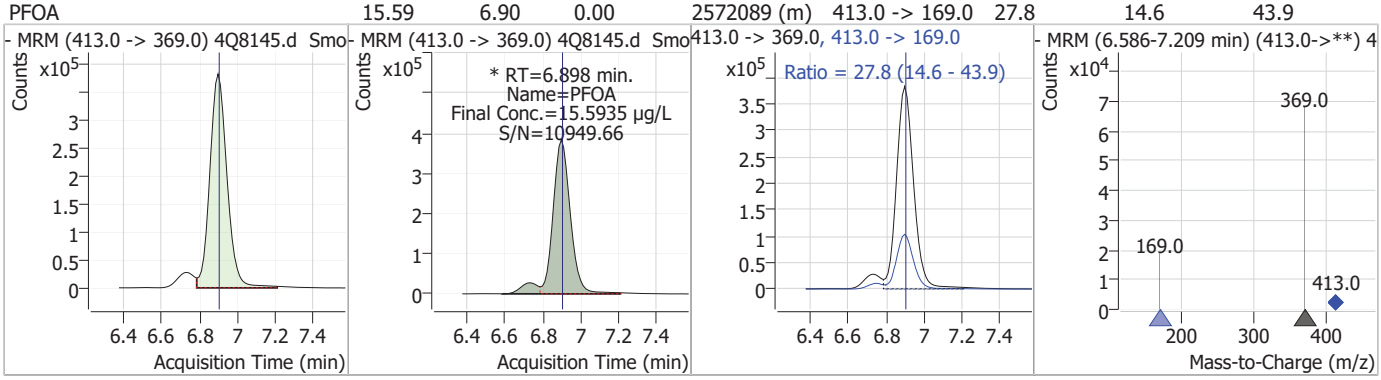


Perfluorinated Compounds by LC/MS/MS

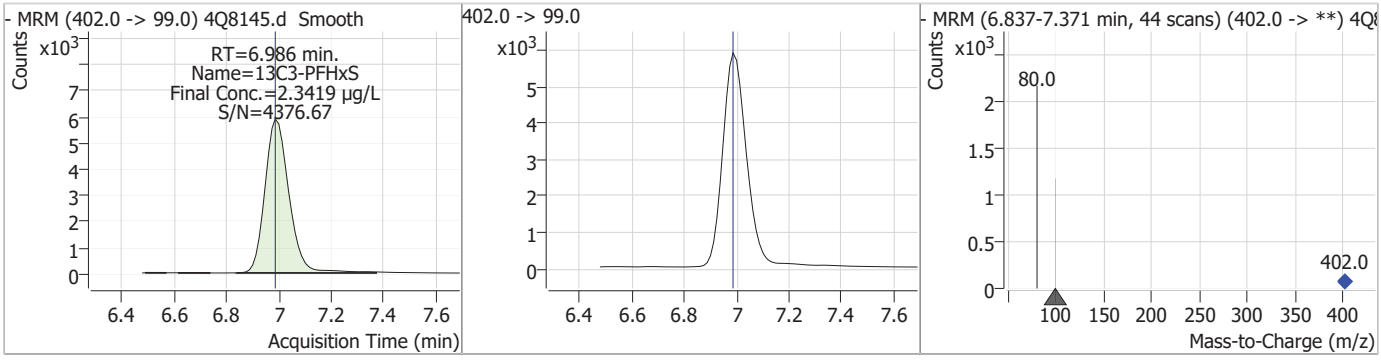
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.43	6.90	0.00	495578				



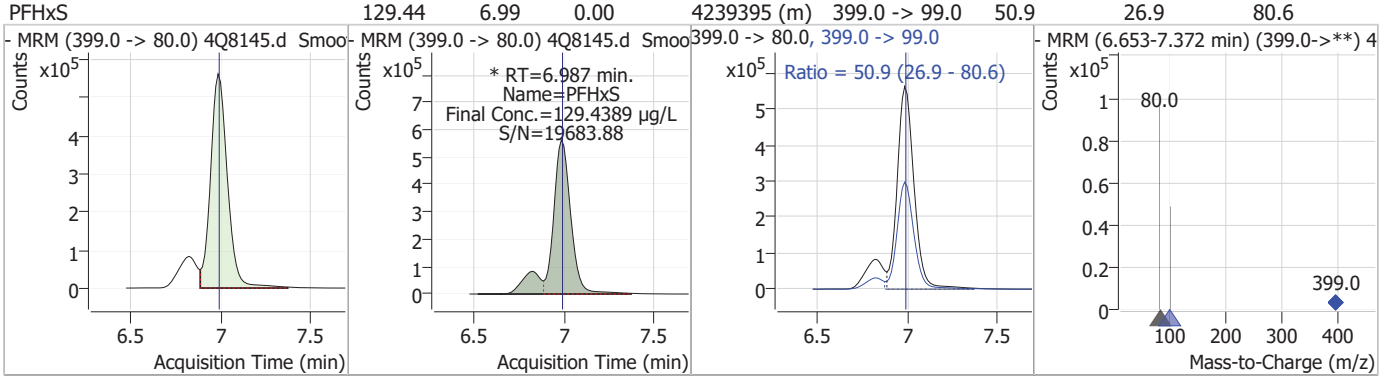
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	15.59	6.90	0.00	2572089 (m)	413.0 -> 169.0	27.8	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.34	6.99	0.00	37612				

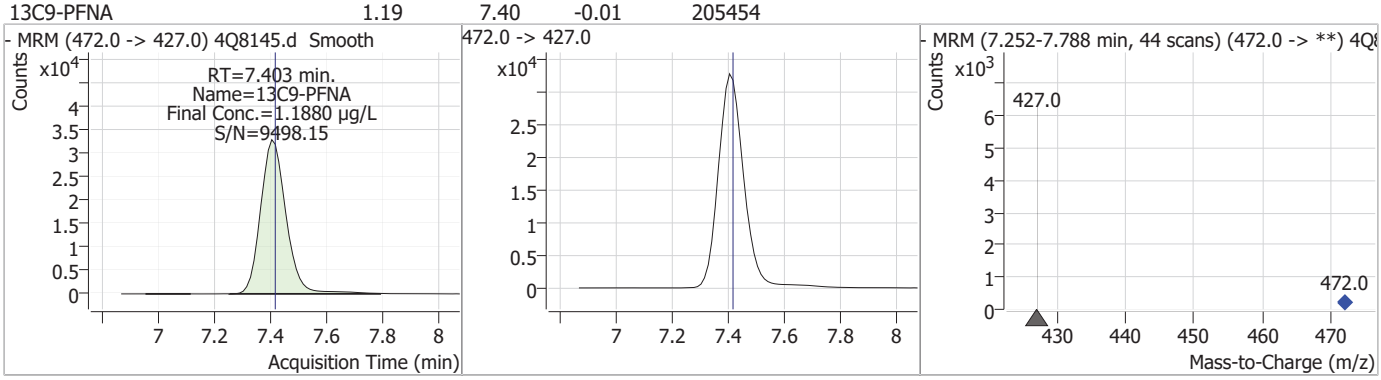


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	129.44	6.99	0.00	4239395 (m)	399.0 -> 99.0	50.9	26.9	80.6

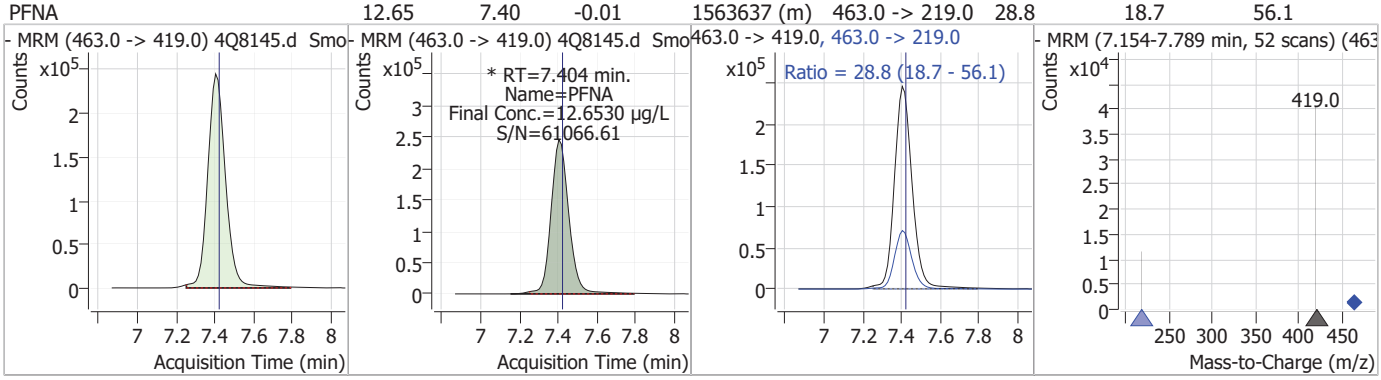


Perfluorinated Compounds by LC/MS/MS

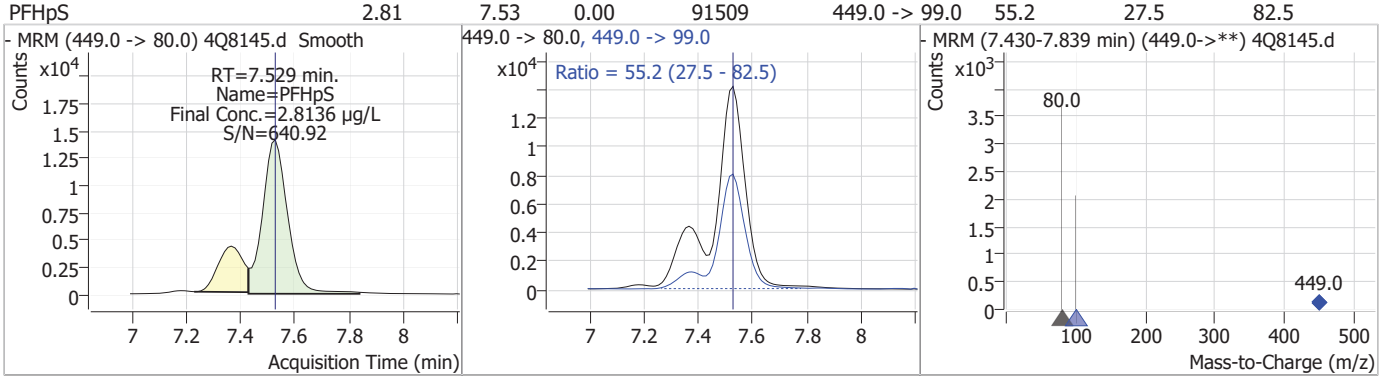
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.19	7.40	-0.01	205454				



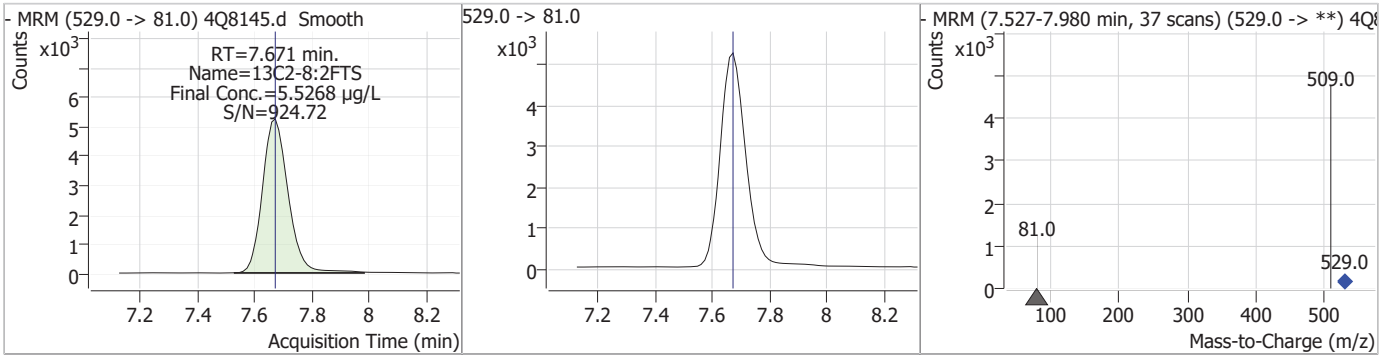
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	12.65	7.40	-0.01	1563637 (m)	463.0 -> 219.0	28.8	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.81	7.53	0.00	91509	449.0 -> 99.0	55.2	27.5	82.5

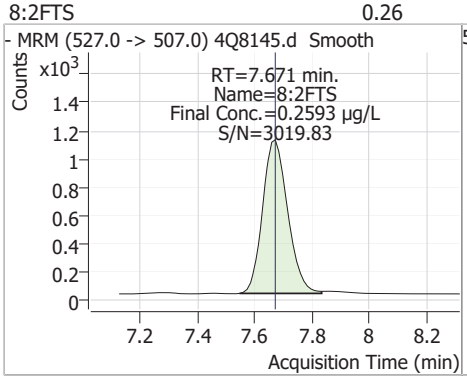


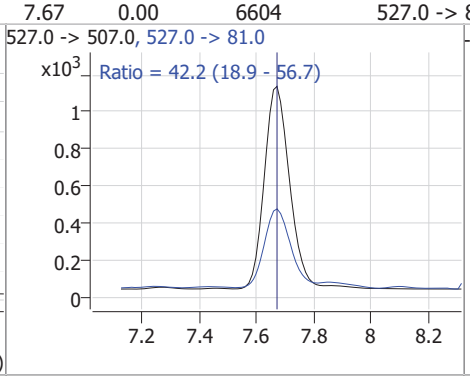
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.53	7.67	0.00	32543				

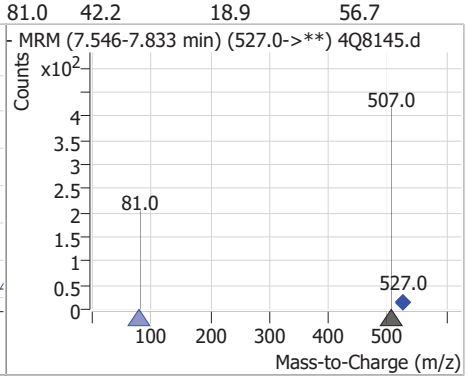


Perfluorinated Compounds by LC/MS/MS

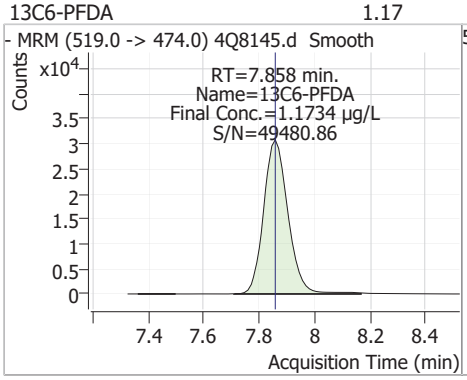
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.26	7.67	0.00	6604	527.0 -> 81.0	42.2	18.9	56.7

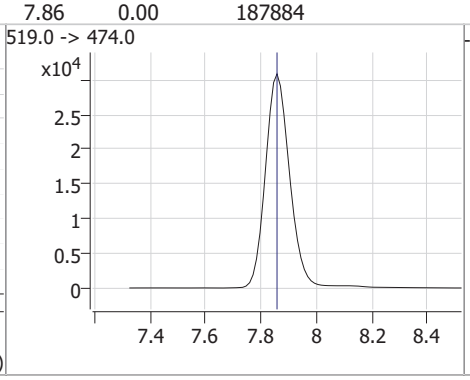


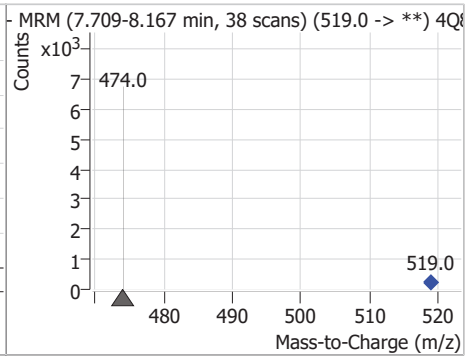




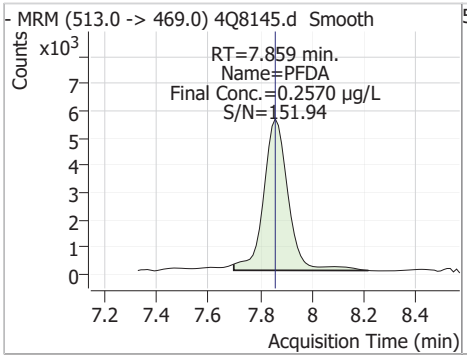
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.17	7.86	0.00	187884				

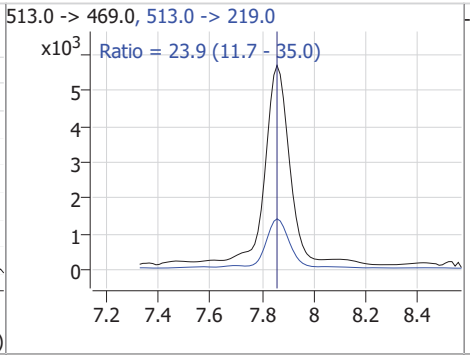


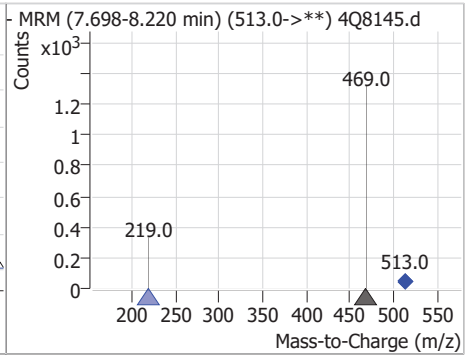




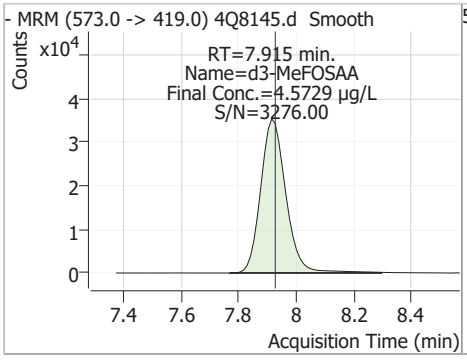
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.26	7.86	0.00	36708	513.0 -> 219.0	23.9	11.7	35.0

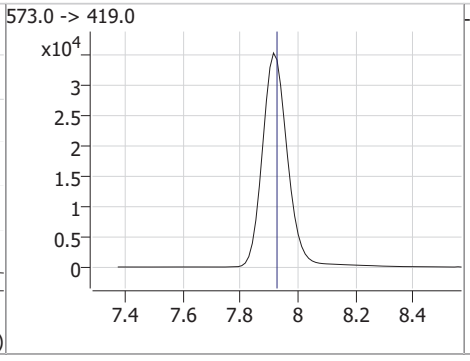


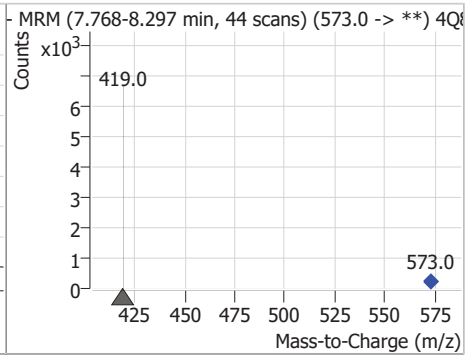




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.57	7.92	-0.01	214620				

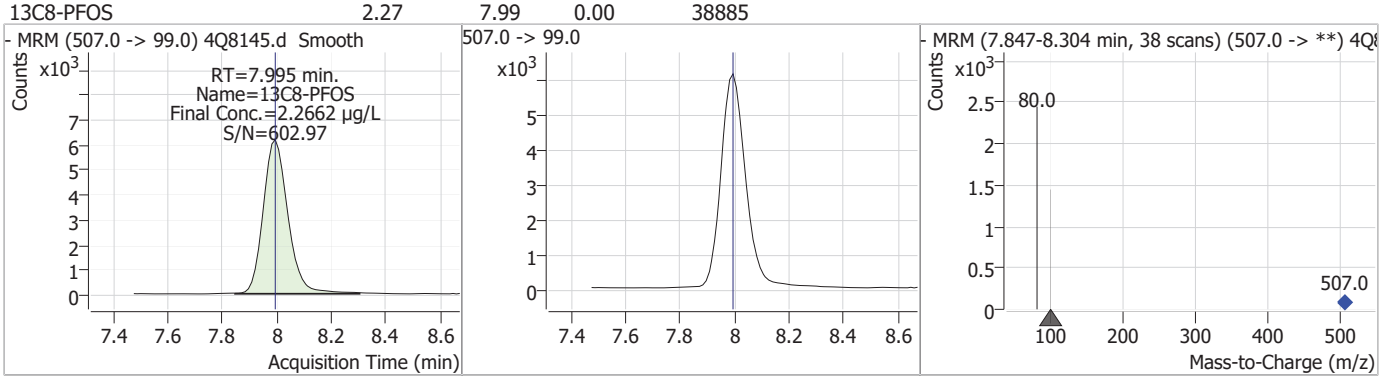




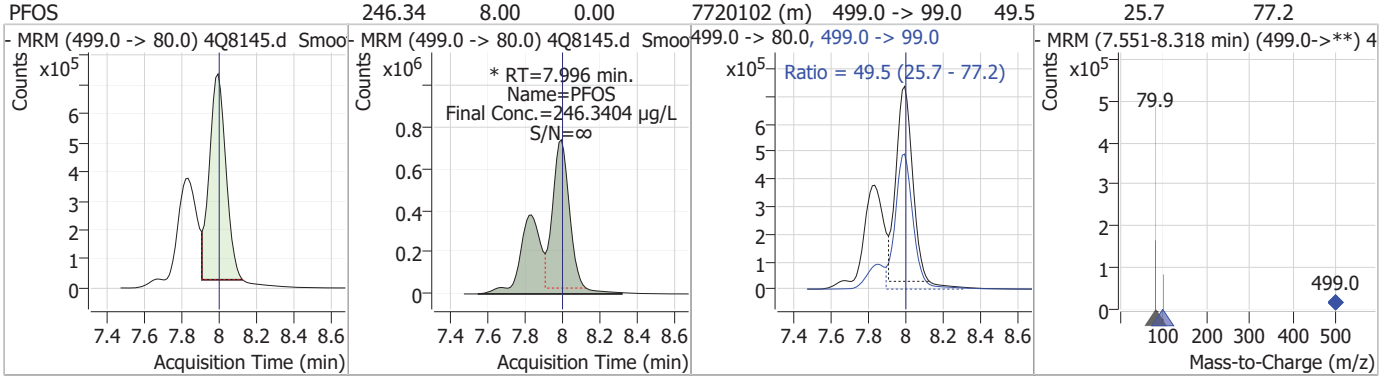


Perfluorinated Compounds by LC/MS/MS

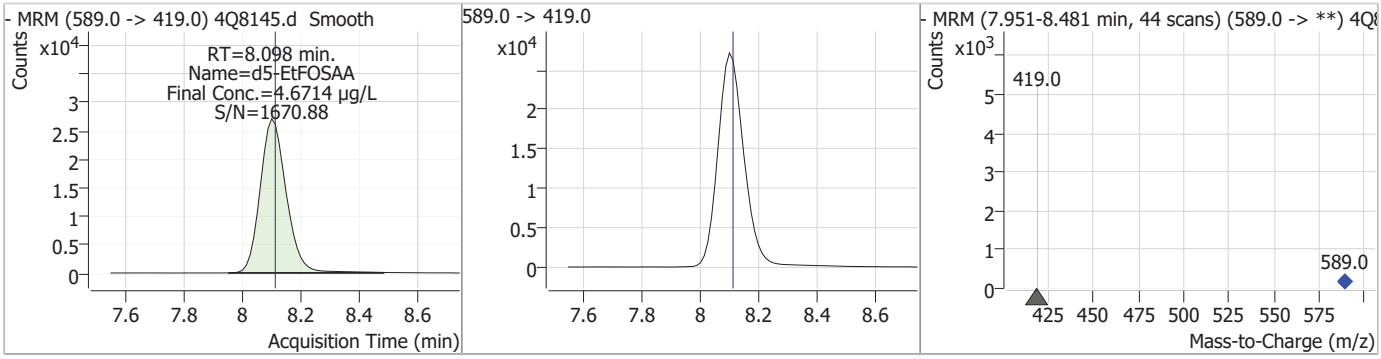
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.27	7.99	0.00	38885				



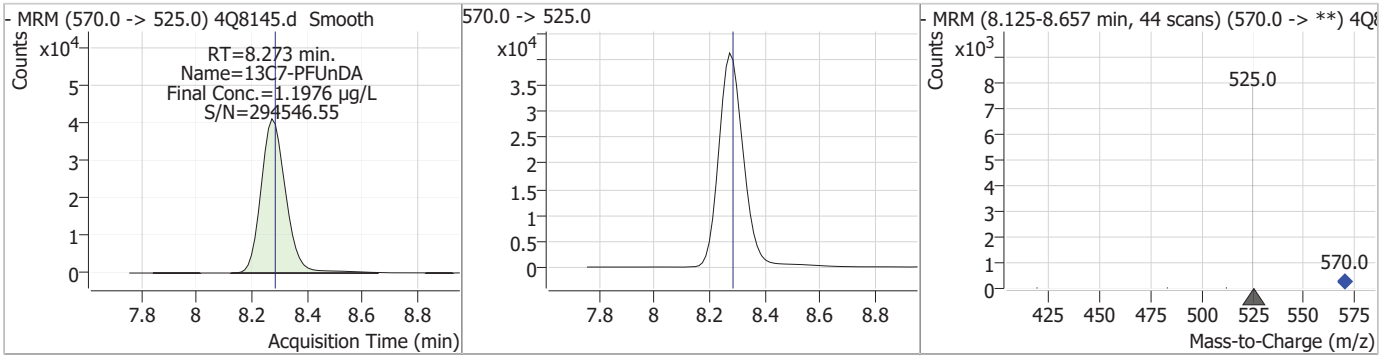
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	246.34	8.00	0.00	7720102 (m)	499.0 -> 99.0	49.5	25.7	77.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.67	8.10	-0.01	168323				

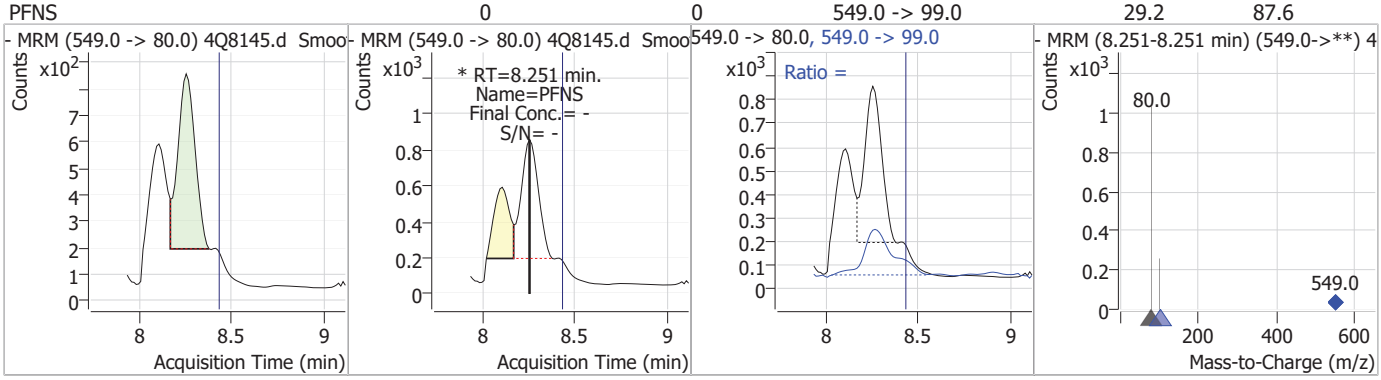


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.20	8.27	-0.01	256125				

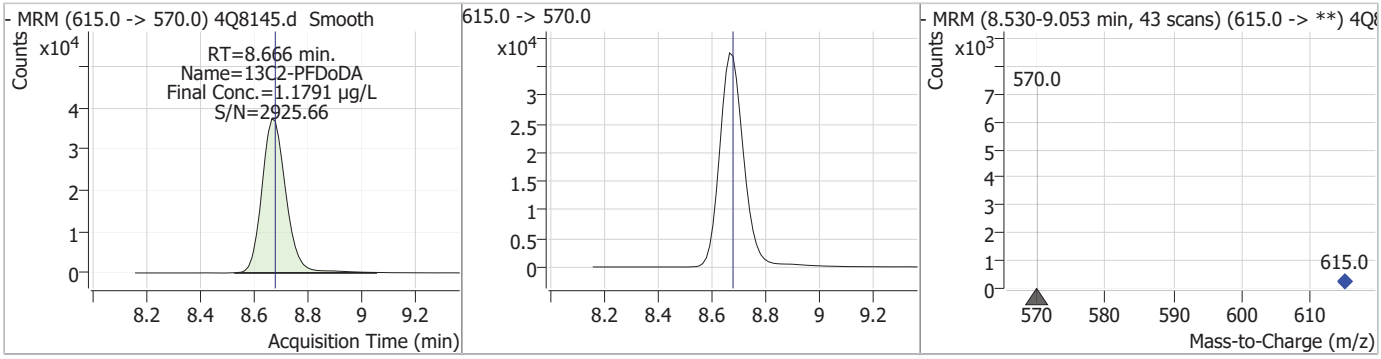


Perfluorinated Compounds by LC/MS/MS

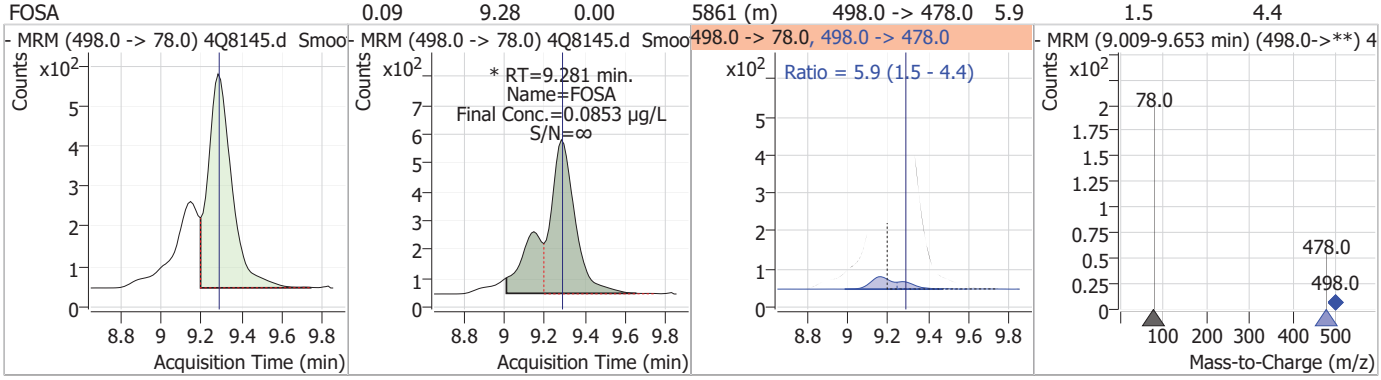
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS		0		0	549.0 -> 99.0		29.2	87.6



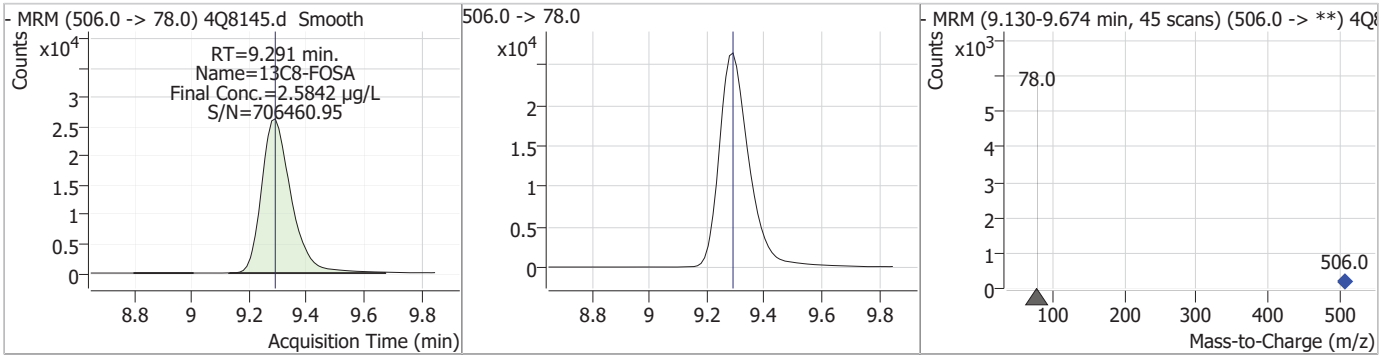
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.18	8.67	-0.01	230975				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.09	9.28	0.00	5861 (m)	498.0 -> 478.0	5.9	1.5	4.4

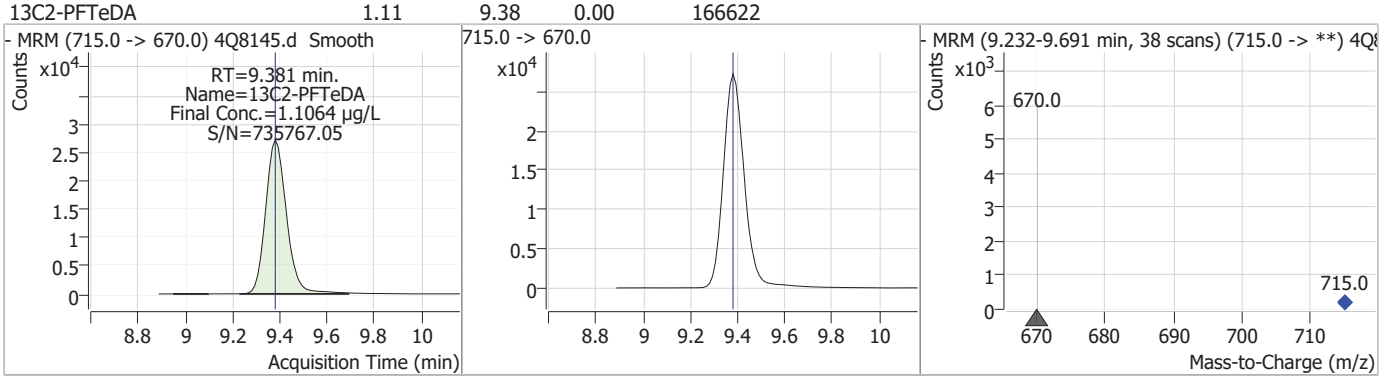


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.58	9.29	0.00	189166				

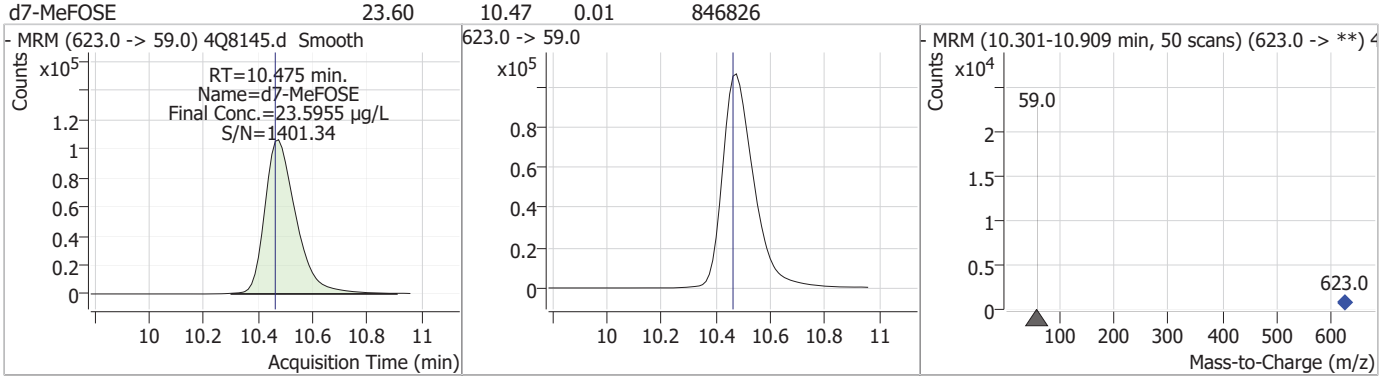


Perfluorinated Compounds by LC/MS/MS

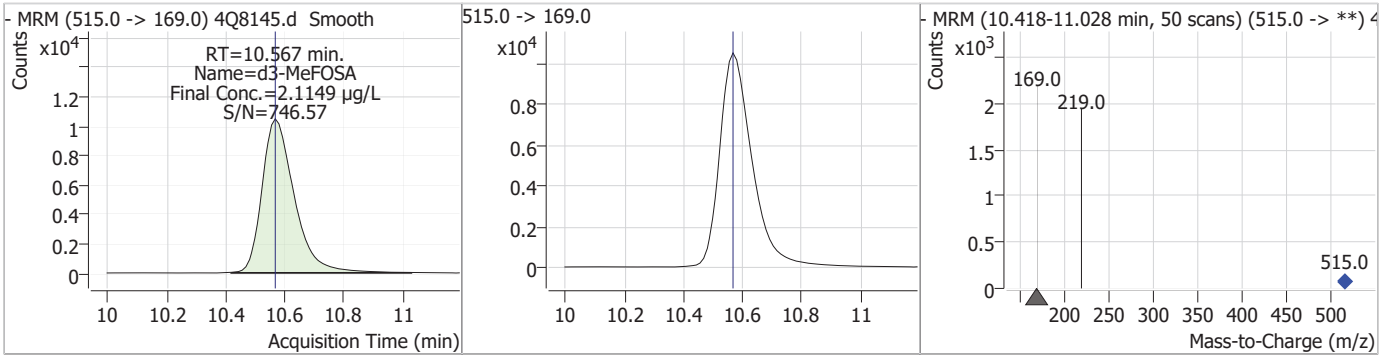
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.11	9.38	0.00	166622				



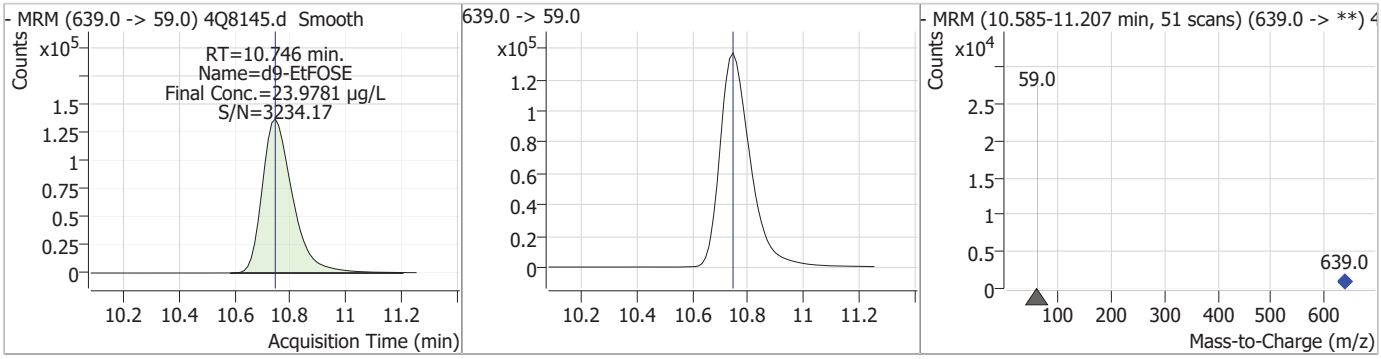
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.60	10.47	0.01	846826				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.11	10.57	0.00	79499				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.98	10.75	0.00	1043462				

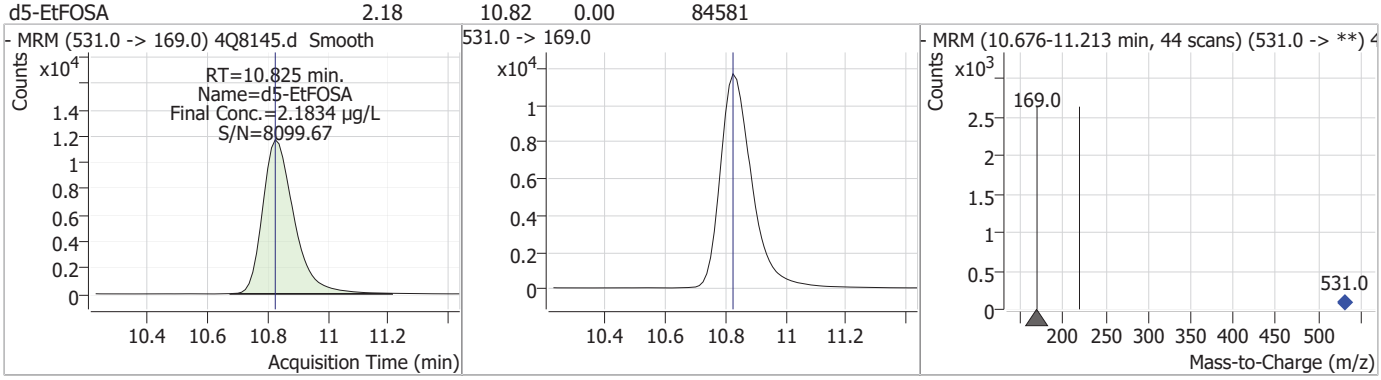


7.1.19

7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.18	10.82	0.00	84581				



7.1.19

7

Manual Integration Approval Summary

Sample Number: JE10205-13
Lab FileID: 4Q8145.D
Injection Time: 04/30/25 18:20

Method: EPA 1633
Analyst approved: 05/01/25 11:50 Maksud Haque
Supervisor approved: 05/06/25 06:20 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
PFOSA	754-91-6		9.28	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/06/25 06:20

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8192.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 3:27:49 PM
Sample Name : JE10205-13
Vial : P2-A8
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q139.batch.bin
Sample Information : OP63163,T4Q139,506,,,5,10,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.871	217.0 -> 172.0	79743	1.00 µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	38728	0.50 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	27892	0.25 µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	27907	0.25 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	41295	0.25 µg/L	0.000
M9-PFNA	7.416	472.0 -> 427.0	16373	0.13 µg/L	0.000
M6-PFDA	7.858	519.0 -> 474.0	16408	0.13 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	20107	0.13 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	17500	0.13 µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	12879	0.13 µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	14928	0.25 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	2551	0.25 µg/L	0.000
		302.0 -> 80.0	5831		
M3-PFHxS	6.999	402.0 -> 99.0	3200	0.25 µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	3873	0.25 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	1199	0.50 µg/L	0.000
M2-6:2FTS	6.696	429.0 -> 81.0	2708	0.50 µg/L	0.012
M2-8:2FTS	7.671	529.0 -> 81.0	3040	0.50 µg/L	0.000
M3-MeFOSAA	7.927	573.0 -> 419.0	19282	0.50 µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	41174	1.00 µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	13681	0.50 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	67697	2.50 µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	82742	2.50 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	6785	0.25 µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	6062	0.25 µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	7018	0.25 µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	36372	0.50 µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	4024	0.25 µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	43754	0.25 µg/L	0.000
13C2-PFDA	7.859	515.0 -> 470.0	15259	0.13 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	17760	0.13 µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	27324	0.25 µg/L	0.012
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	1199	0.59 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 11.9%	
13C2-6:2FTS	6.696	429.0 -> 81.0	2708	0.62 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 12.4%	
13C2-8:2FTS	7.671	529.0 -> 81.0	3040	0.59 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 11.8%	
13C2-PFDoDA	8.666	615.0 -> 570.0	17500	0.11 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 8.5%	
13C2-PFTeDA	9.368	715.0 -> 670.0	12879	0.10 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 8.1%	
13C3-PFBS	5.368	302.0 -> 99.0	2551	0.26 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 10.3%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	3200	0.23 µg/L	0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 9.1%	
13C4-PFBA	2.871	217.0 -> 172.0	79743	0.96 µg/L	-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 9.6%	
13C4-PFHpA	6.291	367.0 -> 322.0	27907	0.23 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 9.1%	
13C5-PFHxA	5.464	318.0 -> 273.0	27892	0.24 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 9.6%	
13C5-PFPeA	4.319	268.0 -> 223.0	38728	0.44 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 8.8%	
13C6-PFDA	7.858	519.0 -> 474.0	16408	0.12 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 9.7%	
13C7-PFUnDA	8.273	570.0 -> 525.0	20107	0.11 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 8.9%	
13C8-FOSA	9.279	506.0 -> 78.0	14928	0.21 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 8.3%	
13C8-PFOA	6.897	421.0 -> 376.0	41295	0.24 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 9.4%	
13C8-PFOS	7.995	507.0 -> 99.0	3873	0.23 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 9.2%	
13C9-PFNA	7.416	472.0 -> 427.0	16373	0.11 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 8.9%	
d3-MeFOSAA	7.927	573.0 -> 419.0	19282	0.42 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 8.3%	
13C3-HFPO-DA	5.792	287.0 -> 169.0	41174	0.91 µg/L	0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 9.1%	
d3-MeFOSA	10.555	515.0 -> 169.0	6062	0.16 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 6.5%	
d5-EtFOSAA	8.098	589.0 -> 419.0	13681	0.39 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 7.7%	
d7-MeFOSE	10.462	623.0 -> 59.0	67697	1.92 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 7.7%	
d9-EtFOSE	10.734	639.0 -> 59.0	82742	1.93 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 7.7%	
d5-EtFOSA	10.825	531.0 -> 169.0	6785	0.18 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 7.1%	
Target Compounds					**QValue**
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	6.684	427.0 -> 407.0	25735	0.95 µg/L	95
		427.0 -> 81.0	12887		
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	2.864	213.0 -> 169.0	19447	0.80 µg/L	100
PFBS	5.382	299.0 -> 80.0	25664	0.88 µg/L	98
		299.0 -> 99.0	10833		
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

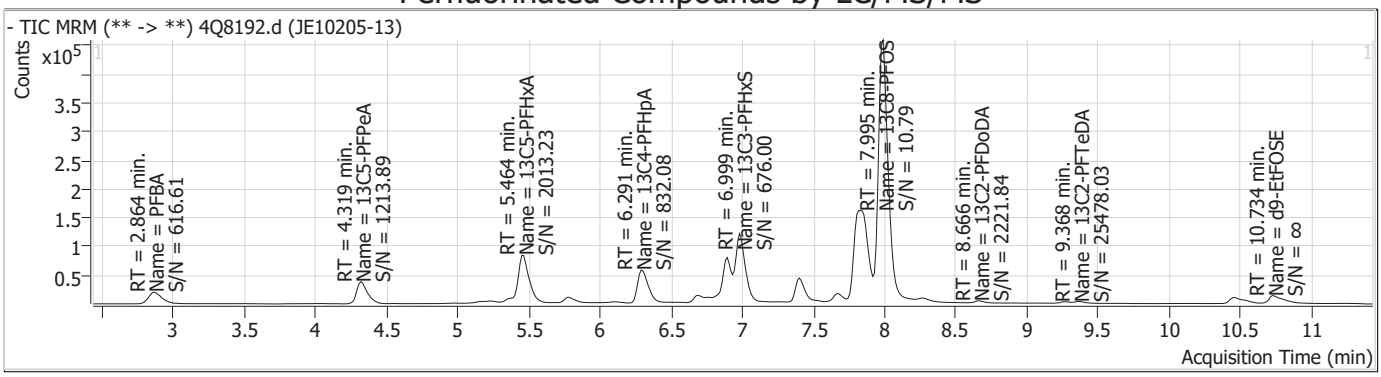
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.292	363.0 -> 319.0	187929	1.11	µg/L		100
		363.0 -> 169.0	38810				
PFHpS	7.529	449.0 -> 80.0	7200	0.26	µg/L		95
		449.0 -> 99.0	4210				
PFHxA	5.467	313.0 -> 269.0	368947	3.07	µg/L		100
		313.0 -> 119.0	11786				
PFHxS	7.000	399.0 -> 80.0	403005	17.41	µg/L	m	92
		399.0 -> 99.0	194274				
PFNA	7.416	463.0 -> 419.0	130580	1.51	µg/L		83
		463.0 -> 219.0	35752				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	6.898	413.0 -> 369.0	224583	2.08	µg/L	m	95
		413.0 -> 169.0	59740				
PFOS	7.996	499.0 -> 80.0	737787	30.62	µg/L	m	98
		499.0 -> 99.0	368211				
PFPeA	4.321	263.0 -> 219.0	167913	2.74	µg/L		100
PFPeS	6.331	349.0 -> 80.0	37927	1.19	µg/L		99
		349.0 -> 99.0	18913				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	-	563.0 -> 519.0	-	N.D.			
		563.0 -> 269.0					
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

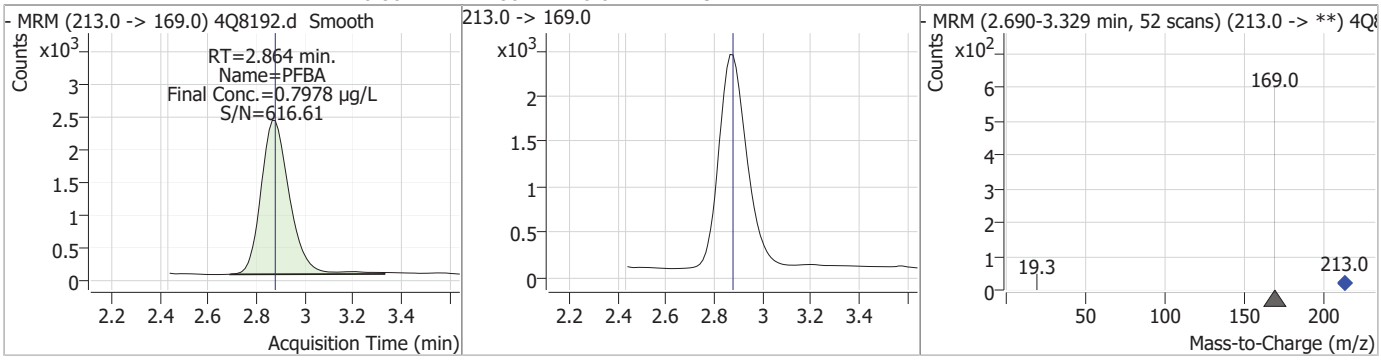
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

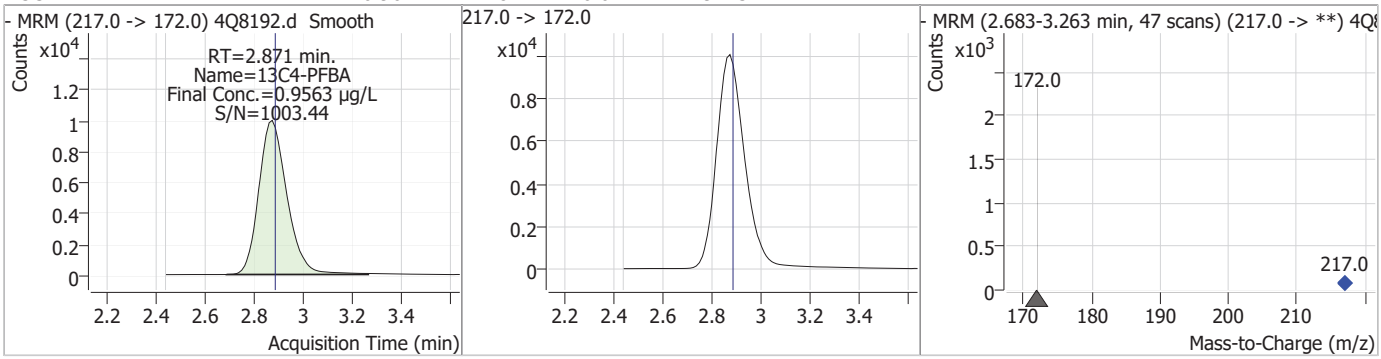
Perfluorinated Compounds by LC/MS/MS



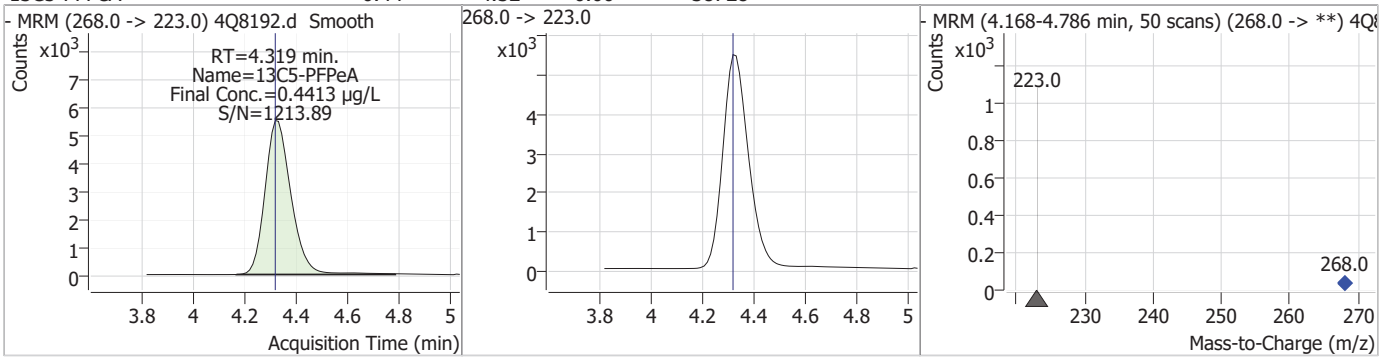
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.80	2.86	-0.01	19447				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	0.96	2.87	-0.01	79743				

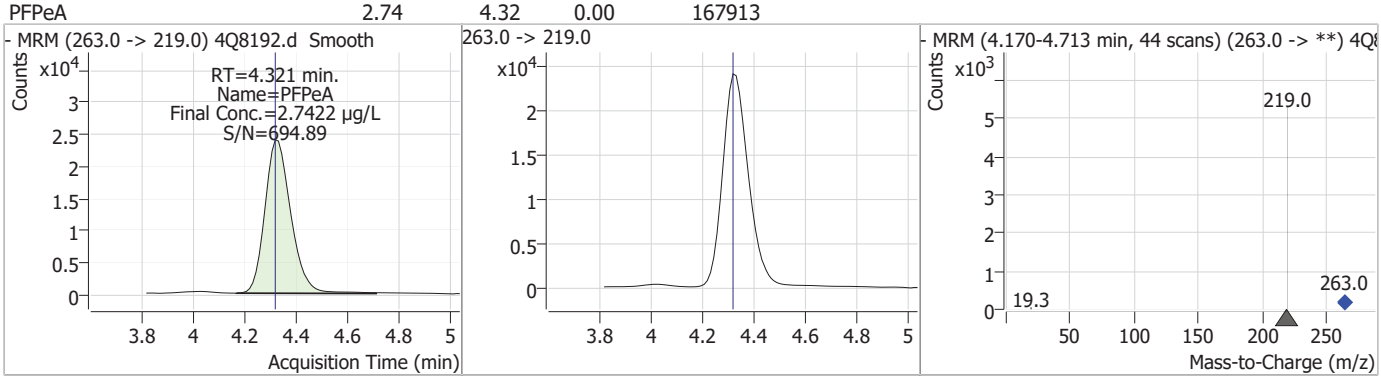


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	0.44	4.32	0.00	38728				

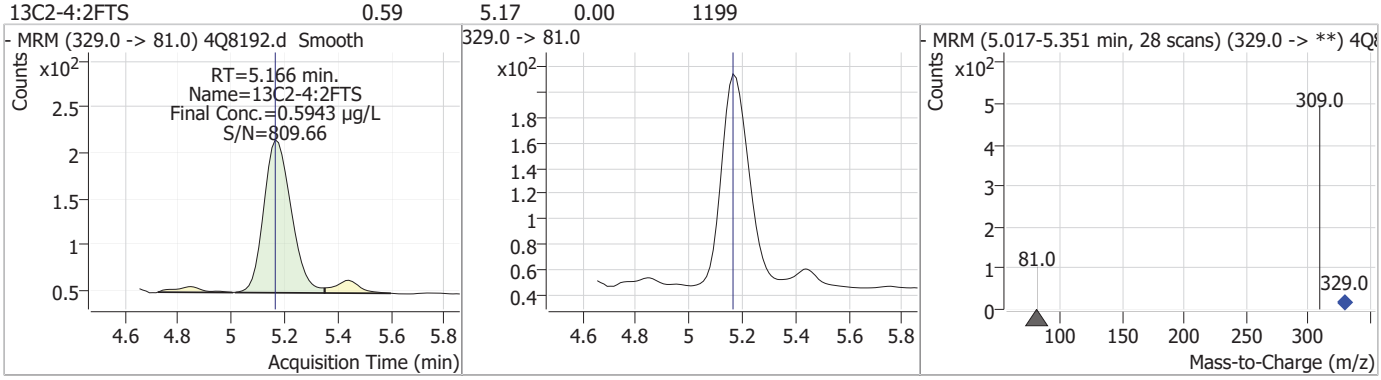


Perfluorinated Compounds by LC/MS/MS

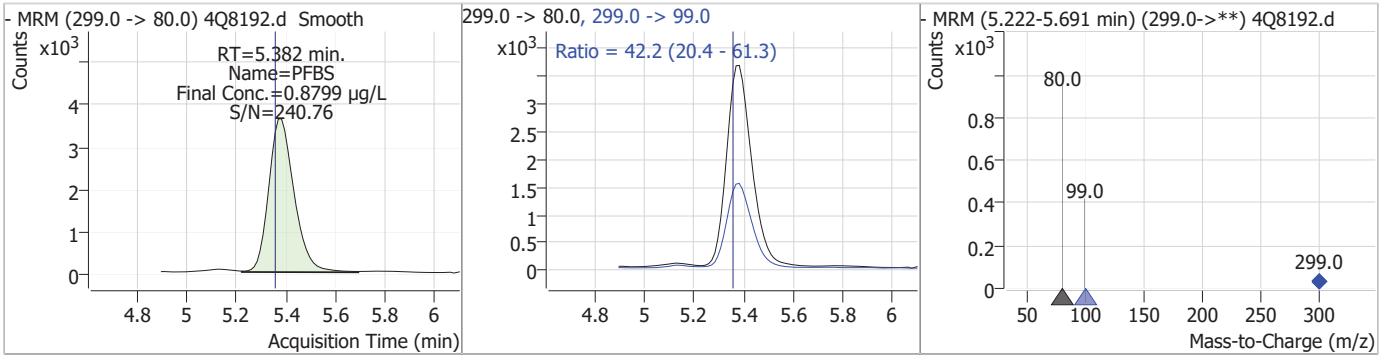
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	2.74	4.32	0.00	167913				



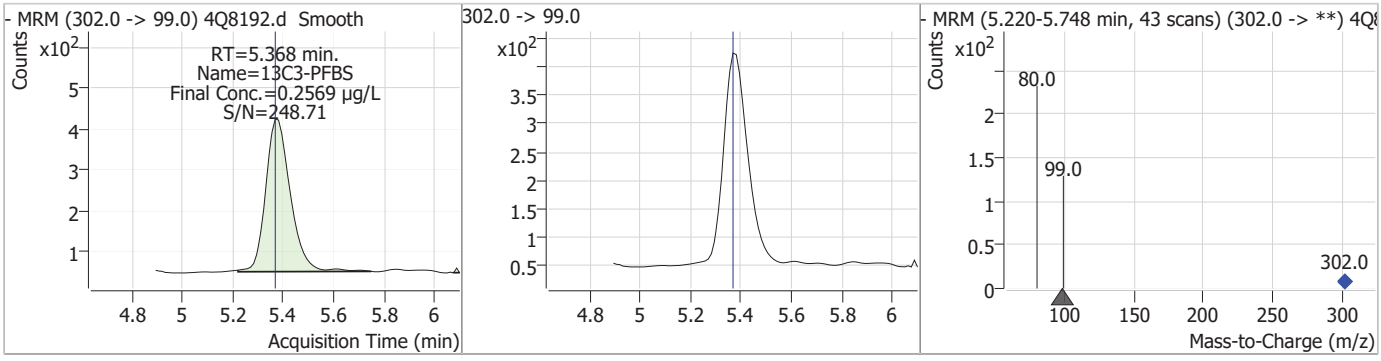
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	0.59	5.17	0.00	1199				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.88	5.38	0.03	25664	299.0 -> 99.0	42.2	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	0.26	5.37	0.00	2551				



7.1.20

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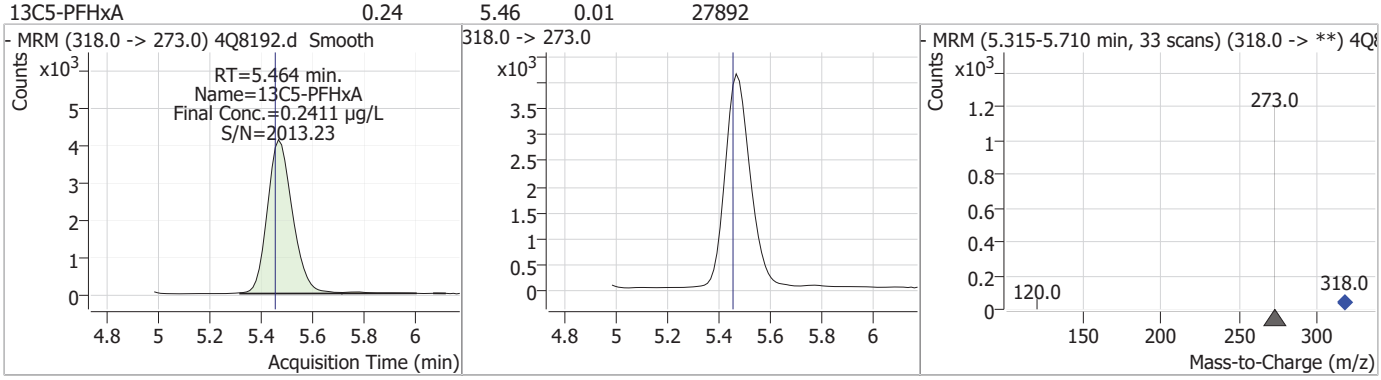
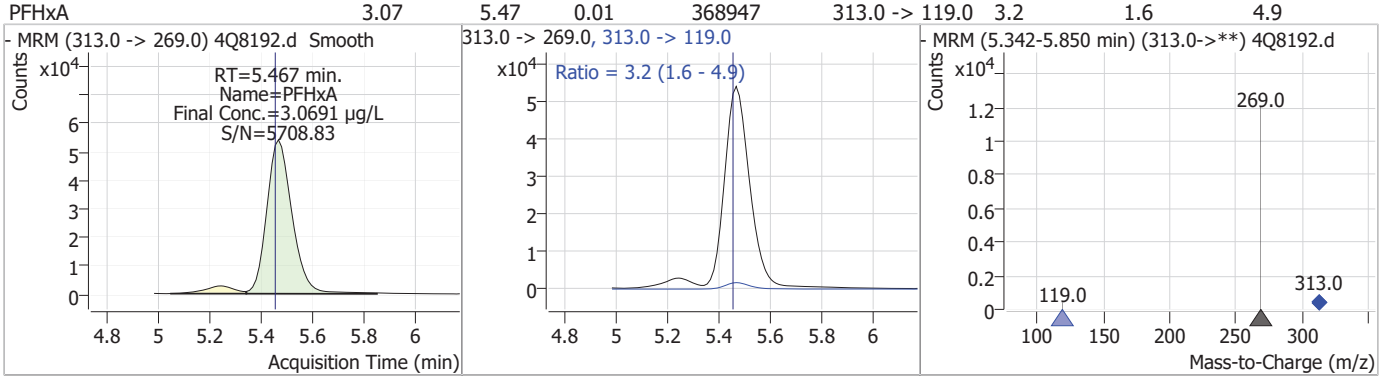
Perfluorinated Compounds by LC/MS/MS

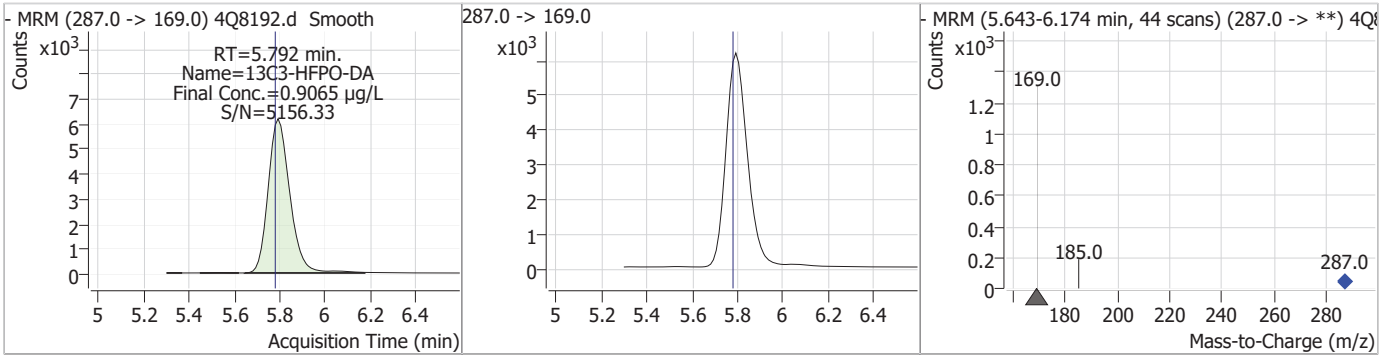
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	0.24	5.46	0.01	27892				



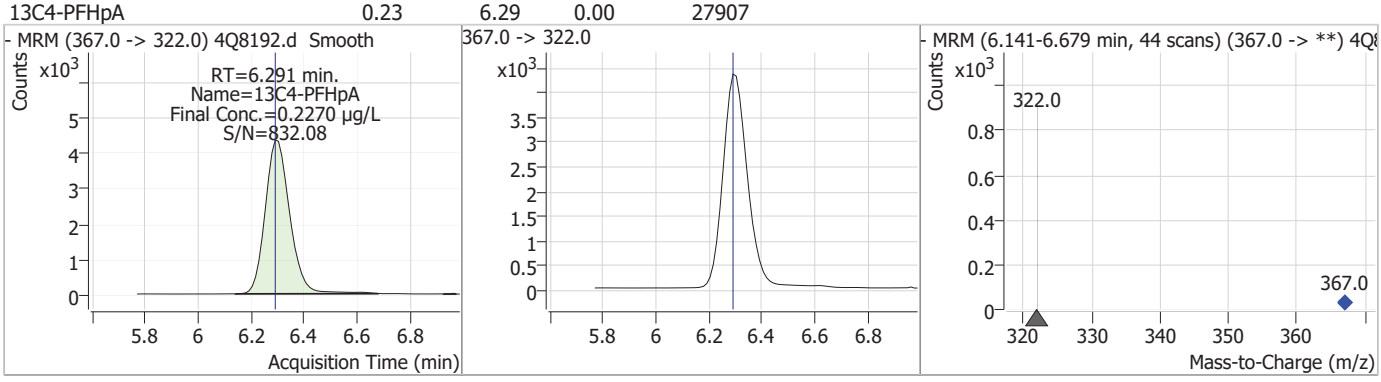
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	3.07	5.47	0.01	368947	313.0 -> 119.0	3.2	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	0.91	5.79	0.01	41174				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	0.23	6.29	0.00	27907				



7.1.20

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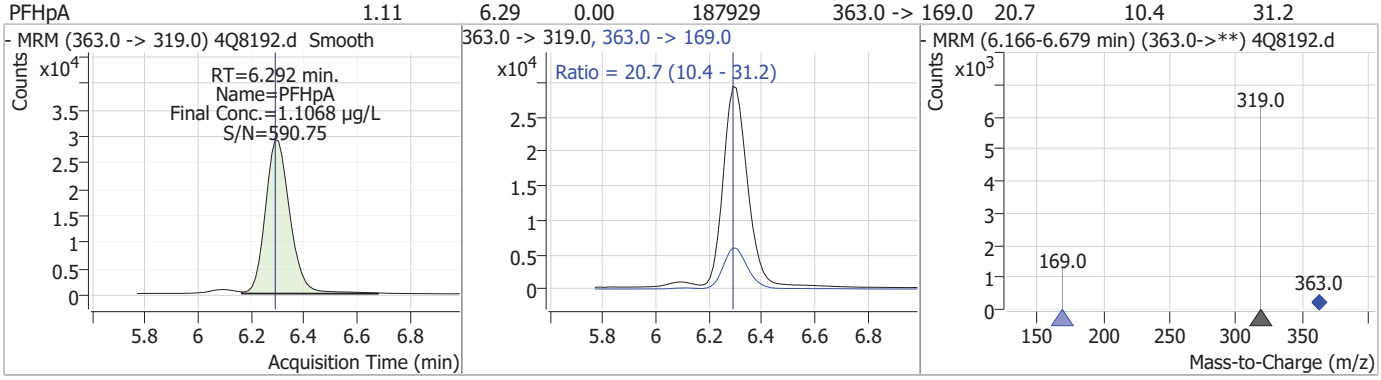
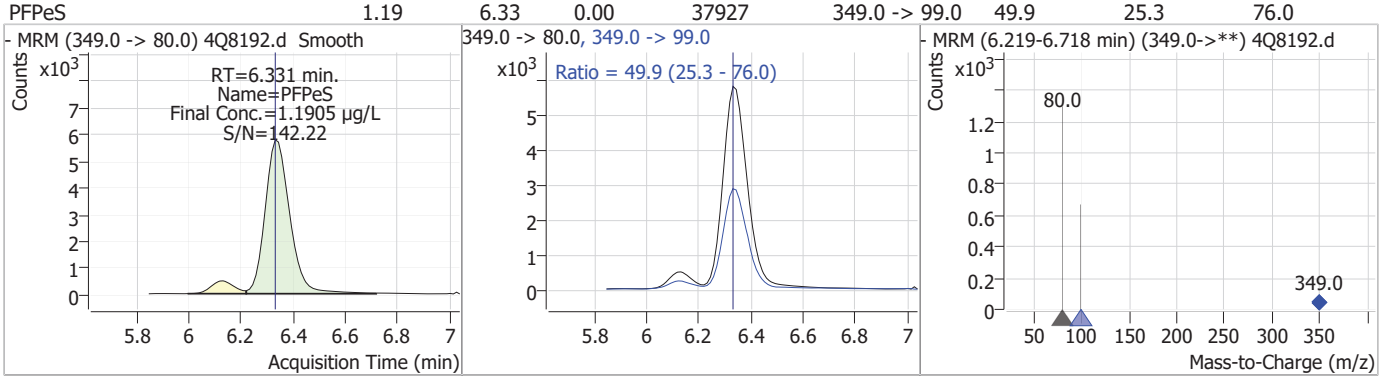
Perfluorinated Compounds by LC/MS/MS

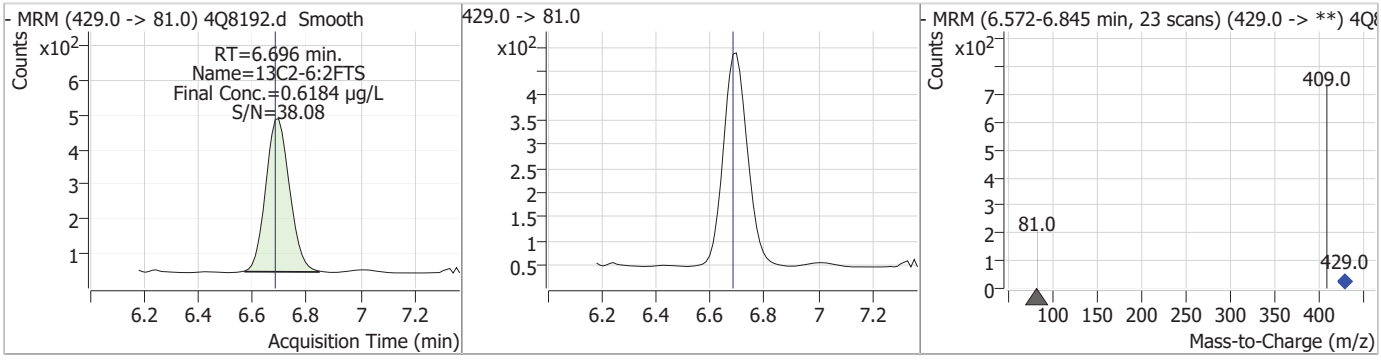
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	1.11	6.29	0.00	187929	363.0 -> 169.0	20.7	10.4	31.2



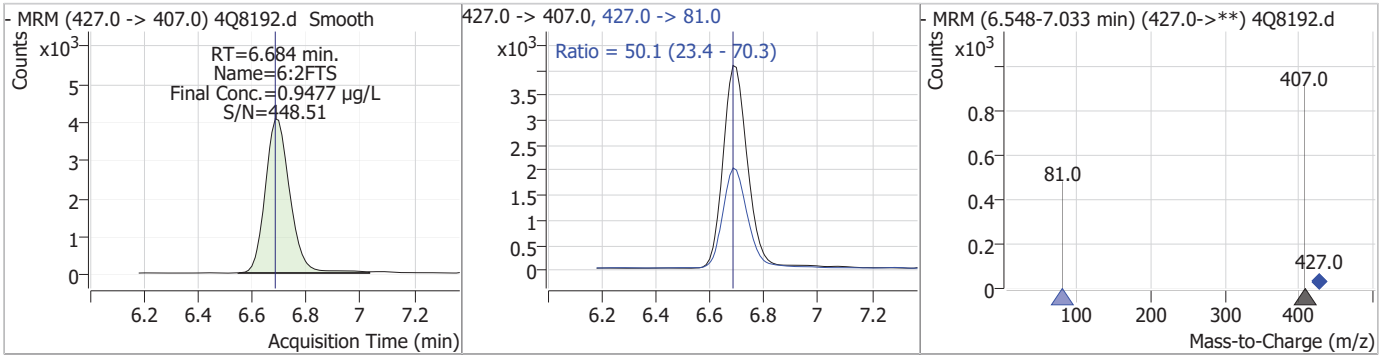
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	1.19	6.33	0.00	37927	349.0 -> 99.0	49.9	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	0.62	6.70	0.01	2708				

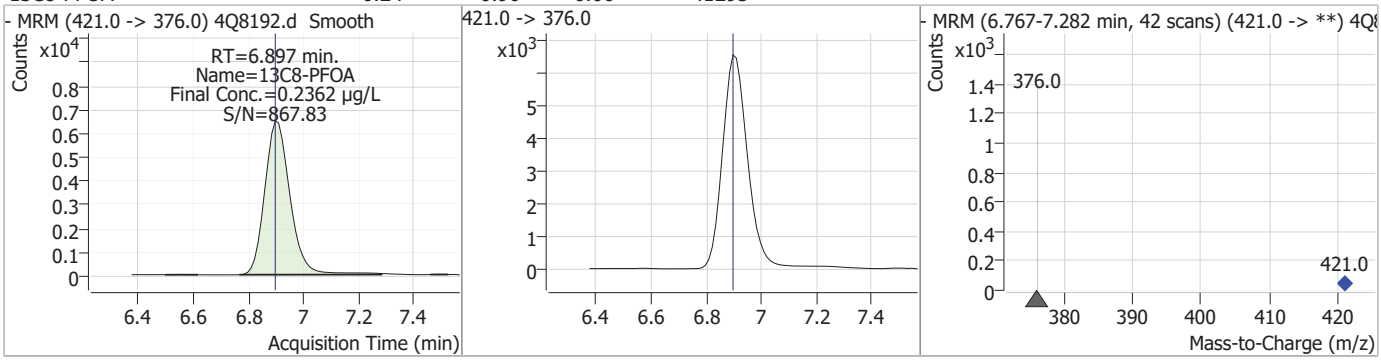


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.95	6.68	0.00	25735	427.0 -> 81.0	50.1	23.4	70.3

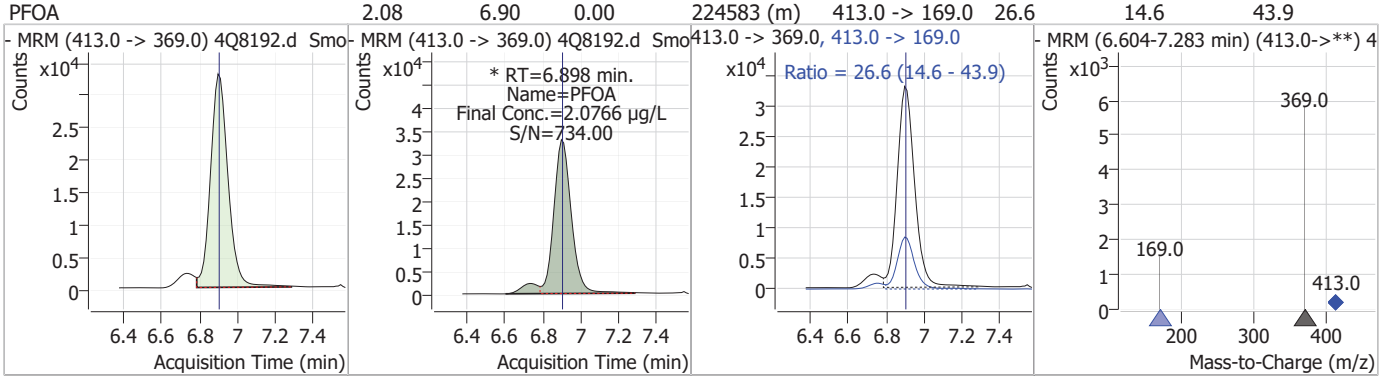


Perfluorinated Compounds by LC/MS/MS

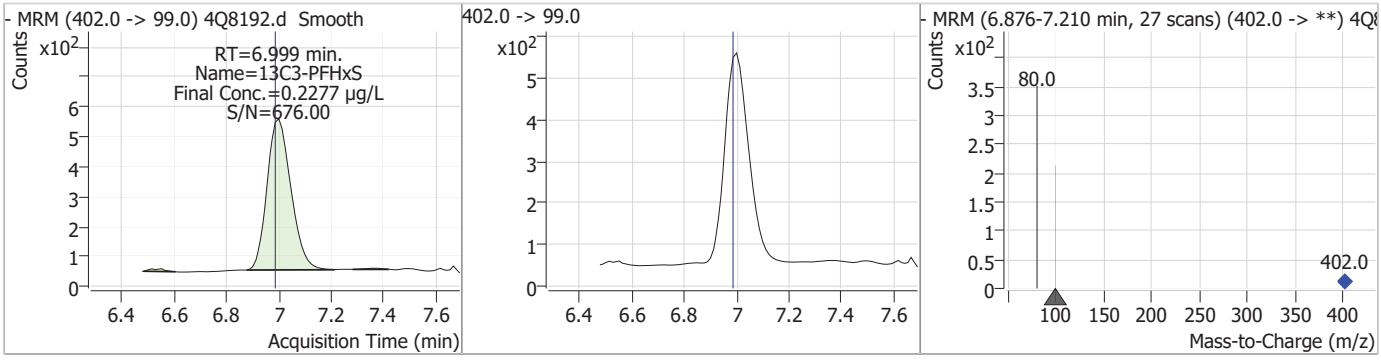
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	0.24	6.90	0.00	41295				



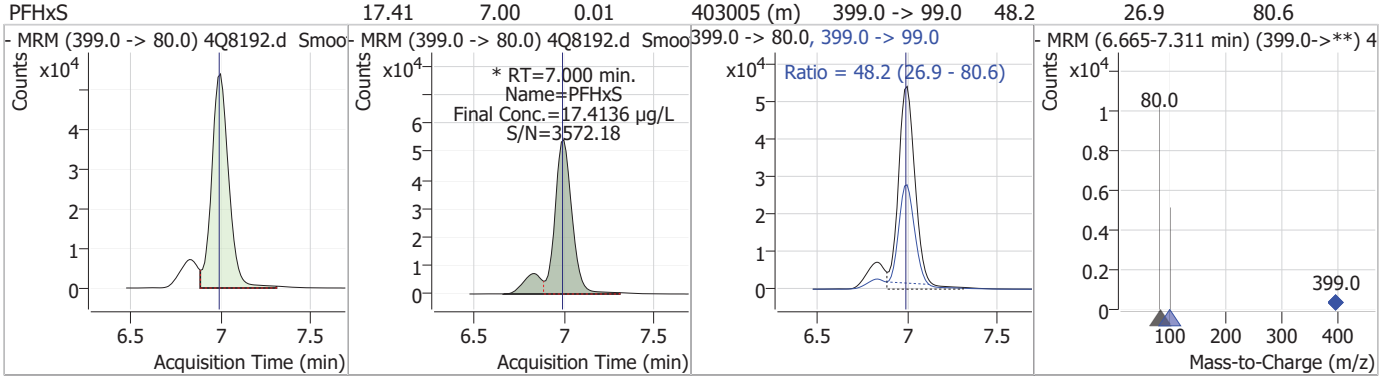
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.08	6.90	0.00	224583 (m)	413.0 -> 169.0	26.6	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	0.23	7.00	0.01	3200				

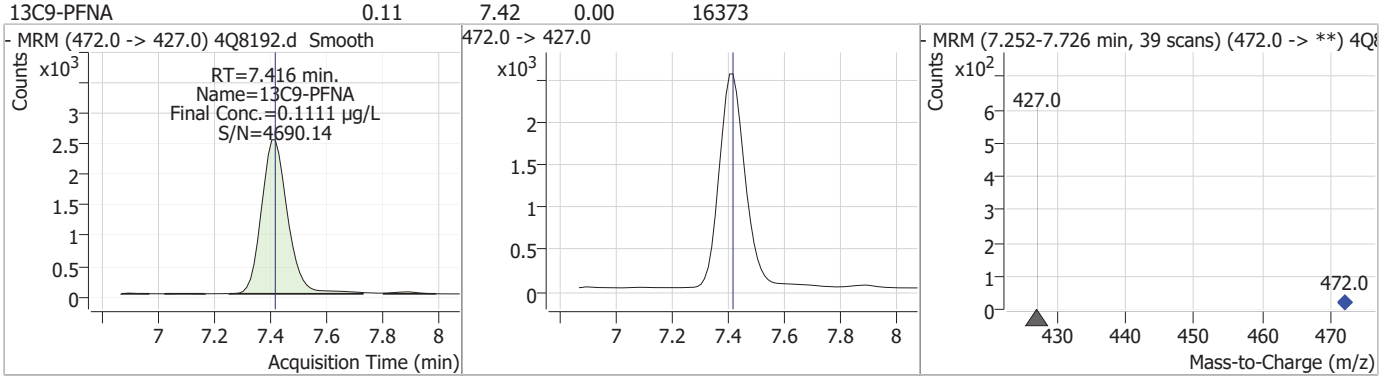


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	17.41	7.00	0.01	403005 (m)	399.0 -> 99.0	48.2	26.9	80.6

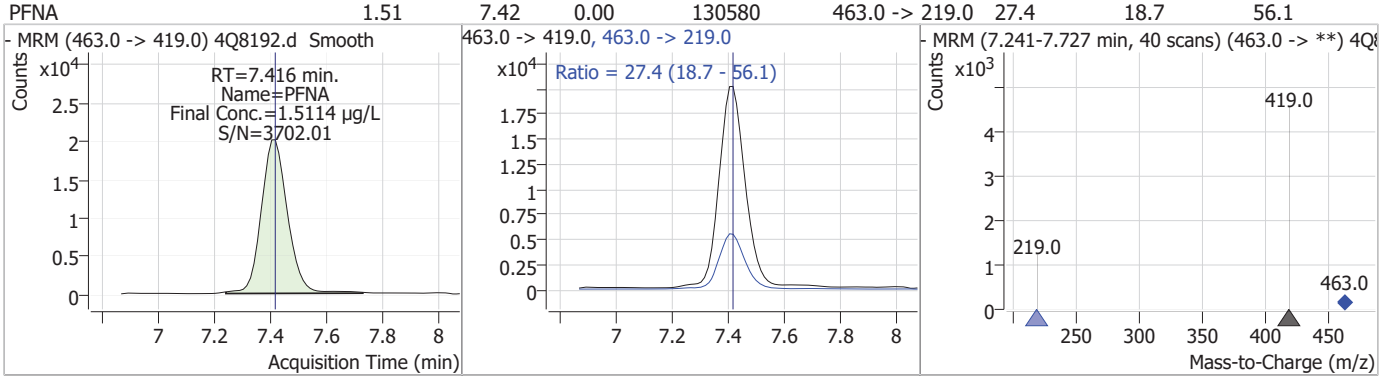


Perfluorinated Compounds by LC/MS/MS

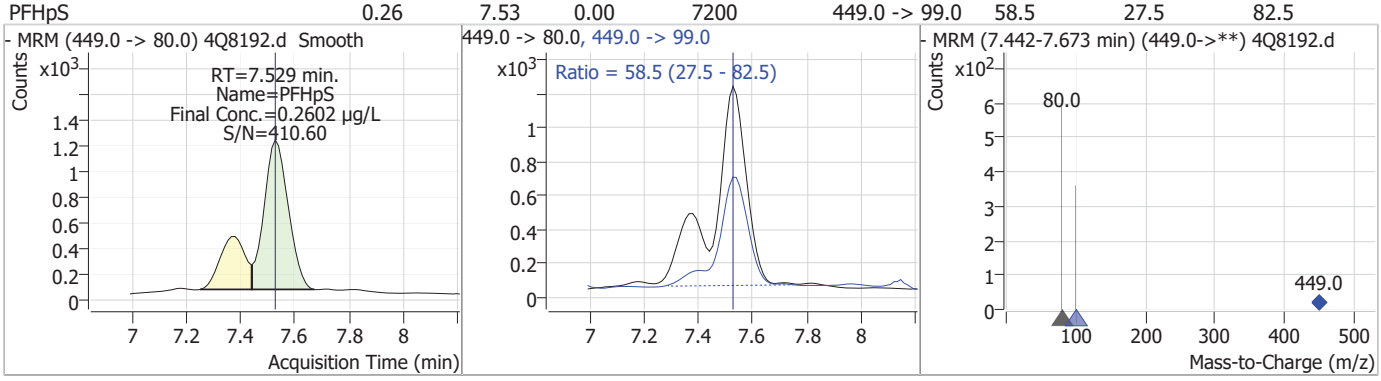
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	0.11	7.42	0.00	16373				



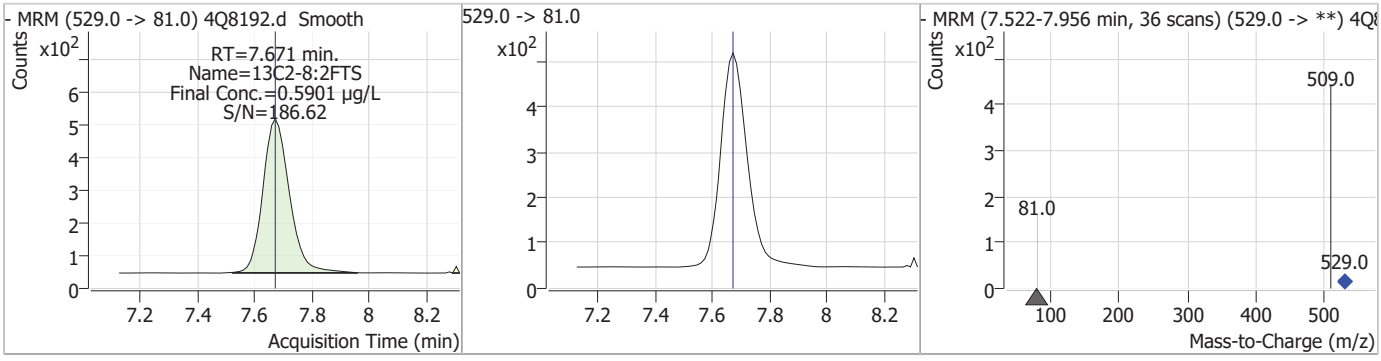
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	1.51	7.42	0.00	130580	463.0 -> 219.0	27.4	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.26	7.53	0.00	7200	449.0 -> 99.0	58.5	27.5	82.5

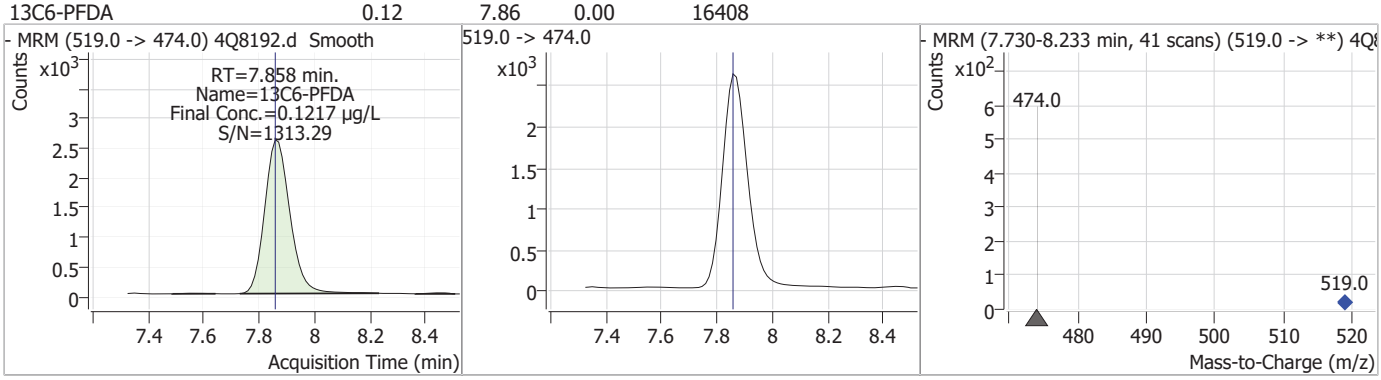


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	0.59	7.67	0.00	3040				

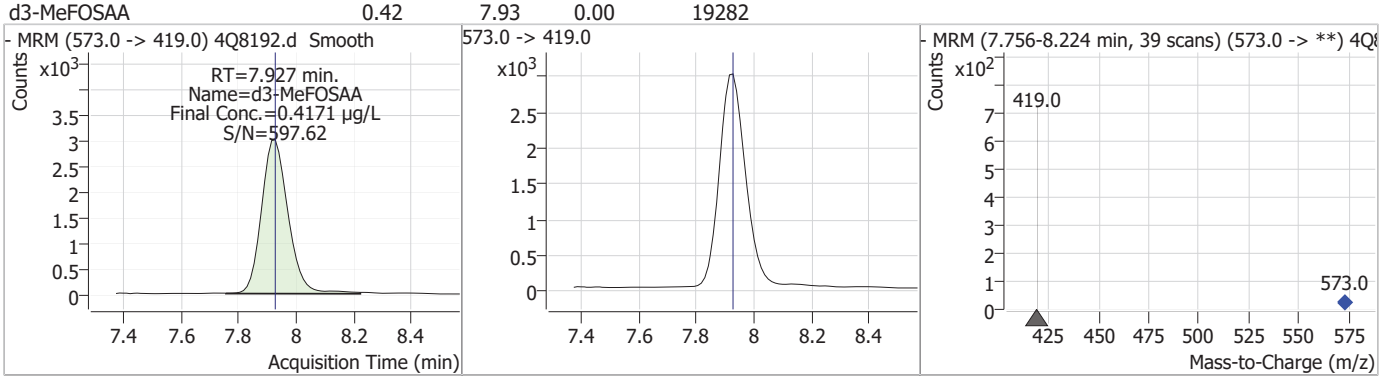


Perfluorinated Compounds by LC/MS/MS

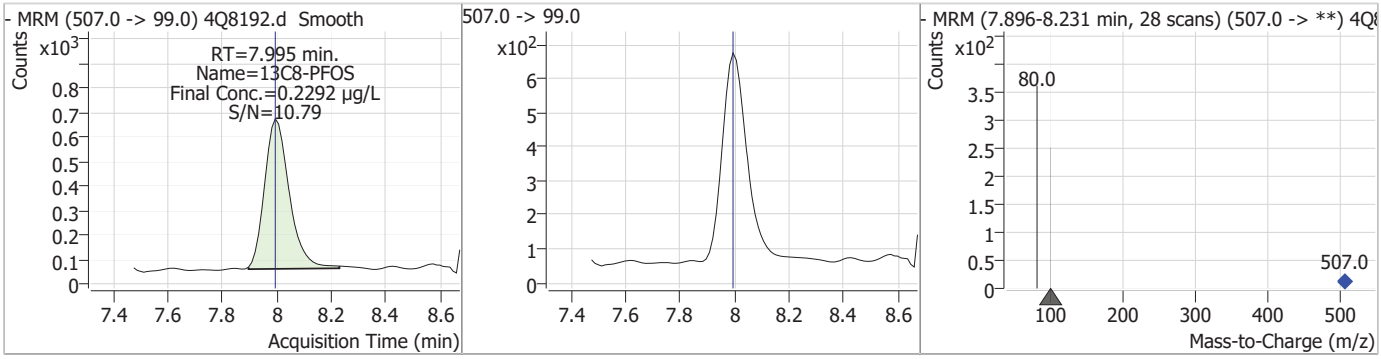
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	0.12	7.86	0.00	16408				



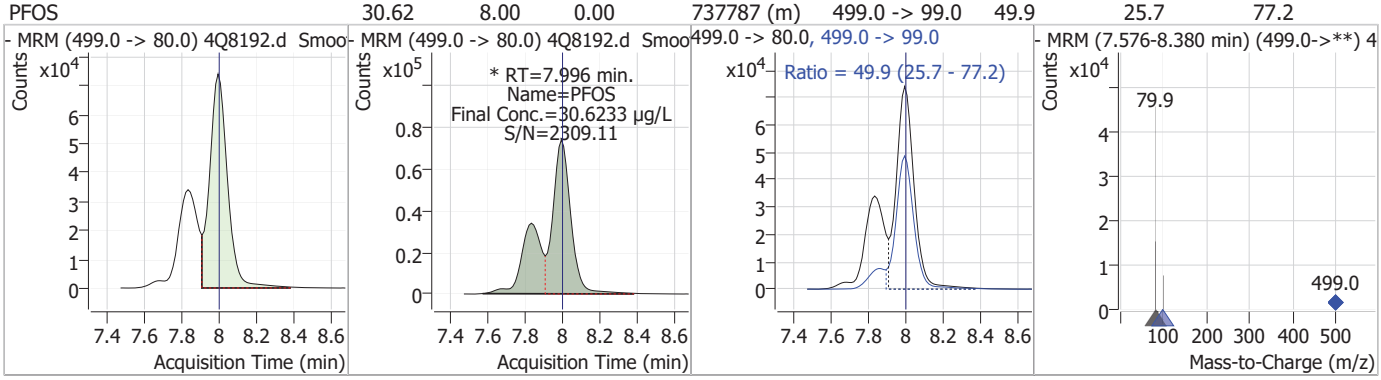
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	0.42	7.93	0.00	19282				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	0.23	7.99	0.00	3873				

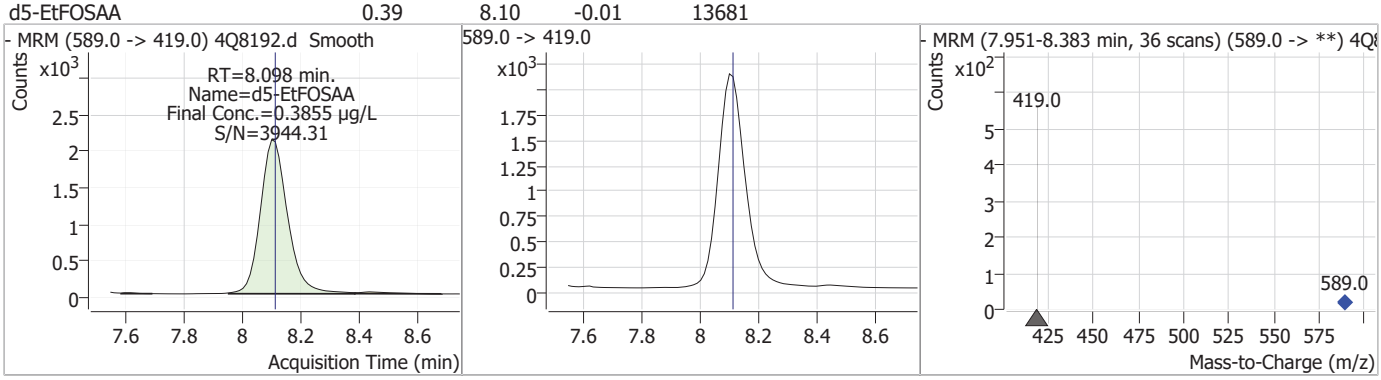


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	30.62	8.00	0.00	737787 (m)	499.0 -> 99.0	49.9	25.7	77.2

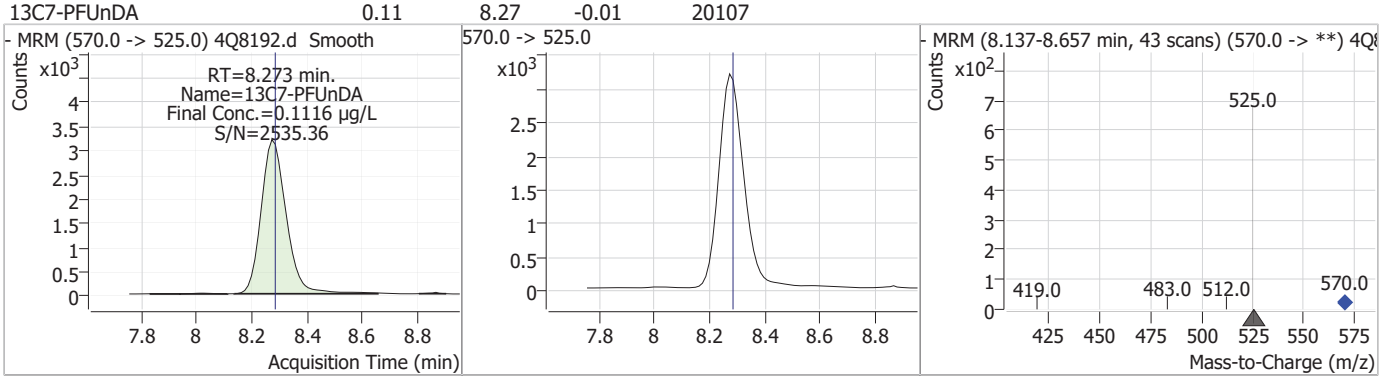


Perfluorinated Compounds by LC/MS/MS

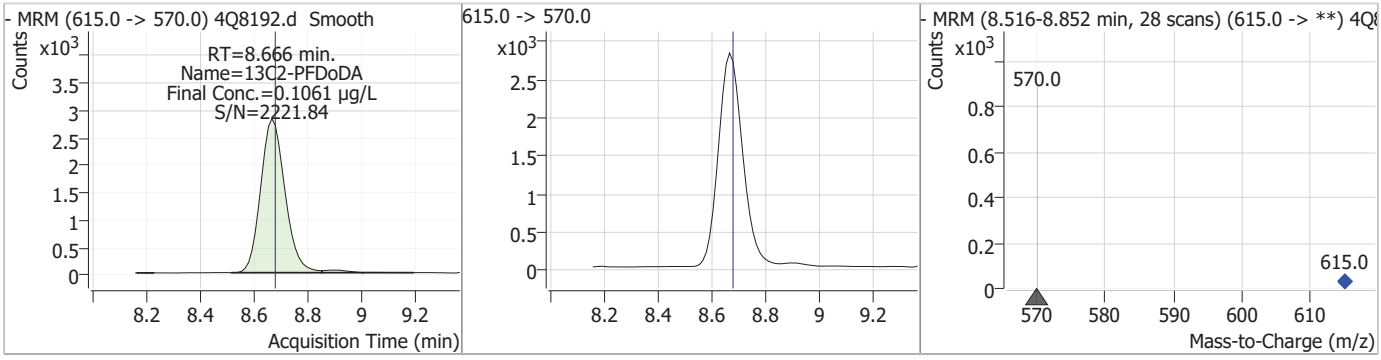
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	0.39	8.10	-0.01	13681				



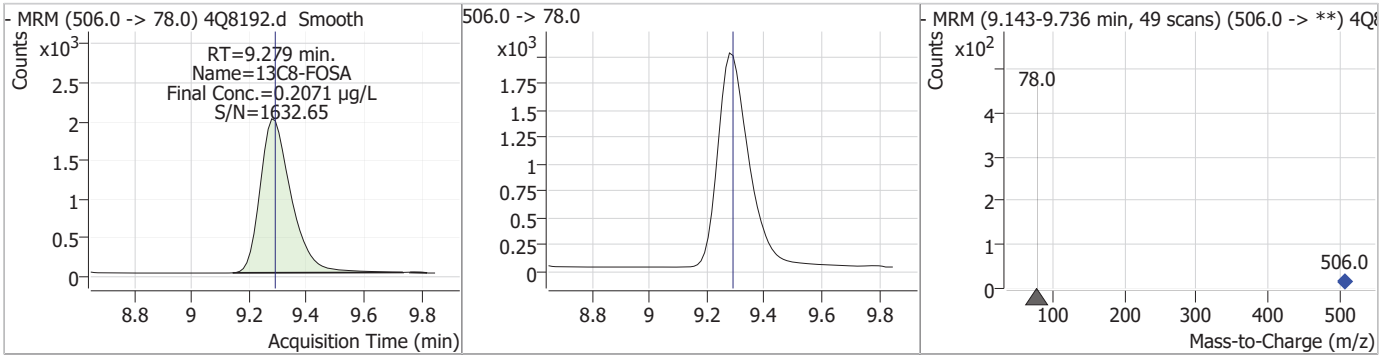
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	0.11	8.27	-0.01	20107				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	0.11	8.67	-0.01	17500				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	0.21	9.28	-0.01	14928				



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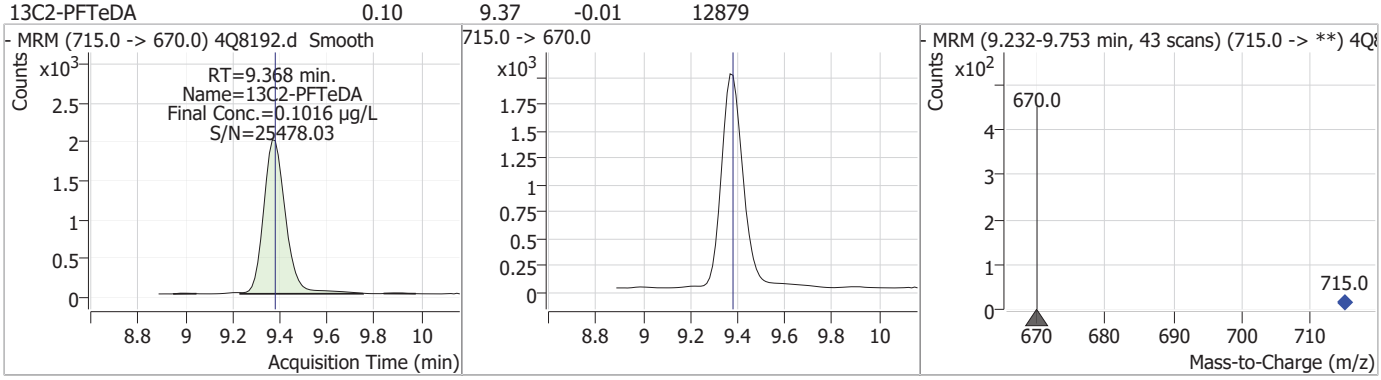
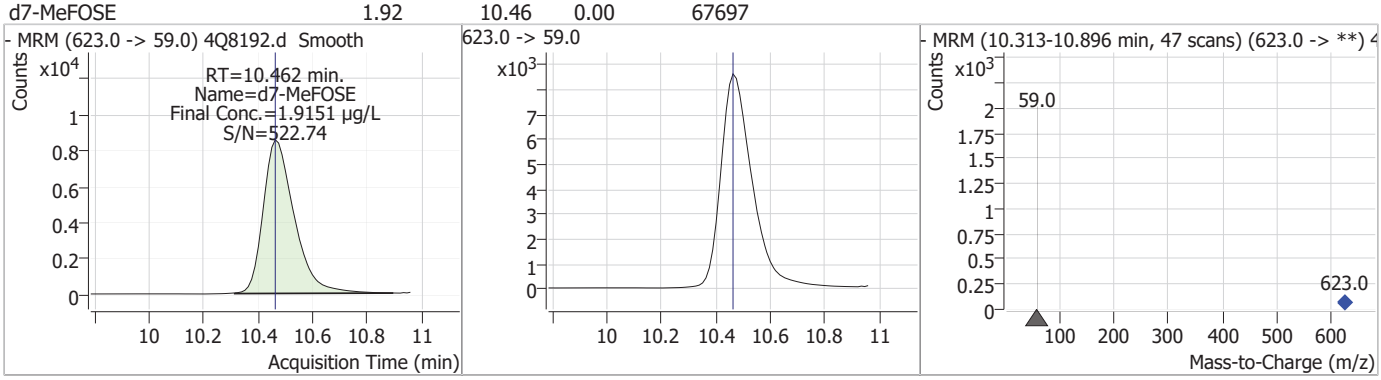
Perfluorinated Compounds by LC/MS/MS

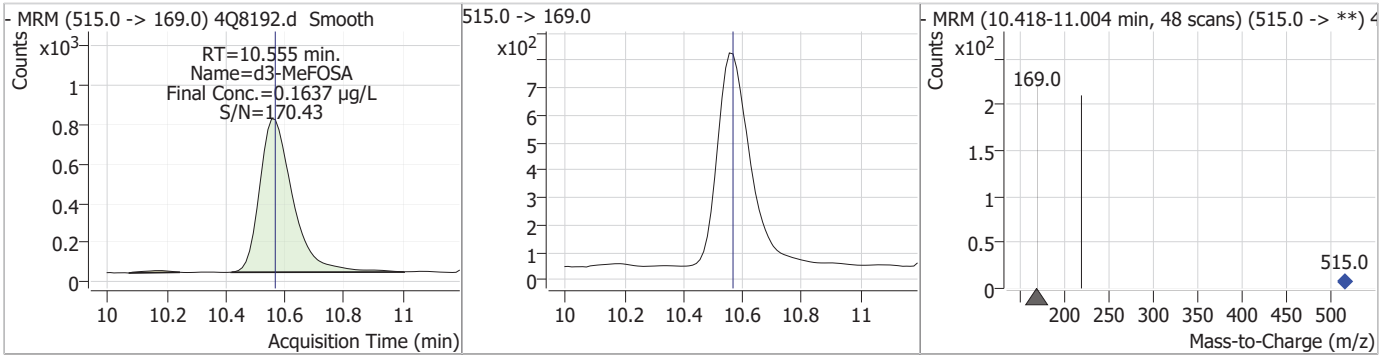
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.10	9.37	-0.01	12879				



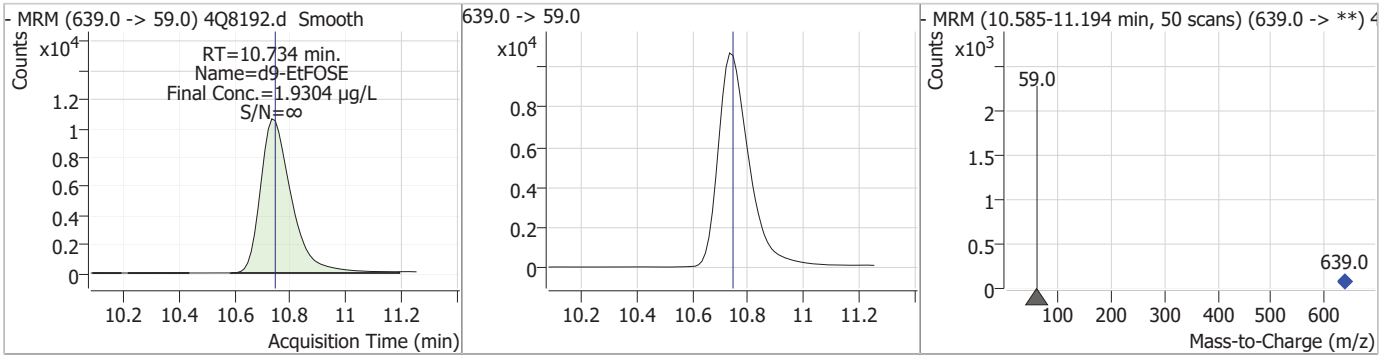
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	1.92	10.46	0.00	67697				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	0.16	10.56	-0.01	6062				

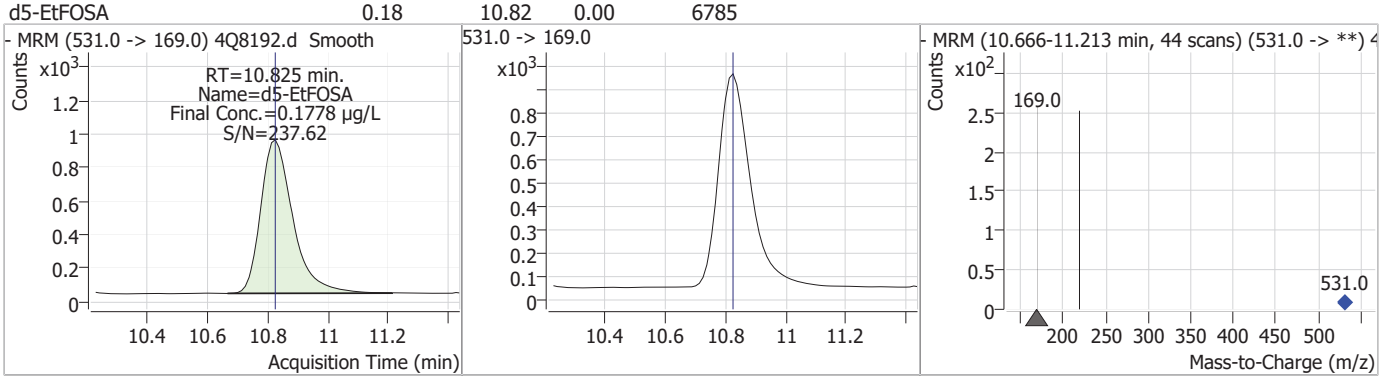


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	1.93	10.73	-0.01	82742				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	0.18	10.82	0.00	6785				



Manual Integration Approval Summary

Sample Number: JE10205-13
Lab FileID: 4Q8192.D
Injection Time: 05/01/25 15:27

Method: EPA 1633
Analyst approved: 05/02/25 05:01 Josephus Gimenez
Supervisor approved: 05/06/25 06:20 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8146.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 6:33:51 PM
Sample Name : JE10205-14
Vial : P1-B9
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,515,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.858	217.0 -> 172.0	892845	10.00	µg/L	-0.025
M5-PFPeA	4.307	268.0 -> 223.0	464246	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	328080	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	341288	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	513951	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	202628	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	198180	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	259358	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	233148	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	173433	1.25	µg/L	0.000
M8-FOSA	9.279	506.0 -> 78.0	184489	2.50	µg/L	-0.012
M3-PFBS	5.355	302.0 -> 99.0	30473	2.50	µg/L	-0.012
		302.0 -> 80.0	73821			
M3-PFHxS	6.986	402.0 -> 99.0	40165	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	45808	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	13667	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	28791	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	33420	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	234340	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	496778	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	171622	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	883063	25.00	µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1090127	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	84202	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	80317	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	78721	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	403401	5.00	µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	49776	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	535453	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	190639	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	205119	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	321136	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	13667	5.48	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 109.5%		
13C2-6:2FTS	6.684	429.0 -> 81.0	28791	5.32	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.3%		
13C2-8:2FTS	7.671	529.0 -> 81.0	33420	5.24	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.9%		
13C2-PFDoDA	8.666	615.0 -> 570.0	233148	1.13	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.5%		
13C2-PFTeDA	9.381	715.0 -> 670.0	173433	1.09	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.6%		
13C3-PFBS	5.355	302.0 -> 99.0	30473	2.48	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.2%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	40165	2.31 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.4%	
13C4-PFBA	2.858	217.0 -> 172.0	892845	9.65 µg/L	-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 96.5%	
13C4-PFHpA	6.291	367.0 -> 322.0	341288	2.36 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.5%	
13C5-PFHxA	5.452	318.0 -> 273.0	328080	2.41 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.5%	
13C5-PFPeA	4.307	268.0 -> 223.0	464246	4.50 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.0%	
13C6-PFDA	7.858	519.0 -> 474.0	198180	1.18 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.1%	
13C7-PFUnDA	8.273	570.0 -> 525.0	259358	1.15 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.2%	
13C8-FOSA	9.279	506.0 -> 78.0	184489	2.28 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.3%	
13C8-PFOA	6.897	421.0 -> 376.0	513951	2.40 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.1%	
13C8-PFOS	7.995	507.0 -> 99.0	45808	2.42 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.7%	
13C9-PFNA	7.403	472.0 -> 427.0	202628	1.19 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.3%	
d3-MeFOSAA	7.915	573.0 -> 419.0	234340	4.52 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.4%	
13C3-HFPO-DA	5.779	287.0 -> 169.0	496778	9.31 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 93.1%	
d3-MeFOSA	10.567	515.0 -> 169.0	80317	1.93 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 77.4%	
d5-EtFOSAA	8.098	589.0 -> 419.0	171622	4.31 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 86.2%	
d7-MeFOSE	10.462	623.0 -> 59.0	883063	22.27 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 89.1%	
d9-EtFOSE	10.746	639.0 -> 59.0	1090127	22.68 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 90.7%	
d5-EtFOSA	10.825	531.0 -> 169.0	84202	1.97 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 78.7%	
Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	6.684	427.0 -> 407.0	16305	0.56 µg/L	99
		427.0 -> 81.0	7768		
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	2.864	213.0 -> 169.0	19588	0.72 µg/L	100
PFBS	5.357	299.0 -> 80.0	46537	1.34 µg/L	99
		299.0 -> 99.0	19310		
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

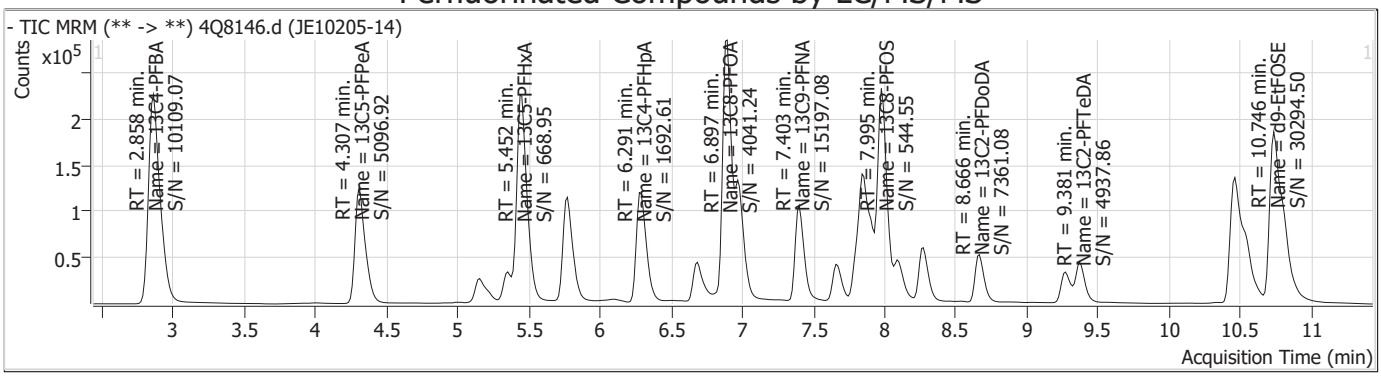
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.292	363.0 -> 319.0	154553	0.74	µg/L		100
		363.0 -> 169.0	32273				
PFHpS	7.529	449.0 -> 80.0	2909	0.08	µg/L		83
		449.0 -> 99.0	1956				
PFHxA	5.455	313.0 -> 269.0	447654	3.17	µg/L		100
		313.0 -> 119.0	14133				
PFHxS	6.987	399.0 -> 80.0	247858	7.09	µg/L	m	97
		399.0 -> 99.0	127347				
PFNA	7.404	463.0 -> 419.0	50838	0.42	µg/L	m	88
		463.0 -> 219.0	15327				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	6.898	413.0 -> 369.0	211798	1.24	µg/L	m	97
		413.0 -> 169.0	58256				
PFOS	7.996	499.0 -> 80.0	271371	7.35	µg/L	m	96
		499.0 -> 99.0	132063				
PFPeA	4.309	263.0 -> 219.0	169709	2.31	µg/L		100
PFPeS	6.318	349.0 -> 80.0	45188	1.19	µg/L		97
		349.0 -> 99.0	23815				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	-	563.0 -> 519.0	-	N.D.			
		563.0 -> 269.0					
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

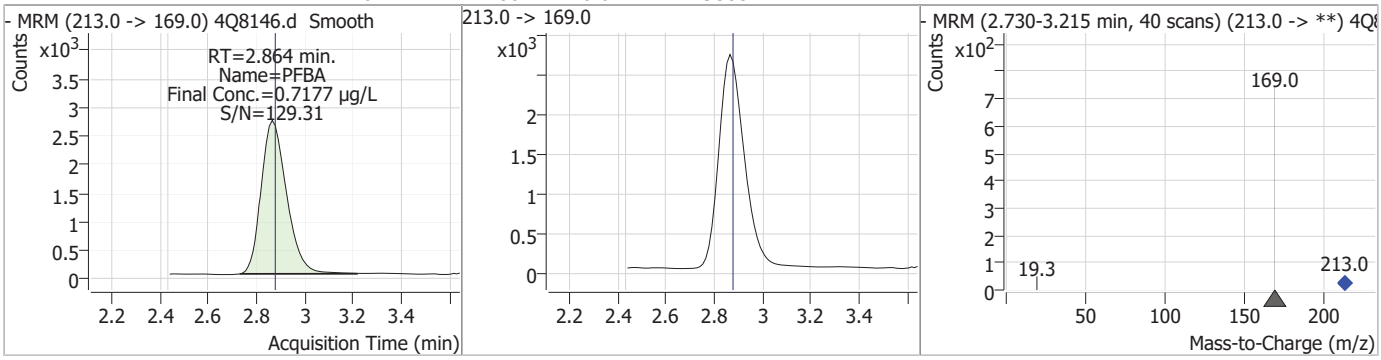
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

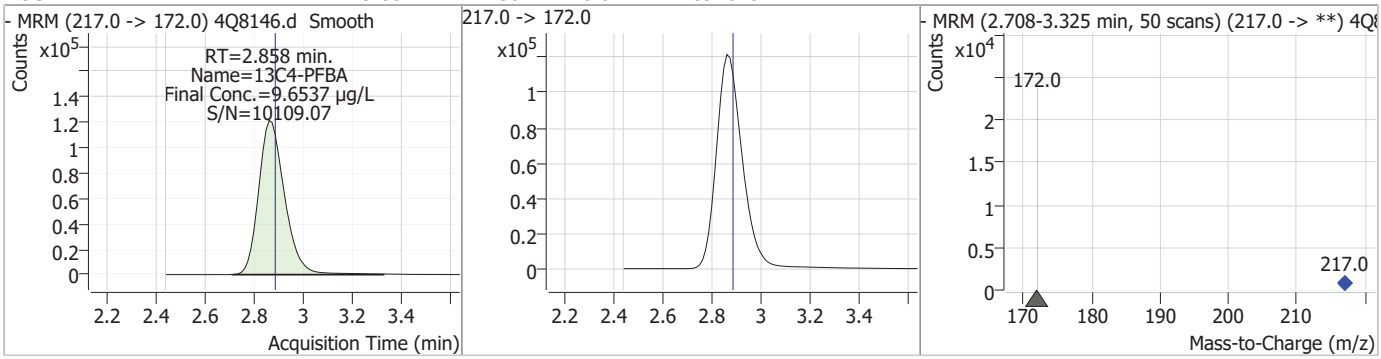
Perfluorinated Compounds by LC/MS/MS



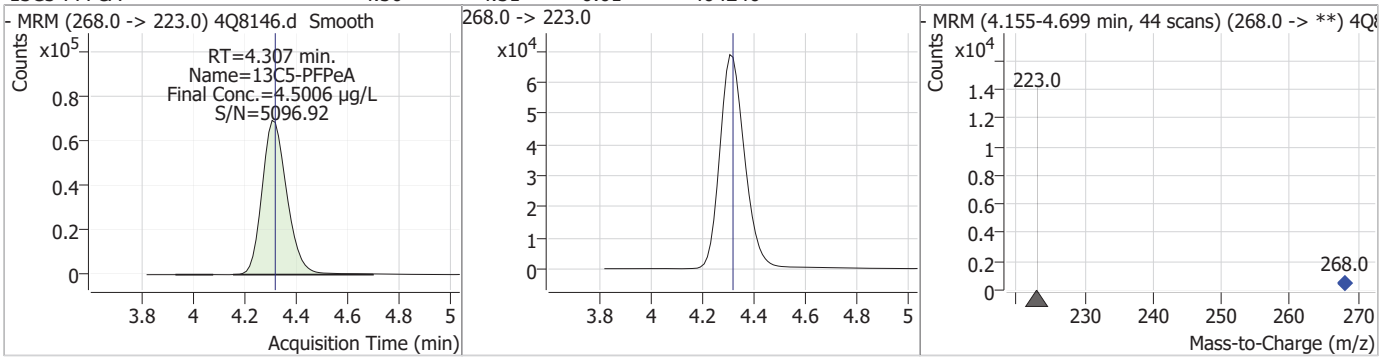
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.72	2.86	-0.01	19588				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.65	2.86	-0.02	892845				

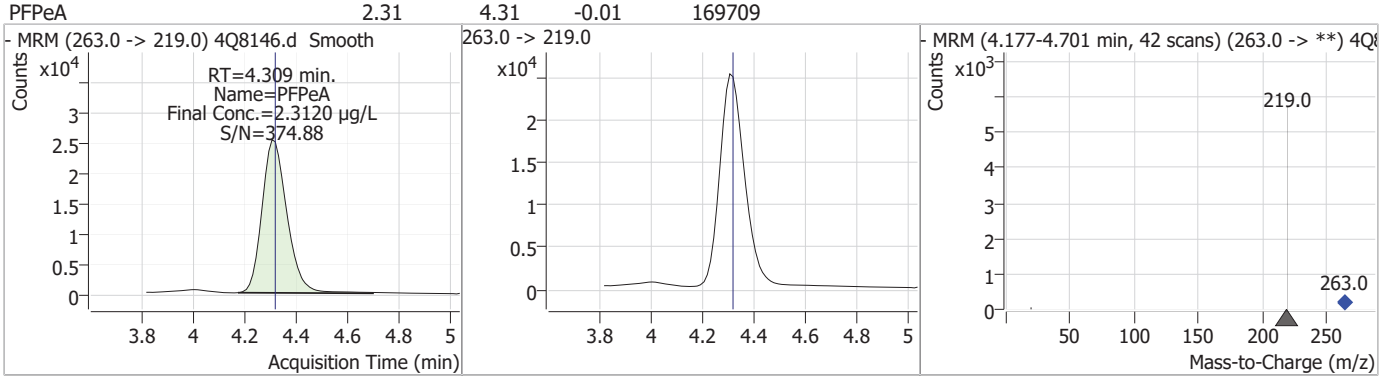


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.50	4.31	-0.01	464246				

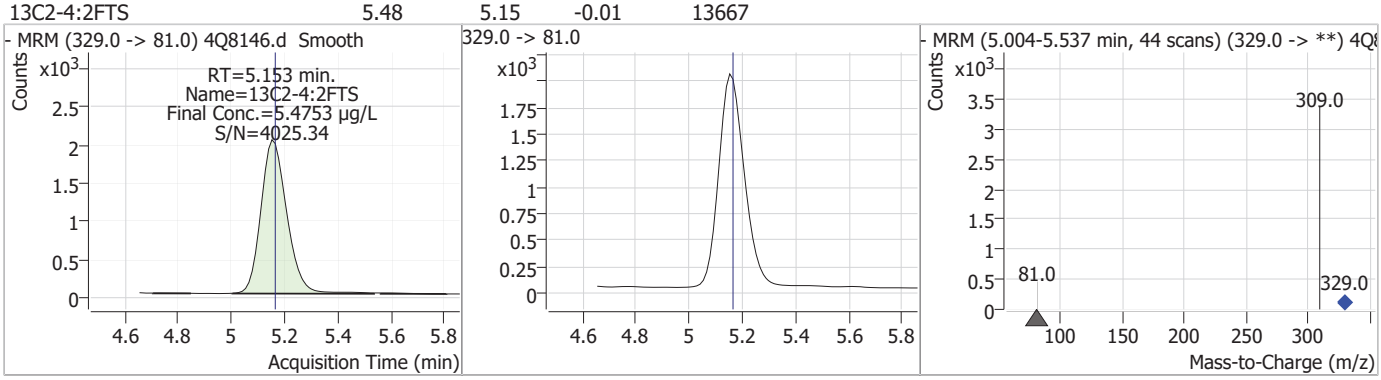


Perfluorinated Compounds by LC/MS/MS

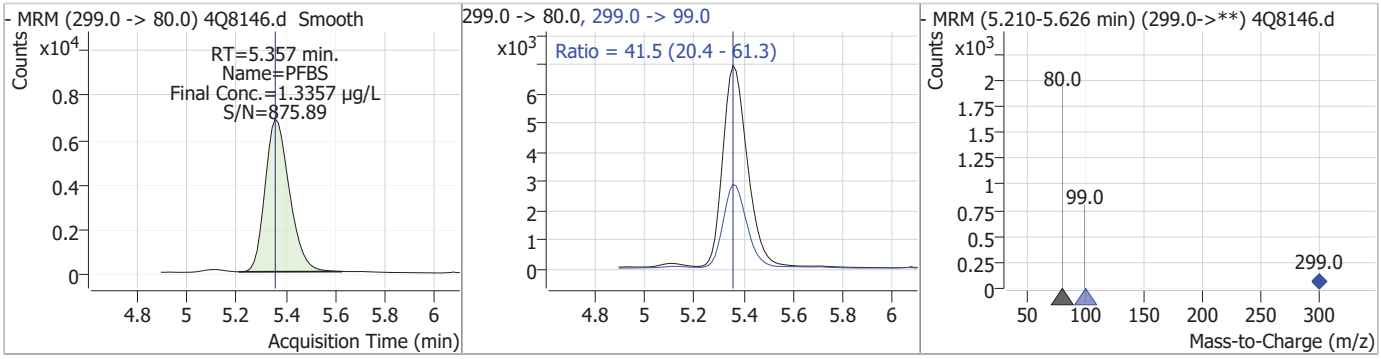
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	2.31	4.31	-0.01	169709				



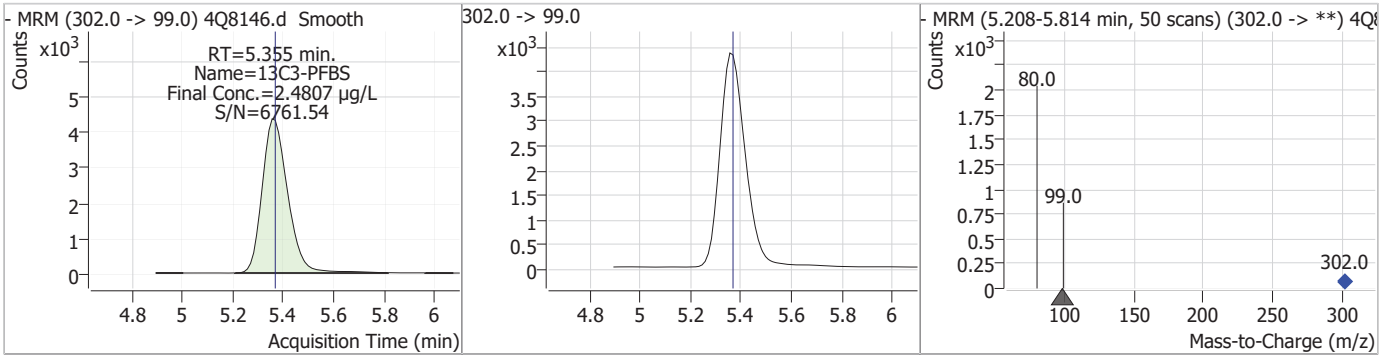
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.48	5.15	-0.01	13667				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	1.34	5.36	0.00	46537	299.0 -> 99.0	41.5	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.48	5.36	-0.01	30473				



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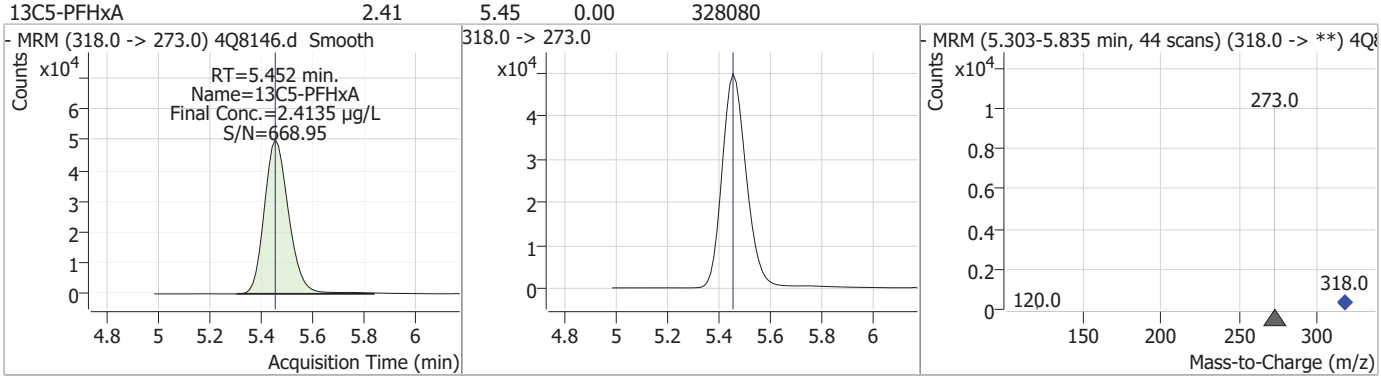
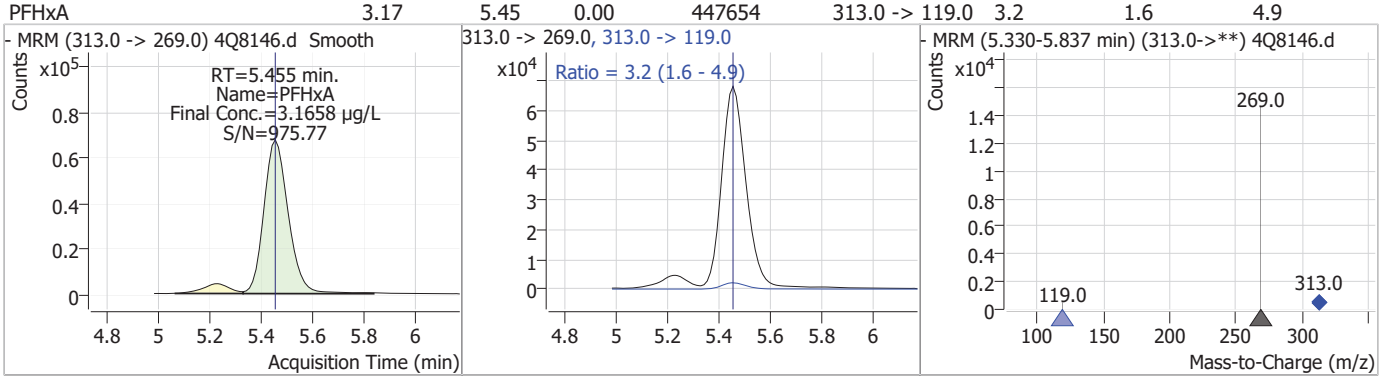
Perfluorinated Compounds by LC/MS/MS

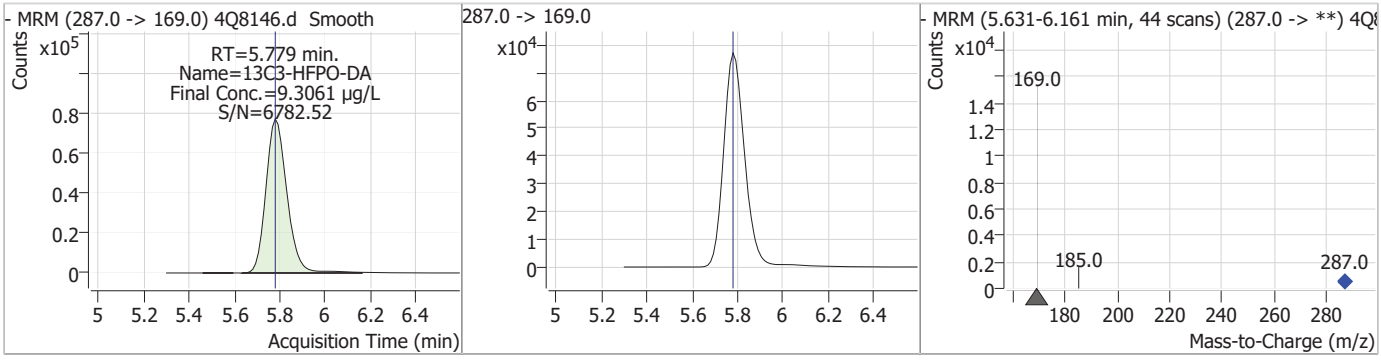
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.41	5.45	0.00	328080				



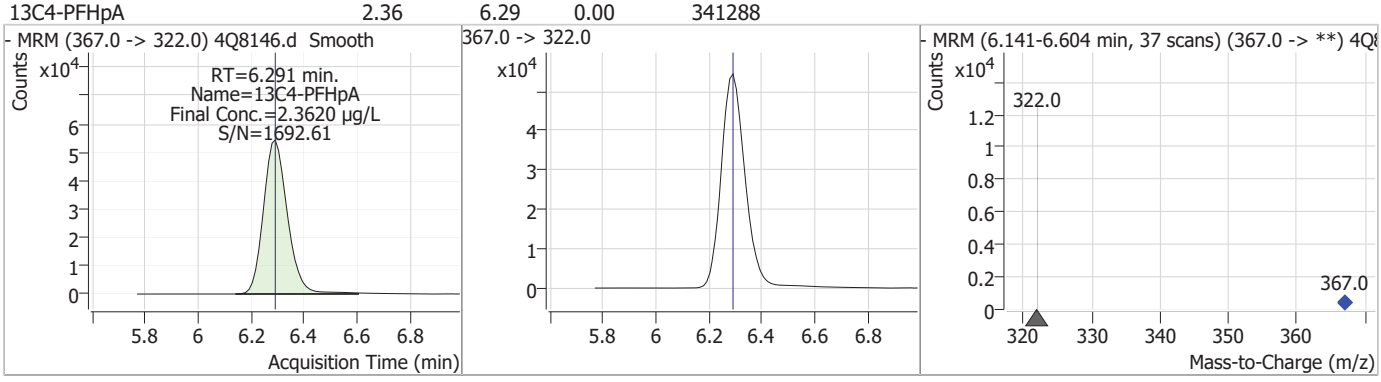
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	3.17	5.45	0.00	447654	313.0 -> 119.0	3.2	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.31	5.78	0.00	496778				

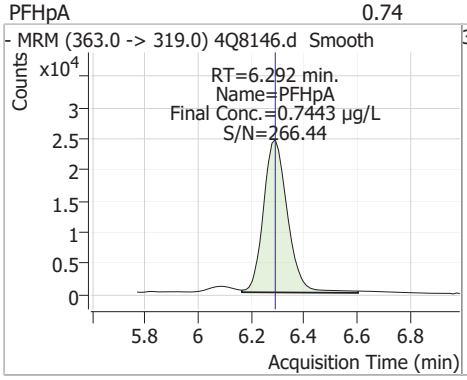


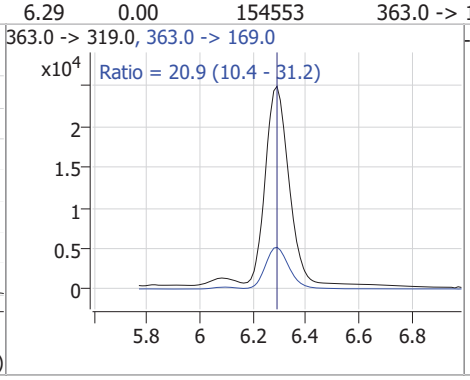
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.36	6.29	0.00	341288				

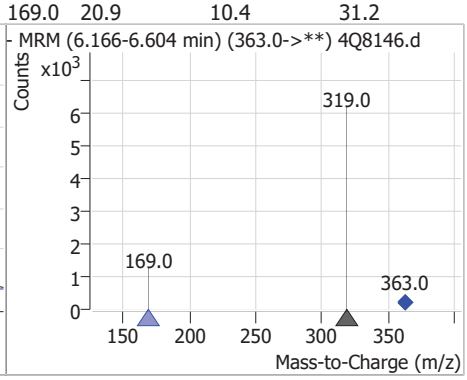


Perfluorinated Compounds by LC/MS/MS

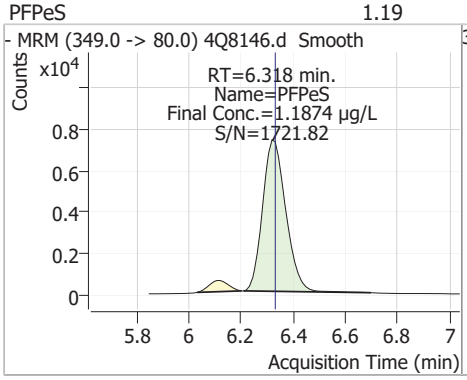
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.74	6.29	0.00	154553	363.0 -> 169.0	20.9	10.4	31.2

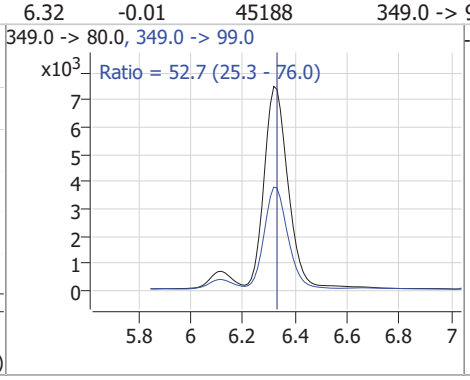


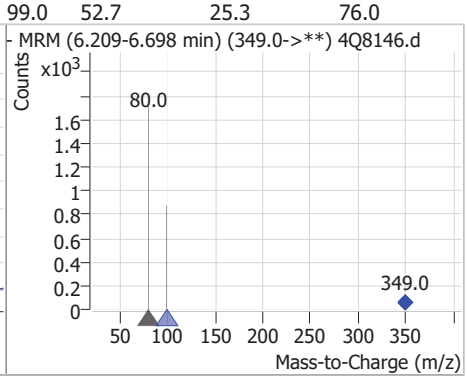




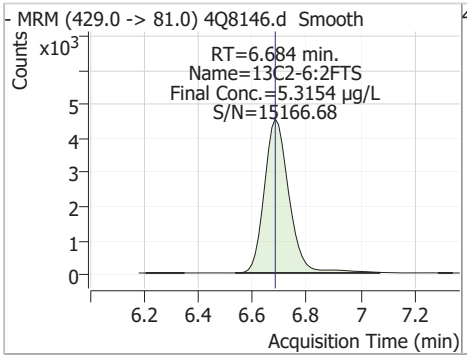
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	1.19	6.32	-0.01	45188	349.0 -> 99.0	52.7	25.3	76.0

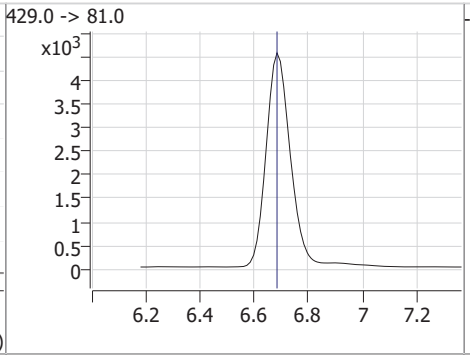


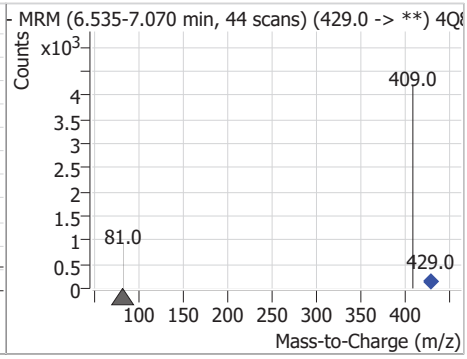




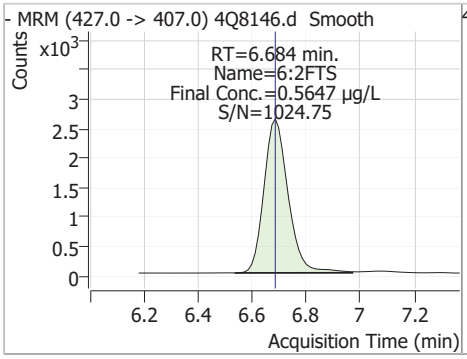
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.32	6.68	0.00	28791				

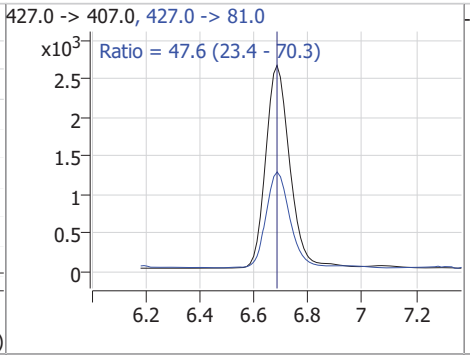


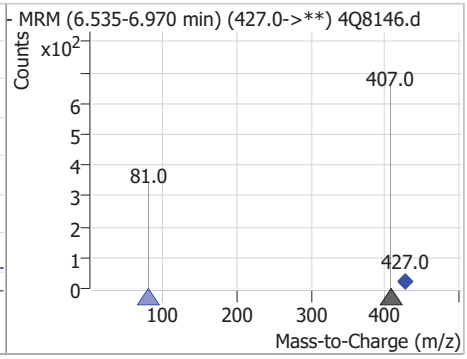




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.56	6.68	0.00	16305	427.0 -> 81.0	47.6	23.4	70.3

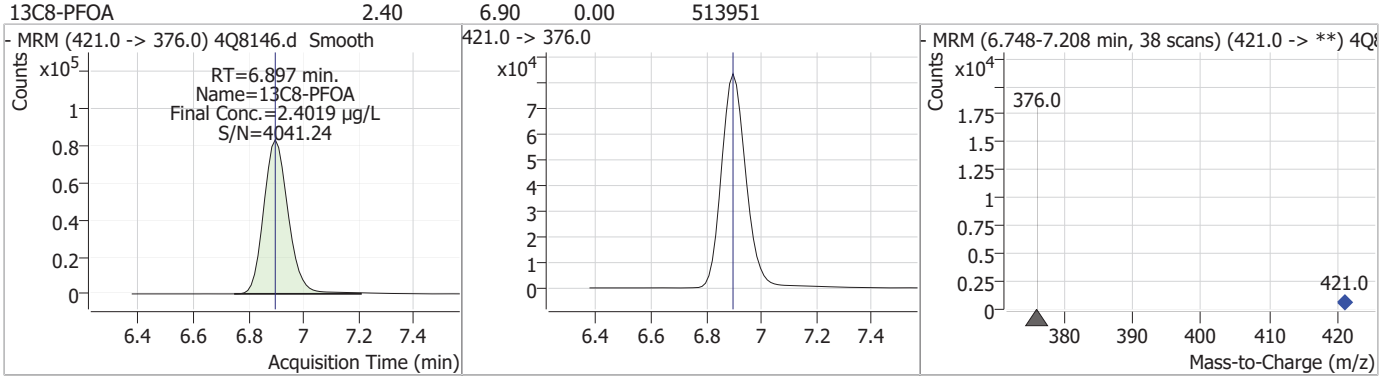




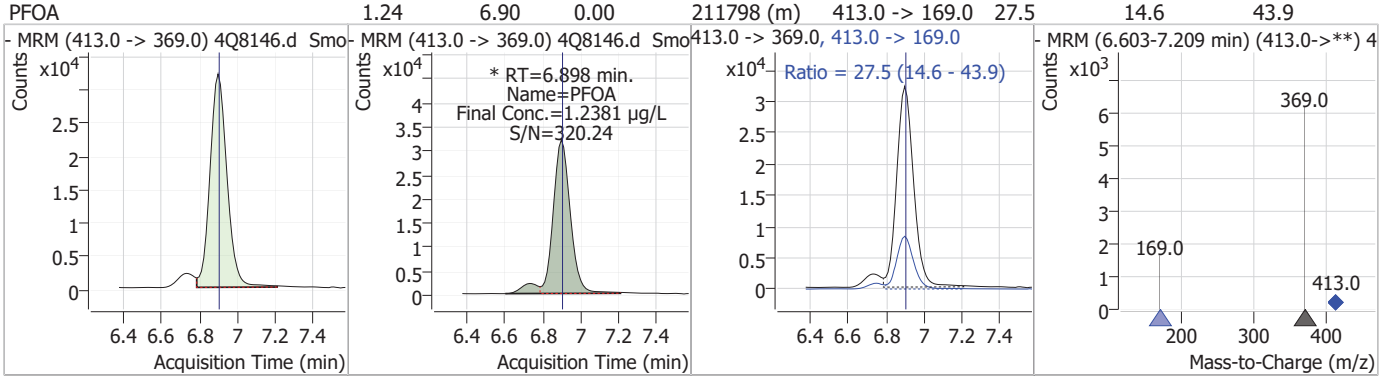


Perfluorinated Compounds by LC/MS/MS

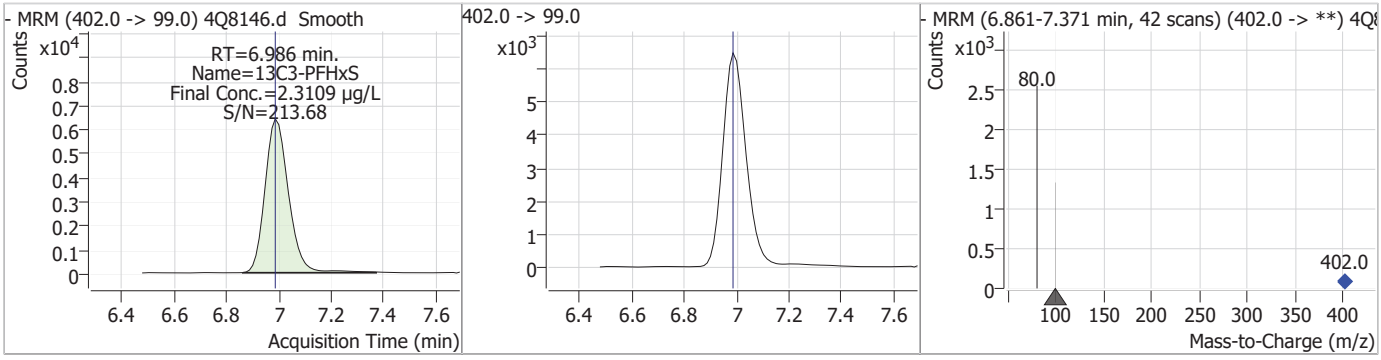
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.40	6.90	0.00	513951				



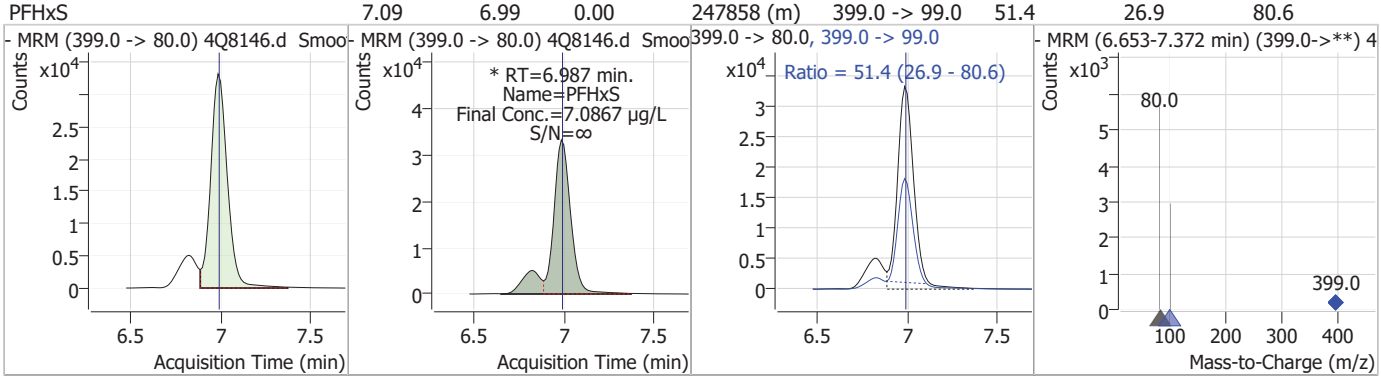
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	1.24	6.90	0.00	211798 (m)	413.0 -> 169.0	27.5	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.31	6.99	0.00	40165				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	7.09	6.99	0.00	247858 (m)	399.0 -> 99.0	51.4	26.9	80.6



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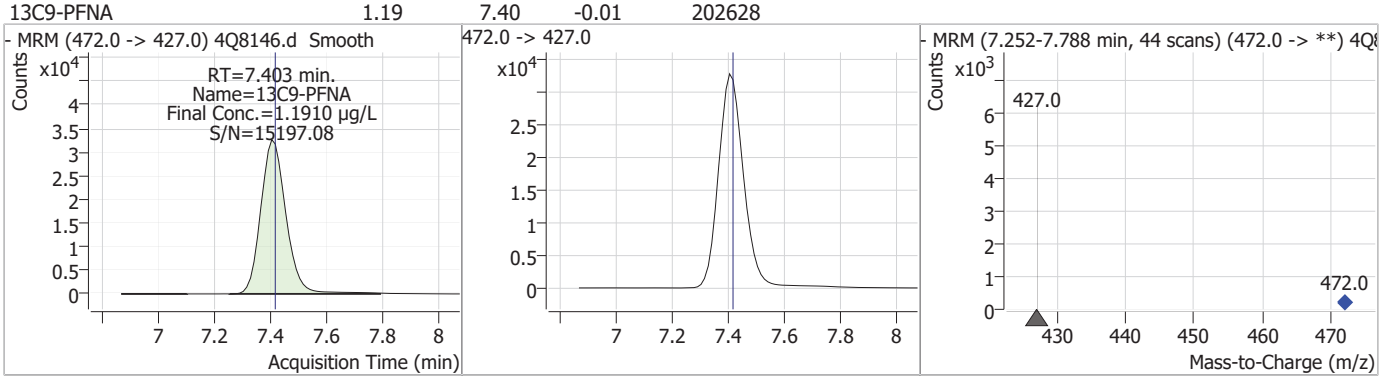
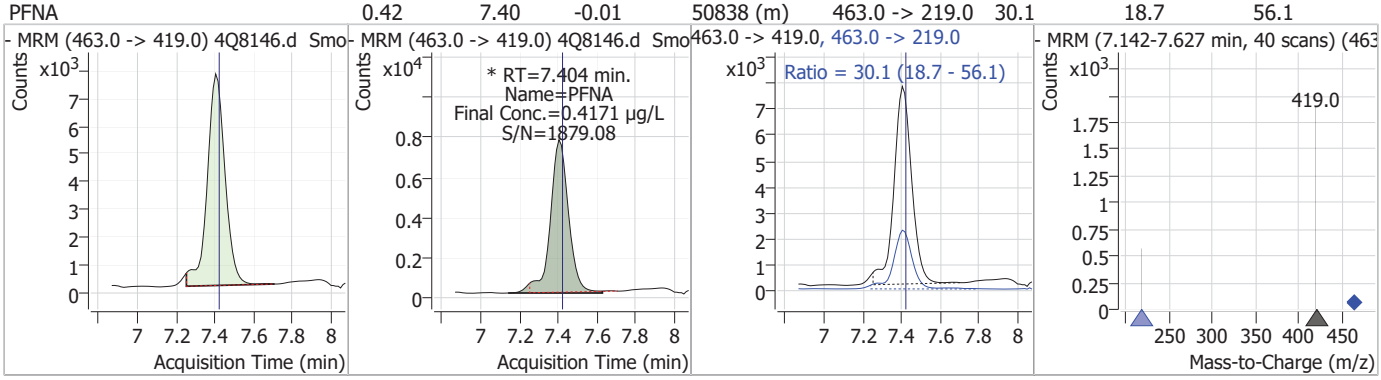
Perfluorinated Compounds by LC/MS/MS

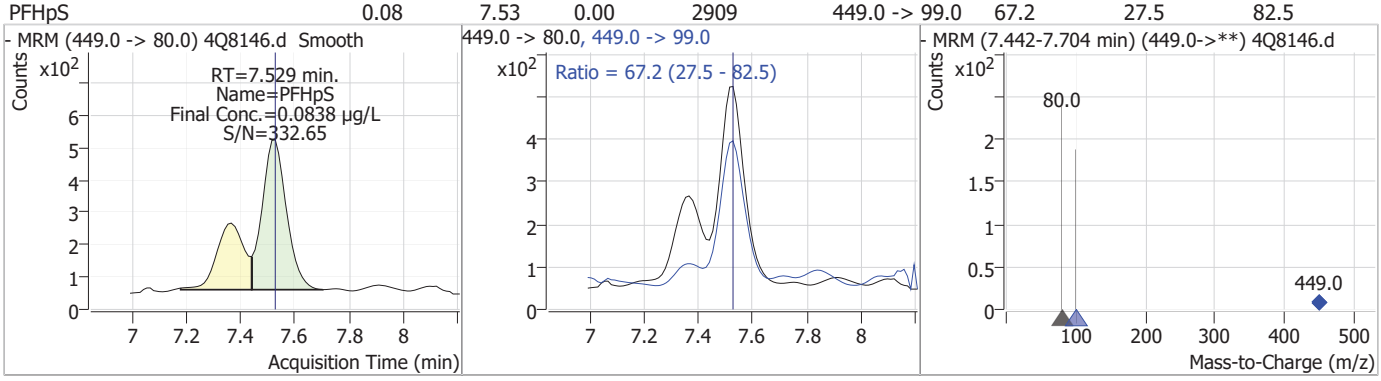
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.19	7.40	-0.01	202628				



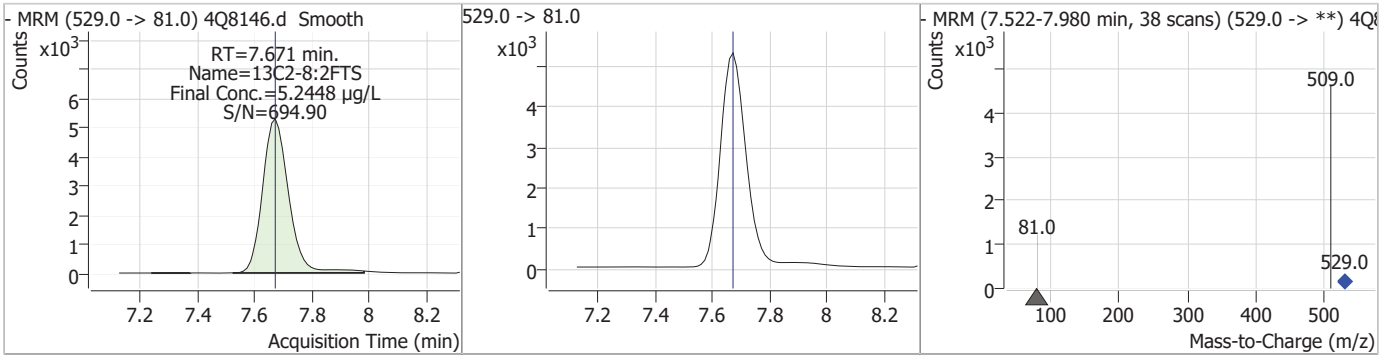
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.42	7.40	-0.01	50838 (m)	463.0 -> 219.0	30.1	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.08	7.53	0.00	2909	449.0 -> 99.0	67.2	27.5	82.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.24	7.67	0.00	33420				



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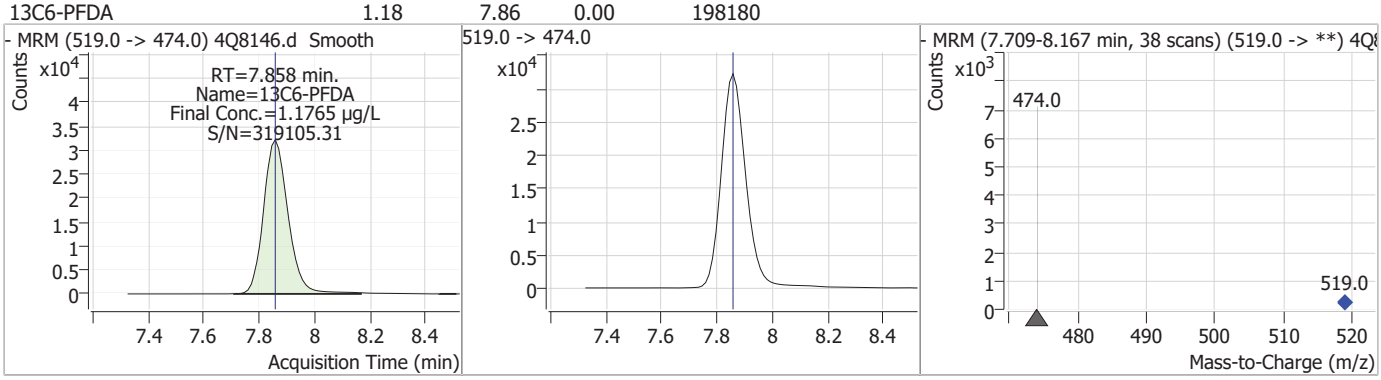
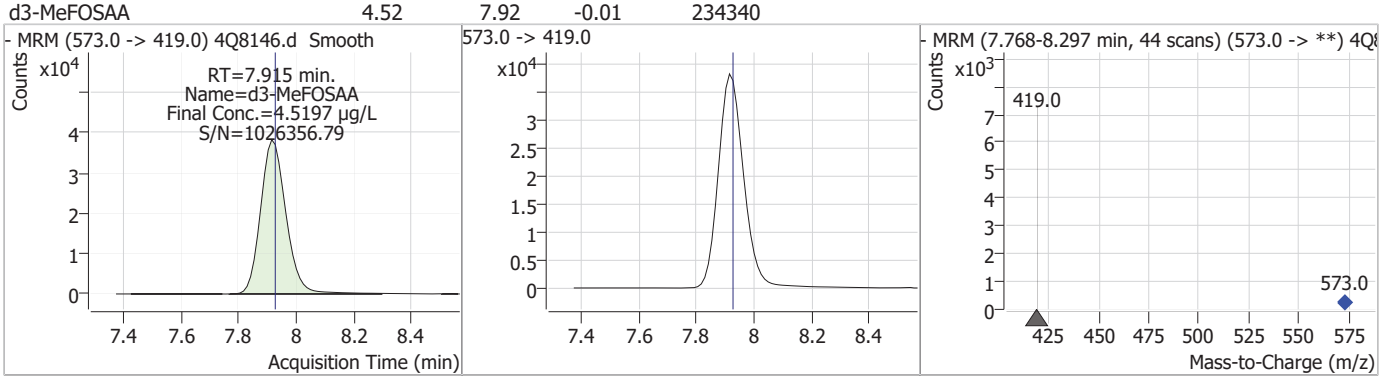
Perfluorinated Compounds by LC/MS/MS

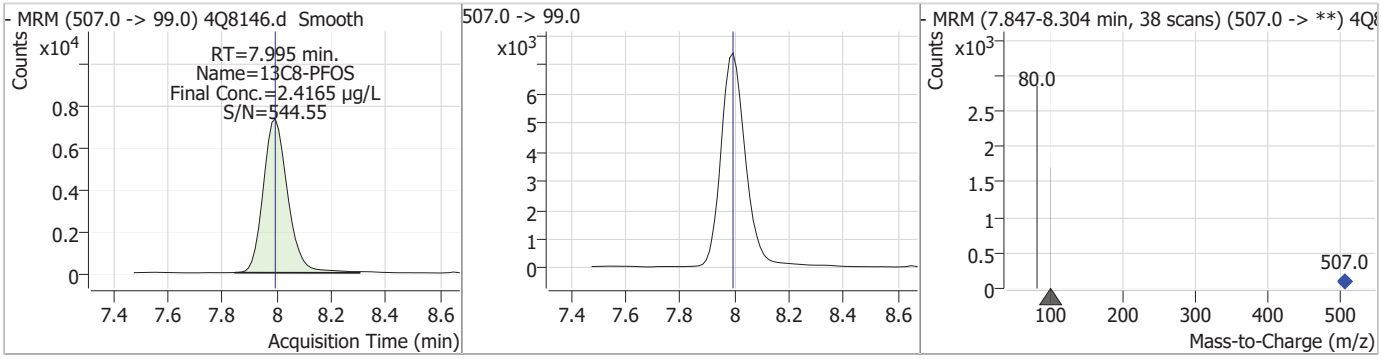
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.18	7.86	0.00	198180				



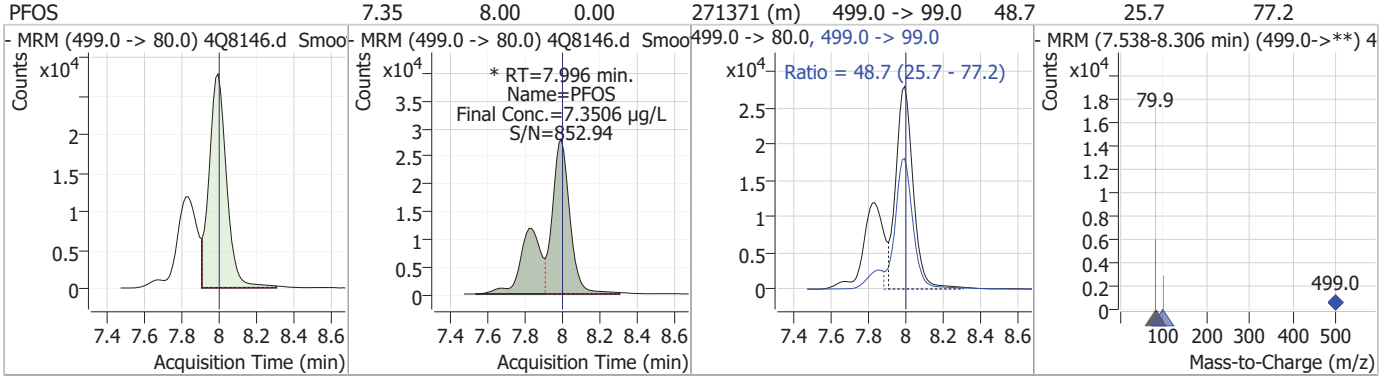
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.52	7.92	-0.01	234340				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.42	7.99	0.00	45808				

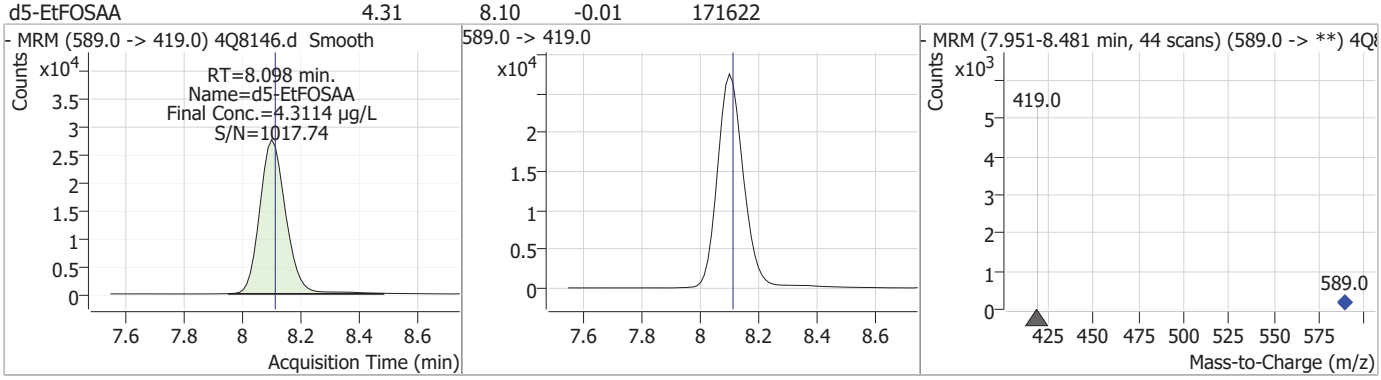


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	7.35	8.00	0.00	271371 (m)	499.0 -> 99.0	48.7	25.7	77.2

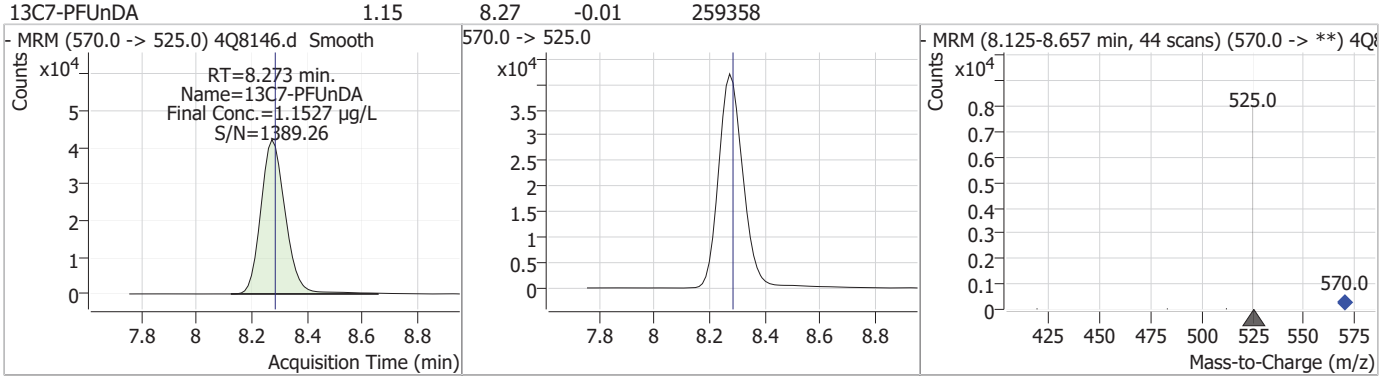


Perfluorinated Compounds by LC/MS/MS

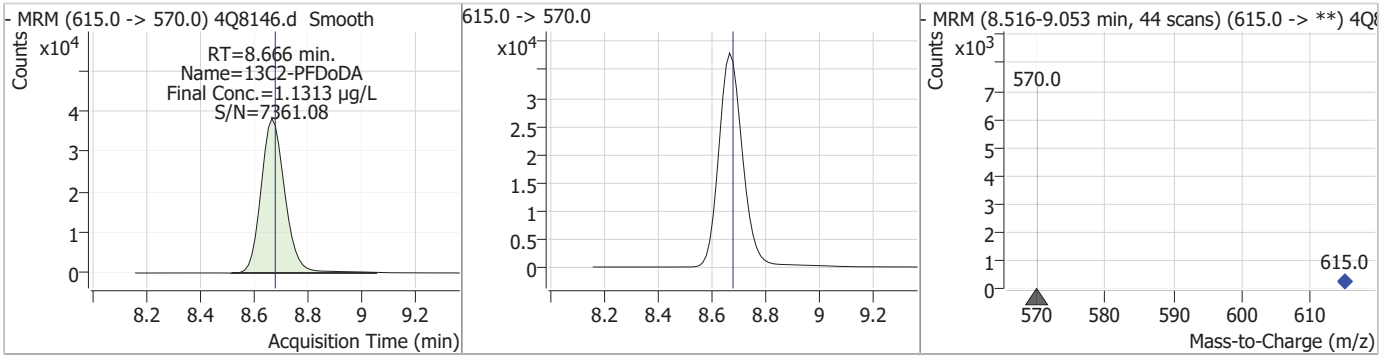
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.31	8.10	-0.01	171622				



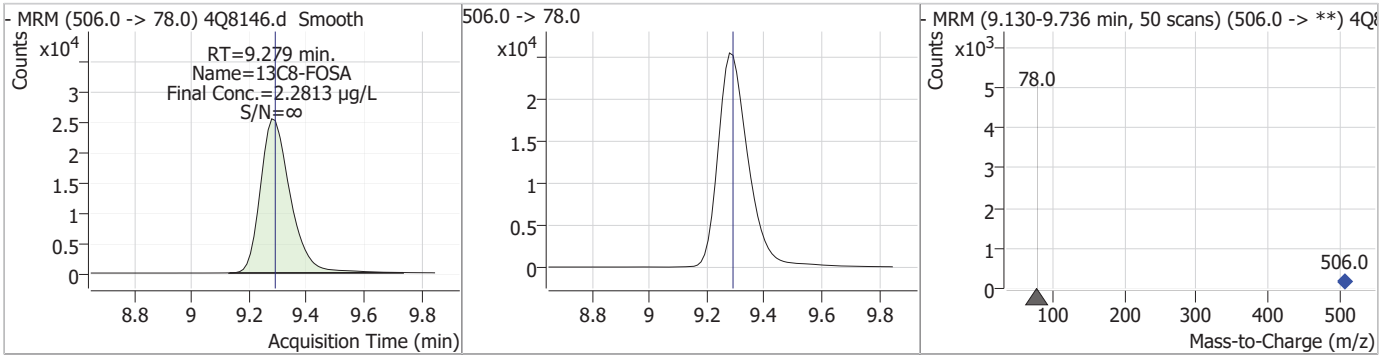
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.15	8.27	-0.01	259358				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.13	8.67	-0.01	233148				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.28	9.28	-0.01	184489				



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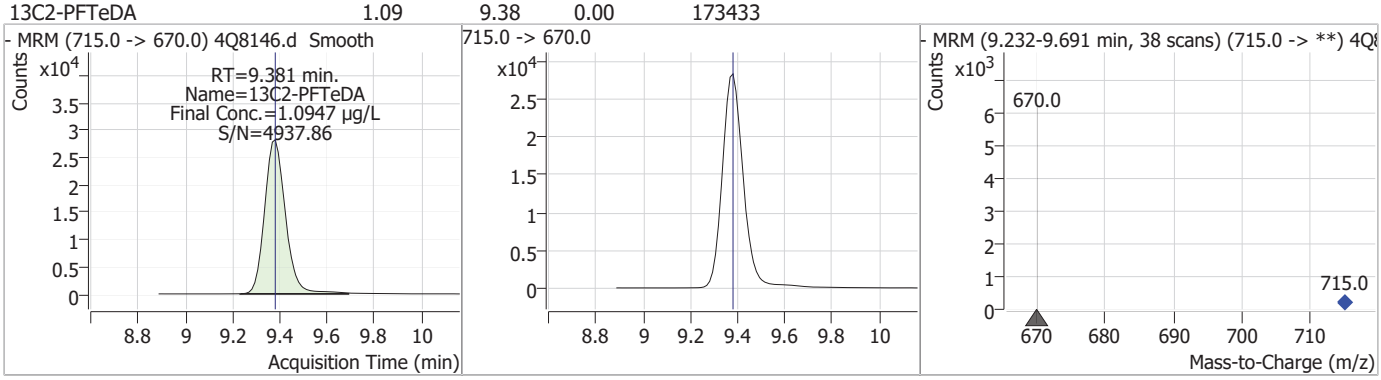
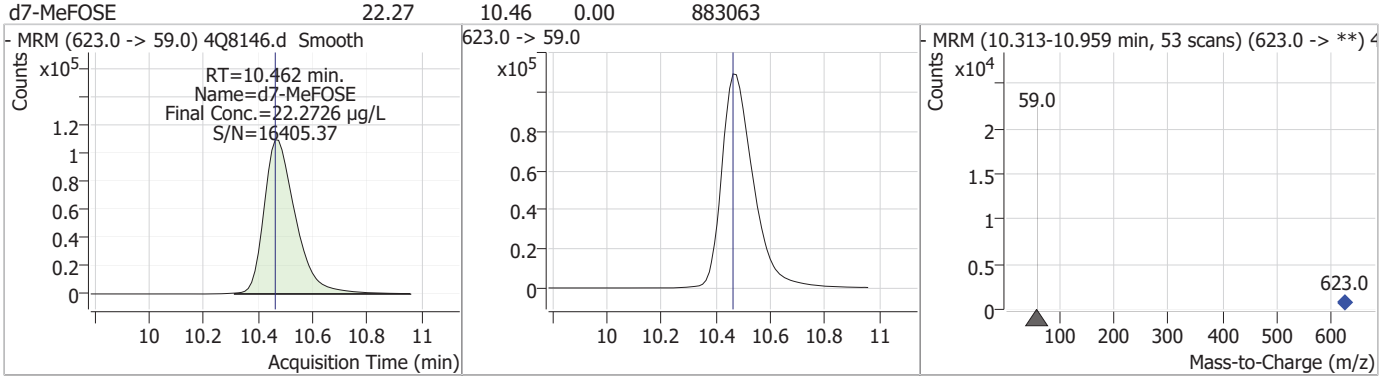
Perfluorinated Compounds by LC/MS/MS

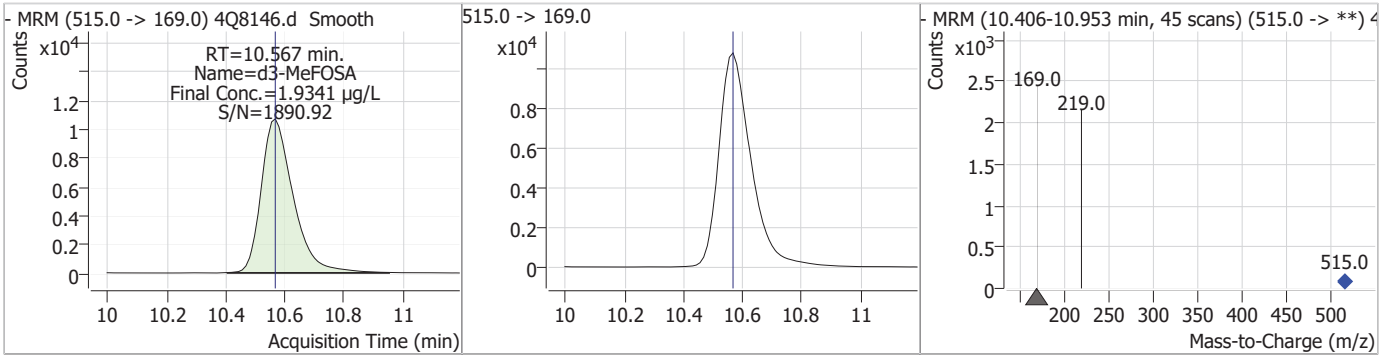
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.09	9.38	0.00	173433				



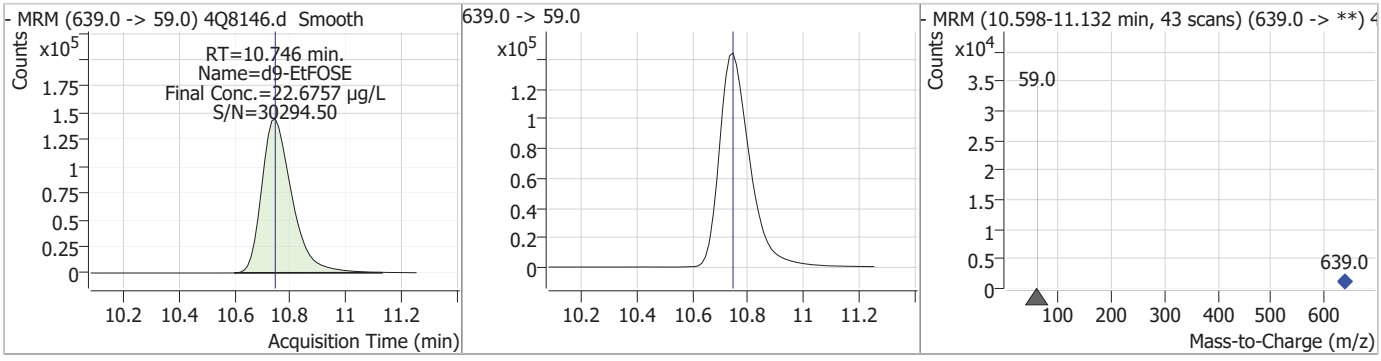
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.27	10.46	0.00	883063				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.93	10.57	0.00	80317				

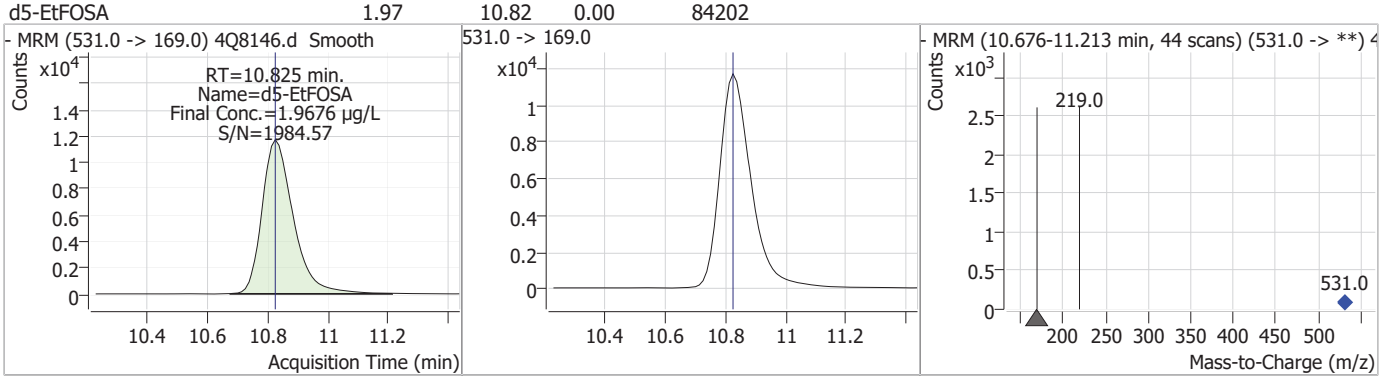


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.68	10.75	0.00	1090127				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.97	10.82	0.00	84202				



7.1.21

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Manual Integration Approval Summary

Sample Number: JE10205-14
Lab FileID: 4Q8146.D
Injection Time: 04/30/25 18:33
Method: EPA 1633
Analyst approved: 05/01/25 04:52 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/06/25 06:22

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8147.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 6:47:24 PM
Sample Name : JE10205-15
Vial : P1-C1
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,503,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.858	217.0 -> 172.0	892295	10.00	µg/L	-0.025
M5-PFPeA	4.307	268.0 -> 223.0	423915	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	325671	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	350536	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	475656	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	194074	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	212305	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	285171	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	250538	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	175680	1.25	µg/L	0.000
M8-FOSA	9.279	506.0 -> 78.0	191347	2.50	µg/L	-0.012
M3-PFBS	5.355	302.0 -> 99.0	31323	2.50	µg/L	-0.012
		302.0 -> 80.0	73994			
M3-PFHxS	6.986	402.0 -> 99.0	39139	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	36341	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	16179	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	20631	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	34934	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	216296	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	495880	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	177564	5.00	µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	942396	25.00	µg/L	0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1132310	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	90074	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	86585	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	63889	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	417301	5.00	µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	48121	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	510412	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	194288	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	204901	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	333756	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	16179	6.70	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 134.1%		
13C2-6:2FTS	6.684	429.0 -> 81.0	20631	3.94	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 78.8%		
13C2-8:2FTS	7.671	529.0 -> 81.0	34934	5.67	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 113.4%		
13C2-PFDoDA	8.666	615.0 -> 570.0	250538	1.19	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.4%		
13C2-PFTeDA	9.381	715.0 -> 670.0	175680	1.09	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.0%		
13C3-PFBS	5.355	302.0 -> 99.0	31323	2.64	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.5%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	39139	2.33	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.2%			
13C4-PFBA	2.858	217.0 -> 172.0	892295	9.33	µg/L		-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 93.3%			
13C4-PFHpA	6.291	367.0 -> 322.0	350536	2.33	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.4%			
13C5-PFHxA	5.452	318.0 -> 273.0	325671	2.31	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.2%			
13C5-PFPeA	4.307	268.0 -> 223.0	423915	3.95	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 79.1%			
13C6-PFDA	7.858	519.0 -> 474.0	212305	1.24	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.9%			
13C7-PFUnDA	8.273	570.0 -> 525.0	285171	1.24	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.5%			
13C8-FOSA	9.279	506.0 -> 78.0	191347	2.92	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 116.6%			
13C8-PFOA	6.897	421.0 -> 376.0	475656	2.33	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.3%			
13C8-PFOS	7.995	507.0 -> 99.0	36341	2.36	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.5%			
13C9-PFNA	7.403	472.0 -> 427.0	194074	1.14	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.4%			
d3-MeFOSAA	7.915	573.0 -> 419.0	216296	5.14	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.8%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	495880	8.94	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 89.4%			
d3-MeFOSA	10.567	515.0 -> 169.0	86585	2.57	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.8%			
d5-EtFOSAA	8.098	589.0 -> 419.0	177564	5.50	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 109.9%			
d7-MeFOSE	10.475	623.0 -> 59.0	942396	29.29	µg/L		0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 117.1%			
d9-EtFOSE	10.746	639.0 -> 59.0	1132310	29.02	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 116.1%			
d5-EtFOSA	10.825	531.0 -> 169.0	90074	2.59	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.7%			
Target Compounds							QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.			
		327.0 -> 81.0					
6:2FTS	6.684	427.0 -> 407.0	6238588	301.53	µg/L		98
		427.0 -> 81.0	2835051				
8:2FTS	7.671	527.0 -> 507.0	255146	9.33	µg/L		99
		527.0 -> 81.0	98010				
EtFOSAA	-	584.0 -> 419.0	-	N.D.			
		584.0 -> 483.0					
FOSA	9.281	498.0 -> 78.0	20555	0.30	µg/L	#m	95
		498.0 -> 478.0	960				
MeFOSAA	-	570.0 -> 419.0	-	N.D.			
		570.0 -> 512.0					
PFBA	2.864	213.0 -> 169.0	992395	36.38	µg/L		100
PFBS	5.357	299.0 -> 80.0	60502	1.69	µg/L		99
		299.0 -> 99.0	24954				
PFDA	7.859	513.0 -> 469.0	263916	1.64	µg/L	m	98
		513.0 -> 219.0	58913				
PFDoDA	-	613.0 -> 569.0	-	N.D.			
		613.0 -> 319.0					

Perfluorinated Compounds by LC/MS/MS

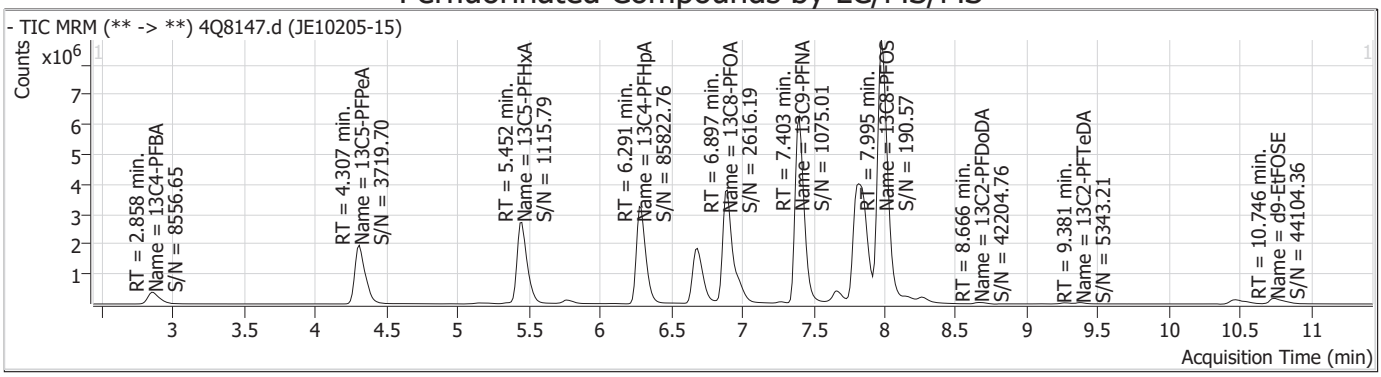
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.606	599.0 -> 80.0	0		µg/L	m	1
		599.0 -> 99.0	0				
PFHpA	6.292	363.0 -> 319.0	12266726	57.52	µg/L		98
		363.0 -> 169.0	2411620				
PFHpS	7.529	449.0 -> 80.0	105340	3.11	µg/L	m	94
		449.0 -> 99.0	62678				
PFHxA	5.455	313.0 -> 269.0	12544891	89.37	µg/L		100
		313.0 -> 119.0	420173				
PFHxS	6.987	399.0 -> 80.0	1755968	51.52	µg/L	m	95
		399.0 -> 99.0	881049				
PFNA	7.404	463.0 -> 419.0	22441814	192.25	µg/L		81
		463.0 -> 219.0	5813284				
PFNS	8.412	549.0 -> 80.0	2250	0.09	µg/L	#m	40
		549.0 -> 99.0	2321				
PFOA	6.898	413.0 -> 369.0	13053779	82.45	µg/L	m	93
		413.0 -> 169.0	3332084				
PFOS	7.996	499.0 -> 80.0	16064702	548.50	µg/L	m	96
		499.0 -> 99.0	7818143				
PFPeA	4.309	263.0 -> 219.0	9671914	144.30	µg/L		100
PFPeS	6.318	349.0 -> 80.0	105672	2.70	µg/L		96
		349.0 -> 99.0	50814				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	8.262	563.0 -> 519.0	269954	1.60	µg/L		96
		563.0 -> 269.0	49636				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

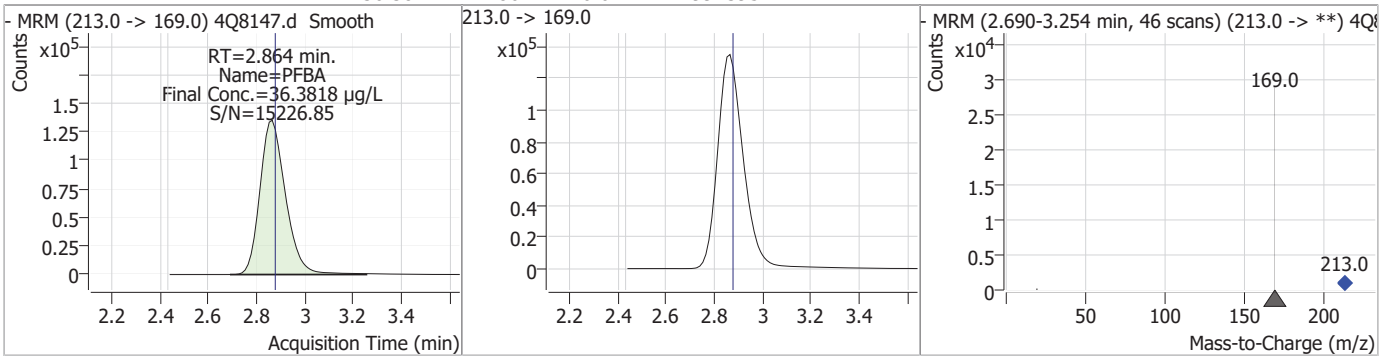
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

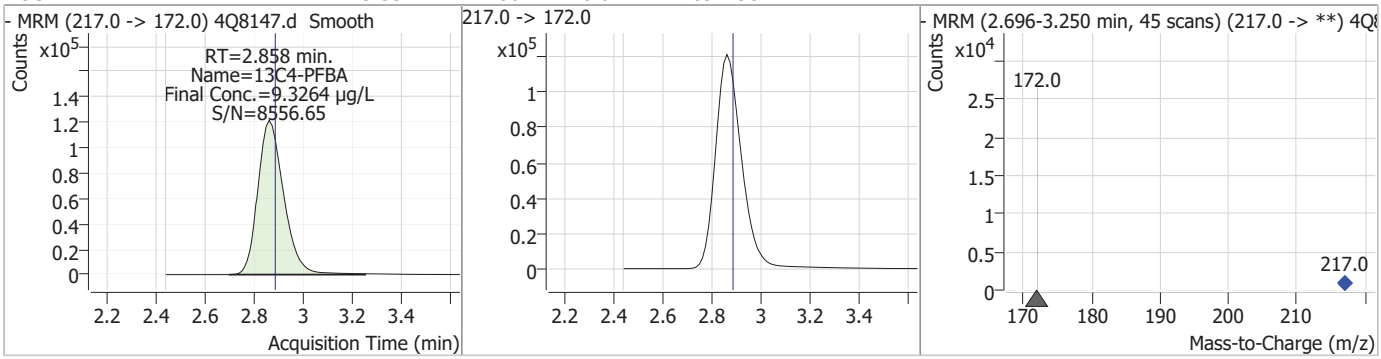
Perfluorinated Compounds by LC/MS/MS



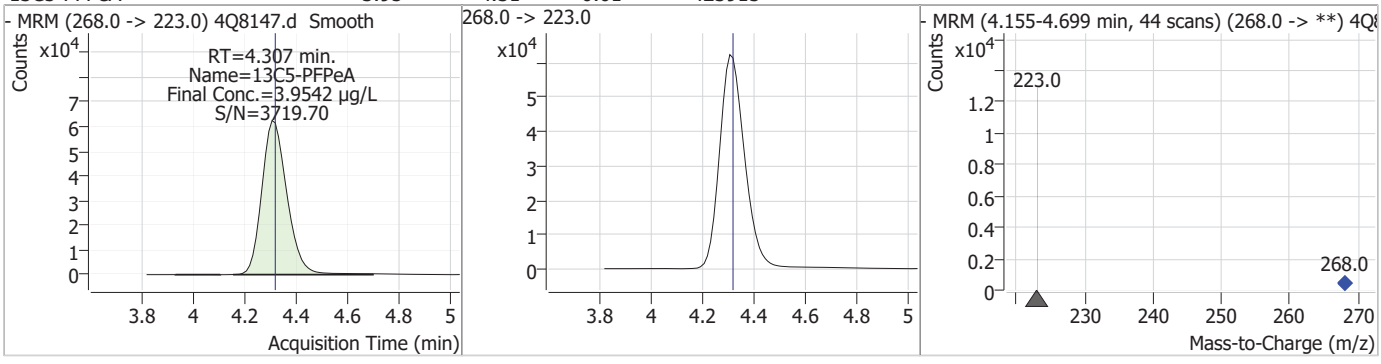
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	36.38	2.86	-0.01	992395				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.33	2.86	-0.02	892295				

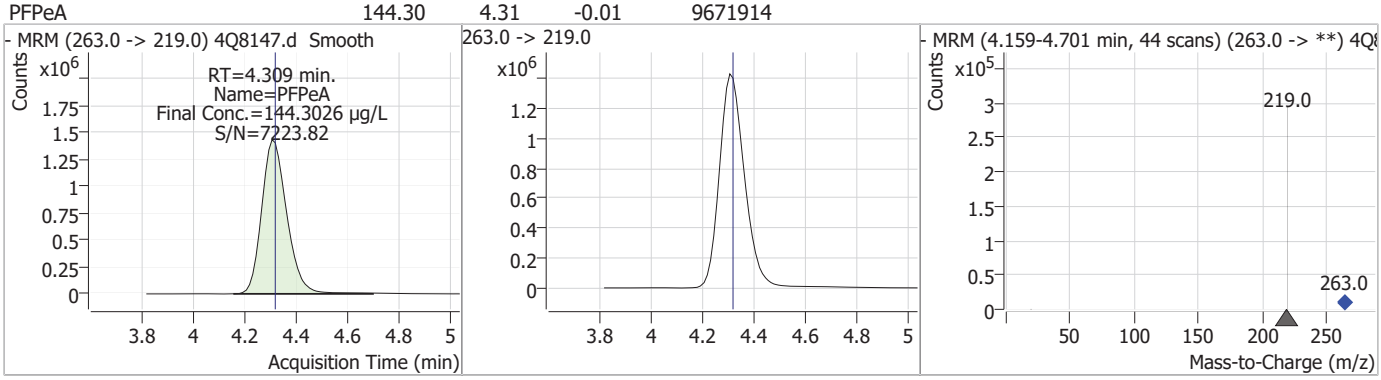


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	3.95	4.31	-0.01	423915				

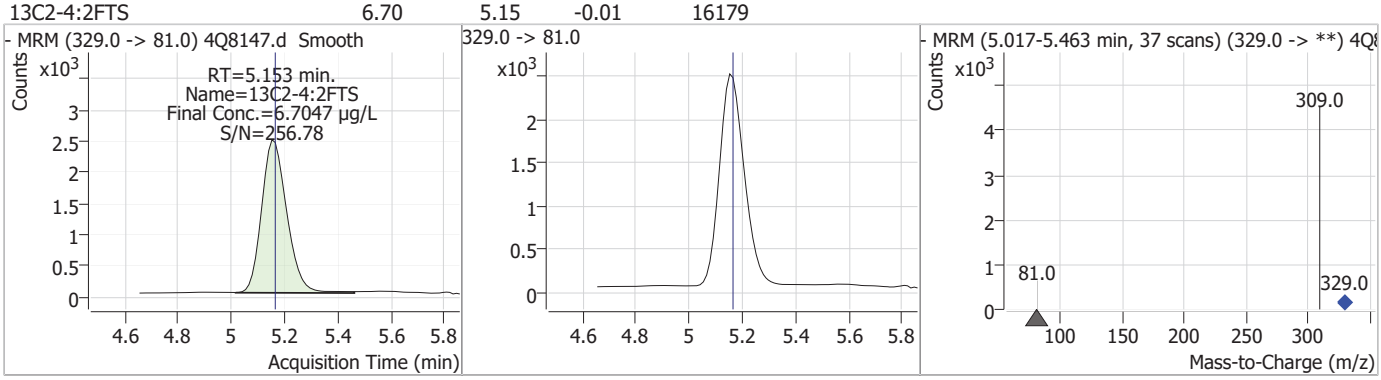


Perfluorinated Compounds by LC/MS/MS

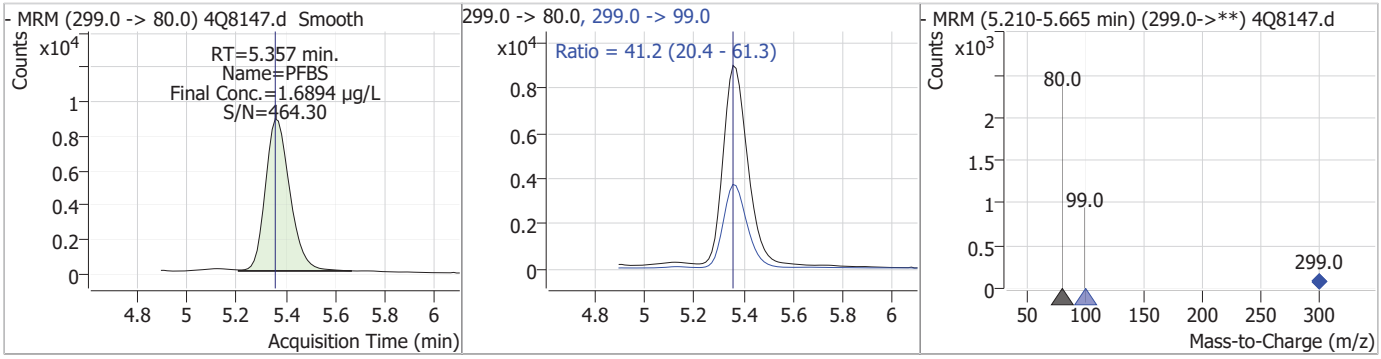
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	144.30	4.31	-0.01	9671914				



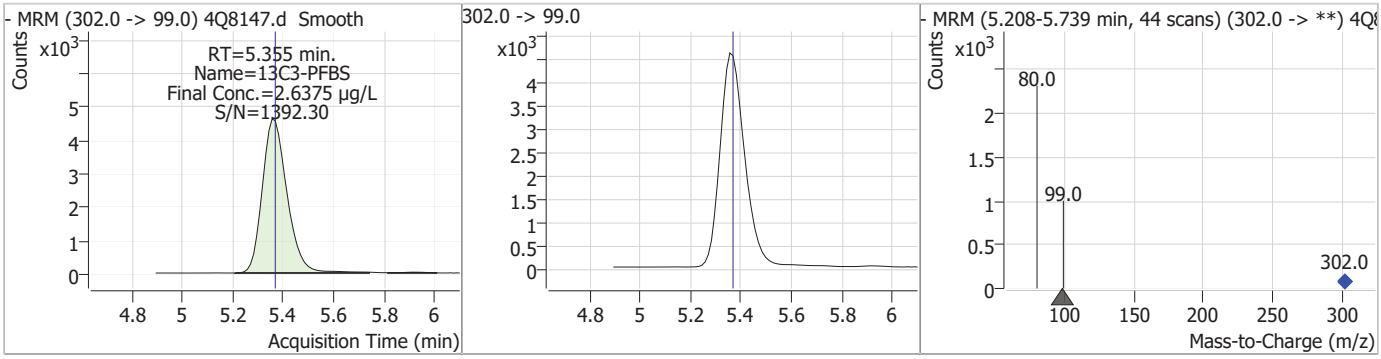
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	6.70	5.15	-0.01	16179				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	1.69	5.36	0.00	60502	299.0 -> 99.0	41.2	20.4	61.3

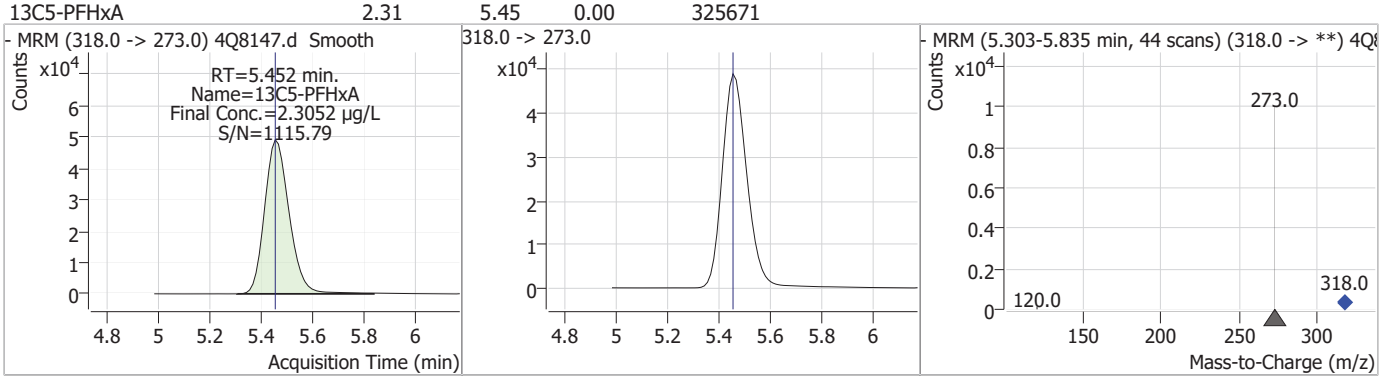


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.64	5.36	-0.01	31323				

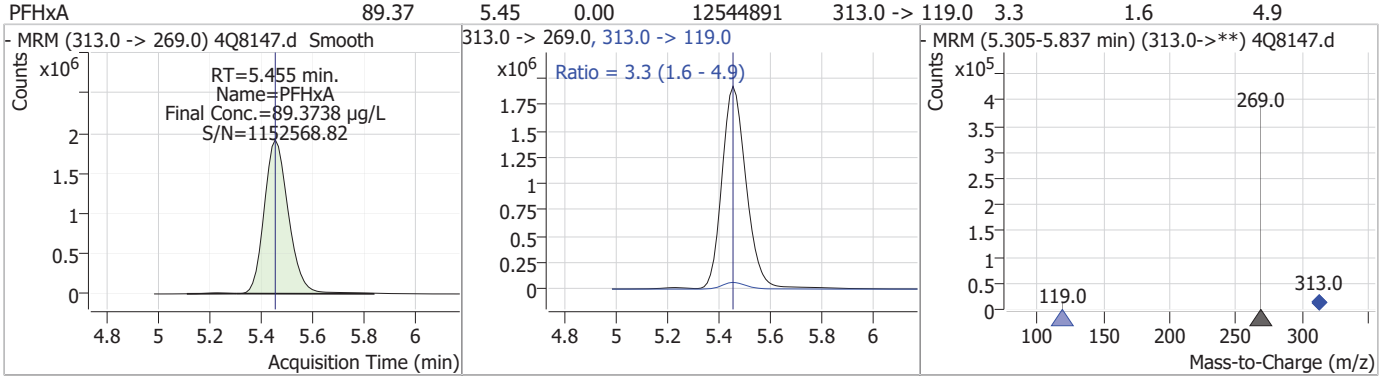


Perfluorinated Compounds by LC/MS/MS

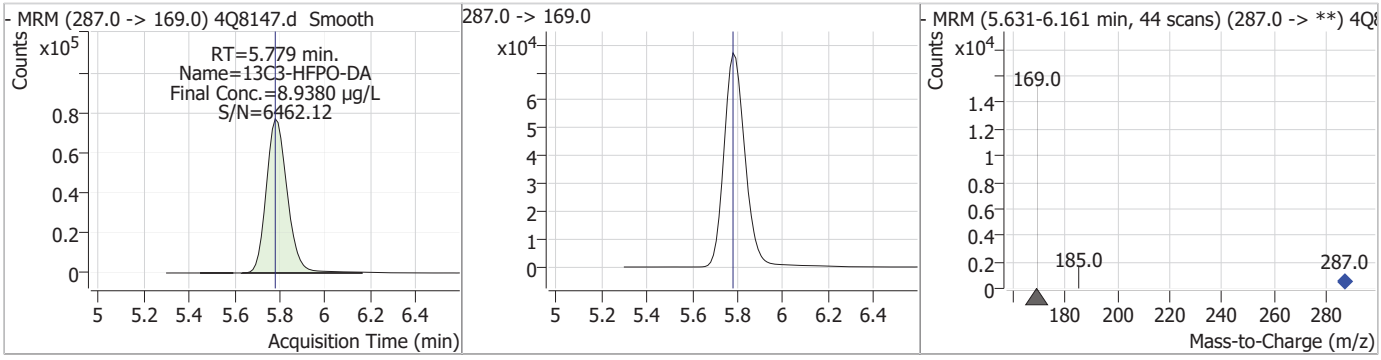
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.31	5.45	0.00	325671				



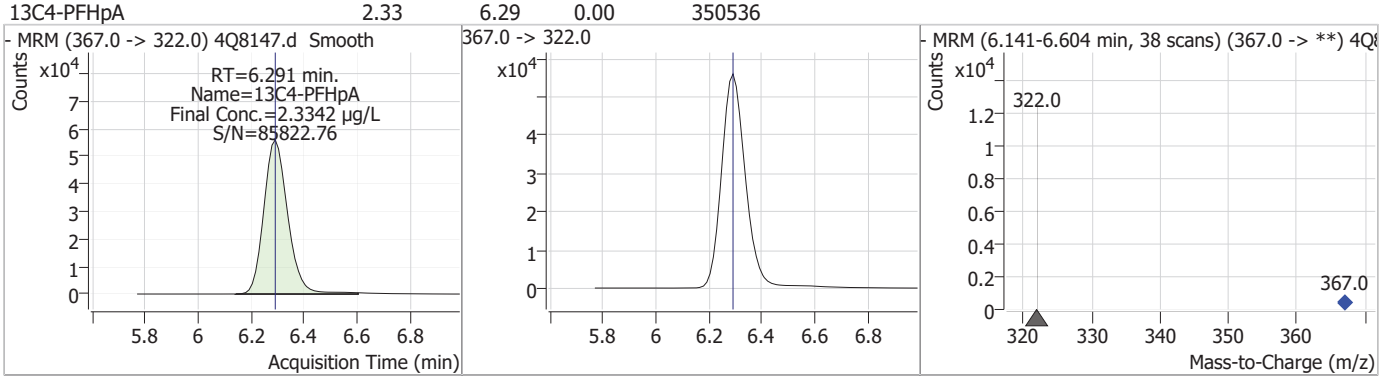
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	89.37	5.45	0.00	12544891	313.0 -> 119.0	3.3	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.94	5.78	0.00	495880				

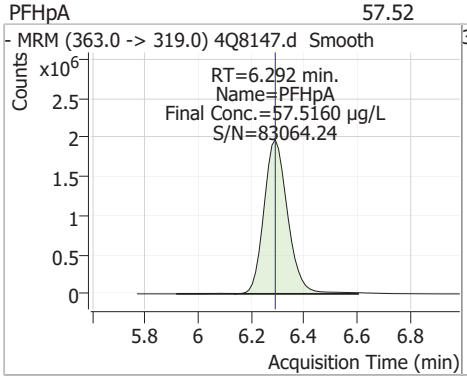


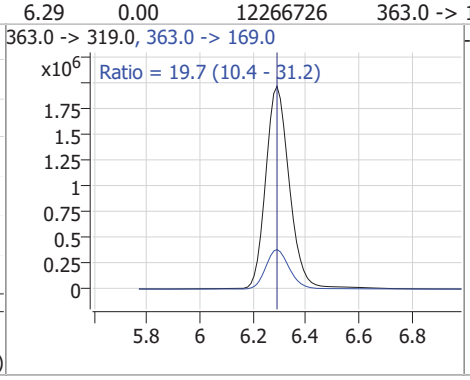
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.33	6.29	0.00	350536				

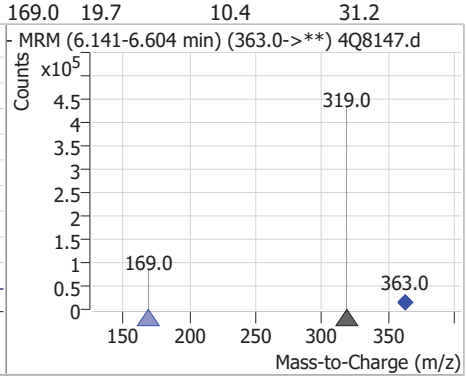


Perfluorinated Compounds by LC/MS/MS

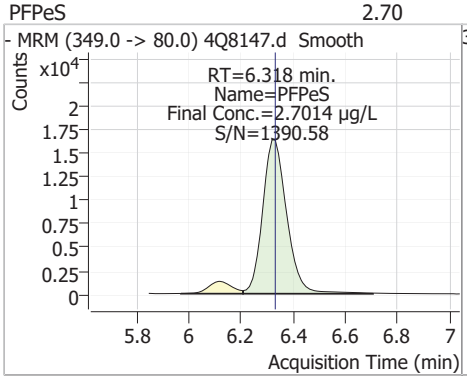
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	57.52	6.29	0.00	12266726	363.0 -> 169.0	19.7	10.4	31.2

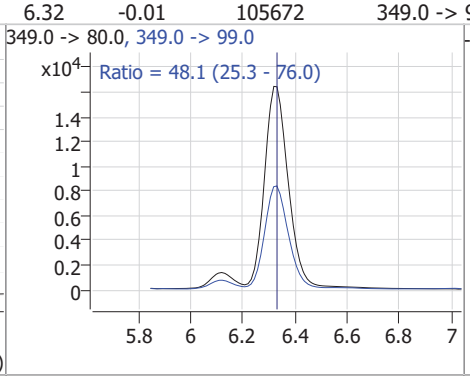


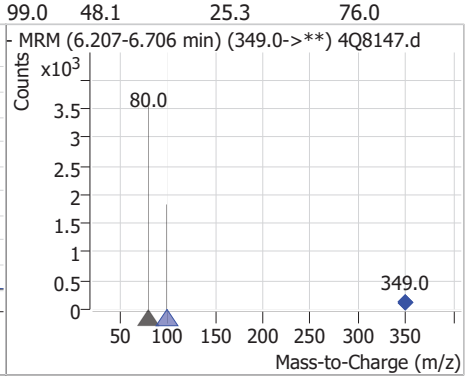




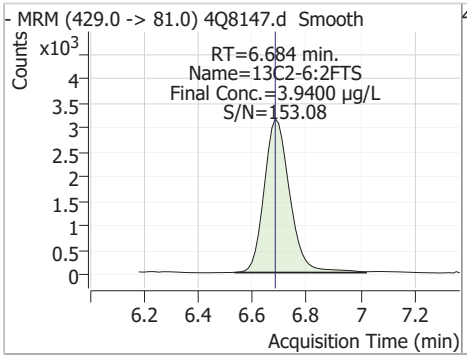
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.70	6.32	-0.01	105672	349.0 -> 99.0	48.1	25.3	76.0

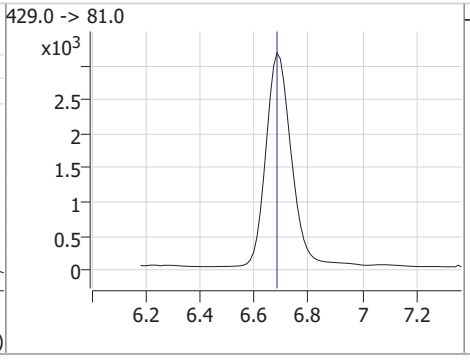


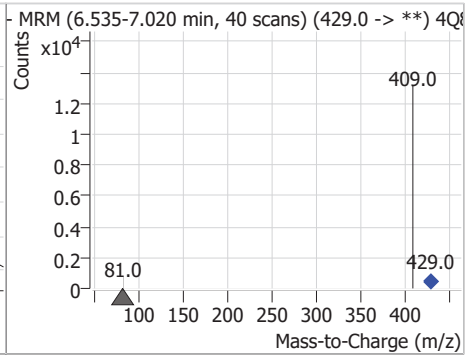




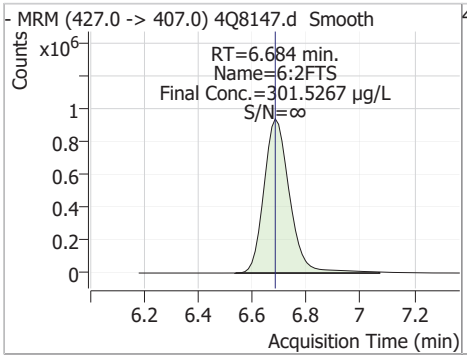
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	3.94	6.68	0.00	20631				

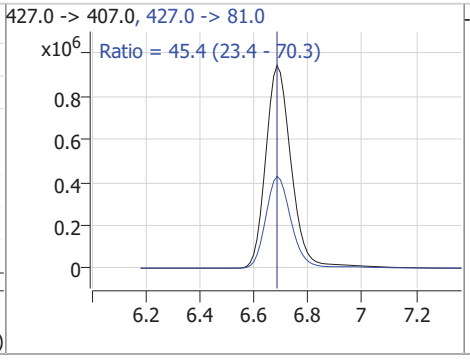


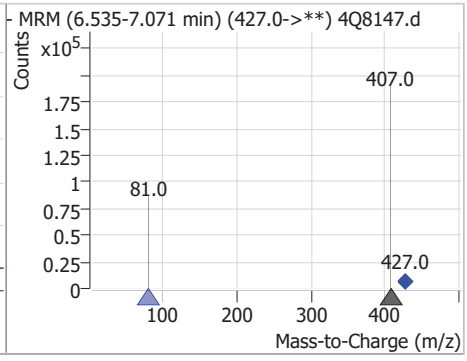




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	301.53	6.68	0.00	6238588	427.0 -> 81.0	45.4	23.4	70.3

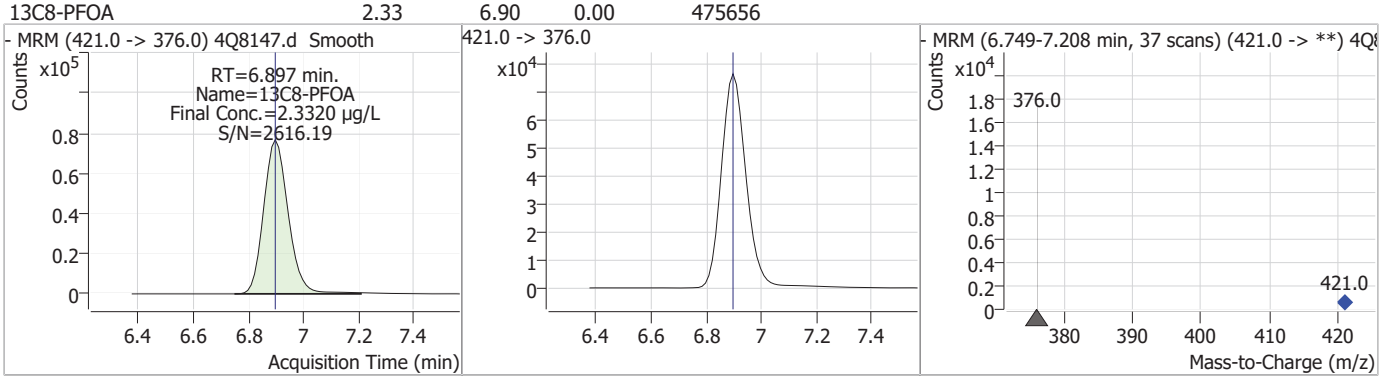




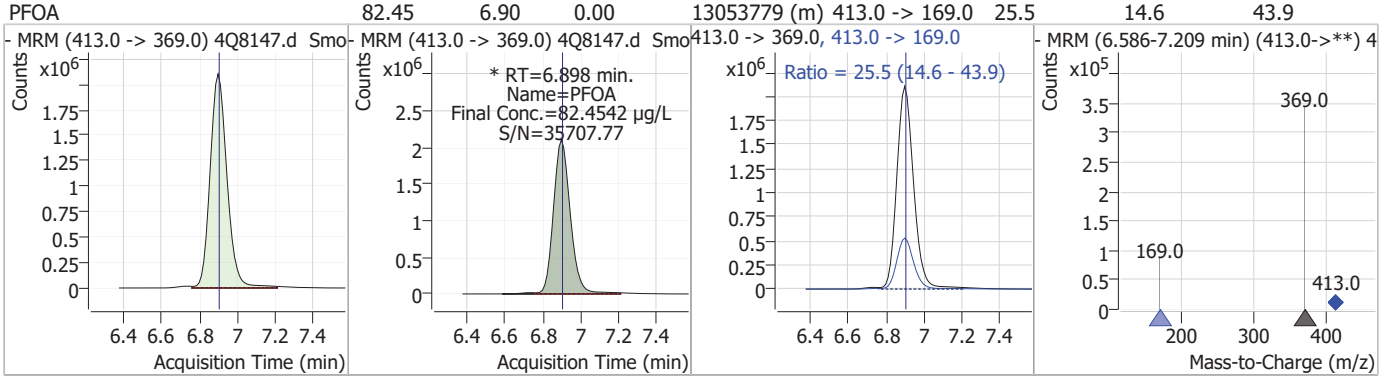


Perfluorinated Compounds by LC/MS/MS

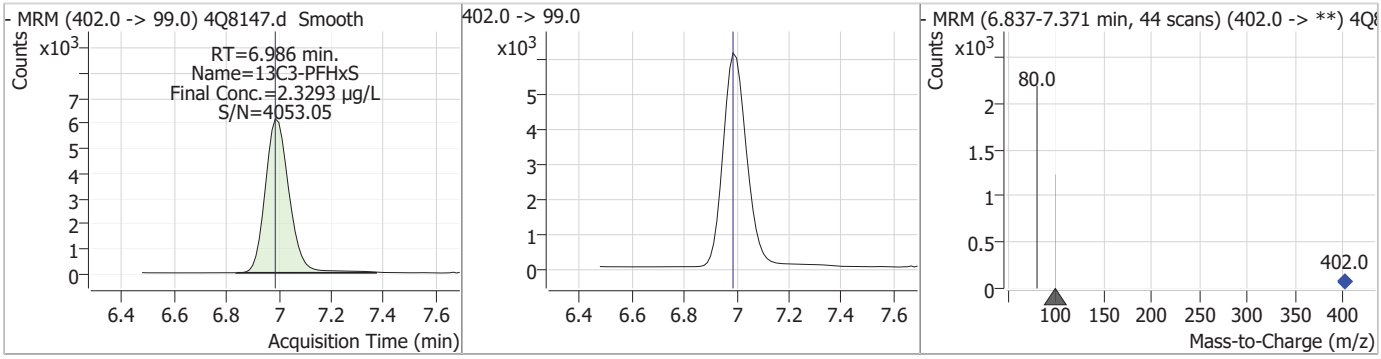
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.33	6.90	0.00	475656				



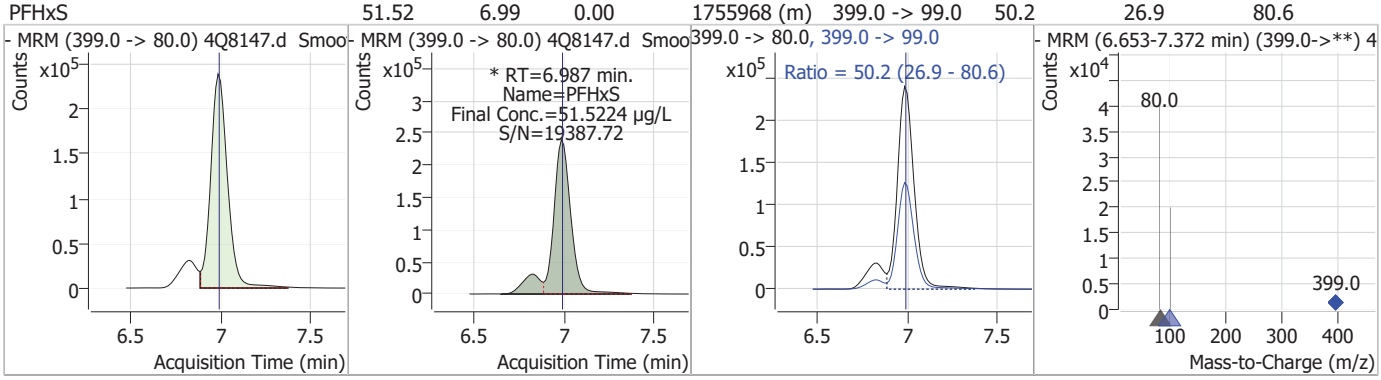
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	82.45	6.90	0.00	13053779 (m)	413.0 -> 169.0	25.5	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.33	6.99	0.00	39139				

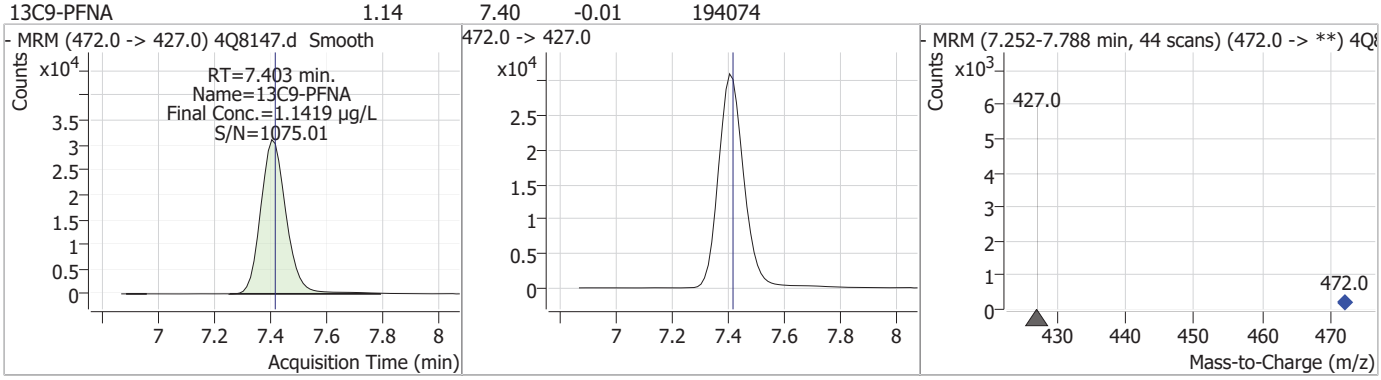


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	51.52	6.99	0.00	1755968 (m)	399.0 -> 99.0	50.2	26.9	80.6

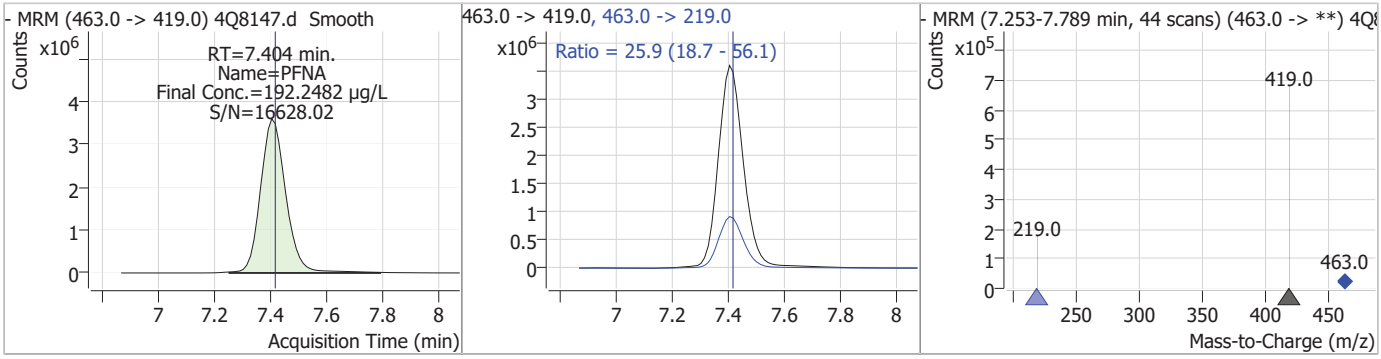


Perfluorinated Compounds by LC/MS/MS

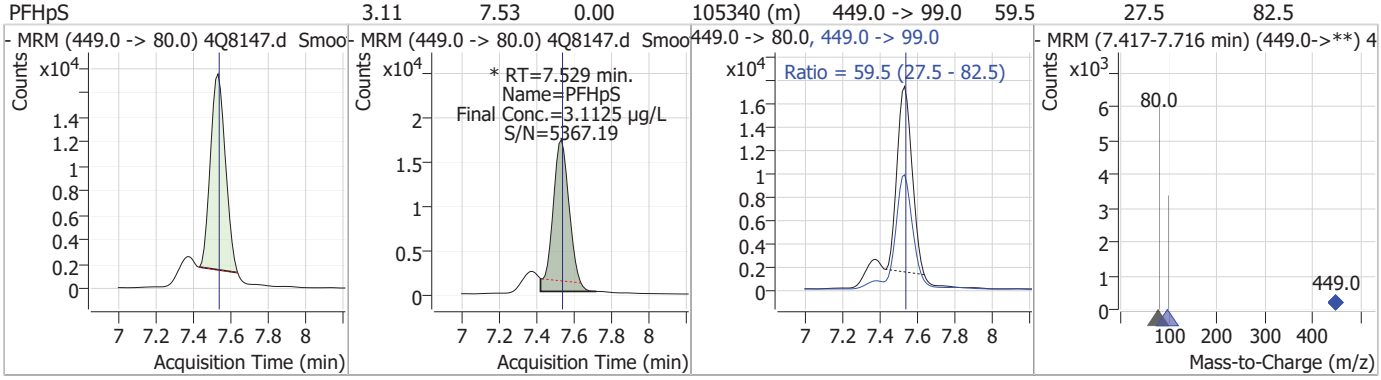
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.14	7.40	-0.01	194074				



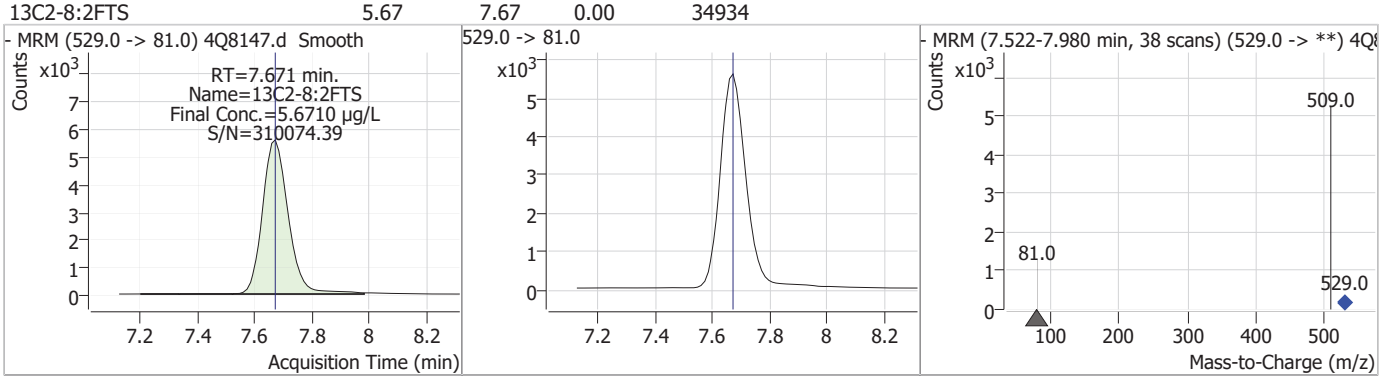
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	192.25	7.40	-0.01	22441814	463.0 -> 219.0	25.9	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	3.11	7.53	0.00	105340 (m)	449.0 -> 99.0	59.5	27.5	82.5

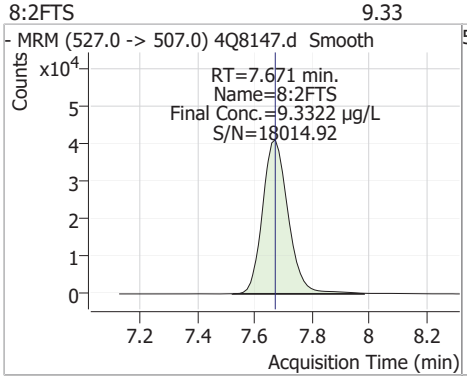


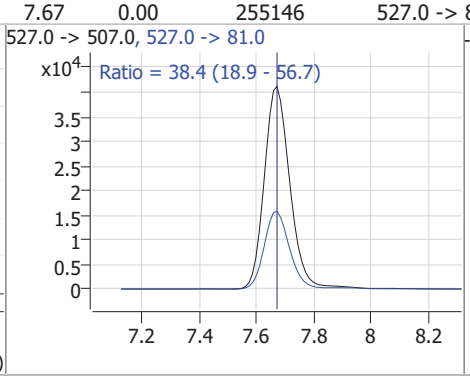
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.67	7.67	0.00	34934				

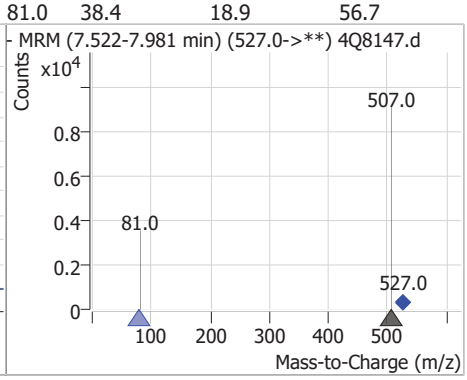


Perfluorinated Compounds by LC/MS/MS

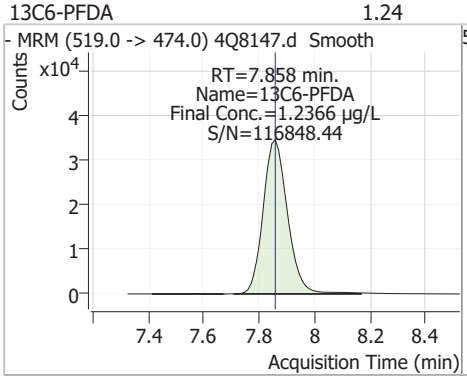
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	9.33	7.67	0.00	255146	527.0 -> 81.0	38.4	18.9	56.7

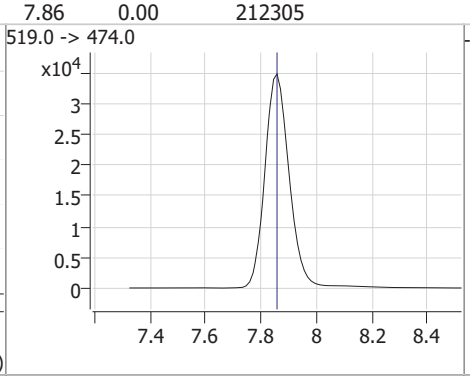


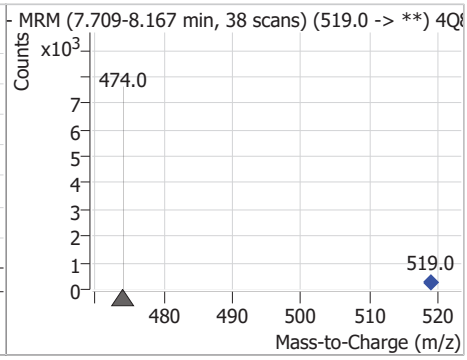




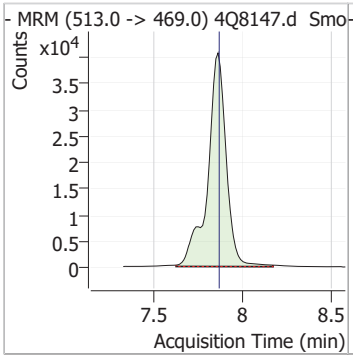
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.24	7.86	0.00	212305				

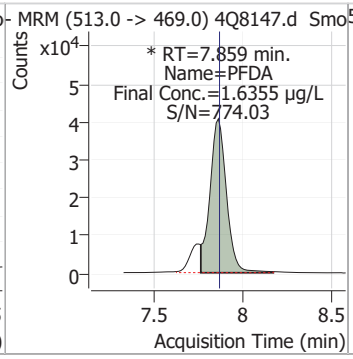


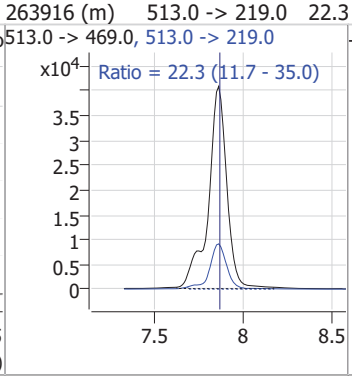


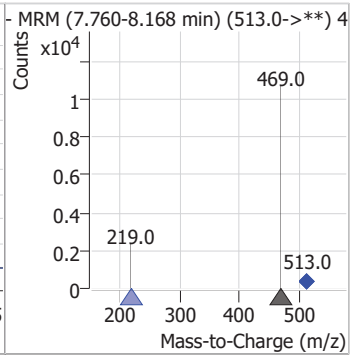


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	1.64	7.86	0.00	263916 (m)	513.0 -> 219.0	22.3	11.7	35.0

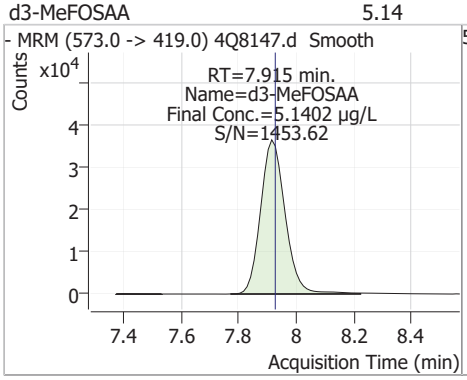


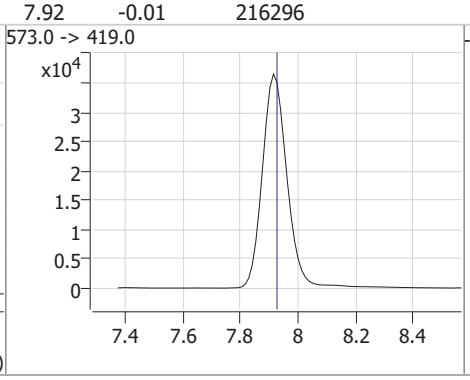


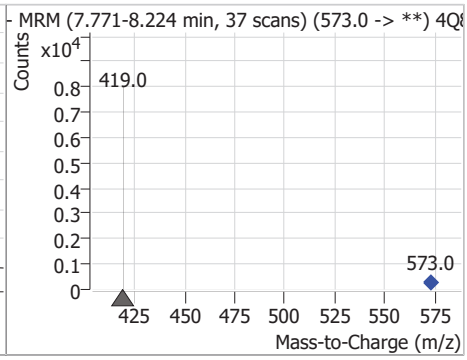




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.14	7.92	-0.01	216296				

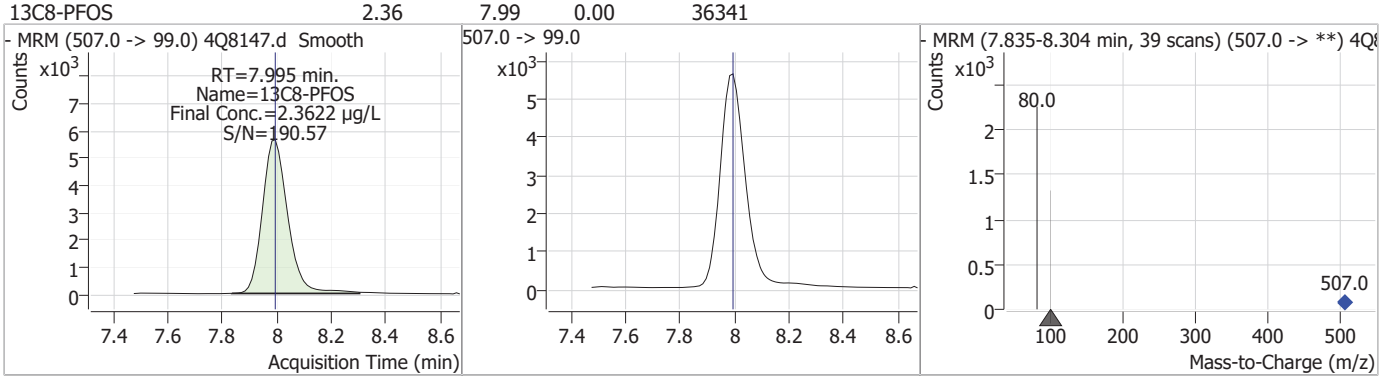




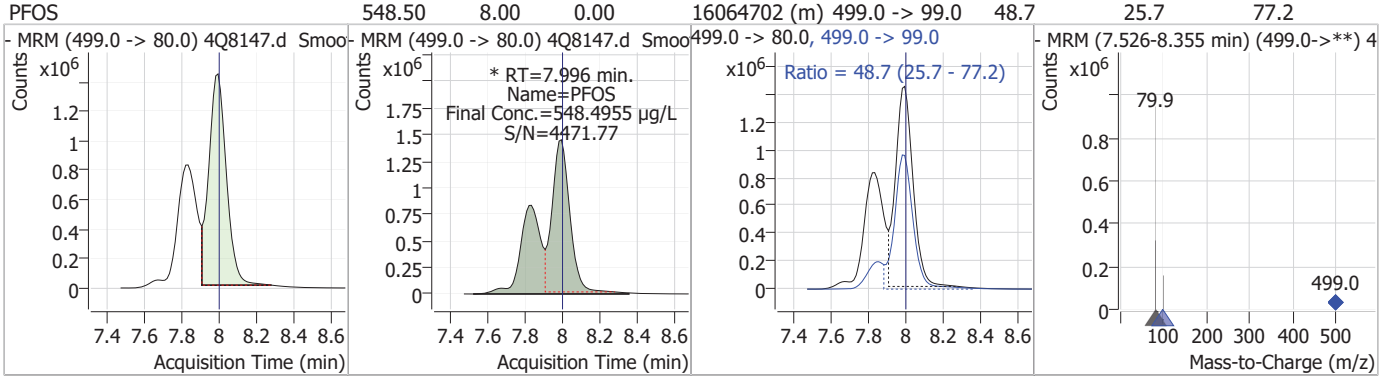


Perfluorinated Compounds by LC/MS/MS

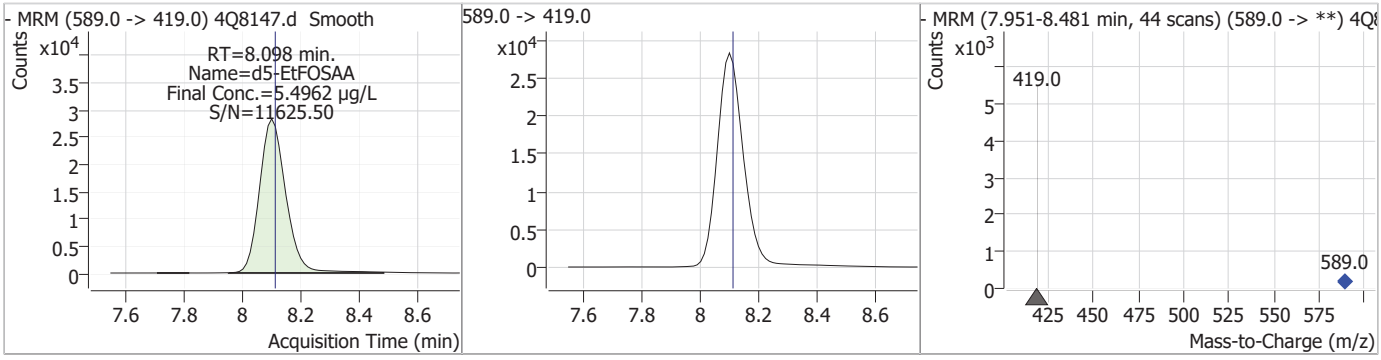
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.36	7.99	0.00	36341				



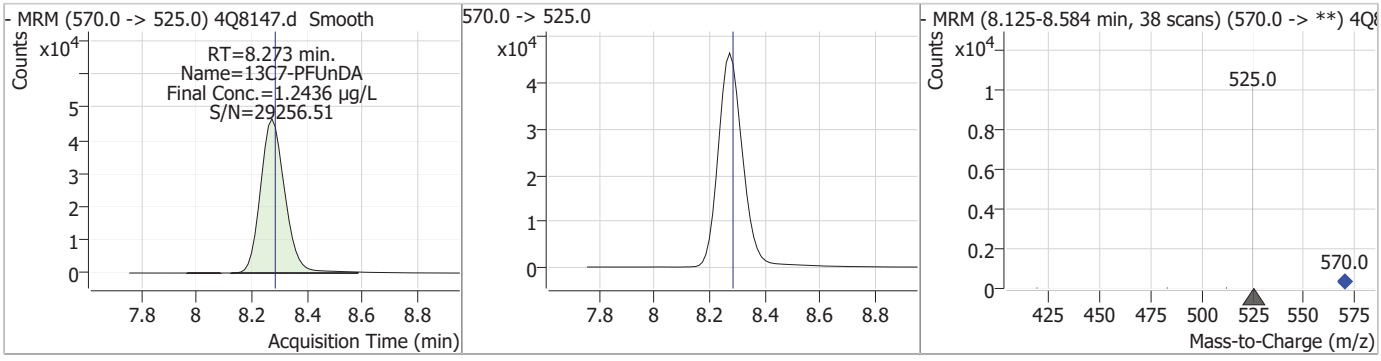
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	548.50	8.00	0.00	16064702 (m)	499.0 -> 99.0	48.7	25.7	77.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.50	8.10	-0.01	177564				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.24	8.27	-0.01	285171				



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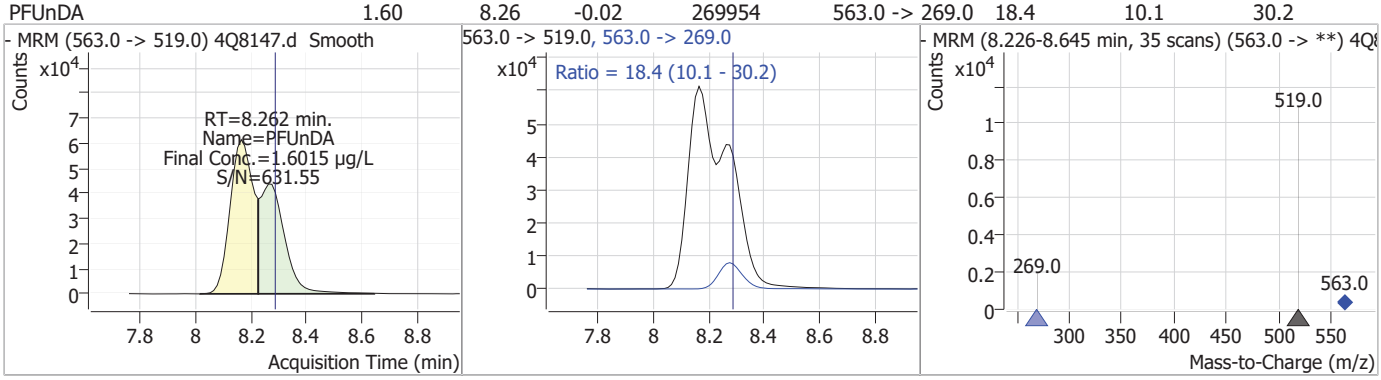
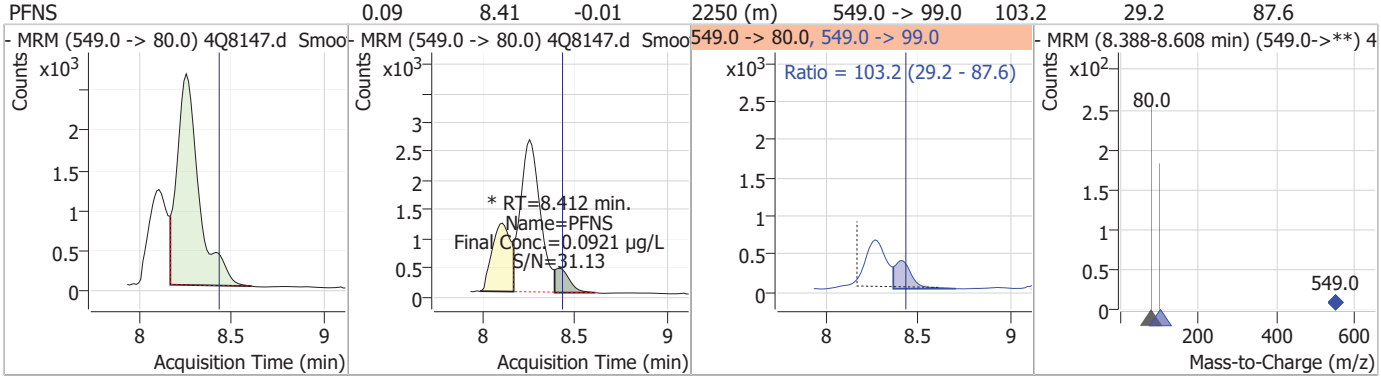
Perfluorinated Compounds by LC/MS/MS

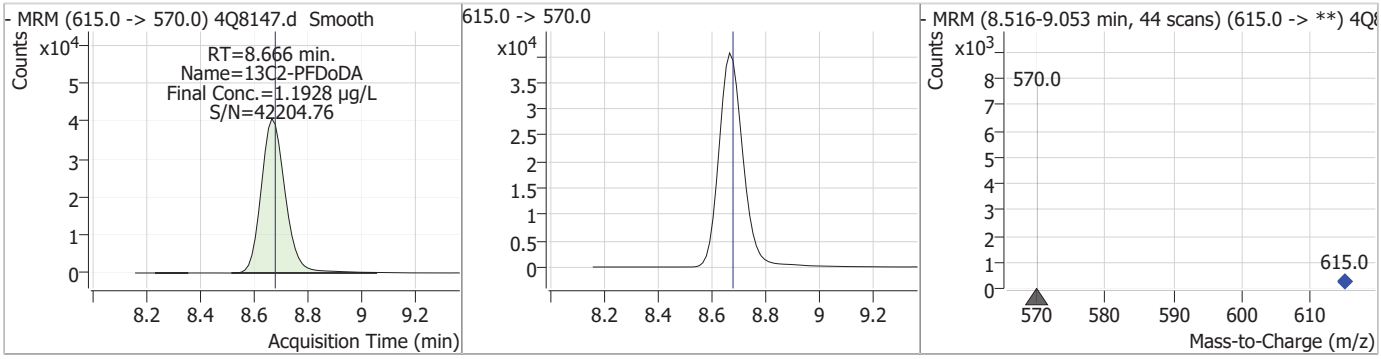
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	1.60	8.26	-0.02	269954	563.0 -> 269.0	18.4	10.1	30.2



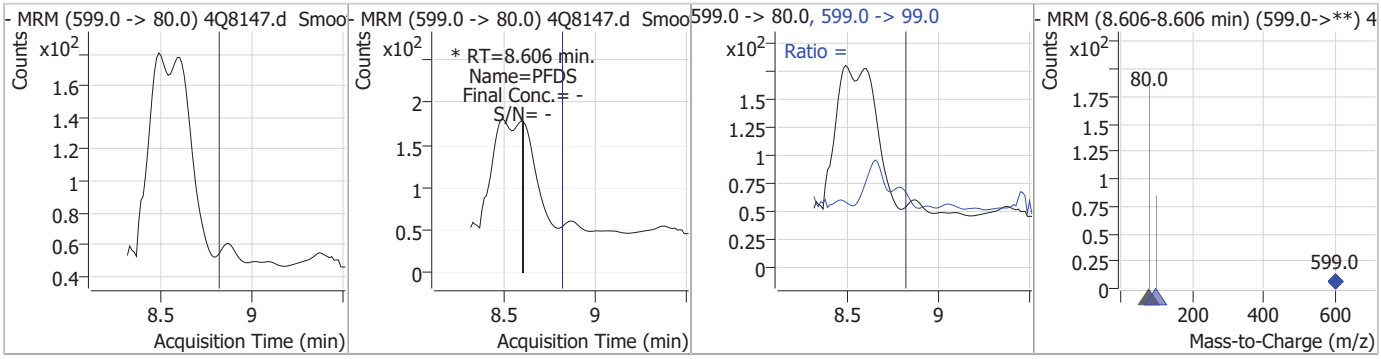
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.09	8.41	-0.01	2250 (m)	549.0 -> 99.0	103.2	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.19	8.67	-0.01	250538				

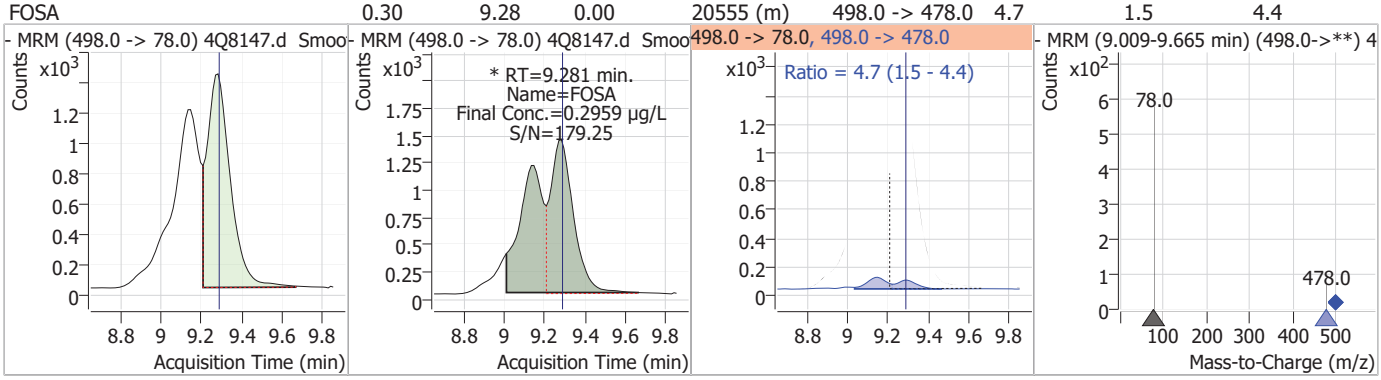


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS		0		0	599.0 -> 99.0		28.2	84.7

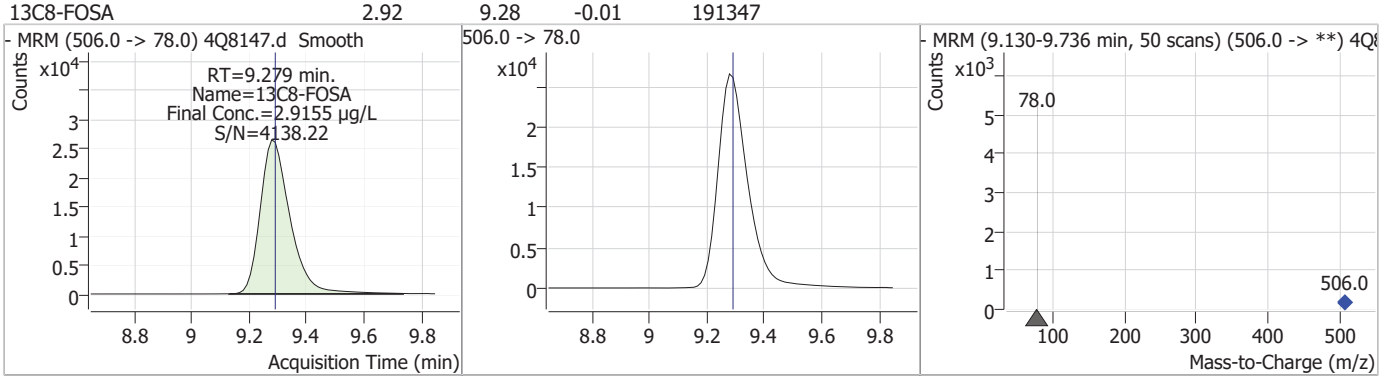


Perfluorinated Compounds by LC/MS/MS

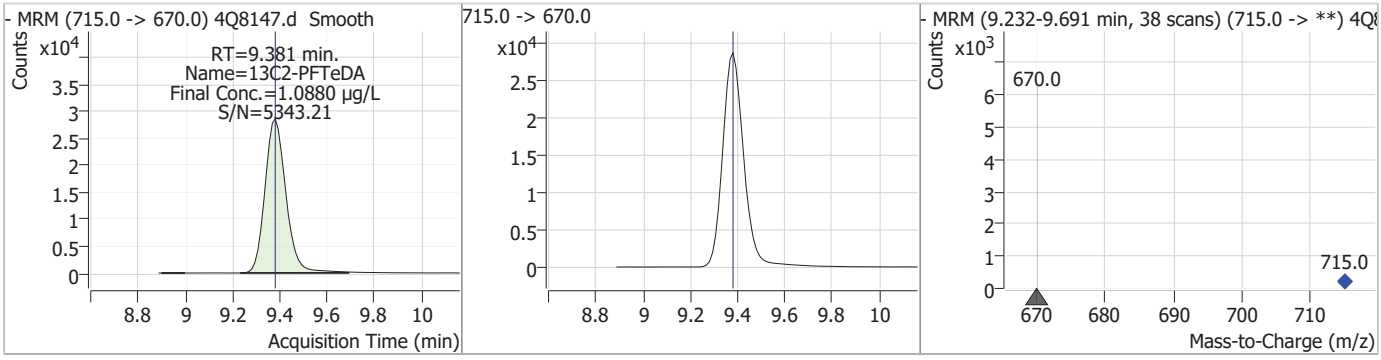
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.30	9.28	0.00	20555 (m)	498.0 -> 478.0	4.7	1.5	4.4



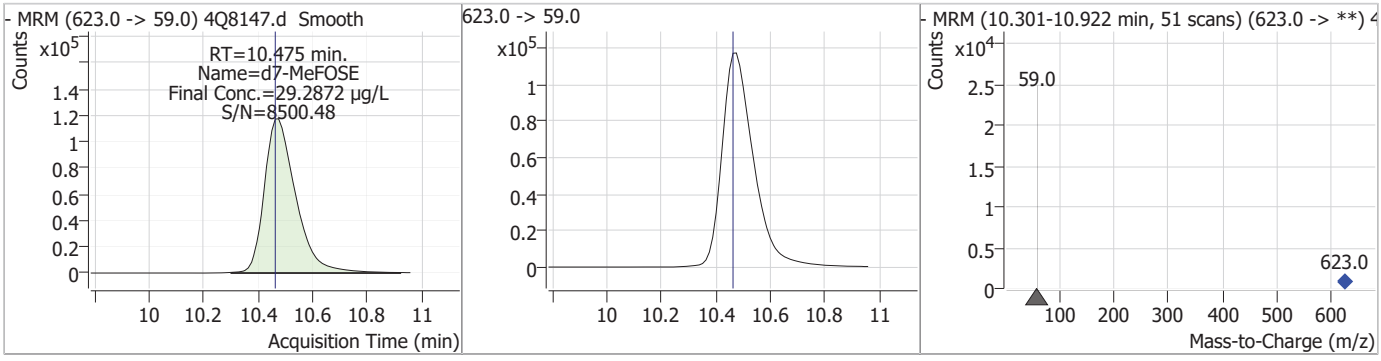
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.92	9.28	-0.01	191347				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.09	9.38	0.00	175680				

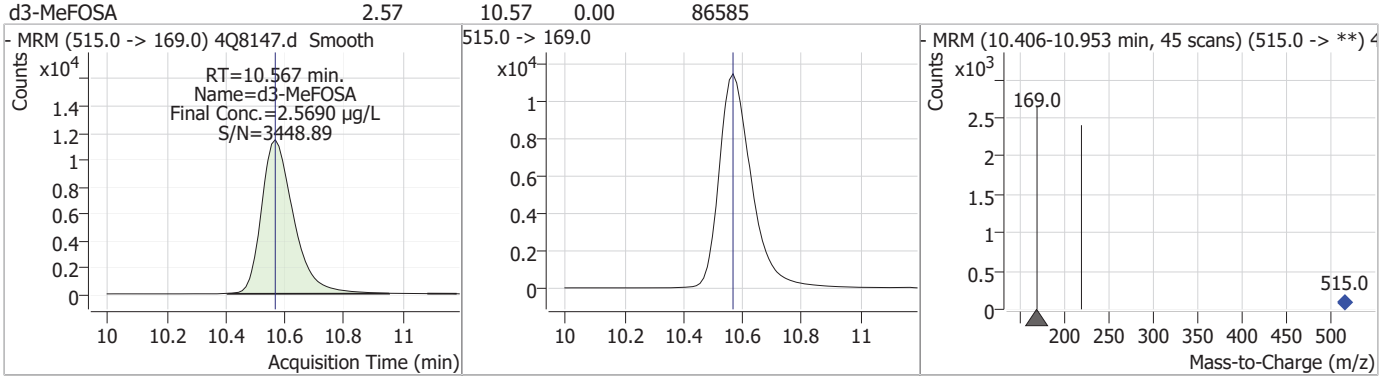


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	29.29	10.47	0.01	942396				

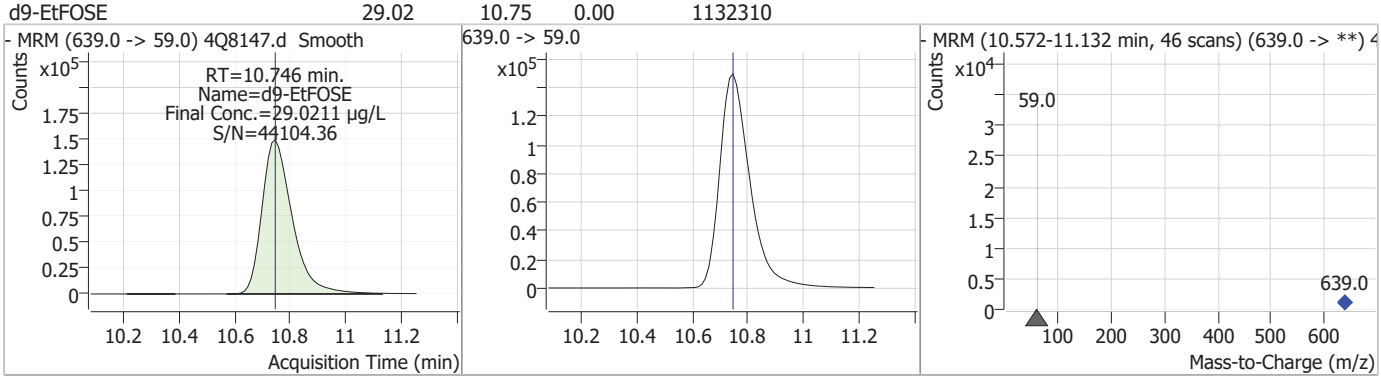


Perfluorinated Compounds by LC/MS/MS

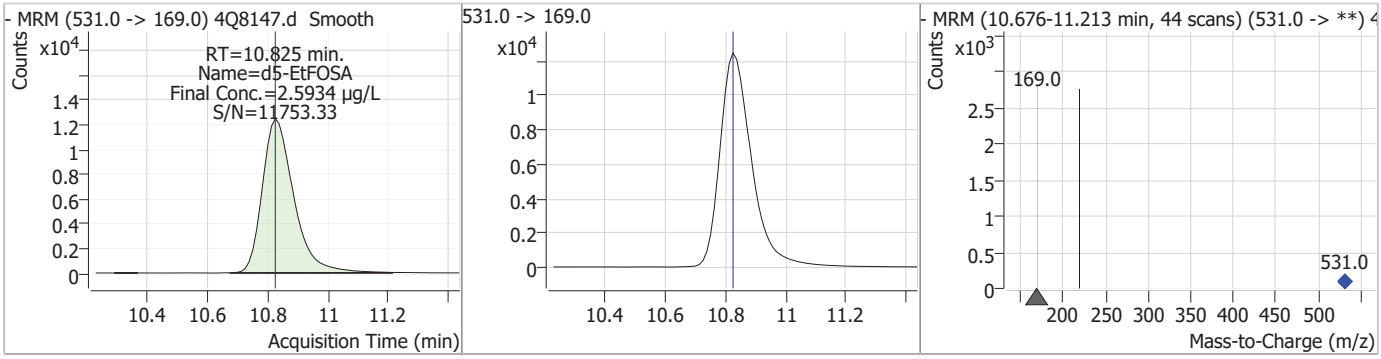
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.57	10.57	0.00	86585				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	29.02	10.75	0.00	1132310				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.59	10.82	0.00	90074				



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7

Manual Integration Approval Summary

Sample Number: JE10205-15
Lab FileID: 4Q8147.D
Injection Time: 04/30/25 18:47
Method: EPA 1633
Analyst approved: 05/01/25 11:50 Maksud Haque
Supervisor approved: 05/06/25 06:22 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluoroheptanesulfonic acid	375-92-8		7.53	Poor instrument integration
Perfluorodecanoic acid	335-76-2		7.86	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
Perfluorononanesulfonic acid	68259-12-1		8.41	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/06/25 06:22

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8193.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 3:41:23 PM
Sample Name : JE10205-15
Vial : P2-A9
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q139.batch.bin
Sample Information : OP63163,T4Q139,503,,,5,20,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.858	217.0 -> 172.0	43410	0.50 µg/L	-0.025
M5-PFPeA	4.319	268.0 -> 223.0	22557	0.25 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	14625	0.13 µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	15587	0.13 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	25379	0.13 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	9434	0.06 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	8288	0.06 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	11107	0.06 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	9878	0.06 µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	7625	0.06 µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	8450	0.13 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	1358	0.13 µg/L	0.000
		302.0 -> 80.0	3174		
M3-PFHxS	6.986	402.0 -> 99.0	2119	0.13 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	2207	0.13 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	855	0.25 µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	1410	0.25 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	1886	0.25 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	10572	0.25 µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	22243	0.50 µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	8138	0.25 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	37485	1.25 µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	46187	1.25 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	3910	0.13 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	3983	0.13 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	3574	0.13 µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	19696	0.25 µg/L	-0.012
18O2-PFHxS	6.999	403.0 -> 84.0	2366	0.13 µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	26250	0.13 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	8658	0.06 µg/L	0.000
13C5-PFNA	7.416	468.0 -> 423.0	10112	0.06 µg/L	0.000
13C2-PFHxA	5.465	315.0 -> 270.0	14082	0.13 µg/L	0.012
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	855	0.36 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 7.2%	
13C2-6:2FTS	6.684	429.0 -> 81.0	1410	0.27 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 5.5%	
13C2-8:2FTS	7.671	529.0 -> 81.0	1886	0.31 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 6.2%	
13C2-PFDoDA	8.666	615.0 -> 570.0	9878	0.05 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 4.2%	
13C2-PFTeDA	9.368	715.0 -> 670.0	7625	0.05 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 4.2%	
13C3-PFBS	5.368	302.0 -> 99.0	1358	0.12 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.7%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	2119	0.13 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 5.1%		
13C4-PFBA	2.858	217.0 -> 172.0	43410	0.48 µg/L		-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 4.8%		
13C4-PFHpA	6.291	367.0 -> 322.0	15587	0.12 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.9%		
13C5-PFHxA	5.464	318.0 -> 273.0	14625	0.12 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.9%		
13C5-PFPeA	4.319	268.0 -> 223.0	22557	0.25 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 5.0%		
13C6-PFDA	7.858	519.0 -> 474.0	8288	0.05 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 4.3%		
13C7-PFUnDA	8.273	570.0 -> 525.0	11107	0.05 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 4.3%		
13C8-FOSA	9.279	506.0 -> 78.0	8450	0.12 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.6%		
13C8-PFOA	6.897	421.0 -> 376.0	25379	0.12 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.8%		
13C8-PFOS	7.995	507.0 -> 99.0	2207	0.13 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 5.1%		
13C9-PFNA	7.403	472.0 -> 427.0	9434	0.06 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 4.5%		
d3-MeFOSAA	7.915	573.0 -> 419.0	10572	0.22 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 4.5%		
13C3-HFPO-DA	5.792	287.0 -> 169.0	22243	0.48 µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 4.8%		
d3-MeFOSA	10.567	515.0 -> 169.0	3983	0.11 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.2%		
d5-EtFOSAA	8.098	589.0 -> 419.0	8138	0.23 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 4.5%		
d7-MeFOSE	10.462	623.0 -> 59.0	37485	1.04 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 4.2%		
d9-EtFOSE	10.734	639.0 -> 59.0	46187	1.06 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 4.2%		
d5-EtFOSA	10.825	531.0 -> 169.0	3910	0.10 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 4.0%		
Target Compounds						QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.		
		327.0 -> 81.0				
6:2FTS	6.684	427.0 -> 407.0	456885	16.16 µg/L		98
		427.0 -> 81.0	208092			
8:2FTS	7.671	527.0 -> 507.0	10215	0.35 µg/L		83
		527.0 -> 81.0	4888			
EtFOSAA	-	584.0 -> 419.0	-	N.D.		
		584.0 -> 483.0				
FOSA	-	498.0 -> 78.0	-	N.D.		
		498.0 -> 478.0				
MeFOSAA	-	570.0 -> 419.0	-	N.D.		
		570.0 -> 512.0				
PFBA	2.864	213.0 -> 169.0	49329	1.86 µg/L		100
PFBS	5.369	299.0 -> 80.0	3234	0.10 µg/L	m	98
		299.0 -> 99.0	1290			
PFDA	7.859	513.0 -> 469.0	9058	0.07 µg/L	m	85
		513.0 -> 219.0	2765			
PFDoDA	-	613.0 -> 569.0	-	N.D.		
		613.0 -> 319.0				

Perfluorinated Compounds by LC/MS/MS

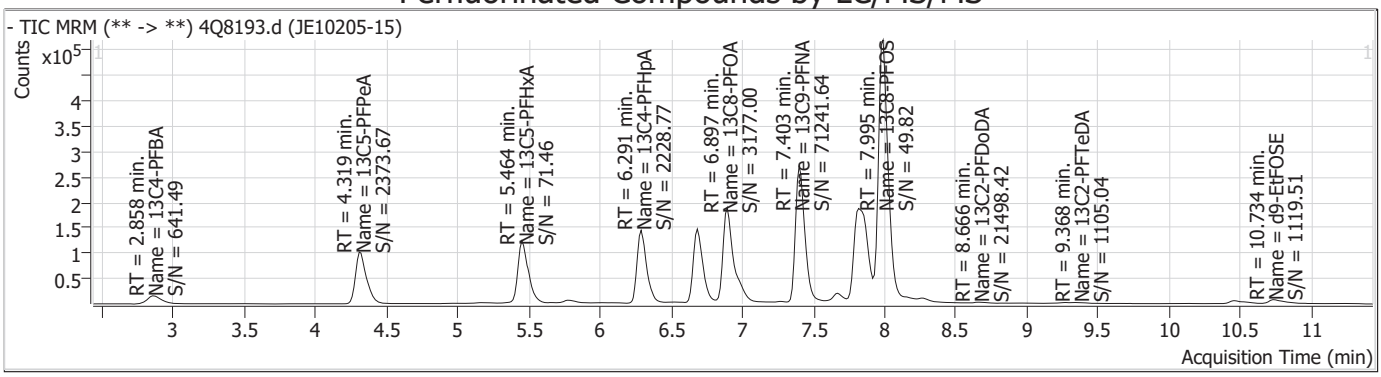
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.292	363.0 -> 319.0	541993	2.86	µg/L		98
		363.0 -> 169.0	117630				
PFHpS	7.529	449.0 -> 80.0	5249	0.14	µg/L	m	96
		449.0 -> 99.0	3040				
PFHxA	5.467	313.0 -> 269.0	584442	4.64	µg/L		100
		313.0 -> 119.0	18978				
PFHxS	7.000	399.0 -> 80.0	89614	2.92	µg/L	m	96
		399.0 -> 99.0	45443				
PFNA	7.404	463.0 -> 419.0	973096	9.77	µg/L		87
		463.0 -> 219.0	288613				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	6.898	413.0 -> 369.0	655205	4.93	µg/L		95
		413.0 -> 169.0	173154				
PFOS	7.996	499.0 -> 80.0	820699	29.89	µg/L	m	98
		499.0 -> 99.0	434302				
PFPeA	4.321	263.0 -> 219.0	530624	7.44	µg/L		100
PFPeS	6.331	349.0 -> 80.0	4539	0.13	µg/L		91
		349.0 -> 99.0	2570				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	8.275	563.0 -> 519.0	11997	0.09	µg/L		96
		563.0 -> 269.0	2190				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

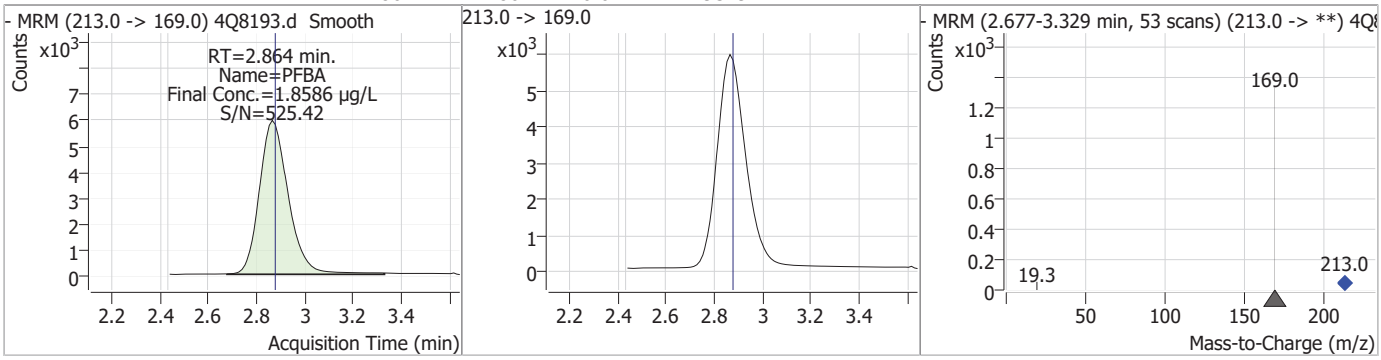
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

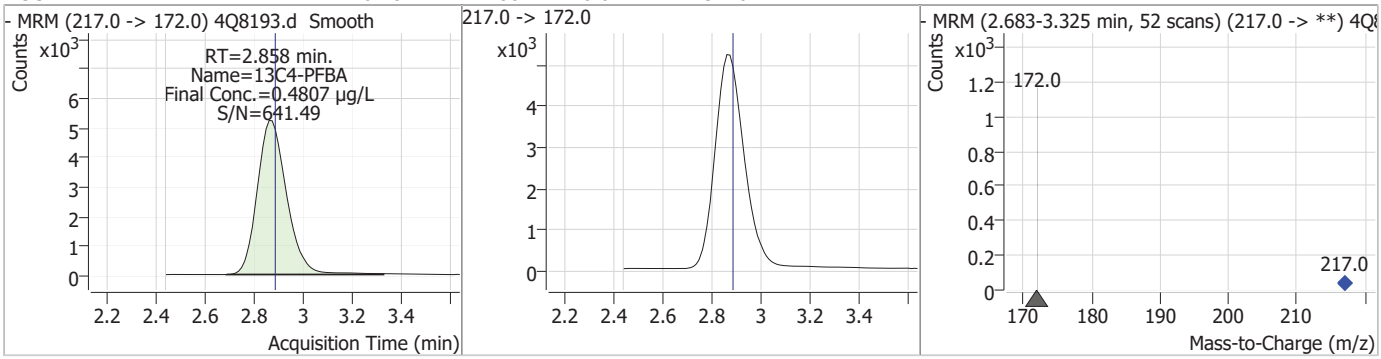
Perfluorinated Compounds by LC/MS/MS



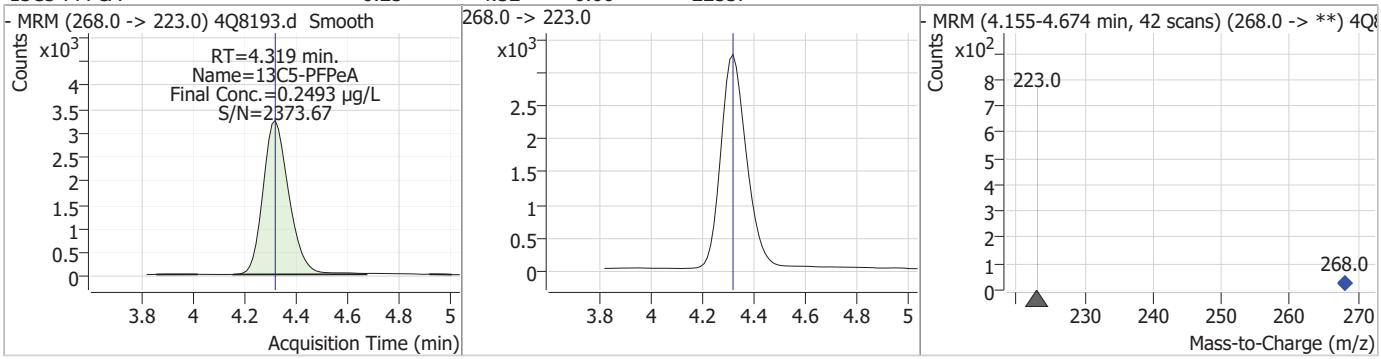
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	1.86	2.86	-0.01	49329				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	0.48	2.86	-0.02	43410				

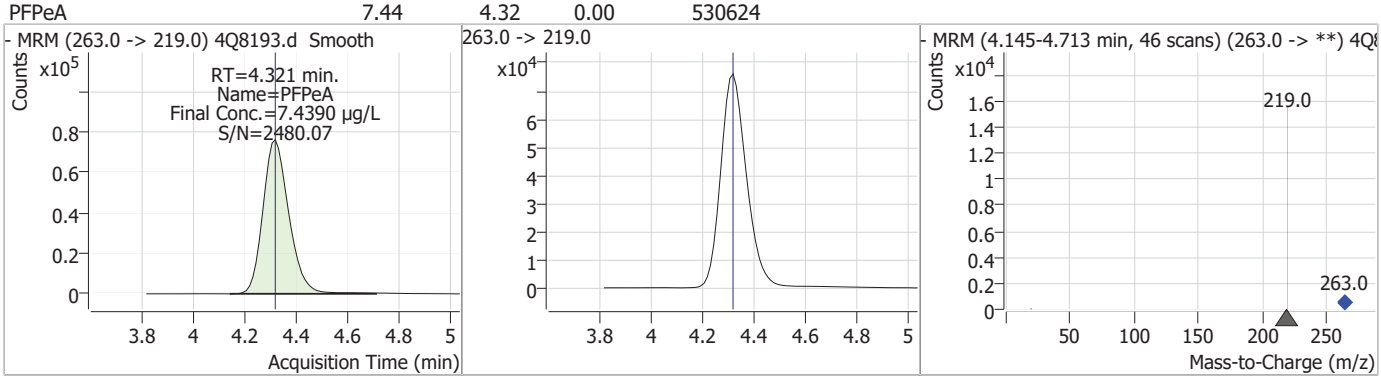


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	0.25	4.32	0.00	22557				

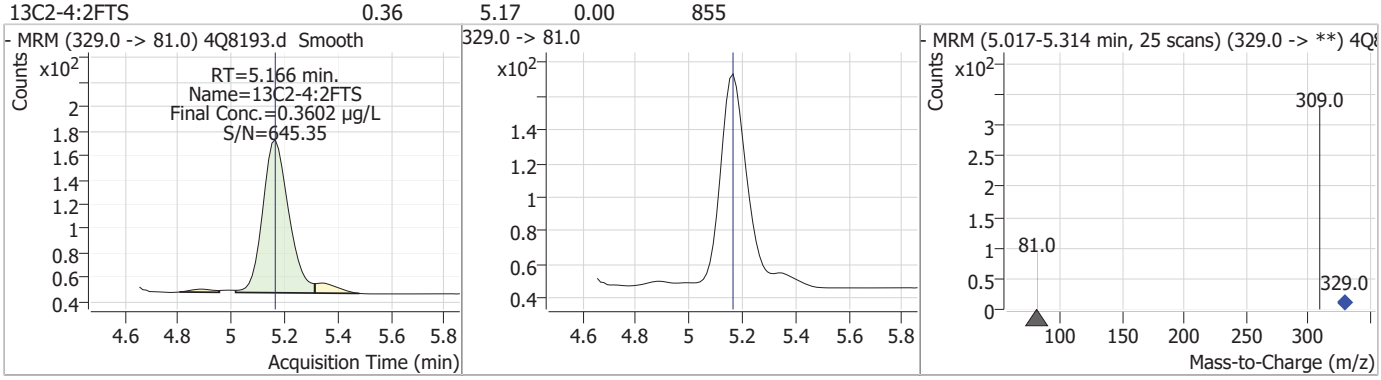


Perfluorinated Compounds by LC/MS/MS

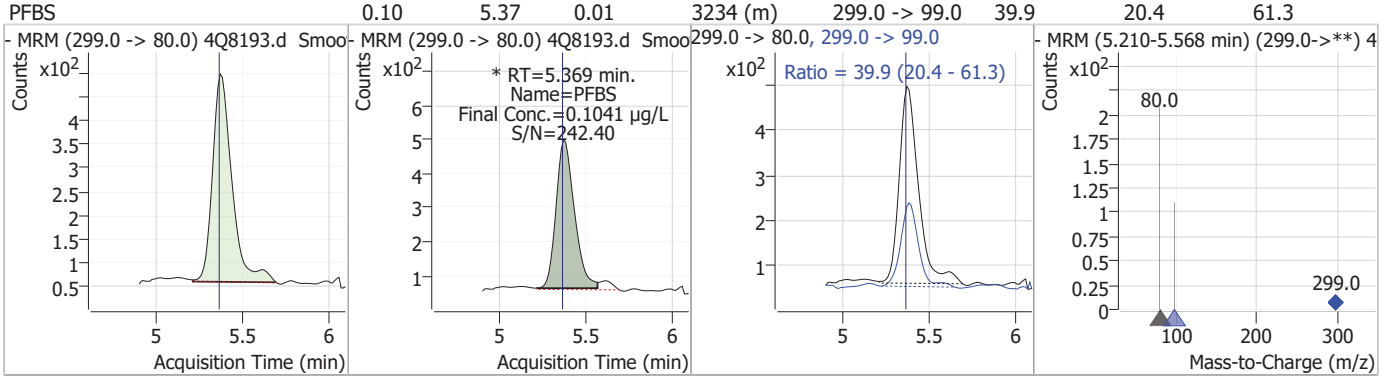
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	7.44	4.32	0.00	530624				



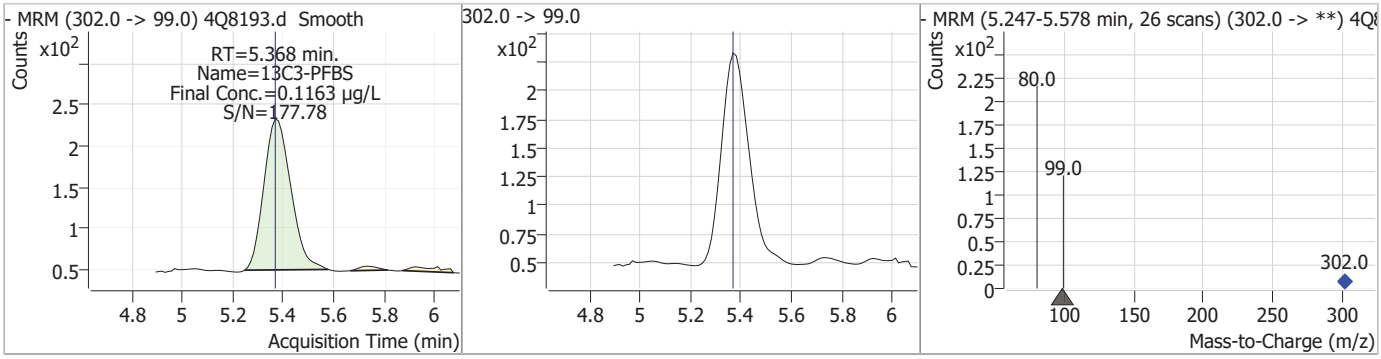
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	0.36	5.17	0.00	855				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.10	5.37	0.01	3234 (m)	299.0 -> 99.0	39.9	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	0.12	5.37	0.00	1358				



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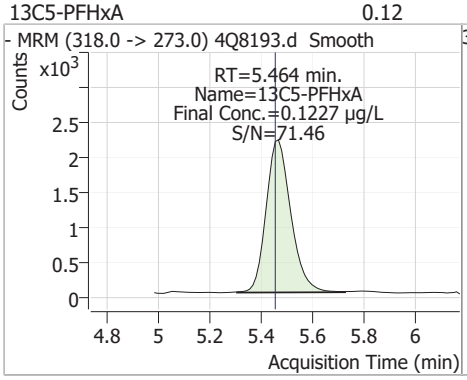
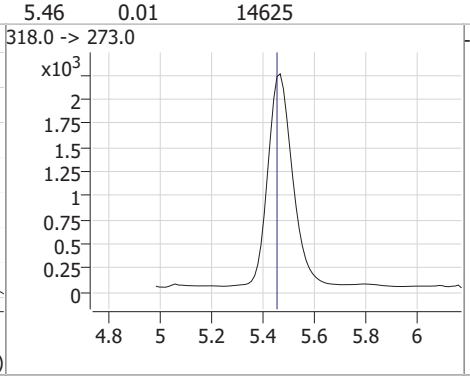
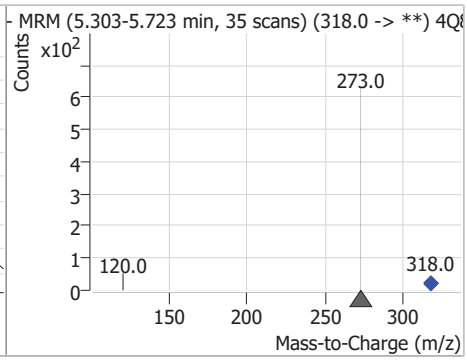
Perfluorinated Compounds by LC/MS/MS

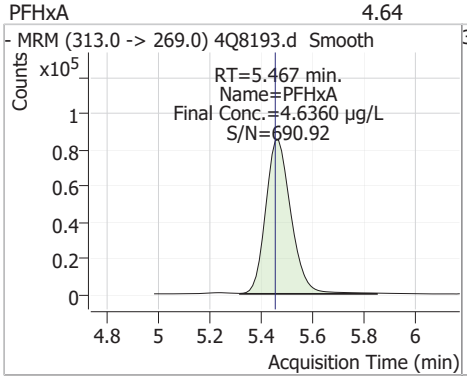
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	0.12	5.46	0.01	14625				

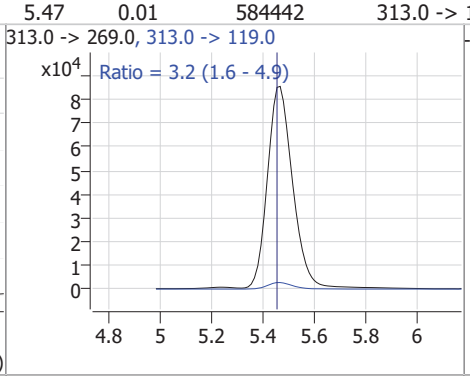


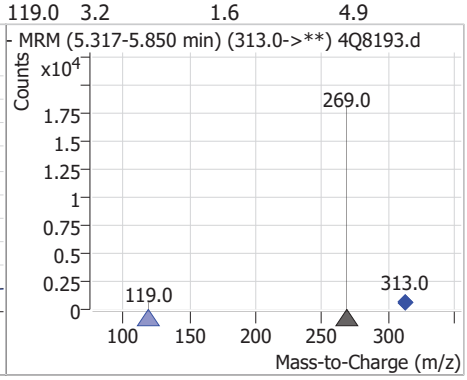




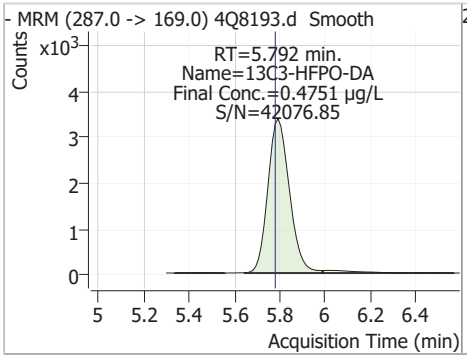
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	4.64	5.47	0.01	584442	313.0 -> 119.0	3.2	1.6	4.9

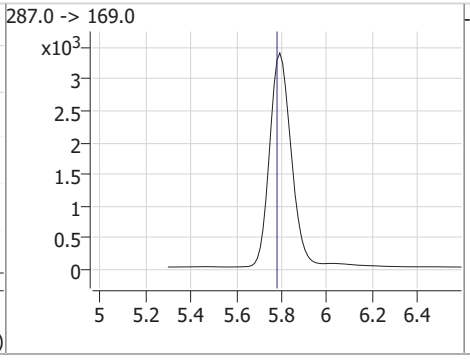


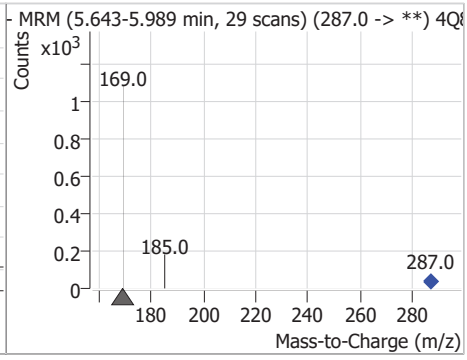




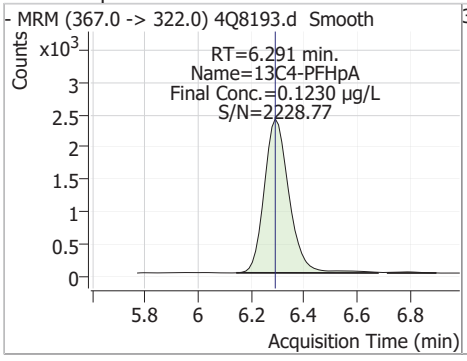
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	0.48	5.79	0.01	22243				

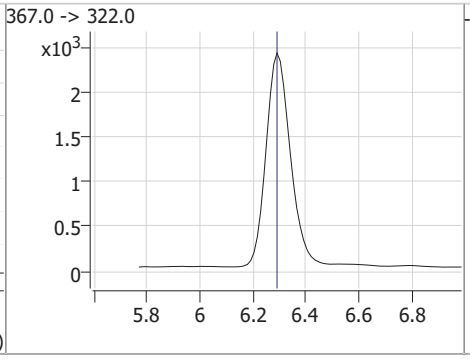


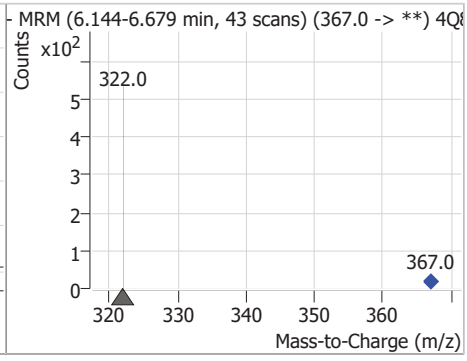




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	0.12	6.29	0.00	15587				

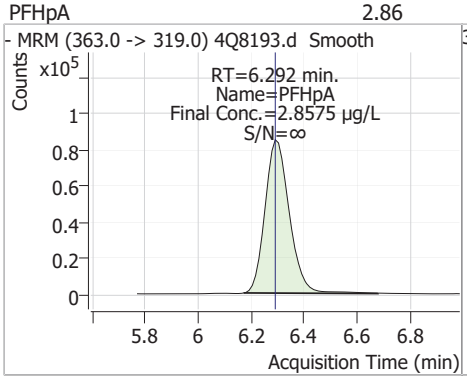


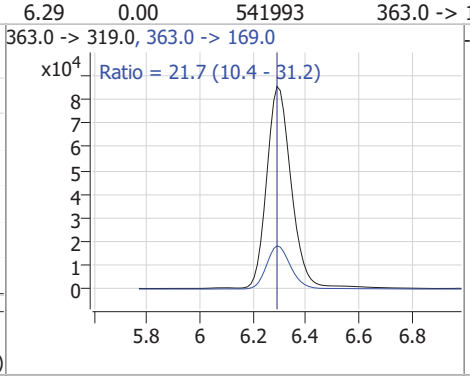


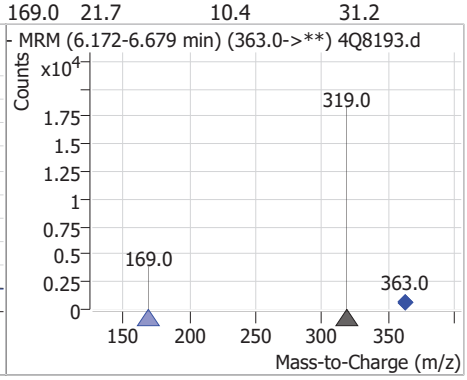


Perfluorinated Compounds by LC/MS/MS

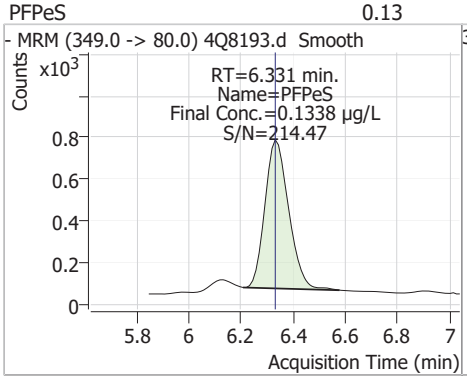
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.86	6.29	0.00	541993	363.0 -> 169.0	21.7	10.4	31.2

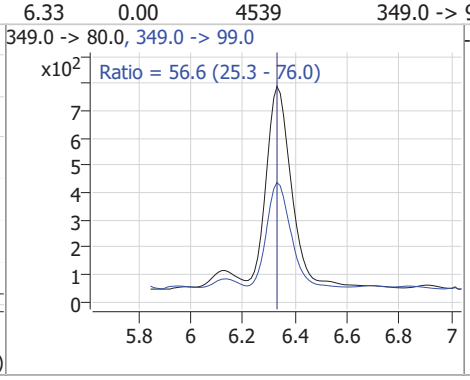


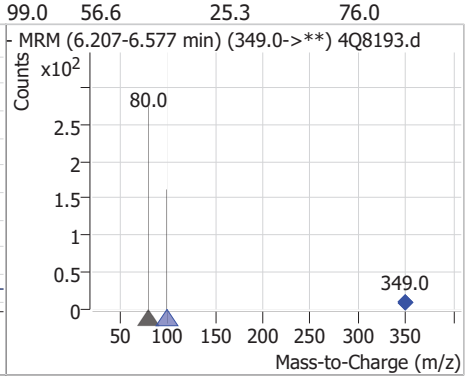




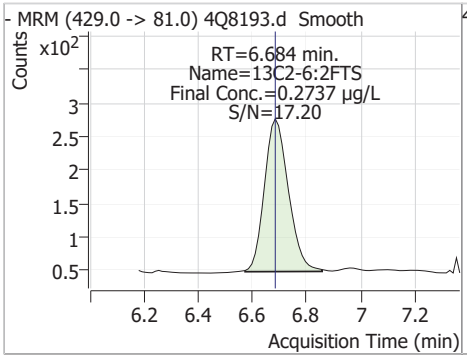
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.13	6.33	0.00	4539	349.0 -> 99.0	56.6	25.3	76.0

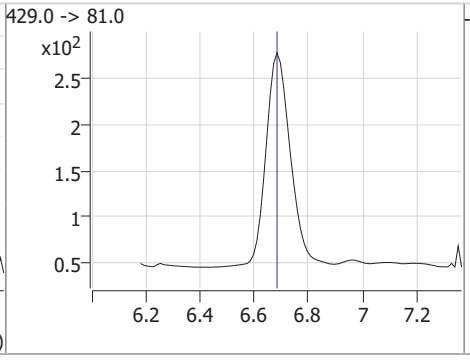


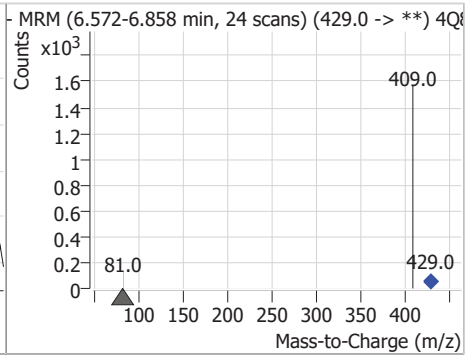




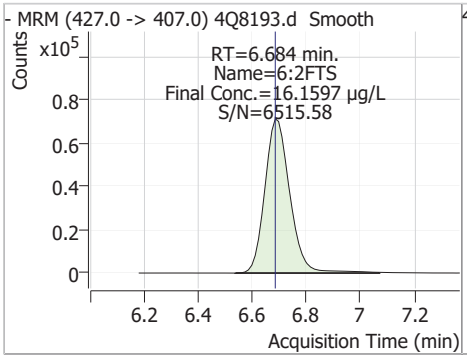
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	0.27	6.68	0.00	1410				

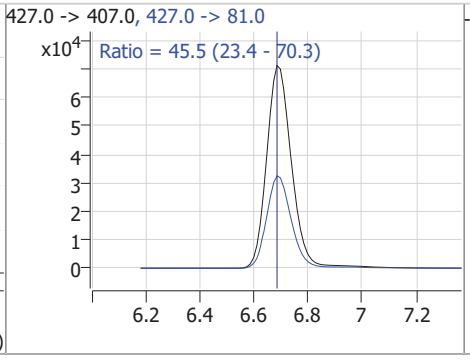


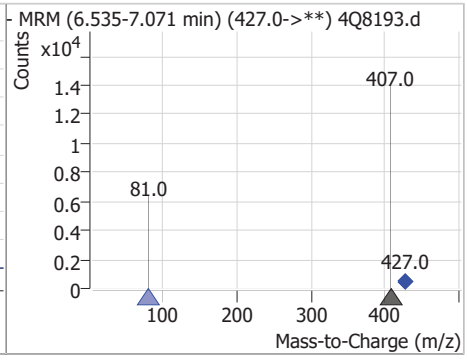




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	16.16	6.68	0.00	456885	427.0 -> 81.0	45.5	23.4	70.3

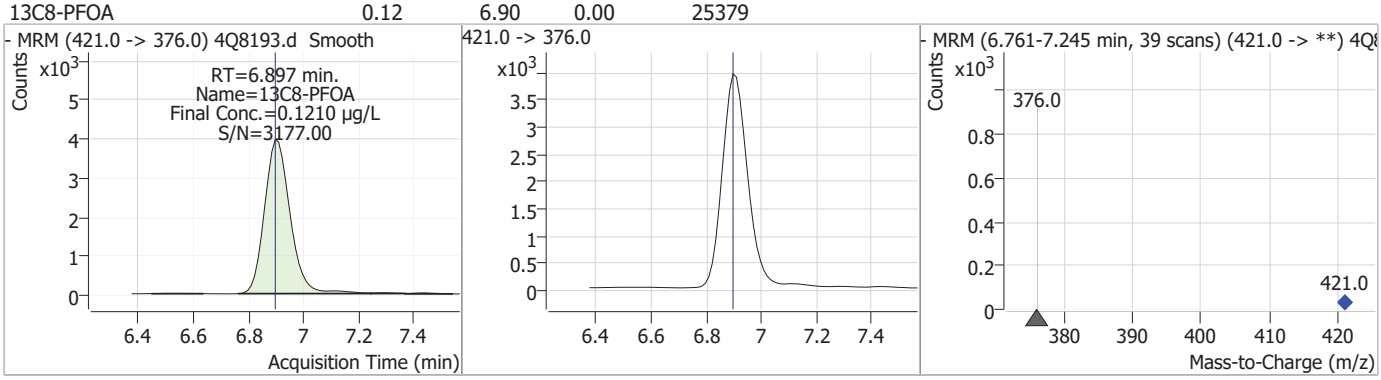




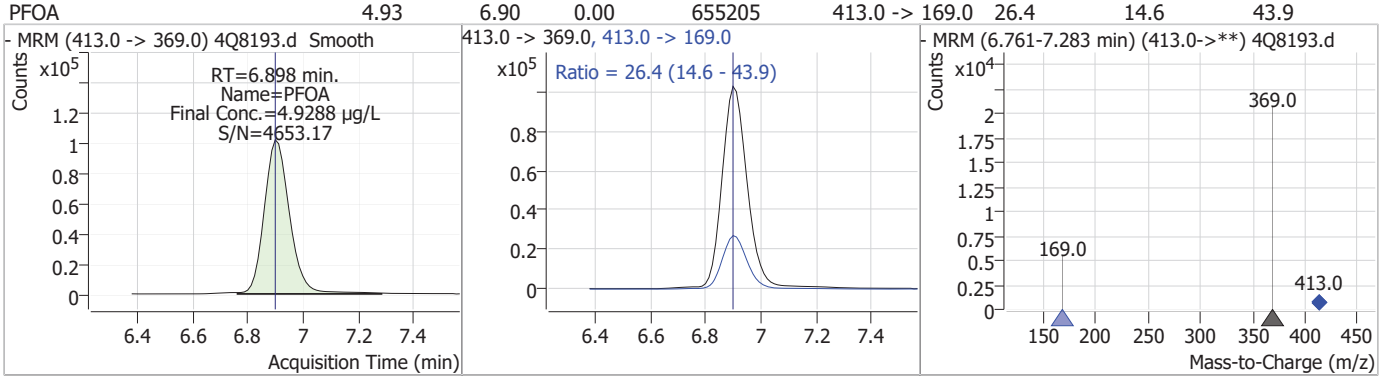


Perfluorinated Compounds by LC/MS/MS

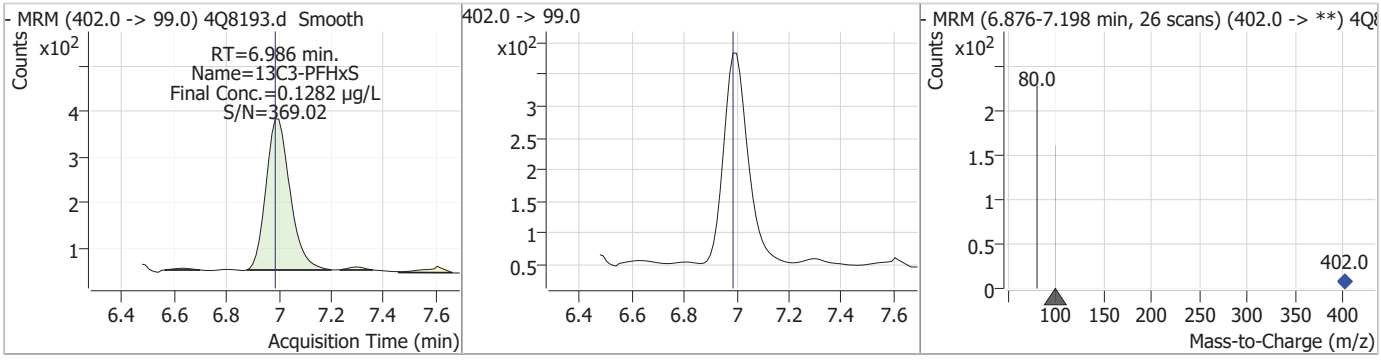
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	0.12	6.90	0.00	25379				



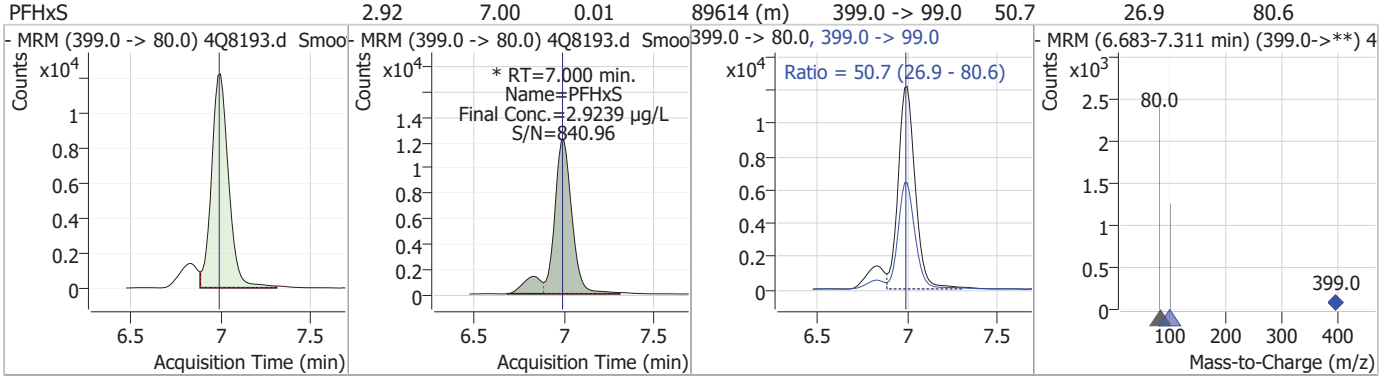
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	4.93	6.90	0.00	655205	413.0 -> 169.0	26.4	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	0.13	6.99	0.00	2119				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.92	7.00	0.01	89614 (m)	399.0 -> 99.0	50.7	26.9	80.6



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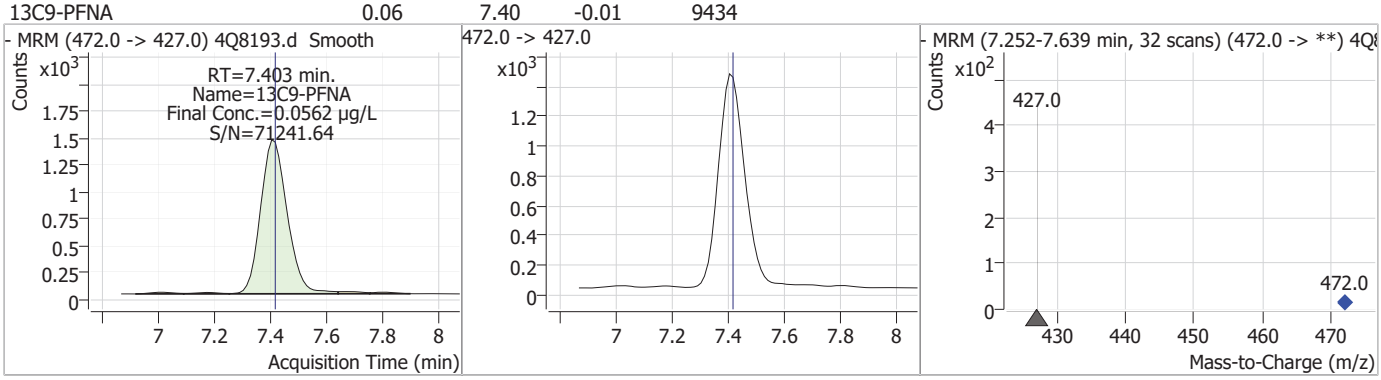
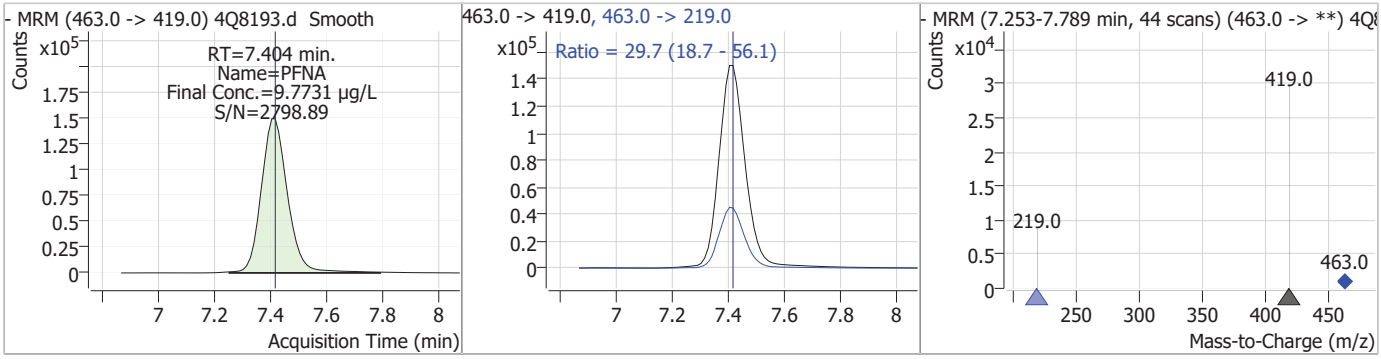
Perfluorinated Compounds by LC/MS/MS

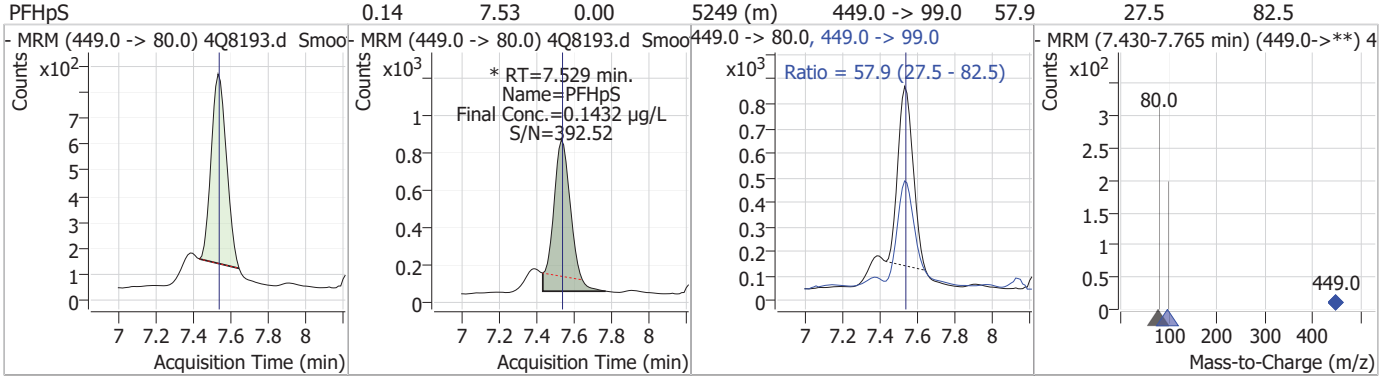
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	0.06	7.40	-0.01	9434				



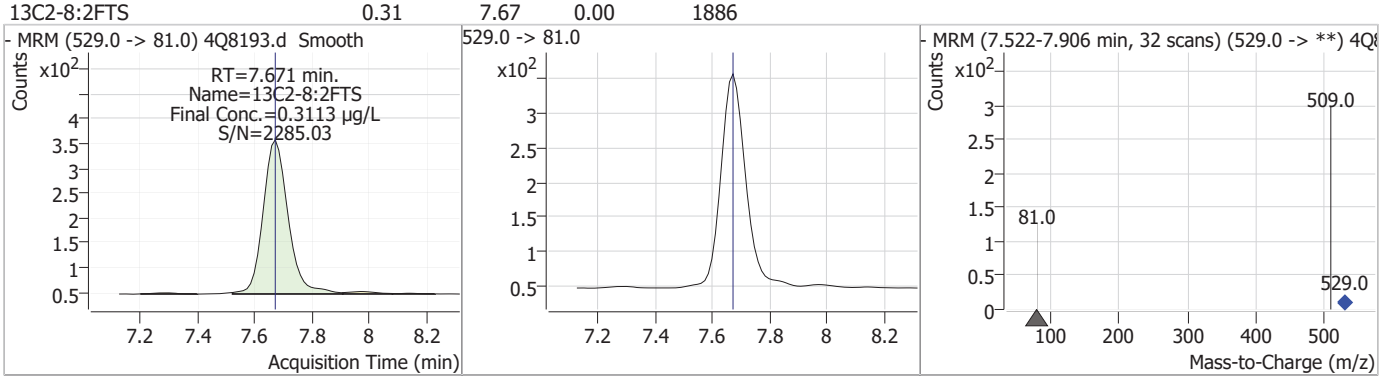
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	9.77	7.40	-0.01	973096	463.0 -> 219.0	29.7	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.14	7.53	0.00	5249 (m)	449.0 -> 99.0	57.9	27.5	82.5

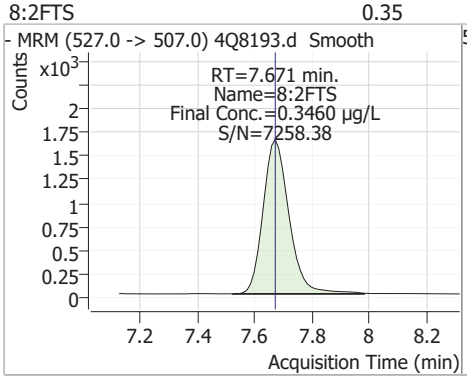


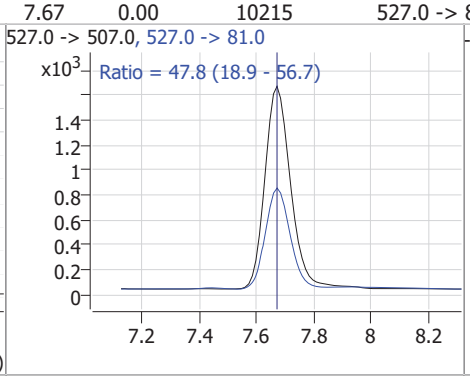
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	0.31	7.67	0.00	1886				

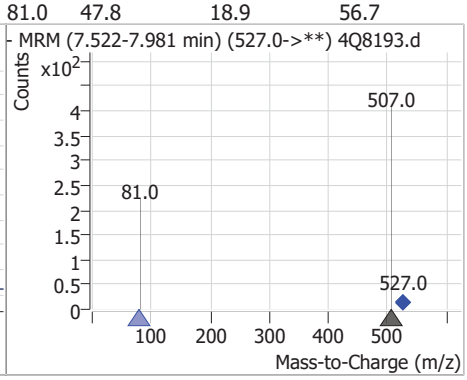


Perfluorinated Compounds by LC/MS/MS

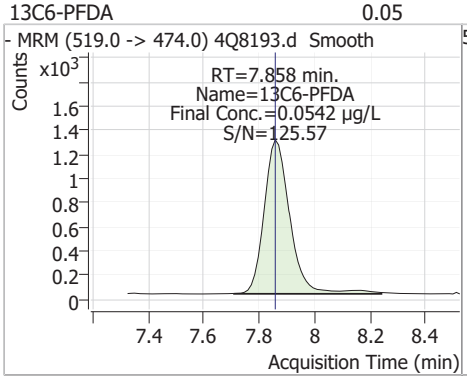
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.35	7.67	0.00	10215	527.0 -> 81.0	47.8	18.9	56.7

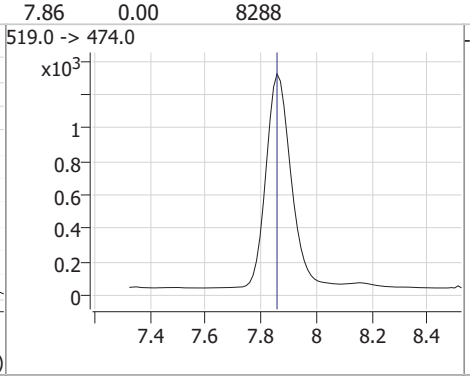


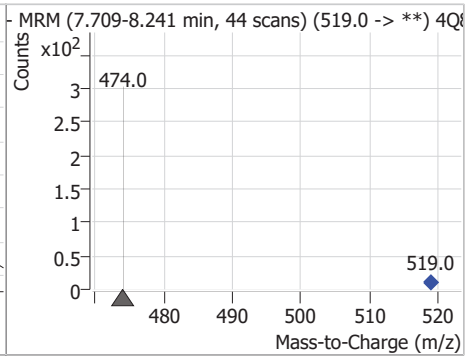




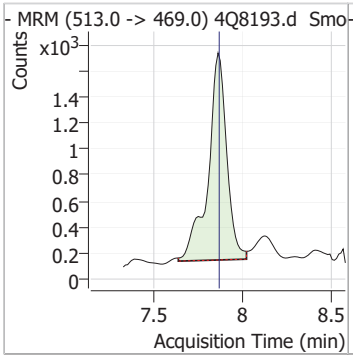
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	0.05	7.86	0.00	8288				

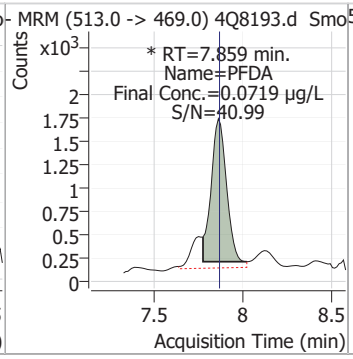


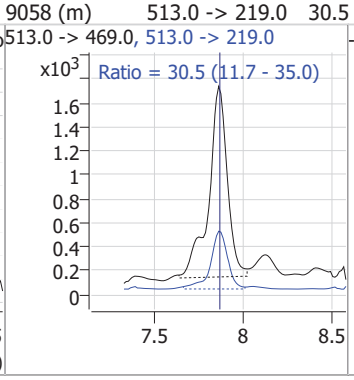


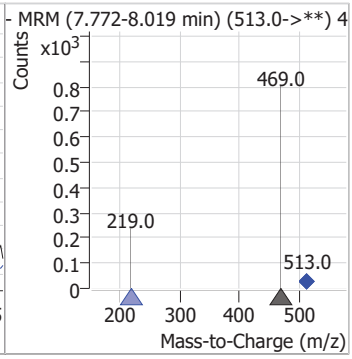


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.07	7.86	0.00	9058 (m)	513.0 -> 219.0	30.5	11.7	35.0

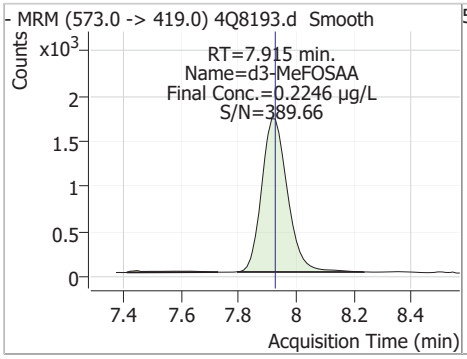


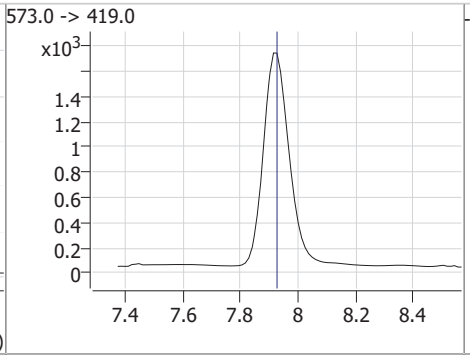


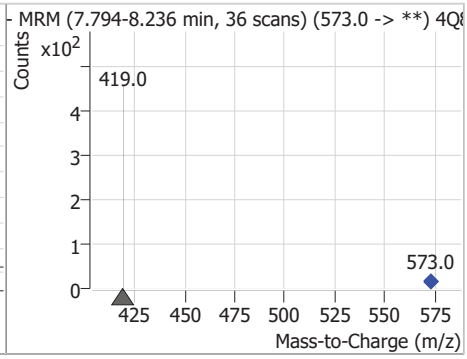




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	0.22	7.92	-0.01	10572				

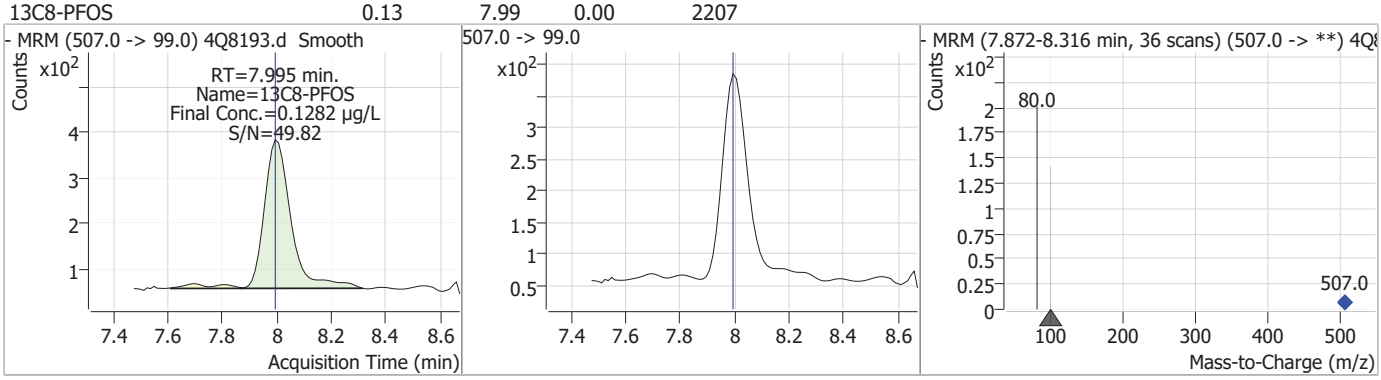




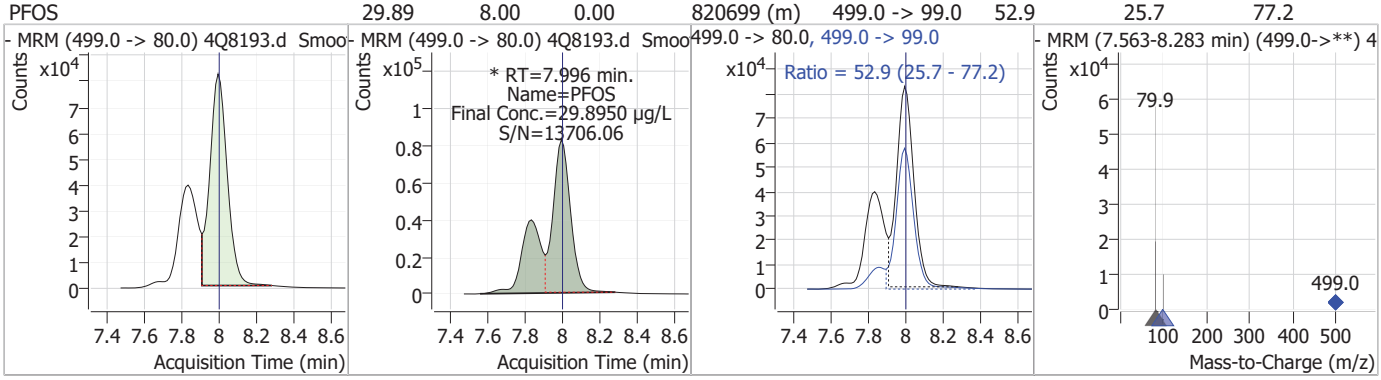


Perfluorinated Compounds by LC/MS/MS

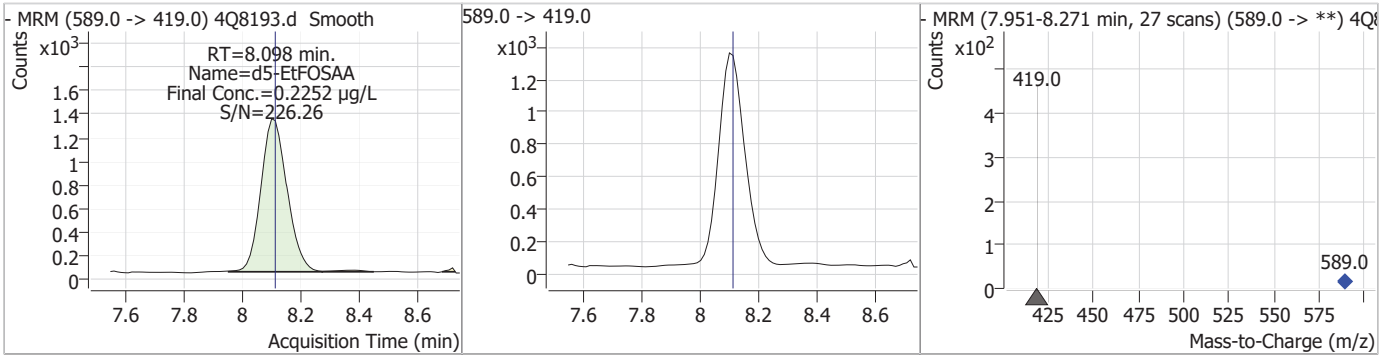
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	0.13	7.99	0.00	2207				



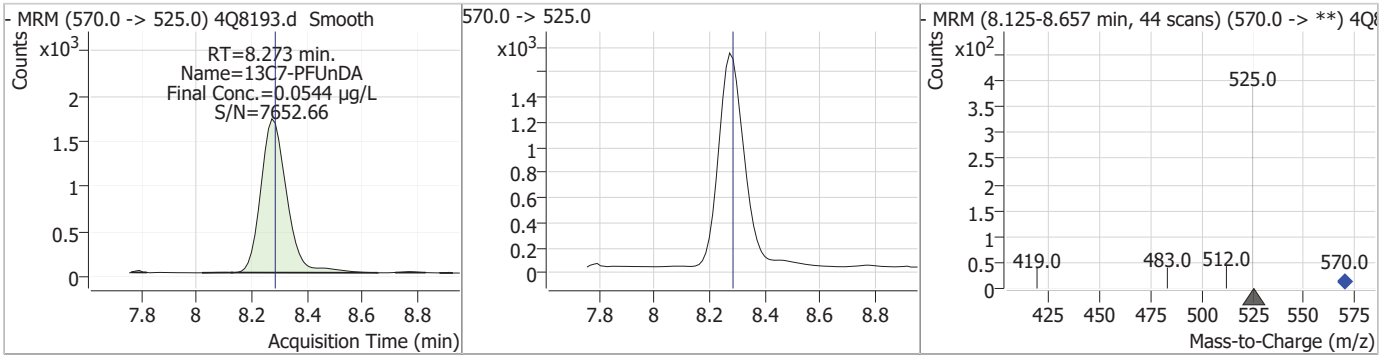
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	29.89	8.00	0.00	820699 (m)	499.0 -> 99.0	52.9	25.7	77.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	0.23	8.10	-0.01	8138				

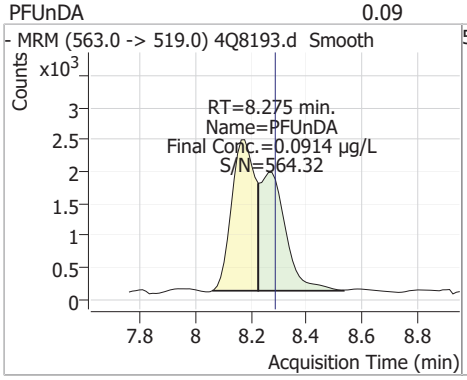


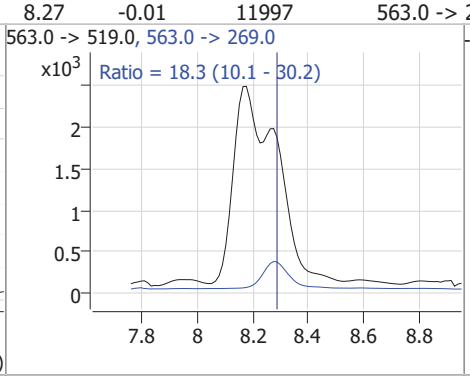
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	0.05	8.27	-0.01	11107				

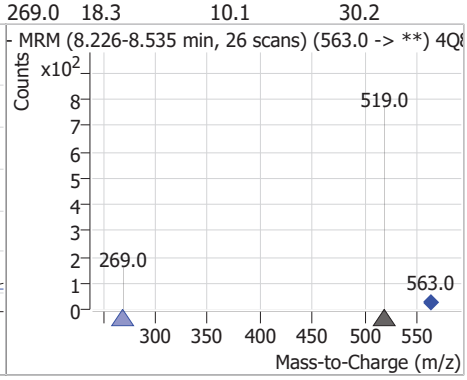


Perfluorinated Compounds by LC/MS/MS

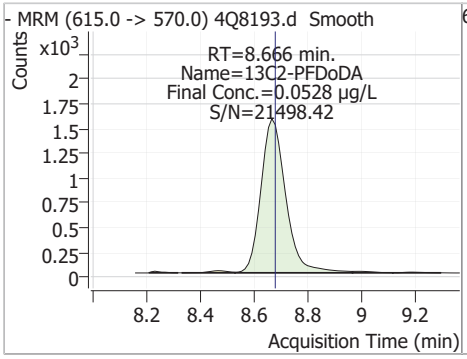
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.09	8.27	-0.01	11997	563.0 -> 269.0	18.3	10.1	30.2

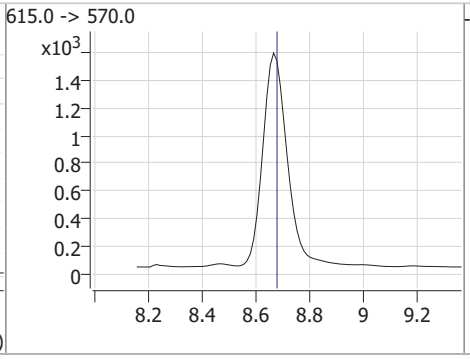


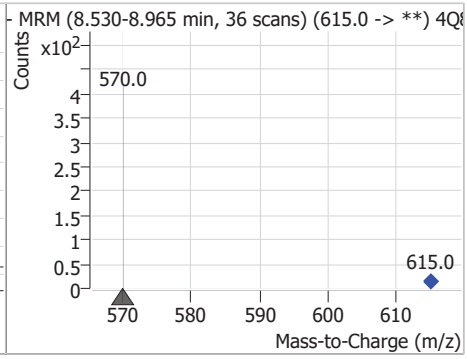




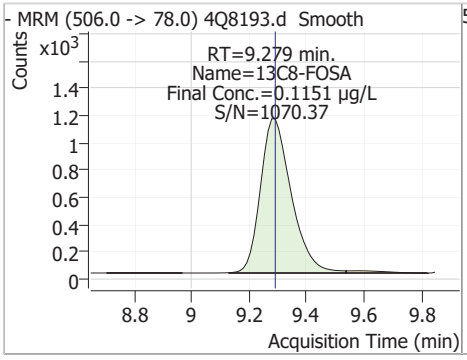
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	0.05	8.67	-0.01	9878				

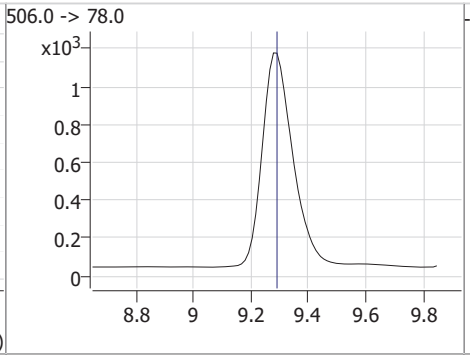


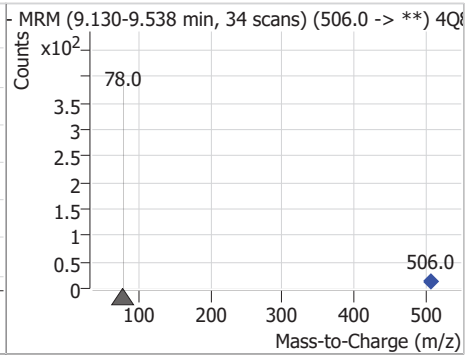




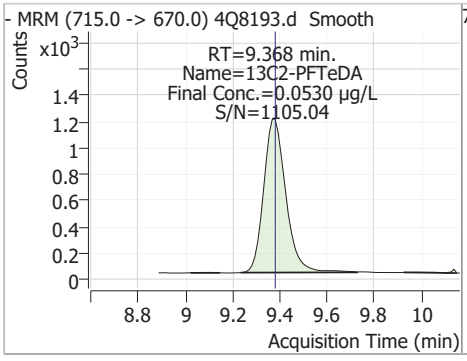
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	0.12	9.28	-0.01	8450				

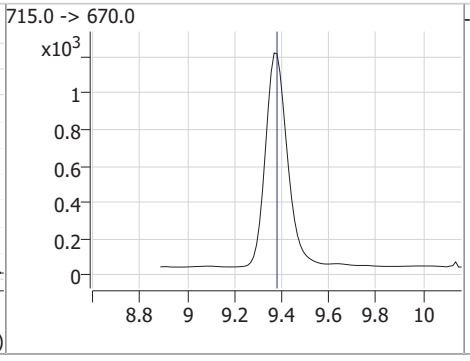


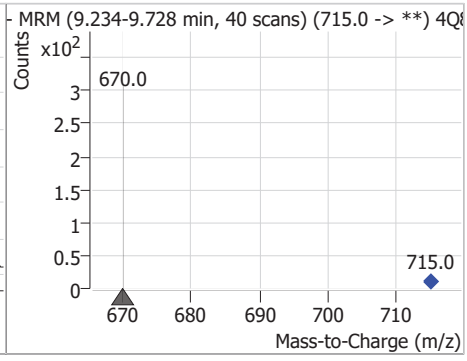




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.05	9.37	-0.01	7625				

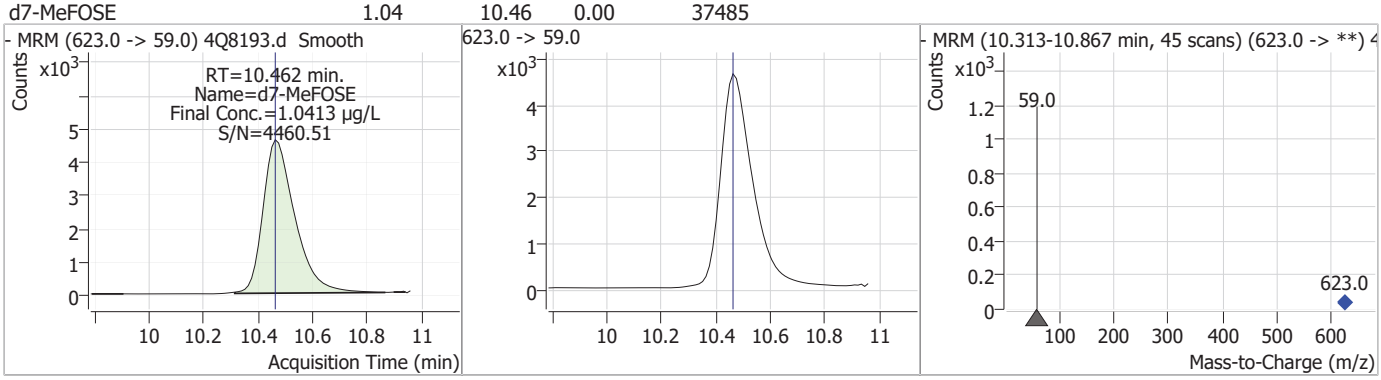




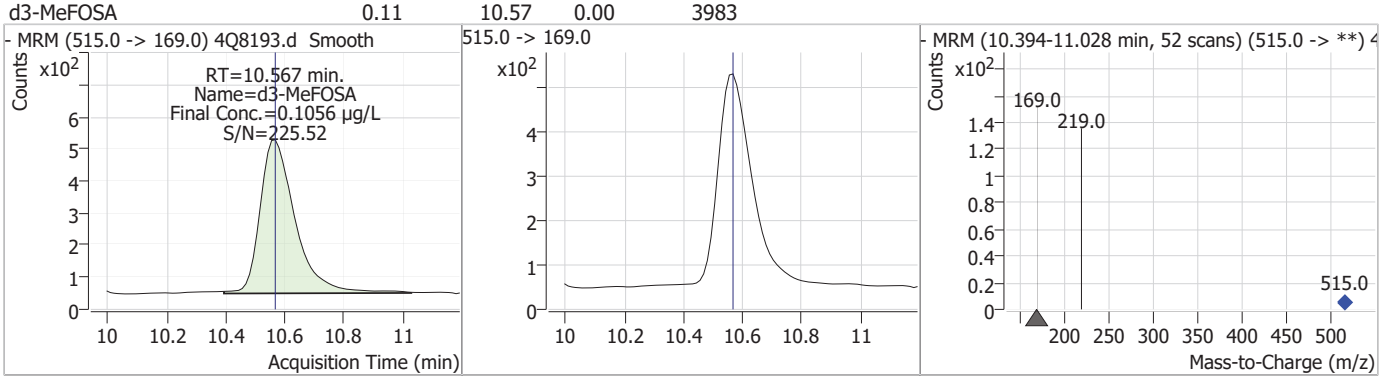


Perfluorinated Compounds by LC/MS/MS

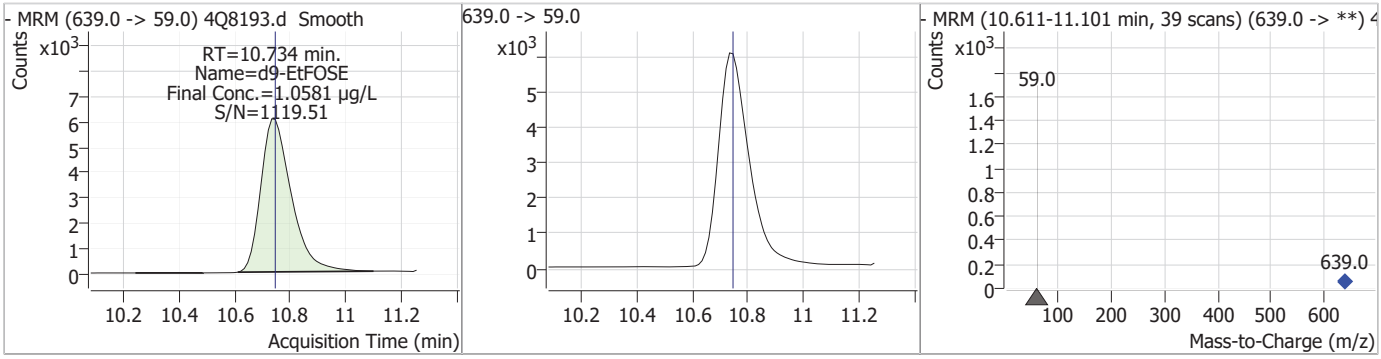
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	1.04	10.46	0.00	37485				



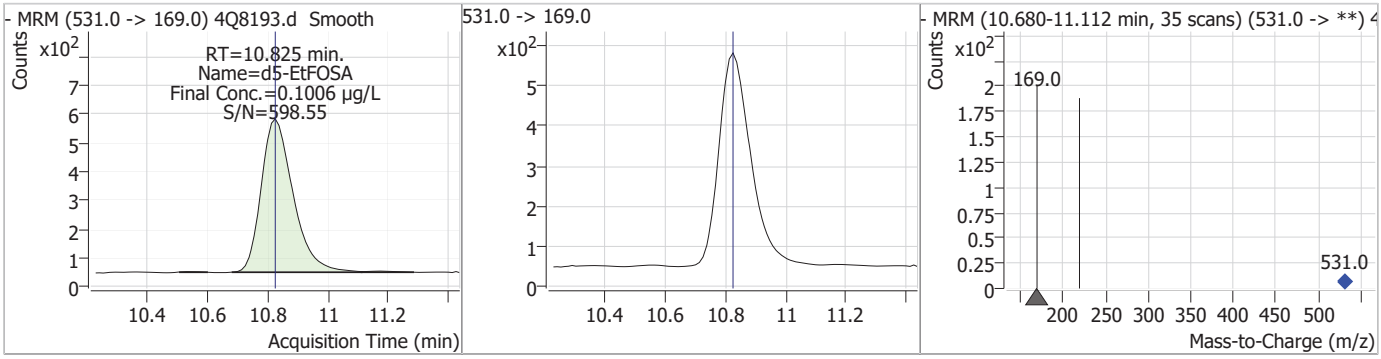
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	0.11	10.57	0.00	3983				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	1.06	10.73	-0.01	46187				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	0.10	10.82	0.00	3910				



Manual Integration Approval Summary

Sample Number: JE10205-15
Lab FileID: 4Q8193.D
Injection Time: 05/01/25 15:41

Method: EPA 1633
Analyst approved: 05/02/25 05:01 Josephus Gimenez
Supervisor approved: 05/06/25 06:22 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorobutanesulfonic acid	375-73-5		5.37	Poor instrument integration
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluoroheptanesulfonic acid	375-92-8		7.53	Poor instrument integration
Perfluorodecanoic acid	335-76-2		7.86	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/02/25 11:54

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8185.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 1:52:47 PM
Sample Name : JE10205-16
Vial : P2-A1
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q139.batch.bin
Sample Information : OP63163,T4Q139,502,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.946	217.0 -> 172.0	1042191	10.00	µg/L	0.062
M5-PFPeA	4.369	268.0 -> 223.0	477508	5.00	µg/L	0.050
M5-PFHxA	5.489	318.0 -> 273.0	326270	2.50	µg/L	0.037
M4-PFHpA	6.316	367.0 -> 322.0	340735	2.50	µg/L	0.025
M8-PFOA	6.922	421.0 -> 376.0	510208	2.50	µg/L	0.025
M9-PFNA	7.428	472.0 -> 427.0	212434	1.25	µg/L	0.012
M6-PFDA	7.870	519.0 -> 474.0	209293	1.25	µg/L	0.012
M7-PFUnDA	8.285	570.0 -> 525.0	289072	1.25	µg/L	0.000
M2-PFDoDA	8.679	615.0 -> 570.0	228026	1.25	µg/L	0.000
M2-PFTeDA	9.381	715.0 -> 670.0	170050	1.25	µg/L	0.000
M8-FOSA	9.340	506.0 -> 78.0	195661	2.50	µg/L	0.049
M3-PFBS	5.406	302.0 -> 99.0	30413	2.50	µg/L	0.038
		302.0 -> 80.0	72388			
M3-PFHxS	7.011	402.0 -> 99.0	40069	2.50	µg/L	0.026
M8-PFOS	8.007	507.0 -> 99.0	45920	2.50	µg/L	0.012
M2-4:2FTS	5.203	329.0 -> 81.0	13995	5.00	µg/L	0.037
M2-6:2FTS	6.708	429.0 -> 81.0	29981	5.00	µg/L	0.025
M2-8:2FTS	7.683	529.0 -> 81.0	36184	5.00	µg/L	0.012
M3-MeFOSAA	7.940	573.0 -> 419.0	228749	5.00	µg/L	0.012
M3-HFPO-DA	5.816	287.0 -> 169.0	485376	10.00	µg/L	0.037
M5-EtFOSAA	8.123	589.0 -> 419.0	177571	5.00	µg/L	0.012
M7-MeFOSE	10.462	623.0 -> 59.0	878876	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	1016815	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	78722	2.50	µg/L	0.000
M3-MeFOSA	10.568	515.0 -> 169.0	78537	2.50	µg/L	0.000
13C4-PFOS	8.008	503.0 -> 80.0	81573	2.50	µg/L	0.012
13C3-PFBA	2.936	216.0 -> 172.0	481421	5.00	µg/L	0.062
18O2-PFHxS	7.011	403.0 -> 84.0	49193	2.50	µg/L	0.012
13C4-PFOA	6.922	417.0 -> 372.0	535249	2.50	µg/L	0.025
13C2-PFDA	7.871	515.0 -> 470.0	198353	1.25	µg/L	0.012
13C5-PFNA	7.428	468.0 -> 423.0	219117	1.25	µg/L	0.012
13C2-PFHxA	5.489	315.0 -> 270.0	321818	2.50	µg/L	0.037
System Monitoring Compounds						
13C2-4:2FTS	5.203	329.0 -> 81.0	13995	5.67	µg/L	0.037
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 113.5%		
13C2-6:2FTS	6.708	429.0 -> 81.0	29981	5.60	µg/L	0.025
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 112.0%		
13C2-8:2FTS	7.683	529.0 -> 81.0	36184	5.75	µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 114.9%		
13C2-PFDoDA	8.679	615.0 -> 570.0	228026	1.06	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 85.1%		
13C2-PFTeDA	9.381	715.0 -> 670.0	170050	1.03	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 82.5%		
13C3-PFBS	5.406	302.0 -> 99.0	30413	2.51	µg/L	0.038
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.2%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.011	402.0 -> 99.0	40069	2.33	µg/L		0.026
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.3%			
13C4-PFBA	2.946	217.0 -> 172.0	1042191	9.44	µg/L		0.062
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.4%			
13C4-PFHpA	6.316	367.0 -> 322.0	340735	2.35	µg/L		0.025
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.1%			
13C5-PFHxA	5.489	318.0 -> 273.0	326270	2.40	µg/L		0.037
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.8%			
13C5-PFPeA	4.369	268.0 -> 223.0	477508	4.62	µg/L		0.050
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.4%			
13C6-PFDA	7.870	519.0 -> 474.0	209293	1.19	µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.5%			
13C7-PFUnDA	8.285	570.0 -> 525.0	289072	1.23	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.8%			
13C8-FOSA	9.340	506.0 -> 78.0	195661	2.33	µg/L		0.049
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.4%			
13C8-PFOA	6.922	421.0 -> 376.0	510208	2.39	µg/L		0.025
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.4%			
13C8-PFOS	8.007	507.0 -> 99.0	45920	2.34	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.5%			
13C9-PFNA	7.428	472.0 -> 427.0	212434	1.17	µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.5%			
d3-MeFOSAA	7.940	573.0 -> 419.0	228749	4.26	µg/L		0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 85.2%			
13C3-HFPO-DA	5.816	287.0 -> 169.0	485376	9.07	µg/L		0.037
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 90.7%			
d3-MeFOSA	10.568	515.0 -> 169.0	78537	1.83	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 73.0%			
d5-EtFOSAA	8.123	589.0 -> 419.0	177571	4.30	µg/L		0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 86.1%			
d7-MeFOSE	10.462	623.0 -> 59.0	878876	21.39	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 85.6%			
d9-EtFOSE	10.734	639.0 -> 59.0	1016815	20.41	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 81.6%			
d5-EtFOSA	10.825	531.0 -> 169.0	78722	1.78	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 71.0%			
Target Compounds							**QValue**
4:2FTS	-	327.0 -> 307.0	-	N.D.			
		327.0 -> 81.0					
6:2FTS	6.709	427.0 -> 407.0	69359	2.31	µg/L		100
		427.0 -> 81.0	32517				
8:2FTS	-	527.0 -> 507.0	-	N.D.			
		527.0 -> 81.0					
EtFOSAA	-	584.0 -> 419.0	-	N.D.			
		584.0 -> 483.0					
FOSA	-	498.0 -> 78.0	-	N.D.			
		498.0 -> 478.0					
MeFOSAA	-	570.0 -> 419.0	-	N.D.			
		570.0 -> 512.0					
PFBA	2.939	213.0 -> 169.0	10995	0.35	µg/L	m	100
PFBS	5.407	299.0 -> 80.0	2562	0.07	µg/L		100
		299.0 -> 99.0	1052				
PFDA	-	513.0 -> 469.0	-	N.D.			
		513.0 -> 219.0					
PFDoDA	-	613.0 -> 569.0	-	N.D.			
		613.0 -> 319.0					

Perfluorinated Compounds by LC/MS/MS

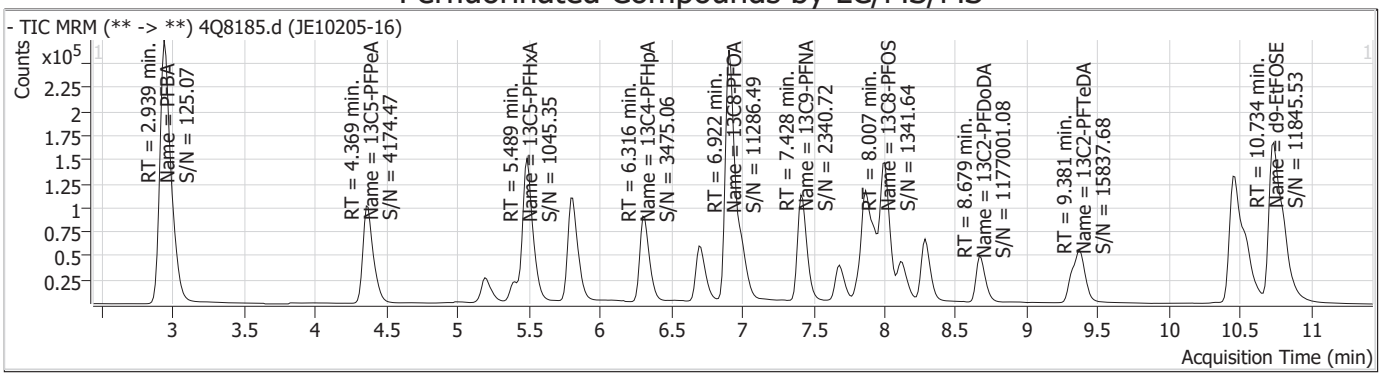
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.317	363.0 -> 319.0	71706	0.35	µg/L		97
		363.0 -> 169.0	13928				
PFHpS	-	449.0 -> 80.0	-	N.D.			
		449.0 -> 99.0					
PFHxA	5.492	313.0 -> 269.0	69083	0.49	µg/L		99
		313.0 -> 119.0	2419				
PFHxS	7.013	399.0 -> 80.0	39126	1.35	µg/L	m	97
		399.0 -> 99.0	20040				
PFNA	7.429	463.0 -> 419.0	70910	0.63	µg/L	m	88
		463.0 -> 219.0	21317				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	6.923	413.0 -> 369.0	149500	1.12	µg/L	m	98
		413.0 -> 169.0	42344				
PFOS	8.008	499.0 -> 80.0	141439	4.95	µg/L	m	96
		499.0 -> 99.0	68706				
PFPeA	4.371	263.0 -> 219.0	45341	0.60	µg/L		100
PFPeS	6.355	349.0 -> 80.0	1691	0.04	µg/L		91
		349.0 -> 99.0	965				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	8.287	563.0 -> 519.0	5728	0.03	µg/L	m	93
		563.0 -> 269.0	1326				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

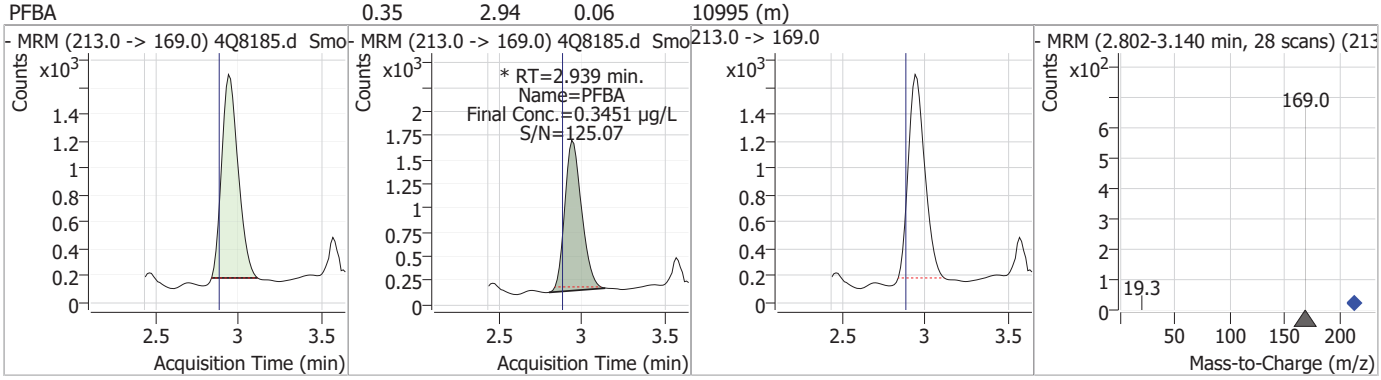
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

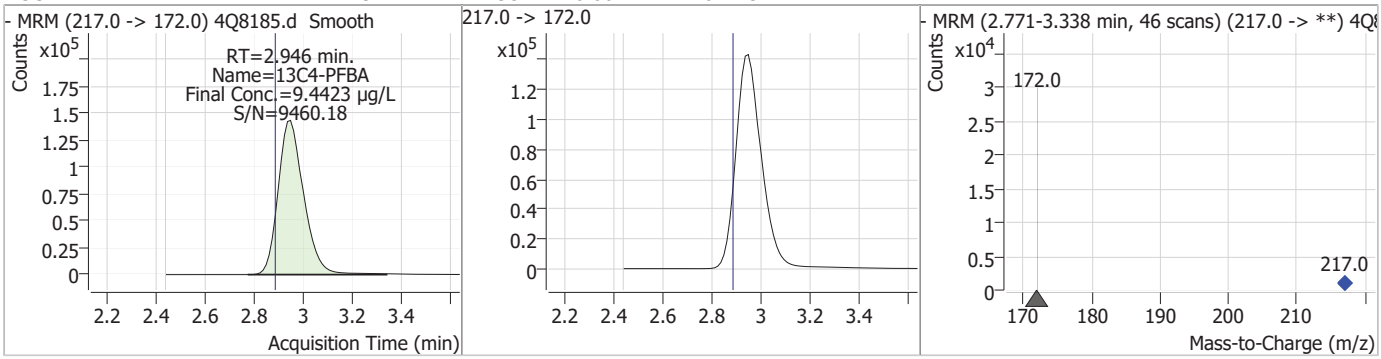
Perfluorinated Compounds by LC/MS/MS



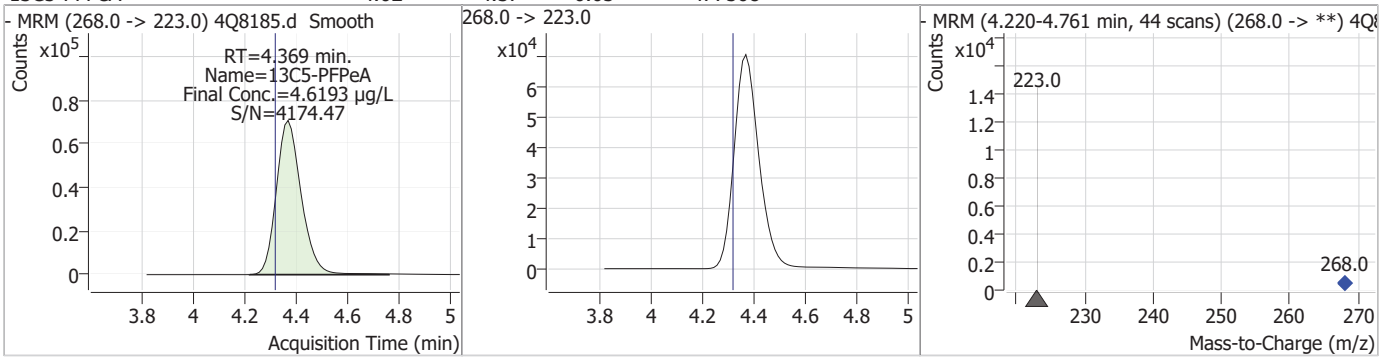
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.35	2.94	0.06	10995 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.44	2.95	0.06	1042191				

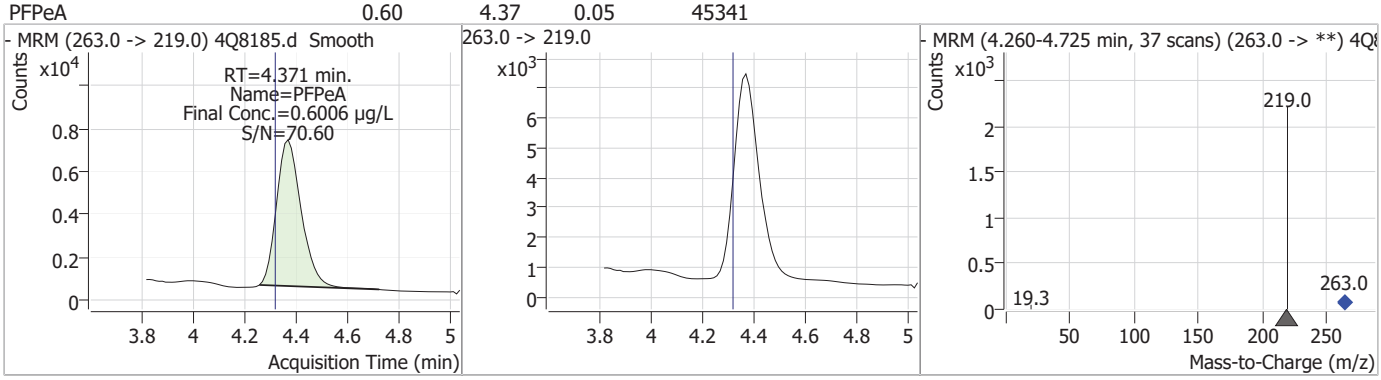


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.62	4.37	0.05	477508				

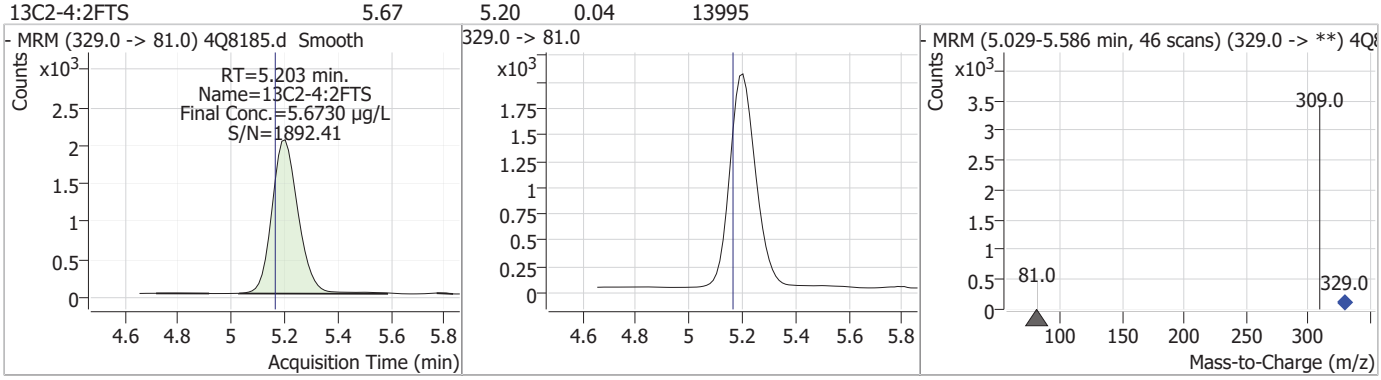


Perfluorinated Compounds by LC/MS/MS

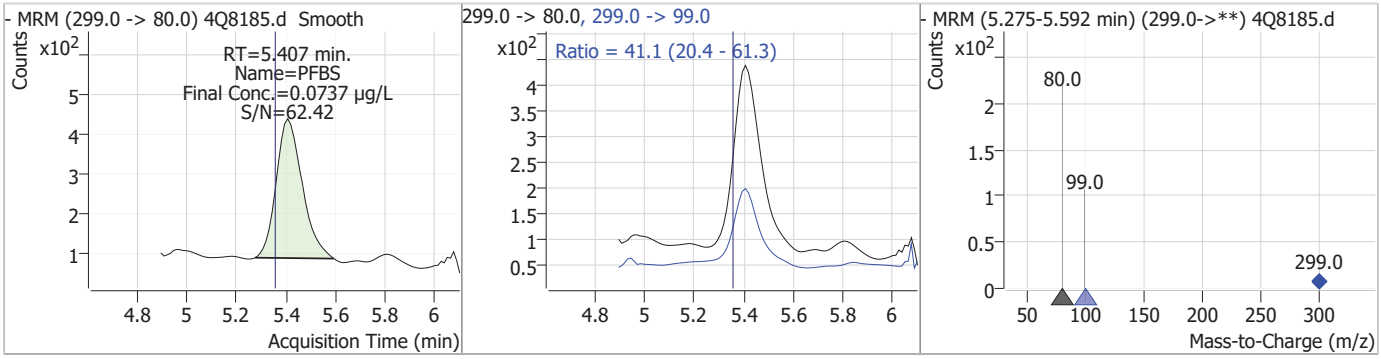
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.60	4.37	0.05	45341				



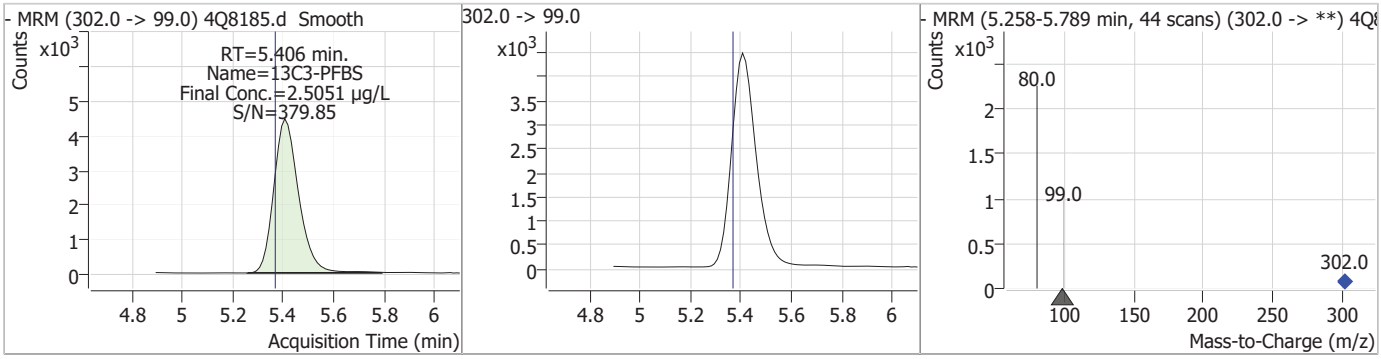
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.67	5.20	0.04	13995				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.07	5.41	0.05	2562	299.0 -> 99.0	41.1	20.4	61.3

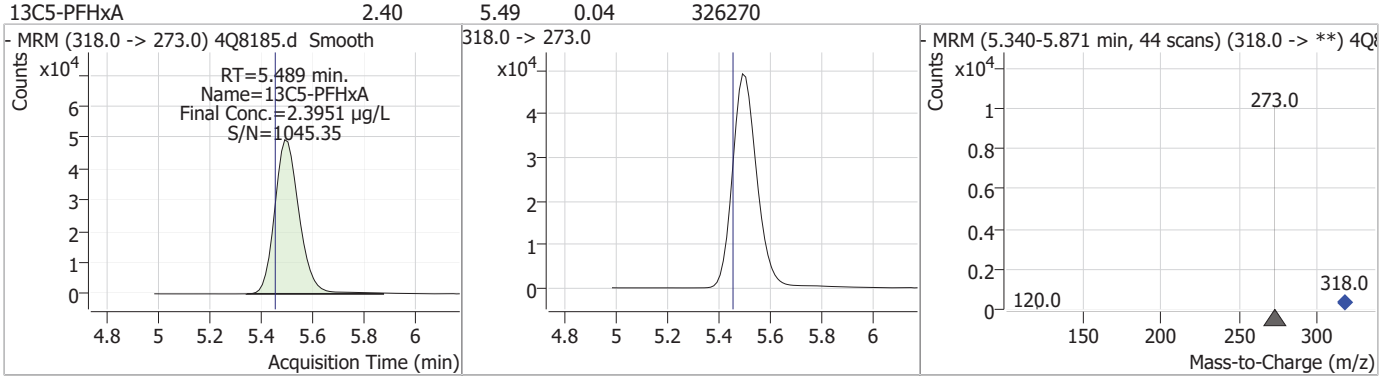


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.51	5.41	0.04	30413				

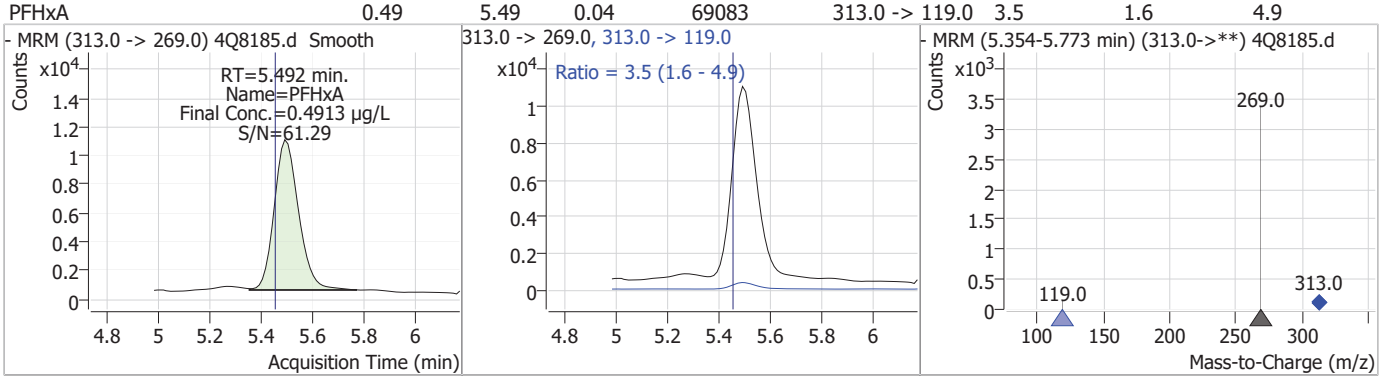


Perfluorinated Compounds by LC/MS/MS

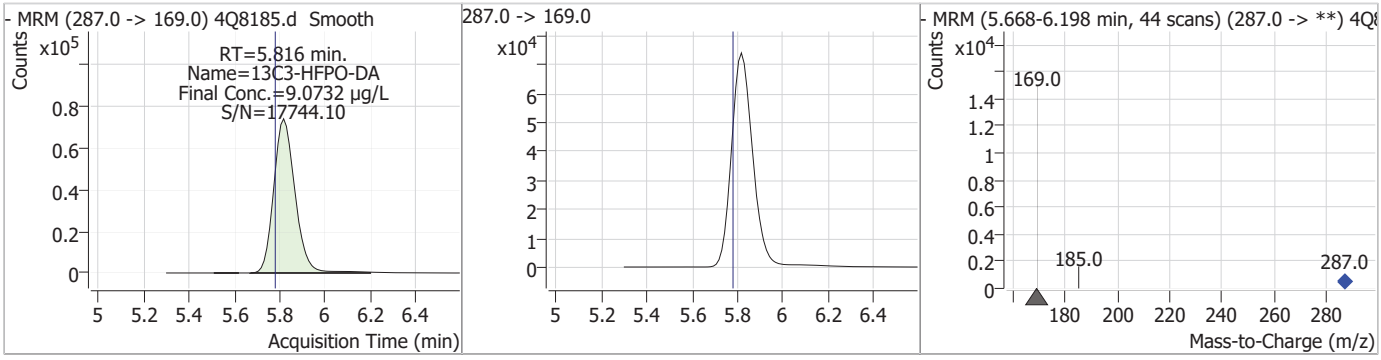
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.40	5.49	0.04	326270				



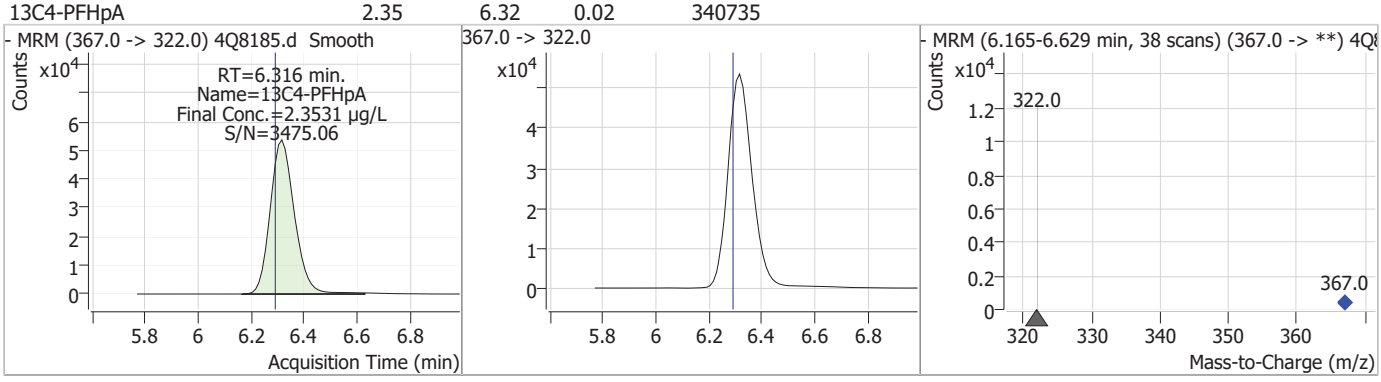
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.49	5.49	0.04	69083	313.0 -> 119.0	3.5	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.07	5.82	0.04	485376				

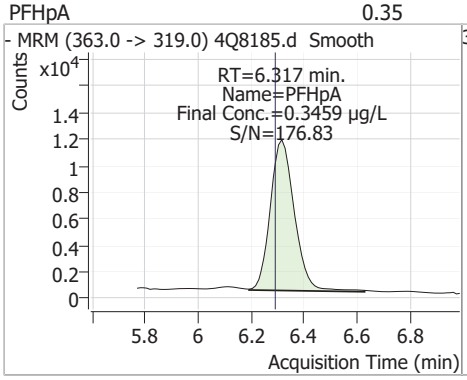


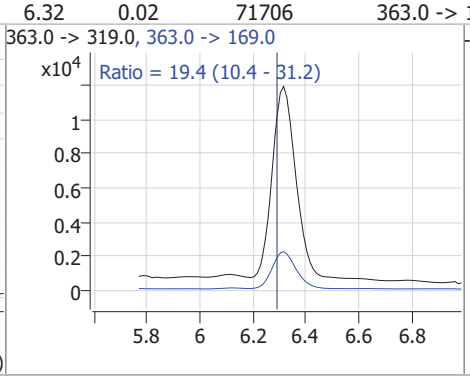
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.35	6.32	0.02	340735				

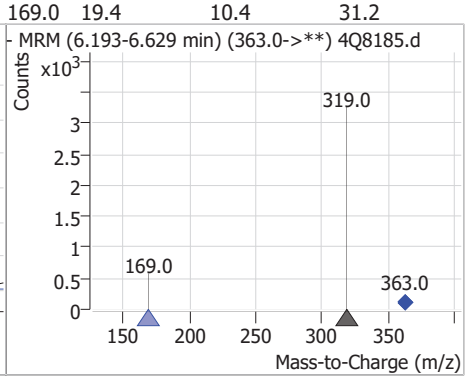


Perfluorinated Compounds by LC/MS/MS

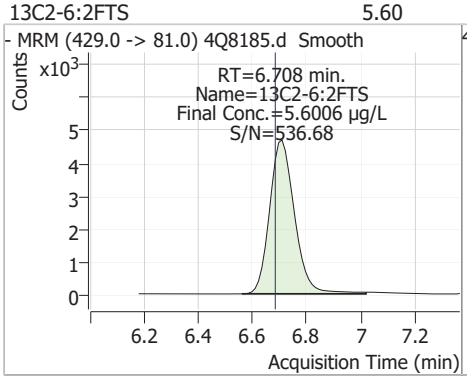
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.35	6.32	0.02	71706	363.0 -> 169.0	19.4	10.4	31.2

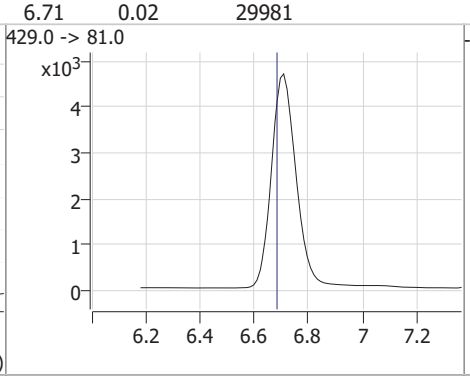


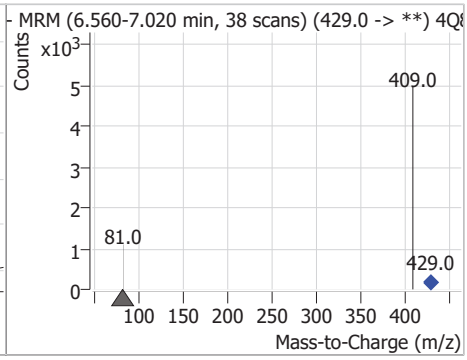




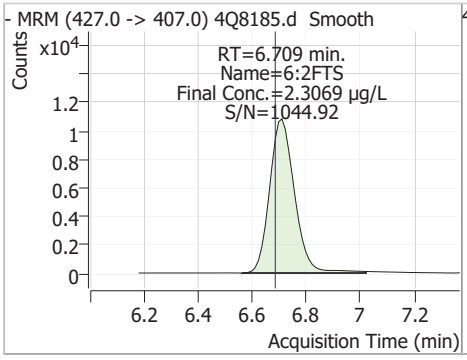
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.60	6.71	0.02	29981				

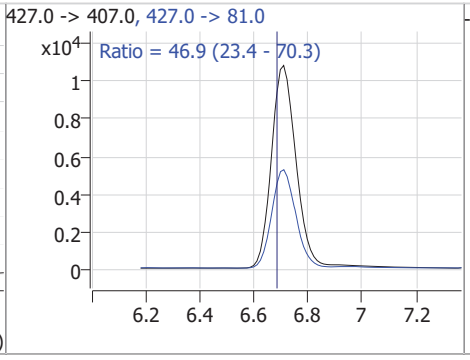


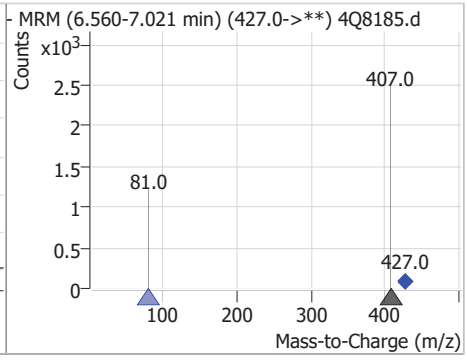




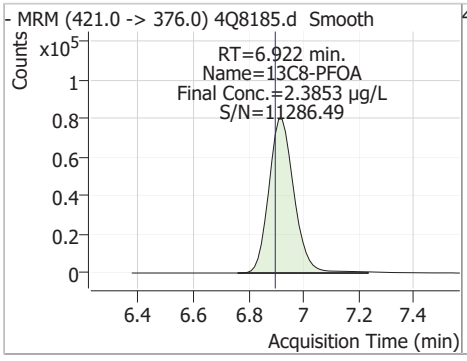
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	2.31	6.71	0.02	69359	427.0 -> 81.0	46.9	23.4	70.3

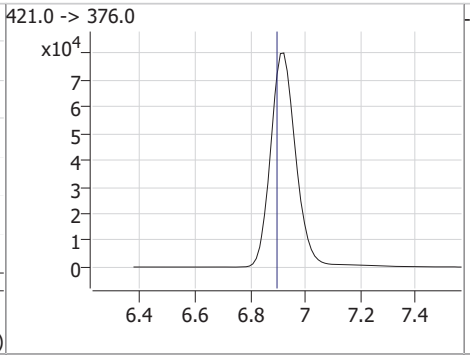


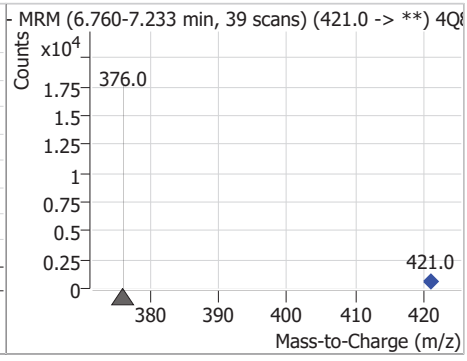




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.39	6.92	0.02	510208				

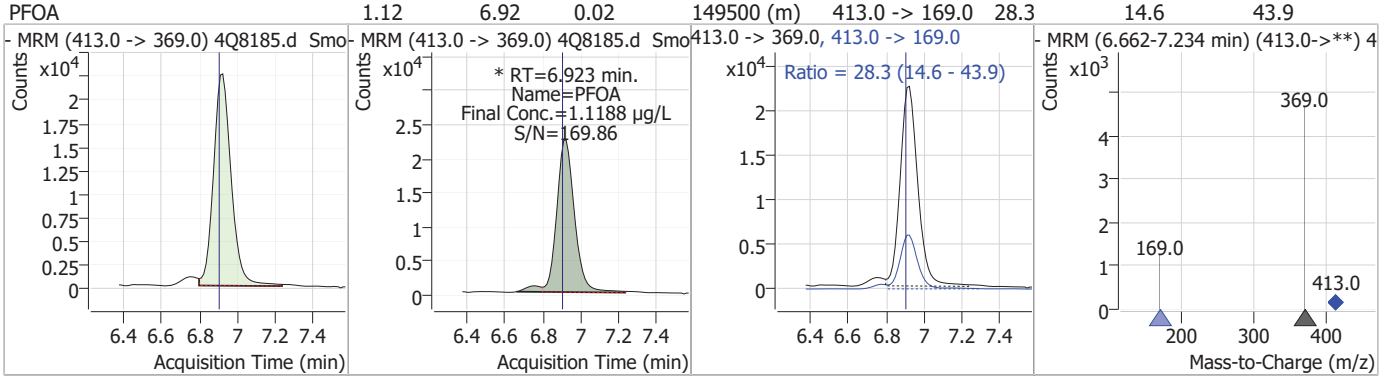




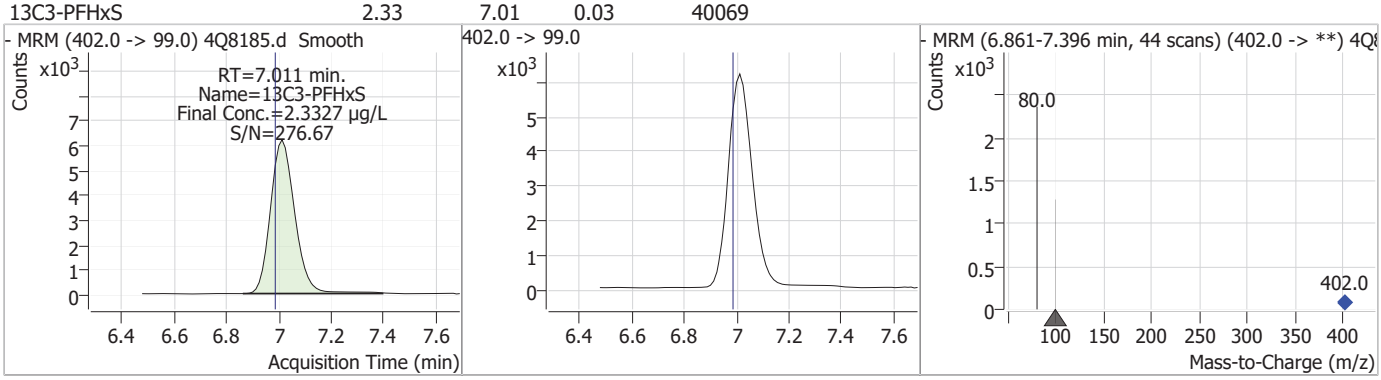


Perfluorinated Compounds by LC/MS/MS

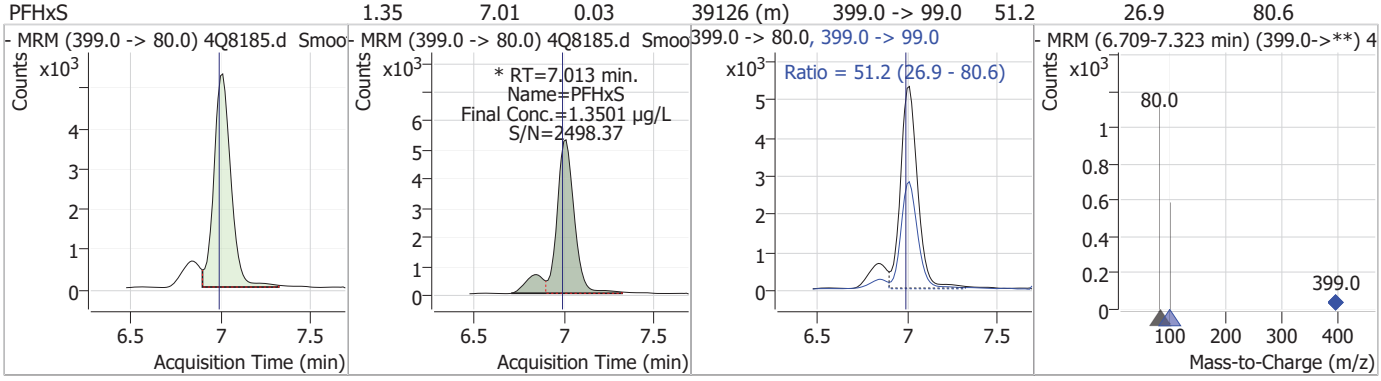
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	1.12	6.92	0.02	149500 (m)	413.0 -> 169.0	28.3	14.6	43.9



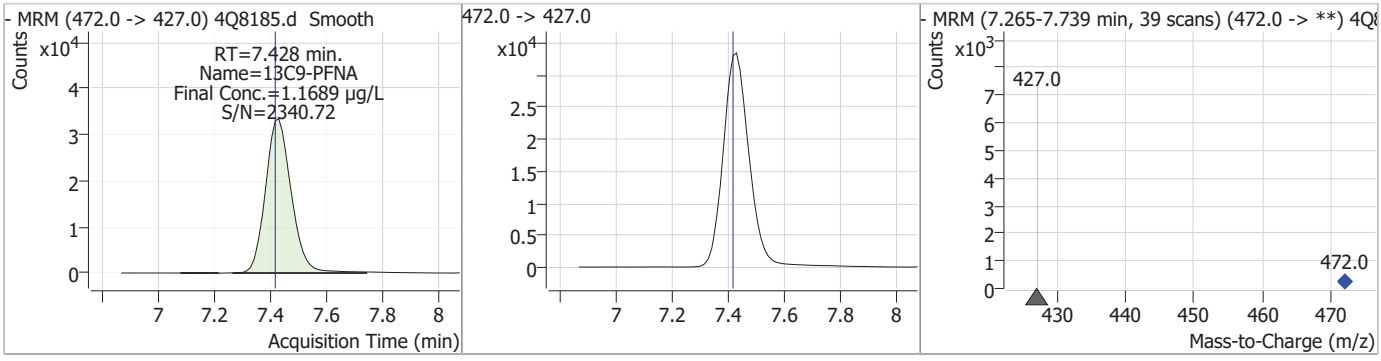
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.33	7.01	0.03	40069				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	1.35	7.01	0.03	39126 (m)	399.0 -> 99.0	51.2	26.9	80.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.17	7.43	0.01	212434				



7.1.24

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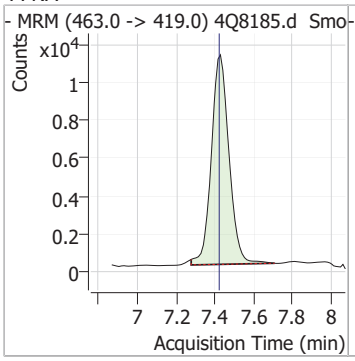
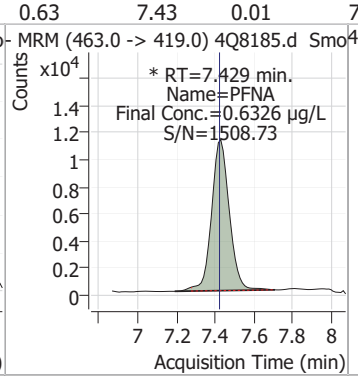
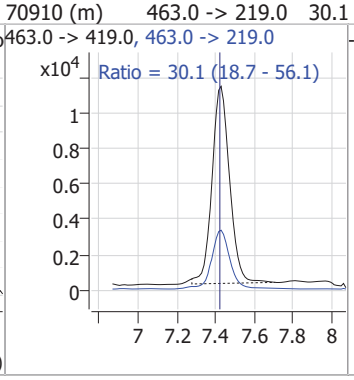
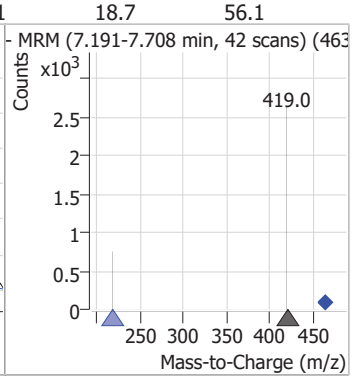
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.63	7.43	0.01	70910 (m)	463.0 -> 219.0	30.1	18.7	56.1

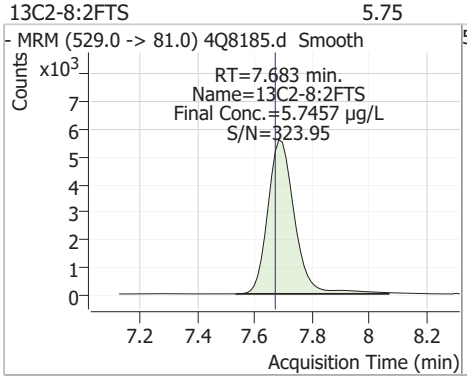


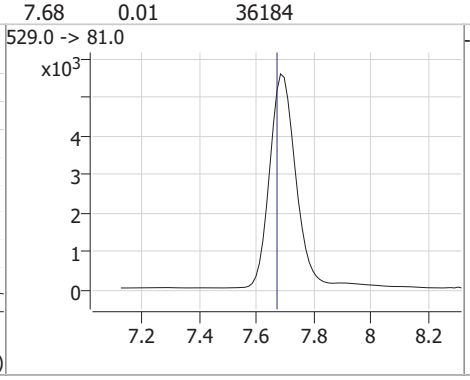


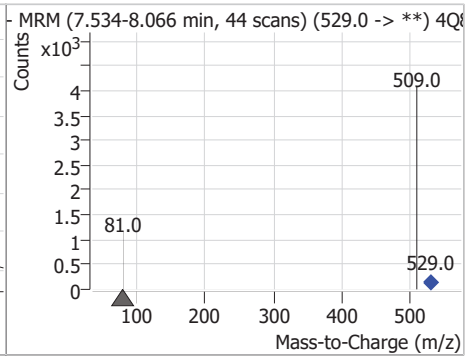




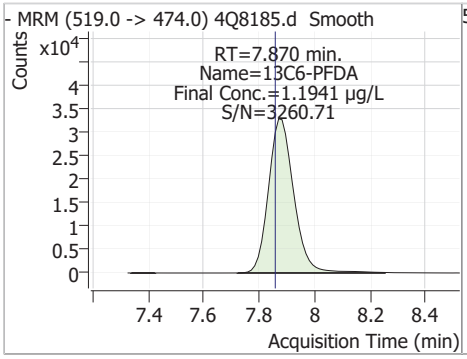
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.75	7.68	0.01	36184				

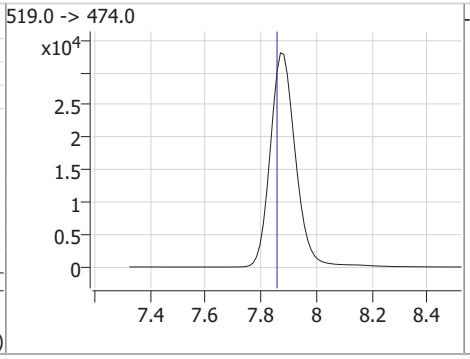


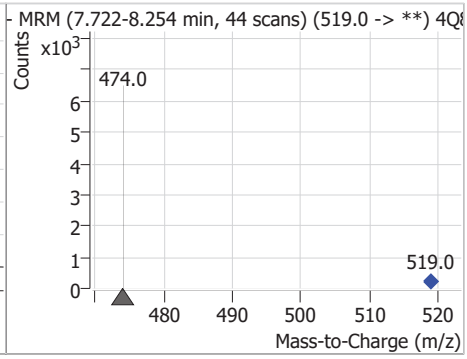




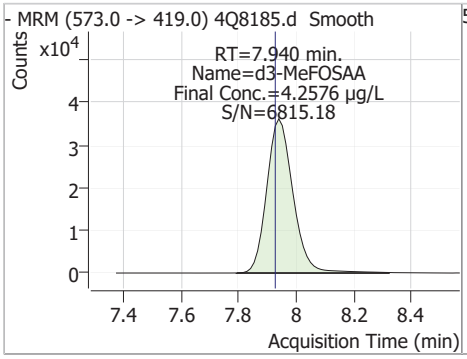
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.19	7.87	0.01	209293				

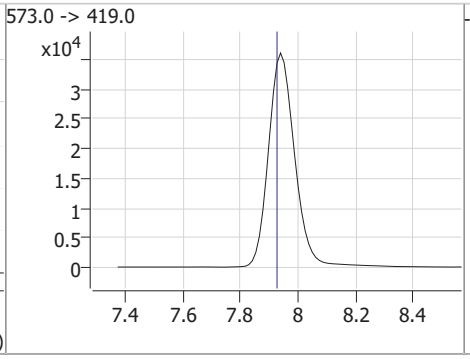


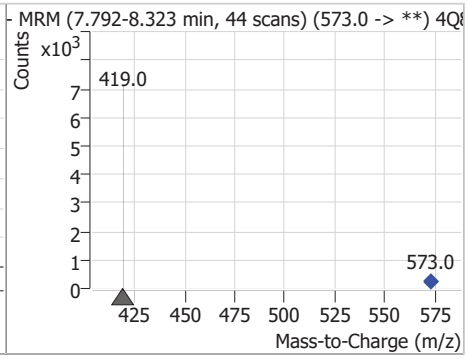




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.26	7.94	0.01	228749				







7.1.24

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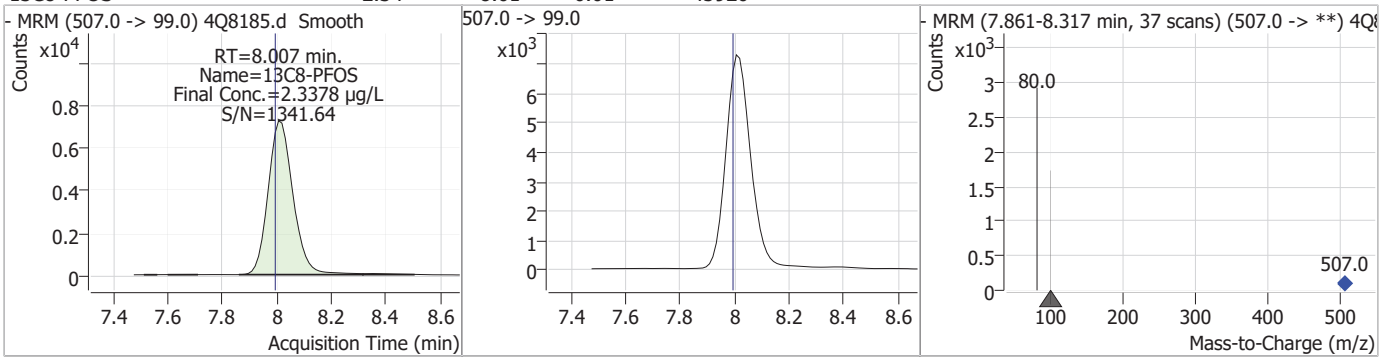
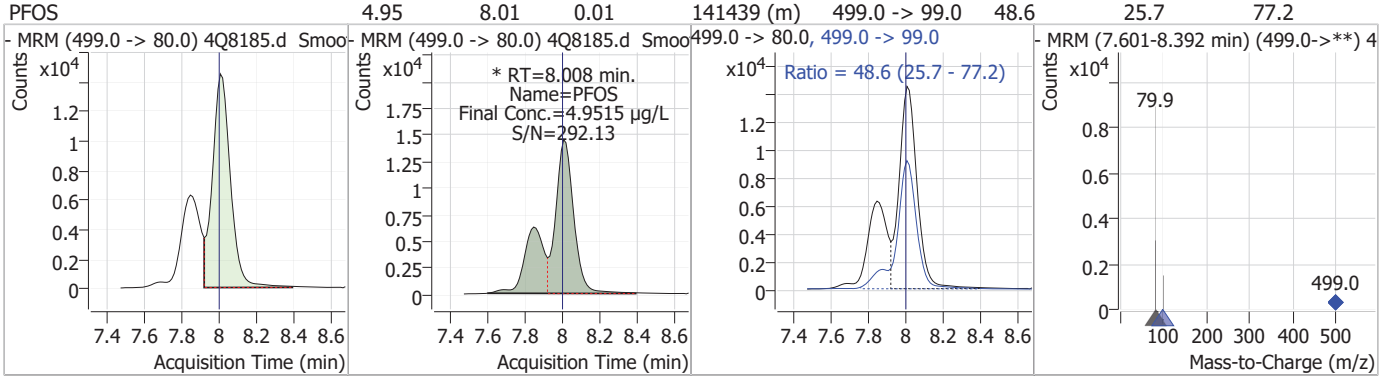
Perfluorinated Compounds by LC/MS/MS

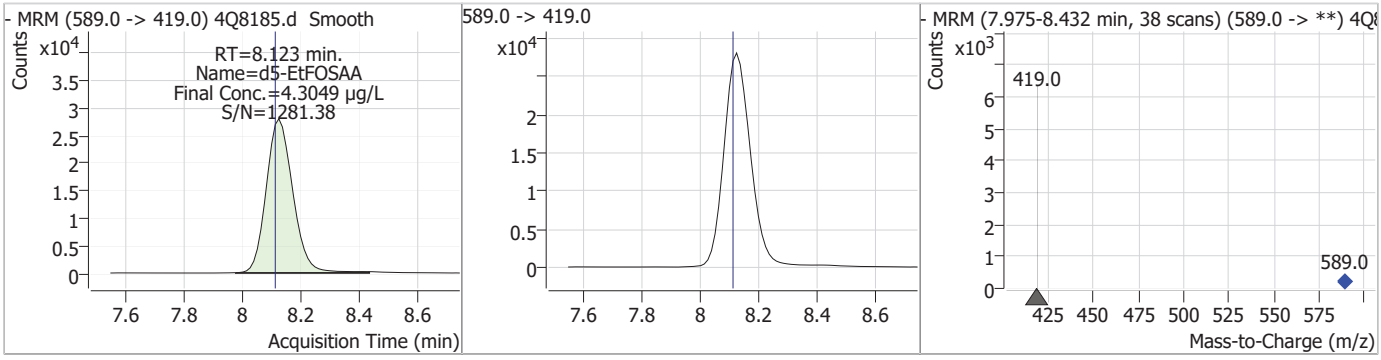
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.34	8.01	0.01	45920				



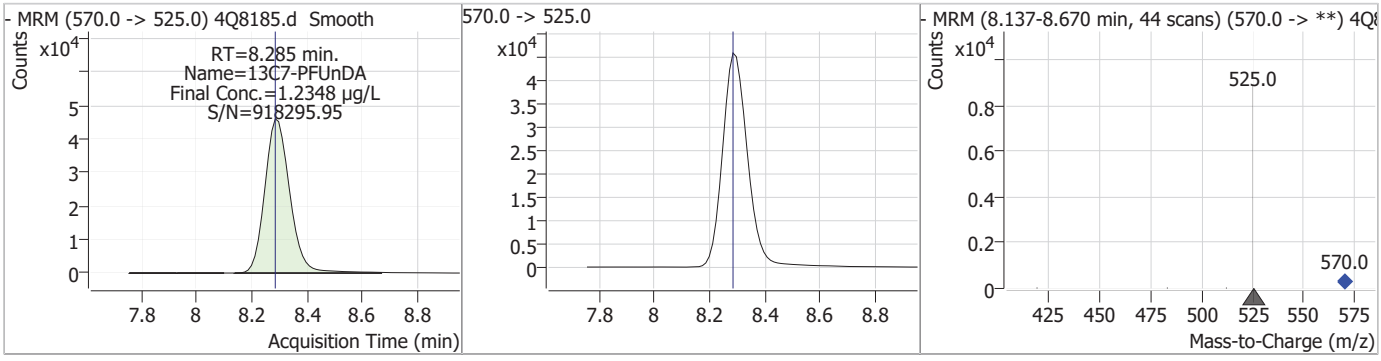
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.95	8.01	0.01	141439 (m)	499.0 -> 99.0	48.6	25.7	77.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.30	8.12	0.01	177571				

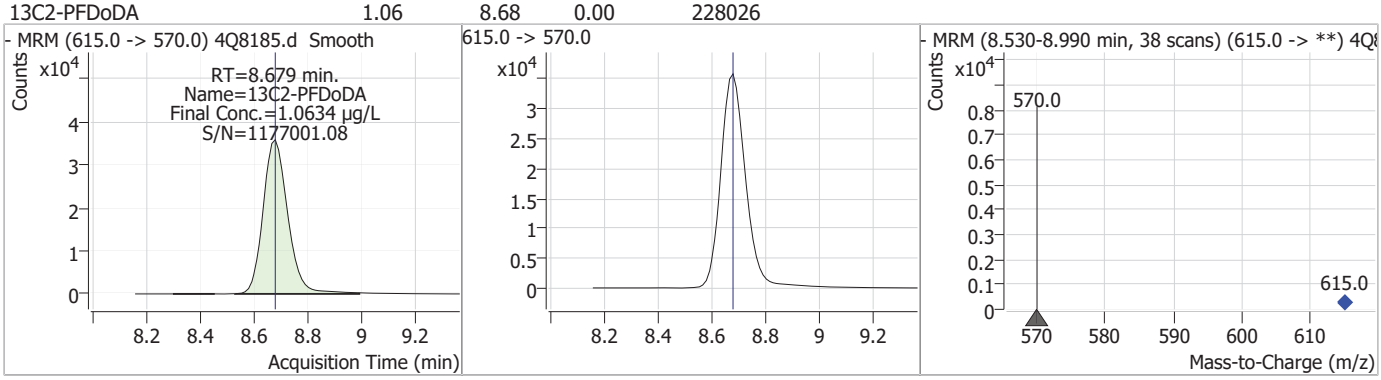


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.23	8.29	0.00	289072				

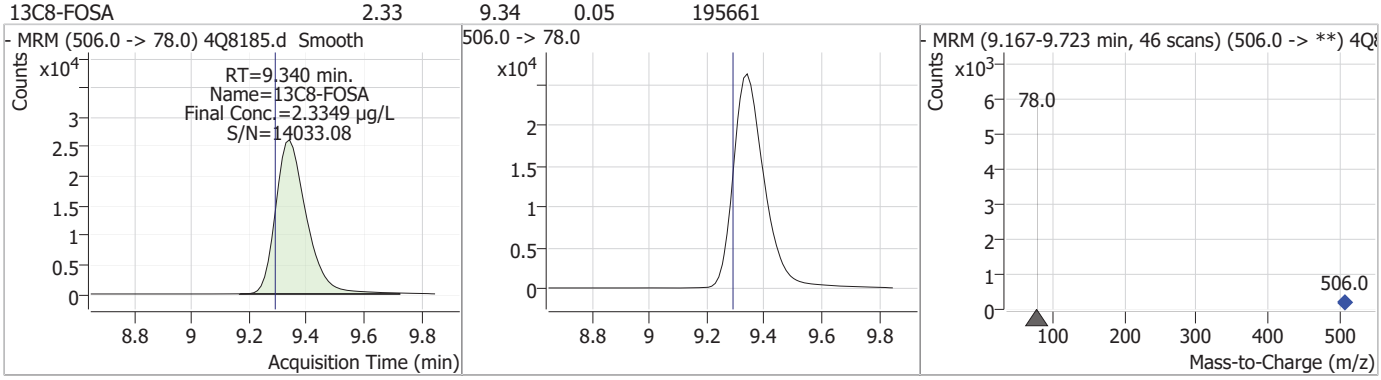


Perfluorinated Compounds by LC/MS/MS

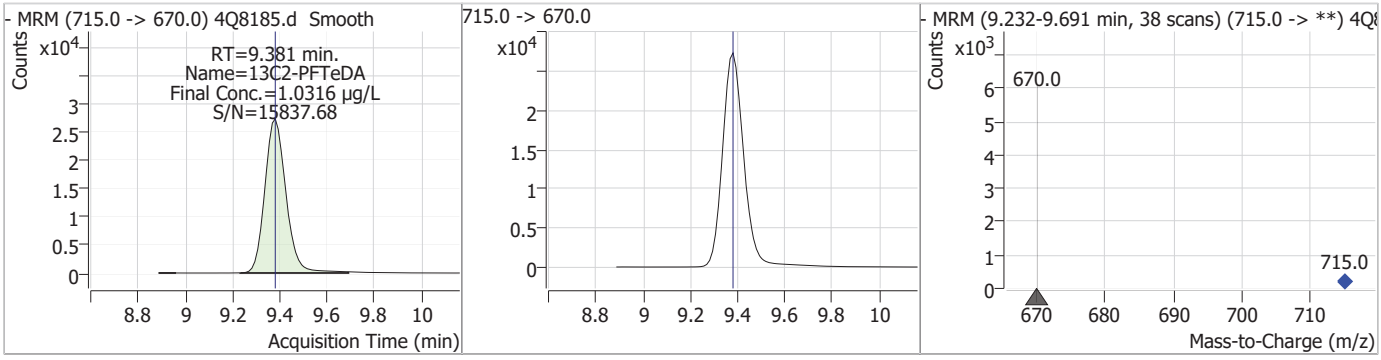
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.06	8.68	0.00	228026				



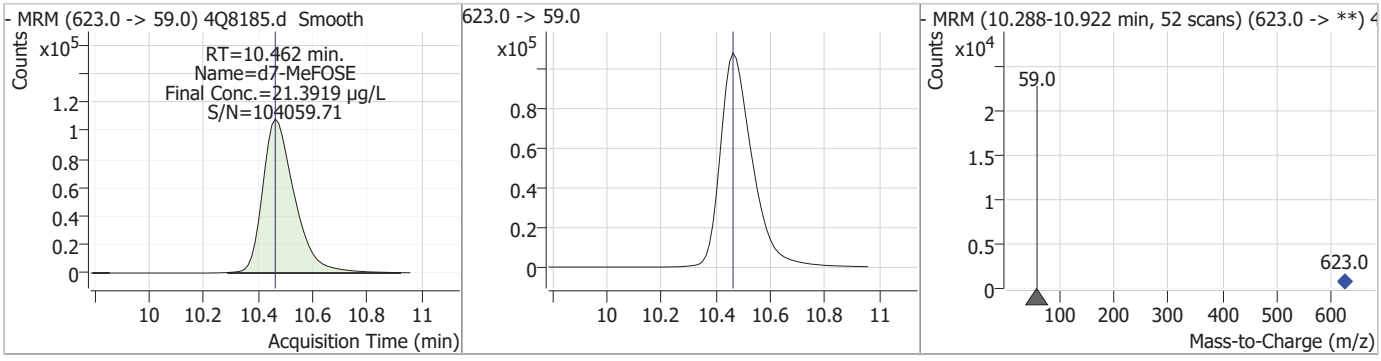
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.33	9.34	0.05	195661				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.03	9.38	0.00	170050				

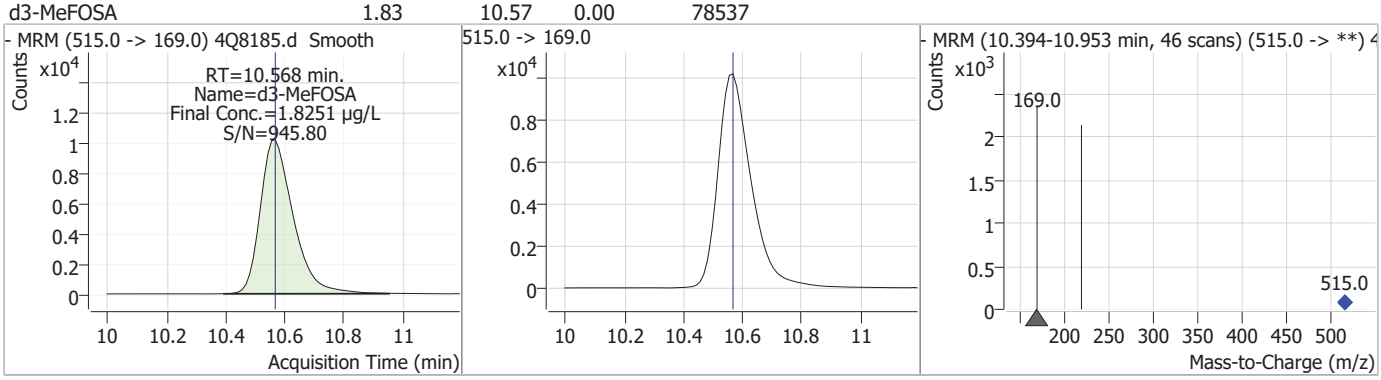


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	21.39	10.46	0.00	878876				

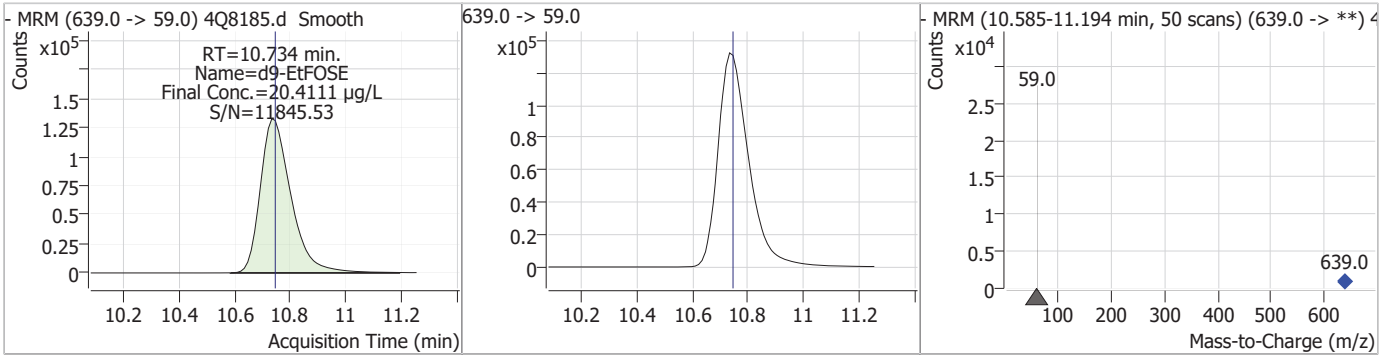


Perfluorinated Compounds by LC/MS/MS

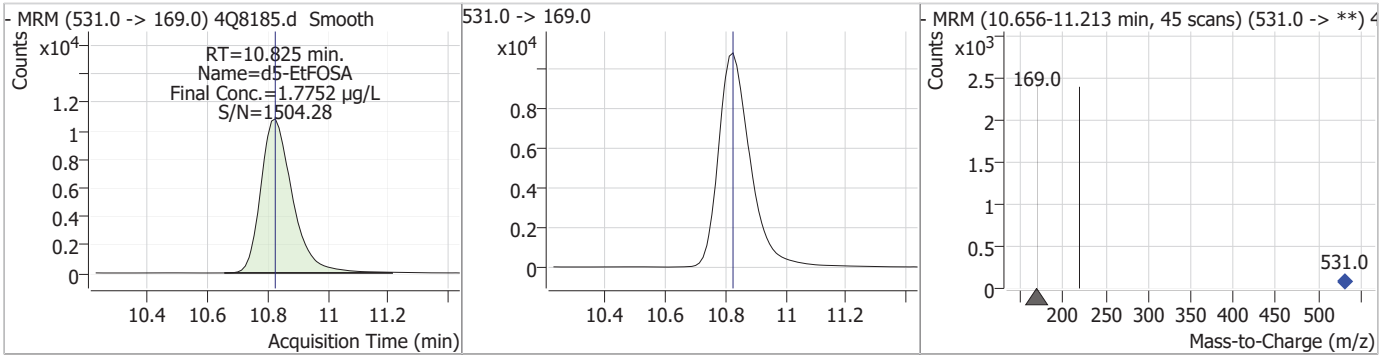
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.83	10.57	0.00	78537				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	20.41	10.73	-0.01	1016815				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.78	10.83	0.00	78722				



7.1.24

7

Manual Integration Approval Summary

Sample Number: JE10205-16
Lab FileID: 4Q8185.D
Injection Time: 05/01/25 13:52
Method: EPA 1633
Analyst approved: 05/02/25 05:01 Josephus Gimenez
Supervisor approved: 05/02/25 11:54 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorobutanoic acid	375-22-4		2.94	Poor instrument integration
Perfluorooctanoic acid	335-67-1		6.92	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.01	Split peak
Perfluorononanoic acid	375-95-1		7.43	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.01	Split peak
Perfluoroundecanoic acid	2058-94-8		8.29	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/06/25 06:23

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8149.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 7:14:34 PM
Sample Name : JE10205-17
Vial : P1-C3
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,489,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.858	217.0 -> 172.0	923983	10.00	µg/L	-0.025
M5-PFPeA	4.319	268.0 -> 223.0	470939	5.00	µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	347687	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	347932	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	520326	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	214512	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	206587	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	282293	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	237334	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	178282	1.25	µg/L	0.000
M8-FOSA	9.279	506.0 -> 78.0	196363	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	31967	2.50	µg/L	0.000
		302.0 -> 80.0	77077			
M3-PFHxS	6.986	402.0 -> 99.0	44072	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	45695	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	14134	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	28490	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	34077	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	256739	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	503580	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	192971	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	904793	25.00	µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1113970	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	89863	2.50	µg/L	0.000
M3-MeFOSA	10.568	515.0 -> 169.0	87531	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	81243	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	424794	5.00	µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	50118	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	547379	2.50	µg/L	0.000
13C2-PFDA	7.859	515.0 -> 470.0	193037	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	223394	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	340382	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	14134	5.62	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 112.5%		
13C2-6:2FTS	6.684	429.0 -> 81.0	28490	5.22	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.5%		
13C2-8:2FTS	7.671	529.0 -> 81.0	34077	5.31	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.2%		
13C2-PFDoDA	8.666	615.0 -> 570.0	237334	1.14	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.0%		
13C2-PFTeDA	9.381	715.0 -> 670.0	178282	1.11	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.9%		
13C3-PFBS	5.368	302.0 -> 99.0	31967	2.58	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.4%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	44072	2.52 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.7%	
13C4-PFBA	2.858	217.0 -> 172.0	923983	9.49 µg/L	-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.9%	
13C4-PFHpA	6.291	367.0 -> 322.0	347932	2.27 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.9%	
13C5-PFHxA	5.452	318.0 -> 273.0	347687	2.41 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.5%	
13C5-PFPeA	4.319	268.0 -> 223.0	470939	4.31 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 86.1%	
13C6-PFDA	7.858	519.0 -> 474.0	206587	1.21 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.9%	
13C7-PFUnDA	8.273	570.0 -> 525.0	282293	1.24 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.1%	
13C8-FOSA	9.279	506.0 -> 78.0	196363	2.35 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.1%	
13C8-PFOA	6.897	421.0 -> 376.0	520326	2.38 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.1%	
13C8-PFOS	7.995	507.0 -> 99.0	45695	2.34 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.4%	
13C9-PFNA	7.403	472.0 -> 427.0	214512	1.16 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.6%	
d3-MeFOSAA	7.915	573.0 -> 419.0	256739	4.80 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.0%	
13C3-HFPO-DA	5.779	287.0 -> 169.0	503580	8.90 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 89.0%	
d3-MeFOSA	10.568	515.0 -> 169.0	87531	2.04 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 81.7%	
d5-EtFOSAA	8.098	589.0 -> 419.0	192971	4.70 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.9%	
d7-MeFOSE	10.462	623.0 -> 59.0	904793	22.11 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 88.4%	
d9-EtFOSE	10.746	639.0 -> 59.0	1113970	22.45 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 89.8%	
d5-EtFOSA	10.825	531.0 -> 169.0	89863	2.03 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 81.4%	
Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	2.864	213.0 -> 169.0	6715	0.24 µg/L	100
PFBS	5.369	299.0 -> 80.0	3553	0.10 µg/L	93
		299.0 -> 99.0	1608		
PFDA	7.859	513.0 -> 469.0	7048	0.04 µg/L	94
		513.0 -> 219.0	1850		
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

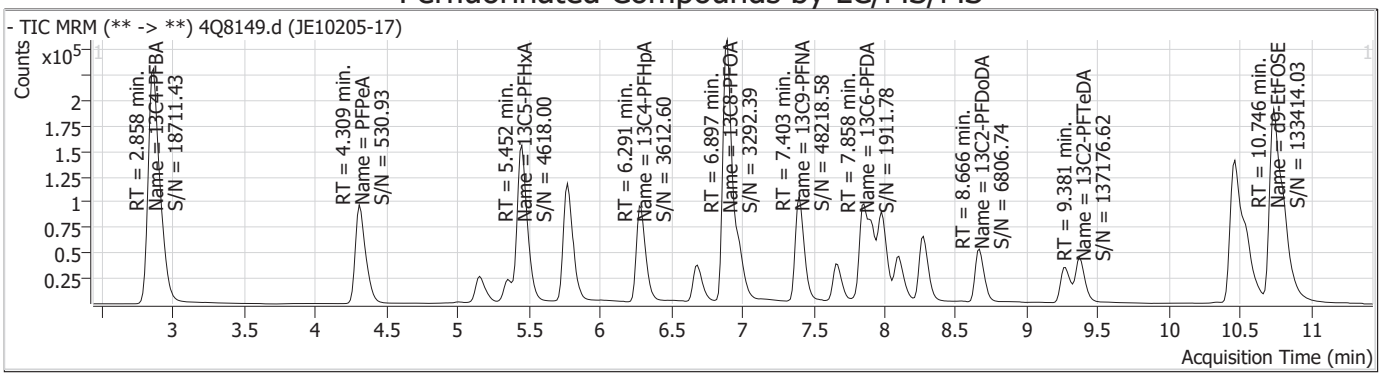
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.292	363.0 -> 319.0	76000	0.36	µg/L		96
		363.0 -> 169.0	14537				
PFHpS	-	449.0 -> 80.0	-	N.D.			
		449.0 -> 99.0					
PFHxA	5.455	313.0 -> 269.0	55949	0.37	µg/L		99
		313.0 -> 119.0	1986				
PFHxS	6.987	399.0 -> 80.0	13520	0.35	µg/L	m	85
		399.0 -> 99.0	5817				
PFNA	7.404	463.0 -> 419.0	21318	0.17	µg/L		87
		463.0 -> 219.0	6350				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	6.898	413.0 -> 369.0	87398	0.50	µg/L	m	96
		413.0 -> 169.0	23655				
PFOS	7.996	499.0 -> 80.0	39832	1.08	µg/L	m	97
		499.0 -> 99.0	19621				
PFPeA	4.309	263.0 -> 219.0	24020	0.32	µg/L		100
PFPeS	-	349.0 -> 80.0	-	N.D.			
		349.0 -> 99.0					
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	8.275	563.0 -> 519.0	7956	0.05	µg/L		97
		563.0 -> 269.0	1719				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

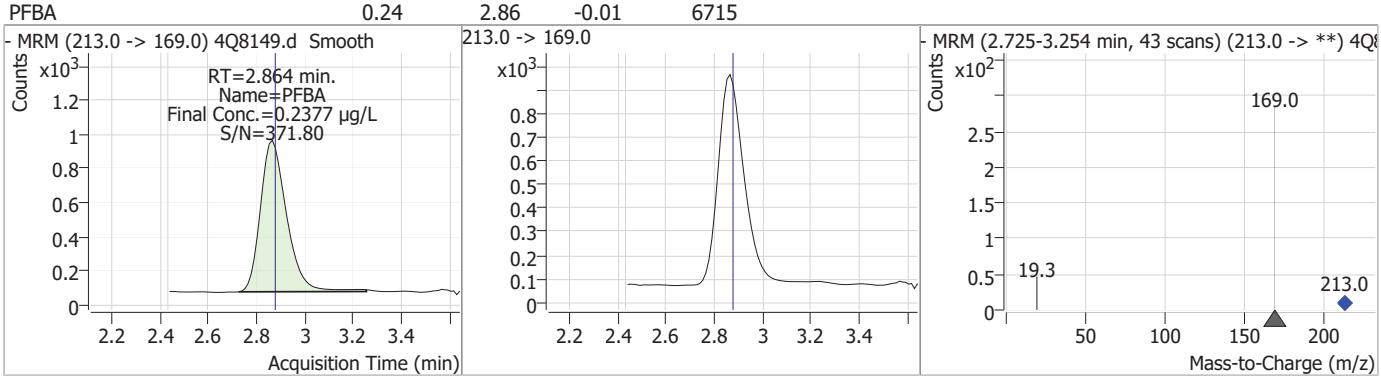
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

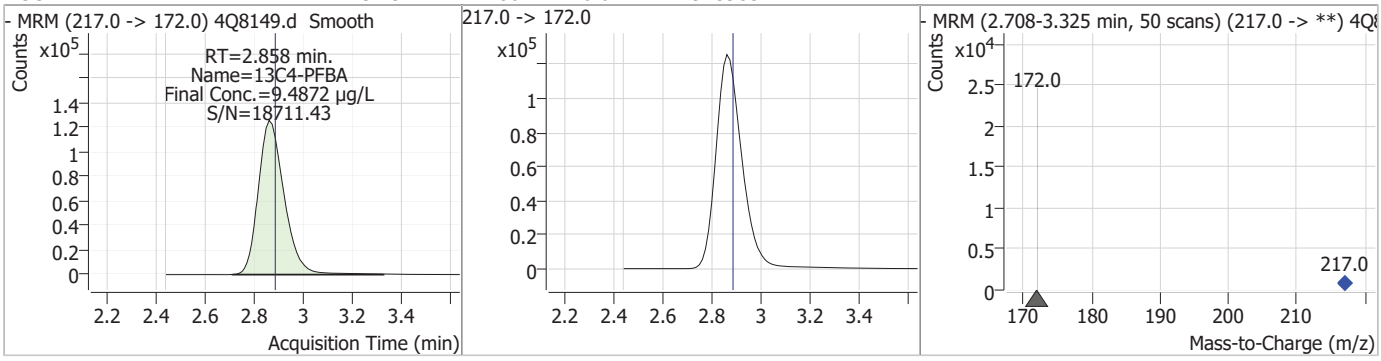
Perfluorinated Compounds by LC/MS/MS



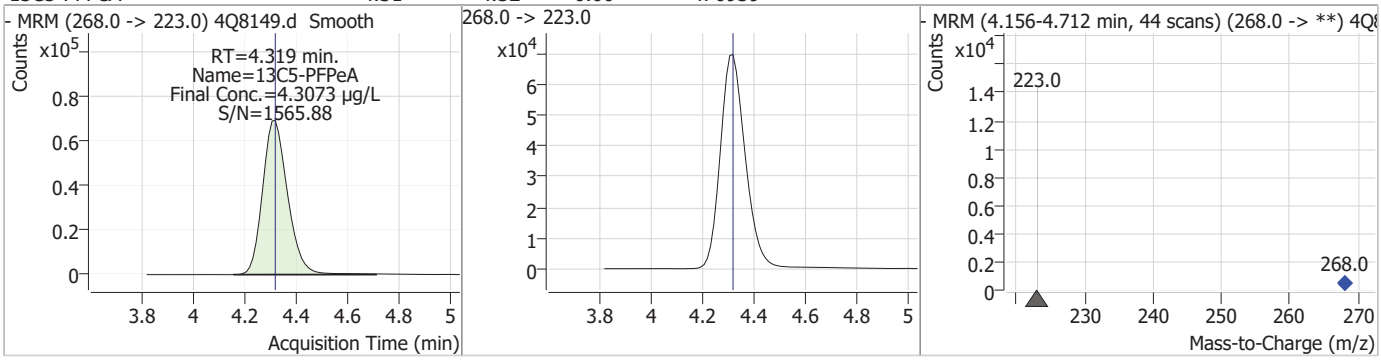
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.24	2.86	-0.01	6715				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.49	2.86	-0.02	923983				

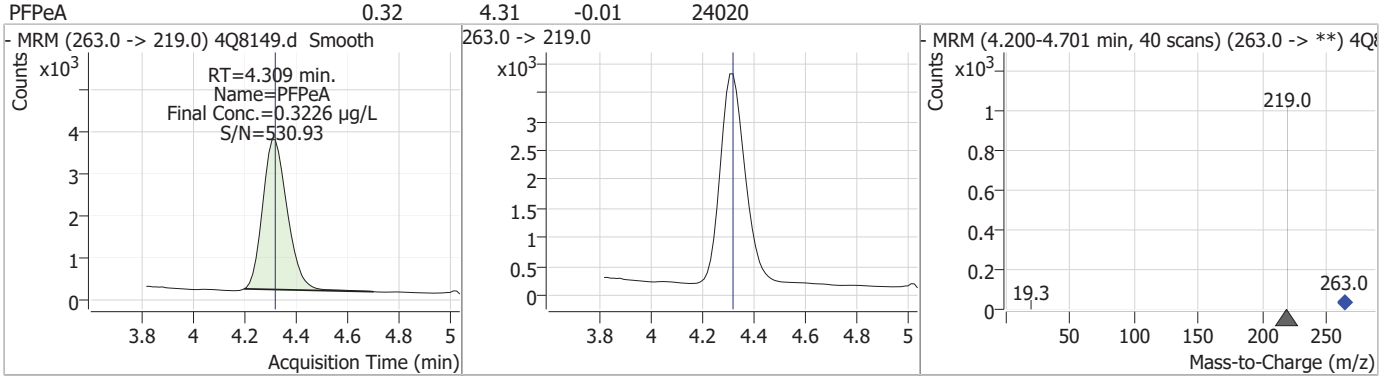


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.31	4.32	0.00	470939				

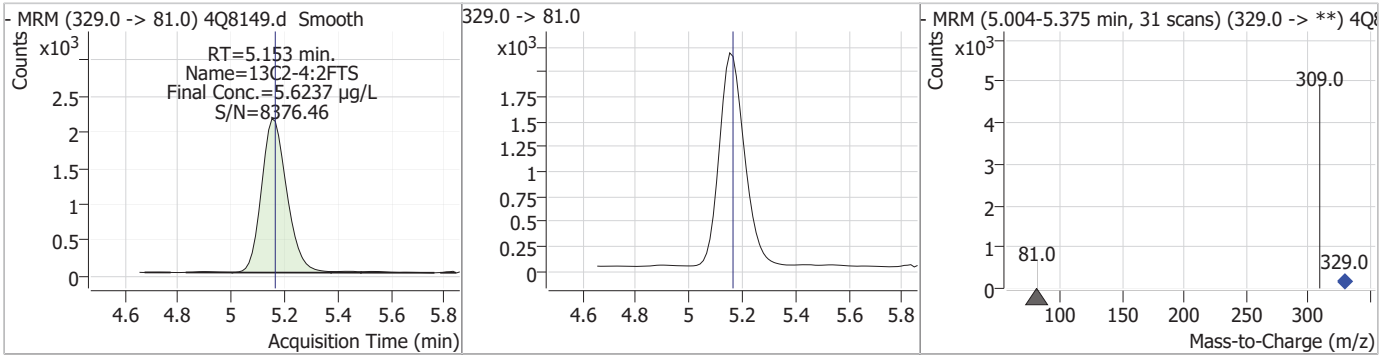


Perfluorinated Compounds by LC/MS/MS

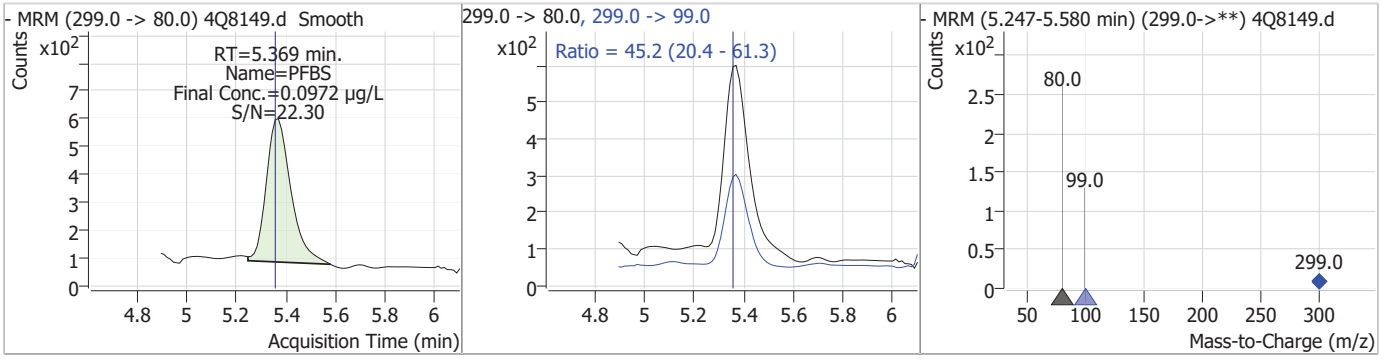
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.32	4.31	-0.01	24020				



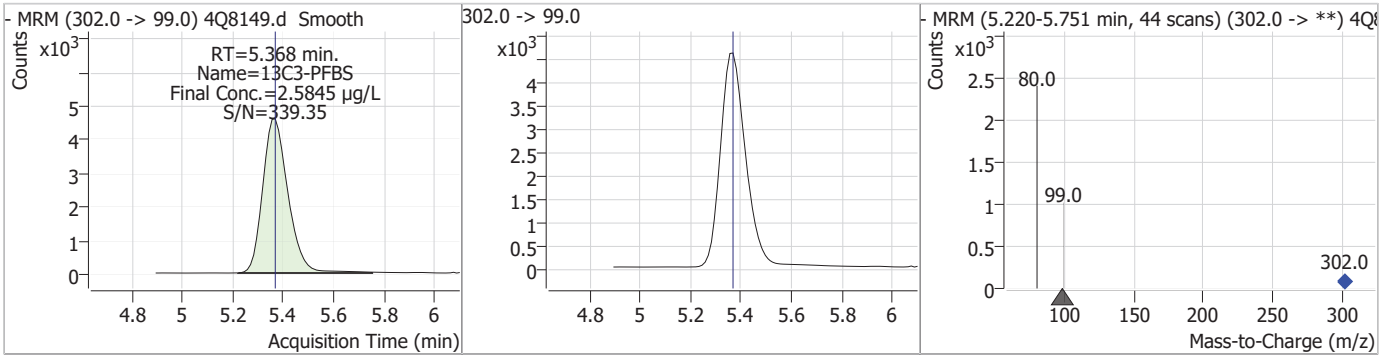
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.62	5.15	-0.01	14134				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.10	5.37	0.01	3553	299.0 -> 99.0	45.2	20.4	61.3

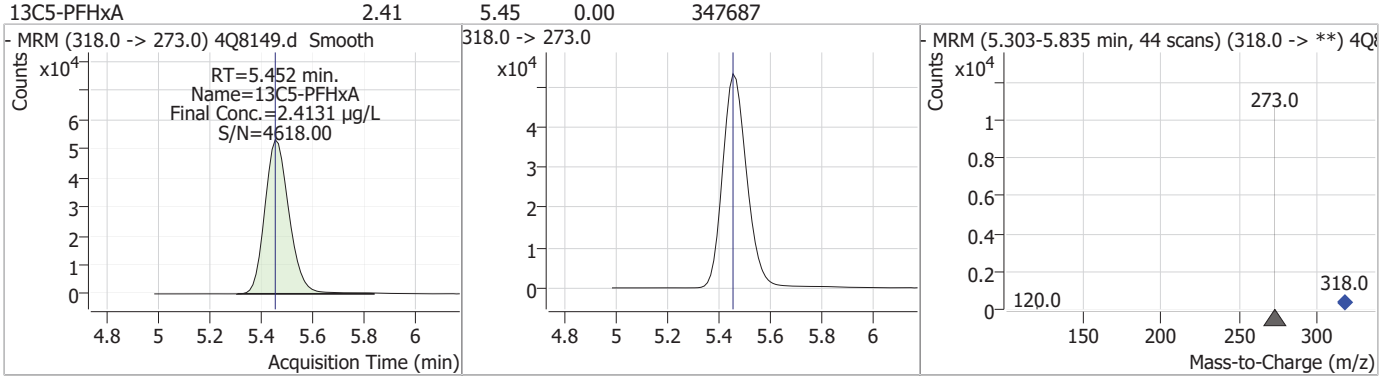


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.58	5.37	0.00	31967				

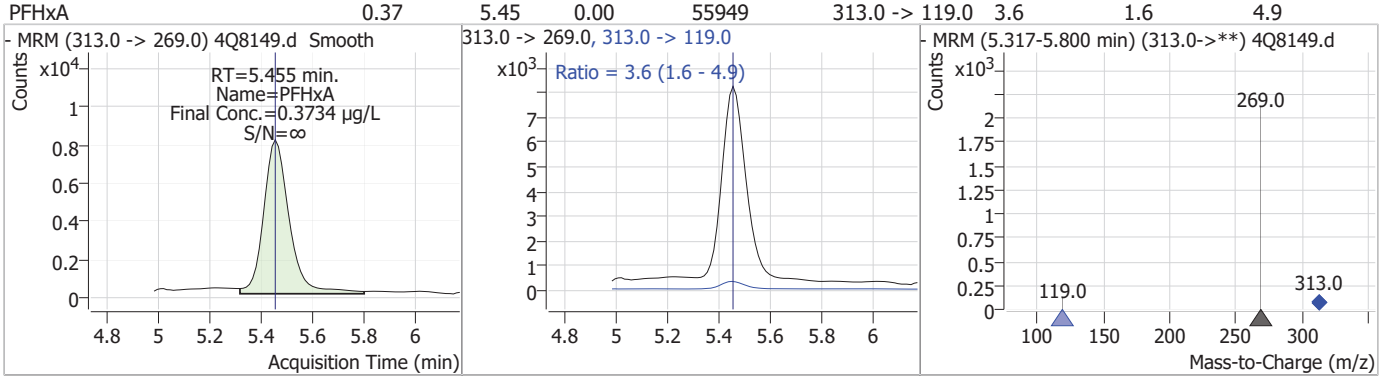


Perfluorinated Compounds by LC/MS/MS

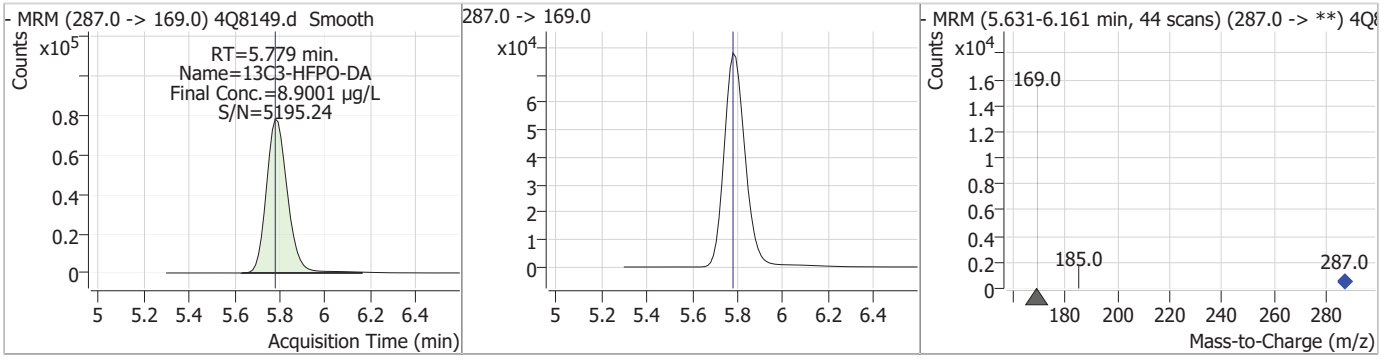
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.41	5.45	0.00	347687				



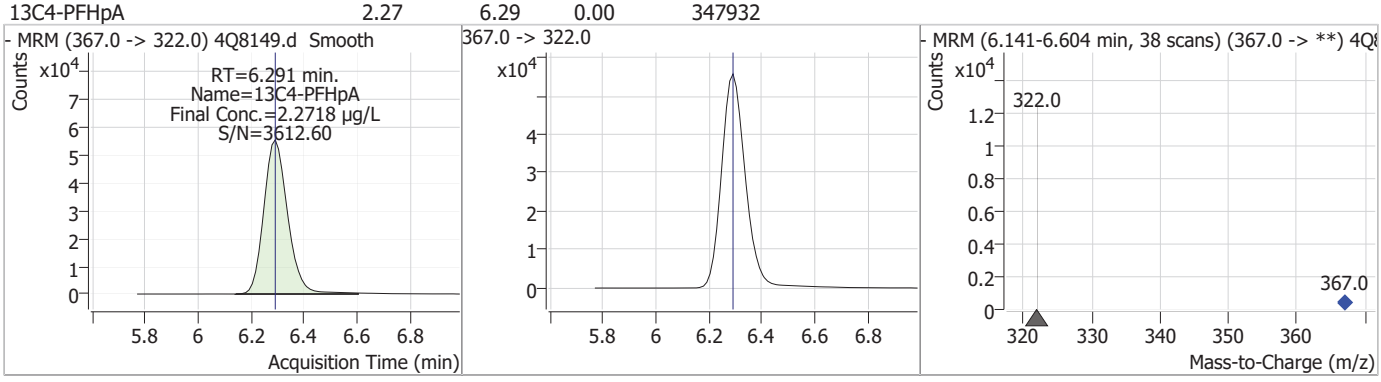
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.37	5.45	0.00	55949	313.0 -> 119.0	3.6	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.90	5.78	0.00	503580				

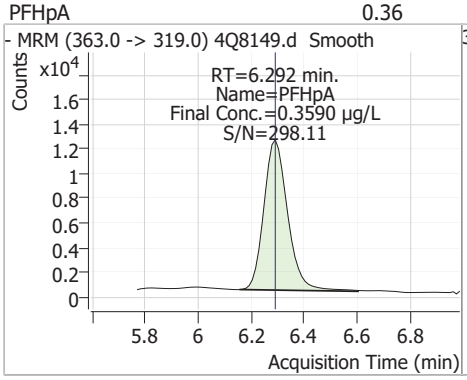


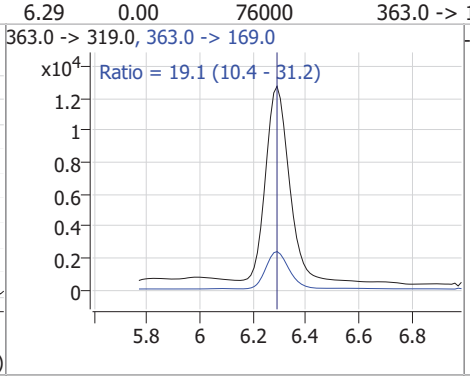
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.27	6.29	0.00	347932				

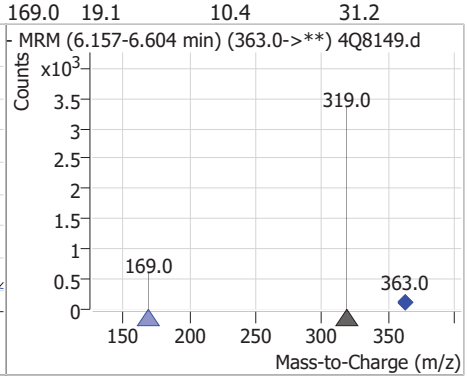


Perfluorinated Compounds by LC/MS/MS

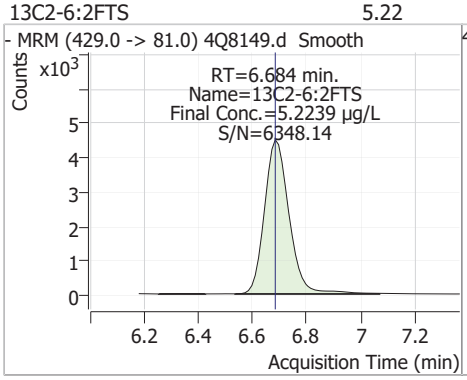
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.36	6.29	0.00	76000	363.0 -> 169.0	19.1	10.4	31.2

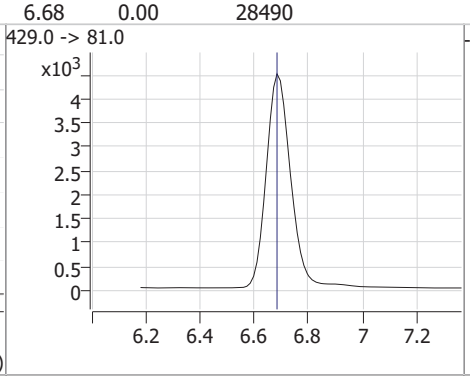


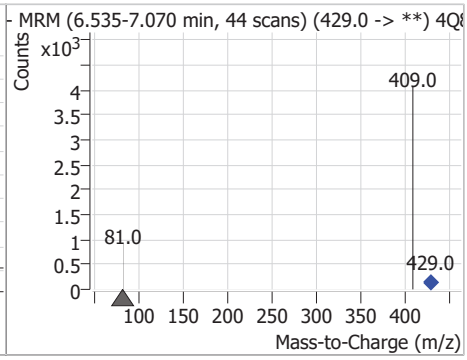




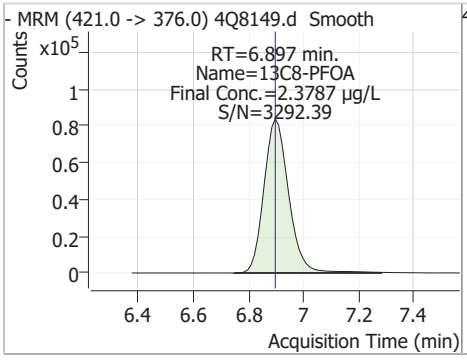
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.22	6.68	0.00	28490				

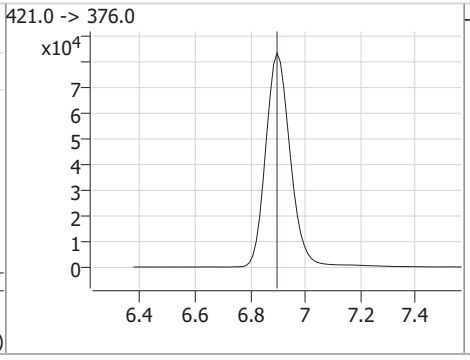


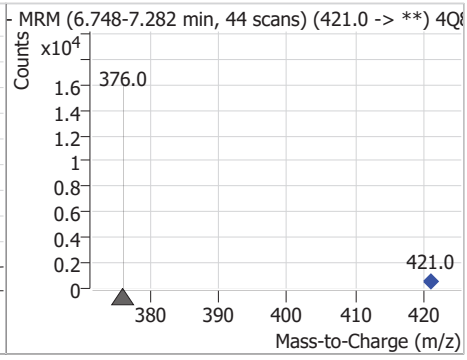




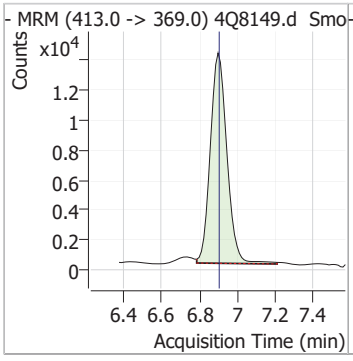
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.38	6.90	0.00	520326				

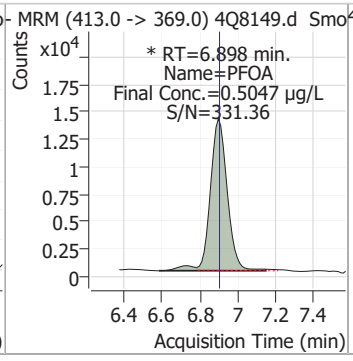


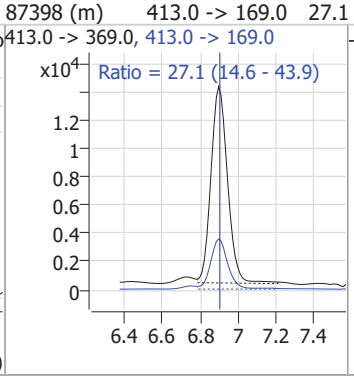


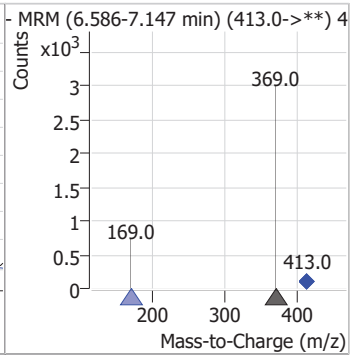


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.50	6.90	0.00	87398 (m)	413.0 -> 169.0	27.1	14.6	43.9



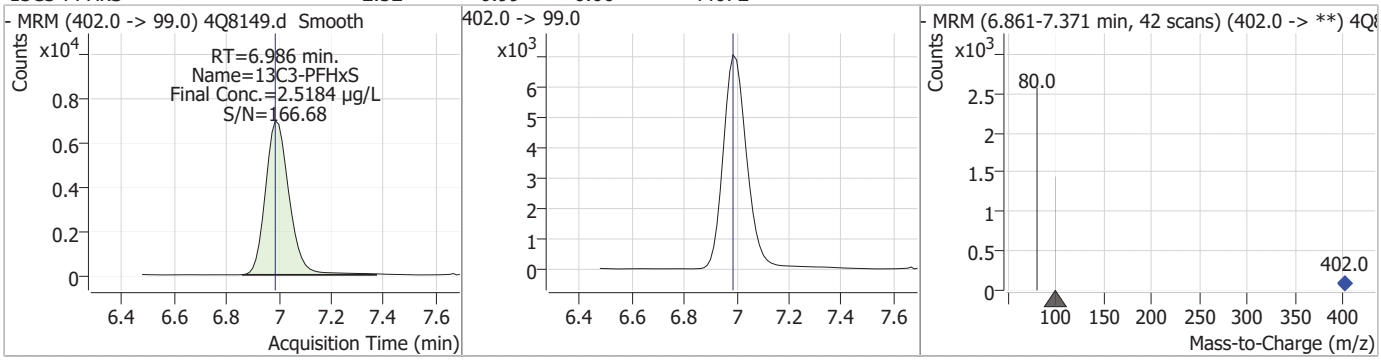




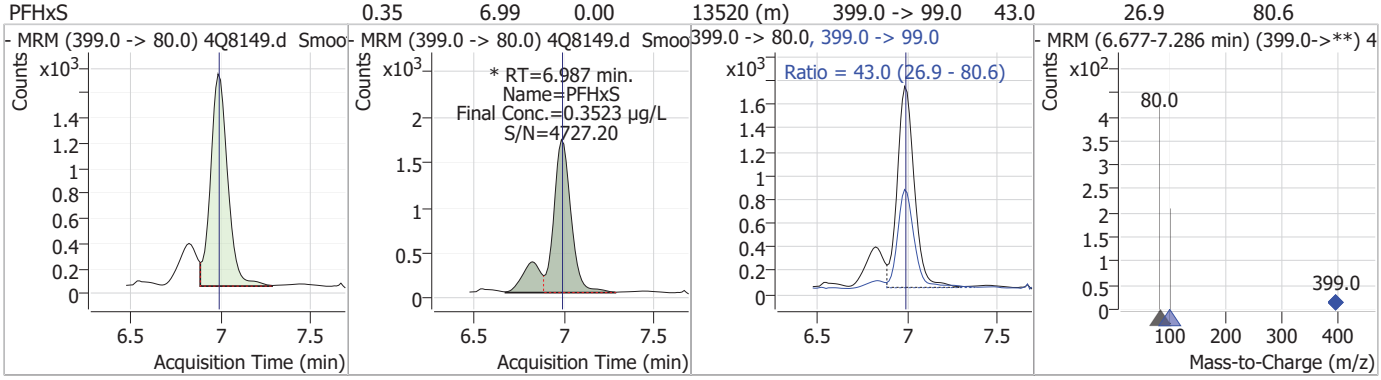


Perfluorinated Compounds by LC/MS/MS

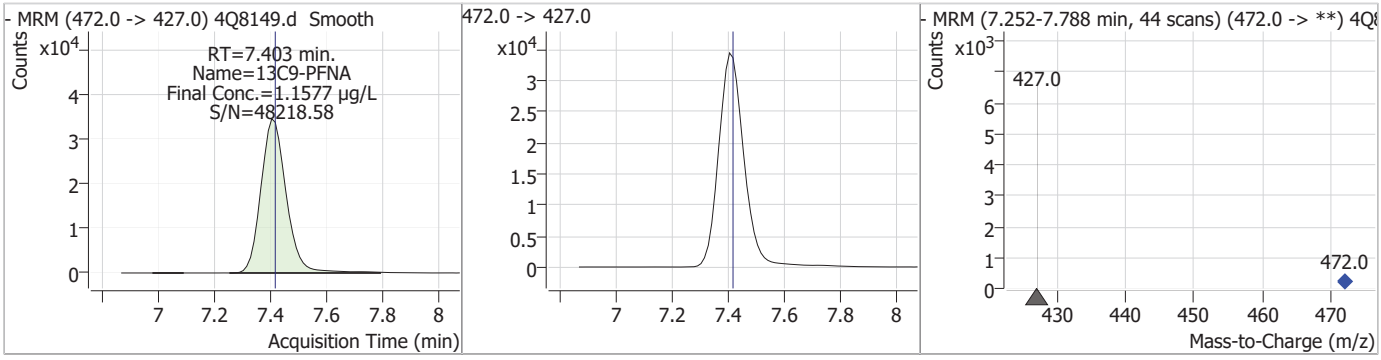
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.52	6.99	0.00	44072				



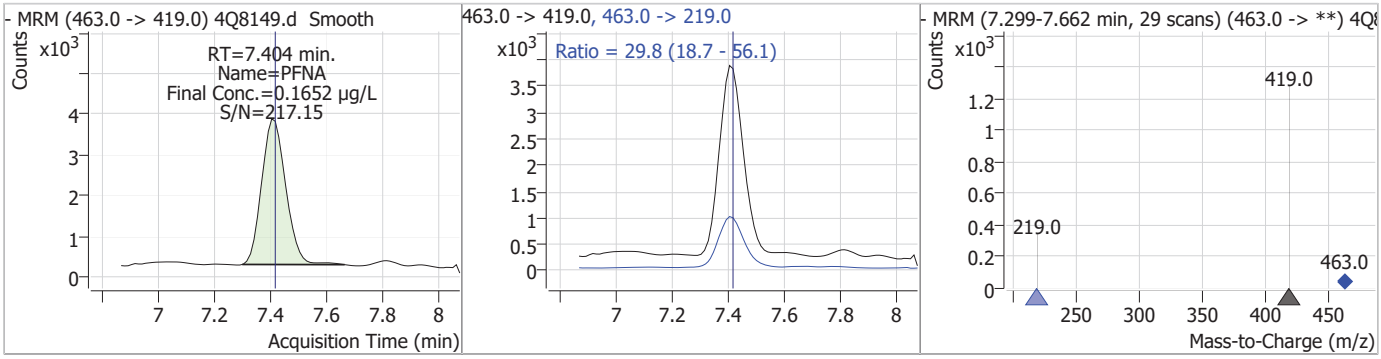
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.35	6.99	0.00	13520 (m)	399.0 -> 99.0	43.0	26.9	80.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.16	7.40	-0.01	214512				

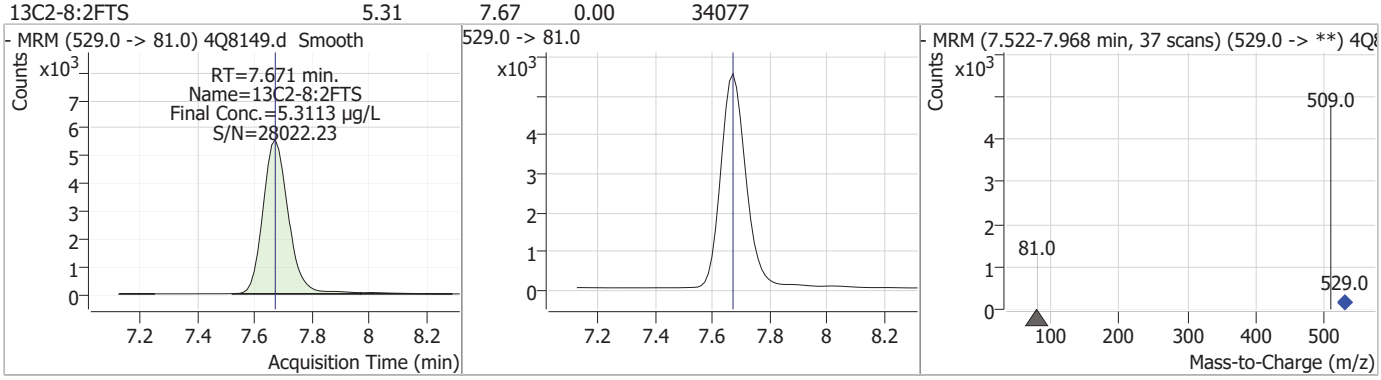


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.17	7.40	-0.01	21318	463.0 -> 219.0	29.8	18.7	56.1

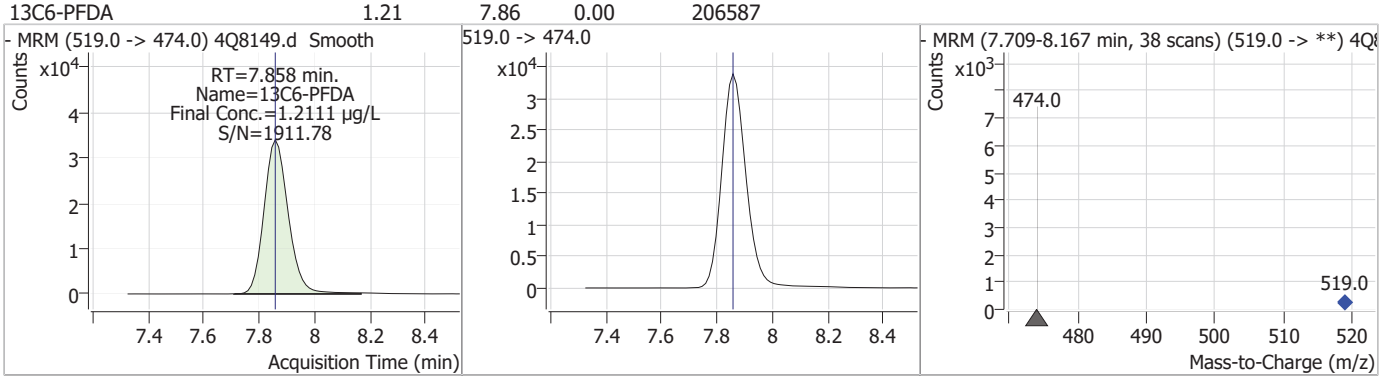


Perfluorinated Compounds by LC/MS/MS

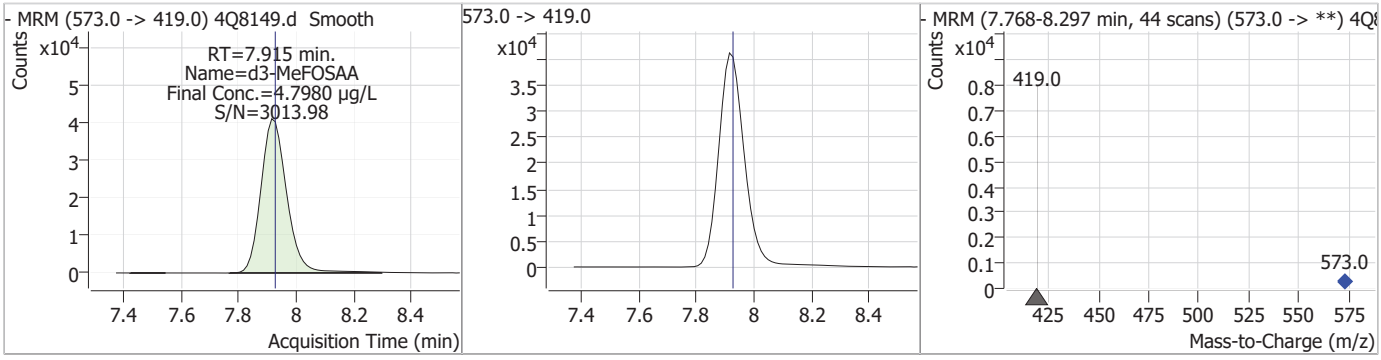
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.31	7.67	0.00	34077				



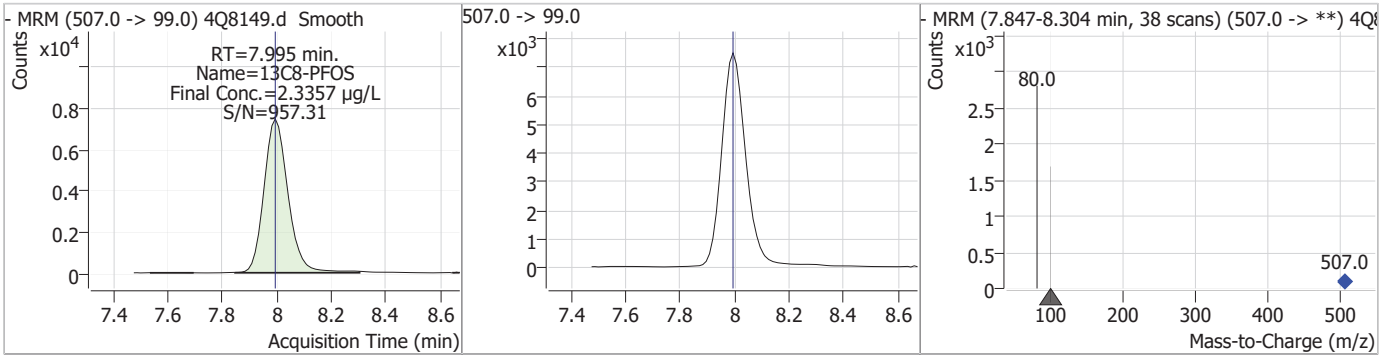
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.21	7.86	0.00	206587				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.80	7.92	-0.01	256739				

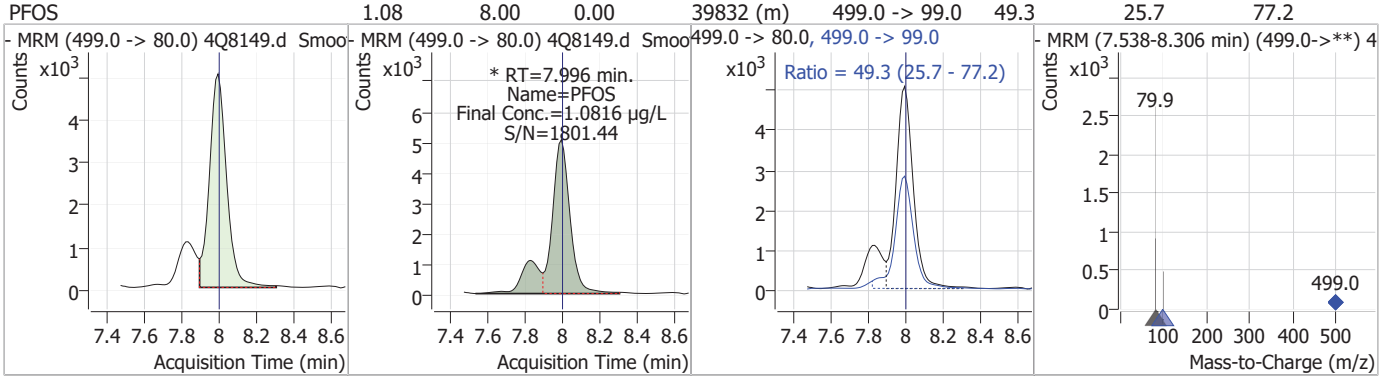


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.34	7.99	0.00	45695				

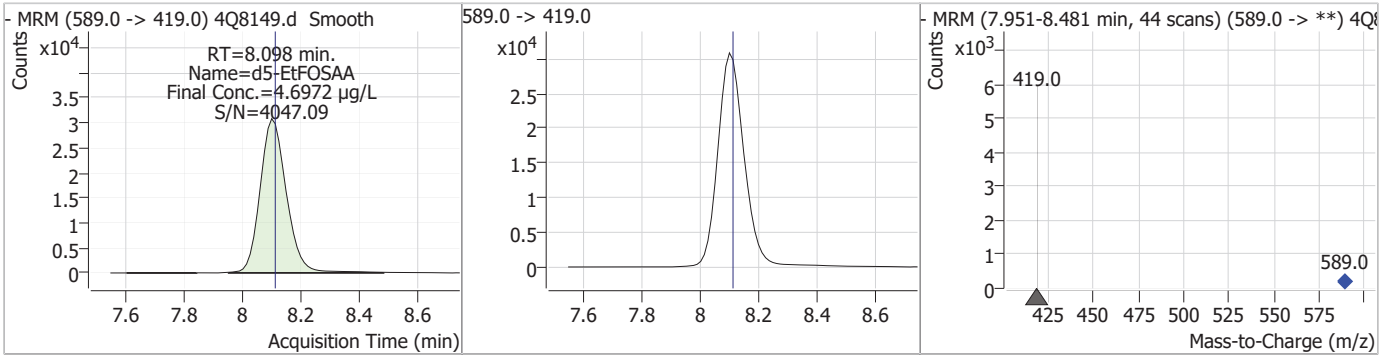


Perfluorinated Compounds by LC/MS/MS

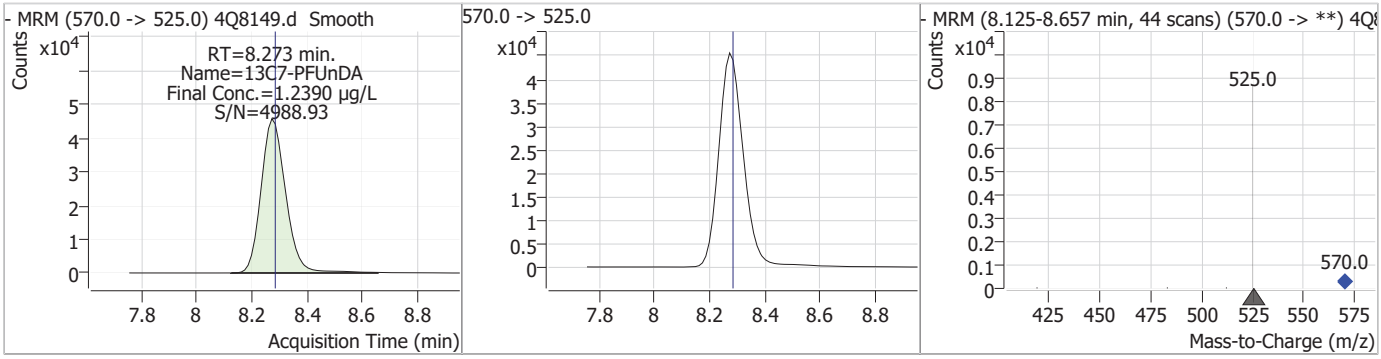
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	1.08	8.00	0.00	39832 (m)	499.0 -> 99.0	49.3	25.7	77.2



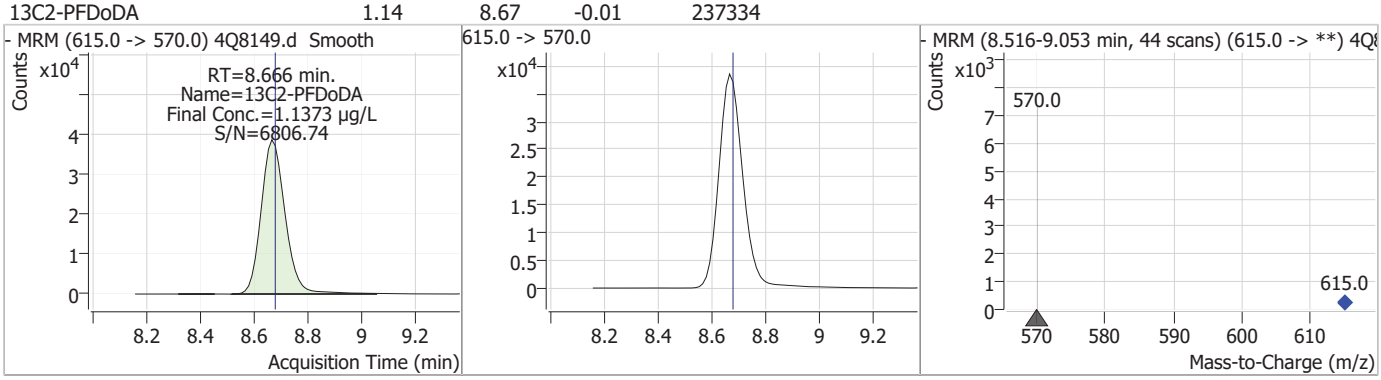
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.70	8.10	-0.01	192971				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.24	8.27	-0.01	282293				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.14	8.67	-0.01	237334				



7.1.25

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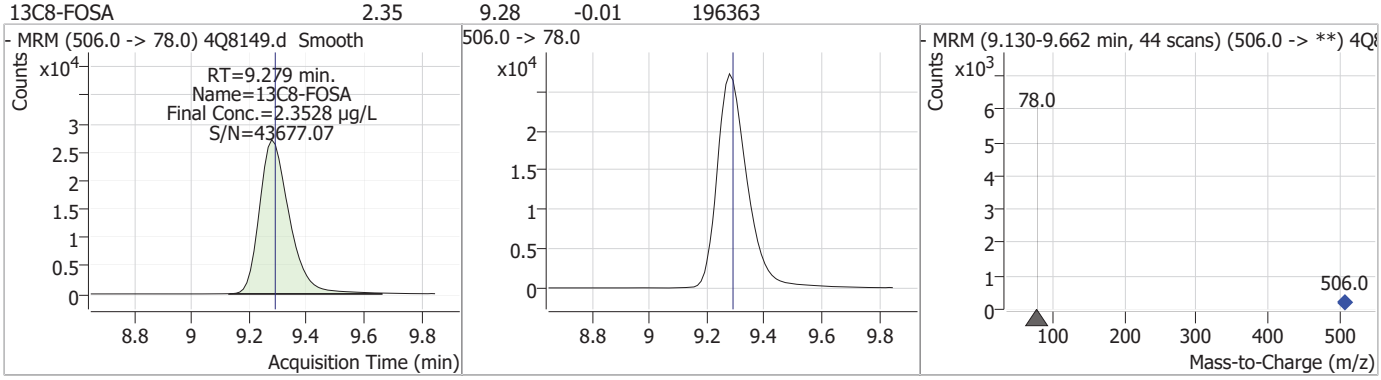
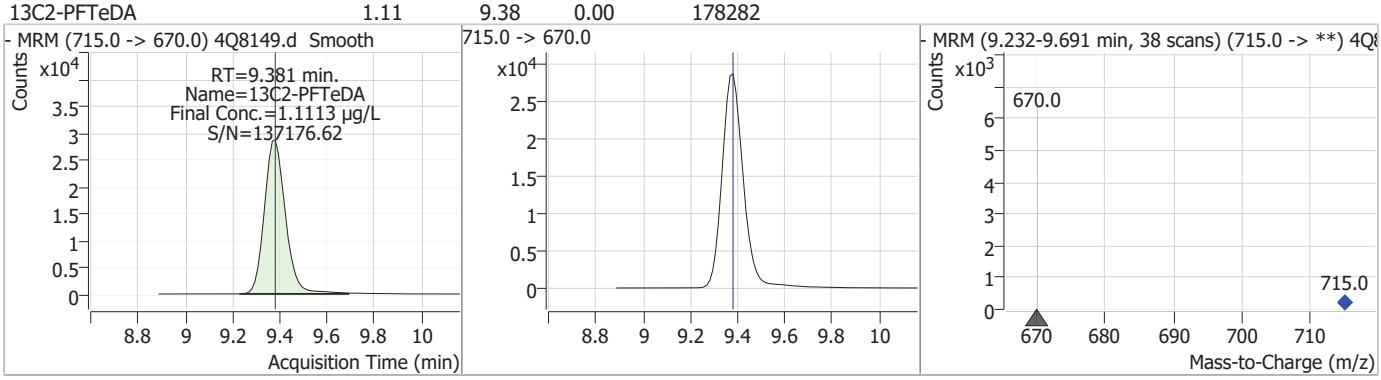
Perfluorinated Compounds by LC/MS/MS

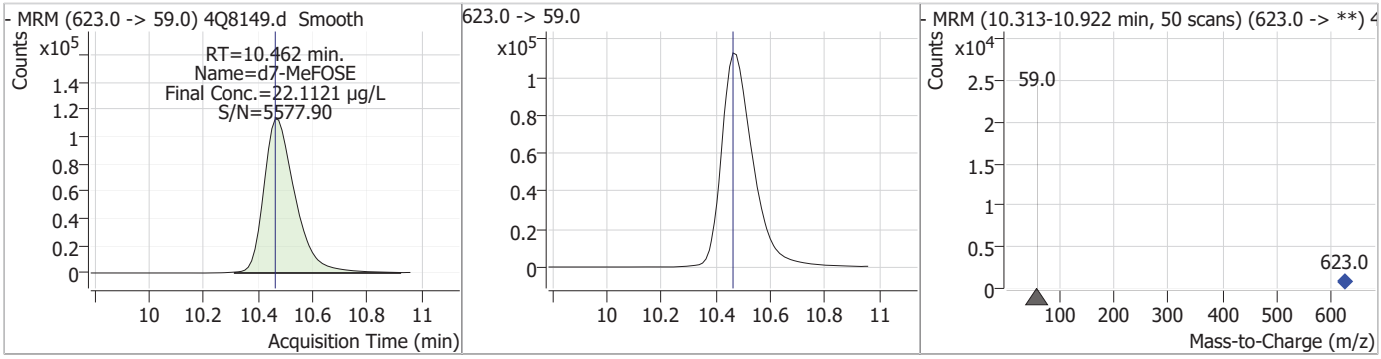
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.35	9.28	-0.01	196363				



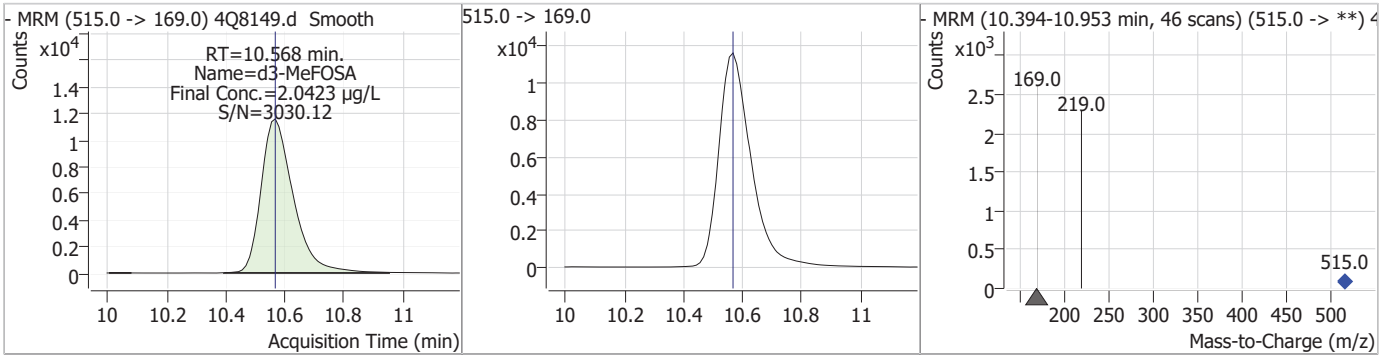
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.11	9.38	0.00	178282				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.11	10.46	0.00	904793				

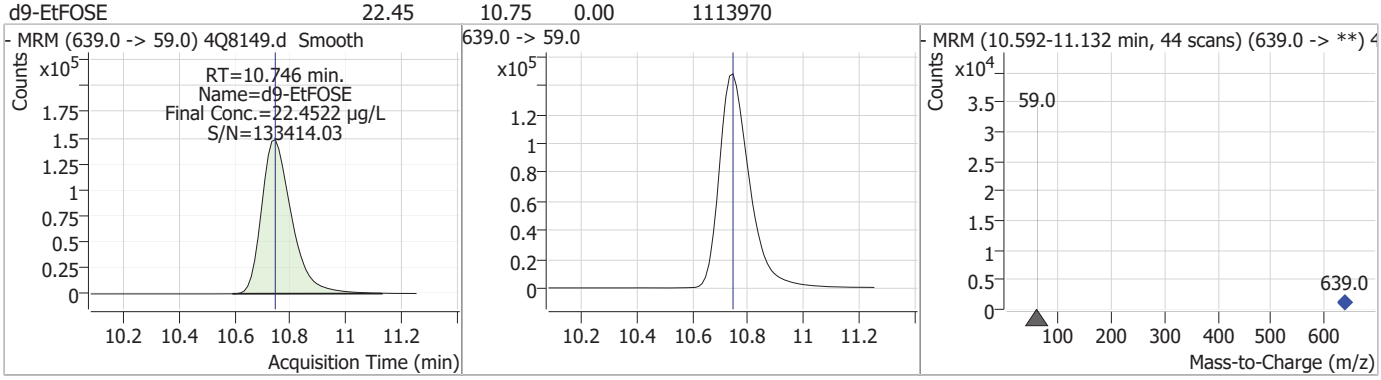


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.04	10.57	0.00	87531				

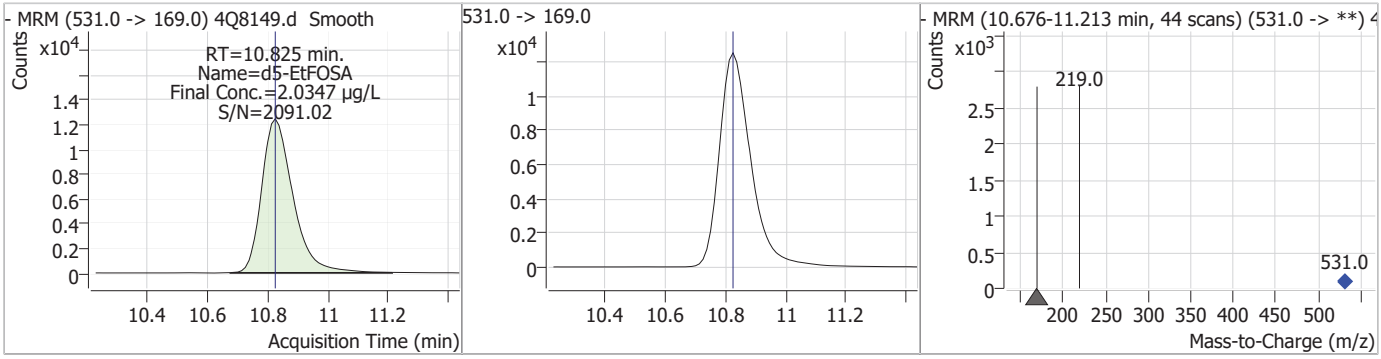


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.45	10.75	0.00	1113970				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.03	10.82	0.00	89863				



7.1.25

7

Manual Integration Approval Summary

Sample Number: JE10205-17
Lab FileID: 4Q8149.D
Injection Time: 04/30/25 19:14

Method: EPA 1633
Analyst approved: 05/01/25 11:50 Maksud Haque
Supervisor approved: 05/06/25 06:23 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8150.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 7:28:07 PM
Sample Name : JE10205-18
Vial : P1-C4
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,511,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.858	217.0 -> 172.0	821361	10.00 µg/L	-0.025
M5-PFPeA	4.307	268.0 -> 223.0	418917	5.00 µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	298115	2.50 µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	303444	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	467850	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	194752	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	172888	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	220109	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	185106	1.25 µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	154002	1.25 µg/L	0.000
M8-FOSA	9.279	506.0 -> 78.0	164274	2.50 µg/L	-0.012
M3-PFBS	5.355	302.0 -> 99.0	25926	2.50 µg/L	-0.012
		302.0 -> 80.0	65270		
M3-PFHxS	6.986	402.0 -> 99.0	38337	2.50 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	42272	2.50 µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	10732	5.00 µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	24615	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	27734	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	188299	5.00 µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	441744	10.00 µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	140656	5.00 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	773118	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	930781	25.00 µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	73167	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	72654	2.50 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	72253	2.50 µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	376075	5.00 µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	45312	2.50 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	482569	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	175893	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	198094	1.25 µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	297914	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.153	329.0 -> 81.0	10732	4.72 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.5%	
13C2-6:2FTS	6.684	429.0 -> 81.0	24615	4.99 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.8%	
13C2-8:2FTS	7.671	529.0 -> 81.0	27734	4.78 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.6%	
13C2-PFDoDA	8.666	615.0 -> 570.0	185106	0.97 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 77.9%	
13C2-PFTeDA	9.381	715.0 -> 670.0	154002	1.05 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 84.3%	
13C3-PFBS	5.355	302.0 -> 99.0	25926	2.32 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.7%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	38337	2.42	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.9%		
13C4-PFBA	2.858	217.0 -> 172.0	821361	9.53	µg/L	-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.3%		
13C4-PFHpA	6.291	367.0 -> 322.0	303444	2.26	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.6%		
13C5-PFHxA	5.452	318.0 -> 273.0	298115	2.36	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.6%		
13C5-PFPeA	4.307	268.0 -> 223.0	418917	4.38	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 87.6%		
13C6-PFDA	7.858	519.0 -> 474.0	172888	1.11	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.0%		
13C7-PFUnDA	8.273	570.0 -> 525.0	220109	1.06	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 84.8%		
13C8-FOSA	9.279	506.0 -> 78.0	164274	2.21	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 88.5%		
13C8-PFOA	6.897	421.0 -> 376.0	467850	2.43	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.0%		
13C8-PFOS	7.995	507.0 -> 99.0	42272	2.43	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.2%		
13C9-PFNA	7.403	472.0 -> 427.0	194752	1.19	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.8%		
d3-MeFOSAA	7.915	573.0 -> 419.0	188299	3.96	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 79.1%		
13C3-HFPO-DA	5.779	287.0 -> 169.0	441744	8.92	µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 89.2%		
d3-MeFOSA	10.567	515.0 -> 169.0	72654	1.91	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 76.2%		
d5-EtFOSAA	8.098	589.0 -> 419.0	140656	3.85	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 77.0%		
d7-MeFOSE	10.462	623.0 -> 59.0	773118	21.25	µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 85.0%		
d9-EtFOSE	10.746	639.0 -> 59.0	930781	21.09	µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 84.4%		
d5-EtFOSA	10.825	531.0 -> 169.0	73167	1.86	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 74.5%		

Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0 327.0 -> 81.0	-	N.D.	
6:2FTS	-	427.0 -> 407.0 427.0 -> 81.0	-	N.D.	
8:2FTS	-	527.0 -> 507.0 527.0 -> 81.0	-	N.D.	
EtFOSAA	-	584.0 -> 419.0 584.0 -> 483.0	-	N.D.	
FOSA	-	498.0 -> 78.0 498.0 -> 478.0	-	N.D.	
MeFOSAA	-	570.0 -> 419.0 570.0 -> 512.0	-	N.D.	
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0 299.0 -> 99.0	-	N.D.	
PFDA	-	513.0 -> 469.0 513.0 -> 219.0	-	N.D.	
PFDoDA	-	613.0 -> 569.0 613.0 -> 319.0	-	N.D.	

Perfluorinated Compounds by LC/MS/MS

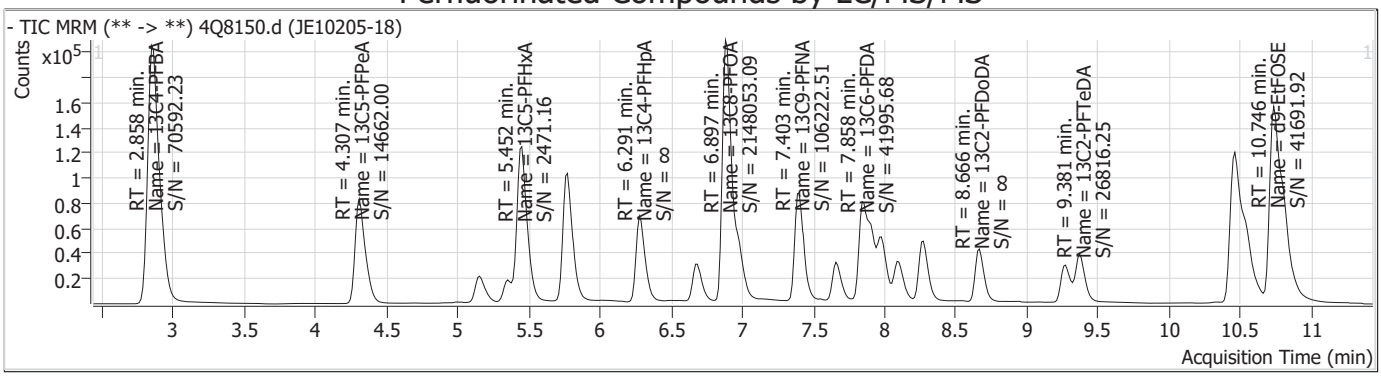
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.		
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 219.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 369.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

Perfluorinated Compounds by LC/MS/MS

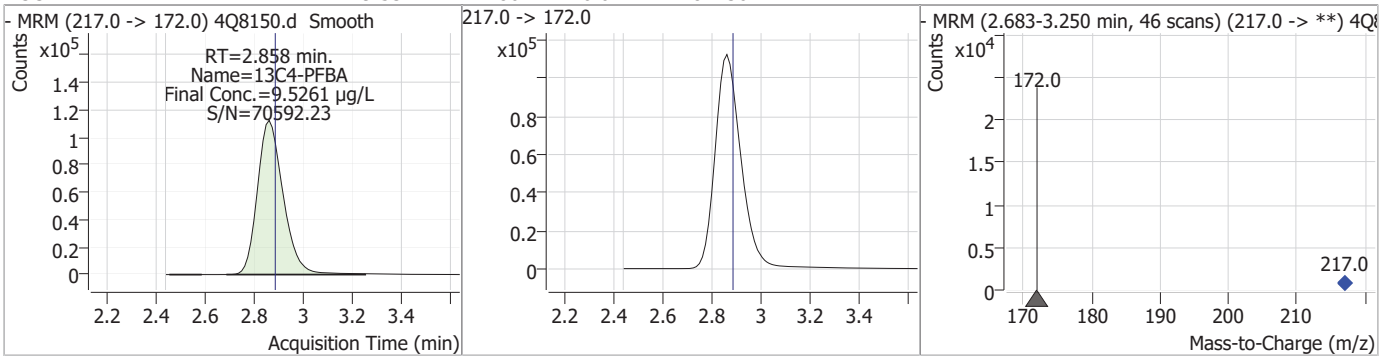
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

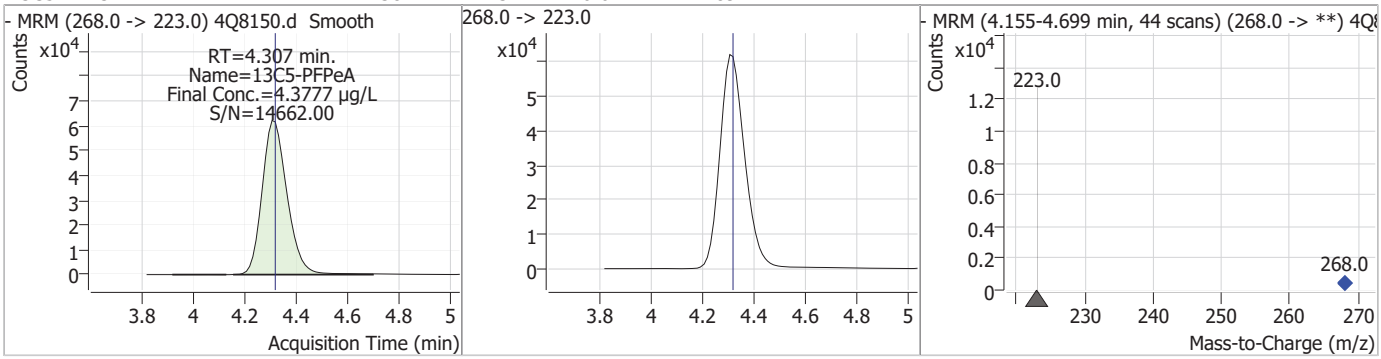
Perfluorinated Compounds by LC/MS/MS



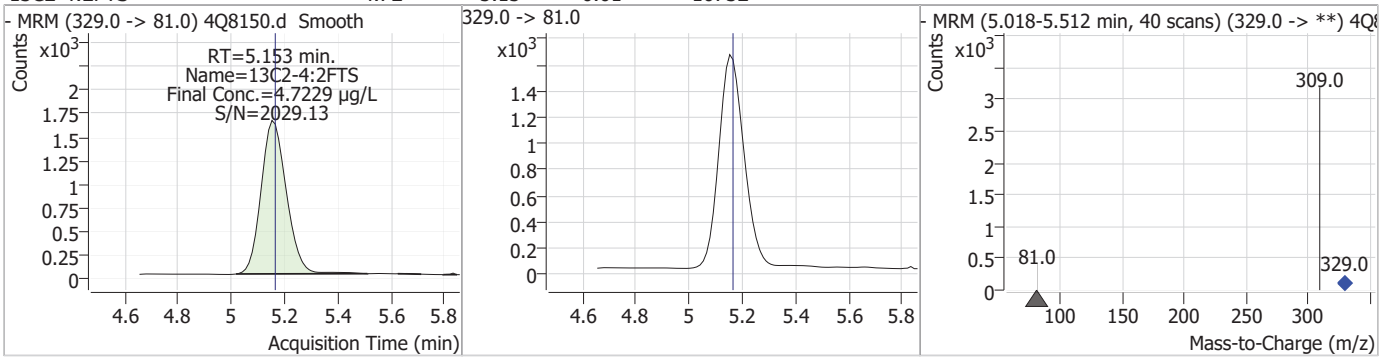
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.53	2.86	-0.02	821361				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.38	4.31	-0.01	418917				

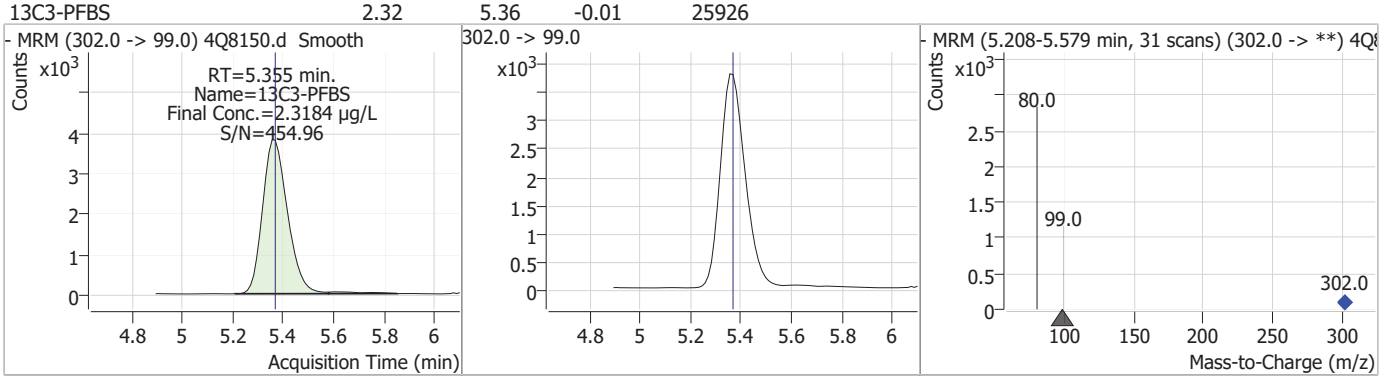


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.72	5.15	-0.01	10732				

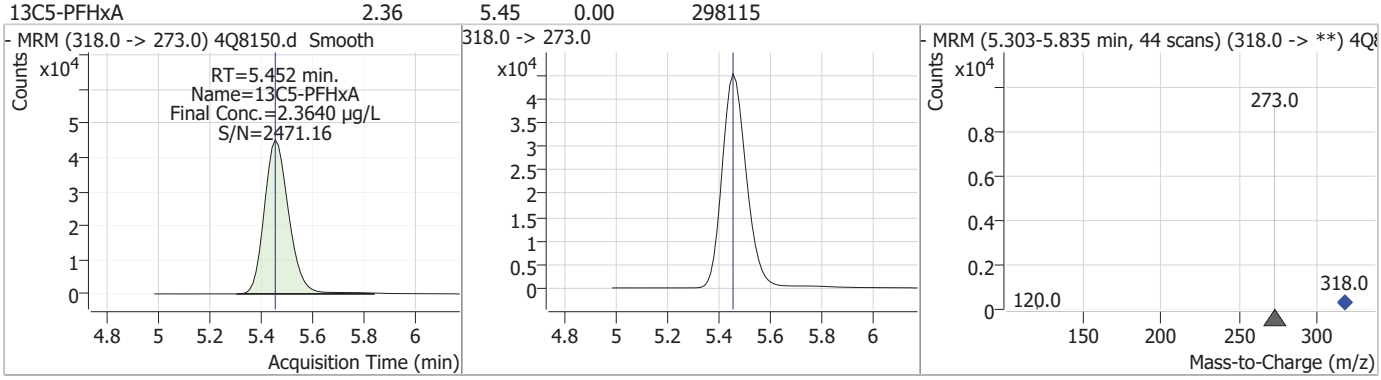


Perfluorinated Compounds by LC/MS/MS

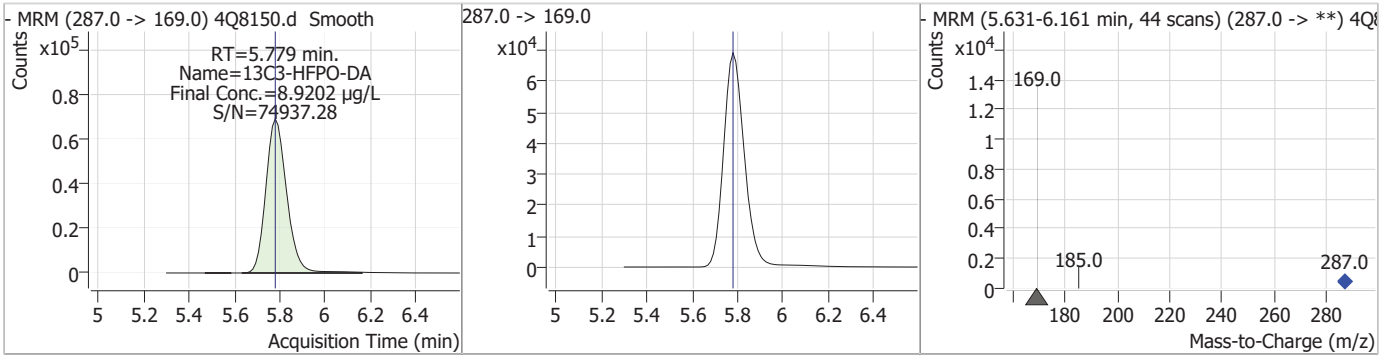
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.32	5.36	-0.01	25926				



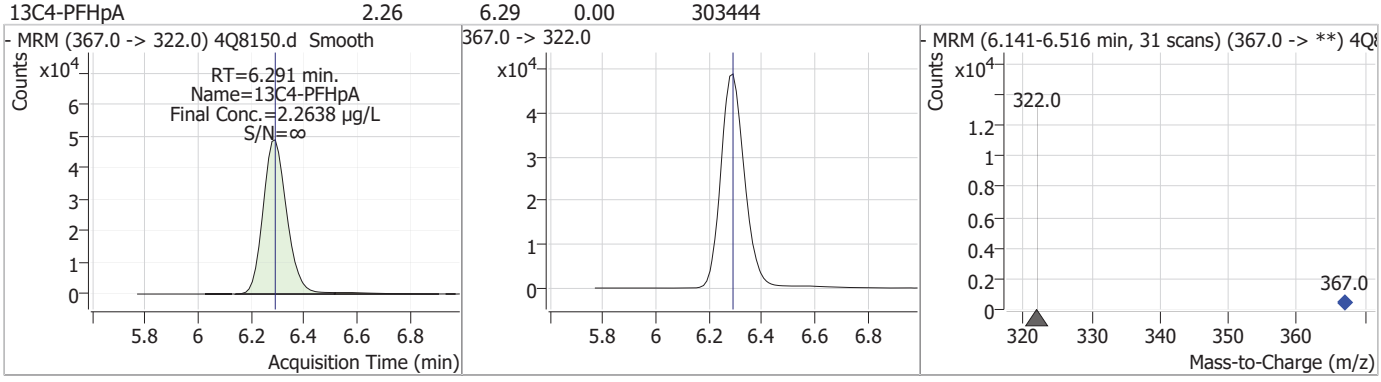
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.36	5.45	0.00	298115				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.92	5.78	0.00	441744				

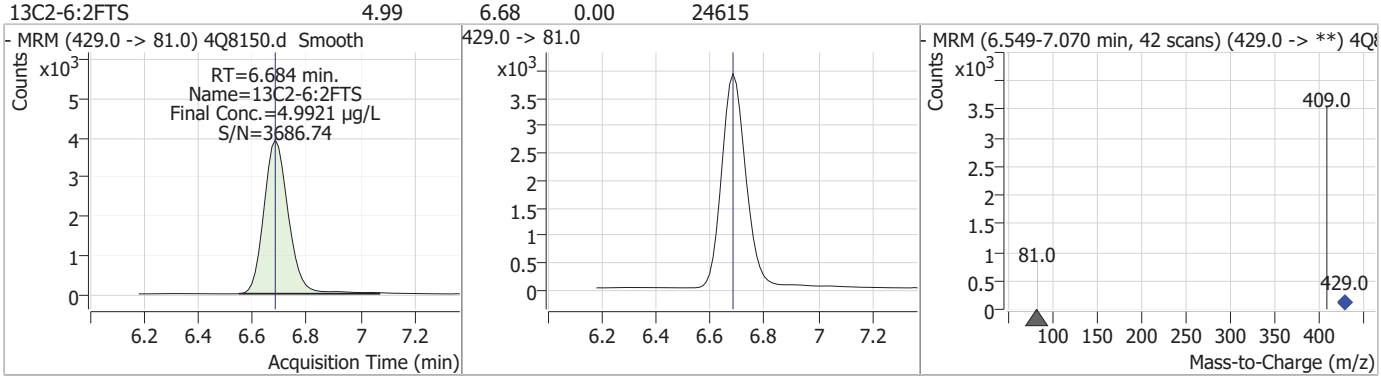


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.26	6.29	0.00	303444				

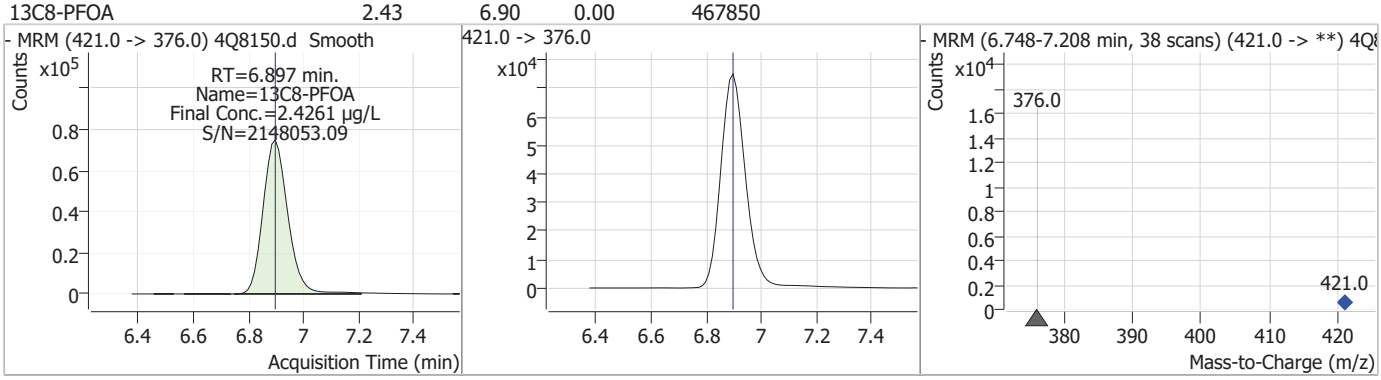


Perfluorinated Compounds by LC/MS/MS

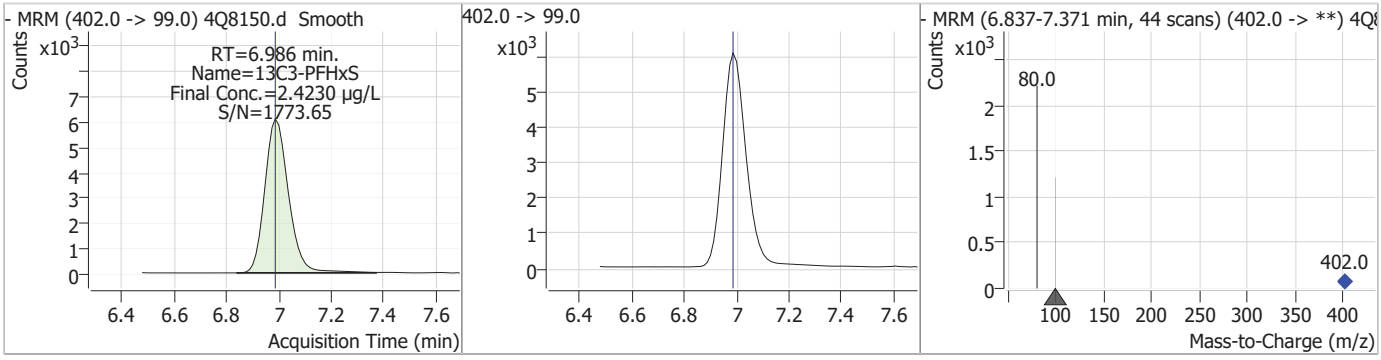
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.99	6.68	0.00	24615				



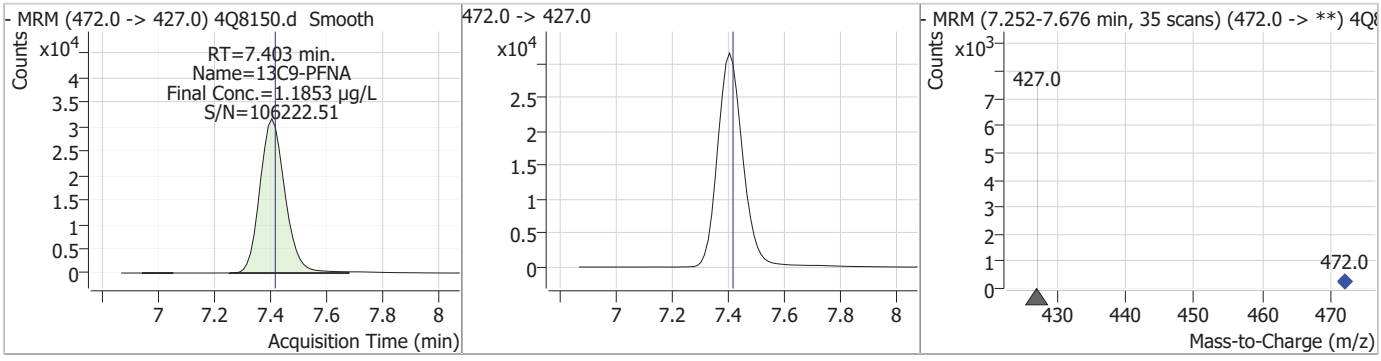
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.43	6.90	0.00	467850				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.42	6.99	0.00	38337				

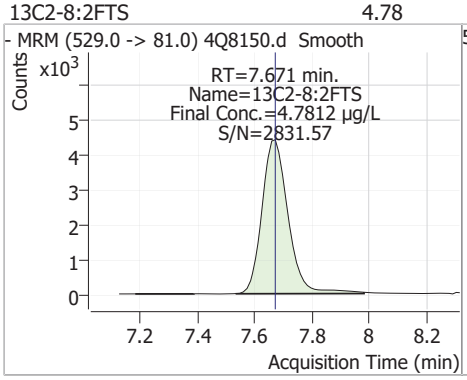


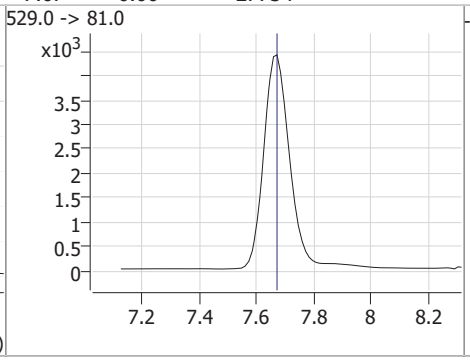
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.19	7.40	-0.01	194752				

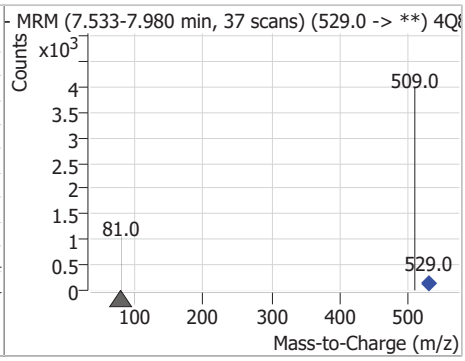


Perfluorinated Compounds by LC/MS/MS

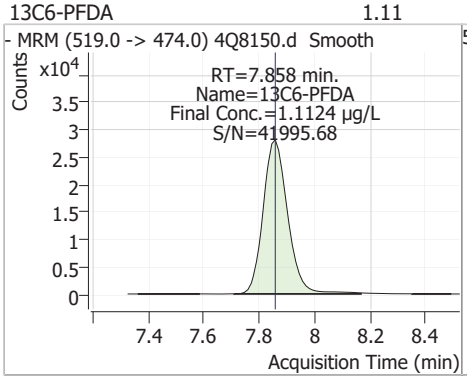
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.78	7.67	0.00	27734				

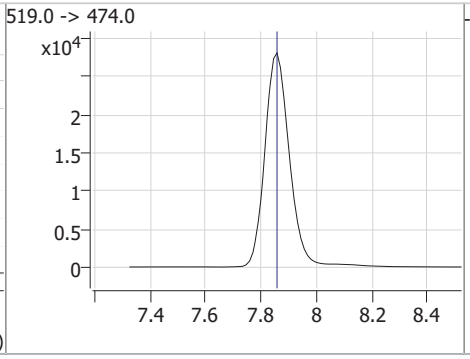


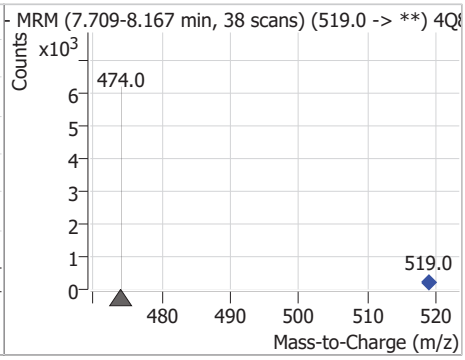




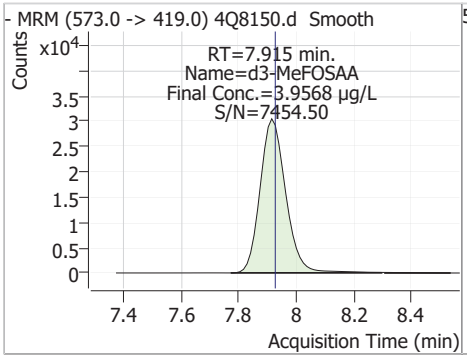
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.11	7.86	0.00	172888				

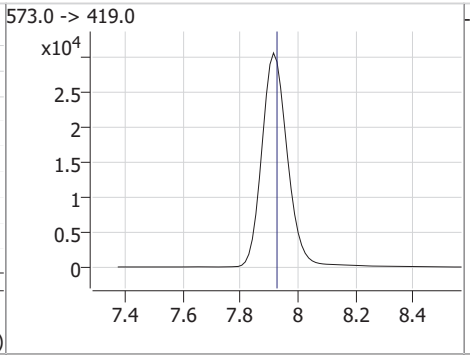


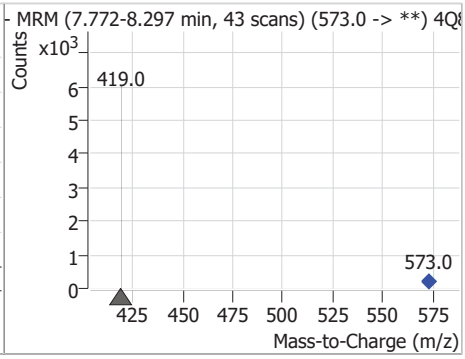




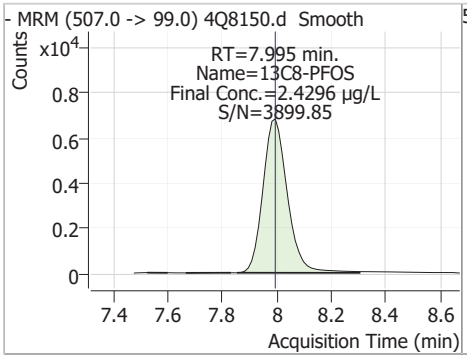
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	3.96	7.92	-0.01	188299				

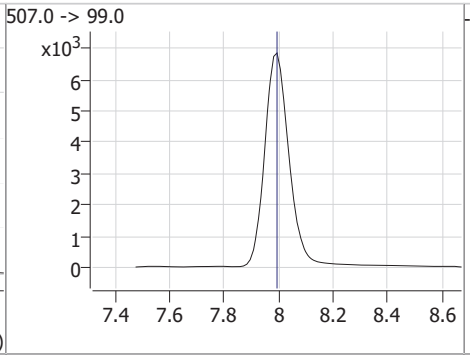


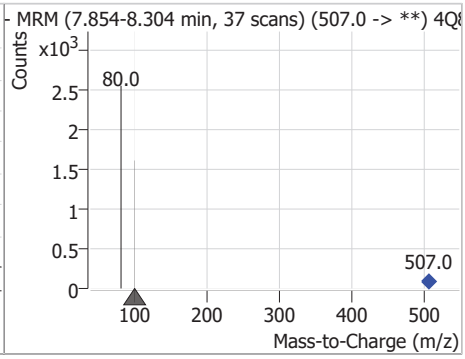




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.43	7.99	0.00	42272				







7.1.26

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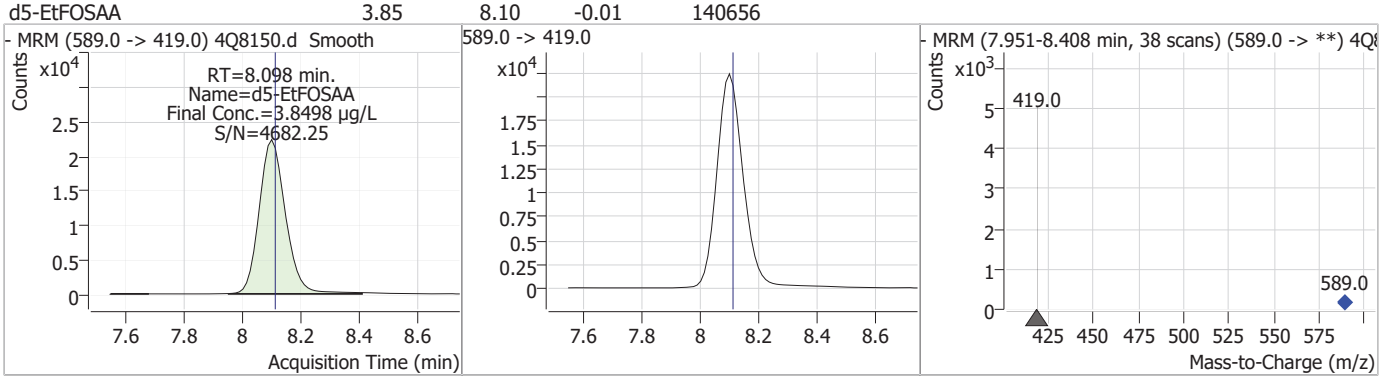
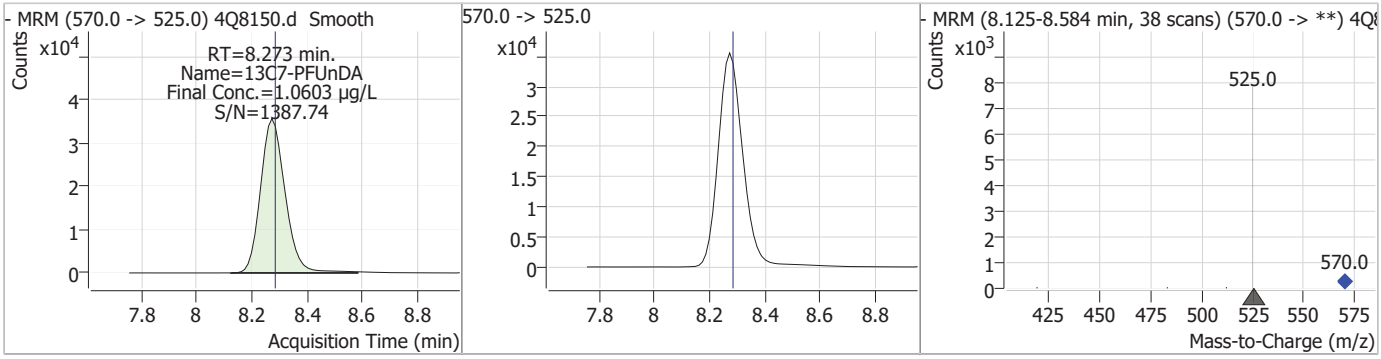
Perfluorinated Compounds by LC/MS/MS

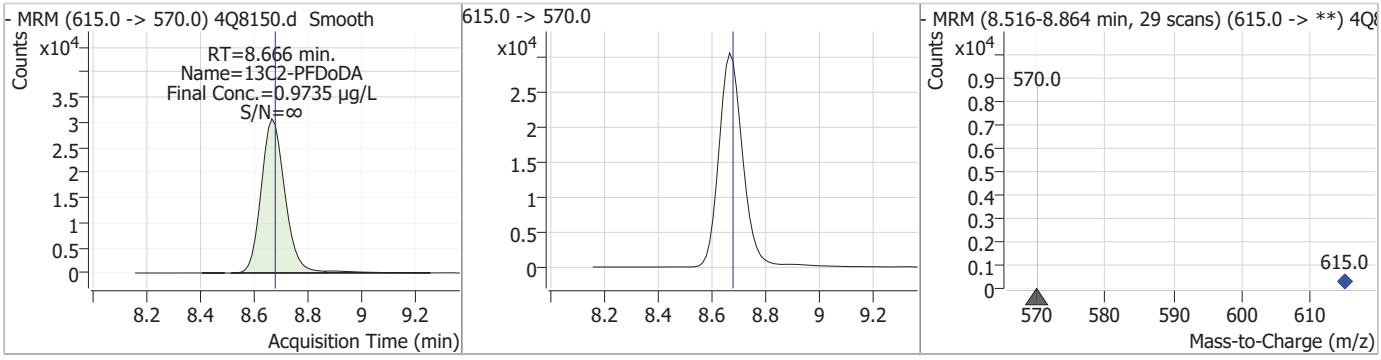
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	3.85	8.10	-0.01	140656				



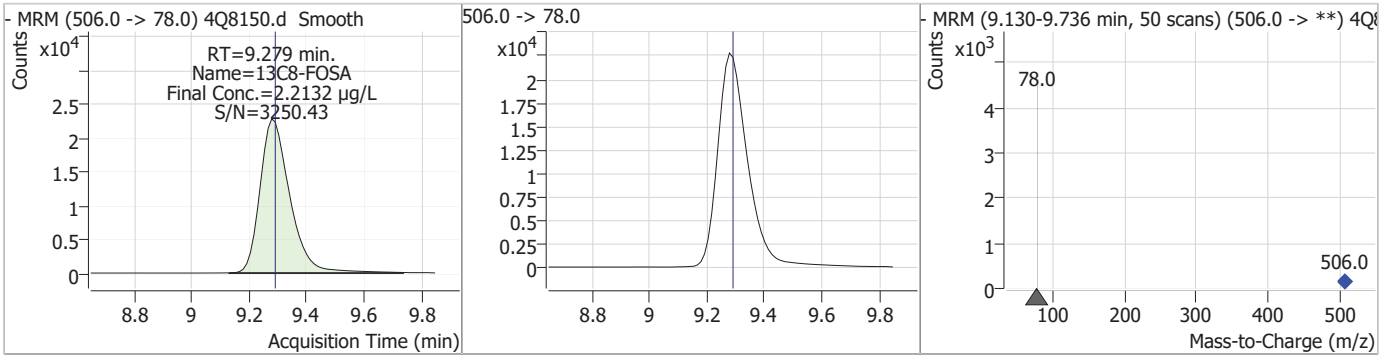
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.06	8.27	-0.01	220109				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	0.97	8.67	-0.01	185106				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.21	9.28	-0.01	164274				

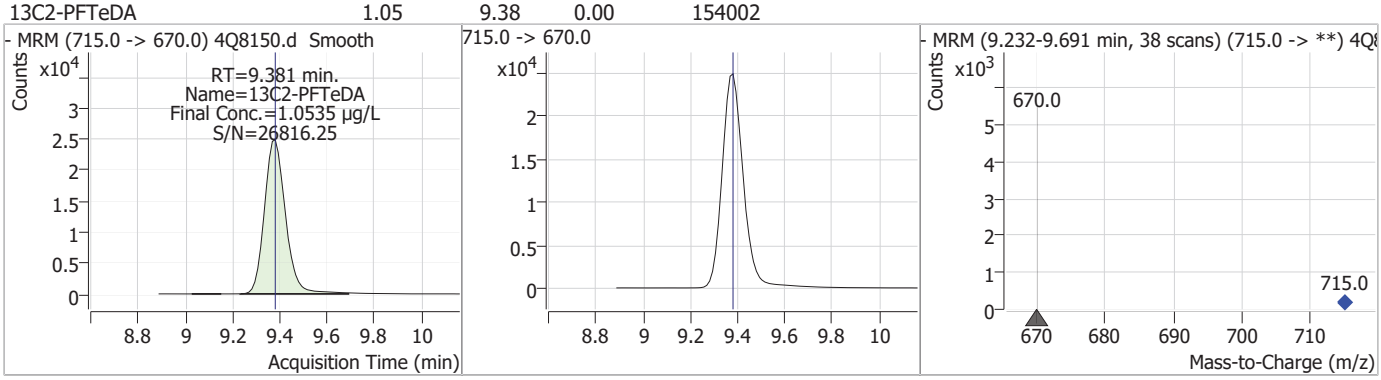


7.1.26

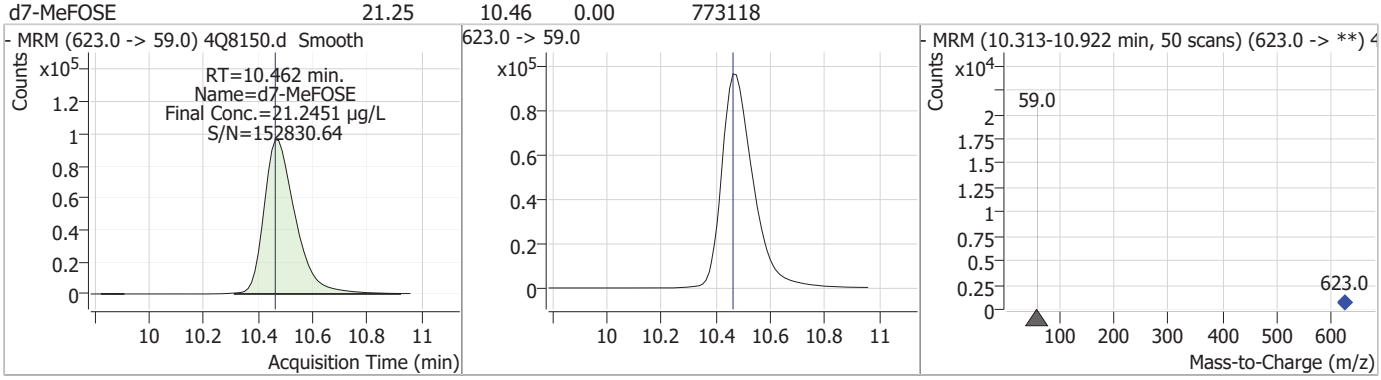
7

Perfluorinated Compounds by LC/MS/MS

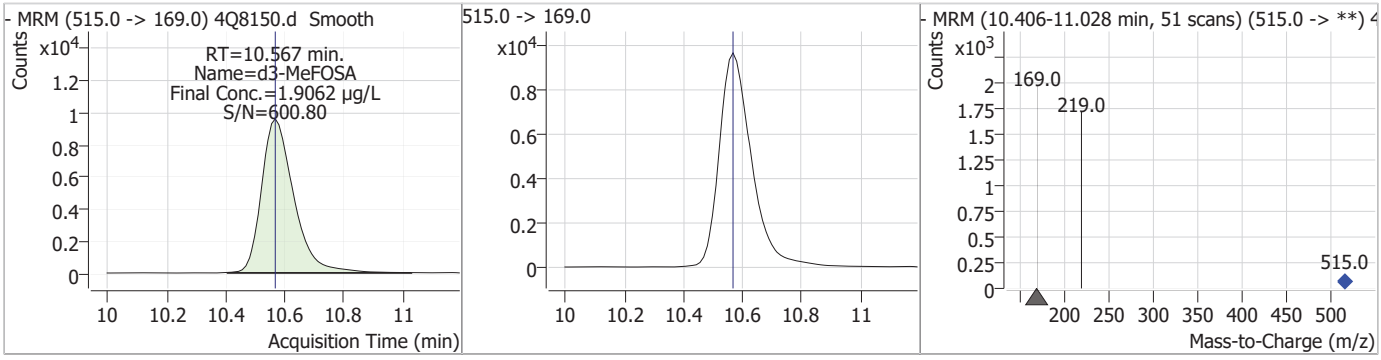
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.05	9.38	0.00	154002				



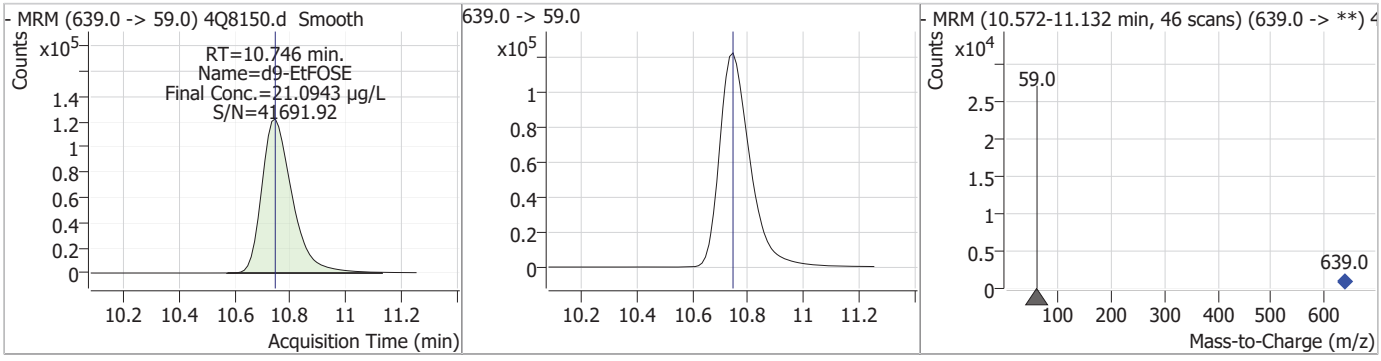
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	21.25	10.46	0.00	773118				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.91	10.57	0.00	72654				

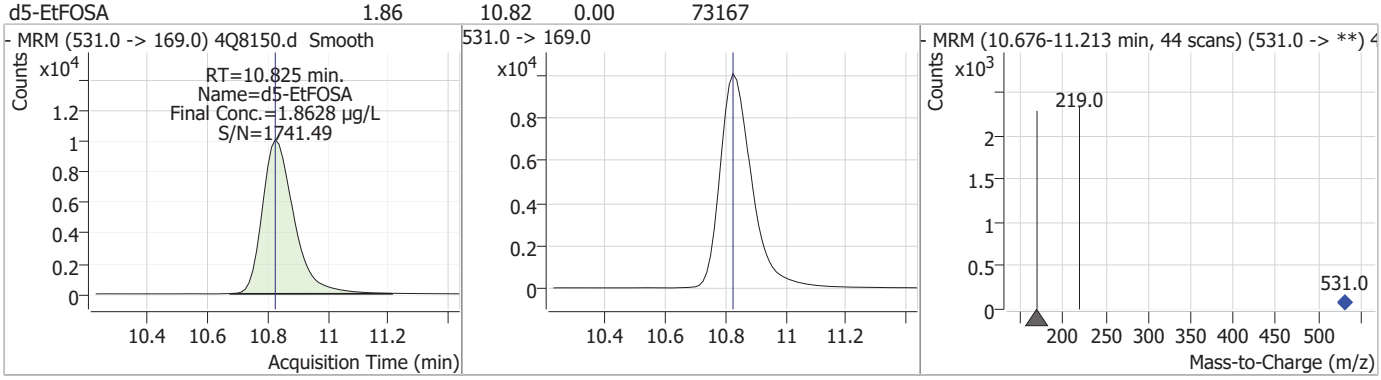


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	21.09	10.75	0.00	930781				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.86	10.82	0.00	73167				



Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/06/25 06:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8151.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 7:41:41 PM
Sample Name : JE10205-19
Vial : P1-C5
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,495,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.858	217.0 -> 172.0	917633	10.00	µg/L	-0.025
M5-PFPeA	4.307	268.0 -> 223.0	466956	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	337629	2.50	µg/L	0.000
M4-PFHpA	6.279	367.0 -> 322.0	343750	2.50	µg/L	-0.012
M8-PFOA	6.897	421.0 -> 376.0	515048	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	217193	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	199929	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	274559	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	228871	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	175935	1.25	µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	190302	2.50	µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	32066	2.50	µg/L	-0.012
		302.0 -> 80.0	72794			
M3-PFHxS	6.986	402.0 -> 99.0	42776	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	46763	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	14080	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	28904	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	32483	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	246088	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	506366	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	191735	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	919944	25.00	µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1117269	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	88422	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	85175	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	80893	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	425860	5.00	µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	51681	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	542635	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	189058	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	224503	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	335568	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	14080	5.43	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.7%		
13C2-6:2FTS	6.684	429.0 -> 81.0	28904	5.14	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.8%		
13C2-8:2FTS	7.671	529.0 -> 81.0	32483	4.91	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.2%		
13C2-PFDoDA	8.666	615.0 -> 570.0	228871	1.12	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.6%		
13C2-PFTeDA	9.381	715.0 -> 670.0	175935	1.12	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.6%		
13C3-PFBS	5.355	302.0 -> 99.0	32066	2.51	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.6%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	42776	2.37 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.8%	
13C4-PFBA	2.858	217.0 -> 172.0	917633	9.40 µg/L	-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.0%	
13C4-PFHpA	6.279	367.0 -> 322.0	343750	2.28 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.1%	
13C5-PFHxA	5.452	318.0 -> 273.0	337629	2.38 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.1%	
13C5-PFPeA	4.307	268.0 -> 223.0	466956	4.33 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 86.6%	
13C6-PFDA	7.858	519.0 -> 474.0	199929	1.20 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.7%	
13C7-PFUnDA	8.273	570.0 -> 525.0	274559	1.23 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.4%	
13C8-FOSA	9.291	506.0 -> 78.0	190302	2.29 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.6%	
13C8-PFOA	6.897	421.0 -> 376.0	515048	2.38 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.0%	
13C8-PFOS	7.995	507.0 -> 99.0	46763	2.40 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.0%	
13C9-PFNA	7.403	472.0 -> 427.0	217193	1.17 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.3%	
d3-MeFOSAA	7.915	573.0 -> 419.0	246088	4.62 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.4%	
13C3-HFPO-DA	5.779	287.0 -> 169.0	506366	9.08 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 90.8%	
d3-MeFOSA	10.567	515.0 -> 169.0	85175	2.00 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 79.8%	
d5-EtFOSAA	8.098	589.0 -> 419.0	191735	4.69 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.7%	
d7-MeFOSE	10.462	623.0 -> 59.0	919944	22.58 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 90.3%	
d9-EtFOSE	10.746	639.0 -> 59.0	1117269	22.62 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 90.5%	
d5-EtFOSA	10.825	531.0 -> 169.0	88422	2.01 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 80.4%	
Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	2.864	213.0 -> 169.0	8116	0.29 µg/L	100
PFBS	5.357	299.0 -> 80.0	16332	0.45 µg/L	98
		299.0 -> 99.0	6855		
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

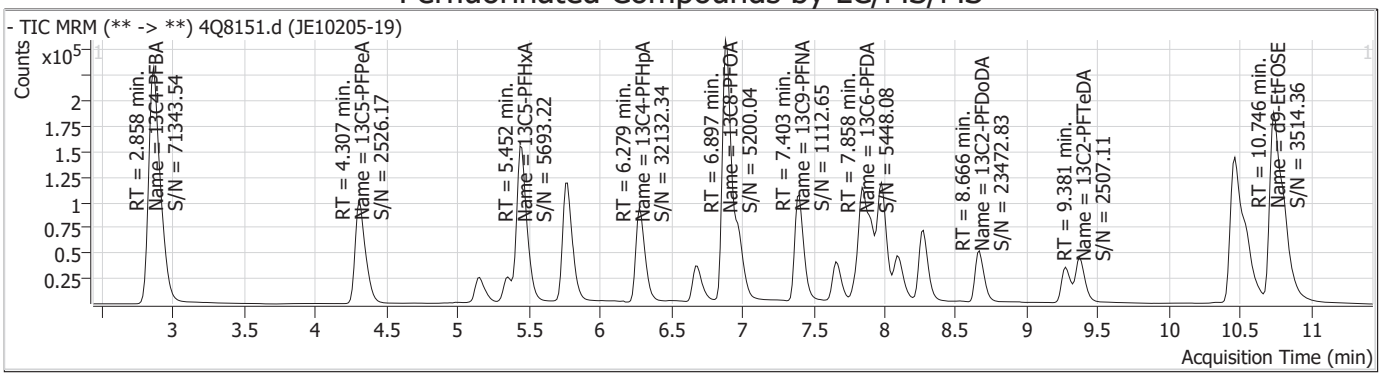
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.292	363.0 -> 319.0	64854	0.31	µg/L		99
		363.0 -> 169.0	13658				
PFHpS	7.516	449.0 -> 80.0	2166	0.06	µg/L	m	90
		449.0 -> 99.0	1038				
PFHxA	5.455	313.0 -> 269.0	65315	0.45	µg/L		100
		313.0 -> 119.0	2238				
PFHxS	6.987	399.0 -> 80.0	55620	1.49	µg/L	m	96
		399.0 -> 99.0	28222				
PFNA	7.404	463.0 -> 419.0	32381	0.25	µg/L	m	85
		463.0 -> 219.0	9164				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	6.898	413.0 -> 369.0	99280	0.58	µg/L	m	96
		413.0 -> 169.0	26946				
PFOS	7.996	499.0 -> 80.0	105945	2.81	µg/L	m	91
		499.0 -> 99.0	47888				
PFPeA	4.309	263.0 -> 219.0	48512	0.66	µg/L		100
PFPeS	6.318	349.0 -> 80.0	5167	0.13	µg/L		94
		349.0 -> 99.0	2418				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	8.275	563.0 -> 519.0	35800	0.22	µg/L		94
		563.0 -> 269.0	6288				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

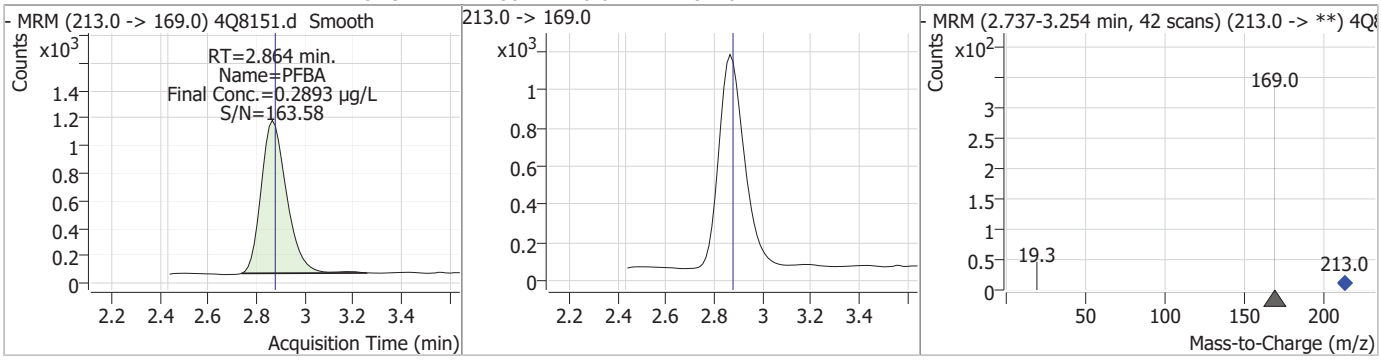
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

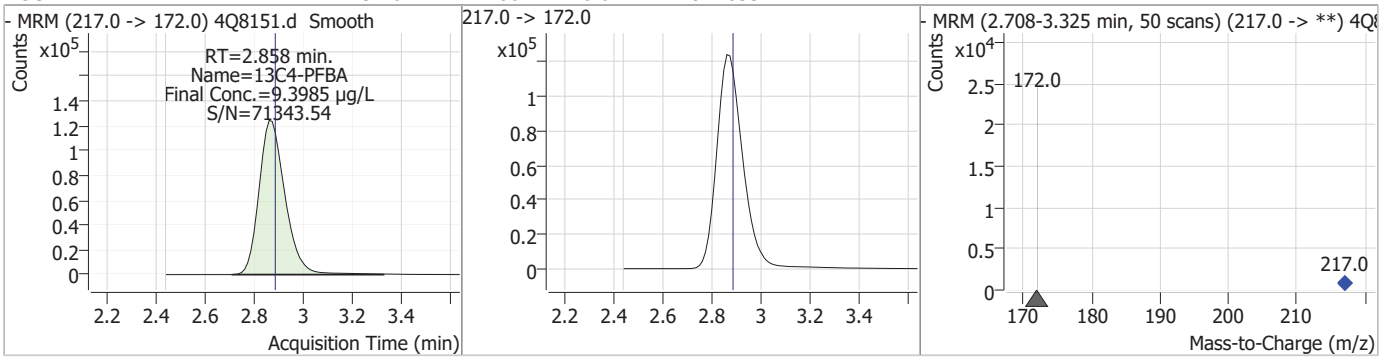
Perfluorinated Compounds by LC/MS/MS



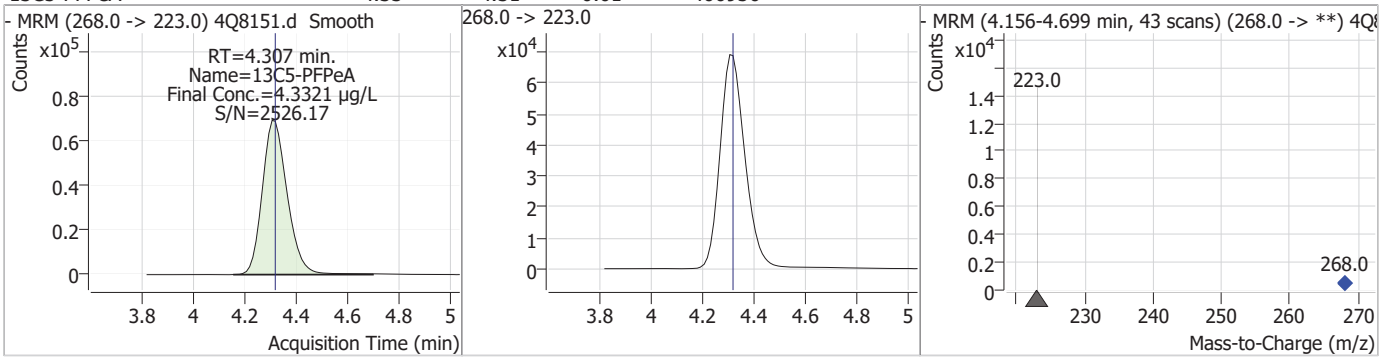
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.29	2.86	-0.01	8116				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.40	2.86	-0.02	917633				

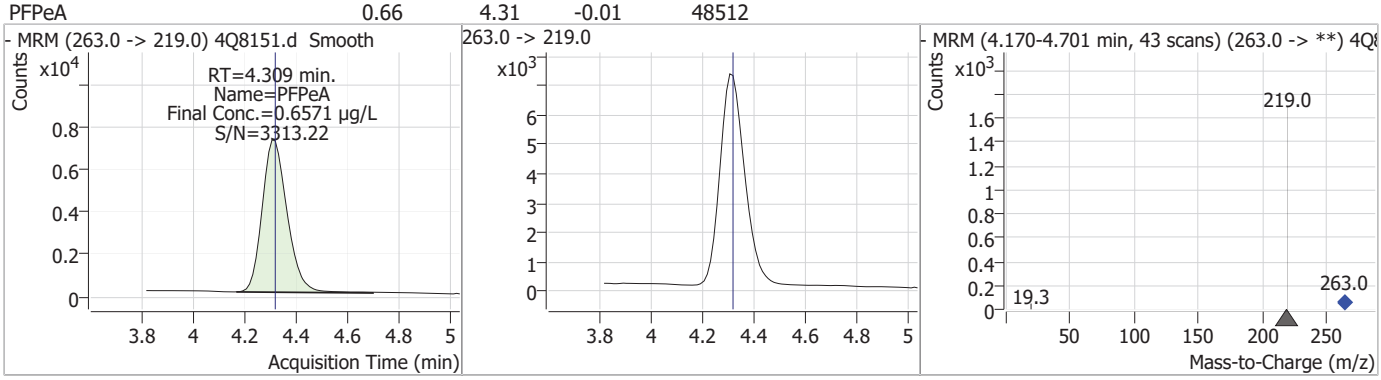


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.33	4.31	-0.01	466956				

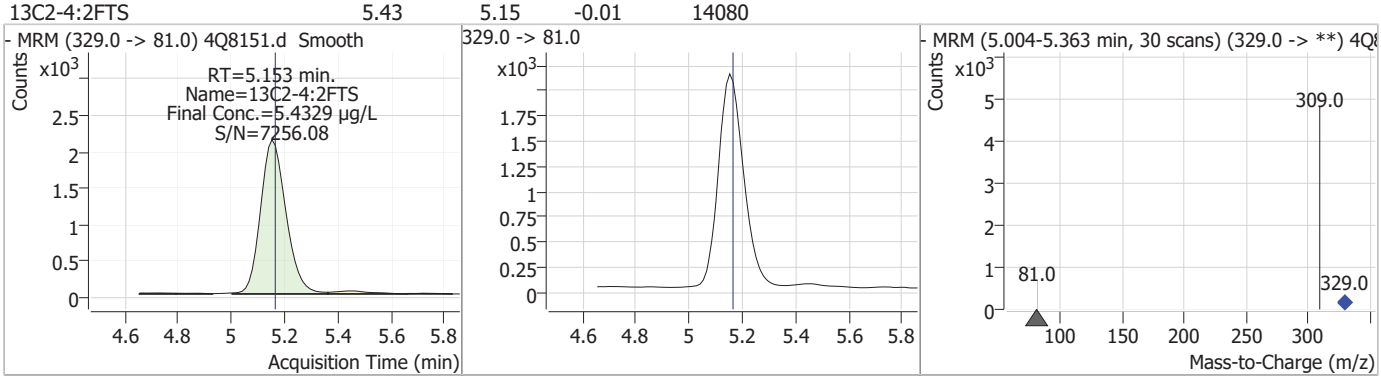


Perfluorinated Compounds by LC/MS/MS

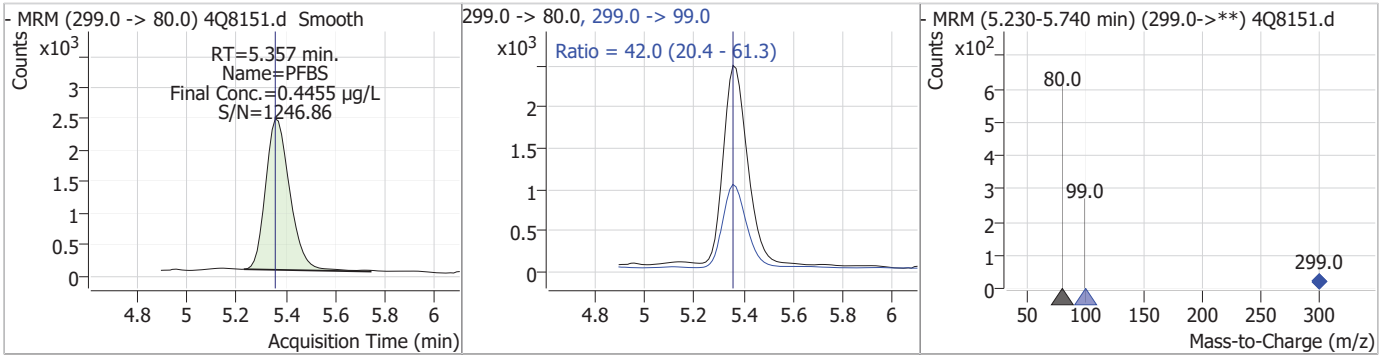
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.66	4.31	-0.01	48512				



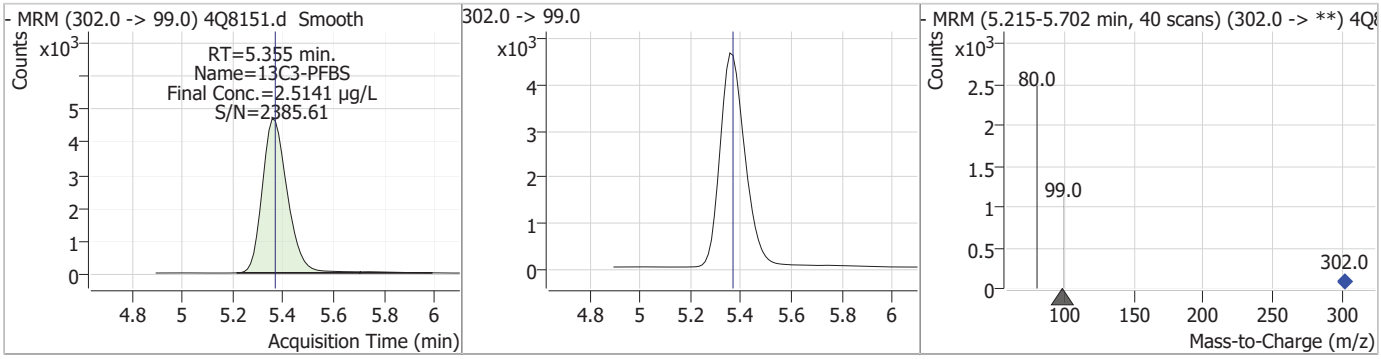
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.43	5.15	-0.01	14080				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.45	5.36	0.00	16332	299.0 -> 99.0	42.0	20.4	61.3

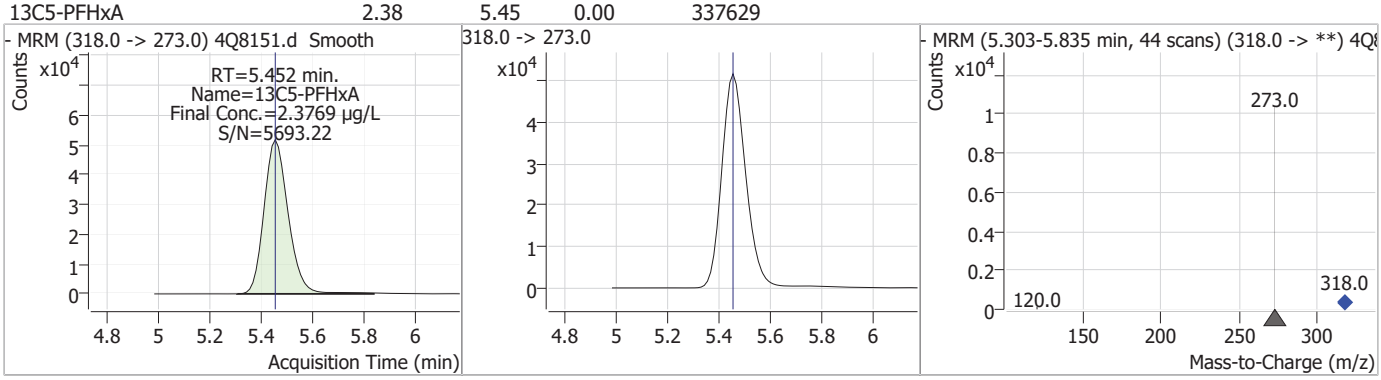


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.51	5.36	-0.01	32066				

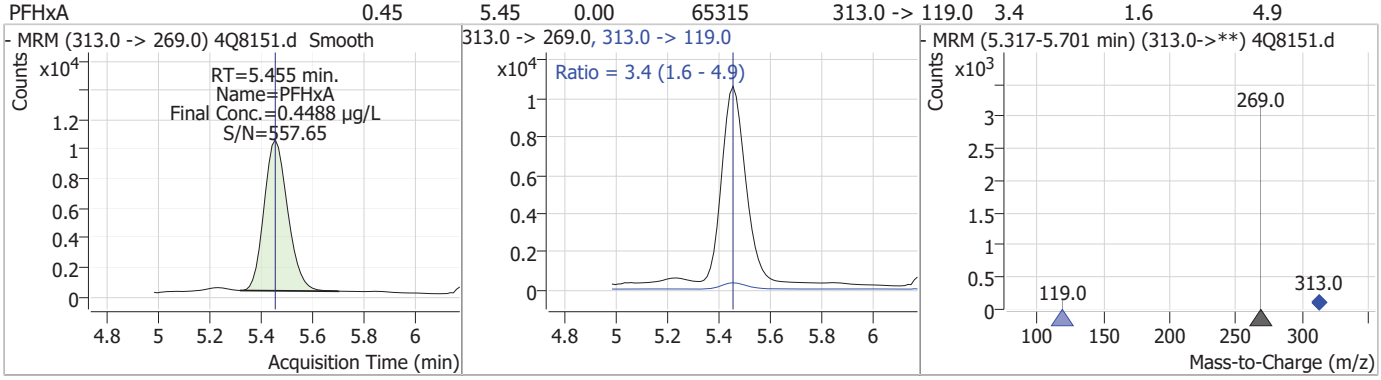


Perfluorinated Compounds by LC/MS/MS

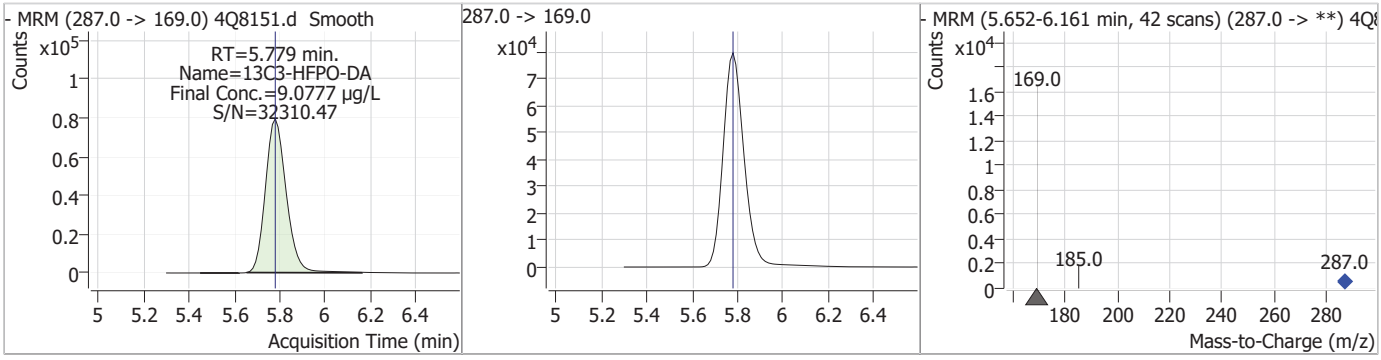
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.38	5.45	0.00	337629				



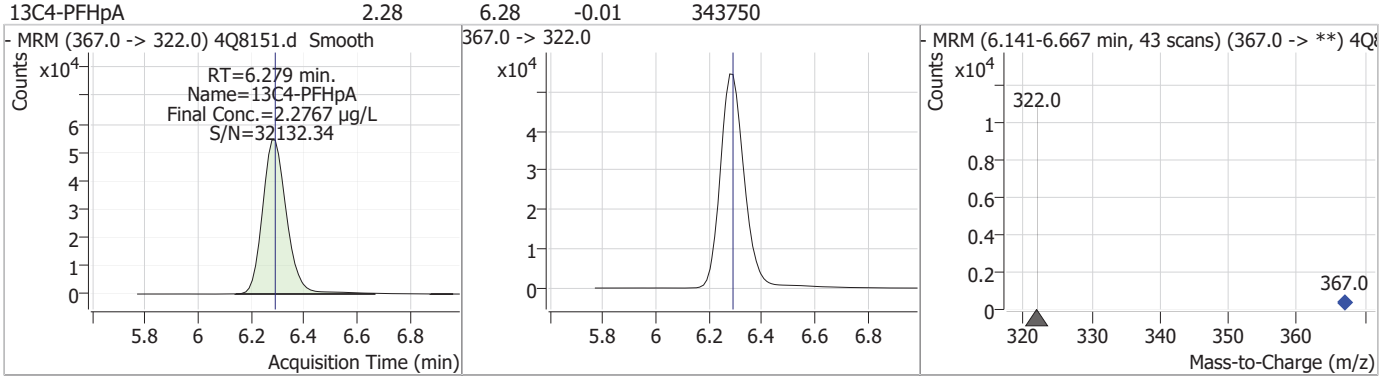
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.45	5.45	0.00	65315	313.0 -> 119.0	3.4	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.08	5.78	0.00	506366				

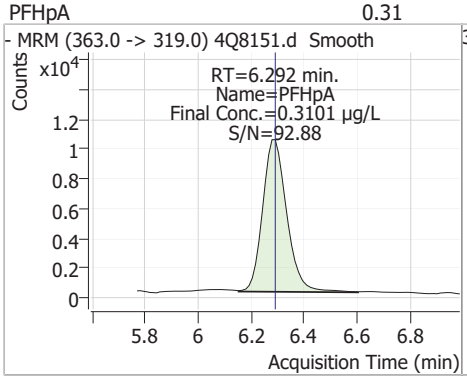


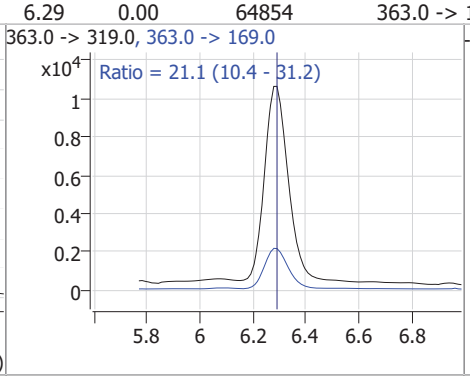
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.28	6.28	-0.01	343750				

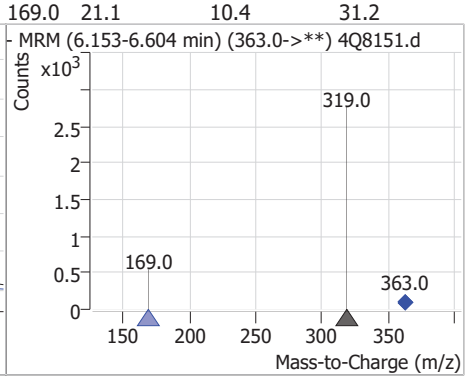


Perfluorinated Compounds by LC/MS/MS

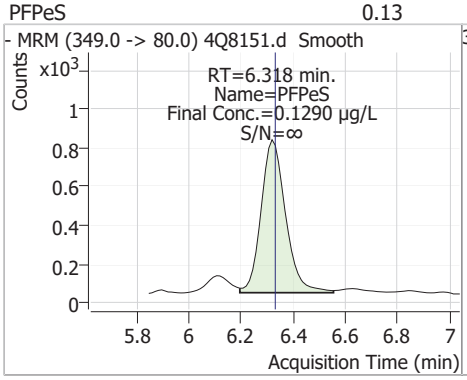
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.31	6.29	0.00	64854	363.0 -> 169.0	21.1	10.4	31.2

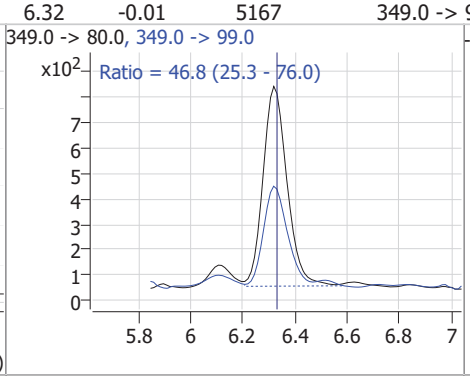


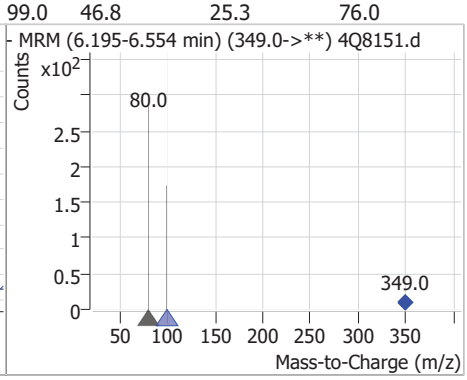




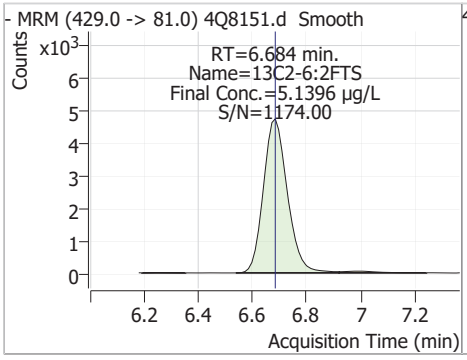
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.13	6.32	-0.01	5167	349.0 -> 99.0	46.8	25.3	76.0

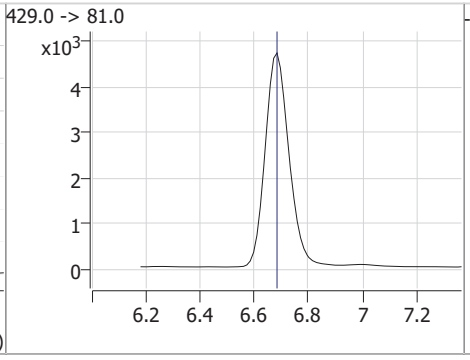


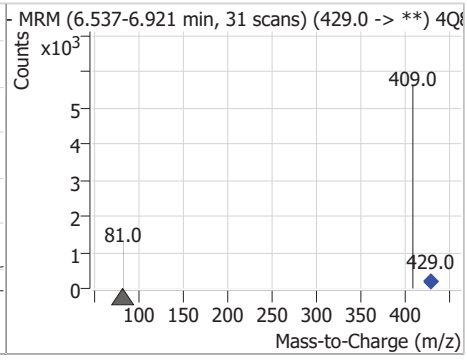




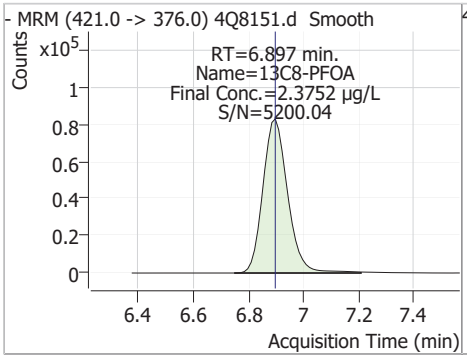
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.14	6.68	0.00	28904				

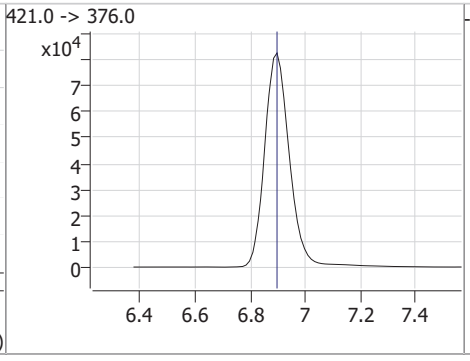


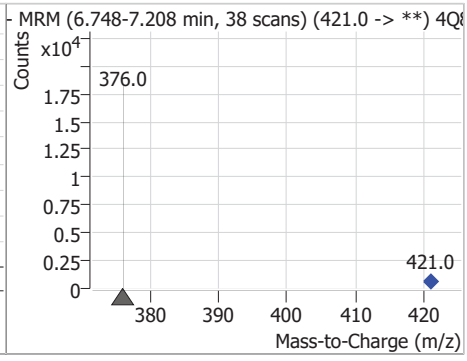




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.38	6.90	0.00	515048				

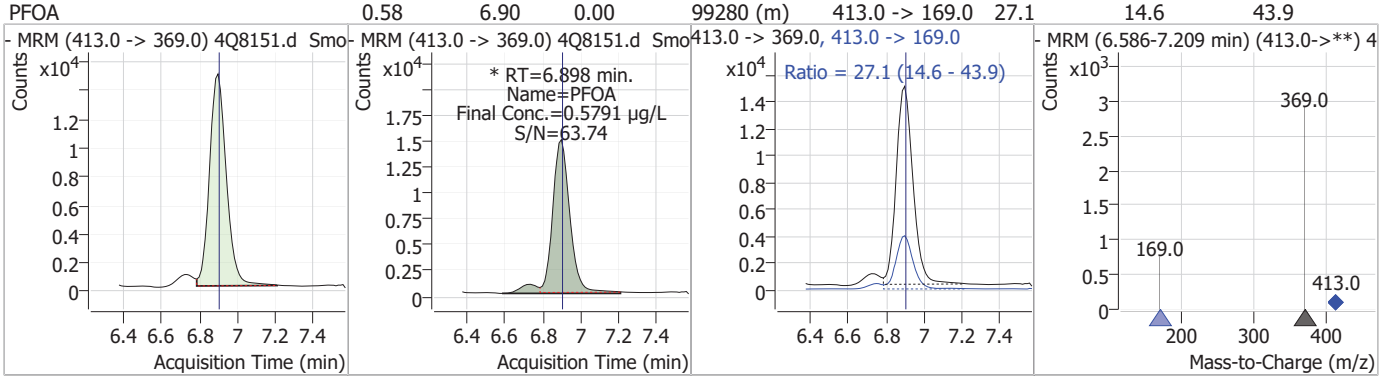




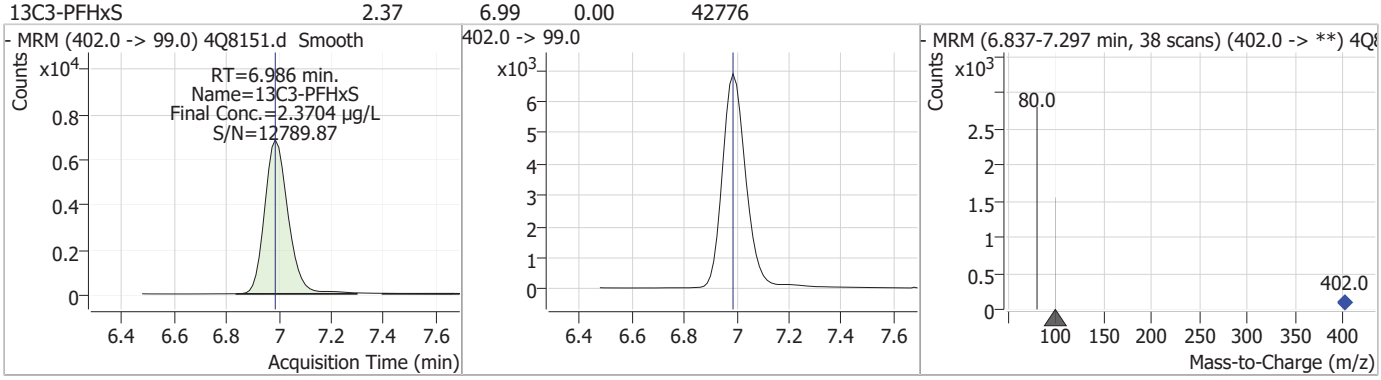


Perfluorinated Compounds by LC/MS/MS

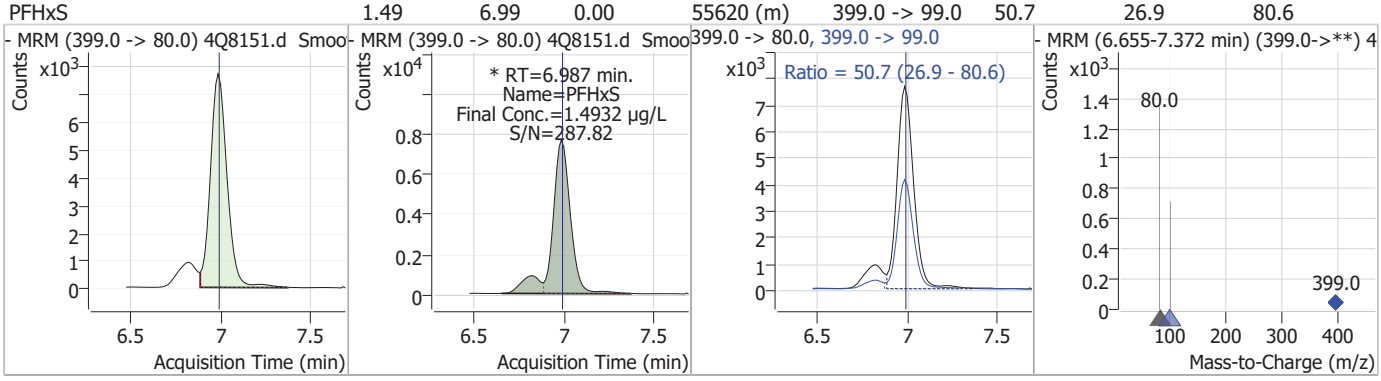
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.58	6.90	0.00	99280 (m)	413.0 -> 169.0	27.1	14.6	43.9



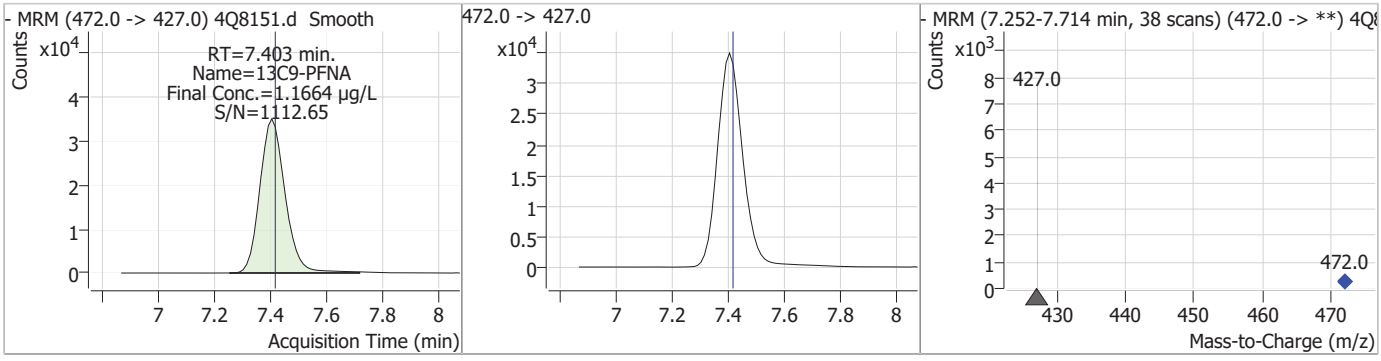
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.37	6.99	0.00	42776				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	1.49	6.99	0.00	55620 (m)	399.0 -> 99.0	50.7	26.9	80.6

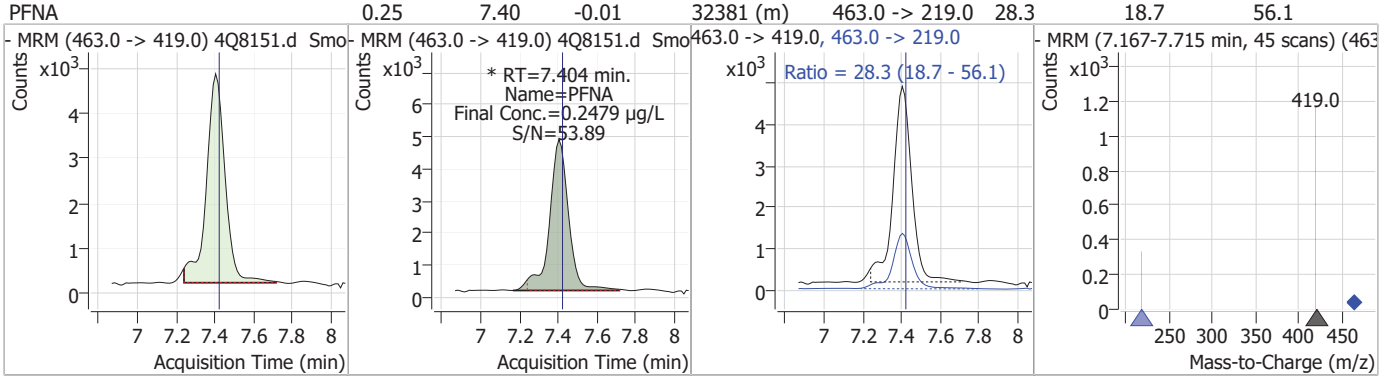


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.17	7.40	-0.01	217193				

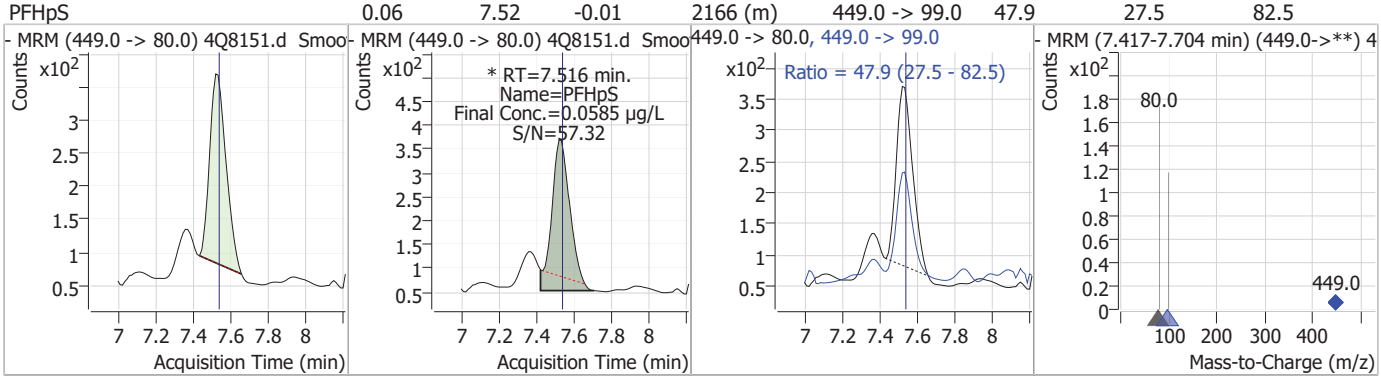


Perfluorinated Compounds by LC/MS/MS

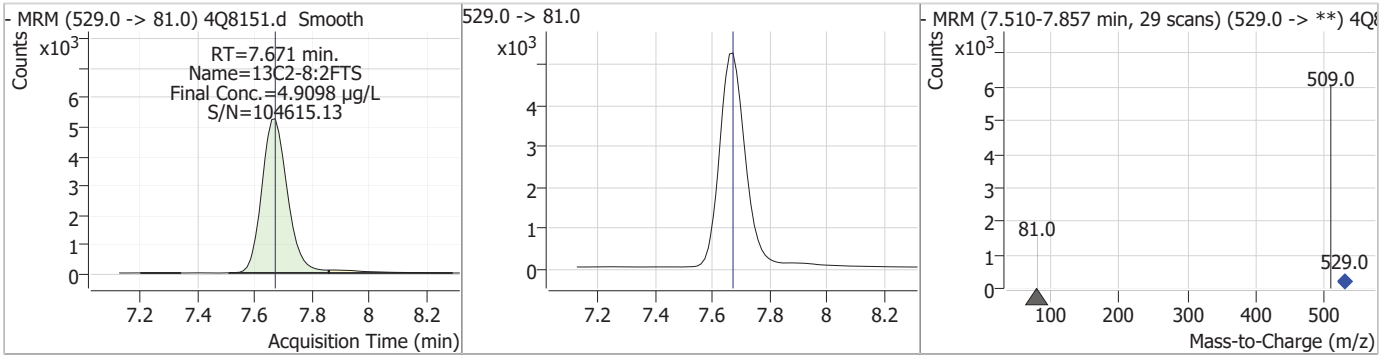
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.25	7.40	-0.01	32381 (m)	463.0 -> 219.0	28.3	18.7	56.1



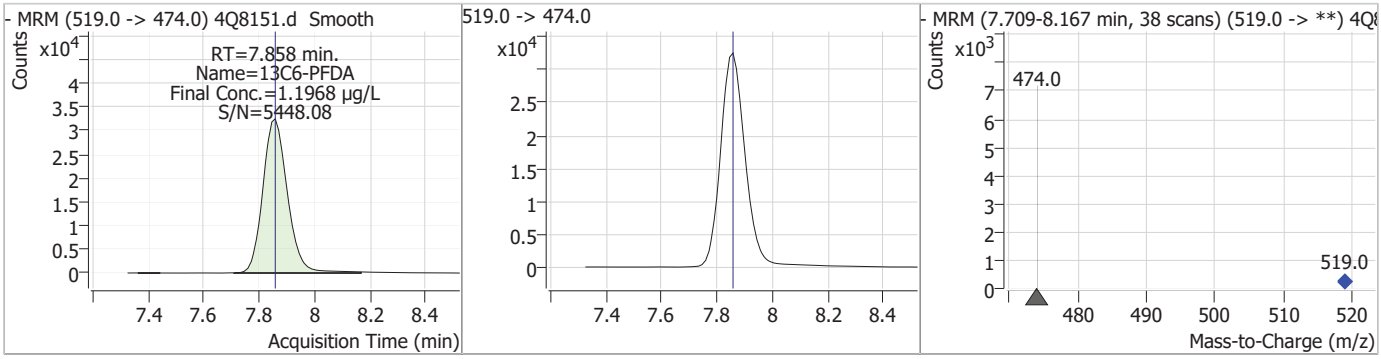
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.06	7.52	-0.01	2166 (m)	449.0 -> 99.0	47.9	27.5	82.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.91	7.67	0.00	32483				

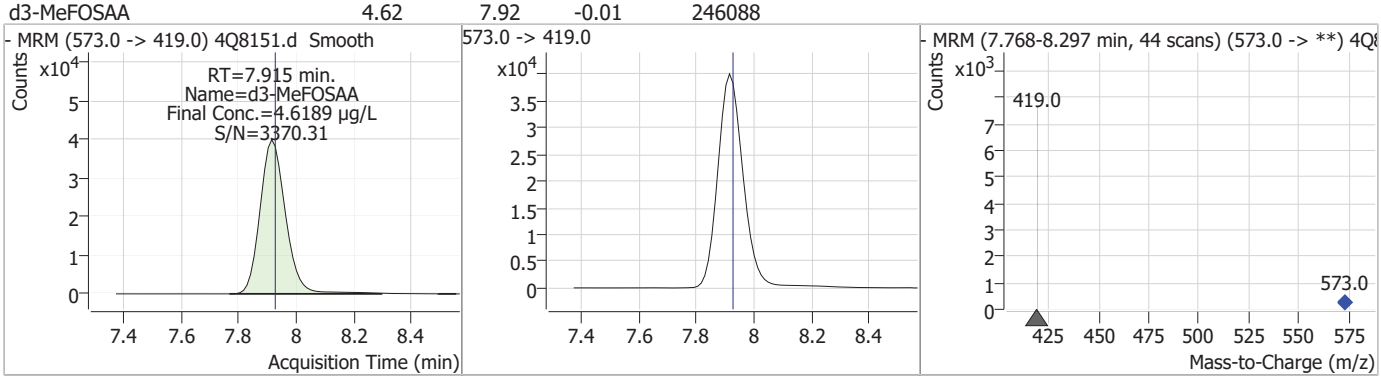


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.20	7.86	0.00	199929				

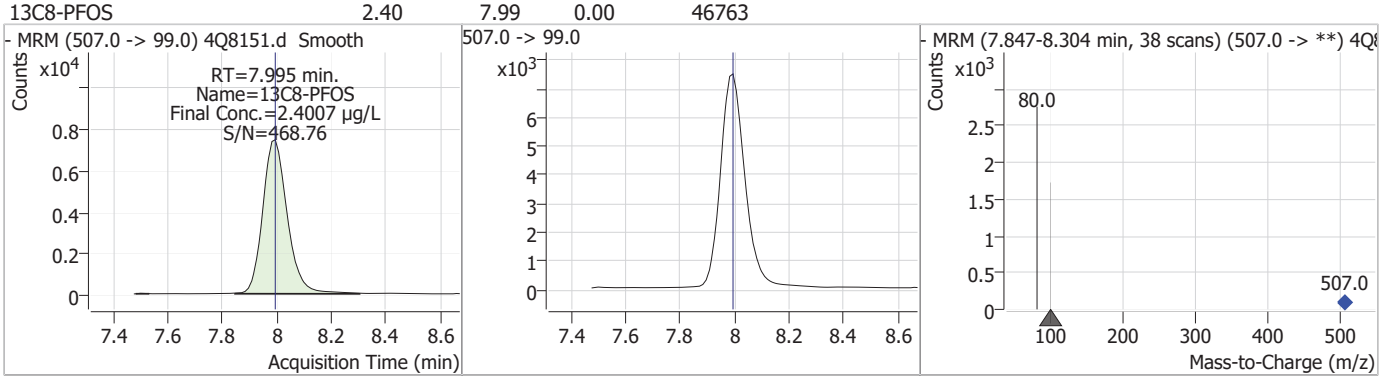


Perfluorinated Compounds by LC/MS/MS

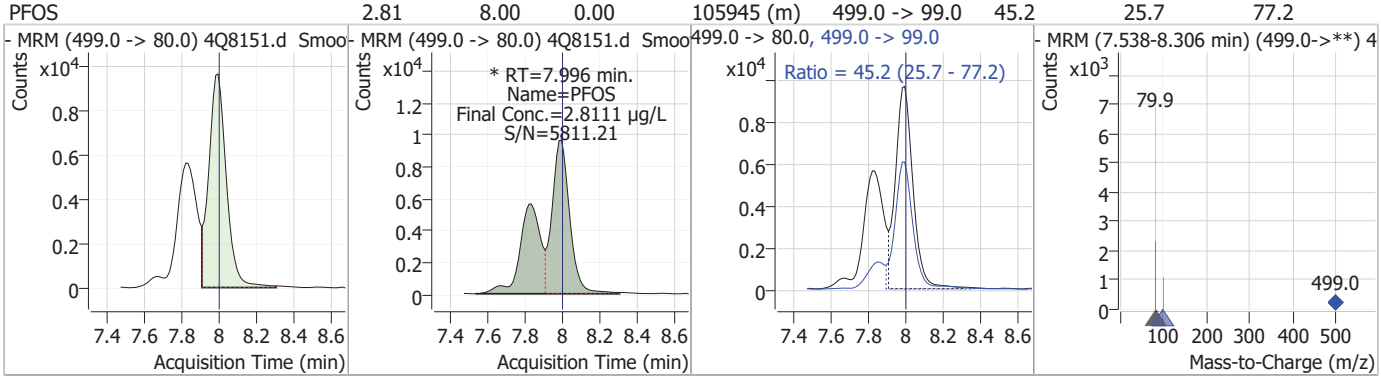
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.62	7.92	-0.01	246088				



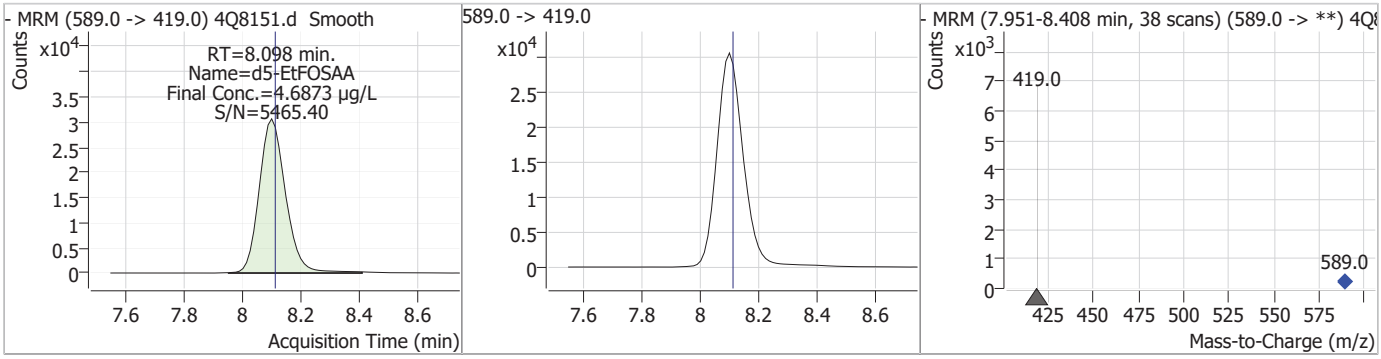
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.40	7.99	0.00	46763				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.81	8.00	0.00	105945 (m)	499.0 -> 99.0	45.2	25.7	77.2

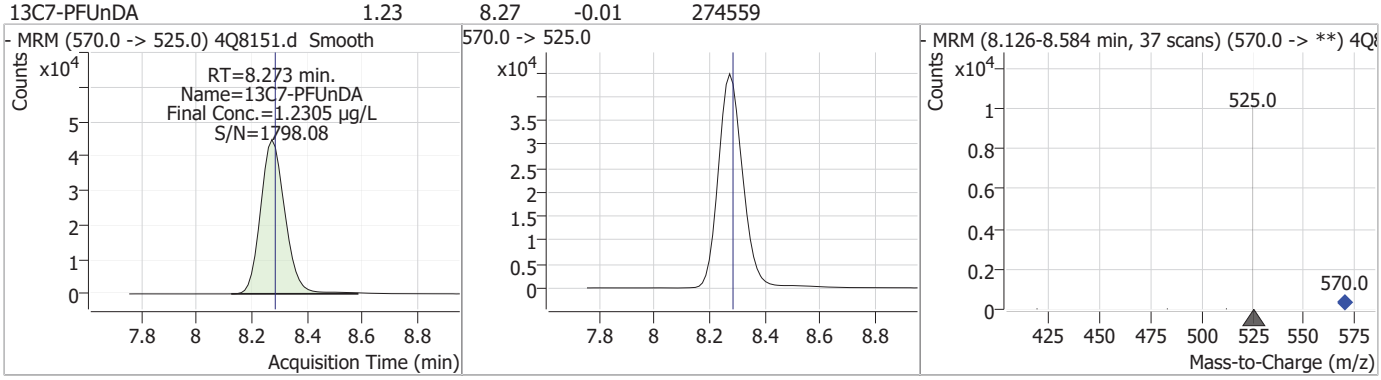


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.69	8.10	-0.01	191735				

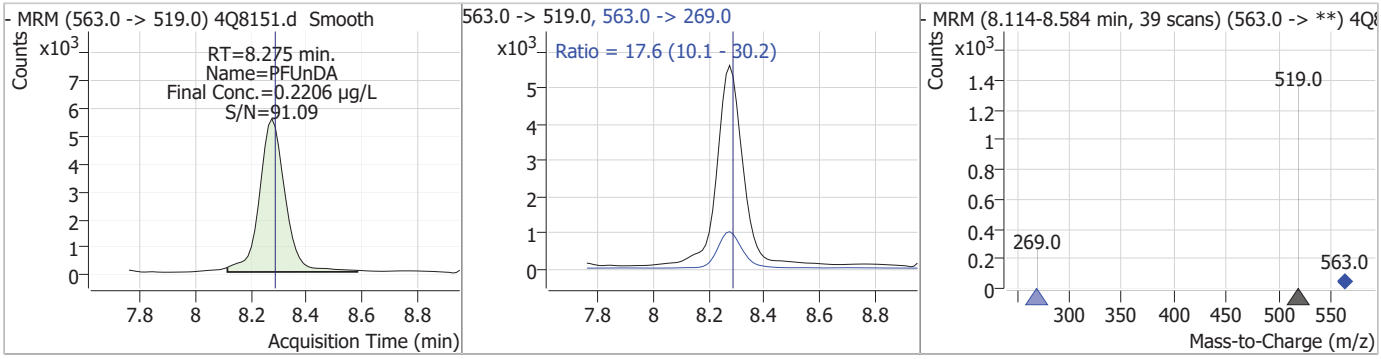


Perfluorinated Compounds by LC/MS/MS

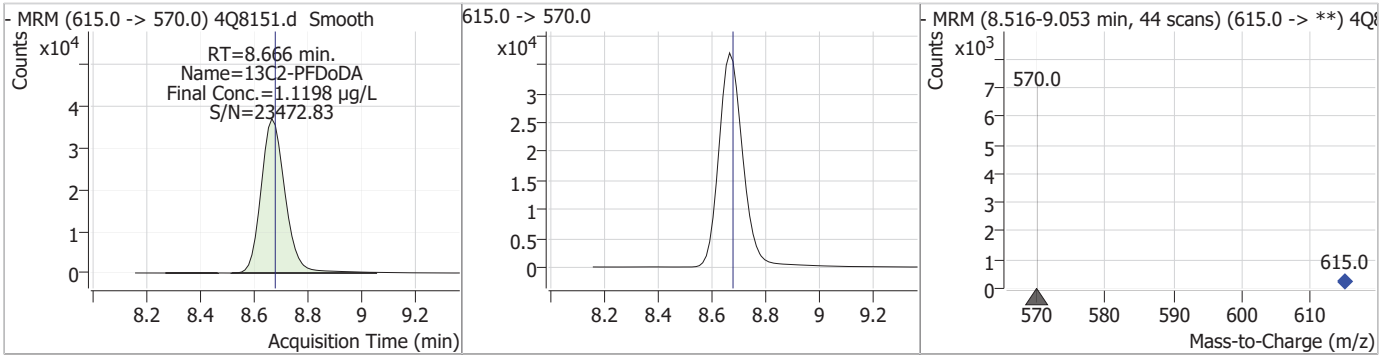
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.23	8.27	-0.01	274559				



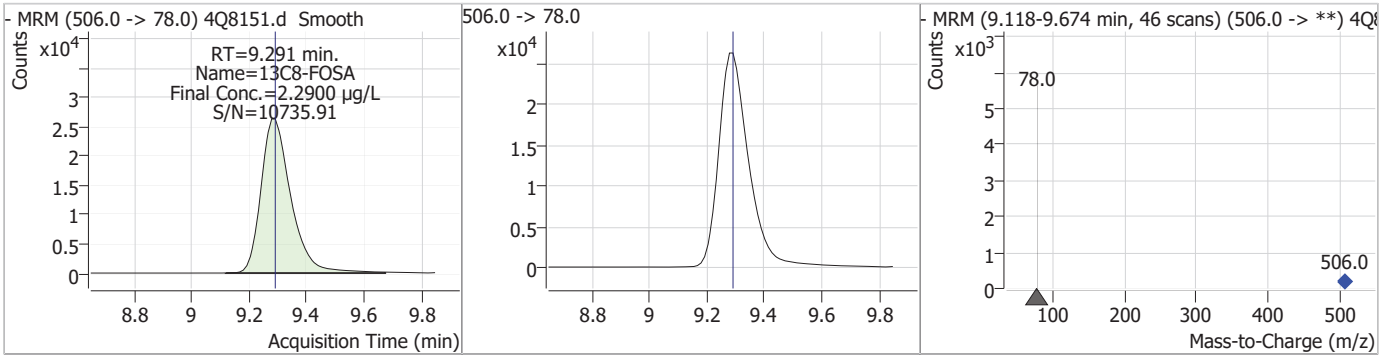
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.22	8.27	-0.01	35800	563.0 -> 269.0	17.6	10.1	30.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.12	8.67	-0.01	228871				

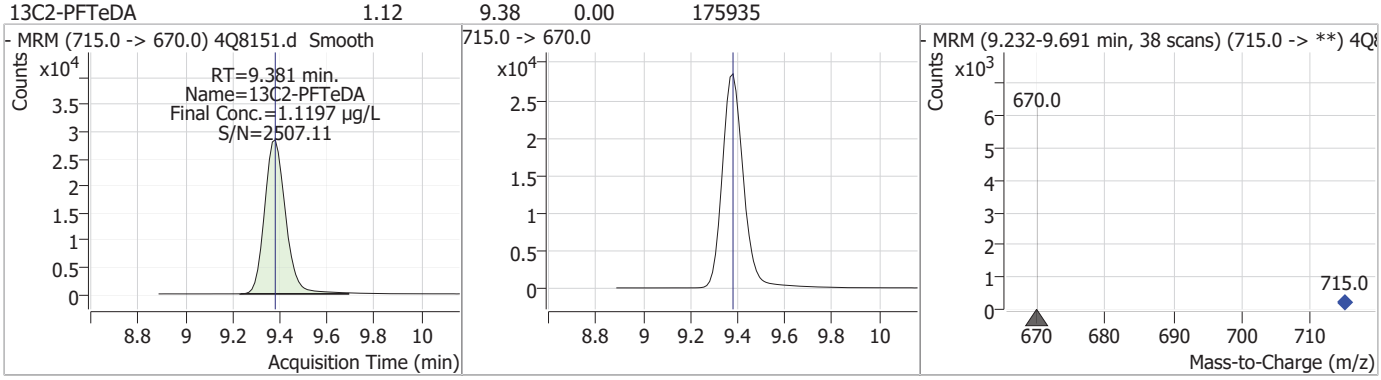


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.29	9.29	0.00	190302				

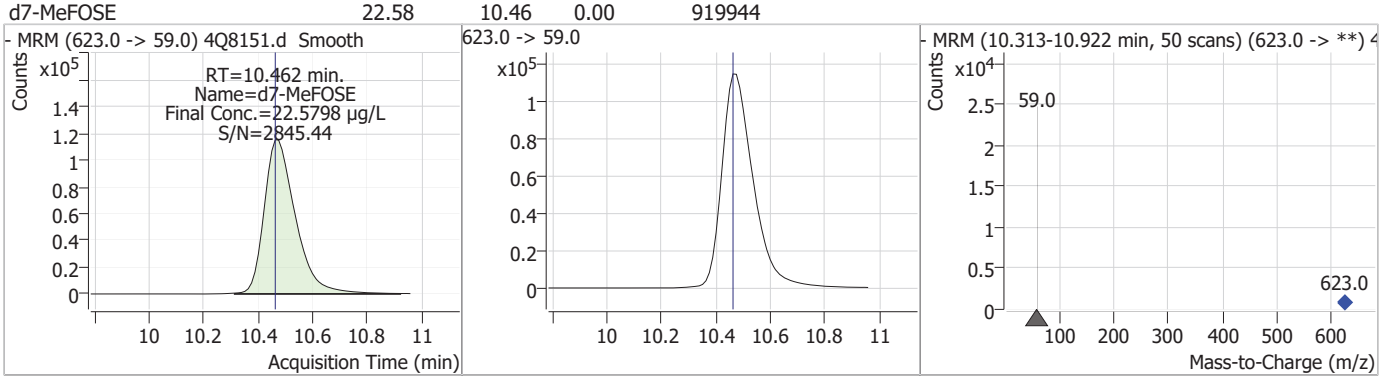


Perfluorinated Compounds by LC/MS/MS

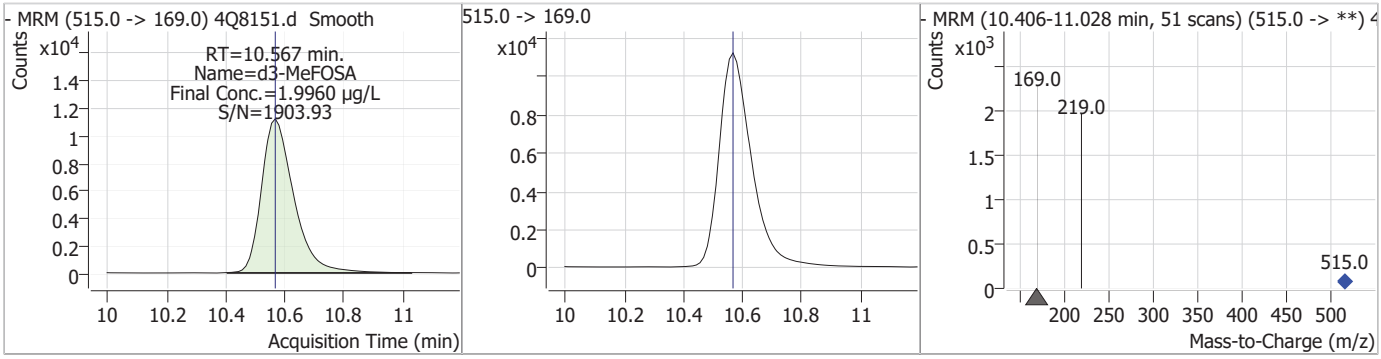
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.12	9.38	0.00	175935				



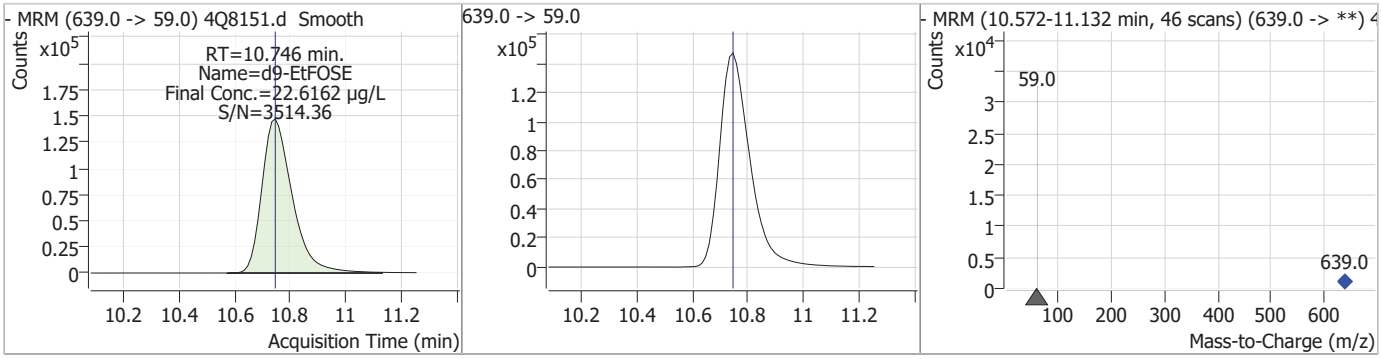
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.58	10.46	0.00	919944				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.00	10.57	0.00	85175				

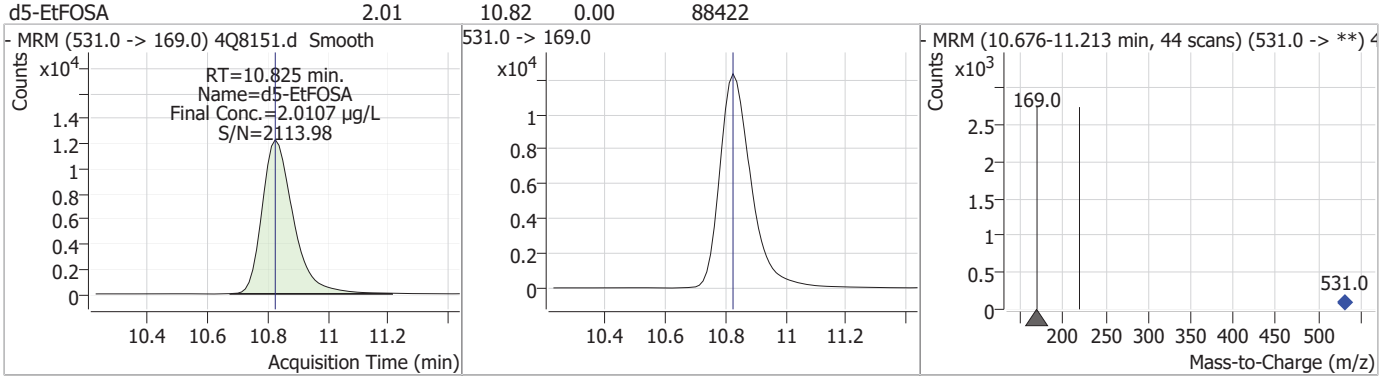


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.62	10.75	0.00	1117269				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.01	10.82	0.00	88422				



7.1.27

7

Manual Integration Approval Summary

Sample Number: JE10205-19
Lab FileID: 4Q8151.D
Injection Time: 04/30/25 19:41

Method: EPA 1633
Analyst approved: 05/01/25 11:50 Maksud Haque
Supervisor approved: 05/06/25 06:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Poor instrument integration
Perfluoroheptanesulfonic acid	375-92-8		7.52	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian 05/15/25 12:50

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8152.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 7:55:16 PM
Sample Name : JE10205-20
Vial : P1-C6
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,520,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	429039	10.00	µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	219964	5.00	µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	150981	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	155130	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	226586	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	92661	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	84684	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	117575	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	108105	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	81959	1.25	µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	78784	2.50	µg/L	0.000
M3-PFBS	5.368	302.0 -> 99.0	13015	2.50	µg/L	0.000
		302.0 -> 80.0	32179			
M3-PFHxS	6.986	402.0 -> 99.0	16662	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	18544	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	5436	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	12128	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	13525	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	105987	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	232214	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	76519	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	459231	25.00	µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	571341	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	45424	2.50	µg/L	0.000
M3-MeFOSA	10.568	515.0 -> 169.0	41825	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	81118	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	412445	5.00	µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	52213	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	558951	2.50	µg/L	0.000
13C2-PFDA	7.859	515.0 -> 470.0	198039	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	220680	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	340438	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	5436	2.08	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 41.5%		
13C2-6:2FTS	6.684	429.0 -> 81.0	12128	2.13	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 42.7%		
13C2-8:2FTS	7.671	529.0 -> 81.0	13525	2.02	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 40.5%		
13C2-PFDoDA	8.666	615.0 -> 570.0	108105	0.50	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 40.4%		
13C2-PFTeDA	9.381	715.0 -> 670.0	81959	0.50	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 39.8%		
13C3-PFBS	5.368	302.0 -> 99.0	13015	1.01	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 40.4%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	16662	0.91 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 36.6%	
13C4-PFBA	2.871	217.0 -> 172.0	429039	4.54 µg/L	-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 45.4%	
13C4-PFHpA	6.291	367.0 -> 322.0	155130	1.01 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 40.5%	
13C5-PFHxA	5.452	318.0 -> 273.0	150981	1.05 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 41.9%	
13C5-PFPeA	4.319	268.0 -> 223.0	219964	2.01 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 40.2%	
13C6-PFDA	7.858	519.0 -> 474.0	84684	0.48 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 38.7%	
13C7-PFUnDA	8.273	570.0 -> 525.0	117575	0.50 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 40.2%	
13C8-FOSA	9.291	506.0 -> 78.0	78784	0.95 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 37.8%	
13C8-PFOA	6.897	421.0 -> 376.0	226586	1.01 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 40.6%	
13C8-PFOS	7.995	507.0 -> 99.0	18544	0.95 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 38.0%	
13C9-PFNA	7.403	472.0 -> 427.0	92661	0.51 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 40.5%	
d3-MeFOSAA	7.915	573.0 -> 419.0	105987	1.98 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 39.7%	
13C3-HFPO-DA	5.779	287.0 -> 169.0	232214	4.10 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 41.0%	
d3-MeFOSA	10.568	515.0 -> 169.0	41825	0.98 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 39.1%	
d5-EtFOSAA	8.098	589.0 -> 419.0	76519	1.87 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 37.3%	
d7-MeFOSE	10.462	623.0 -> 59.0	459231	11.24 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 45.0%	
d9-EtFOSE	10.746	639.0 -> 59.0	571341	11.53 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 46.1%	
d5-EtFOSA	10.825	531.0 -> 169.0	45424	1.03 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 41.2%	
Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	6.684	427.0 -> 407.0	28214	2.32 µg/L	99
		427.0 -> 81.0	13447		
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	5.369	299.0 -> 80.0	2853	0.19 µg/L	83
		299.0 -> 99.0	1462		
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

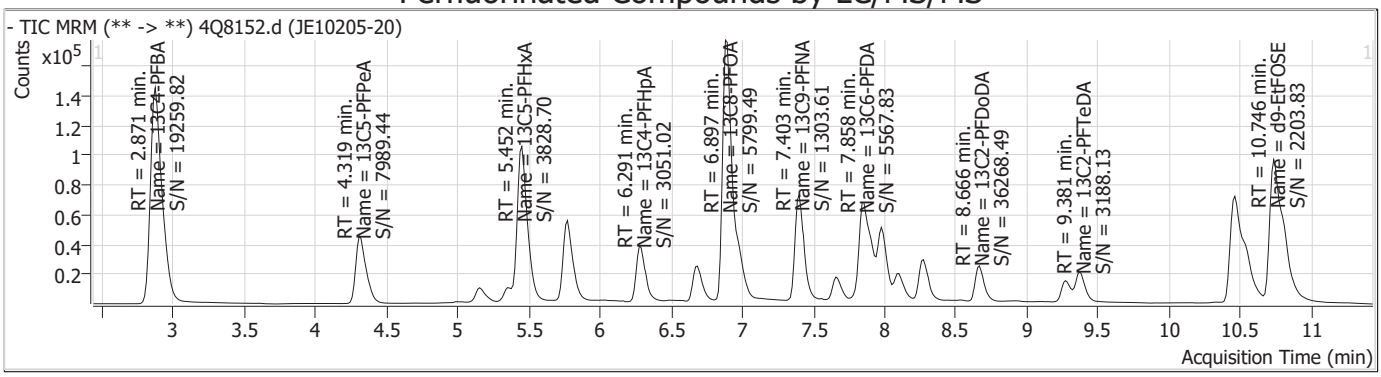
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.292	363.0 -> 319.0	13532	0.14	µg/L		96
		363.0 -> 169.0	3092				
PFHpS	-	449.0 -> 80.0	-	N.D.			
		449.0 -> 99.0					
PFHxA	5.455	313.0 -> 269.0	17639	0.27	µg/L		98
		313.0 -> 119.0	683				
PFHxS	6.987	399.0 -> 80.0	10171	0.70	µg/L	m	98
		399.0 -> 99.0	5580				
PFNA	7.404	463.0 -> 419.0	8208	0.15	µg/L	m	85
		463.0 -> 219.0	2342				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	6.898	413.0 -> 369.0	15877	0.21	µg/L	m	97
		413.0 -> 169.0	4900				
PFOS	7.996	499.0 -> 80.0	23380	1.56	µg/L	m	95
		499.0 -> 99.0	11176				
PFPeA	4.321	263.0 -> 219.0	13745	0.40	µg/L		100
PFPeS	-	349.0 -> 80.0	-	N.D.			
		349.0 -> 99.0					
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	8.275	563.0 -> 519.0	7096	0.10	µg/L	m	90
		563.0 -> 269.0	1757				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

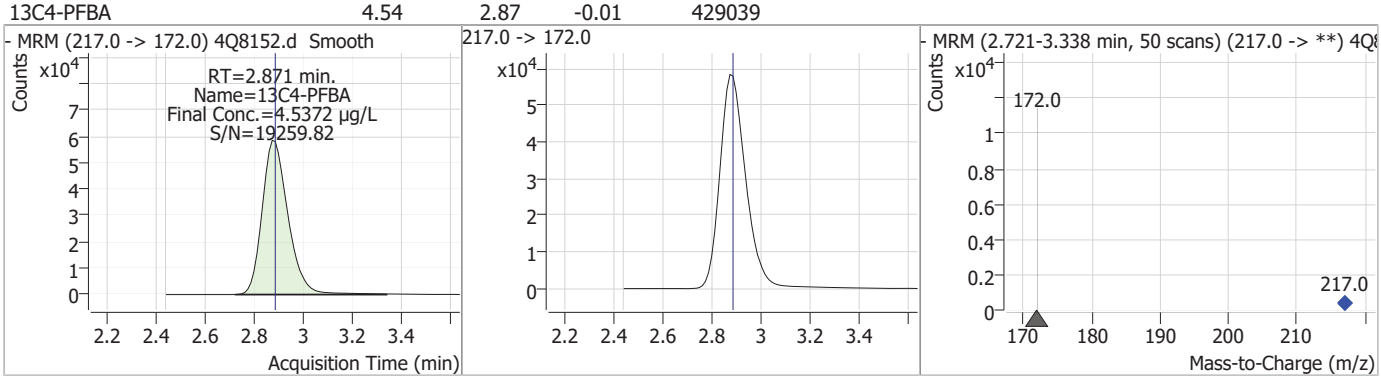
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

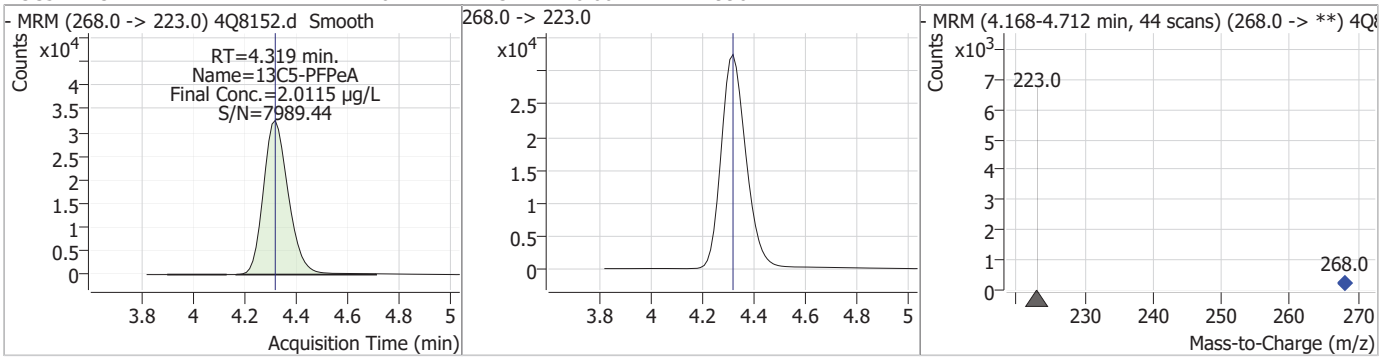
Perfluorinated Compounds by LC/MS/MS



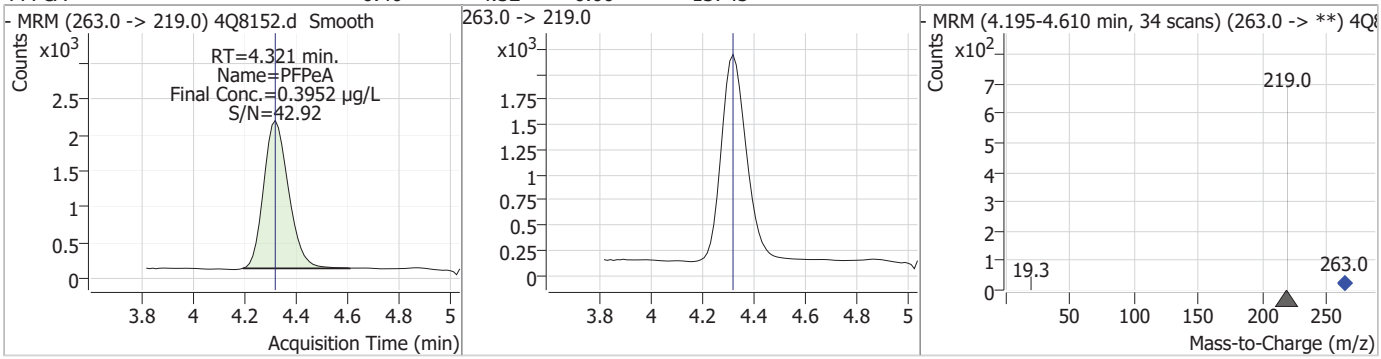
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	4.54	2.87	-0.01	429039				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	2.01	4.32	0.00	219964				

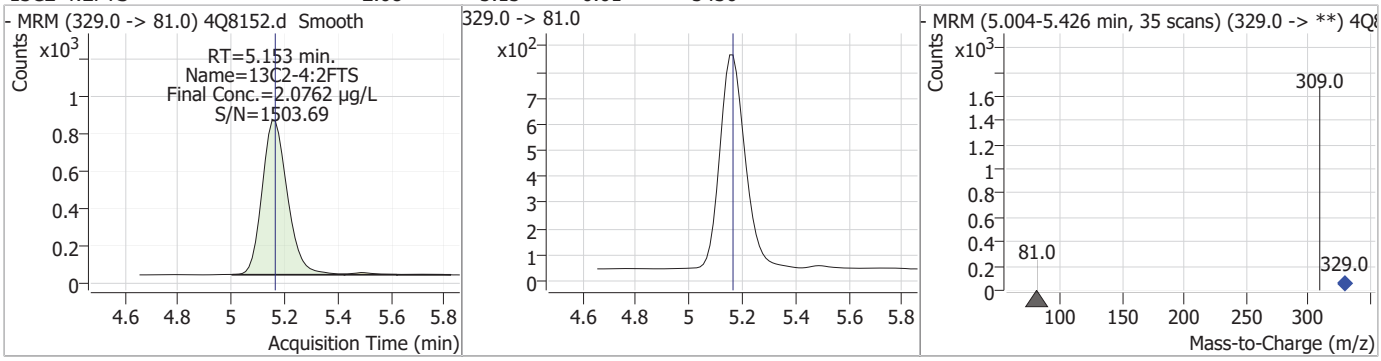


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.40	4.32	0.00	13745				

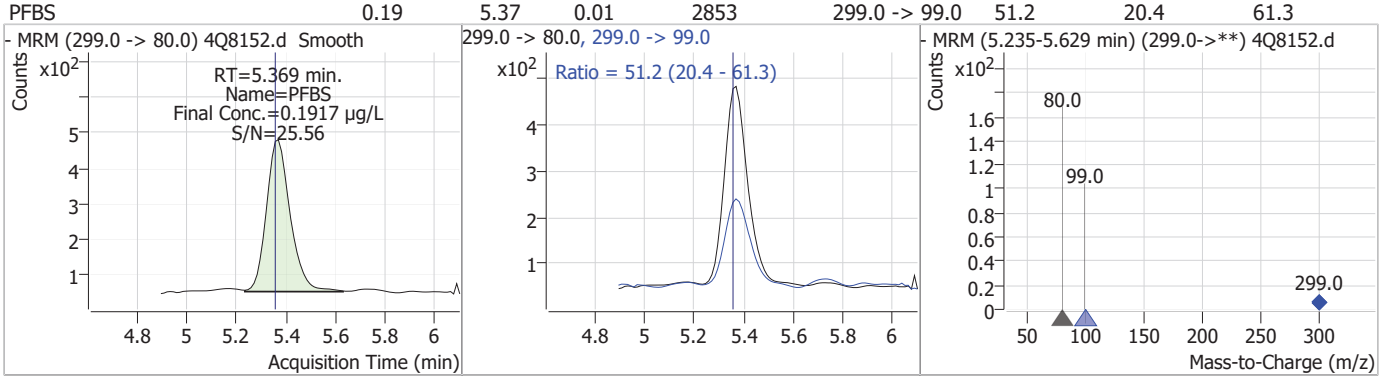


Perfluorinated Compounds by LC/MS/MS

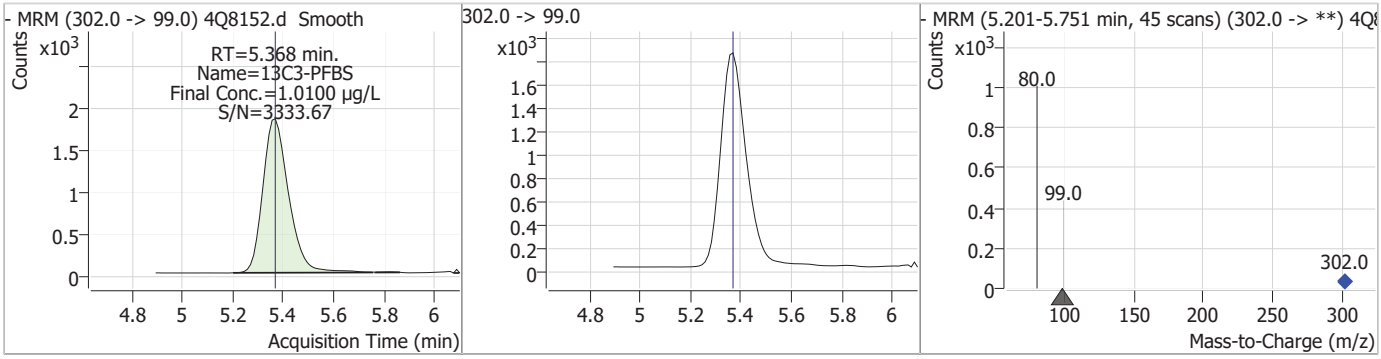
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	2.08	5.15	-0.01	5436				



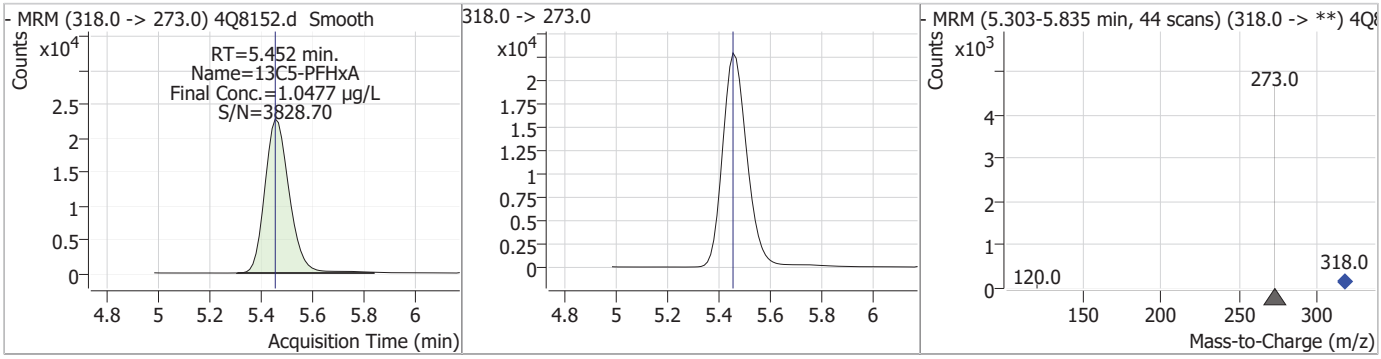
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.19	5.37	0.01	2853	299.0 -> 99.0	51.2	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	1.01	5.37	0.00	13015				

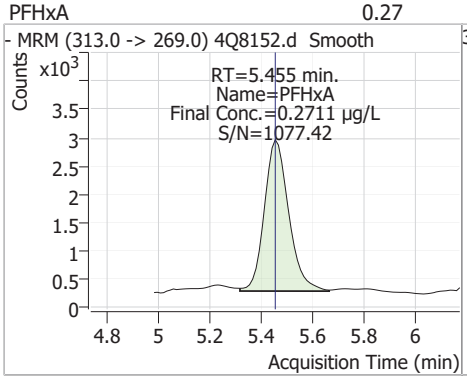


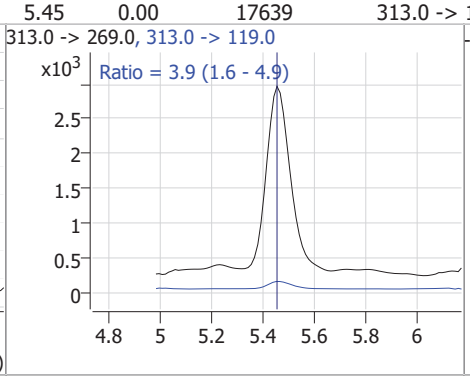
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	1.05	5.45	0.00	150981				

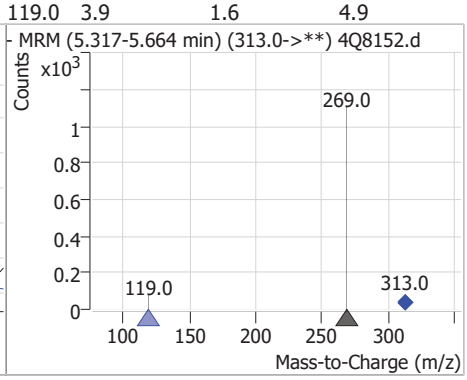


Perfluorinated Compounds by LC/MS/MS

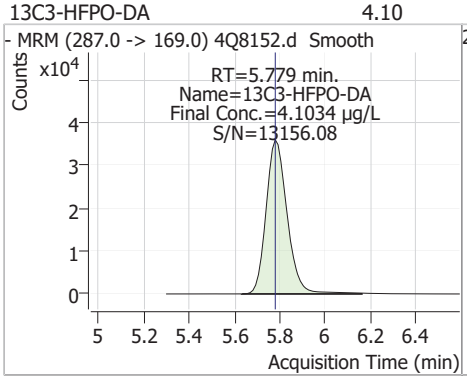
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.27	5.45	0.00	17639	313.0 -> 119.0	3.9	1.6	4.9

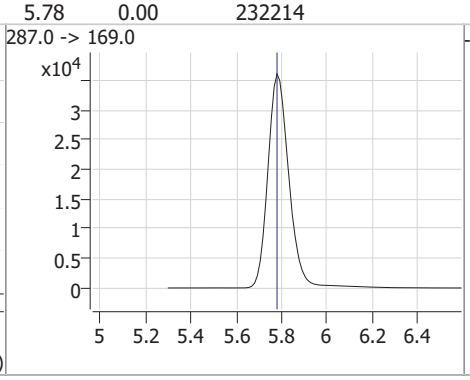


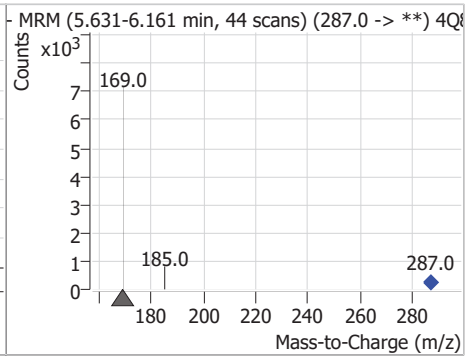




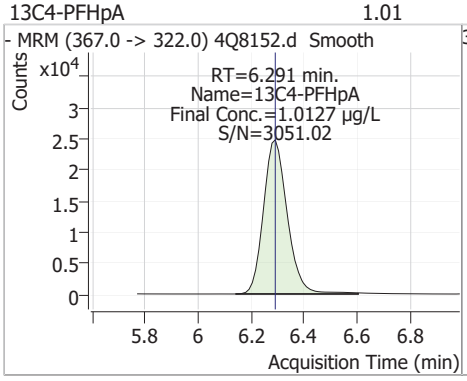
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	4.10	5.78	0.00	232214				

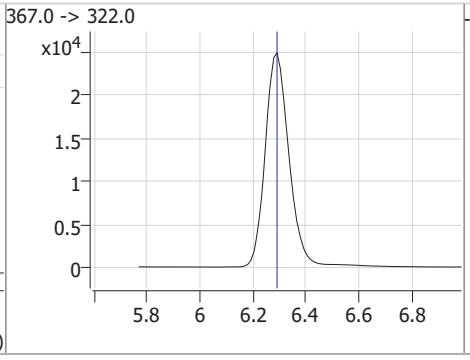


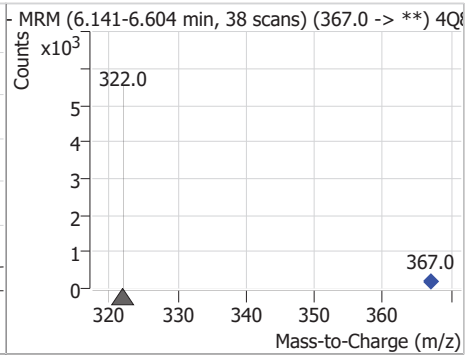




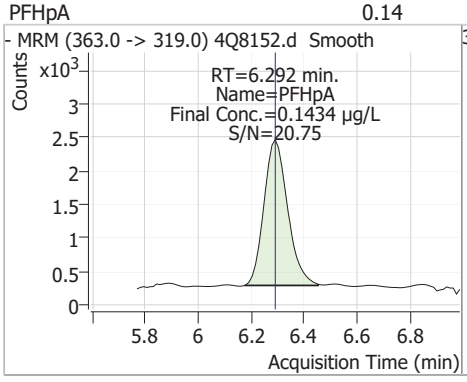
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	1.01	6.29	0.00	155130				

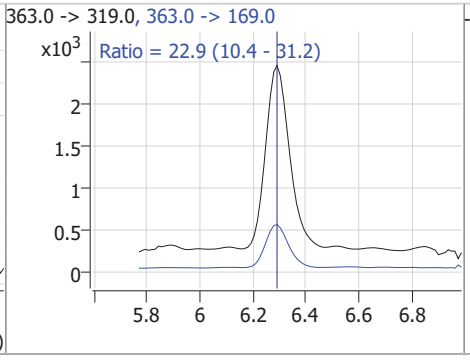


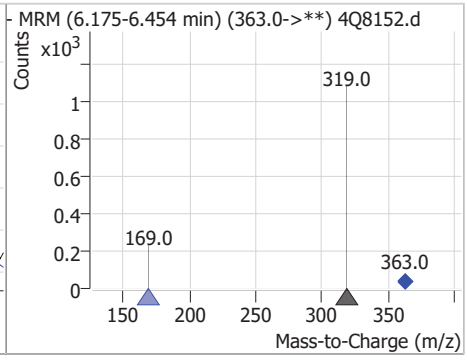




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.14	6.29	0.00	13532	363.0 -> 169.0	22.9	10.4	31.2

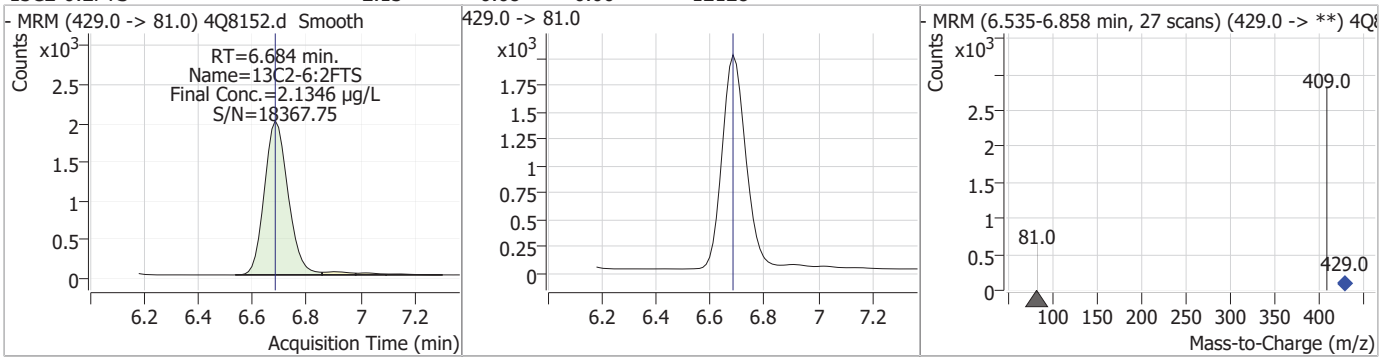




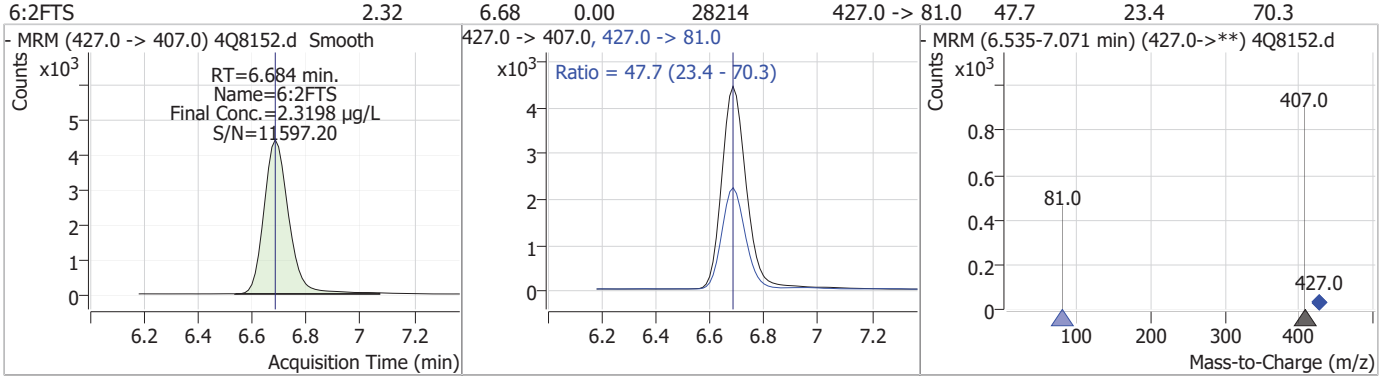


Perfluorinated Compounds by LC/MS/MS

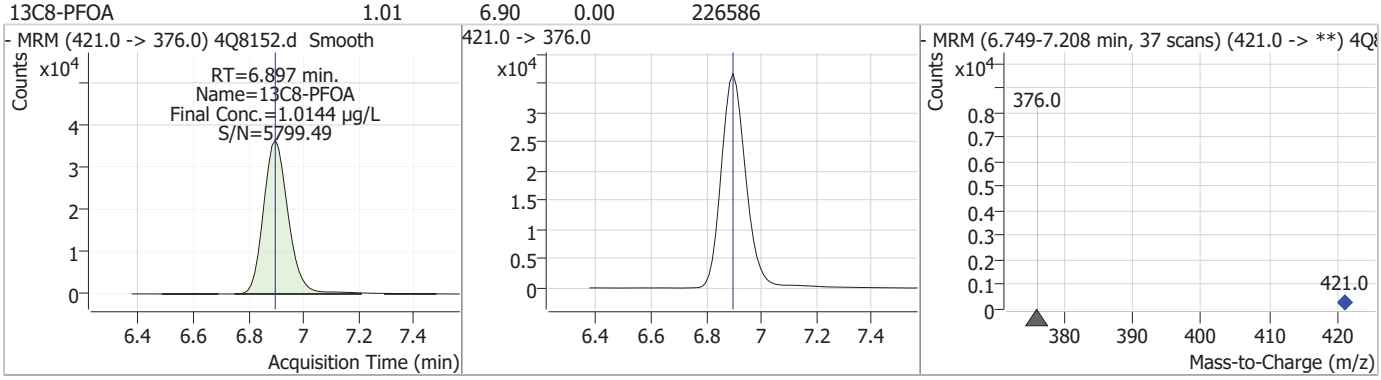
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	2.13	6.68	0.00	12128				



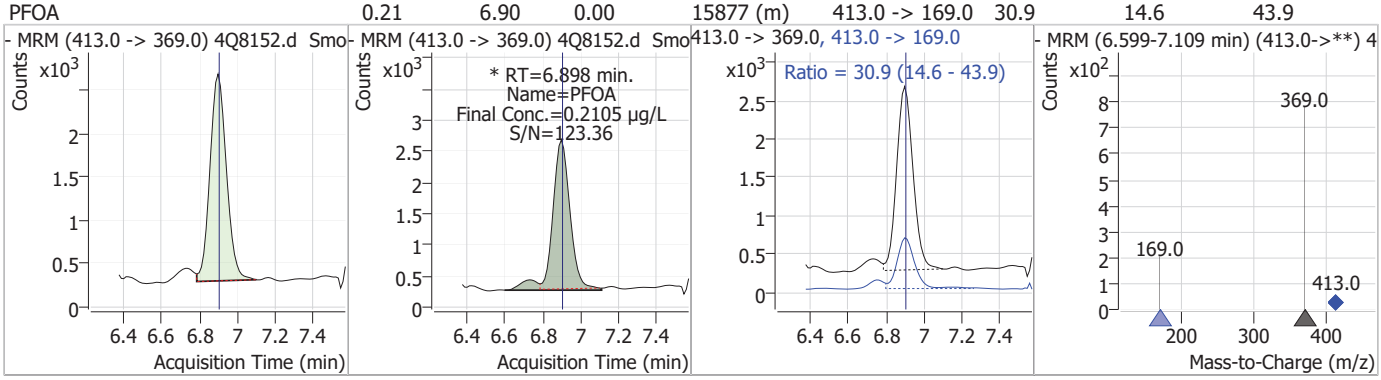
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	2.32	6.68	0.00	28214	427.0 -> 81.0	47.7	23.4	70.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	1.01	6.90	0.00	226586				

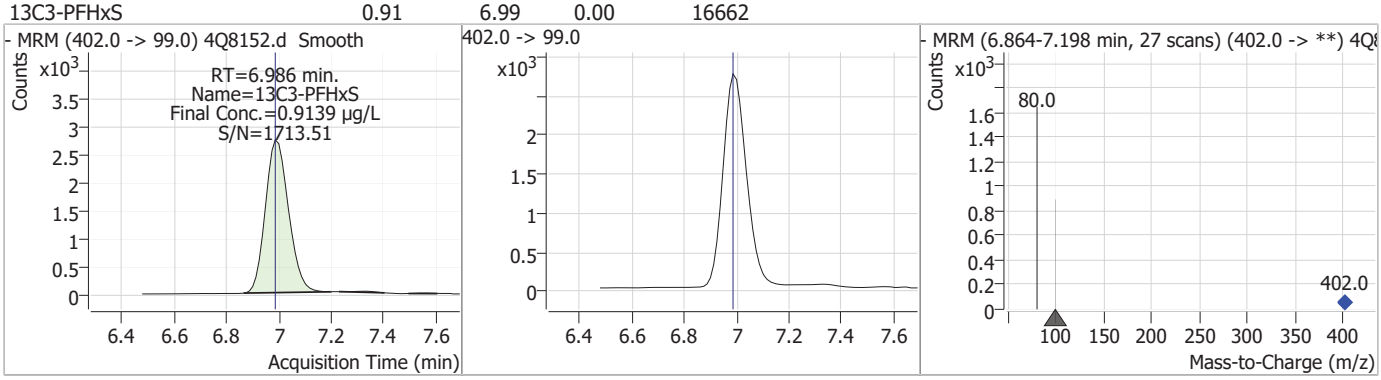


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.21	6.90	0.00	15877 (m)	413.0 -> 169.0	30.9	14.6	43.9

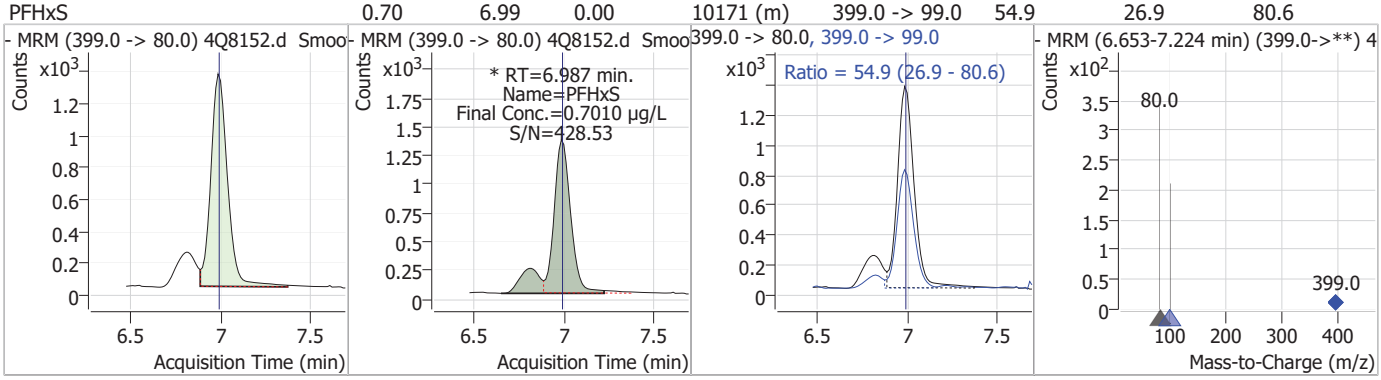


Perfluorinated Compounds by LC/MS/MS

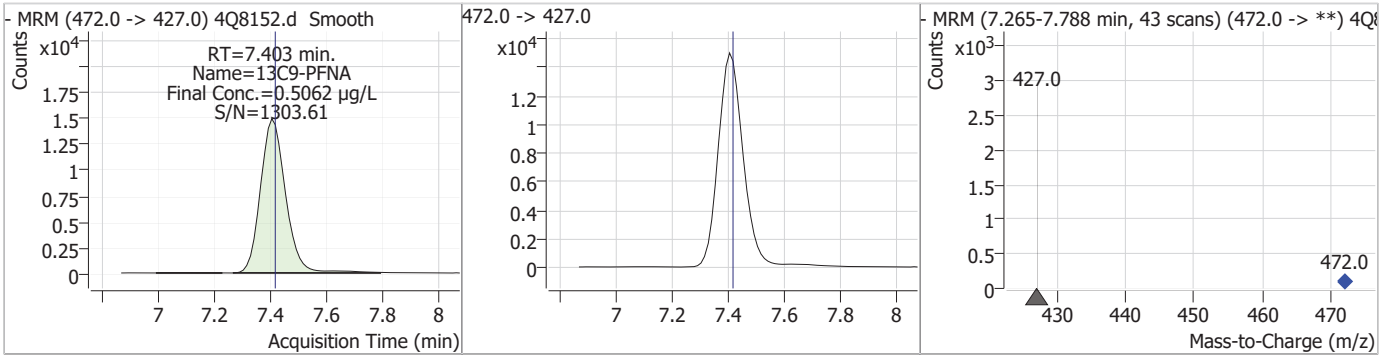
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	0.91	6.99	0.00	16662				



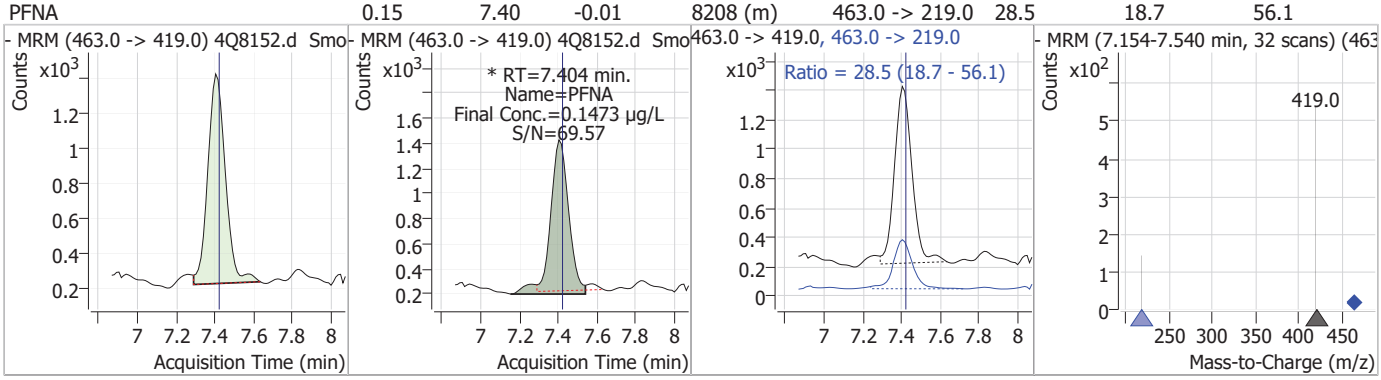
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.70	6.99	0.00	10171 (m)	399.0 -> 99.0	54.9	26.9	80.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	0.51	7.40	-0.01	92661				

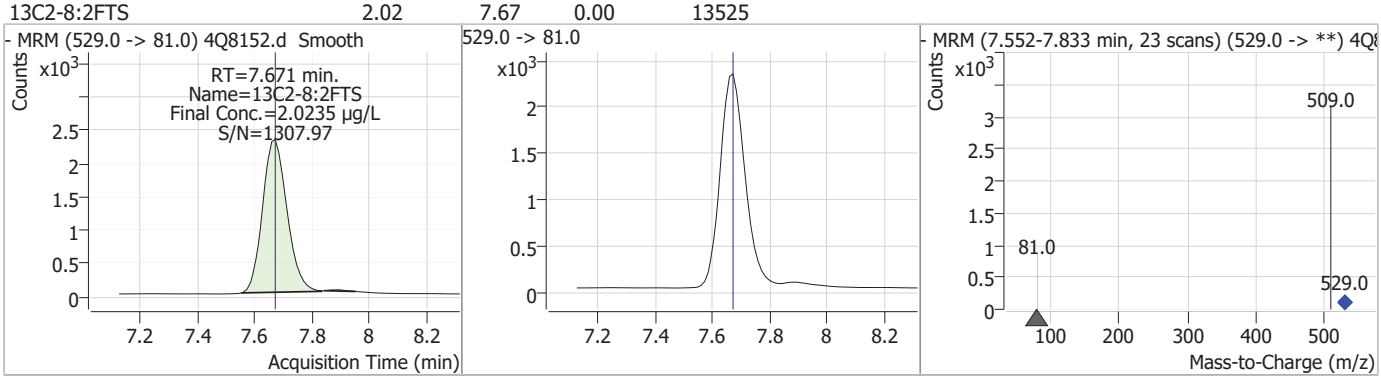


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.15	7.40	-0.01	8208 (m)	463.0 -> 219.0	28.5	18.7	56.1

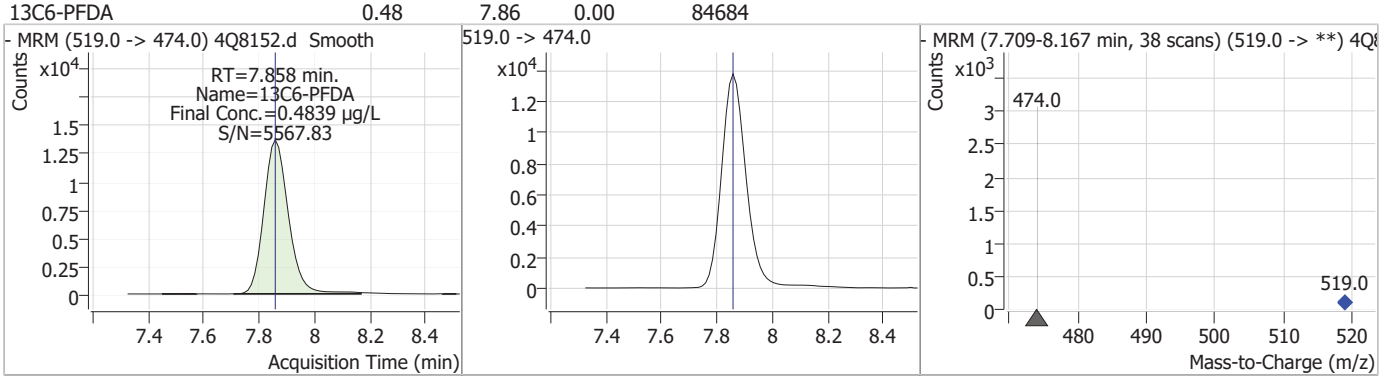


Perfluorinated Compounds by LC/MS/MS

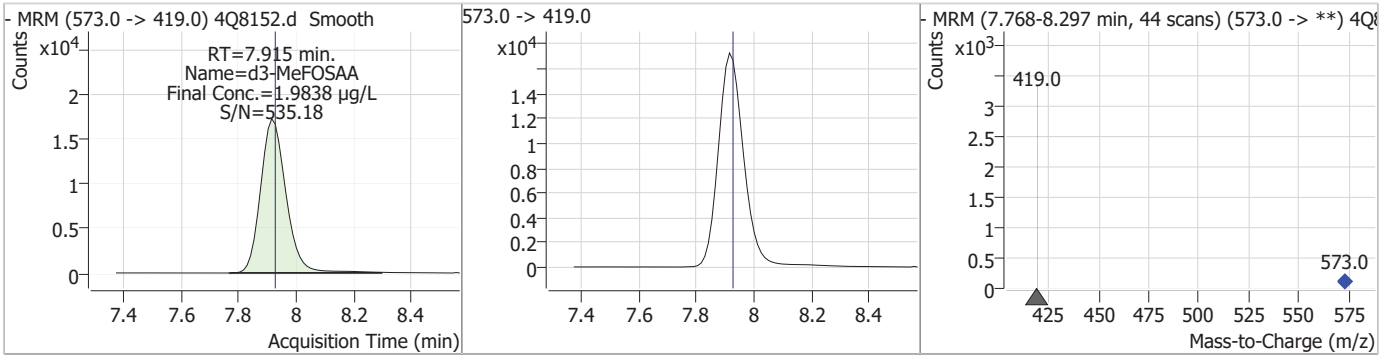
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	2.02	7.67	0.00	13525				



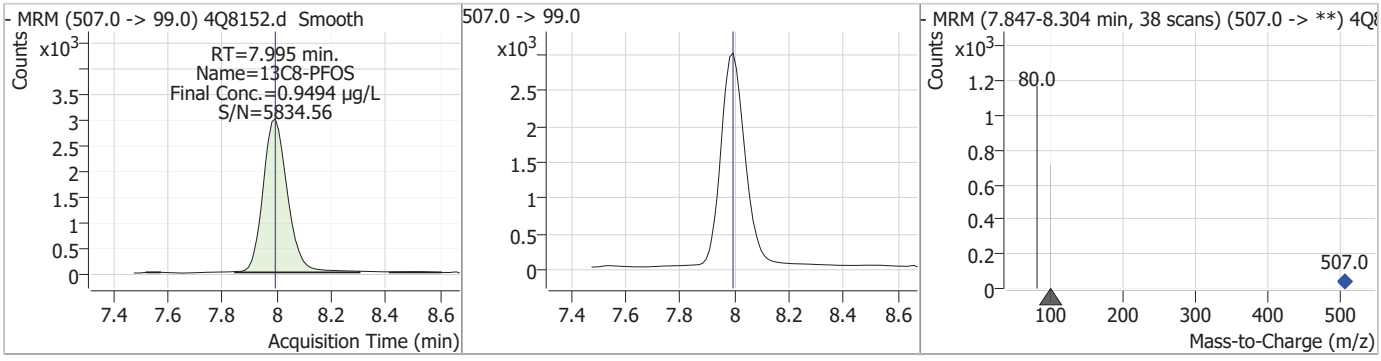
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	0.48	7.86	0.00	84684				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	1.98	7.92	-0.01	105987				

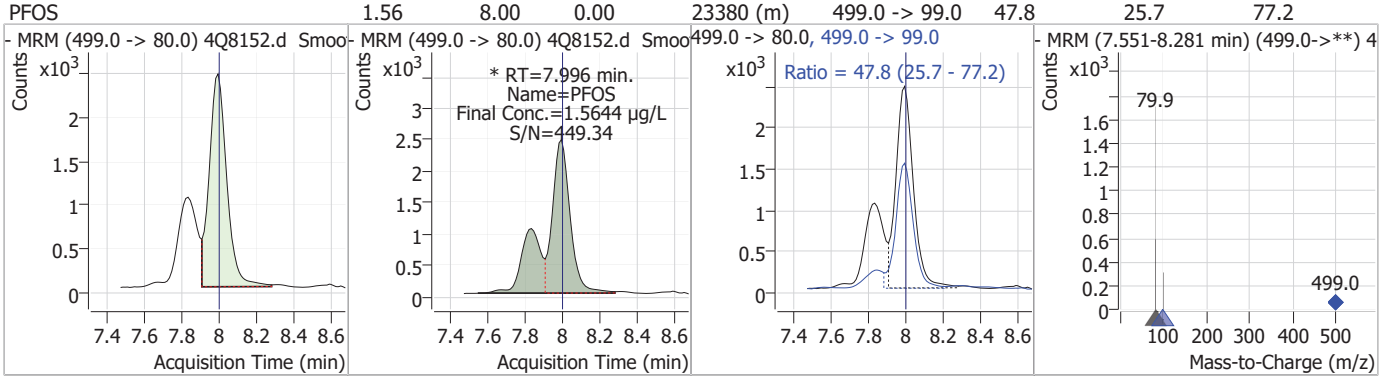


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	0.95	7.99	0.00	18544				

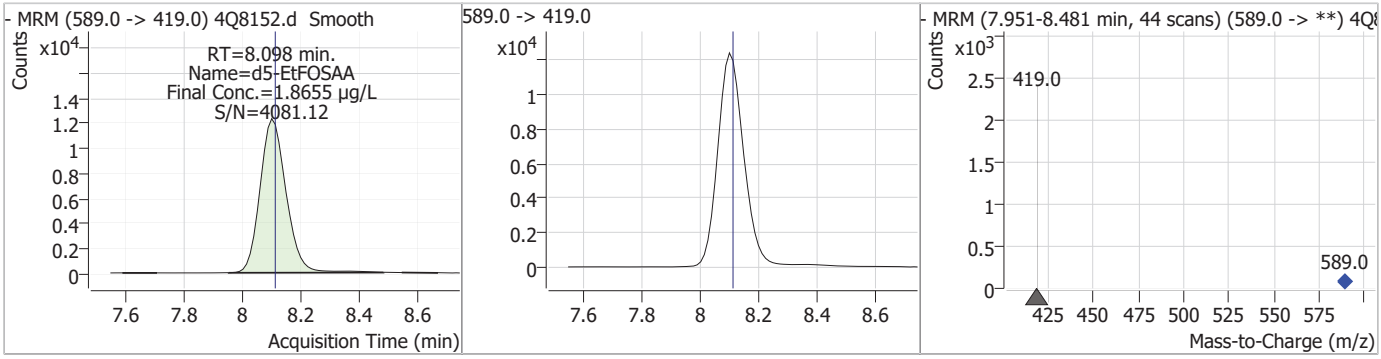


Perfluorinated Compounds by LC/MS/MS

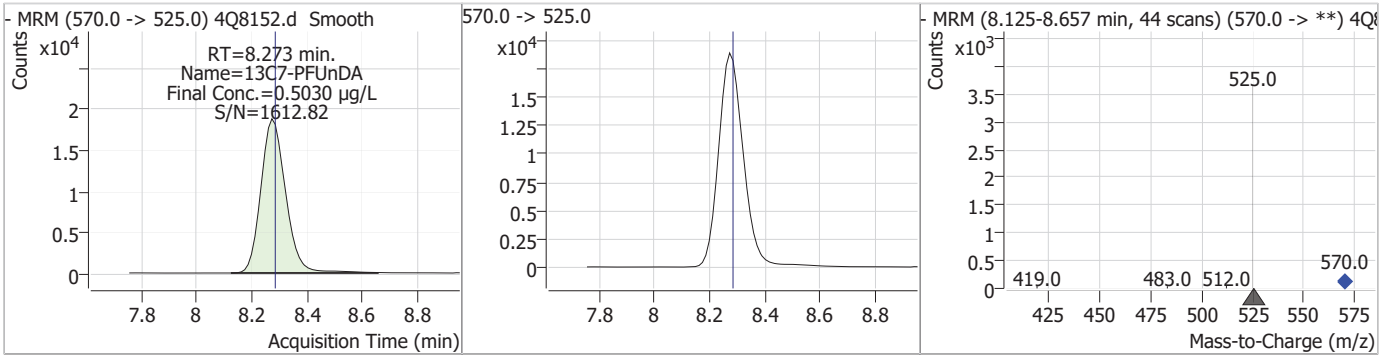
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	1.56	8.00	0.00	23380 (m)	499.0 -> 99.0	47.8	25.7	77.2



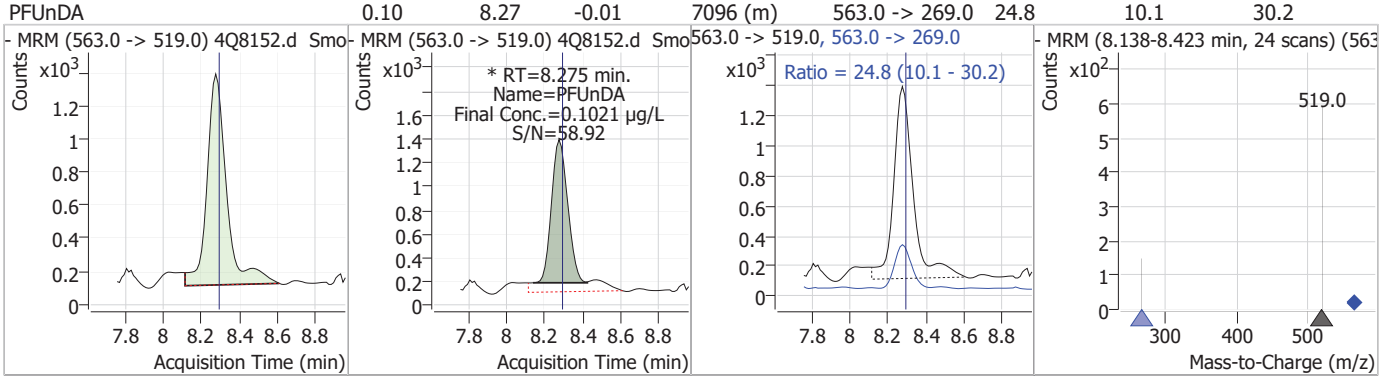
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	1.87	8.10	-0.01	76519				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	0.50	8.27	-0.01	117575				

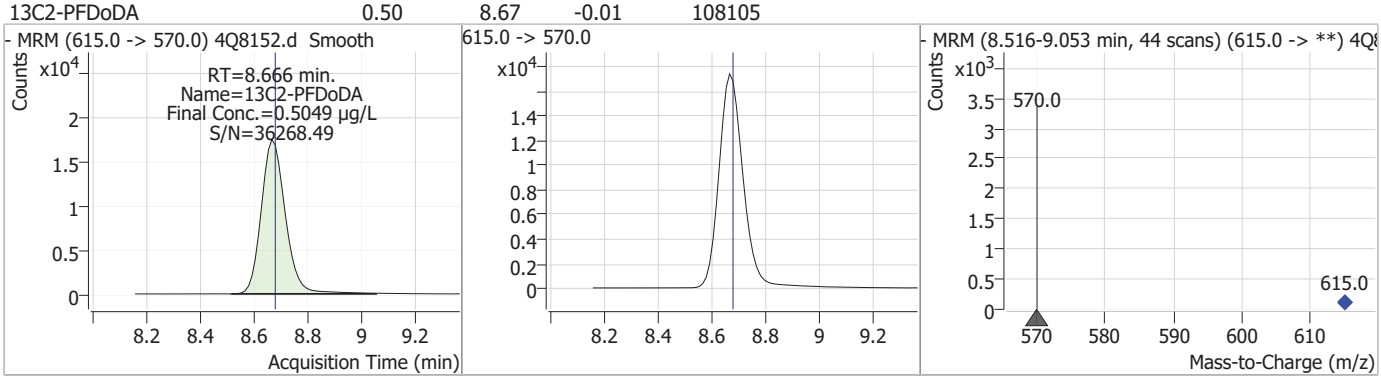


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.10	8.27	-0.01	7096 (m)	563.0 -> 269.0	24.8	10.1	30.2

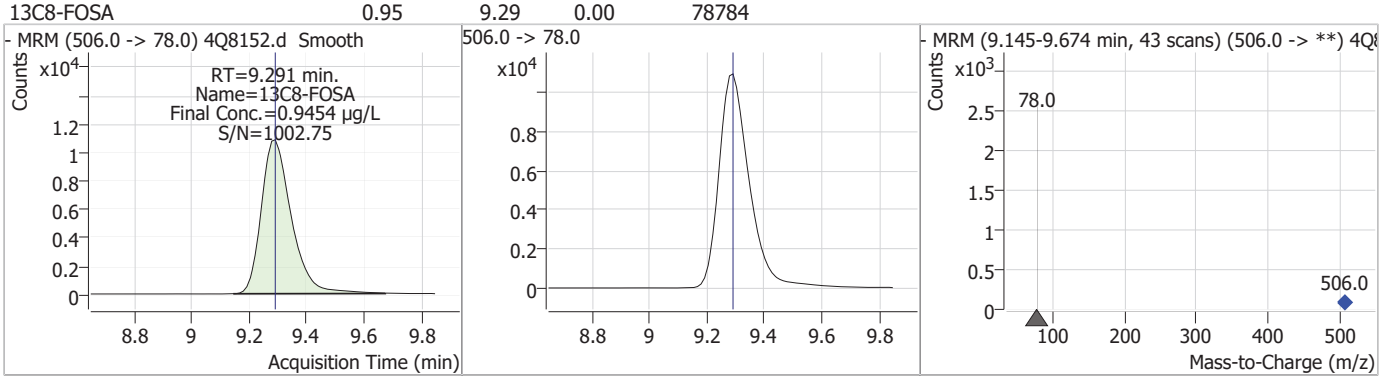


Perfluorinated Compounds by LC/MS/MS

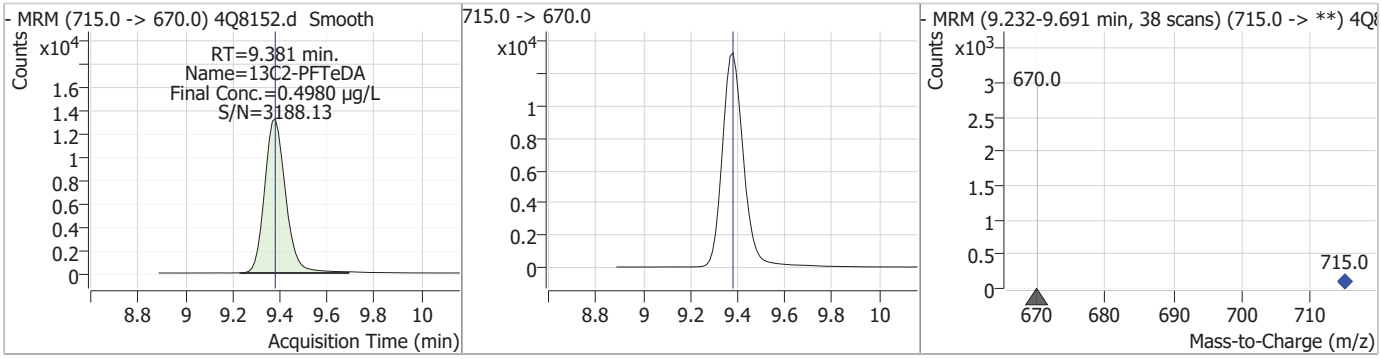
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	0.50	8.67	-0.01	108105				



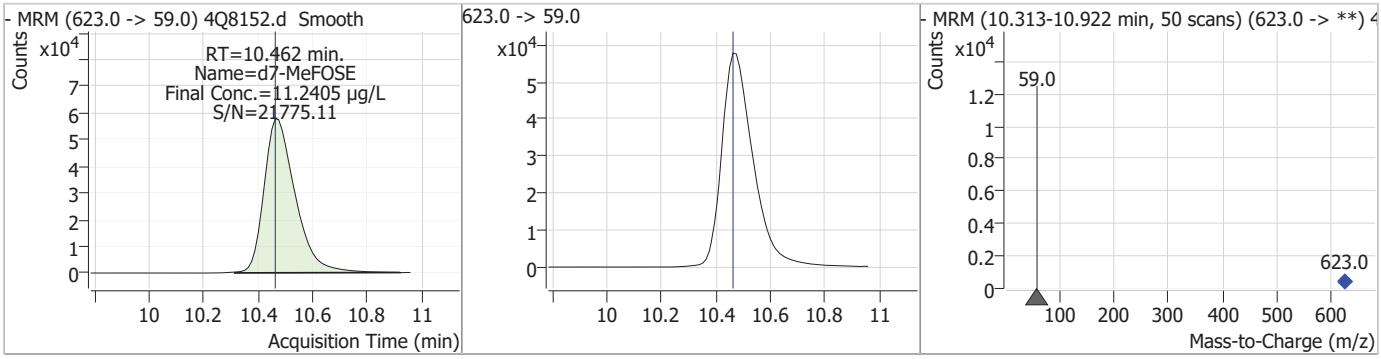
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	0.95	9.29	0.00	78784				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.50	9.38	0.00	81959				

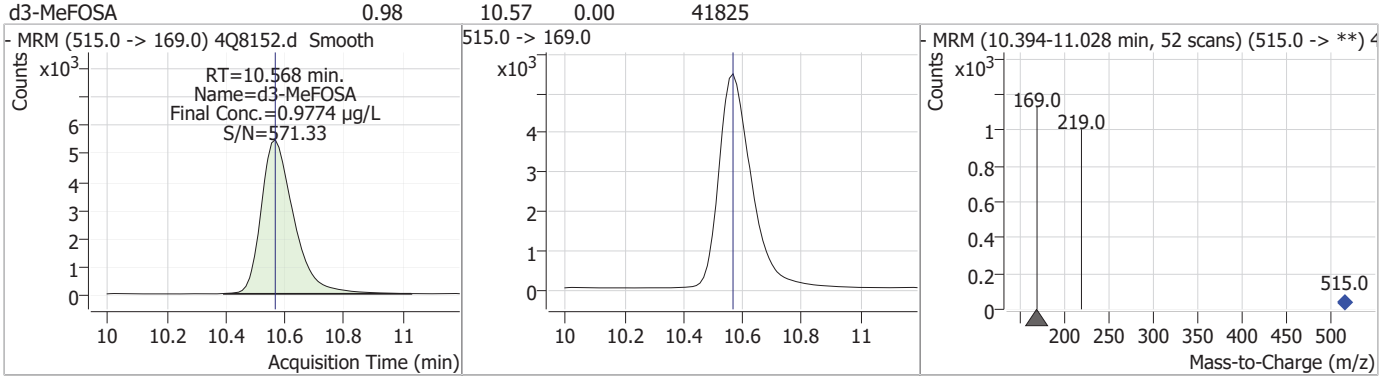


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	11.24	10.46	0.00	459231				

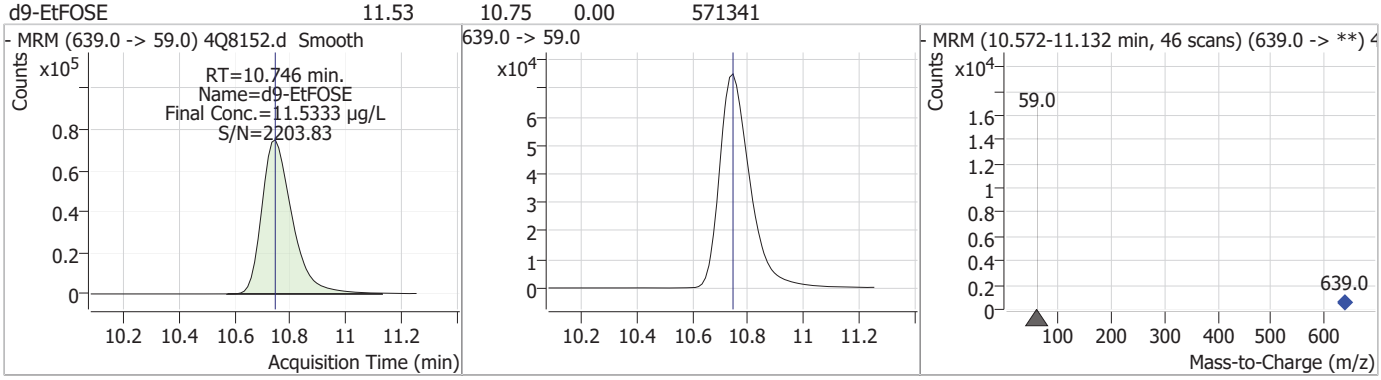


Perfluorinated Compounds by LC/MS/MS

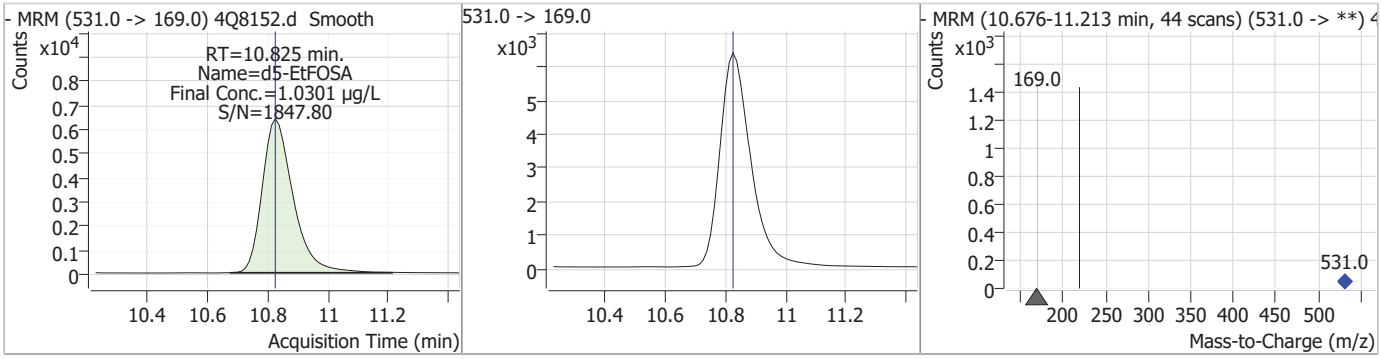
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	0.98	10.57	0.00	41825				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	11.53	10.75	0.00	571341				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.03	10.82	0.00	45424				



Manual Integration Approval Summary

Sample Number: JE10205-20
Lab FileID: 4Q8152.D
Injection Time: 04/30/25 19:55

Method: EPA 1633
Analyst approved: 05/01/25 11:50 Maksud Haque
Supervisor approved: 05/15/25 12:50 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
Perfluoroundecanoic acid	2058-94-8		8.28	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/15/25 12:46

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33757.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/12/2025 6:14:05 PM
Sample Name : JE10205-20
Vial : P1-C6
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q345.batch.bin
Sample Information : OP63419,T2Q345,70,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	90532	10.00 µg/L	0.000
M5-PFPeA	4.624	268.0 -> 223.0	48484	5.00 µg/L	-0.012
M5-PFHxA	5.732	318.0 -> 273.0	27369	2.50 µg/L	-0.012
M4-PFHpA	6.528	367.0 -> 322.0	23300	2.50 µg/L	-0.012
M8-PFOA	7.111	421.0 -> 376.0	50584	2.50 µg/L	-0.013
M9-PFNA	7.632	472.0 -> 427.0	20034	1.25 µg/L	-0.012
M6-PFDA	8.114	519.0 -> 474.0	13628	1.25 µg/L	-0.025
M7-PFUnDA	8.583	570.0 -> 525.0	21981	1.25 µg/L	-0.024
M2-PFDoDA	9.016	615.0 -> 570.0	20162	1.25 µg/L	-0.025
M2-PFTeDA	9.783	715.0 -> 670.0	15645	1.25 µg/L	-0.012
M8-FOSA	9.333	506.0 -> 78.0	13973	2.50 µg/L	-0.013
M3-PFBS	5.687	302.0 -> 99.0	4843	2.50 µg/L	-0.012
M3-PFHxS	7.238	402.0 -> 99.0	5755	2.50 µg/L	-0.012
M8-PFOS	8.303	507.0 -> 99.0	5373	2.50 µg/L	-0.012
M2-4:2FTS	5.421	329.0 -> 81.0	1358	5.00 µg/L	-0.012
M2-6:2FTS	6.885	429.0 -> 81.0	2820	5.00 µg/L	-0.025
M2-8:2FTS	7.902	529.0 -> 81.0	4247	5.00 µg/L	-0.012
M3-MeFOSAA	8.135	573.0 -> 419.0	28776	5.00 µg/L	-0.025
M3-HFPO-DA	6.062	287.0 -> 169.0	20822	10.00 µg/L	-0.012
M5-EtFOSAA	8.331	589.0 -> 419.0	22025	5.00 µg/L	-0.025
M7-MeFOSE	10.520	623.0 -> 59.0	117740	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	163151	25.00 µg/L	0.000
M5-EtFOSA	10.882	531.0 -> 169.0	8602	2.50 µg/L	-0.012
M3-MeFOSA	10.624	515.0 -> 169.0	8866	2.50 µg/L	0.000
13C4-PFOS	8.291	503.0 -> 80.0	10934	2.50 µg/L	-0.025
13C3-PFBA	3.265	216.0 -> 172.0	42659	5.00 µg/L	0.000
18O2-PFHxS	7.238	403.0 -> 84.0	7132	2.50 µg/L	-0.025
13C4-PFOA	7.111	417.0 -> 372.0	58437	2.50 µg/L	-0.013
13C2-PFDA	8.115	515.0 -> 470.0	16003	1.25 µg/L	-0.025
13C5-PFNA	7.632	468.0 -> 423.0	20033	1.25 µg/L	-0.012
13C2-PFHxA	5.733	315.0 -> 270.0	27930	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.421	329.0 -> 81.0	1358	5.27 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.3%	
13C2-6:2FTS	6.885	429.0 -> 81.0	2820	5.06 µg/L	-0.025
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.1%	
13C2-8:2FTS	7.902	529.0 -> 81.0	4247	4.72 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.4%	
13C2-PFDoDA	9.016	615.0 -> 570.0	20162	0.92 µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 73.8%	
13C2-PFTeDA	9.783	715.0 -> 670.0	15645	0.92 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 73.8%	
13C3-PFBS	5.687	302.0 -> 99.0	4843	2.41 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.5%	
13C3-PFHxS	7.238	402.0 -> 99.0	5755	2.37 µg/L	-0.012

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.7%	
13C4-PFBA	3.263	217.0 -> 172.0	90532	9.02 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 90.2%	
13C4-PFHpA	6.528	367.0 -> 322.0	23300	2.39 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.7%	
13C5-PFHxA	5.732	318.0 -> 273.0	27369	2.24 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 89.5%	
13C5-PFPeA	4.624	268.0 -> 223.0	48484	4.65 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.0%	
13C6-PFDA	8.114	519.0 -> 474.0	13628	1.02 µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 81.8%	
13C7-PFUnDA	8.583	570.0 -> 525.0	21981	1.05 µg/L	-0.024
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 84.1%	
13C8-FOSA	9.333	506.0 -> 78.0	13973	1.85 µg/L	-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 73.9%	
13C8-PFOA	7.111	421.0 -> 376.0	50584	2.11 µg/L	-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 84.6%	
13C8-PFOS	8.303	507.0 -> 99.0	5373	2.25 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.1%	
13C9-PFNA	7.632	472.0 -> 427.0	20034	1.15 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.6%	
d3-MeFOSAA	8.135	573.0 -> 419.0	28776	3.69 µg/L	-0.025
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 73.7%	
13C3-HFPO-DA	6.062	287.0 -> 169.0	20822	10.85 µg/L	-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 108.5%	
d3-MeFOSA	10.624	515.0 -> 169.0	8866	1.51 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 60.3%	
d5-EtFOSAA	8.331	589.0 -> 419.0	22025	3.50 µg/L	-0.025
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 69.9%	
d7-MeFOSE	10.520	623.0 -> 59.0	117740	18.31 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 73.3%	
d9-EtFOSE	10.803	639.0 -> 59.0	163151	18.08 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 72.3%	
d5-EtFOSA	10.882	531.0 -> 169.0	8602	1.45 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 58.0%	
Target Compounds					**QValue**
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0	-	N.D.	
		299.0 -> 99.0			
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			
PFDS	-	599.0 -> 80.0	-	N.D.	

Perfluorinated Compounds by LC/MS/MS

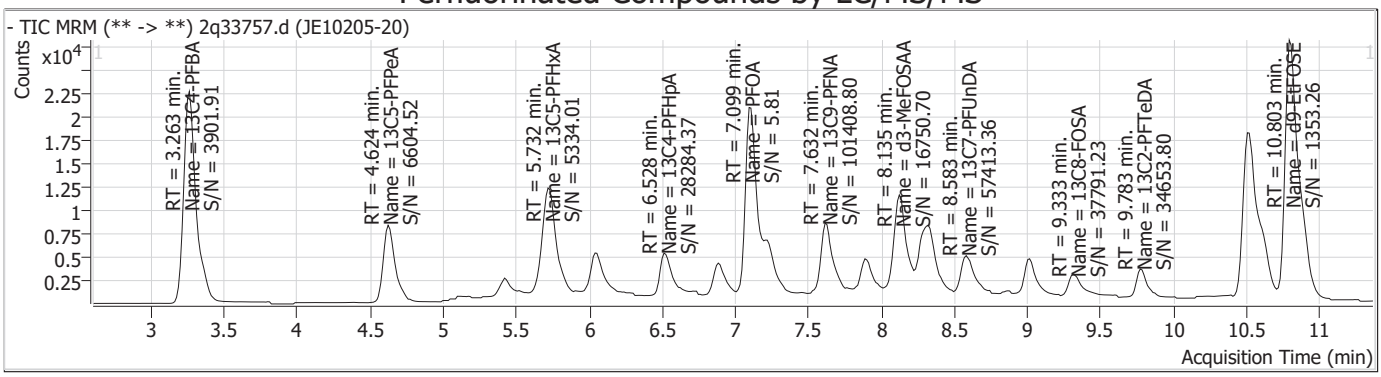
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0					
PFHpA	-	363.0 -> 319.0	-	N.D.			
		363.0 -> 169.0					
PFHpS	-	449.0 -> 80.0	-	N.D.			
		449.0 -> 99.0					
PFHxA	-	313.0 -> 269.0	-	N.D.			
		313.0 -> 119.0					
PFHxS	7.239	399.0 -> 80.0	330	0.08	µg/L		77
		399.0 -> 99.0	234				
PFNA	-	463.0 -> 419.0	-	N.D.			
		463.0 -> 219.0					
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	7.099	413.0 -> 369.0	653	0.04	µg/L	m	79
		413.0 -> 169.0	80				
PFOS	8.292	499.0 -> 80.0	1013	0.20	µg/L	m	97
		499.0 -> 99.0	458				
PFPeA	-	263.0 -> 219.0	-	N.D.			
PFPeS	-	349.0 -> 80.0	-	N.D.			
		349.0 -> 99.0					
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 169.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 169.0					
PFUnDA	-	563.0 -> 519.0	-	N.D.			
		563.0 -> 269.0					
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

 # = Qualifier out of range, m = manually integrated, + = Area summed

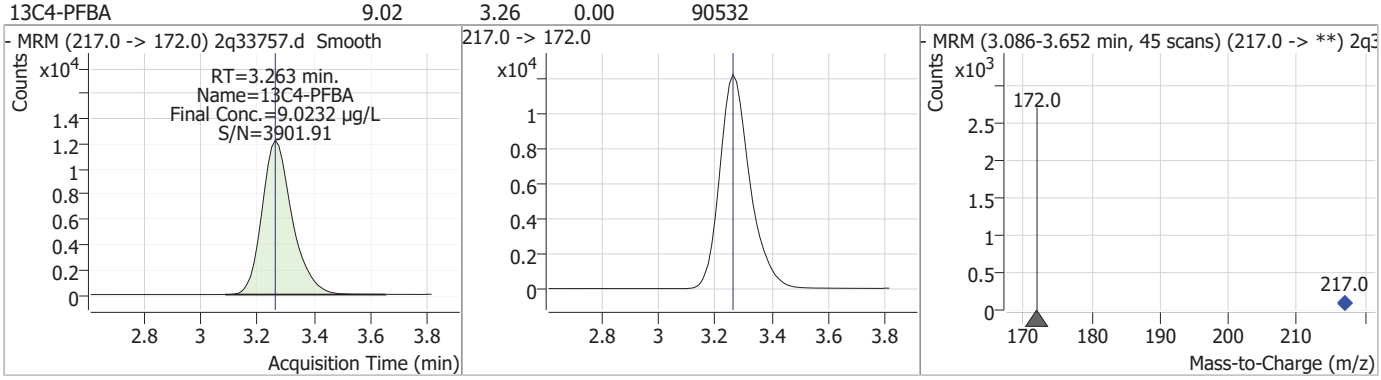
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

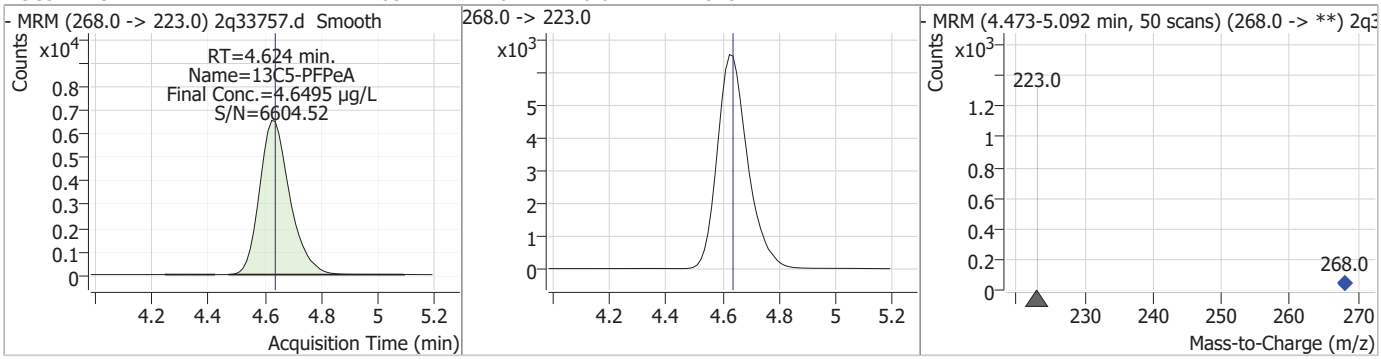
Perfluorinated Compounds by LC/MS/MS



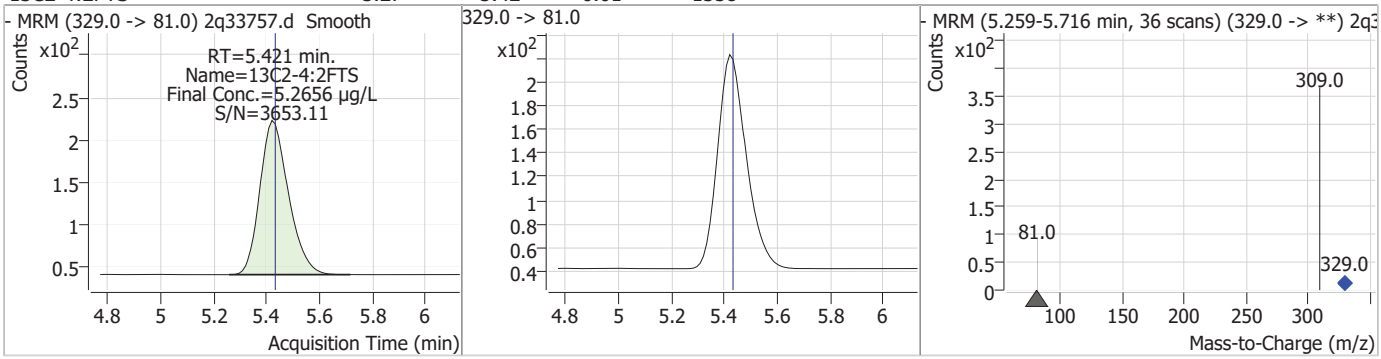
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.02	3.26	0.00	90532				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.65	4.62	-0.01	48484				

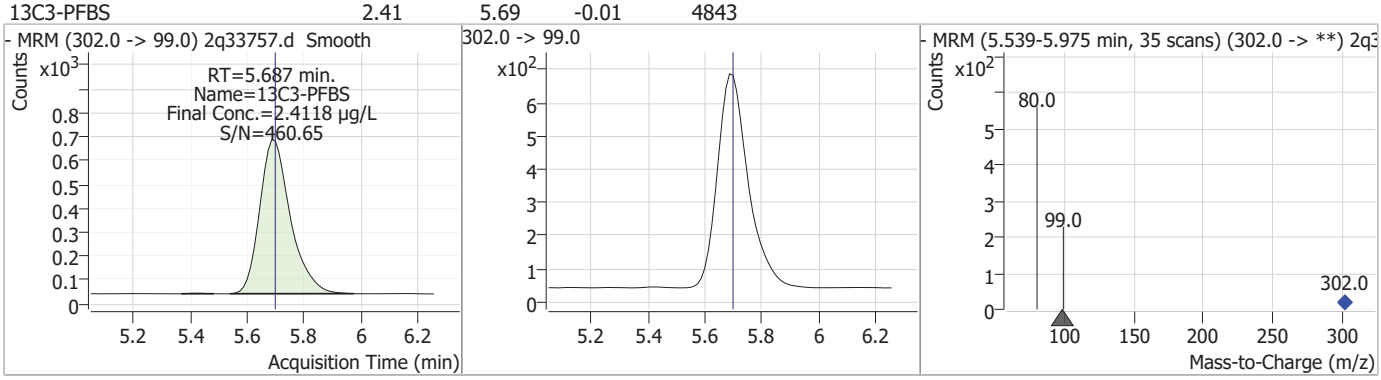


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.27	5.42	-0.01	1358				

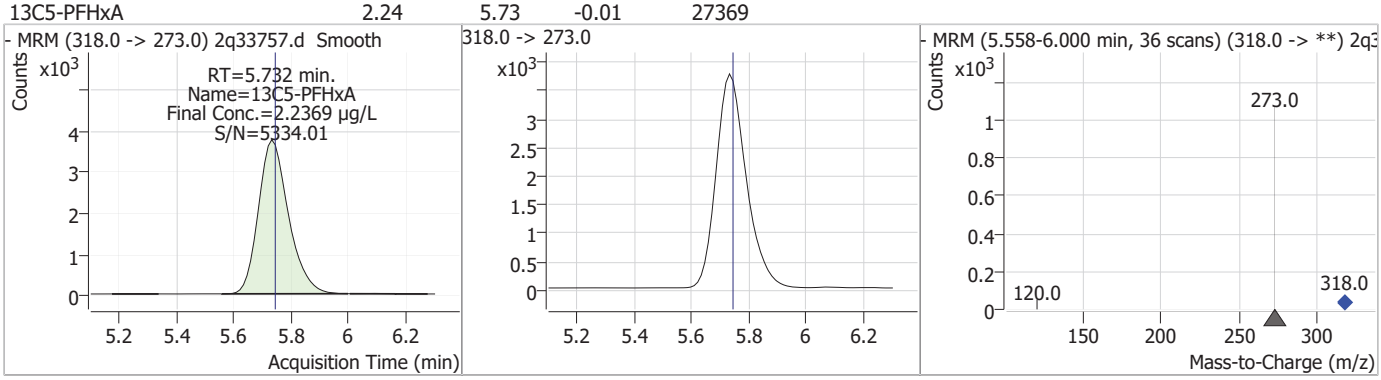


Perfluorinated Compounds by LC/MS/MS

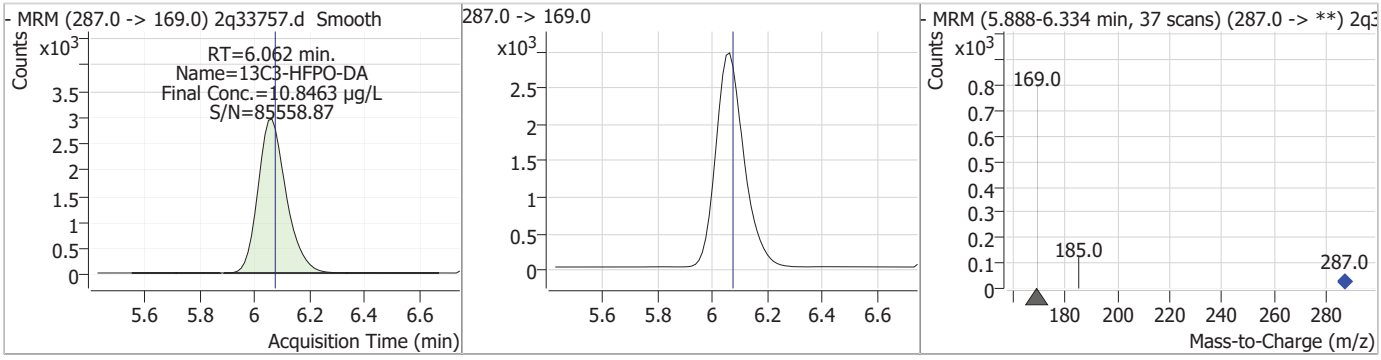
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.41	5.69	-0.01	4843				



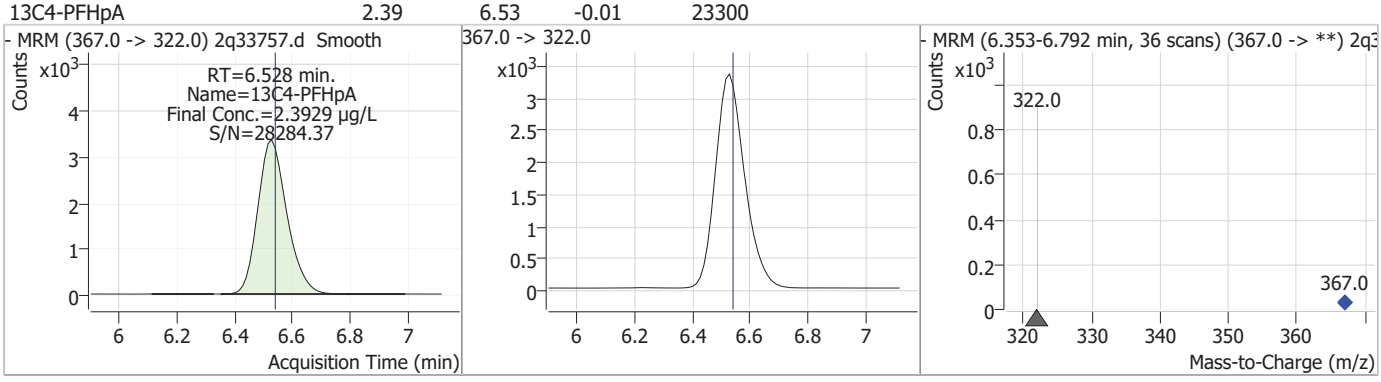
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.24	5.73	-0.01	27369				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.85	6.06	-0.01	20822				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.39	6.53	-0.01	23300				



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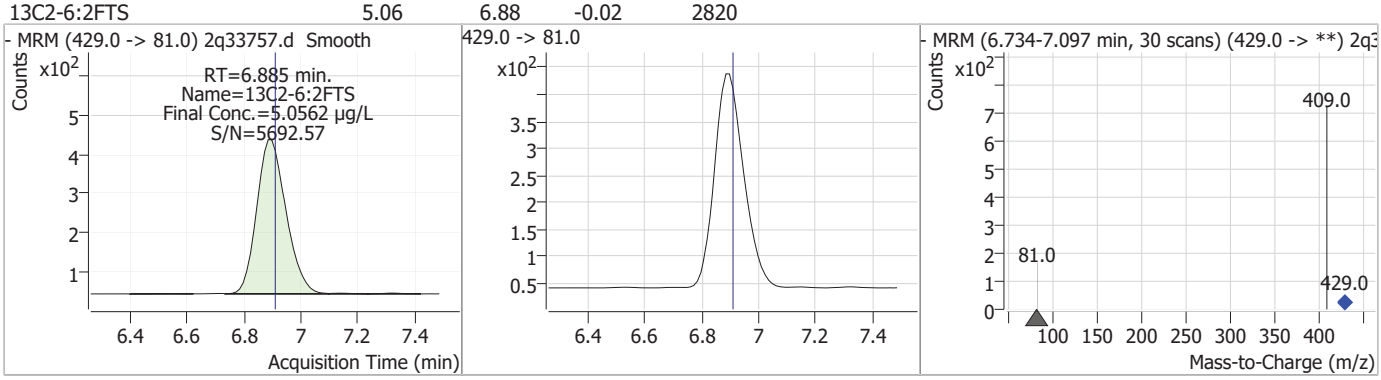
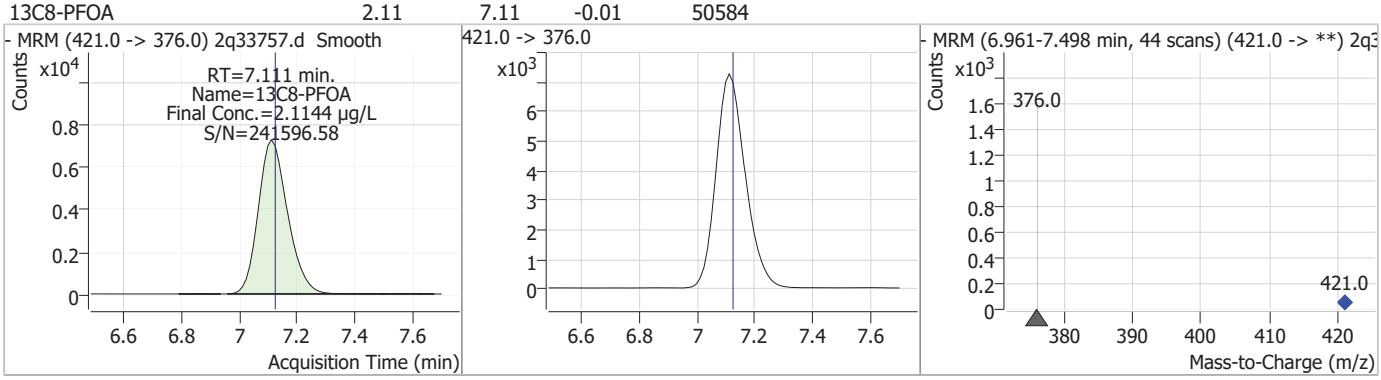
Perfluorinated Compounds by LC/MS/MS

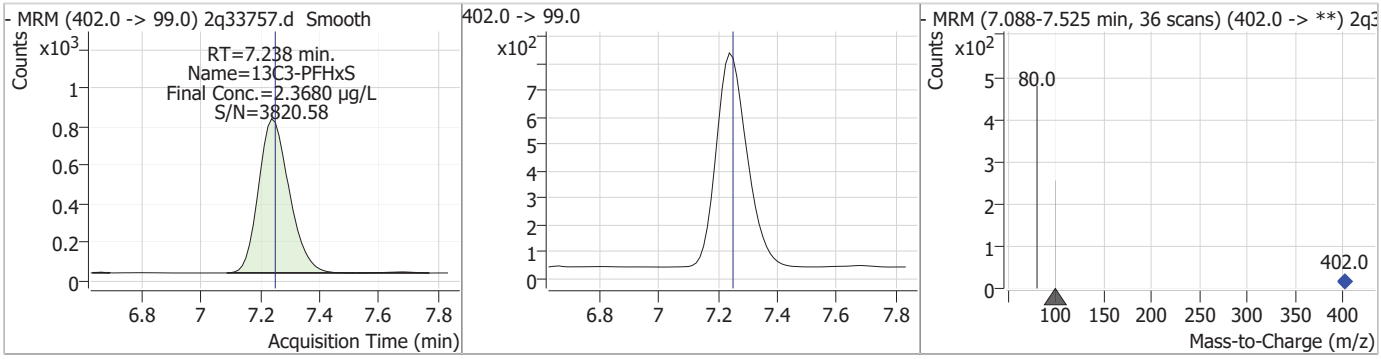
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.06	6.88	-0.02	2820				



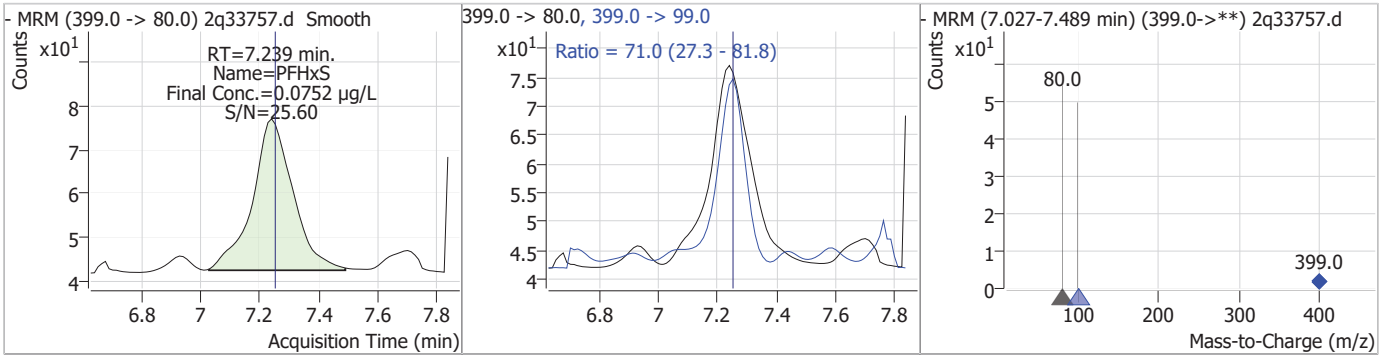
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.11	7.11	-0.01	50584				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.37	7.24	-0.01	5755				

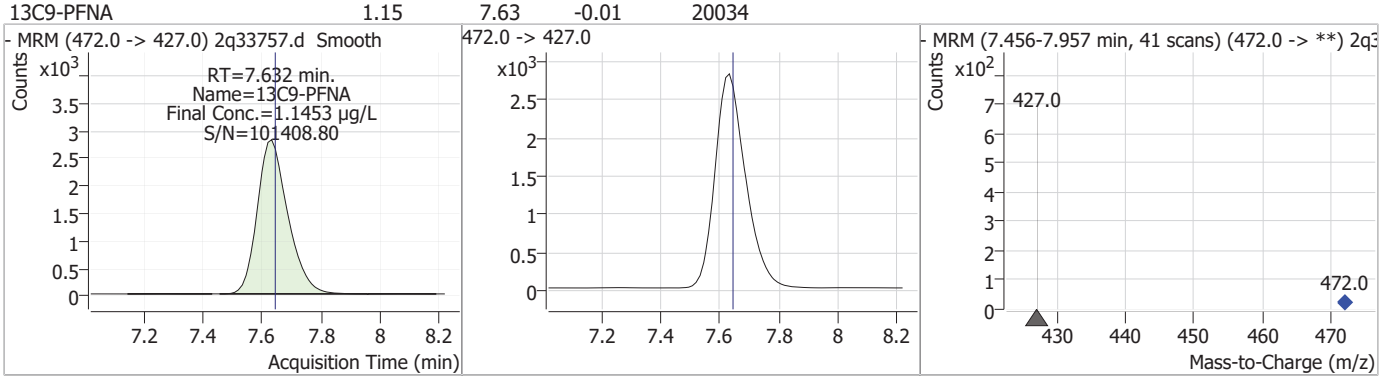


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.08	7.24	-0.01	330	399.0 -> 99.0	71.0	27.3	81.8

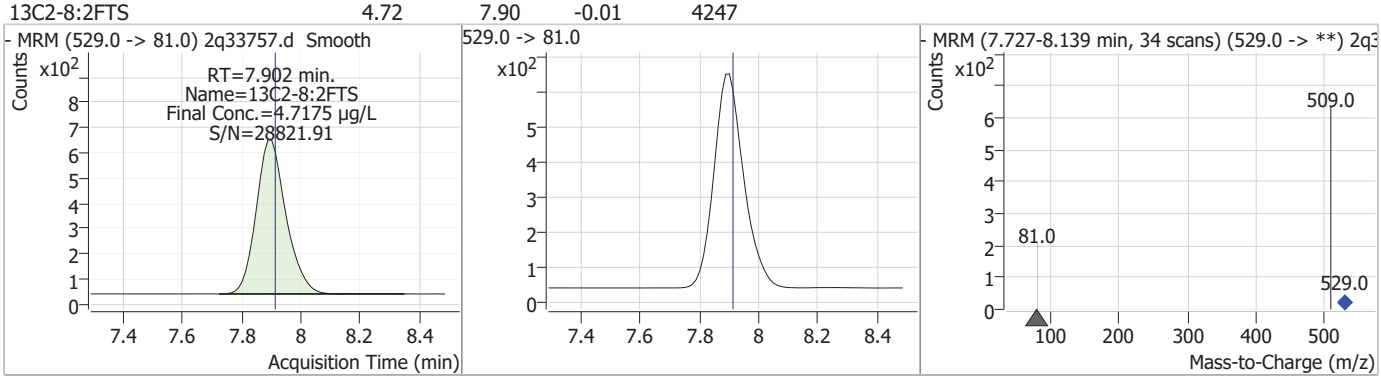


Perfluorinated Compounds by LC/MS/MS

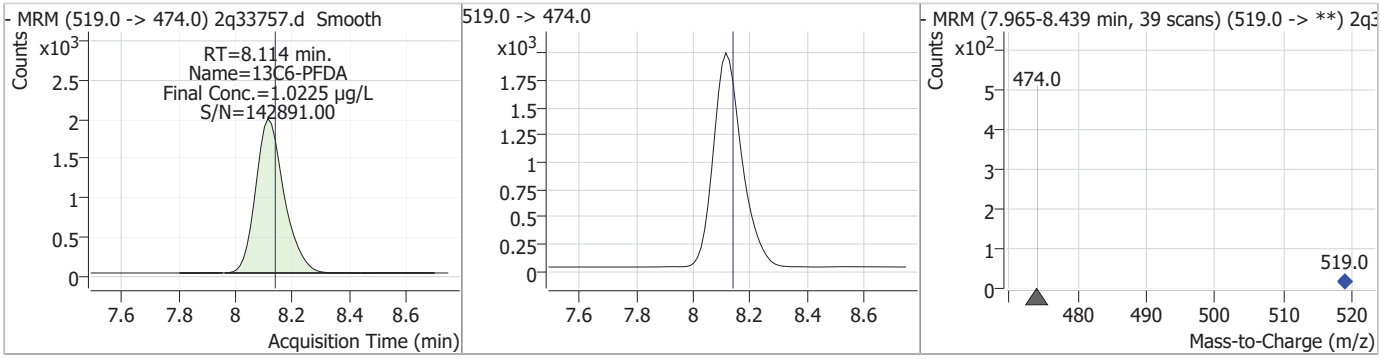
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.15	7.63	-0.01	20034				



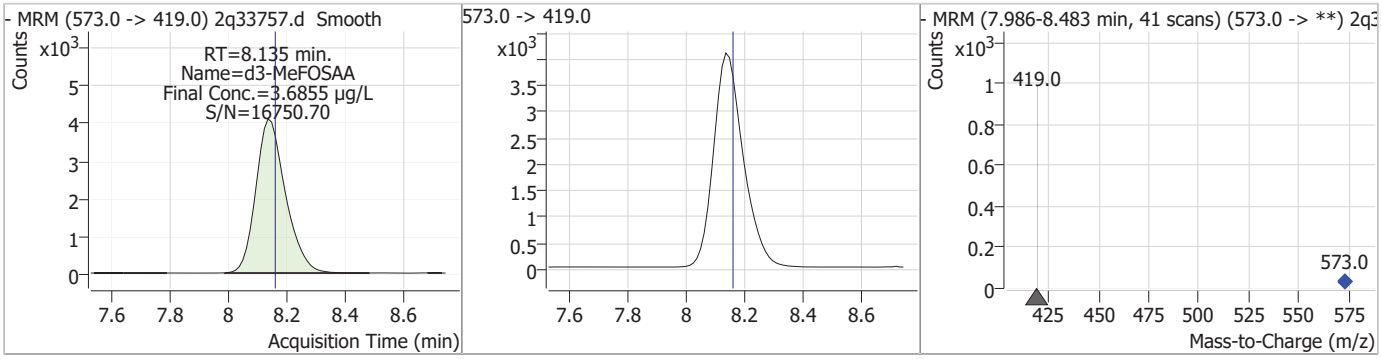
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.72	7.90	-0.01	4247				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.02	8.11	-0.03	13628				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	3.69	8.13	-0.02	28776				



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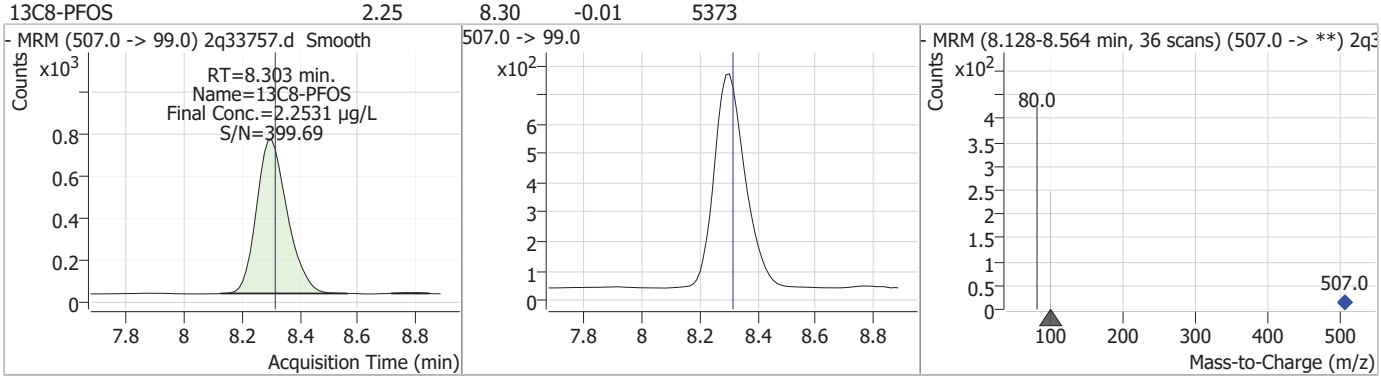
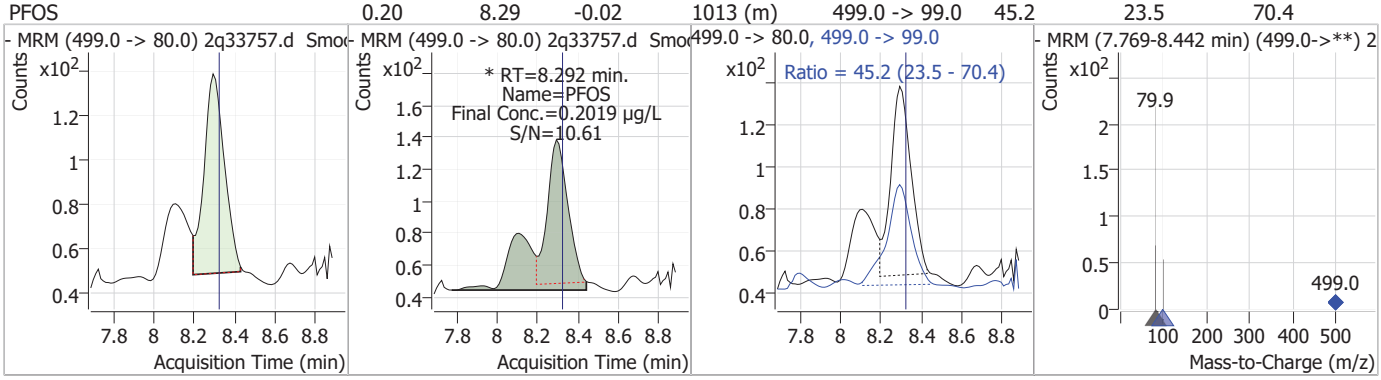
Perfluorinated Compounds by LC/MS/MS

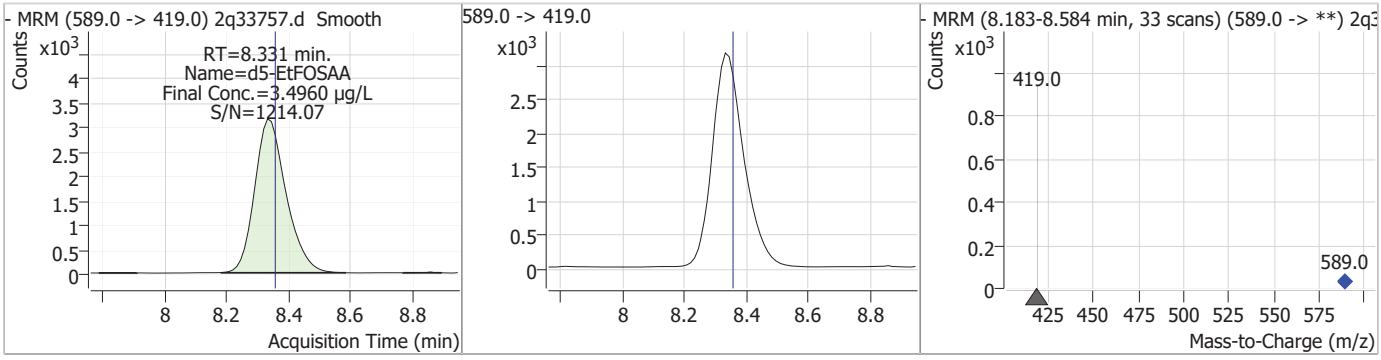
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.25	8.30	-0.01	5373				



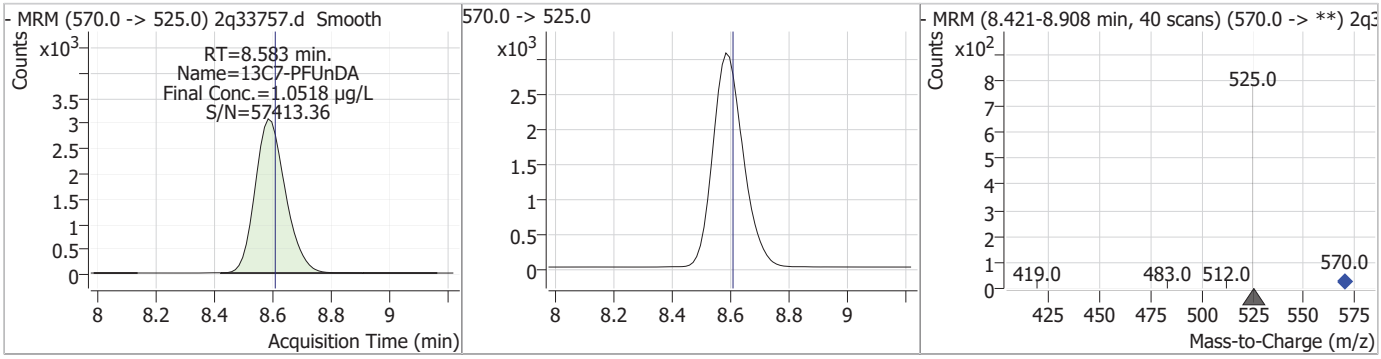
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.20	8.29	-0.02	1013 (m)	499.0 -> 99.0	45.2	23.5	70.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	3.50	8.33	-0.02	22025				

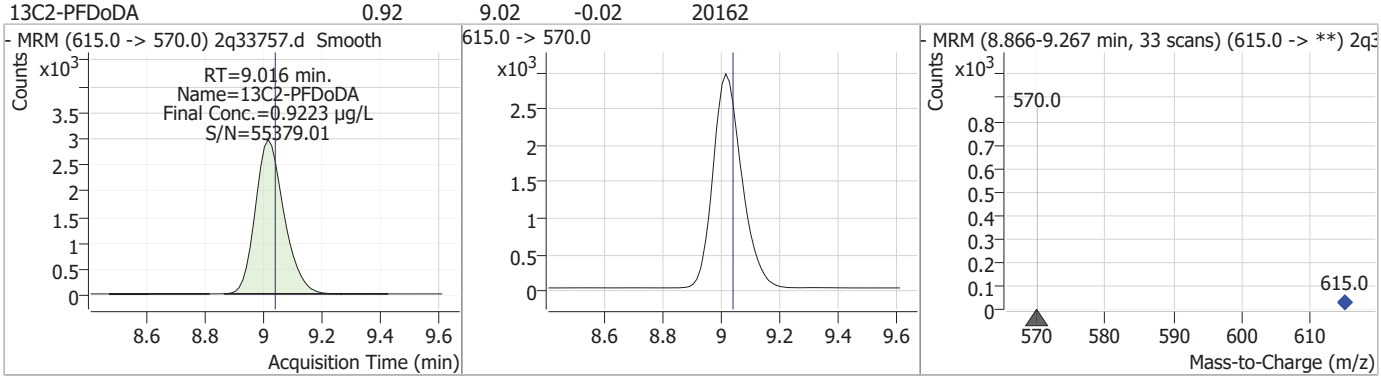


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.05	8.58	-0.02	21981				

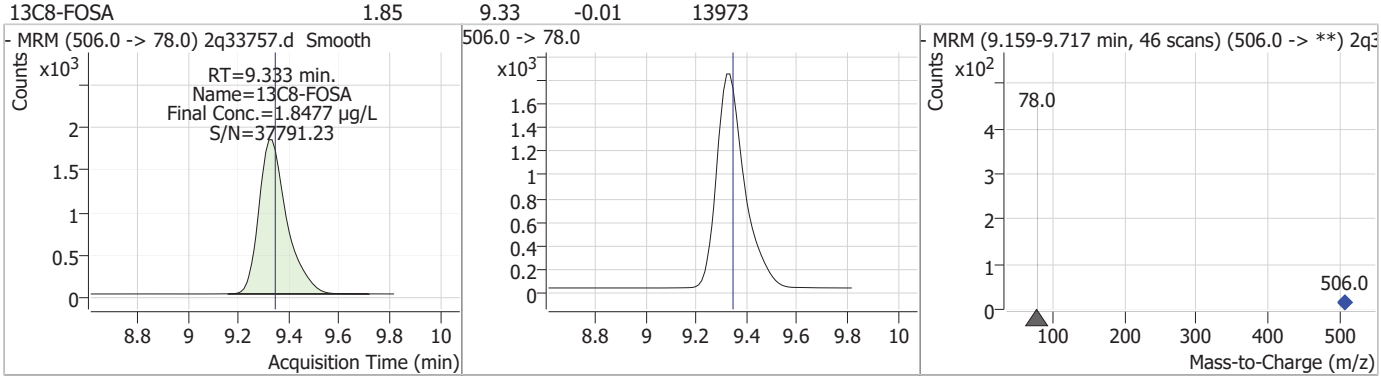


Perfluorinated Compounds by LC/MS/MS

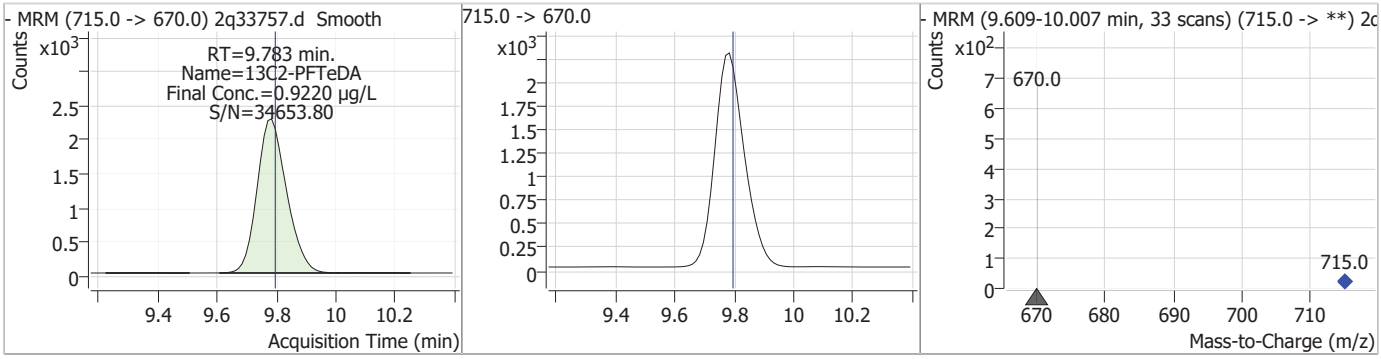
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	0.92	9.02	-0.02	20162				



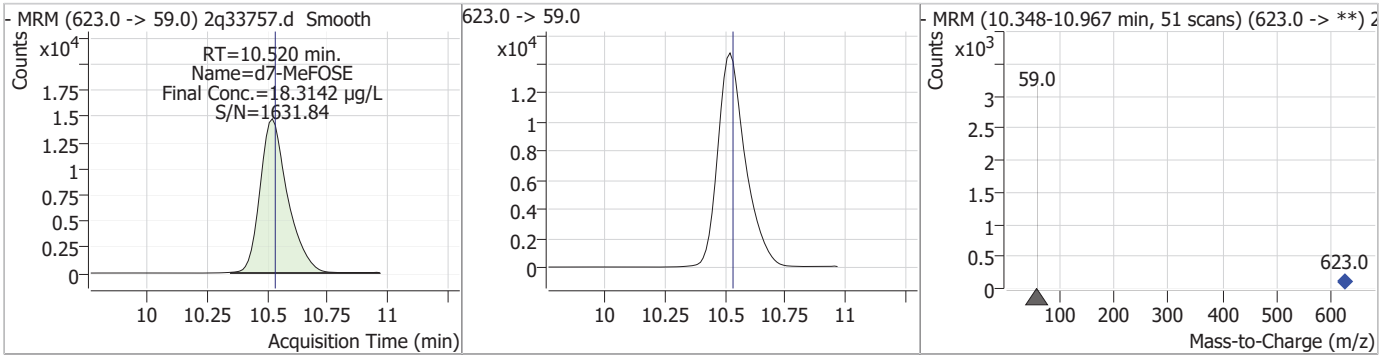
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	1.85	9.33	-0.01	13973				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.92	9.78	-0.01	15645				

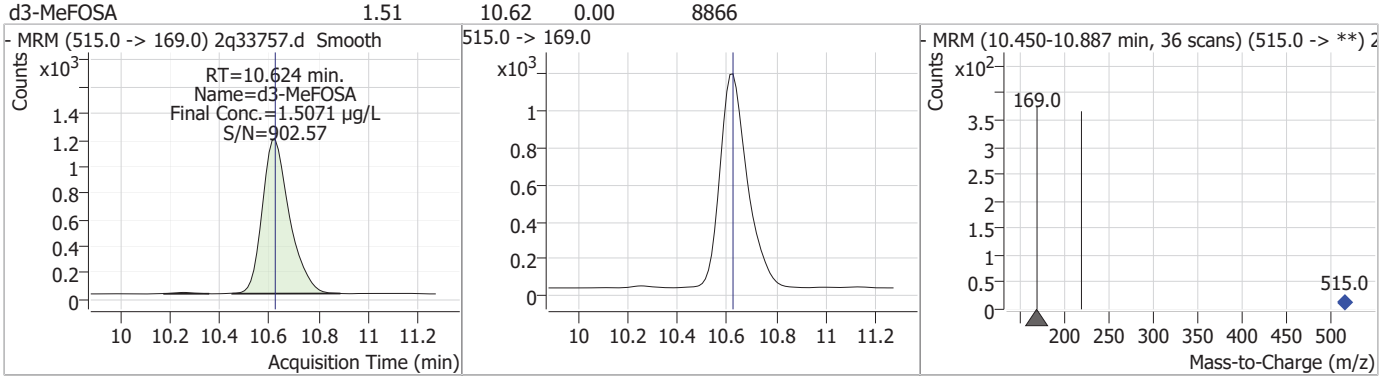


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	18.31	10.52	-0.01	117740				

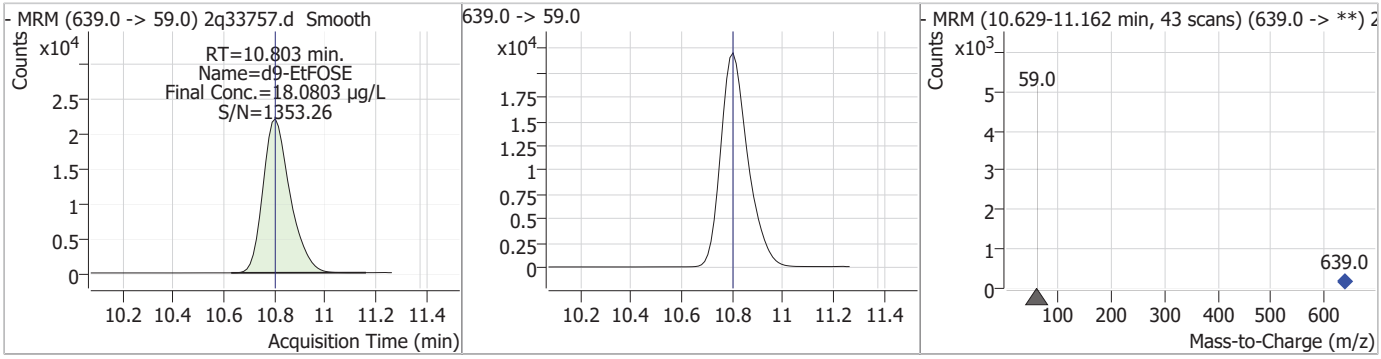


Perfluorinated Compounds by LC/MS/MS

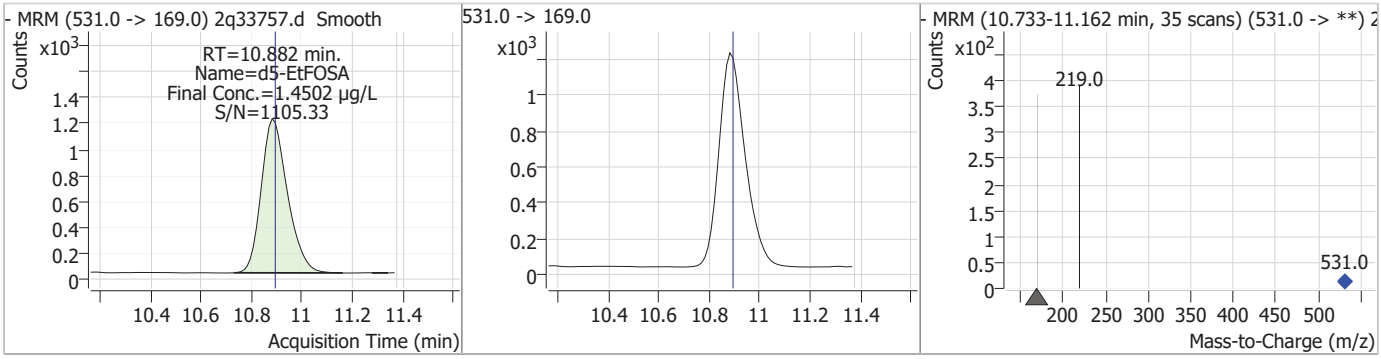
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.51	10.62	0.00	8866				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	18.08	10.80	0.00	163151				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.45	10.88	-0.01	8602				



7.1.29

7

Manual Integration Approval Summary

Sample Number: JE10205-20
Lab FileID: 2Q33757.D
Injection Time: 05/12/25 18:14

Method: EPA 1633
Analyst approved: 05/13/25 16:28 Victoria Londregan
Supervisor approved: 05/15/25 12:46 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.10	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.29	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8155.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 8:35:59 PM
Sample Name : JE10205-21
Vial : P1-C7
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,508,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.858	217.0 -> 172.0	842343	10.00	µg/L	-0.025
M5-PFPeA	4.319	268.0 -> 223.0	435740	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	322923	2.50	µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	331846	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	487793	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	203872	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	191376	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	261866	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	220731	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	155620	1.25	µg/L	0.000
M8-FOSA	9.279	506.0 -> 78.0	178257	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	29086	2.50	µg/L	0.000
		302.0 -> 80.0	71580			
M3-PFHxS	6.999	402.0 -> 99.0	38774	2.50	µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	44492	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	12281	5.00	µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	26690	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	29842	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	238874	5.00	µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	489504	10.00	µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	179305	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	828946	25.00	µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1004872	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	77227	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	77056	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	78840	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	386443	5.00	µg/L	-0.012
18O2-PFHxS	6.999	403.0 -> 84.0	45246	2.50	µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	512548	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	183426	1.25	µg/L	0.000
13C5-PFNA	7.416	468.0 -> 423.0	209950	1.25	µg/L	0.000
13C2-PFHxA	5.465	315.0 -> 270.0	315991	2.50	µg/L	0.012
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	12281	5.41	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.3%		
13C2-6:2FTS	6.684	429.0 -> 81.0	26690	5.42	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.4%		
13C2-8:2FTS	7.671	529.0 -> 81.0	29842	5.15	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.0%		
13C2-PFDoDA	8.666	615.0 -> 570.0	220731	1.11	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.1%		
13C2-PFTeDA	9.381	715.0 -> 670.0	155620	1.02	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 81.7%		
13C3-PFBS	5.368	302.0 -> 99.0	29086	2.60	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.2%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	38774	2.45 µg/L	0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.2%	
13C4-PFBA	2.858	217.0 -> 172.0	842343	9.51 µg/L	-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.1%	
13C4-PFHpA	6.291	367.0 -> 322.0	331846	2.33 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.4%	
13C5-PFHxA	5.464	318.0 -> 273.0	322923	2.41 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.6%	
13C5-PFPeA	4.319	268.0 -> 223.0	435740	4.29 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 85.9%	
13C6-PFDA	7.858	519.0 -> 474.0	191376	1.18 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.5%	
13C7-PFUnDA	8.273	570.0 -> 525.0	261866	1.21 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.8%	
13C8-FOSA	9.279	506.0 -> 78.0	178257	2.20 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 88.0%	
13C8-PFOA	6.897	421.0 -> 376.0	487793	2.38 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.3%	
13C8-PFOS	7.995	507.0 -> 99.0	44492	2.34 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.7%	
13C9-PFNA	7.403	472.0 -> 427.0	203872	1.17 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.7%	
d3-MeFOSAA	7.915	573.0 -> 419.0	238874	4.60 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.0%	
13C3-HFPO-DA	5.792	287.0 -> 169.0	489504	9.32 µg/L	0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 93.2%	
d3-MeFOSA	10.567	515.0 -> 169.0	77056	1.85 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 74.1%	
d5-EtFOSAA	8.098	589.0 -> 419.0	179305	4.50 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.0%	
d7-MeFOSE	10.462	623.0 -> 59.0	828946	20.88 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 83.5%	
d9-EtFOSE	10.746	639.0 -> 59.0	1004872	20.87 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 83.5%	
d5-EtFOSA	10.825	531.0 -> 169.0	77227	1.80 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 72.1%	
Target Compounds					**QValue**
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	5.369	299.0 -> 80.0	10602	0.32 µg/L	99
		299.0 -> 99.0	4403		
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

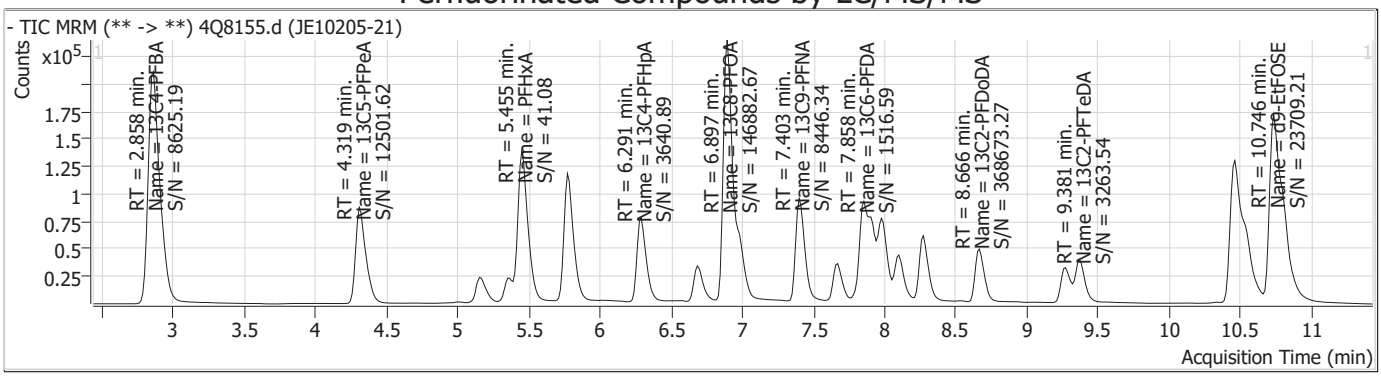
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.			
		599.0 -> 99.0					
PFHpA	6.292	363.0 -> 319.0	15740	0.08	µg/L		98
		363.0 -> 169.0	3434				
PFHpS	-	449.0 -> 80.0	-	N.D.			
		449.0 -> 99.0					
PFHxA	5.455	313.0 -> 269.0	16608	0.12	µg/L		97
		313.0 -> 119.0	695				
PFHxS	7.000	399.0 -> 80.0	25697	0.76	µg/L	m	94
		399.0 -> 99.0	12622				
PFNA	7.416	463.0 -> 419.0	12002	0.10	µg/L	m	88
		463.0 -> 219.0	3592				
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	6.898	413.0 -> 369.0	71720	0.44	µg/L	m	97
		413.0 -> 169.0	19917				
PFOS	7.996	499.0 -> 80.0	36200	1.01	µg/L	m	92
		499.0 -> 99.0	16721				
PFPeA	4.321	263.0 -> 219.0	6174	0.09	µg/L		100
PFPeS	6.331	349.0 -> 80.0	3347	0.09	µg/L		91
		349.0 -> 99.0	1488				
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	-	563.0 -> 519.0	-	N.D.			
		563.0 -> 269.0					
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

Perfluorinated Compounds by LC/MS/MS

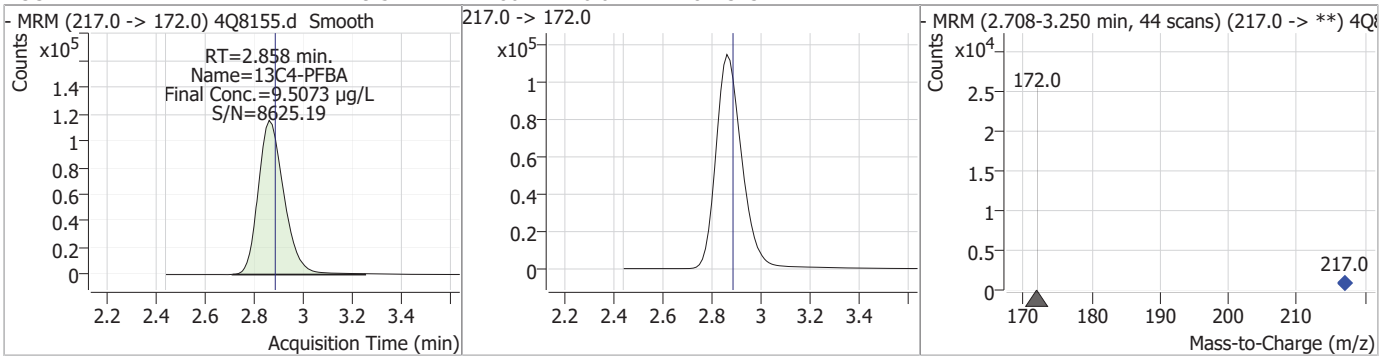
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

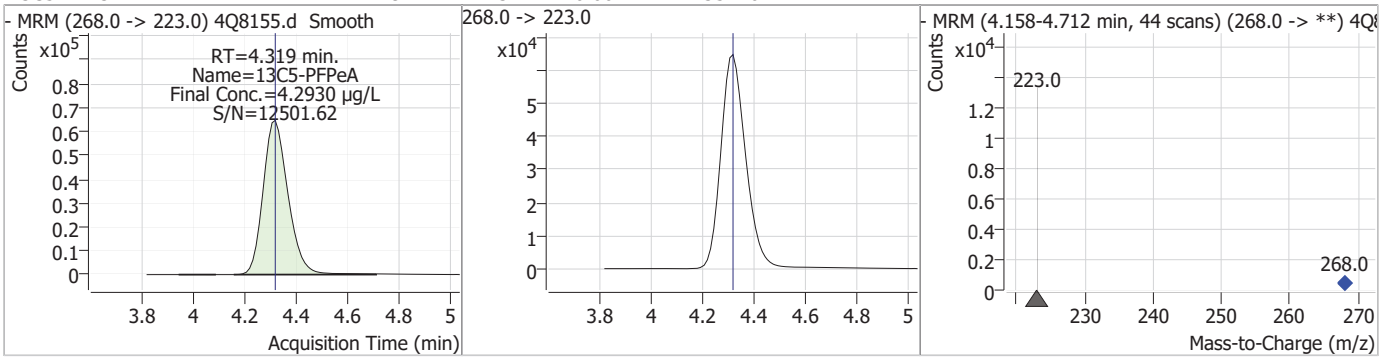
Perfluorinated Compounds by LC/MS/MS



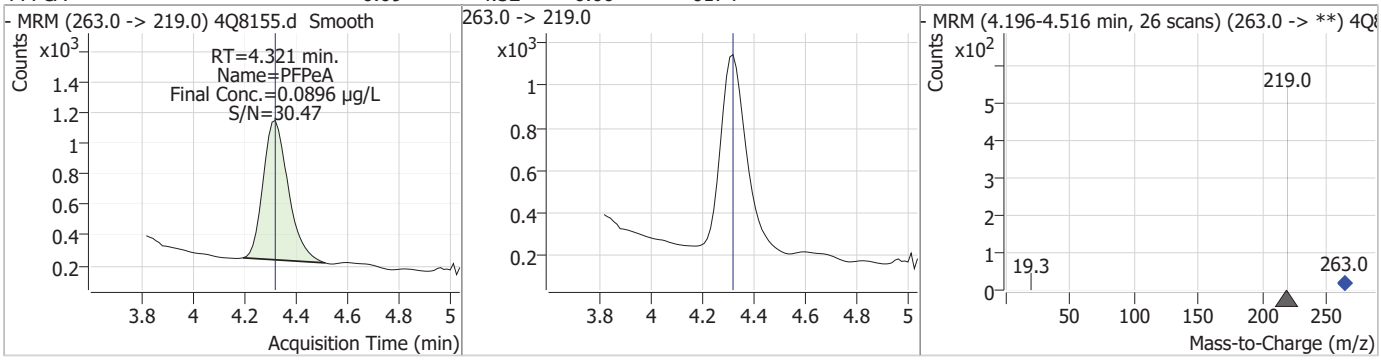
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.51	2.86	-0.02	842343				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.29	4.32	0.00	435740				

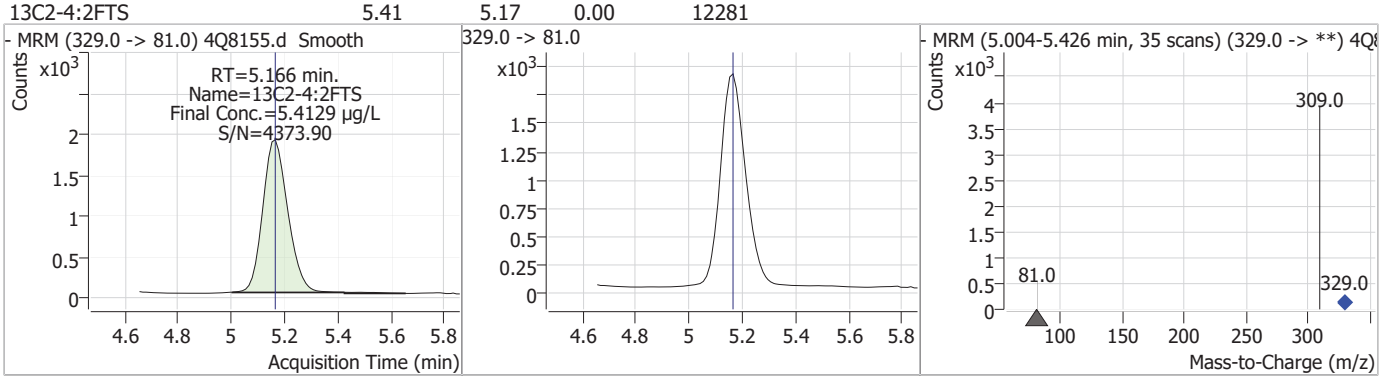


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.09	4.32	0.00	6174				

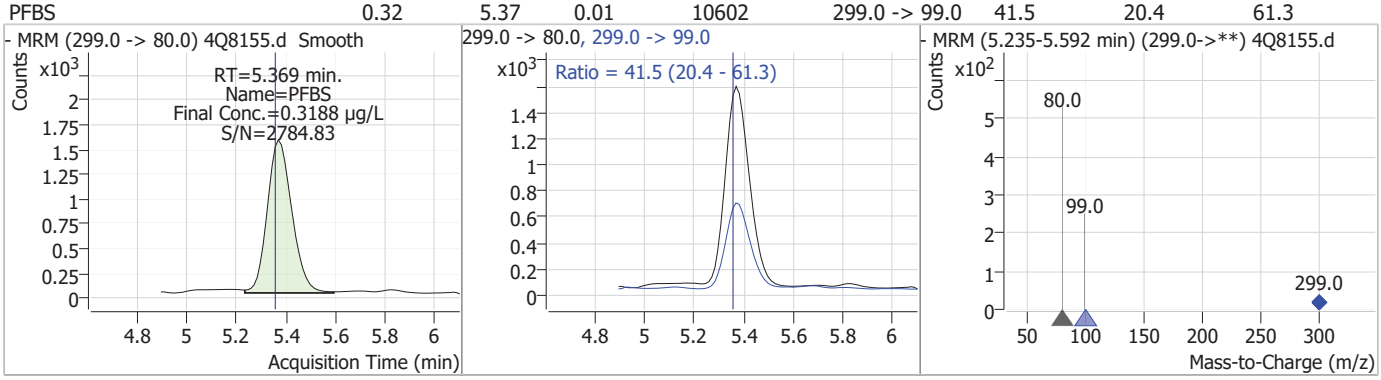


Perfluorinated Compounds by LC/MS/MS

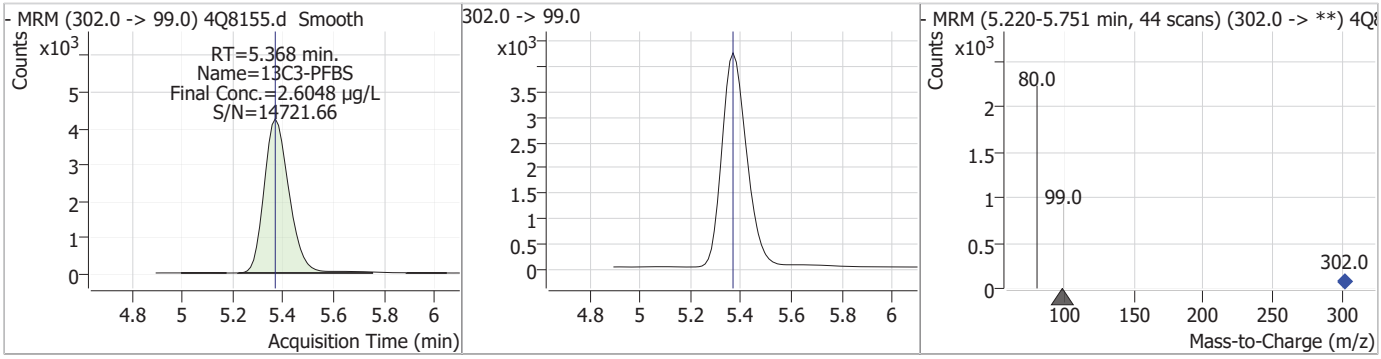
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.41	5.17	0.00	12281				



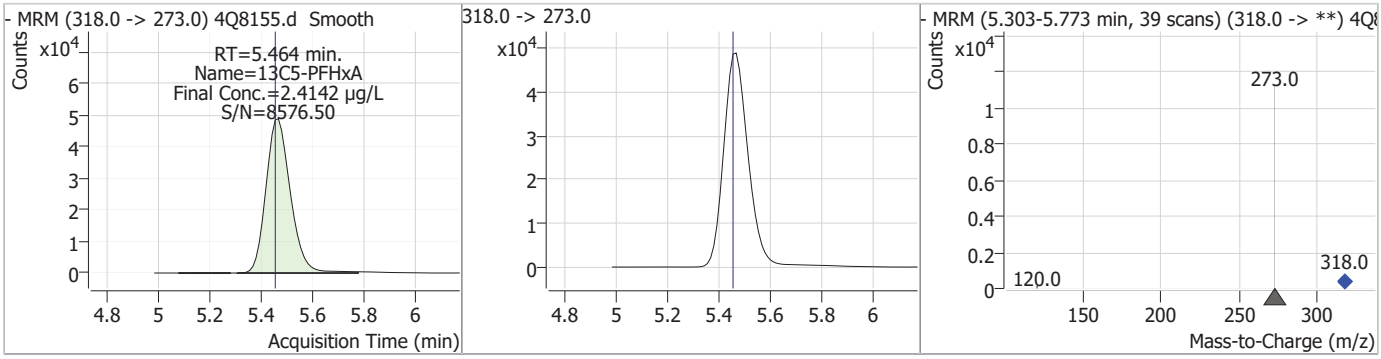
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.32	5.37	0.01	10602	299.0 -> 99.0	41.5	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.60	5.37	0.00	29086				

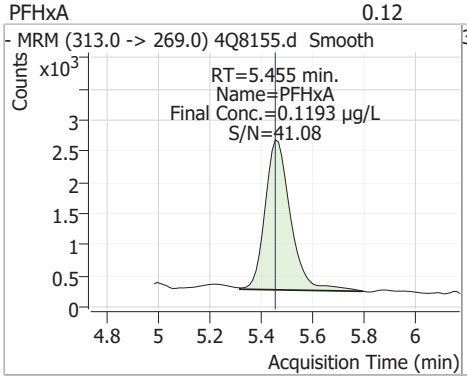


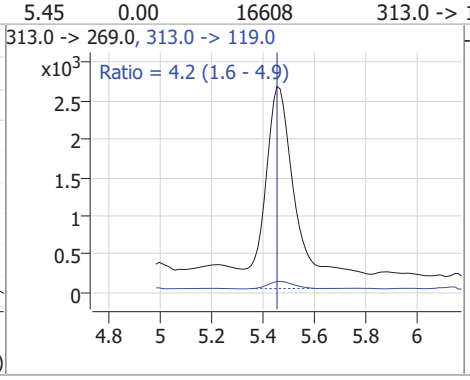
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.41	5.46	0.01	322923				

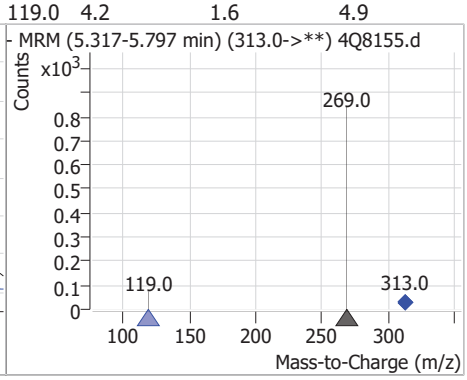


Perfluorinated Compounds by LC/MS/MS

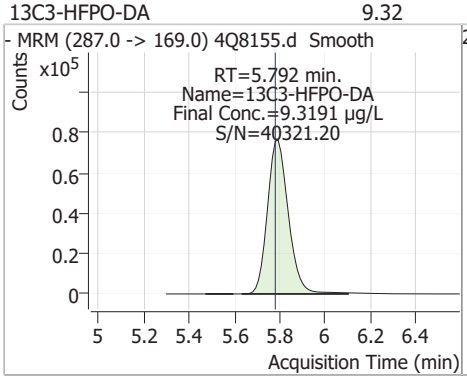
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.12	5.45	0.00	16608	313.0 -> 119.0	4.2	1.6	4.9

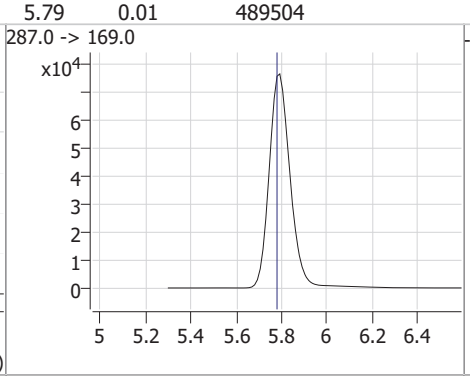


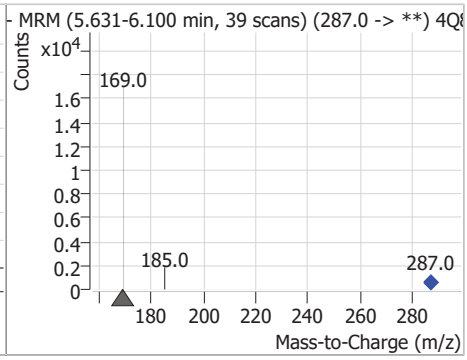




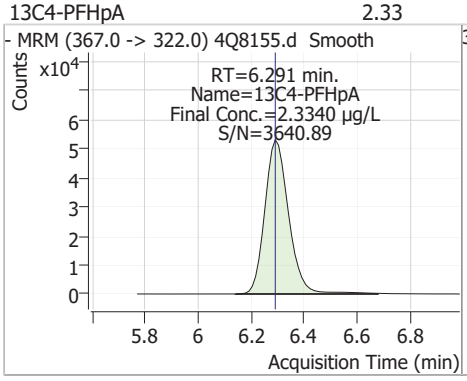
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.32	5.79	0.01	489504				

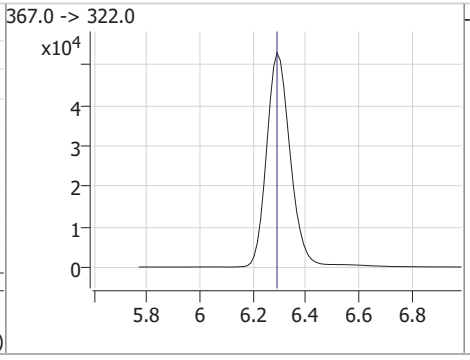


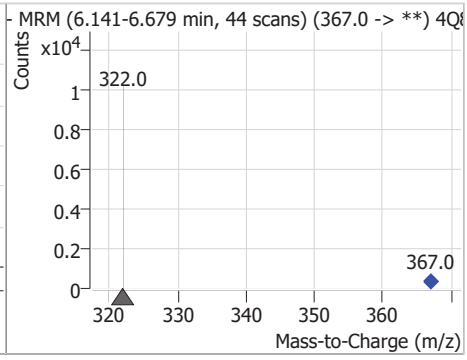




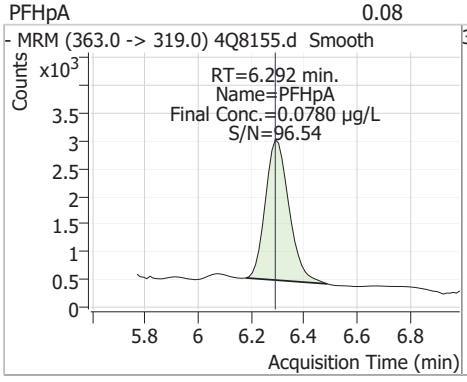
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.33	6.29	0.00	331846				

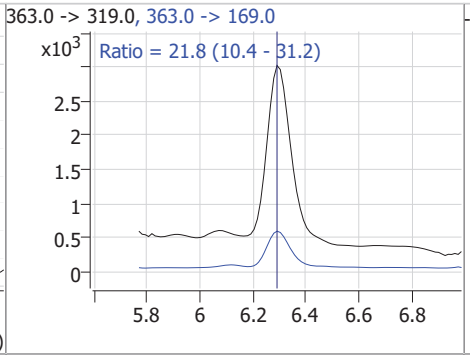


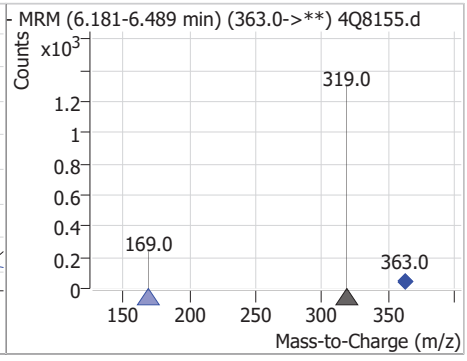




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.08	6.29	0.00	15740	363.0 -> 169.0	21.8	10.4	31.2

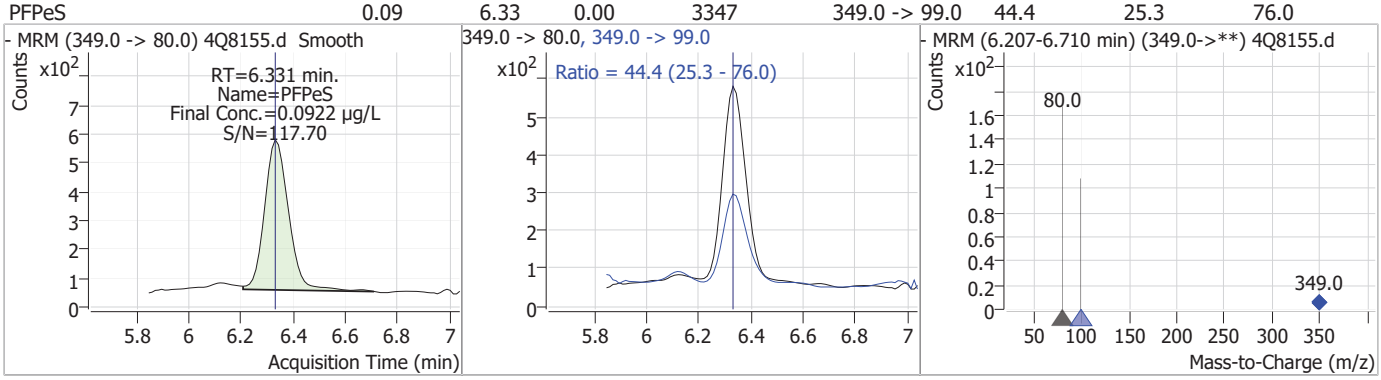




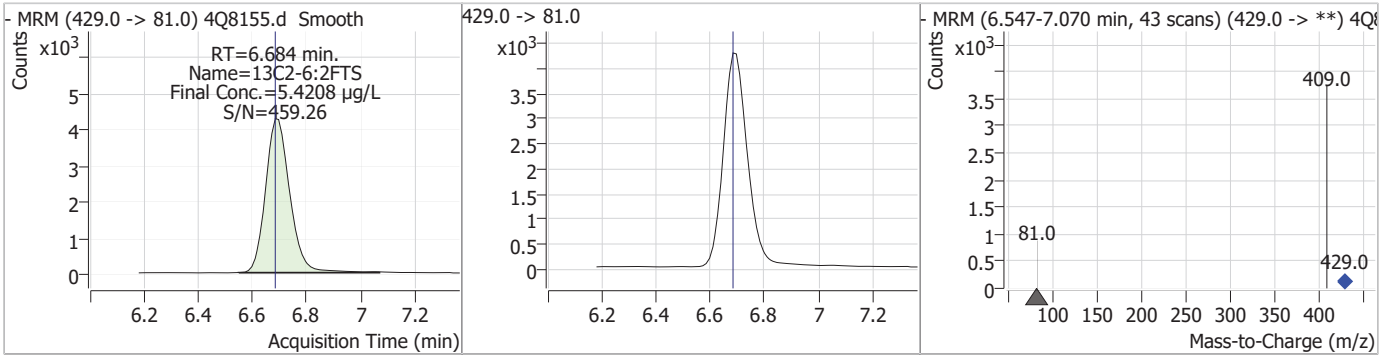


Perfluorinated Compounds by LC/MS/MS

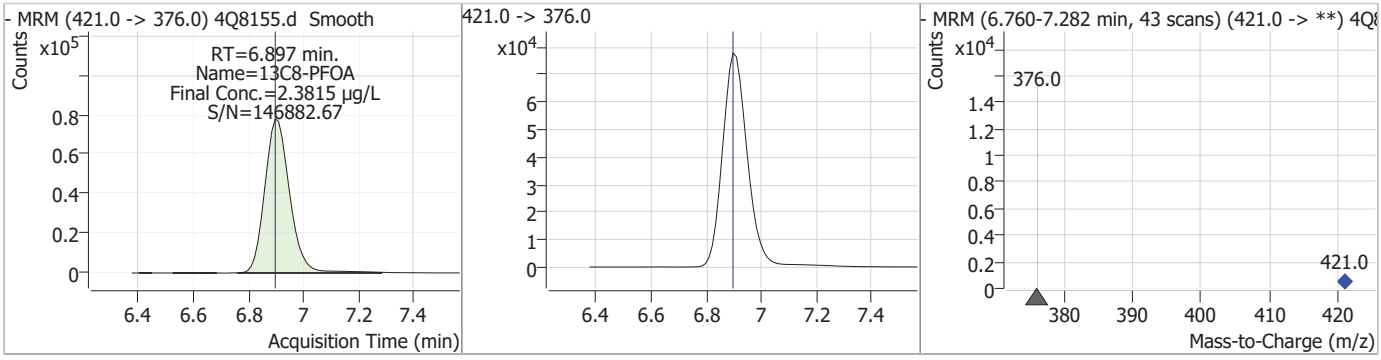
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.09	6.33	0.00	3347	349.0 -> 99.0	44.4	25.3	76.0



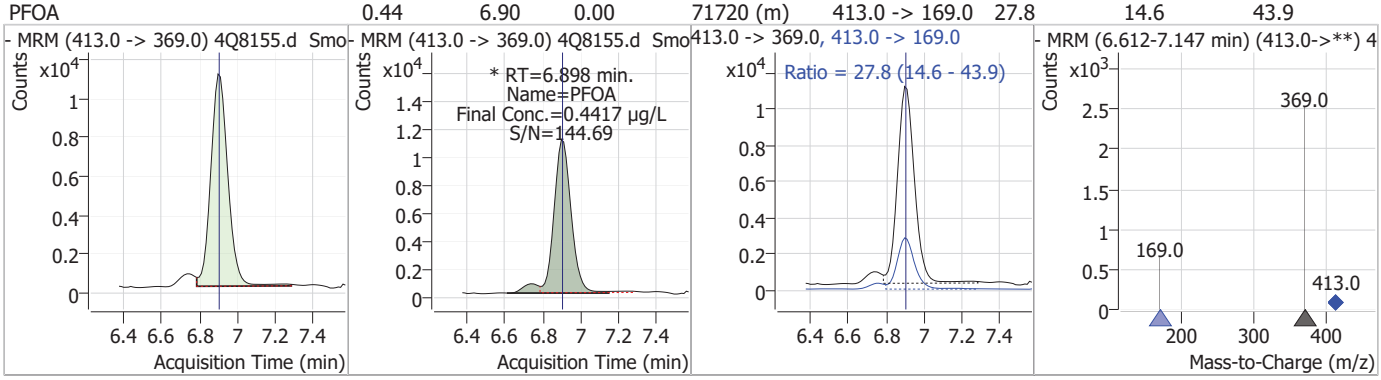
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.42	6.68	0.00	26690				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.38	6.90	0.00	487793				

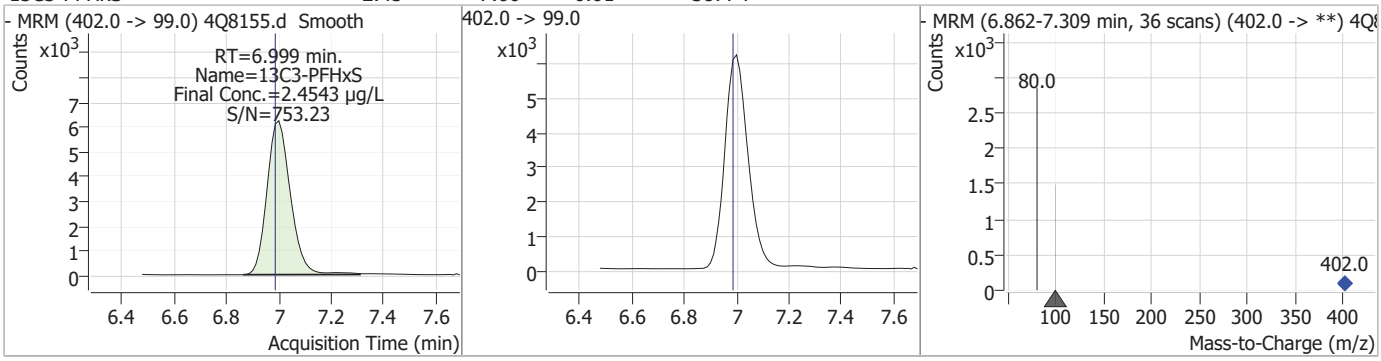


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.44	6.90	0.00	71720 (m)	413.0 -> 169.0	27.8	14.6	43.9

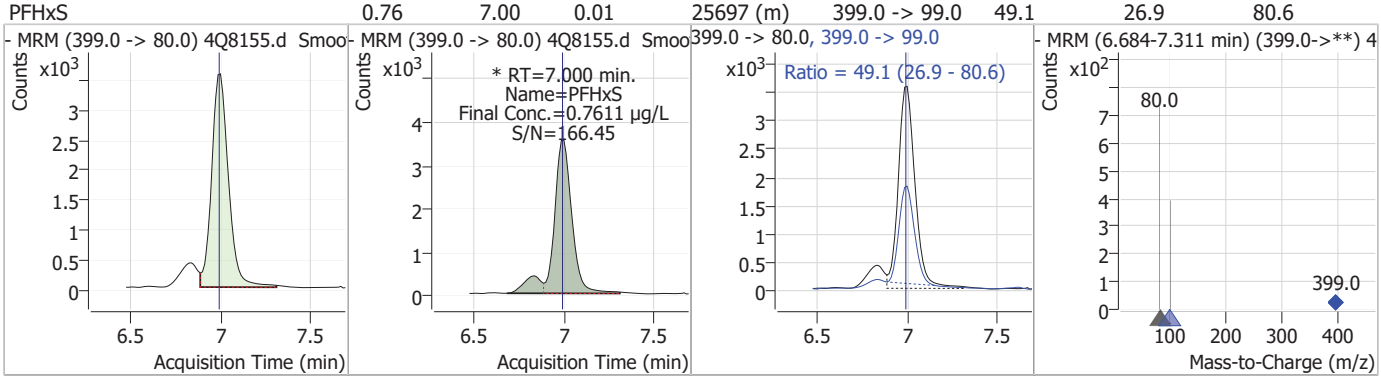


Perfluorinated Compounds by LC/MS/MS

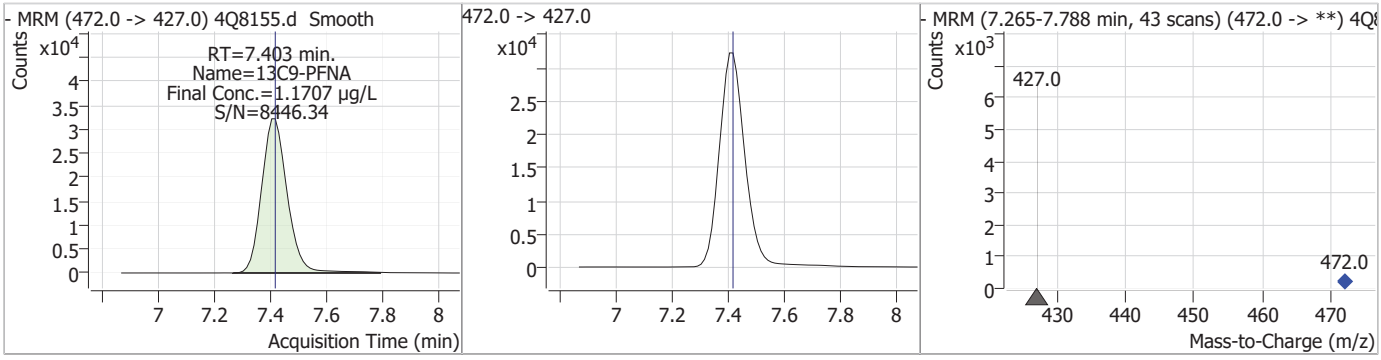
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.45	7.00	0.01	38774				



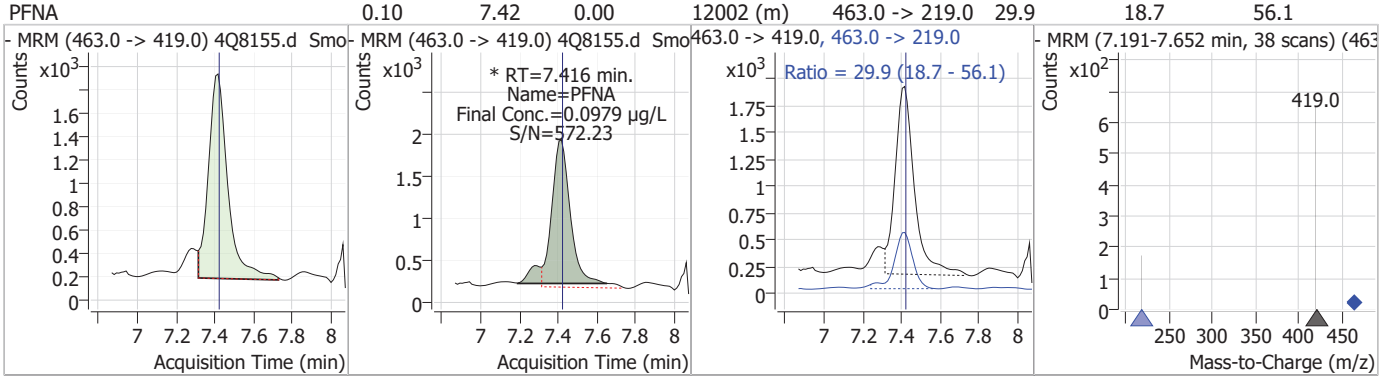
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.76	7.00	0.01	25697 (m)	399.0 -> 99.0	49.1	26.9	80.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.17	7.40	-0.01	203872				

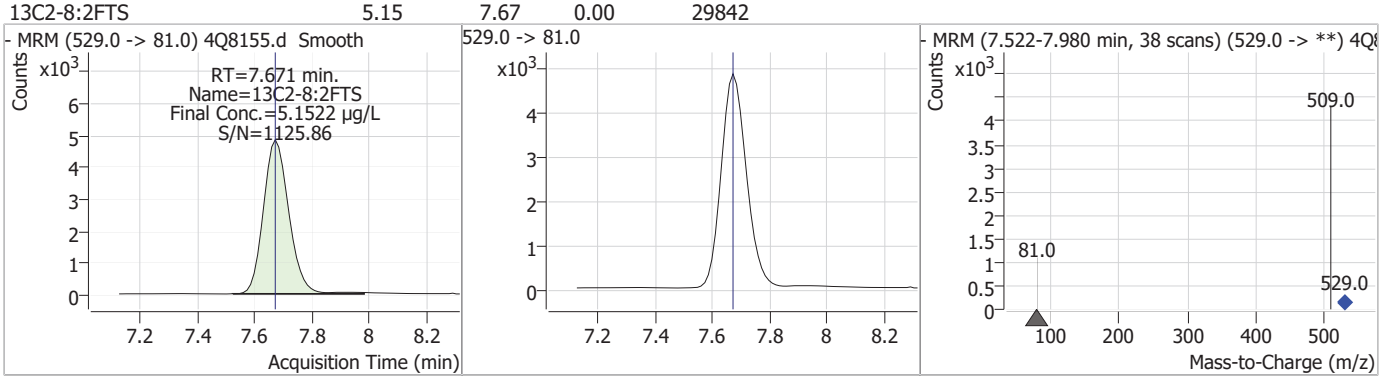


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.10	7.42	0.00	12002 (m)	463.0 -> 219.0	29.9	18.7	56.1

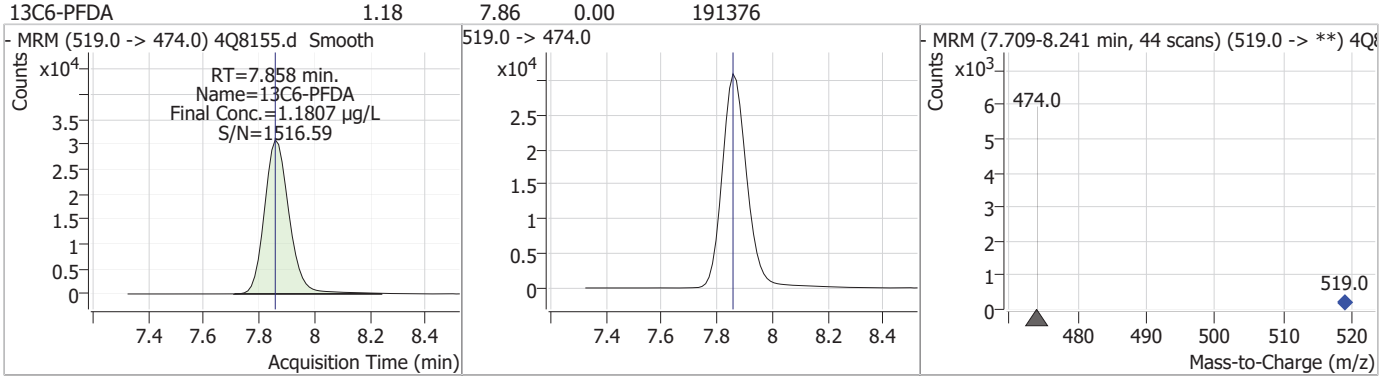


Perfluorinated Compounds by LC/MS/MS

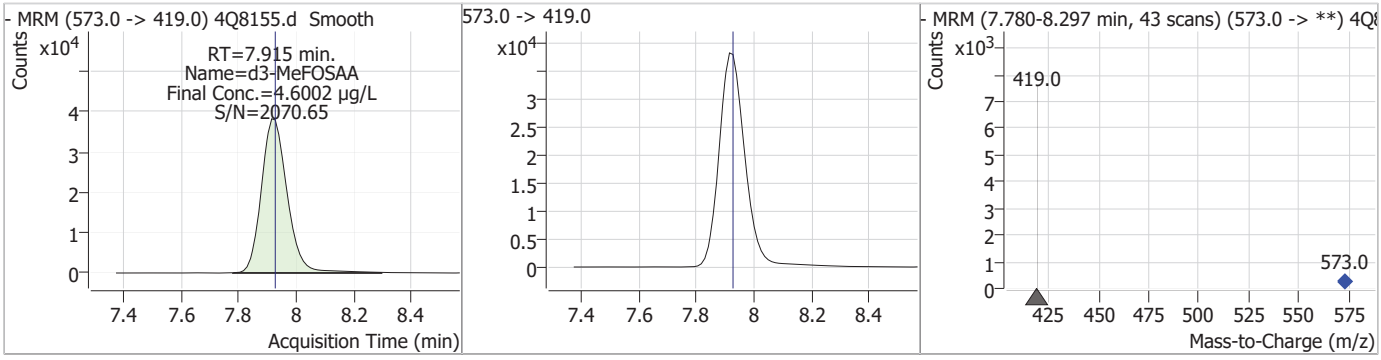
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.15	7.67	0.00	29842				



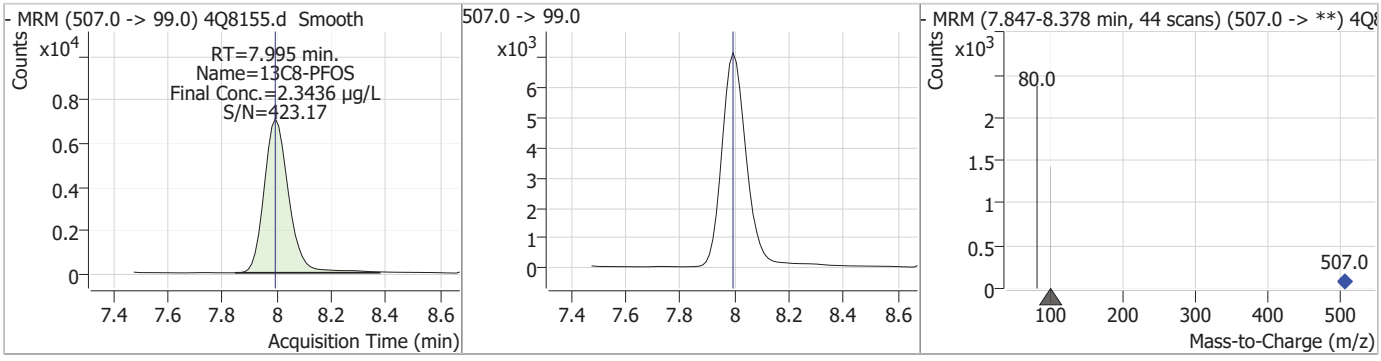
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.18	7.86	0.00	191376				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.60	7.92	-0.01	238874				

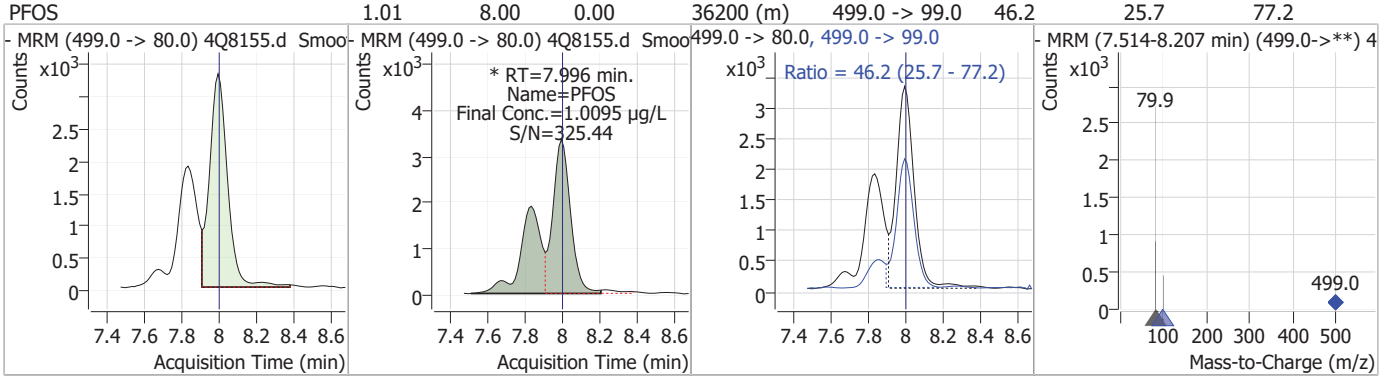


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.34	7.99	0.00	44492				

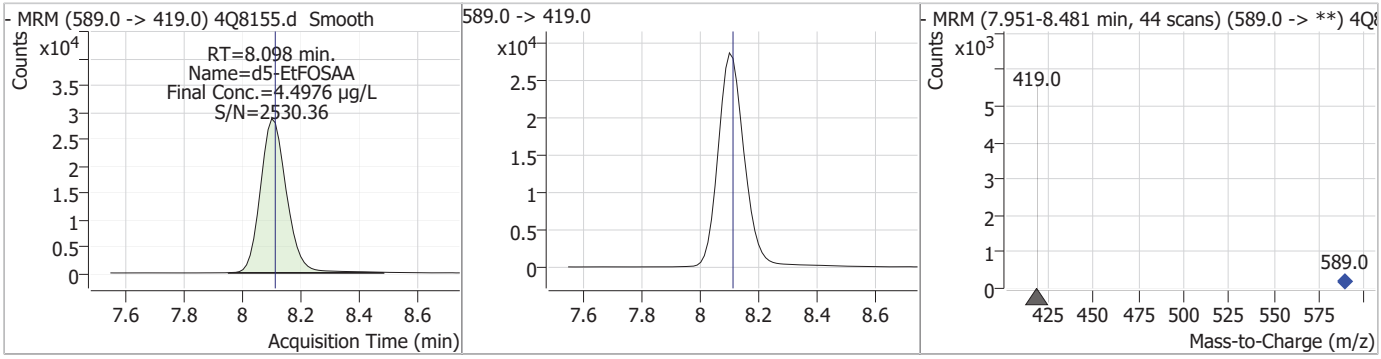


Perfluorinated Compounds by LC/MS/MS

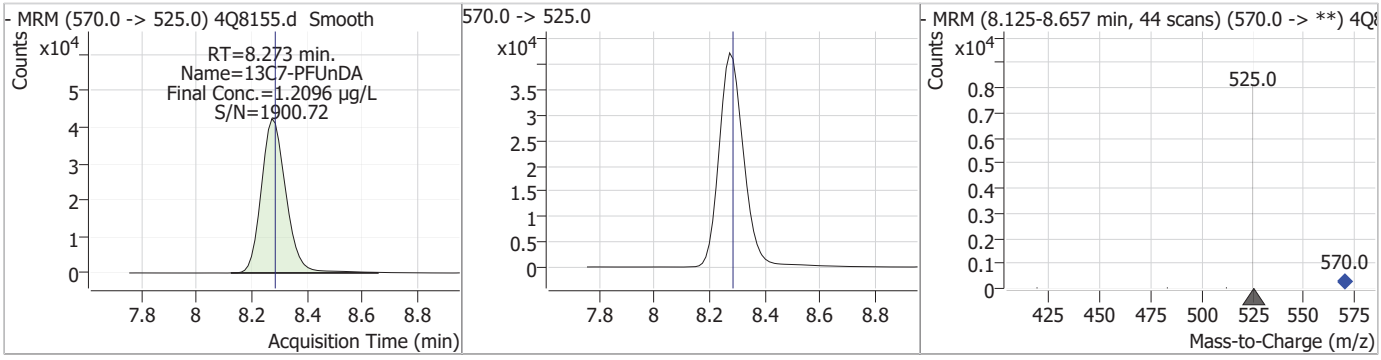
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	1.01	8.00	0.00	36200 (m)	499.0 -> 99.0	46.2	25.7	77.2



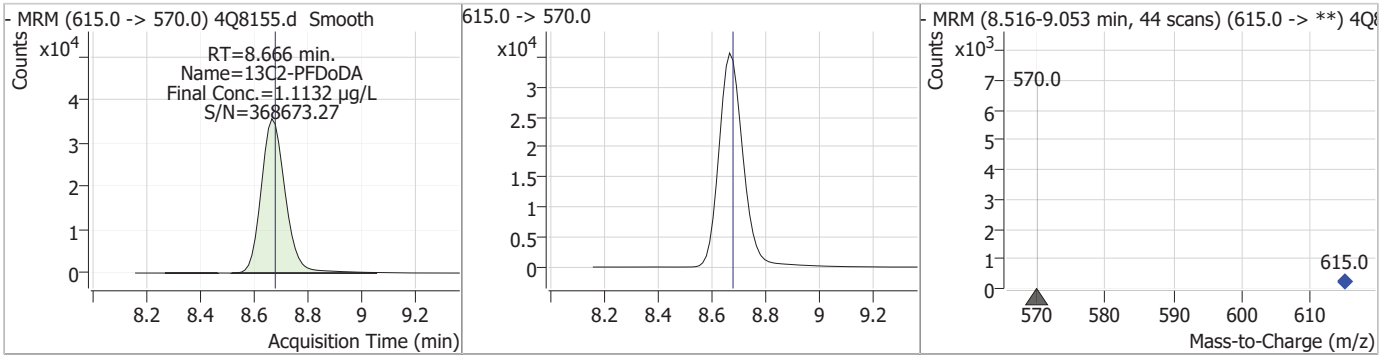
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.50	8.10	-0.01	179305				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.21	8.27	-0.01	261866				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.11	8.67	-0.01	220731				



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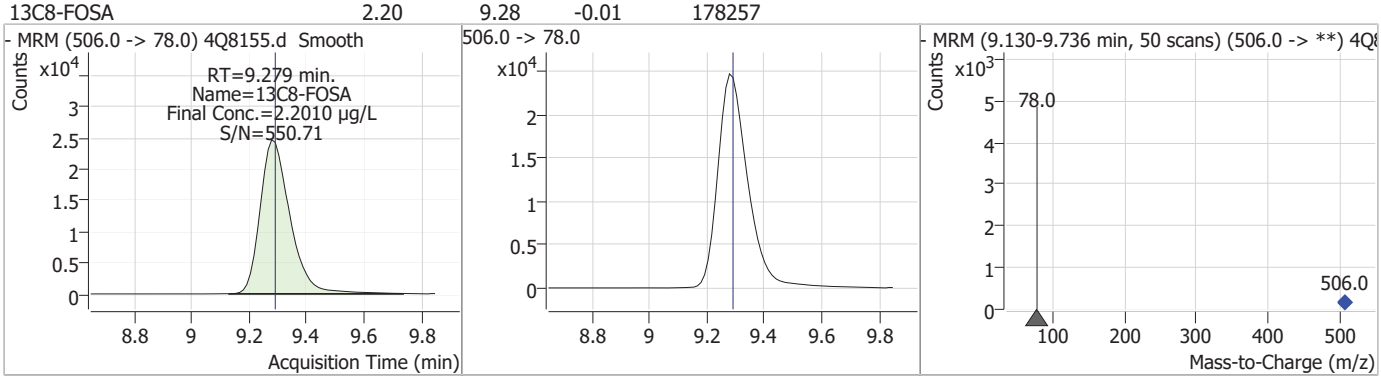
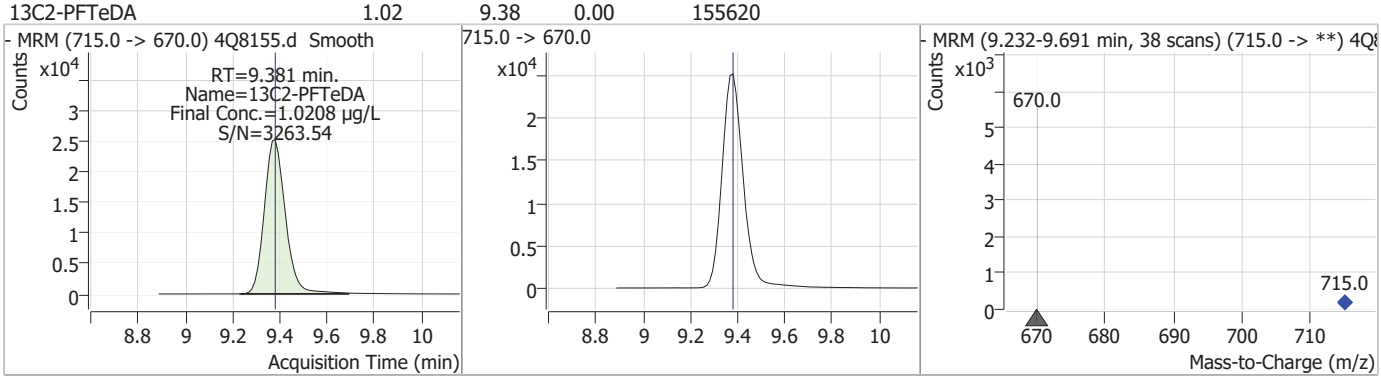
Perfluorinated Compounds by LC/MS/MS

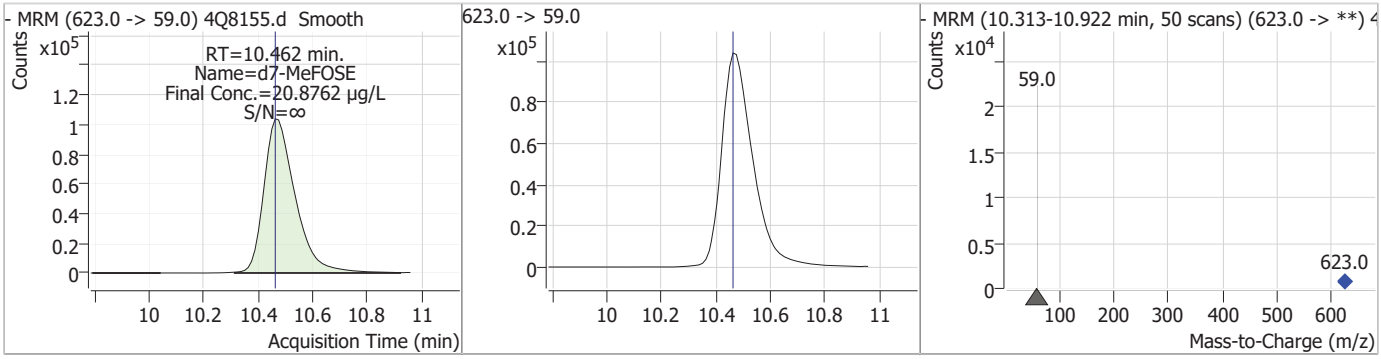
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.20	9.28	-0.01	178257				



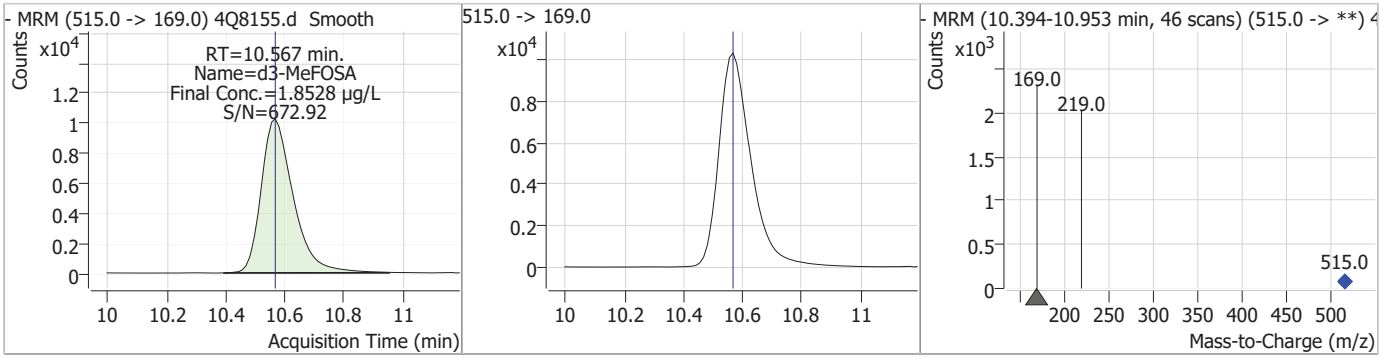
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.02	9.38	0.00	155620				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	20.88	10.46	0.00	828946				

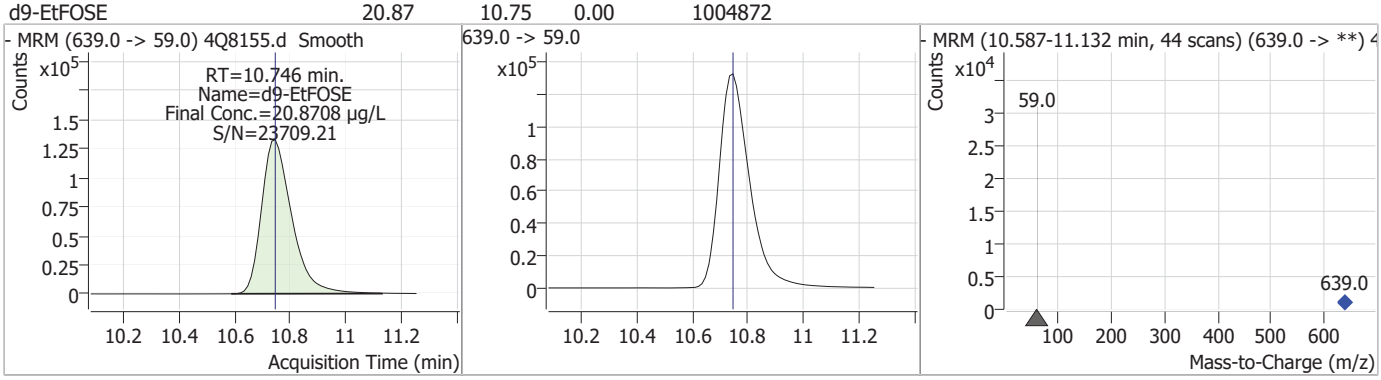


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.85	10.57	0.00	77056				

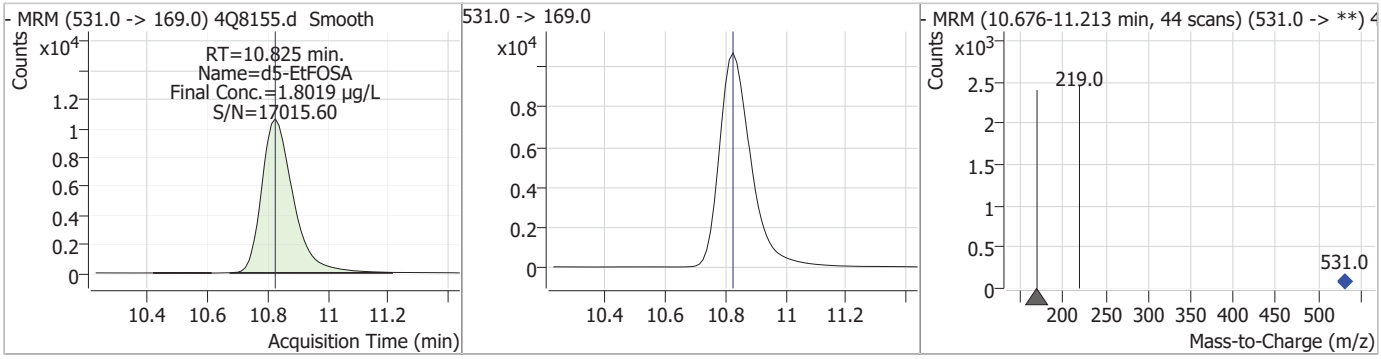


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	20.87	10.75	0.00	1004872				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.80	10.82	0.00	77227				



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7

Manual Integration Approval Summary

Sample Number: JE10205-21
Lab FileID: 4Q8155.D
Injection Time: 04/30/25 20:35

Method: EPA 1633
Analyst approved: 05/01/25 04:52 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.42	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak

Perfluorinated Compounds by LC/MS/MS

Data File	: 4Q8140.d
Operator	: maksudh
Acq. Method	: 1633.m
Acq. Date-Time	: 4/30/2025 5:12:22 PM
Sample Name	: OP63163-MB
Vial	: P1-B3
DA Method File	: 043025_1633_T4Q138.quantmethod.xml
Batch Name	: T4Q138.batch.bin
Sample Information	: OP63163,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.858	217.0 -> 172.0	1042238	10.00 µg/L	-0.025
M5-PFPeA	4.307	268.0 -> 223.0	541658	5.00 µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	360266	2.50 µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	374812	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	567196	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	235490	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	223847	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	293524	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	255614	1.25 µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	195307	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	202882	2.50 µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	32788	2.50 µg/L	-0.012
		302.0 -> 80.0	79090		
M3-PFHxS	6.986	402.0 -> 99.0	46320	2.50 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	49507	2.50 µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	15044	5.00 µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	31093	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	36039	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	275728	5.00 µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	559406	10.00 µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	201313	5.00 µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	952835	25.00 µg/L	0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1199361	25.00 µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	96265	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	87243	2.50 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	82144	2.50 µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	459001	5.00 µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	52863	2.50 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	570292	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	199905	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	230979	1.25 µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	338882	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.153	329.0 -> 81.0	15044	5.68 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 113.5%	
13C2-6:2FTS	6.684	429.0 -> 81.0	31093	5.41 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.1%	
13C2-8:2FTS	7.671	529.0 -> 81.0	36039	5.33 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.5%	
13C2-PFDoDA	8.666	615.0 -> 570.0	255614	1.18 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.6%	
13C2-PFTeDA	9.381	715.0 -> 670.0	195307	1.18 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.0%	
13C3-PFBS	5.355	302.0 -> 99.0	32788	2.51 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.5%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	46320	2.51 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.4%	
13C4-PFBA	2.858	217.0 -> 172.0	1042238	9.90 µg/L	-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.0%	
13C4-PFHpA	6.291	367.0 -> 322.0	374812	2.46 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.3%	
13C5-PFHxA	5.452	318.0 -> 273.0	360266	2.51 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.5%	
13C5-PFPeA	4.307	268.0 -> 223.0	541658	4.98 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.5%	
13C6-PFDA	7.858	519.0 -> 474.0	223847	1.27 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.4%	
13C7-PFUnDA	8.273	570.0 -> 525.0	293524	1.24 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.5%	
13C8-FOSA	9.291	506.0 -> 78.0	202882	2.40 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.2%	
13C8-PFOA	6.897	421.0 -> 376.0	567196	2.49 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.6%	
13C8-PFOS	7.995	507.0 -> 99.0	49507	2.50 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.1%	
13C9-PFNA	7.403	472.0 -> 427.0	235490	1.23 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.3%	
d3-MeFOSAA	7.915	573.0 -> 419.0	275728	5.10 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.9%	
13C3-HFPO-DA	5.779	287.0 -> 169.0	559406	9.93 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.3%	
d3-MeFOSA	10.567	515.0 -> 169.0	87243	2.01 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 80.5%	
d5-EtFOSAA	8.098	589.0 -> 419.0	201313	4.85 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.9%	
d7-MeFOSE	10.475	623.0 -> 59.0	952835	23.03 µg/L	0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 92.1%	
d9-EtFOSE	10.746	639.0 -> 59.0	1199361	23.91 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 95.6%	
d5-EtFOSA	10.825	531.0 -> 169.0	96265	2.16 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 86.2%	

Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0	-	N.D.	
		299.0 -> 99.0			
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

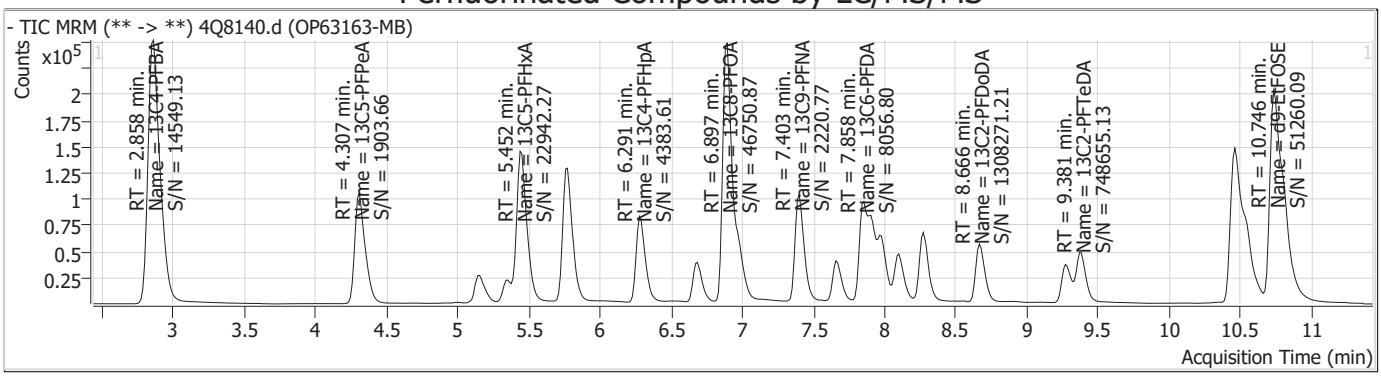
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.		
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 219.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 369.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

Perfluorinated Compounds by LC/MS/MS

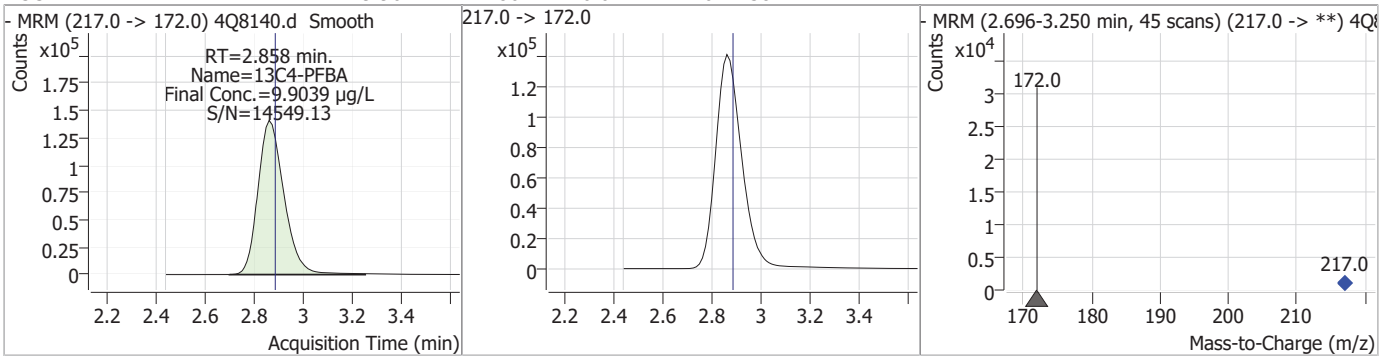
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

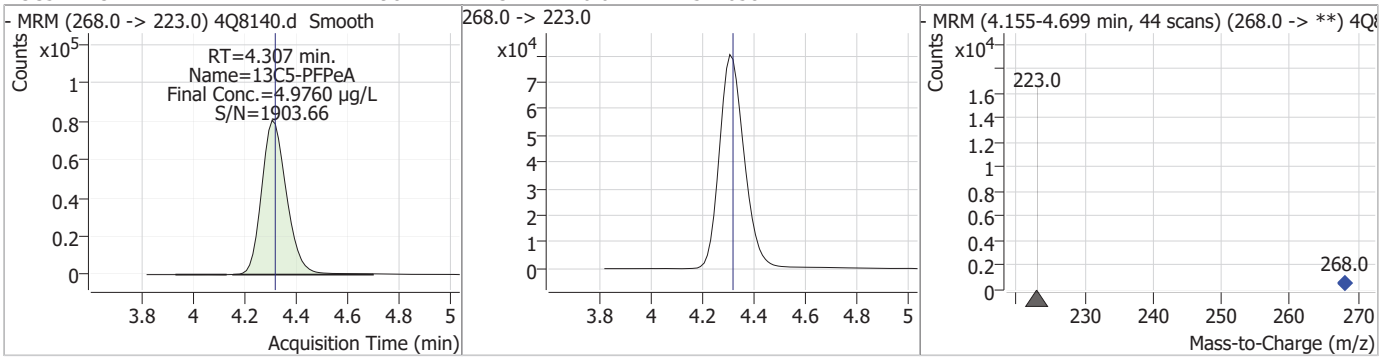
Perfluorinated Compounds by LC/MS/MS



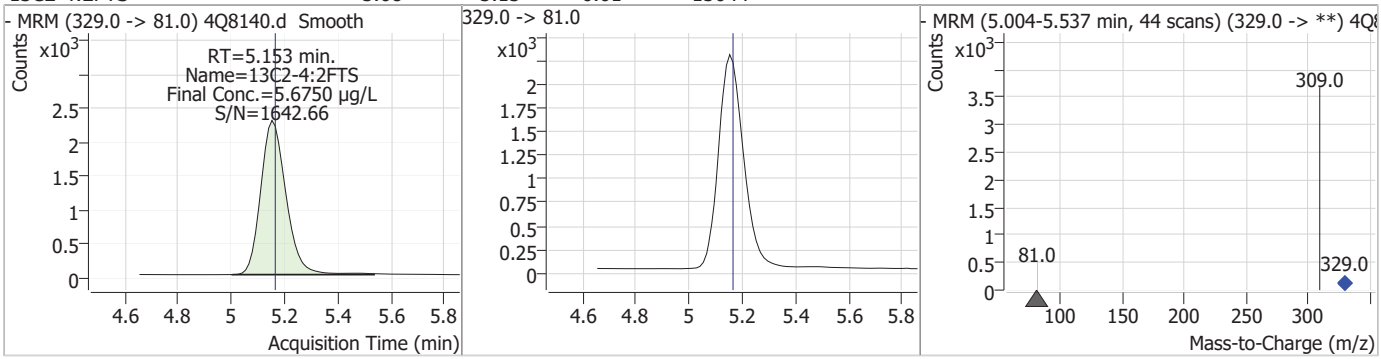
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.90	2.86	-0.02	1042238				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.98	4.31	-0.01	541658				

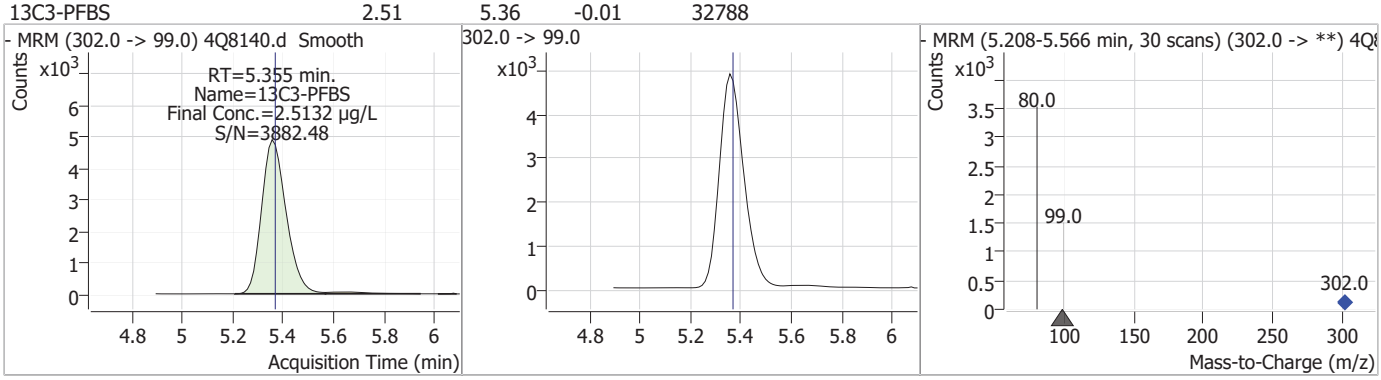


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.68	5.15	-0.01	15044				

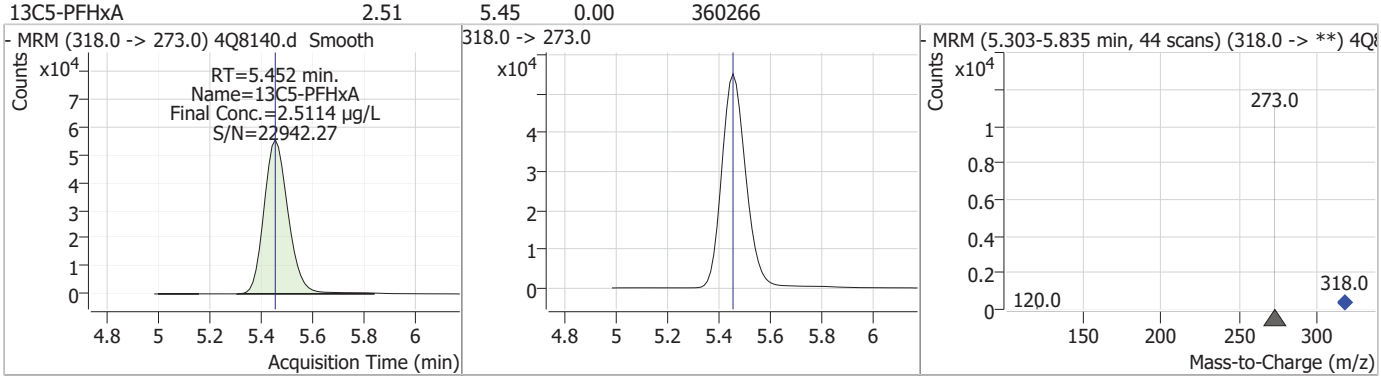


Perfluorinated Compounds by LC/MS/MS

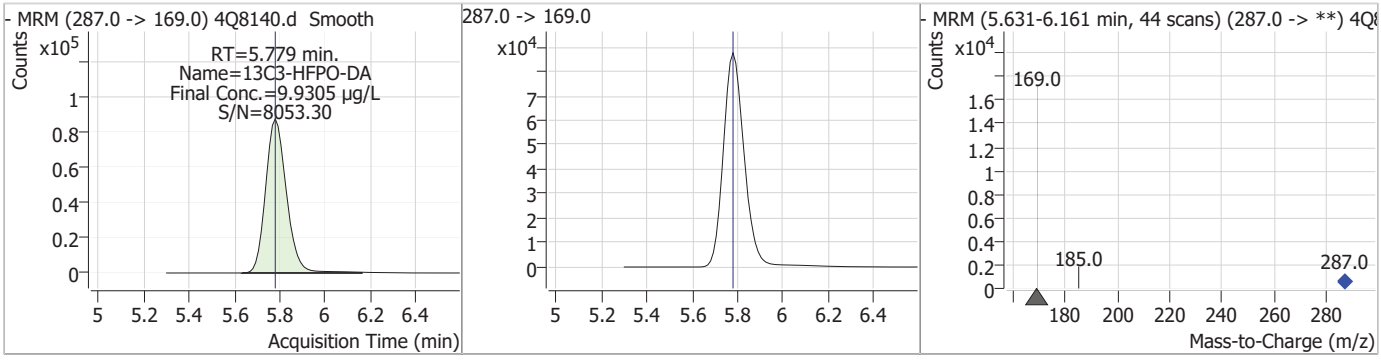
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.51	5.36	-0.01	32788				



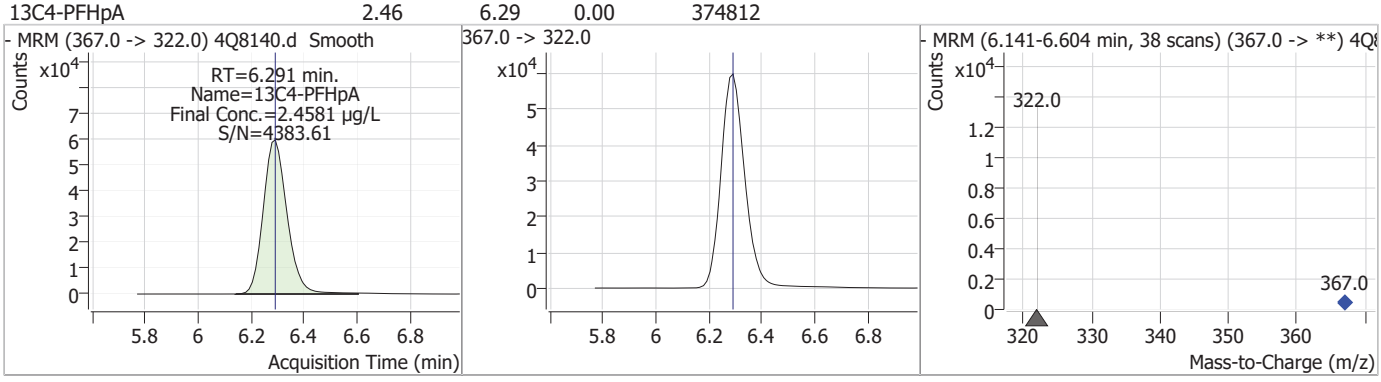
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.51	5.45	0.00	360266				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.93	5.78	0.00	559406				

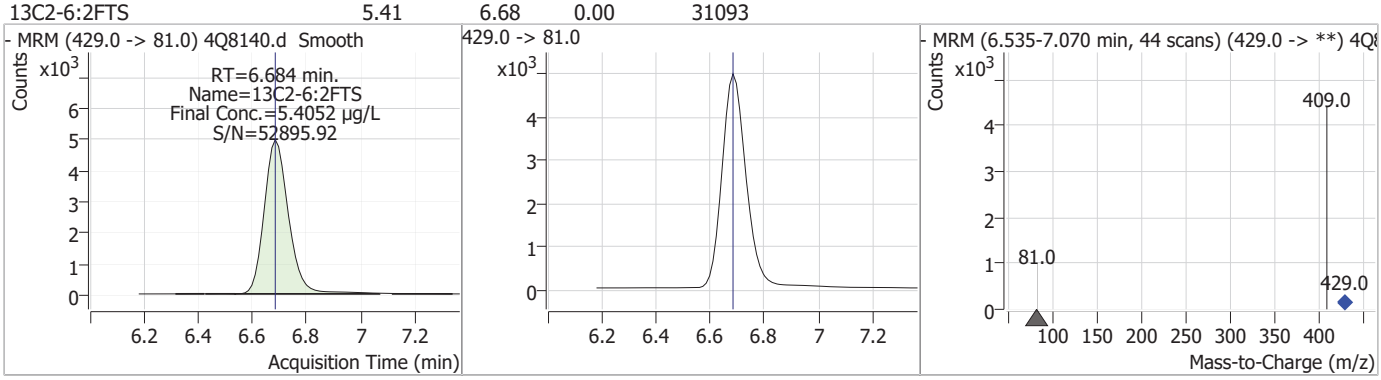


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.46	6.29	0.00	374812				

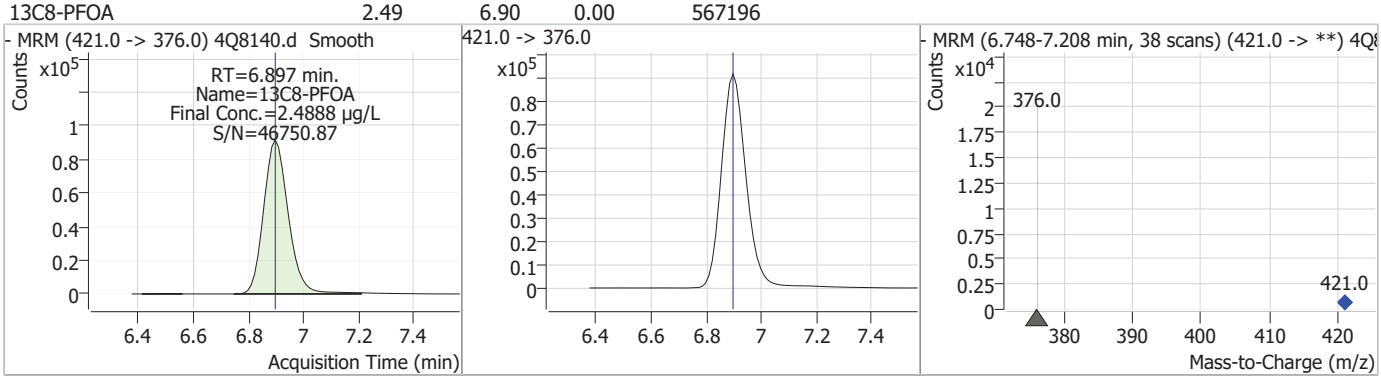


Perfluorinated Compounds by LC/MS/MS

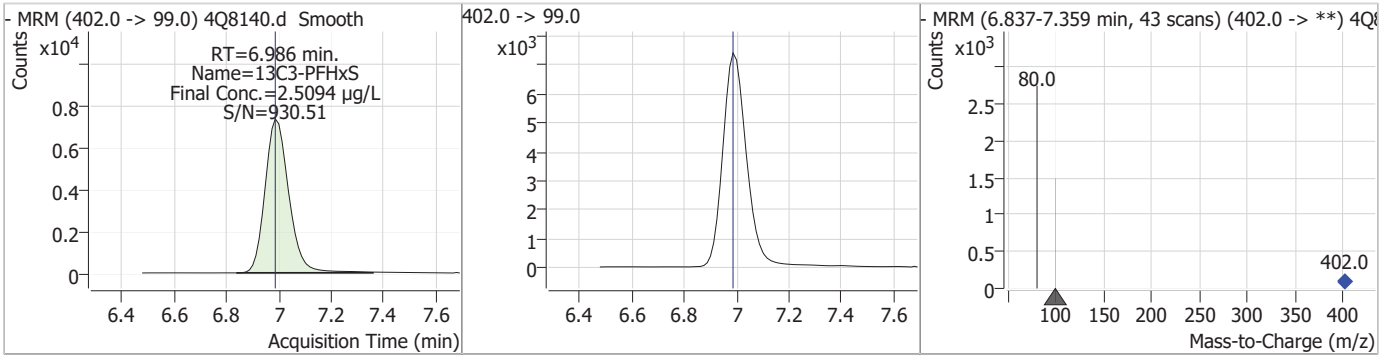
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.41	6.68	0.00	31093				



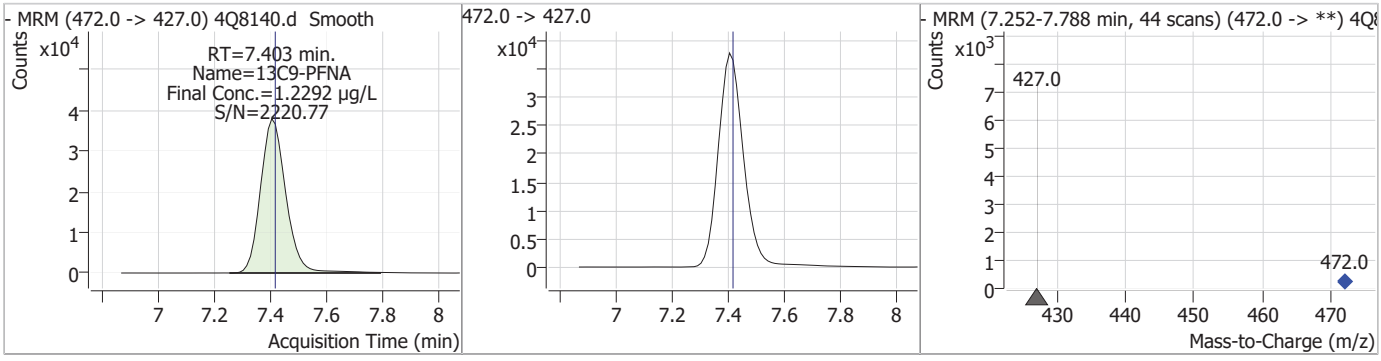
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.49	6.90	0.00	567196				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.51	6.99	0.00	46320				

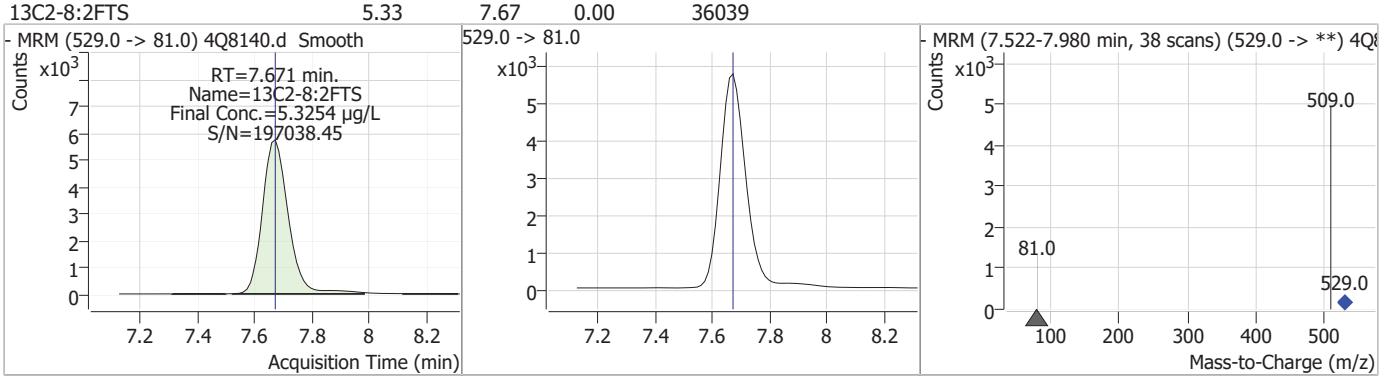


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.23	7.40	-0.01	235490				

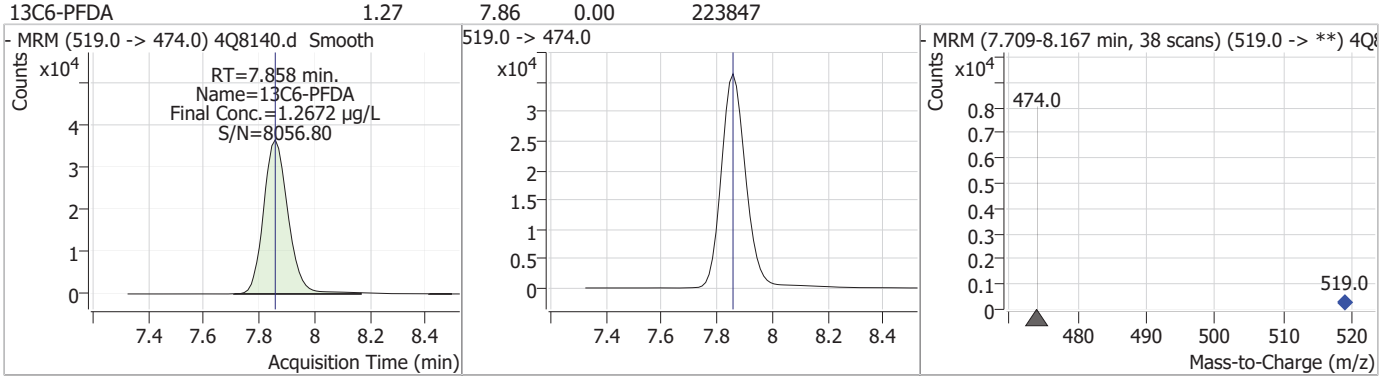


Perfluorinated Compounds by LC/MS/MS

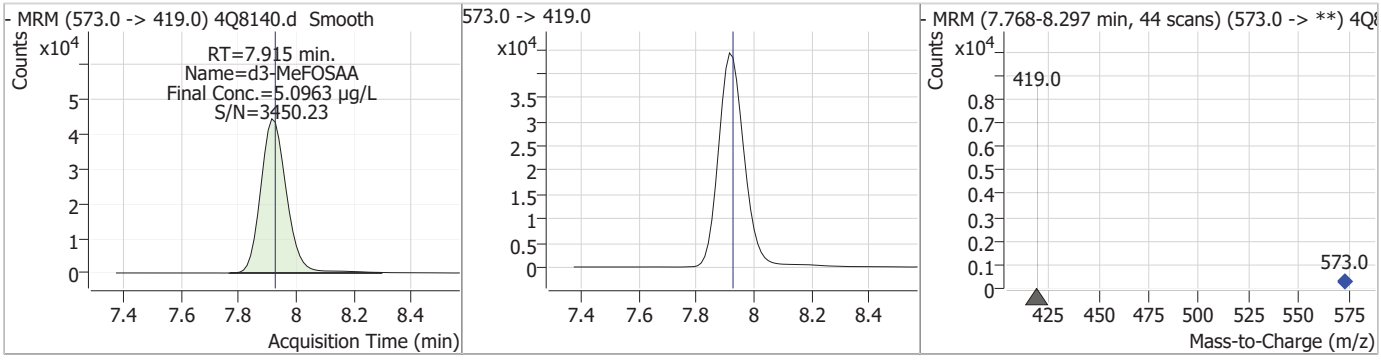
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.33	7.67	0.00	36039				



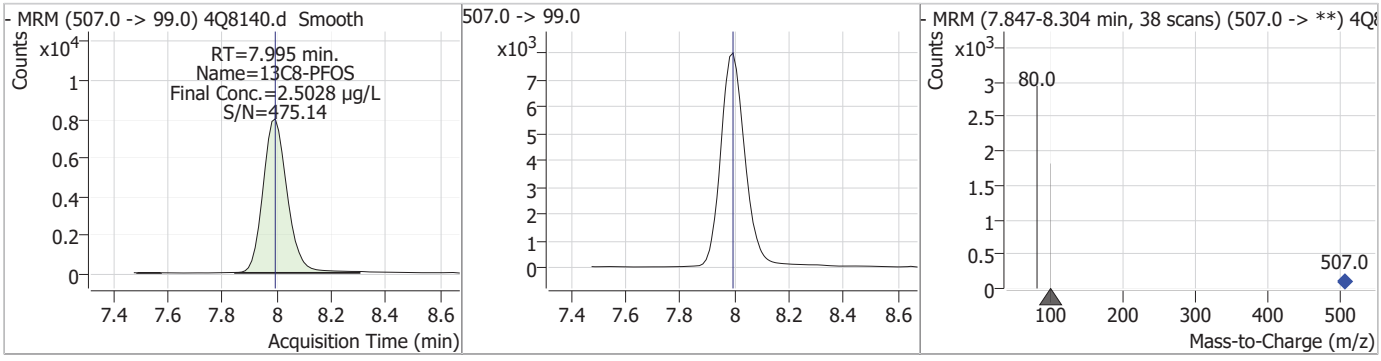
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.27	7.86	0.00	223847				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.10	7.92	-0.01	275728				

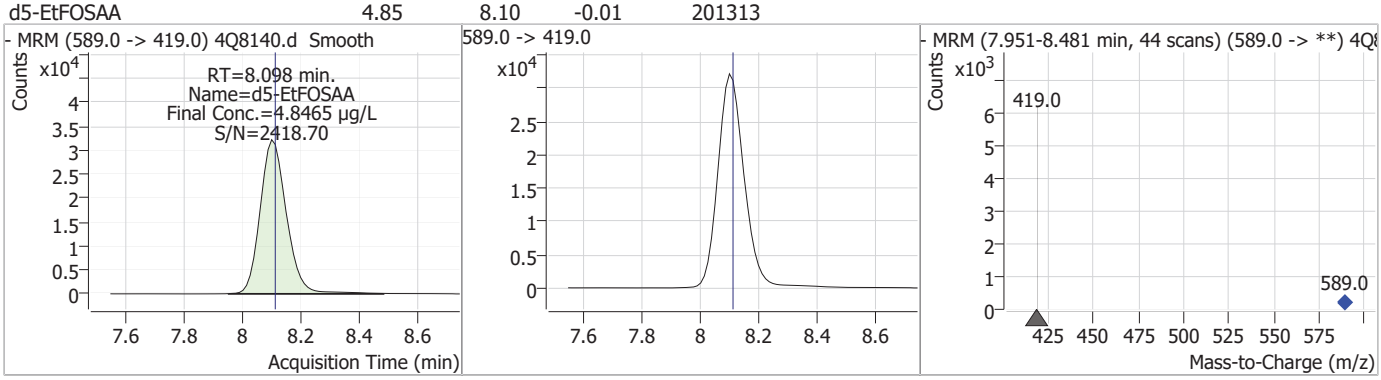


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.50	7.99	0.00	49507				

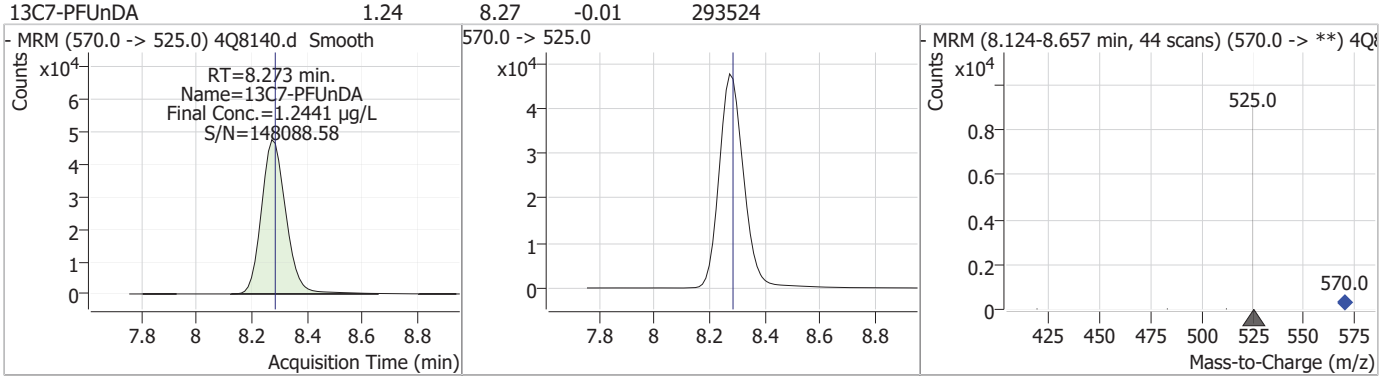


Perfluorinated Compounds by LC/MS/MS

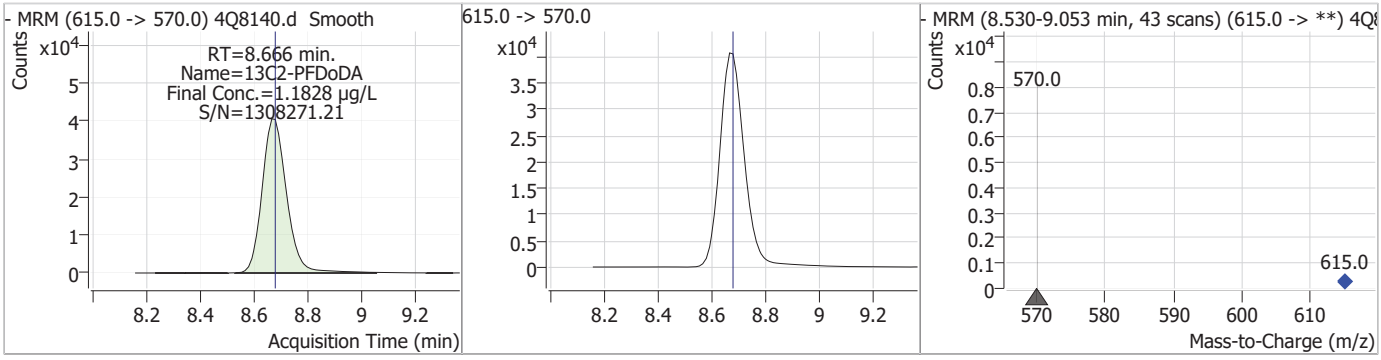
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.85	8.10	-0.01	201313				



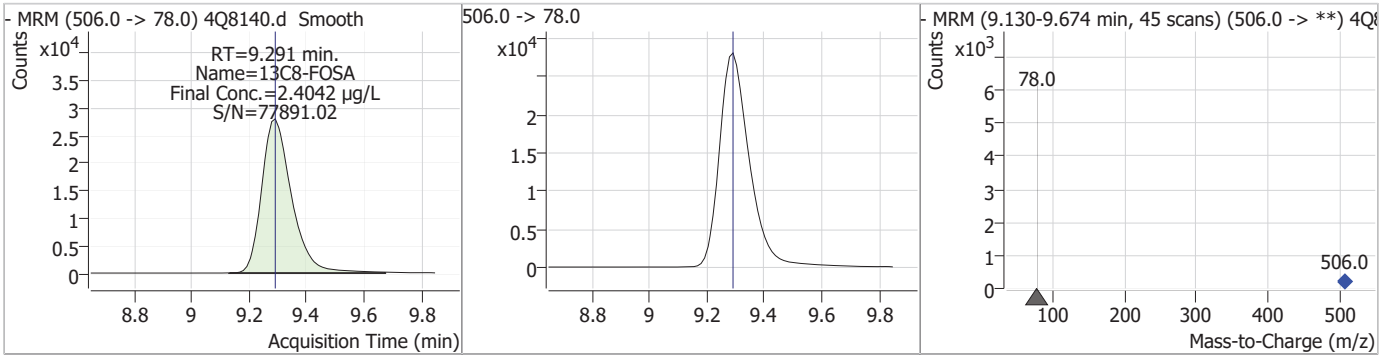
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.24	8.27	-0.01	293524				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.18	8.67	-0.01	255614				

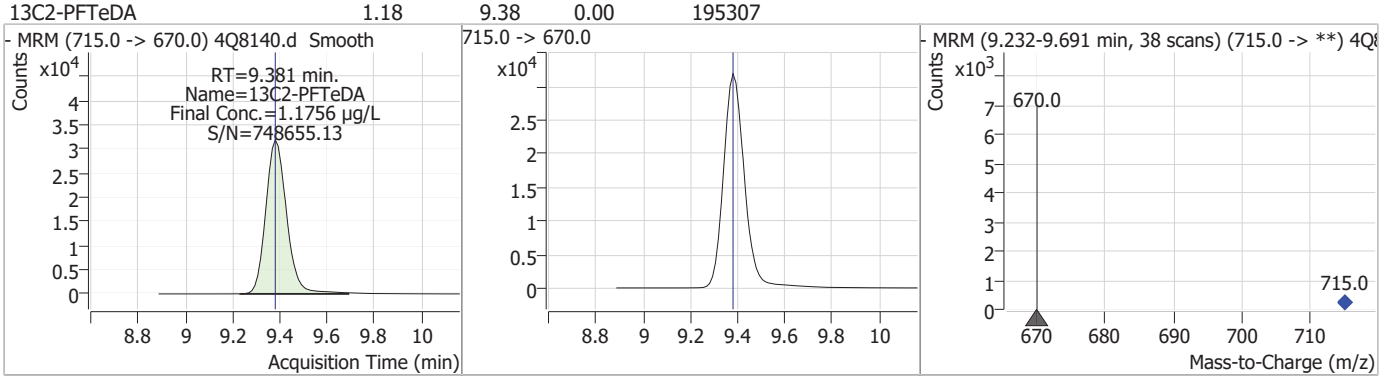


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.40	9.29	0.00	202882				

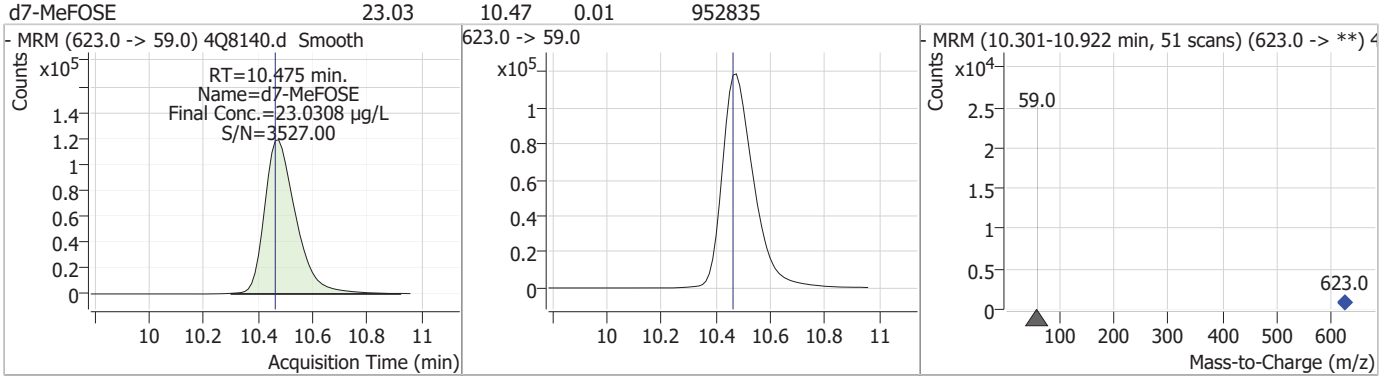


Perfluorinated Compounds by LC/MS/MS

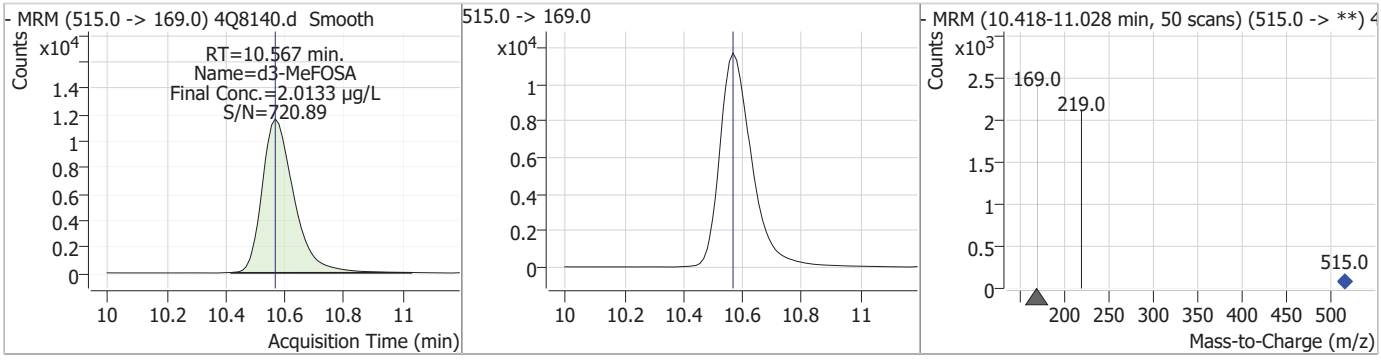
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.18	9.38	0.00	195307				



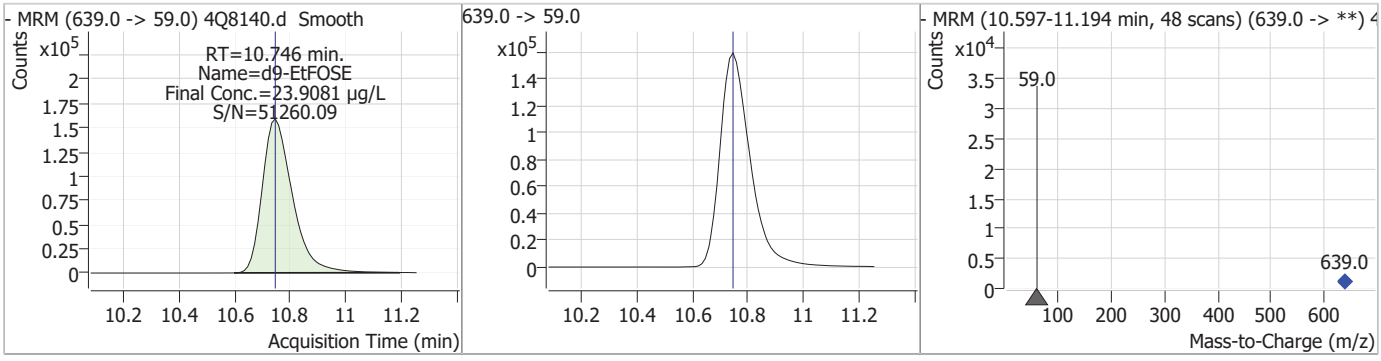
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.03	10.47	0.01	952835				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.01	10.57	0.00	87243				

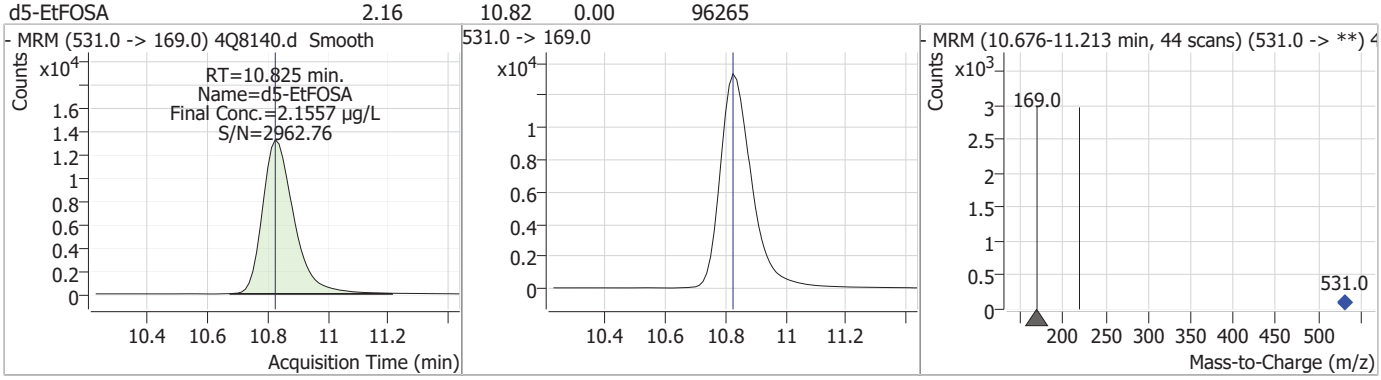


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.91	10.75	0.00	1199361				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.16	10.82	0.00	96265				



7.2.1

7

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8156.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 8:49:35 PM
Sample Name : OP63161-MB
Vial : P1-C8
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.871	217.0 -> 172.0	910569	10.00 µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	482499	5.00 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	316701	2.50 µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	336675	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	487503	2.50 µg/L	0.000
M9-PFNA	7.416	472.0 -> 427.0	192717	1.25 µg/L	0.000
M6-PFDA	7.858	519.0 -> 474.0	190354	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	249655	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	208069	1.25 µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	148850	1.25 µg/L	0.000
M8-FOSA	9.279	506.0 -> 78.0	169148	2.50 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	27635	2.50 µg/L	0.000
		302.0 -> 80.0	67643		
M3-PFHxS	6.999	402.0 -> 99.0	40102	2.50 µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	41692	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	12913	5.00 µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	25349	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	29475	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	229108	5.00 µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	495763	10.00 µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	168015	5.00 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	782511	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	961182	25.00 µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	81126	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	75720	2.50 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	79606	2.50 µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	429945	5.00 µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	47760	2.50 µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	519522	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	188139	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	208749	1.25 µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	330705	2.50 µg/L	0.012
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	12913	5.39 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.8%	
13C2-6:2FTS	6.684	429.0 -> 81.0	25349	4.88 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.5%	
13C2-8:2FTS	7.671	529.0 -> 81.0	29475	4.82 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.4%	
13C2-PFDoDA	8.666	615.0 -> 570.0	208069	1.02 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 81.8%	
13C2-PFTeDA	9.381	715.0 -> 670.0	148850	0.95 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 76.2%	
13C3-PFBS	5.368	302.0 -> 99.0	27635	2.34 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.8%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	40102	2.40	µg/L	0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.2%		
13C4-PFBA	2.871	217.0 -> 172.0	910569	9.24	µg/L	-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 92.4%		
13C4-PFHpA	6.291	367.0 -> 322.0	336675	2.26	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.5%		
13C5-PFHxA	5.464	318.0 -> 273.0	316701	2.26	µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.5%		
13C5-PFPeA	4.319	268.0 -> 223.0	482499	4.54	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.8%		
13C6-PFDA	7.858	519.0 -> 474.0	190354	1.15	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.6%		
13C7-PFUnDA	8.273	570.0 -> 525.0	249655	1.12	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.9%		
13C8-FOSA	9.279	506.0 -> 78.0	169148	2.07	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 82.7%		
13C8-PFOA	6.897	421.0 -> 376.0	487503	2.35	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.9%		
13C8-PFOS	7.995	507.0 -> 99.0	41692	2.17	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 87.0%		
13C9-PFNA	7.416	472.0 -> 427.0	192717	1.11	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.0%		
d3-MeFOSAA	7.915	573.0 -> 419.0	229108	4.37	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 87.4%		
13C3-HFPO-DA	5.792	287.0 -> 169.0	495763	9.02	µg/L	0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 90.2%		
d3-MeFOSA	10.567	515.0 -> 169.0	75720	1.80	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 72.1%		
d5-EtFOSAA	8.098	589.0 -> 419.0	168015	4.17	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 83.5%		
d7-MeFOSE	10.462	623.0 -> 59.0	782511	19.52	µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 78.1%		
d9-EtFOSE	10.746	639.0 -> 59.0	961182	19.77	µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 79.1%		
d5-EtFOSA	10.825	531.0 -> 169.0	81126	1.87	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 75.0%		

Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0 327.0 -> 81.0	-	N.D.	
6:2FTS	-	427.0 -> 407.0 427.0 -> 81.0	-	N.D.	
8:2FTS	-	527.0 -> 507.0 527.0 -> 81.0	-	N.D.	
EtFOSAA	-	584.0 -> 419.0 584.0 -> 483.0	-	N.D.	
FOSA	-	498.0 -> 78.0 498.0 -> 478.0	-	N.D.	
MeFOSAA	-	570.0 -> 419.0 570.0 -> 512.0	-	N.D.	
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0 299.0 -> 99.0	-	N.D.	
PFDA	-	513.0 -> 469.0 513.0 -> 219.0	-	N.D.	
PFDoDA	-	613.0 -> 569.0 613.0 -> 319.0	-	N.D.	

Perfluorinated Compounds by LC/MS/MS

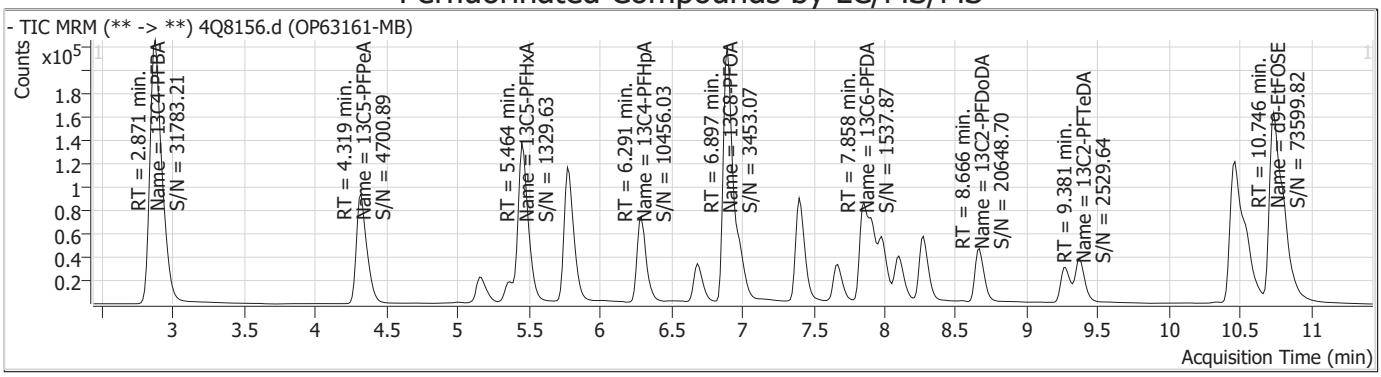
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.		
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 219.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 369.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

Perfluorinated Compounds by LC/MS/MS

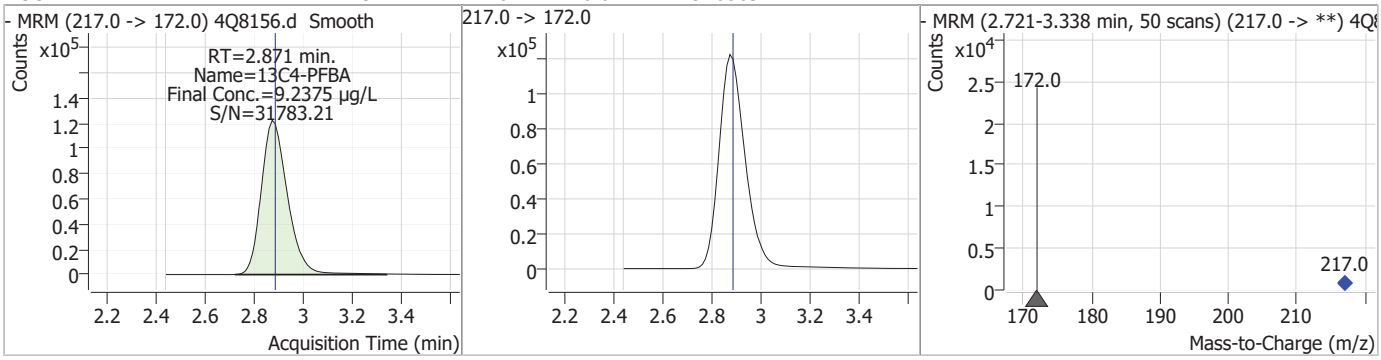
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

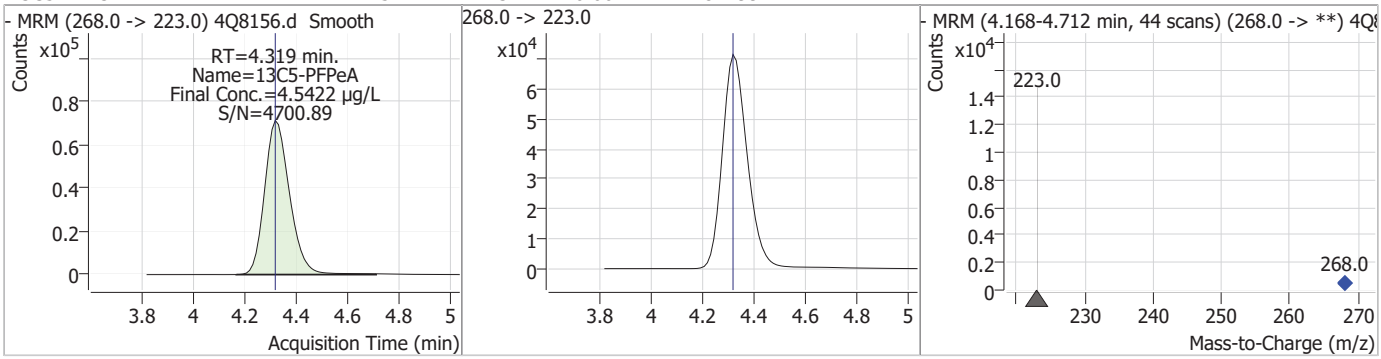
Perfluorinated Compounds by LC/MS/MS



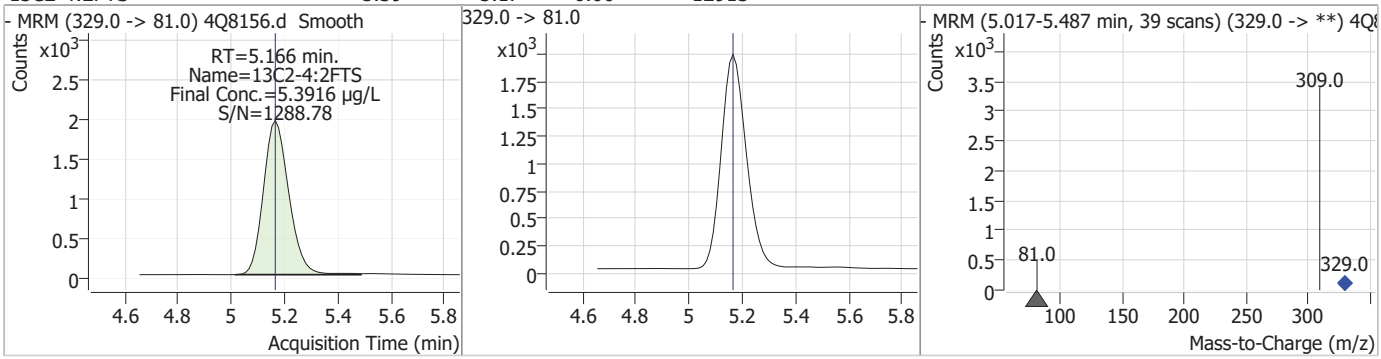
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.24	2.87	-0.01	910569				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.54	4.32	0.00	482499				

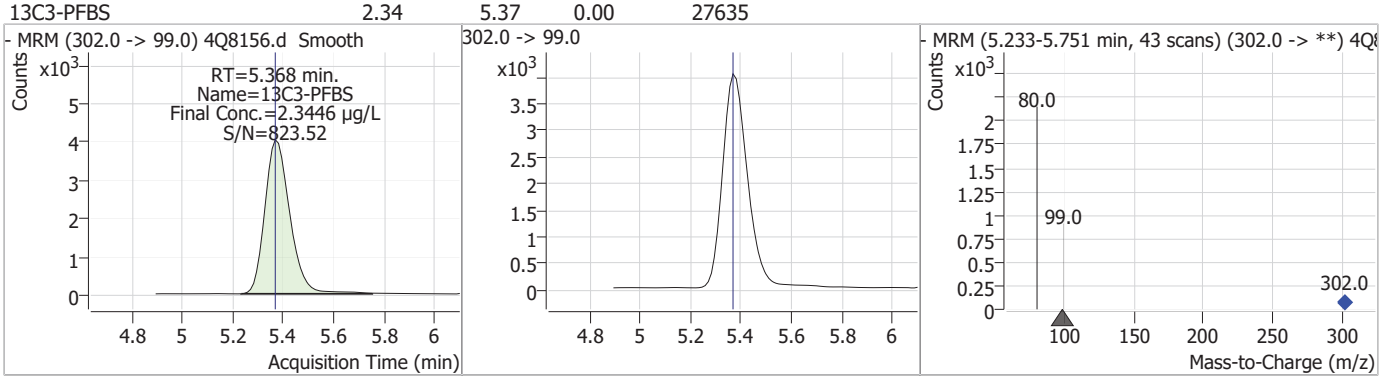


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.39	5.17	0.00	12913				

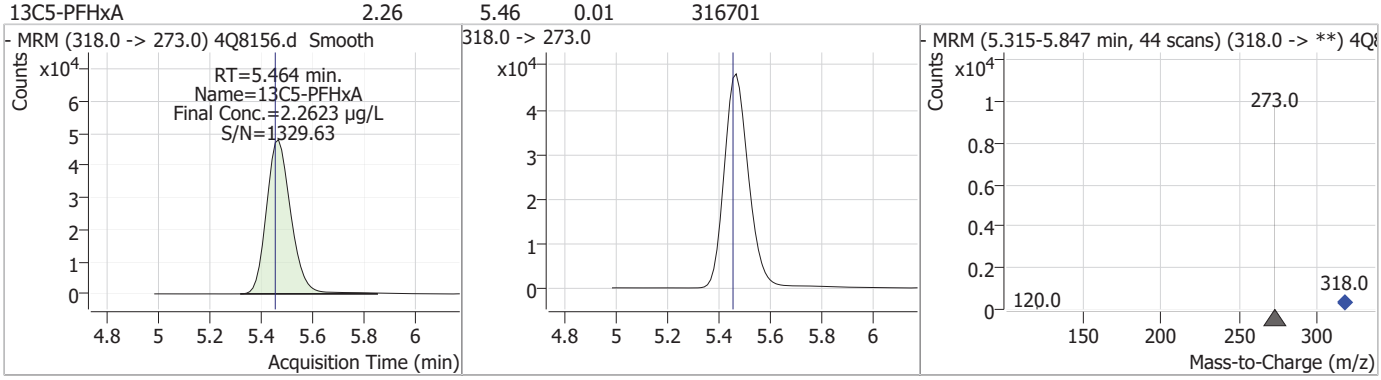


Perfluorinated Compounds by LC/MS/MS

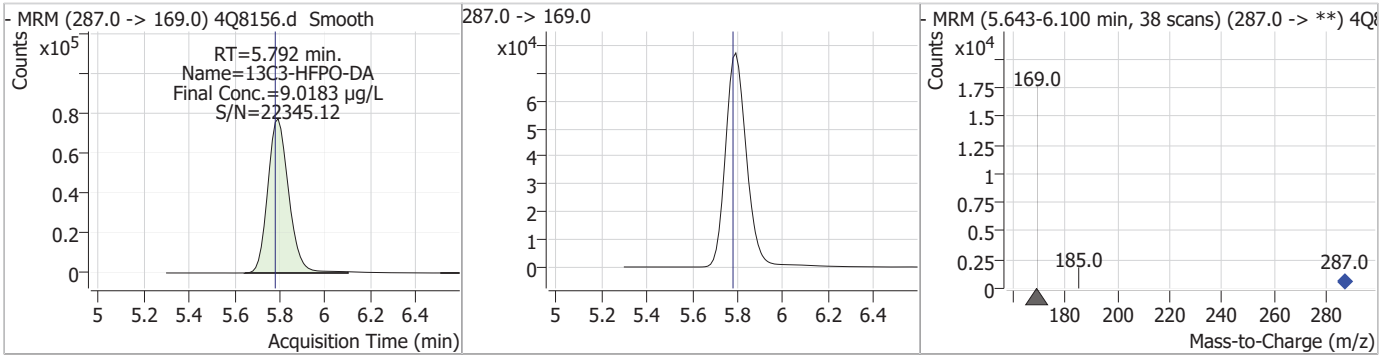
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.34	5.37	0.00	27635				



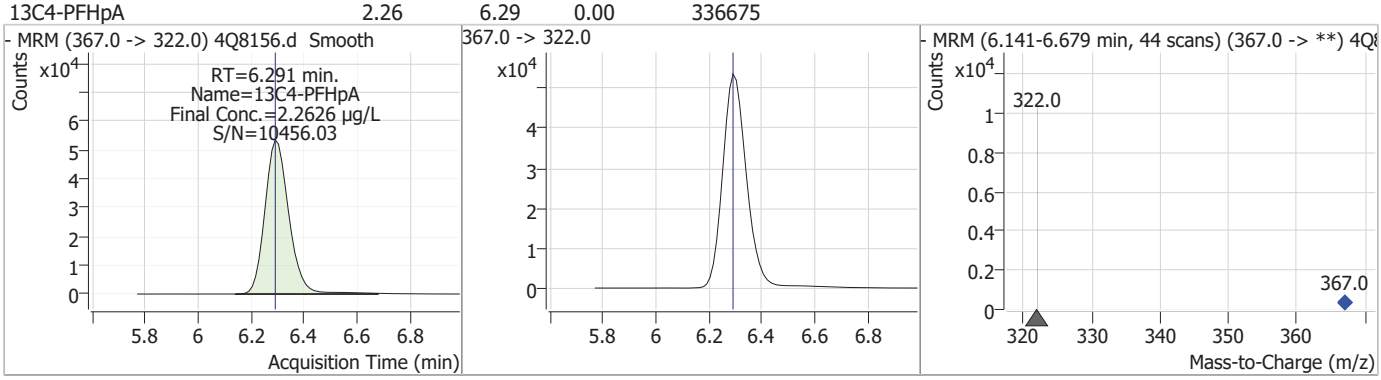
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.26	5.46	0.01	316701				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.02	5.79	0.01	495763				

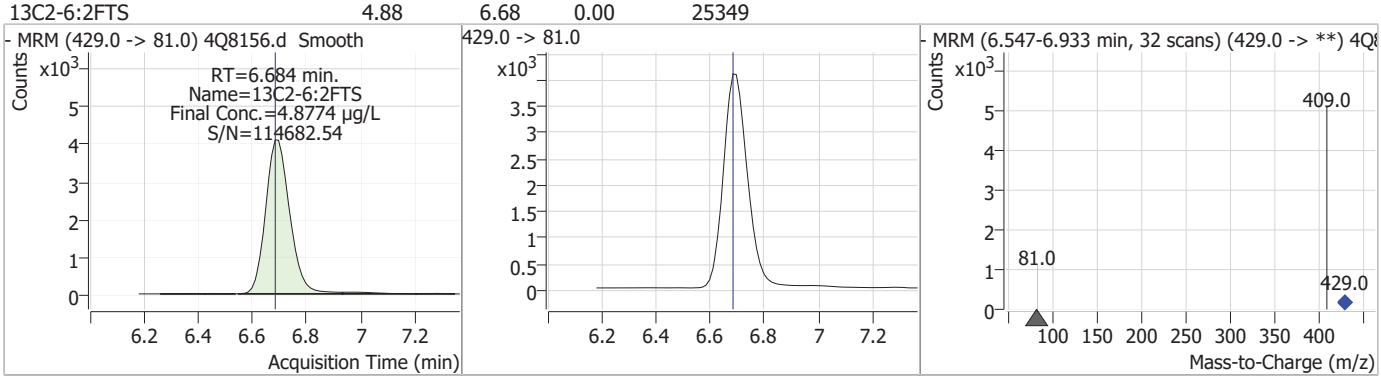


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.26	6.29	0.00	336675				

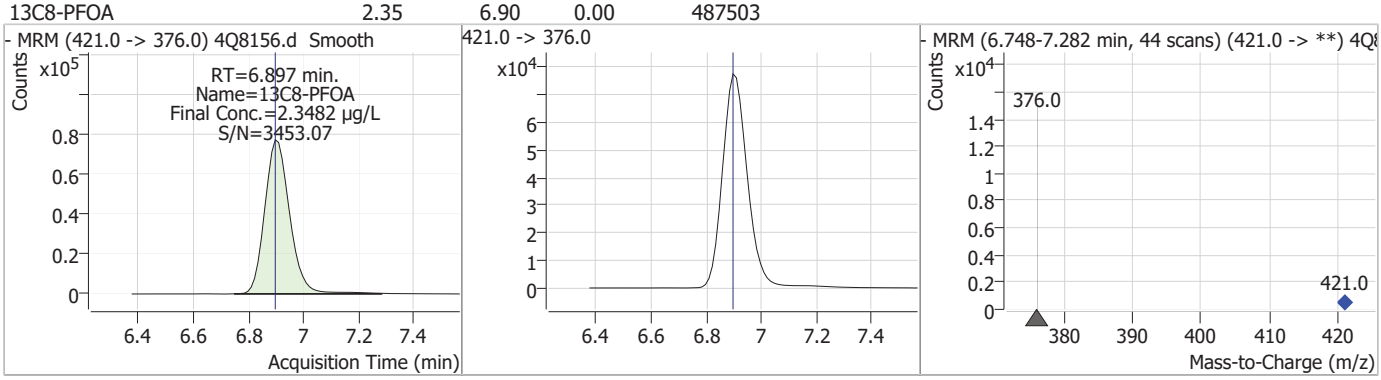


Perfluorinated Compounds by LC/MS/MS

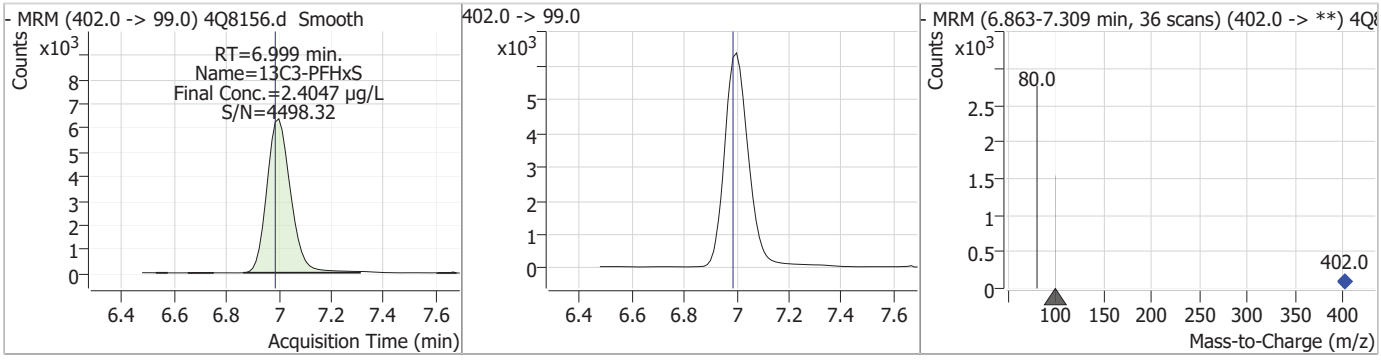
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.88	6.68	0.00	25349				



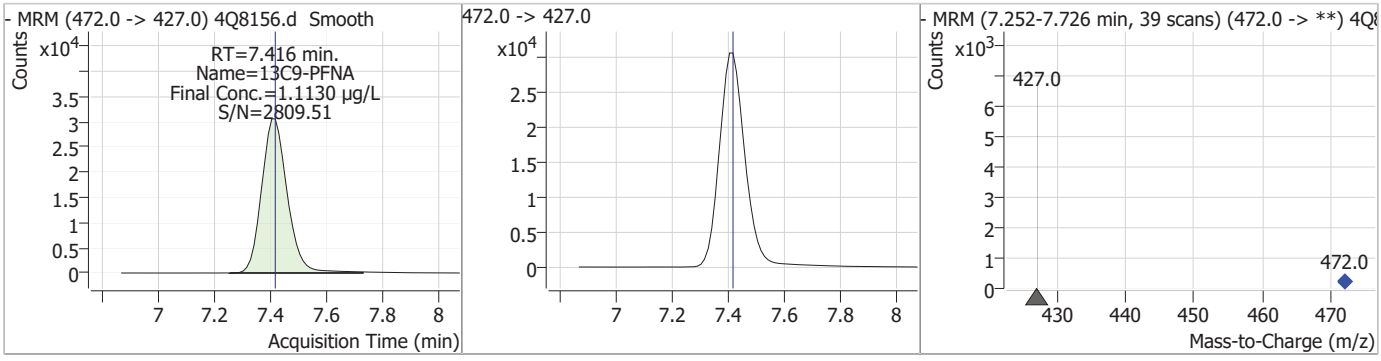
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.35	6.90	0.00	487503				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.40	7.00	0.01	40102				

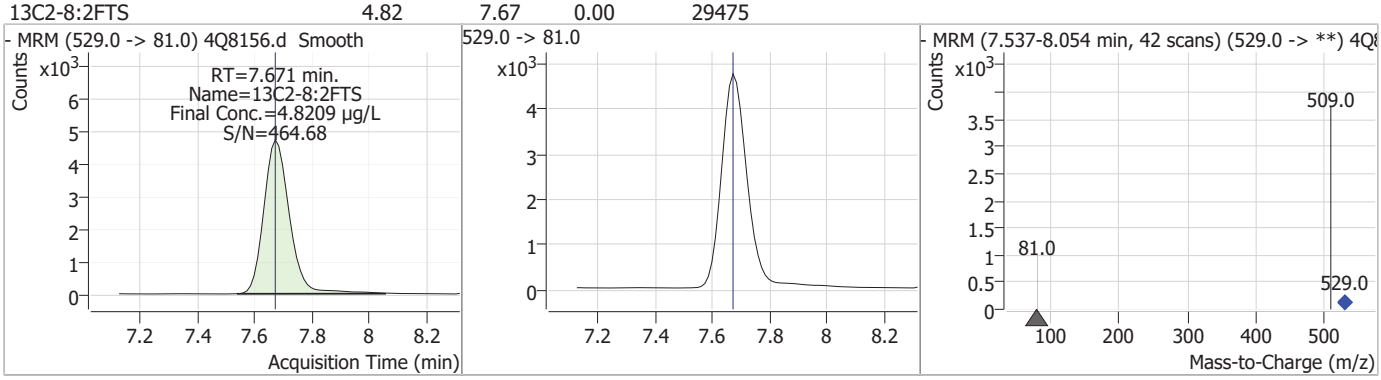


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.11	7.42	0.00	192717				

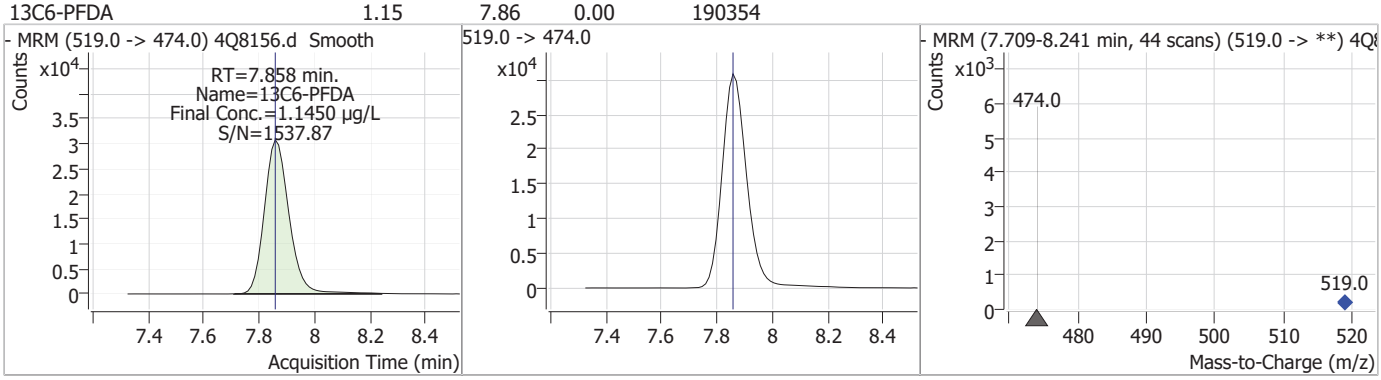


Perfluorinated Compounds by LC/MS/MS

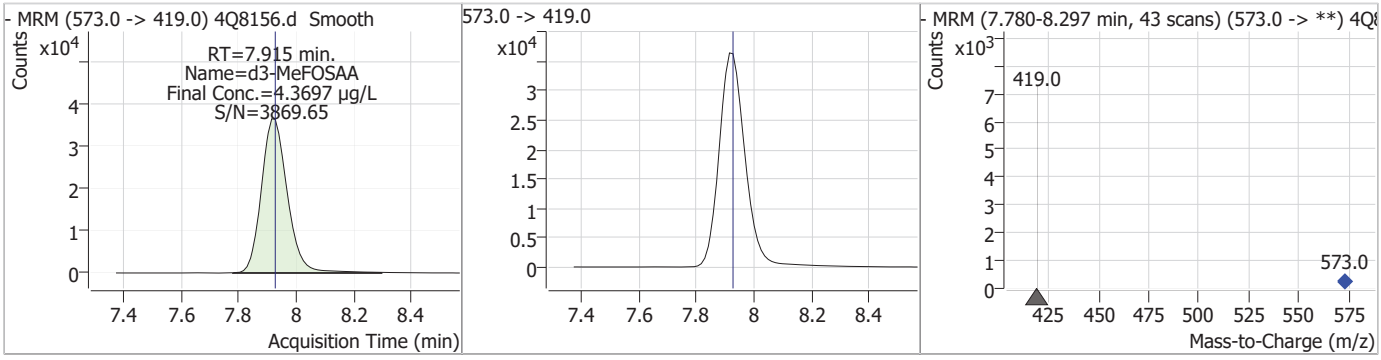
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.82	7.67	0.00	29475				



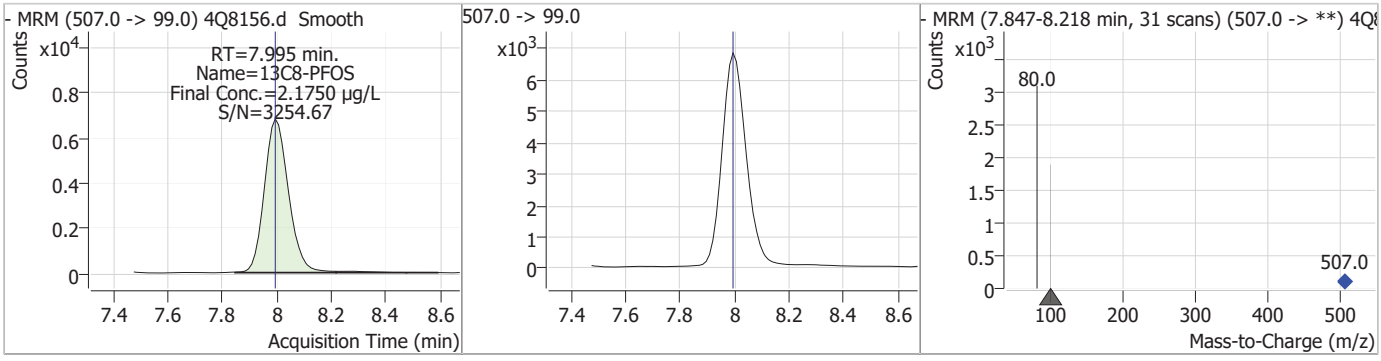
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.15	7.86	0.00	190354				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.37	7.92	-0.01	229108				

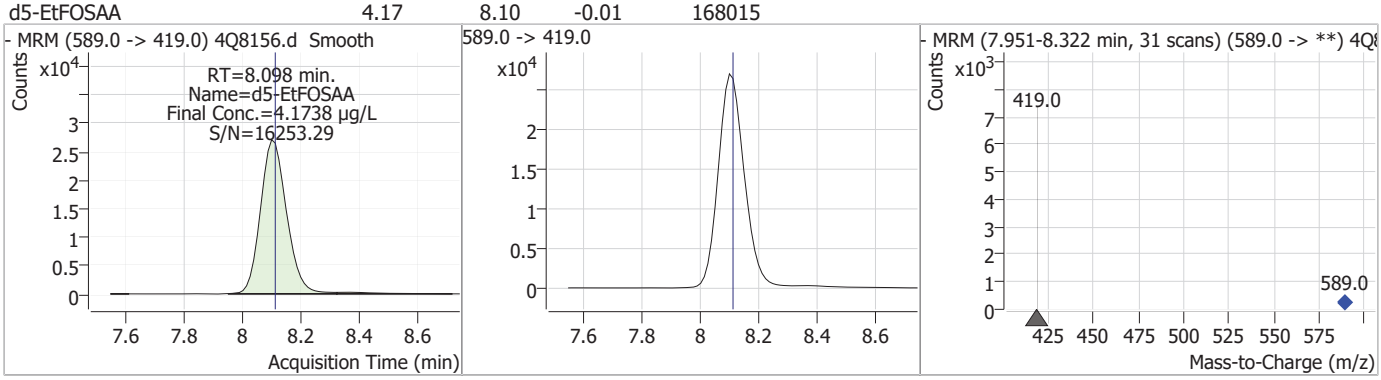


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.17	7.99	0.00	41692				

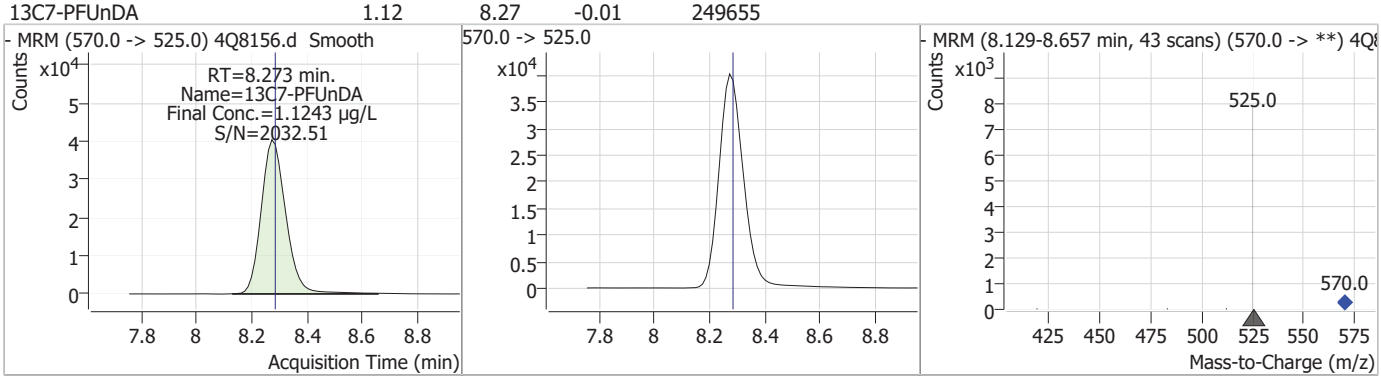


Perfluorinated Compounds by LC/MS/MS

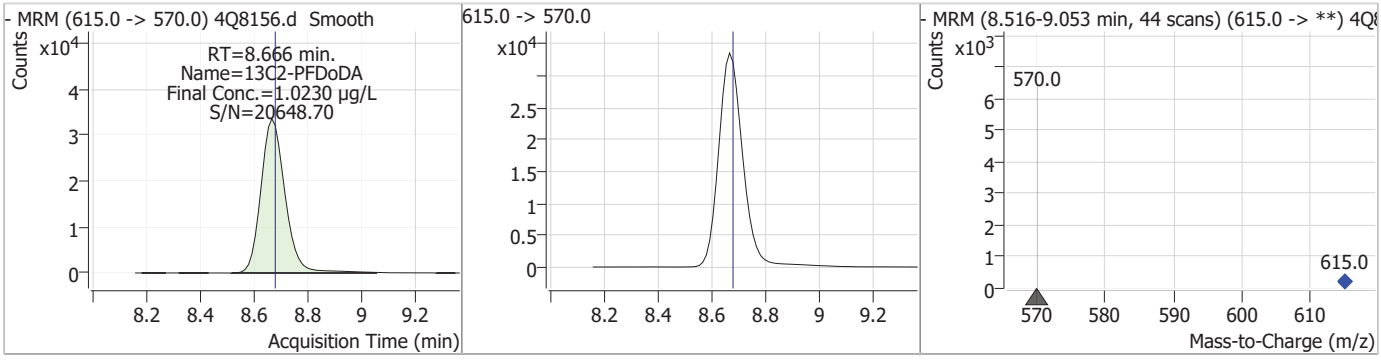
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.17	8.10	-0.01	168015				



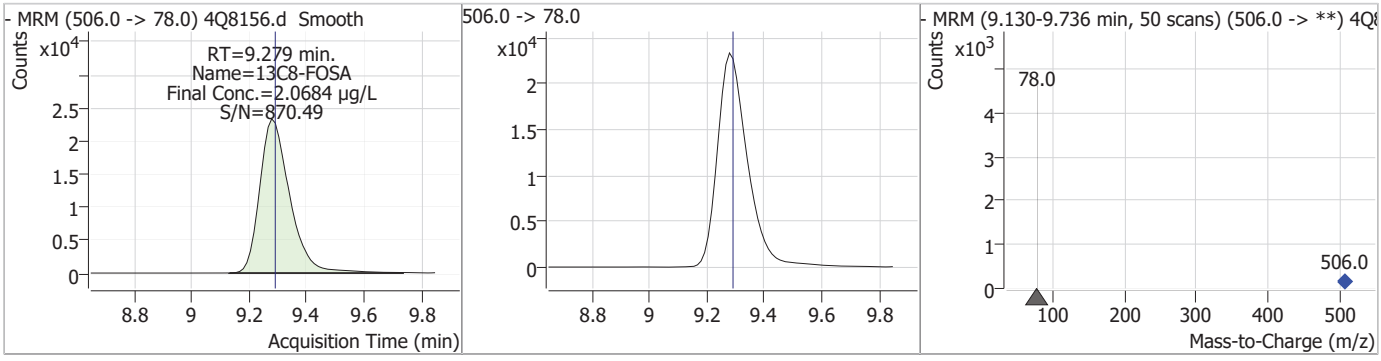
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.12	8.27	-0.01	249655				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.02	8.67	-0.01	208069				

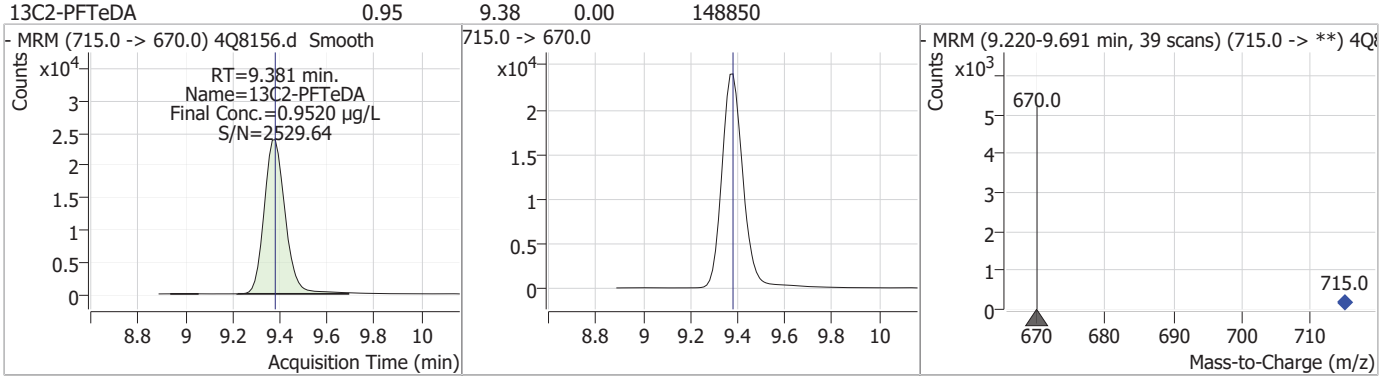


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.07	9.28	-0.01	169148				

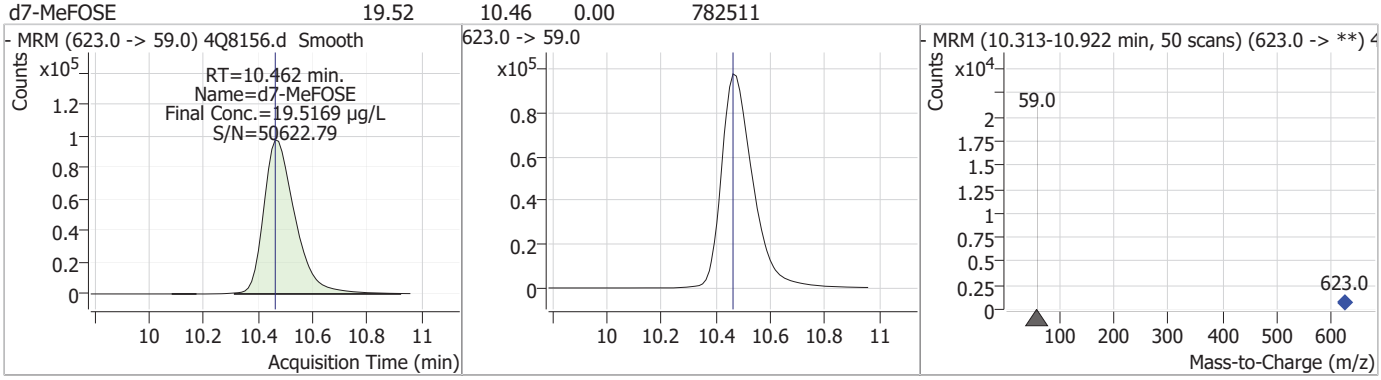


Perfluorinated Compounds by LC/MS/MS

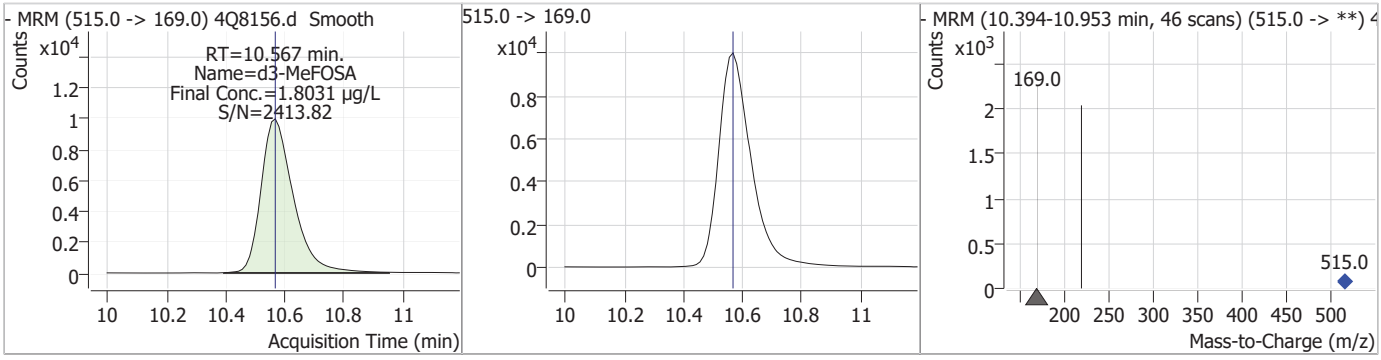
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	0.95	9.38	0.00	148850				



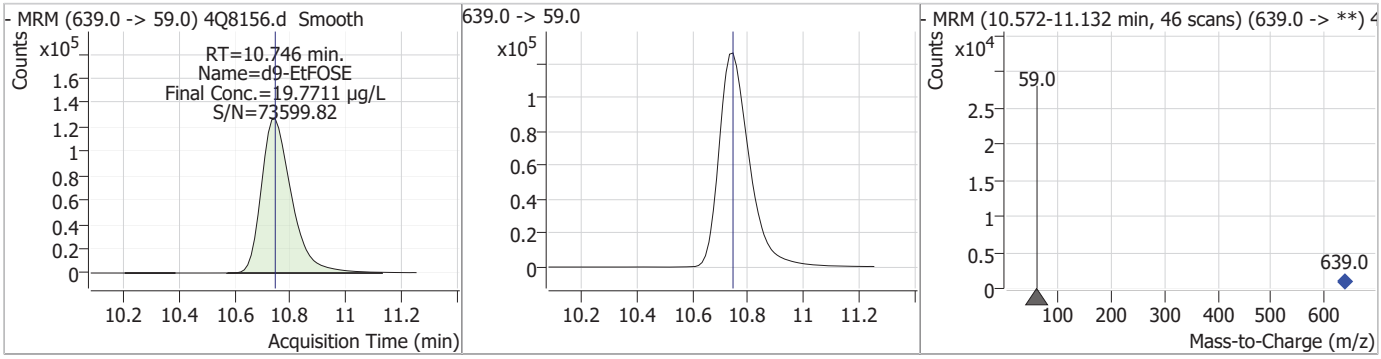
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	19.52	10.46	0.00	782511				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.80	10.57	0.00	75720				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	19.77	10.75	0.00	961182				

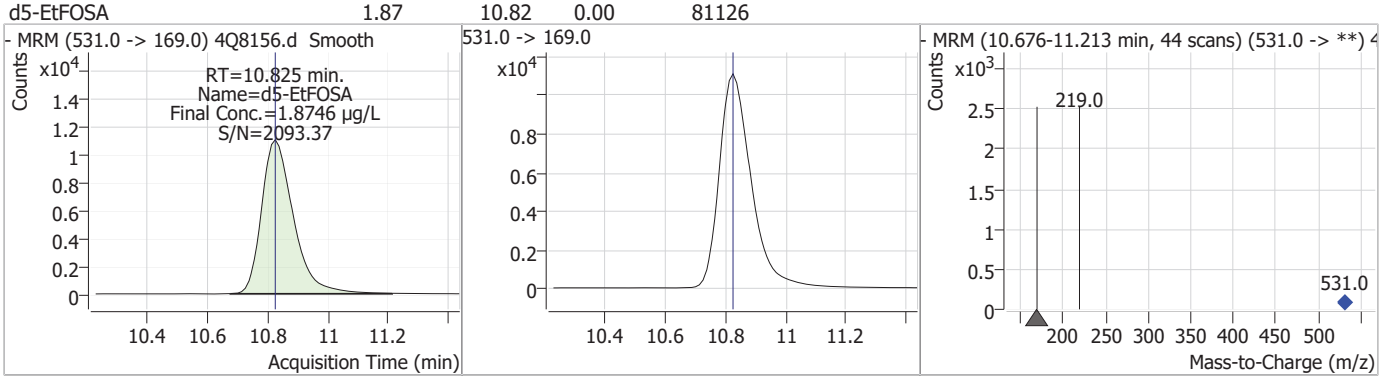


7.2.2

7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.87	10.82	0.00	81126				



7.2.2

7

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/16/25 06:10

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26069.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/15/2025 1:25:30 PM
Sample Name : op63534-mb
Vial : P1-D2
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : T1Q362.batch.bin
Sample Information : OP63534,T1Q362,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.273	217.0 -> 172.0	188709	10.00 µg/L	0.012
M5-PFPeA	4.648	268.0 -> 223.0	111919	5.00 µg/L	0.000
M5-PFHxA	5.759	318.0 -> 273.0	61093	2.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	49129	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	75959	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	27083	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	28803	1.25 µg/L	0.000
M7-PFUnDA	8.607	570.0 -> 525.0	43317	1.25 µg/L	0.012
M2-PFDoDA	9.027	615.0 -> 570.0	37265	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	14132	1.25 µg/L	0.000
M8-FOSA	9.346	506.0 -> 78.0	19161	2.50 µg/L	0.012
M3-PFBS	5.711	302.0 -> 99.0	7364	2.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	6846	2.50 µg/L	0.000
M8-PFOS	8.316	507.0 -> 99.0	7062	2.50 µg/L	0.012
M2-4:2FTS	5.446	329.0 -> 81.0	1474	5.00 µg/L	0.000
M2-6:2FTS	6.934	429.0 -> 81.0	2672	5.00 µg/L	0.012
M2-8:2FTS	7.927	529.0 -> 81.0	4511	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	37779	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	17614	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	30526	5.00 µg/L	0.000
M7-MeFOSE	10.498	623.0 -> 59.0	97614	25.00 µg/L	-0.012
M9-EtFOSE	10.768	639.0 -> 59.0	112766	25.00 µg/L	-0.012
M5-EtFOSA	10.859	531.0 -> 169.0	11778	2.50 µg/L	0.000
M3-MeFOSA	10.589	515.0 -> 169.0	11558	2.50 µg/L	-0.012
13C4-PFOS	8.317	503.0 -> 80.0	12697	2.50 µg/L	0.012
13C3-PFBA	3.276	216.0 -> 172.0	83030	5.00 µg/L	0.025
18O2-PFHxS	7.274	403.0 -> 84.0	8013	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	89711	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	23837	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	28355	1.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	61057	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1474	5.51 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 110.2%	
13C2-6:2FTS	6.934	429.0 -> 81.0	2672	5.15 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.0%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4511	5.53 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 110.5%	
13C2-PFDoDA	9.027	615.0 -> 570.0	37265	1.15 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.2%	
13C2-PFTeDA	9.772	715.0 -> 670.0	14132	1.04 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 83.1%	
13C3-PFBS	5.711	302.0 -> 99.0	7364	2.75 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 110.2%	
13C3-PFHxS	7.275	402.0 -> 99.0	6846	2.55 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.2%	
13C4-PFBA	3.273	217.0 -> 172.0	188709	9.56 µg/L	0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.6%	
13C4-PFHpA	6.553	367.0 -> 322.0	49129	2.32 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.8%	
13C5-PFHxA	5.759	318.0 -> 273.0	61093	2.35 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.1%	
13C5-PFPeA	4.648	268.0 -> 223.0	111919	5.00 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.0%	
13C6-PFDA	8.139	519.0 -> 474.0	28803	1.25 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.8%	
13C7-PFUnDA	8.607	570.0 -> 525.0	43317	1.29 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.4%	
13C8-FOSA	9.346	506.0 -> 78.0	19161	2.47 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.9%	
13C8-PFOA	7.148	421.0 -> 376.0	75959	2.33 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.0%	
13C8-PFOS	8.316	507.0 -> 99.0	7062	2.42 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.7%	
13C9-PFNA	7.656	472.0 -> 427.0	27083	1.17 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.6%	
d3-MeFOSAA	8.161	573.0 -> 419.0	37779	4.89 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.7%	
13C3-HFPO-DA	6.087	287.0 -> 169.0	17614	7.74 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 77.4%	
d3-MeFOSA	10.589	515.0 -> 169.0	11558	1.92 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 76.9%	
d5-EtFOSAA	8.358	589.0 -> 419.0	30526	4.85 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.0%	
d7-MeFOSE	10.498	623.0 -> 59.0	97614	24.56 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 98.2%	
d9-EtFOSE	10.768	639.0 -> 59.0	112766	23.95 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 95.8%	
d5-EtFOSA	10.859	531.0 -> 169.0	11778	1.92 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 76.7%	
Target Compounds					**QValue**
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0	-	N.D.	
		299.0 -> 99.0			
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			
PFDS	-	599.0 -> 80.0	-	N.D.	

Perfluorinated Compounds by LC/MS/MS

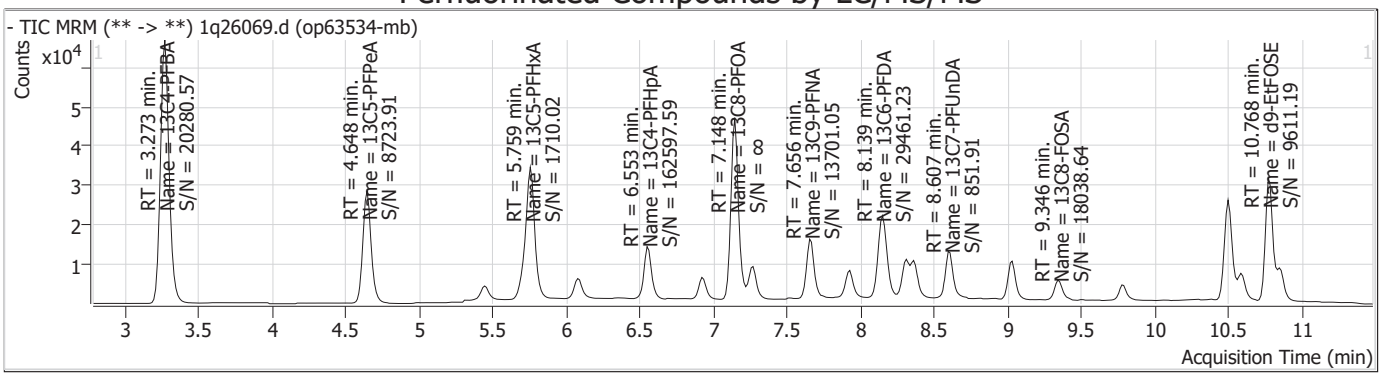
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0					
PFHpA	-	363.0 -> 319.0	-	N.D.			
		363.0 -> 169.0					
PFHpS	-	449.0 -> 80.0	-	N.D.			
		449.0 -> 99.0					
PFHxA	-	313.0 -> 269.0	-	N.D.			
		313.0 -> 119.0					
PFHxS	-	399.0 -> 80.0	-	N.D.			
		399.0 -> 99.0					
PFNA	-	463.0 -> 419.0	-	N.D.			
		463.0 -> 219.0					
PFNS	-	549.0 -> 80.0	-	N.D.			
		549.0 -> 99.0					
PFOA	-	413.0 -> 369.0	-	N.D.			
		413.0 -> 169.0					
PFOS	8.318	499.0 -> 80.0	393	0.07	µg/L	m	78
		499.0 -> 99.0	236				
PFPeA	-	263.0 -> 219.0	-	N.D.			
PFPeS	-	349.0 -> 80.0	-	N.D.			
		349.0 -> 99.0					
PFTeDA	-	713.0 -> 669.0	-	N.D.			
		713.0 -> 219.0					
PFTrDA	-	663.0 -> 619.0	-	N.D.			
		663.0 -> 369.0					
PFUnDA	-	563.0 -> 519.0	-	N.D.			
		563.0 -> 269.0					
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.			
		633.0 -> 453.0					
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.			
		533.0 -> 353.0					
ADONA	-	377.0 -> 251.0	-	N.D.			
		377.0 -> 85.0					
HFPO-DA	-	285.0 -> 169.0	-	N.D.			
		285.0 -> 185.0					
3:3FTCA	-	241.0 -> 177.0	-	N.D.			
		241.0 -> 117.0					
5:3FTCA	-	341.0 -> 237.0	-	N.D.			
		341.0 -> 217.0					
7:3FTCA	-	441.0 -> 337.0	-	N.D.			
		441.0 -> 317.0					
EtFOSA	-	526.0 -> 219.0	-	N.D.			
		526.0 -> 169.0					
EtFOSE	-	630.0 -> 59.0	-	N.D.			
MeFOSA	-	512.0 -> 169.0	-	N.D.			
		512.0 -> 219.0					
MeFOSE	-	616.0 -> 59.0	-	N.D.			
PFDoDS	-	699.0 -> 80.0	-	N.D.			
		699.0 -> 99.0					
NFDHA	-	295.0 -> 201.0	-	N.D.			
		201.0 -> 85.0					
		295.0 -> 85.0					
PFMBA	-	279.0 -> 85.0	-	N.D.			
PFMPA	-	229.0 -> 85.0	-	N.D.			
PFEESA	-	315.0 -> 135.0	-	N.D.			
		315.0 -> 69.0					

 # = Qualifier out of range, m = manually integrated, + = Area summed

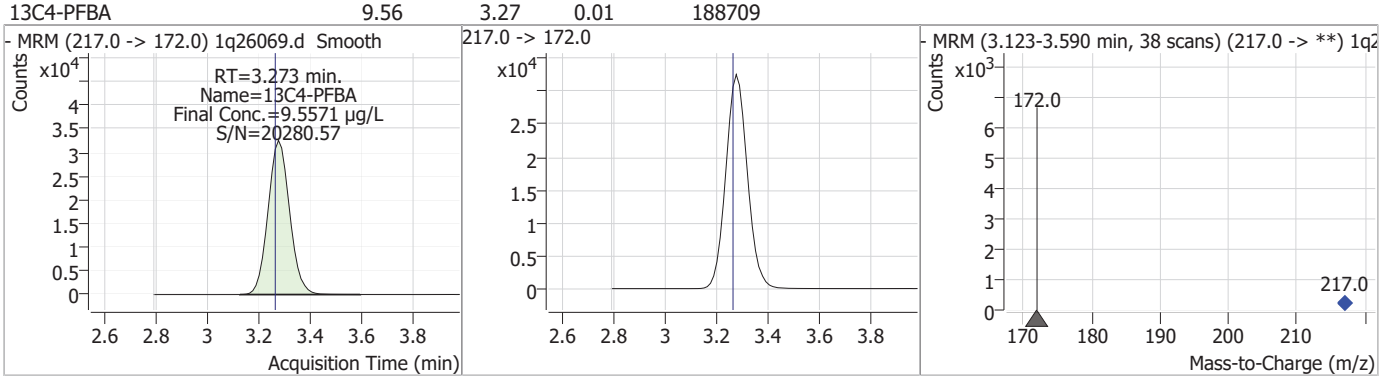
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

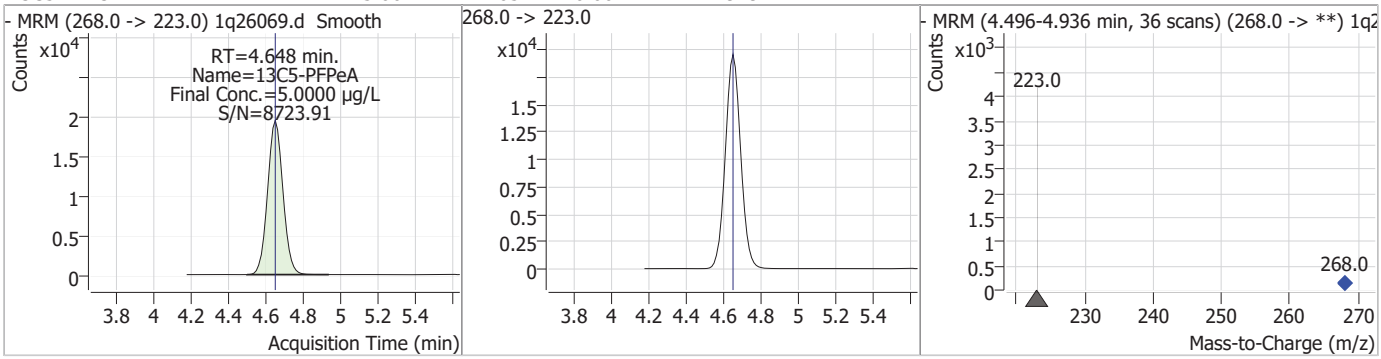
Perfluorinated Compounds by LC/MS/MS



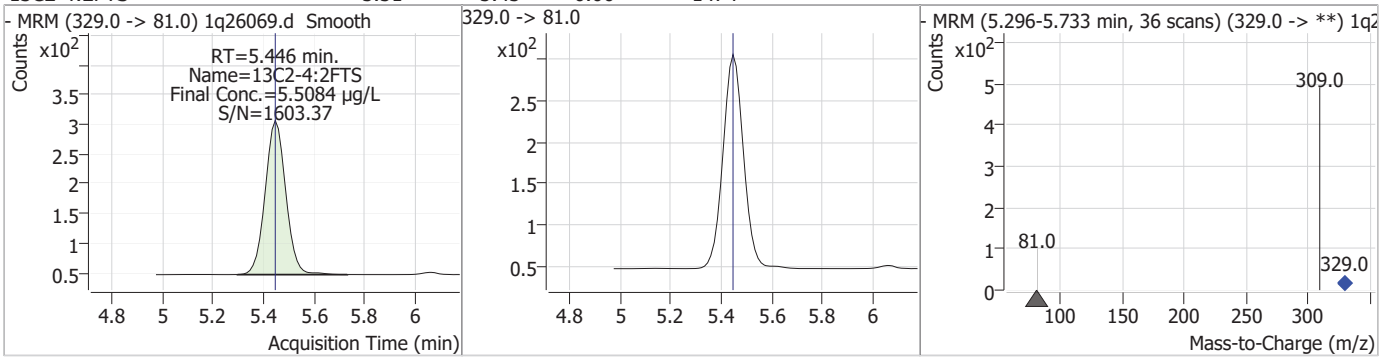
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.56	3.27	0.01	188709				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.00	4.65	0.00	111919				

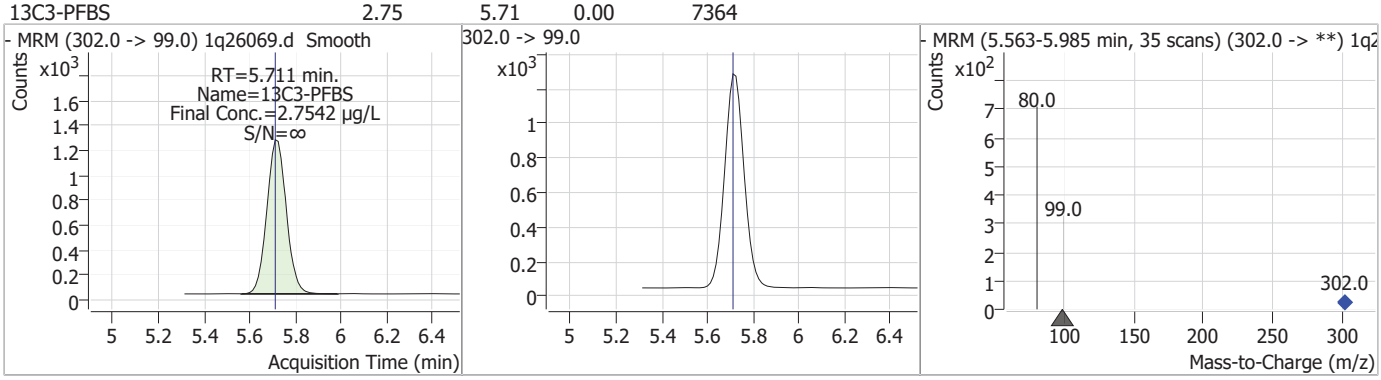


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.51	5.45	0.00	1474				

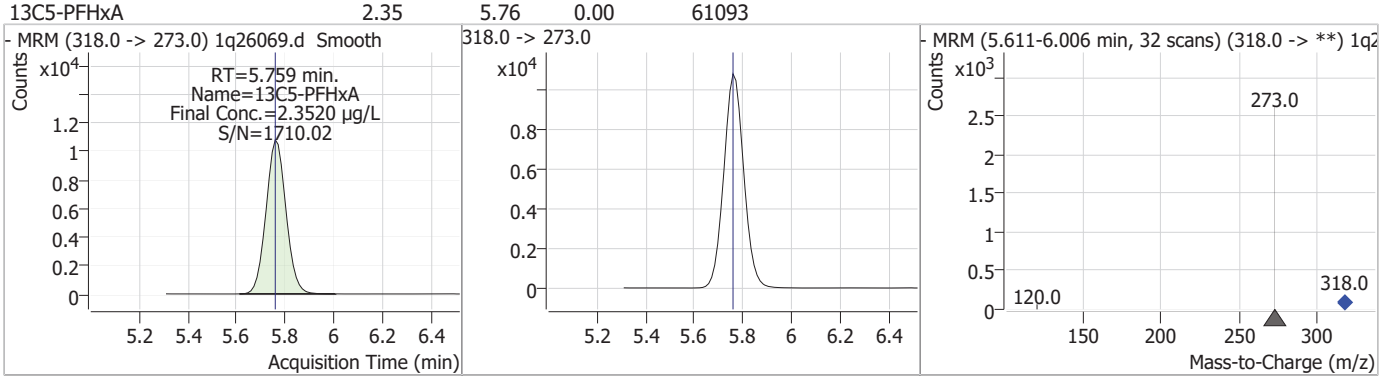


Perfluorinated Compounds by LC/MS/MS

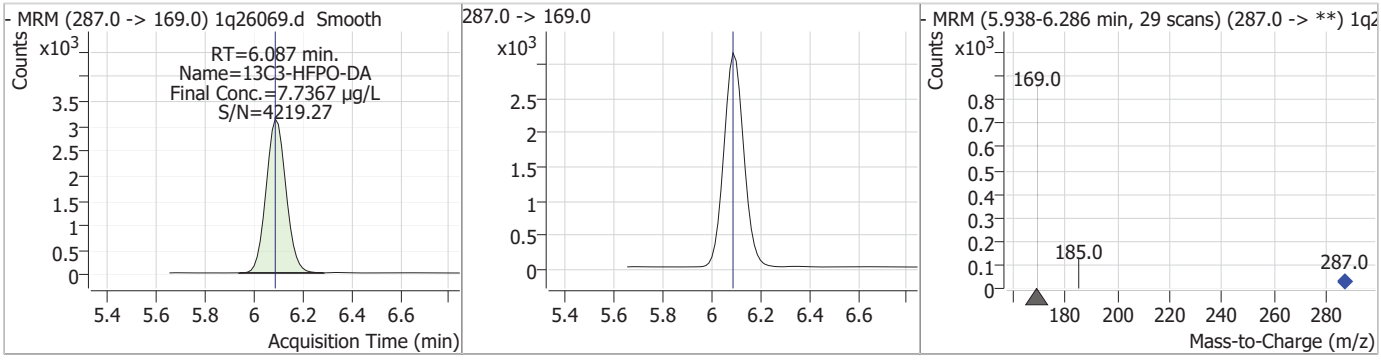
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.75	5.71	0.00	7364				



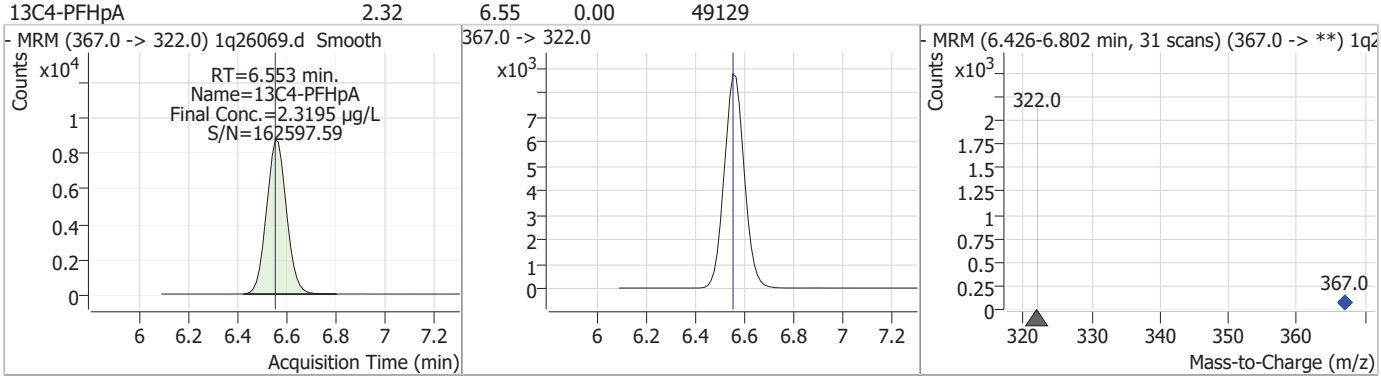
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.35	5.76	0.00	61093				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	7.74	6.09	0.00	17614				

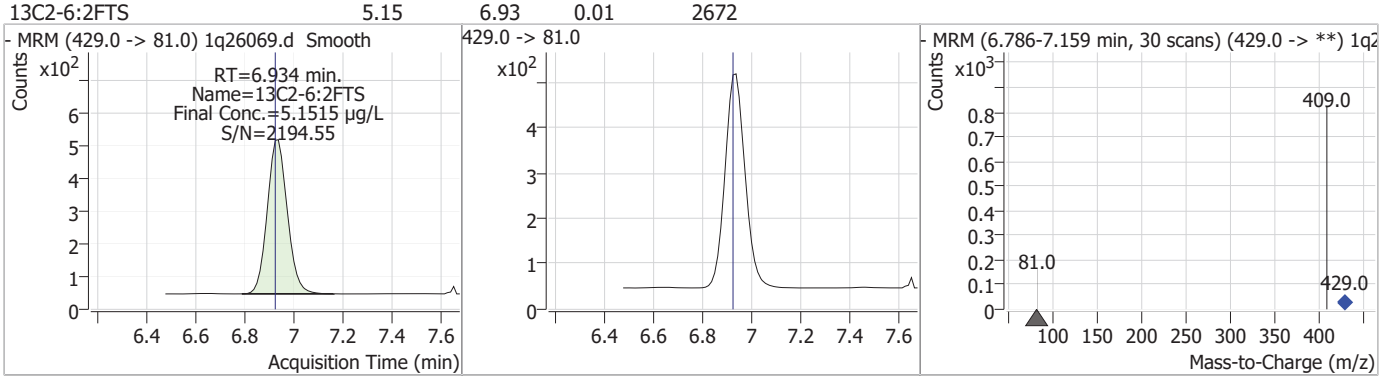


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.32	6.55	0.00	49129				

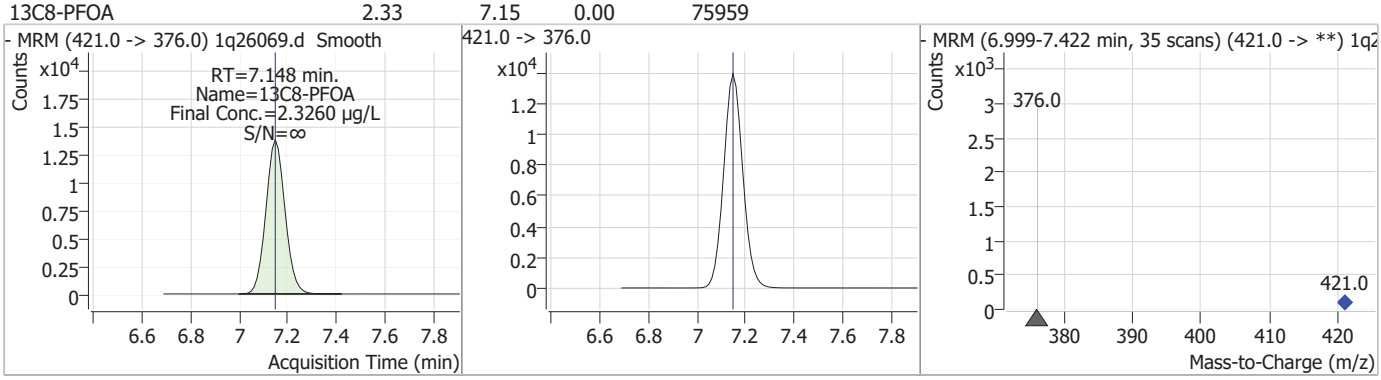


Perfluorinated Compounds by LC/MS/MS

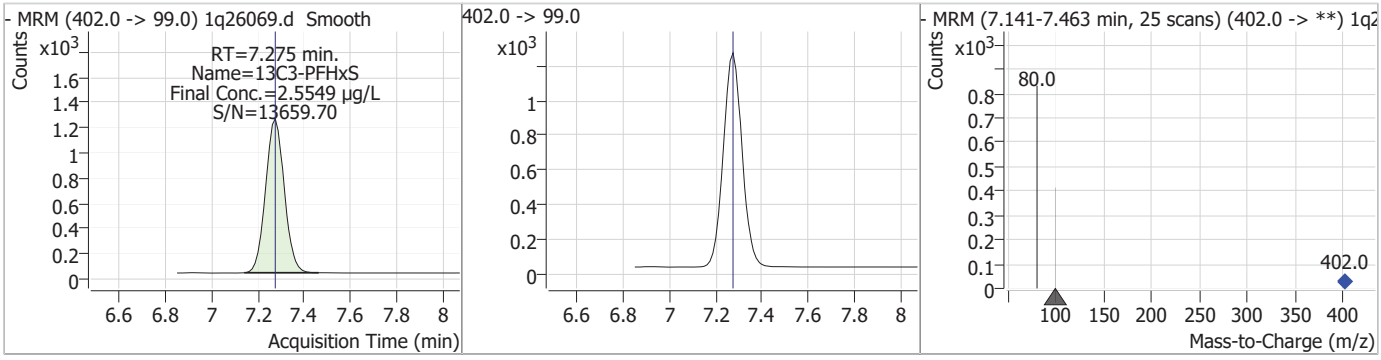
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.15	6.93	0.01	2672				



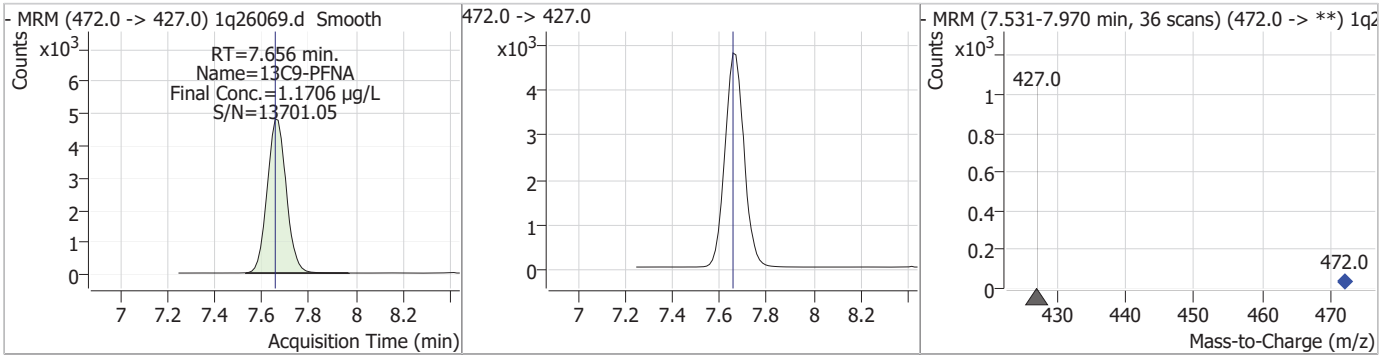
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.33	7.15	0.00	75959				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.55	7.27	0.00	6846				

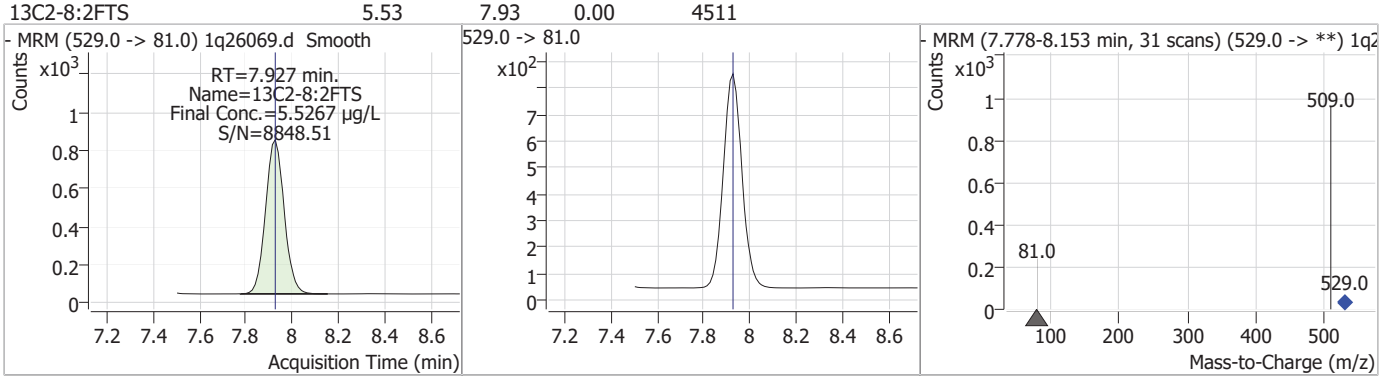


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.17	7.66	0.00	27083				

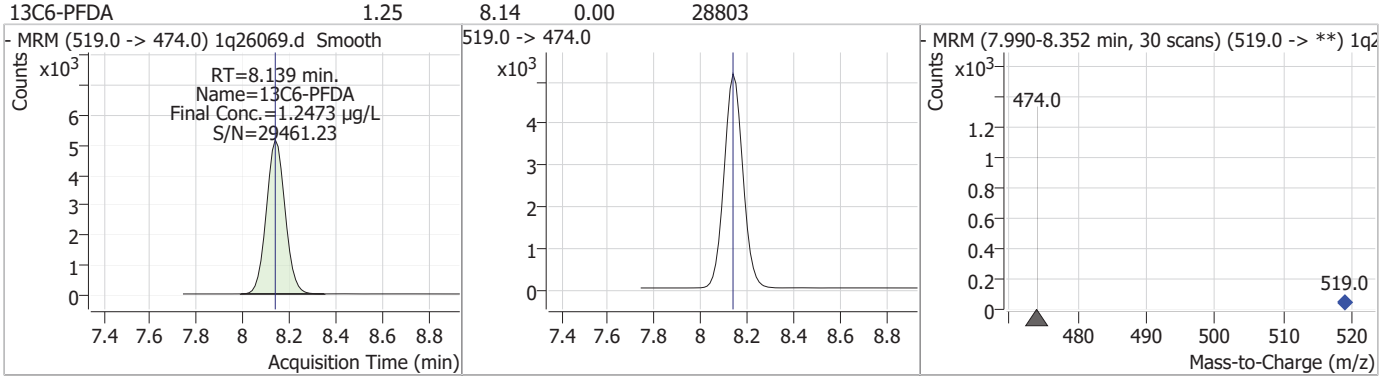


Perfluorinated Compounds by LC/MS/MS

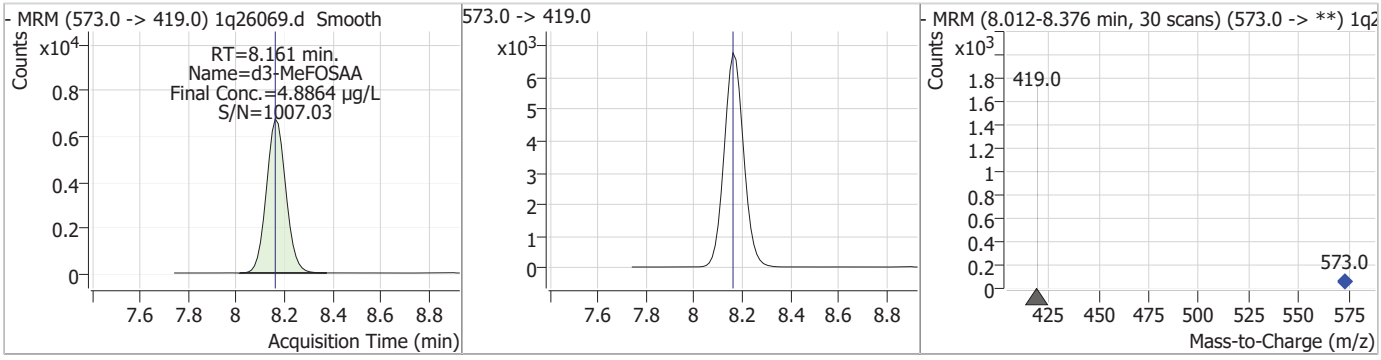
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.53	7.93	0.00	4511				



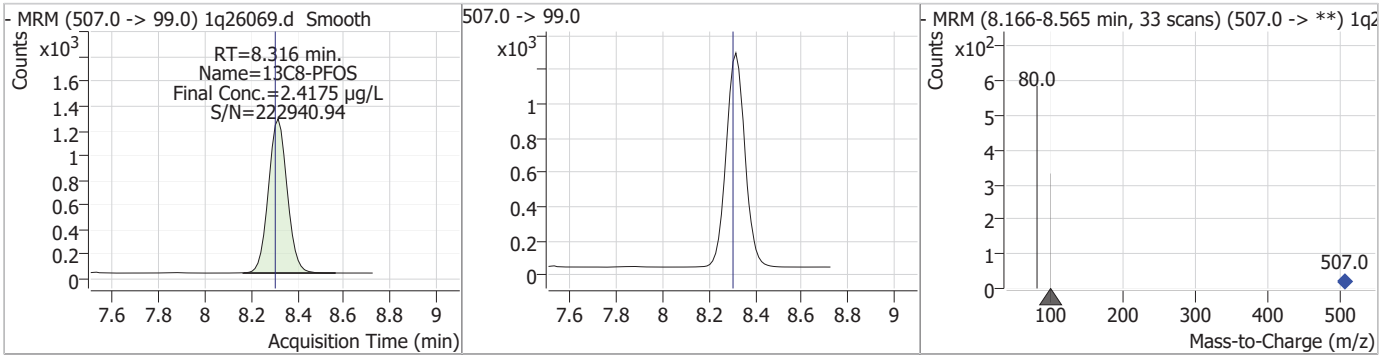
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.25	8.14	0.00	28803				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.89	8.16	0.00	37779				

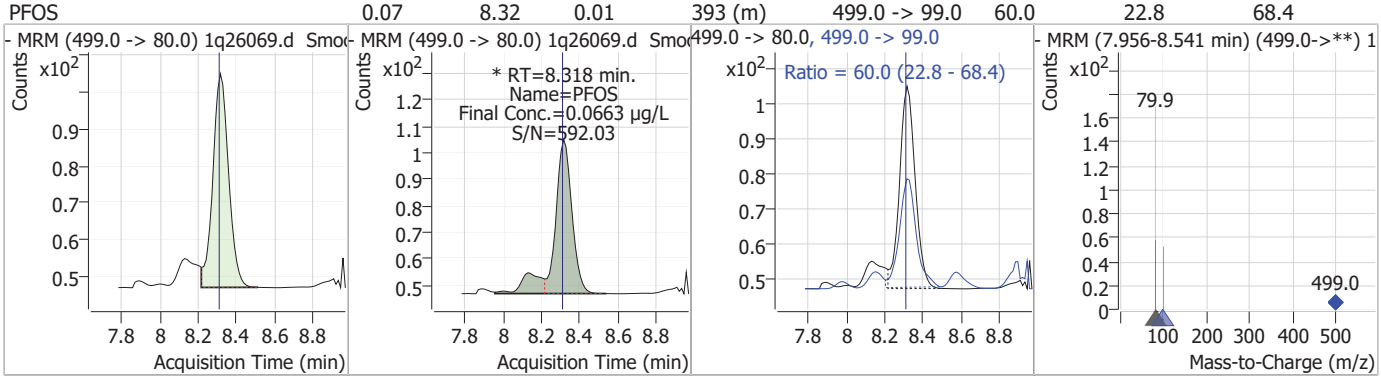


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.42	8.32	0.01	7062				

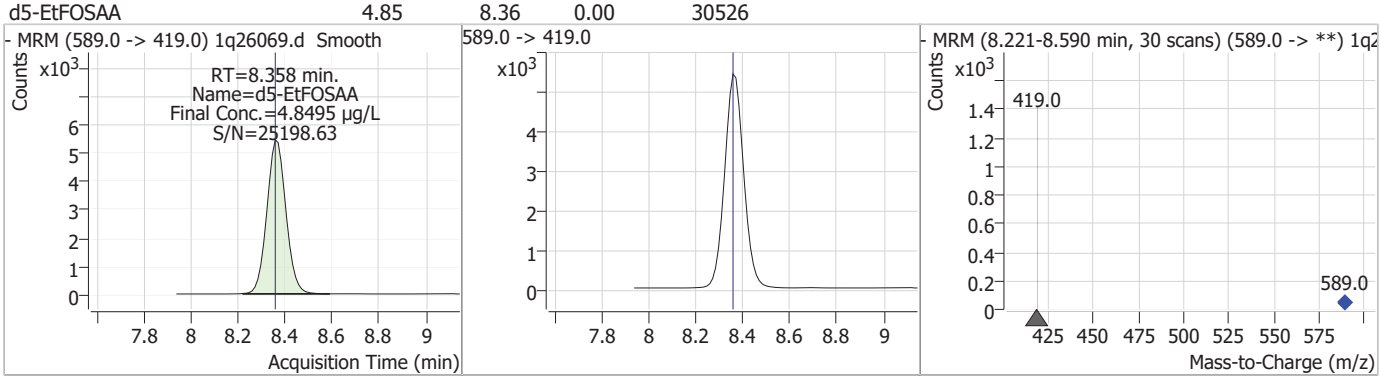


Perfluorinated Compounds by LC/MS/MS

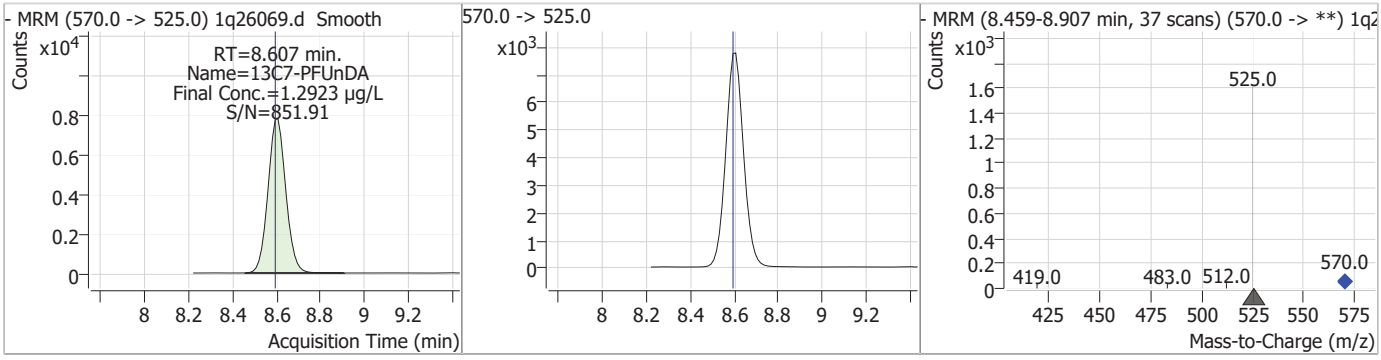
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.07	8.32	0.01	393 (m)	499.0 -> 99.0	60.0	22.8	68.4



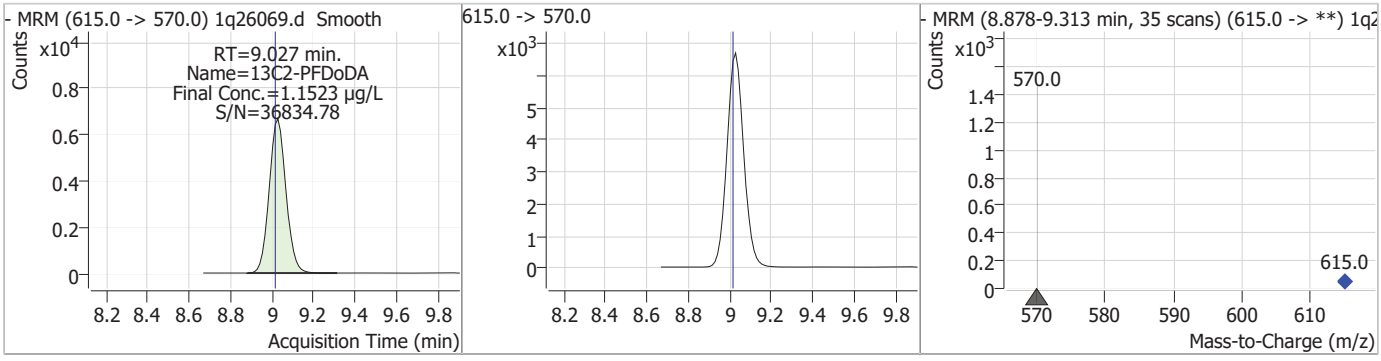
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.85	8.36	0.00	30526				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.29	8.61	0.01	43317				

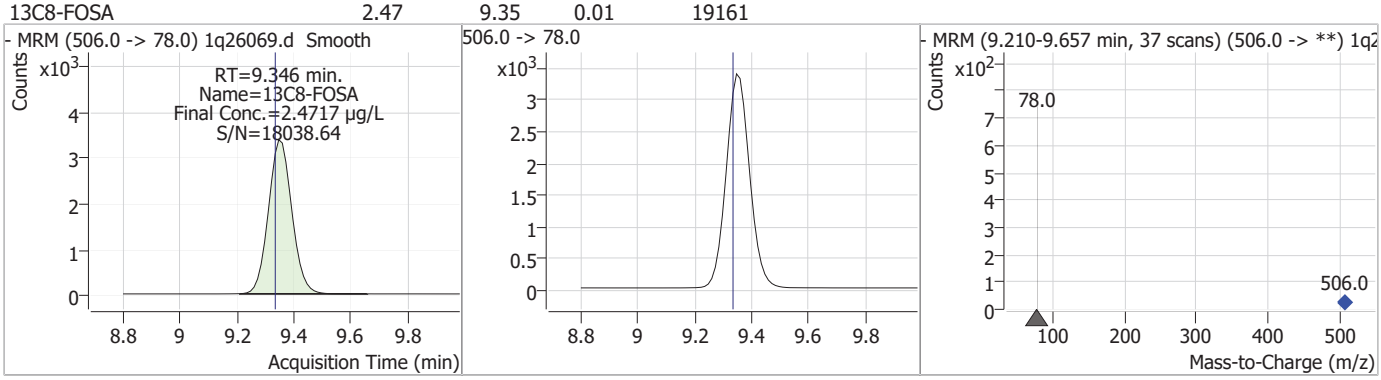


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.15	9.03	0.01	37265				

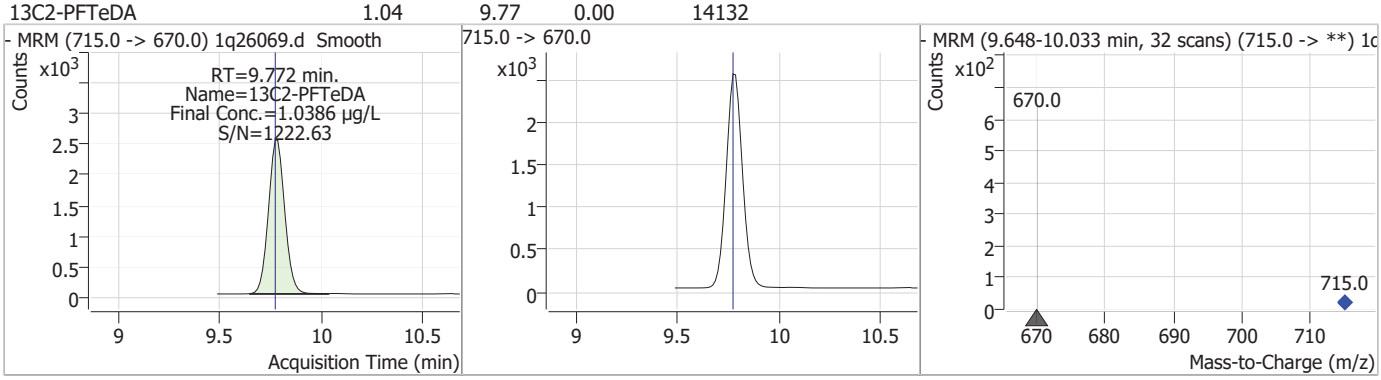


Perfluorinated Compounds by LC/MS/MS

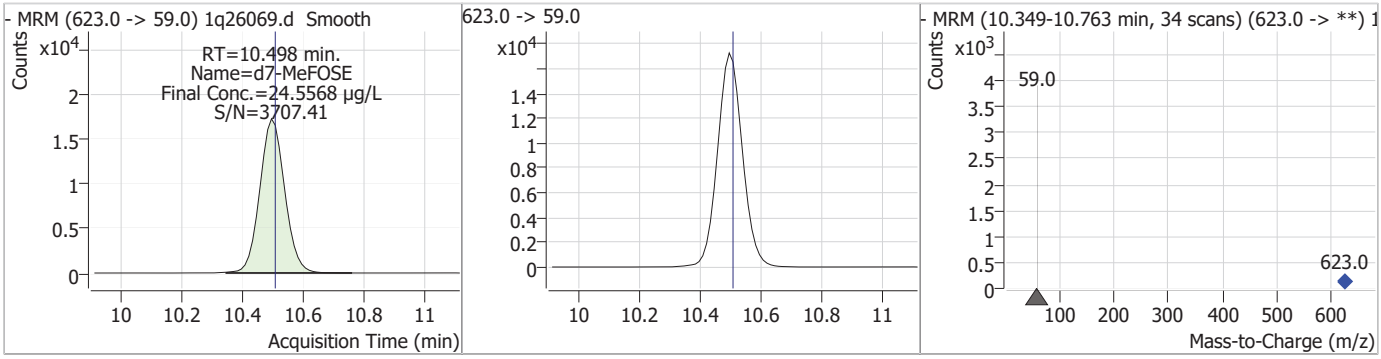
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.47	9.35	0.01	19161				



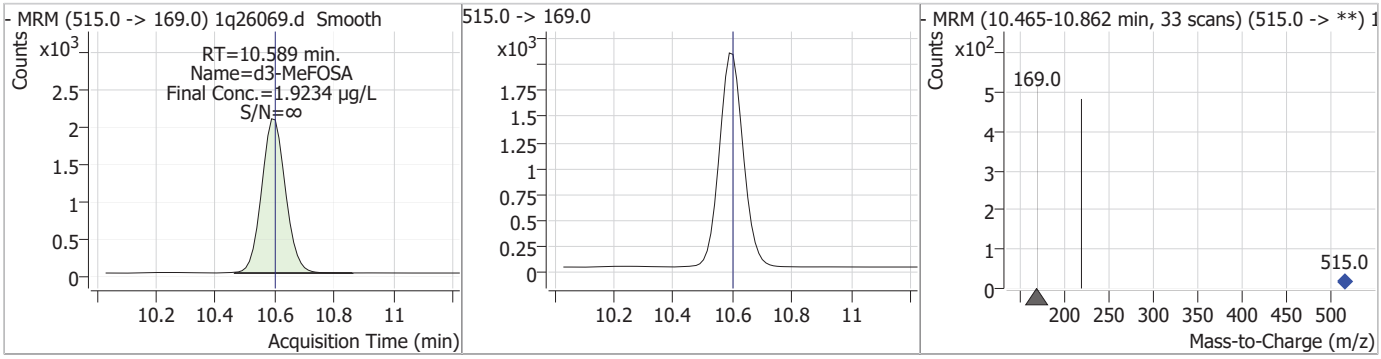
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.04	9.77	0.00	14132				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.56	10.50	-0.01	97614				

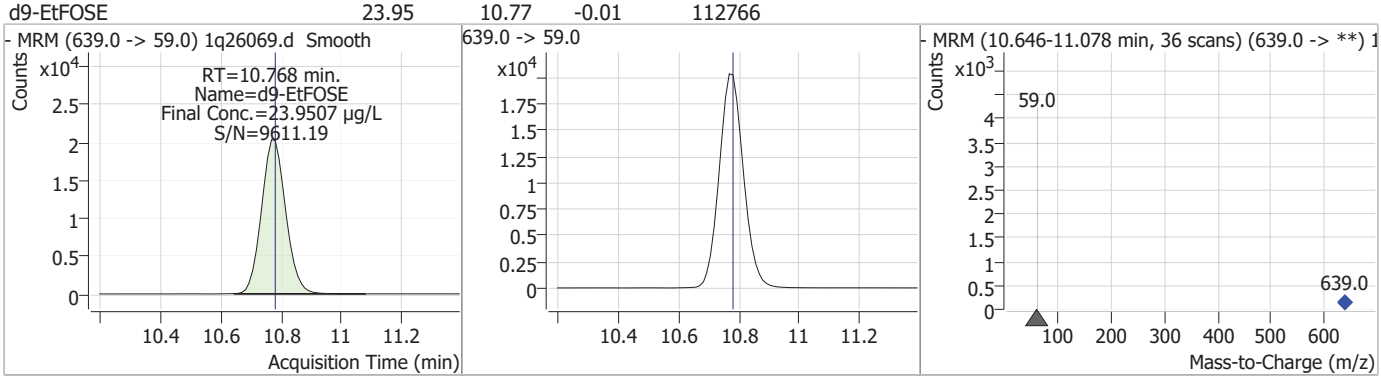


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.92	10.59	-0.01	11558				

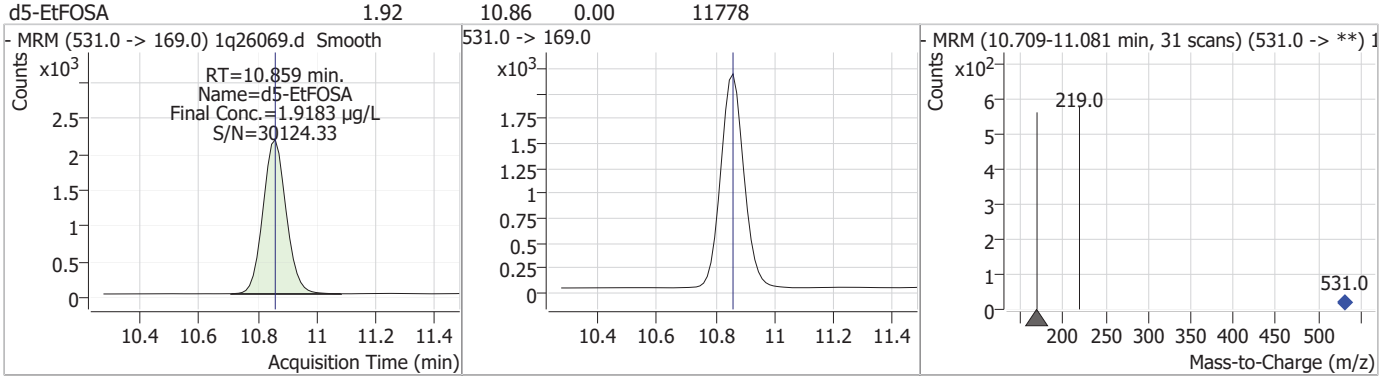


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.95	10.77	-0.01	112766				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.92	10.86	0.00	11778				



7.2.3

7

Manual Integration Approval Summary

Sample Number: OP63534-MB
Lab FileID: 1Q26069.D
Injection Time: 05/15/25 13:25

Method: EPA 1633
Analyst approved: 05/16/25 02:49 Alodia Hana Barrogo
Supervisor approved: 05/16/25 06:10 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8089.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 7:01:05 PM
Sample Name : IBLK
Vial : P1-A1
DA Method File : 042925_1633_T4Q137.quantmethod.xml
Batch Name : t4q137.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.908	217.0 -> 172.0	816982	10.00 µg/L	0.000
M5-PFPeA	4.344	268.0 -> 223.0	420680	5.00 µg/L	0.000
M5-PFHxA	5.489	318.0 -> 273.0	286717	2.50 µg/L	0.000
M4-PFHpA	6.316	367.0 -> 322.0	310545	2.50 µg/L	0.000
M8-PFOA	6.934	421.0 -> 376.0	478984	2.50 µg/L	0.000
M9-PFNA	7.440	472.0 -> 427.0	197898	1.25 µg/L	0.000
M6-PFDA	7.895	519.0 -> 474.0	197505	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	248594	1.25 µg/L	0.000
M2-PFDoDA	8.716	615.0 -> 570.0	236558	1.25 µg/L	0.000
M2-PFTeDA	9.430	715.0 -> 670.0	200523	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	171227	2.50 µg/L	0.000
M3-PFBS	5.393	302.0 -> 99.0	26470	2.50 µg/L	0.012
		302.0 -> 80.0	61221		
M3-PFHxS	7.024	402.0 -> 99.0	38643	2.50 µg/L	0.000
M8-PFOS	8.019	507.0 -> 99.0	39287	2.50 µg/L	0.000
M2-4:2FTS	5.190	329.0 -> 81.0	11093	5.00 µg/L	0.000
M2-6:2FTS	6.721	429.0 -> 81.0	23898	5.00 µg/L	0.000
M2-8:2FTS	7.696	529.0 -> 81.0	27326	5.00 µg/L	0.000
M3-MeFOSAA	7.952	573.0 -> 419.0	212504	5.00 µg/L	0.000
M3-HFPO-DA	5.816	287.0 -> 169.0	431684	10.00 µg/L	0.000
M5-EtFOSAA	8.135	589.0 -> 419.0	167648	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	961759	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1244686	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	100717	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	90853	2.50 µg/L	-0.012
13C4-PFOS	8.020	503.0 -> 80.0	65464	2.50 µg/L	0.000
13C3-PFBA	2.911	216.0 -> 172.0	332544	5.00 µg/L	0.000
18O2-PFHxS	7.023	403.0 -> 84.0	40082	2.50 µg/L	0.000
13C4-PFOA	6.935	417.0 -> 372.0	435320	2.50 µg/L	0.000
13C2-PFDA	7.895	515.0 -> 470.0	161464	1.25 µg/L	0.000
13C5-PFNA	7.440	468.0 -> 423.0	176620	1.25 µg/L	0.000
13C2-PFHxA	5.477	315.0 -> 270.0	249367	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.190	329.0 -> 81.0	11093	5.40 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.0%	
13C2-6:2FTS	6.721	429.0 -> 81.0	23898	5.62 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 112.4%	
13C2-8:2FTS	7.696	529.0 -> 81.0	27326	5.24 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.8%	
13C2-PFDoDA	8.716	615.0 -> 570.0	236558	1.19 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.9%	
13C2-PFTeDA	9.430	715.0 -> 670.0	200523	1.18 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.0%	
13C3-PFBS	5.393	302.0 -> 99.0	26470	2.54 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.7%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
13C3-PFHxS	7.024	402.0 -> 99.0	38643	2.54	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.5%		
13C4-PFBA	2.908	217.0 -> 172.0	816982	9.95	µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.5%		
13C4-PFHpA	6.316	367.0 -> 322.0	310545	2.49	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.5%		
13C5-PFHxA	5.489	318.0 -> 273.0	286717	2.51	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.5%		
13C5-PFPeA	4.344	268.0 -> 223.0	420680	5.01	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.2%		
13C6-PFDA	7.895	519.0 -> 474.0	197505	1.23	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.5%		
13C7-PFUnDA	8.310	570.0 -> 525.0	248594	1.20	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.1%		
13C8-FOSA	9.291	506.0 -> 78.0	171227	2.44	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.6%		
13C8-PFOA	6.934	421.0 -> 376.0	478984	2.53	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.3%		
13C8-PFOS	8.019	507.0 -> 99.0	39287	2.37	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.6%		
13C9-PFNA	7.440	472.0 -> 427.0	197898	1.24	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.5%		
d3-MeFOSAA	7.952	573.0 -> 419.0	212504	5.19	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.8%		
13C3-HFPO-DA	5.816	287.0 -> 169.0	431684	10.05	µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.5%		
d3-MeFOSA	10.567	515.0 -> 169.0	90853	2.39	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.6%		
d5-EtFOSAA	8.135	589.0 -> 419.0	167648	5.27	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.3%		
d7-MeFOSE	10.475	623.0 -> 59.0	961759	24.37	µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.5%		
d9-EtFOSE	10.746	639.0 -> 59.0	1244686	24.24	µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.0%		
d5-EtFOSA	10.837	531.0 -> 169.0	100717	2.46	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.6%		

Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0 327.0 -> 81.0	-	N.D.	
6:2FTS	-	427.0 -> 407.0 427.0 -> 81.0	-	N.D.	
8:2FTS	-	527.0 -> 507.0 527.0 -> 81.0	-	N.D.	
EtFOSAA	-	584.0 -> 419.0 584.0 -> 483.0	-	N.D.	
FOSA	-	498.0 -> 78.0 498.0 -> 478.0	-	N.D.	
MeFOSAA	-	570.0 -> 419.0 570.0 -> 512.0	-	N.D.	
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0 299.0 -> 99.0	-	N.D.	
PFDA	-	513.0 -> 469.0 513.0 -> 219.0	-	N.D.	
PFDoDA	-	613.0 -> 569.0 613.0 -> 319.0	-	N.D.	

Perfluorinated Compounds by LC/MS/MS

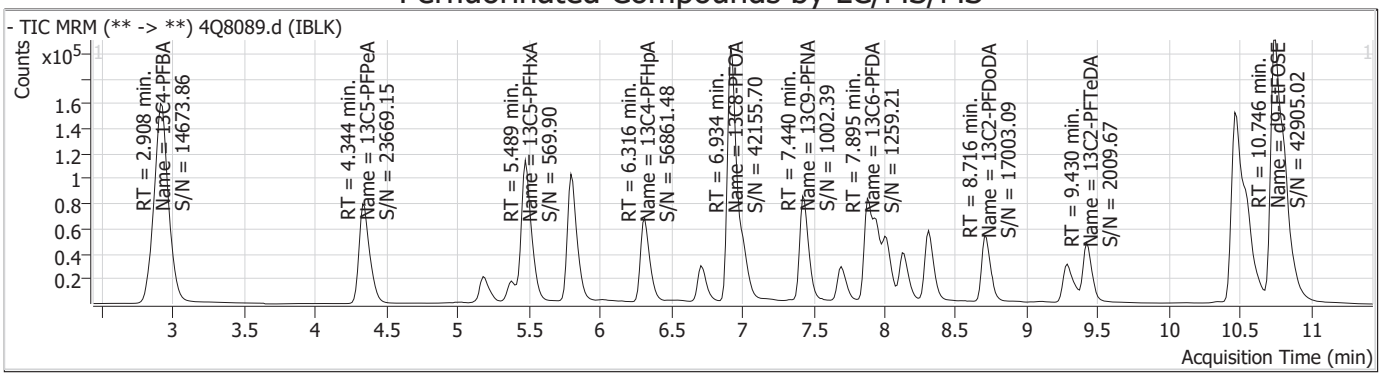
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.		
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 219.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 369.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

Perfluorinated Compounds by LC/MS/MS

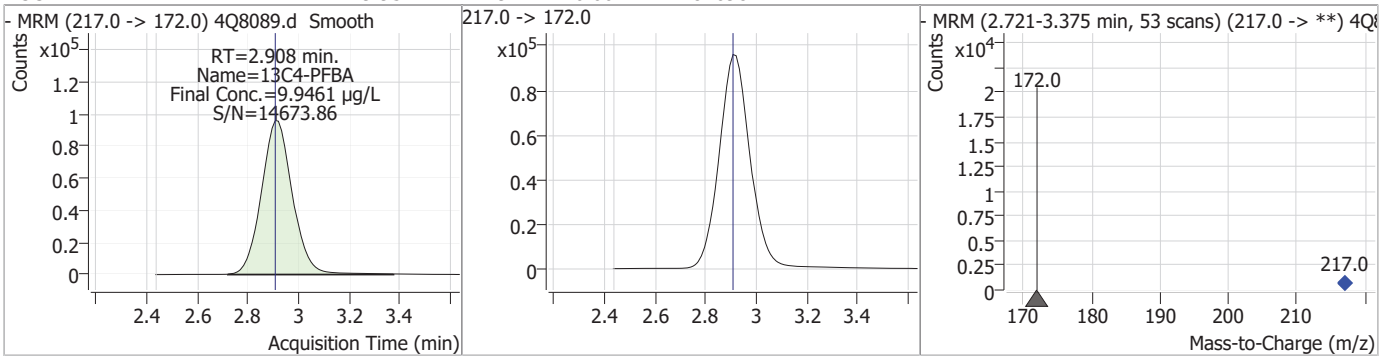
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

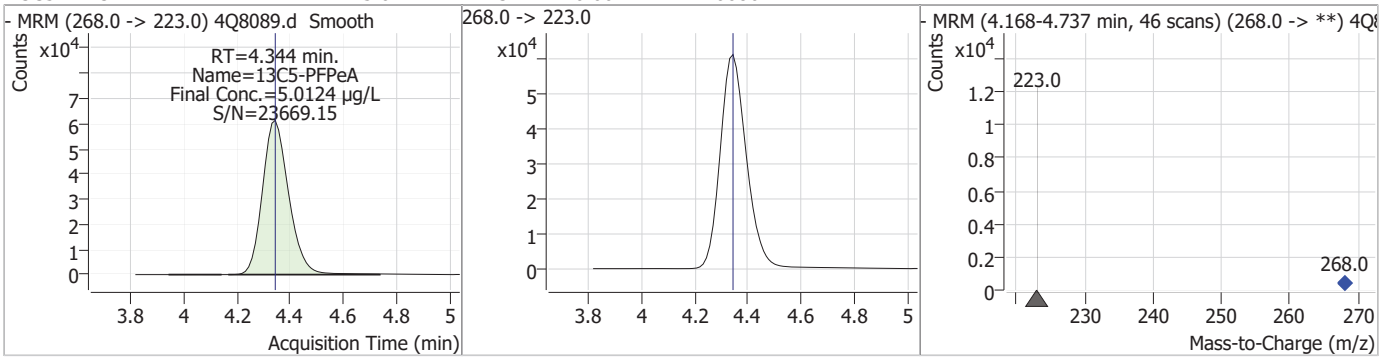
Perfluorinated Compounds by LC/MS/MS



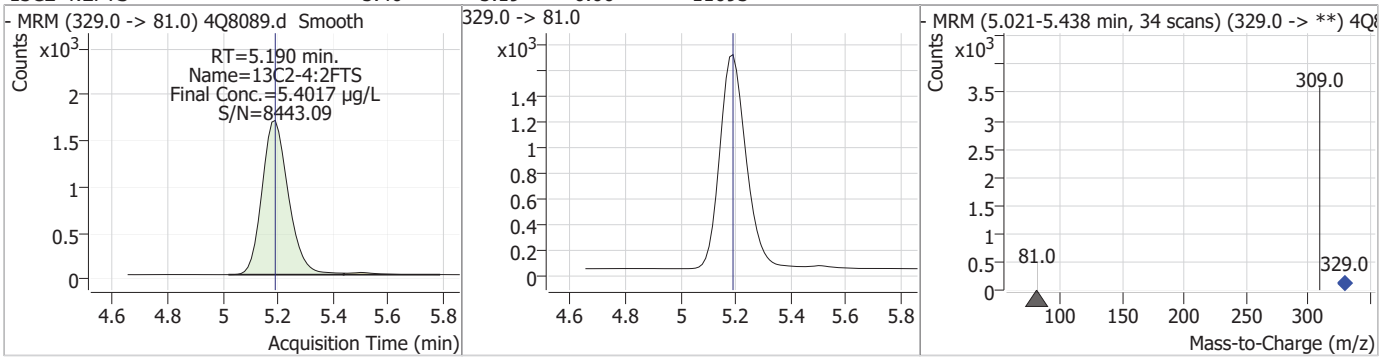
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.95	2.91	0.00	816982				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.01	4.34	0.00	420680				

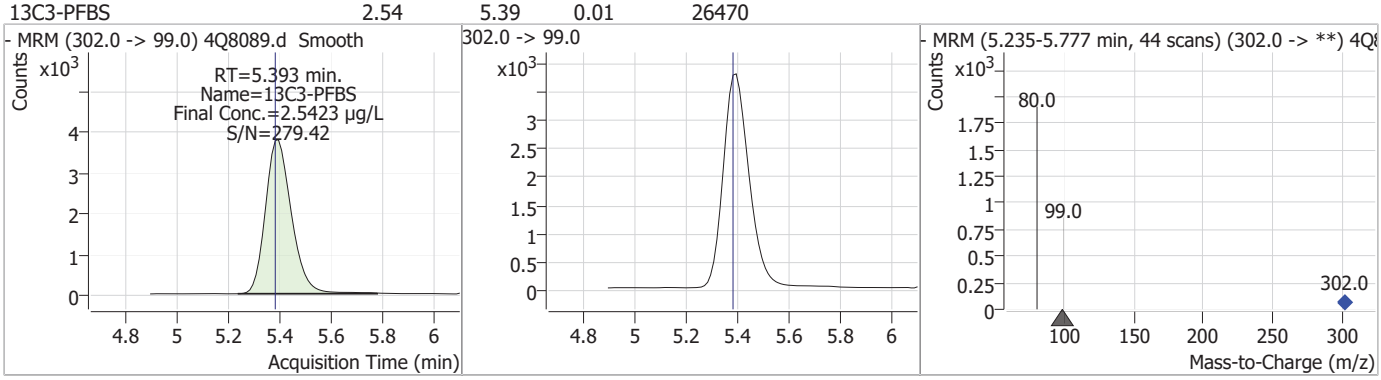


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.40	5.19	0.00	11093				

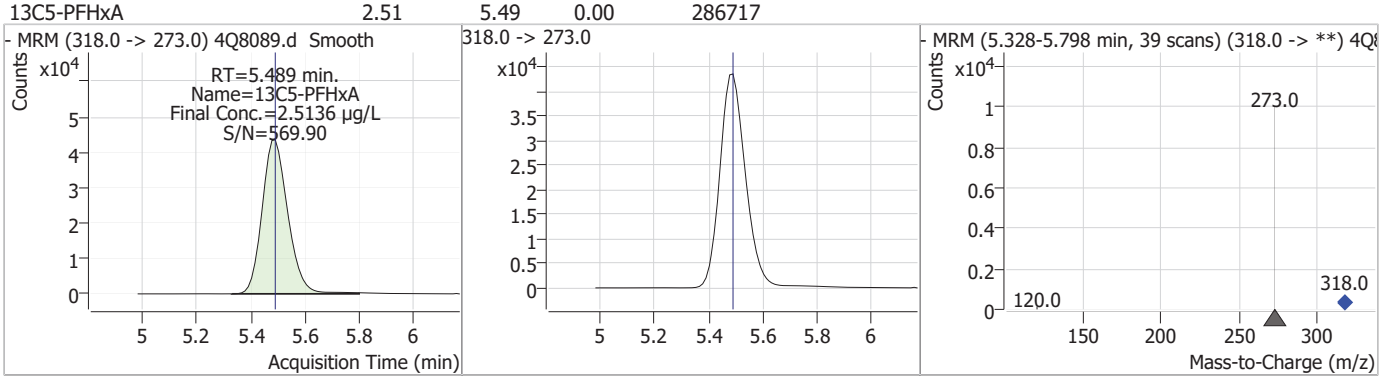


Perfluorinated Compounds by LC/MS/MS

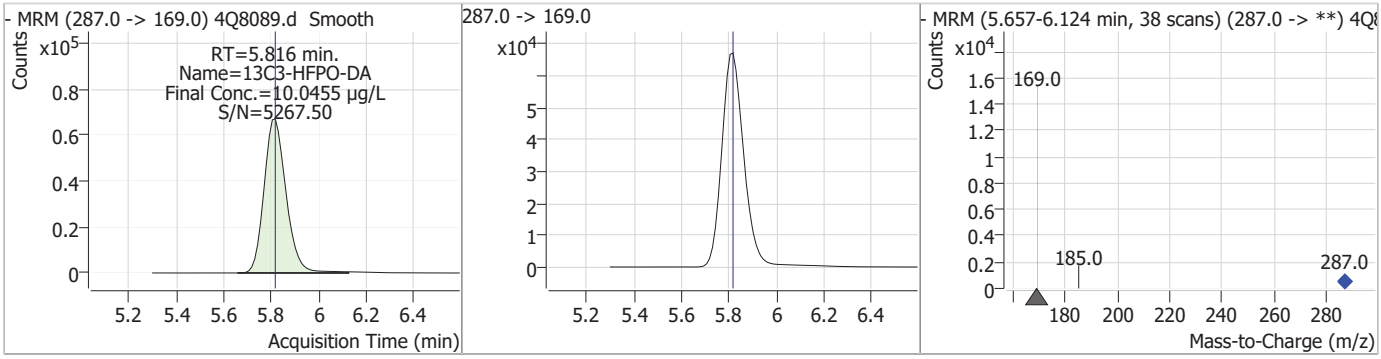
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.54	5.39	0.01	26470				



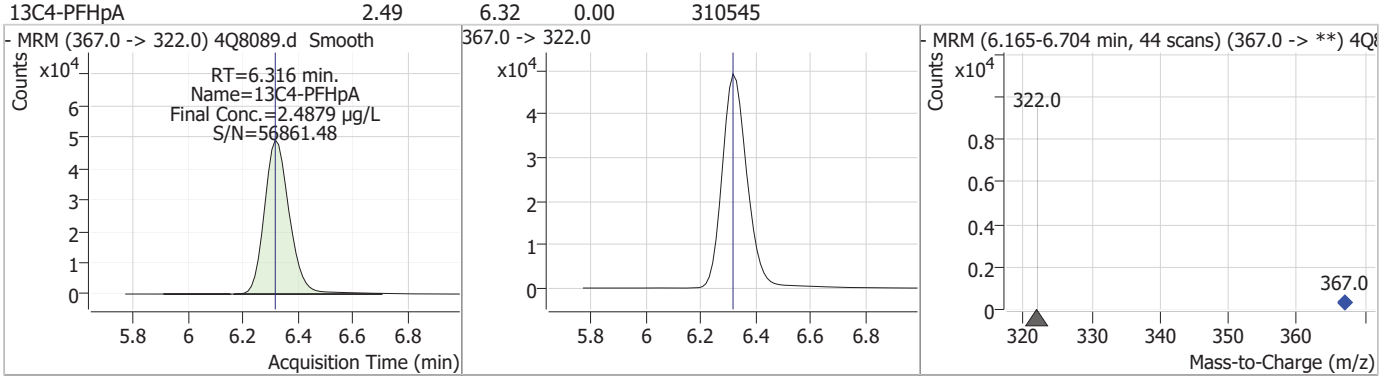
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.51	5.49	0.00	286717				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.05	5.82	0.00	431684				

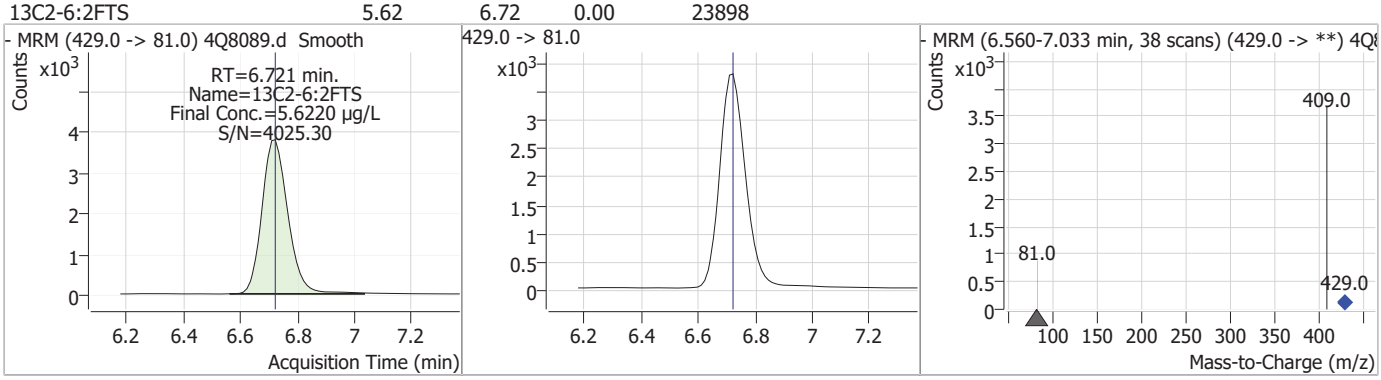


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.49	6.32	0.00	310545				

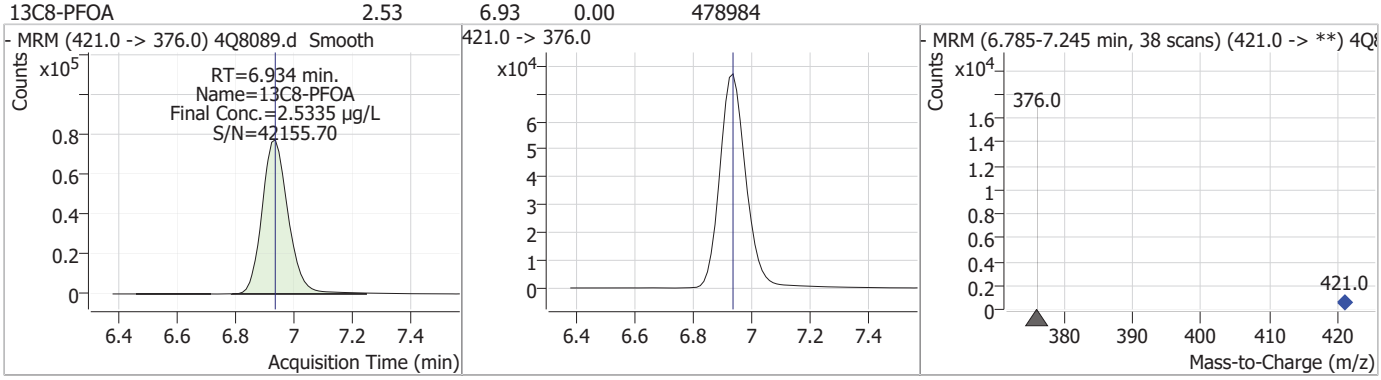


Perfluorinated Compounds by LC/MS/MS

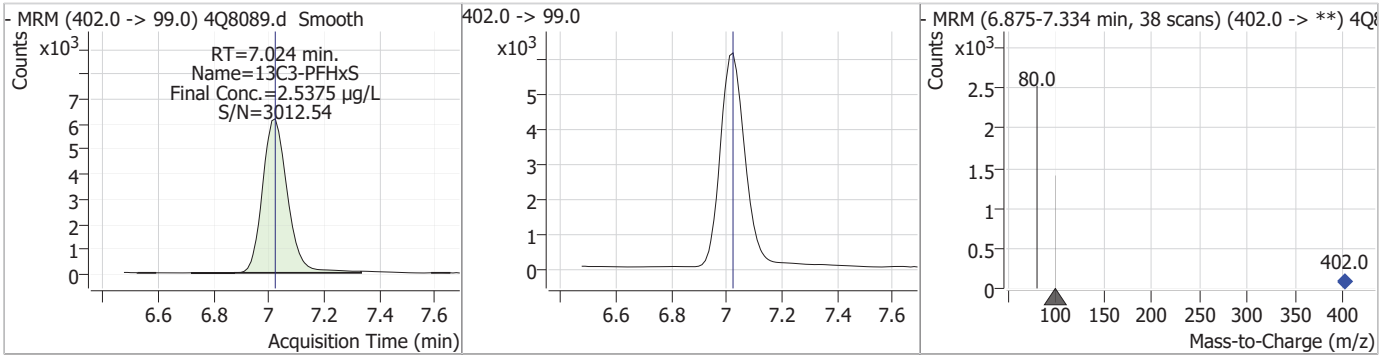
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.62	6.72	0.00	23898				



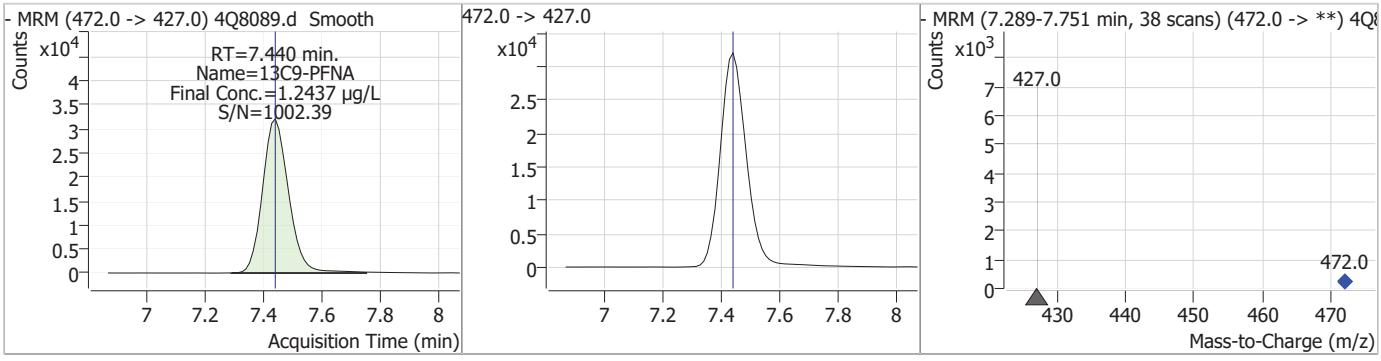
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.53	6.93	0.00	478984				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.54	7.02	0.00	38643				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.24	7.44	0.00	197898				



7.2.4

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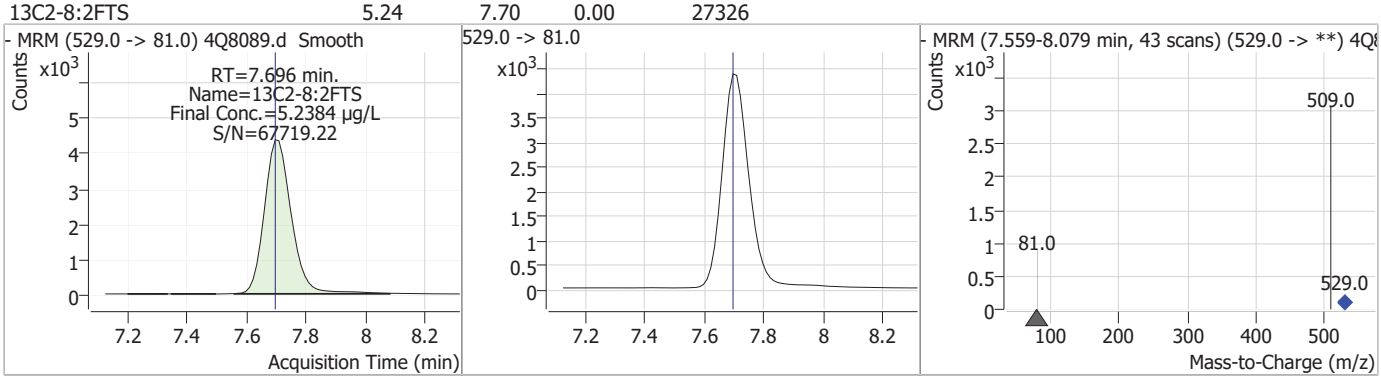
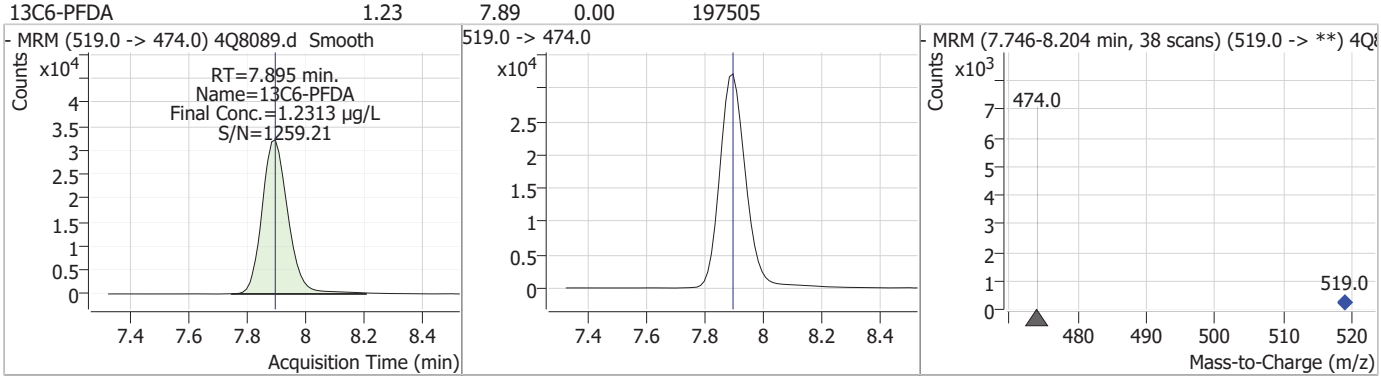
Perfluorinated Compounds by LC/MS/MS

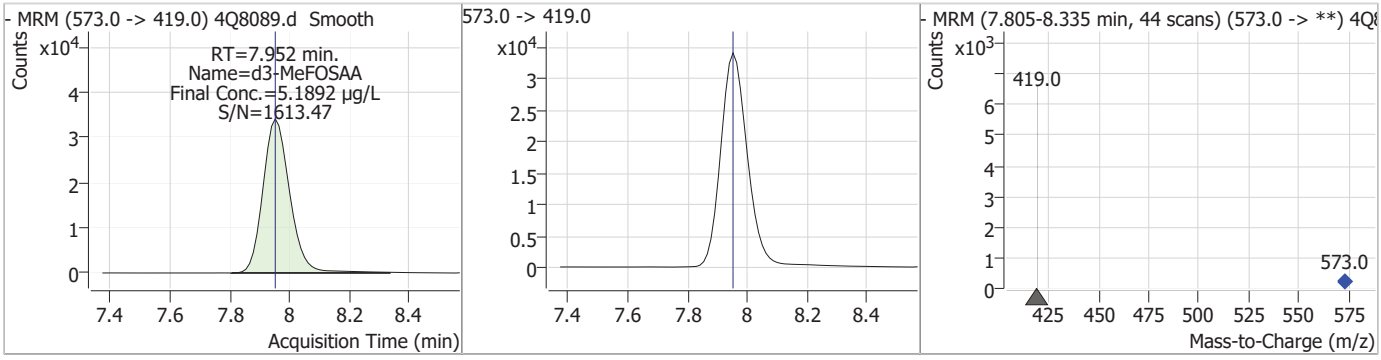
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.24	7.70	0.00	27326				



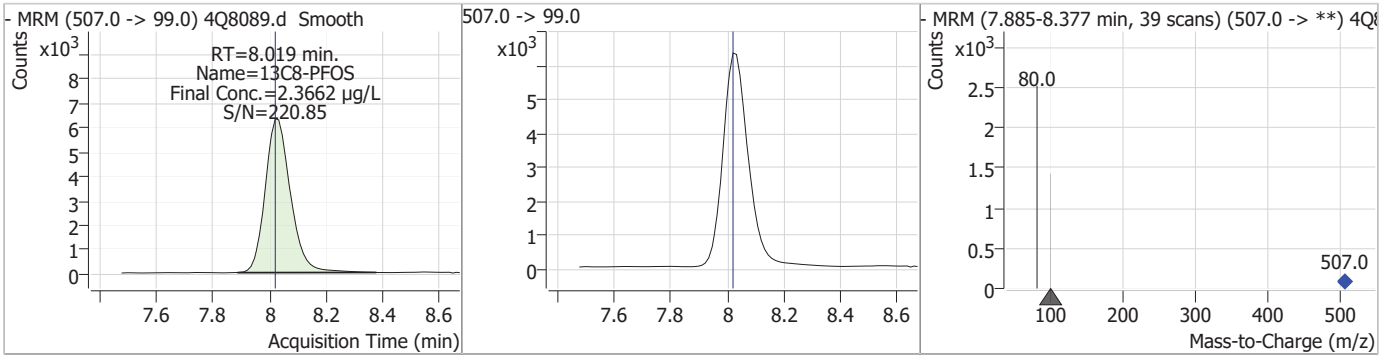
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.23	7.89	0.00	197505				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.19	7.95	0.00	212504				

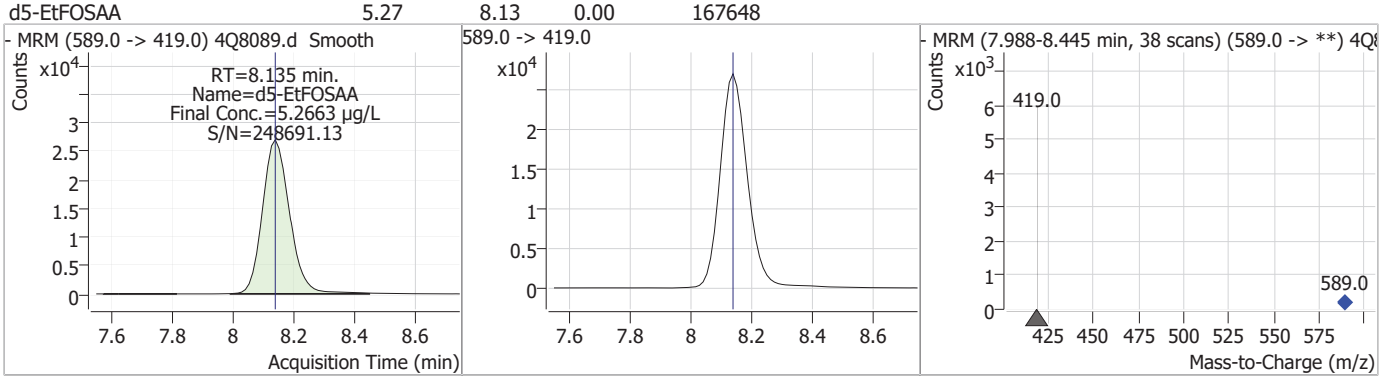


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.37	8.02	0.00	39287				

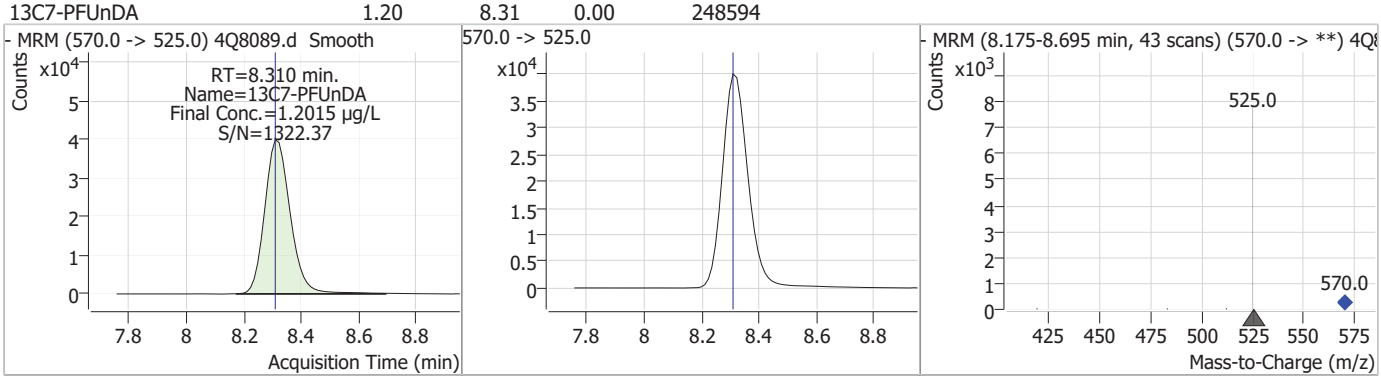


Perfluorinated Compounds by LC/MS/MS

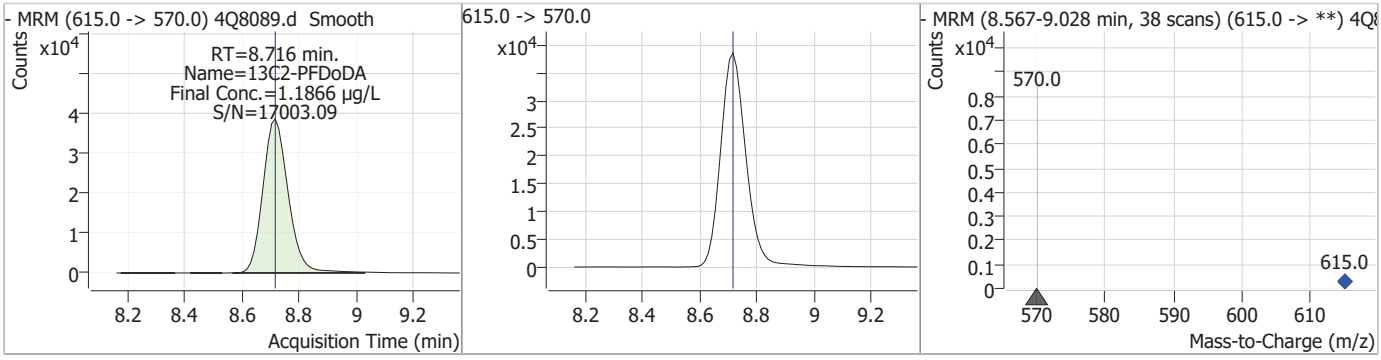
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.27	8.13	0.00	167648				



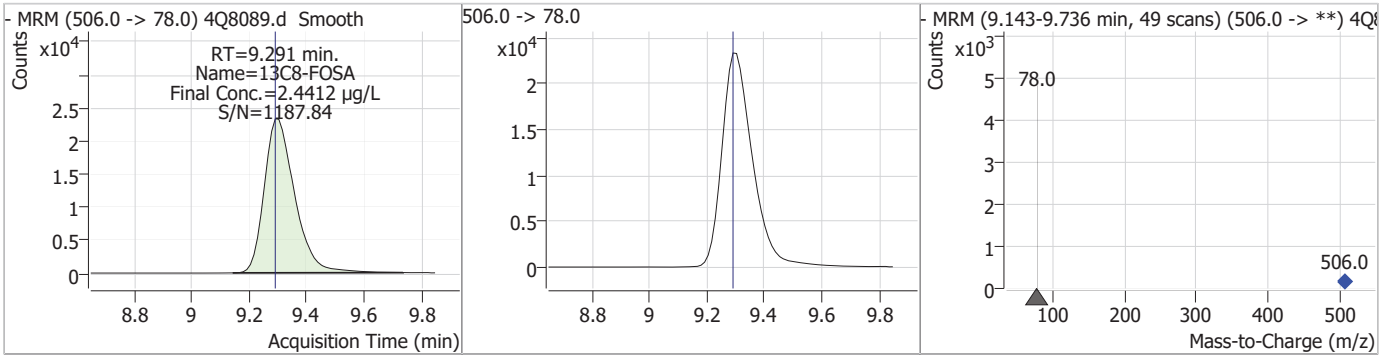
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.20	8.31	0.00	248594				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.19	8.72	0.00	236558				

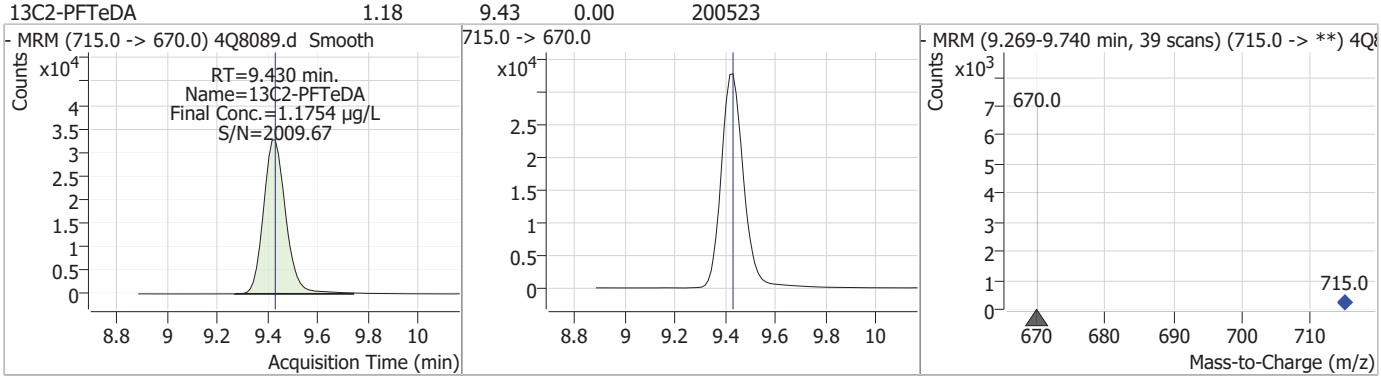


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.44	9.29	0.00	171227				

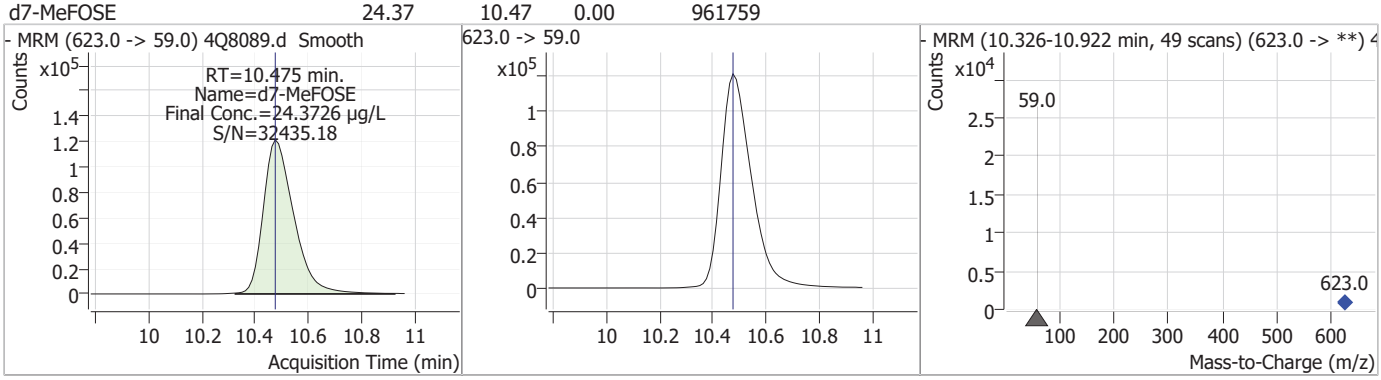


Perfluorinated Compounds by LC/MS/MS

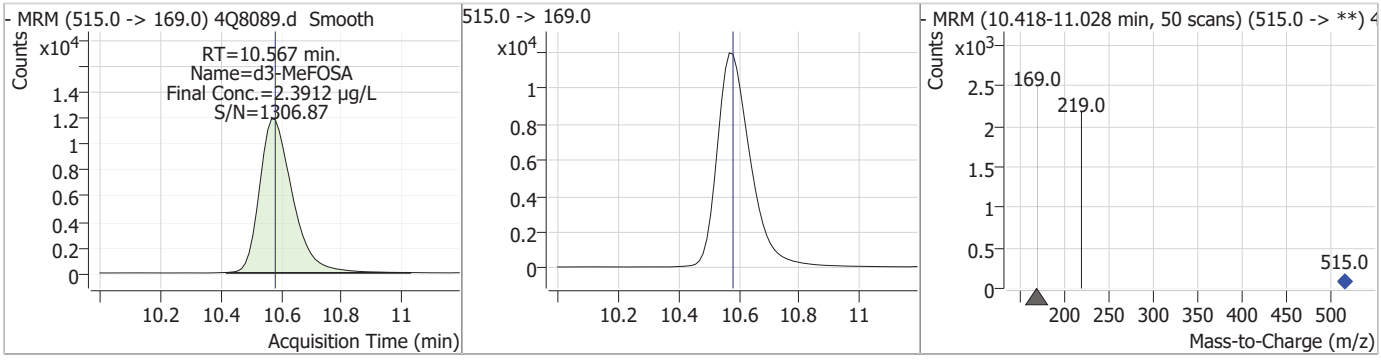
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.18	9.43	0.00	200523				



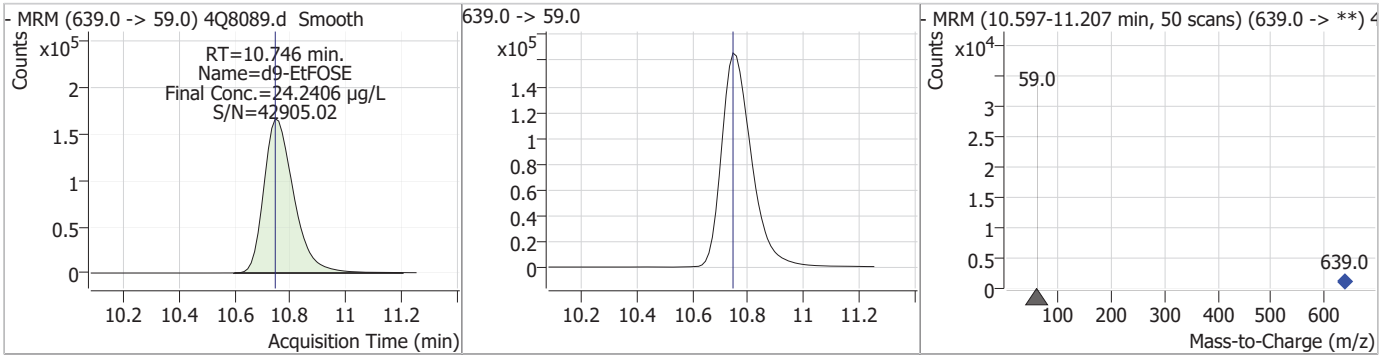
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.37	10.47	0.00	961759				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.39	10.57	-0.01	90853				

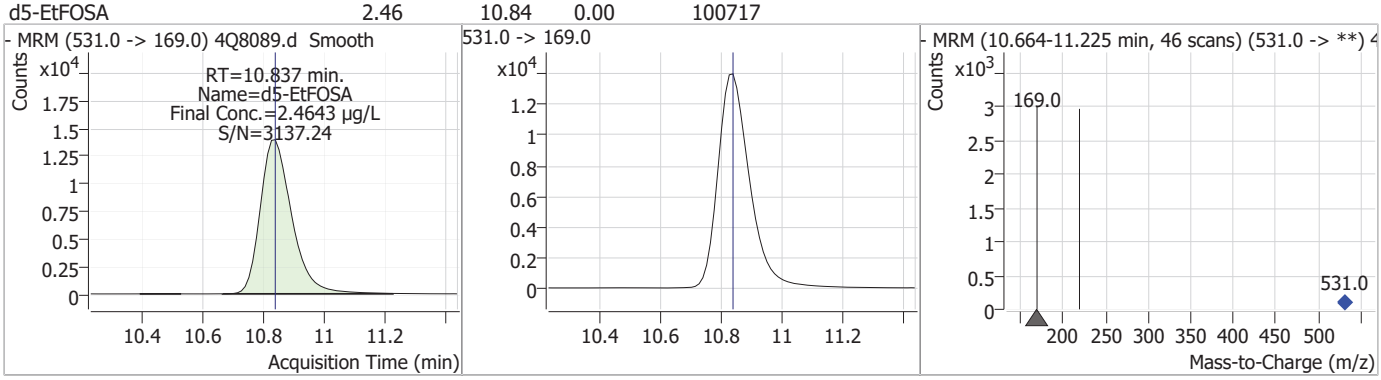


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.24	10.75	0.00	1244686				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.46	10.84	0.00	100717				



7.2.4

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Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8136.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 4:18:03 PM
Sample Name : IBLK
Vial : P1-A1
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63077,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.883	217.0 -> 172.0	921741	10.00 µg/L	0.000
M5-PFPeA	4.319	268.0 -> 223.0	484721	5.00 µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	321453	2.50 µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	338705	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	511925	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	203516	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	191460	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	254655	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	225264	1.25 µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	182172	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	186160	2.50 µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	27377	2.50 µg/L	-0.012
		302.0 -> 80.0	70434		
M3-PFHxS	6.986	402.0 -> 99.0	41916	2.50 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	42060	2.50 µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	13495	5.00 µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	26534	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	30695	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	236426	5.00 µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	485019	10.00 µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	178417	5.00 µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	892203	25.00 µg/L	0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1122000	25.00 µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	98318	2.50 µg/L	0.000
M3-MeFOSA	10.568	515.0 -> 169.0	89482	2.50 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	71956	2.50 µg/L	0.000
13C3-PFBA	2.886	216.0 -> 172.0	396636	5.00 µg/L	0.012
18O2-PFHxS	6.985	403.0 -> 84.0	44113	2.50 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	504216	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	164721	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	194754	1.25 µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	290772	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.153	329.0 -> 81.0	13495	6.10 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 122.0%	
13C2-6:2FTS	6.684	429.0 -> 81.0	26534	5.53 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 110.6%	
13C2-8:2FTS	7.671	529.0 -> 81.0	30695	5.44 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.7%	
13C2-PFDoDA	8.666	615.0 -> 570.0	225264	1.27 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.2%	
13C2-PFTeDA	9.381	715.0 -> 670.0	182172	1.33 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.5%	
13C3-PFBS	5.355	302.0 -> 99.0	27377	2.51 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.6%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	41916	2.72 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 108.8%	
13C4-PFBA	2.883	217.0 -> 172.0	921741	10.14 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.4%	
13C4-PFHpA	6.291	367.0 -> 322.0	338705	2.59 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.6%	
13C5-PFHxA	5.452	318.0 -> 273.0	321453	2.61 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.5%	
13C5-PFPeA	4.319	268.0 -> 223.0	484721	5.19 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.8%	
13C6-PFDA	7.858	519.0 -> 474.0	191460	1.32 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.2%	
13C7-PFUnDA	8.273	570.0 -> 525.0	254655	1.31 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.8%	
13C8-FOSA	9.291	506.0 -> 78.0	186160	2.52 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.7%	
13C8-PFOA	6.897	421.0 -> 376.0	511925	2.54 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.6%	
13C8-PFOS	7.995	507.0 -> 99.0	42060	2.43 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.1%	
13C9-PFNA	7.403	472.0 -> 427.0	203516	1.26 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.8%	
d3-MeFOSAA	7.915	573.0 -> 419.0	236426	4.99 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.8%	
13C3-HFPO-DA	5.779	287.0 -> 169.0	485019	10.03 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.3%	
d3-MeFOSA	10.568	515.0 -> 169.0	89482	2.36 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.3%	
d5-EtFOSAA	8.098	589.0 -> 419.0	178417	4.90 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.1%	
d7-MeFOSE	10.475	623.0 -> 59.0	892203	24.62 µg/L	0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 98.5%	
d9-EtFOSE	10.746	639.0 -> 59.0	1122000	25.53 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 102.1%	
d5-EtFOSA	10.825	531.0 -> 169.0	98318	2.51 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.5%	

Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0	-	N.D.	
		299.0 -> 99.0			
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

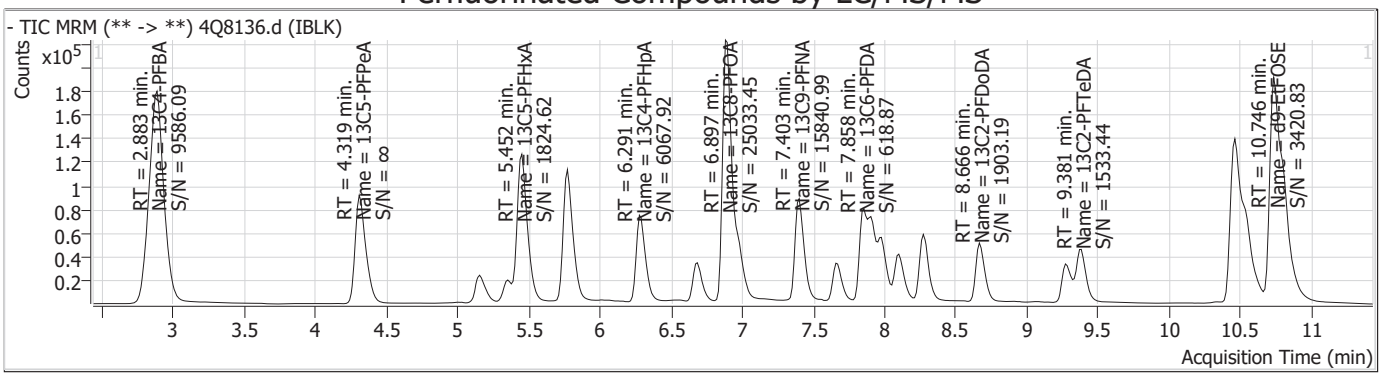
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.		
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 219.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 369.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

Perfluorinated Compounds by LC/MS/MS

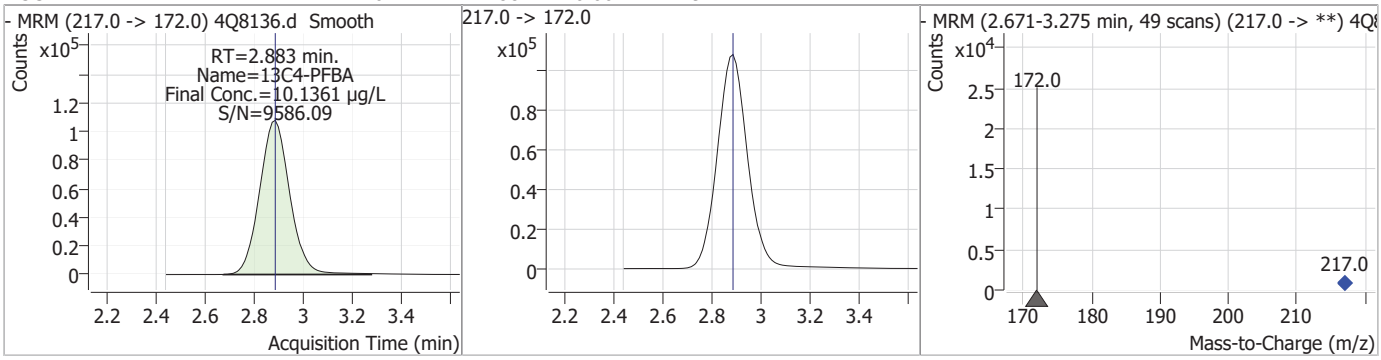
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

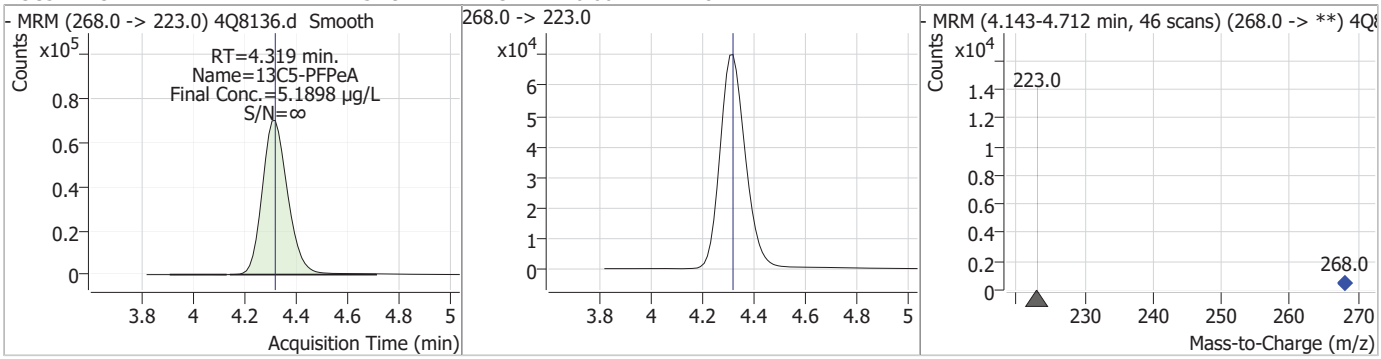
Perfluorinated Compounds by LC/MS/MS



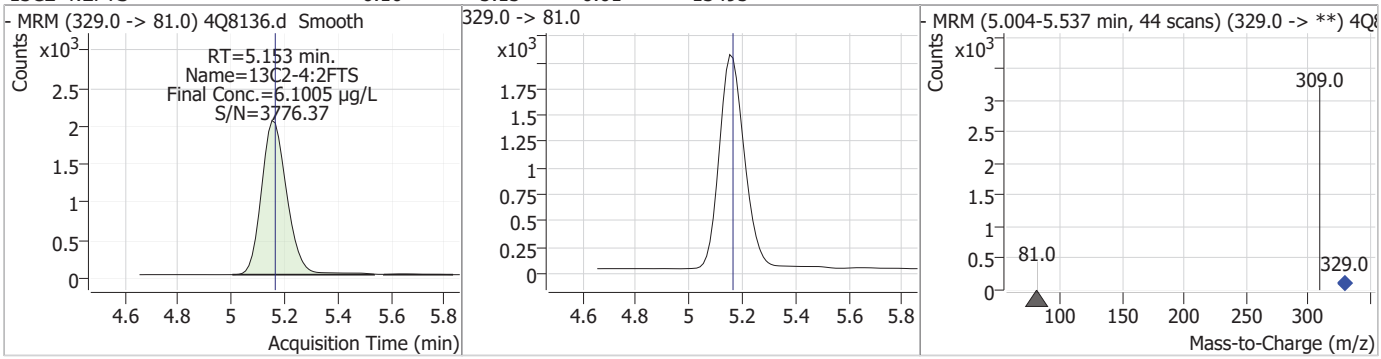
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.14	2.88	0.00	921741				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.19	4.32	0.00	484721				

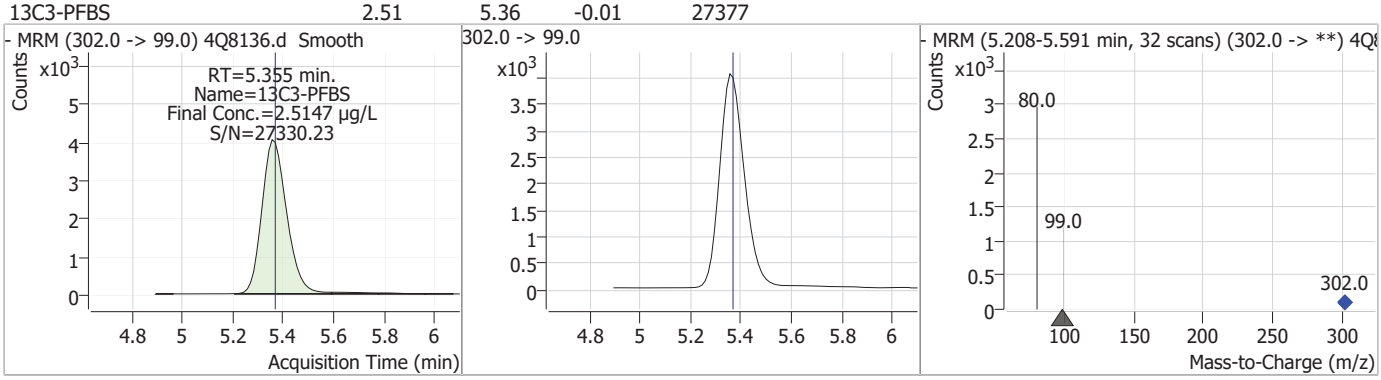


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	6.10	5.15	-0.01	13495				

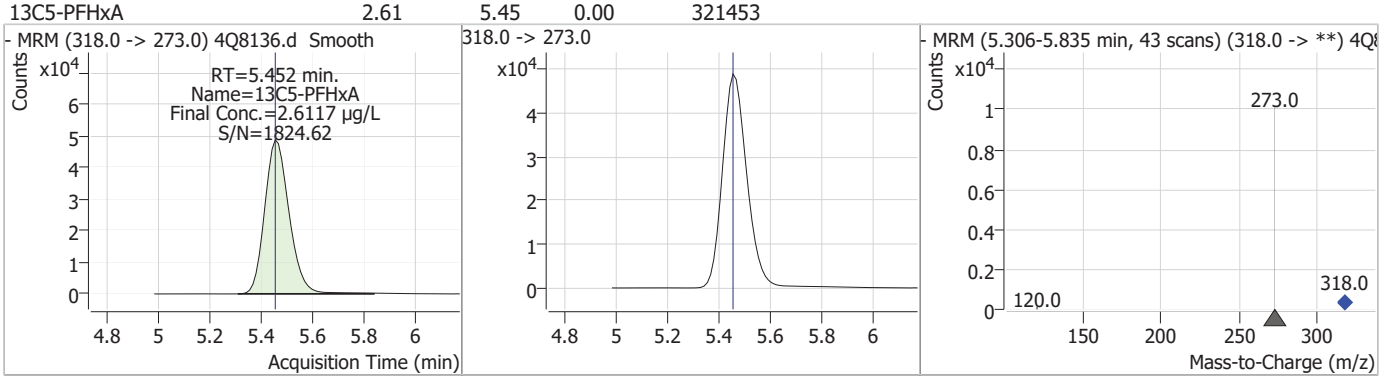


Perfluorinated Compounds by LC/MS/MS

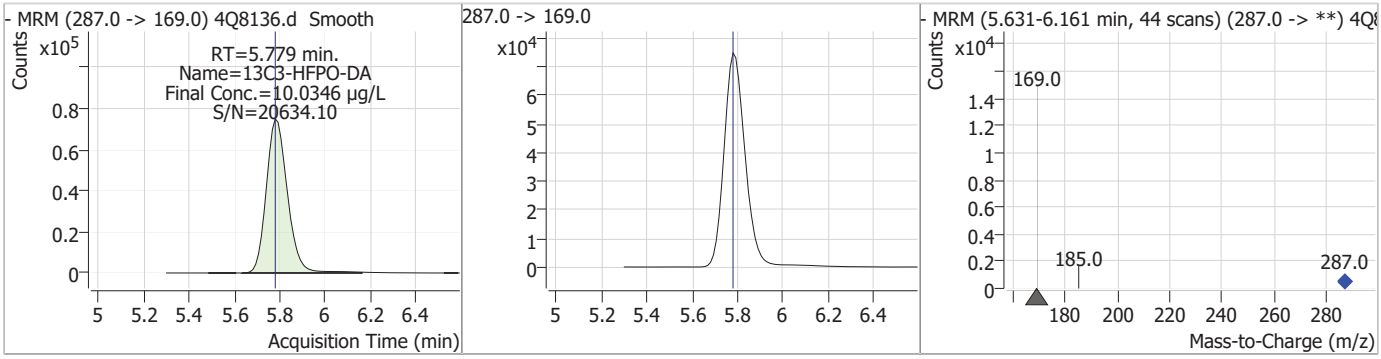
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.51	5.36	-0.01	27377				



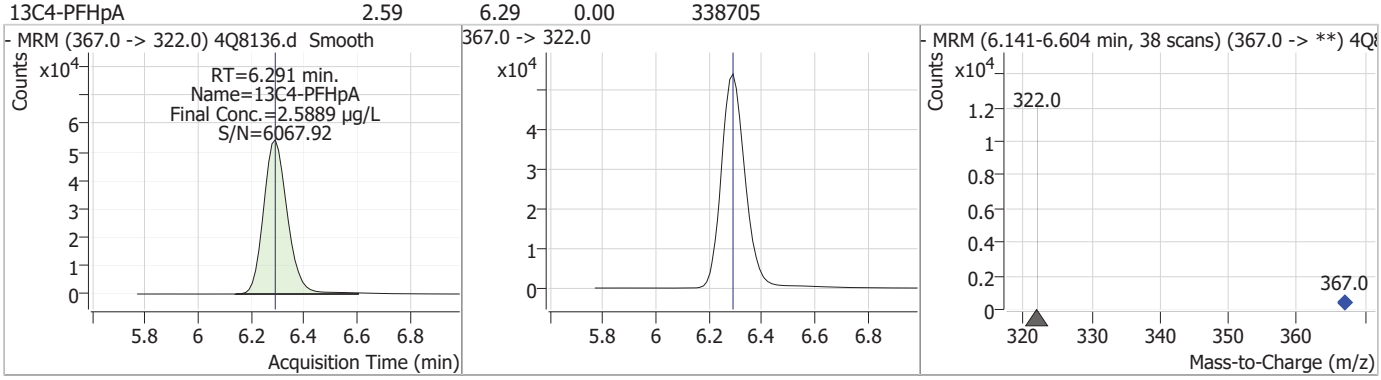
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.61	5.45	0.00	321453				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.03	5.78	0.00	485019				

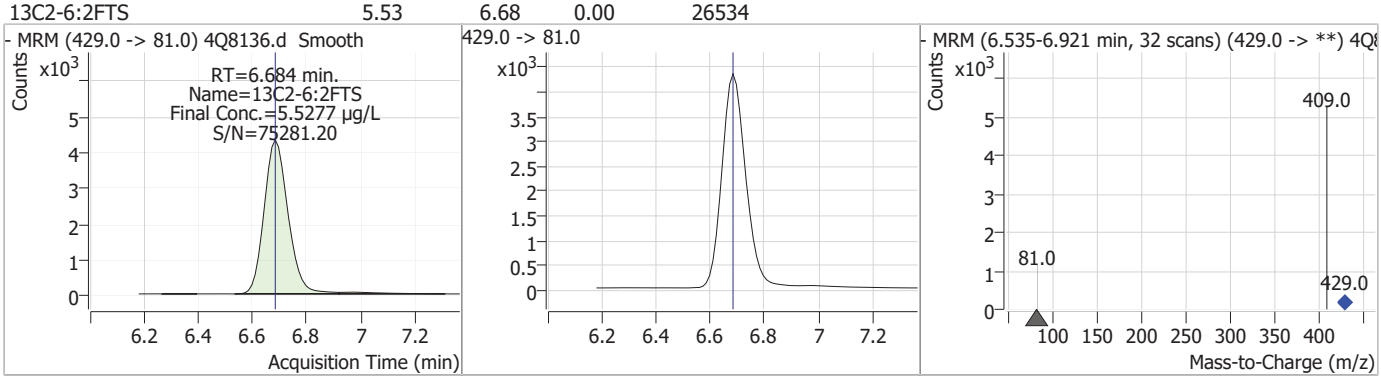


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.59	6.29	0.00	338705				

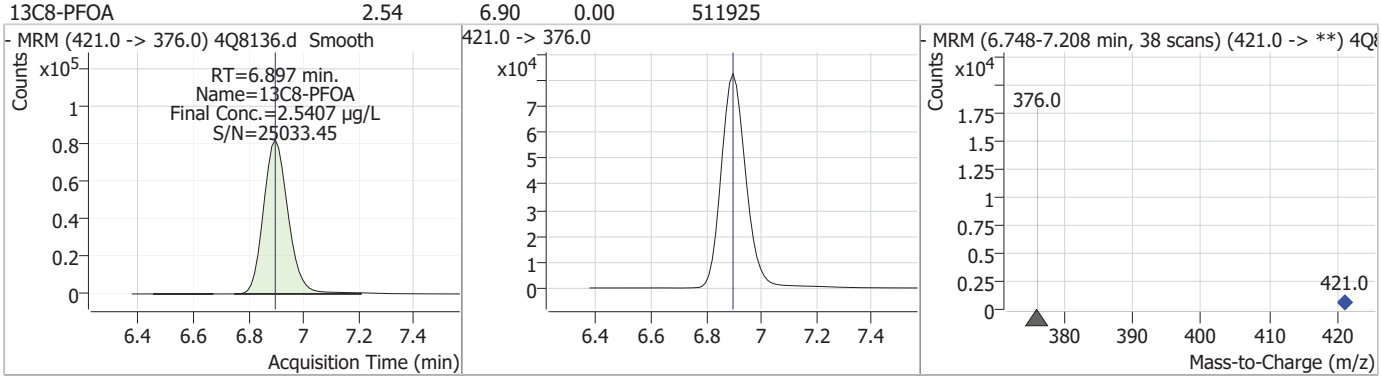


Perfluorinated Compounds by LC/MS/MS

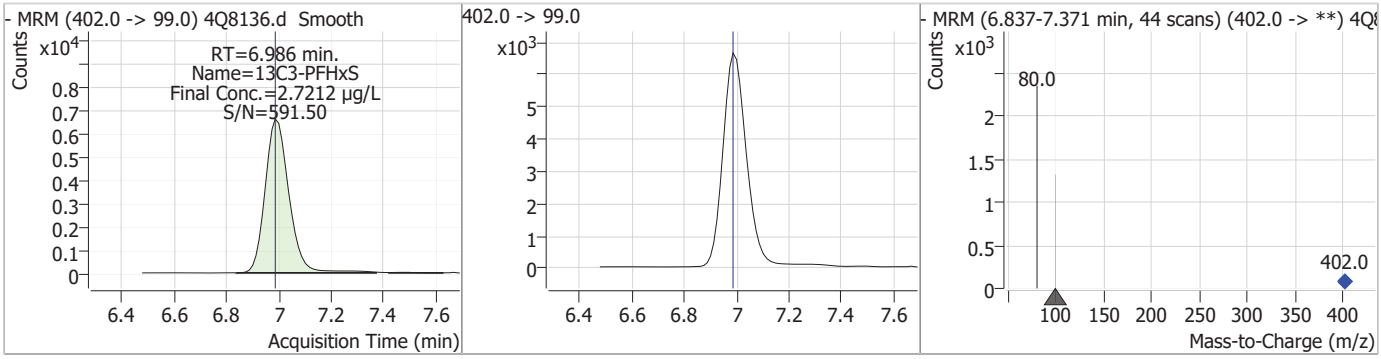
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.53	6.68	0.00	26534				



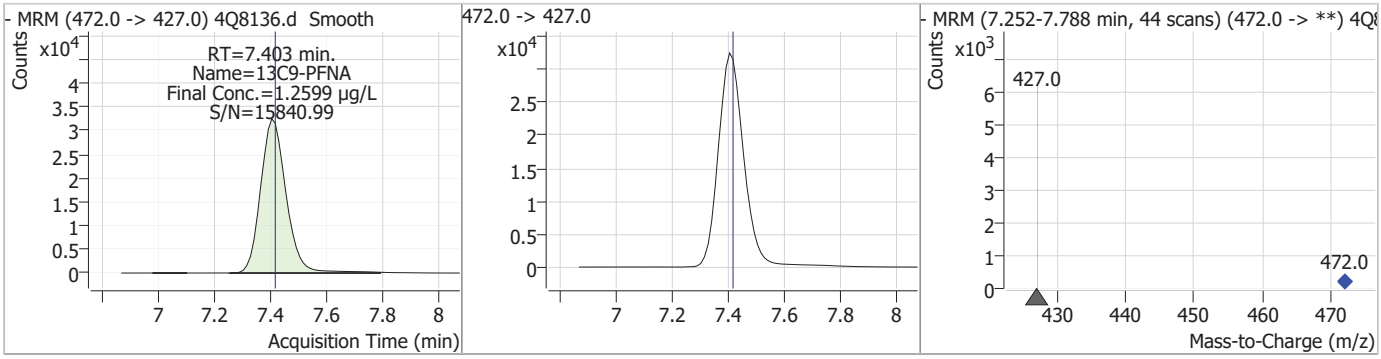
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.54	6.90	0.00	511925				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.72	6.99	0.00	41916				

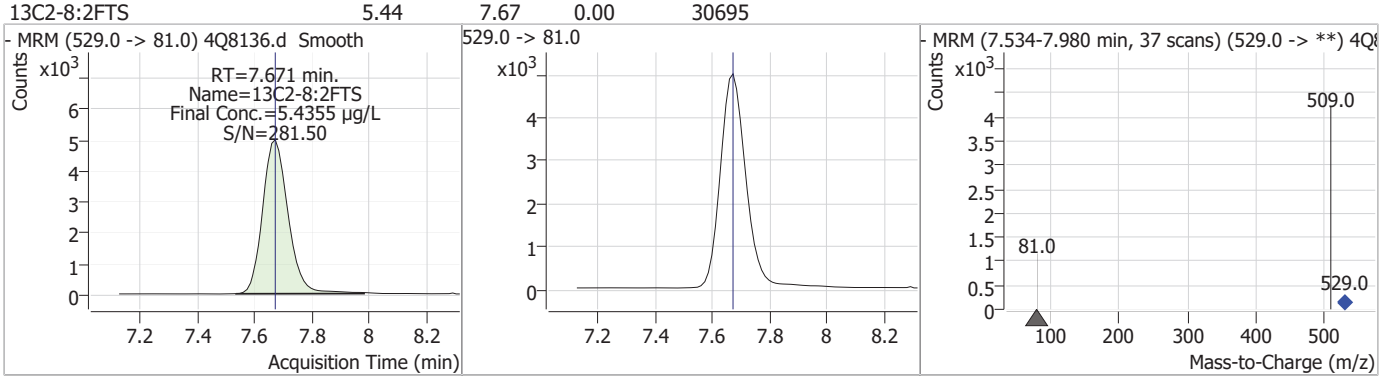


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.26	7.40	-0.01	203516				

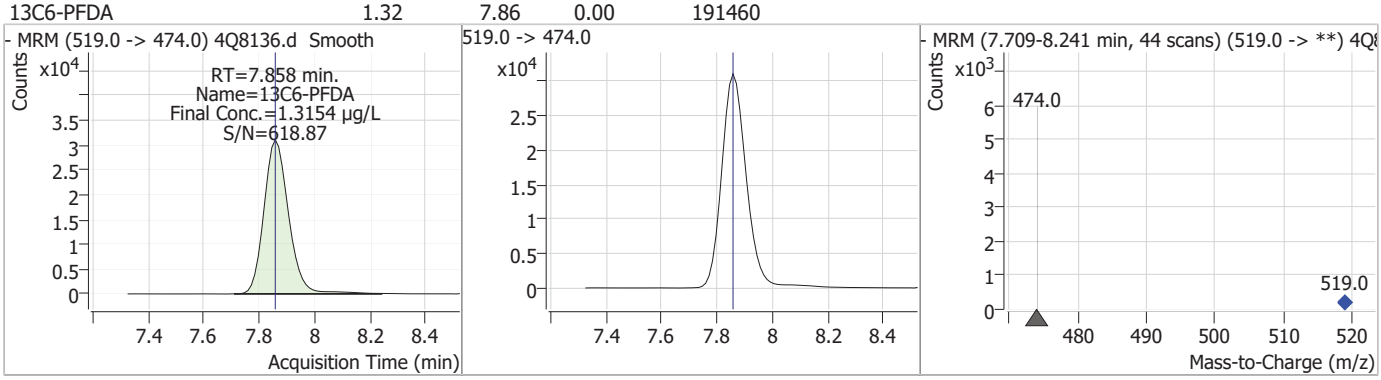


Perfluorinated Compounds by LC/MS/MS

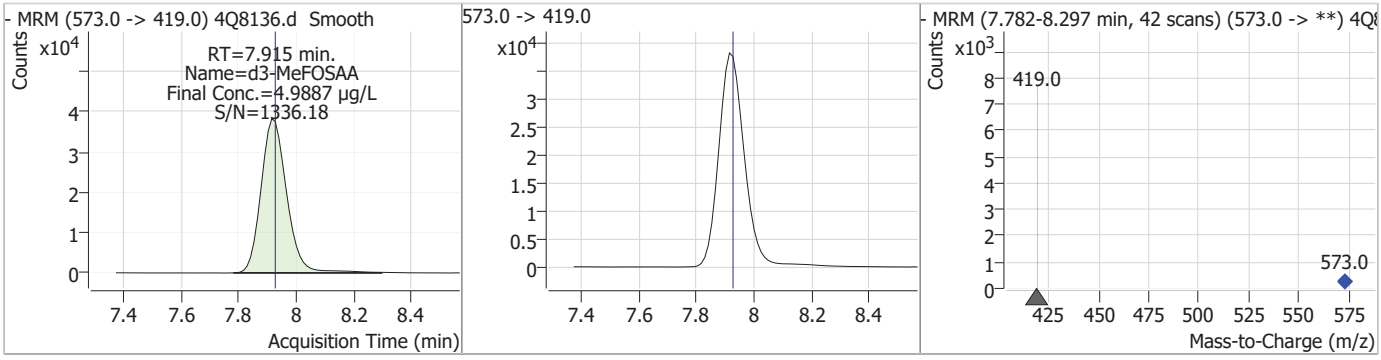
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.44	7.67	0.00	30695				



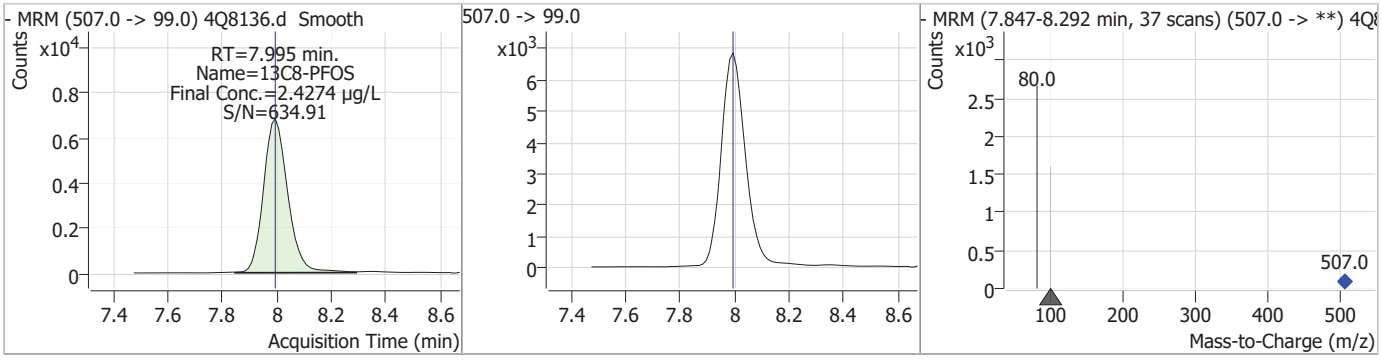
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.32	7.86	0.00	191460				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.99	7.92	-0.01	236426				

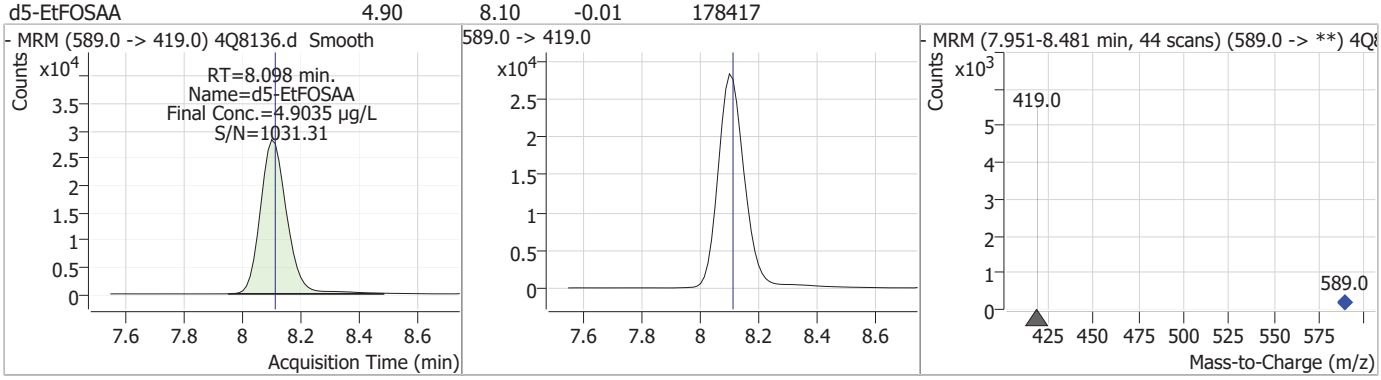


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.43	7.99	0.00	42060				

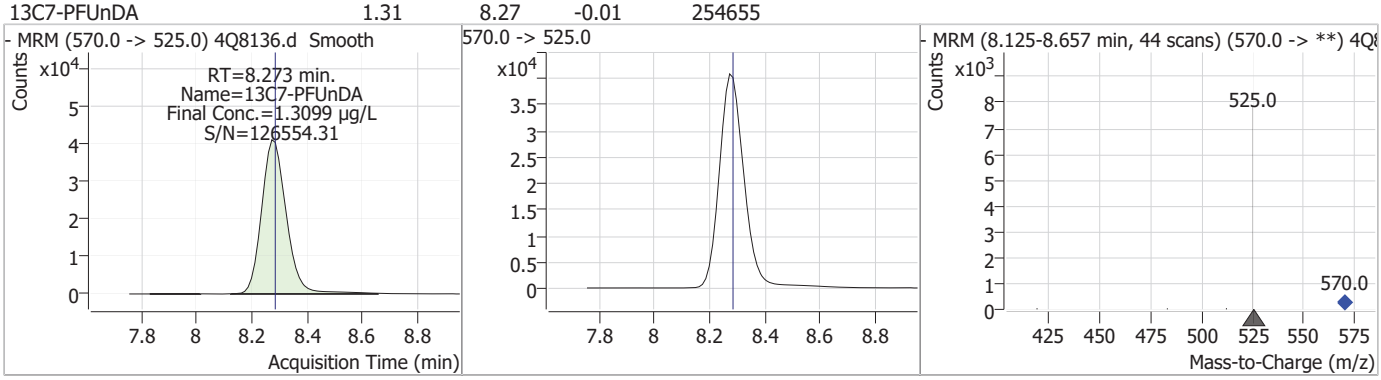


Perfluorinated Compounds by LC/MS/MS

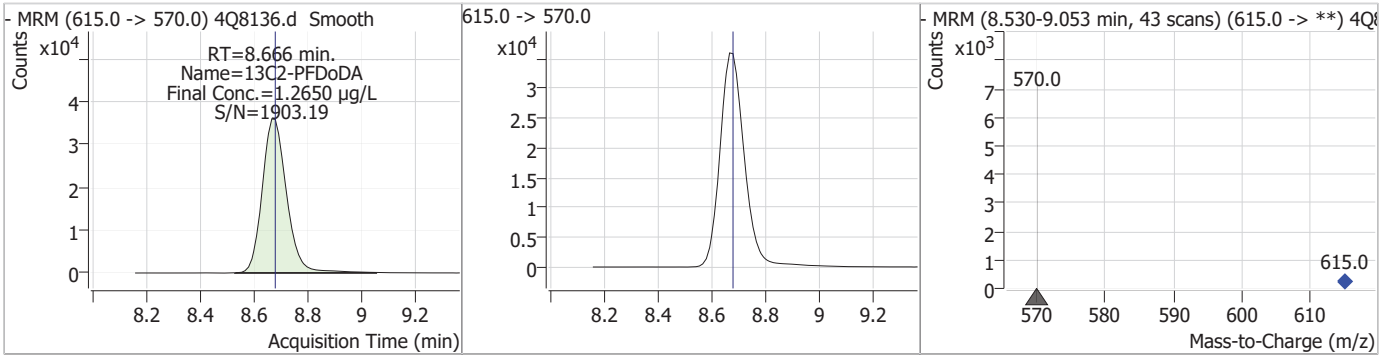
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.90	8.10	-0.01	178417				



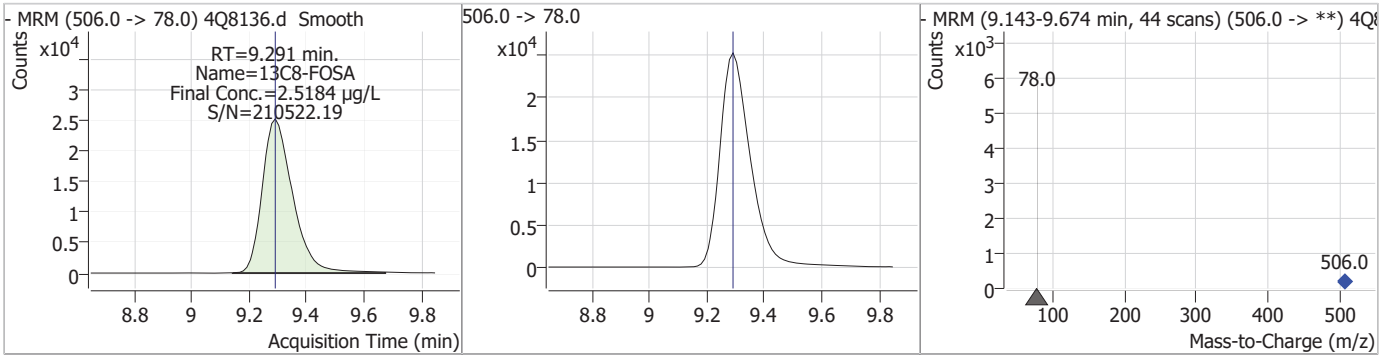
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.31	8.27	-0.01	254655				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.27	8.67	-0.01	225264				

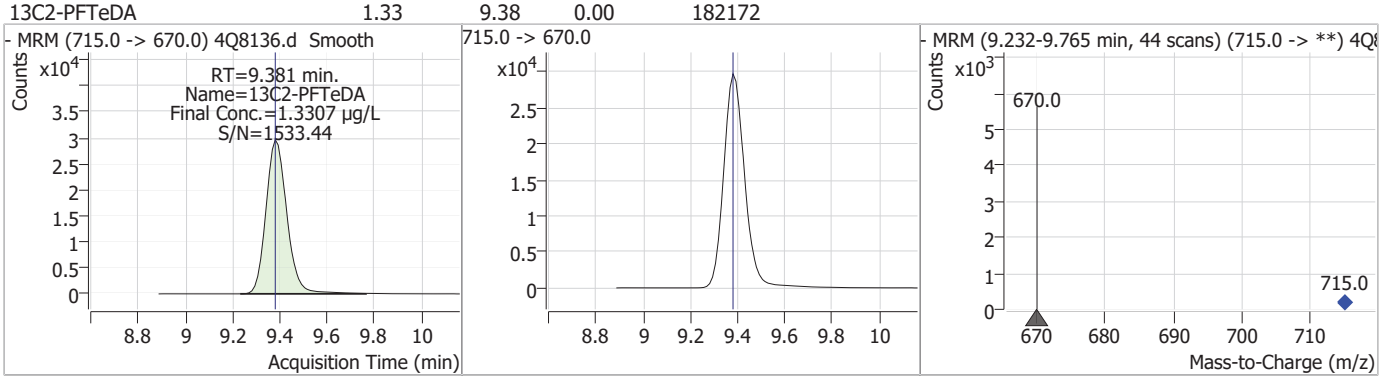


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.52	9.29	0.00	186160				

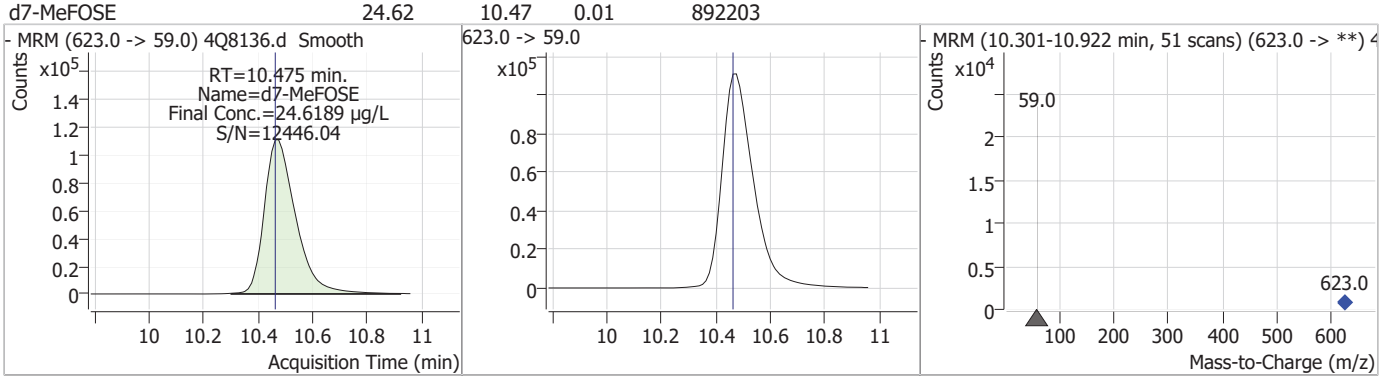


Perfluorinated Compounds by LC/MS/MS

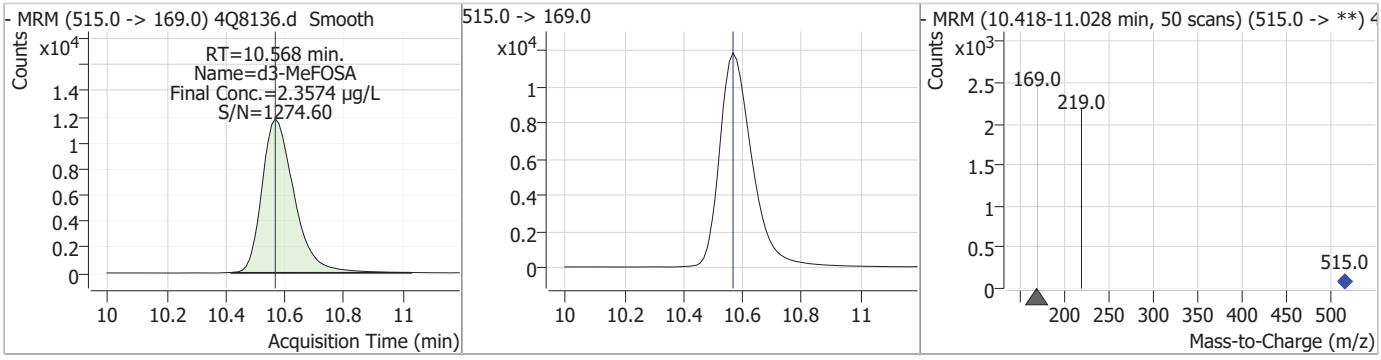
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.33	9.38	0.00	182172				



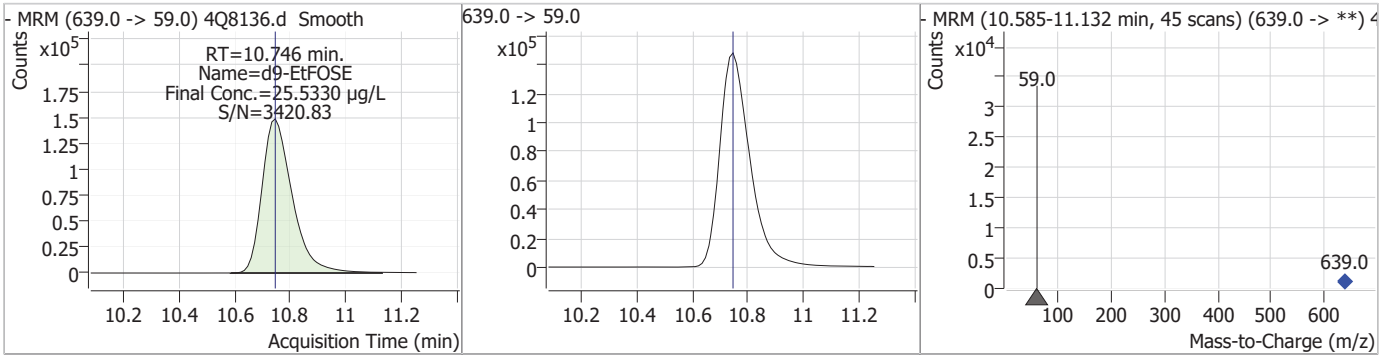
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.62	10.47	0.01	892203				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.36	10.57	0.00	89482				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.53	10.75	0.00	1122000				



7.2.5

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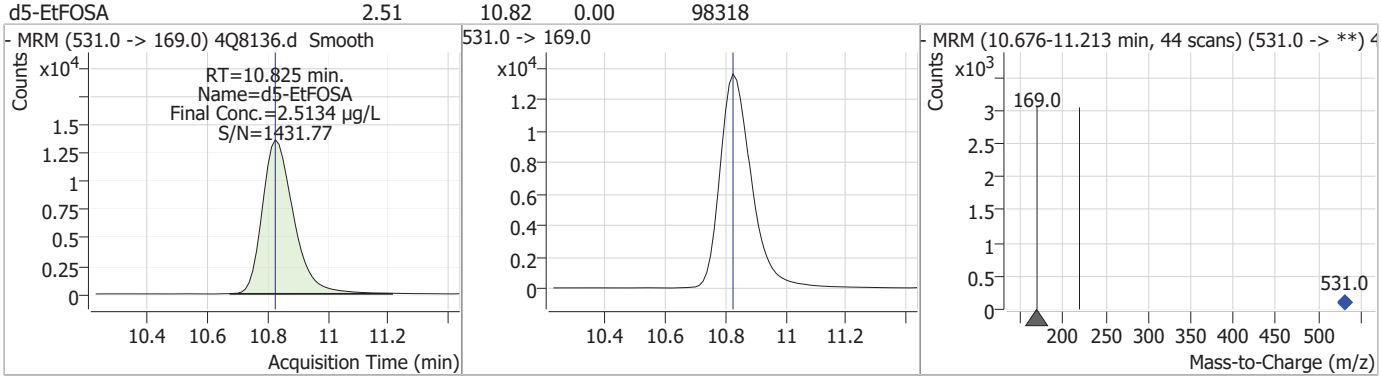
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.51	10.82	0.00	98318				



7.2.5

7

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8154.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 8:22:25 PM
Sample Name : ICCB
Vial : P1-A1
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.883	217.0 -> 172.0	918174	10.00 µg/L	0.000
M5-PFPeA	4.319	268.0 -> 223.0	479189	5.00 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	325517	2.50 µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	332307	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	499359	2.50 µg/L	0.000
M9-PFNA	7.415	472.0 -> 427.0	202967	1.25 µg/L	0.000
M6-PFDA	7.858	519.0 -> 474.0	193349	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	263133	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	217292	1.25 µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	170677	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	178946	2.50 µg/L	0.000
M3-PFBS	5.368	302.0 -> 99.0	29653	2.50 µg/L	0.000
		302.0 -> 80.0	68929		
M3-PFHxS	6.999	402.0 -> 99.0	39482	2.50 µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	45314	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	12300	5.00 µg/L	0.000
M2-6:2FTS	6.696	429.0 -> 81.0	25542	5.00 µg/L	0.012
M2-8:2FTS	7.671	529.0 -> 81.0	29511	5.00 µg/L	0.000
M3-MeFOSAA	7.927	573.0 -> 419.0	235925	5.00 µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	497736	10.00 µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	185170	5.00 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	883620	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1089012	25.00 µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	96923	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	90101	2.50 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	70824	2.50 µg/L	0.000
13C3-PFBA	2.886	216.0 -> 172.0	392557	5.00 µg/L	0.012
18O2-PFHxS	6.999	403.0 -> 84.0	43020	2.50 µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	481425	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	165575	1.25 µg/L	0.000
13C5-PFNA	7.416	468.0 -> 423.0	190822	1.25 µg/L	0.000
13C2-PFHxA	5.465	315.0 -> 270.0	302487	2.50 µg/L	0.012
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	12300	5.70 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 114.0%	
13C2-6:2FTS	6.696	429.0 -> 81.0	25542	5.46 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 109.1%	
13C2-8:2FTS	7.671	529.0 -> 81.0	29511	5.36 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.2%	
13C2-PFDoDA	8.666	615.0 -> 570.0	217292	1.21 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.1%	
13C2-PFTeDA	9.381	715.0 -> 670.0	170677	1.24 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.2%	
13C3-PFBS	5.368	302.0 -> 99.0	29653	2.79 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 111.7%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	39482	2.63 µg/L	0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.1%	
13C4-PFBA	2.883	217.0 -> 172.0	918174	10.20 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 102.0%	
13C4-PFHpA	6.291	367.0 -> 322.0	332307	2.44 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.7%	
13C5-PFHxA	5.464	318.0 -> 273.0	325517	2.54 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.7%	
13C5-PFPeA	4.319	268.0 -> 223.0	479189	4.93 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.6%	
13C6-PFDA	7.858	519.0 -> 474.0	193349	1.32 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.7%	
13C7-PFUnDA	8.273	570.0 -> 525.0	263133	1.35 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 107.7%	
13C8-FOSA	9.291	506.0 -> 78.0	178946	2.46 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.4%	
13C8-PFOA	6.897	421.0 -> 376.0	499359	2.60 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.8%	
13C8-PFOS	7.995	507.0 -> 99.0	45314	2.66 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.3%	
13C9-PFNA	7.415	472.0 -> 427.0	202967	1.28 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.6%	
d3-MeFOSAA	7.927	573.0 -> 419.0	235925	5.06 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.2%	
13C3-HFPO-DA	5.792	287.0 -> 169.0	497736	9.90 µg/L	0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.0%	
d3-MeFOSA	10.567	515.0 -> 169.0	90101	2.41 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.5%	
d5-EtFOSAA	8.098	589.0 -> 419.0	185170	5.17 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.4%	
d7-MeFOSE	10.462	623.0 -> 59.0	883620	24.77 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 99.1%	
d9-EtFOSE	10.746	639.0 -> 59.0	1089012	25.18 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.7%	
d5-EtFOSA	10.825	531.0 -> 169.0	96923	2.52 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.7%	

Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0	-	N.D.	
		299.0 -> 99.0			
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

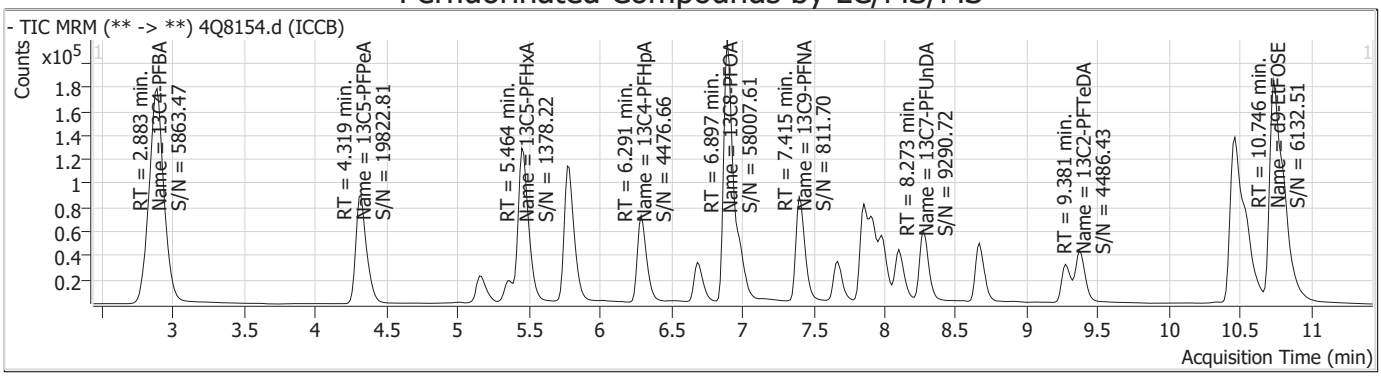
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.		
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 219.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 369.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

Perfluorinated Compounds by LC/MS/MS

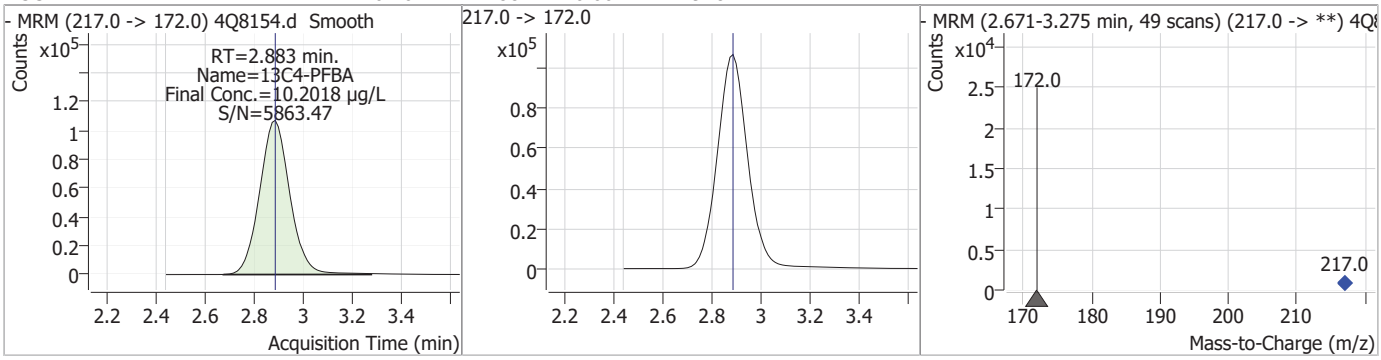
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

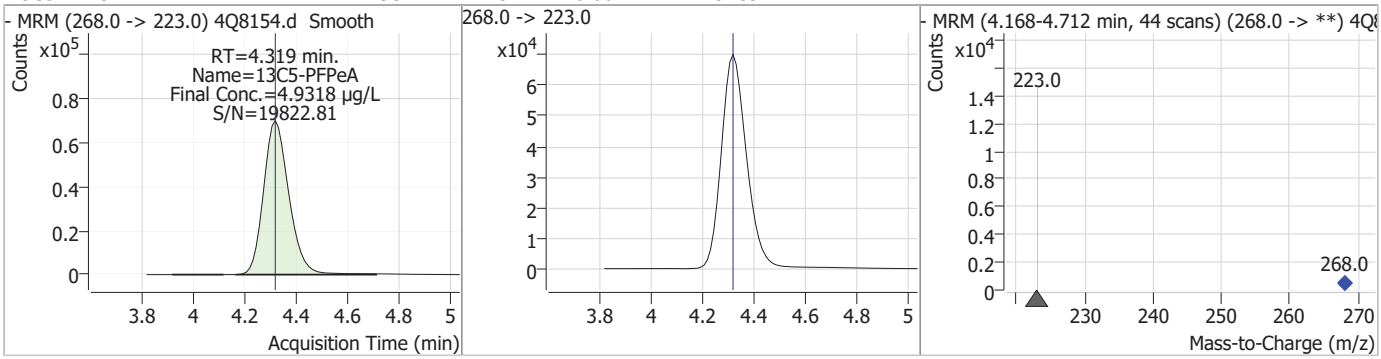
Perfluorinated Compounds by LC/MS/MS



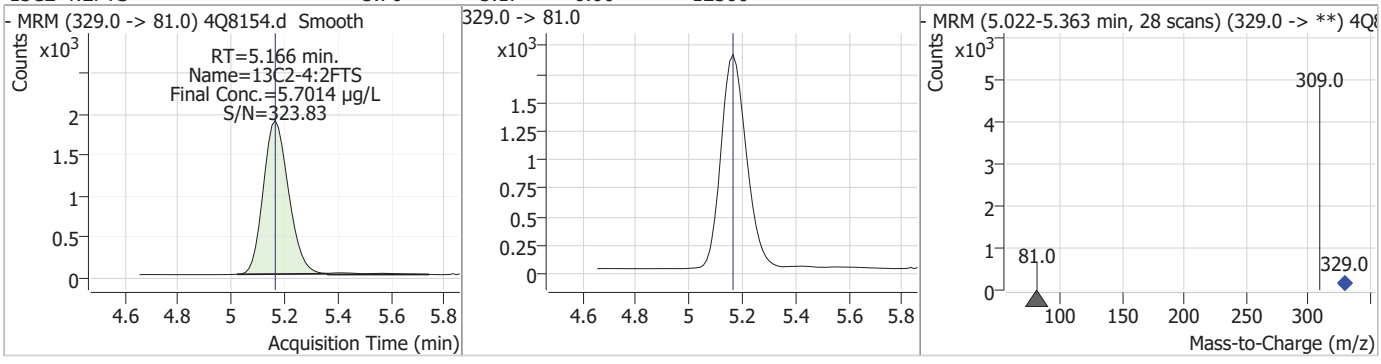
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.20	2.88	0.00	918174				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.93	4.32	0.00	479189				

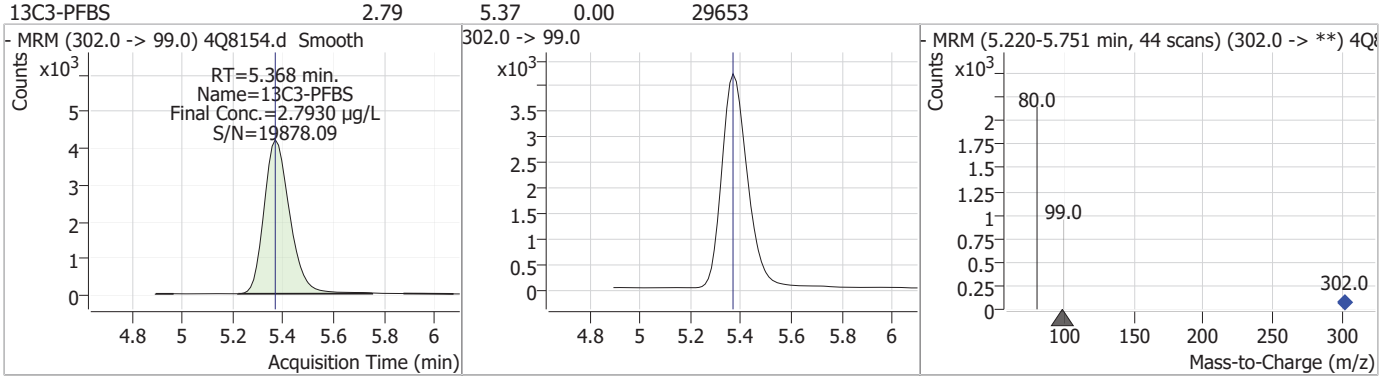


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.70	5.17	0.00	12300				

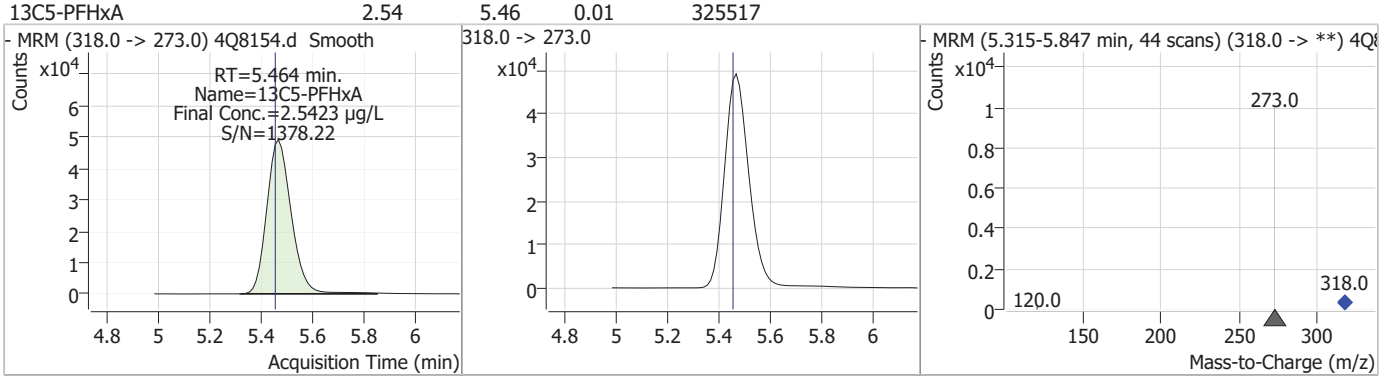


Perfluorinated Compounds by LC/MS/MS

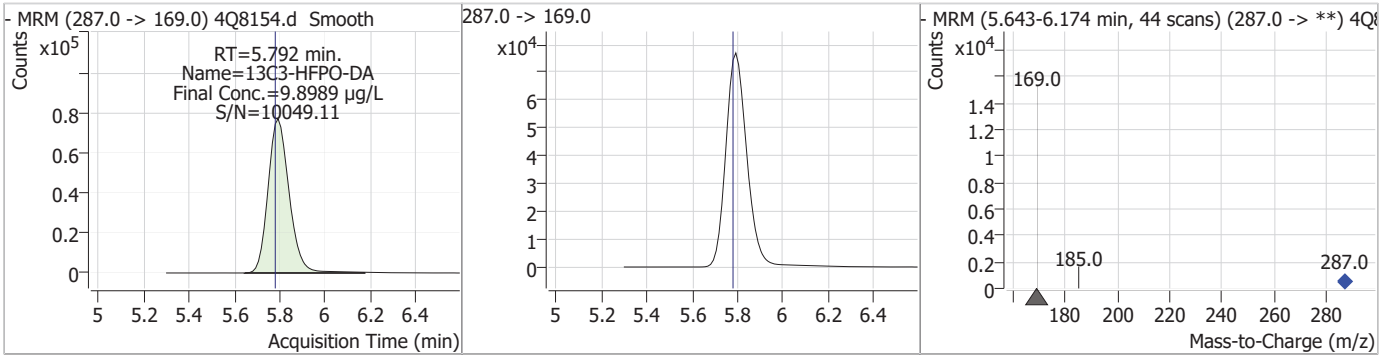
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.79	5.37	0.00	29653				



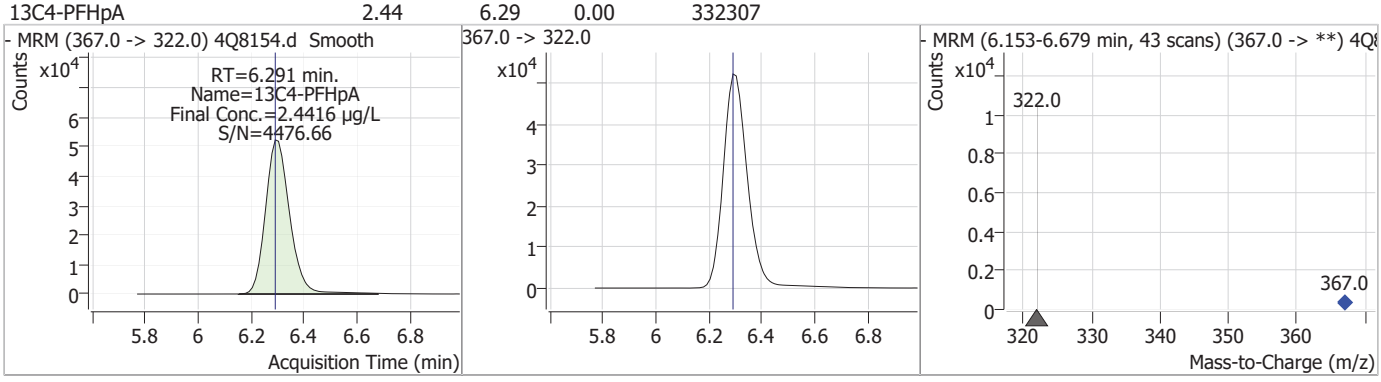
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.54	5.46	0.01	325517				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.90	5.79	0.01	497736				

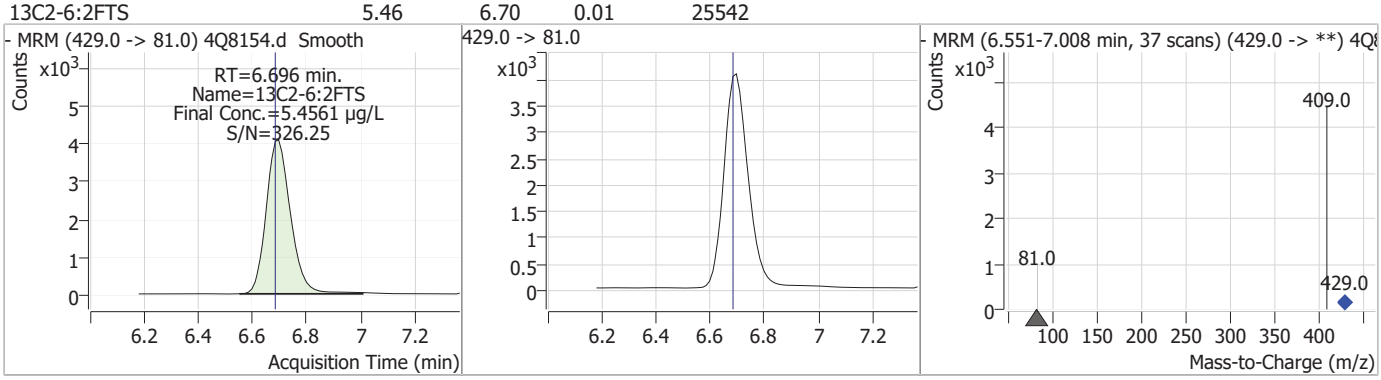


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.44	6.29	0.00	332307				

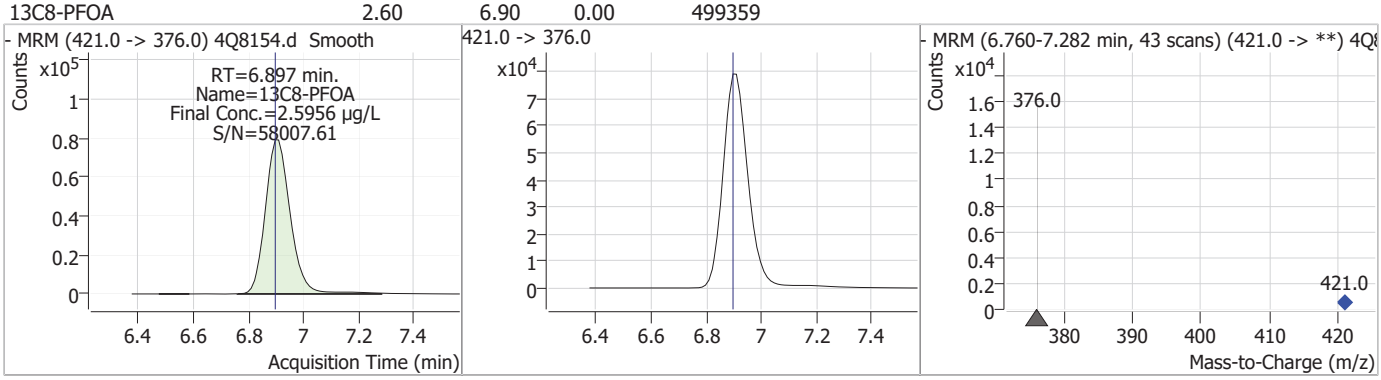


Perfluorinated Compounds by LC/MS/MS

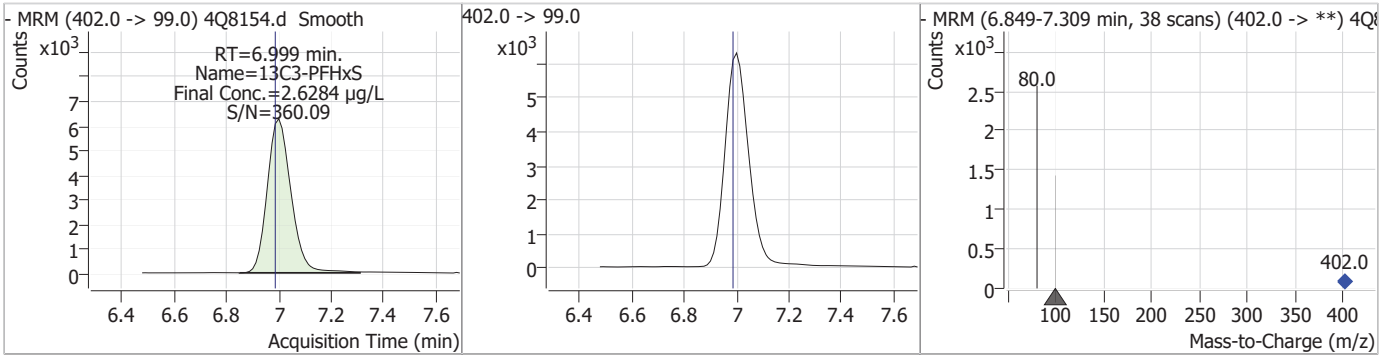
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.46	6.70	0.01	25542				



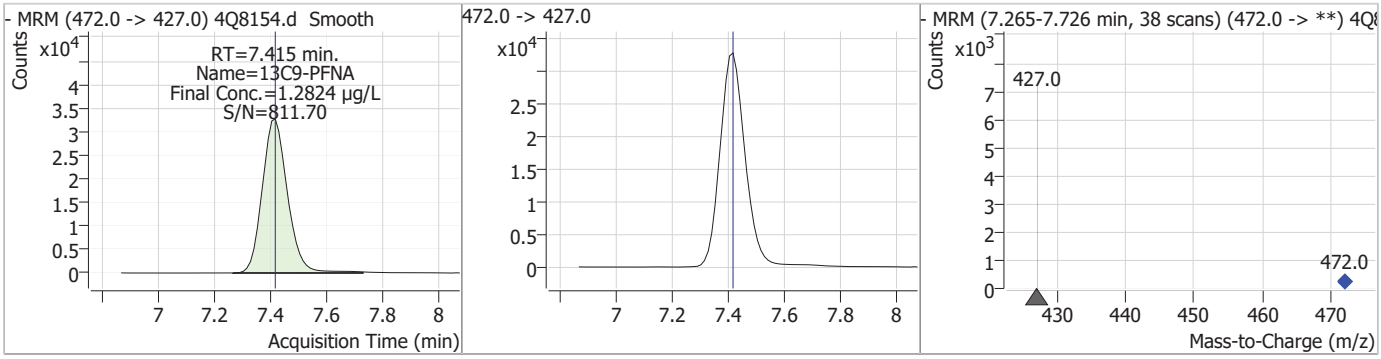
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.60	6.90	0.00	499359				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.63	7.00	0.01	39482				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.28	7.42	0.00	202967				



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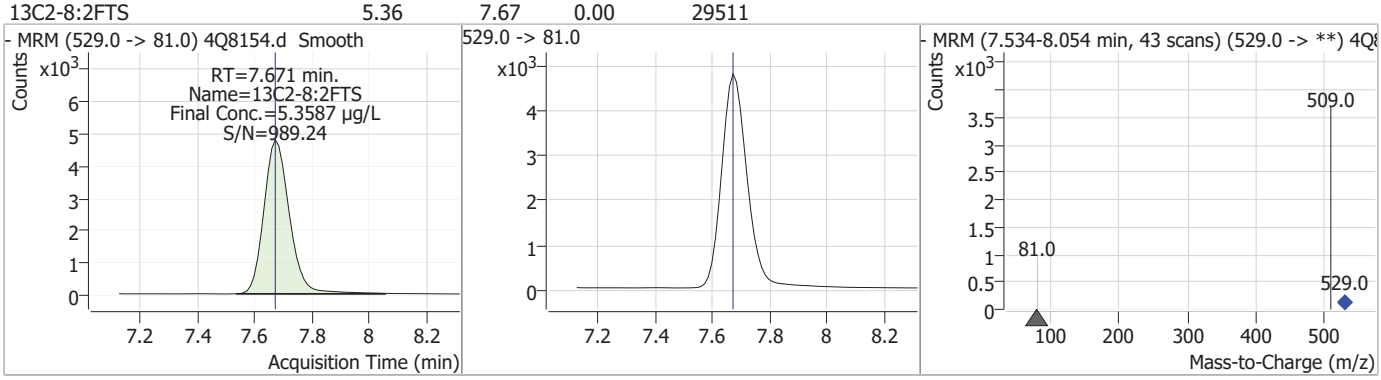
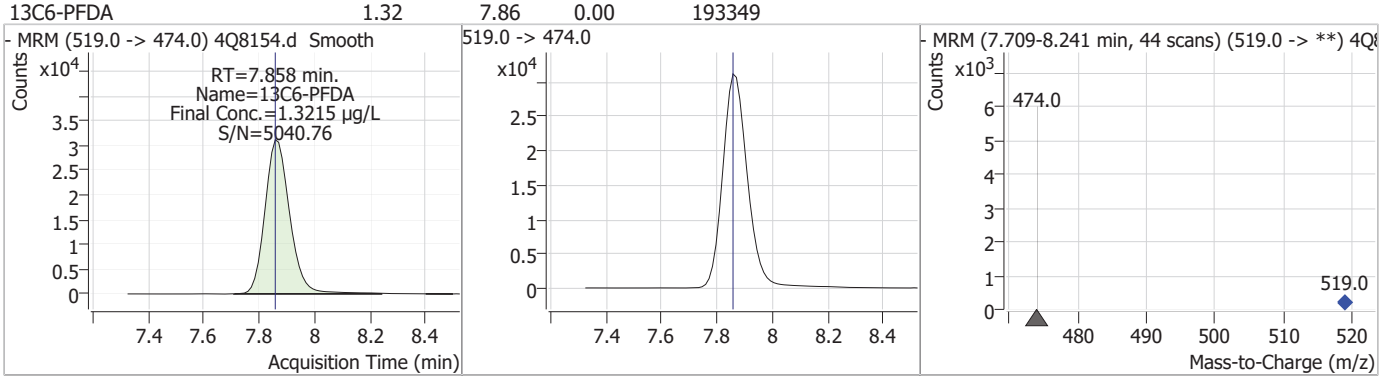
Perfluorinated Compounds by LC/MS/MS

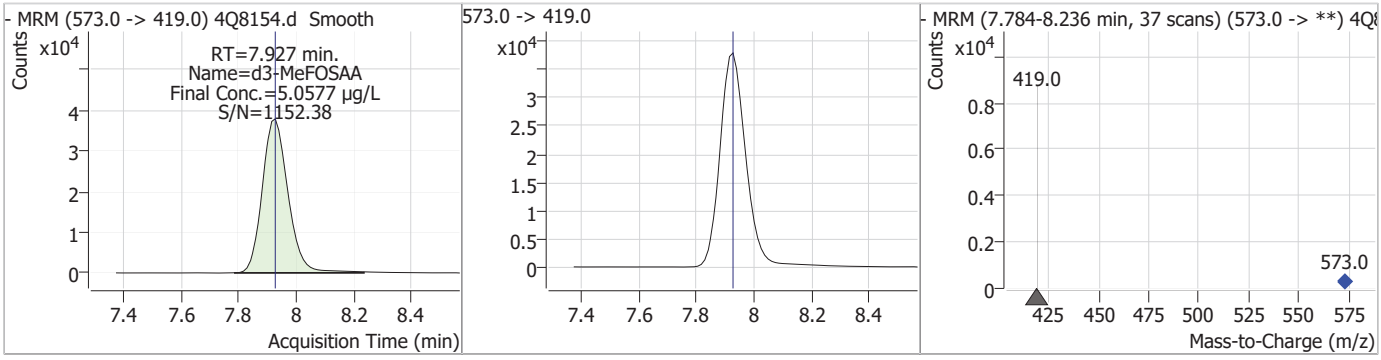
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.36	7.67	0.00	29511				



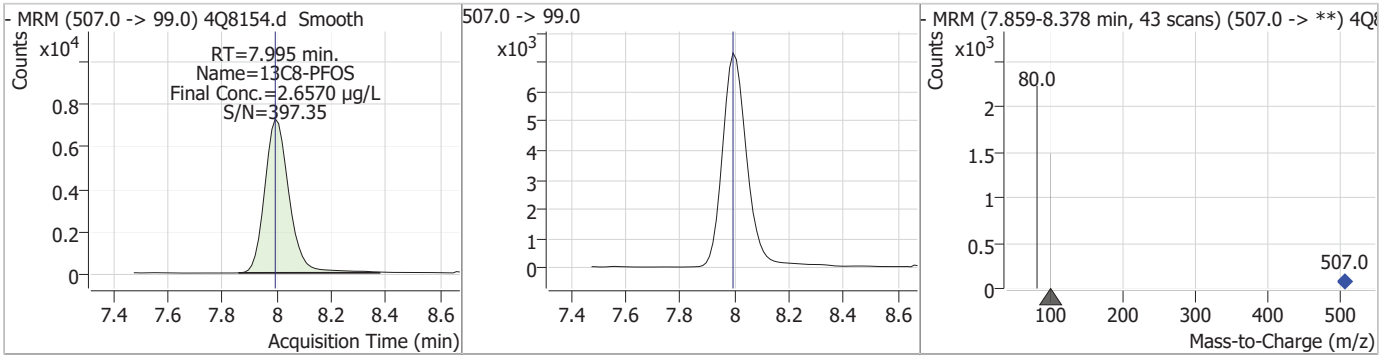
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.32	7.86	0.00	193349				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.06	7.93	0.00	235925				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.66	7.99	0.00	45314				



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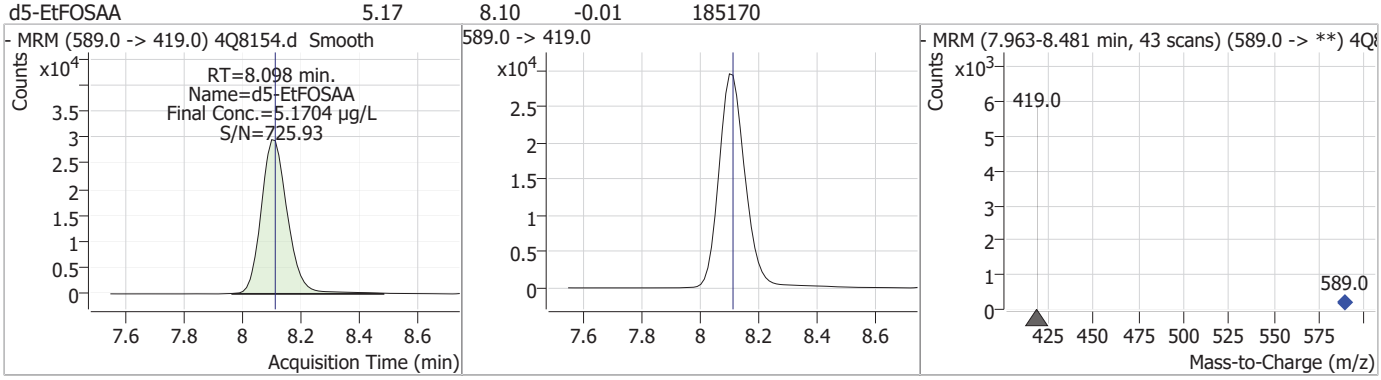
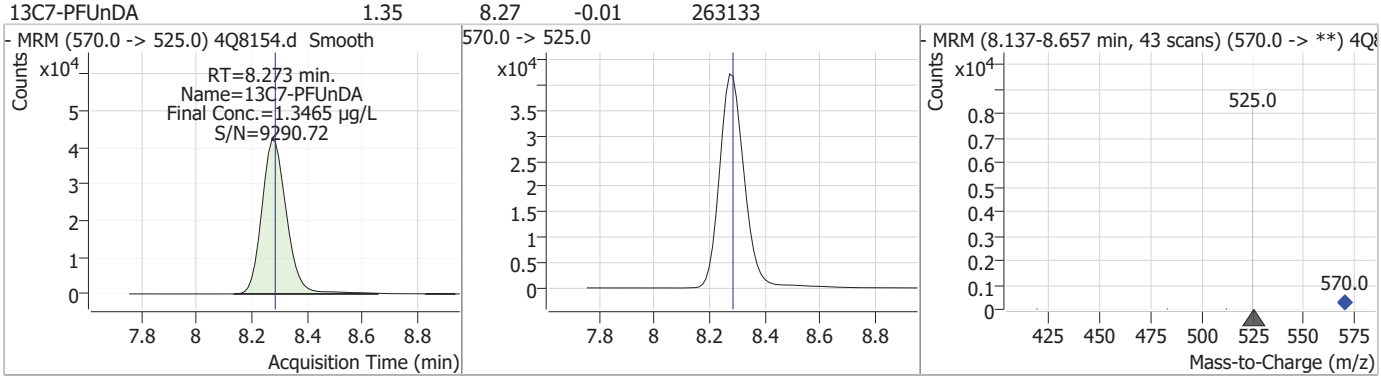
Perfluorinated Compounds by LC/MS/MS

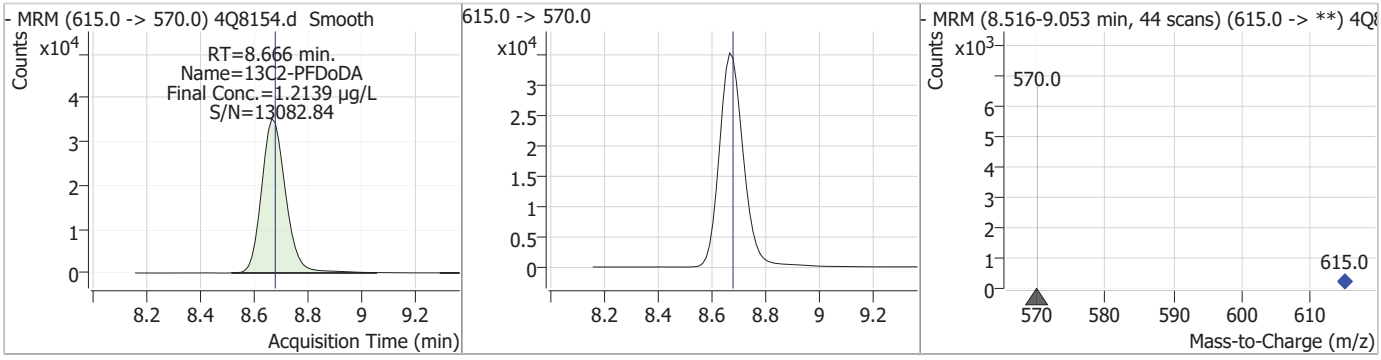
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.17	8.10	-0.01	185170				



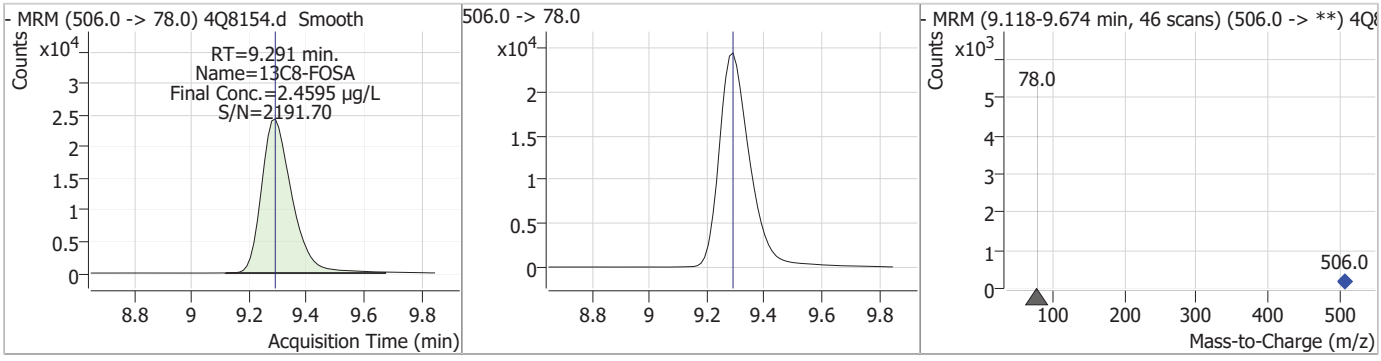
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.35	8.27	-0.01	263133				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.21	8.67	-0.01	217292				

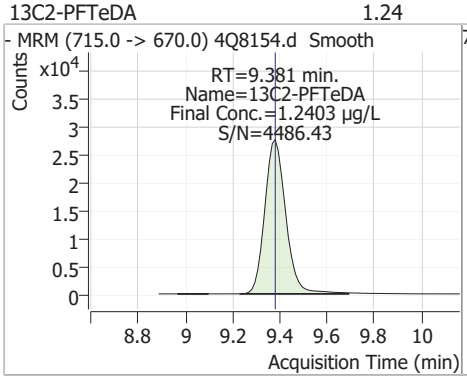


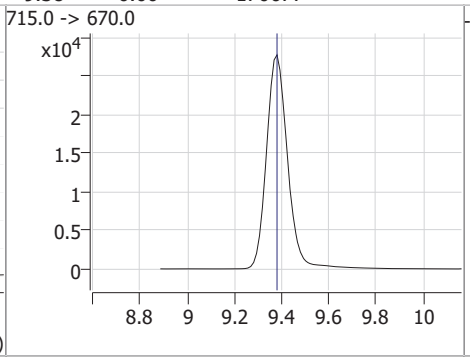
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.46	9.29	0.00	178946				

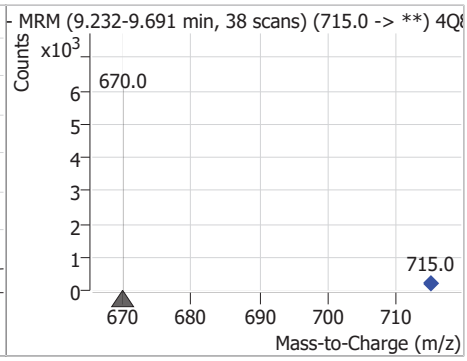


Perfluorinated Compounds by LC/MS/MS

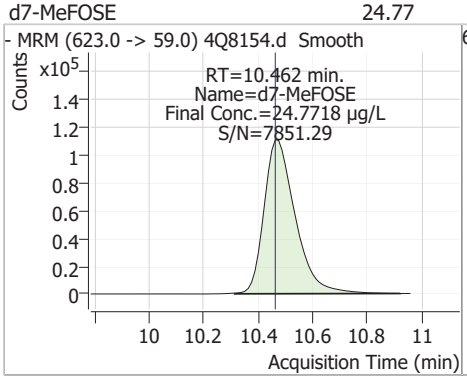
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.24	9.38	0.00	170677				

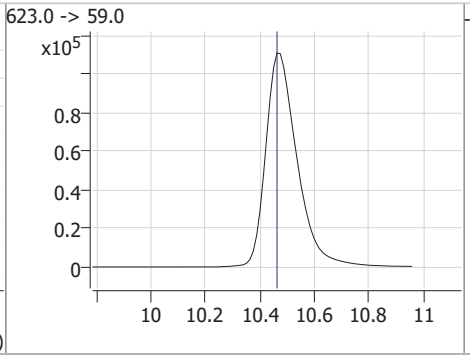


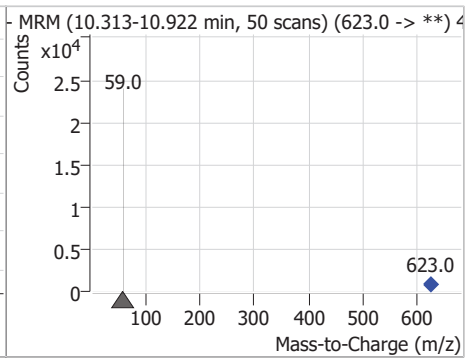




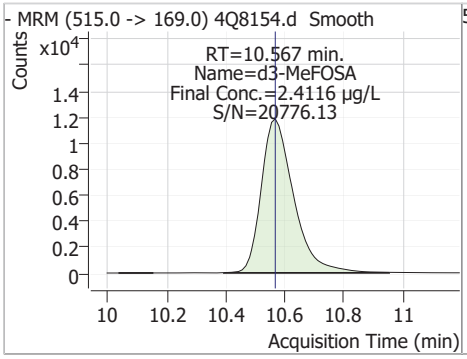
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.77	10.46	0.00	883620				

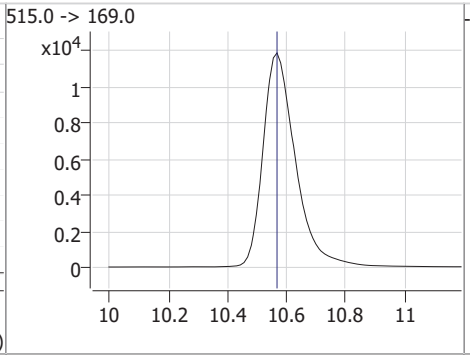


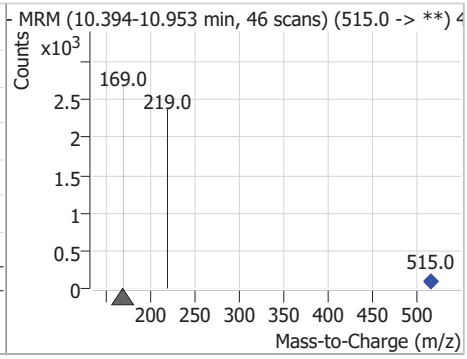




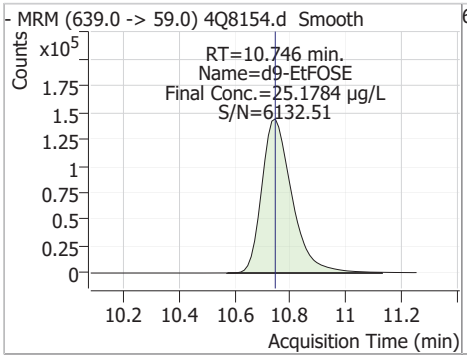
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.41	10.57	0.00	90101				

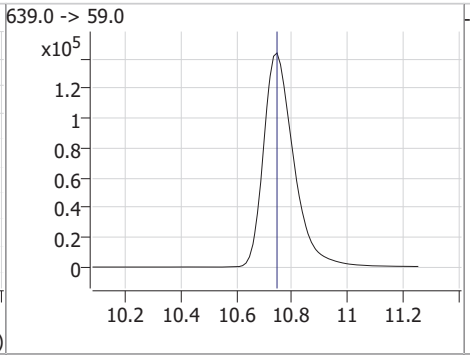


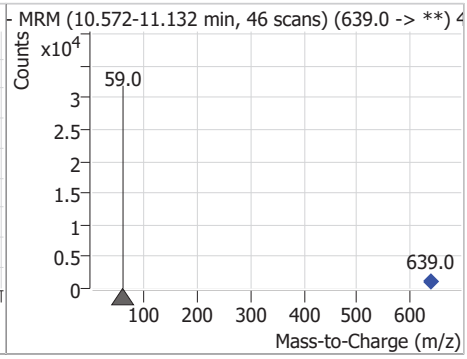




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.18	10.75	0.00	1089012				

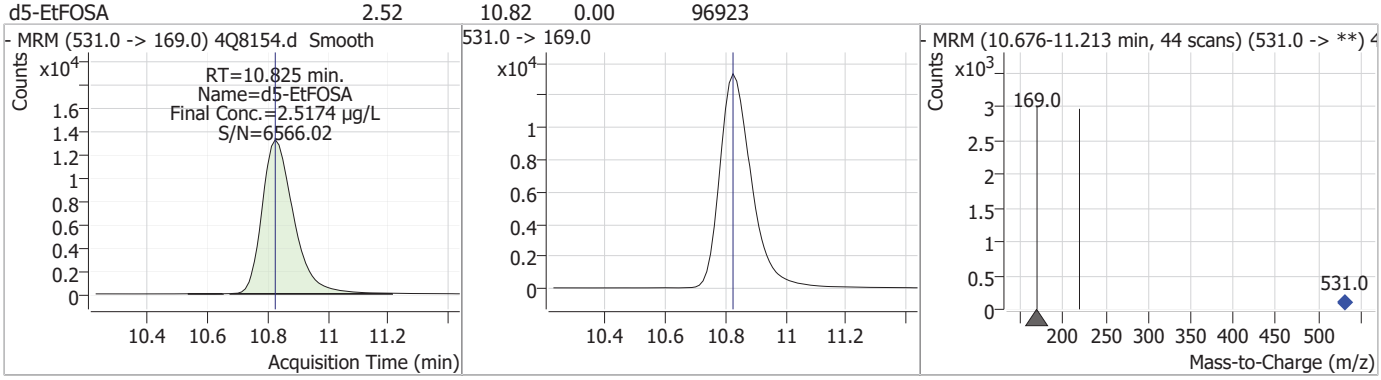






Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.52	10.82	0.00	96923				



7.2.6

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Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8171.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 12:13:07 AM
Sample Name : ICCB
Vial : P1-A1
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.883	217.0 -> 172.0	817033	10.00 µg/L	0.000
M5-PFPeA	4.319	268.0 -> 223.0	462272	5.00 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	301573	2.50 µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	313888	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	469762	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	184136	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	172569	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	238791	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	207123	1.25 µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	155021	1.25 µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	166093	2.50 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	26165	2.50 µg/L	0.000
		302.0 -> 80.0	66095		
M3-PFHxS	6.999	402.0 -> 99.0	38332	2.50 µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	41363	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	11029	5.00 µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	24433	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	27625	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	214392	5.00 µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	483303	10.00 µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	165404	5.00 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	789267	25.00 µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	966333	25.00 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	87799	2.50 µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	85036	2.50 µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	65206	2.50 µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	368161	5.00 µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	41152	2.50 µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	460548	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	154274	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	175153	1.25 µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	281197	2.50 µg/L	0.012
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	11029	5.34 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.9%	
13C2-6:2FTS	6.684	429.0 -> 81.0	24433	5.46 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 109.1%	
13C2-8:2FTS	7.671	529.0 -> 81.0	27625	5.24 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.9%	
13C2-PFDoDA	8.666	615.0 -> 570.0	207123	1.24 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.4%	
13C2-PFTeDA	9.368	715.0 -> 670.0	155021	1.21 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.7%	
13C3-PFBS	5.368	302.0 -> 99.0	26165	2.58 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.1%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	38332	2.67 µg/L	0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.7%	
13C4-PFBA	2.883	217.0 -> 172.0	817033	9.68 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 96.8%	
13C4-PFHpA	6.291	367.0 -> 322.0	313888	2.48 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.2%	
13C5-PFHxA	5.464	318.0 -> 273.0	301573	2.53 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.3%	
13C5-PFPeA	4.319	268.0 -> 223.0	462272	5.12 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.4%	
13C6-PFDA	7.858	519.0 -> 474.0	172569	1.27 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.3%	
13C7-PFUnDA	8.273	570.0 -> 525.0	238791	1.31 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.9%	
13C8-FOSA	9.279	506.0 -> 78.0	166093	2.48 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.2%	
13C8-PFOA	6.897	421.0 -> 376.0	469762	2.55 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.1%	
13C8-PFOS	7.995	507.0 -> 99.0	41363	2.63 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.4%	
13C9-PFNA	7.403	472.0 -> 427.0	184136	1.27 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.4%	
d3-MeFOSAA	7.915	573.0 -> 419.0	214392	4.99 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.8%	
13C3-HFPO-DA	5.792	287.0 -> 169.0	483303	10.34 µg/L	0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 103.4%	
d3-MeFOSA	10.555	515.0 -> 169.0	85036	2.47 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.9%	
d5-EtFOSAA	8.098	589.0 -> 419.0	165404	5.02 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.3%	
d7-MeFOSE	10.462	623.0 -> 59.0	789267	24.03 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 96.1%	
d9-EtFOSE	10.734	639.0 -> 59.0	966333	24.27 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.1%	
d5-EtFOSA	10.825	531.0 -> 169.0	87799	2.48 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.1%	

Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0	-	N.D.	
		299.0 -> 99.0			
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

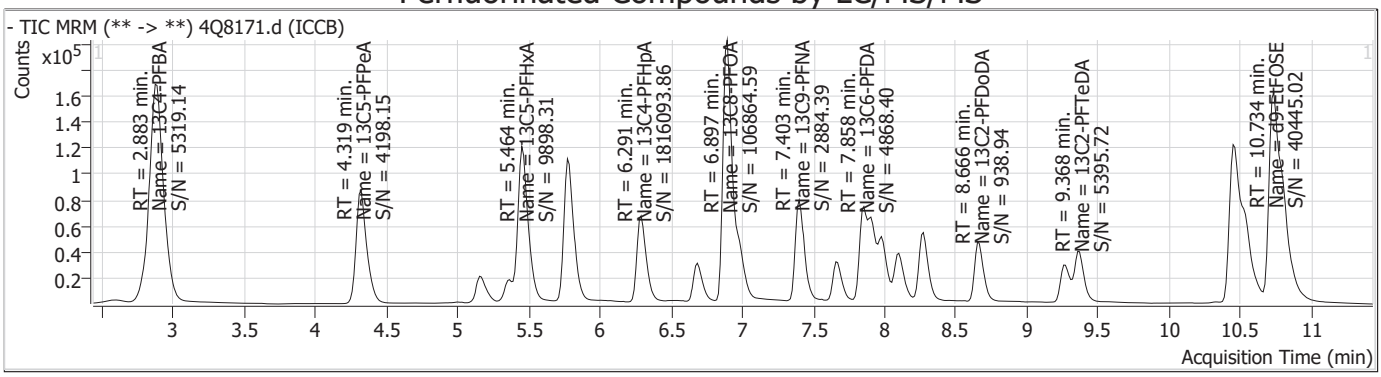
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.		
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 219.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 369.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

Perfluorinated Compounds by LC/MS/MS

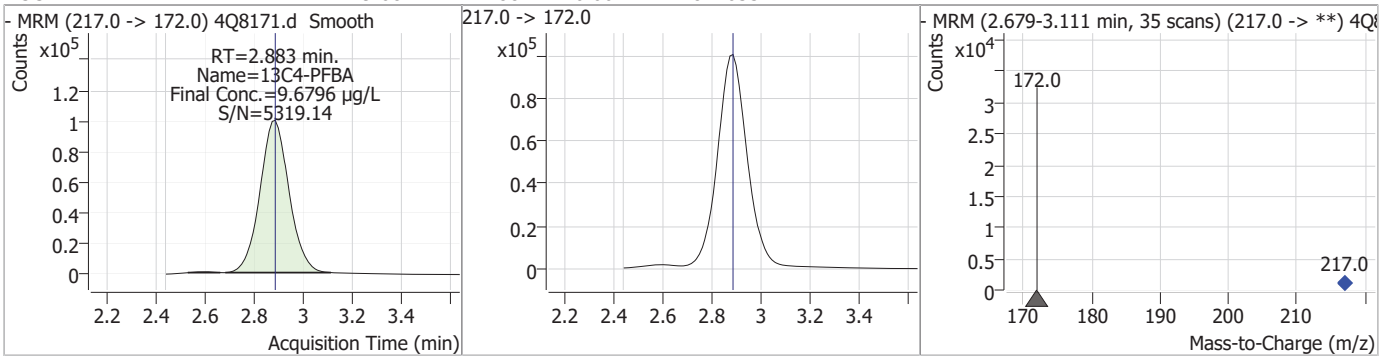
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

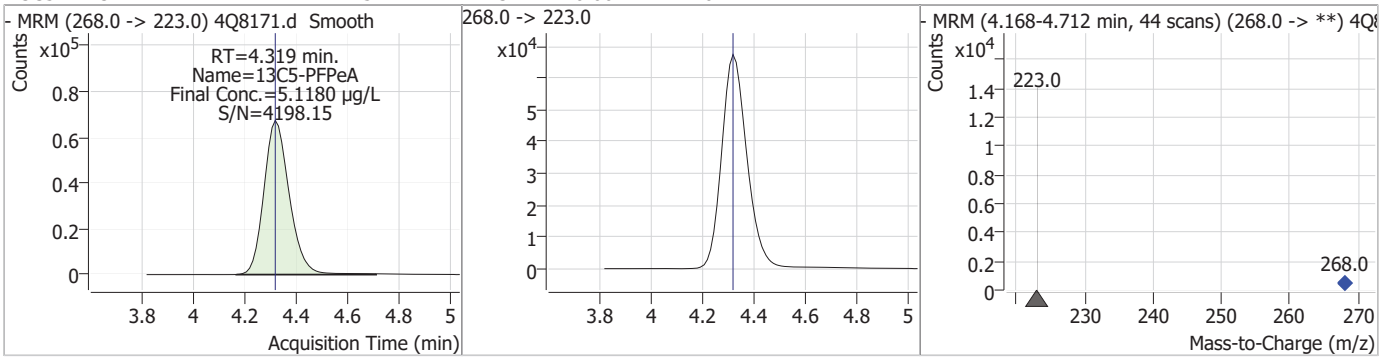
Perfluorinated Compounds by LC/MS/MS



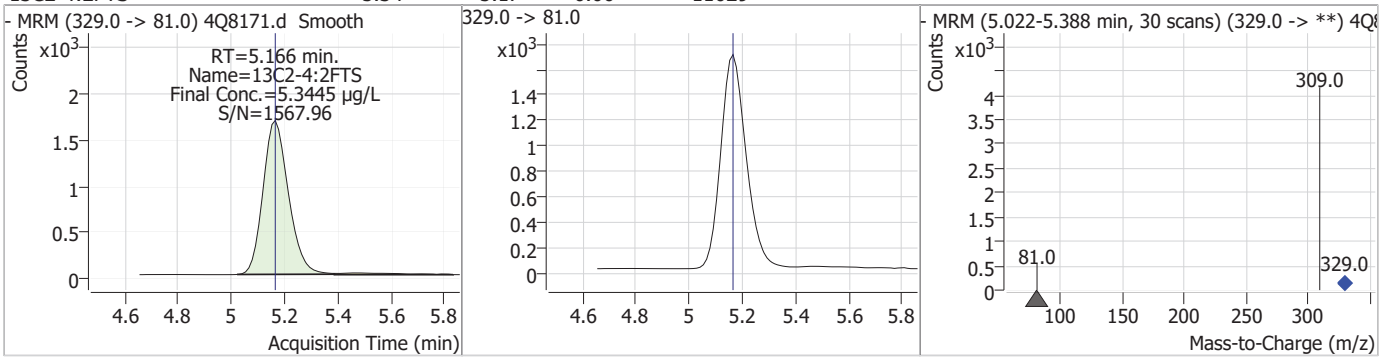
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.68	2.88	0.00	817033				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.12	4.32	0.00	462272				

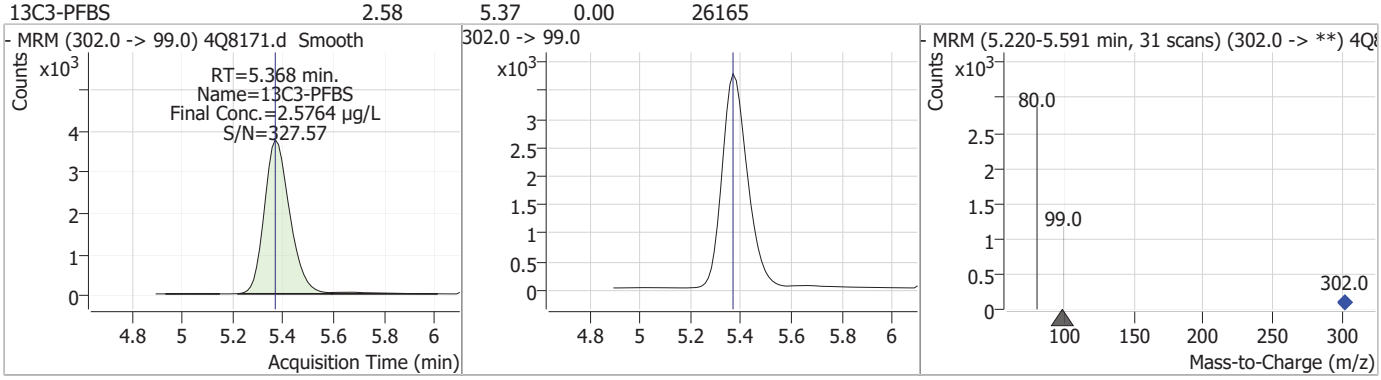


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.34	5.17	0.00	11029				

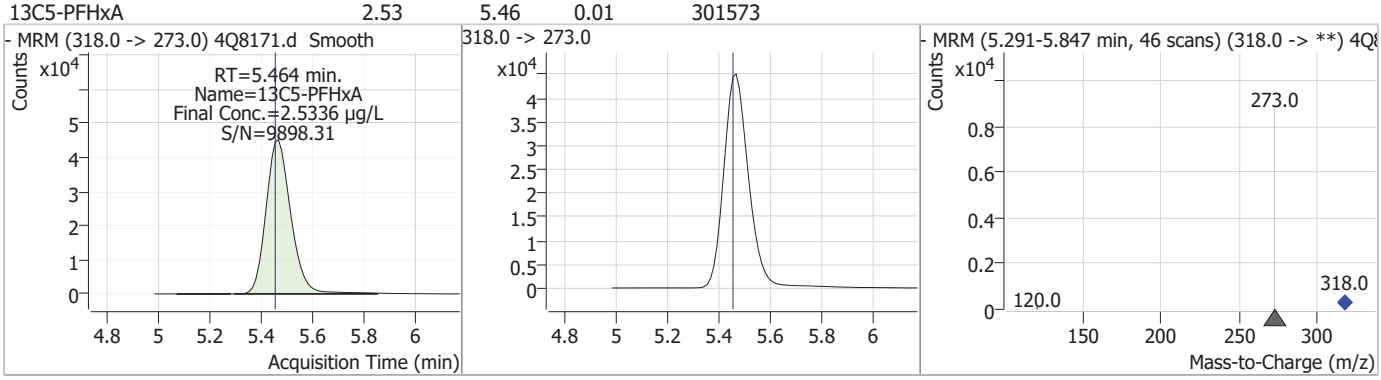


Perfluorinated Compounds by LC/MS/MS

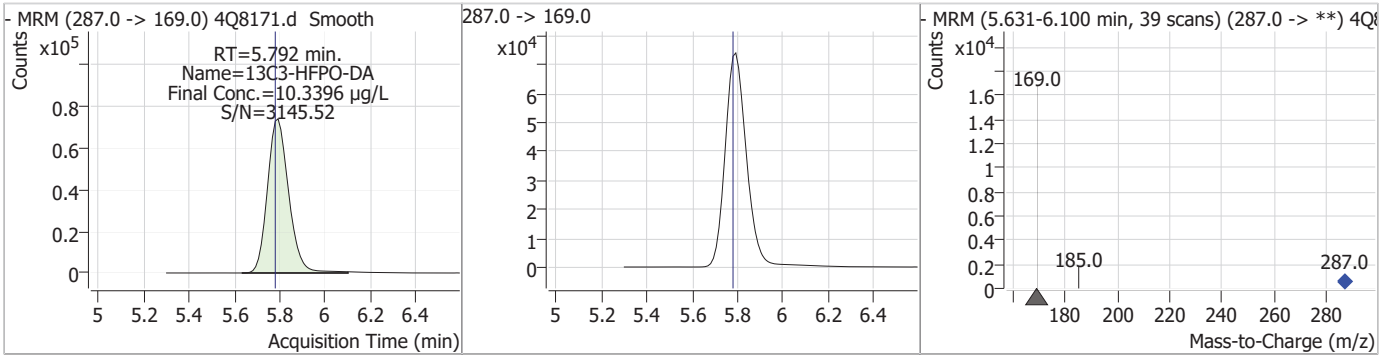
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.58	5.37	0.00	26165				



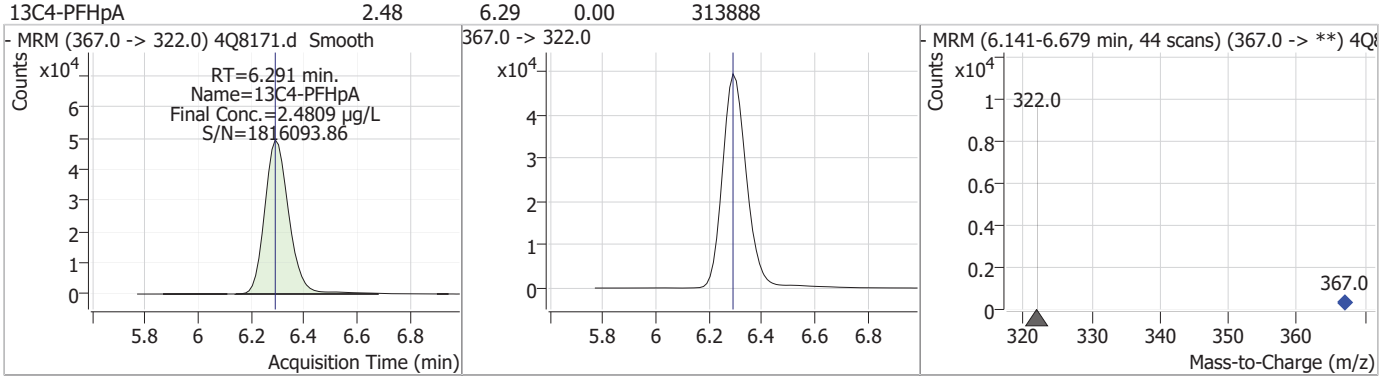
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.53	5.46	0.01	301573				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.34	5.79	0.01	483303				

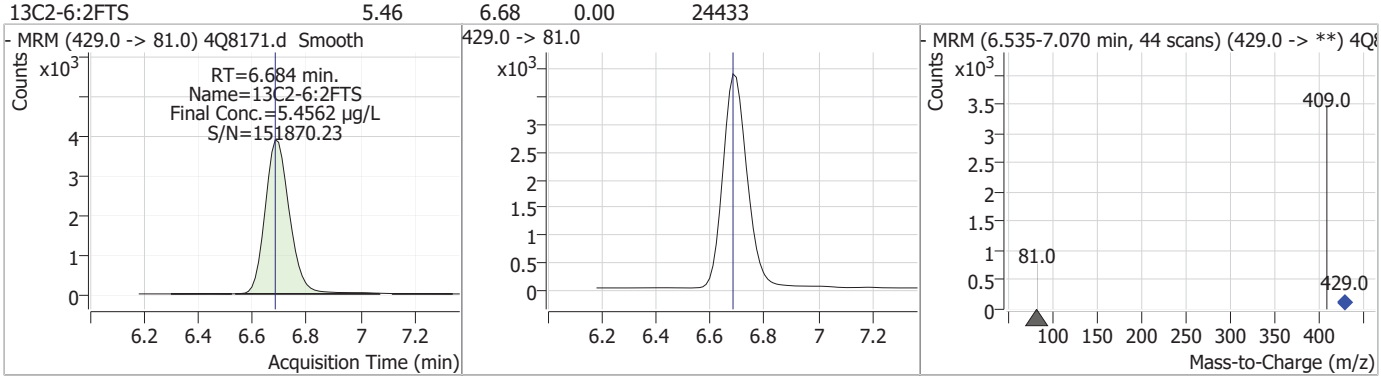


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.48	6.29	0.00	313888				

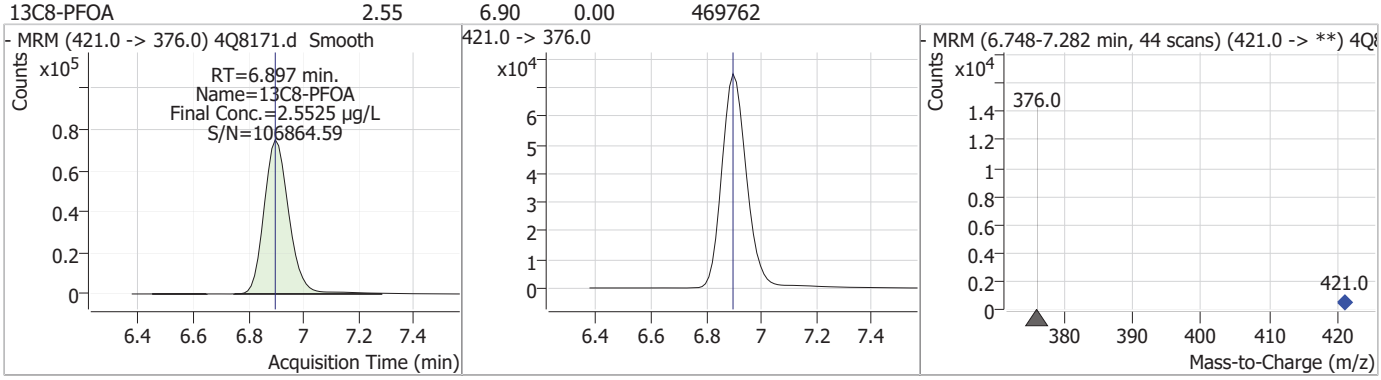


Perfluorinated Compounds by LC/MS/MS

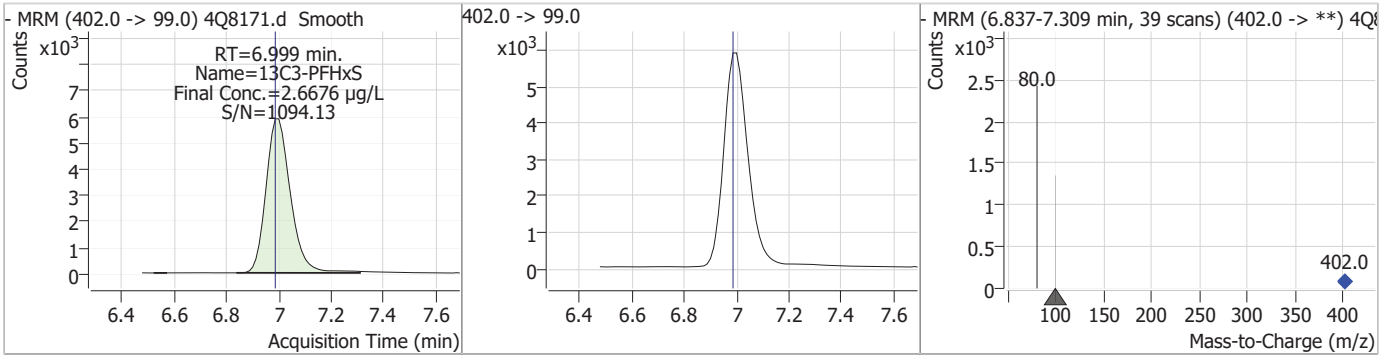
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.46	6.68	0.00	24433				



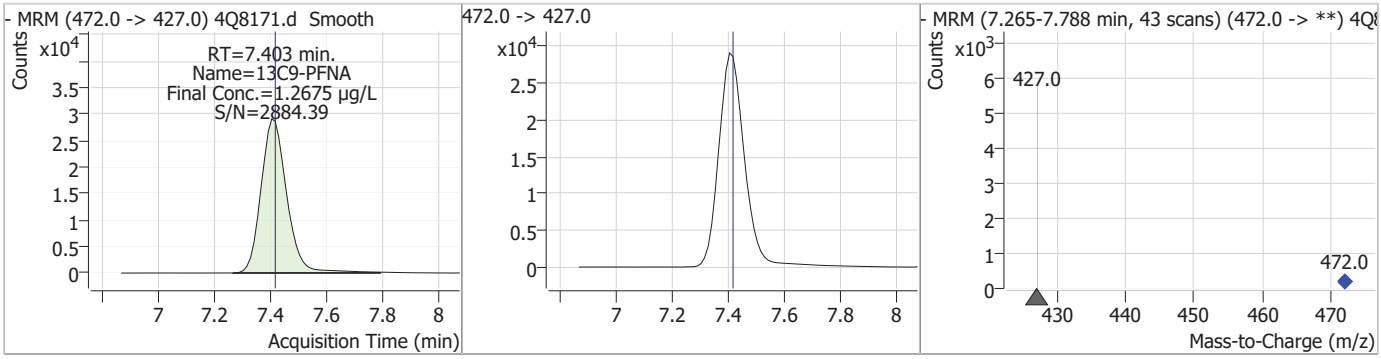
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.55	6.90	0.00	469762				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.67	7.00	0.01	38332				

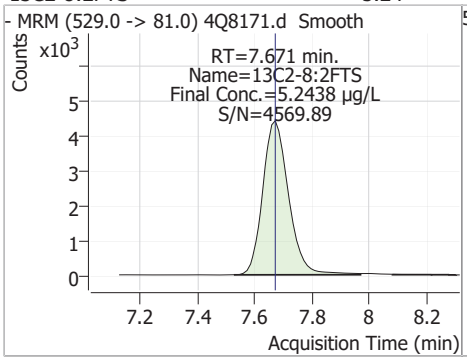


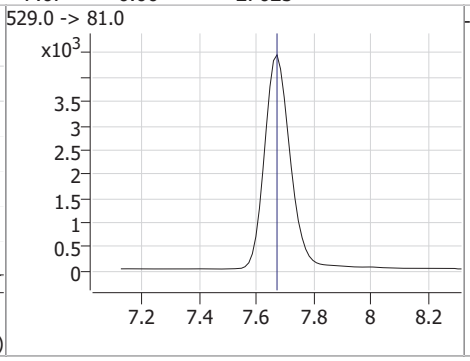
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.27	7.40	-0.01	184136				

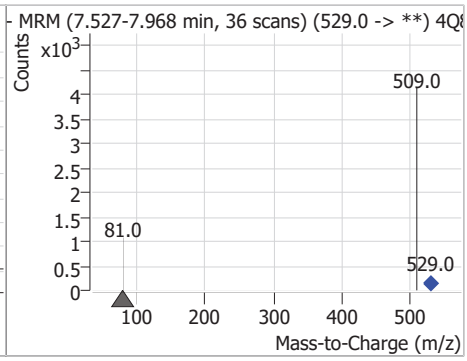


Perfluorinated Compounds by LC/MS/MS

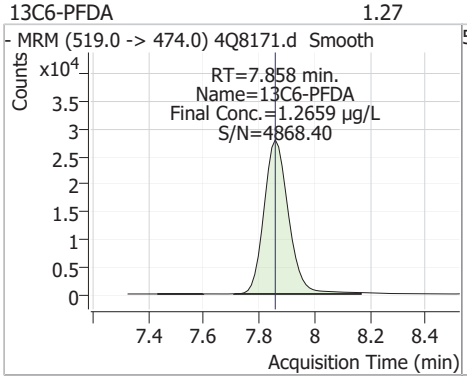
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.24	7.67	0.00	27625				

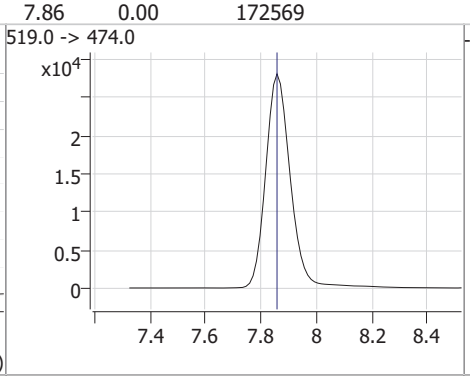


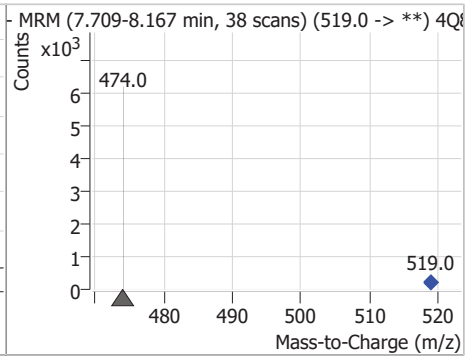




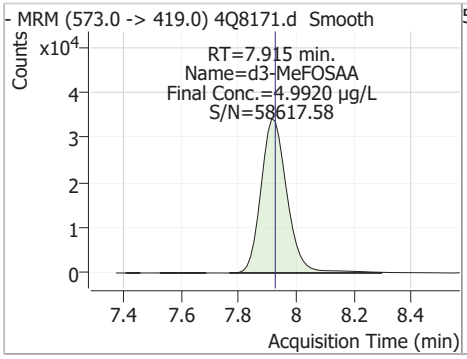
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.27	7.86	0.00	172569				

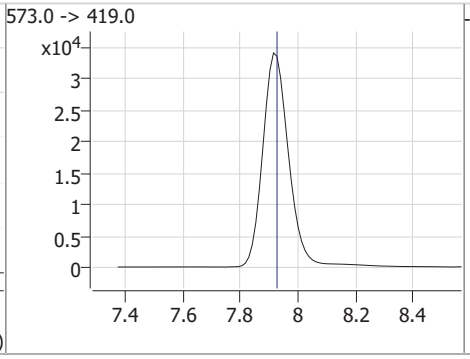


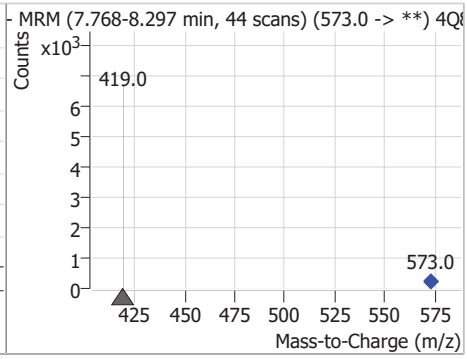




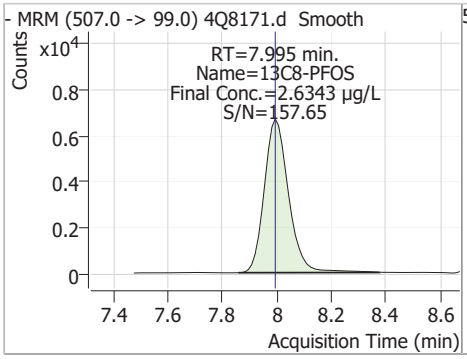
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.99	7.92	-0.01	214392				

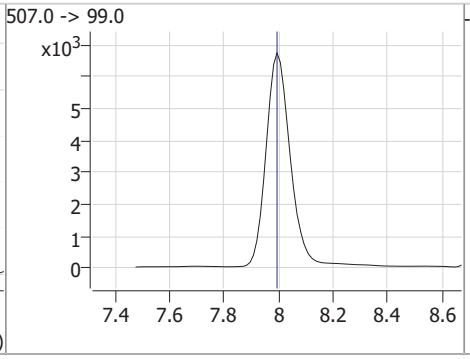


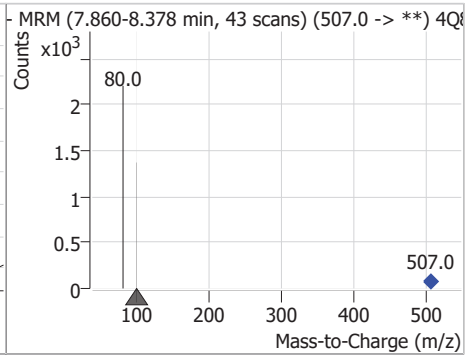




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.63	7.99	0.00	41363				

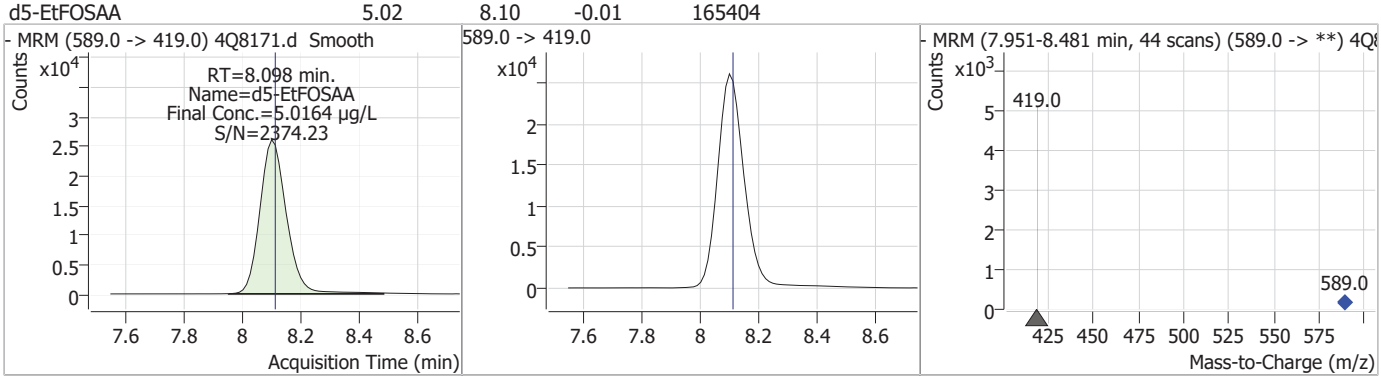




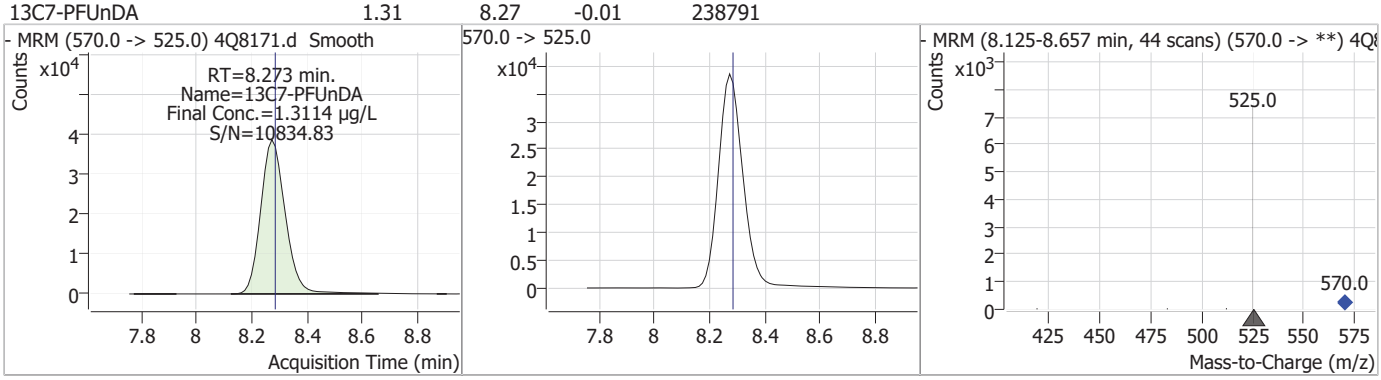


Perfluorinated Compounds by LC/MS/MS

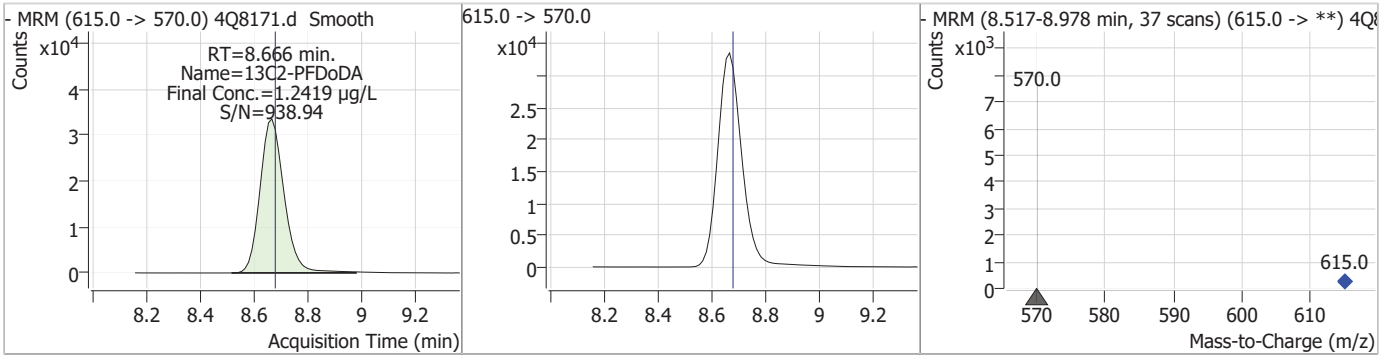
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.02	8.10	-0.01	165404				



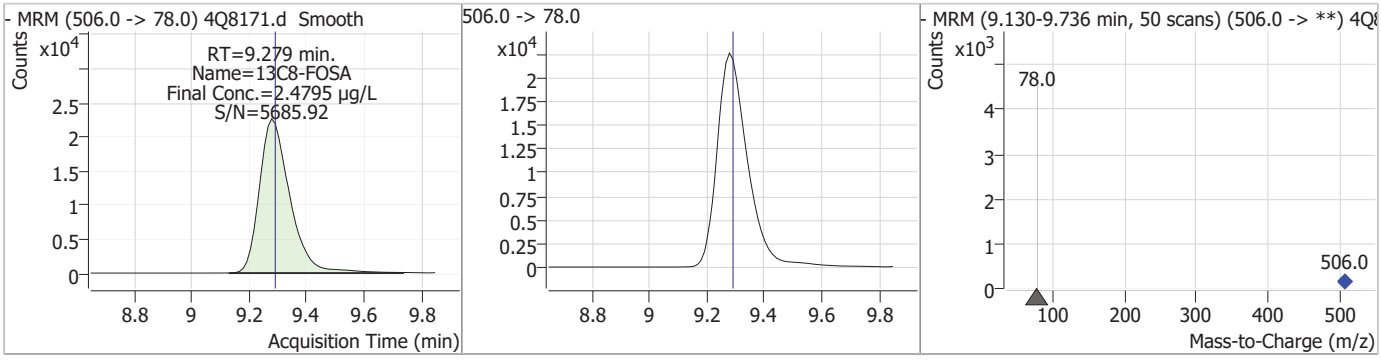
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.31	8.27	-0.01	238791				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.24	8.67	-0.01	207123				

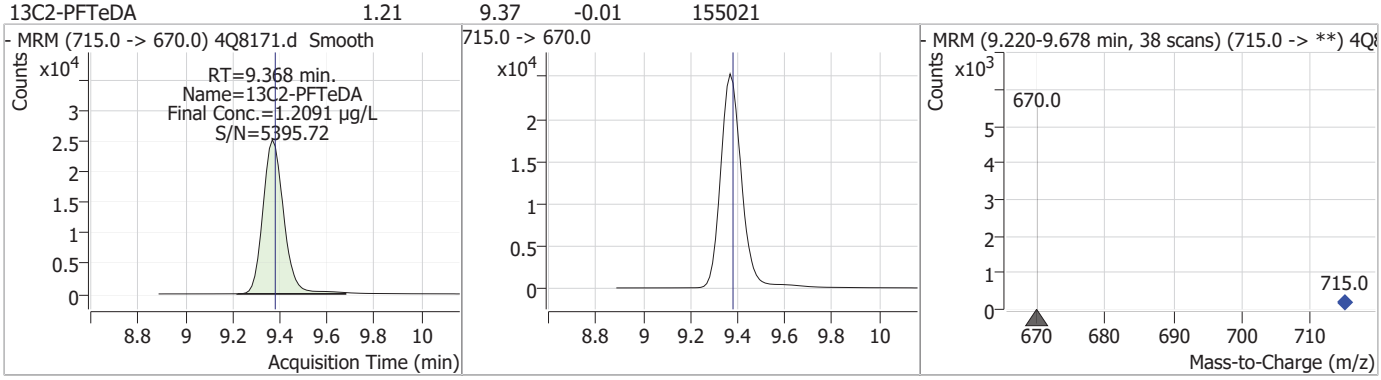


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.48	9.28	-0.01	166093				

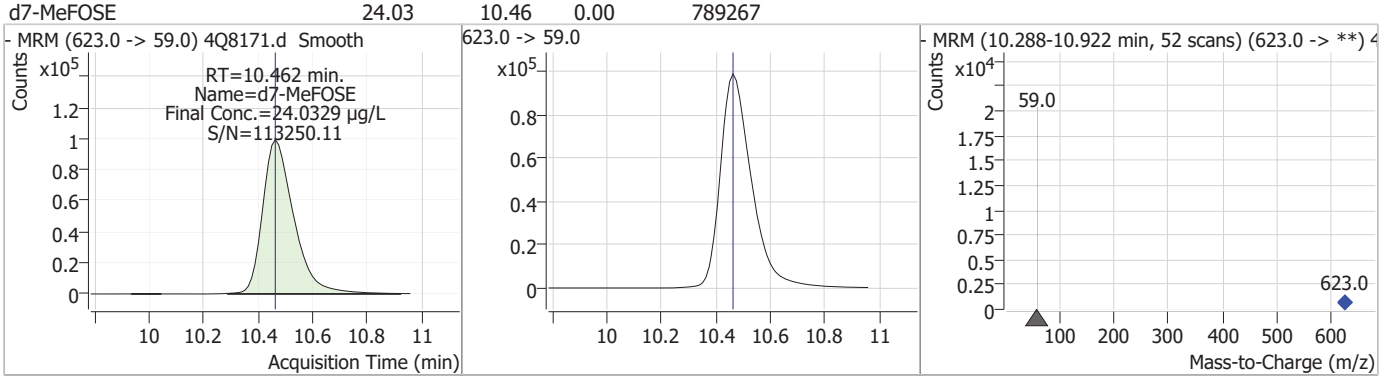


Perfluorinated Compounds by LC/MS/MS

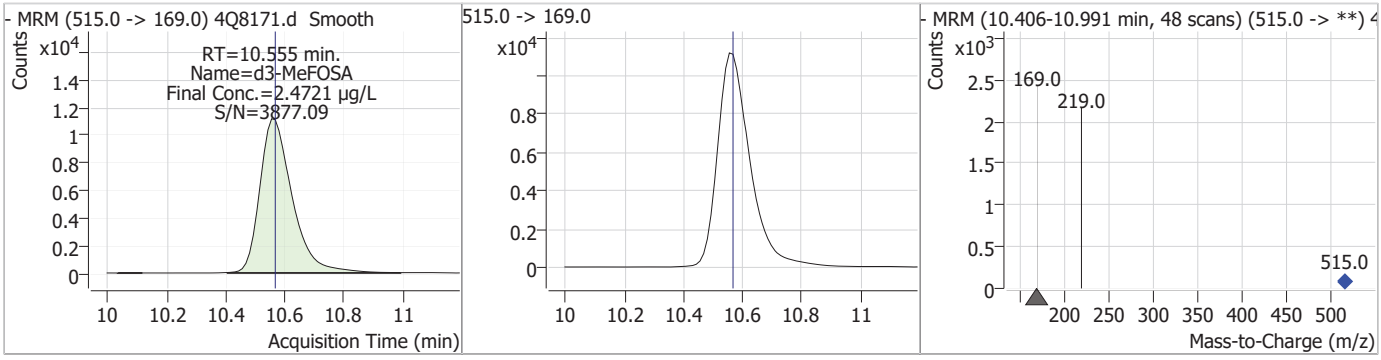
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.21	9.37	-0.01	155021				



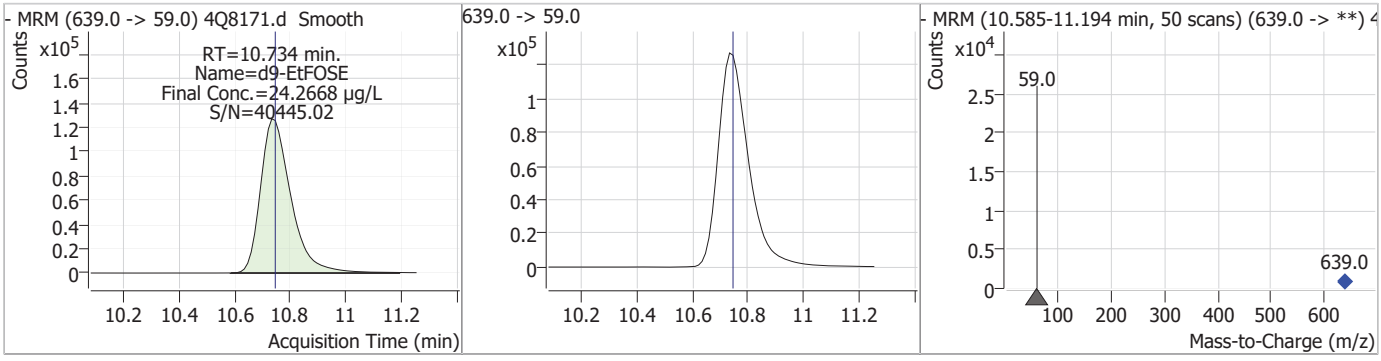
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.03	10.46	0.00	789267				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.47	10.56	-0.01	85036				

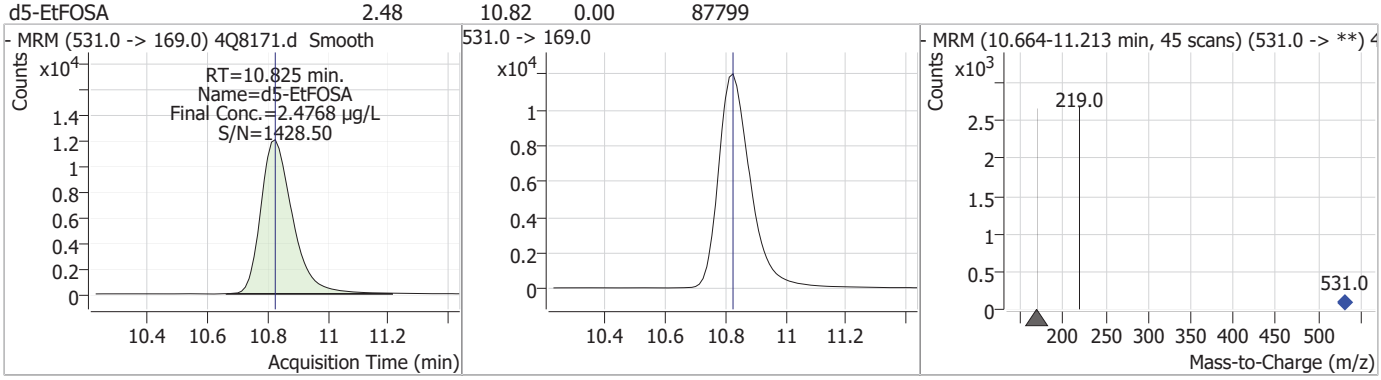


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.27	10.73	-0.01	966333				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.48	10.82	0.00	87799				



7.2.7

7

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8174.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 12:53:48 AM
Sample Name : ICCB
Vial : P1-A1
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.871	217.0 -> 172.0	910859	10.00 µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	472483	5.00 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	316943	2.50 µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	328191	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	479985	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	191817	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	174821	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	239702	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	208332	1.25 µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	152383	1.25 µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	166981	2.50 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	28778	2.50 µg/L	0.000
		302.0 -> 80.0	67907		
M3-PFHxS	6.999	402.0 -> 99.0	38634	2.50 µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	42336	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	12244	5.00 µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	24426	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	28187	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	221690	5.00 µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	488688	10.00 µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	165635	5.00 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	806713	25.00 µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	988992	25.00 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	91408	2.50 µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	86773	2.50 µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	66574	2.50 µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	389575	5.00 µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	41900	2.50 µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	477953	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	155373	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	178537	1.25 µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	294473	2.50 µg/L	0.012
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	12244	5.83 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 116.5%	
13C2-6:2FTS	6.684	429.0 -> 81.0	24426	5.36 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.1%	
13C2-8:2FTS	7.671	529.0 -> 81.0	28187	5.25 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.1%	
13C2-PFDoDA	8.666	615.0 -> 570.0	208332	1.24 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.2%	
13C2-PFTeDA	9.368	715.0 -> 670.0	152383	1.18 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.4%	
13C3-PFBS	5.368	302.0 -> 99.0	28778	2.78 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 111.3%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	38634	2.64 µg/L	0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.6%	
13C4-PFBA	2.871	217.0 -> 172.0	910859	10.20 µg/L	-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 102.0%	
13C4-PFHpA	6.291	367.0 -> 322.0	328191	2.48 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.1%	
13C5-PFHxA	5.464	318.0 -> 273.0	316943	2.54 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.7%	
13C5-PFPeA	4.319	268.0 -> 223.0	472483	5.00 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.9%	
13C6-PFDA	7.858	519.0 -> 474.0	174821	1.27 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.9%	
13C7-PFUnDA	8.273	570.0 -> 525.0	239702	1.31 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.6%	
13C8-FOSA	9.279	506.0 -> 78.0	166981	2.44 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.7%	
13C8-PFOA	6.897	421.0 -> 376.0	479985	2.51 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.5%	
13C8-PFOS	7.995	507.0 -> 99.0	42336	2.64 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.6%	
13C9-PFNA	7.403	472.0 -> 427.0	191817	1.30 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.6%	
d3-MeFOSAA	7.915	573.0 -> 419.0	221690	5.06 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.1%	
13C3-HFPO-DA	5.792	287.0 -> 169.0	488688	9.98 µg/L	0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.8%	
d3-MeFOSA	10.555	515.0 -> 169.0	86773	2.47 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.8%	
d5-EtFOSAA	8.098	589.0 -> 419.0	165635	4.92 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.4%	
d7-MeFOSE	10.462	623.0 -> 59.0	806713	24.06 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 96.2%	
d9-EtFOSE	10.734	639.0 -> 59.0	988992	24.33 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.3%	
d5-EtFOSA	10.825	531.0 -> 169.0	91408	2.53 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.0%	
Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0	-	N.D.	
		299.0 -> 99.0			
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

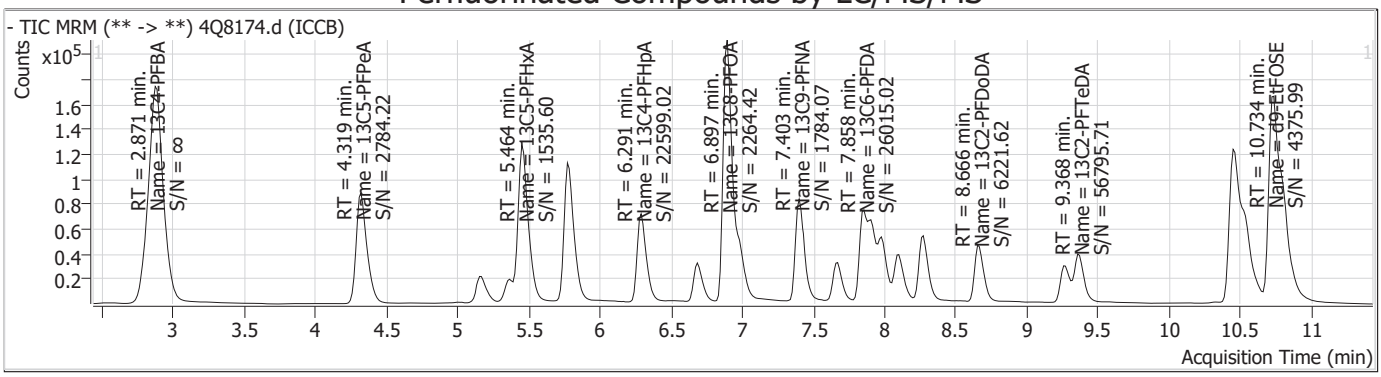
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.		
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 219.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 369.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

Perfluorinated Compounds by LC/MS/MS

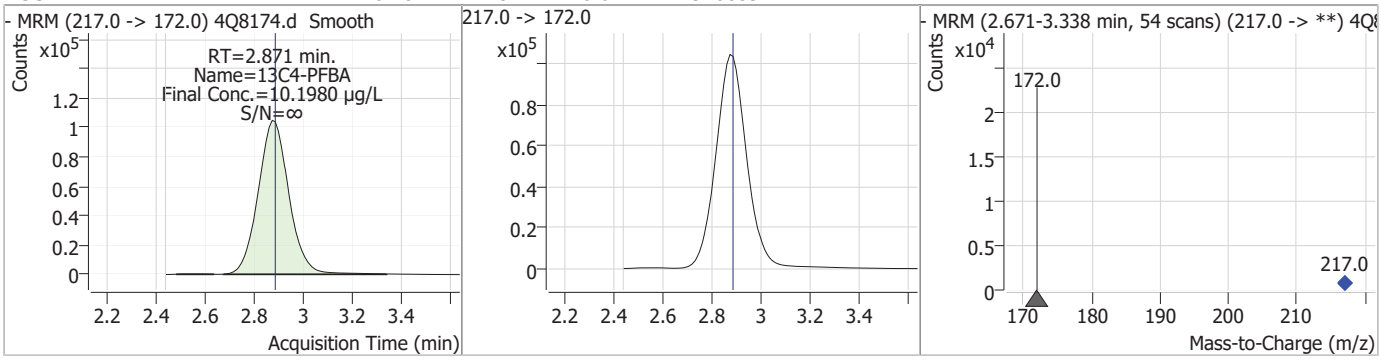
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

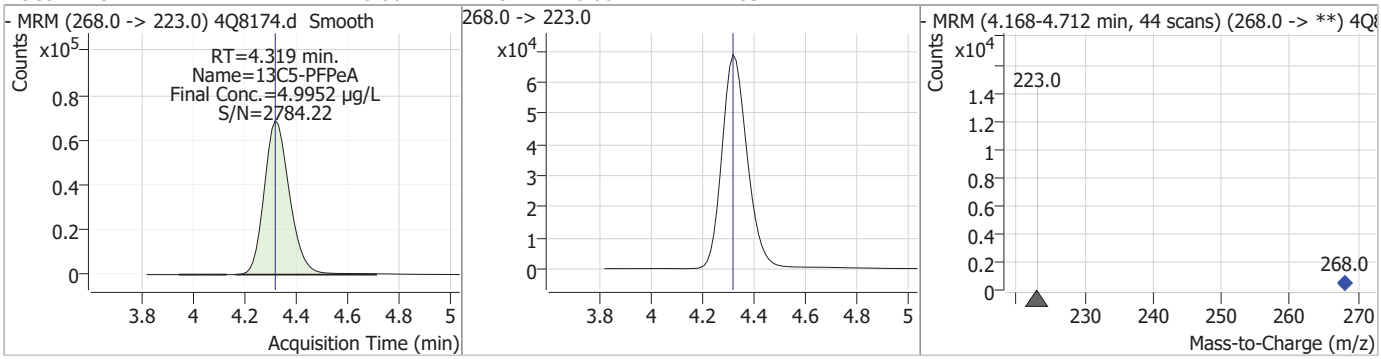
Perfluorinated Compounds by LC/MS/MS



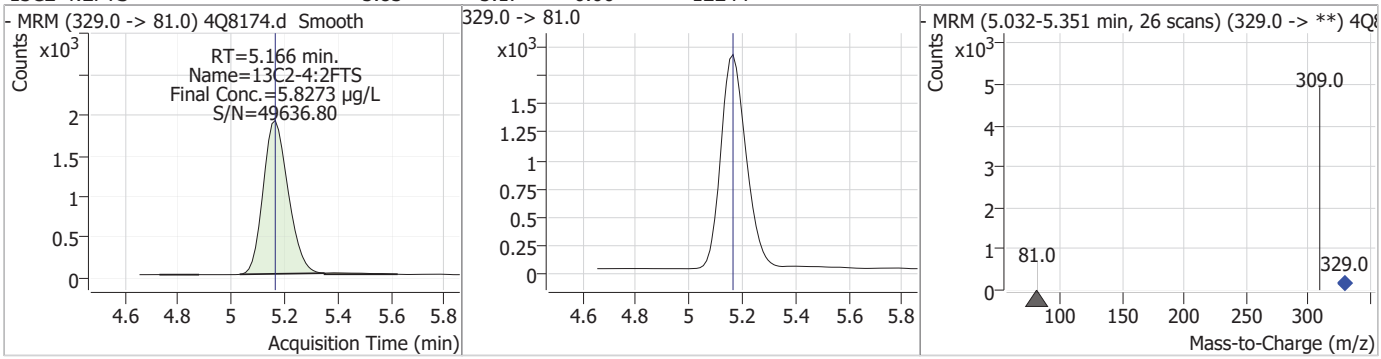
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.20	2.87	-0.01	910859				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.00	4.32	0.00	472483				

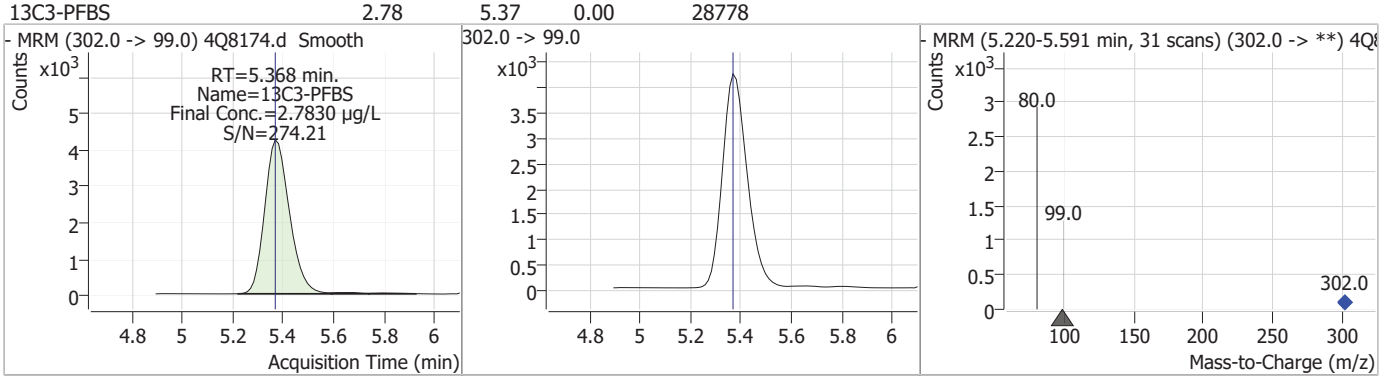


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.83	5.17	0.00	12244				

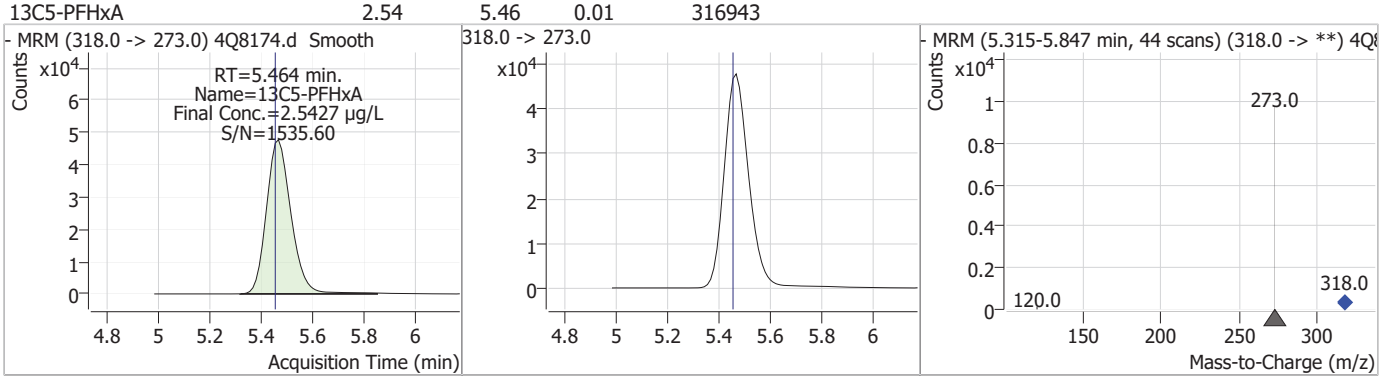


Perfluorinated Compounds by LC/MS/MS

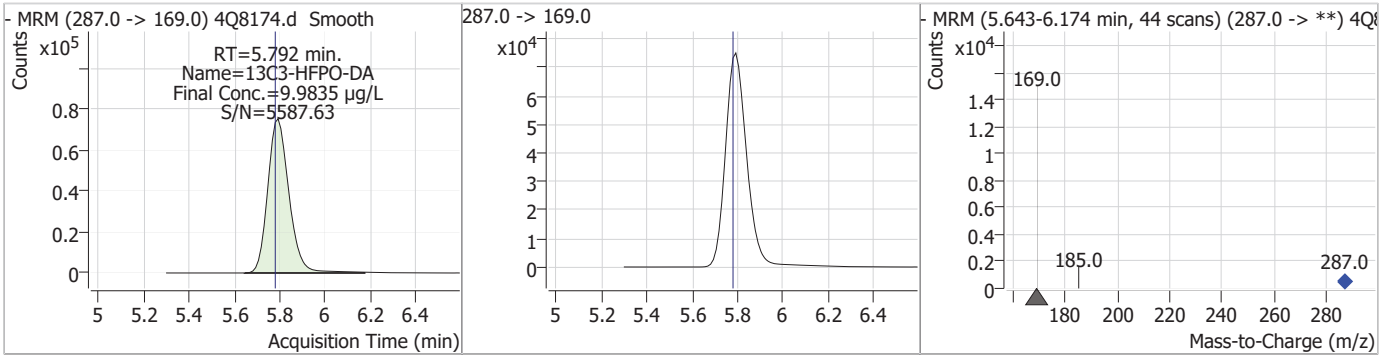
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.78	5.37	0.00	28778				



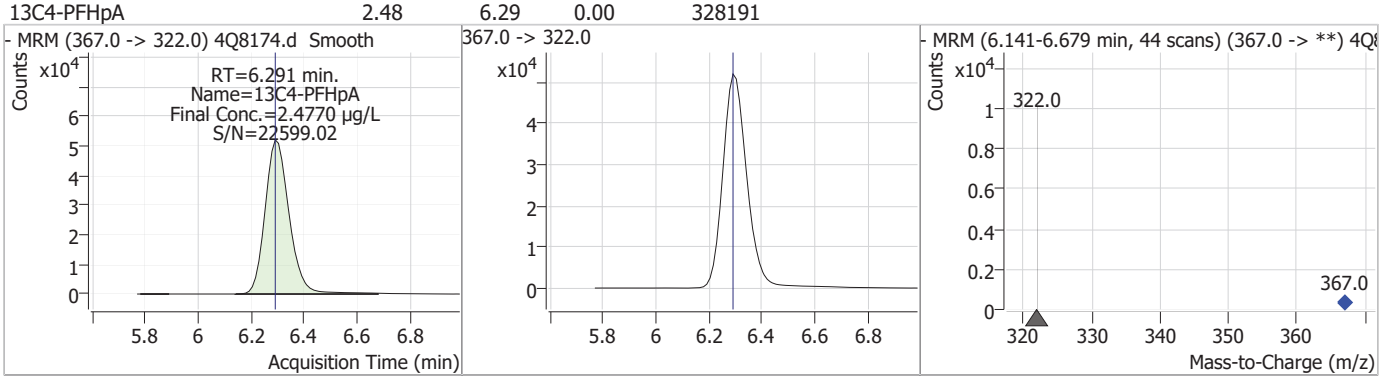
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.54	5.46	0.01	316943				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.98	5.79	0.01	488688				

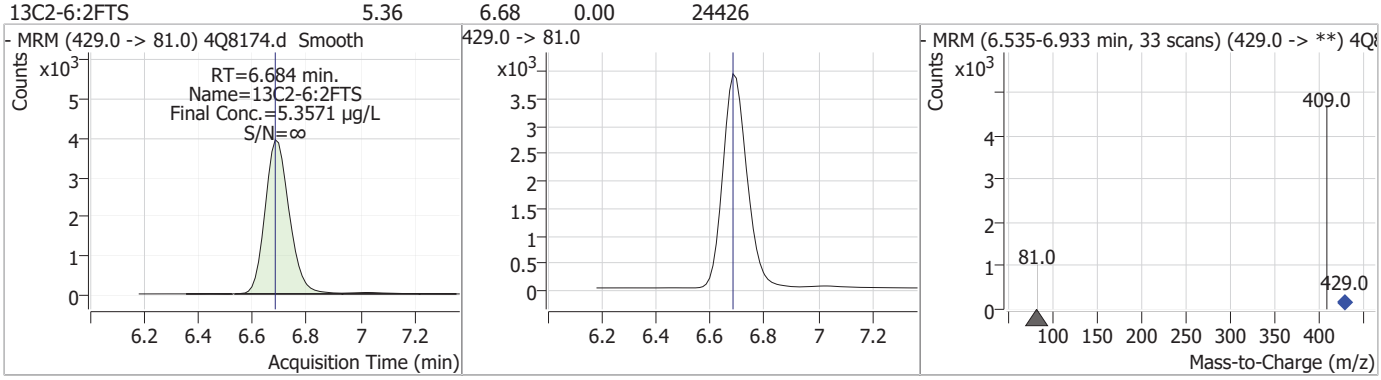


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.48	6.29	0.00	328191				

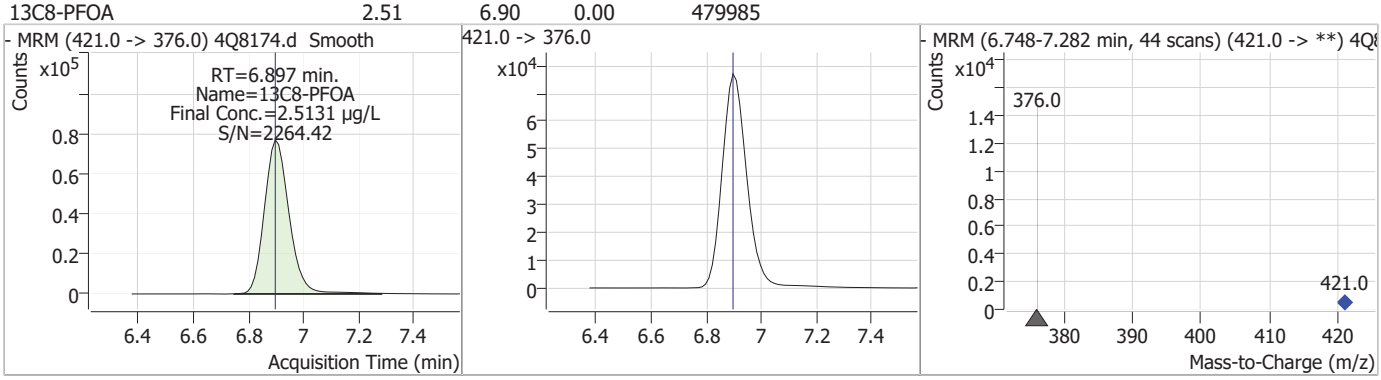


Perfluorinated Compounds by LC/MS/MS

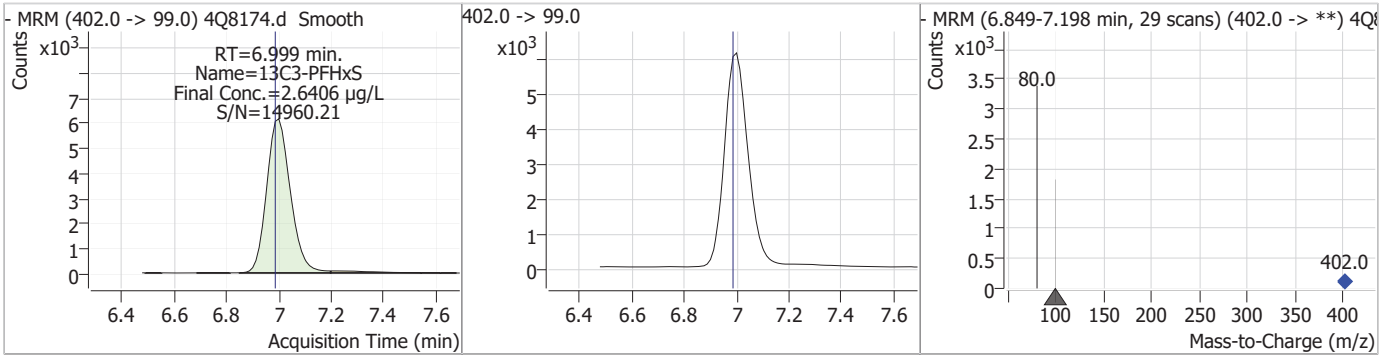
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.36	6.68	0.00	24426				



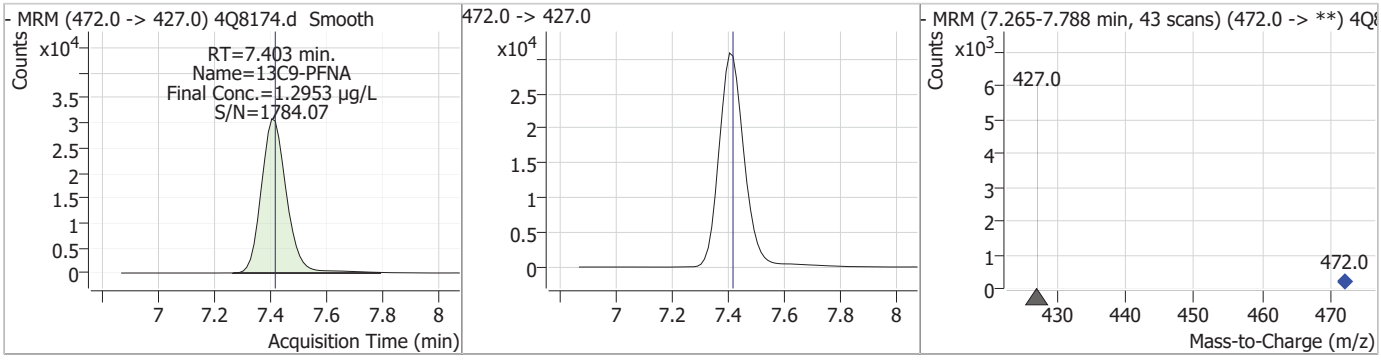
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.51	6.90	0.00	479985				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.64	7.00	0.01	38634				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.30	7.40	-0.01	191817				



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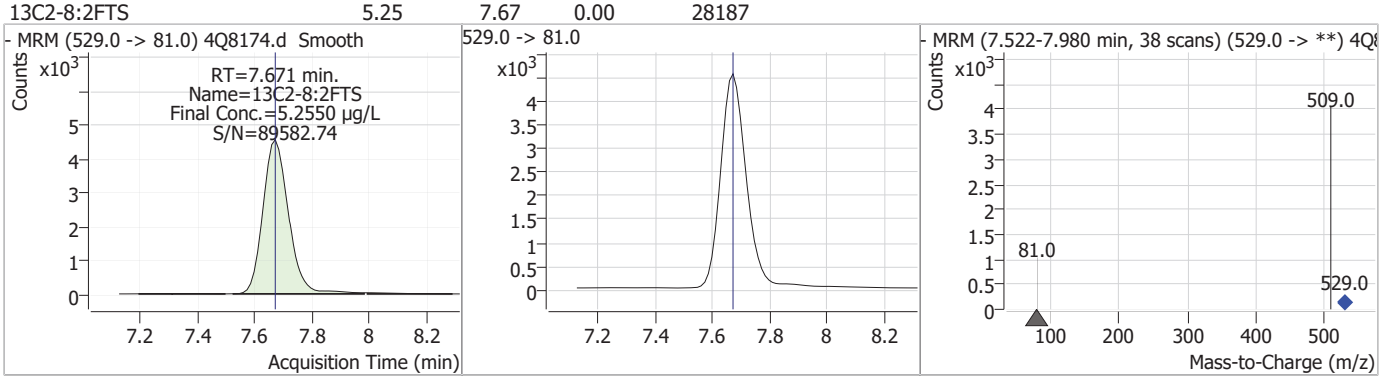
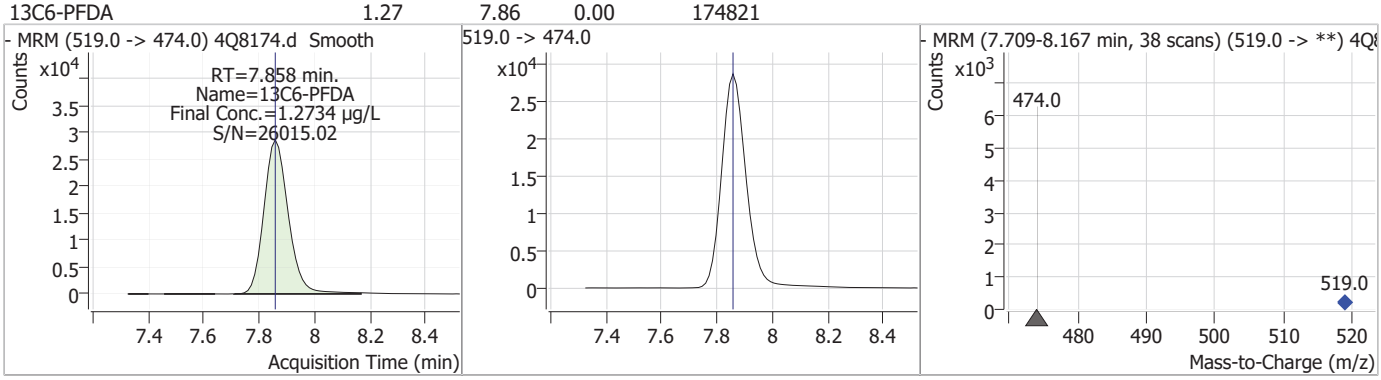
Perfluorinated Compounds by LC/MS/MS

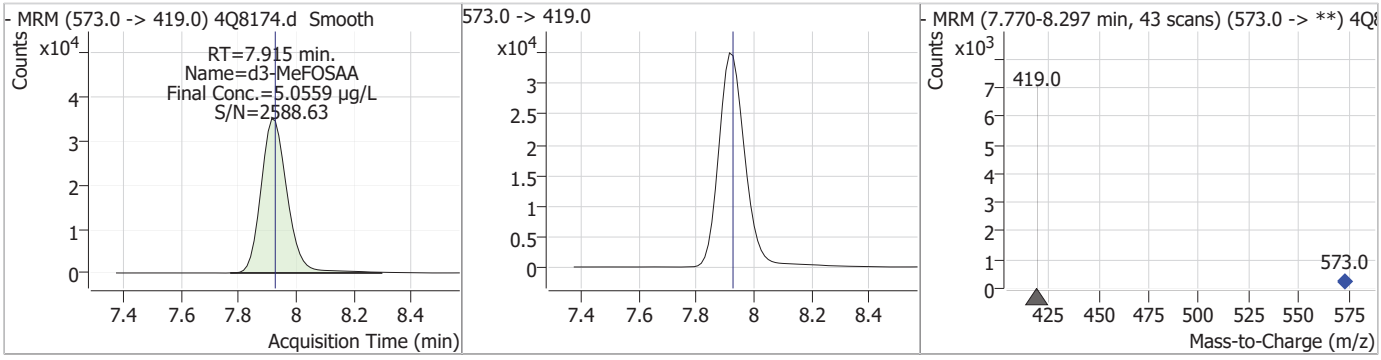
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.25	7.67	0.00	28187				



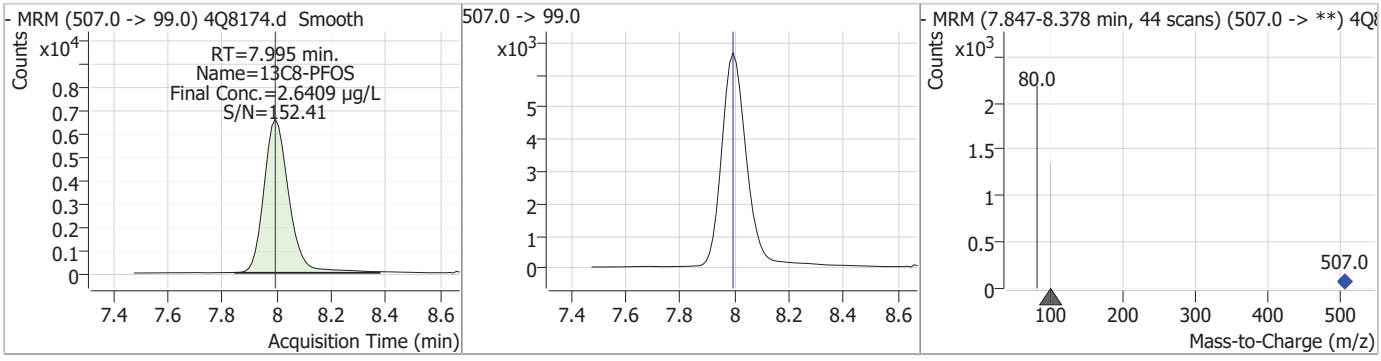
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.27	7.86	0.00	174821				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.06	7.92	-0.01	221690				

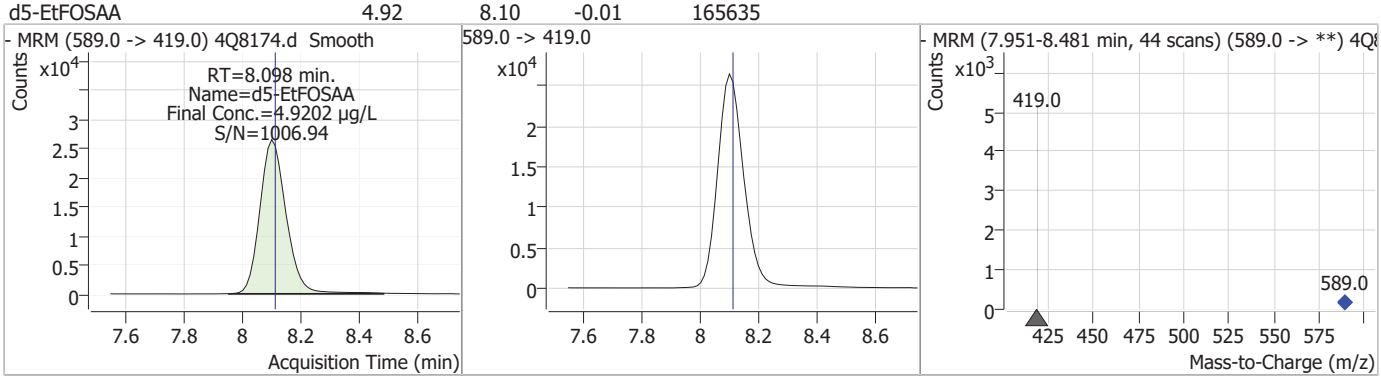


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.64	7.99	0.00	42336				

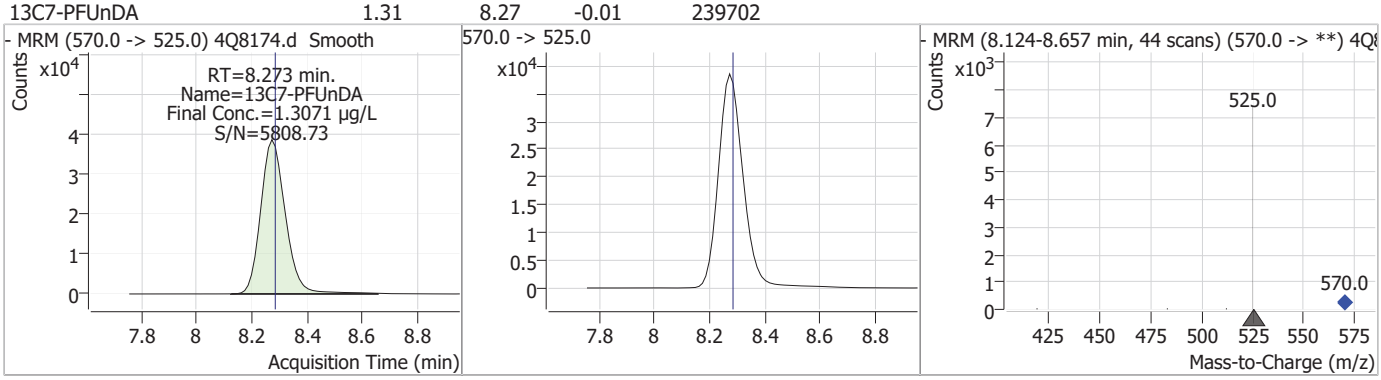


Perfluorinated Compounds by LC/MS/MS

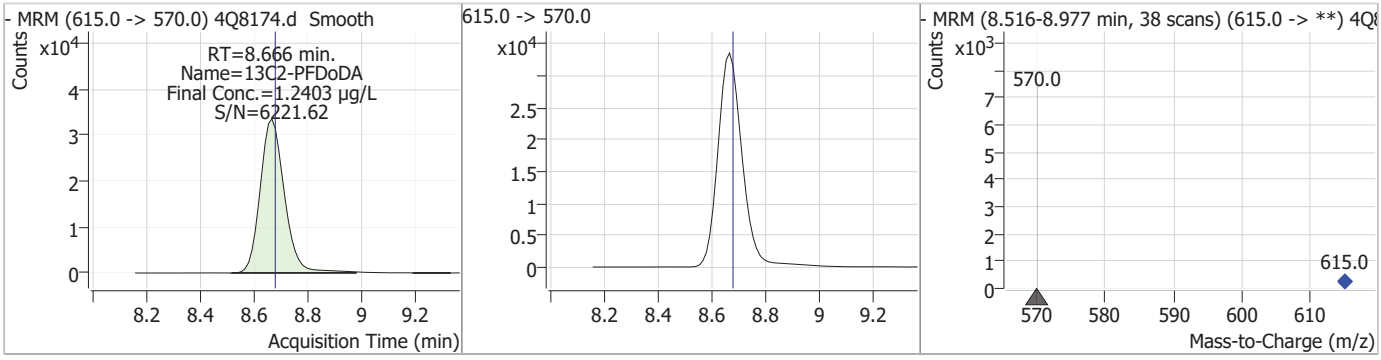
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.92	8.10	-0.01	165635				



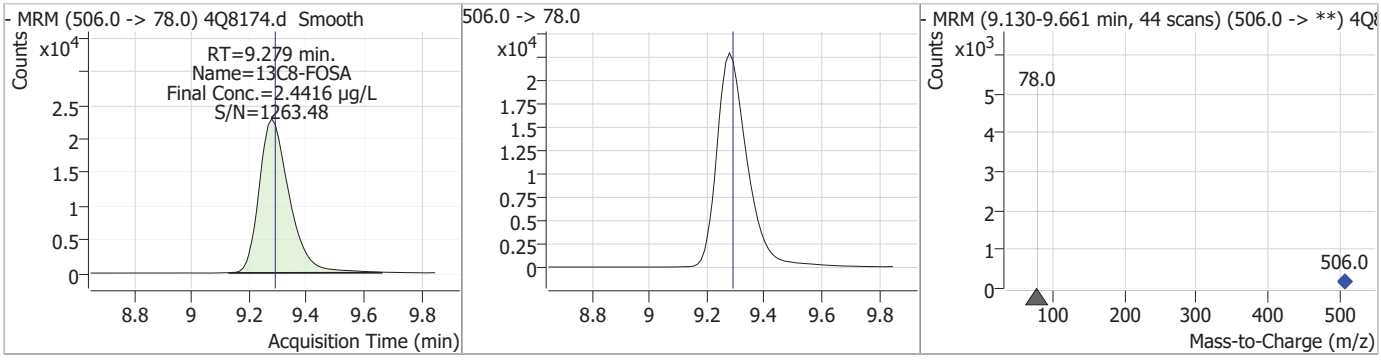
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.31	8.27	-0.01	239702				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.24	8.67	-0.01	208332				

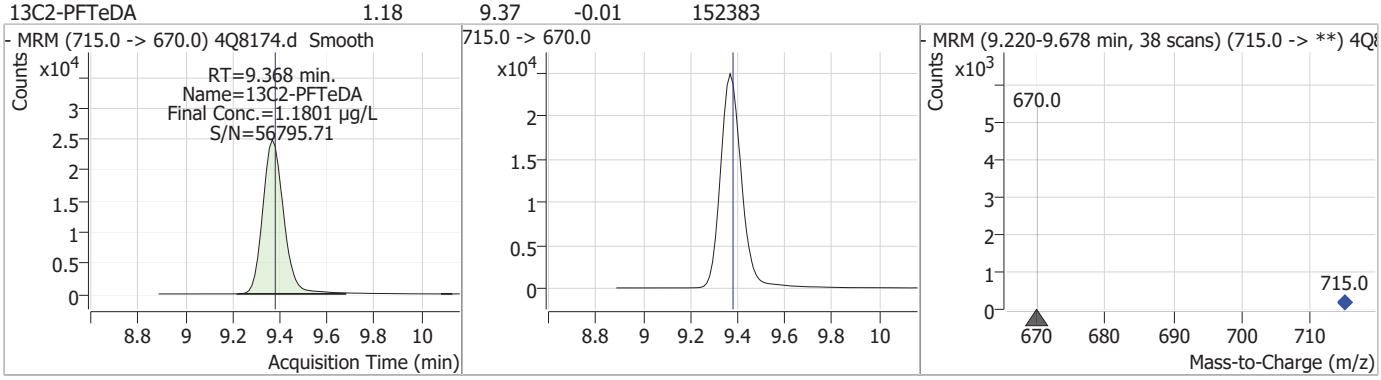


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.44	9.28	-0.01	166981				

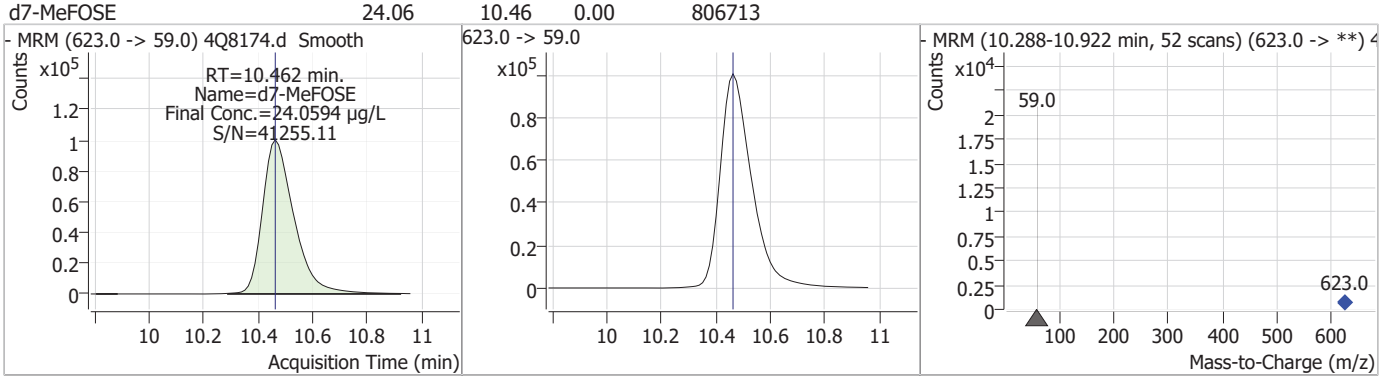


Perfluorinated Compounds by LC/MS/MS

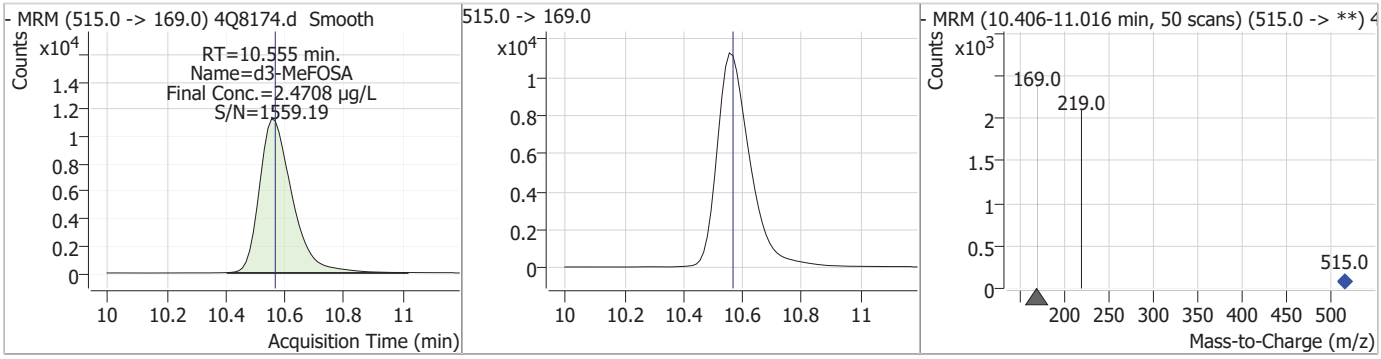
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.18	9.37	-0.01	152383				



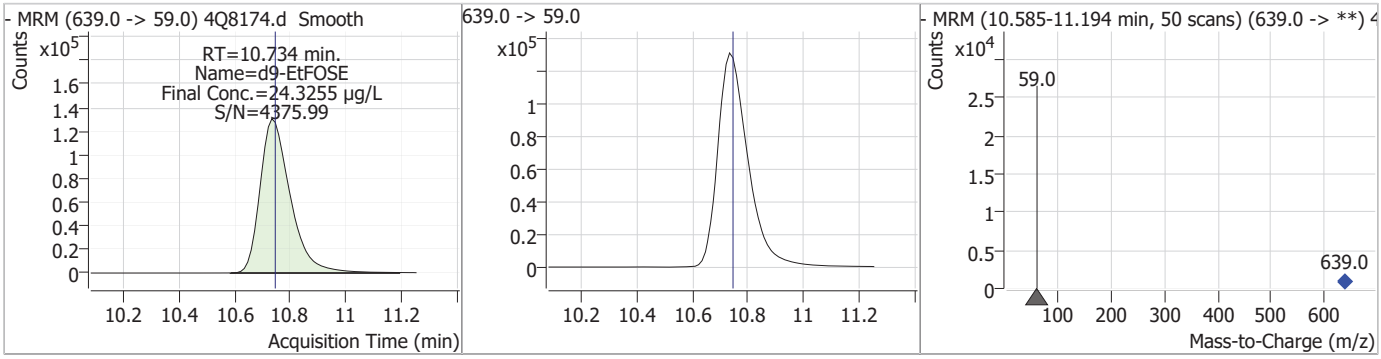
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.06	10.46	0.00	806713				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.47	10.56	-0.01	86773				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.33	10.73	-0.01	988992				



7.2.8

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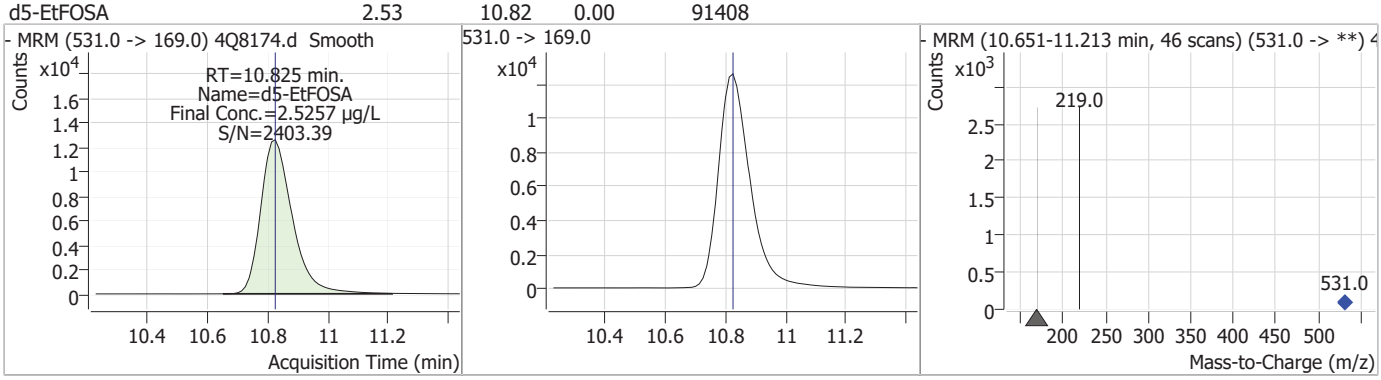
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.53	10.82	0.00	91408				



7.2.8

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Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8181.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 12:22:26 PM
Sample Name : IBLK
Vial : P1-A1
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q139.batch.bin
Sample Information : OP63077,T4Q139,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.871	217.0 -> 172.0	933562	10.00 µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	482213	5.00 µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	317337	2.50 µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	332678	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	506385	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	199800	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	185929	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	250383	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	226134	1.25 µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	174115	1.25 µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	183428	2.50 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	27945	2.50 µg/L	0.000
		302.0 -> 80.0	70018		
M3-PFHxS	6.986	402.0 -> 99.0	39887	2.50 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	41074	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	13239	5.00 µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	26564	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	28600	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	235057	5.00 µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	495665	10.00 µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	173661	5.00 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	862341	25.00 µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	1070306	25.00 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	97174	2.50 µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	91942	2.50 µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	72842	2.50 µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	399113	5.00 µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	45513	2.50 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	502235	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	165560	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	194371	1.25 µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	293672	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	13239	5.80 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 116.0%	
13C2-6:2FTS	6.684	429.0 -> 81.0	26564	5.36 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.3%	
13C2-8:2FTS	7.671	529.0 -> 81.0	28600	4.91 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.2%	
13C2-PFDoDA	8.666	615.0 -> 570.0	226134	1.26 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.1%	
13C2-PFTeDA	9.368	715.0 -> 670.0	174115	1.27 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.2%	
13C3-PFBS	5.368	302.0 -> 99.0	27945	2.49 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.5%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	39887	2.51 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.4%	
13C4-PFBA	2.871	217.0 -> 172.0	933562	10.20 µg/L	-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 102.0%	
13C4-PFHpA	6.291	367.0 -> 322.0	332678	2.52 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.7%	
13C5-PFHxA	5.452	318.0 -> 273.0	317337	2.55 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.1%	
13C5-PFPeA	4.319	268.0 -> 223.0	482213	5.11 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.2%	
13C6-PFDA	7.858	519.0 -> 474.0	185929	1.27 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.7%	
13C7-PFUnDA	8.273	570.0 -> 525.0	250383	1.28 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.5%	
13C8-FOSA	9.279	506.0 -> 78.0	183428	2.45 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.1%	
13C8-PFOA	6.897	421.0 -> 376.0	506385	2.52 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.9%	
13C8-PFOS	7.995	507.0 -> 99.0	41074	2.34 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.7%	
13C9-PFNA	7.403	472.0 -> 427.0	199800	1.24 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.1%	
d3-MeFOSAA	7.915	573.0 -> 419.0	235057	4.90 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.0%	
13C3-HFPO-DA	5.779	287.0 -> 169.0	495665	10.15 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.5%	
d3-MeFOSA	10.555	515.0 -> 169.0	91942	2.39 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.7%	
d5-EtFOSAA	8.098	589.0 -> 419.0	173661	4.71 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.3%	
d7-MeFOSE	10.462	623.0 -> 59.0	862341	23.51 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 94.0%	
d9-EtFOSE	10.734	639.0 -> 59.0	1070306	24.06 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 96.2%	
d5-EtFOSA	10.825	531.0 -> 169.0	97174	2.45 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.2%	

Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0	-	N.D.	
		299.0 -> 99.0			
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

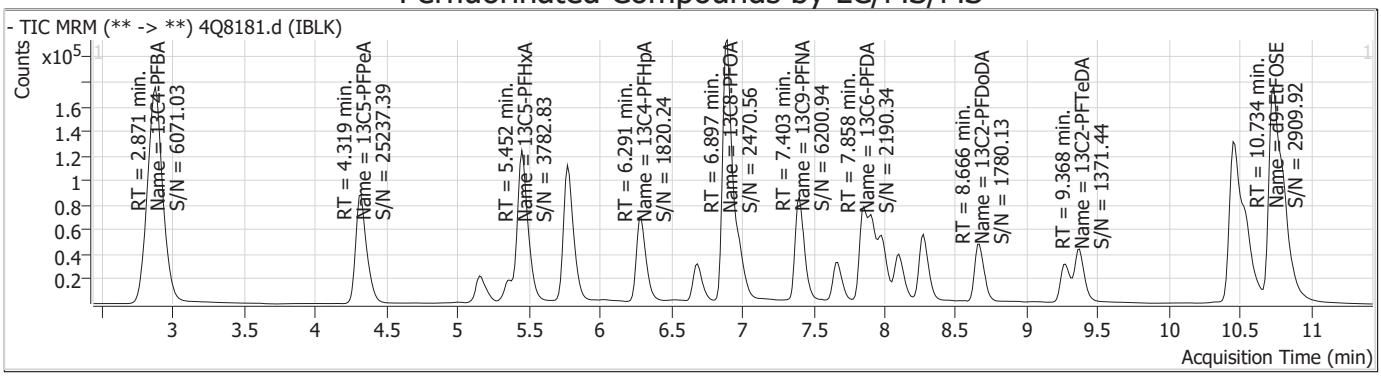
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.		
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 219.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 369.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

Perfluorinated Compounds by LC/MS/MS

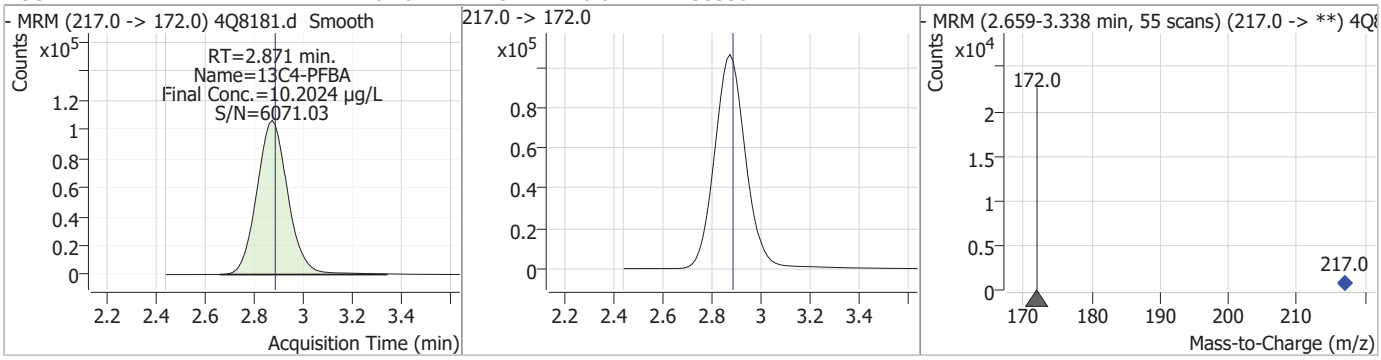
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

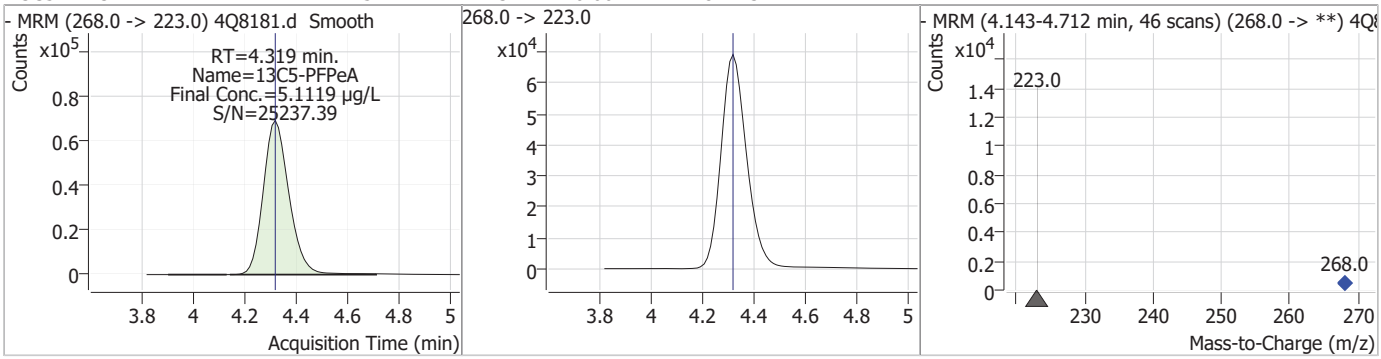
Perfluorinated Compounds by LC/MS/MS



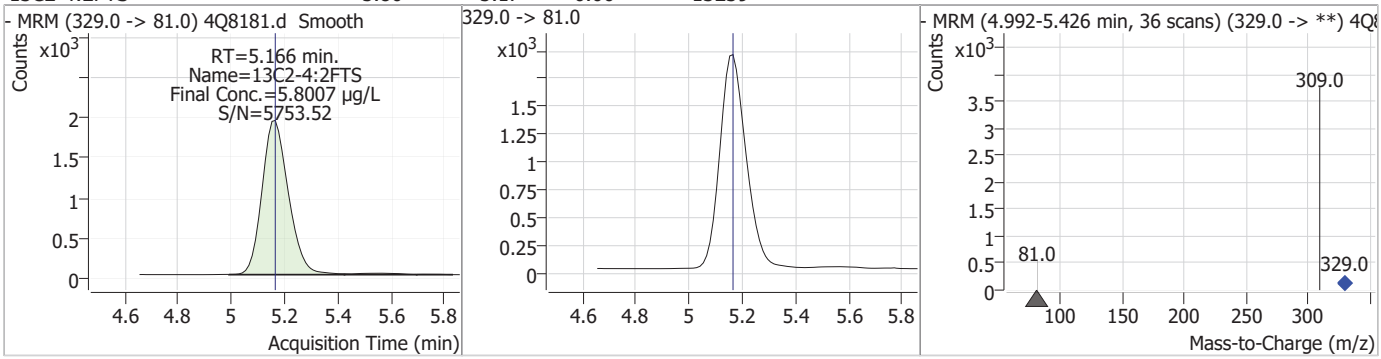
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.20	2.87	-0.01	933562				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.11	4.32	0.00	482213				

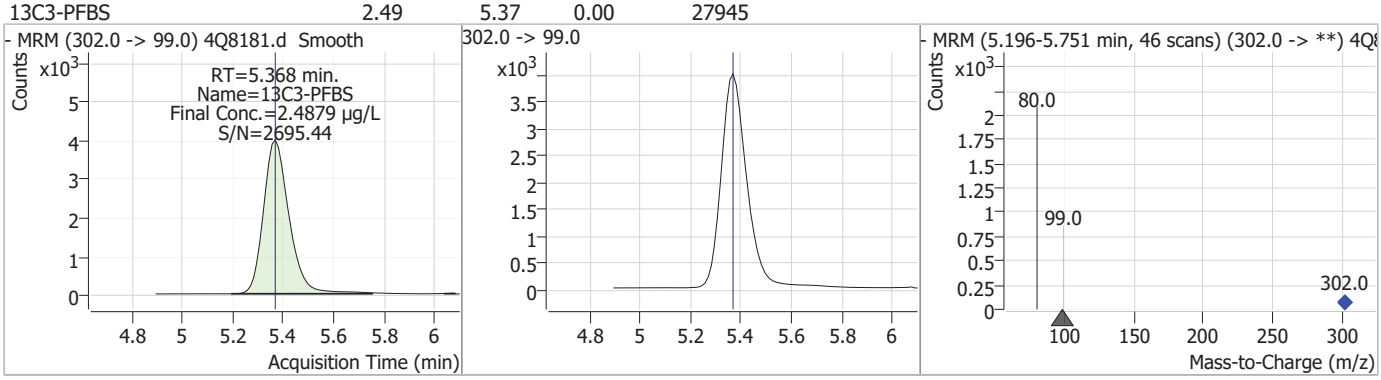


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.80	5.17	0.00	13239				

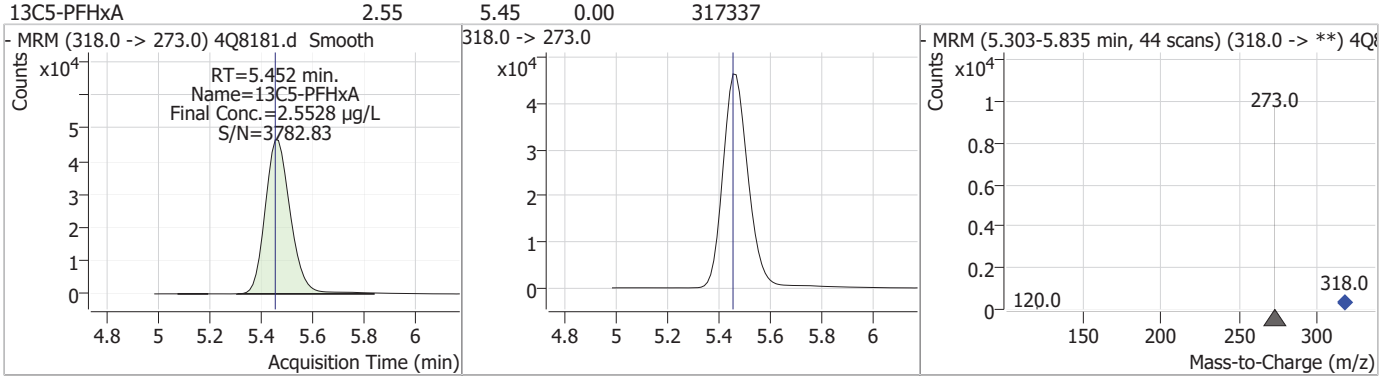


Perfluorinated Compounds by LC/MS/MS

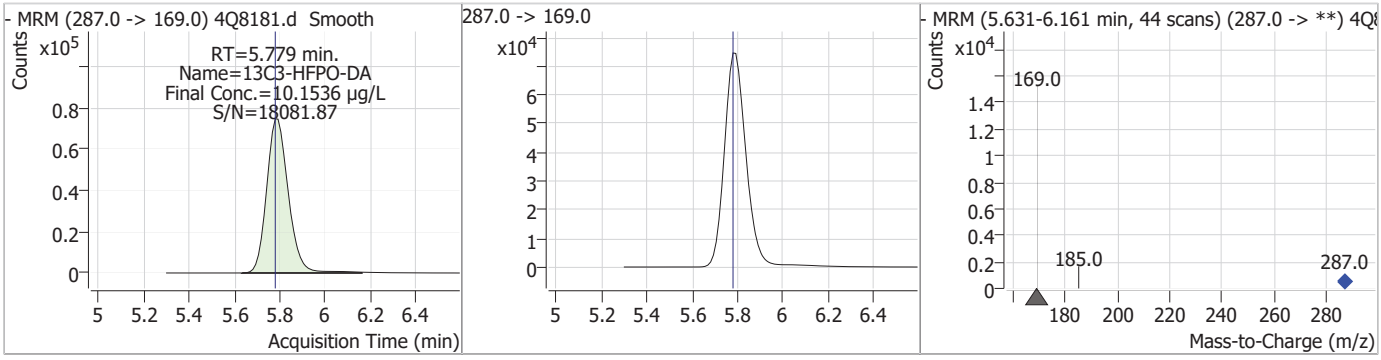
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.49	5.37	0.00	27945				



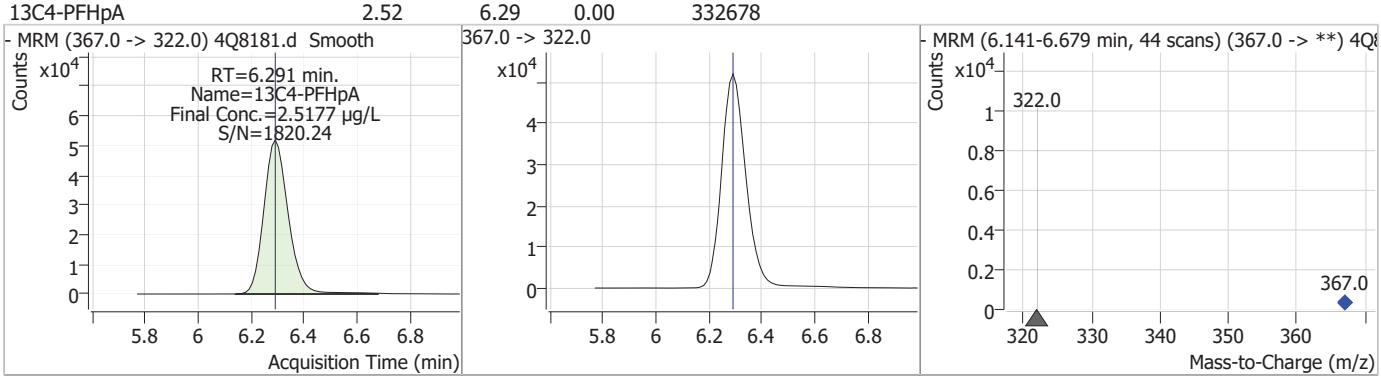
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.55	5.45	0.00	317337				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.15	5.78	0.00	495665				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.52	6.29	0.00	332678				



7.2.9

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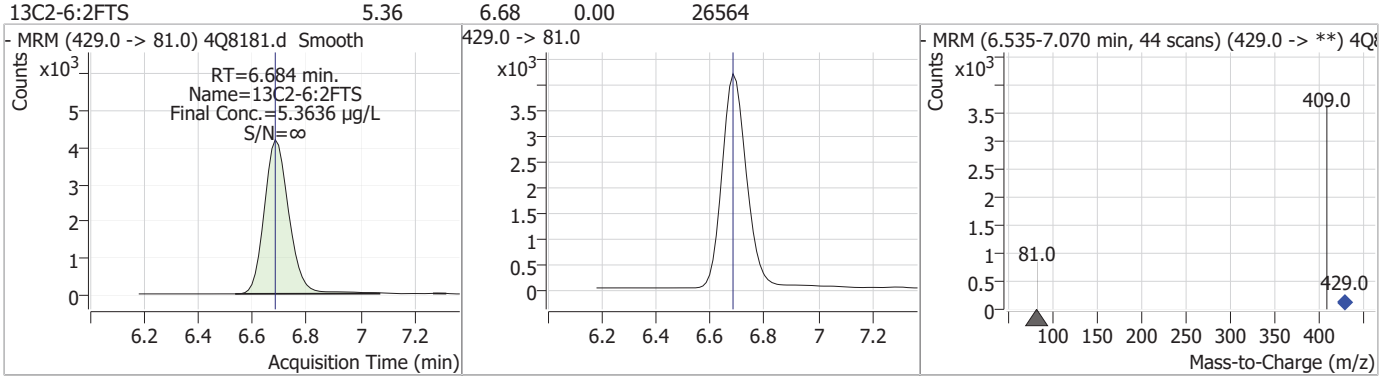
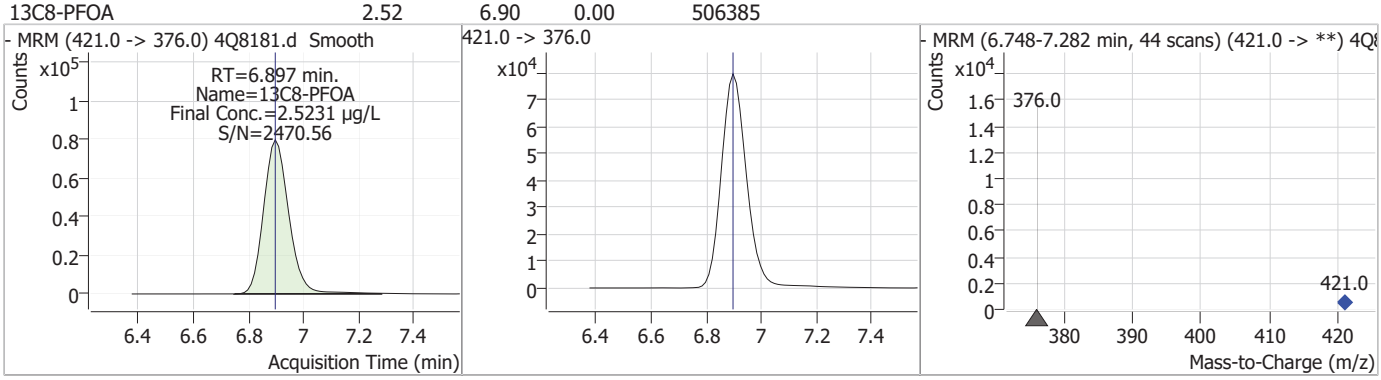
Perfluorinated Compounds by LC/MS/MS

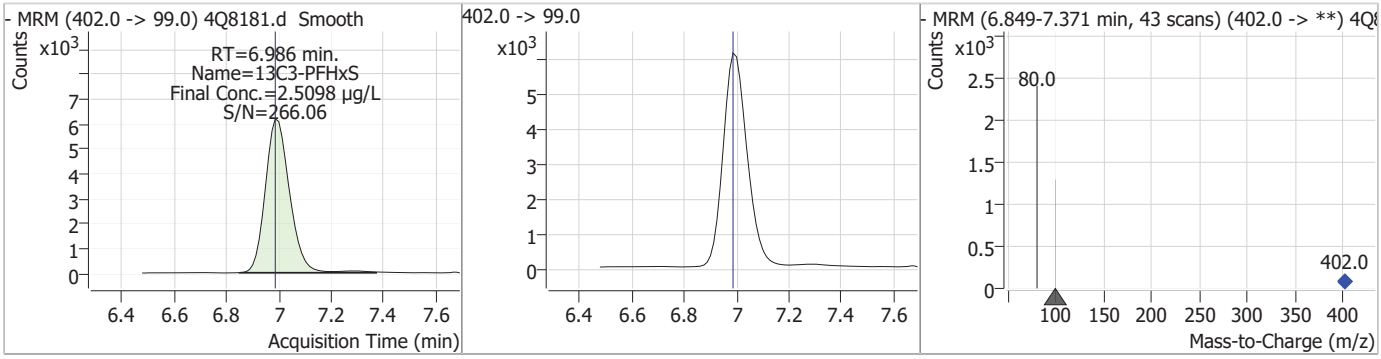
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.36	6.68	0.00	26564				



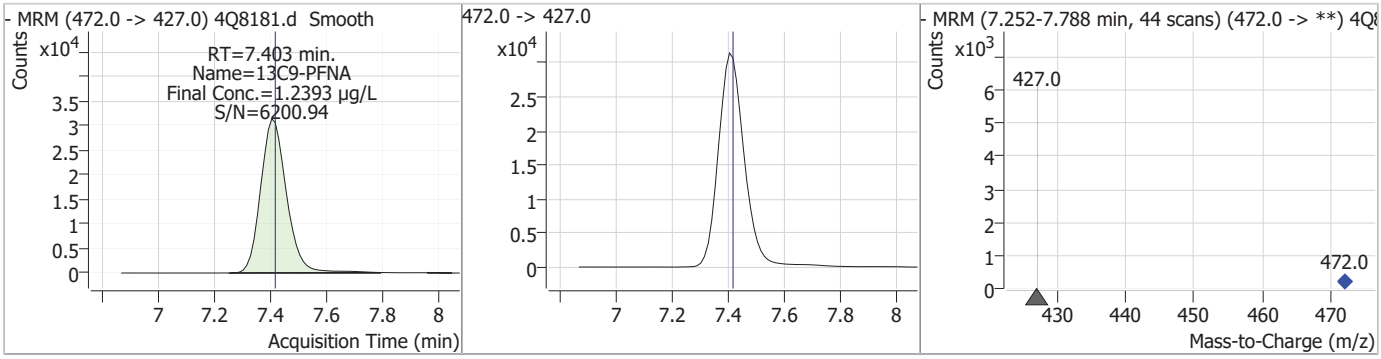
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.52	6.90	0.00	506385				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.51	6.99	0.00	39887				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.24	7.40	-0.01	199800				



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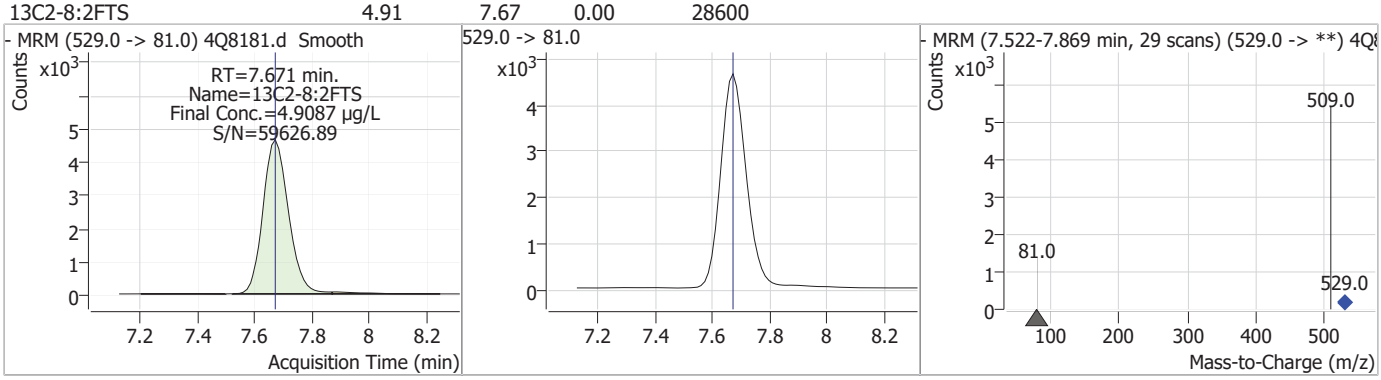
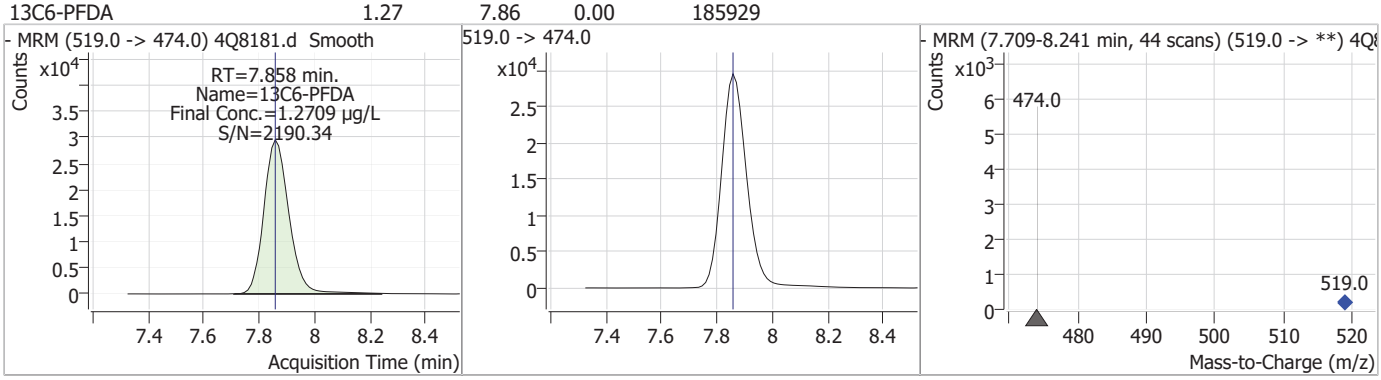
Perfluorinated Compounds by LC/MS/MS

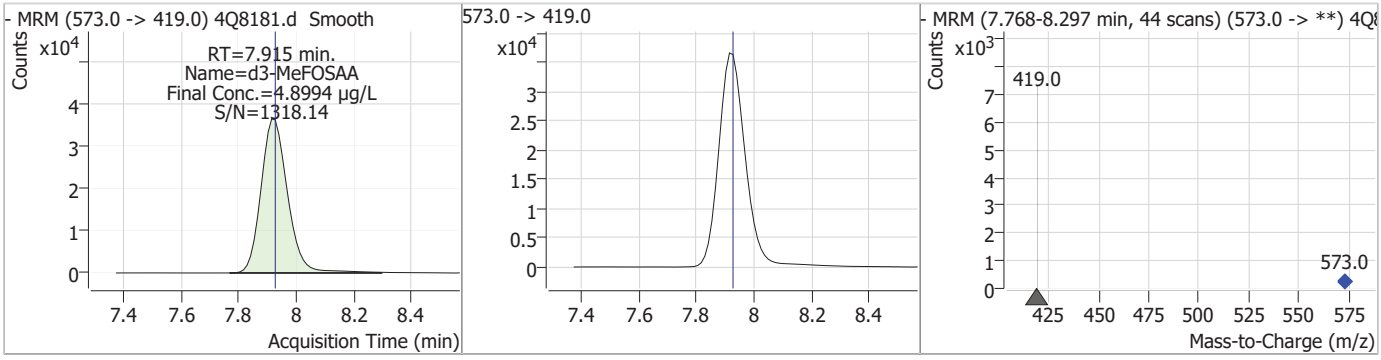
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.91	7.67	0.00	28600				



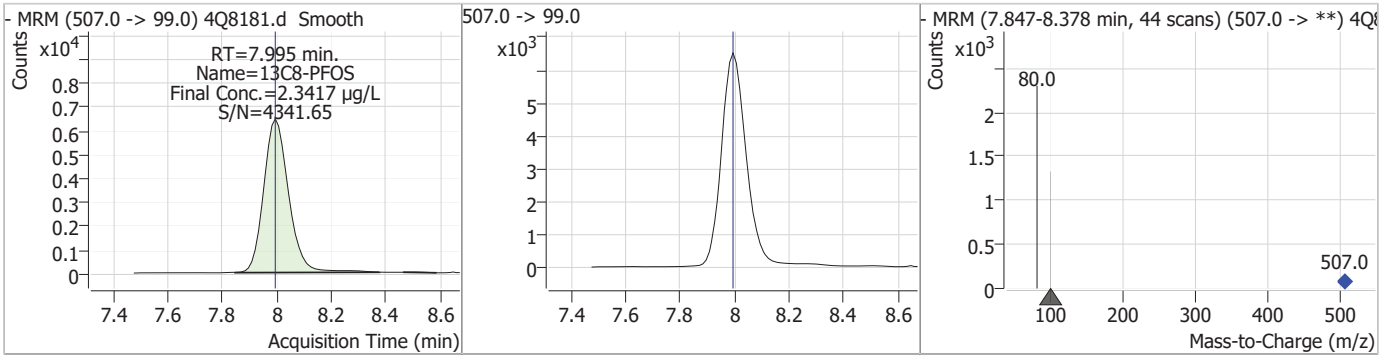
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.27	7.86	0.00	185929				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.90	7.92	-0.01	235057				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.34	7.99	0.00	41074				



7.2.9

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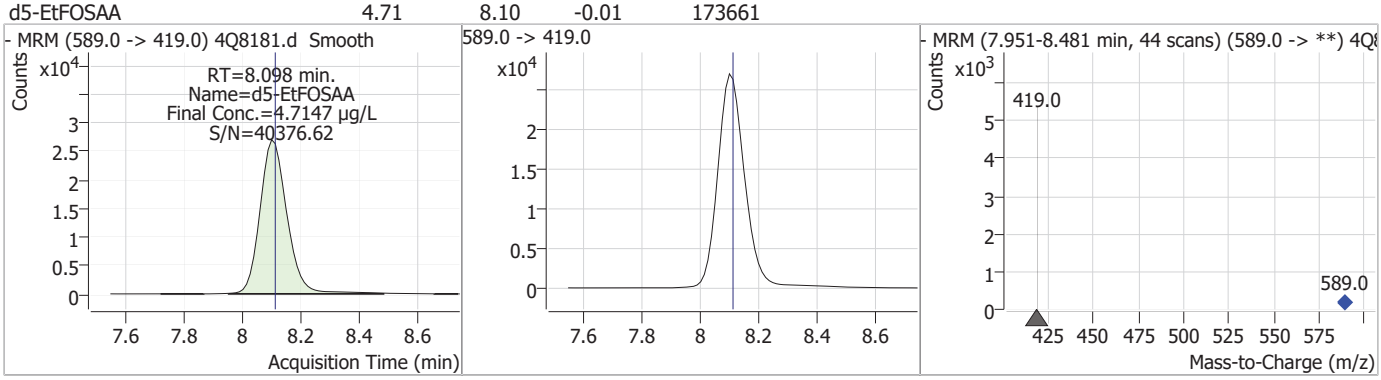
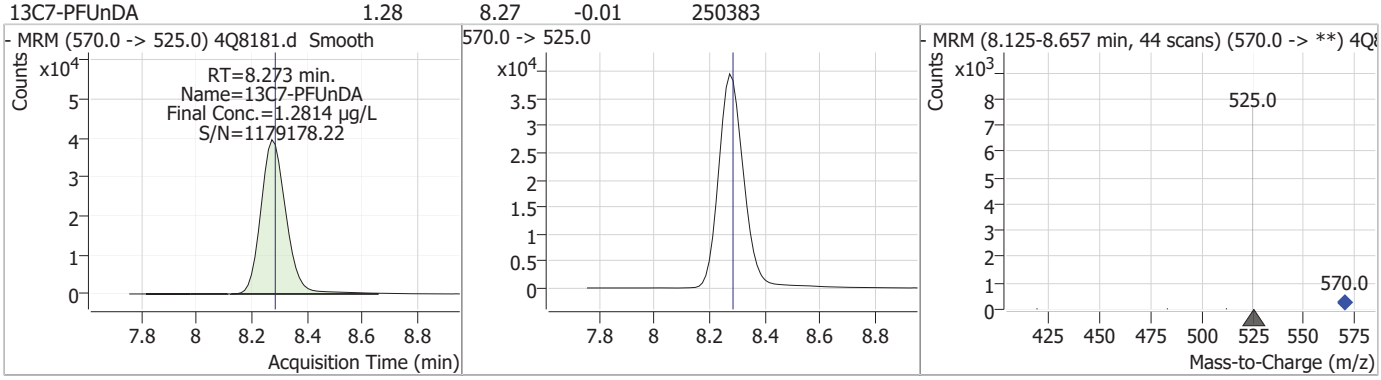
Perfluorinated Compounds by LC/MS/MS

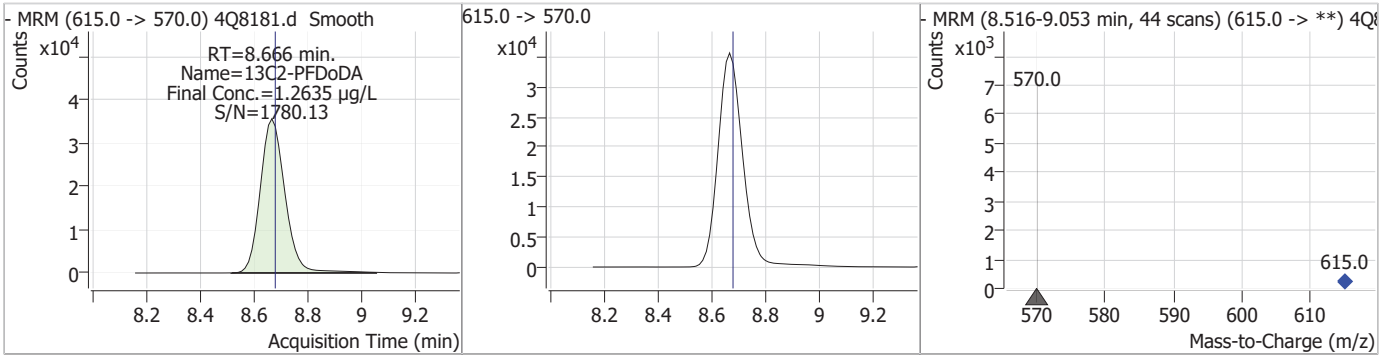
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.71	8.10	-0.01	173661				



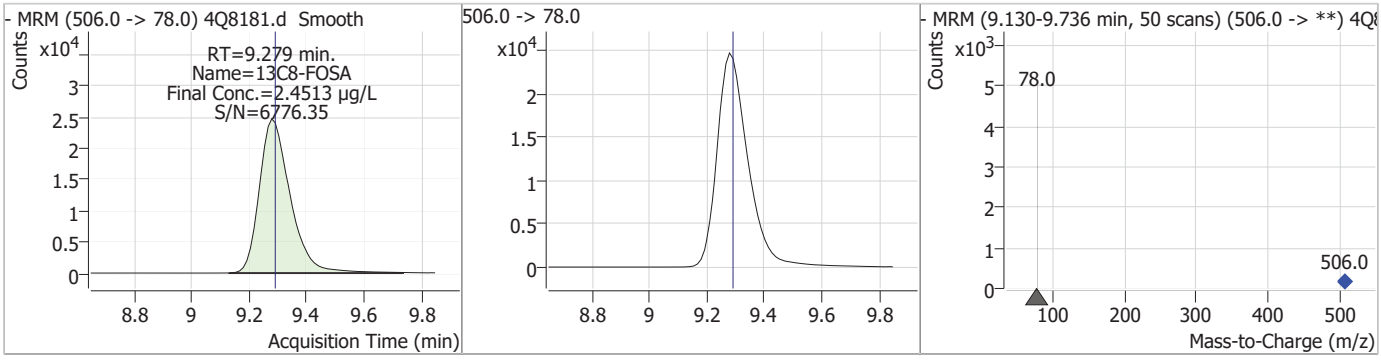
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.28	8.27	-0.01	250383				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.26	8.67	-0.01	226134				

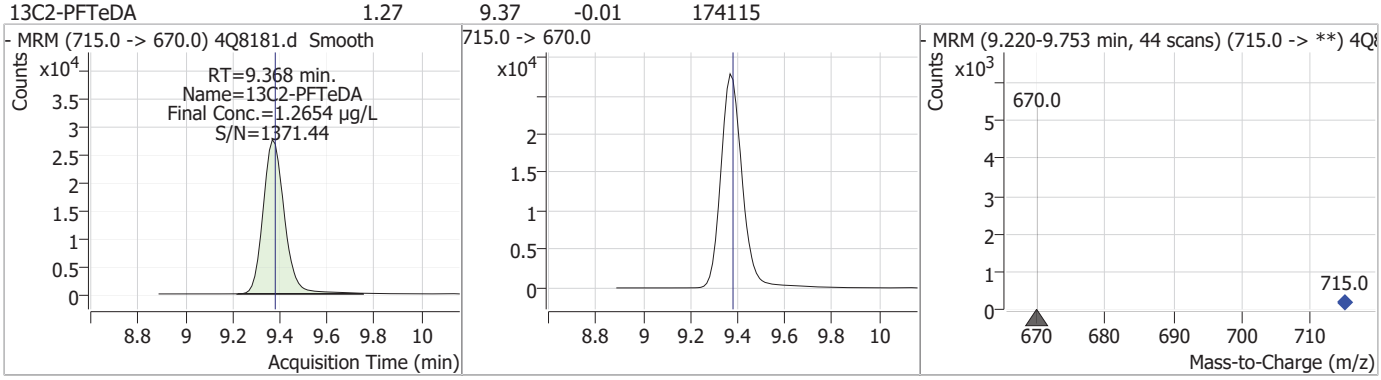


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.45	9.28	-0.01	183428				

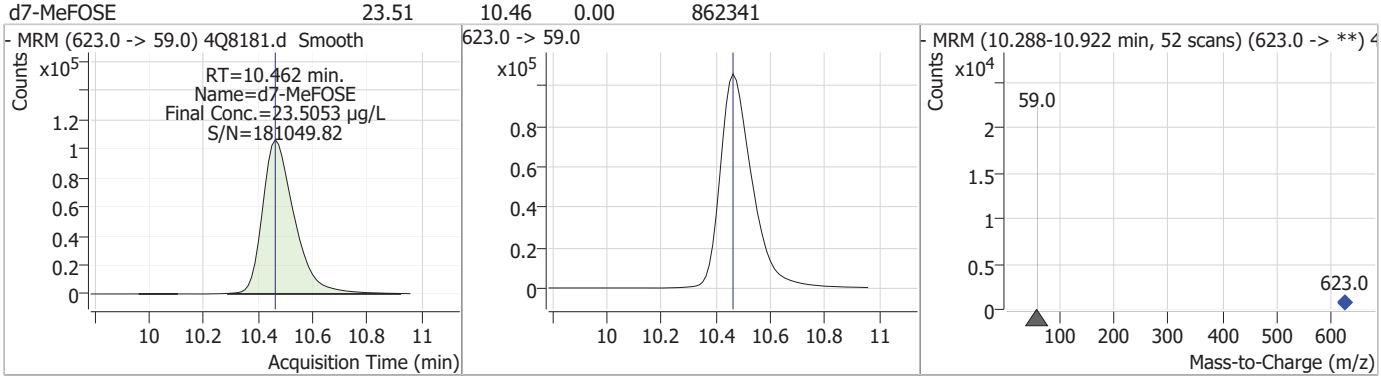


Perfluorinated Compounds by LC/MS/MS

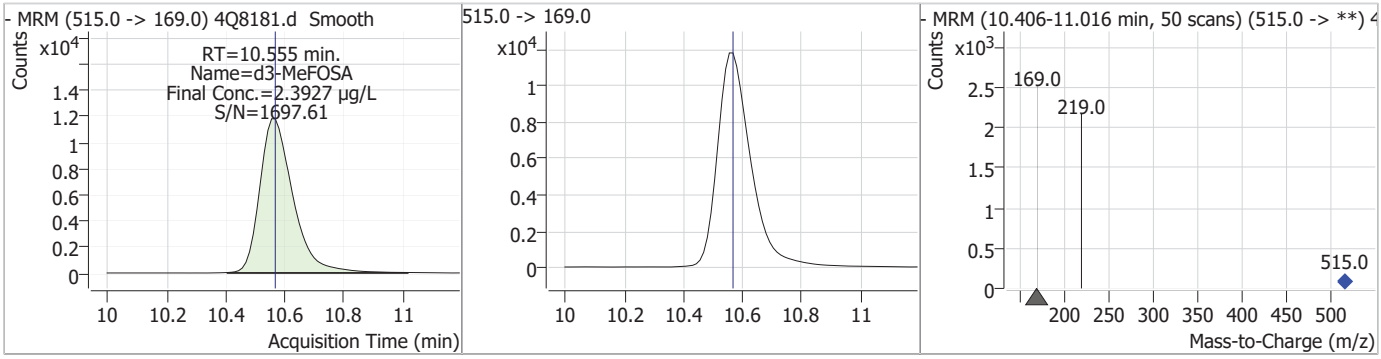
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.27	9.37	-0.01	174115				



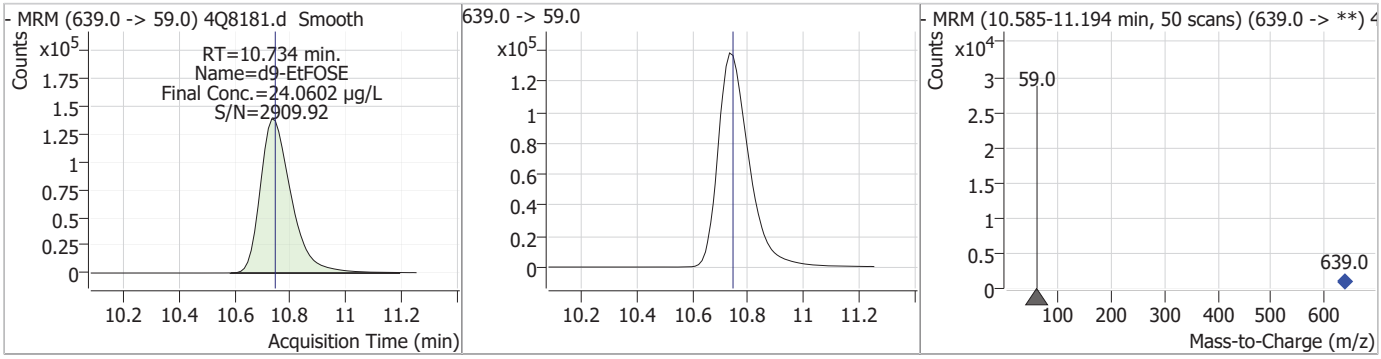
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.51	10.46	0.00	862341				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.39	10.56	-0.01	91942				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.06	10.73	-0.01	1070306				



7.2.9

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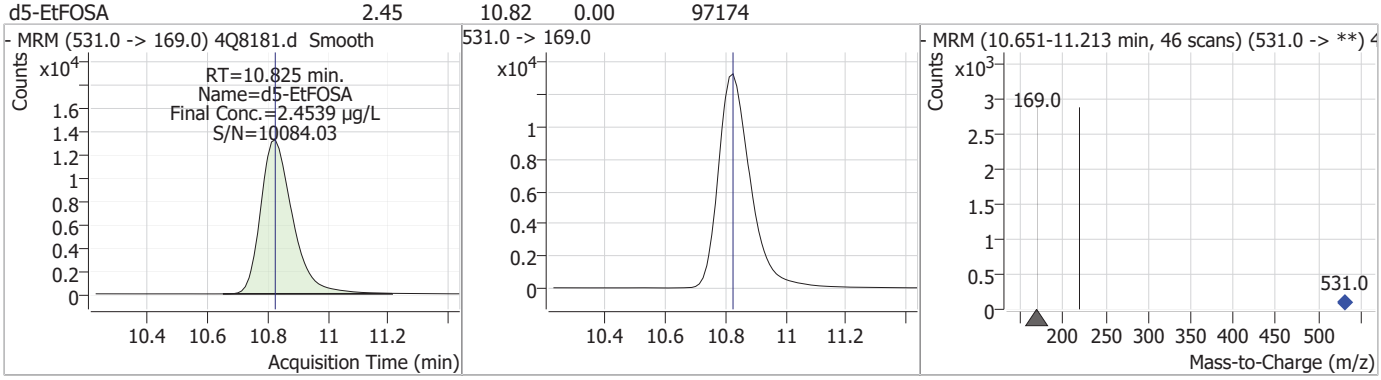
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.45	10.82	0.00	97174				



7.2.9

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Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8239.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 3:48:45 PM
Sample Name : IBLK
Vial : P1-A1
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.896	217.0 -> 172.0	789129	10.00 µg/L	0.012
M5-PFPeA	4.319	268.0 -> 223.0	424917	5.00 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	286902	2.50 µg/L	0.000
M4-PFHpA	6.304	367.0 -> 322.0	313024	2.50 µg/L	0.000
M8-PFOA	6.909	421.0 -> 376.0	471358	2.50 µg/L	-0.012
M9-PFNA	7.428	472.0 -> 427.0	190337	1.25 µg/L	0.000
M6-PFDA	7.870	519.0 -> 474.0	190510	1.25 µg/L	-0.012
M7-PFUnDA	8.298	570.0 -> 525.0	239384	1.25 µg/L	-0.012
M2-PFDoDA	8.691	615.0 -> 570.0	217091	1.25 µg/L	-0.012
M2-PFTeDA	9.406	715.0 -> 670.0	178397	1.25 µg/L	-0.012
M8-FOSA	9.303	506.0 -> 78.0	174635	2.50 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	26179	2.50 µg/L	0.000
		302.0 -> 80.0	61988		
M3-PFHxS	6.999	402.0 -> 99.0	35428	2.50 µg/L	0.000
M8-PFOS	8.007	507.0 -> 99.0	40116	2.50 µg/L	0.000
M2-4:2FTS	5.178	329.0 -> 81.0	12074	5.00 µg/L	0.012
M2-6:2FTS	6.708	429.0 -> 81.0	26717	5.00 µg/L	0.000
M2-8:2FTS	7.683	529.0 -> 81.0	29563	5.00 µg/L	0.000
M3-MeFOSAA	7.940	573.0 -> 419.0	218263	5.00 µg/L	0.000
M3-HFPO-DA	5.804	287.0 -> 169.0	416633	10.00 µg/L	0.012
M5-EtFOSAA	8.123	589.0 -> 419.0	177260	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	901690	25.00 µg/L	-0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1119704	25.00 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	91303	2.50 µg/L	-0.012
M3-MeFOSA	10.567	515.0 -> 169.0	83421	2.50 µg/L	-0.012
13C4-PFOS	8.008	503.0 -> 80.0	61801	2.50 µg/L	0.000
13C3-PFBA	2.899	216.0 -> 172.0	301087	5.00 µg/L	0.012
18O2-PFHxS	6.999	403.0 -> 84.0	36937	2.50 µg/L	0.000
13C4-PFOA	6.910	417.0 -> 372.0	428310	2.50 µg/L	-0.012
13C2-PFDA	7.871	515.0 -> 470.0	149014	1.25 µg/L	-0.012
13C5-PFNA	7.428	468.0 -> 423.0	164878	1.25 µg/L	0.000
13C2-PFHxA	5.465	315.0 -> 270.0	247624	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.178	329.0 -> 81.0	12074	5.88 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 117.6%	
13C2-6:2FTS	6.708	429.0 -> 81.0	26717	6.01 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 120.2%	
13C2-8:2FTS	7.683	529.0 -> 81.0	29563	5.56 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 111.2%	
13C2-PFDoDA	8.691	615.0 -> 570.0	217091	1.30 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.3%	
13C2-PFTeDA	9.406	715.0 -> 670.0	178397	1.27 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.5%	
13C3-PFBS	5.368	302.0 -> 99.0	26179	2.88 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 115.3%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	35428	2.72 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 108.6%	
13C4-PFBA	2.896	217.0 -> 172.0	789129	11.10 µg/L	0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 111.0%	
13C4-PFHpA	6.304	367.0 -> 322.0	313024	2.66 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.2%	
13C5-PFHxA	5.464	318.0 -> 273.0	286902	2.64 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.5%	
13C5-PFPeA	4.319	268.0 -> 223.0	424917	5.35 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.0%	
13C6-PFDA	7.870	519.0 -> 474.0	190510	1.32 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.8%	
13C7-PFUnDA	8.298	570.0 -> 525.0	239384	1.36 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 108.6%	
13C8-FOSA	9.303	506.0 -> 78.0	174635	2.63 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.1%	
13C8-PFOA	6.909	421.0 -> 376.0	471358	2.67 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.9%	
13C8-PFOS	8.007	507.0 -> 99.0	40116	2.73 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 109.3%	
13C9-PFNA	7.428	472.0 -> 427.0	190337	1.33 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.5%	
d3-MeFOSAA	7.940	573.0 -> 419.0	218263	5.25 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.1%	
13C3-HFPO-DA	5.804	287.0 -> 169.0	416633	10.75 µg/L	0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 107.5%	
d3-MeFOSA	10.567	515.0 -> 169.0	83421	2.62 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.0%	
d5-EtFOSAA	8.123	589.0 -> 419.0	177260	5.34 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.9%	
d7-MeFOSE	10.475	623.0 -> 59.0	901690	25.62 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 102.5%	
d9-EtFOSE	10.746	639.0 -> 59.0	1119704	26.05 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 104.2%	
d5-EtFOSA	10.825	531.0 -> 169.0	91303	2.67 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.6%	

Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0	-	N.D.	
		299.0 -> 99.0			
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			

Perfluorinated Compounds by LC/MS/MS

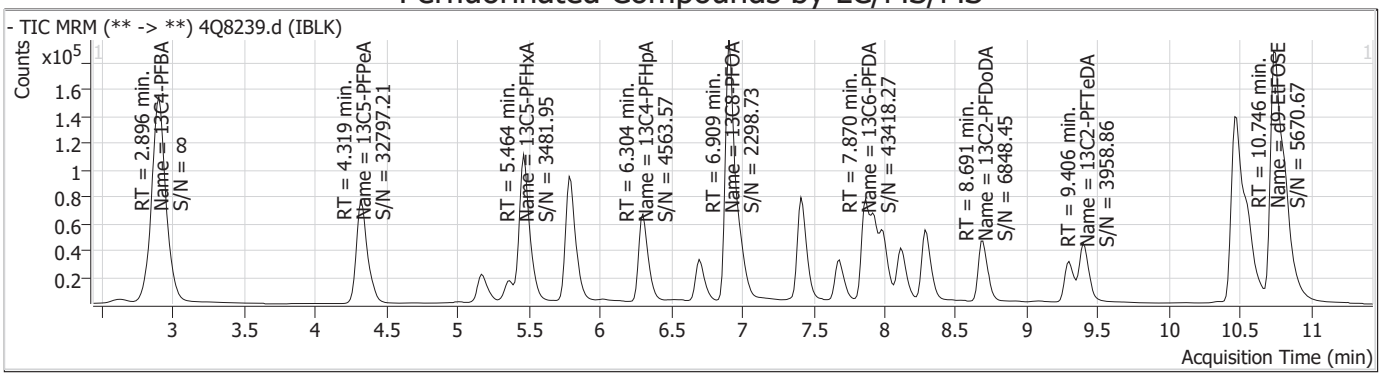
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
PFDS	-	599.0 -> 80.0	-	N.D.		
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 219.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 369.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

Perfluorinated Compounds by LC/MS/MS

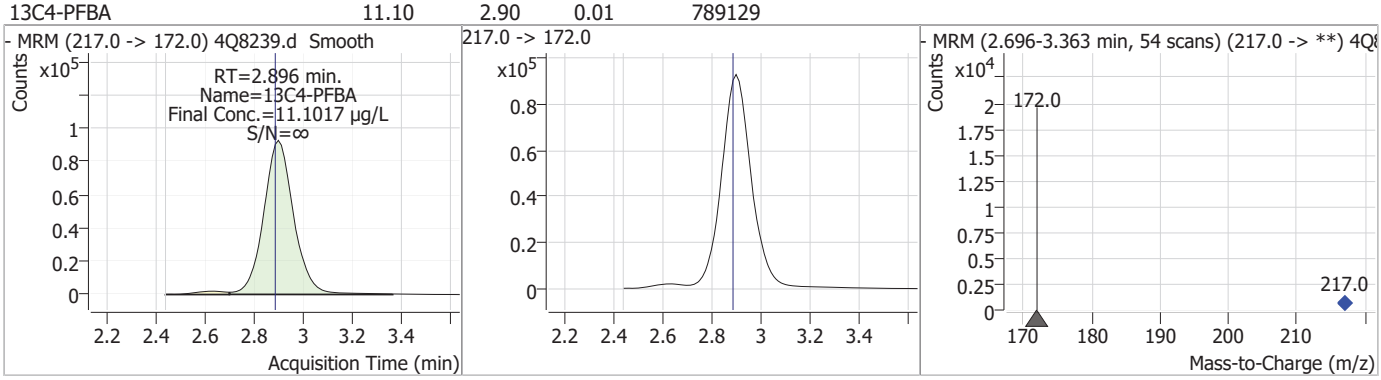
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

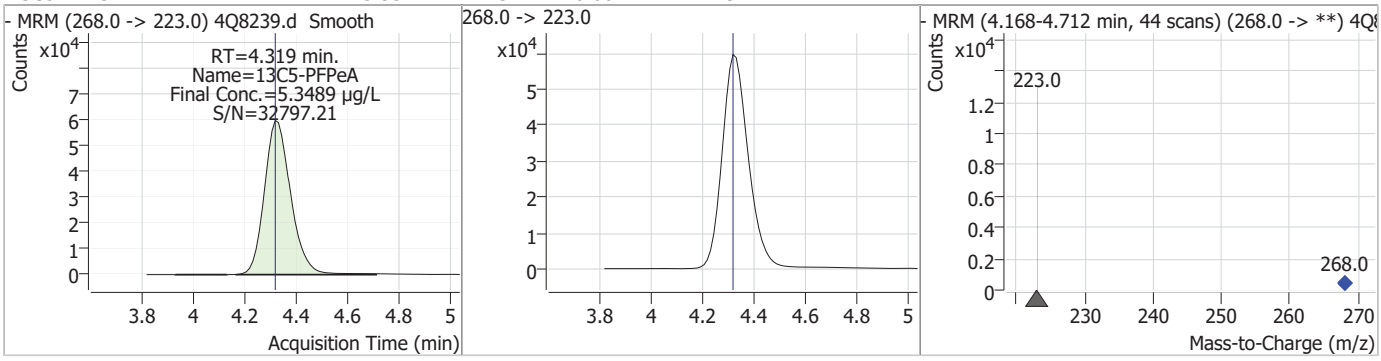
Perfluorinated Compounds by LC/MS/MS



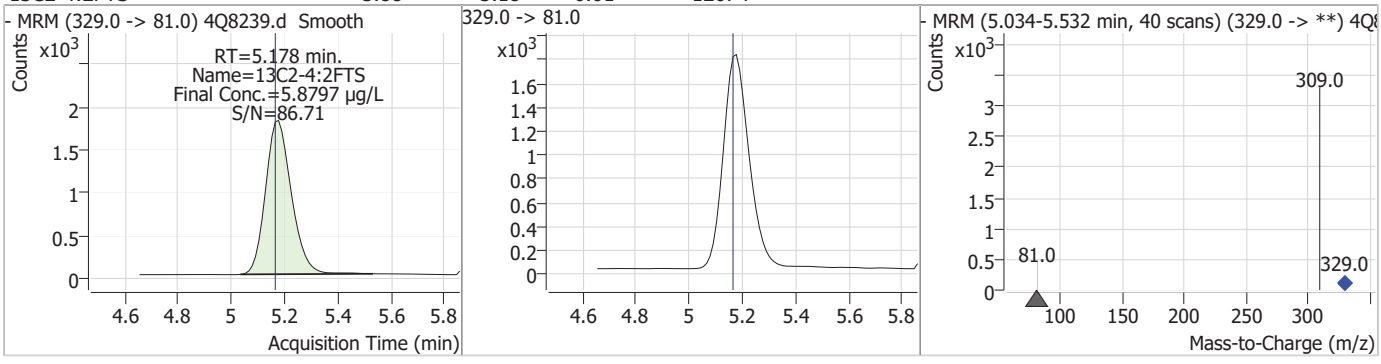
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	11.10	2.90	0.01	789129				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.35	4.32	0.00	424917				

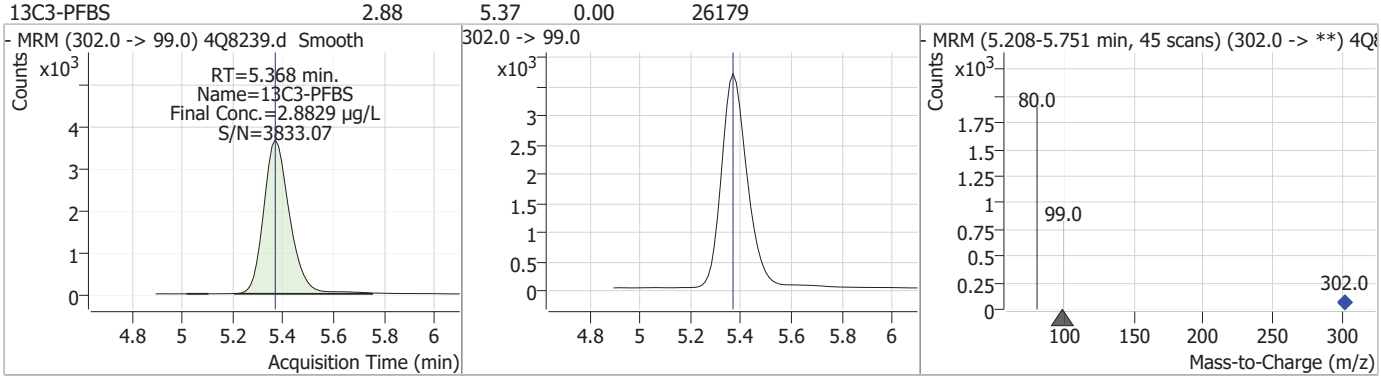


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.88	5.18	0.01	12074				

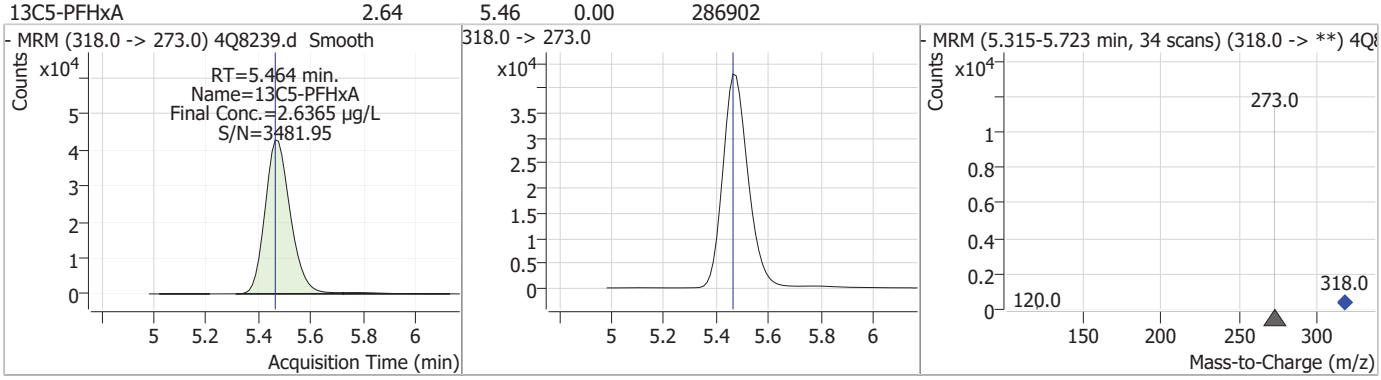


Perfluorinated Compounds by LC/MS/MS

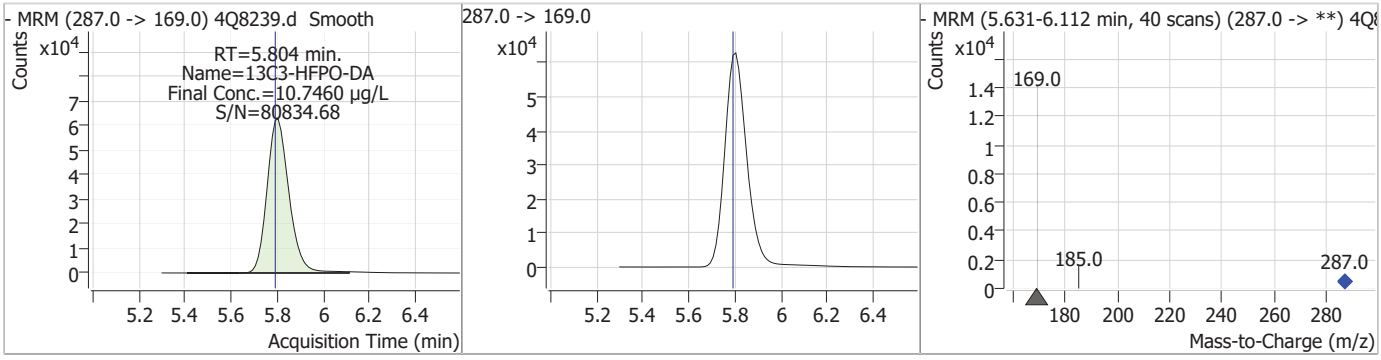
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.88	5.37	0.00	26179				



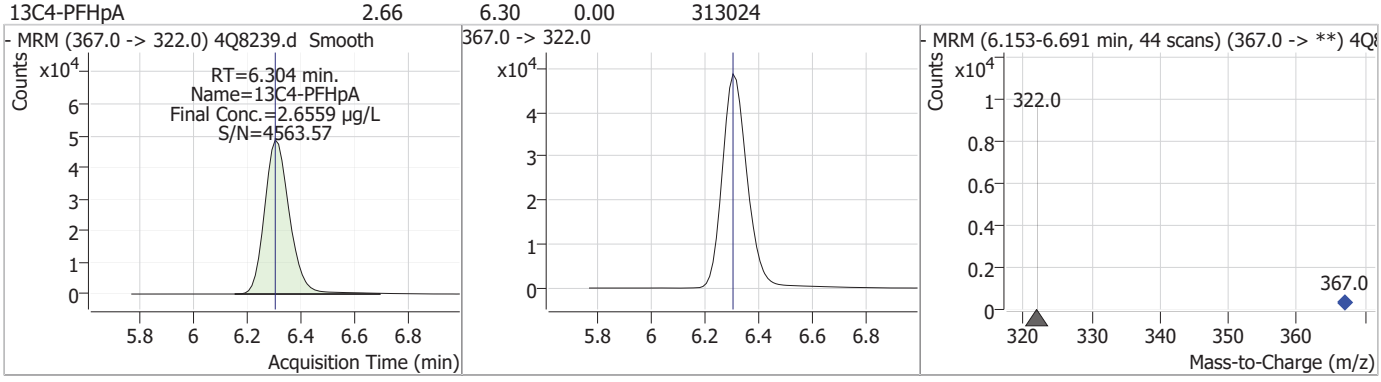
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.64	5.46	0.00	286902				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.75	5.80	0.01	416633				

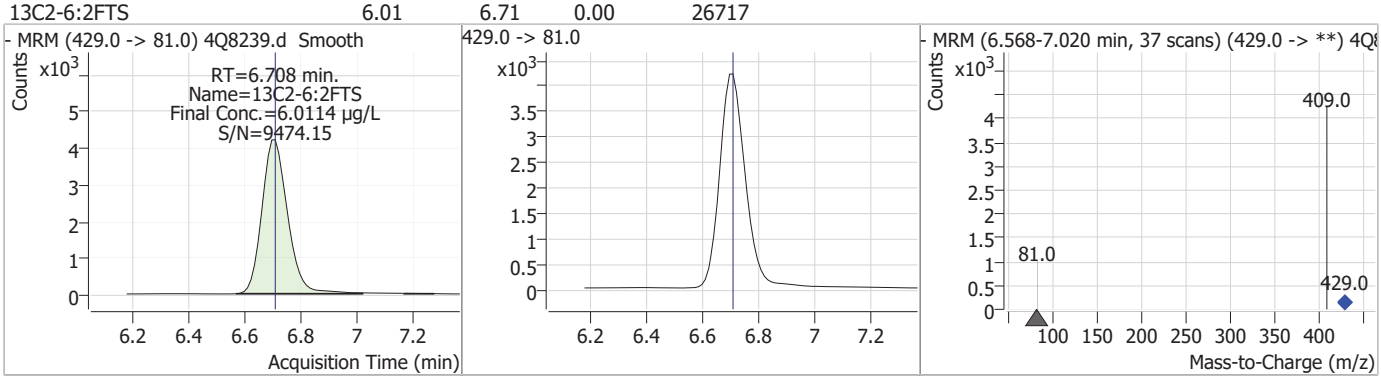


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.66	6.30	0.00	313024				

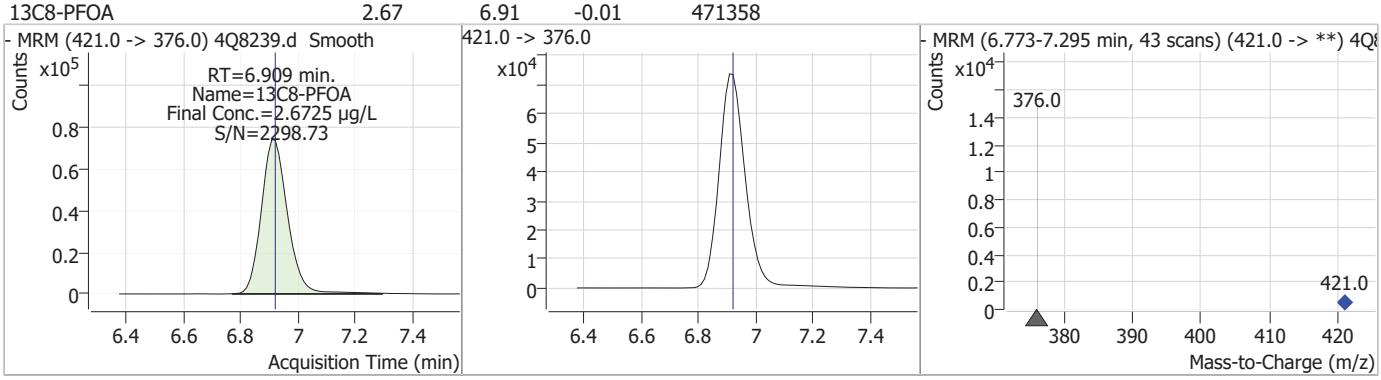


Perfluorinated Compounds by LC/MS/MS

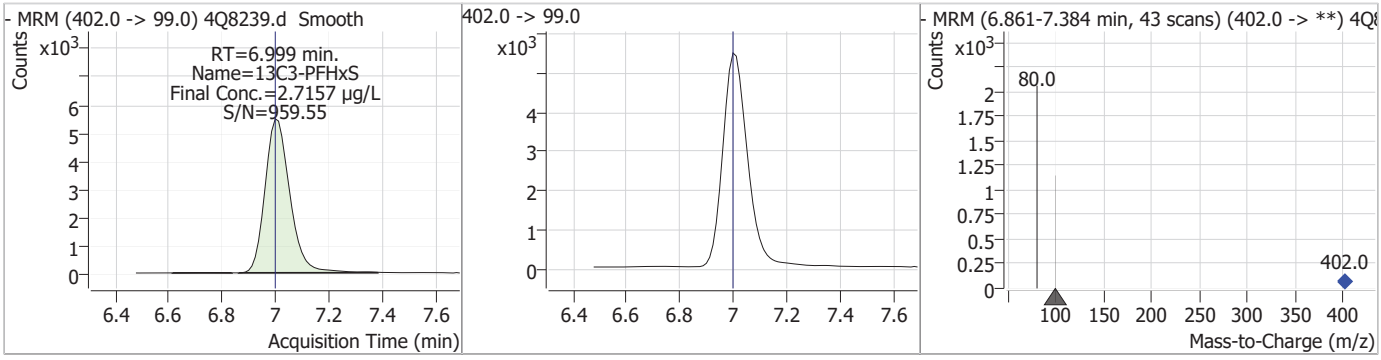
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	6.01	6.71	0.00	26717				



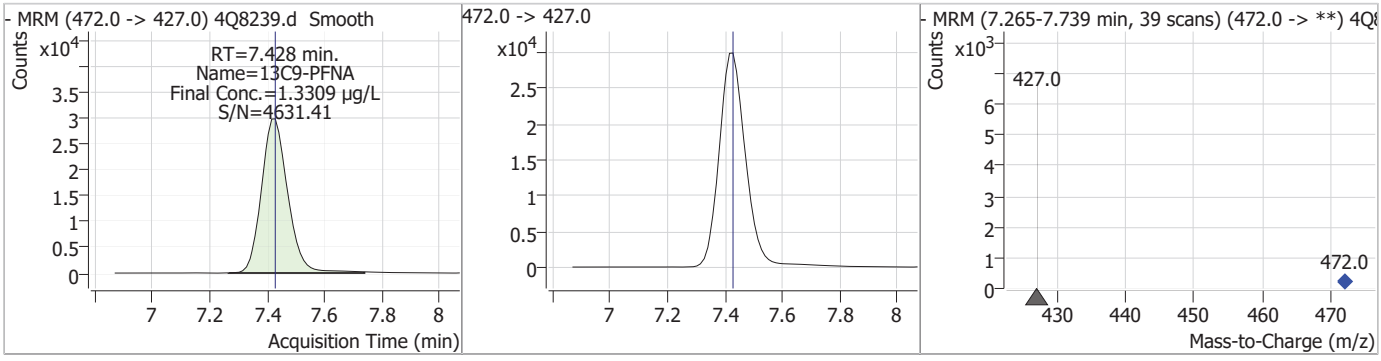
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.67	6.91	-0.01	471358				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.72	7.00	0.00	35428				

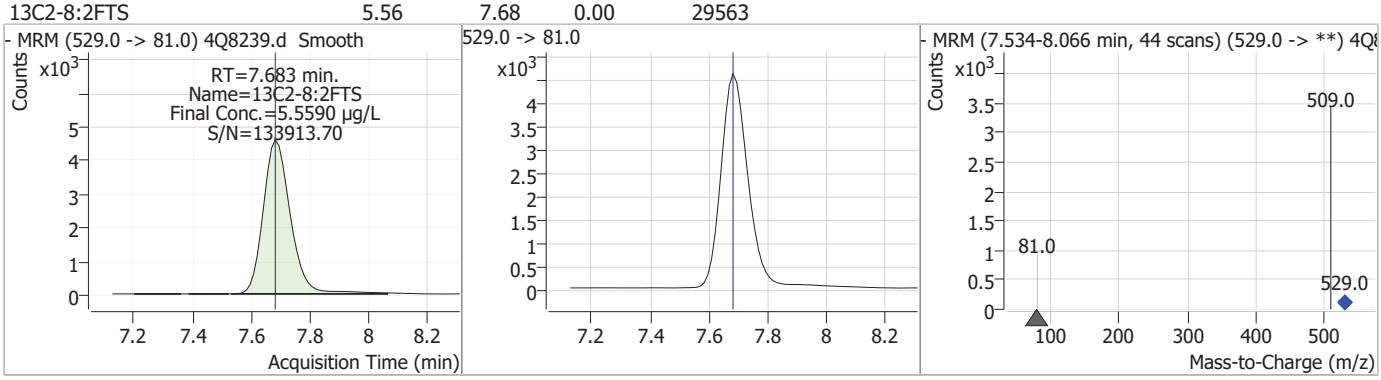


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.33	7.43	0.00	190337				

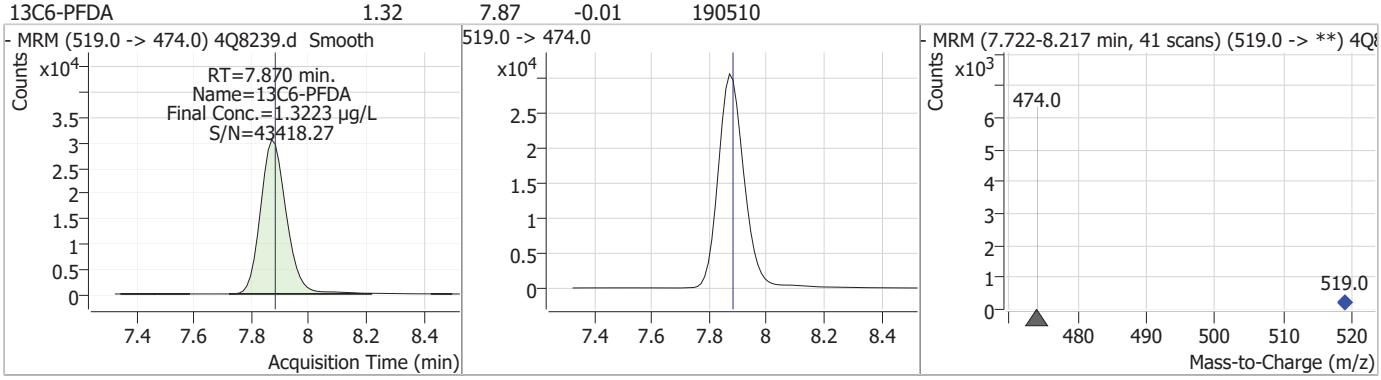


Perfluorinated Compounds by LC/MS/MS

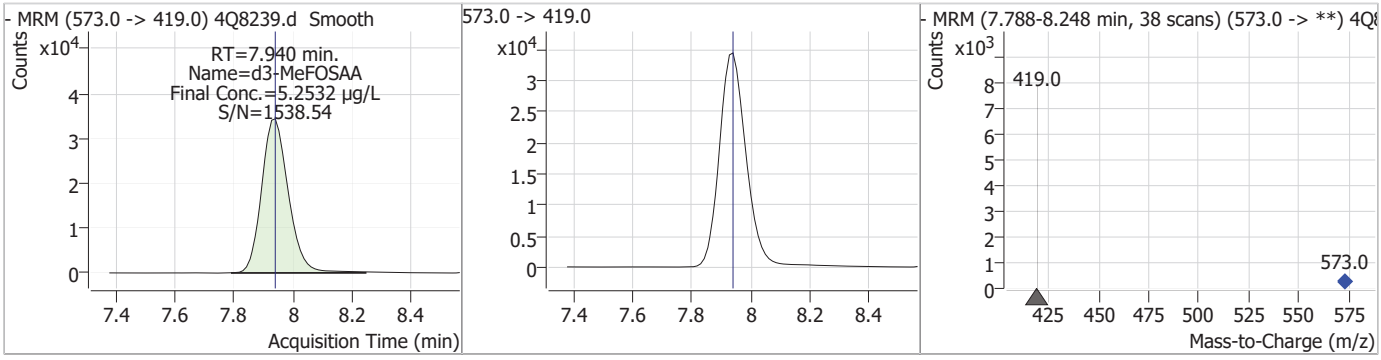
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.56	7.68	0.00	29563				



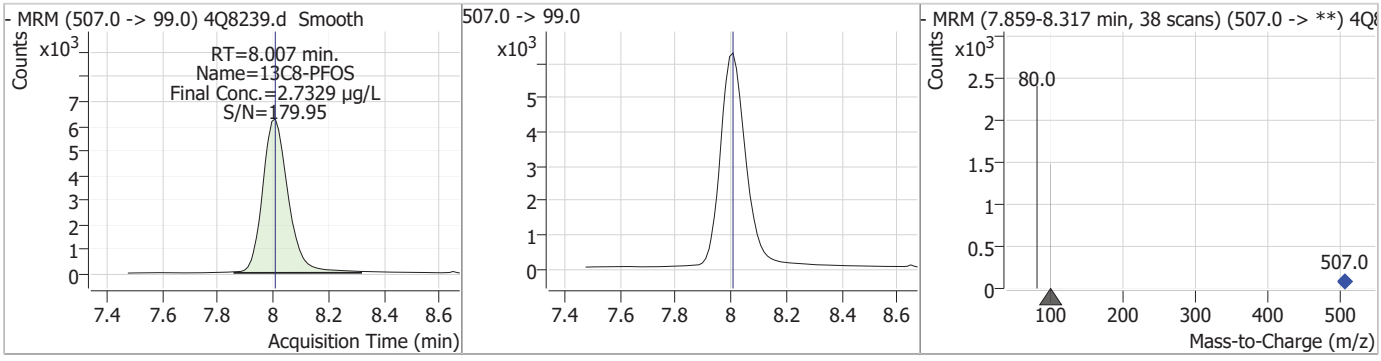
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.32	7.87	-0.01	190510				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.25	7.94	0.00	218263				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.73	8.01	0.00	40116				

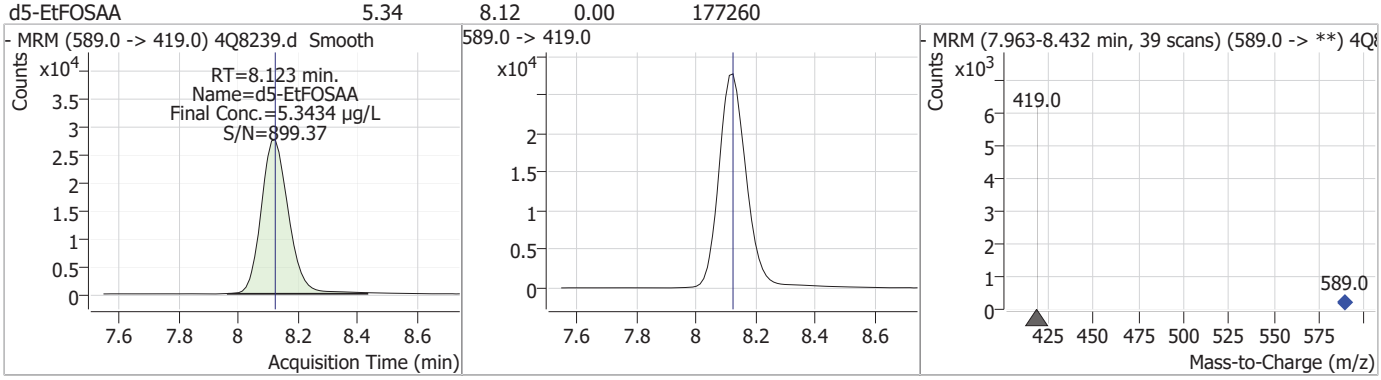


7.2.10

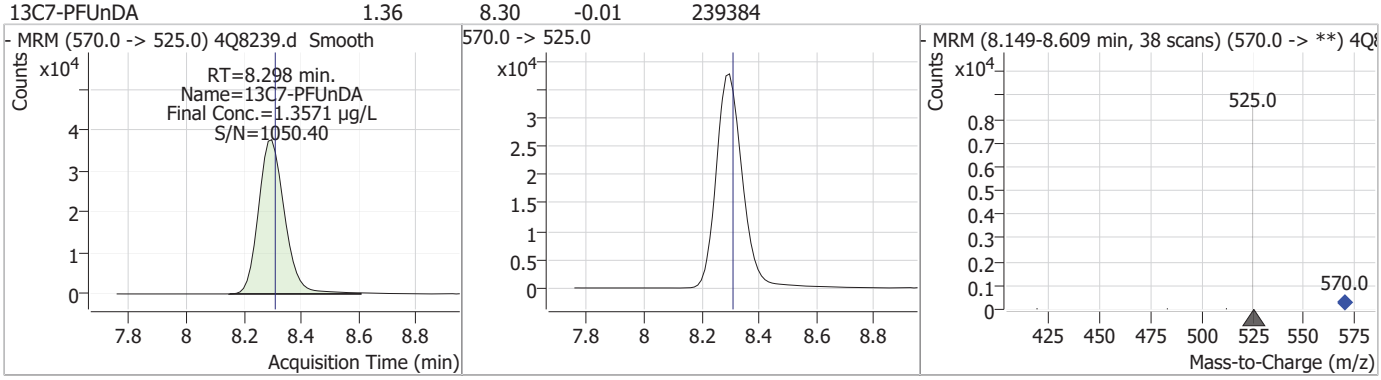
7

Perfluorinated Compounds by LC/MS/MS

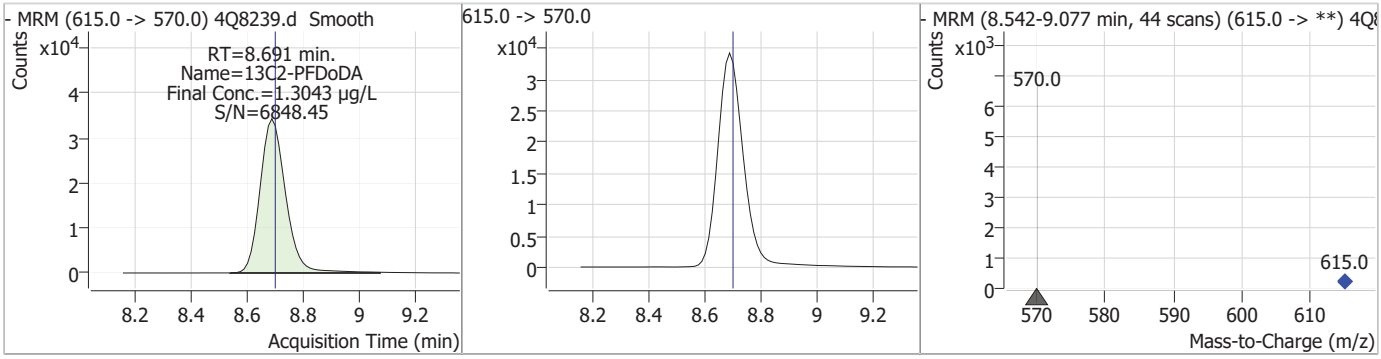
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.34	8.12	0.00	177260				



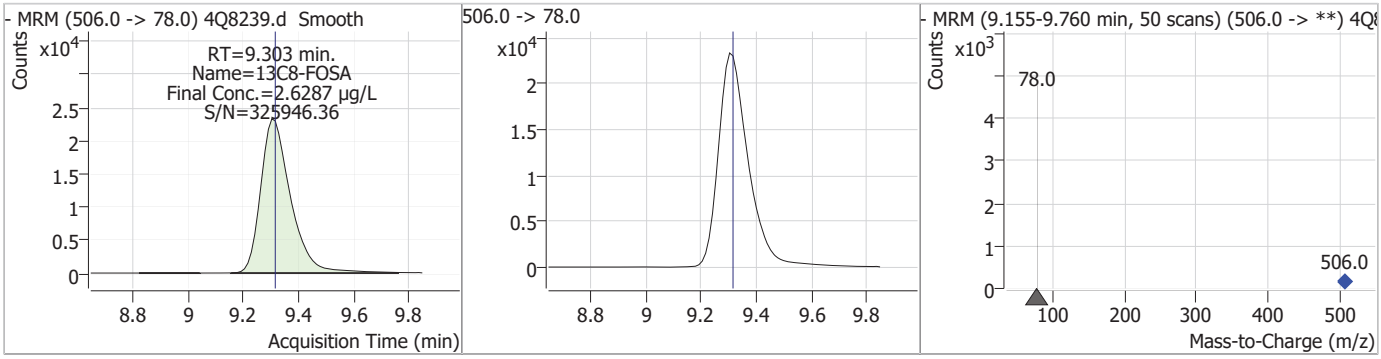
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.36	8.30	-0.01	239384				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.30	8.69	-0.01	217091				

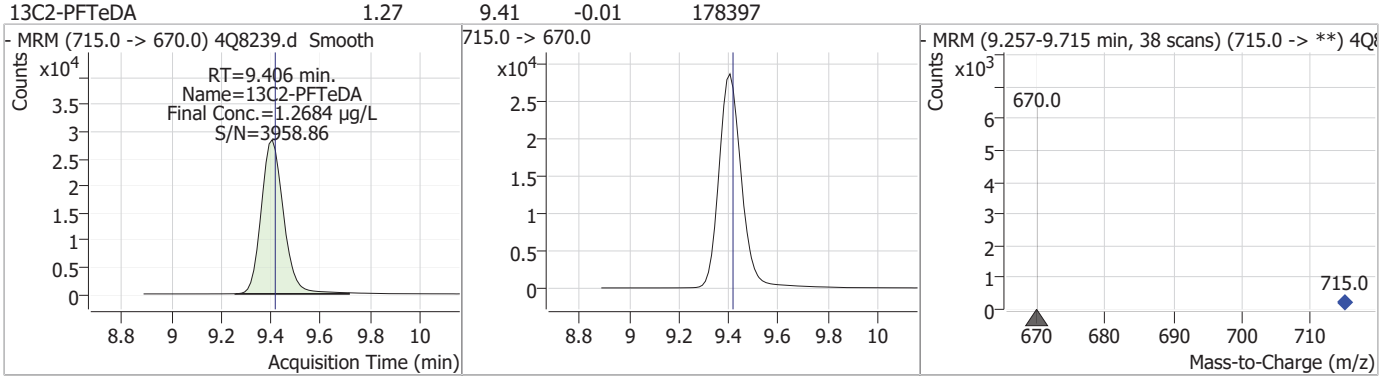


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.63	9.30	-0.01	174635				

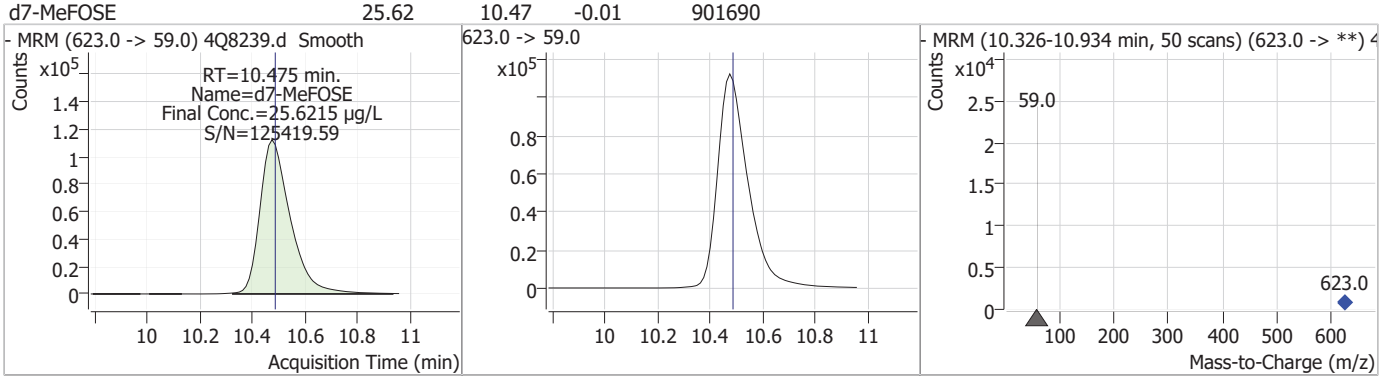


Perfluorinated Compounds by LC/MS/MS

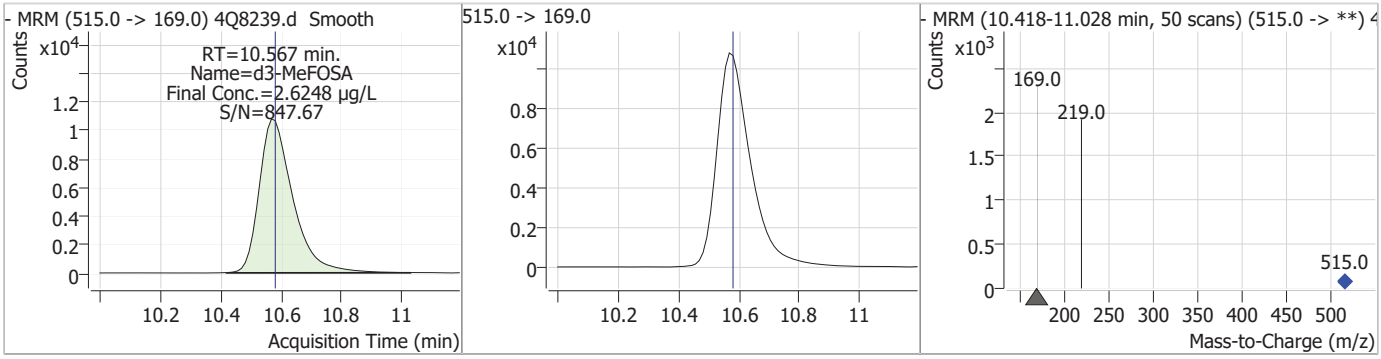
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.27	9.41	-0.01	178397				



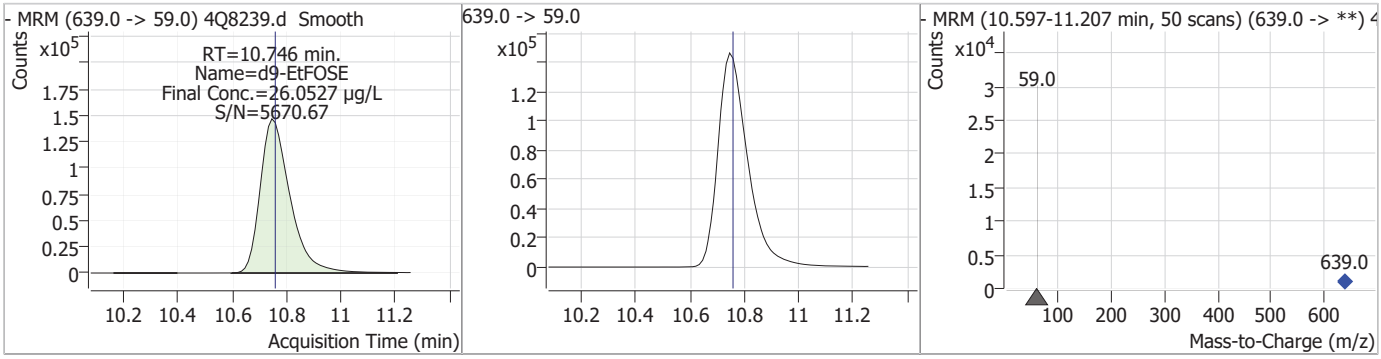
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.62	10.47	-0.01	901690				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.62	10.57	-0.01	83421				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	26.05	10.75	-0.01	1119704				

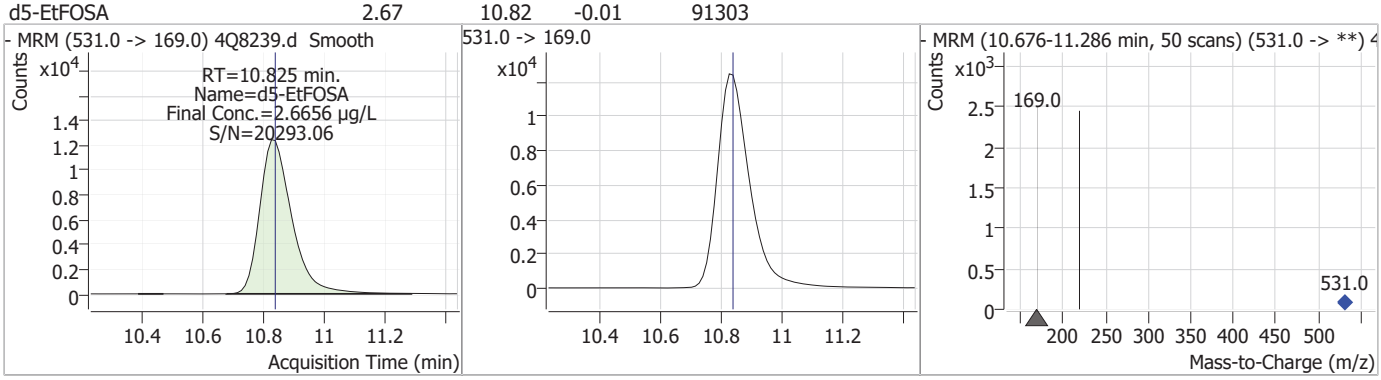


7.2.10

7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.67	10.82	-0.01	91303				



7.2.10

7

Perfluorinated Compounds by LC/MS/MS

Data File	: 2q33785.d
Operator	: victoril
Acq. Method	: 1633.m
Acq. Date-Time	: 5/13/2025 12:38:51 AM
Sample Name	: ICCB
Vial	: P1-A1
DA Method File	: 050925_1633_T2Q344.quantmethod.xml
Batch Name	: T2Q345.batch.bin
Sample Information	: OP63379,T2Q345,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	106834	10.00 µg/L	0.000
M5-PFPeA	4.624	268.0 -> 223.0	57760	5.00 µg/L	-0.012
M5-PFHxA	5.732	318.0 -> 273.0	34311	2.50 µg/L	-0.012
M4-PFHpA	6.528	367.0 -> 322.0	27827	2.50 µg/L	-0.012
M8-PFOA	7.111	421.0 -> 376.0	59234	2.50 µg/L	-0.013
M9-PFNA	7.632	472.0 -> 427.0	23669	1.25 µg/L	-0.012
M6-PFDA	8.114	519.0 -> 474.0	17458	1.25 µg/L	-0.025
M7-PFUnDA	8.583	570.0 -> 525.0	28386	1.25 µg/L	-0.024
M2-PFDoDA	9.016	615.0 -> 570.0	26506	1.25 µg/L	-0.025
M2-PFTeDA	9.783	715.0 -> 670.0	21419	1.25 µg/L	-0.012
M8-FOSA	9.333	506.0 -> 78.0	18219	2.50 µg/L	-0.013
M3-PFBS	5.687	302.0 -> 99.0	5414	2.50 µg/L	-0.012
M3-PFHxS	7.238	402.0 -> 99.0	6599	2.50 µg/L	-0.012
M8-PFOS	8.303	507.0 -> 99.0	5875	2.50 µg/L	-0.012
M2-4:2FTS	5.420	329.0 -> 81.0	1305	5.00 µg/L	-0.012
M2-6:2FTS	6.885	429.0 -> 81.0	3268	5.00 µg/L	-0.025
M2-8:2FTS	7.902	529.0 -> 81.0	4749	5.00 µg/L	-0.012
M3-MeFOSAA	8.147	573.0 -> 419.0	40670	5.00 µg/L	-0.012
M3-HFPO-DA	6.062	287.0 -> 169.0	23090	10.00 µg/L	-0.012
M5-EtFOSAA	8.344	589.0 -> 419.0	33134	5.00 µg/L	-0.012
M7-MeFOSE	10.520	623.0 -> 59.0	154843	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	213234	25.00 µg/L	0.000
M5-EtFOSA	10.895	531.0 -> 169.0	15139	2.50 µg/L	0.000
M3-MeFOSA	10.624	515.0 -> 169.0	14909	2.50 µg/L	0.000
13C4-PFOS	8.291	503.0 -> 80.0	11630	2.50 µg/L	-0.025
13C3-PFBA	3.253	216.0 -> 172.0	48770	5.00 µg/L	-0.012
18O2-PFHxS	7.238	403.0 -> 84.0	7678	2.50 µg/L	-0.025
13C4-PFOA	7.111	417.0 -> 372.0	63116	2.50 µg/L	-0.013
13C2-PFDA	8.127	515.0 -> 470.0	17533	1.25 µg/L	-0.013
13C5-PFNA	7.632	468.0 -> 423.0	23761	1.25 µg/L	-0.012
13C2-PFHxA	5.733	315.0 -> 270.0	32550	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.420	329.0 -> 81.0	1305	4.95 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.1%	
13C2-6:2FTS	6.885	429.0 -> 81.0	3268	5.58 µg/L	-0.025
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 111.6%	
13C2-8:2FTS	7.902	529.0 -> 81.0	4749	4.82 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.5%	
13C2-PFDoDA	9.016	615.0 -> 570.0	26506	1.11 µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.9%	
13C2-PFTeDA	9.783	715.0 -> 670.0	21419	1.11 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.2%	
13C3-PFBS	5.687	302.0 -> 99.0	5414	2.54 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.5%	
13C3-PFHxS	7.238	402.0 -> 99.0	6599	2.49 µg/L	-0.012

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.7%	
13C4-PFBA	3.263	217.0 -> 172.0	106834	9.33 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 93.3%	
13C4-PFHpA	6.528	367.0 -> 322.0	27827	2.46 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.3%	
13C5-PFHxA	5.732	318.0 -> 273.0	34311	2.40 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.9%	
13C5-PFPeA	4.624	268.0 -> 223.0	57760	4.70 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.1%	
13C6-PFDA	8.114	519.0 -> 474.0	17458	1.21 µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.1%	
13C7-PFUnDA	8.583	570.0 -> 525.0	28386	1.22 µg/L	-0.024
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.7%	
13C8-FOSA	9.333	506.0 -> 78.0	18219	2.29 µg/L	-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.5%	
13C8-PFOA	7.111	421.0 -> 376.0	59234	2.33 µg/L	-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.4%	
13C8-PFOS	8.303	507.0 -> 99.0	5875	2.39 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.5%	
13C9-PFNA	7.632	472.0 -> 427.0	23669	1.14 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.5%	
d3-MeFOSAA	8.147	573.0 -> 419.0	40670	5.09 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.7%	
13C3-HFPO-DA	6.062	287.0 -> 169.0	23090	10.17 µg/L	-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.7%	
d3-MeFOSA	10.624	515.0 -> 169.0	14909	2.41 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.5%	
d5-EtFOSAA	8.344	589.0 -> 419.0	33134	4.98 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.6%	
d7-MeFOSE	10.520	623.0 -> 59.0	154843	21.81 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 87.2%	
d9-EtFOSE	10.803	639.0 -> 59.0	213234	21.35 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 85.4%	
d5-EtFOSA	10.895	531.0 -> 169.0	15139	2.44 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.5%	
Target Compounds					**QValue**
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0	-	N.D.	
		299.0 -> 99.0			
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			
PFDS	-	599.0 -> 80.0	-	N.D.	

Perfluorinated Compounds by LC/MS/MS

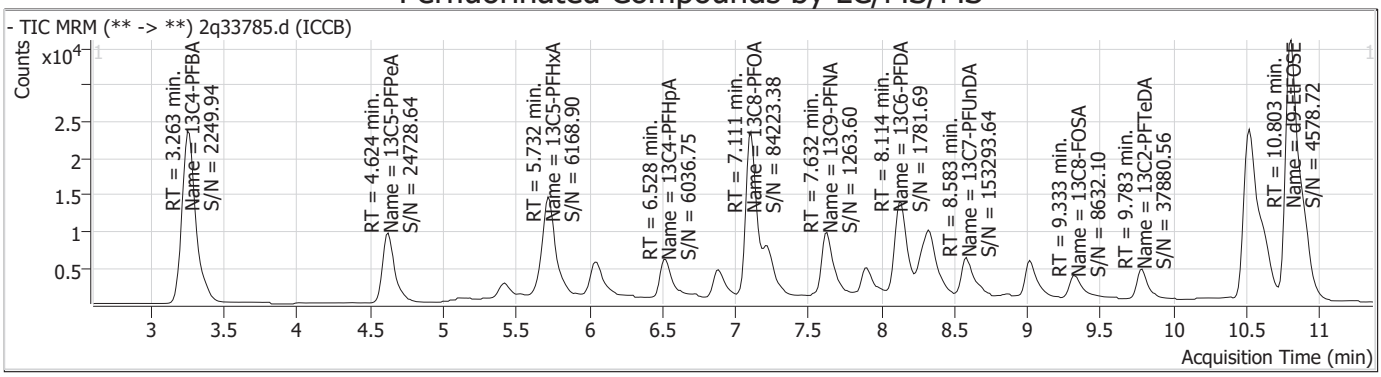
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 169.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 169.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

 # = Qualifier out of range, m = manually integrated, + = Area summed

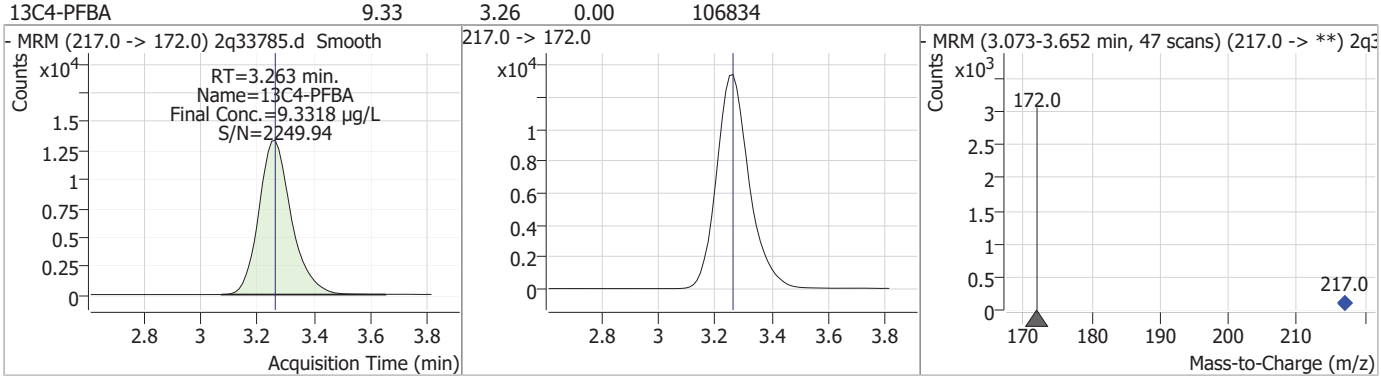
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

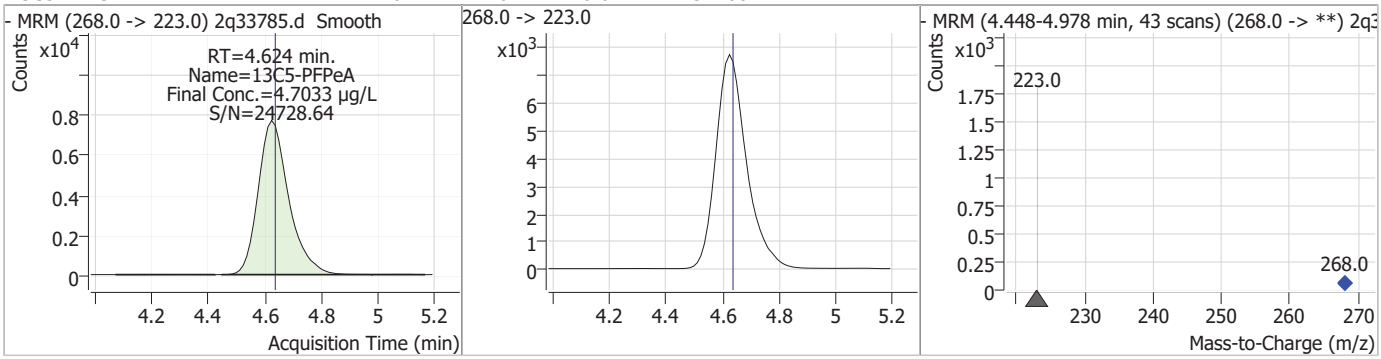
Perfluorinated Compounds by LC/MS/MS



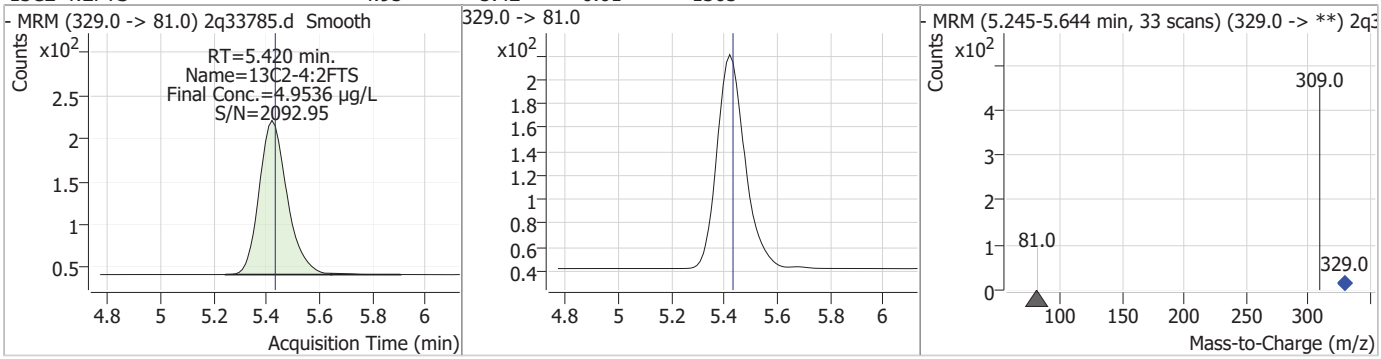
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.33	3.26	0.00	106834				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.70	4.62	-0.01	57760				

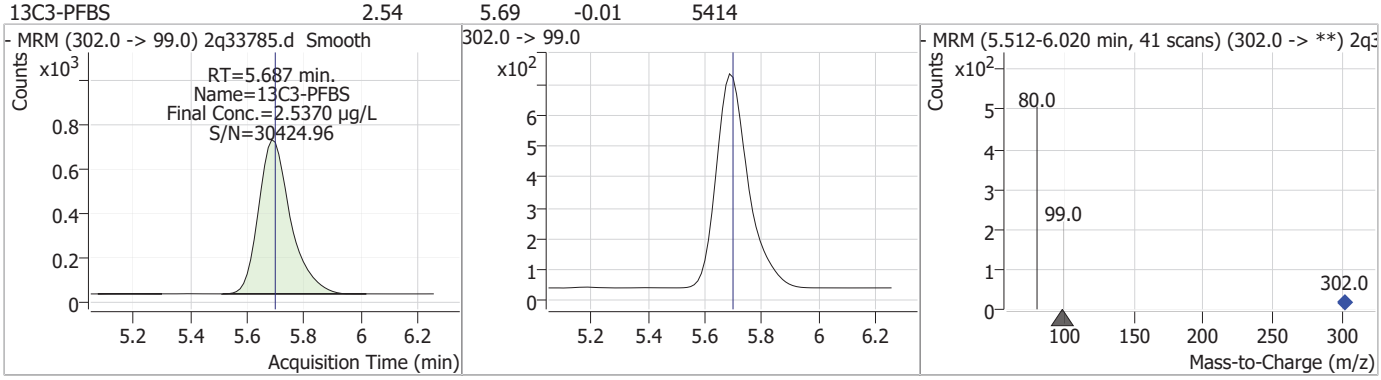


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.95	5.42	-0.01	1305				

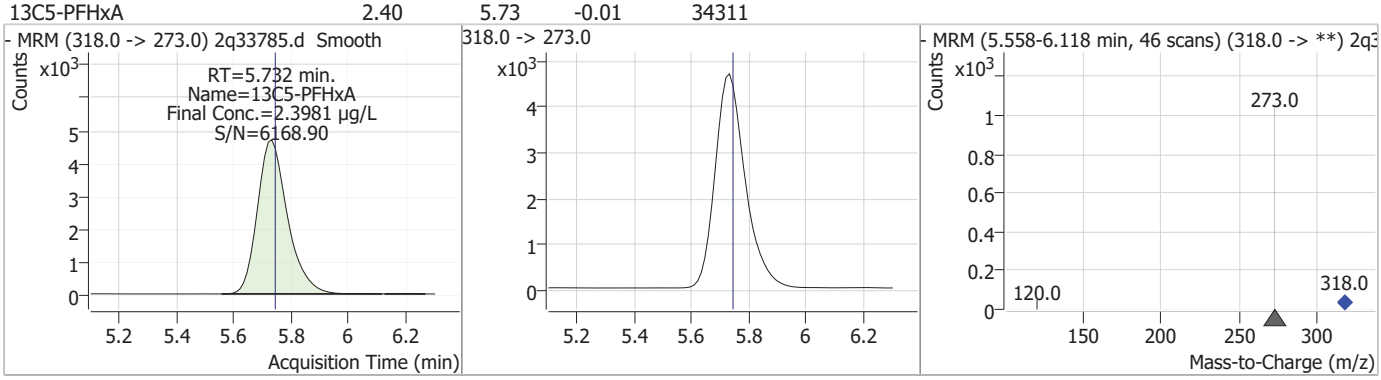


Perfluorinated Compounds by LC/MS/MS

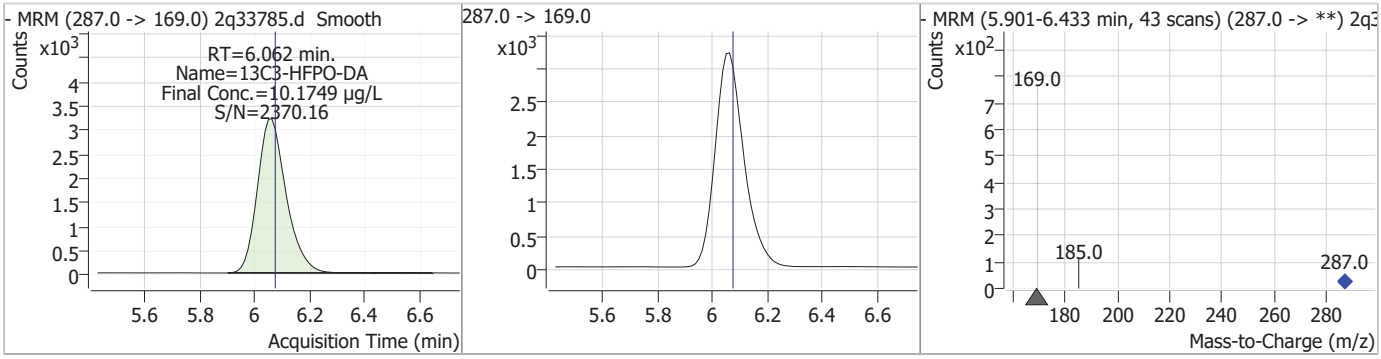
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.54	5.69	-0.01	5414				



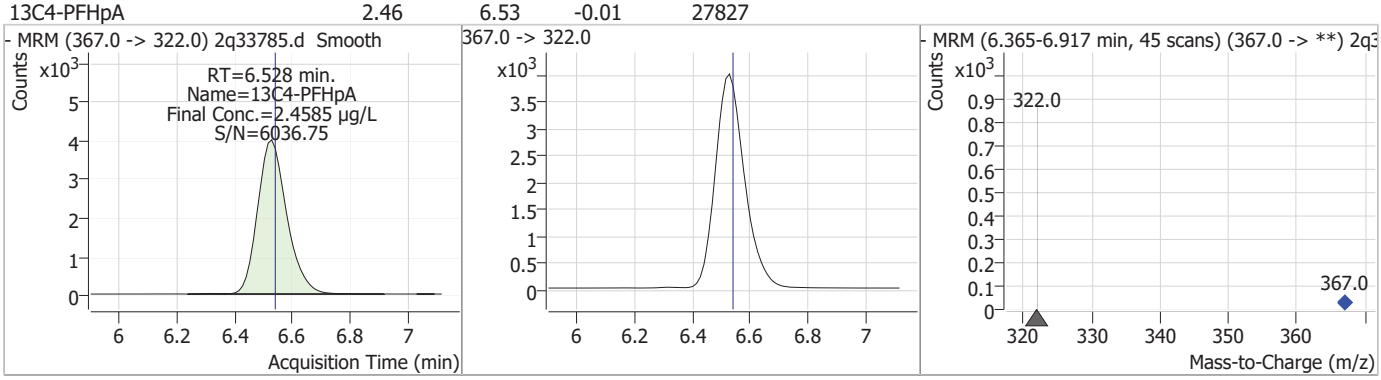
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.40	5.73	-0.01	34311				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.17	6.06	-0.01	23090				

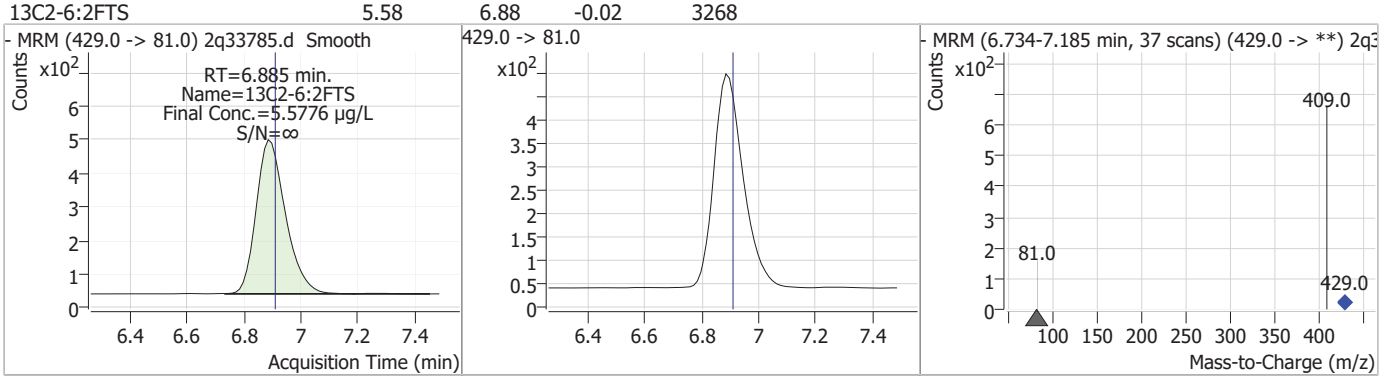


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.46	6.53	-0.01	27827				

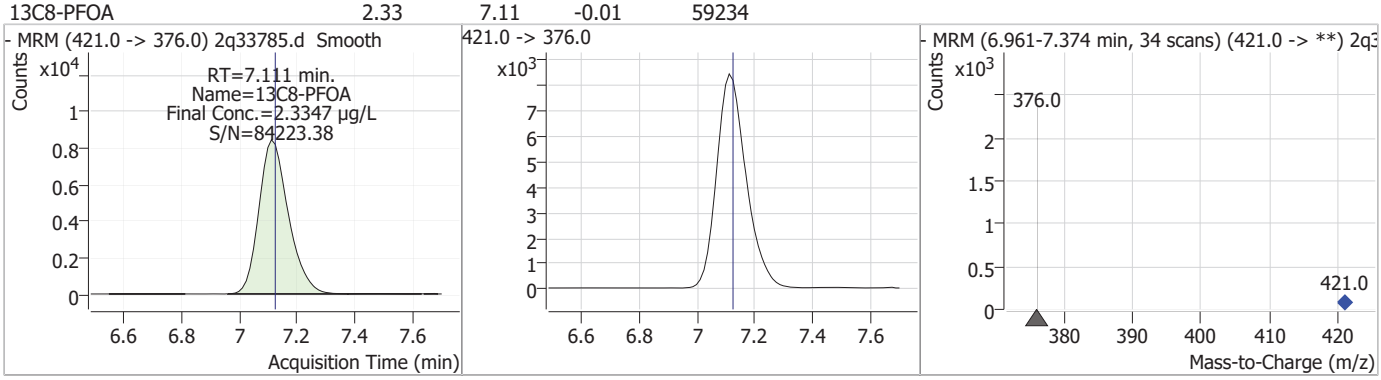


Perfluorinated Compounds by LC/MS/MS

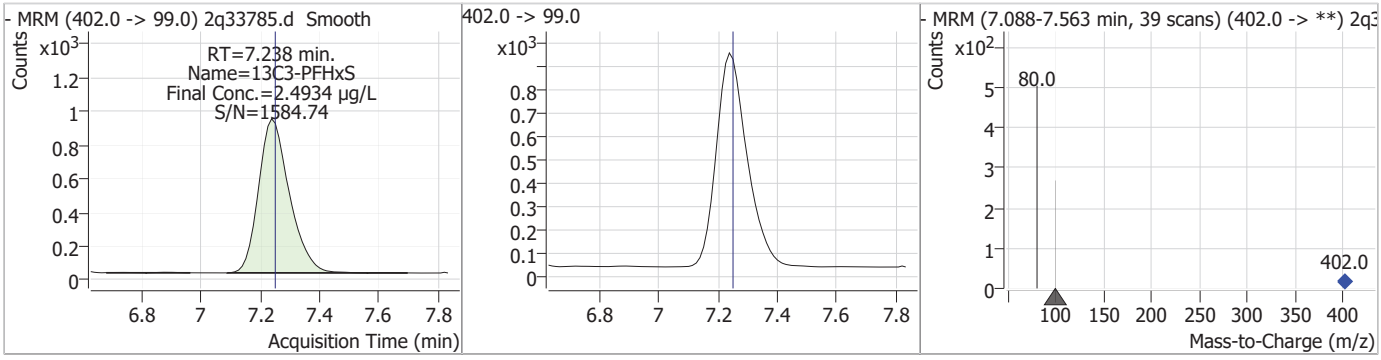
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.58	6.88	-0.02	3268				



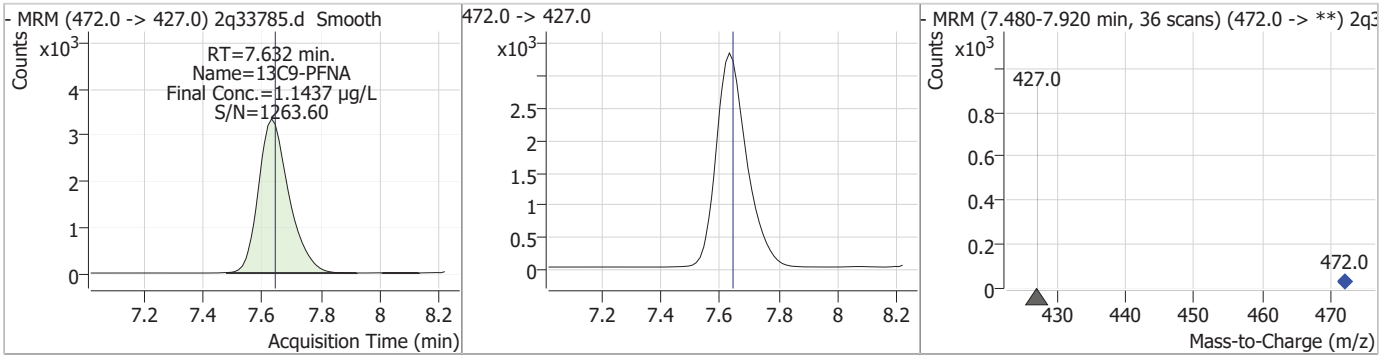
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.33	7.11	-0.01	59234				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.49	7.24	-0.01	6599				

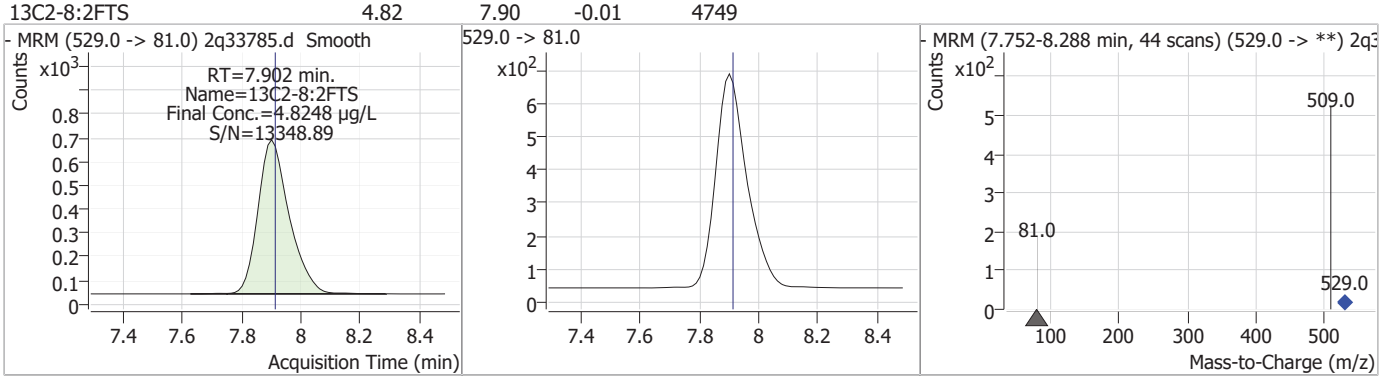


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.14	7.63	-0.01	23669				

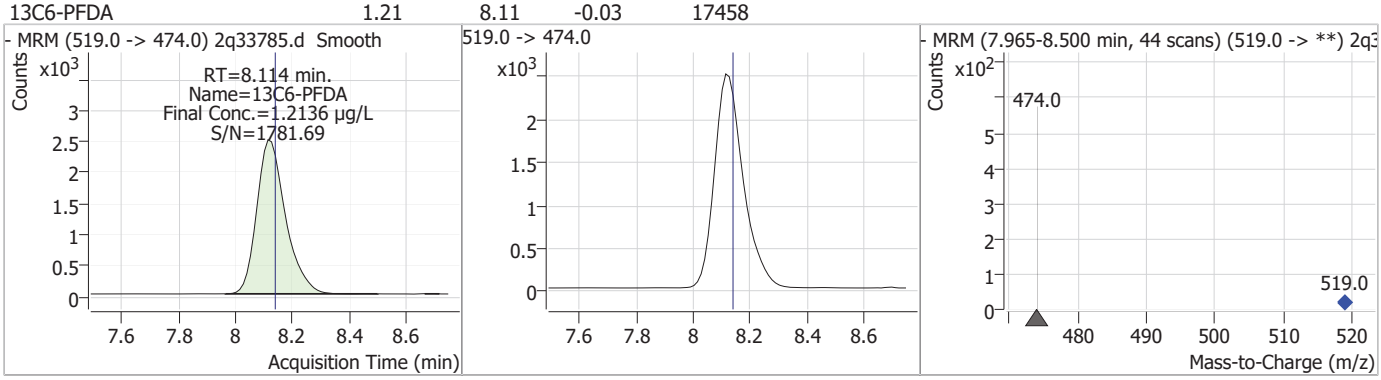


Perfluorinated Compounds by LC/MS/MS

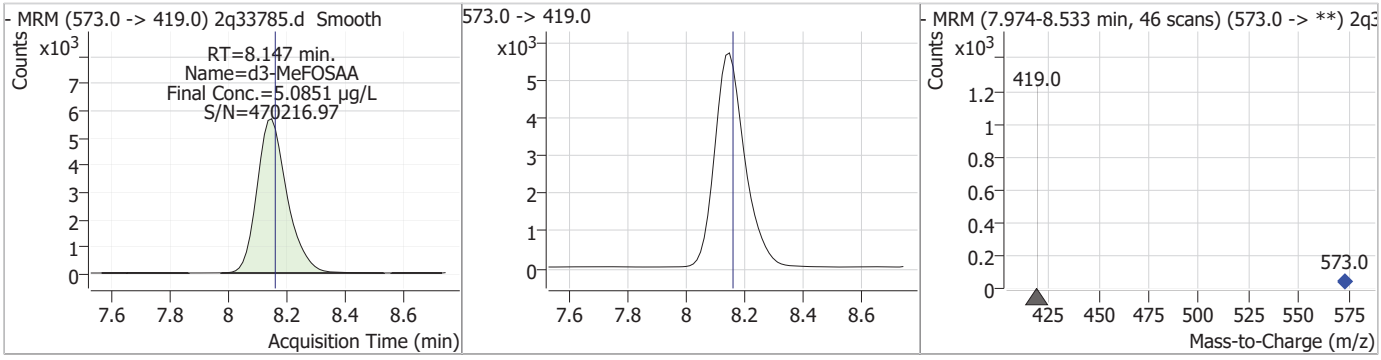
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.82	7.90	-0.01	4749				



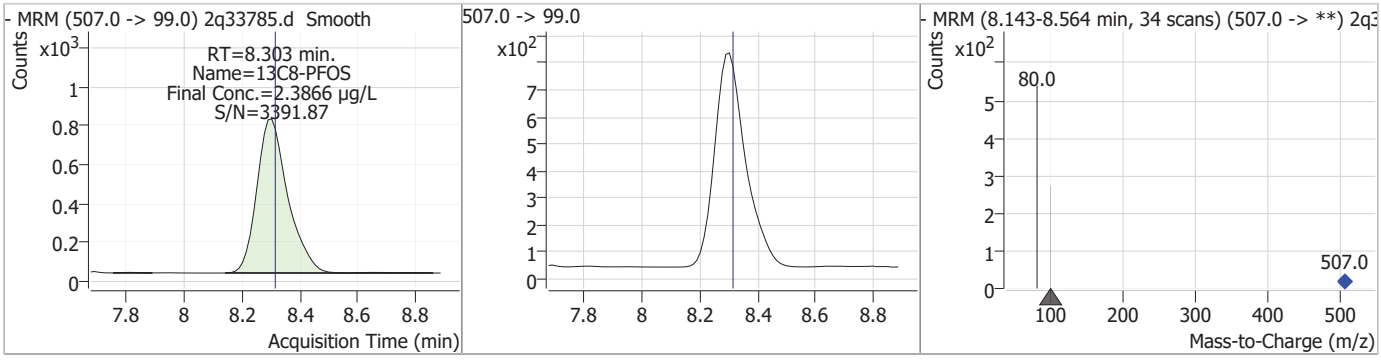
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.21	8.11	-0.03	17458				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.09	8.15	-0.01	40670				

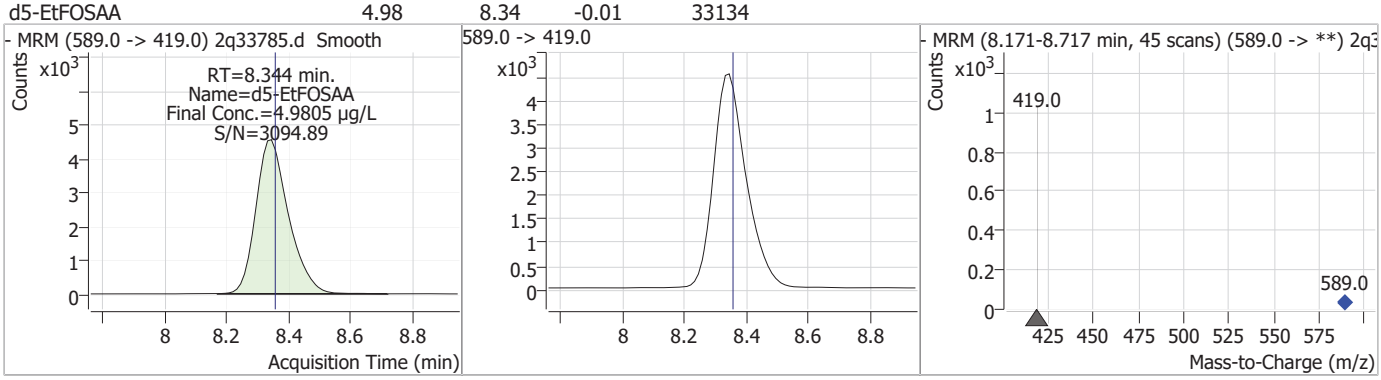


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.39	8.30	-0.01	5875				

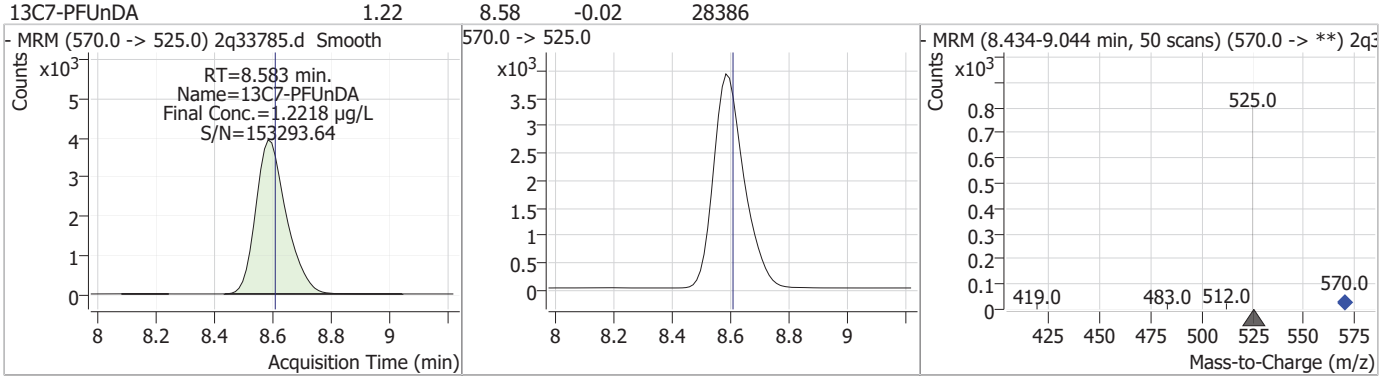


Perfluorinated Compounds by LC/MS/MS

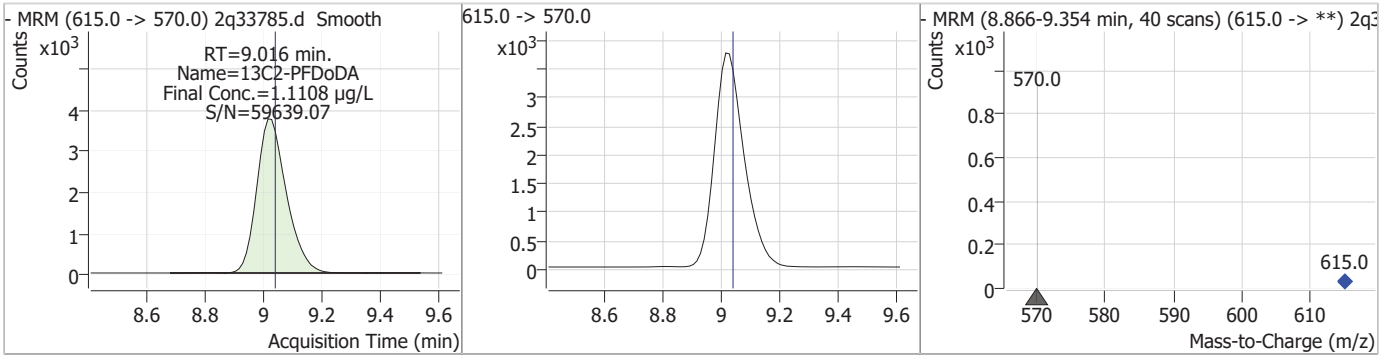
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.98	8.34	-0.01	33134				



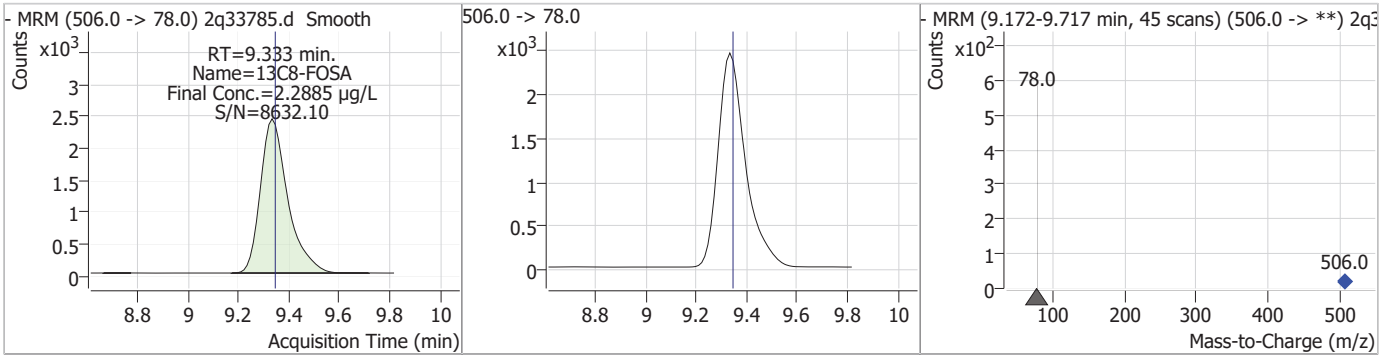
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.22	8.58	-0.02	28386				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.11	9.02	-0.02	26506				

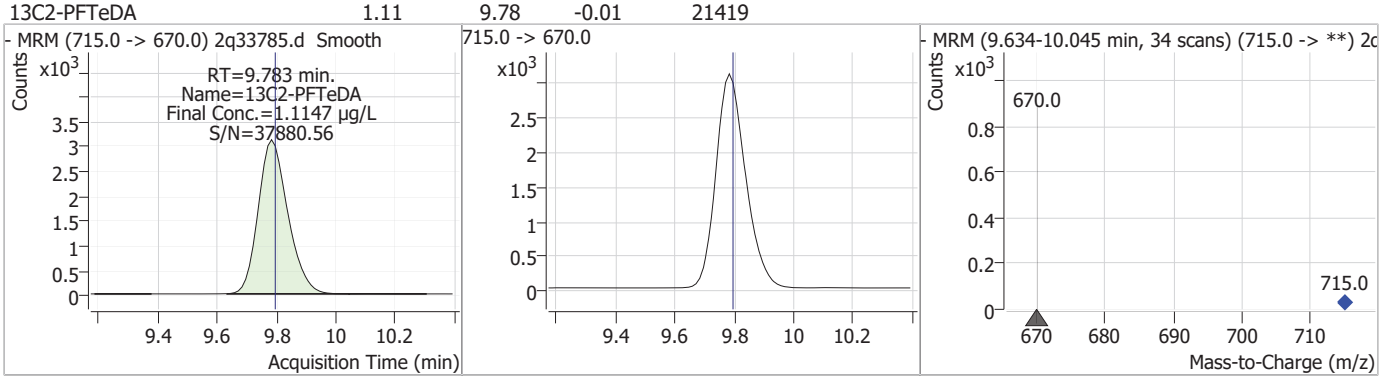


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.29	9.33	-0.01	18219				

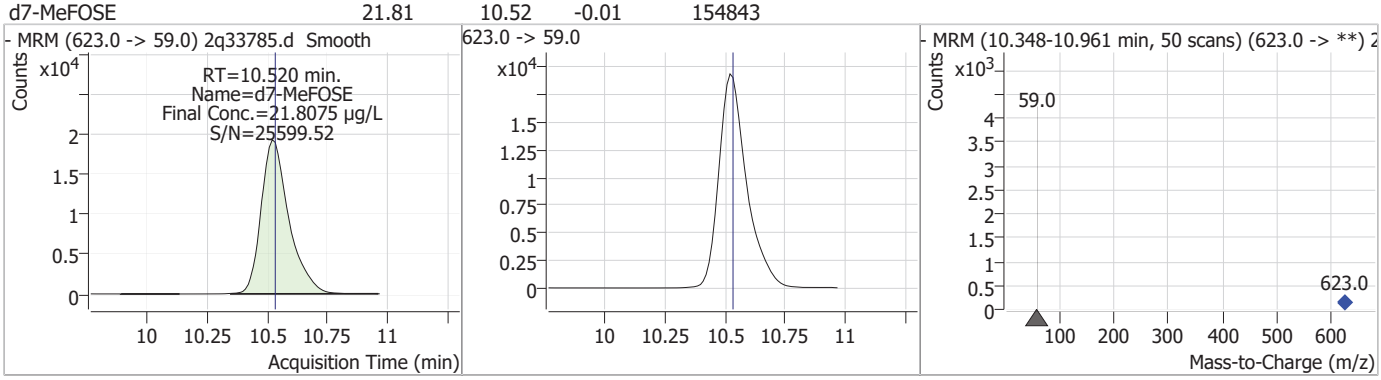


Perfluorinated Compounds by LC/MS/MS

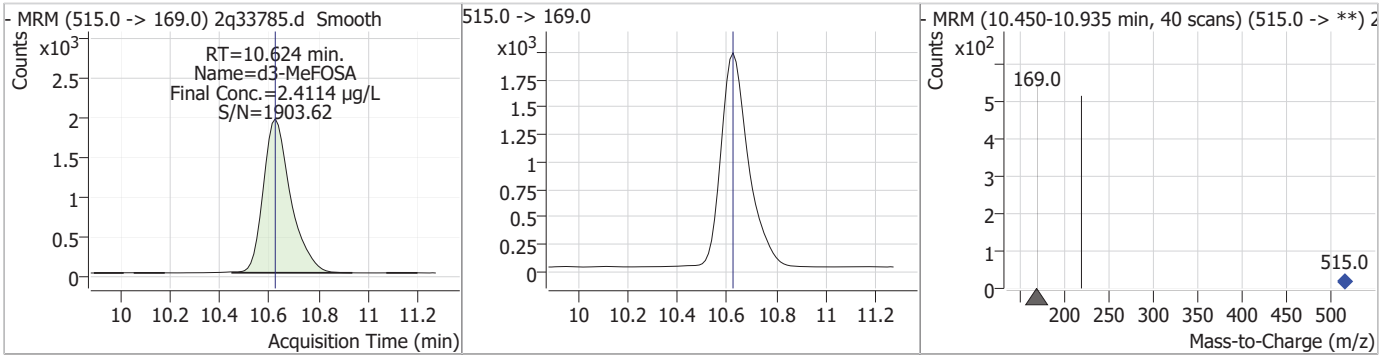
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.11	9.78	-0.01	21419				



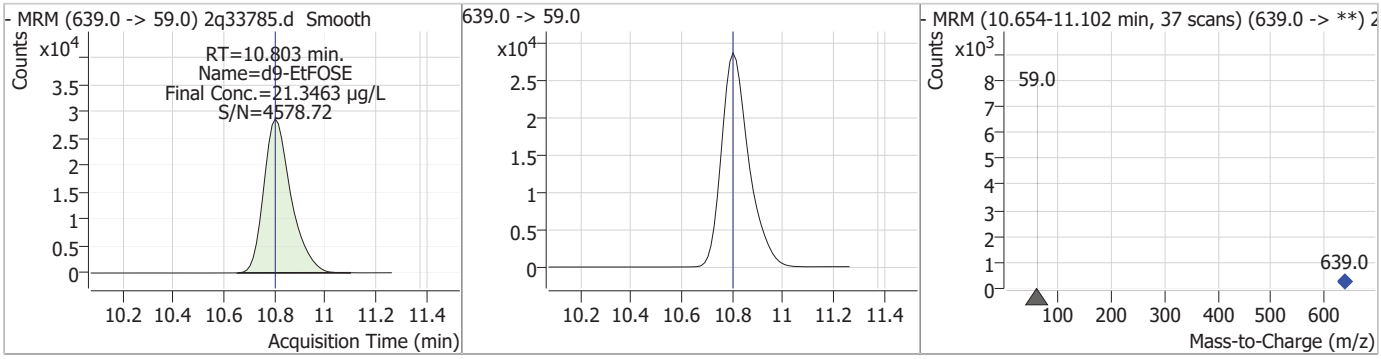
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	21.81	10.52	-0.01	154843				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.41	10.62	0.00	14909				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	21.35	10.80	0.00	213234				

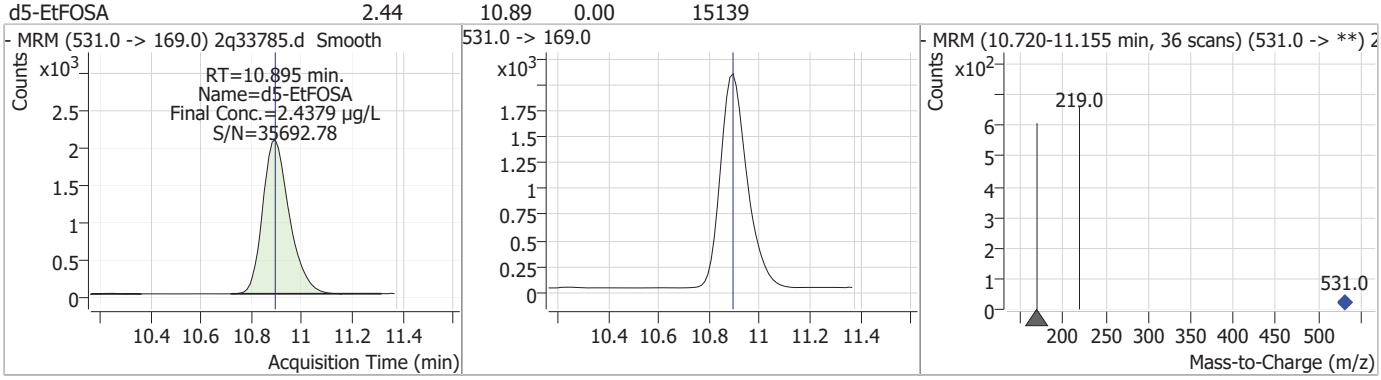


7.2.11

7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.44	10.89	0.00	15139				



7.2.11

7

Perfluorinated Compounds by LC/MS/MS

Data File	: 2q33799.d
Operator	: victoril
Acq. Method	: 1633.m
Acq. Date-Time	: 5/13/2025 3:51:47 AM
Sample Name	: ICCB
Vial	: P1-A1
DA Method File	: 050925_1633_T2Q344.quantmethod.xml
Batch Name	: T2Q345.batch.bin
Sample Information	: OP63380,T2Q345,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	107344	10.00 µg/L	0.000
M5-PFPeA	4.624	268.0 -> 223.0	57565	5.00 µg/L	-0.012
M5-PFHxA	5.732	318.0 -> 273.0	34374	2.50 µg/L	-0.012
M4-PFHpA	6.528	367.0 -> 322.0	28091	2.50 µg/L	-0.012
M8-PFOA	7.111	421.0 -> 376.0	61988	2.50 µg/L	-0.013
M9-PFNA	7.632	472.0 -> 427.0	25119	1.25 µg/L	-0.012
M6-PFDA	8.127	519.0 -> 474.0	16470	1.25 µg/L	-0.013
M7-PFUnDA	8.596	570.0 -> 525.0	26869	1.25 µg/L	-0.012
M2-PFDoDA	9.016	615.0 -> 570.0	27445	1.25 µg/L	-0.025
M2-PFTeDA	9.783	715.0 -> 670.0	19812	1.25 µg/L	-0.012
M8-FOSA	9.333	506.0 -> 78.0	19218	2.50 µg/L	-0.013
M3-PFBS	5.687	302.0 -> 99.0	5547	2.50 µg/L	-0.012
M3-PFHxS	7.238	402.0 -> 99.0	6751	2.50 µg/L	-0.012
M8-PFOS	8.303	507.0 -> 99.0	6304	2.50 µg/L	-0.012
M2-4:2FTS	5.421	329.0 -> 81.0	1442	5.00 µg/L	-0.012
M2-6:2FTS	6.897	429.0 -> 81.0	3067	5.00 µg/L	-0.012
M2-8:2FTS	7.902	529.0 -> 81.0	4550	5.00 µg/L	-0.012
M3-MeFOSAA	8.147	573.0 -> 419.0	41361	5.00 µg/L	-0.012
M3-HFPO-DA	6.062	287.0 -> 169.0	22733	10.00 µg/L	-0.012
M5-EtFOSAA	8.344	589.0 -> 419.0	32980	5.00 µg/L	-0.012
M7-MeFOSE	10.520	623.0 -> 59.0	152240	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	213094	25.00 µg/L	0.000
M5-EtFOSA	10.895	531.0 -> 169.0	15049	2.50 µg/L	0.000
M3-MeFOSA	10.624	515.0 -> 169.0	15012	2.50 µg/L	0.000
13C4-PFOS	8.304	503.0 -> 80.0	11199	2.50 µg/L	-0.012
13C3-PFBA	3.253	216.0 -> 172.0	48325	5.00 µg/L	-0.012
18O2-PFHxS	7.250	403.0 -> 84.0	7744	2.50 µg/L	-0.012
13C4-PFOA	7.111	417.0 -> 372.0	63173	2.50 µg/L	-0.013
13C2-PFDA	8.127	515.0 -> 470.0	16659	1.25 µg/L	-0.013
13C5-PFNA	7.632	468.0 -> 423.0	22093	1.25 µg/L	-0.012
13C2-PFHxA	5.733	315.0 -> 270.0	31342	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.421	329.0 -> 81.0	1442	5.43 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.5%	
13C2-6:2FTS	6.897	429.0 -> 81.0	3067	5.19 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.8%	
13C2-8:2FTS	7.902	529.0 -> 81.0	4550	4.58 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.7%	
13C2-PFDoDA	9.016	615.0 -> 570.0	27445	1.21 µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.8%	
13C2-PFTeDA	9.783	715.0 -> 670.0	19812	1.09 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 86.8%	
13C3-PFBS	5.687	302.0 -> 99.0	5547	2.58 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.1%	
13C3-PFHxS	7.238	402.0 -> 99.0	6751	2.53 µg/L	-0.012

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.2%	
13C4-PFBA	3.263	217.0 -> 172.0	107344	9.46 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.6%	
13C4-PFHpA	6.528	367.0 -> 322.0	28091	2.58 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.1%	
13C5-PFHxA	5.732	318.0 -> 273.0	34374	2.50 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.8%	
13C5-PFPeA	4.624	268.0 -> 223.0	57565	4.87 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.4%	
13C6-PFDA	8.127	519.0 -> 474.0	16470	1.21 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.4%	
13C7-PFUnDA	8.596	570.0 -> 525.0	26869	1.22 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.4%	
13C8-FOSA	9.333	506.0 -> 78.0	19218	2.51 µg/L	-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.3%	
13C8-PFOA	7.111	421.0 -> 376.0	61988	2.44 µg/L	-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.6%	
13C8-PFOS	8.303	507.0 -> 99.0	6304	2.66 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.4%	
13C9-PFNA	7.632	472.0 -> 427.0	25119	1.31 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.4%	
d3-MeFOSAA	8.147	573.0 -> 419.0	41361	5.37 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.4%	
13C3-HFPO-DA	6.062	287.0 -> 169.0	22733	10.40 µg/L	-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 104.0%	
d3-MeFOSA	10.624	515.0 -> 169.0	15012	2.52 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.9%	
d5-EtFOSAA	8.344	589.0 -> 419.0	32980	5.15 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.0%	
d7-MeFOSE	10.520	623.0 -> 59.0	152240	22.27 µg/L	-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 89.1%	
d9-EtFOSE	10.803	639.0 -> 59.0	213094	22.15 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 88.6%	
d5-EtFOSA	10.895	531.0 -> 169.0	15049	2.52 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.7%	
Target Compounds					QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0	-	N.D.	
		299.0 -> 99.0			
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			
PFDS	-	599.0 -> 80.0	-	N.D.	

Perfluorinated Compounds by LC/MS/MS

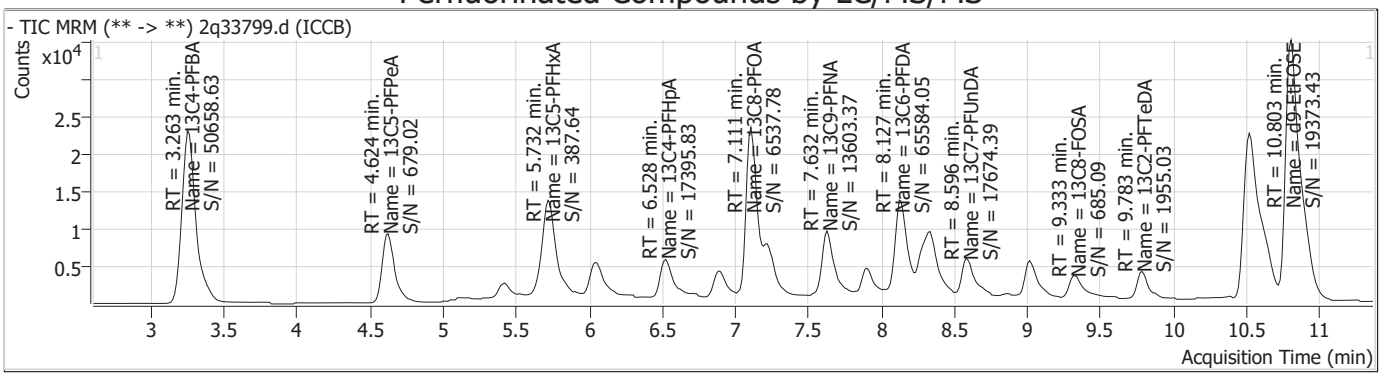
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 169.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 169.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

 # = Qualifier out of range, m = manually integrated, + = Area summed

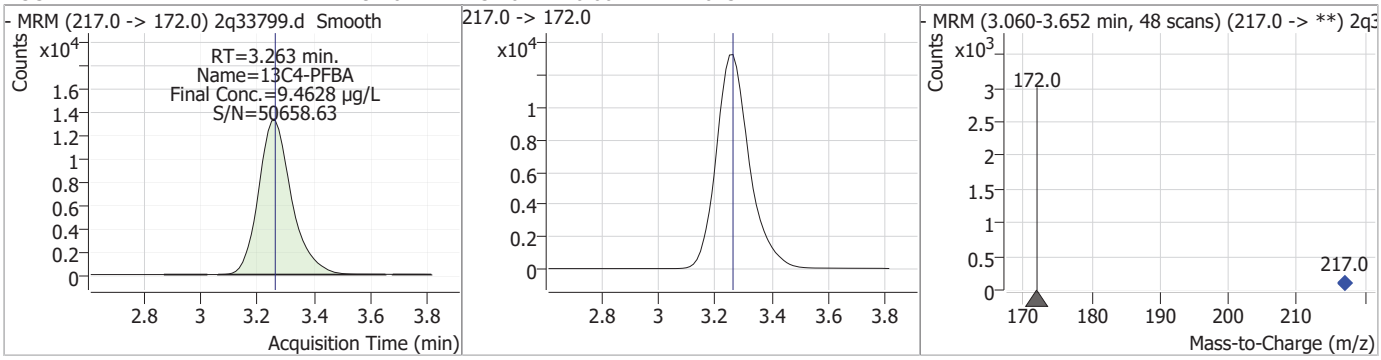
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

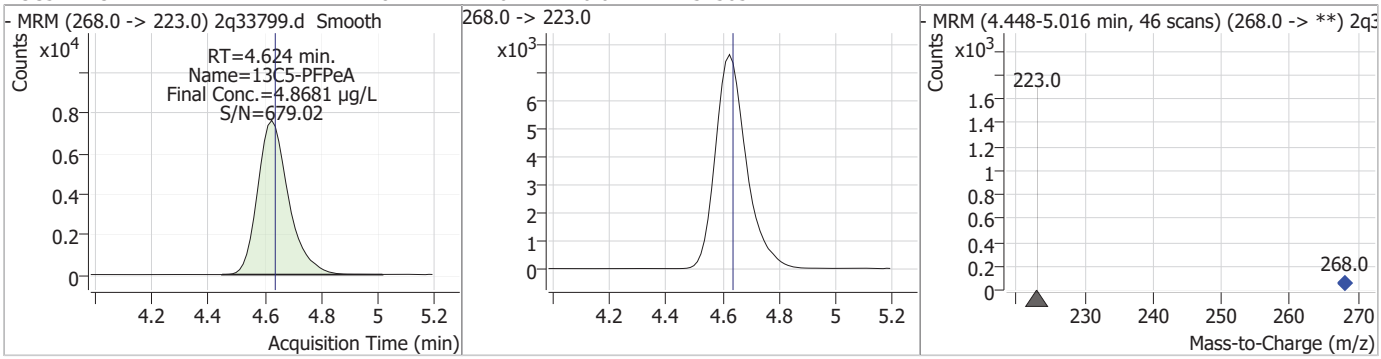
Perfluorinated Compounds by LC/MS/MS



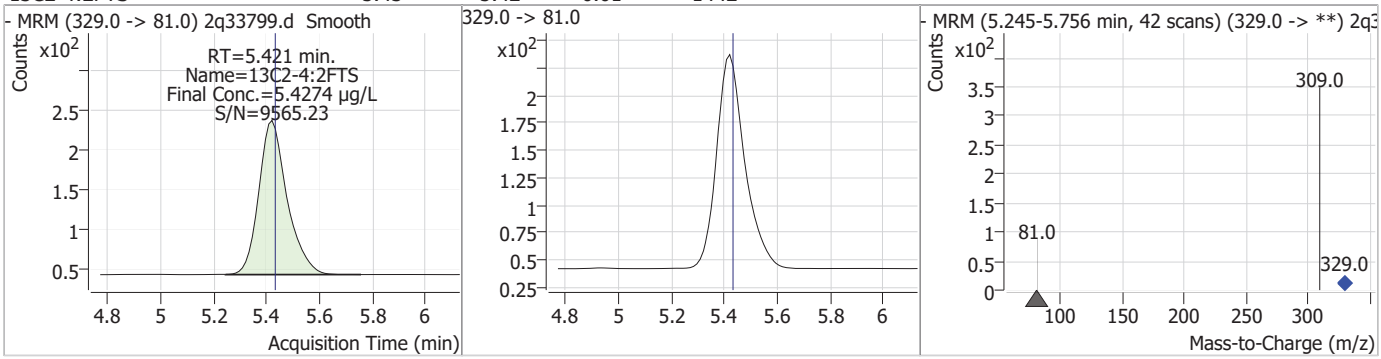
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.46	3.26	0.00	107344				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.87	4.62	-0.01	57565				

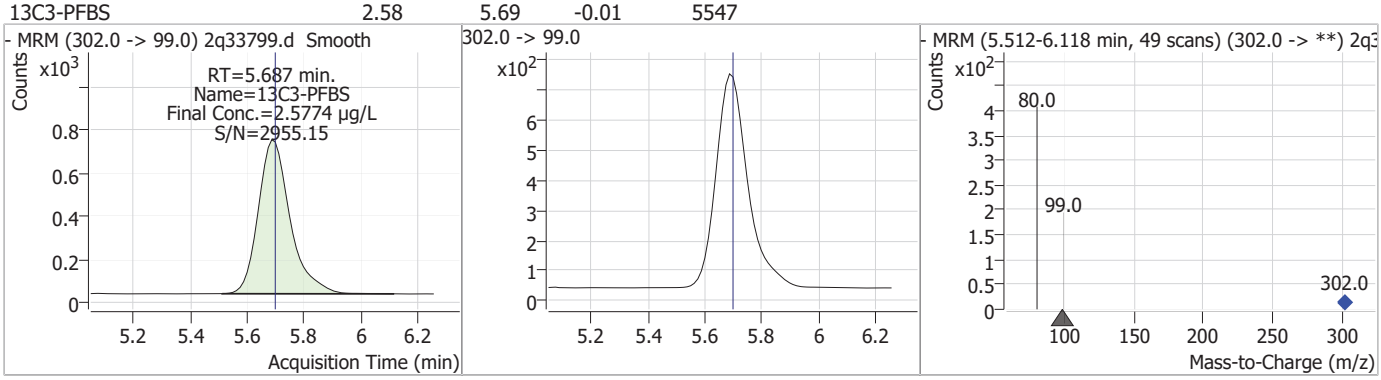


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.43	5.42	-0.01	1442				

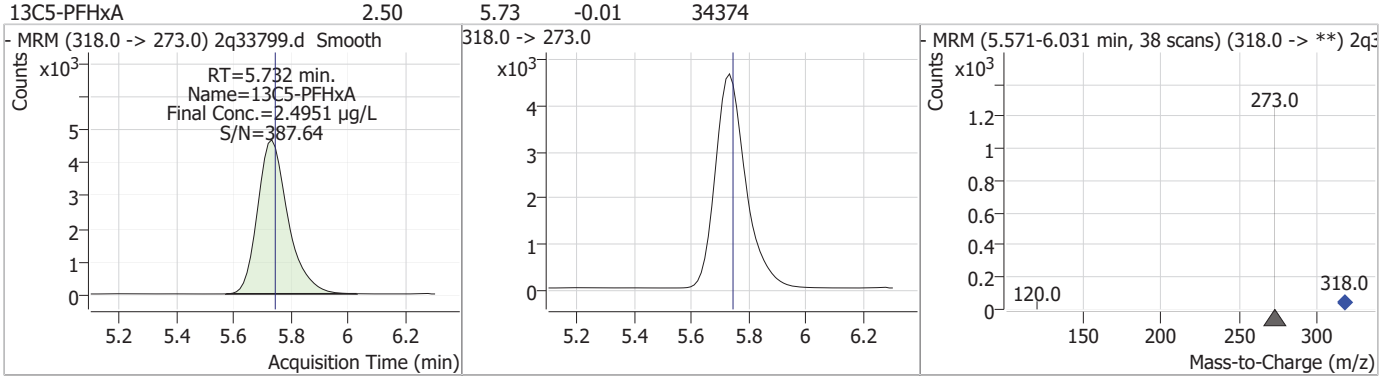


Perfluorinated Compounds by LC/MS/MS

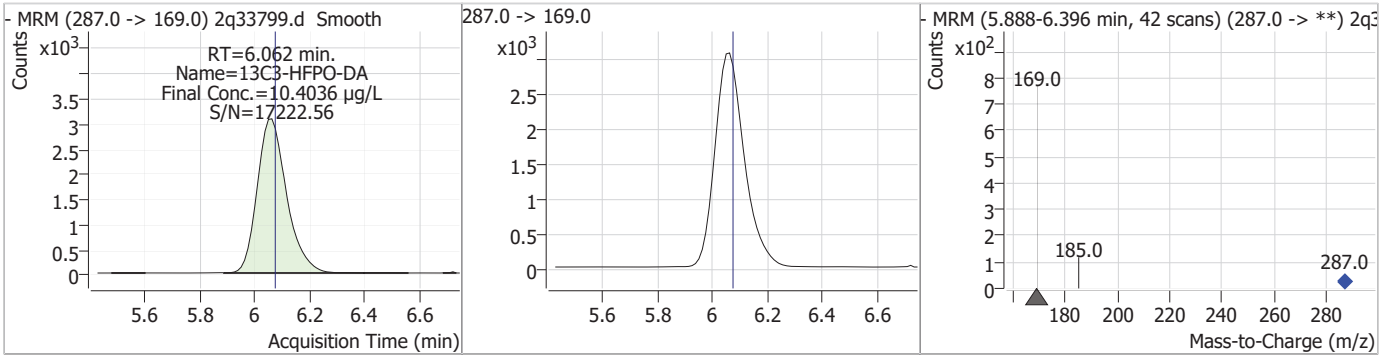
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.58	5.69	-0.01	5547				



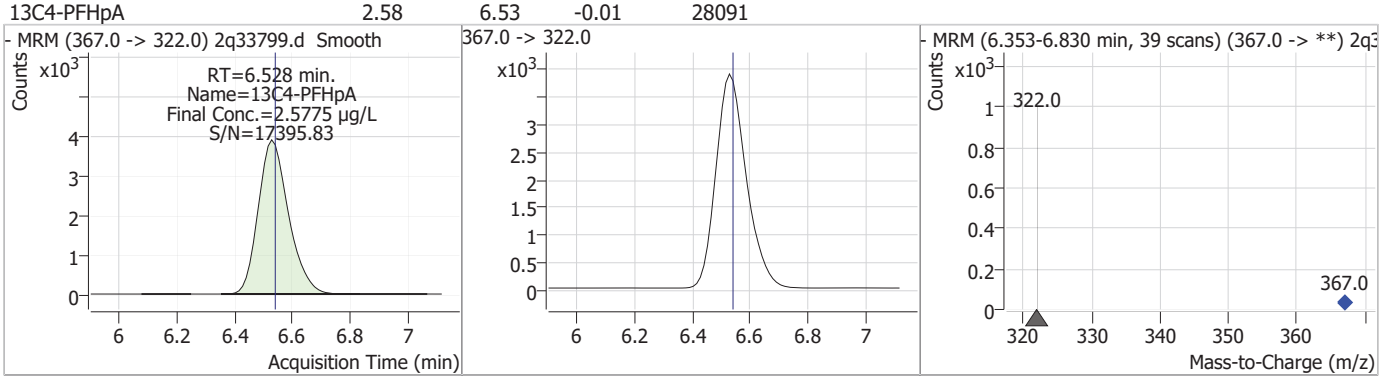
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.50	5.73	-0.01	34374				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.40	6.06	-0.01	22733				

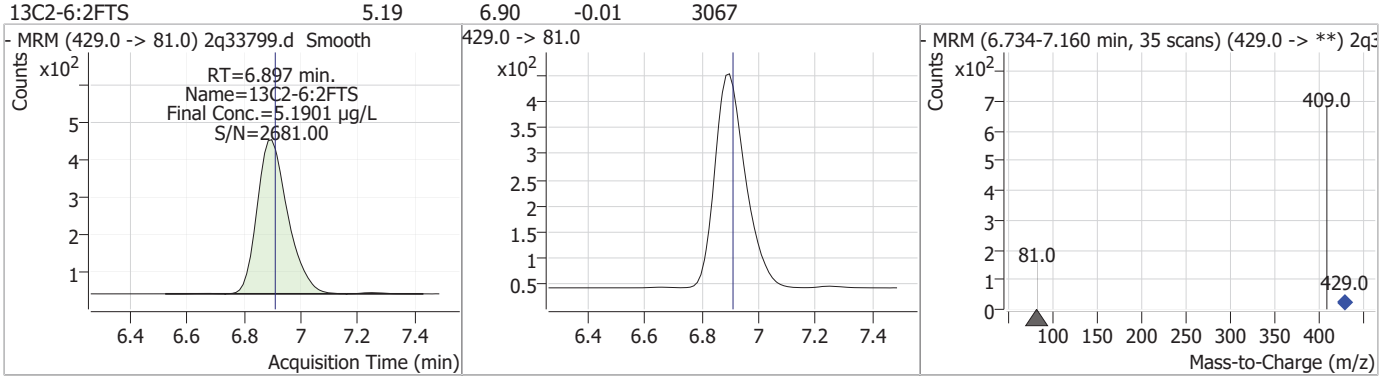


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.58	6.53	-0.01	28091				

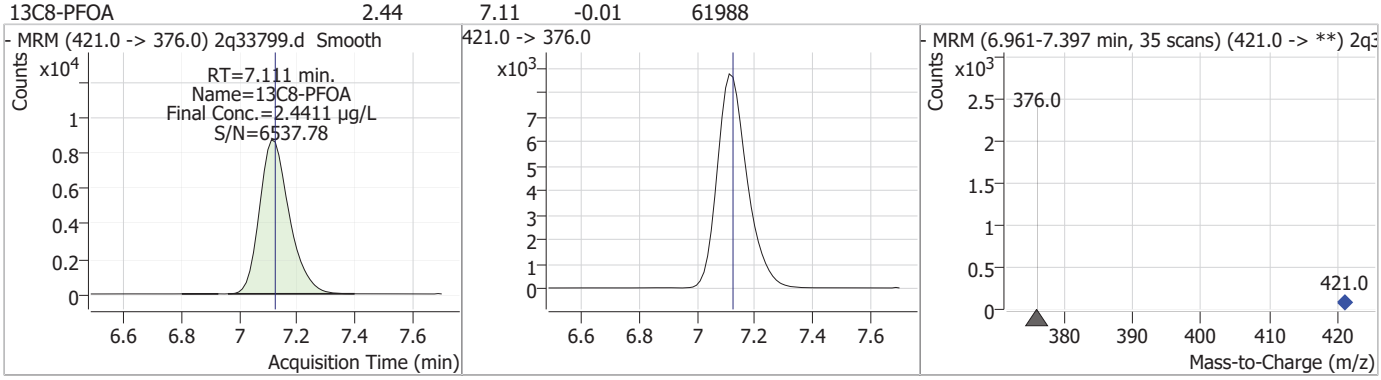


Perfluorinated Compounds by LC/MS/MS

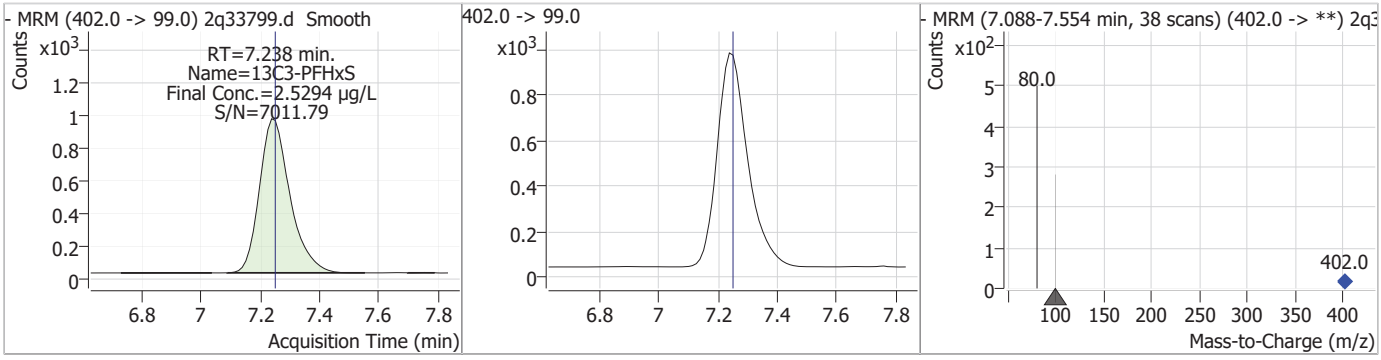
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.19	6.90	-0.01	3067				



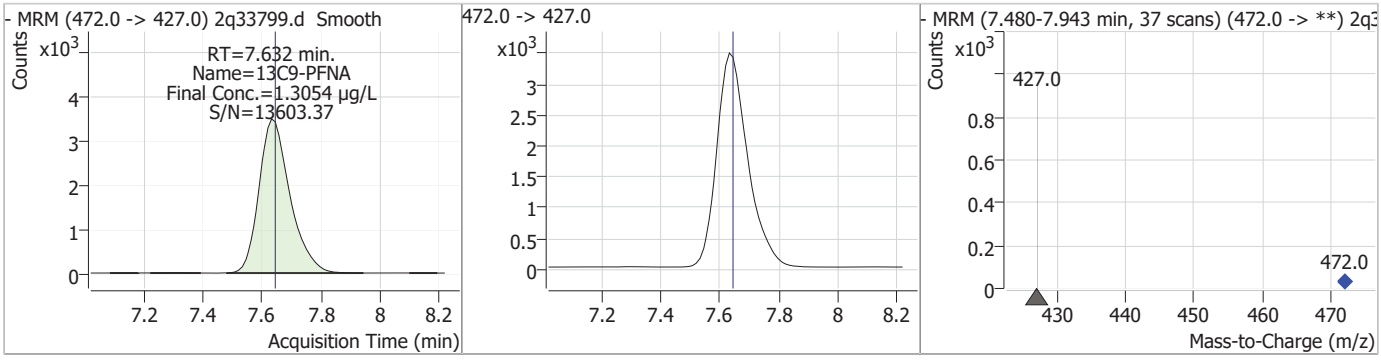
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.44	7.11	-0.01	61988				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.53	7.24	-0.01	6751				

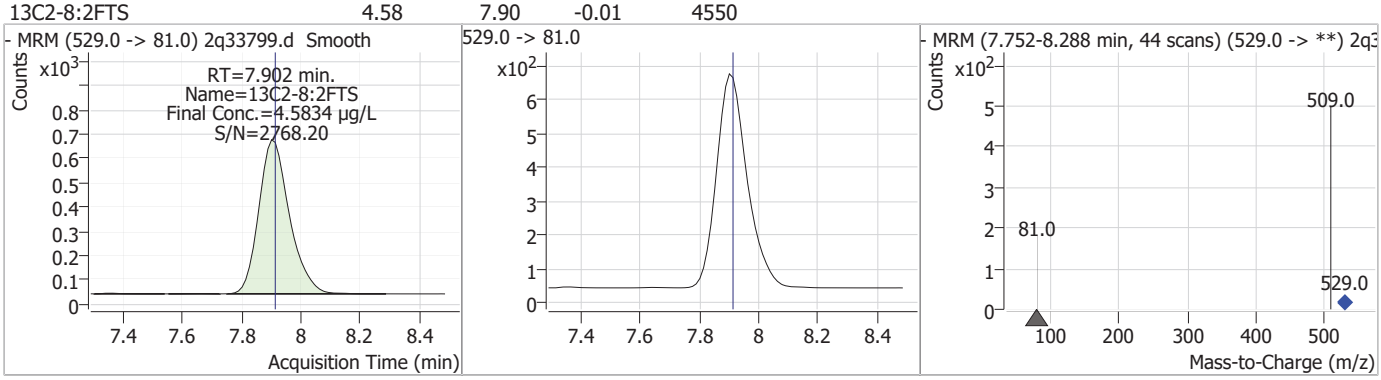


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.31	7.63	-0.01	25119				

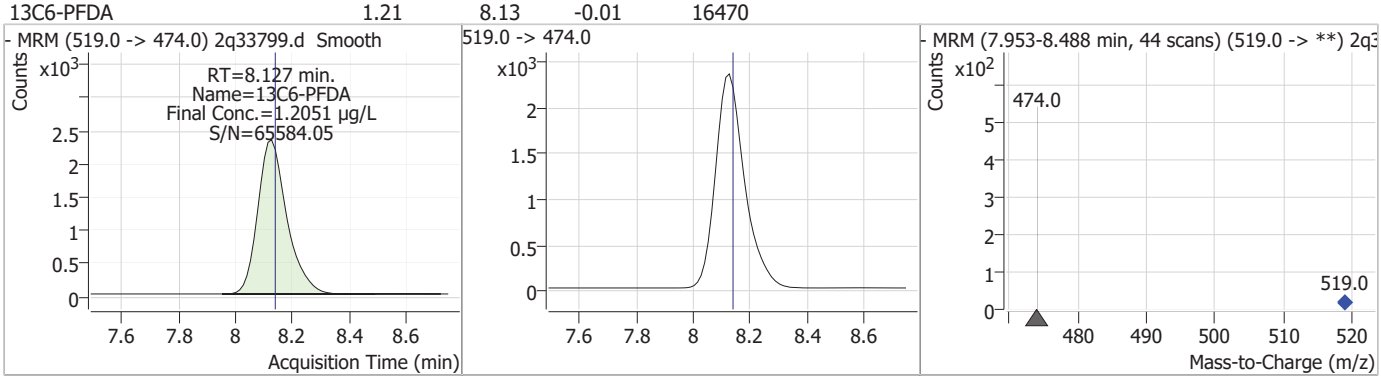


Perfluorinated Compounds by LC/MS/MS

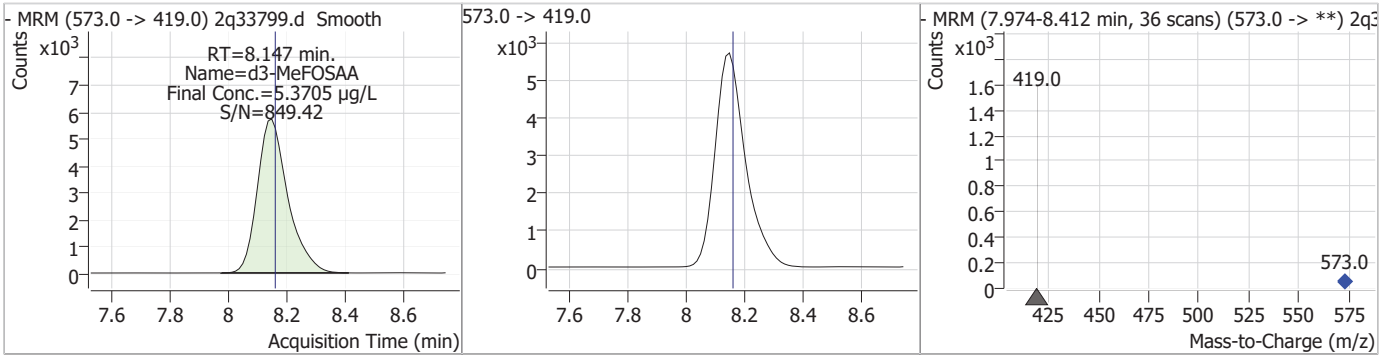
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.58	7.90	-0.01	4550				



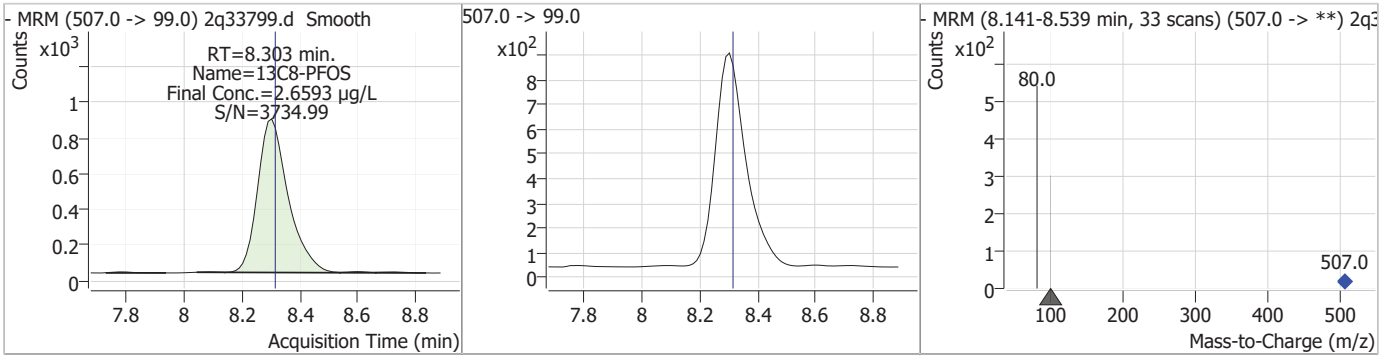
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.21	8.13	-0.01	16470				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.37	8.15	-0.01	41361				

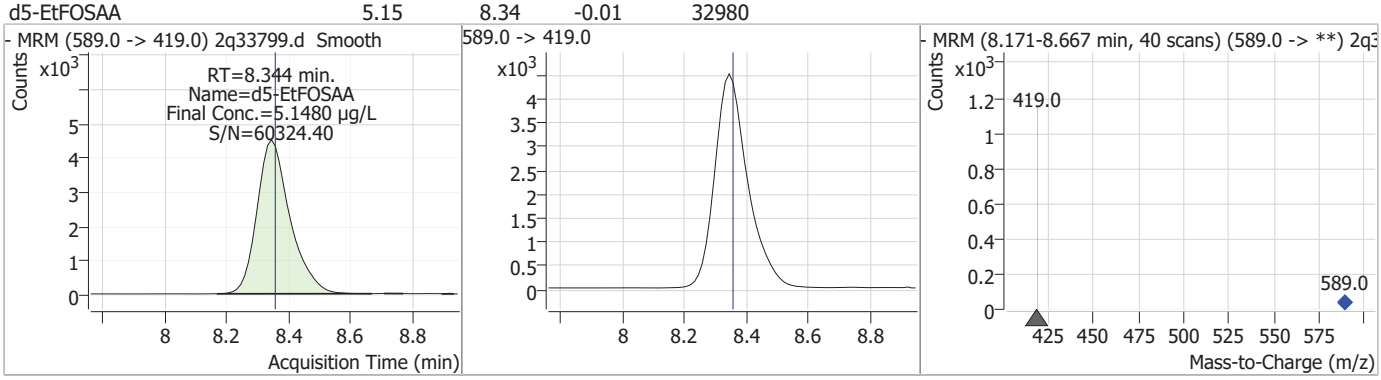


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.66	8.30	-0.01	6304				

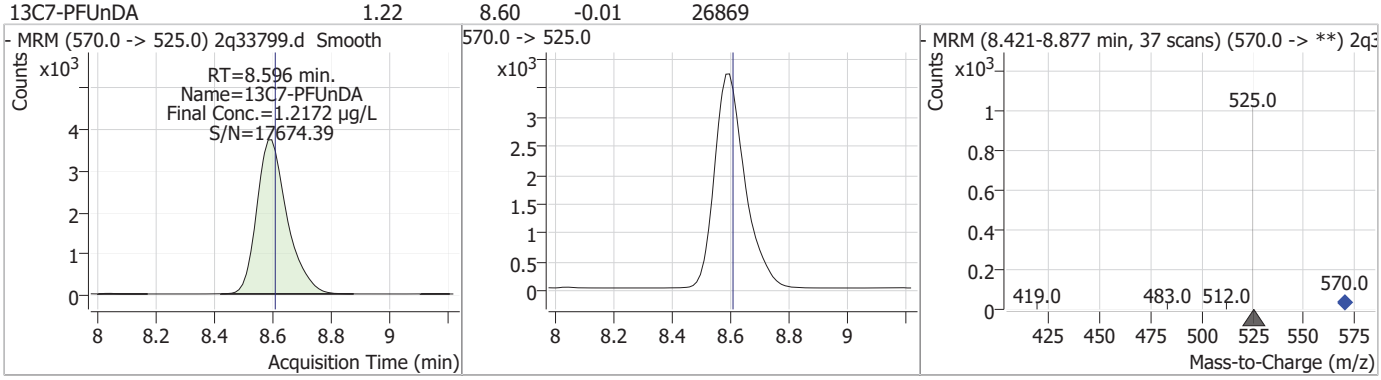


Perfluorinated Compounds by LC/MS/MS

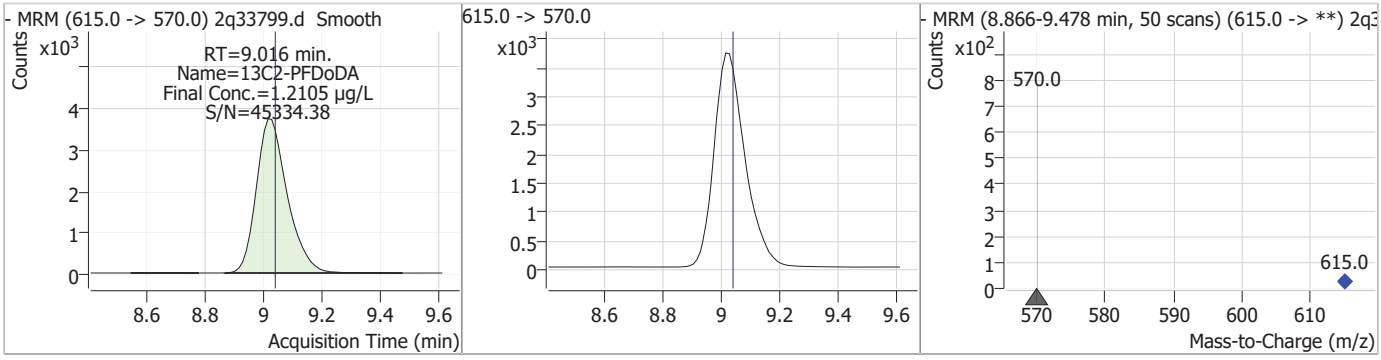
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.15	8.34	-0.01	32980				



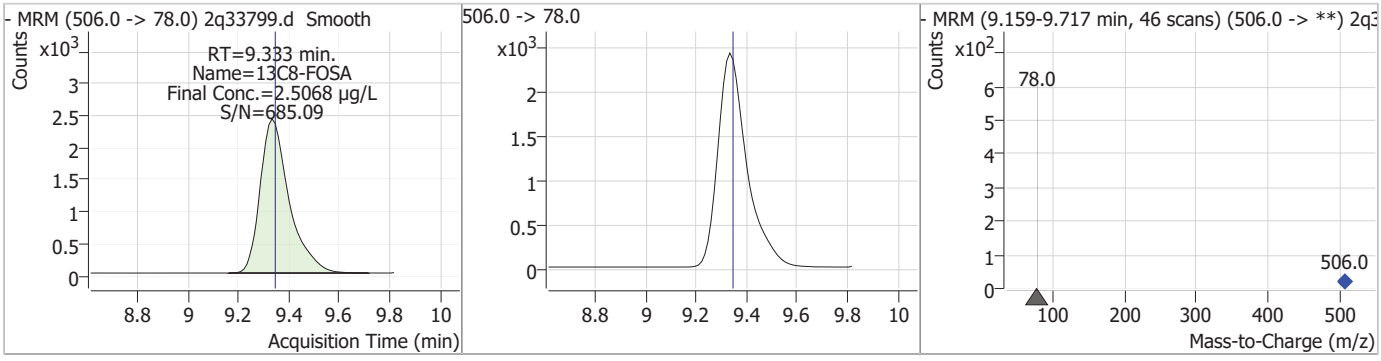
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.22	8.60	-0.01	26869				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.21	9.02	-0.02	27445				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.51	9.33	-0.01	19218				



7.2.12

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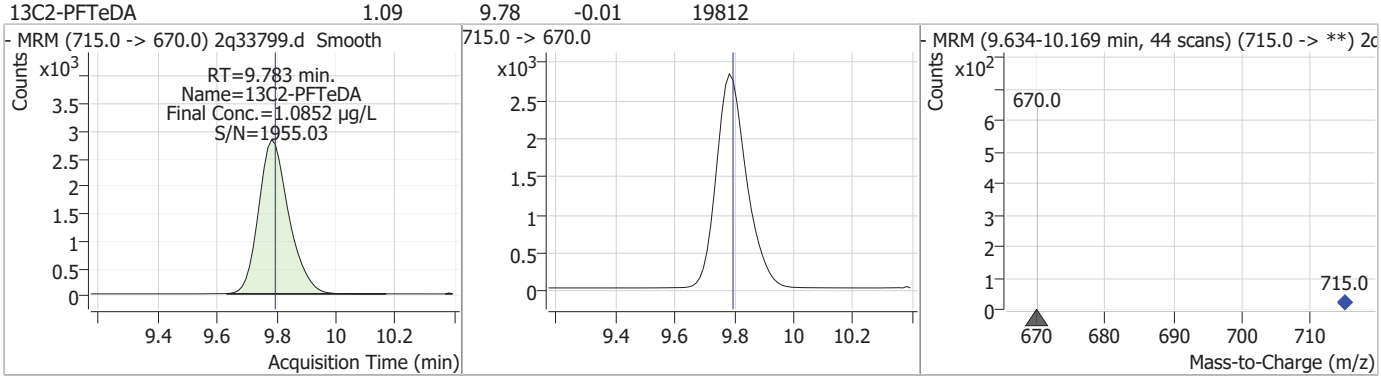
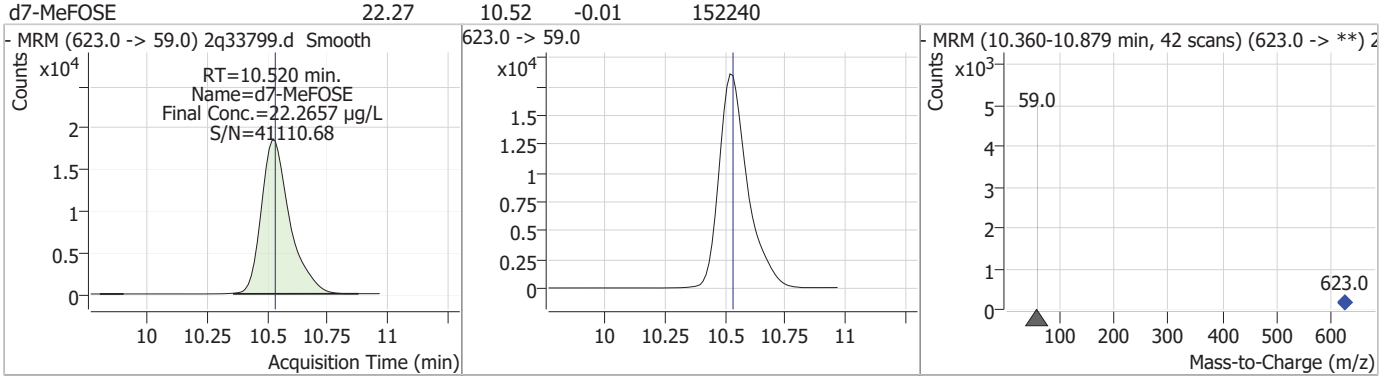
Perfluorinated Compounds by LC/MS/MS

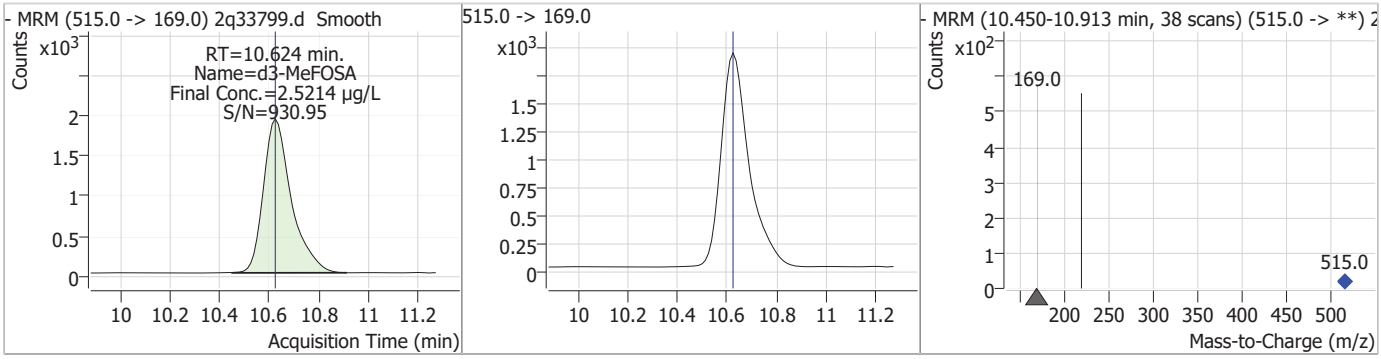
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.09	9.78	-0.01	19812				



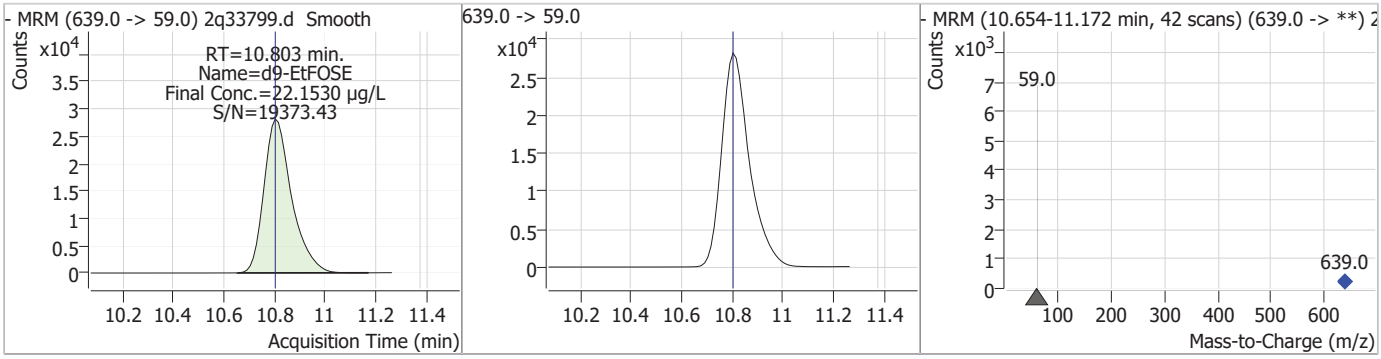
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.27	10.52	-0.01	152240				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.52	10.62	0.00	15012				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.15	10.80	0.00	213094				



7.2.12

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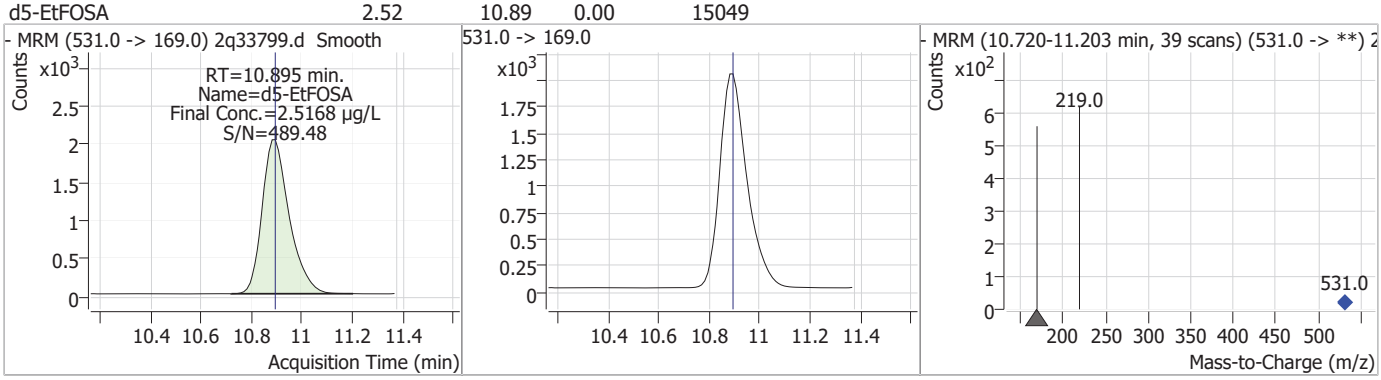
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.52	10.89	0.00	15049				



7.2.12

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Perfluorinated Compounds by LC/MS/MS

Data File	: 1q26037.d
Operator	: maksudh
Acq. Method	: 1633.m
Acq. Date-Time	: 5/14/2025 6:37:52 PM
Sample Name	: IBLK
Vial	: P1-A1
DA Method File	: 051425_1633_T1Q361.quantmethod.xml
Batch Name	: t1q361.batch.bin
Sample Information	: OP63461,T1Q361,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	160585	10.00 µg/L	0.000
M5-PFPeA	4.636	268.0 -> 223.0	96898	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	54104	2.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	45102	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	70574	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	26119	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	25839	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	38854	1.25 µg/L	0.000
M2-PFDoDA	9.014	615.0 -> 570.0	36841	1.25 µg/L	0.000
M2-PFTeDA	9.772	715.0 -> 670.0	14872	1.25 µg/L	0.000
M8-FOSA	9.334	506.0 -> 78.0	17006	2.50 µg/L	0.000
M3-PFBS	5.711	302.0 -> 99.0	6000	2.50 µg/L	0.000
M3-PFHxS	7.263	402.0 -> 99.0	6286	2.50 µg/L	-0.012
M8-PFOS	8.304	507.0 -> 99.0	6650	2.50 µg/L	0.000
M2-4:2FTS	5.446	329.0 -> 81.0	1082	5.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	2367	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	3584	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	34702	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	18684	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	27636	5.00 µg/L	0.000
M7-MeFOSE	10.510	623.0 -> 59.0	91650	25.00 µg/L	0.000
M9-EtFOSE	10.780	639.0 -> 59.0	104308	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	13967	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	12550	2.50 µg/L	0.000
13C4-PFOS	8.304	503.0 -> 80.0	10847	2.50 µg/L	0.000
13C3-PFBA	3.251	216.0 -> 172.0	66322	5.00 µg/L	0.000
18O2-PFHxS	7.262	403.0 -> 84.0	7745	2.50 µg/L	-0.012
13C4-PFOA	7.149	417.0 -> 372.0	77394	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	21304	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	23649	1.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	51047	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1082	4.18 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 83.7%	
13C2-6:2FTS	6.922	429.0 -> 81.0	2367	4.72 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.4%	
13C2-8:2FTS	7.927	529.0 -> 81.0	3584	4.54 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.9%	
13C2-PFDoDA	9.014	615.0 -> 570.0	36841	1.27 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.0%	
13C2-PFTeDA	9.772	715.0 -> 670.0	14872	1.22 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.8%	
13C3-PFBS	5.711	302.0 -> 99.0	6000	2.32 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.9%	
13C3-PFHxS	7.263	402.0 -> 99.0	6286	2.43 µg/L	-0.012

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.1%	
13C4-PFBA	3.260	217.0 -> 172.0	160585	10.18 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.8%	
13C4-PFHpA	6.553	367.0 -> 322.0	45102	2.55 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.9%	
13C5-PFHxA	5.759	318.0 -> 273.0	54104	2.49 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.7%	
13C5-PFPeA	4.636	268.0 -> 223.0	96898	5.18 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.6%	
13C6-PFDA	8.139	519.0 -> 474.0	25839	1.25 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.2%	
13C7-PFUnDA	8.595	570.0 -> 525.0	38854	1.30 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.8%	
13C8-FOSA	9.334	506.0 -> 78.0	17006	2.57 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.7%	
13C8-PFOA	7.148	421.0 -> 376.0	70574	2.51 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.2%	
13C8-PFOS	8.304	507.0 -> 99.0	6650	2.66 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.6%	
13C9-PFNA	7.656	472.0 -> 427.0	26119	1.35 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 108.3%	
d3-MeFOSAA	8.161	573.0 -> 419.0	34702	5.25 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.1%	
13C3-HFPO-DA	6.087	287.0 -> 169.0	18684	9.82 µg/L	0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.2%	
d3-MeFOSA	10.601	515.0 -> 169.0	12550	2.44 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.8%	
d5-EtFOSAA	8.358	589.0 -> 419.0	27636	5.14 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.8%	
d7-MeFOSE	10.510	623.0 -> 59.0	91650	26.99 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 108.0%	
d9-EtFOSE	10.780	639.0 -> 59.0	104308	25.93 µg/L	0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 103.7%	
d5-EtFOSA	10.859	531.0 -> 169.0	13967	2.66 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.5%	
Target Compounds					**QValue**
4:2FTS	-	327.0 -> 307.0	-	N.D.	
		327.0 -> 81.0			
6:2FTS	-	427.0 -> 407.0	-	N.D.	
		427.0 -> 81.0			
8:2FTS	-	527.0 -> 507.0	-	N.D.	
		527.0 -> 81.0			
EtFOSAA	-	584.0 -> 419.0	-	N.D.	
		584.0 -> 483.0			
FOSA	-	498.0 -> 78.0	-	N.D.	
		498.0 -> 478.0			
MeFOSAA	-	570.0 -> 419.0	-	N.D.	
		570.0 -> 512.0			
PFBA	-	213.0 -> 169.0	-	N.D.	
PFBS	-	299.0 -> 80.0	-	N.D.	
		299.0 -> 99.0			
PFDA	-	513.0 -> 469.0	-	N.D.	
		513.0 -> 219.0			
PFDoDA	-	613.0 -> 569.0	-	N.D.	
		613.0 -> 319.0			
PFDS	-	599.0 -> 80.0	-	N.D.	

Perfluorinated Compounds by LC/MS/MS

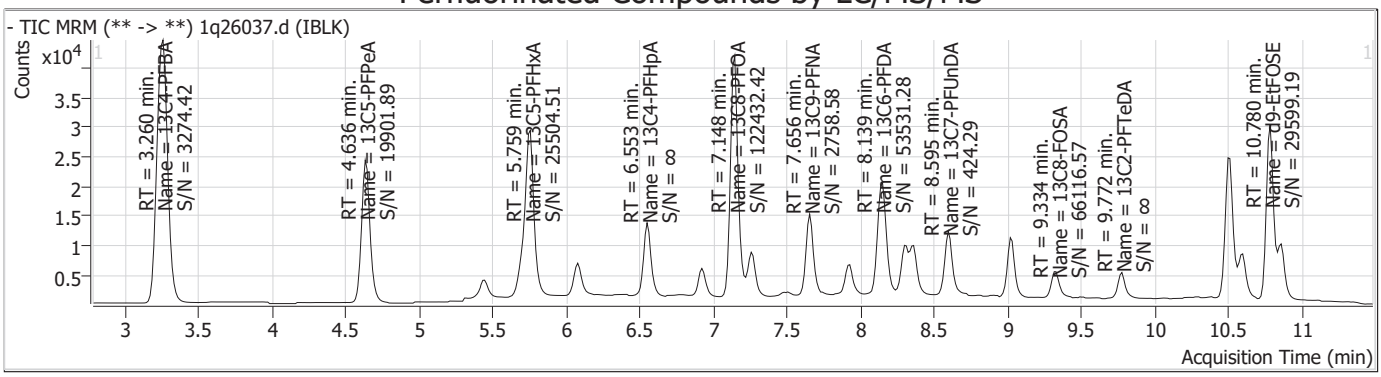
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 219.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 369.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

 # = Qualifier out of range, m = manually integrated, + = Area summed

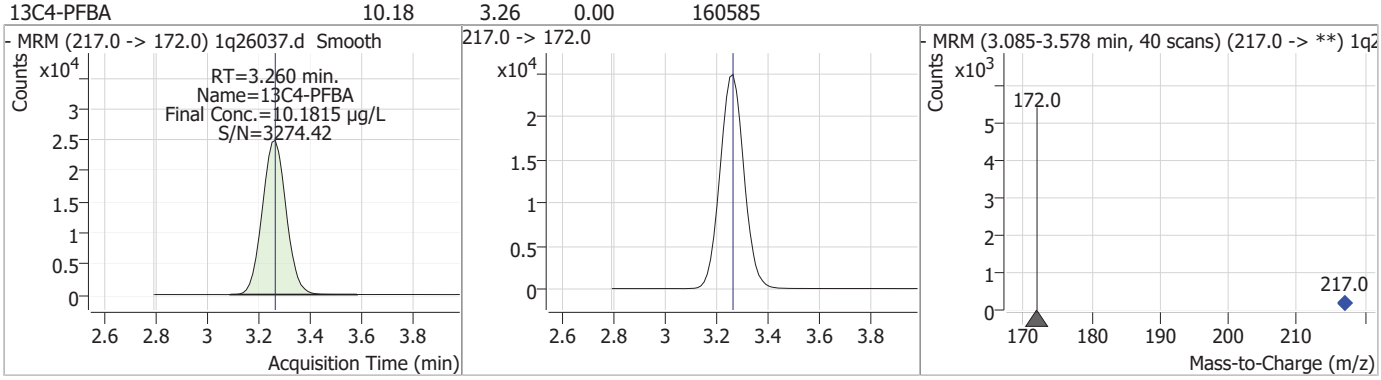
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

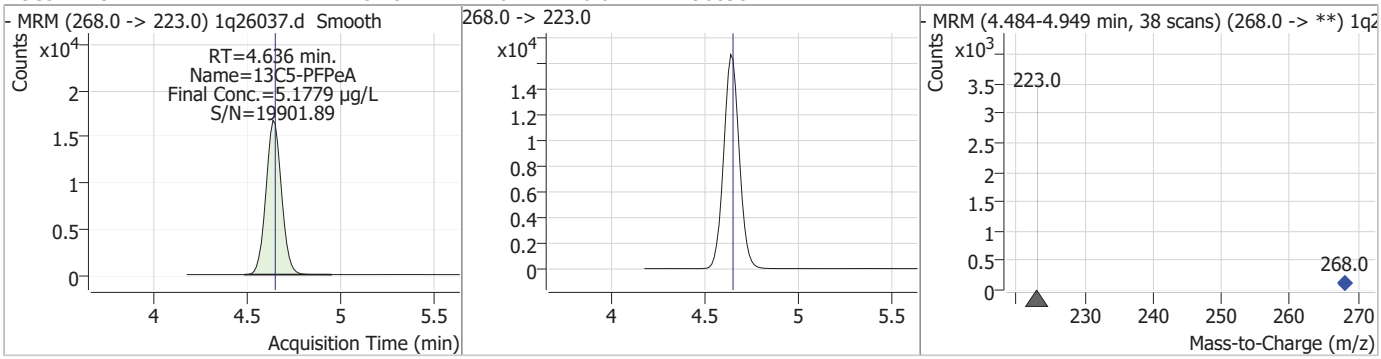
Perfluorinated Compounds by LC/MS/MS



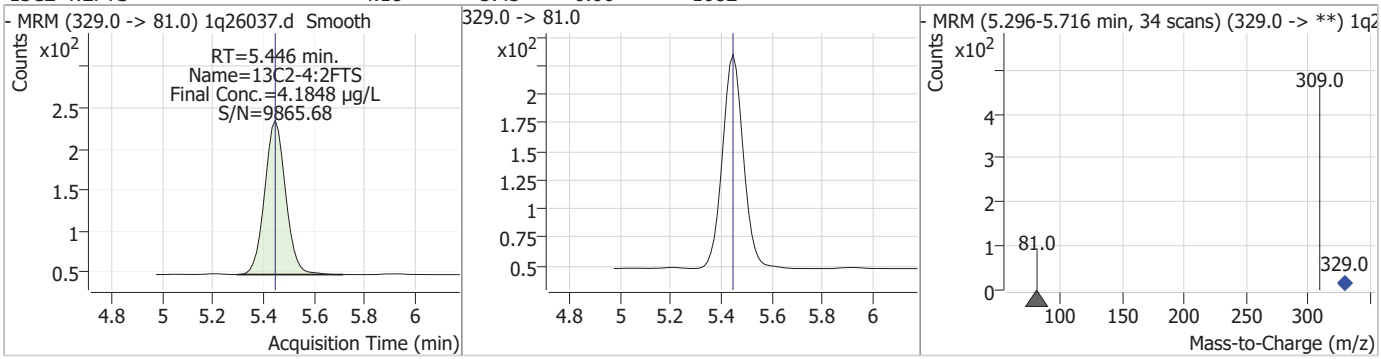
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.18	3.26	0.00	160585				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.18	4.64	-0.01	96898				

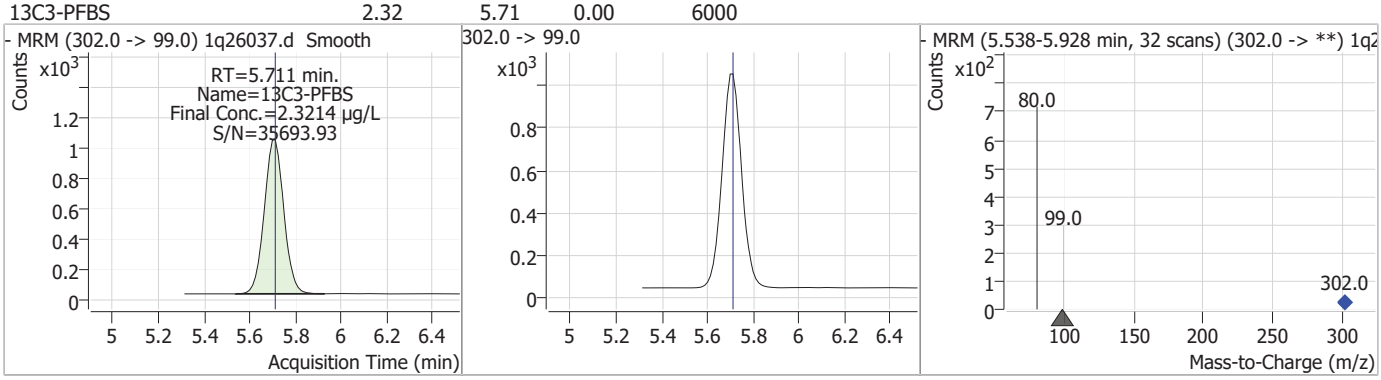


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.18	5.45	0.00	1082				

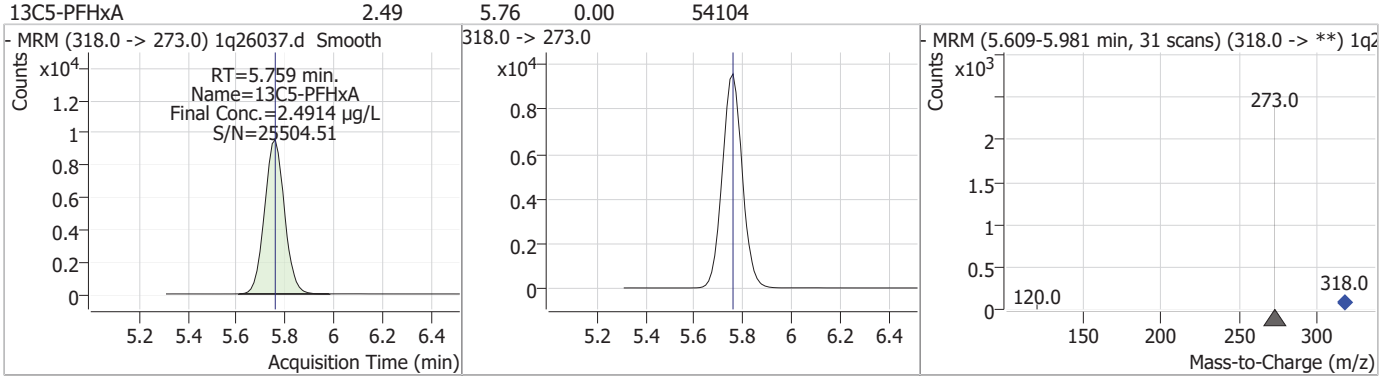


Perfluorinated Compounds by LC/MS/MS

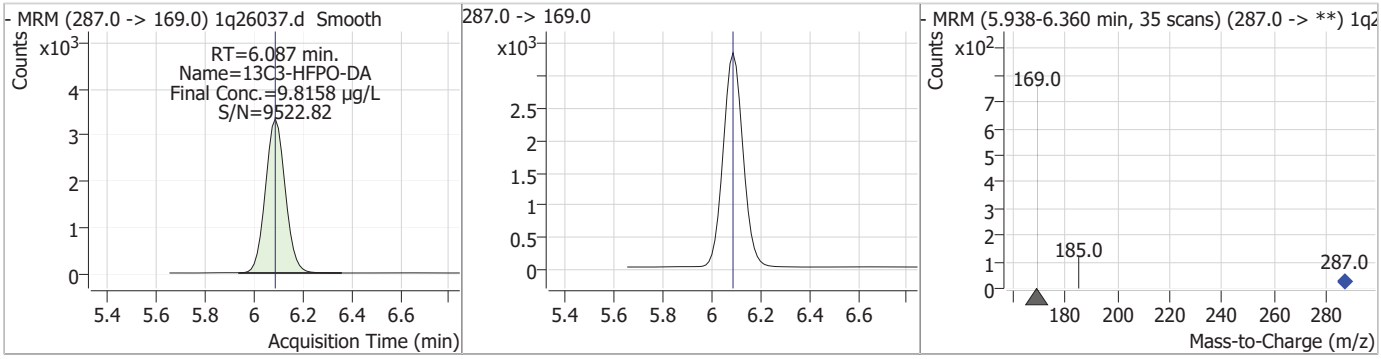
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.32	5.71	0.00	6000				



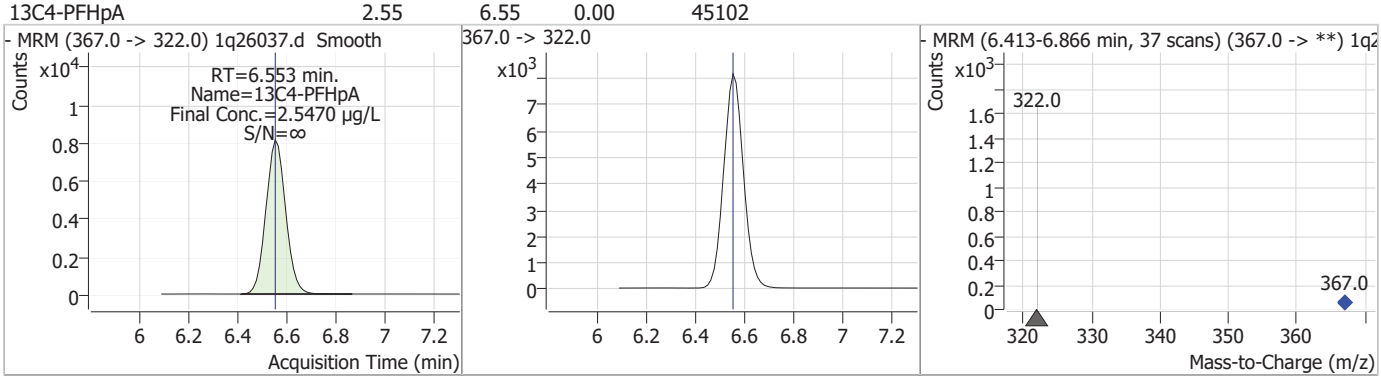
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.49	5.76	0.00	54104				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.82	6.09	0.00	18684				

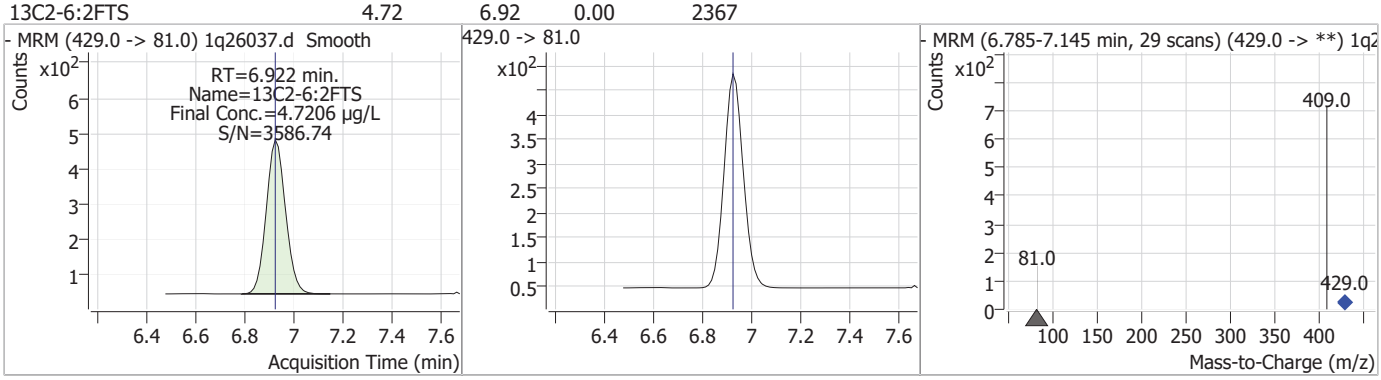


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.55	6.55	0.00	45102				

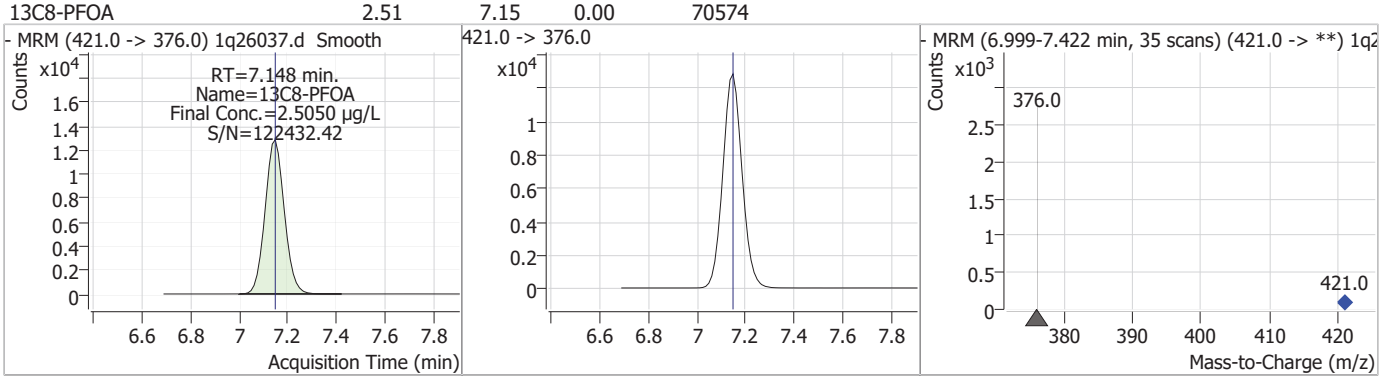


Perfluorinated Compounds by LC/MS/MS

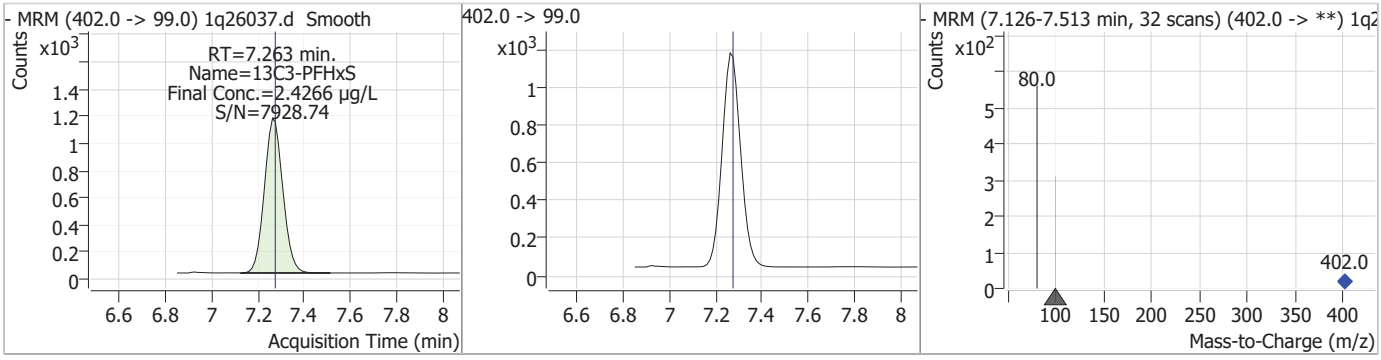
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.72	6.92	0.00	2367				



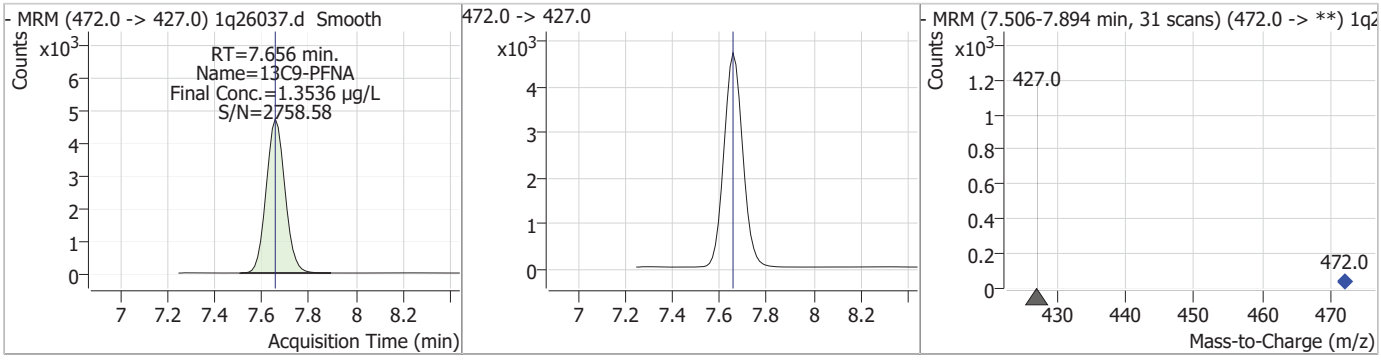
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.51	7.15	0.00	70574				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.43	7.26	-0.01	6286				

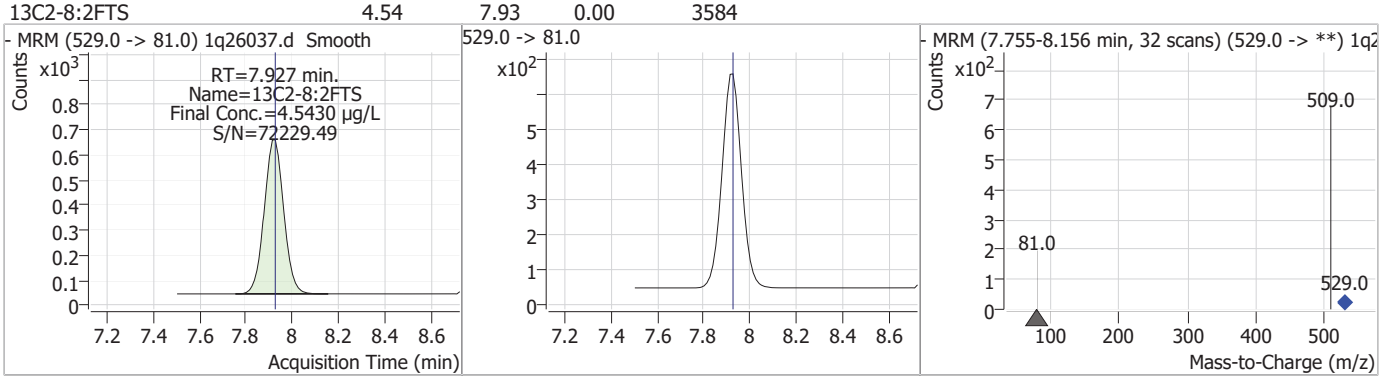


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.35	7.66	0.00	26119				

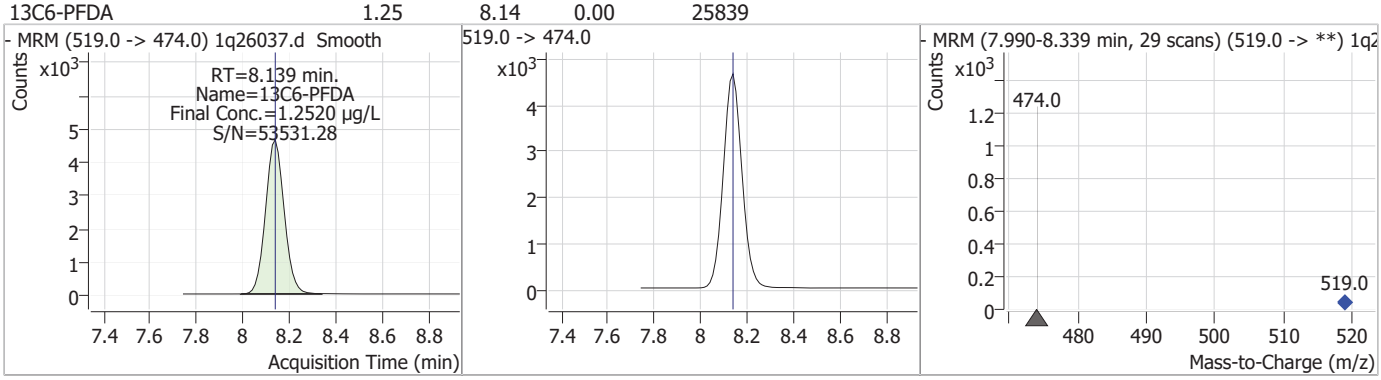


Perfluorinated Compounds by LC/MS/MS

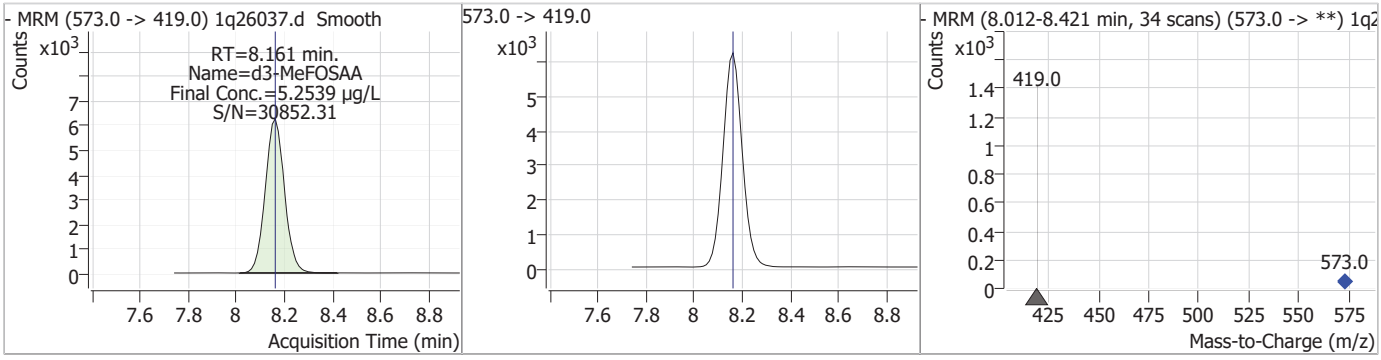
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.54	7.93	0.00	3584				



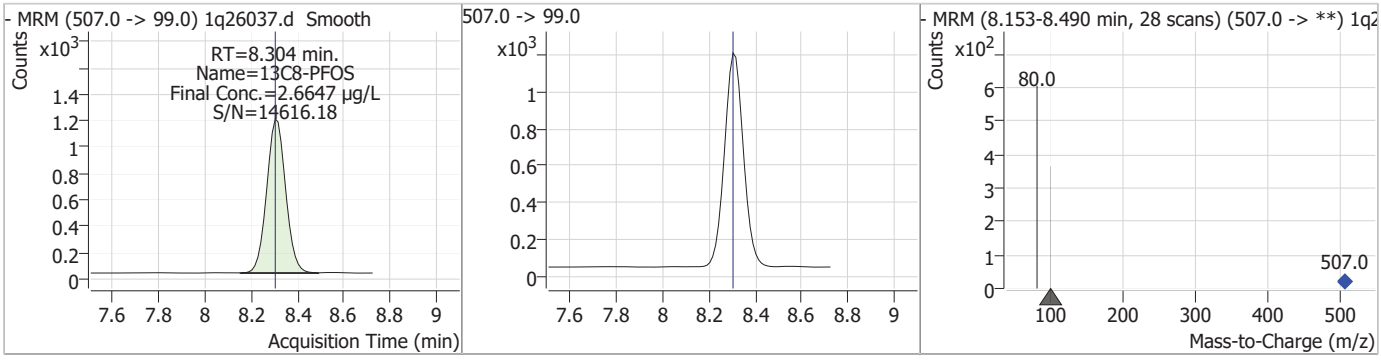
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.25	8.14	0.00	25839				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.25	8.16	0.00	34702				

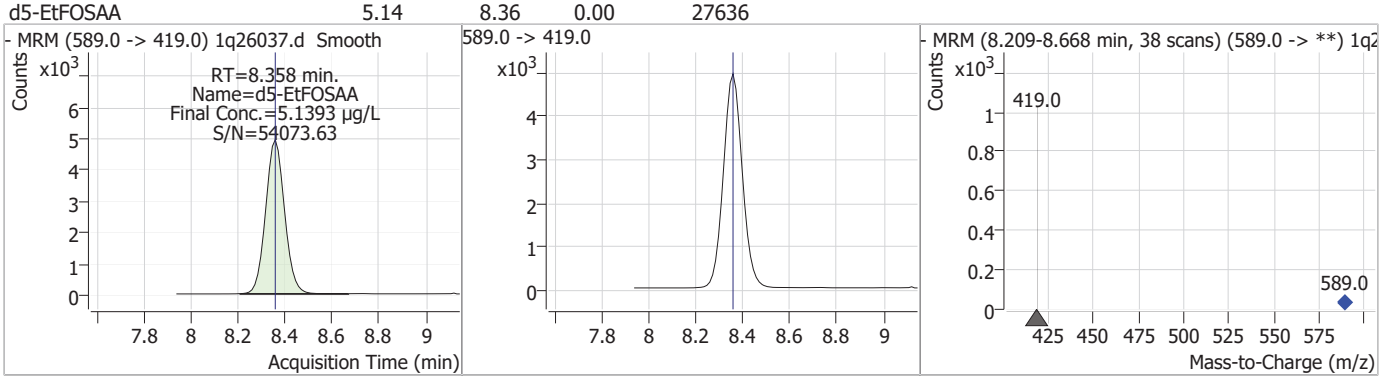


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.66	8.30	0.00	6650				

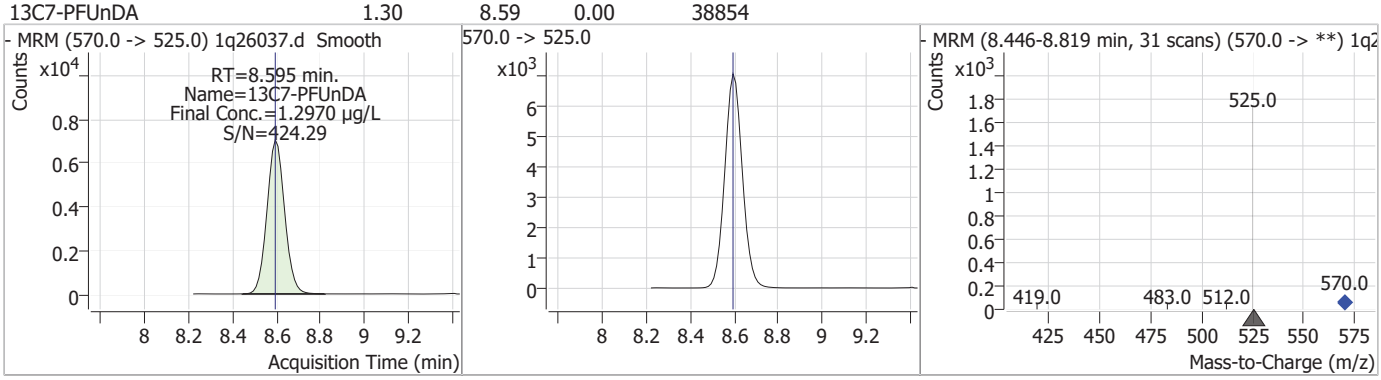


Perfluorinated Compounds by LC/MS/MS

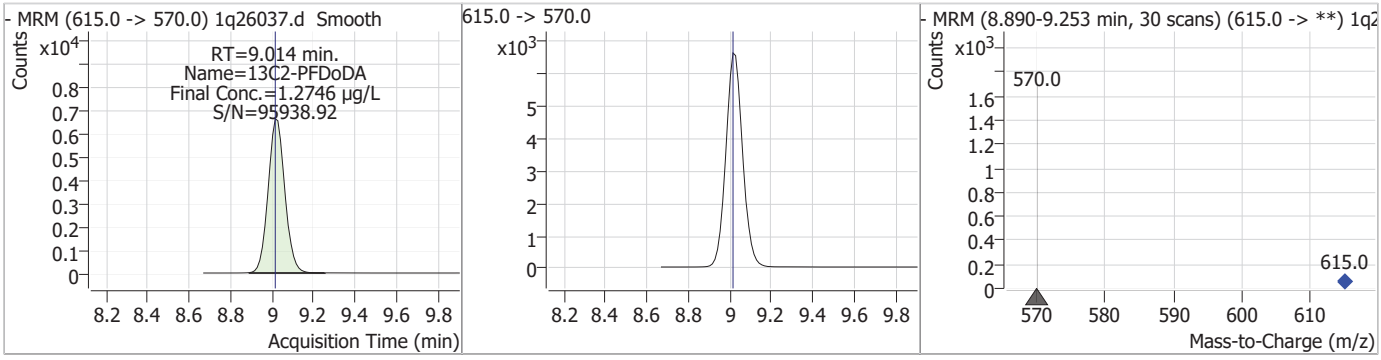
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.14	8.36	0.00	27636				



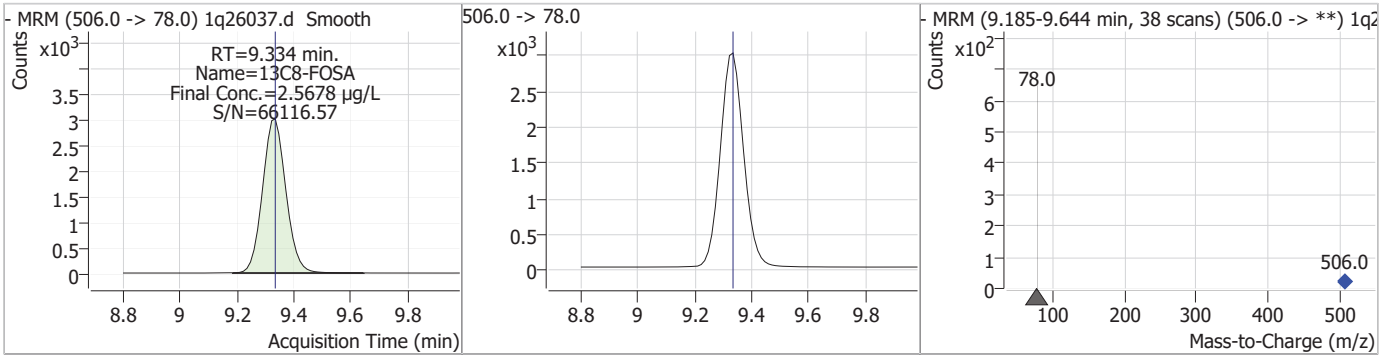
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.30	8.59	0.00	38854				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.27	9.01	0.00	36841				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.57	9.33	0.00	17006				



7.2.13

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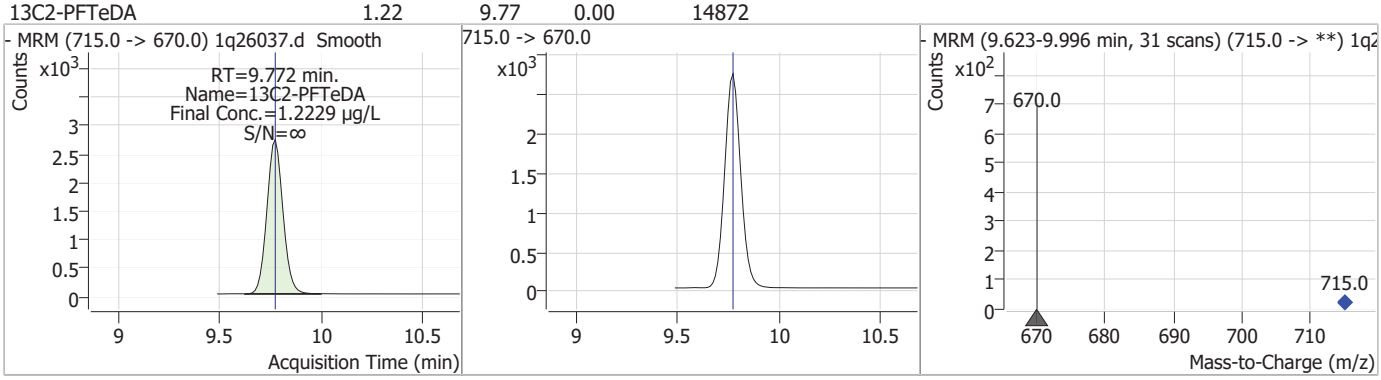
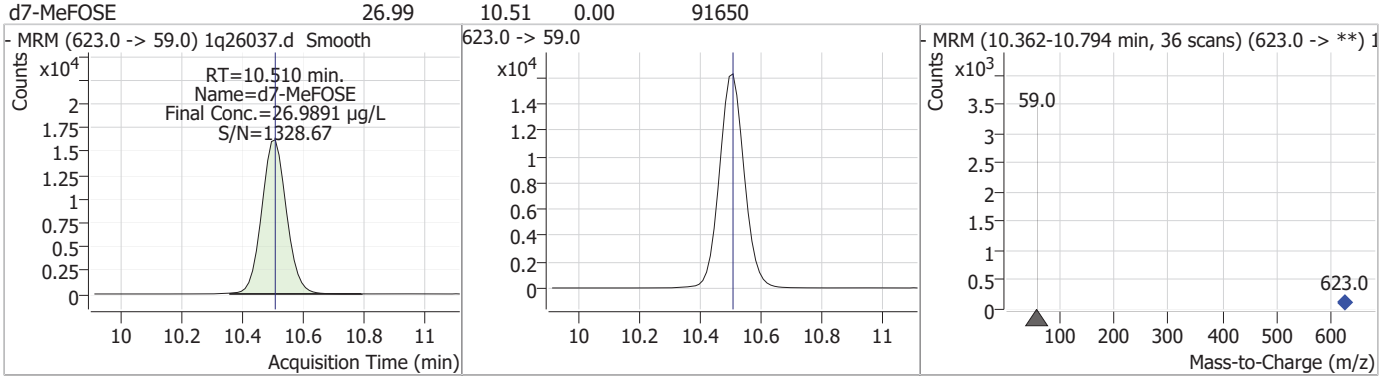
Perfluorinated Compounds by LC/MS/MS

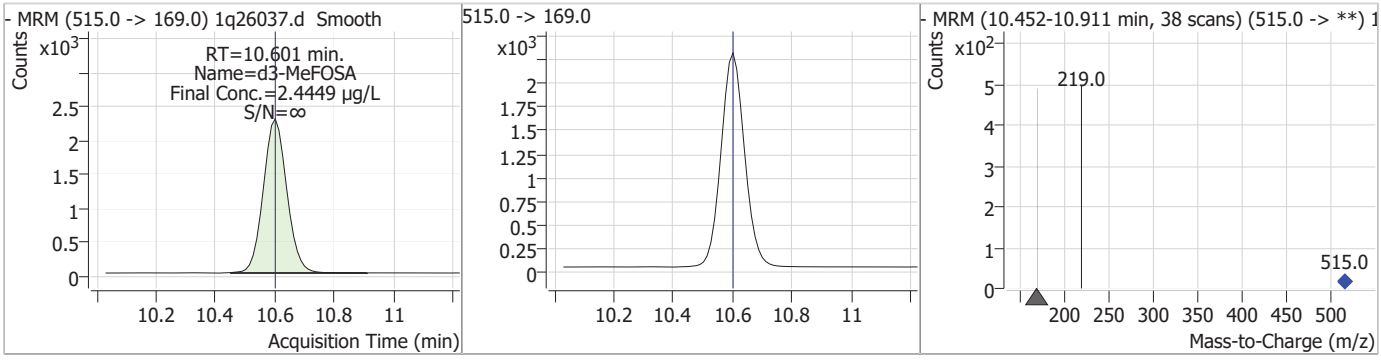
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.22	9.77	0.00	14872				



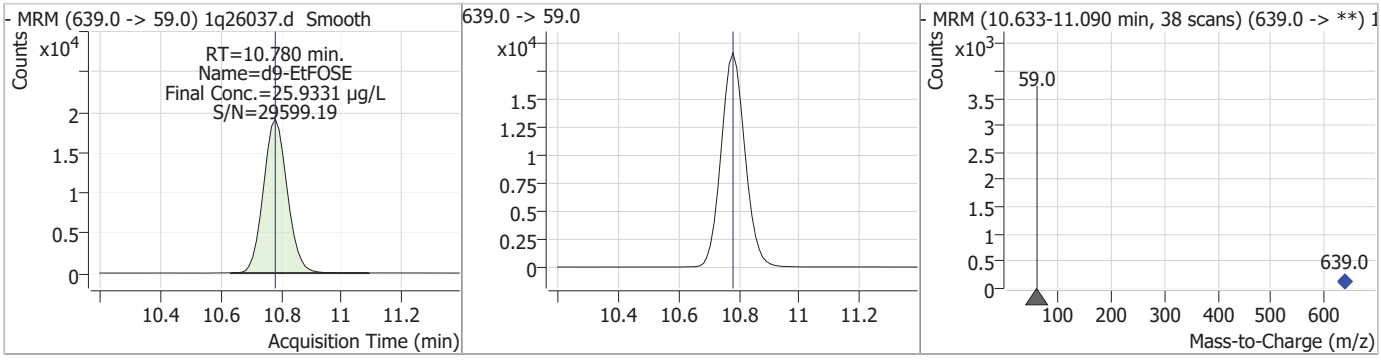
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	26.99	10.51	0.00	91650				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.44	10.60	0.00	12550				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.93	10.78	0.00	104308				

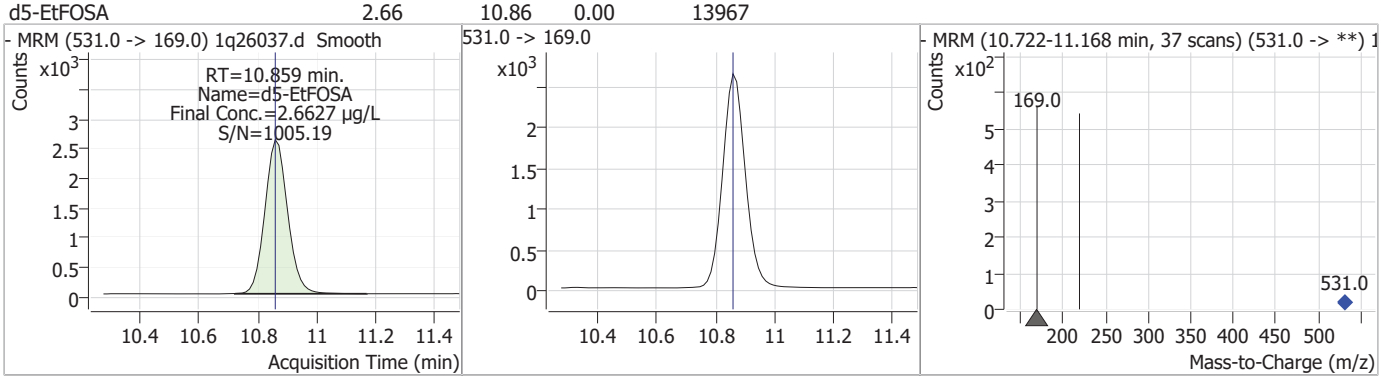


7.2.13

7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.66	10.86	0.00	13967				



7.2.13

7

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/16/25 06:10

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26062.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/15/2025 11:16:35 AM
Sample Name : IBLK
Vial : P1-A1
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : T1Q362.batch.bin
Sample Information : OP63461,T1Q362,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	167616	10.00 µg/L	0.000
M5-PFPeA	4.648	268.0 -> 223.0	99238	5.00 µg/L	0.000
M5-PFHxA	5.759	318.0 -> 273.0	55791	2.50 µg/L	0.000
M4-PFHpA	6.565	367.0 -> 322.0	42065	2.50 µg/L	0.012
M8-PFOA	7.148	421.0 -> 376.0	68198	2.50 µg/L	0.000
M9-PFNA	7.669	472.0 -> 427.0	24694	1.25 µg/L	0.012
M6-PFDA	8.152	519.0 -> 474.0	24947	1.25 µg/L	0.012
M7-PFUnDA	8.607	570.0 -> 525.0	35769	1.25 µg/L	0.012
M2-PFDoDA	9.027	615.0 -> 570.0	34357	1.25 µg/L	0.012
M2-PFTeDA	9.785	715.0 -> 670.0	14197	1.25 µg/L	0.012
M8-FOSA	9.359	506.0 -> 78.0	17576	2.50 µg/L	0.025
M3-PFBS	5.711	302.0 -> 99.0	6019	2.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	6116	2.50 µg/L	0.000
M8-PFOS	8.316	507.0 -> 99.0	6369	2.50 µg/L	0.012
M2-4:2FTS	5.446	329.0 -> 81.0	1207	5.00 µg/L	0.000
M2-6:2FTS	6.934	429.0 -> 81.0	2113	5.00 µg/L	0.012
M2-8:2FTS	7.927	529.0 -> 81.0	3248	5.00 µg/L	0.000
M3-MeFOSAA	8.173	573.0 -> 419.0	33527	5.00 µg/L	0.013
M3-HFPO-DA	6.087	287.0 -> 169.0	16680	10.00 µg/L	0.000
M5-EtFOSAA	8.370	589.0 -> 419.0	26846	5.00 µg/L	0.012
M7-MeFOSE	10.498	623.0 -> 59.0	94536	25.00 µg/L	-0.012
M9-EtFOSE	10.780	639.0 -> 59.0	111899	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	13402	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	13514	2.50 µg/L	0.000
13C4-PFOS	8.317	503.0 -> 80.0	10186	2.50 µg/L	0.012
13C3-PFBA	3.263	216.0 -> 172.0	69358	5.00 µg/L	0.013
18O2-PFHxS	7.274	403.0 -> 84.0	6944	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	74383	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	19666	1.25 µg/L	0.000
13C5-PFNA	7.669	468.0 -> 423.0	22497	1.25 µg/L	0.012
13C2-PFHxA	5.760	315.0 -> 270.0	51720	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1207	5.21 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.1%	
13C2-6:2FTS	6.934	429.0 -> 81.0	2113	4.70 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.0%	
13C2-8:2FTS	7.927	529.0 -> 81.0	3248	4.59 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.8%	
13C2-PFDoDA	9.027	615.0 -> 570.0	34357	1.29 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.0%	
13C2-PFTeDA	9.785	715.0 -> 670.0	14197	1.26 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.2%	
13C3-PFBS	5.711	302.0 -> 99.0	6019	2.60 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.9%	
13C3-PFHxS	7.275	402.0 -> 99.0	6116	2.63 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.3%		
13C4-PFBA	3.260	217.0 -> 172.0	167616	10.16 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.6%		
13C4-PFHpA	6.565	367.0 -> 322.0	42065	2.34 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.8%		
13C5-PFHxA	5.759	318.0 -> 273.0	55791	2.54 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.4%		
13C5-PFPeA	4.648	268.0 -> 223.0	99238	5.23 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.7%		
13C6-PFDA	8.152	519.0 -> 474.0	24947	1.31 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.8%		
13C7-PFUnDA	8.607	570.0 -> 525.0	35769	1.29 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.5%		
13C8-FOSA	9.359	506.0 -> 78.0	17576	2.83 µg/L		0.025
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 113.0%		
13C8-PFOA	7.148	421.0 -> 376.0	68198	2.52 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.7%		
13C8-PFOS	8.316	507.0 -> 99.0	6369	2.72 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 108.7%		
13C9-PFNA	7.669	472.0 -> 427.0	24694	1.35 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 107.6%		
d3-MeFOSAA	8.173	573.0 -> 419.0	33527	5.41 µg/L		0.013
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.1%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	16680	8.65 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 86.5%		
d3-MeFOSA	10.601	515.0 -> 169.0	13514	2.80 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 112.1%		
d5-EtFOSAA	8.370	589.0 -> 419.0	26846	5.32 µg/L		0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.3%		
d7-MeFOSE	10.498	623.0 -> 59.0	94536	29.64 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 118.6%		
d9-EtFOSE	10.780	639.0 -> 59.0	111899	29.63 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 118.5%		
d5-EtFOSA	10.859	531.0 -> 169.0	13402	2.72 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 108.8%		
Target Compounds						QValue
4:2FTS	-	327.0 -> 307.0	-	N.D.		
		327.0 -> 81.0				
6:2FTS	-	427.0 -> 407.0	-	N.D.		
		427.0 -> 81.0				
8:2FTS	-	527.0 -> 507.0	-	N.D.		
		527.0 -> 81.0				
EtFOSAA	8.371	584.0 -> 419.0	226	0.05 µg/L	m	82
		584.0 -> 483.0	181			
FOSA	-	498.0 -> 78.0	-	N.D.		
		498.0 -> 478.0				
MeFOSAA	-	570.0 -> 419.0	-	N.D.		
		570.0 -> 512.0				
PFBA	-	213.0 -> 169.0	-	N.D.		
PFBS	-	299.0 -> 80.0	-	N.D.		
		299.0 -> 99.0				
PFDA	-	513.0 -> 469.0	-	N.D.		
		513.0 -> 219.0				
PFDoDA	-	613.0 -> 569.0	-	N.D.		
		613.0 -> 319.0				
PFDS	-	599.0 -> 80.0	-	N.D.		

Perfluorinated Compounds by LC/MS/MS

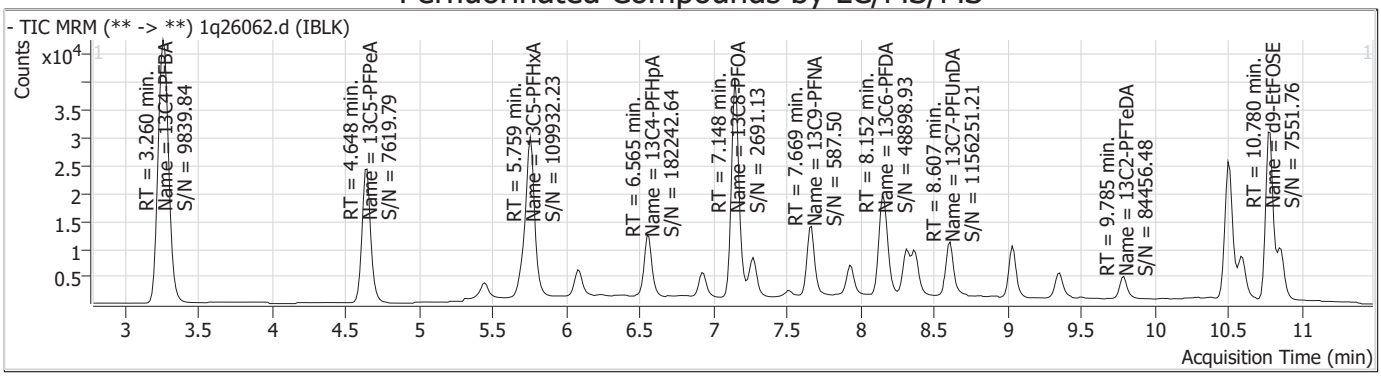
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
		599.0 -> 99.0				
PFHpA	-	363.0 -> 319.0	-	N.D.		
		363.0 -> 169.0				
PFHpS	-	449.0 -> 80.0	-	N.D.		
		449.0 -> 99.0				
PFHxA	-	313.0 -> 269.0	-	N.D.		
		313.0 -> 119.0				
PFHxS	-	399.0 -> 80.0	-	N.D.		
		399.0 -> 99.0				
PFNA	-	463.0 -> 419.0	-	N.D.		
		463.0 -> 219.0				
PFNS	-	549.0 -> 80.0	-	N.D.		
		549.0 -> 99.0				
PFOA	-	413.0 -> 369.0	-	N.D.		
		413.0 -> 169.0				
PFOS	-	499.0 -> 80.0	-	N.D.		
		499.0 -> 99.0				
PFPeA	-	263.0 -> 219.0	-	N.D.		
PFPeS	-	349.0 -> 80.0	-	N.D.		
		349.0 -> 99.0				
PFTeDA	-	713.0 -> 669.0	-	N.D.		
		713.0 -> 219.0				
PFTrDA	-	663.0 -> 619.0	-	N.D.		
		663.0 -> 369.0				
PFUnDA	-	563.0 -> 519.0	-	N.D.		
		563.0 -> 269.0				
11Cl-PF3OUdS	-	631.0 -> 451.0	-	N.D.		
		633.0 -> 453.0				
9Cl-PF3ONS	-	531.0 -> 351.0	-	N.D.		
		533.0 -> 353.0				
ADONA	-	377.0 -> 251.0	-	N.D.		
		377.0 -> 85.0				
HFPO-DA	-	285.0 -> 169.0	-	N.D.		
		285.0 -> 185.0				
3:3FTCA	-	241.0 -> 177.0	-	N.D.		
		241.0 -> 117.0				
5:3FTCA	-	341.0 -> 237.0	-	N.D.		
		341.0 -> 217.0				
7:3FTCA	-	441.0 -> 337.0	-	N.D.		
		441.0 -> 317.0				
EtFOSA	-	526.0 -> 219.0	-	N.D.		
		526.0 -> 169.0				
EtFOSE	-	630.0 -> 59.0	-	N.D.		
MeFOSA	-	512.0 -> 169.0	-	N.D.		
		512.0 -> 219.0				
MeFOSE	-	616.0 -> 59.0	-	N.D.		
PFDoDS	-	699.0 -> 80.0	-	N.D.		
		699.0 -> 99.0				
NFDHA	-	295.0 -> 201.0	-	N.D.		
		201.0 -> 85.0				
		295.0 -> 85.0				
PFMBA	-	279.0 -> 85.0	-	N.D.		
PFMPA	-	229.0 -> 85.0	-	N.D.		
PFEESA	-	315.0 -> 135.0	-	N.D.		
		315.0 -> 69.0				

 # = Qualifier out of range, m = manually integrated, + = Area summed

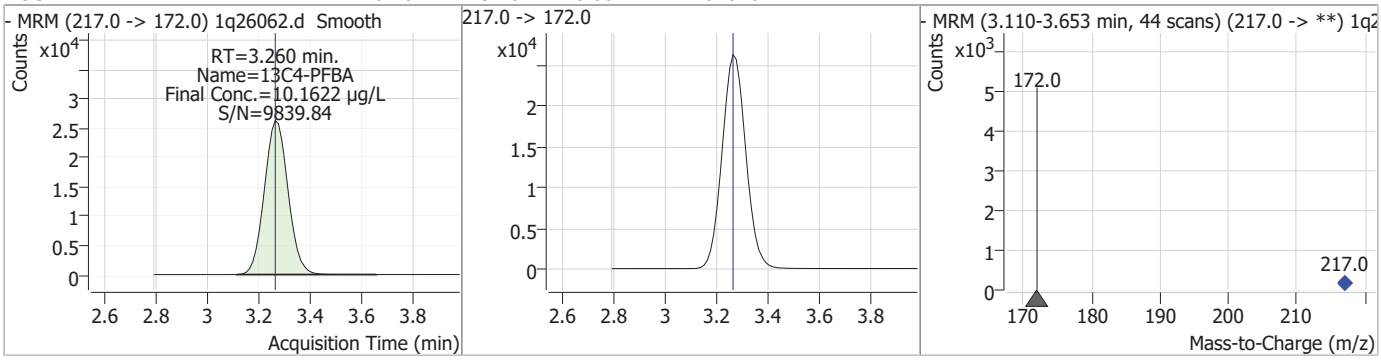
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

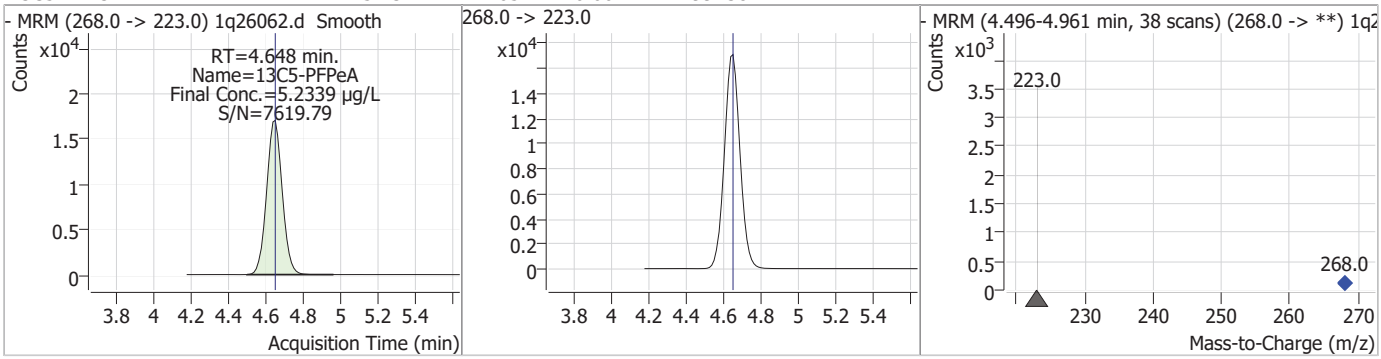
Perfluorinated Compounds by LC/MS/MS



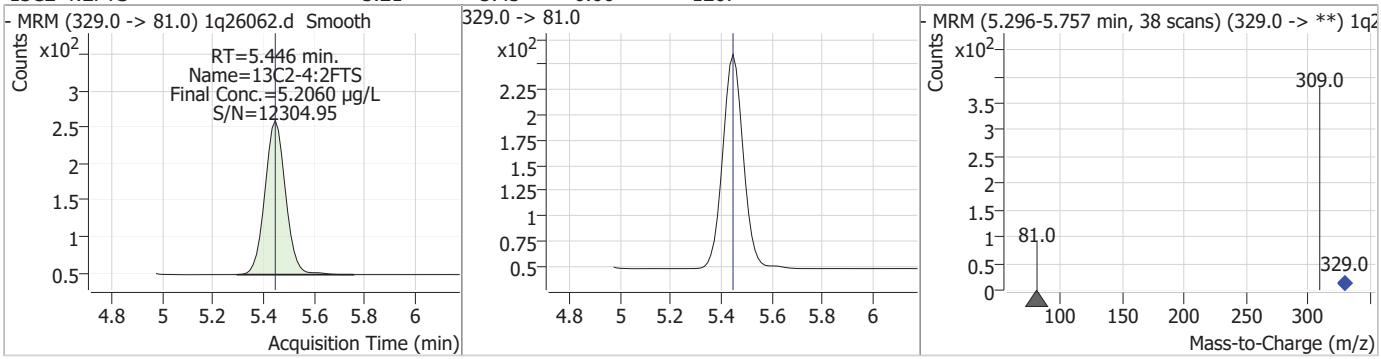
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.16	3.26	0.00	167616				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.23	4.65	0.00	99238				

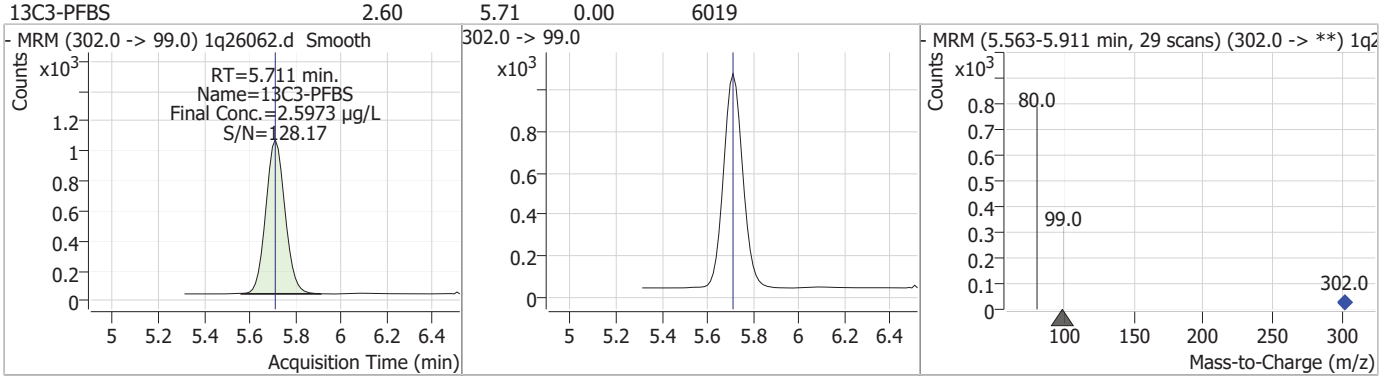


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.21	5.45	0.00	1207				

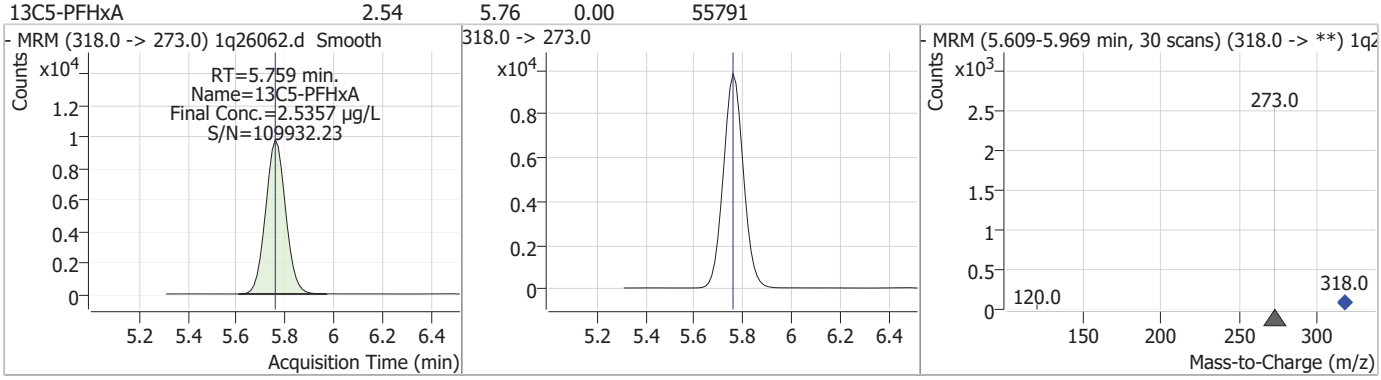


Perfluorinated Compounds by LC/MS/MS

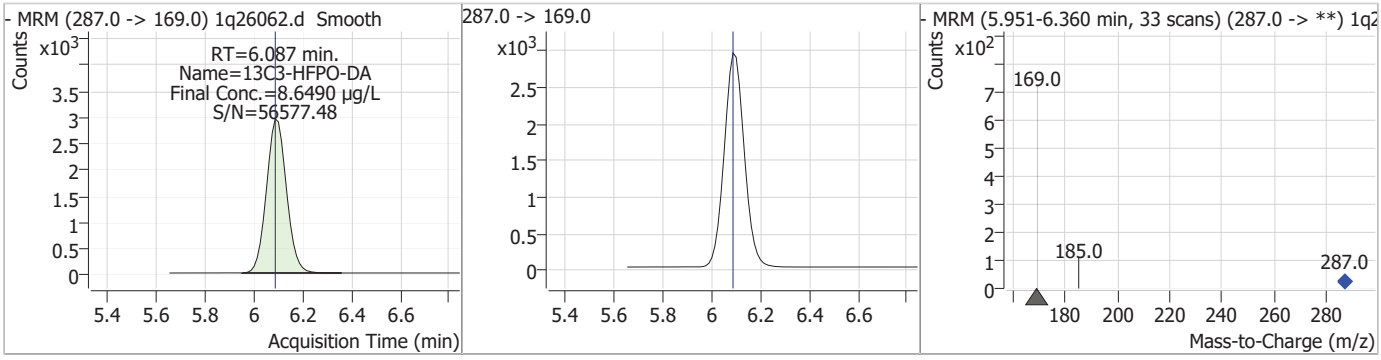
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.60	5.71	0.00	6019				



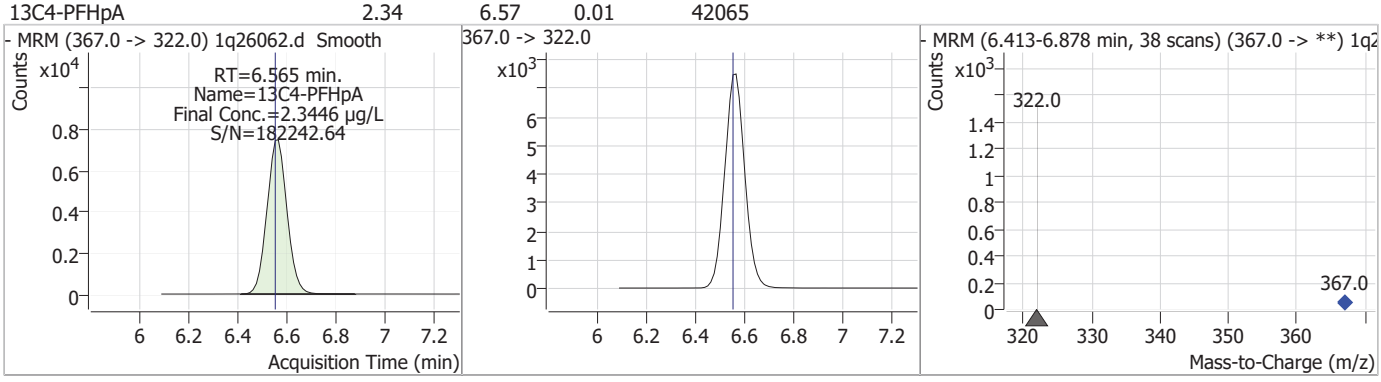
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.54	5.76	0.00	55791				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.65	6.09	0.00	16680				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.34	6.57	0.01	42065				



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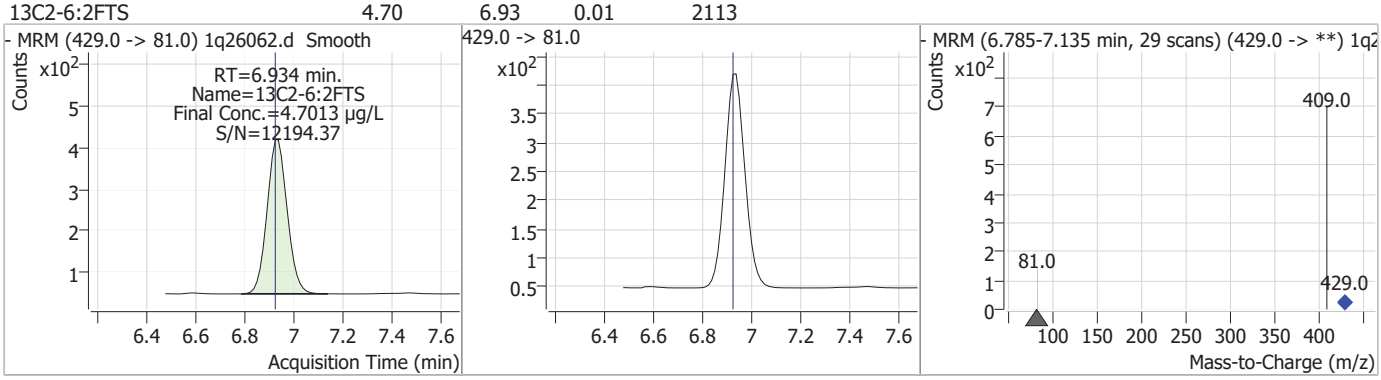
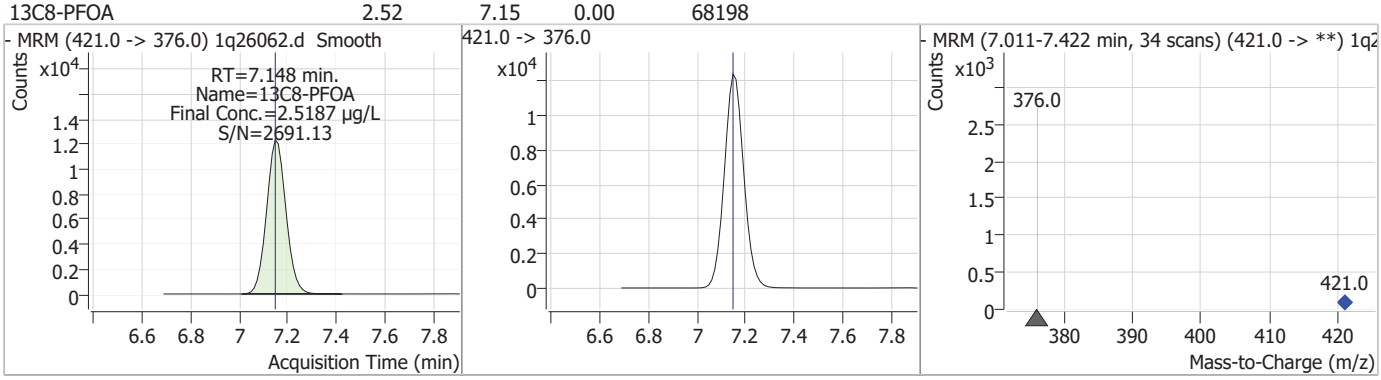
Perfluorinated Compounds by LC/MS/MS

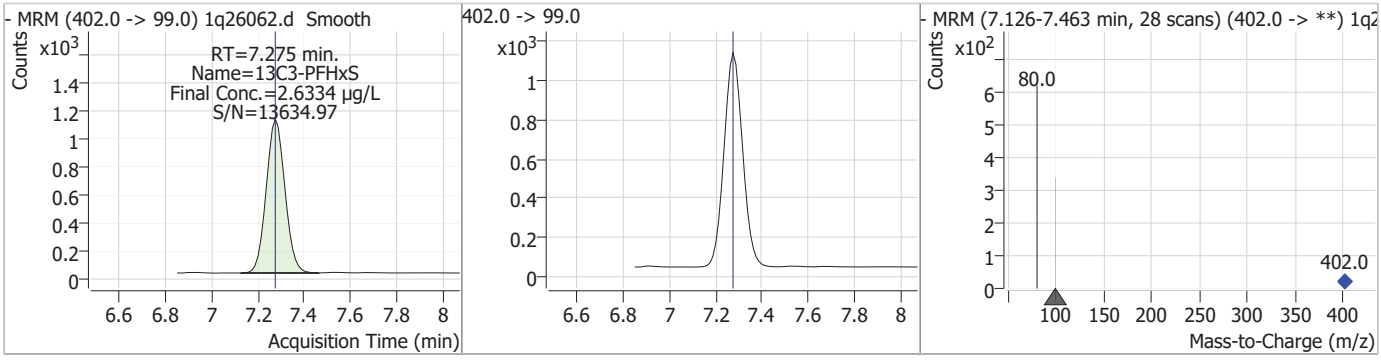
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.70	6.93	0.01	2113				



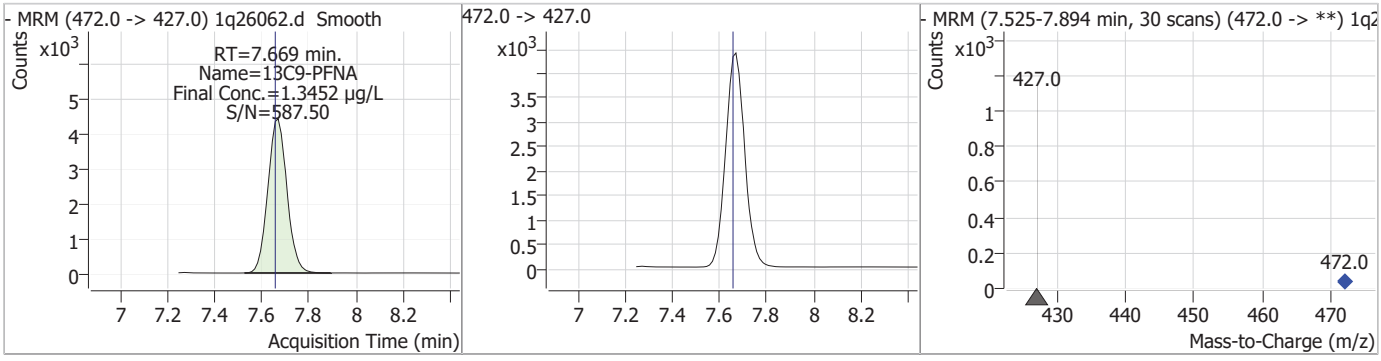
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.52	7.15	0.00	68198				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.63	7.27	0.00	6116				

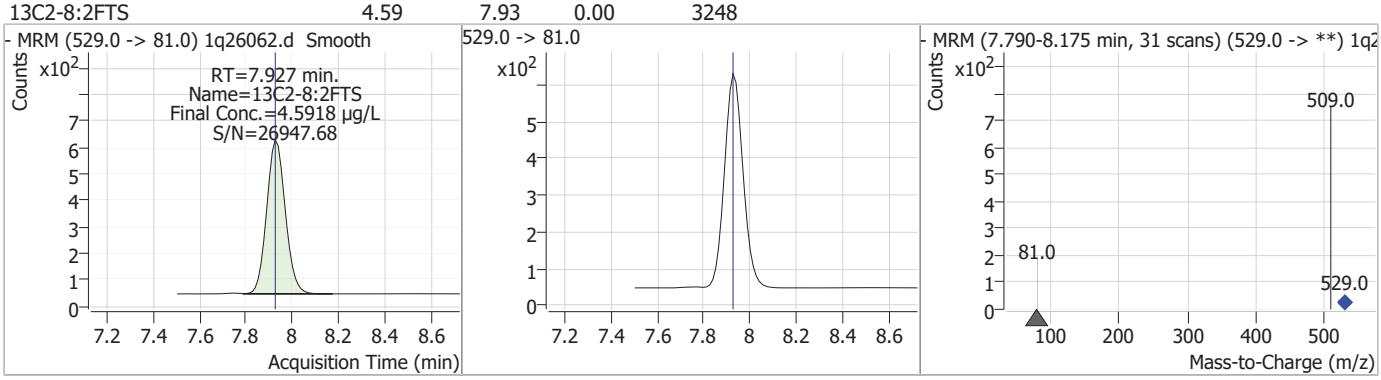


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.35	7.67	0.01	24694				

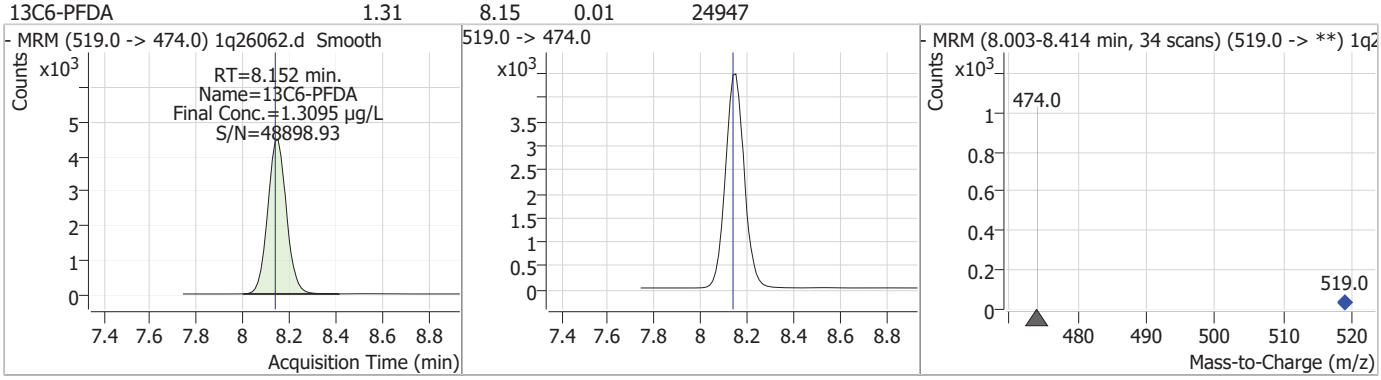


Perfluorinated Compounds by LC/MS/MS

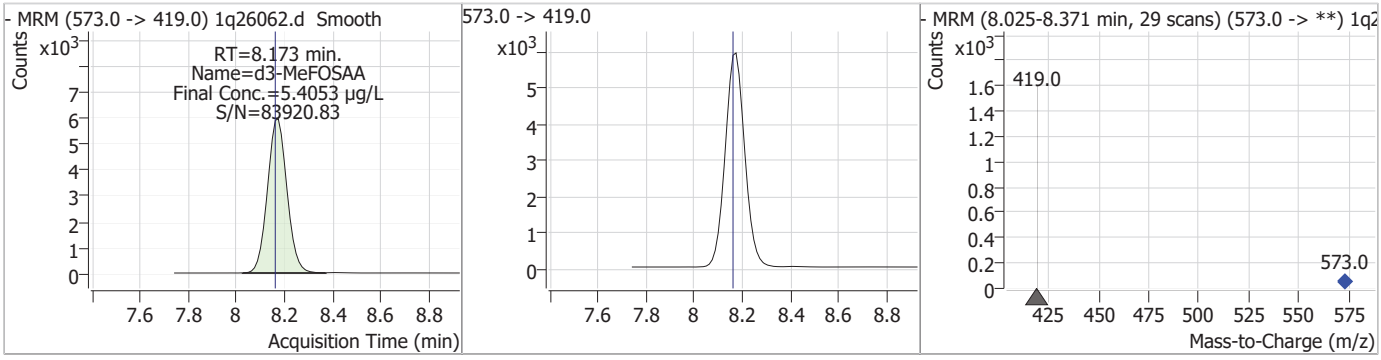
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.59	7.93	0.00	3248				



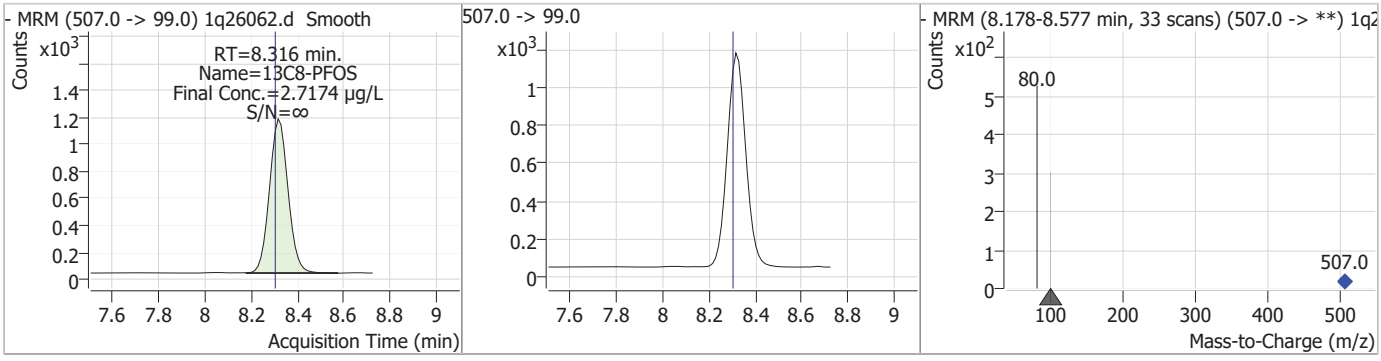
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.31	8.15	0.01	24947				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.41	8.17	0.01	33527				

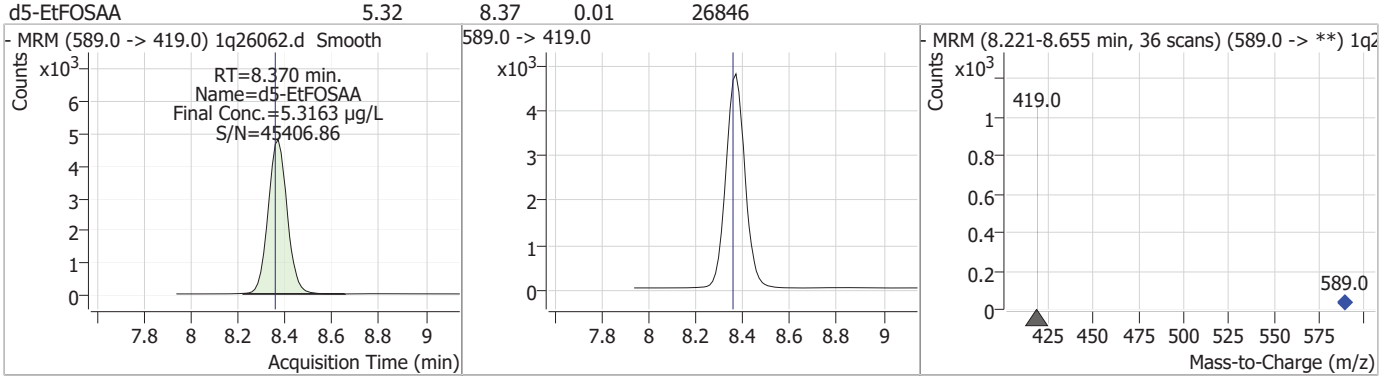


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.72	8.32	0.01	6369				

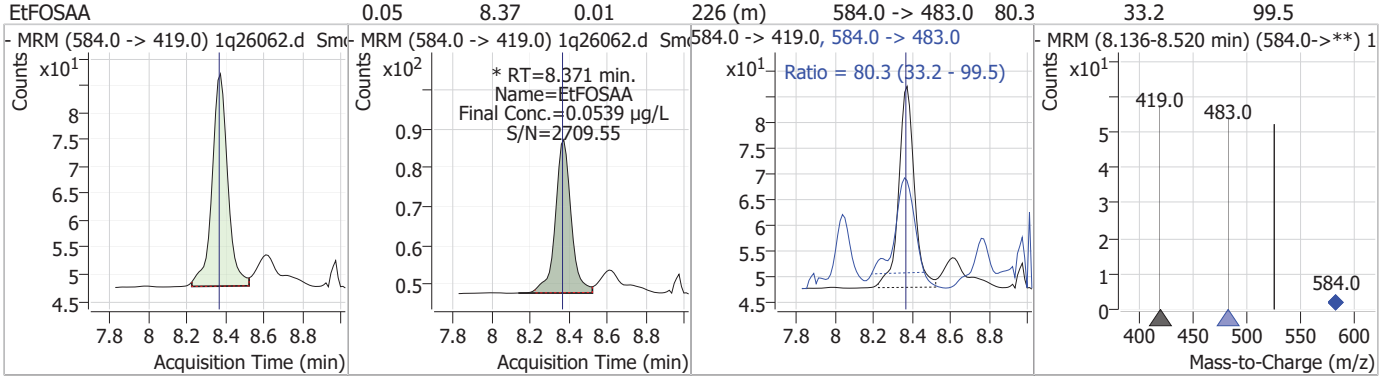


Perfluorinated Compounds by LC/MS/MS

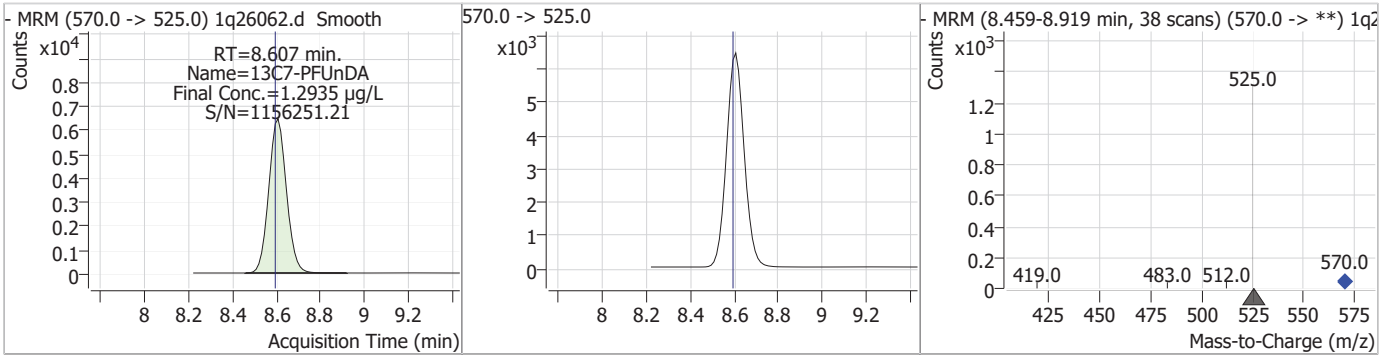
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.32	8.37	0.01	26846				



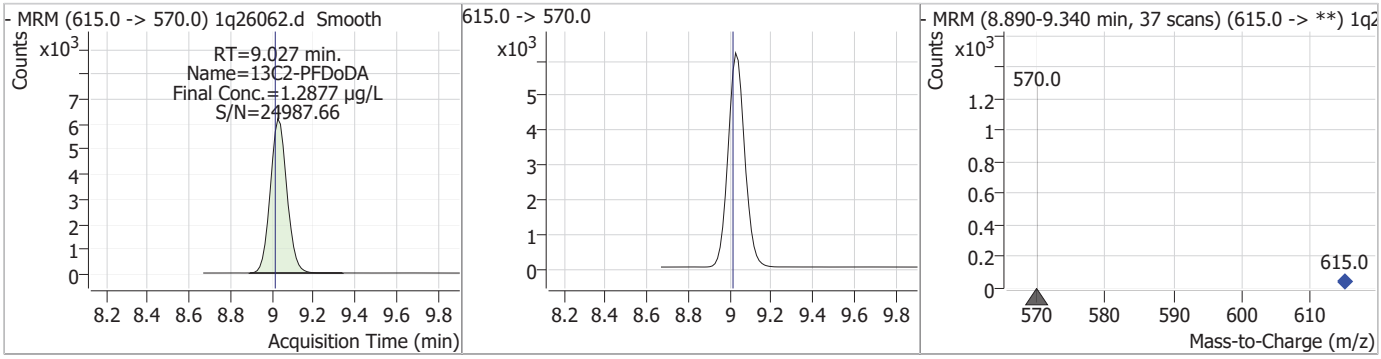
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.05	8.37	0.01	226 (m)	584.0 -> 483.0	80.3	33.2	99.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.29	8.61	0.01	35769				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.29	9.03	0.01	34357				



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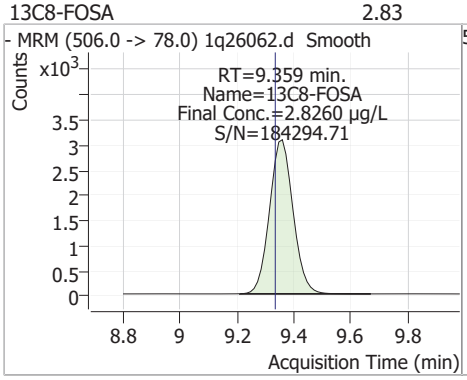
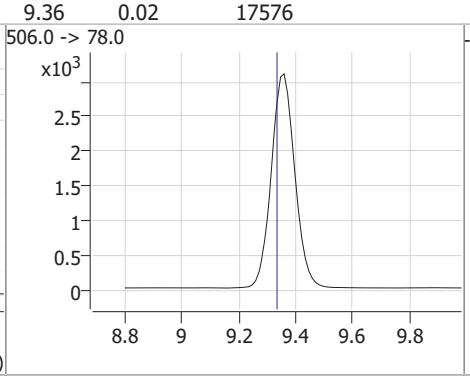
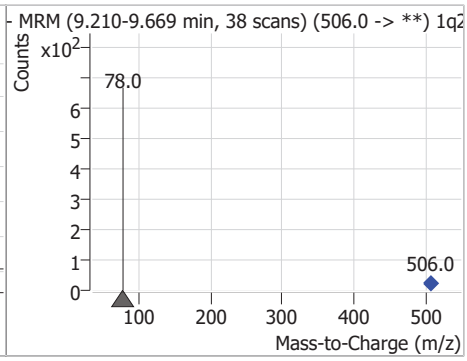
Perfluorinated Compounds by LC/MS/MS

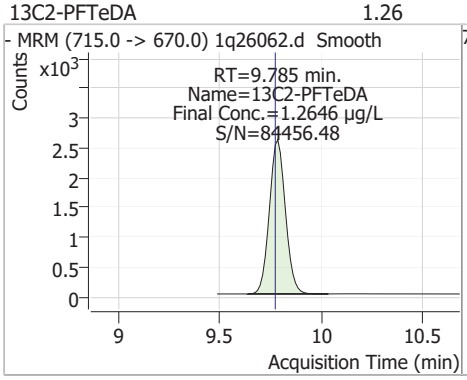
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.83	9.36	0.02	17576				

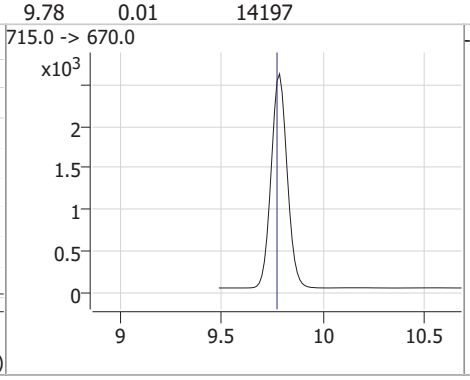


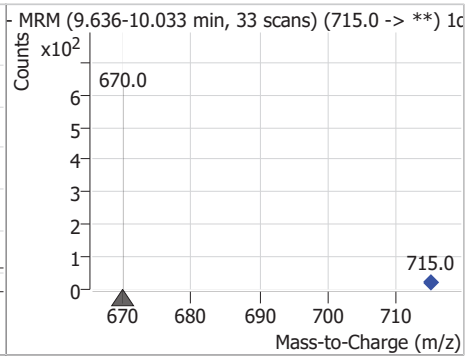




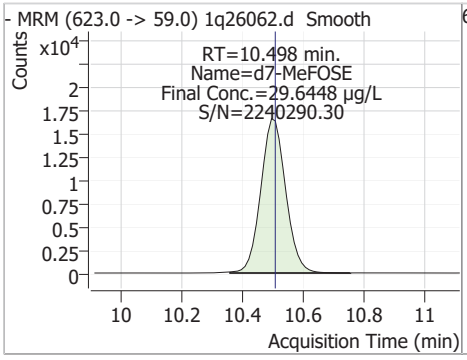
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.26	9.78	0.01	14197				

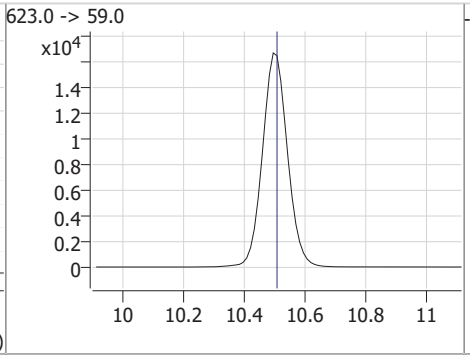


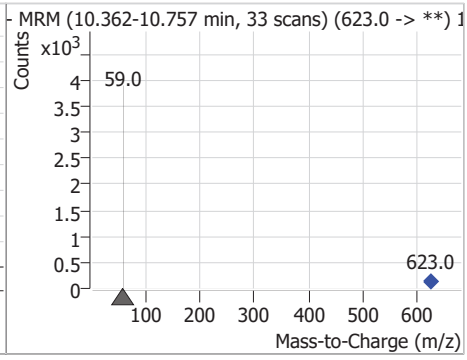




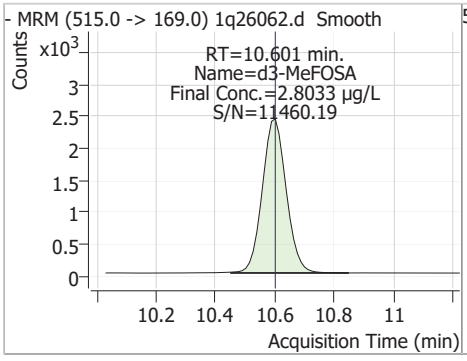
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	29.64	10.50	-0.01	94536				

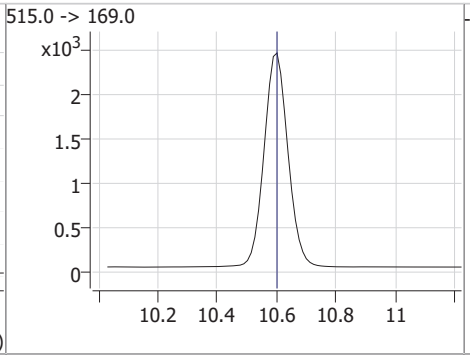


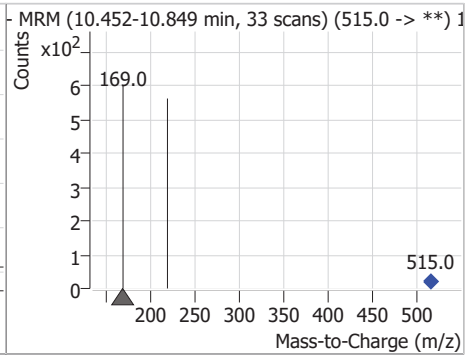




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.80	10.60	0.00	13514				







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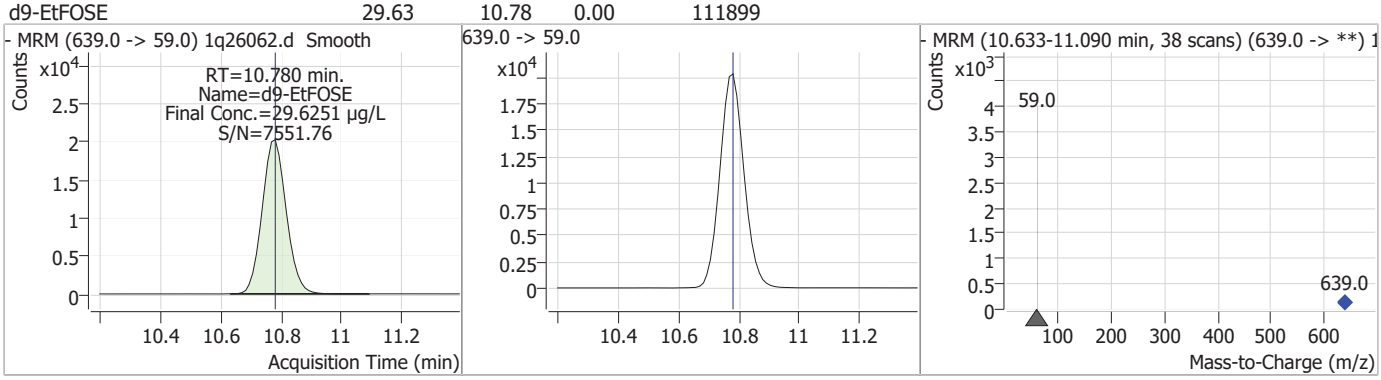
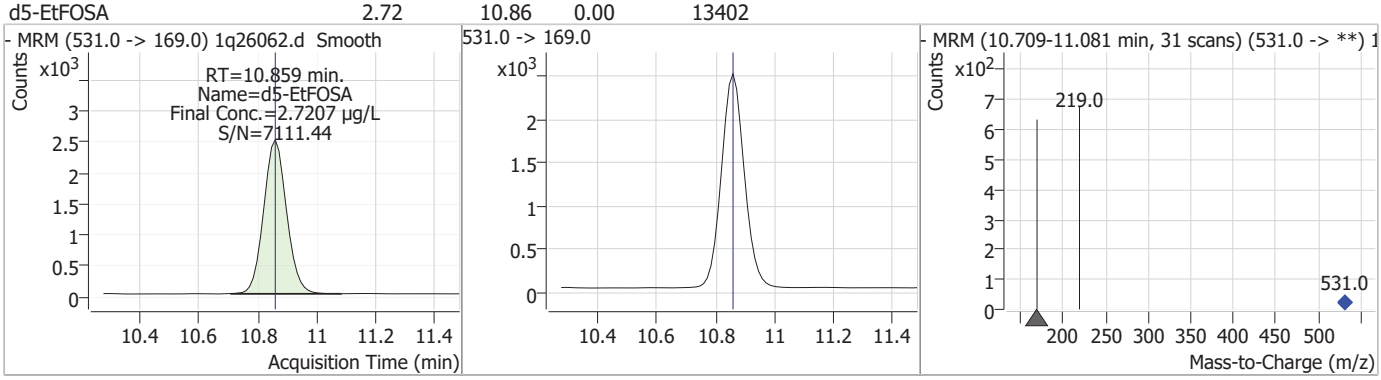
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	29.63	10.78	0.00	111899				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.72	10.86	0.00	13402				



Manual Integration Approval Summary

Sample Number: T1Q362-IBLK
Lab FileID: 1Q26062.D
Injection Time: 05/15/25 11:16
Method: EPA 1633
Analyst approved: 05/16/25 02:49 Alodia Hana Barrogo
Supervisor approved: 05/16/25 06:10 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
EtFOSAA	2991-50-6		8.37	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8141.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 5:25:57 PM
Sample Name : OP63163-LLBS:2
Vial : P1-B4
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	998744	10.00	µg/L	-0.012
M5-PFPeA	4.307	268.0 -> 223.0	527181	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	342346	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	364116	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	548634	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	212251	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	203170	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	275487	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	241033	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	178081	1.25	µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	189384	2.50	µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	30506	2.50	µg/L	-0.012
		302.0 -> 80.0	76576			
M3-PFHxS	6.986	402.0 -> 99.0	42812	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	47475	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	13728	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	30429	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	34277	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	252478	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	536950	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	186686	5.00	µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	927979	25.00	µg/L	0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1149069	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	84836	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	78556	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	83160	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	458349	5.00	µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	52296	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	581415	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	199788	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	225114	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	333828	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	13728	5.23	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.7%		
13C2-6:2FTS	6.684	429.0 -> 81.0	30429	5.35	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.9%		
13C2-8:2FTS	7.671	529.0 -> 81.0	34277	5.12	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.4%		
13C2-PFDoDA	8.666	615.0 -> 570.0	241033	1.12	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.3%		
13C2-PFTeDA	9.381	715.0 -> 670.0	178081	1.07	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 85.8%		
13C3-PFBS	5.355	302.0 -> 99.0	30506	2.36	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.5%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	42812	2.34	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.8%			
13C4-PFBA	2.871	217.0 -> 172.0	998744	9.50	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.0%			
13C4-PFHpA	6.291	367.0 -> 322.0	364116	2.42	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.0%			
13C5-PFHxA	5.452	318.0 -> 273.0	342346	2.42	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.9%			
13C5-PFPeA	4.307	268.0 -> 223.0	527181	4.92	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.3%			
13C6-PFDA	7.858	519.0 -> 474.0	203170	1.15	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.1%			
13C7-PFUnDA	8.273	570.0 -> 525.0	275487	1.17	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.5%			
13C8-FOSA	9.291	506.0 -> 78.0	189384	2.22	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 88.7%			
13C8-PFOA	6.897	421.0 -> 376.0	548634	2.36	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.5%			
13C8-PFOS	7.995	507.0 -> 99.0	47475	2.37	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.8%			
13C9-PFNA	7.403	472.0 -> 427.0	212251	1.14	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.9%			
d3-MeFOSAA	7.915	573.0 -> 419.0	252478	4.61	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.2%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	536950	9.68	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 96.8%			
d3-MeFOSA	10.567	515.0 -> 169.0	78556	1.79	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 71.6%			
d5-EtFOSAA	8.098	589.0 -> 419.0	186686	4.44	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 88.8%			
d7-MeFOSE	10.475	623.0 -> 59.0	927979	22.16	µg/L		0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 88.6%			
d9-EtFOSE	10.746	639.0 -> 59.0	1149069	22.63	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 90.5%			
d5-EtFOSA	10.825	531.0 -> 169.0	84836	1.88	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 75.1%			
Target Compounds							QValue
4:2FTS	5.154	327.0 -> 307.0	40150	1.59	µg/L		98
		327.0 -> 81.0	18127				
6:2FTS	6.684	427.0 -> 407.0	45574	1.49	µg/L		99
		427.0 -> 81.0	21573				
8:2FTS	7.671	527.0 -> 507.0	41757	1.56	µg/L		99
		527.0 -> 81.0	15932				
EtFOSAA	8.099	584.0 -> 419.0	12926	0.37	µg/L	m	98
		584.0 -> 483.0	7463				
FOSA	9.281	498.0 -> 78.0	28095	0.41	µg/L	m	100
		498.0 -> 478.0	821				
MeFOSAA	7.917	570.0 -> 419.0	16880	0.39	µg/L	m	97
		570.0 -> 512.0	5846				
PFBA	2.864	213.0 -> 169.0	47065	1.54	µg/L		100
PFBS	5.357	299.0 -> 80.0	12631	0.36	µg/L		100
		299.0 -> 99.0	5170				
PFDA	7.859	513.0 -> 469.0	65871	0.43	µg/L		98
		513.0 -> 219.0	14808				
PFDoDA	8.667	613.0 -> 569.0	76704	0.41	µg/L		99
		613.0 -> 319.0	10379				

Perfluorinated Compounds by LC/MS/MS

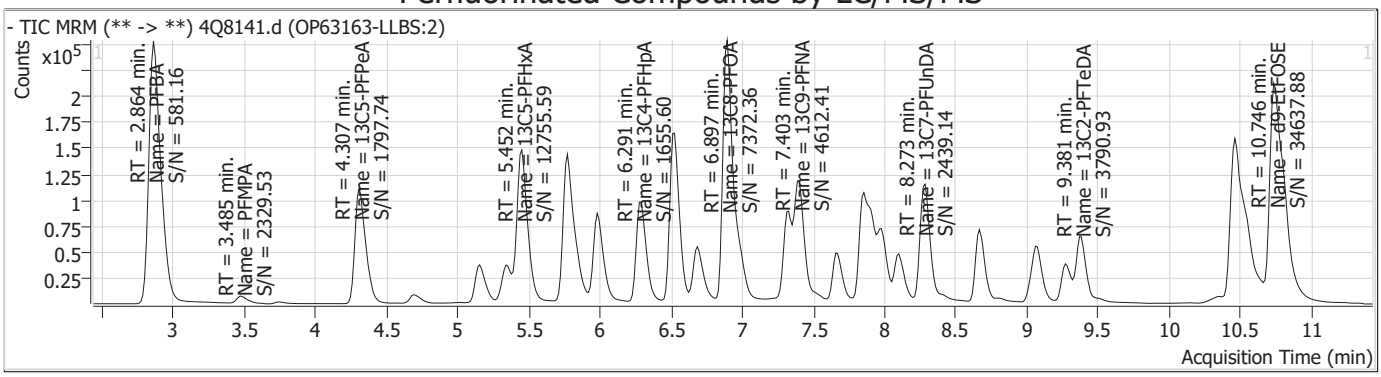
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	8753	0.36	µg/L		98
		599.0 -> 99.0	5054				
PFHpA	6.292	363.0 -> 319.0	82207	0.37	µg/L		99
		363.0 -> 169.0	16650				
PFHpS	7.529	449.0 -> 80.0	13438	0.36	µg/L		96
		449.0 -> 99.0	6984				
PFHxA	5.455	313.0 -> 269.0	58402	0.40	µg/L		100
		313.0 -> 119.0	1955				
PFHxS	6.987	399.0 -> 80.0	14291	0.38	µg/L	m	95
		399.0 -> 99.0	7182				
PFNA	7.404	463.0 -> 419.0	52065	0.41	µg/L	m	97
		463.0 -> 219.0	18477				
PFNS	8.425	549.0 -> 80.0	12569	0.39	µg/L	m	92
		549.0 -> 99.0	6622				
PFOA	6.898	413.0 -> 369.0	71115	0.39	µg/L	m	100
		413.0 -> 169.0	20594				
PFOS	7.996	499.0 -> 80.0	16066	0.42	µg/L	m	93
		499.0 -> 99.0	7530				
PFPeA	4.309	263.0 -> 219.0	65886	0.79	µg/L		100
PFPeS	6.318	349.0 -> 80.0	13525	0.36	µg/L		97
		349.0 -> 99.0	7119				
PFTeDA	9.381	713.0 -> 669.0	83349	0.40	µg/L		99
		713.0 -> 219.0	5758				
PFTrDA	9.038	663.0 -> 619.0	83275	0.40	µg/L		99
		663.0 -> 369.0	4757				
PFUnDA	8.275	563.0 -> 519.0	62438	0.38	µg/L		98
		563.0 -> 269.0	12051				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	152007	1.49	µg/L		98
		633.0 -> 453.0	46087				
9Cl-PF3ONS	8.301	531.0 -> 351.0	168686	1.50	µg/L		96
		533.0 -> 353.0	47711				
ADONA	6.527	377.0 -> 251.0	595027	1.41	µg/L		100
		377.0 -> 85.0	193854				
HFPO-DA	5.780	285.0 -> 169.0	91540	1.62	µg/L		100
		285.0 -> 185.0	10098				
3:3FTCA	3.744	241.0 -> 177.0	8736	1.75	µg/L		96
		241.0 -> 117.0	821				
5:3FTCA	5.993	341.0 -> 237.0	247160	9.47	µg/L		98
		341.0 -> 217.0	168764				
7:3FTCA	7.330	441.0 -> 337.0	312540	9.21	µg/L		99
		441.0 -> 317.0	139104				
EtFOSA	10.826	526.0 -> 219.0	13800	0.39	µg/L		94
		526.0 -> 169.0	18640				
EtFOSE	10.760	630.0 -> 59.0	202450	3.79	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	16181	0.39	µg/L		100
		512.0 -> 219.0	10704				
MeFOSE	10.488	616.0 -> 59.0	157425	3.87	µg/L		100
PFDoDS	9.508	699.0 -> 80.0	7041	0.34	µg/L		94
		699.0 -> 99.0	4745				
NFDHA	5.333	295.0 -> 201.0	14318	0.74	µg/L		87
		201.0 -> 85.0	63003				
		295.0 -> 85.0	4370				
PFMBA	4.698	279.0 -> 85.0	44245	0.78	µg/L		100
PFMPA	3.485	229.0 -> 85.0	37438	0.78	µg/L		100
PFEESA	5.849	315.0 -> 135.0	97332	0.72	µg/L		99
		315.0 -> 69.0	7982				

Perfluorinated Compounds by LC/MS/MS

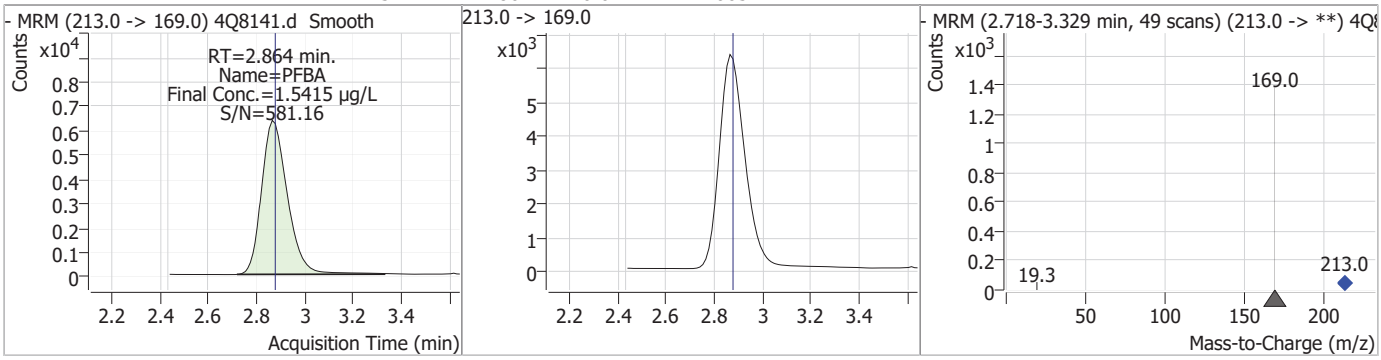
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

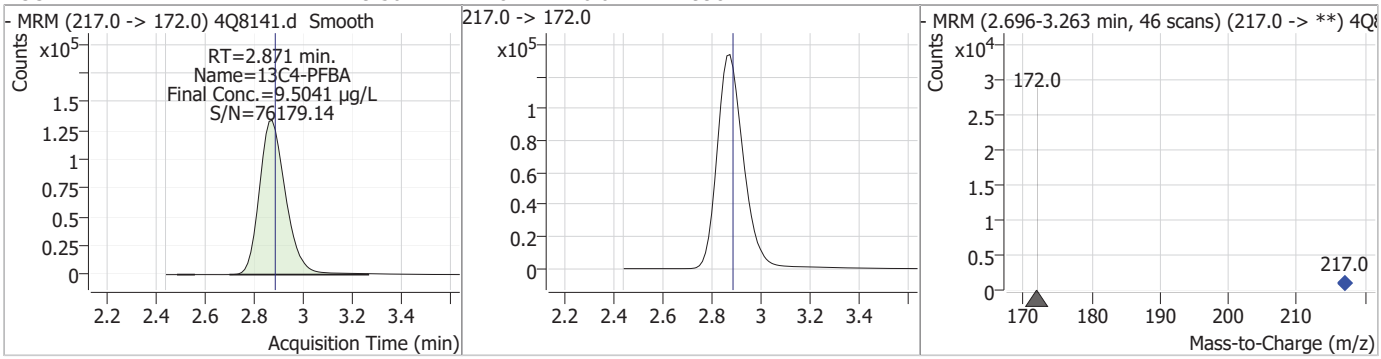
Perfluorinated Compounds by LC/MS/MS



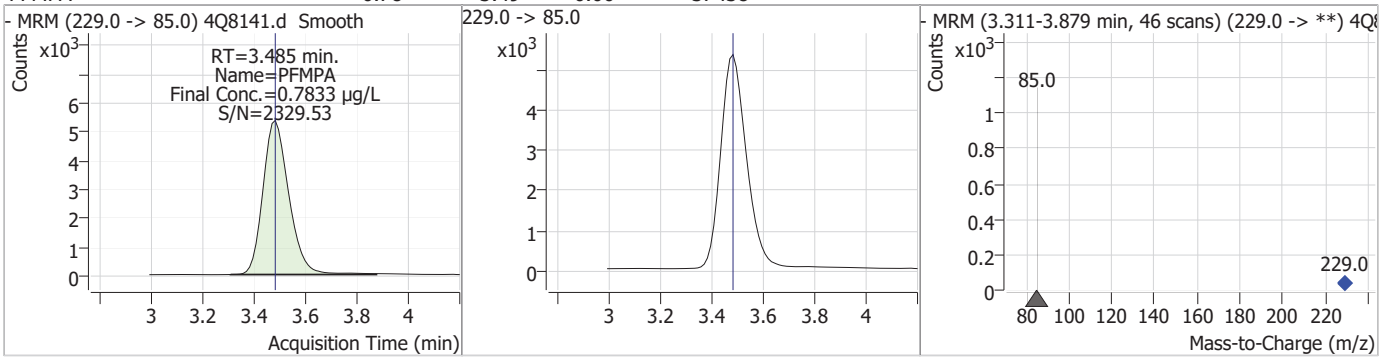
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	1.54	2.86	-0.01	47065				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.50	2.87	-0.01	998744				

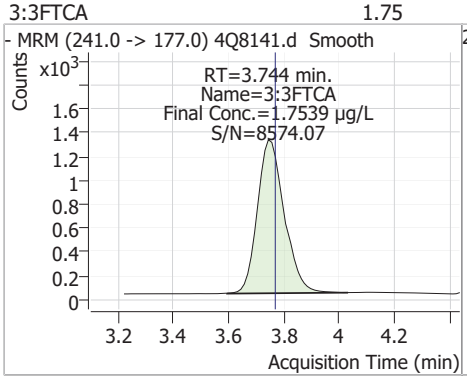


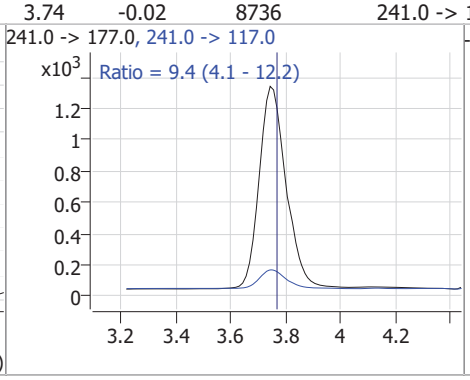
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.78	3.49	0.00	37438				

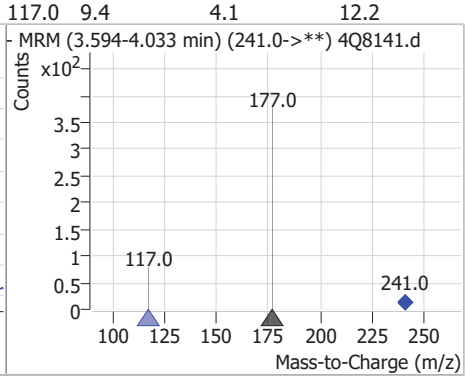


Perfluorinated Compounds by LC/MS/MS

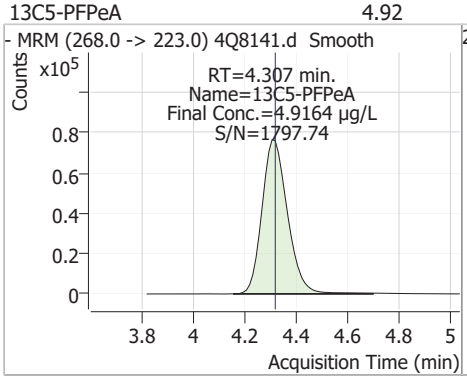
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	1.75	3.74	-0.02	8736	241.0 -> 117.0	9.4	4.1	12.2

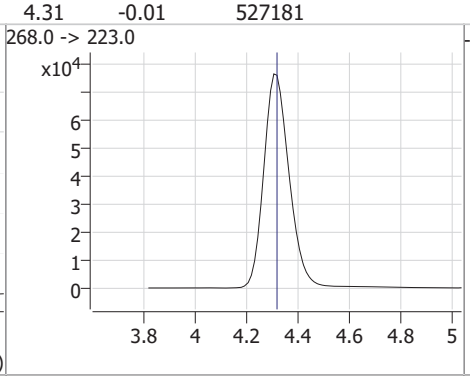


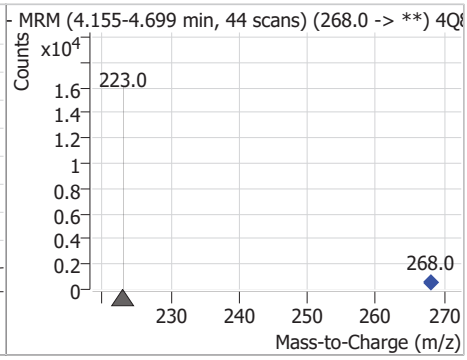




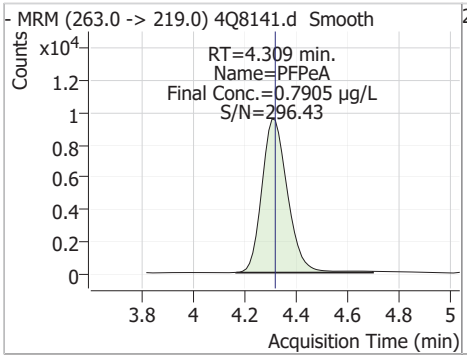
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.92	4.31	-0.01	527181				

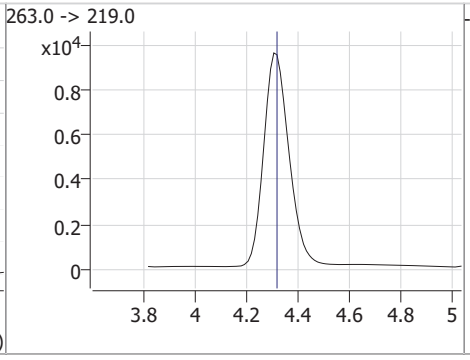


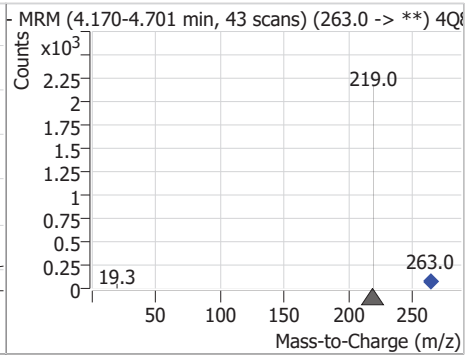




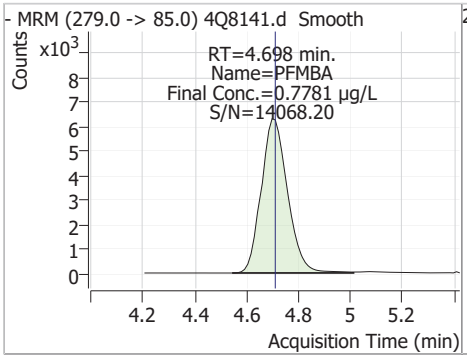
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.79	4.31	-0.01	65886				

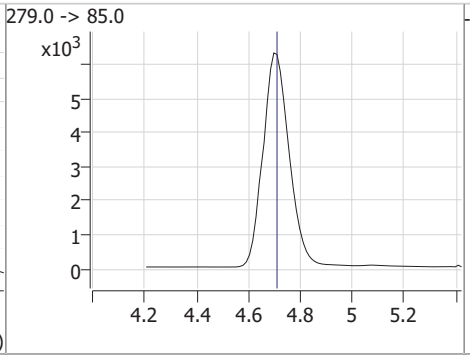


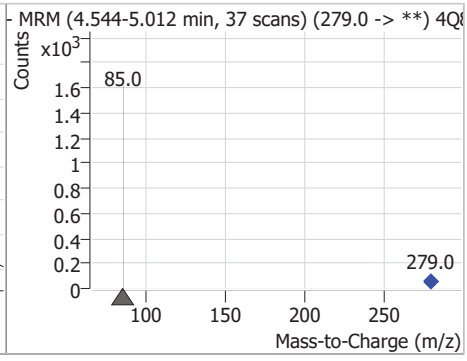




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.78	4.70	-0.01	44245				

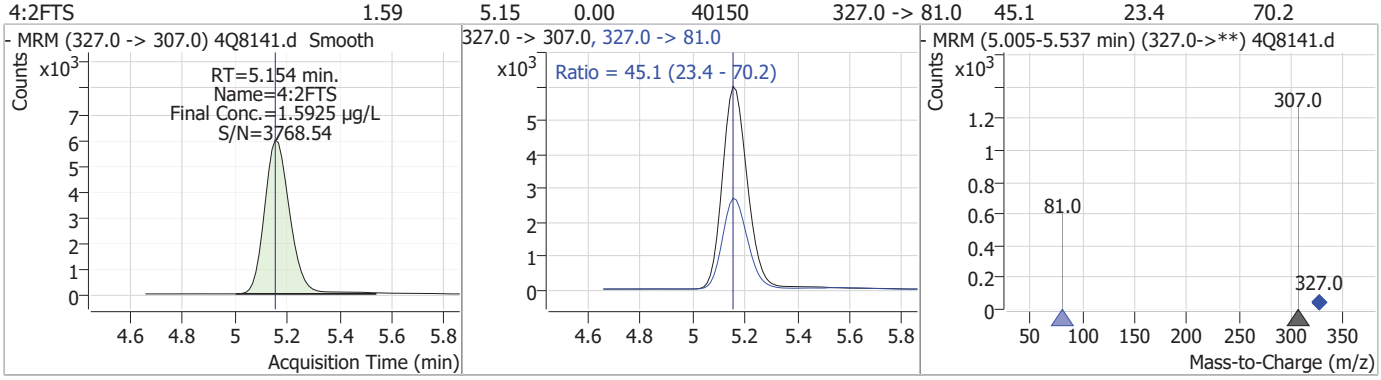




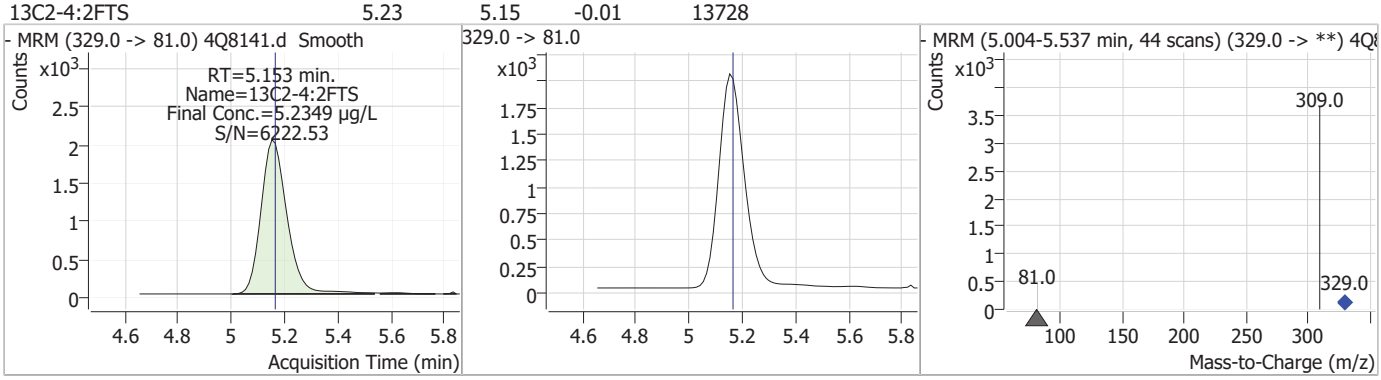


Perfluorinated Compounds by LC/MS/MS

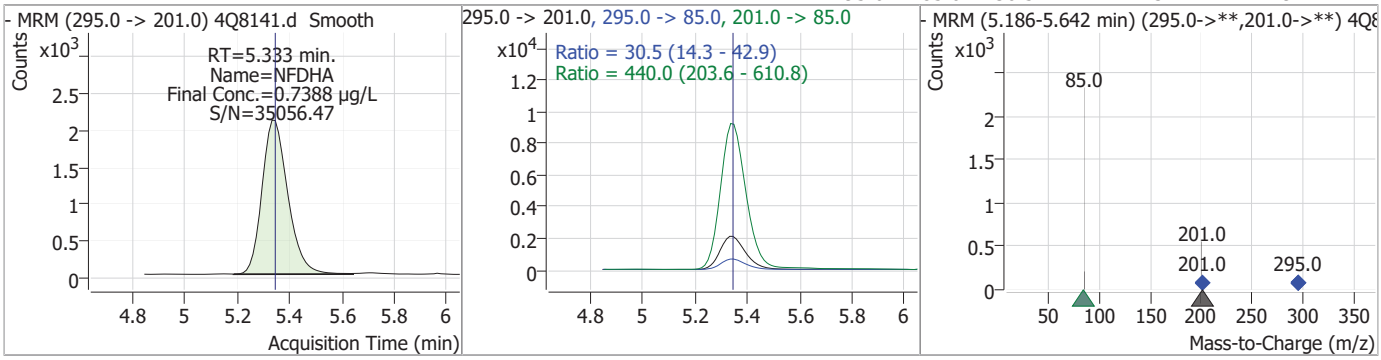
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	1.59	5.15	0.00	40150	327.0 -> 81.0	45.1	23.4	70.2



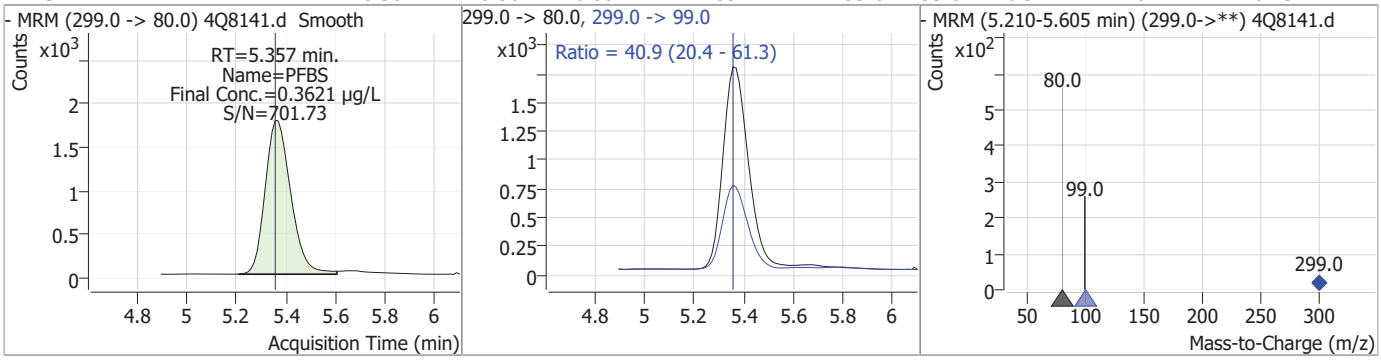
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.23	5.15	-0.01	13728				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.74	5.33	-0.01	14318	201.0 -> 85.0	440.0	203.6	610.8
					295.0 -> 85.0	30.5	14.3	42.9

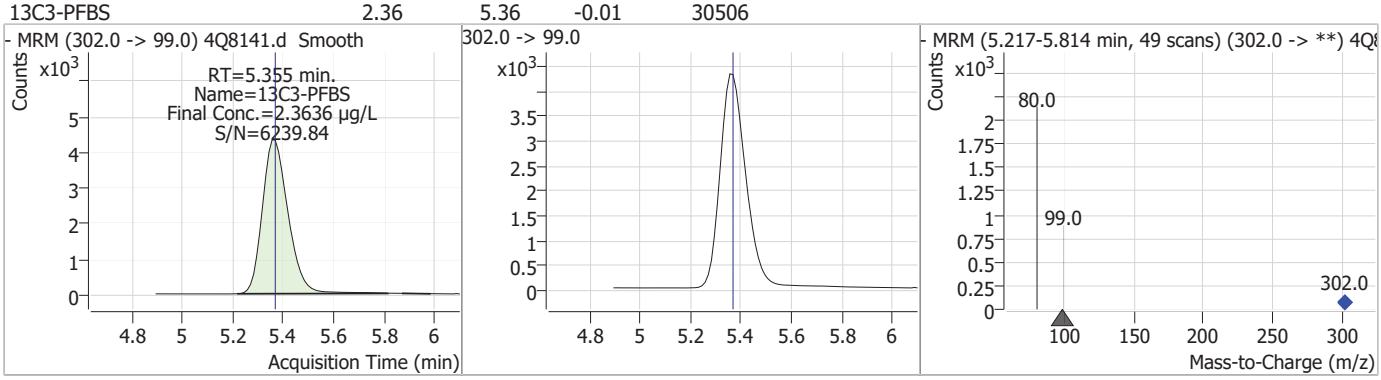


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.36	5.36	0.00	12631	299.0 -> 99.0	40.9	20.4	61.3

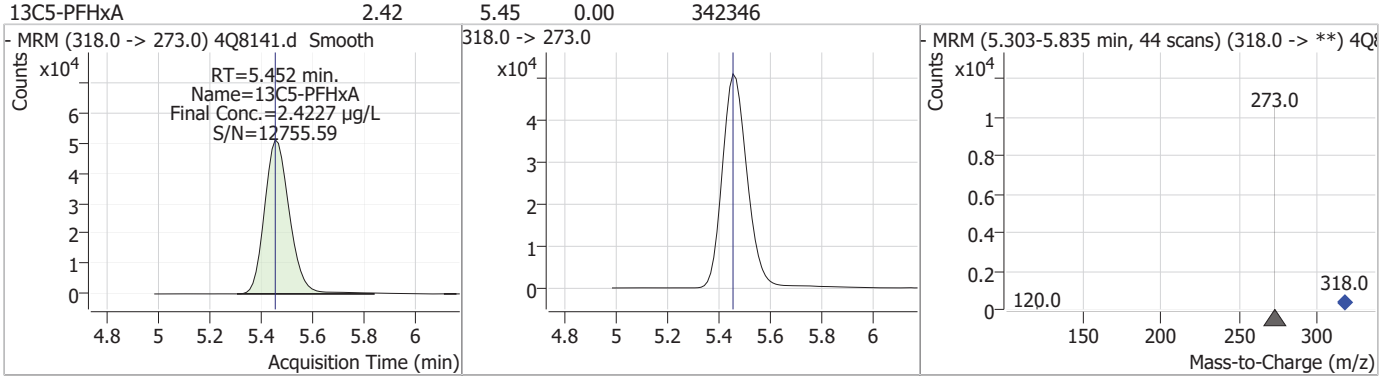


Perfluorinated Compounds by LC/MS/MS

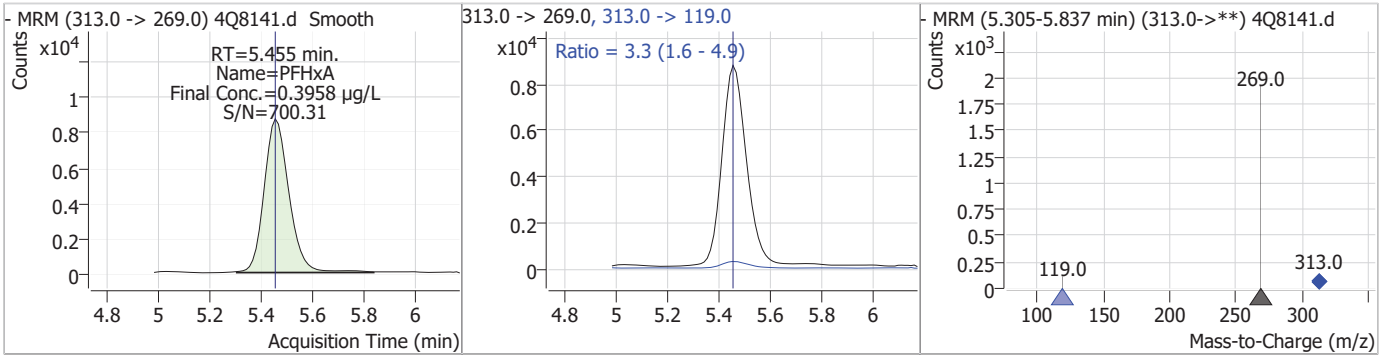
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.36	5.36	-0.01	30506				



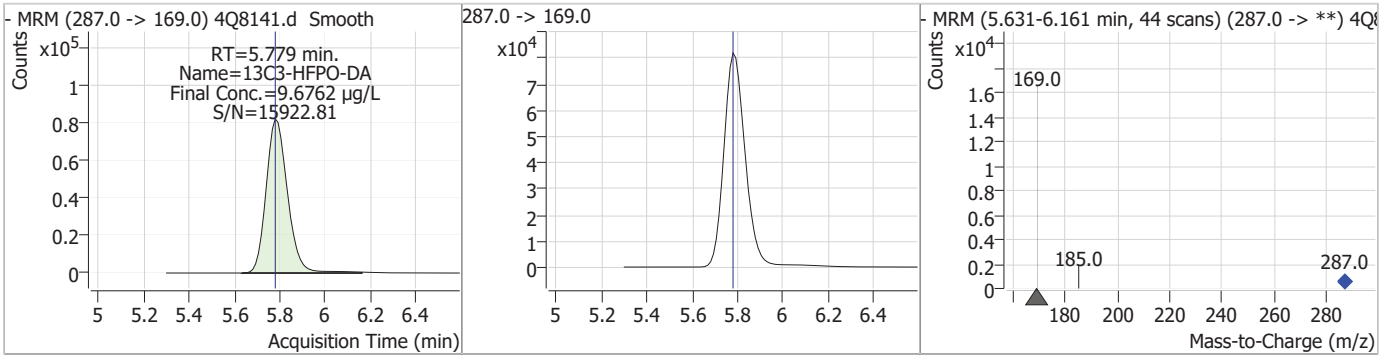
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.42	5.45	0.00	342346				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.40	5.45	0.00	58402	313.0 -> 119.0	3.3	1.6	4.9

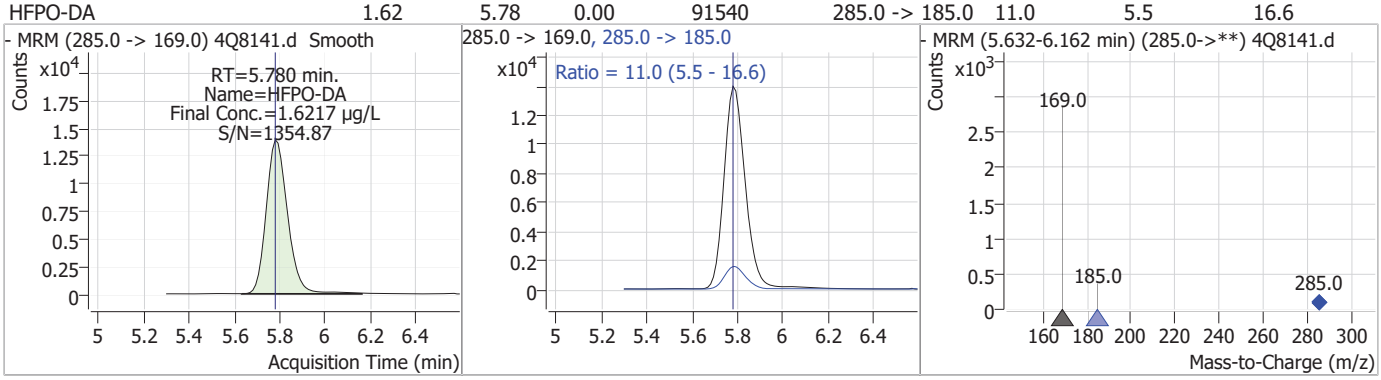


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.68	5.78	0.00	536950				

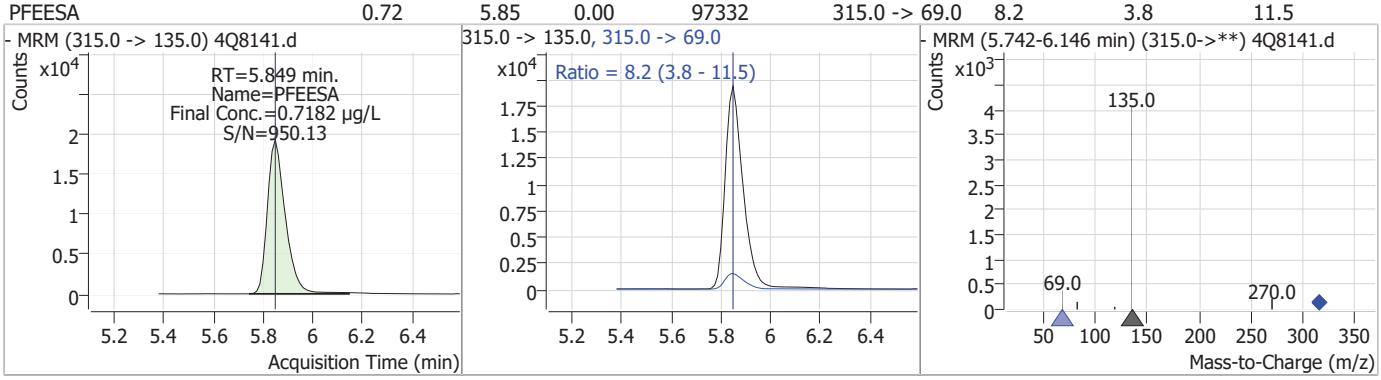


Perfluorinated Compounds by LC/MS/MS

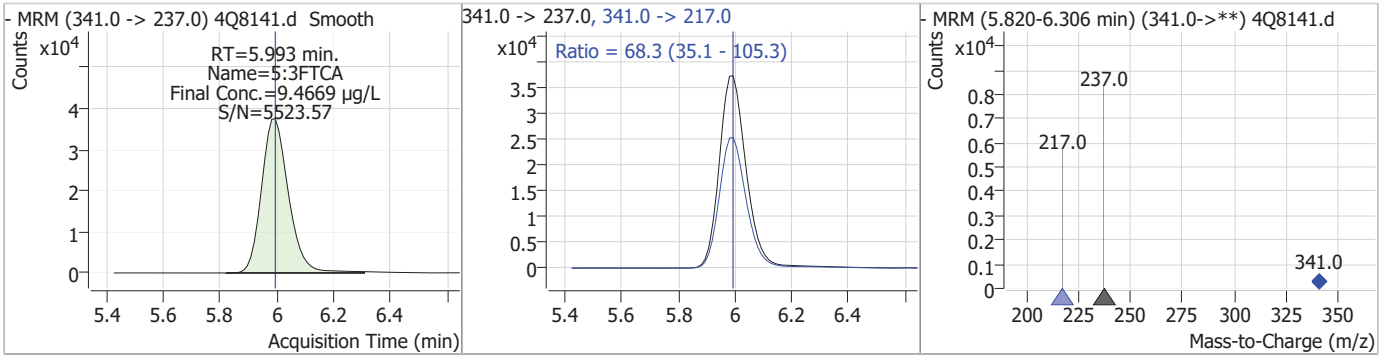
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	1.62	5.78	0.00	91540	285.0 -> 185.0	11.0	5.5	16.6



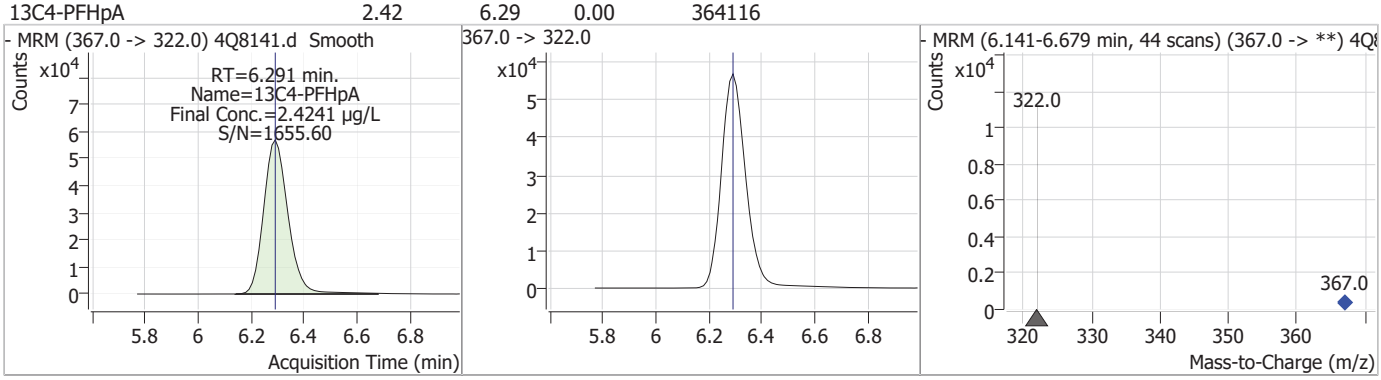
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.72	5.85	0.00	97332	315.0 -> 69.0	8.2	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	9.47	5.99	0.00	247160	341.0 -> 217.0	68.3	35.1	105.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.42	6.29	0.00	364116				



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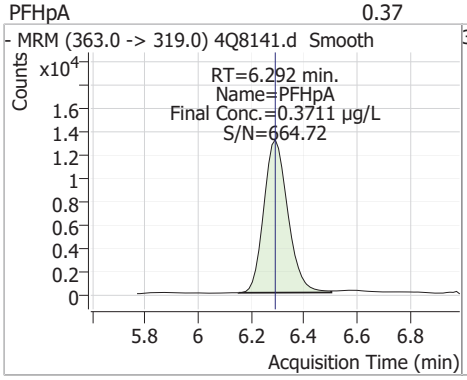
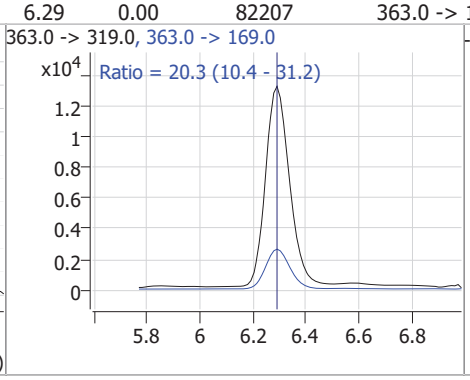
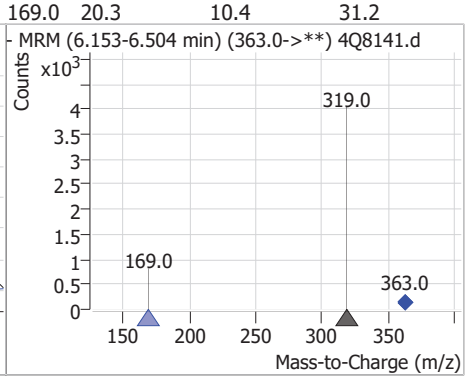
Perfluorinated Compounds by LC/MS/MS

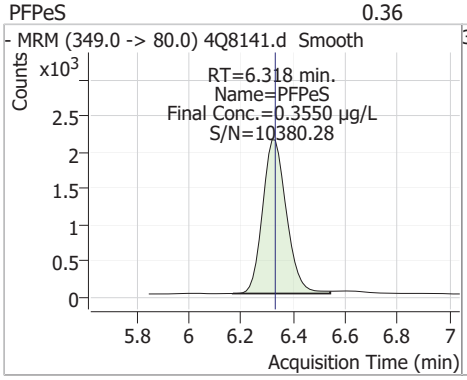
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.37	6.29	0.00	82207	363.0 -> 169.0	20.3	10.4	31.2

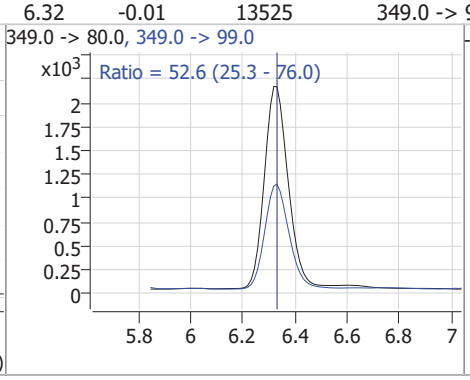


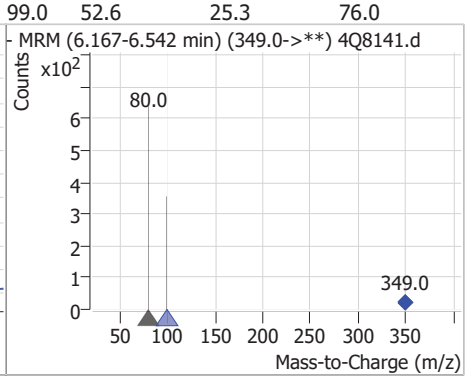




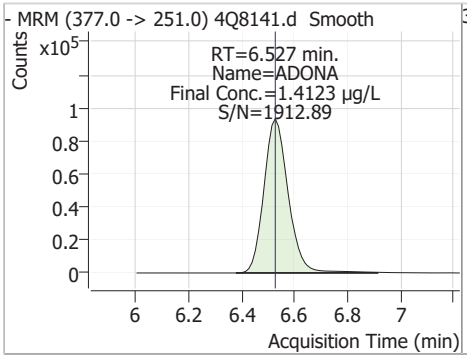
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.36	6.32	-0.01	13525	349.0 -> 99.0	52.6	25.3	76.0

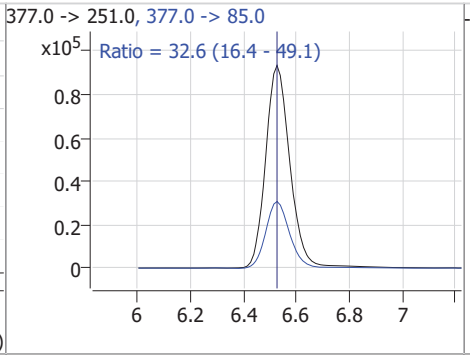


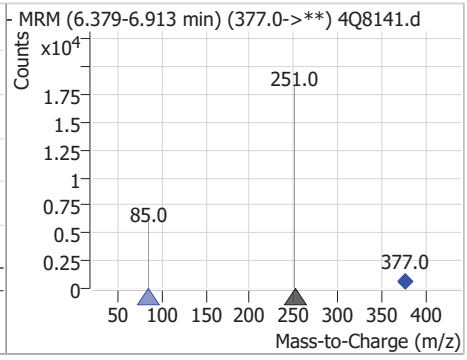




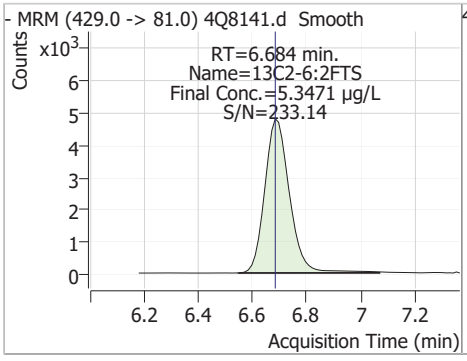
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	1.41	6.53	0.00	595027	377.0 -> 85.0	32.6	16.4	49.1

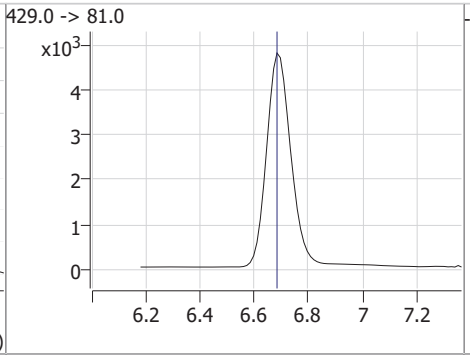


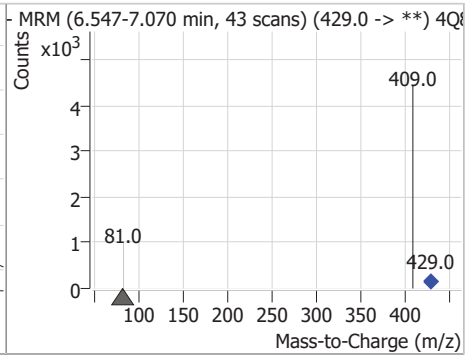




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.35	6.68	0.00	30429				







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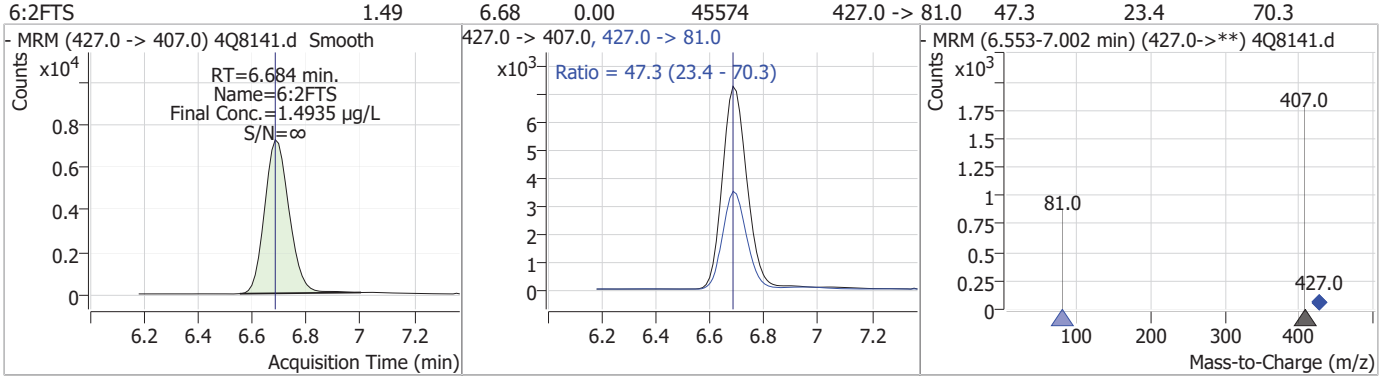
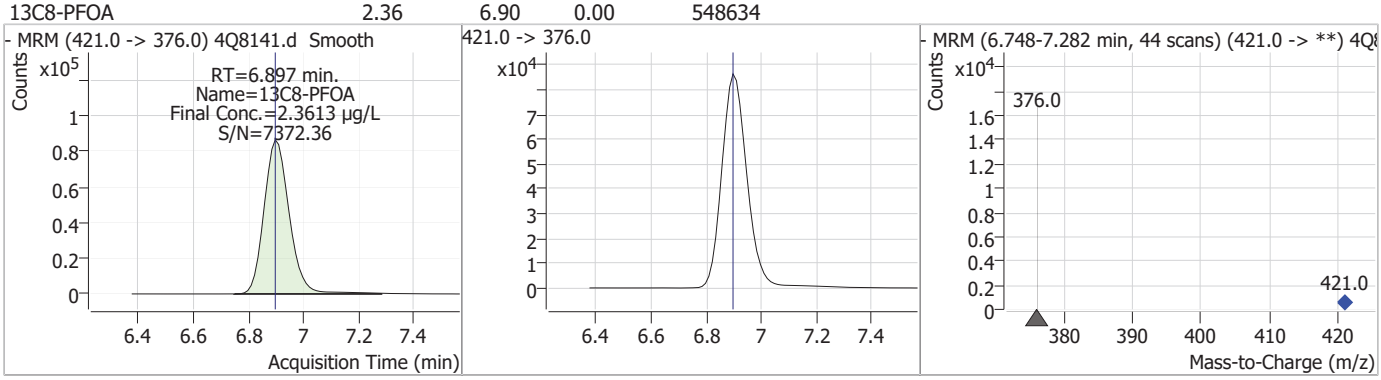
Perfluorinated Compounds by LC/MS/MS

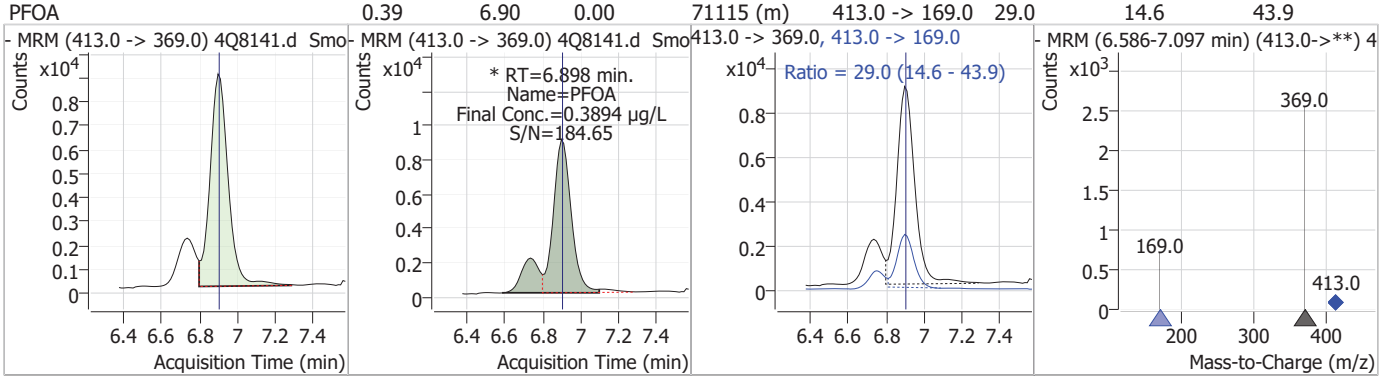
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	1.49	6.68	0.00	45574	427.0 -> 81.0	47.3	23.4	70.3



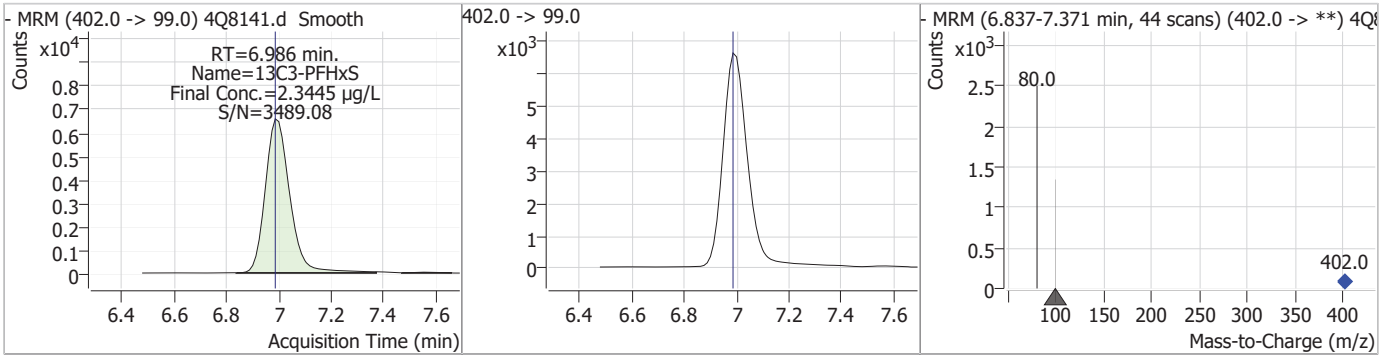
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.36	6.90	0.00	548634				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.39	6.90	0.00	71115 (m)	413.0 -> 169.0	29.0	14.6	43.9

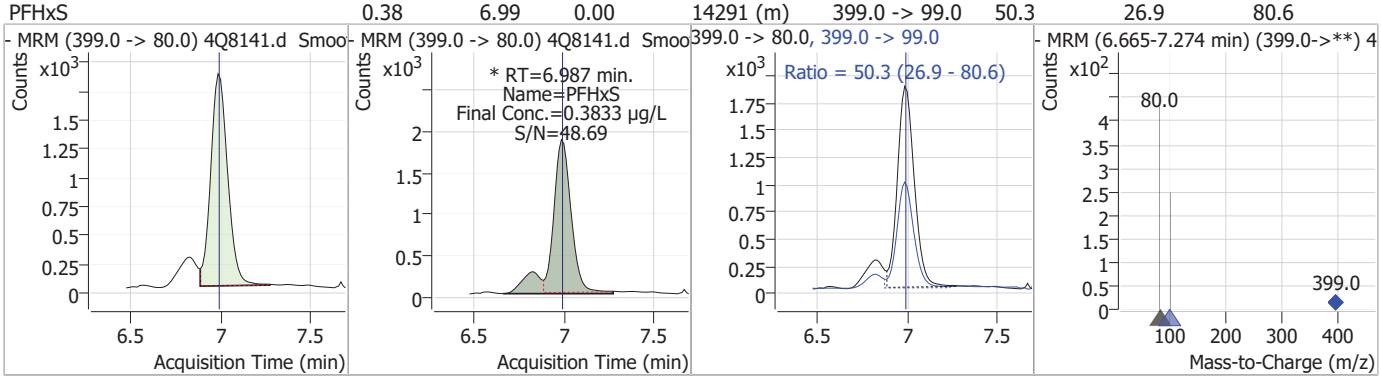


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.34	6.99	0.00	42812				

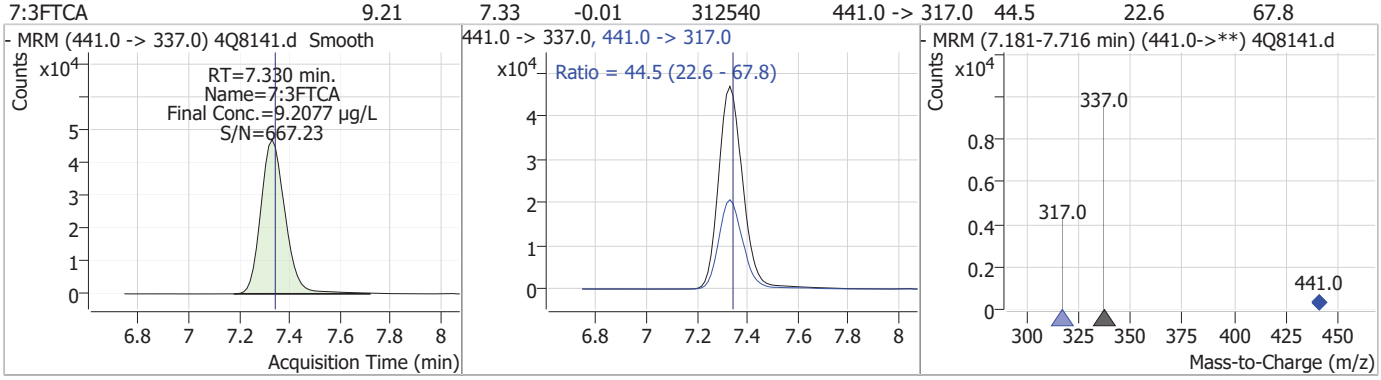


Perfluorinated Compounds by LC/MS/MS

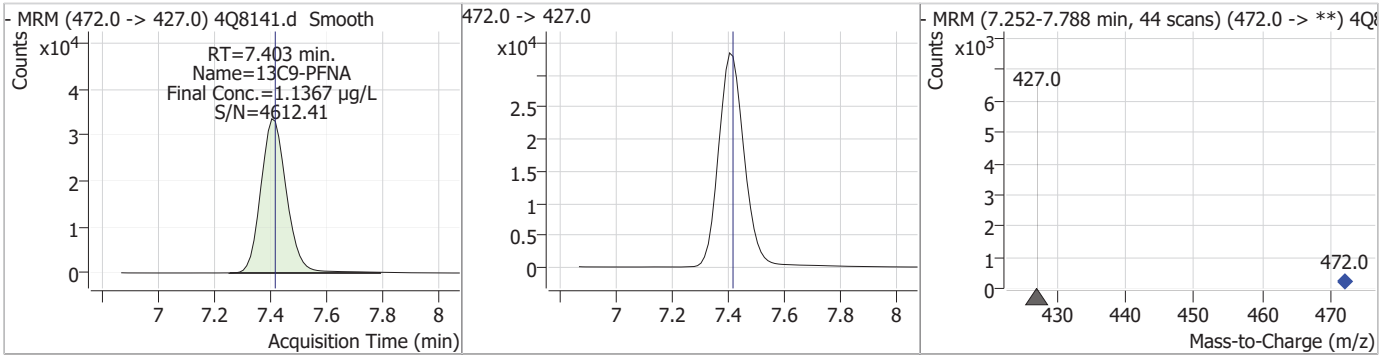
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.38	6.99	0.00	14291 (m)	399.0 -> 99.0	50.3	26.9	80.6



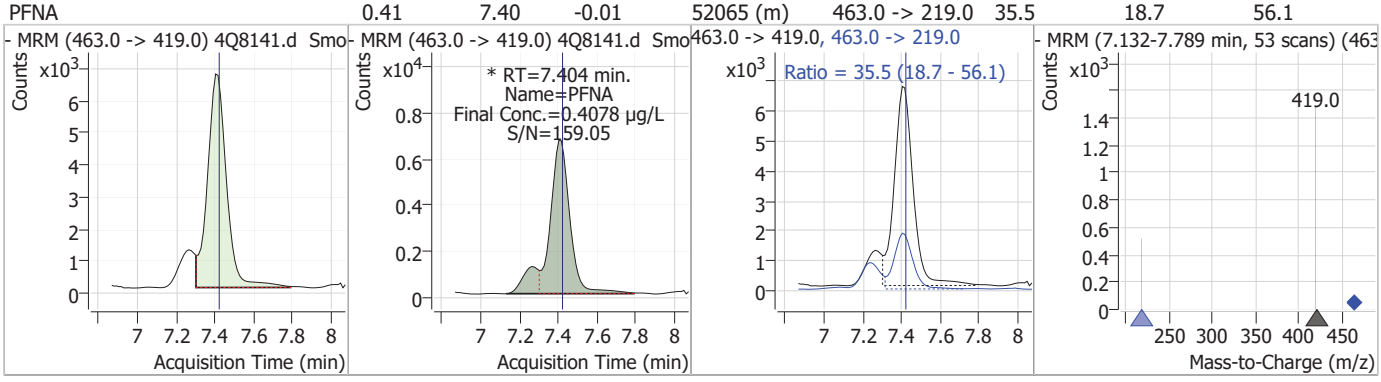
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	9.21	7.33	-0.01	312540	441.0 -> 317.0	44.5	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.14	7.40	-0.01	212251				

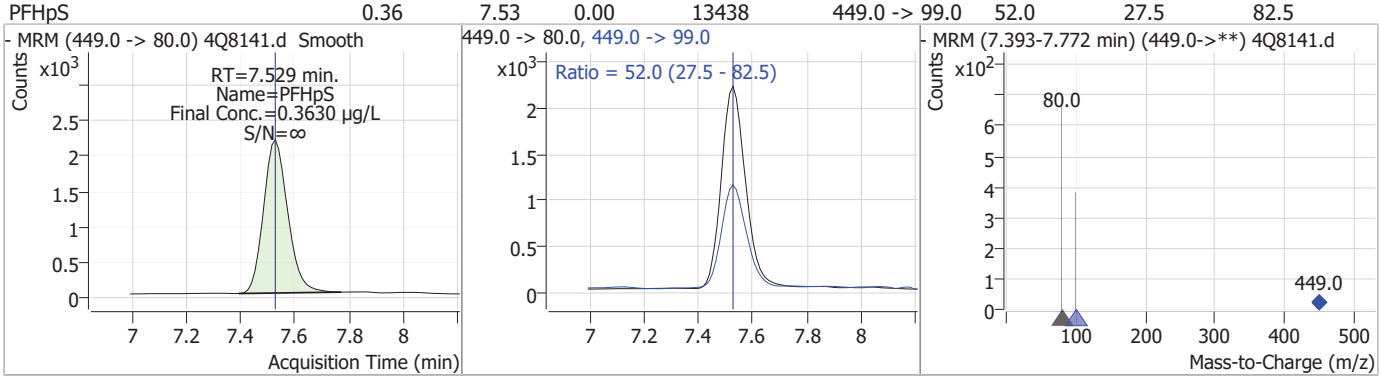


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.41	7.40	-0.01	52065 (m)	463.0 -> 219.0	35.5	18.7	56.1

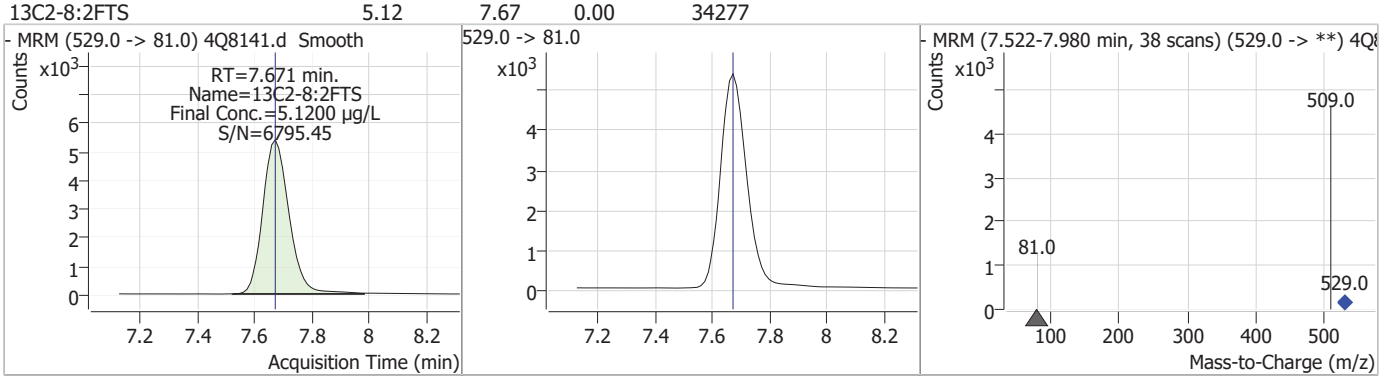


Perfluorinated Compounds by LC/MS/MS

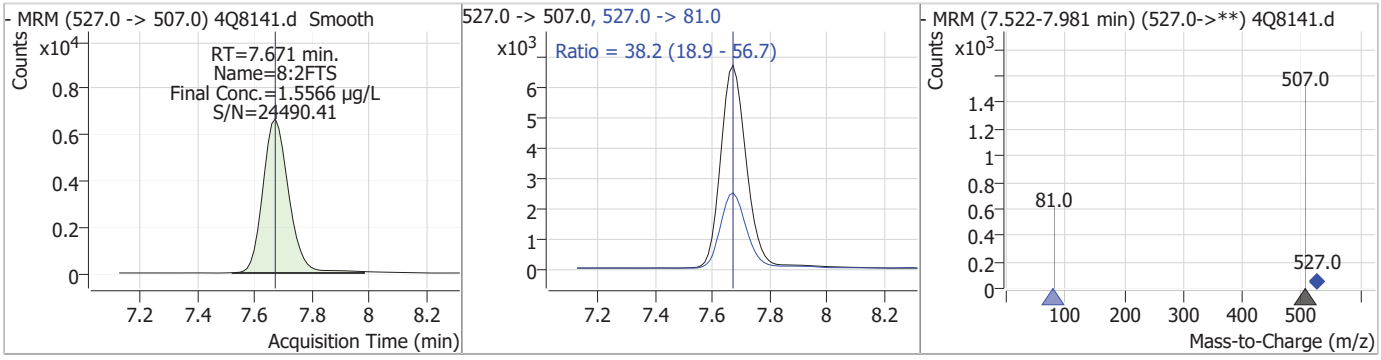
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.36	7.53	0.00	13438	449.0 -> 99.0	52.0	27.5	82.5



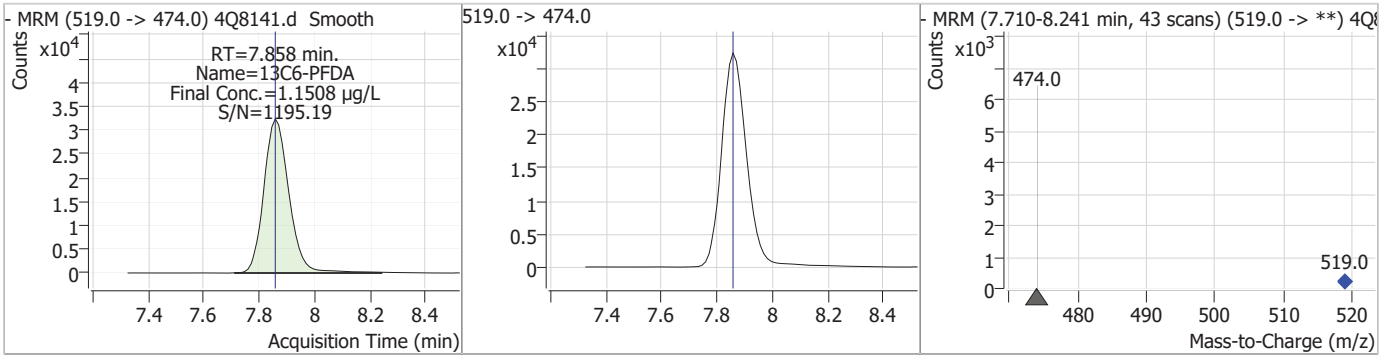
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.12	7.67	0.00	34277				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	1.56	7.67	0.00	41757	527.0 -> 81.0	38.2	18.9	56.7

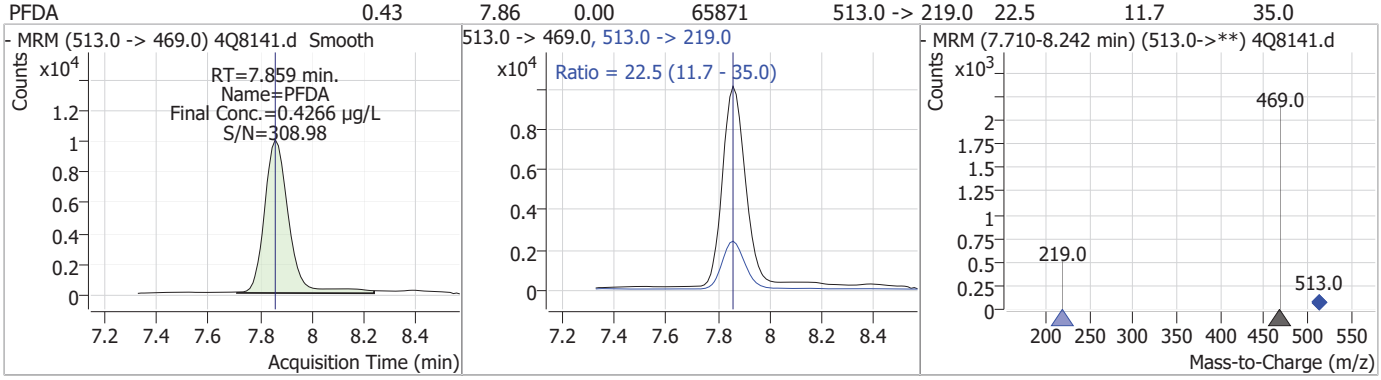


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.15	7.86	0.00	203170				

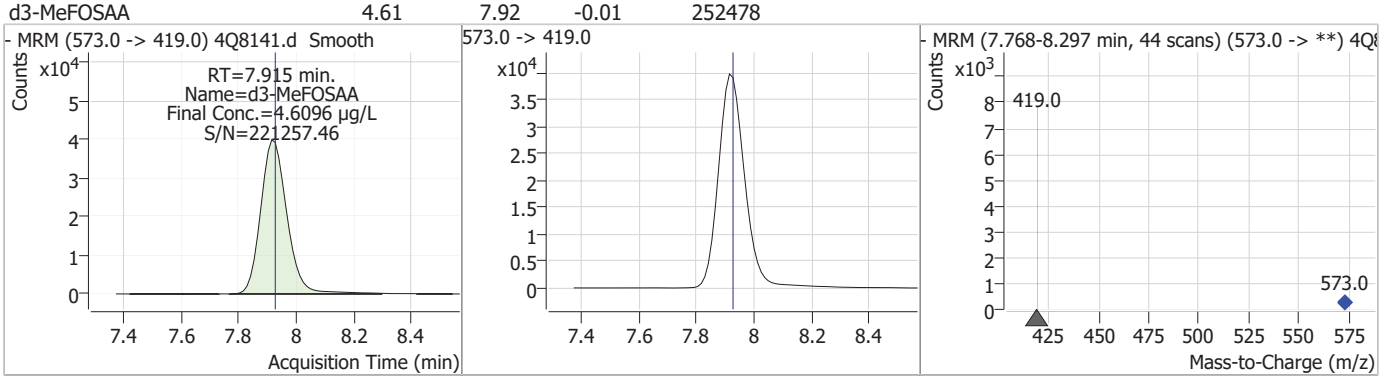


Perfluorinated Compounds by LC/MS/MS

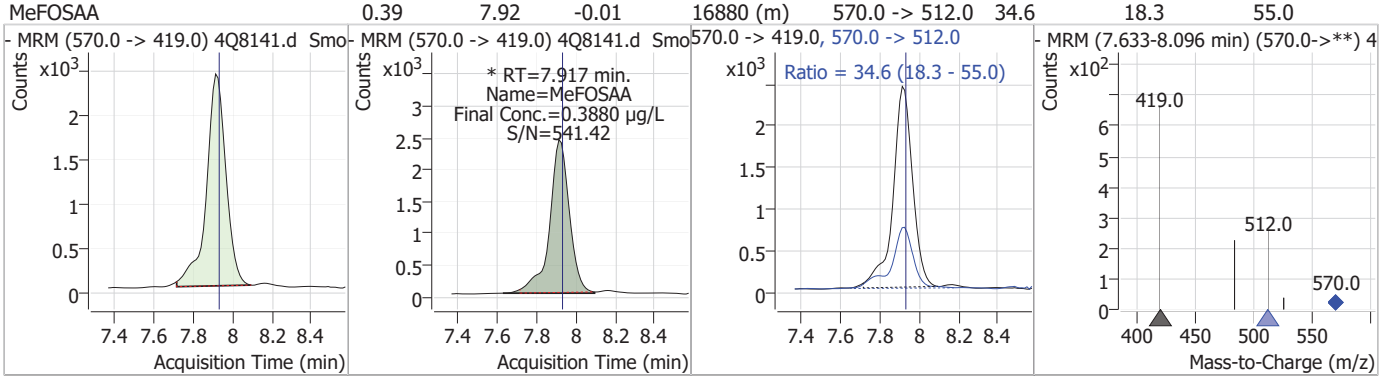
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.43	7.86	0.00	65871	513.0 -> 219.0	22.5	11.7	35.0



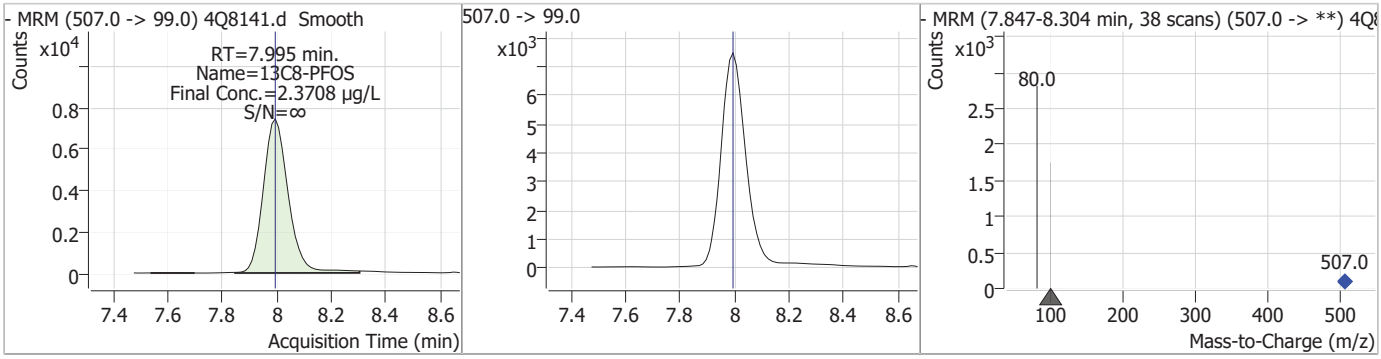
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.61	7.92	-0.01	252478				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.39	7.92	-0.01	16880 (m)	570.0 -> 512.0	34.6	18.3	55.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.37	7.99	0.00	47475				



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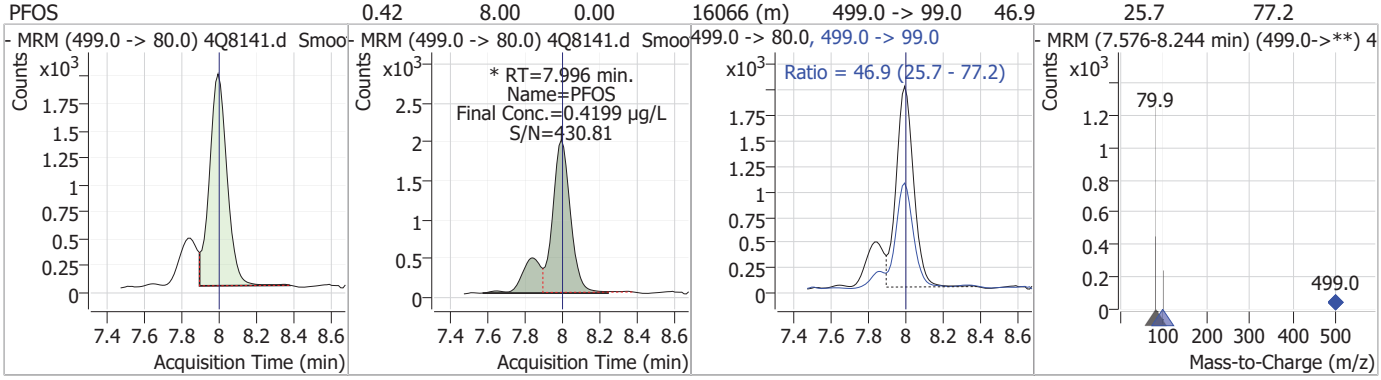
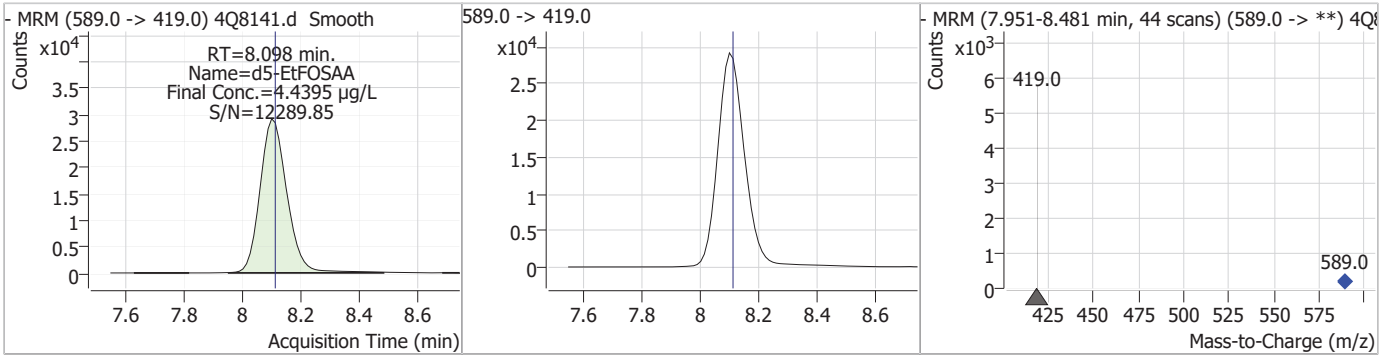
Perfluorinated Compounds by LC/MS/MS

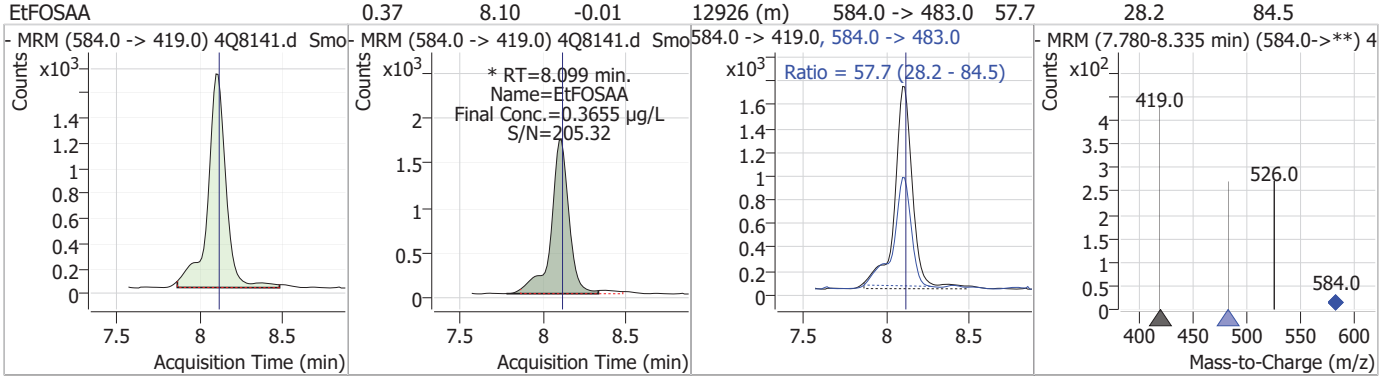
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.42	8.00	0.00	16066 (m)	499.0 -> 99.0	46.9	25.7	77.2



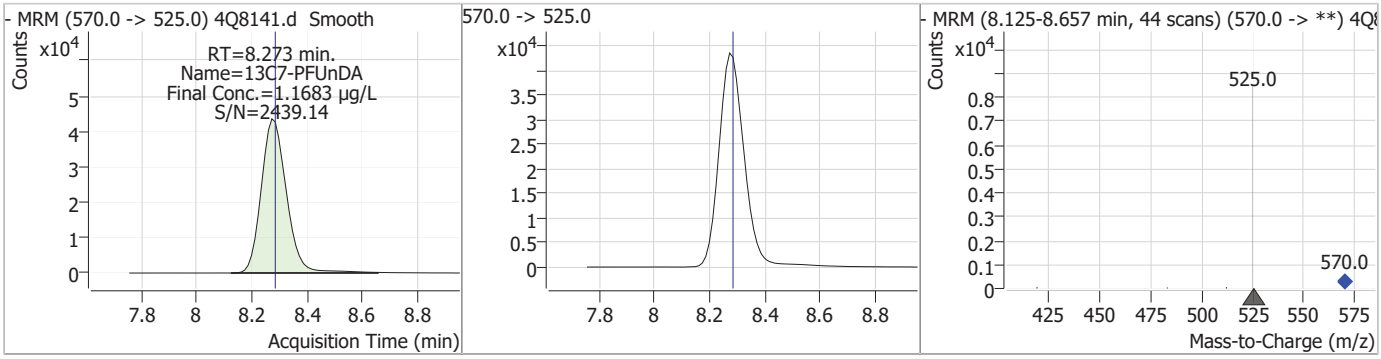
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.44	8.10	-0.01	186686				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.37	8.10	-0.01	12926 (m)	584.0 -> 483.0	57.7	28.2	84.5

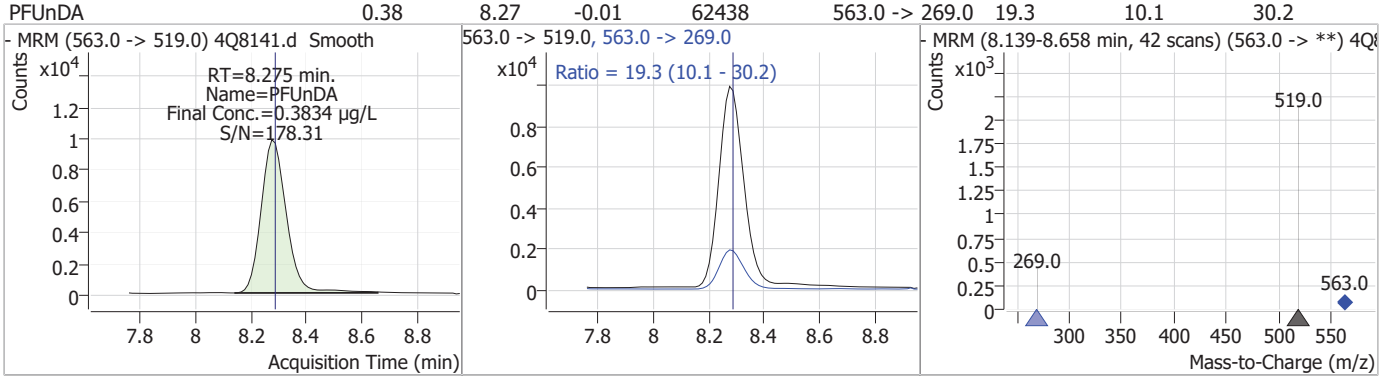


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.17	8.27	-0.01	275487				

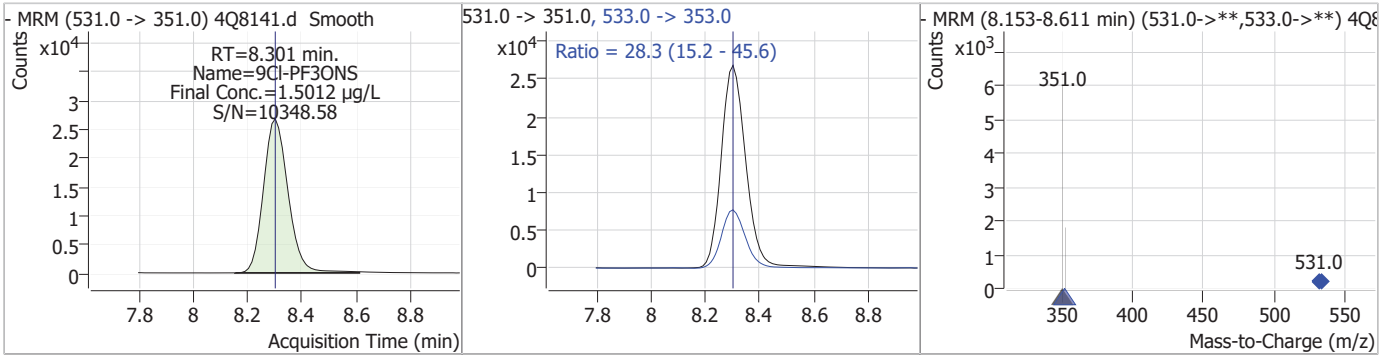


Perfluorinated Compounds by LC/MS/MS

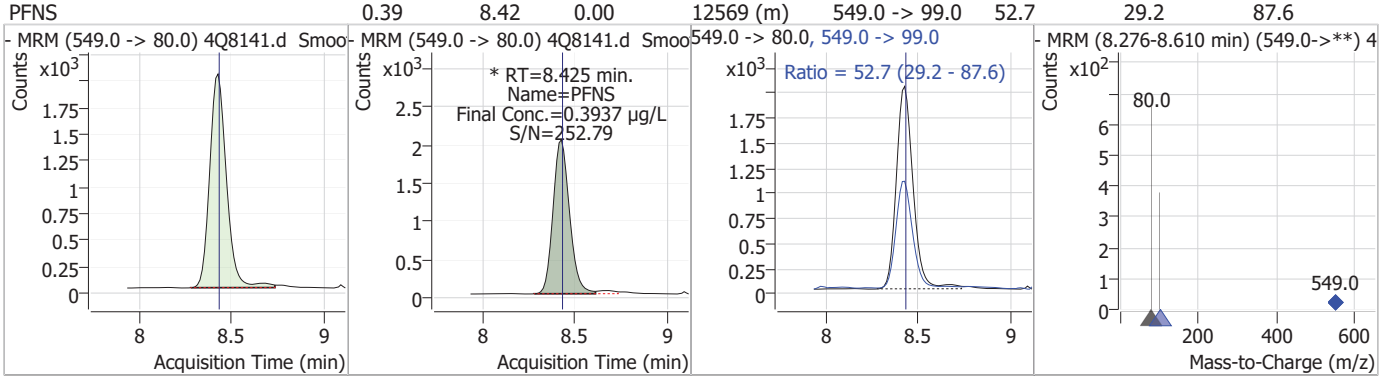
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.38	8.27	-0.01	62438	563.0 -> 269.0	19.3	10.1	30.2



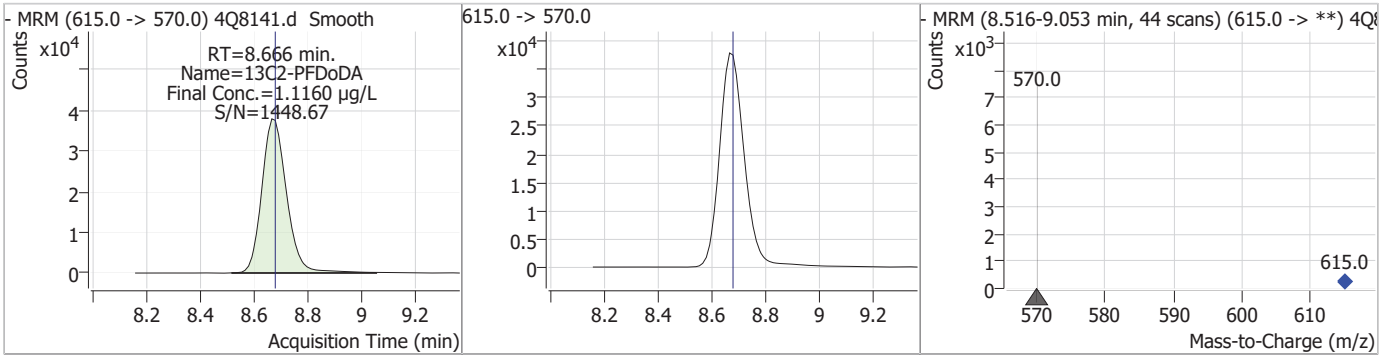
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	1.50	8.30	0.00	168686	533.0 -> 353.0	28.3	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.39	8.42	0.00	12569 (m)	549.0 -> 99.0	52.7	29.2	87.6

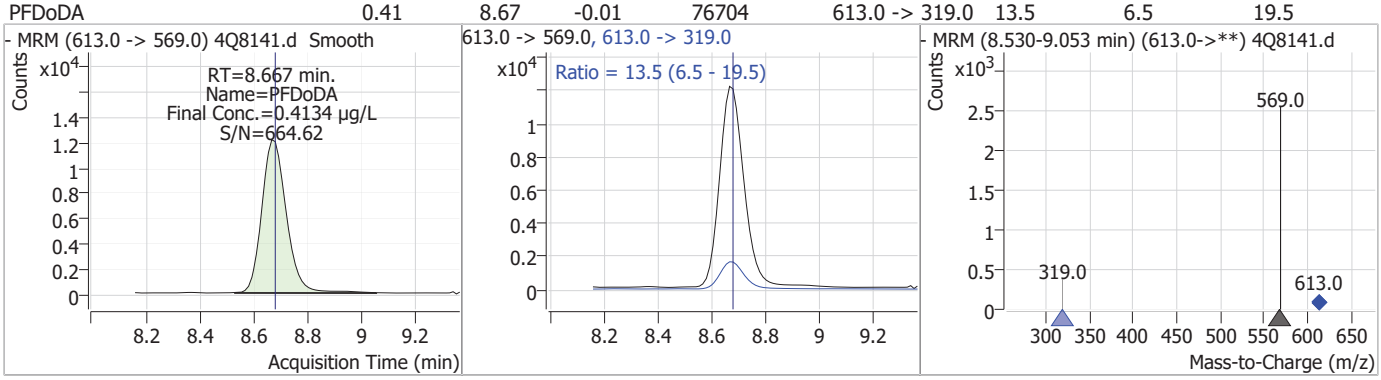


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.12	8.67	-0.01	241033				

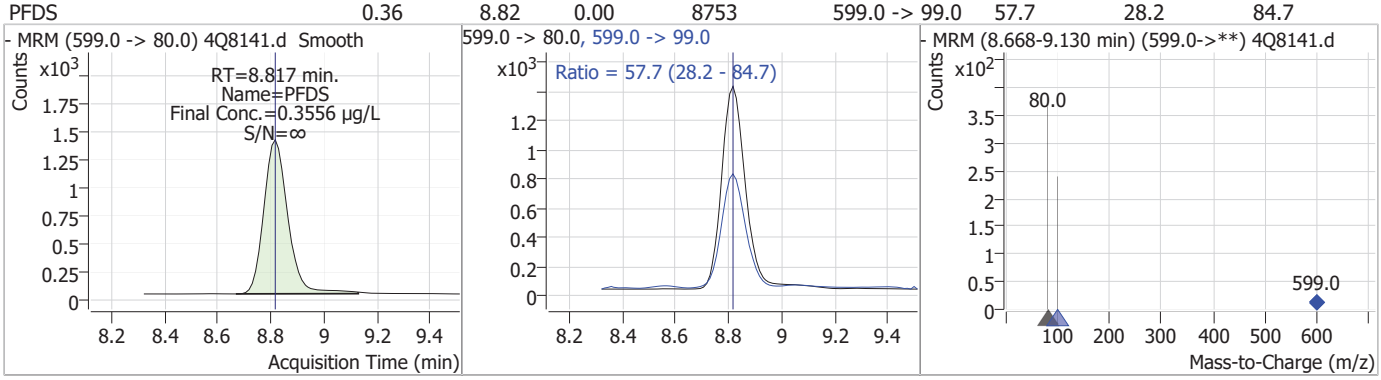


Perfluorinated Compounds by LC/MS/MS

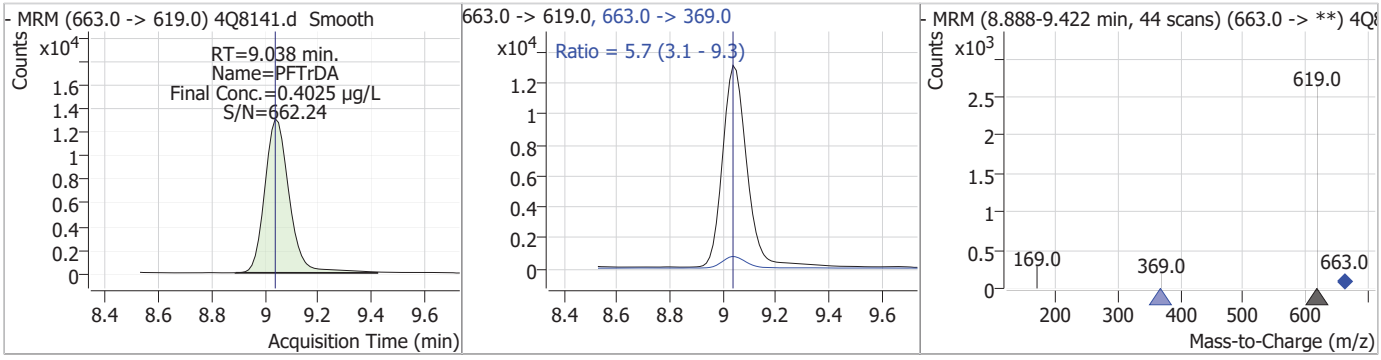
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.41	8.67	-0.01	76704	613.0 -> 319.0	13.5	6.5	19.5



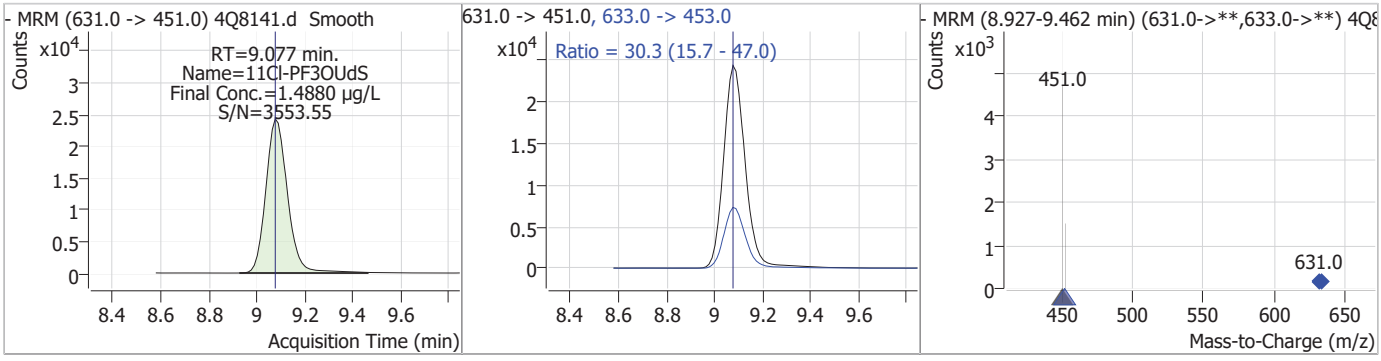
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.36	8.82	0.00	8753	599.0 -> 99.0	57.7	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.40	9.04	0.00	83275	663.0 -> 369.0	5.7	3.1	9.3

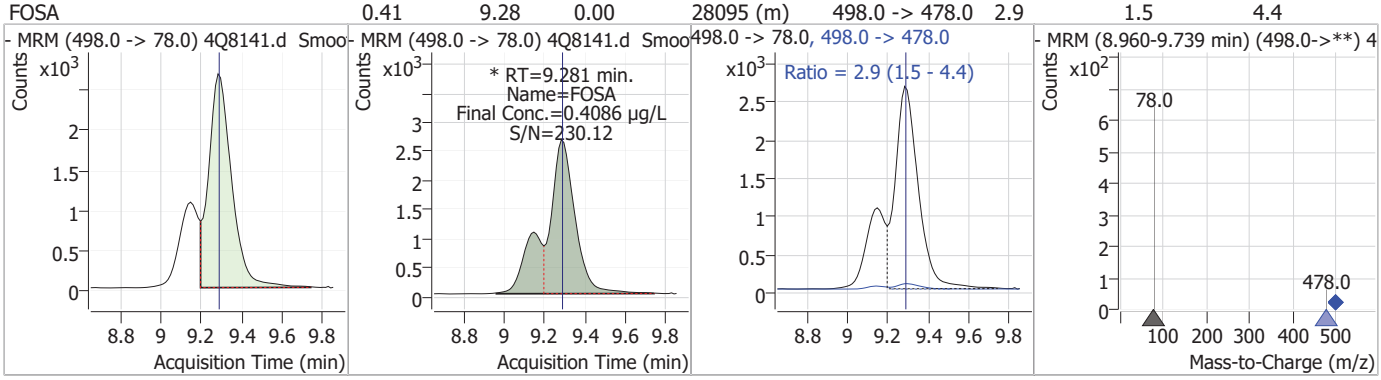


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	1.49	9.08	0.00	152007	633.0 -> 453.0	30.3	15.7	47.0

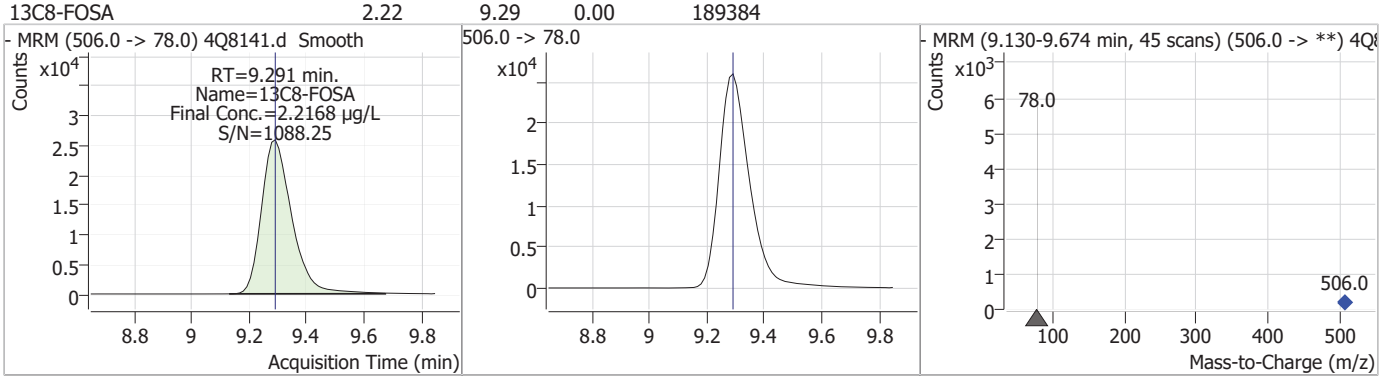


Perfluorinated Compounds by LC/MS/MS

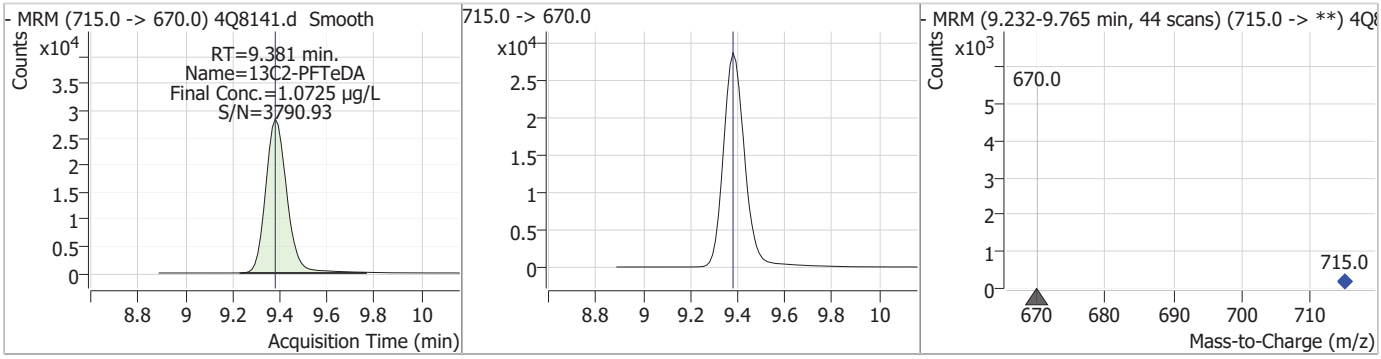
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.41	9.28	0.00	28095 (m)	498.0 -> 478.0	2.9	1.5	4.4



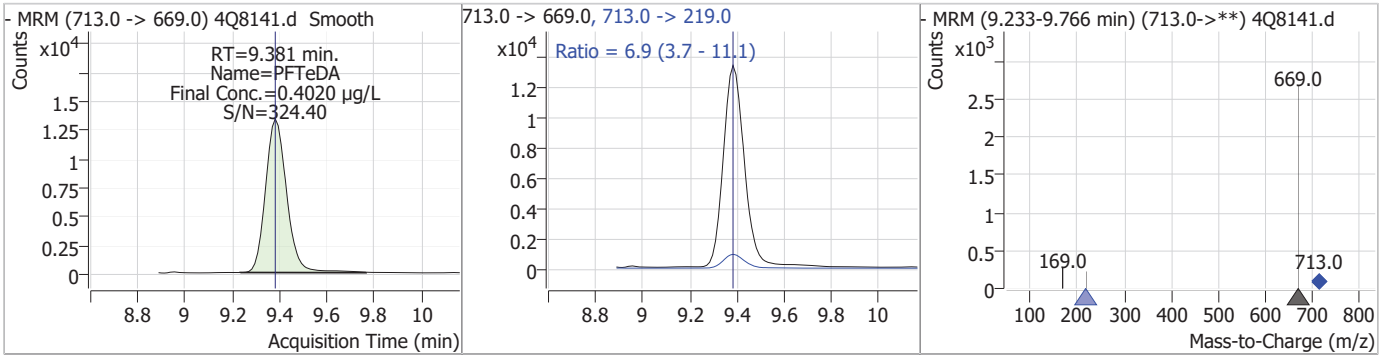
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.22	9.29	0.00	189384				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.07	9.38	0.00	178081				

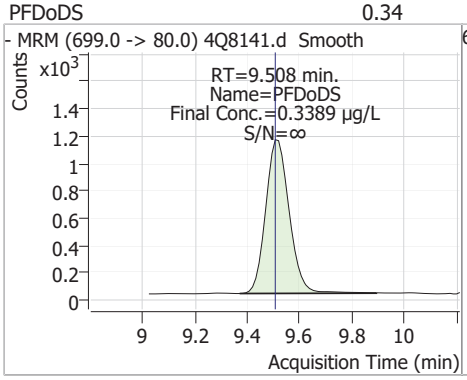


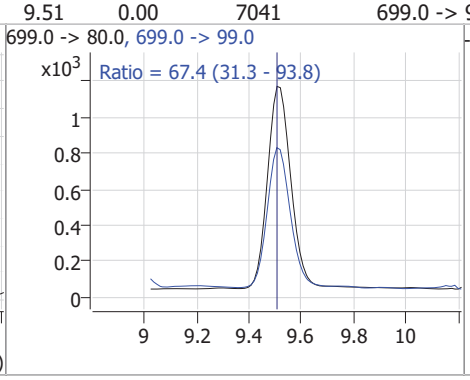
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.40	9.38	0.00	83349	713.0 -> 219.0	6.9	3.7	11.1

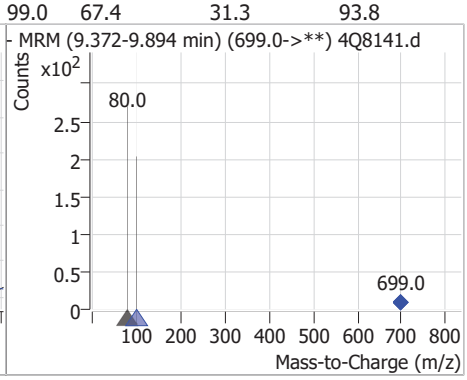


Perfluorinated Compounds by LC/MS/MS

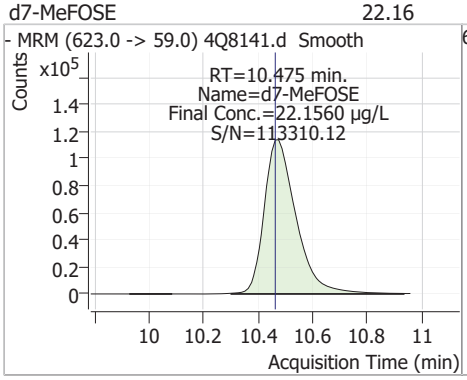
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.34	9.51	0.00	7041	699.0 -> 99.0	67.4	31.3	93.8

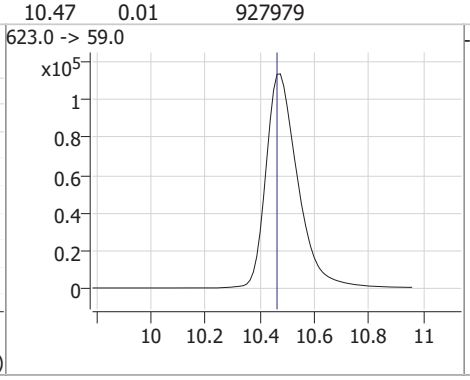


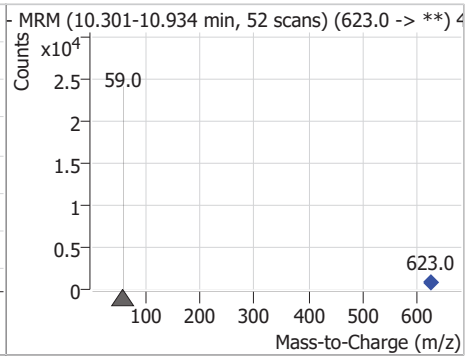




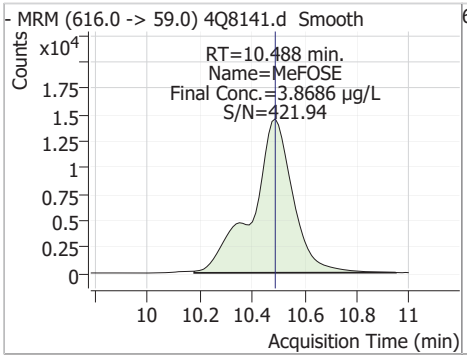
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.16	10.47	0.01	927979				

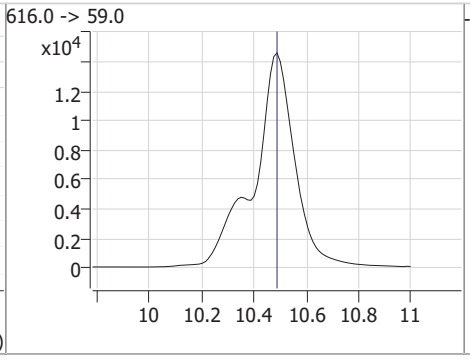


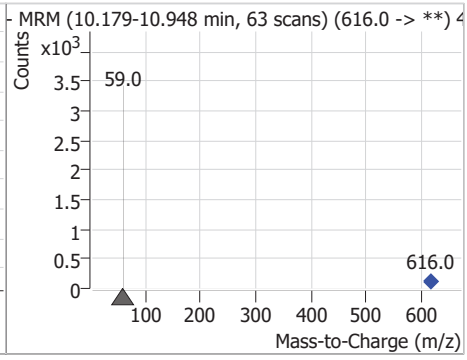




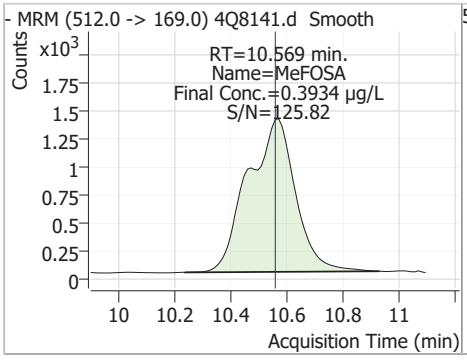
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	3.87	10.49	0.00	157425				

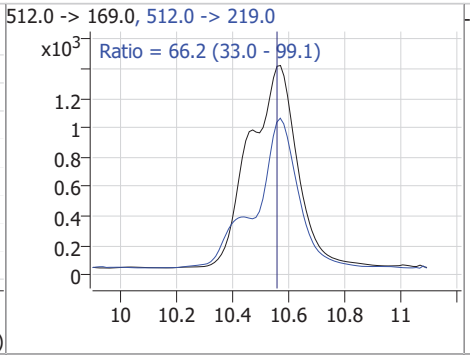


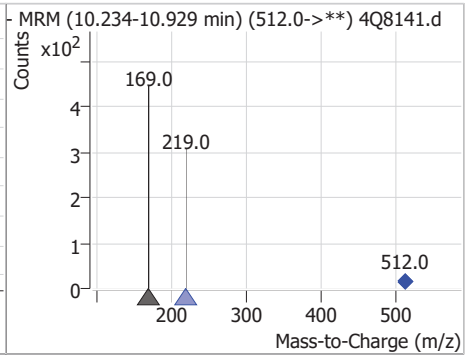




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.39	10.57	0.01	16181	512.0 -> 219.0	66.2	33.0	99.1

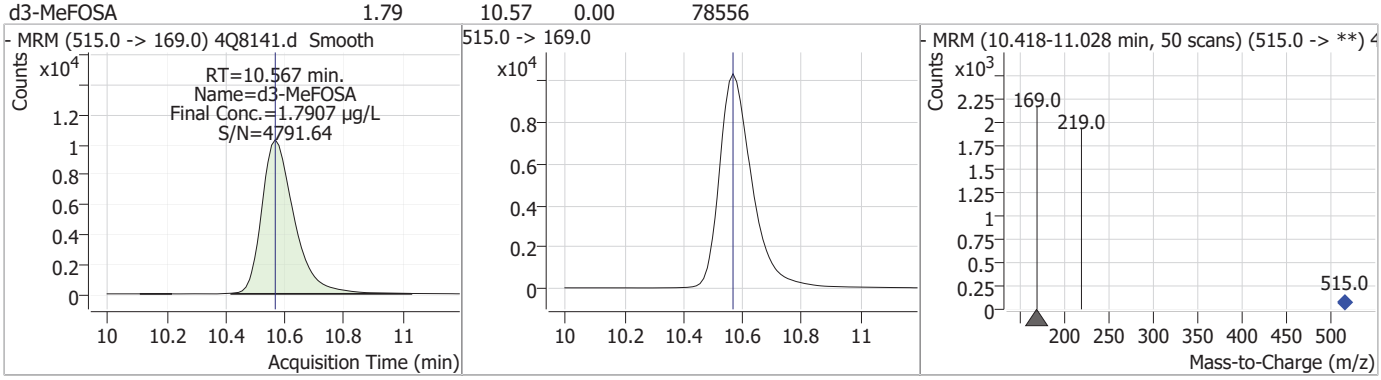




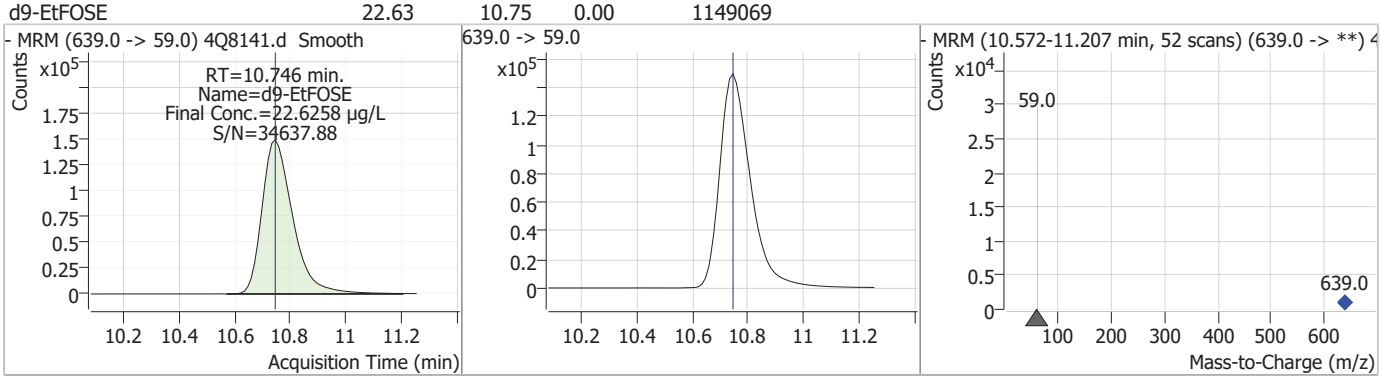


Perfluorinated Compounds by LC/MS/MS

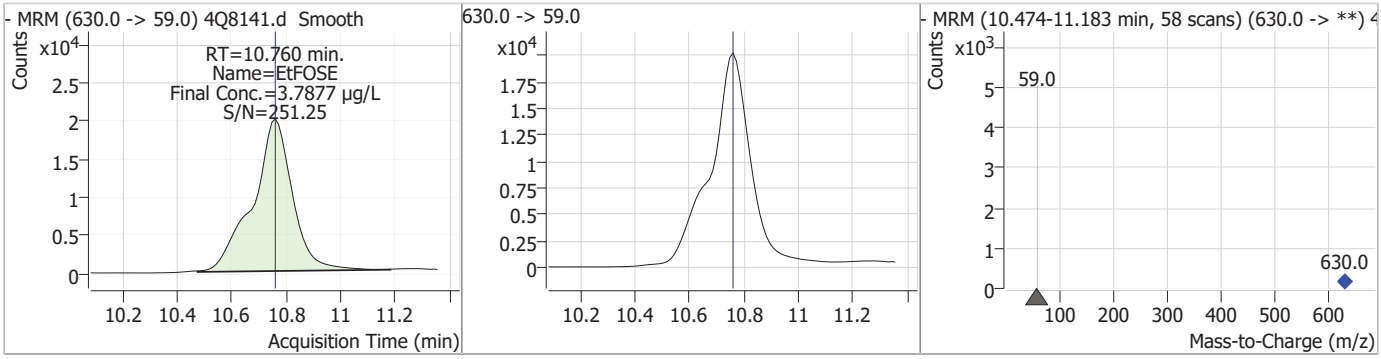
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.79	10.57	0.00	78556				



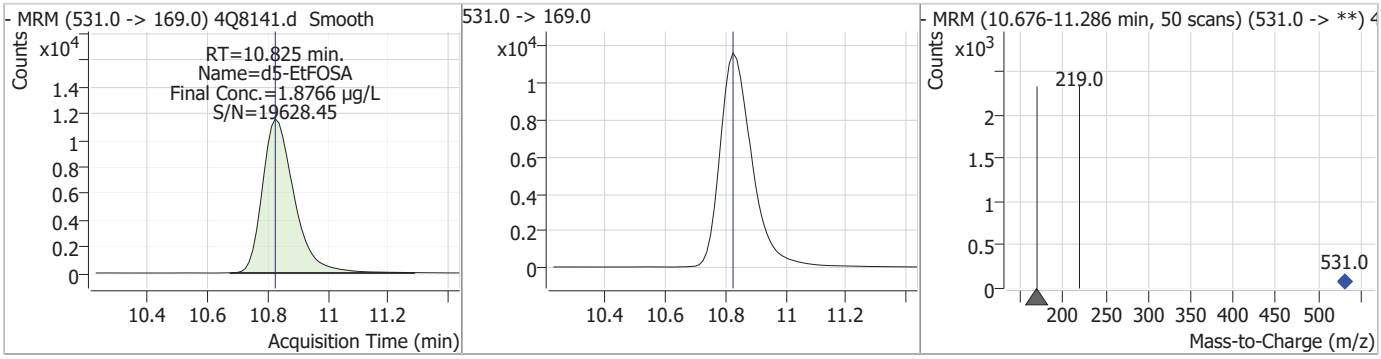
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.63	10.75	0.00	1149069				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	3.79	10.76	0.00	202450				

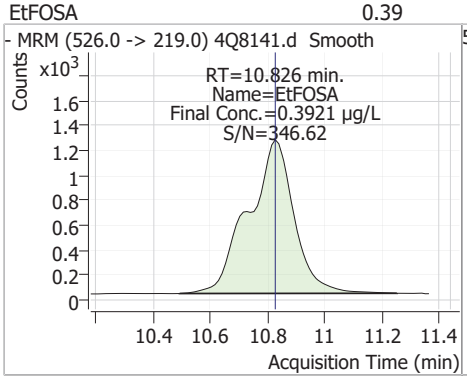


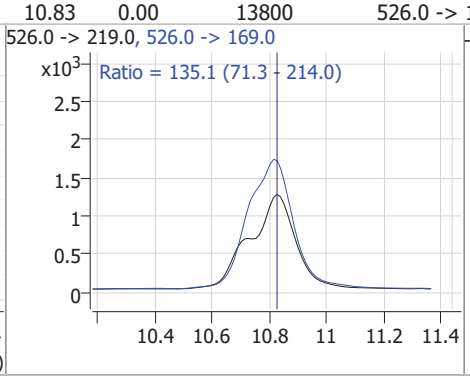
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.88	10.82	0.00	84836				

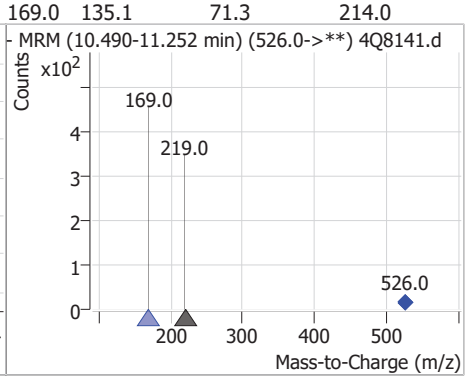


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.39	10.83	0.00	13800	526.0 -> 169.0	135.1	71.3	214.0







7.3.1

7

Manual Integration Approval Summary

Sample Number: OP63163-LLBS
Lab FileID: 4Q8141.D
Injection Time: 04/30/25 17:25
Method: EPA 1633
Analyst approved: 05/01/25 04:03 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.92	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.10	Poor instrument integration
Perfluorononanesulfonic acid	68259-12-1		8.43	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8142.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 5:39:31 PM
Sample Name : OP63163-BS
Vial : P1-B5
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.858	217.0 -> 172.0	1018488	10.00 µg/L	-0.025
M5-PFPeA	4.307	268.0 -> 223.0	541742	5.00 µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	363266	2.50 µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	377870	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	556340	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	227169	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	219320	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	294006	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	259958	1.25 µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	192344	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	194914	2.50 µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	31296	2.50 µg/L	-0.012
		302.0 -> 80.0	78264		
M3-PFHxS	6.986	402.0 -> 99.0	45402	2.50 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	49568	2.50 µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	14599	5.00 µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	30078	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	33185	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	278600	5.00 µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	554518	10.00 µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	203075	5.00 µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	967092	25.00 µg/L	0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1187314	25.00 µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	86191	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	81943	2.50 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	83267	2.50 µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	455449	5.00 µg/L	-0.012
18O2-PFHxS	6.985	403.0 -> 84.0	53060	2.50 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	573760	2.50 µg/L	0.000
13C2-PFDA	7.859	515.0 -> 470.0	204362	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	222035	1.25 µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	346052	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.153	329.0 -> 81.0	14599	5.49 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 109.7%	
13C2-6:2FTS	6.684	429.0 -> 81.0	30078	5.21 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.2%	
13C2-8:2FTS	7.671	529.0 -> 81.0	33185	4.89 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.7%	
13C2-PFDoDA	8.666	615.0 -> 570.0	259958	1.18 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.1%	
13C2-PFTeDA	9.381	715.0 -> 670.0	192344	1.13 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.6%	
13C3-PFBS	5.355	302.0 -> 99.0	31296	2.39 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.6%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	45402	2.45	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.0%			
13C4-PFBA	2.858	217.0 -> 172.0	1018488	9.75	µg/L		-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 97.5%			
13C4-PFHpA	6.291	367.0 -> 322.0	377870	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.1%			
13C5-PFHxA	5.452	318.0 -> 273.0	363266	2.48	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.2%			
13C5-PFPeA	4.307	268.0 -> 223.0	541742	4.87	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.5%			
13C6-PFDA	7.858	519.0 -> 474.0	219320	1.21	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.2%			
13C7-PFUnDA	8.273	570.0 -> 525.0	294006	1.22	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.5%			
13C8-FOSA	9.291	506.0 -> 78.0	194914	2.28	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.1%			
13C8-PFOA	6.897	421.0 -> 376.0	556340	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.1%			
13C8-PFOS	7.995	507.0 -> 99.0	49568	2.47	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.9%			
13C9-PFNA	7.403	472.0 -> 427.0	227169	1.23	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.7%			
d3-MeFOSAA	7.915	573.0 -> 419.0	278600	5.08	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.6%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	554518	9.64	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 96.4%			
d3-MeFOSA	10.567	515.0 -> 169.0	81943	1.87	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 74.6%			
d5-EtFOSAA	8.098	589.0 -> 419.0	203075	4.82	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.5%			
d7-MeFOSE	10.475	623.0 -> 59.0	967092	23.06	µg/L		0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 92.2%			
d9-EtFOSE	10.746	639.0 -> 59.0	1187314	23.35	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 93.4%			
d5-EtFOSA	10.825	531.0 -> 169.0	86191	1.90	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 76.2%			
Target Compounds							QValue
4:2FTS	5.154	327.0 -> 307.0	244631	9.12	µg/L		100
		327.0 -> 81.0	114168				
6:2FTS	6.684	427.0 -> 407.0	295448	9.79	µg/L		99
		427.0 -> 81.0	141052				
8:2FTS	7.671	527.0 -> 507.0	272583	10.50	µg/L		100
		527.0 -> 81.0	103613				
EtFOSAA	8.111	584.0 -> 419.0	97917	2.55	µg/L	m	100
		584.0 -> 483.0	55467				
FOSA	9.281	498.0 -> 78.0	182331	2.58	µg/L	m	99
		498.0 -> 478.0	4909				
MeFOSAA	7.929	570.0 -> 419.0	119353	2.49	µg/L	m	93
		570.0 -> 512.0	38774				
PFBA	2.864	213.0 -> 169.0	321100	10.31	µg/L		100
PFBS	5.357	299.0 -> 80.0	80230	2.24	µg/L		98
		299.0 -> 99.0	31625				
PFDA	7.859	513.0 -> 469.0	420597	2.52	µg/L		100
		513.0 -> 219.0	98863				
PFDoDA	8.679	613.0 -> 569.0	516288	2.58	µg/L		98
		613.0 -> 319.0	71230				

Perfluorinated Compounds by LC/MS/MS

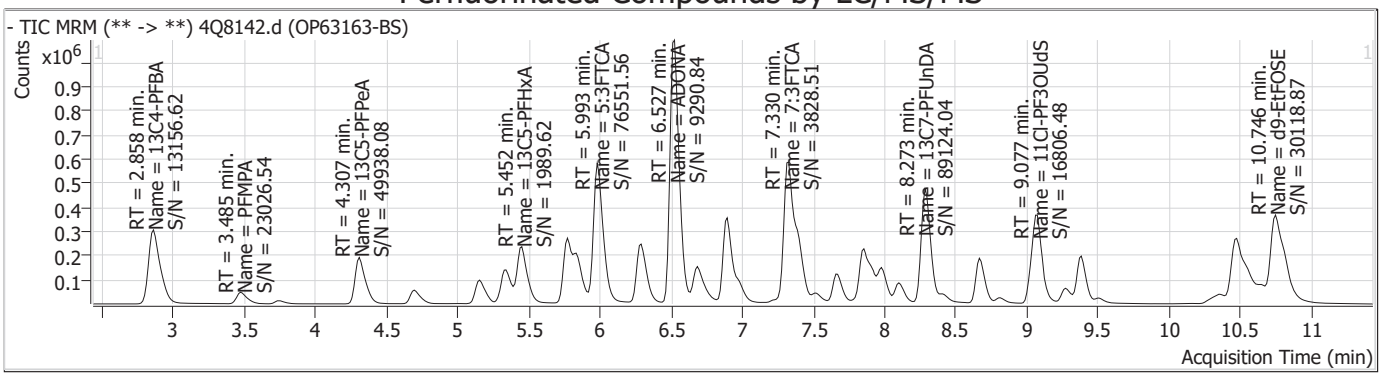
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	61191	2.33	µg/L		98
		599.0 -> 99.0	33529				
PFHpA	6.292	363.0 -> 319.0	574836	2.50	µg/L		99
		363.0 -> 169.0	116239				
PFHpS	7.529	449.0 -> 80.0	89589	2.28	µg/L		95
		449.0 -> 99.0	52253				
PFHxA	5.455	313.0 -> 269.0	396758	2.53	µg/L		100
		313.0 -> 119.0	12591				
PFHxS	6.987	399.0 -> 80.0	89392	2.26	µg/L	m	99
		399.0 -> 99.0	47522				
PFNA	7.404	463.0 -> 419.0	346829	2.54	µg/L	m	98
		463.0 -> 219.0	125876				
PFNS	8.425	549.0 -> 80.0	80621	2.42	µg/L		95
		549.0 -> 99.0	50318				
PFOA	6.898	413.0 -> 369.0	462870	2.50	µg/L	m	98
		413.0 -> 169.0	131165				
PFOS	7.996	499.0 -> 80.0	92732	2.32	µg/L	m	98
		499.0 -> 99.0	49287				
PFPeA	4.309	263.0 -> 219.0	439323	5.13	µg/L		100
PFPeS	6.331	349.0 -> 80.0	93829	2.40	µg/L		98
		349.0 -> 99.0	46257				
PFTeDA	9.382	713.0 -> 669.0	570698	2.55	µg/L		99
		713.0 -> 219.0	40873				
PFTrDA	9.038	663.0 -> 619.0	548624	2.46	µg/L		100
		663.0 -> 369.0	34420				
PFUnDA	8.275	563.0 -> 519.0	447884	2.58	µg/L		100
		563.0 -> 269.0	90677				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	996941	9.45	µg/L		99
		633.0 -> 453.0	305454				
9Cl-PF3ONS	8.301	531.0 -> 351.0	1112195	9.58	µg/L		99
		533.0 -> 353.0	345589				
ADONA	6.527	377.0 -> 251.0	3839037	8.82	µg/L		100
		377.0 -> 85.0	1247821				
HFPO-DA	5.780	285.0 -> 169.0	605883	10.39	µg/L		99
		285.0 -> 185.0	65372				
3:3FTCA	3.744	241.0 -> 177.0	62427	12.20	µg/L		100
		241.0 -> 117.0	5164				
5:3FTCA	5.993	341.0 -> 237.0	1642952	58.78	µg/L		100
		341.0 -> 217.0	1150177				
7:3FTCA	7.330	441.0 -> 337.0	2055840	57.08	µg/L		99
		441.0 -> 317.0	915755				
EtFOSA	10.826	526.0 -> 219.0	88350	2.47	µg/L		97
		526.0 -> 169.0	122984				
EtFOSE	10.760	630.0 -> 59.0	1371999	24.84	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	108117	2.52	µg/L		98
		512.0 -> 219.0	69324				
MeFOSE	10.488	616.0 -> 59.0	1053856	24.85	µg/L		100
PFDoDS	9.508	699.0 -> 80.0	48775	2.25	µg/L		96
		699.0 -> 99.0	31994				
NFDHA	5.345	295.0 -> 201.0	102990	5.01	µg/L		99
		201.0 -> 85.0	416429				
		295.0 -> 85.0	26764				
PFMBA	4.698	279.0 -> 85.0	293601	5.02	µg/L		100
PFMPA	3.485	229.0 -> 85.0	252837	5.15	µg/L		100
PFEESA	5.849	315.0 -> 135.0	649293	4.52	µg/L		99
		315.0 -> 69.0	51588				

Perfluorinated Compounds by LC/MS/MS

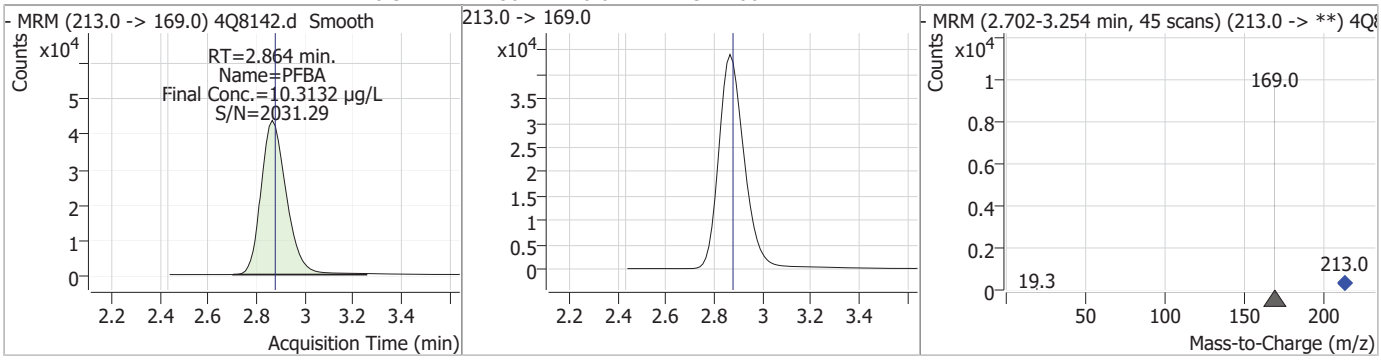
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

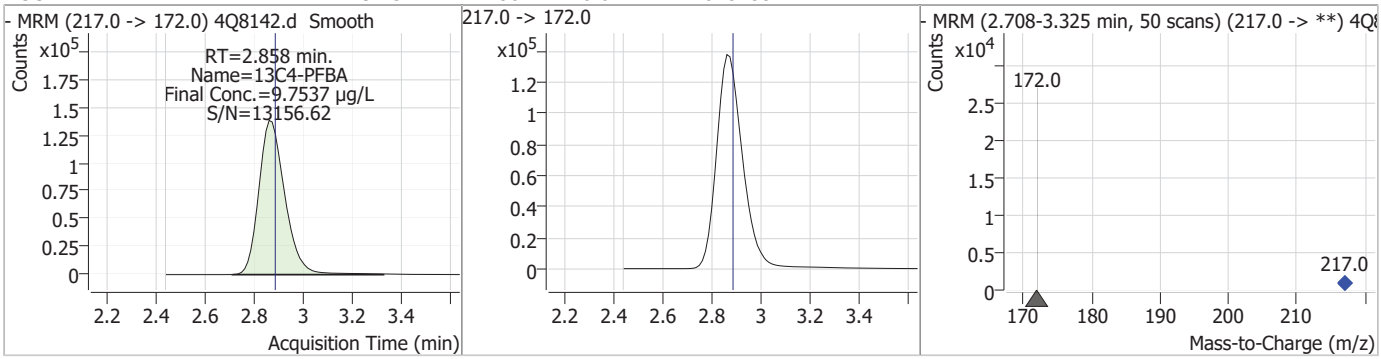
Perfluorinated Compounds by LC/MS/MS



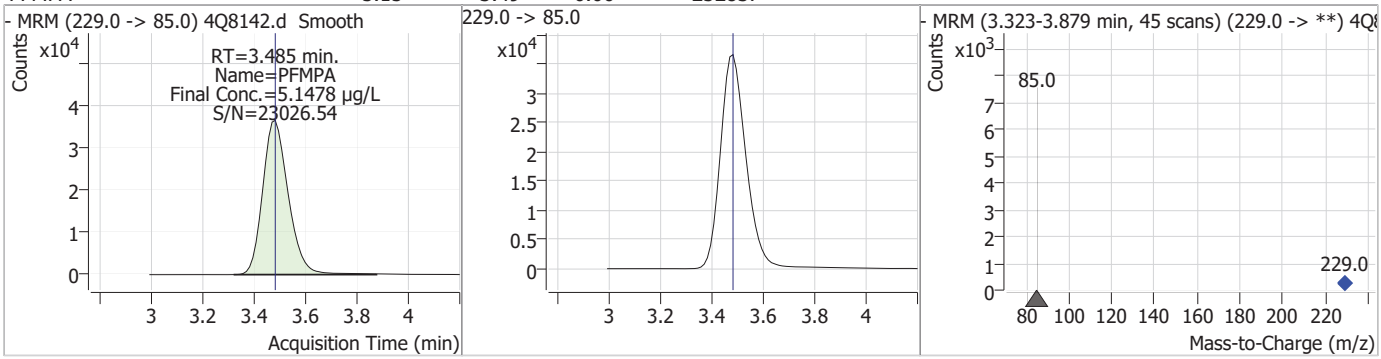
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.31	2.86	-0.01	321100				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.75	2.86	-0.02	1018488				

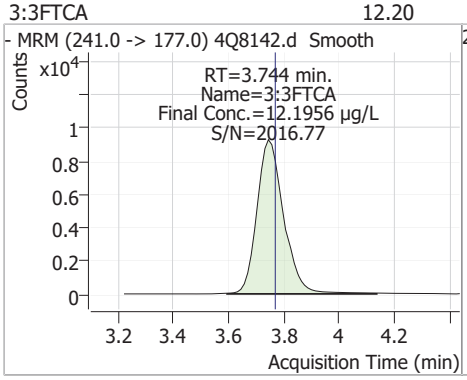


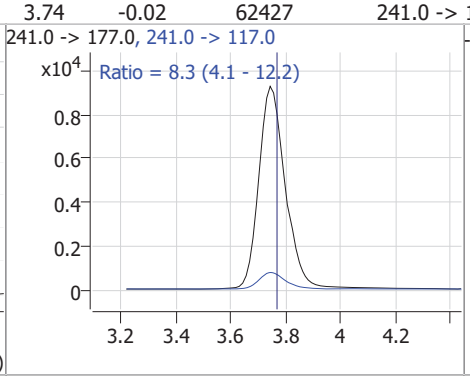
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.15	3.49	0.00	252837				

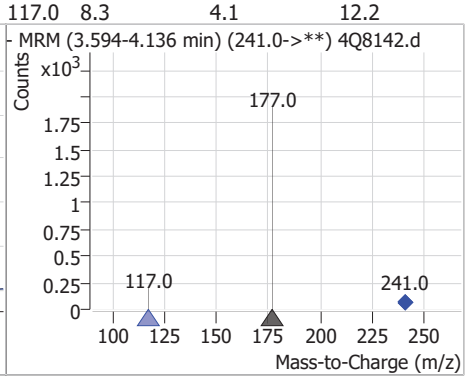


Perfluorinated Compounds by LC/MS/MS

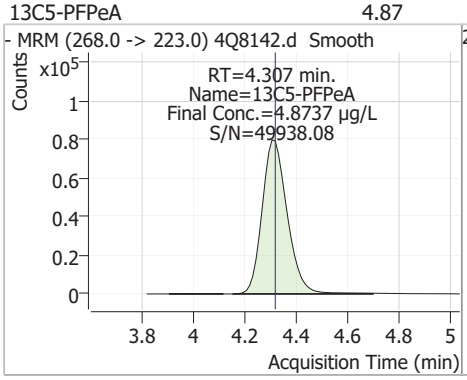
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.20	3.74	-0.02	62427	241.0 -> 117.0	8.3	4.1	12.2

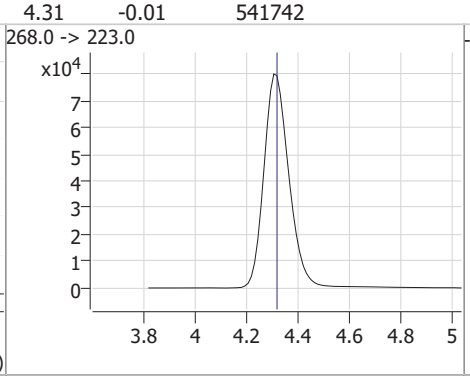


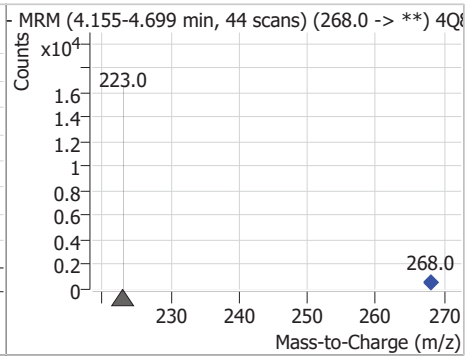




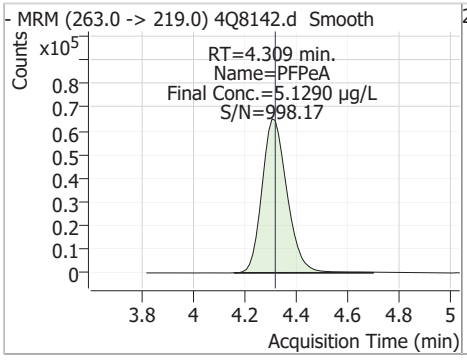
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.87	4.31	-0.01	541742				

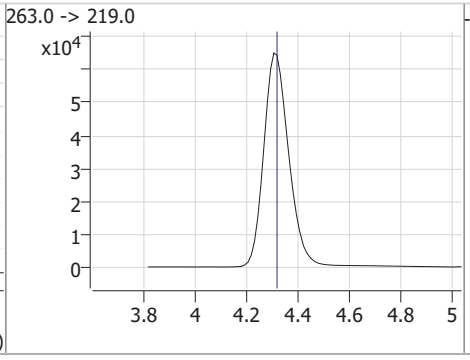


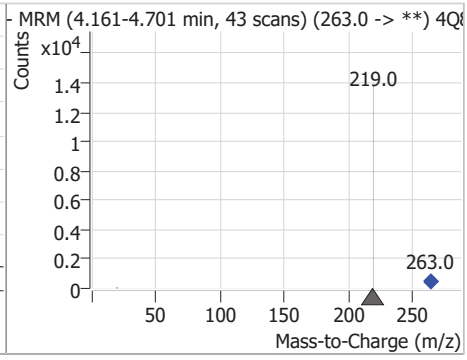




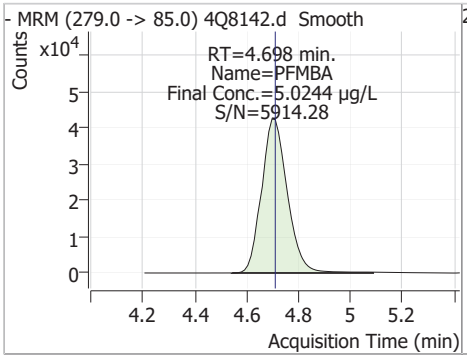
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.13	4.31	-0.01	439323				

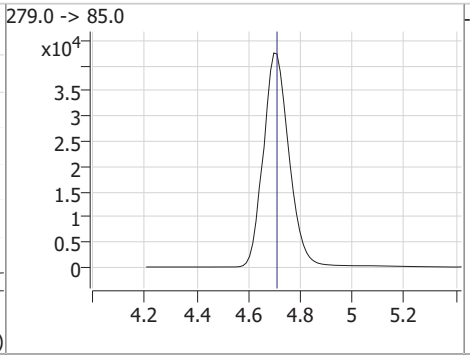


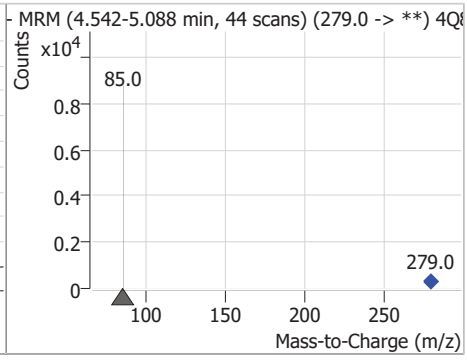




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.02	4.70	-0.01	293601				

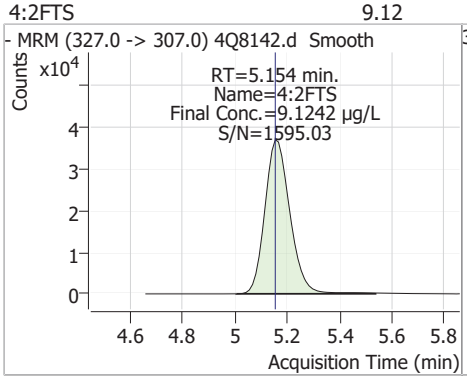


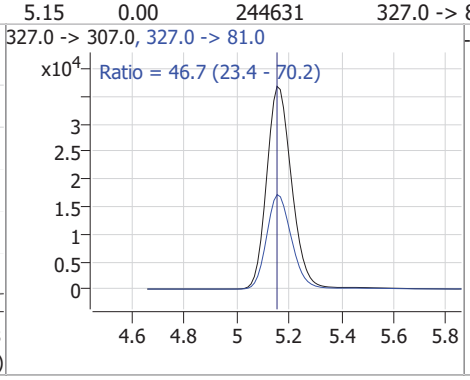


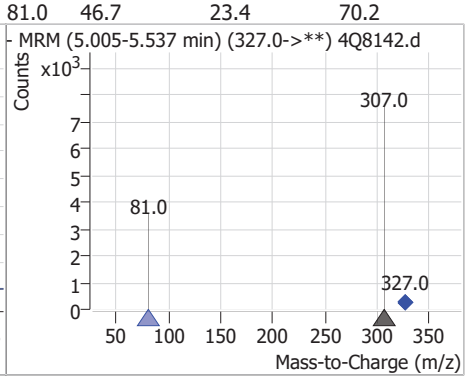


Perfluorinated Compounds by LC/MS/MS

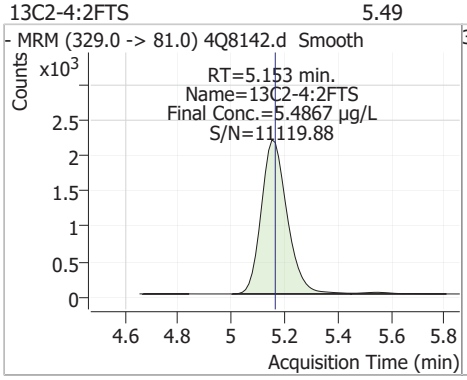
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.12	5.15	0.00	244631	327.0 -> 81.0	46.7	23.4	70.2

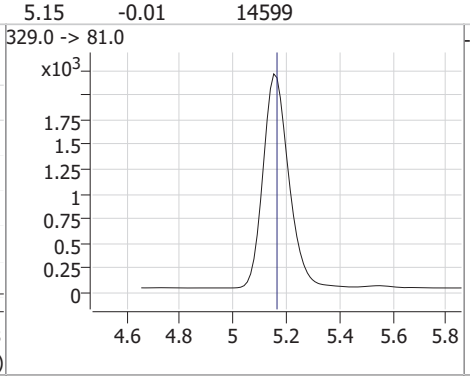


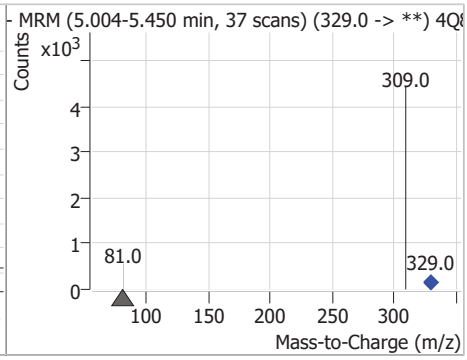




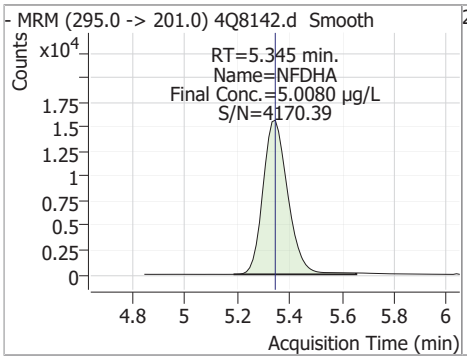
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.49	5.15	-0.01	14599				

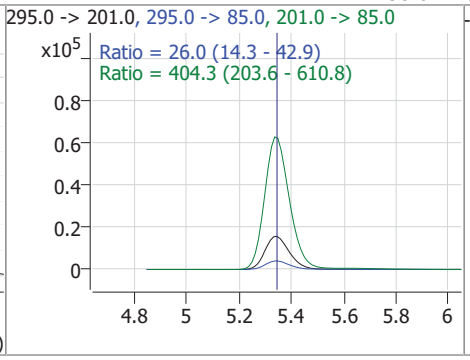


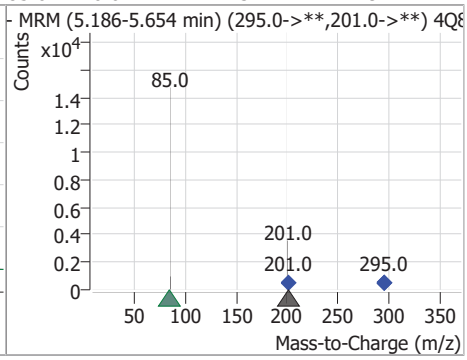




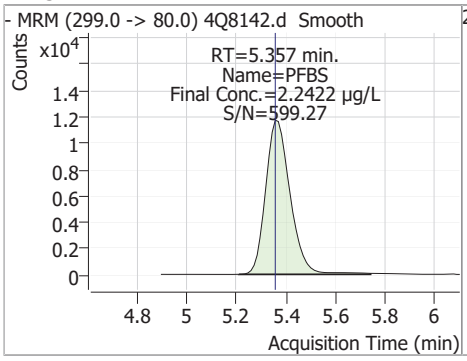
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.01	5.35	0.00	102990	201.0 -> 85.0	404.3	203.6	610.8
					295.0 -> 85.0	26.0	14.3	42.9

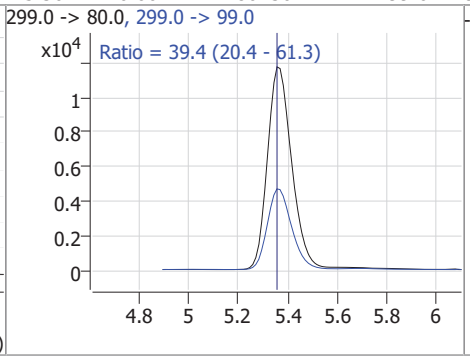


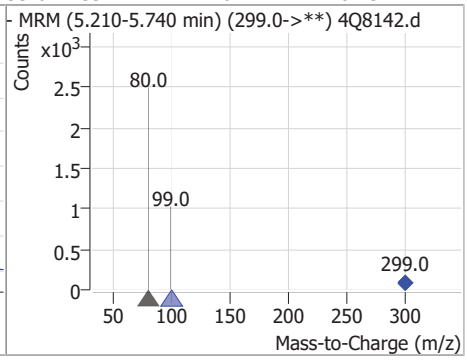




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.24	5.36	0.00	80230	299.0 -> 99.0	39.4	20.4	61.3

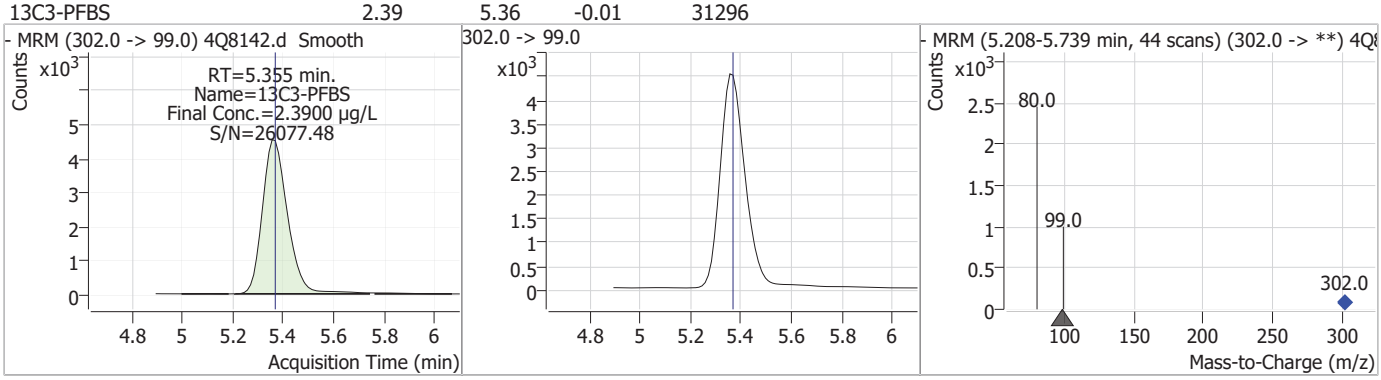




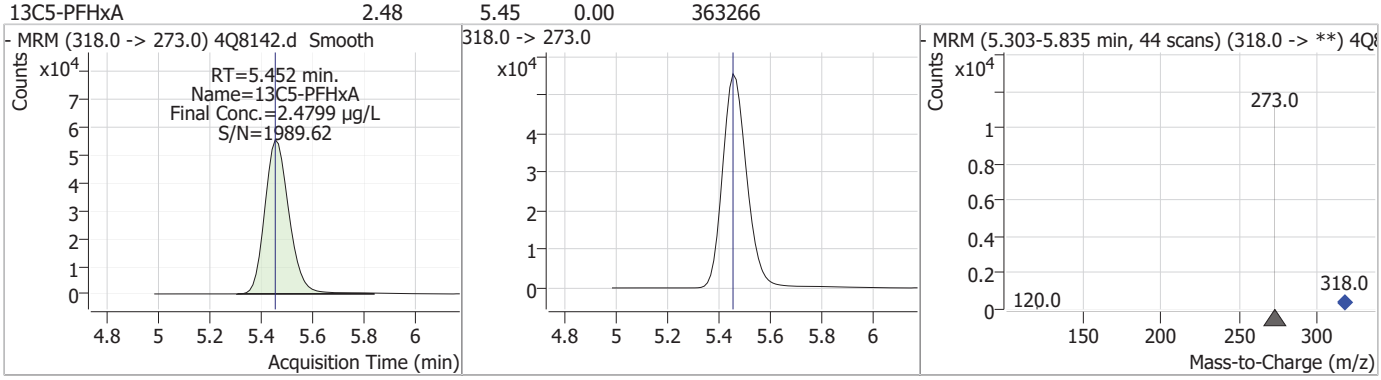


Perfluorinated Compounds by LC/MS/MS

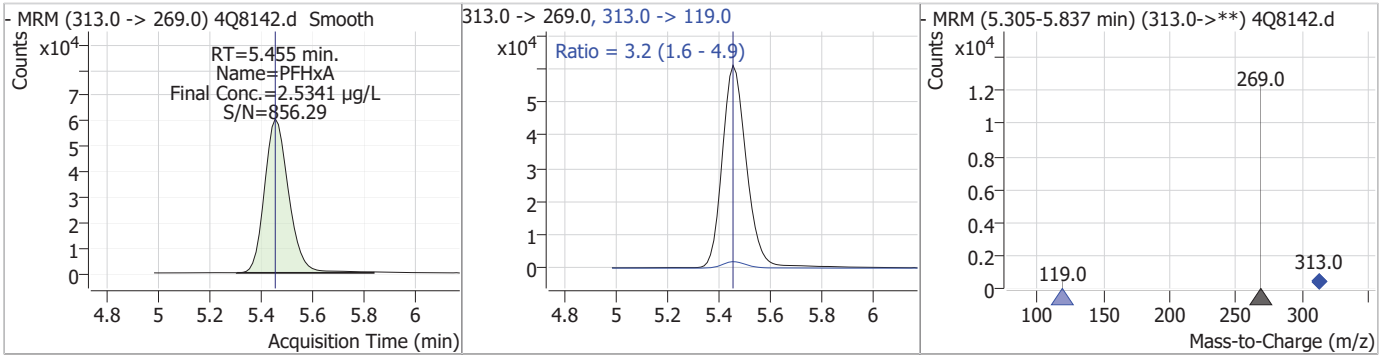
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.39	5.36	-0.01	31296				



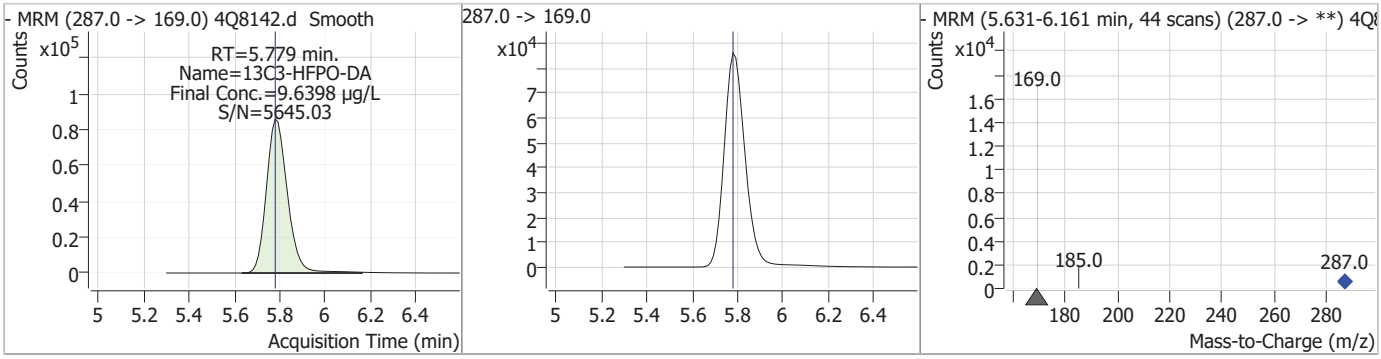
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.48	5.45	0.00	363266				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.53	5.45	0.00	396758	313.0 -> 119.0	3.2	1.6	4.9

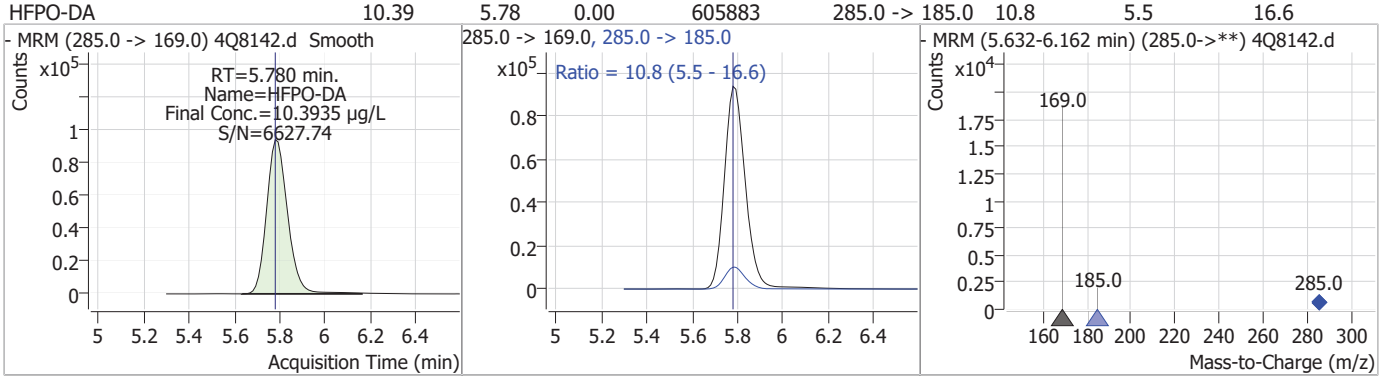


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.64	5.78	0.00	554518				

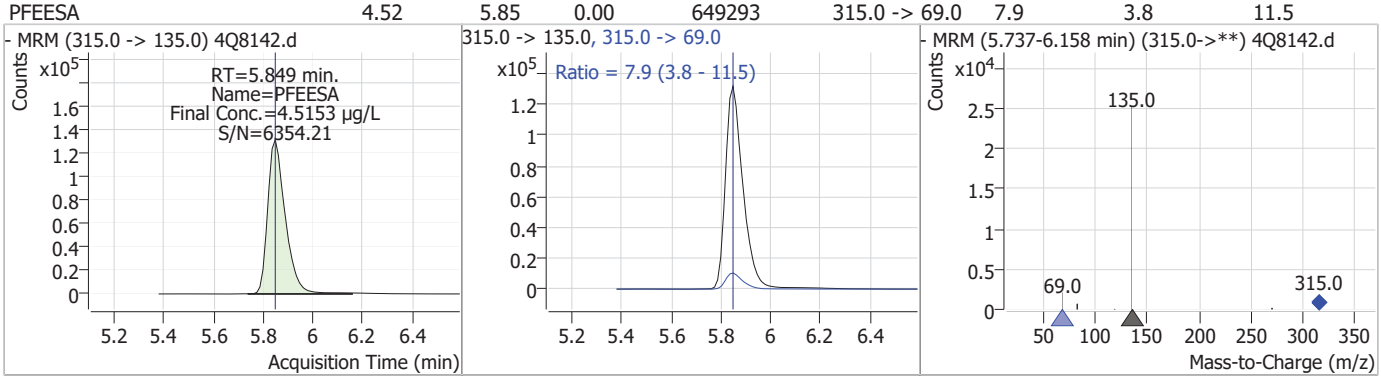


Perfluorinated Compounds by LC/MS/MS

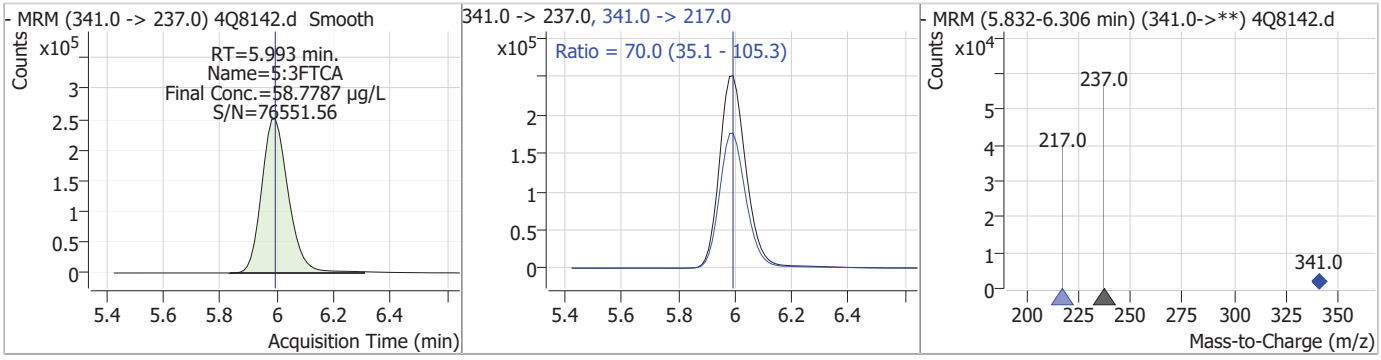
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.39	5.78	0.00	605883	285.0 -> 185.0	10.8	5.5	16.6



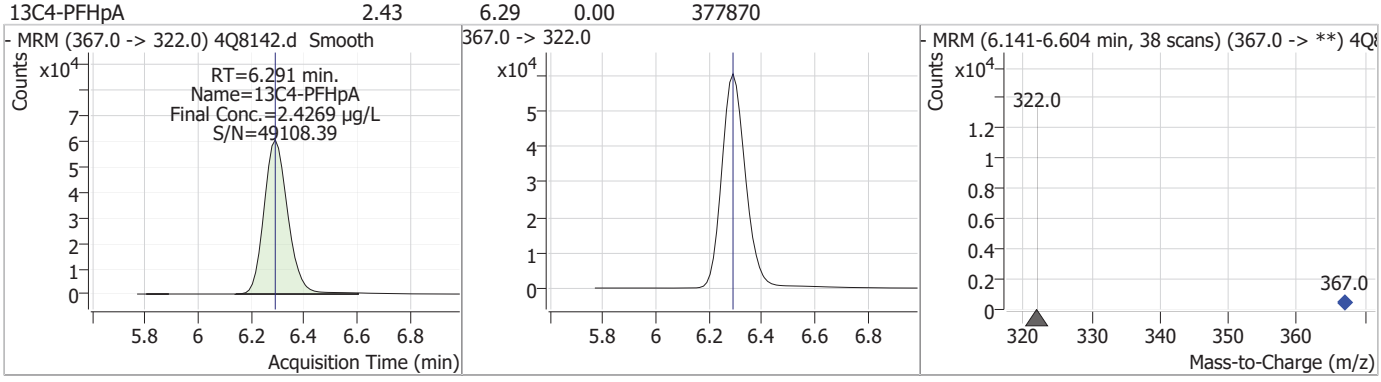
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.52	5.85	0.00	649293	315.0 -> 69.0	7.9	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	58.78	5.99	0.00	1642952	341.0 -> 217.0	70.0	35.1	105.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.43	6.29	0.00	377870				



7.3.2

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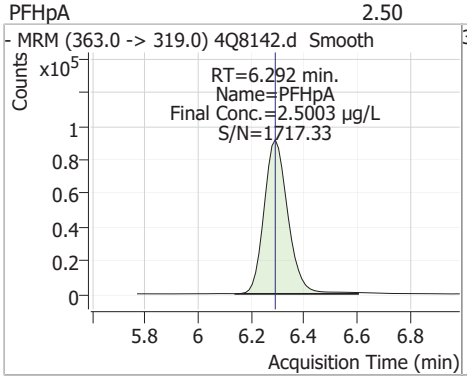
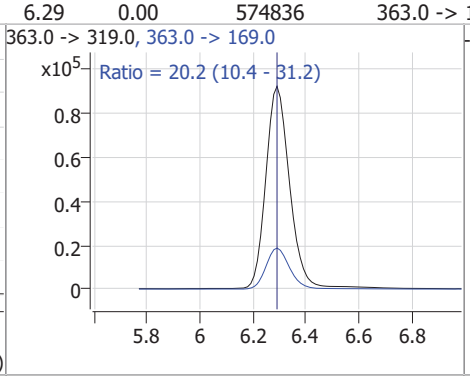
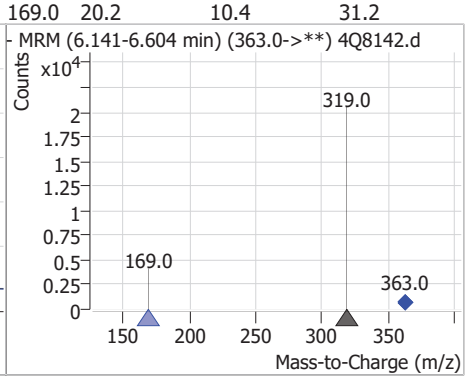
Perfluorinated Compounds by LC/MS/MS

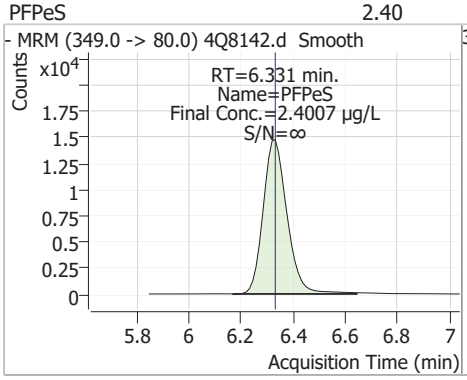
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.50	6.29	0.00	574836	363.0 -> 169.0	20.2	10.4	31.2

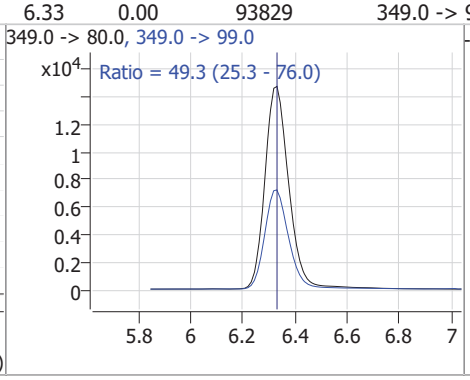


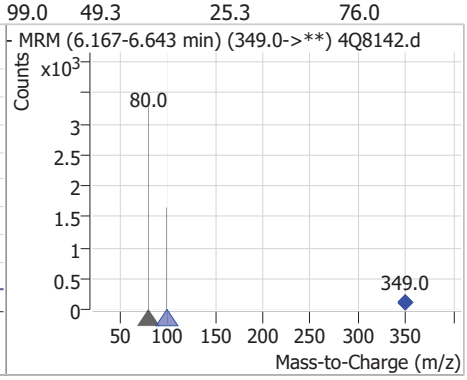




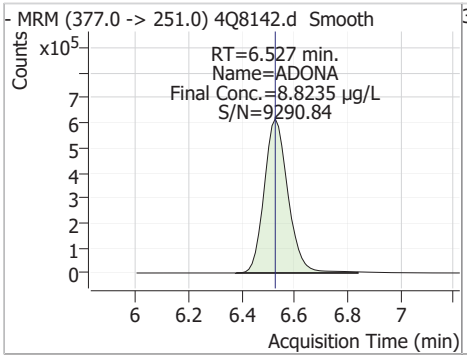
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.40	6.33	0.00	93829	349.0 -> 99.0	49.3	25.3	76.0

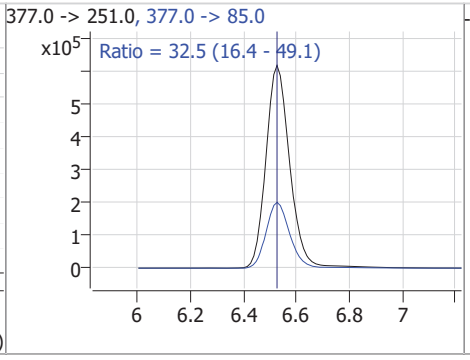


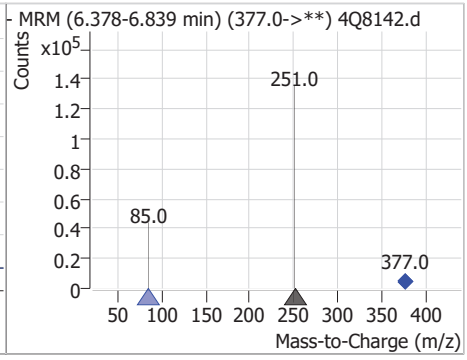




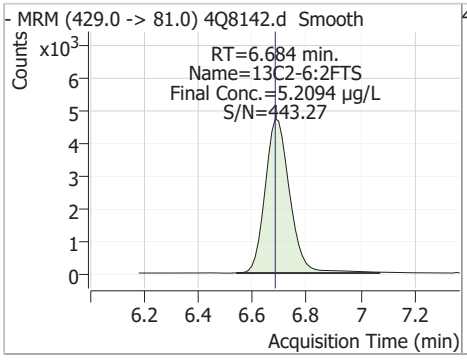
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.82	6.53	0.00	3839037	377.0 -> 85.0	32.5	16.4	49.1

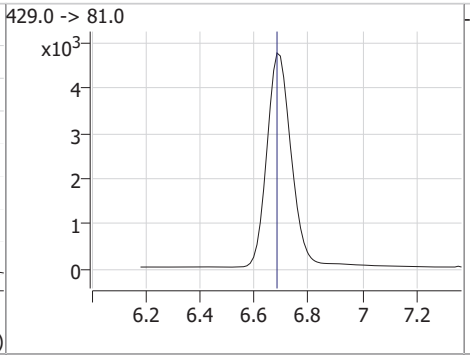


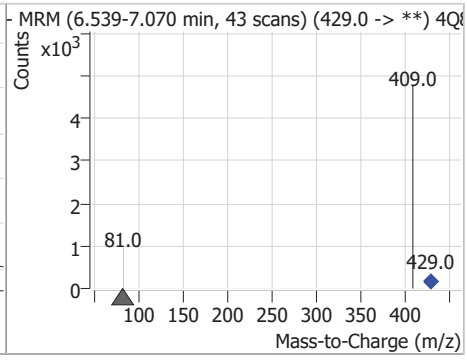




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.21	6.68	0.00	30078				







7.3.2

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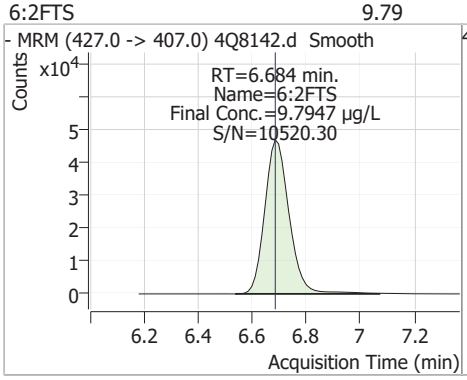
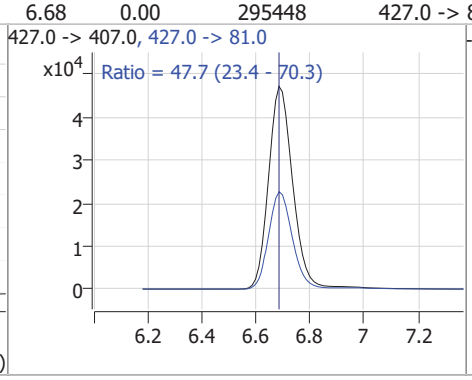
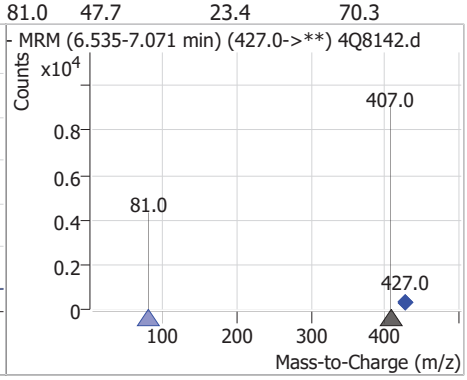
Perfluorinated Compounds by LC/MS/MS

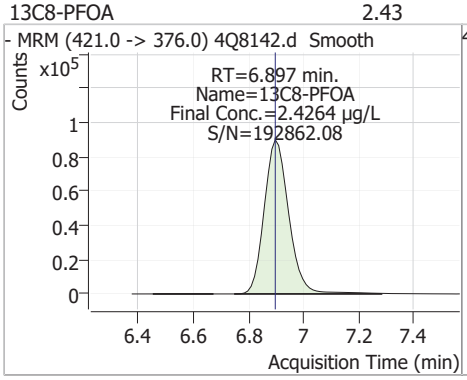
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.79	6.68	0.00	295448	427.0 -> 81.0	47.7	23.4	70.3

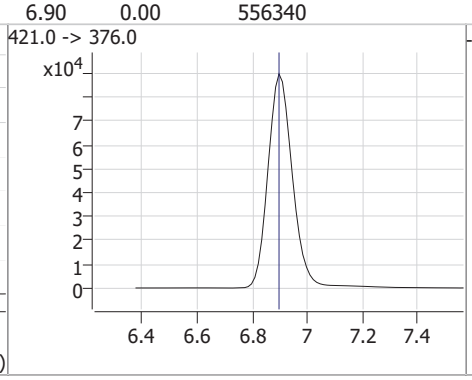


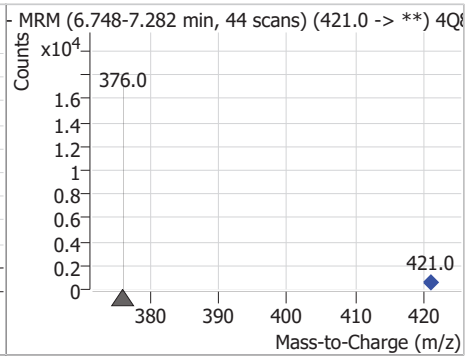




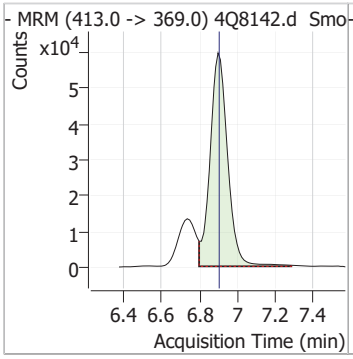
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.43	6.90	0.00	556340				

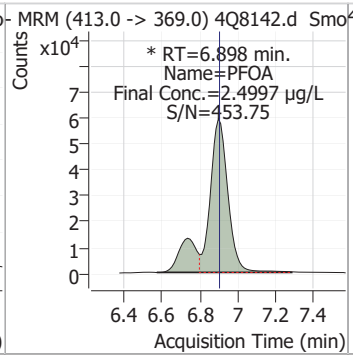


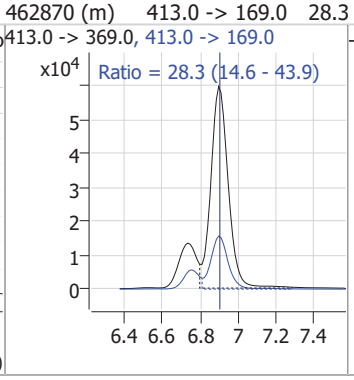


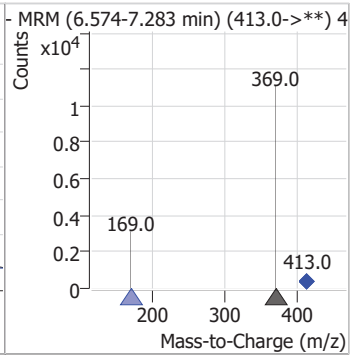


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.50	6.90	0.00	462870 (m)	413.0 -> 169.0	28.3	14.6	43.9

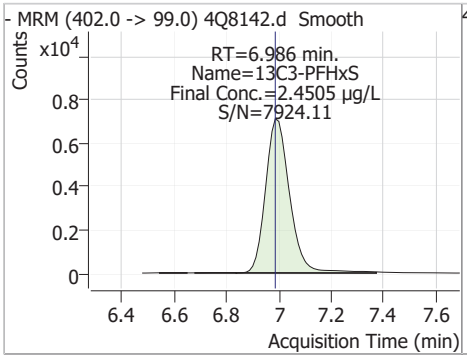


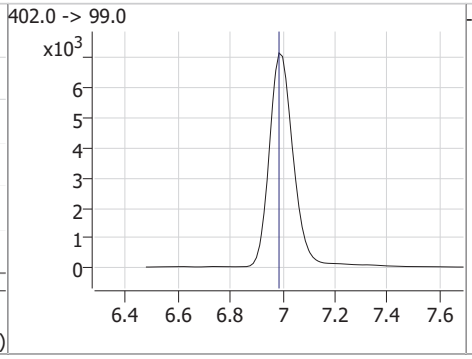


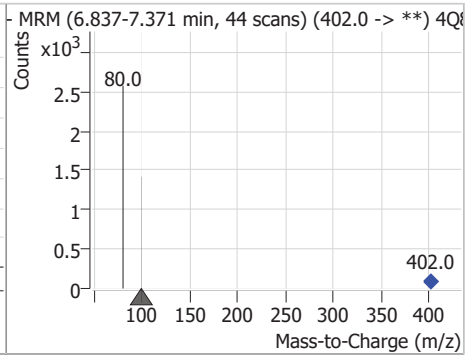




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.45	6.99	0.00	45402				

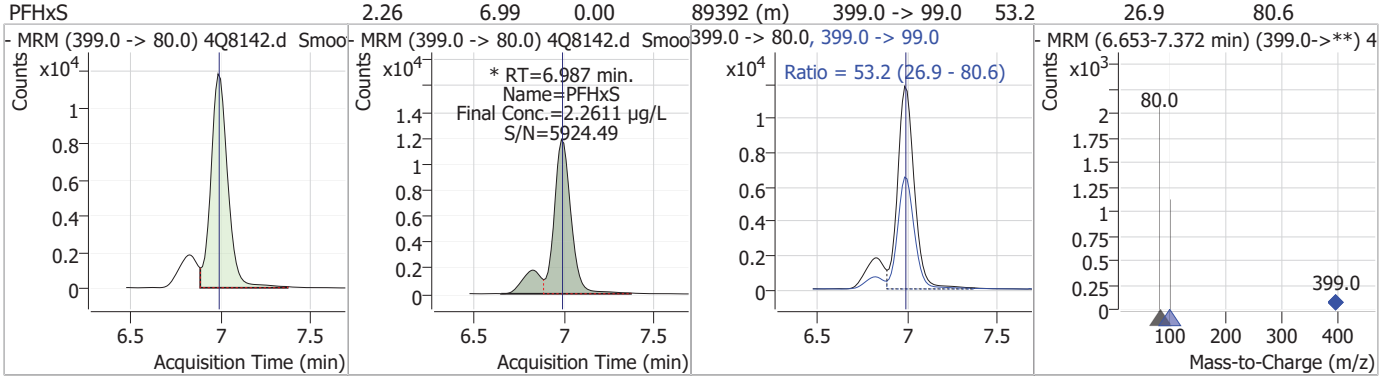




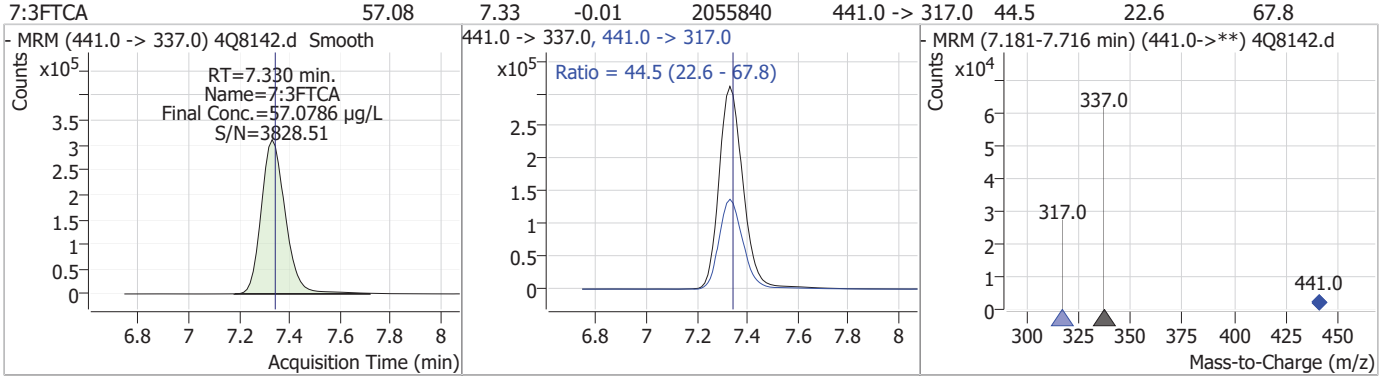


Perfluorinated Compounds by LC/MS/MS

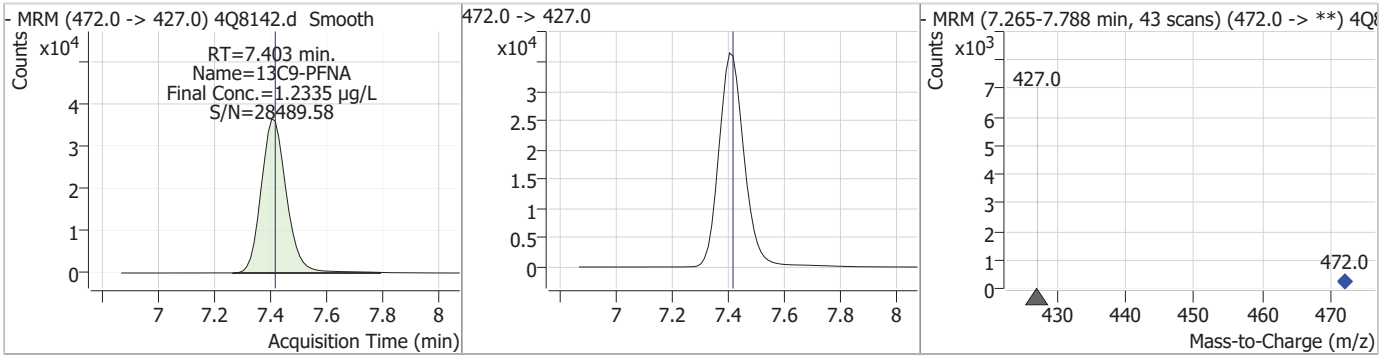
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.26	6.99	0.00	89392 (m)	399.0 -> 99.0	53.2	26.9	80.6



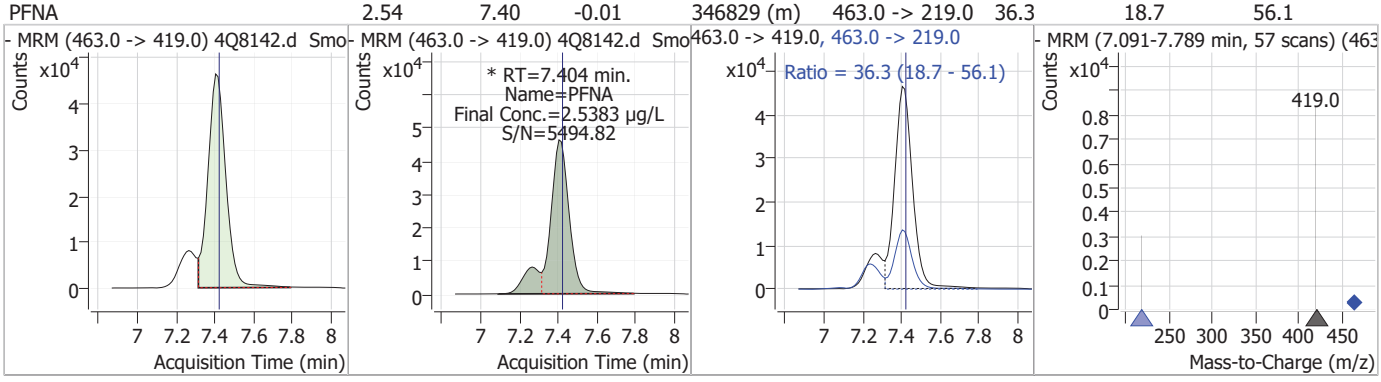
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	57.08	7.33	-0.01	2055840	441.0 -> 317.0	44.5	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.23	7.40	-0.01	227169				

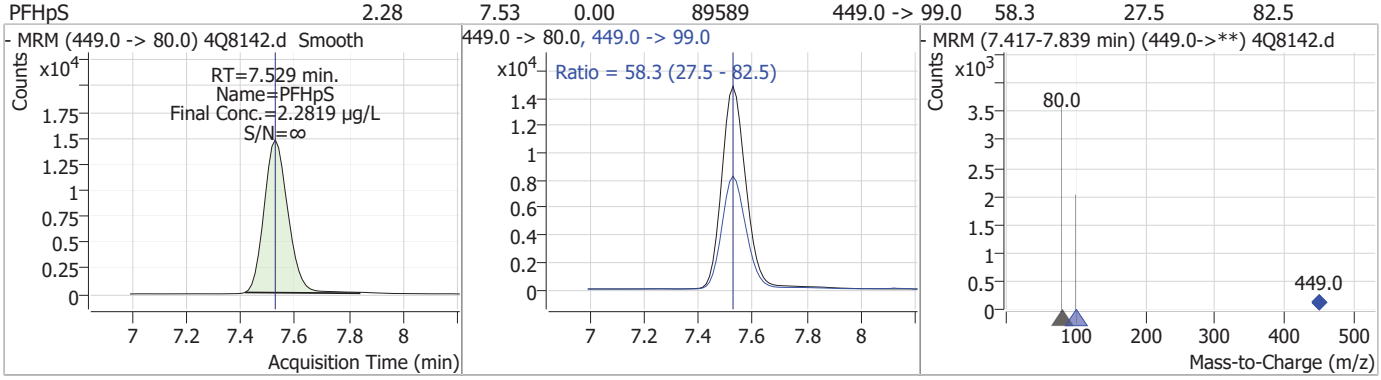


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.54	7.40	-0.01	346829 (m)	463.0 -> 219.0	36.3	18.7	56.1

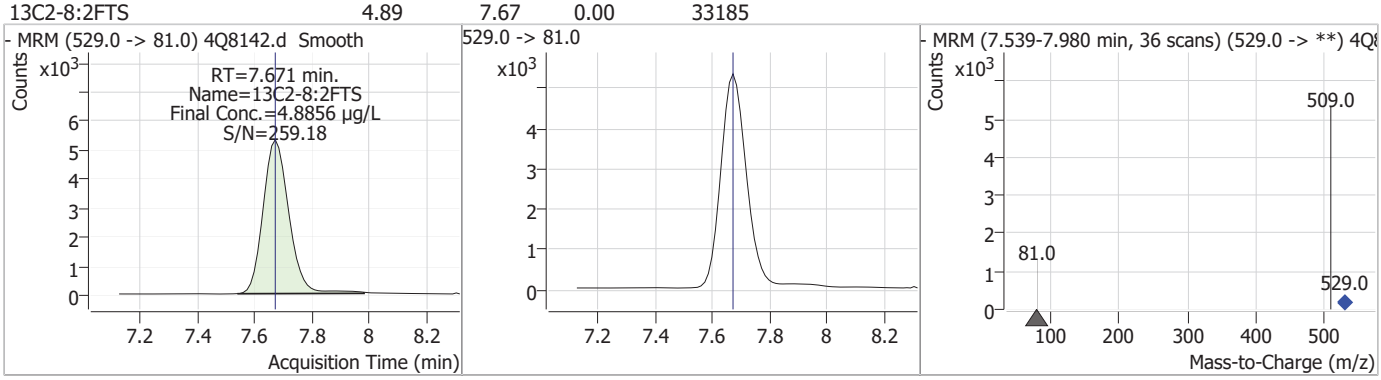


Perfluorinated Compounds by LC/MS/MS

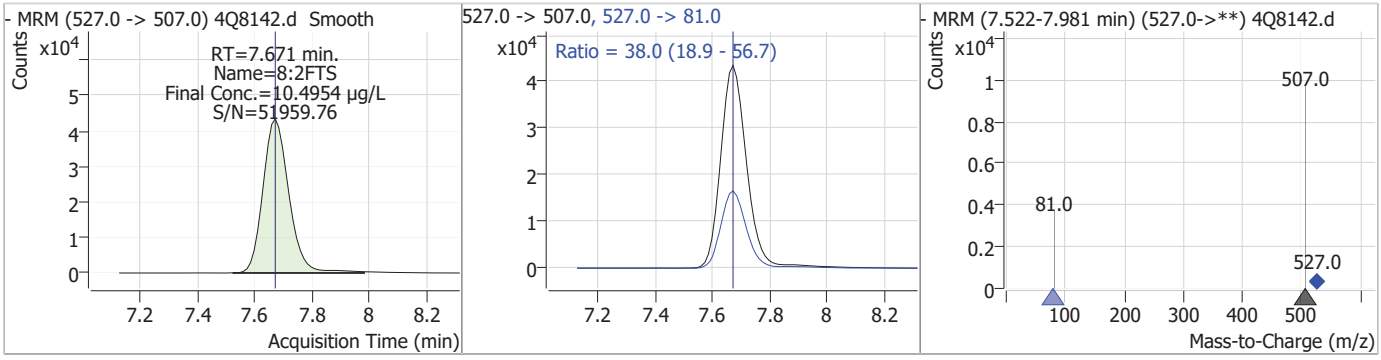
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.28	7.53	0.00	89589	449.0 -> 99.0	58.3	27.5	82.5



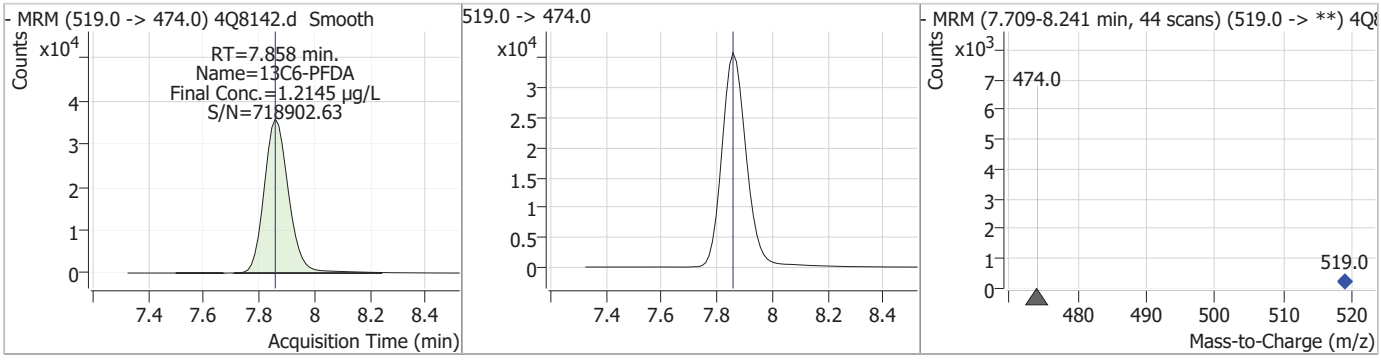
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.89	7.67	0.00	33185				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.50	7.67	0.00	272583	527.0 -> 81.0	38.0	18.9	56.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.21	7.86	0.00	219320				



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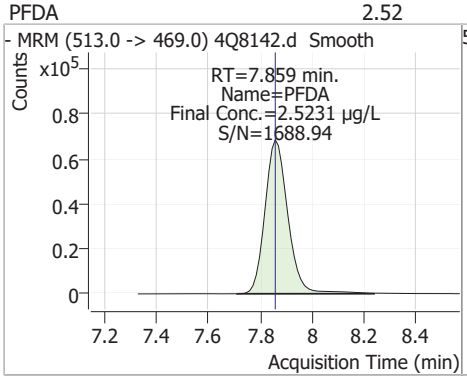
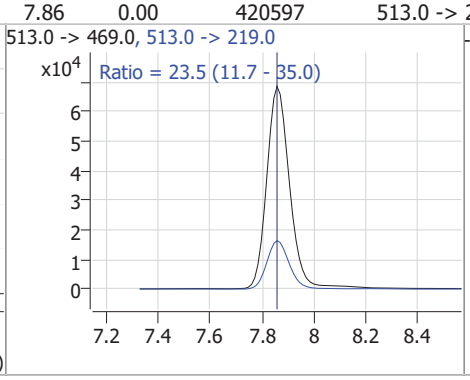
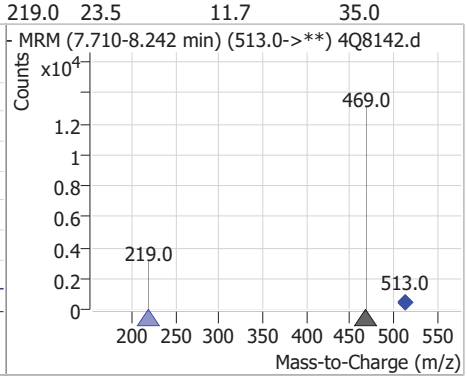
Perfluorinated Compounds by LC/MS/MS

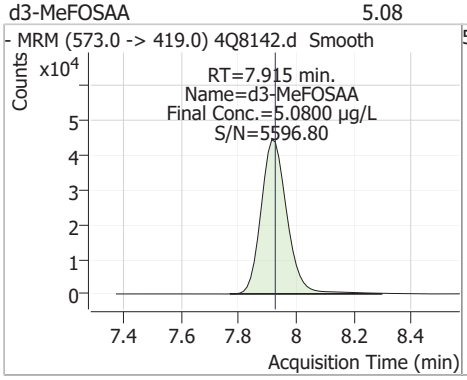
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.52	7.86	0.00	420597	513.0 -> 219.0	23.5	11.7	35.0

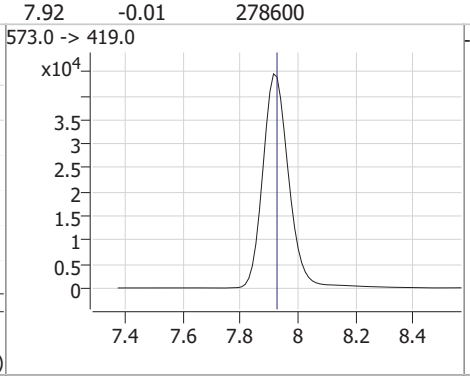


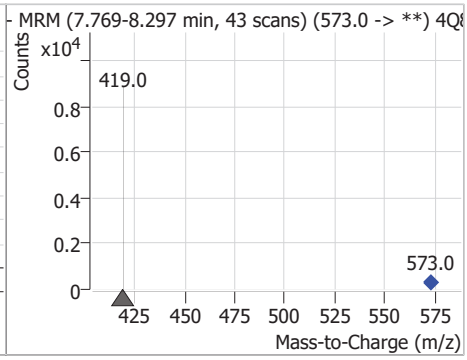




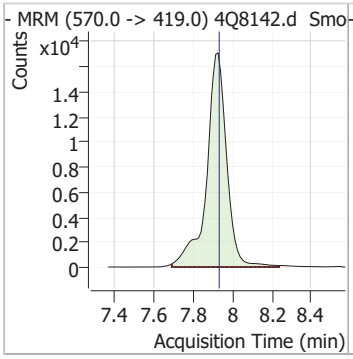
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.08	7.92	-0.01	278600				

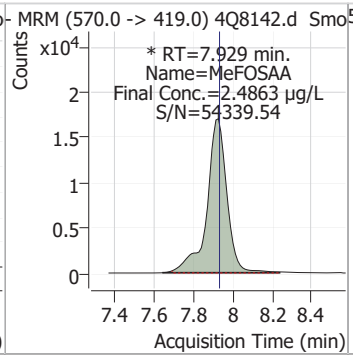


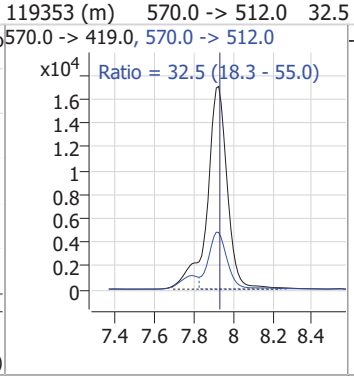


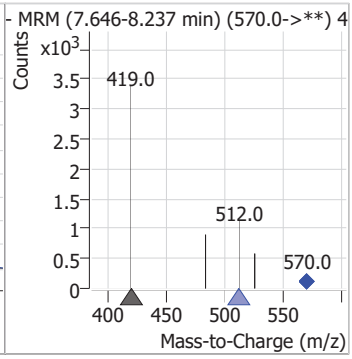


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.49	7.93	0.00	119353 (m)	570.0 -> 512.0	32.5	18.3	55.0

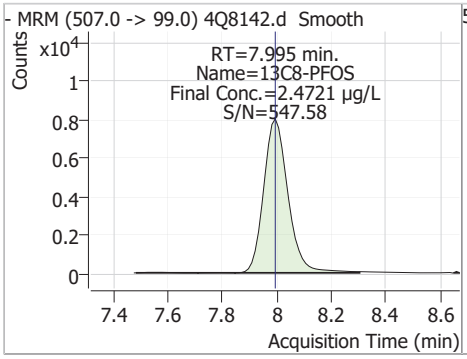


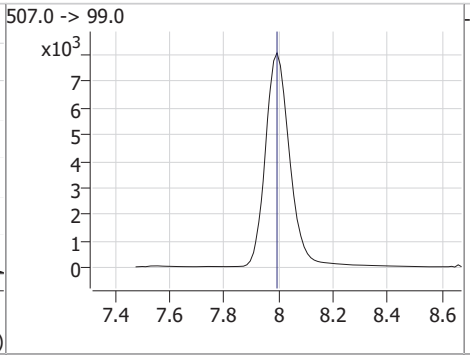


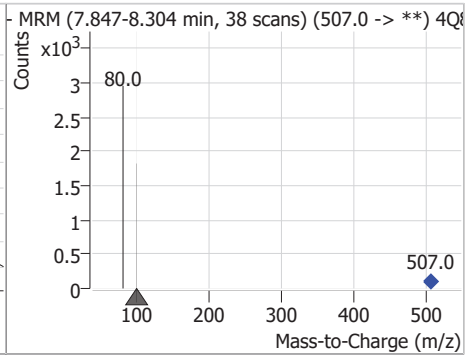




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.47	7.99	0.00	49568				

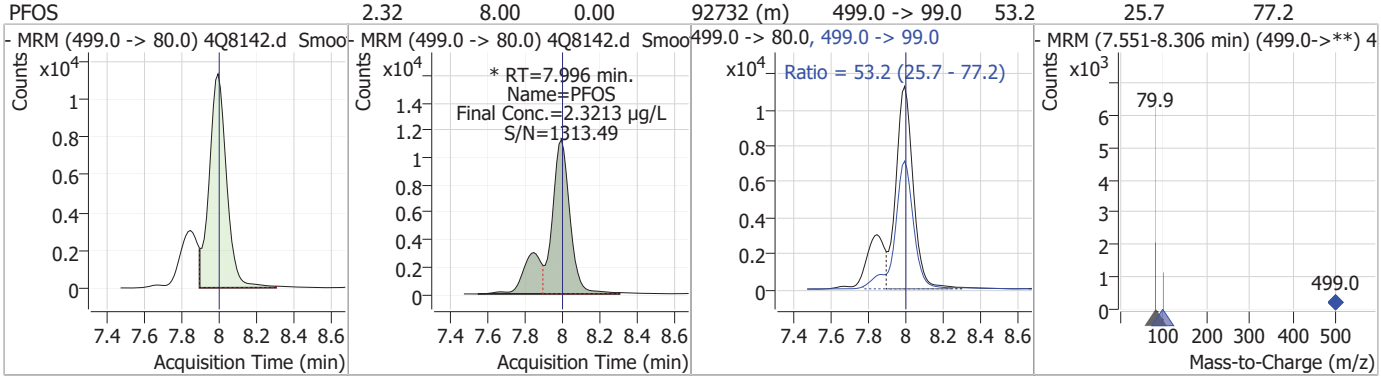




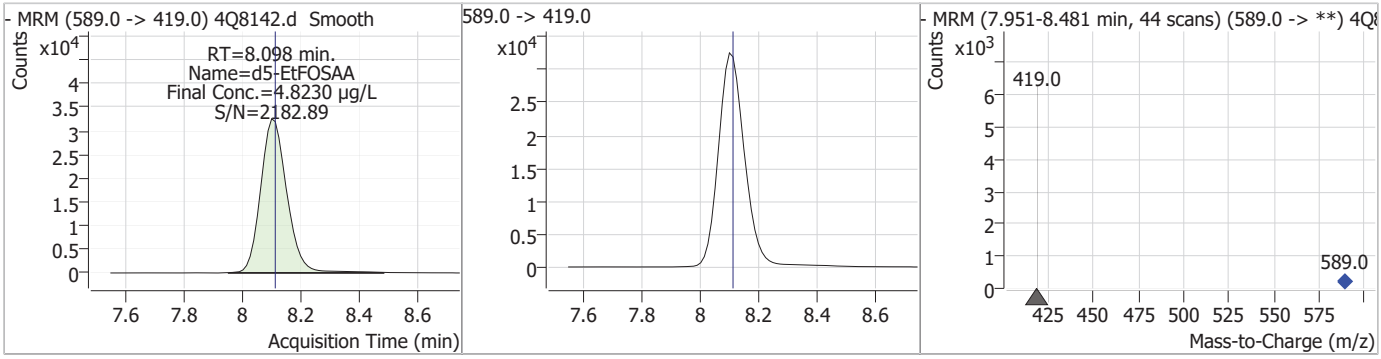


Perfluorinated Compounds by LC/MS/MS

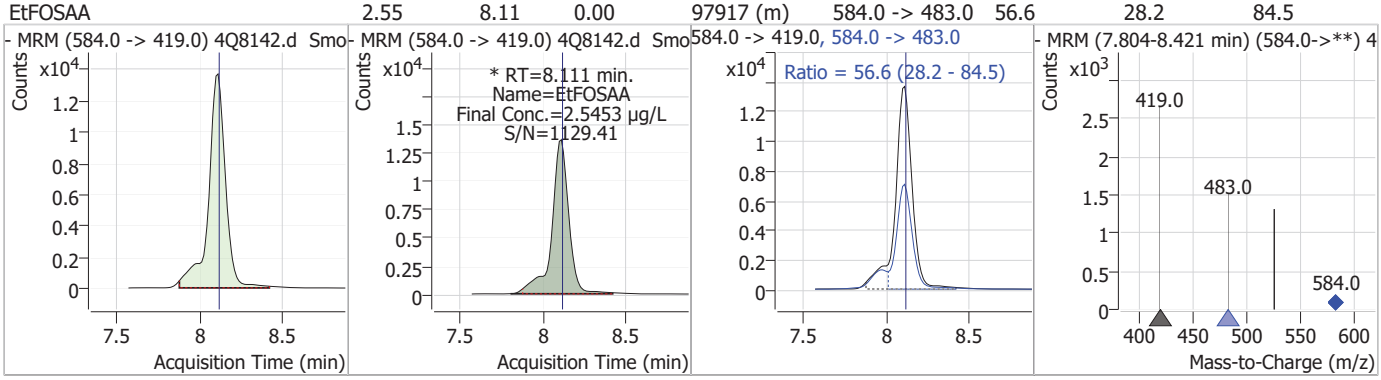
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.32	8.00	0.00	92732 (m)	499.0 -> 99.0	53.2	25.7	77.2



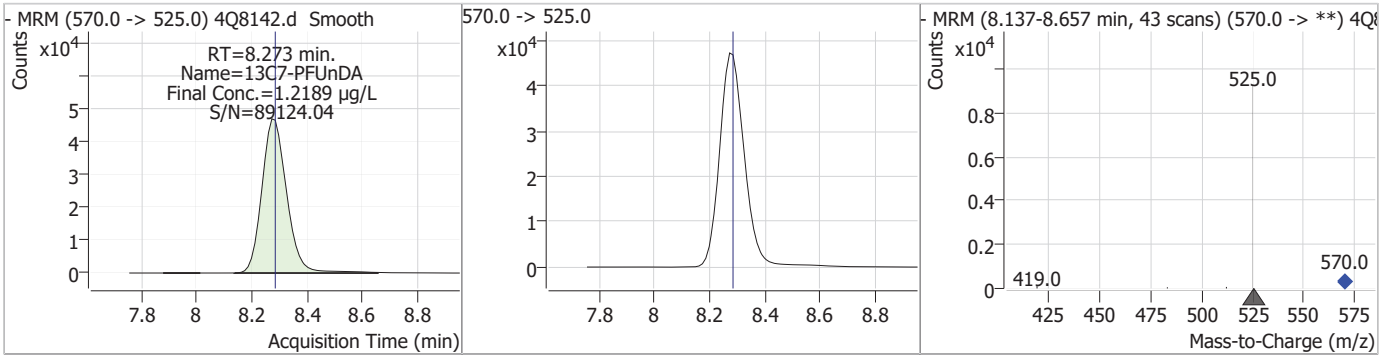
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.82	8.10	-0.01	203075				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.55	8.11	0.00	97917 (m)	584.0 -> 483.0	56.6	28.2	84.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.22	8.27	-0.01	294006				



7.3.2

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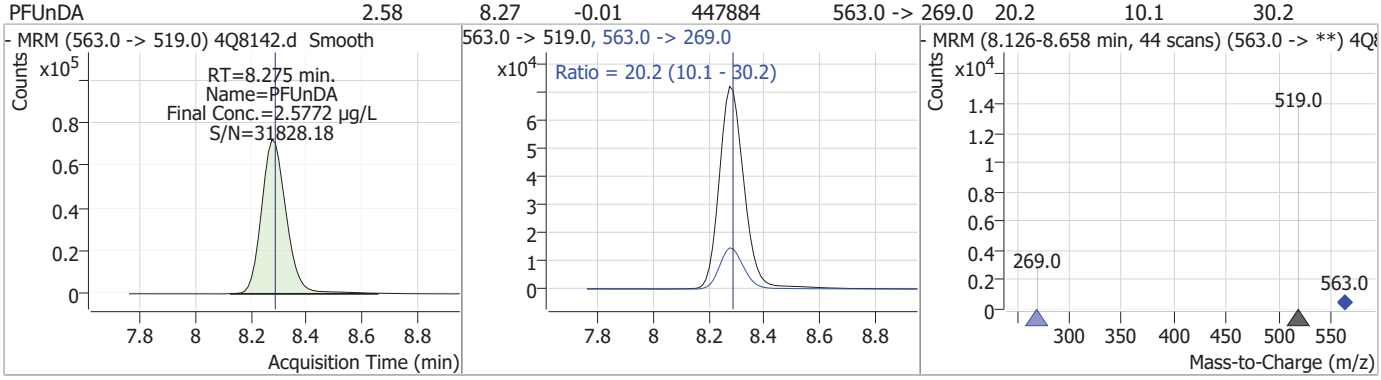
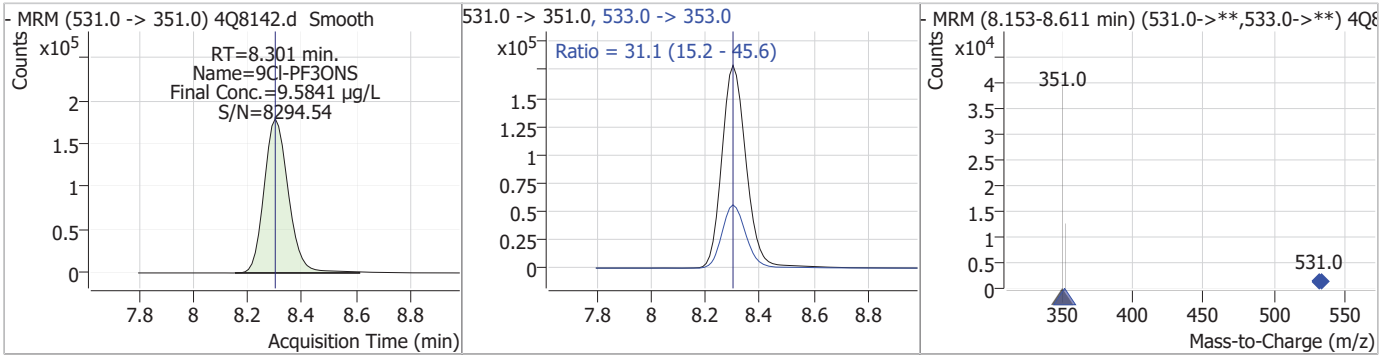
Perfluorinated Compounds by LC/MS/MS

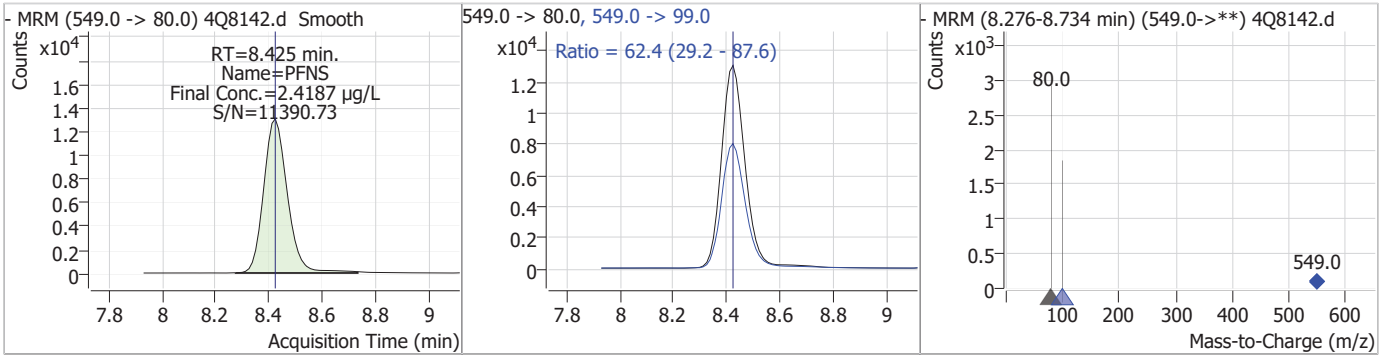
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.58	8.27	-0.01	447884	563.0 -> 269.0	20.2	10.1	30.2



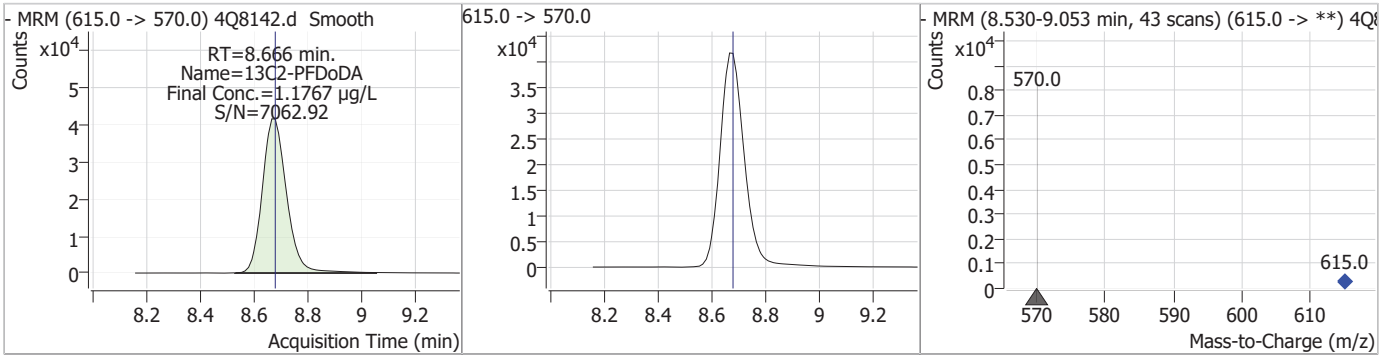
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.58	8.30	0.00	1112195	533.0 -> 353.0	31.1	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.42	8.42	0.00	80621	549.0 -> 99.0	62.4	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.18	8.67	-0.01	259958				

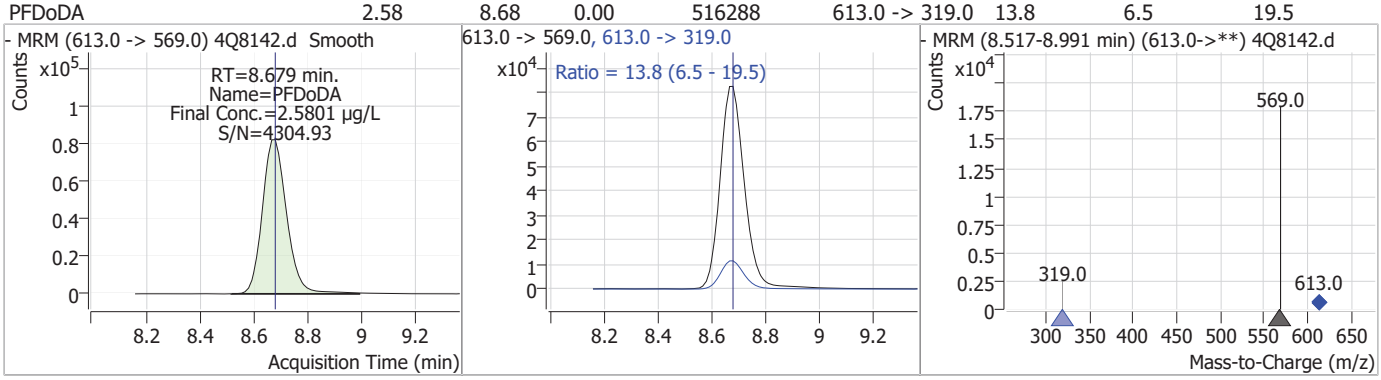


7.3.2

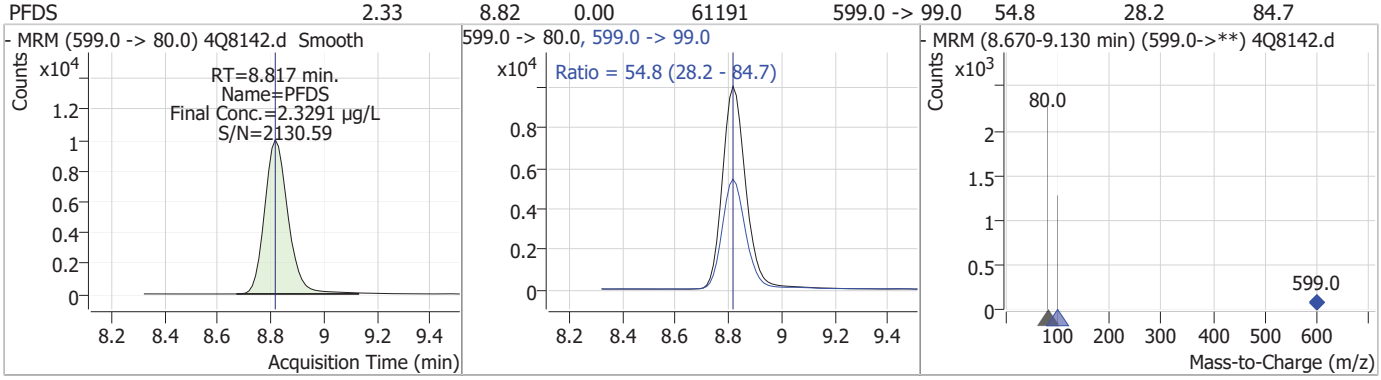
7

Perfluorinated Compounds by LC/MS/MS

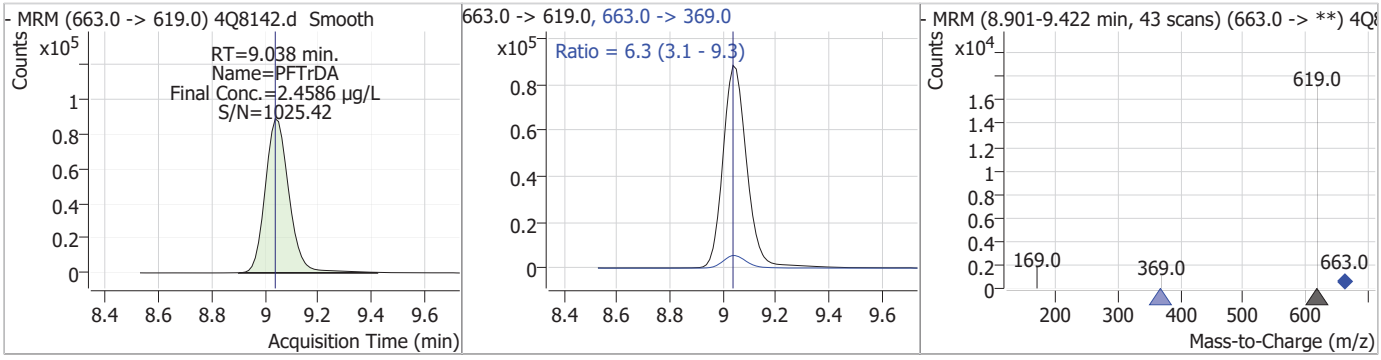
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.58	8.68	0.00	516288	613.0 -> 319.0	13.8	6.5	19.5



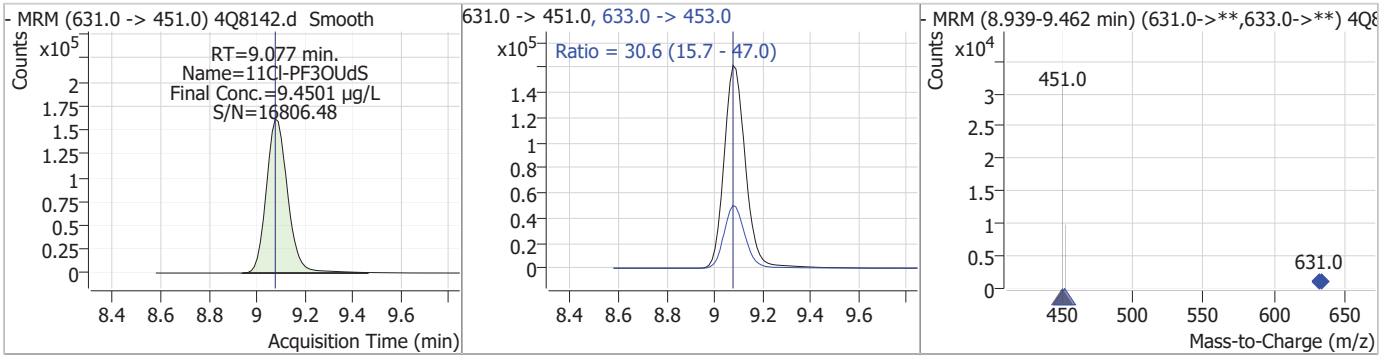
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.33	8.82	0.00	61191	599.0 -> 99.0	54.8	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.46	9.04	0.00	548624	663.0 -> 369.0	6.3	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.45	9.08	0.00	996941	633.0 -> 453.0	30.6	15.7	47.0

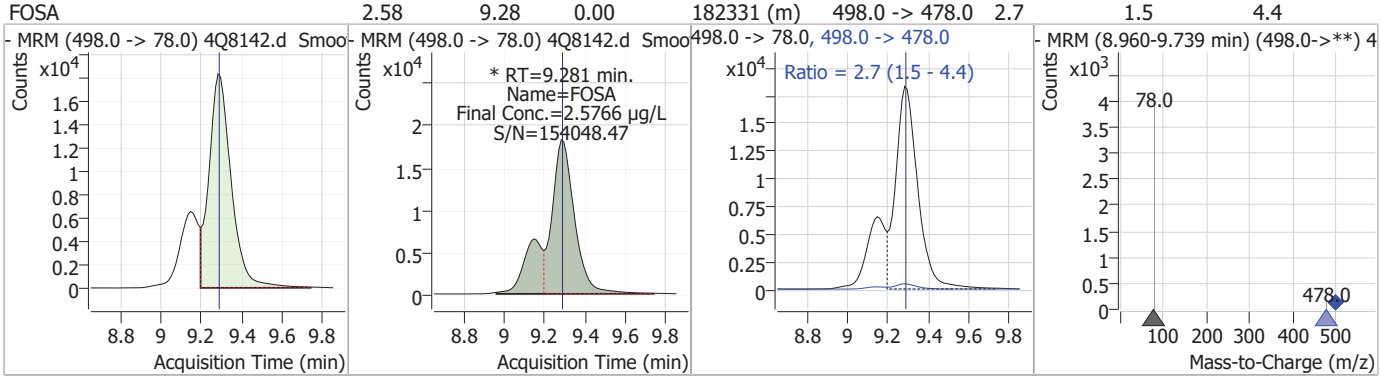


7.3.2

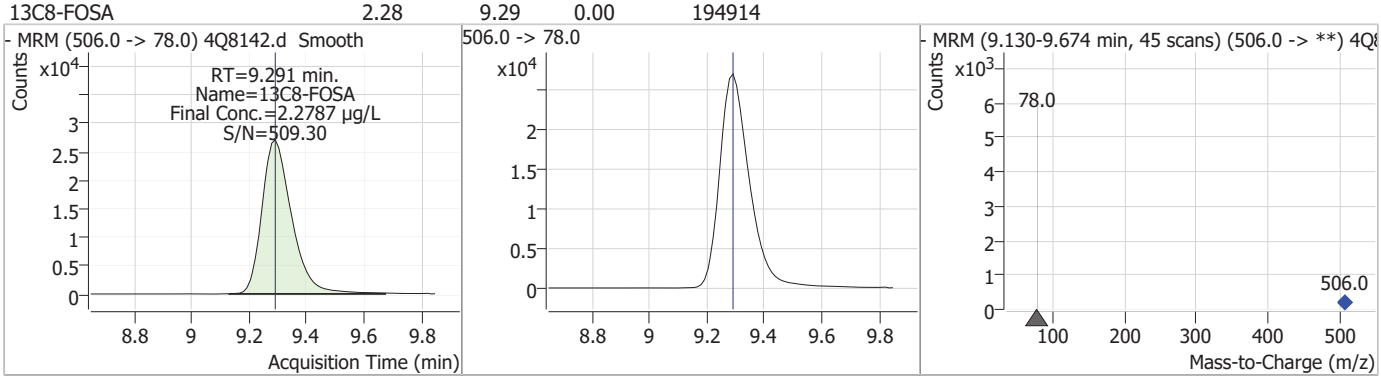
7

Perfluorinated Compounds by LC/MS/MS

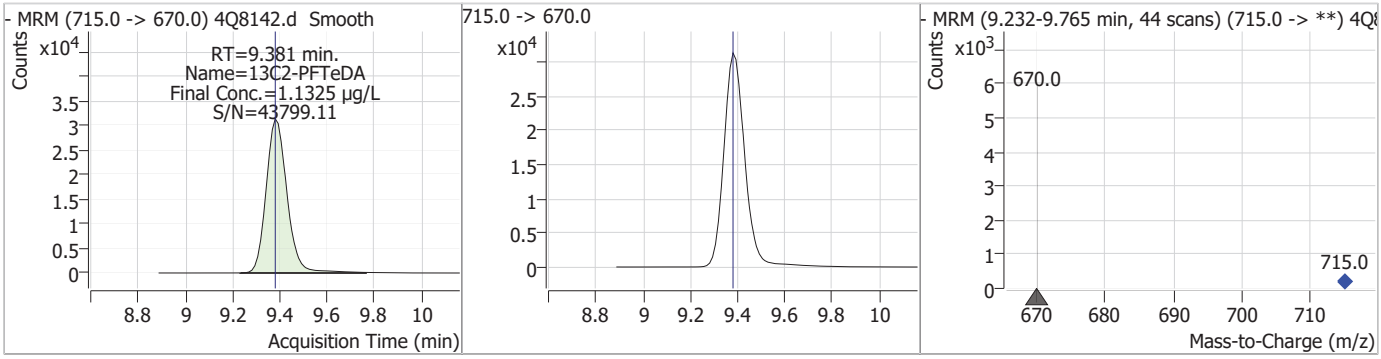
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.58	9.28	0.00	182331 (m)	498.0 -> 478.0	2.7	1.5	4.4



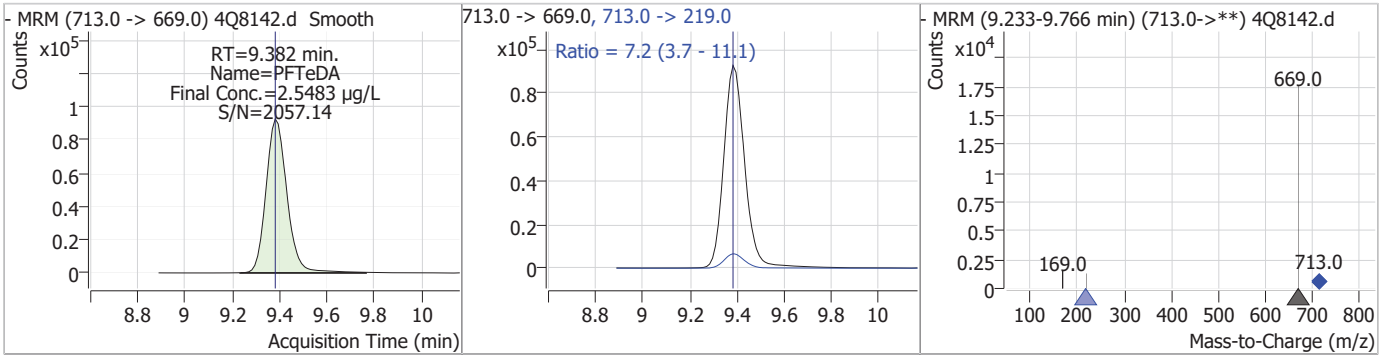
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.28	9.29	0.00	194914				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.13	9.38	0.00	192344				

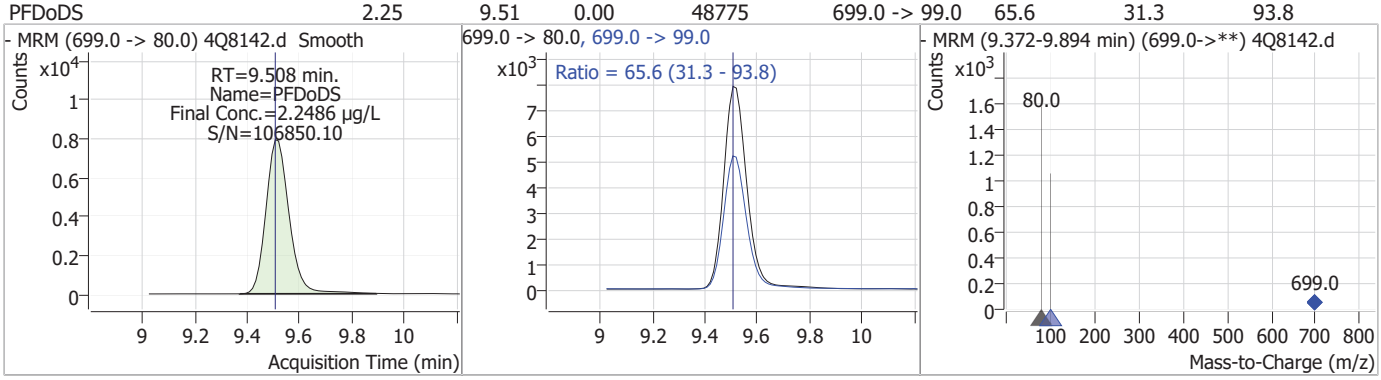


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.55	9.38	0.00	570698	713.0 -> 219.0	7.2	3.7	11.1

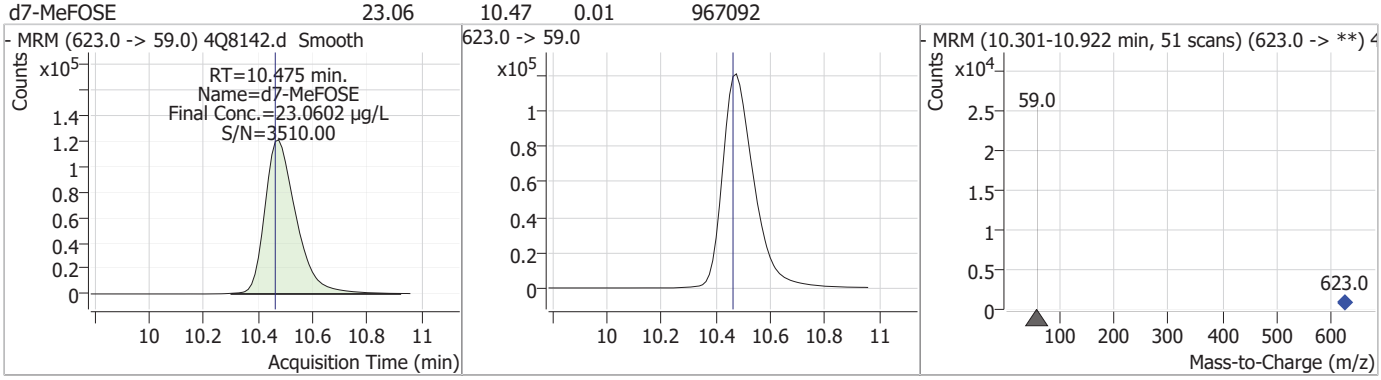


Perfluorinated Compounds by LC/MS/MS

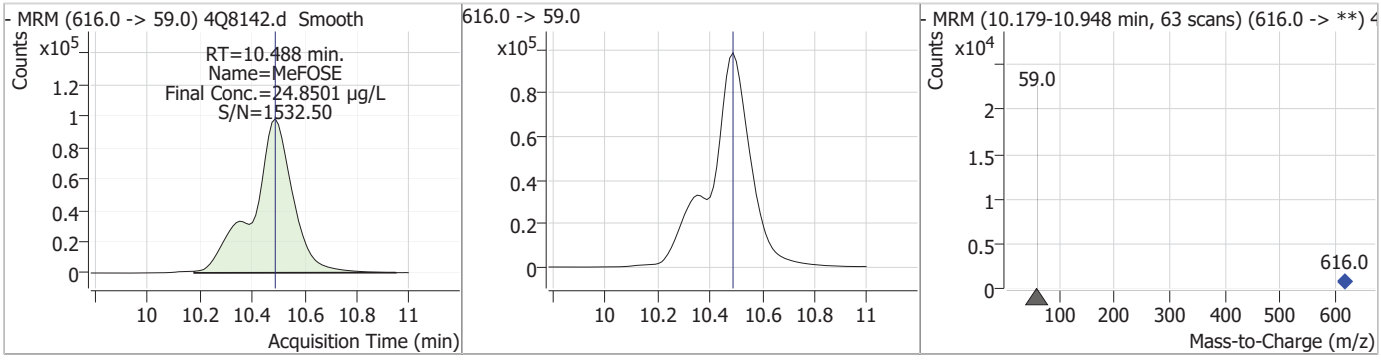
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.25	9.51	0.00	48775	699.0 -> 99.0	65.6	31.3	93.8



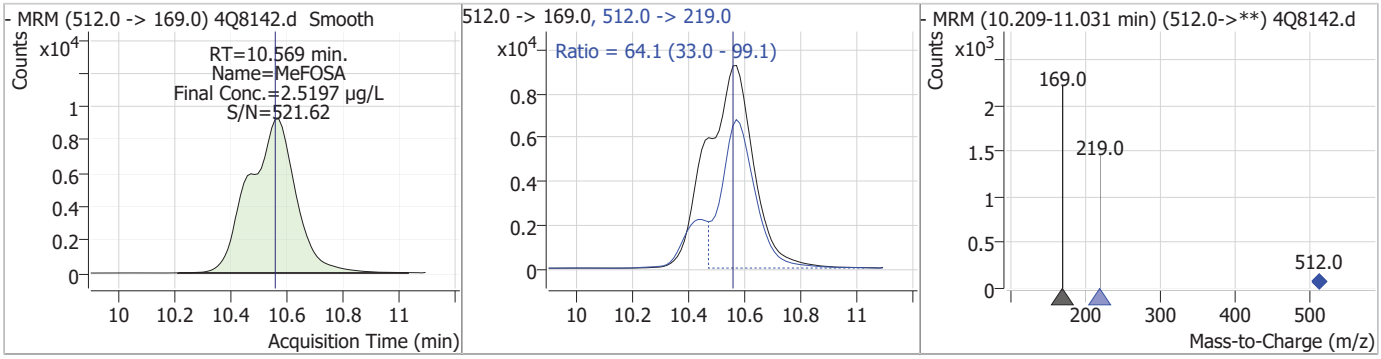
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.06	10.47	0.01	967092				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	24.85	10.49	0.00	1053856				

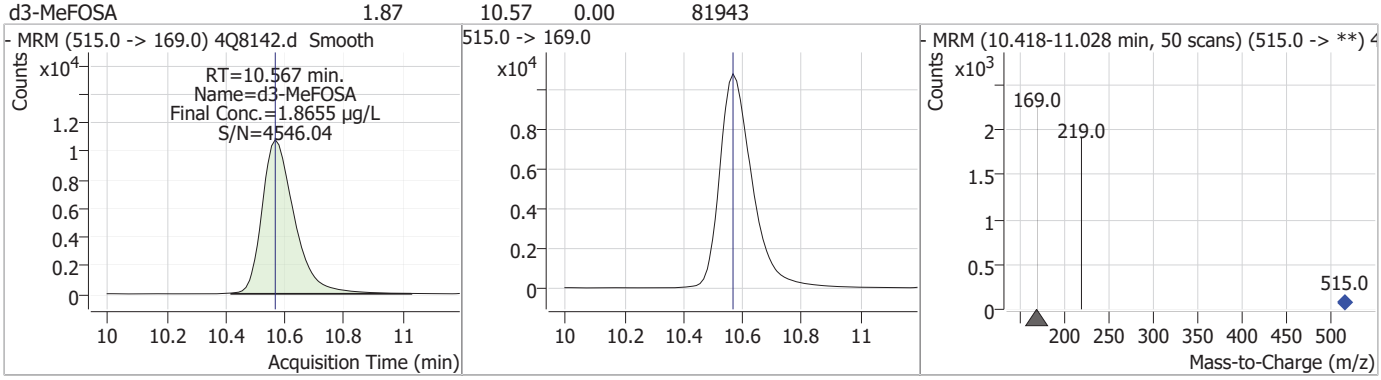


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.52	10.57	0.01	108117	512.0 -> 219.0	64.1	33.0	99.1

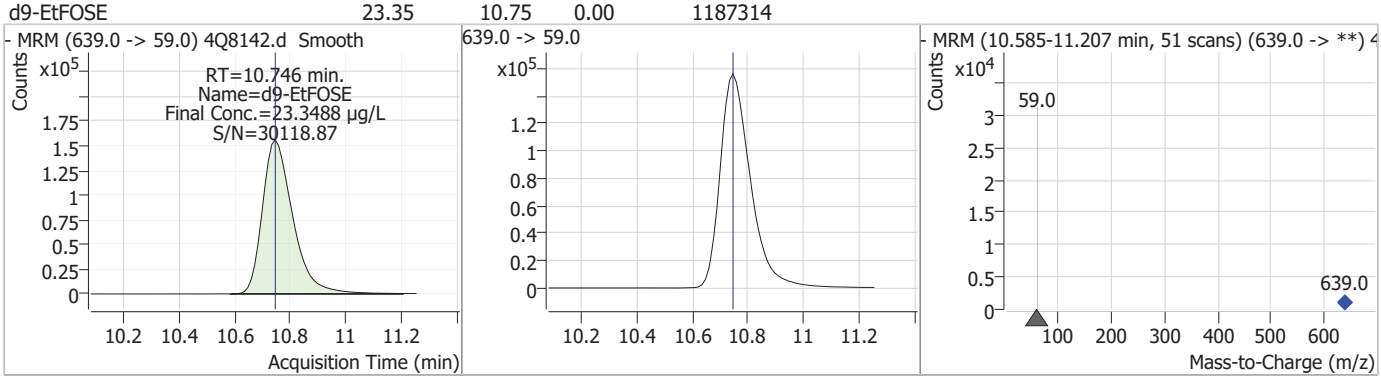


Perfluorinated Compounds by LC/MS/MS

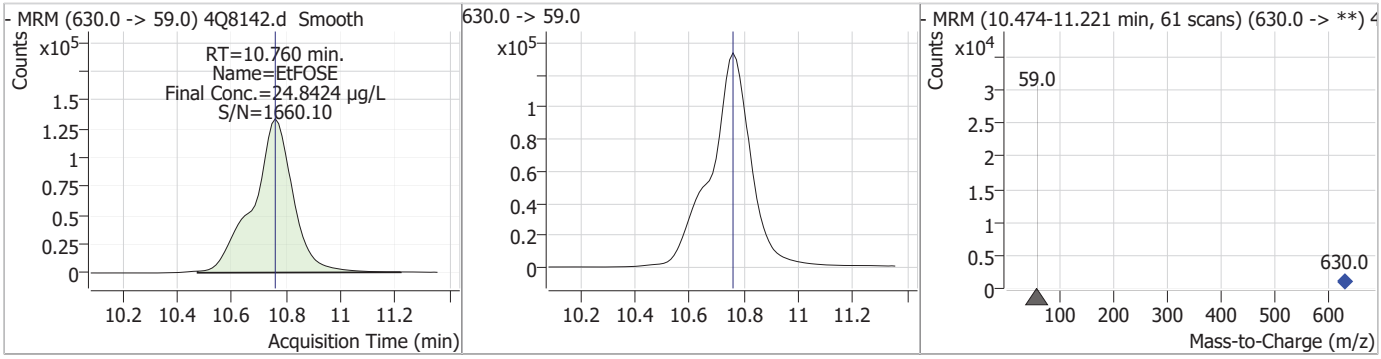
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.87	10.57	0.00	81943				



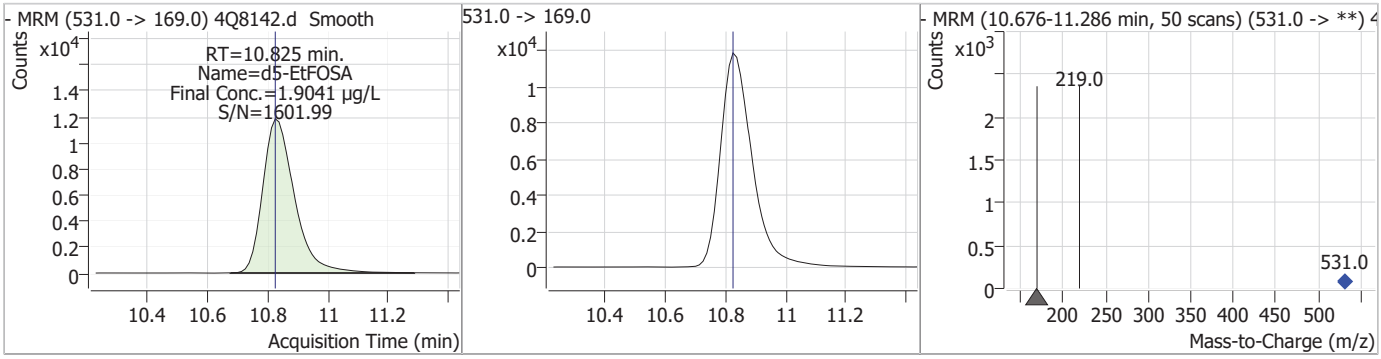
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.35	10.75	0.00	1187314				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	24.84	10.76	0.00	1371999				

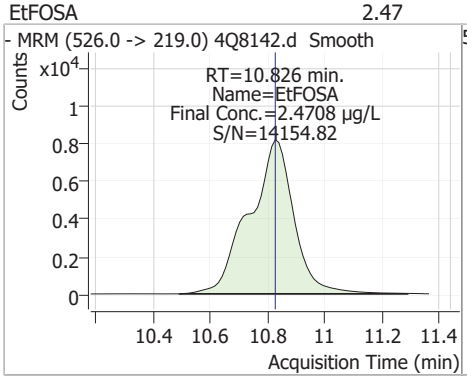


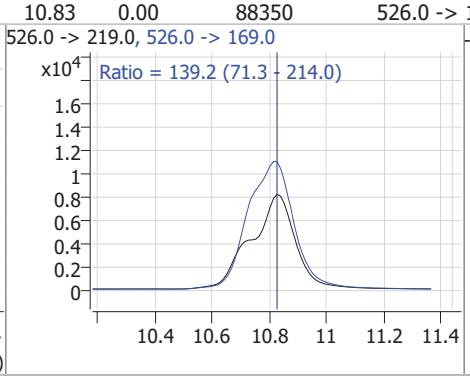
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.90	10.82	0.00	86191				

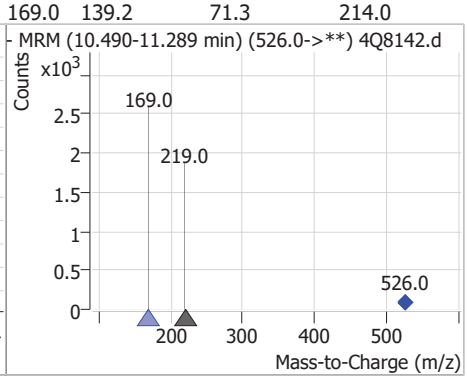


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.47	10.83	0.00	88350	526.0 -> 169.0	139.2	71.3	214.0







7.3.2

7

Manual Integration Approval Summary

Sample Number: OP63163-BS
Lab FileID: 4Q8142.D
Injection Time: 04/30/25 17:39
Method: EPA 1633
Analyst approved: 05/01/25 04:03 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.93	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8157.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 9:03:09 PM
Sample Name : OP63161-LLBS:2
Vial : P1-C9
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.858	217.0 -> 172.0	887875	10.00	µg/L	-0.025
M5-PFPeA	4.319	268.0 -> 223.0	472222	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	308579	2.50	µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	327021	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	485716	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	187525	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	179811	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	241515	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	208531	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	151538	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	167042	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	26404	2.50	µg/L	0.000
		302.0 -> 80.0	68277			
M3-PFHxS	6.999	402.0 -> 99.0	38709	2.50	µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	41674	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	12085	5.00	µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	24634	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	28594	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	227175	5.00	µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	488769	10.00	µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	169048	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	775118	25.00	µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	965505	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	79460	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	70122	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	72407	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	409672	5.00	µg/L	-0.012
18O2-PFHxS	6.999	403.0 -> 84.0	45978	2.50	µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	509349	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	170288	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	197425	1.25	µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	301930	2.50	µg/L	0.012
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	12085	5.24	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.8%		
13C2-6:2FTS	6.684	429.0 -> 81.0	24634	4.92	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.5%		
13C2-8:2FTS	7.671	529.0 -> 81.0	28594	4.86	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.2%		
13C2-PFDoDA	8.666	615.0 -> 570.0	208531	1.13	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.6%		
13C2-PFTeDA	9.368	715.0 -> 670.0	151538	1.07	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 85.7%		
13C3-PFBS	5.368	302.0 -> 99.0	26404	2.33	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.1%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	38709	2.41	µg/L		0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.4%			
13C4-PFBA	2.858	217.0 -> 172.0	887875	9.45	µg/L		-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.5%			
13C4-PFHpA	6.291	367.0 -> 322.0	327021	2.41	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.3%			
13C5-PFHxA	5.464	318.0 -> 273.0	308579	2.41	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.6%			
13C5-PFPeA	4.319	268.0 -> 223.0	472222	4.87	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.4%			
13C6-PFDA	7.858	519.0 -> 474.0	179811	1.19	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.6%			
13C7-PFUnDA	8.273	570.0 -> 525.0	241515	1.20	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.1%			
13C8-FOSA	9.279	506.0 -> 78.0	167042	2.25	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 89.8%			
13C8-PFOA	6.897	421.0 -> 376.0	485716	2.39	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.5%			
13C8-PFOS	7.995	507.0 -> 99.0	41674	2.39	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.6%			
13C9-PFNA	7.403	472.0 -> 427.0	187525	1.15	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.6%			
d3-MeFOSAA	7.915	573.0 -> 419.0	227175	4.76	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.3%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	488769	9.74	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 97.4%			
d3-MeFOSA	10.567	515.0 -> 169.0	70122	1.84	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 73.4%			
d5-EtFOSAA	8.098	589.0 -> 419.0	169048	4.62	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.3%			
d7-MeFOSE	10.462	623.0 -> 59.0	775118	21.25	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 85.0%			
d9-EtFOSE	10.746	639.0 -> 59.0	965505	21.83	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 87.3%			
d5-EtFOSA	10.825	531.0 -> 169.0	79460	2.02	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 80.7%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	29834	1.34	µg/L		96
		327.0 -> 81.0	14725				
6:2FTS	6.684	427.0 -> 407.0	38191	1.55	µg/L		97
		427.0 -> 81.0	17224				
8:2FTS	7.671	527.0 -> 507.0	33740	1.51	µg/L		99
		527.0 -> 81.0	12856				
EtFOSAA	8.099	584.0 -> 419.0	11087	0.35	µg/L	m	98
		584.0 -> 483.0	6056				
FOSA	9.269	498.0 -> 78.0	22783	0.38	µg/L	m	99
		498.0 -> 478.0	775				
MeFOSAA	7.917	570.0 -> 419.0	14592	0.37	µg/L	m	97
		570.0 -> 512.0	5086				
PFBA	2.864	213.0 -> 169.0	40617	1.50	µg/L		100
PFBS	5.369	299.0 -> 80.0	10411	0.34	µg/L		99
		299.0 -> 99.0	4181				
PFDA	7.859	513.0 -> 469.0	50465	0.37	µg/L		97
		513.0 -> 219.0	10952				
PFDoDA	8.667	613.0 -> 569.0	60621	0.38	µg/L		97
		613.0 -> 319.0	8537				

Perfluorinated Compounds by LC/MS/MS

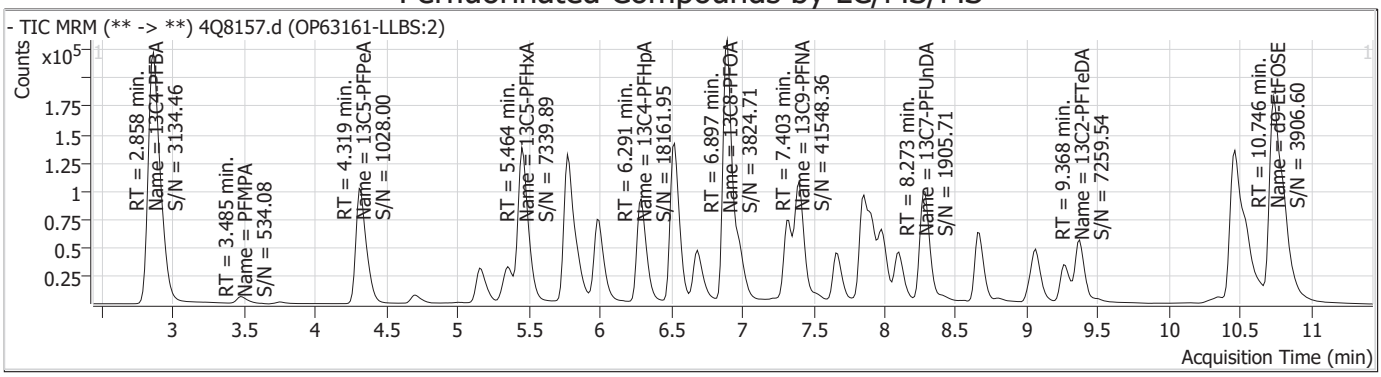
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.804	599.0 -> 80.0	7965	0.37	µg/L		99
		599.0 -> 99.0	4416				
PFHpA	6.292	363.0 -> 319.0	74781	0.38	µg/L		99
		363.0 -> 169.0	15104				
PFHpS	7.529	449.0 -> 80.0	11722	0.35	µg/L		99
		449.0 -> 99.0	6378				
PFHxA	5.467	313.0 -> 269.0	49704	0.37	µg/L		99
		313.0 -> 119.0	1455				
PFHxS	6.987	399.0 -> 80.0	12142	0.36	µg/L	m	99
		399.0 -> 99.0	6458				
PFNA	7.404	463.0 -> 419.0	43610	0.39	µg/L	m	98
		463.0 -> 219.0	15790				
PFNS	8.425	549.0 -> 80.0	10571	0.38	µg/L		95
		549.0 -> 99.0	5784				
PFOA	6.898	413.0 -> 369.0	63364	0.39	µg/L	m	98
		413.0 -> 169.0	17823				
PFOS	7.996	499.0 -> 80.0	13880	0.41	µg/L	m	88
		499.0 -> 99.0	8349				
PFPeA	4.321	263.0 -> 219.0	57552	0.77	µg/L		100
PFPeS	6.331	349.0 -> 80.0	12135	0.37	µg/L		99
		349.0 -> 99.0	6046				
PFTeDA	9.369	713.0 -> 669.0	67516	0.38	µg/L		100
		713.0 -> 219.0	4930				
PFTrDA	9.038	663.0 -> 619.0	70371	0.39	µg/L		100
		663.0 -> 369.0	4246				
PFUnDA	8.275	563.0 -> 519.0	52077	0.36	µg/L		98
		563.0 -> 269.0	9909				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	127123	1.37	µg/L		95
		633.0 -> 453.0	36196				
9Cl-PF3ONS	8.301	531.0 -> 351.0	140670	1.38	µg/L		99
		533.0 -> 353.0	41656				
ADONA	6.527	377.0 -> 251.0	494060	1.29	µg/L		100
		377.0 -> 85.0	161604				
HFPO-DA	5.792	285.0 -> 169.0	75769	1.47	µg/L		97
		285.0 -> 185.0	7587				
3:3FTCA	3.756	241.0 -> 177.0	7963	1.78	µg/L		97
		241.0 -> 117.0	722				
5:3FTCA	5.993	341.0 -> 237.0	203499	8.65	µg/L		98
		341.0 -> 217.0	145488				
7:3FTCA	7.330	441.0 -> 337.0	251089	8.21	µg/L		97
		441.0 -> 317.0	108761				
EtFOSA	10.826	526.0 -> 219.0	12286	0.37	µg/L		98
		526.0 -> 169.0	17841				
EtFOSE	10.760	630.0 -> 59.0	168985	3.76	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	15046	0.41	µg/L		98
		512.0 -> 219.0	9684				
MeFOSE	10.476	616.0 -> 59.0	127180	3.74	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	6218	0.34	µg/L		90
		699.0 -> 99.0	3414				
NFDHA	5.345	295.0 -> 201.0	12670	0.73	µg/L		97
		201.0 -> 85.0	52502				
		295.0 -> 85.0	3927				
PFMBA	4.710	279.0 -> 85.0	37218	0.73	µg/L		100
PFMPA	3.485	229.0 -> 85.0	31678	0.74	µg/L		100
PFEESA	5.849	315.0 -> 135.0	85628	0.70	µg/L		100
		315.0 -> 69.0	6712				

Perfluorinated Compounds by LC/MS/MS

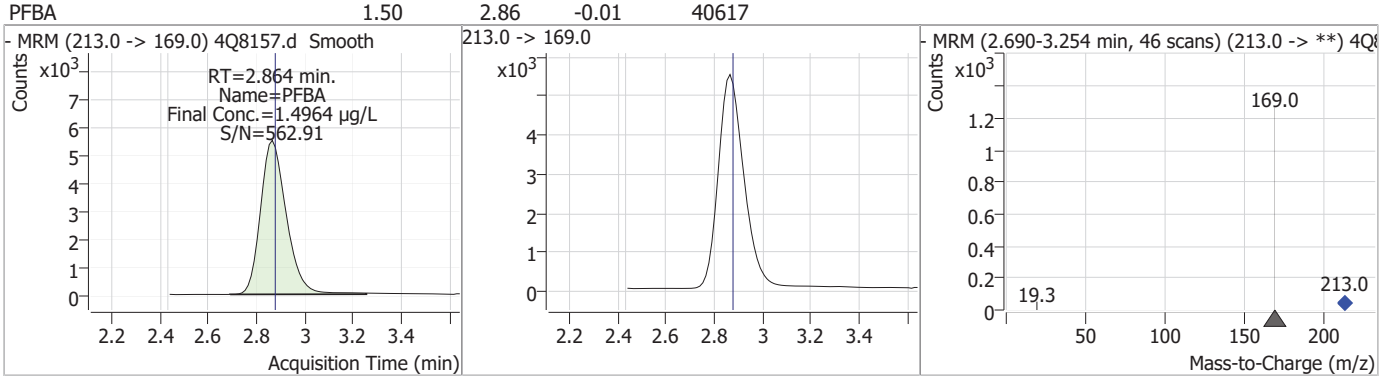
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

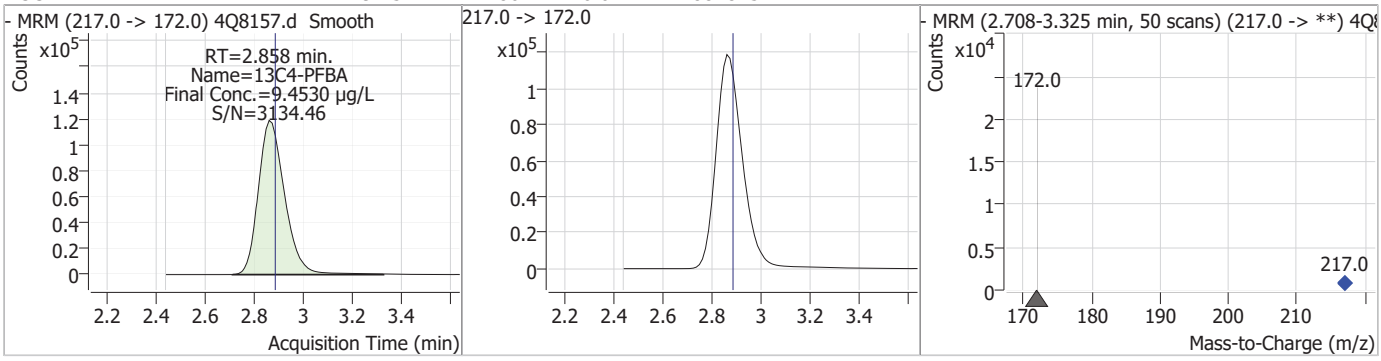
Perfluorinated Compounds by LC/MS/MS



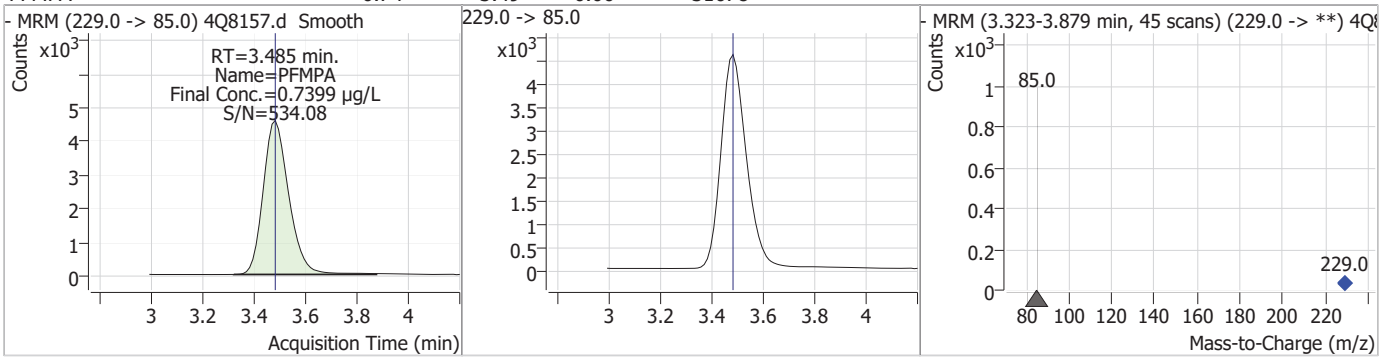
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	1.50	2.86	-0.01	40617				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.45	2.86	-0.02	887875				

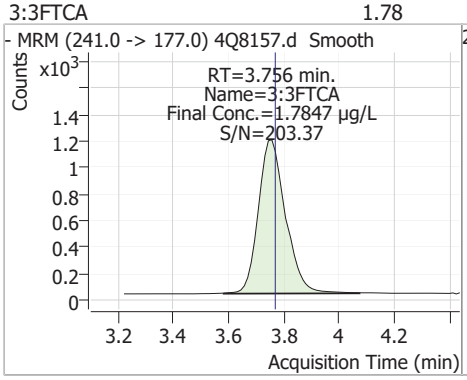


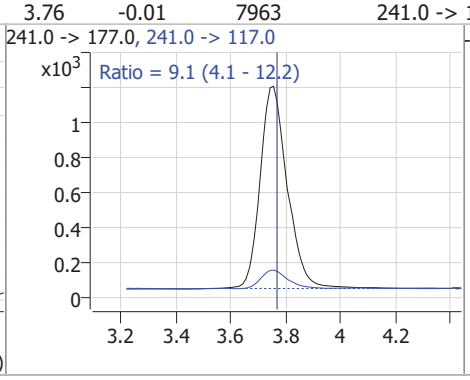
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.74	3.49	0.00	31678				

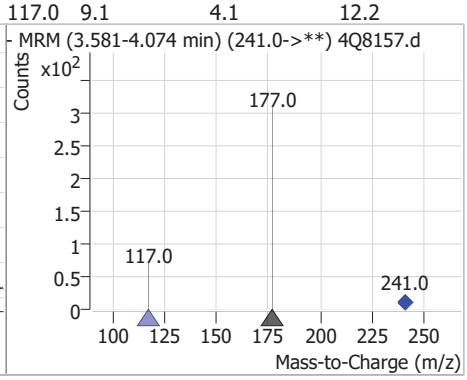


Perfluorinated Compounds by LC/MS/MS

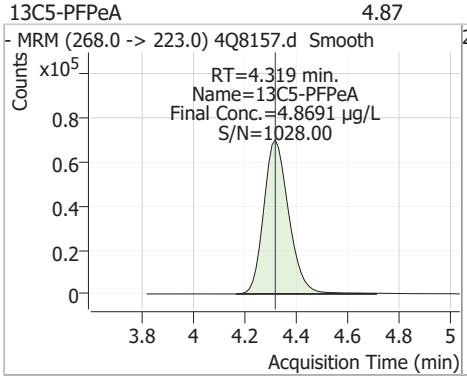
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	1.78	3.76	-0.01	7963	241.0 -> 117.0	9.1	4.1	12.2

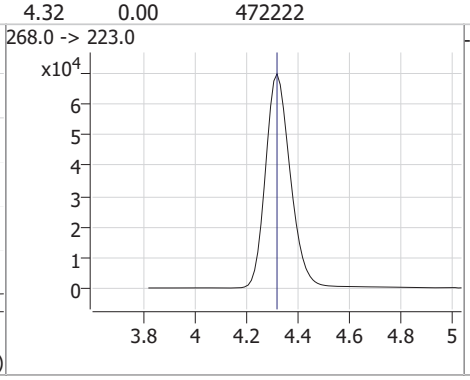


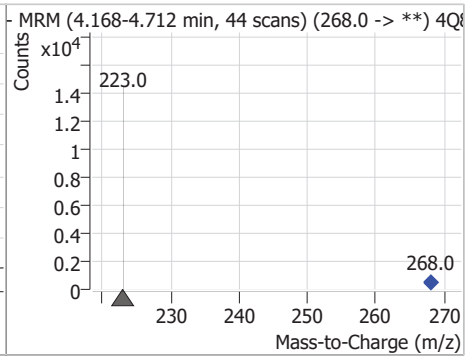




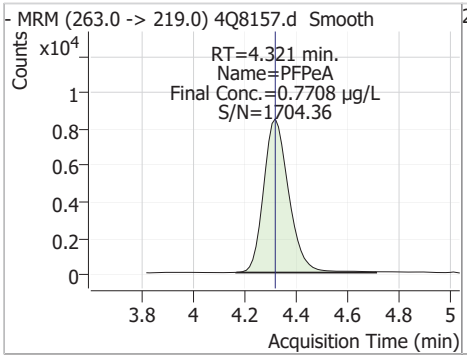
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.87	4.32	0.00	472222				

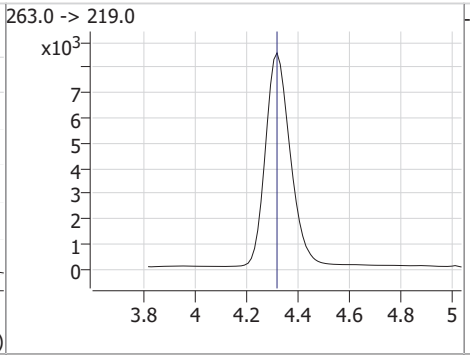


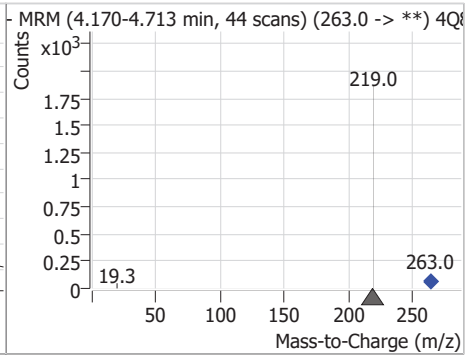




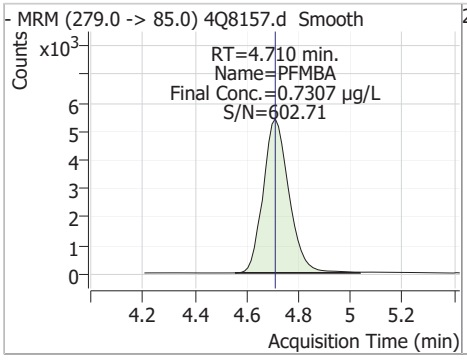
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.77	4.32	0.00	57552				

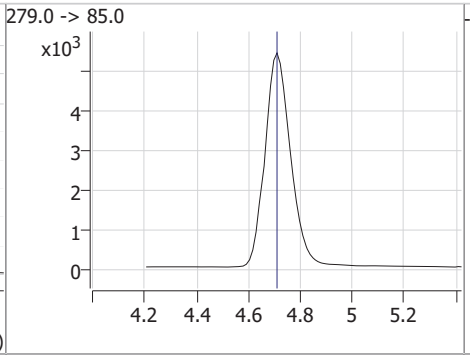


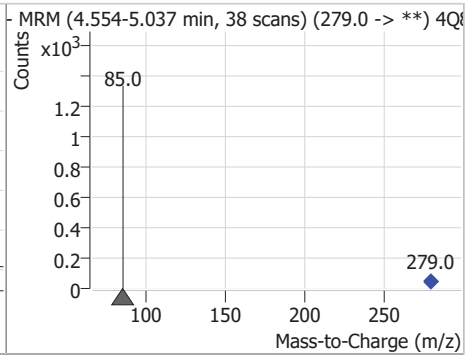




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.73	4.71	0.00	37218				

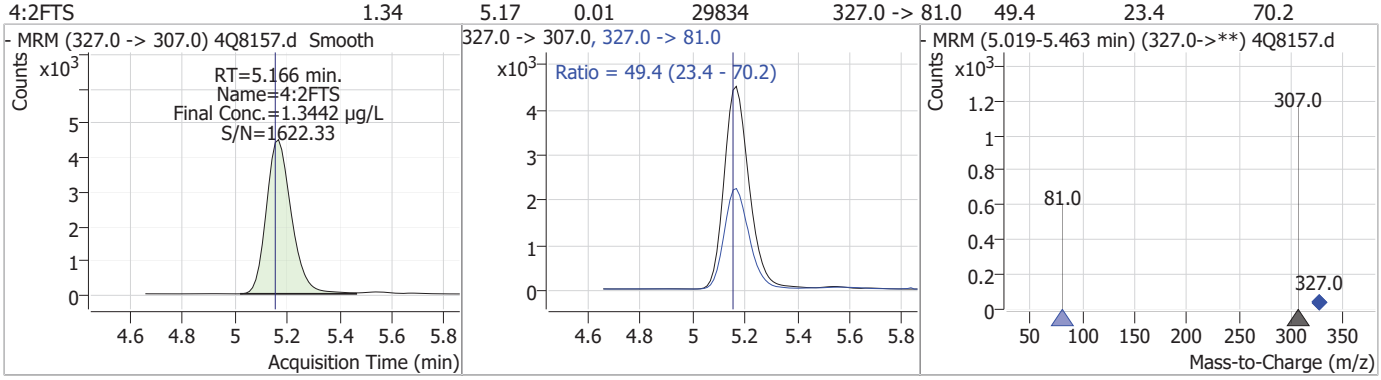




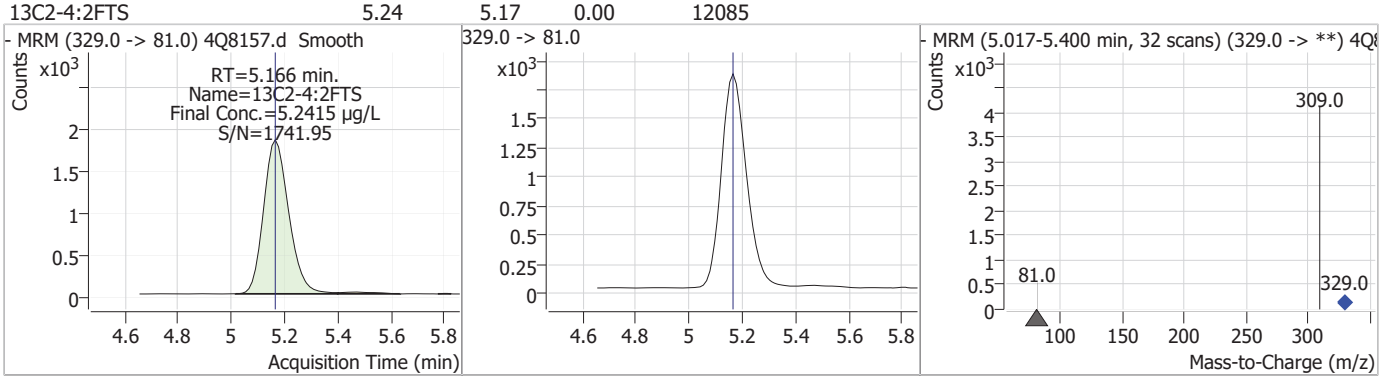


Perfluorinated Compounds by LC/MS/MS

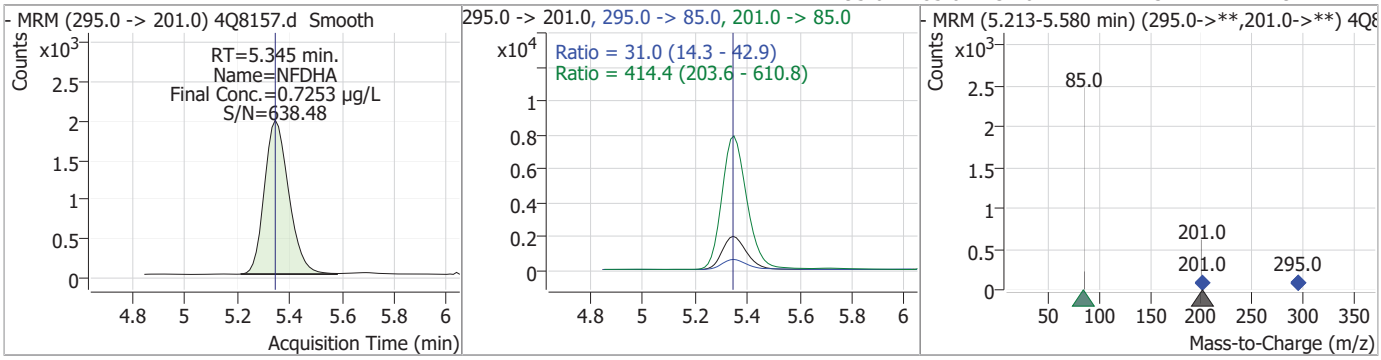
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	1.34	5.17	0.01	29834	327.0 -> 81.0	49.4	23.4	70.2



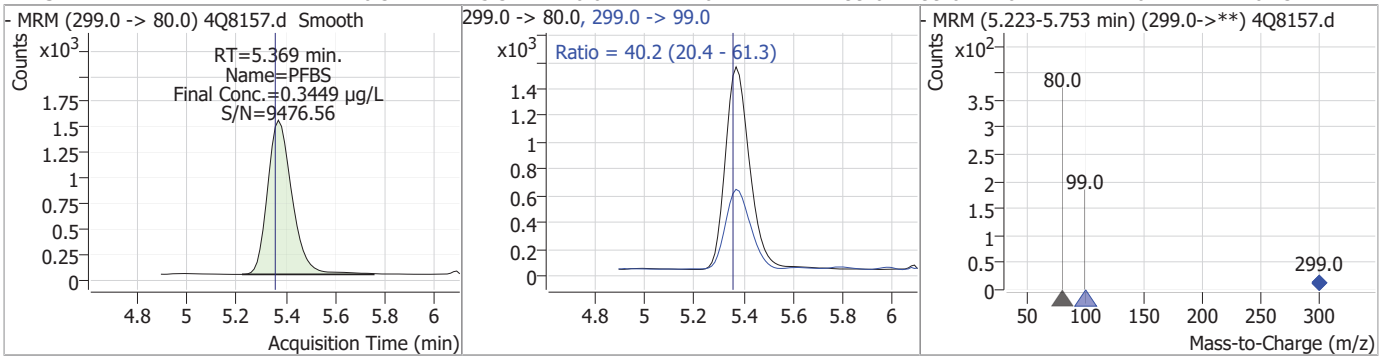
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.24	5.17	0.00	12085				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.73	5.35	0.00	12670	201.0 -> 85.0	414.4	203.6	610.8
					295.0 -> 85.0	31.0	14.3	42.9

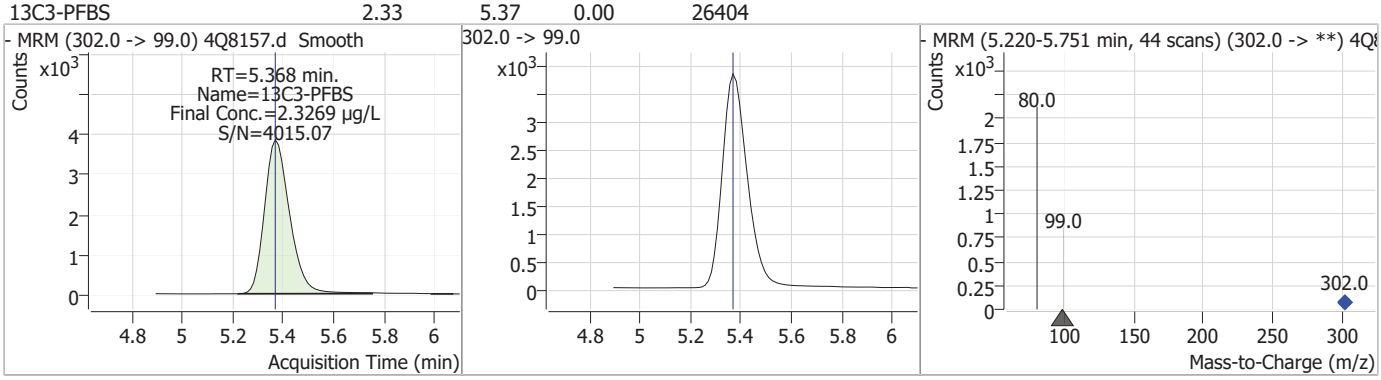


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.34	5.37	0.01	10411	299.0 -> 99.0	40.2	20.4	61.3

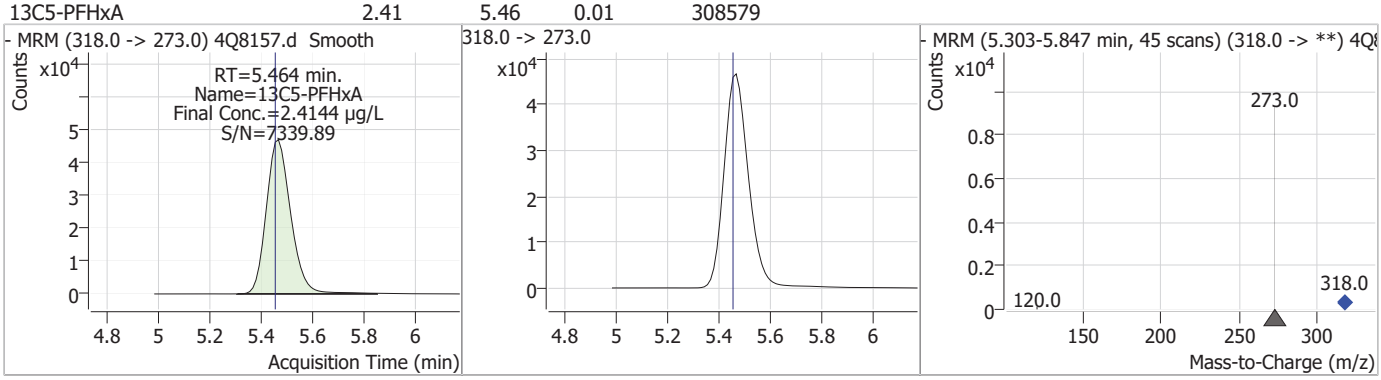


Perfluorinated Compounds by LC/MS/MS

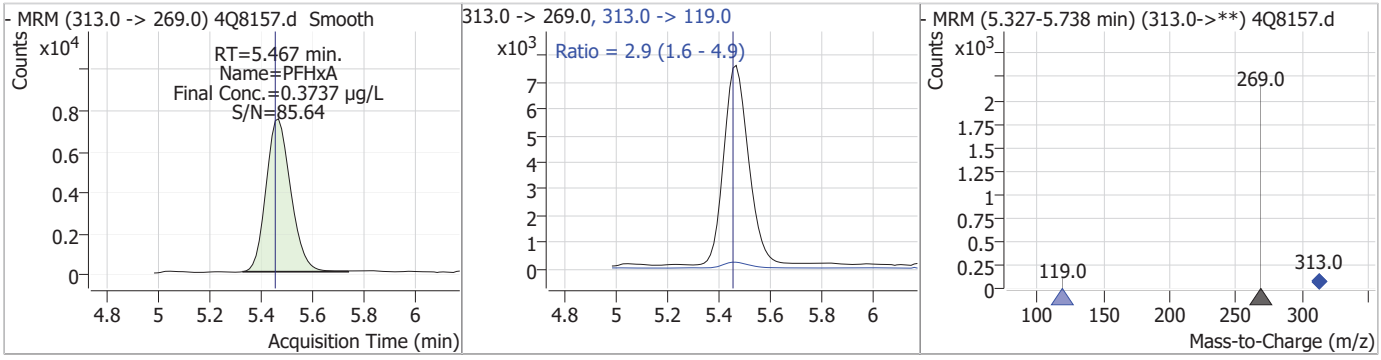
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.33	5.37	0.00	26404				



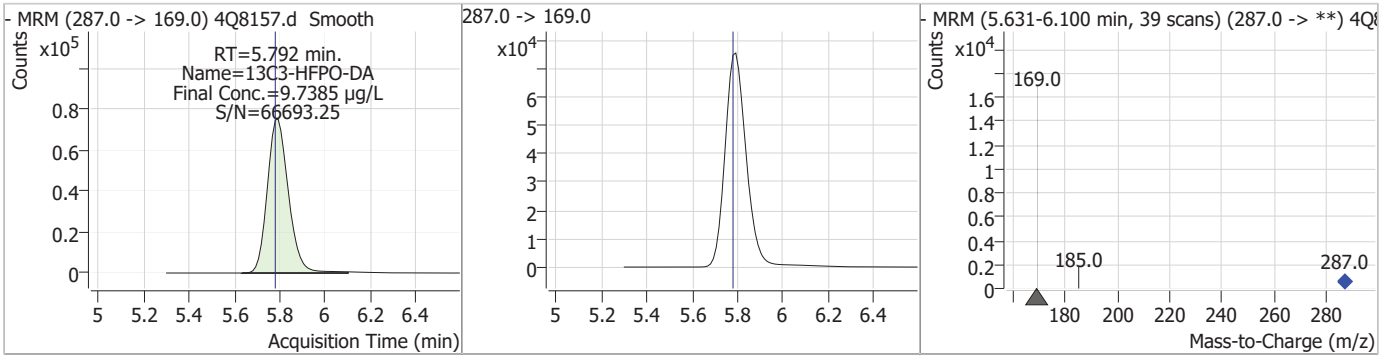
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.41	5.46	0.01	308579				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.37	5.47	0.01	49704	313.0 -> 119.0	2.9	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.74	5.79	0.01	488769				

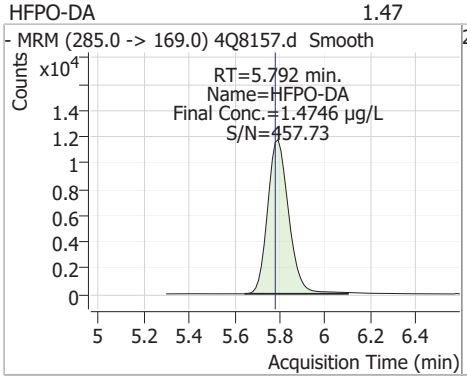


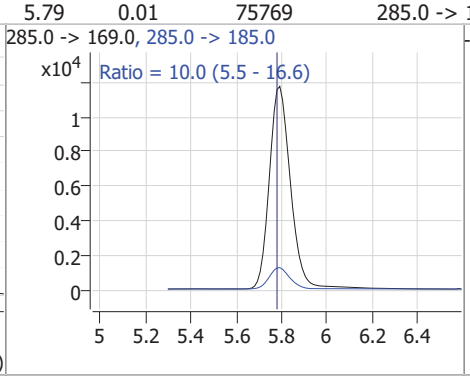
7.3.3

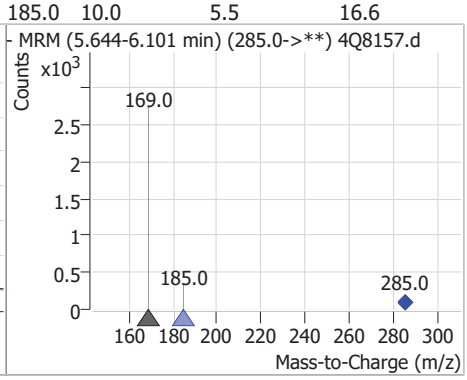
7

Perfluorinated Compounds by LC/MS/MS

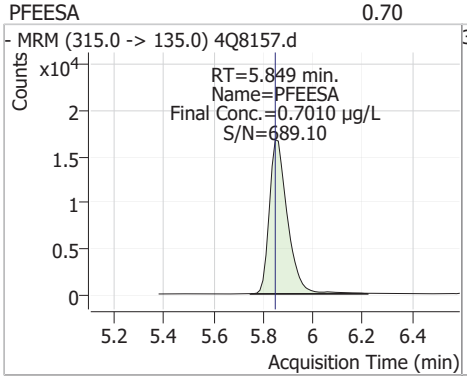
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	1.47	5.79	0.01	75769	285.0 -> 185.0	10.0	5.5	16.6

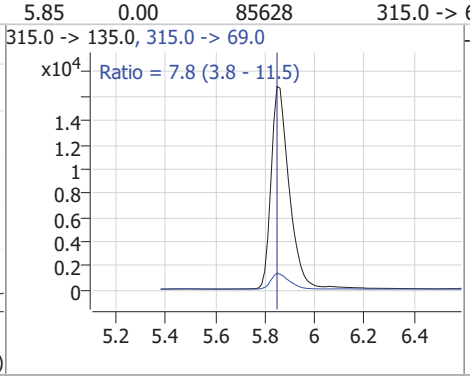


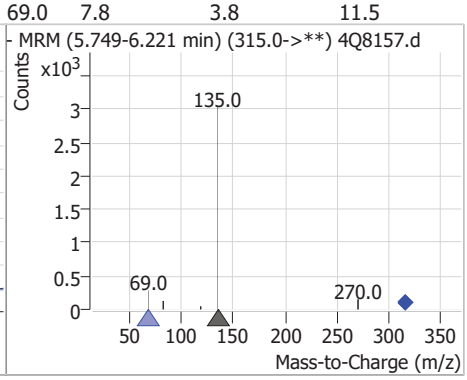




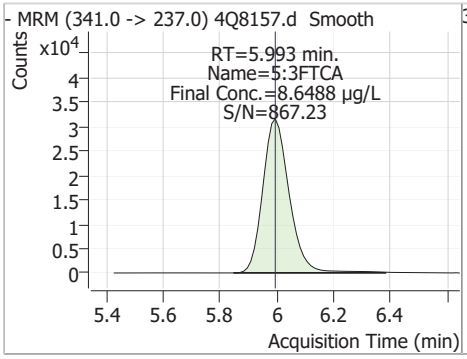
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.70	5.85	0.00	85628	315.0 -> 69.0	7.8	3.8	11.5

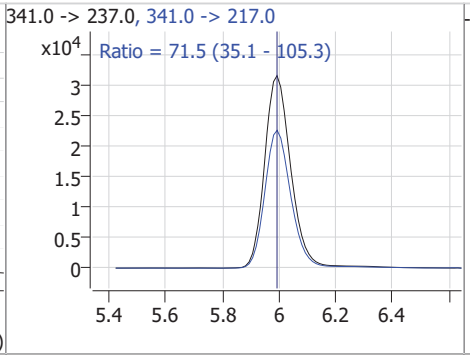


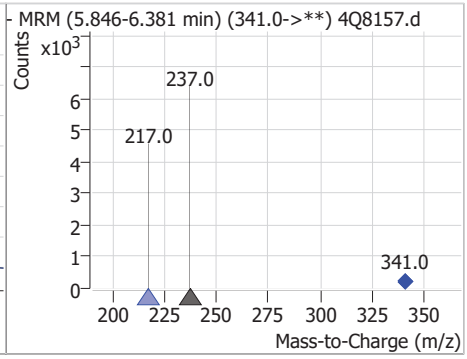




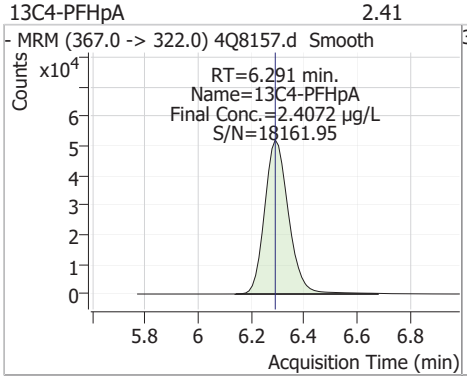
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	8.65	5.99	0.00	203499	341.0 -> 217.0	71.5	35.1	105.3

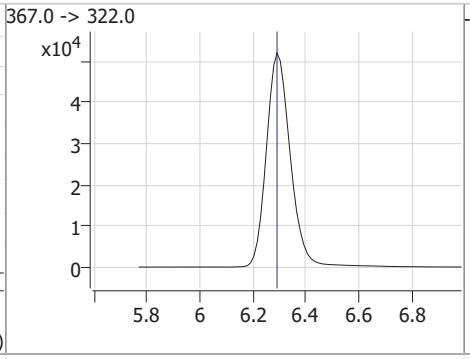


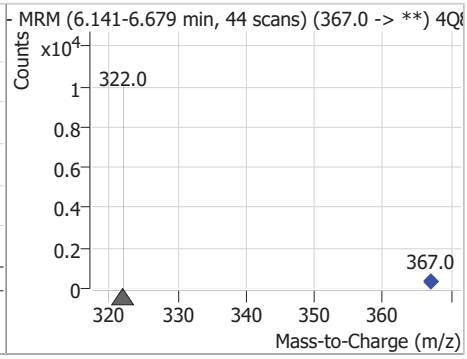




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.41	6.29	0.00	327021				

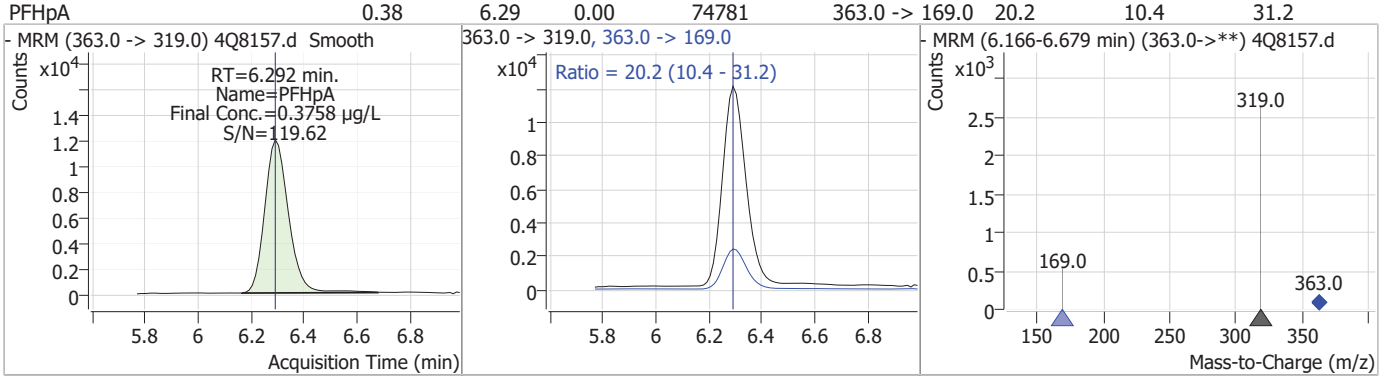




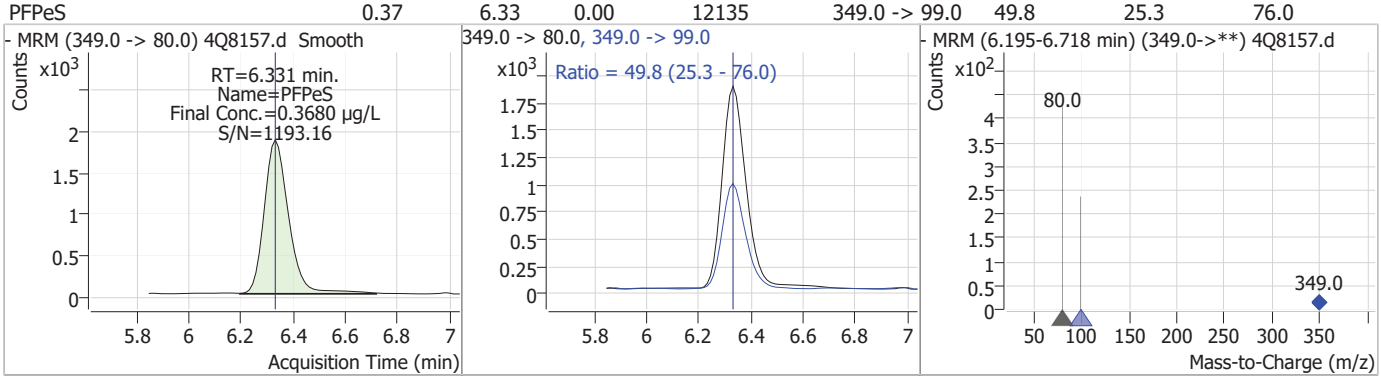


Perfluorinated Compounds by LC/MS/MS

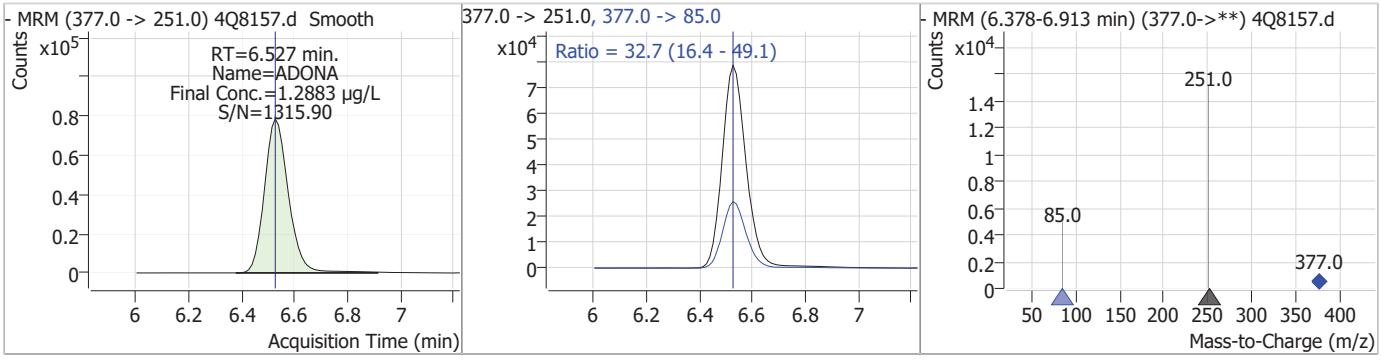
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.38	6.29	0.00	74781	363.0 -> 169.0	20.2	10.4	31.2



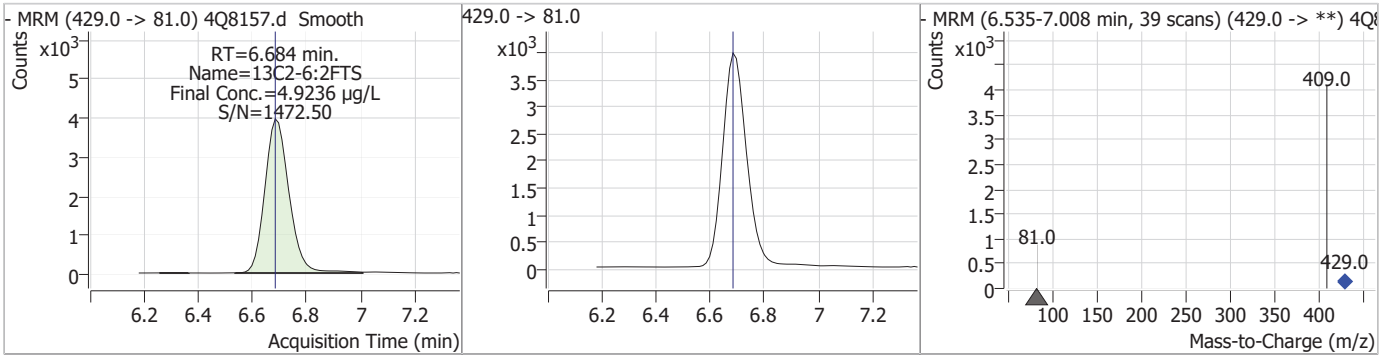
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.37	6.33	0.00	12135	349.0 -> 99.0	49.8	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	1.29	6.53	0.00	494060	377.0 -> 85.0	32.7	16.4	49.1

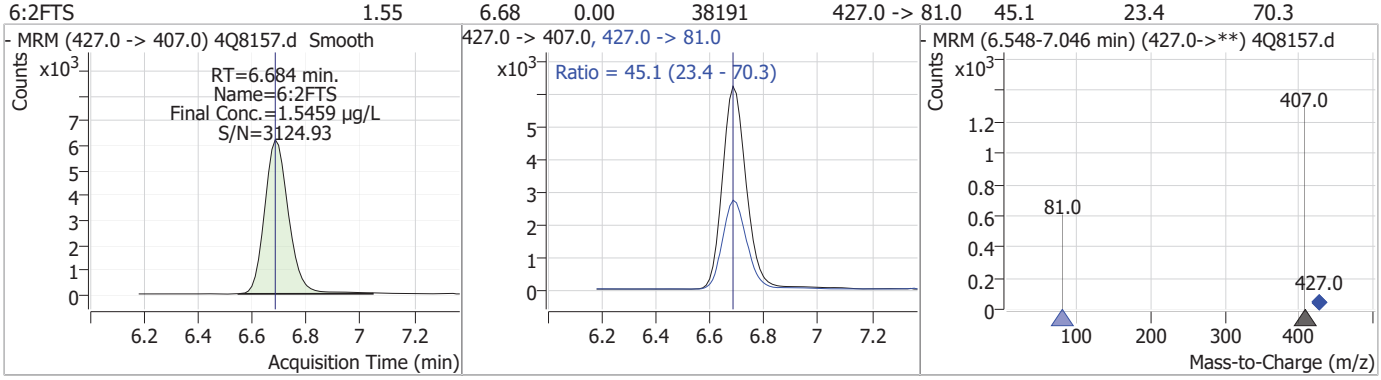


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.92	6.68	0.00	24634				

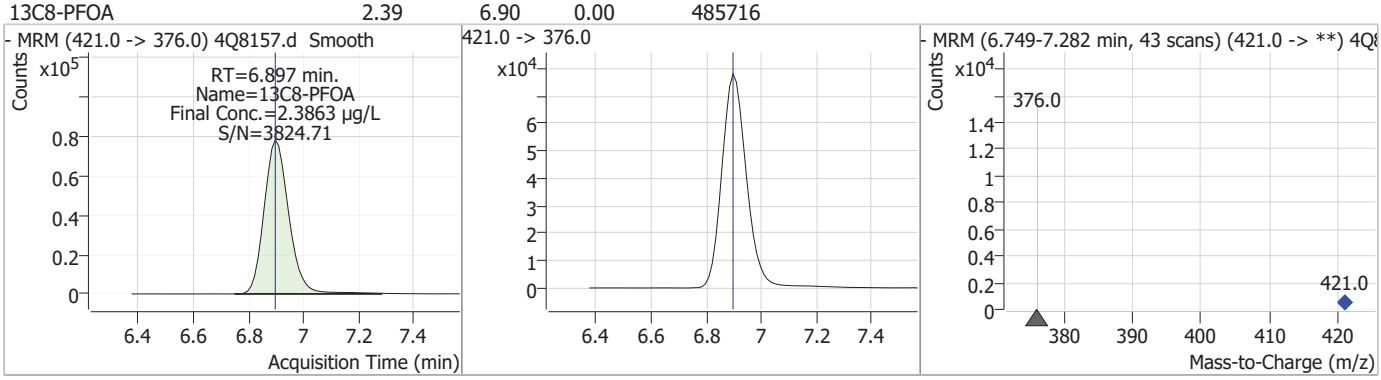


Perfluorinated Compounds by LC/MS/MS

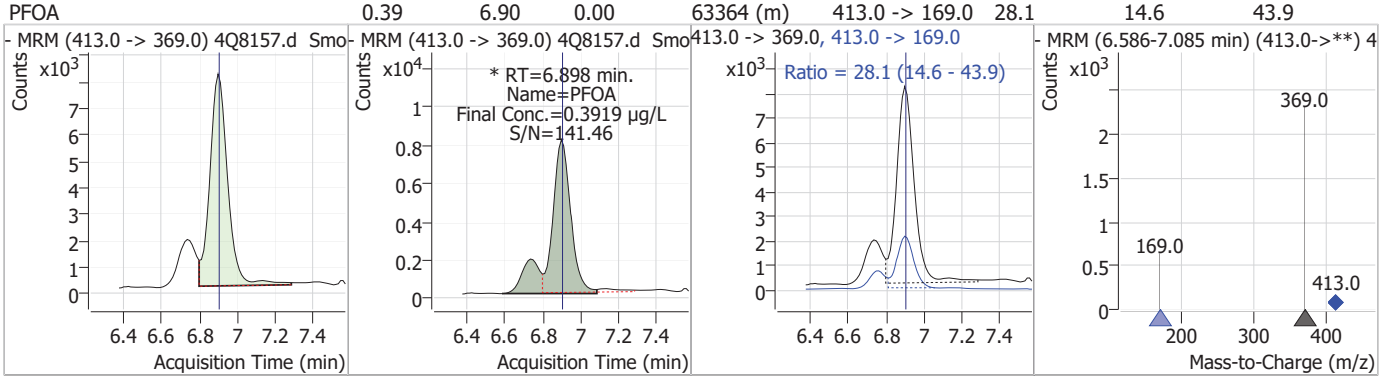
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	1.55	6.68	0.00	38191	427.0 -> 81.0	45.1	23.4	70.3



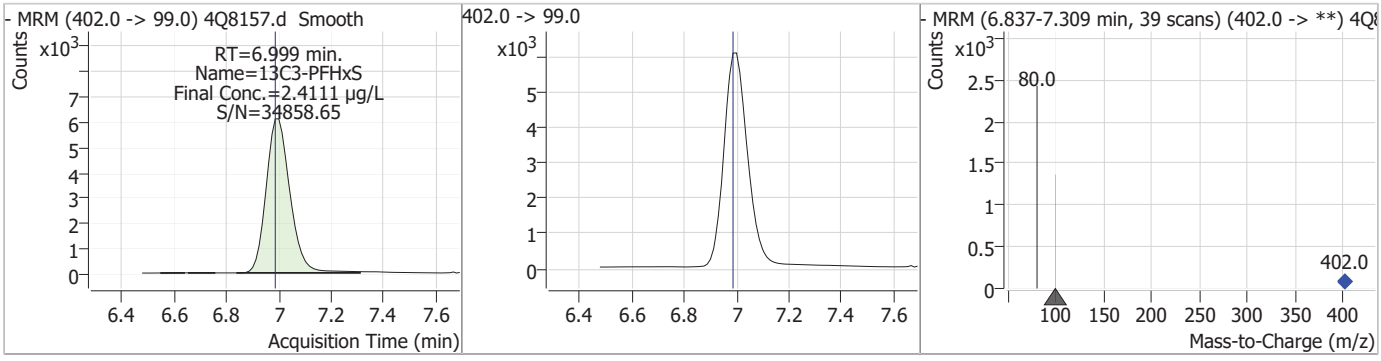
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.39	6.90	0.00	485716				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.39	6.90	0.00	63364 (m)	413.0 -> 169.0	28.1	14.6	43.9

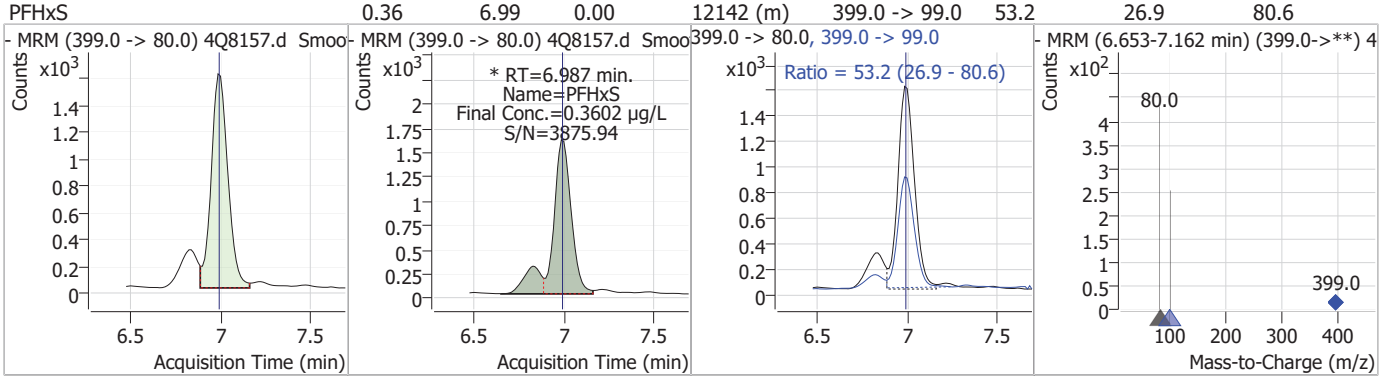


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.41	7.00	0.01	38709				

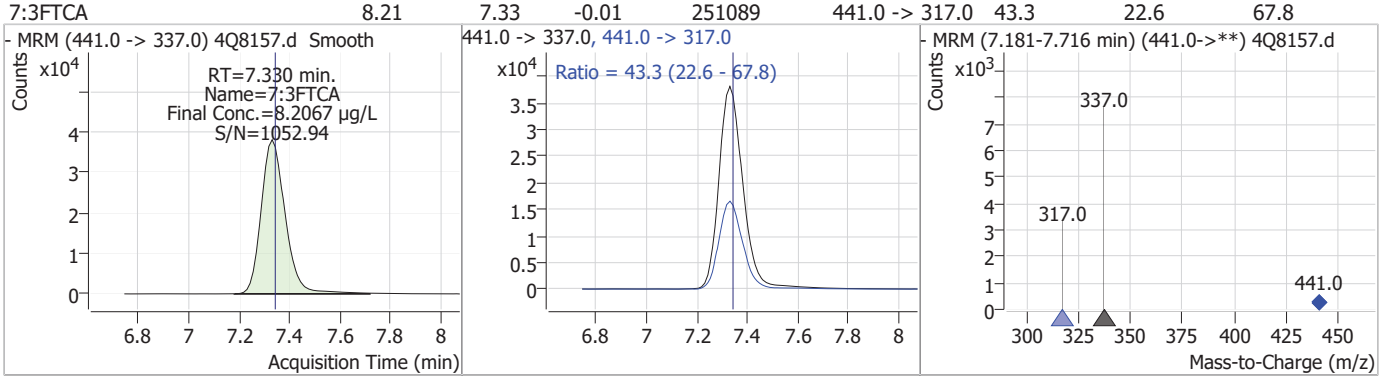


Perfluorinated Compounds by LC/MS/MS

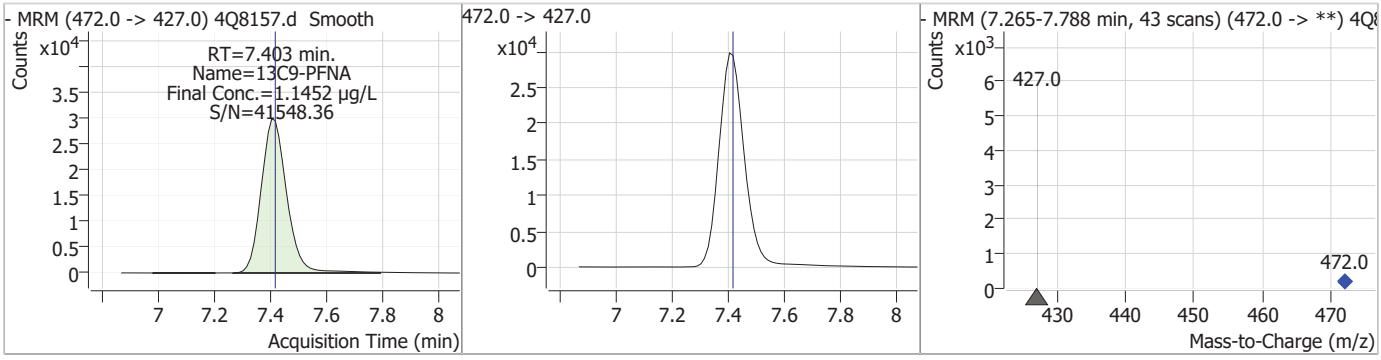
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.36	6.99	0.00	12142 (m)	399.0 -> 99.0	53.2	26.9	80.6



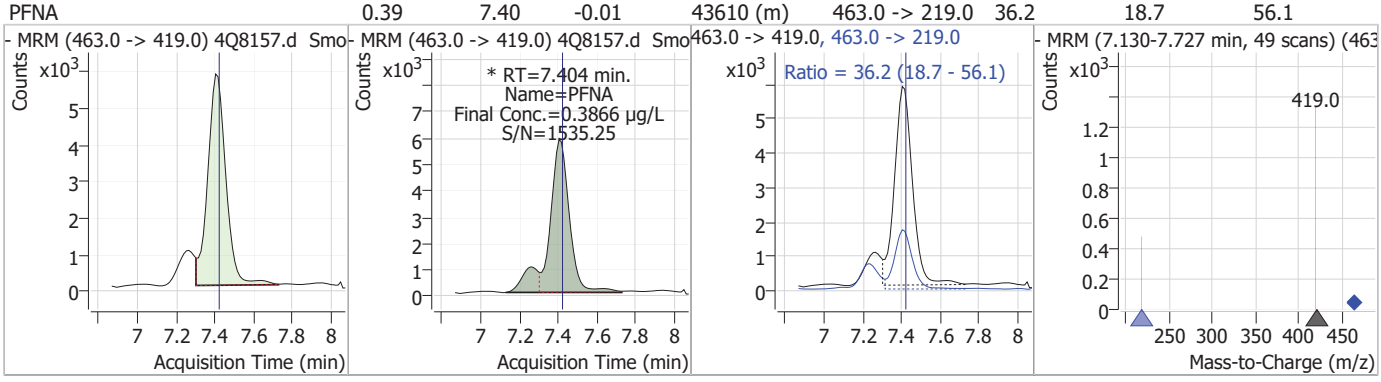
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	8.21	7.33	-0.01	251089	441.0 -> 317.0	43.3	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.15	7.40	-0.01	187525				

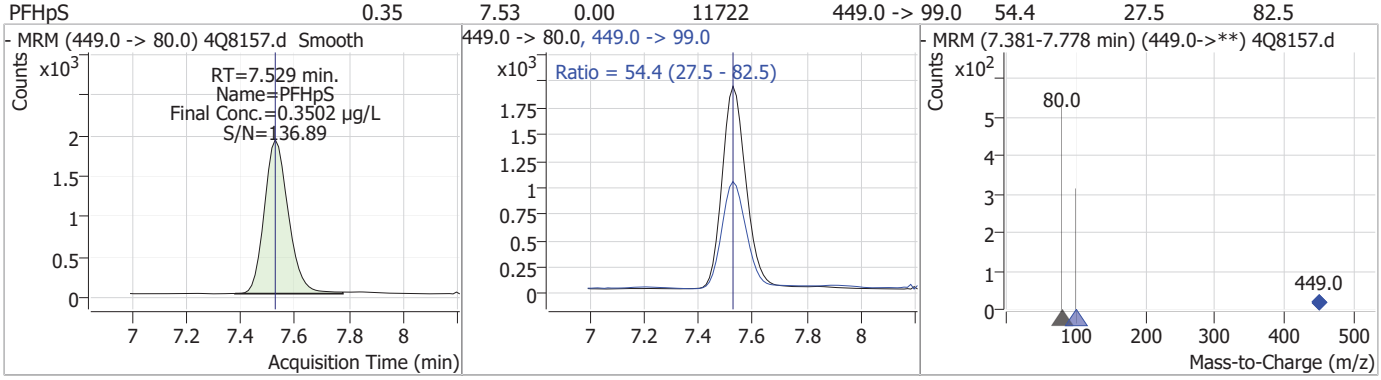


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.39	7.40	-0.01	43610 (m)	463.0 -> 219.0	36.2	18.7	56.1

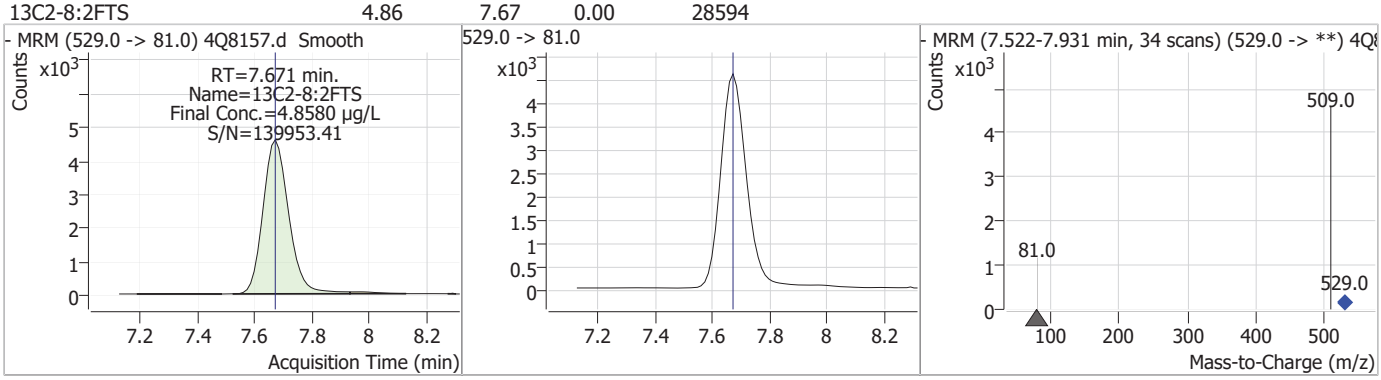


Perfluorinated Compounds by LC/MS/MS

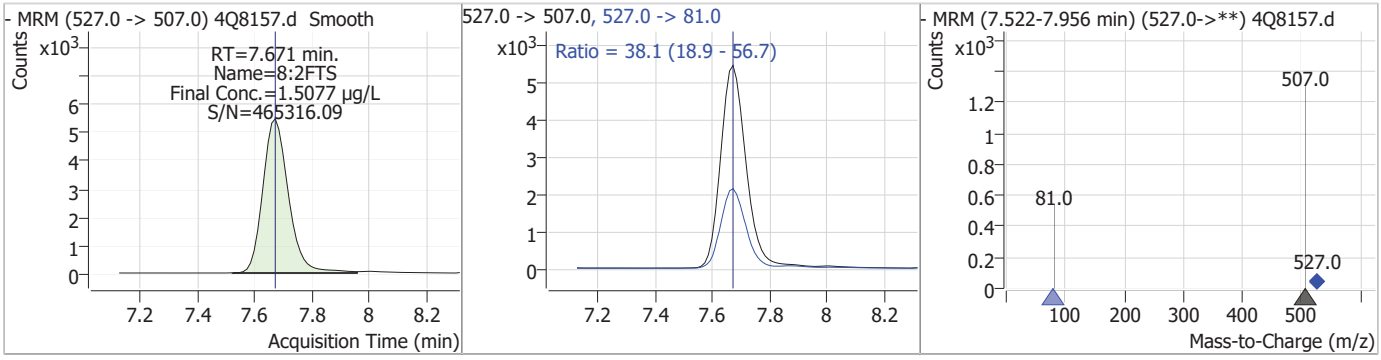
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.35	7.53	0.00	11722	449.0 -> 99.0	54.4	27.5	82.5



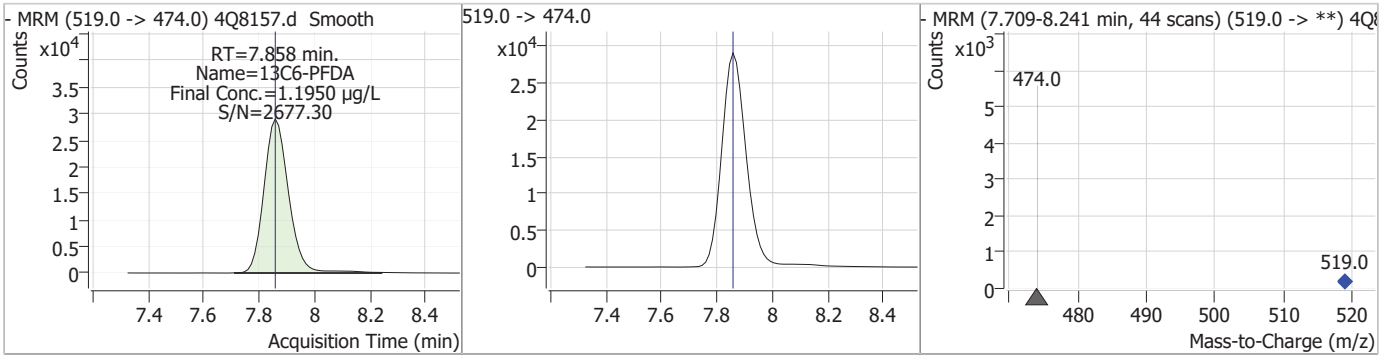
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.86	7.67	0.00	28594				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	1.51	7.67	0.00	33740	527.0 -> 81.0	38.1	18.9	56.7

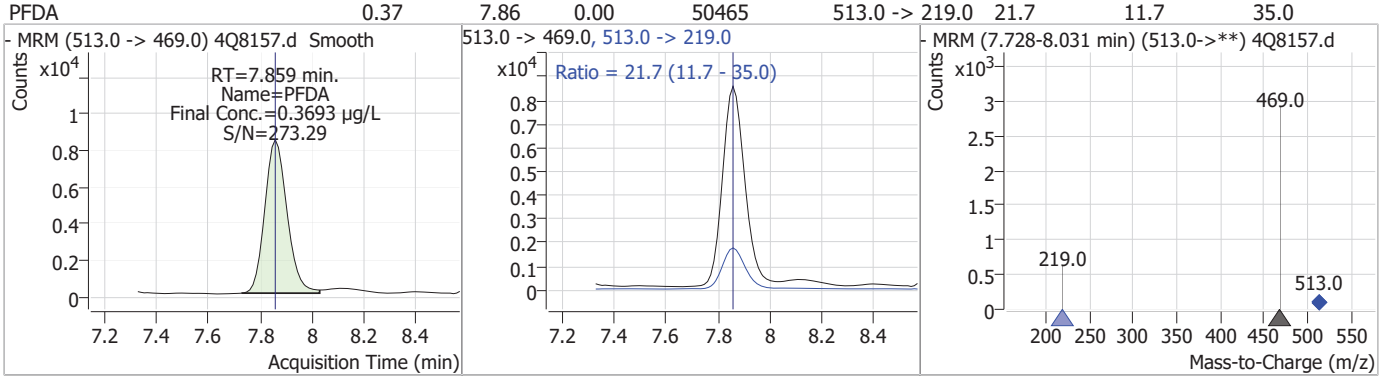


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.19	7.86	0.00	179811				

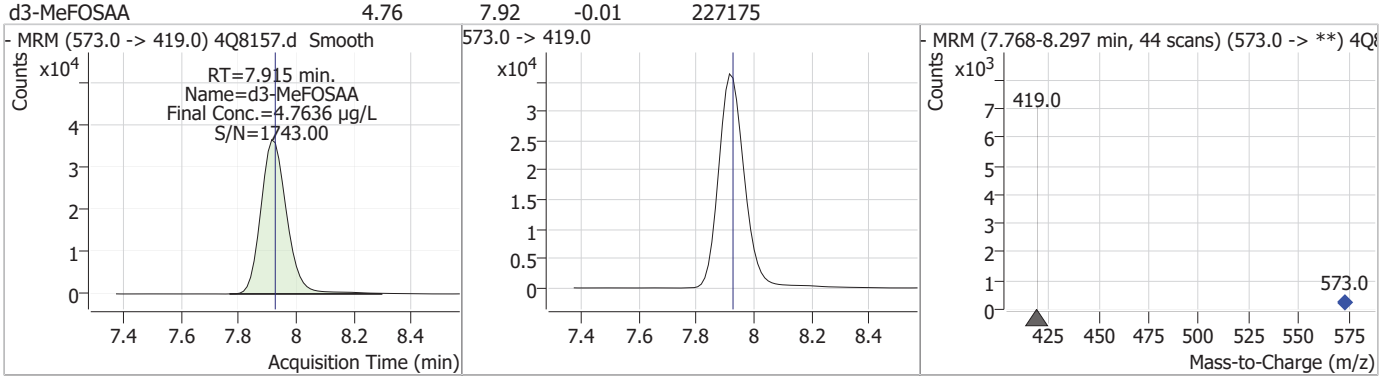


Perfluorinated Compounds by LC/MS/MS

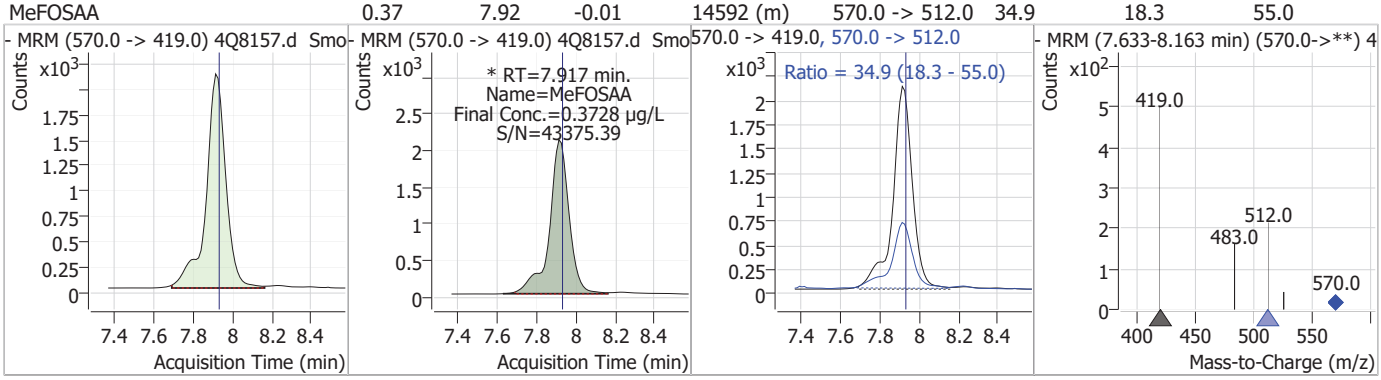
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.37	7.86	0.00	50465	513.0 -> 219.0	21.7	11.7	35.0



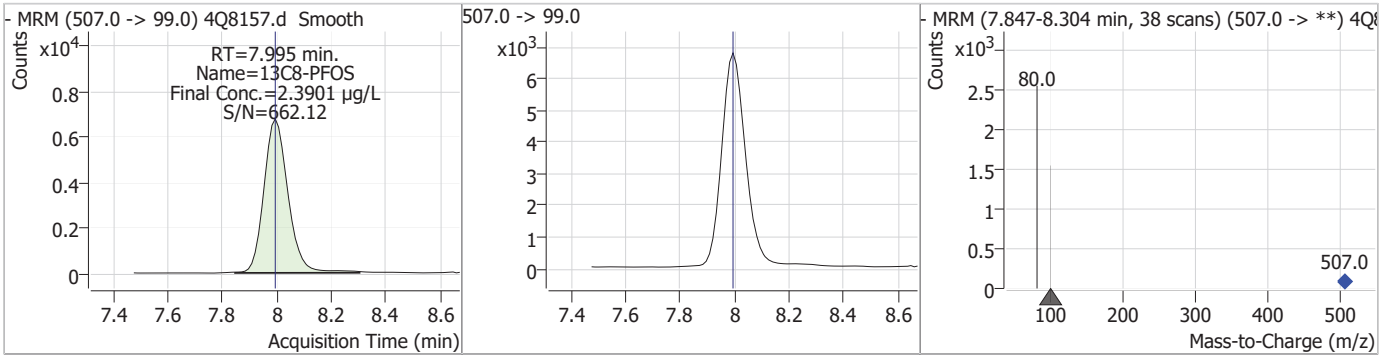
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.76	7.92	-0.01	227175				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.37	7.92	-0.01	14592 (m)	570.0 -> 512.0	34.9	18.3	55.0

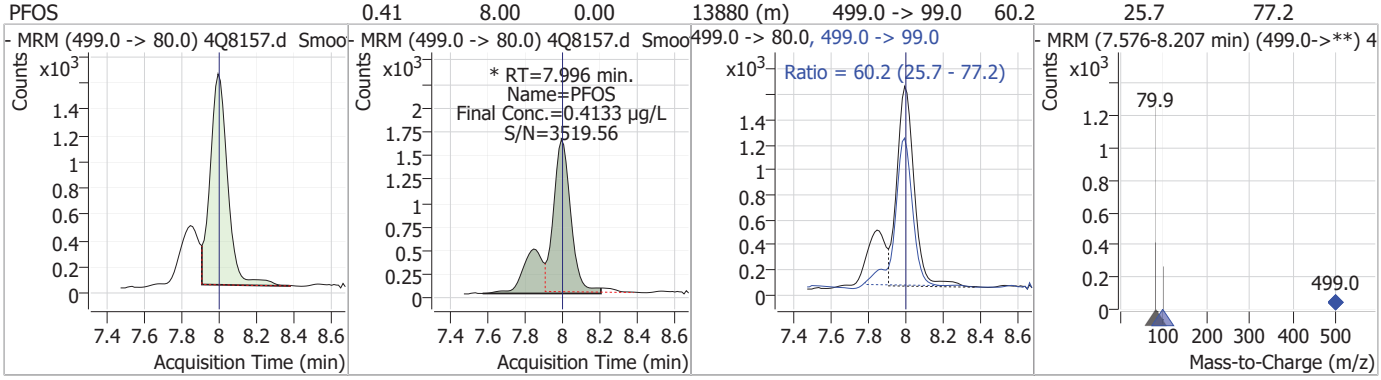


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.39	7.99	0.00	41674				

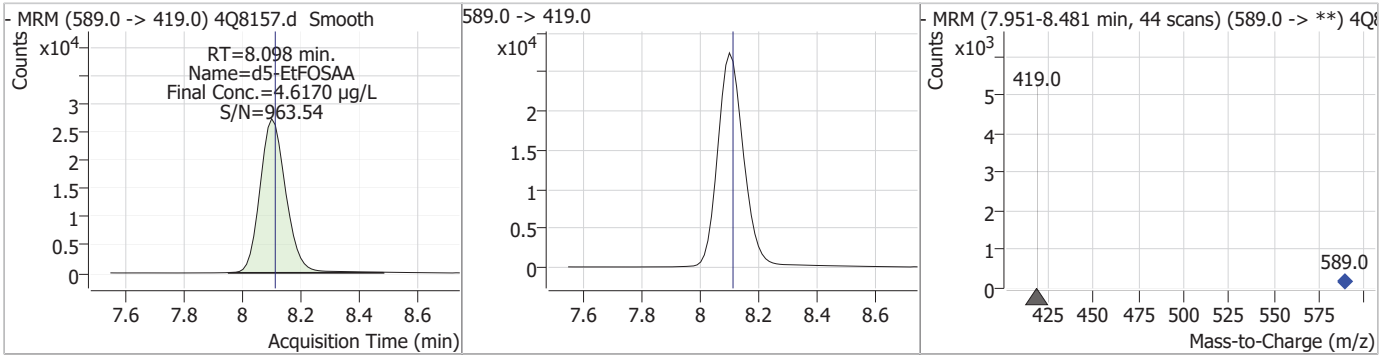


Perfluorinated Compounds by LC/MS/MS

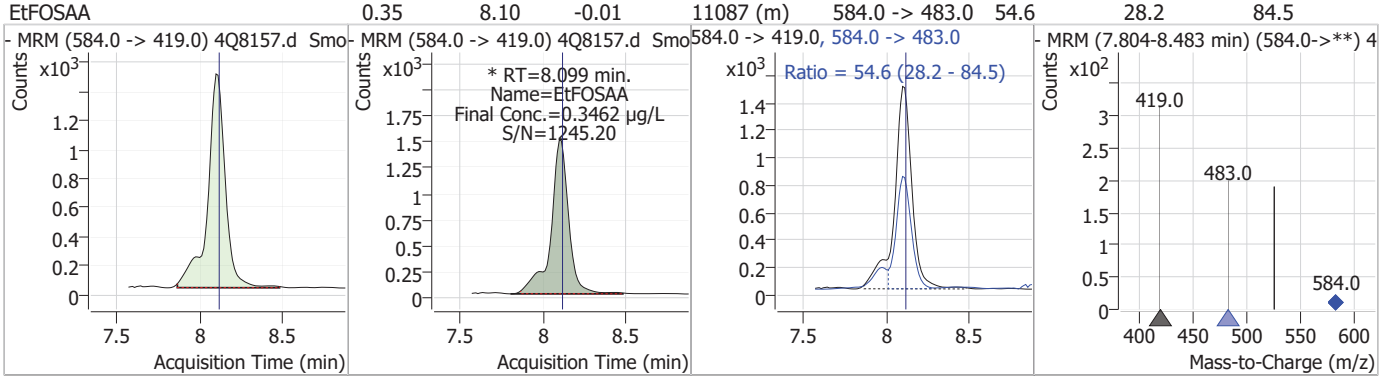
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.41	8.00	0.00	13880 (m)	499.0 -> 99.0	60.2	25.7	77.2



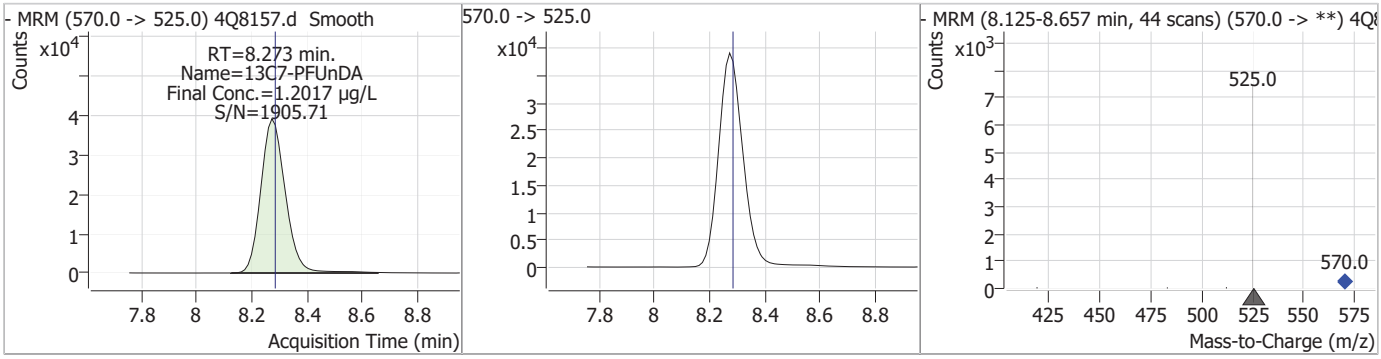
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.62	8.10	-0.01	169048				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.35	8.10	-0.01	11087 (m)	584.0 -> 483.0	54.6	28.2	84.5

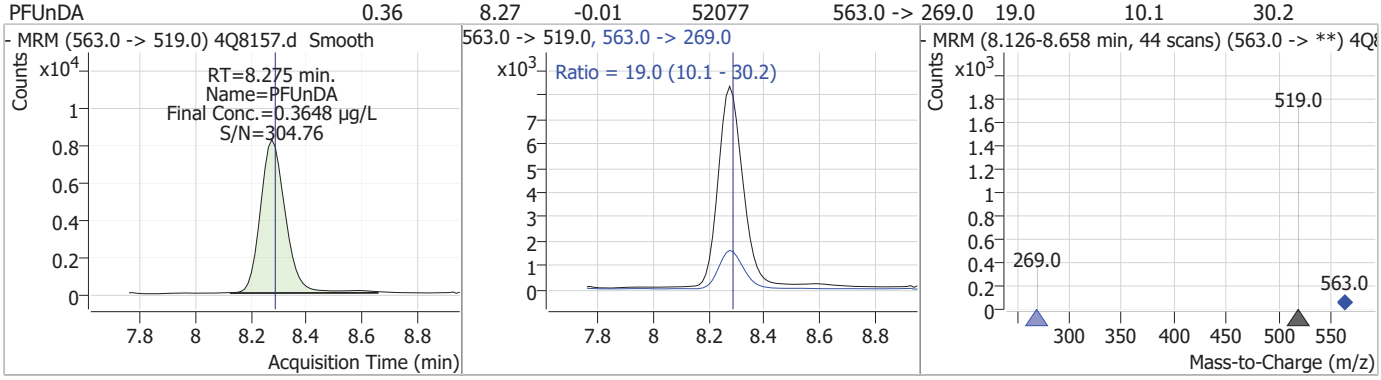


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.20	8.27	-0.01	241515				

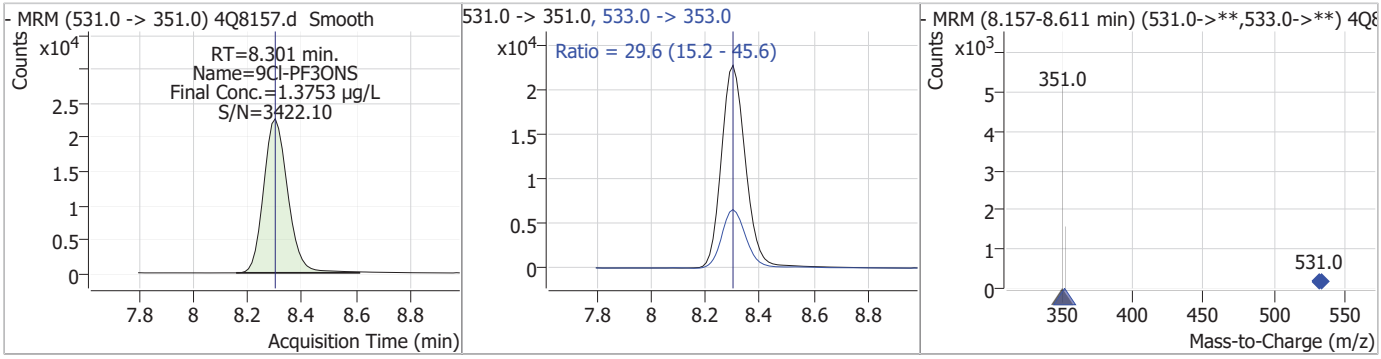


Perfluorinated Compounds by LC/MS/MS

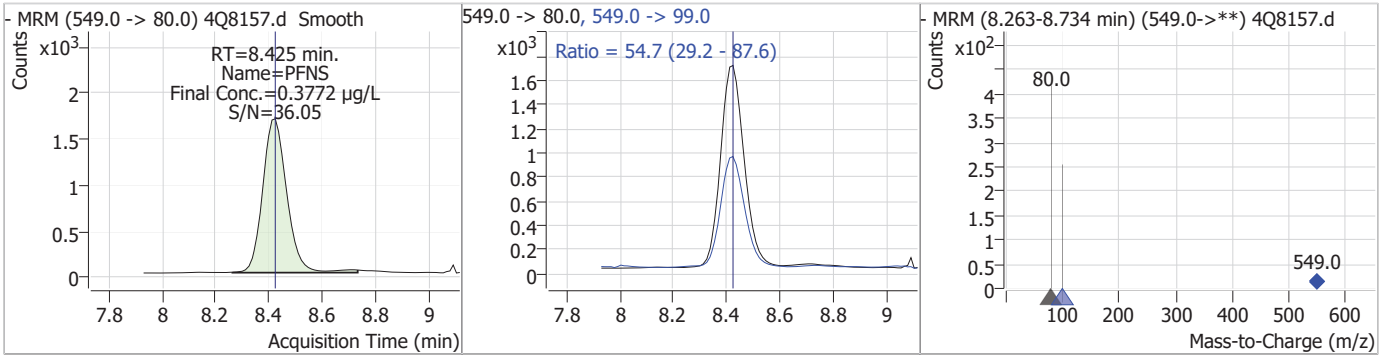
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.36	8.27	-0.01	52077	563.0 -> 269.0	19.0	10.1	30.2



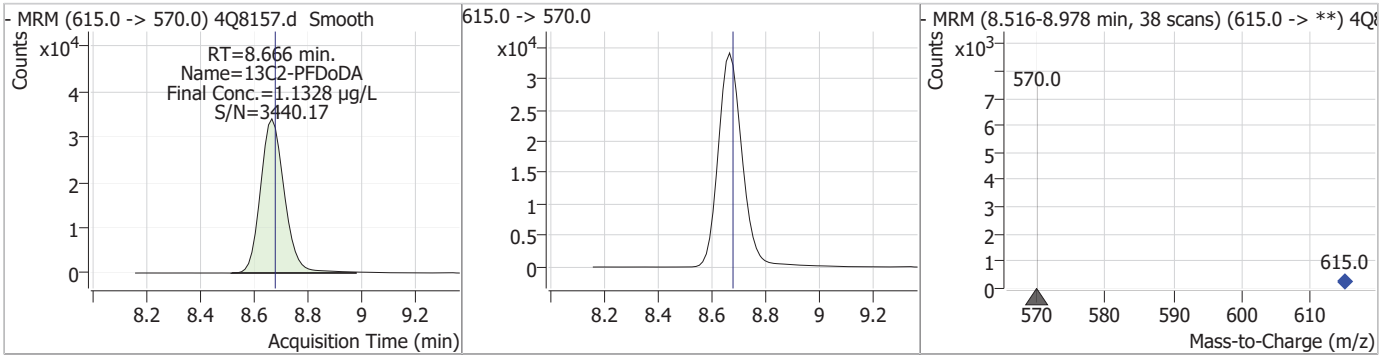
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	1.38	8.30	0.00	140670	533.0 -> 353.0	29.6	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.38	8.42	0.00	10571	549.0 -> 99.0	54.7	29.2	87.6

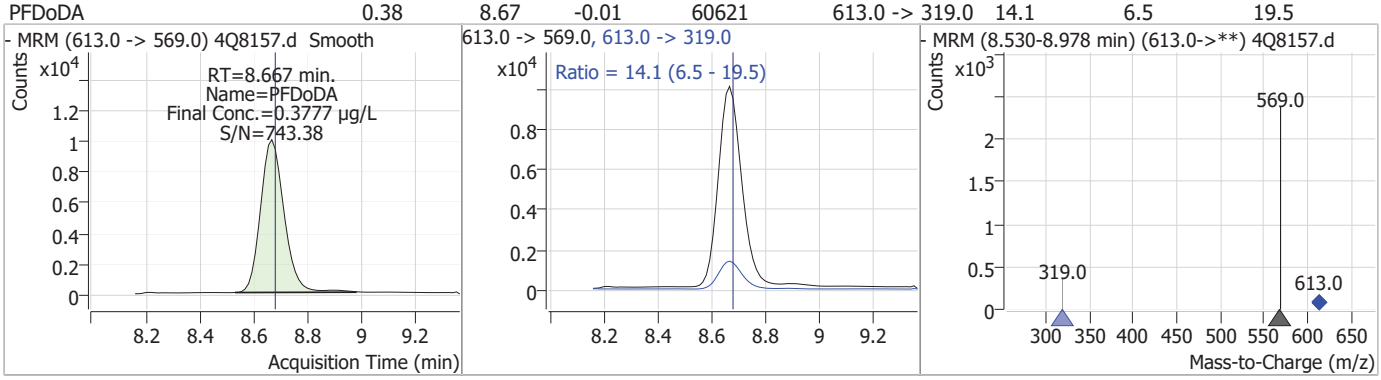


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.13	8.67	-0.01	208531				

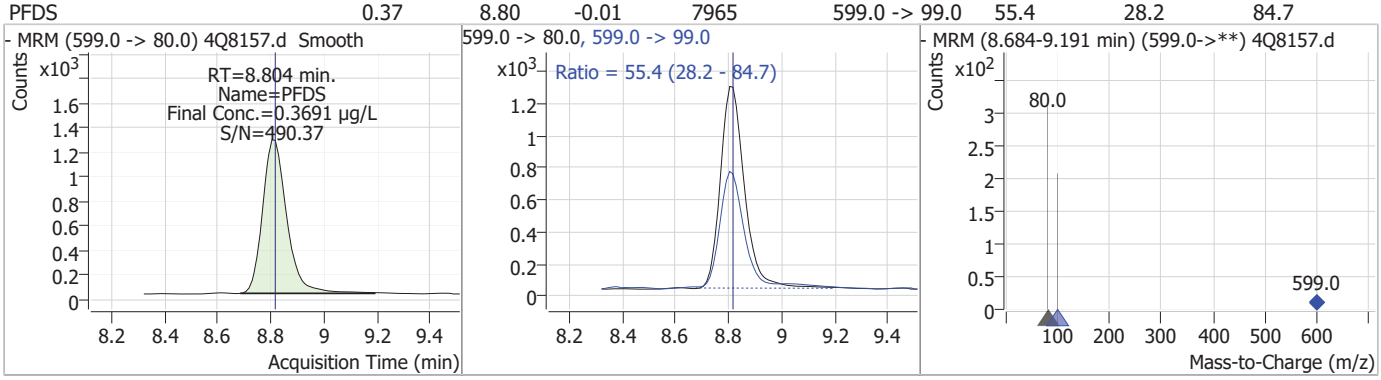


Perfluorinated Compounds by LC/MS/MS

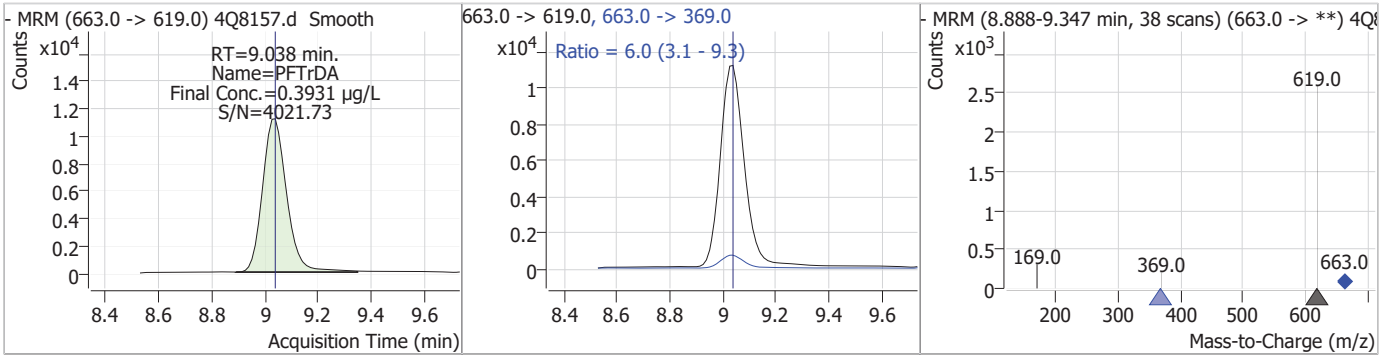
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.38	8.67	-0.01	60621	613.0 -> 319.0	14.1	6.5	19.5



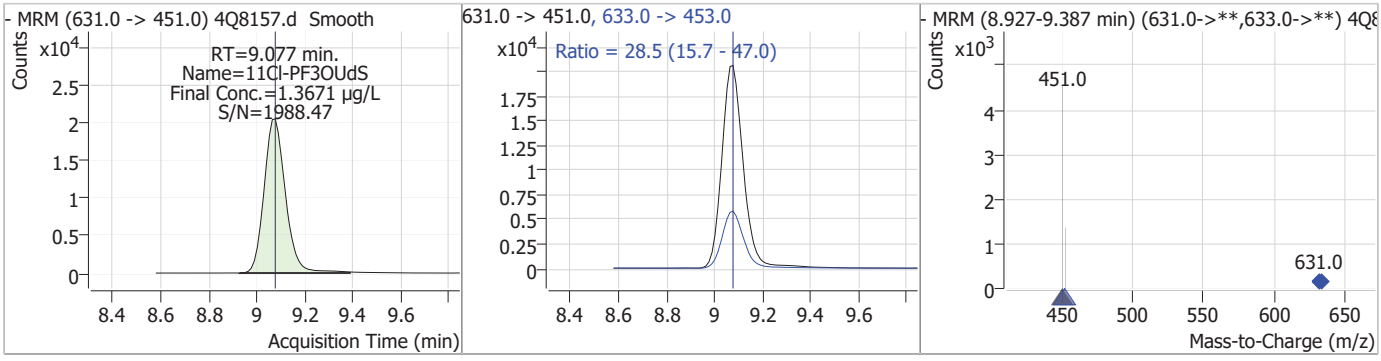
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.37	8.80	-0.01	7965	599.0 -> 99.0	55.4	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.39	9.04	0.00	70371	663.0 -> 369.0	6.0	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	1.37	9.08	0.00	127123	633.0 -> 453.0	28.5	15.7	47.0

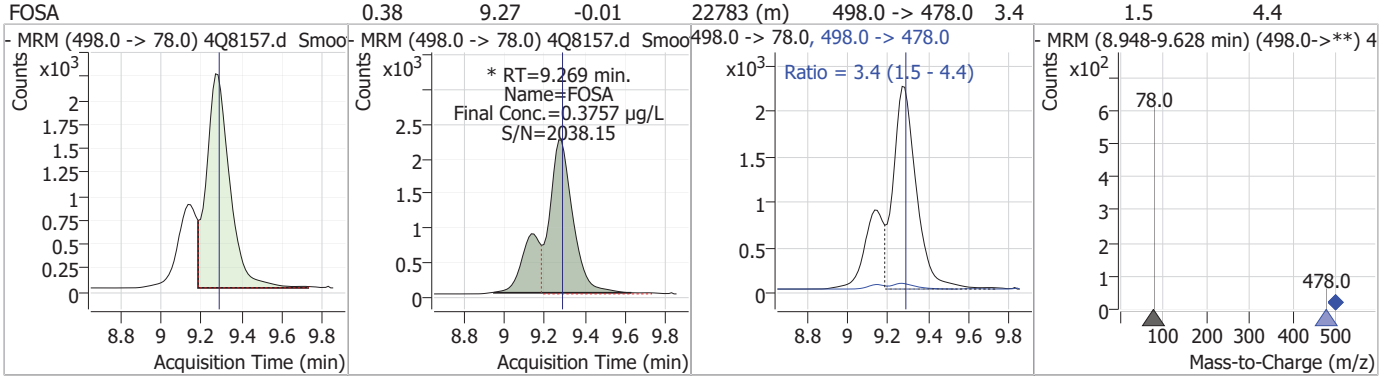


7.3.3

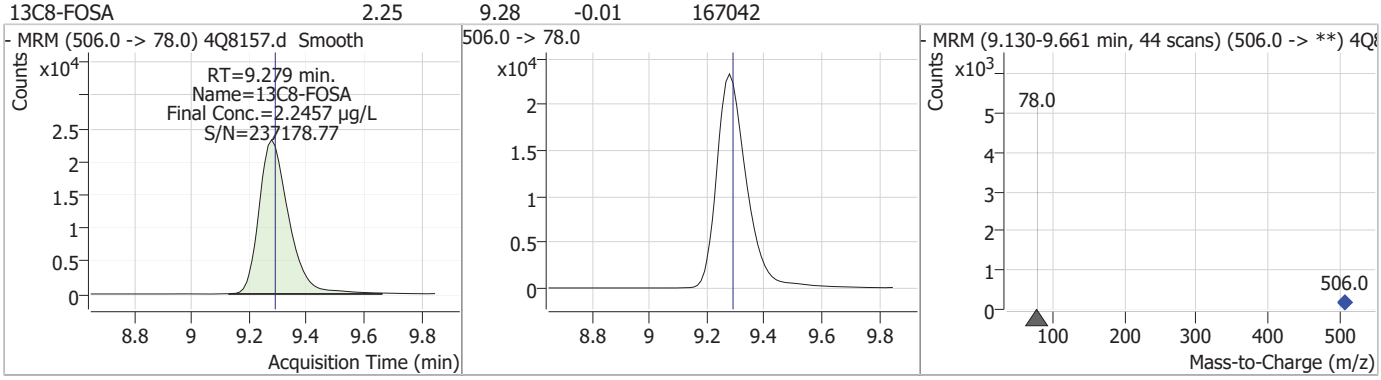
7

Perfluorinated Compounds by LC/MS/MS

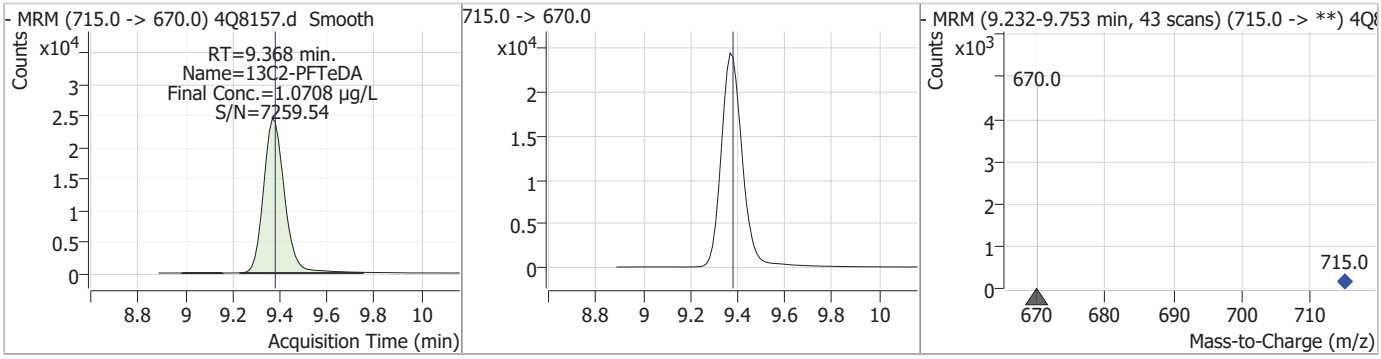
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.38	9.27	-0.01	22783 (m)	498.0 -> 478.0	3.4	1.5	4.4



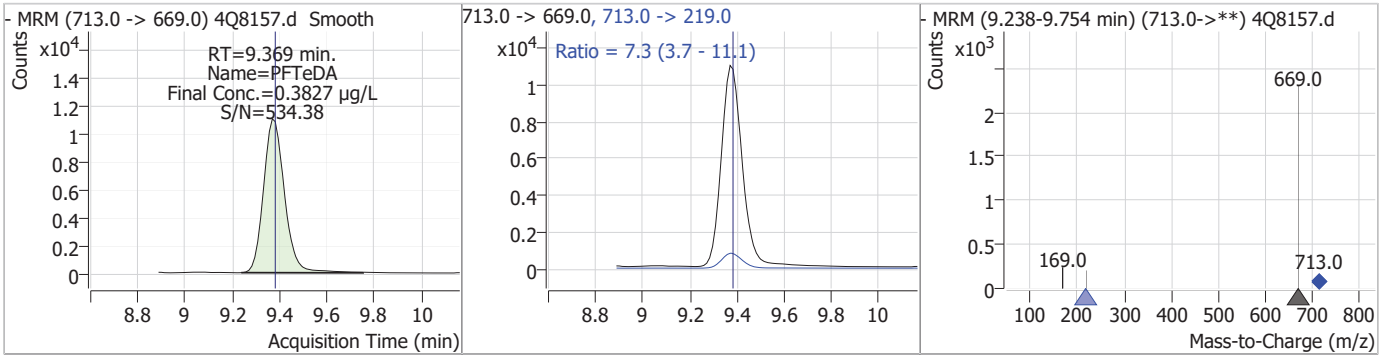
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.25	9.28	-0.01	167042				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.07	9.37	-0.01	151538				

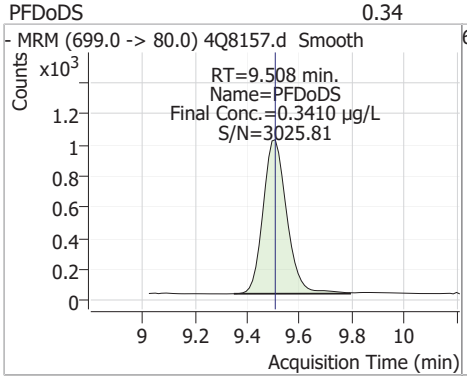


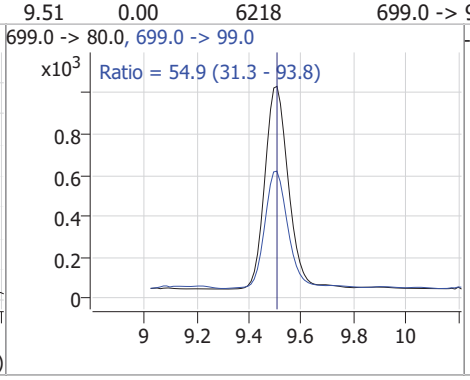
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.38	9.37	-0.01	67516	713.0 -> 219.0	7.3	3.7	11.1

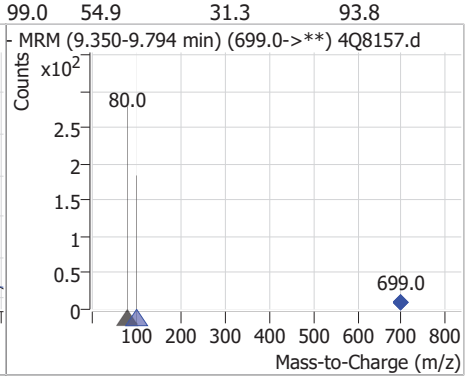


Perfluorinated Compounds by LC/MS/MS

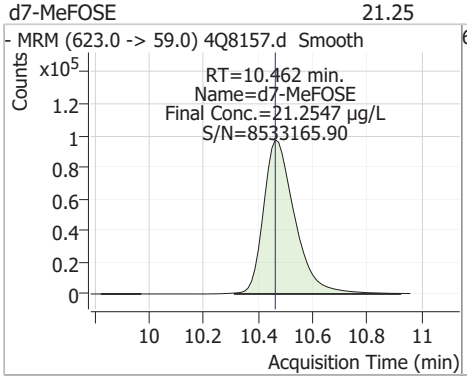
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.34	9.51	0.00	6218	699.0 -> 99.0	54.9	31.3	93.8

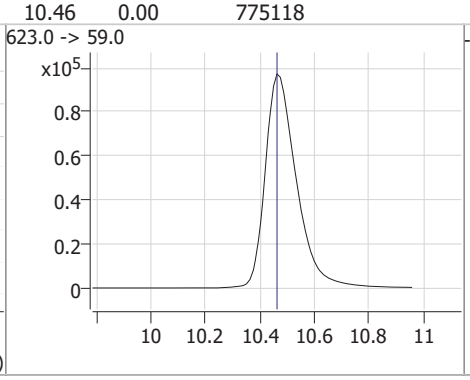


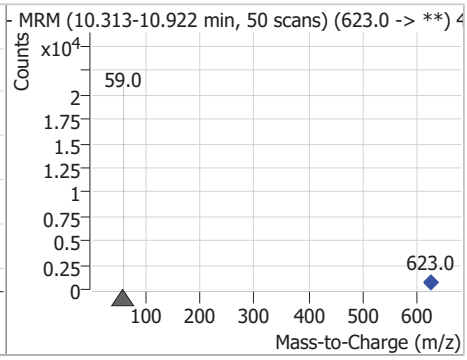




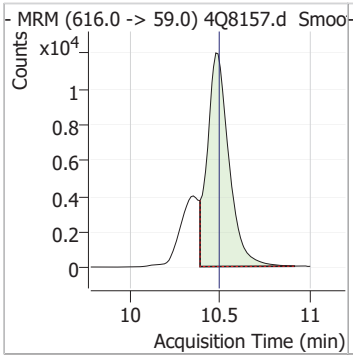
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	21.25	10.46	0.00	775118				

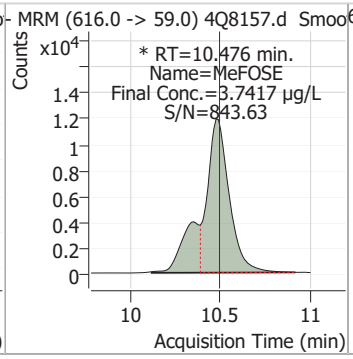


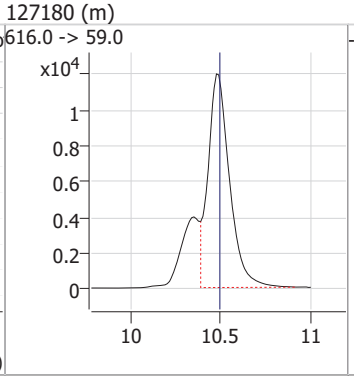


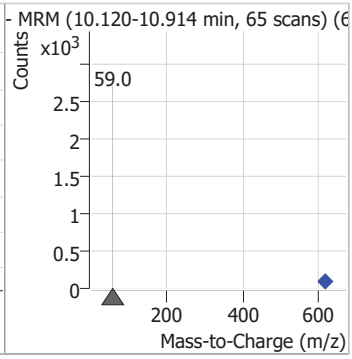


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	3.74	10.48	-0.01	127180 (m)				

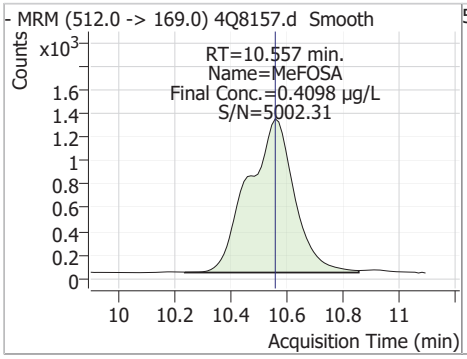


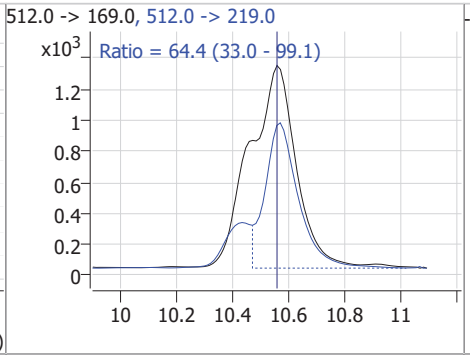


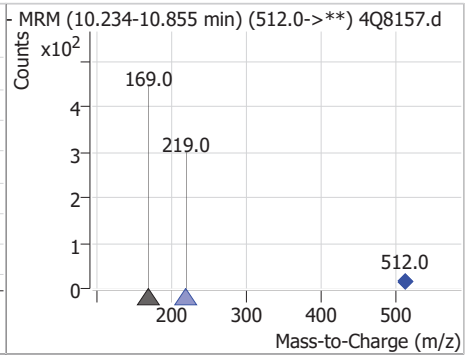




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.41	10.56	0.00	15046	512.0 -> 219.0	64.4	33.0	99.1

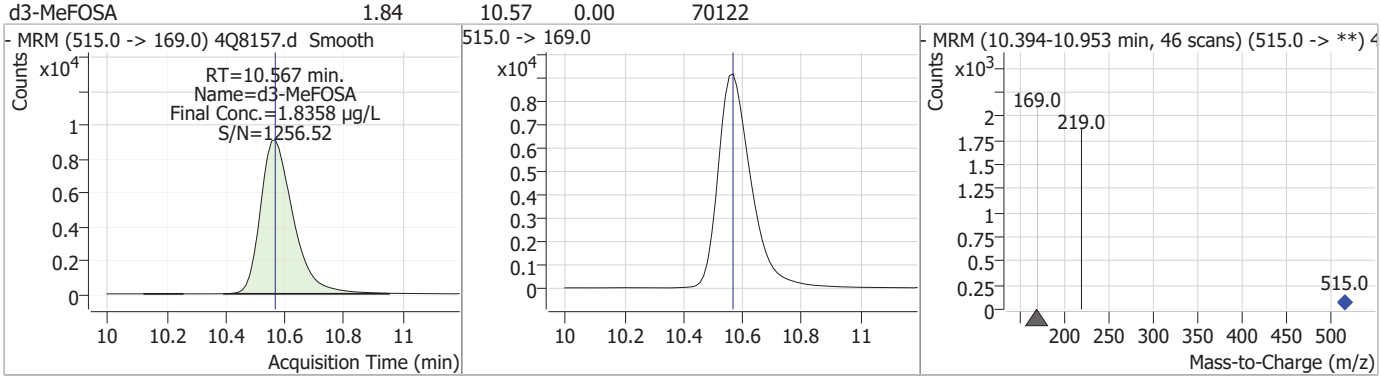




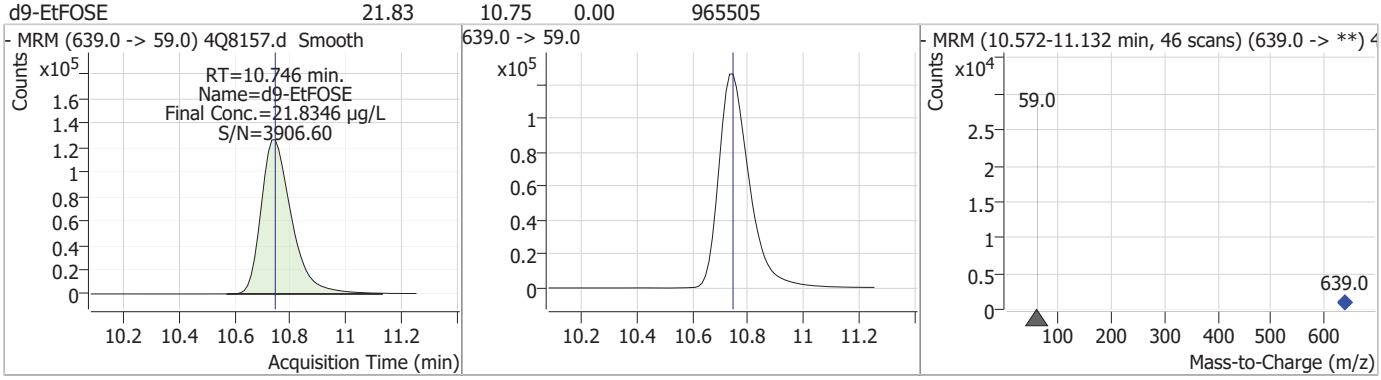


Perfluorinated Compounds by LC/MS/MS

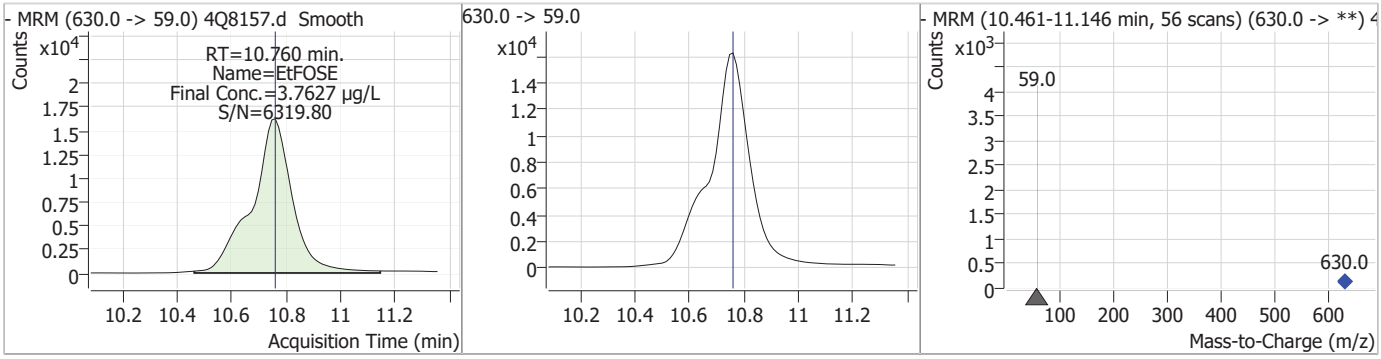
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.84	10.57	0.00	70122				



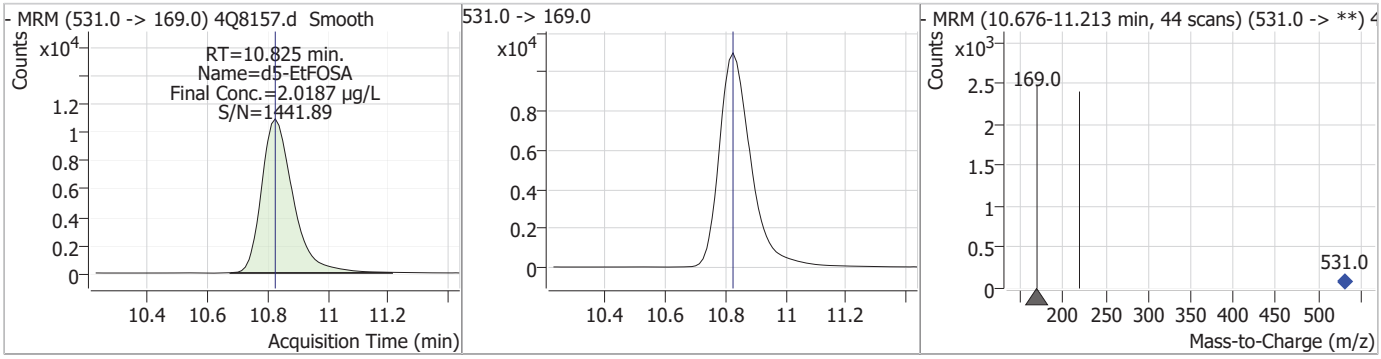
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	21.83	10.75	0.00	965505				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	3.76	10.76	0.00	168985				

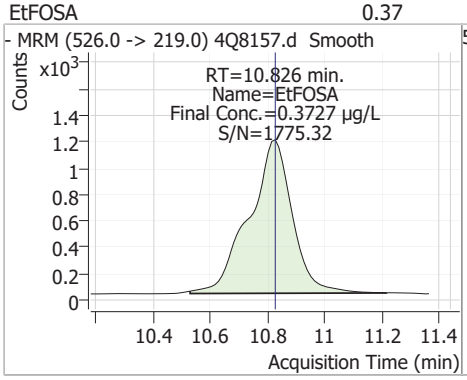


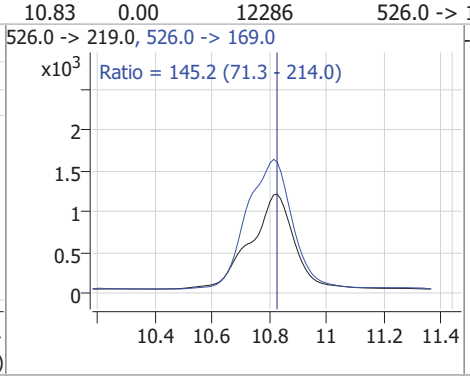
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.02	10.82	0.00	79460				

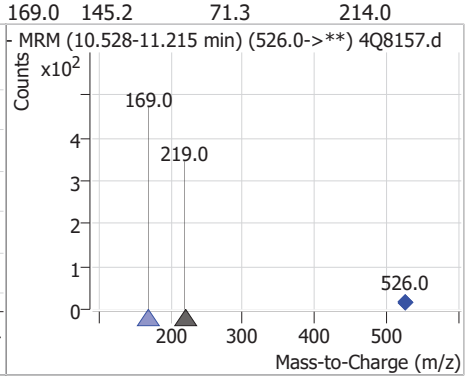


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.37	10.83	0.00	12286	526.0 -> 169.0	145.2	71.3	214.0







7.3.3

7

Manual Integration Approval Summary

Sample Number: OP63161-LLBS
Lab FileID: 4Q8157.D
Injection Time: 04/30/25 21:03
Method: EPA 1633
Analyst approved: 05/01/25 04:03 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.92	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.10	Poor instrument integration
PFOSA	754-91-6		9.27	Split peak
MeFOSE	24448-09-7		10.48	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8158.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 9:16:43 PM
Sample Name : OP63161-BS
Vial : P1-D1
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	990210	10.00	µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	520873	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	347007	2.50	µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	360079	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	535270	2.50	µg/L	0.000
M9-PFNA	7.416	472.0 -> 427.0	216359	1.25	µg/L	0.000
M6-PFDA	7.858	519.0 -> 474.0	198765	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	264682	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	232298	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	169825	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	188375	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	30206	2.50	µg/L	0.000
		302.0 -> 80.0	75515			
M3-PFHxS	6.999	402.0 -> 99.0	42773	2.50	µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	43160	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	12996	5.00	µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	28329	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	32440	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	251311	5.00	µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	534440	10.00	µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	179796	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	846819	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	1038585	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	84792	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	84200	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	81189	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	460487	5.00	µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	53970	2.50	µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	588877	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	192674	1.25	µg/L	0.000
13C5-PFNA	7.416	468.0 -> 423.0	229784	1.25	µg/L	0.000
13C2-PFHxA	5.465	315.0 -> 270.0	346525	2.50	µg/L	0.012
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	12996	4.80	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.0%		
13C2-6:2FTS	6.684	429.0 -> 81.0	28329	4.82	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.5%		
13C2-8:2FTS	7.671	529.0 -> 81.0	32440	4.70	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.9%		
13C2-PFDoDA	8.666	615.0 -> 570.0	232298	1.12	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.2%		
13C2-PFTeDA	9.368	715.0 -> 670.0	169825	1.06	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 84.8%		
13C3-PFBS	5.368	302.0 -> 99.0	30206	2.27	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.7%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	42773	2.27	µg/L		0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.8%			
13C4-PFBA	2.871	217.0 -> 172.0	990210	9.38	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 93.8%			
13C4-PFHpA	6.291	367.0 -> 322.0	360079	2.31	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.4%			
13C5-PFHxA	5.464	318.0 -> 273.0	347007	2.37	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.6%			
13C5-PFPeA	4.319	268.0 -> 223.0	520873	4.68	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.6%			
13C6-PFDA	7.858	519.0 -> 474.0	198765	1.17	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.4%			
13C7-PFUnDA	8.273	570.0 -> 525.0	264682	1.16	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.1%			
13C8-FOSA	9.279	506.0 -> 78.0	188375	2.26	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.3%			
13C8-PFOA	6.897	421.0 -> 376.0	535270	2.27	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.0%			
13C8-PFOS	7.995	507.0 -> 99.0	43160	2.21	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 88.3%			
13C9-PFNA	7.416	472.0 -> 427.0	216359	1.14	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.8%			
d3-MeFOSAA	7.915	573.0 -> 419.0	251311	4.70	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.0%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	534440	9.28	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 92.8%			
d3-MeFOSA	10.555	515.0 -> 169.0	84200	1.97	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 78.6%			
d5-EtFOSAA	8.098	589.0 -> 419.0	179796	4.38	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 87.6%			
d7-MeFOSE	10.462	623.0 -> 59.0	846819	20.71	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 82.8%			
d9-EtFOSE	10.734	639.0 -> 59.0	1038585	20.95	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 83.8%			
d5-EtFOSA	10.825	531.0 -> 169.0	84792	1.92	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 76.8%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	229030	9.60	µg/L		98
		327.0 -> 81.0	110617				
6:2FTS	6.684	427.0 -> 407.0	283905	9.99	µg/L		99
		427.0 -> 81.0	132173				
8:2FTS	7.671	527.0 -> 507.0	264693	10.43	µg/L		99
		527.0 -> 81.0	101427				
EtFOSAA	8.099	584.0 -> 419.0	88010	2.58	µg/L	m	97
		584.0 -> 483.0	47457				
FOSA	9.269	498.0 -> 78.0	175290	2.56	µg/L	m	99
		498.0 -> 478.0	4910				
MeFOSAA	7.917	570.0 -> 419.0	108932	2.52	µg/L	m	96
		570.0 -> 512.0	37379				
PFBA	2.877	213.0 -> 169.0	307887	10.17	µg/L		100
PFBS	5.369	299.0 -> 80.0	77972	2.26	µg/L		98
		299.0 -> 99.0	32963				
PFDA	7.859	513.0 -> 469.0	385232	2.55	µg/L		100
		513.0 -> 219.0	90054				
PFDoDA	8.667	613.0 -> 569.0	471825	2.64	µg/L		99
		613.0 -> 319.0	63904				

Perfluorinated Compounds by LC/MS/MS

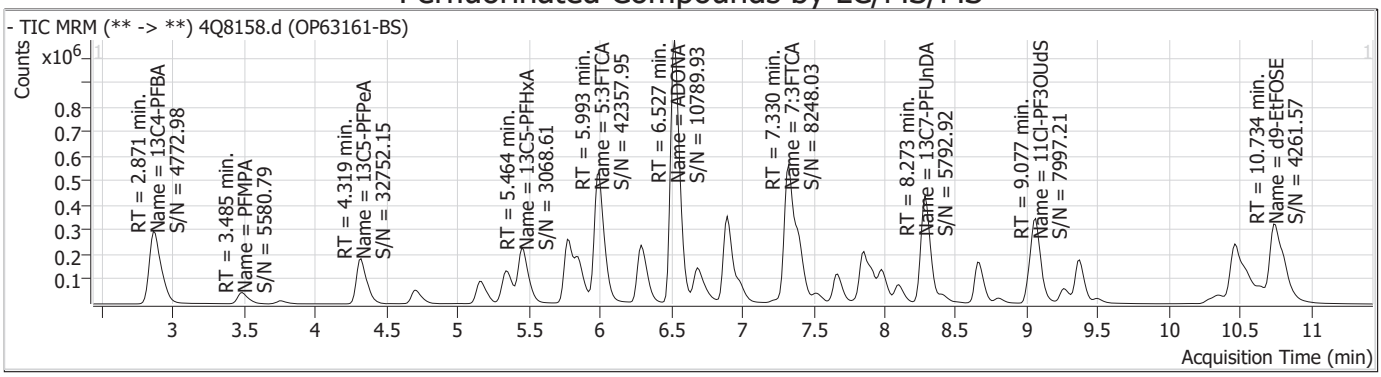
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.804	599.0 -> 80.0	57232	2.42	µg/L		99
		599.0 -> 99.0	31987				
PFHpA	6.292	363.0 -> 319.0	553715	2.53	µg/L		99
		363.0 -> 169.0	112877				
PFHpS	7.529	449.0 -> 80.0	89886	2.43	µg/L		98
		449.0 -> 99.0	50836				
PFHxA	5.467	313.0 -> 269.0	385235	2.58	µg/L		99
		313.0 -> 119.0	11903				
PFHxS	7.000	399.0 -> 80.0	86750	2.33	µg/L	m	99
		399.0 -> 99.0	47217				
PFNA	7.416	463.0 -> 419.0	335820	2.58	µg/L	m	95
		463.0 -> 219.0	116539				
PFNS	8.425	549.0 -> 80.0	74961	2.58	µg/L		96
		549.0 -> 99.0	45735				
PFOA	6.898	413.0 -> 369.0	459562	2.58	µg/L	m	99
		413.0 -> 169.0	131032				
PFOS	7.996	499.0 -> 80.0	91054	2.62	µg/L	m	98
		499.0 -> 99.0	47962				
PFPeA	4.321	263.0 -> 219.0	430580	5.23	µg/L		100
PFPeS	6.331	349.0 -> 80.0	90521	2.40	µg/L		97
		349.0 -> 99.0	44172				
PFTeDA	9.369	713.0 -> 669.0	516184	2.61	µg/L		99
		713.0 -> 219.0	36687				
PFTrDA	9.025	663.0 -> 619.0	511151	2.56	µg/L		100
		663.0 -> 369.0	32246				
PFUnDA	8.275	563.0 -> 519.0	405241	2.59	µg/L		98
		563.0 -> 269.0	77020				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	957427	9.42	µg/L		98
		633.0 -> 453.0	291100				
9Cl-PF3ONS	8.301	531.0 -> 351.0	1043448	9.33	µg/L		99
		533.0 -> 353.0	320532				
ADONA	6.527	377.0 -> 251.0	3748251	8.94	µg/L		100
		377.0 -> 85.0	1227653				
HFPO-DA	5.792	285.0 -> 169.0	589151	10.49	µg/L		99
		285.0 -> 185.0	63962				
3:3FTCA	3.756	241.0 -> 177.0	59671	12.12	µg/L		99
		241.0 -> 117.0	4706				
5:3FTCA	5.993	341.0 -> 237.0	1549818	58.05	µg/L		100
		341.0 -> 217.0	1082262				
7:3FTCA	7.330	441.0 -> 337.0	1948150	56.62	µg/L		100
		441.0 -> 317.0	876979				
EtFOSA	10.826	526.0 -> 219.0	88558	2.52	µg/L		98
		526.0 -> 169.0	128425				
EtFOSE	10.760	630.0 -> 59.0	1219636	25.25	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	110024	2.50	µg/L		100
		512.0 -> 219.0	72426				
MeFOSE	10.476	616.0 -> 59.0	952826	25.66	µg/L		100
PFDoDS	9.508	699.0 -> 80.0	46095	2.44	µg/L		100
		699.0 -> 99.0	28765				
NFDHA	5.345	295.0 -> 201.0	104407	5.31	µg/L		90
		201.0 -> 85.0	398948				
		295.0 -> 85.0	26745				
PFMBA	4.710	279.0 -> 85.0	287492	5.12	µg/L		100
PFMPA	3.485	229.0 -> 85.0	244358	5.17	µg/L		100
PFEESA	5.861	315.0 -> 135.0	621475	4.52	µg/L		99
		315.0 -> 69.0	49759				

Perfluorinated Compounds by LC/MS/MS

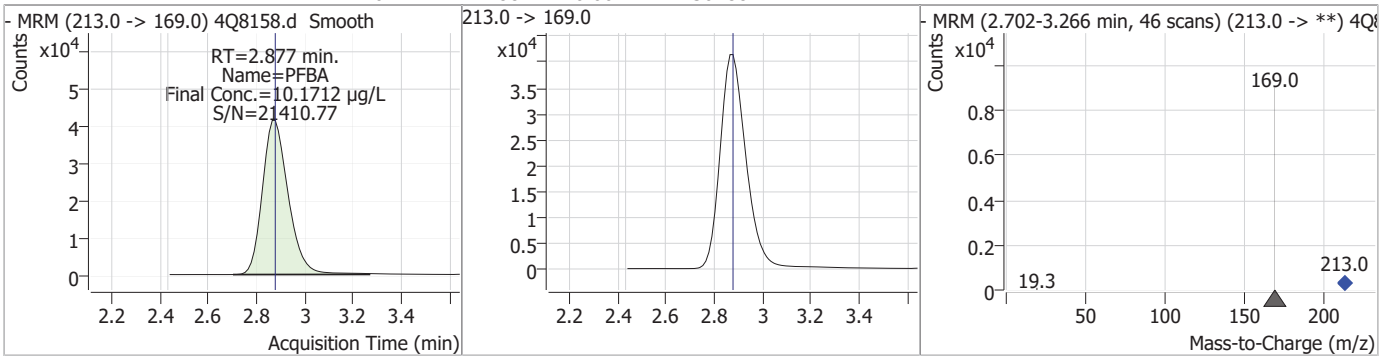
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

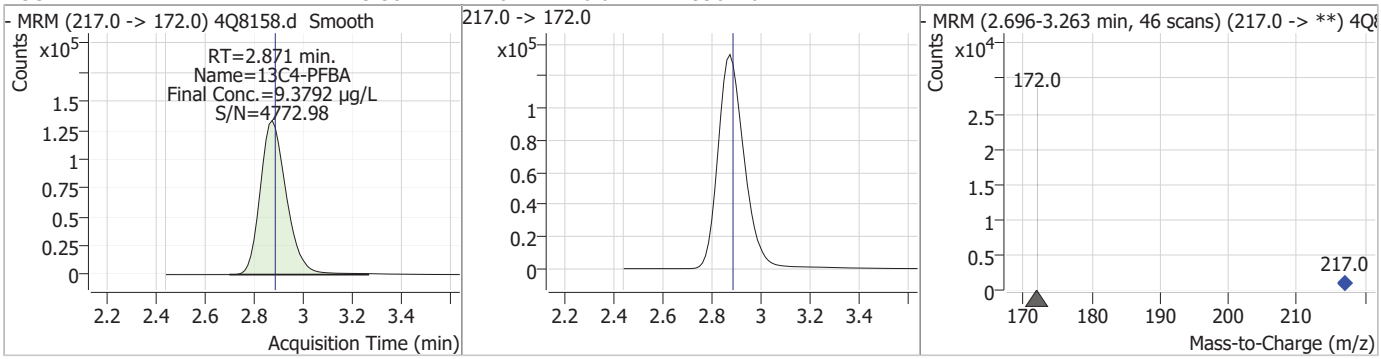
Perfluorinated Compounds by LC/MS/MS



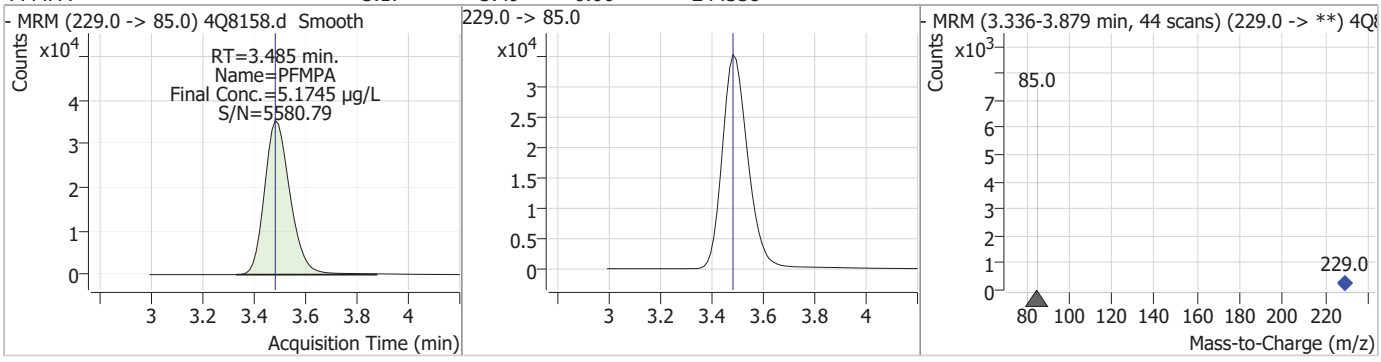
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.17	2.88	0.00	307887				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.38	2.87	-0.01	990210				

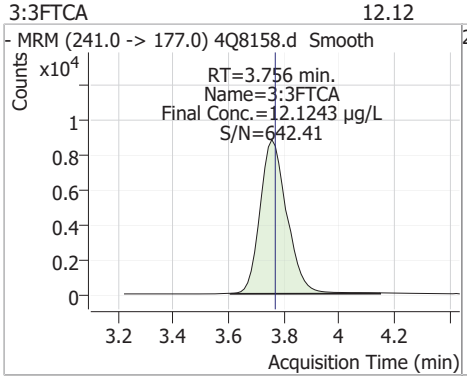


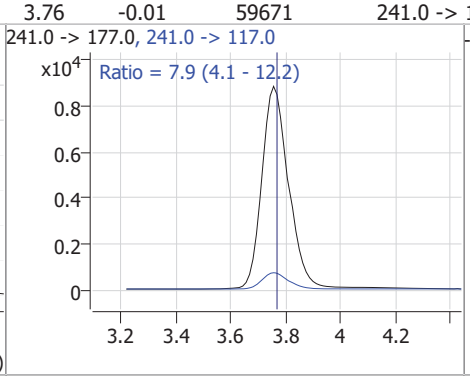
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.17	3.49	0.00	244358				

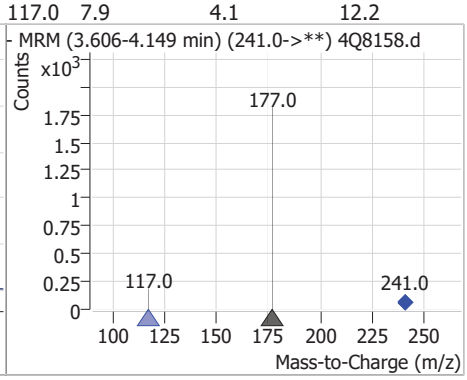


Perfluorinated Compounds by LC/MS/MS

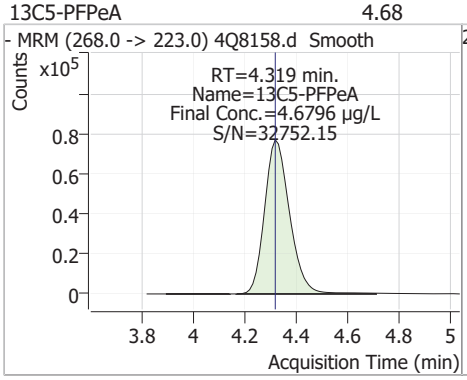
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.12	3.76	-0.01	59671	241.0 -> 117.0	7.9	4.1	12.2

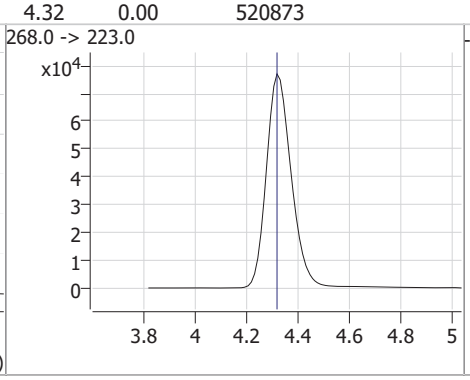


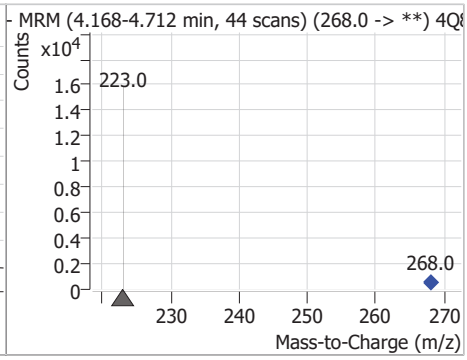




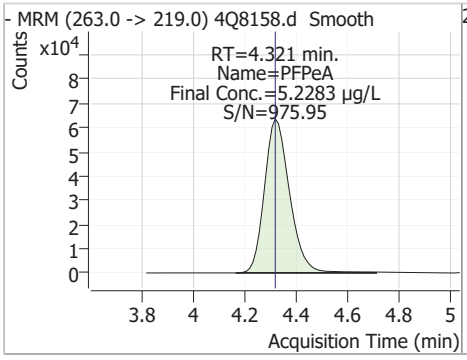
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.68	4.32	0.00	520873				

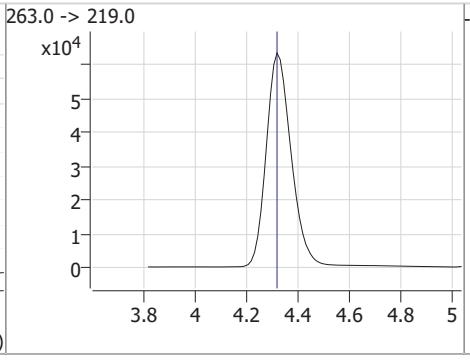


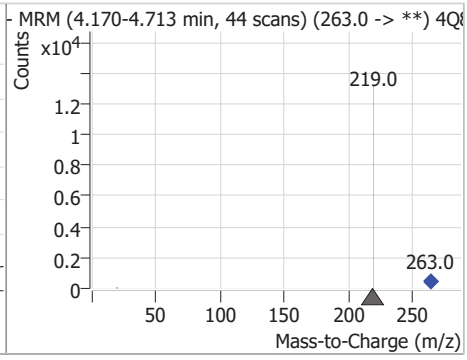




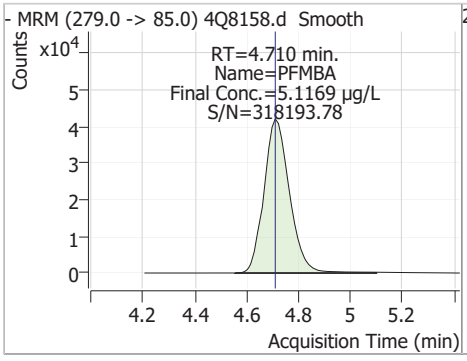
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.23	4.32	0.00	430580				

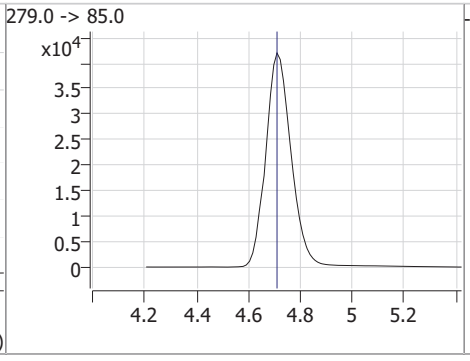


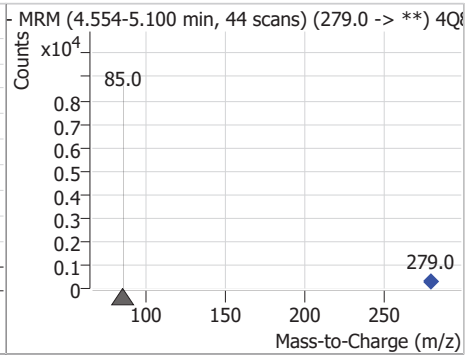




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.12	4.71	0.00	287492				

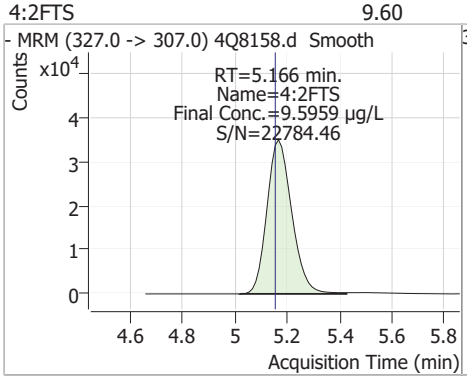


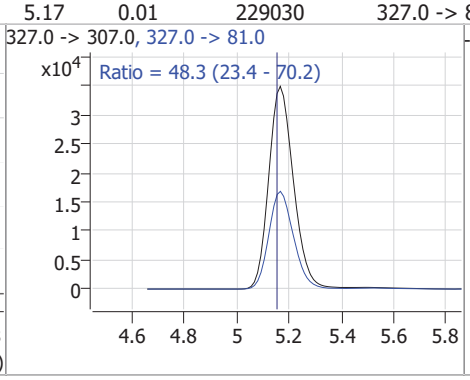


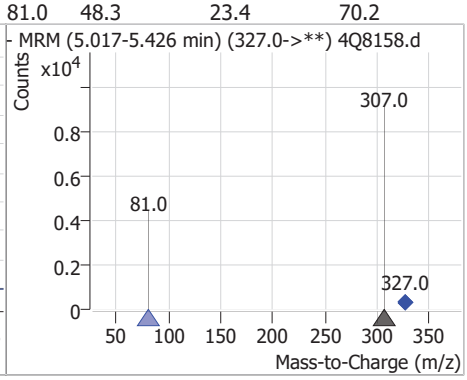


Perfluorinated Compounds by LC/MS/MS

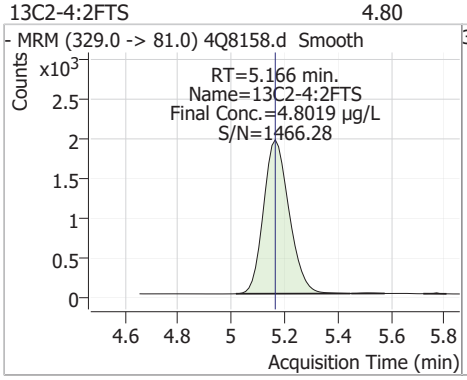
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.60	5.17	0.01	229030	327.0 -> 81.0	48.3	23.4	70.2

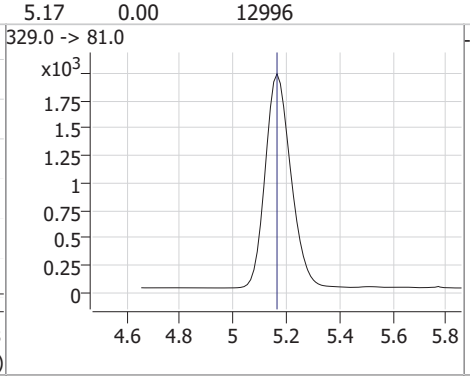


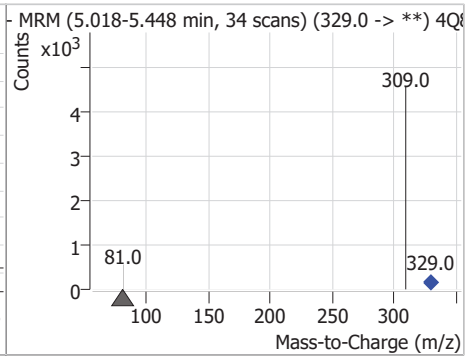




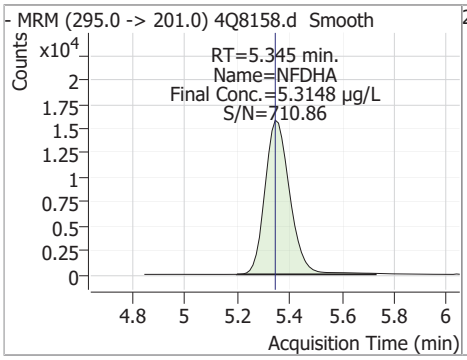
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.80	5.17	0.00	12996				

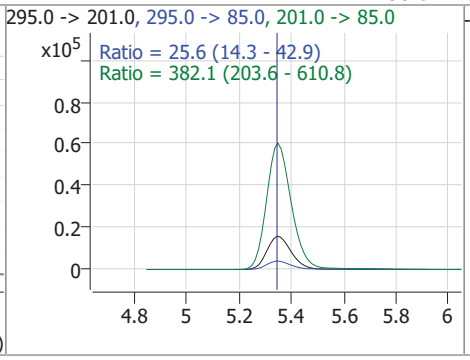


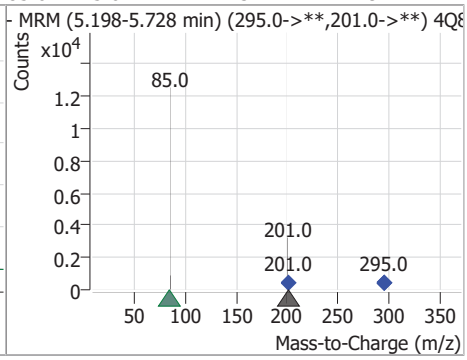




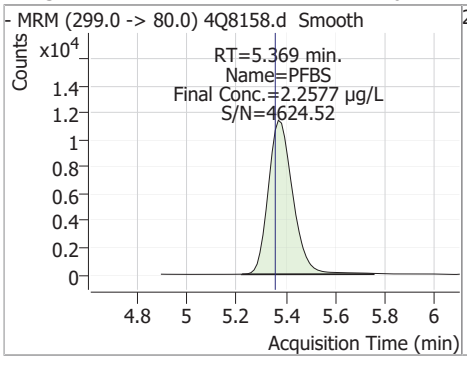
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.31	5.35	0.00	104407	201.0 -> 85.0	382.1	203.6	610.8
					295.0 -> 85.0	25.6	14.3	42.9

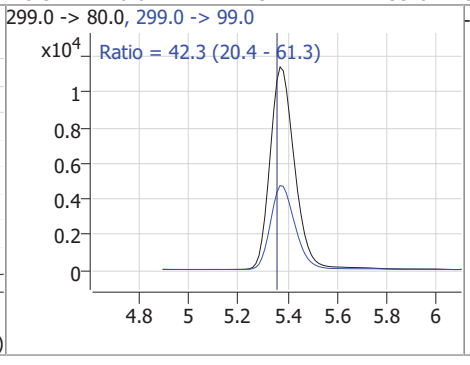


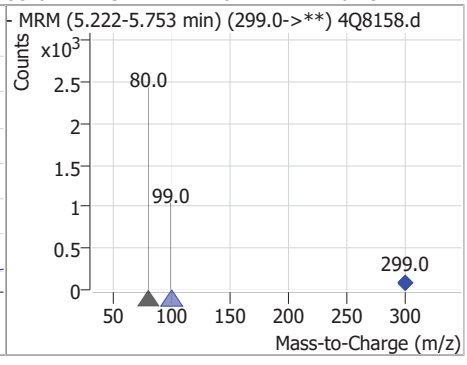




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.26	5.37	0.01	77972	299.0 -> 99.0	42.3	20.4	61.3

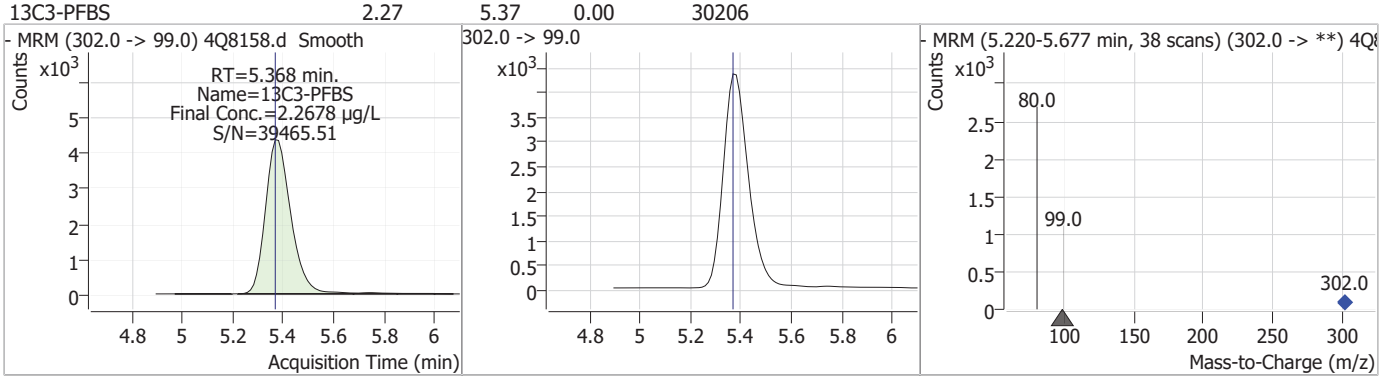




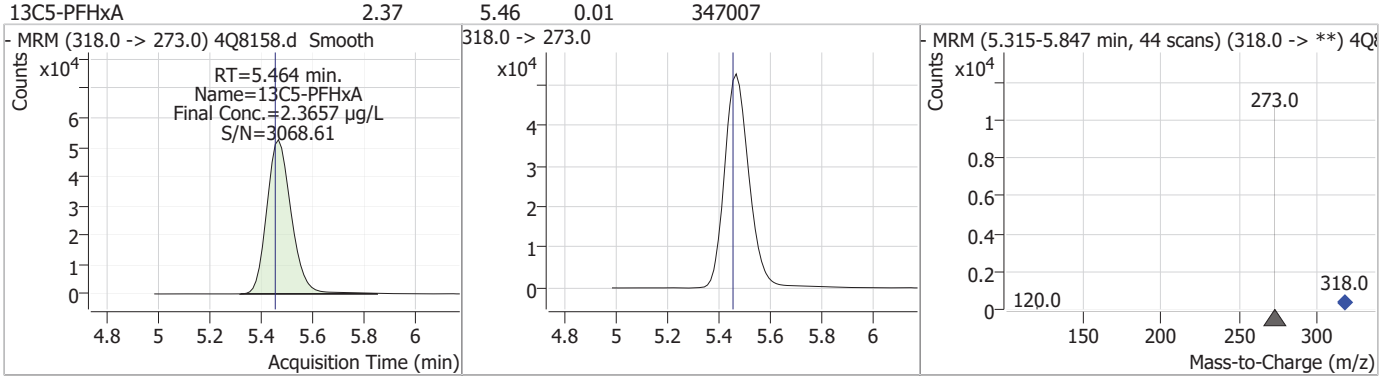


Perfluorinated Compounds by LC/MS/MS

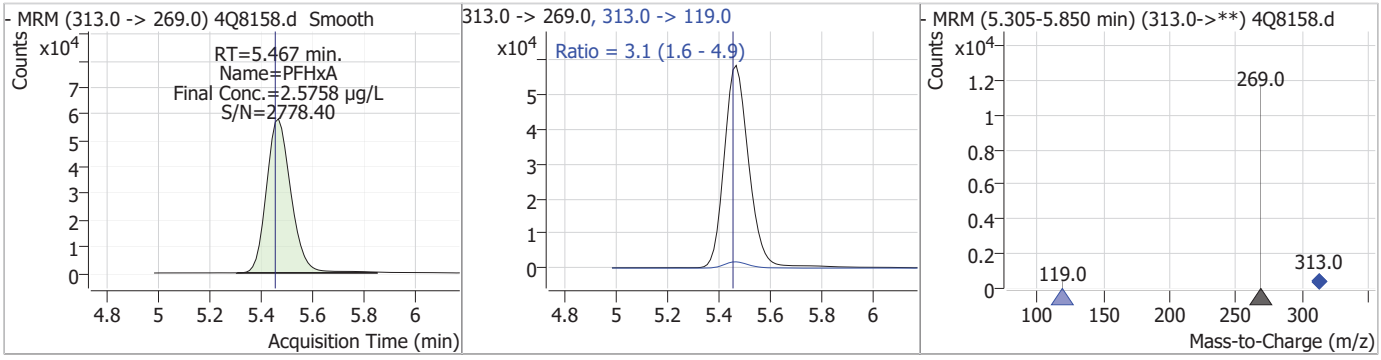
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.27	5.37	0.00	30206				



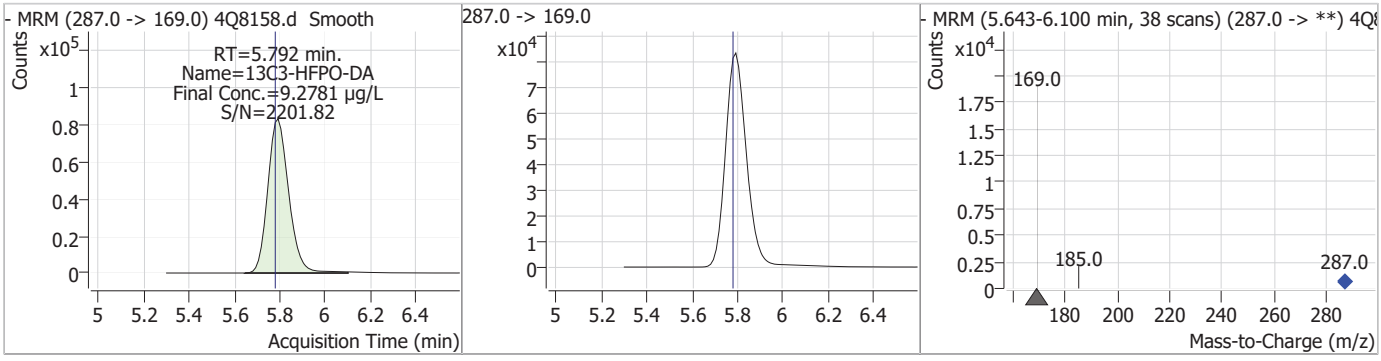
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.37	5.46	0.01	347007				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.58	5.47	0.01	385235	313.0 -> 119.0	3.1	1.6	4.9

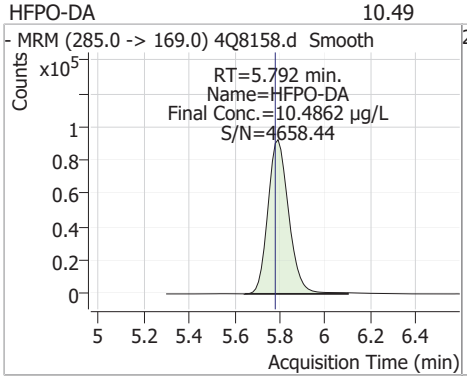


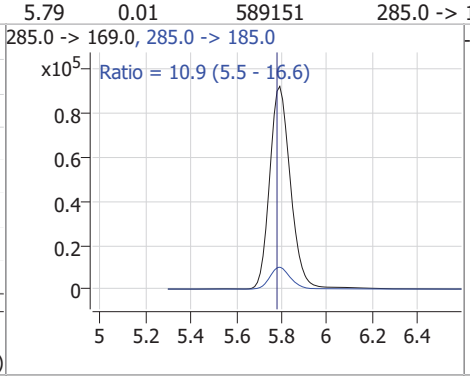
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.28	5.79	0.01	534440				

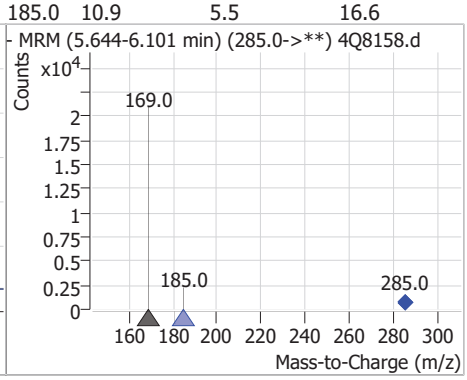


Perfluorinated Compounds by LC/MS/MS

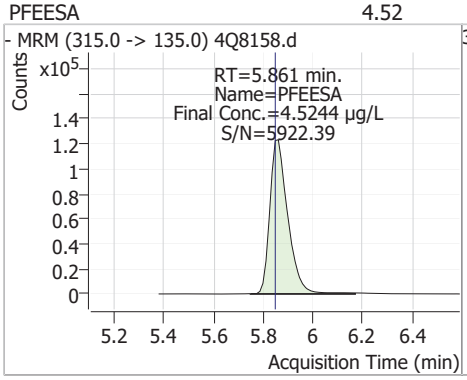
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.49	5.79	0.01	589151	285.0 -> 185.0	10.9	5.5	16.6

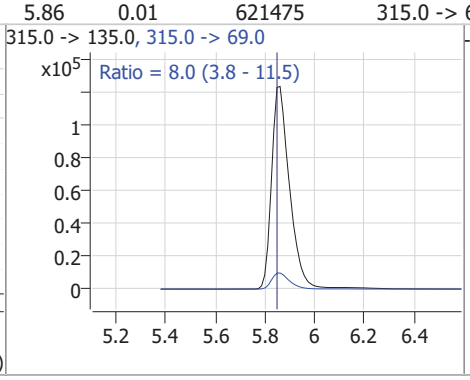


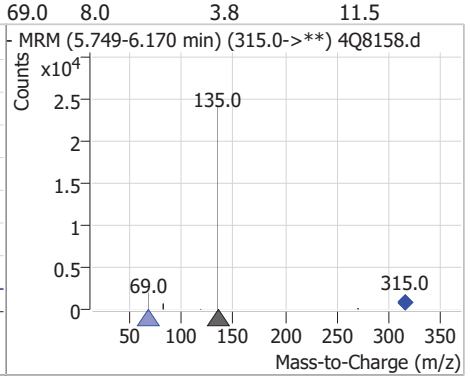




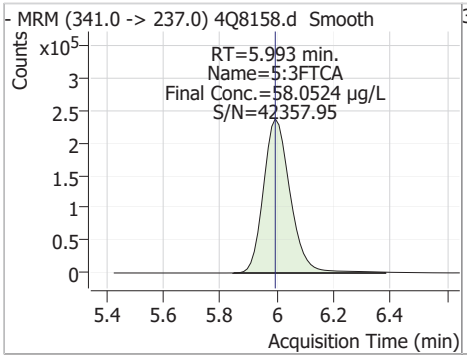
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.52	5.86	0.01	621475	315.0 -> 69.0	8.0	3.8	11.5

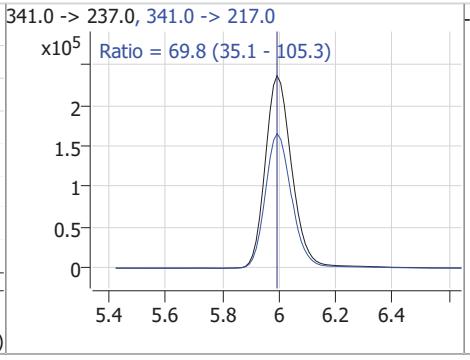


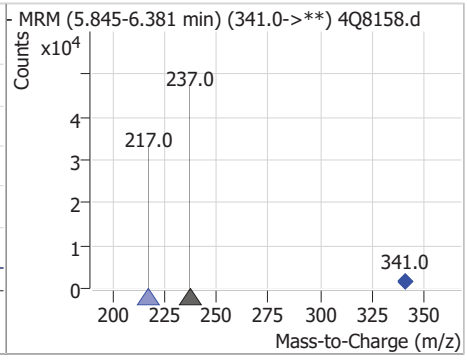




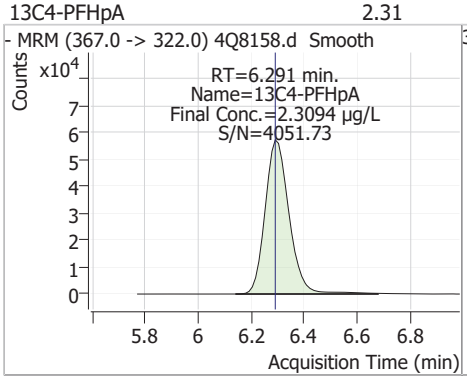
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	58.05	5.99	0.00	1549818	341.0 -> 217.0	69.8	35.1	105.3

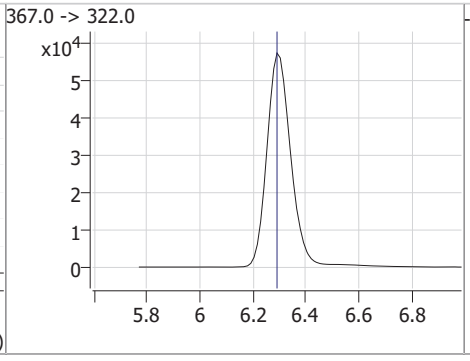


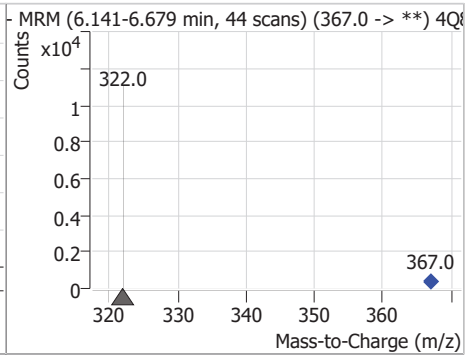




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.31	6.29	0.00	360079				

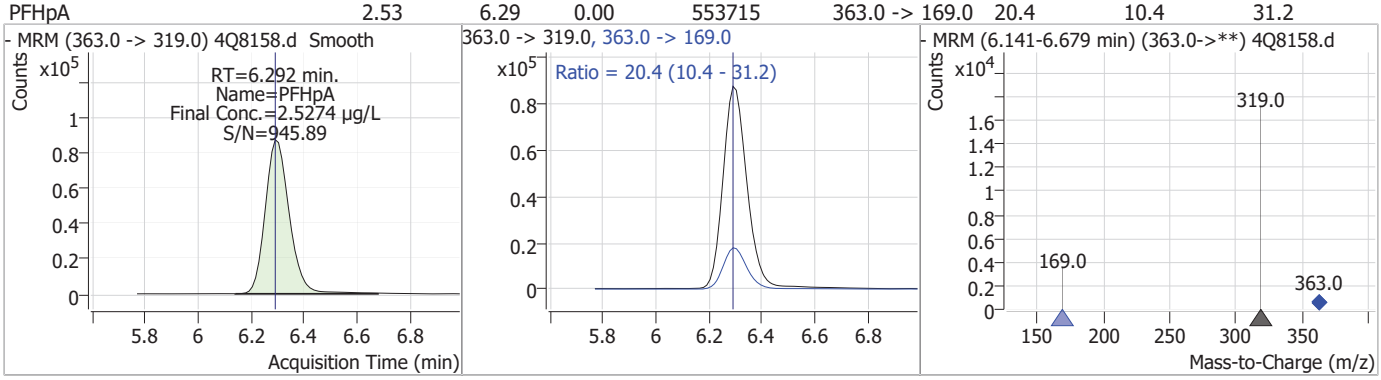




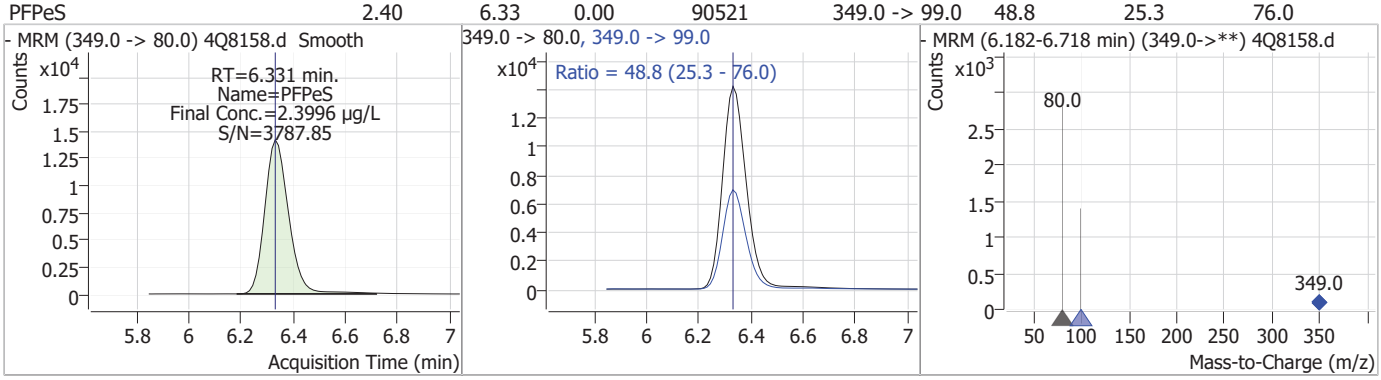


Perfluorinated Compounds by LC/MS/MS

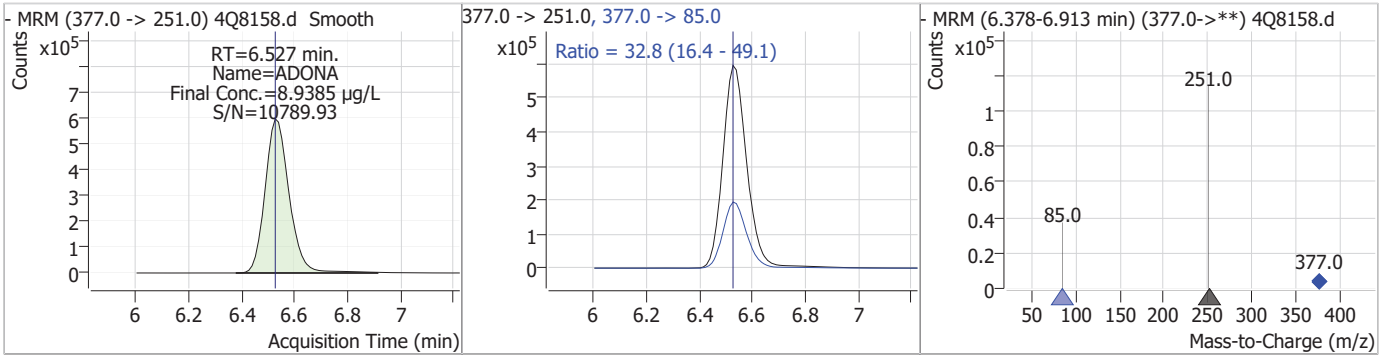
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.53	6.29	0.00	553715	363.0 -> 169.0	20.4	10.4	31.2



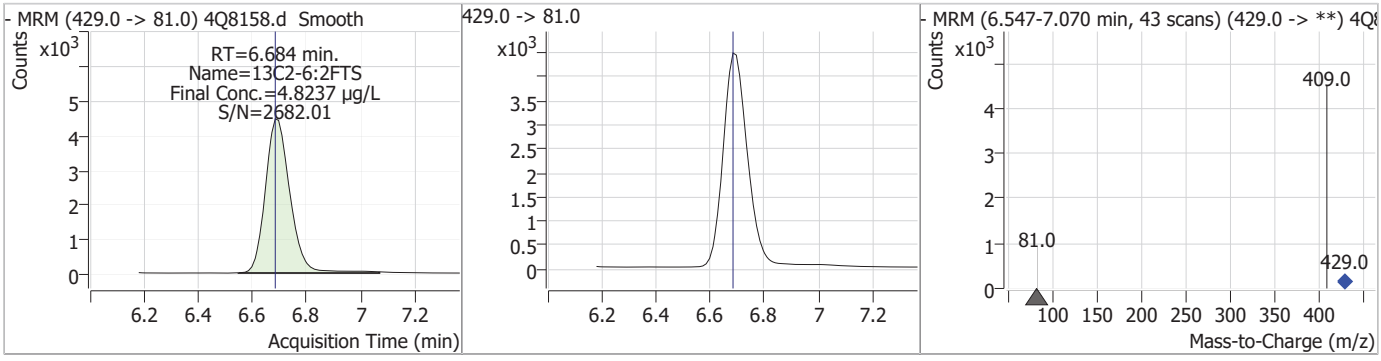
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.40	6.33	0.00	90521	349.0 -> 99.0	48.8	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.94	6.53	0.00	3748251	377.0 -> 85.0	32.8	16.4	49.1

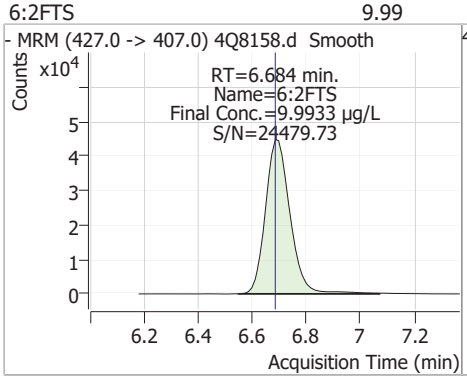


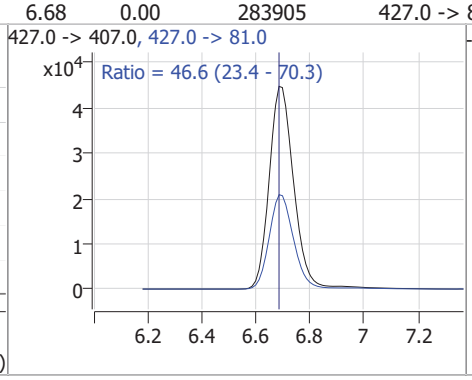
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.82	6.68	0.00	28329				

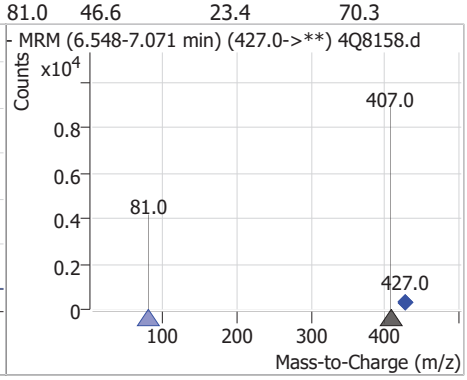


Perfluorinated Compounds by LC/MS/MS

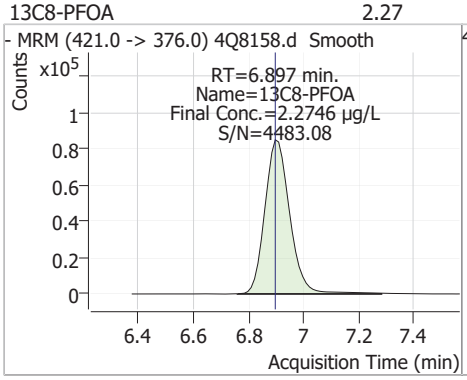
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.99	6.68	0.00	283905	427.0 -> 81.0	46.6	23.4	70.3

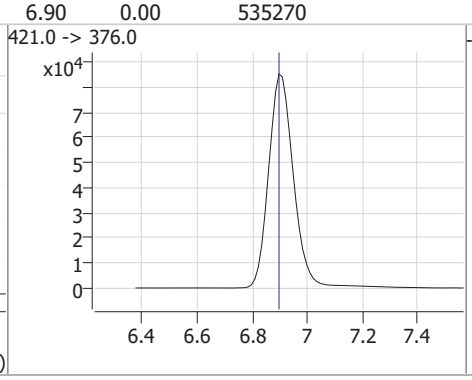


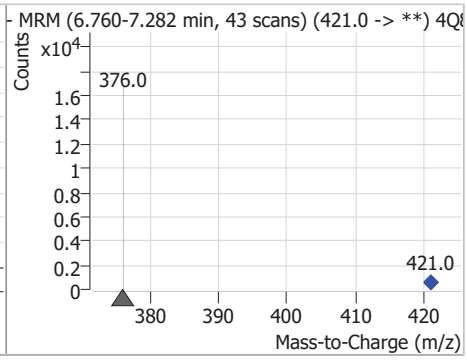




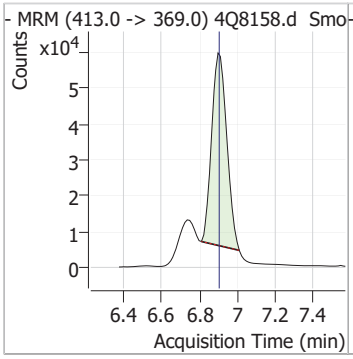
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.27	6.90	0.00	535270				

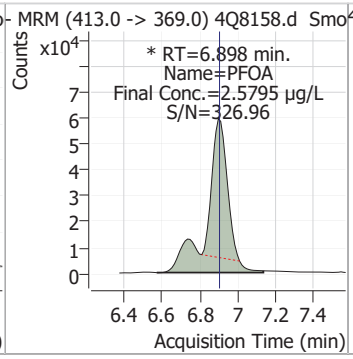


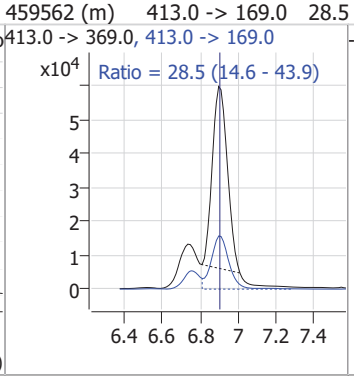


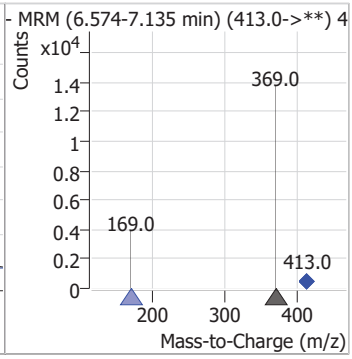


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.58	6.90	0.00	459562 (m)	413.0 -> 169.0	28.5	14.6	43.9

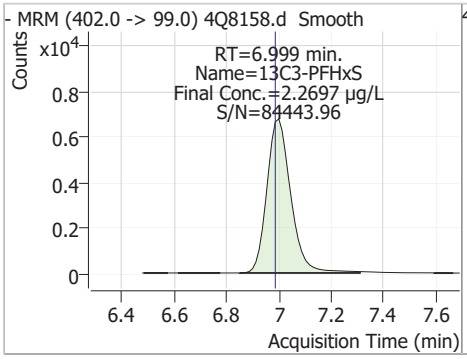


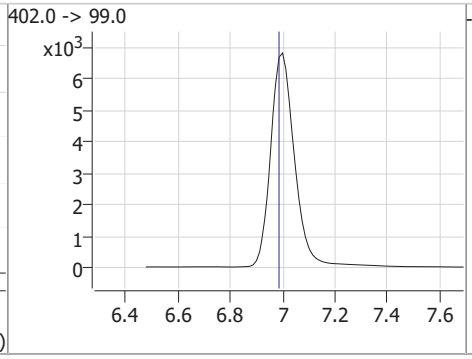


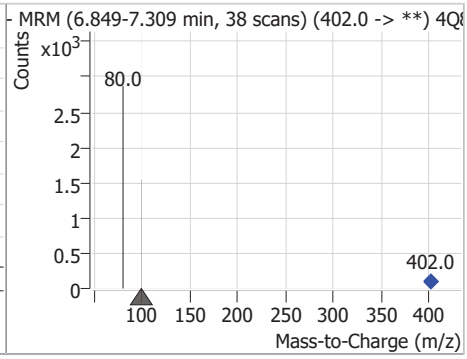




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.27	7.00	0.01	42773				

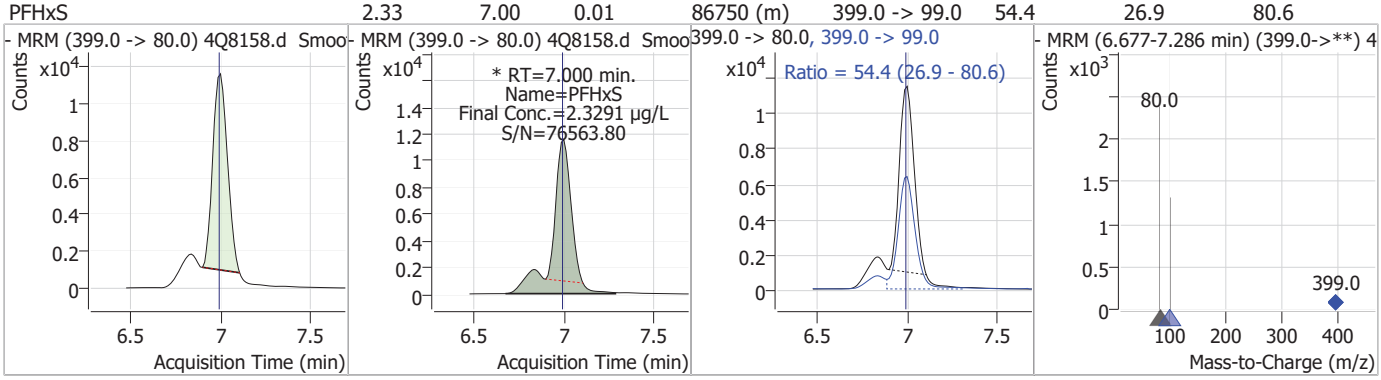




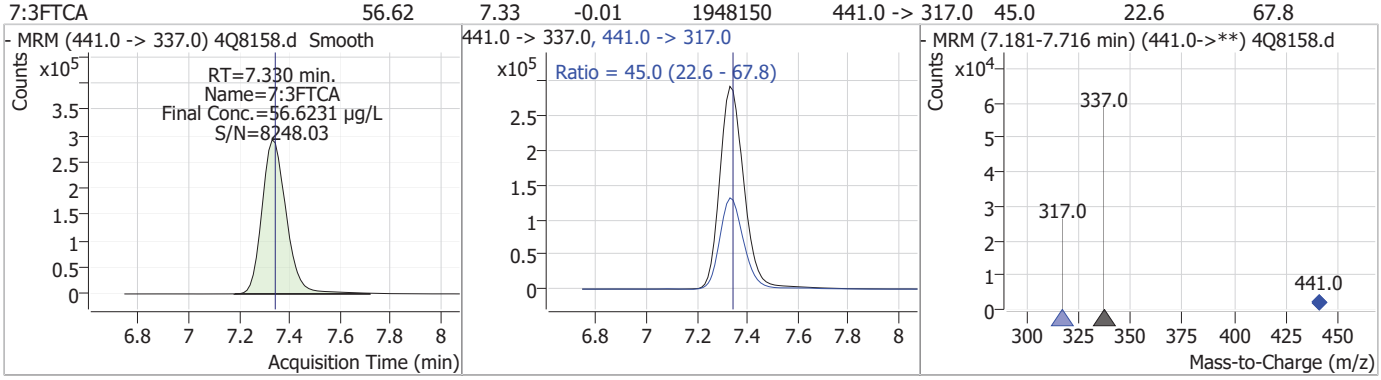


Perfluorinated Compounds by LC/MS/MS

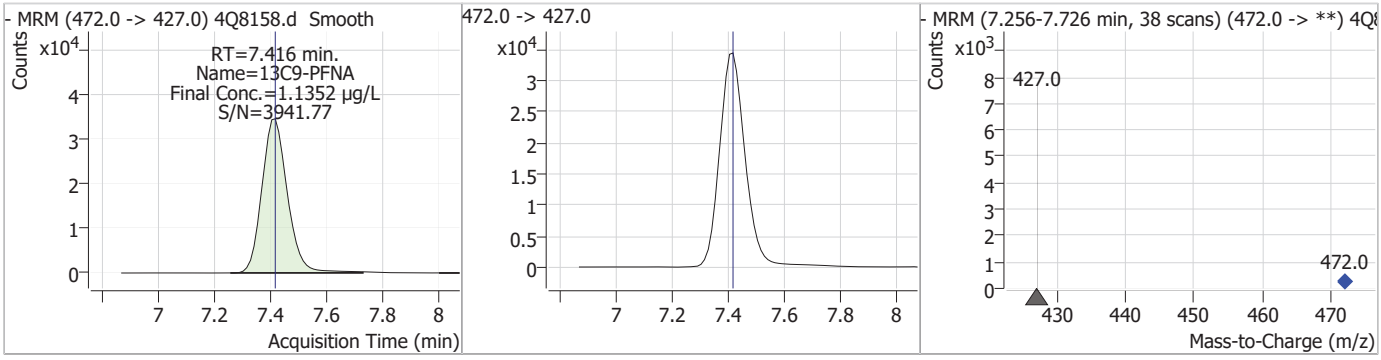
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.33	7.00	0.01	86750 (m)	399.0 -> 99.0	54.4	26.9	80.6



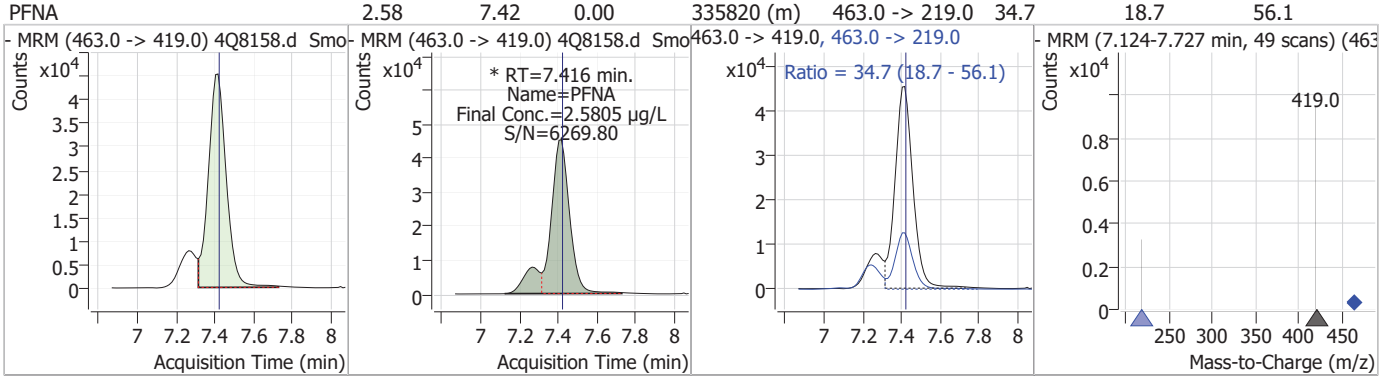
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	56.62	7.33	-0.01	1948150	441.0 -> 317.0	45.0	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.14	7.42	0.00	216359				

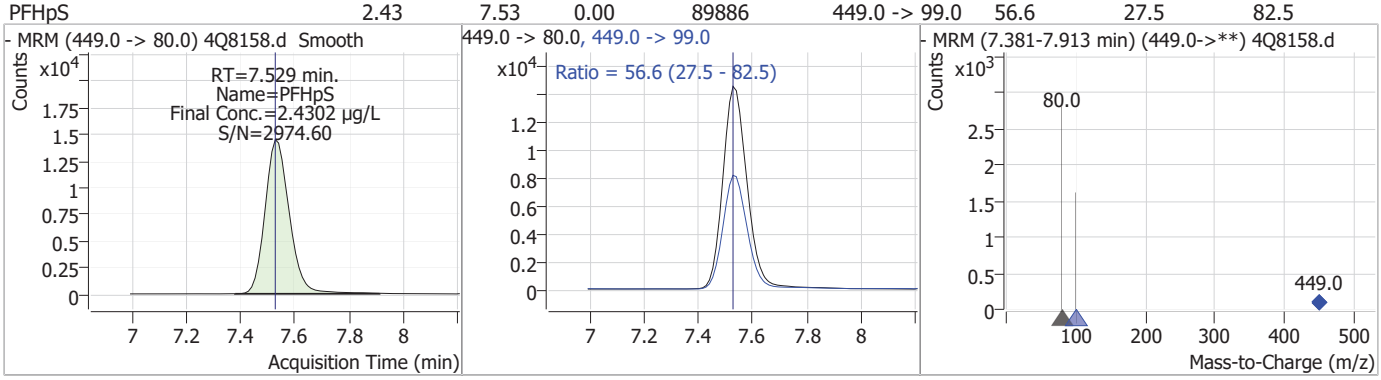


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.58	7.42	0.00	335820 (m)	463.0 -> 219.0	34.7	18.7	56.1

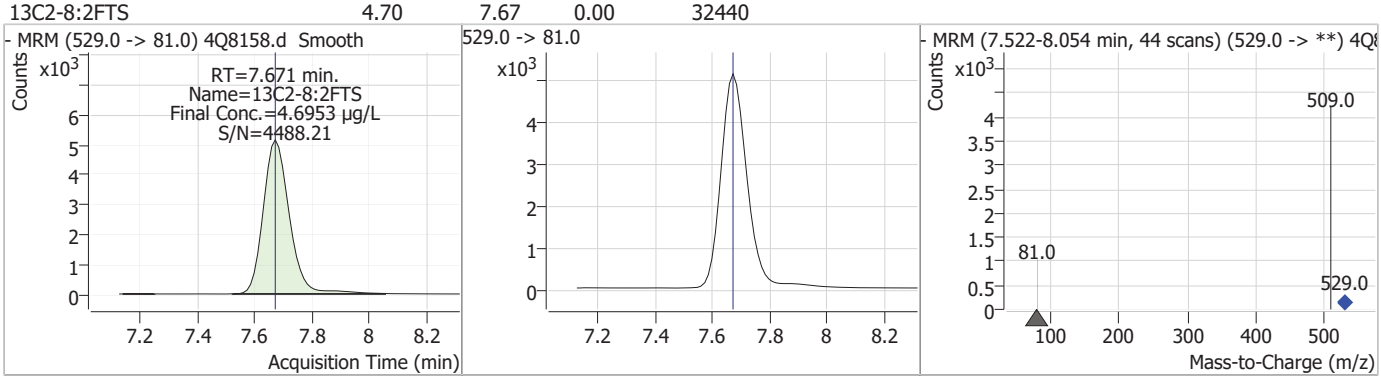


Perfluorinated Compounds by LC/MS/MS

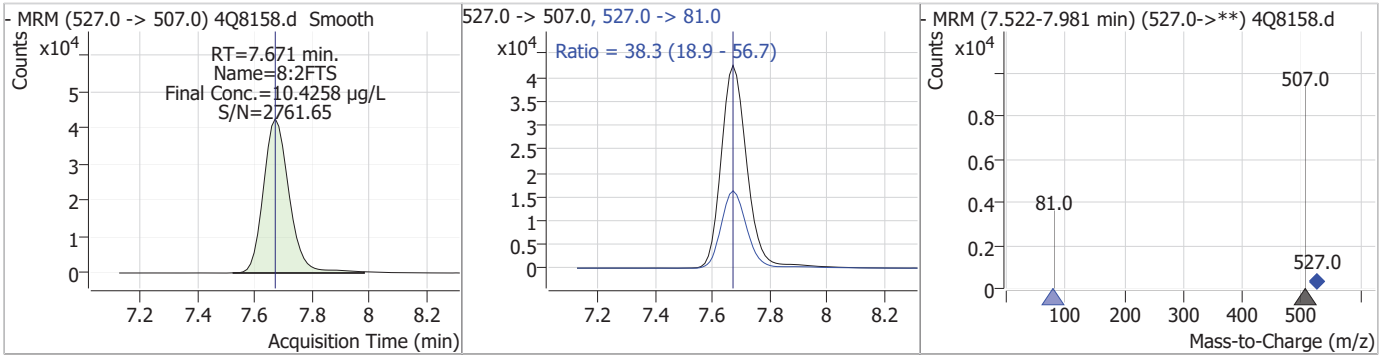
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.43	7.53	0.00	89886	449.0 -> 99.0	56.6	27.5	82.5



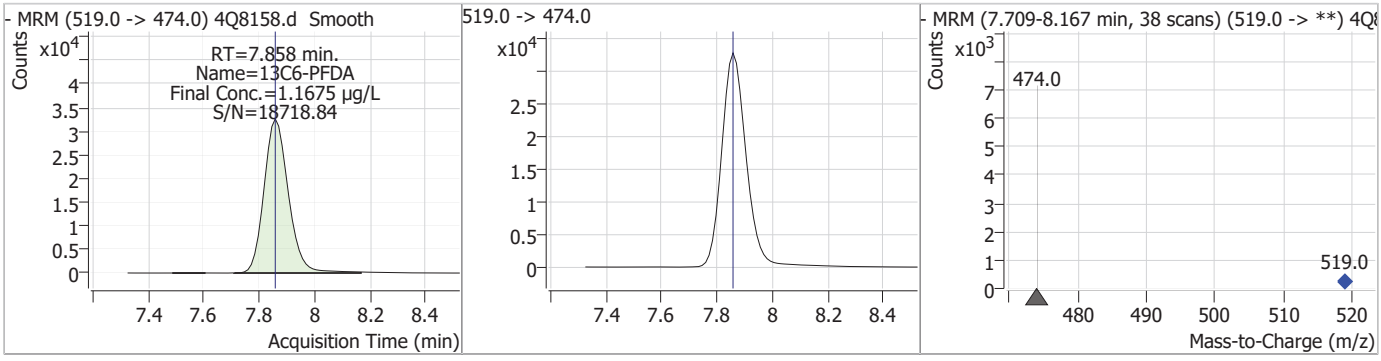
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.70	7.67	0.00	32440				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.43	7.67	0.00	264693	527.0 -> 81.0	38.3	18.9	56.7

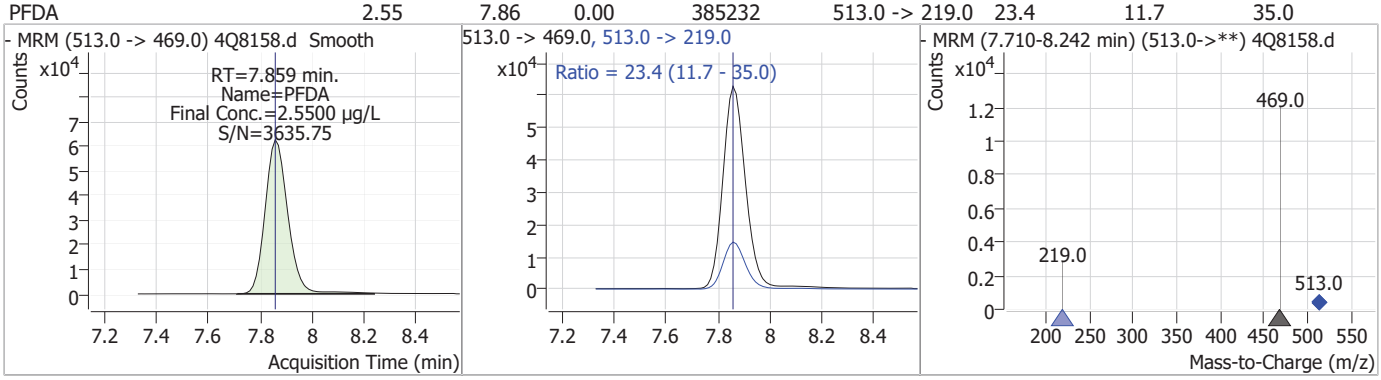


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.17	7.86	0.00	198765				

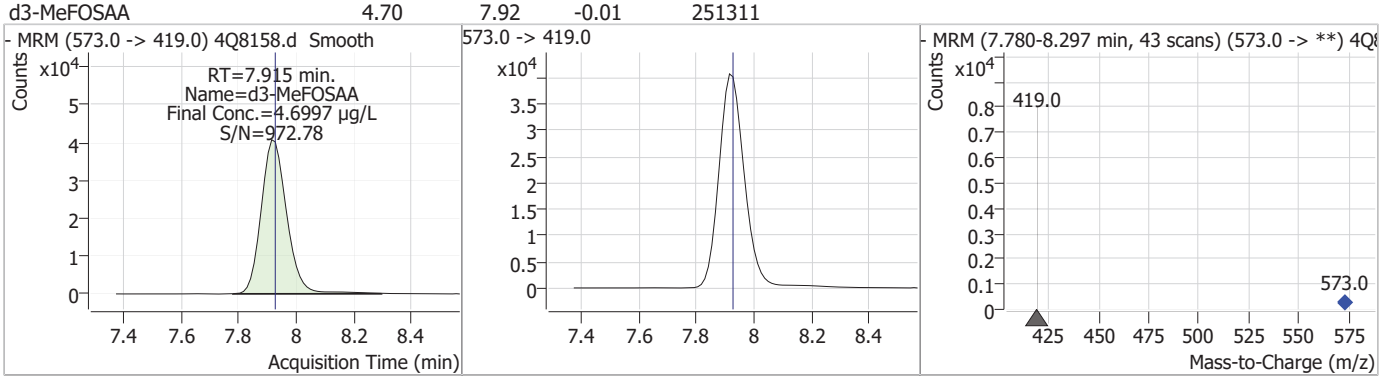


Perfluorinated Compounds by LC/MS/MS

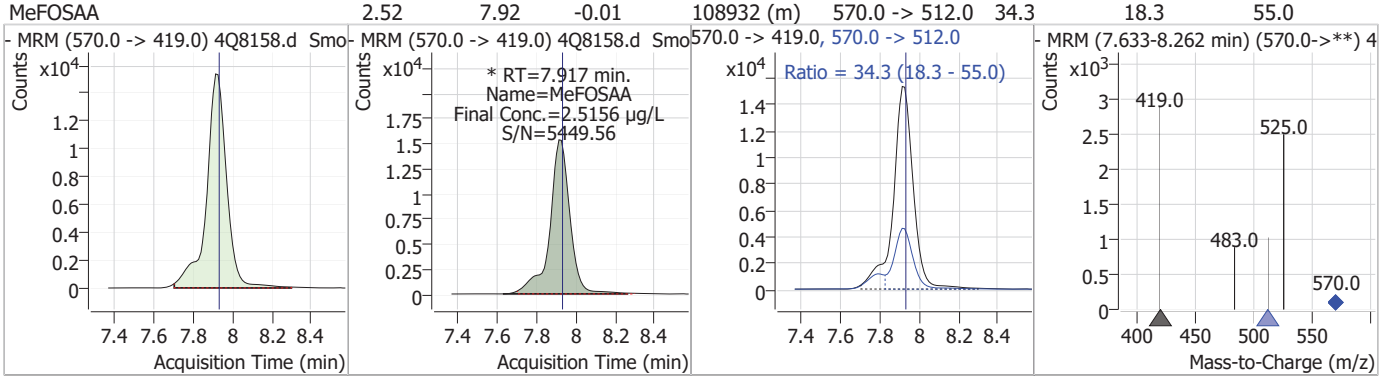
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.55	7.86	0.00	385232	513.0 -> 219.0	23.4	11.7	35.0



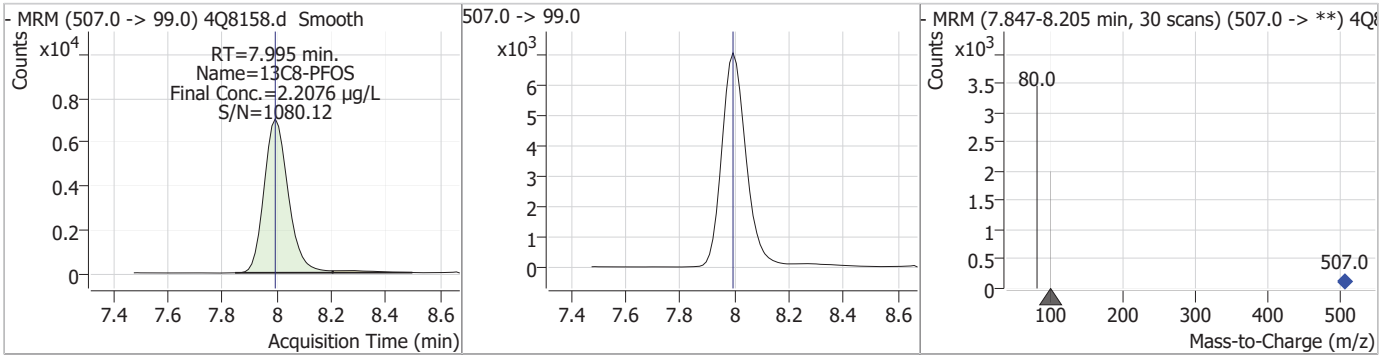
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.70	7.92	-0.01	251311				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.52	7.92	-0.01	108932 (m)	570.0 -> 512.0	34.3	18.3	55.0

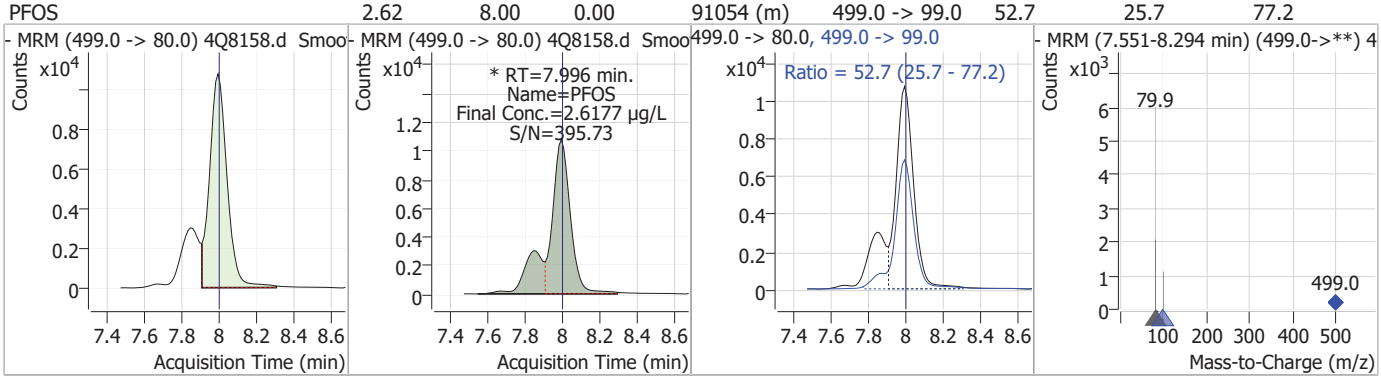


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.21	7.99	0.00	43160				

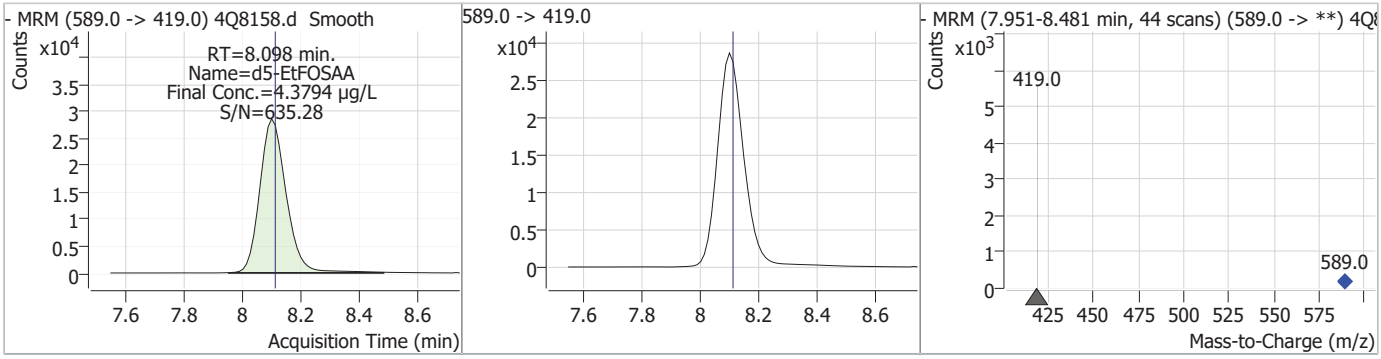


Perfluorinated Compounds by LC/MS/MS

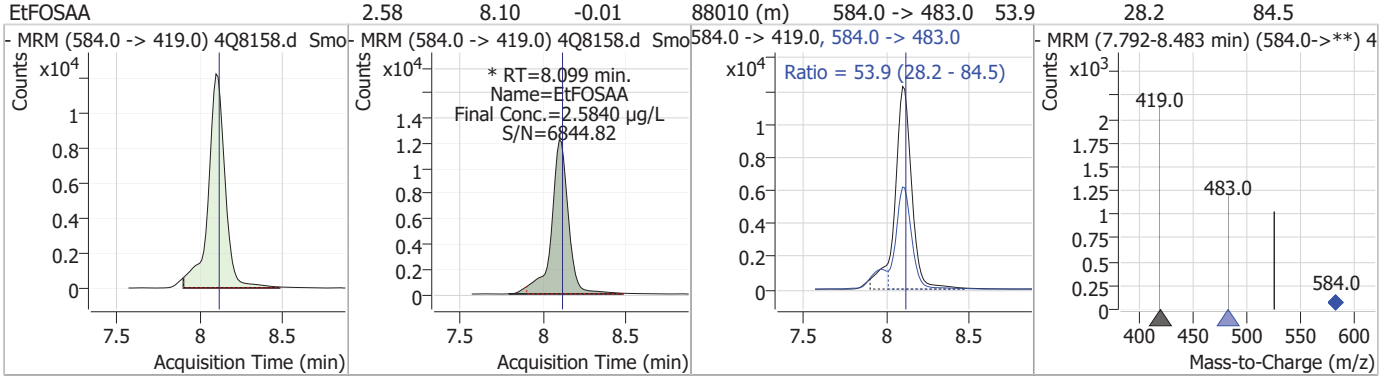
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.62	8.00	0.00	91054 (m)	499.0 -> 99.0	52.7	25.7	77.2



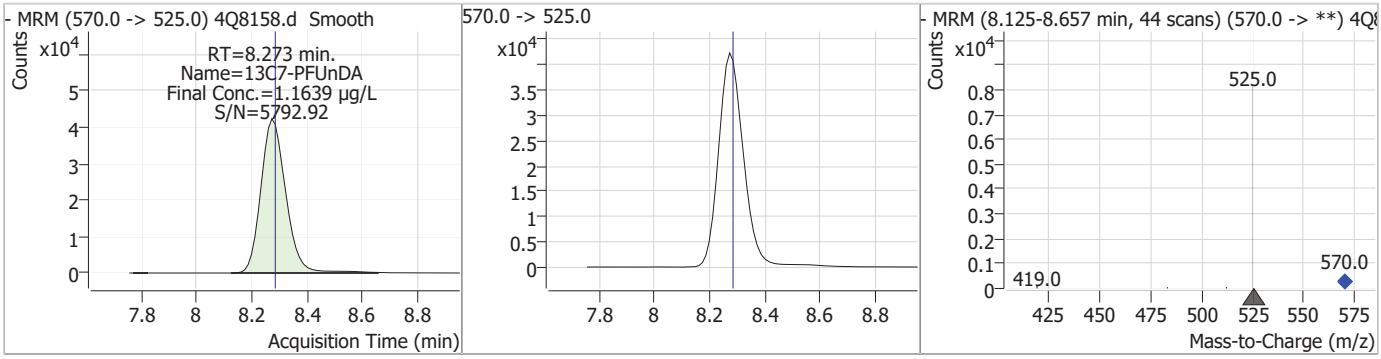
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.38	8.10	-0.01	179796				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.58	8.10	-0.01	88010 (m)	584.0 -> 483.0	53.9	28.2	84.5

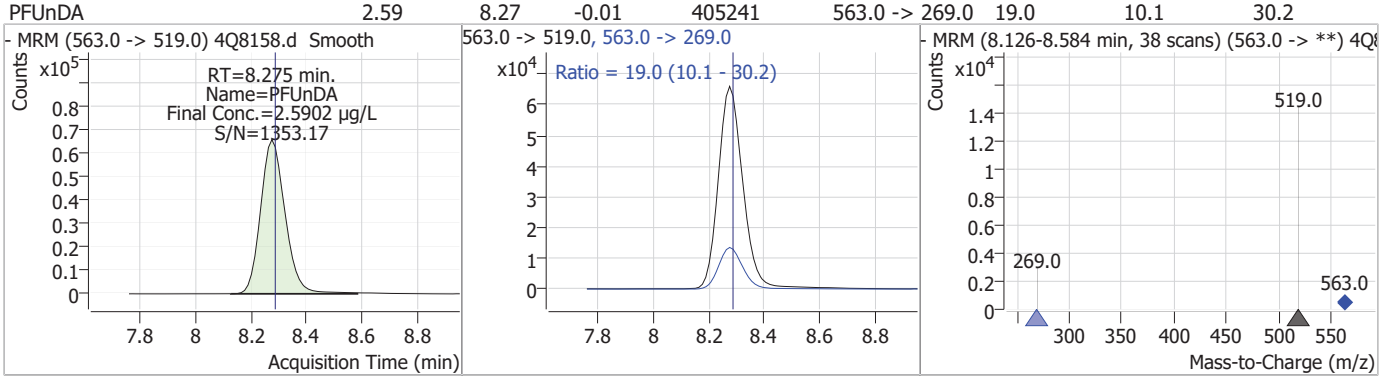


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.16	8.27	-0.01	264682				

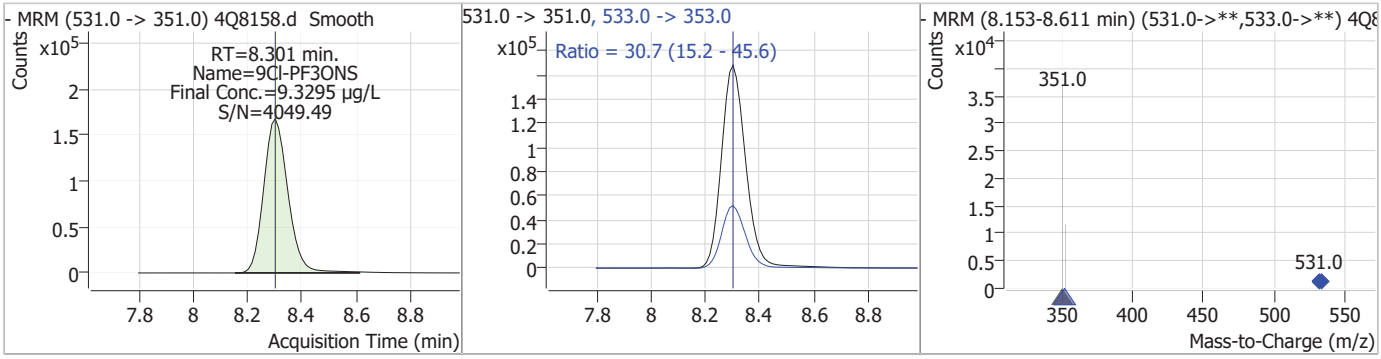


Perfluorinated Compounds by LC/MS/MS

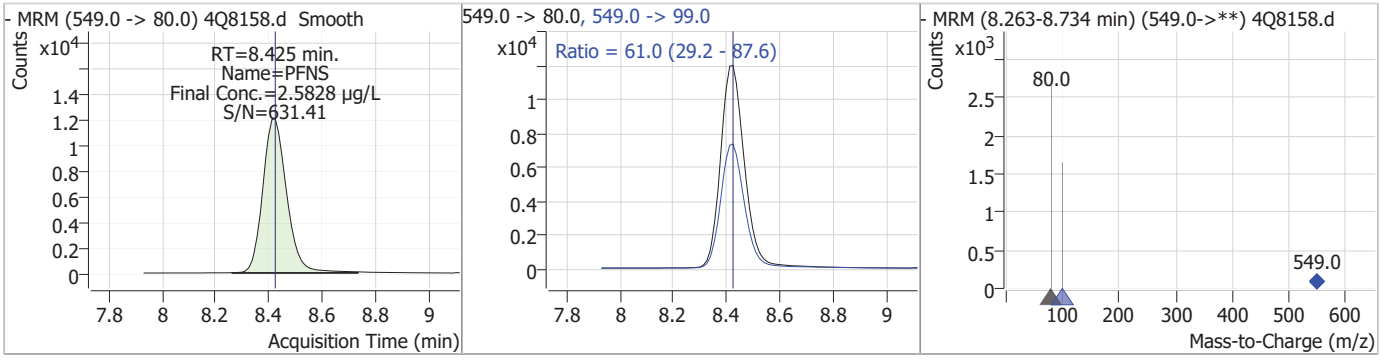
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.59	8.27	-0.01	405241	563.0 -> 269.0	19.0	10.1	30.2



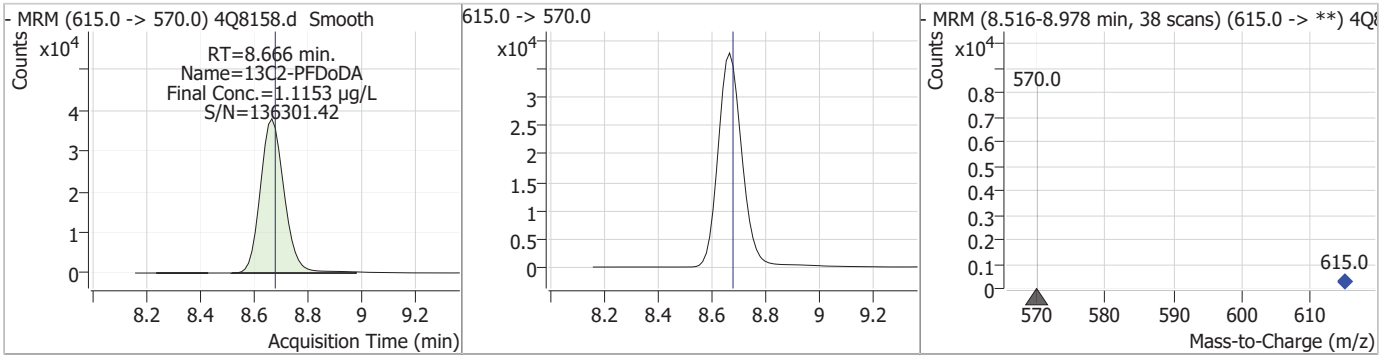
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.33	8.30	0.00	1043448	533.0 -> 353.0	30.7	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.58	8.42	0.00	74961	549.0 -> 99.0	61.0	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.12	8.67	-0.01	232298				



7.3.4

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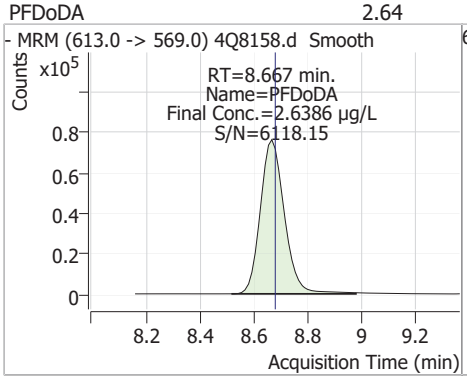
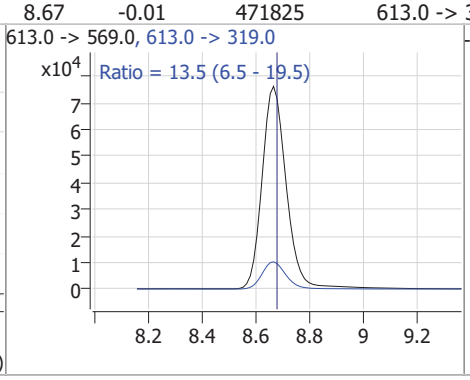
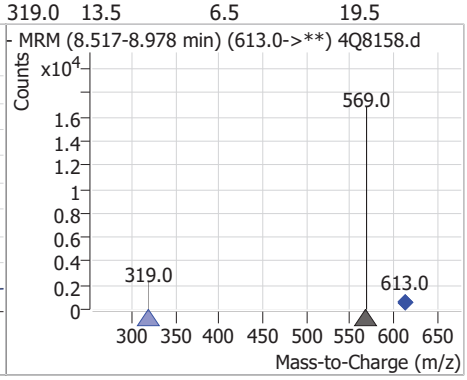
Perfluorinated Compounds by LC/MS/MS

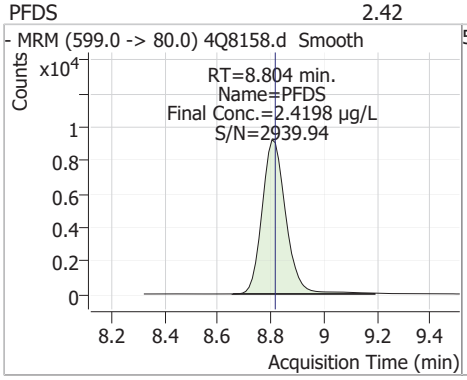
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.64	8.67	-0.01	471825	613.0 -> 319.0	13.5	6.5	19.5

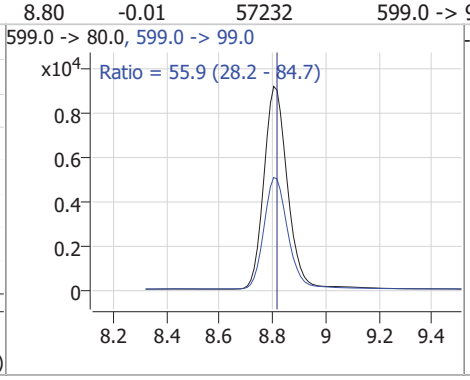


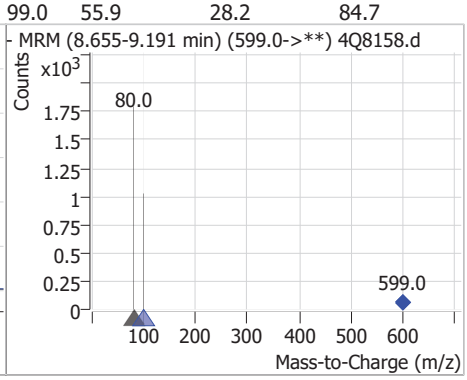




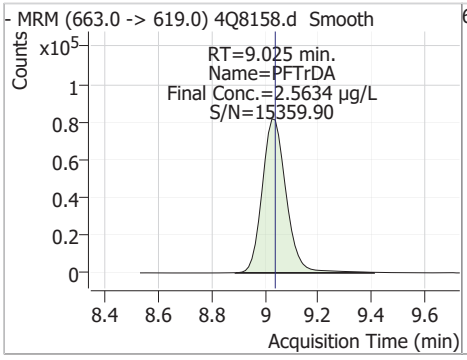
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.42	8.80	-0.01	57232	599.0 -> 99.0	55.9	28.2	84.7

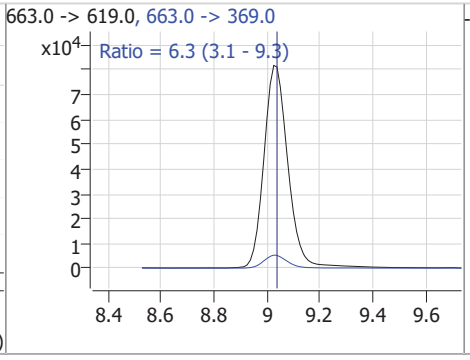


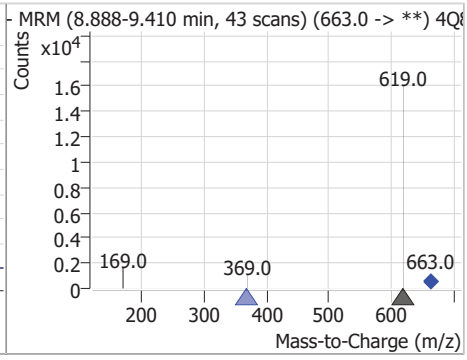




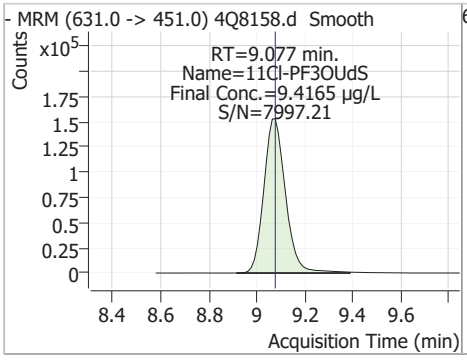
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.56	9.03	-0.01	511151	663.0 -> 369.0	6.3	3.1	9.3

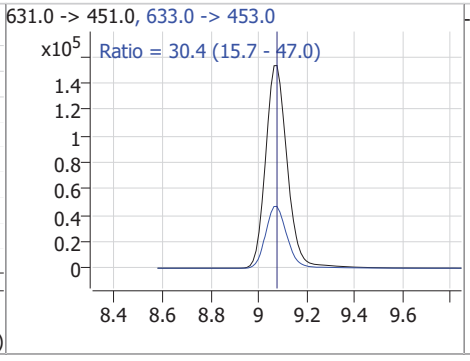


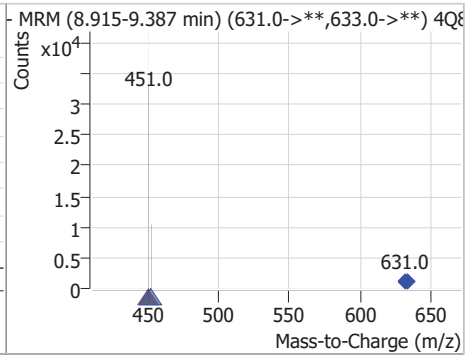




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.42	9.08	0.00	957427	633.0 -> 453.0	30.4	15.7	47.0

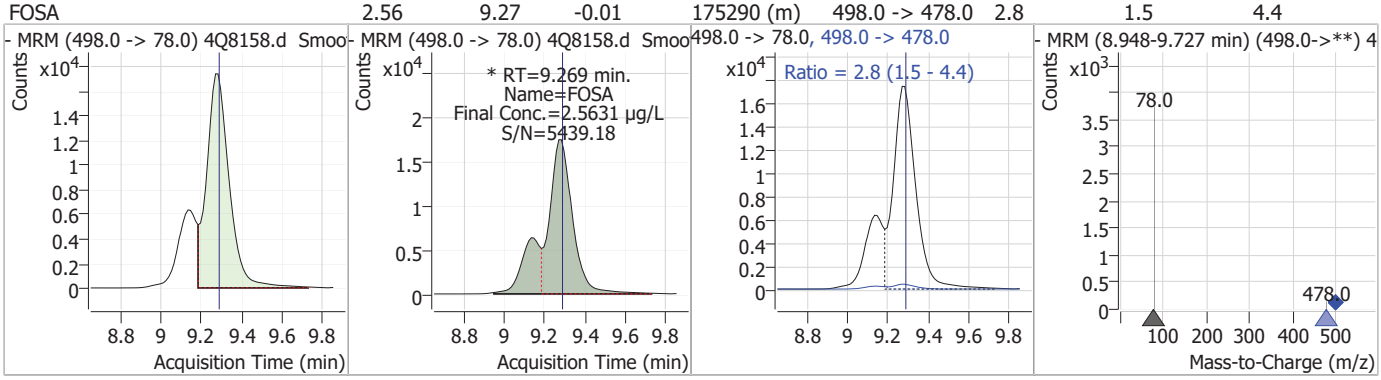




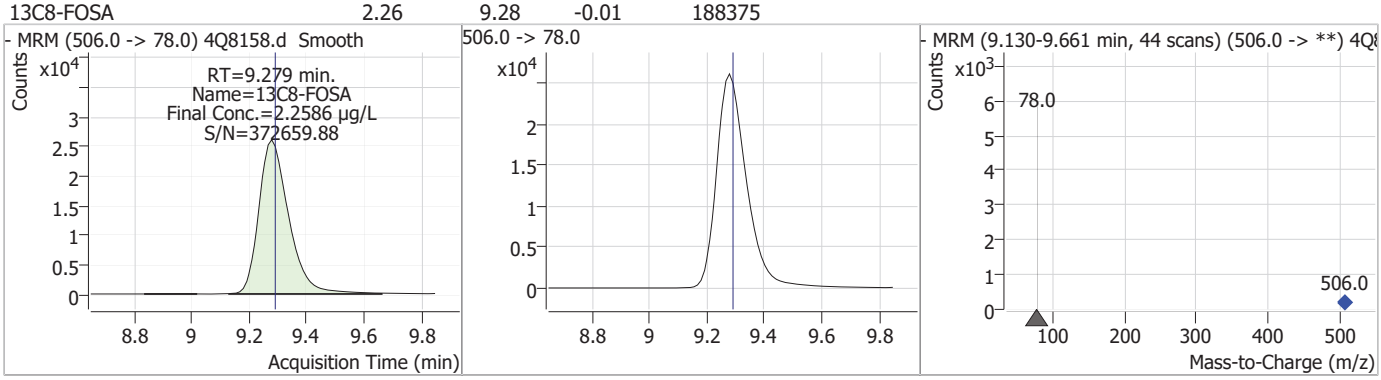


Perfluorinated Compounds by LC/MS/MS

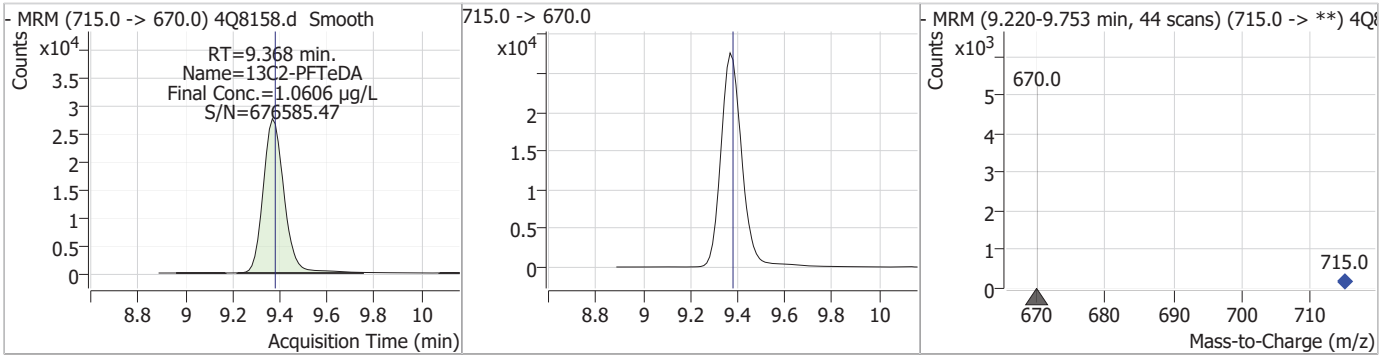
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.56	9.27	-0.01	175290 (m)	498.0 -> 478.0	2.8	1.5	4.4



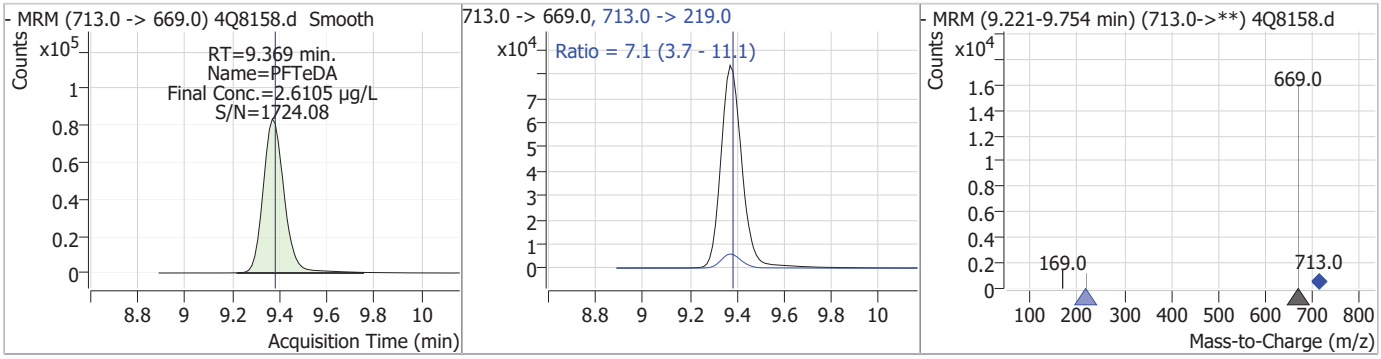
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.26	9.28	-0.01	188375				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.06	9.37	-0.01	169825				

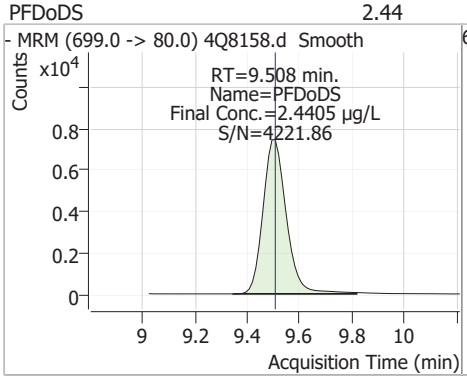


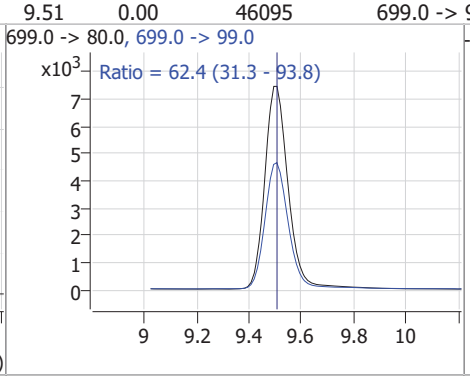
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.61	9.37	-0.01	516184	713.0 -> 219.0	7.1	3.7	11.1

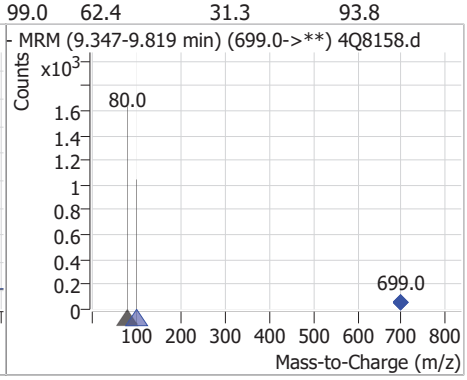


Perfluorinated Compounds by LC/MS/MS

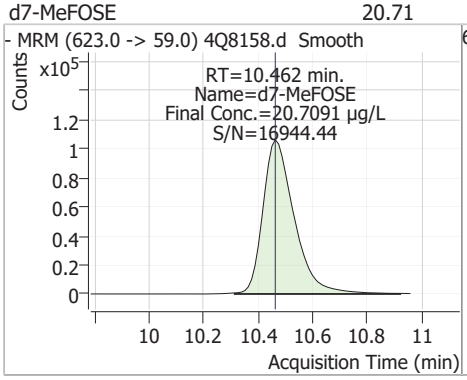
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.44	9.51	0.00	46095	699.0 -> 99.0	62.4	31.3	93.8

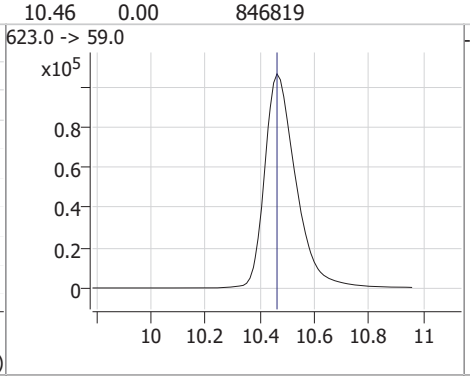


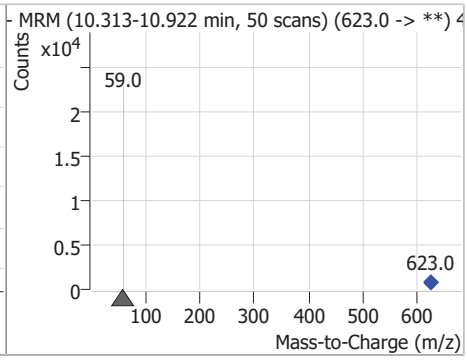




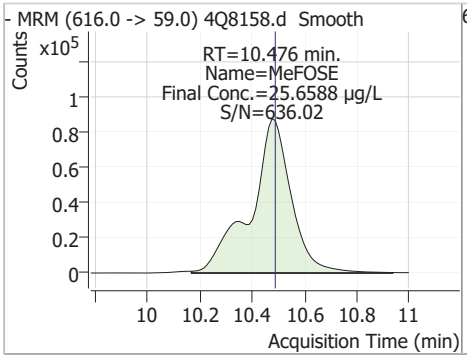
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	20.71	10.46	0.00	846819				

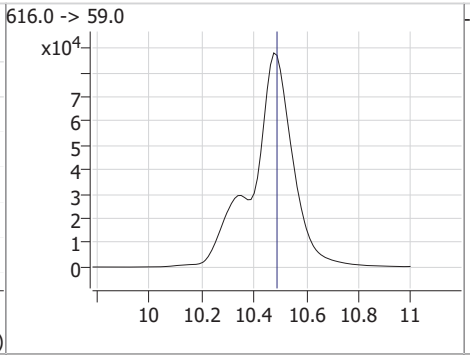


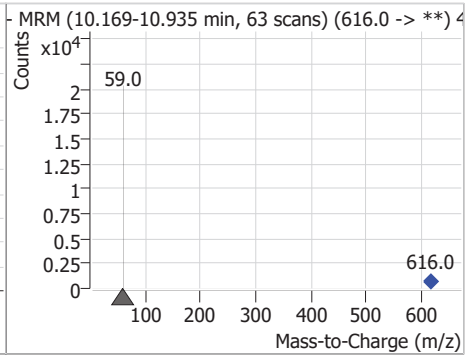




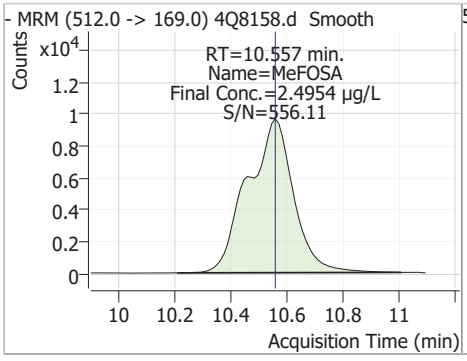
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.66	10.48	-0.01	952826				

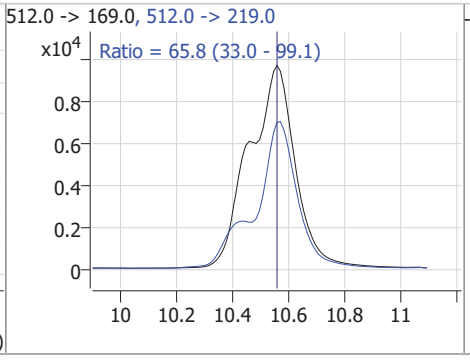


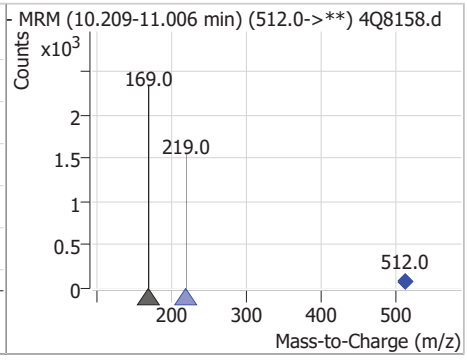




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.50	10.56	0.00	110024	512.0 -> 219.0	65.8	33.0	99.1

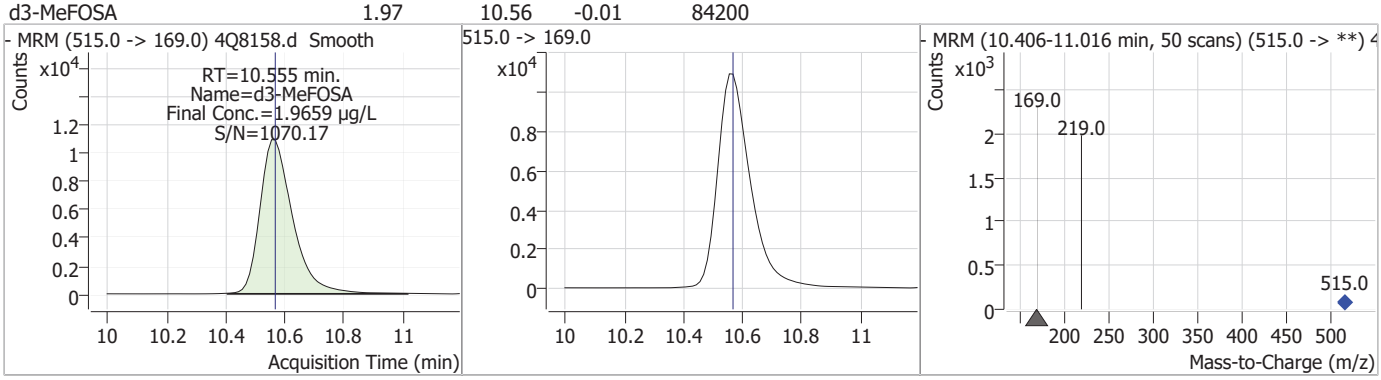




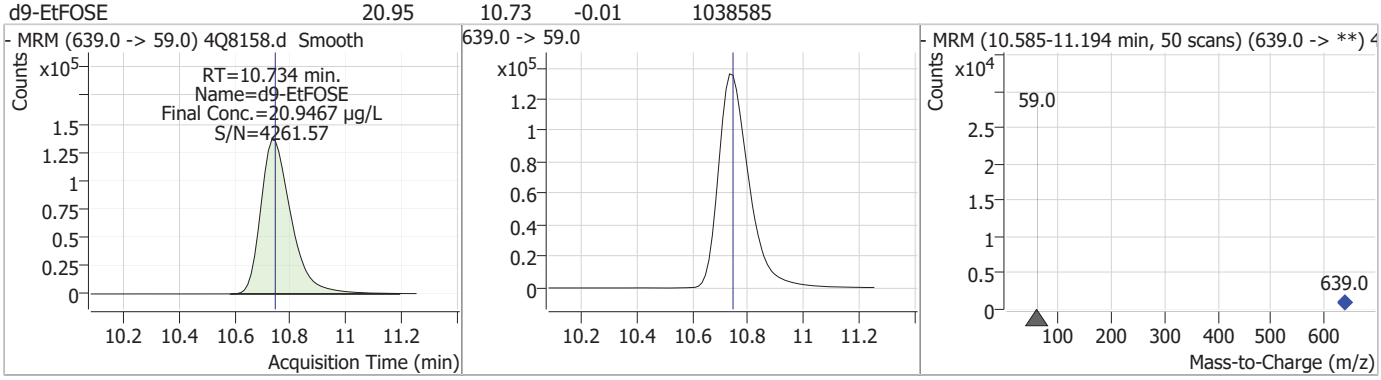


Perfluorinated Compounds by LC/MS/MS

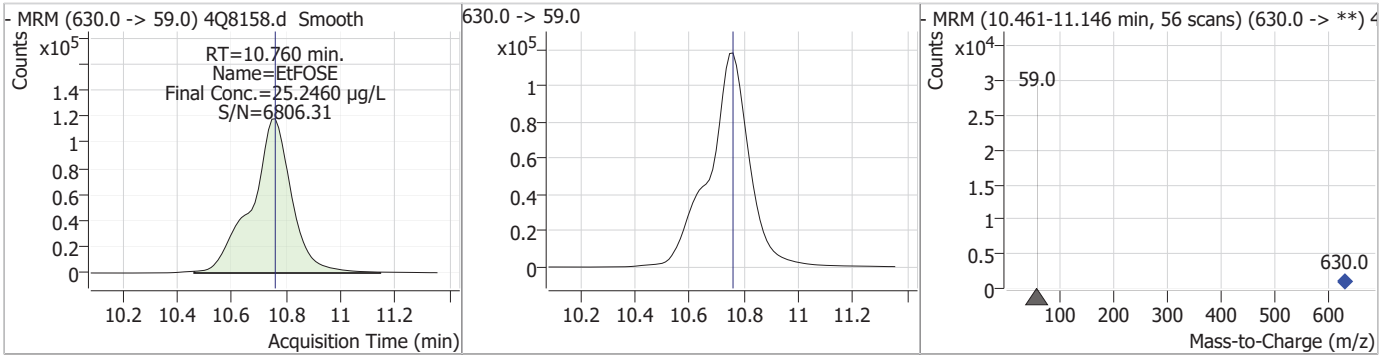
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.97	10.56	-0.01	84200				



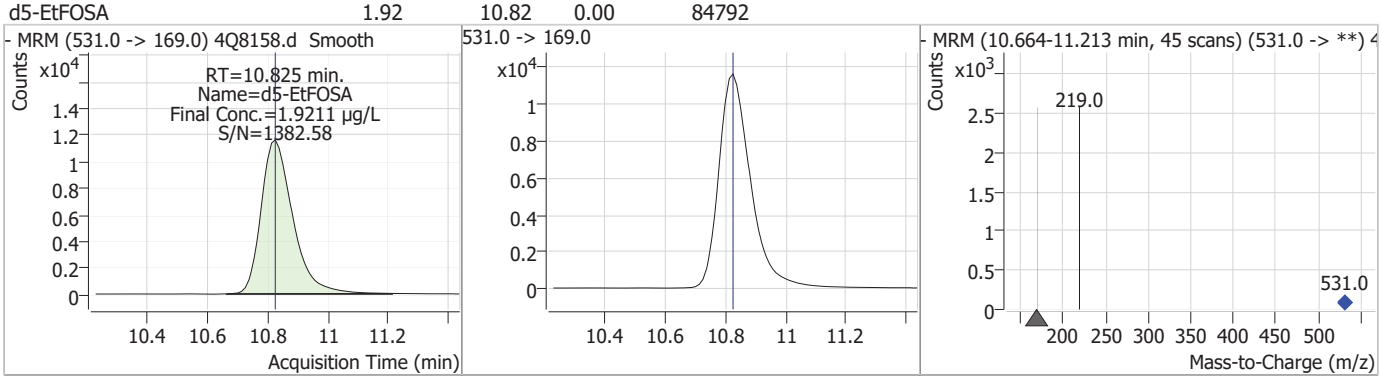
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	20.95	10.73	-0.01	1038585				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.25	10.76	0.00	1219636				

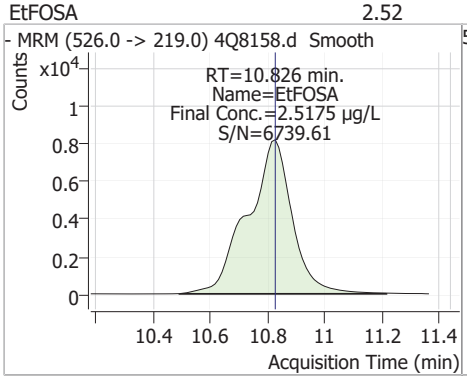


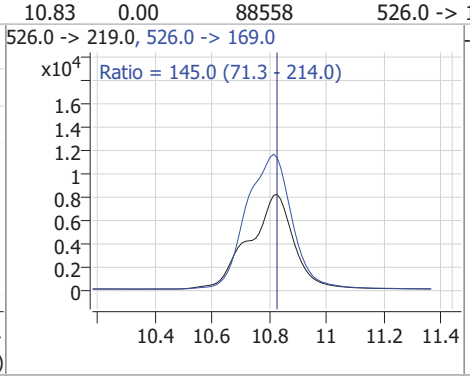
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	1.92	10.82	0.00	84792				

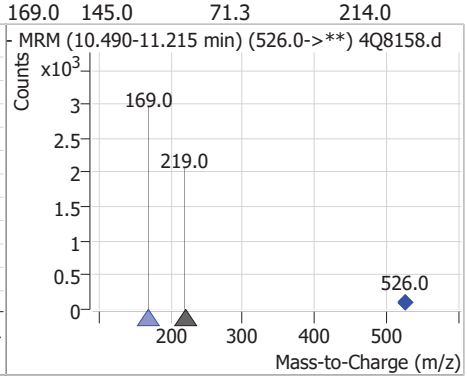


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.52	10.83	0.00	88558	526.0 -> 169.0	145.0	71.3	214.0







7.3.4

7

Manual Integration Approval Summary

Sample Number: OP63161-BS
Lab FileID: 4Q8158.D
Injection Time: 04/30/25 21:16
Method: EPA 1633
Analyst approved: 05/01/25 04:03 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.42	Split peak
MeFOSAA	2355-31-9		7.92	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.10	Poor instrument integration
PFOSA	754-91-6		9.27	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/16/25 06:10

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26070.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/15/2025 1:40:24 PM
Sample Name : op63534-llbs:2
Vial : P1-D3
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : T1Q362.batch.bin
Sample Information : OP63534,T1Q362,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.273	217.0 -> 172.0	190163	10.00 µg/L	0.012
M5-PFPeA	4.648	268.0 -> 223.0	112479	5.00 µg/L	0.000
M5-PFHxA	5.771	318.0 -> 273.0	62833	2.50 µg/L	0.012
M4-PFHpA	6.565	367.0 -> 322.0	51972	2.50 µg/L	0.012
M8-PFOA	7.148	421.0 -> 376.0	79213	2.50 µg/L	0.000
M9-PFNA	7.669	472.0 -> 427.0	27577	1.25 µg/L	0.012
M6-PFDA	8.139	519.0 -> 474.0	27206	1.25 µg/L	0.000
M7-PFUnDA	8.607	570.0 -> 525.0	46750	1.25 µg/L	0.012
M2-PFDoDA	9.027	615.0 -> 570.0	38308	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	15172	1.25 µg/L	0.000
M8-FOSA	9.346	506.0 -> 78.0	18913	2.50 µg/L	0.012
M3-PFBS	5.724	302.0 -> 99.0	6796	2.50 µg/L	0.013
M3-PFHxS	7.275	402.0 -> 99.0	6506	2.50 µg/L	0.000
M8-PFOS	8.316	507.0 -> 99.0	7041	2.50 µg/L	0.012
M2-4:2FTS	5.459	329.0 -> 81.0	1504	5.00 µg/L	0.012
M2-6:2FTS	6.934	429.0 -> 81.0	2801	5.00 µg/L	0.012
M2-8:2FTS	7.927	529.0 -> 81.0	4755	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	39096	5.00 µg/L	0.000
M3-HFPO-DA	6.100	287.0 -> 169.0	17767	10.00 µg/L	0.013
M5-EtFOSAA	8.370	589.0 -> 419.0	30736	5.00 µg/L	0.012
M7-MeFOSE	10.498	623.0 -> 59.0	100607	25.00 µg/L	-0.012
M9-EtFOSE	10.768	639.0 -> 59.0	116963	25.00 µg/L	-0.012
M5-EtFOSA	10.859	531.0 -> 169.0	12400	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	11875	2.50 µg/L	0.000
13C4-PFOS	8.317	503.0 -> 80.0	12180	2.50 µg/L	0.012
13C3-PFBA	3.276	216.0 -> 172.0	84691	5.00 µg/L	0.025
18O2-PFHxS	7.274	403.0 -> 84.0	8964	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	91274	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	25122	1.25 µg/L	0.000
13C5-PFNA	7.669	468.0 -> 423.0	28062	1.25 µg/L	0.012
13C2-PFHxA	5.772	315.0 -> 270.0	61820	2.50 µg/L	0.012
System Monitoring Compounds					
13C2-4:2FTS	5.459	329.0 -> 81.0	1504	5.03 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.5%	
13C2-6:2FTS	6.934	429.0 -> 81.0	2801	4.83 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.6%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4755	5.21 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.2%	
13C2-PFDoDA	9.027	615.0 -> 570.0	38308	1.12 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.9%	
13C2-PFTeDA	9.772	715.0 -> 670.0	15172	1.06 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 84.6%	
13C3-PFBS	5.724	302.0 -> 99.0	6796	2.27 µg/L	0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.9%	
13C3-PFHxS	7.275	402.0 -> 99.0	6506	2.17 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 86.8%		
13C4-PFBA	3.273	217.0 -> 172.0	190163	9.44 µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.4%		
13C4-PFHpA	6.565	367.0 -> 322.0	51972	2.42 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.9%		
13C5-PFHxA	5.771	318.0 -> 273.0	62833	2.39 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.6%		
13C5-PFPeA	4.648	268.0 -> 223.0	112479	4.96 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.3%		
13C6-PFDA	8.139	519.0 -> 474.0	27206	1.12 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.4%		
13C7-PFUnDA	8.607	570.0 -> 525.0	46750	1.32 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.9%		
13C8-FOSA	9.346	506.0 -> 78.0	18913	2.54 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.7%		
13C8-PFOA	7.148	421.0 -> 376.0	79213	2.38 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.4%		
13C8-PFOS	8.316	507.0 -> 99.0	7041	2.51 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.5%		
13C9-PFNA	7.669	472.0 -> 427.0	27577	1.20 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.3%		
d3-MeFOSAA	8.161	573.0 -> 419.0	39096	5.27 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.4%		
13C3-HFPO-DA	6.100	287.0 -> 169.0	17767	7.71 µg/L		0.013
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 77.1%		
d3-MeFOSA	10.601	515.0 -> 169.0	11875	2.06 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 82.4%		
d5-EtFOSAA	8.370	589.0 -> 419.0	30736	5.09 µg/L		0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.8%		
d7-MeFOSE	10.498	623.0 -> 59.0	100607	26.39 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 105.5%		
d9-EtFOSE	10.768	639.0 -> 59.0	116963	25.90 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 103.6%		
d5-EtFOSA	10.859	531.0 -> 169.0	12400	2.11 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 84.2%		
Target Compounds						**QValue**
4:2FTS	5.447	327.0 -> 307.0	4250	1.52 µg/L		96
		327.0 -> 81.0	1919			
6:2FTS	6.934	427.0 -> 407.0	5256	1.47 µg/L		95
		427.0 -> 81.0	2062			
8:2FTS	7.927	527.0 -> 507.0	6953	1.61 µg/L		98
		527.0 -> 81.0	2109			
EtFOSAA	8.371	584.0 -> 419.0	2026	0.42 µg/L	m	95
		584.0 -> 483.0	1266			
FOSA	9.349	498.0 -> 78.0	2793	0.43 µg/L	m	100
		498.0 -> 478.0	148			
MeFOSAA	8.175	570.0 -> 419.0	2369	0.38 µg/L	m	100
		570.0 -> 512.0	883			
PFBA	3.279	213.0 -> 169.0	8172	1.54 µg/L		100
PFBS	5.726	299.0 -> 80.0	2702	0.34 µg/L		95
		299.0 -> 99.0	1126			
PFDA	8.140	513.0 -> 469.0	7615	0.41 µg/L		98
		513.0 -> 219.0	1189			
PFDoDA	9.027	613.0 -> 569.0	11435	0.41 µg/L		100
		613.0 -> 319.0	1283			
PFDS	9.193	599.0 -> 80.0	1506	0.39 µg/L		91

Perfluorinated Compounds by LC/MS/MS

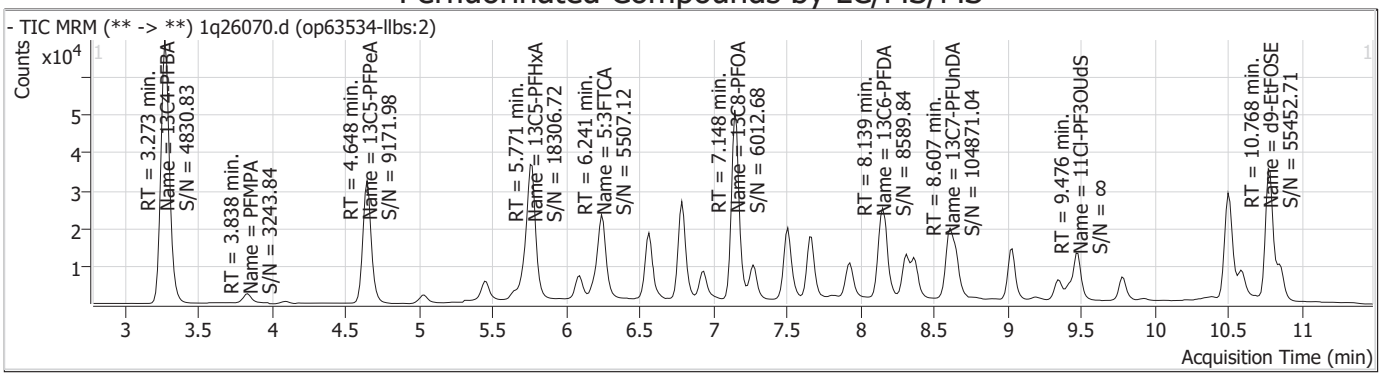
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	863				
PFHpA	6.566	363.0 -> 319.0	11143	0.38	µg/L		94
		363.0 -> 169.0	2007				
PFHpS	7.822	449.0 -> 80.0	1913	0.43	µg/L		93
		449.0 -> 99.0	875				
PFHxA	5.774	313.0 -> 269.0	9431	0.41	µg/L		100
		313.0 -> 119.0	259				
PFHxS	7.276	399.0 -> 80.0	2036	0.40	µg/L	m	91
		399.0 -> 99.0	1166				
PFNA	7.669	463.0 -> 419.0	5890	0.43	µg/L	m	100
		463.0 -> 219.0	1706				
PFNS	8.772	549.0 -> 80.0	935	0.37	µg/L		90
		549.0 -> 99.0	456				
PFOA	7.149	413.0 -> 369.0	11750	0.43	µg/L	m	98
		413.0 -> 169.0	2570				
PFOS	8.318	499.0 -> 80.0	2633	0.45	µg/L	m	87
		499.0 -> 99.0	1425				
PFPeA	4.650	263.0 -> 219.0	15936	0.81	µg/L		100
PFPeS	6.642	349.0 -> 80.0	1252	0.36	µg/L		82
		349.0 -> 99.0	732				
PFTeDA	9.773	713.0 -> 669.0	6279	0.38	µg/L		97
		713.0 -> 219.0	456				
PFTrDA	9.412	663.0 -> 619.0	10765	0.40	µg/L		100
		663.0 -> 369.0	752				
PFUnDA	8.609	563.0 -> 519.0	11776	0.38	µg/L		97
		563.0 -> 269.0	1505				
11Cl-PF3OUdS	9.476	631.0 -> 451.0	35146	1.83	µg/L		99
		633.0 -> 453.0	10182				
9Cl-PF3ONS	8.648	531.0 -> 351.0	28712	1.83	µg/L		95
		533.0 -> 353.0	9083				
ADONA	6.789	377.0 -> 251.0	74209	1.90	µg/L		98
		377.0 -> 85.0	19708				
HFPO-DA	6.101	285.0 -> 169.0	3291	1.91	µg/L		88
		285.0 -> 185.0	171				
3:3FTCA	4.097	241.0 -> 177.0	2414	2.26	µg/L		93
		241.0 -> 117.0	225				
5:3FTCA	6.241	341.0 -> 237.0	49833	12.24	µg/L		92
		341.0 -> 217.0	32096				
7:3FTCA	7.509	441.0 -> 337.0	49699	10.81	µg/L		100
		441.0 -> 317.0	22440				
EtFOSA	10.860	526.0 -> 219.0	2043	0.39	µg/L	m	79
		526.0 -> 169.0	3183				
EtFOSE	10.794	630.0 -> 59.0	20154	3.95	µg/L		100
MeFOSA	10.603	512.0 -> 169.0	2462	0.40	µg/L	m	88
		512.0 -> 219.0	1899				
MeFOSE	10.523	616.0 -> 59.0	15974	3.90	µg/L	m	100
PFDoDS	9.924	699.0 -> 80.0	1319	0.41	µg/L		99
		699.0 -> 99.0	741				
NFDHA	5.651	295.0 -> 201.0	948	0.62	µg/L		38
		201.0 -> 85.0	6962				
		295.0 -> 85.0	326				
PFMBA	5.039	279.0 -> 85.0	8278	0.78	µg/L		100
PFMPA	3.838	229.0 -> 85.0	9658	0.81	µg/L		100
PFEESA	6.194	315.0 -> 135.0	14793	0.68	µg/L		97
		315.0 -> 69.0	1465				

 # = Qualifier out of range, m = manually integrated, + = Area summed

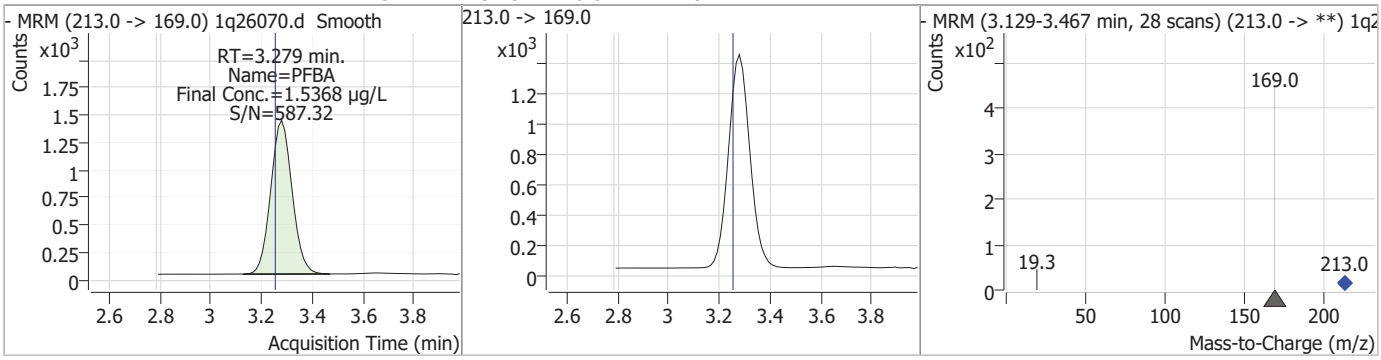
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

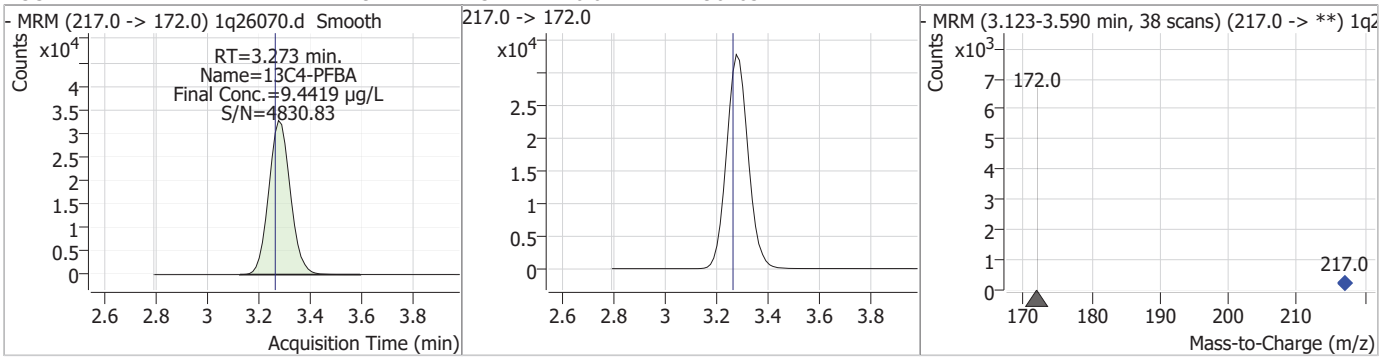
Perfluorinated Compounds by LC/MS/MS



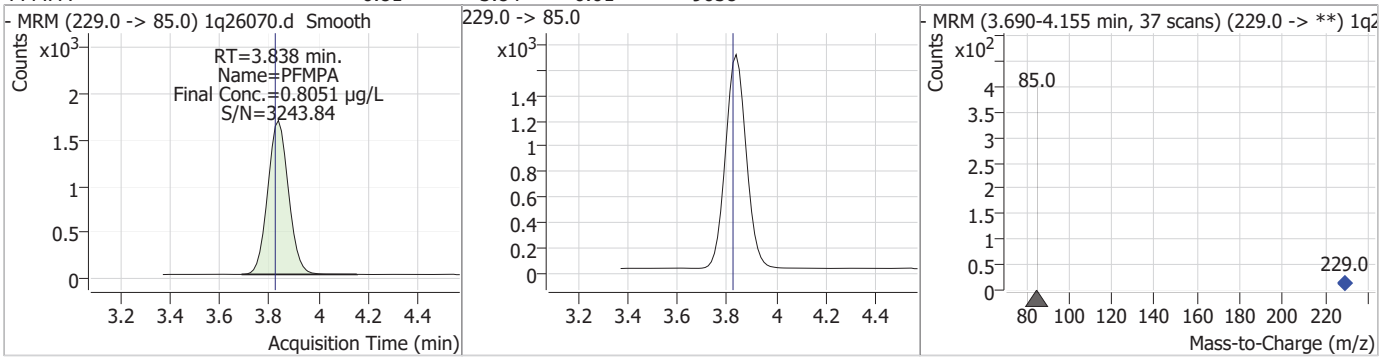
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	1.54	3.28	0.02	8172				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.44	3.27	0.01	190163				

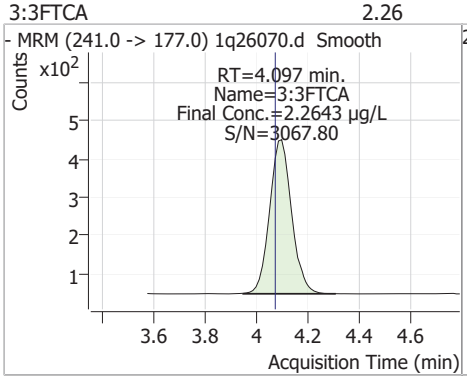


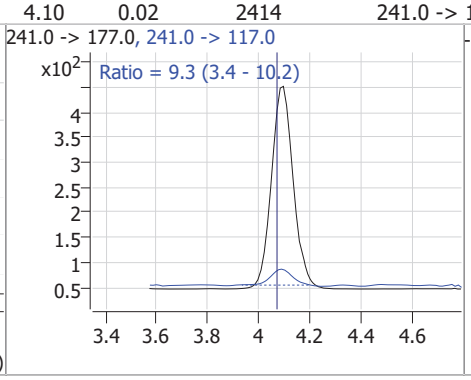
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.81	3.84	0.01	9658				

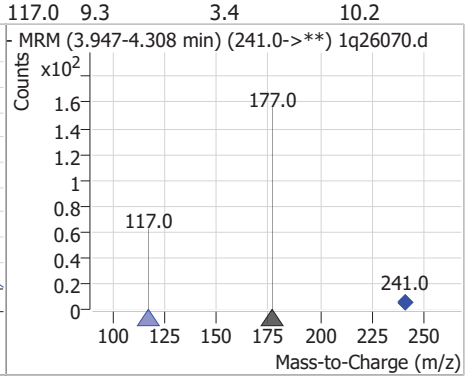


Perfluorinated Compounds by LC/MS/MS

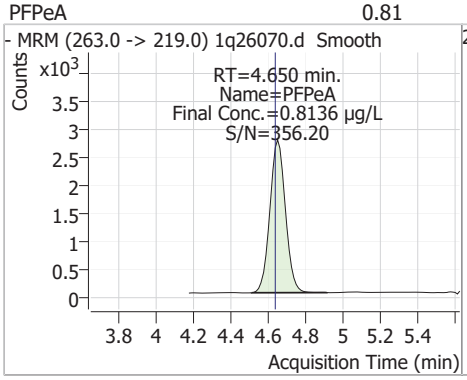
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	2.26	4.10	0.02	2414	241.0 -> 117.0	9.3	3.4	10.2

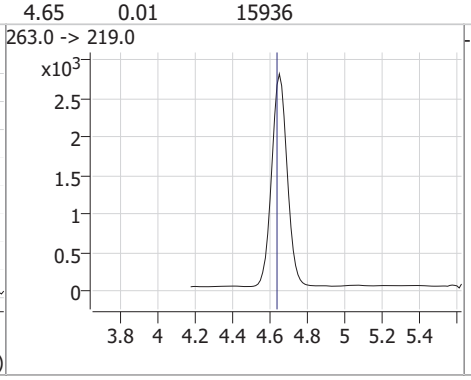


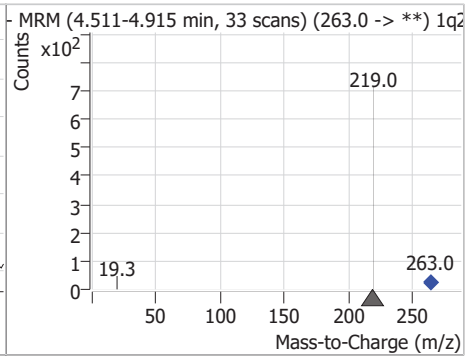




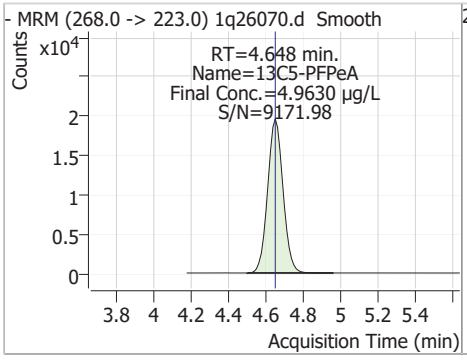
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.81	4.65	0.01	15936				

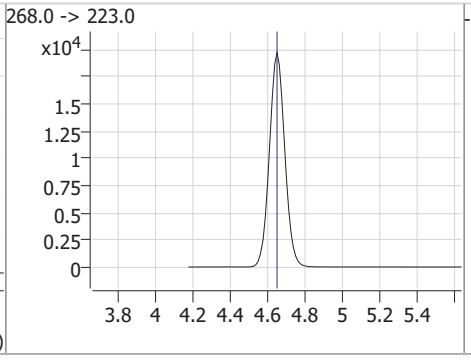


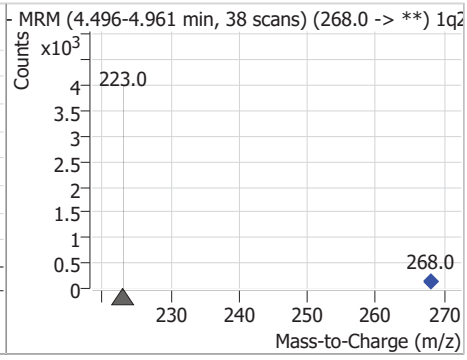




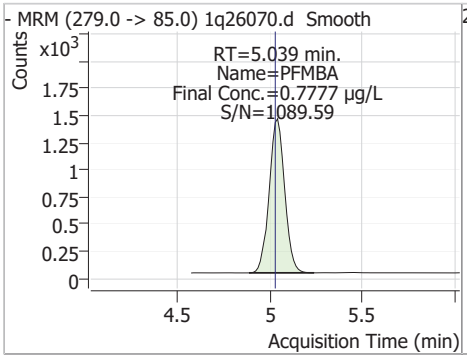
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.96	4.65	0.00	112479				

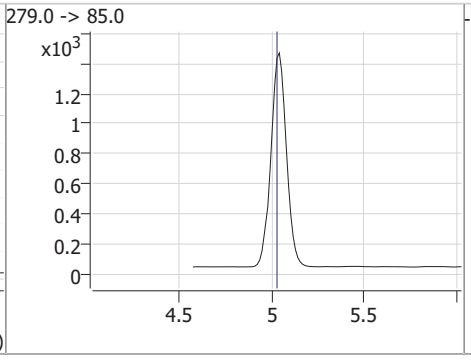


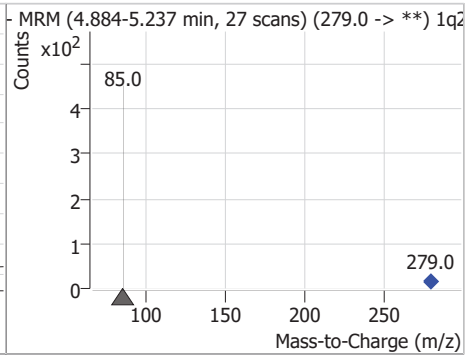




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.78	5.04	0.01	8278				

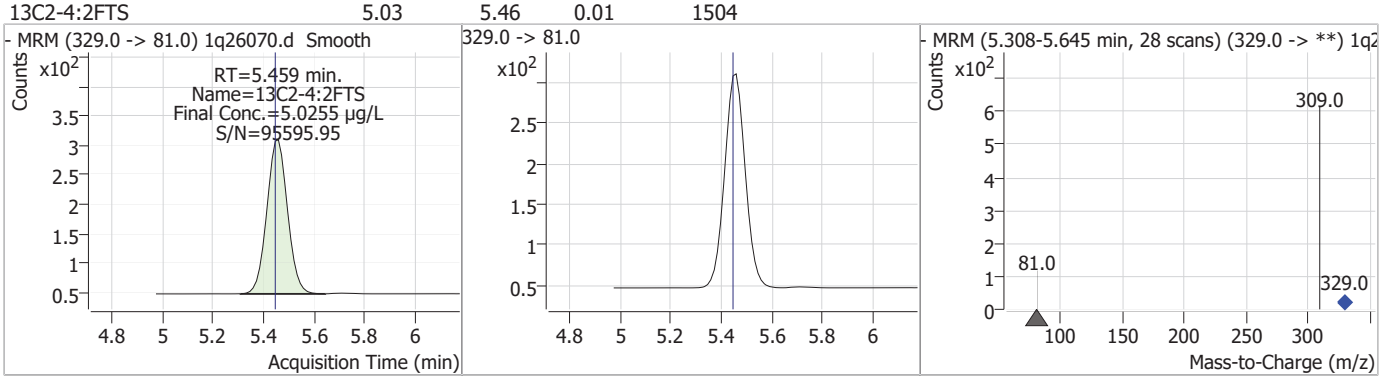




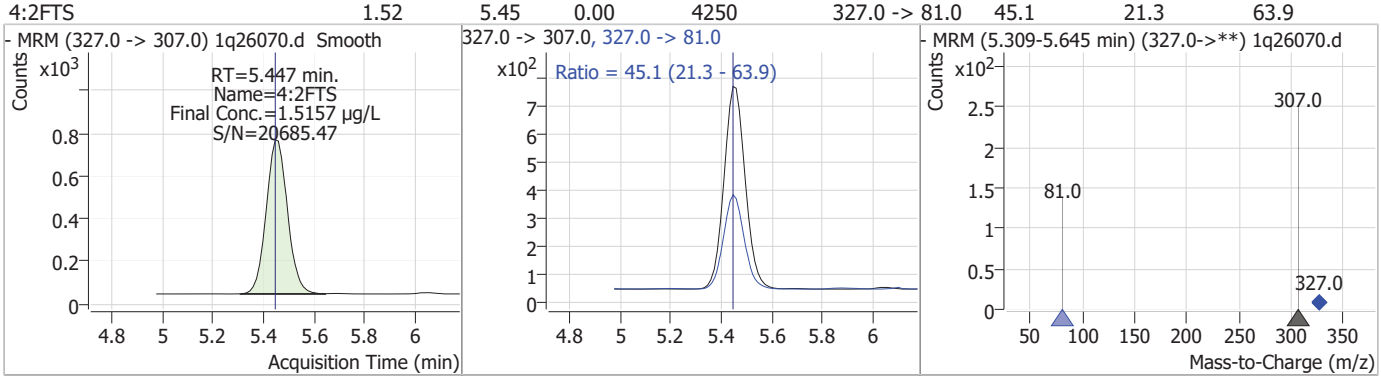


Perfluorinated Compounds by LC/MS/MS

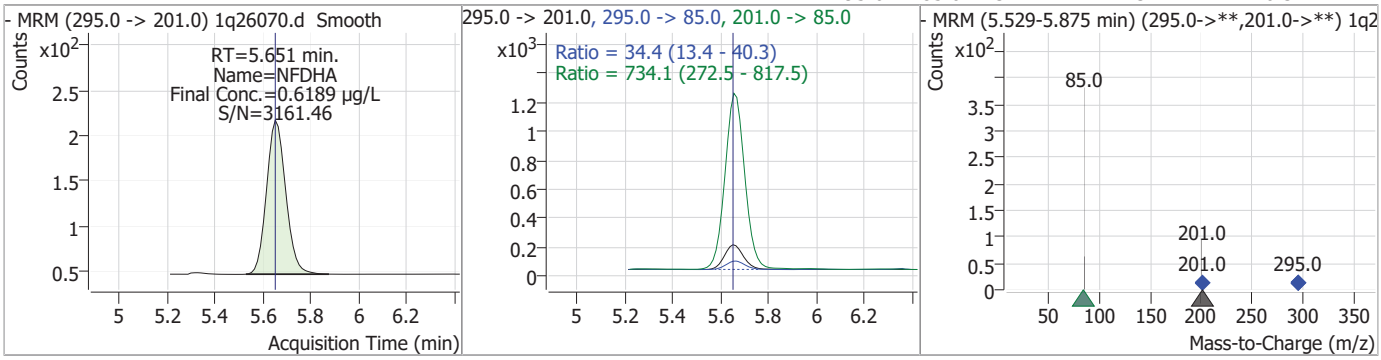
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.03	5.46	0.01	1504				



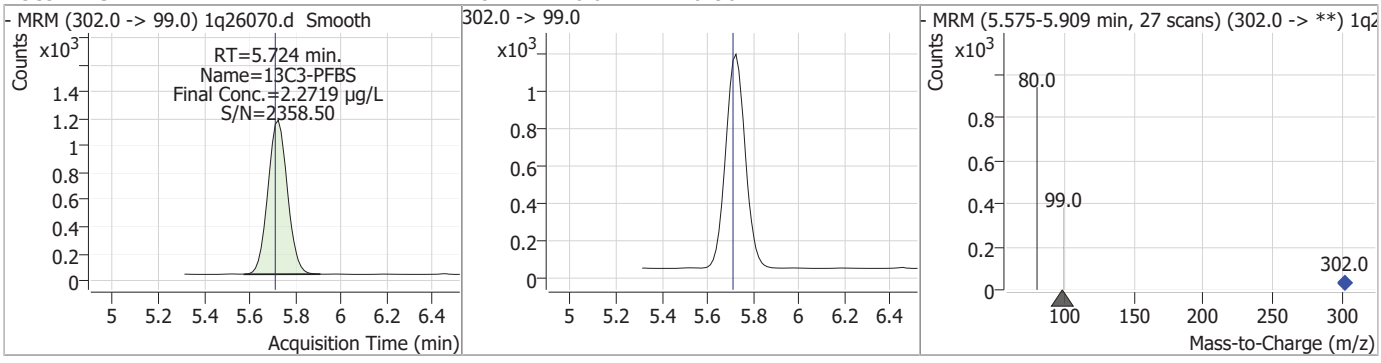
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	1.52	5.45	0.00	4250	327.0 -> 81.0	45.1	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.62	5.65	0.00	948	201.0 -> 85.0	734.1	272.5	817.5
					295.0 -> 85.0	34.4	13.4	40.3

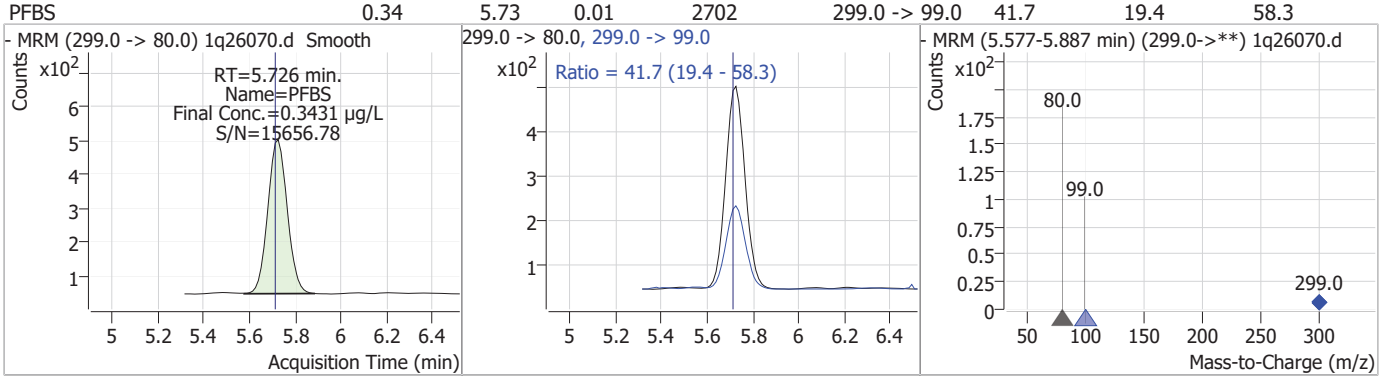


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.27	5.72	0.01	6796				

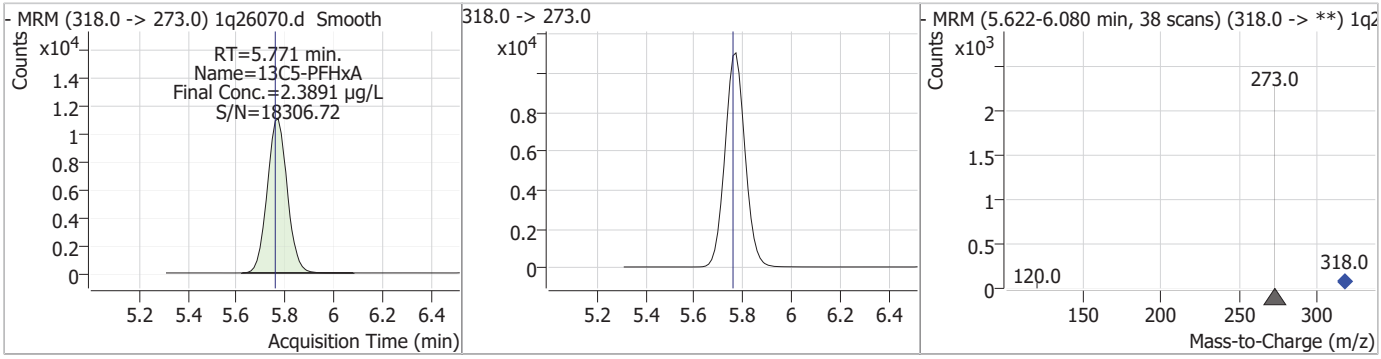


Perfluorinated Compounds by LC/MS/MS

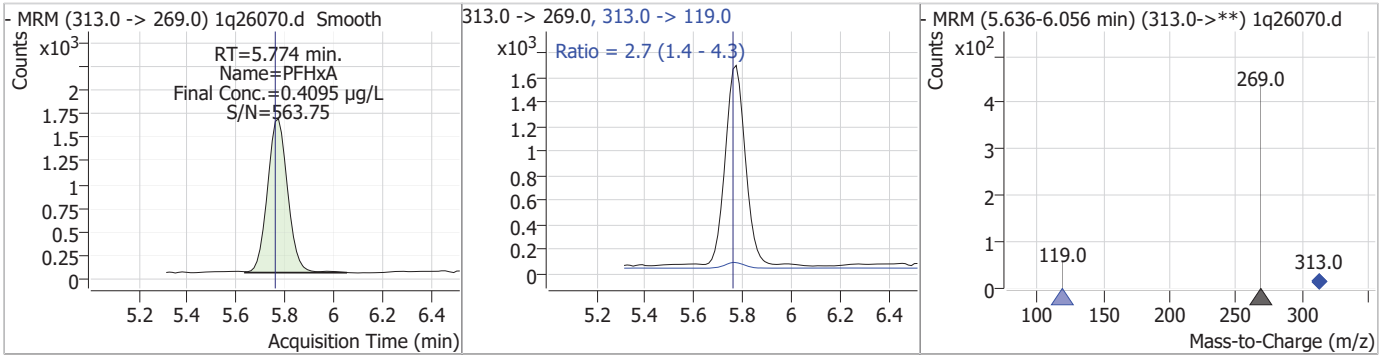
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.34	5.73	0.01	2702	299.0 -> 99.0	41.7	19.4	58.3



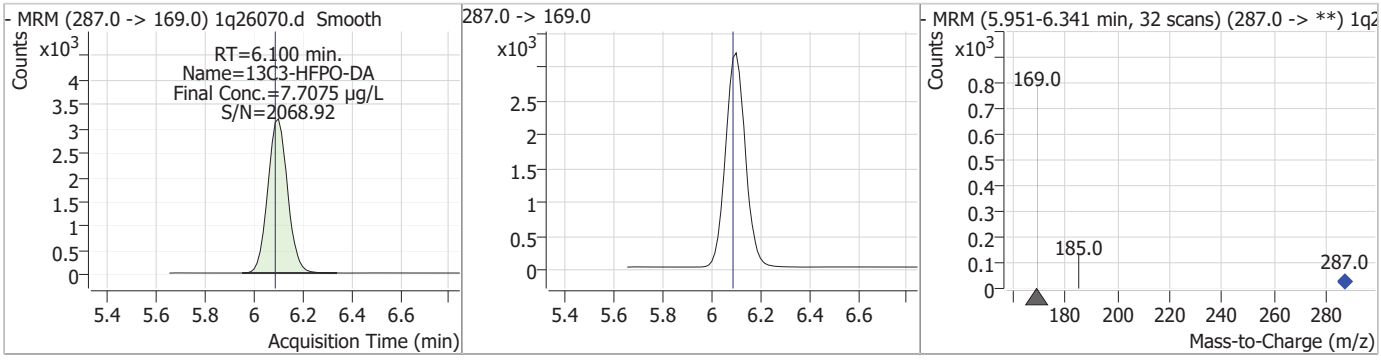
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.39	5.77	0.01	62833				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.41	5.77	0.01	9431	313.0 -> 119.0	2.7	1.4	4.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	7.71	6.10	0.01	17767				

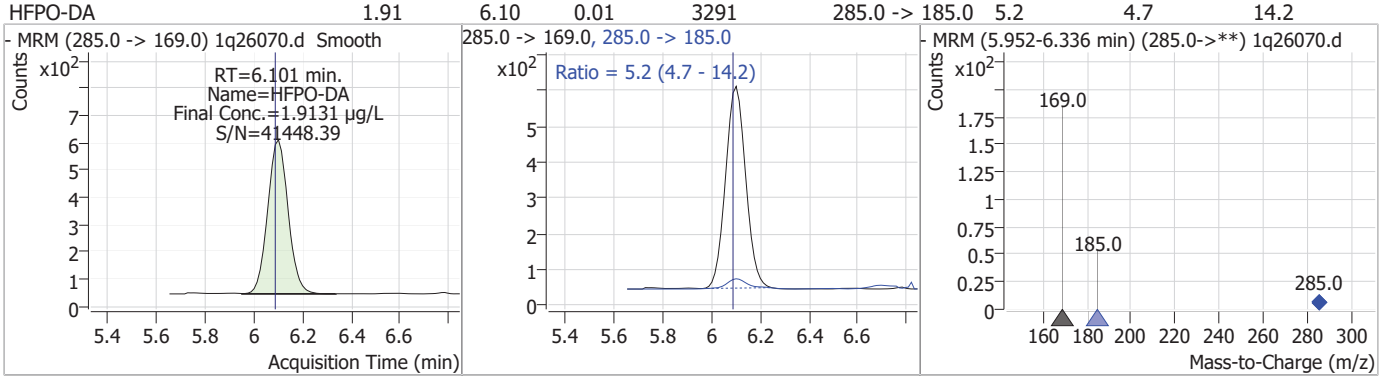


7.3.5

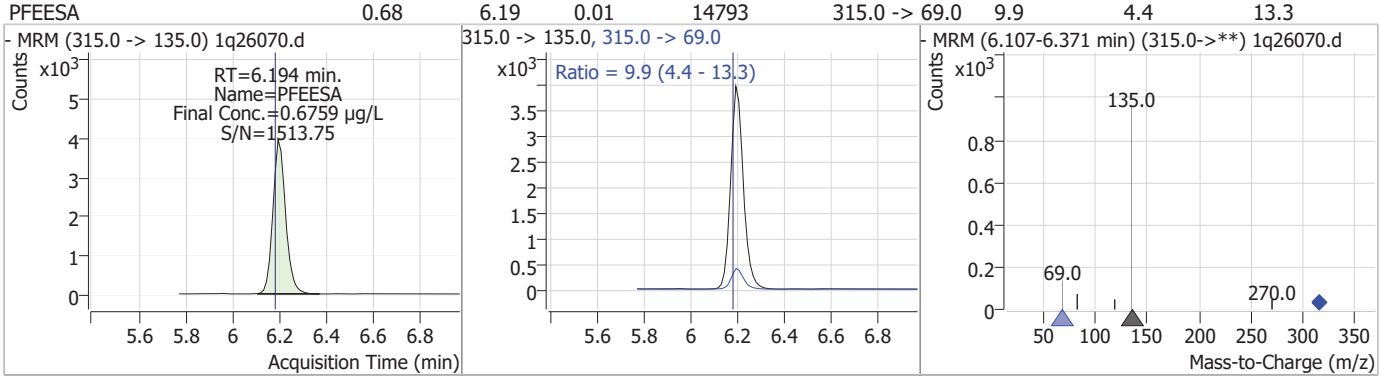
7

Perfluorinated Compounds by LC/MS/MS

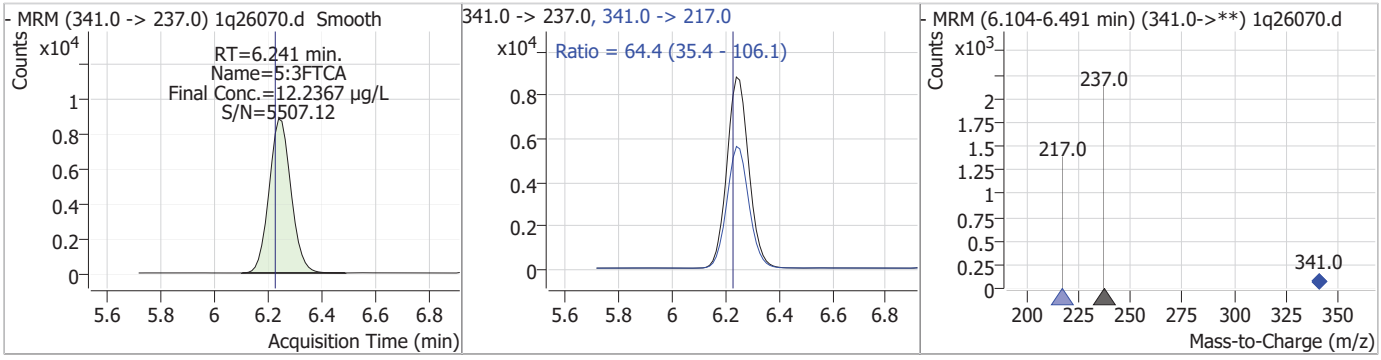
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	1.91	6.10	0.01	3291	285.0 -> 185.0	5.2	4.7	14.2



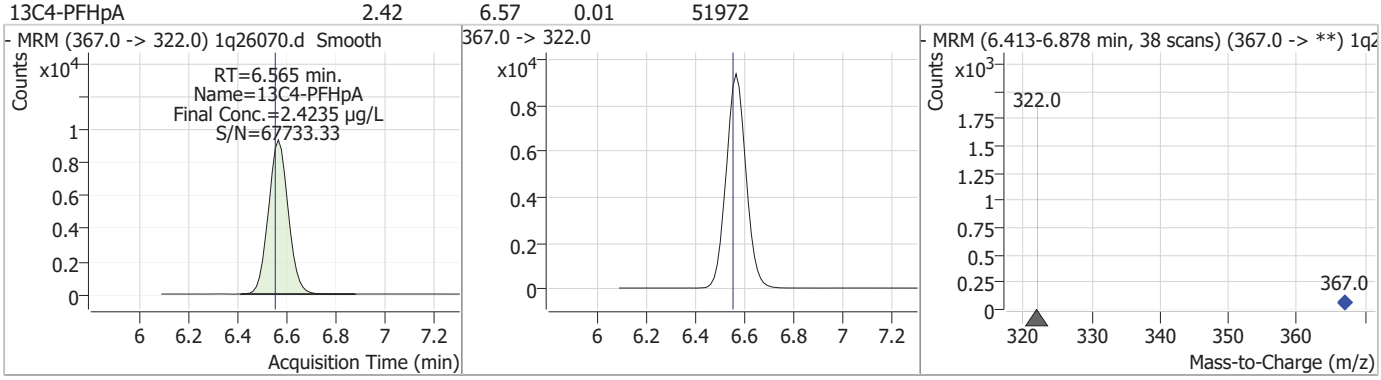
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.68	6.19	0.01	14793	315.0 -> 69.0	9.9	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	12.24	6.24	0.01	49833	341.0 -> 217.0	64.4	35.4	106.1

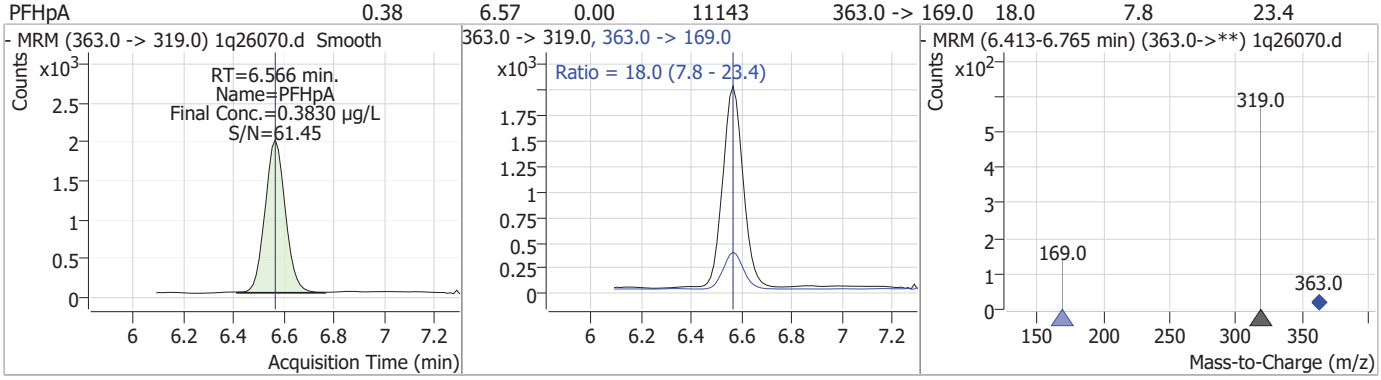


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.42	6.57	0.01	51972				

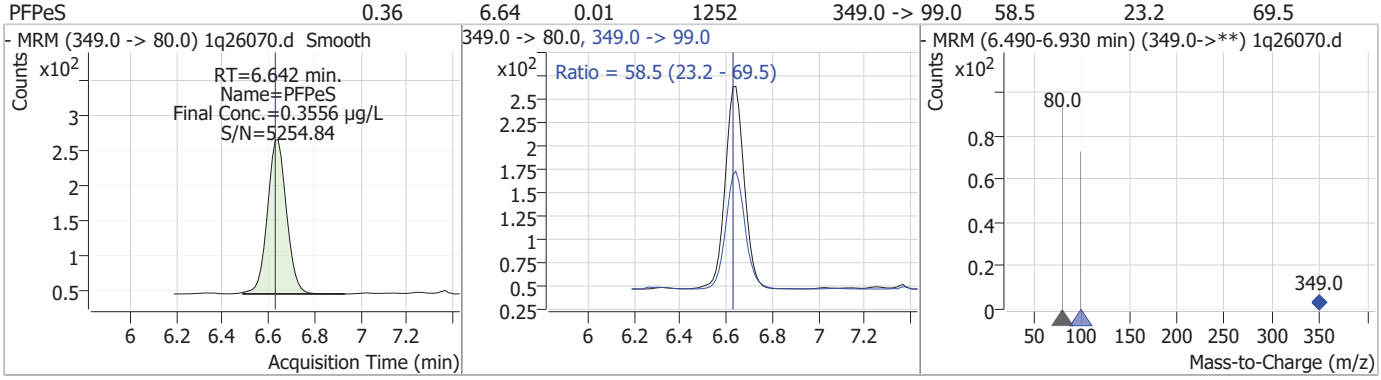


Perfluorinated Compounds by LC/MS/MS

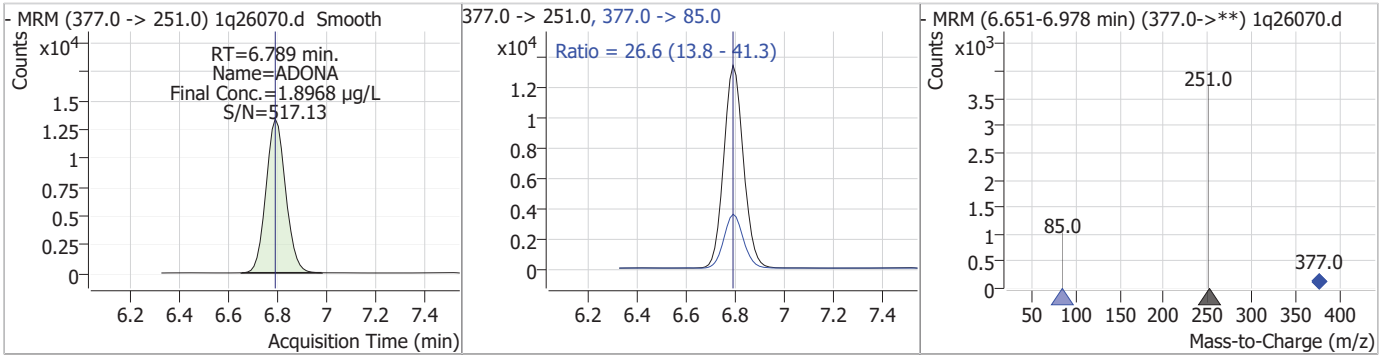
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.38	6.57	0.00	11143	363.0 -> 169.0	18.0	7.8	23.4



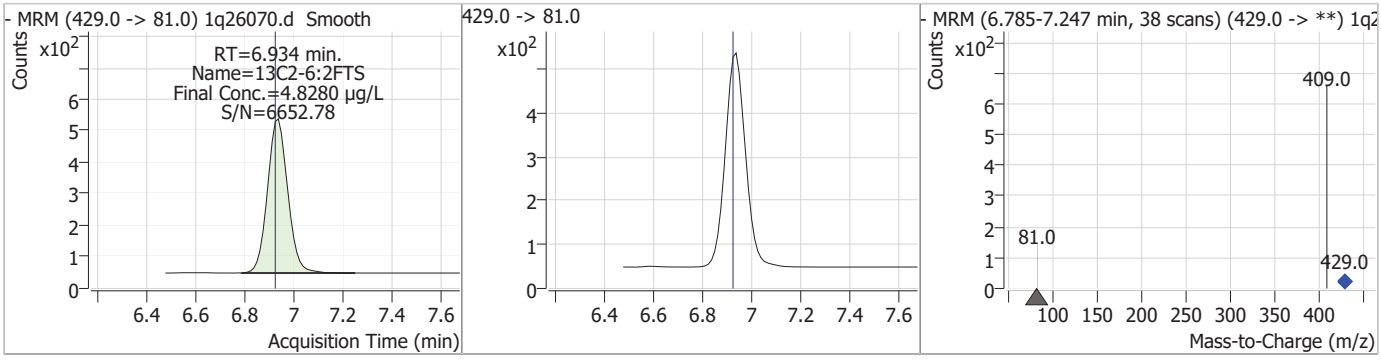
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.36	6.64	0.01	1252	349.0 -> 99.0	58.5	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	1.90	6.79	0.00	74209	377.0 -> 85.0	26.6	13.8	41.3

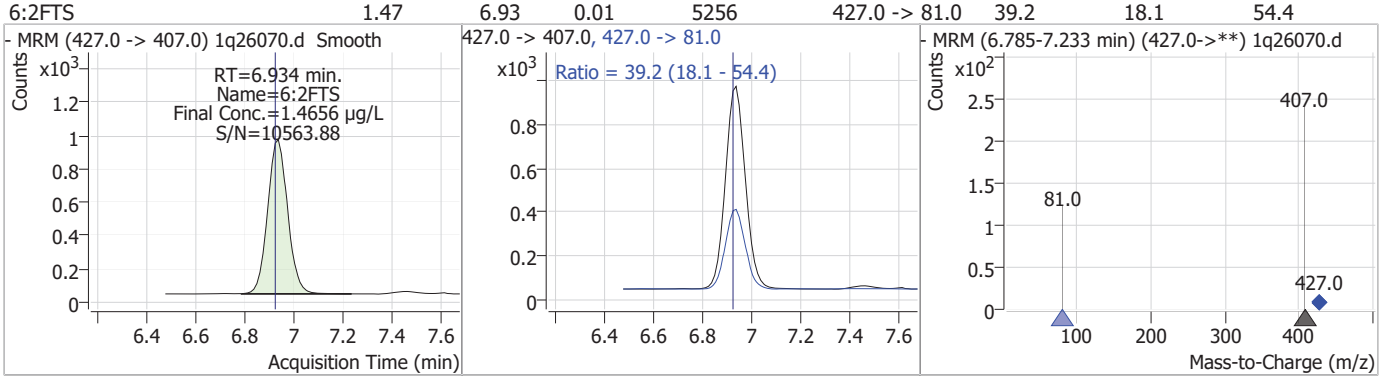


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.83	6.93	0.01	2801				

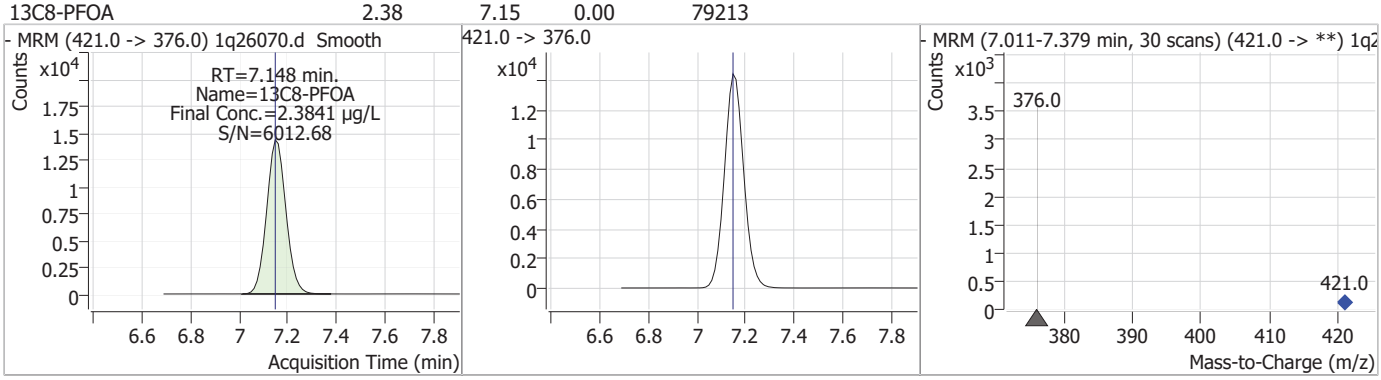


Perfluorinated Compounds by LC/MS/MS

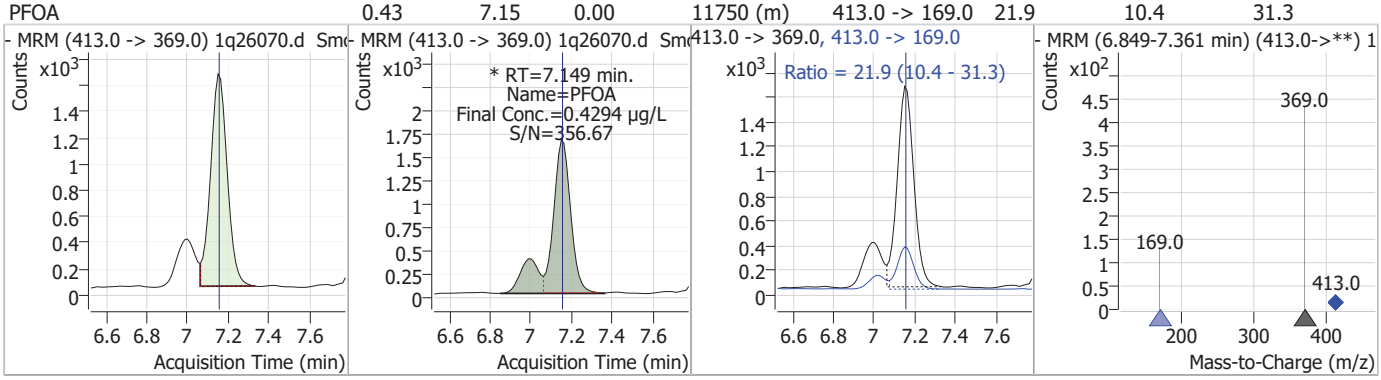
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	1.47	6.93	0.01	5256	427.0 -> 81.0	39.2	18.1	54.4



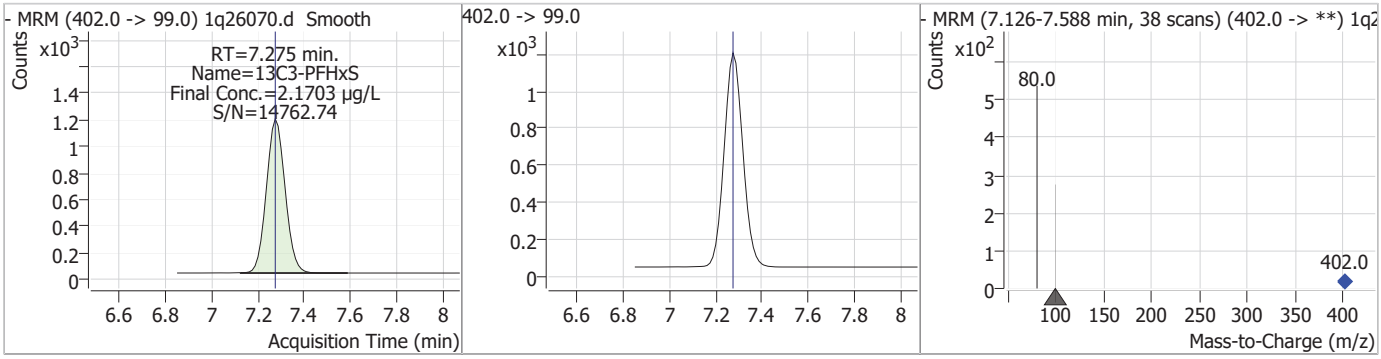
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.38	7.15	0.00	79213				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.43	7.15	0.00	11750 (m)	413.0 -> 169.0	21.9	10.4	31.3

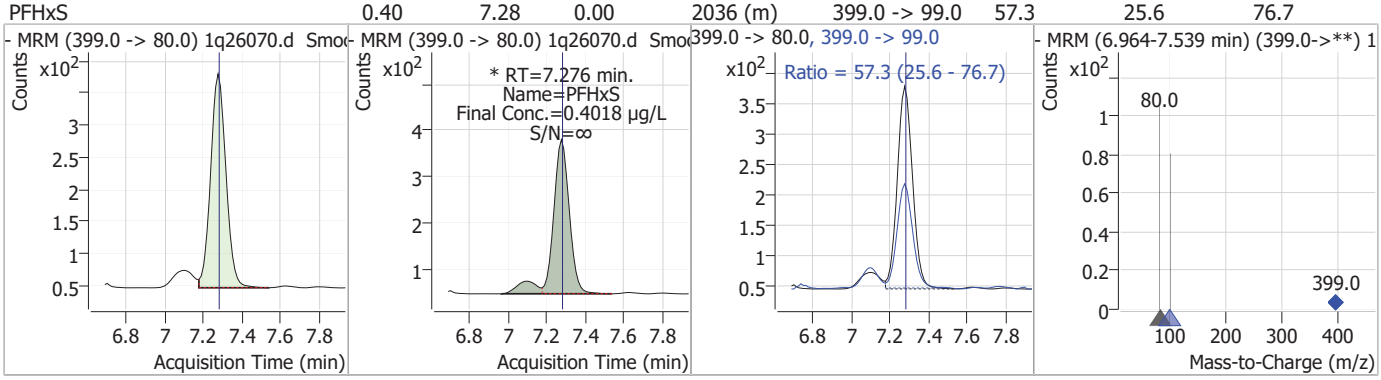


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.17	7.27	0.00	6506				

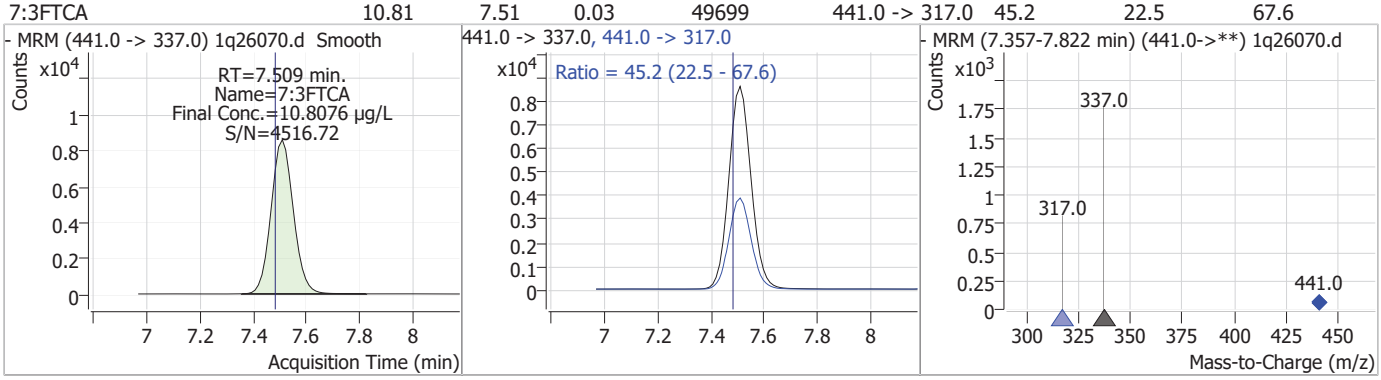


Perfluorinated Compounds by LC/MS/MS

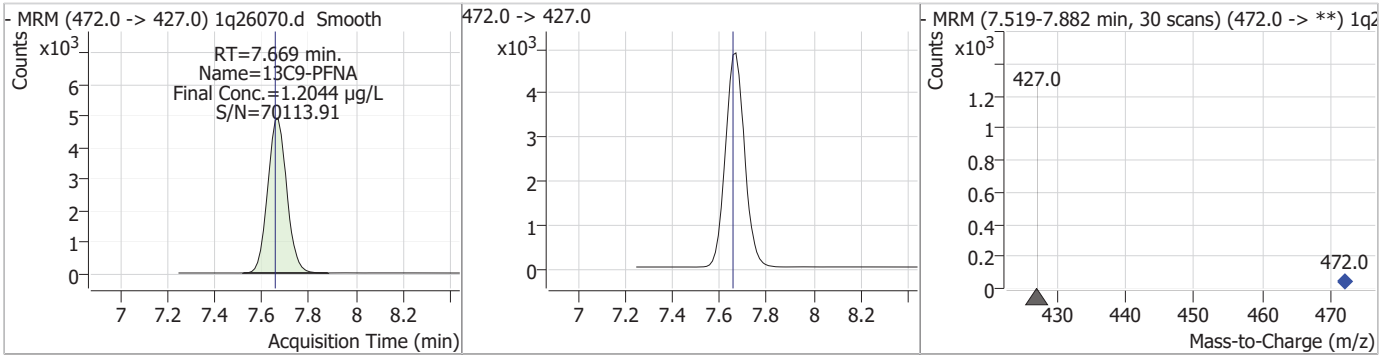
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.40	7.28	0.00	2036 (m)	399.0 -> 99.0	57.3	25.6	76.7



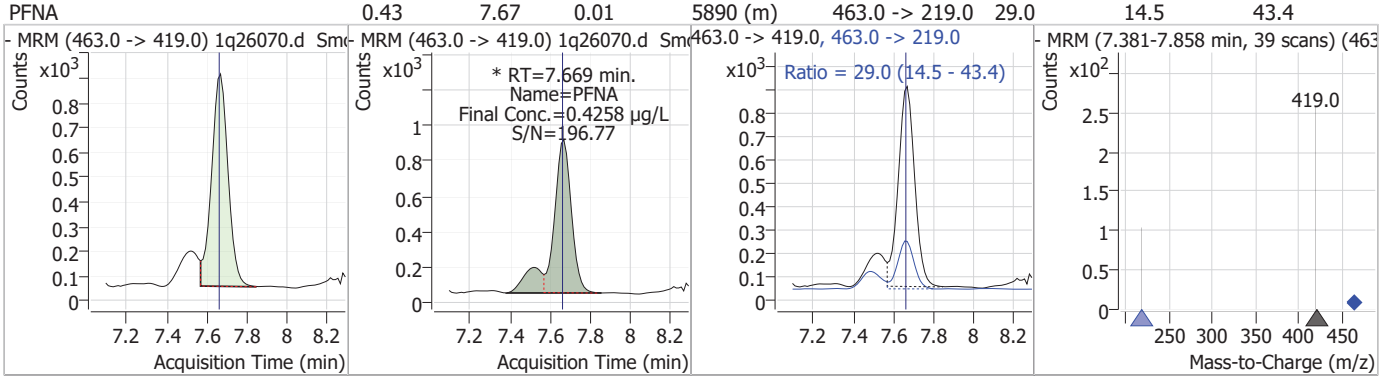
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	10.81	7.51	0.03	49699	441.0 -> 317.0	45.2	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.20	7.67	0.01	27577				

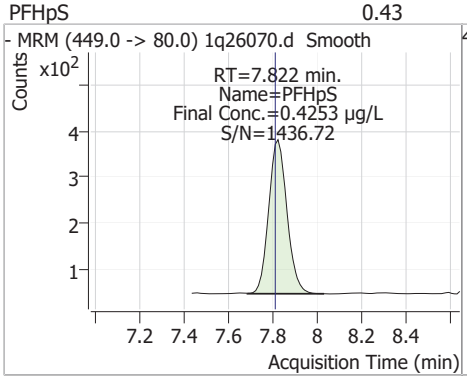


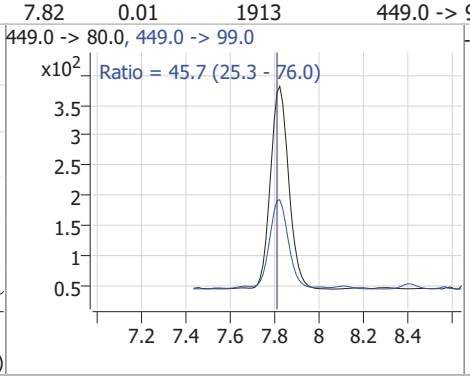
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.43	7.67	0.01	5890 (m)	463.0 -> 219.0	29.0	14.5	43.4

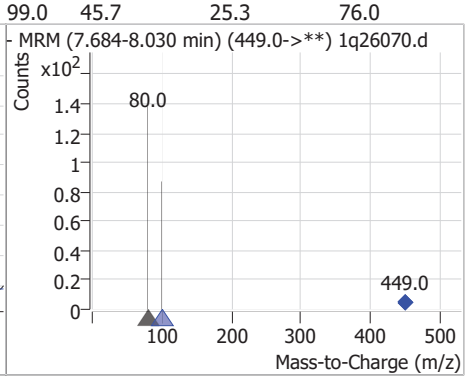


Perfluorinated Compounds by LC/MS/MS

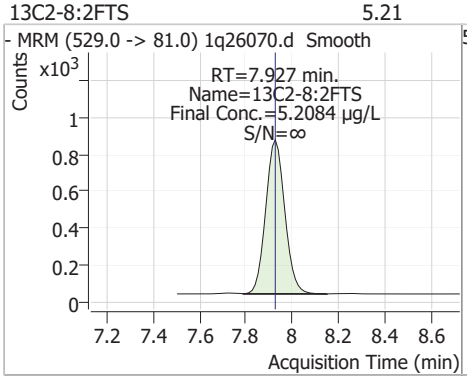
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.43	7.82	0.01	1913	449.0 -> 99.0	45.7	25.3	76.0

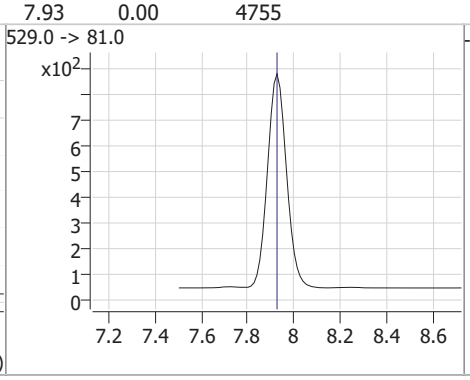


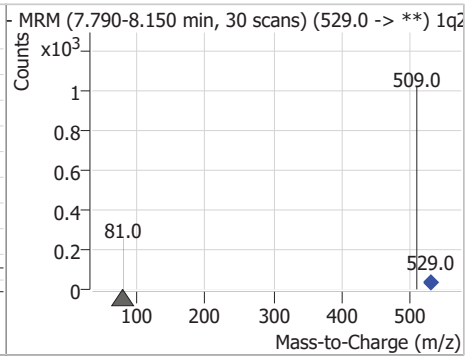




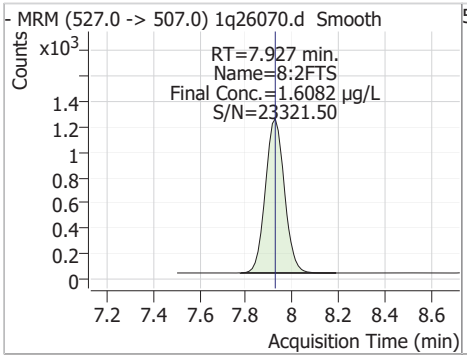
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.21	7.93	0.00	4755				

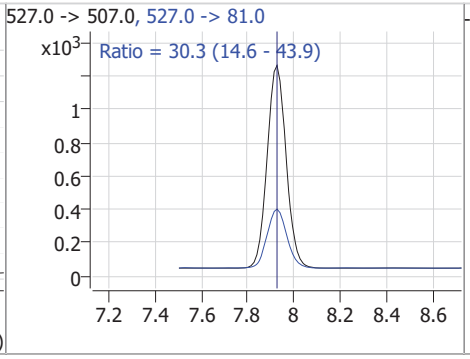


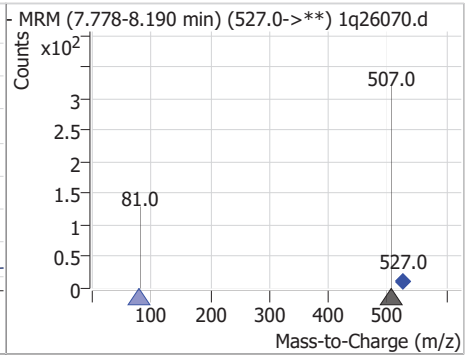




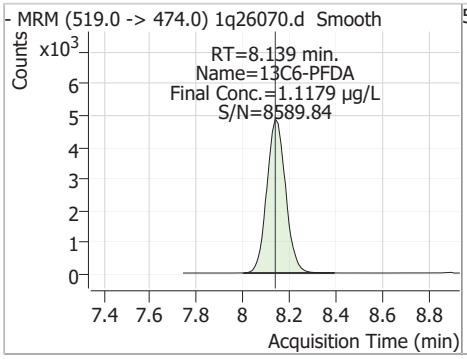
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	1.61	7.93	0.00	6953	527.0 -> 81.0	30.3	14.6	43.9

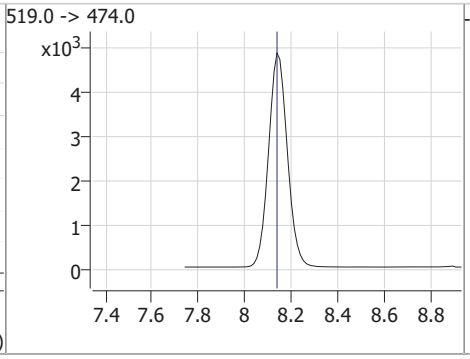


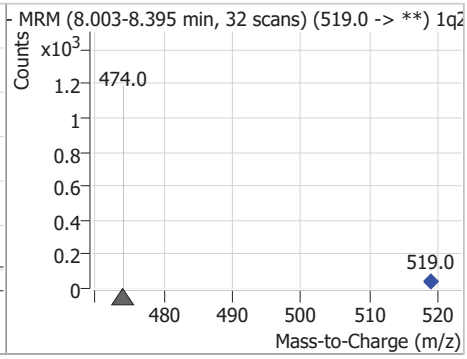




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.12	8.14	0.00	27206				

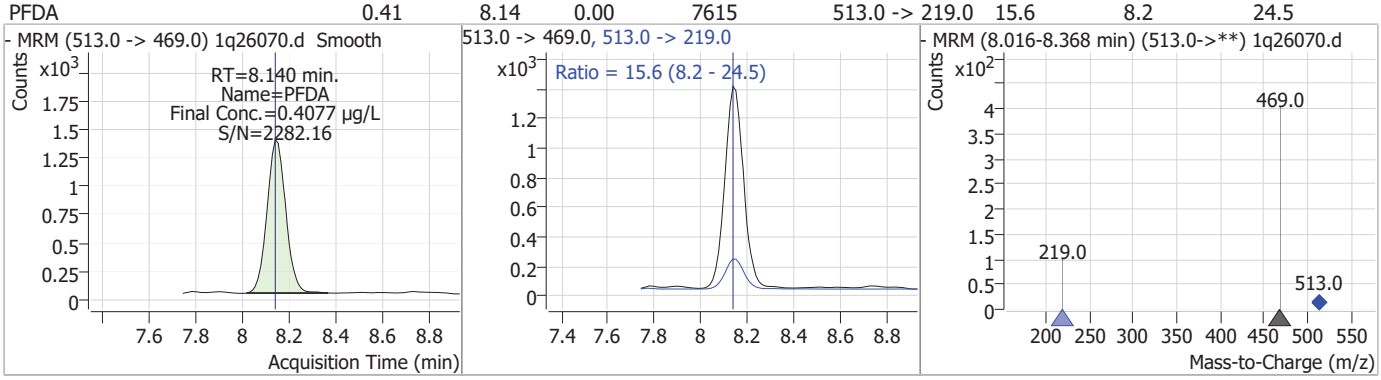




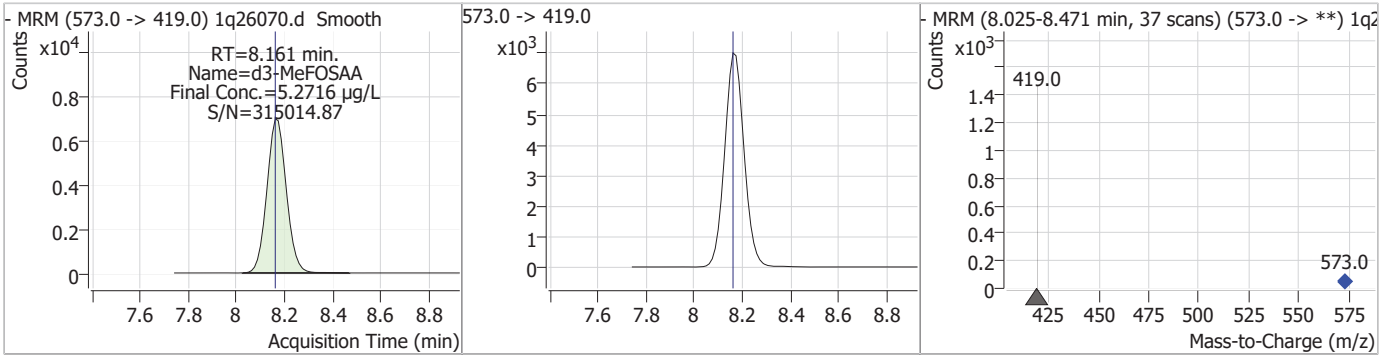


Perfluorinated Compounds by LC/MS/MS

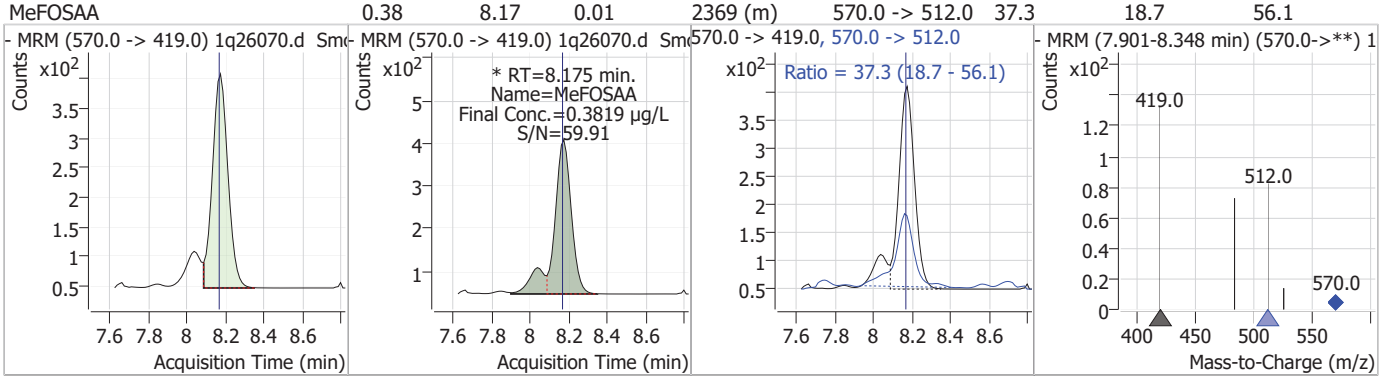
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.41	8.14	0.00	7615	513.0 -> 219.0	15.6	8.2	24.5



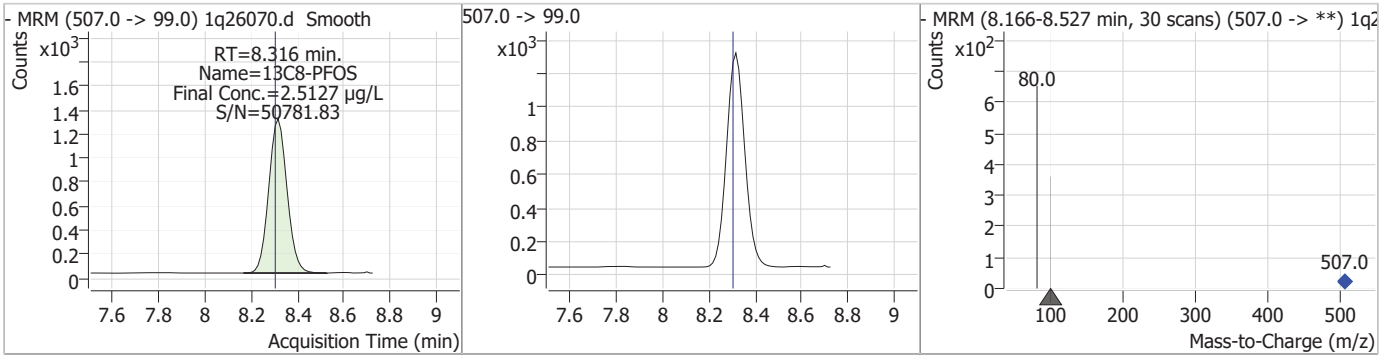
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.27	8.16	0.00	39096				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.38	8.17	0.01	2369 (m)	570.0 -> 512.0	37.3	18.7	56.1

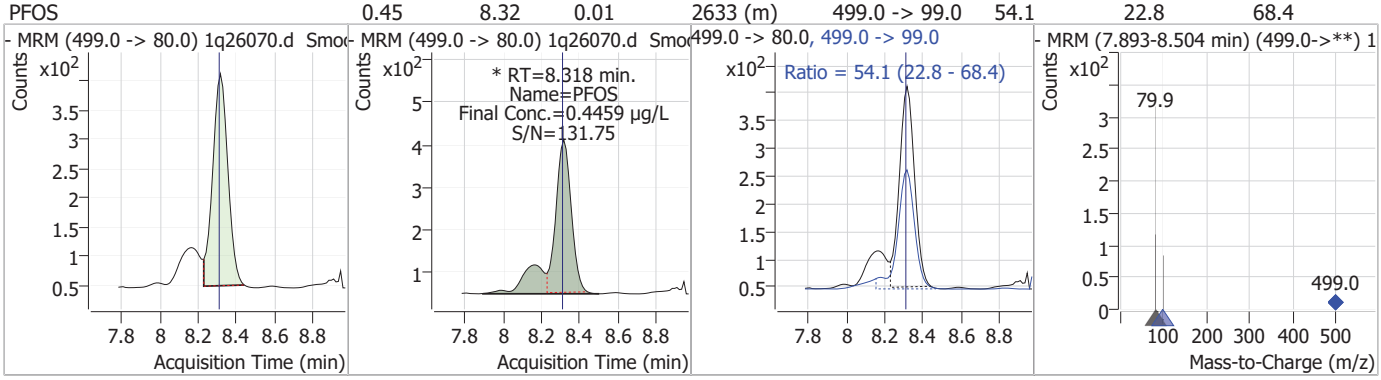


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.51	8.32	0.01	7041				

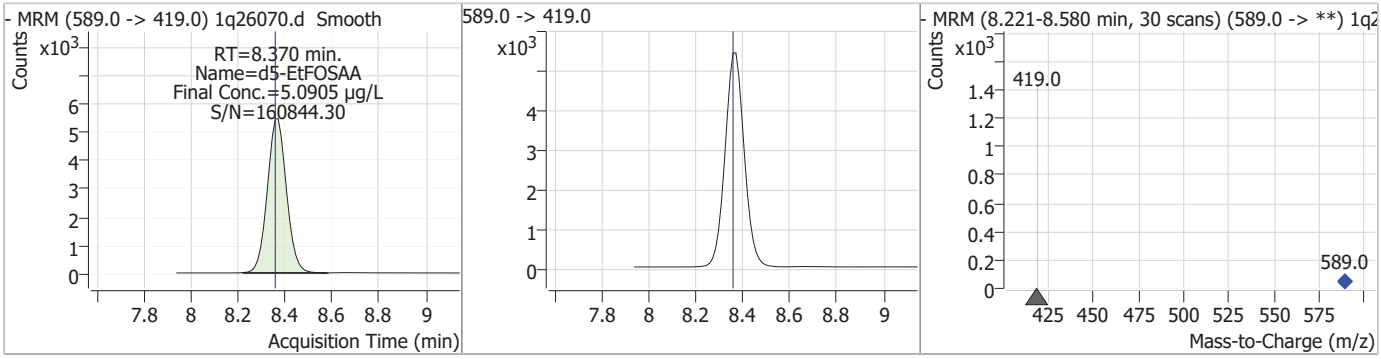


Perfluorinated Compounds by LC/MS/MS

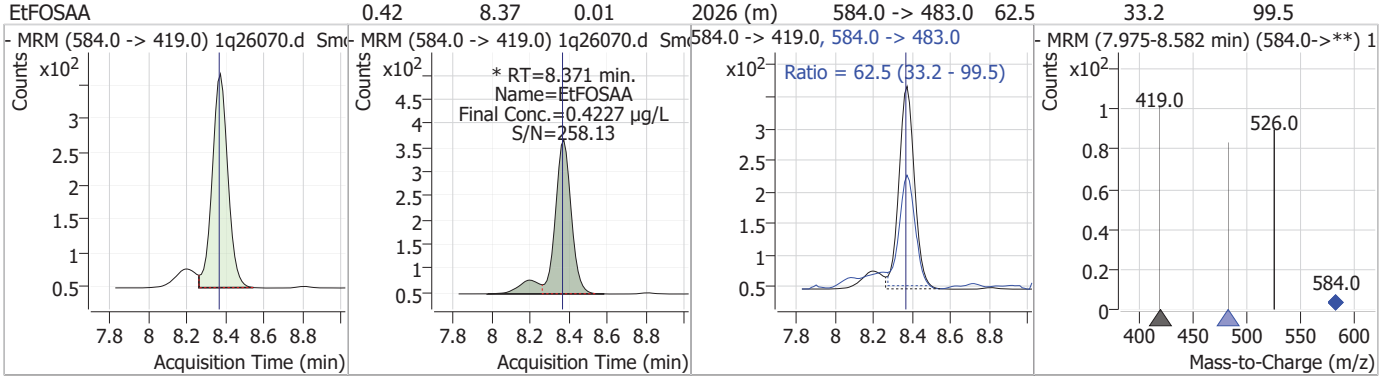
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.45	8.32	0.01	2633 (m)	499.0 -> 99.0	54.1	22.8	68.4



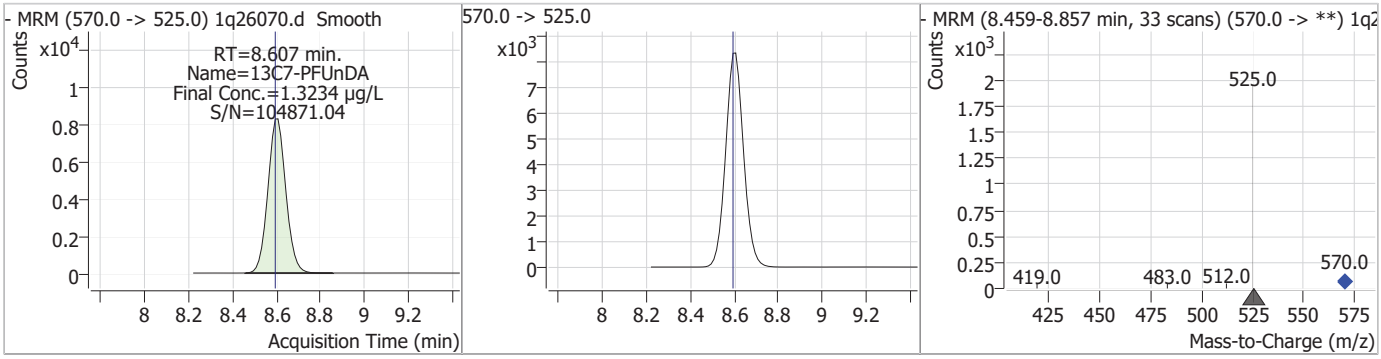
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.09	8.37	0.01	30736				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.42	8.37	0.01	2026 (m)	584.0 -> 483.0	62.5	33.2	99.5

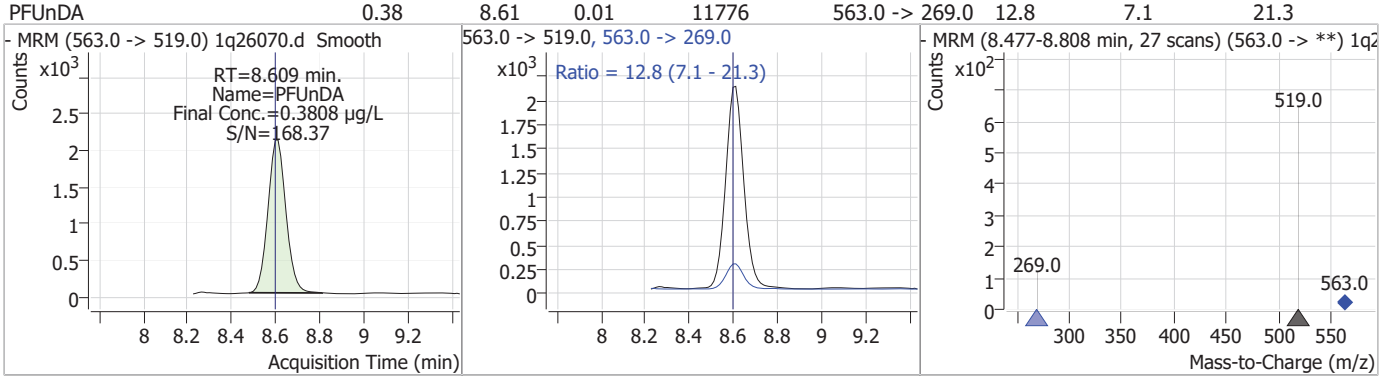


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.32	8.61	0.01	46750				

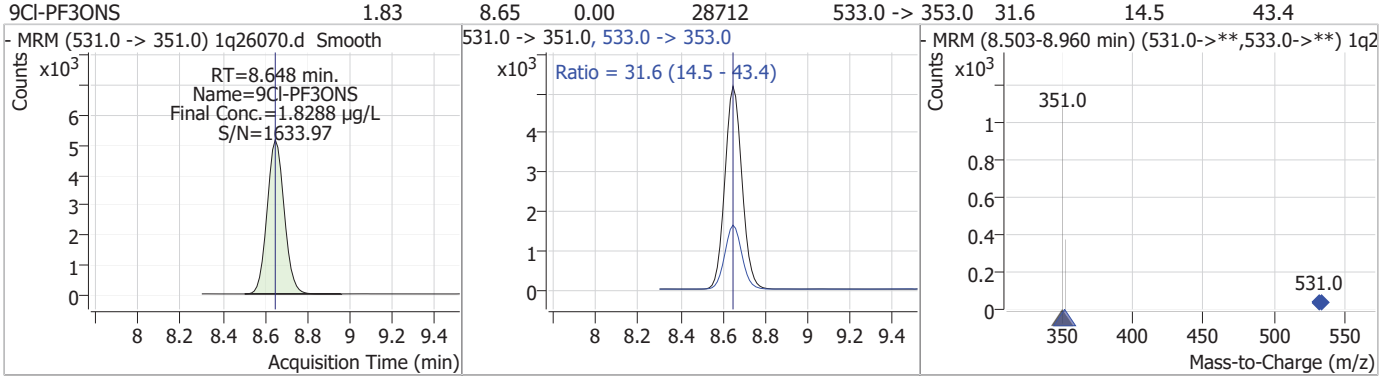


Perfluorinated Compounds by LC/MS/MS

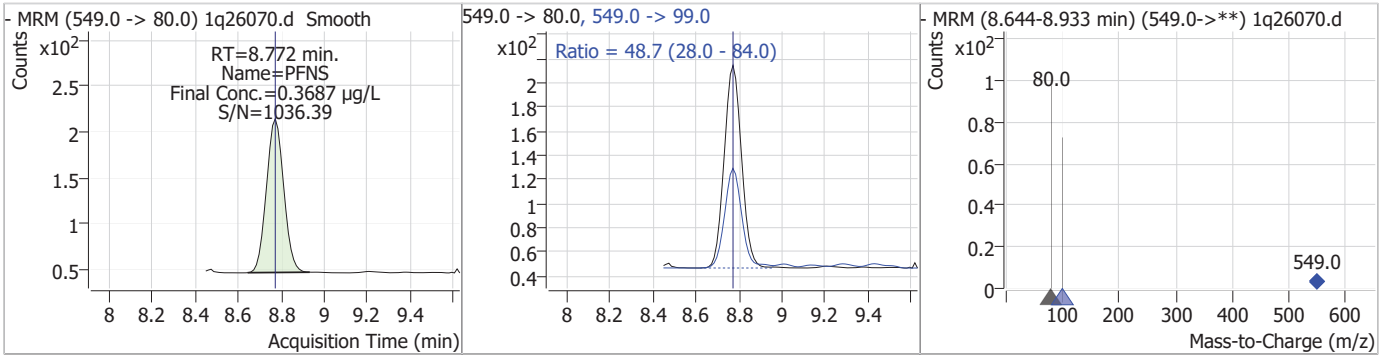
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.38	8.61	0.01	11776	563.0 -> 269.0	12.8	7.1	21.3



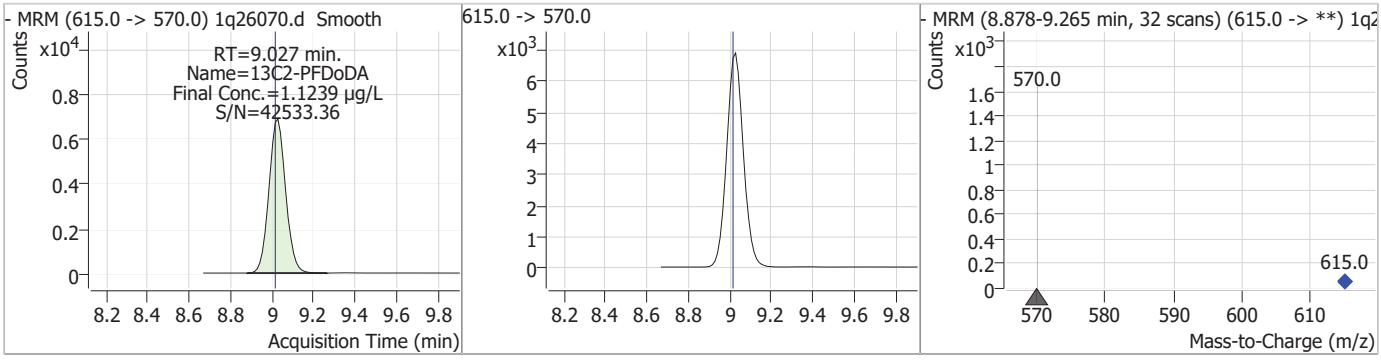
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	1.83	8.65	0.00	28712	533.0 -> 353.0	31.6	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.37	8.77	0.00	935	549.0 -> 99.0	48.7	28.0	84.0

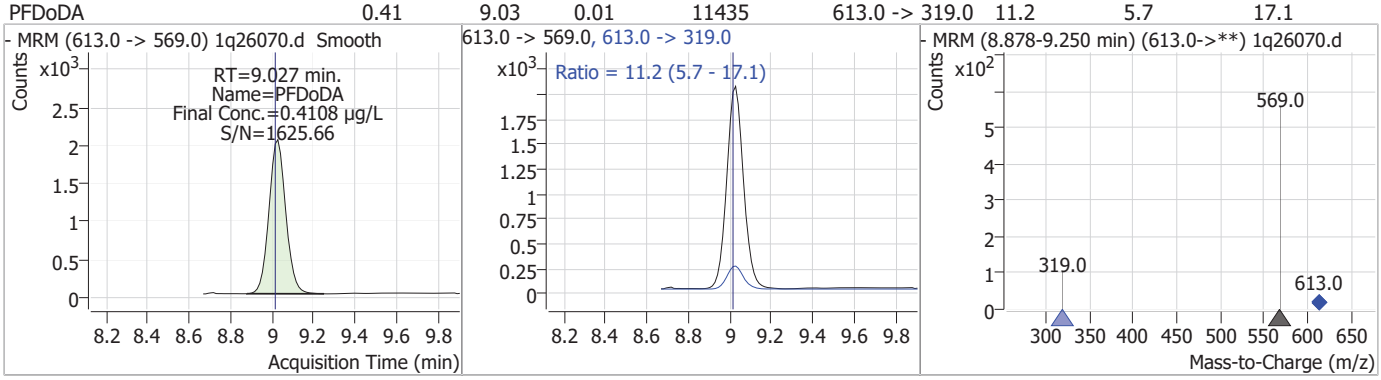


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.12	9.03	0.01	38308				

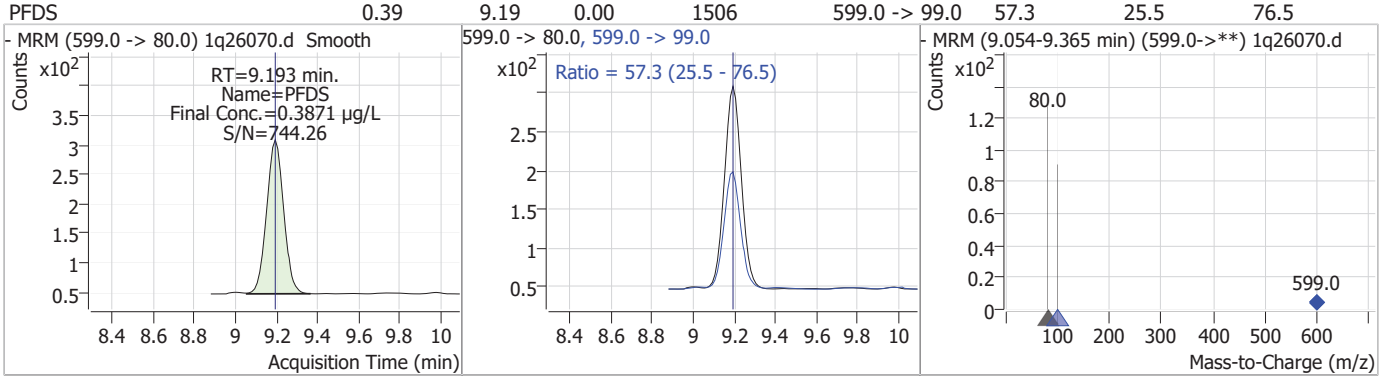


Perfluorinated Compounds by LC/MS/MS

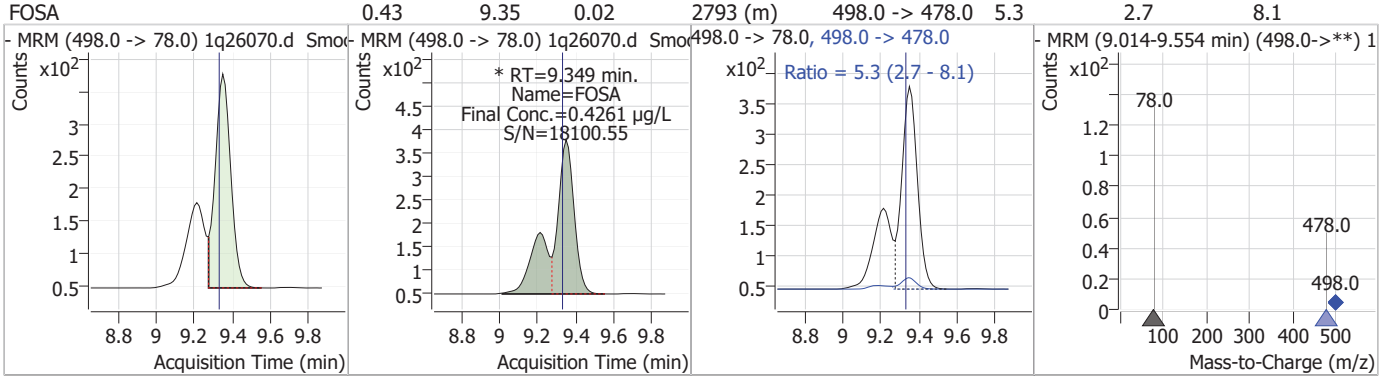
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.41	9.03	0.01	11435	613.0 -> 319.0	11.2	5.7	17.1



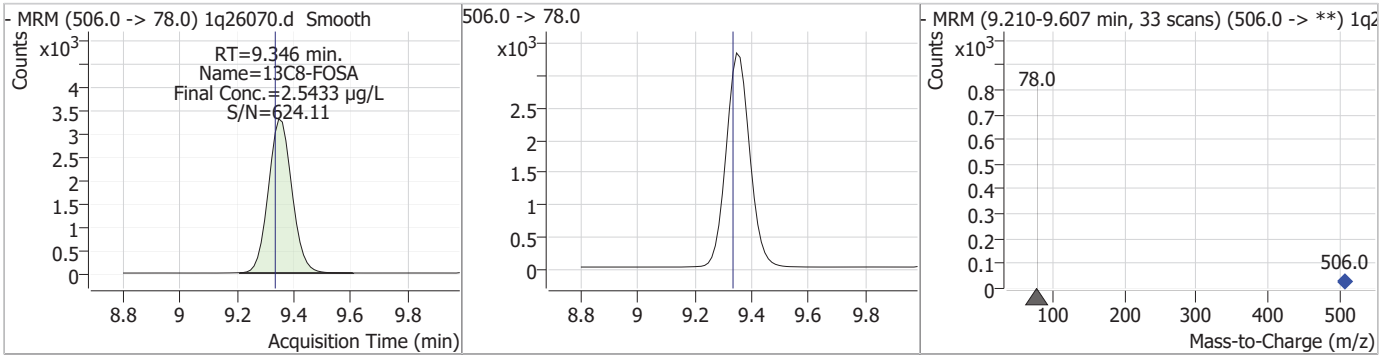
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.39	9.19	0.00	1506	599.0 -> 99.0	57.3	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.43	9.35	0.02	2793 (m)	498.0 -> 478.0	5.3	2.7	8.1

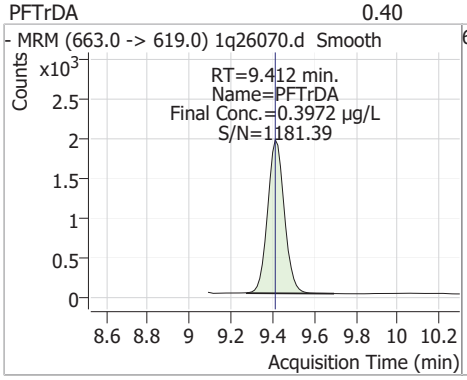


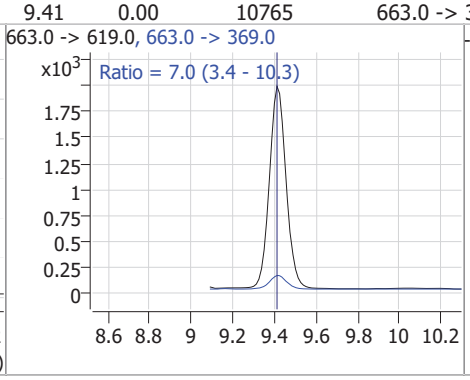
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.54	9.35	0.01	18913				

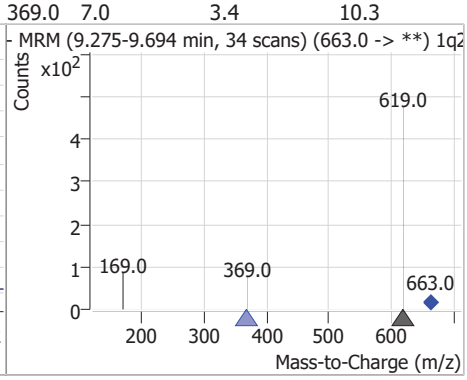


Perfluorinated Compounds by LC/MS/MS

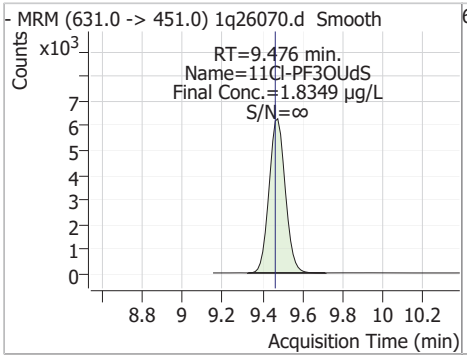
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.40	9.41	0.00	10765	663.0 -> 369.0	7.0	3.4	10.3

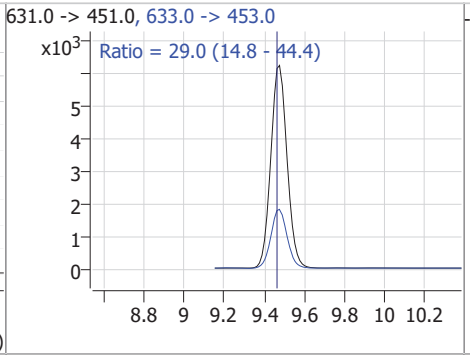


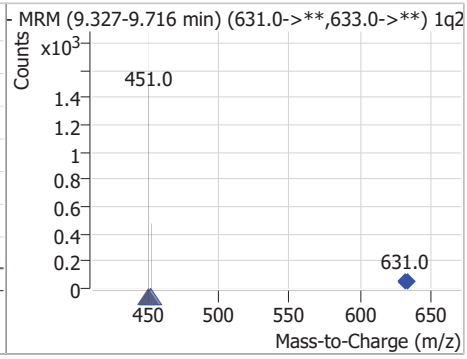




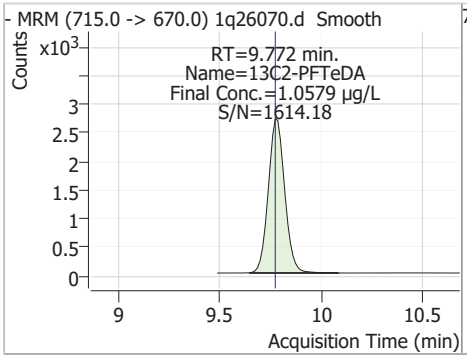
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	1.83	9.48	0.01	35146	633.0 -> 453.0	29.0	14.8	44.4

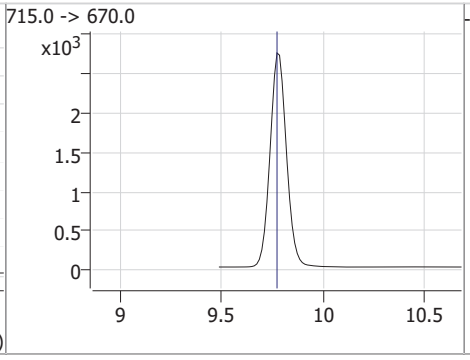


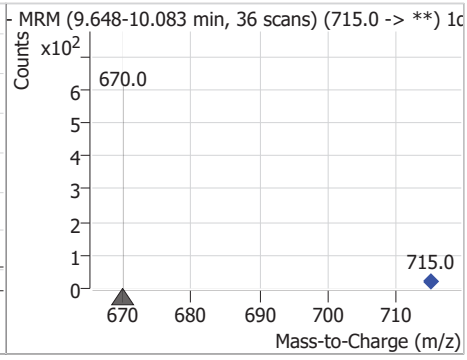




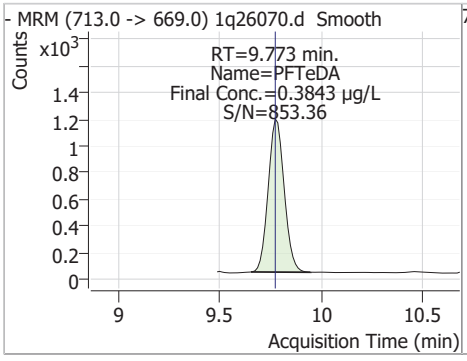
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.06	9.77	0.00	15172				

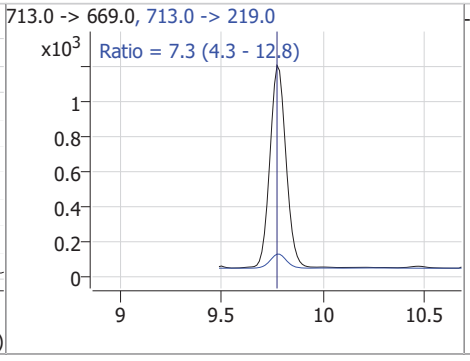


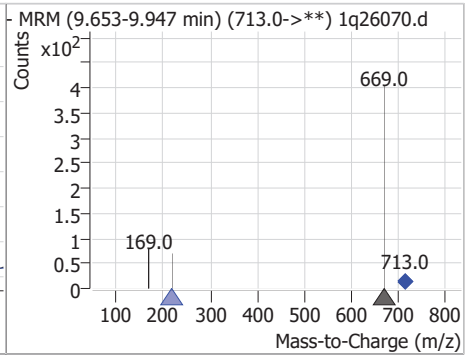




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.38	9.77	0.00	6279	713.0 -> 219.0	7.3	4.3	12.8

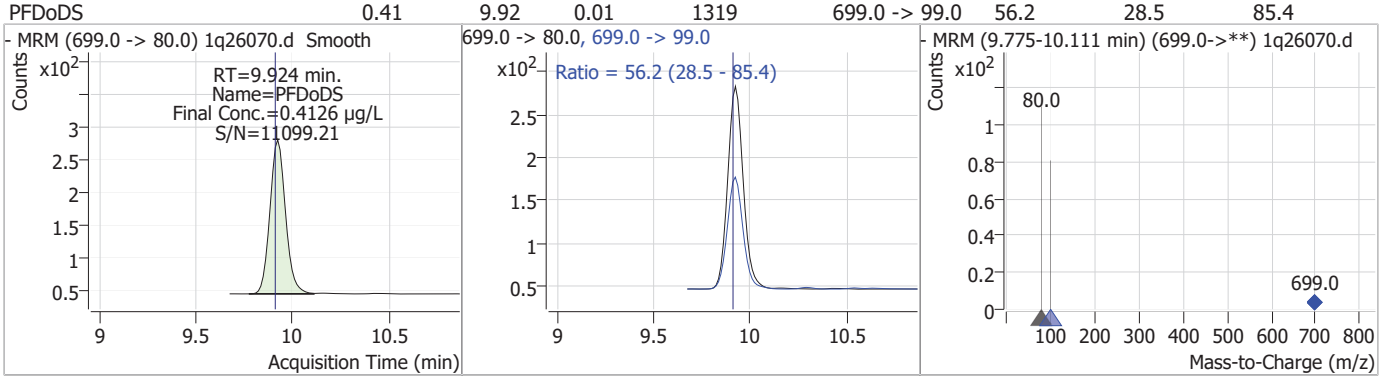




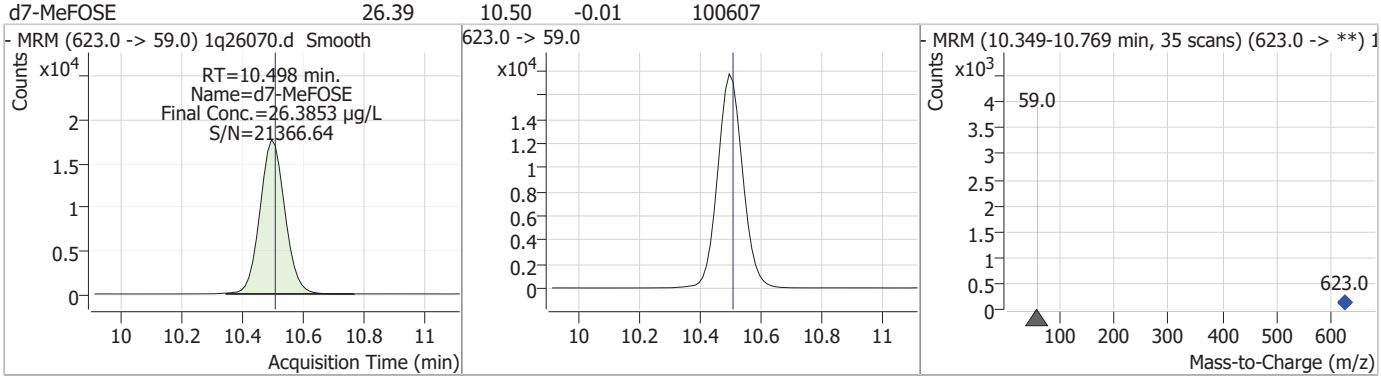


Perfluorinated Compounds by LC/MS/MS

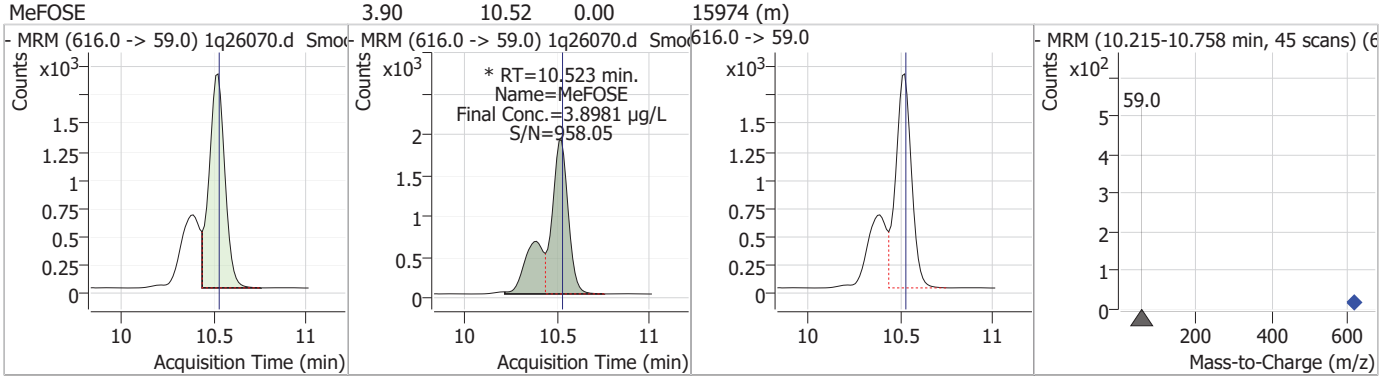
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.41	9.92	0.01	1319	699.0 -> 99.0	56.2	28.5	85.4



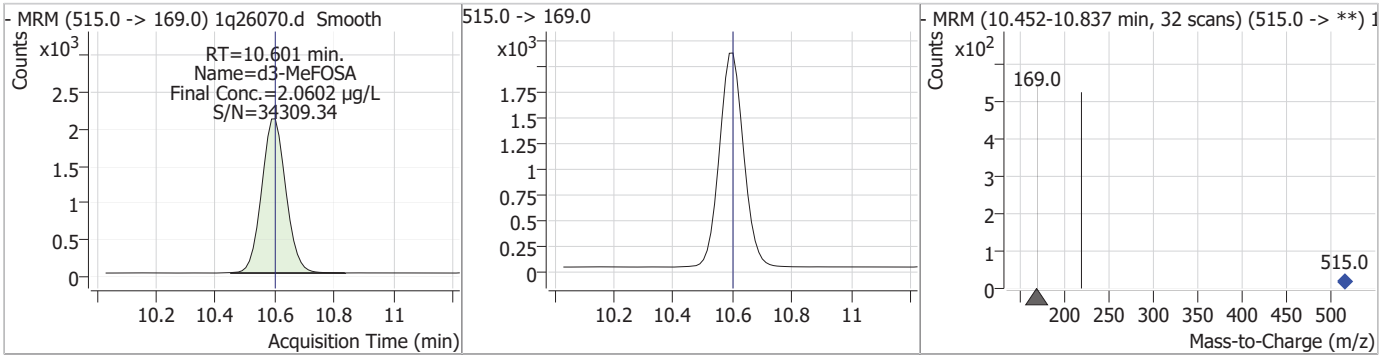
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	26.39	10.50	-0.01	100607				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	3.90	10.52	0.00	15974 (m)				

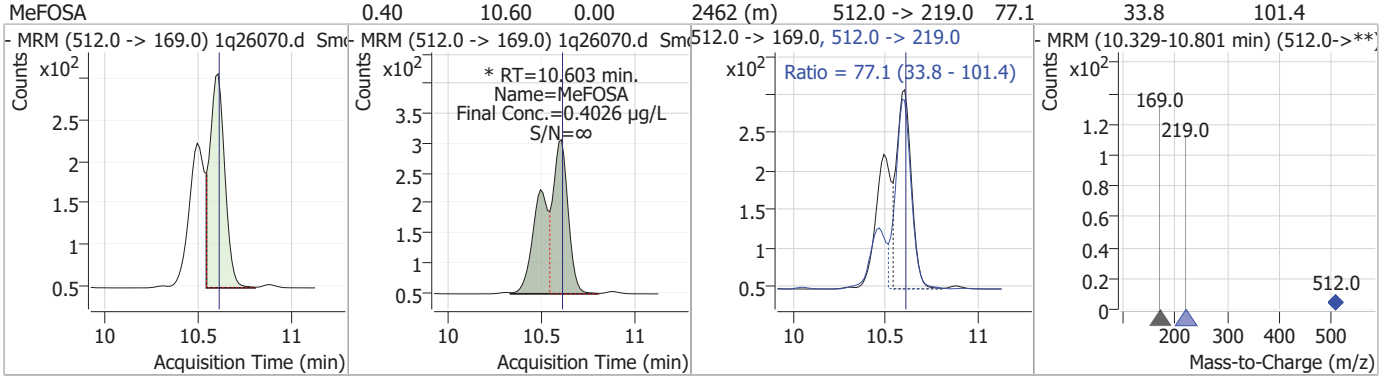


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.06	10.60	0.00	11875				

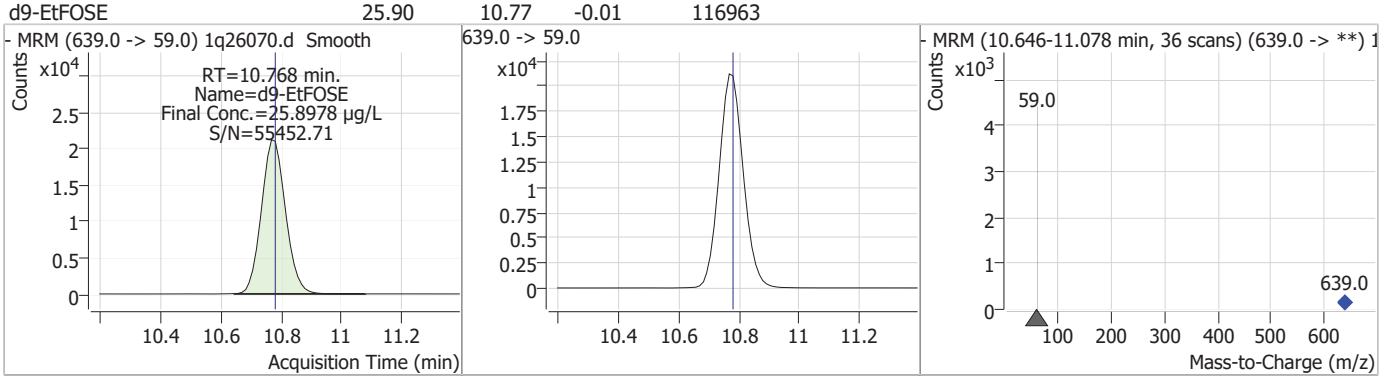


Perfluorinated Compounds by LC/MS/MS

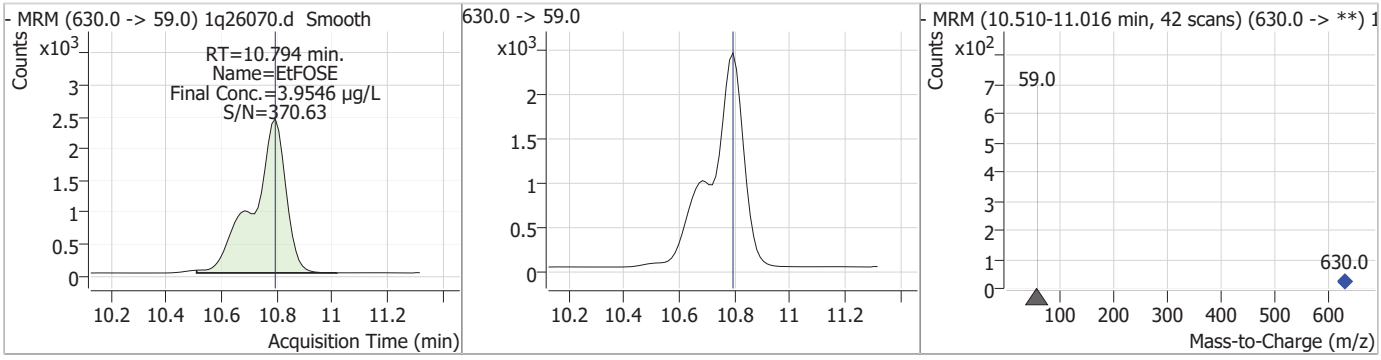
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.40	10.60	0.00	2462 (m)	512.0 -> 219.0	77.1	33.8	101.4



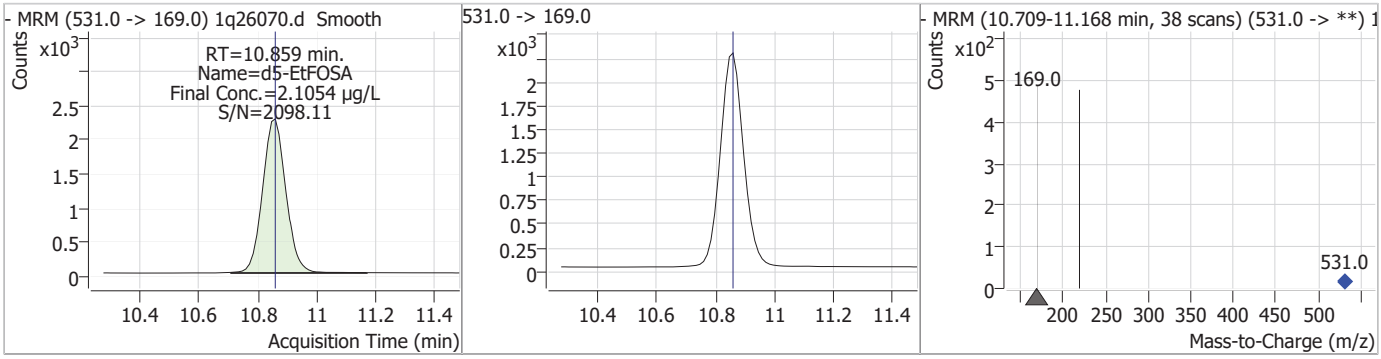
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.90	10.77	-0.01	116963				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	3.95	10.79	0.00	20154				

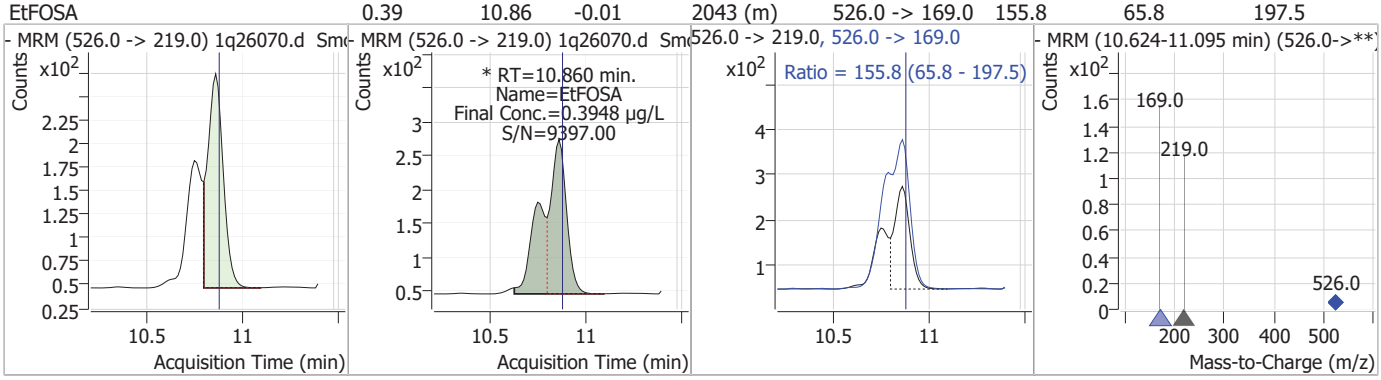


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.11	10.86	0.00	12400				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.39	10.86	-0.01	2043 (m)	526.0 -> 169.0	155.8	65.8	197.5



7.3.5

7

Manual Integration Approval Summary

Sample Number: OP63534-LLBS
Lab FileID: 1Q26070.D
Injection Time: 05/15/25 13:40
Method: EPA 1633
Analyst approved: 05/16/25 02:49 Alodia Hana Barrogo
Supervisor approved: 05/16/25 06:10 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.67	Split peak
MeFOSAA	2355-31-9		8.18	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Split peak
PFOSA	754-91-6		9.35	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSA	4151-50-2		10.86	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/16/25 06:10

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26071.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/15/2025 1:55:18 PM
Sample Name : op63534-bs
Vial : P1-D4
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : T1Q362.batch.bin
Sample Information : OP63534,T1Q362,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.273	217.0 -> 172.0	195980	10.00 µg/L	0.012
M5-PFPeA	4.648	268.0 -> 223.0	117723	5.00 µg/L	0.000
M5-PFHxA	5.759	318.0 -> 273.0	66125	2.50 µg/L	0.000
M4-PFHpA	6.565	367.0 -> 322.0	51270	2.50 µg/L	0.012
M8-PFOA	7.148	421.0 -> 376.0	83174	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	29528	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	29749	1.25 µg/L	0.000
M7-PFUnDA	8.607	570.0 -> 525.0	47826	1.25 µg/L	0.012
M2-PFDoDA	9.027	615.0 -> 570.0	40880	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	15744	1.25 µg/L	0.000
M8-FOSA	9.346	506.0 -> 78.0	21325	2.50 µg/L	0.012
M3-PFBS	5.724	302.0 -> 99.0	7458	2.50 µg/L	0.013
M3-PFHxS	7.275	402.0 -> 99.0	7010	2.50 µg/L	0.000
M8-PFOS	8.316	507.0 -> 99.0	7254	2.50 µg/L	0.012
M2-4:2FTS	5.446	329.0 -> 81.0	1638	5.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	2969	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	4572	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	43129	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	19222	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	32647	5.00 µg/L	0.000
M7-MeFOSE	10.498	623.0 -> 59.0	105740	25.00 µg/L	-0.012
M9-EtFOSE	10.768	639.0 -> 59.0	120180	25.00 µg/L	-0.012
M5-EtFOSA	10.859	531.0 -> 169.0	13208	2.50 µg/L	0.000
M3-MeFOSA	10.589	515.0 -> 169.0	12532	2.50 µg/L	-0.012
13C4-PFOS	8.317	503.0 -> 80.0	13611	2.50 µg/L	0.012
13C3-PFBA	3.276	216.0 -> 172.0	85431	5.00 µg/L	0.025
18O2-PFHxS	7.274	403.0 -> 84.0	8419	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	91399	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	25371	1.25 µg/L	0.000
13C5-PFNA	7.669	468.0 -> 423.0	30866	1.25 µg/L	0.012
13C2-PFHxA	5.760	315.0 -> 270.0	63431	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1638	5.83 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 116.5%	
13C2-6:2FTS	6.922	429.0 -> 81.0	2969	5.45 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 109.0%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4572	5.33 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.6%	
13C2-PFDoDA	9.027	615.0 -> 570.0	40880	1.19 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.0%	
13C2-PFTeDA	9.772	715.0 -> 670.0	15744	1.09 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.0%	
13C3-PFBS	5.724	302.0 -> 99.0	7458	2.65 µg/L	0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.2%	
13C3-PFHxS	7.275	402.0 -> 99.0	7010	2.49 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.6%		
13C4-PFBA	3.273	217.0 -> 172.0	195980	9.65 µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 96.5%		
13C4-PFHpA	6.565	367.0 -> 322.0	51270	2.33 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.2%		
13C5-PFHxA	5.759	318.0 -> 273.0	66125	2.45 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.0%		
13C5-PFPeA	4.648	268.0 -> 223.0	117723	5.06 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.2%		
13C6-PFDA	8.139	519.0 -> 474.0	29749	1.21 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.8%		
13C7-PFUnDA	8.607	570.0 -> 525.0	47826	1.34 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 107.2%		
13C8-FOSA	9.346	506.0 -> 78.0	21325	2.57 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.6%		
13C8-PFOA	7.148	421.0 -> 376.0	83174	2.50 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.0%		
13C8-PFOS	8.316	507.0 -> 99.0	7254	2.32 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.7%		
13C9-PFNA	7.656	472.0 -> 427.0	29528	1.17 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.8%		
d3-MeFOSAA	8.161	573.0 -> 419.0	43129	5.20 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.1%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	19222	8.13 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 81.3%		
d3-MeFOSA	10.589	515.0 -> 169.0	12532	1.95 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 77.8%		
d5-EtFOSAA	8.358	589.0 -> 419.0	32647	4.84 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.8%		
d7-MeFOSE	10.498	623.0 -> 59.0	105740	24.81 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 99.3%		
d9-EtFOSE	10.768	639.0 -> 59.0	120180	23.81 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 95.2%		
d5-EtFOSA	10.859	531.0 -> 169.0	13208	2.01 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 80.3%		
Target Compounds						QValue
4:2FTS	5.447	327.0 -> 307.0	29364	9.62 µg/L		97
		327.0 -> 81.0	13135			
6:2FTS	6.922	427.0 -> 407.0	39946	10.51 µg/L		100
		427.0 -> 81.0	14401			
8:2FTS	7.927	527.0 -> 507.0	47378	11.40 µg/L		94
		527.0 -> 81.0	15301			
EtFOSAA	8.371	584.0 -> 419.0	14455	2.84 µg/L	m	86
		584.0 -> 483.0	8004			
FOSA	9.349	498.0 -> 78.0	18172	2.46 µg/L	m	99
		498.0 -> 478.0	920			
MeFOSAA	8.162	570.0 -> 419.0	17841	2.61 µg/L	m	96
		570.0 -> 512.0	7118			
PFBA	3.279	213.0 -> 169.0	55121	10.06 µg/L		100
PFBS	5.726	299.0 -> 80.0	20522	2.38 µg/L		98
		299.0 -> 99.0	7728			
PFDA	8.140	513.0 -> 469.0	52044	2.55 µg/L		98
		513.0 -> 219.0	8852			
PFDoDA	9.027	613.0 -> 569.0	80086	2.70 µg/L		100
		613.0 -> 319.0	9111			
PFDS	9.193	599.0 -> 80.0	9465	2.38 µg/L		98

Perfluorinated Compounds by LC/MS/MS

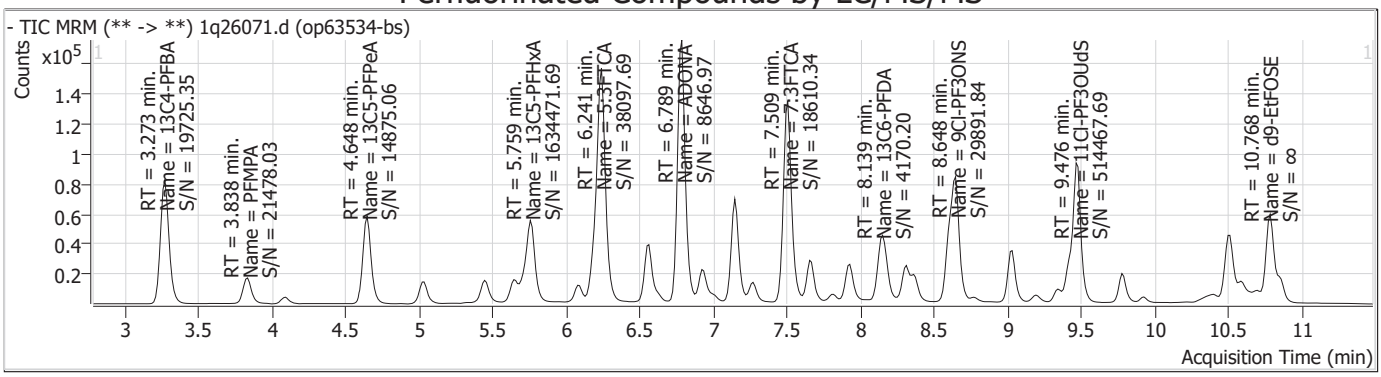
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	4678				
PFHpA	6.566	363.0 -> 319.0	80194	2.79	µg/L		97
		363.0 -> 169.0	13607				
PFHpS	7.822	449.0 -> 80.0	11849	2.44	µg/L		93
		449.0 -> 99.0	6572				
PFHxA	5.761	313.0 -> 269.0	64711	2.67	µg/L		100
		313.0 -> 119.0	1789				
PFHxS	7.276	399.0 -> 80.0	13260	2.43	µg/L	m	96
		399.0 -> 99.0	7176				
PFNA	7.669	463.0 -> 419.0	41687	2.81	µg/L	m	95
		463.0 -> 219.0	10850				
PFNS	8.772	549.0 -> 80.0	6502	2.49	µg/L		98
		549.0 -> 99.0	3725				
PFOA	7.149	413.0 -> 369.0	77245	2.69	µg/L	m	97
		413.0 -> 169.0	17278				
PFOS	8.318	499.0 -> 80.0	15383	2.53	µg/L	m	98
		499.0 -> 99.0	7172				
PFPeA	4.650	263.0 -> 219.0	112131	5.47	µg/L		100
PFPeS	6.630	349.0 -> 80.0	9296	2.41	µg/L		94
		349.0 -> 99.0	3927				
PFTeDA	9.773	713.0 -> 669.0	45282	2.67	µg/L		99
		713.0 -> 219.0	3685				
PFTrDA	9.412	663.0 -> 619.0	75541	2.61	µg/L		100
		663.0 -> 369.0	5083				
PFUnDA	8.596	563.0 -> 519.0	84543	2.67	µg/L		100
		563.0 -> 269.0	11950				
11Cl-PF3OUdS	9.476	631.0 -> 451.0	255936	12.35	µg/L		100
		633.0 -> 453.0	75336				
9Cl-PF3ONS	8.648	531.0 -> 351.0	213724	12.58	µg/L		98
		533.0 -> 353.0	63971				
ADONA	6.789	377.0 -> 251.0	510479	12.06	µg/L		99
		377.0 -> 85.0	138796				
HFPO-DA	6.088	285.0 -> 169.0	20088	10.79	µg/L		95
		285.0 -> 185.0	1549				
3:3FTCA	4.084	241.0 -> 177.0	16570	14.85	µg/L		99
		241.0 -> 117.0	1158				
5:3FTCA	6.241	341.0 -> 237.0	342700	79.96	µg/L		96
		341.0 -> 217.0	232261				
7:3FTCA	7.509	441.0 -> 337.0	365429	75.51	µg/L		97
		441.0 -> 317.0	158467				
EtFOSA	10.860	526.0 -> 219.0	13872	2.52	µg/L	m	93
		526.0 -> 169.0	19408				
EtFOSE	10.794	630.0 -> 59.0	143721	27.45	µg/L		100
MeFOSA	10.590	512.0 -> 169.0	17458	2.70	µg/L	m	98
		512.0 -> 219.0	11499				
MeFOSE	10.511	616.0 -> 59.0	111641	25.92	µg/L	m	100
PFDoDS	9.924	699.0 -> 80.0	8358	2.54	µg/L		98
		699.0 -> 99.0	4620				
NFDHA	5.651	295.0 -> 201.0	7556	4.69	µg/L		74
		201.0 -> 85.0	47267				
		295.0 -> 85.0	2149				
PFMBA	5.039	279.0 -> 85.0	59018	5.30	µg/L		100
PFMPA	3.838	229.0 -> 85.0	68964	5.49	µg/L		100
PFEESA	6.194	315.0 -> 135.0	108565	4.71	µg/L		100
		315.0 -> 69.0	9482				

 # = Qualifier out of range, m = manually integrated, + = Area summed

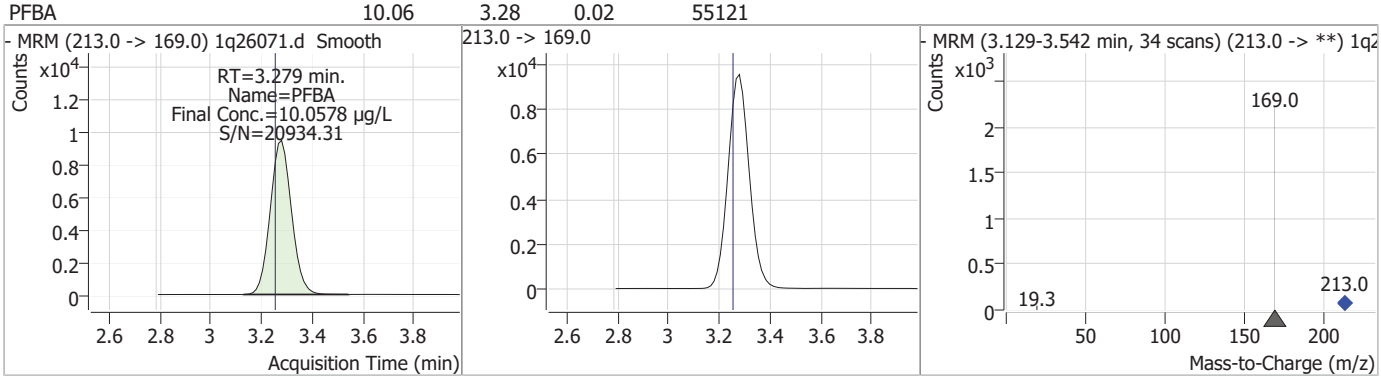
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

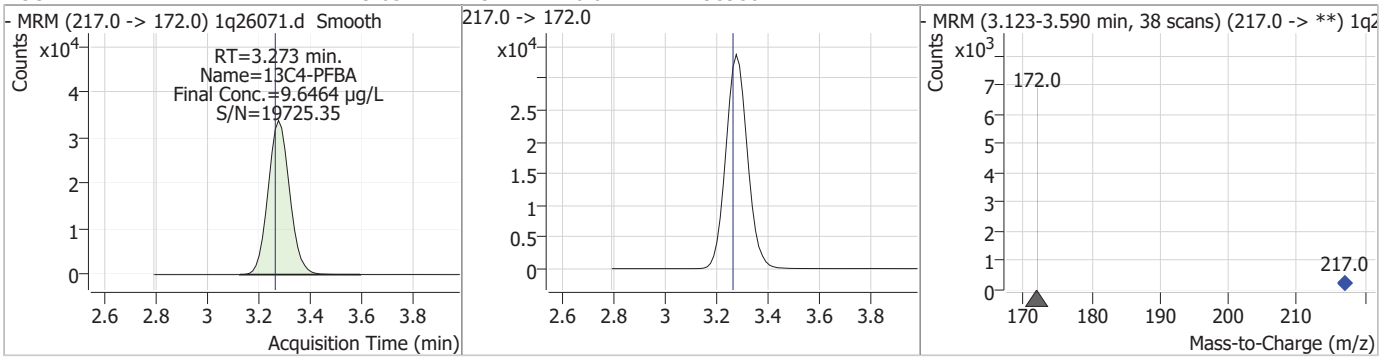
Perfluorinated Compounds by LC/MS/MS



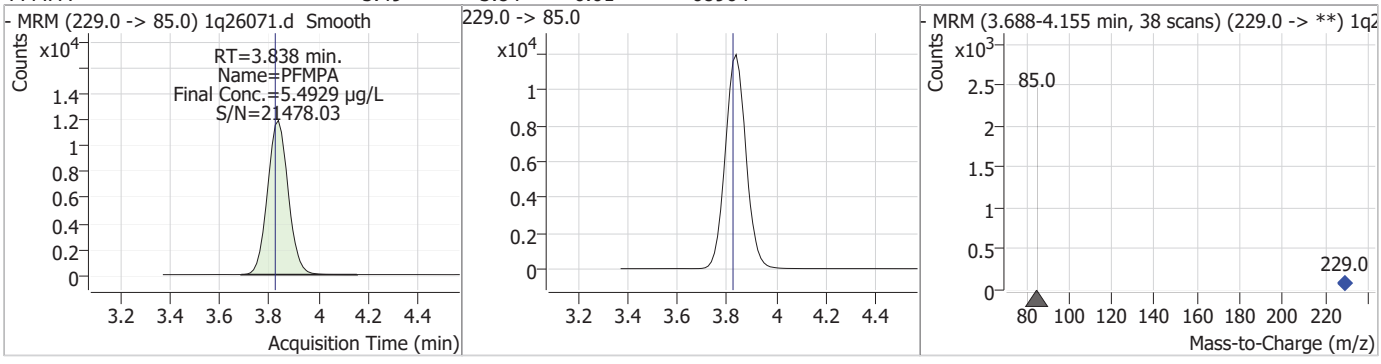
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.06	3.28	0.02	55121				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.65	3.27	0.01	195980				

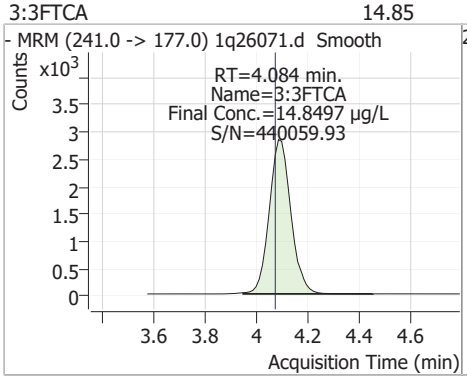


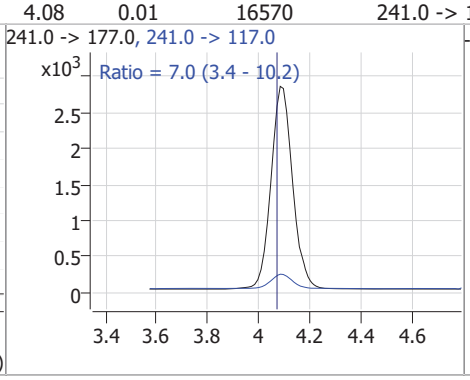
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.49	3.84	0.01	68964				

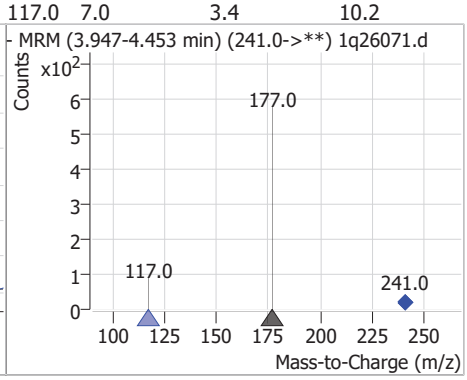


Perfluorinated Compounds by LC/MS/MS

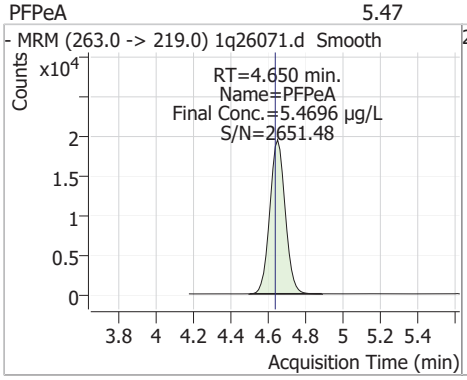
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	14.85	4.08	0.01	16570	241.0 -> 117.0	7.0	3.4	10.2

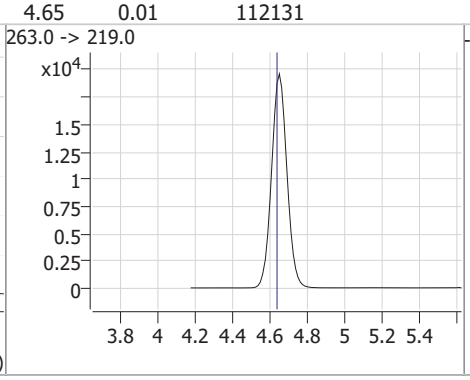


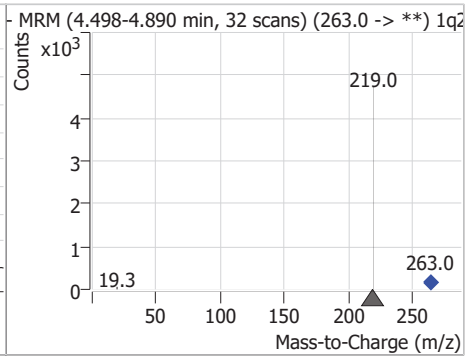




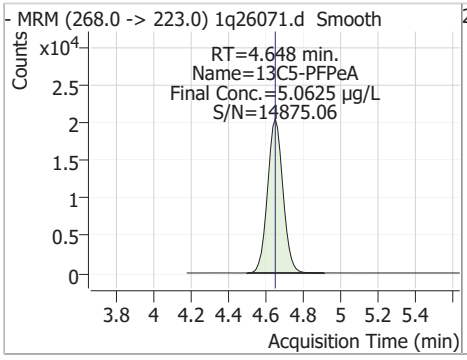
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.47	4.65	0.01	112131				

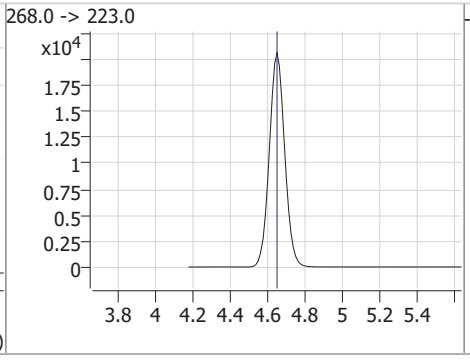


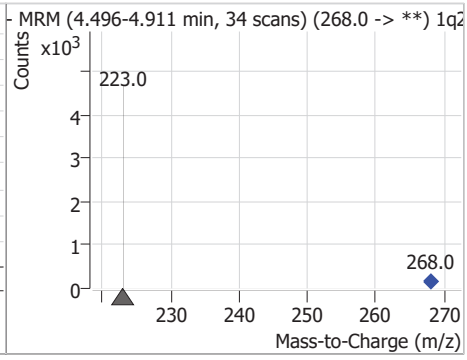




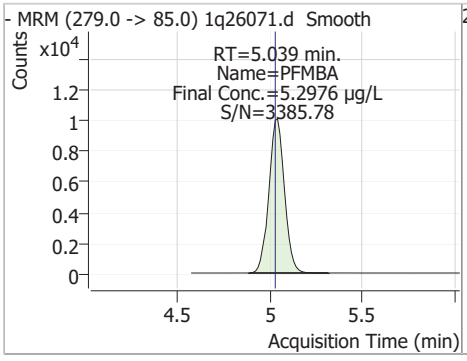
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.06	4.65	0.00	117723				

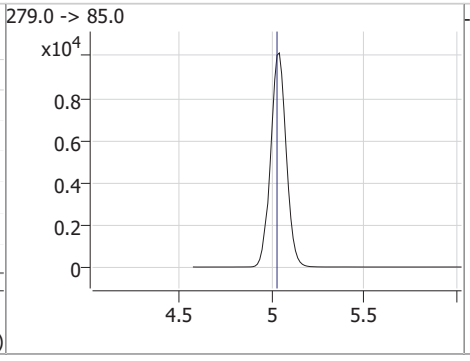


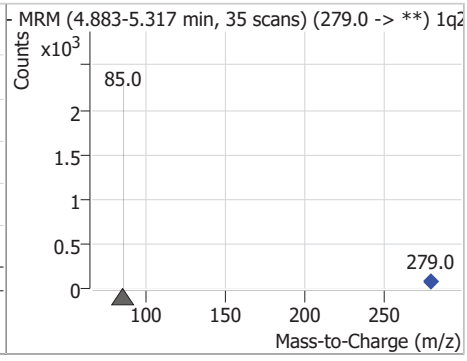




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.30	5.04	0.01	59018				

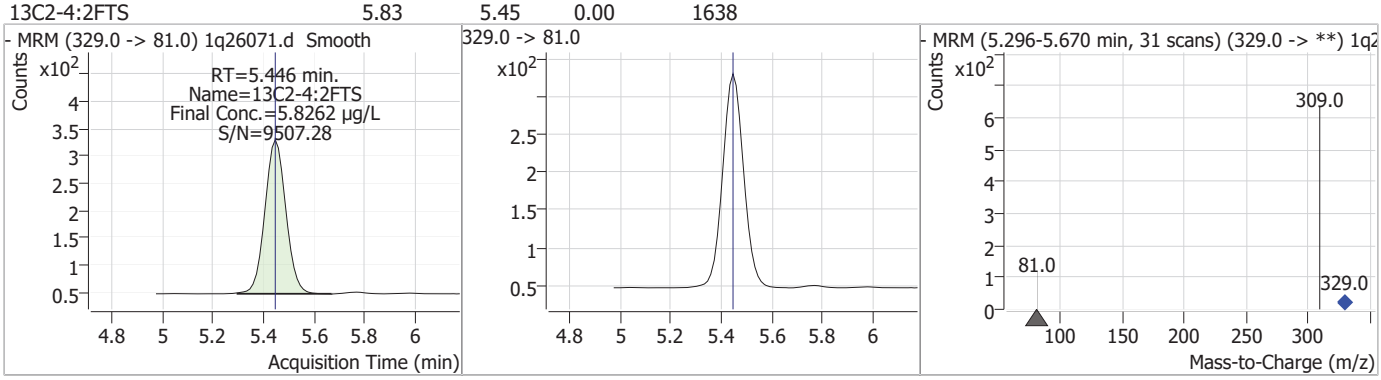




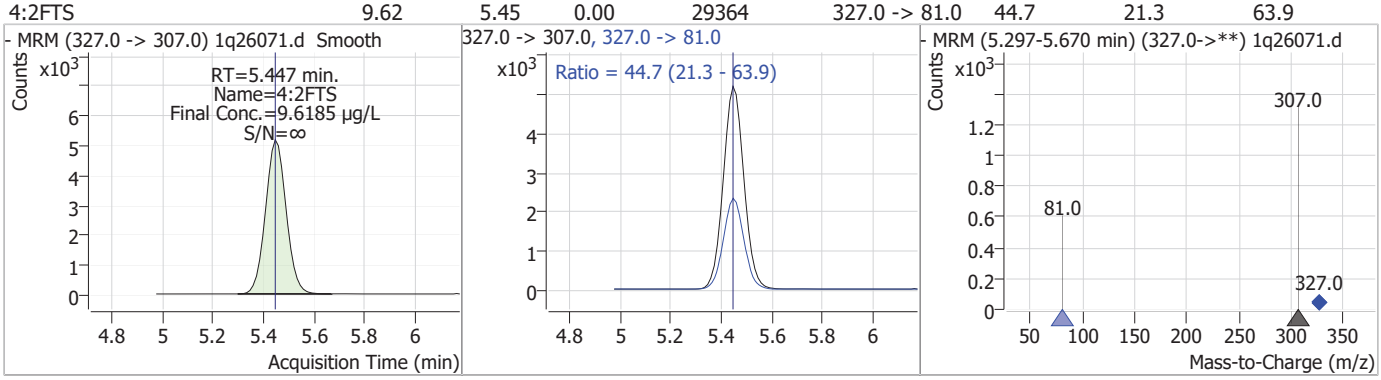


Perfluorinated Compounds by LC/MS/MS

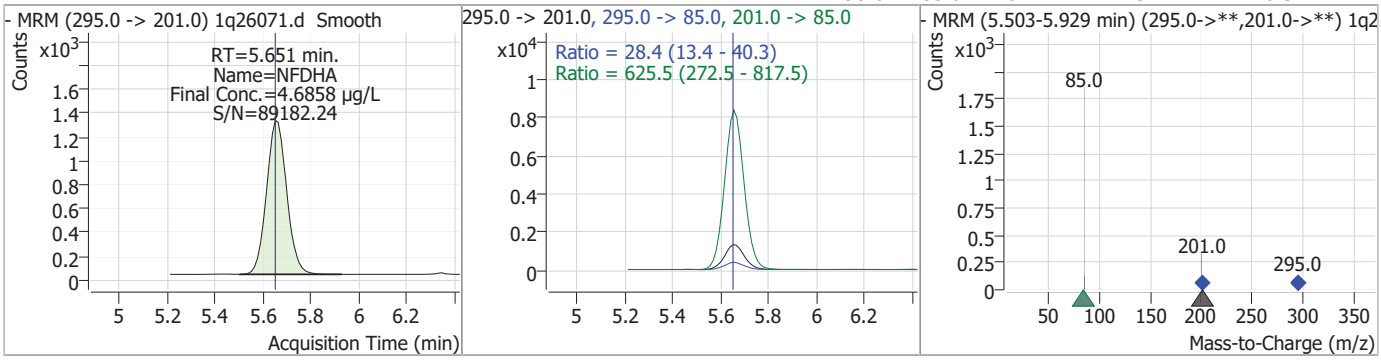
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.83	5.45	0.00	1638				



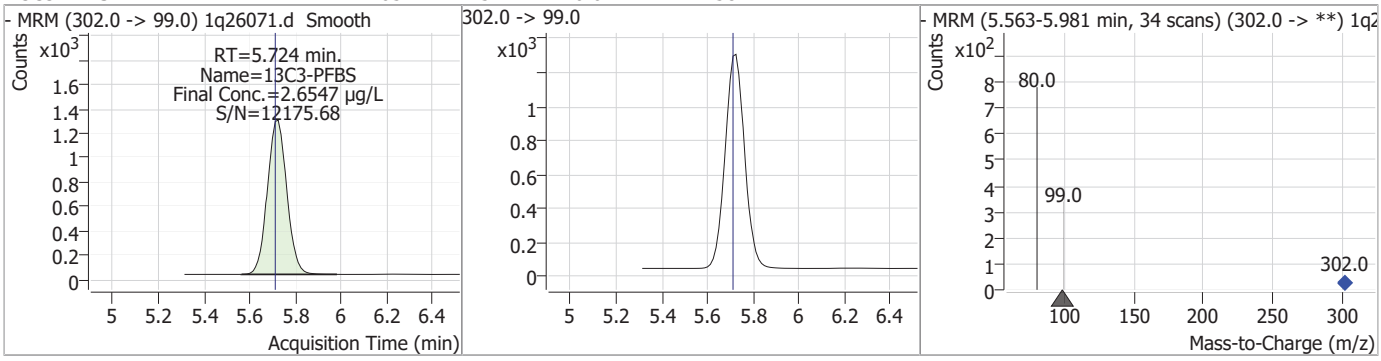
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.62	5.45	0.00	29364	327.0 -> 81.0	44.7	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	4.69	5.65	0.00	7556	201.0 -> 85.0	625.5	272.5	817.5
					295.0 -> 85.0	28.4	13.4	40.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.65	5.72	0.01	7458				

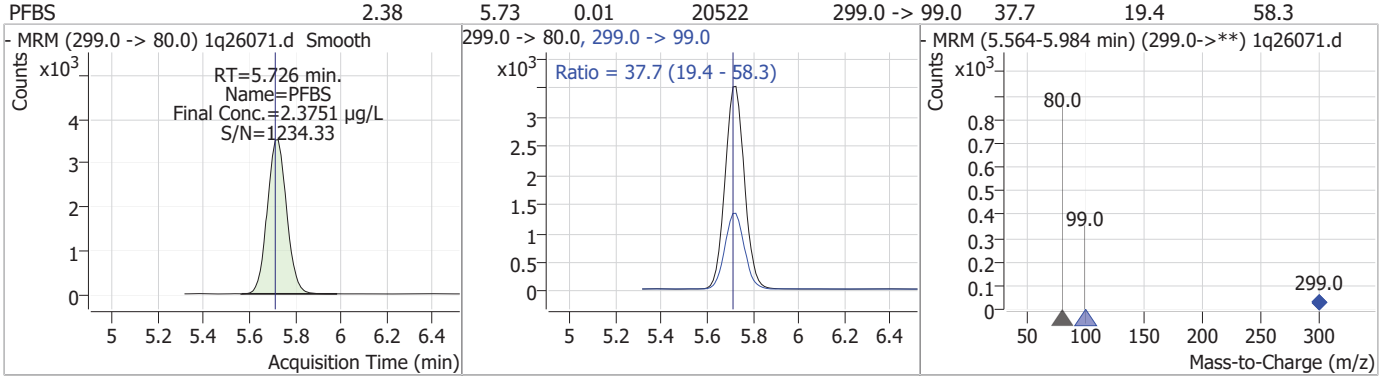


7.3.6

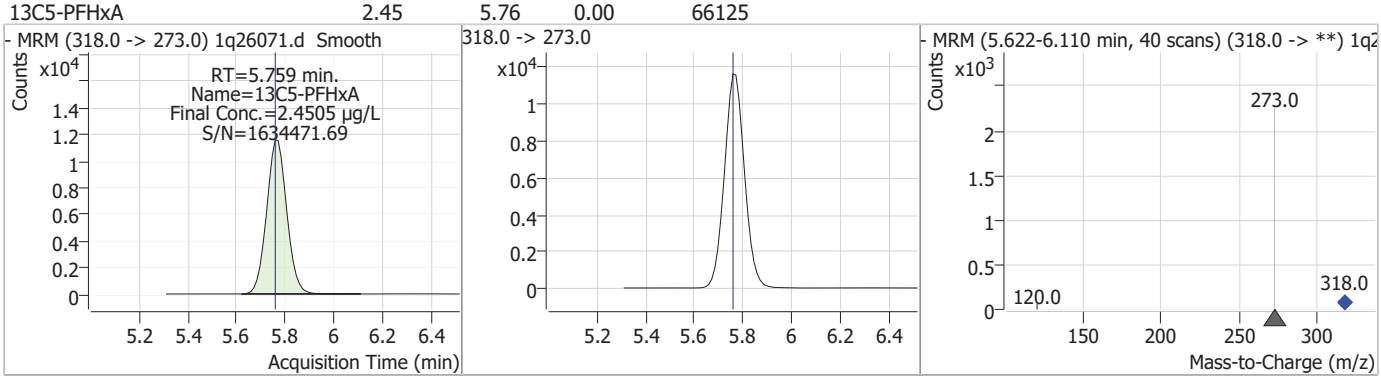
7

Perfluorinated Compounds by LC/MS/MS

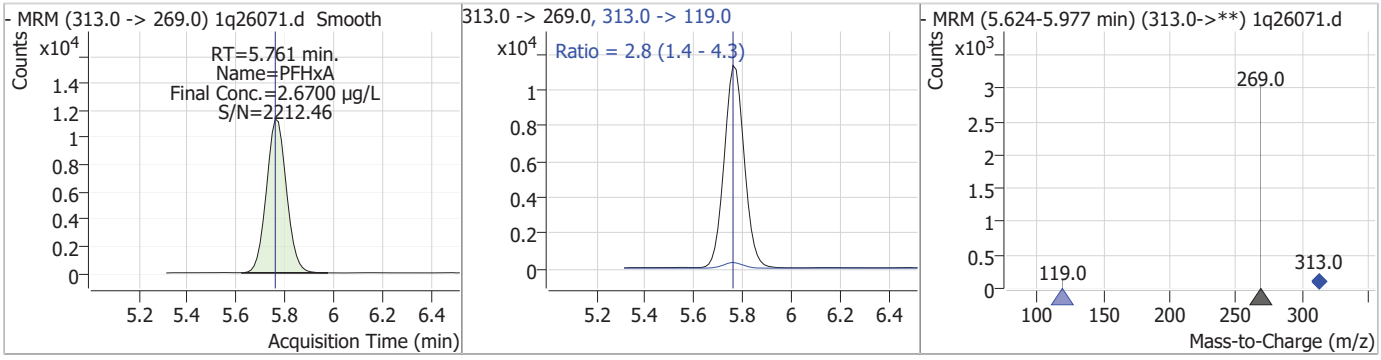
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.38	5.73	0.01	20522	299.0 -> 99.0	37.7	19.4	58.3



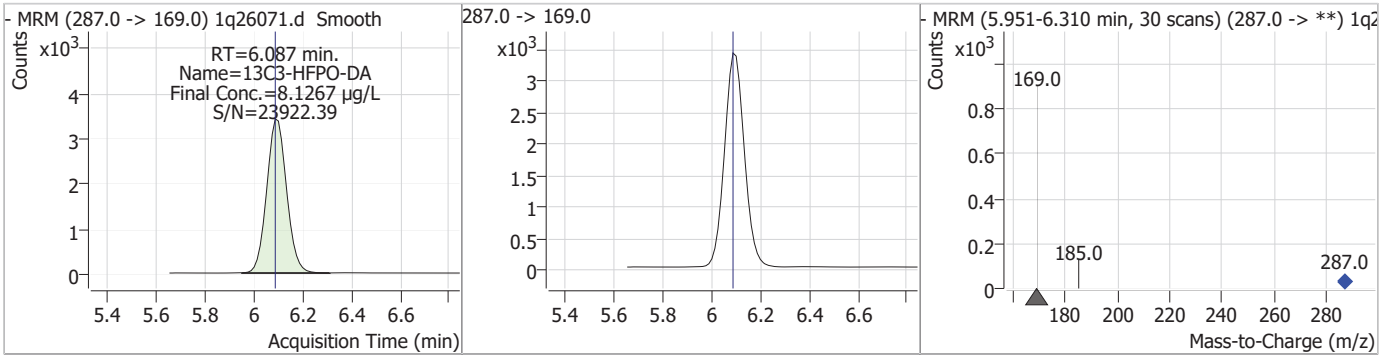
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.45	5.76	0.00	66125				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.67	5.76	0.00	64711	313.0 -> 119.0	2.8	1.4	4.3

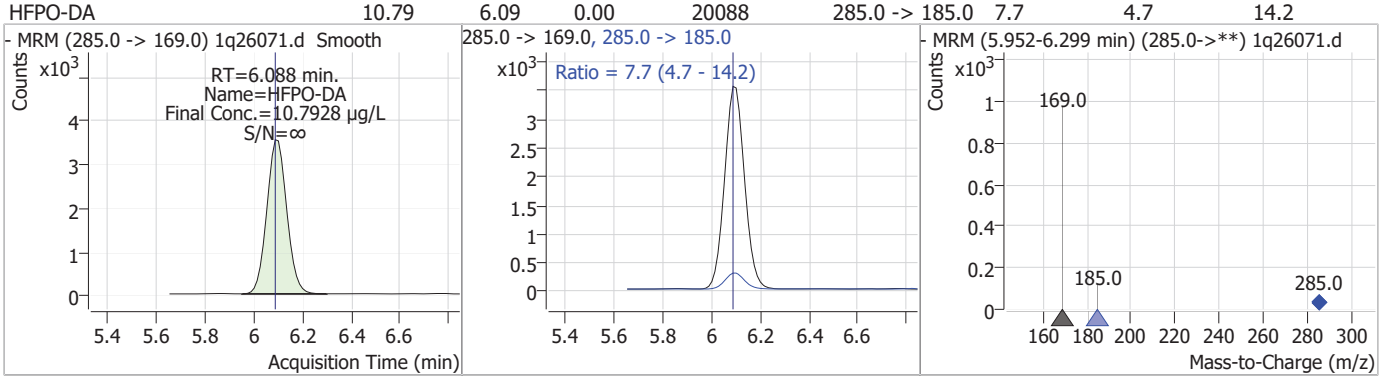


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.13	6.09	0.00	19222				

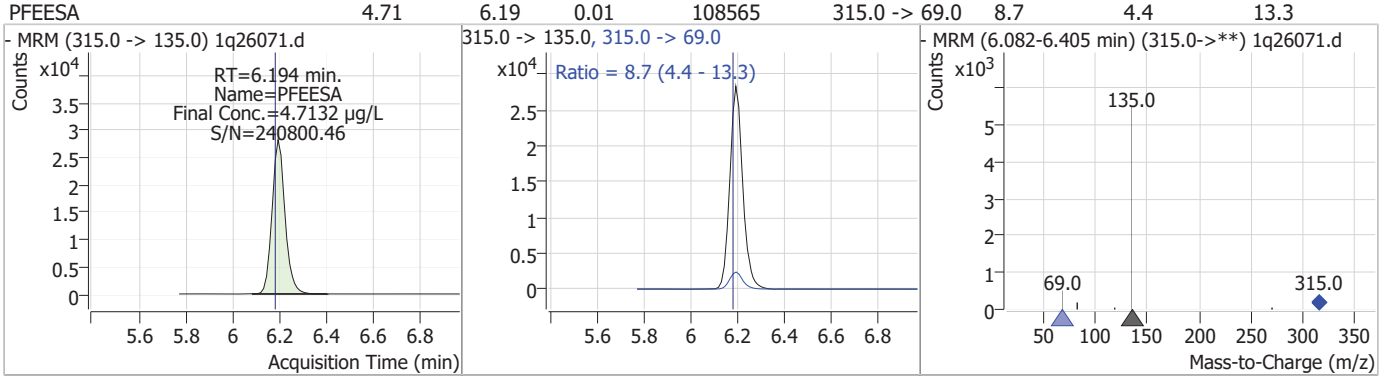


Perfluorinated Compounds by LC/MS/MS

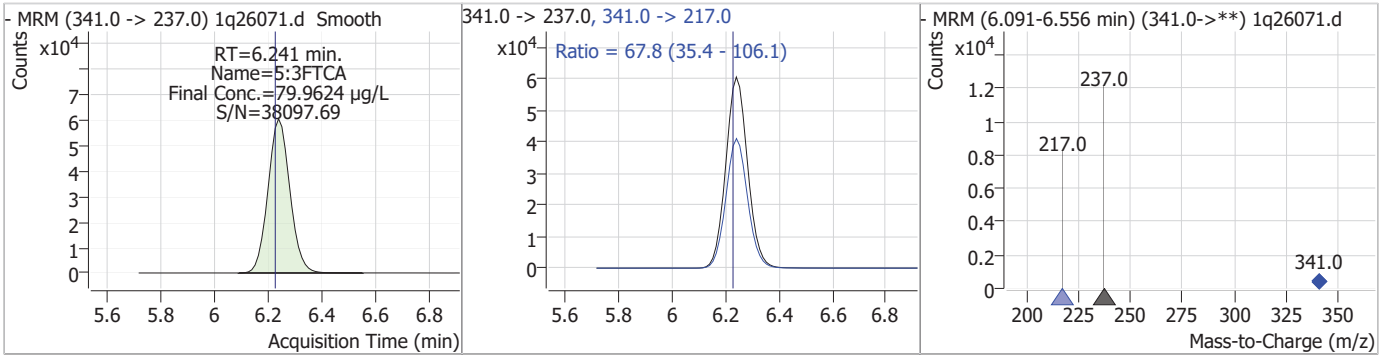
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.79	6.09	0.00	20088	285.0 -> 185.0	7.7	4.7	14.2



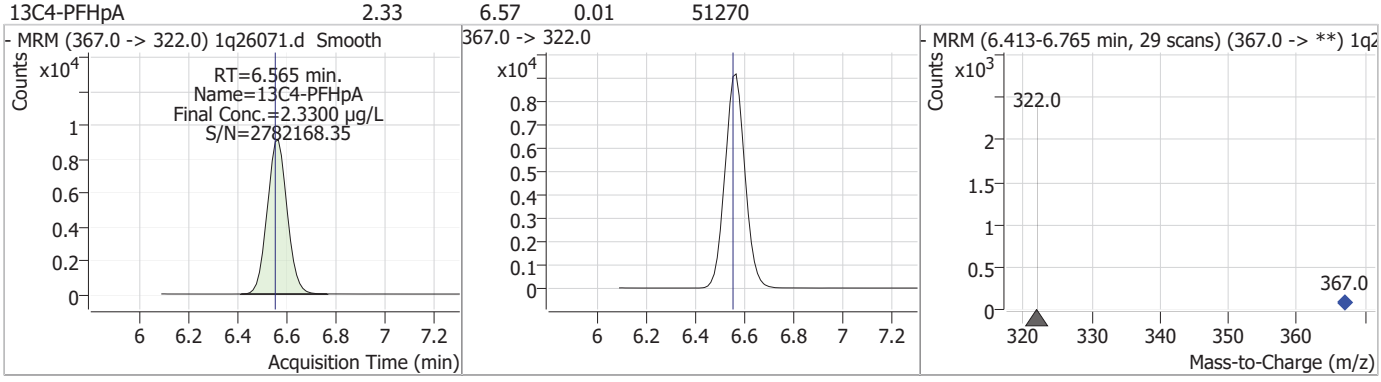
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.71	6.19	0.01	108565	315.0 -> 69.0	8.7	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	79.96	6.24	0.01	342700	341.0 -> 217.0	67.8	35.4	106.1

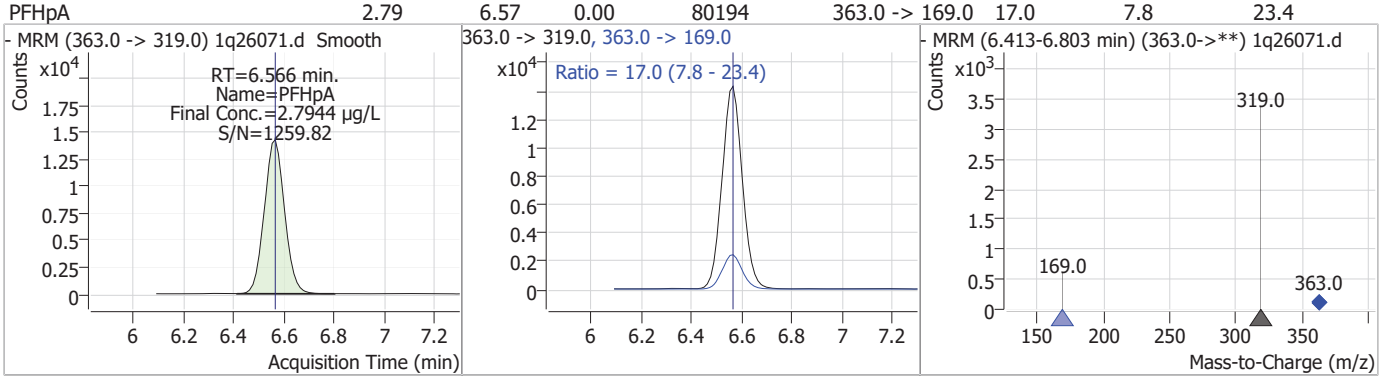


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.33	6.57	0.01	51270				

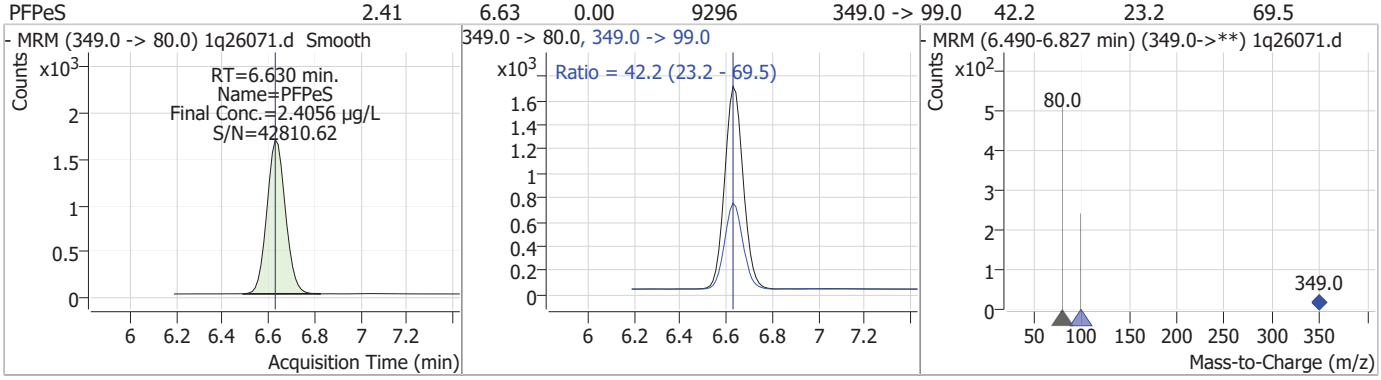


Perfluorinated Compounds by LC/MS/MS

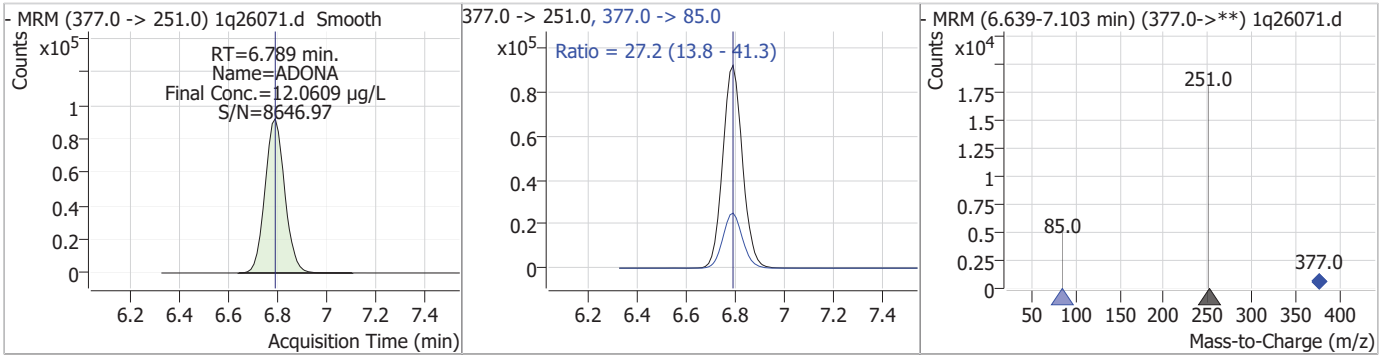
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.79	6.57	0.00	80194	363.0 -> 169.0	17.0	7.8	23.4



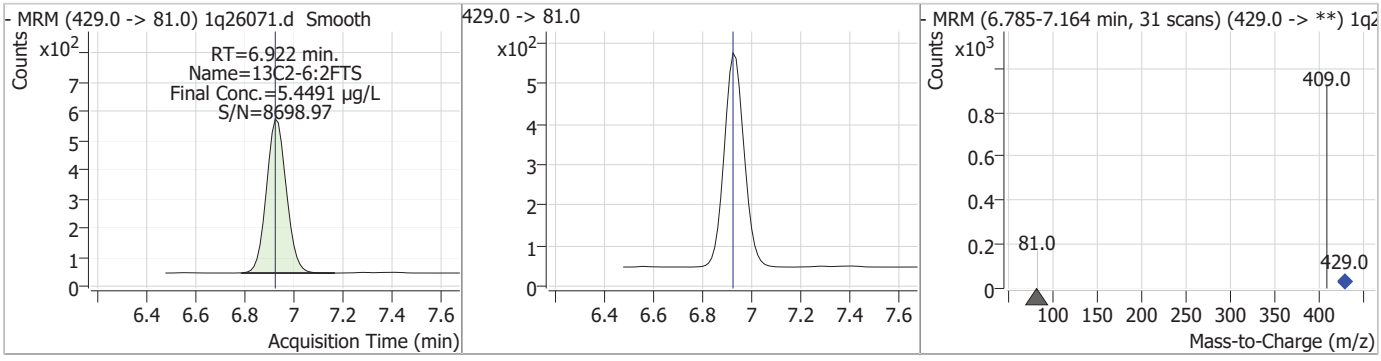
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.41	6.63	0.00	9296	349.0 -> 99.0	42.2	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	12.06	6.79	0.00	510479	377.0 -> 85.0	27.2	13.8	41.3

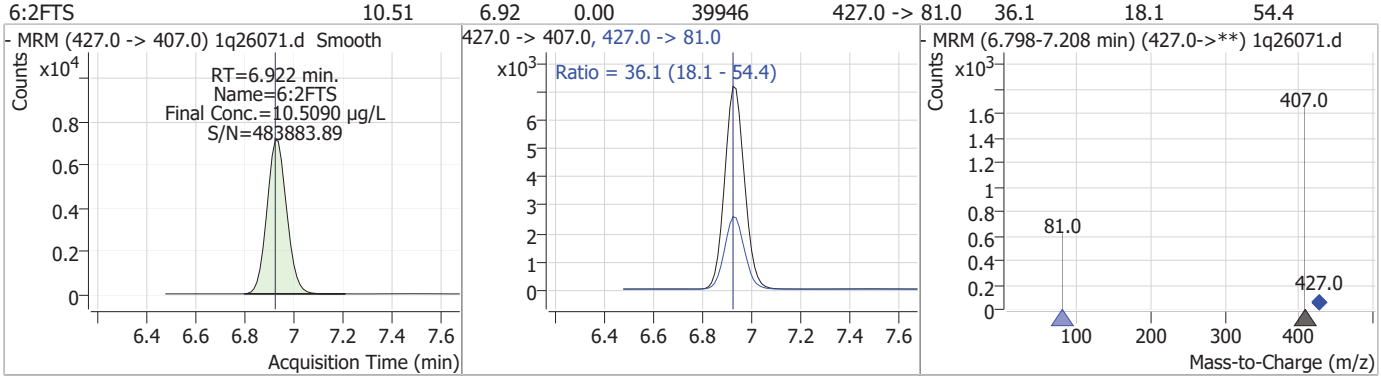


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.45	6.92	0.00	2969				

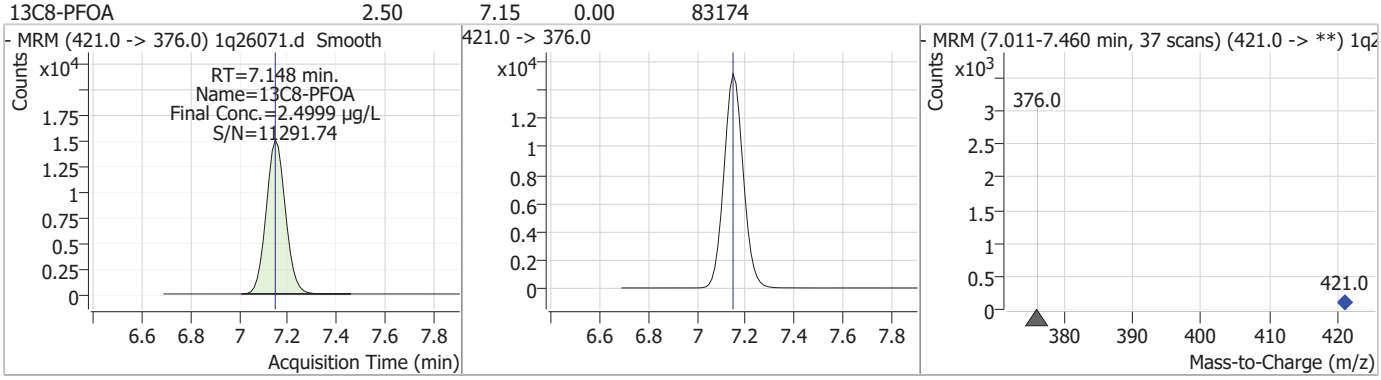


Perfluorinated Compounds by LC/MS/MS

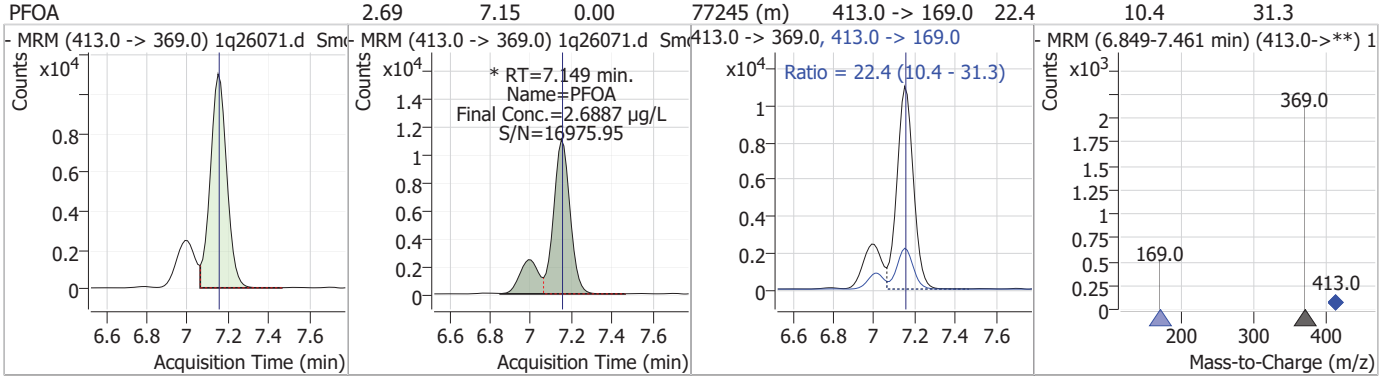
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	10.51	6.92	0.00	39946	427.0 -> 81.0	36.1	18.1	54.4



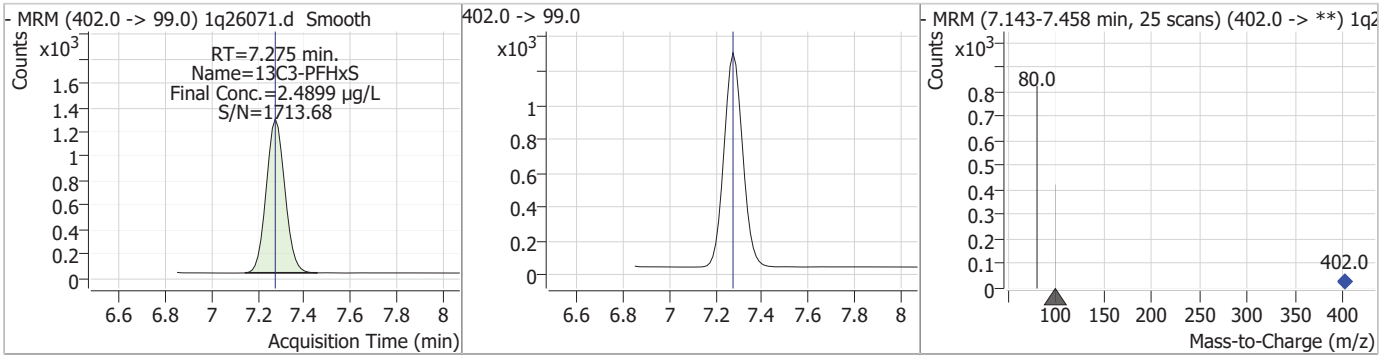
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.50	7.15	0.00	83174				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.69	7.15	0.00	77245 (m)	413.0 -> 169.0	22.4	10.4	31.3

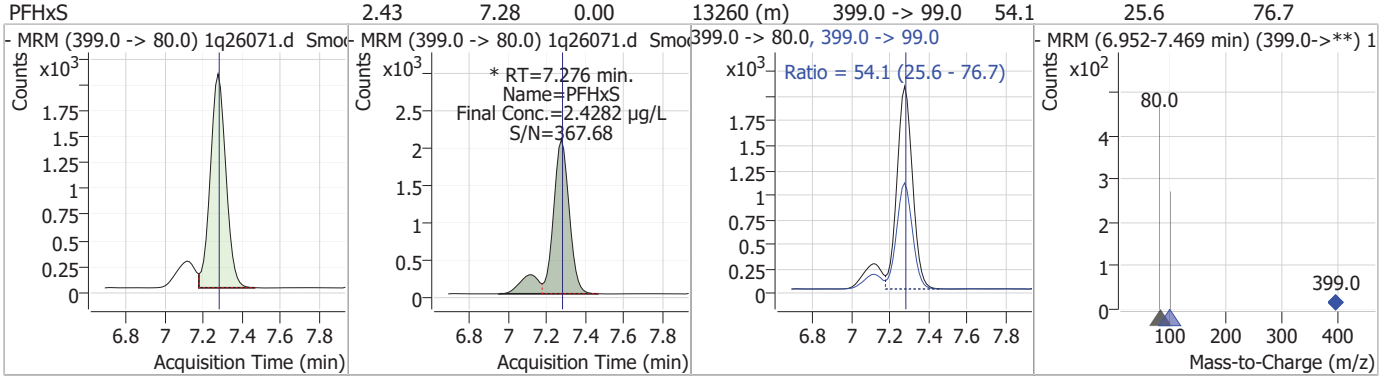


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.49	7.27	0.00	7010				

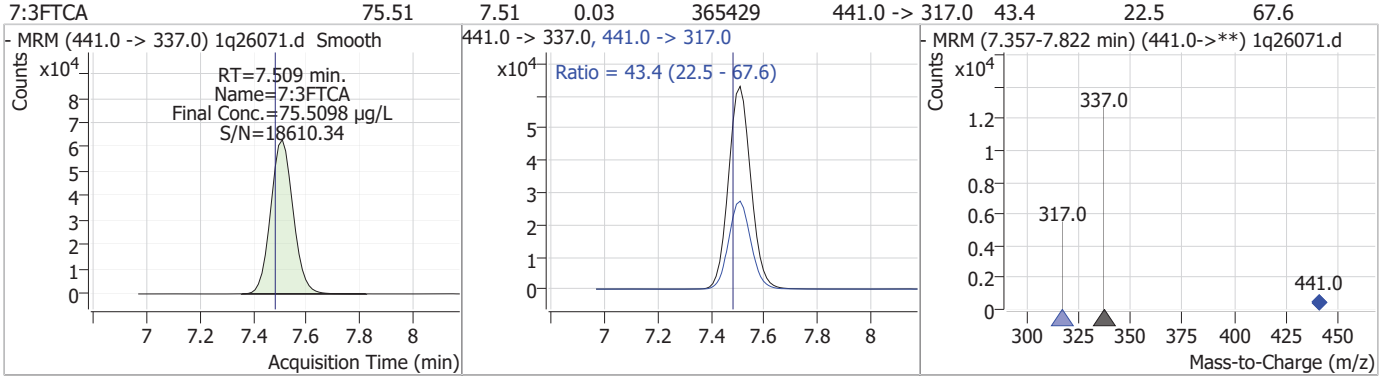


Perfluorinated Compounds by LC/MS/MS

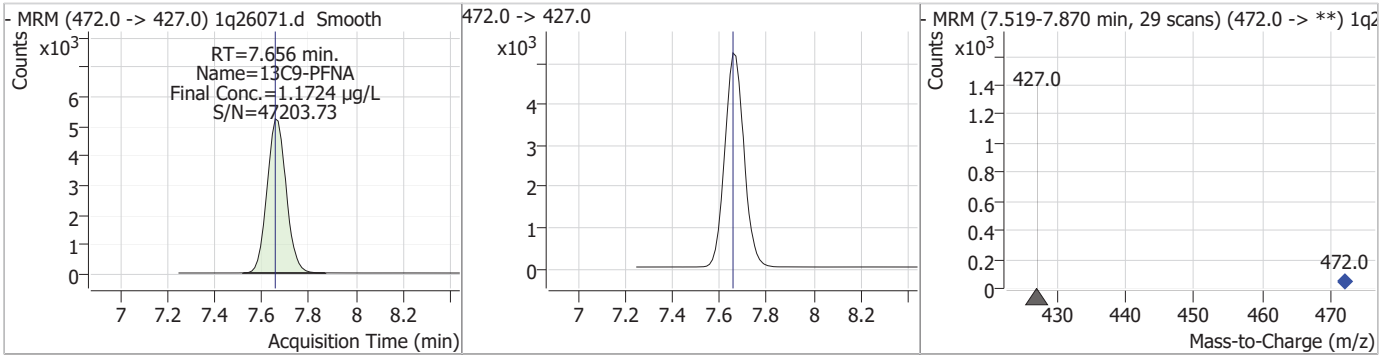
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.43	7.28	0.00	13260 (m)	399.0 -> 99.0	54.1	25.6	76.7



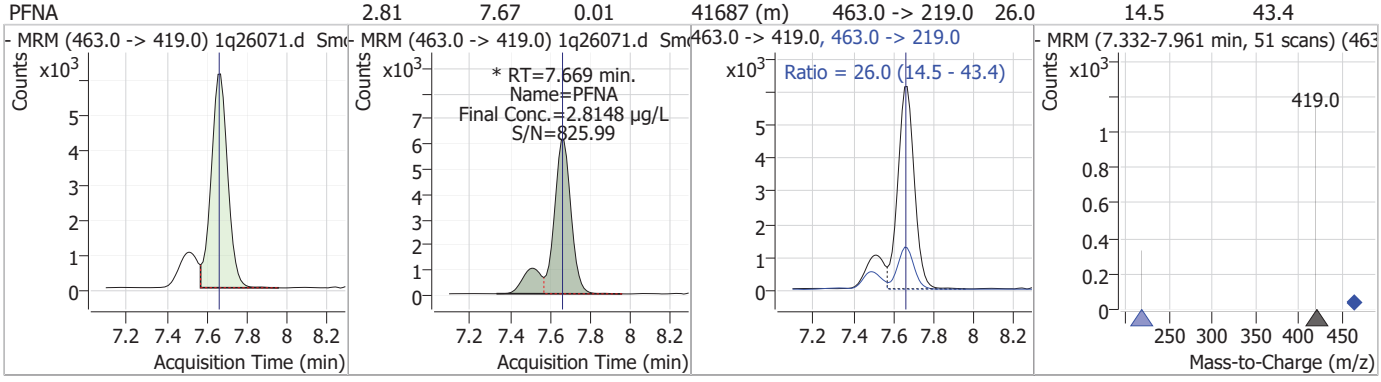
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	75.51	7.51	0.03	365429	441.0 -> 317.0	43.4	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.17	7.66	0.00	29528				

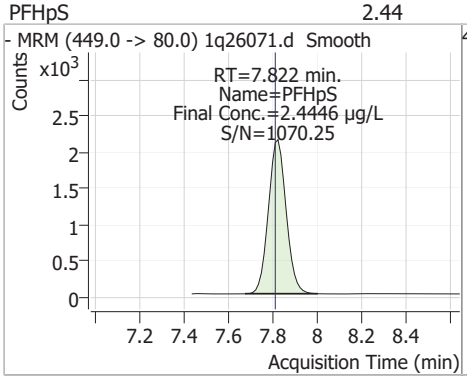


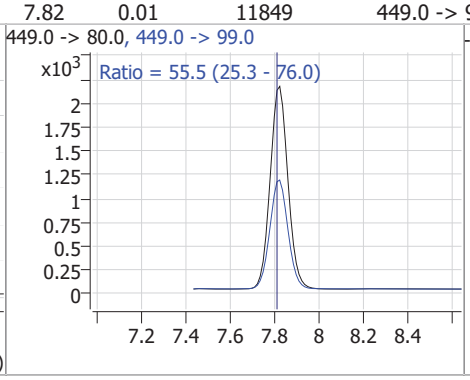
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.81	7.67	0.01	41687 (m)	463.0 -> 219.0	26.0	14.5	43.4

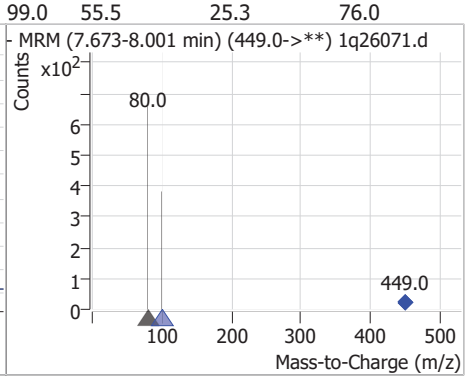


Perfluorinated Compounds by LC/MS/MS

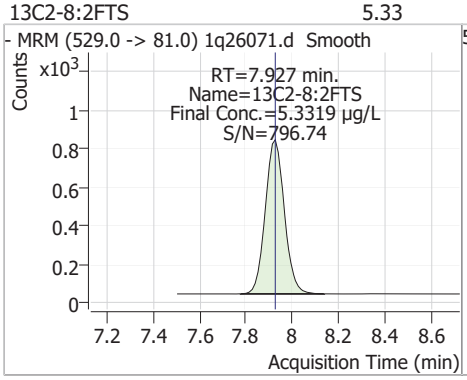
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.44	7.82	0.01	11849	449.0 -> 99.0	55.5	25.3	76.0

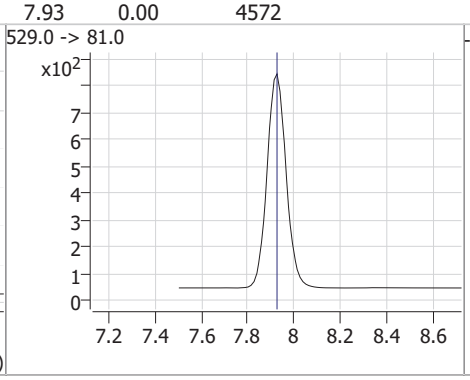


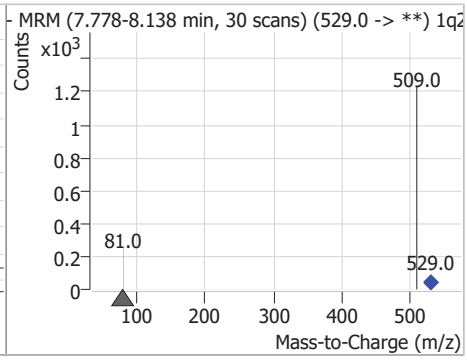




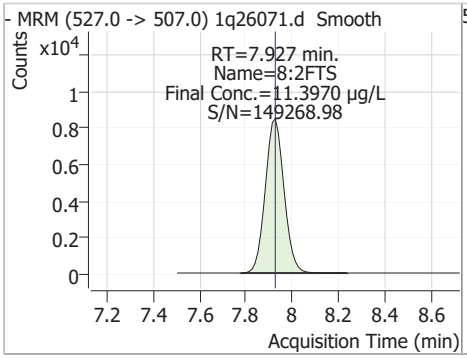
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.33	7.93	0.00	4572				

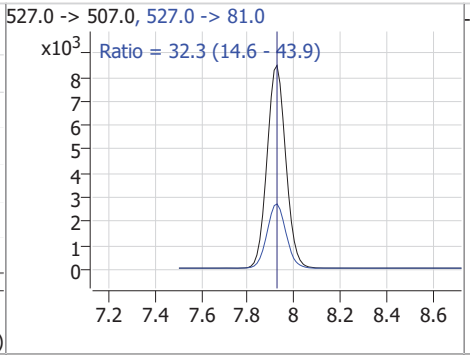


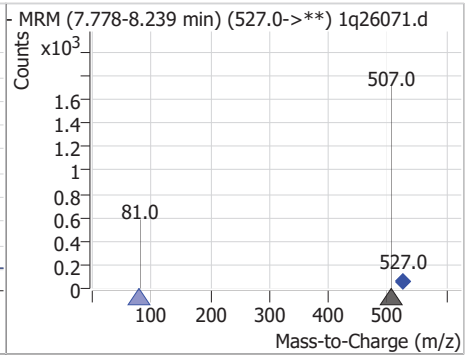




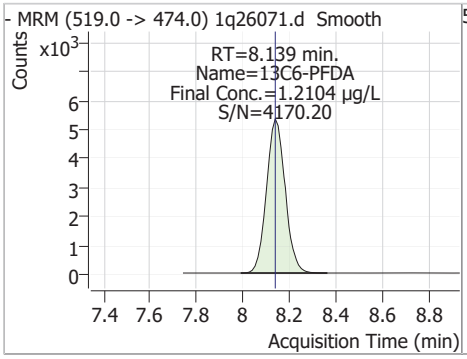
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	11.40	7.93	0.00	47378	527.0 -> 81.0	32.3	14.6	43.9

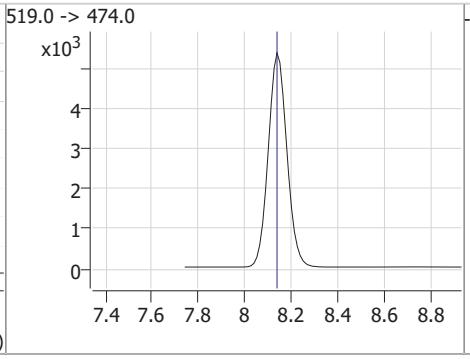


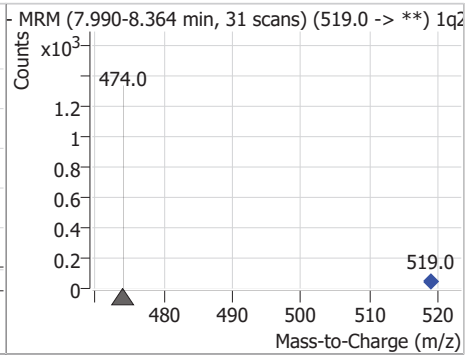




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.21	8.14	0.00	29749				

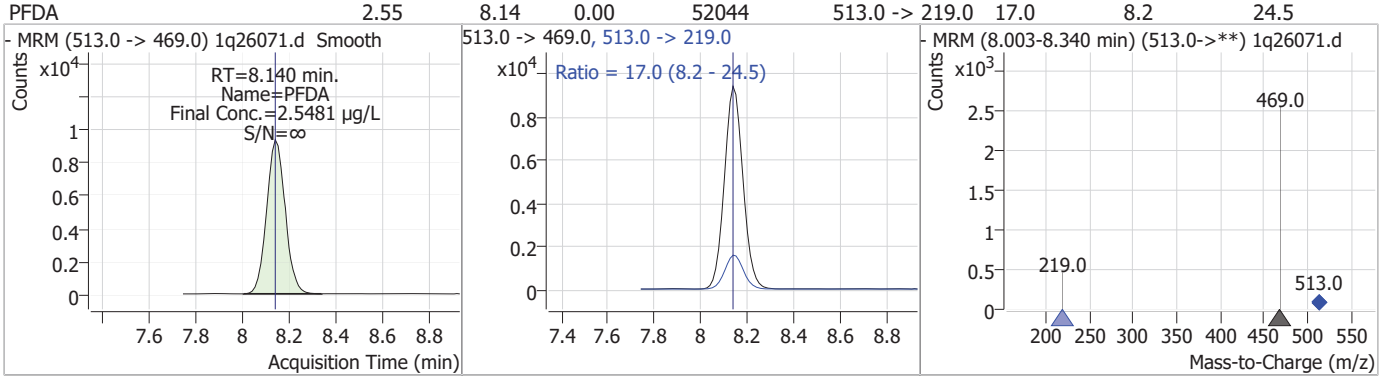




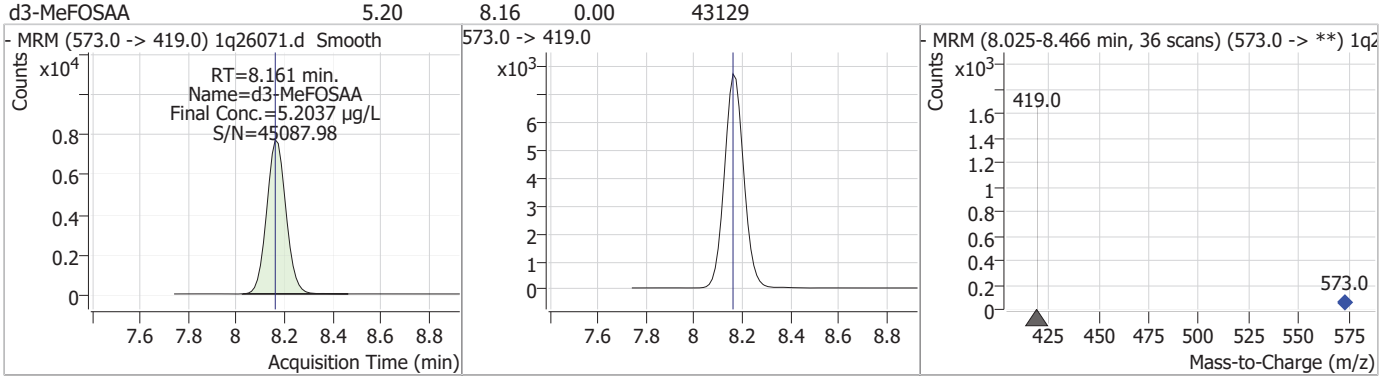


Perfluorinated Compounds by LC/MS/MS

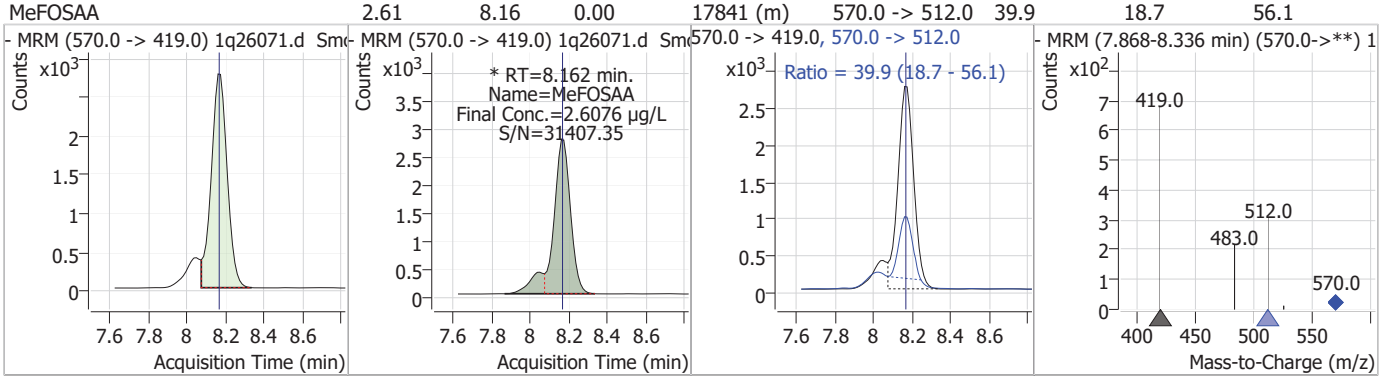
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.55	8.14	0.00	52044	513.0 -> 219.0	17.0	8.2	24.5



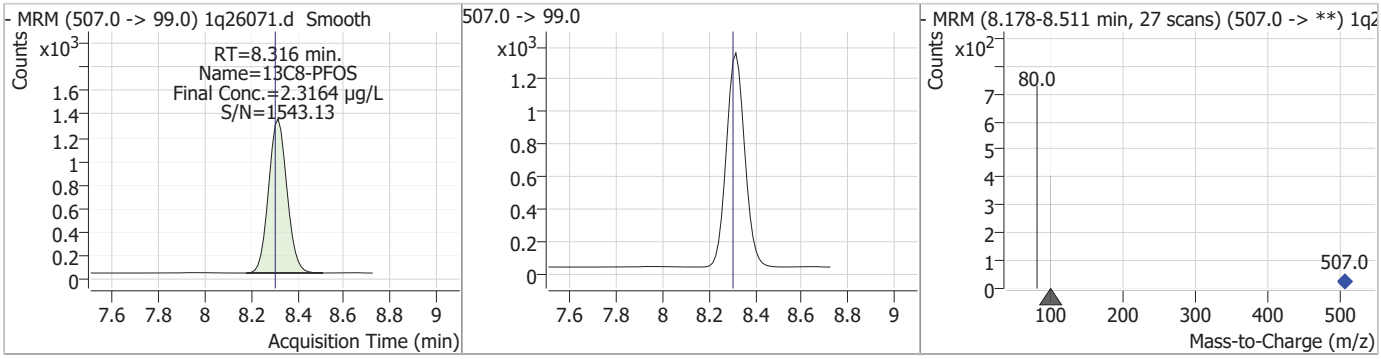
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.20	8.16	0.00	43129				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.61	8.16	0.00	17841 (m)	570.0 -> 512.0	39.9	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.32	8.32	0.01	7254				



7.3.6

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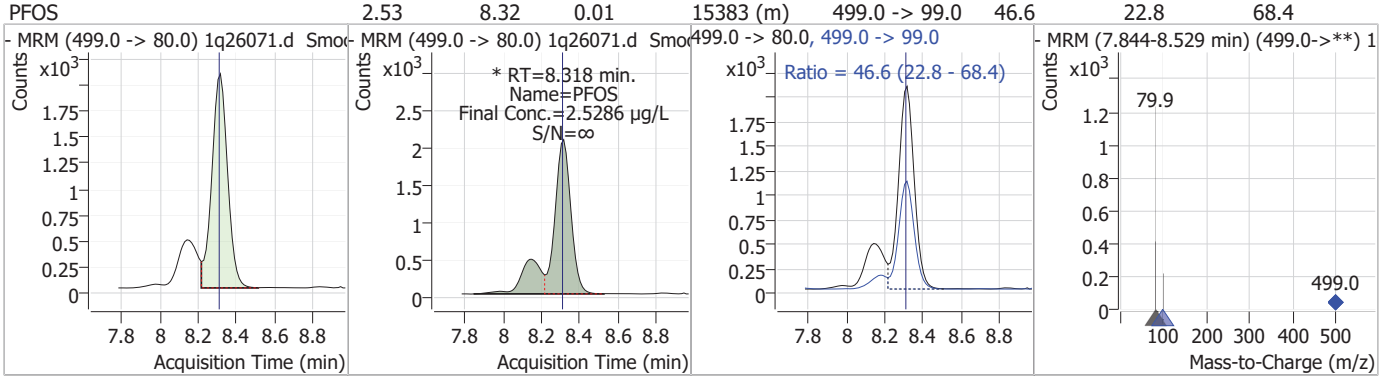
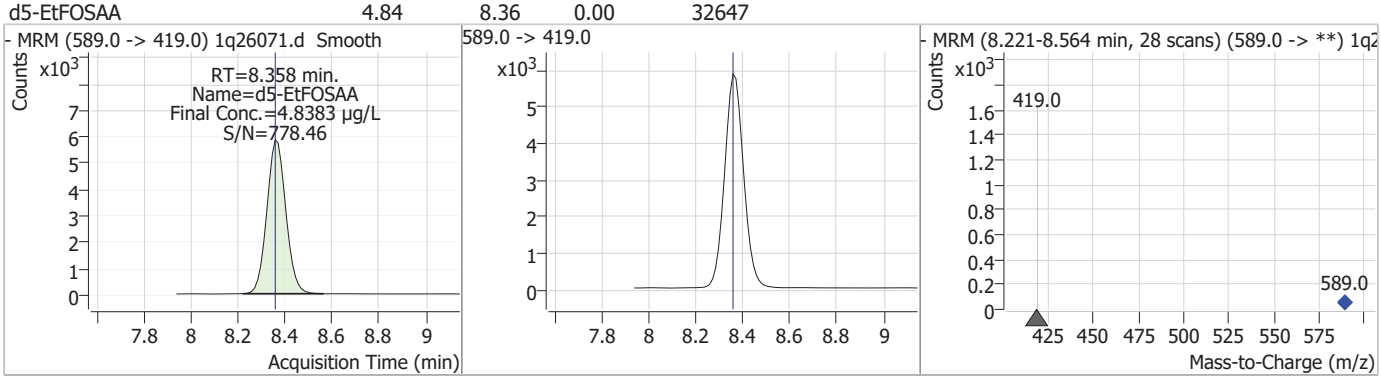
Perfluorinated Compounds by LC/MS/MS

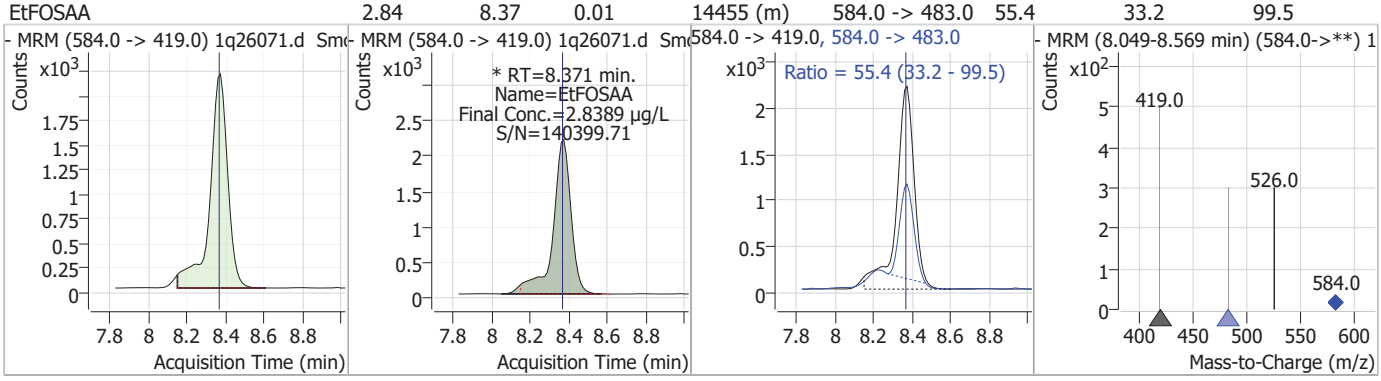
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.53	8.32	0.01	15383 (m)	499.0 -> 99.0	46.6	22.8	68.4



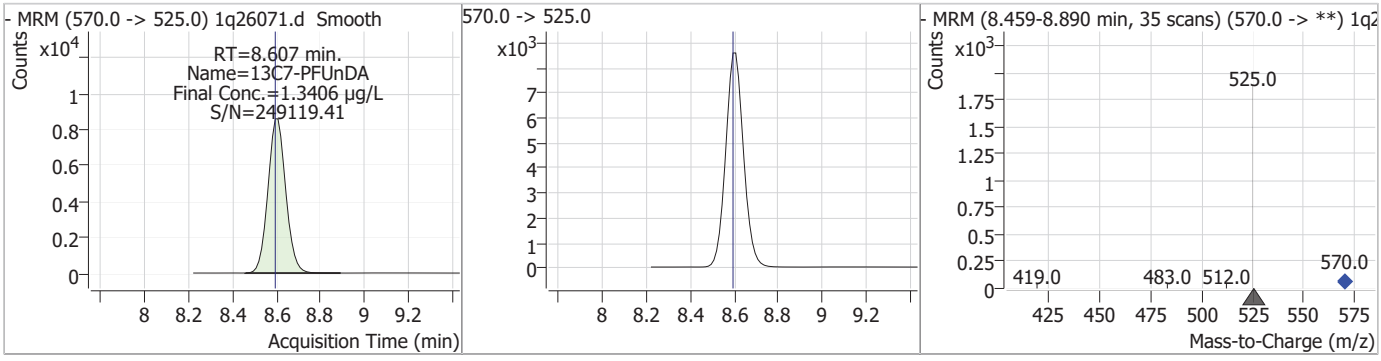
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.84	8.36	0.00	32647				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.84	8.37	0.01	14455 (m)	584.0 -> 483.0	55.4	33.2	99.5

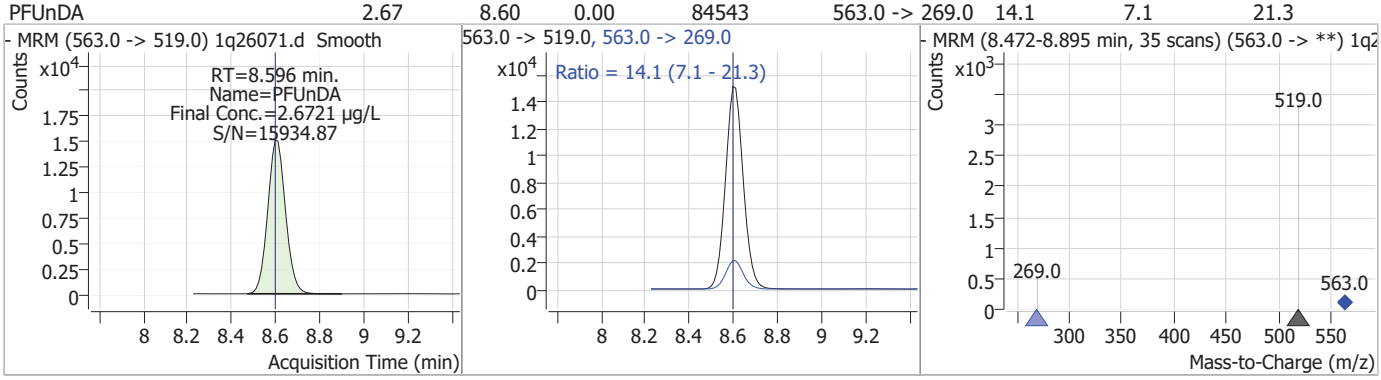


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.34	8.61	0.01	47826				

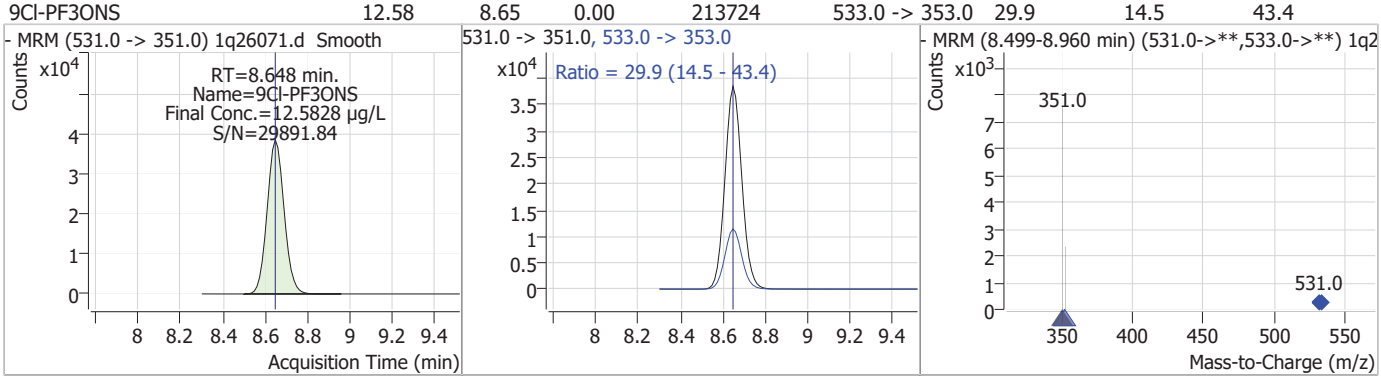


Perfluorinated Compounds by LC/MS/MS

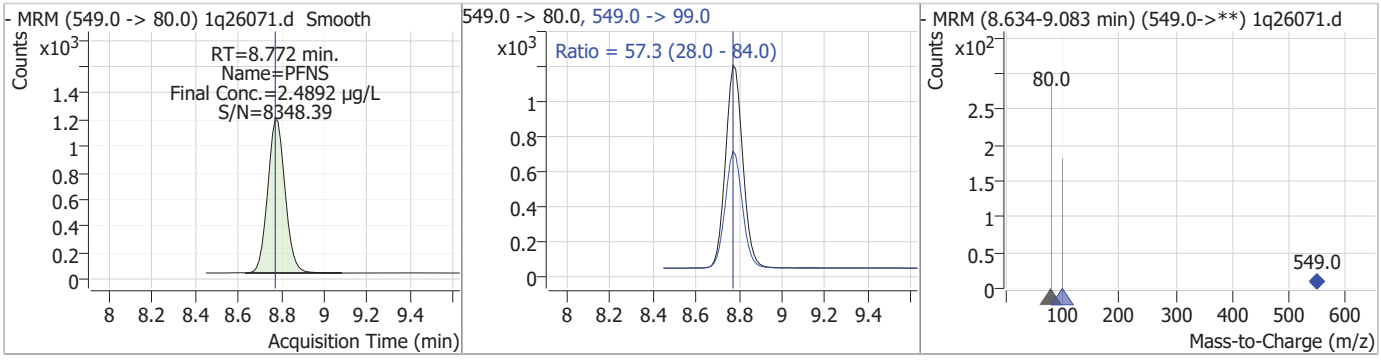
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.67	8.60	0.00	84543	563.0 -> 269.0	14.1	7.1	21.3



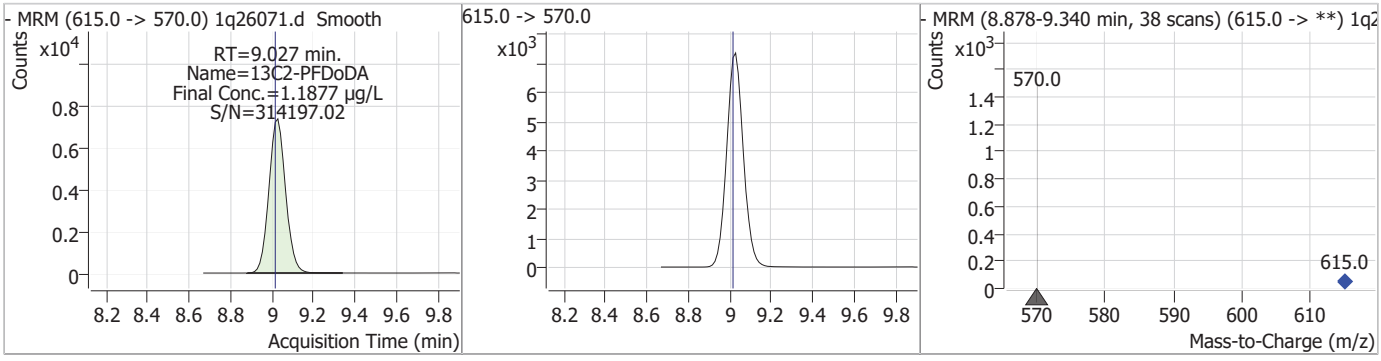
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	12.58	8.65	0.00	213724	533.0 -> 353.0	29.9	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.49	8.77	0.00	6502	549.0 -> 99.0	57.3	28.0	84.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.19	9.03	0.01	40880				



7.3.6

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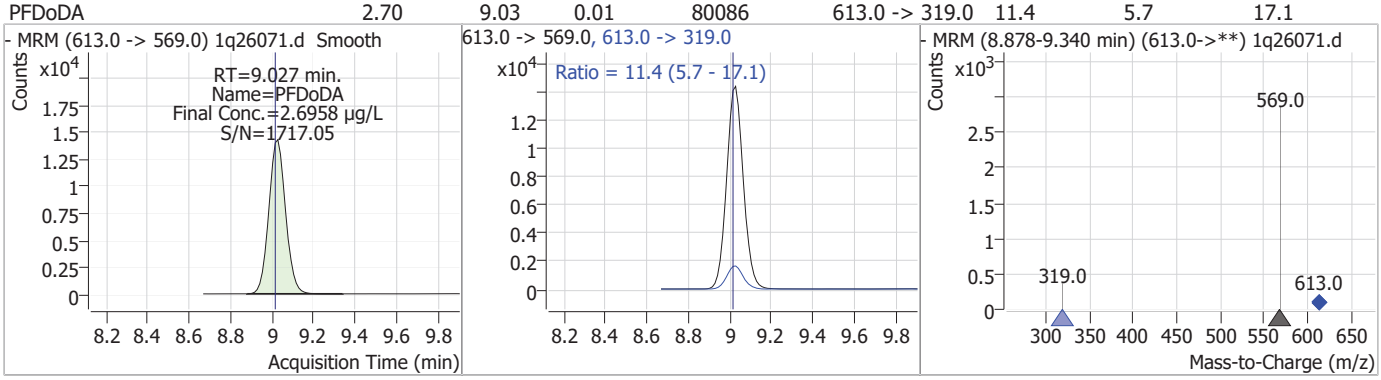
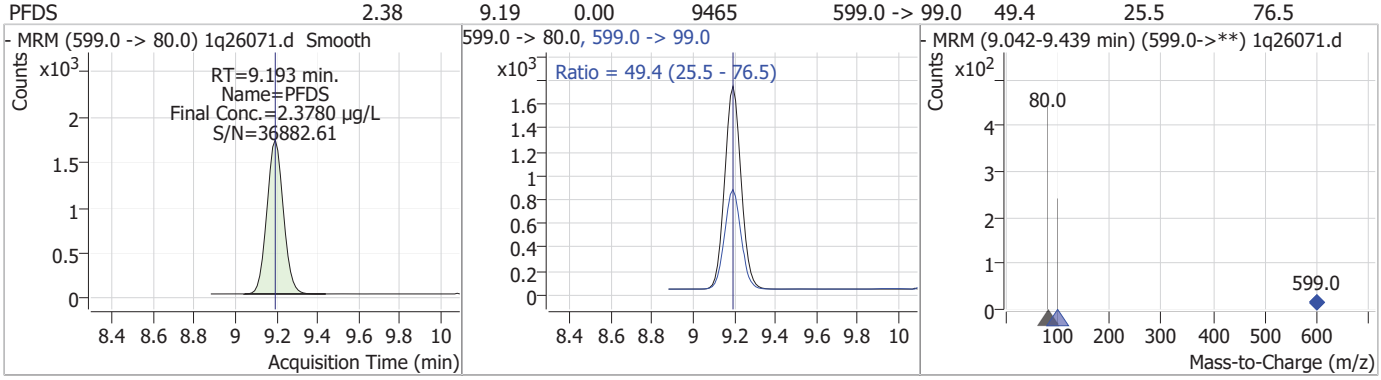
Perfluorinated Compounds by LC/MS/MS

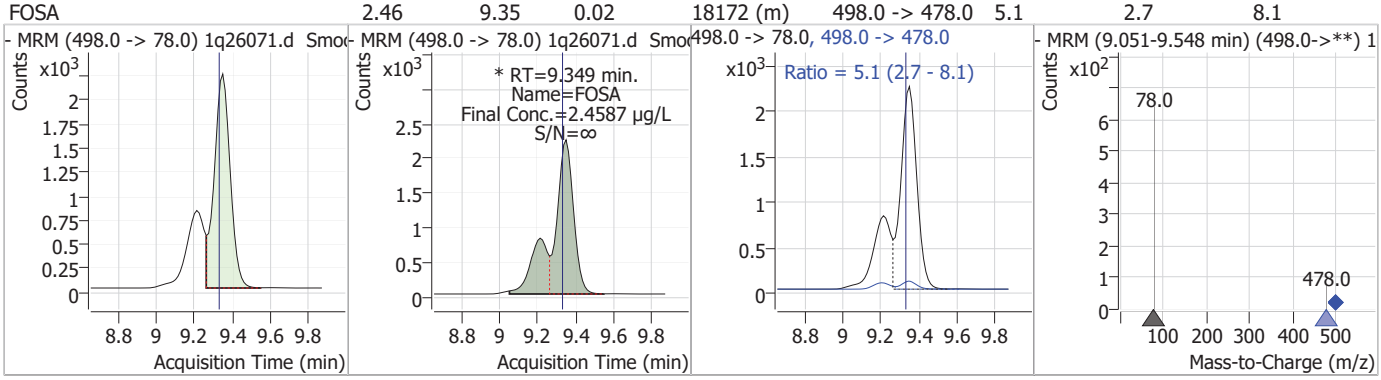
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.70	9.03	0.01	80086	613.0 -> 319.0	11.4	5.7	17.1



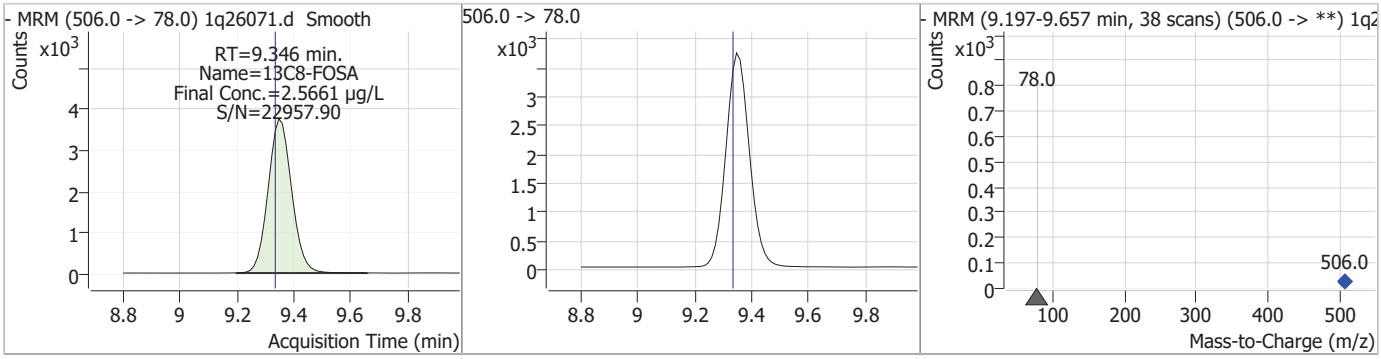
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.38	9.19	0.00	9465	599.0 -> 99.0	49.4	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.46	9.35	0.02	18172 (m)	498.0 -> 478.0	5.1	2.7	8.1

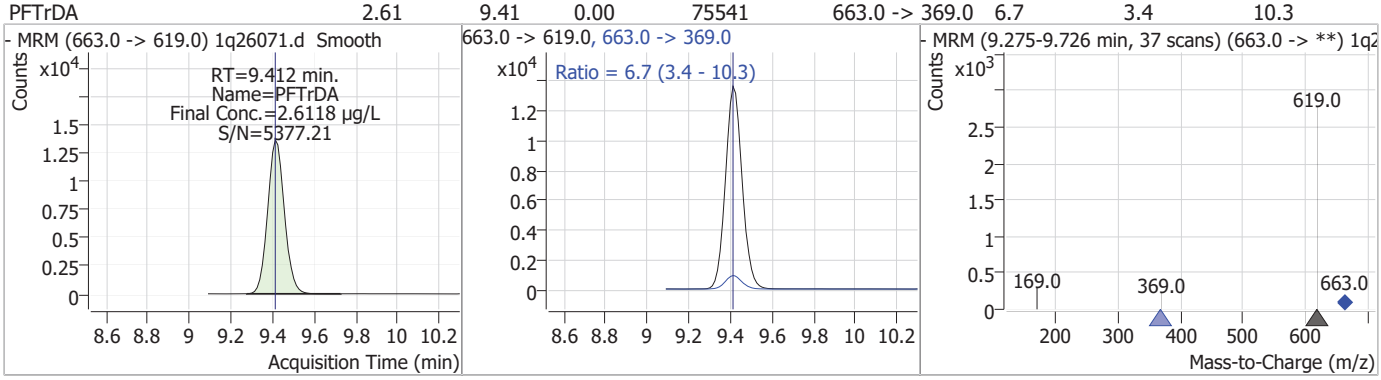


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.57	9.35	0.01	21325				

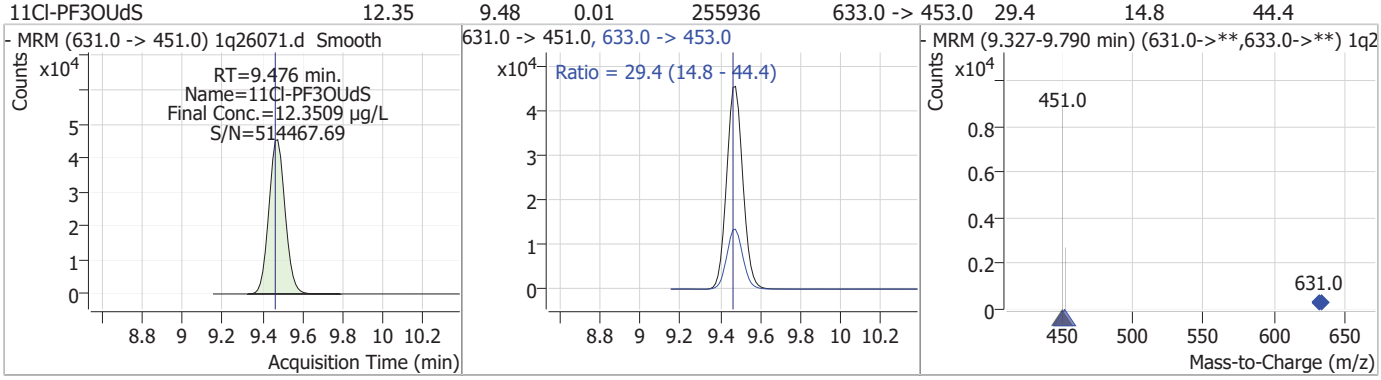


Perfluorinated Compounds by LC/MS/MS

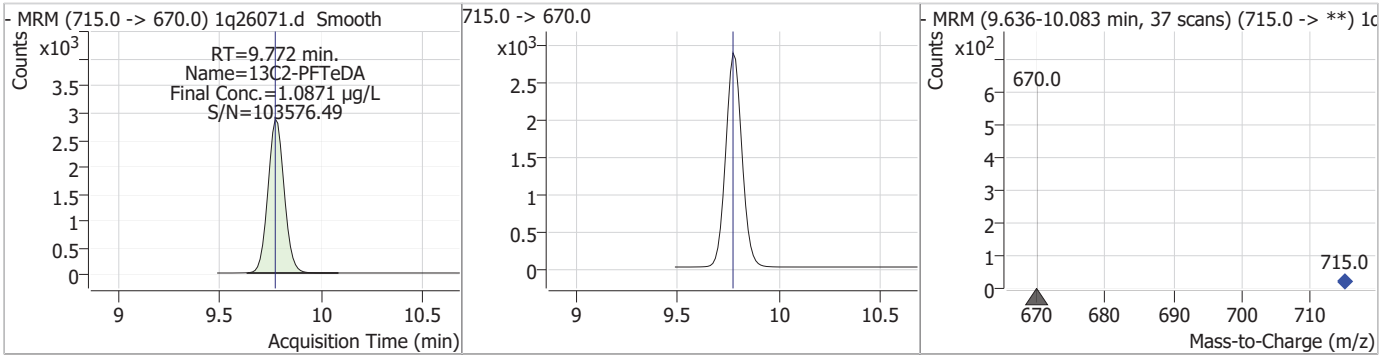
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.61	9.41	0.00	75541	663.0 -> 369.0	6.7	3.4	10.3



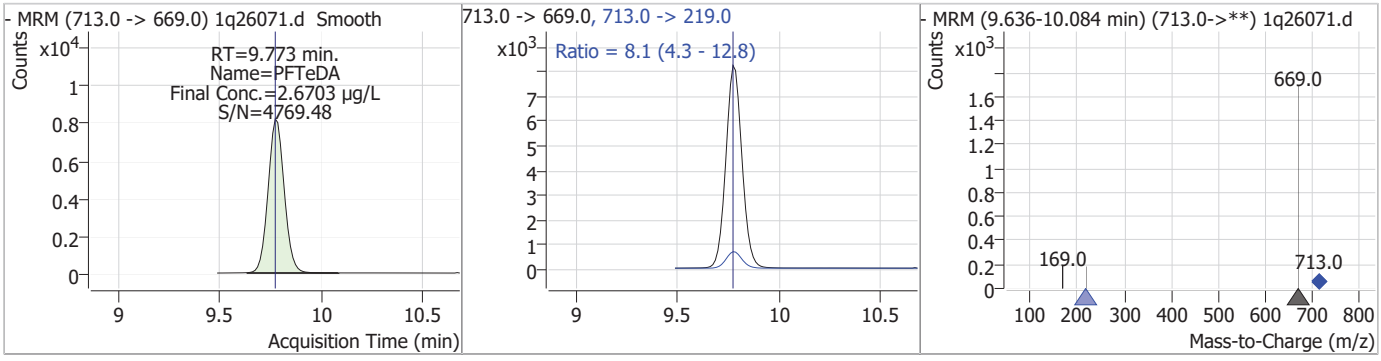
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	12.35	9.48	0.01	255936	633.0 -> 453.0	29.4	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.09	9.77	0.00	15744				

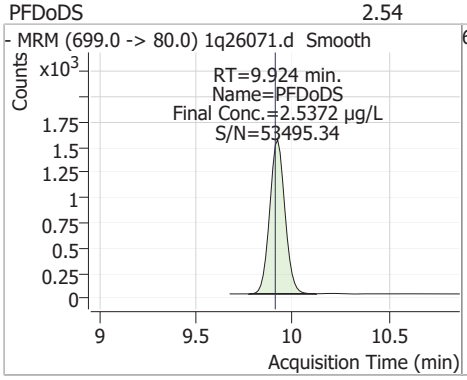


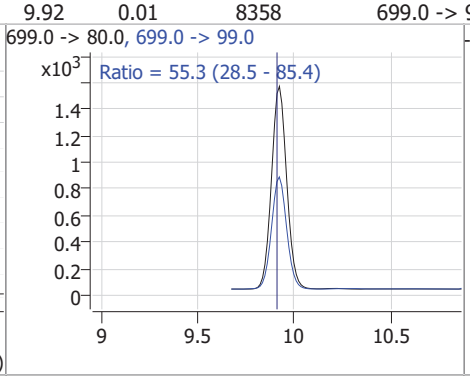
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.67	9.77	0.00	45282	713.0 -> 219.0	8.1	4.3	12.8

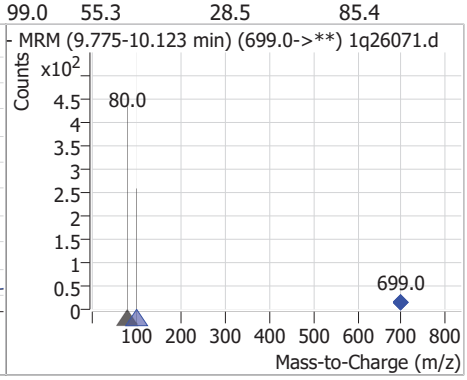


Perfluorinated Compounds by LC/MS/MS

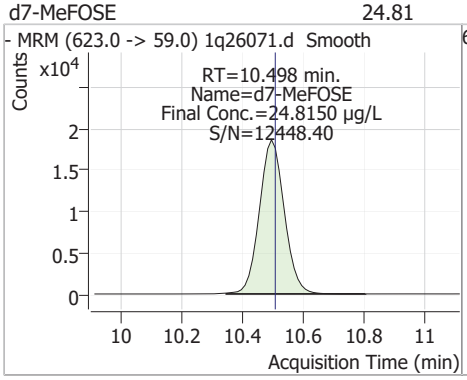
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.54	9.92	0.01	8358	699.0 -> 99.0	55.3	28.5	85.4

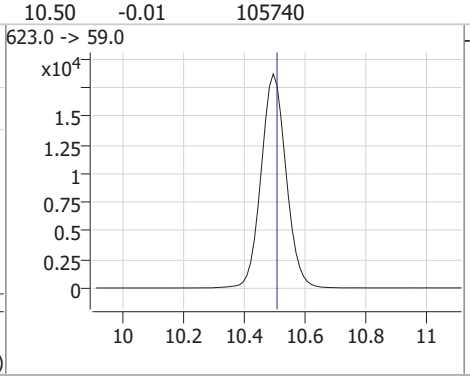


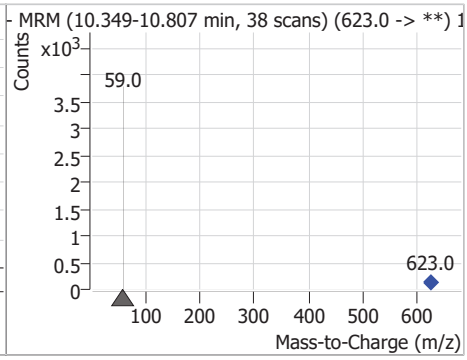




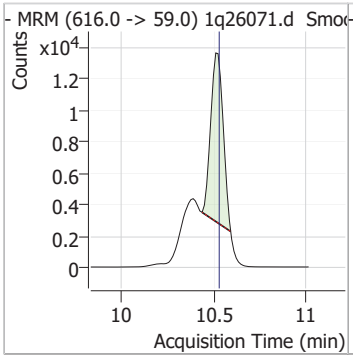
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.81	10.50	-0.01	105740				

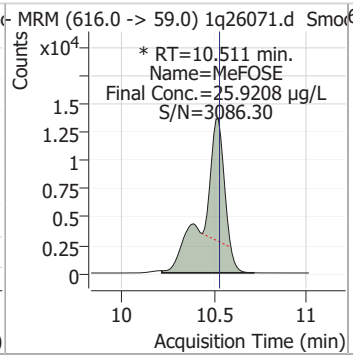


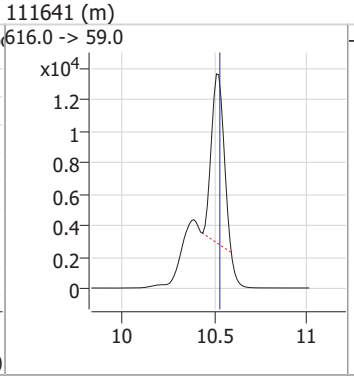


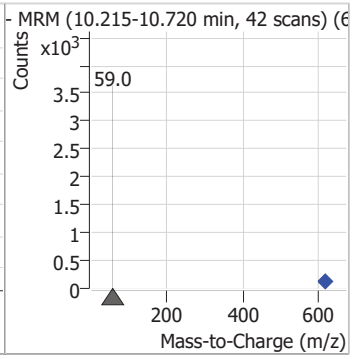


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.92	10.51	-0.01	111641 (m)				

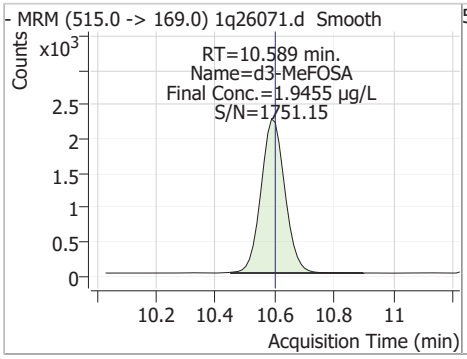


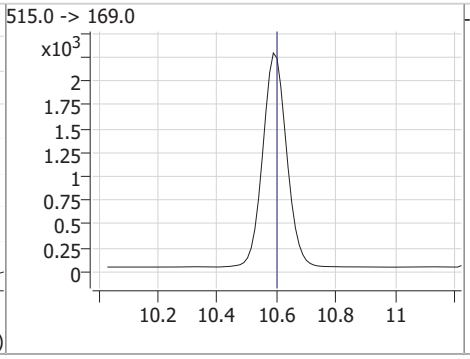


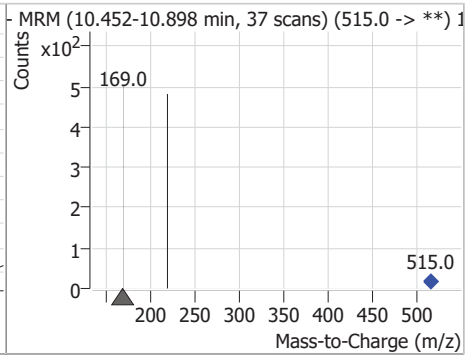




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	1.95	10.59	-0.01	12532				







7.3.6

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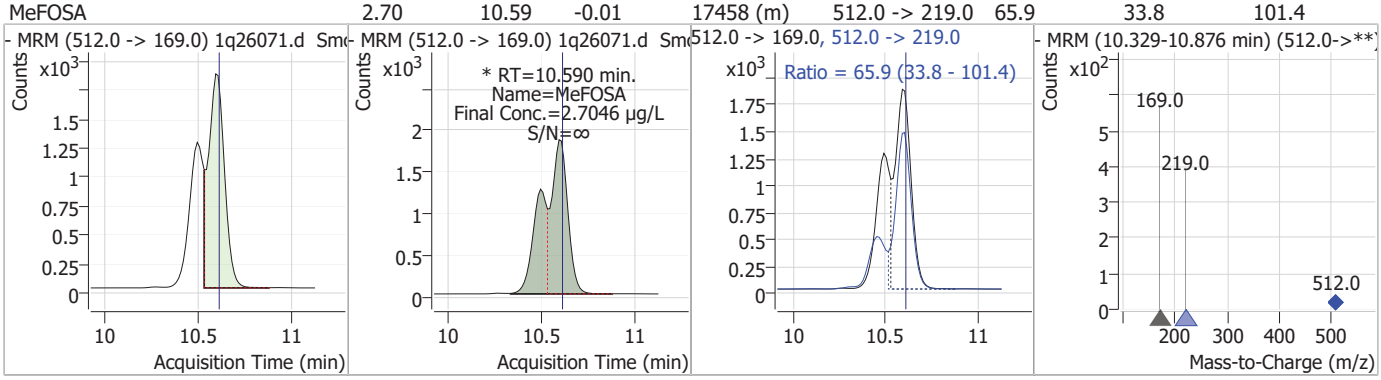
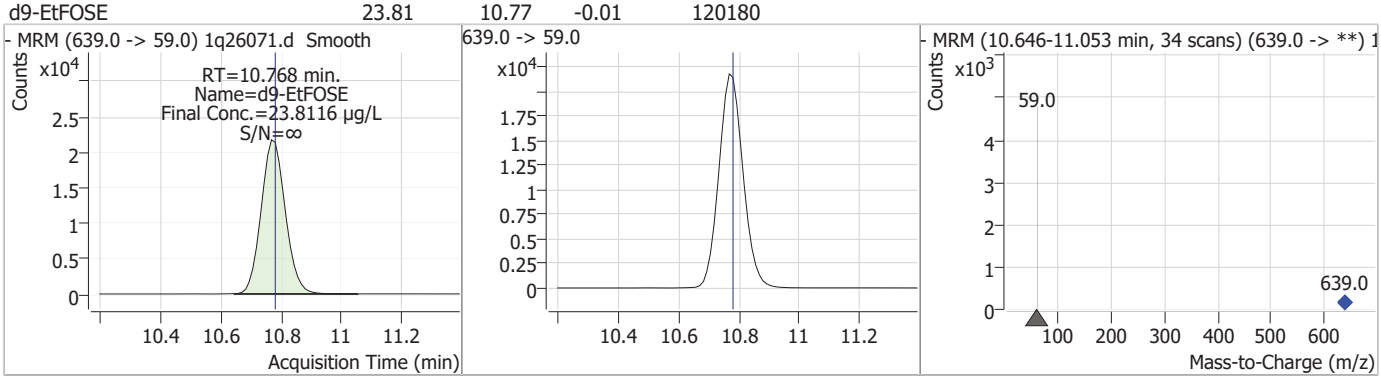
Perfluorinated Compounds by LC/MS/MS

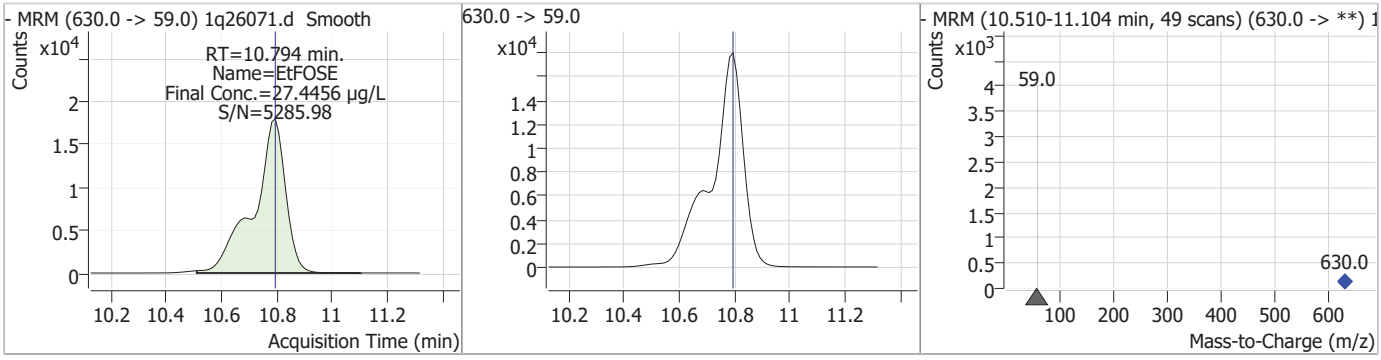
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.70	10.59	-0.01	17458 (m)	512.0 -> 219.0	65.9	33.8	101.4



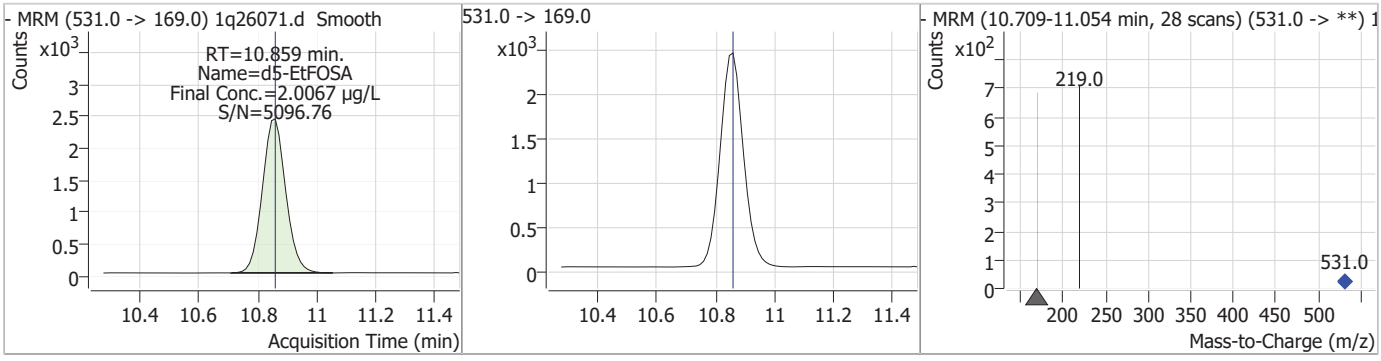
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.81	10.77	-0.01	120180				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	27.45	10.79	0.00	143721				

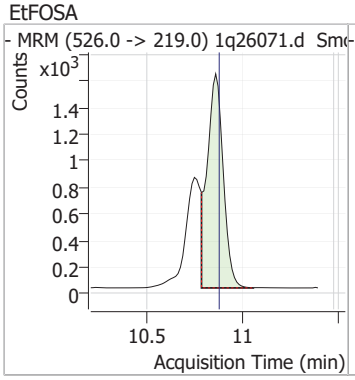


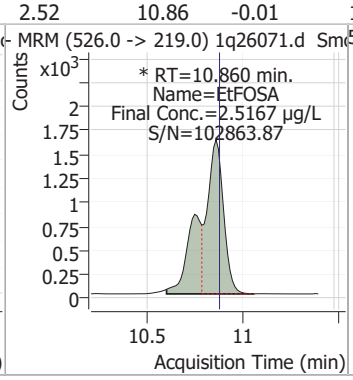
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.01	10.86	0.00	13208				

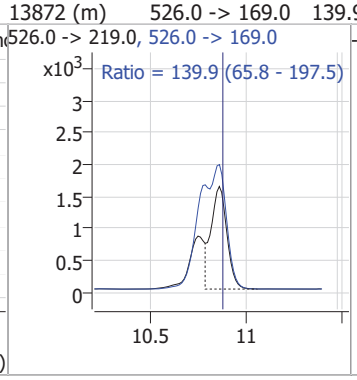


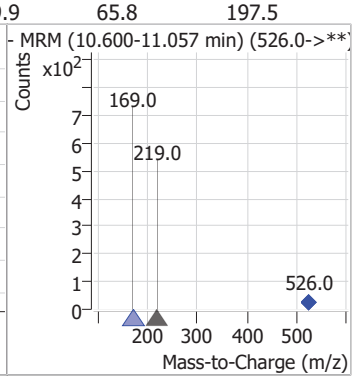
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.52	10.86	-0.01	13872 (m)	526.0 -> 169.0	139.9	65.8	197.5









7.3.6

7

Manual Integration Approval Summary

Sample Number: OP63534-BS
Lab FileID: 1Q26071.D
Injection Time: 05/15/25 13:55
Method: EPA 1633
Analyst approved: 05/16/25 02:49 Alodia Hana Barrogo
Supervisor approved: 05/16/25 06:10 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.67	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Poor instrument integration
PFOSA	754-91-6		9.35	Split peak
MeFOSE	24448-09-7		10.51	Split peak
MeFOSA	31506-32-8		10.59	Split peak
EtFOSA	4151-50-2		10.86	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/15/25 12:50

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8159.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 9:30:16 PM
Sample Name : OP63161-MS
Vial : P1-D2
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,488,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	825124	10.00	µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	382392	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	288189	2.50	µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	290002	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	433752	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	172424	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	168621	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	230537	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	188173	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	153329	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	159919	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	26639	2.50	µg/L	0.000
		302.0 -> 80.0	65404			
M3-PFHxS	6.999	402.0 -> 99.0	34050	2.50	µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	31326	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	12819	5.00	µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	20245	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	25057	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	193772	5.00	µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	450590	10.00	µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	147582	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	732666	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	897025	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	77136	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	72829	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	57872	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	394274	5.00	µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	42346	2.50	µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	478680	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	170639	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	191383	1.25	µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	303637	2.50	µg/L	0.012
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	12819	6.04	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 120.7%		
13C2-6:2FTS	6.684	429.0 -> 81.0	20245	4.39	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 87.9%		
13C2-8:2FTS	7.671	529.0 -> 81.0	25057	4.62	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.4%		
13C2-PFDoDA	8.666	615.0 -> 570.0	188173	1.02	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 81.6%		
13C2-PFTeDA	9.368	715.0 -> 670.0	153329	1.08	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 86.5%		
13C3-PFBS	5.368	302.0 -> 99.0	26639	2.55	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.0%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	34050	2.30	µg/L		0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.1%			
13C4-PFBA	2.871	217.0 -> 172.0	825124	9.13	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 91.3%			
13C4-PFHpA	6.291	367.0 -> 322.0	290002	2.12	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 84.9%			
13C5-PFHxA	5.464	318.0 -> 273.0	288189	2.24	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 89.7%			
13C5-PFPeA	4.319	268.0 -> 223.0	382392	3.92	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 78.4%			
13C6-PFDA	7.858	519.0 -> 474.0	168621	1.12	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.5%			
13C7-PFUnDA	8.273	570.0 -> 525.0	230537	1.14	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.6%			
13C8-FOSA	9.279	506.0 -> 78.0	159919	2.69	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.6%			
13C8-PFOA	6.897	421.0 -> 376.0	433752	2.27	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.7%			
13C8-PFOS	7.995	507.0 -> 99.0	31326	2.25	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 89.9%			
13C9-PFNA	7.403	472.0 -> 427.0	172424	1.09	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 86.9%			
d3-MeFOSAA	7.915	573.0 -> 419.0	193772	5.08	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.7%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	450590	8.93	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 89.3%			
d3-MeFOSA	10.555	515.0 -> 169.0	72829	2.39	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.4%			
d5-EtFOSAA	8.098	589.0 -> 419.0	147582	5.04	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.9%			
d7-MeFOSE	10.462	623.0 -> 59.0	732666	25.14	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.5%			
d9-EtFOSE	10.734	639.0 -> 59.0	897025	25.38	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 101.5%			
d5-EtFOSA	10.825	531.0 -> 169.0	77136	2.45	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.1%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	243481	10.34	µg/L		99
		327.0 -> 81.0	114915				
6:2FTS	6.684	427.0 -> 407.0	3847367	189.50	µg/L		99
		427.0 -> 81.0	1782239				
8:2FTS	7.671	527.0 -> 507.0	653635	33.33	µg/L		100
		527.0 -> 81.0	248191				
EtFOSAA	8.099	584.0 -> 419.0	70262	2.51	µg/L	m	99
		584.0 -> 483.0	39057				
FOSA	9.281	498.0 -> 78.0	224278	3.86	µg/L	m	100
		498.0 -> 478.0	6439				
MeFOSAA	7.917	570.0 -> 419.0	86594	2.59	µg/L	m	97
		570.0 -> 512.0	30233				
PFBA	2.877	213.0 -> 169.0	1065596	42.25	µg/L		100
PFBS	5.369	299.0 -> 80.0	209336	6.87	µg/L		99
		299.0 -> 99.0	84870				
PFDA	7.859	513.0 -> 469.0	665223	5.19	µg/L	m	99
		513.0 -> 219.0	152603				
PFDoDA	8.667	613.0 -> 569.0	395618	2.73	µg/L		99
		613.0 -> 319.0	52647				

Perfluorinated Compounds by LC/MS/MS

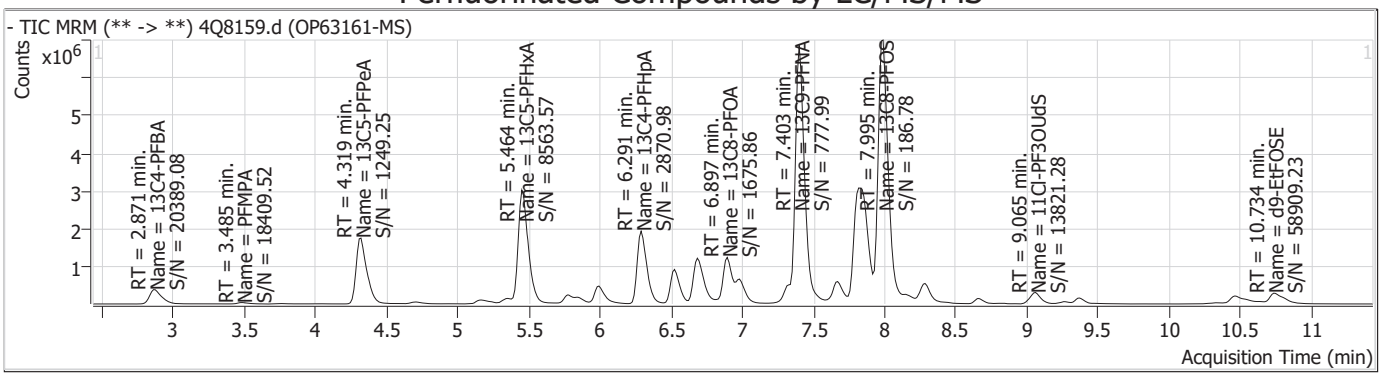
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.804	599.0 -> 80.0	46722	2.27	µg/L		98
		599.0 -> 99.0	25561				
PFHpA	6.292	363.0 -> 319.0	7060796	40.02	µg/L		100
		363.0 -> 169.0	1454610				
PFHpS	7.529	449.0 -> 80.0	277360	9.42	µg/L		99
		449.0 -> 99.0	153980				
PFHxA	5.467	313.0 -> 269.0	13888274	111.81	µg/L		100
		313.0 -> 119.0	454855				
PFHxS	7.000	399.0 -> 80.0	1949418	65.75	µg/L	m	94
		399.0 -> 99.0	967257				
PFNA	7.404	463.0 -> 419.0	24086940	232.25	µg/L		79
		463.0 -> 219.0	6032036				
PFNS	8.425	549.0 -> 80.0	71403	3.39	µg/L		100
		549.0 -> 99.0	41774				
PFOA	6.898	413.0 -> 369.0	3894244	26.97	µg/L	m	97
		413.0 -> 169.0	1075465				
PFOS	7.996	499.0 -> 80.0	12820598	507.82	µg/L	m	95
		499.0 -> 99.0	6112986				
PFPeA	4.321	263.0 -> 219.0	8829352	146.04	µg/L		100
PFPeS	6.331	349.0 -> 80.0	320568	9.64	µg/L		99
		349.0 -> 99.0	165185				
PFTeDA	9.369	713.0 -> 669.0	450666	2.52	µg/L		100
		713.0 -> 219.0	33310				
PFTrDA	9.025	663.0 -> 619.0	457132	2.83	µg/L		99
		663.0 -> 369.0	29390				
PFUnDA	8.275	563.0 -> 519.0	857694	6.29	µg/L		96
		563.0 -> 269.0	156239				
11Cl-PF3OUdS	9.065	631.0 -> 451.0	822657	9.60	µg/L		98
		633.0 -> 453.0	247848				
9Cl-PF3ONS	8.301	531.0 -> 351.0	918869	9.74	µg/L		99
		533.0 -> 353.0	282156				
ADONA	6.527	377.0 -> 251.0	3148817	8.91	µg/L		99
		377.0 -> 85.0	1017975				
HFPO-DA	5.792	285.0 -> 169.0	487512	10.29	µg/L		99
		285.0 -> 185.0	51988				
3:3FTCA	3.756	241.0 -> 177.0	49494	13.70	µg/L		100
		241.0 -> 117.0	3922				
5:3FTCA	5.993	341.0 -> 237.0	1356229	61.14	µg/L		100
		341.0 -> 217.0	957417				
7:3FTCA	7.330	441.0 -> 337.0	1650889	57.78	µg/L		98
		441.0 -> 317.0	727673				
EtFOSA	10.826	526.0 -> 219.0	81957	2.56	µg/L		99
		526.0 -> 169.0	116025				
EtFOSE	10.747	630.0 -> 59.0	1053164	25.24	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	101009	2.65	µg/L		99
		512.0 -> 219.0	66026				
MeFOSE	10.476	616.0 -> 59.0	814356	25.35	µg/L	m	100
PFDoDS	9.496	699.0 -> 80.0	39311	2.87	µg/L		97
		699.0 -> 99.0	25488				
NFDHA	5.345	295.0 -> 201.0	85611	5.25	µg/L		87
		201.0 -> 85.0	319701				
		295.0 -> 85.0	22603				
PFMBA	4.710	279.0 -> 85.0	231611	5.62	µg/L		100
PFMPA	3.485	229.0 -> 85.0	196867	5.68	µg/L		100
PFEESA	5.861	315.0 -> 135.0	541231	4.74	µg/L		99
		315.0 -> 69.0	43074				

Perfluorinated Compounds by LC/MS/MS

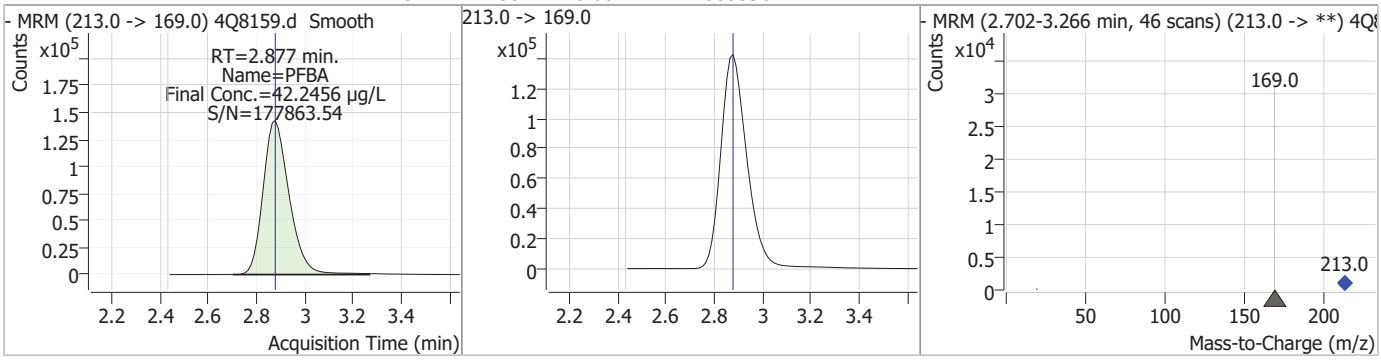
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

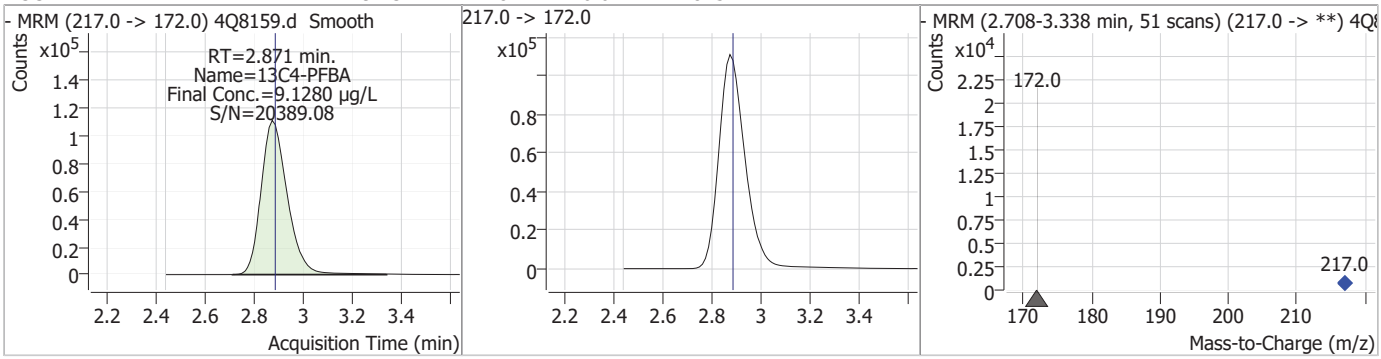
Perfluorinated Compounds by LC/MS/MS



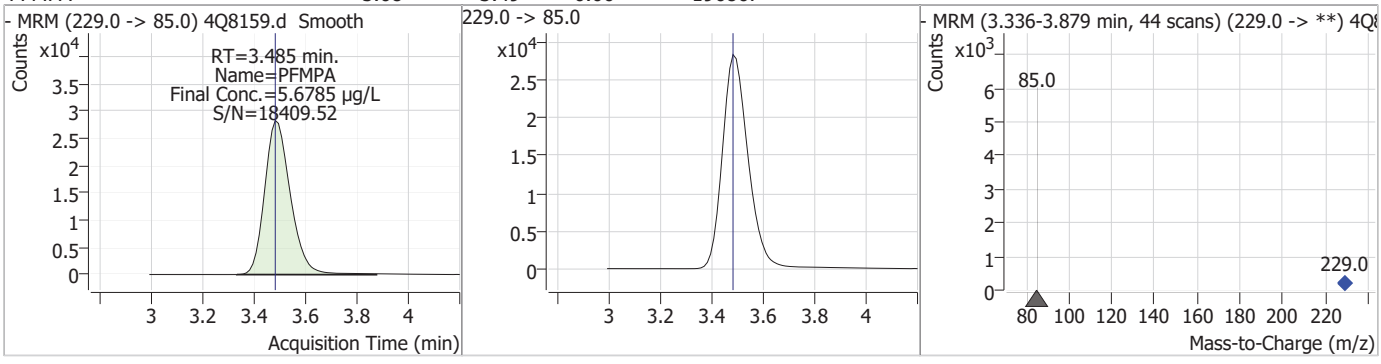
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	42.25	2.88	0.00	1065596				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.13	2.87	-0.01	825124				

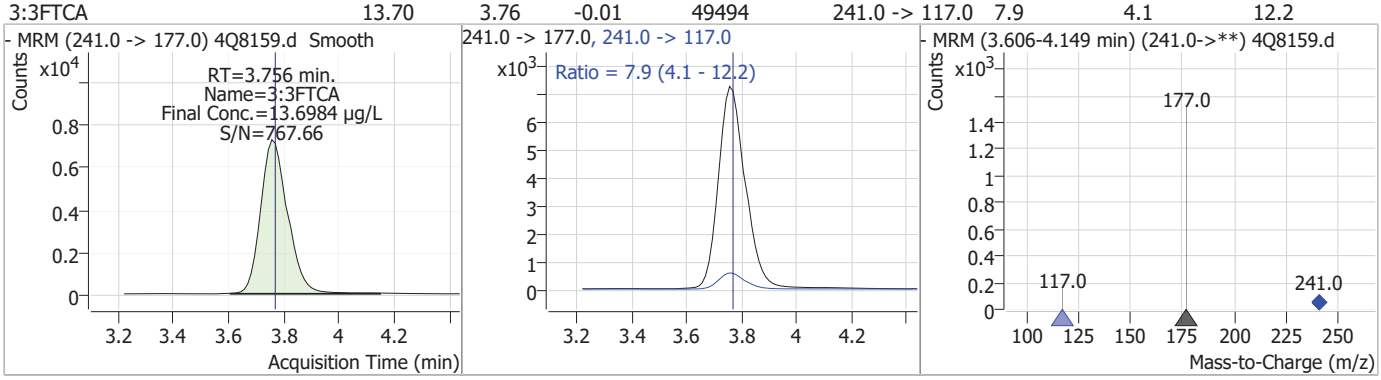


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.68	3.49	0.00	196867				

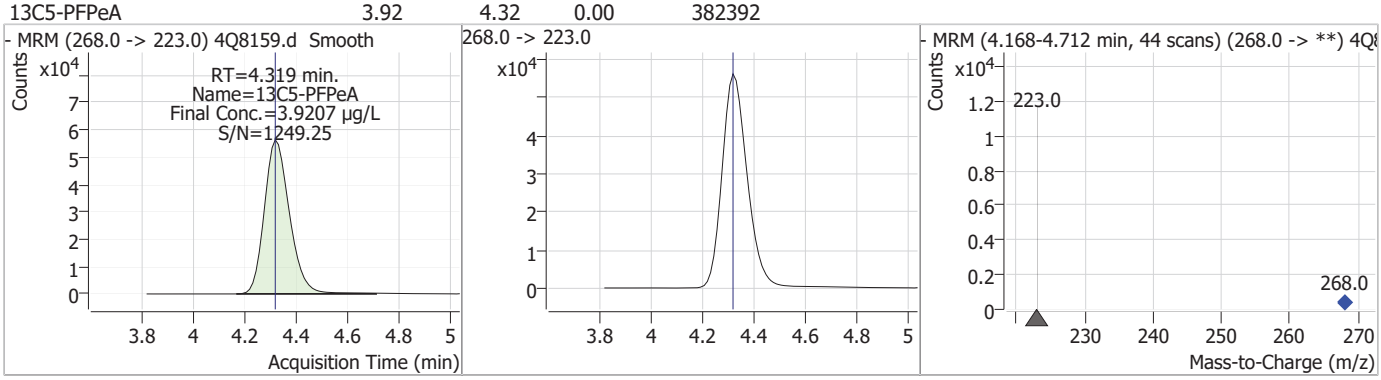


Perfluorinated Compounds by LC/MS/MS

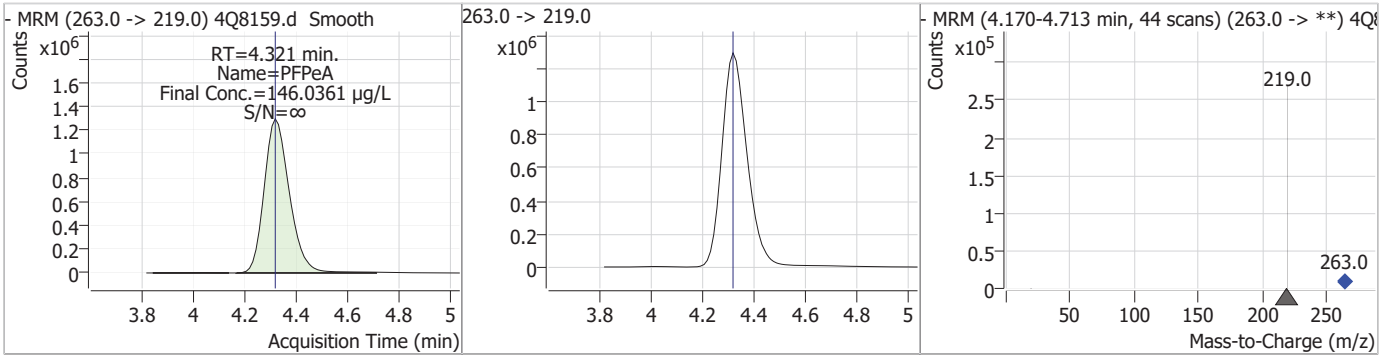
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	13.70	3.76	-0.01	49494	241.0 -> 117.0	7.9	4.1	12.2



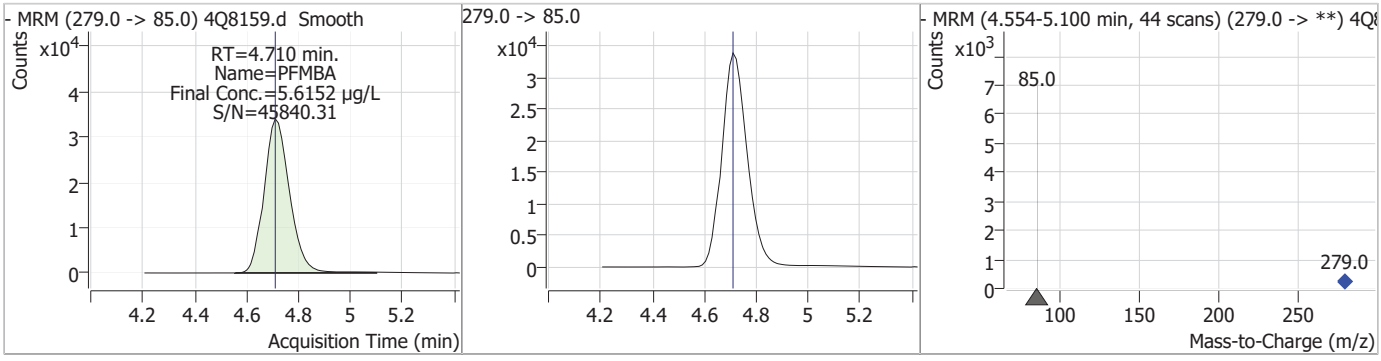
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	3.92	4.32	0.00	382392				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	146.04	4.32	0.00	8829352				

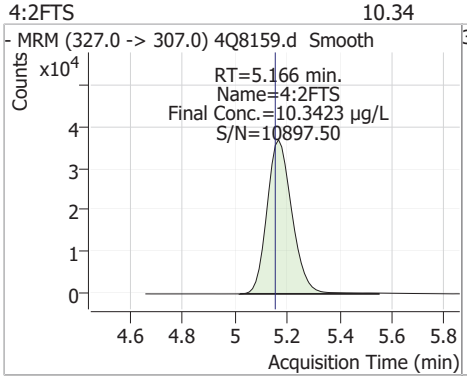


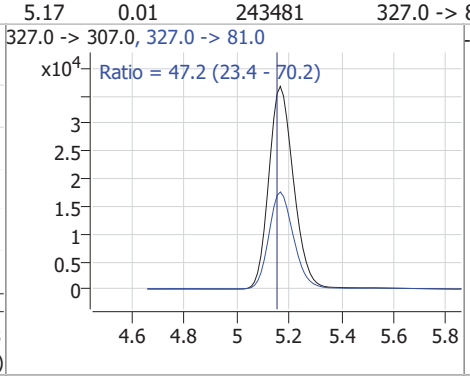
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.62	4.71	0.00	231611				

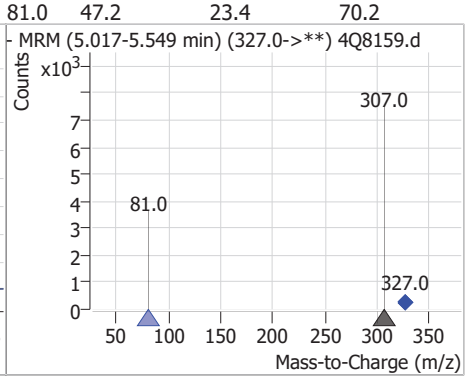


Perfluorinated Compounds by LC/MS/MS

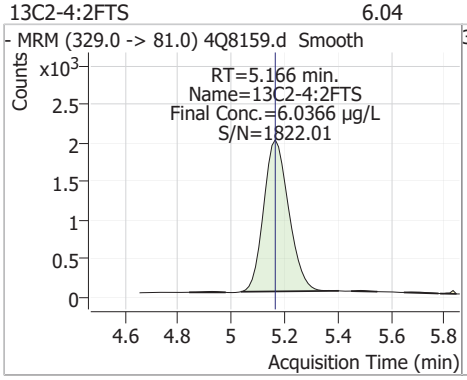
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	10.34	5.17	0.01	243481	327.0 -> 81.0	47.2	23.4	70.2

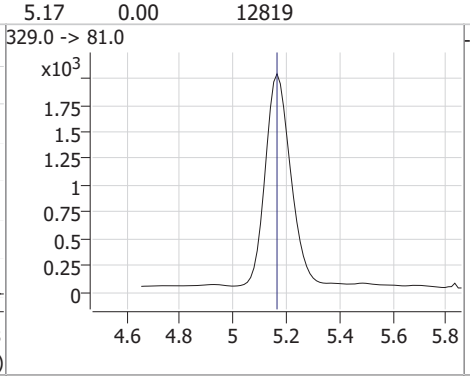


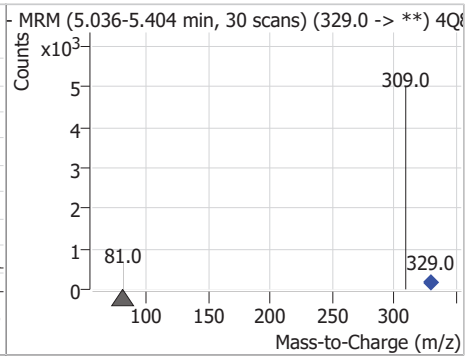




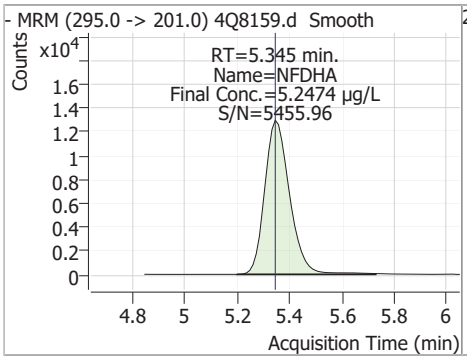
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	6.04	5.17	0.00	12819				

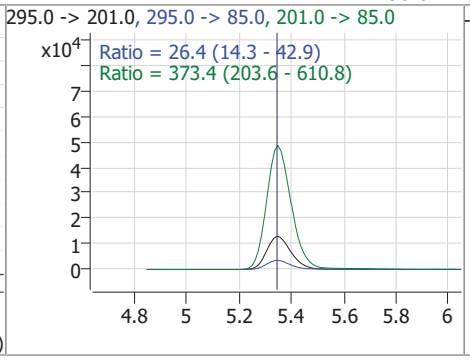


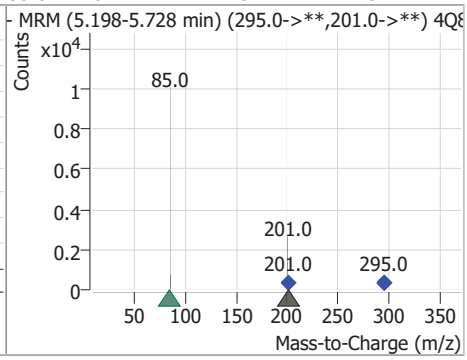




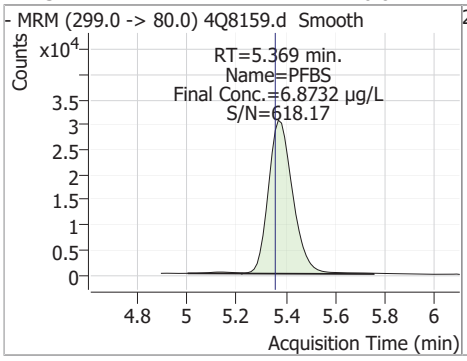
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.25	5.35	0.00	85611	201.0 -> 85.0	373.4	203.6	610.8
					295.0 -> 85.0	26.4	14.3	42.9

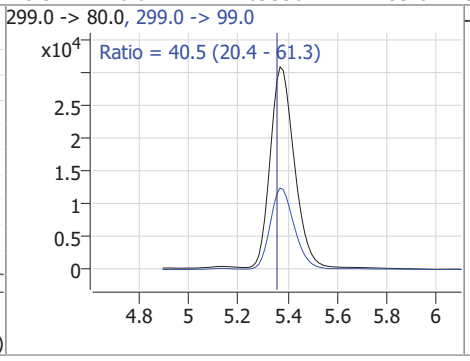


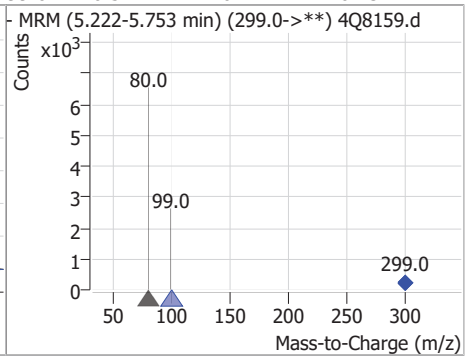




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	6.87	5.37	0.01	209336	299.0 -> 99.0	40.5	20.4	61.3

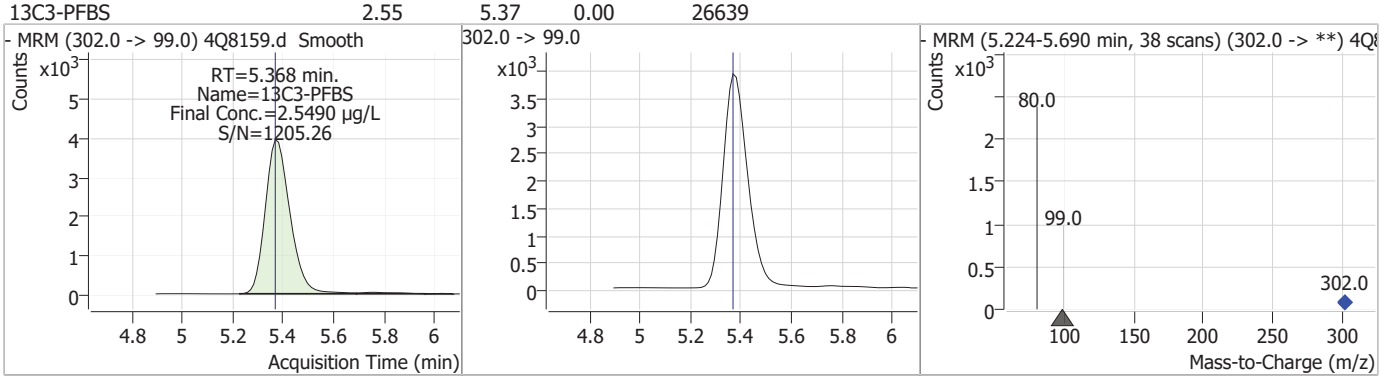




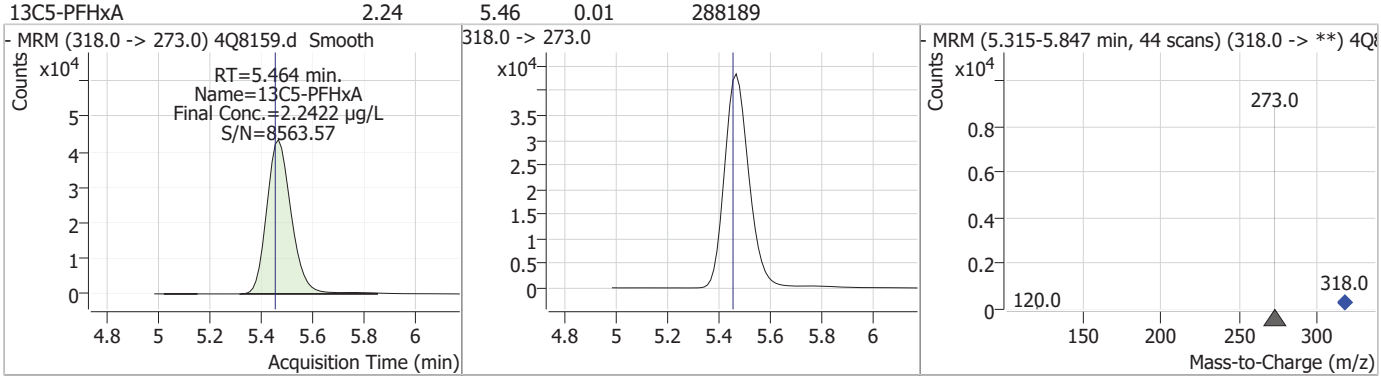


Perfluorinated Compounds by LC/MS/MS

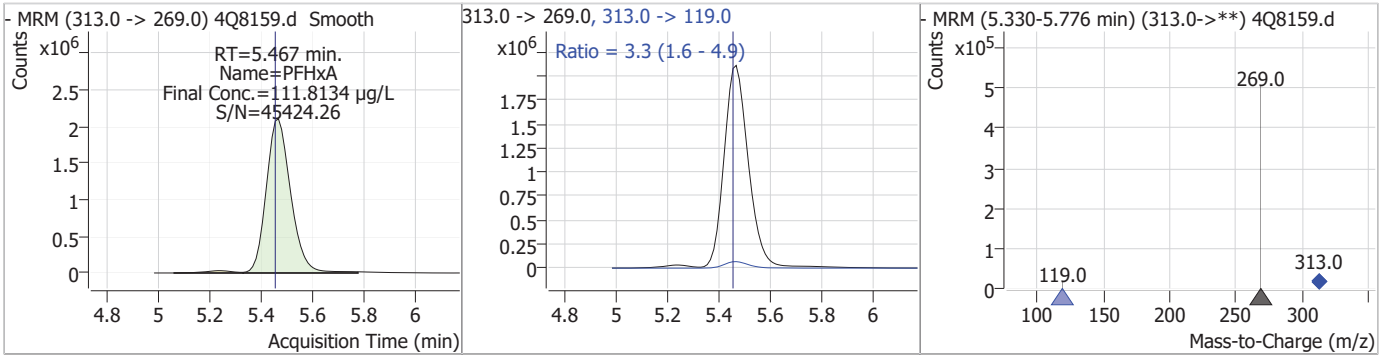
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.55	5.37	0.00	26639				



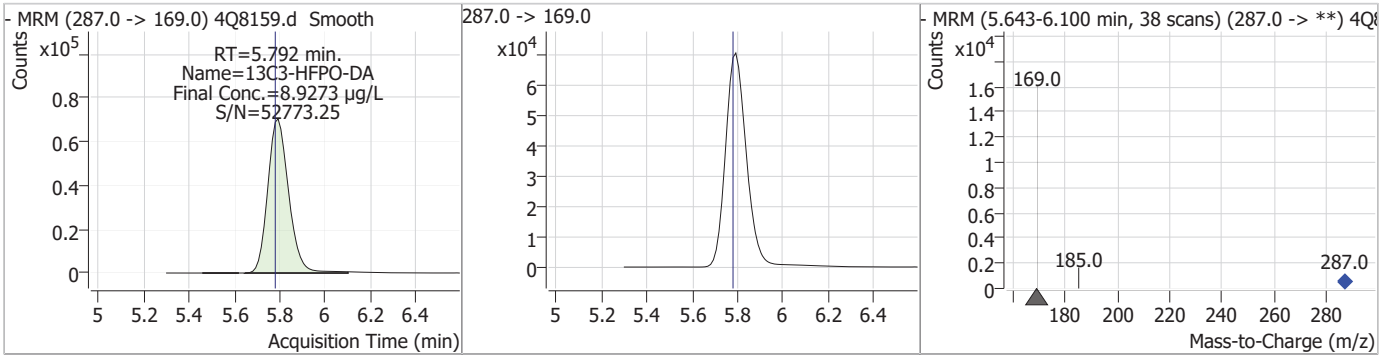
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.24	5.46	0.01	288189				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	111.81	5.47	0.01	13888274	313.0 -> 119.0	3.3	1.6	4.9

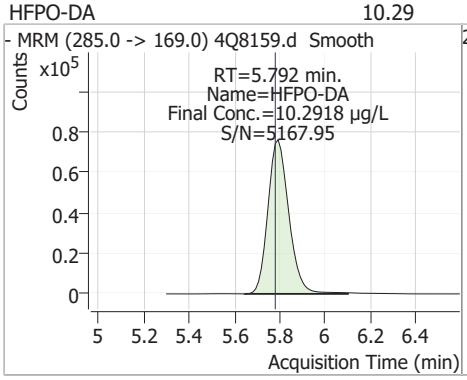


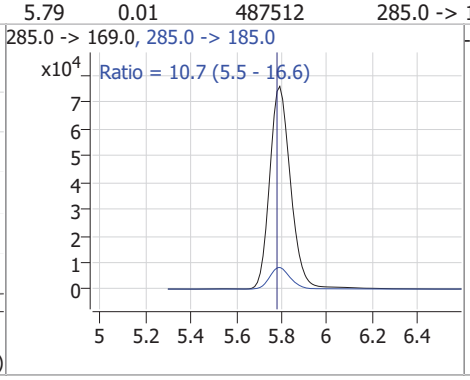
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.93	5.79	0.01	450590				

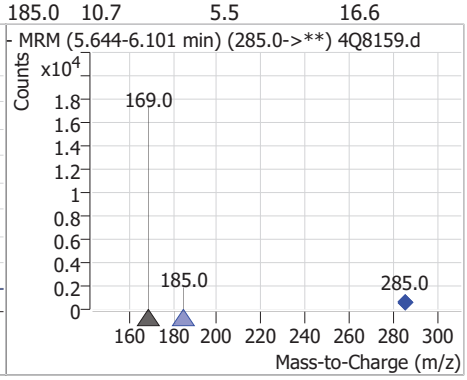


Perfluorinated Compounds by LC/MS/MS

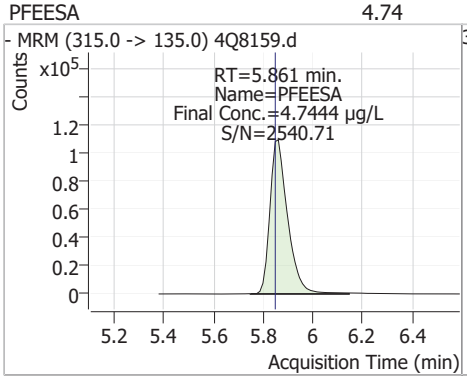
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.29	5.79	0.01	487512	285.0 -> 185.0	10.7	5.5	16.6

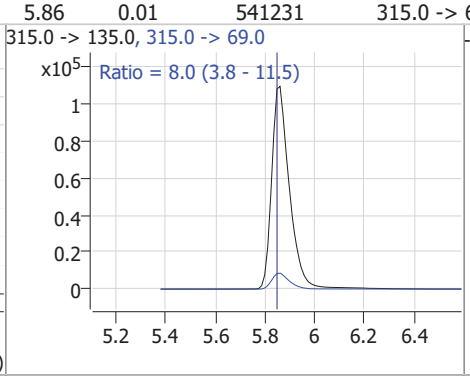


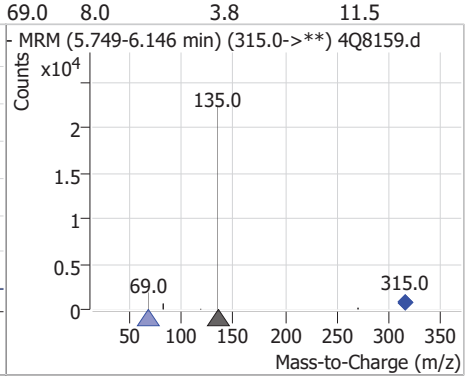




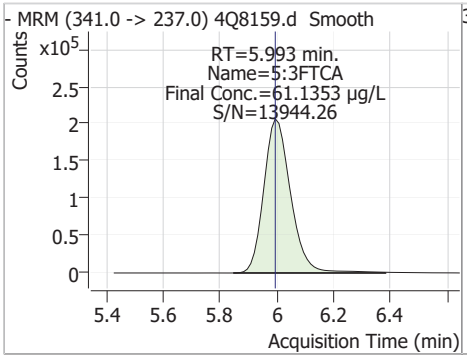
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.74	5.86	0.01	541231	315.0 -> 69.0	8.0	3.8	11.5

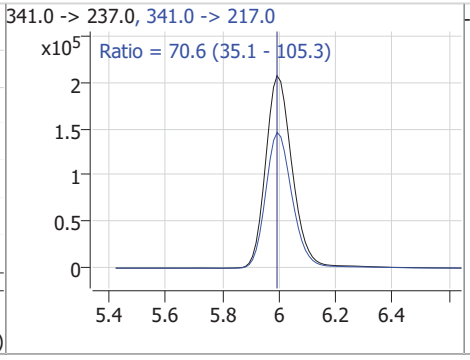


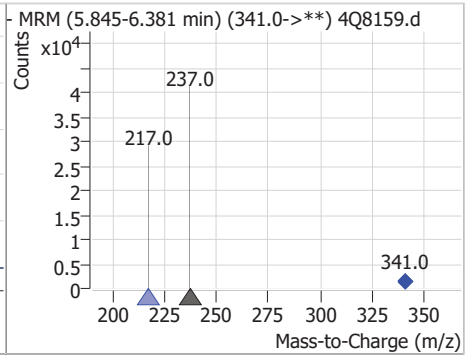




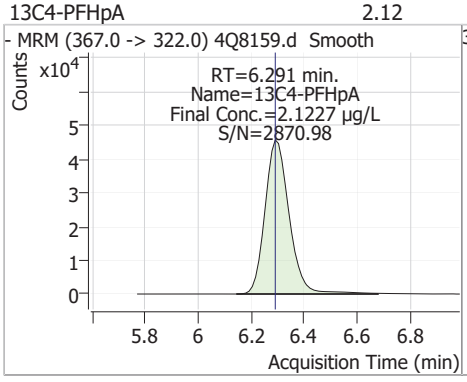
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	61.14	5.99	0.00	1356229	341.0 -> 217.0	70.6	35.1	105.3

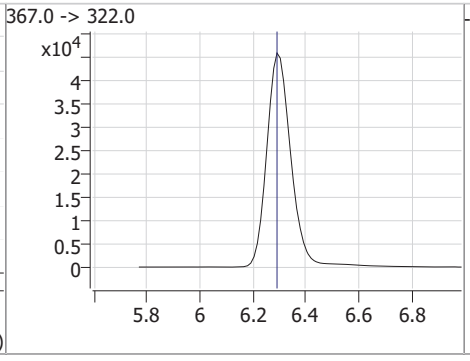


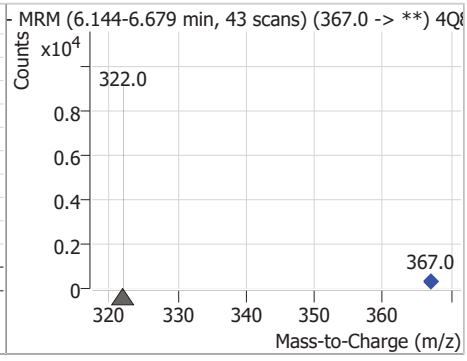




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.12	6.29	0.00	290002				

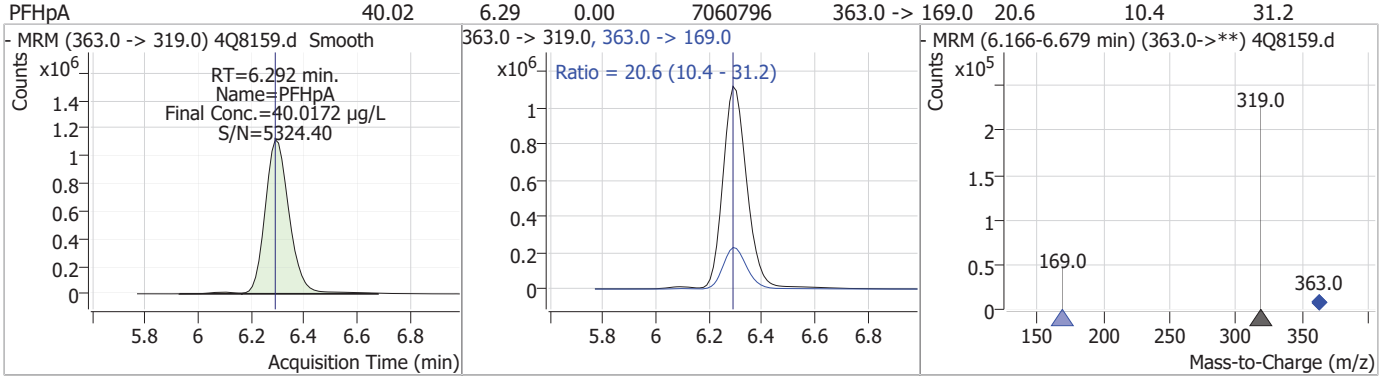




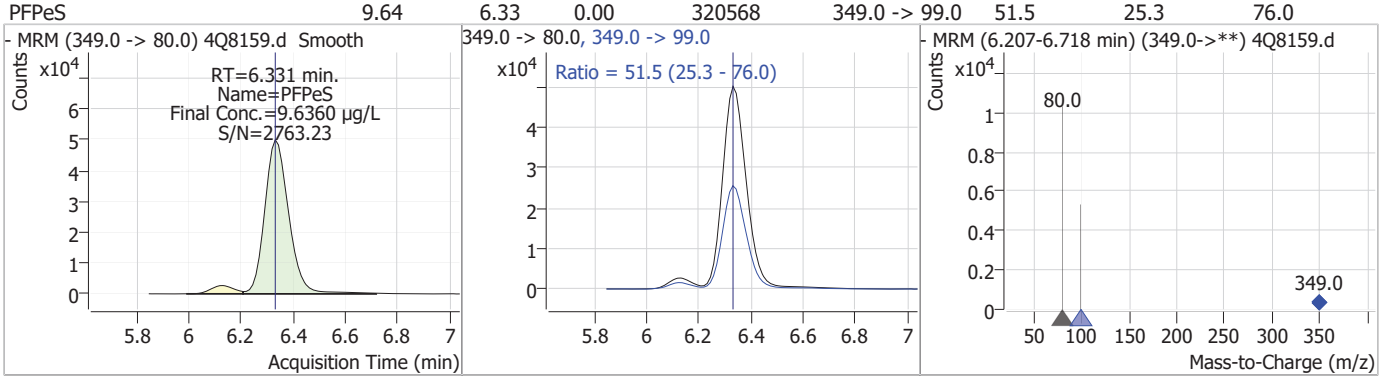


Perfluorinated Compounds by LC/MS/MS

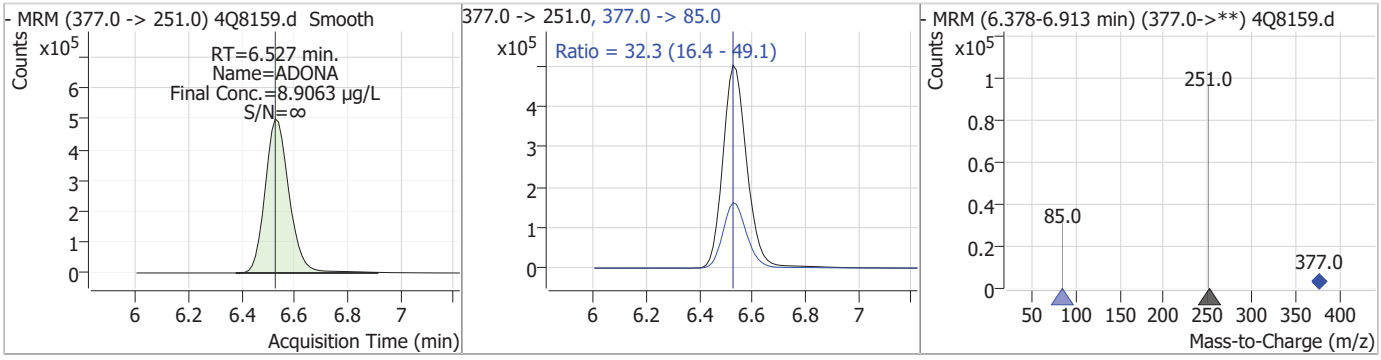
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	40.02	6.29	0.00	7060796	363.0 -> 169.0	20.6	10.4	31.2



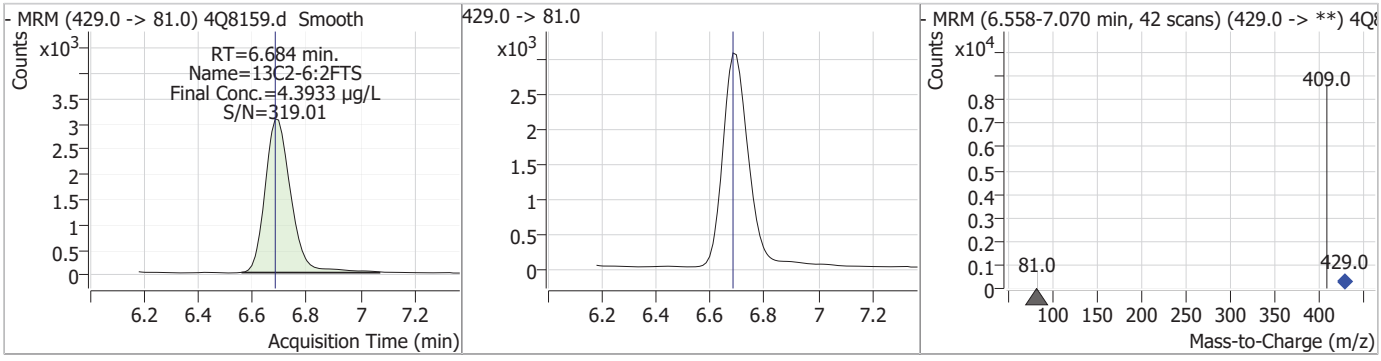
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	9.64	6.33	0.00	320568	349.0 -> 99.0	51.5	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.91	6.53	0.00	3148817	377.0 -> 85.0	32.3	16.4	49.1

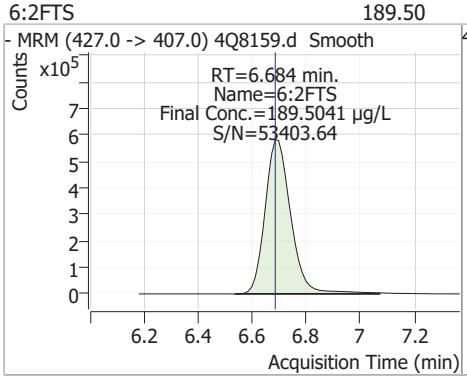


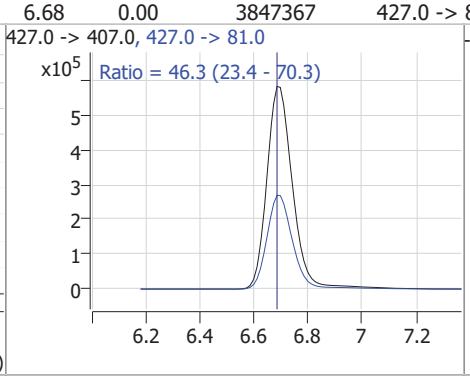
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.39	6.68	0.00	20245				

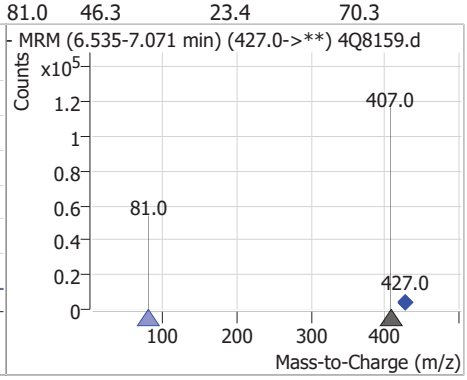


Perfluorinated Compounds by LC/MS/MS

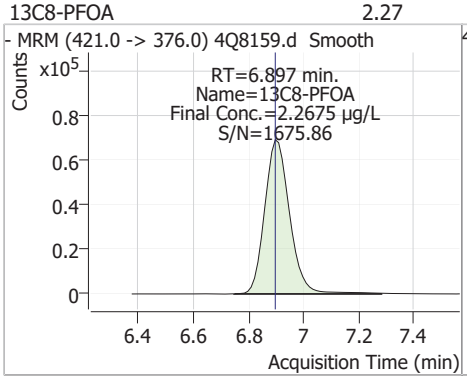
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	189.50	6.68	0.00	3847367	427.0 -> 81.0	46.3	23.4	70.3

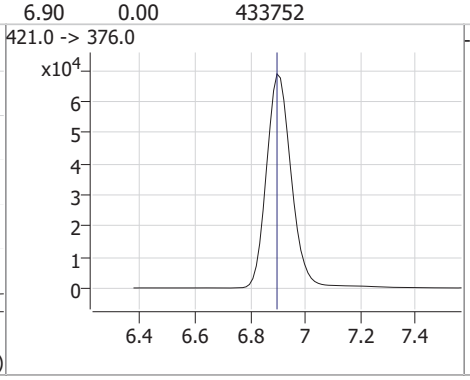


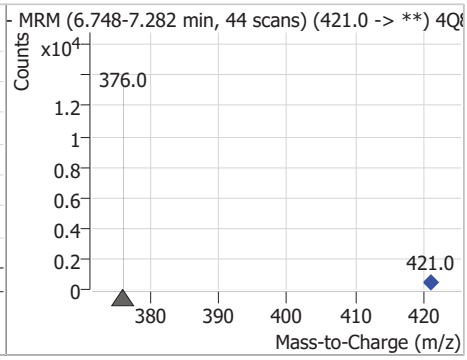




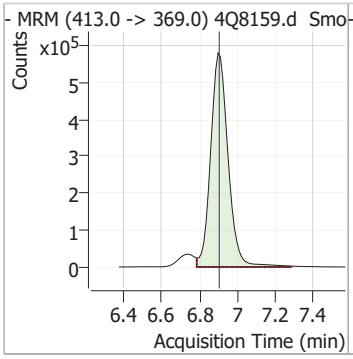
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.27	6.90	0.00	433752				

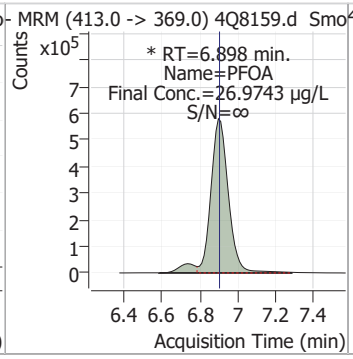


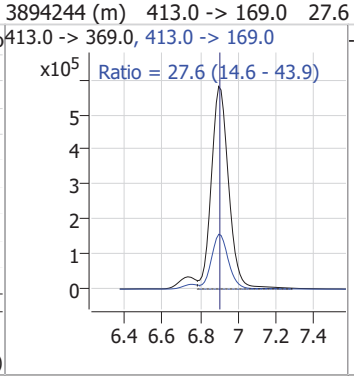


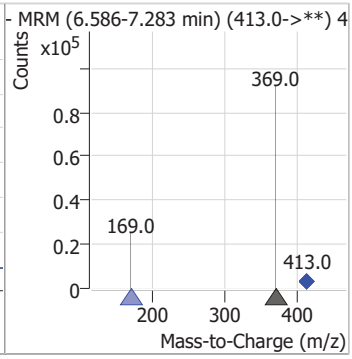


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	26.97	6.90	0.00	3894244 (m)	413.0 -> 169.0	27.6	14.6	43.9

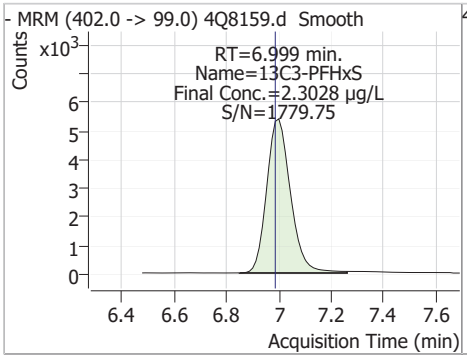


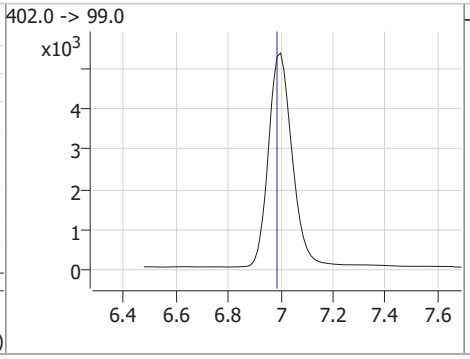


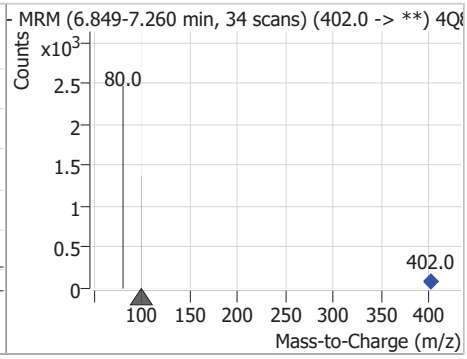




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.30	7.00	0.01	34050				

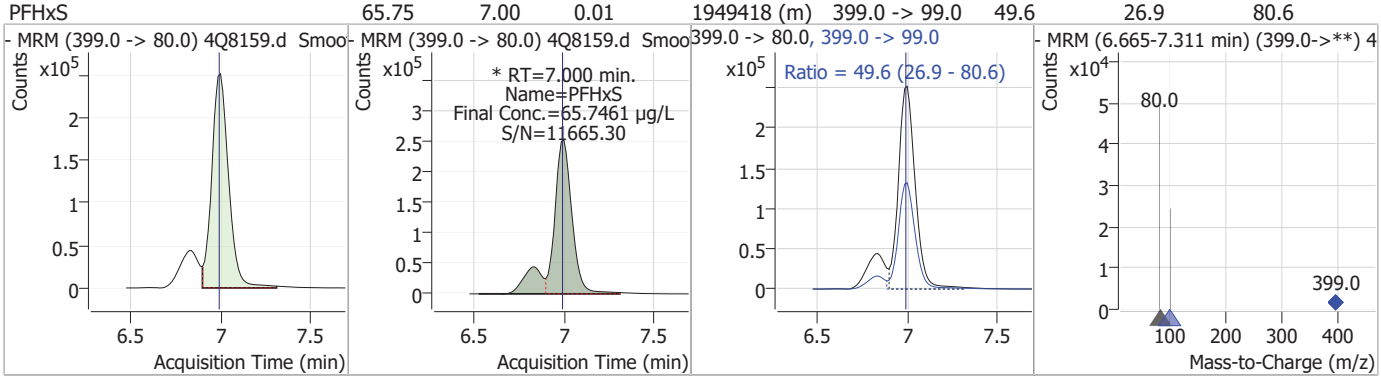




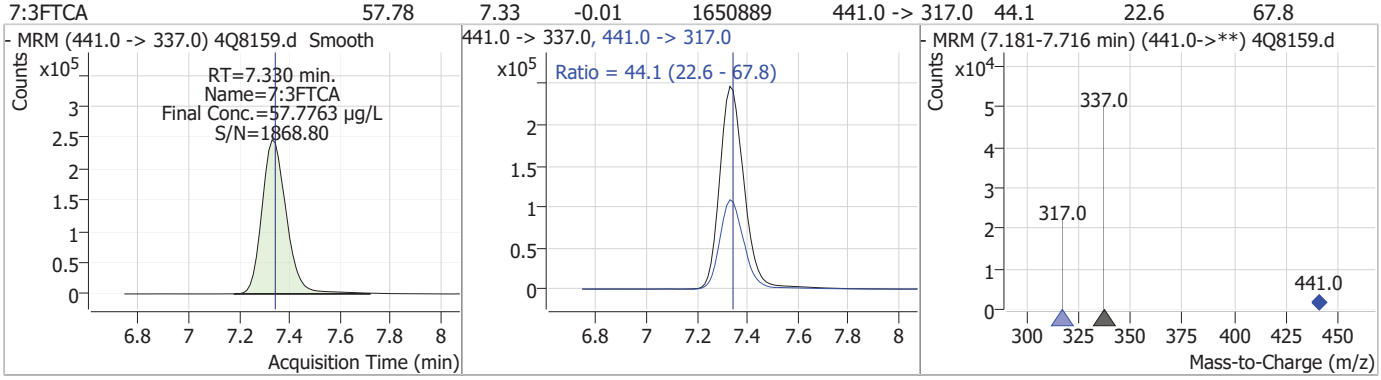


Perfluorinated Compounds by LC/MS/MS

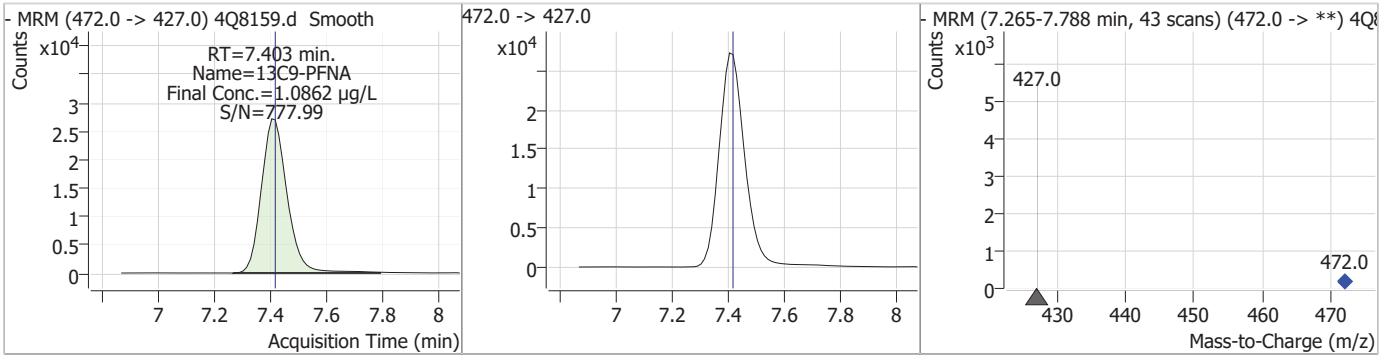
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	65.75	7.00	0.01	1949418 (m)	399.0 -> 99.0	49.6	26.9	80.6



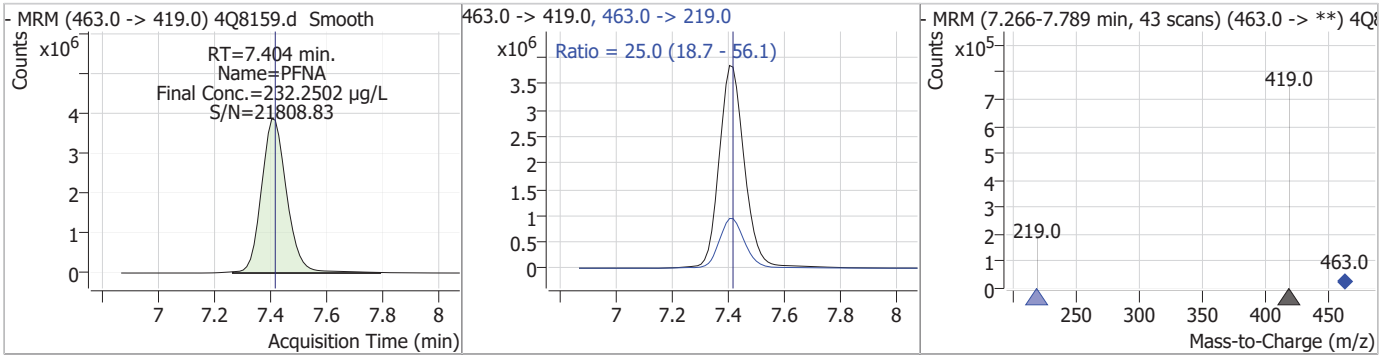
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	57.78	7.33	-0.01	1650889	441.0 -> 317.0	44.1	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.09	7.40	-0.01	172424				

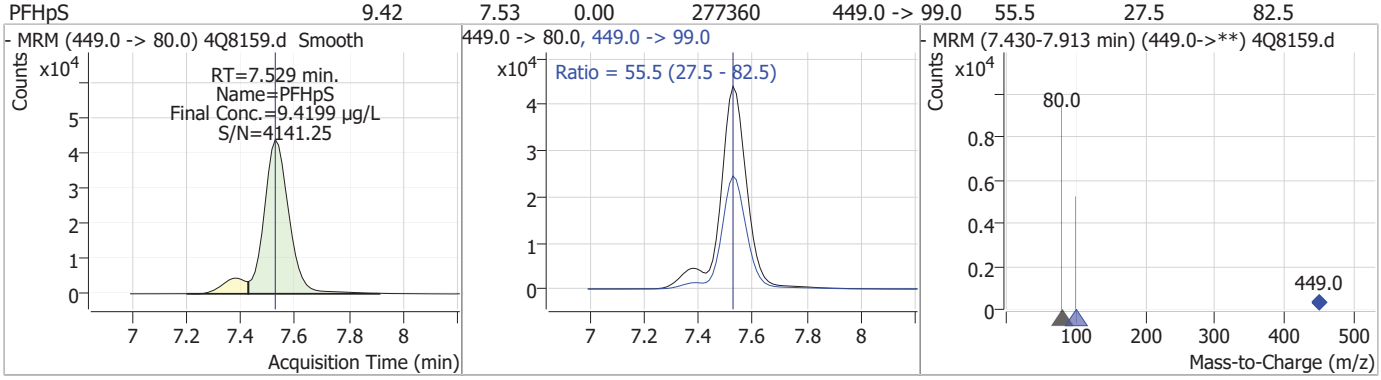


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	232.25	7.40	-0.01	24086940	463.0 -> 219.0	25.0	18.7	56.1

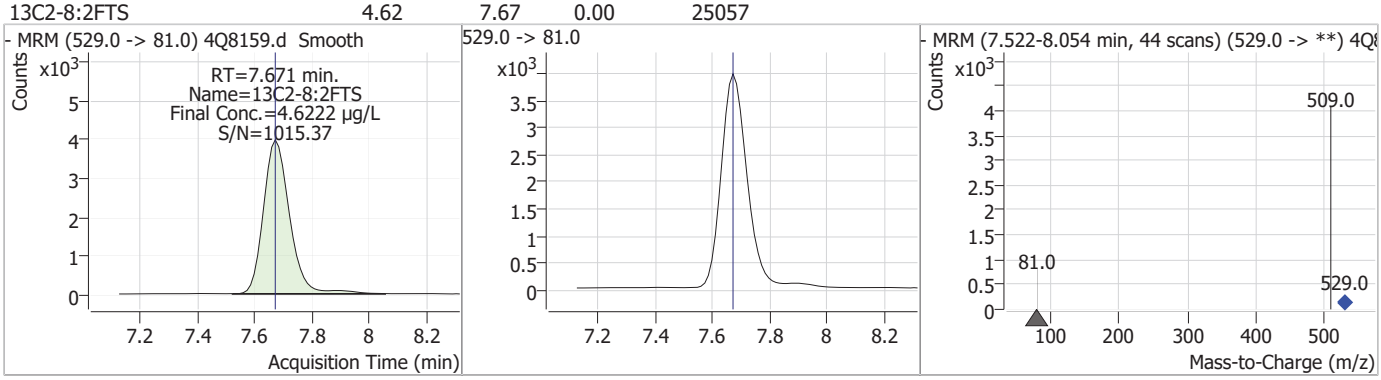


Perfluorinated Compounds by LC/MS/MS

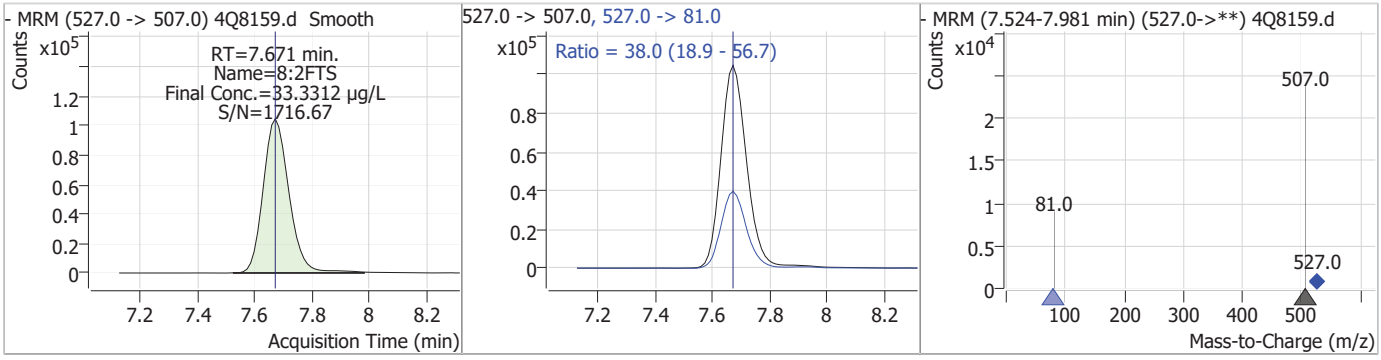
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	9.42	7.53	0.00	277360	449.0 -> 99.0	55.5	27.5	82.5



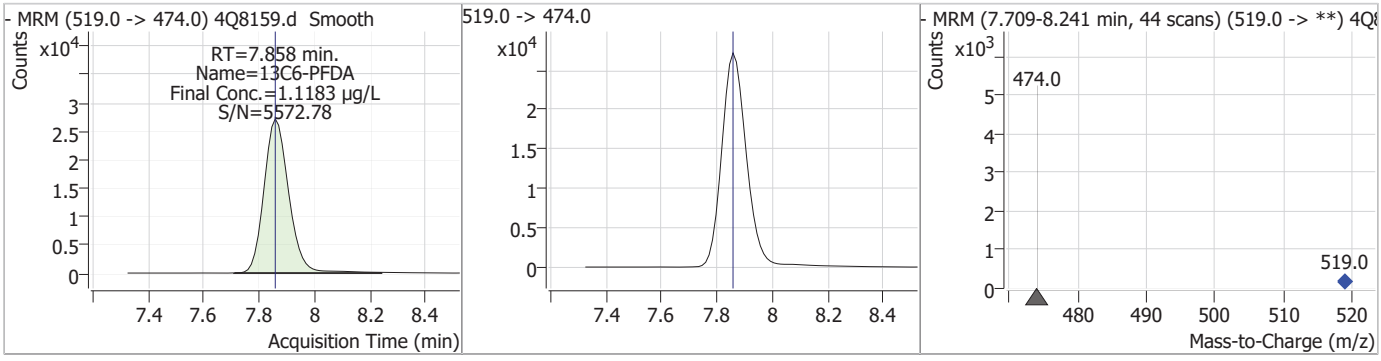
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.62	7.67	0.00	25057				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	33.33	7.67	0.00	653635	527.0 -> 81.0	38.0	18.9	56.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.12	7.86	0.00	168621				

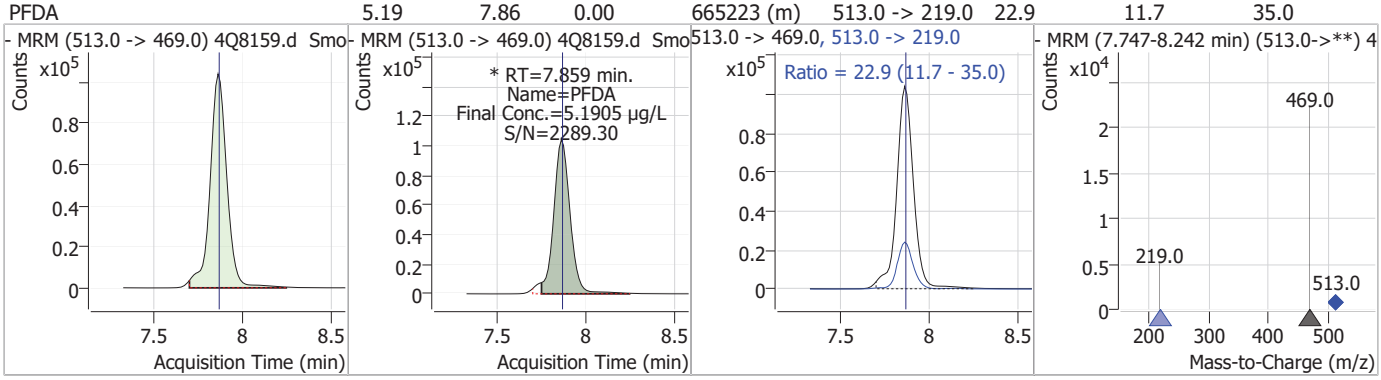


7.4.1

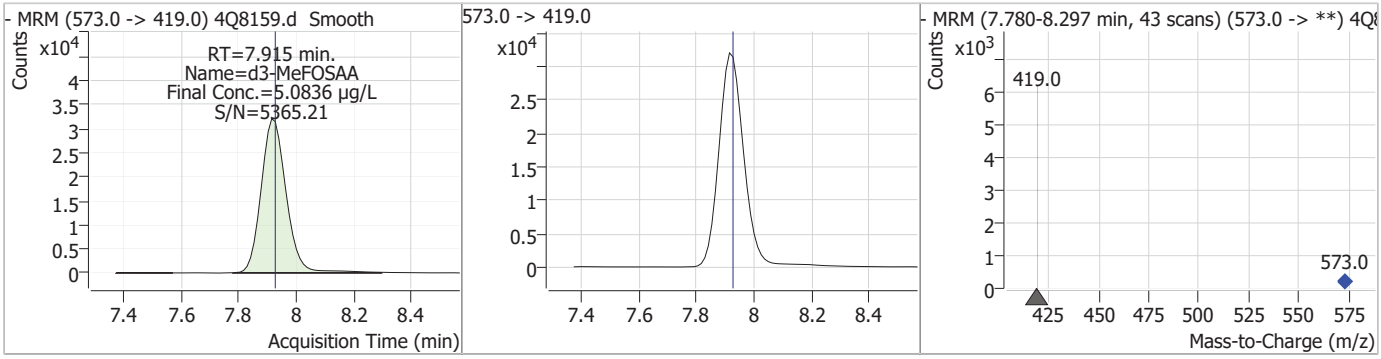
7

Perfluorinated Compounds by LC/MS/MS

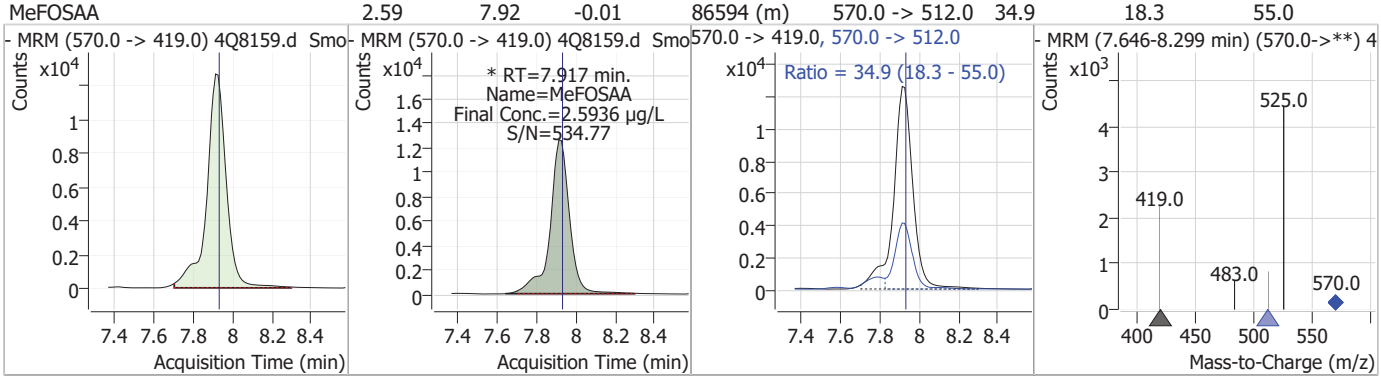
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	5.19	7.86	0.00	665223 (m)	513.0 -> 219.0	22.9	11.7	35.0



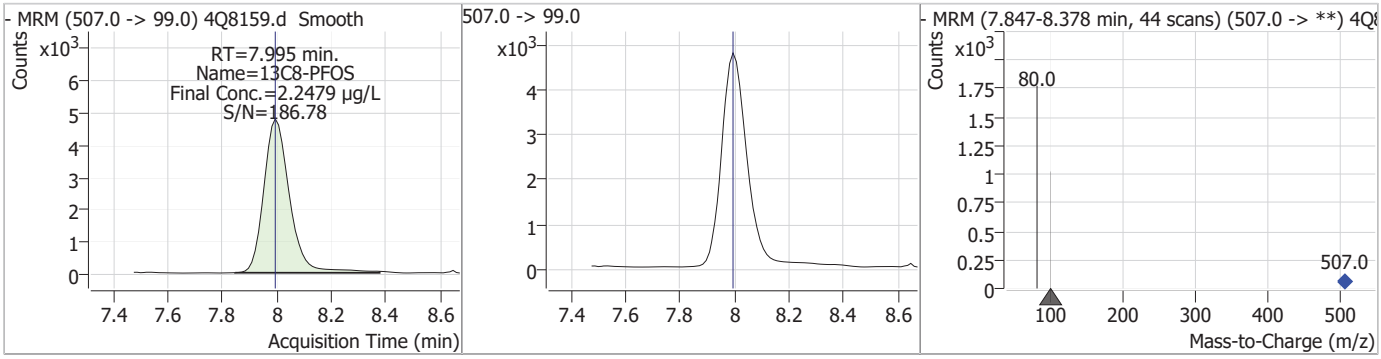
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.08	7.92	-0.01	193772				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.59	7.92	-0.01	86594 (m)	570.0 -> 512.0	34.9	18.3	55.0

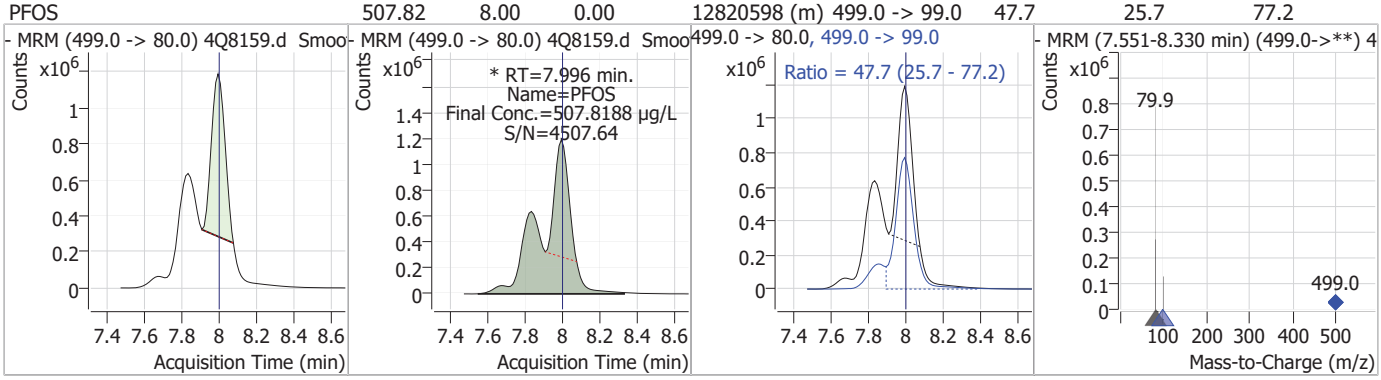


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.25	7.99	0.00	31326				

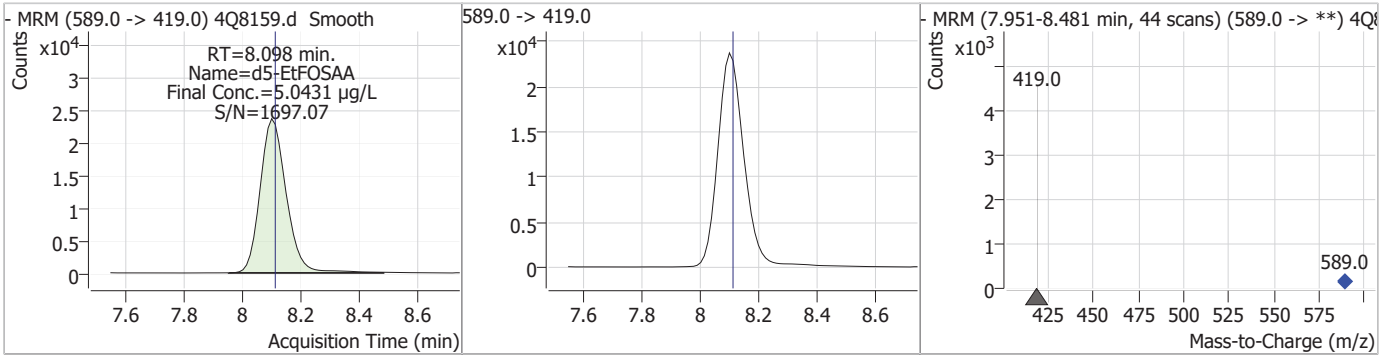


Perfluorinated Compounds by LC/MS/MS

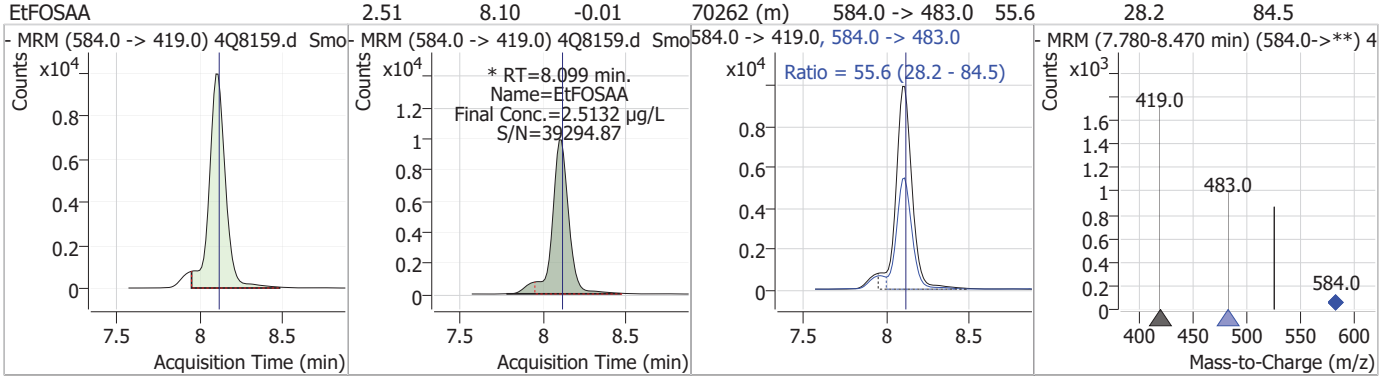
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	507.82	8.00	0.00	12820598 (m)	499.0 -> 99.0	47.7	25.7	77.2



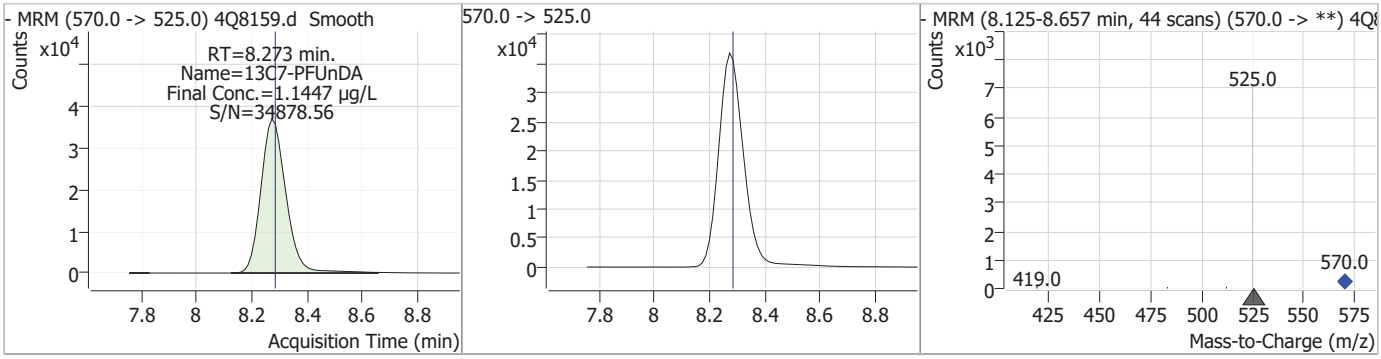
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.04	8.10	-0.01	147582				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.51	8.10	-0.01	70262 (m)	584.0 -> 483.0	55.6	28.2	84.5

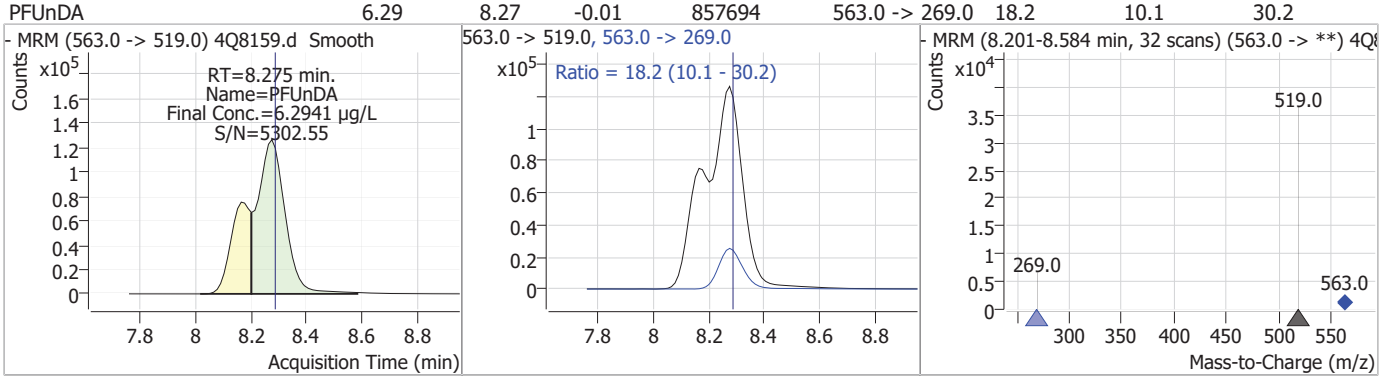


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.14	8.27	-0.01	230537				

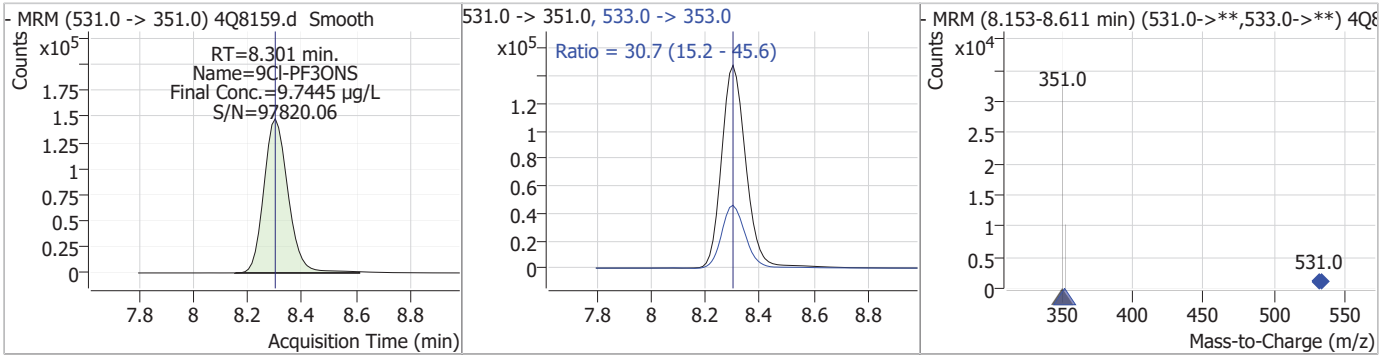


Perfluorinated Compounds by LC/MS/MS

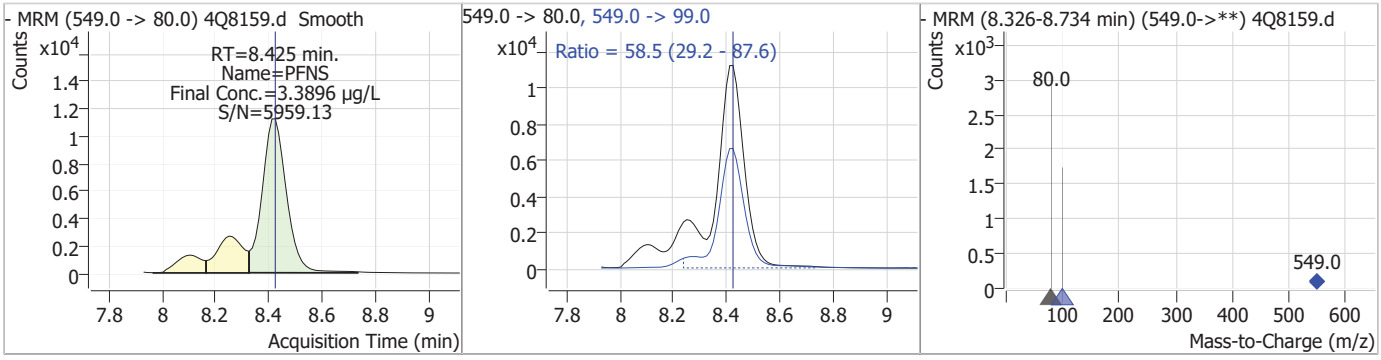
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	6.29	8.27	-0.01	857694	563.0 -> 269.0	18.2	10.1	30.2



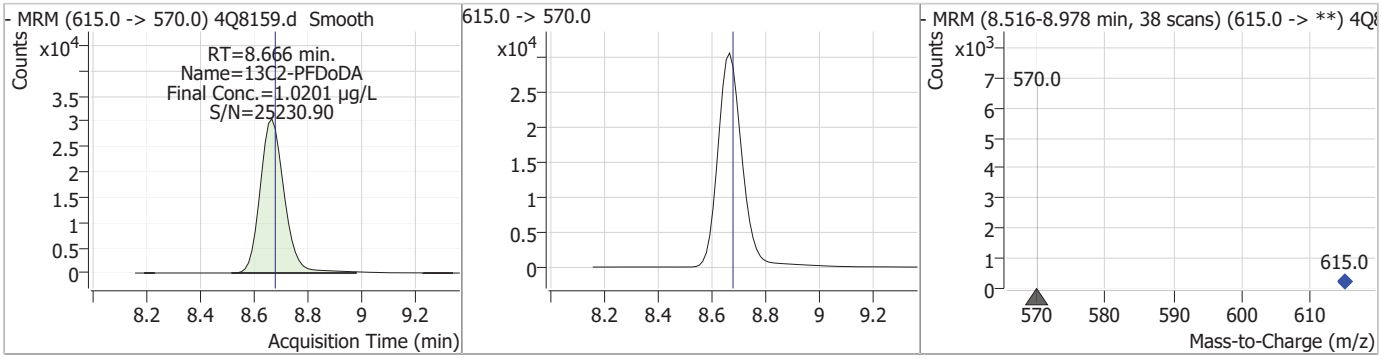
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.74	8.30	0.00	918869	533.0 -> 353.0	30.7	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	3.39	8.42	0.00	71403	549.0 -> 99.0	58.5	29.2	87.6

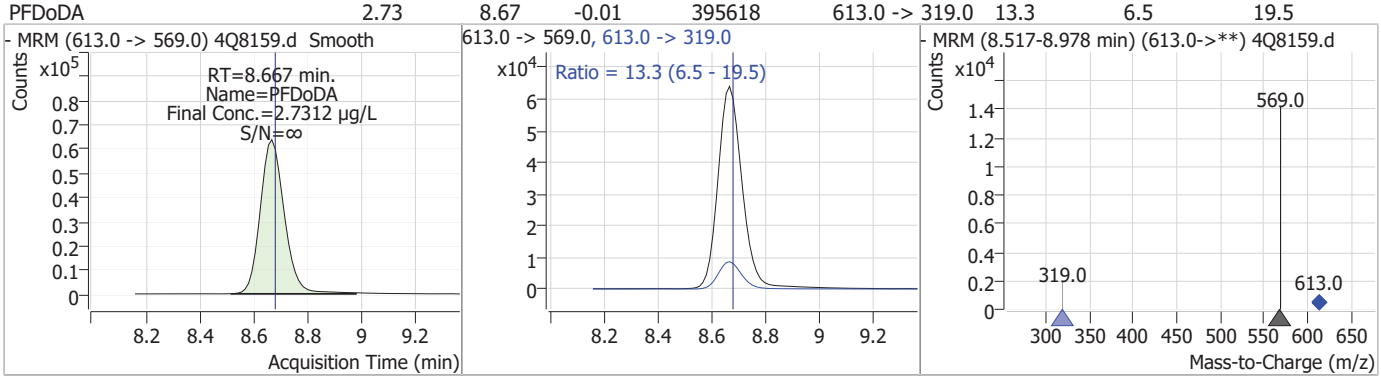


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.02	8.67	-0.01	188173				

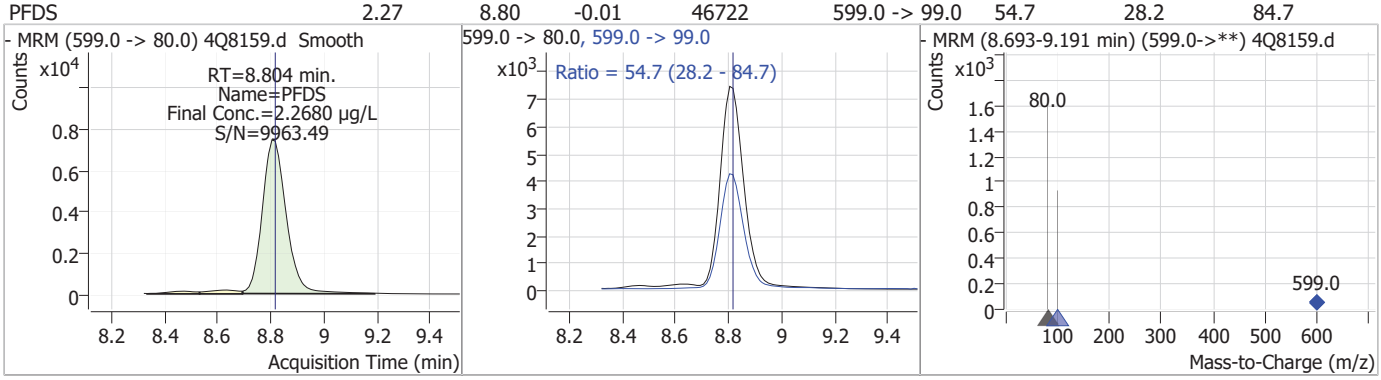


Perfluorinated Compounds by LC/MS/MS

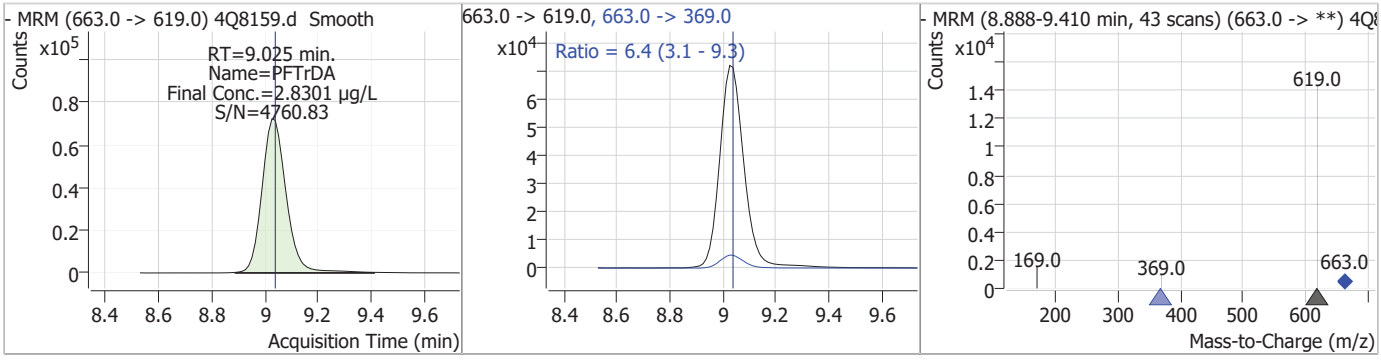
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.73	8.67	-0.01	395618	613.0 -> 319.0	13.3	6.5	19.5



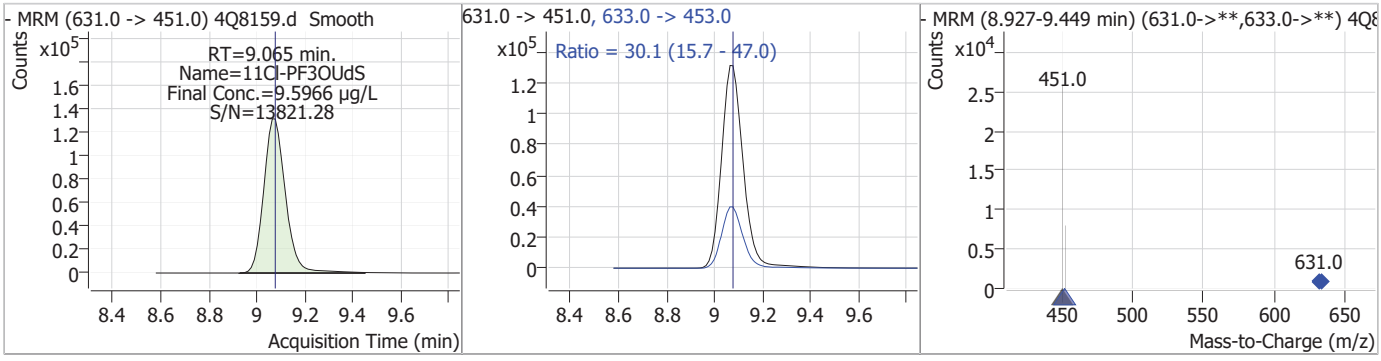
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.27	8.80	-0.01	46722	599.0 -> 99.0	54.7	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.83	9.03	-0.01	457132	663.0 -> 369.0	6.4	3.1	9.3

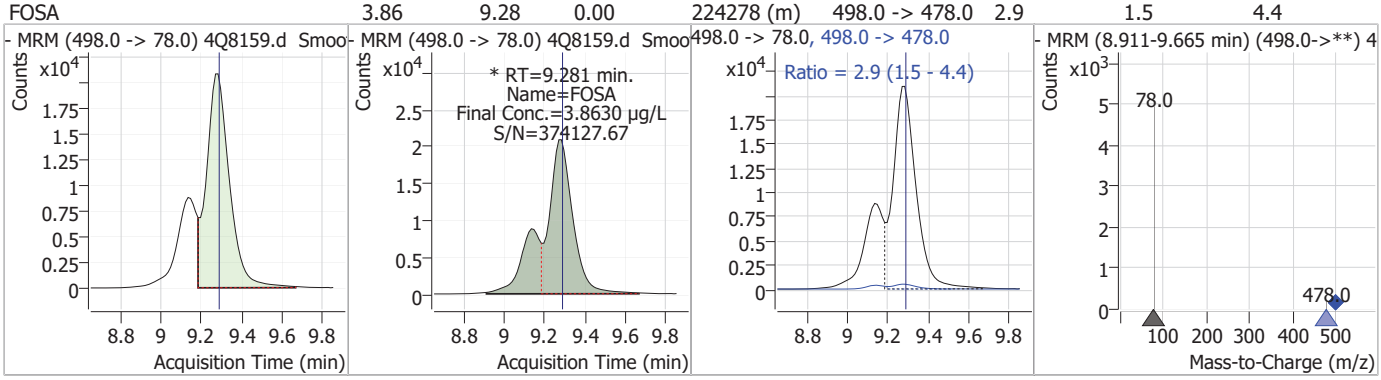


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.60	9.06	-0.01	822657	633.0 -> 453.0	30.1	15.7	47.0

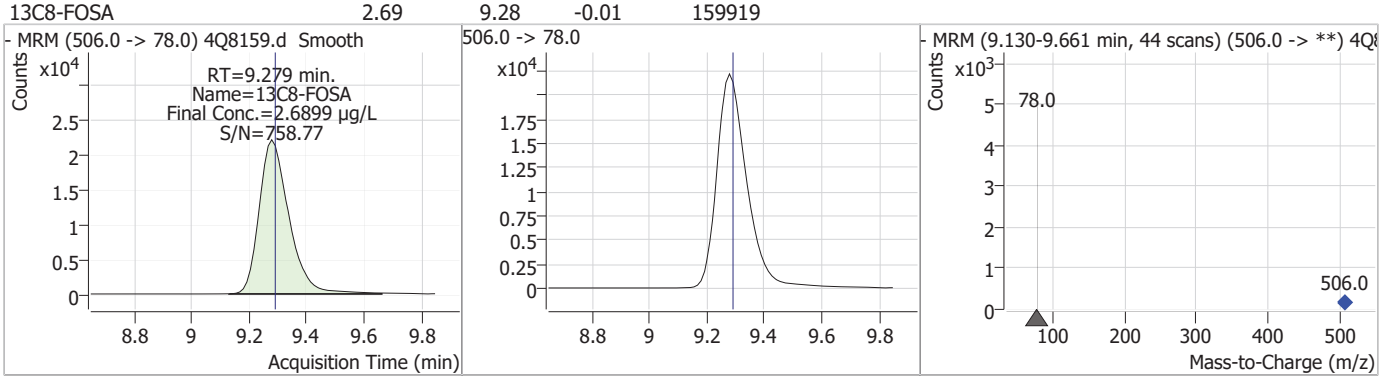


Perfluorinated Compounds by LC/MS/MS

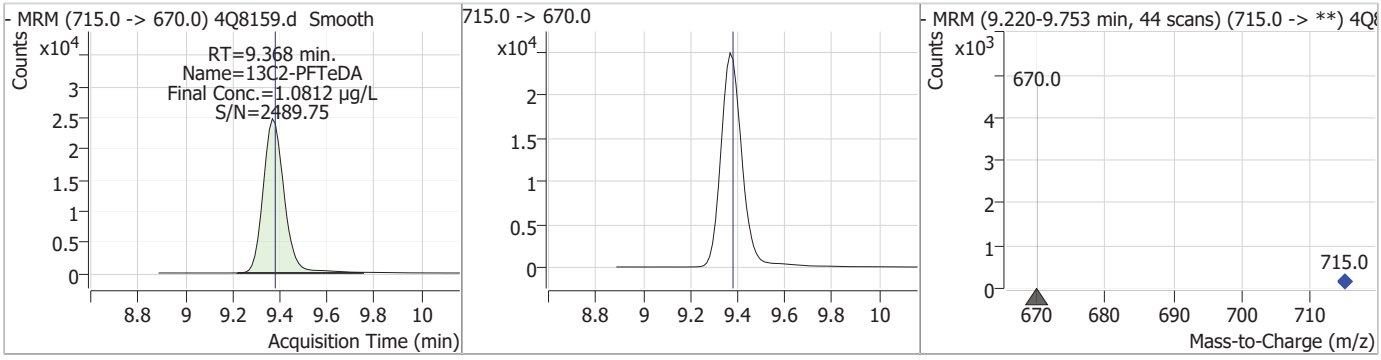
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	3.86	9.28	0.00	224278 (m)	498.0 -> 478.0	2.9	1.5	4.4



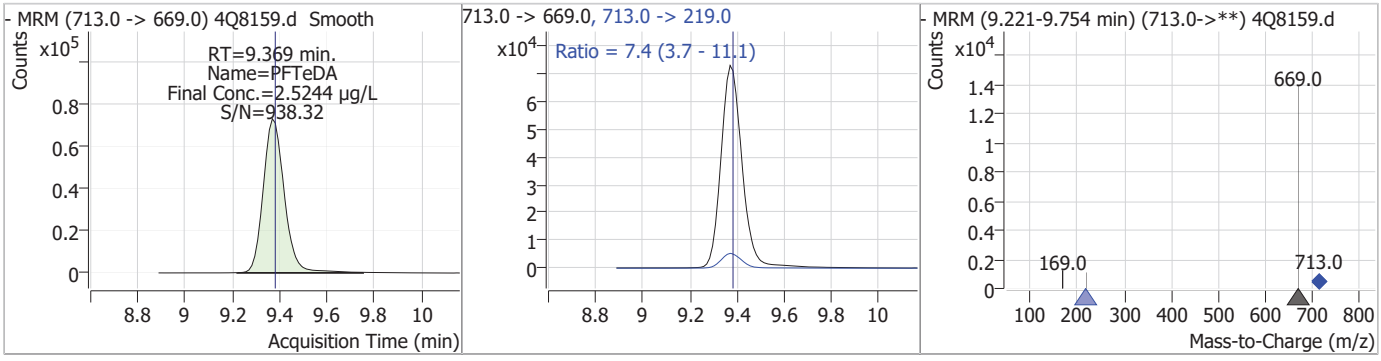
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.69	9.28	-0.01	159919				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.08	9.37	-0.01	153329				

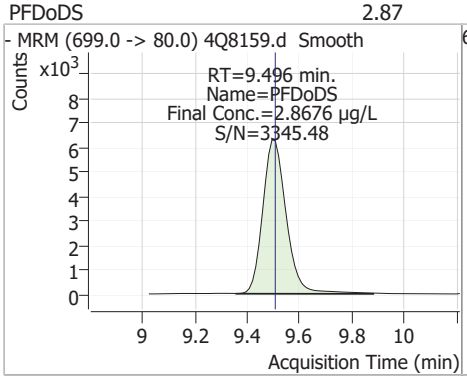


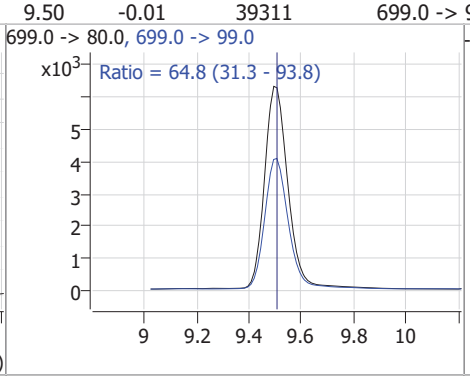
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.52	9.37	-0.01	450666	713.0 -> 219.0	7.4	3.7	11.1

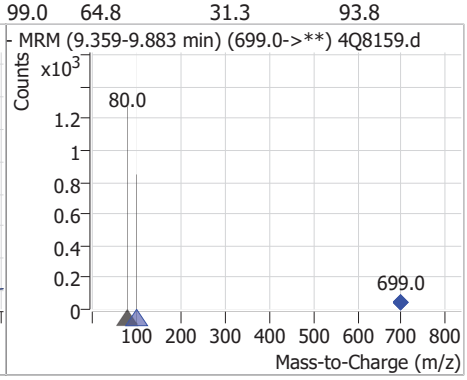


Perfluorinated Compounds by LC/MS/MS

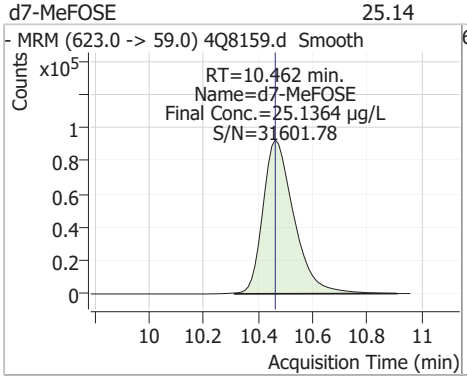
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.87	9.50	-0.01	39311	699.0 -> 99.0	64.8	31.3	93.8

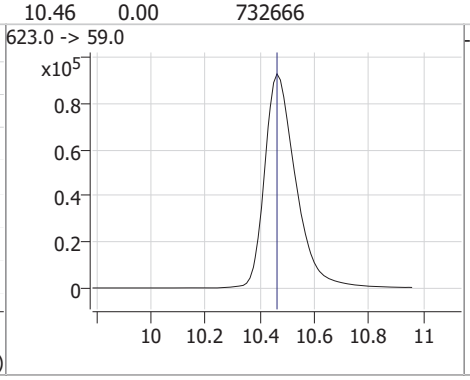


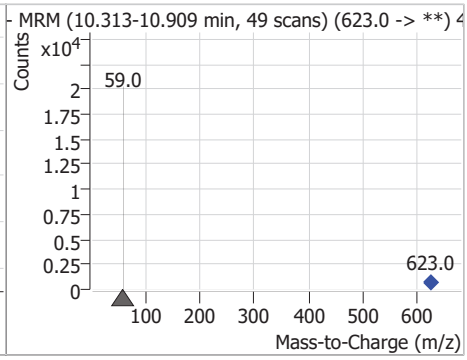




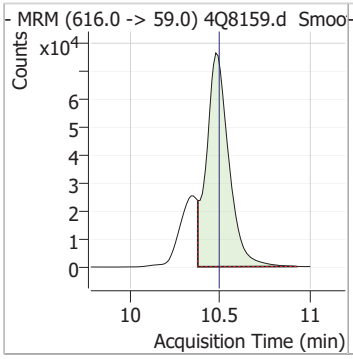
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.14	10.46	0.00	732666				

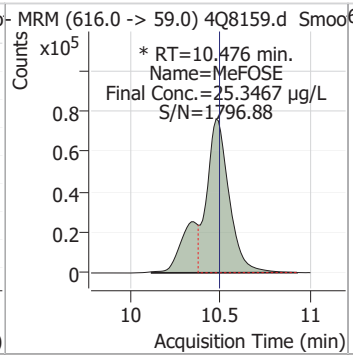


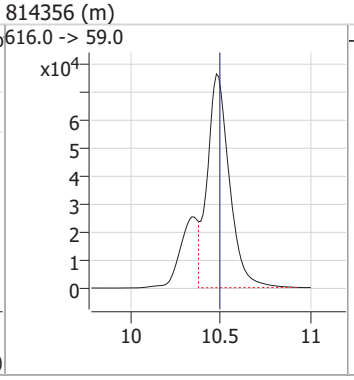


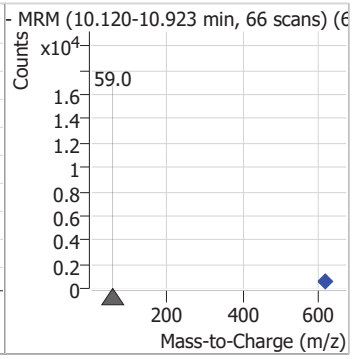


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.35	10.48	-0.01	814356 (m)				

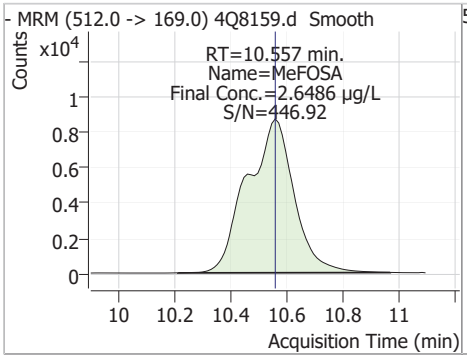


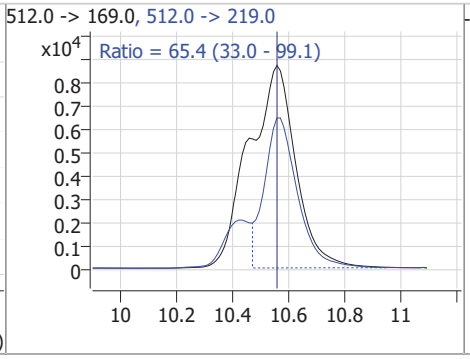


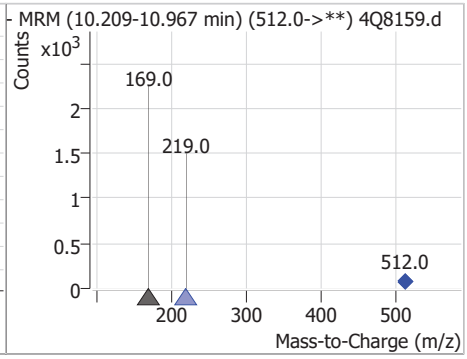




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.65	10.56	0.00	101009	512.0 -> 219.0	65.4	33.0	99.1

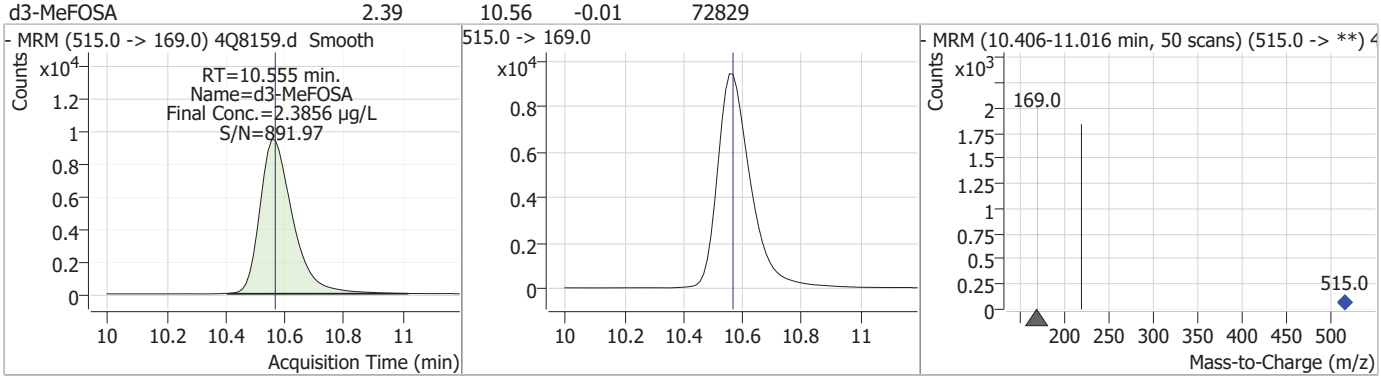




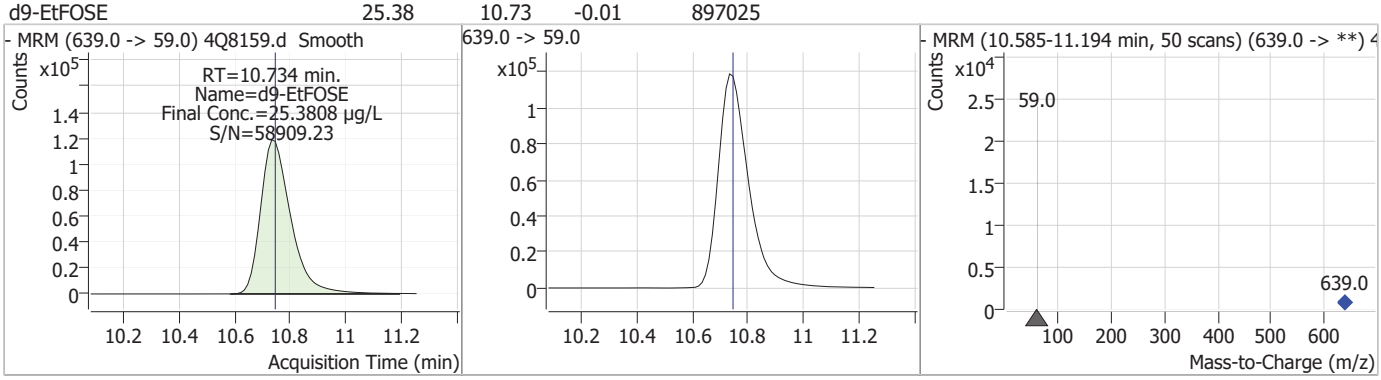


Perfluorinated Compounds by LC/MS/MS

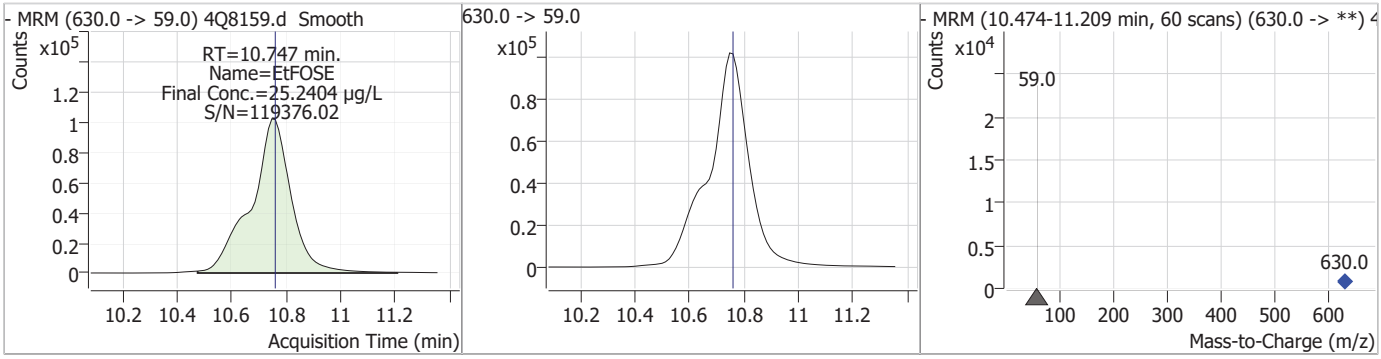
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.39	10.56	-0.01	72829				



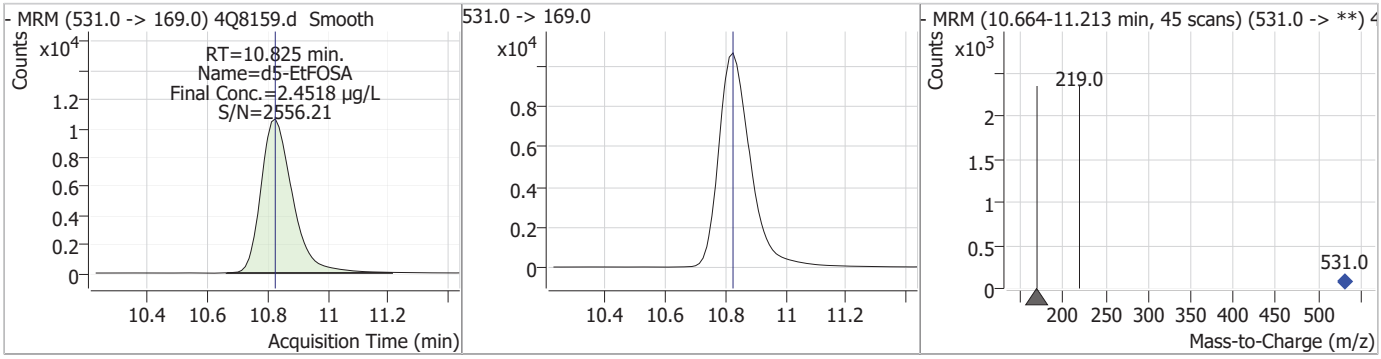
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.38	10.73	-0.01	897025				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.24	10.75	-0.01	1053164				

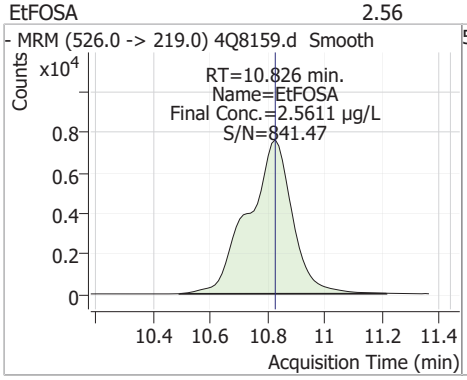


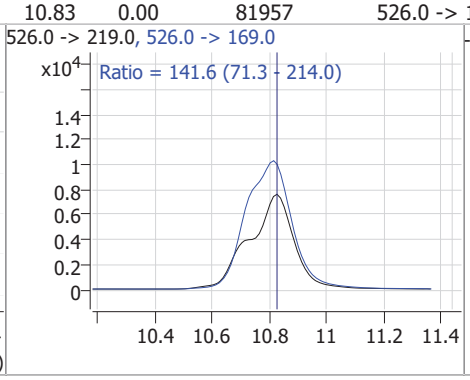
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.45	10.82	0.00	77136				

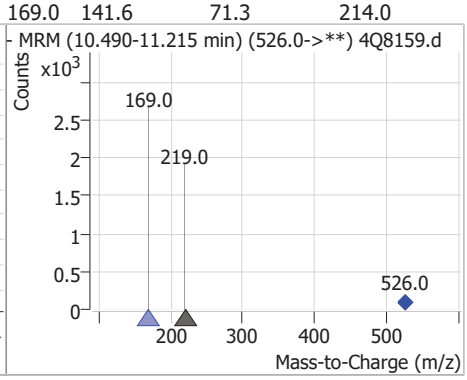


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.56	10.83	0.00	81957	526.0 -> 169.0	141.6	71.3	214.0







7.4.1

7

Manual Integration Approval Summary

Sample Number: OP63161-MS
Lab FileID: 4Q8159.D
Injection Time: 04/30/25 21:30
Method: EPA 1633
Analyst approved: 05/01/25 11:50 Maksud Haque
Supervisor approved: 05/15/25 12:50 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorodecanoic acid	335-76-2		7.86	Poor instrument integration
MeFOSAA	2355-31-9		7.92	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.10	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak
MeFOSE	24448-09-7		10.48	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/15/25 12:50

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8160.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 9:43:51 PM
Sample Name : OP63161-MSD
Vial : P1-D3
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,488,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.858	217.0 -> 172.0	809730	10.00	µg/L	-0.025
M5-PFPeA	4.319	268.0 -> 223.0	366979	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	281110	2.50	µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	290102	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	424683	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	166089	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	160893	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	225139	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	188579	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	141165	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	154220	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	24795	2.50	µg/L	0.000
		302.0 -> 80.0	64528			
M3-PFHxS	6.999	402.0 -> 99.0	33538	2.50	µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	30950	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	12482	5.00	µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	19161	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	24011	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	185189	5.00	µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	432224	10.00	µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	142145	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	675717	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	816593	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	69575	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	67881	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	56440	2.50	µg/L	0.000
13C3-PFBA	2.861	216.0 -> 172.0	384391	5.00	µg/L	-0.012
18O2-PFHxS	6.999	403.0 -> 84.0	41033	2.50	µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	471026	2.50	µg/L	0.000
13C2-PFDA	7.859	515.0 -> 470.0	164936	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	184819	1.25	µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	294373	2.50	µg/L	0.012
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	12482	6.07	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 121.3%		
13C2-6:2FTS	6.684	429.0 -> 81.0	19161	4.29	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 85.8%		
13C2-8:2FTS	7.671	529.0 -> 81.0	24011	4.57	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.4%		
13C2-PFDoDA	8.666	615.0 -> 570.0	188579	1.06	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 84.6%		
13C2-PFTeDA	9.368	715.0 -> 670.0	141165	1.03	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 82.4%		
13C3-PFBS	5.368	302.0 -> 99.0	24795	2.45	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.9%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	33538	2.34	µg/L		0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.6%			
13C4-PFBA	2.858	217.0 -> 172.0	809730	9.19	µg/L		-0.025
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 91.9%			
13C4-PFHpA	6.291	367.0 -> 322.0	290102	2.19	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 87.6%			
13C5-PFHxA	5.464	318.0 -> 273.0	281110	2.26	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.2%			
13C5-PFPeA	4.319	268.0 -> 223.0	366979	3.88	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 77.6%			
13C6-PFDA	7.858	519.0 -> 474.0	160893	1.10	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.3%			
13C7-PFUnDA	8.273	570.0 -> 525.0	225139	1.16	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.5%			
13C8-FOSA	9.279	506.0 -> 78.0	154220	2.66	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.4%			
13C8-PFOA	6.897	421.0 -> 376.0	424683	2.26	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.2%			
13C8-PFOS	7.995	507.0 -> 99.0	30950	2.28	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.1%			
13C9-PFNA	7.403	472.0 -> 427.0	166089	1.08	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 86.7%			
d3-MeFOSAA	7.915	573.0 -> 419.0	185189	4.98	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.6%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	432224	8.83	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 88.3%			
d3-MeFOSA	10.555	515.0 -> 169.0	67881	2.28	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.2%			
d5-EtFOSAA	8.098	589.0 -> 419.0	142145	4.98	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.6%			
d7-MeFOSE	10.462	623.0 -> 59.0	675717	23.77	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 95.1%			
d9-EtFOSE	10.734	639.0 -> 59.0	816593	23.69	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 94.8%			
d5-EtFOSA	10.825	531.0 -> 169.0	69575	2.27	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.7%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	239564	10.45	µg/L		97
		327.0 -> 81.0	116457				
6:2FTS	6.684	427.0 -> 407.0	3910879	203.52	µg/L		99
		427.0 -> 81.0	1816186				
8:2FTS	7.671	527.0 -> 507.0	644466	34.30	µg/L		100
		527.0 -> 81.0	244553				
EtFOSAA	8.099	584.0 -> 419.0	68352	2.54	µg/L	m	99
		584.0 -> 483.0	37952				
FOSA	9.269	498.0 -> 78.0	220854	3.94	µg/L	m	100
		498.0 -> 478.0	6967				
MeFOSAA	7.917	570.0 -> 419.0	79818	2.50	µg/L	m	97
		570.0 -> 512.0	27881				
PFBA	2.864	213.0 -> 169.0	1074809	43.42	µg/L		100
PFBS	5.369	299.0 -> 80.0	200522	7.07	µg/L		99
		299.0 -> 99.0	82654				
PFDA	7.859	513.0 -> 469.0	622905	5.09	µg/L	m	100
		513.0 -> 219.0	146712				
PFDoDA	8.667	613.0 -> 569.0	384489	2.65	µg/L		96
		613.0 -> 319.0	55431				

Perfluorinated Compounds by LC/MS/MS

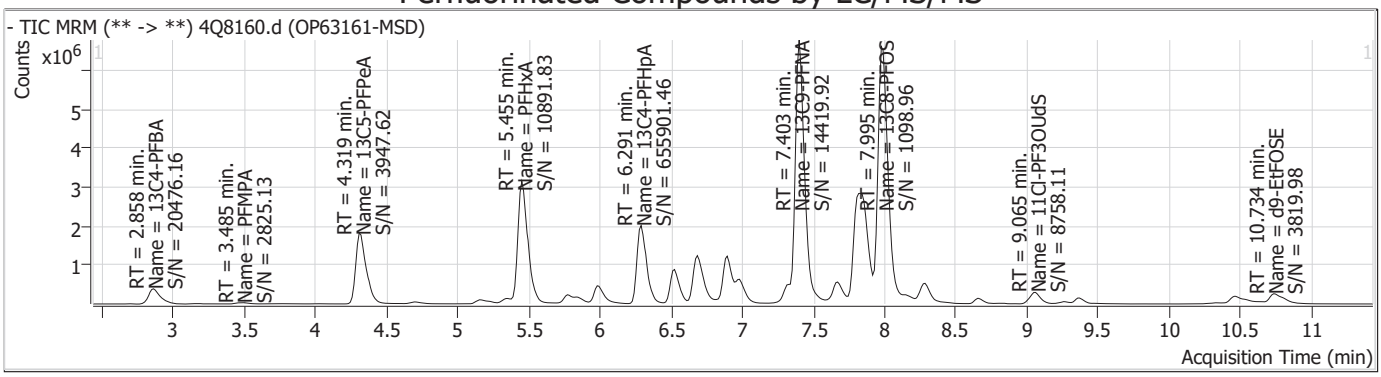
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.804	599.0 -> 80.0	47948	2.38	µg/L		100
		599.0 -> 99.0	26971				
PFHpA	6.292	363.0 -> 319.0	7442407	42.17	µg/L		99
		363.0 -> 169.0	1514728				
PFHpS	7.529	449.0 -> 80.0	262516	9.05	µg/L		95
		449.0 -> 99.0	153400				
PFHxA	5.455	313.0 -> 269.0	14517113	119.82	µg/L		100
		313.0 -> 119.0	476324				
PFHxS	7.000	399.0 -> 80.0	1866480	63.91	µg/L	m	95
		399.0 -> 99.0	932437				
PFNA	7.404	463.0 -> 419.0	23904675	239.28	µg/L		80
		463.0 -> 219.0	6061257				
PFNS	8.412	549.0 -> 80.0	71763	3.45	µg/L		99
		549.0 -> 99.0	42545				
PFOA	6.898	413.0 -> 369.0	3834568	27.13	µg/L	m	98
		413.0 -> 169.0	1074149				
PFOS	7.996	499.0 -> 80.0	11874131	476.03	µg/L	m	95
		499.0 -> 99.0	5682807				
PFPeA	4.321	263.0 -> 219.0	9040632	155.81	µg/L		100
PFPeS	6.331	349.0 -> 80.0	320551	10.35	µg/L		100
		349.0 -> 99.0	161831				
PFTeDA	9.369	713.0 -> 669.0	444429	2.70	µg/L		99
		713.0 -> 219.0	31873				
PFTrDA	9.025	663.0 -> 619.0	453067	2.80	µg/L		99
		663.0 -> 369.0	27166				
PFUnDA	8.275	563.0 -> 519.0	820436	6.17	µg/L		96
		563.0 -> 269.0	147979				
11Cl-PF3OUdS	9.065	631.0 -> 451.0	802430	9.76	µg/L		98
		633.0 -> 453.0	241574				
9Cl-PF3ONS	8.301	531.0 -> 351.0	919280	10.16	µg/L		99
		533.0 -> 353.0	274061				
ADONA	6.527	377.0 -> 251.0	3016238	8.89	µg/L		100
		377.0 -> 85.0	993273				
HFPO-DA	5.792	285.0 -> 169.0	480669	10.58	µg/L		99
		285.0 -> 185.0	51832				
3:3FTCA	3.756	241.0 -> 177.0	50030	14.43	µg/L		99
		241.0 -> 117.0	3893				
5:3FTCA	5.993	341.0 -> 237.0	1313476	60.70	µg/L		99
		341.0 -> 217.0	934890				
7:3FTCA	7.330	441.0 -> 337.0	1613006	57.87	µg/L		99
		441.0 -> 317.0	723784				
EtFOSA	10.826	526.0 -> 219.0	74969	2.60	µg/L		99
		526.0 -> 169.0	106138				
EtFOSE	10.747	630.0 -> 59.0	979484	25.79	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	95569	2.69	µg/L		98
		512.0 -> 219.0	61293				
MeFOSE	10.476	616.0 -> 59.0	768251	25.93	µg/L	m	100
PFDoDS	9.496	699.0 -> 80.0	38552	2.85	µg/L		96
		699.0 -> 99.0	23052				
NFDHA	5.345	295.0 -> 201.0	82957	5.21	µg/L		85
		201.0 -> 85.0	305686				
		295.0 -> 85.0	22287				
PFMBA	4.710	279.0 -> 85.0	223987	5.66	µg/L		100
PFMPA	3.485	229.0 -> 85.0	194206	5.84	µg/L		100
PFEESA	5.849	315.0 -> 135.0	532559	4.79	µg/L		99
		315.0 -> 69.0	43227				

Perfluorinated Compounds by LC/MS/MS

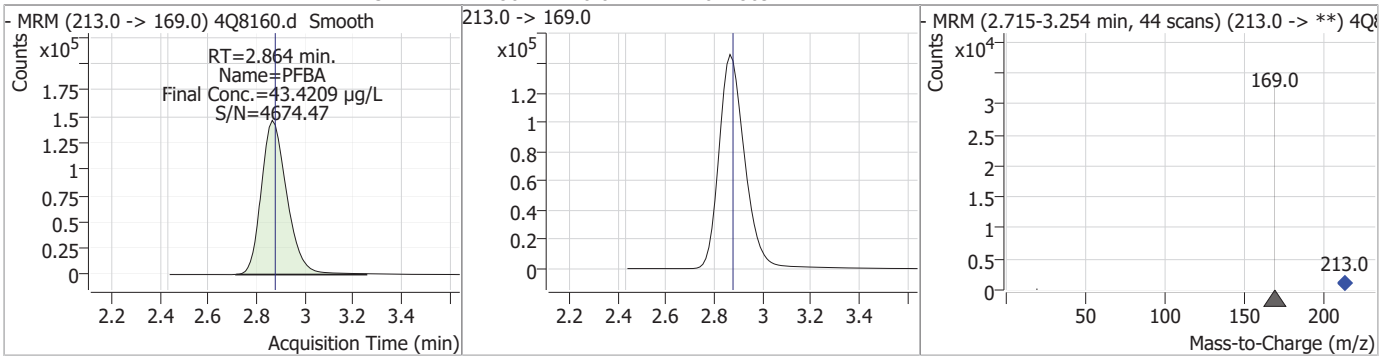
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

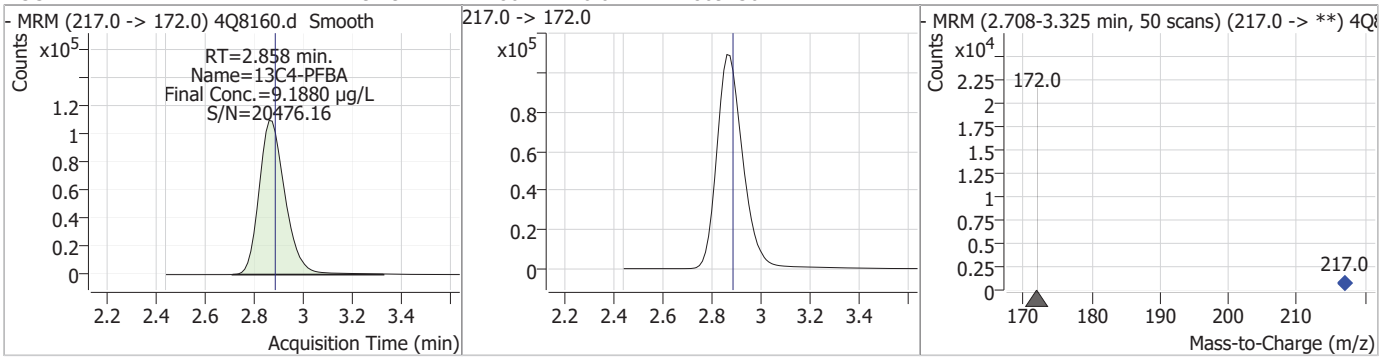
Perfluorinated Compounds by LC/MS/MS



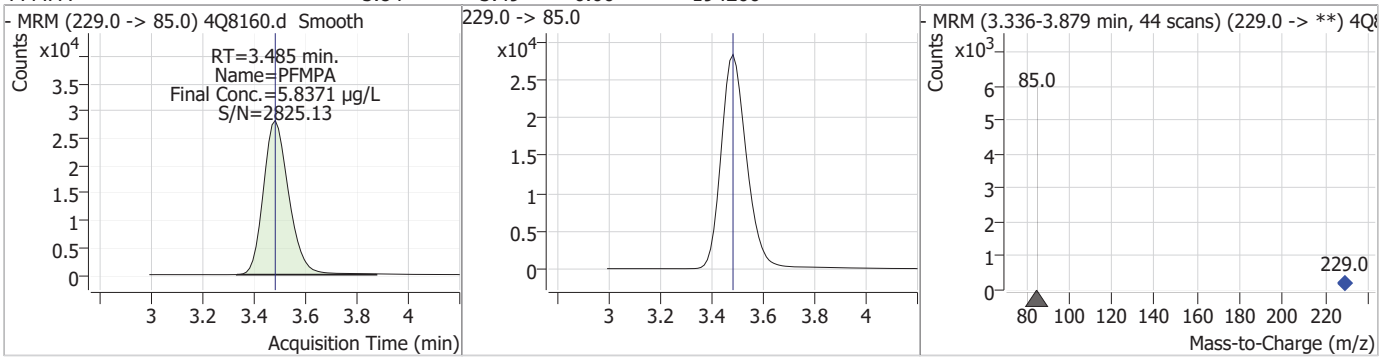
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	43.42	2.86	-0.01	1074809				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.19	2.86	-0.02	809730				

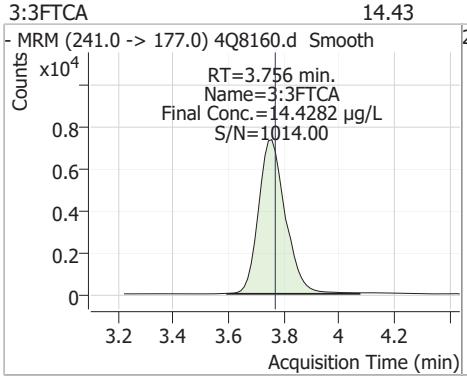


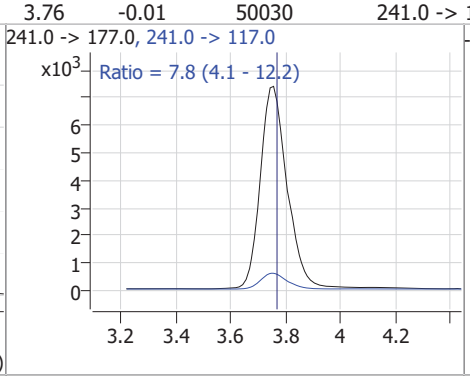
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.84	3.49	0.00	194206				

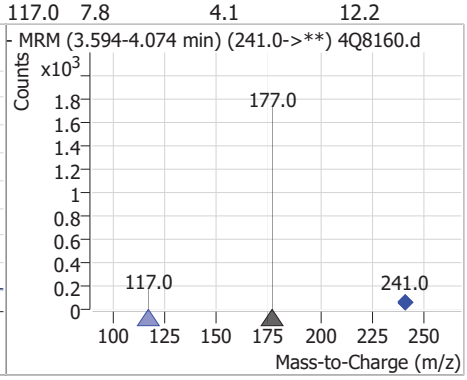


Perfluorinated Compounds by LC/MS/MS

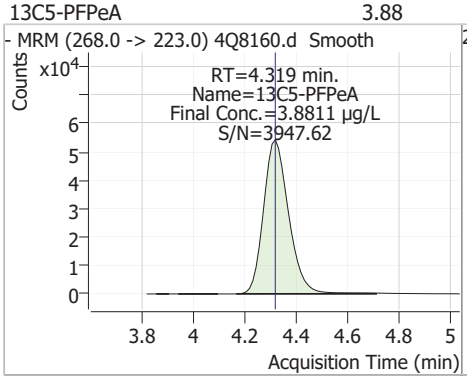
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	14.43	3.76	-0.01	50030	241.0 -> 117.0	7.8	4.1	12.2

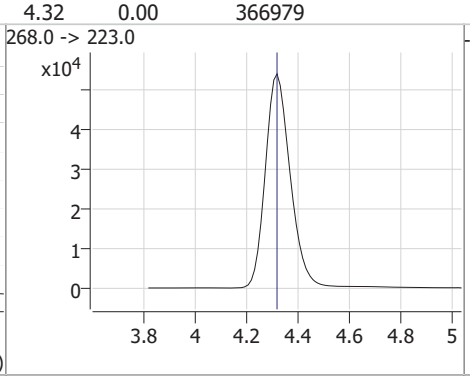


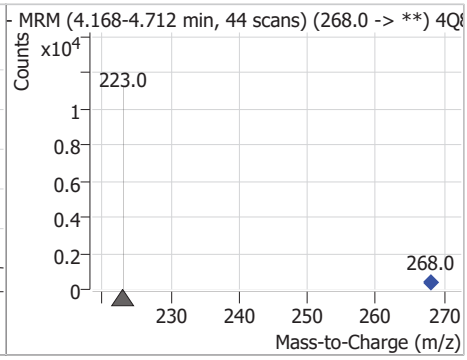




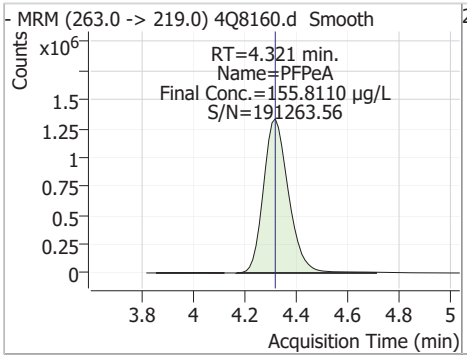
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	3.88	4.32	0.00	366979				

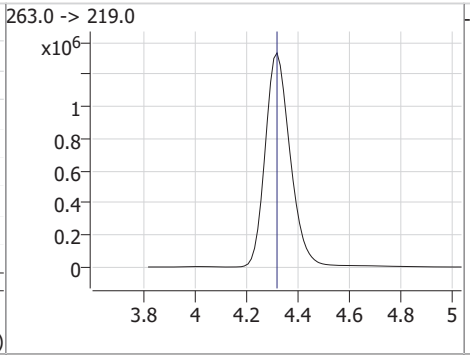


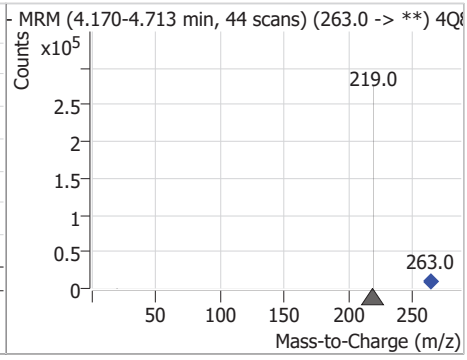




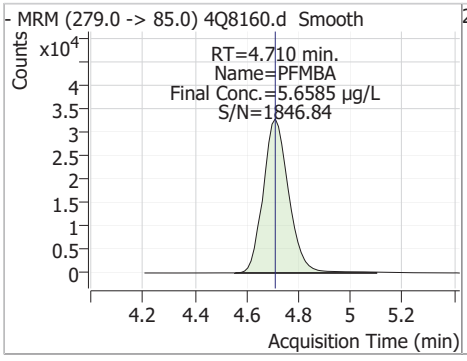
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	155.81	4.32	0.00	9040632				

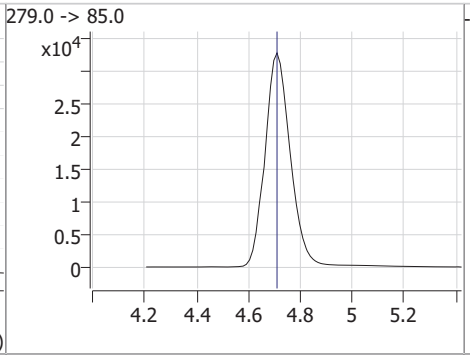


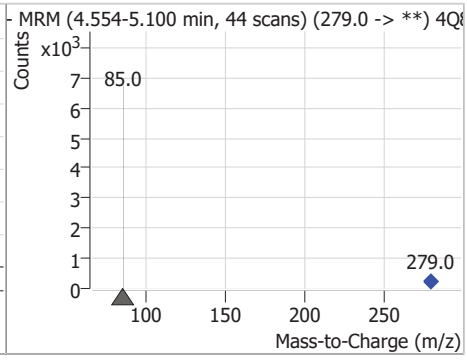




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.66	4.71	0.00	223987				

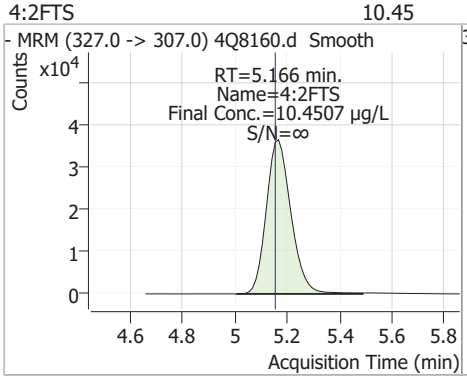


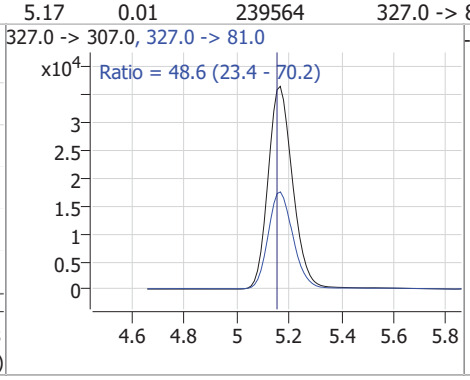


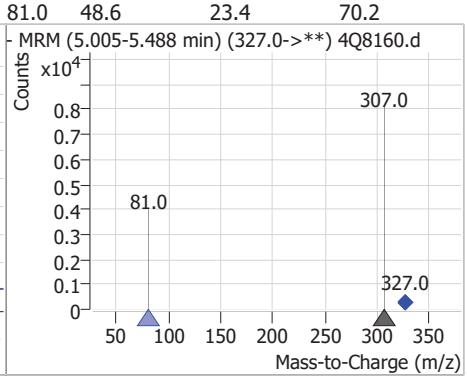


Perfluorinated Compounds by LC/MS/MS

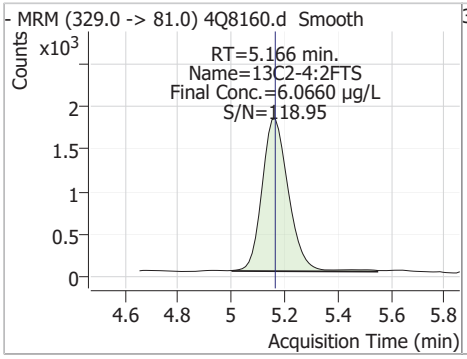
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	10.45	5.17	0.01	239564	327.0 -> 81.0	48.6	23.4	70.2

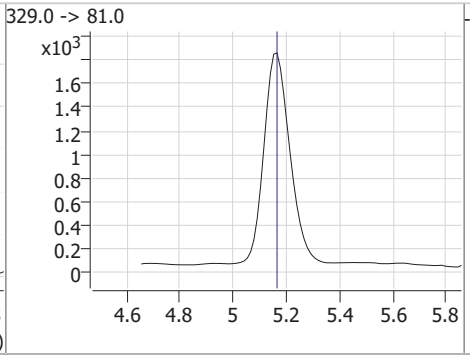


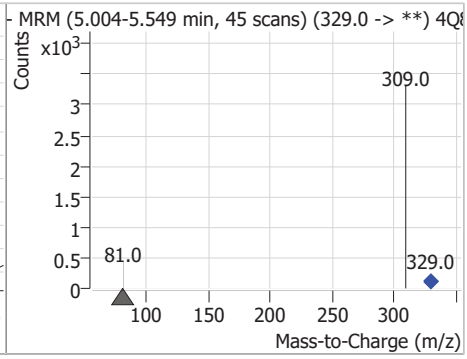




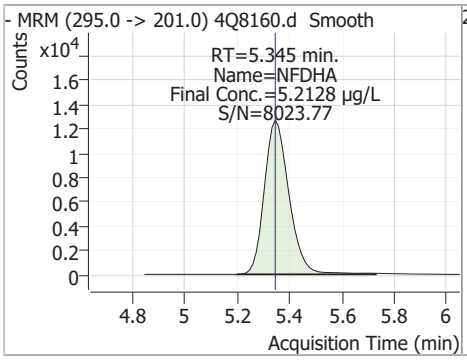
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	6.07	5.17	0.00	12482				

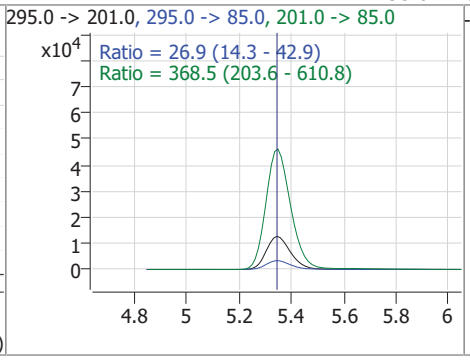


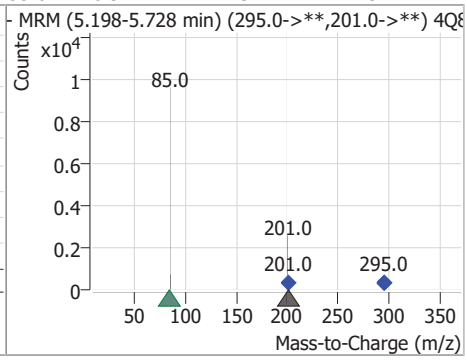




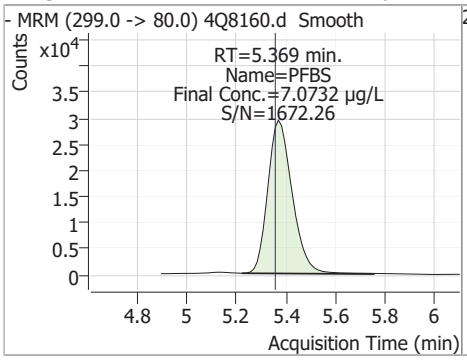
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.21	5.35	0.00	82957	201.0 -> 85.0	368.5	203.6	610.8
					295.0 -> 85.0	26.9	14.3	42.9

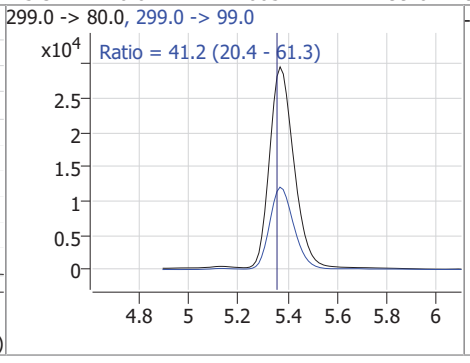


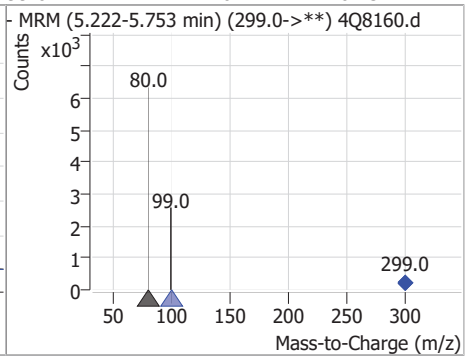




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	7.07	5.37	0.01	200522	299.0 -> 99.0	41.2	20.4	61.3

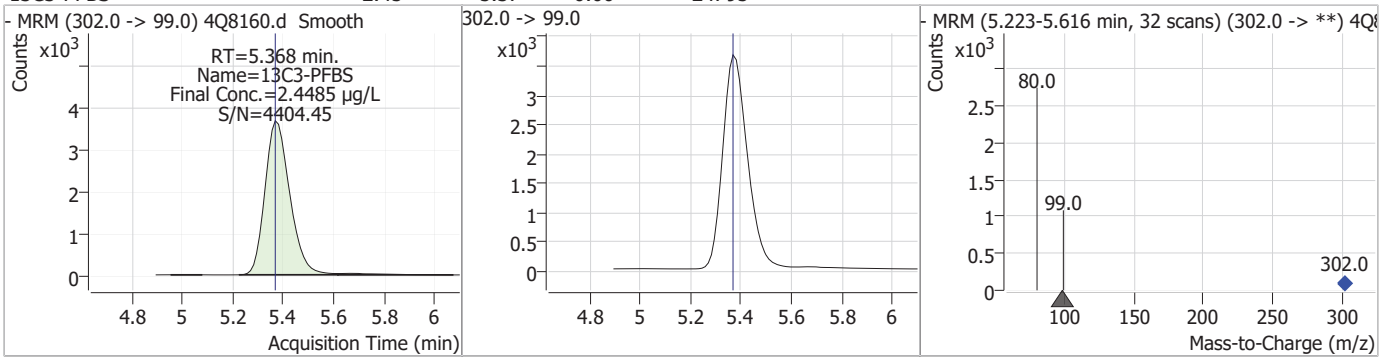




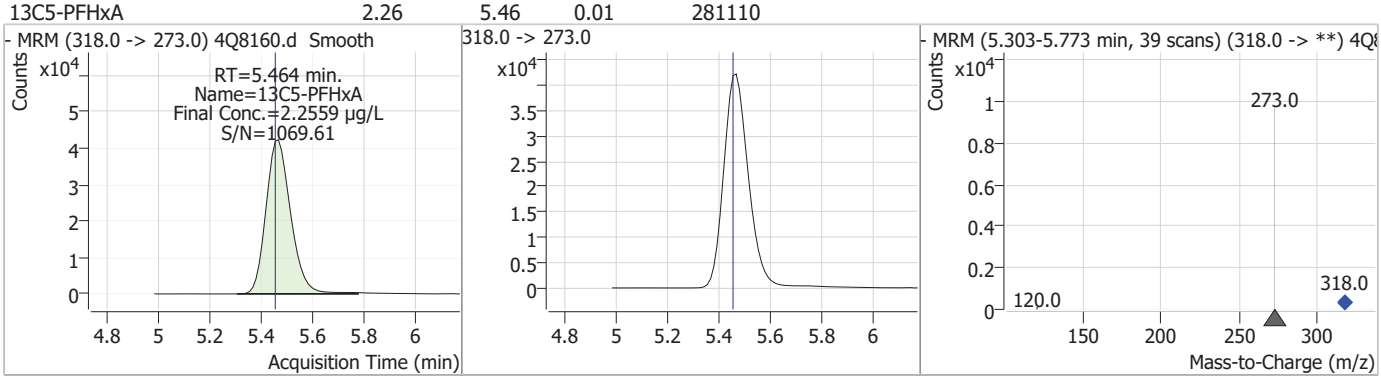


Perfluorinated Compounds by LC/MS/MS

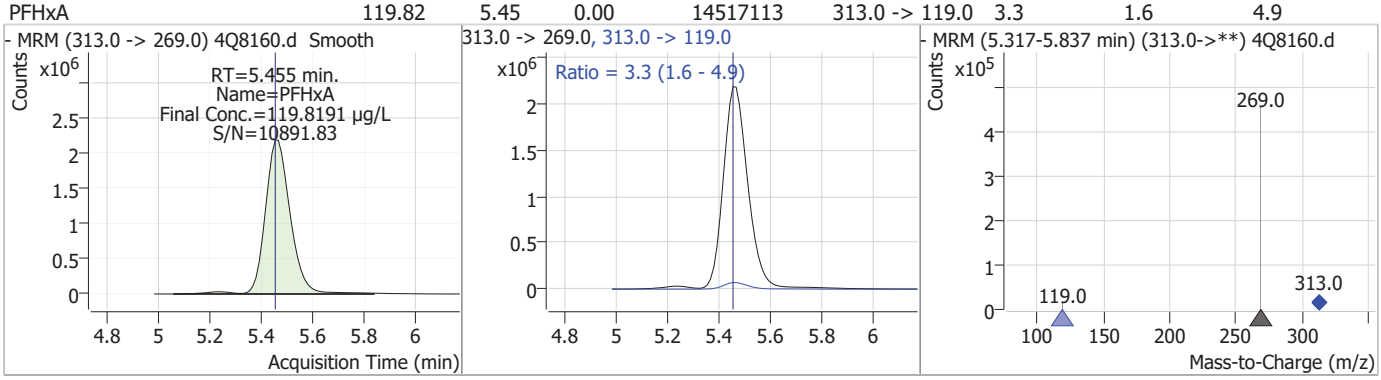
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.45	5.37	0.00	24795				



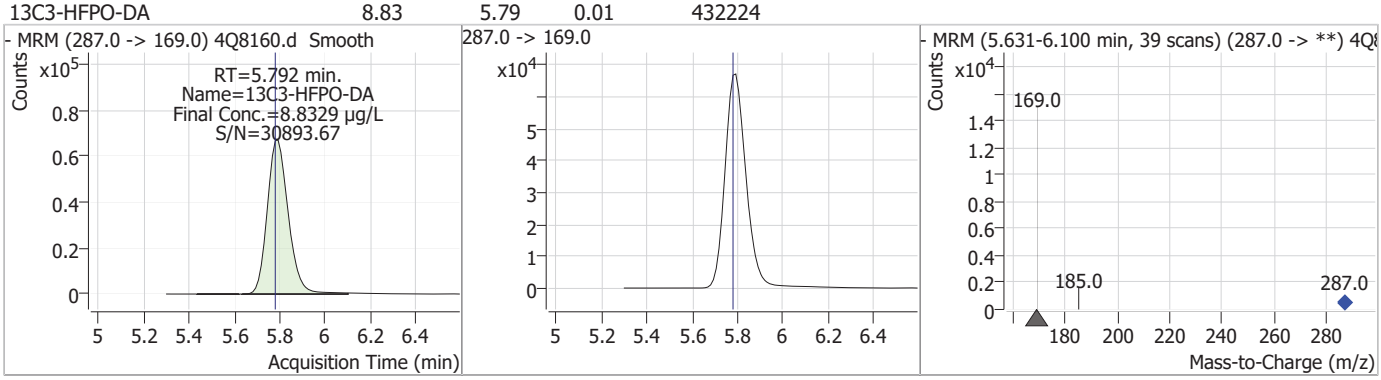
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.26	5.46	0.01	281110				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	119.82	5.45	0.00	14517113	313.0 -> 119.0	3.3	1.6	4.9

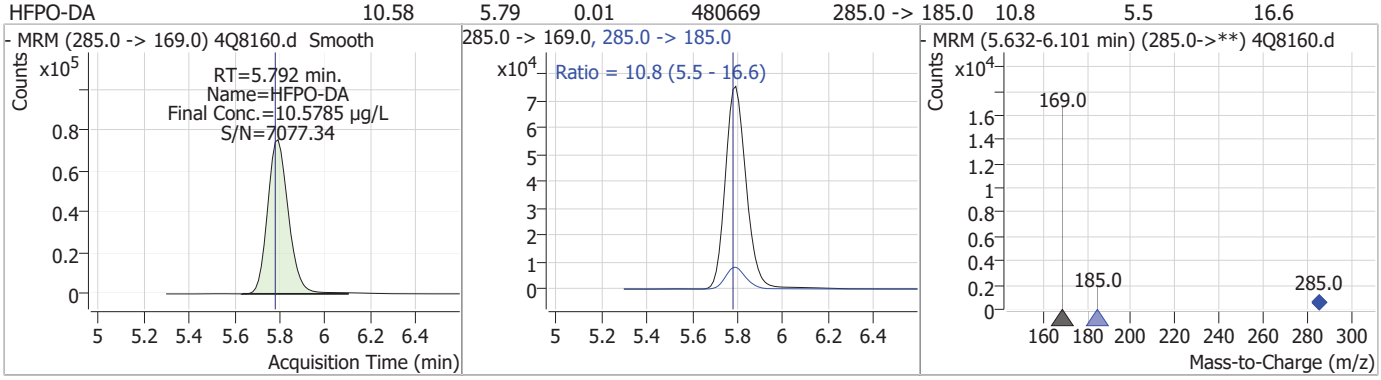


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.83	5.79	0.01	432224				

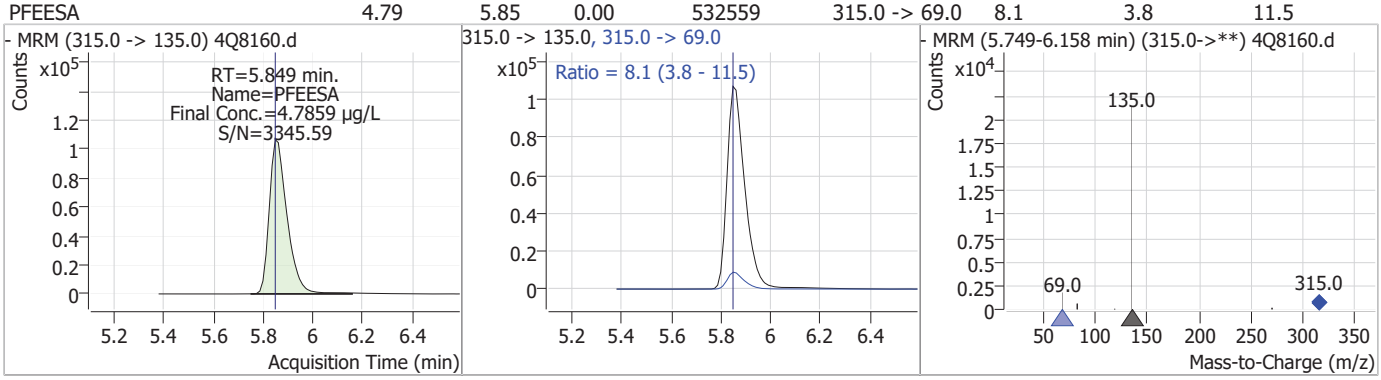


Perfluorinated Compounds by LC/MS/MS

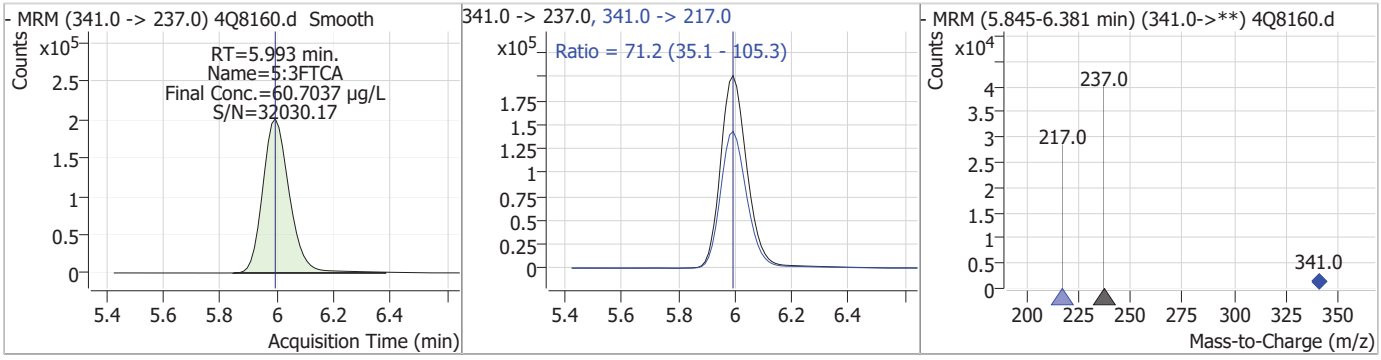
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.58	5.79	0.01	480669	285.0 -> 185.0	10.8	5.5	16.6



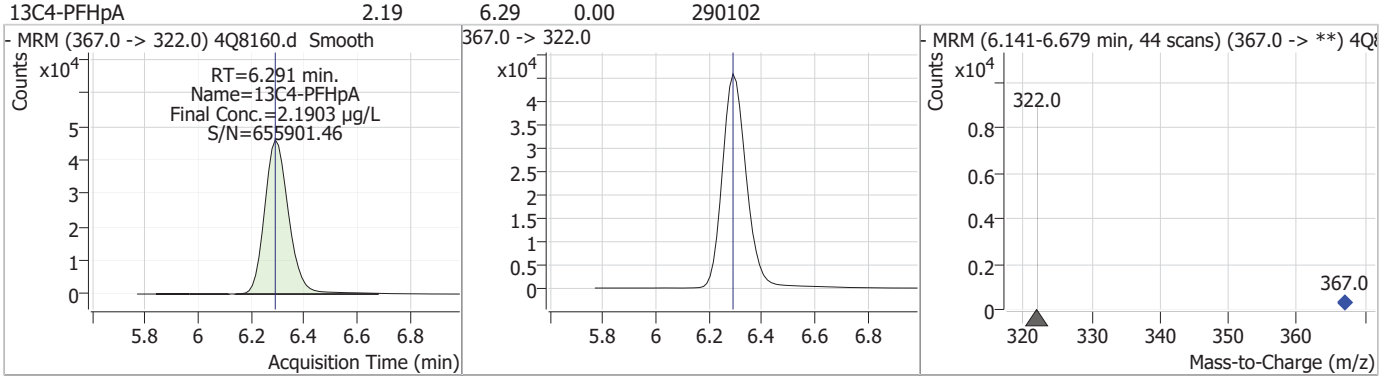
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.79	5.85	0.00	532559	315.0 -> 69.0	8.1	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	60.70	5.99	0.00	1313476	341.0 -> 217.0	71.2	35.1	105.3

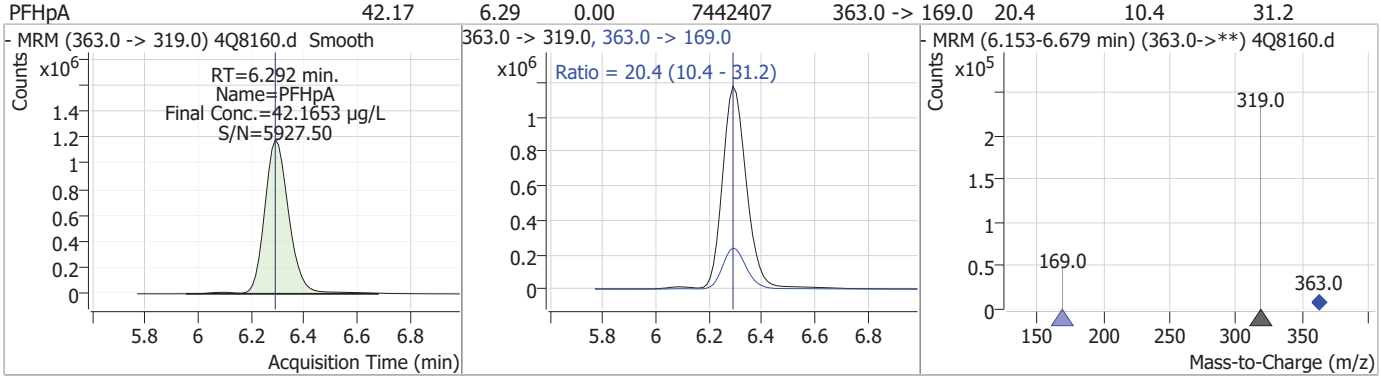


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.19	6.29	0.00	290102				

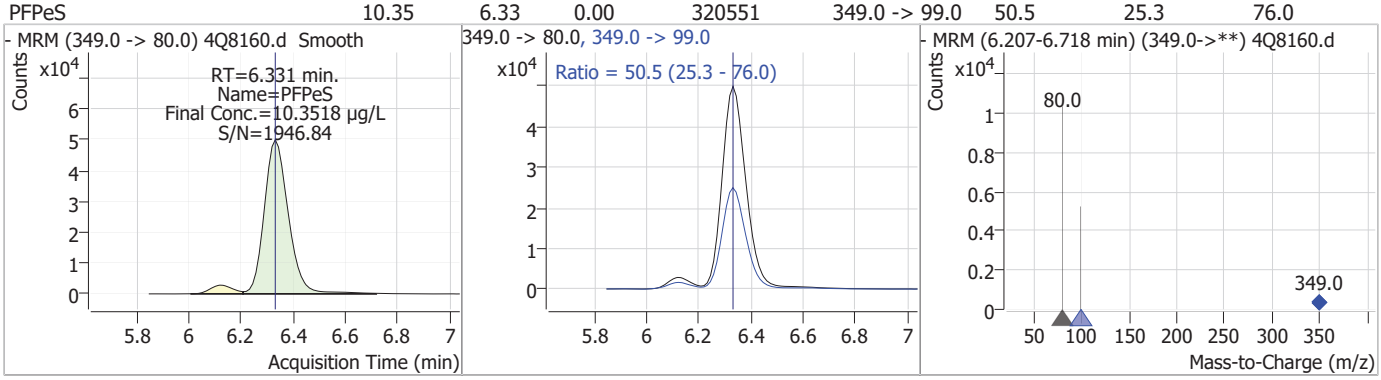


Perfluorinated Compounds by LC/MS/MS

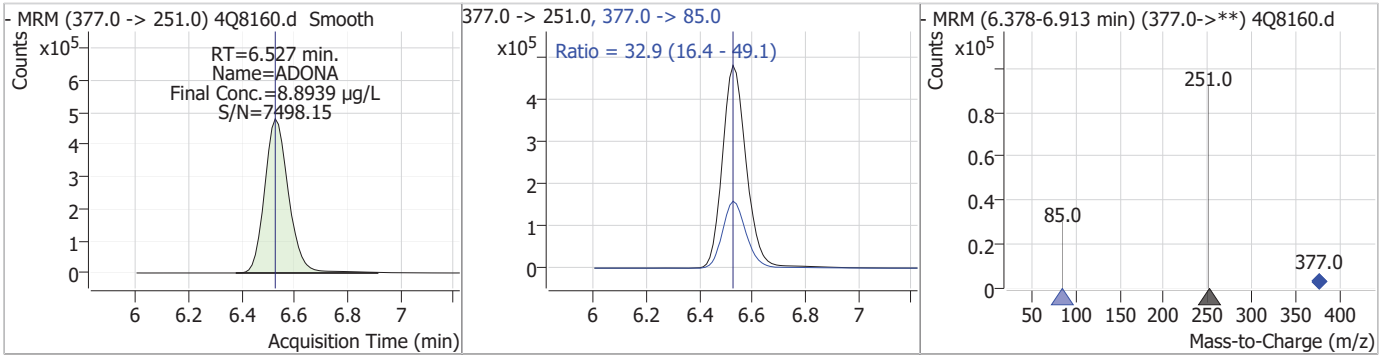
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	42.17	6.29	0.00	7442407	363.0 -> 169.0	20.4	10.4	31.2



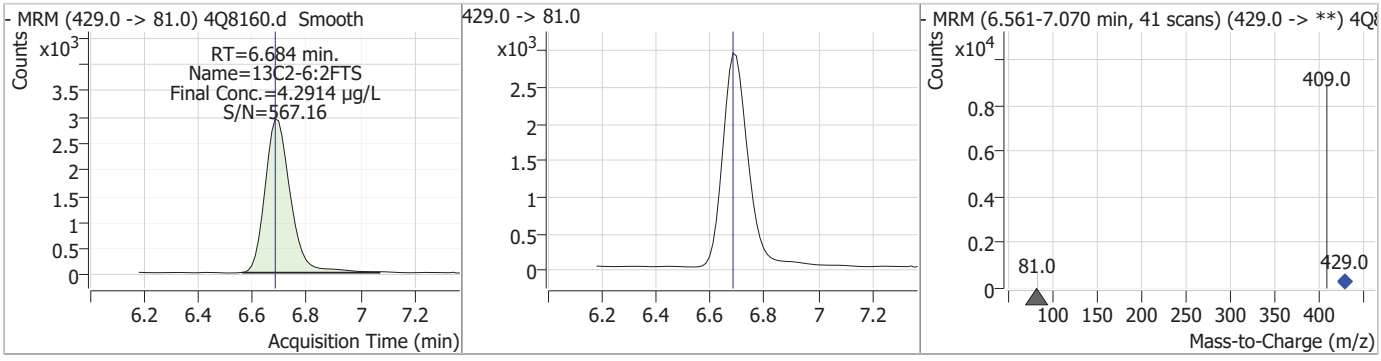
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	10.35	6.33	0.00	320551	349.0 -> 99.0	50.5	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.89	6.53	0.00	3016238	377.0 -> 85.0	32.9	16.4	49.1

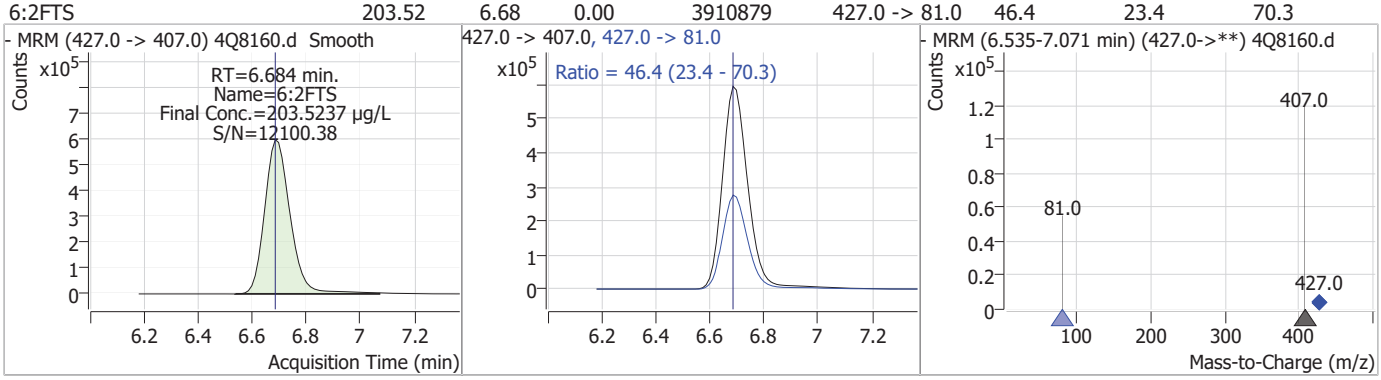


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.29	6.68	0.00	19161				

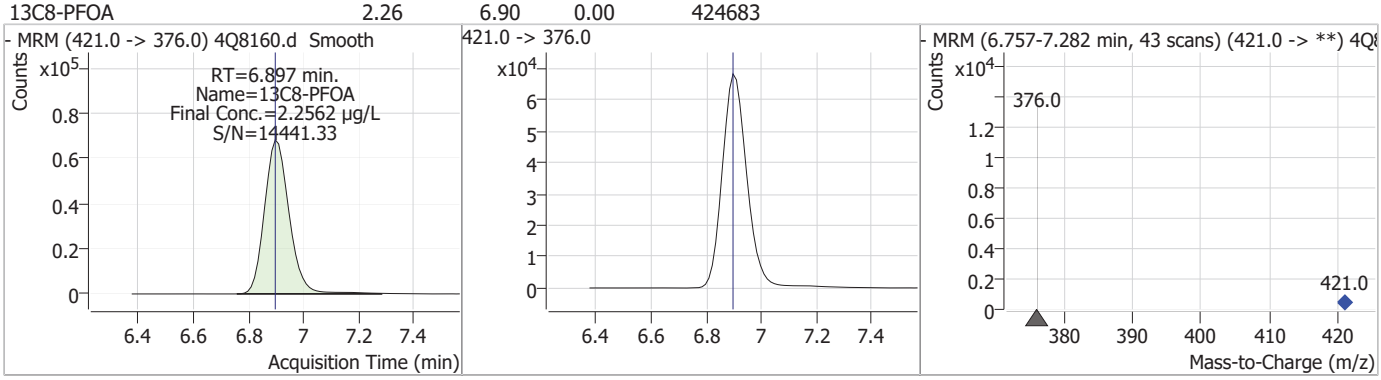


Perfluorinated Compounds by LC/MS/MS

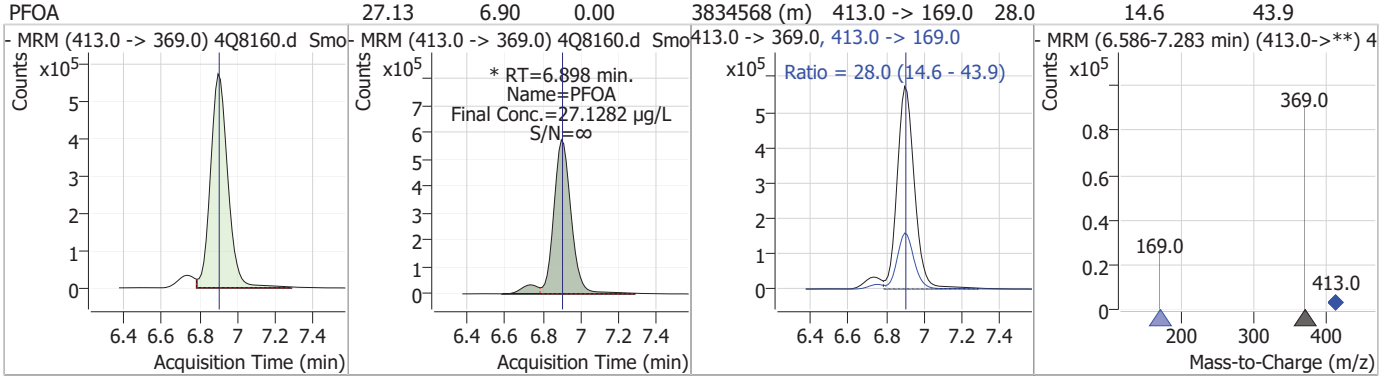
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	203.52	6.68	0.00	3910879	427.0 -> 81.0	46.4	23.4	70.3



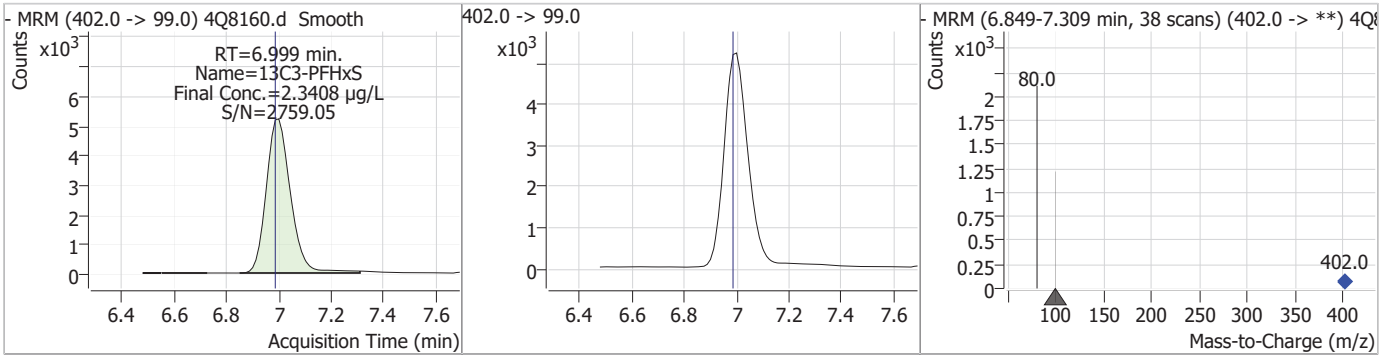
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.26	6.90	0.00	424683				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	27.13	6.90	0.00	3834568 (m)	413.0 -> 169.0	28.0	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.34	7.00	0.01	33538				

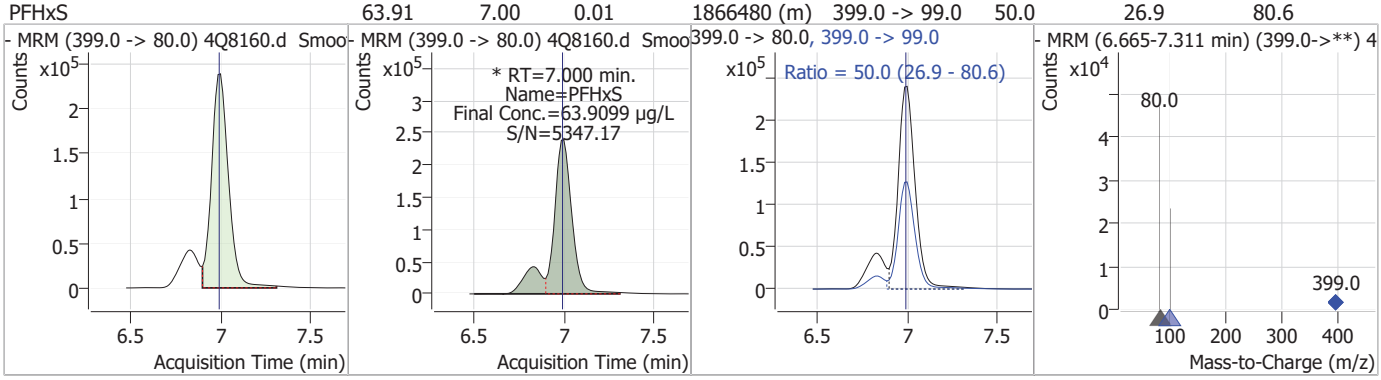


7.4.2

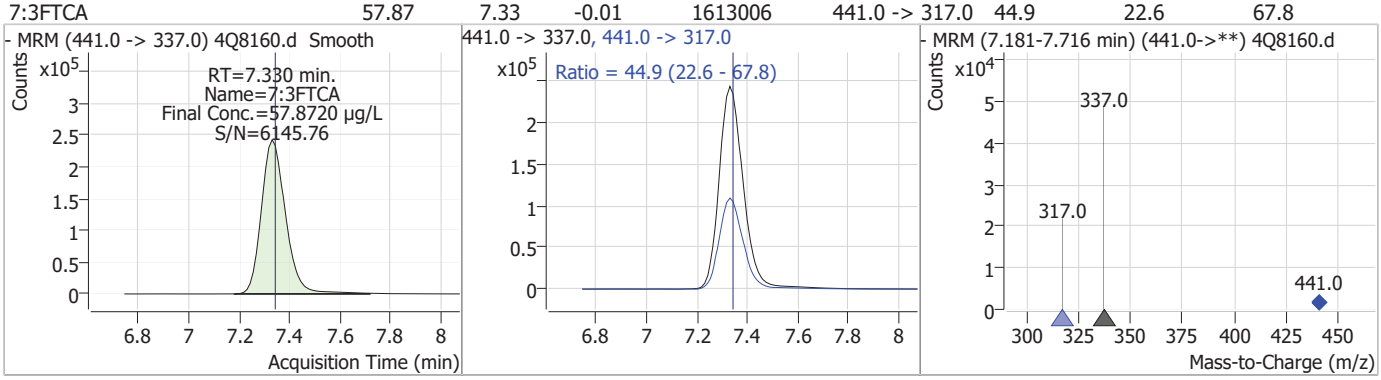
7

Perfluorinated Compounds by LC/MS/MS

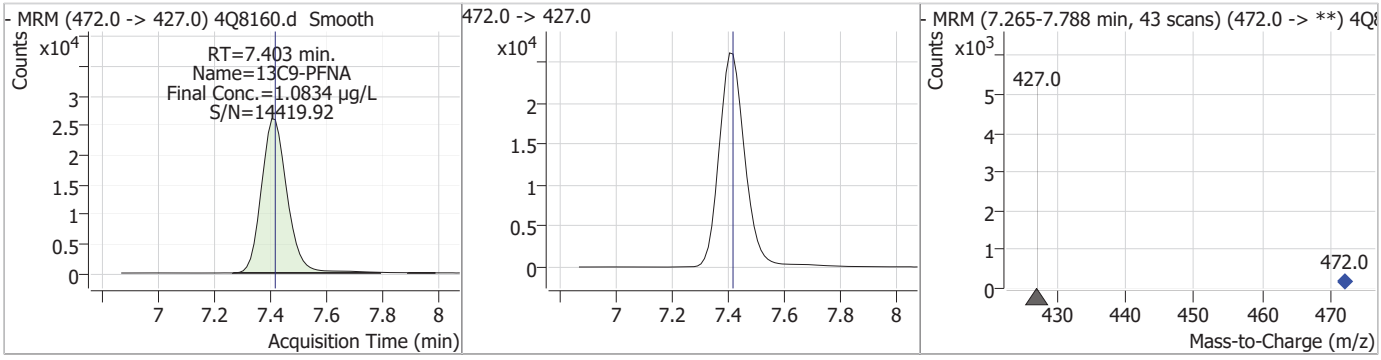
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	63.91	7.00	0.01	1866480 (m)	399.0 -> 99.0	50.0	26.9	80.6



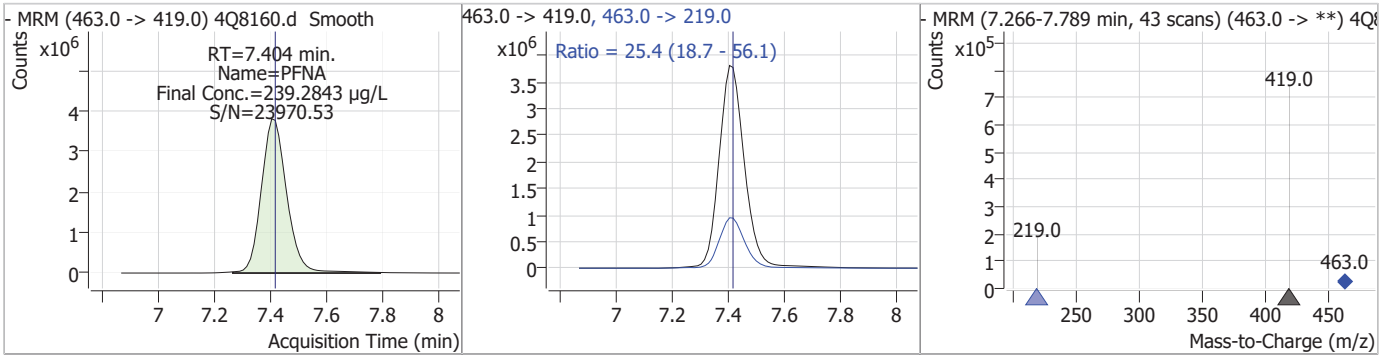
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	57.87	7.33	-0.01	1613006	441.0 -> 317.0	44.9	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.08	7.40	-0.01	166089				

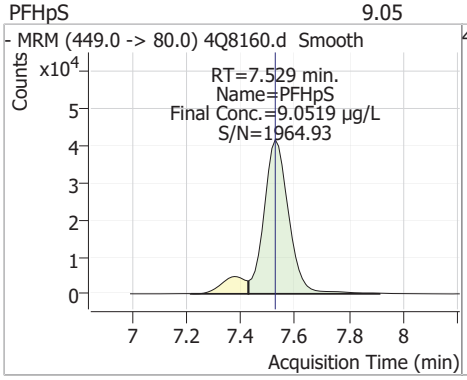


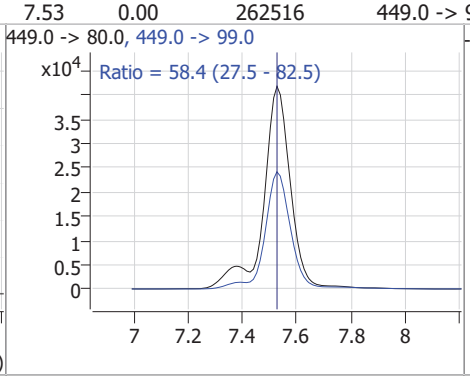
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	239.28	7.40	-0.01	23904675	463.0 -> 219.0	25.4	18.7	56.1

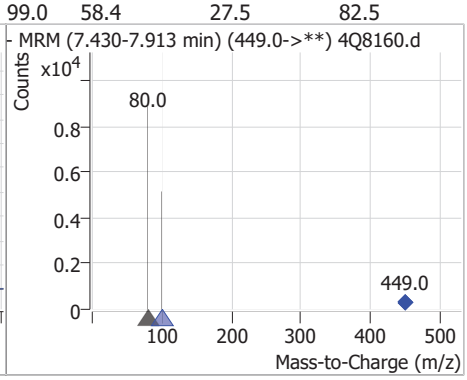


Perfluorinated Compounds by LC/MS/MS

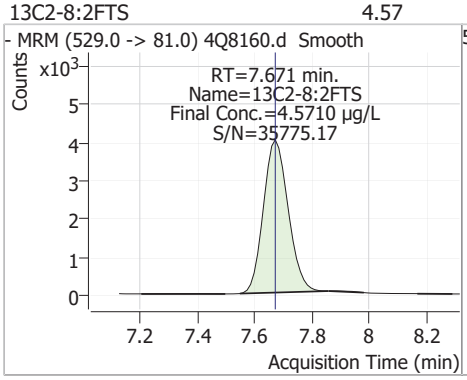
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	9.05	7.53	0.00	262516	449.0 -> 99.0	58.4	27.5	82.5

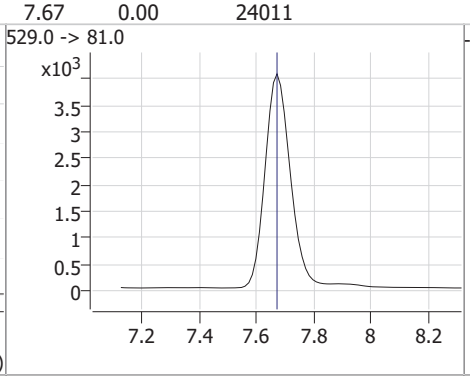


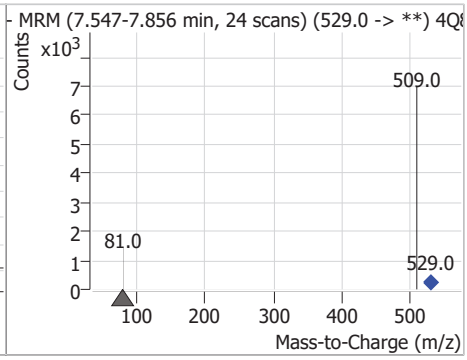




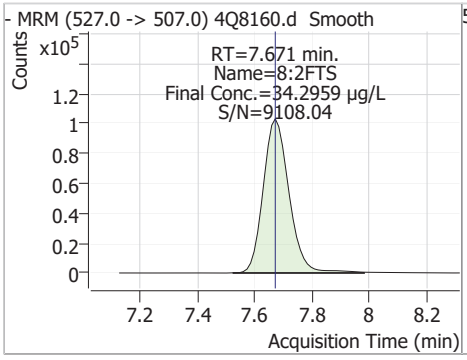
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.57	7.67	0.00	24011				

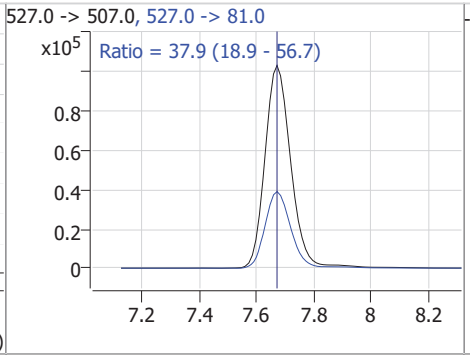


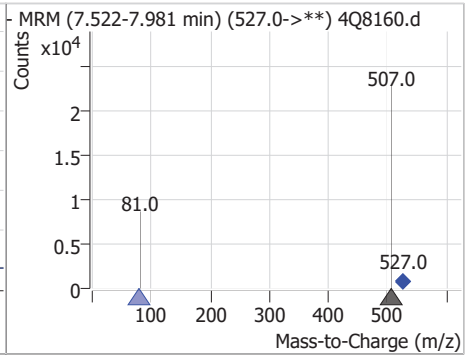




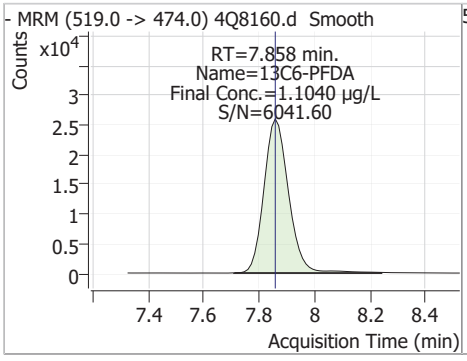
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	34.30	7.67	0.00	644466	527.0 -> 81.0	37.9	18.9	56.7

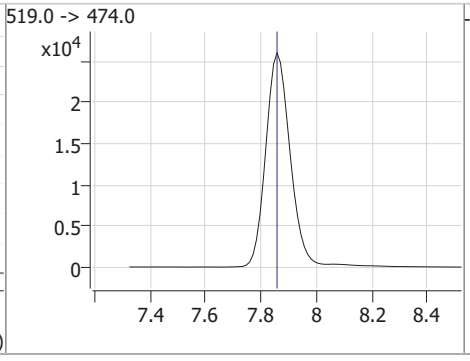


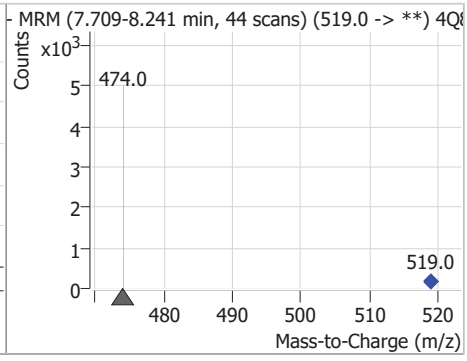




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.10	7.86	0.00	160893				

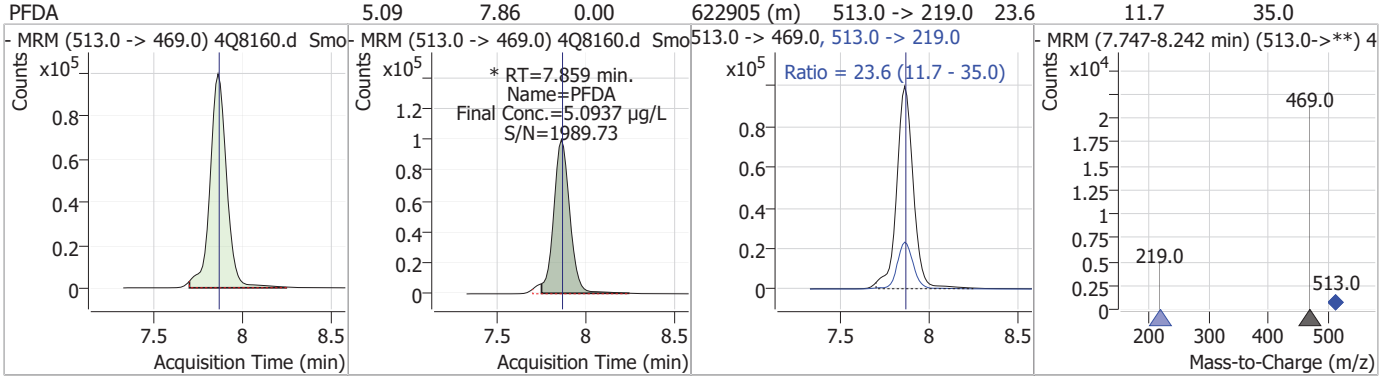




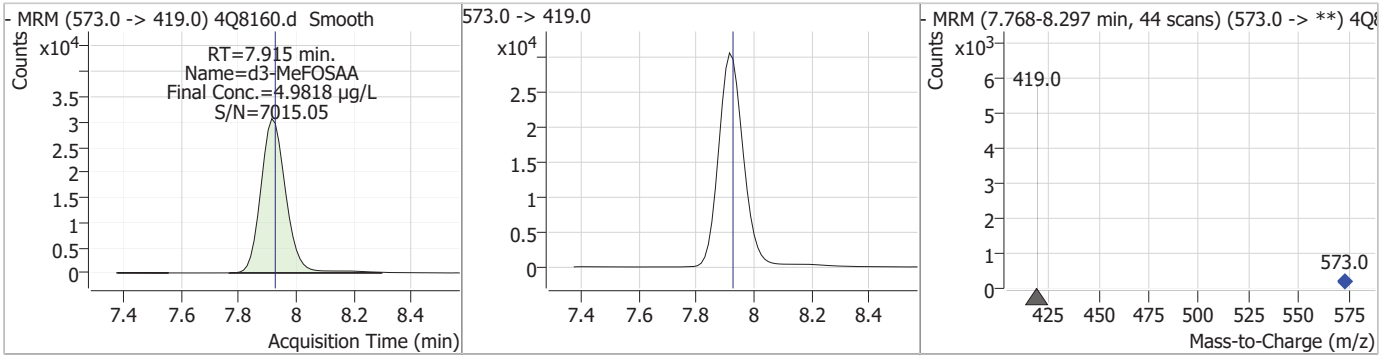


Perfluorinated Compounds by LC/MS/MS

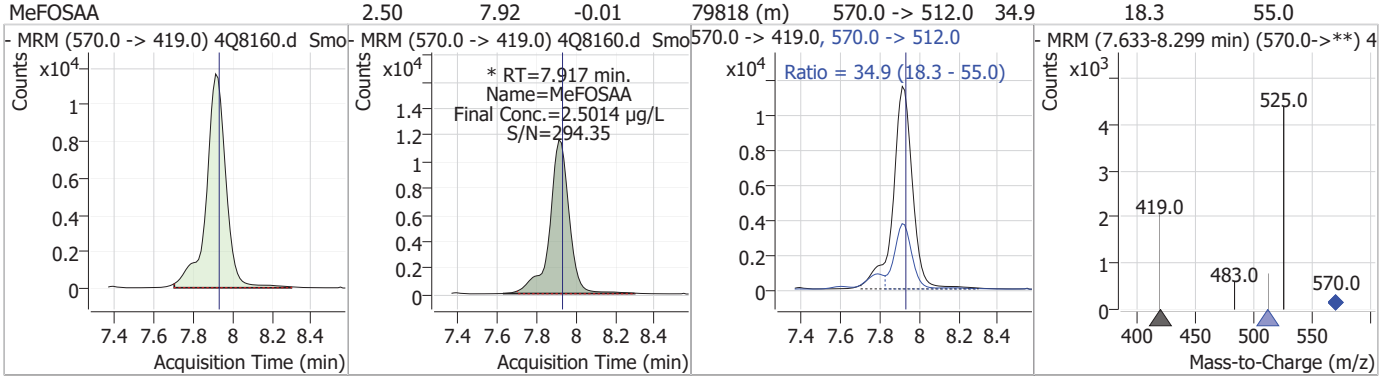
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	5.09	7.86	0.00	622905 (m)	513.0 -> 219.0	23.6	11.7	35.0



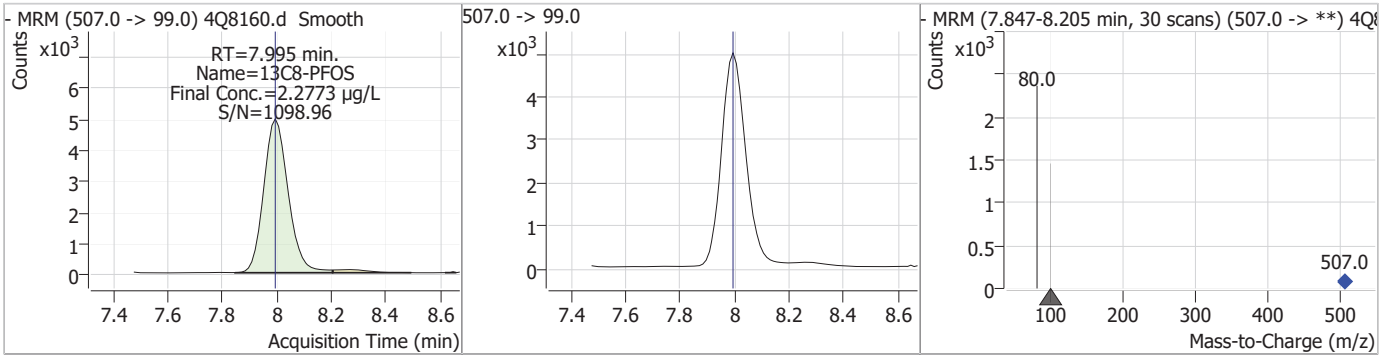
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.98	7.92	-0.01	185189				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.50	7.92	-0.01	79818 (m)	570.0 -> 512.0	34.9	18.3	55.0

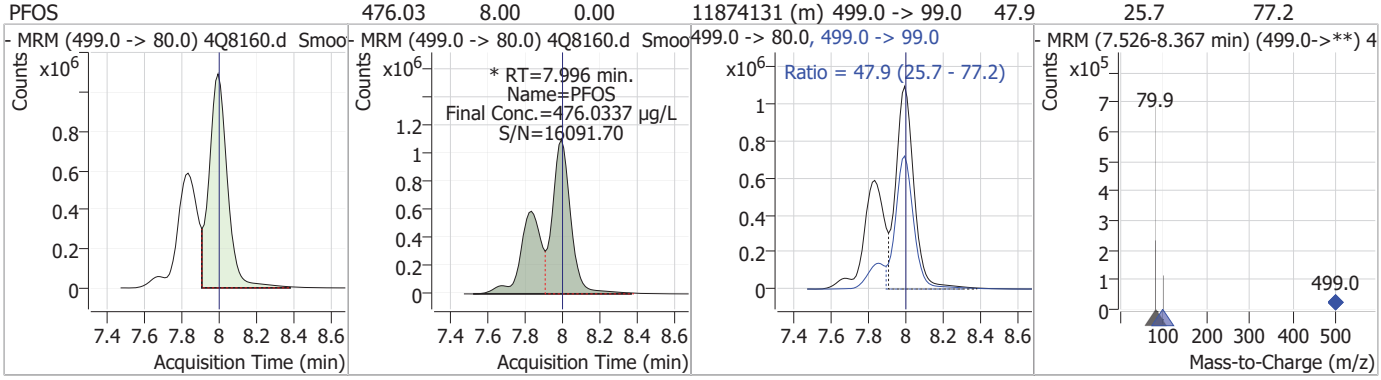


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.28	7.99	0.00	30950				

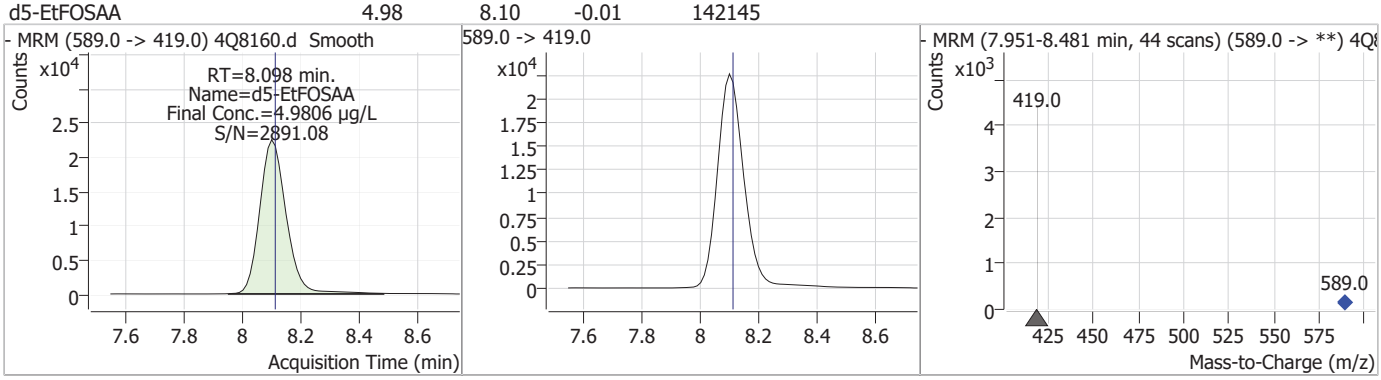


Perfluorinated Compounds by LC/MS/MS

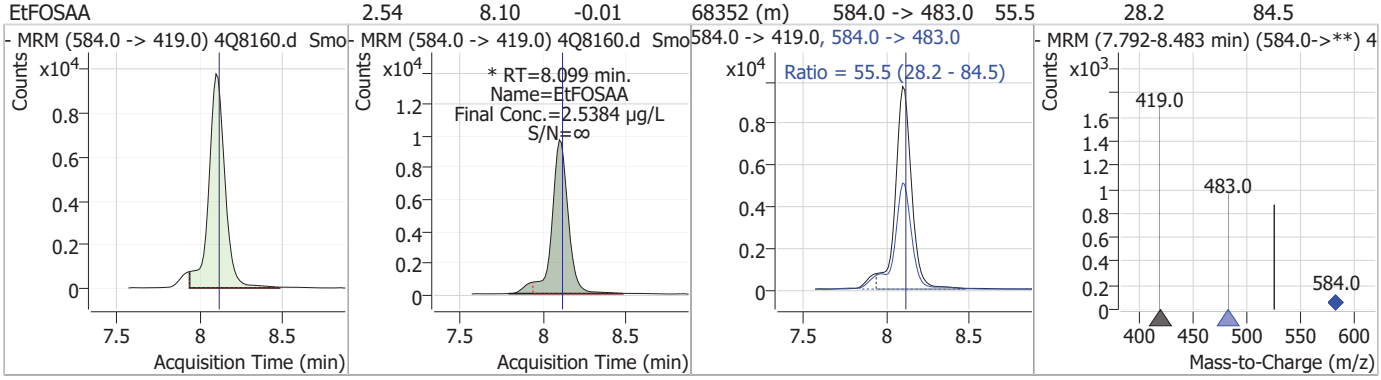
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	476.03	8.00	0.00	11874131 (m)	499.0 -> 99.0	47.9	25.7	77.2



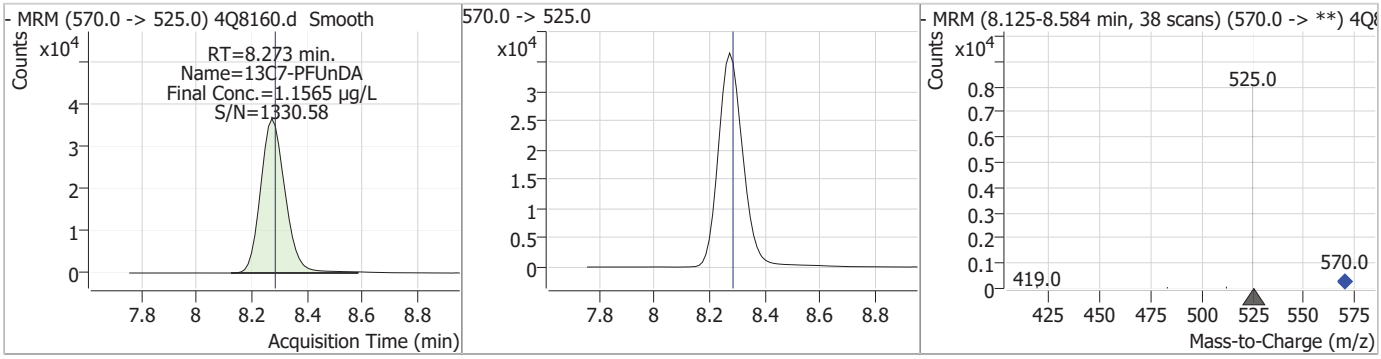
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.98	8.10	-0.01	142145				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.54	8.10	-0.01	68352 (m)	584.0 -> 483.0	55.5	28.2	84.5

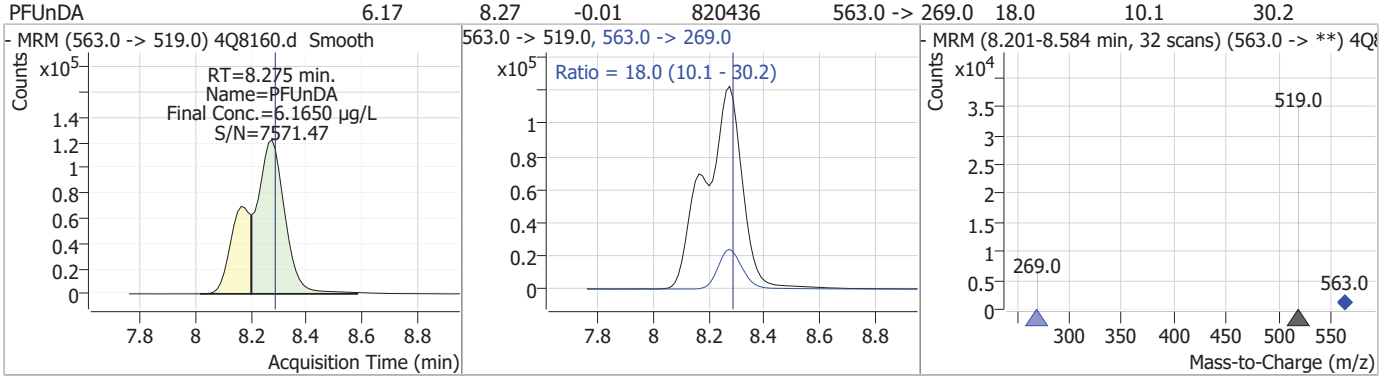


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.16	8.27	-0.01	225139				

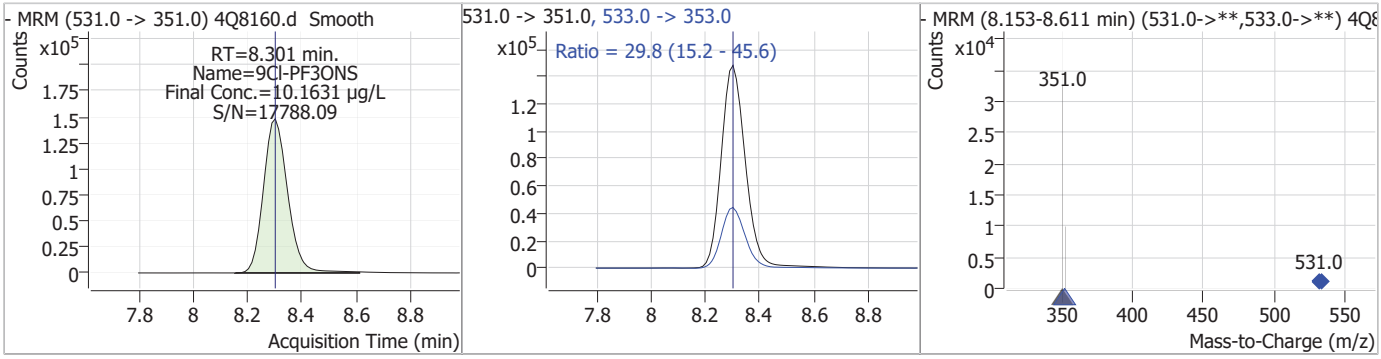


Perfluorinated Compounds by LC/MS/MS

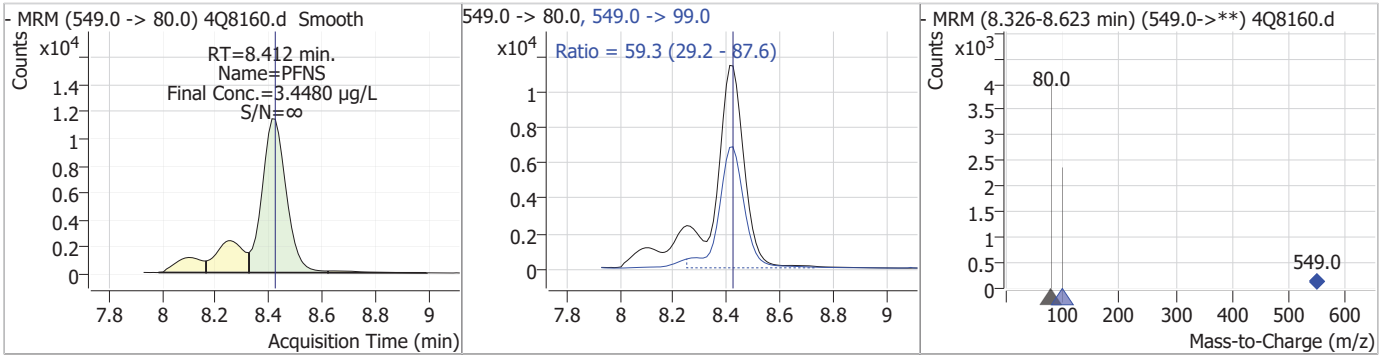
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	6.17	8.27	-0.01	820436	563.0 -> 269.0	18.0	10.1	30.2



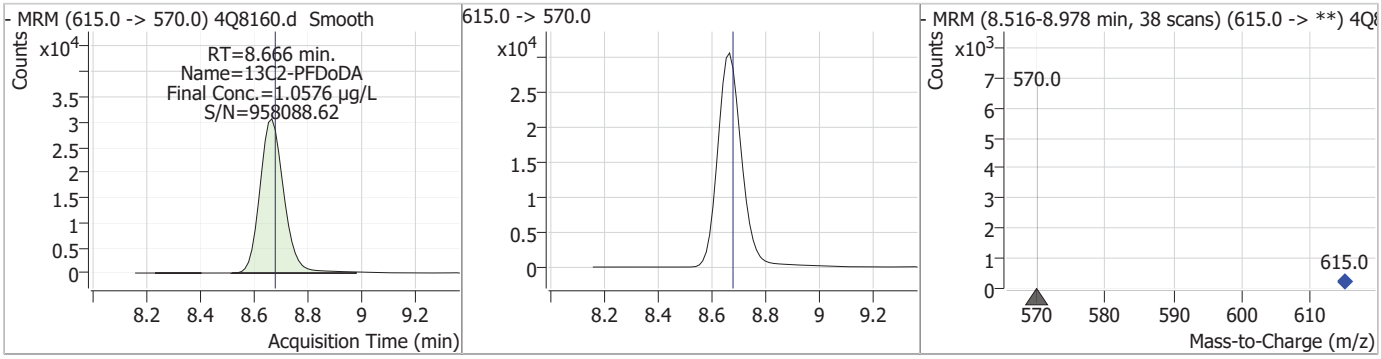
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	10.16	8.30	0.00	919280	533.0 -> 353.0	29.8	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	3.45	8.41	-0.01	71763	549.0 -> 99.0	59.3	29.2	87.6

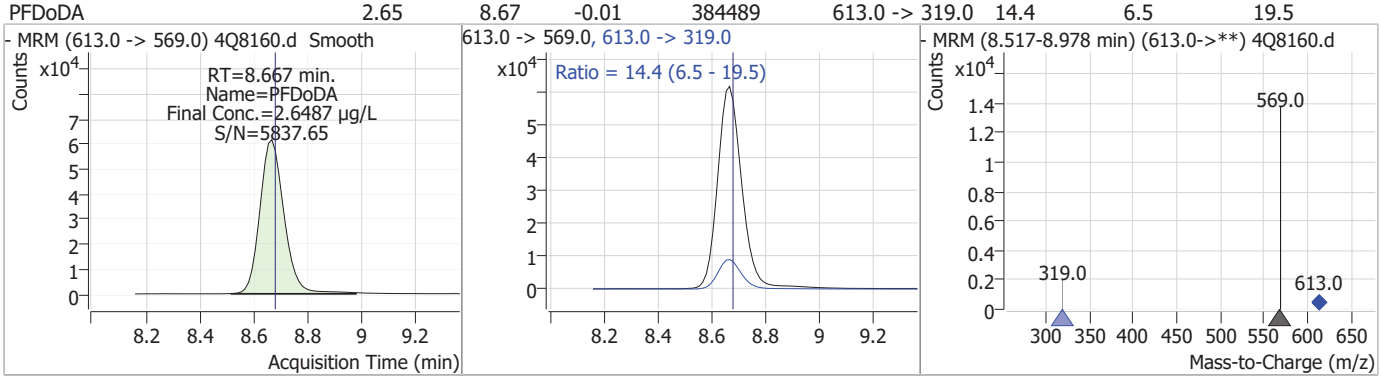


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.06	8.67	-0.01	188579				

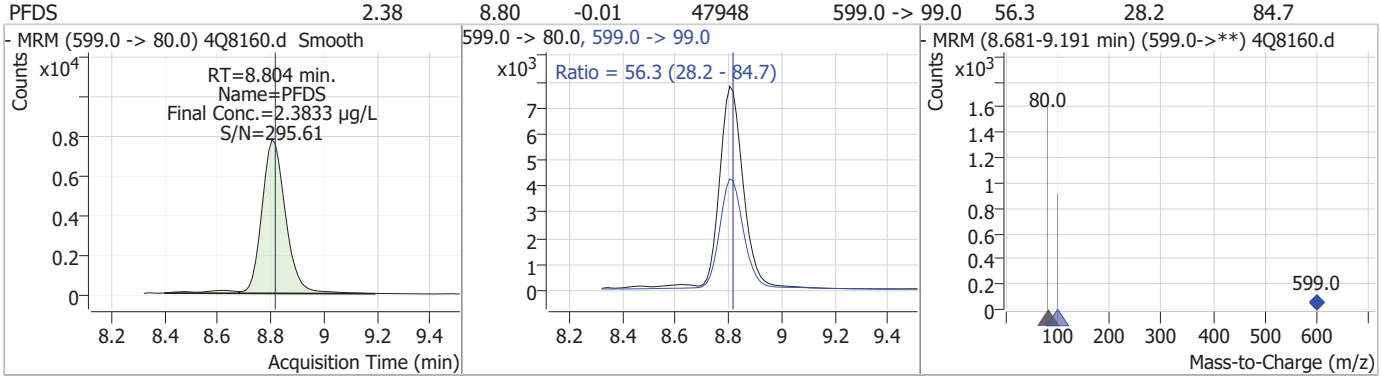


Perfluorinated Compounds by LC/MS/MS

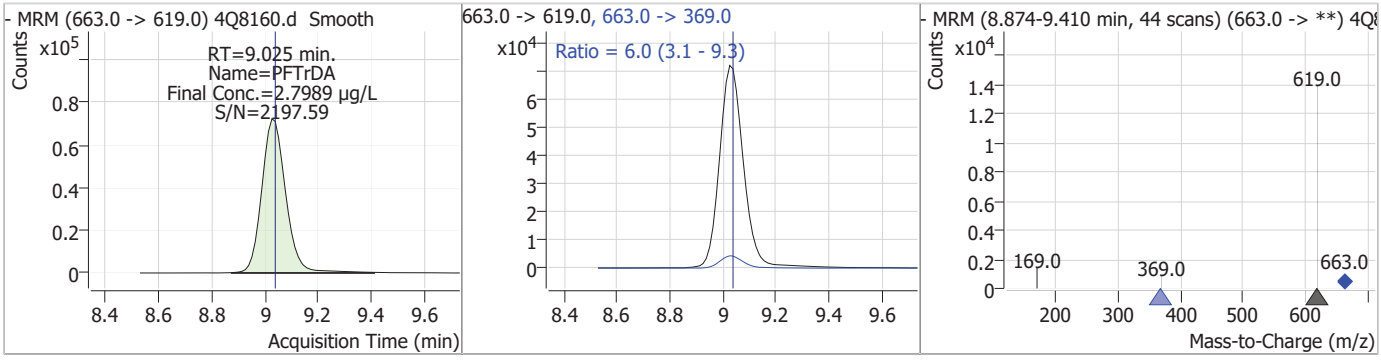
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.65	8.67	-0.01	384489	613.0 -> 319.0	14.4	6.5	19.5



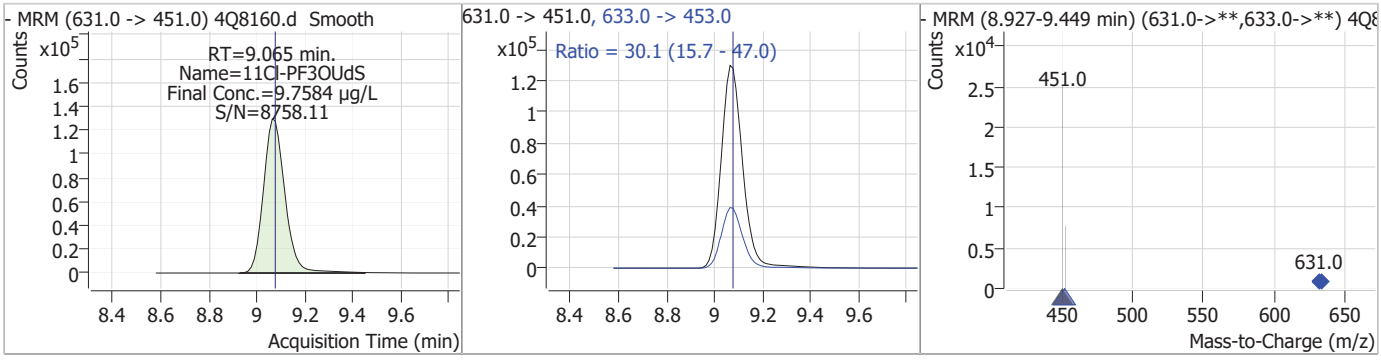
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.38	8.80	-0.01	47948	599.0 -> 99.0	56.3	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.80	9.03	-0.01	453067	663.0 -> 369.0	6.0	3.1	9.3

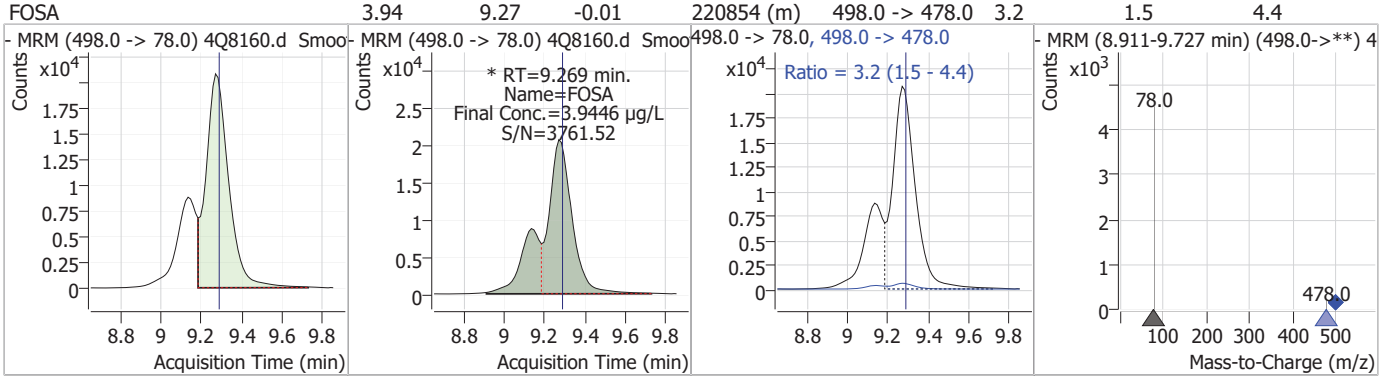


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.76	9.06	-0.01	802430	633.0 -> 453.0	30.1	15.7	47.0

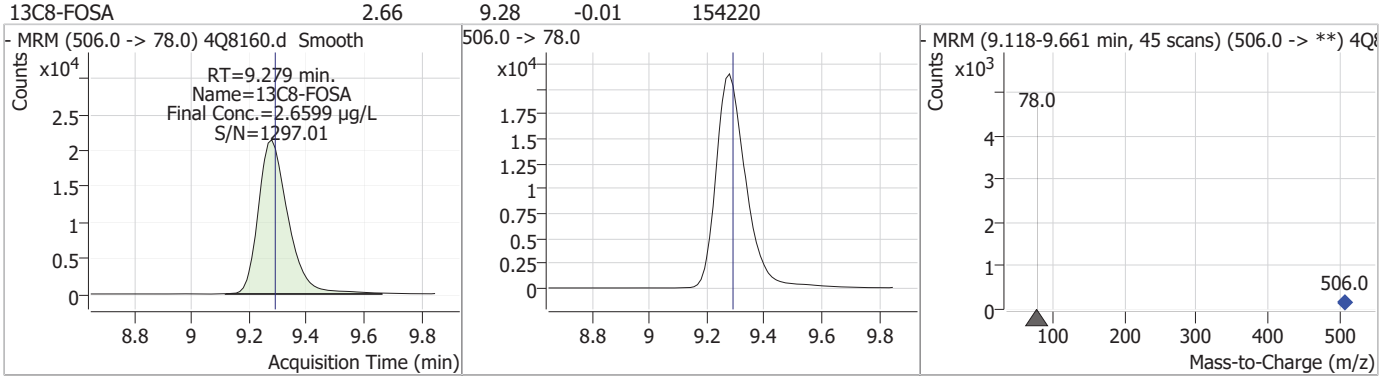


Perfluorinated Compounds by LC/MS/MS

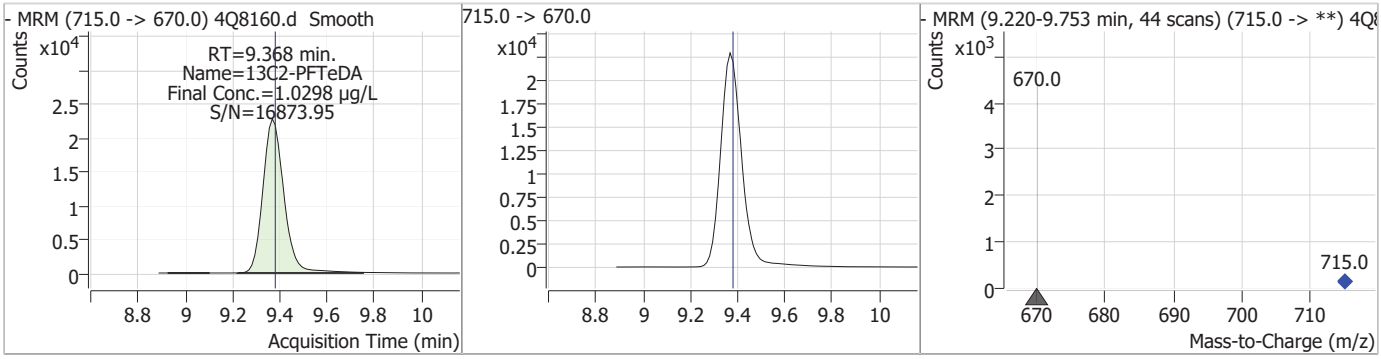
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	3.94	9.27	-0.01	220854 (m)	498.0 -> 478.0	3.2	1.5	4.4



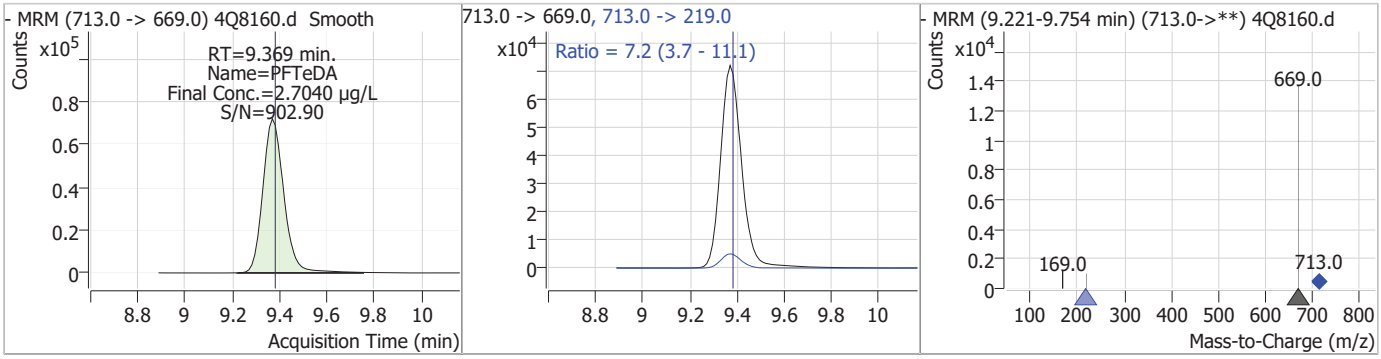
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.66	9.28	-0.01	154220				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.03	9.37	-0.01	141165				

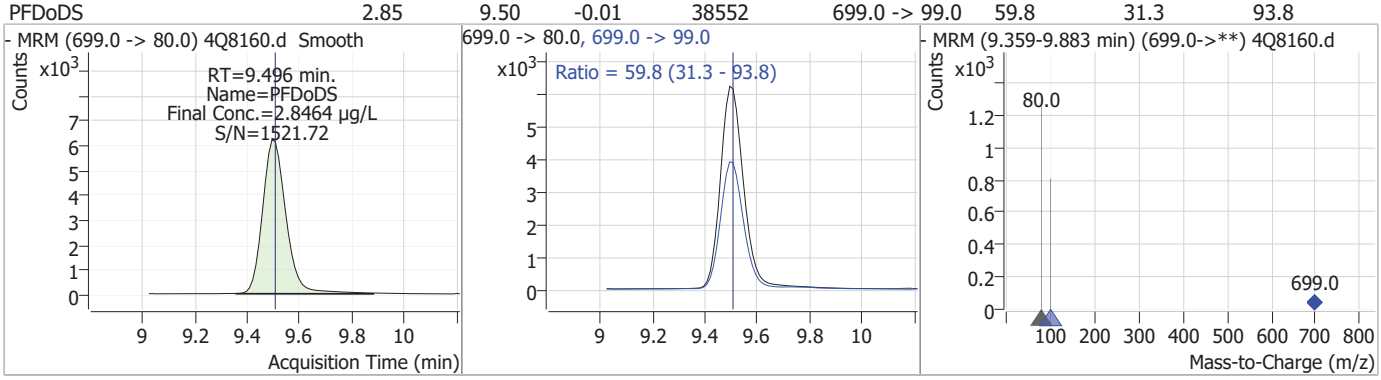


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.70	9.37	-0.01	444429	713.0 -> 219.0	7.2	3.7	11.1

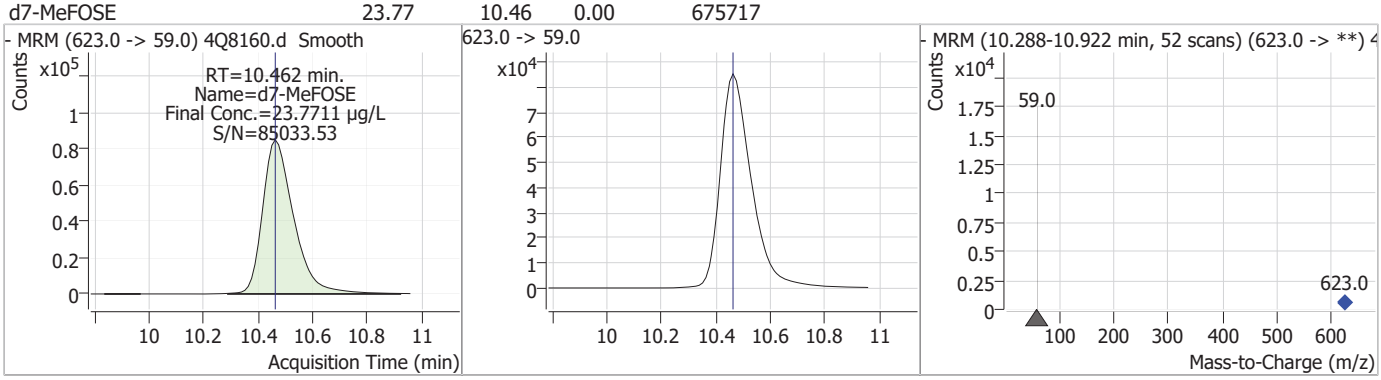


Perfluorinated Compounds by LC/MS/MS

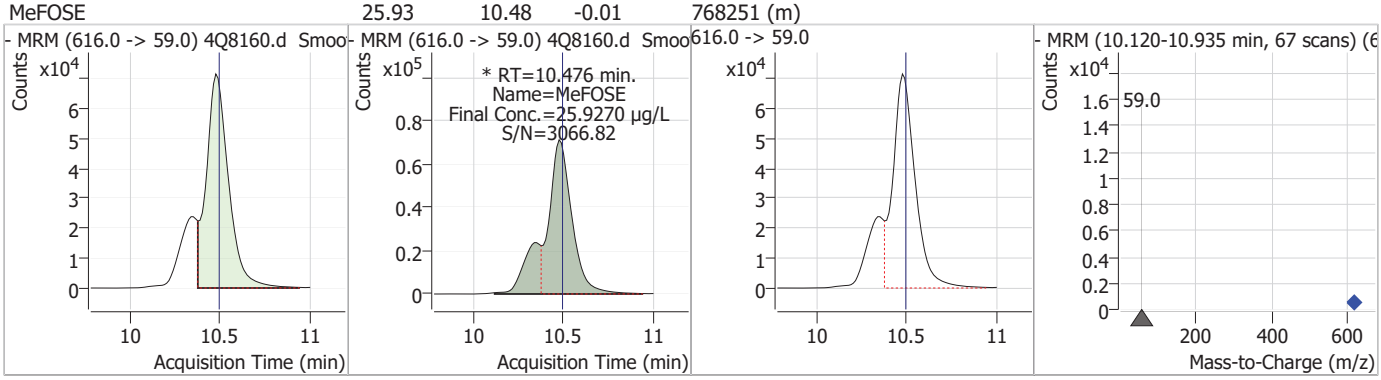
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.85	9.50	-0.01	38552	699.0 -> 99.0	59.8	31.3	93.8



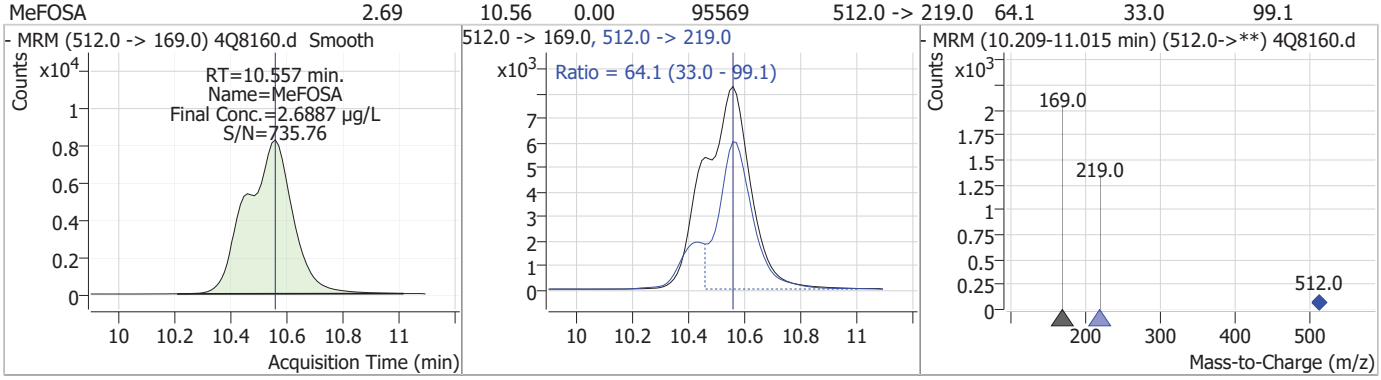
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.77	10.46	0.00	675717				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.93	10.48	-0.01	768251 (m)				

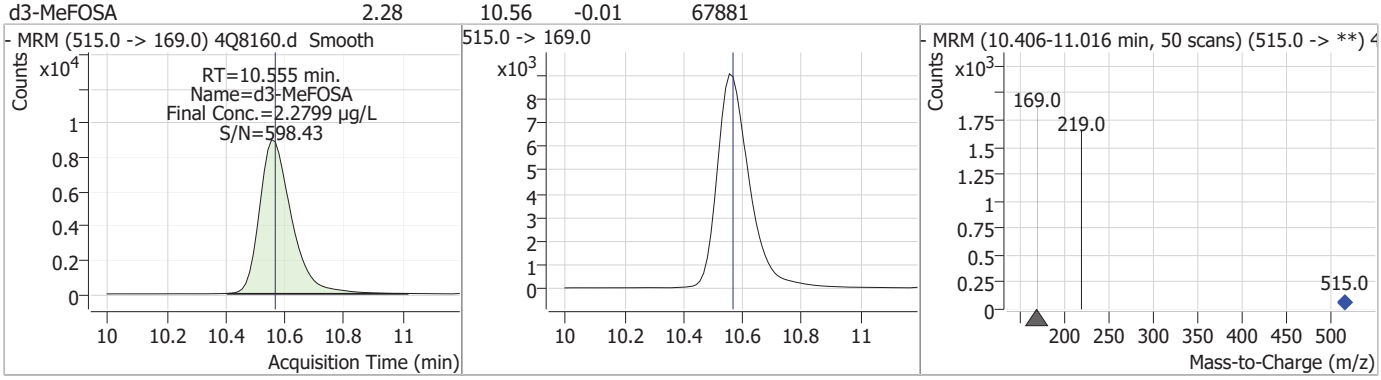


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.69	10.56	0.00	95569	512.0 -> 219.0	64.1	33.0	99.1

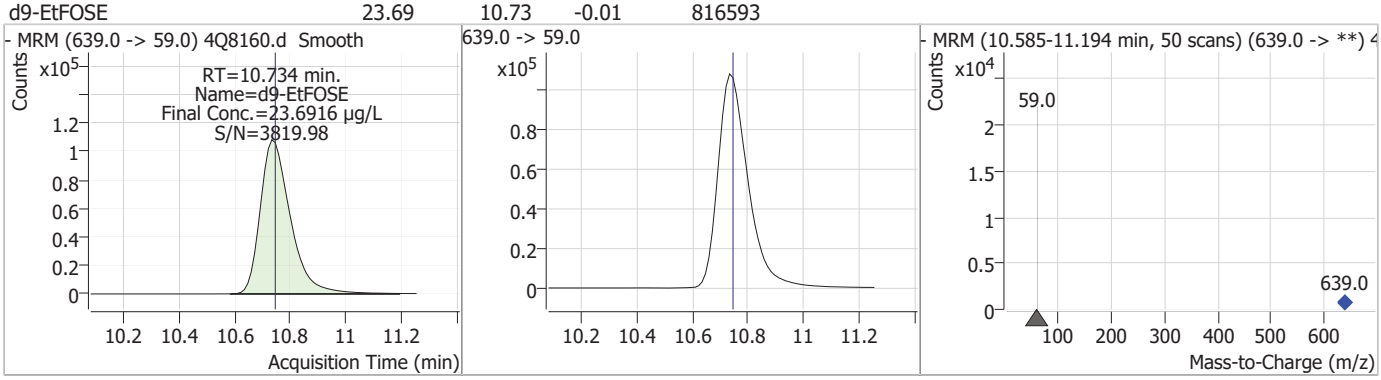


Perfluorinated Compounds by LC/MS/MS

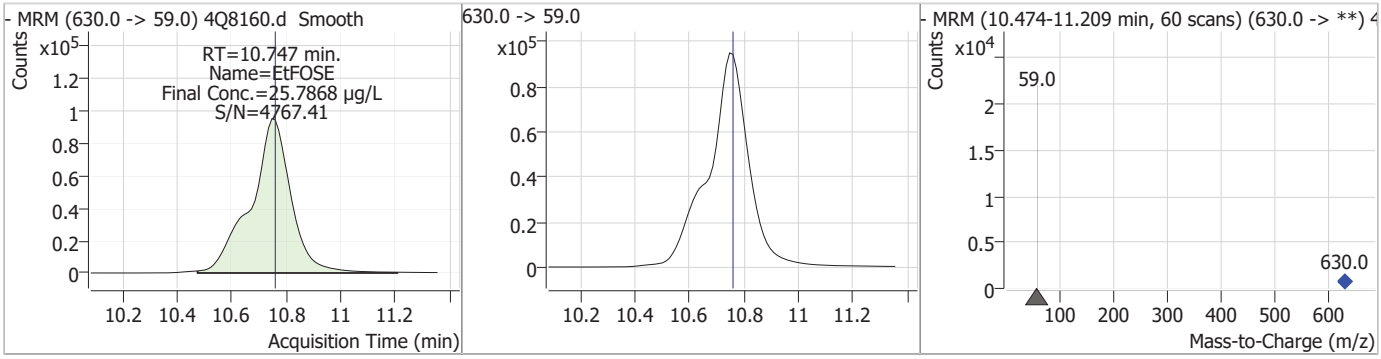
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.28	10.56	-0.01	67881				



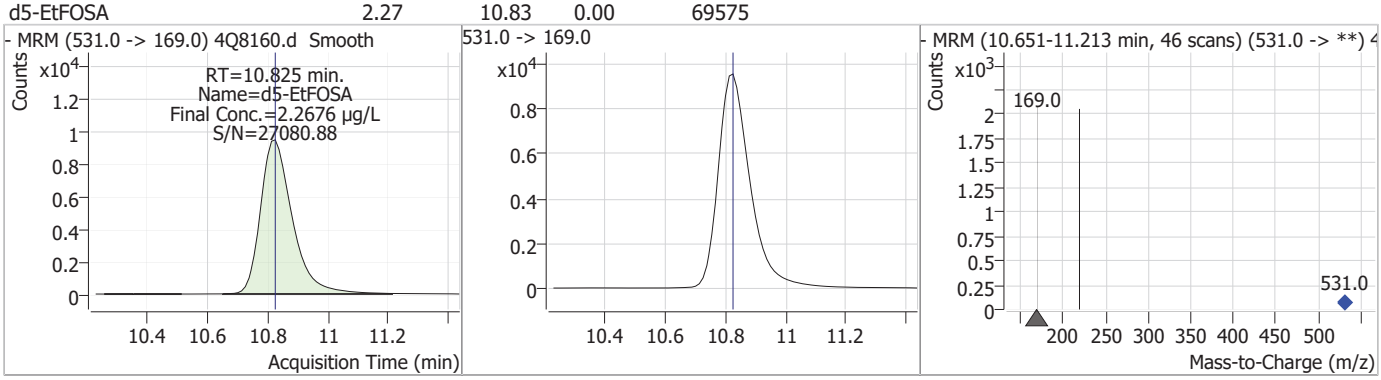
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.69	10.73	-0.01	816593				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.79	10.75	-0.01	979484				

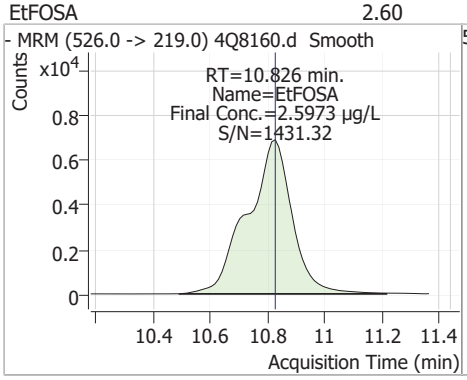


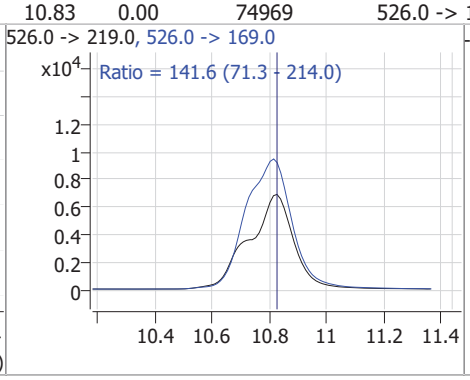
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.27	10.83	0.00	69575				

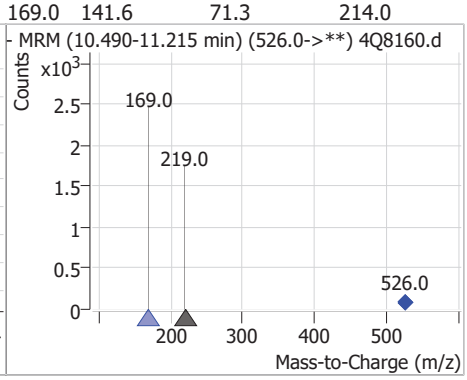


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.60	10.83	0.00	74969	526.0 -> 169.0	141.6	71.3	214.0







7.4.2

7

Manual Integration Approval Summary

Sample Number: OP63161-MSD
Lab FileID: 4Q8160.D
Injection Time: 04/30/25 21:43
Method: EPA 1633
Analyst approved: 05/01/25 11:50 Maksud Haque
Supervisor approved: 05/15/25 12:50 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorodecanoic acid	335-76-2		7.86	Poor instrument integration
MeFOSAA	2355-31-9		7.92	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.10	Poor instrument integration
PFOSA	754-91-6		9.27	Split peak
MeFOSE	24448-09-7		10.48	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/15/25 05:29

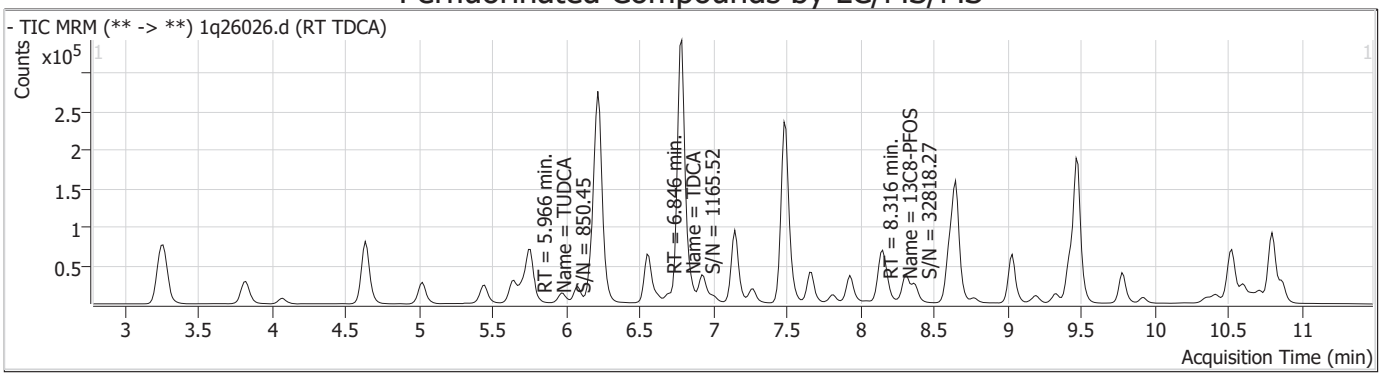
Perfluorinated Compounds by LC/MS/MS

Data File : 1q26026.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/14/2025 3:53:50 PM
Sample Name : RT TDCA
Vial : P1-B1
DA Method File : T1q358_TDCA.batch.bin
Batch Name : t1q361 TDCA.batch.bin
Sample Information : OP63461,T1Q361,500,,,5,1,WATER

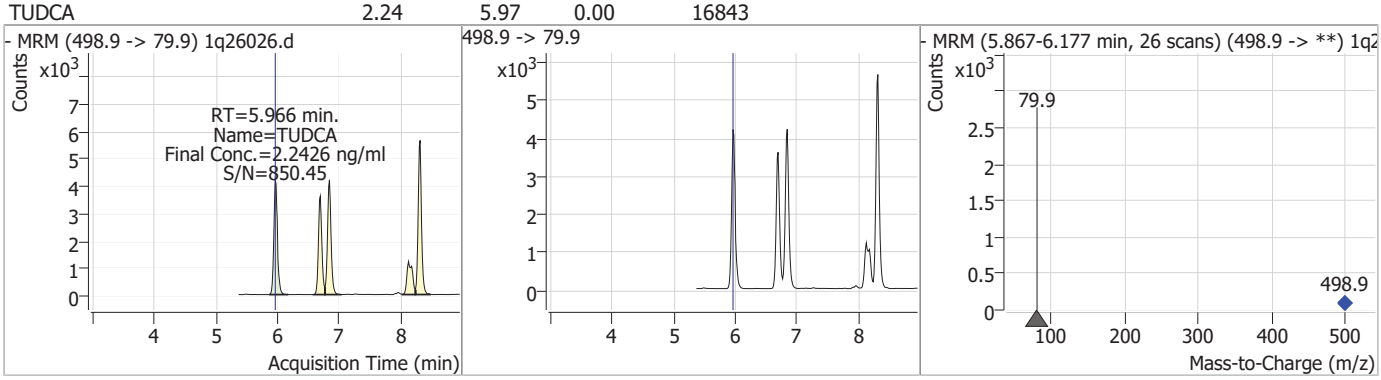
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
Internal Standards							
M8-PFOS	8.316	507.1 -> 79.9	14503	2.50	µg/L		0.000
13C4-PFOS	8.317	502.8 -> 79.9	12872	2.50	µg/L		0.000
System Monitoring Compounds							
13C8-PFOS	8.316	507.1 -> 79.9	14503	5.46	µg/L		0.000
Spiked Amount: 2.50	Range: 50.0 - 150.0%			Recovery = 218.2%			
Target Compounds							QValue
PFOS	8.317	499.0 -> 99.0	13354	1.78	µg/L	#m	73
		499.0 -> 80.0	28984				
TCDCA	6.697	498.9 -> 79.9	14938	1.99	ng/ml		100
TDCA	6.846	498.9 -> 79.9	16687	2.22	ng/ml		100
TUDCA	5.966	498.9 -> 79.9	16843	2.24	ng/ml		100

 # = Qualifier out of range, m = manually integrated, + = Area summed

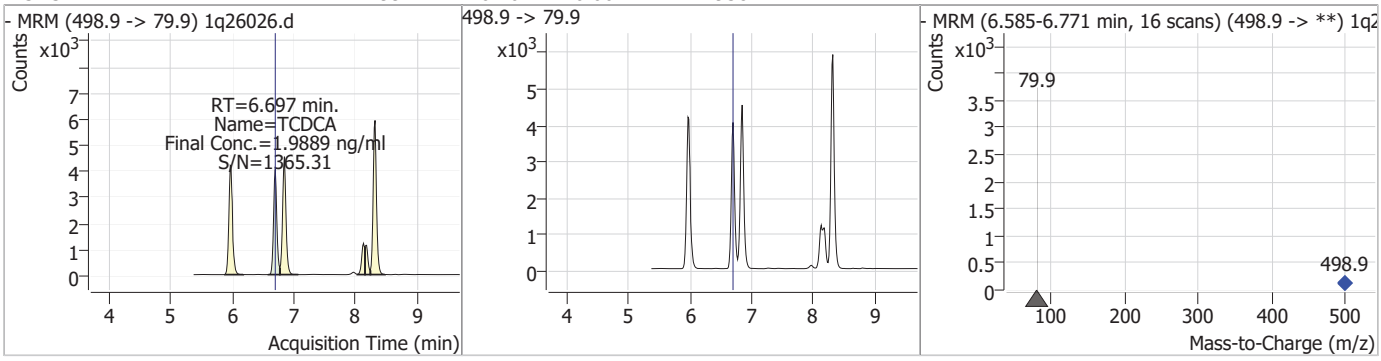
Perfluorinated Compounds by LC/MS/MS



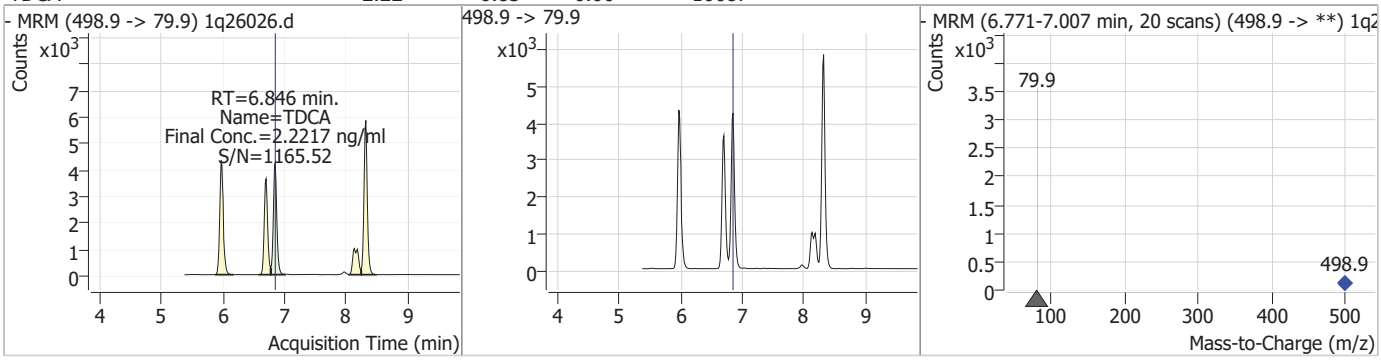
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TUDCA	2.24	5.97	0.00	16843				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TCDCA	1.99	6.70	0.00	14938				

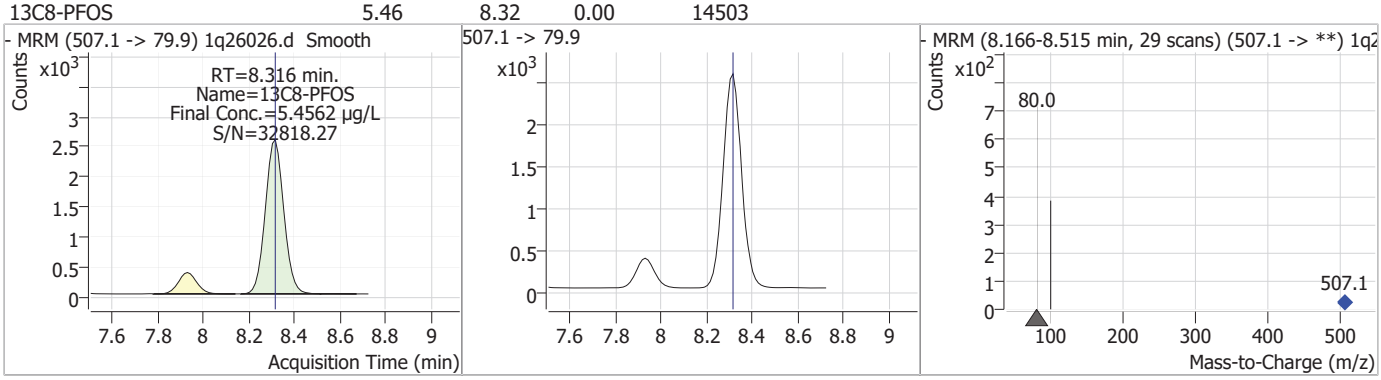


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TDCA	2.22	6.85	0.00	16687				

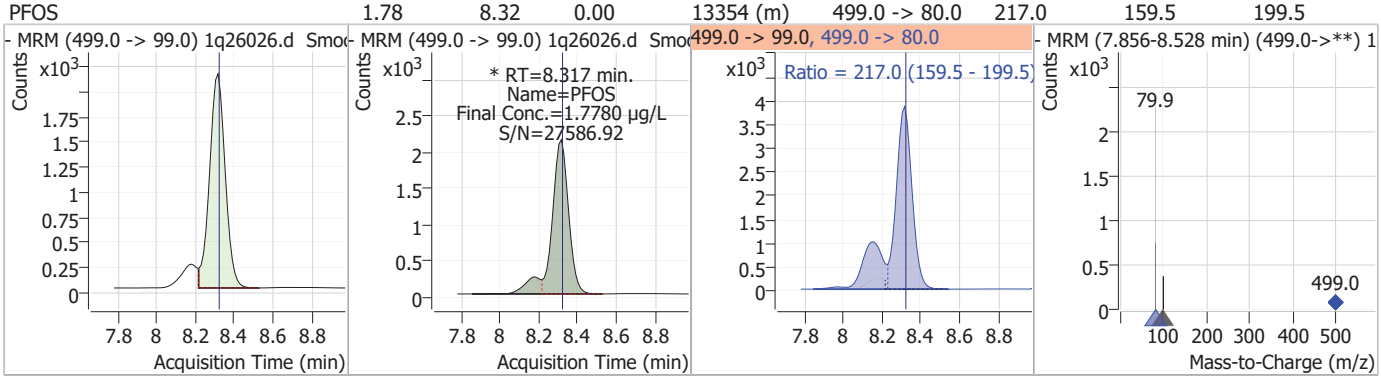


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	5.46	8.32	0.00	14503				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	1.78	8.32	0.00	13354 (m)	499.0 -> 80.0	217.0	159.5	199.5



Manual Integration Approval Summary

Sample Number: T1Q361-RT
Lab FileID: 1Q26026.D
Injection Time: 05/14/25 15:53
Method: EPA 1633
Analyst approved: 05/15/25 01:25 Rensel John Romano
Supervisor approved: 05/15/25 05:29 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/15/25 05:29

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26027.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/14/2025 4:08:45 PM
Sample Name : RT
Vial : P1-A6
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : t1q361.batch.bin
Sample Information : OP63461,T1Q361,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.248	217.0 -> 172.0	185878	10.00 µg/L	-0.012
M5-PFPeA	4.636	268.0 -> 223.0	114942	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	65853	2.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	53433	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	87000	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	30579	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	31304	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	43508	1.25 µg/L	0.000
M2-PFDoDA	9.027	615.0 -> 570.0	43519	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	17226	1.25 µg/L	0.000
M8-FOSA	9.334	506.0 -> 78.0	20436	2.50 µg/L	0.000
M3-PFBS	5.699	302.0 -> 99.0	7636	2.50 µg/L	-0.012
M3-PFHxS	7.275	402.0 -> 99.0	7473	2.50 µg/L	0.000
M8-PFOS	8.316	507.0 -> 99.0	7332	2.50 µg/L	0.012
M2-4:2FTS	5.446	329.0 -> 81.0	1539	5.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	3035	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	4300	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	39412	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	24083	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	32309	5.00 µg/L	0.000
M7-MeFOSE	10.510	623.0 -> 59.0	107516	25.00 µg/L	0.000
M9-EtFOSE	10.780	639.0 -> 59.0	124067	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	15784	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	15532	2.50 µg/L	0.000
13C4-PFOS	8.317	503.0 -> 80.0	13684	2.50 µg/L	0.012
13C3-PFBA	3.251	216.0 -> 172.0	79582	5.00 µg/L	0.000
18O2-PFHxS	7.274	403.0 -> 84.0	9195	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	97476	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	25624	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	29405	1.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	61731	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1539	5.01 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.2%	
13C2-6:2FTS	6.922	429.0 -> 81.0	3035	5.10 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.0%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4300	4.59 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.8%	
13C2-PFDoDA	9.027	615.0 -> 570.0	43519	1.25 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.1%	
13C2-PFTeDA	9.772	715.0 -> 670.0	17226	1.18 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.2%	
13C3-PFBS	5.699	302.0 -> 99.0	7636	2.49 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.5%	
13C3-PFHxS	7.275	402.0 -> 99.0	7473	2.43 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.2%		
13C4-PFBA	3.248	217.0 -> 172.0	185878	9.82 µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.2%		
13C4-PFHpA	6.553	367.0 -> 322.0	53433	2.50 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.8%		
13C5-PFHxA	5.759	318.0 -> 273.0	65853	2.51 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.3%		
13C5-PFPeA	4.636	268.0 -> 223.0	114942	5.08 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.6%		
13C6-PFDA	8.139	519.0 -> 474.0	31304	1.26 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.9%		
13C7-PFUnDA	8.595	570.0 -> 525.0	43508	1.21 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.6%		
13C8-FOSA	9.334	506.0 -> 78.0	20436	2.45 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.8%		
13C8-PFOA	7.148	421.0 -> 376.0	87000	2.45 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.1%		
13C8-PFOS	8.316	507.0 -> 99.0	7332	2.33 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.2%		
13C9-PFNA	7.656	472.0 -> 427.0	30579	1.27 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.0%		
d3-MeFOSAA	8.161	573.0 -> 419.0	39412	4.73 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.6%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	24083	10.46 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 104.6%		
d3-MeFOSA	10.601	515.0 -> 169.0	15532	2.40 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.9%		
d5-EtFOSAA	8.358	589.0 -> 419.0	32309	4.76 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.3%		
d7-MeFOSE	10.510	623.0 -> 59.0	107516	25.10 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.4%		
d9-EtFOSE	10.780	639.0 -> 59.0	124067	24.45 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.8%		
d5-EtFOSA	10.859	531.0 -> 169.0	15784	2.39 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.4%		
Target Compounds						QValue
4:2FTS	5.447	327.0 -> 307.0	50540	17.62 µg/L		96
		327.0 -> 81.0	22713			
6:2FTS	6.922	427.0 -> 407.0	72419	18.64 µg/L		93
		427.0 -> 81.0	23423			
8:2FTS	7.927	527.0 -> 507.0	74149	18.97 µg/L		96
		527.0 -> 81.0	23236			
EtFOSAA	8.371	584.0 -> 419.0	25064	4.97 µg/L	m	87
		584.0 -> 483.0	13958			
FOSA	9.337	498.0 -> 78.0	35687	5.04 µg/L	m	96
		498.0 -> 478.0	1490			
MeFOSAA	8.162	570.0 -> 419.0	31231	5.00 µg/L	m	97
		570.0 -> 512.0	12321			
PFBA	3.254	213.0 -> 169.0	105502	20.30 µg/L		100
PFBS	5.700	299.0 -> 80.0	36694	4.15 µg/L		98
		299.0 -> 99.0	14770			
PFDA	8.140	513.0 -> 469.0	108263	5.04 µg/L		98
		513.0 -> 219.0	16751			
PFDoDA	9.027	613.0 -> 569.0	158283	5.01 µg/L		97
		613.0 -> 319.0	19621			
PFDS	9.193	599.0 -> 80.0	18295	5.05 µg/L		96

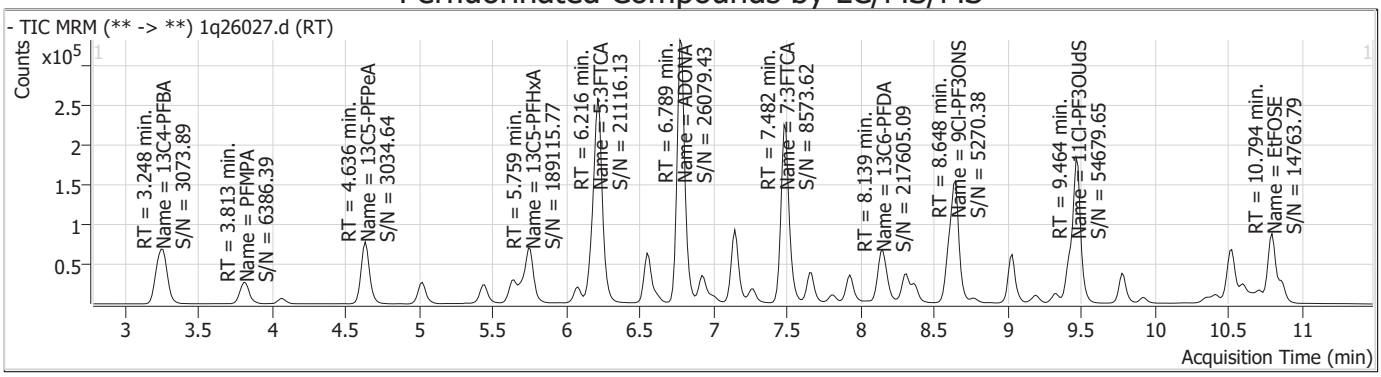
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	8882				
PFHpA	6.554	363.0 -> 319.0	149015	4.98	µg/L		95
		363.0 -> 169.0	26160				
PFHpS	7.822	449.0 -> 80.0	24176	4.68	µg/L		97
		449.0 -> 99.0	12755				
PFHxA	5.761	313.0 -> 269.0	123577	5.12	µg/L		100
		313.0 -> 119.0	3474				
PFHxS	7.276	399.0 -> 80.0	25836	4.44	µg/L	m	97
		399.0 -> 99.0	12713				
PFNA	7.669	463.0 -> 419.0	79439	5.18	µg/L	m	97
		463.0 -> 219.0	21595				
PFNS	8.772	549.0 -> 80.0	13464	5.10	µg/L		90
		549.0 -> 99.0	6535				
PFOA	7.149	413.0 -> 369.0	148239	4.93	µg/L	m	96
		413.0 -> 169.0	33473				
PFOS	8.318	499.0 -> 80.0	28793	4.68	µg/L	m	100
		499.0 -> 99.0	13195				
PFPeA	4.638	263.0 -> 219.0	197864	9.89	µg/L		100
PFPeS	6.630	349.0 -> 80.0	16686	4.22	µg/L		98
		349.0 -> 99.0	7509				
PFTeDA	9.773	713.0 -> 669.0	98496	5.31	µg/L		99
		713.0 -> 219.0	8079				
PFTrDA	9.412	663.0 -> 619.0	154572	5.02	µg/L		100
		663.0 -> 369.0	10415				
PFUnDA	8.596	563.0 -> 519.0	151040	5.25	µg/L		97
		563.0 -> 269.0	23022				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	490987	18.91	µg/L		100
		633.0 -> 453.0	145444				
9Cl-PF3ONS	8.648	531.0 -> 351.0	391313	18.39	µg/L		97
		533.0 -> 353.0	120592				
ADONA	6.789	377.0 -> 251.0	968949	18.27	µg/L		100
		377.0 -> 85.0	264749				
HFPO-DA	6.088	285.0 -> 169.0	44491	19.08	µg/L		97
		285.0 -> 185.0	3692				
3:3FTCA	4.072	241.0 -> 177.0	25780	23.66	µg/L		99
		241.0 -> 117.0	1835				
5:3FTCA	6.216	341.0 -> 237.0	529294	124.01	µg/L		100
		341.0 -> 217.0	375455				
7:3FTCA	7.482	441.0 -> 337.0	604880	125.50	µg/L		98
		441.0 -> 317.0	264788				
EtFOSA	10.872	526.0 -> 219.0	32118	4.88	µg/L	m	94
		526.0 -> 169.0	44498				
EtFOSE	10.794	630.0 -> 59.0	273138	50.53	µg/L		100
MeFOSA	10.603	512.0 -> 169.0	39395	4.92	µg/L	m	99
		512.0 -> 219.0	26868				
MeFOSE	10.523	616.0 -> 59.0	216087	49.34	µg/L	m	100
PFDoDS	9.924	699.0 -> 80.0	16303	4.90	µg/L		97
		699.0 -> 99.0	9630				
NFDHA	5.651	295.0 -> 201.0	15906	9.90	µg/L		98
		201.0 -> 85.0	87458				
		295.0 -> 85.0	4711				
PFMBA	5.027	279.0 -> 85.0	108036	9.93	µg/L		100
PFMPA	3.813	229.0 -> 85.0	122686	10.01	µg/L		100
PFEESA	6.182	315.0 -> 135.0	210409	9.17	µg/L		100
		315.0 -> 69.0	18660				

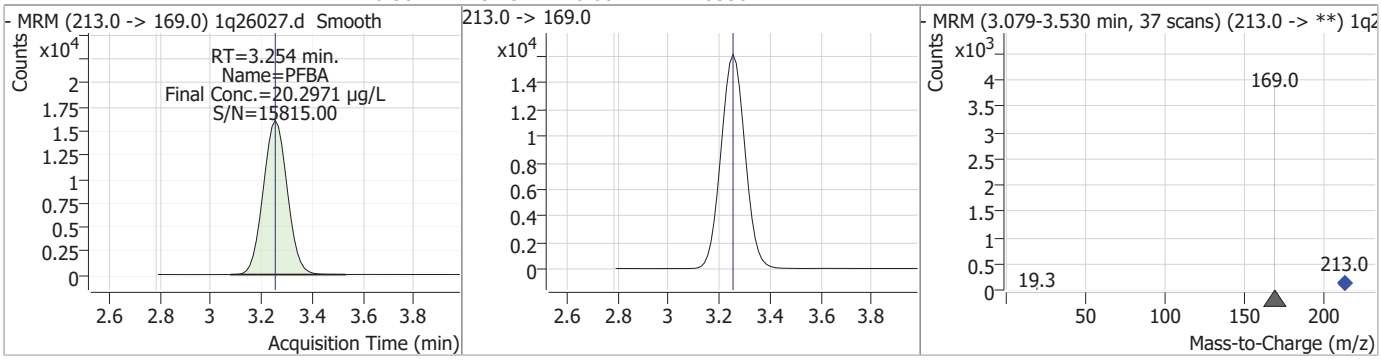
 # = Qualifier out of range, m = manually integrated, + = Area summed

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

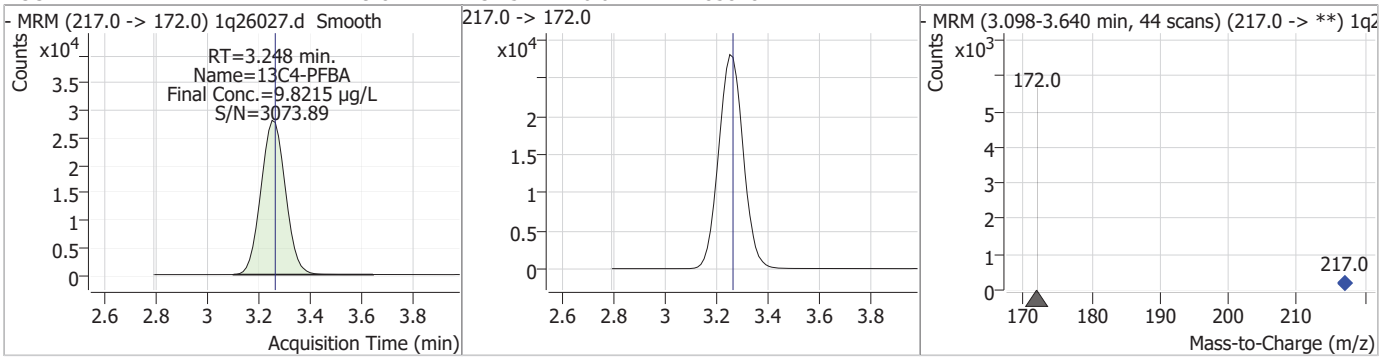
Perfluorinated Compounds by LC/MS/MS



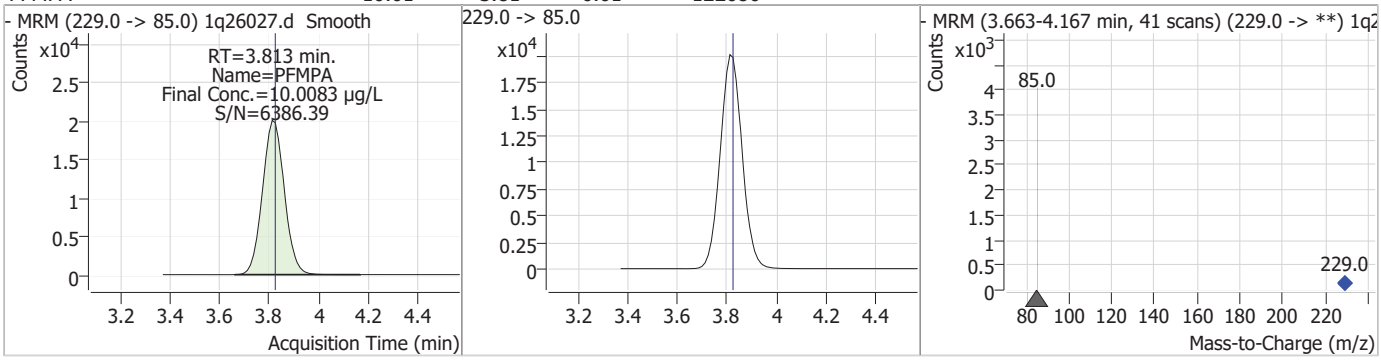
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	20.30	3.25	0.00	105502				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.82	3.25	-0.01	185878				

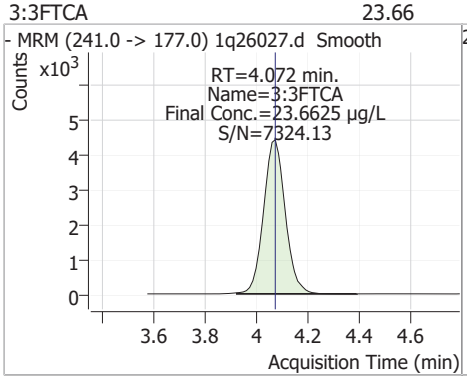


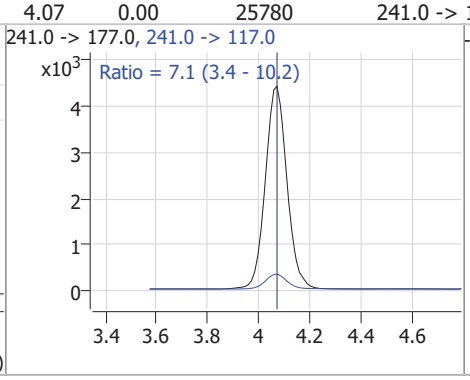
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	10.01	3.81	-0.01	122686				

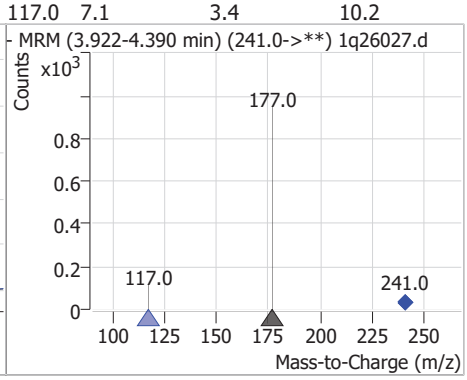


Perfluorinated Compounds by LC/MS/MS

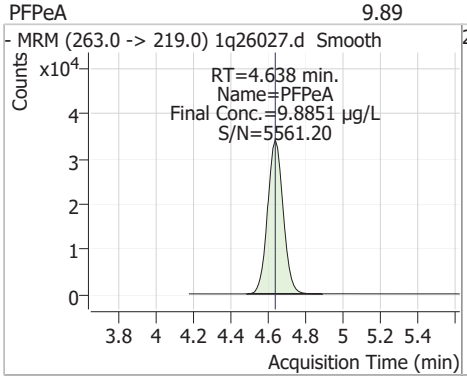
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	23.66	4.07	0.00	25780	241.0 -> 117.0	7.1	3.4	10.2

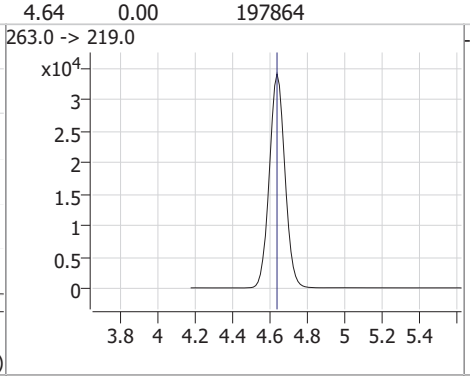


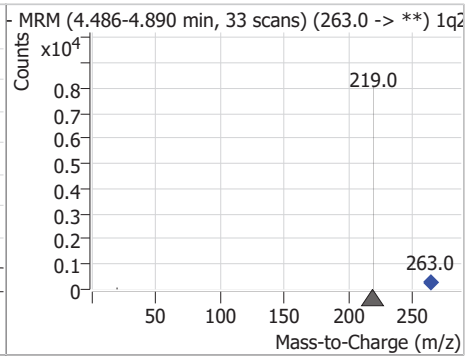




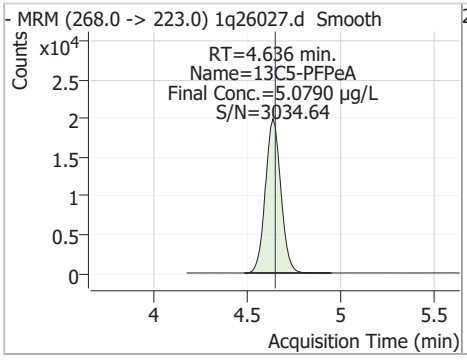
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	9.89	4.64	0.00	197864				

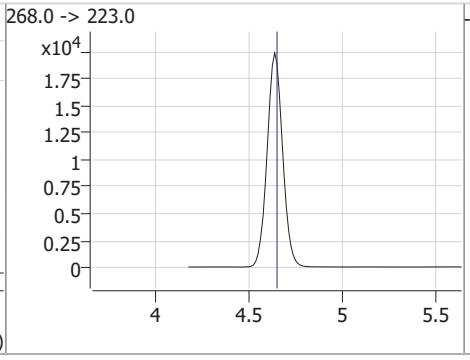


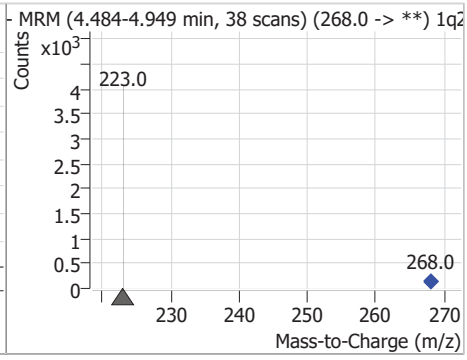




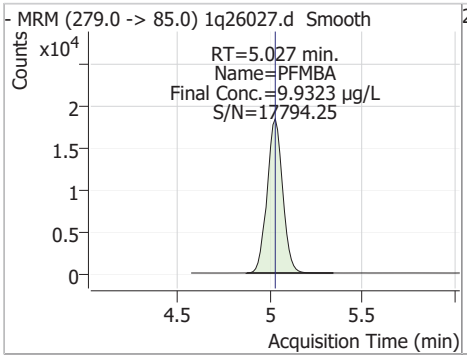
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.08	4.64	-0.01	114942				

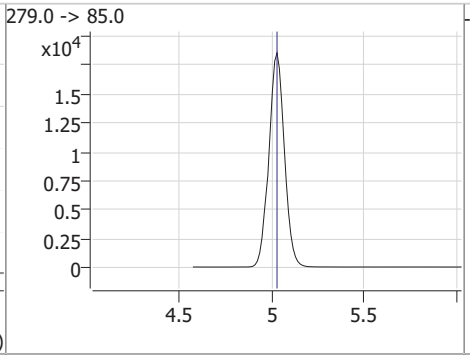


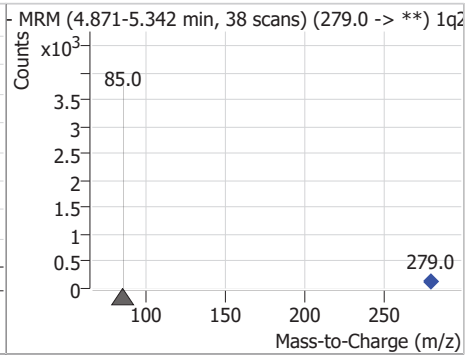




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	9.93	5.03	0.00	108036				







7.5.2

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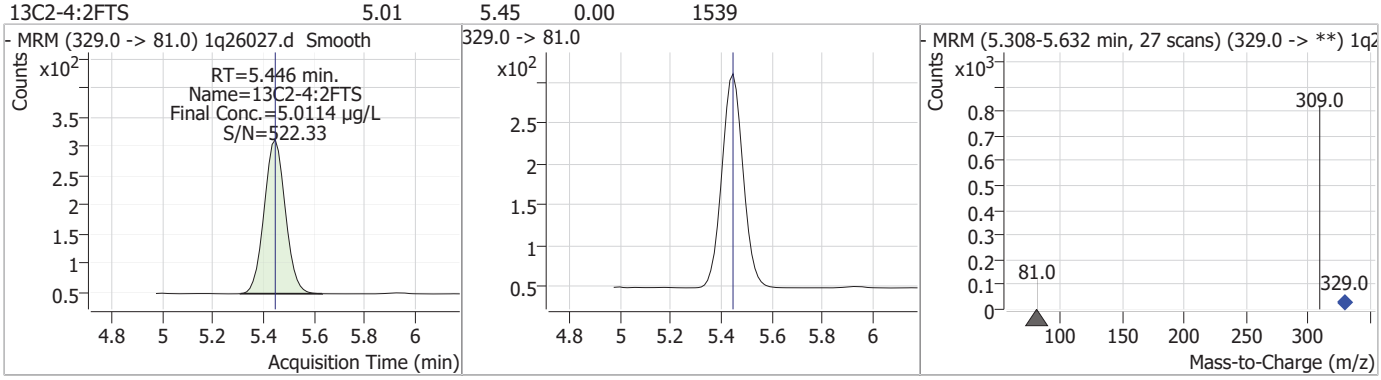
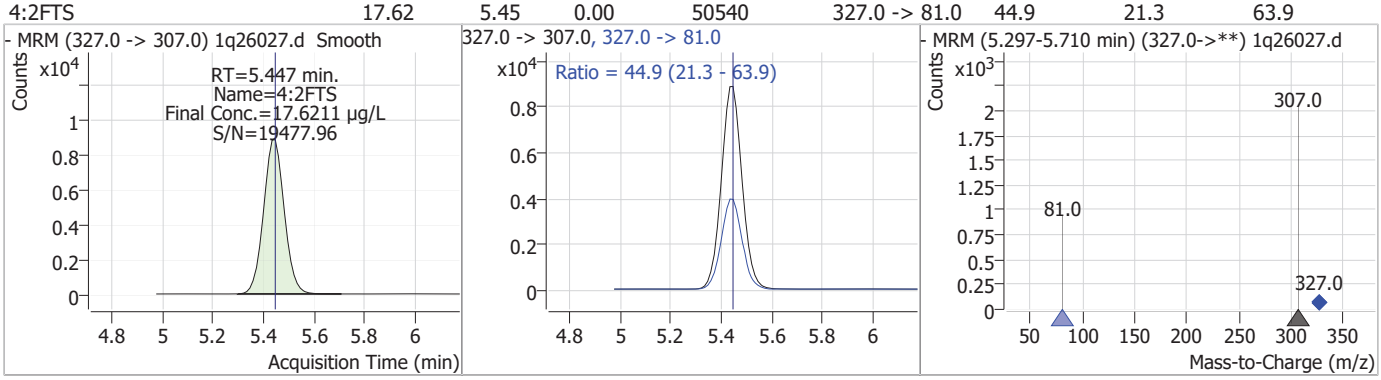
Perfluorinated Compounds by LC/MS/MS

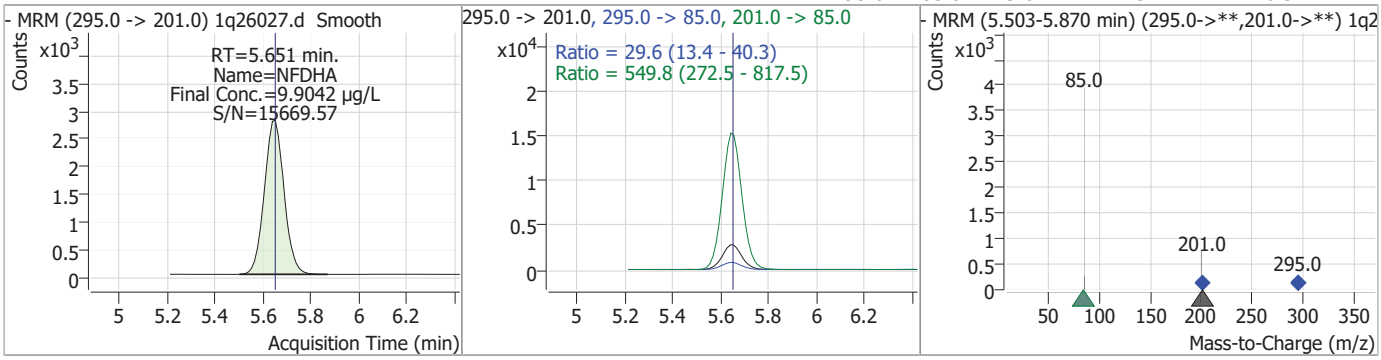
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.01	5.45	0.00	1539				



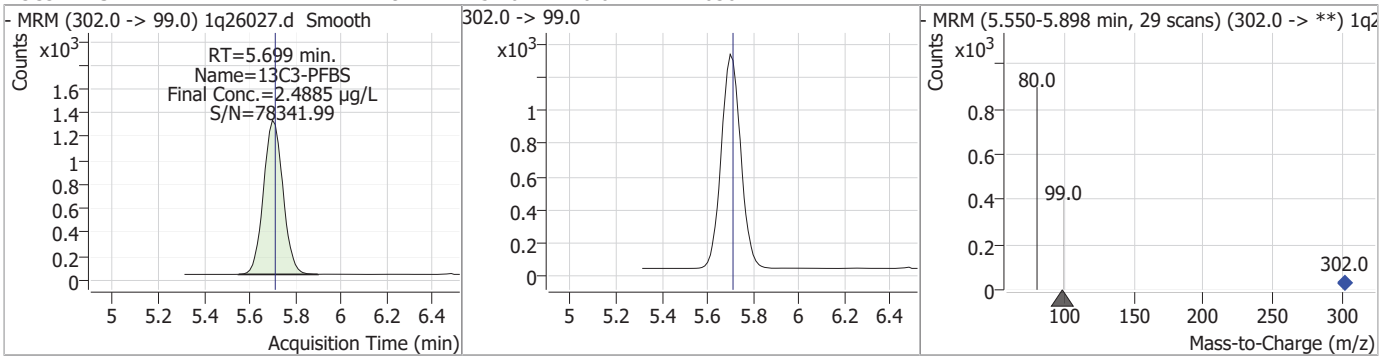
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	17.62	5.45	0.00	50540	327.0 -> 81.0	44.9	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	9.90	5.65	0.00	15906	201.0 -> 85.0	549.8	272.5	817.5
					295.0 -> 85.0	29.6	13.4	40.3

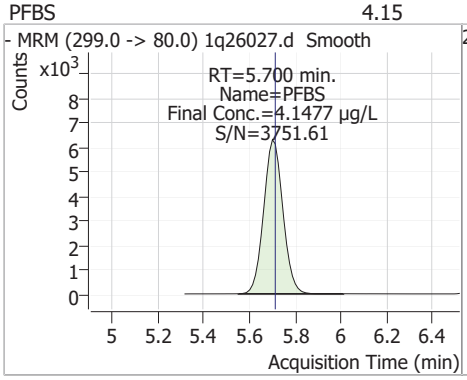


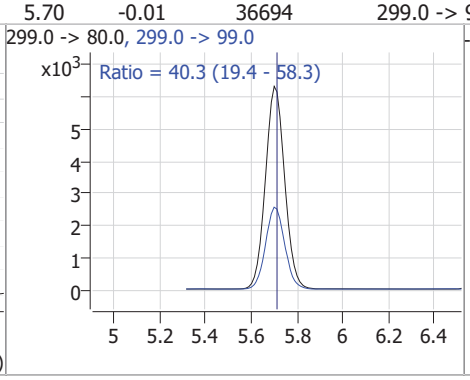
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.49	5.70	-0.01	7636				

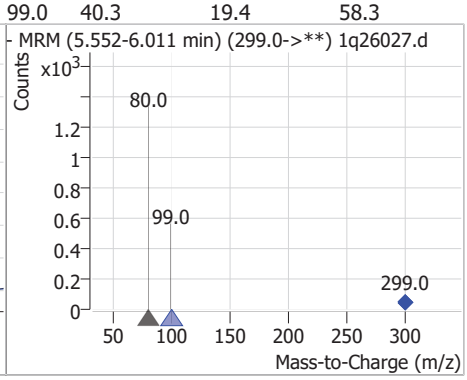


Perfluorinated Compounds by LC/MS/MS

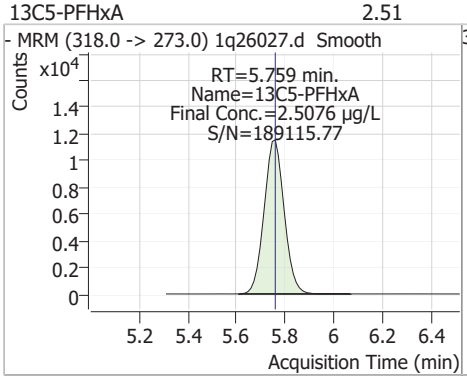
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.15	5.70	-0.01	36694	299.0 -> 99.0	40.3	19.4	58.3

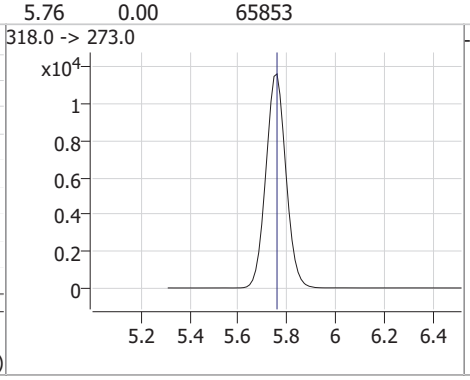


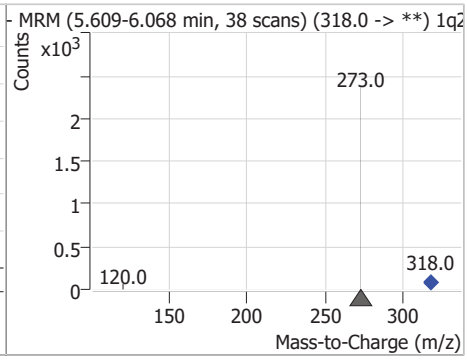




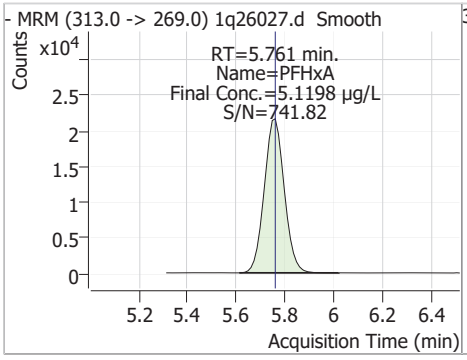
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.51	5.76	0.00	65853				

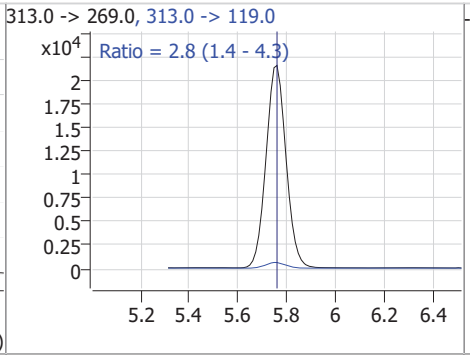


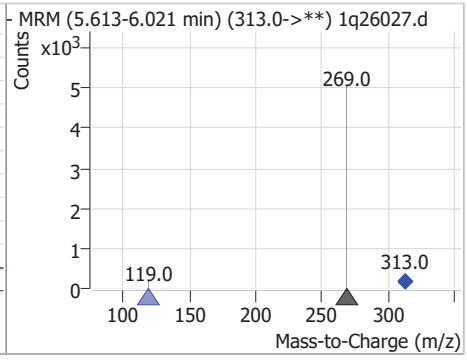




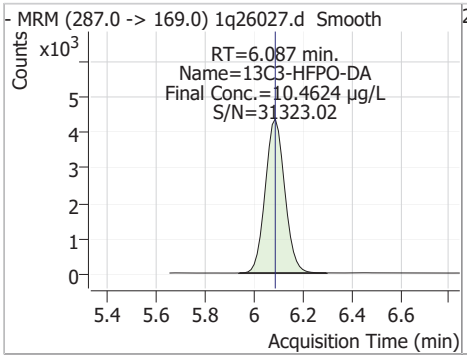
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	5.12	5.76	0.00	123577	313.0 -> 119.0	2.8	1.4	4.3

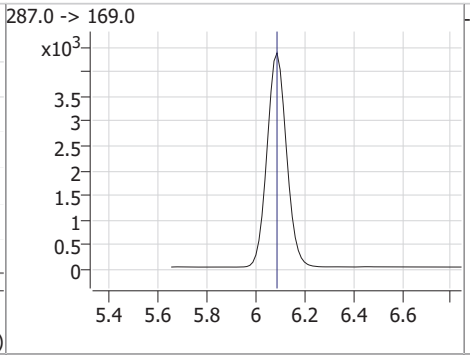


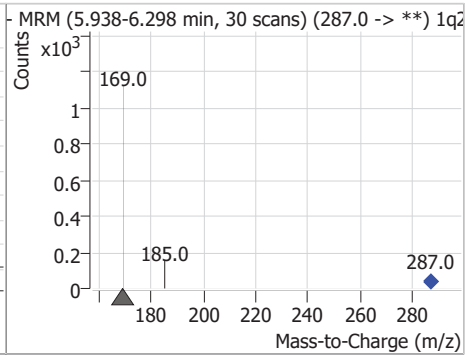




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.46	6.09	0.00	24083				







7.5.2

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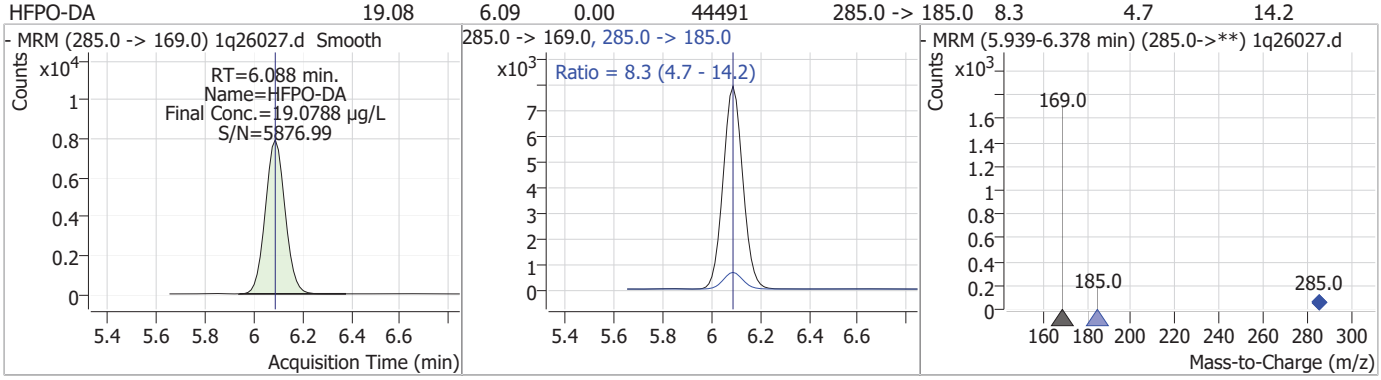
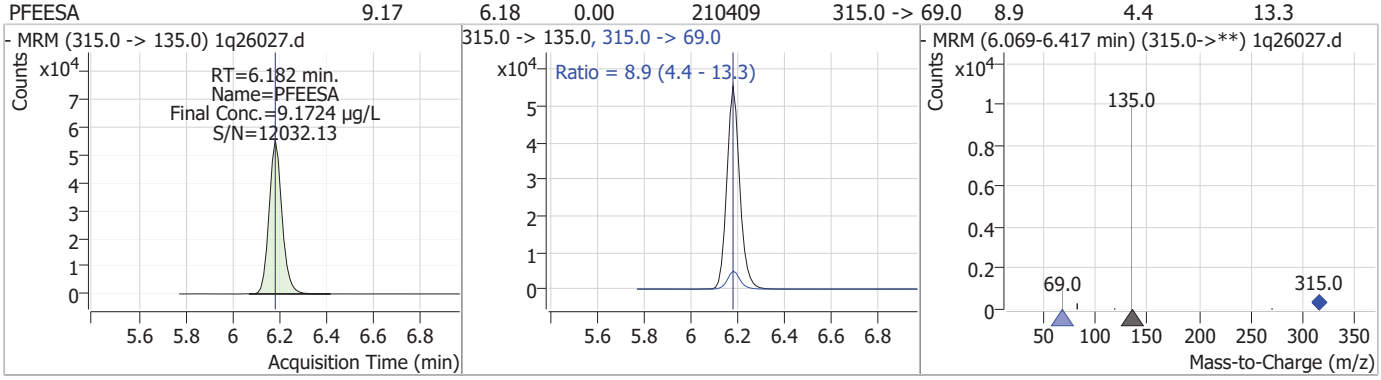
Perfluorinated Compounds by LC/MS/MS

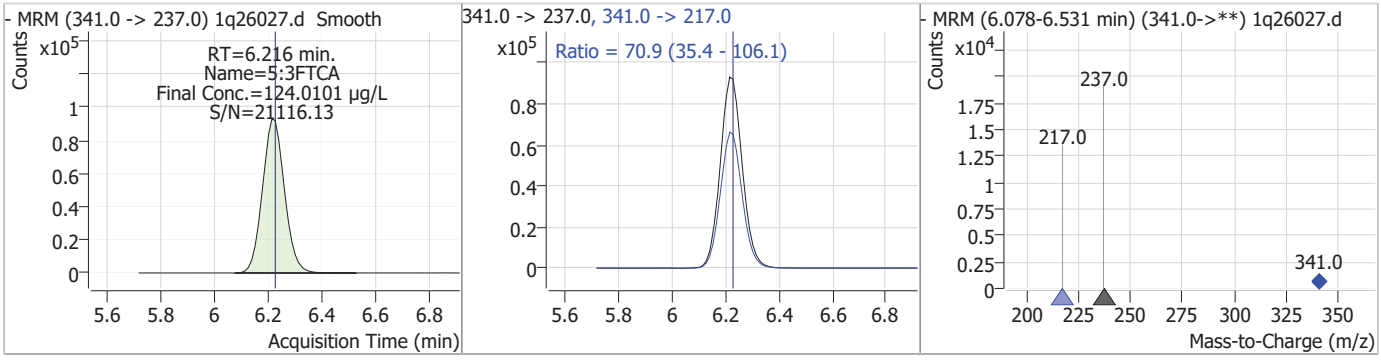
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	19.08	6.09	0.00	44491	285.0 -> 185.0	8.3	4.7	14.2



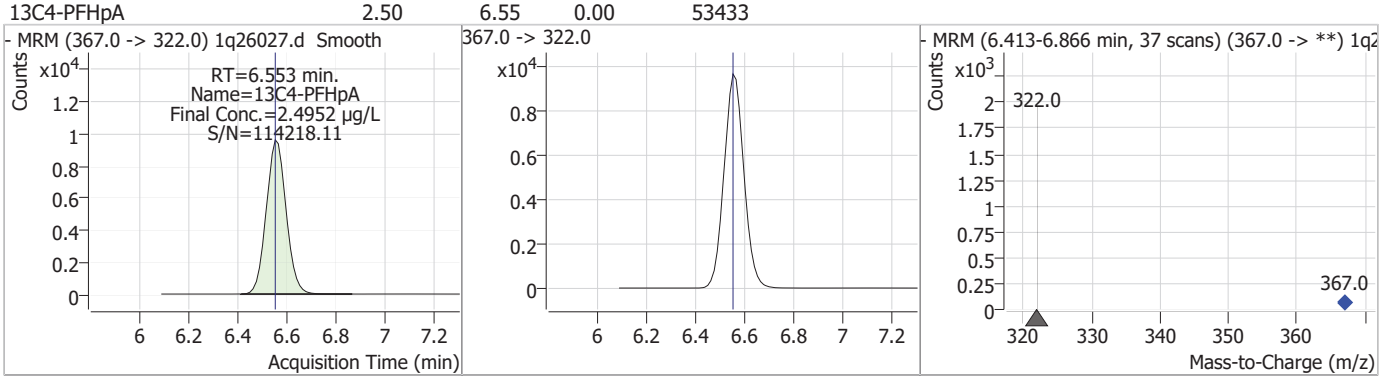
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	9.17	6.18	0.00	210409	315.0 -> 69.0	8.9	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	124.01	6.22	-0.01	529294	341.0 -> 217.0	70.9	35.4	106.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.50	6.55	0.00	53433				



7.5.2

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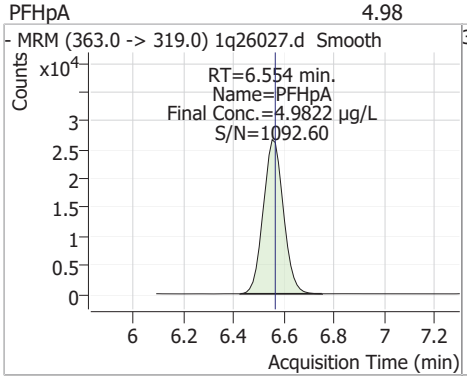
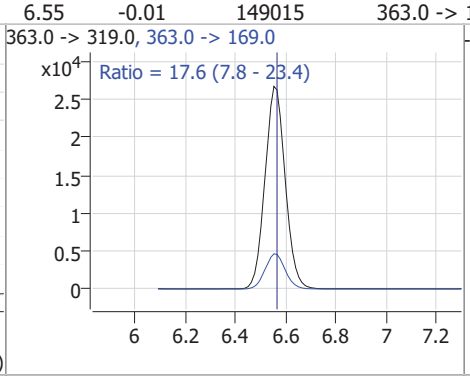
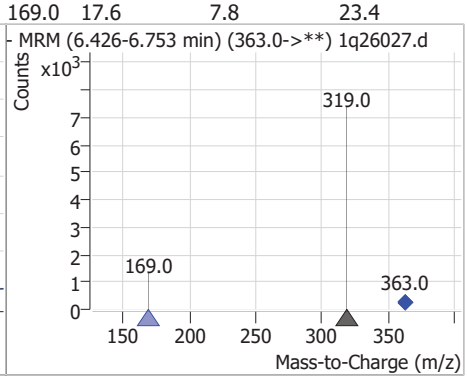
Perfluorinated Compounds by LC/MS/MS

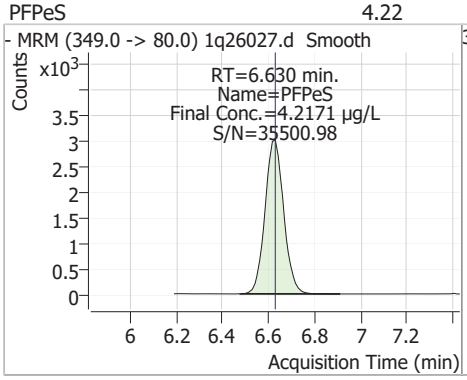
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	4.98	6.55	-0.01	149015	363.0 -> 169.0	17.6	7.8	23.4

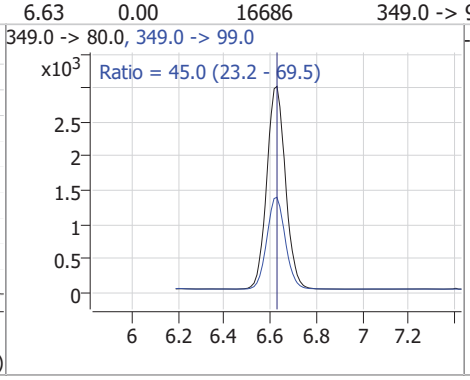


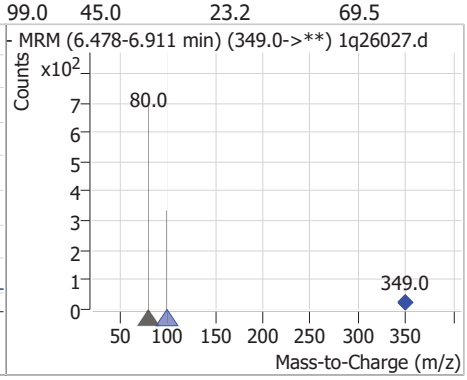




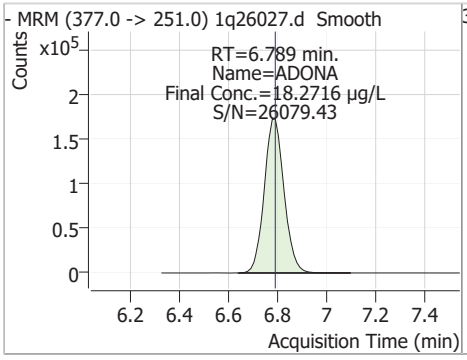
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	4.22	6.63	0.00	16686	349.0 -> 99.0	45.0	23.2	69.5

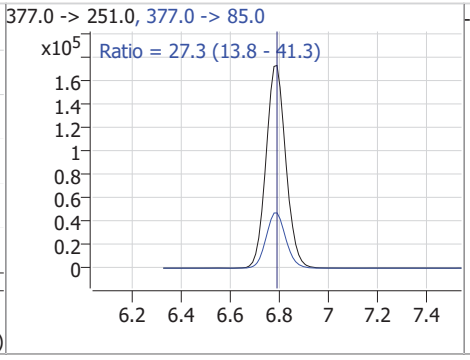


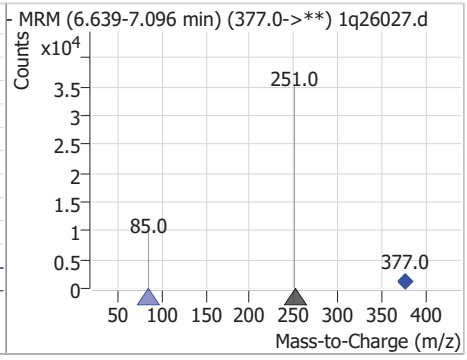




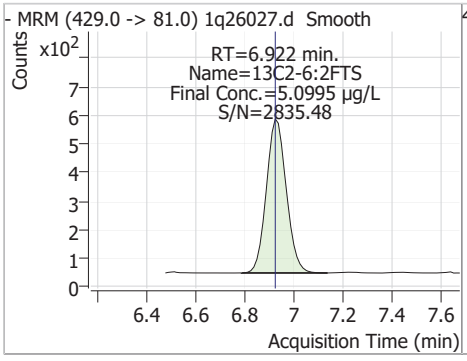
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	18.27	6.79	0.00	968949	377.0 -> 85.0	27.3	13.8	41.3

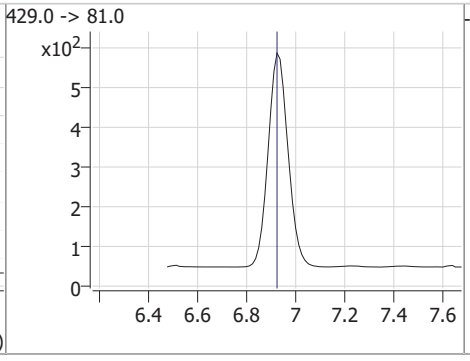


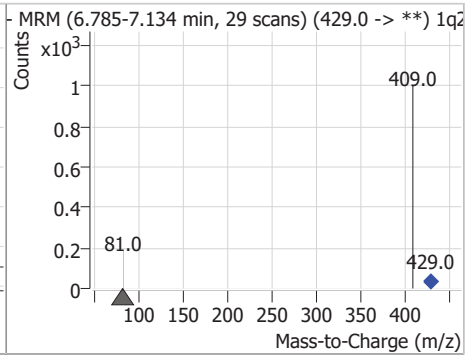




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.10	6.92	0.00	3035				

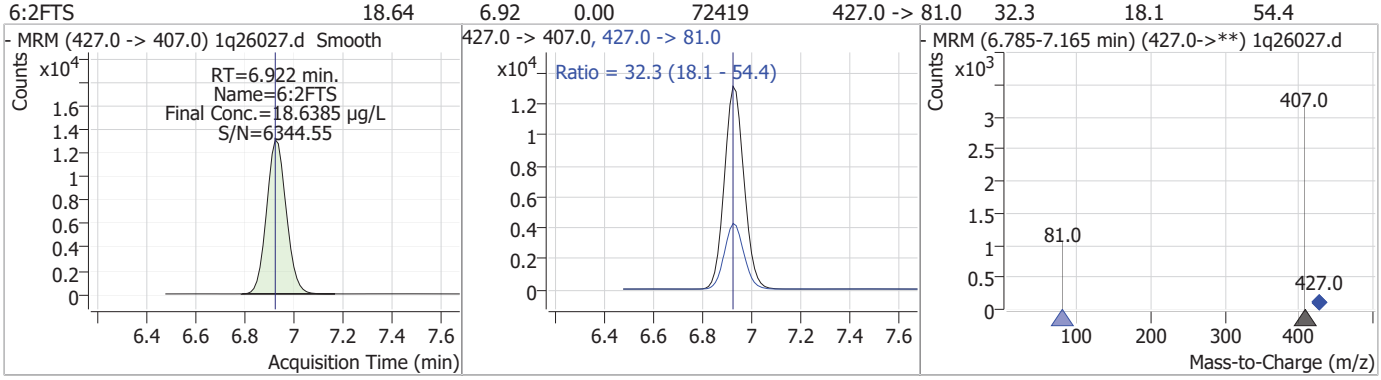




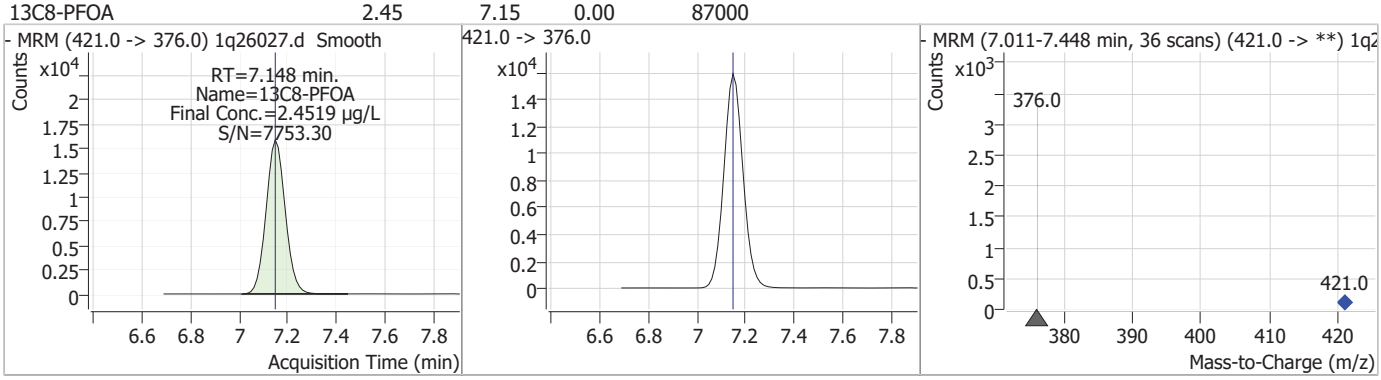


Perfluorinated Compounds by LC/MS/MS

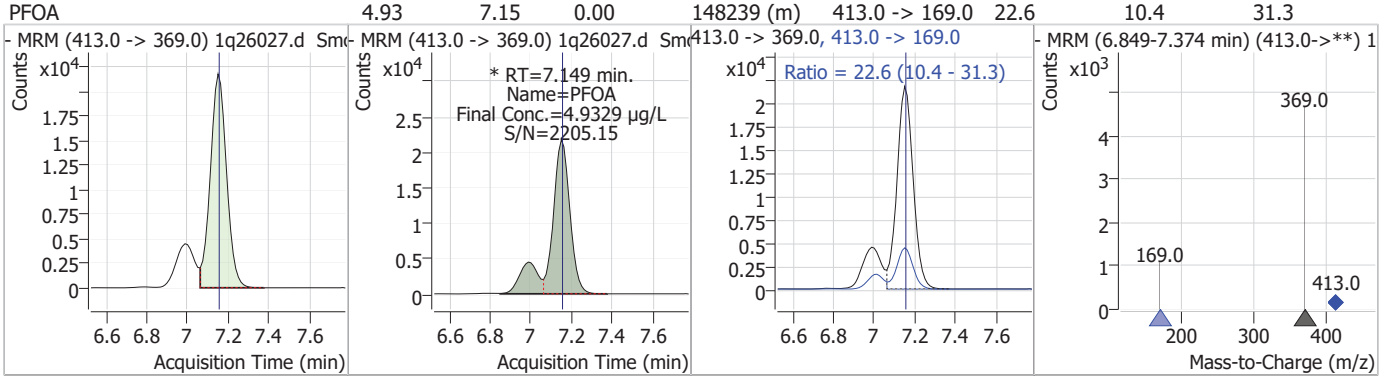
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	18.64	6.92	0.00	72419	427.0 -> 81.0	32.3	18.1	54.4



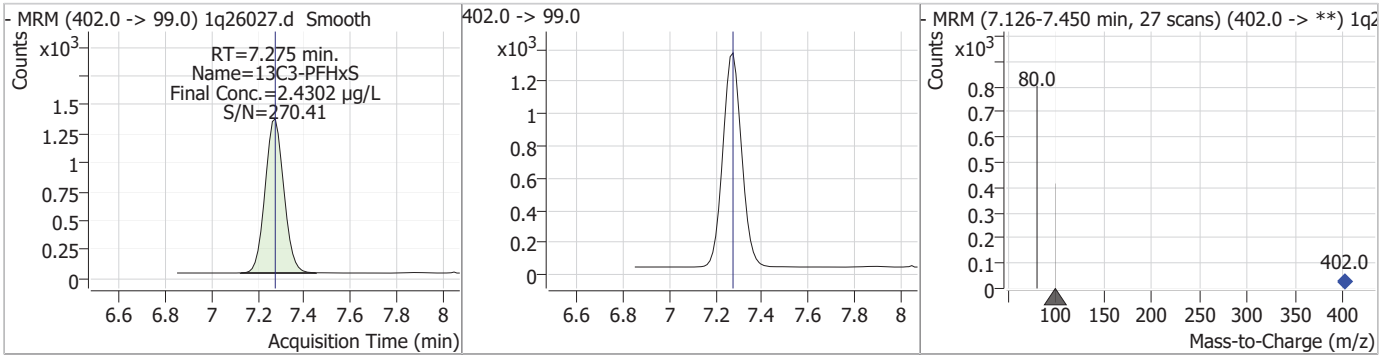
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.45	7.15	0.00	87000				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	4.93	7.15	0.00	148239 (m)	413.0 -> 169.0	22.6	10.4	31.3

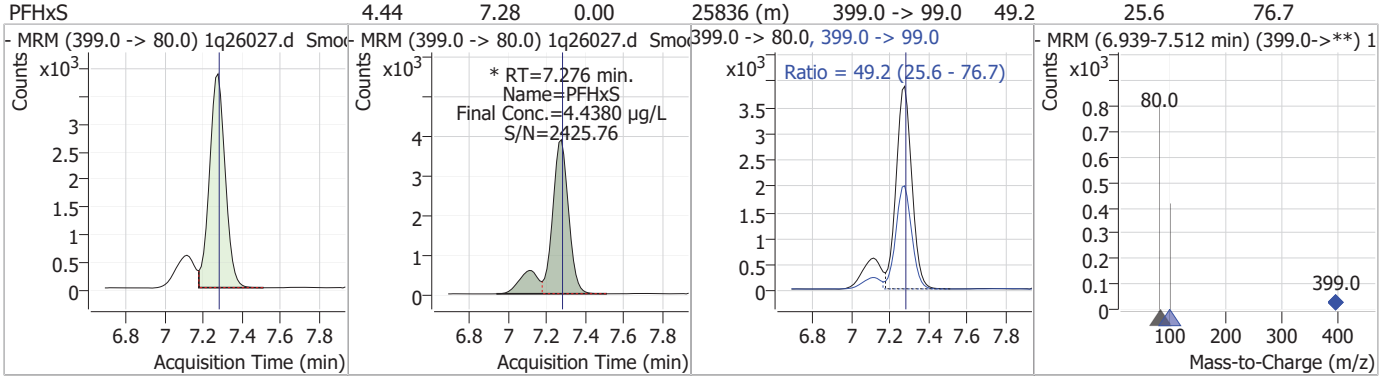


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.43	7.27	0.00	7473				

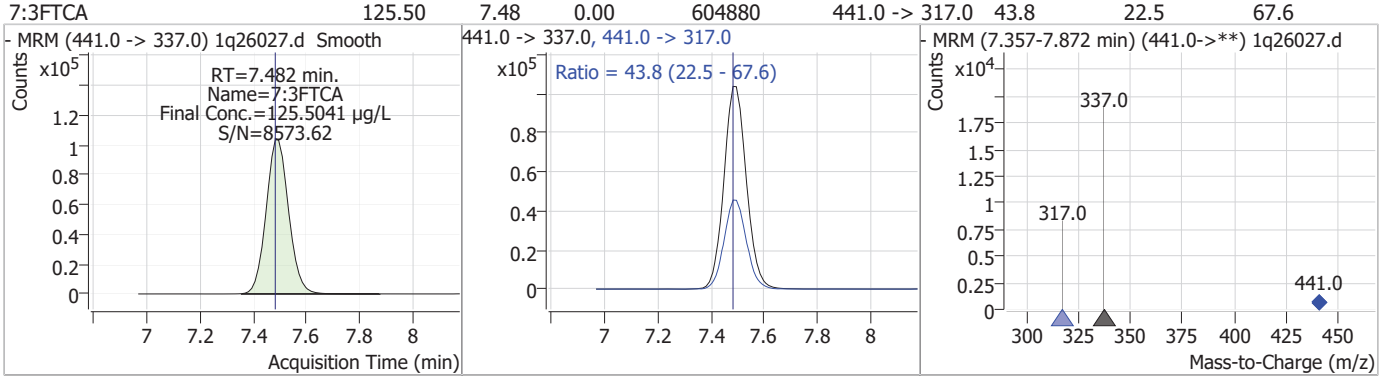


Perfluorinated Compounds by LC/MS/MS

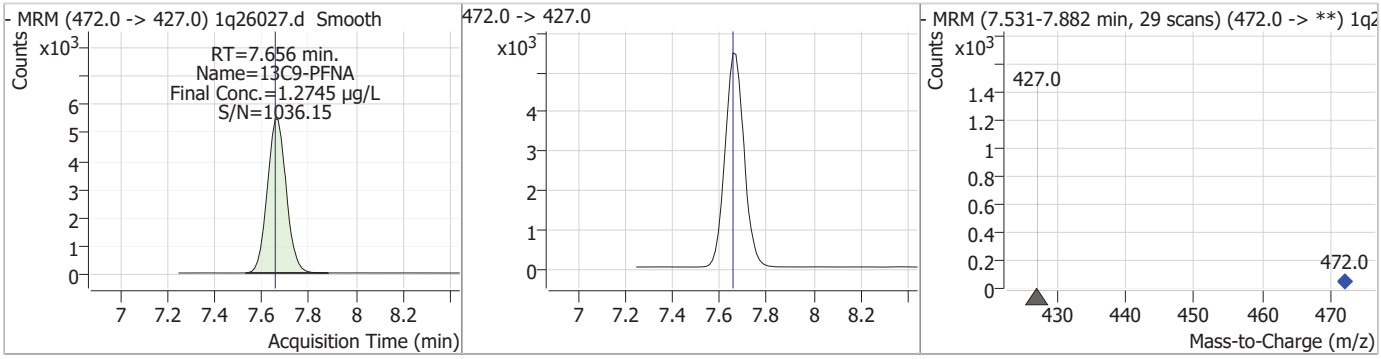
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	4.44	7.28	0.00	25836 (m)	399.0 -> 99.0	49.2	25.6	76.7



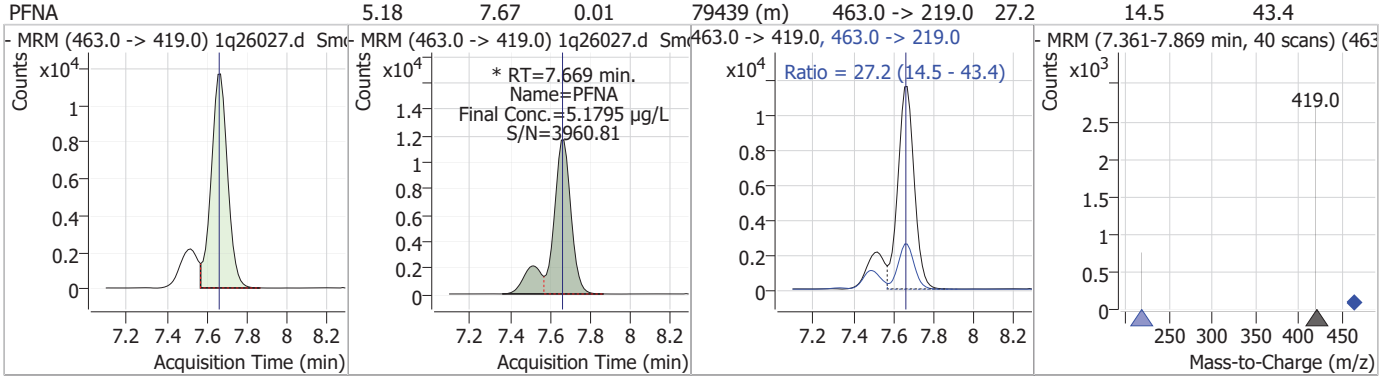
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	125.50	7.48	0.00	604880	441.0 -> 317.0	43.8	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.27	7.66	0.00	30579				

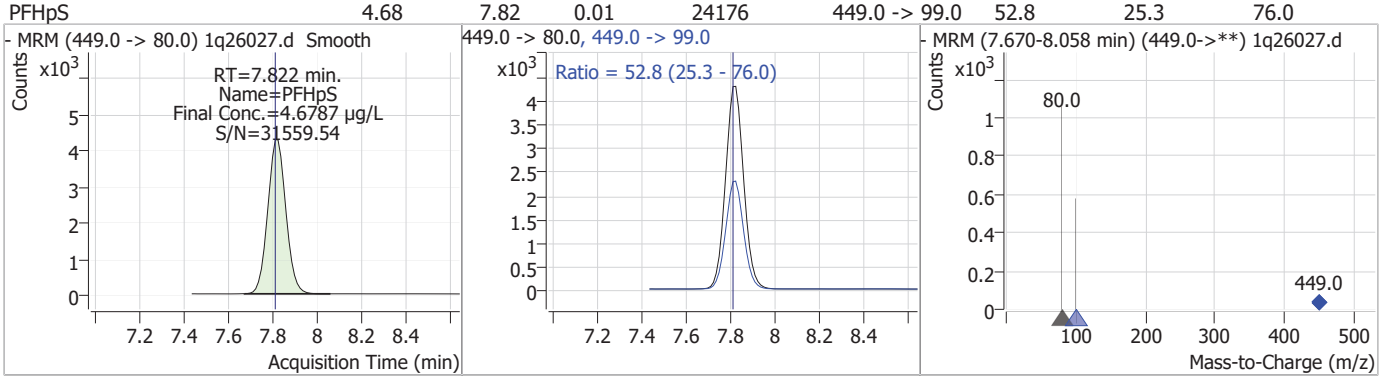


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	5.18	7.67	0.01	79439 (m)	463.0 -> 219.0	27.2	14.5	43.4

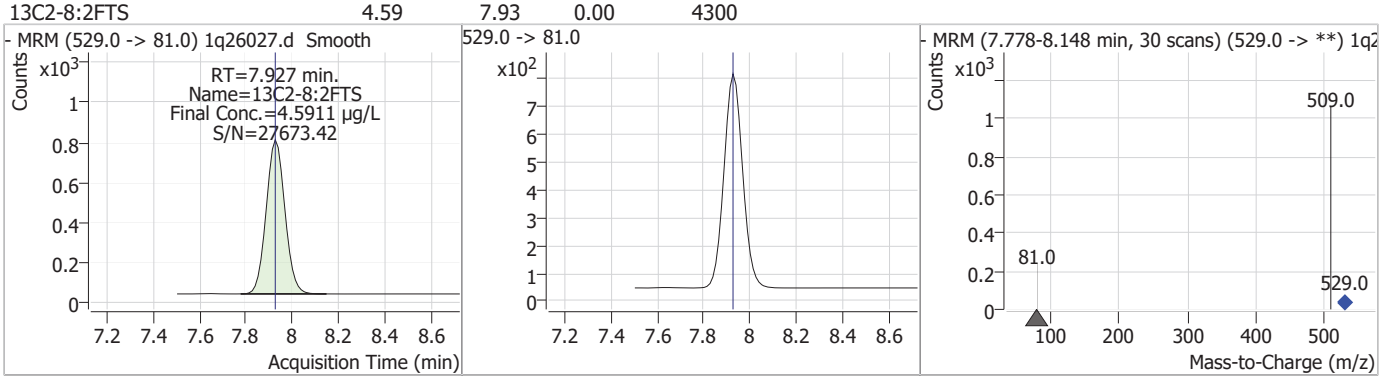


Perfluorinated Compounds by LC/MS/MS

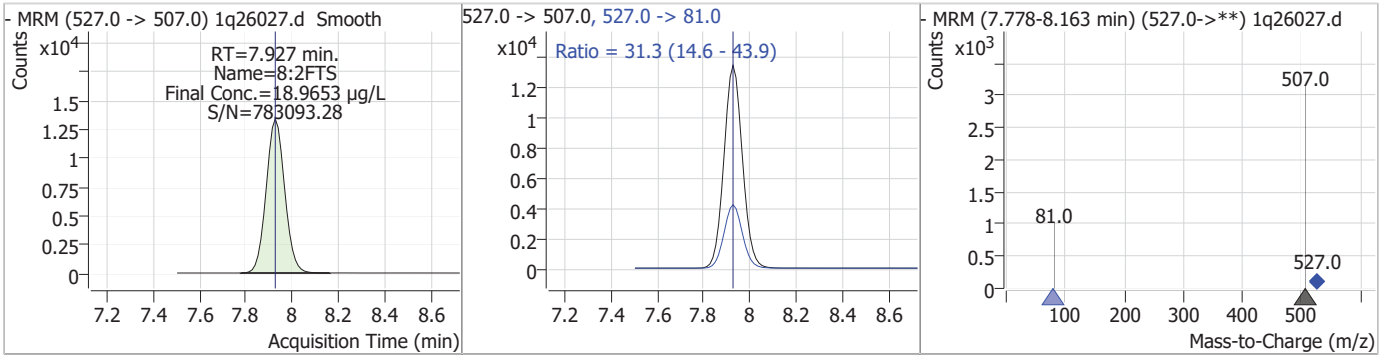
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	4.68	7.82	0.01	24176	449.0 -> 99.0	52.8	25.3	76.0



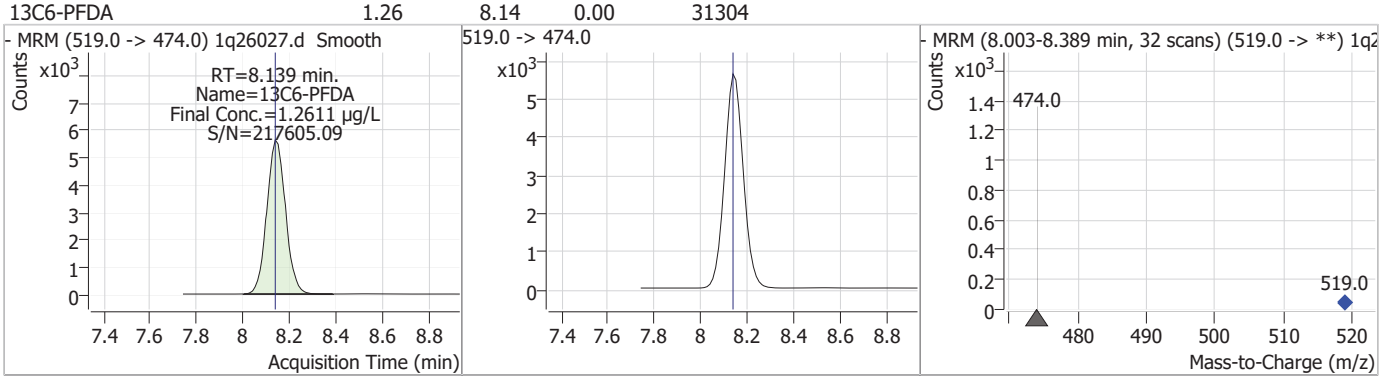
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.59	7.93	0.00	4300				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	18.97	7.93	0.00	74149	527.0 -> 81.0	31.3	14.6	43.9

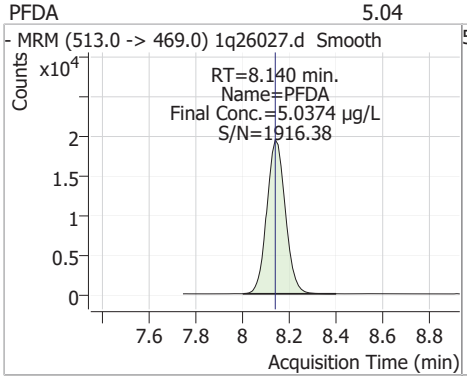


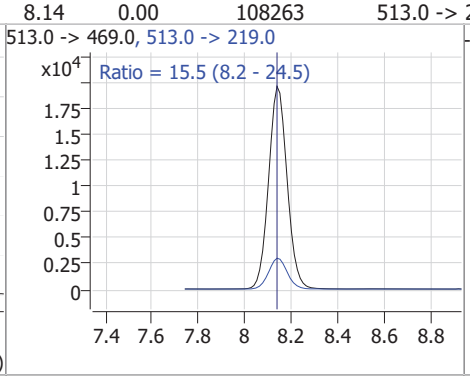
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.26	8.14	0.00	31304				

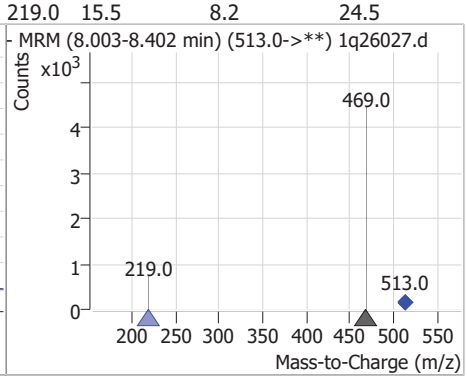


Perfluorinated Compounds by LC/MS/MS

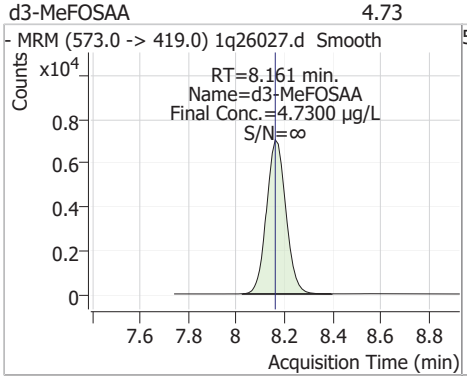
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	5.04	8.14	0.00	108263	513.0 -> 219.0	15.5	8.2	24.5

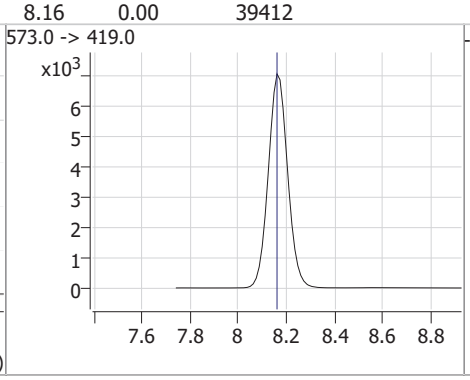


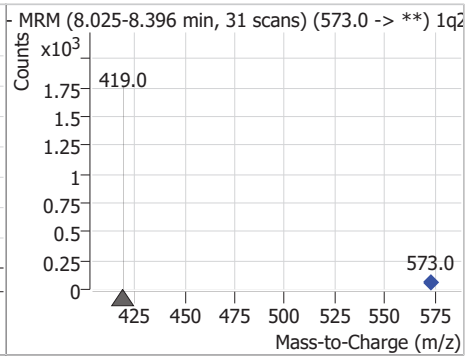




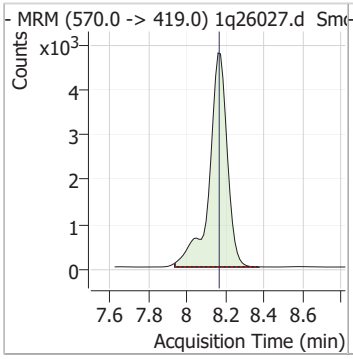
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.73	8.16	0.00	39412				

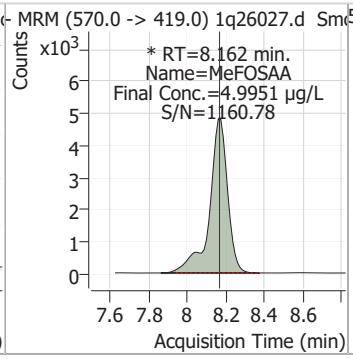


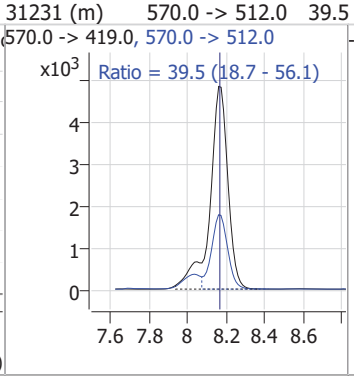


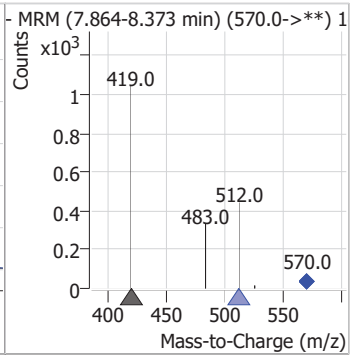


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	5.00	8.16	0.00	31231 (m)	570.0 -> 512.0	39.5	18.7	56.1

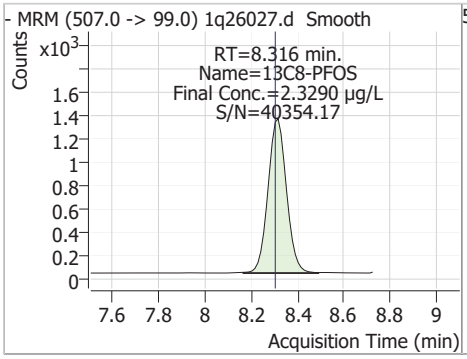


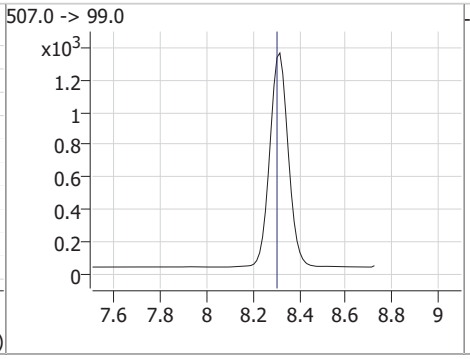


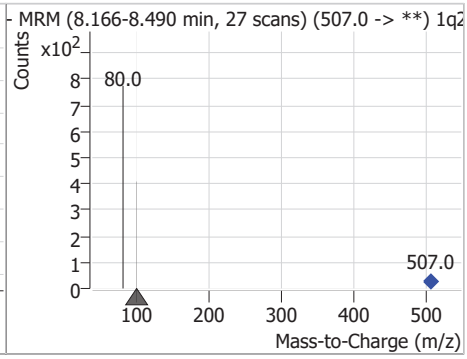




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.33	8.32	0.01	7332				

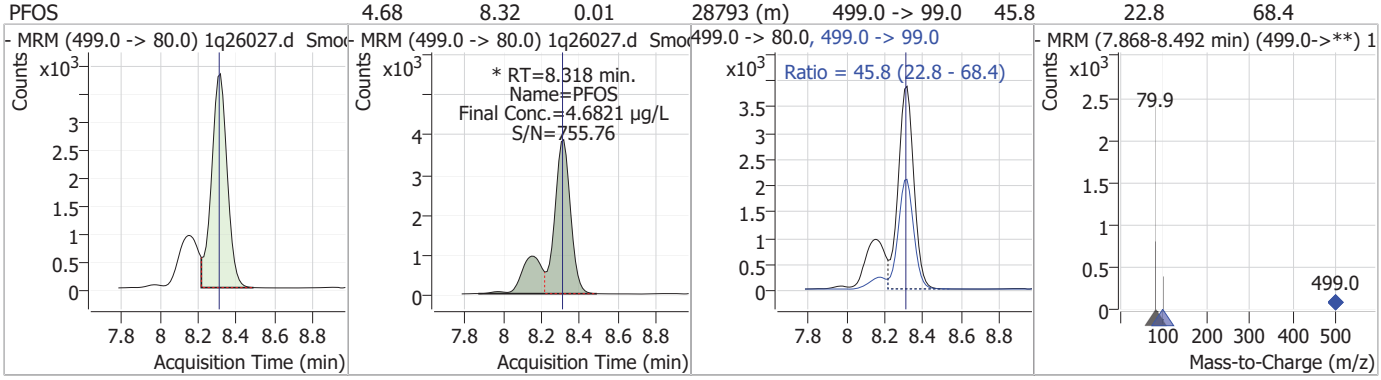




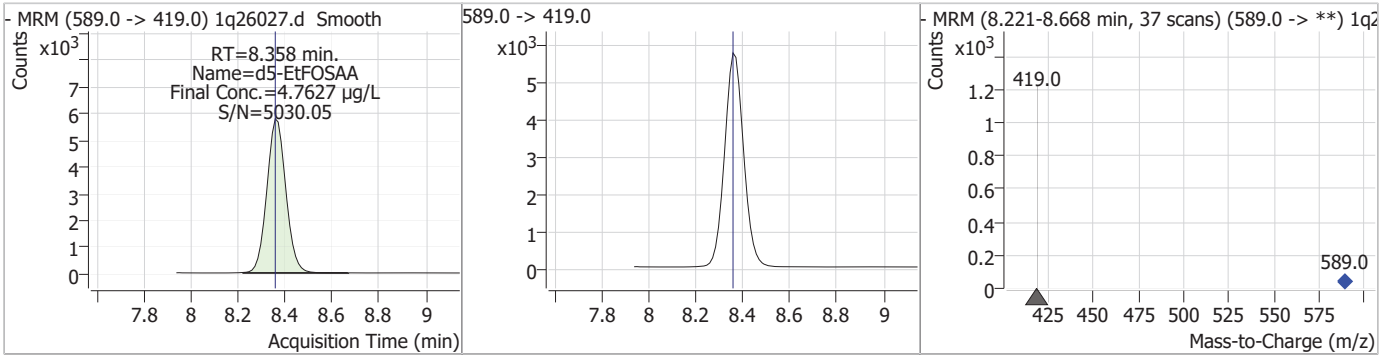


Perfluorinated Compounds by LC/MS/MS

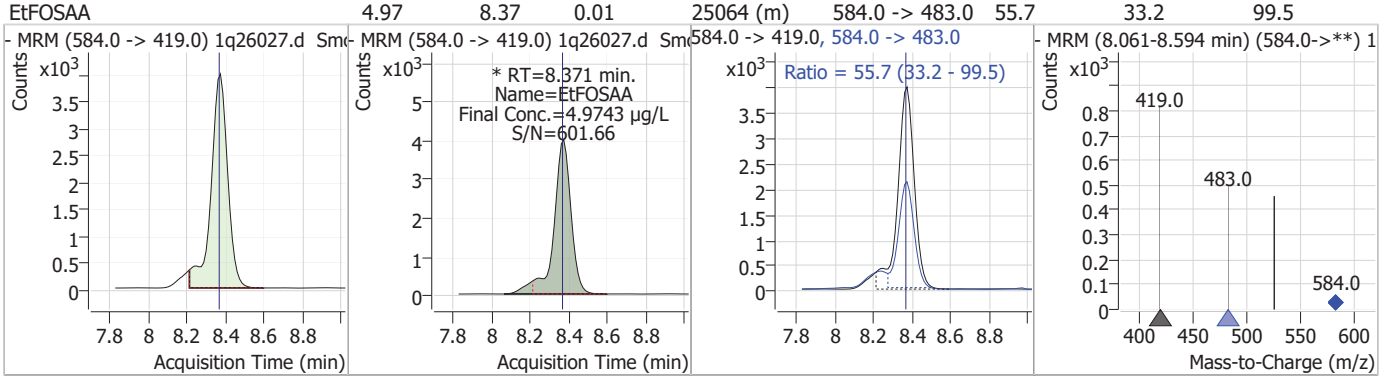
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.68	8.32	0.01	28793 (m)	499.0 -> 99.0	45.8	22.8	68.4



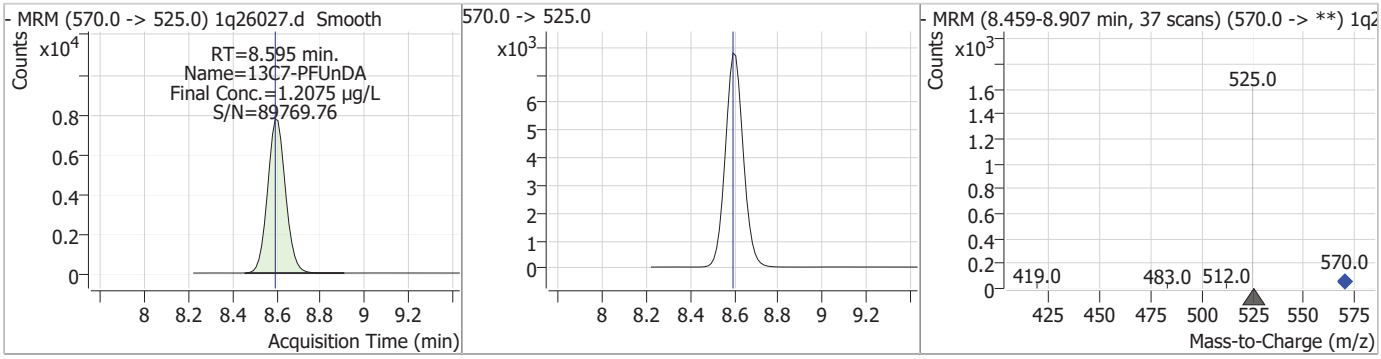
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.76	8.36	0.00	32309				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	4.97	8.37	0.01	25064 (m)	584.0 -> 483.0	55.7	33.2	99.5

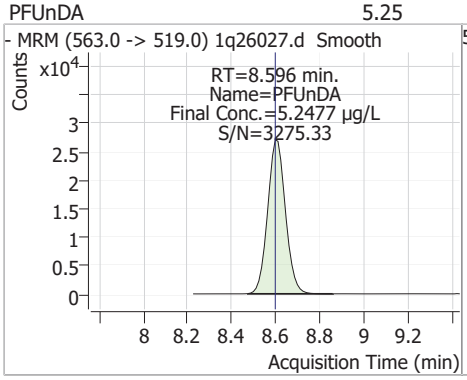


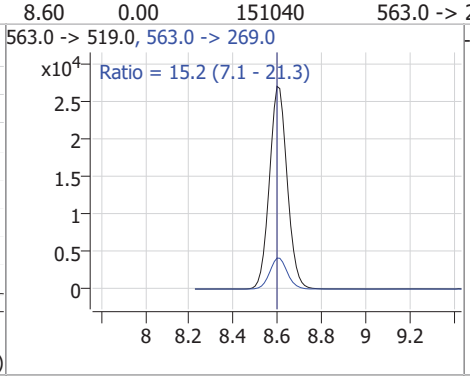
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.21	8.59	0.00	43508				

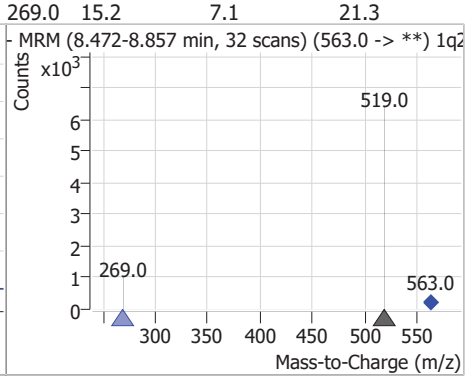


Perfluorinated Compounds by LC/MS/MS

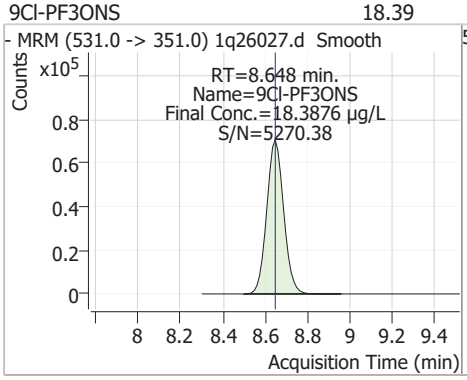
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	5.25	8.60	0.00	151040	563.0 -> 269.0	15.2	7.1	21.3

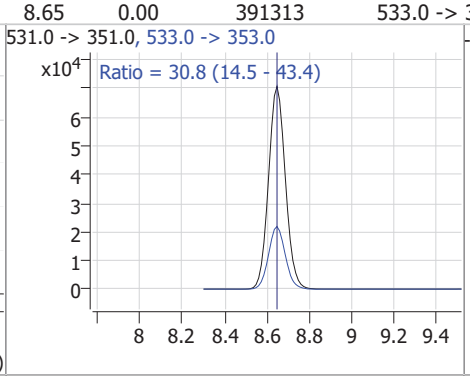


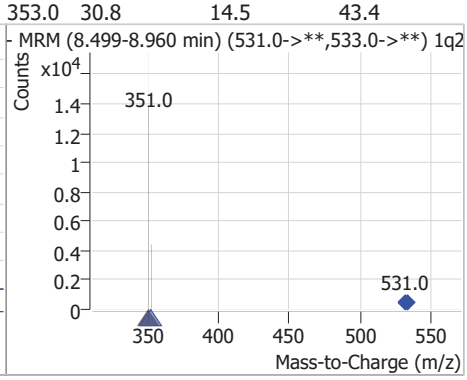




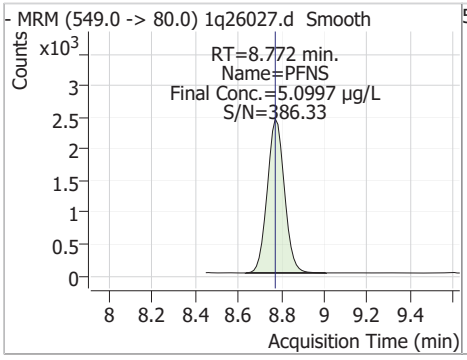
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	18.39	8.65	0.00	391313	533.0 -> 353.0	30.8	14.5	43.4

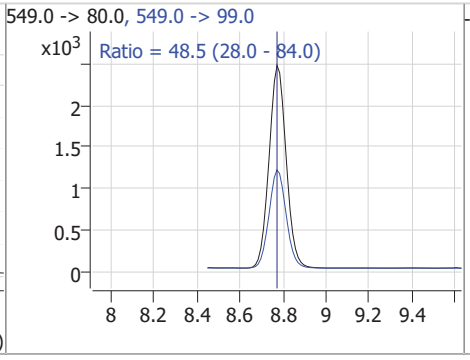


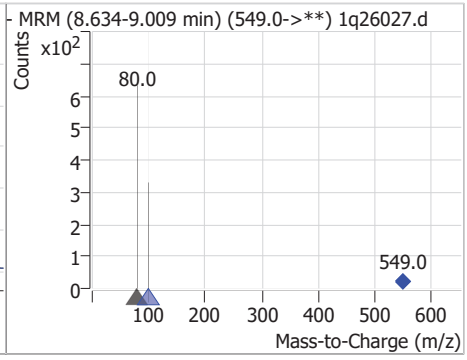




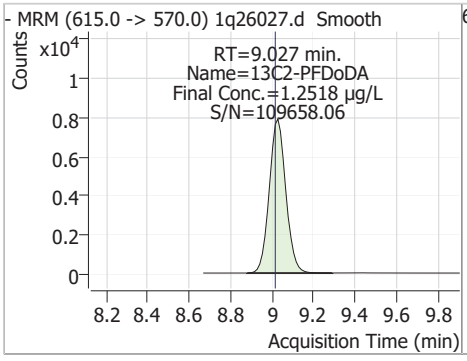
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	5.10	8.77	0.00	13464	549.0 -> 99.0	48.5	28.0	84.0

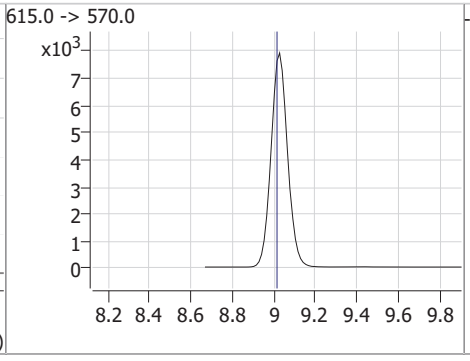


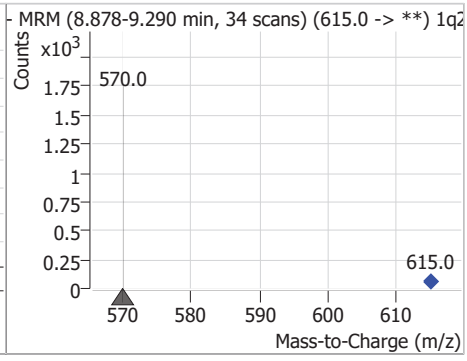




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.25	9.03	0.01	43519				





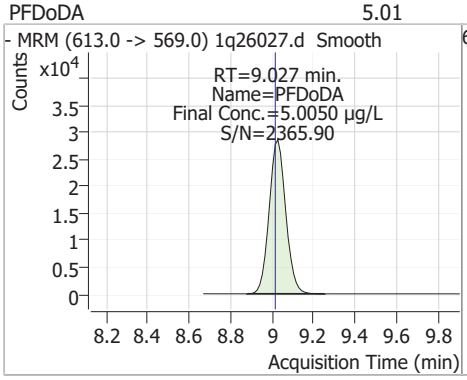


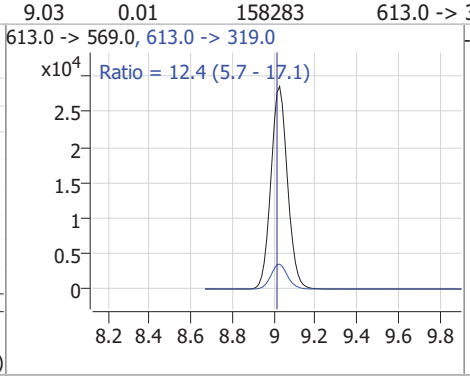
7.5.2

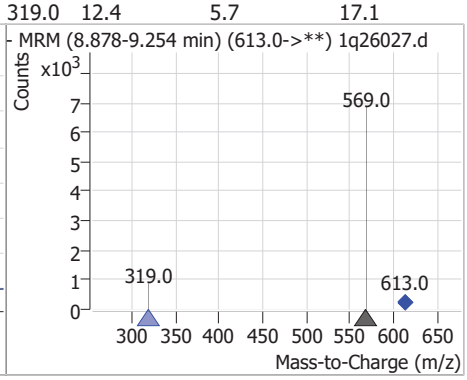
7

Perfluorinated Compounds by LC/MS/MS

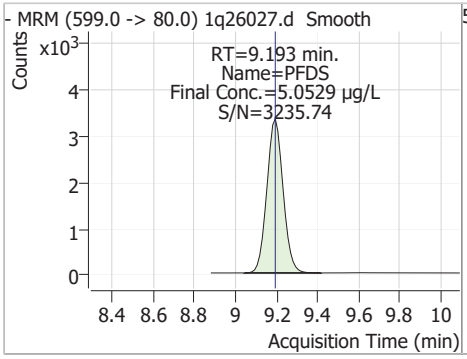
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	5.01	9.03	0.01	158283	613.0 -> 319.0	12.4	5.7	17.1

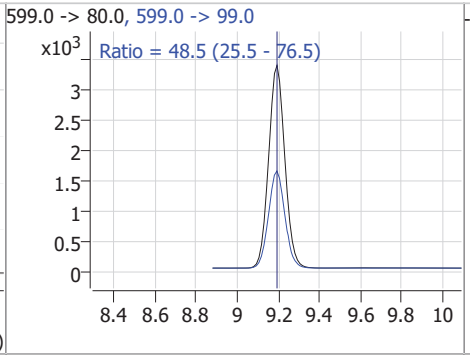


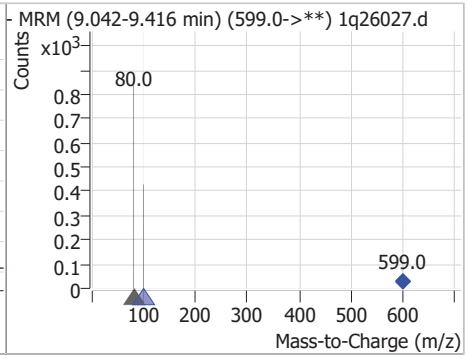




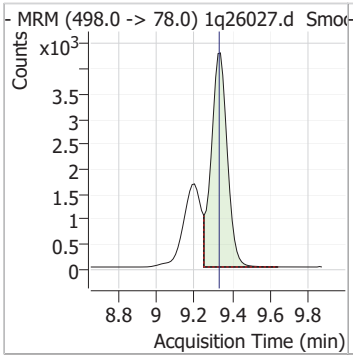
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	5.05	9.19	0.00	18295	599.0 -> 99.0	48.5	25.5	76.5

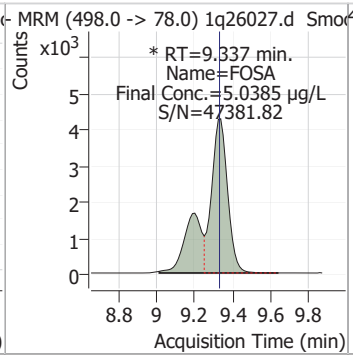


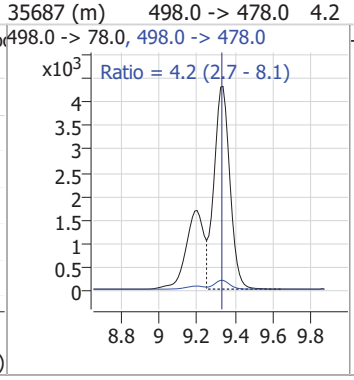


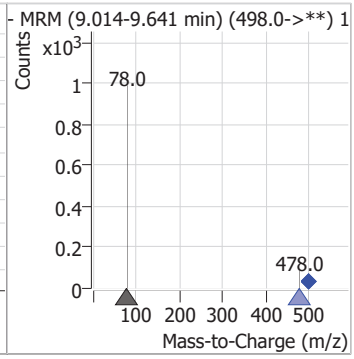


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	5.04	9.34	0.01	35687 (m)	498.0 -> 478.0	4.2	2.7	8.1

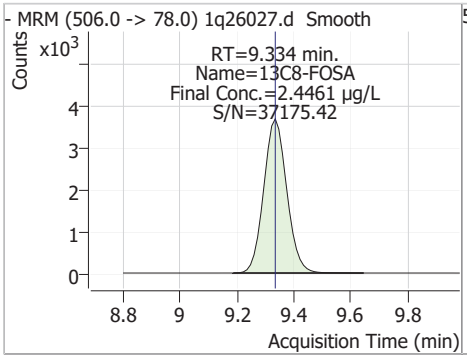


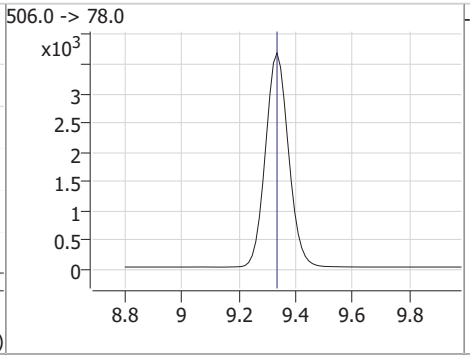


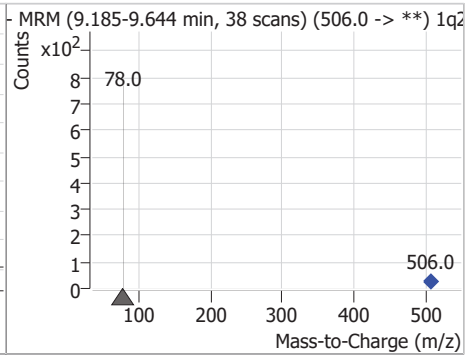




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.45	9.33	0.00	20436				





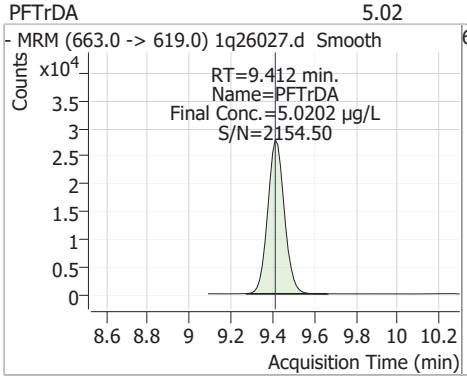


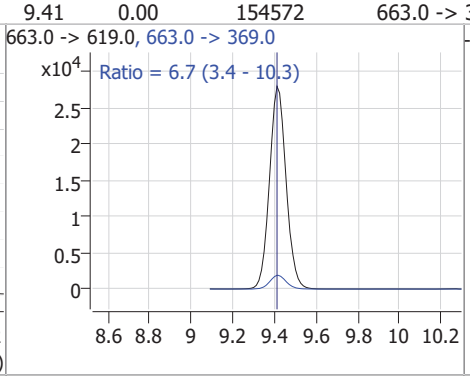
7.5.2

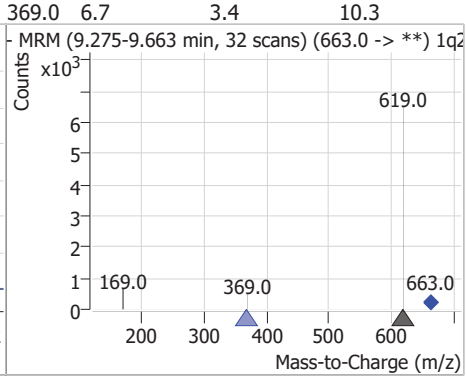
7

Perfluorinated Compounds by LC/MS/MS

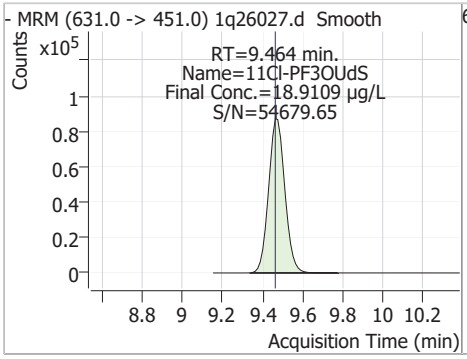
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	5.02	9.41	0.00	154572	663.0 -> 369.0	6.7	3.4	10.3

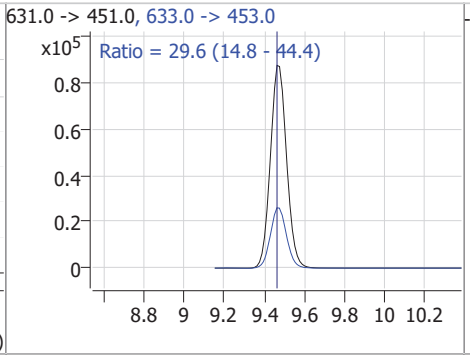


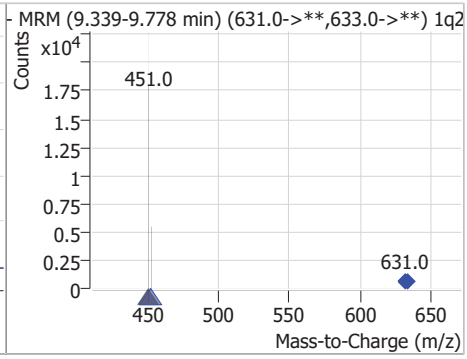




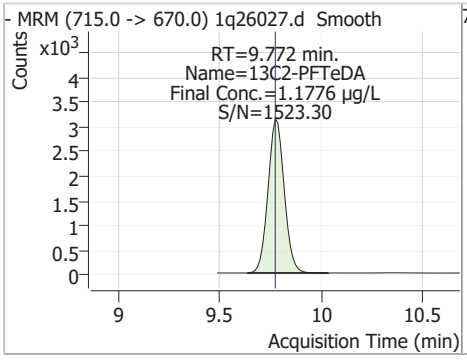
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	18.91	9.46	0.00	490987	633.0 -> 453.0	29.6	14.8	44.4

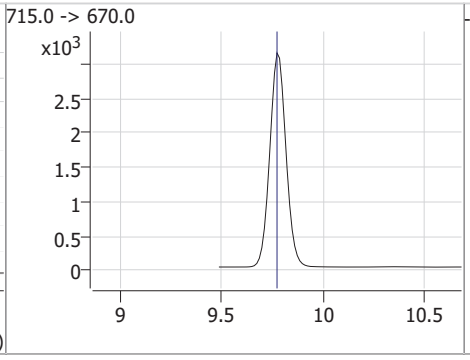


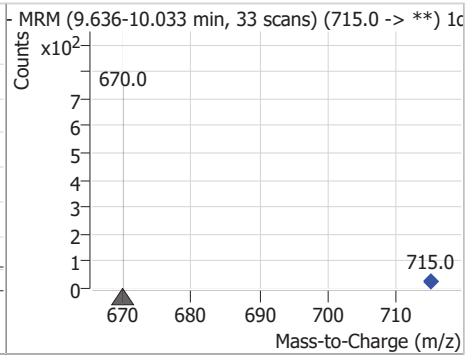




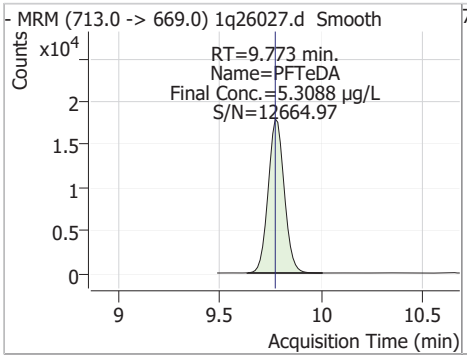
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.18	9.77	0.00	17226				

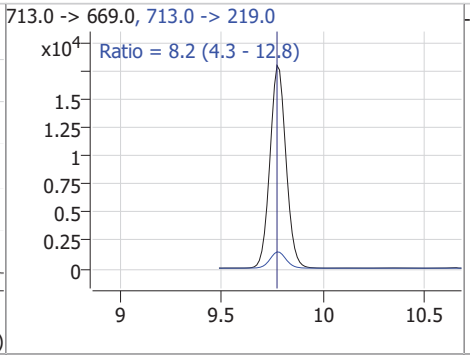


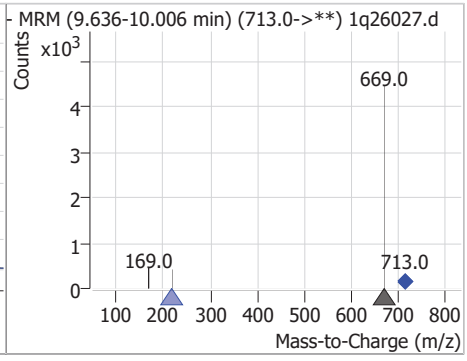




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	5.31	9.77	0.00	98496	713.0 -> 219.0	8.2	4.3	12.8





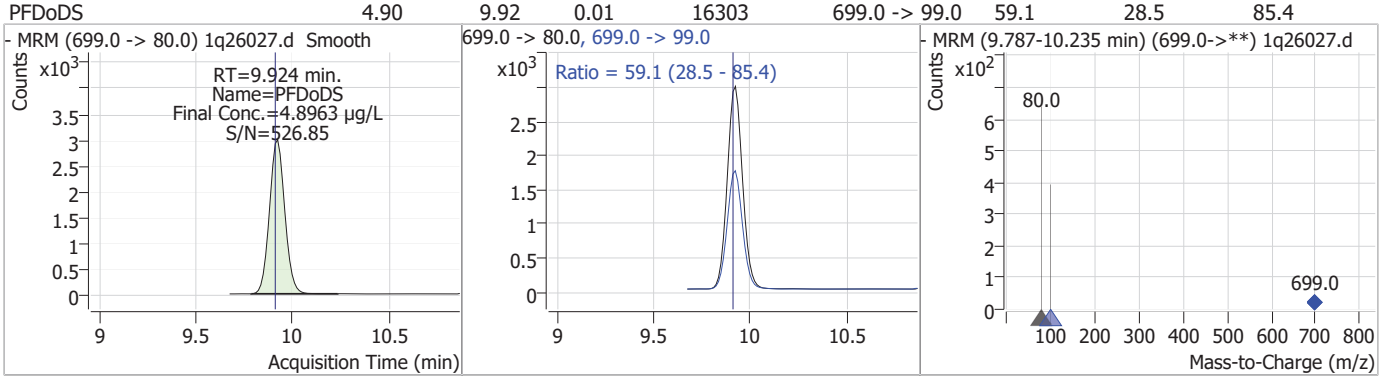


7.5.2

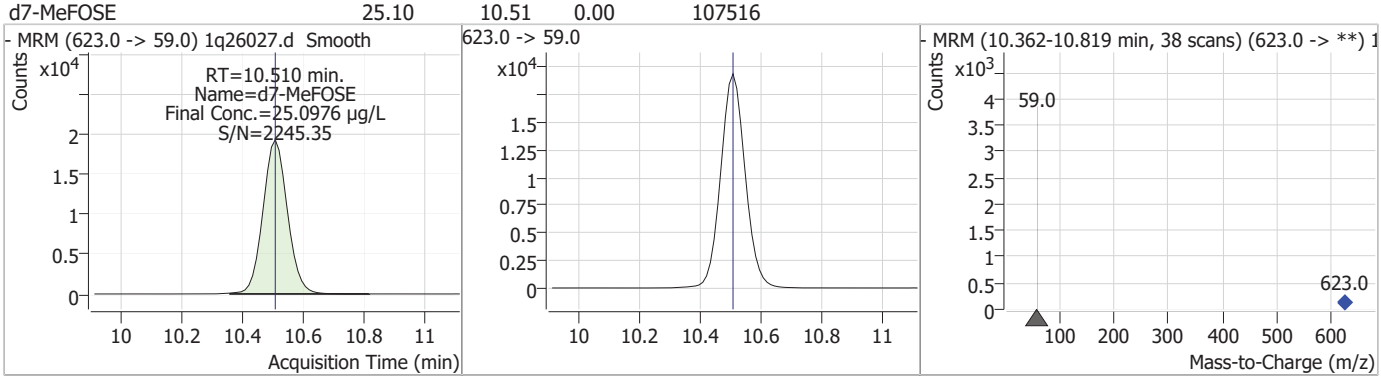
7

Perfluorinated Compounds by LC/MS/MS

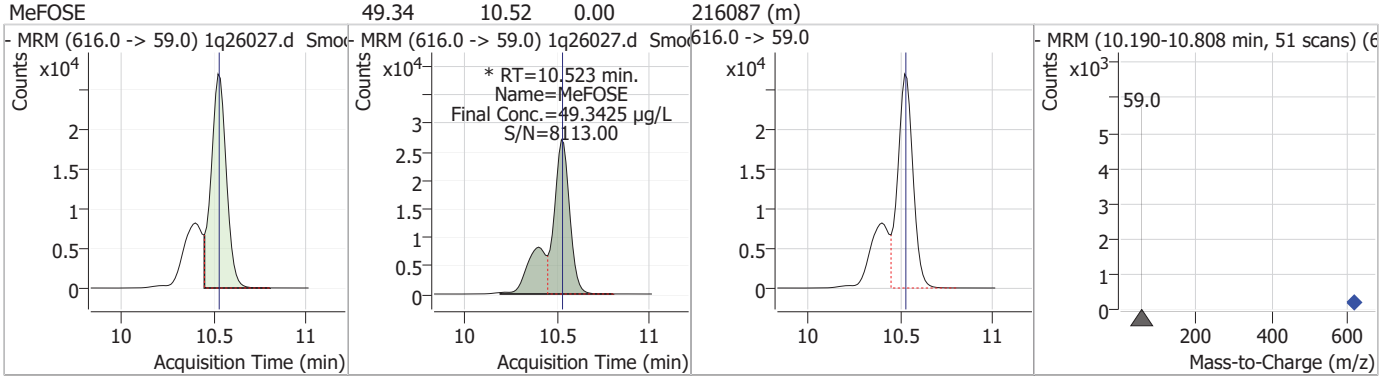
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	4.90	9.92	0.01	16303	699.0 -> 99.0	59.1	28.5	85.4



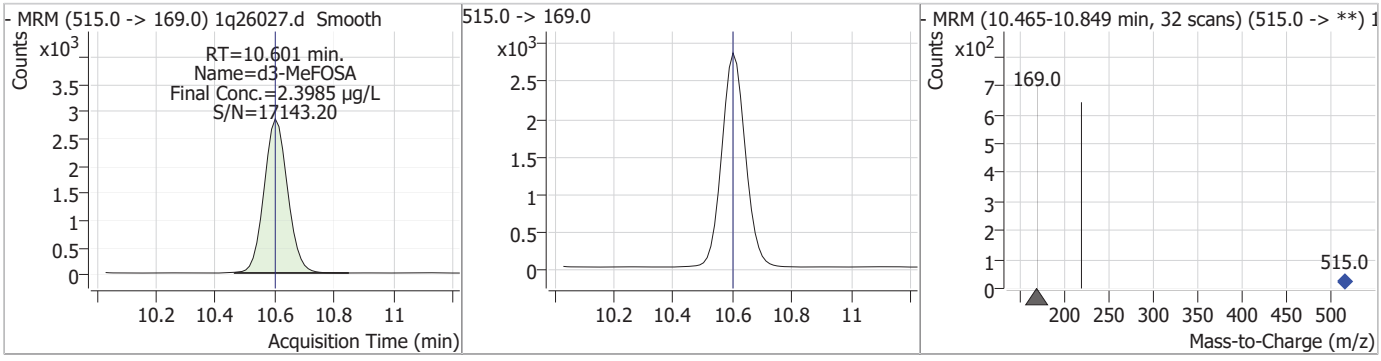
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.10	10.51	0.00	107516				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	49.34	10.52	0.00	216087 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.40	10.60	0.00	15532				

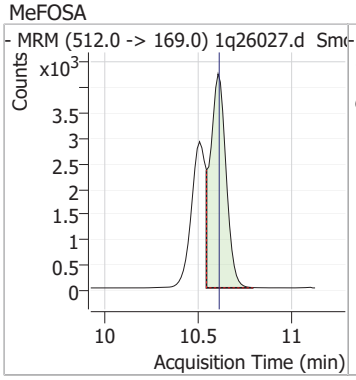


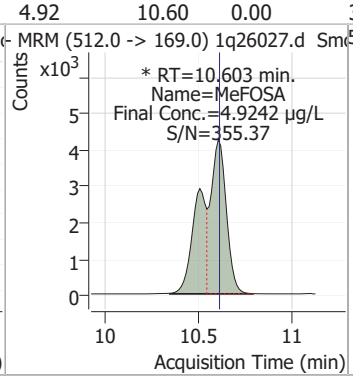
7.5.2

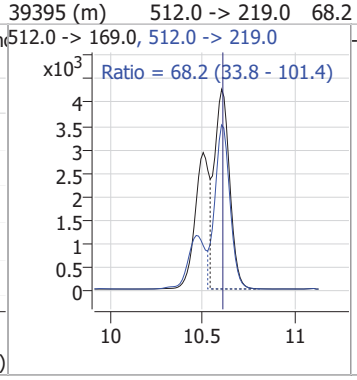
7

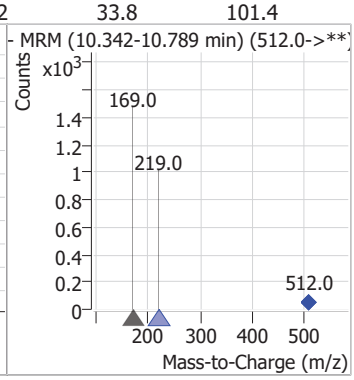
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	4.92	10.60	0.00	39395 (m)	512.0 -> 219.0	68.2	33.8	101.4

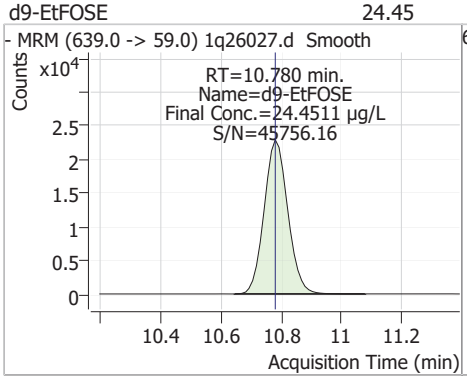


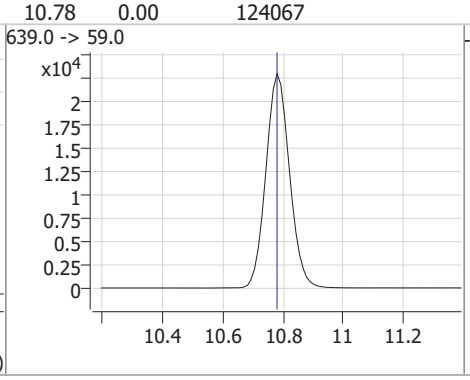


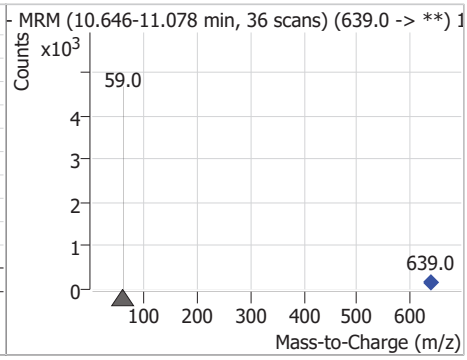




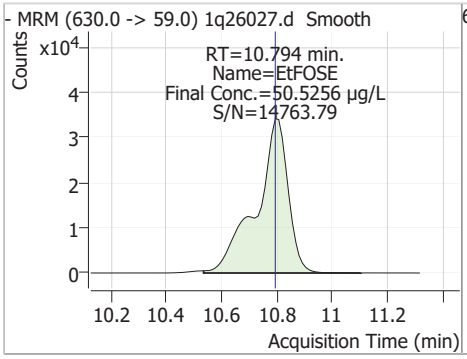
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.45	10.78	0.00	124067				

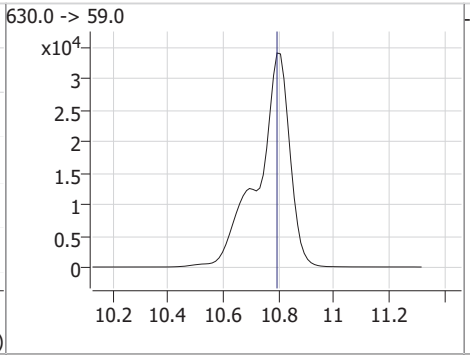


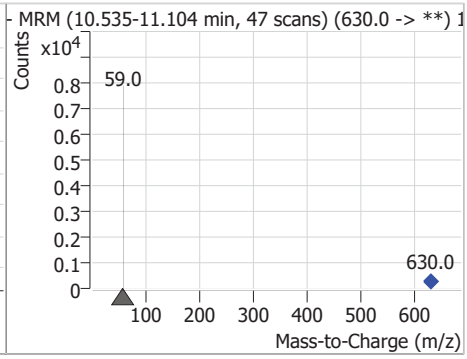




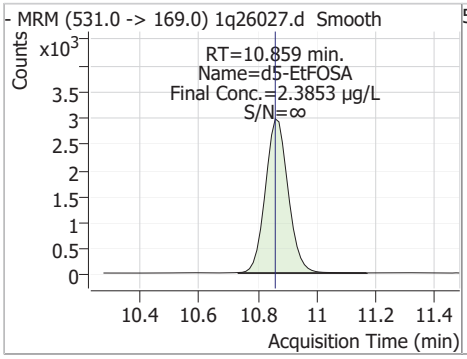
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	50.53	10.79	0.00	273138				

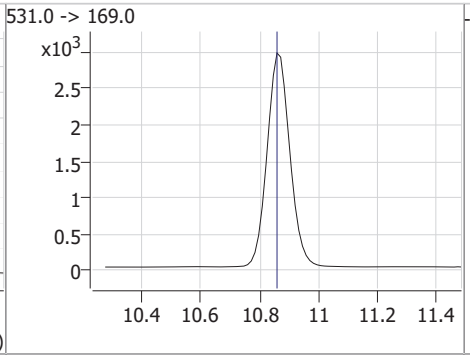


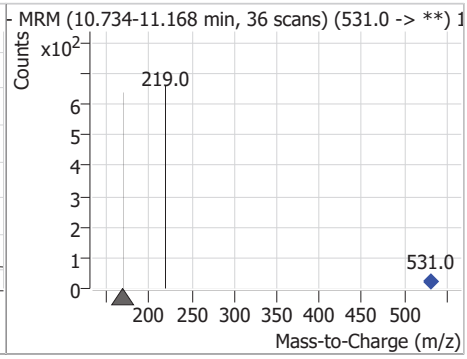




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.39	10.86	0.00	15784				

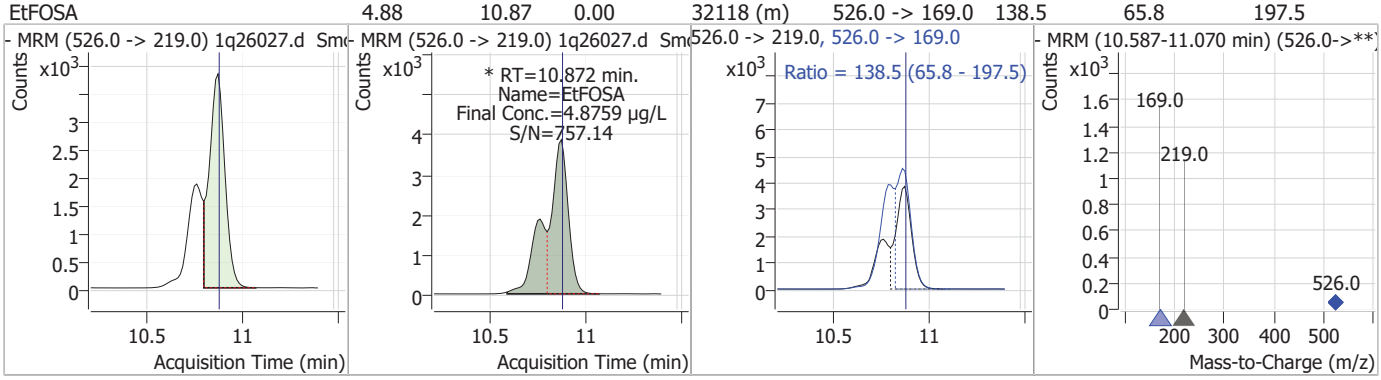






Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	4.88	10.87	0.00	32118 (m)	526.0 -> 169.0	138.5	65.8	197.5



Manual Integration Approval Summary

Sample Number: T1Q361-RT
Lab FileID: 1Q26027.D
Injection Time: 05/14/25 16:08

Method: EPA 1633
Analyst approved: 05/15/25 01:25 Rensel John Romano
Supervisor approved: 05/15/25 05:29 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.67	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Split peak
PFOSA	754-91-6		9.34	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSA	4151-50-2		10.87	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/16/25 06:10

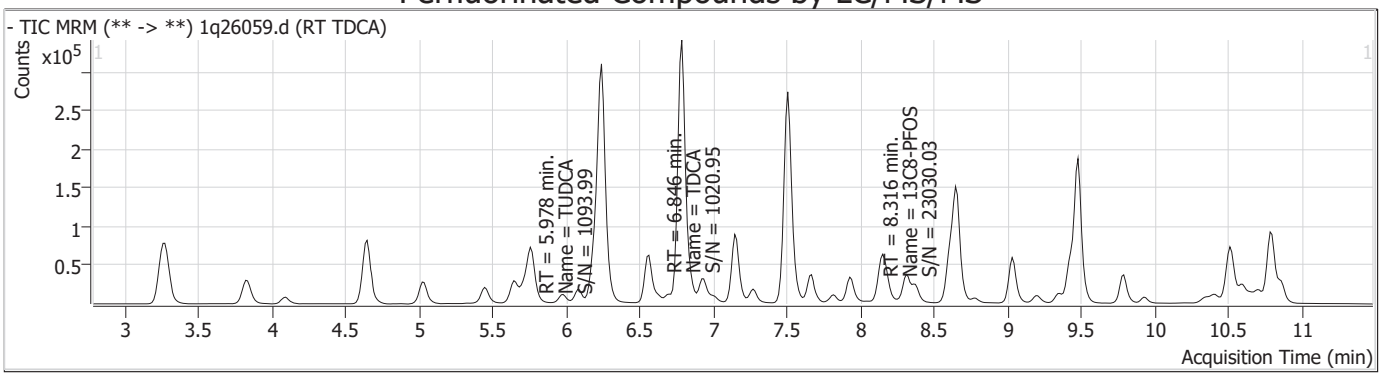
Perfluorinated Compounds by LC/MS/MS

Data File : 1q26059.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/15/2025 10:31:51 AM
Sample Name : RT TDCA
Vial : P1-B1
DA Method File : t1q361 TDCA.batch.bin
Batch Name : T1Q362_TDCA.batch.bin
Sample Information : OP63461,T1Q362,500,,,5,1,WATER

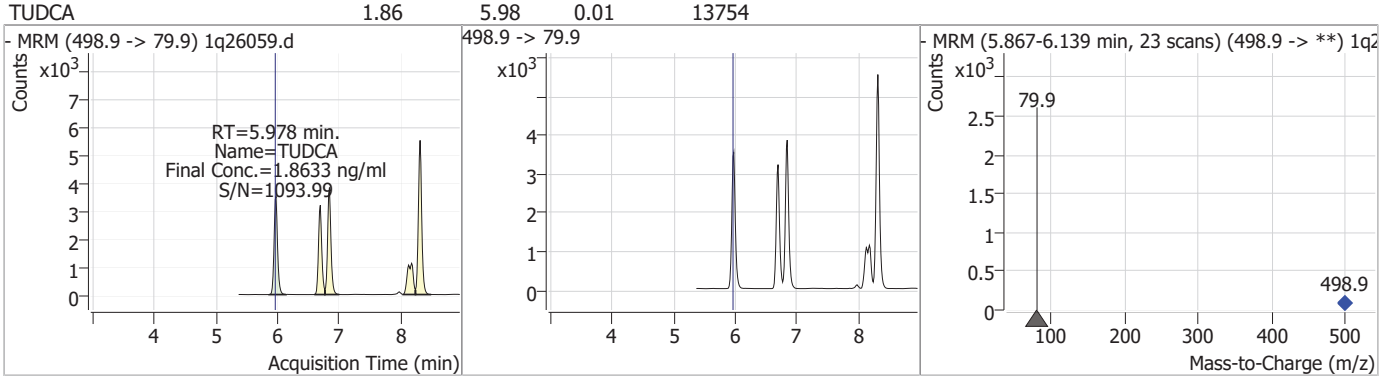
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
Internal Standards							
M8-PFOS	8.316	507.1 -> 79.9	14254	2.50	µg/L		0.000
13C4-PFOS	8.317	502.8 -> 79.9	12844	2.50	µg/L		0.000
System Monitoring Compounds							
13C8-PFOS	8.316	507.1 -> 79.9	14254	5.37	µg/L		0.000
Spiked Amount: 2.50	Range: 50.0 - 150.0%			Recovery = 215.0%			
Target Compounds							QValue
PFOS	8.317	499.0 -> 99.0	13166	1.78	µg/L	#m	71
		499.0 -> 80.0	29122				
TCDCA	6.697	498.9 -> 79.9	13500	1.83	ng/ml		100
TDCA	6.846	498.9 -> 79.9	15135	2.05	ng/ml		100
TUDCA	5.978	498.9 -> 79.9	13754	1.86	ng/ml		100

 # = Qualifier out of range, m = manually integrated, + = Area summed

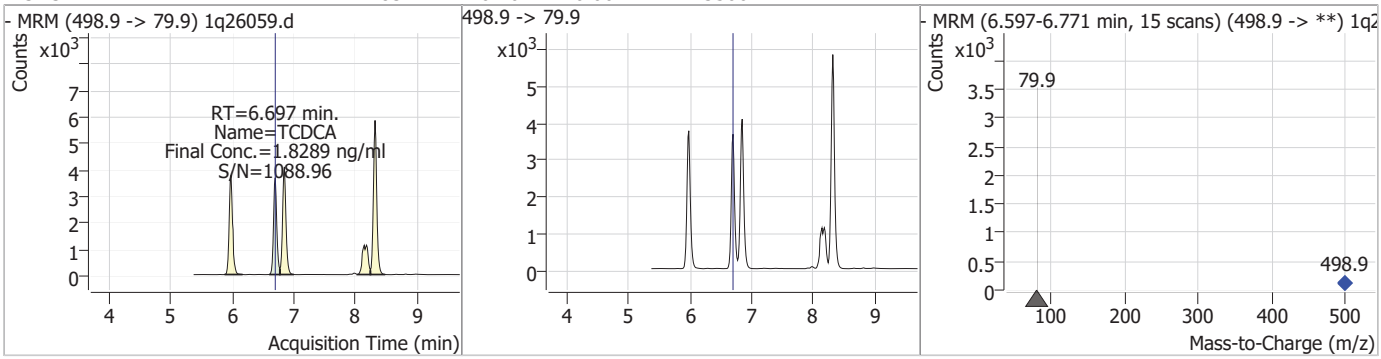
Perfluorinated Compounds by LC/MS/MS



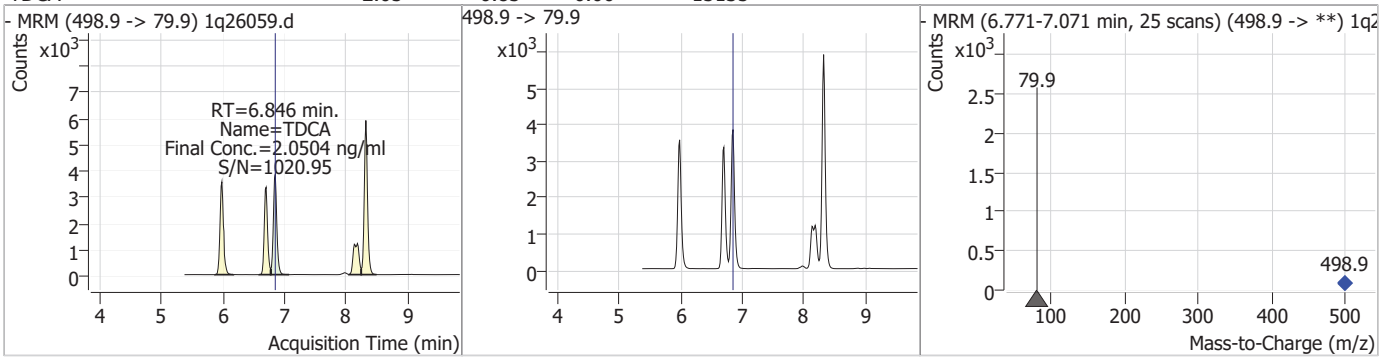
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TUDCA	1.86	5.98	0.01	13754				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TCDCA	1.83	6.70	0.00	13500				

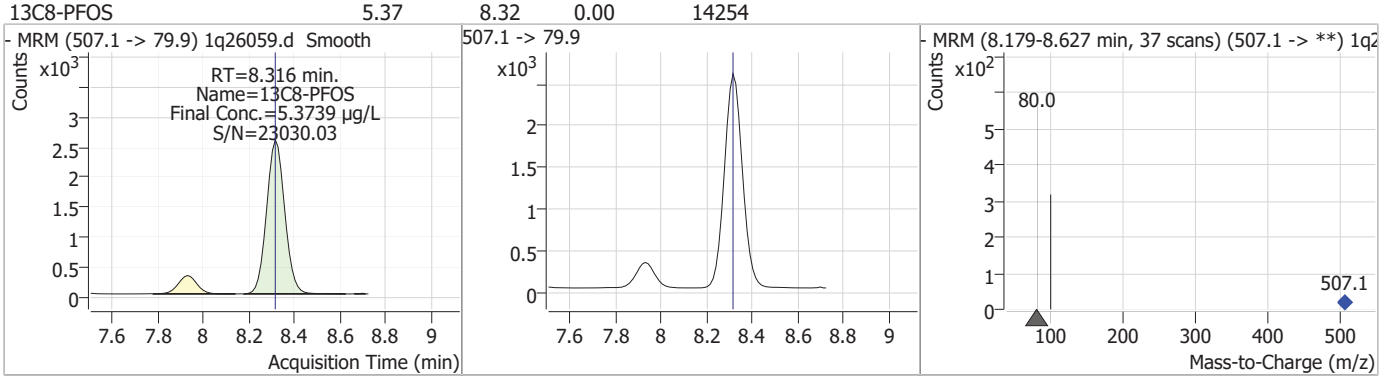


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TDCA	2.05	6.85	0.00	15135				

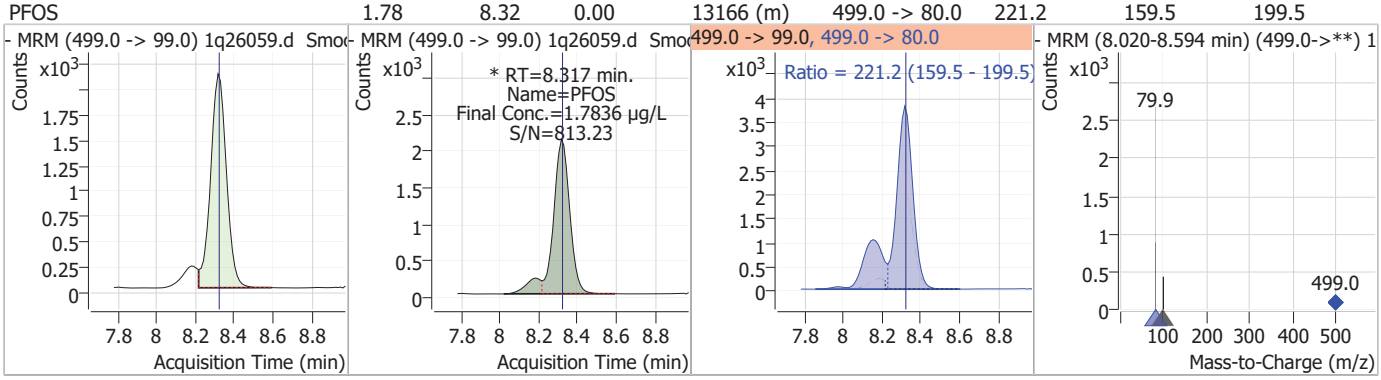


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	5.37	8.32	0.00	14254				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	1.78	8.32	0.00	13166 (m)	499.0 -> 80.0	221.2	159.5	199.5



Manual Integration Approval Summary

Sample Number: T1Q362-RT
Lab FileID: 1Q26059.D
Injection Time: 05/15/25 10:31
Method: EPA 1633
Analyst approved: 05/16/25 02:49 Alodia Hana Barrogo
Supervisor approved: 05/16/25 06:10 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/16/25 06:10

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26060.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/15/2025 10:46:47 AM
Sample Name : RT
Vial : P1-A6
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : T1Q362.batch.bin
Sample Information : OP63461,T1Q362,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	193399	10.00 µg/L	0.000
M5-PFPeA	4.636	268.0 -> 223.0	118081	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	68549	2.50 µg/L	0.000
M4-PFHpA	6.565	367.0 -> 322.0	51544	2.50 µg/L	0.012
M8-PFOA	7.148	421.0 -> 376.0	84386	2.50 µg/L	0.000
M9-PFNA	7.669	472.0 -> 427.0	28529	1.25 µg/L	0.012
M6-PFDA	8.152	519.0 -> 474.0	29073	1.25 µg/L	0.012
M7-PFUnDA	8.607	570.0 -> 525.0	42344	1.25 µg/L	0.012
M2-PFDoDA	9.027	615.0 -> 570.0	40821	1.25 µg/L	0.012
M2-PFTeDA	9.785	715.0 -> 670.0	17173	1.25 µg/L	0.012
M8-FOSA	9.359	506.0 -> 78.0	20716	2.50 µg/L	0.025
M3-PFBS	5.711	302.0 -> 99.0	7497	2.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	7331	2.50 µg/L	0.000
M8-PFOS	8.316	507.0 -> 99.0	6968	2.50 µg/L	0.012
M2-4:2FTS	5.446	329.0 -> 81.0	1395	5.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	2448	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	4065	5.00 µg/L	0.000
M3-MeFOSAA	8.173	573.0 -> 419.0	38016	5.00 µg/L	0.013
M3-HFPO-DA	6.087	287.0 -> 169.0	18317	10.00 µg/L	0.000
M5-EtFOSAA	8.370	589.0 -> 419.0	30817	5.00 µg/L	0.012
M7-MeFOSE	10.498	623.0 -> 59.0	111503	25.00 µg/L	-0.012
M9-EtFOSE	10.780	639.0 -> 59.0	130567	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	15959	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	15506	2.50 µg/L	0.000
13C4-PFOS	8.317	503.0 -> 80.0	13594	2.50 µg/L	0.012
13C3-PFBA	3.263	216.0 -> 172.0	82485	5.00 µg/L	0.013
18O2-PFHxS	7.274	403.0 -> 84.0	8274	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	93052	2.50 µg/L	0.000
13C2-PFDA	8.152	515.0 -> 470.0	23924	1.25 µg/L	0.012
13C5-PFNA	7.669	468.0 -> 423.0	30515	1.25 µg/L	0.012
13C2-PFHxA	5.760	315.0 -> 270.0	63849	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1395	5.05 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.0%	
13C2-6:2FTS	6.922	429.0 -> 81.0	2448	4.57 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.4%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4065	4.82 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.5%	
13C2-PFDoDA	9.027	615.0 -> 570.0	40821	1.26 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.6%	
13C2-PFTeDA	9.785	715.0 -> 670.0	17173	1.26 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.6%	
13C3-PFBS	5.711	302.0 -> 99.0	7497	2.72 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 108.6%	
13C3-PFHxS	7.275	402.0 -> 99.0	7331	2.65 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.0%		
13C4-PFBA	3.260	217.0 -> 172.0	193399	9.86 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.6%		
13C4-PFHpA	6.565	367.0 -> 322.0	51544	2.33 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.1%		
13C5-PFHxA	5.759	318.0 -> 273.0	68549	2.52 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.9%		
13C5-PFPeA	4.636	268.0 -> 223.0	118081	5.04 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.9%		
13C6-PFDA	8.152	519.0 -> 474.0	29073	1.25 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.4%		
13C7-PFUnDA	8.607	570.0 -> 525.0	42344	1.26 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.7%		
13C8-FOSA	9.359	506.0 -> 78.0	20716	2.50 µg/L		0.025
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.8%		
13C8-PFOA	7.148	421.0 -> 376.0	84386	2.49 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.7%		
13C8-PFOS	8.316	507.0 -> 99.0	6968	2.23 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 89.1%		
13C9-PFNA	7.669	472.0 -> 427.0	28529	1.15 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.7%		
d3-MeFOSAA	8.173	573.0 -> 419.0	38016	4.59 µg/L		0.013
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.9%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	18317	7.69 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 76.9%		
d3-MeFOSA	10.601	515.0 -> 169.0	15506	2.41 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.4%		
d5-EtFOSAA	8.370	589.0 -> 419.0	30817	4.57 µg/L		0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.5%		
d7-MeFOSE	10.498	623.0 -> 59.0	111503	26.20 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 104.8%		
d9-EtFOSE	10.780	639.0 -> 59.0	130567	25.90 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 103.6%		
d5-EtFOSA	10.859	531.0 -> 169.0	15959	2.43 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.1%		
Target Compounds						QValue
4:2FTS	5.447	327.0 -> 307.0	44618	17.16 µg/L		94
		327.0 -> 81.0	20629			
6:2FTS	6.934	427.0 -> 407.0	63098	20.14 µg/L		98
		427.0 -> 81.0	22157			
8:2FTS	7.927	527.0 -> 507.0	74213	20.08 µg/L		99
		527.0 -> 81.0	22018			
EtFOSAA	8.371	584.0 -> 419.0	23775	4.95 µg/L	m	89
		584.0 -> 483.0	13681			
FOSA	9.349	498.0 -> 78.0	37012	5.16 µg/L	m	97
		498.0 -> 478.0	1644			
MeFOSAA	8.175	570.0 -> 419.0	30290	5.02 µg/L	m	98
		570.0 -> 512.0	10953			
PFBA	3.266	213.0 -> 169.0	105586	19.52 µg/L		100
PFBS	5.713	299.0 -> 80.0	36921	4.25 µg/L		99
		299.0 -> 99.0	14089			
PFDA	8.152	513.0 -> 469.0	100318	5.03 µg/L		98
		513.0 -> 219.0	15410			
PFDoDA	9.027	613.0 -> 569.0	152131	5.13 µg/L		100
		613.0 -> 319.0	17307			
PFDS	9.193	599.0 -> 80.0	18758	5.32 µg/L		100

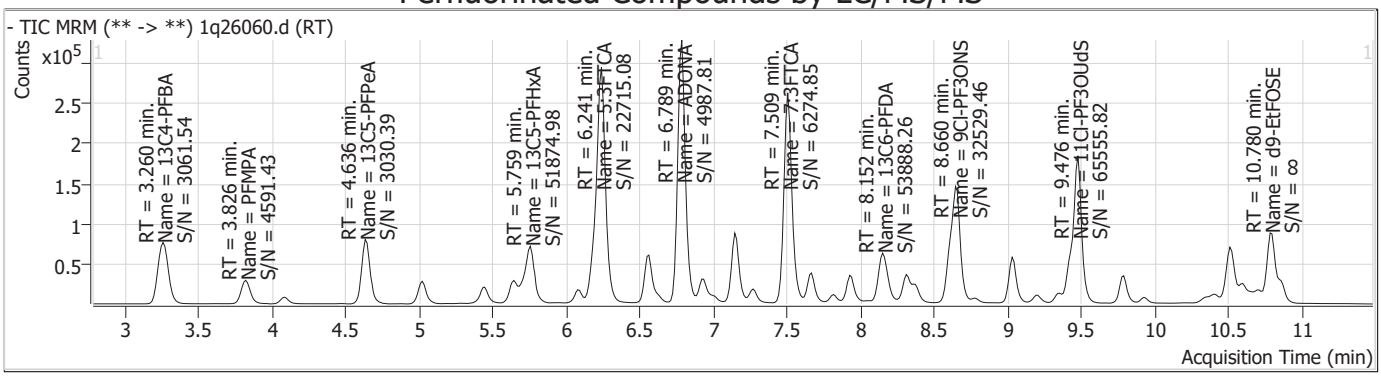
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	9623				
PFHpA	6.566	363.0 -> 319.0	147102	5.10	µg/L		95
		363.0 -> 169.0	26085				
PFHpS	7.822	449.0 -> 80.0	24718	4.88	µg/L		94
		449.0 -> 99.0	11526				
PFHxA	5.761	313.0 -> 269.0	124438	4.95	µg/L		99
		313.0 -> 119.0	3347				
PFHxS	7.276	399.0 -> 80.0	25130	4.40	µg/L	m	97
		399.0 -> 99.0	13364				
PFNA	7.669	463.0 -> 419.0	73280	5.12	µg/L	m	99
		463.0 -> 219.0	21760				
PFNS	8.785	549.0 -> 80.0	12357	4.92	µg/L		98
		549.0 -> 99.0	7107				
PFOA	7.149	413.0 -> 369.0	142145	4.88	µg/L	m	97
		413.0 -> 169.0	31424				
PFOS	8.318	499.0 -> 80.0	27639	4.73	µg/L	m	97
		499.0 -> 99.0	13122				
PFPeA	4.638	263.0 -> 219.0	206765	10.06	µg/L		100
PFPeS	6.630	349.0 -> 80.0	17242	4.44	µg/L		93
		349.0 -> 99.0	7144				
PFTeDA	9.785	713.0 -> 669.0	93767	5.07	µg/L		99
		713.0 -> 219.0	7475				
PFTrDA	9.424	663.0 -> 619.0	153671	5.32	µg/L		99
		663.0 -> 369.0	10167				
PFUnDA	8.609	563.0 -> 519.0	144514	5.16	µg/L		99
		563.0 -> 269.0	21031				
11Cl-PF3OUdS	9.476	631.0 -> 451.0	494071	25.02	µg/L		100
		633.0 -> 453.0	146971				
9Cl-PF3ONS	8.660	531.0 -> 351.0	383394	23.69	µg/L		98
		533.0 -> 353.0	114985				
ADONA	6.789	377.0 -> 251.0	948983	23.53	µg/L		100
		377.0 -> 85.0	258591				
HFPO-DA	6.088	285.0 -> 169.0	38240	21.56	µg/L		94
		285.0 -> 185.0	2827				
3:3FTCA	4.084	241.0 -> 177.0	31770	28.39	µg/L		99
		241.0 -> 117.0	2225				
5:3FTCA	6.241	341.0 -> 237.0	637317	143.45	µg/L		99
		341.0 -> 217.0	456058				
7:3FTCA	7.509	441.0 -> 337.0	698344	139.20	µg/L		99
		441.0 -> 317.0	309158				
EtFOSA	10.860	526.0 -> 219.0	33060	4.96	µg/L	m	94
		526.0 -> 169.0	45776				
EtFOSE	10.794	630.0 -> 59.0	286996	50.45	µg/L	m	100
MeFOSA	10.603	512.0 -> 169.0	38350	4.80	µg/L	m	92
		512.0 -> 219.0	28333				
MeFOSE	10.523	616.0 -> 59.0	228501	50.31	µg/L	m	100
PFDoDS	9.924	699.0 -> 80.0	16255	5.14	µg/L		99
		699.0 -> 99.0	9374				
NFDHA	5.651	295.0 -> 201.0	13753	8.23	µg/L		66
		201.0 -> 85.0	89220				
		295.0 -> 85.0	3529				
PFMBA	5.027	279.0 -> 85.0	112516	10.07	µg/L		100
PFMPA	3.826	229.0 -> 85.0	127784	10.15	µg/L		100
PFEESA	6.194	315.0 -> 135.0	203583	8.53	µg/L		100
		315.0 -> 69.0	17689				

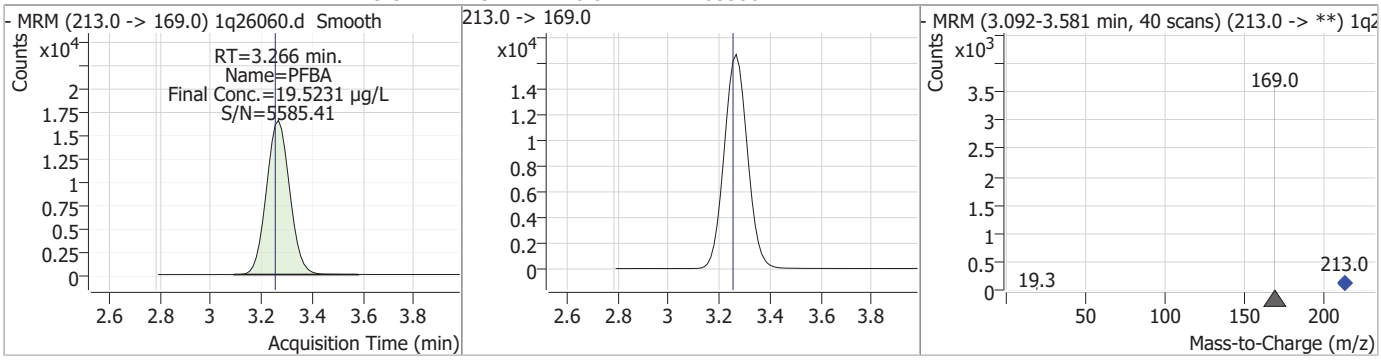
 # = Qualifier out of range, m = manually integrated, + = Area summed

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

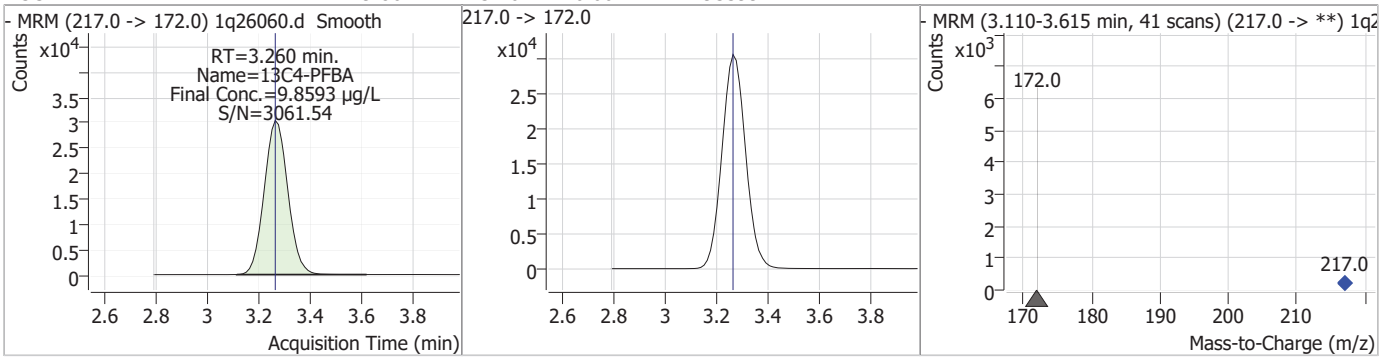
Perfluorinated Compounds by LC/MS/MS



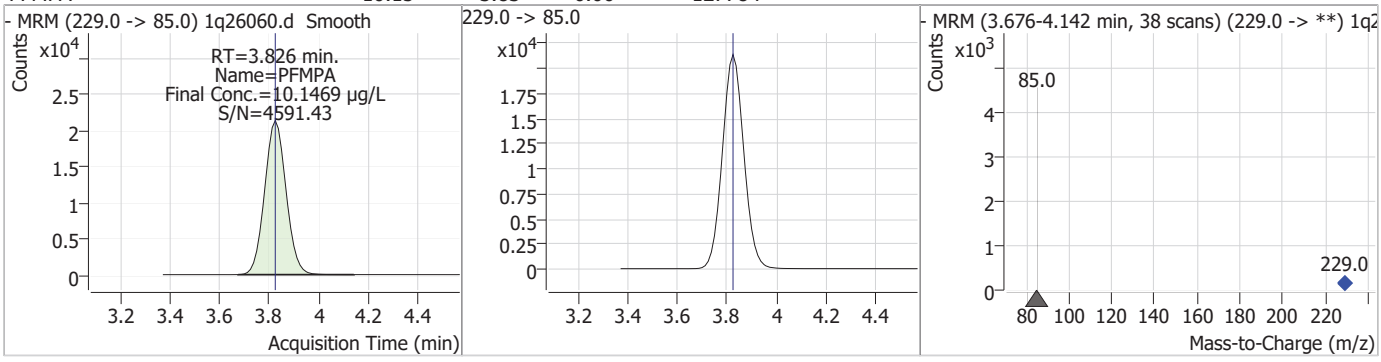
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	19.52	3.27	0.01	105586				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.86	3.26	0.00	193399				

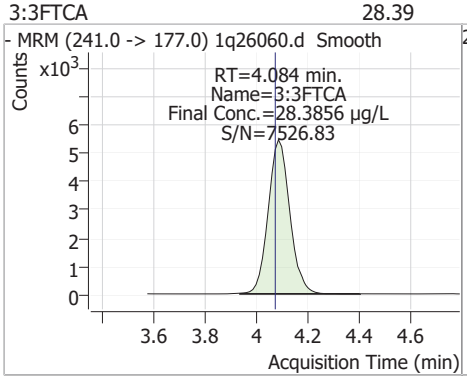


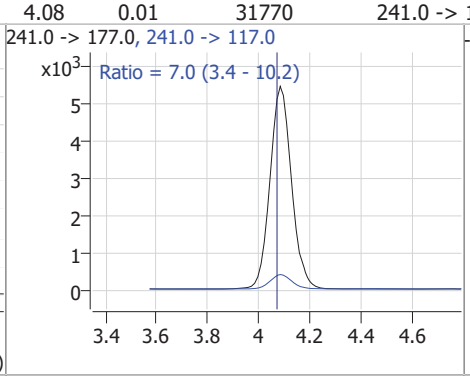
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	10.15	3.83	0.00	127784				

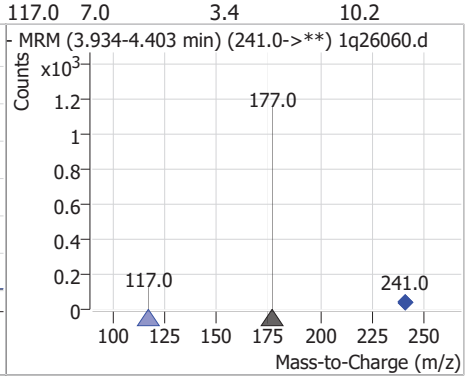


Perfluorinated Compounds by LC/MS/MS

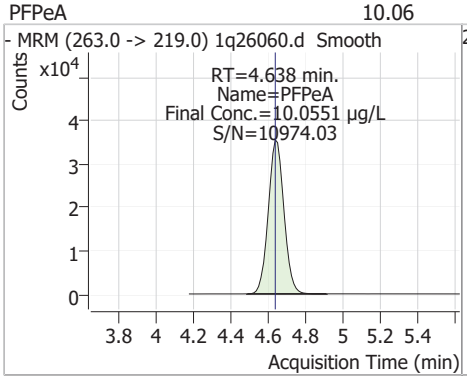
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	28.39	4.08	0.01	31770	241.0 -> 117.0	7.0	3.4	10.2

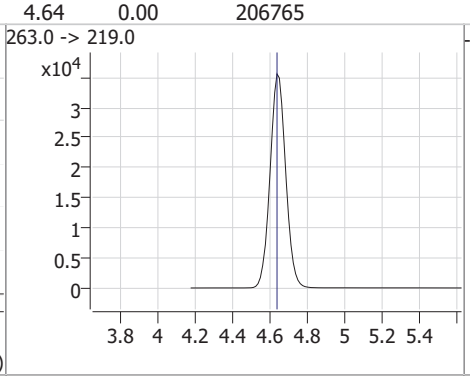


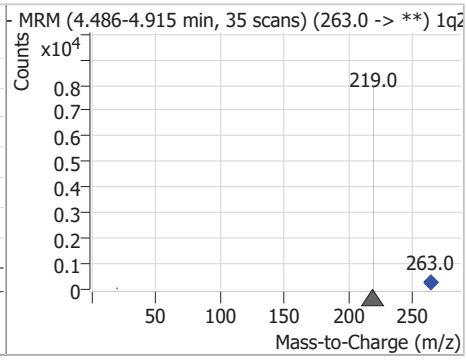




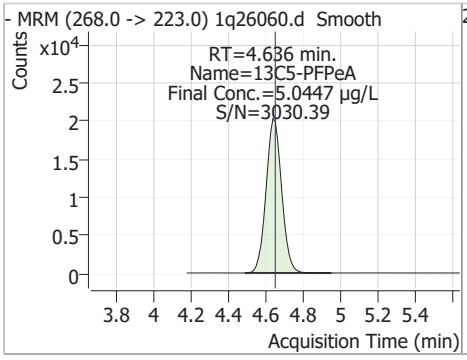
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	10.06	4.64	0.00	206765				

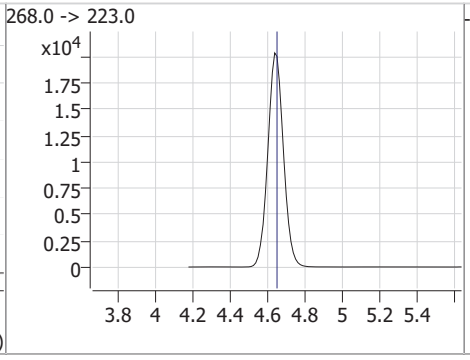


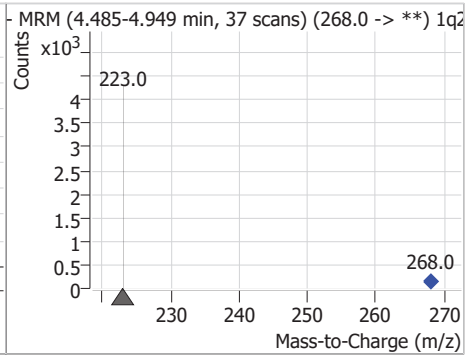




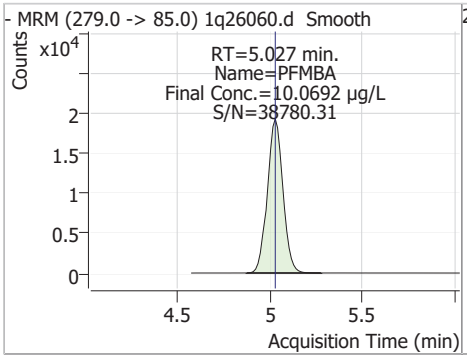
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.04	4.64	-0.01	118081				

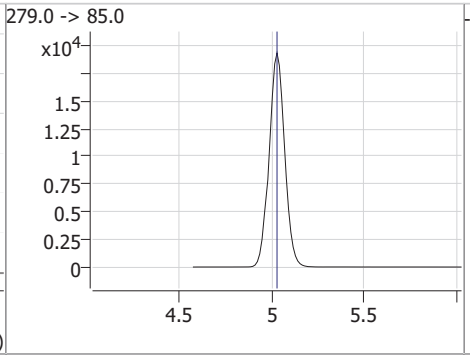


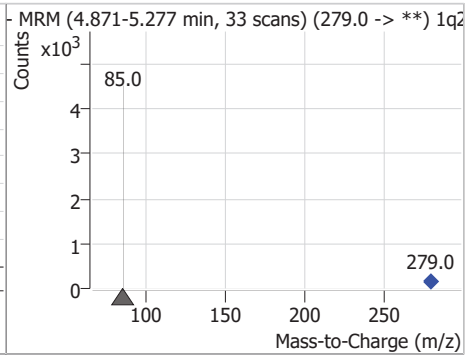




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	10.07	5.03	0.00	112516				

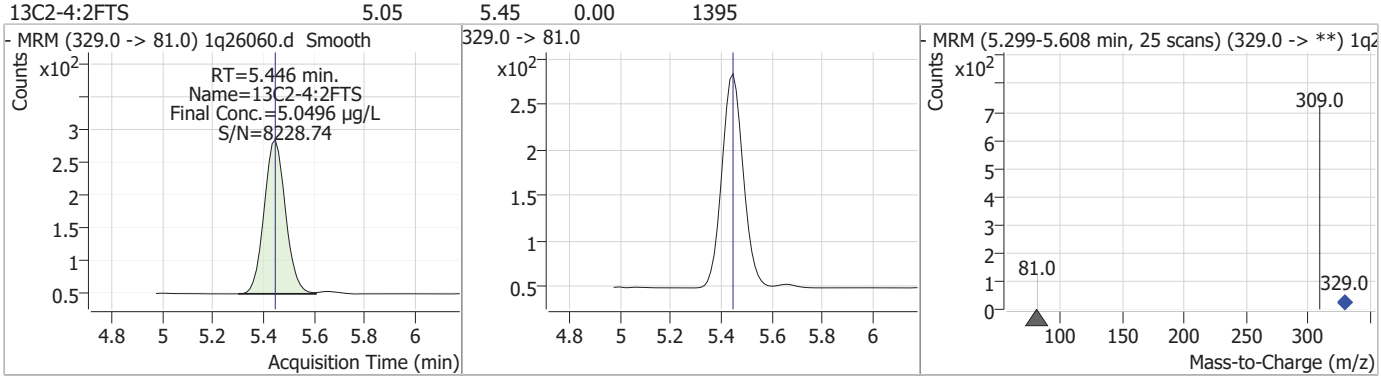




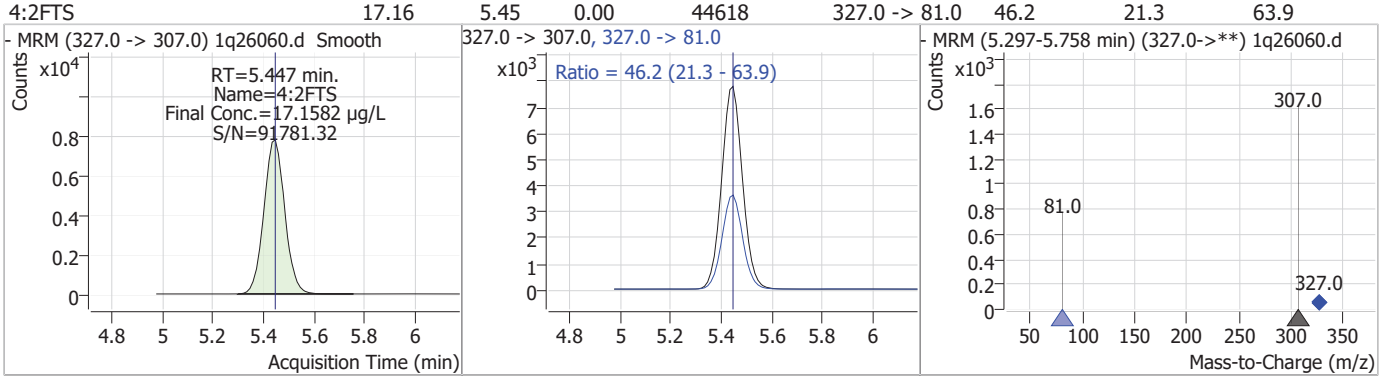


Perfluorinated Compounds by LC/MS/MS

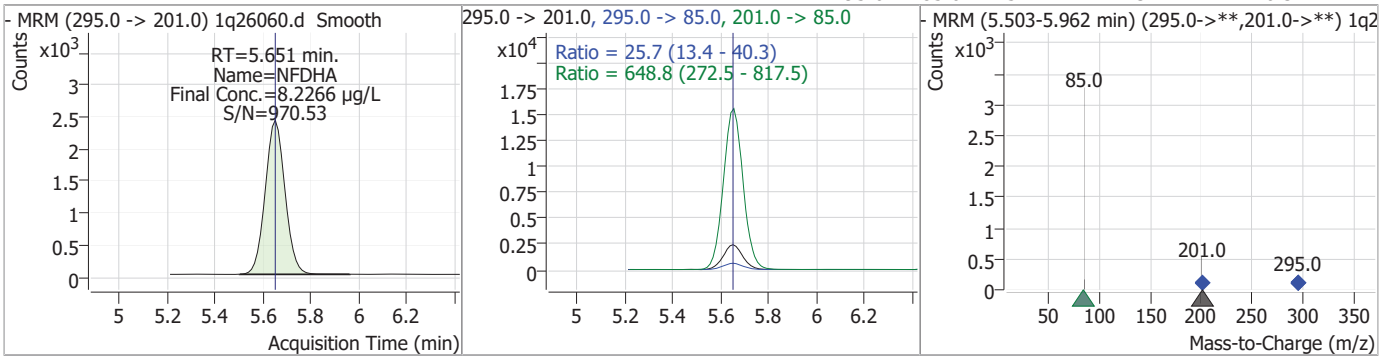
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.05	5.45	0.00	1395				



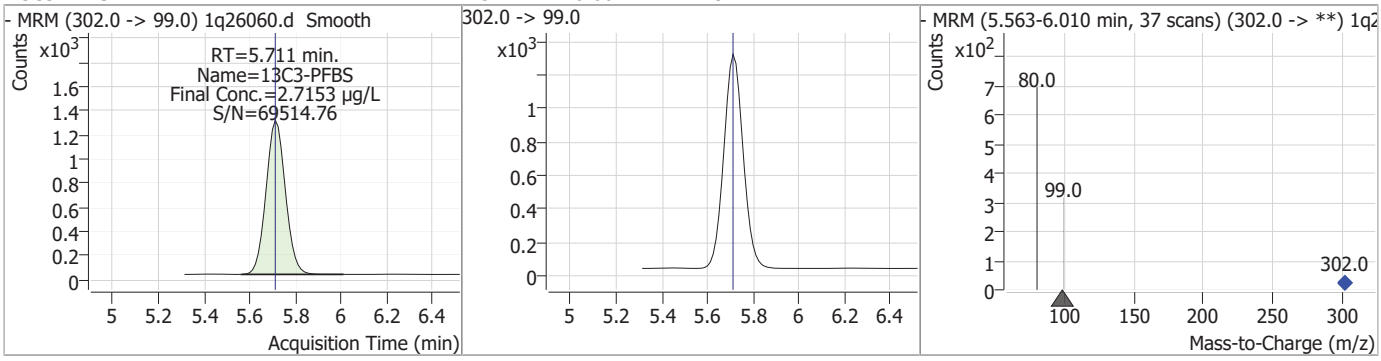
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	17.16	5.45	0.00	44618	327.0 -> 81.0	46.2	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	8.23	5.65	0.00	13753	201.0 -> 85.0	648.8	272.5	817.5
					295.0 -> 85.0	25.7	13.4	40.3

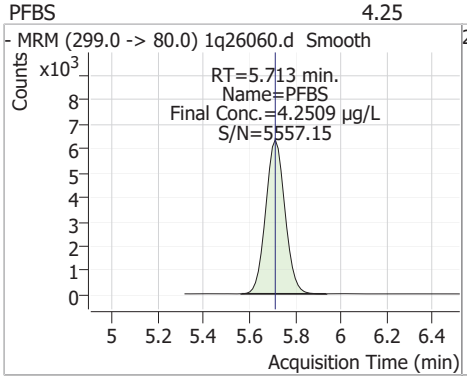


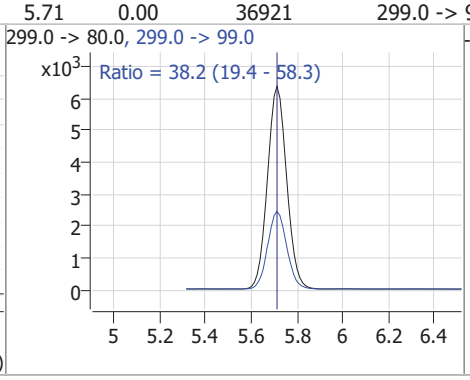
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.72	5.71	0.00	7497				

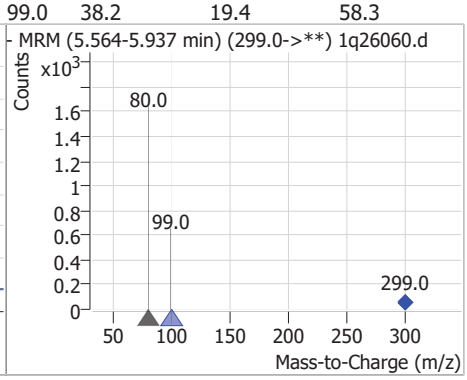


Perfluorinated Compounds by LC/MS/MS

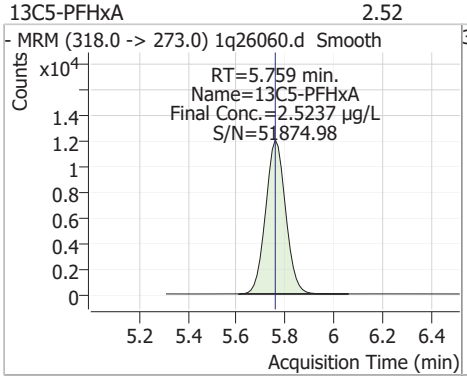
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.25	5.71	0.00	36921	299.0 -> 99.0	38.2	19.4	58.3

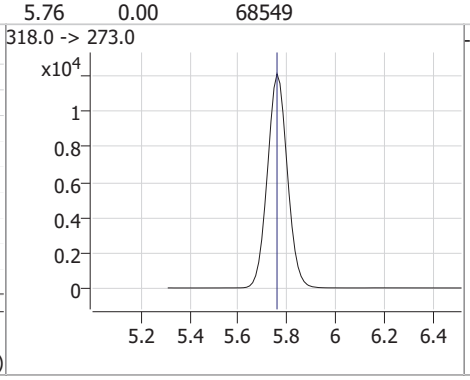


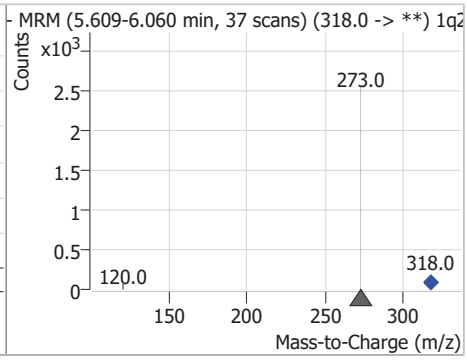




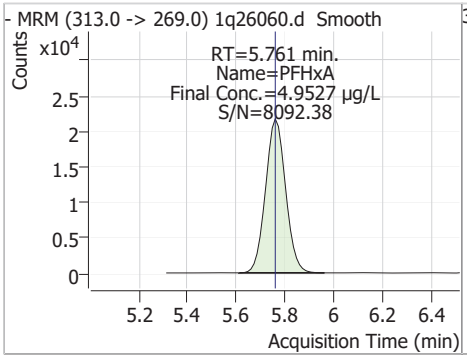
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.52	5.76	0.00	68549				

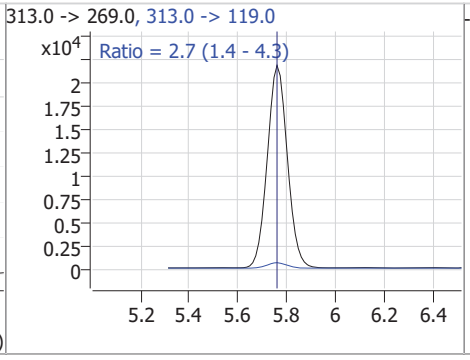


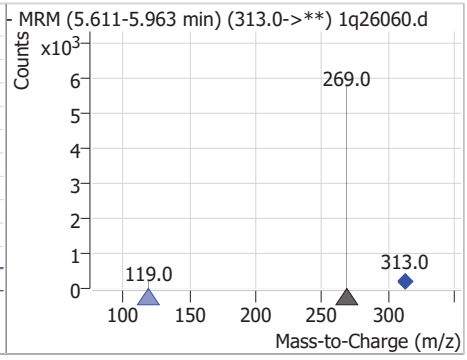




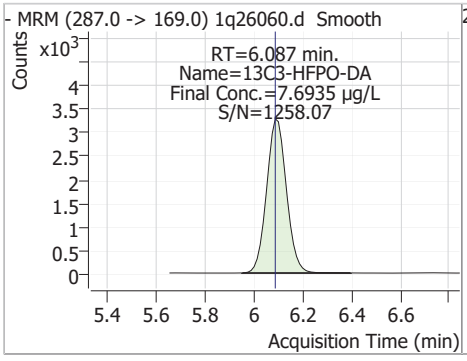
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	4.95	5.76	0.00	124438	313.0 -> 119.0	2.7	1.4	4.3

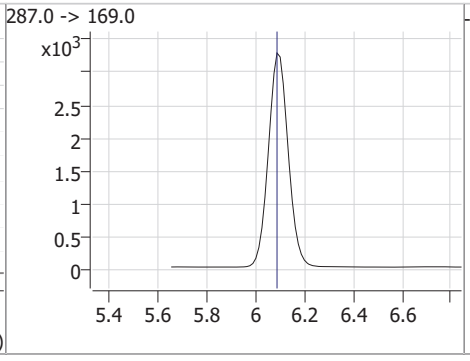


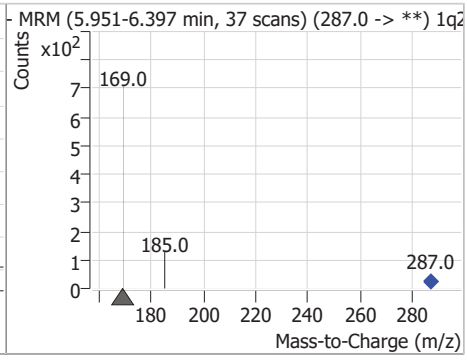




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	7.69	6.09	0.00	18317				

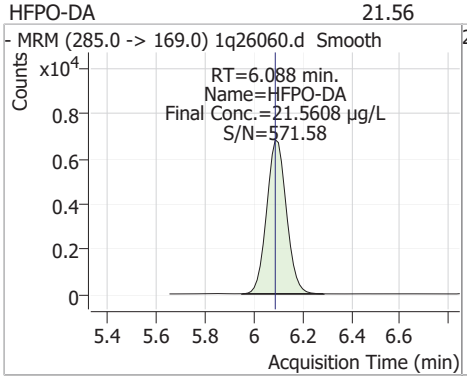


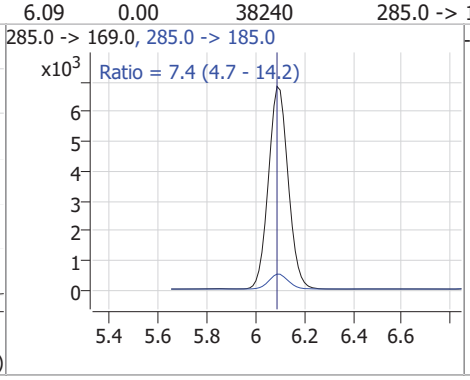


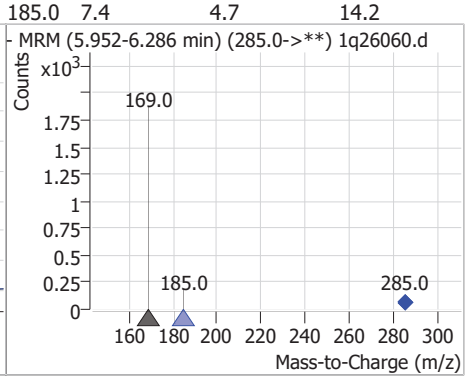


Perfluorinated Compounds by LC/MS/MS

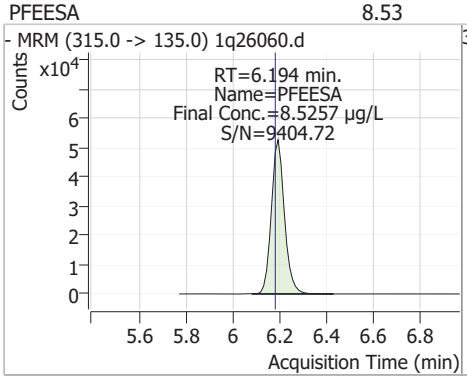
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	21.56	6.09	0.00	38240	285.0 -> 185.0	7.4	4.7	14.2

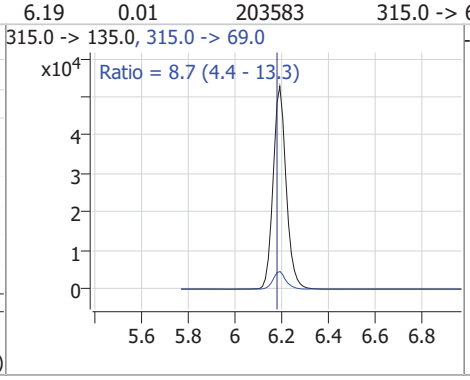


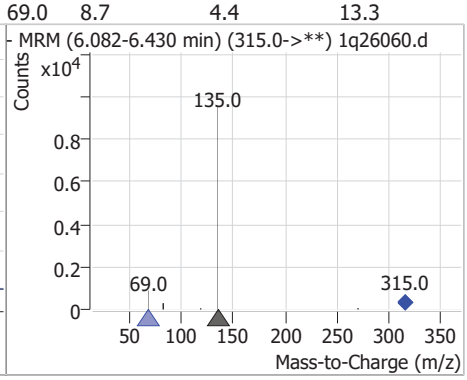




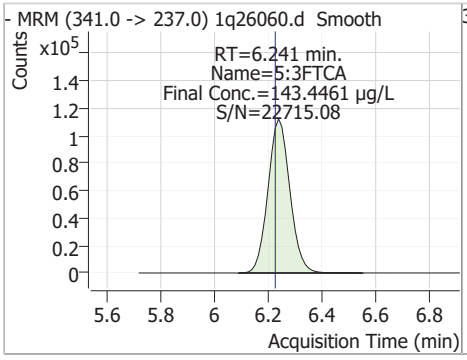
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	8.53	6.19	0.01	203583	315.0 -> 69.0	8.7	4.4	13.3

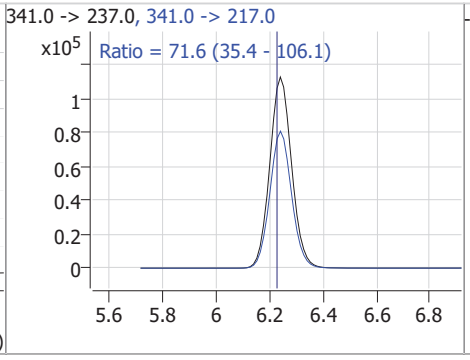


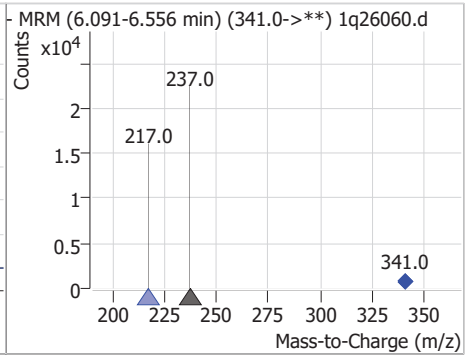




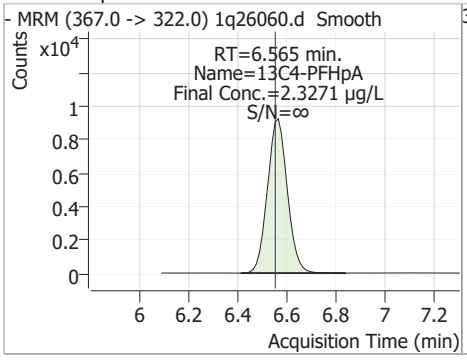
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	143.45	6.24	0.01	637317	341.0 -> 217.0	71.6	35.4	106.1

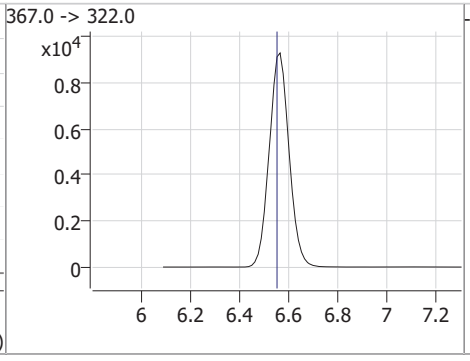


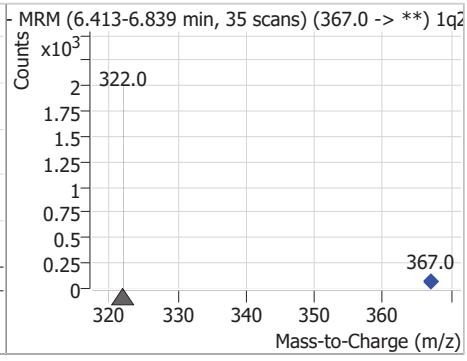




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.33	6.57	0.01	51544				







7.5.4

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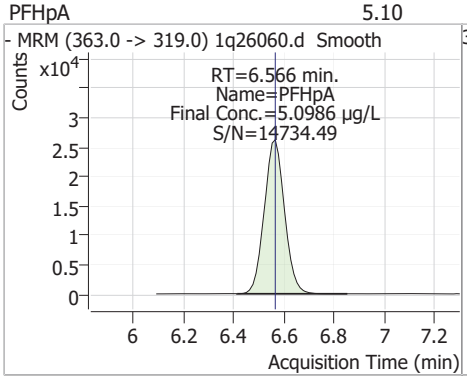
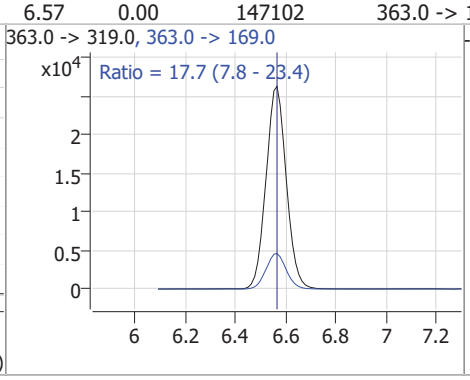
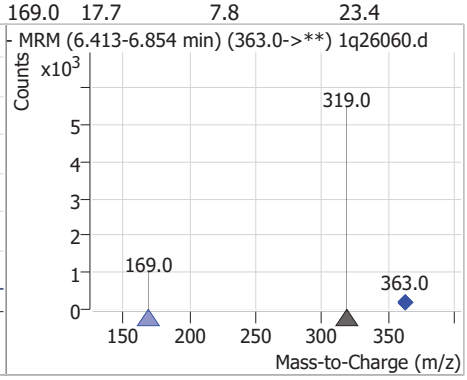
Perfluorinated Compounds by LC/MS/MS

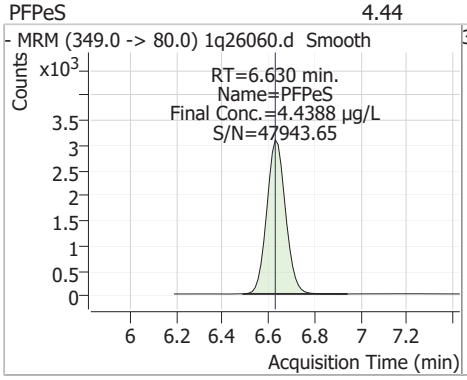
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	5.10	6.57	0.00	147102	363.0 -> 169.0	17.7	7.8	23.4

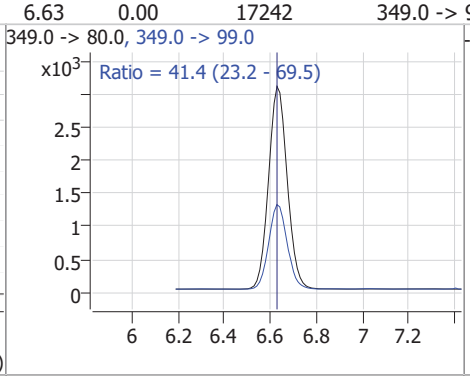


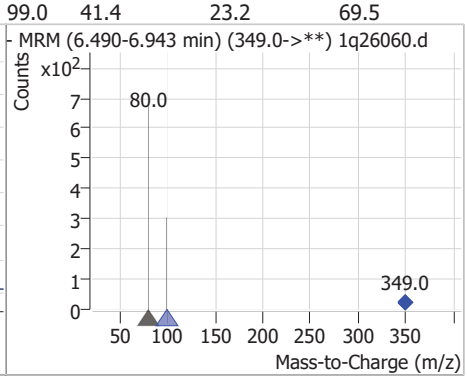




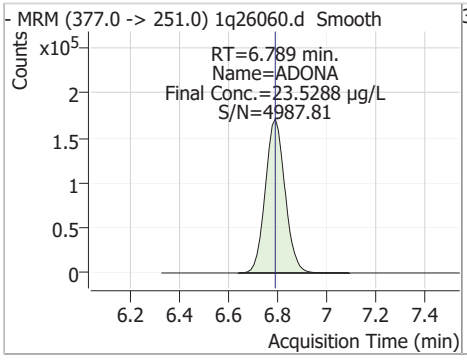
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	4.44	6.63	0.00	17242	349.0 -> 99.0	41.4	23.2	69.5

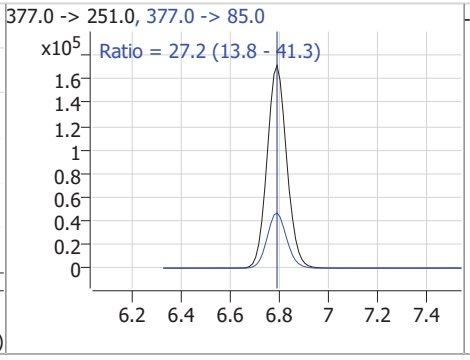


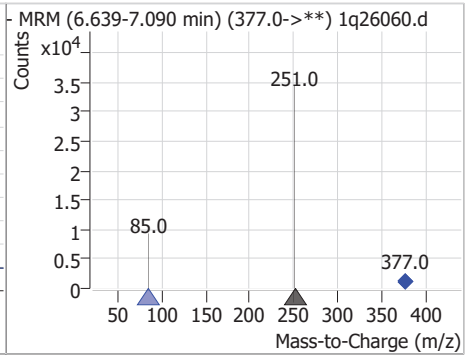




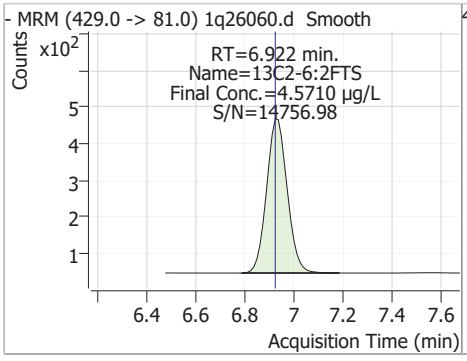
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	23.53	6.79	0.00	948983	377.0 -> 85.0	27.2	13.8	41.3

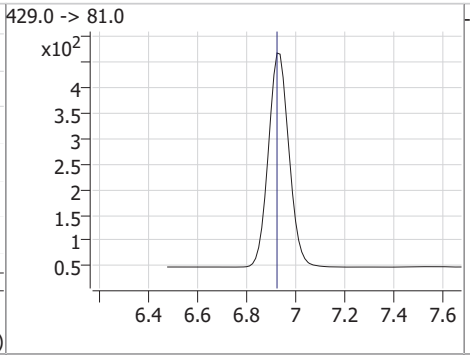


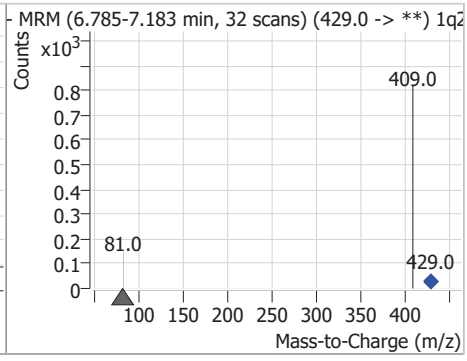




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.57	6.92	0.00	2448				







7.5.4

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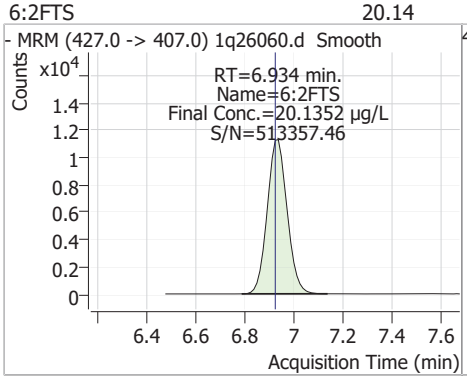
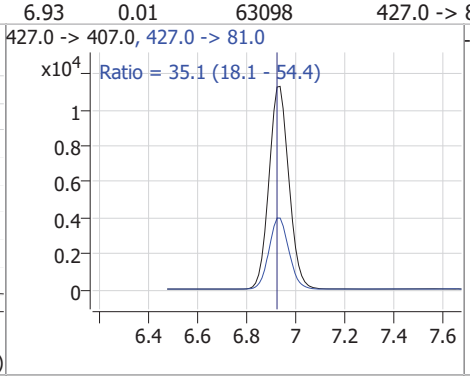
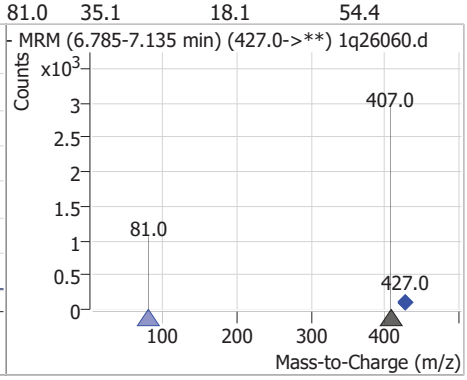
Perfluorinated Compounds by LC/MS/MS

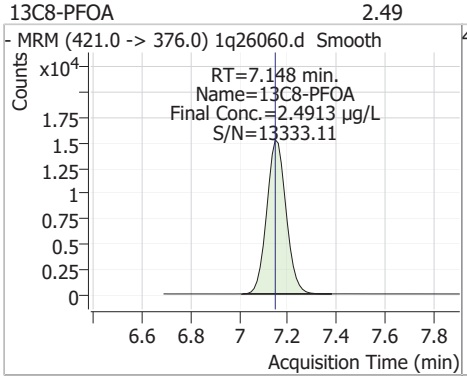
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	20.14	6.93	0.01	63098	427.0 -> 81.0	35.1	18.1	54.4

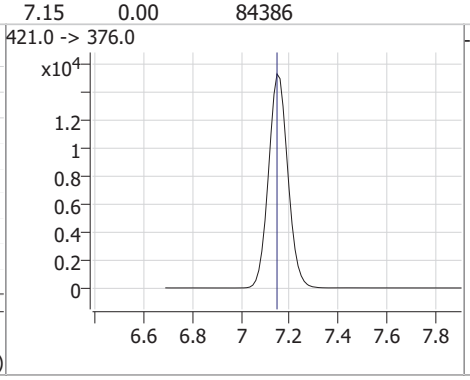


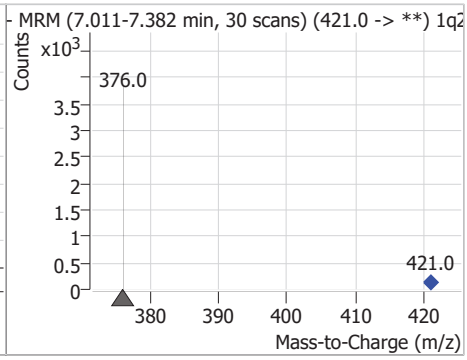




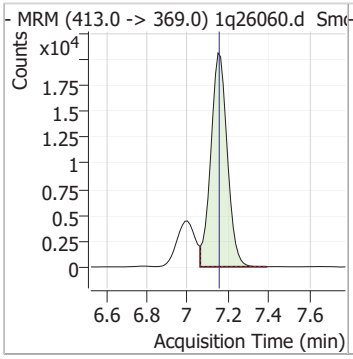
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.49	7.15	0.00	84386				

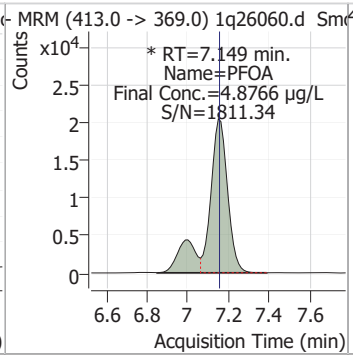


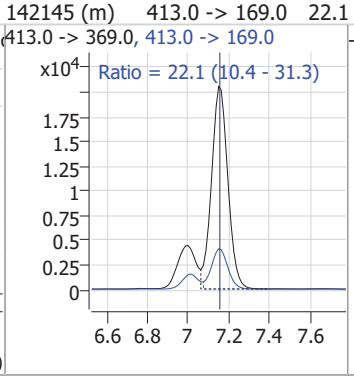


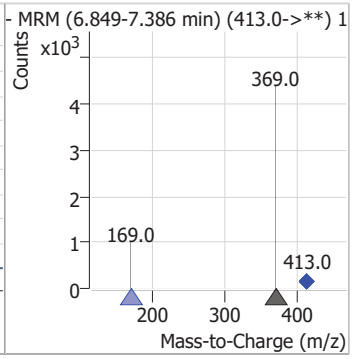


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	4.88	7.15	0.00	142145 (m)	413.0 -> 169.0	22.1	10.4	31.3

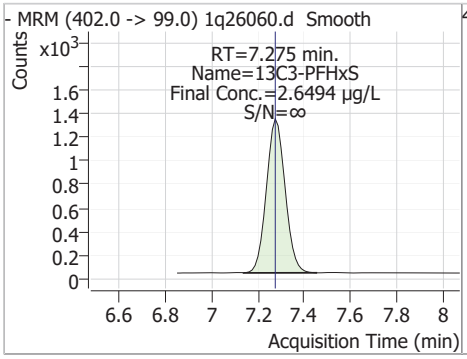


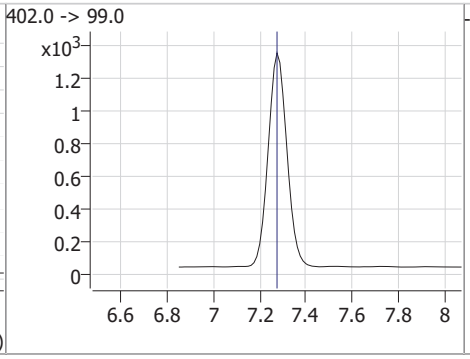


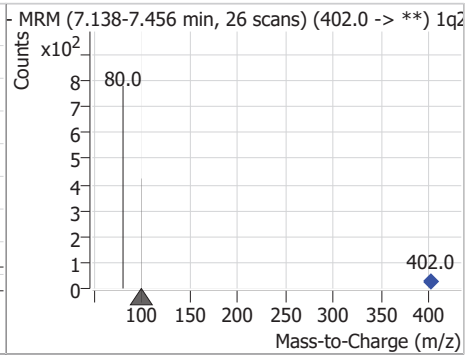




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.65	7.27	0.00	7331				

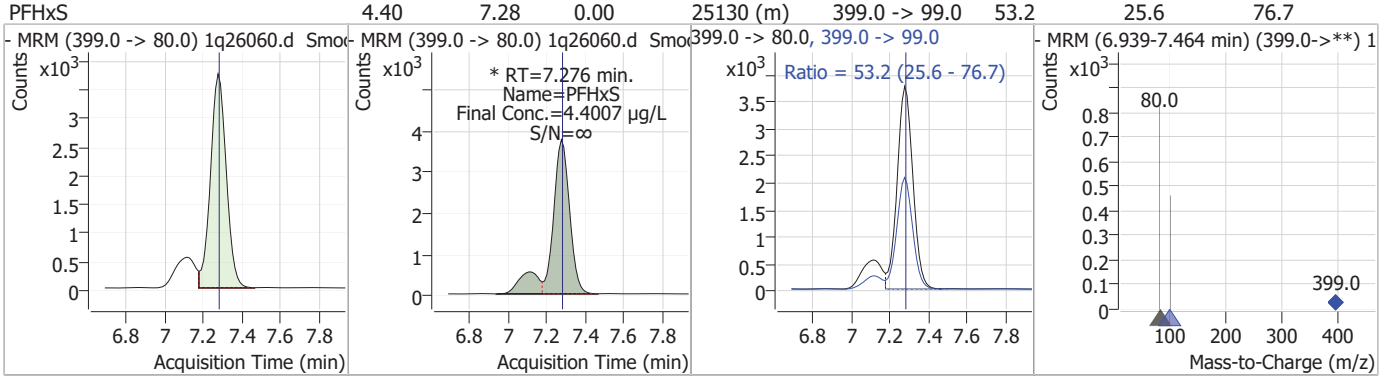




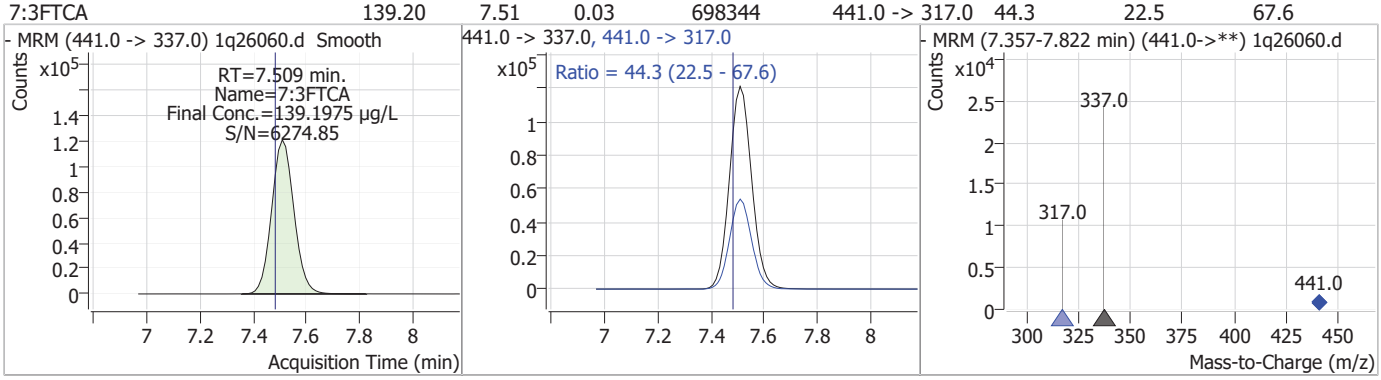


Perfluorinated Compounds by LC/MS/MS

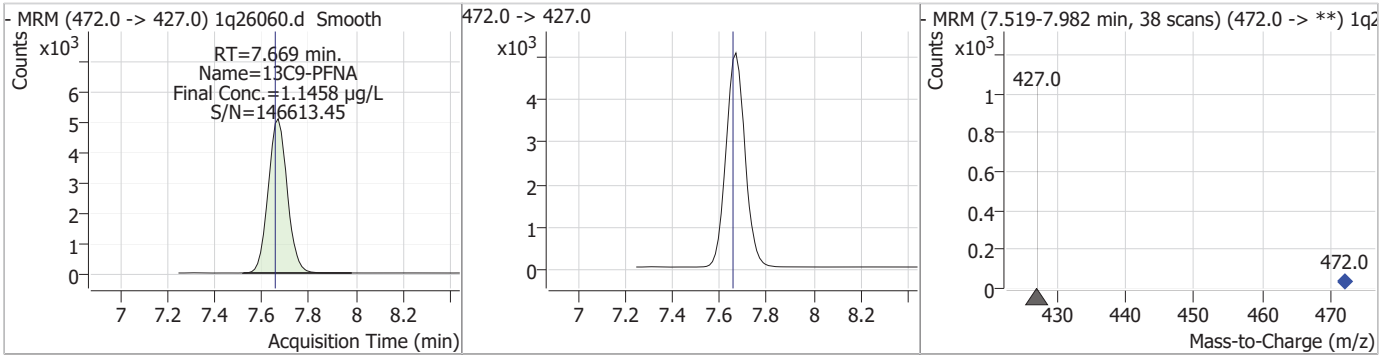
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	4.40	7.28	0.00	25130 (m)	399.0 -> 99.0	53.2	25.6	76.7



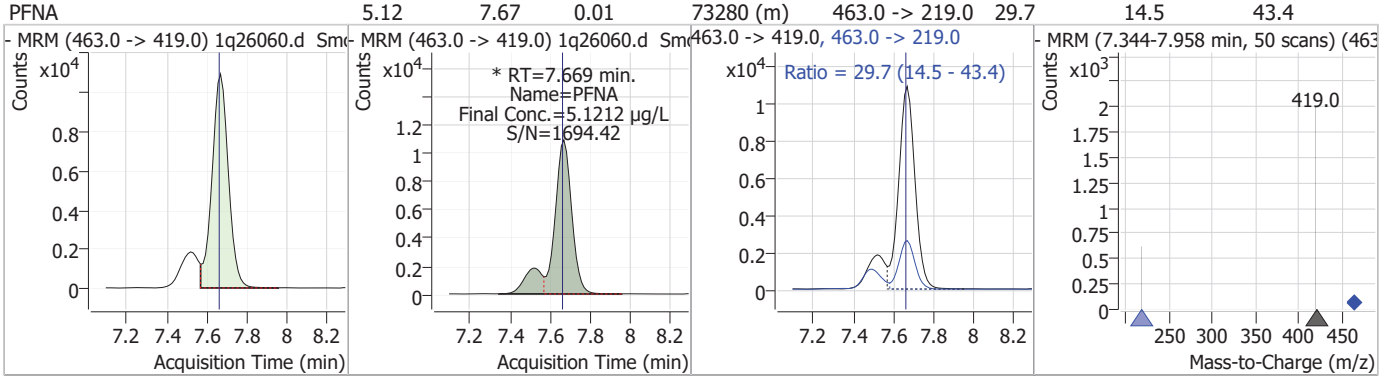
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	139.20	7.51	0.03	698344	441.0 -> 317.0	44.3	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.15	7.67	0.01	28529				

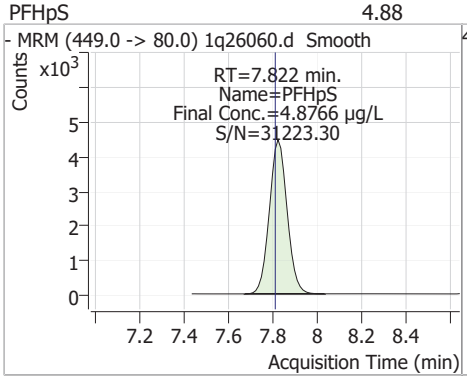


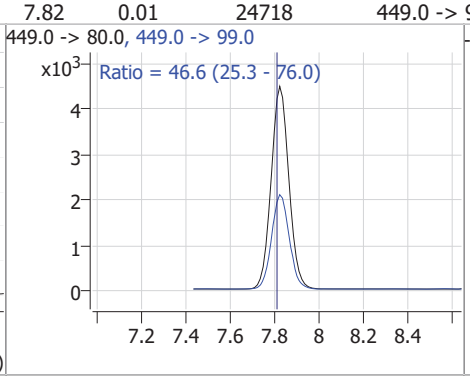
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	5.12	7.67	0.01	73280 (m)	463.0 -> 219.0	29.7	14.5	43.4

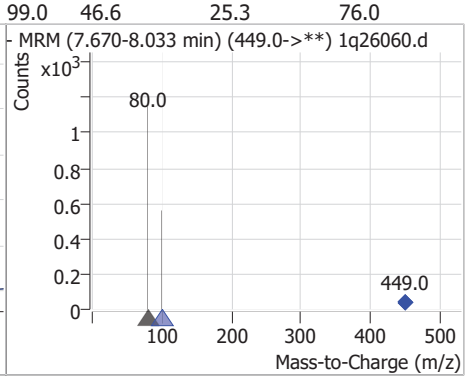


Perfluorinated Compounds by LC/MS/MS

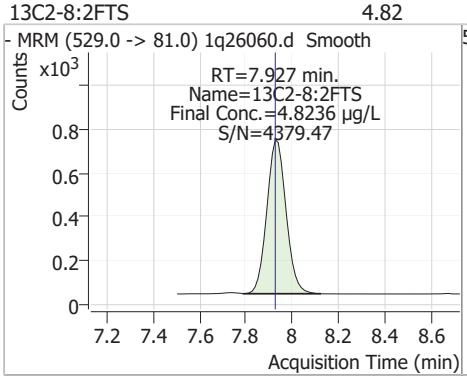
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	4.88	7.82	0.01	24718	449.0 -> 99.0	46.6	25.3	76.0

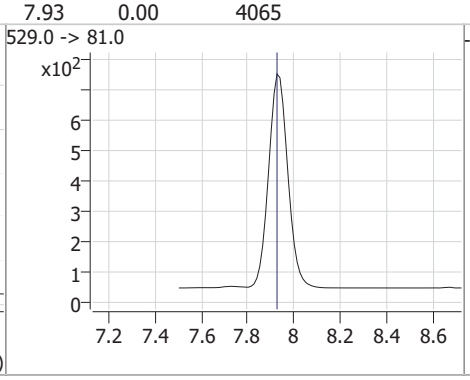


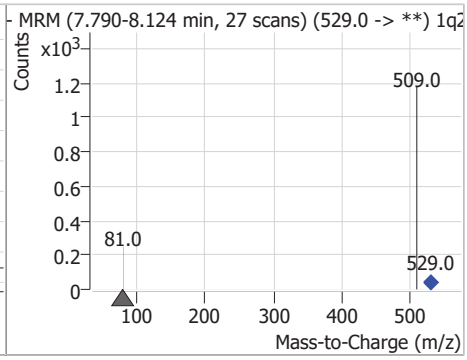




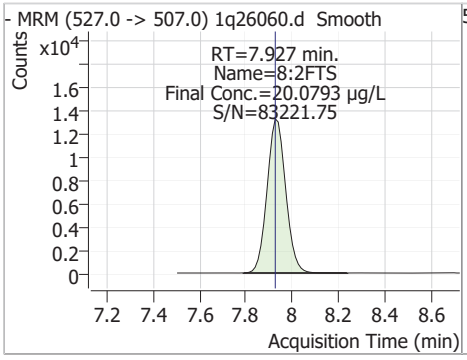
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.82	7.93	0.00	4065				

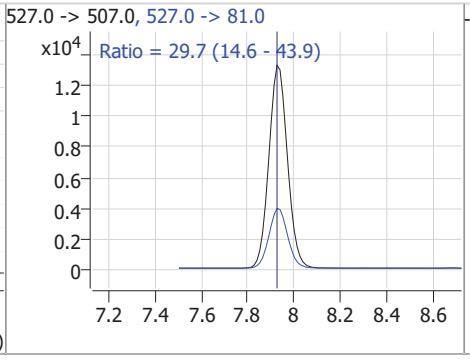


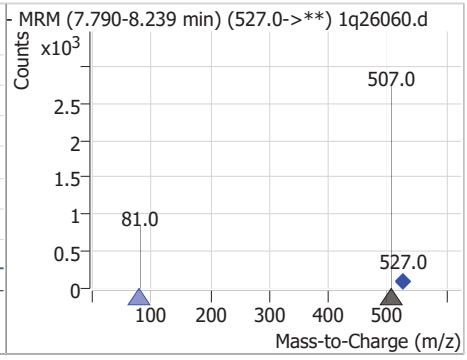




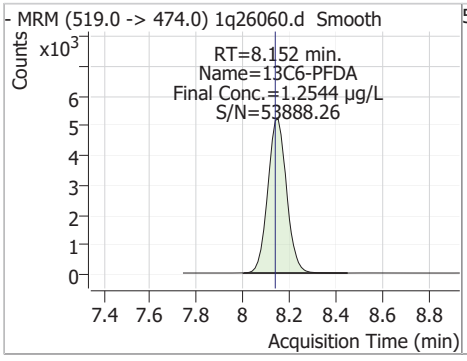
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	20.08	7.93	0.00	74213	527.0 -> 81.0	29.7	14.6	43.9

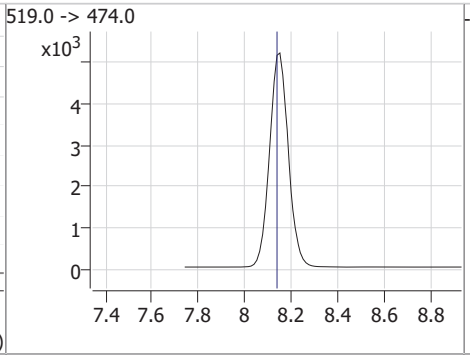


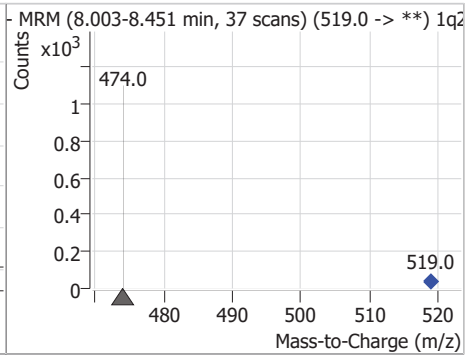




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.25	8.15	0.01	29073				

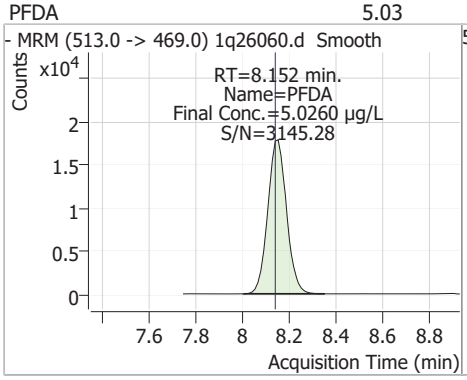


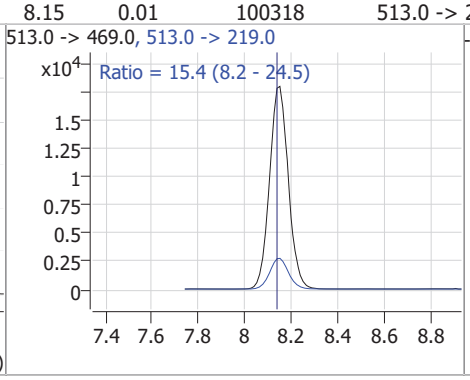


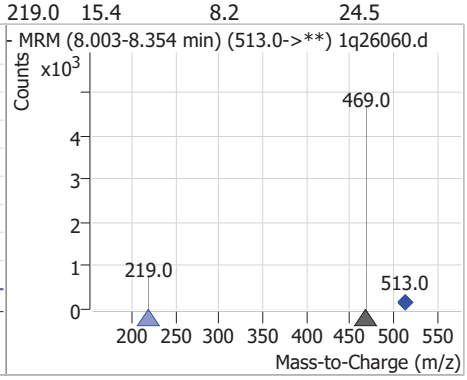


Perfluorinated Compounds by LC/MS/MS

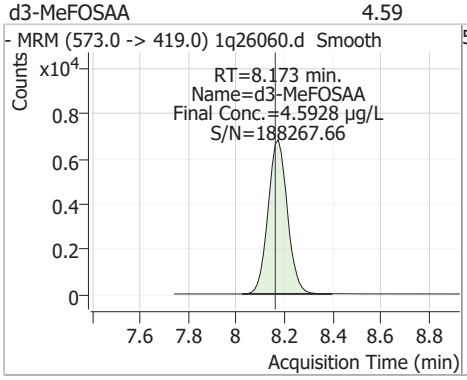
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	5.03	8.15	0.01	100318	513.0 -> 219.0	15.4	8.2	24.5

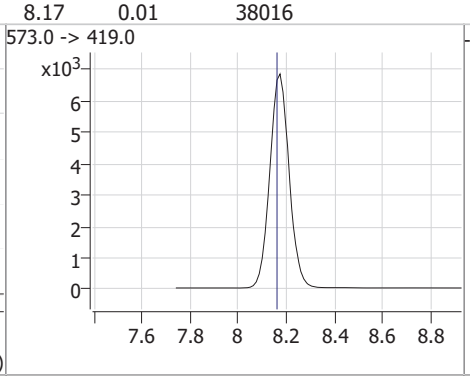


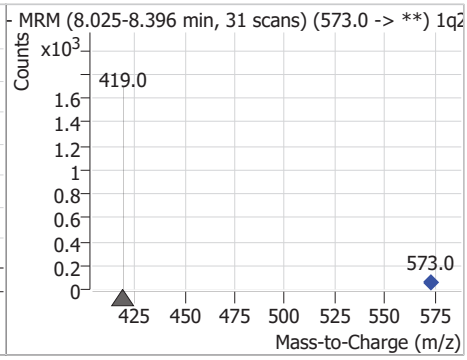




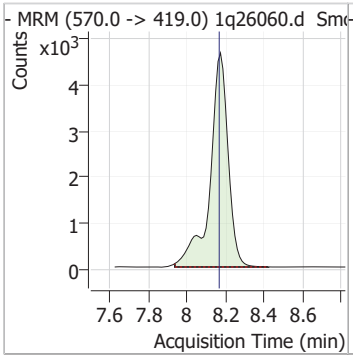
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.59	8.17	0.01	38016				

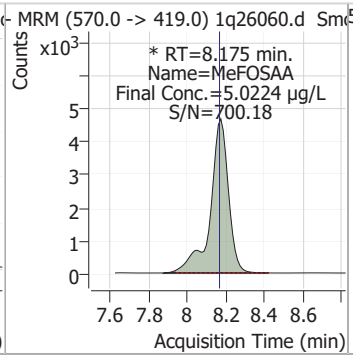


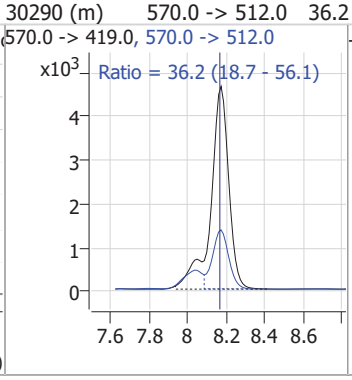


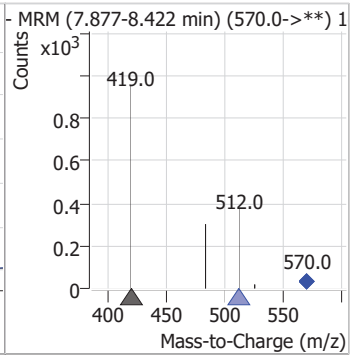


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	5.02	8.17	0.01	30290 (m)	570.0 -> 512.0	36.2	18.7	56.1

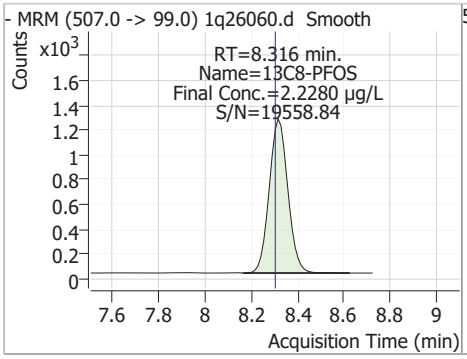


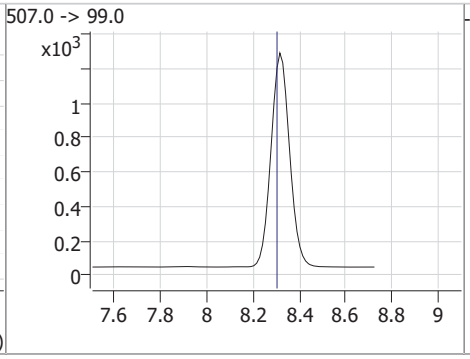


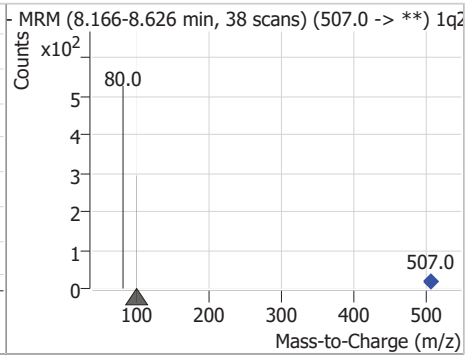




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.23	8.32	0.01	6968				





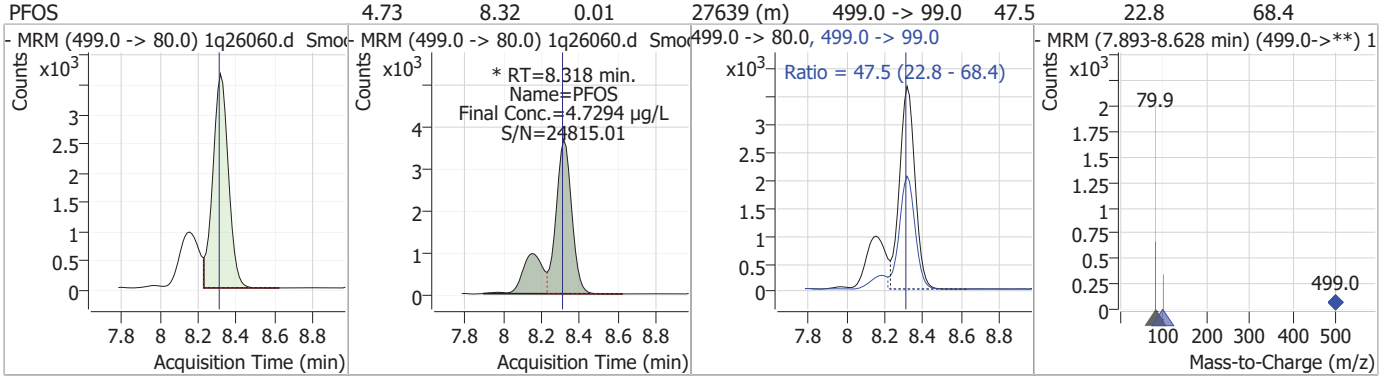


7.5.4

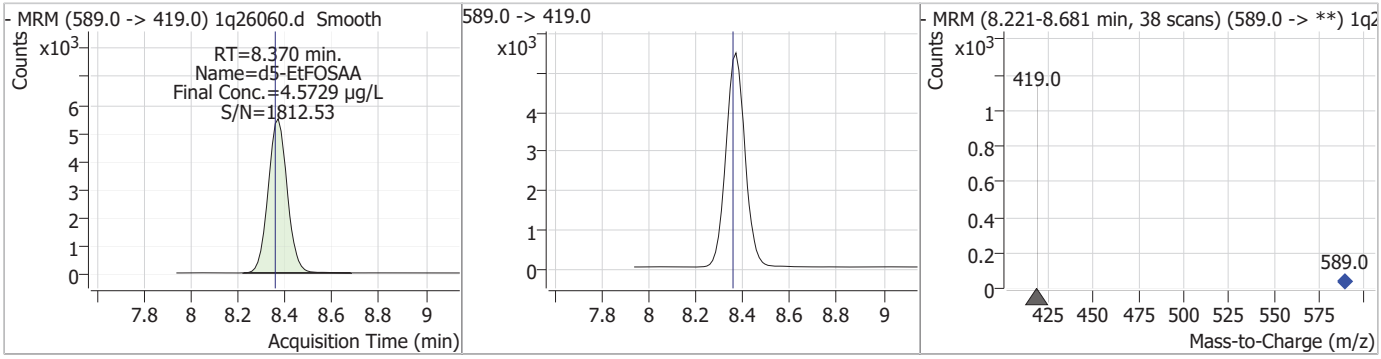
7

Perfluorinated Compounds by LC/MS/MS

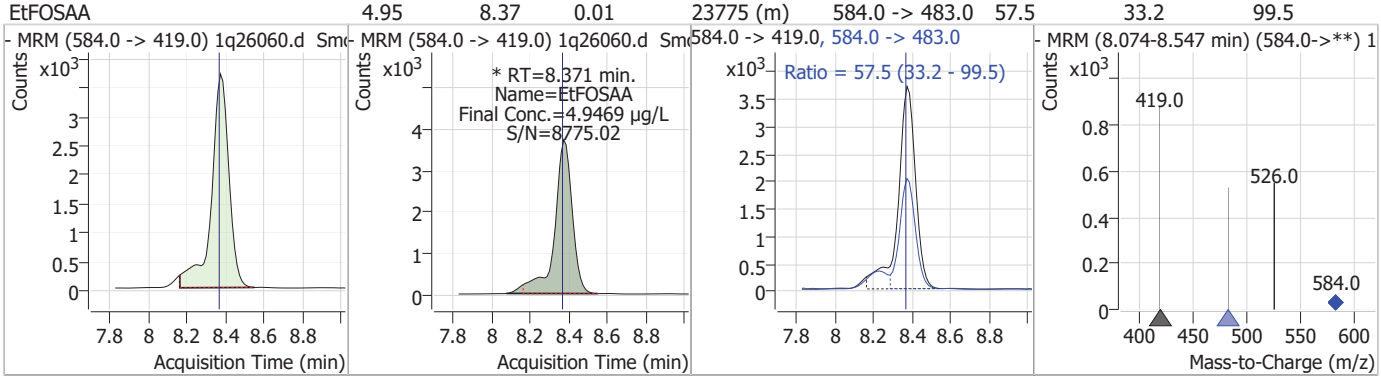
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.73	8.32	0.01	27639 (m)	499.0 -> 99.0	47.5	22.8	68.4



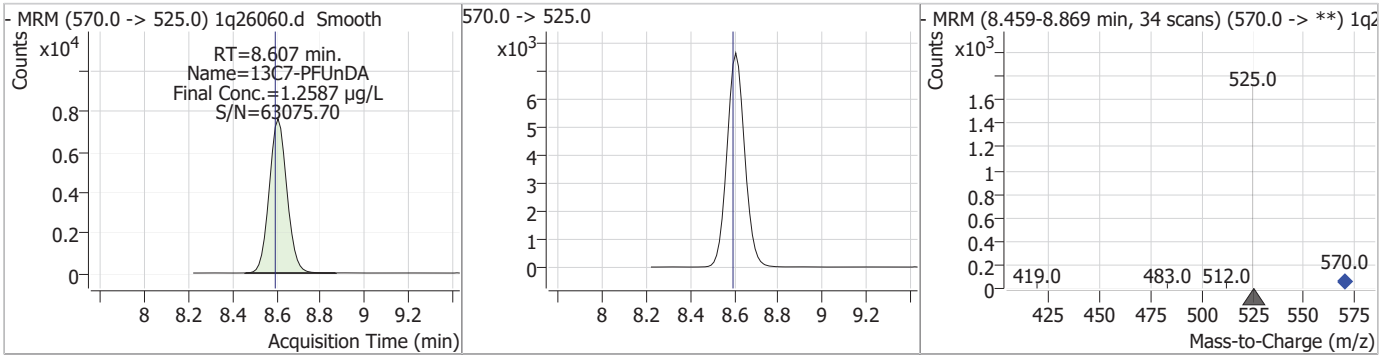
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.57	8.37	0.01	30817				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	4.95	8.37	0.01	23775 (m)	584.0 -> 483.0	57.5	33.2	99.5

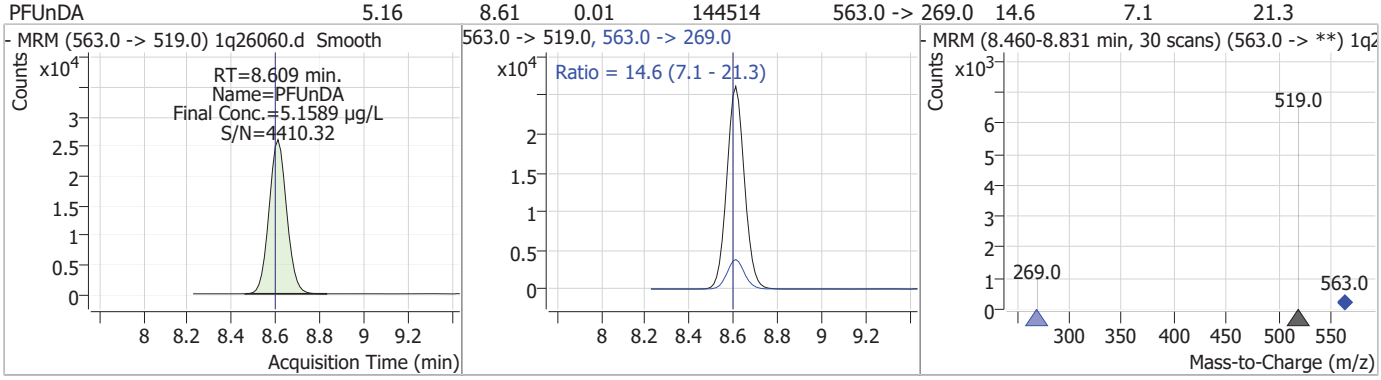


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.26	8.61	0.01	42344				

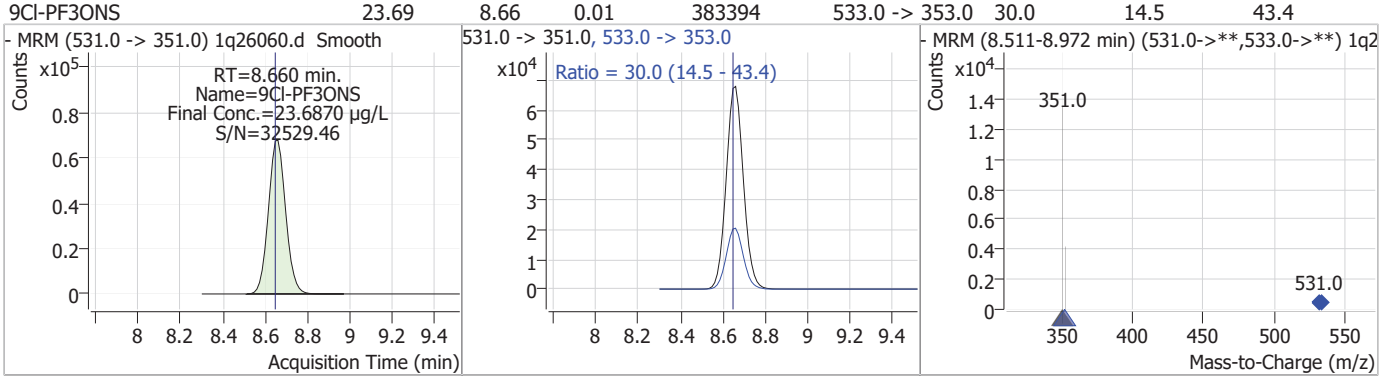


Perfluorinated Compounds by LC/MS/MS

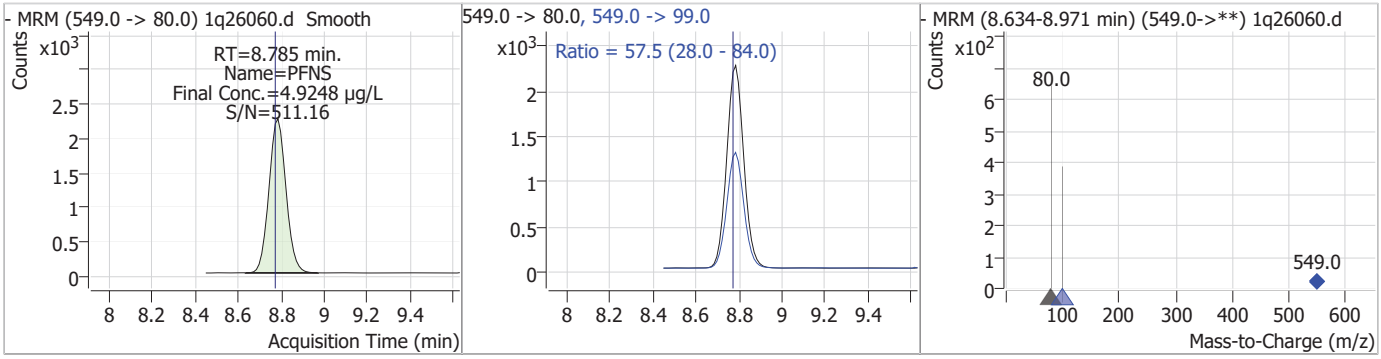
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	5.16	8.61	0.01	144514	563.0 -> 269.0	14.6	7.1	21.3



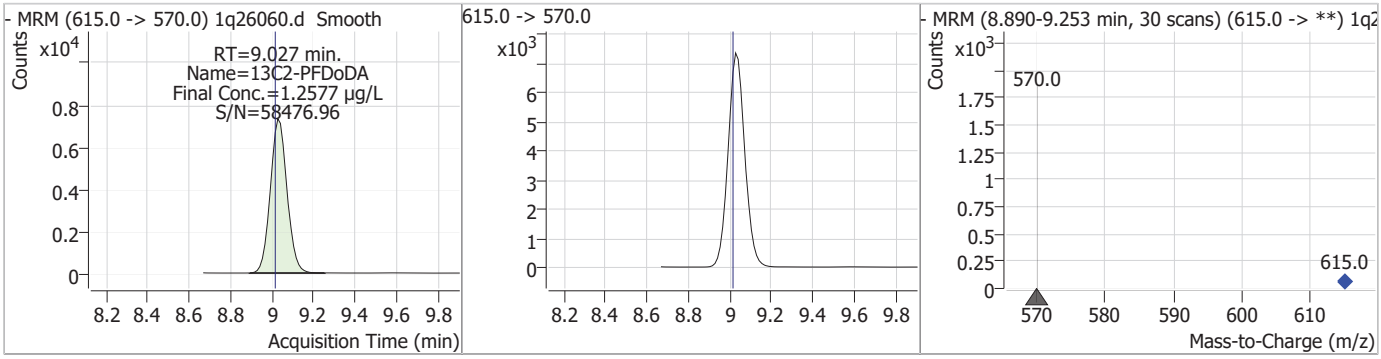
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	23.69	8.66	0.01	383394	533.0 -> 353.0	30.0	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	4.92	8.78	0.01	12357	549.0 -> 99.0	57.5	28.0	84.0

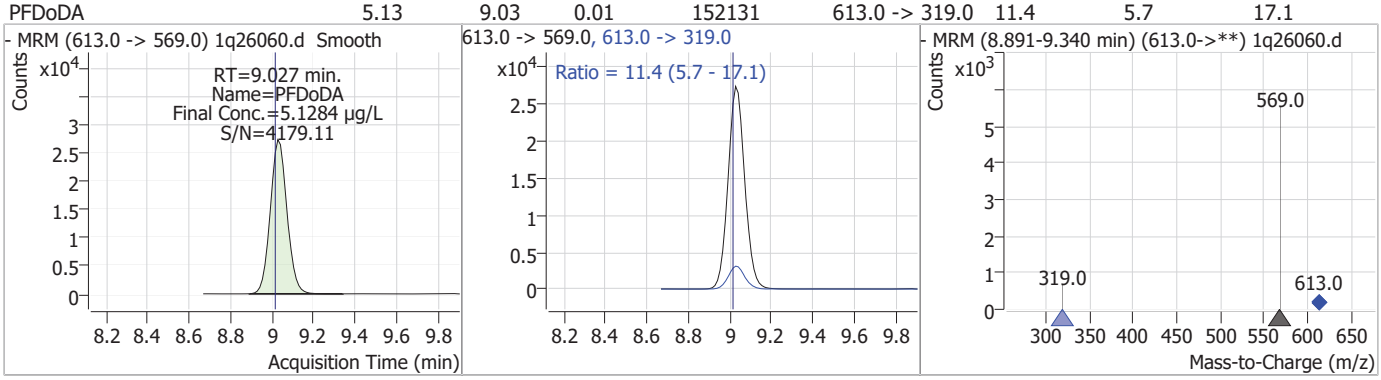


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.26	9.03	0.01	40821				

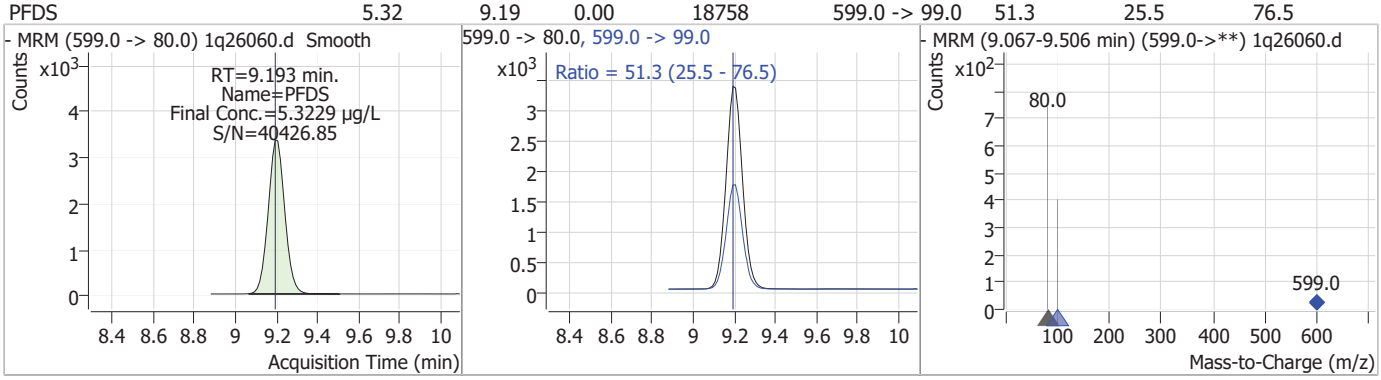


Perfluorinated Compounds by LC/MS/MS

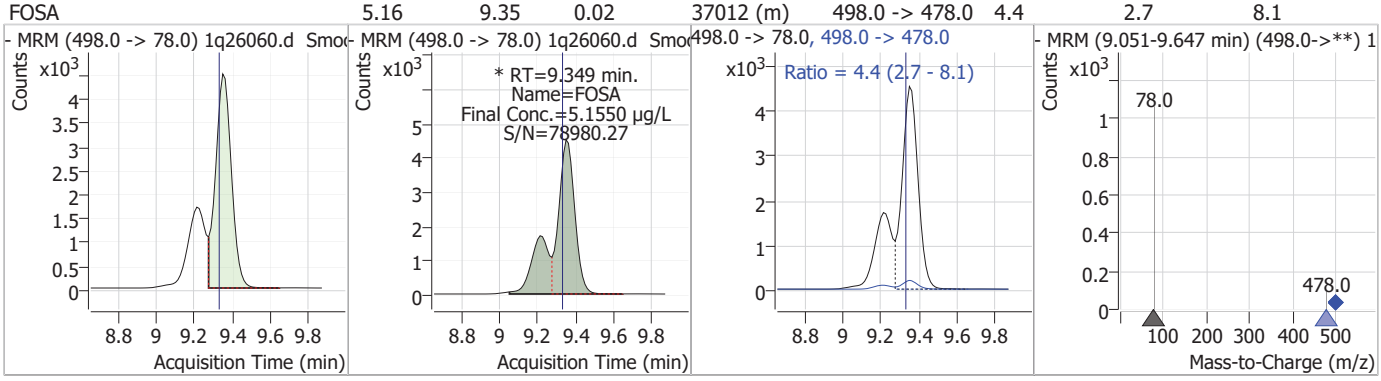
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	5.13	9.03	0.01	152131	613.0 -> 319.0	11.4	5.7	17.1



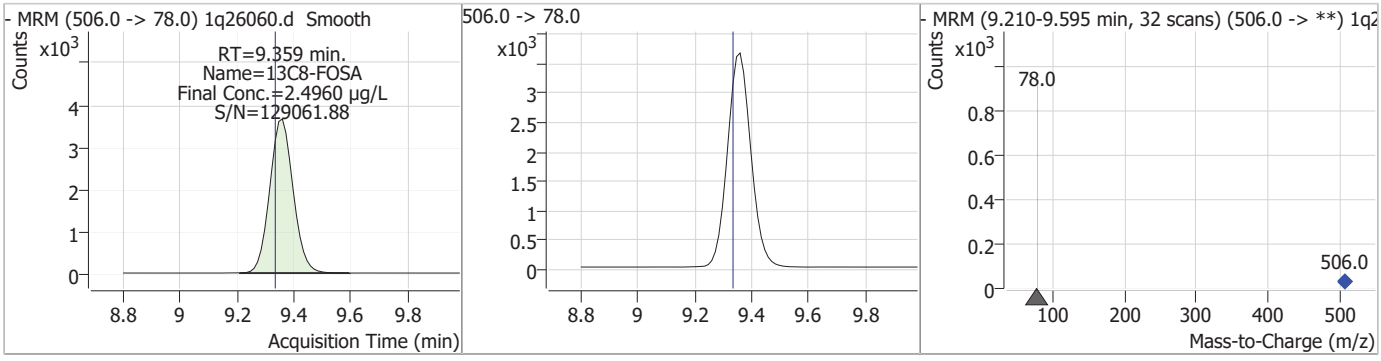
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	5.32	9.19	0.00	18758	599.0 -> 99.0	51.3	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	5.16	9.35	0.02	37012 (m)	498.0 -> 478.0	4.4	2.7	8.1

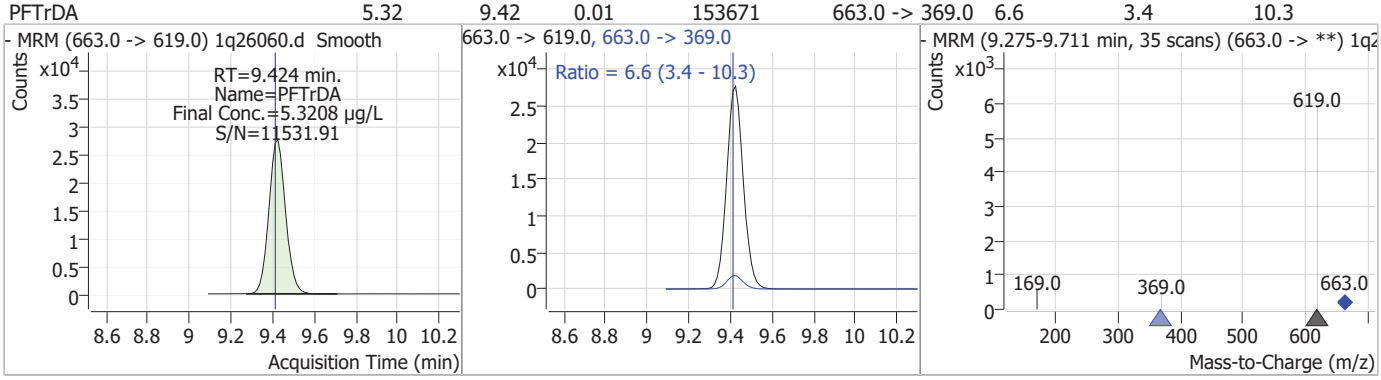


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.50	9.36	0.02	20716				

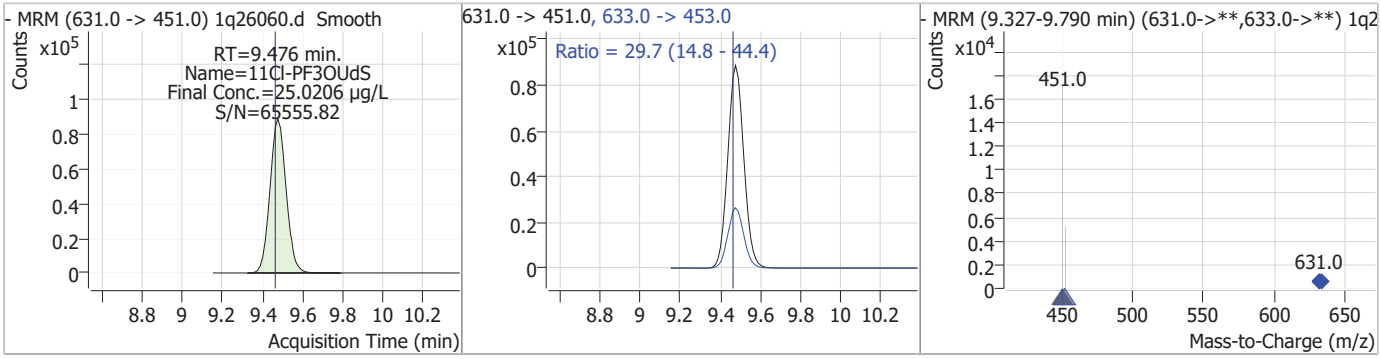


Perfluorinated Compounds by LC/MS/MS

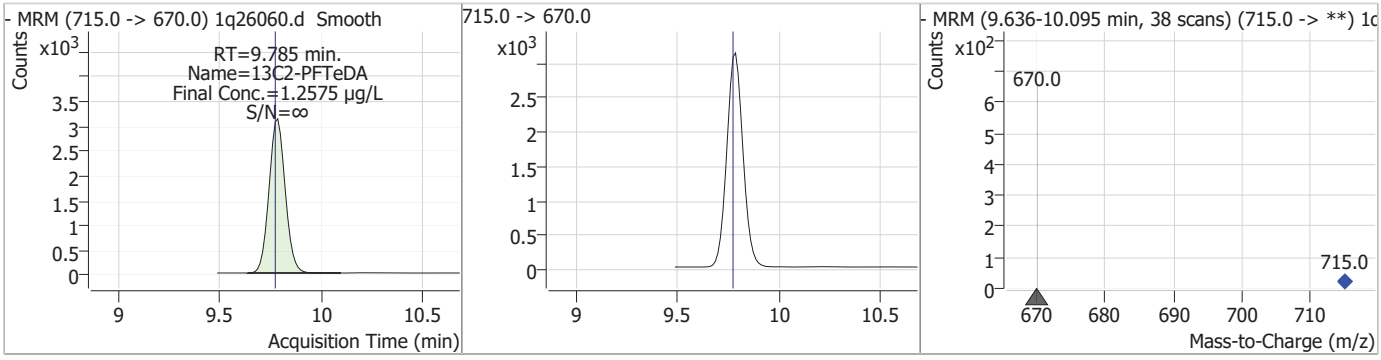
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	5.32	9.42	0.01	153671	663.0 -> 369.0	6.6	3.4	10.3



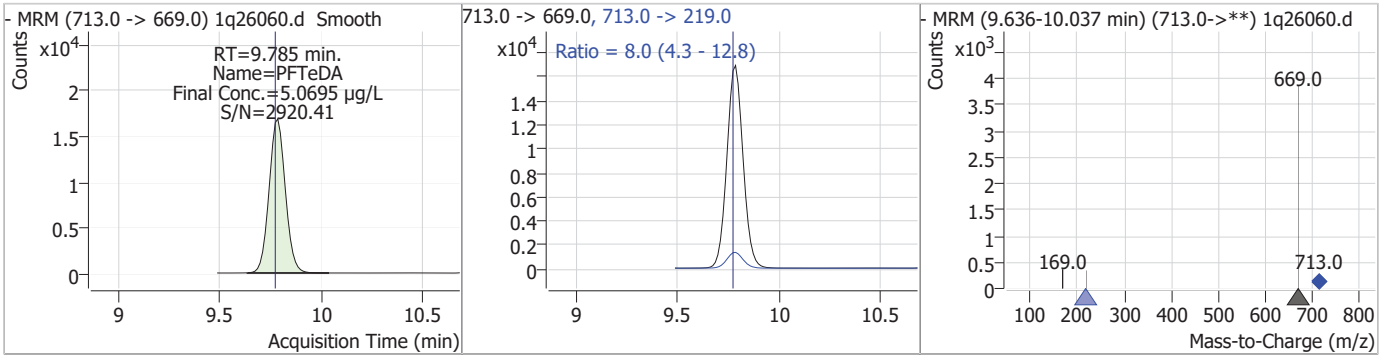
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	25.02	9.48	0.01	494071	633.0 -> 453.0	29.7	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.26	9.78	0.01	17173				

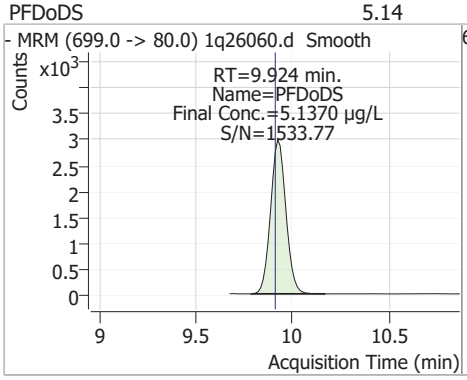


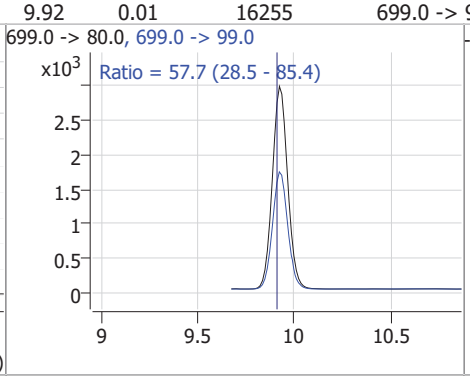
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	5.07	9.79	0.01	93767	713.0 -> 219.0	8.0	4.3	12.8

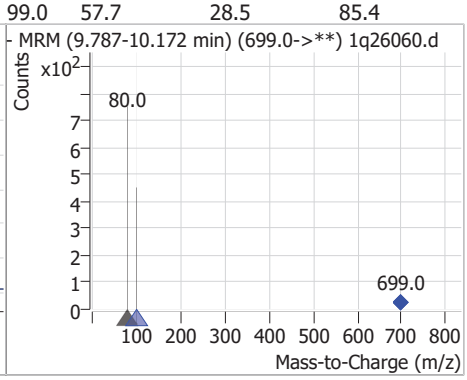


Perfluorinated Compounds by LC/MS/MS

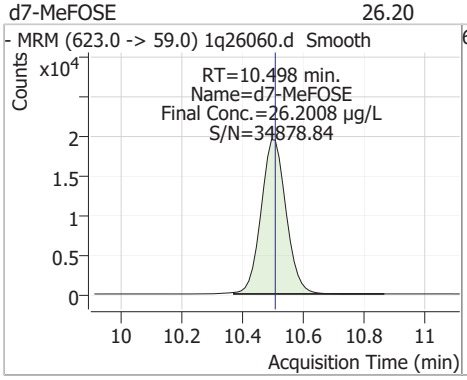
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	5.14	9.92	0.01	16255	699.0 -> 99.0	57.7	28.5	85.4

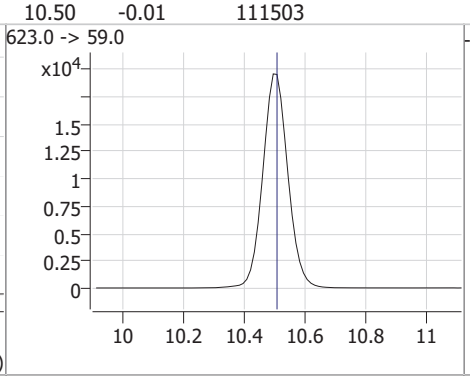


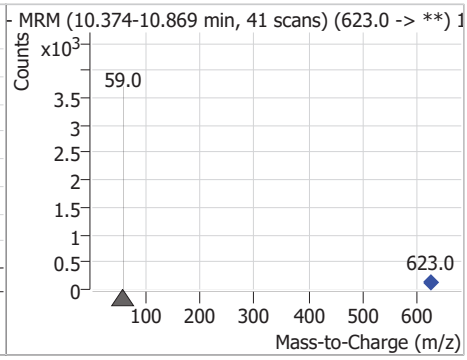




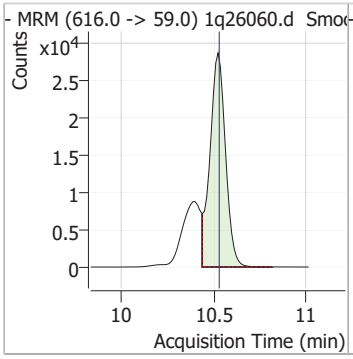
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	26.20	10.50	-0.01	111503				

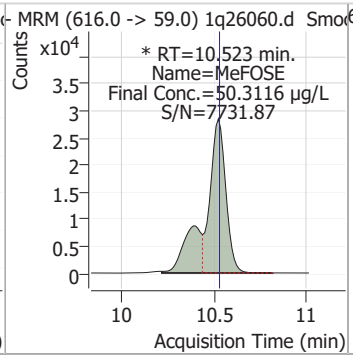


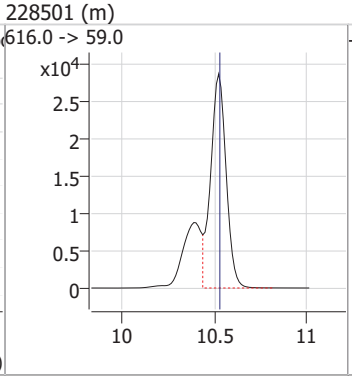


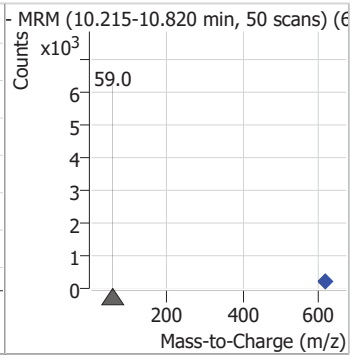


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	50.31	10.52	0.00	228501 (m)				

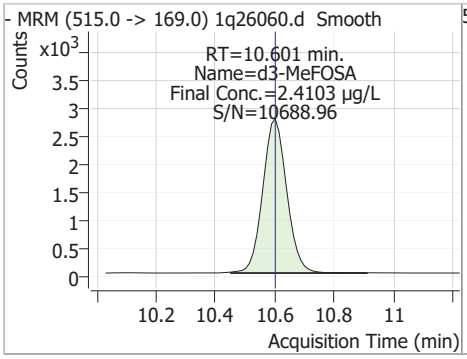


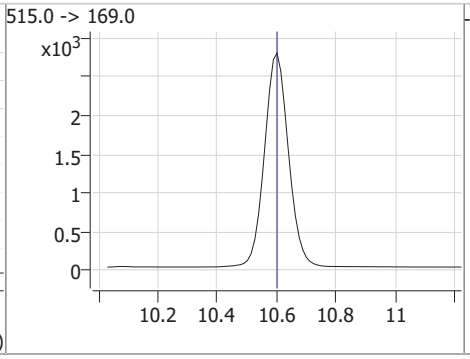


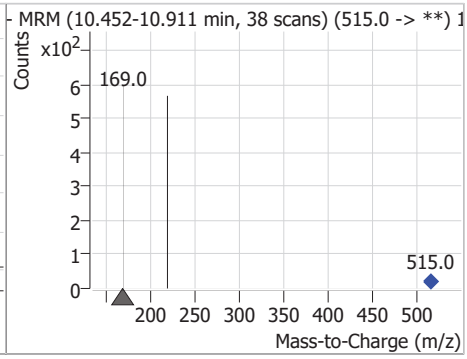




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.41	10.60	0.00	15506				







7.5.4

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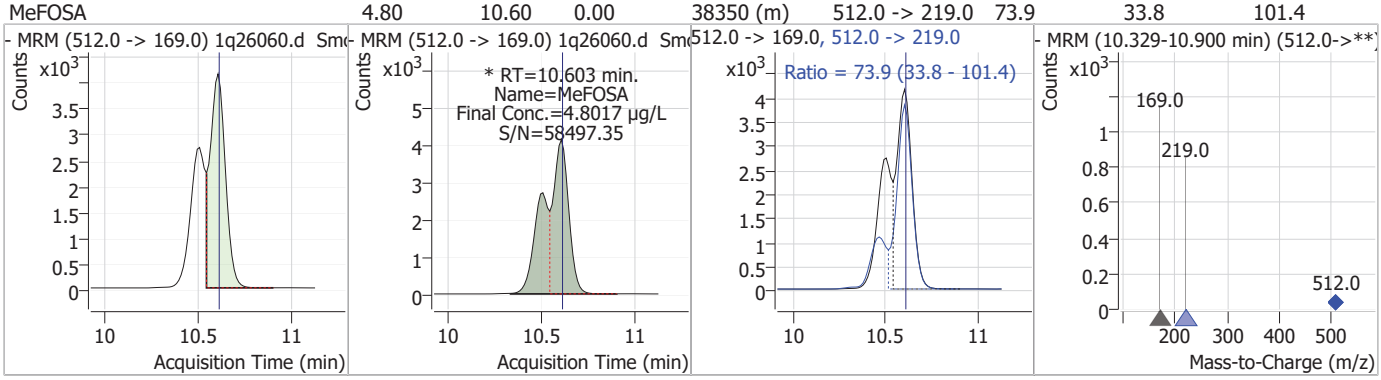
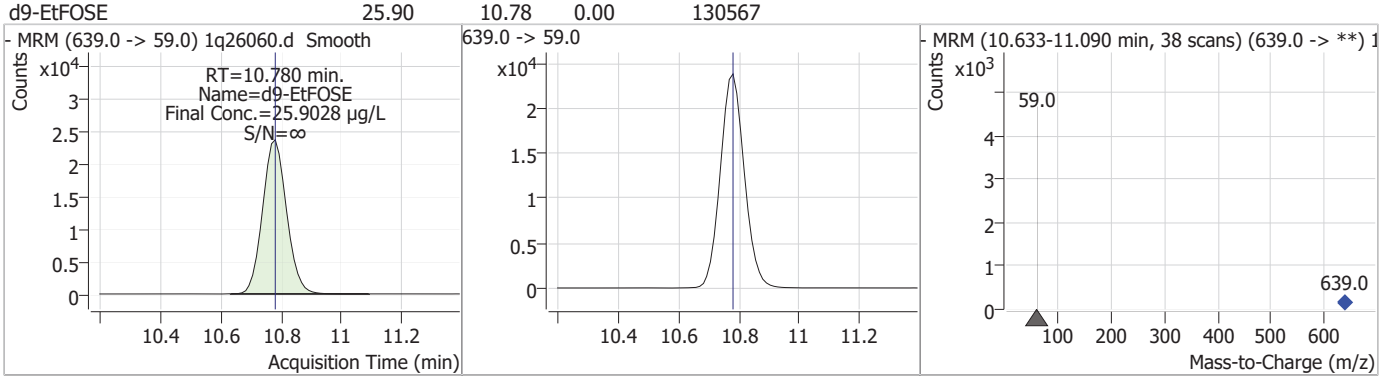
Perfluorinated Compounds by LC/MS/MS

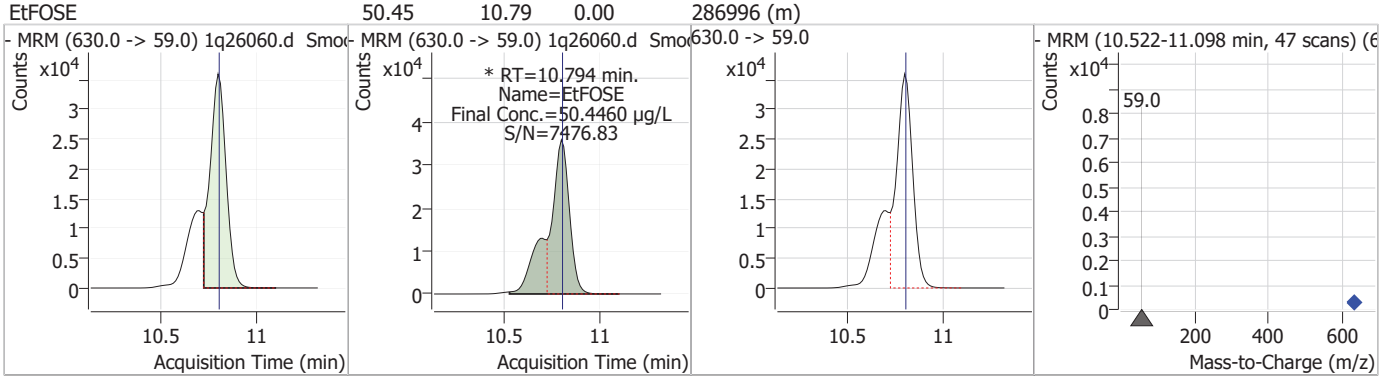
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	4.80	10.60	0.00	38350 (m)	512.0 -> 219.0	73.9	33.8	101.4



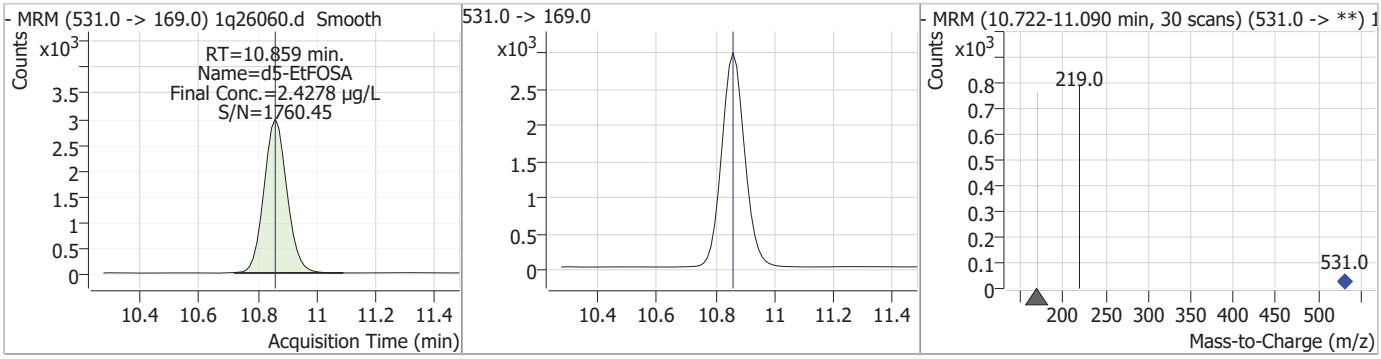
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.90	10.78	0.00	130567				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	50.45	10.79	0.00	286996 (m)				

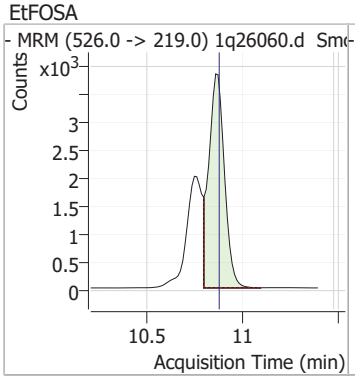


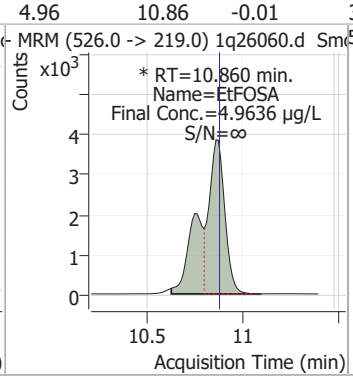
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.43	10.86	0.00	15959				

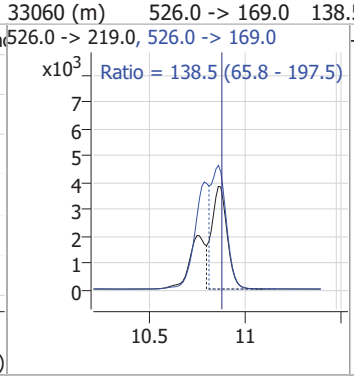


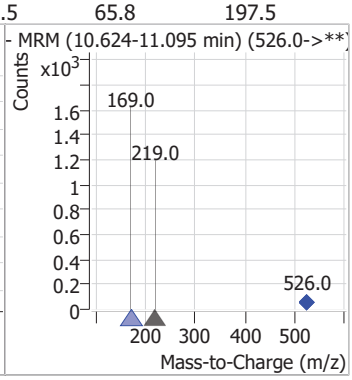
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	4.96	10.86	-0.01	33060 (m)	526.0 -> 169.0	138.5	65.8	197.5









Manual Integration Approval Summary

Sample Number: T1Q362-RT
Lab FileID: 1Q26060.D
Injection Time: 05/15/25 10:46
Method: EPA 1633
Analyst approved: 05/16/25 02:49 Alodia Hana Barrogo
Supervisor approved: 05/16/25 06:10 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.67	Split peak
MeFOSAA	2355-31-9		8.18	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Poor instrument integration
PFOSA	754-91-6		9.35	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSE	1691-99-2		10.79	Split peak
EtFOSA	4151-50-2		10.86	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/12/25 09:51

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33660.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/9/2025 2:42:22 PM
Sample Name : RT
Vial : P1-A6
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q344.batch.bin
Sample Information : OP62666,T2Q344,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	120318	10.00 µg/L	0.000
M5-PFPeA	4.637	268.0 -> 223.0	63301	5.00 µg/L	0.000
M5-PFHxA	5.745	318.0 -> 273.0	38106	2.50 µg/L	0.000
M4-PFHpA	6.540	367.0 -> 322.0	30975	2.50 µg/L	0.000
M8-PFOA	7.124	421.0 -> 376.0	64961	2.50 µg/L	0.000
M9-PFNA	7.644	472.0 -> 427.0	25323	1.25 µg/L	0.000
M6-PFDA	8.127	519.0 -> 474.0	18837	1.25 µg/L	-0.013
M7-PFUnDA	8.608	570.0 -> 525.0	28997	1.25 µg/L	0.000
M2-PFDoDA	9.028	615.0 -> 570.0	27583	1.25 µg/L	-0.012
M2-PFTeDA	9.796	715.0 -> 670.0	23632	1.25 µg/L	0.000
M8-FOSA	9.345	506.0 -> 78.0	20521	2.50 µg/L	0.000
M3-PFBS	5.699	302.0 -> 99.0	6017	2.50 µg/L	0.000
M3-PFHxS	7.250	402.0 -> 99.0	7174	2.50 µg/L	0.000
M8-PFOS	8.315	507.0 -> 99.0	6939	2.50 µg/L	0.000
M2-4:2FTS	5.433	329.0 -> 81.0	1600	5.00 µg/L	0.000
M2-6:2FTS	6.897	429.0 -> 81.0	3190	5.00 µg/L	-0.012
M2-8:2FTS	7.914	529.0 -> 81.0	4845	5.00 µg/L	0.000
M3-MeFOSAA	8.160	573.0 -> 419.0	40042	5.00 µg/L	0.000
M3-HFPO-DA	6.074	287.0 -> 169.0	24133	10.00 µg/L	0.000
M5-EtFOSAA	8.356	589.0 -> 419.0	34428	5.00 µg/L	0.000
M7-MeFOSE	10.520	623.0 -> 59.0	178088	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	251747	25.00 µg/L	0.000
M5-EtFOSA	10.882	531.0 -> 169.0	16583	2.50 µg/L	-0.012
M3-MeFOSA	10.624	515.0 -> 169.0	15721	2.50 µg/L	0.000
13C4-PFOS	8.316	503.0 -> 80.0	12551	2.50 µg/L	0.000
13C3-PFBA	3.265	216.0 -> 172.0	51506	5.00 µg/L	0.000
18O2-PFHxS	7.250	403.0 -> 84.0	8238	2.50 µg/L	-0.012
13C4-PFOA	7.124	417.0 -> 372.0	64707	2.50 µg/L	0.000
13C2-PFDA	8.127	515.0 -> 470.0	17880	1.25 µg/L	-0.013
13C5-PFNA	7.645	468.0 -> 423.0	23658	1.25 µg/L	0.000
13C2-PFHxA	5.746	315.0 -> 270.0	33619	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.433	329.0 -> 81.0	1600	5.37 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.4%	
13C2-6:2FTS	6.897	429.0 -> 81.0	3190	4.95 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.0%	
13C2-8:2FTS	7.914	529.0 -> 81.0	4845	4.66 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.2%	
13C2-PFDoDA	9.028	615.0 -> 570.0	27583	1.13 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.3%	
13C2-PFTeDA	9.796	715.0 -> 670.0	23632	1.25 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.7%	
13C3-PFBS	5.699	302.0 -> 99.0	6017	2.59 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.8%	
13C3-PFHxS	7.250	402.0 -> 99.0	7174	2.56 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.2%		
13C4-PFBA	3.263	217.0 -> 172.0	120318	9.93 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.3%		
13C4-PFHpA	6.540	367.0 -> 322.0	30975	2.64 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.7%		
13C5-PFHxA	5.745	318.0 -> 273.0	38106	2.59 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.5%		
13C5-PFPeA	4.637	268.0 -> 223.0	63301	5.04 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.9%		
13C6-PFDA	8.127	519.0 -> 474.0	18837	1.27 µg/L		-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.2%		
13C7-PFUnDA	8.608	570.0 -> 525.0	28997	1.24 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.4%		
13C8-FOSA	9.345	506.0 -> 78.0	20521	2.36 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.6%		
13C8-PFOA	7.124	421.0 -> 376.0	64961	2.45 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.1%		
13C8-PFOS	8.315	507.0 -> 99.0	6939	2.54 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.4%		
13C9-PFNA	7.644	472.0 -> 427.0	25323	1.23 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.1%		
d3-MeFOSAA	8.160	573.0 -> 419.0	40042	4.47 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 89.4%		
13C3-HFPO-DA	6.074	287.0 -> 169.0	24133	10.44 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 104.4%		
d3-MeFOSA	10.624	515.0 -> 169.0	15721	2.33 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.1%		
d5-EtFOSAA	8.356	589.0 -> 419.0	34428	4.76 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.2%		
d7-MeFOSE	10.520	623.0 -> 59.0	178088	24.13 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 96.5%		
d9-EtFOSE	10.803	639.0 -> 59.0	251747	24.31 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.2%		
d5-EtFOSA	10.882	531.0 -> 169.0	16583	2.44 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.4%		
Target Compounds						QValue
4:2FTS	5.433	327.0 -> 307.0	38511	16.64 µg/L		97
		327.0 -> 81.0	21249			
6:2FTS	6.898	427.0 -> 407.0	75316	19.90 µg/L		99
		427.0 -> 81.0	28113			
8:2FTS	7.915	527.0 -> 507.0	71535	20.33 µg/L		97
		527.0 -> 81.0	28926			
EtFOSAA	8.357	584.0 -> 419.0	26701	4.88 µg/L	m	96
		584.0 -> 483.0	13490			
FOSA	9.335	498.0 -> 78.0	35449	5.07 µg/L	m	98
		498.0 -> 478.0	1637			
MeFOSAA	8.161	570.0 -> 419.0	30511	5.15 µg/L	m	98
		570.0 -> 512.0	9318			
PFBA	3.255	213.0 -> 169.0	61914	19.49 µg/L		100
PFBS	5.700	299.0 -> 80.0	31541	4.16 µg/L		100
		299.0 -> 99.0	11438			
PFDA	8.128	513.0 -> 469.0	68186	4.69 µg/L		98
		513.0 -> 219.0	12366			
PFDoDA	9.029	613.0 -> 569.0	105240	5.28 µg/L		100
		613.0 -> 319.0	16260			
PFDS	9.206	599.0 -> 80.0	16970	4.65 µg/L		97

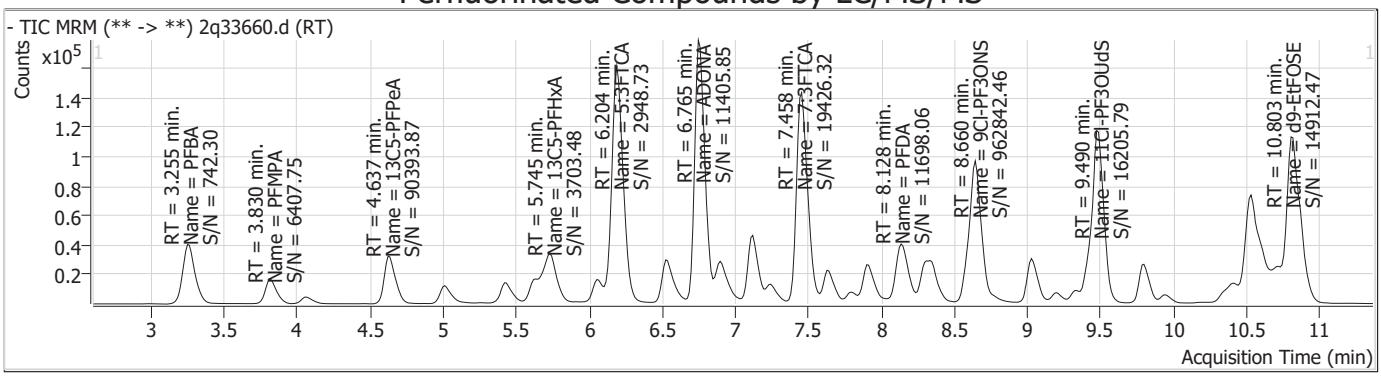
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	7723				
PFHpA	6.541	363.0 -> 319.0	94031	4.72	µg/L		100
		363.0 -> 169.0	16853				
PFHpS	7.809	449.0 -> 80.0	22651	4.48	µg/L		91
		449.0 -> 99.0	10182				
PFHxA	5.748	313.0 -> 269.0	62697	4.86	µg/L		100
		313.0 -> 119.0	1964				
PFHxS	7.252	399.0 -> 80.0	22598	4.18	µg/L	m	95
		399.0 -> 99.0	11578				
PFNA	7.645	463.0 -> 419.0	57733	5.12	µg/L	m	95
		463.0 -> 219.0	14680				
PFNS	8.784	549.0 -> 80.0	10347	4.38	µg/L		88
		549.0 -> 99.0	5012				
PFOA	7.125	413.0 -> 369.0	96364	4.88	µg/L	m	99
		413.0 -> 169.0	21008				
PFOS	8.317	499.0 -> 80.0	26704	4.21	µg/L	m	98
		499.0 -> 99.0	12154				
PFPeA	4.640	263.0 -> 219.0	112857	10.08	µg/L		100
PFPeS	6.617	349.0 -> 80.0	12289	4.48	µg/L		98
		349.0 -> 99.0	5220				
PFTeDA	9.796	713.0 -> 669.0	93992	4.72	µg/L		99
		713.0 -> 169.0	7792				
PFTrDA	9.426	663.0 -> 619.0	126616	5.41	µg/L		98
		663.0 -> 169.0	13057				
PFUnDA	8.597	563.0 -> 519.0	94438	4.78	µg/L		95
		563.0 -> 269.0	16925				
11Cl-PF3OUdS	9.490	631.0 -> 451.0	411321	19.41	µg/L		100
		633.0 -> 453.0	123305				
9Cl-PF3ONS	8.660	531.0 -> 351.0	328625	19.31	µg/L		99
		533.0 -> 353.0	91605				
ADONA	6.765	377.0 -> 251.0	673576	18.67	µg/L		100
		377.0 -> 85.0	210781				
HFPO-DA	6.075	285.0 -> 169.0	47093	19.99	µg/L		94
		285.0 -> 185.0	4984				
3:3FTCA	4.065	241.0 -> 177.0	23193	25.33	µg/L		99
		241.0 -> 117.0	1599				
5:3FTCA	6.204	341.0 -> 237.0	415629	127.95	µg/L		98
		341.0 -> 217.0	288962				
7:3FTCA	7.458	441.0 -> 337.0	535610	126.72	µg/L		100
		441.0 -> 317.0	219356				
EtFOSA	10.895	526.0 -> 219.0	33303	4.85	µg/L		99
		526.0 -> 169.0	44912				
EtFOSE	10.817	630.0 -> 59.0	495716	50.76	µg/L		100
MeFOSA	10.613	512.0 -> 169.0	39256	5.11	µg/L		98
		512.0 -> 219.0	27011				
MeFOSE	10.544	616.0 -> 59.0	342250	52.36	µg/L	m	100
PFDoDS	9.948	699.0 -> 80.0	17093	4.57	µg/L		92
		699.0 -> 99.0	9348				
NFDHA	5.639	295.0 -> 201.0	11181	10.49	µg/L		94
		201.0 -> 85.0	63983				
		295.0 -> 85.0	3572				
PFMBA	5.015	279.0 -> 85.0	65049	9.90	µg/L		100
PFMPA	3.830	229.0 -> 85.0	95097	10.08	µg/L		100
PFEESA	6.168	315.0 -> 135.0	139782	8.79	µg/L		99
		315.0 -> 69.0	15465				

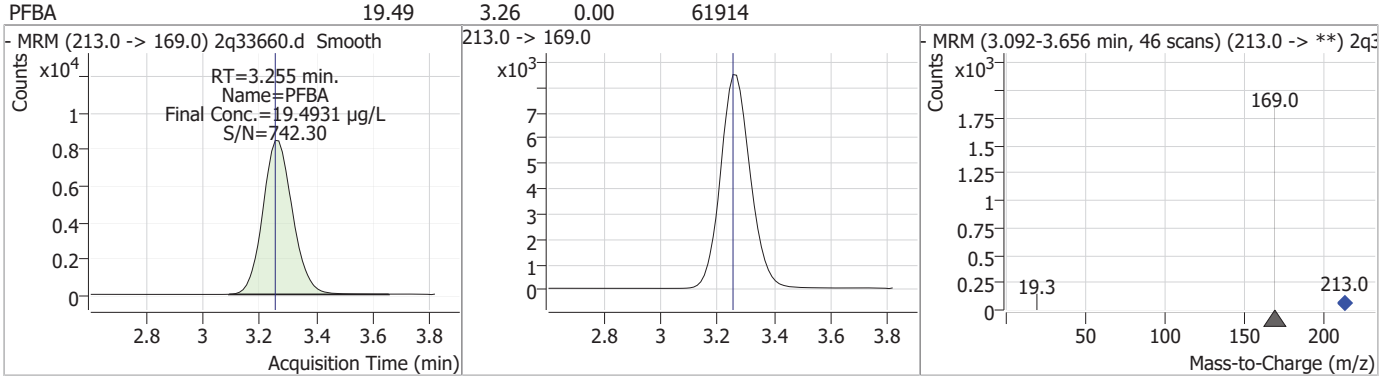
 # = Qualifier out of range, m = manually integrated, + = Area summed

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

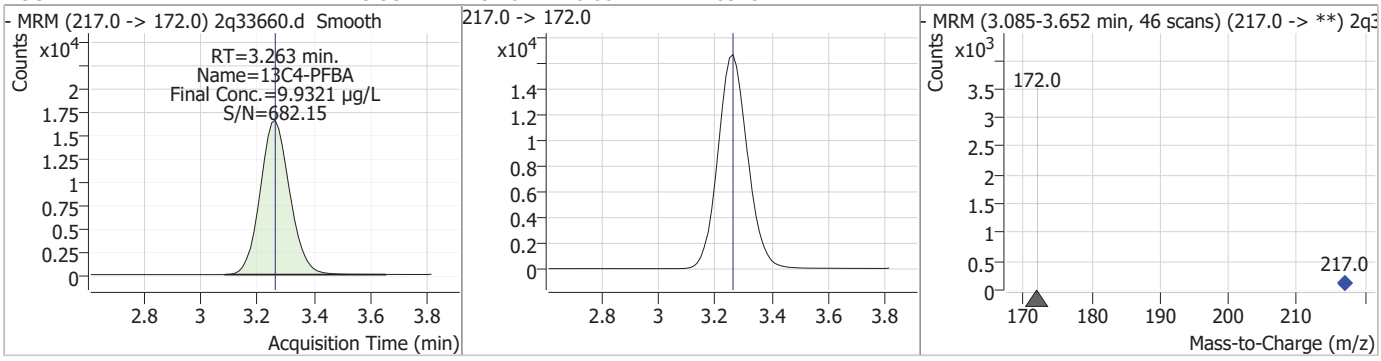
Perfluorinated Compounds by LC/MS/MS



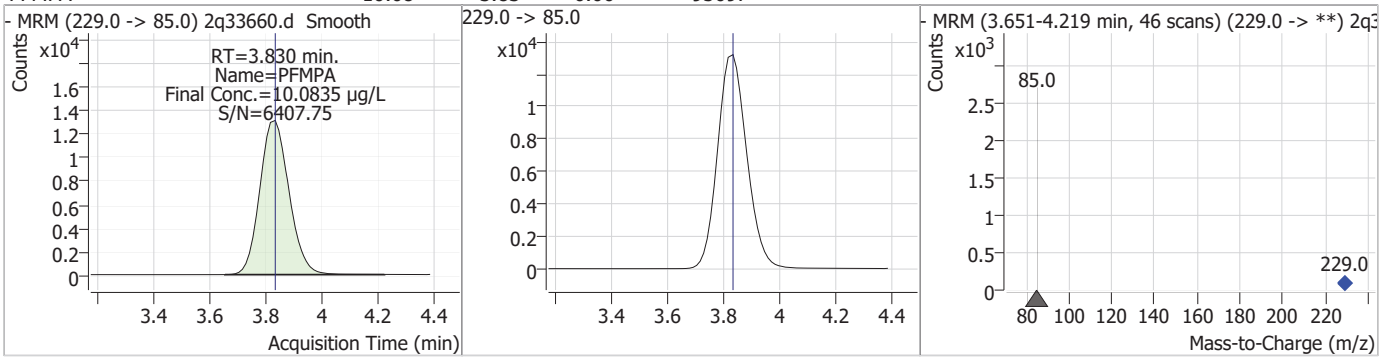
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	19.49	3.26	0.00	61914				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.93	3.26	0.00	120318				

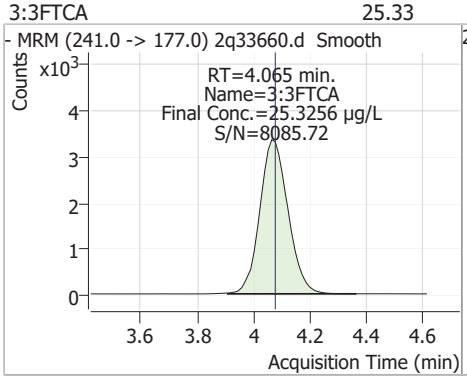


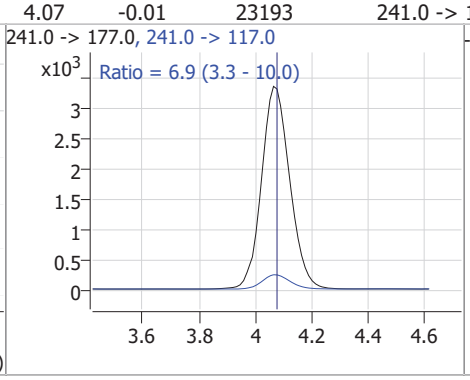
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	10.08	3.83	0.00	95097				

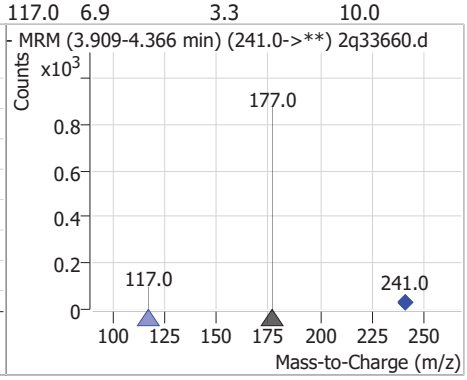


Perfluorinated Compounds by LC/MS/MS

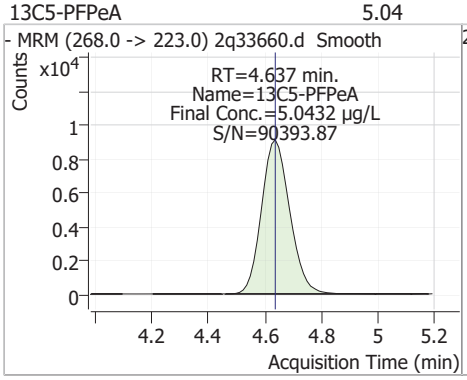
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	25.33	4.07	-0.01	23193	241.0 -> 117.0	6.9	3.3	10.0

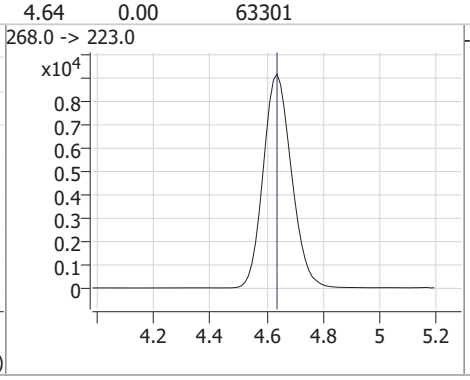


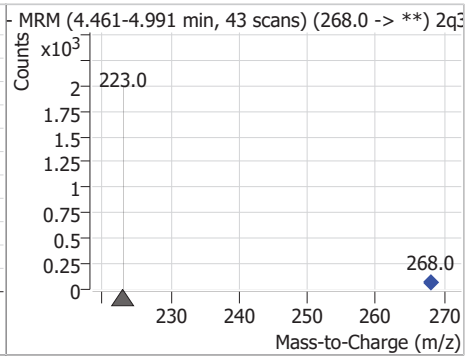




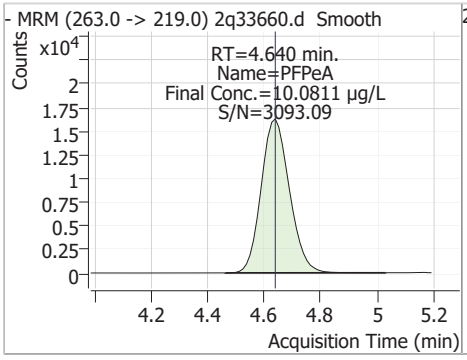
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.04	4.64	0.00	63301				

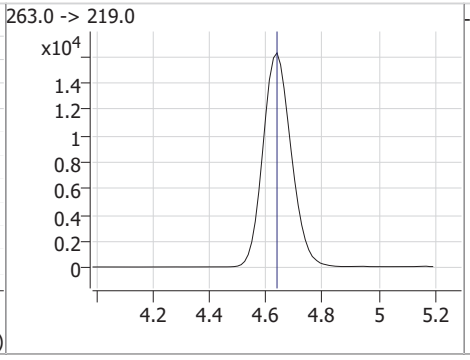


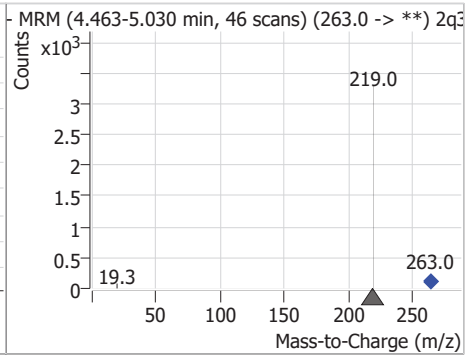




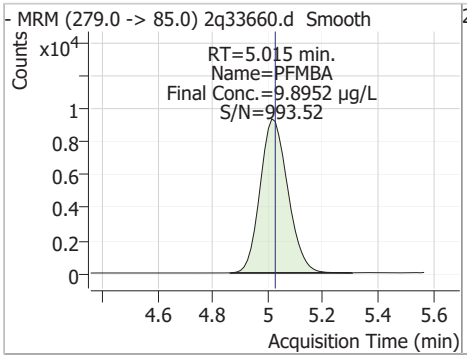
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	10.08	4.64	0.00	112857				

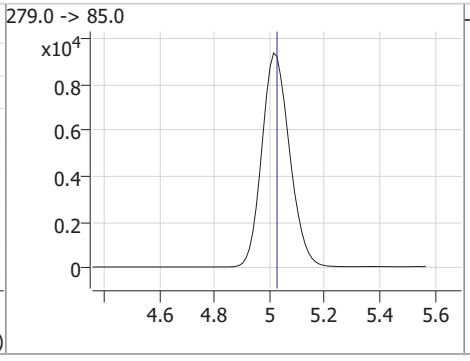


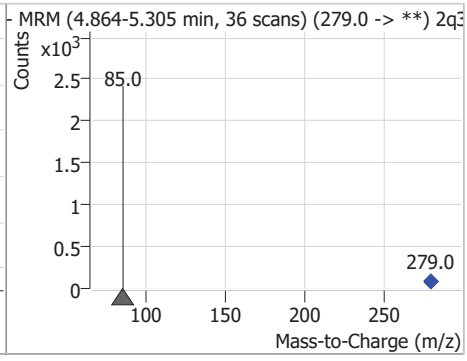




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	9.90	5.01	-0.01	65049				

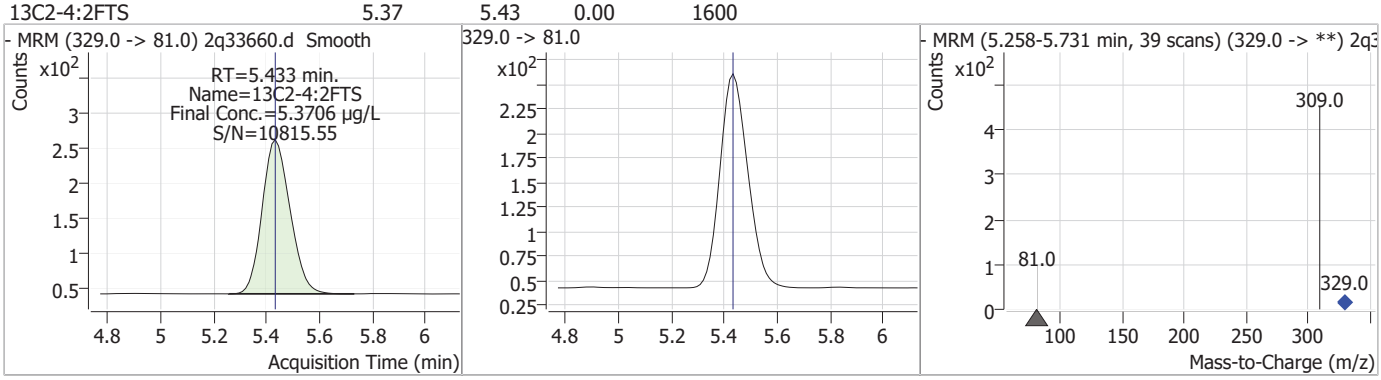




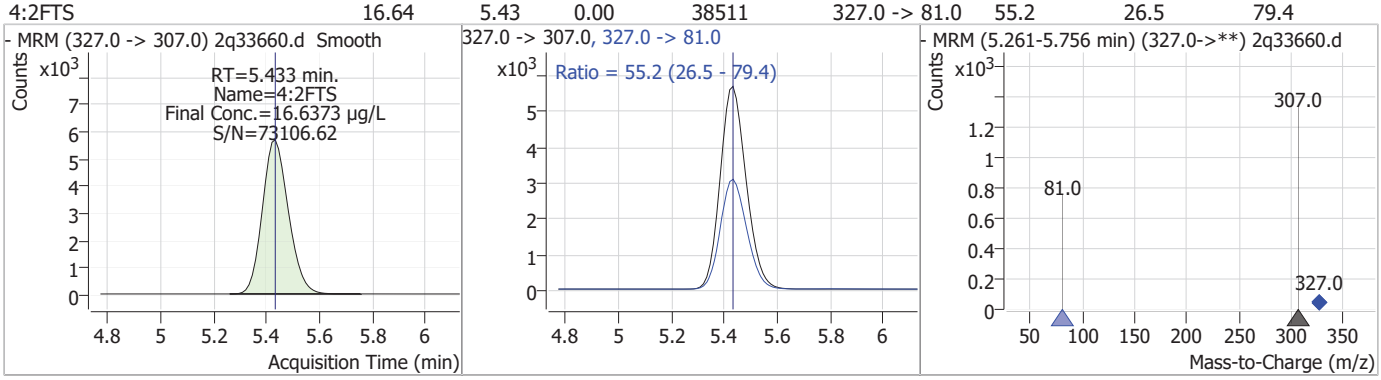


Perfluorinated Compounds by LC/MS/MS

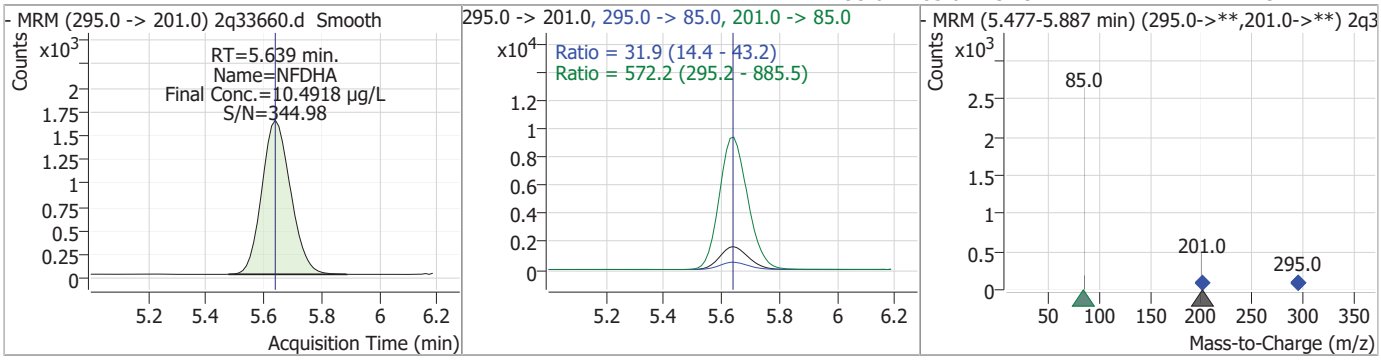
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.37	5.43	0.00	1600				



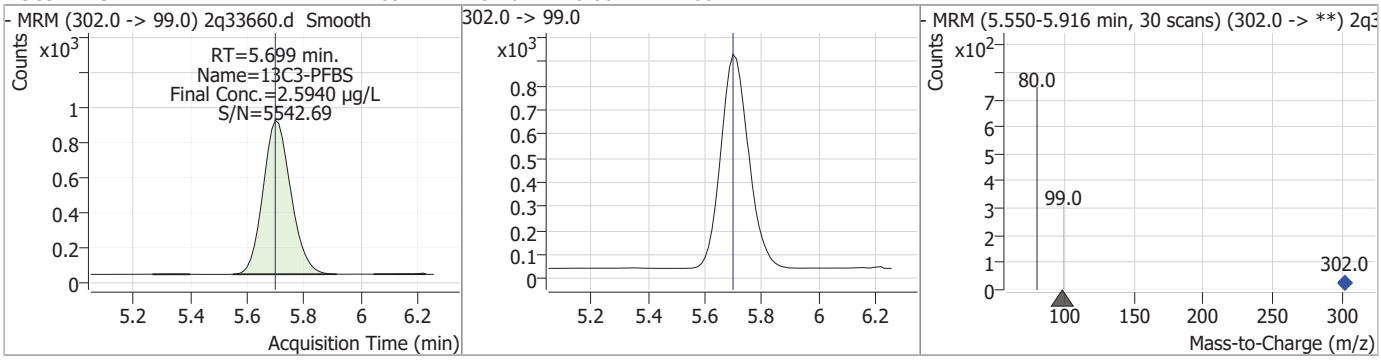
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	16.64	5.43	0.00	38511	327.0 -> 81.0	55.2	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	10.49	5.64	0.00	11181	201.0 -> 85.0	572.2	295.2	885.5
					295.0 -> 85.0	31.9	14.4	43.2

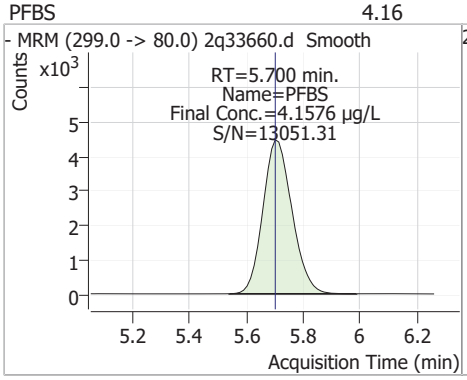


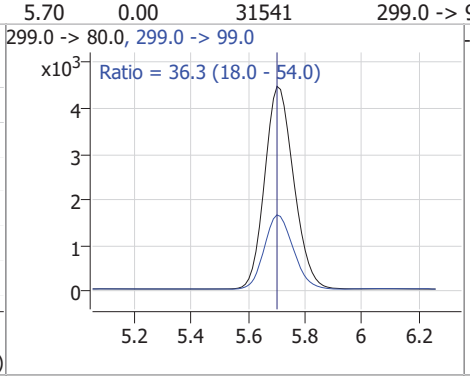
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.59	5.70	0.00	6017				

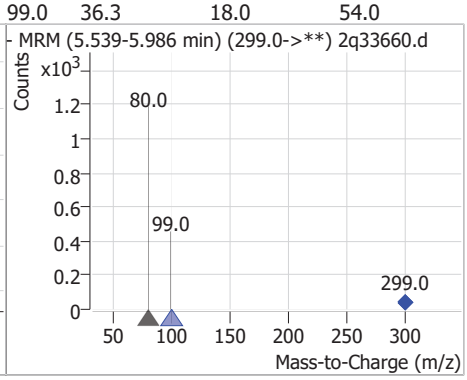


Perfluorinated Compounds by LC/MS/MS

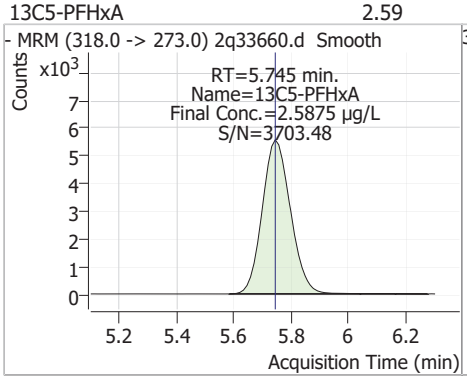
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.16	5.70	0.00	31541	299.0 -> 99.0	36.3	18.0	54.0

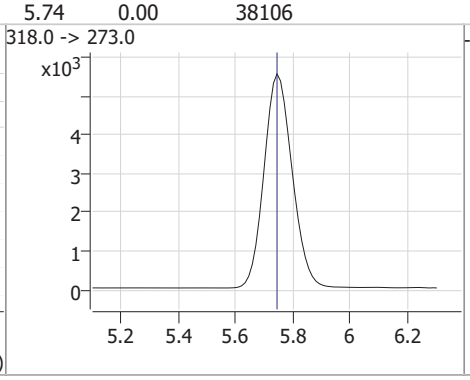


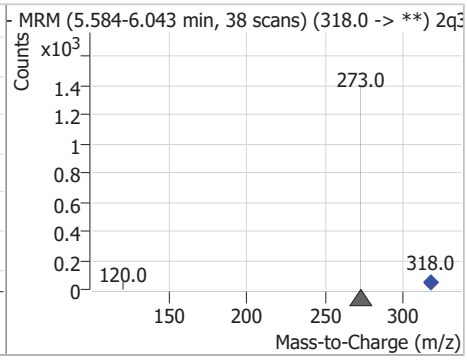




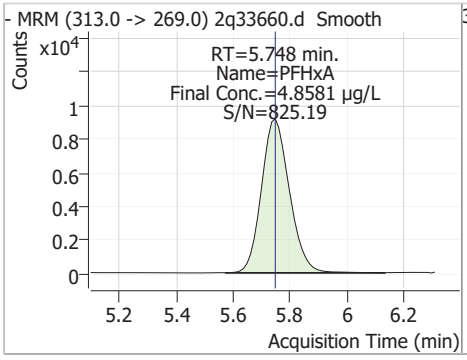
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.59	5.74	0.00	38106				

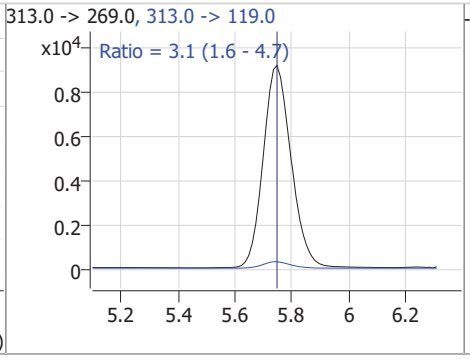


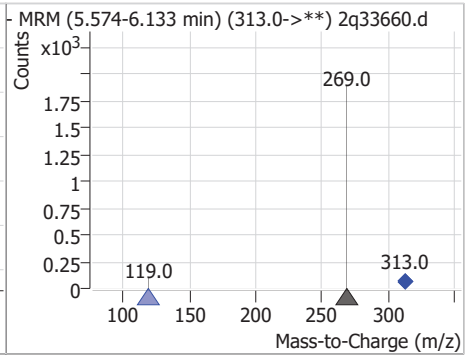




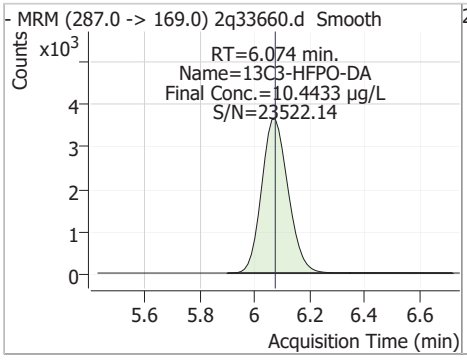
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	4.86	5.75	0.00	62697	313.0 -> 119.0	3.1	1.6	4.7

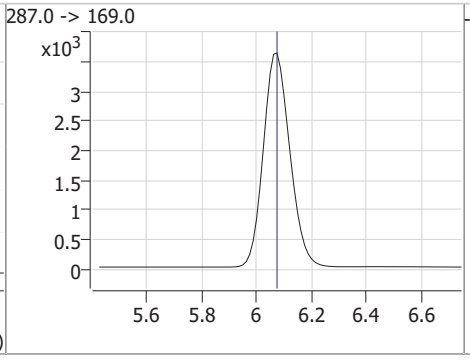


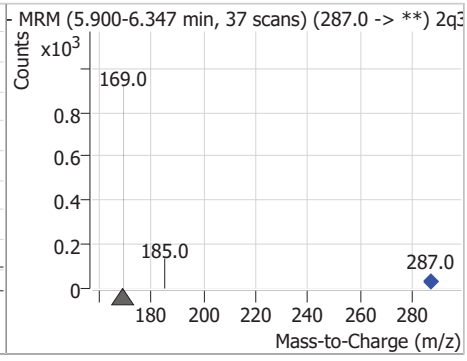




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.44	6.07	0.00	24133				





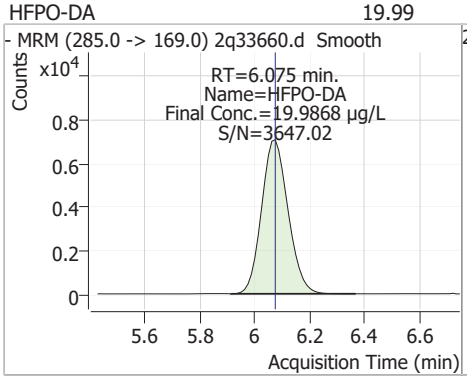


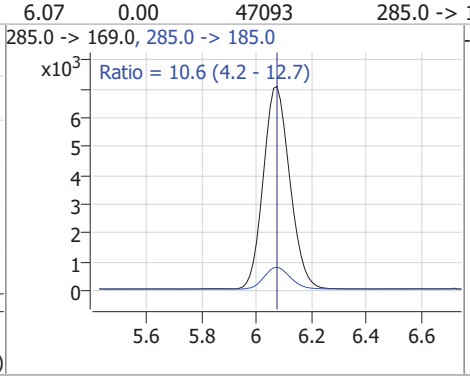
7.5.5

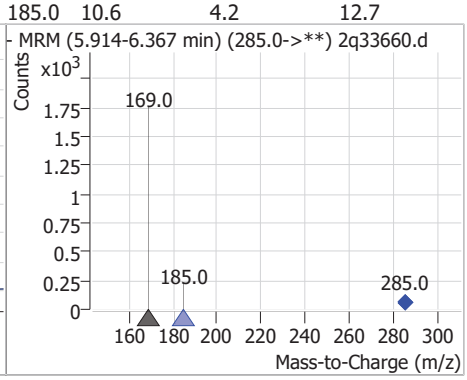
7

Perfluorinated Compounds by LC/MS/MS

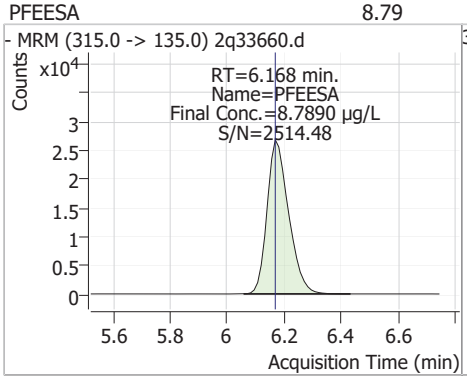
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	19.99	6.07	0.00	47093	285.0 -> 185.0	10.6	4.2	12.7

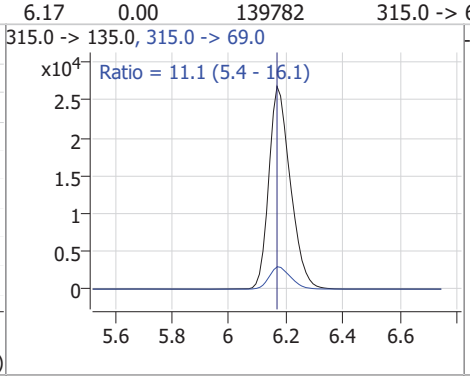


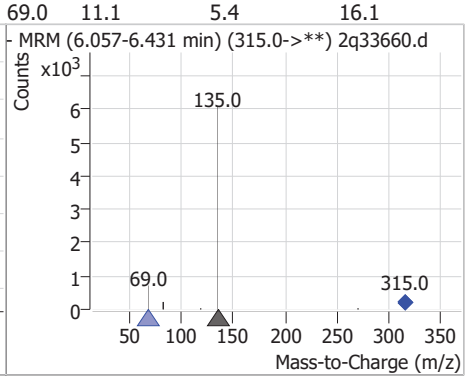




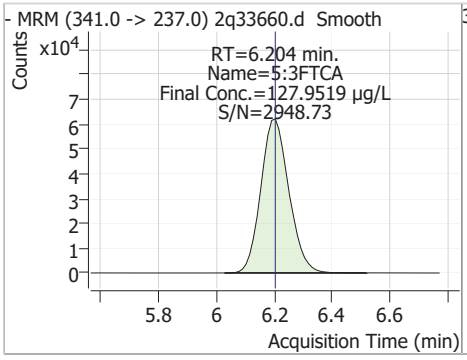
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	8.79	6.17	0.00	139782	315.0 -> 69.0	11.1	5.4	16.1

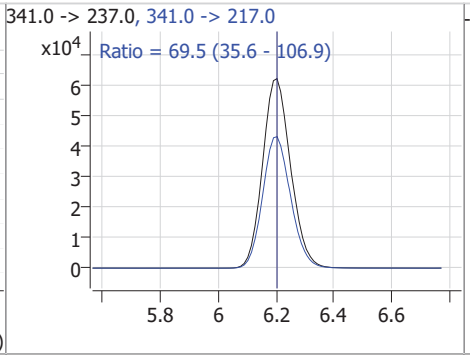


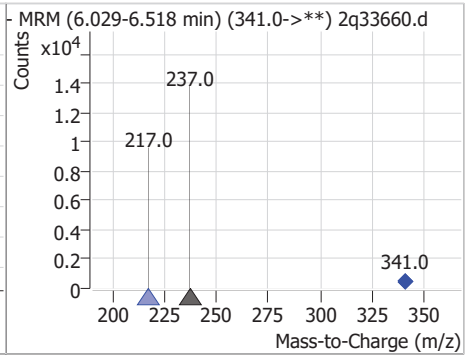




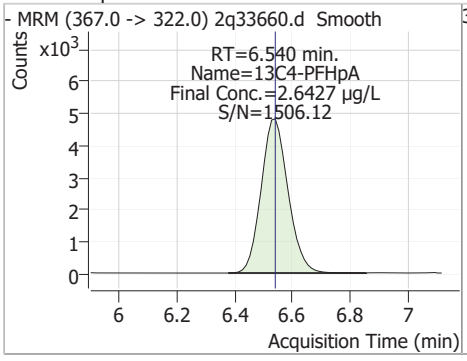
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	127.95	6.20	0.00	415629	341.0 -> 217.0	69.5	35.6	106.9

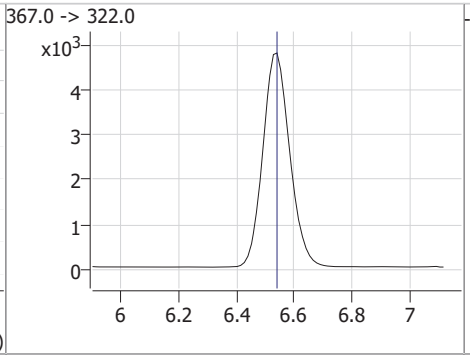


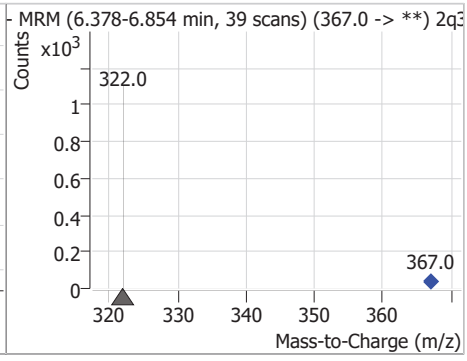




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.64	6.54	0.00	30975				





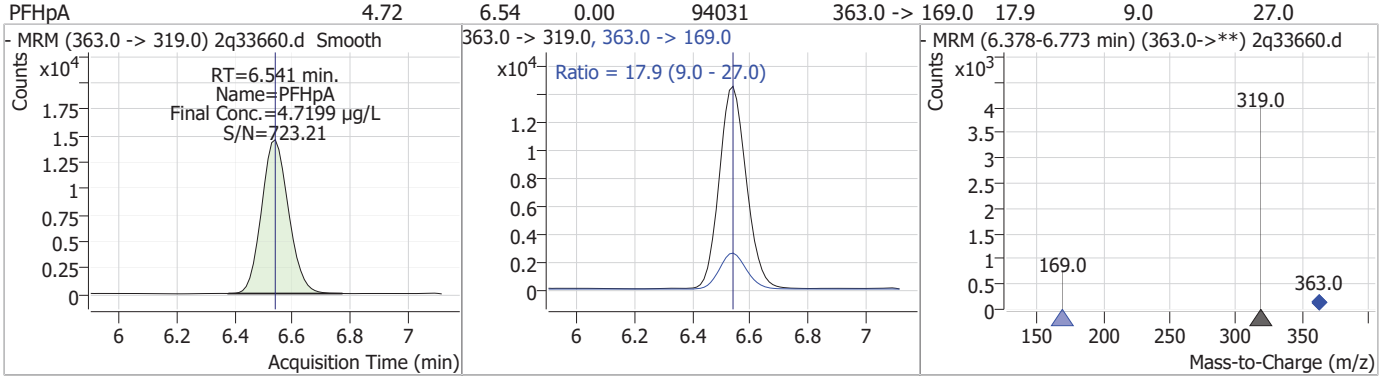


7.5.5

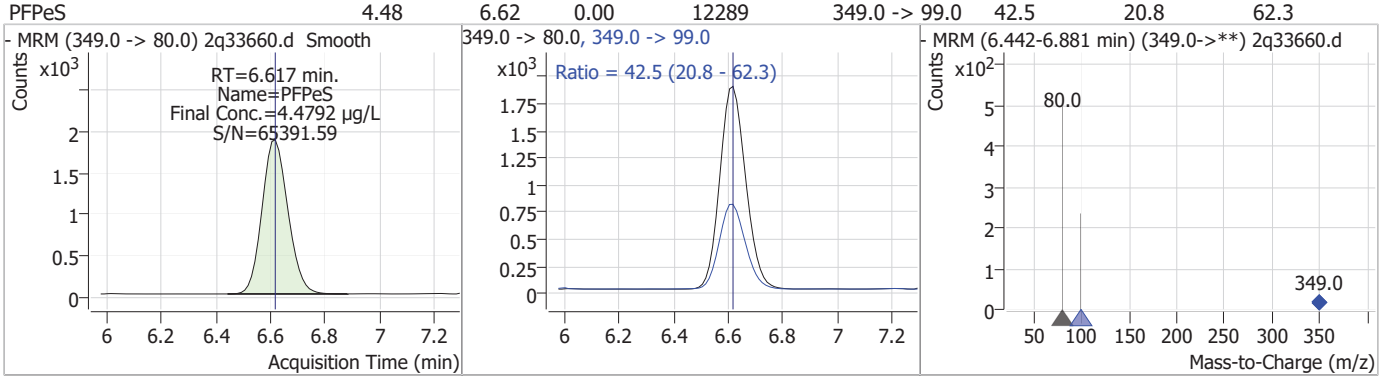
7

Perfluorinated Compounds by LC/MS/MS

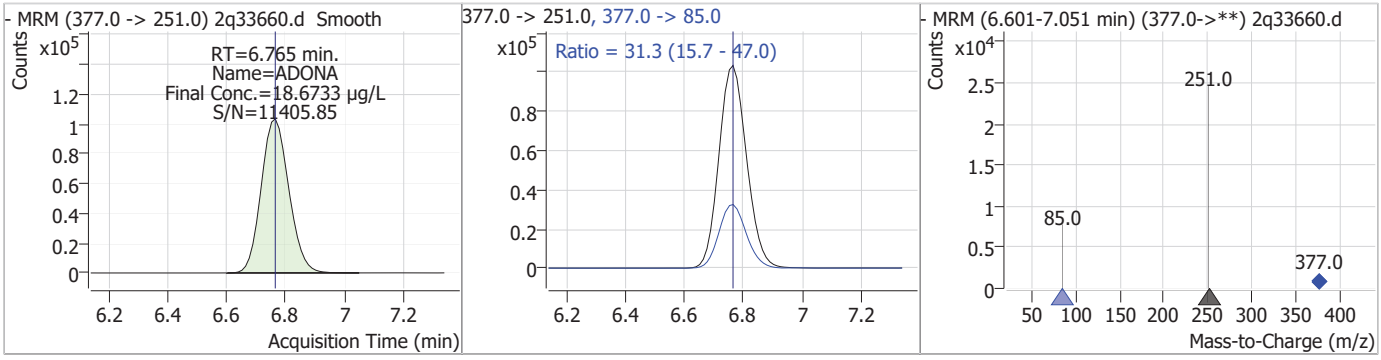
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	4.72	6.54	0.00	94031	363.0 -> 169.0	17.9	9.0	27.0



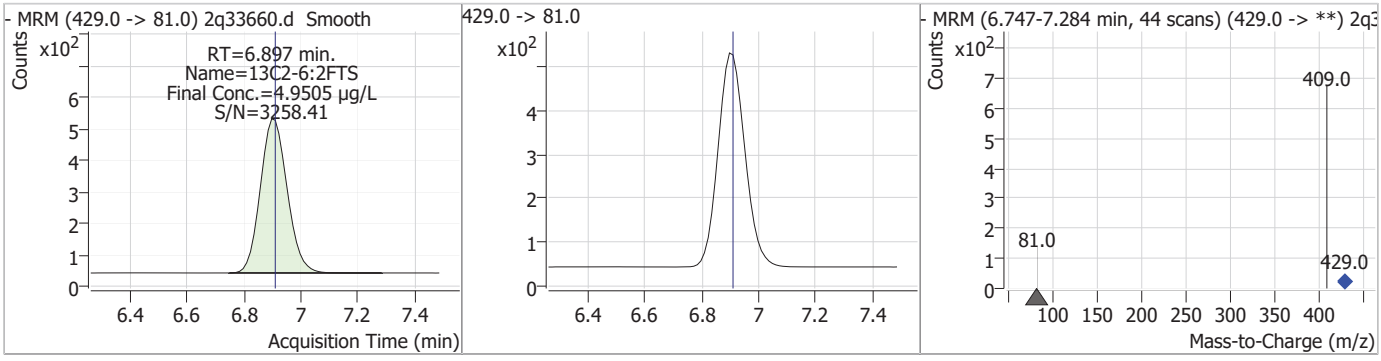
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	4.48	6.62	0.00	12289	349.0 -> 99.0	42.5	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	18.67	6.77	0.00	673576	377.0 -> 85.0	31.3	15.7	47.0

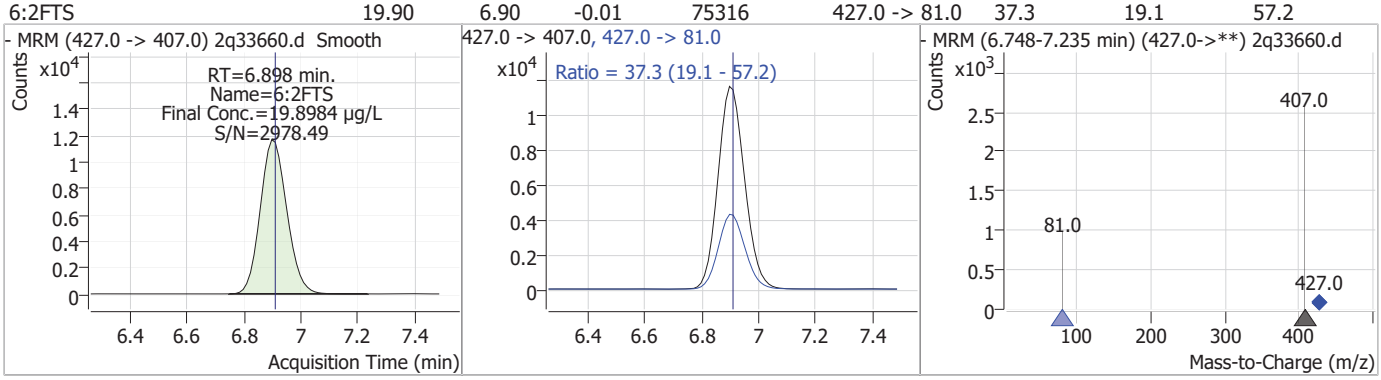


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.95	6.90	-0.01	3190				

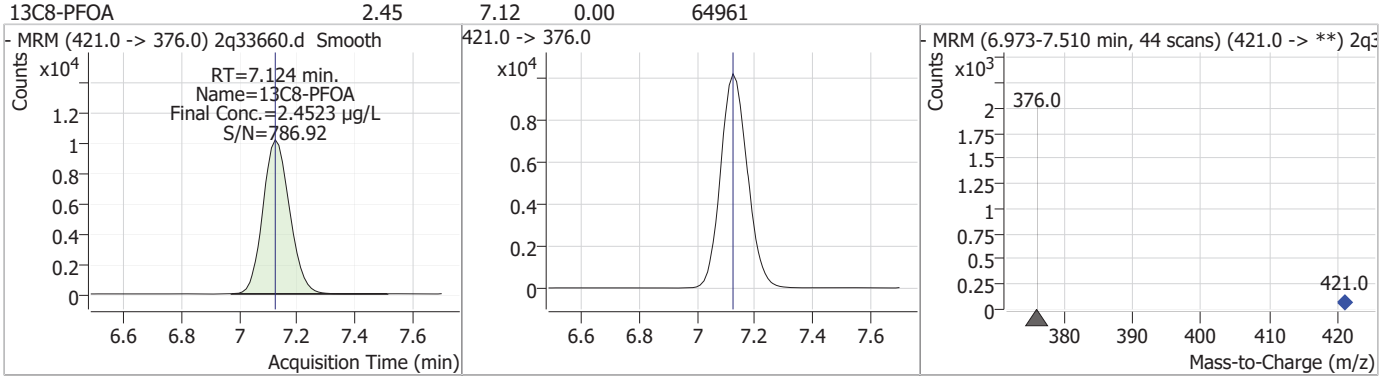


Perfluorinated Compounds by LC/MS/MS

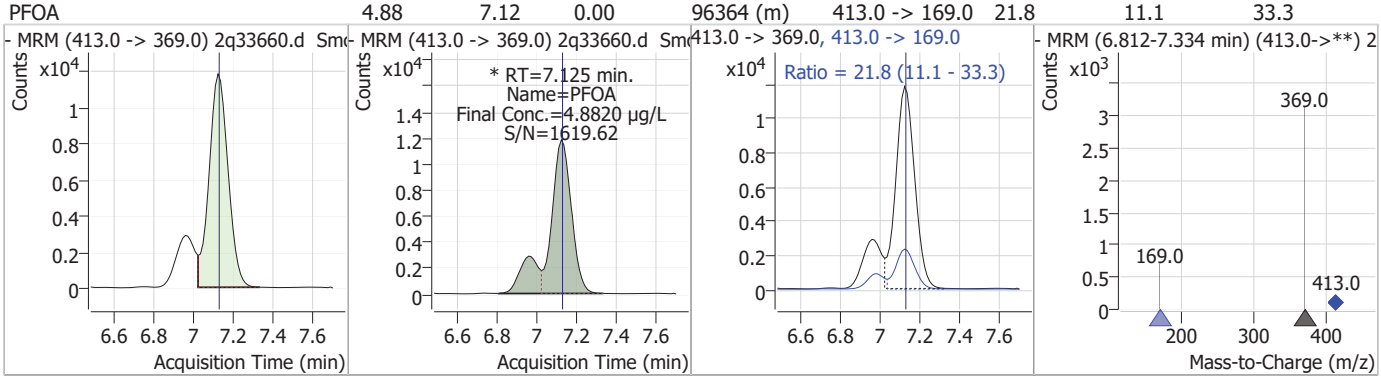
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	19.90	6.90	-0.01	75316	427.0 -> 81.0	37.3	19.1	57.2



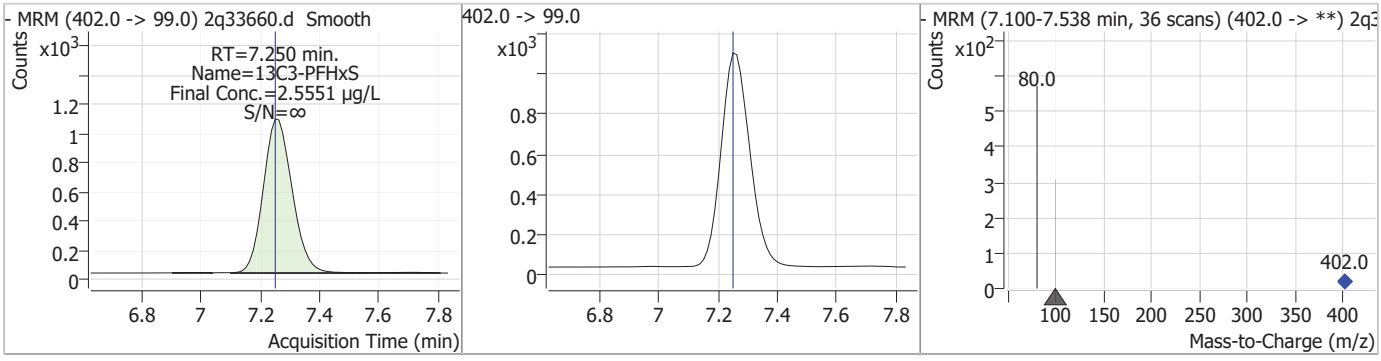
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.45	7.12	0.00	64961				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	4.88	7.12	0.00	96364 (m)	413.0 -> 169.0	21.8	11.1	33.3

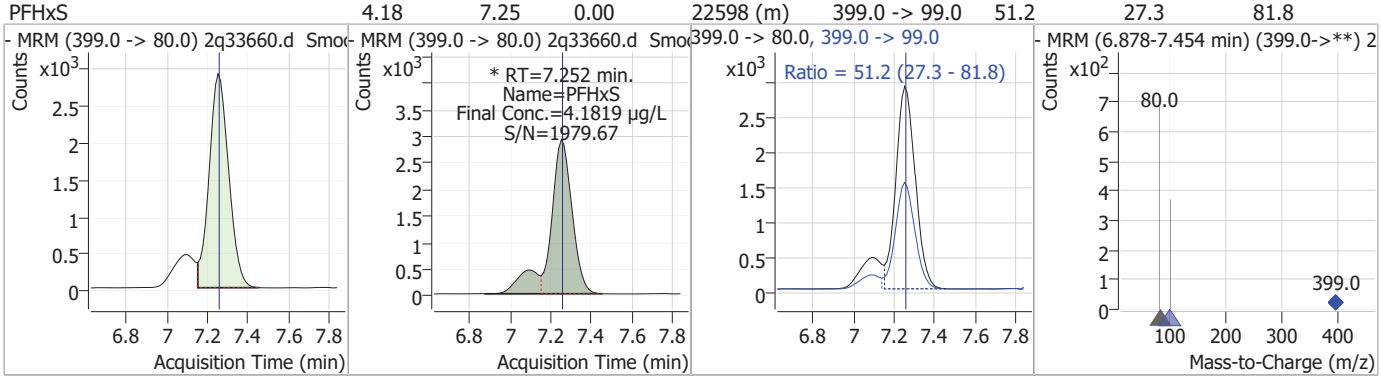


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.56	7.25	0.00	7174				

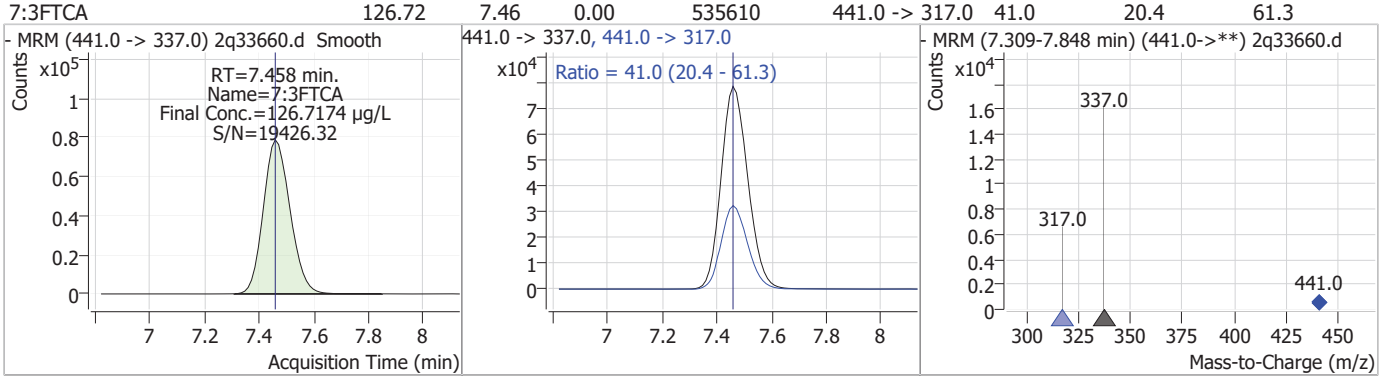


Perfluorinated Compounds by LC/MS/MS

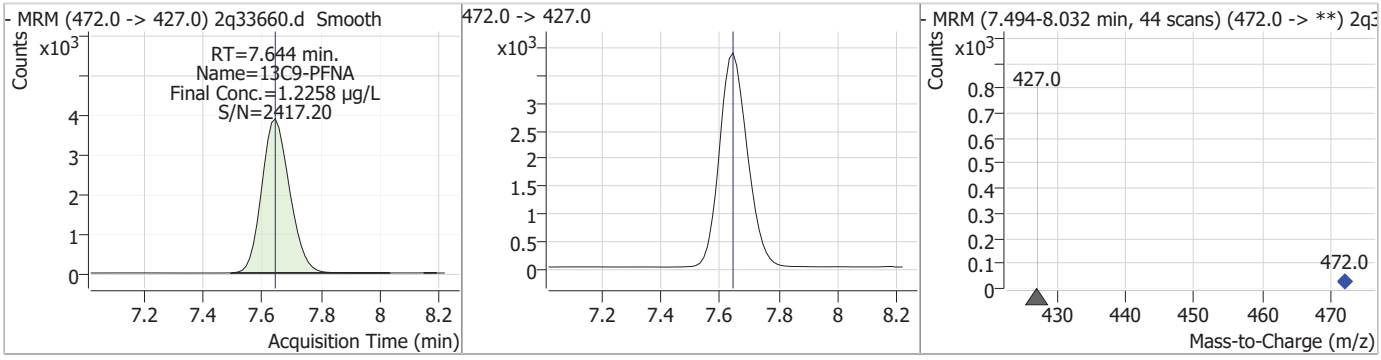
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	4.18	7.25	0.00	22598 (m)	399.0 -> 99.0	51.2	27.3	81.8



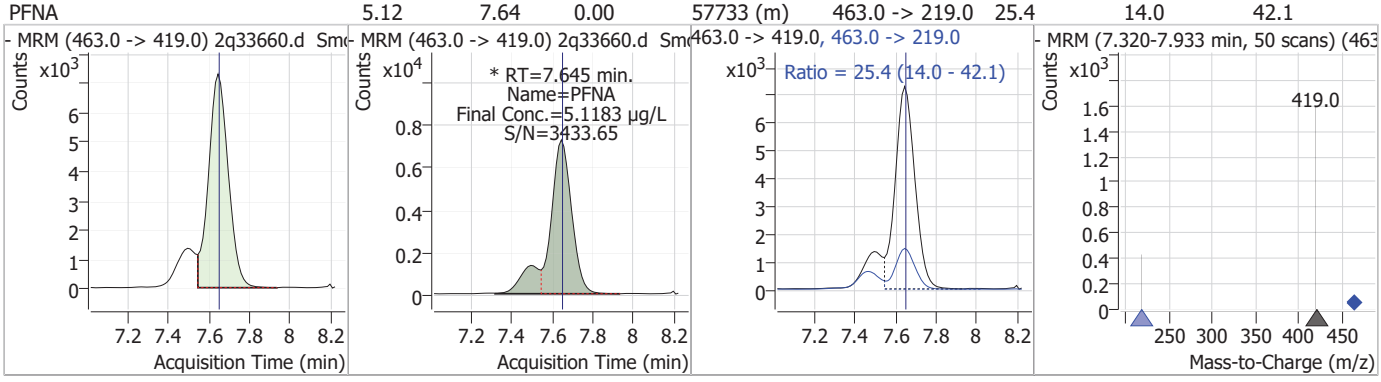
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	126.72	7.46	0.00	535610	441.0 -> 317.0	41.0	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.23	7.64	0.00	25323				

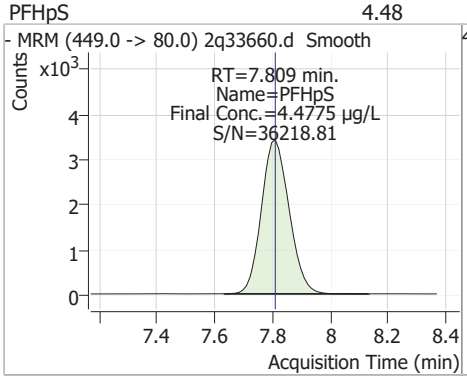


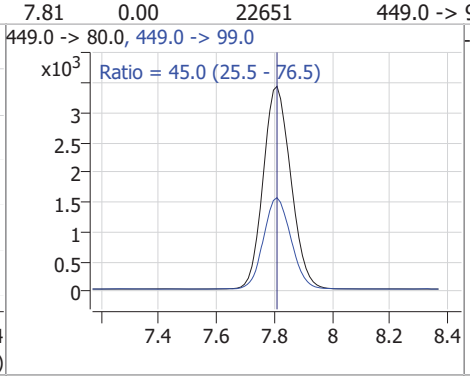
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	5.12	7.64	0.00	57733 (m)	463.0 -> 219.0	25.4	14.0	42.1

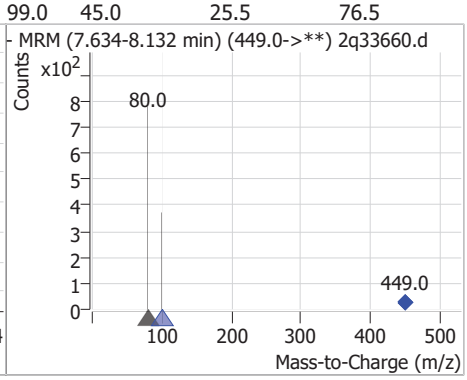


Perfluorinated Compounds by LC/MS/MS

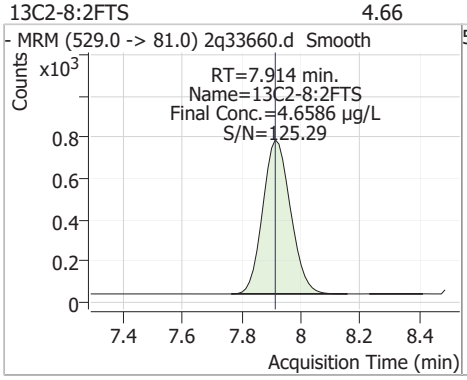
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	4.48	7.81	0.00	22651	449.0 -> 99.0	45.0	25.5	76.5

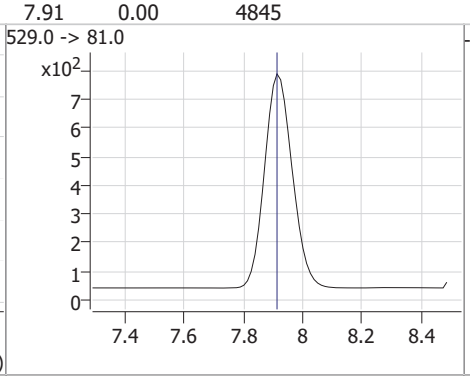


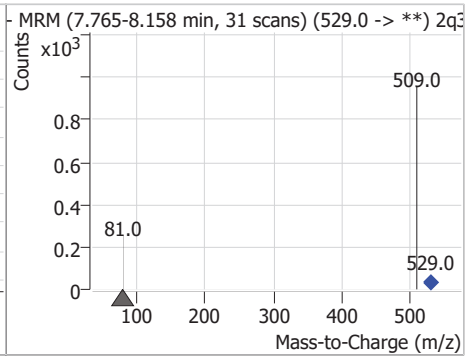




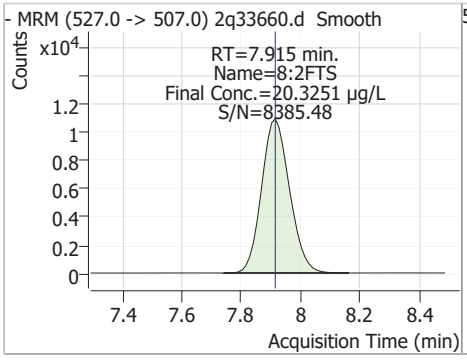
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.66	7.91	0.00	4845				

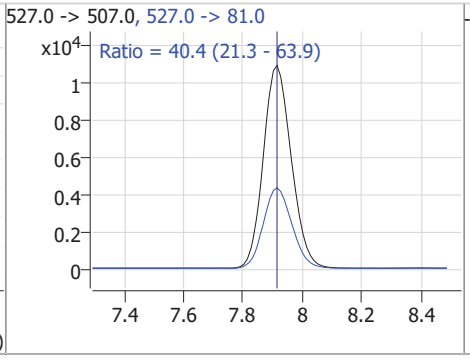


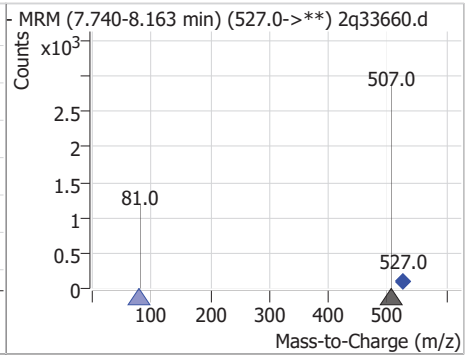




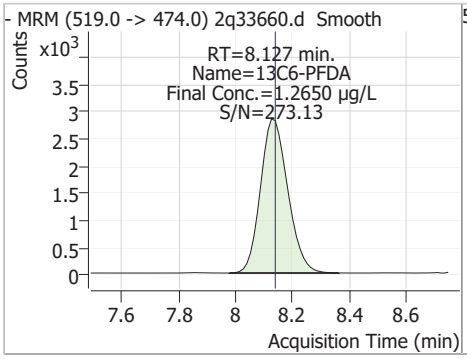
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	20.33	7.91	0.00	71535	527.0 -> 81.0	40.4	21.3	63.9

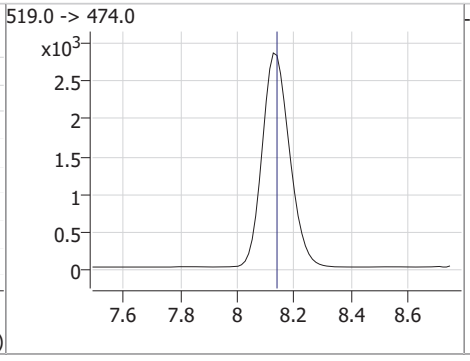


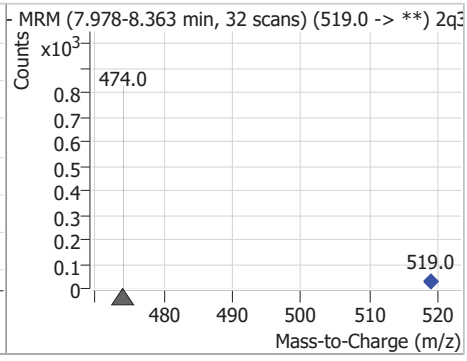




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.27	8.13	-0.01	18837				

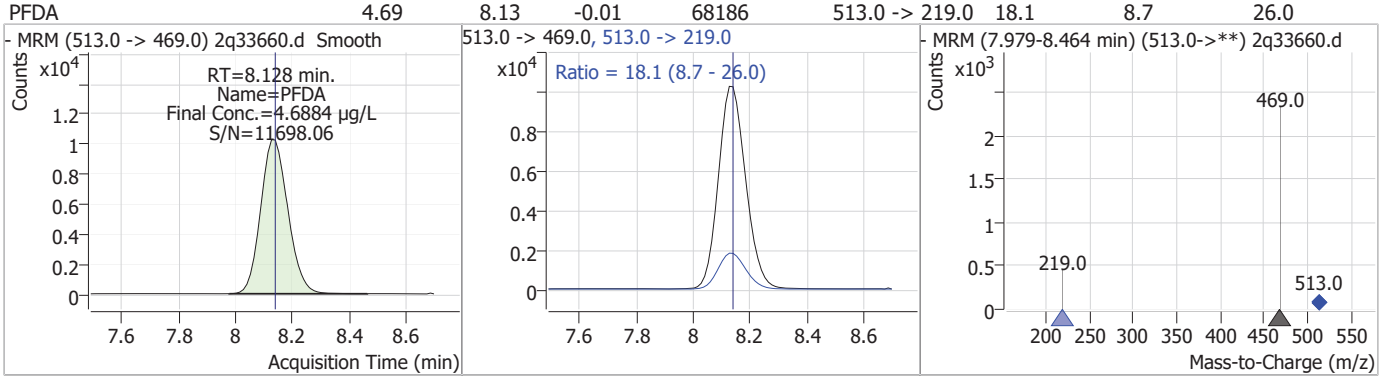




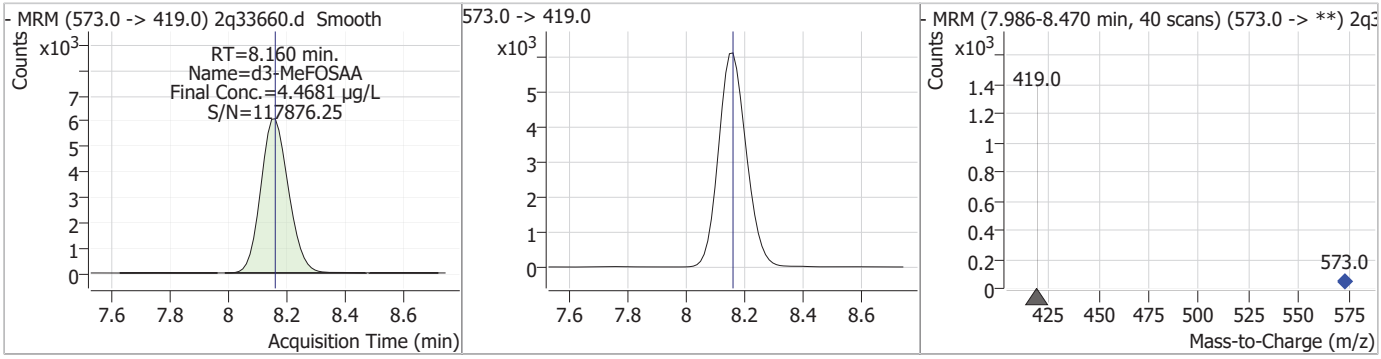


Perfluorinated Compounds by LC/MS/MS

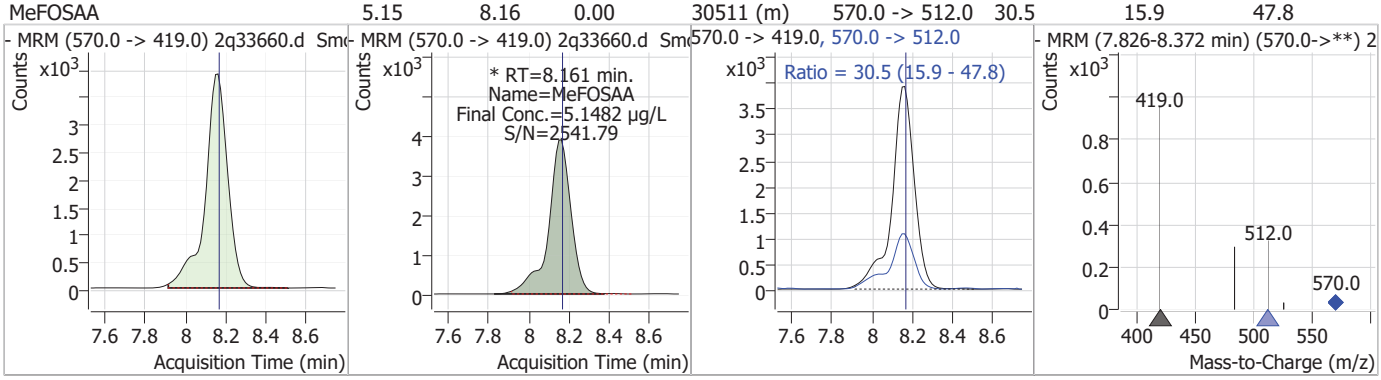
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	4.69	8.13	-0.01	68186	513.0 -> 219.0	18.1	8.7	26.0



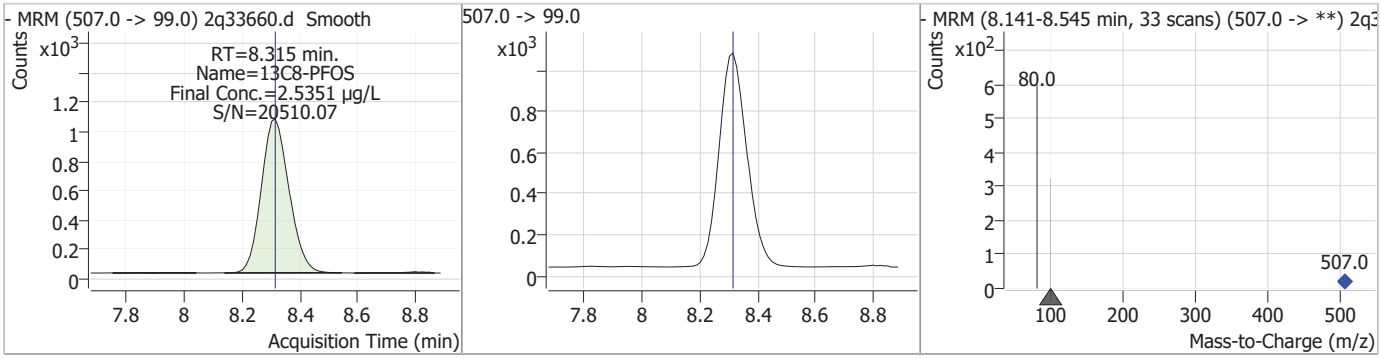
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.47	8.16	0.00	40042				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	5.15	8.16	0.00	30511 (m)	570.0 -> 512.0	30.5	15.9	47.8

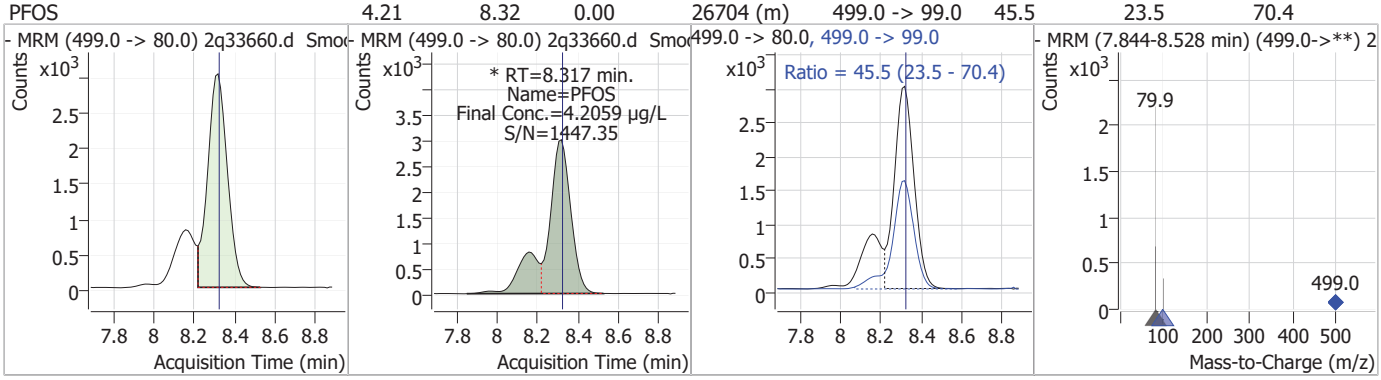


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.54	8.32	0.00	6939				

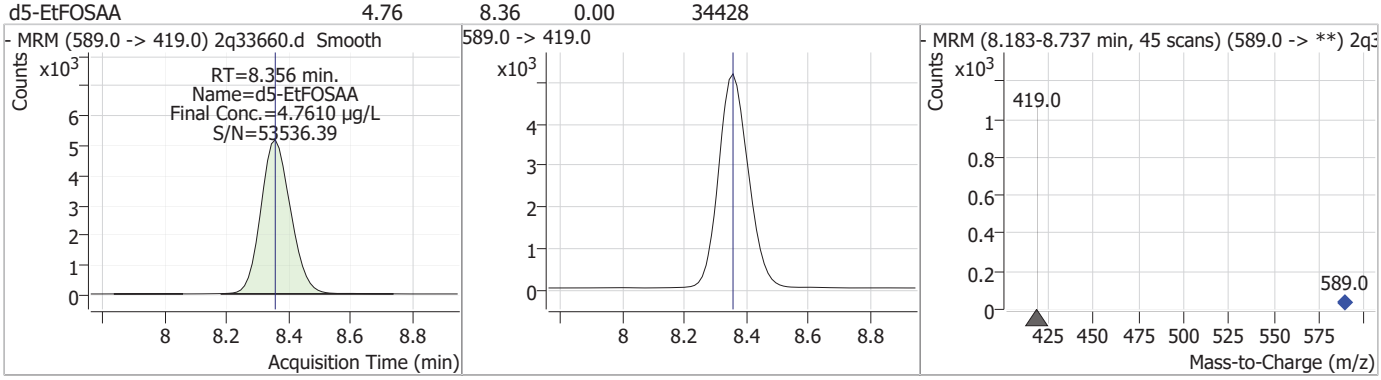


Perfluorinated Compounds by LC/MS/MS

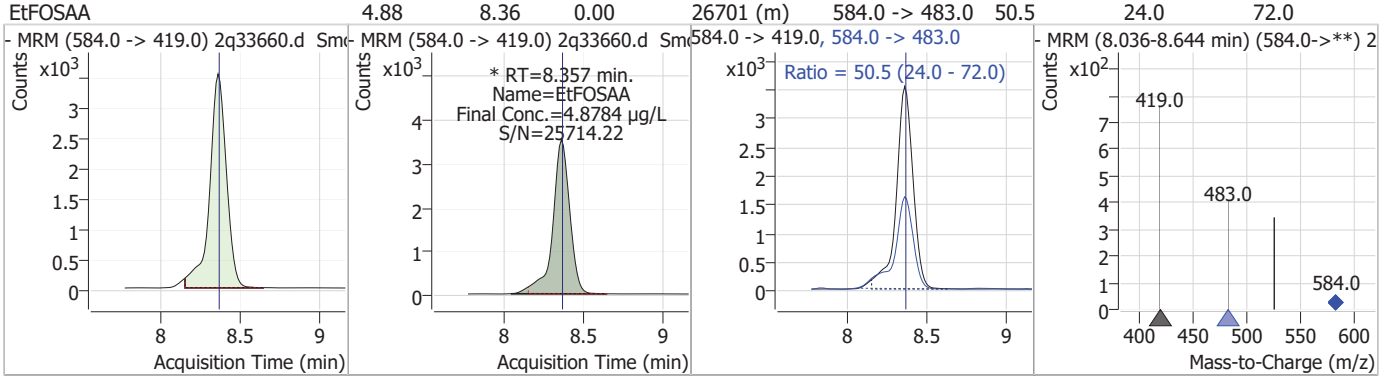
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.21	8.32	0.00	26704 (m)	499.0 -> 99.0	45.5	23.5	70.4



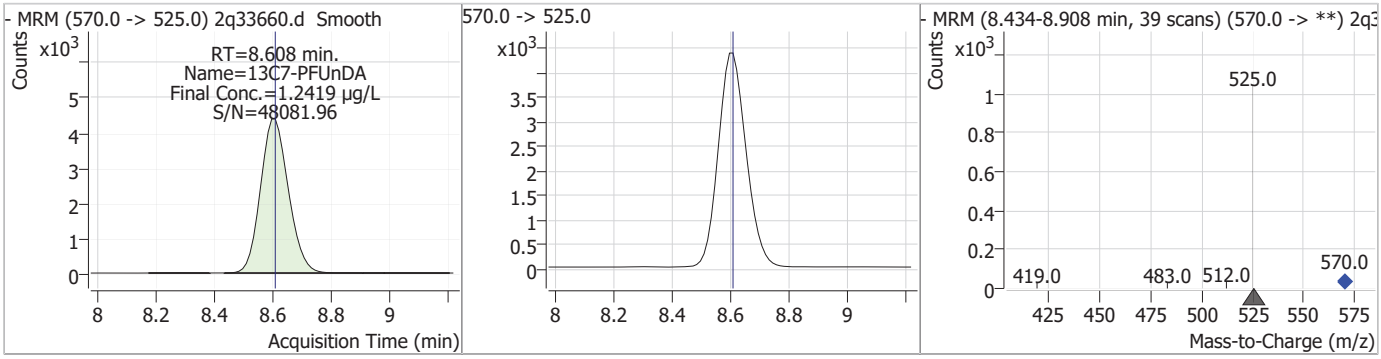
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.76	8.36	0.00	34428				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	4.88	8.36	0.00	26701 (m)	584.0 -> 483.0	50.5	24.0	72.0

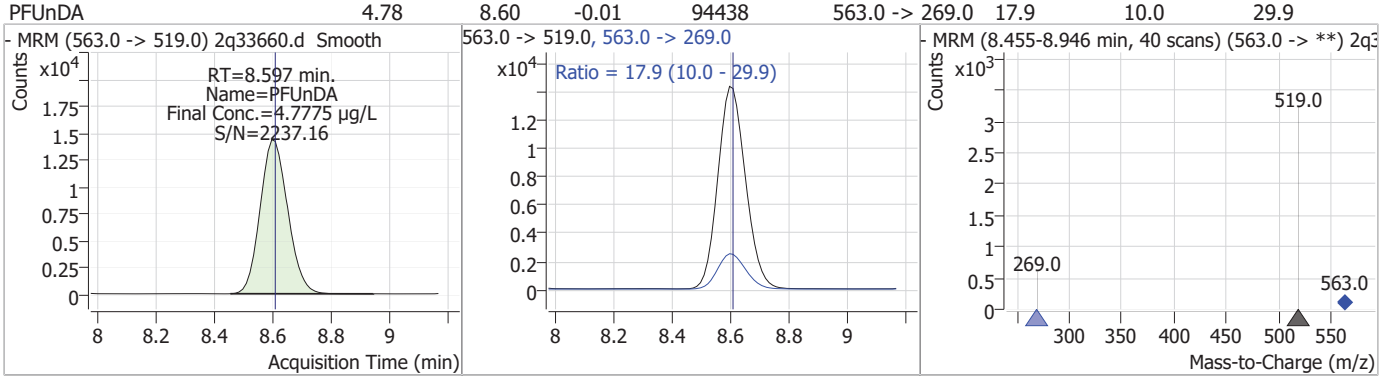


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.24	8.61	0.00	28997				

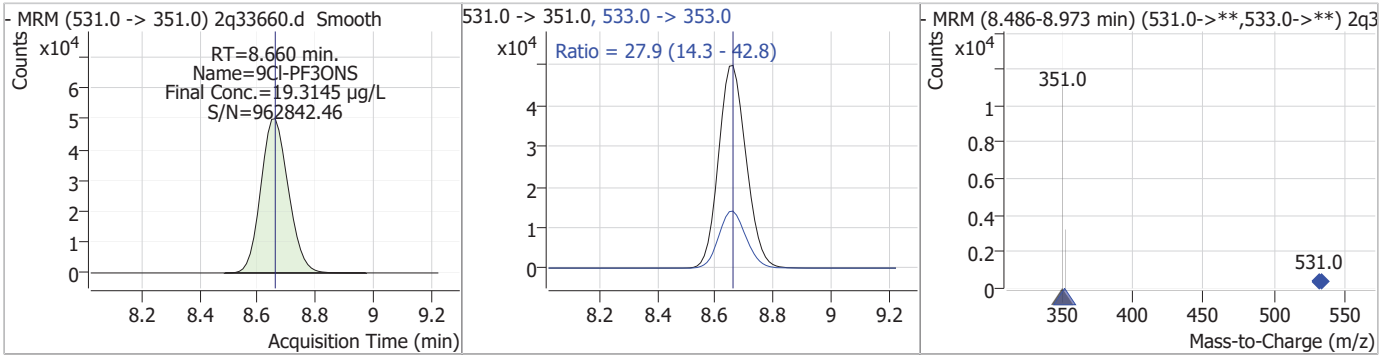


Perfluorinated Compounds by LC/MS/MS

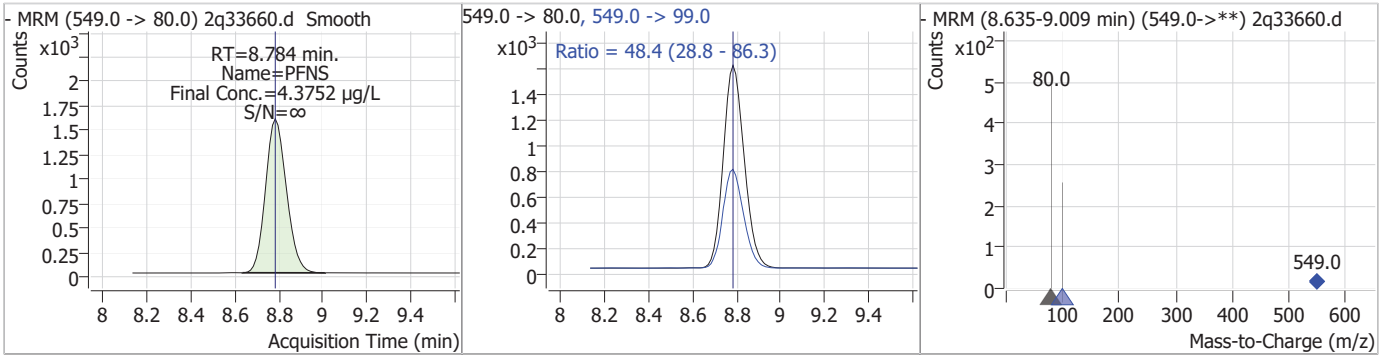
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	4.78	8.60	-0.01	94438	563.0 -> 269.0	17.9	10.0	29.9



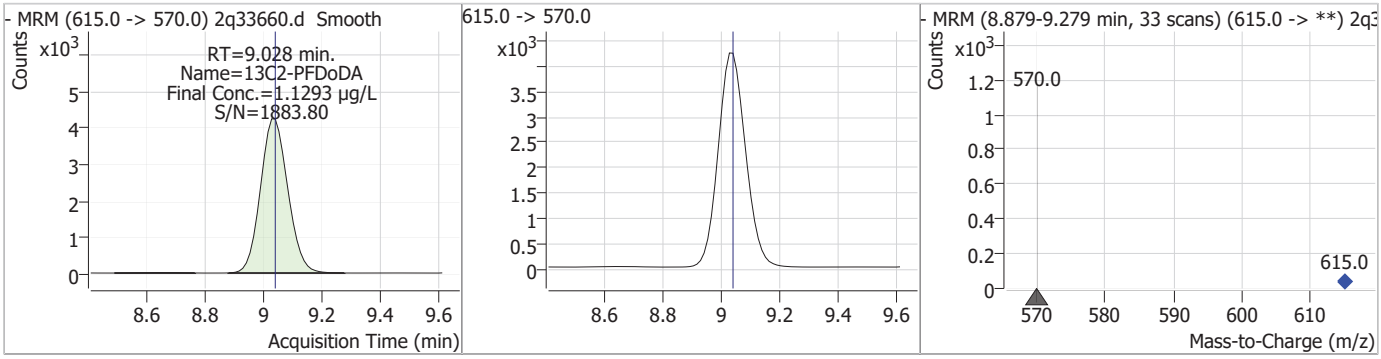
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	19.31	8.66	0.00	328625	533.0 -> 353.0	27.9	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	4.38	8.78	0.00	10347	549.0 -> 99.0	48.4	28.8	86.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.13	9.03	-0.01	27583				

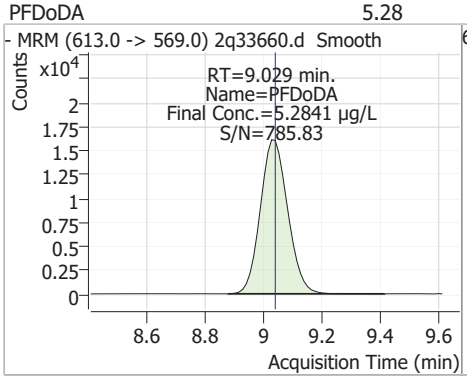


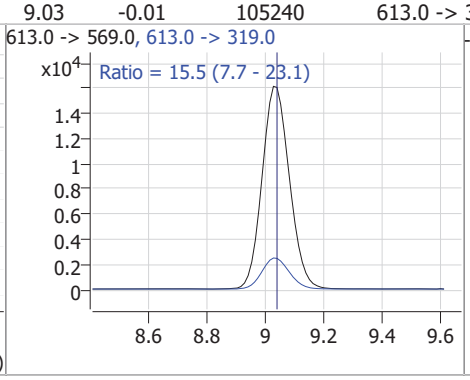
7.5.5

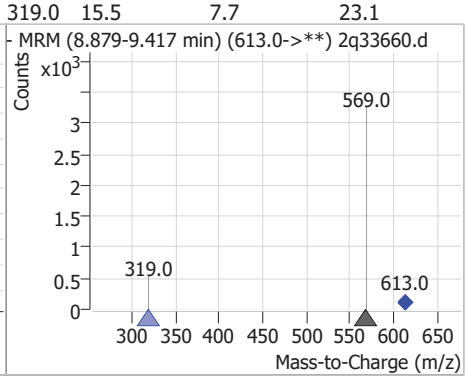
7

Perfluorinated Compounds by LC/MS/MS

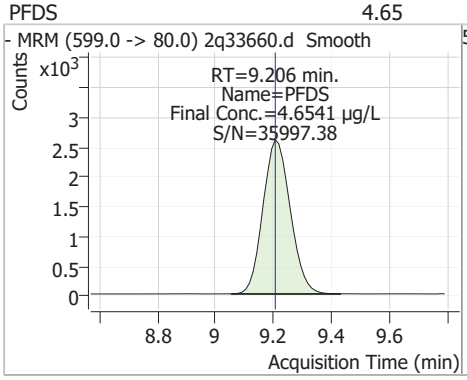
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	5.28	9.03	-0.01	105240	613.0 -> 319.0	15.5	7.7	23.1

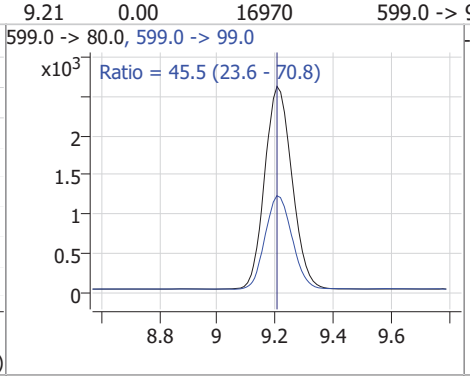


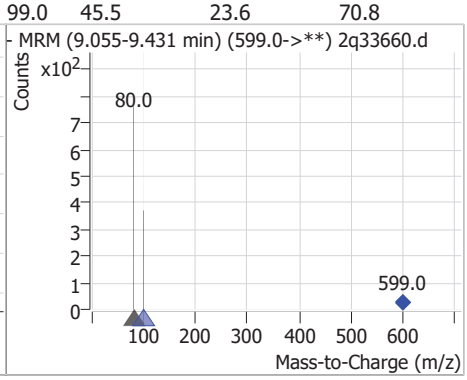




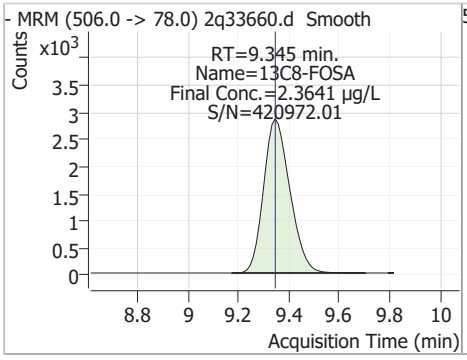
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	4.65	9.21	0.00	16970	599.0 -> 99.0	45.5	23.6	70.8

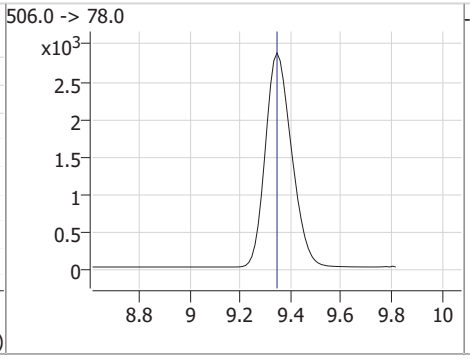


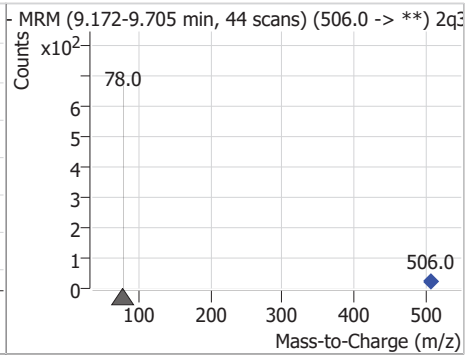




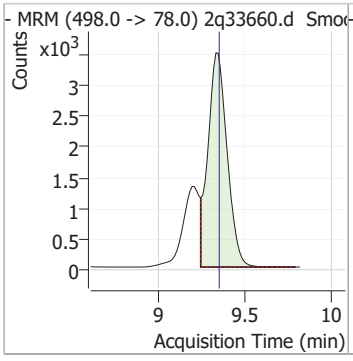
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.36	9.35	0.00	20521				

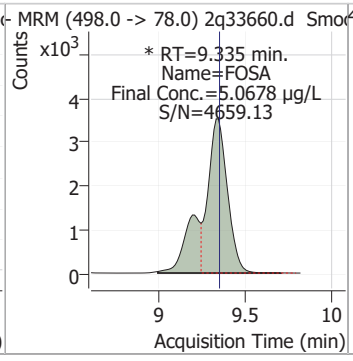


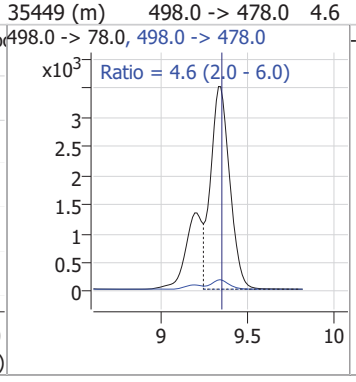


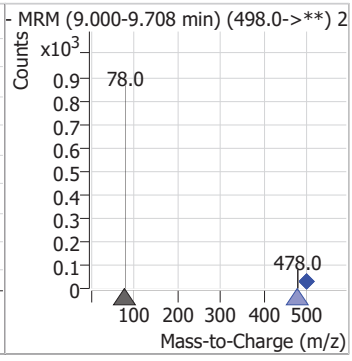


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	5.07	9.34	-0.01	35449 (m)	498.0 -> 478.0	4.6	2.0	6.0



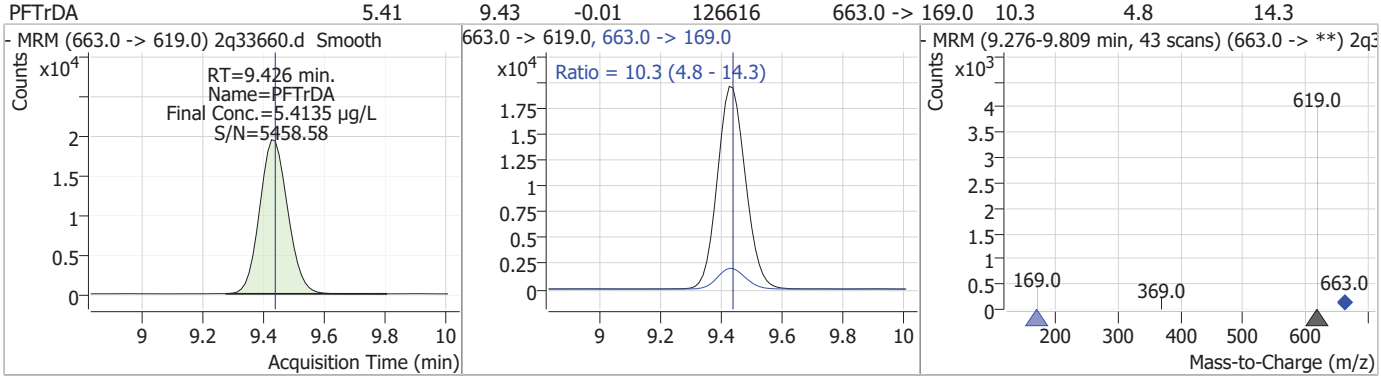




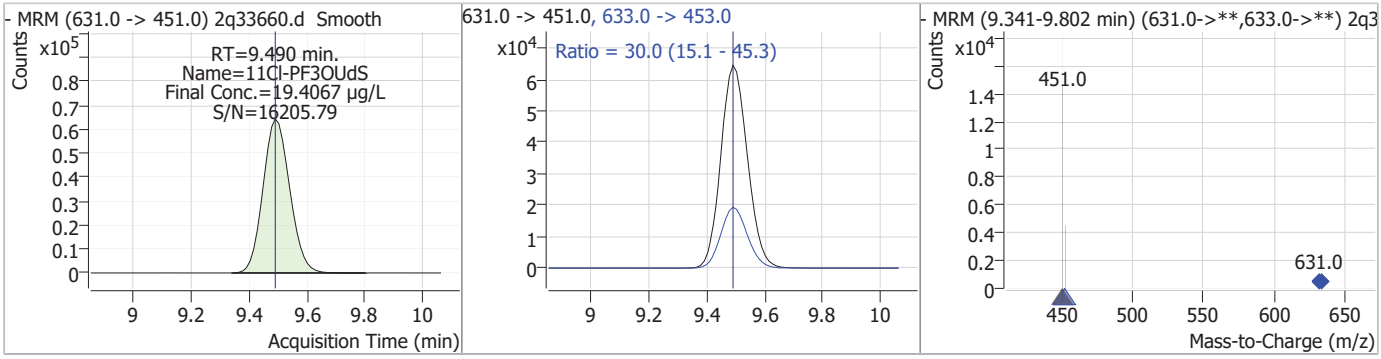


Perfluorinated Compounds by LC/MS/MS

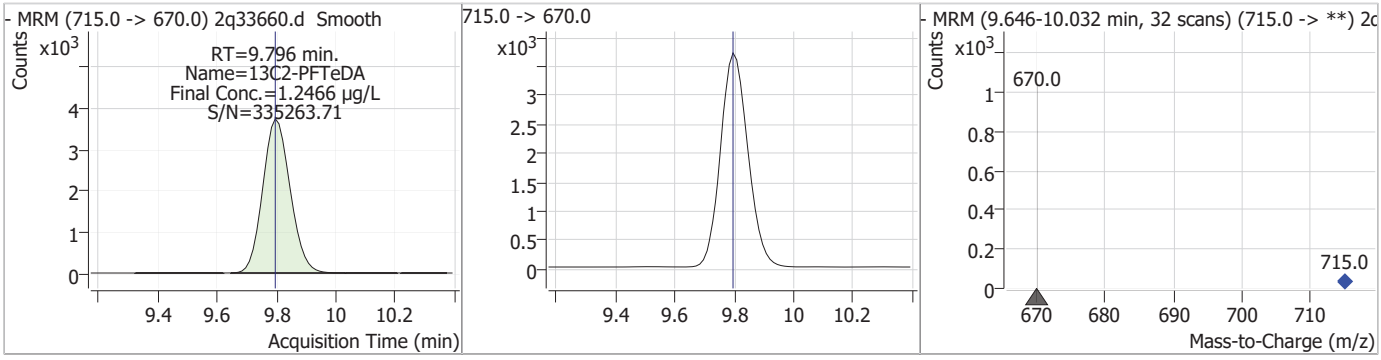
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	5.41	9.43	-0.01	126616	663.0 -> 169.0	10.3	4.8	14.3



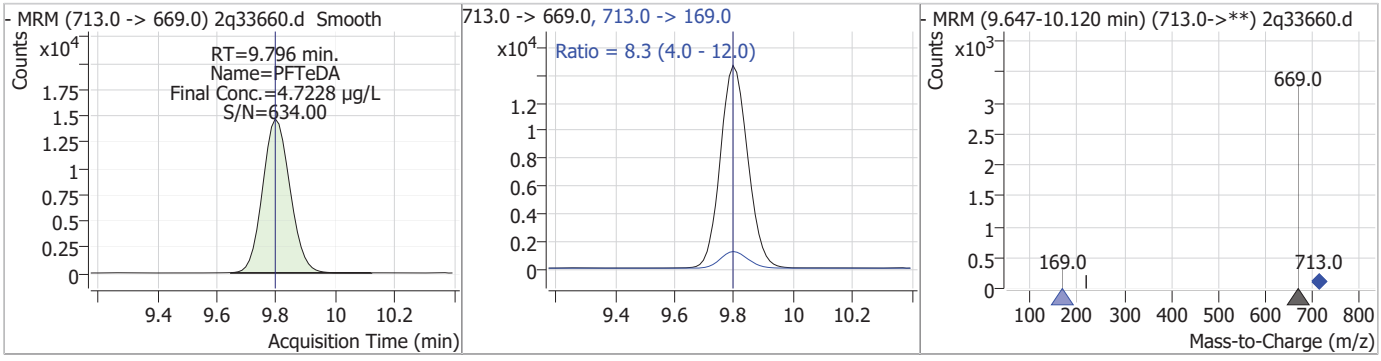
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	19.41	9.49	0.00	411321	633.0 -> 453.0	30.0	15.1	45.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.25	9.80	0.00	23632				

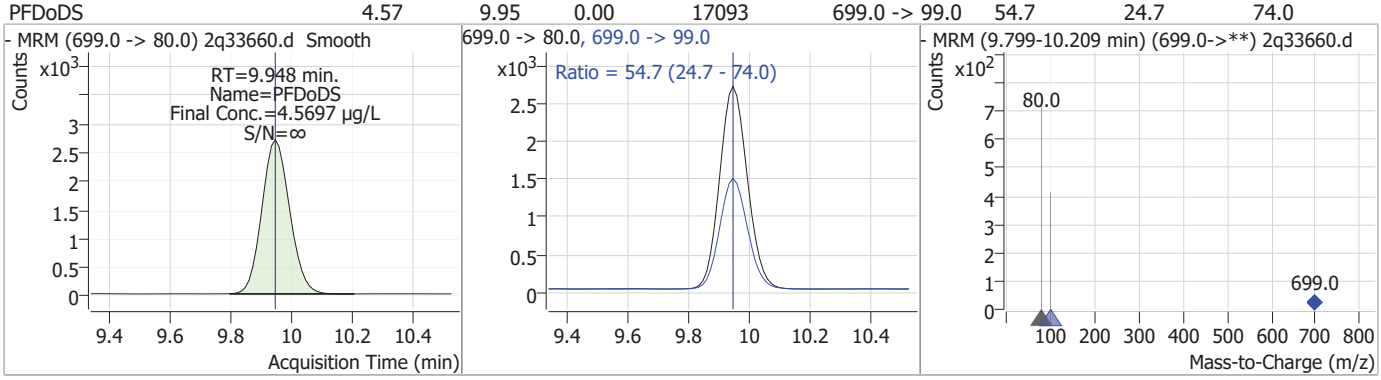


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	4.72	9.80	0.00	93992	713.0 -> 169.0	8.3	4.0	12.0

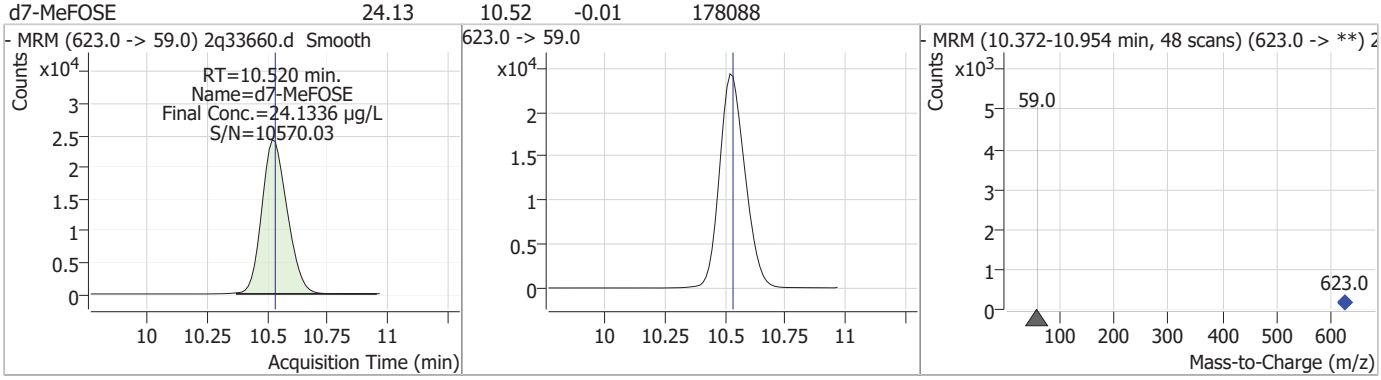


Perfluorinated Compounds by LC/MS/MS

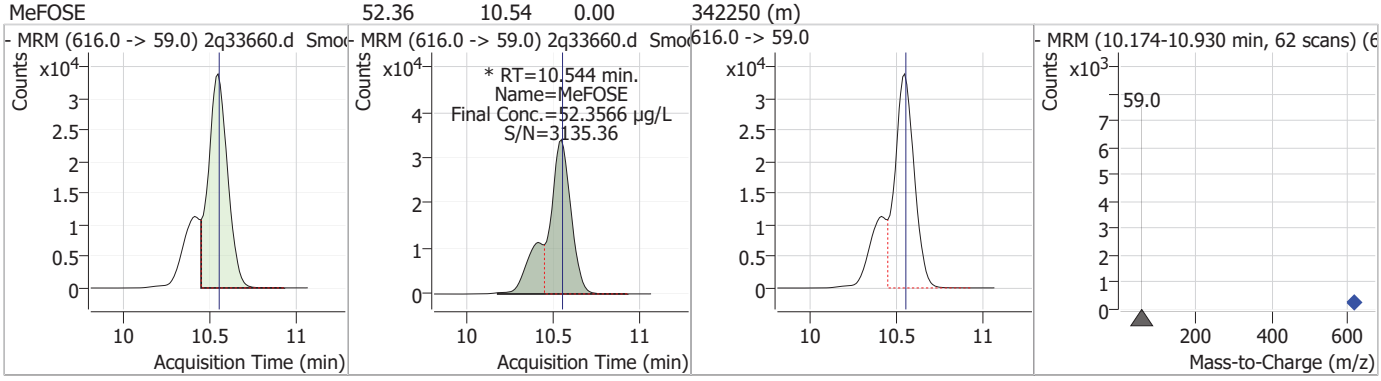
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	4.57	9.95	0.00	17093	699.0 -> 99.0	54.7	24.7	74.0



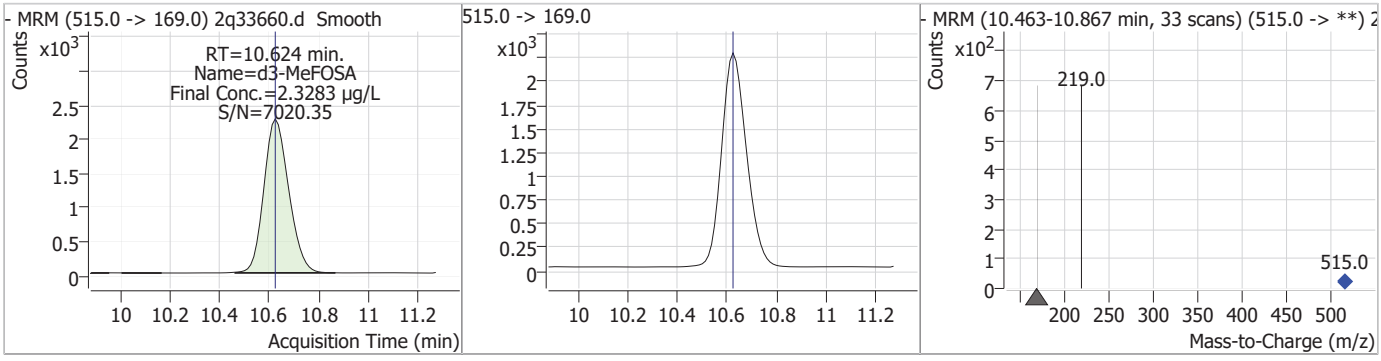
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.13	10.52	-0.01	178088				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	52.36	10.54	0.00	342250 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.33	10.62	0.00	15721				



7.5.5

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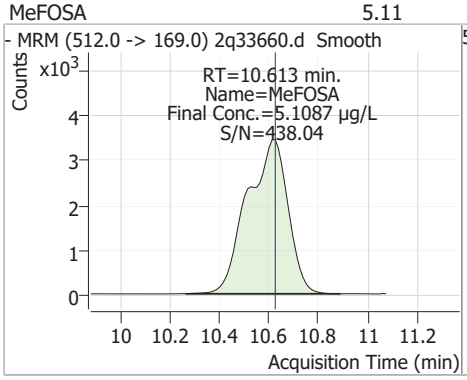
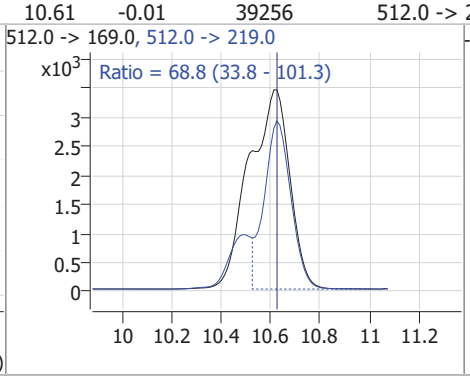
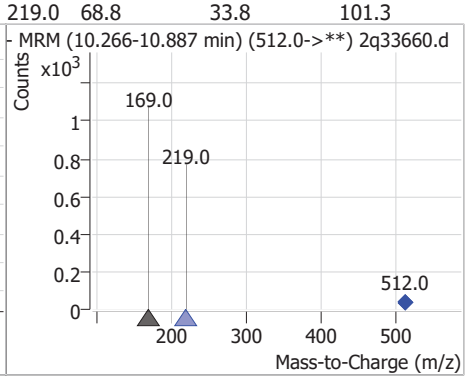
Perfluorinated Compounds by LC/MS/MS

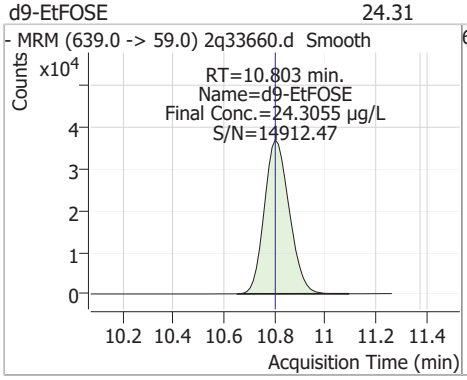
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	5.11	10.61	-0.01	39256	512.0 -> 219.0	68.8	33.8	101.3

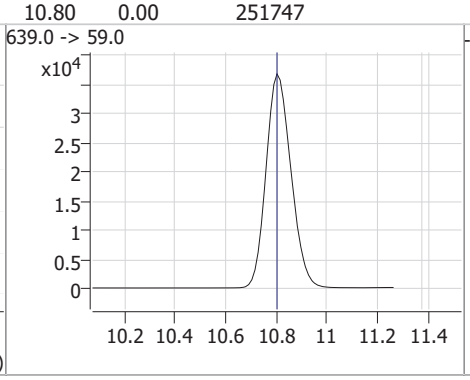


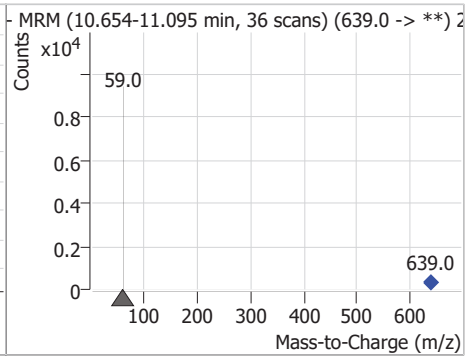




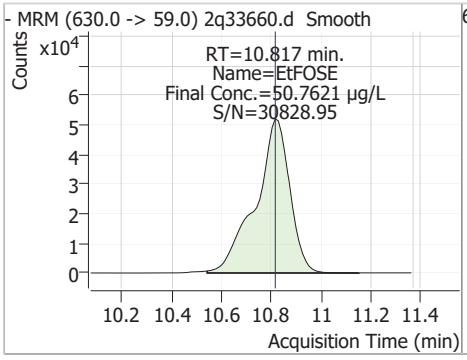
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.31	10.80	0.00	251747				

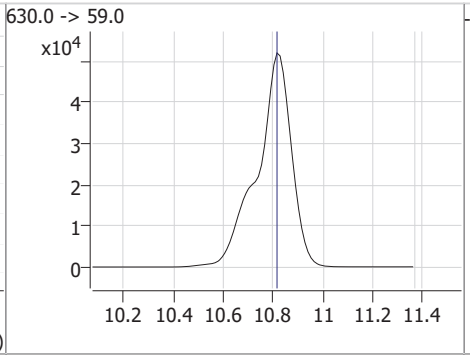


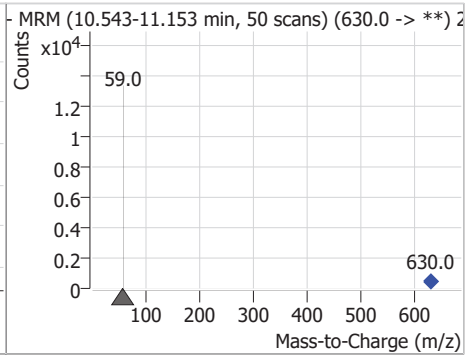




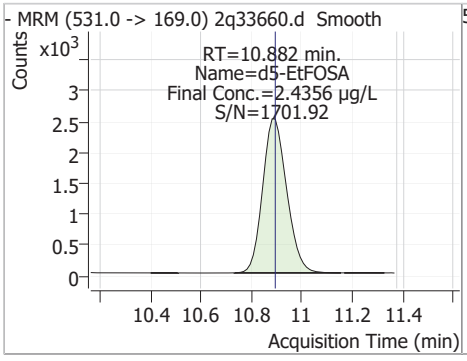
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	50.76	10.82	0.00	495716				

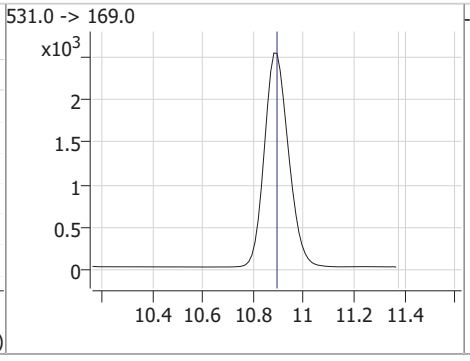


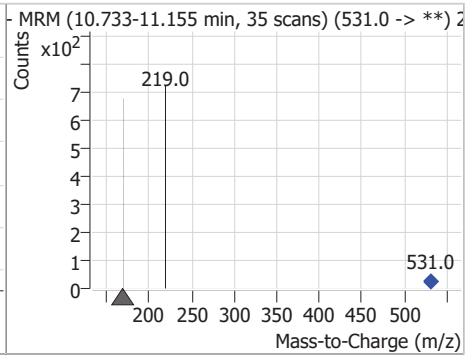




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.44	10.88	-0.01	16583				

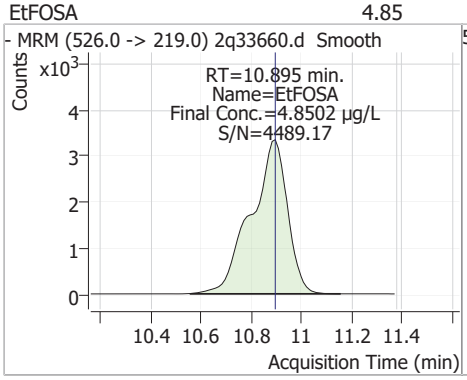


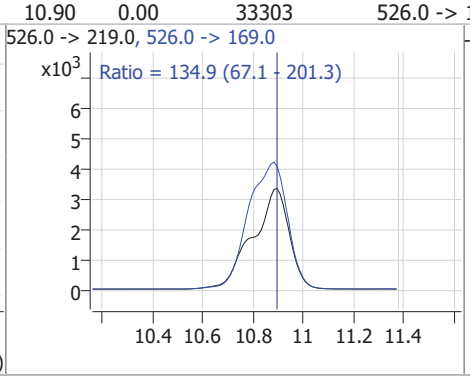


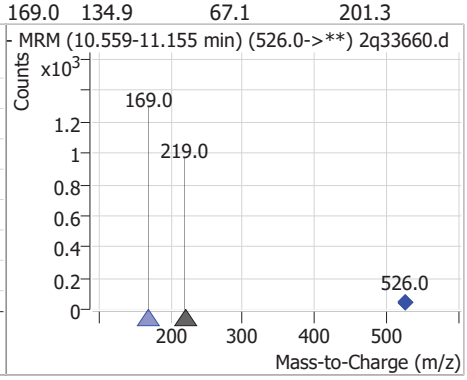


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	4.85	10.90	0.00	33303	526.0 -> 169.0	134.9	67.1	201.3







7.5.5

7

Manual Integration Approval Summary

Sample Number: T2Q344-RT
Lab FileID: 2Q33660.D
Injection Time: 05/09/25 14:42
Method: EPA 1633
Analyst approved: 05/10/25 01:15 Josephus Gimenez
Supervisor approved: 05/12/25 09:51 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.12	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.25	Split peak
Perfluorononanoic acid	375-95-1		7.64	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.36	Split peak
PFOSA	754-91-6		9.34	Split peak
MeFOSE	24448-09-7		10.54	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/13/25 08:50

Perfluorinated Compounds by LC/MS/MS

Data File	: 2q33738.d
Operator	: victoril
Acq. Method	: 1633.m
Acq. Date-Time	: 5/12/2025 12:34:57 PM
Sample Name	: RT TDCA
Vial	: P1-B1
DA Method File	: TDCA.quantmethod.xml
Batch Name	: T2Q345_TDCA.batch.bin
Sample Information	: OP62666,T2Q345,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
Internal Standards							
M8-PFOS	8.303	507.1 -> 79.9	12184	2.50	µg/L		-0.112
13C4-PFOS	8.304	502.8 -> 79.9	11398	2.50	µg/L		-0.112
System Monitoring Compounds							
13C8-PFOS	8.303	507.1 -> 79.9	12184	5.18	µg/L		-0.112
Spiked Amount: 2.50	Range: 50.0 - 150.0%			Recovery = 207.1%			
Target Compounds							QValue
PFOS	8.305	499.0 -> 80.0	21941	3.48	µg/L	#m	83
		499.0 -> 99.0	9413				
TCDCA	5.939	498.9 -> 79.9	51327	8.13	ng/ml		100
TDCA	6.808	498.9 -> 79.9	49819	7.90	ng/ml		100
TUDCA	6.796	498.9 -> 79.9	51324	8.13	ng/ml		100

 # = Qualifier out of range, m = manually integrated, + = Area summed

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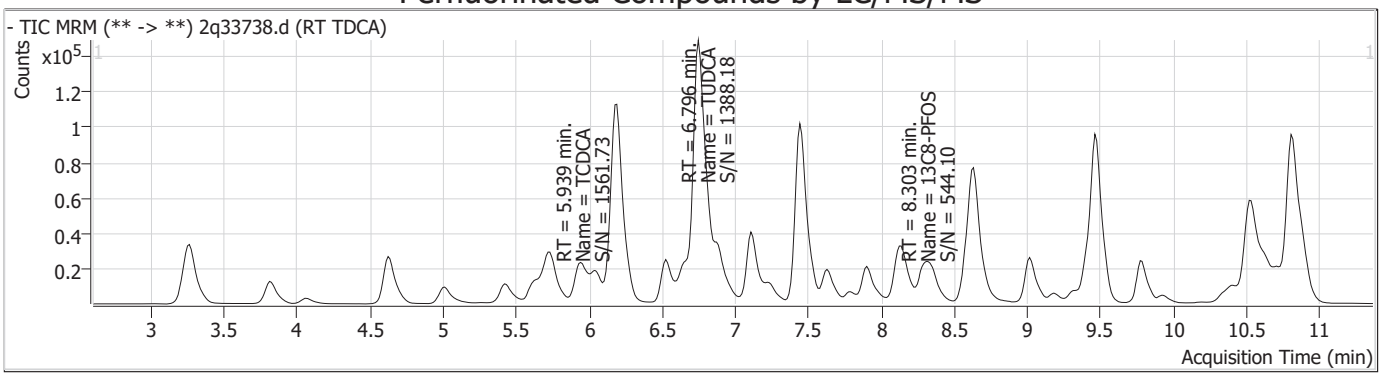
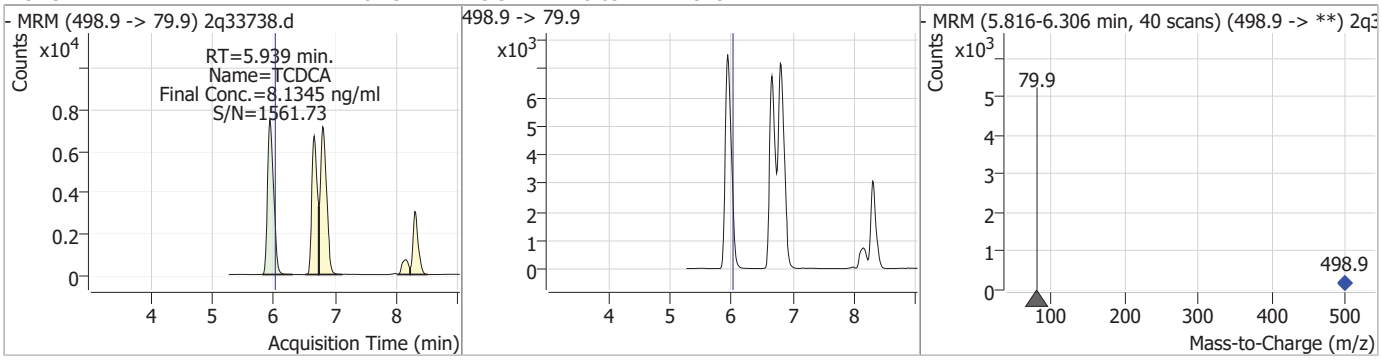
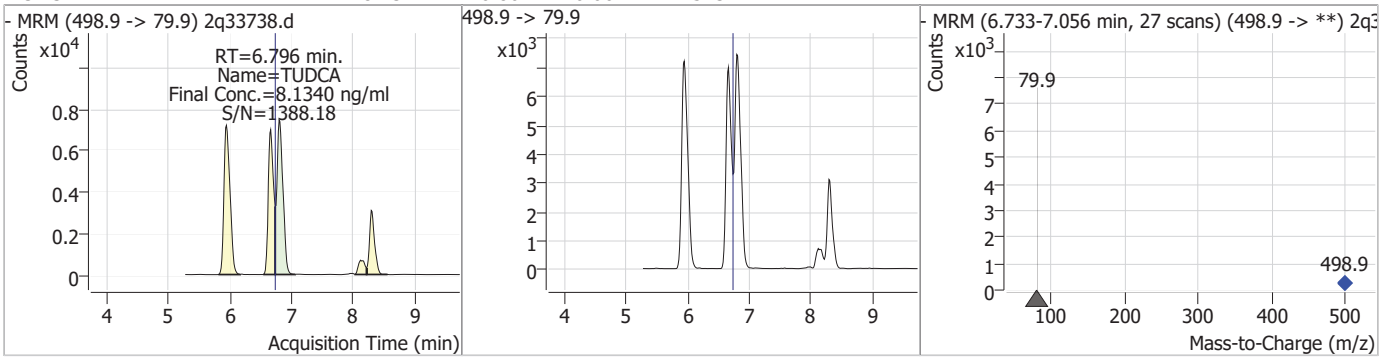
Perfluorinated Compounds by LC/MS/MS



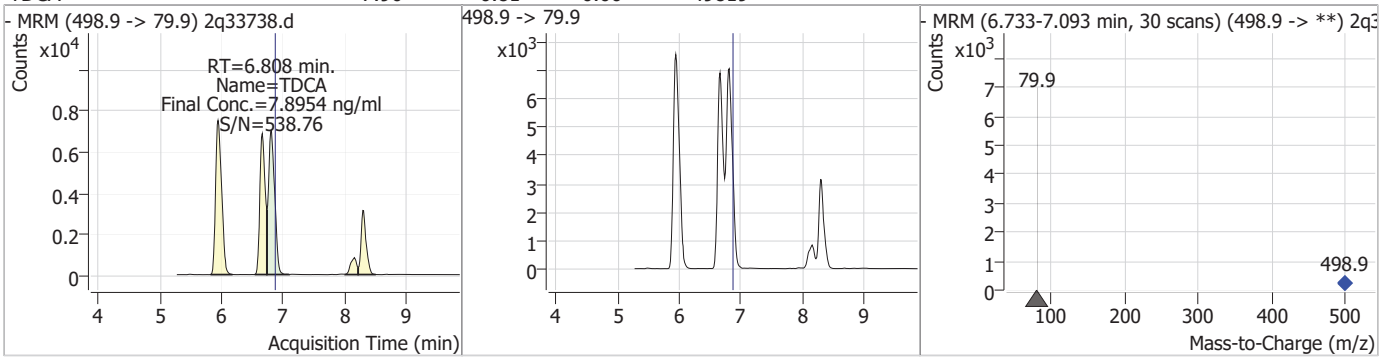
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TCDCA	8.13	5.94	-0.09	51327				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TUDCA	8.13	6.80	0.06	51324				

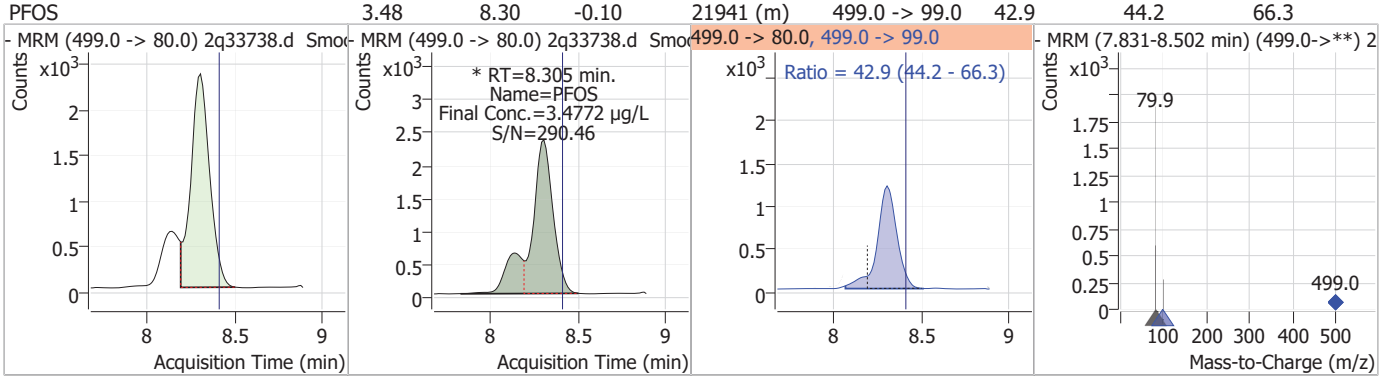


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TDCA	7.90	6.81	-0.06	49819				

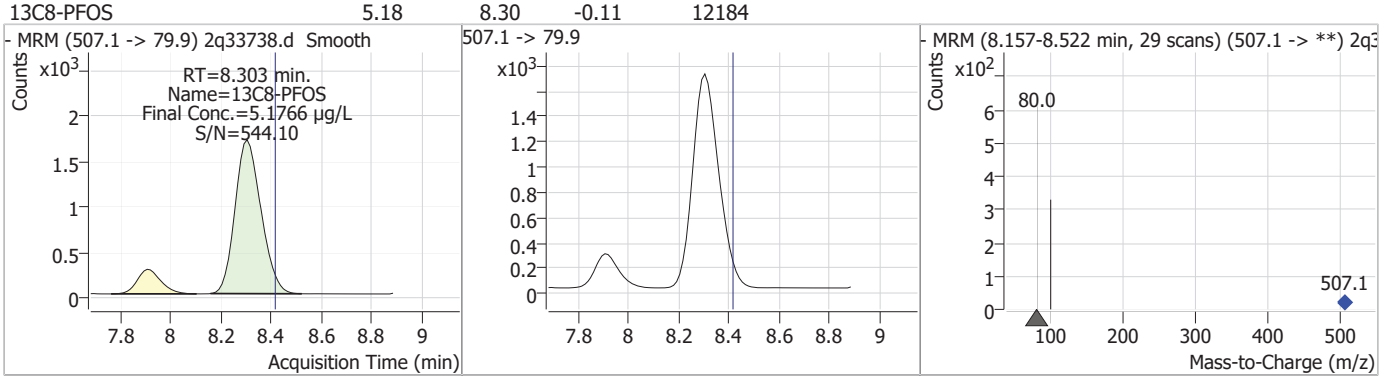


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	3.48	8.30	-0.10	21941 (m)	499.0 -> 99.0	42.9	44.2	66.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	5.18	8.30	-0.11	12184				



7.5.9

7

Manual Integration Approval Summary

Sample Number: T2Q345-RT
Lab FileID: 2Q33738.D
Injection Time: 05/12/25 12:34
Method: EPA 1633
Analyst approved: 05/13/25 06:06 Cyrill Anne Abrenica
Supervisor approved: 05/13/25 08:50 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanesulfonic acid	1763-23-1		8.30	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/13/25 08:50

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33739.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/12/2025 12:48:42 PM
Sample Name : RT
Vial : P1-A6
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q345.batch.bin
Sample Information : OP62666,T2Q345,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	114427	10.00 µg/L	0.000
M5-PFPeA	4.637	268.0 -> 223.0	62952	5.00 µg/L	0.000
M5-PFHxA	5.745	318.0 -> 273.0	36041	2.50 µg/L	0.000
M4-PFHpA	6.528	367.0 -> 322.0	30198	2.50 µg/L	-0.012
M8-PFOA	7.124	421.0 -> 376.0	65479	2.50 µg/L	0.000
M9-PFNA	7.632	472.0 -> 427.0	25709	1.25 µg/L	-0.012
M6-PFDA	8.127	519.0 -> 474.0	17804	1.25 µg/L	-0.013
M7-PFUnDA	8.596	570.0 -> 525.0	28130	1.25 µg/L	-0.012
M2-PFDoDA	9.016	615.0 -> 570.0	30130	1.25 µg/L	-0.025
M2-PFTeDA	9.783	715.0 -> 670.0	23872	1.25 µg/L	-0.012
M8-FOSA	9.333	506.0 -> 78.0	20424	2.50 µg/L	-0.013
M3-PFBS	5.699	302.0 -> 99.0	5624	2.50 µg/L	0.000
M3-PFHxS	7.250	402.0 -> 99.0	6497	2.50 µg/L	0.000
M8-PFOS	8.303	507.0 -> 99.0	6540	2.50 µg/L	-0.012
M2-4:2FTS	5.433	329.0 -> 81.0	1468	5.00 µg/L	0.000
M2-6:2FTS	6.897	429.0 -> 81.0	3154	5.00 µg/L	-0.012
M2-8:2FTS	7.902	529.0 -> 81.0	4479	5.00 µg/L	-0.012
M3-MeFOSAA	8.147	573.0 -> 419.0	40465	5.00 µg/L	-0.012
M3-HFPO-DA	6.062	287.0 -> 169.0	24320	10.00 µg/L	-0.012
M5-EtFOSAA	8.344	589.0 -> 419.0	32163	5.00 µg/L	-0.012
M7-MeFOSE	10.520	623.0 -> 59.0	173105	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	247993	25.00 µg/L	0.000
M5-EtFOSA	10.882	531.0 -> 169.0	16677	2.50 µg/L	-0.012
M3-MeFOSA	10.624	515.0 -> 169.0	15418	2.50 µg/L	0.000
13C4-PFOS	8.304	503.0 -> 80.0	12061	2.50 µg/L	-0.012
13C3-PFBA	3.265	216.0 -> 172.0	48496	5.00 µg/L	0.000
18O2-PFHxS	7.250	403.0 -> 84.0	7750	2.50 µg/L	-0.012
13C4-PFOA	7.124	417.0 -> 372.0	63899	2.50 µg/L	0.000
13C2-PFDA	8.127	515.0 -> 470.0	17778	1.25 µg/L	-0.013
13C5-PFNA	7.645	468.0 -> 423.0	23391	1.25 µg/L	0.000
13C2-PFHxA	5.746	315.0 -> 270.0	34431	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.433	329.0 -> 81.0	1468	5.52 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 110.4%	
13C2-6:2FTS	6.897	429.0 -> 81.0	3154	5.33 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.7%	
13C2-8:2FTS	7.902	529.0 -> 81.0	4479	4.51 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.2%	
13C2-PFDoDA	9.016	615.0 -> 570.0	30130	1.25 µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.6%	
13C2-PFTeDA	9.783	715.0 -> 670.0	23872	1.23 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.0%	
13C3-PFBS	5.699	302.0 -> 99.0	5624	2.61 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.4%	
13C3-PFHxS	7.250	402.0 -> 99.0	6497	2.43 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.3%		
13C4-PFBA	3.263	217.0 -> 172.0	114427	10.05 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.5%		
13C4-PFHpA	6.528	367.0 -> 322.0	30198	2.52 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.9%		
13C5-PFHxA	5.745	318.0 -> 273.0	36041	2.38 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.3%		
13C5-PFPeA	4.637	268.0 -> 223.0	62952	4.85 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.9%		
13C6-PFDA	8.127	519.0 -> 474.0	17804	1.22 µg/L		-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.7%		
13C7-PFUnDA	8.596	570.0 -> 525.0	28130	1.19 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.5%		
13C8-FOSA	9.333	506.0 -> 78.0	20424	2.47 µg/L		-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.0%		
13C8-PFOA	7.124	421.0 -> 376.0	65479	2.55 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.0%		
13C8-PFOS	8.303	507.0 -> 99.0	6540	2.56 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.5%		
13C9-PFNA	7.632	472.0 -> 427.0	25709	1.26 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.0%		
d3-MeFOSAA	8.147	573.0 -> 419.0	40465	4.88 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.6%		
13C3-HFPO-DA	6.062	287.0 -> 169.0	24320	10.13 µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.3%		
d3-MeFOSA	10.624	515.0 -> 169.0	15418	2.40 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.2%		
d5-EtFOSAA	8.344	589.0 -> 419.0	32163	4.66 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.2%		
d7-MeFOSE	10.520	623.0 -> 59.0	173105	23.51 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 94.0%		
d9-EtFOSE	10.803	639.0 -> 59.0	247993	23.94 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 95.8%		
d5-EtFOSA	10.882	531.0 -> 169.0	16677	2.59 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.6%		
Target Compounds						QValue
4:2FTS	5.421	327.0 -> 307.0	39008	17.77 µg/L		96
		327.0 -> 81.0	21740			
6:2FTS	6.898	427.0 -> 407.0	69421	18.35 µg/L		100
		427.0 -> 81.0	26335			
8:2FTS	7.902	527.0 -> 507.0	68174	20.13 µg/L		99
		527.0 -> 81.0	28498			
EtFOSAA	8.345	584.0 -> 419.0	27027	5.47 µg/L	m	99
		584.0 -> 483.0	13214			
FOSA	9.323	498.0 -> 78.0	36469	6.81 µg/L	m	100
		498.0 -> 478.0	1491			
MeFOSAA	8.149	570.0 -> 419.0	30740	5.24 µg/L		96
		570.0 -> 512.0	9169			
PFBA	3.268	213.0 -> 169.0	58680	20.24 µg/L		100
PFBS	5.700	299.0 -> 80.0	30562	4.14 µg/L		98
		299.0 -> 99.0	11414			
PFDA	8.128	513.0 -> 469.0	69827	5.20 µg/L		98
		513.0 -> 219.0	11525			
PFDoDA	9.016	613.0 -> 569.0	109852	5.05 µg/L		98
		613.0 -> 319.0	17711			
PFDS	9.194	599.0 -> 80.0	16467	4.87 µg/L		99

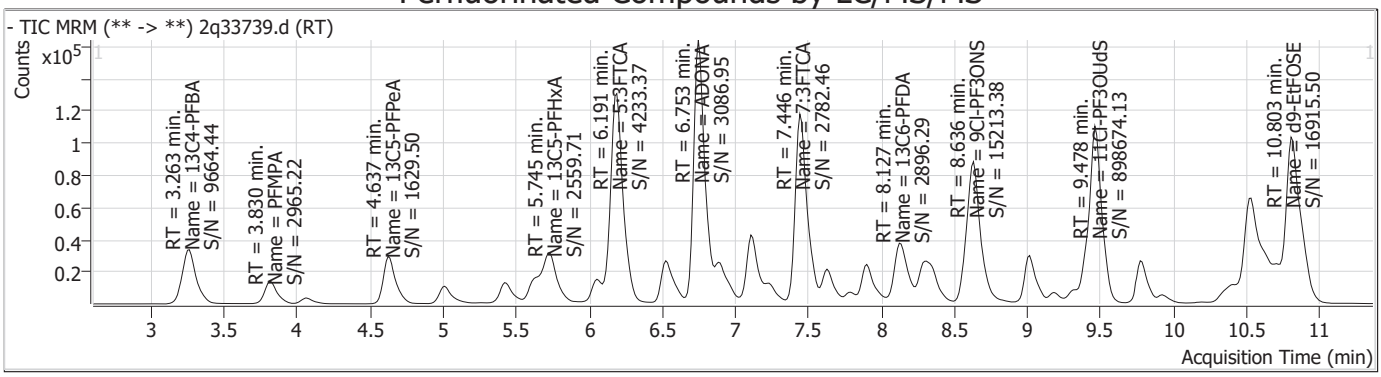
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	7658				
PFHpA	6.528	363.0 -> 319.0	91642	4.82	µg/L		100
		363.0 -> 169.0	16629				
PFHpS	7.797	449.0 -> 80.0	22153	4.81	µg/L		93
		449.0 -> 99.0	10274				
PFHxA	5.748	313.0 -> 269.0	61325	5.10	µg/L		99
		313.0 -> 119.0	2118				
PFHxS	7.252	399.0 -> 80.0	22142	5.43	µg/L	m	90
		399.0 -> 99.0	10419				
PFNA	7.633	463.0 -> 419.0	58249	6.02	µg/L	m	96
		463.0 -> 219.0	15128				
PFNS	8.771	549.0 -> 80.0	10524	4.82	µg/L		92
		549.0 -> 99.0	5425				
PFOA	7.125	413.0 -> 369.0	96978	6.09	µg/L	m	99
		413.0 -> 169.0	21050				
PFOS	8.305	499.0 -> 80.0	25949	5.59	µg/L	m	98
		499.0 -> 99.0	12475				
PFPeA	4.640	263.0 -> 219.0	111733	10.01	µg/L		100
PFPeS	6.604	349.0 -> 80.0	12575	4.57	µg/L		97
		349.0 -> 99.0	5011				
PFTeDA	9.784	713.0 -> 669.0	100965	5.16	µg/L		100
		713.0 -> 169.0	8248				
PFTrDA	9.414	663.0 -> 619.0	132450	5.05	µg/L		99
		663.0 -> 169.0	13159				
PFUnDA	8.597	563.0 -> 519.0	102003	5.48	µg/L		93
		563.0 -> 269.0	17334				
11Cl-PF3OUdS	9.478	631.0 -> 451.0	402765	19.12	µg/L		100
		633.0 -> 453.0	121795				
9Cl-PF3ONS	8.636	531.0 -> 351.0	318318	18.78	µg/L		97
		533.0 -> 353.0	95842				
ADONA	6.753	377.0 -> 251.0	674289	19.04	µg/L		99
		377.0 -> 85.0	205531				
HFPO-DA	6.062	285.0 -> 169.0	47640	19.79	µg/L		98
		285.0 -> 185.0	4438				
3:3FTCA	4.065	241.0 -> 177.0	19599	22.37	µg/L		98
		241.0 -> 117.0	1440				
5:3FTCA	6.191	341.0 -> 237.0	357234	120.19	µg/L		99
		341.0 -> 217.0	250728				
7:3FTCA	7.446	441.0 -> 337.0	469181	122.93	µg/L		100
		441.0 -> 317.0	192777				
EtFOSA	10.883	526.0 -> 219.0	31874	6.48	µg/L		100
		526.0 -> 169.0	42610				
EtFOSE	10.817	630.0 -> 59.0	481367	49.65	µg/L		100
MeFOSA	10.613	512.0 -> 169.0	37974	6.32	µg/L		85
		512.0 -> 219.0	21142				
MeFOSE	10.533	616.0 -> 59.0	325499	62.98	µg/L		100
PFDoDS	9.936	699.0 -> 80.0	16813	4.56	µg/L		99
		699.0 -> 99.0	8230				
NFDHA	5.639	295.0 -> 201.0	11034	11.05	µg/L		93
		201.0 -> 85.0	63002				
		295.0 -> 85.0	4003				
PFMBA	5.015	279.0 -> 85.0	63668	9.84	µg/L		100
PFMPA	3.830	229.0 -> 85.0	88801	9.63	µg/L		100
PFEESA	6.168	315.0 -> 135.0	138719	9.32	µg/L		100
		315.0 -> 69.0	15063				

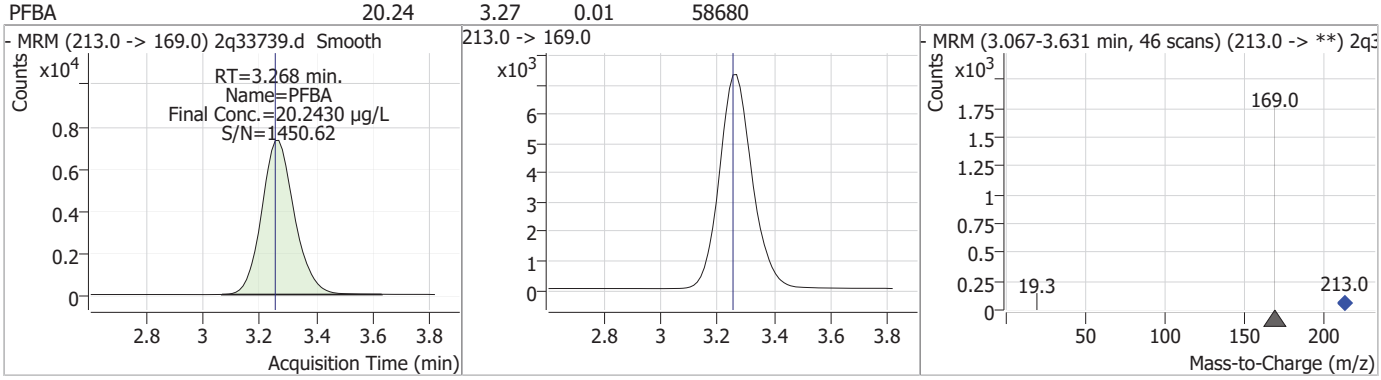
 # = Qualifier out of range, m = manually integrated, + = Area summed

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

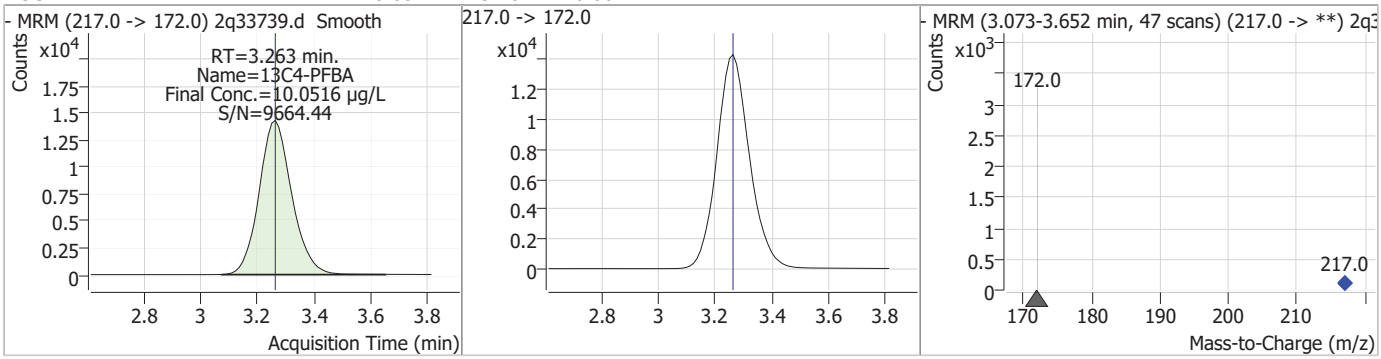
Perfluorinated Compounds by LC/MS/MS



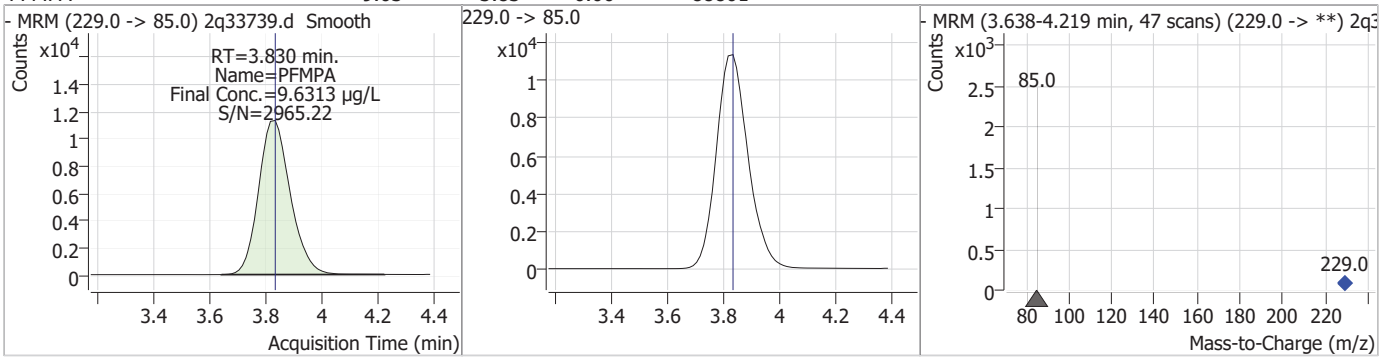
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	20.24	3.27	0.01	58680				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.05	3.26	0.00	114427				

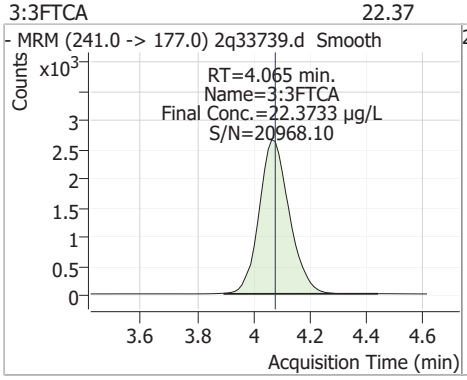


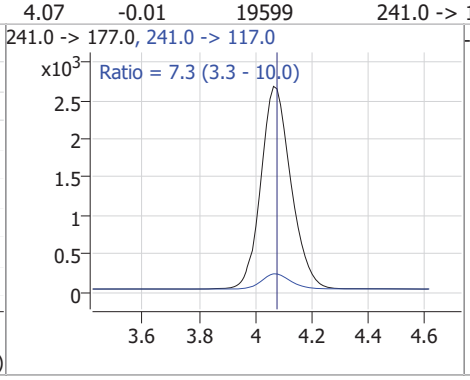
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	9.63	3.83	0.00	88801				

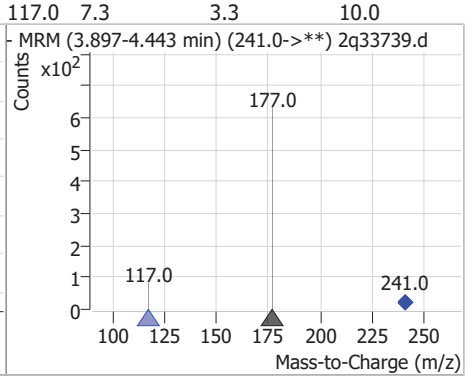


Perfluorinated Compounds by LC/MS/MS

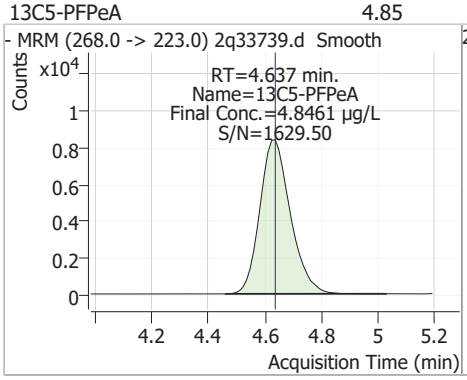
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	22.37	4.07	-0.01	19599	241.0 -> 117.0	7.3	3.3	10.0

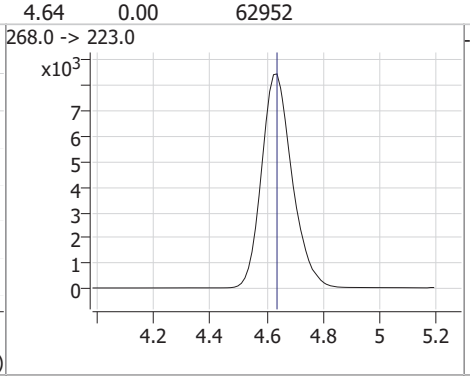


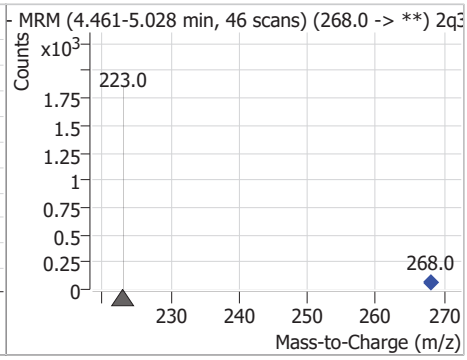




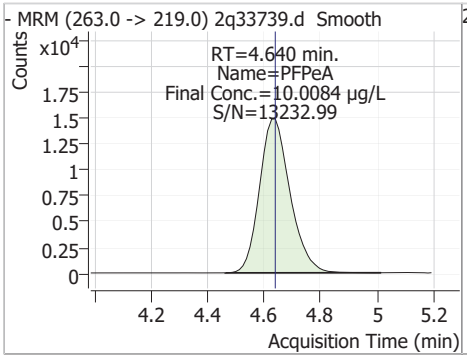
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.85	4.64	0.00	62952				

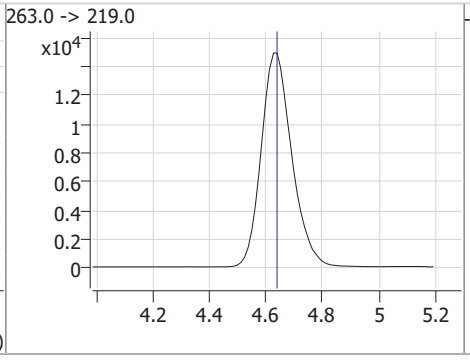


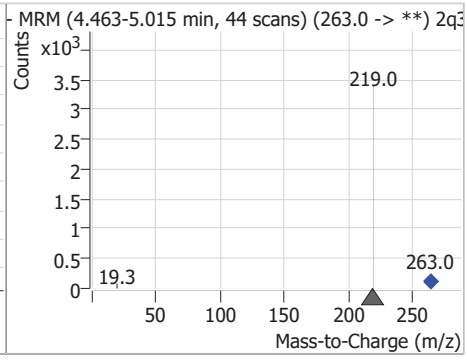




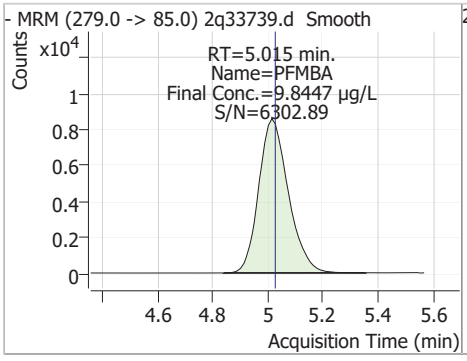
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	10.01	4.64	0.00	111733				

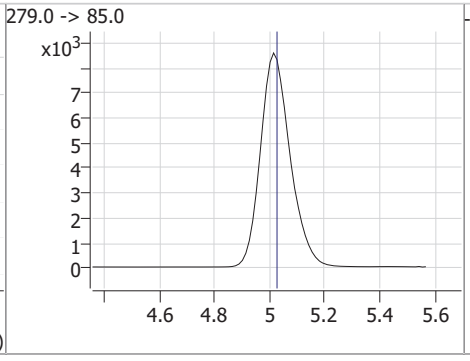


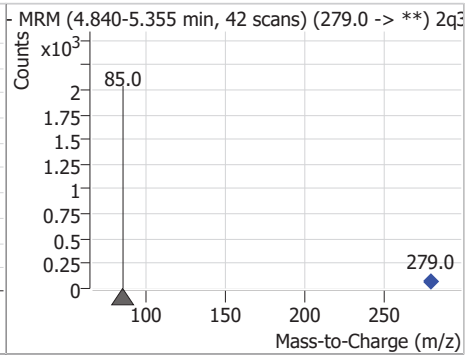




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	9.84	5.01	-0.01	63668				

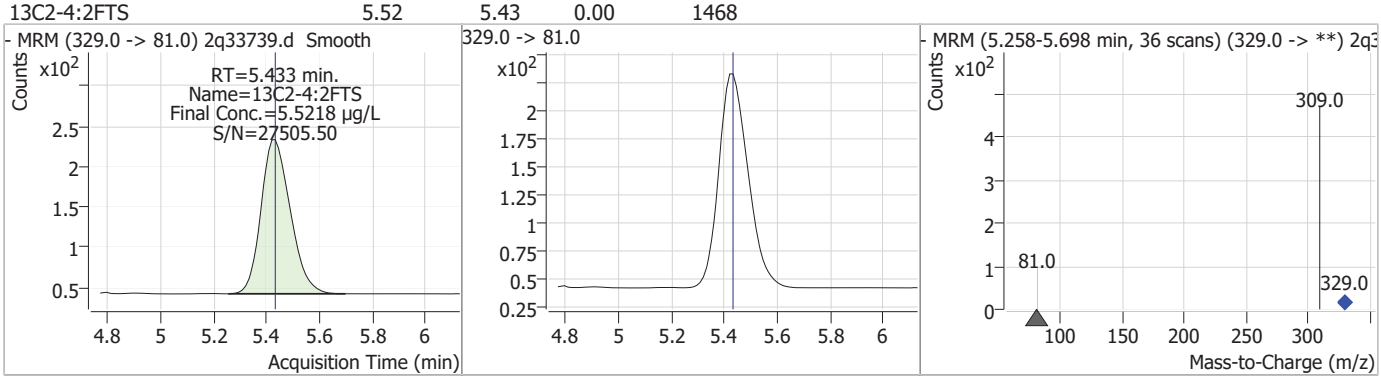




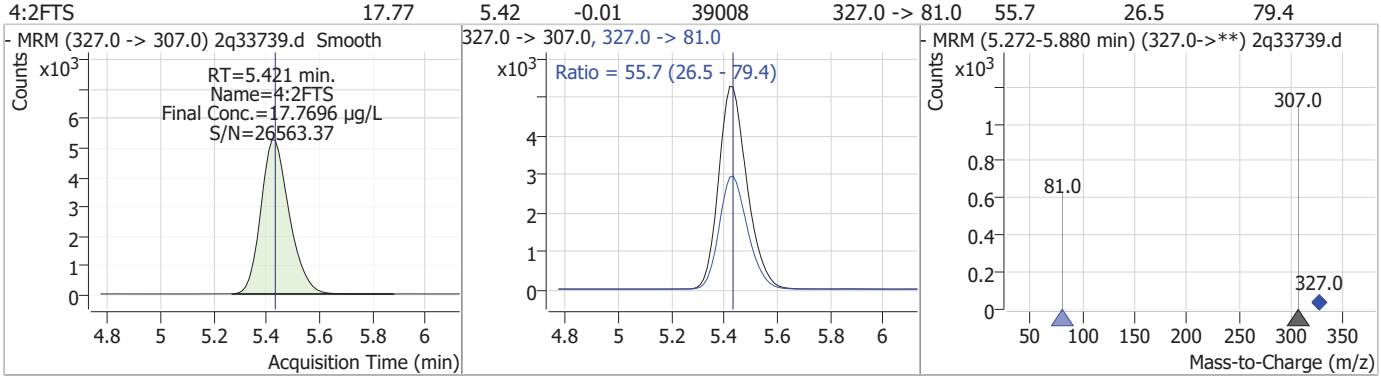


Perfluorinated Compounds by LC/MS/MS

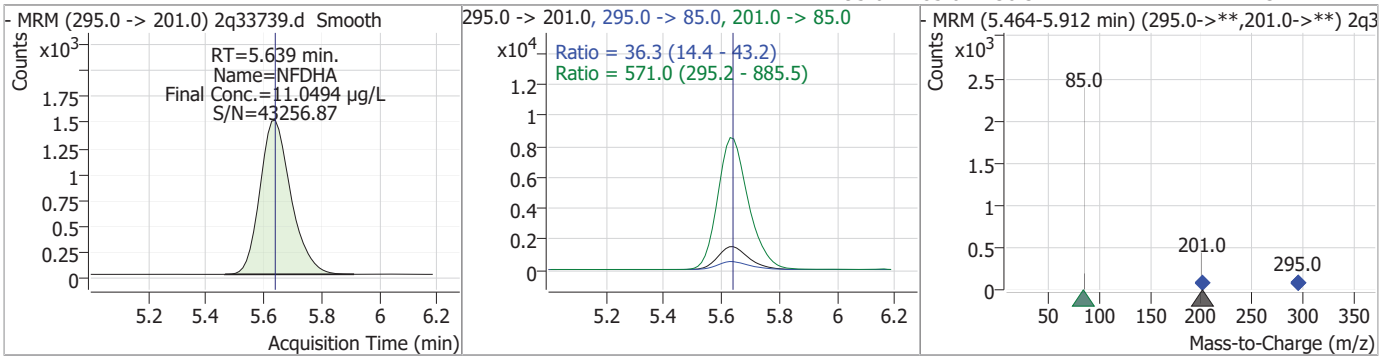
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.52	5.43	0.00	1468				



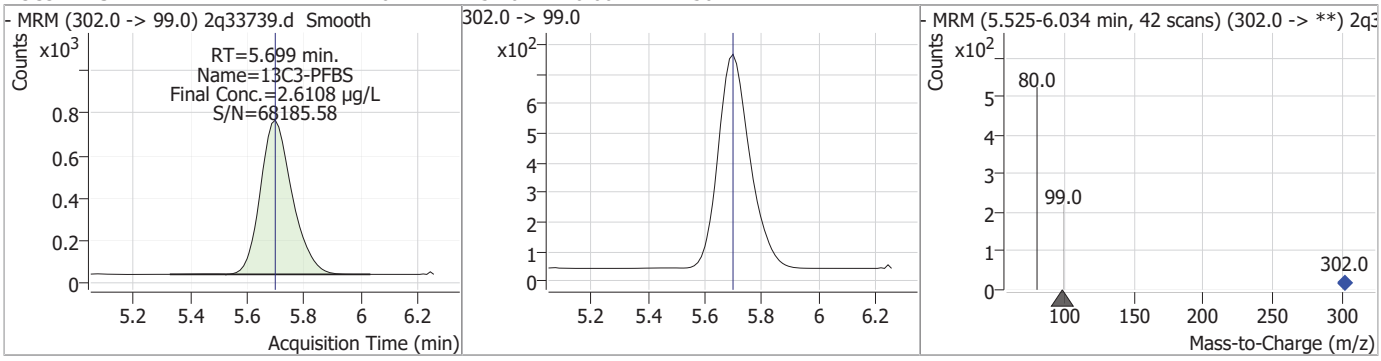
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	17.77	5.42	-0.01	39008	327.0 -> 81.0	55.7	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	11.05	5.64	0.00	11034	201.0 -> 85.0	571.0	295.2	885.5
					295.0 -> 85.0	36.3	14.4	43.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.61	5.70	0.00	5624				

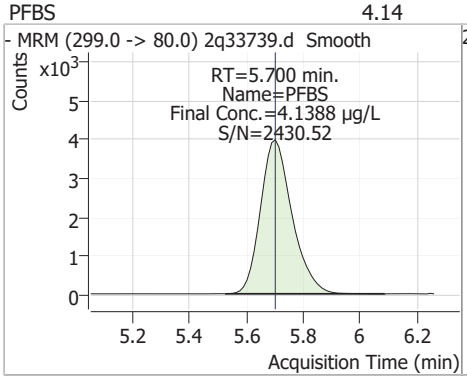


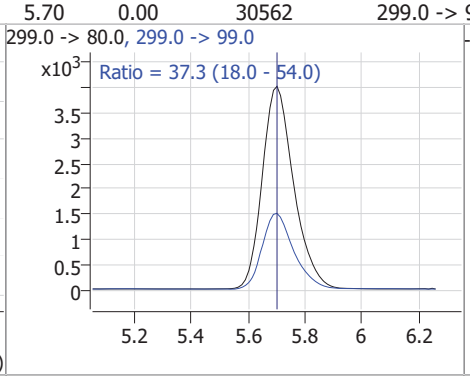
7.5.7

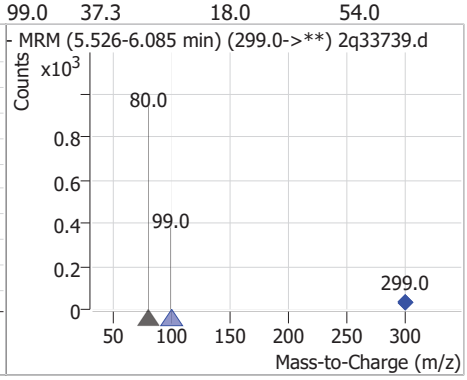
7

Perfluorinated Compounds by LC/MS/MS

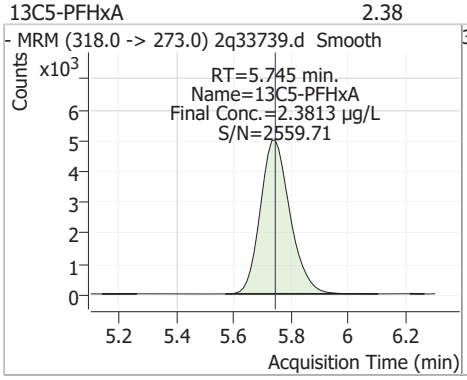
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.14	5.70	0.00	30562	299.0 -> 99.0	37.3	18.0	54.0

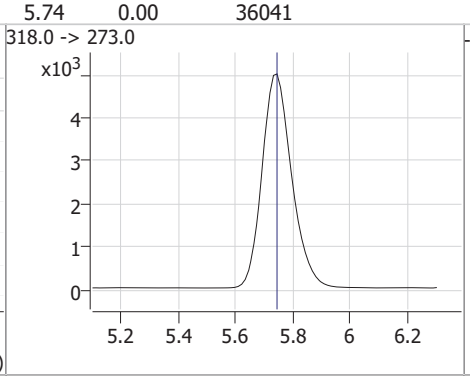


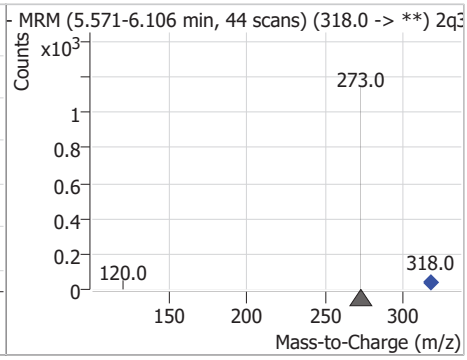




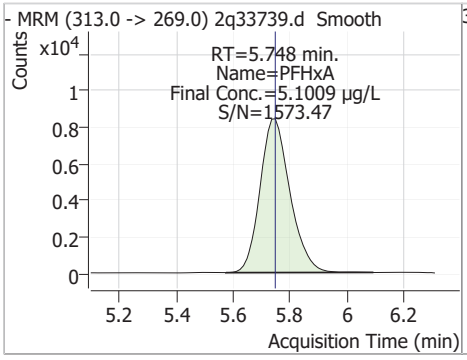
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.38	5.74	0.00	36041				

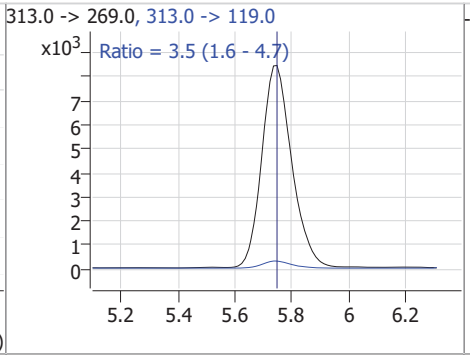


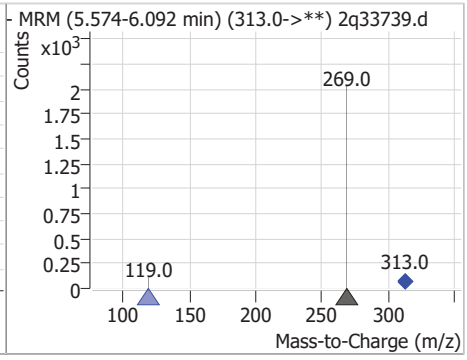




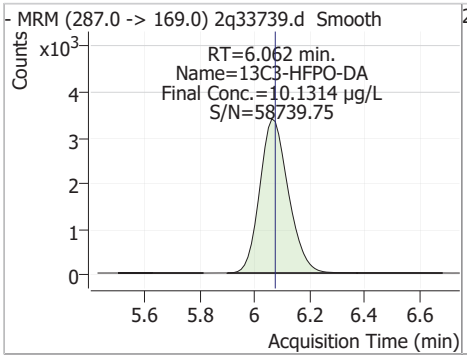
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	5.10	5.75	0.00	61325	313.0 -> 119.0	3.5	1.6	4.7

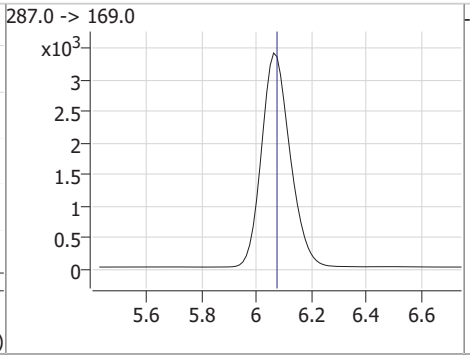


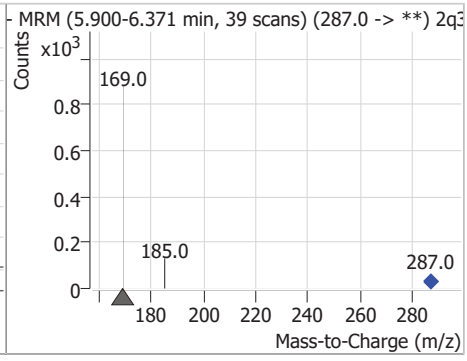




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.13	6.06	-0.01	24320				

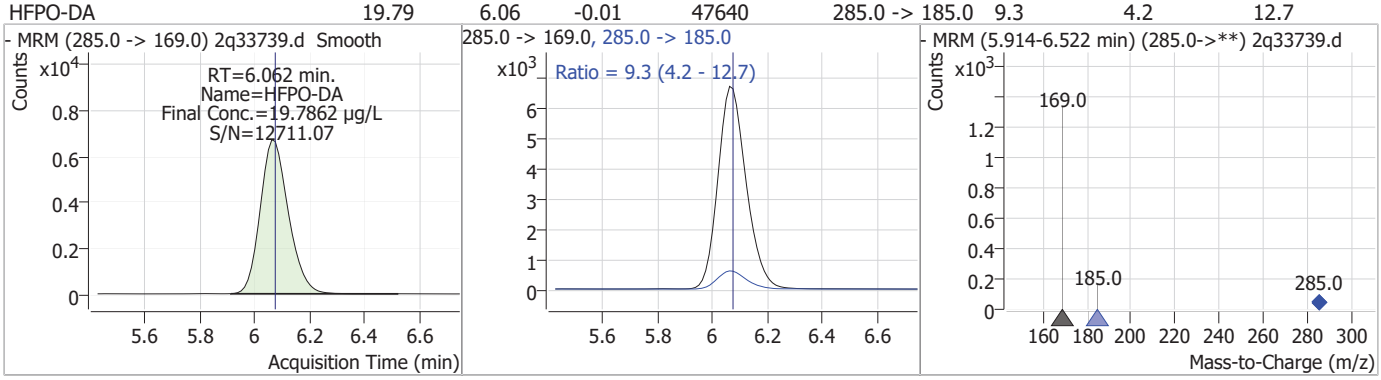




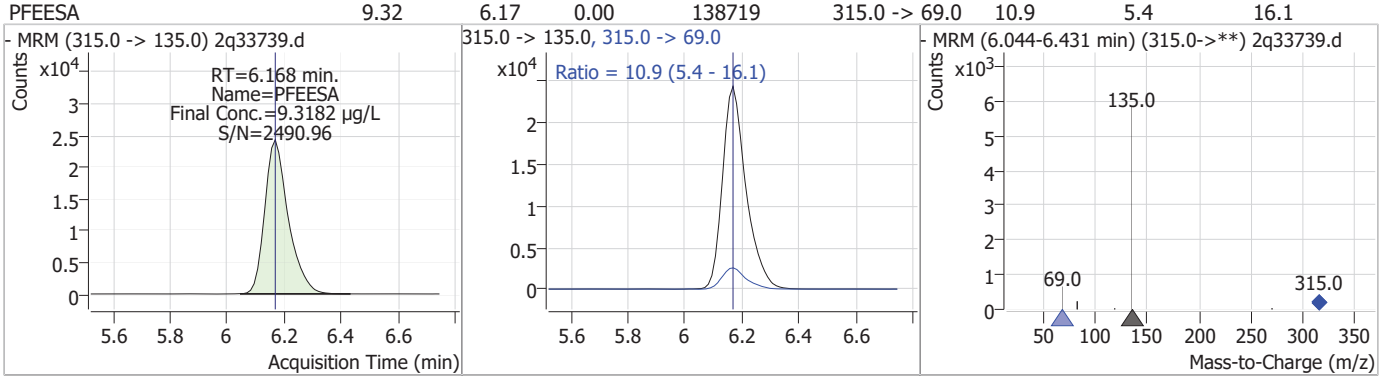


Perfluorinated Compounds by LC/MS/MS

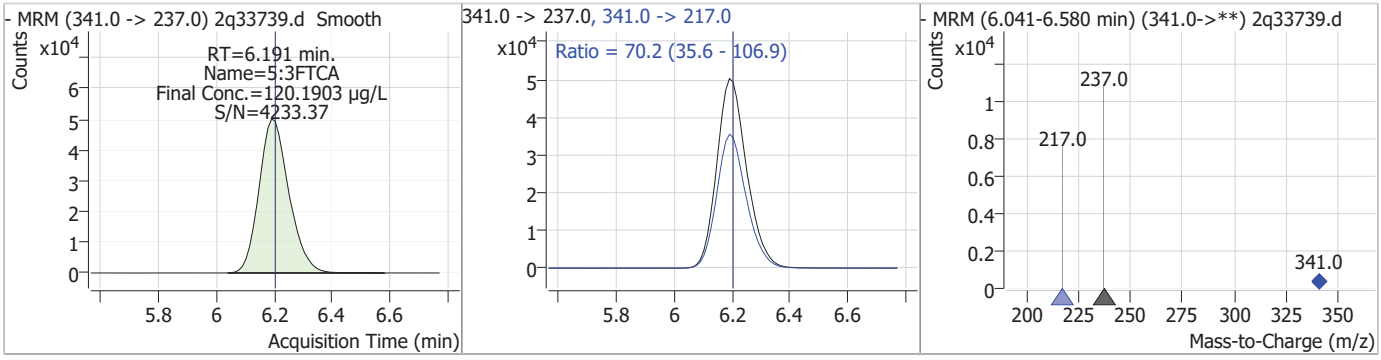
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	19.79	6.06	-0.01	47640	285.0 -> 185.0	9.3	4.2	12.7



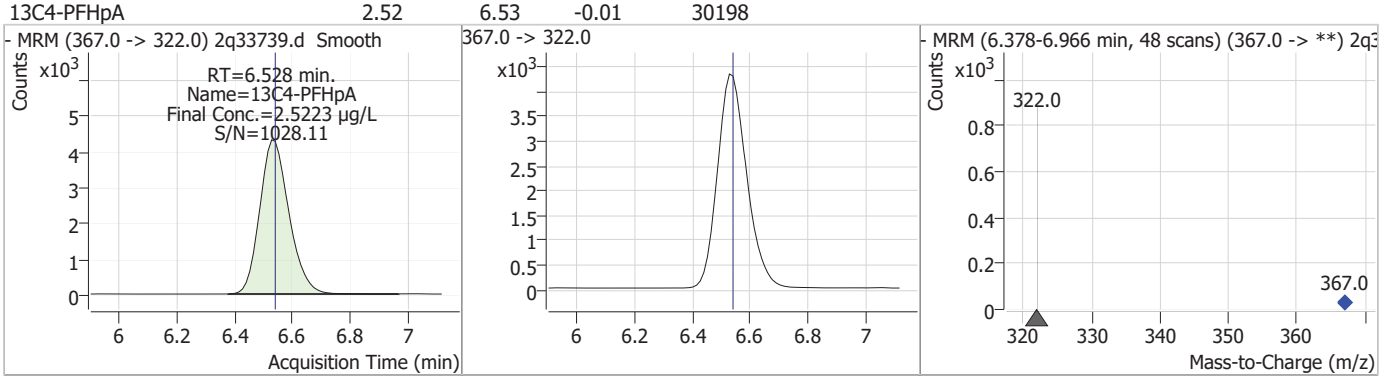
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	9.32	6.17	0.00	138719	315.0 -> 69.0	10.9	5.4	16.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	120.19	6.19	-0.01	357234	341.0 -> 217.0	70.2	35.6	106.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.52	6.53	-0.01	30198				

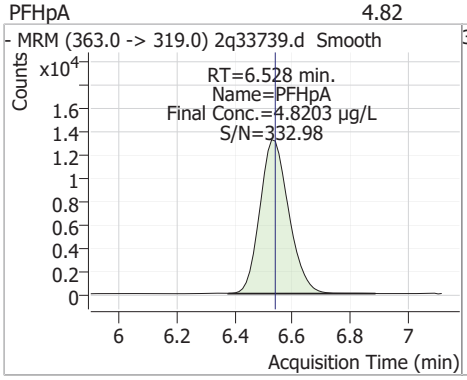


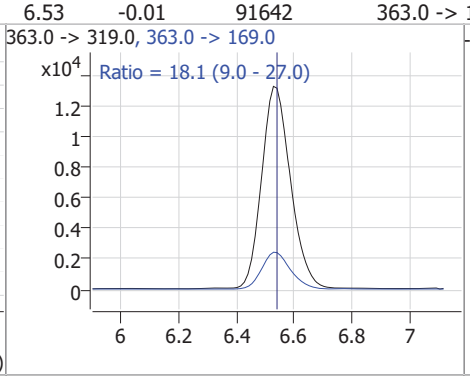
7.5.7

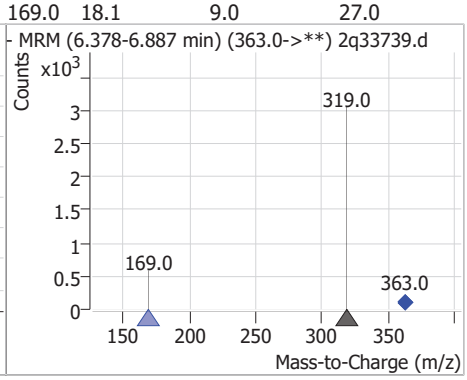
7

Perfluorinated Compounds by LC/MS/MS

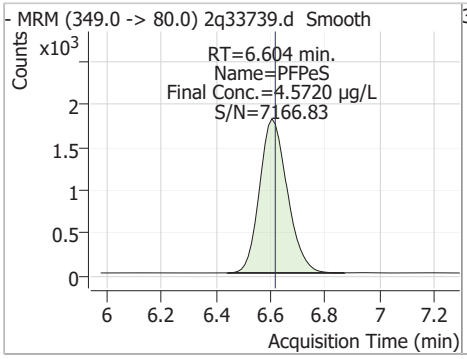
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	4.82	6.53	-0.01	91642	363.0 -> 169.0	18.1	9.0	27.0

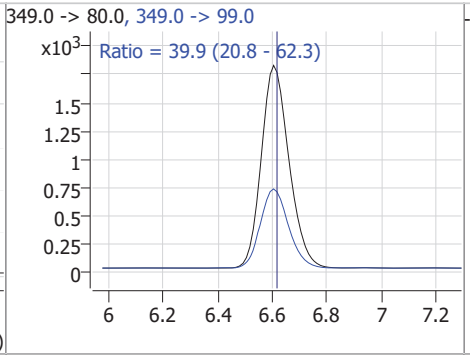


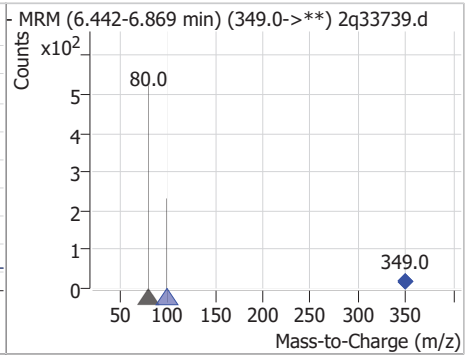




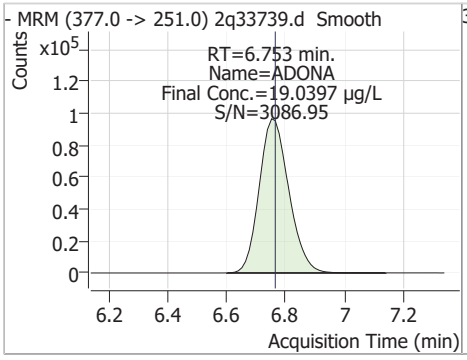
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	4.57	6.60	-0.01	12575	349.0 -> 99.0	39.9	20.8	62.3

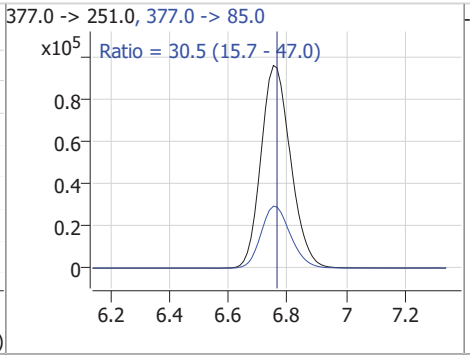


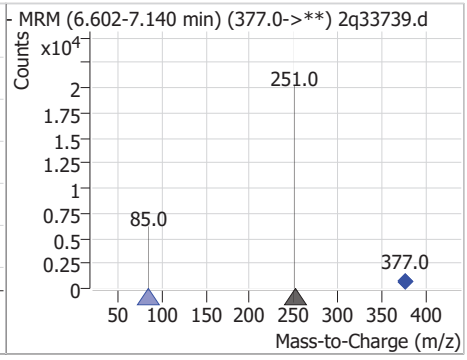




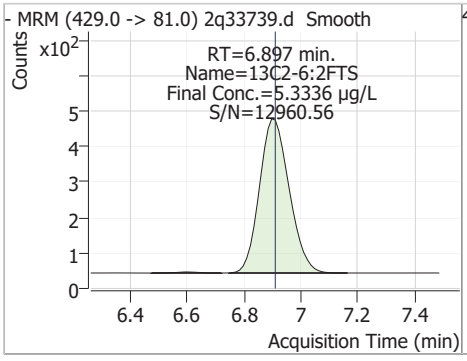
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	19.04	6.75	-0.01	674289	377.0 -> 85.0	30.5	15.7	47.0

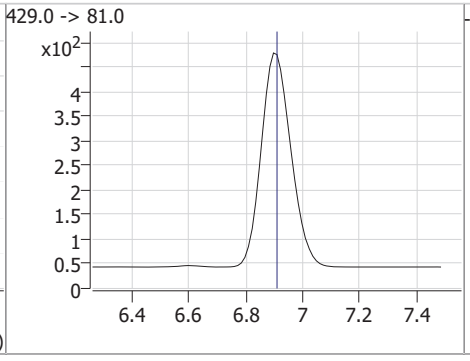


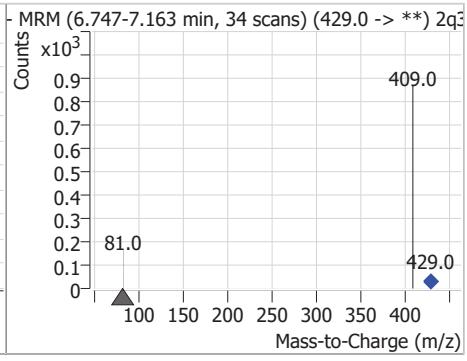




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.33	6.90	-0.01	3154				





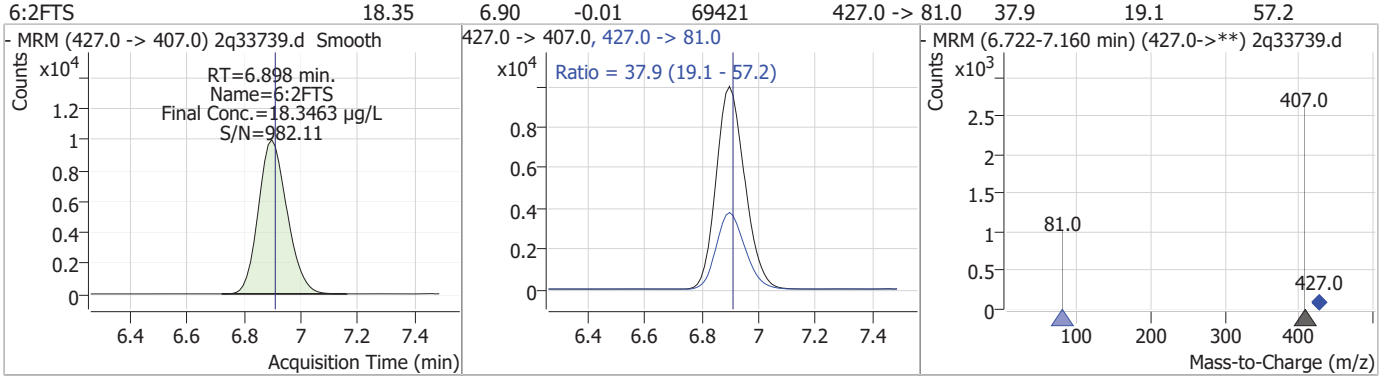


7.5.7

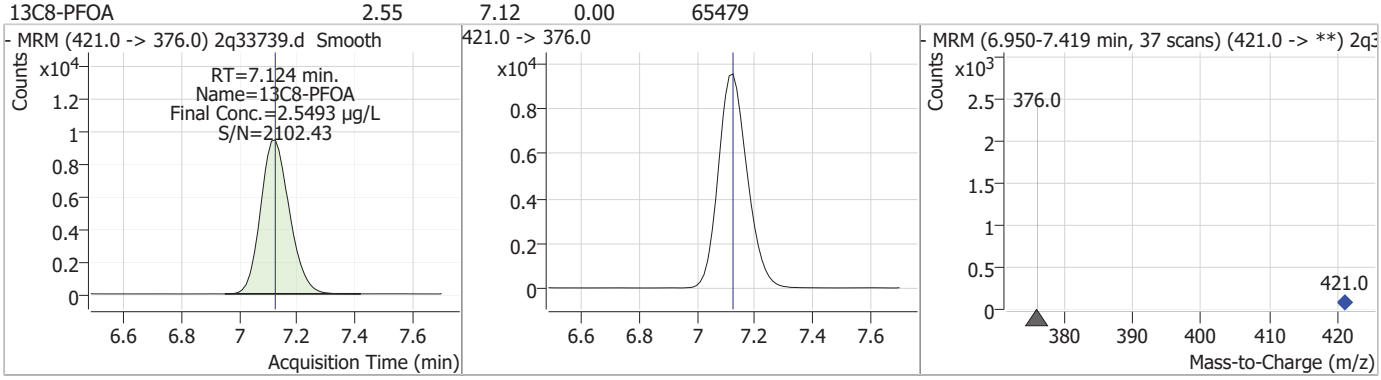
7

Perfluorinated Compounds by LC/MS/MS

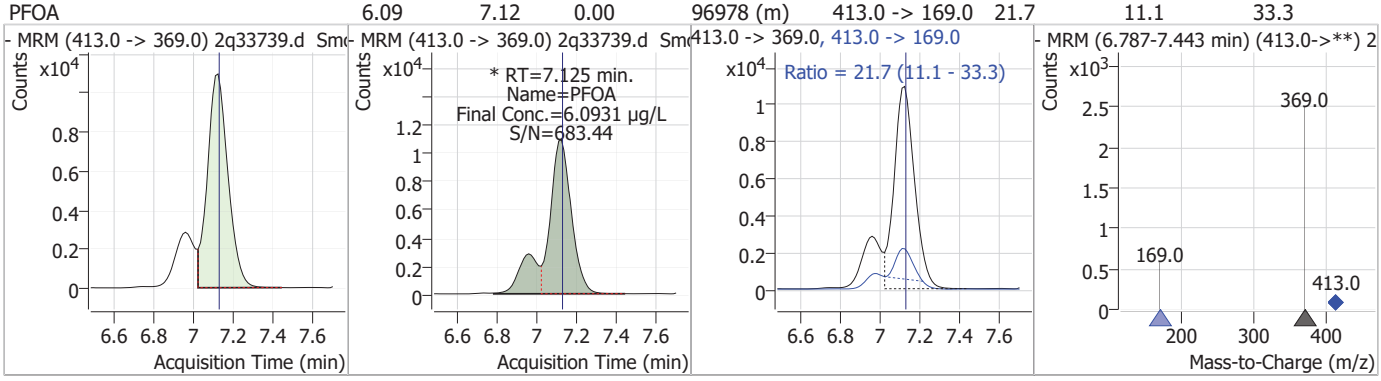
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	18.35	6.90	-0.01	69421	427.0 -> 81.0	37.9	19.1	57.2



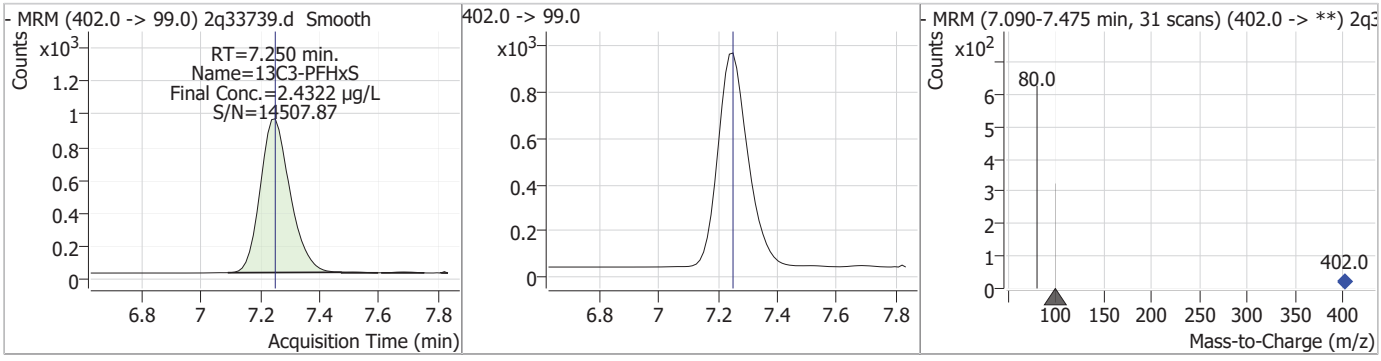
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.55	7.12	0.00	65479				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	6.09	7.12	0.00	96978 (m)	413.0 -> 169.0	21.7	11.1	33.3

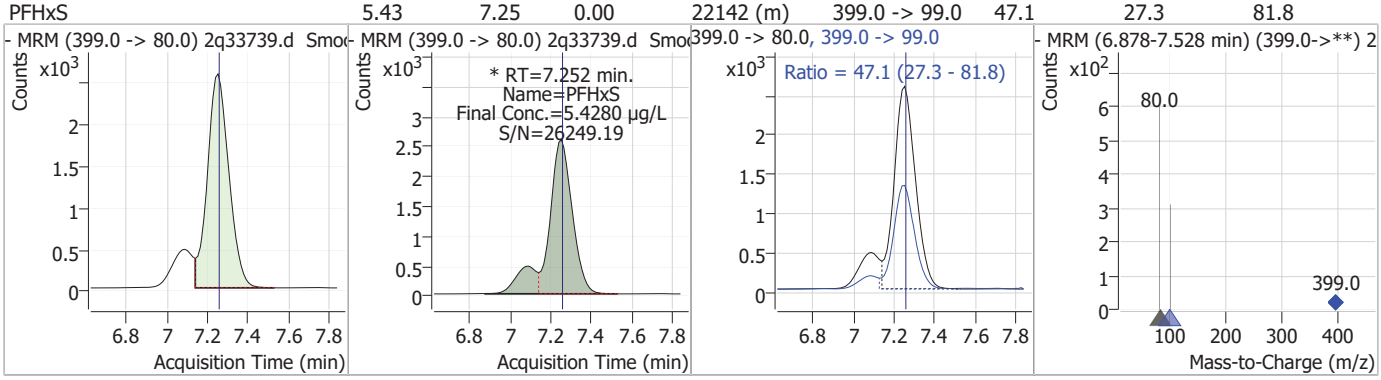


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.43	7.25	0.00	6497				

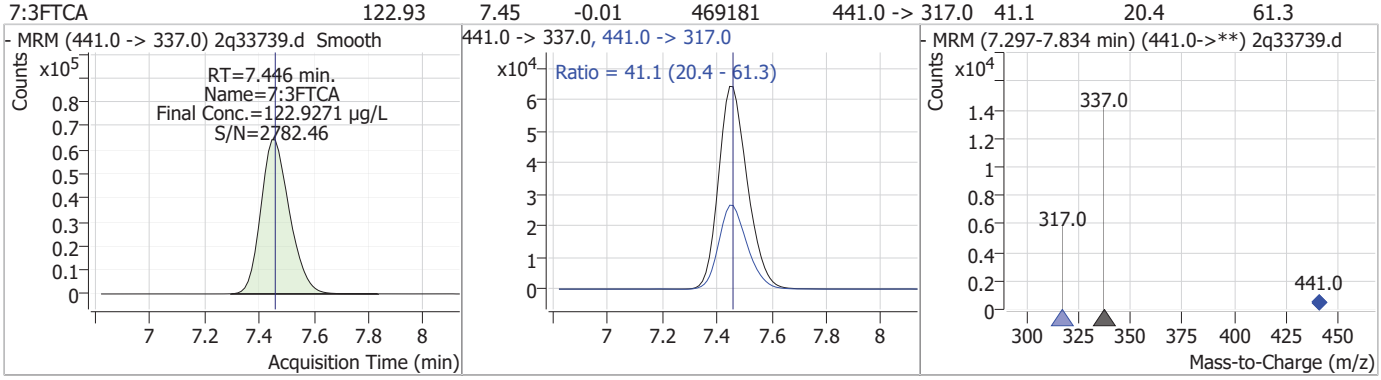


Perfluorinated Compounds by LC/MS/MS

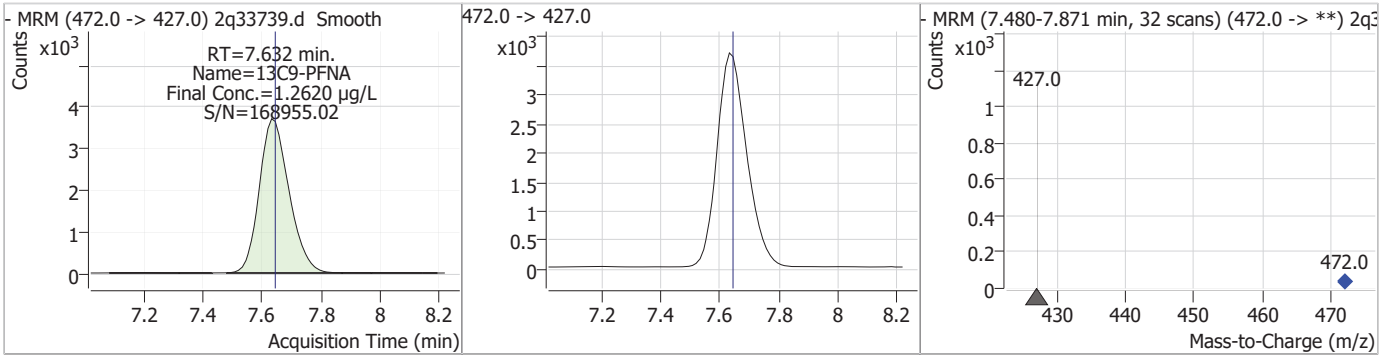
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	5.43	7.25	0.00	22142 (m)	399.0 -> 99.0	47.1	27.3	81.8



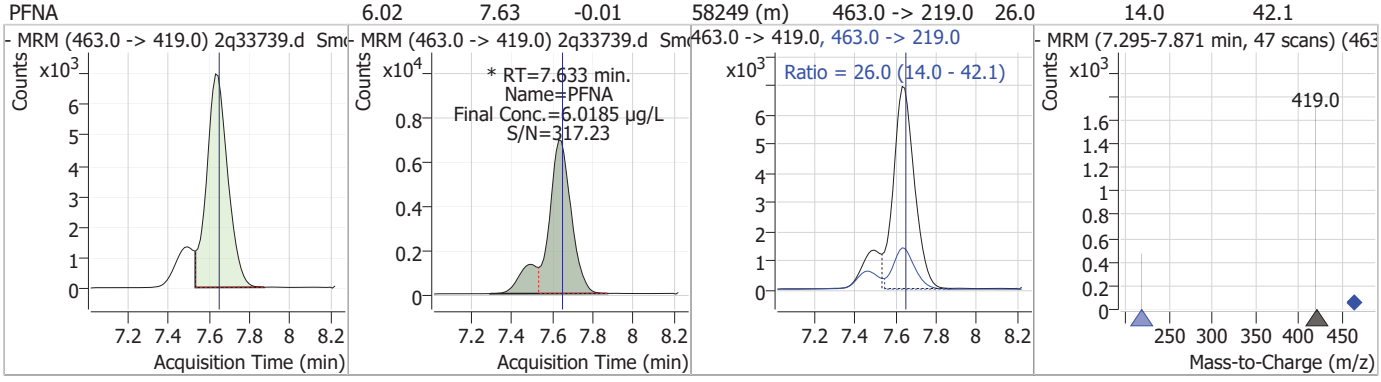
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	122.93	7.45	-0.01	469181	441.0 -> 317.0	41.1	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.26	7.63	-0.01	25709				

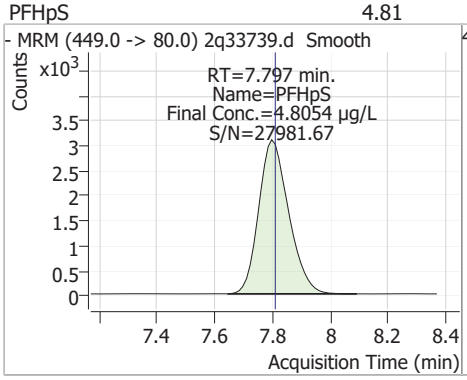


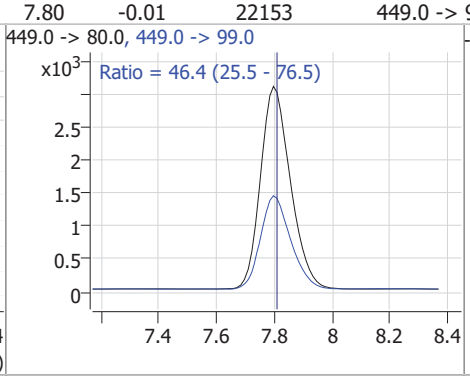
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	6.02	7.63	-0.01	58249 (m)	463.0 -> 219.0	26.0	14.0	42.1

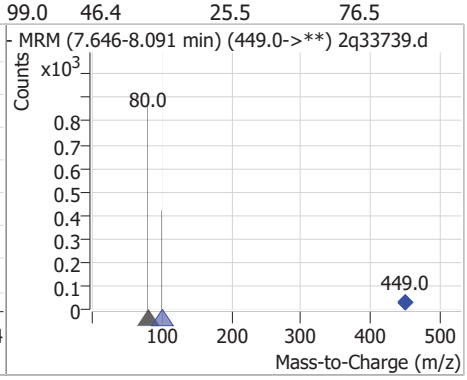


Perfluorinated Compounds by LC/MS/MS

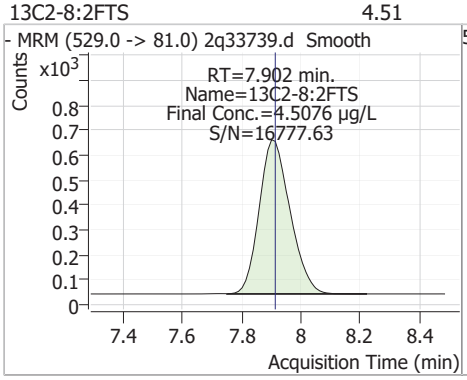
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	4.81	7.80	-0.01	22153	449.0 -> 99.0	46.4	25.5	76.5

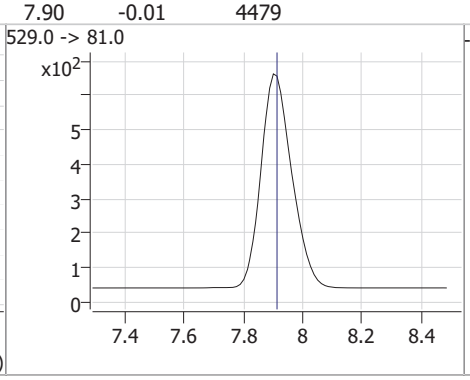


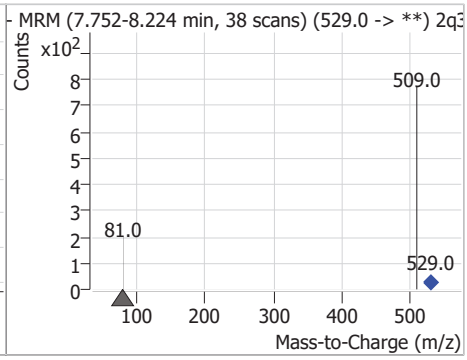




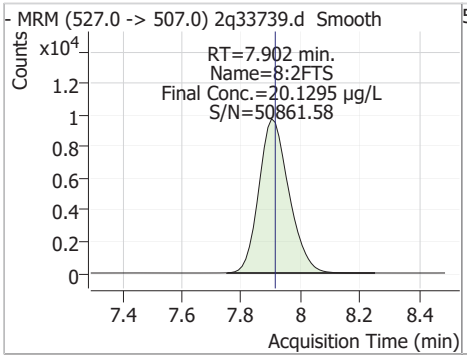
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.51	7.90	-0.01	4479				

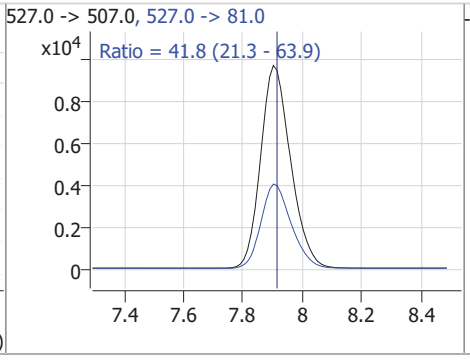


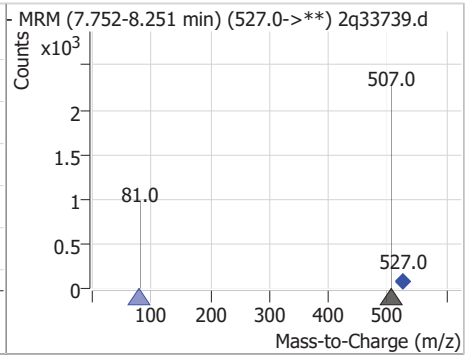




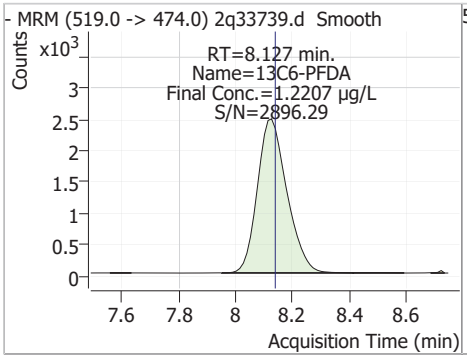
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	20.13	7.90	-0.01	68174	527.0 -> 81.0	41.8	21.3	63.9

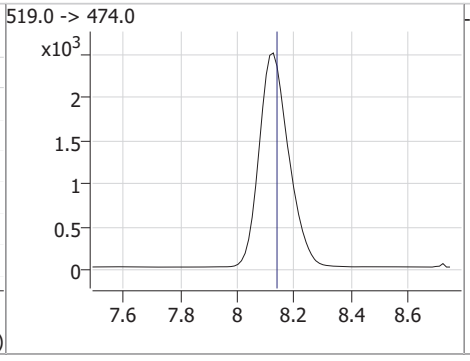


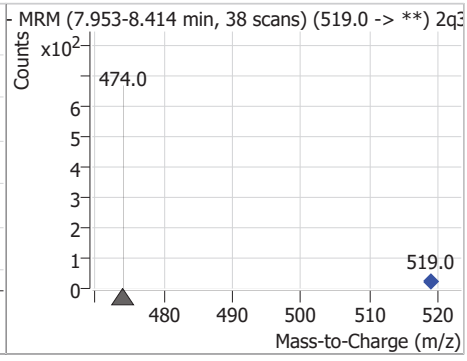




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.22	8.13	-0.01	17804				

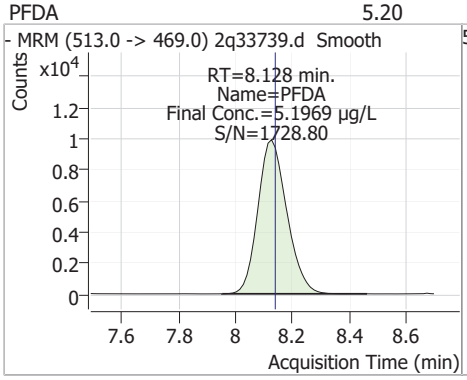


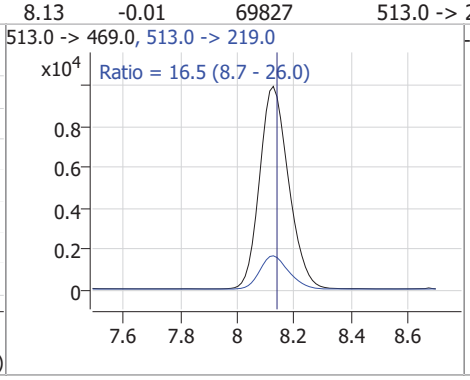


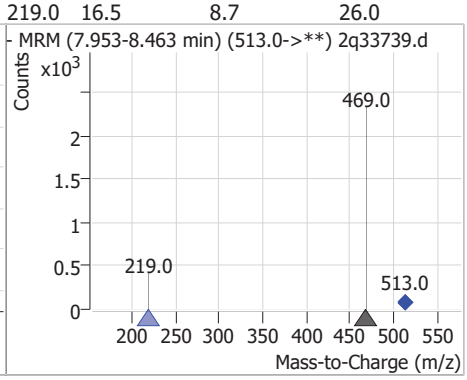


Perfluorinated Compounds by LC/MS/MS

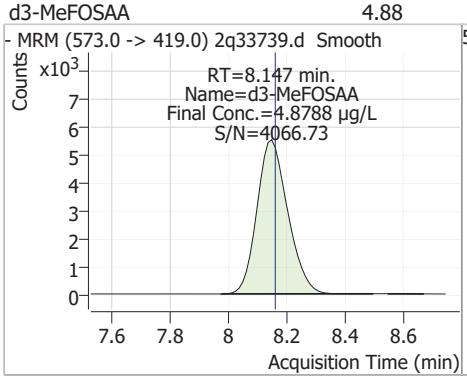
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	5.20	8.13	-0.01	69827	513.0 -> 219.0	16.5	8.7	26.0

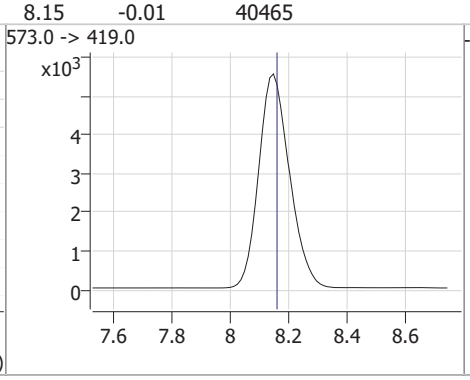


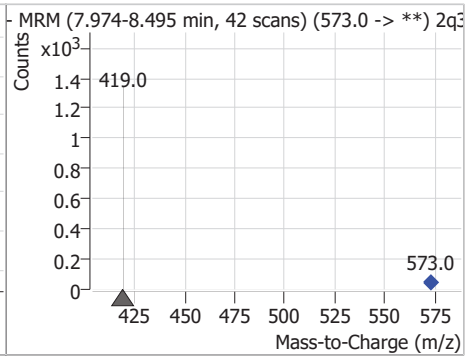




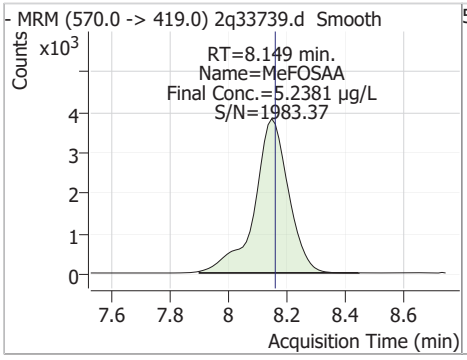
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.88	8.15	-0.01	40465				

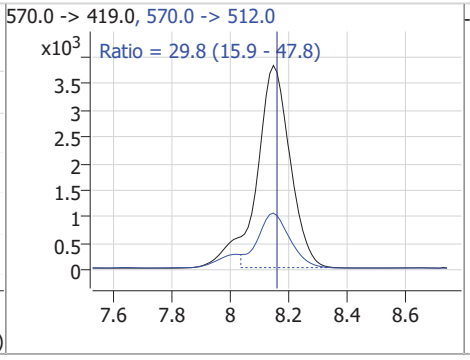


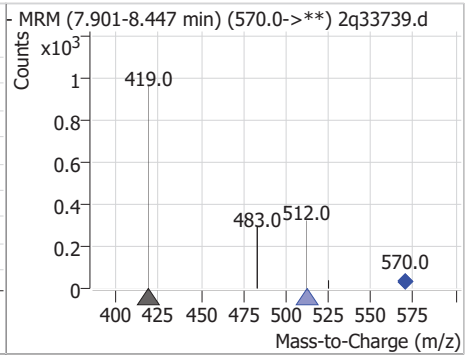




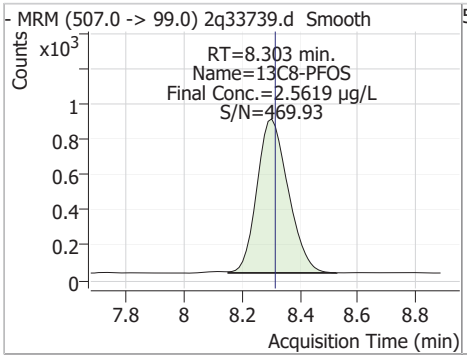
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	5.24	8.15	-0.01	30740	570.0 -> 512.0	29.8	15.9	47.8

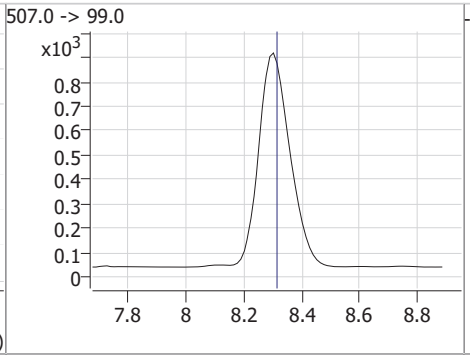


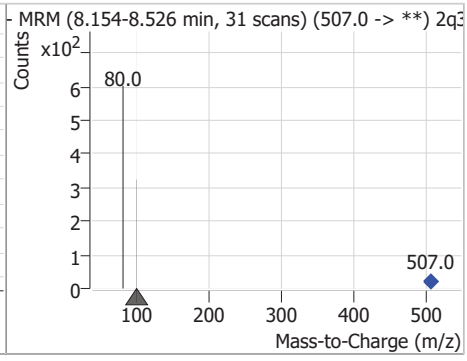




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.56	8.30	-0.01	6540				

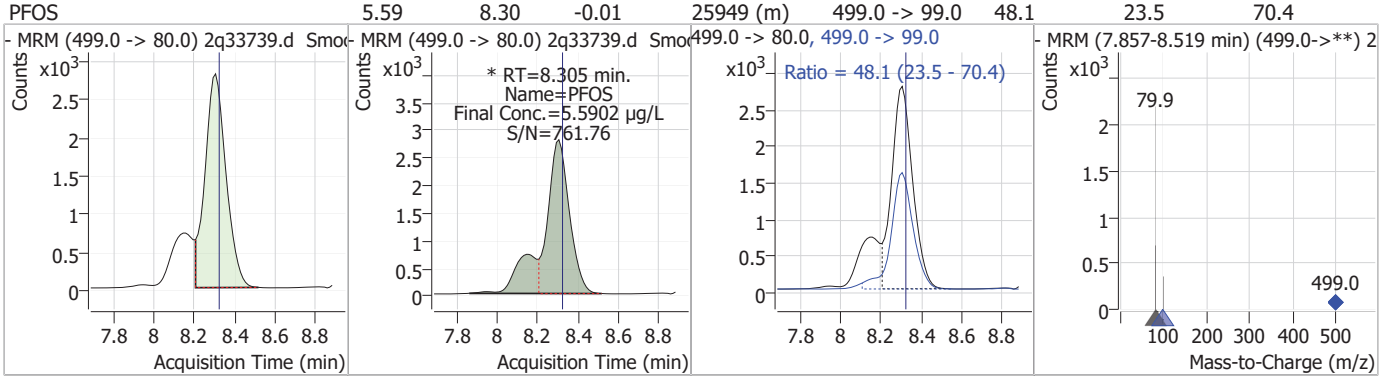




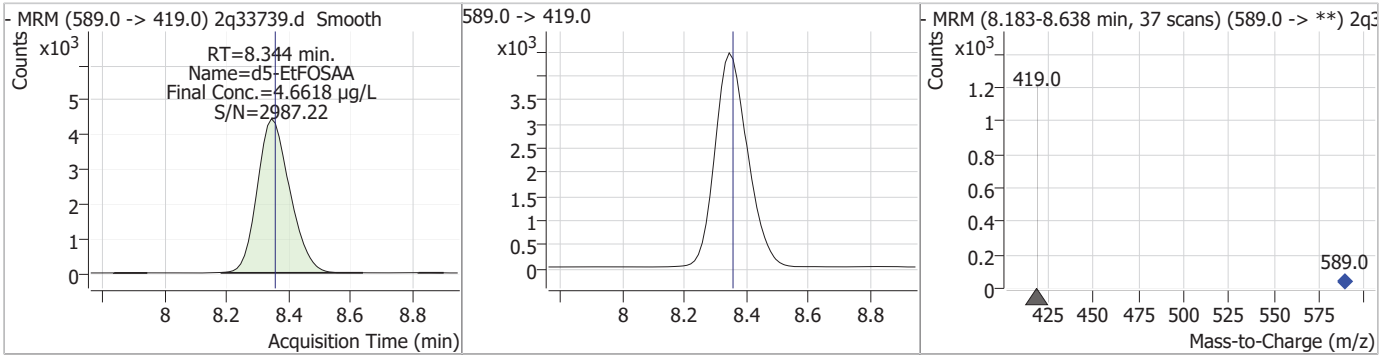


Perfluorinated Compounds by LC/MS/MS

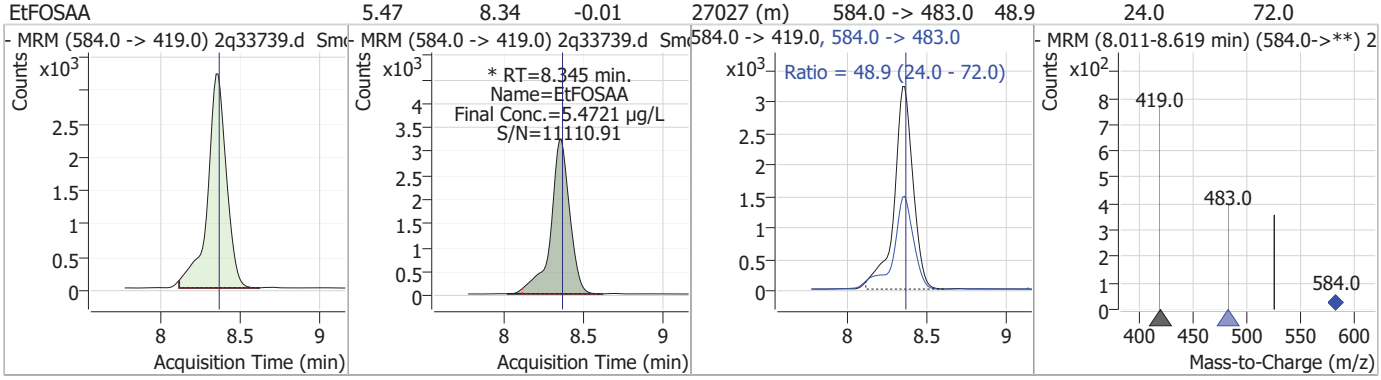
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	5.59	8.30	-0.01	25949 (m)	499.0 -> 99.0	48.1	23.5	70.4



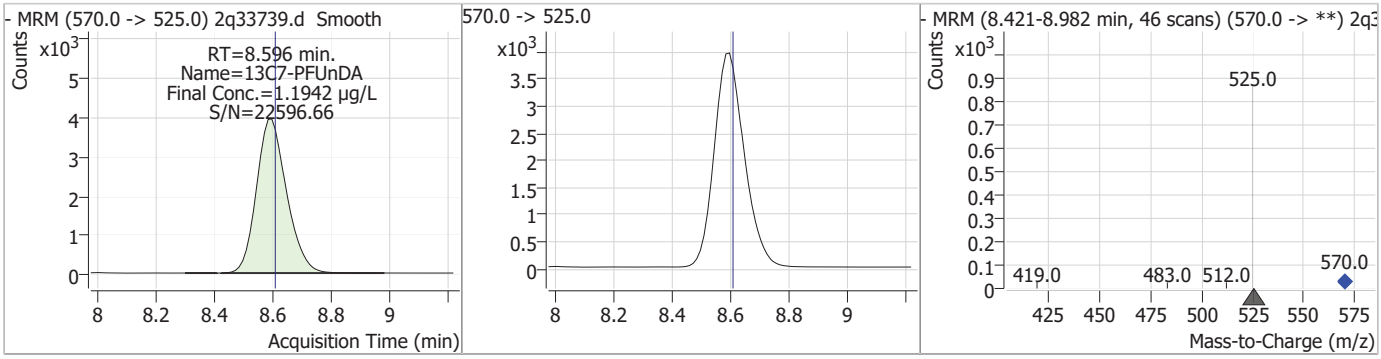
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.66	8.34	-0.01	32163				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	5.47	8.34	-0.01	27027 (m)	584.0 -> 483.0	48.9	24.0	72.0

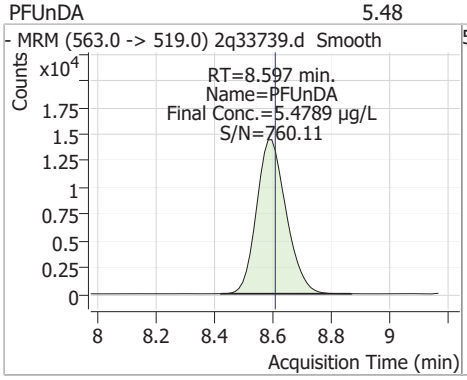


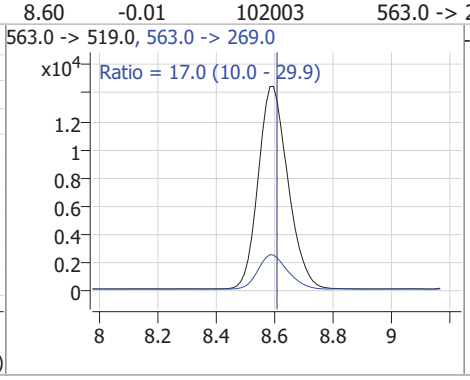
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.19	8.60	-0.01	28130				

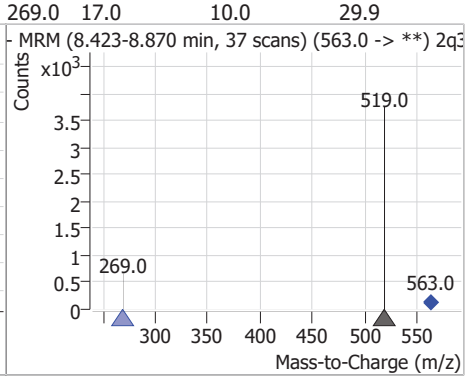


Perfluorinated Compounds by LC/MS/MS

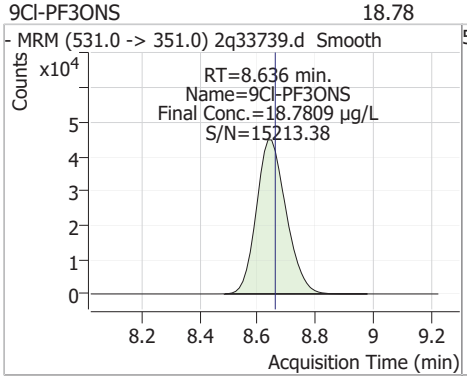
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	5.48	8.60	-0.01	102003	563.0 -> 269.0	17.0	10.0	29.9

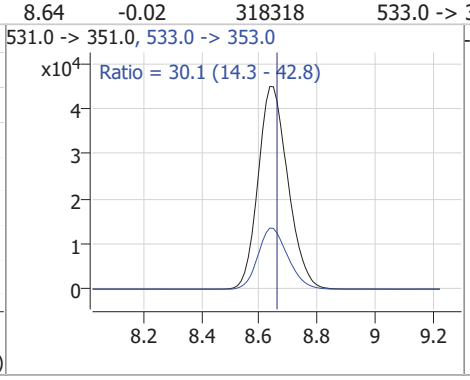


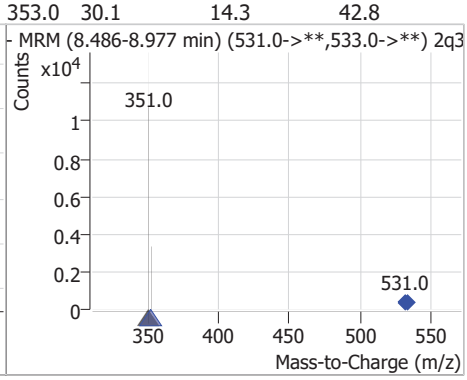




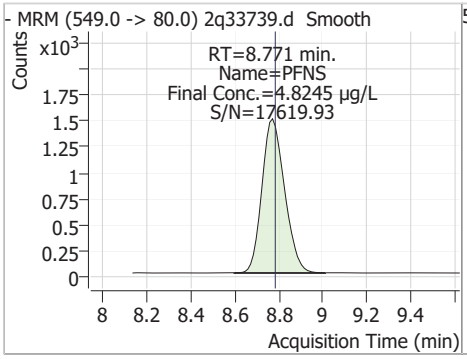
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	18.78	8.64	-0.02	318318	533.0 -> 353.0	30.1	14.3	42.8

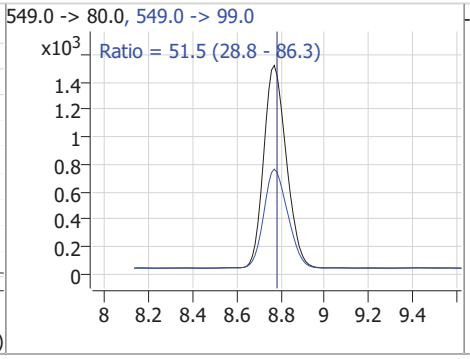


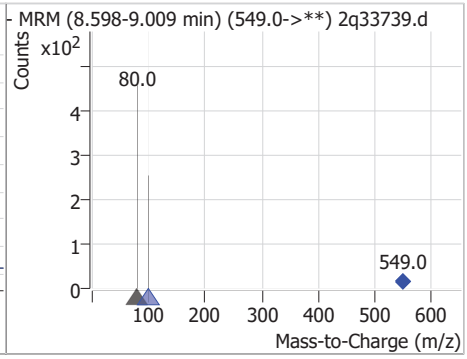




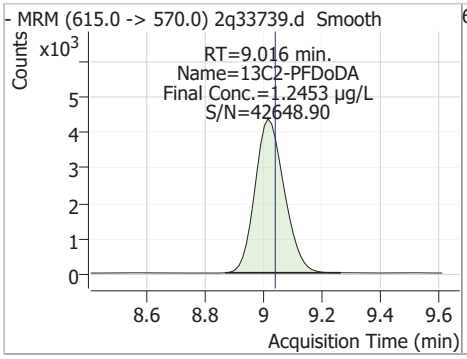
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	4.82	8.77	-0.01	10524	549.0 -> 99.0	51.5	28.8	86.3

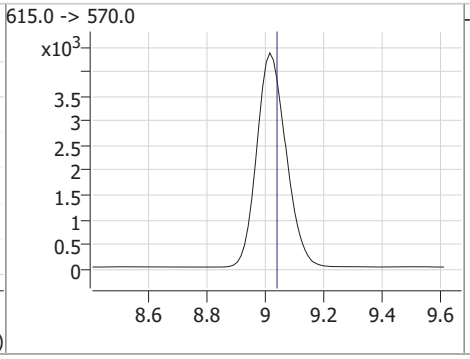


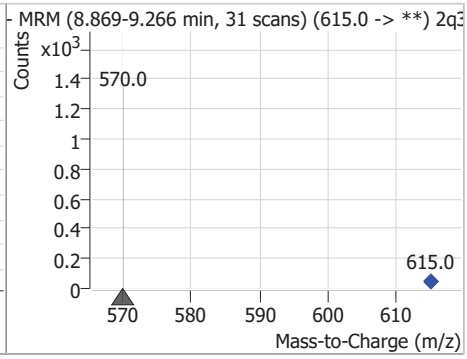




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.25	9.02	-0.02	30130				





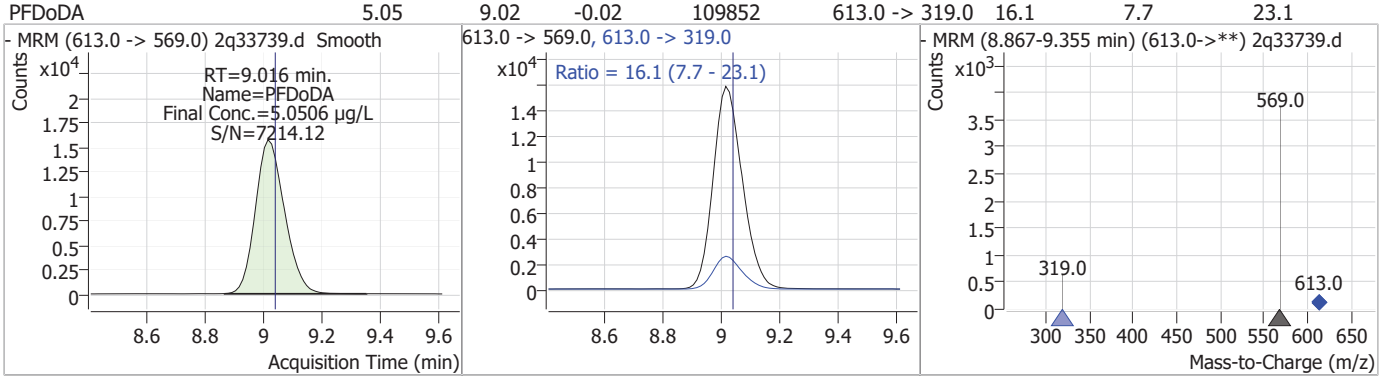


7.5.7

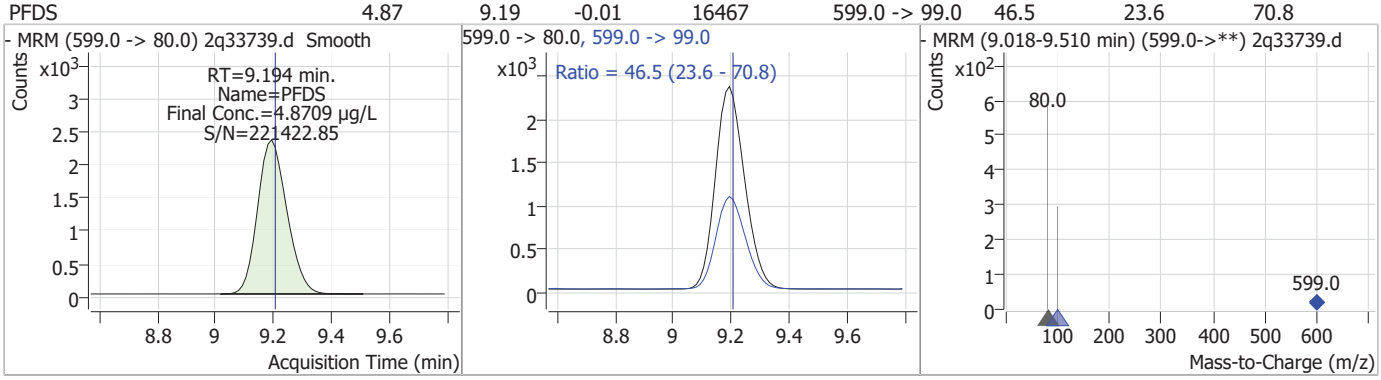
7

Perfluorinated Compounds by LC/MS/MS

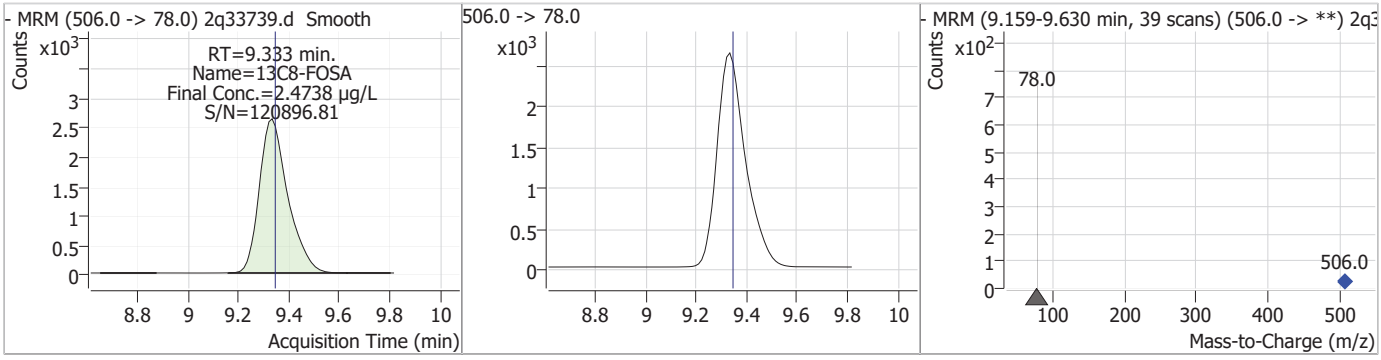
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	5.05	9.02	-0.02	109852	613.0 -> 319.0	16.1	7.7	23.1



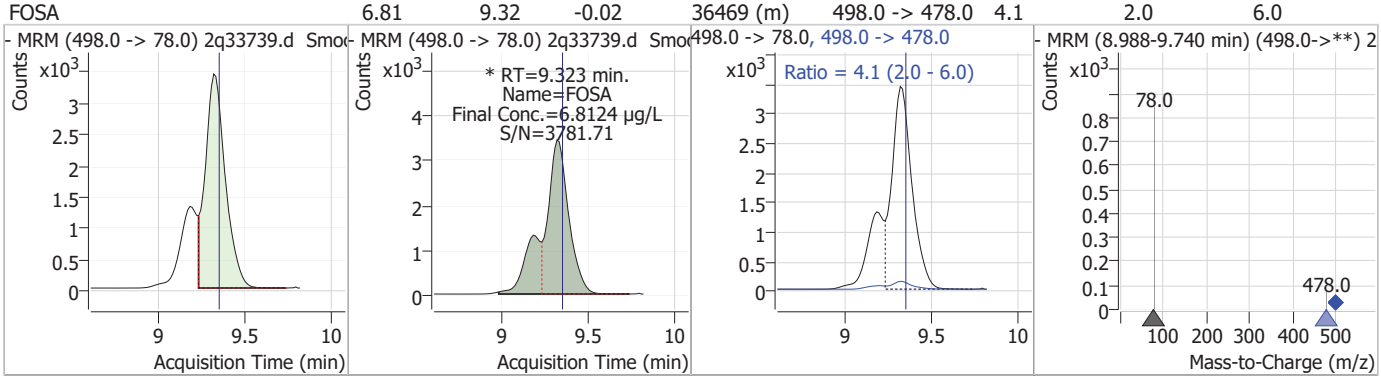
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	4.87	9.19	-0.01	16467	599.0 -> 99.0	46.5	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.47	9.33	-0.01	20424				

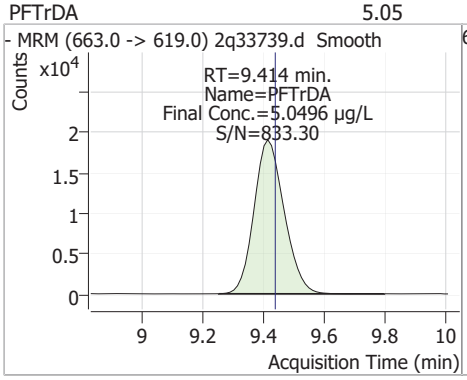


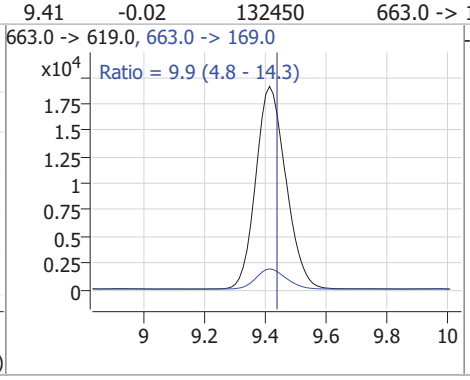
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	6.81	9.32	-0.02	36469 (m)	498.0 -> 478.0	4.1	2.0	6.0

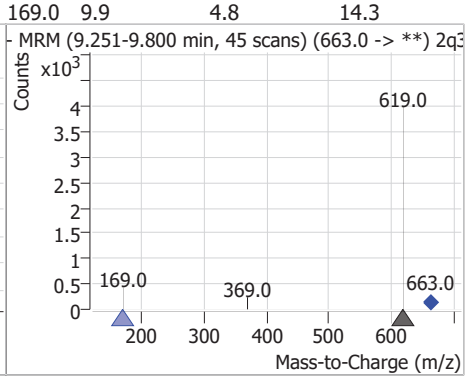


Perfluorinated Compounds by LC/MS/MS

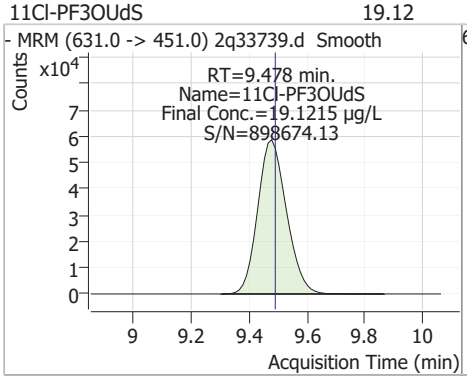
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	5.05	9.41	-0.02	132450	663.0 -> 169.0	9.9	4.8	14.3

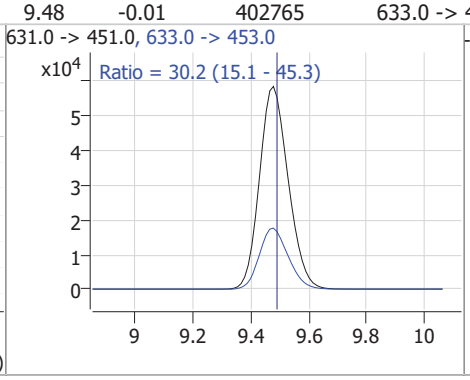


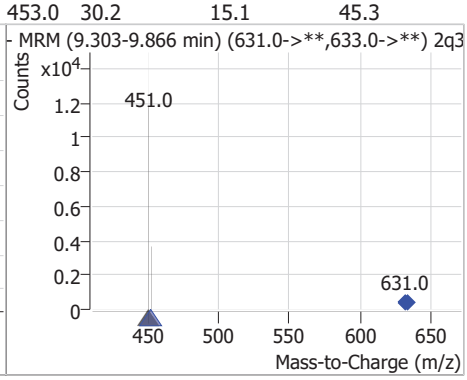




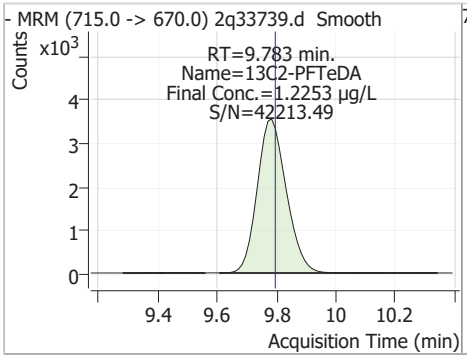
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	19.12	9.48	-0.01	402765	633.0 -> 453.0	30.2	15.1	45.3

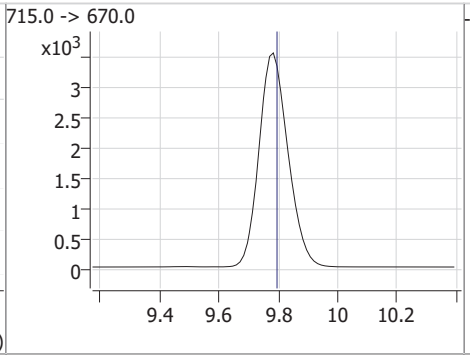


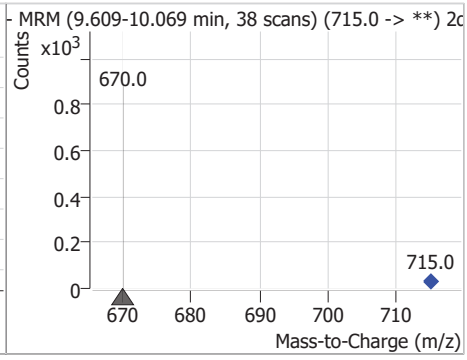




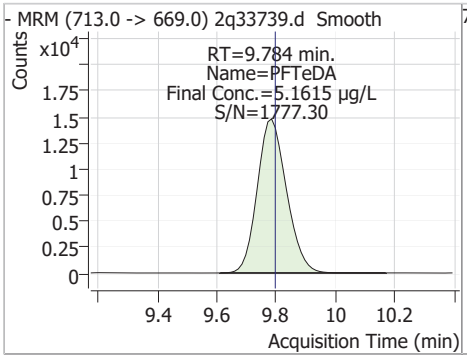
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.23	9.78	-0.01	23872				

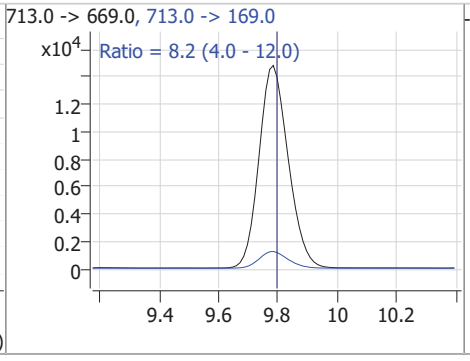


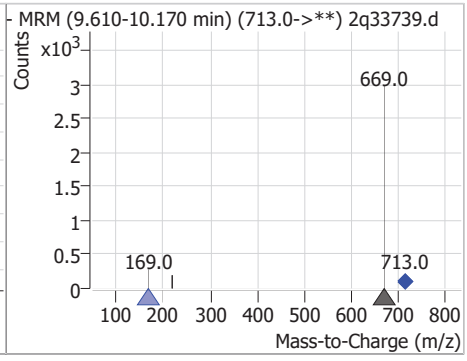




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	5.16	9.78	-0.01	100965	713.0 -> 169.0	8.2	4.0	12.0

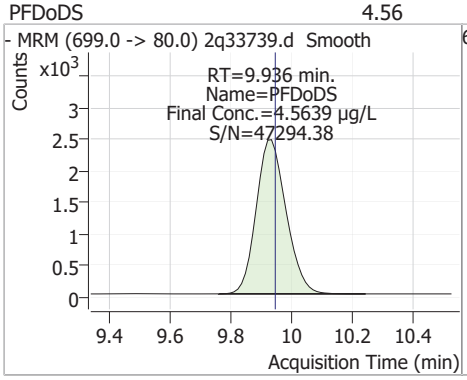


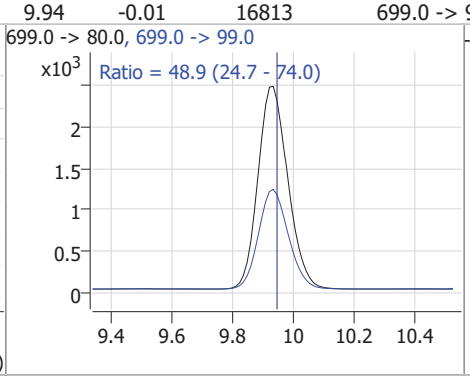


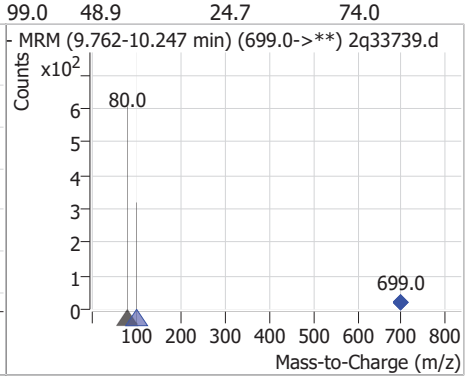


Perfluorinated Compounds by LC/MS/MS

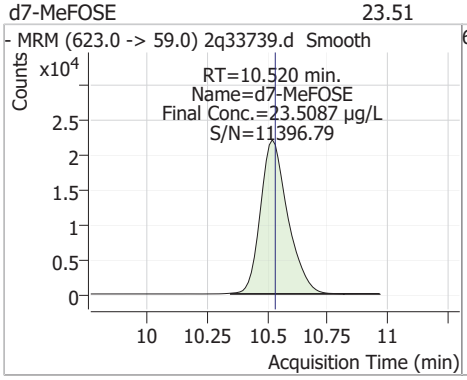
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	4.56	9.94	-0.01	16813	699.0 -> 99.0	48.9	24.7	74.0

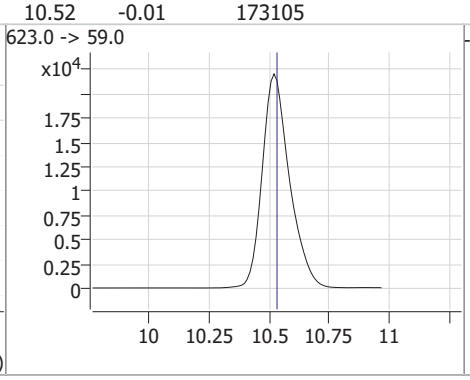


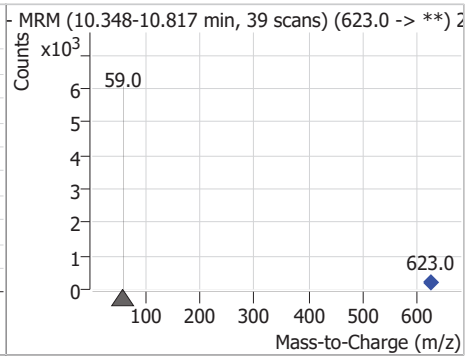




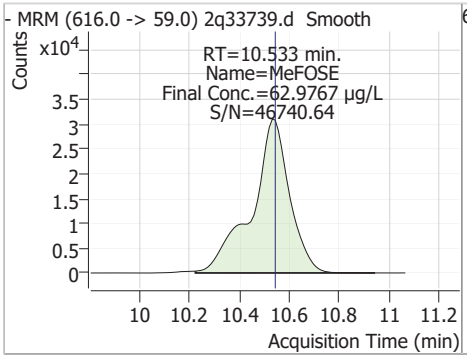
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.51	10.52	-0.01	173105				

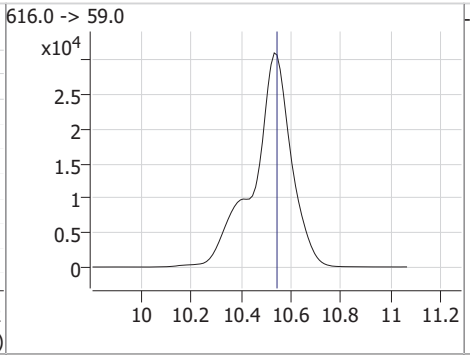


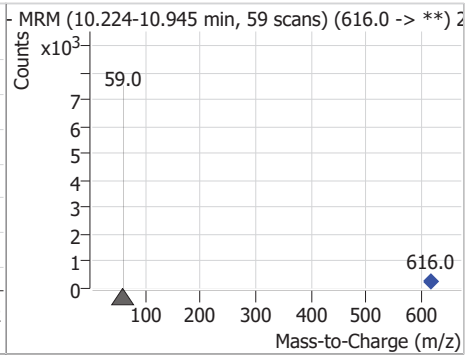




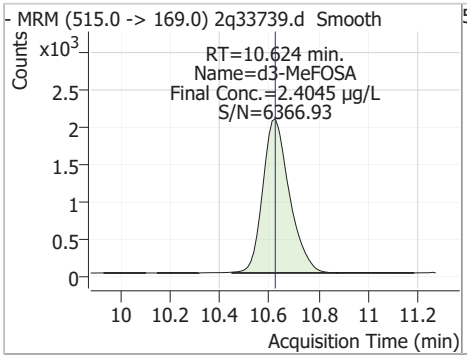
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	62.98	10.53	-0.01	325499				

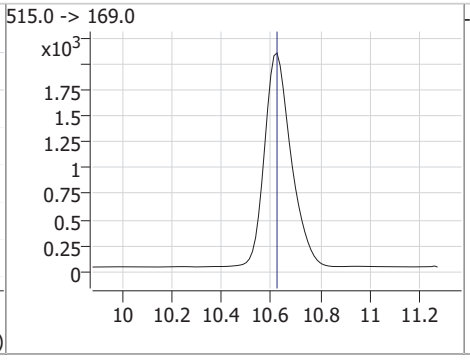


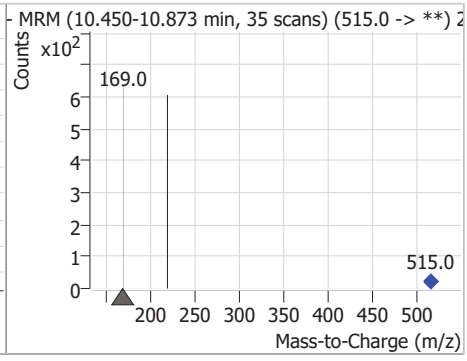




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.40	10.62	0.00	15418				

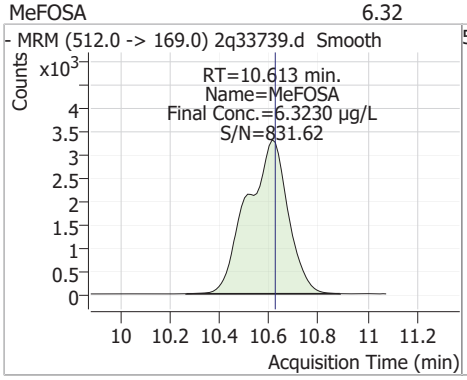


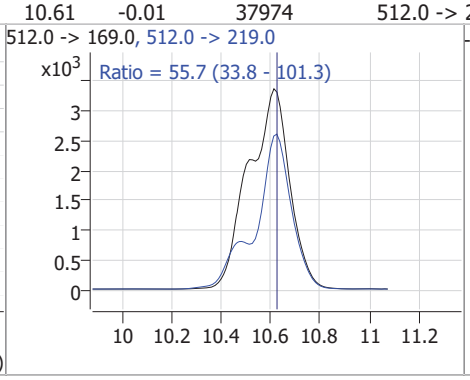


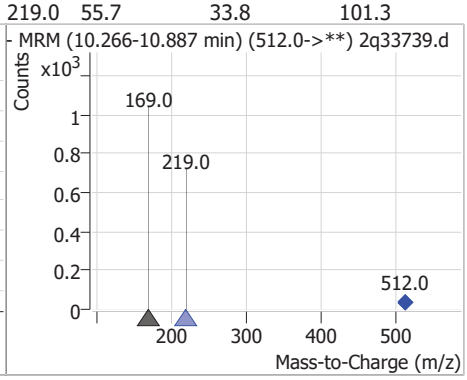


Perfluorinated Compounds by LC/MS/MS

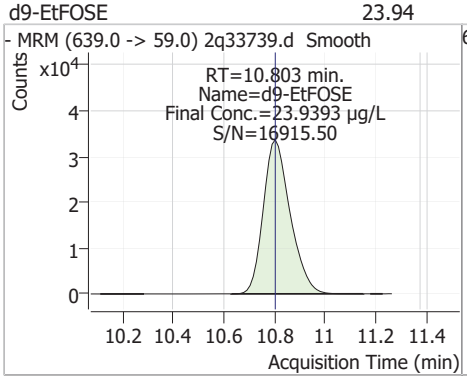
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	6.32	10.61	-0.01	37974	512.0 -> 219.0	55.7	33.8	101.3

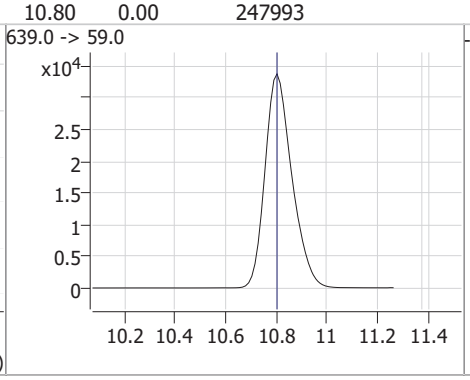


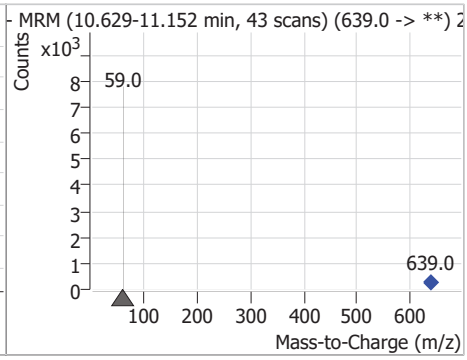




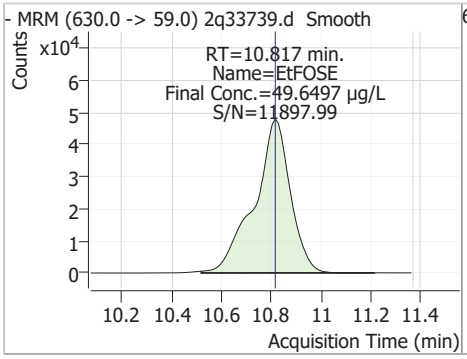
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.94	10.80	0.00	247993				

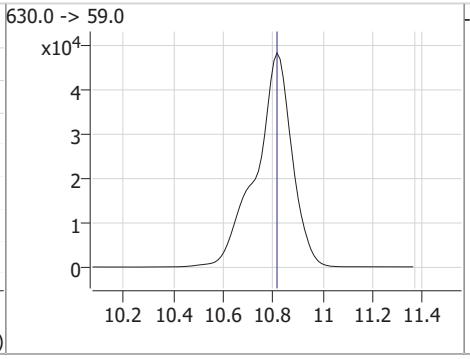


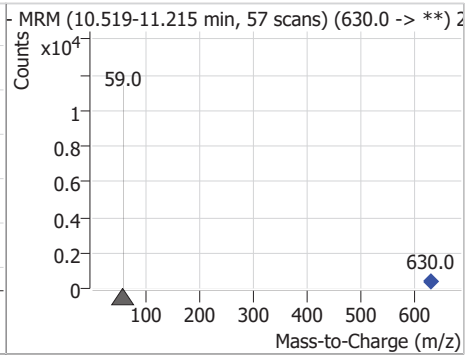




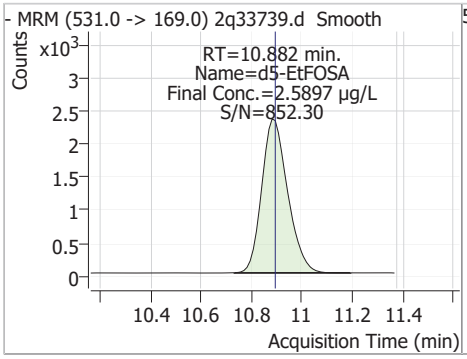
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	49.65	10.82	0.00	481367				

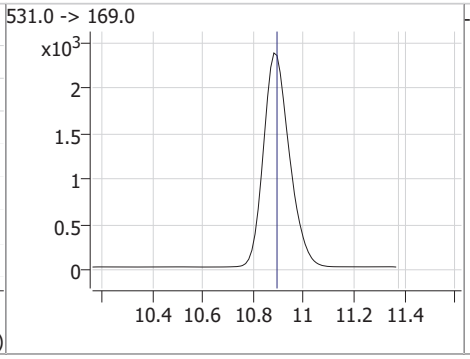


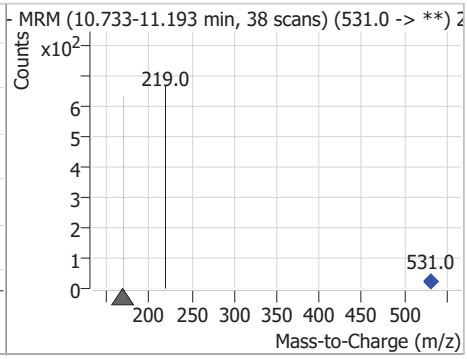




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.59	10.88	-0.01	16677				

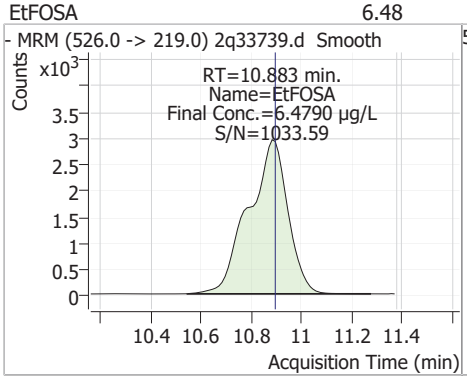


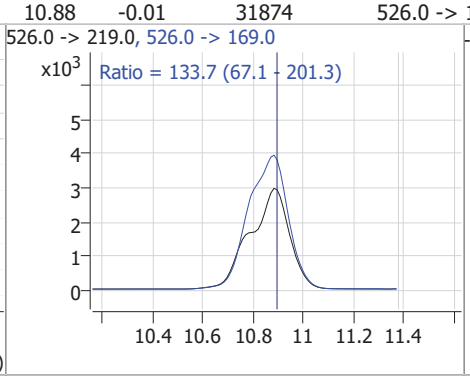


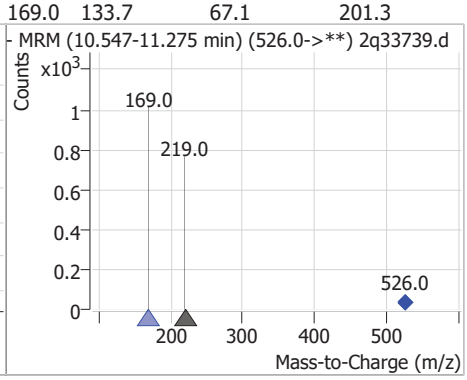


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	6.48	10.88	-0.01	31874	526.0 -> 169.0	133.7	67.1	201.3







7.5.7

7

Manual Integration Approval Summary

Sample Number: T2Q345-RT
Lab FileID: 2Q33739.D
Injection Time: 05/12/25 12:48
Method: EPA 1633
Analyst approved: 05/13/25 06:06 Cyrill Anne Abrenica
Supervisor approved: 05/13/25 08:50 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.12	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.25	Split peak
Perfluorononanoic acid	375-95-1		7.63	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.30	Split peak
EtFOSAA	2991-50-6		8.35	Split peak
PFOSA	754-91-6		9.32	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
04/30/25 07:24

Perfluorinated Compounds by LC/MS/MS

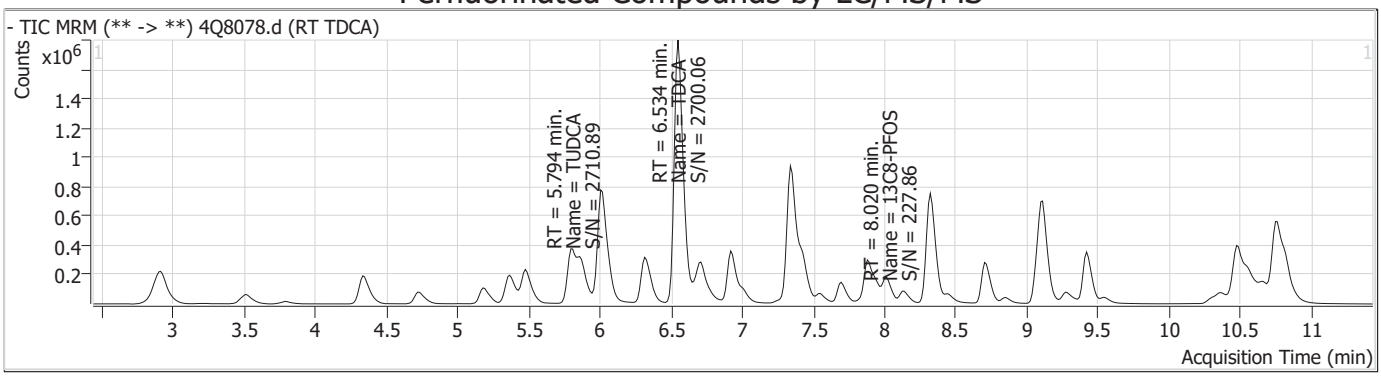
Data File : 4Q8078.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 4:31:47 PM
Sample Name : RT TDCA
Vial : P1-B1
DA Method File : TDCA.quantmethod.xml
Batch Name : t4q137 TDCA.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
Internal Standards							
M8-PFOS	8.020	507.1 -> 79.9	63004	2.50	µg/L		0.000
13C4-PFOS	8.020	502.8 -> 79.9	64861	2.50	µg/L	m	0.000
System Monitoring Compounds							
13C8-PFOS	8.020	507.1 -> 79.9	63004	4.70	µg/L		0.000
Spiked Amount: 2.50	Range: 50.0 - 150.0%			Recovery = 188.2%			
Target Compounds							QValue
PFOS	8.021	499.0 -> 80.0	151284	4.64	µg/L	m	100
		499.0 -> 99.0	80980				
TCDCA	6.669	498.9 -> 79.9	183682	5.63	ng/ml		100
TDCA	6.534	498.9 -> 79.9	157625	4.83	ng/ml	m	100
TUDCA	5.794	498.9 -> 79.9	201656	6.18	ng/ml		100

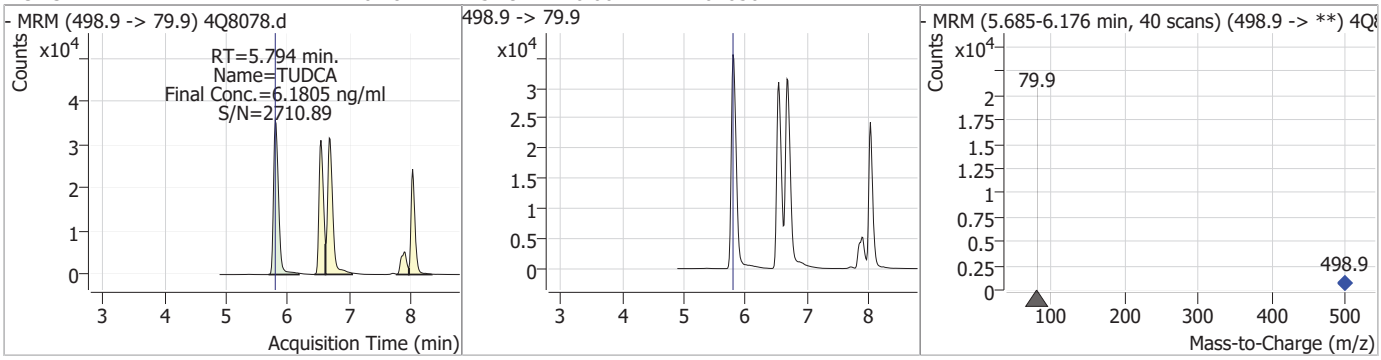
 # = Qualifier out of range, m = manually integrated, + = Area summed

7.5.8
7

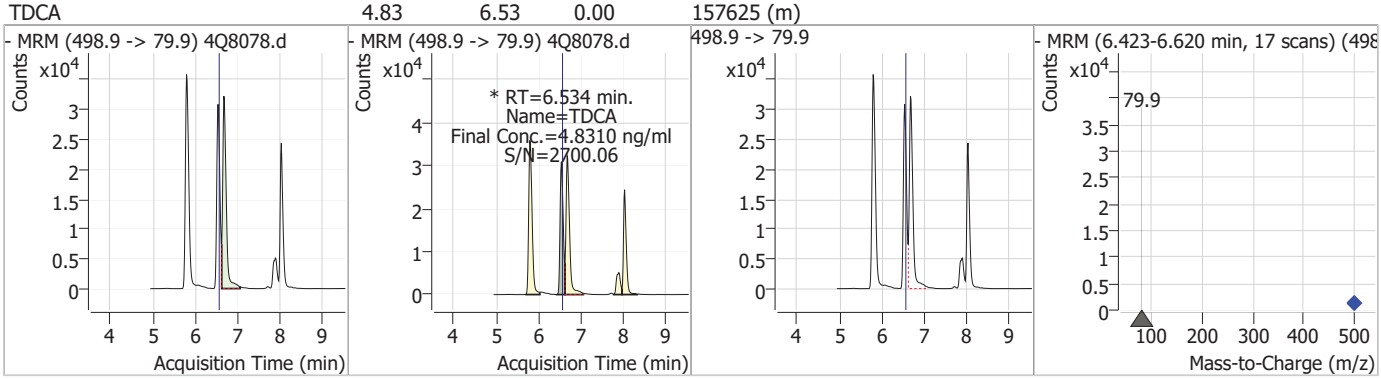
Perfluorinated Compounds by LC/MS/MS



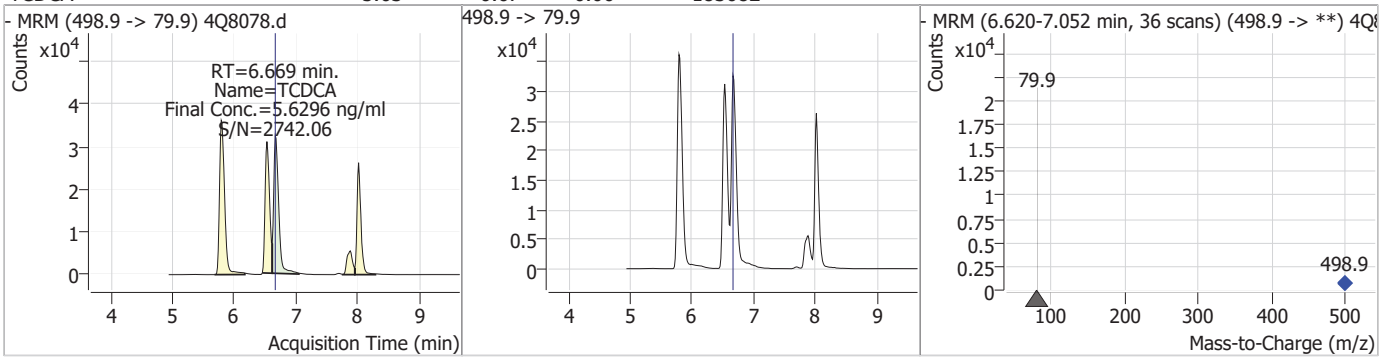
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TUDCA	6.18	5.79	0.00	201656				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TDCA	4.83	6.53	0.00	157625 (m)				

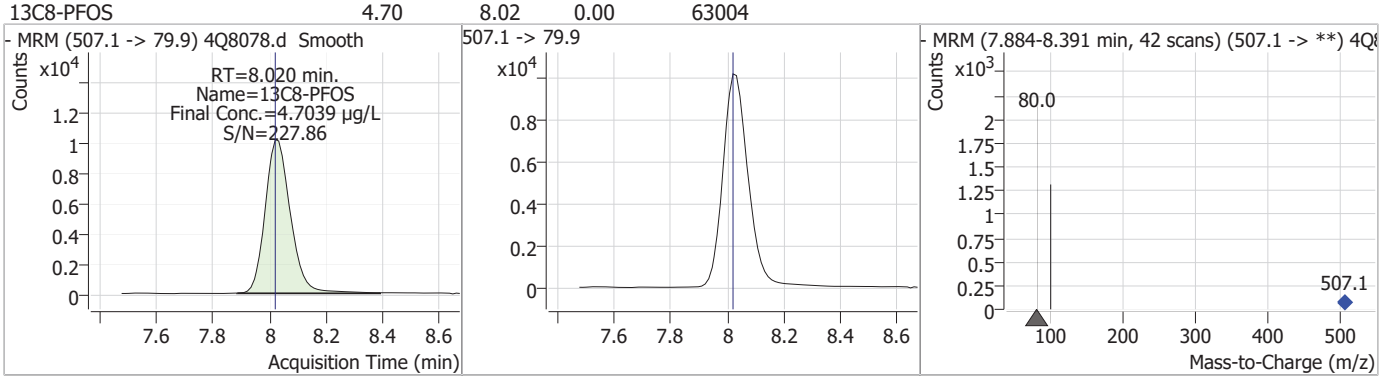


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TCDCA	5.63	6.67	0.00	183682				

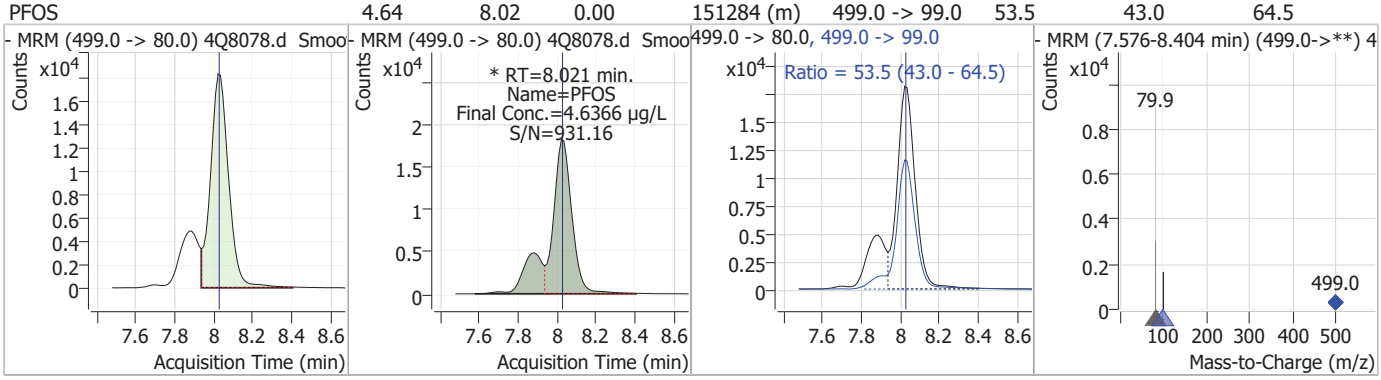


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	4.70	8.02	0.00	63004				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.64	8.02	0.00	151284 (m)	499.0 -> 99.0	53.5	43.0	64.5



Manual Integration Approval Summary

Sample Number: T4Q137-RT
Lab FileID: 4Q8078.D
Injection Time: 04/29/25 16:31
Method: EPA 1633
Analyst approved: 04/30/25 02:22 Rensel John Romano
Supervisor approved: 04/30/25 07:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
TDCA	516-50-7		6.53	Poorly defined baseline
13C4-PFOS			8.02	Poorly defined baseline
Perfluorooctanesulfonic acid	1763-23-1		8.02	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 04/30/25 07:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8079.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 4:45:20 PM
Sample Name : RT
Vial : P1-A6
DA Method File : 042925_1633_T4Q137.quantmethod.xml
Batch Name : t4q137.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.908	217.0 -> 172.0	750689	10.00	µg/L	0.000
M5-PFPeA	4.344	268.0 -> 223.0	393280	5.00	µg/L	0.000
M5-PFHxA	5.476	318.0 -> 273.0	264595	2.50	µg/L	-0.012
M4-PFHpA	6.316	367.0 -> 322.0	291959	2.50	µg/L	0.000
M8-PFOA	6.934	421.0 -> 376.0	446340	2.50	µg/L	0.000
M9-PFNA	7.440	472.0 -> 427.0	189123	1.25	µg/L	0.000
M6-PFDA	7.895	519.0 -> 474.0	178914	1.25	µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	234873	1.25	µg/L	0.000
M2-PFDoDA	8.716	615.0 -> 570.0	220930	1.25	µg/L	0.000
M2-PFTeDA	9.418	715.0 -> 670.0	200742	1.25	µg/L	-0.012
M8-FOSA	9.291	506.0 -> 78.0	168583	2.50	µg/L	0.000
M3-PFBS	5.393	302.0 -> 99.0	23968	2.50	µg/L	0.012
		302.0 -> 80.0	59495			
M3-PFHxS	7.024	402.0 -> 99.0	36935	2.50	µg/L	0.000
M8-PFOS	8.032	507.0 -> 99.0	37807	2.50	µg/L	0.012
M2-4:2FTS	5.178	329.0 -> 81.0	8833	5.00	µg/L	-0.012
M2-6:2FTS	6.721	429.0 -> 81.0	18709	5.00	µg/L	0.000
M2-8:2FTS	7.696	529.0 -> 81.0	23555	5.00	µg/L	0.000
M3-MeFOSAA	7.952	573.0 -> 419.0	188328	5.00	µg/L	0.000
M3-HFPO-DA	5.816	287.0 -> 169.0	395111	10.00	µg/L	0.000
M5-EtFOSAA	8.135	589.0 -> 419.0	144075	5.00	µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	951426	25.00	µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1208845	25.00	µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	96496	2.50	µg/L	0.000
M3-MeFOSA	10.580	515.0 -> 169.0	89025	2.50	µg/L	0.000
13C4-PFOS	8.020	503.0 -> 80.0	57611	2.50	µg/L	0.000
13C3-PFBA	2.911	216.0 -> 172.0	286449	5.00	µg/L	0.000
18O2-PFHxS	7.023	403.0 -> 84.0	36365	2.50	µg/L	0.000
13C4-PFOA	6.935	417.0 -> 372.0	394039	2.50	µg/L	0.000
13C2-PFDA	7.895	515.0 -> 470.0	138143	1.25	µg/L	0.000
13C5-PFNA	7.440	468.0 -> 423.0	155550	1.25	µg/L	0.000
13C2-PFHxA	5.477	315.0 -> 270.0	217071	2.50	µg/L	-0.012
System Monitoring Compounds						
13C2-4:2FTS	5.178	329.0 -> 81.0	8833	4.74	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.8%		
13C2-6:2FTS	6.721	429.0 -> 81.0	18709	4.85	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.0%		
13C2-8:2FTS	7.696	529.0 -> 81.0	23555	4.98	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.5%		
13C2-PFDoDA	8.716	615.0 -> 570.0	220930	1.30	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.6%		
13C2-PFTeDA	9.418	715.0 -> 670.0	200742	1.38	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 110.0%		
13C3-PFBS	5.393	302.0 -> 99.0	23968	2.54	µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.5%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.024	402.0 -> 99.0	36935	2.67	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.9%			
13C4-PFBA	2.908	217.0 -> 172.0	750689	10.61	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 106.1%			
13C4-PFHpA	6.316	367.0 -> 322.0	291959	2.69	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.5%			
13C5-PFHxA	5.476	318.0 -> 273.0	264595	2.66	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.6%			
13C5-PFPeA	4.344	268.0 -> 223.0	393280	5.38	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.7%			
13C6-PFDA	7.895	519.0 -> 474.0	178914	1.30	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.3%			
13C7-PFUnDA	8.310	570.0 -> 525.0	234873	1.33	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.1%			
13C8-FOSA	9.291	506.0 -> 78.0	168583	2.73	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 109.2%			
13C8-PFOA	6.934	421.0 -> 376.0	446340	2.61	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.3%			
13C8-PFOS	8.032	507.0 -> 99.0	37807	2.59	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.5%			
13C9-PFNA	7.440	472.0 -> 427.0	189123	1.35	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 108.0%			
d3-MeFOSAA	7.952	573.0 -> 419.0	188328	5.23	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.5%			
13C3-HFPO-DA	5.816	287.0 -> 169.0	395111	10.56	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 105.6%			
d3-MeFOSA	10.580	515.0 -> 169.0	89025	2.66	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.5%			
d5-EtFOSAA	8.135	589.0 -> 419.0	144075	5.14	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.9%			
d7-MeFOSE	10.475	623.0 -> 59.0	951426	27.40	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 109.6%			
d9-EtFOSE	10.746	639.0 -> 59.0	1208845	26.75	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 107.0%			
d5-EtFOSA	10.837	531.0 -> 169.0	96496	2.68	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.3%			
Target Compounds							QValue
4:2FTS	5.178	327.0 -> 307.0	267253	19.64	µg/L		100
		327.0 -> 81.0	121040				
6:2FTS	6.721	427.0 -> 407.0	308574	19.60	µg/L		99
		427.0 -> 81.0	145598				
8:2FTS	7.696	527.0 -> 507.0	312295	20.44	µg/L		100
		527.0 -> 81.0	120455				
EtFOSAA	8.136	584.0 -> 419.0	116099	4.94	µg/L	m	98
		584.0 -> 483.0	60754				
FOSA	9.294	498.0 -> 78.0	256695	4.86	µg/L	m	100
		498.0 -> 478.0	6572				
MeFOSAA	7.953	570.0 -> 419.0	137428	4.78	µg/L	m	100
		570.0 -> 512.0	47852				
PFBA	2.902	213.0 -> 169.0	404375	19.64	µg/L		100
PFBS	5.382	299.0 -> 80.0	98215	4.37	µg/L		98
		299.0 -> 99.0	40562				
PFDA	7.896	513.0 -> 469.0	571940	5.03	µg/L		98
		513.0 -> 219.0	131503				
PFDoDA	8.716	613.0 -> 569.0	758637	5.09	µg/L		99
		613.0 -> 319.0	106594				

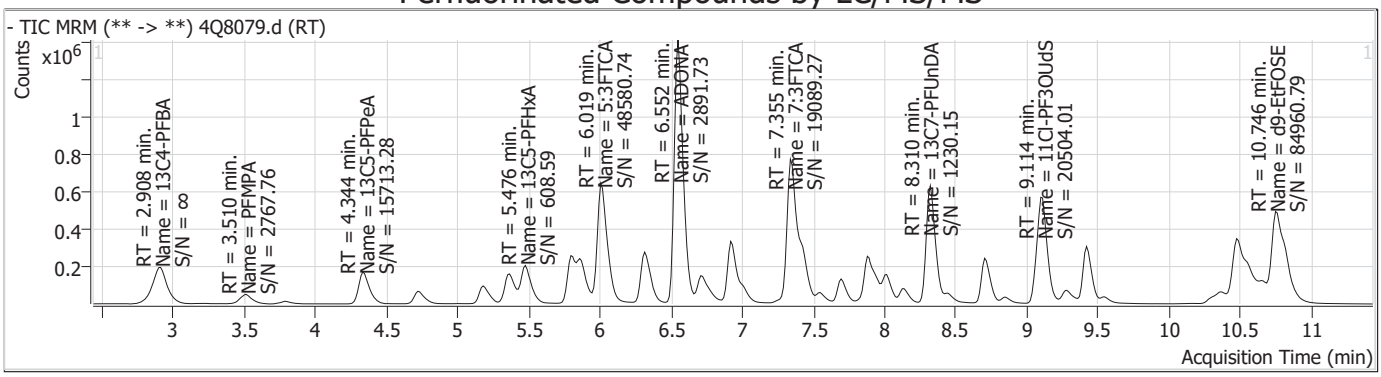
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.854	599.0 -> 80.0	88285	4.76	µg/L		93
		599.0 -> 99.0	48781				
PFHpA	6.317	363.0 -> 319.0	721434	4.81	µg/L		98
		363.0 -> 169.0	148961				
PFHpS	7.553	449.0 -> 80.0	126149	4.58	µg/L		98
		449.0 -> 99.0	70394				
PFHxA	5.479	313.0 -> 269.0	468002	4.86	µg/L		99
		313.0 -> 119.0	16137				
PFHxS	7.025	399.0 -> 80.0	121017	4.35	µg/L	m	100
		399.0 -> 99.0	62680				
PFNA	7.441	463.0 -> 419.0	474469	4.88	µg/L	m	100
		463.0 -> 219.0	167399				
PFNS	8.461	549.0 -> 80.0	111005	4.85	µg/L		94
		549.0 -> 99.0	71485				
PFOA	6.935	413.0 -> 369.0	614221	4.89	µg/L	m	99
		413.0 -> 169.0	178945				
PFOS	8.021	499.0 -> 80.0	121840	4.62	µg/L	m	97
		499.0 -> 99.0	63073				
PFPeA	4.346	263.0 -> 219.0	513813	9.85	µg/L		100
PFPeS	6.355	349.0 -> 80.0	117202	4.68	µg/L		97
		349.0 -> 99.0	56966				
PFTeDA	9.419	713.0 -> 669.0	977975	4.89	µg/L		100
		713.0 -> 219.0	70029				
PFTrDA	9.087	663.0 -> 619.0	880193	5.22	µg/L		100
		663.0 -> 369.0	54224				
PFUnDA	8.312	563.0 -> 519.0	615552	5.10	µg/L		99
		563.0 -> 269.0	123242				
11Cl-PF3OUdS	9.114	631.0 -> 451.0	1474187	19.20	µg/L		100
		633.0 -> 453.0	447626				
9Cl-PF3ONS	8.339	531.0 -> 351.0	1516097	18.51	µg/L		100
		533.0 -> 353.0	462851				
ADONA	6.552	377.0 -> 251.0	4771634	17.80	µg/L		99
		377.0 -> 85.0	1594654				
HFPO-DA	5.817	285.0 -> 169.0	703489	19.65	µg/L		99
		285.0 -> 185.0	78240				
3:3FTCA	3.781	241.0 -> 177.0	69126	24.31	µg/L		99
		241.0 -> 117.0	5653				
5:3FTCA	6.019	341.0 -> 237.0	1879477	125.63	µg/L		99
		341.0 -> 217.0	1326089				
7:3FTCA	7.355	441.0 -> 337.0	2663968	122.11	µg/L		99
		441.0 -> 317.0	1213952				
EtFOSA	10.838	526.0 -> 219.0	168147	4.82	µg/L		100
		526.0 -> 169.0	240220				
EtFOSE	10.760	630.0 -> 59.0	2220808	48.59	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	215883	5.06	µg/L		97
		512.0 -> 219.0	139977				
MeFOSE	10.488	616.0 -> 59.0	1682639	48.55	µg/L	m	100
PFDoDS	9.546	699.0 -> 80.0	77863	5.05	µg/L		98
		699.0 -> 99.0	49119				
NFDHA	5.370	295.0 -> 201.0	122374	9.79	µg/L		90
		201.0 -> 85.0	484583				
		295.0 -> 85.0	31554				
PFMBA	4.735	279.0 -> 85.0	349313	9.82	µg/L		100
PFMPA	3.510	229.0 -> 85.0	302256	9.79	µg/L		100
PFEESA	5.872	315.0 -> 135.0	793894	8.71	µg/L		99
		315.0 -> 69.0	65233				

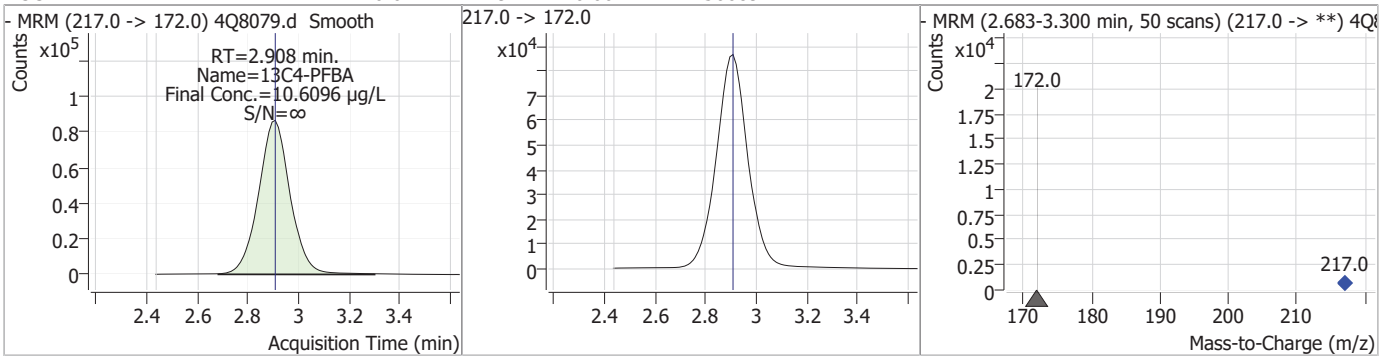
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

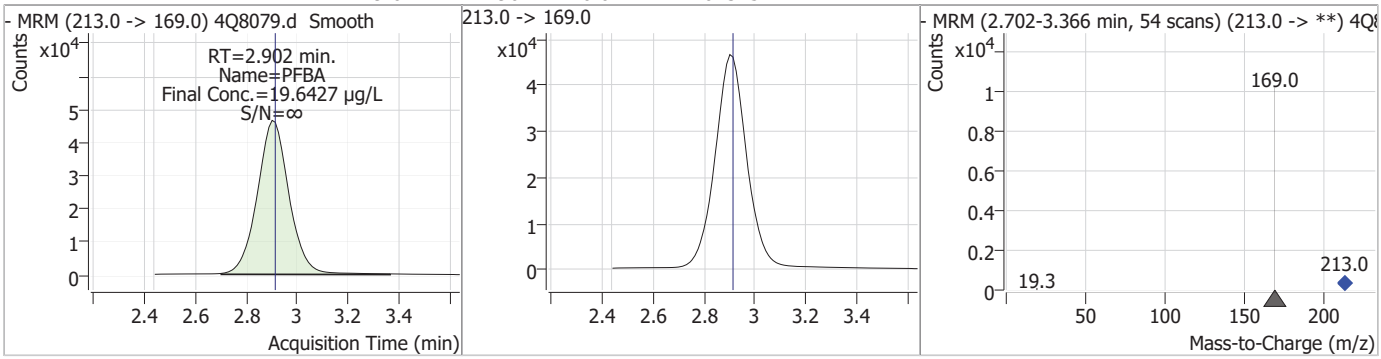
Perfluorinated Compounds by LC/MS/MS



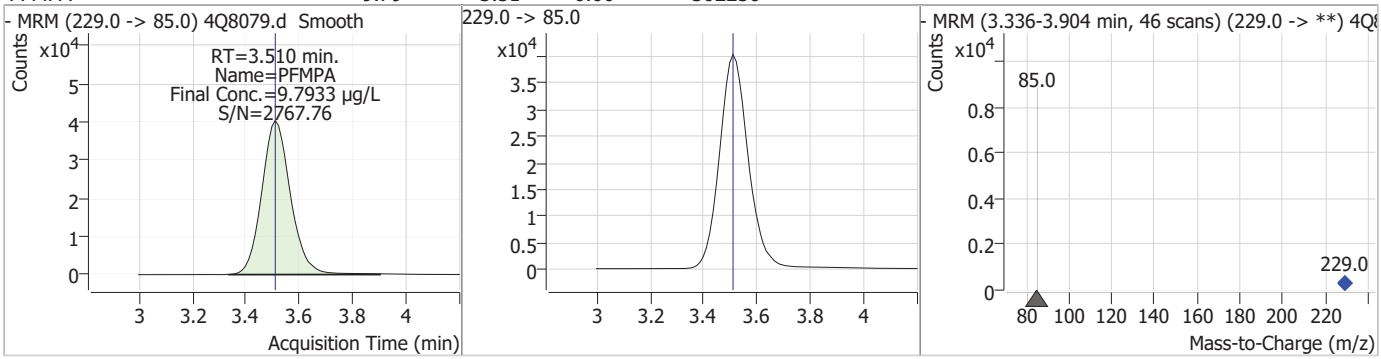
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.61	2.91	0.00	750689				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	19.64	2.90	-0.01	404375				

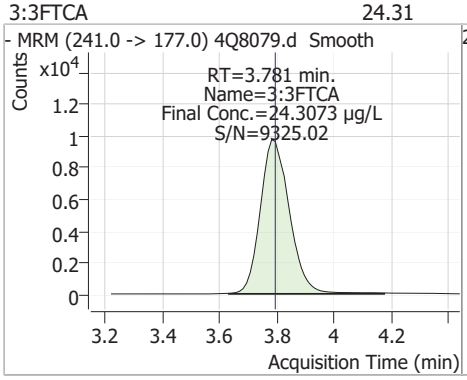


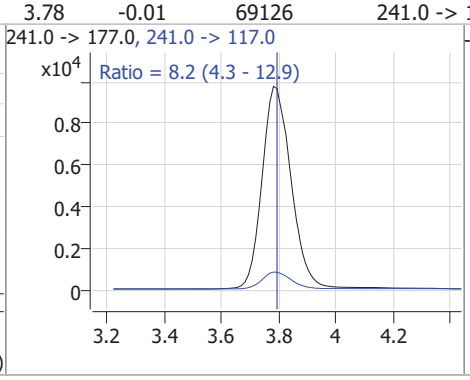
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	9.79	3.51	0.00	302256				

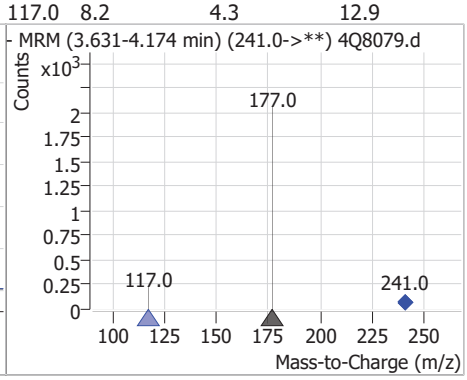


Perfluorinated Compounds by LC/MS/MS

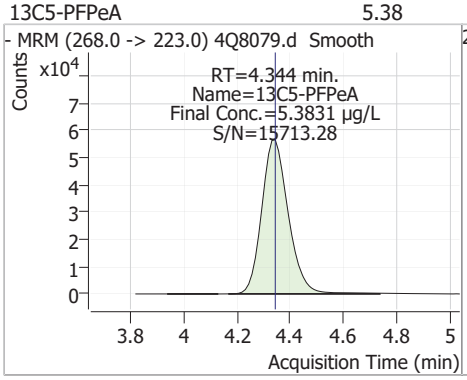
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	24.31	3.78	-0.01	69126	241.0 -> 117.0	8.2	4.3	12.9

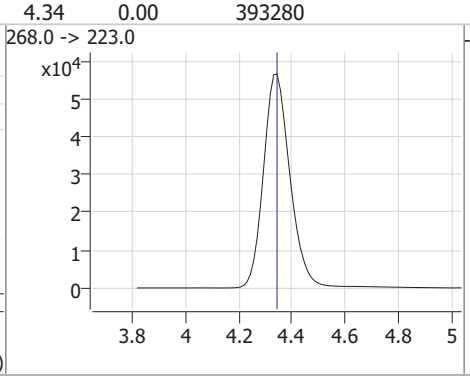


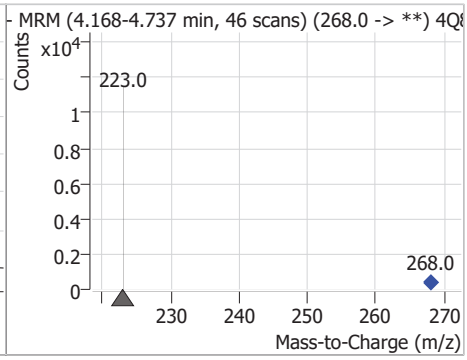




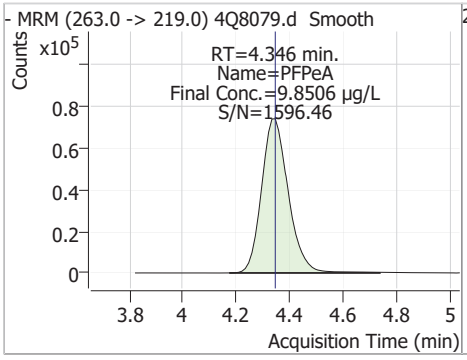
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.38	4.34	0.00	393280				

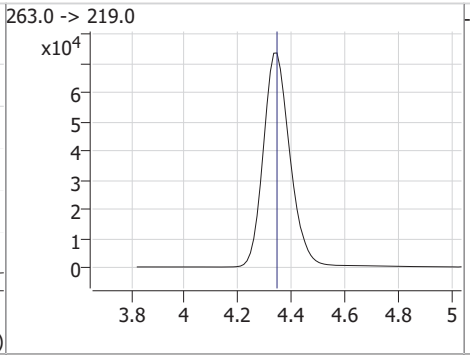


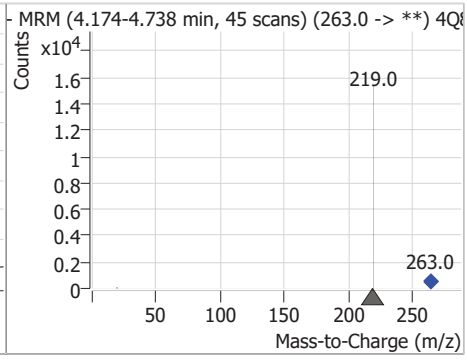




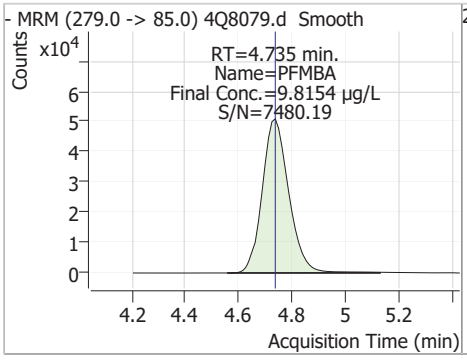
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	9.85	4.35	0.00	513813				

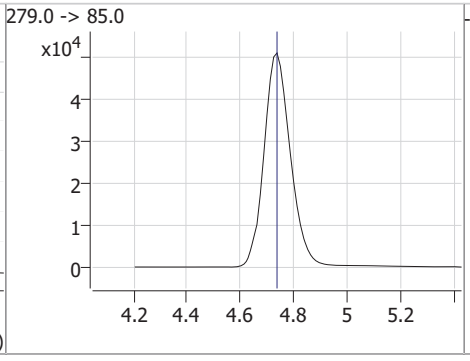


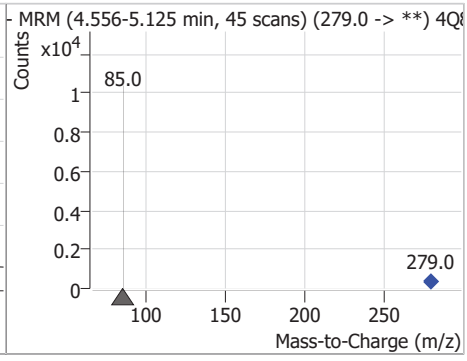




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	9.82	4.73	0.00	349313				

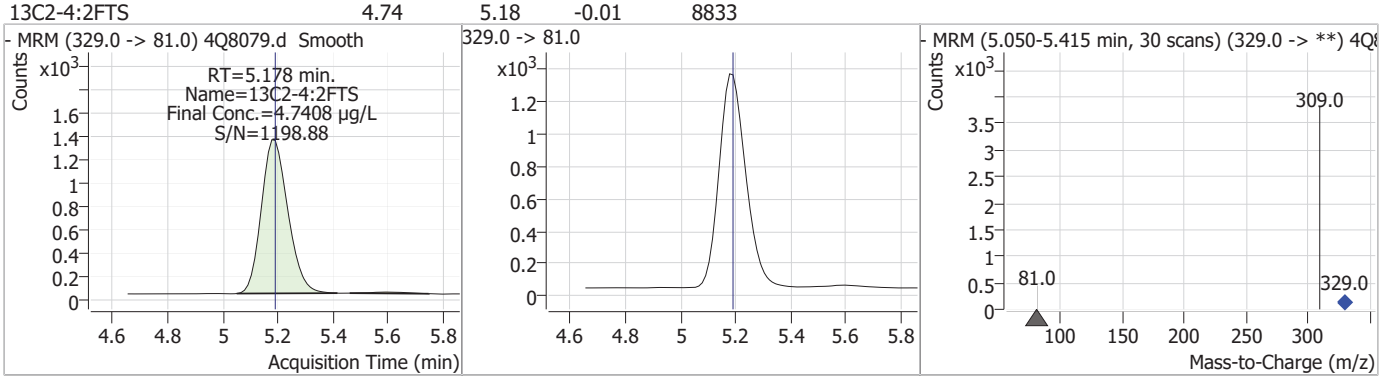




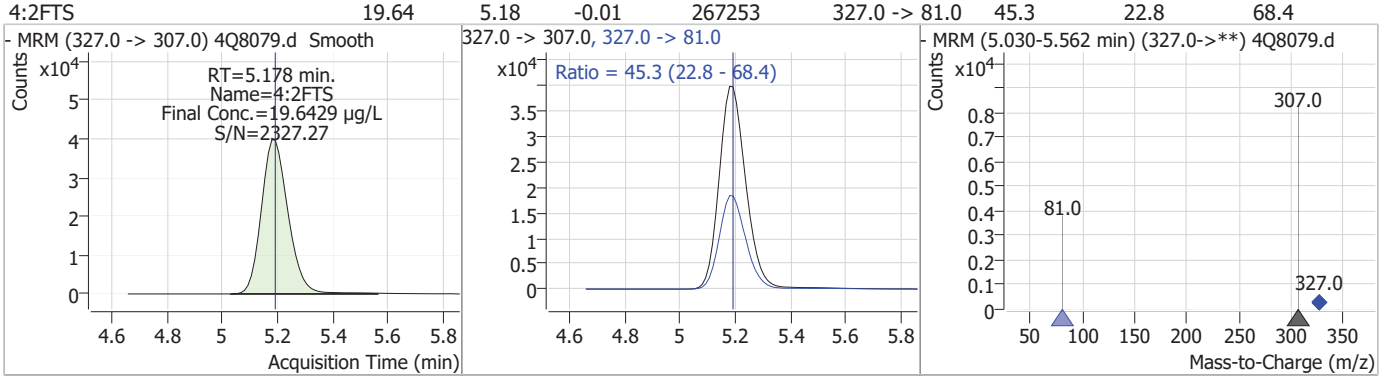


Perfluorinated Compounds by LC/MS/MS

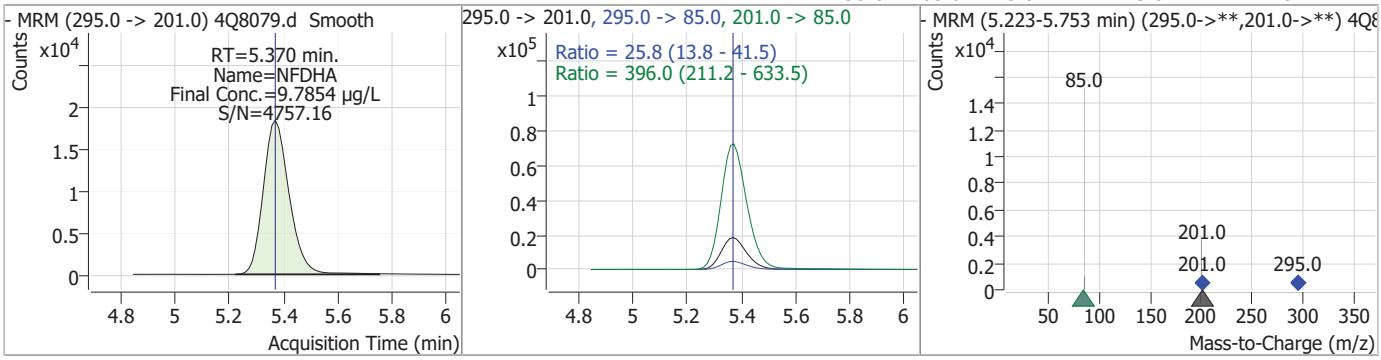
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.74	5.18	-0.01	8833				



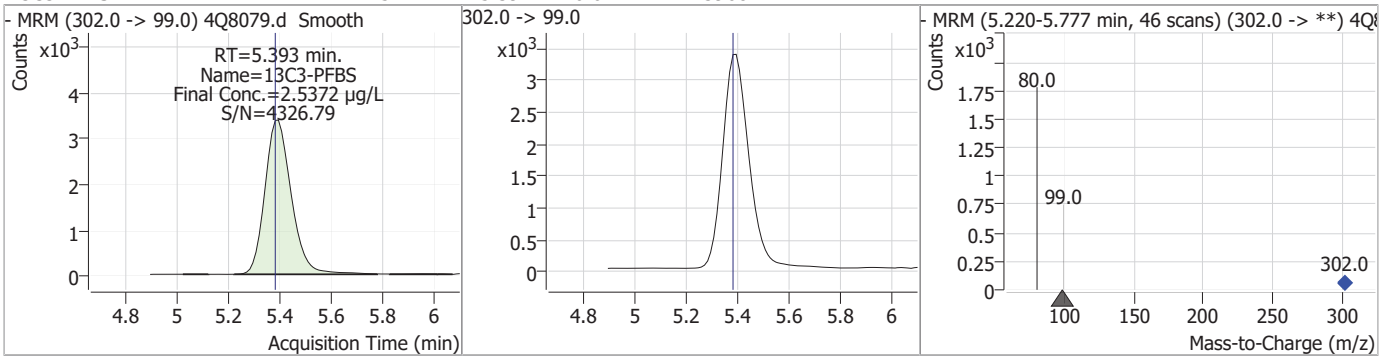
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	19.64	5.18	-0.01	267253	327.0 -> 81.0	45.3	22.8	68.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	9.79	5.37	0.00	122374	201.0 -> 85.0	396.0	211.2	633.5
					295.0 -> 85.0	25.8	13.8	41.5

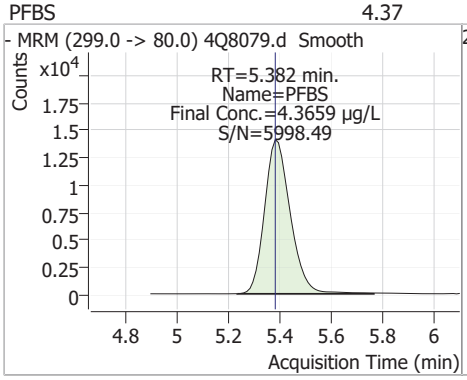


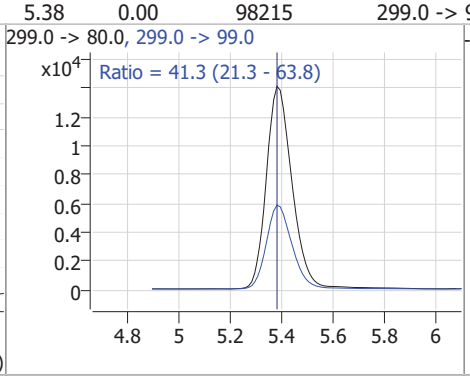
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.54	5.39	0.01	23968				

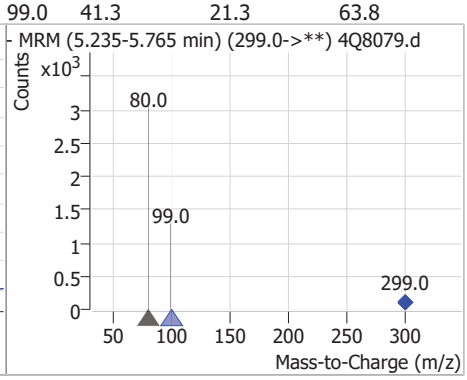


Perfluorinated Compounds by LC/MS/MS

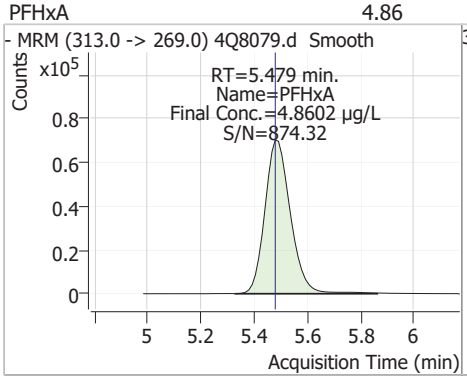
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.37	5.38	0.00	98215	299.0 -> 99.0	41.3	21.3	63.8

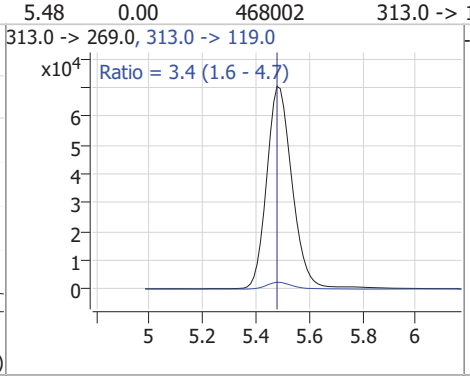


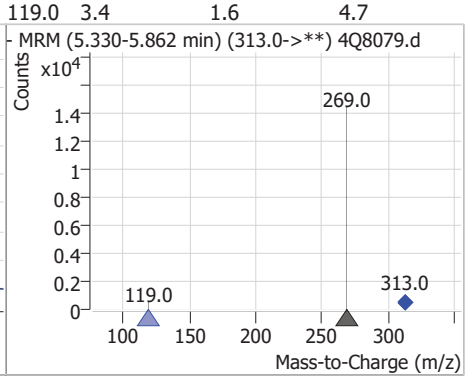




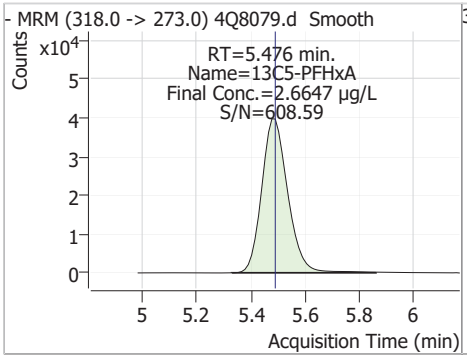
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	4.86	5.48	0.00	468002	313.0 -> 119.0	3.4	1.6	4.7

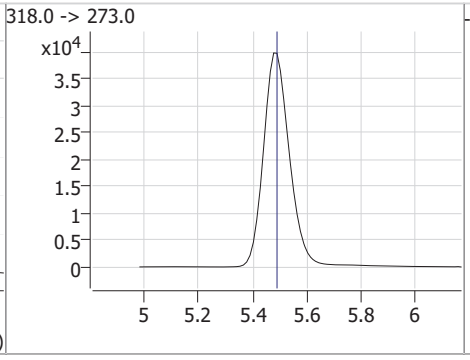


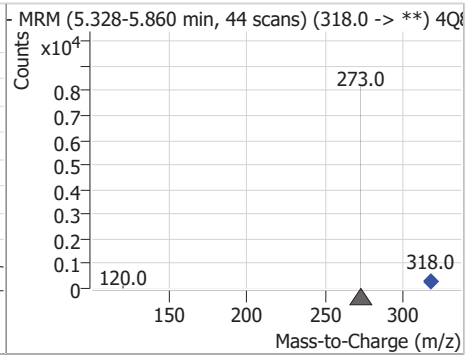




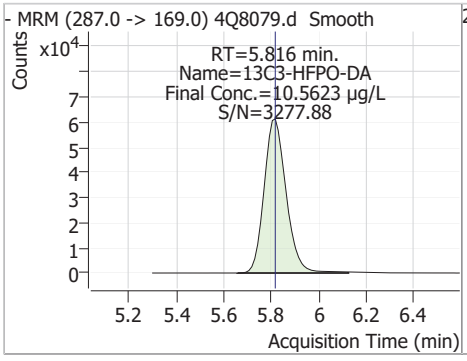
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.66	5.48	-0.01	264595				

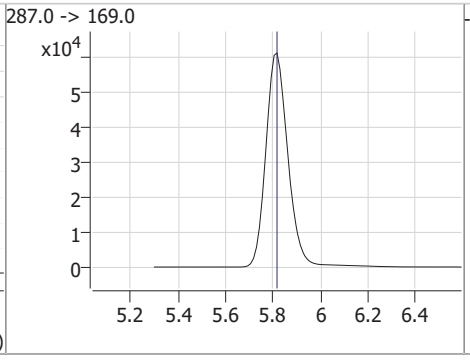


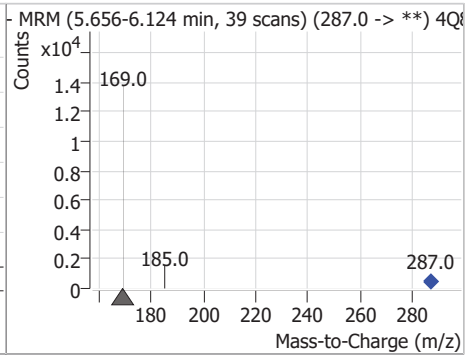




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.56	5.82	0.00	395111				

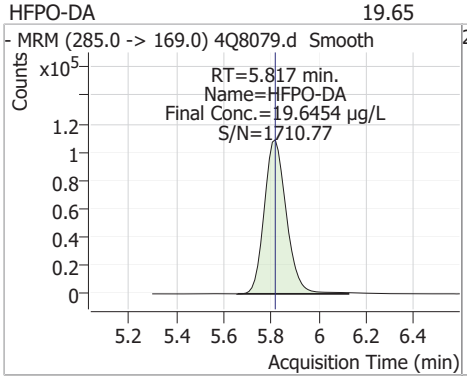


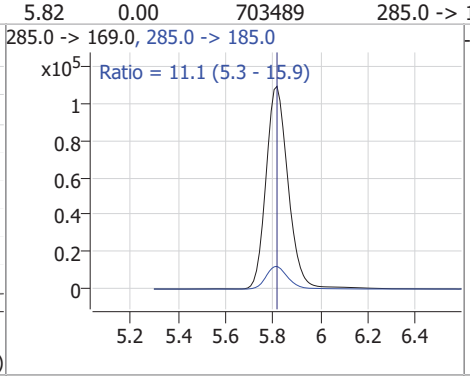


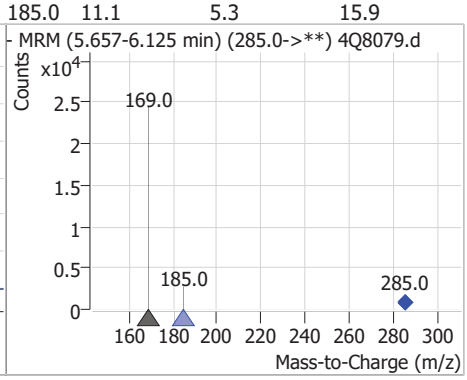


Perfluorinated Compounds by LC/MS/MS

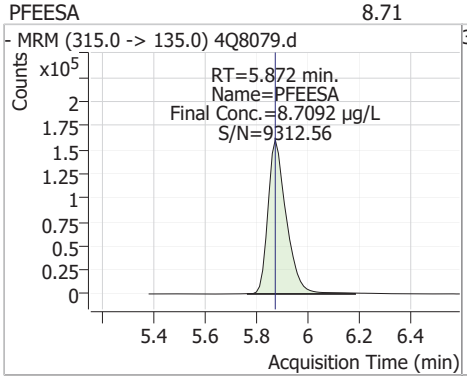
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	19.65	5.82	0.00	703489	285.0 -> 185.0	11.1	5.3	15.9

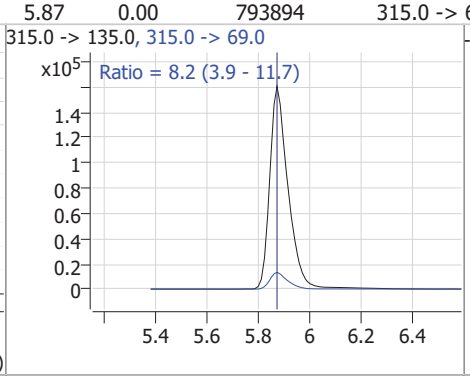


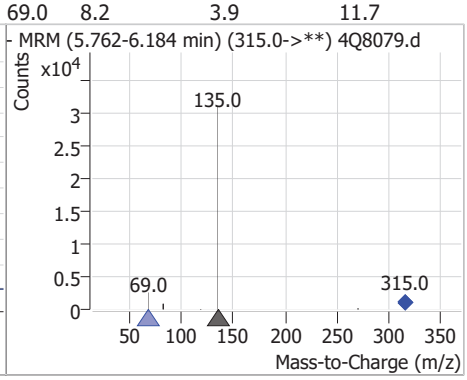




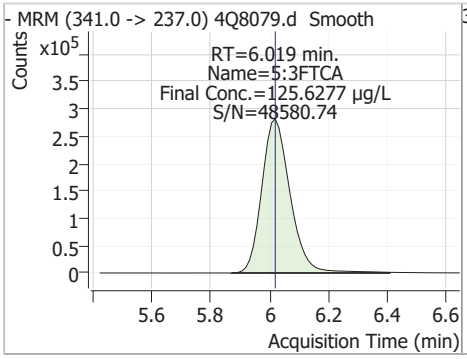
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	8.71	5.87	0.00	793894	315.0 -> 69.0	8.2	3.9	11.7

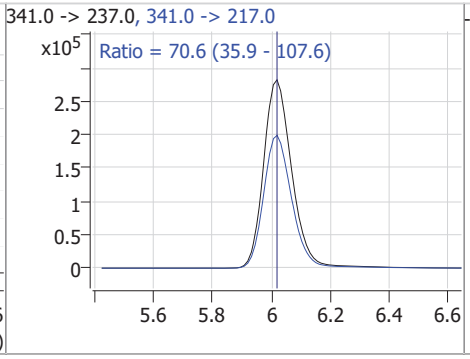


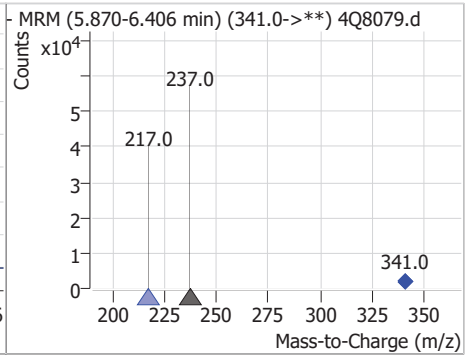




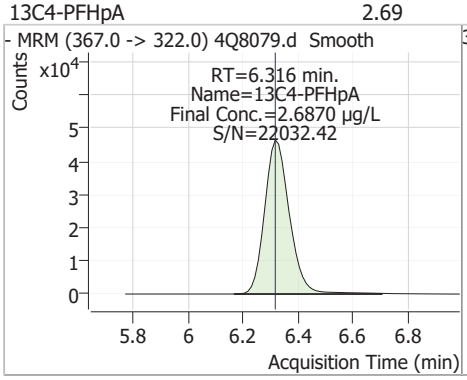
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	125.63	6.02	0.00	1879477	341.0 -> 217.0	70.6	35.9	107.6

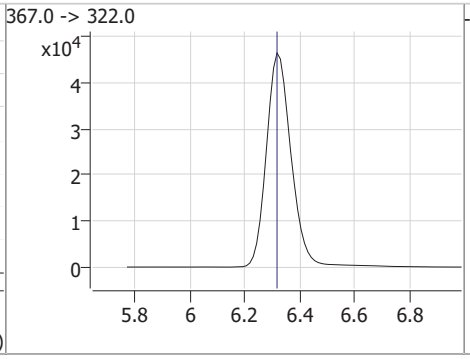


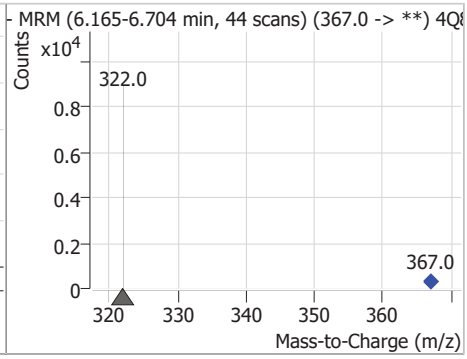




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.69	6.32	0.00	291959				





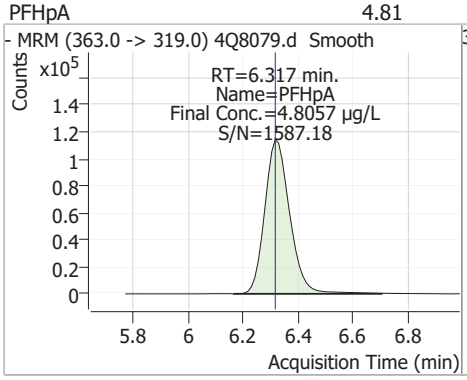


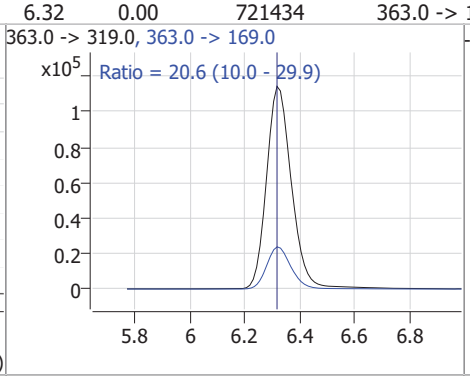
7.5.9

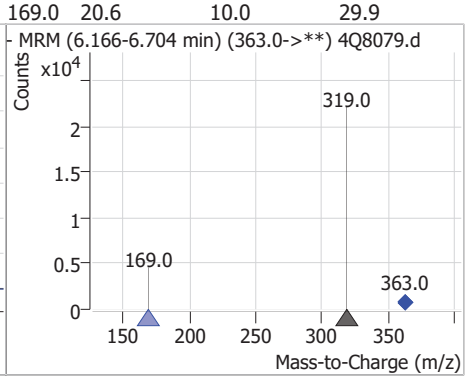
7

Perfluorinated Compounds by LC/MS/MS

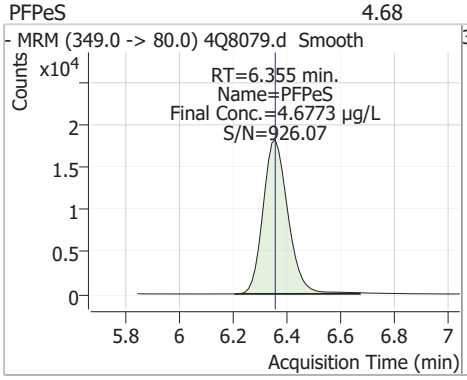
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	4.81	6.32	0.00	721434	363.0 -> 169.0	20.6	10.0	29.9

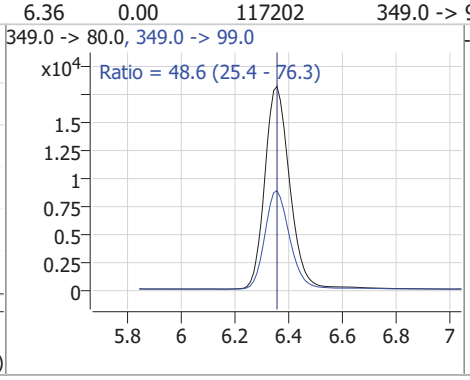


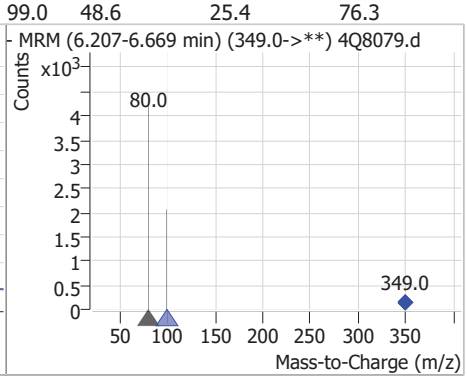




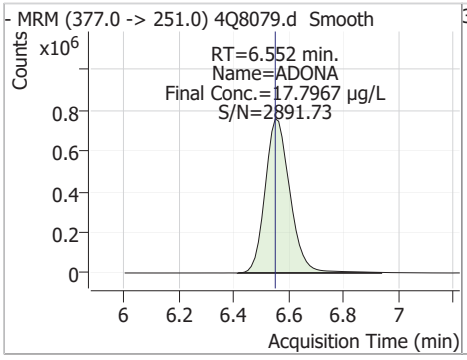
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	4.68	6.36	0.00	117202	349.0 -> 99.0	48.6	25.4	76.3

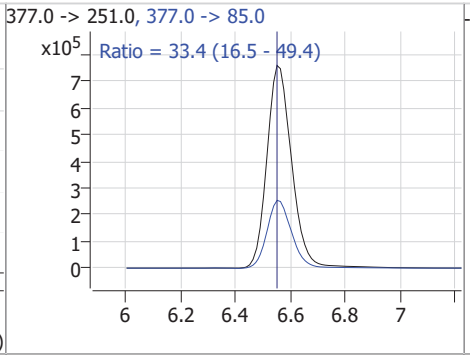


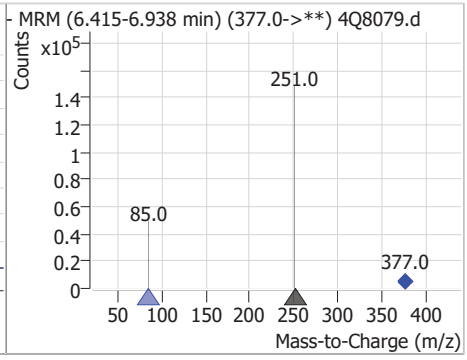




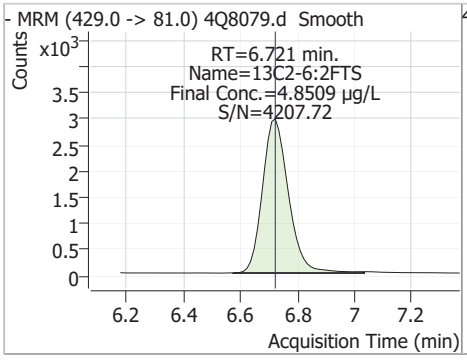
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	17.80	6.55	0.00	4771634	377.0 -> 85.0	33.4	16.5	49.4

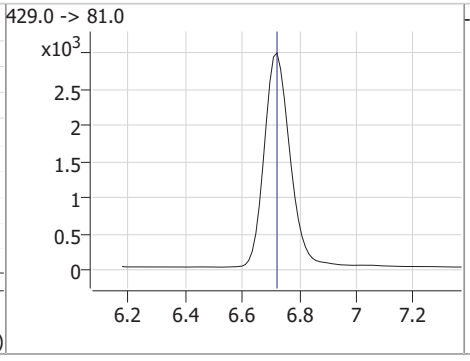


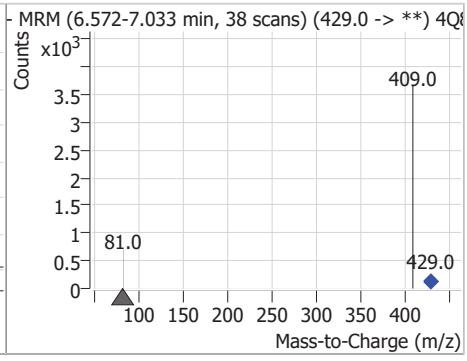




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.85	6.72	0.00	18709				

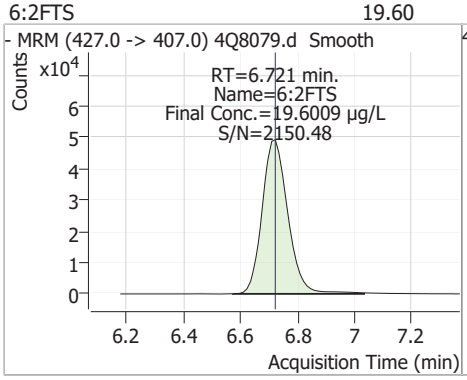


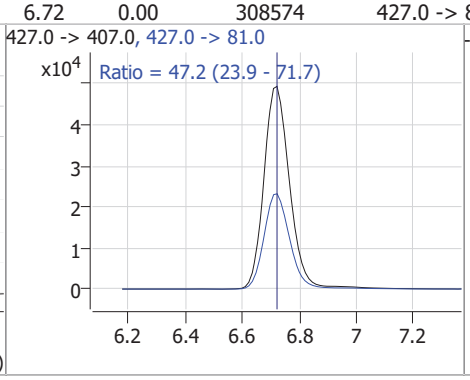


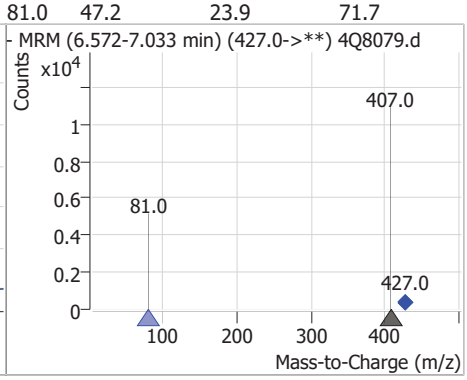


Perfluorinated Compounds by LC/MS/MS

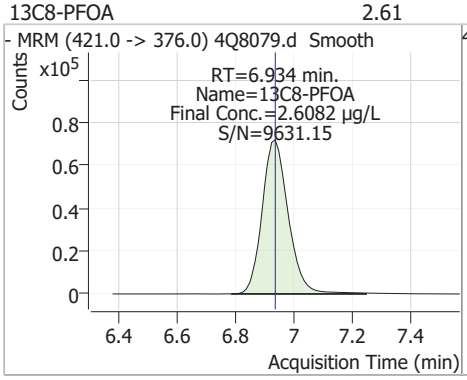
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	19.60	6.72	0.00	308574	427.0 -> 81.0	47.2	23.9	71.7

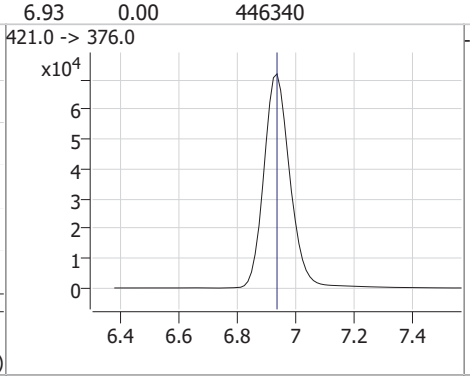


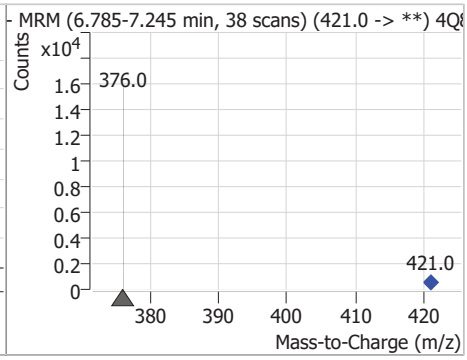




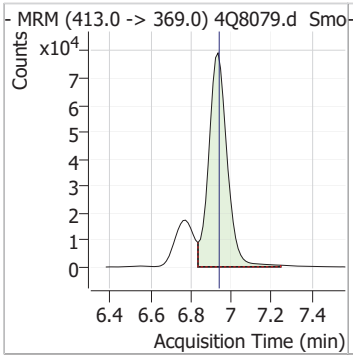
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.61	6.93	0.00	446340				

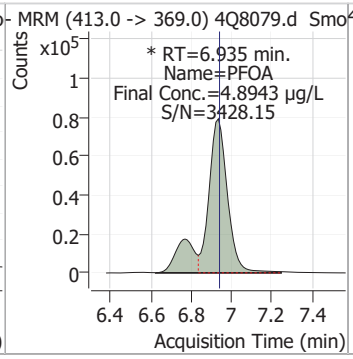


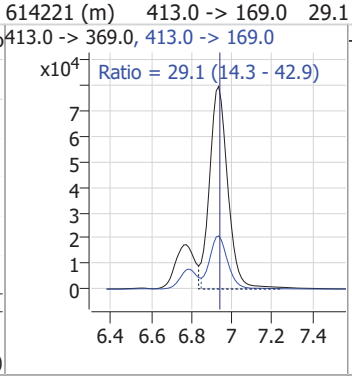


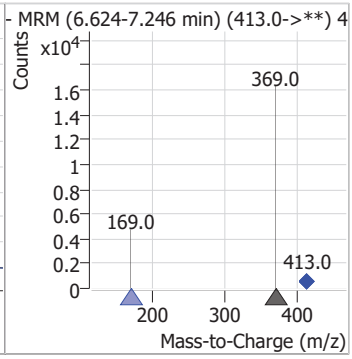


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	4.89	6.93	0.00	614221 (m)	413.0 -> 169.0	29.1	14.3	42.9

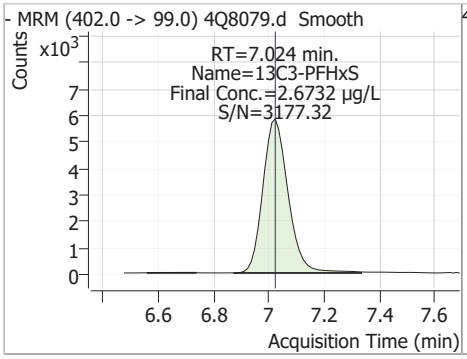


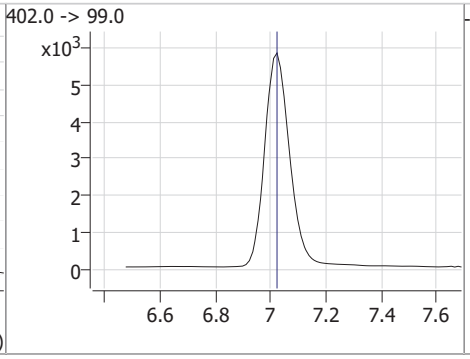


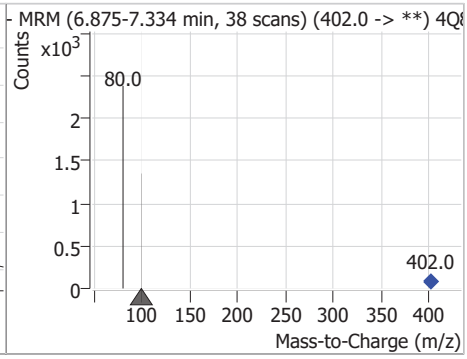




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.67	7.02	0.00	36935				

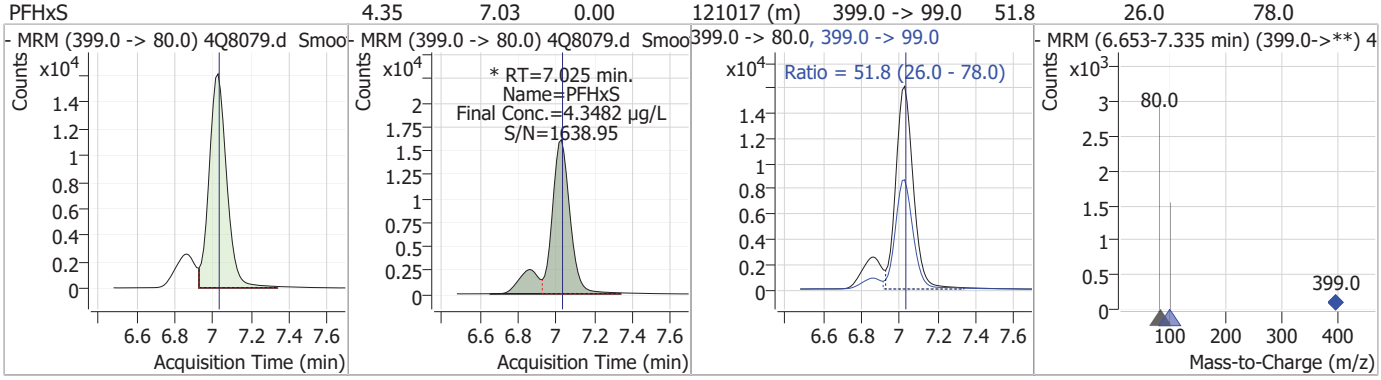




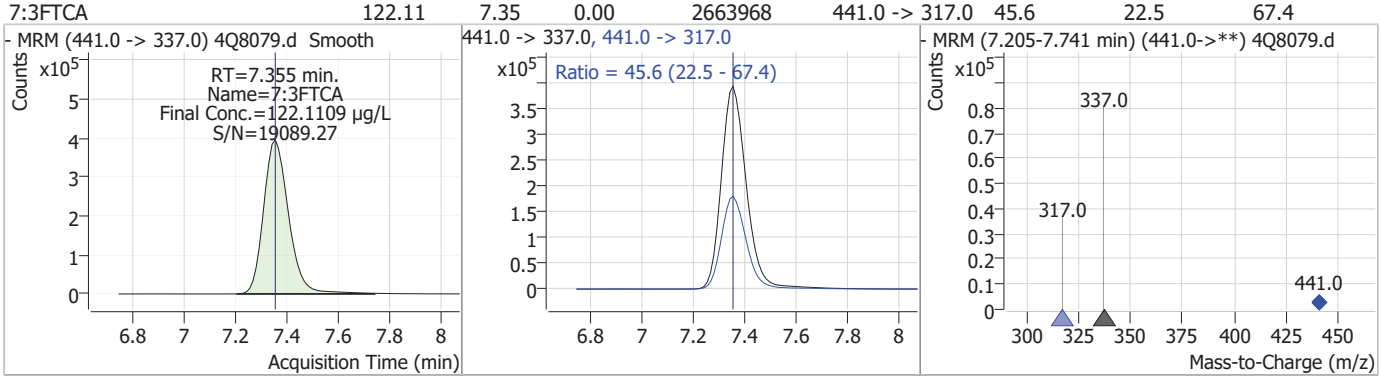


Perfluorinated Compounds by LC/MS/MS

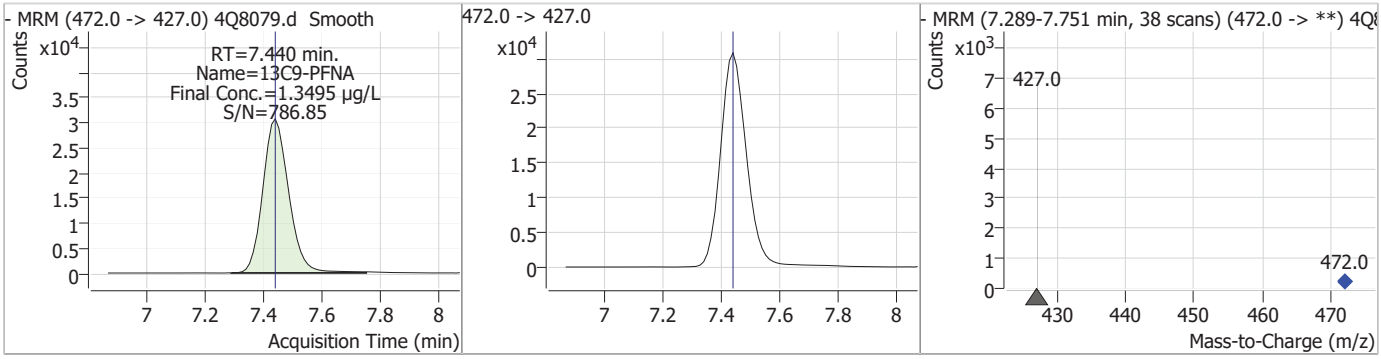
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	4.35	7.03	0.00	121017 (m)	399.0 -> 99.0	51.8	26.0	78.0



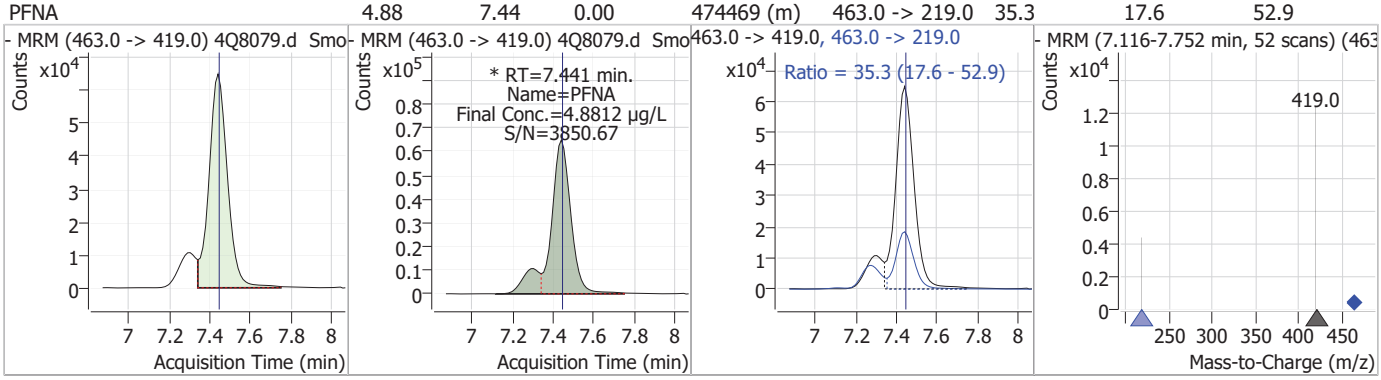
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	122.11	7.35	0.00	2663968	441.0 -> 317.0	45.6	22.5	67.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.35	7.44	0.00	189123				

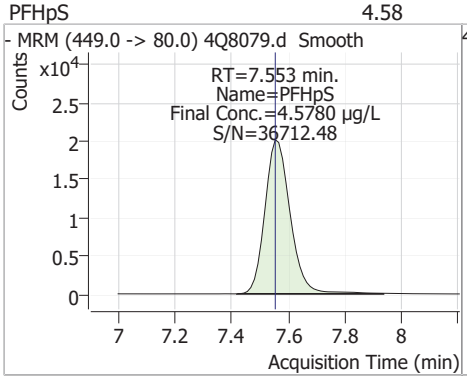


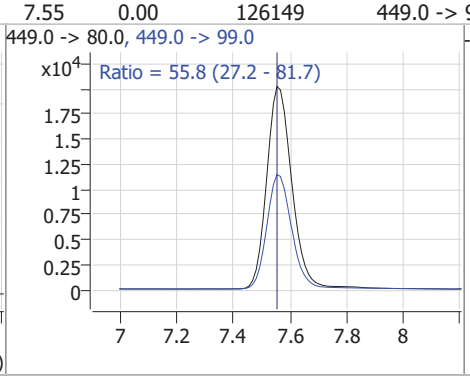
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	4.88	7.44	0.00	474469 (m)	463.0 -> 219.0	35.3	17.6	52.9

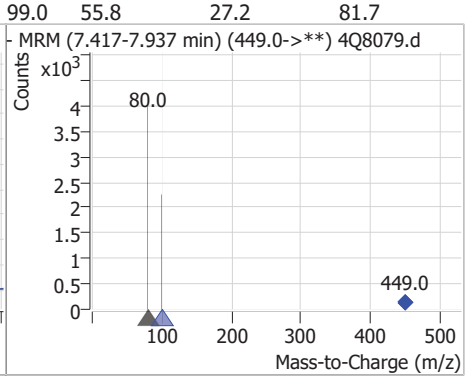


Perfluorinated Compounds by LC/MS/MS

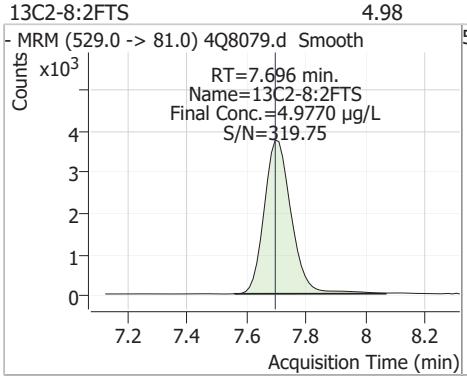
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	4.58	7.55	0.00	126149	449.0 -> 99.0	55.8	27.2	81.7

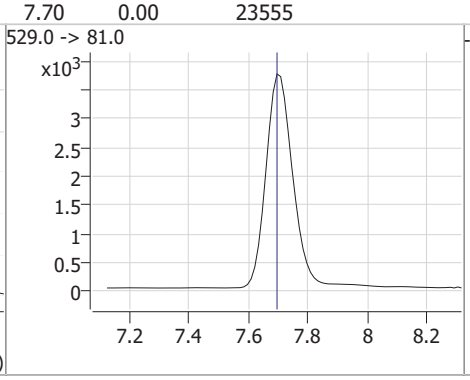


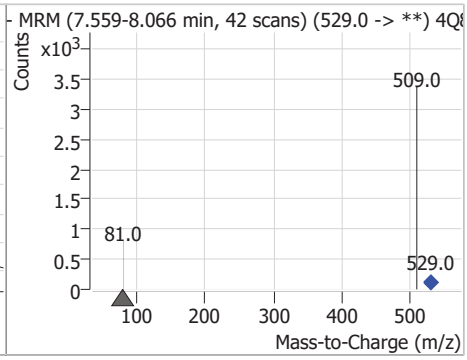




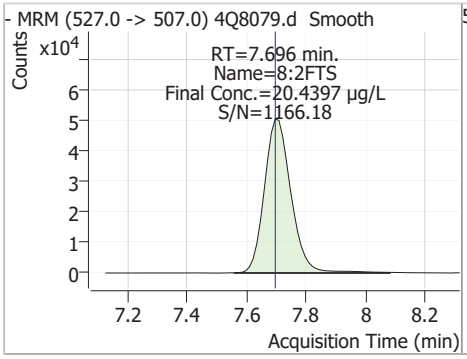
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.98	7.70	0.00	23555				

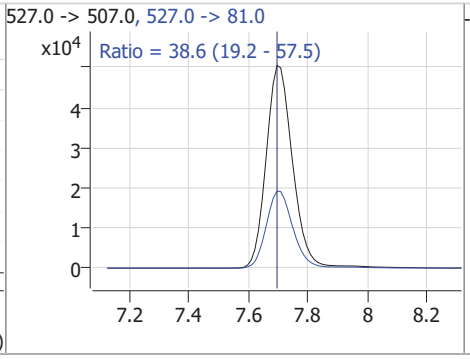


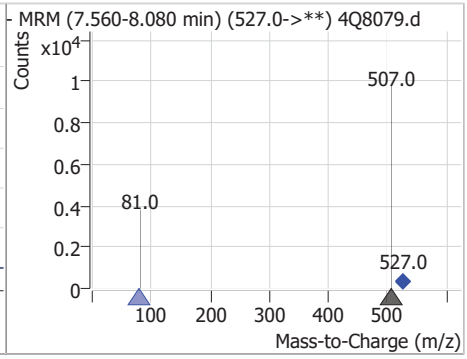




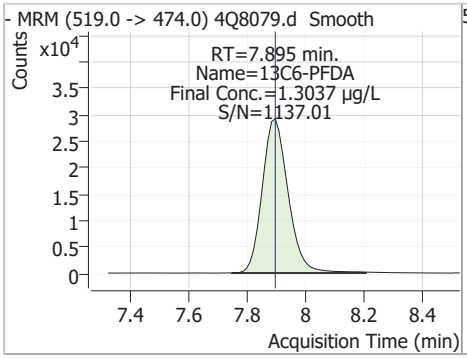
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	20.44	7.70	0.00	312295	527.0 -> 81.0	38.6	19.2	57.5

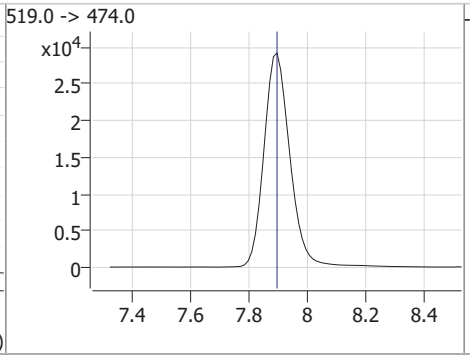


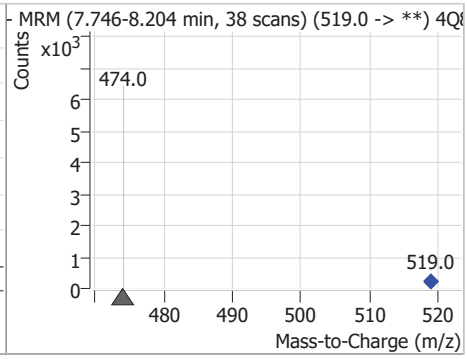




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.30	7.89	0.00	178914				

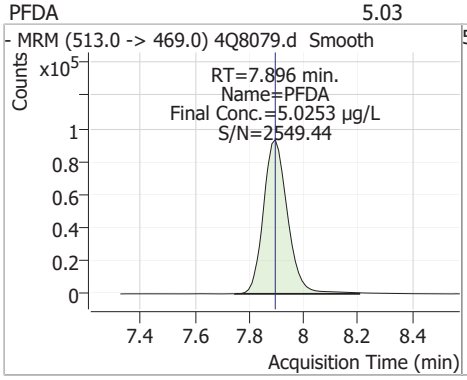


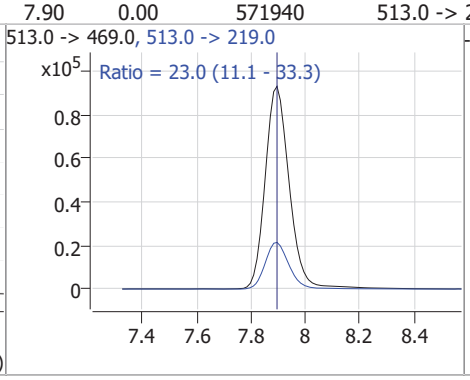


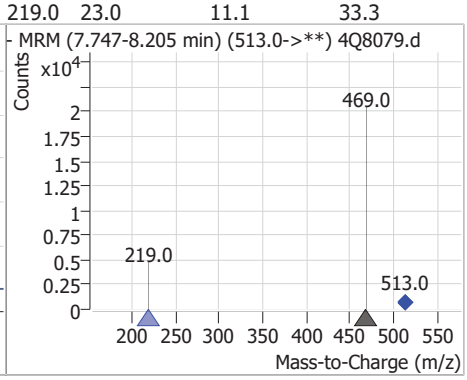


Perfluorinated Compounds by LC/MS/MS

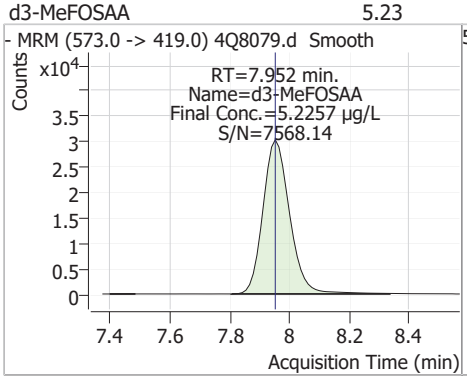
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	5.03	7.90	0.00	571940	513.0 -> 219.0	23.0	11.1	33.3

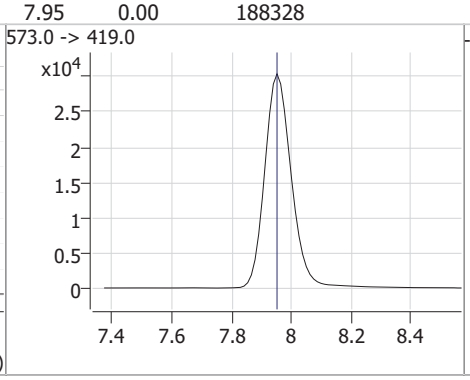


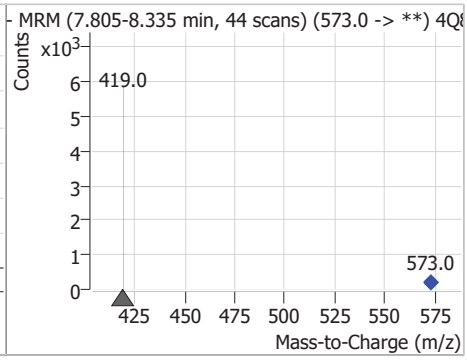




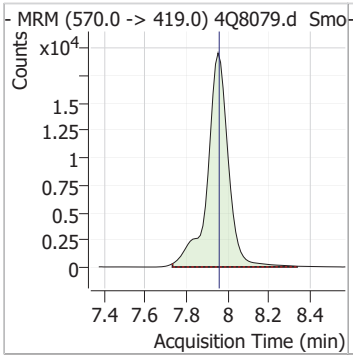
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.23	7.95	0.00	188328				

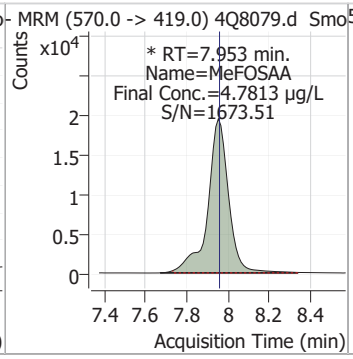


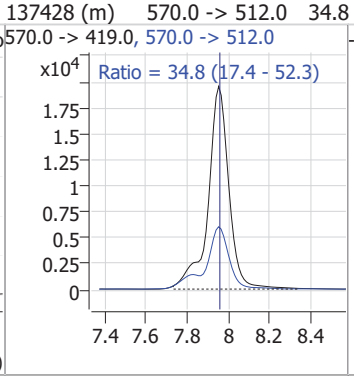


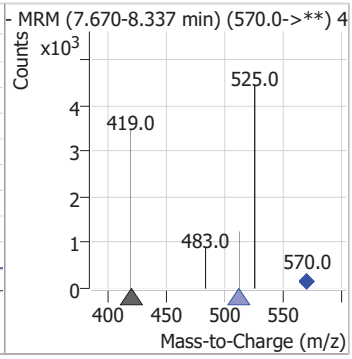


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	4.78	7.95	0.00	137428 (m)	570.0 -> 512.0	34.8	17.4	52.3

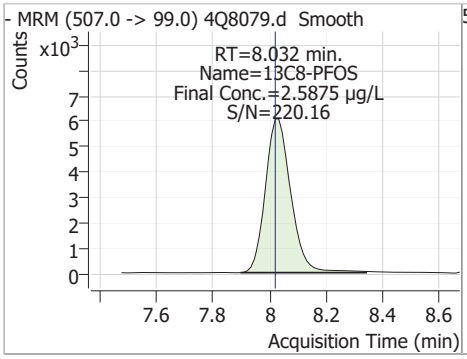


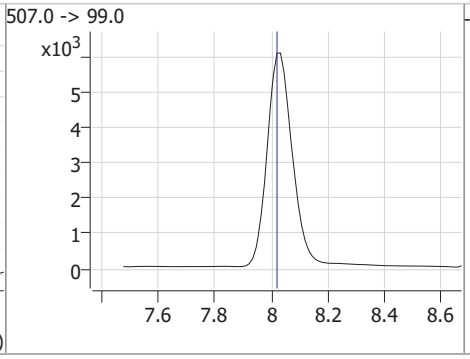


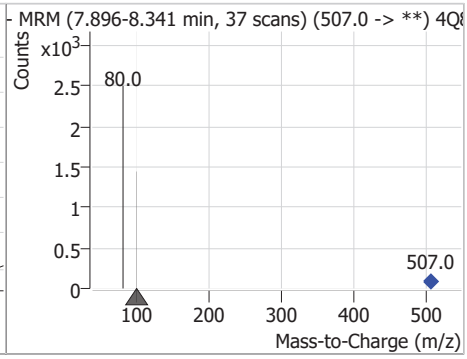




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.59	8.03	0.01	37807				

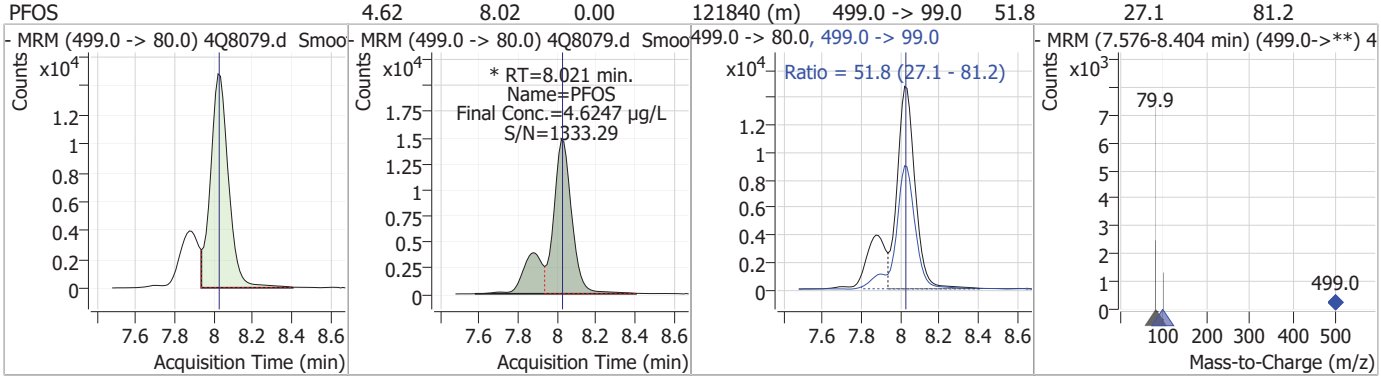




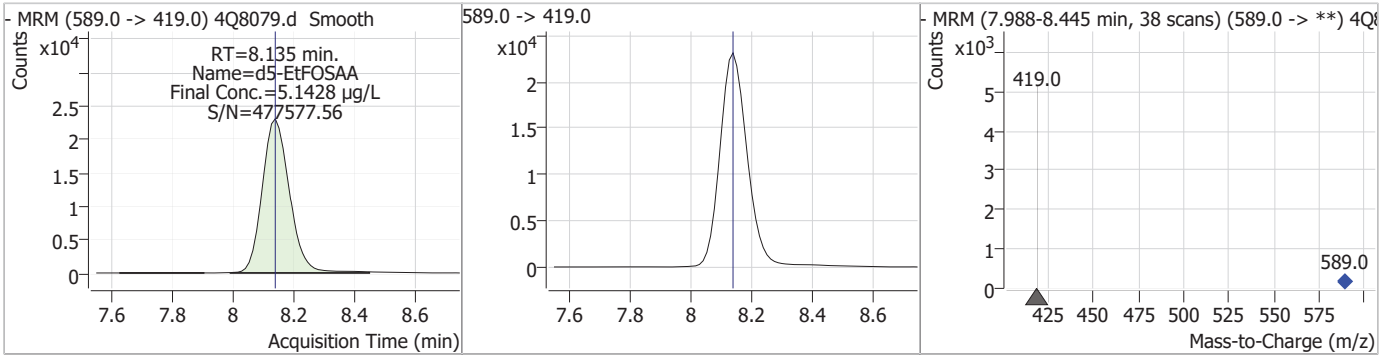


Perfluorinated Compounds by LC/MS/MS

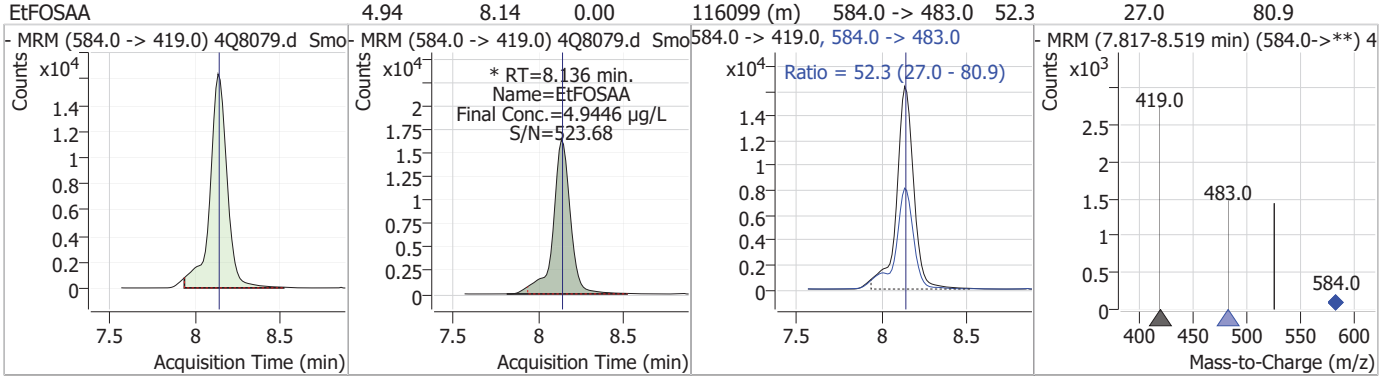
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.62	8.02	0.00	121840 (m)	499.0 -> 99.0	51.8	27.1	81.2



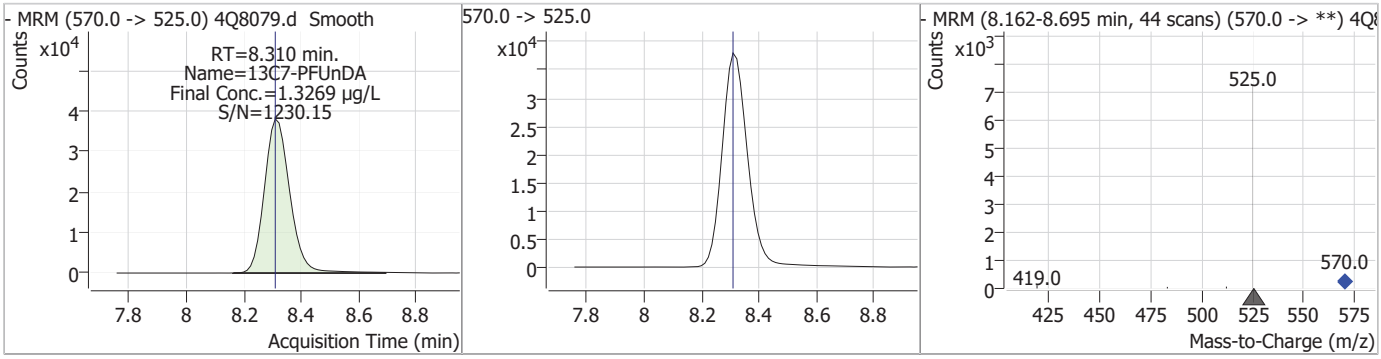
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.14	8.13	0.00	144075				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	4.94	8.14	0.00	116099 (m)	584.0 -> 483.0	52.3	27.0	80.9

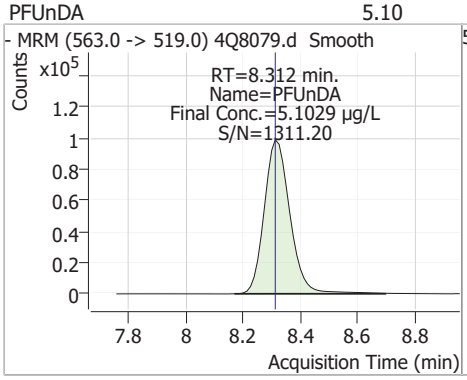


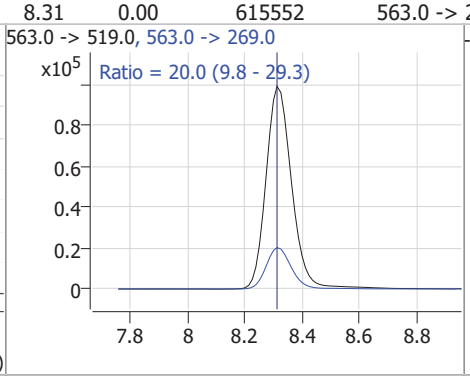
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.33	8.31	0.00	234873				

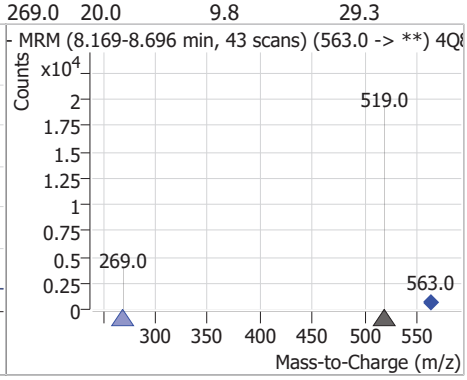


Perfluorinated Compounds by LC/MS/MS

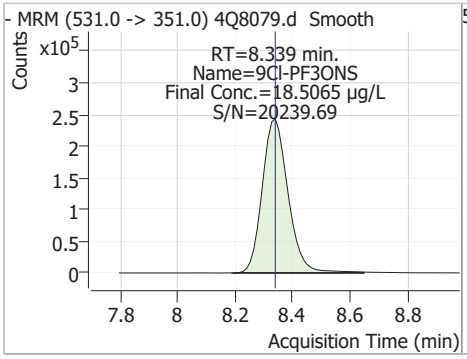
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	5.10	8.31	0.00	615552	563.0 -> 269.0	20.0	9.8	29.3

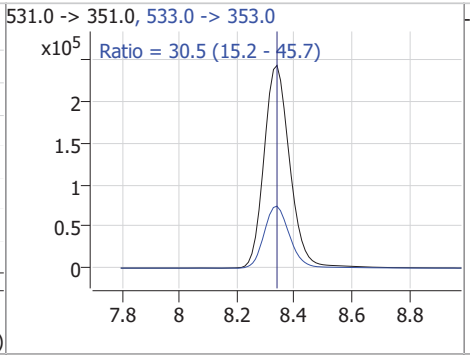


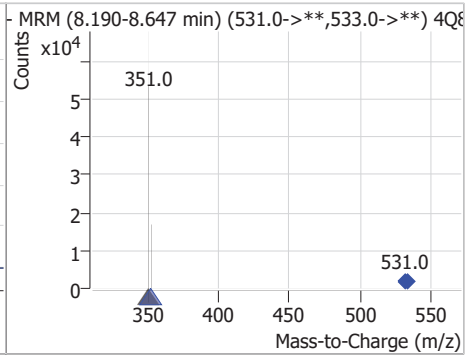




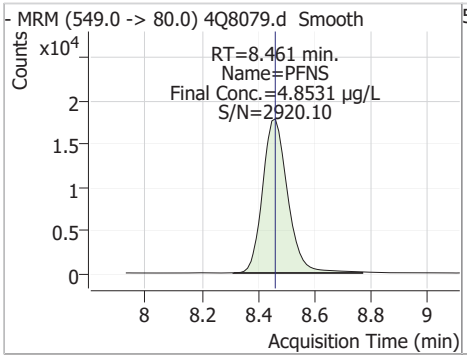
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	18.51	8.34	0.00	1516097	533.0 -> 353.0	30.5	15.2	45.7

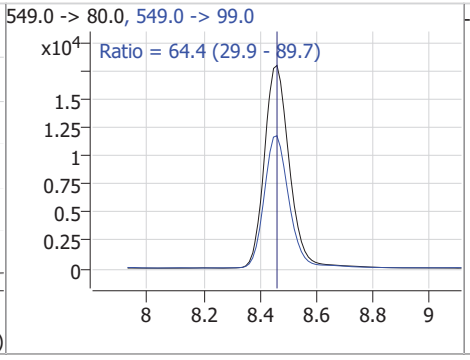


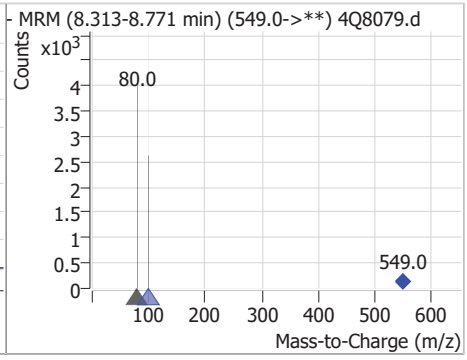




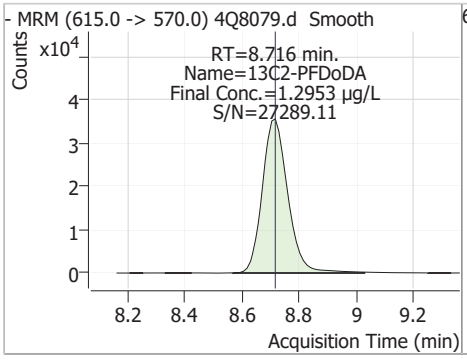
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	4.85	8.46	0.00	111005	549.0 -> 99.0	64.4	29.9	89.7

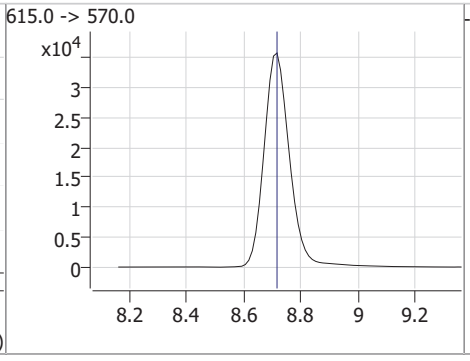


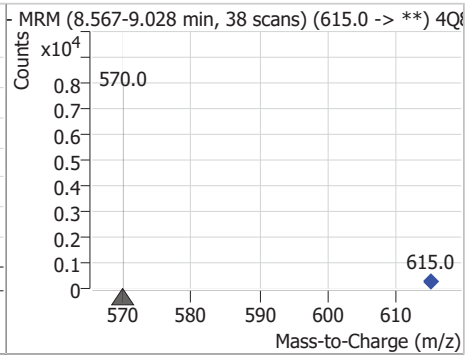




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.30	8.72	0.00	220930				

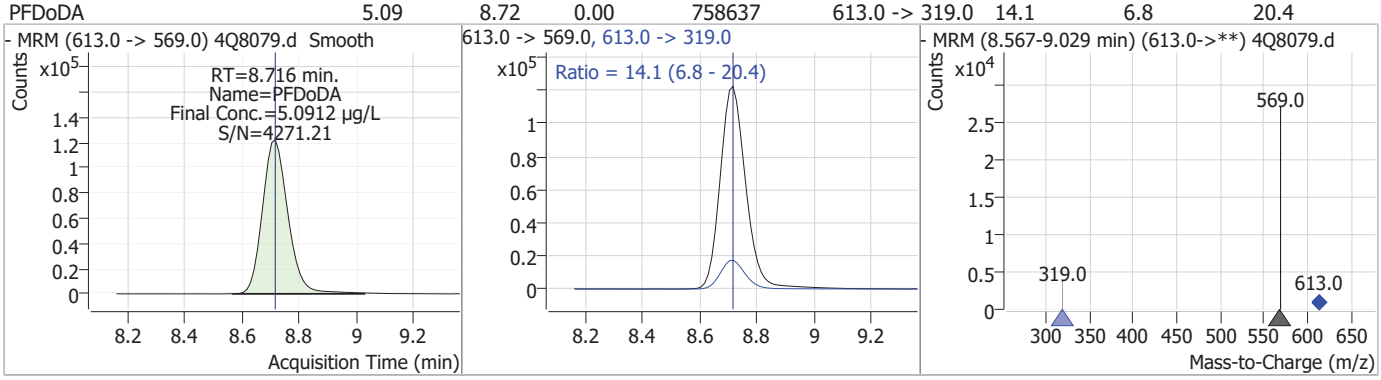




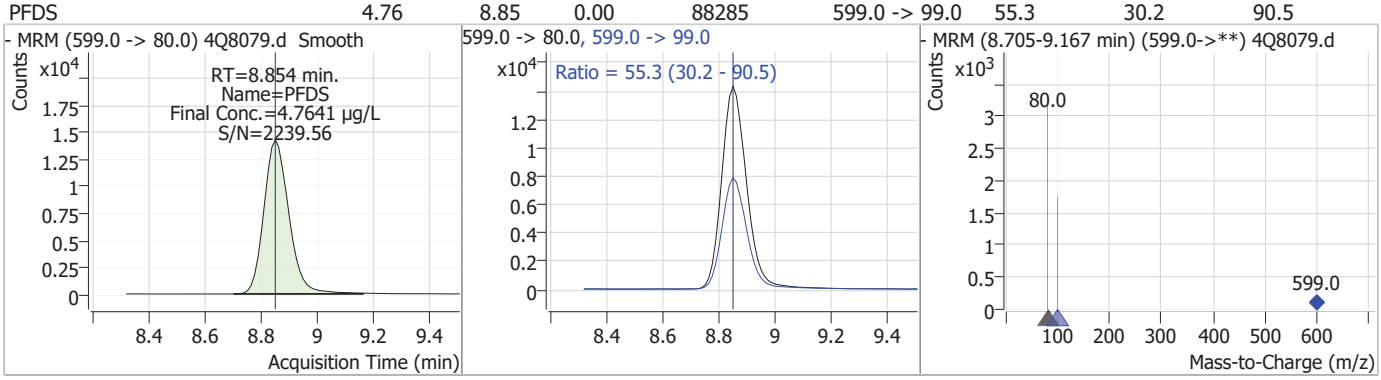


Perfluorinated Compounds by LC/MS/MS

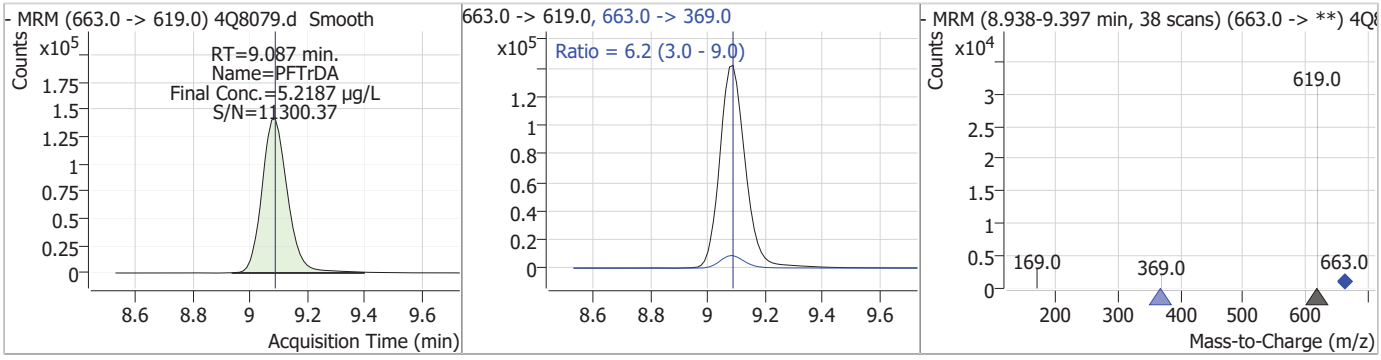
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	5.09	8.72	0.00	758637	613.0 -> 319.0	14.1	6.8	20.4



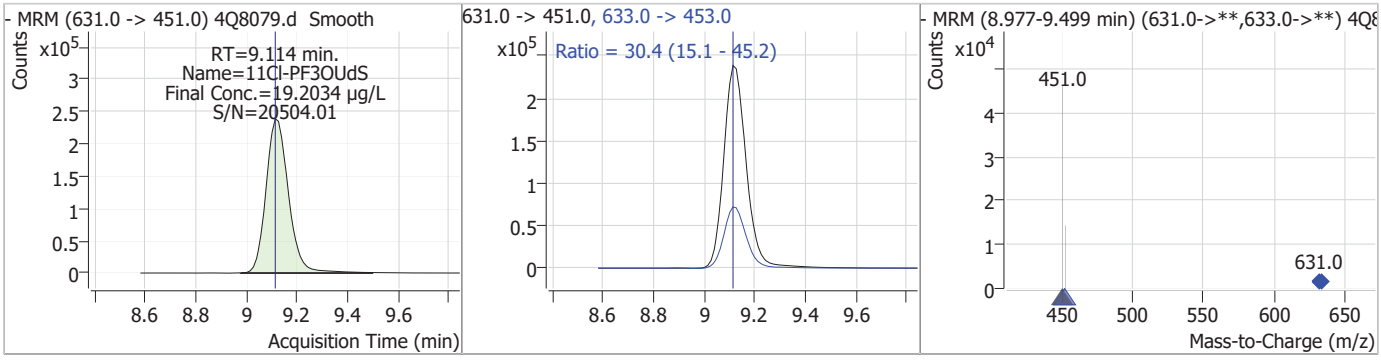
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	4.76	8.85	0.00	88285	599.0 -> 99.0	55.3	30.2	90.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	5.22	9.09	0.00	880193	663.0 -> 369.0	6.2	3.0	9.0

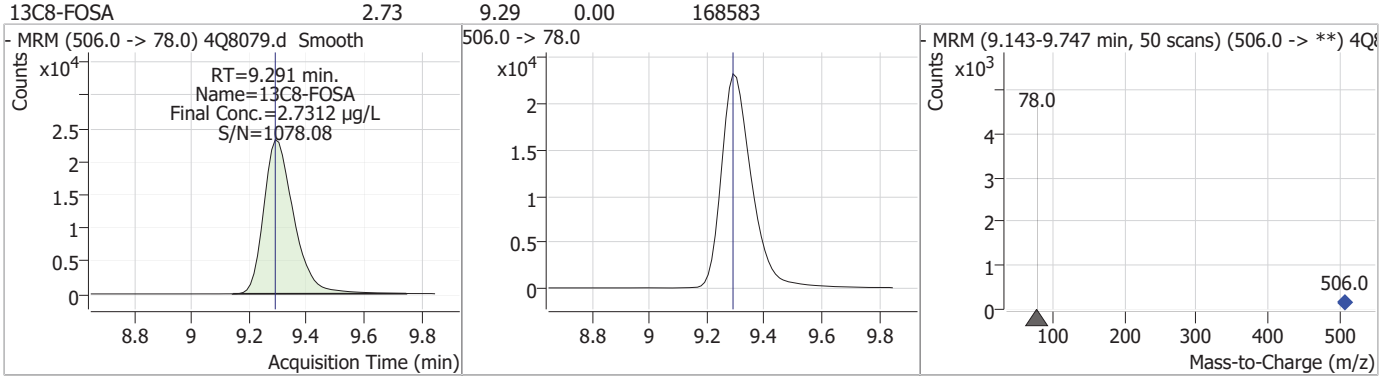


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	19.20	9.11	0.00	1474187	633.0 -> 453.0	30.4	15.1	45.2

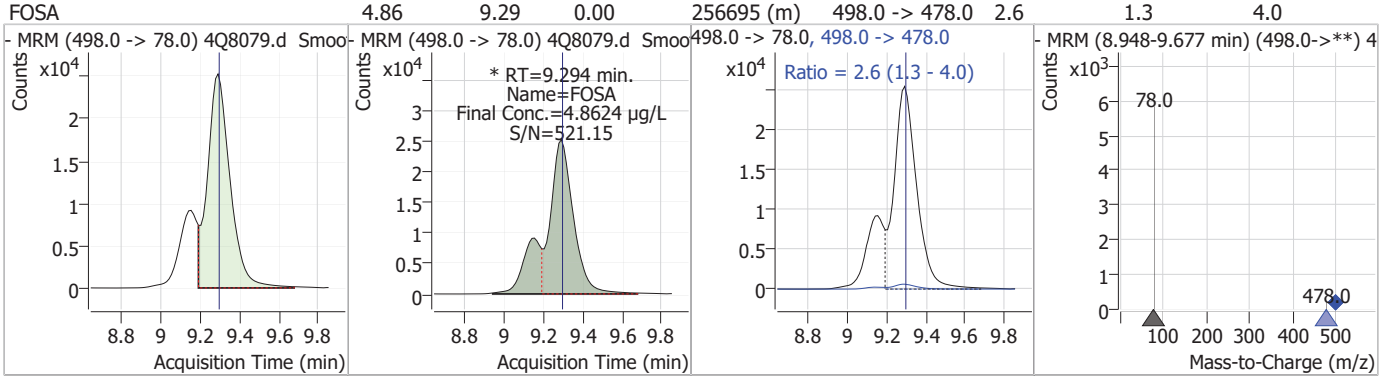


Perfluorinated Compounds by LC/MS/MS

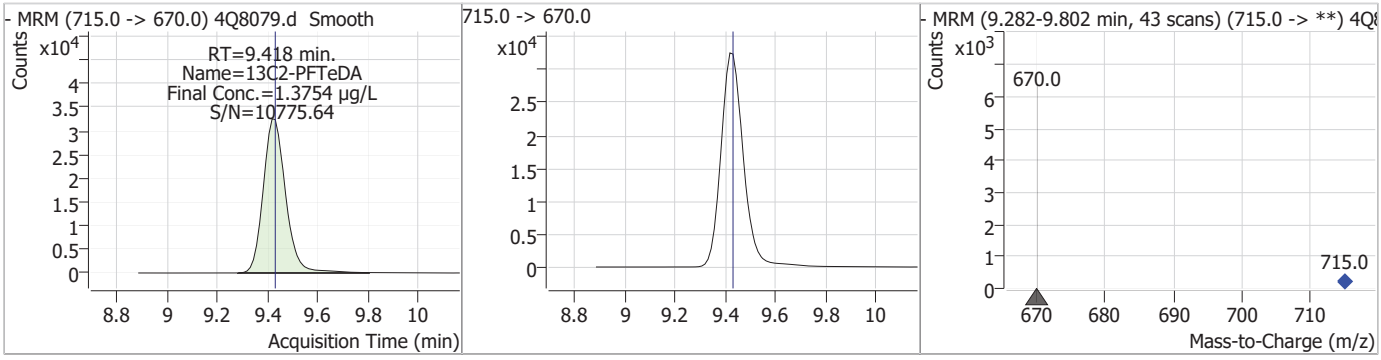
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.73	9.29	0.00	168583				



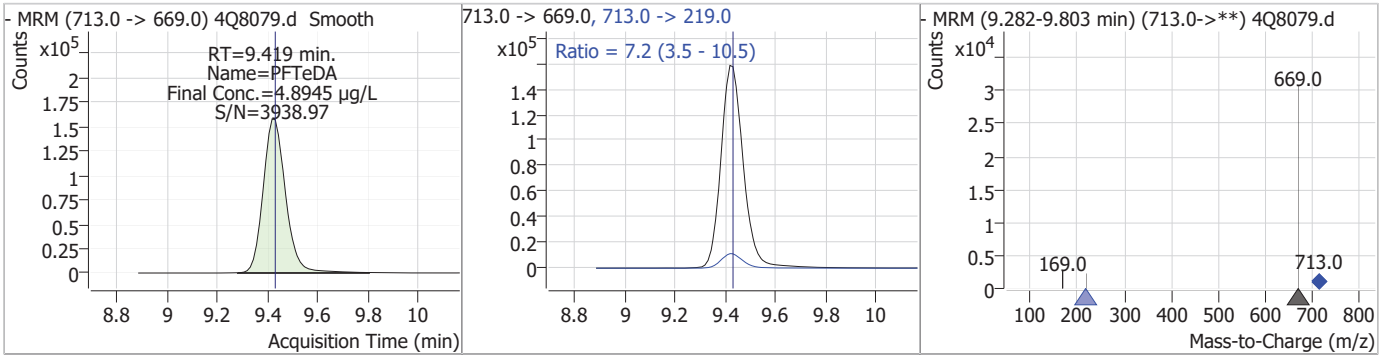
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	4.86	9.29	0.00	256695 (m)	498.0 -> 478.0	2.6	1.3	4.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.38	9.42	-0.01	200742				

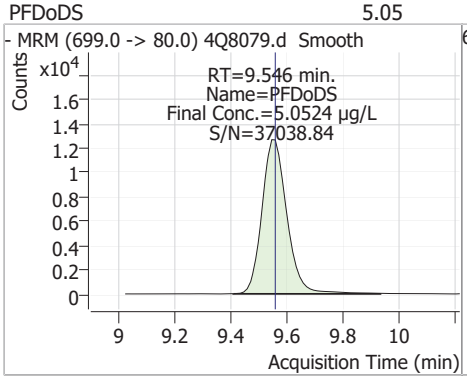


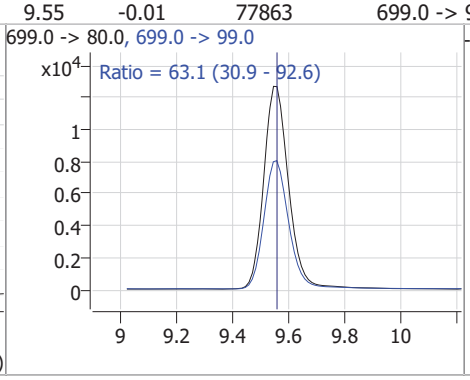
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	4.89	9.42	-0.01	977975	713.0 -> 219.0	7.2	3.5	10.5

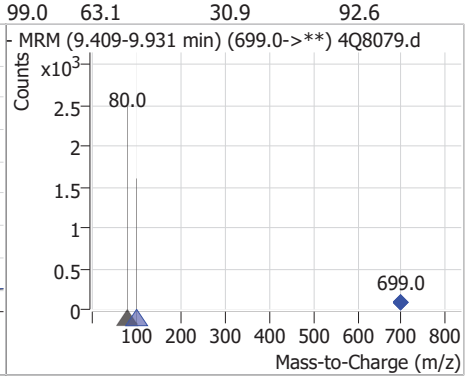


Perfluorinated Compounds by LC/MS/MS

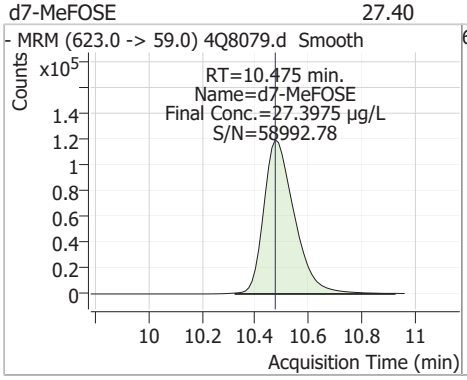
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	5.05	9.55	-0.01	77863	699.0 -> 99.0	63.1	30.9	92.6

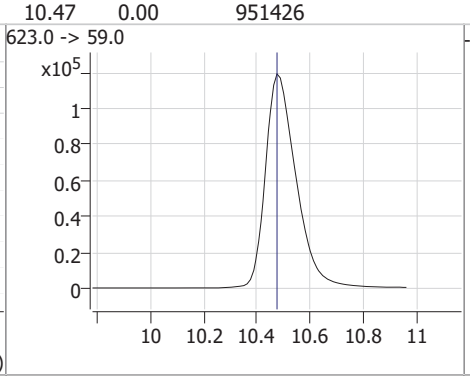


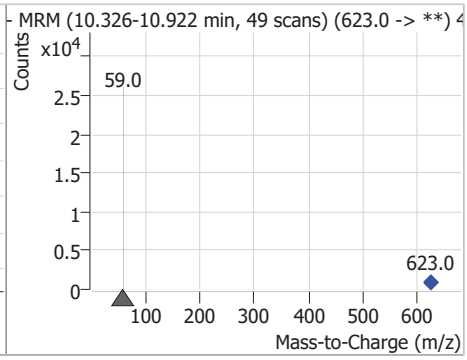




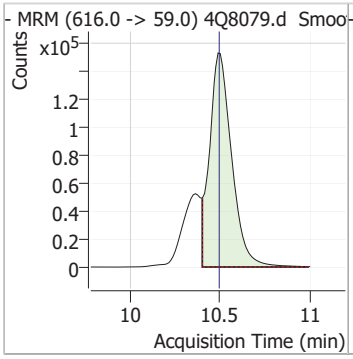
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	27.40	10.47	0.00	951426				

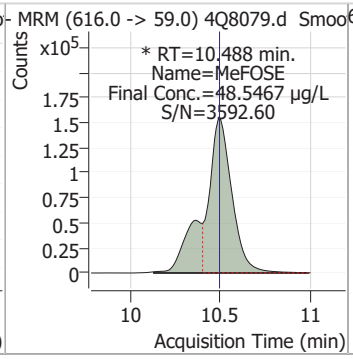


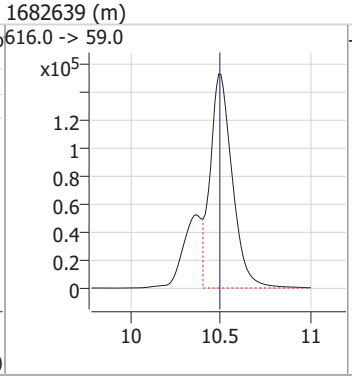


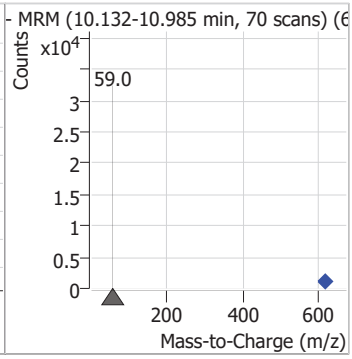


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	48.55	10.49	0.00	1682639 (m)				

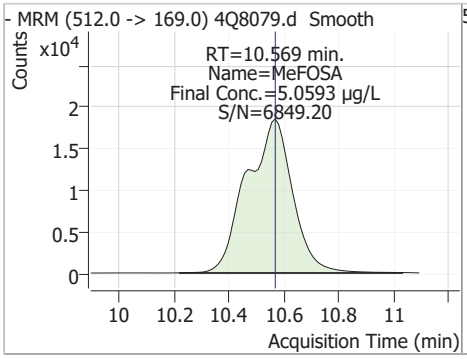


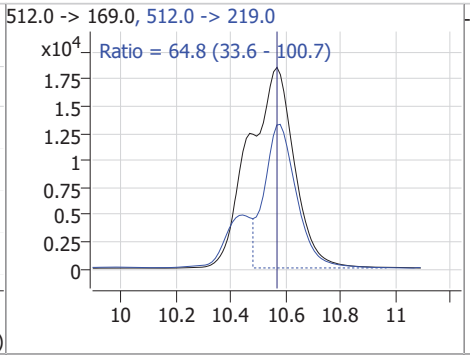


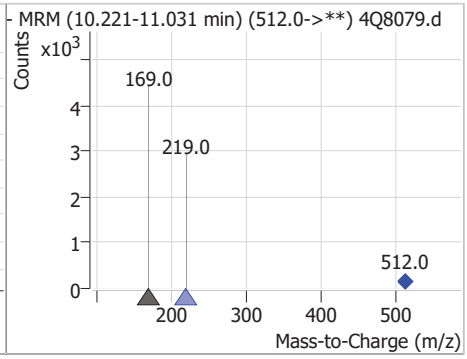




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	5.06	10.57	0.00	215883	512.0 -> 219.0	64.8	33.6	100.7

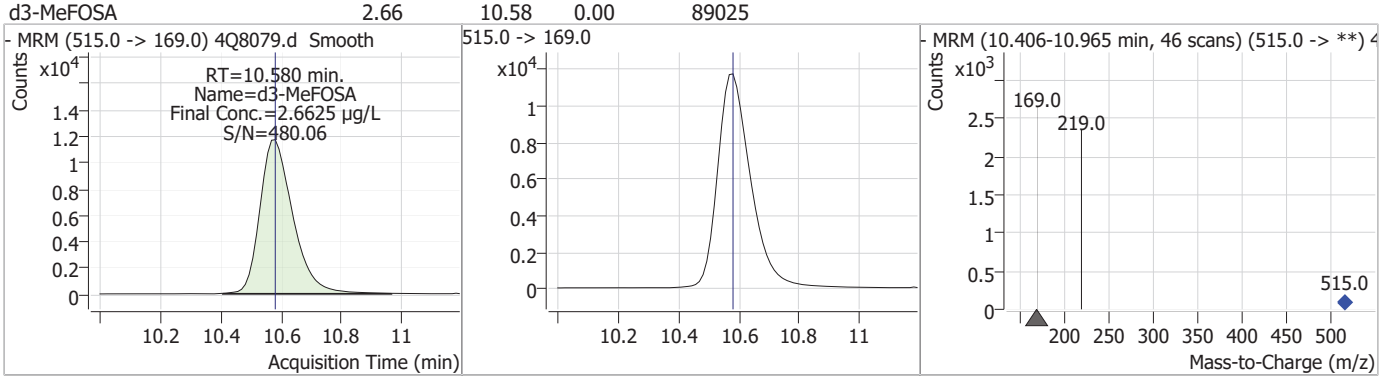




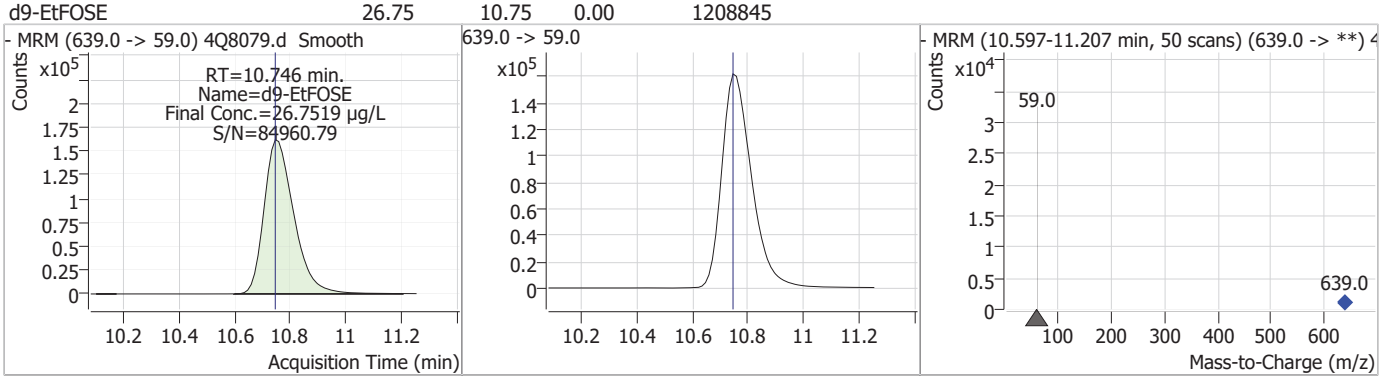


Perfluorinated Compounds by LC/MS/MS

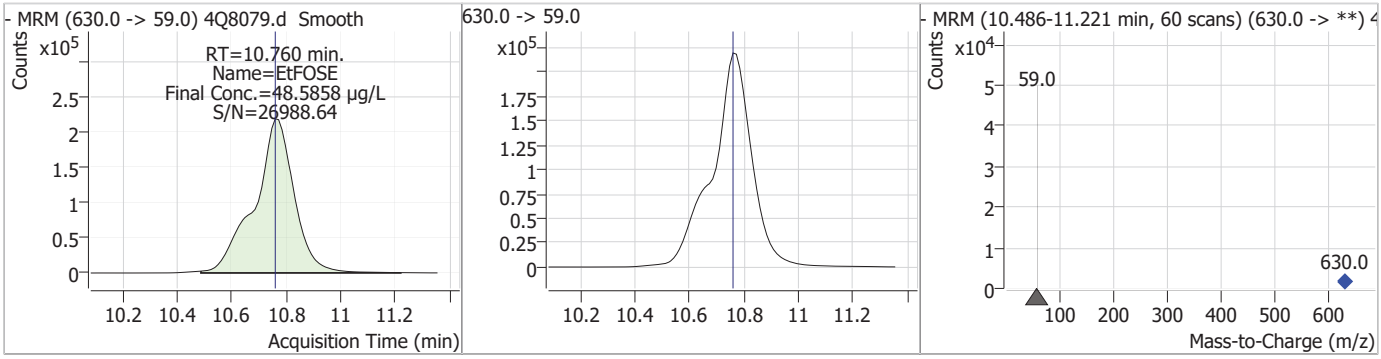
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.66	10.58	0.00	89025				



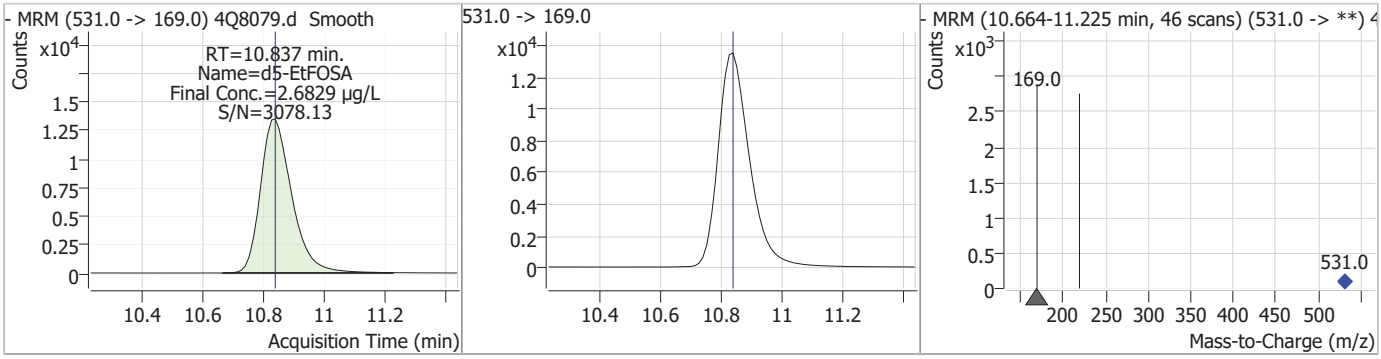
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	26.75	10.75	0.00	1208845				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	48.59	10.76	0.00	2220808				

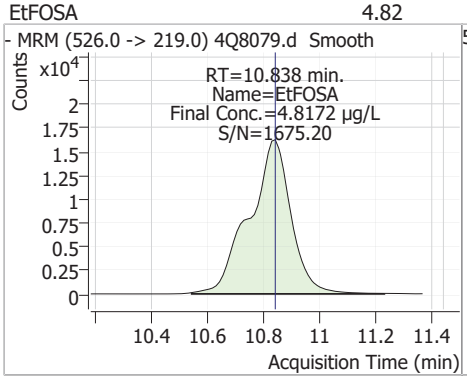


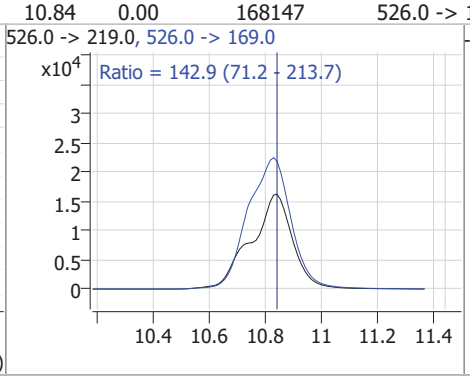
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.68	10.84	0.00	96496				

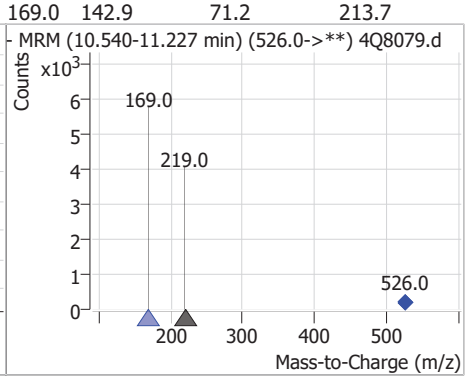


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	4.82	10.84	0.00	168147	526.0 -> 169.0	142.9	71.2	213.7







7.5.9

7

Manual Integration Approval Summary

Sample Number: T4Q137-RT
Lab FileID: 4Q8079.D
Injection Time: 04/29/25 16:45
Method: EPA 1633
Analyst approved: 04/30/25 02:22 Rensel John Romano
Supervisor approved: 04/30/25 07:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.93	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.03	Split peak
Perfluorononanoic acid	375-95-1		7.44	Split peak
MeFOSAA	2355-31-9		7.95	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.02	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.29	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File	: 4Q8125.d
Operator	: maksudh
Acq. Method	: 1633.m
Acq. Date-Time	: 4/30/2025 1:48:41 PM
Sample Name	: RT TDCA
Vial	: P1-B1
DA Method File	: TDCA.quantmethod.xml
Batch Name	: T4Q138_TDCA.batch.bin
Sample Information	: OP63077,T4Q138,500,,,5,1,WATER

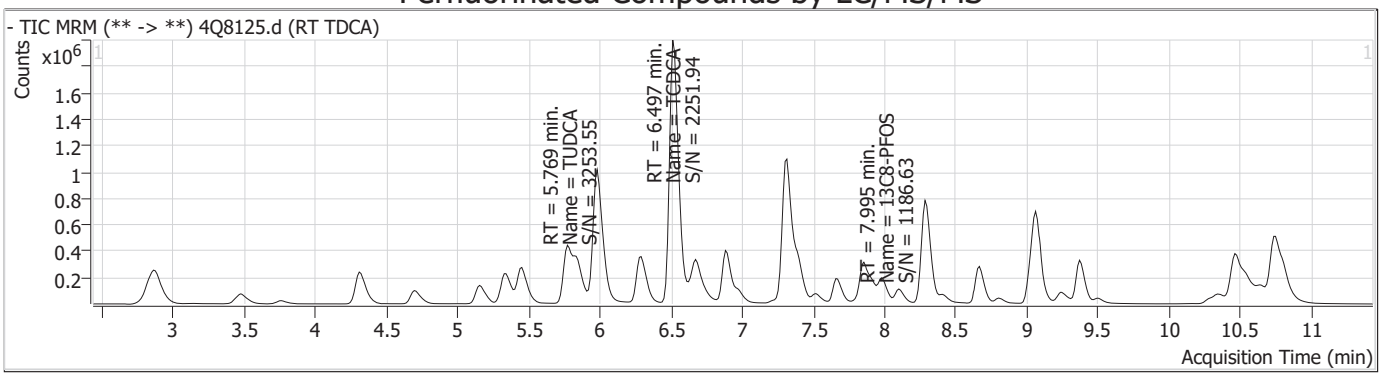
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
Internal Standards							
M8-PFOS	7.995	507.1 -> 79.9	68519	2.50	µg/L		0.000
13C4-PFOS	7.995	502.8 -> 79.9	69691	2.50	µg/L		0.000
System Monitoring Compounds							
13C8-PFOS	7.995	507.1 -> 79.9	68519	4.76	µg/L		0.000
Spiked Amount: 2.50	Range: 50.0 - 150.0%			Recovery = 190.4%			
Target Compounds							QValue
PFOS	7.996	499.0 -> 80.0	155397	4.38	µg/L	m	100
		499.0 -> 99.0	83964				
TCDCA	6.497	498.9 -> 79.9	187014	5.27	ng/ml	m	100
TDCA	6.645	498.9 -> 79.9	231241	6.52	ng/ml		100
TUDCA	5.769	498.9 -> 79.9	240894	6.79	ng/ml		100

 # = Qualifier out of range, m = manually integrated, + = Area summed

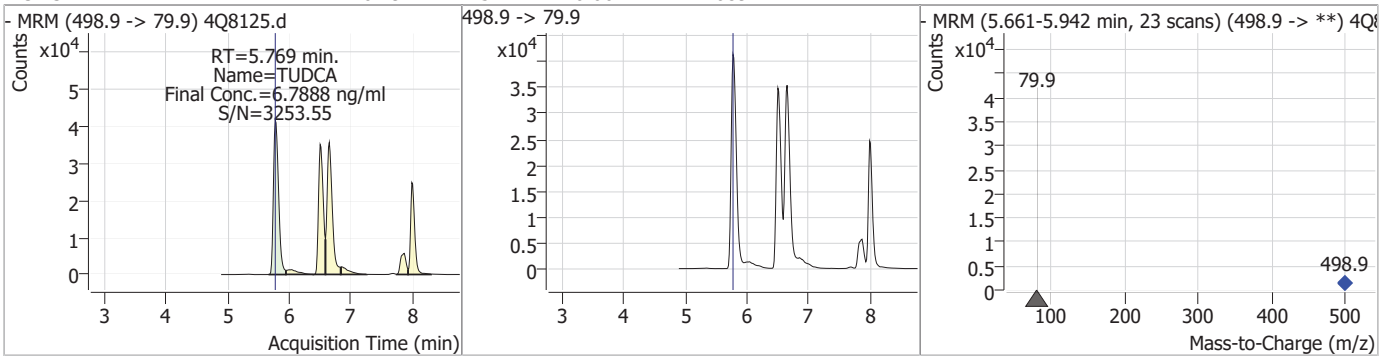
7.5.10

7

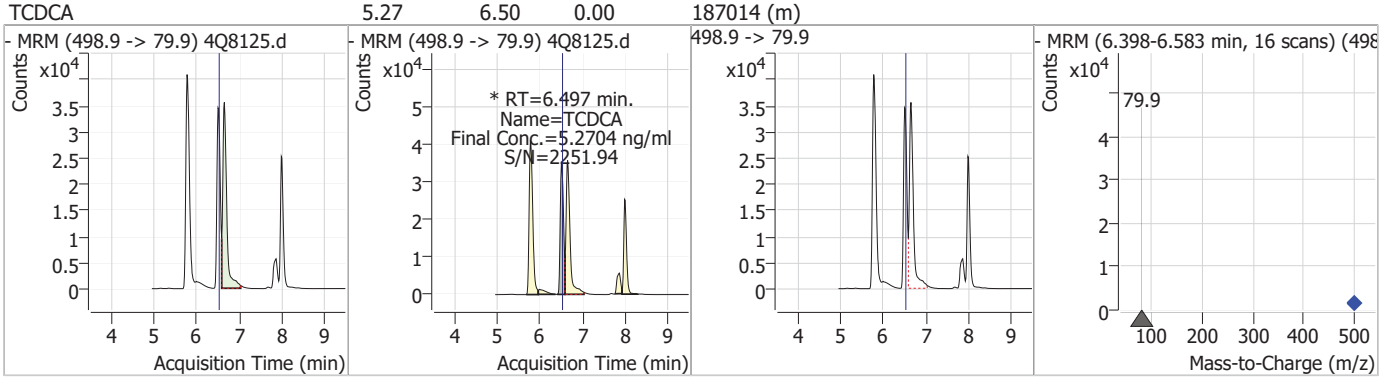
Perfluorinated Compounds by LC/MS/MS



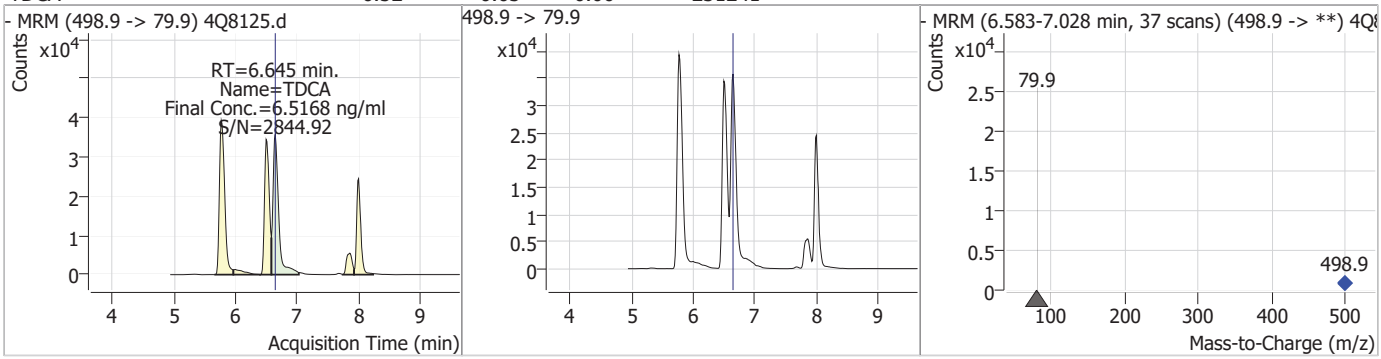
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TUDCA	6.79	5.77	0.00	240894				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TCDCA	5.27	6.50	0.00	187014 (m)				

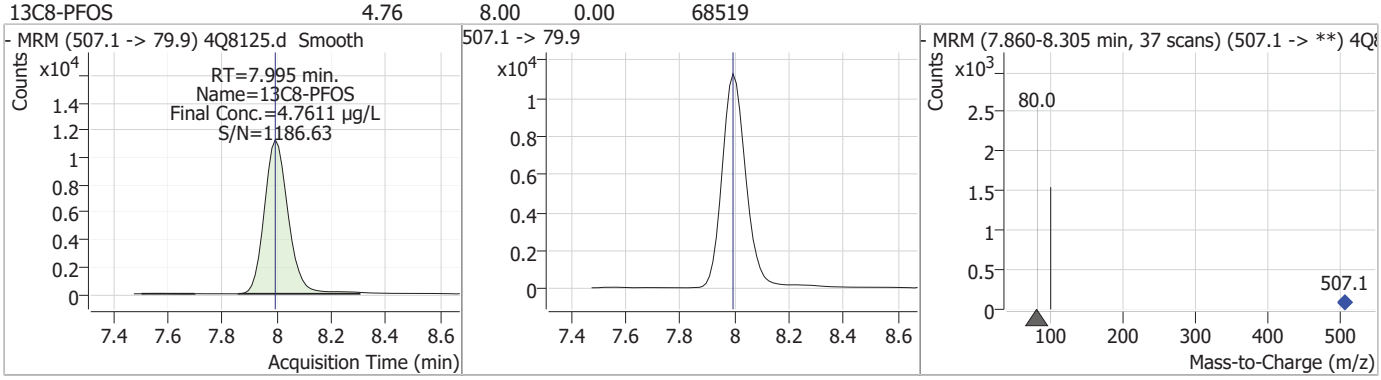


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TDCA	6.52	6.65	0.00	231241				

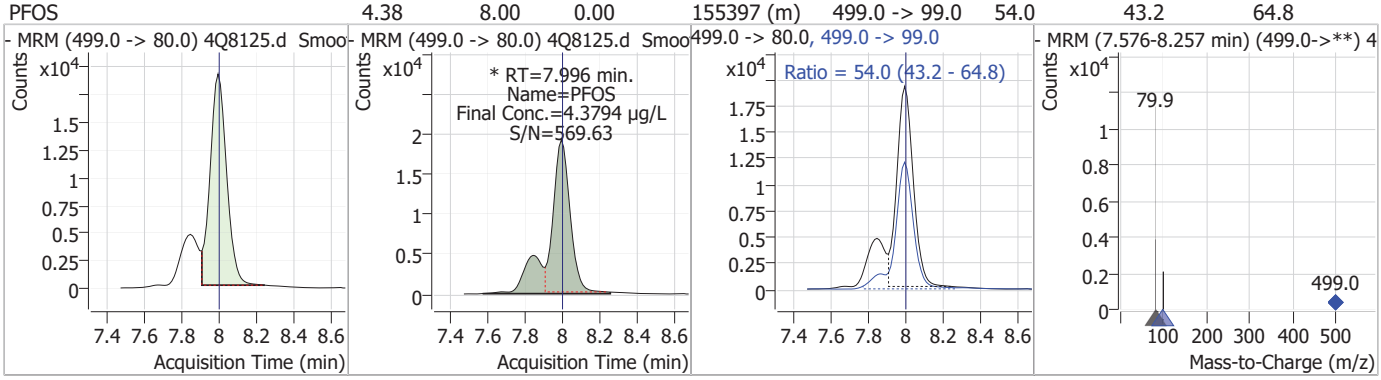


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	4.76	8.00	0.00	68519				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.38	8.00	0.00	155397 (m)	499.0 -> 99.0	54.0	43.2	64.8



Manual Integration Approval Summary

Sample Number: T4Q138-RT
Lab FileID: 4Q8125.D
Injection Time: 04/30/25 13:48
Method: EPA 1633
Analyst approved: 04/30/25 23:06 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
TCDCA	516-35-8		6.50	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8126.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 2:02:16 PM
Sample Name : RT
Vial : P1-A6
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63077,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	923600	10.00	µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	482583	5.00	µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	312759	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	334021	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	498412	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	205008	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	188052	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	254751	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	235765	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	183965	1.25	µg/L	0.000
M8-FOSA	9.279	506.0 -> 78.0	186540	2.50	µg/L	-0.012
M3-PFBS	5.355	302.0 -> 99.0	28756	2.50	µg/L	-0.012
		302.0 -> 80.0	66276			
M3-PFHxS	6.986	402.0 -> 99.0	40437	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	43077	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	11501	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	25025	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	29351	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	231070	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	482430	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	176308	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	905888	25.00	µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1097072	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	98697	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	93670	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	72224	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	388234	5.00	µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	44129	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	489208	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	162183	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	194131	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	285842	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	11501	5.20	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.9%		
13C2-6:2FTS	6.684	429.0 -> 81.0	25025	5.21	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.2%		
13C2-8:2FTS	7.671	529.0 -> 81.0	29351	5.20	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.9%		
13C2-PFDoDA	8.666	615.0 -> 570.0	235765	1.34	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 107.6%		
13C2-PFTeDA	9.381	715.0 -> 670.0	183965	1.36	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 109.2%		
13C3-PFBS	5.355	302.0 -> 99.0	28756	2.64	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.6%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	40437	2.62	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.0%			
13C4-PFBA	2.871	217.0 -> 172.0	923600	10.38	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 103.8%			
13C4-PFHpA	6.291	367.0 -> 322.0	334021	2.60	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.9%			
13C5-PFHxA	5.452	318.0 -> 273.0	312759	2.58	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.4%			
13C5-PFPeA	4.319	268.0 -> 223.0	482583	5.26	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.1%			
13C6-PFDA	7.858	519.0 -> 474.0	188052	1.31	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.0%			
13C7-PFUnDA	8.273	570.0 -> 525.0	254751	1.33	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.5%			
13C8-FOSA	9.279	506.0 -> 78.0	186540	2.51	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.6%			
13C8-PFOA	6.897	421.0 -> 376.0	498412	2.55	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.0%			
13C8-PFOS	7.995	507.0 -> 99.0	43077	2.48	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.1%			
13C9-PFNA	7.403	472.0 -> 427.0	205008	1.27	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.9%			
d3-MeFOSAA	7.915	573.0 -> 419.0	231070	4.86	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.2%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	482430	10.15	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.5%			
d3-MeFOSA	10.567	515.0 -> 169.0	93670	2.46	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.3%			
d5-EtFOSAA	8.098	589.0 -> 419.0	176308	4.83	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.6%			
d7-MeFOSE	10.462	623.0 -> 59.0	905888	24.90	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 99.6%			
d9-EtFOSE	10.746	639.0 -> 59.0	1097072	24.87	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 99.5%			
d5-EtFOSA	10.825	531.0 -> 169.0	98697	2.51	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.5%			
Target Compounds							QValue
4:2FTS	5.154	327.0 -> 307.0	387118	18.33	µg/L		97
		327.0 -> 81.0	187947				
6:2FTS	6.684	427.0 -> 407.0	503133	20.05	µg/L		98
		427.0 -> 81.0	229399				
8:2FTS	7.671	527.0 -> 507.0	475740	20.71	µg/L		98
		527.0 -> 81.0	185489				
EtFOSAA	8.099	584.0 -> 419.0	175081	5.24	µg/L	m	95
		584.0 -> 483.0	92165				
FOSA	9.269	498.0 -> 78.0	343281	5.07	µg/L	m	99
		498.0 -> 478.0	9198				
MeFOSAA	7.917	570.0 -> 419.0	203494	5.11	µg/L	m	98
		570.0 -> 512.0	71965				
PFBA	2.877	213.0 -> 169.0	569565	20.17	µg/L		100
PFBS	5.357	299.0 -> 80.0	138888	4.22	µg/L		99
		299.0 -> 99.0	57805				
PFDA	7.859	513.0 -> 469.0	709293	4.96	µg/L		98
		513.0 -> 219.0	172659				
PFDoDA	8.667	613.0 -> 569.0	904289	4.98	µg/L		98
		613.0 -> 319.0	124687				

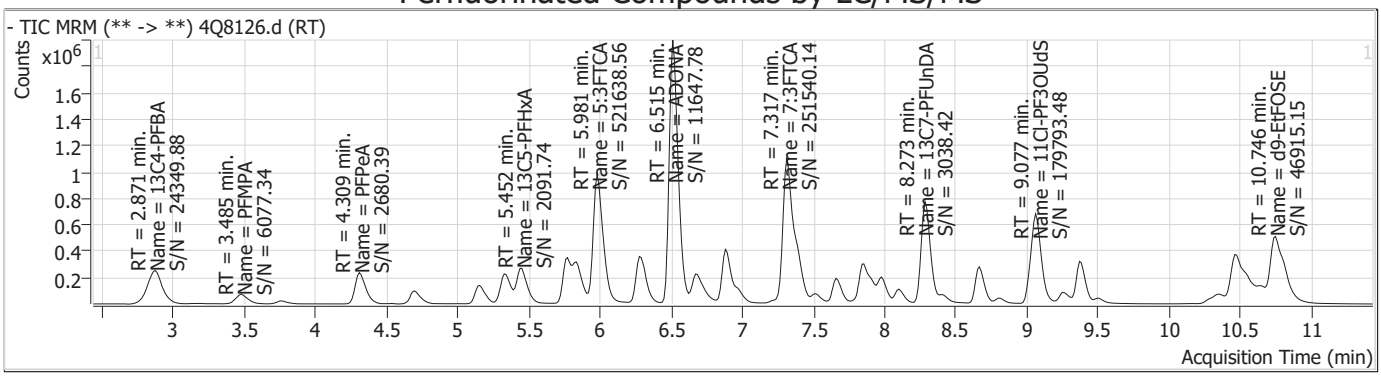
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	110561	4.86	µg/L		98
		599.0 -> 99.0	60988				
PFHpA	6.292	363.0 -> 319.0	989937	4.87	µg/L		100
		363.0 -> 169.0	204858				
PFHpS	7.529	449.0 -> 80.0	165793	4.74	µg/L		99
		449.0 -> 99.0	92442				
PFHxA	5.455	313.0 -> 269.0	679330	5.04	µg/L		100
		313.0 -> 119.0	22342				
PFHxS	6.987	399.0 -> 80.0	159515	4.53	µg/L	m	97
		399.0 -> 99.0	82340				
PFNA	7.404	463.0 -> 419.0	629148	5.10	µg/L	m	96
		463.0 -> 219.0	218826				
PFNS	8.425	549.0 -> 80.0	140169	4.84	µg/L		94
		549.0 -> 99.0	88339				
PFOA	6.898	413.0 -> 369.0	826521	4.98	µg/L	m	100
		413.0 -> 169.0	240894				
PFOS	7.996	499.0 -> 80.0	159506	4.59	µg/L	m	98
		499.0 -> 99.0	84394				
PFPeA	4.309	263.0 -> 219.0	768594	10.07	µg/L		100
PFPeS	6.318	349.0 -> 80.0	164233	4.57	µg/L		97
		349.0 -> 99.0	80218				
PFTeDA	9.381	713.0 -> 669.0	1050837	4.91	µg/L		100
		713.0 -> 219.0	76754				
PFTrDA	9.038	663.0 -> 619.0	1008417	4.98	µg/L		100
		663.0 -> 369.0	63605				
PFUnDA	8.275	563.0 -> 519.0	754096	5.01	µg/L		99
		563.0 -> 269.0	156102				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	1810542	19.73	µg/L		99
		633.0 -> 453.0	554353				
9Cl-PF3ONS	8.301	531.0 -> 351.0	1921527	19.03	µg/L		100
		533.0 -> 353.0	582734				
ADONA	6.515	377.0 -> 251.0	6852549	18.10	µg/L		99
		377.0 -> 85.0	2211620				
HFPO-DA	5.780	285.0 -> 169.0	1020376	20.12	µg/L		99
		285.0 -> 185.0	116822				
3:3FTCA	3.756	241.0 -> 177.0	113730	24.94	µg/L		99
		241.0 -> 117.0	8933				
5:3FTCA	5.981	341.0 -> 237.0	2826643	116.25	µg/L		100
		341.0 -> 217.0	1994305				
7:3FTCA	7.317	441.0 -> 337.0	3797685	122.47	µg/L		99
		441.0 -> 317.0	1694799				
EtFOSA	10.826	526.0 -> 219.0	201559	4.92	µg/L		99
		526.0 -> 169.0	284671				
EtFOSE	10.760	630.0 -> 59.0	2527143	49.52	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	246600	5.03	µg/L		98
		512.0 -> 219.0	158957				
MeFOSE	10.476	616.0 -> 59.0	1975147	49.72	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	93494	4.96	µg/L		99
		699.0 -> 99.0	59170				
NFDHA	5.333	295.0 -> 201.0	177873	10.05	µg/L		99
		201.0 -> 85.0	720157				
		295.0 -> 85.0	44727				
PFMBA	4.698	279.0 -> 85.0	521556	10.02	µg/L		100
PFMPA	3.485	229.0 -> 85.0	436584	9.98	µg/L		100
PFEESA	5.849	315.0 -> 135.0	1096367	8.86	µg/L		99
		315.0 -> 69.0	89487				

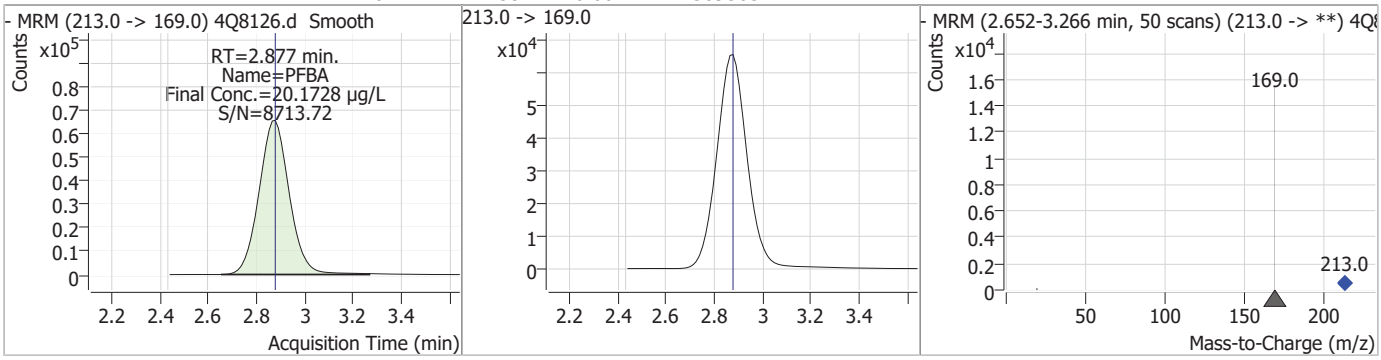
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

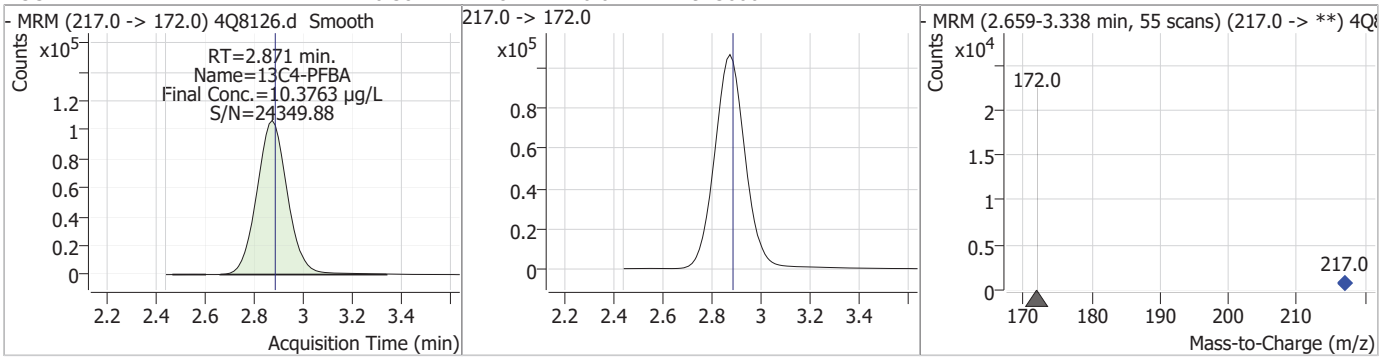
Perfluorinated Compounds by LC/MS/MS



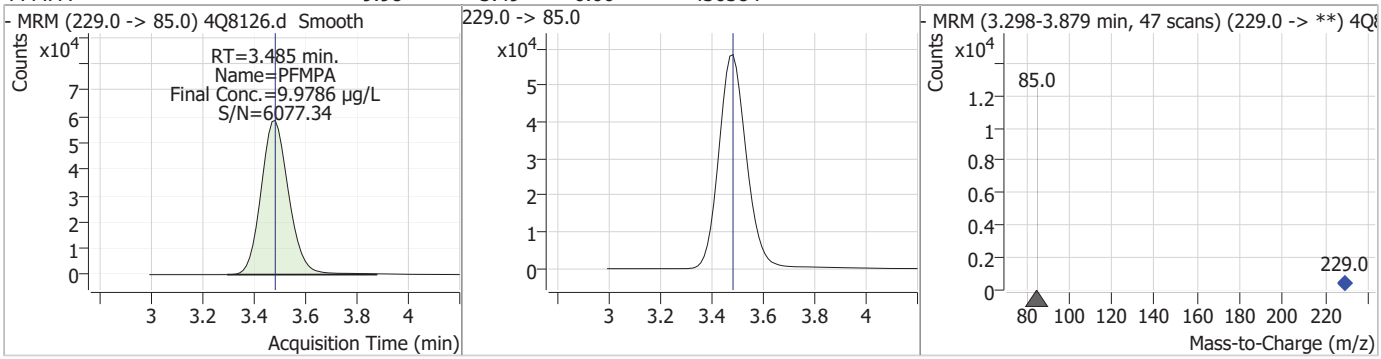
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	20.17	2.88	0.00	569565				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.38	2.87	-0.01	923600				

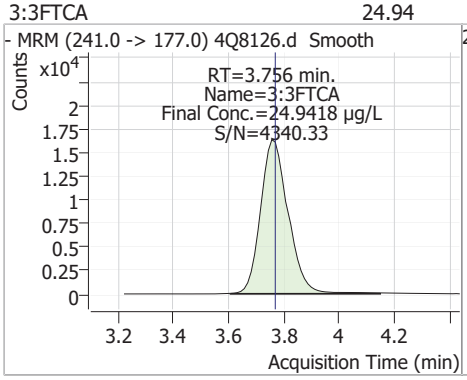


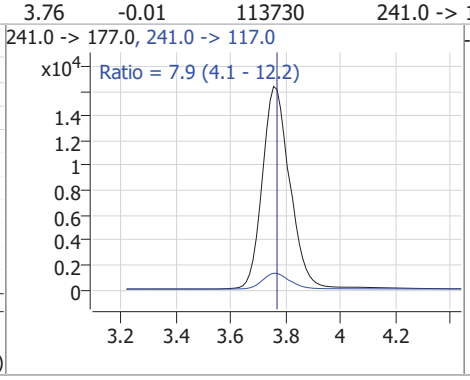
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	9.98	3.49	0.00	436584				

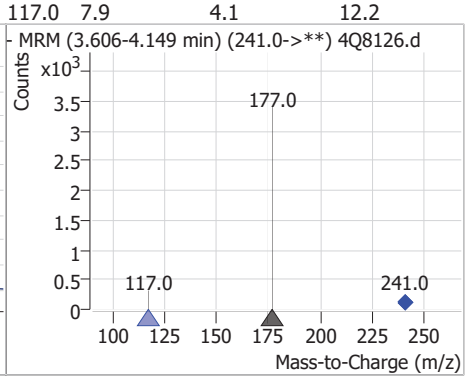


Perfluorinated Compounds by LC/MS/MS

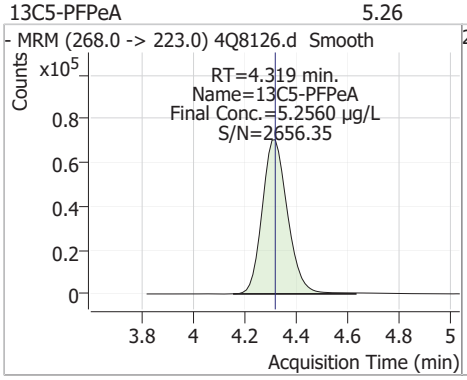
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	24.94	3.76	-0.01	113730	241.0 -> 117.0	7.9	4.1	12.2

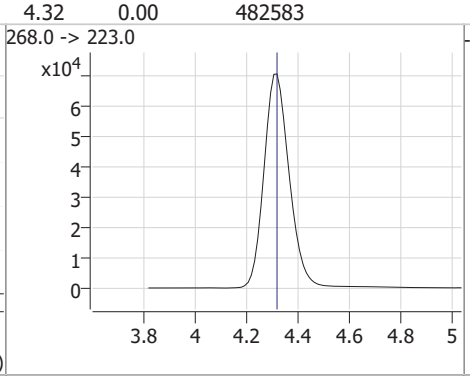


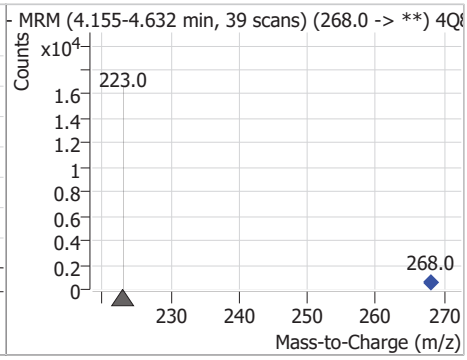




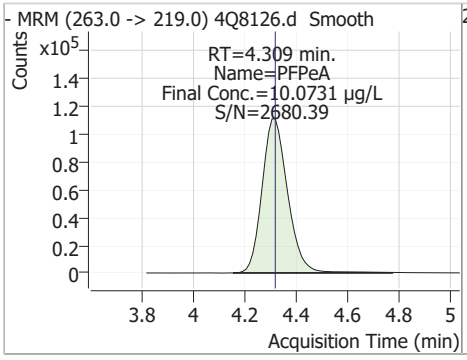
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.26	4.32	0.00	482583				

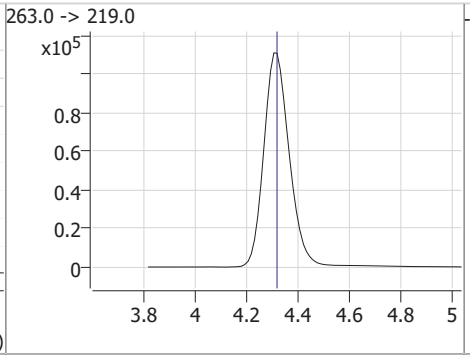


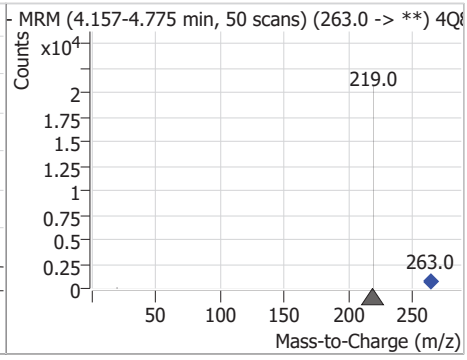




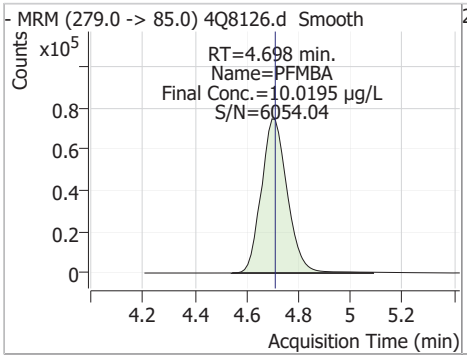
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	10.07	4.31	-0.01	768594				

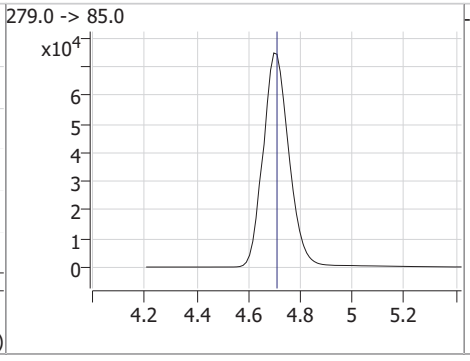


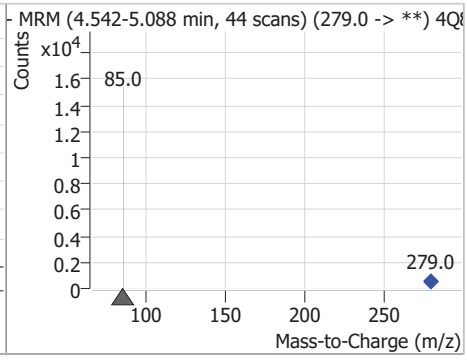




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	10.02	4.70	-0.01	521556				

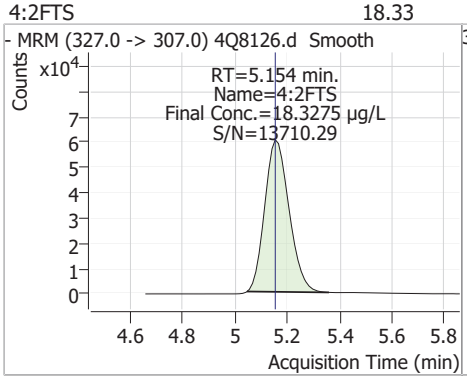


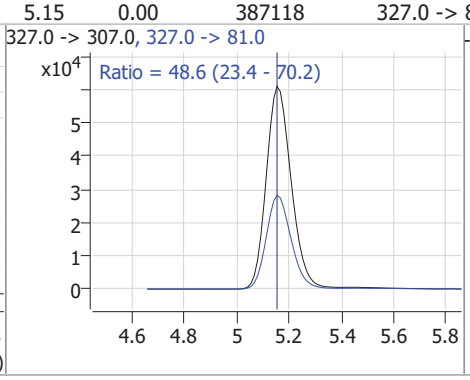


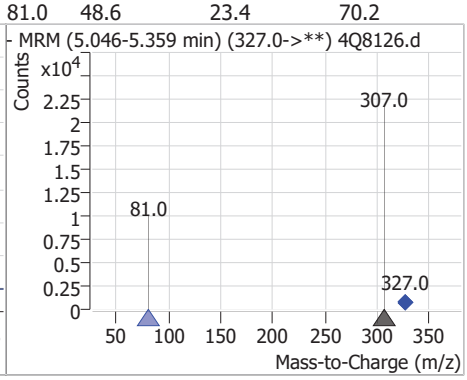


Perfluorinated Compounds by LC/MS/MS

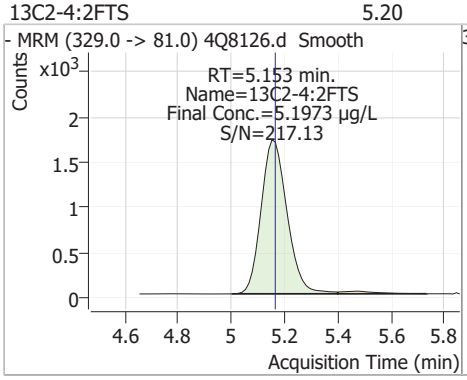
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	18.33	5.15	0.00	387118	327.0 -> 81.0	48.6	23.4	70.2

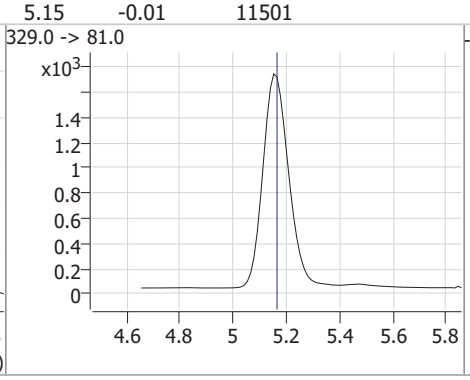


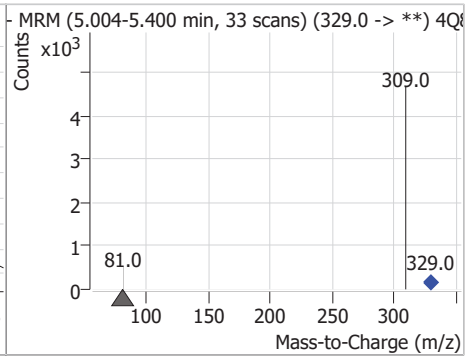




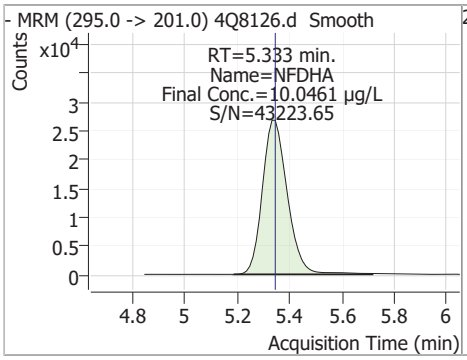
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.20	5.15	-0.01	11501				

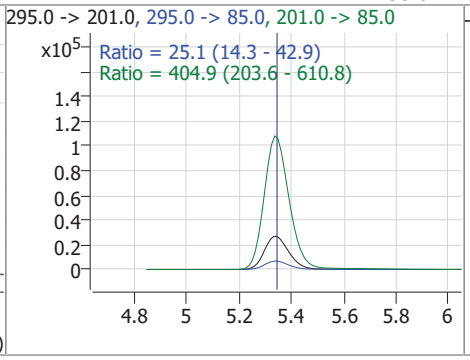


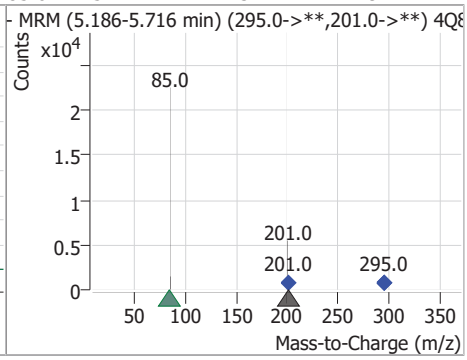




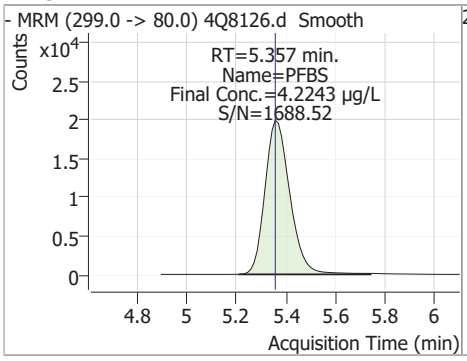
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	10.05	5.33	-0.01	177873	201.0 -> 85.0	404.9	203.6	610.8
					295.0 -> 85.0	25.1	14.3	42.9

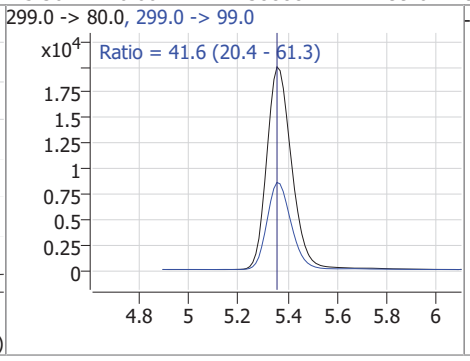


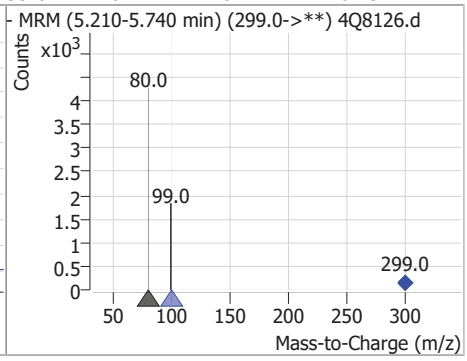




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.22	5.36	0.00	138888	299.0 -> 99.0	41.6	20.4	61.3

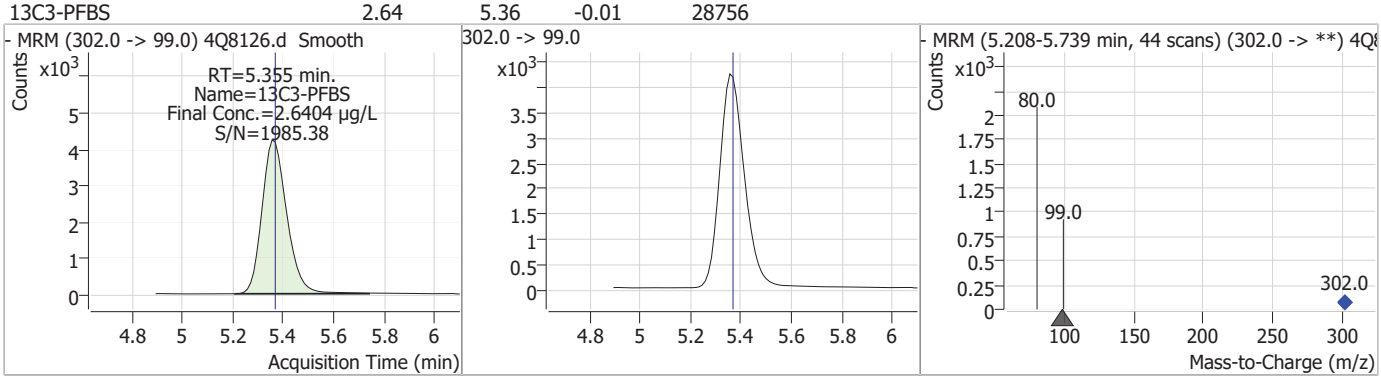




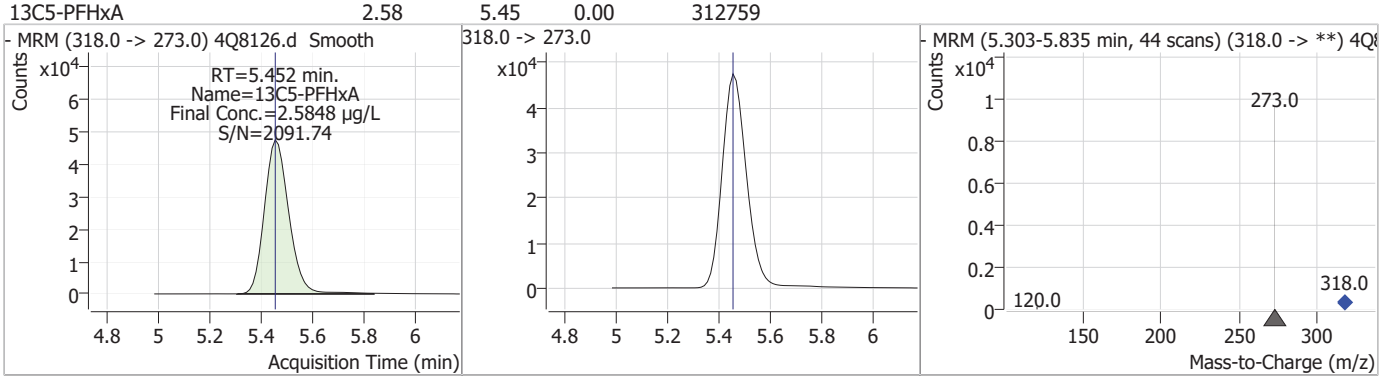


Perfluorinated Compounds by LC/MS/MS

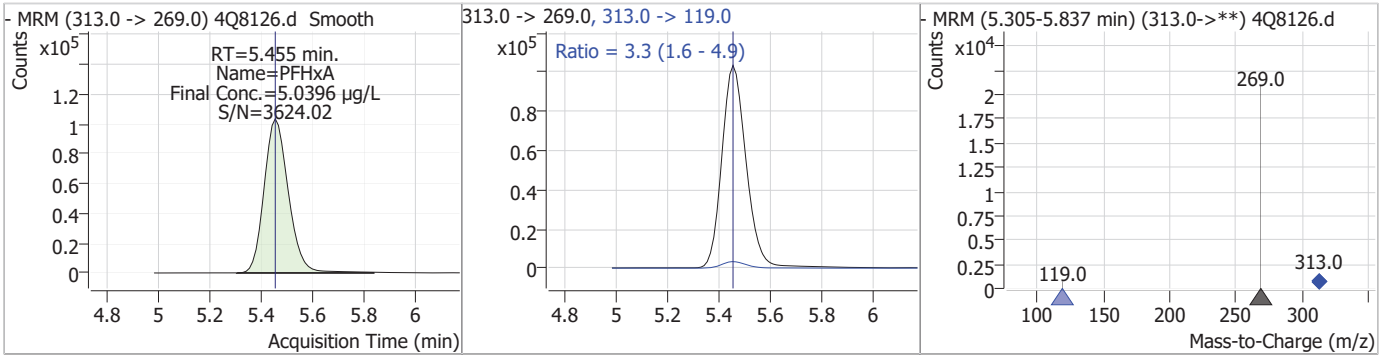
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.64	5.36	-0.01	28756				



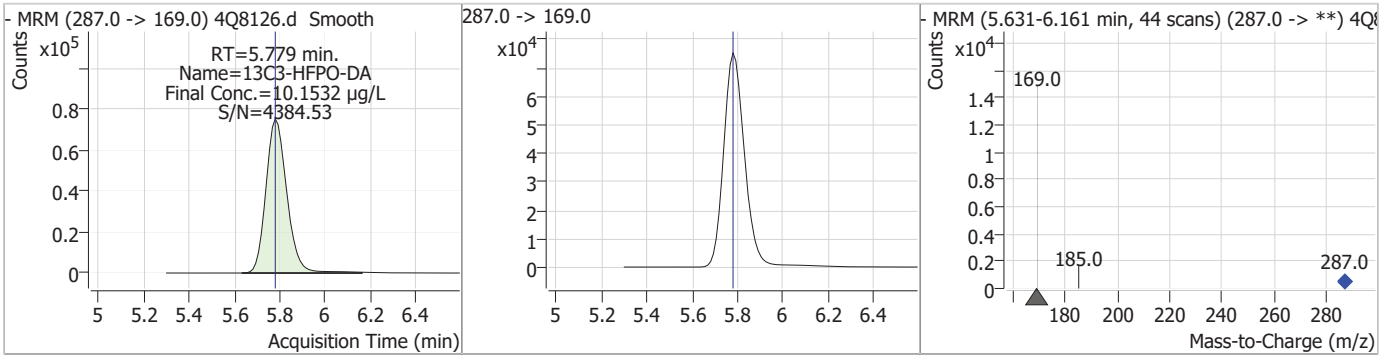
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.58	5.45	0.00	312759				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	5.04	5.45	0.00	679330	313.0 -> 119.0	3.3	1.6	4.9

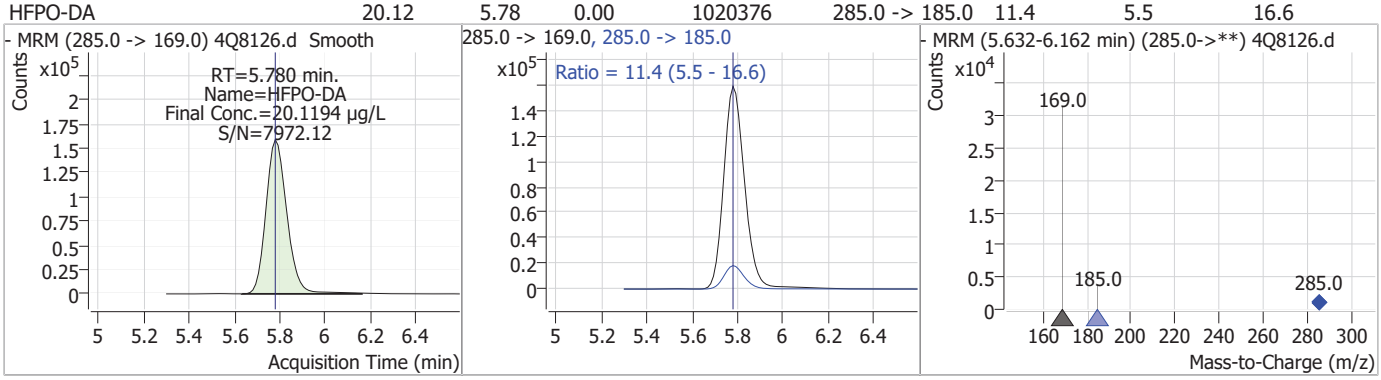


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.15	5.78	0.00	482430				

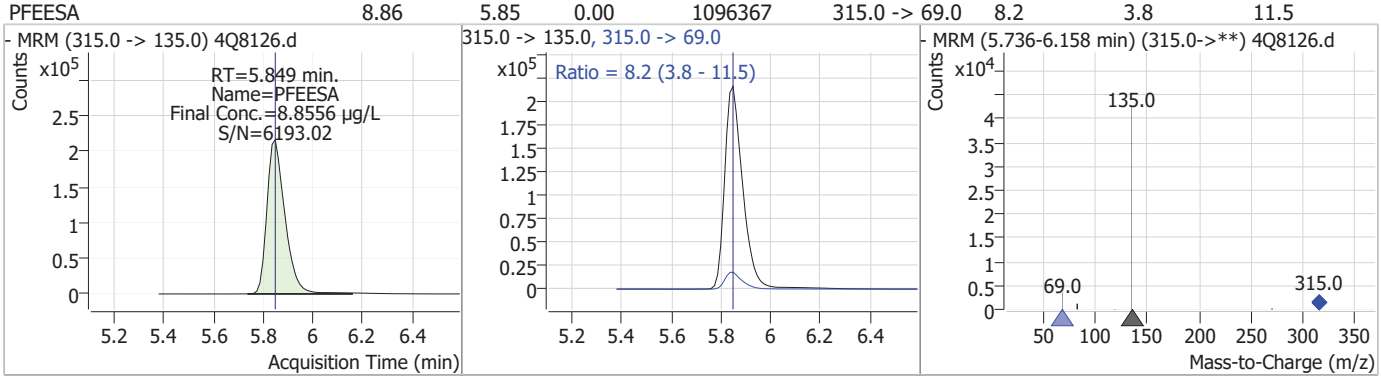


Perfluorinated Compounds by LC/MS/MS

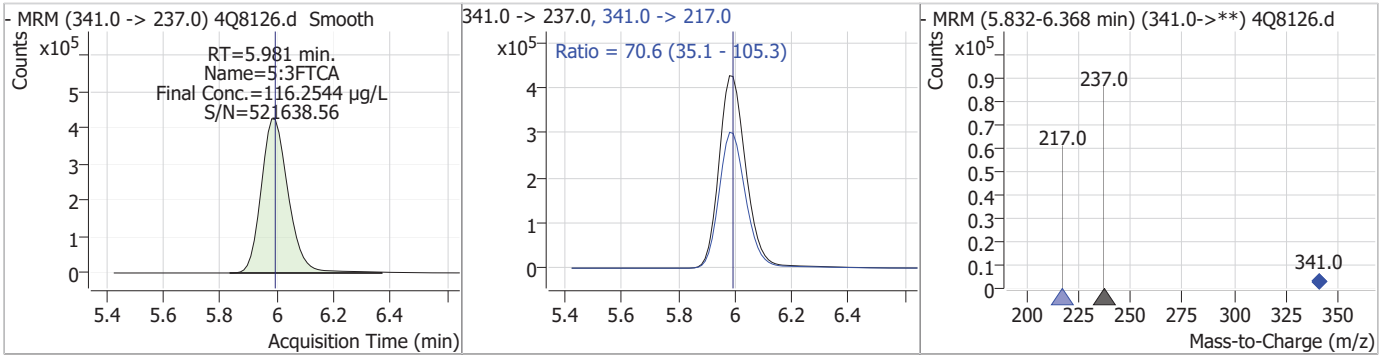
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	20.12	5.78	0.00	1020376	285.0 -> 185.0	11.4	5.5	16.6



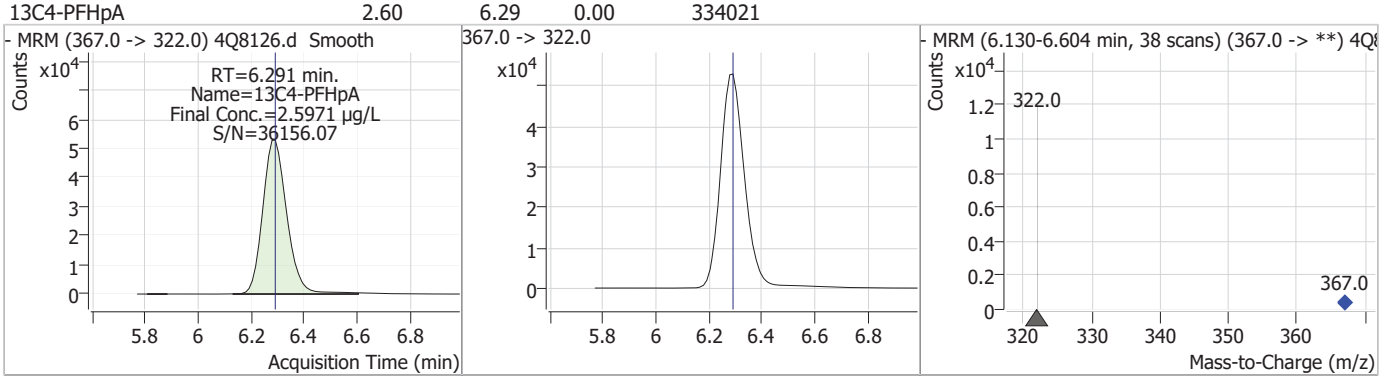
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	8.86	5.85	0.00	1096367	315.0 -> 69.0	8.2	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	116.25	5.98	-0.01	2826643	341.0 -> 217.0	70.6	35.1	105.3

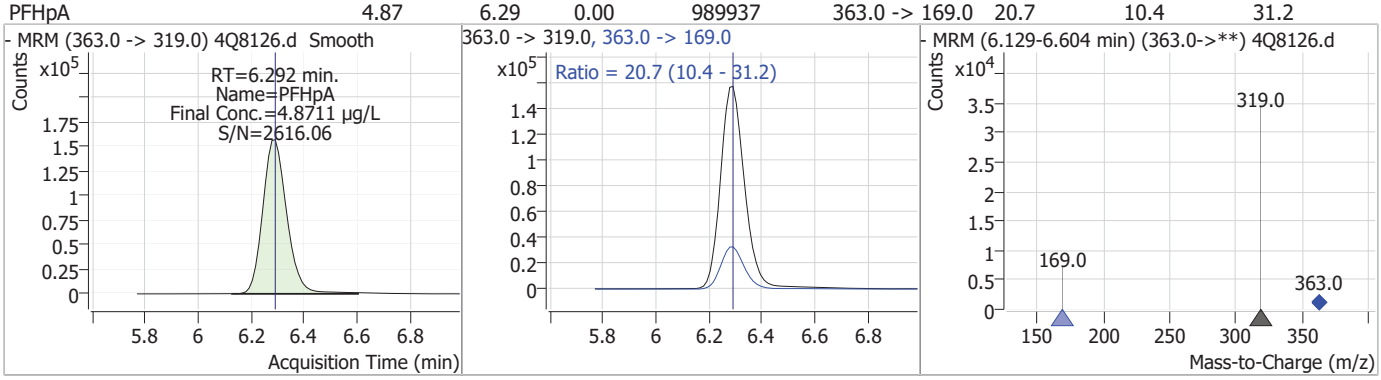


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.60	6.29	0.00	334021				

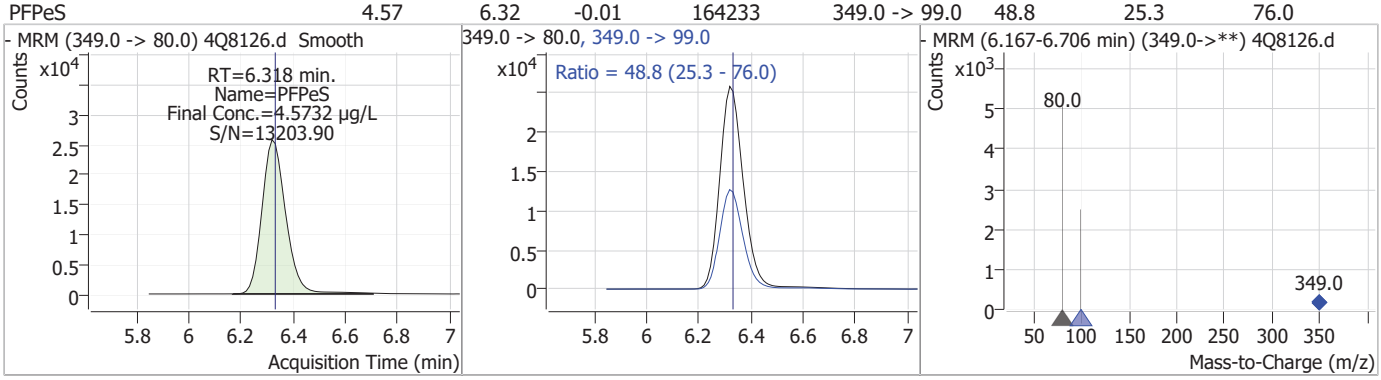


Perfluorinated Compounds by LC/MS/MS

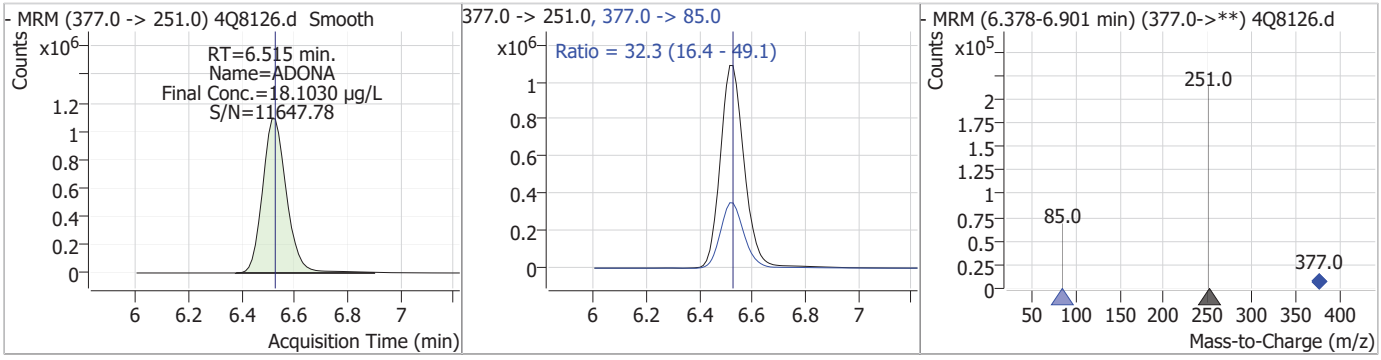
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	4.87	6.29	0.00	989937	363.0 -> 169.0	20.7	10.4	31.2



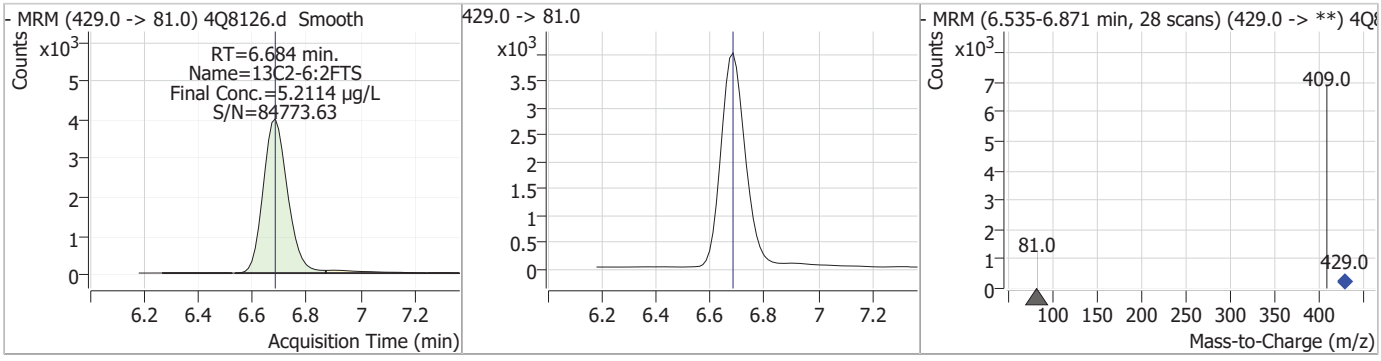
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	4.57	6.32	-0.01	164233	349.0 -> 99.0	48.8	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	18.10	6.52	-0.01	6852549	377.0 -> 85.0	32.3	16.4	49.1

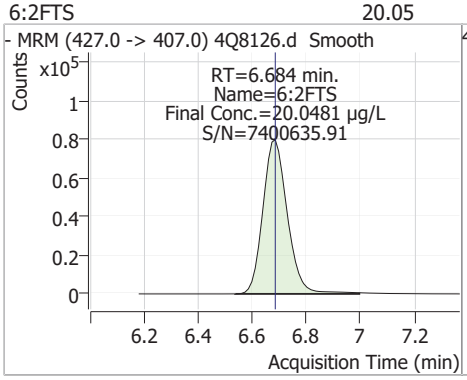


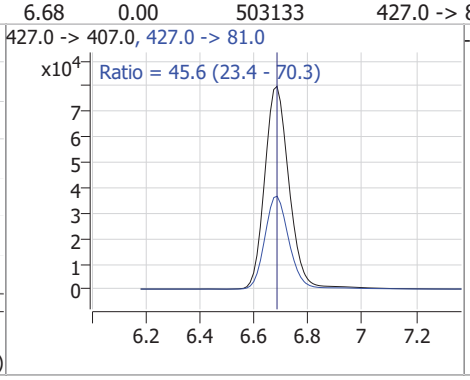
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.21	6.68	0.00	25025				

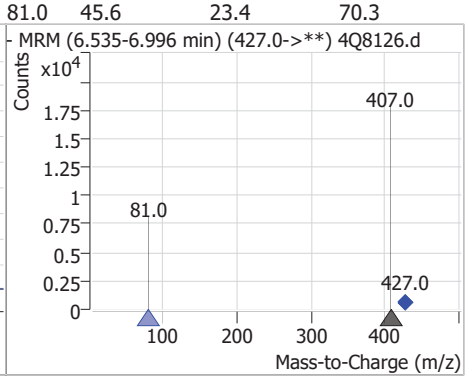


Perfluorinated Compounds by LC/MS/MS

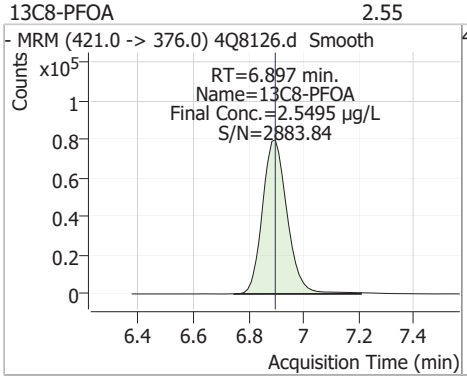
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	20.05	6.68	0.00	503133	427.0 -> 81.0	45.6	23.4	70.3

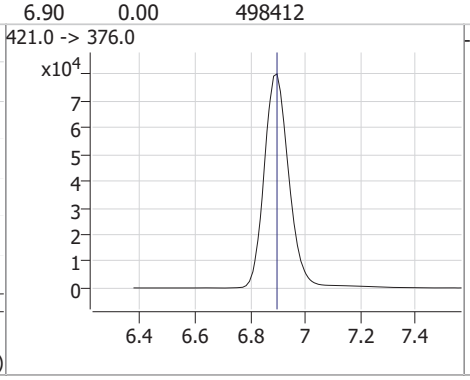


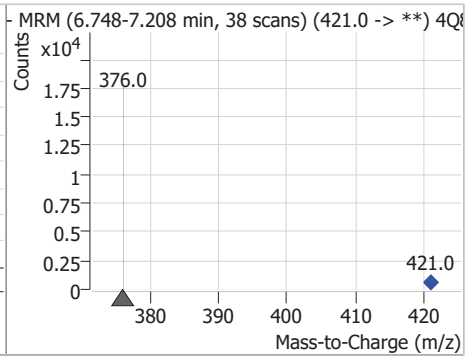




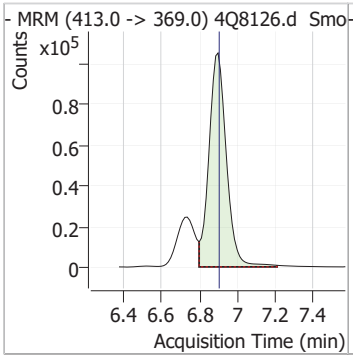
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.55	6.90	0.00	498412				

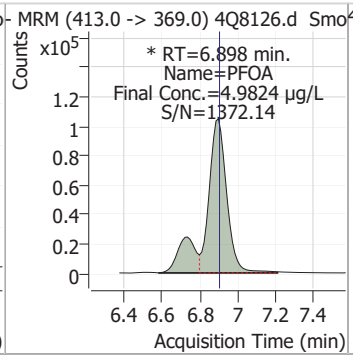


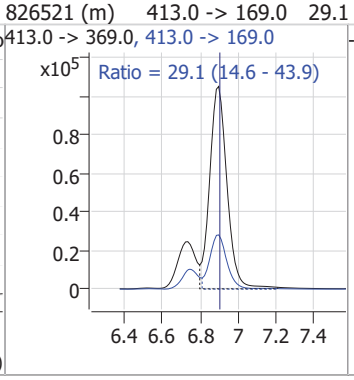


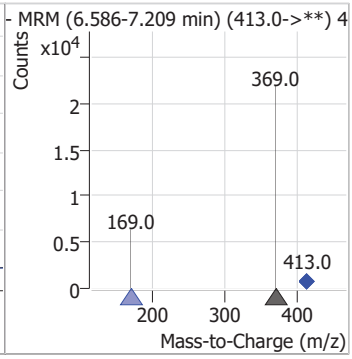


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	4.98	6.90	0.00	826521 (m)	413.0 -> 169.0	29.1	14.6	43.9

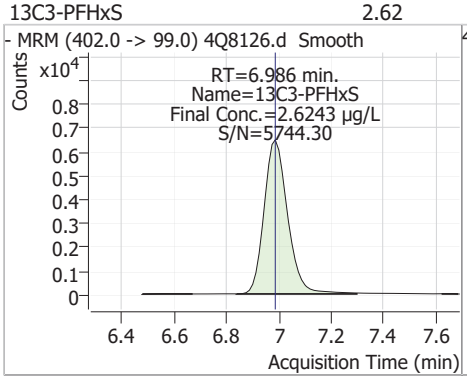


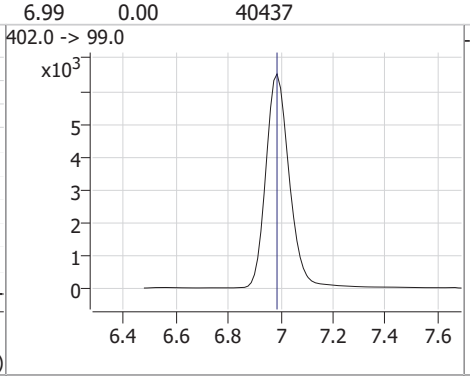


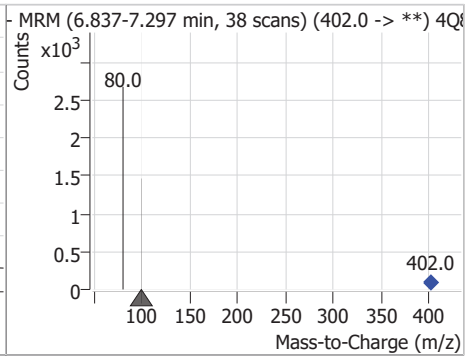




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.62	6.99	0.00	40437				

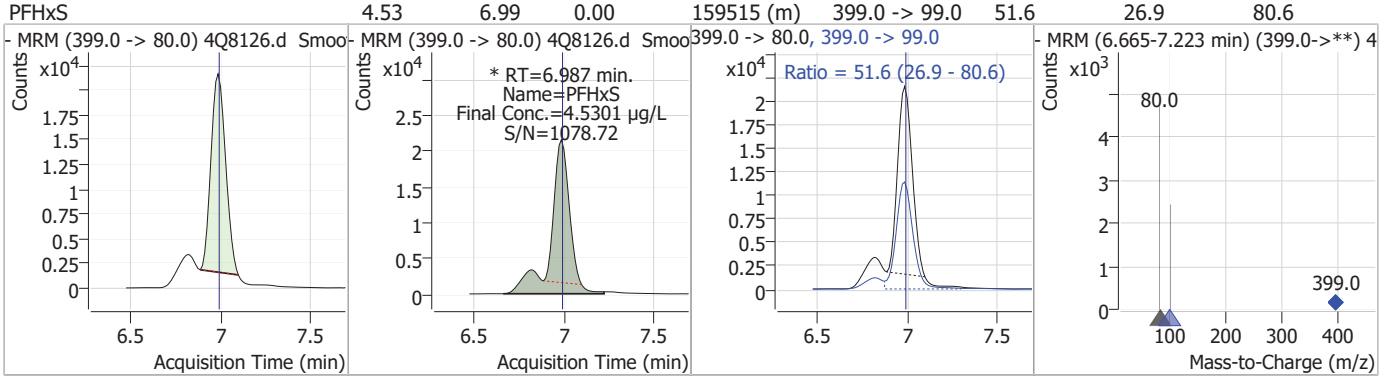




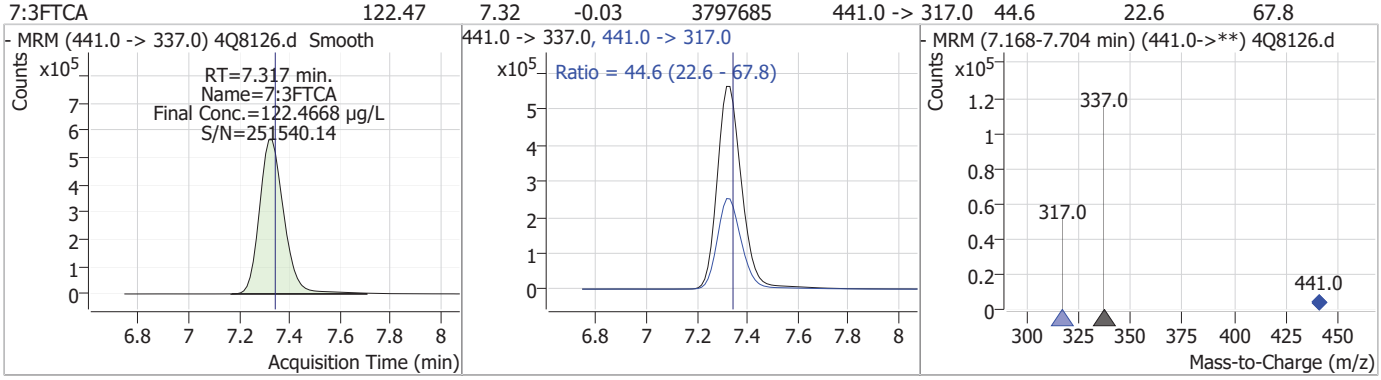


Perfluorinated Compounds by LC/MS/MS

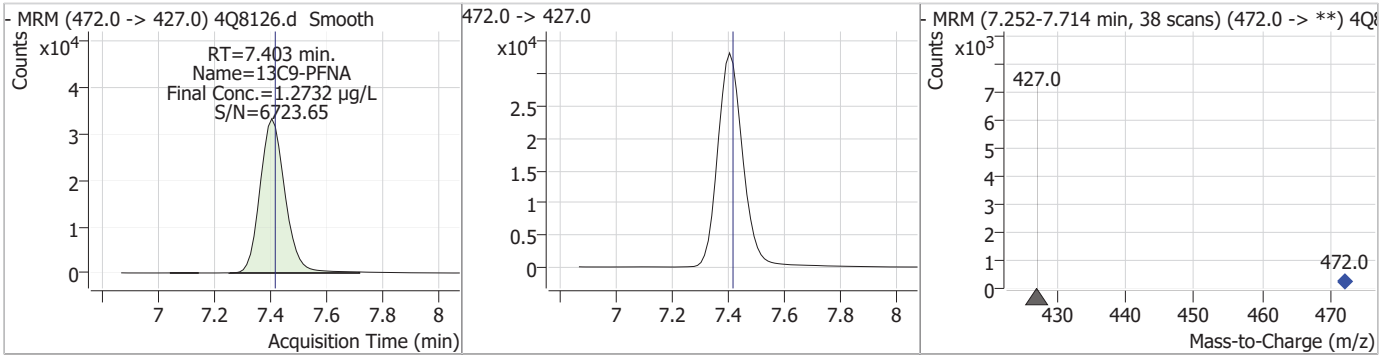
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	4.53	6.99	0.00	159515 (m)	399.0 -> 99.0	51.6	26.9	80.6



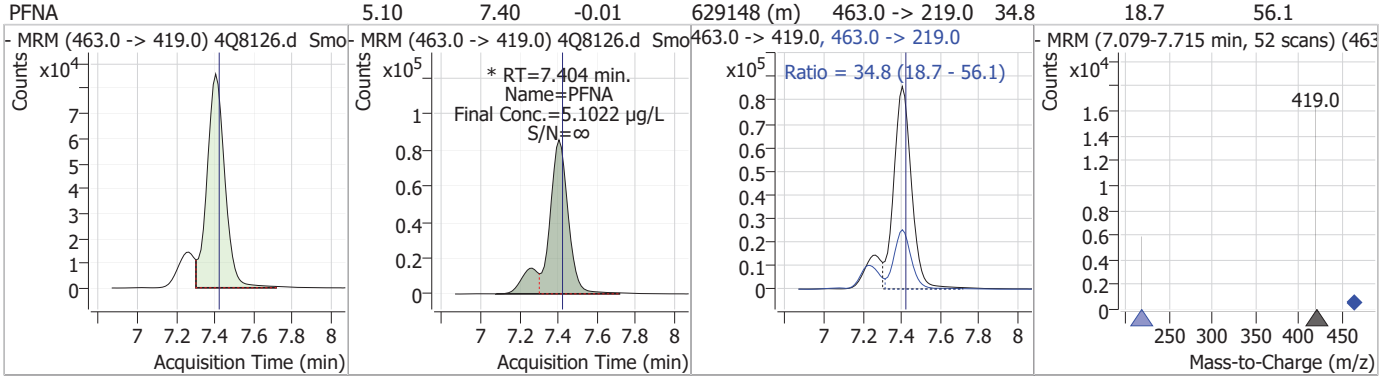
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	122.47	7.32	-0.03	3797685	441.0 -> 317.0	44.6	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.27	7.40	-0.01	205008				

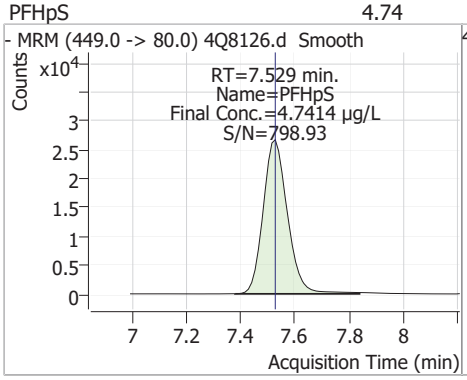


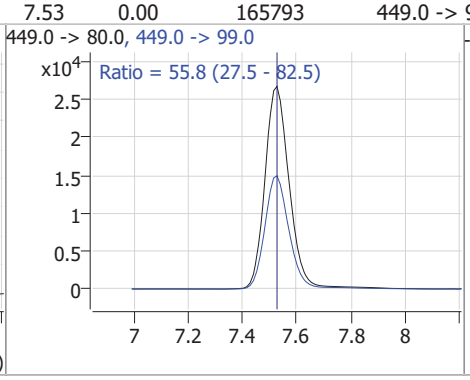
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	5.10	7.40	-0.01	629148 (m)	463.0 -> 219.0	34.8	18.7	56.1

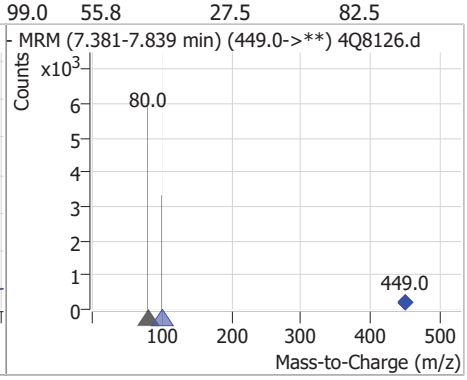


Perfluorinated Compounds by LC/MS/MS

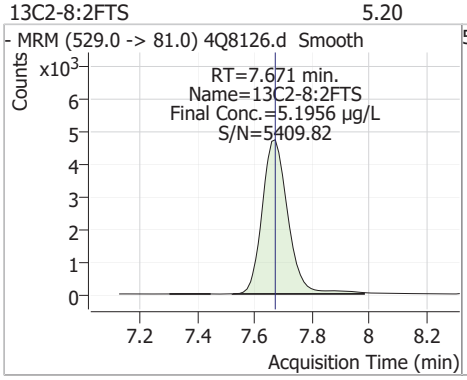
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	4.74	7.53	0.00	165793	449.0 -> 99.0	55.8	27.5	82.5

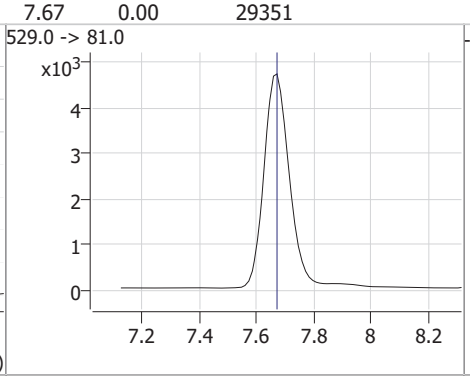


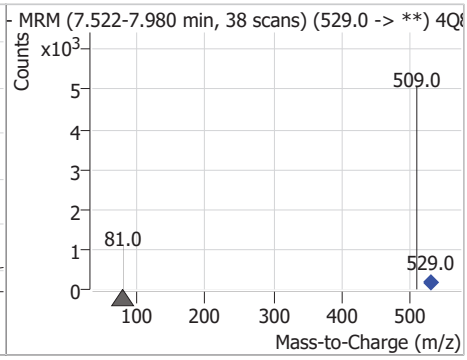




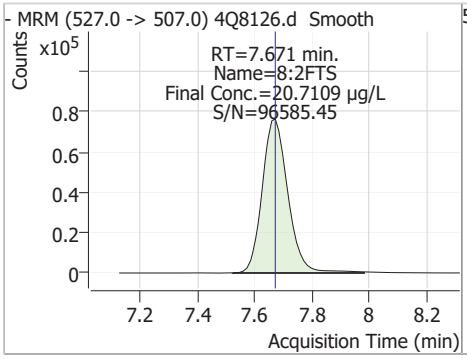
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.20	7.67	0.00	29351				

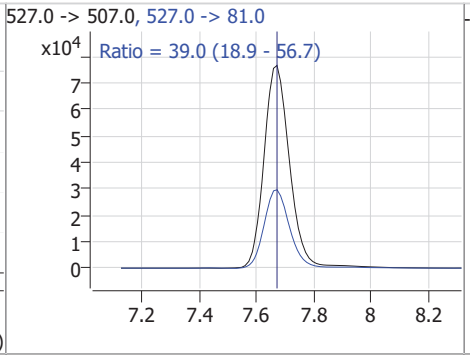


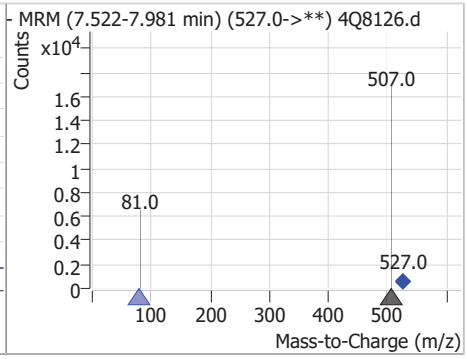




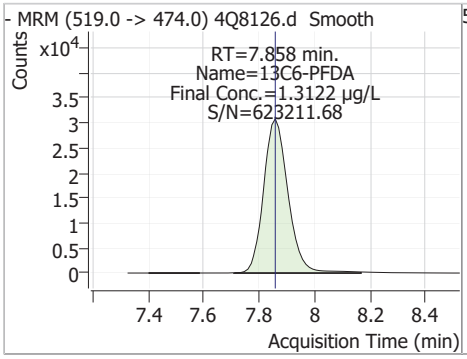
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	20.71	7.67	0.00	475740	527.0 -> 81.0	39.0	18.9	56.7

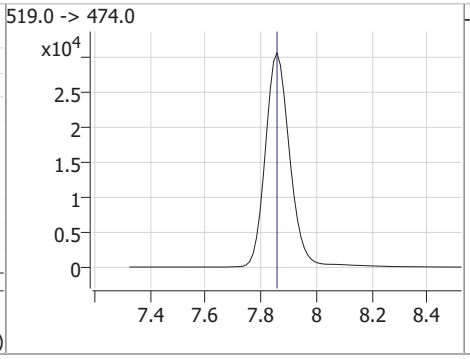


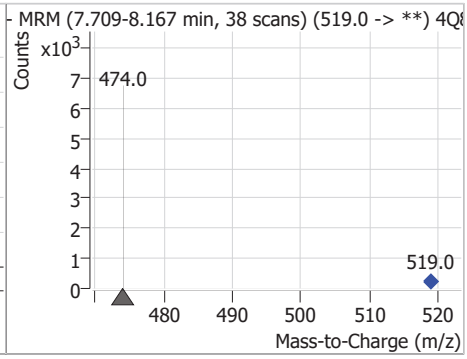




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.31	7.86	0.00	188052				

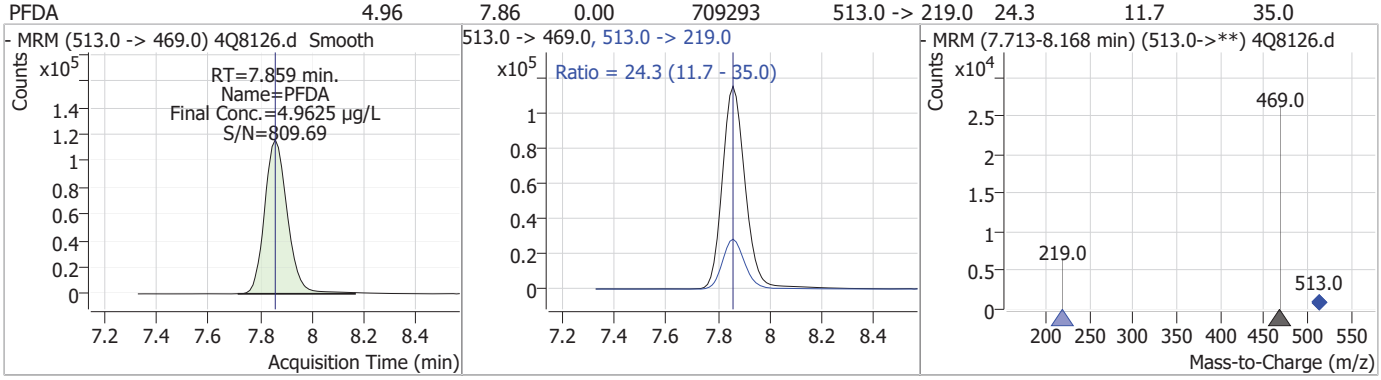




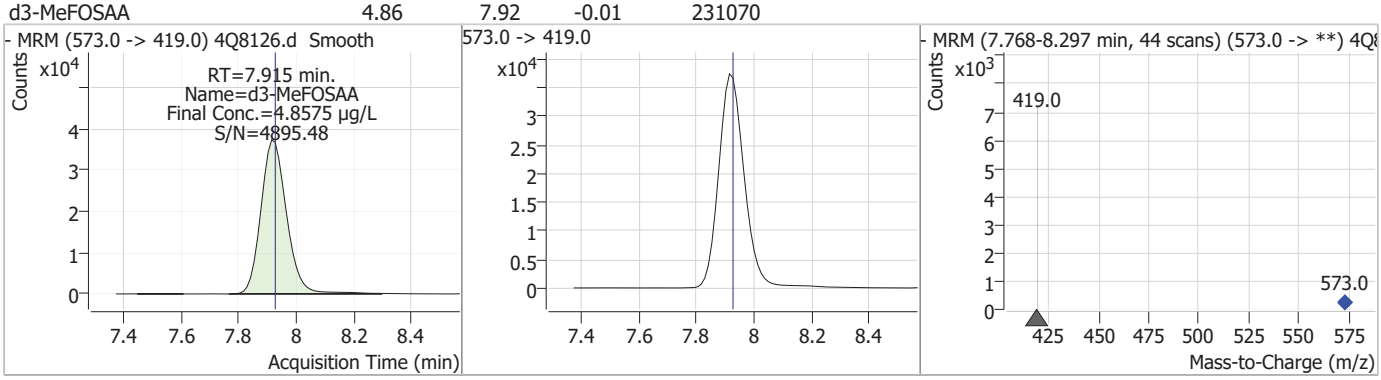


Perfluorinated Compounds by LC/MS/MS

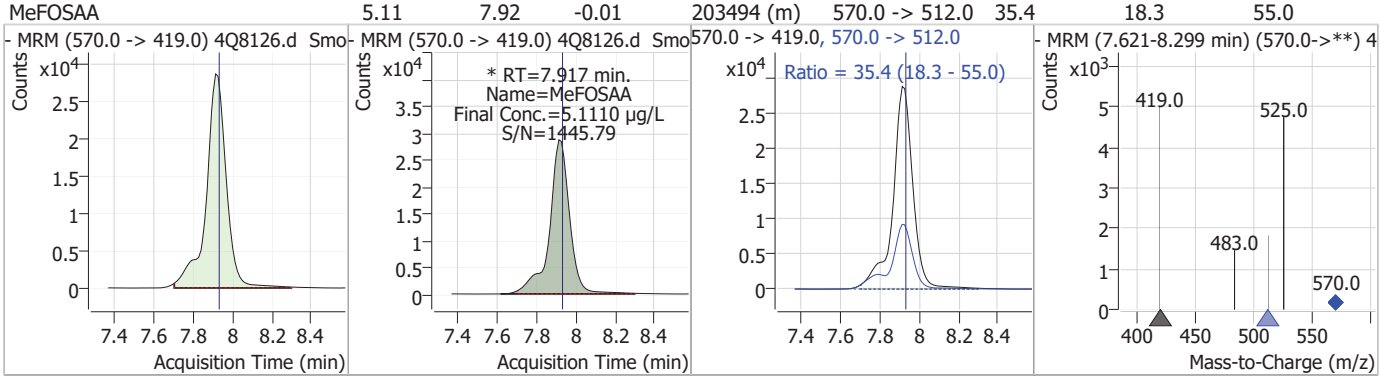
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	4.96	7.86	0.00	709293	513.0 -> 219.0	24.3	11.7	35.0



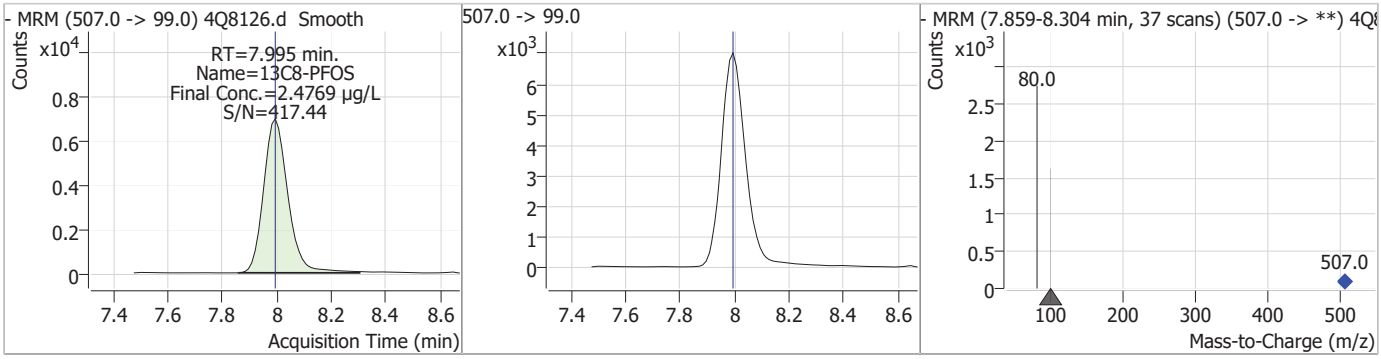
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.86	7.92	-0.01	231070				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	5.11	7.92	-0.01	203494 (m)	570.0 -> 512.0	35.4	18.3	55.0

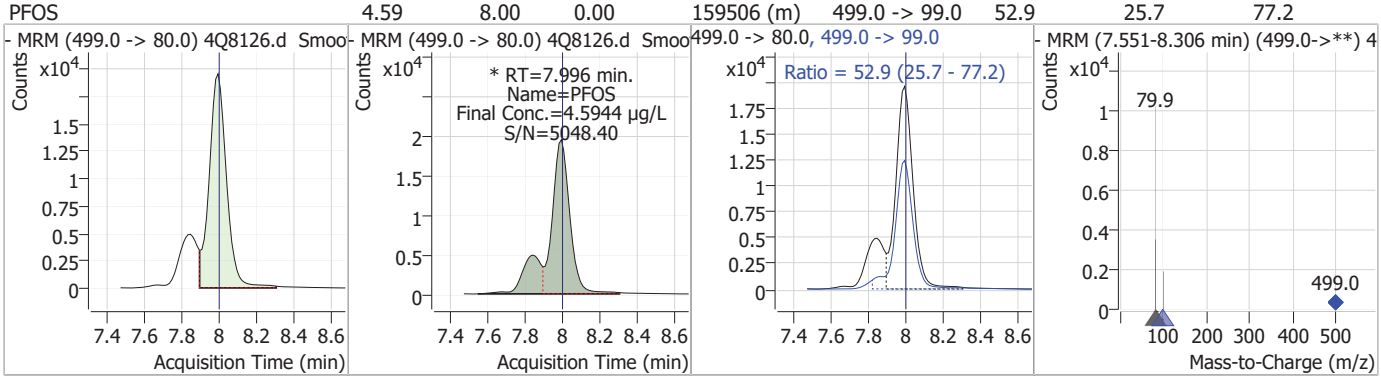


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.48	7.99	0.00	43077				

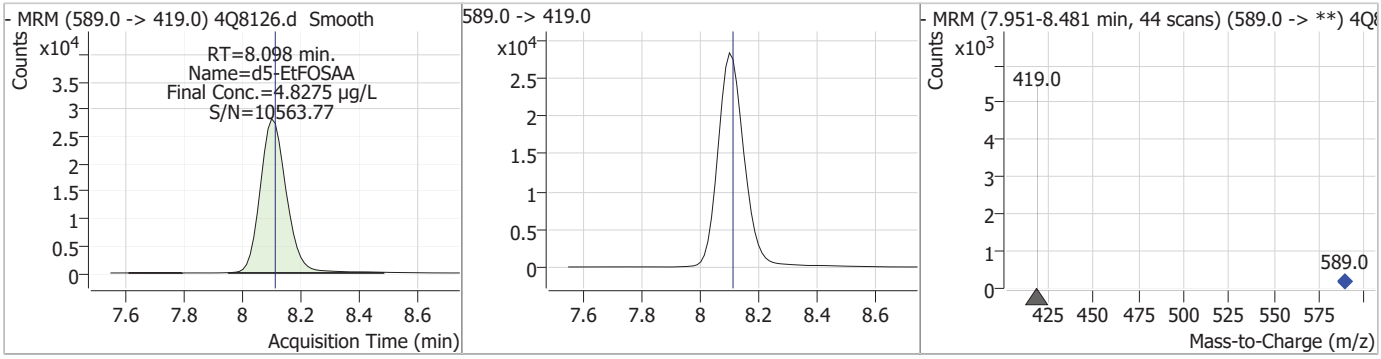


Perfluorinated Compounds by LC/MS/MS

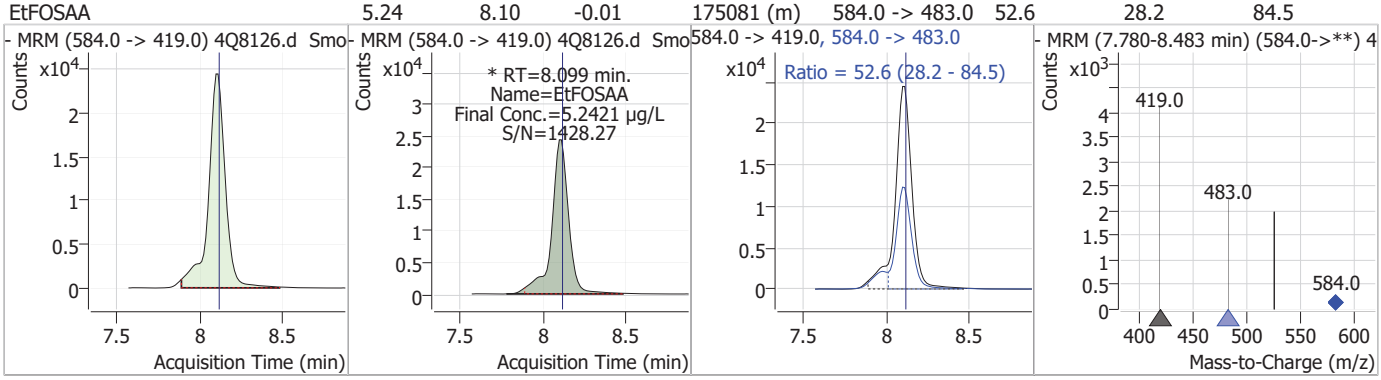
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.59	8.00	0.00	159506 (m)	499.0 -> 99.0	52.9	25.7	77.2



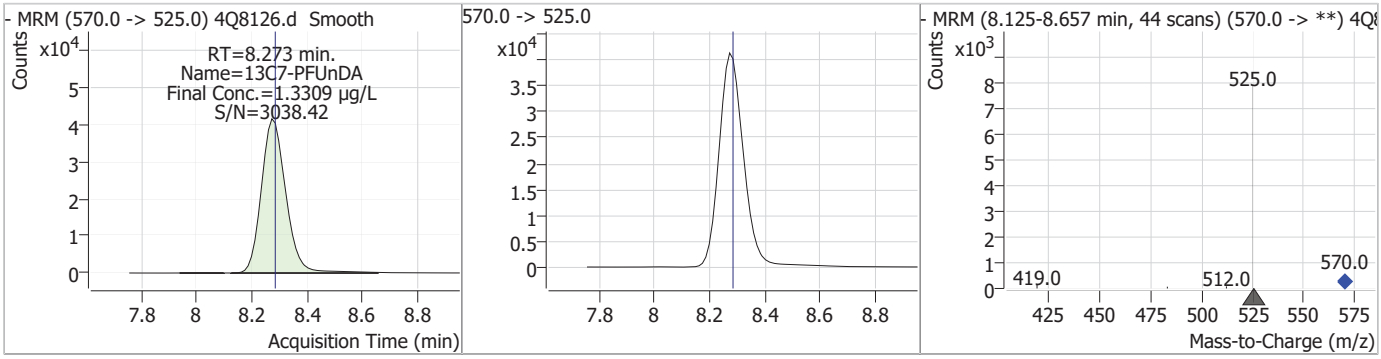
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.83	8.10	-0.01	176308				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	5.24	8.10	-0.01	175081 (m)	584.0 -> 483.0	52.6	28.2	84.5

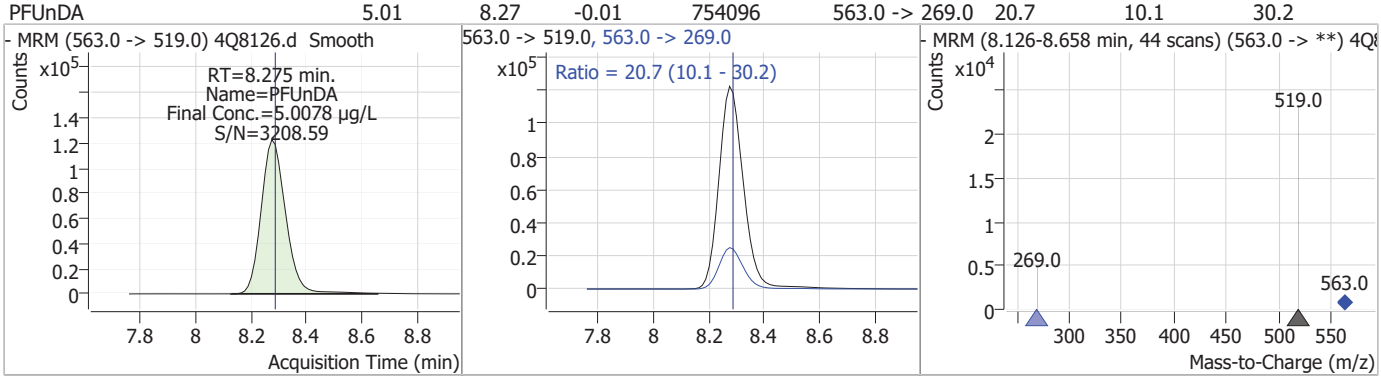


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.33	8.27	-0.01	254751				

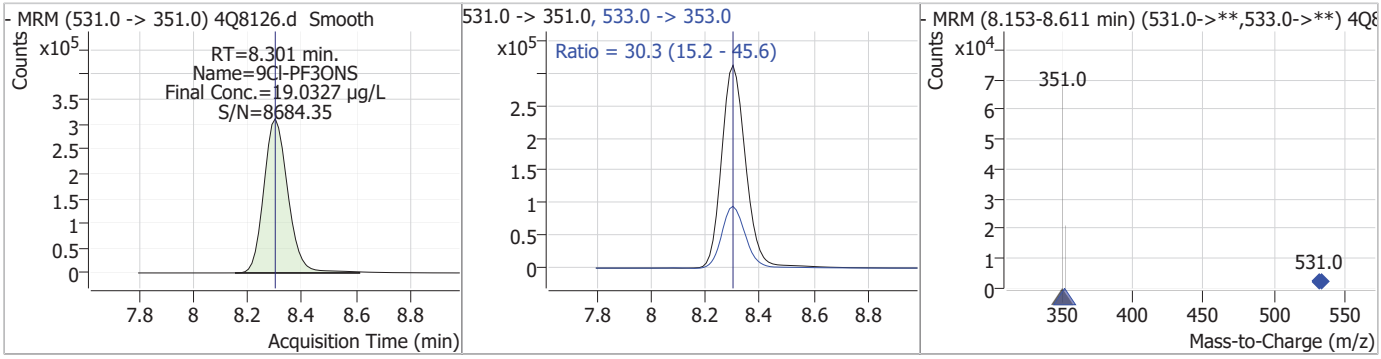


Perfluorinated Compounds by LC/MS/MS

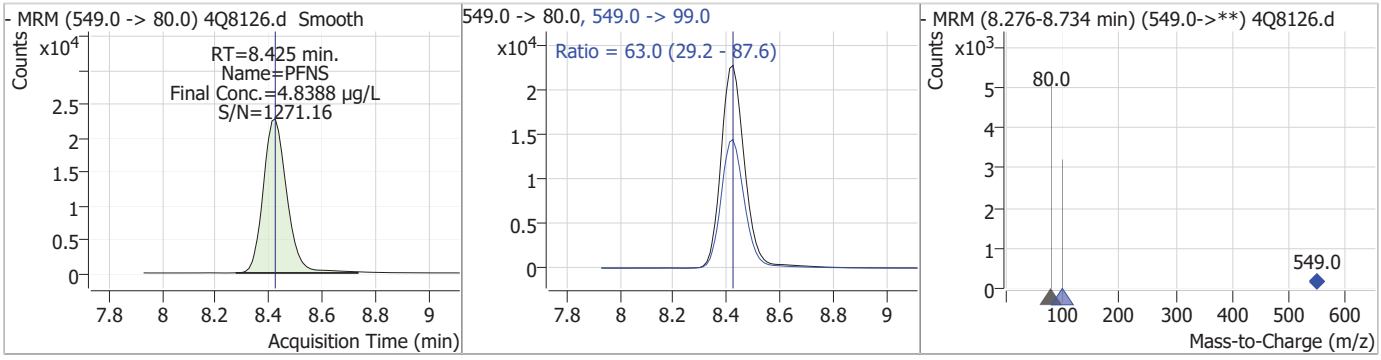
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	5.01	8.27	-0.01	754096	563.0 -> 269.0	20.7	10.1	30.2



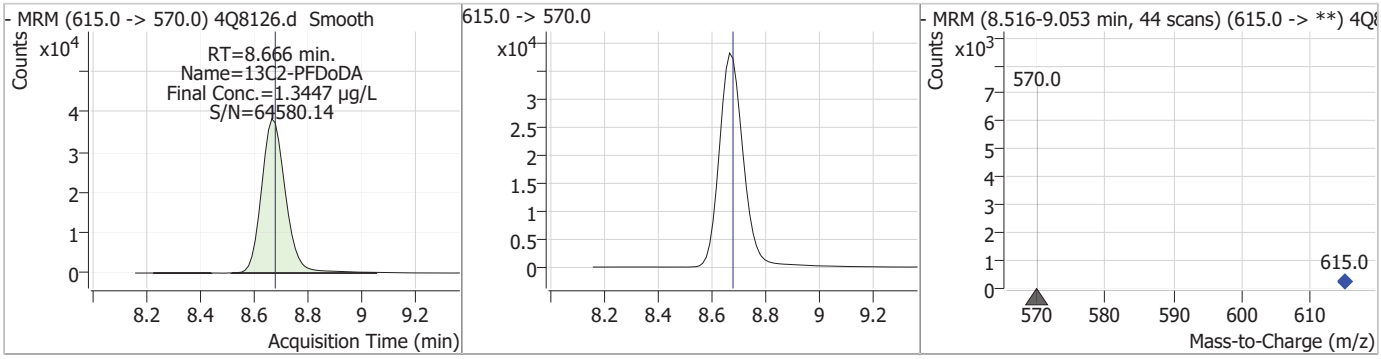
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	19.03	8.30	0.00	1921527	533.0 -> 353.0	30.3	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	4.84	8.42	0.00	140169	549.0 -> 99.0	63.0	29.2	87.6

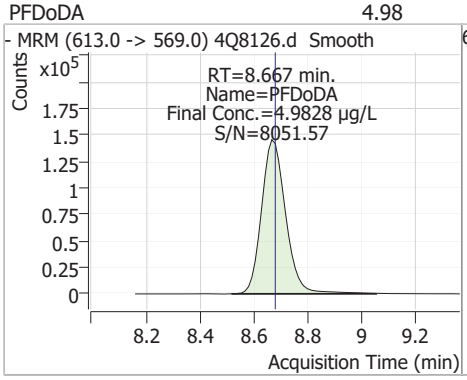


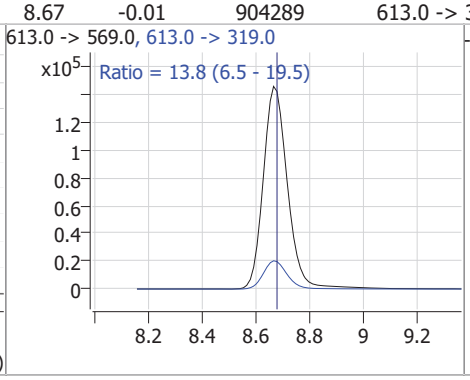
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.34	8.67	-0.01	235765				

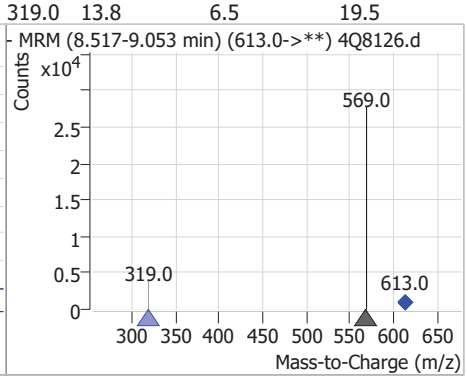


Perfluorinated Compounds by LC/MS/MS

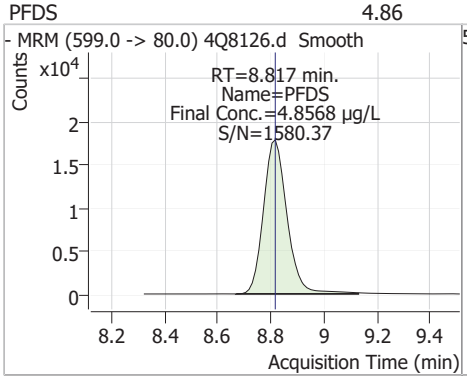
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	4.98	8.67	-0.01	904289	613.0 -> 319.0	13.8	6.5	19.5

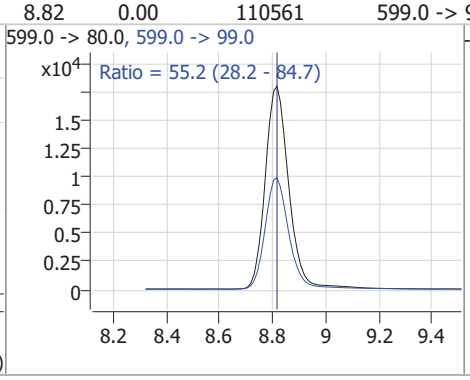


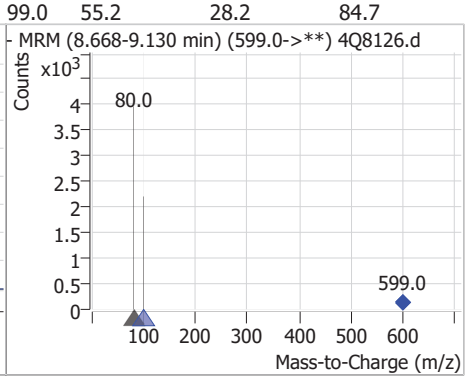




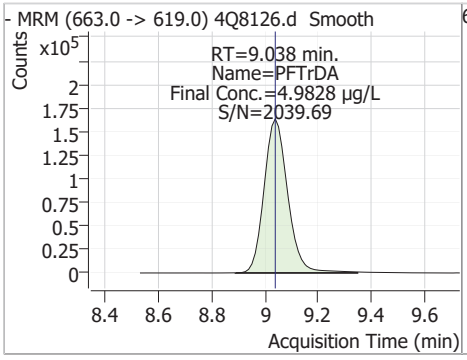
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	4.86	8.82	0.00	110561	599.0 -> 99.0	55.2	28.2	84.7

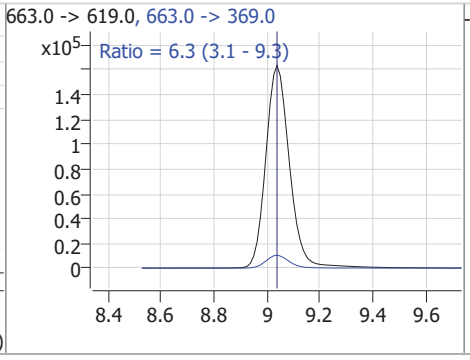


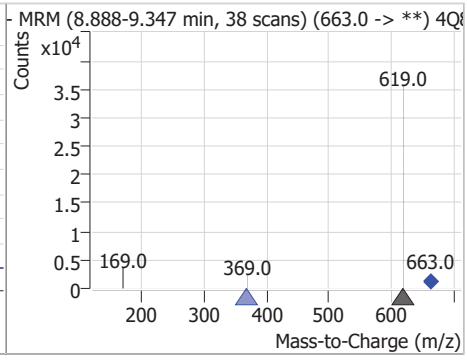




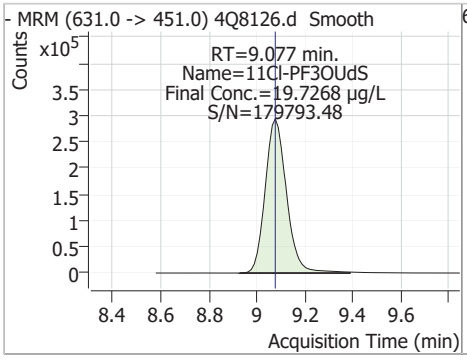
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	4.98	9.04	0.00	1008417	663.0 -> 369.0	6.3	3.1	9.3

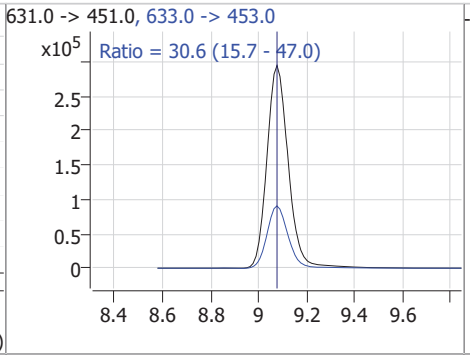


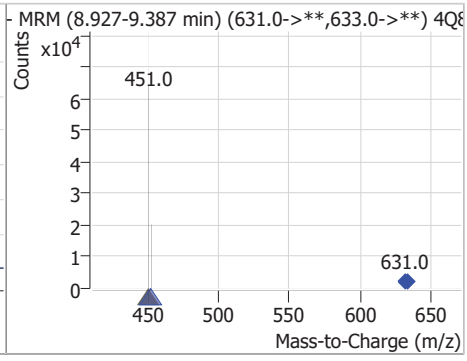




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	19.73	9.08	0.00	1810542	633.0 -> 453.0	30.6	15.7	47.0

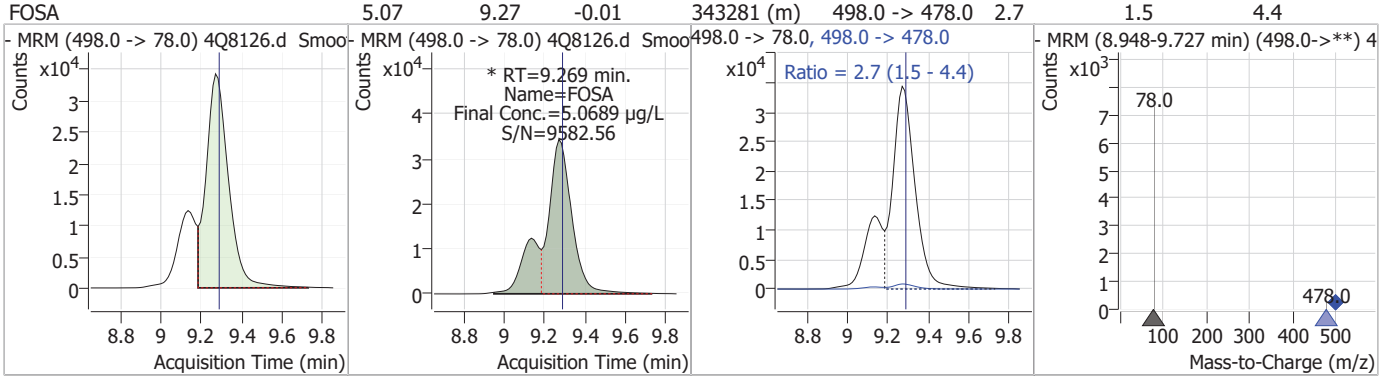




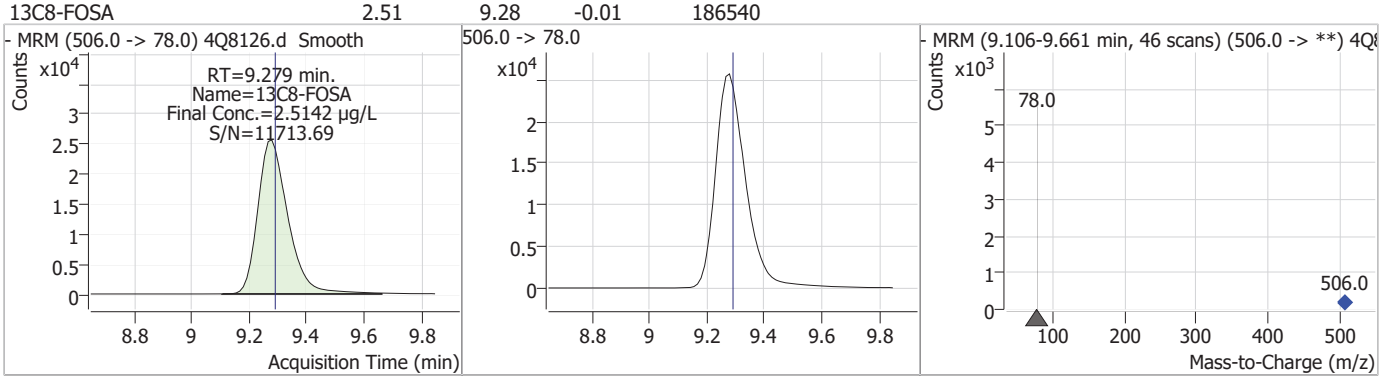


Perfluorinated Compounds by LC/MS/MS

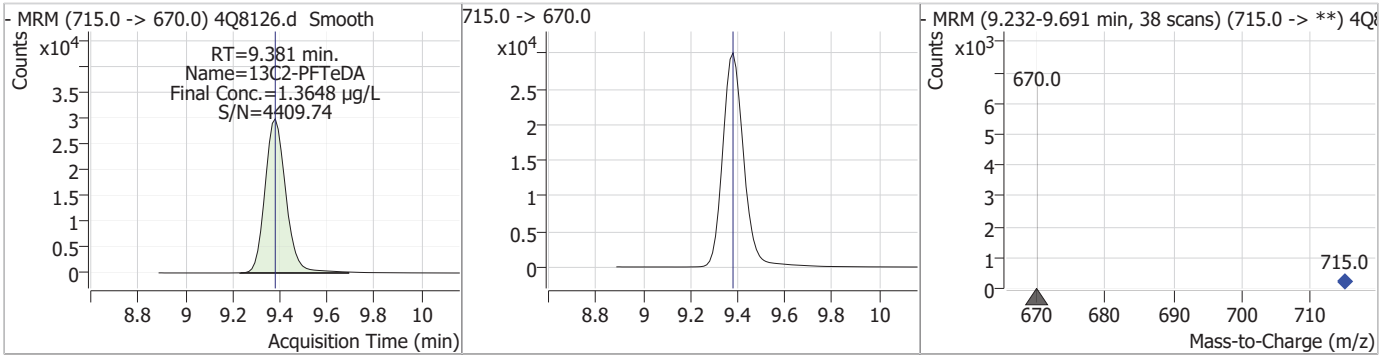
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	5.07	9.27	-0.01	343281 (m)	498.0 -> 478.0	2.7	1.5	4.4



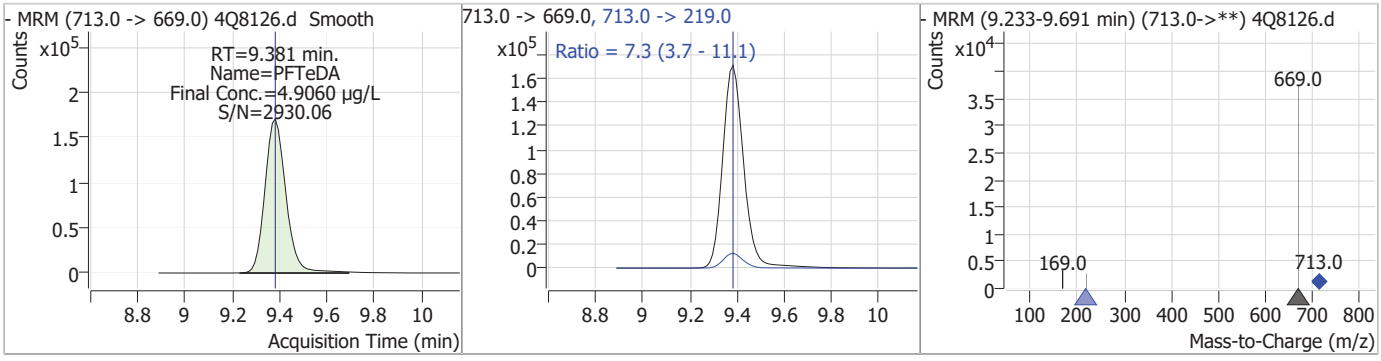
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.51	9.28	-0.01	186540				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.36	9.38	0.00	183965				

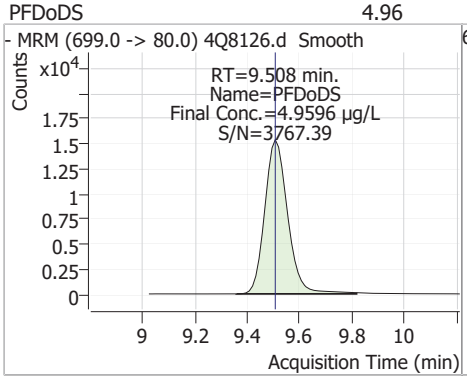


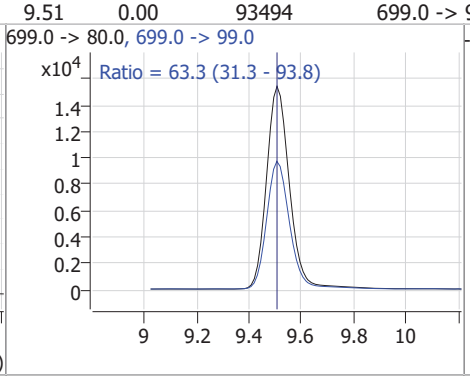
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	4.91	9.38	0.00	1050837	713.0 -> 219.0	7.3	3.7	11.1

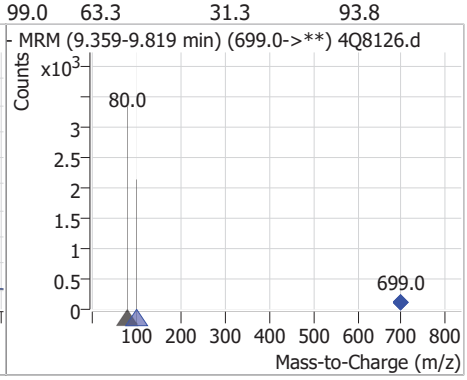


Perfluorinated Compounds by LC/MS/MS

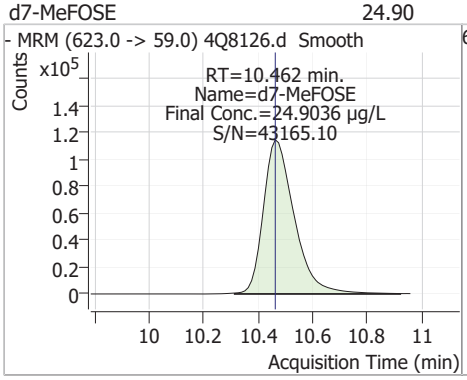
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	4.96	9.51	0.00	93494	699.0 -> 99.0	63.3	31.3	93.8

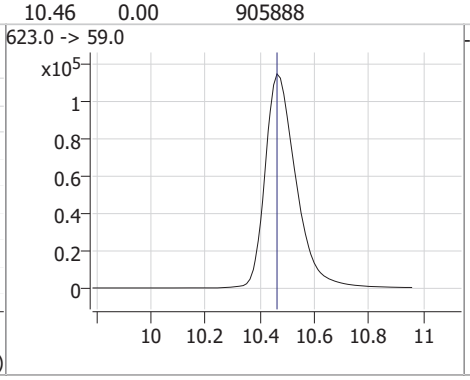


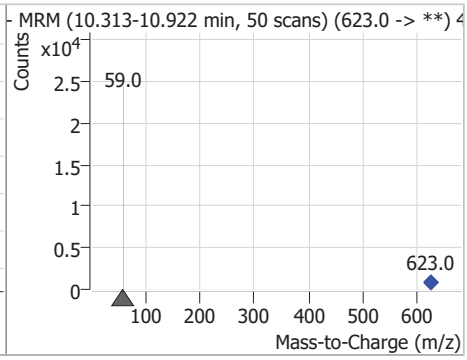




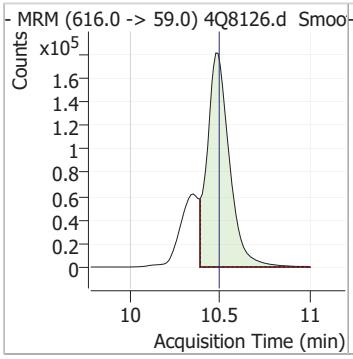
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.90	10.46	0.00	905888				

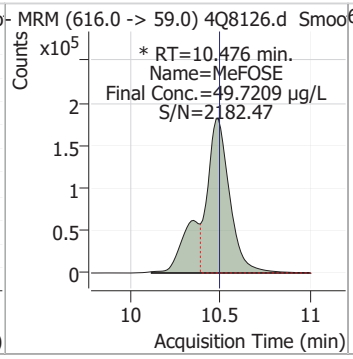


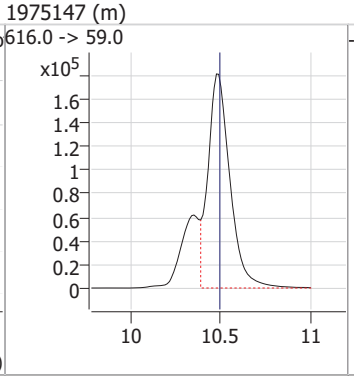


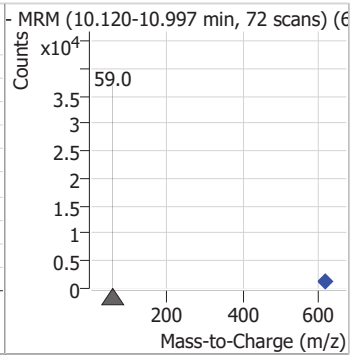


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	49.72	10.48	-0.01	1975147 (m)				

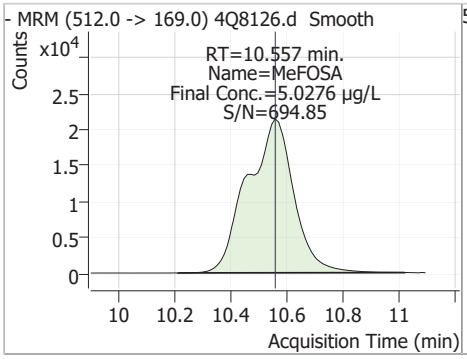


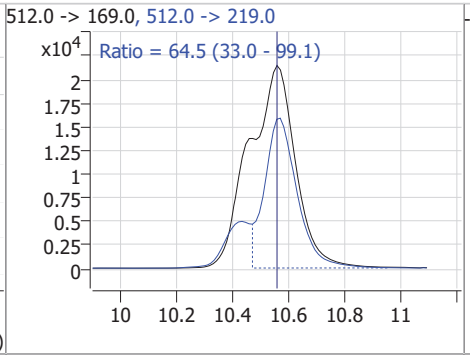


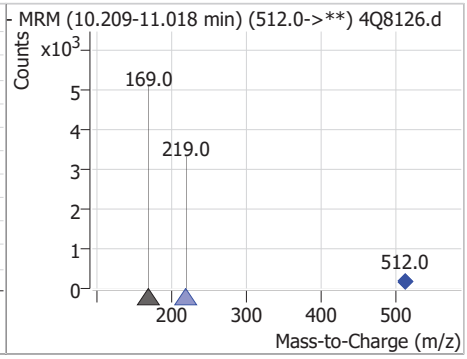




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	5.03	10.56	0.00	246600	512.0 -> 219.0	64.5	33.0	99.1





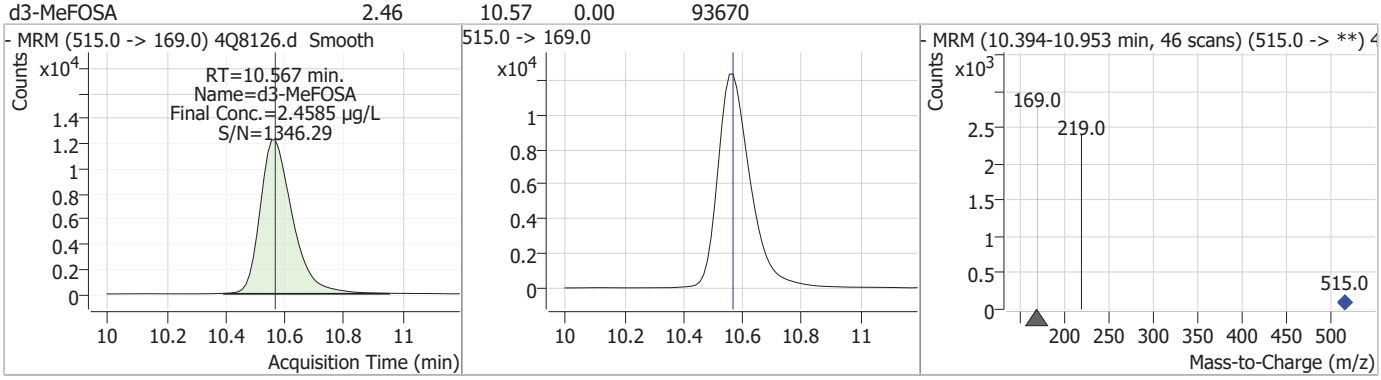


7.5.11

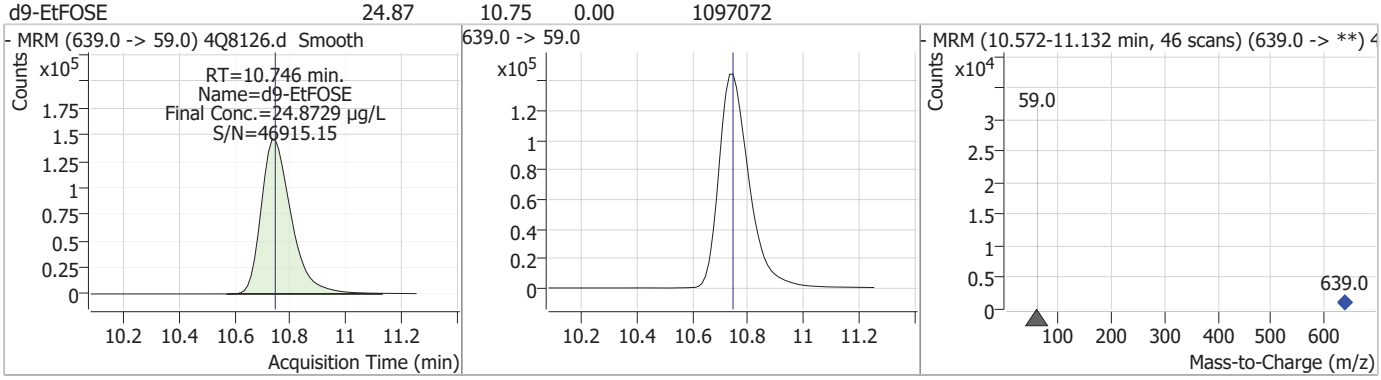
7

Perfluorinated Compounds by LC/MS/MS

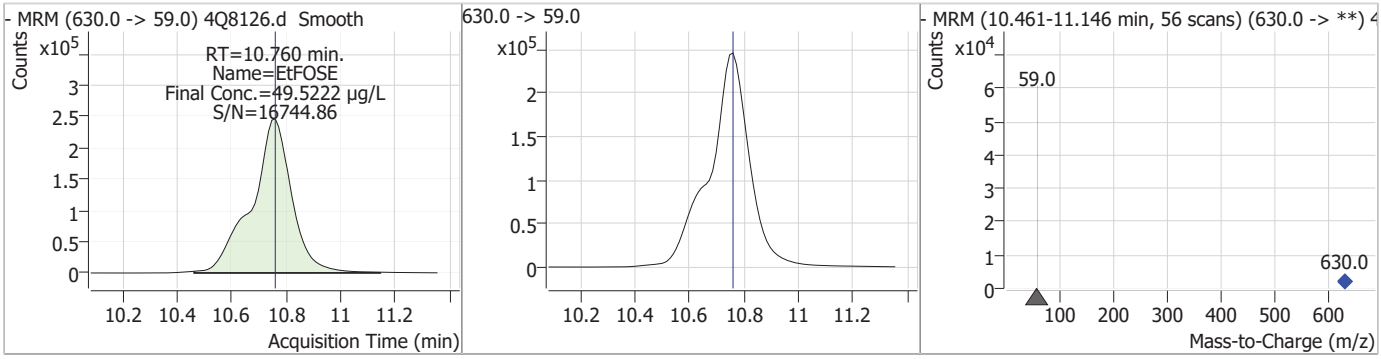
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.46	10.57	0.00	93670				



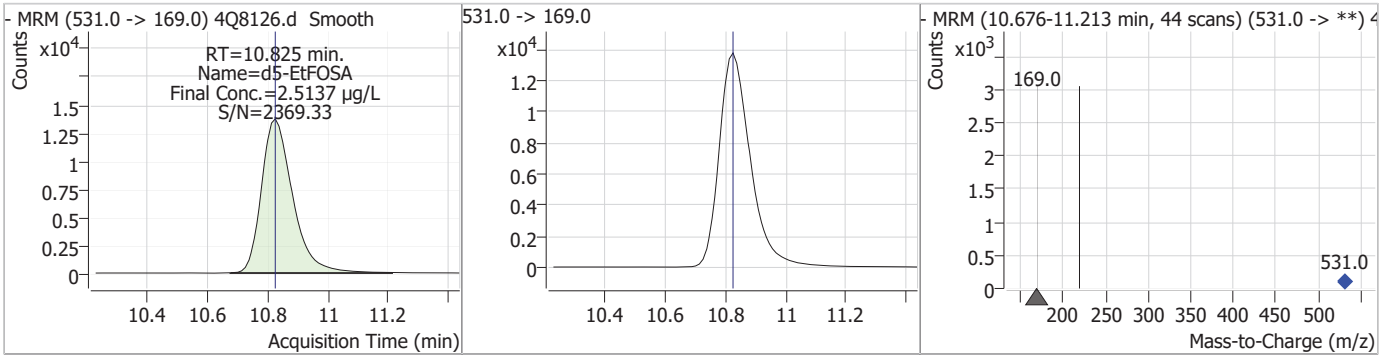
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.87	10.75	0.00	1097072				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	49.52	10.76	0.00	2527143				

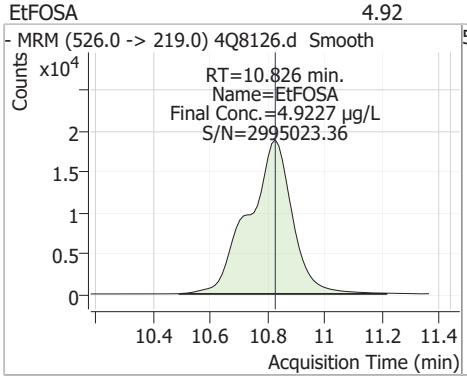


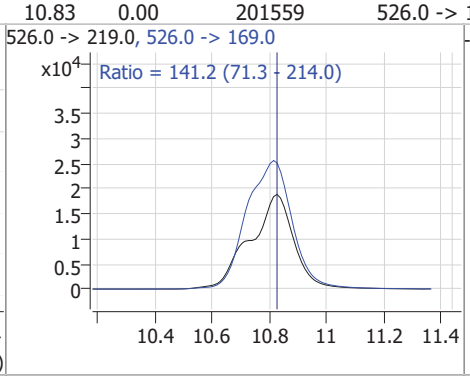
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.51	10.82	0.00	98697				

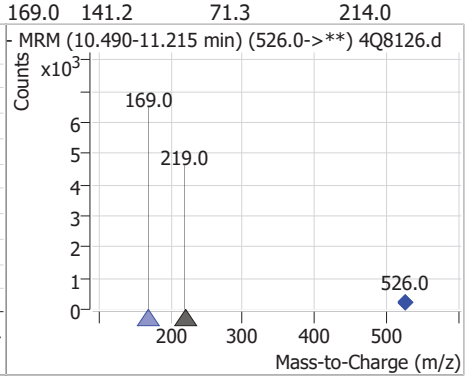


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	4.92	10.83	0.00	201559	526.0 -> 169.0	141.2	71.3	214.0







7.5.11

7

Manual Integration Approval Summary

Sample Number: T4Q138-RT
Lab FileID: 4Q8126.D
Injection Time: 04/30/25 14:02
Method: EPA 1633
Analyst approved: 04/30/25 23:06 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.92	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.10	Poor instrument integration
PFOSA	754-91-6		9.27	Split peak
MeFOSE	24448-09-7		10.48	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/02/25 11:54

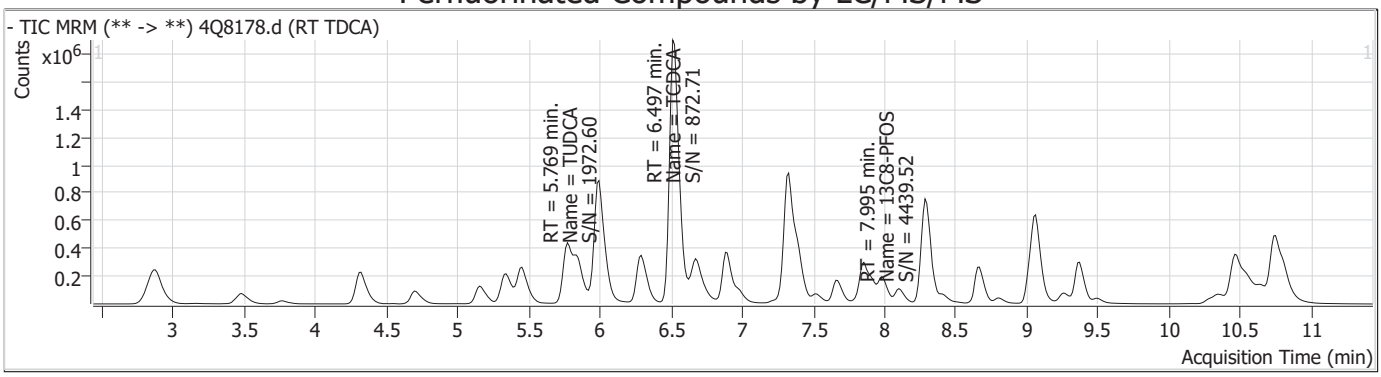
Perfluorinated Compounds by LC/MS/MS

Data File	: 4Q8178.d
Operator	: maksudh
Acq. Method	: 1633.m
Acq. Date-Time	: 5/1/2025 11:41:43 AM
Sample Name	: RT TDCA
Vial	: P1-B1
DA Method File	: T4Q138_TDCA.batch.bin
Batch Name	: T4Q139_TDCA.batch.bin
Sample Information	: OP63077,T4Q139,500,,,5,1,WATER

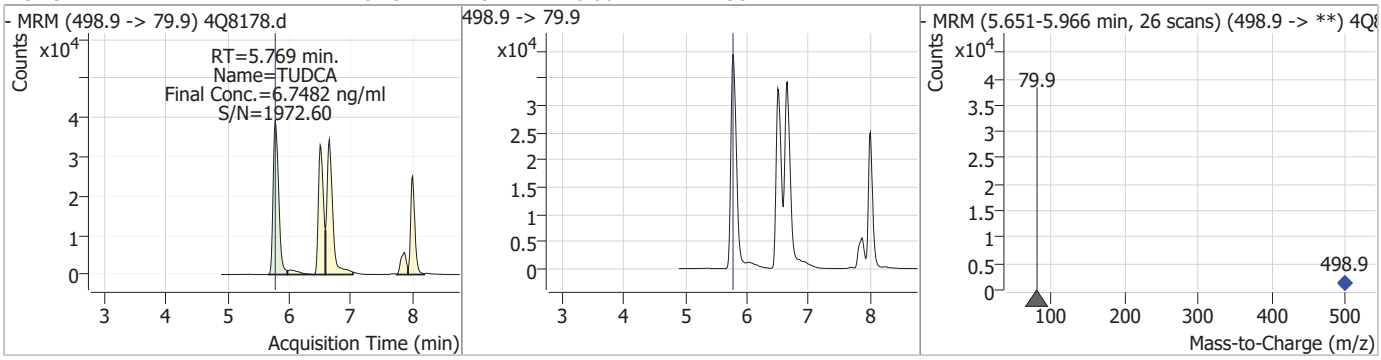
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
Internal Standards							
M8-PFOS	7.995	507.1 -> 79.9	70087	2.50	µg/L		0.000
13C4-PFOS	7.995	502.8 -> 79.9	72525	2.50	µg/L		0.000
System Monitoring Compounds							
13C8-PFOS	7.995	507.1 -> 79.9	70087	4.68	µg/L		0.000
Spiked Amount: 2.50	Range: 50.0 - 150.0%			Recovery = 187.2%			
Target Compounds							QValue
PFOS	7.996	499.0 -> 80.0	162383	4.47	µg/L	m	96
		499.0 -> 99.0	83019				
TCDCA	6.497	498.9 -> 79.9	187242	5.16	ng/ml		100
TDCA	6.645	498.9 -> 79.9	229202	6.31	ng/ml		100
TUDCA	5.769	498.9 -> 79.9	244932	6.75	ng/ml		100

 # = Qualifier out of range, m = manually integrated, + = Area summed

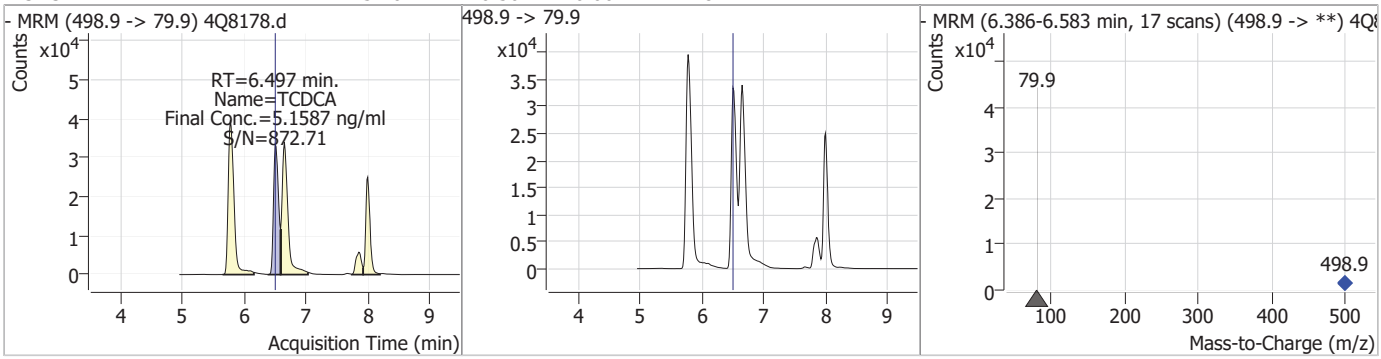
Perfluorinated Compounds by LC/MS/MS



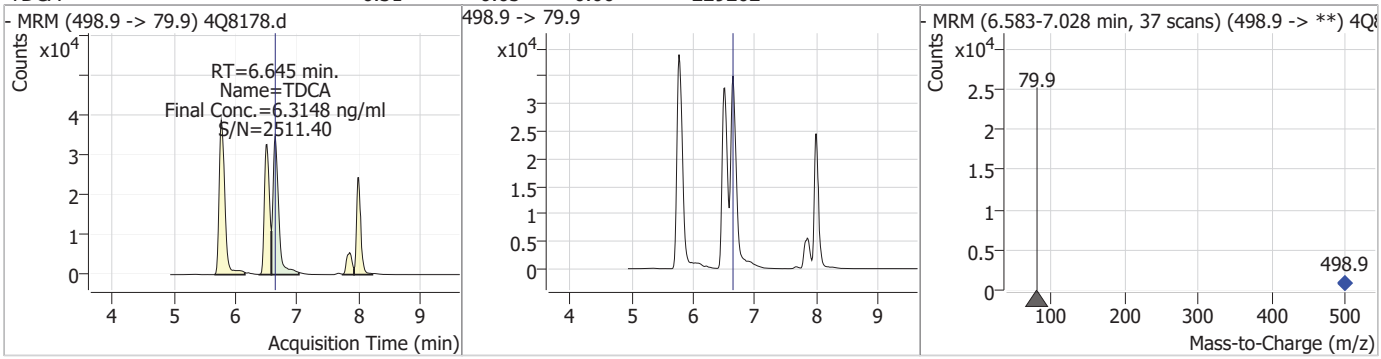
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TUDCA	6.75	5.77	0.00	244932				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TCDCA	5.16	6.50	0.00	187242				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TDCA	6.31	6.65	0.00	229202				



7.5.12

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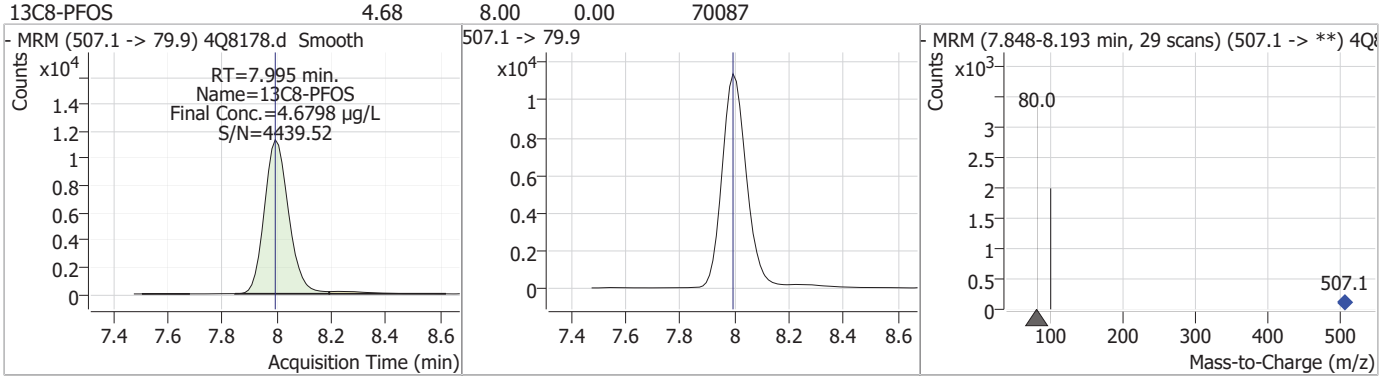
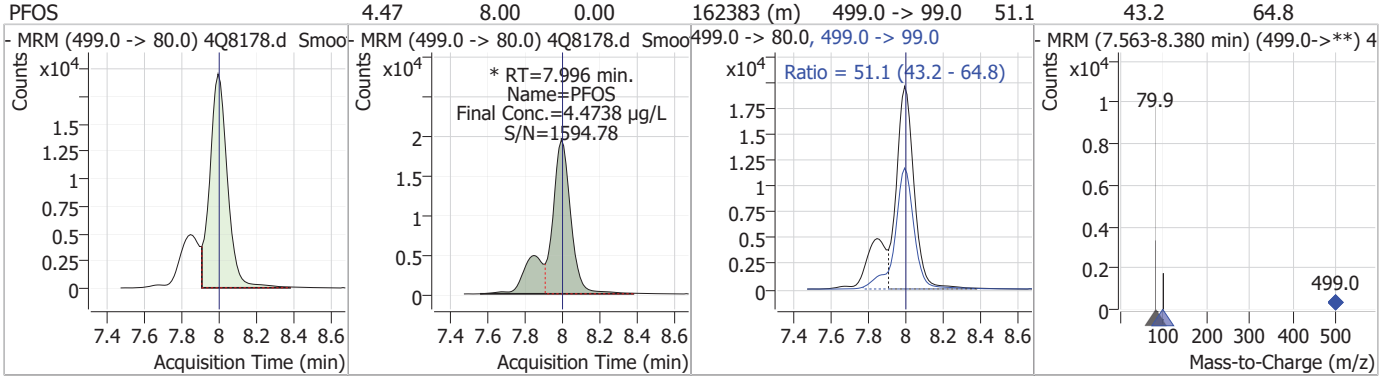
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	4.68	8.00	0.00	70087				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.47	8.00	0.00	162383 (m)	499.0 -> 99.0	51.1	43.2	64.8



Manual Integration Approval Summary

Sample Number: T4Q139-RT
Lab FileID: 4Q8178.D
Injection Time: 05/01/25 11:41
Method: EPA 1633
Analyst approved: 05/02/25 04:45 Josephus Gimenez
Supervisor approved: 05/02/25 11:54 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/02/25 11:54

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8179.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 11:55:17 AM
Sample Name : RT
Vial : P1-A6
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q139.batch.bin
Sample Information : OP63077,T4Q139,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	920602	10.00	µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	475734	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	312808	2.50	µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	327883	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	484090	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	203991	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	182283	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	258431	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	225364	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	173490	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	178693	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	27728	2.50	µg/L	0.000
		302.0 -> 80.0	70945			
M3-PFHxS	6.986	402.0 -> 99.0	38759	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	44536	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	11036	5.00	µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	23417	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	27768	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	233756	5.00	µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	494867	10.00	µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	180348	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	867207	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	1059142	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	96688	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	91637	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	72291	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	386394	5.00	µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	44892	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	480821	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	166584	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	192878	1.25	µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	288698	2.50	µg/L	0.012
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	11036	4.90	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.0%		
13C2-6:2FTS	6.684	429.0 -> 81.0	23417	4.79	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.9%		
13C2-8:2FTS	7.671	529.0 -> 81.0	27768	4.83	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.6%		
13C2-PFDoDA	8.666	615.0 -> 570.0	225364	1.25	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.1%		
13C2-PFTeDA	9.368	715.0 -> 670.0	173490	1.25	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.3%		
13C3-PFBS	5.368	302.0 -> 99.0	27728	2.50	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.1%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	38759	2.47	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.9%			
13C4-PFBA	2.871	217.0 -> 172.0	920602	10.39	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 103.9%			
13C4-PFHpA	6.291	367.0 -> 322.0	327883	2.52	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.0%			
13C5-PFHxA	5.464	318.0 -> 273.0	312808	2.56	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.4%			
13C5-PFPeA	4.319	268.0 -> 223.0	475734	5.13	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.6%			
13C6-PFDA	7.858	519.0 -> 474.0	182283	1.24	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.1%			
13C7-PFUnDA	8.273	570.0 -> 525.0	258431	1.31	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.2%			
13C8-FOSA	9.279	506.0 -> 78.0	178693	2.41	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.2%			
13C8-PFOA	6.897	421.0 -> 376.0	484090	2.52	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.8%			
13C8-PFOS	7.995	507.0 -> 99.0	44536	2.56	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.3%			
13C9-PFNA	7.403	472.0 -> 427.0	203991	1.28	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.0%			
d3-MeFOSAA	7.915	573.0 -> 419.0	233756	4.91	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.2%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	494867	10.31	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 103.1%			
d3-MeFOSA	10.555	515.0 -> 169.0	91637	2.40	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.1%			
d5-EtFOSAA	8.098	589.0 -> 419.0	180348	4.93	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.7%			
d7-MeFOSE	10.462	623.0 -> 59.0	867207	23.82	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 95.3%			
d9-EtFOSE	10.734	639.0 -> 59.0	1059142	23.99	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 96.0%			
d5-EtFOSA	10.825	531.0 -> 169.0	96688	2.46	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.4%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	388207	19.15	µg/L		99
		327.0 -> 81.0	183275				
6:2FTS	6.684	427.0 -> 407.0	468672	19.96	µg/L		100
		427.0 -> 81.0	220731				
8:2FTS	7.671	527.0 -> 507.0	457763	21.06	µg/L		98
		527.0 -> 81.0	177358				
EtFOSAA	8.111	584.0 -> 419.0	168203	5.02	µg/L	m	98
		584.0 -> 483.0	92500				
FOSA	9.269	498.0 -> 78.0	327587	7.10	µg/L	m	99
		498.0 -> 478.0	9082				
MeFOSAA	7.929	570.0 -> 419.0	207977	5.19	µg/L	m	98
		570.0 -> 512.0	73678				
PFBA	2.877	213.0 -> 169.0	558018	19.83	µg/L		100
PFBS	5.369	299.0 -> 80.0	139809	4.41	µg/L		98
		299.0 -> 99.0	59145				
PFDA	7.859	513.0 -> 469.0	731287	5.28	µg/L		99
		513.0 -> 219.0	168208				
PFDoDA	8.667	613.0 -> 569.0	861606	4.97	µg/L		96
		613.0 -> 319.0	124741				

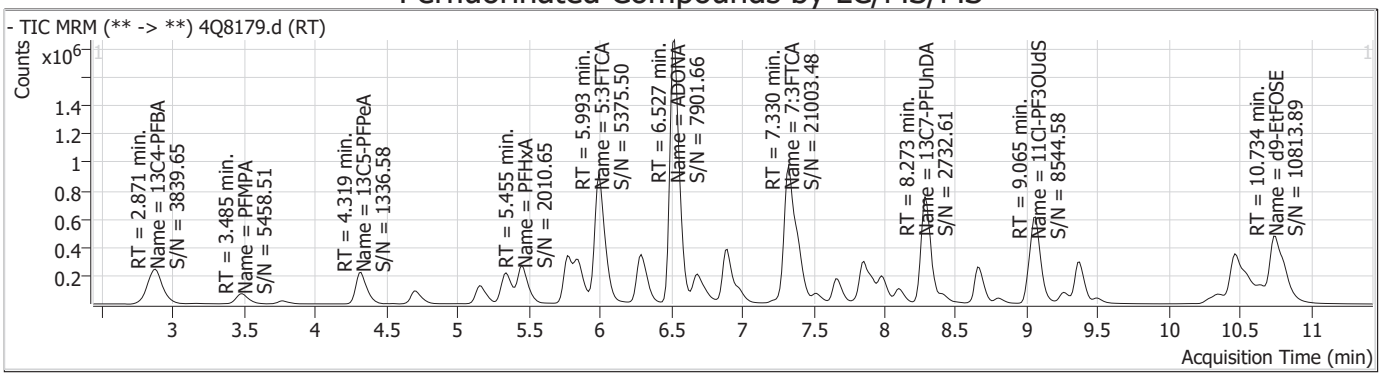
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.804	599.0 -> 80.0	104746	4.54	µg/L		99
		599.0 -> 99.0	59923				
PFHpA	6.292	363.0 -> 319.0	1002610	5.03	µg/L		100
		363.0 -> 169.0	207886				
PFHpS	7.529	449.0 -> 80.0	163190	4.87	µg/L		100
		449.0 -> 99.0	90081				
PFHxA	5.455	313.0 -> 269.0	687087	5.10	µg/L		100
		313.0 -> 119.0	22172				
PFHxS	6.987	399.0 -> 80.0	155392	5.54	µg/L	m	100
		399.0 -> 99.0	82940				
PFNA	7.404	463.0 -> 419.0	609996	5.67	µg/L	m	98
		463.0 -> 219.0	219374				
PFNS	8.425	549.0 -> 80.0	144649	4.83	µg/L		97
		549.0 -> 99.0	87747				
PFOA	6.898	413.0 -> 369.0	805344	6.35	µg/L	m	100
		413.0 -> 169.0	233856				
PFOS	7.996	499.0 -> 80.0	158507	5.72	µg/L	m	98
		499.0 -> 99.0	83944				
PFPeA	4.321	263.0 -> 219.0	748429	9.95	µg/L		100
PFPeS	6.331	349.0 -> 80.0	159578	4.61	µg/L		100
		349.0 -> 99.0	80616				
PFTeDA	9.369	713.0 -> 669.0	1003910	4.97	µg/L		100
		713.0 -> 219.0	75862				
PFTrDA	9.025	663.0 -> 619.0	974540	5.04	µg/L		100
		663.0 -> 369.0	60745				
PFUnDA	8.275	563.0 -> 519.0	770697	5.05	µg/L		99
		563.0 -> 269.0	157979				
11Cl-PF3OUdS	9.065	631.0 -> 451.0	1726839	18.34	µg/L		99
		633.0 -> 453.0	527801				
9Cl-PF3ONS	8.301	531.0 -> 351.0	1956895	18.90	µg/L		100
		533.0 -> 353.0	598853				
ADONA	6.527	377.0 -> 251.0	6763049	18.36	µg/L		99
		377.0 -> 85.0	2160219				
HFPO-DA	5.792	285.0 -> 169.0	1028878	19.78	µg/L		100
		285.0 -> 185.0	115031				
3:3FTCA	3.769	241.0 -> 177.0	110161	24.51	µg/L		99
		241.0 -> 117.0	8520				
5:3FTCA	5.993	341.0 -> 237.0	2756339	117.68	µg/L		100
		341.0 -> 217.0	1935774				
7:3FTCA	7.330	441.0 -> 337.0	3544902	114.30	µg/L		99
		441.0 -> 317.0	1577539				
EtFOSA	10.826	526.0 -> 219.0	198259	4.94	µg/L		99
		526.0 -> 169.0	285448				
EtFOSE	10.747	630.0 -> 59.0	2437110	49.47	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	246165	5.13	µg/L		100
		512.0 -> 219.0	162572				
MeFOSE	10.476	616.0 -> 59.0	1893076	61.66	µg/L		100
PFDoDS	9.496	699.0 -> 80.0	91892	4.71	µg/L		99
		699.0 -> 99.0	56699				
NFDHA	5.345	295.0 -> 201.0	179847	10.16	µg/L		95
		201.0 -> 85.0	709774				
		295.0 -> 85.0	46165				
PFMBA	4.710	279.0 -> 85.0	501025	9.76	µg/L		100
PFMPA	3.485	229.0 -> 85.0	447143	10.37	µg/L		100
PFEESA	5.849	315.0 -> 135.0	1109270	8.96	µg/L		98
		315.0 -> 69.0	92735				

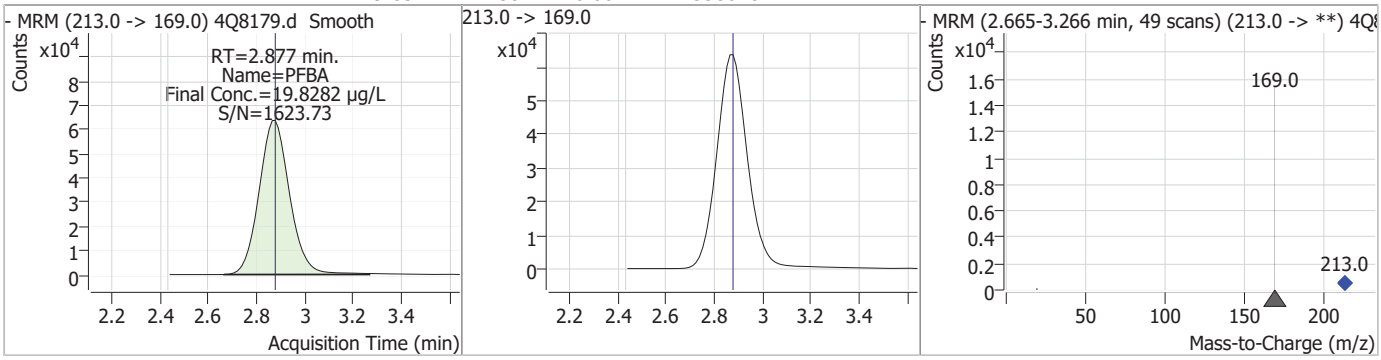
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

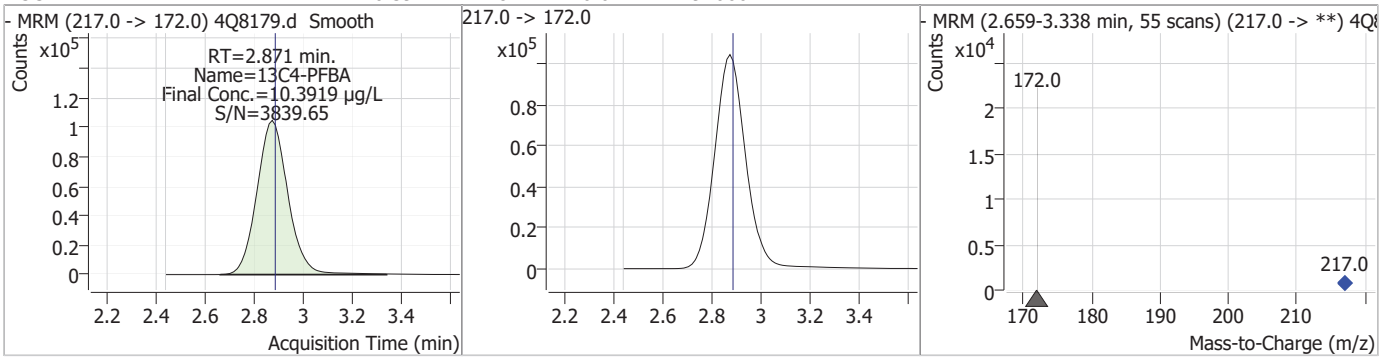
Perfluorinated Compounds by LC/MS/MS



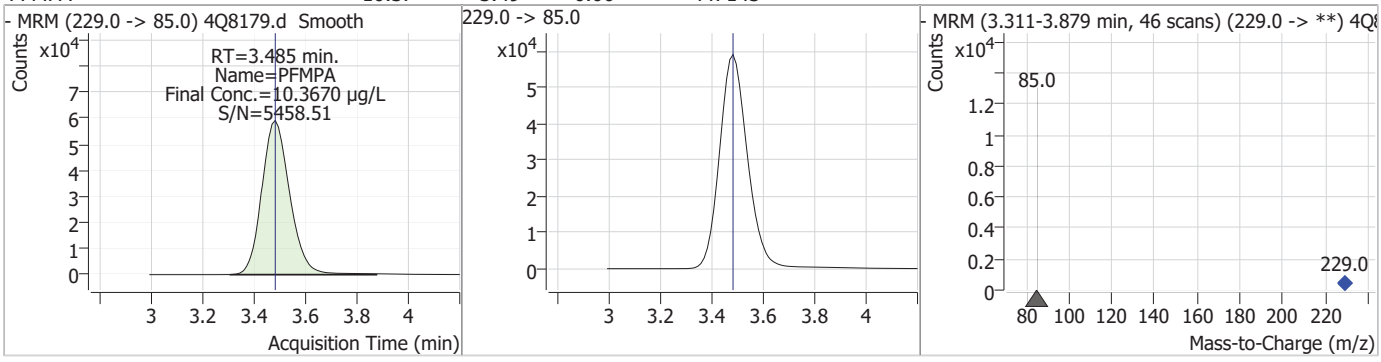
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	19.83	2.88	0.00	558018				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.39	2.87	-0.01	920602				

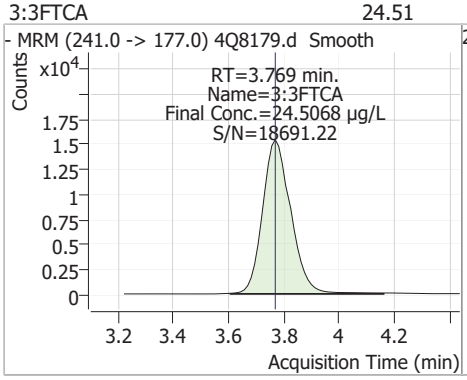


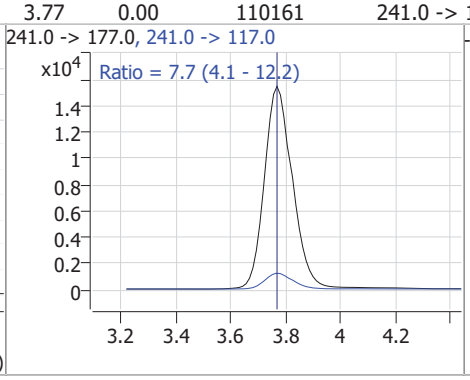
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	10.37	3.49	0.00	447143				

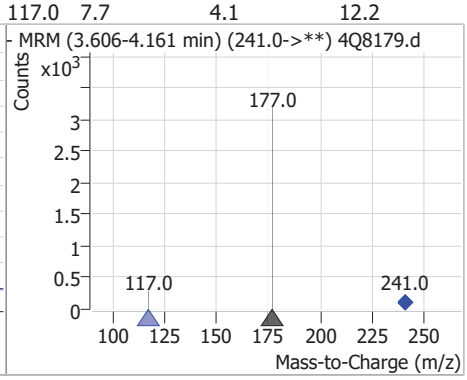


Perfluorinated Compounds by LC/MS/MS

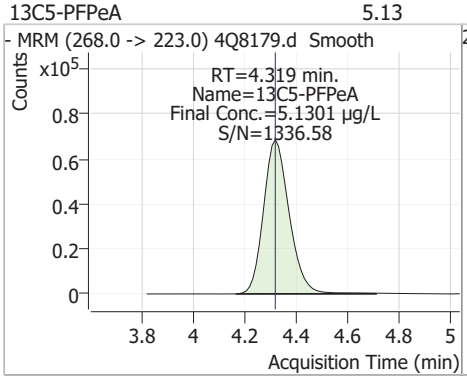
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	24.51	3.77	0.00	110161	241.0 -> 117.0	7.7	4.1	12.2

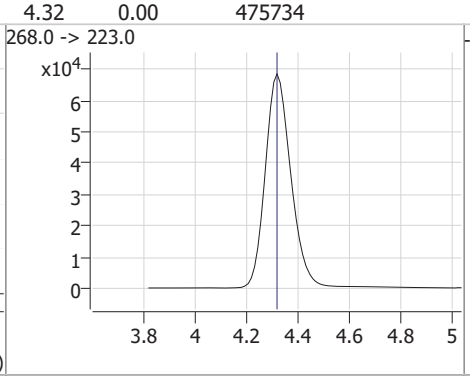


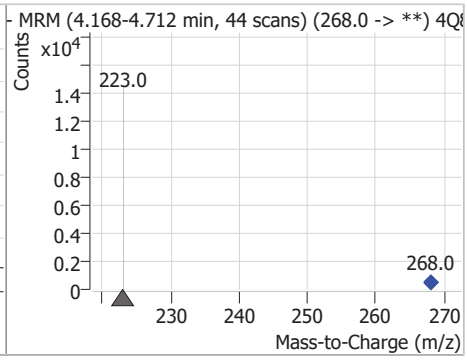




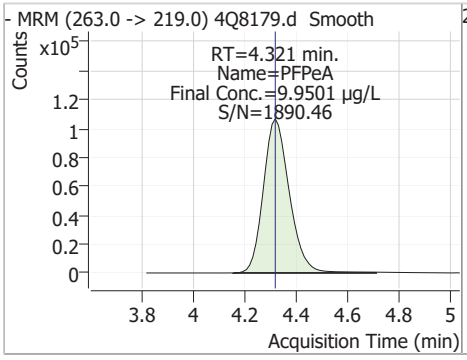
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.13	4.32	0.00	475734				

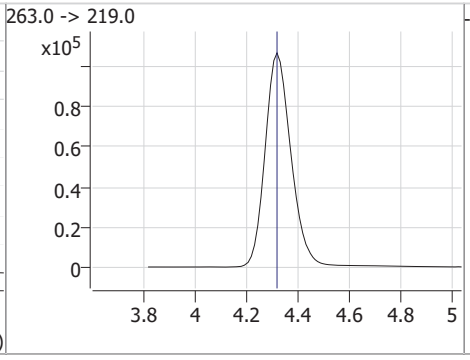


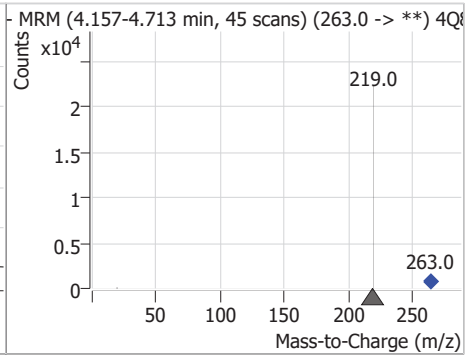




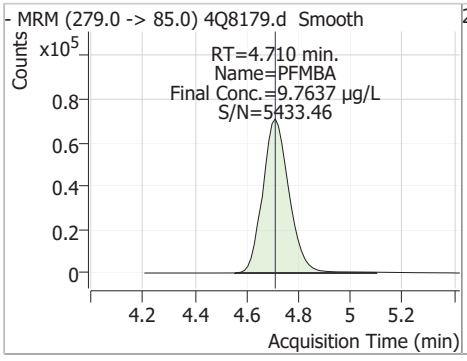
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	9.95	4.32	0.00	748429				

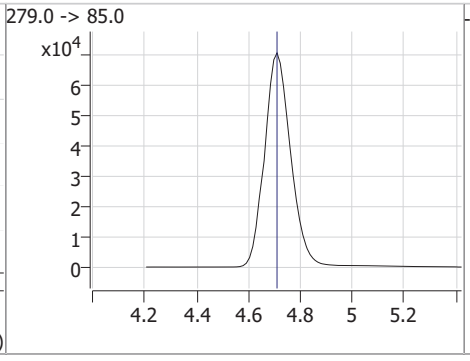


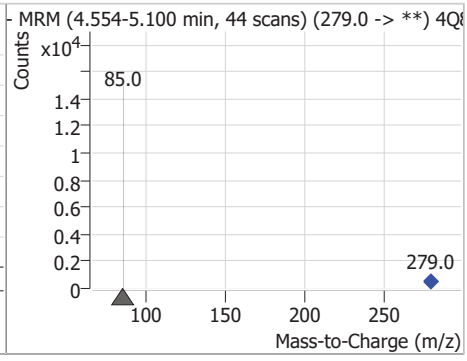




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	9.76	4.71	0.00	501025				

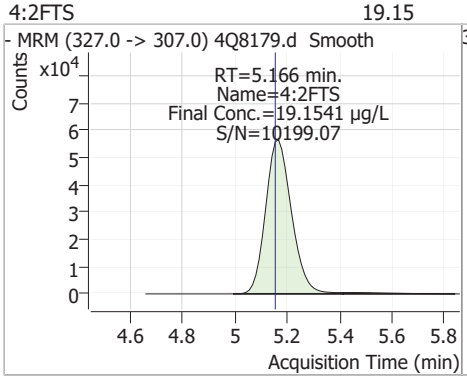


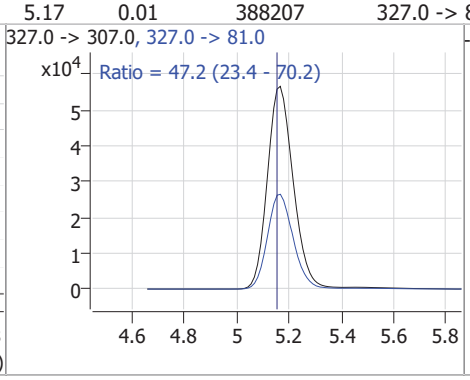


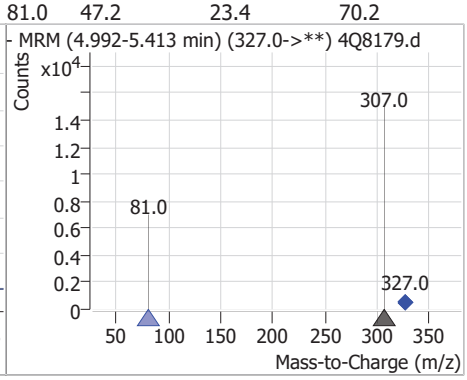


Perfluorinated Compounds by LC/MS/MS

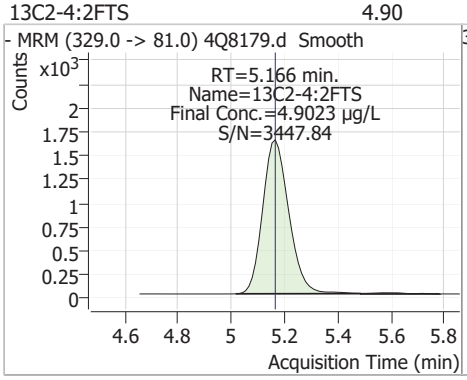
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	19.15	5.17	0.01	388207	327.0 -> 81.0	47.2	23.4	70.2

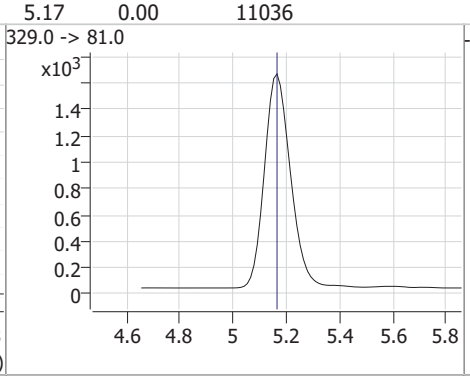


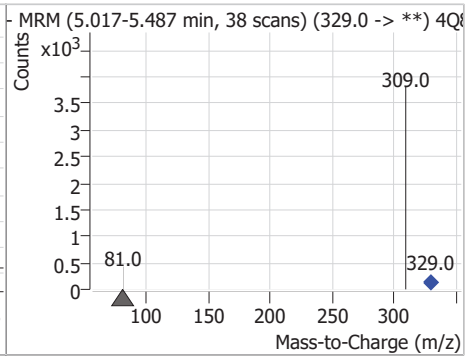




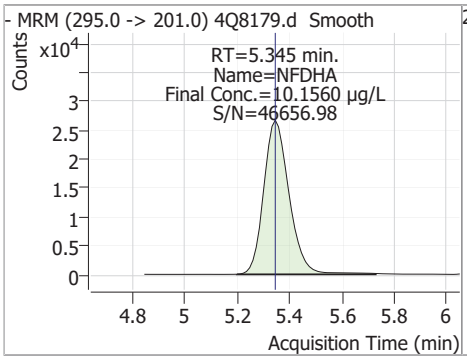
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.90	5.17	0.00	11036				

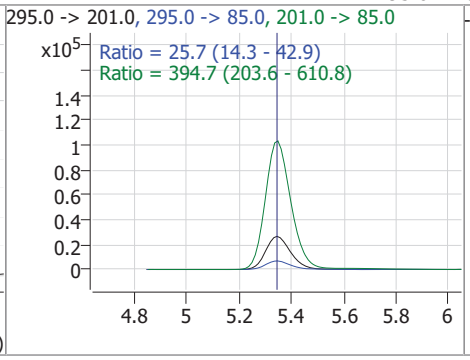


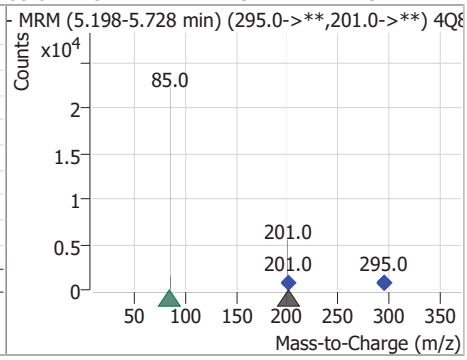




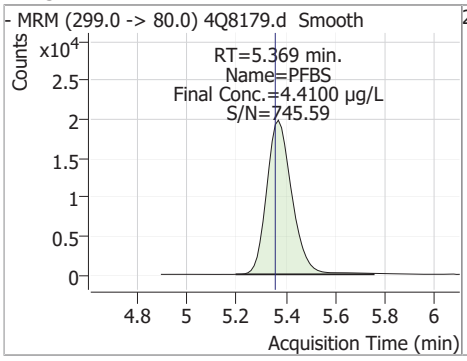
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	10.16	5.35	0.00	179847	201.0 -> 85.0	394.7	203.6	610.8
					295.0 -> 85.0	25.7	14.3	42.9

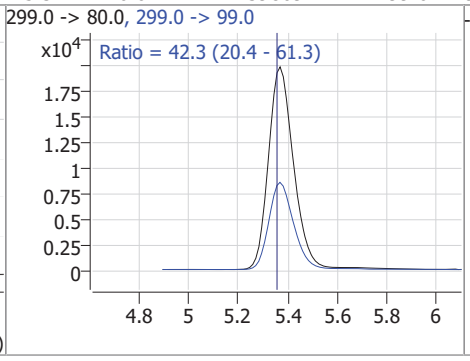


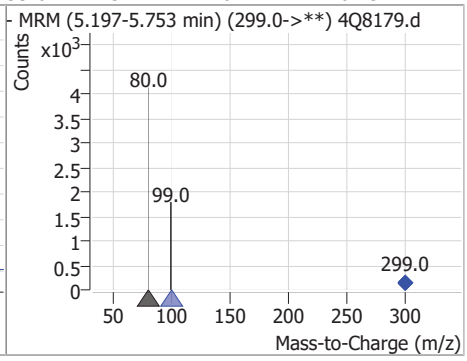




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.41	5.37	0.01	139809	299.0 -> 99.0	42.3	20.4	61.3

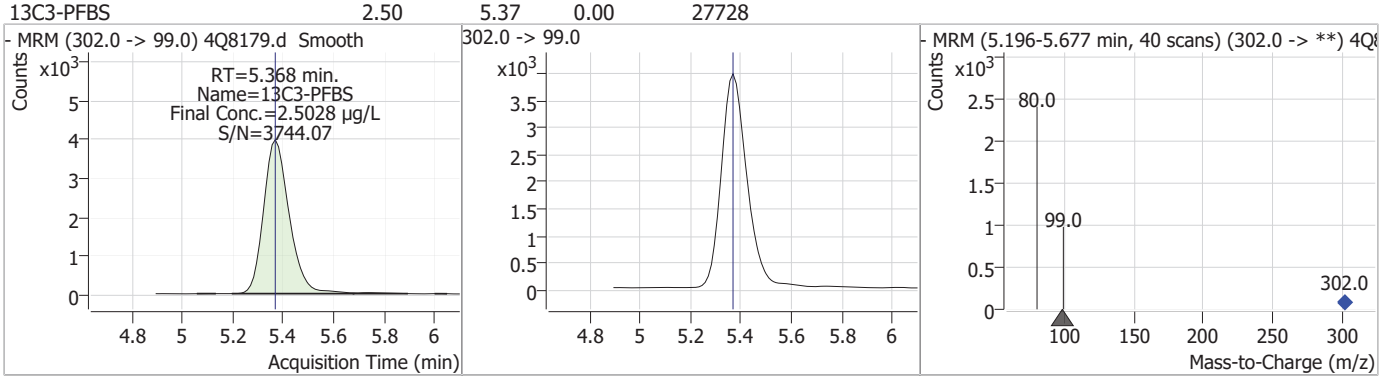




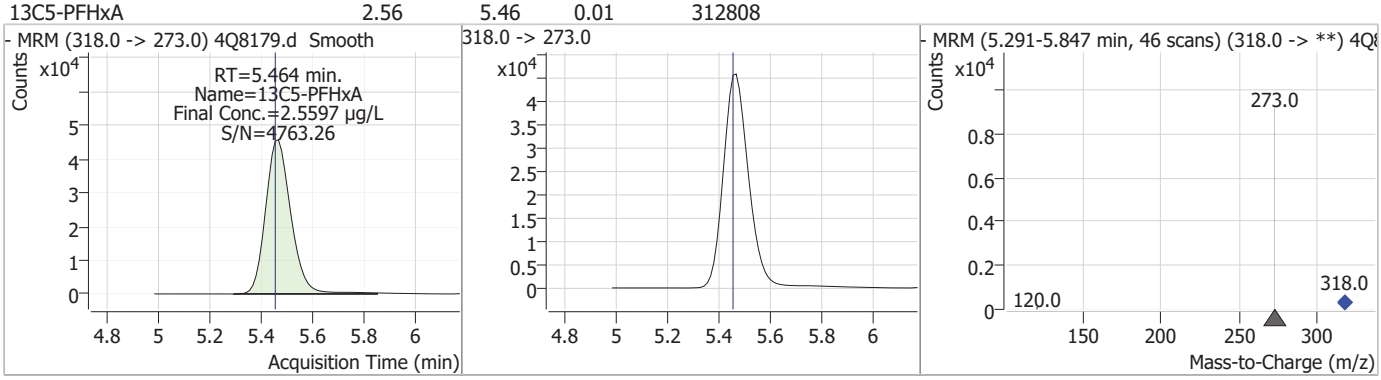


Perfluorinated Compounds by LC/MS/MS

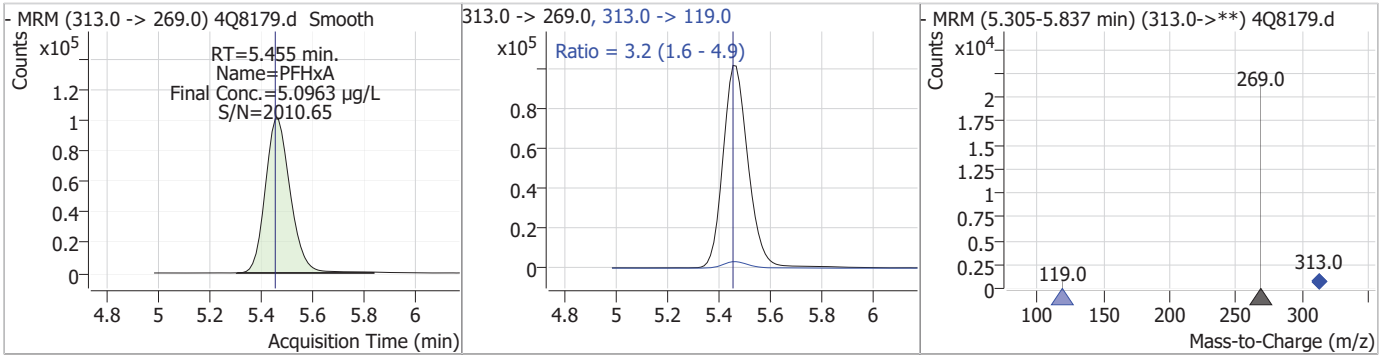
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.50	5.37	0.00	27728				



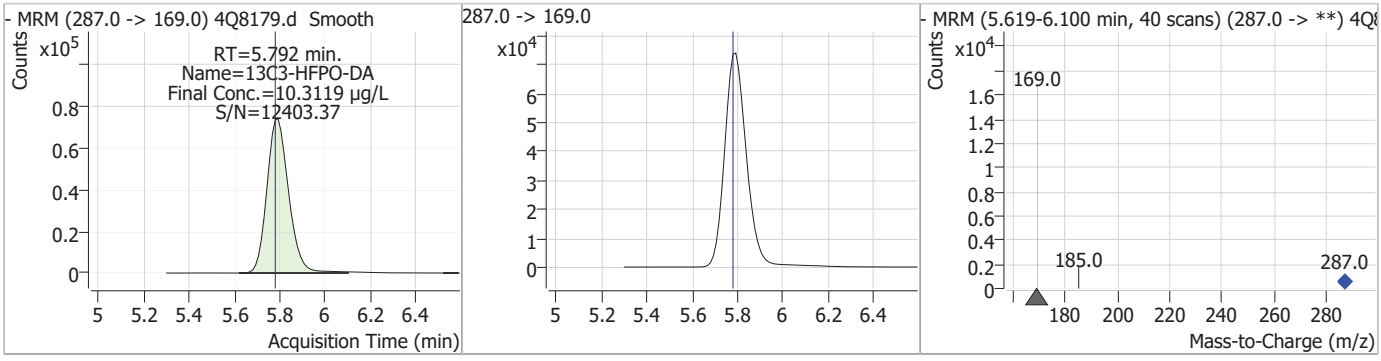
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.56	5.46	0.01	312808				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	5.10	5.45	0.00	687087	313.0 -> 119.0	3.2	1.6	4.9

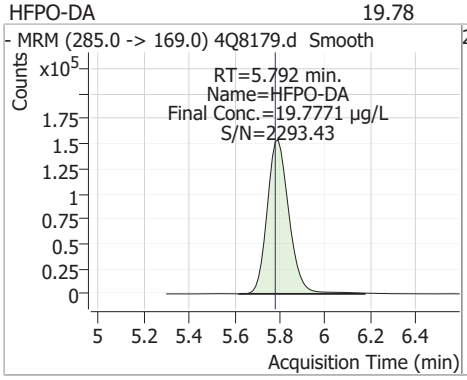


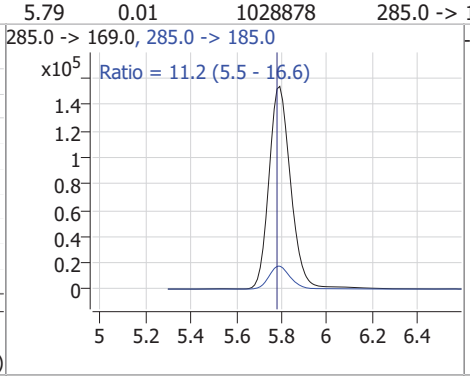
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.31	5.79	0.01	494867				

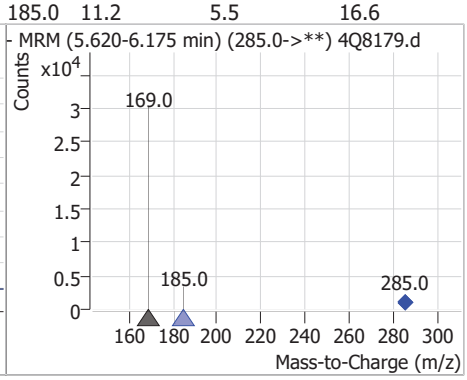


Perfluorinated Compounds by LC/MS/MS

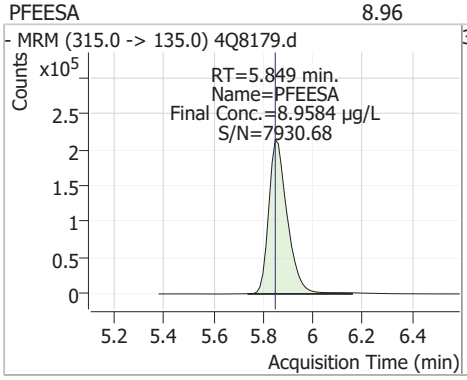
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	19.78	5.79	0.01	1028878	285.0 -> 185.0	11.2	5.5	16.6

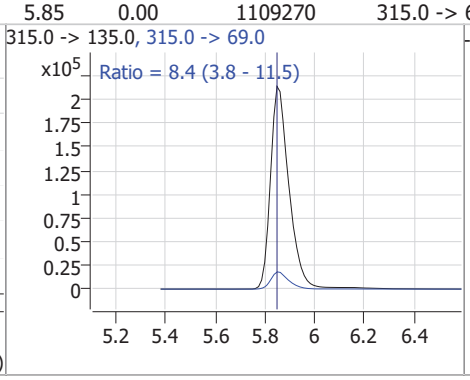


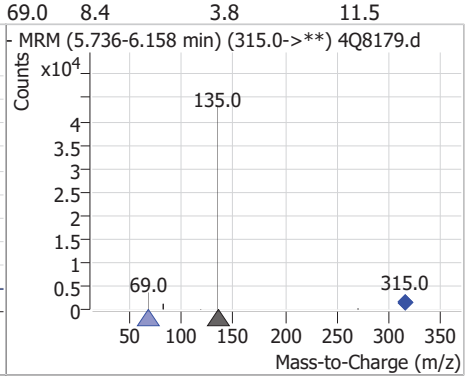




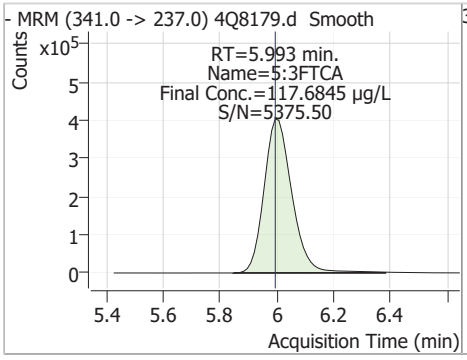
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	8.96	5.85	0.00	1109270	315.0 -> 69.0	8.4	3.8	11.5

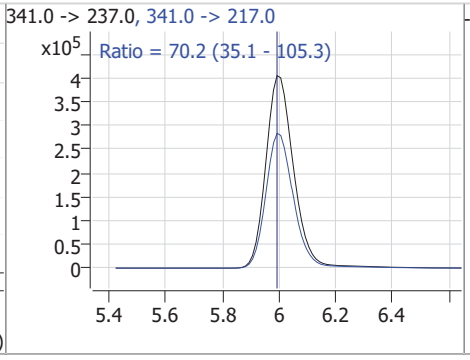


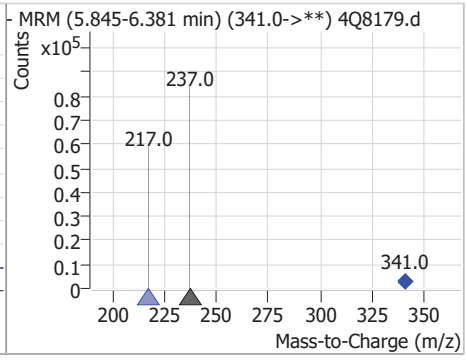




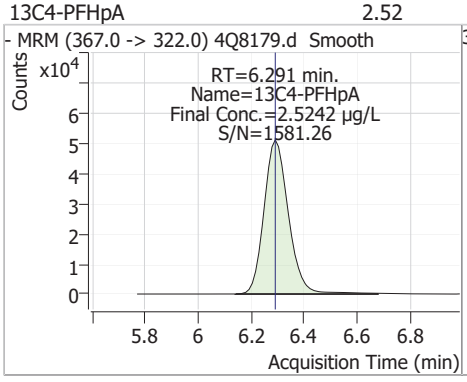
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	117.68	5.99	0.00	2756339	341.0 -> 217.0	70.2	35.1	105.3

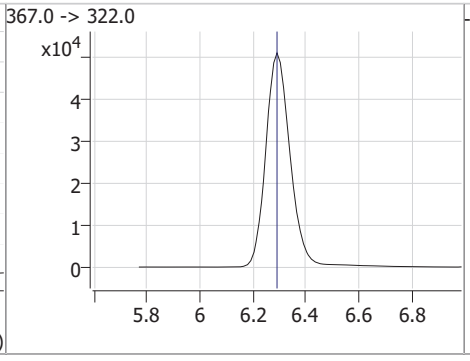


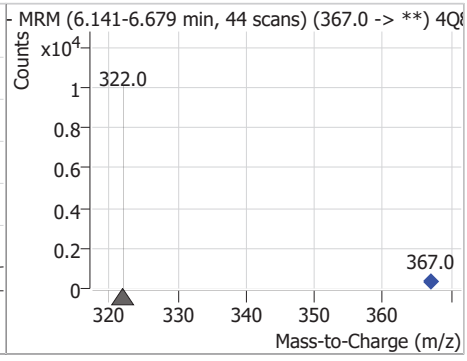




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.52	6.29	0.00	327883				





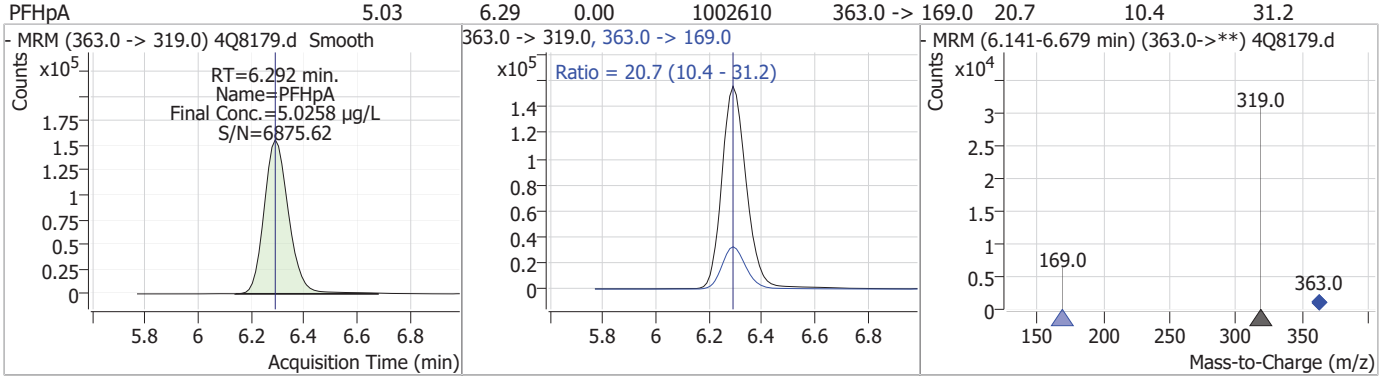


7.5.13

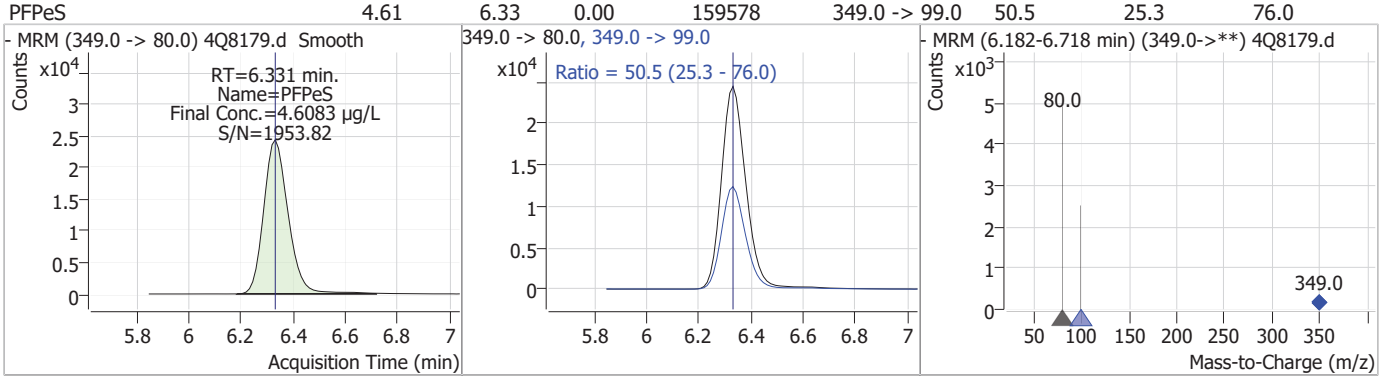
7

Perfluorinated Compounds by LC/MS/MS

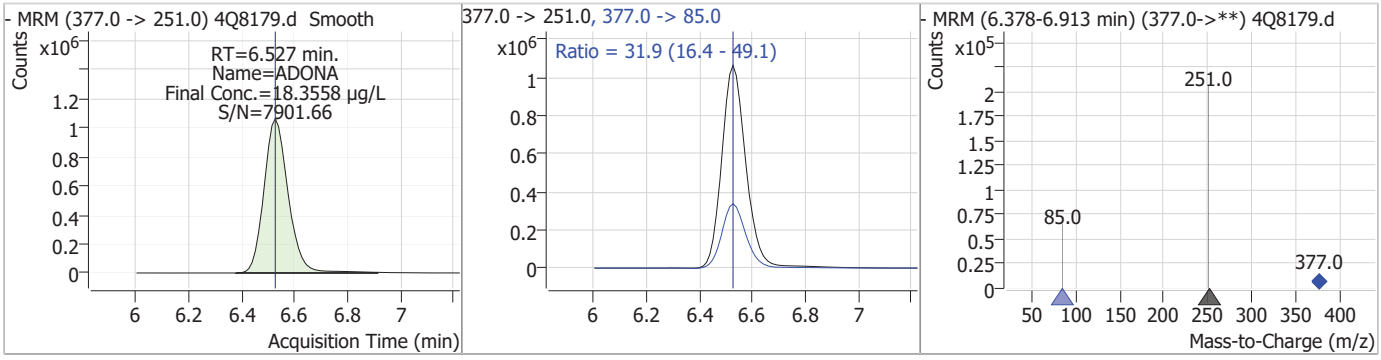
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	5.03	6.29	0.00	1002610	363.0 -> 169.0	20.7	10.4	31.2



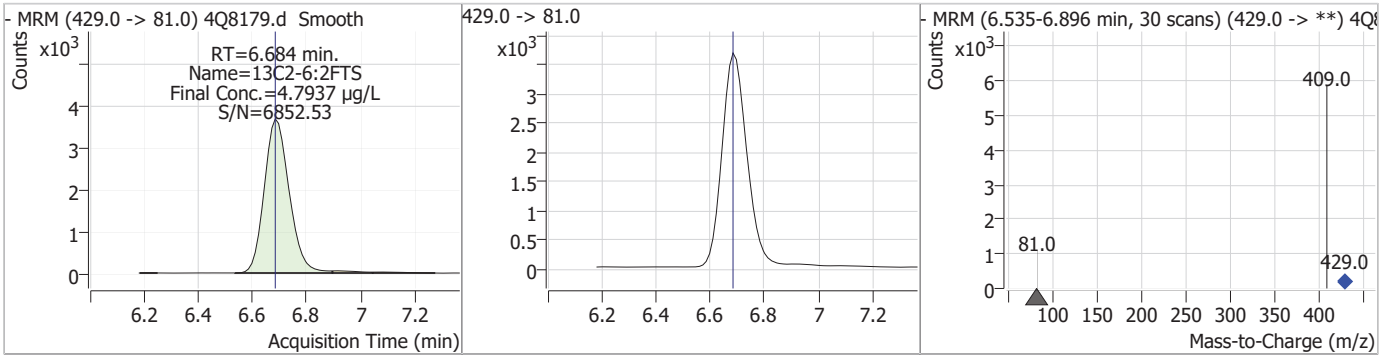
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	4.61	6.33	0.00	159578	349.0 -> 99.0	50.5	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	18.36	6.53	0.00	6763049	377.0 -> 85.0	31.9	16.4	49.1

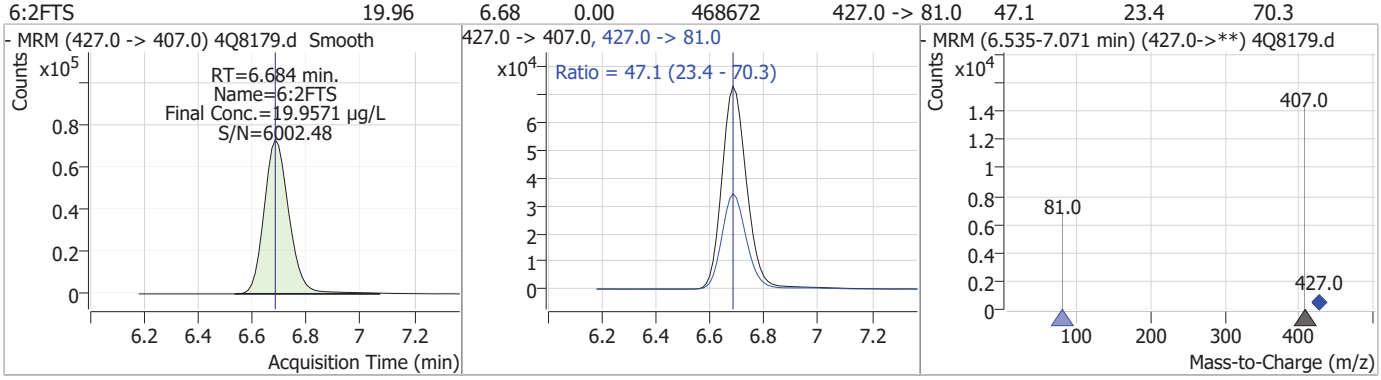


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.79	6.68	0.00	23417				

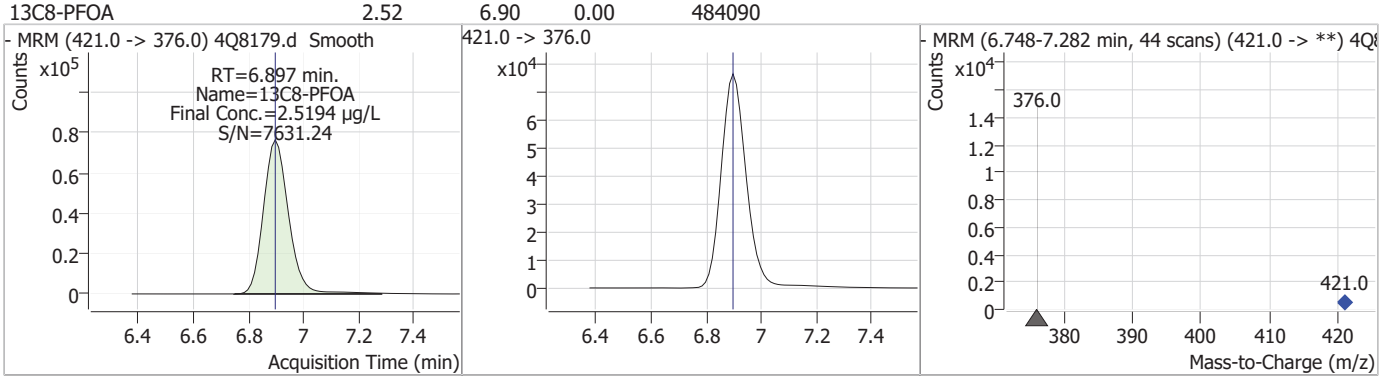


Perfluorinated Compounds by LC/MS/MS

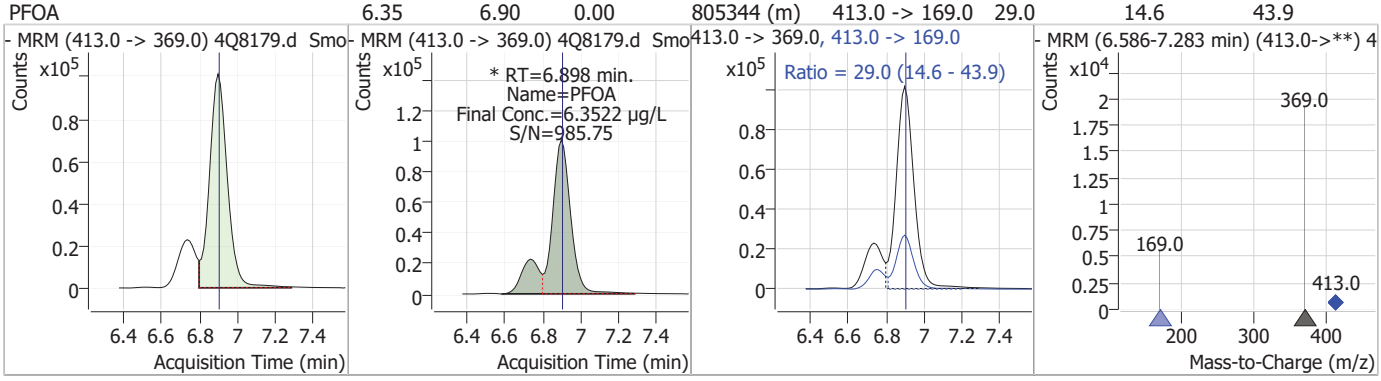
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	19.96	6.68	0.00	468672	427.0 -> 81.0	47.1	23.4	70.3



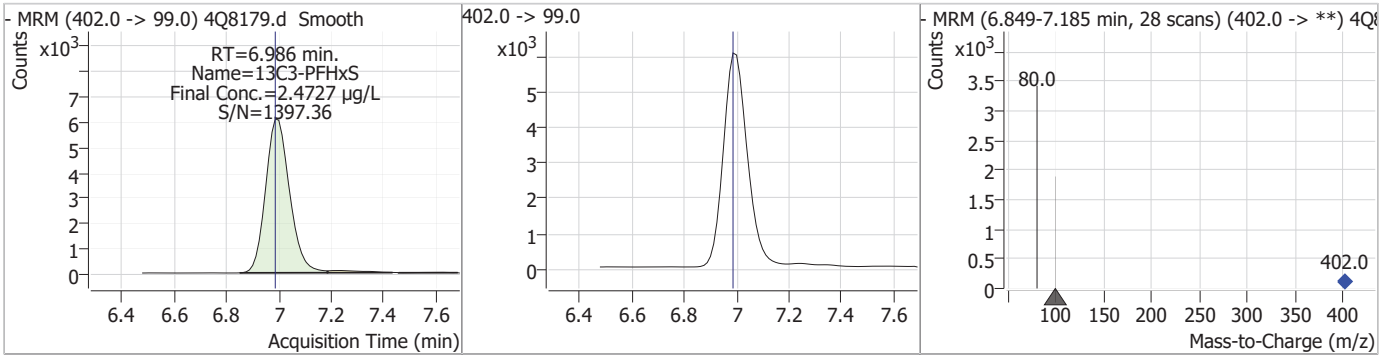
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.52	6.90	0.00	484090				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	6.35	6.90	0.00	805344 (m)	413.0 -> 169.0	29.0	14.6	43.9

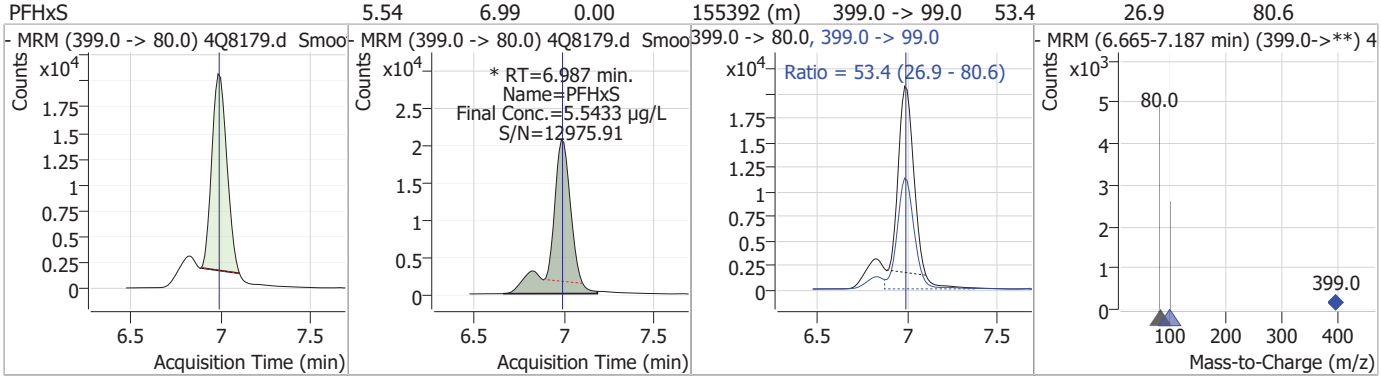


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.47	6.99	0.00	38759				

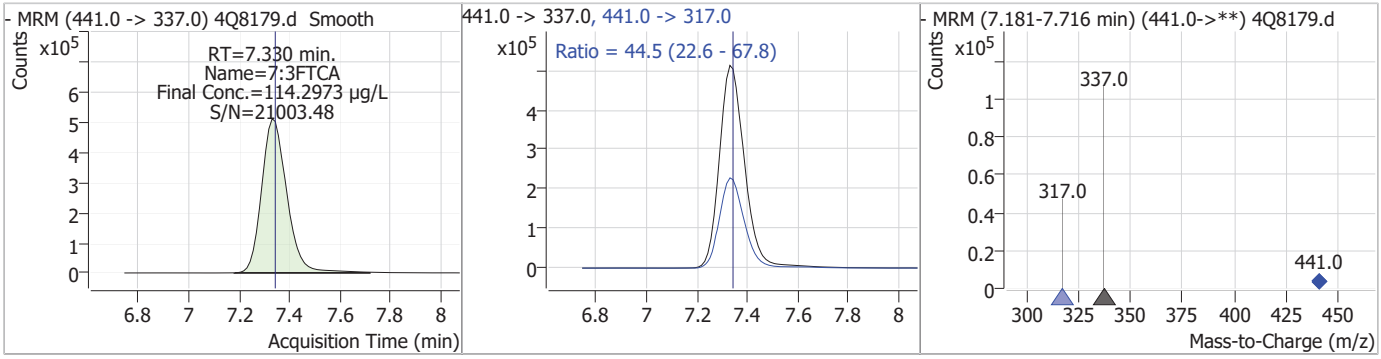


Perfluorinated Compounds by LC/MS/MS

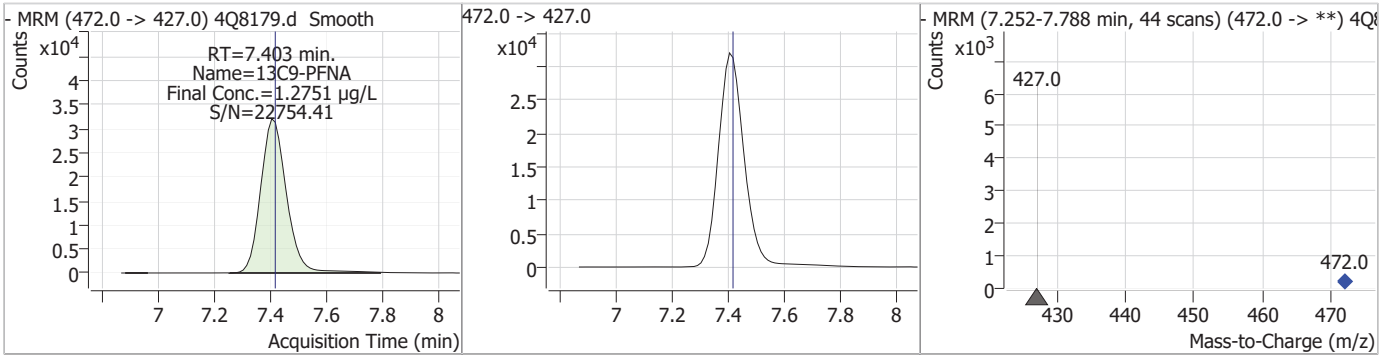
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	5.54	6.99	0.00	155392 (m)	399.0 -> 99.0	53.4	26.9	80.6



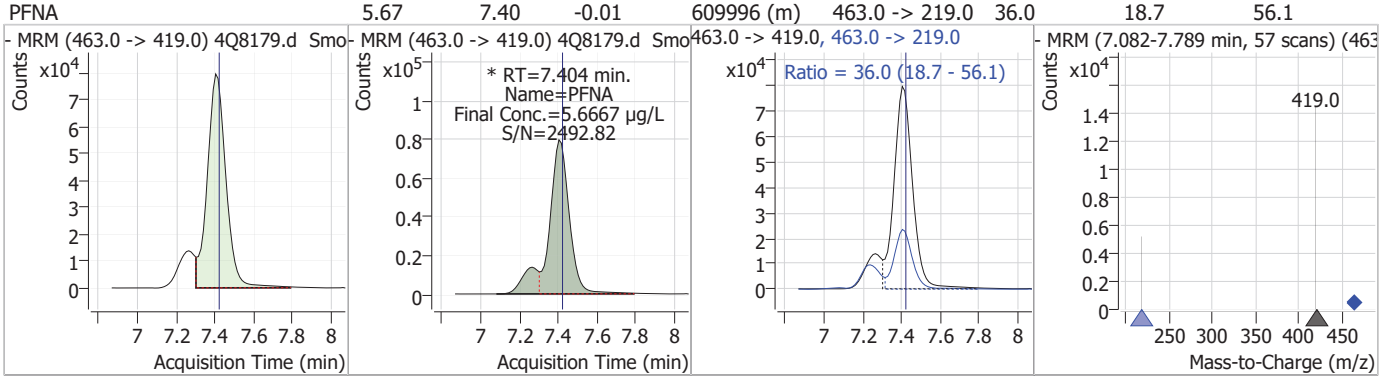
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	114.30	7.33	-0.01	3544902	441.0 -> 317.0	44.5	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.28	7.40	-0.01	203991				

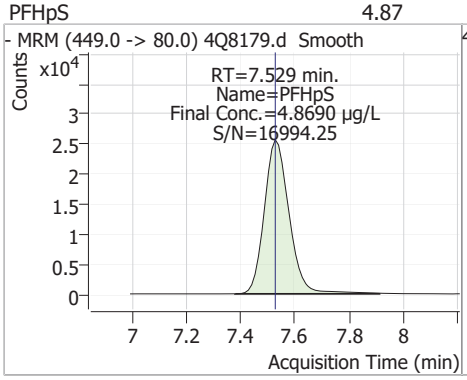


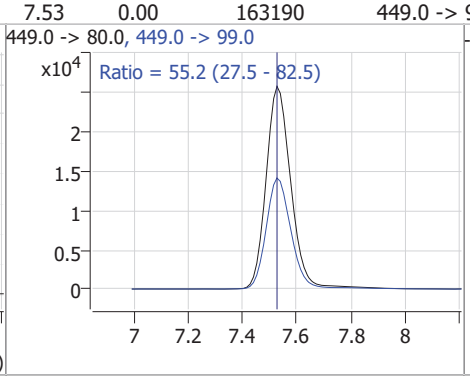
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	5.67	7.40	-0.01	609996 (m)	463.0 -> 219.0	36.0	18.7	56.1

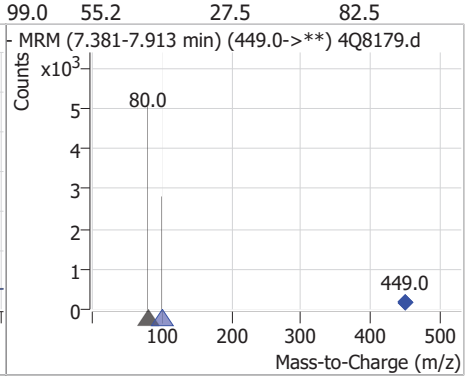


Perfluorinated Compounds by LC/MS/MS

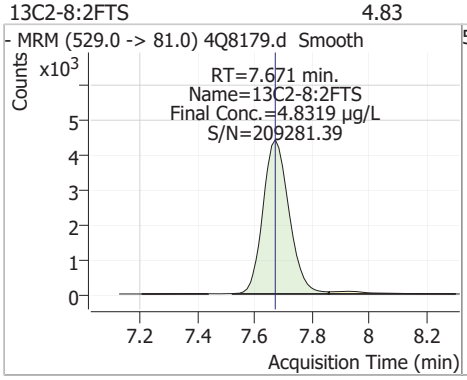
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	4.87	7.53	0.00	163190	449.0 -> 99.0	55.2	27.5	82.5

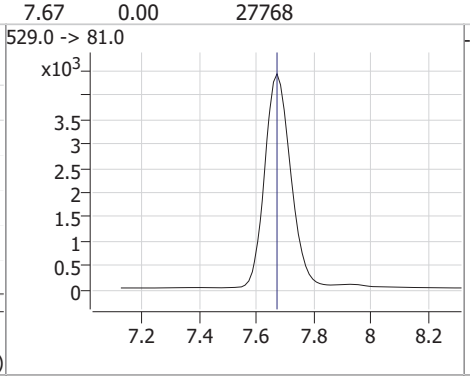


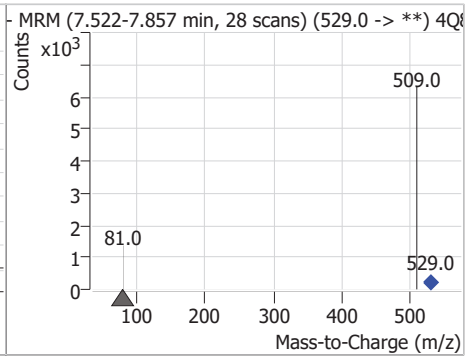




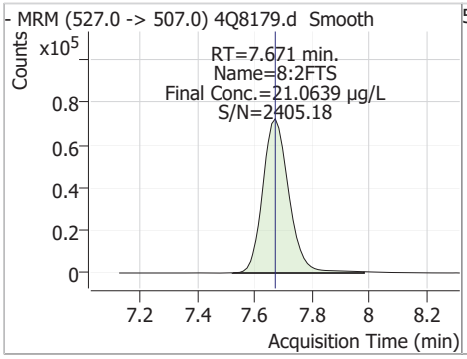
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.83	7.67	0.00	27768				

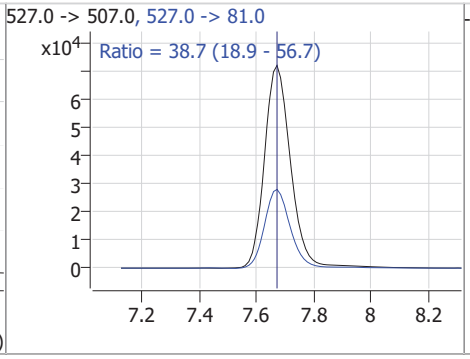


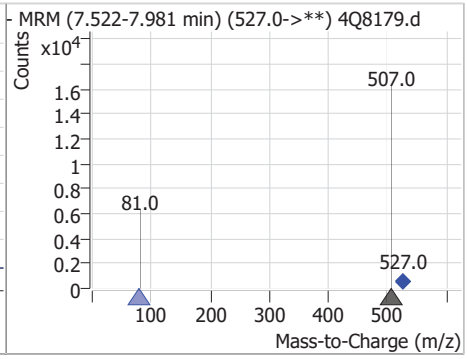




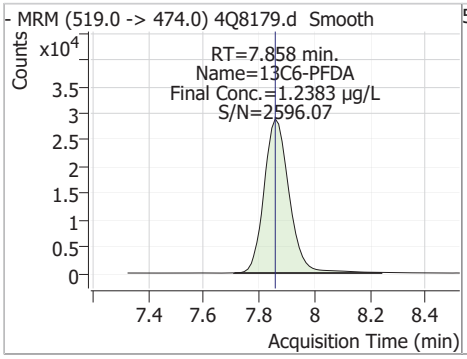
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	21.06	7.67	0.00	457763	527.0 -> 81.0	38.7	18.9	56.7

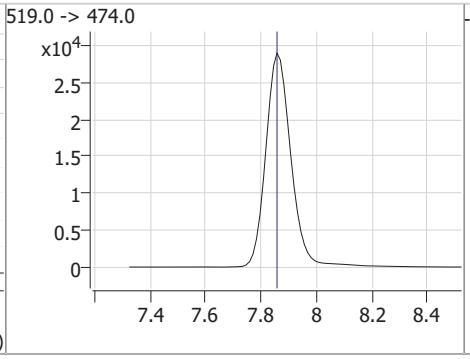


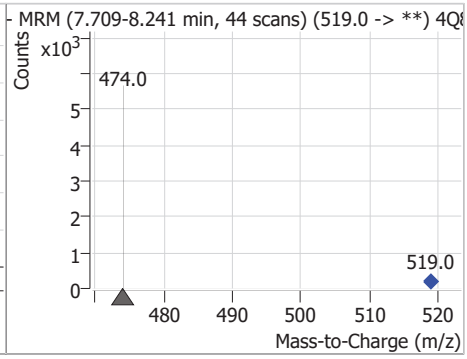




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.24	7.86	0.00	182283				

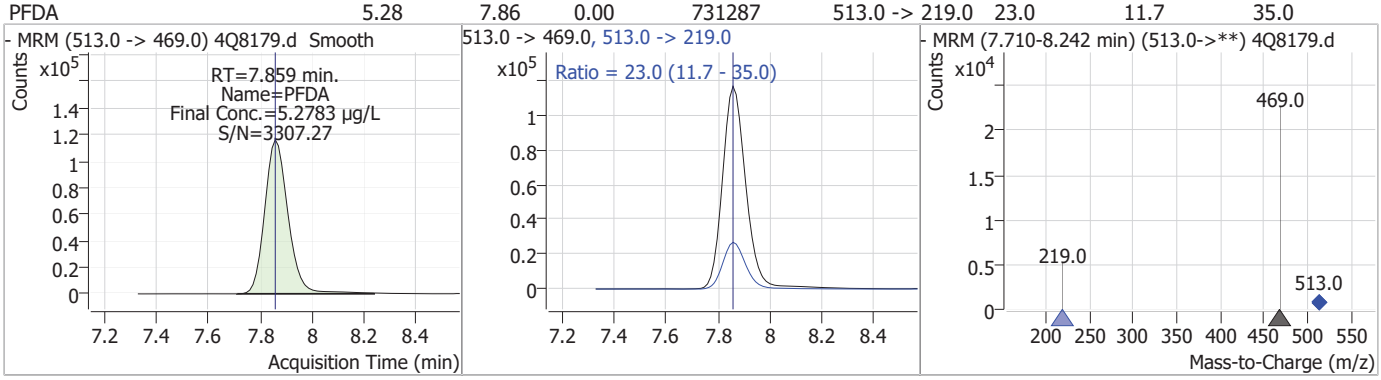




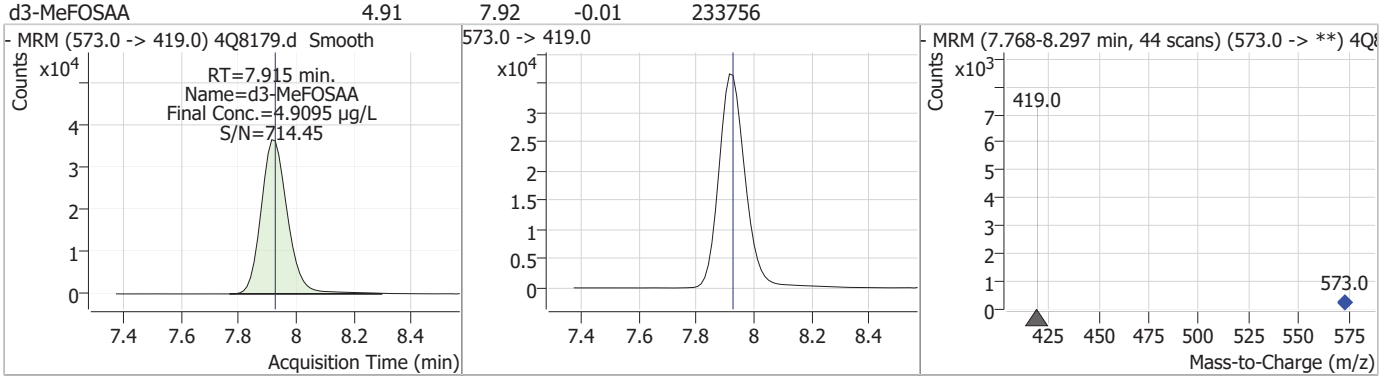


Perfluorinated Compounds by LC/MS/MS

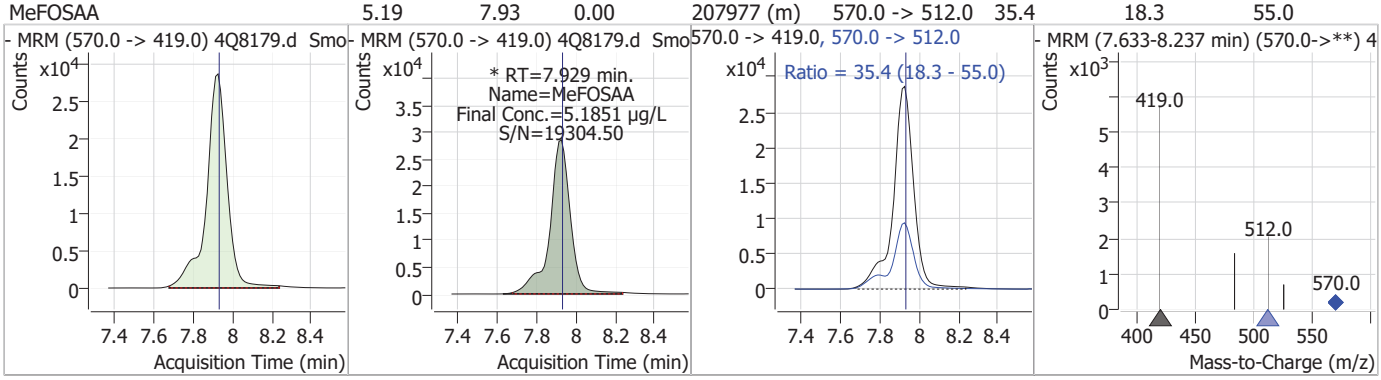
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	5.28	7.86	0.00	731287	513.0 -> 219.0	23.0	11.7	35.0



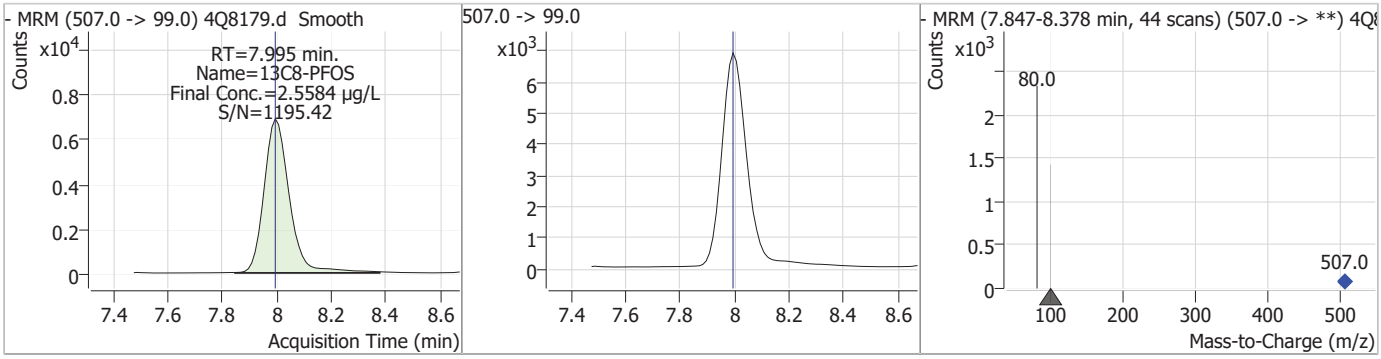
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.91	7.92	-0.01	233756				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	5.19	7.93	0.00	207977 (m)	570.0 -> 512.0	35.4	18.3	55.0

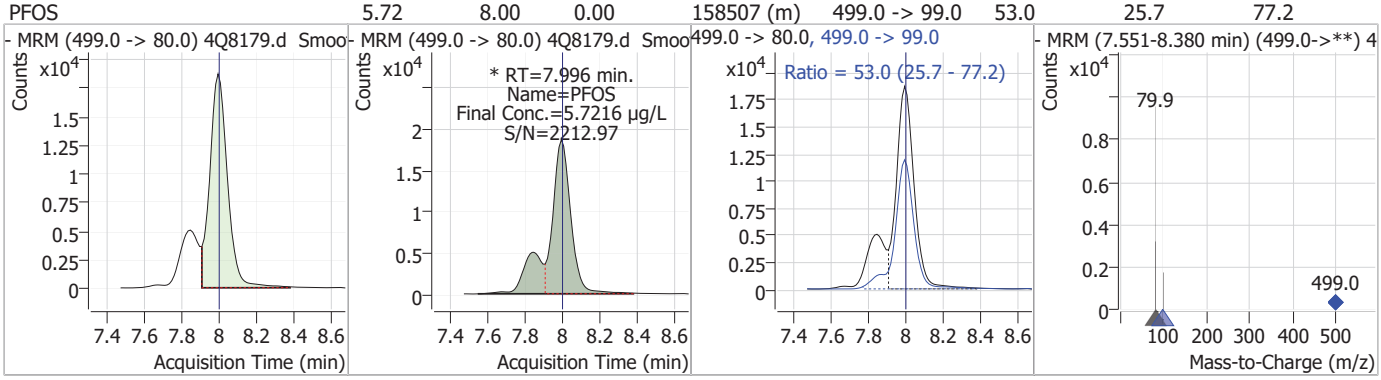


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.56	7.99	0.00	44536				

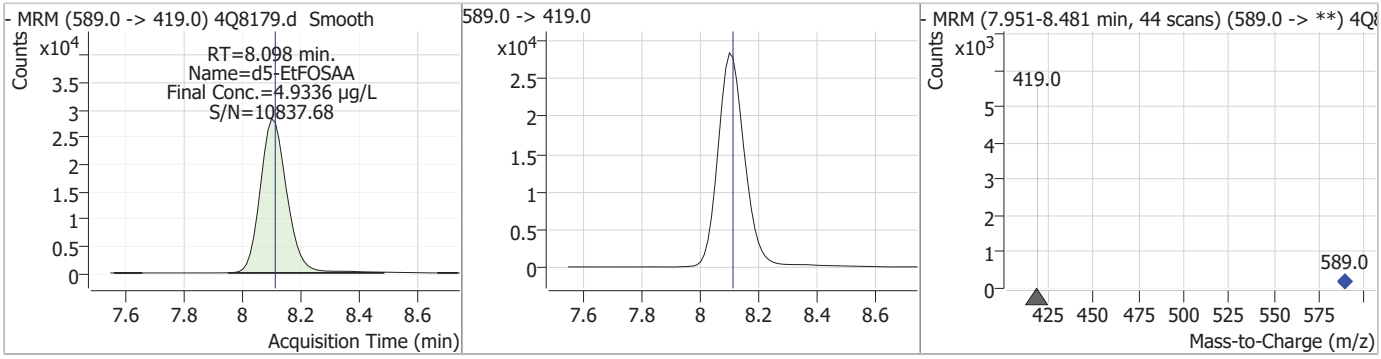


Perfluorinated Compounds by LC/MS/MS

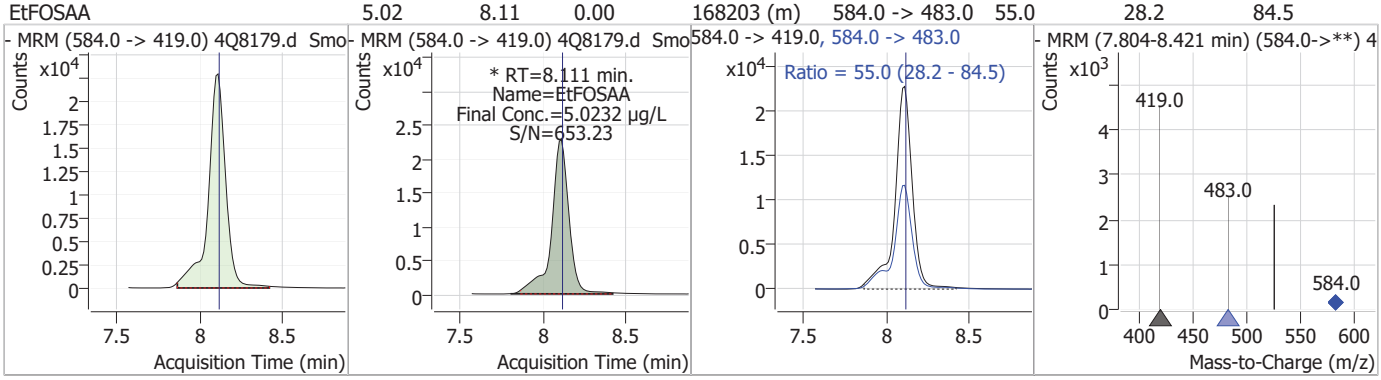
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	5.72	8.00	0.00	158507 (m)	499.0 -> 99.0	53.0	25.7	77.2



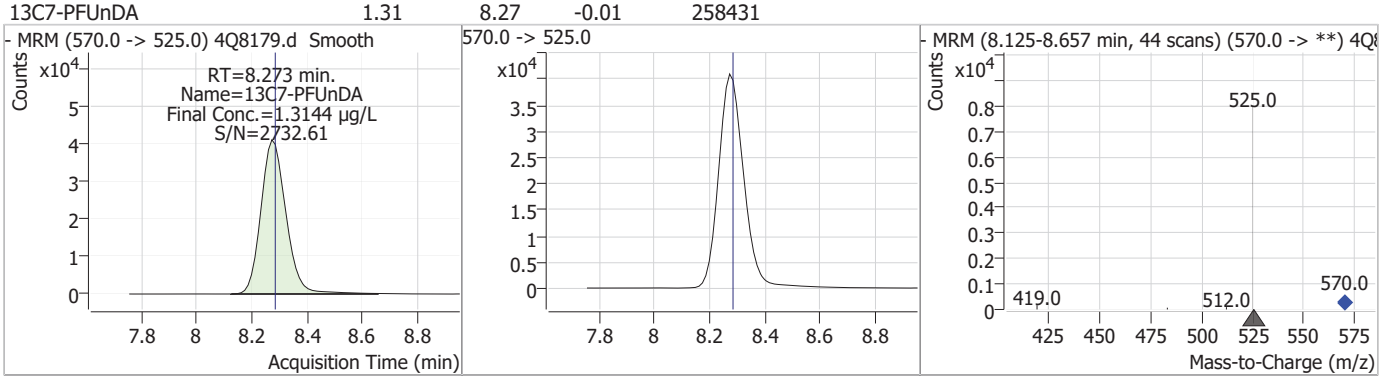
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.93	8.10	-0.01	180348				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	5.02	8.11	0.00	168203 (m)	584.0 -> 483.0	55.0	28.2	84.5

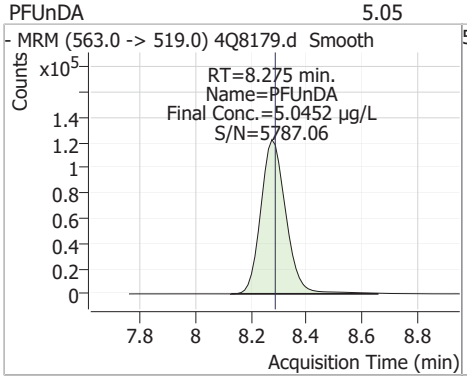


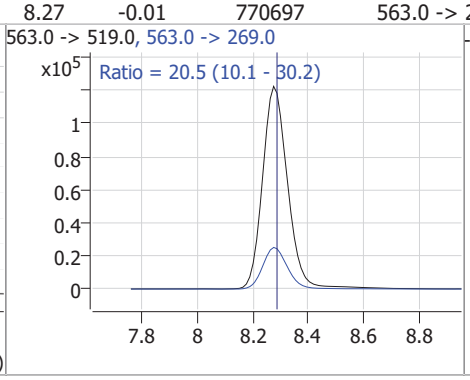
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.31	8.27	-0.01	258431				

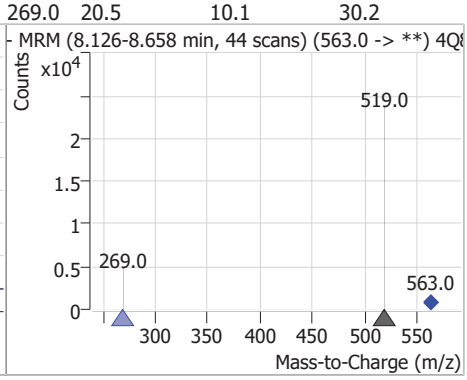


Perfluorinated Compounds by LC/MS/MS

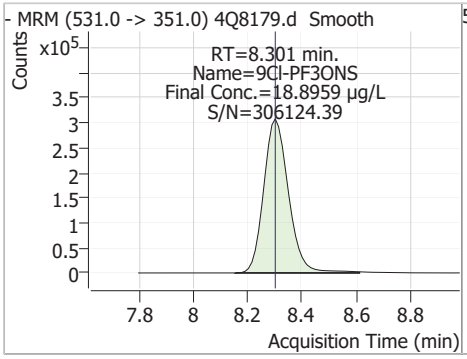
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	5.05	8.27	-0.01	770697	563.0 -> 269.0	20.5	10.1	30.2

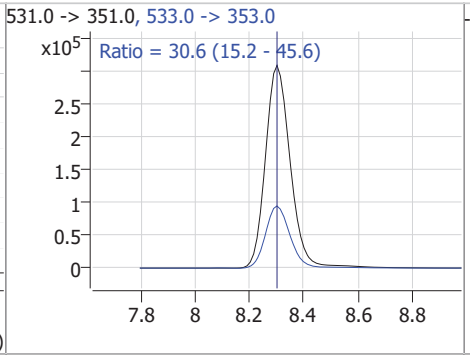


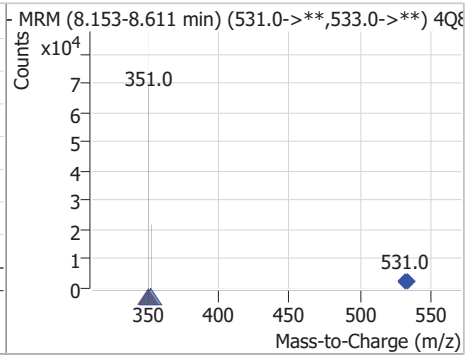




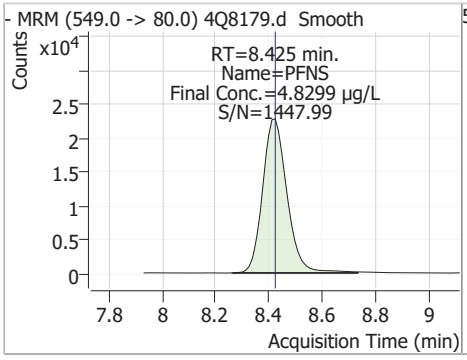
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	18.90	8.30	0.00	1956895	533.0 -> 353.0	30.6	15.2	45.6

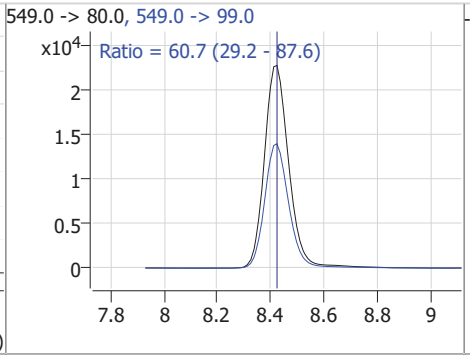


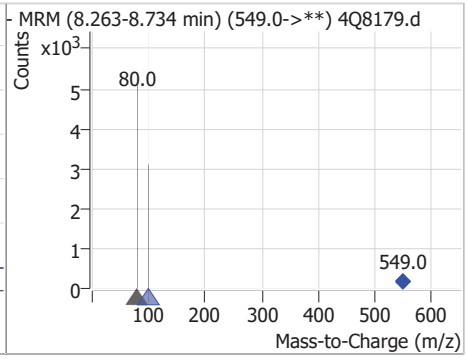




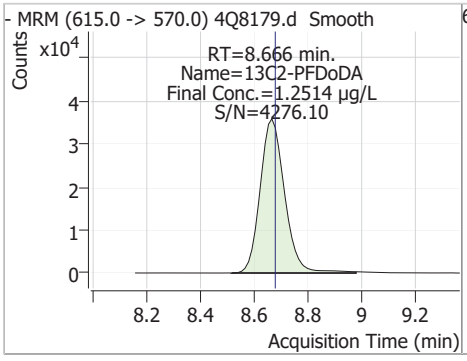
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	4.83	8.42	0.00	144649	549.0 -> 99.0	60.7	29.2	87.6

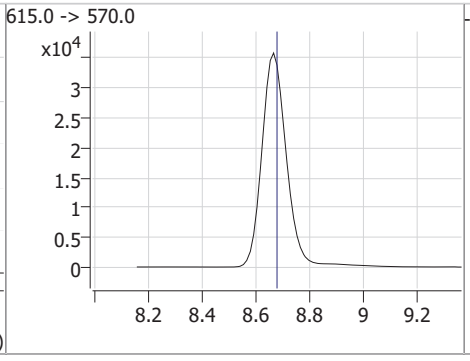


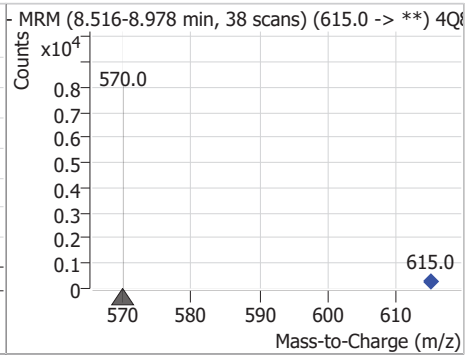




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.25	8.67	-0.01	225364				

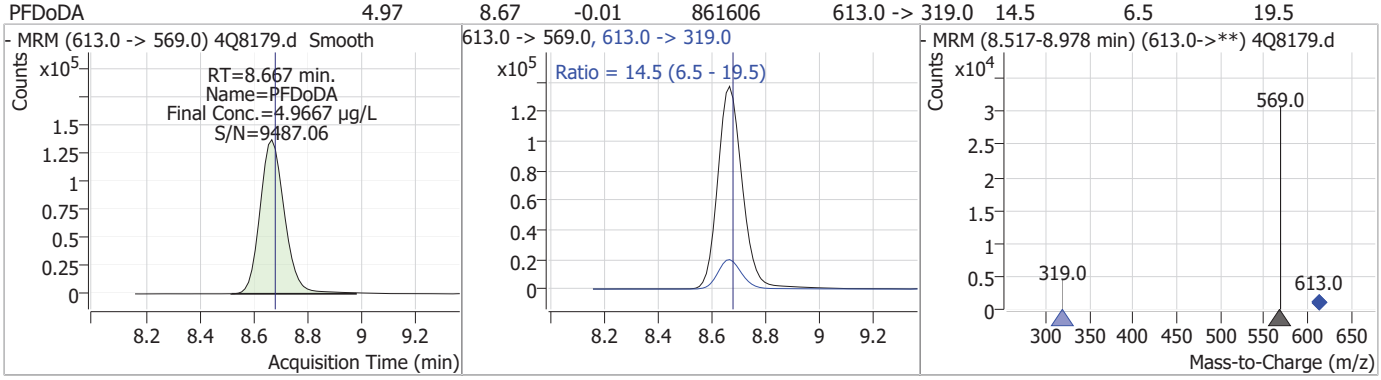




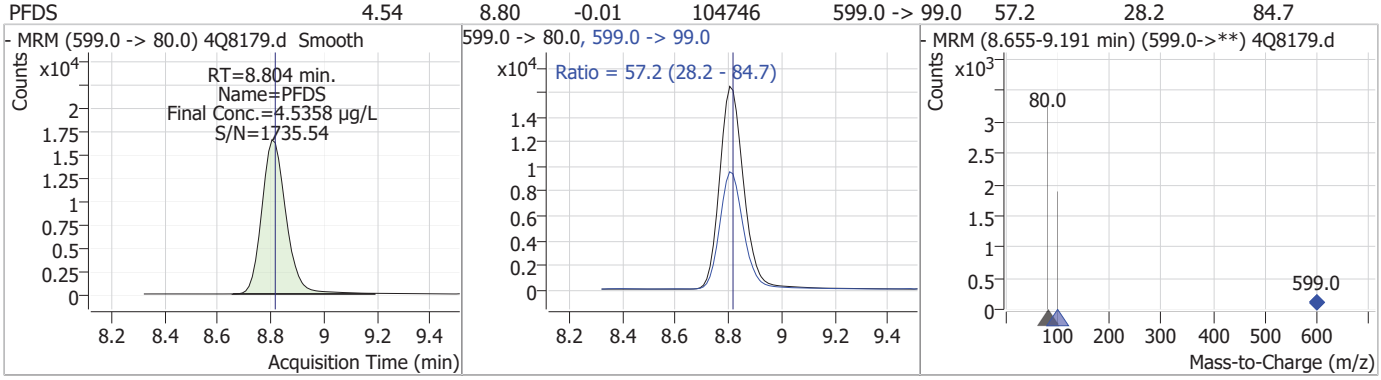


Perfluorinated Compounds by LC/MS/MS

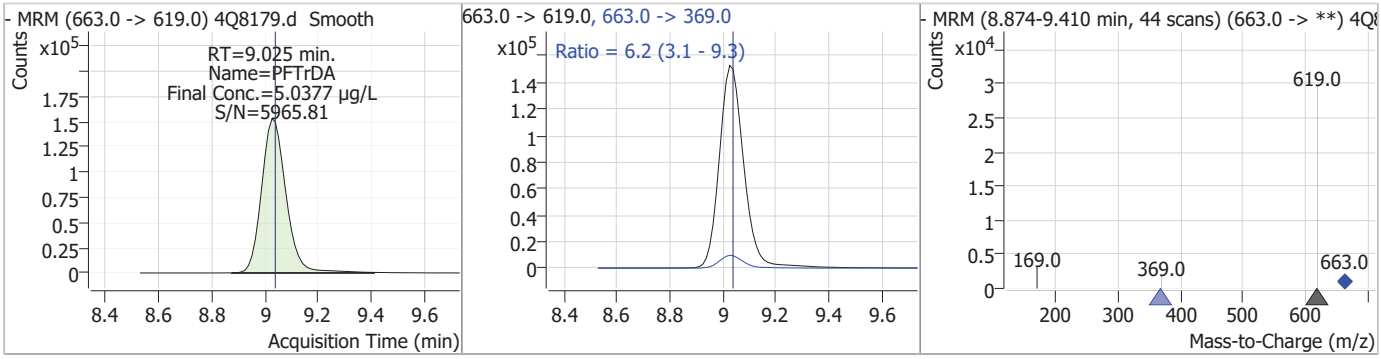
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	4.97	8.67	-0.01	861606	613.0 -> 319.0	14.5	6.5	19.5



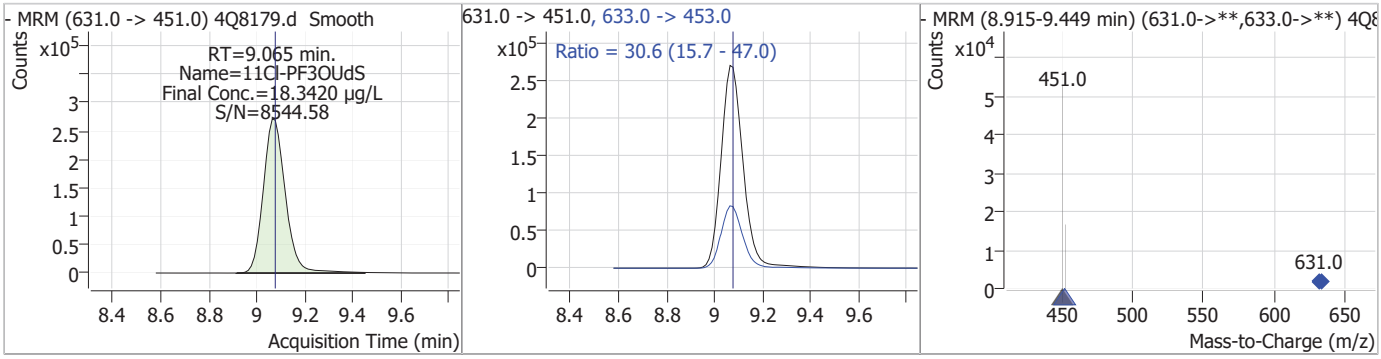
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	4.54	8.80	-0.01	104746	599.0 -> 99.0	57.2	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	5.04	9.03	-0.01	974540	663.0 -> 369.0	6.2	3.1	9.3

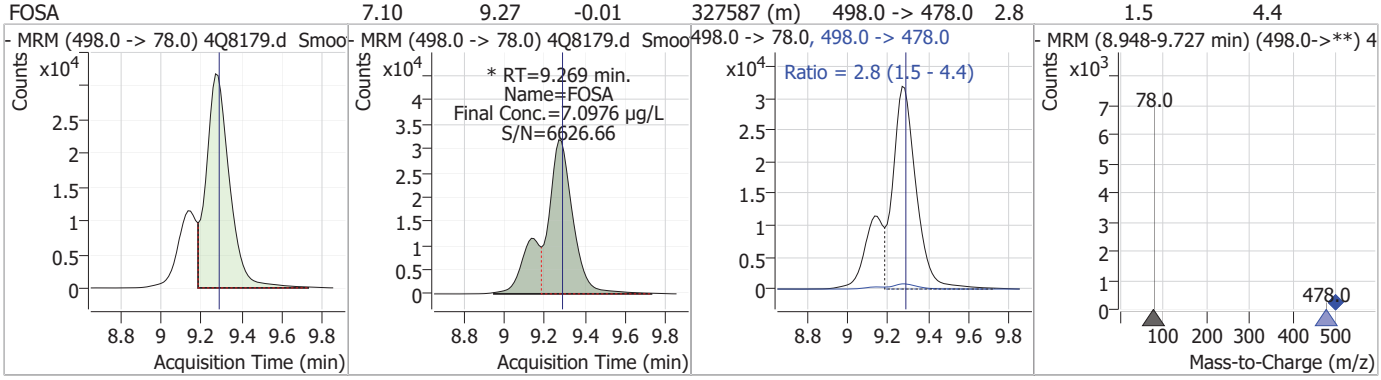


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	18.34	9.06	-0.01	1726839	633.0 -> 453.0	30.6	15.7	47.0

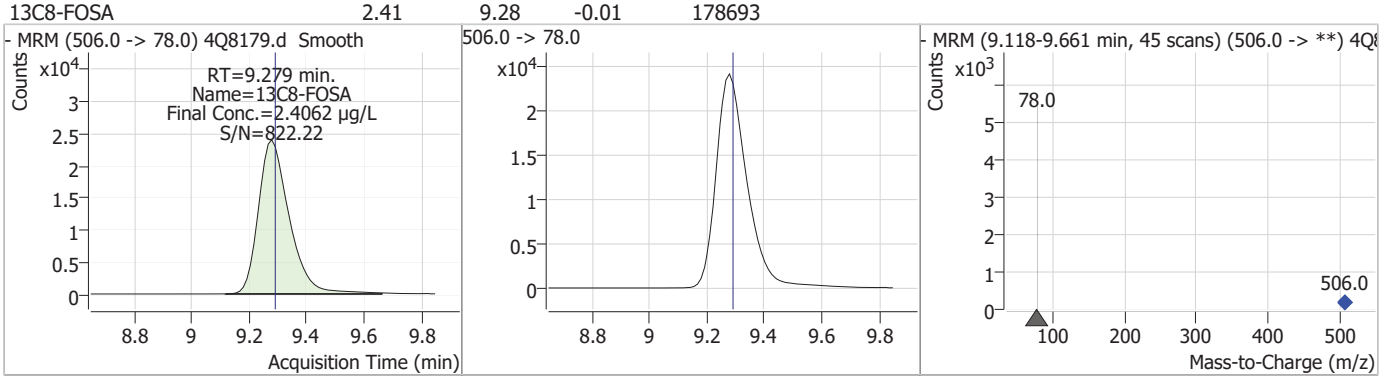


Perfluorinated Compounds by LC/MS/MS

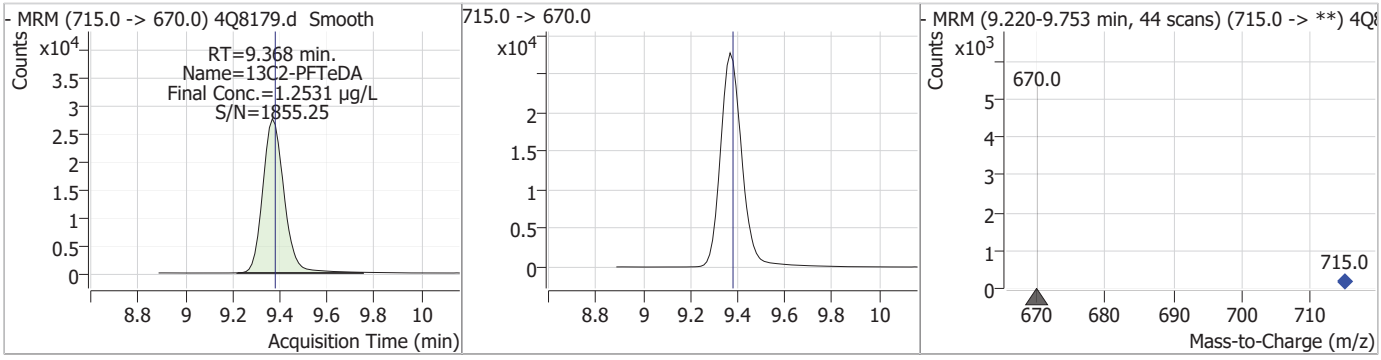
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	7.10	9.27	-0.01	327587 (m)	498.0 -> 478.0	2.8	1.5	4.4



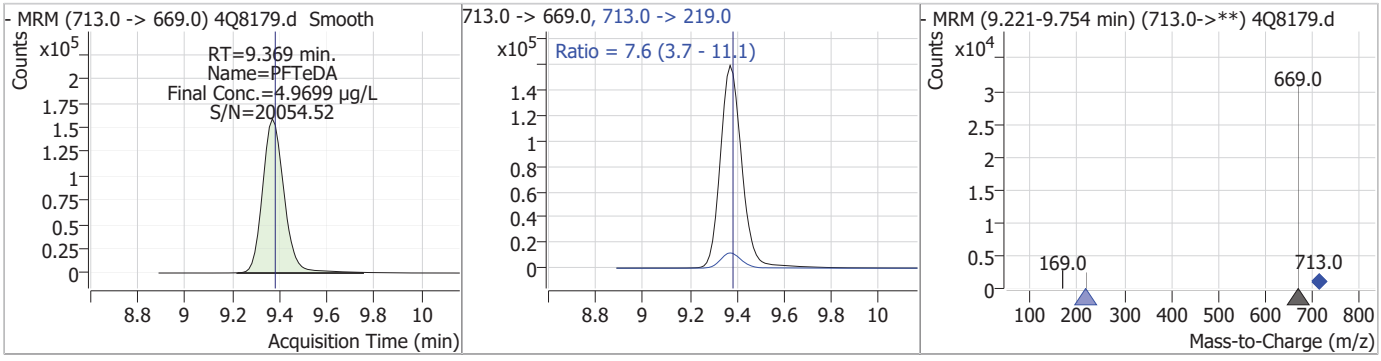
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.41	9.28	-0.01	178693				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.25	9.37	-0.01	173490				

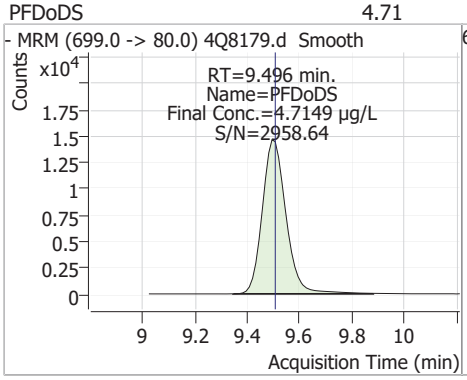


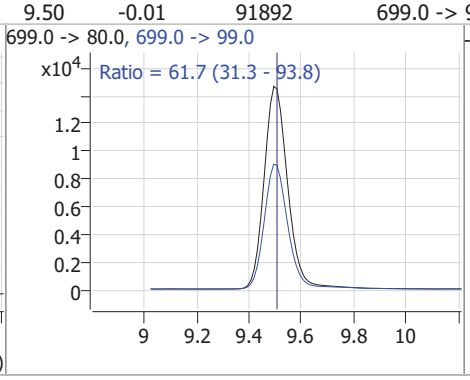
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	4.97	9.37	-0.01	1003910	713.0 -> 219.0	7.6	3.7	11.1

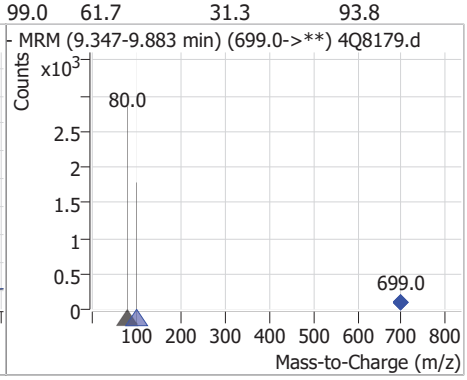


Perfluorinated Compounds by LC/MS/MS

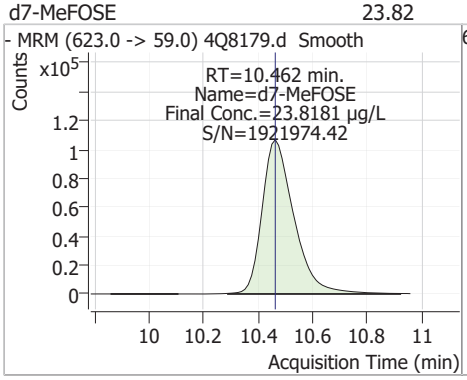
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	4.71	9.50	-0.01	91892	699.0 -> 99.0	61.7	31.3	93.8

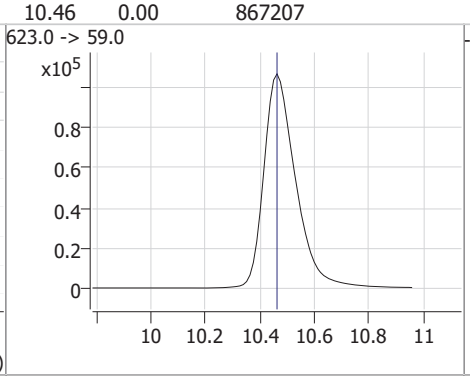


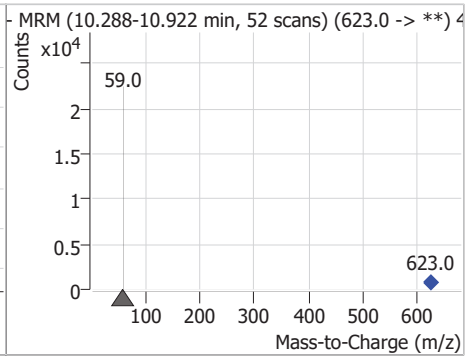




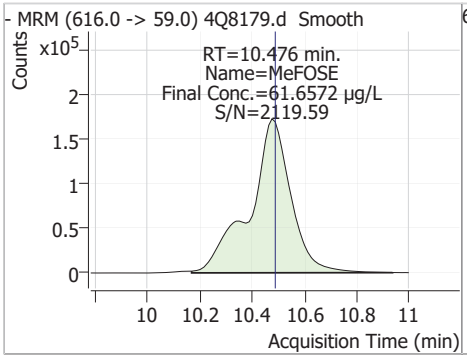
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.82	10.46	0.00	867207				

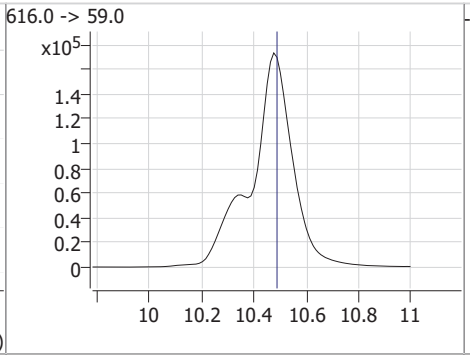


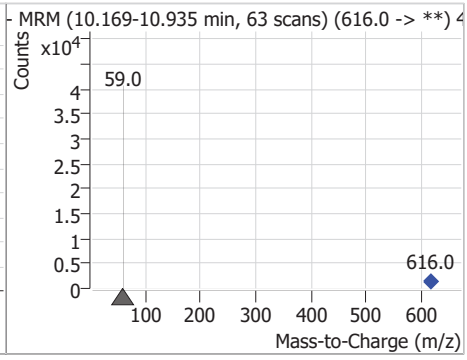




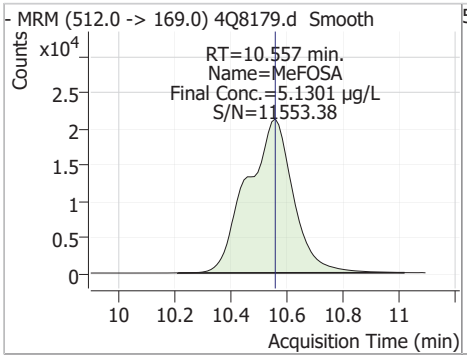
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	61.66	10.48	-0.01	1893076				

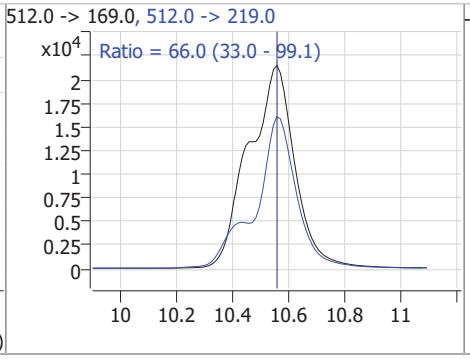


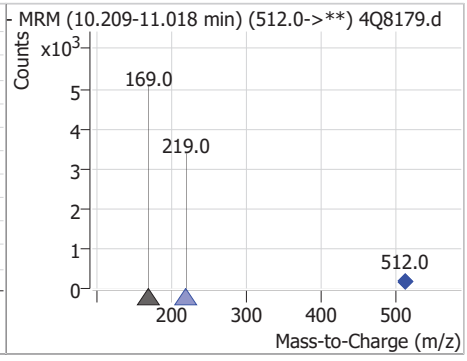




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	5.13	10.56	0.00	246165	512.0 -> 219.0	66.0	33.0	99.1

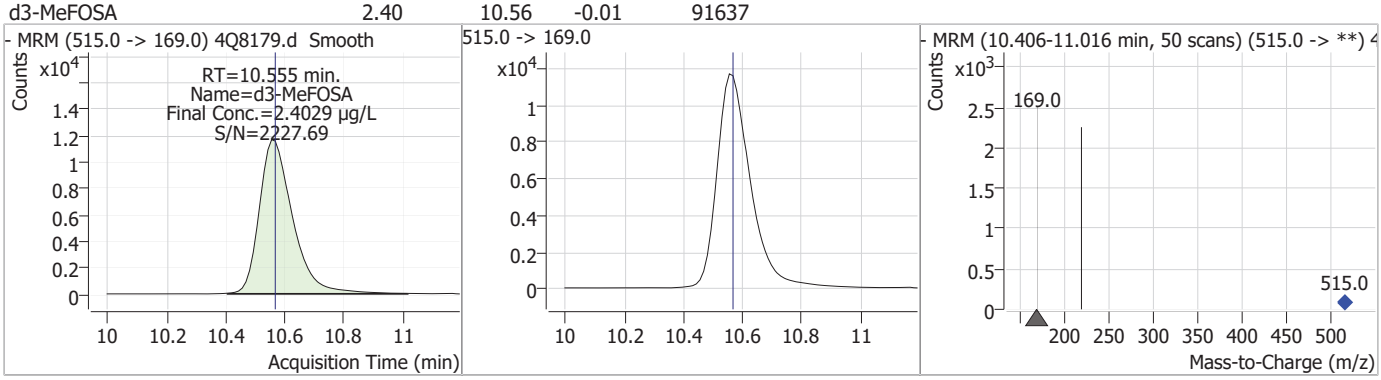




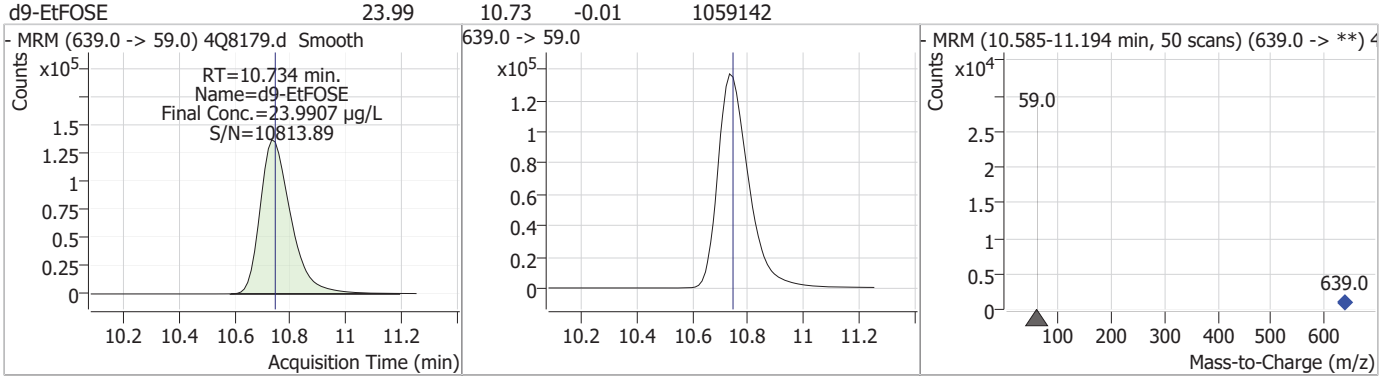


Perfluorinated Compounds by LC/MS/MS

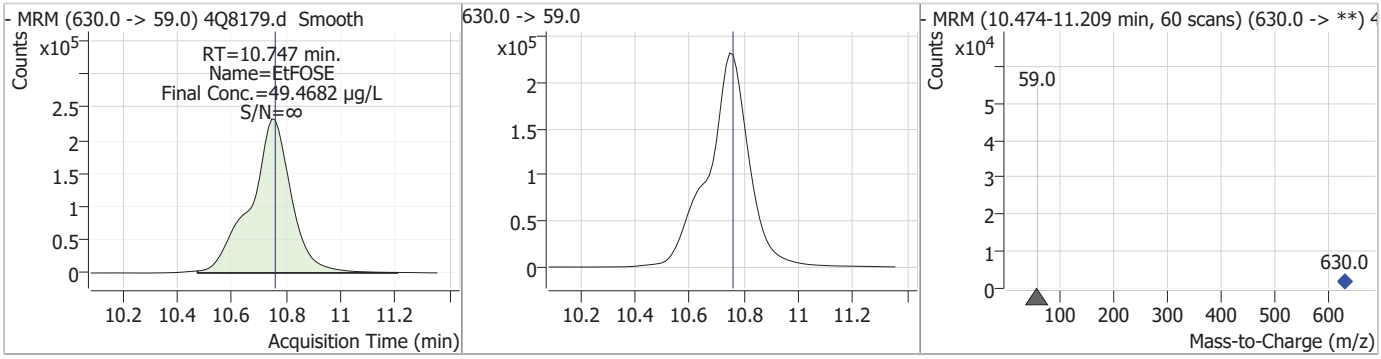
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.40	10.56	-0.01	91637				



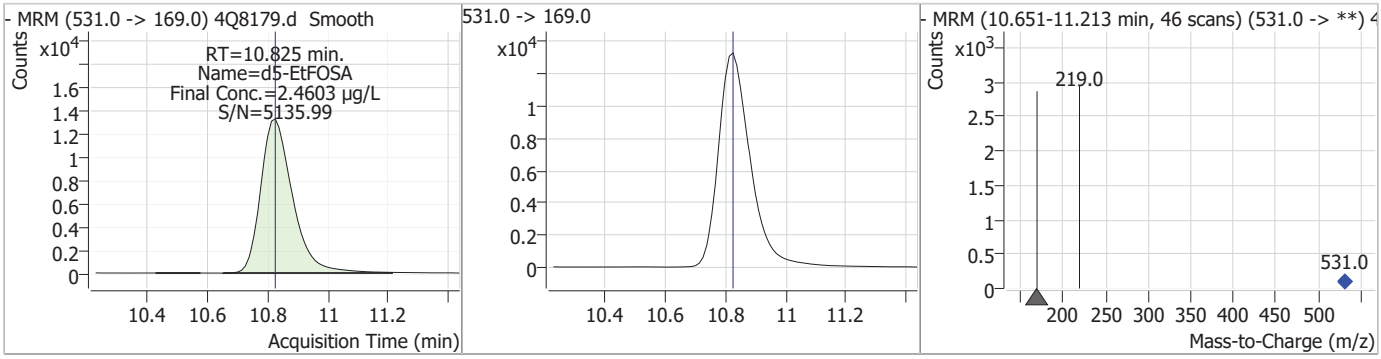
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.99	10.73	-0.01	1059142				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	49.47	10.75	-0.01	2437110				

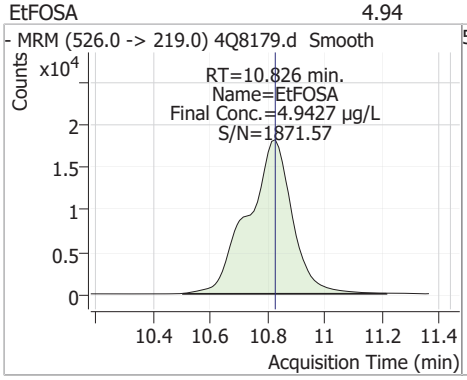


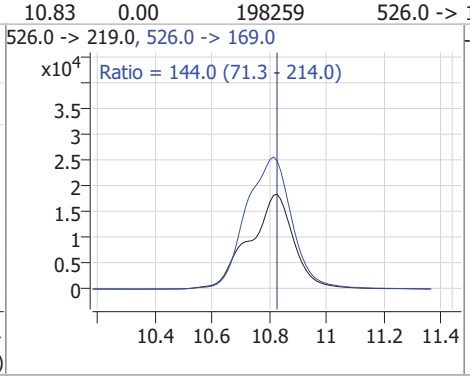
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.46	10.82	0.00	96688				

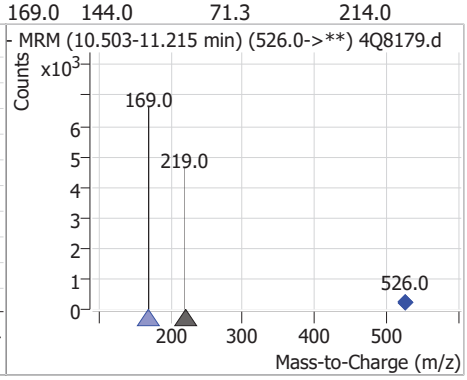


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	4.94	10.83	0.00	198259	526.0 -> 169.0	144.0	71.3	214.0







7.5.13

7

Manual Integration Approval Summary

Sample Number: T4Q139-RT
Lab FileID: 4Q8179.D
Injection Time: 05/01/25 11:55
Method: EPA 1633
Analyst approved: 05/02/25 04:45 Josephus Gimenez
Supervisor approved: 05/02/25 11:54 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.93	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Split peak
PFOSA	754-91-6		9.27	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

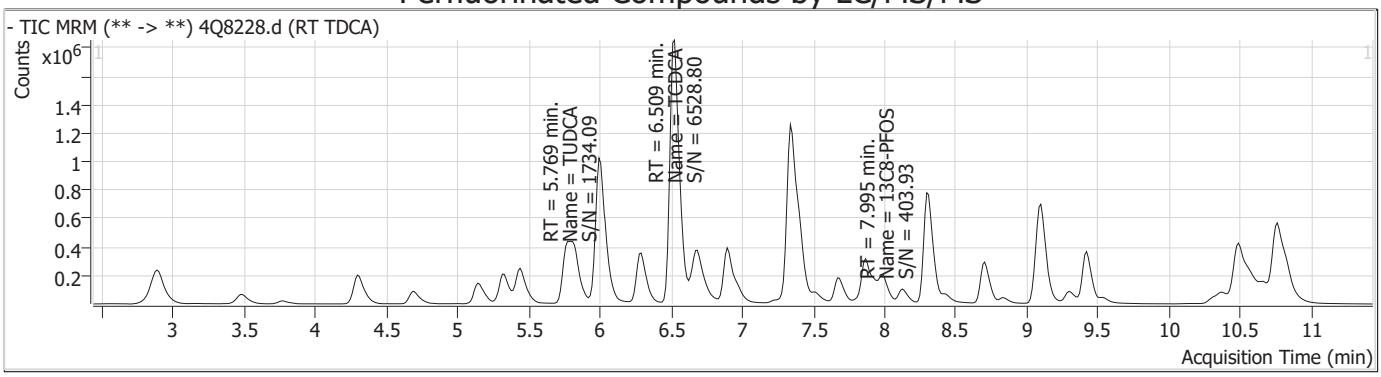
Data File : 4Q8228.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 1:19:28 PM
Sample Name : RT TDCA
Vial : P1-B1
DA Method File : TDCA.quantmethod.xml
Batch Name : T4Q140 TDCA.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
Internal Standards							
M8-PFOS	7.995	507.1 -> 79.9	67495	2.50	µg/L		0.000
13C4-PFOS	7.995	502.8 -> 79.9	70599	2.50	µg/L		0.000
System Monitoring Compounds							
13C8-PFOS	7.995	507.1 -> 79.9	67495	4.63	µg/L		0.000
Spiked Amount: 2.50	Range: 50.0 - 150.0%			Recovery = 185.2%			
Target Compounds							QValue
PFOS	7.996	499.0 -> 80.0	156023	4.46	µg/L	#m	81
		499.0 -> 99.0	84425				
TCDCA	6.509	498.9 -> 79.9	230334	6.59	ng/ml	m	100
TDCA	6.657	498.9 -> 79.9	289168	8.27	ng/ml		100
TUDCA	5.769	498.9 -> 79.9	314887	9.01	ng/ml		100

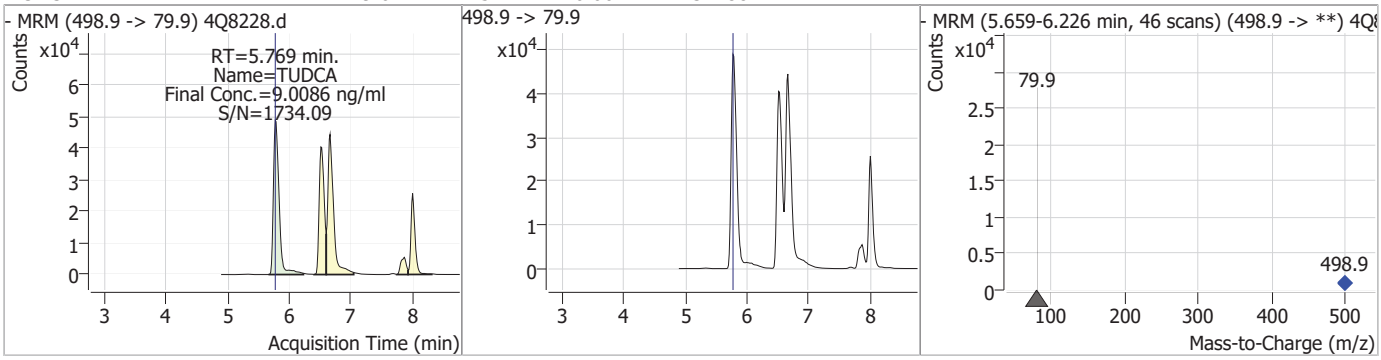
 # = Qualifier out of range, m = manually integrated, + = Area summed

7.5.14
7

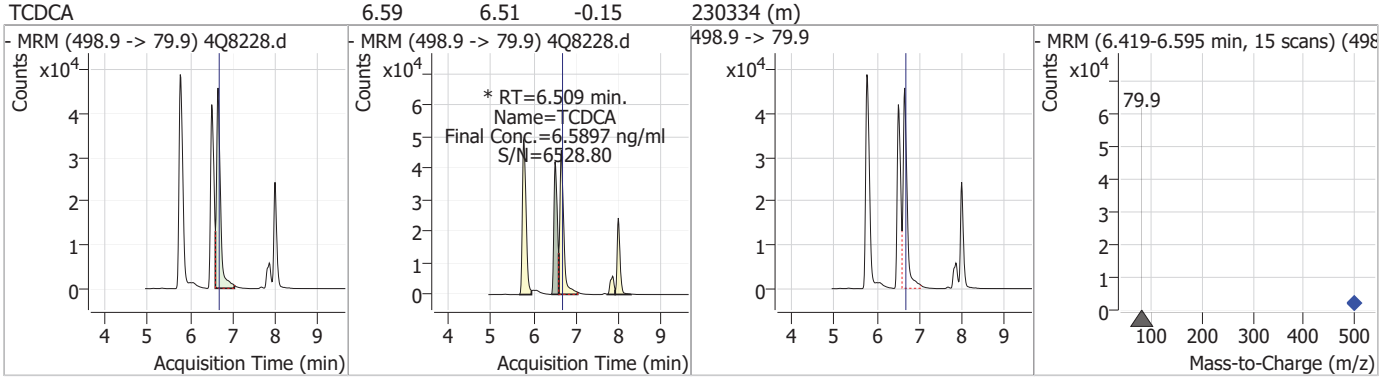
Perfluorinated Compounds by LC/MS/MS



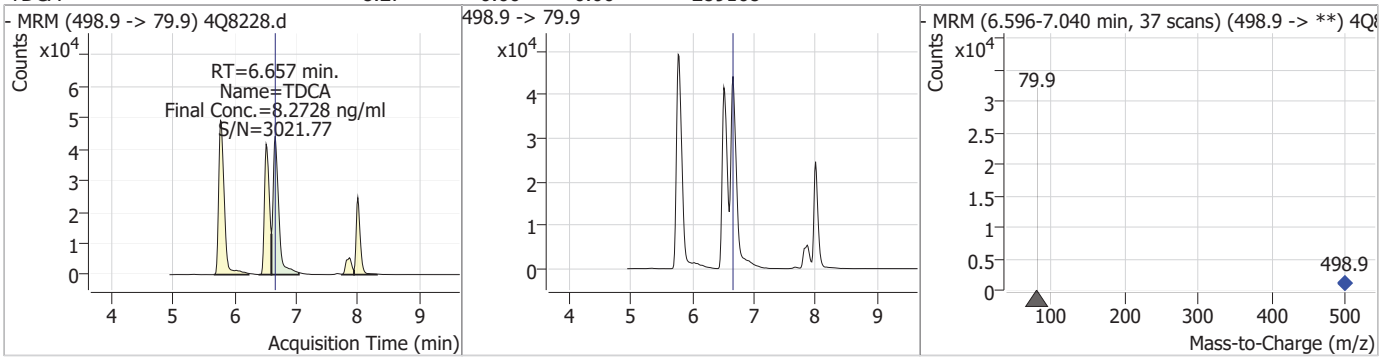
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TUDCA	9.01	5.77	0.00	314887				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TCDCA	6.59	6.51	-0.15	230334 (m)				

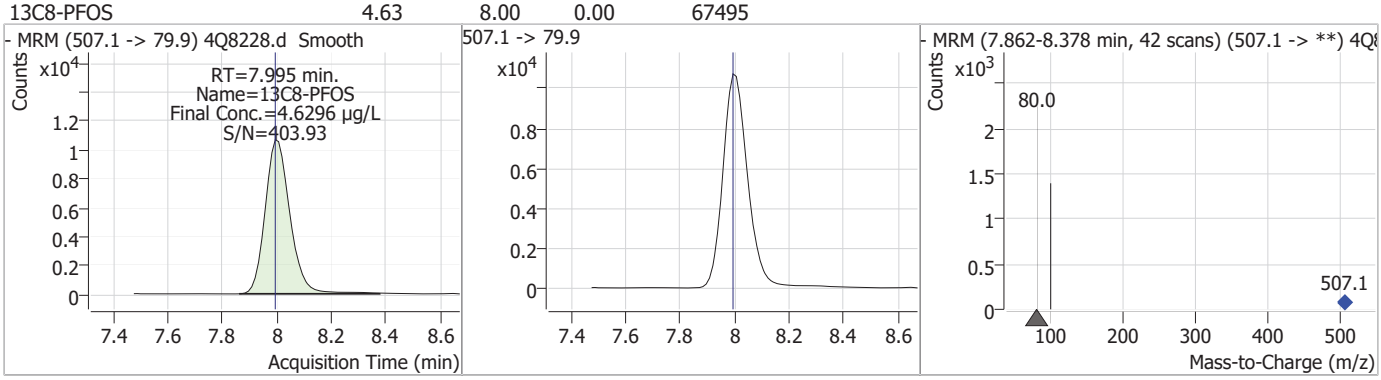


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
TDCA	8.27	6.66	0.00	289168				

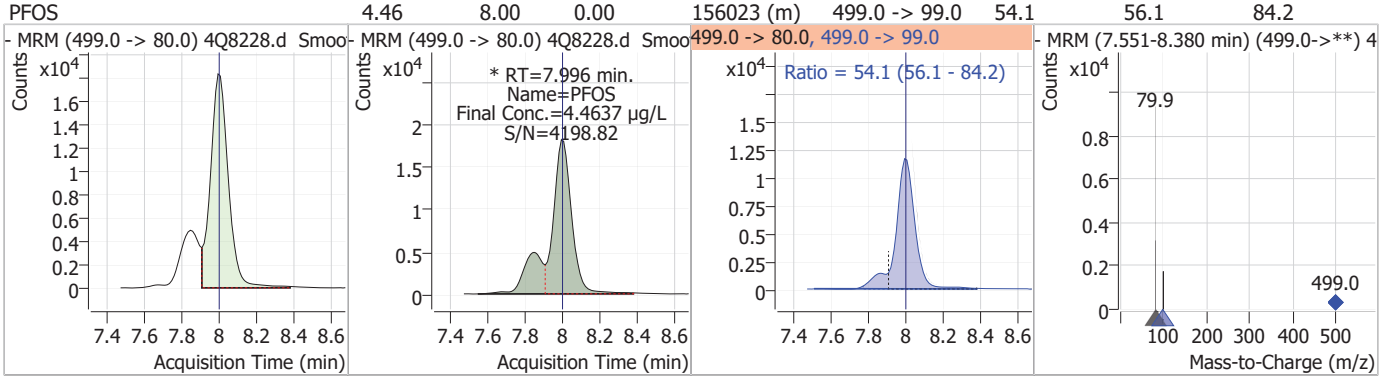


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	4.63	8.00	0.00	67495				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.46	8.00	0.00	156023 (m)	499.0 -> 99.0	54.1	56.1	84.2



7.5.14

7

Manual Integration Approval Summary

Sample Number: T4Q140-RT
Lab FileID: 4Q8228.D
Injection Time: 05/02/25 13:19
Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
TCDCA	516-35-8		6.51	Poorly defined baseline
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8229.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 1:33:03 PM
Sample Name : RT
Vial : P1-A6
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.883	217.0 -> 172.0	793493	10.00 µg/L	0.000
M5-PFPeA	4.307	268.0 -> 223.0	434860	5.00 µg/L	-0.012
M5-PFHxA	5.439	318.0 -> 273.0	297027	2.50 µg/L	-0.025
M4-PFHpA	6.291	367.0 -> 322.0	330704	2.50 µg/L	-0.012
M8-PFOA	6.897	421.0 -> 376.0	521159	2.50 µg/L	-0.025
M9-PFNA	7.416	472.0 -> 427.0	214826	1.25 µg/L	-0.012
M6-PFDA	7.870	519.0 -> 474.0	213375	1.25 µg/L	-0.012
M7-PFUnDA	8.298	570.0 -> 525.0	249338	1.25 µg/L	-0.012
M2-PFDoDA	8.704	615.0 -> 570.0	255490	1.25 µg/L	0.000
M2-PFTeDA	9.418	715.0 -> 670.0	212836	1.25 µg/L	0.000
M8-FOSA	9.316	506.0 -> 78.0	197768	2.50 µg/L	0.000
M3-PFBS	5.331	302.0 -> 99.0	26855	2.50 µg/L	-0.037
		302.0 -> 80.0	64182		
M3-PFHxS	6.986	402.0 -> 99.0	36194	2.50 µg/L	-0.014
M8-PFOS	8.007	507.0 -> 99.0	40922	2.50 µg/L	0.000
M2-4:2FTS	5.141	329.0 -> 81.0	13079	5.00 µg/L	-0.025
M2-6:2FTS	6.696	429.0 -> 81.0	27188	5.00 µg/L	-0.012
M2-8:2FTS	7.683	529.0 -> 81.0	33376	5.00 µg/L	0.000
M3-MeFOSAA	7.940	573.0 -> 419.0	228350	5.00 µg/L	0.000
M3-HFPO-DA	5.779	287.0 -> 169.0	414987	10.00 µg/L	-0.012
M5-EtFOSAA	8.123	589.0 -> 419.0	180748	5.00 µg/L	0.000
M7-MeFOSE	10.487	623.0 -> 59.0	1082179	25.00 µg/L	0.000
M9-EtFOSE	10.759	639.0 -> 59.0	1307537	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	98146	2.50 µg/L	0.000
M3-MeFOSA	10.580	515.0 -> 169.0	86698	2.50 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	69377	2.50 µg/L	-0.012
13C3-PFBA	2.886	216.0 -> 172.0	323832	5.00 µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	42418	2.50 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	487053	2.50 µg/L	-0.025
13C2-PFDA	7.871	515.0 -> 470.0	170895	1.25 µg/L	-0.012
13C5-PFNA	7.416	468.0 -> 423.0	195131	1.25 µg/L	-0.012
13C2-PFHxA	5.440	315.0 -> 270.0	263260	2.50 µg/L	-0.025
System Monitoring Compounds					
13C2-4:2FTS	5.141	329.0 -> 81.0	13079	5.55 µg/L	-0.025
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 110.9%	
13C2-6:2FTS	6.696	429.0 -> 81.0	27188	5.33 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.5%	
13C2-8:2FTS	7.683	529.0 -> 81.0	33376	5.47 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 109.3%	
13C2-PFDoDA	8.704	615.0 -> 570.0	255490	1.34 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 107.1%	
13C2-PFTeDA	9.418	715.0 -> 670.0	212836	1.32 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.6%	
13C3-PFBS	5.331	302.0 -> 99.0	26855	2.58 µg/L	-0.037
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.0%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	36194	2.42	µg/L		-0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.6%			
13C4-PFBA	2.883	217.0 -> 172.0	793493	10.38	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 103.8%			
13C4-PFHpA	6.291	367.0 -> 322.0	330704	2.64	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.6%			
13C5-PFHxA	5.439	318.0 -> 273.0	297027	2.57	µg/L		-0.025
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.7%			
13C5-PFPeA	4.307	268.0 -> 223.0	434860	5.15	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.0%			
13C6-PFDA	7.870	519.0 -> 474.0	213375	1.29	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.3%			
13C7-PFUnDA	8.298	570.0 -> 525.0	249338	1.23	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.6%			
13C8-FOSA	9.316	506.0 -> 78.0	197768	2.65	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.1%			
13C8-PFOA	6.897	421.0 -> 376.0	521159	2.60	µg/L		-0.025
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.9%			
13C8-PFOS	8.007	507.0 -> 99.0	40922	2.48	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.3%			
13C9-PFNA	7.416	472.0 -> 427.0	214826	1.27	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.5%			
d3-MeFOSAA	7.940	573.0 -> 419.0	228350	4.90	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.9%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	414987	10.07	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.7%			
d3-MeFOSA	10.580	515.0 -> 169.0	86698	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.2%			
d5-EtFOSAA	8.123	589.0 -> 419.0	180748	4.85	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.1%			
d7-MeFOSE	10.487	623.0 -> 59.0	1082179	27.39	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 109.6%			
d9-EtFOSE	10.759	639.0 -> 59.0	1307537	27.10	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 108.4%			
d5-EtFOSA	10.837	531.0 -> 169.0	98146	2.55	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.1%			
Target Compounds							QValue
4:2FTS	5.141	327.0 -> 307.0	432021	19.32	µg/L		100
		327.0 -> 81.0	192306				
6:2FTS	6.684	427.0 -> 407.0	511874	19.48	µg/L		99
		427.0 -> 81.0	237876				
8:2FTS	7.684	527.0 -> 507.0	461400	18.97	µg/L		99
		527.0 -> 81.0	178393				
EtFOSAA	8.136	584.0 -> 419.0	163524	5.01	µg/L	m	97
		584.0 -> 483.0	84587				
FOSA	9.318	498.0 -> 78.0	345746	4.84	µg/L	m	100
		498.0 -> 478.0	8876				
MeFOSAA	7.941	570.0 -> 419.0	191837	5.04	µg/L	m	97
		570.0 -> 512.0	64839				
PFBA	2.889	213.0 -> 169.0	527426	20.36	µg/L		100
PFBS	5.332	299.0 -> 80.0	130781	4.35	µg/L		100
		299.0 -> 99.0	53384				
PFDA	7.871	513.0 -> 469.0	743876	4.89	µg/L		100
		513.0 -> 219.0	170062				
PFDoDA	8.704	613.0 -> 569.0	960050	4.78	µg/L		98
		613.0 -> 319.0	133933				

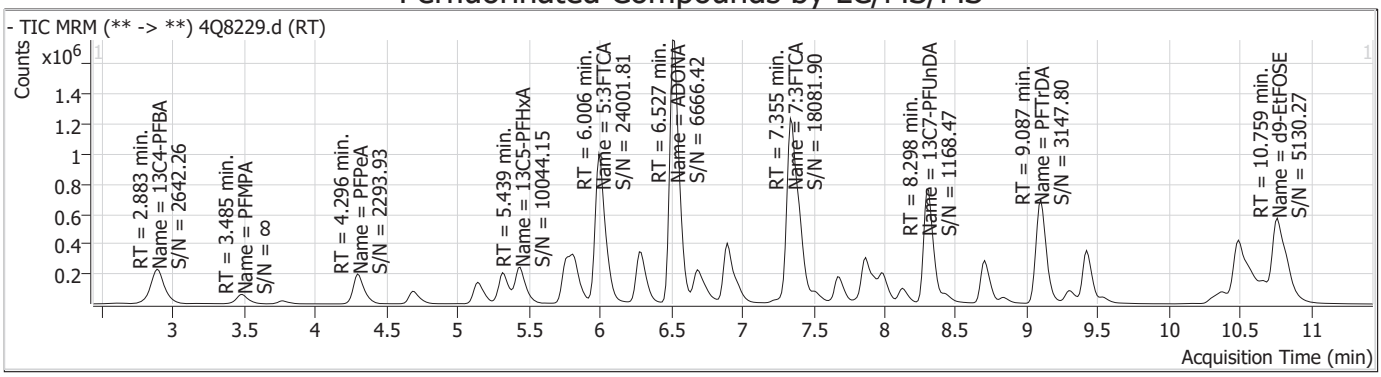
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.841	599.0 -> 80.0	109060	4.93	µg/L		98
		599.0 -> 99.0	60256				
PFHpA	6.292	363.0 -> 319.0	940850	4.96	µg/L		100
		363.0 -> 169.0	189915				
PFHpS	7.529	449.0 -> 80.0	155128	4.97	µg/L		98
		449.0 -> 99.0	88211				
PFHxA	5.442	313.0 -> 269.0	612943	5.09	µg/L		100
		313.0 -> 119.0	20100				
PFHxS	6.987	399.0 -> 80.0	149833	4.74	µg/L	m	100
		399.0 -> 99.0	78674				
PFNA	7.416	463.0 -> 419.0	617041	4.98	µg/L	m	100
		463.0 -> 219.0	218641				
PFNS	8.437	549.0 -> 80.0	138403	4.90	µg/L		94
		549.0 -> 99.0	84049				
PFOA	6.898	413.0 -> 369.0	813254	4.76	µg/L	m	98
		413.0 -> 169.0	227575				
PFOS	7.996	499.0 -> 80.0	152426	4.66	µg/L	m	95
		499.0 -> 99.0	79367				
PFPeA	4.296	263.0 -> 219.0	657064	9.70	µg/L		100
PFPeS	6.306	349.0 -> 80.0	154885	4.64	µg/L		99
		349.0 -> 99.0	76704				
PFTeDA	9.419	713.0 -> 669.0	1200939	5.19	µg/L		99
		713.0 -> 219.0	83666				
PFTrDA	9.087	663.0 -> 619.0	1116750	5.05	µg/L		99
		663.0 -> 369.0	71665				
PFUnDA	8.299	563.0 -> 519.0	791096	5.29	µg/L		100
		563.0 -> 269.0	150892				
11Cl-PF3OUdS	9.114	631.0 -> 451.0	1712883	19.66	µg/L		100
		633.0 -> 453.0	529420				
9Cl-PF3ONS	8.313	531.0 -> 351.0	1948379	19.79	µg/L		99
		533.0 -> 353.0	606921				
ADONA	6.527	377.0 -> 251.0	6363393	18.98	µg/L		99
		377.0 -> 85.0	2067924				
HFPO-DA	5.780	285.0 -> 169.0	834702	19.41	µg/L		100
		285.0 -> 185.0	97768				
3:3FTCA	3.769	241.0 -> 177.0	101878	24.68	µg/L		99
		241.0 -> 117.0	9394				
5:3FTCA	6.006	341.0 -> 237.0	2950310	126.80	µg/L		99
		341.0 -> 217.0	2158387				
7:3FTCA	7.355	441.0 -> 337.0	4394137	131.75	µg/L		100
		441.0 -> 317.0	2040188				
EtFOSA	10.838	526.0 -> 219.0	192286	4.85	µg/L		98
		526.0 -> 169.0	275482				
EtFOSE	10.772	630.0 -> 59.0	2809366	48.19	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	235092	5.12	µg/L		98
		512.0 -> 219.0	159206				
MeFOSE	10.500	616.0 -> 59.0	2228700	48.34	µg/L	m	100
PFDoDS	9.546	699.0 -> 80.0	89886	4.98	µg/L		96
		699.0 -> 99.0	57019				
NFDHA	5.333	295.0 -> 201.0	126315	9.39	µg/L		91
		201.0 -> 85.0	659019				
		295.0 -> 85.0	33196				
PFMBA	4.698	279.0 -> 85.0	458402	9.98	µg/L		100
PFMPA	3.485	229.0 -> 85.0	379643	9.67	µg/L		100
PFEESA	5.823	315.0 -> 135.0	1029558	9.03	µg/L		100
		315.0 -> 69.0	84509				

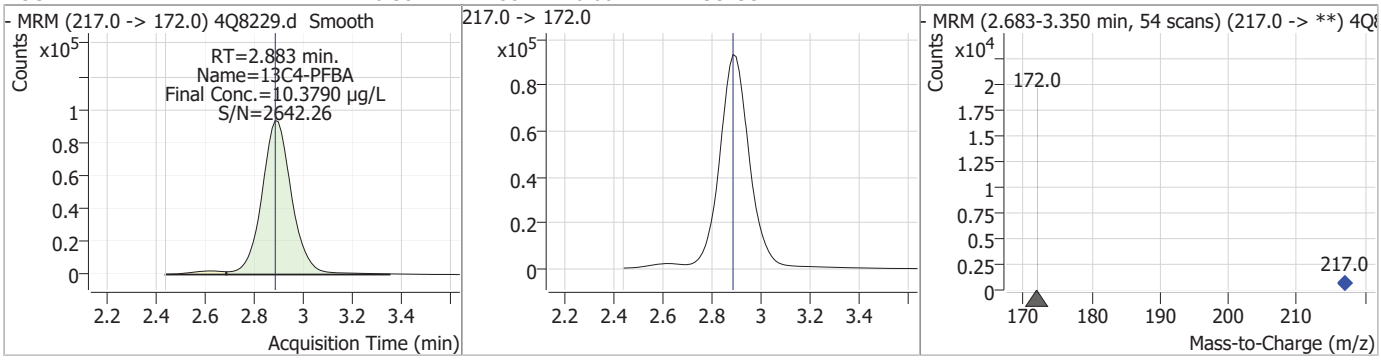
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

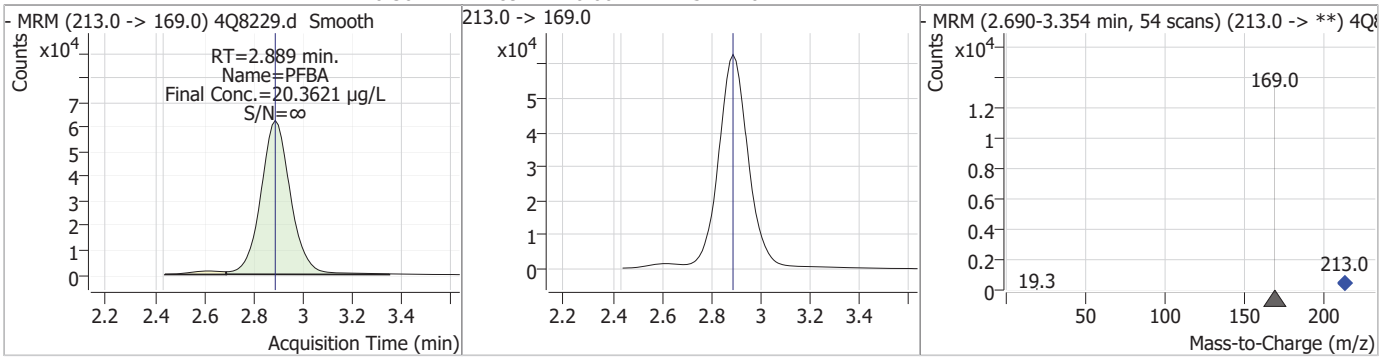
Perfluorinated Compounds by LC/MS/MS



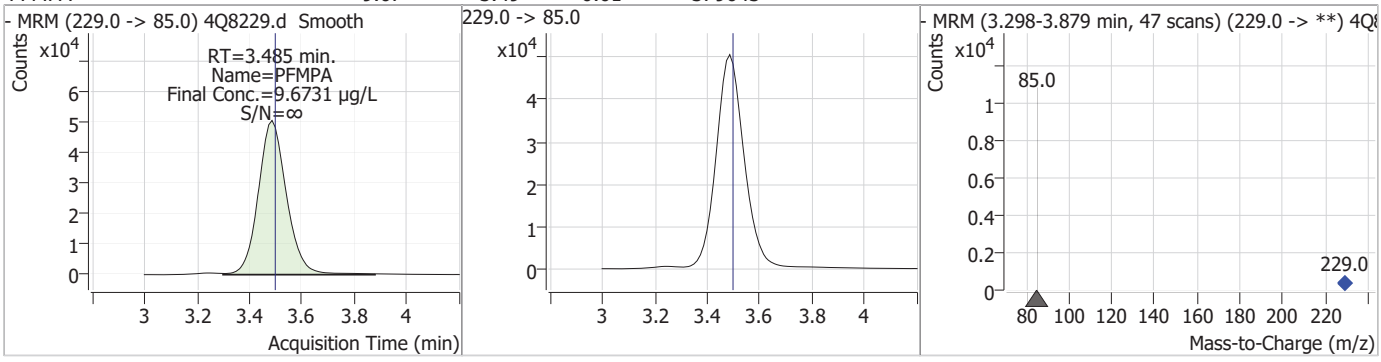
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.38	2.88	0.00	793493				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	20.36	2.89	0.00	527426				

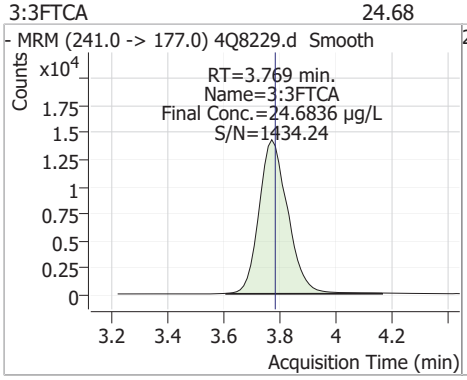


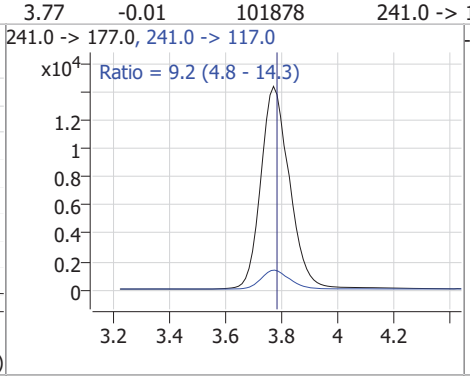
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	9.67	3.49	-0.01	379643				

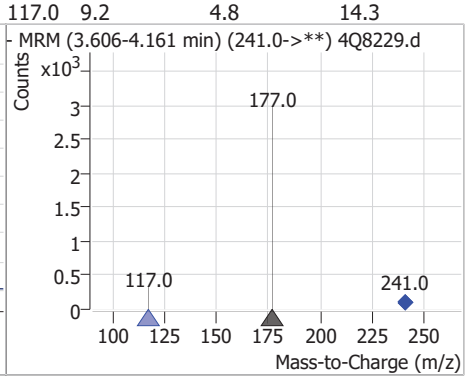


Perfluorinated Compounds by LC/MS/MS

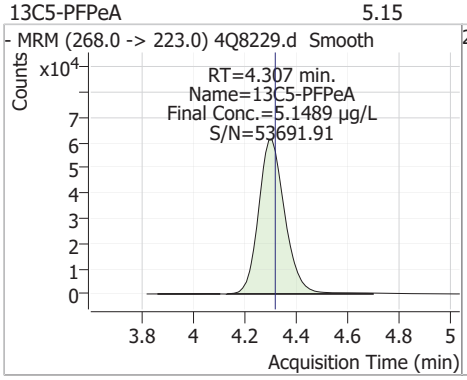
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	24.68	3.77	-0.01	101878	241.0 -> 117.0	9.2	4.8	14.3

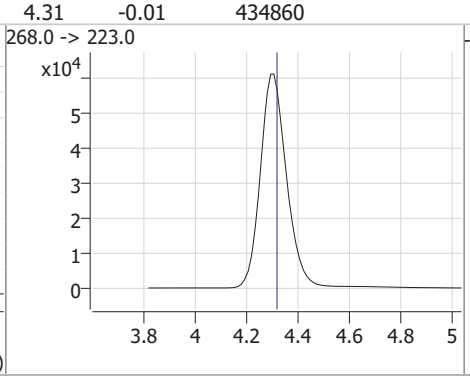


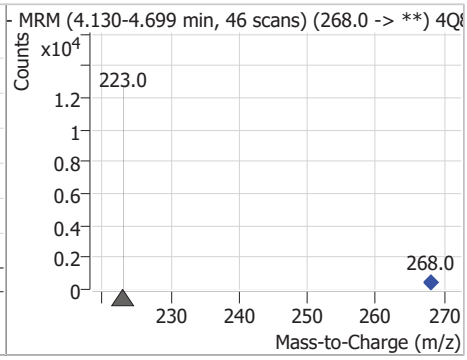




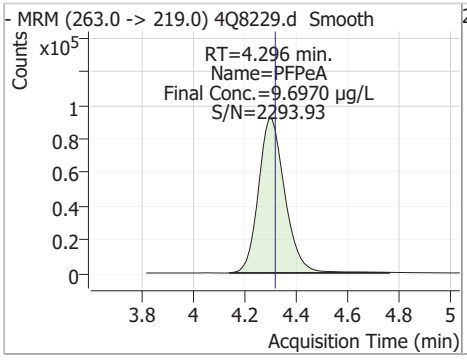
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.15	4.31	-0.01	434860				

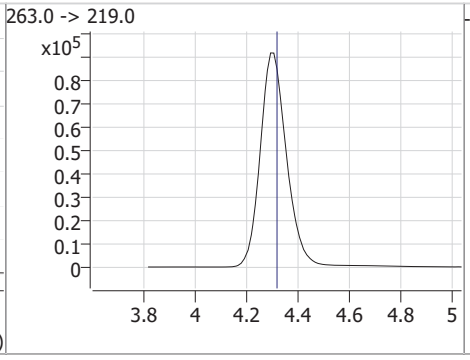


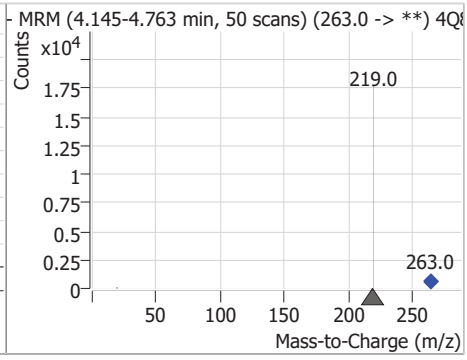




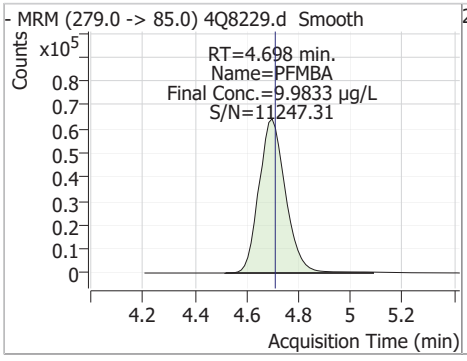
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	9.70	4.30	-0.02	657064				

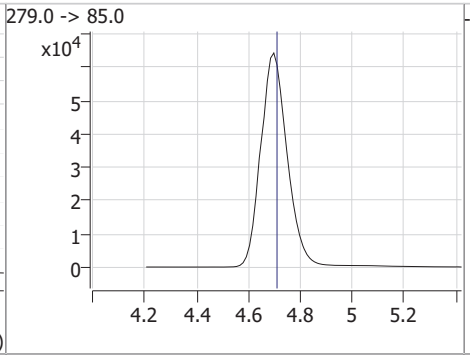


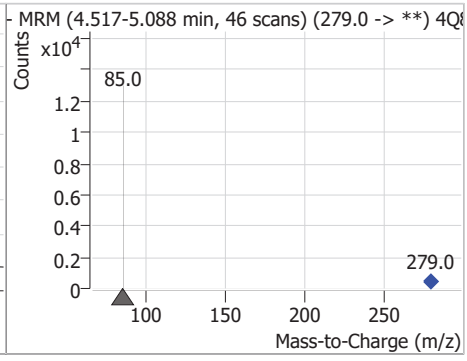




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	9.98	4.70	-0.01	458402				





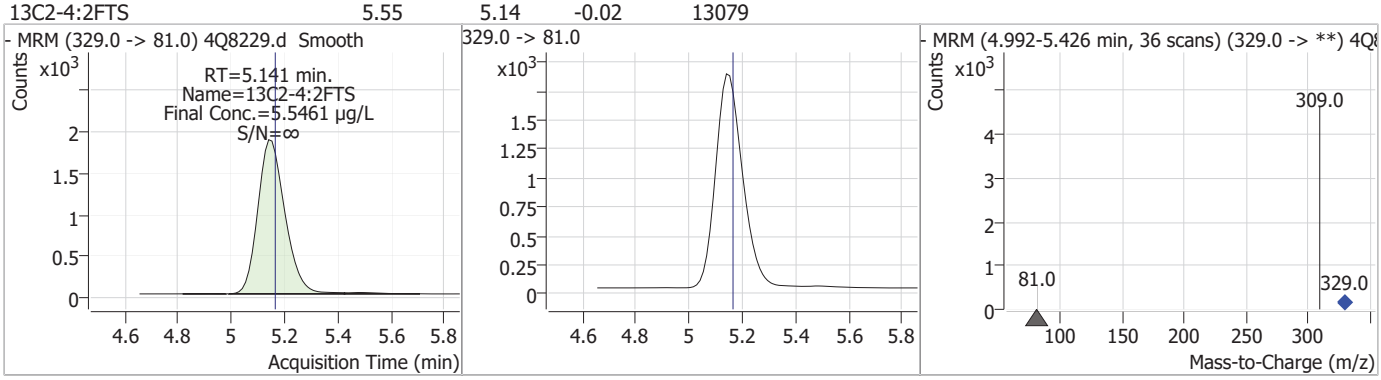


7.5.15

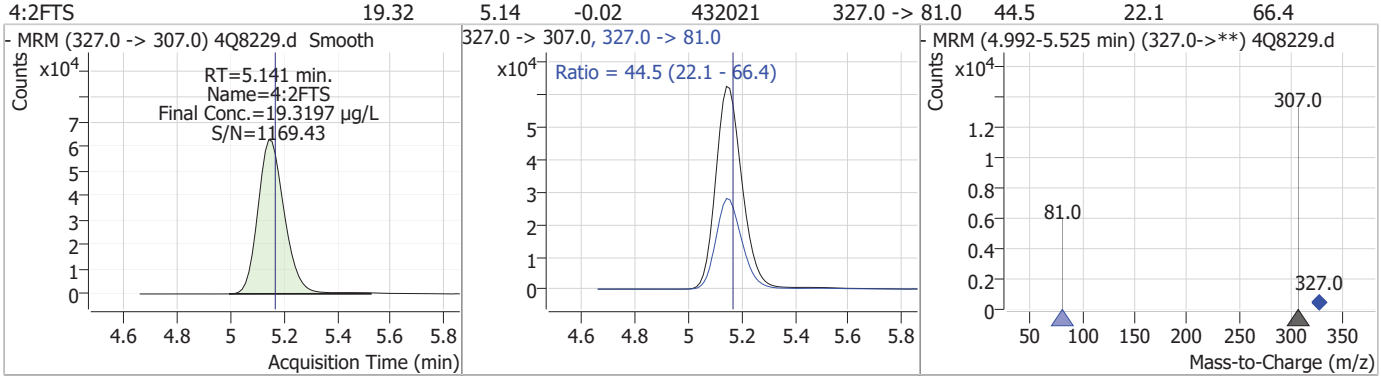
7

Perfluorinated Compounds by LC/MS/MS

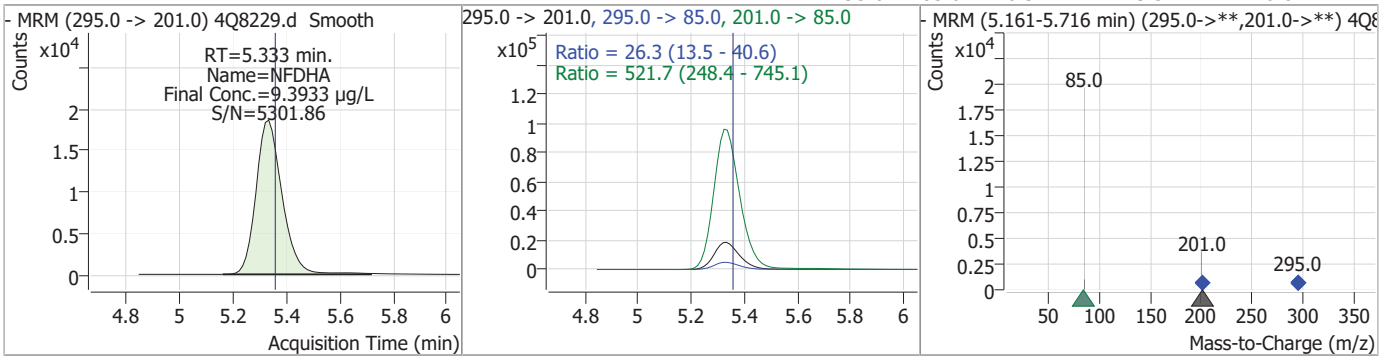
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.55	5.14	-0.02	13079				



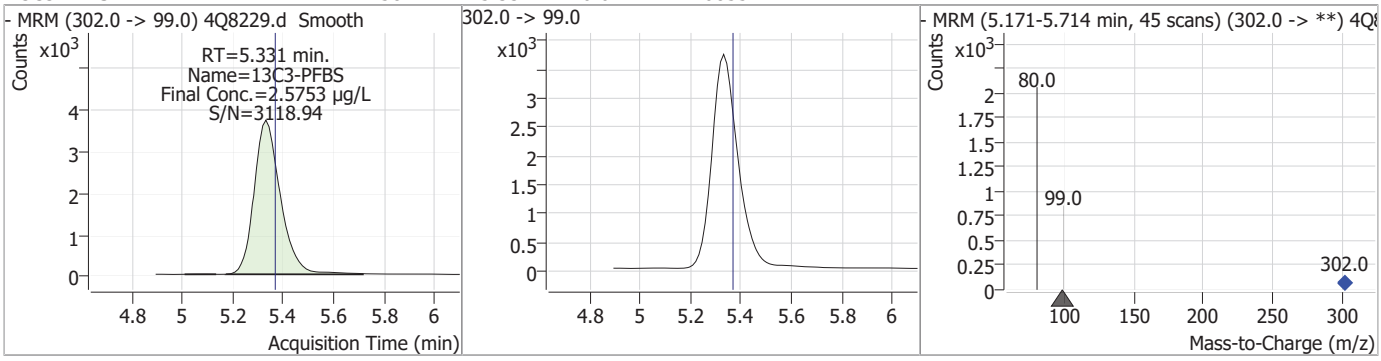
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	19.32	5.14	-0.02	432021	327.0 -> 81.0	44.5	22.1	66.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	9.39	5.33	-0.02	126315	201.0 -> 85.0	521.7	248.4	745.1
					295.0 -> 85.0	26.3	13.5	40.6

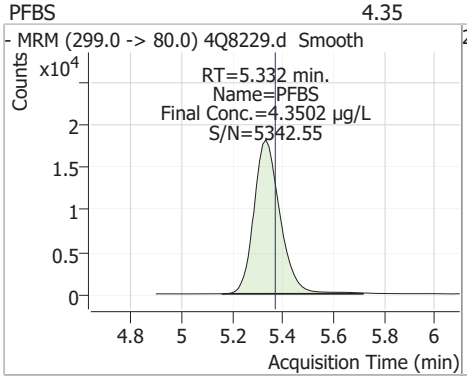


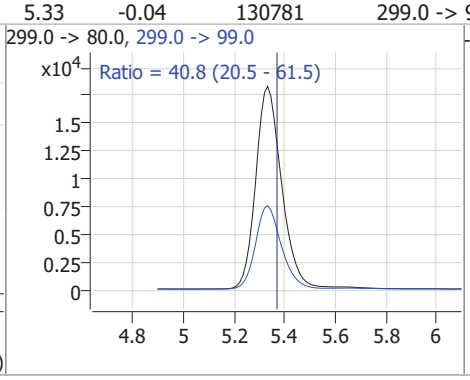
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.58	5.33	-0.04	26855				

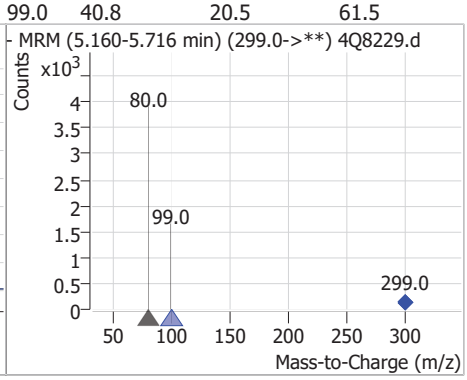


Perfluorinated Compounds by LC/MS/MS

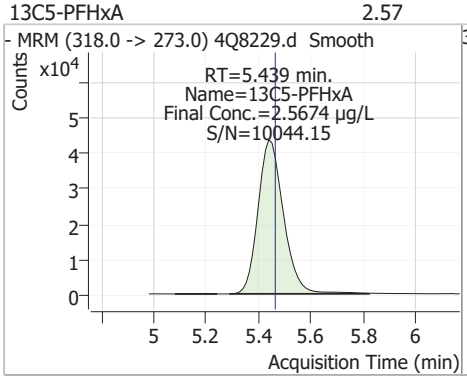
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.35	5.33	-0.04	130781	299.0 -> 99.0	40.8	20.5	61.5

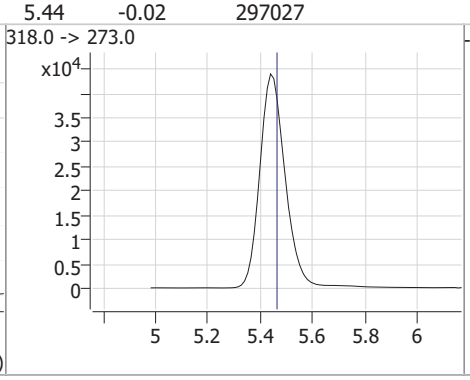


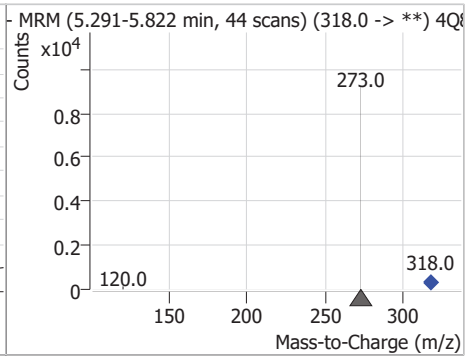




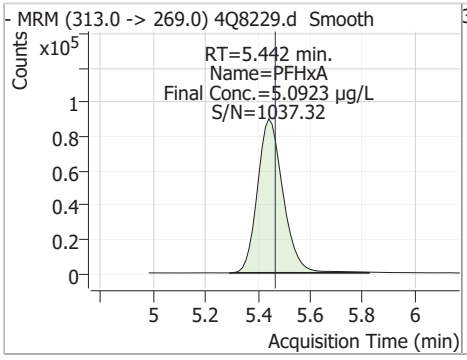
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.57	5.44	-0.02	297027				

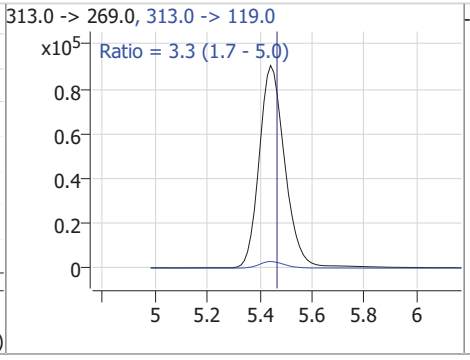


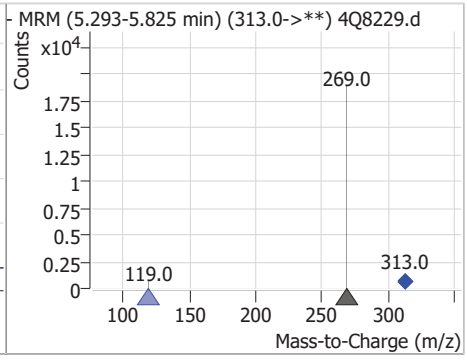




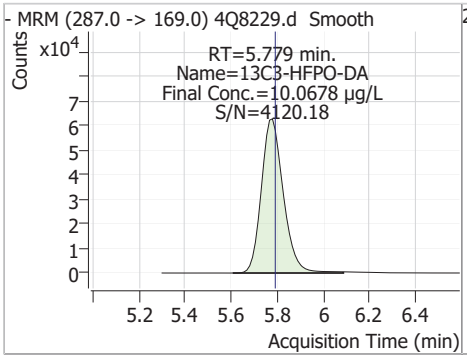
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	5.09	5.44	-0.02	612943	313.0 -> 119.0	3.3	1.7	5.0

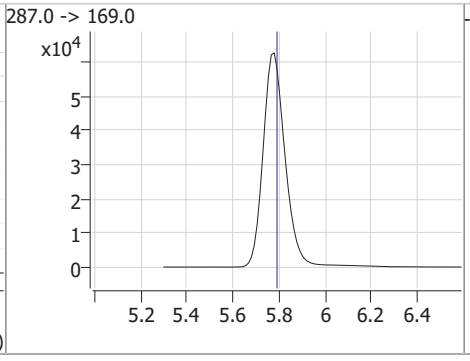


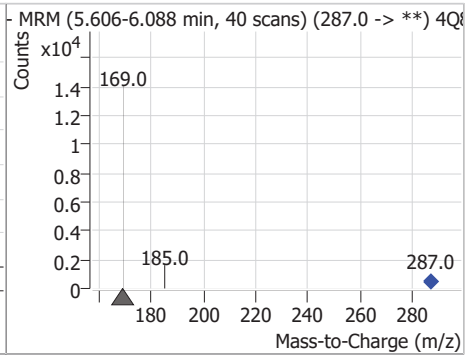




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.07	5.78	-0.01	414987				

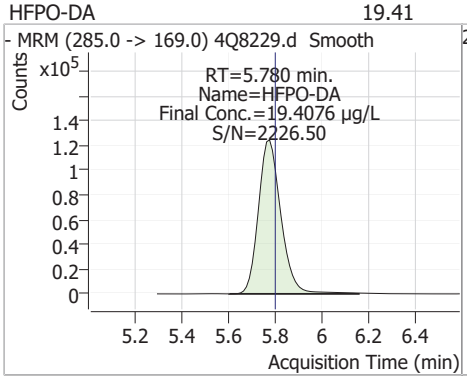


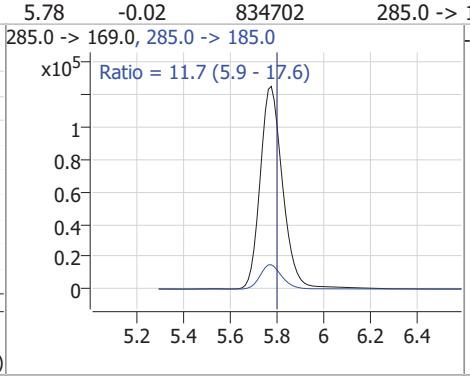


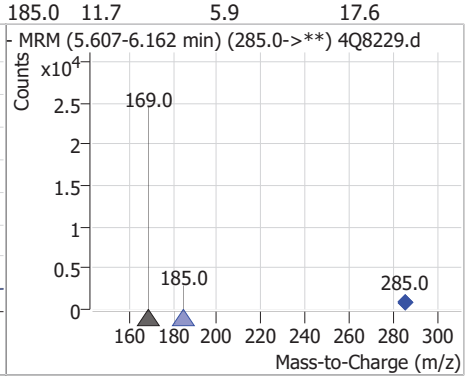


Perfluorinated Compounds by LC/MS/MS

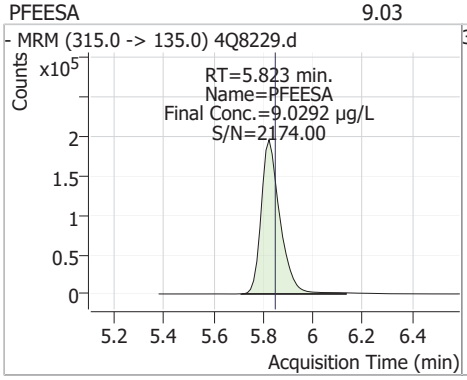
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	19.41	5.78	-0.02	834702	285.0 -> 185.0	11.7	5.9	17.6

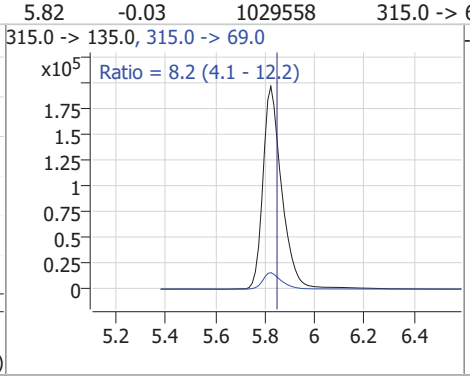


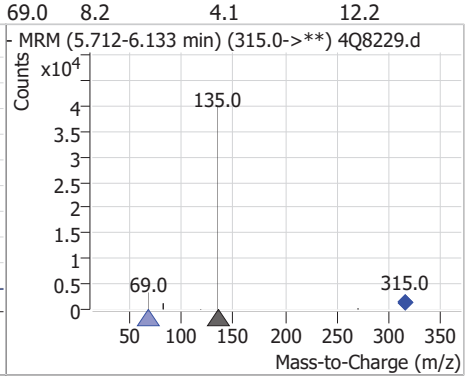




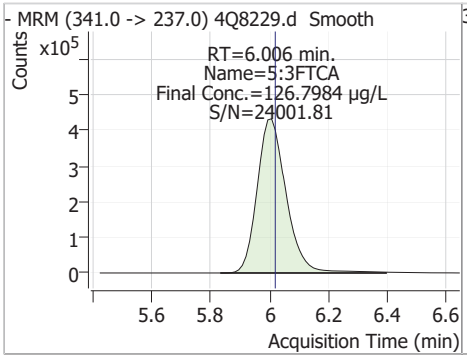
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	9.03	5.82	-0.03	1029558	315.0 -> 69.0	8.2	4.1	12.2

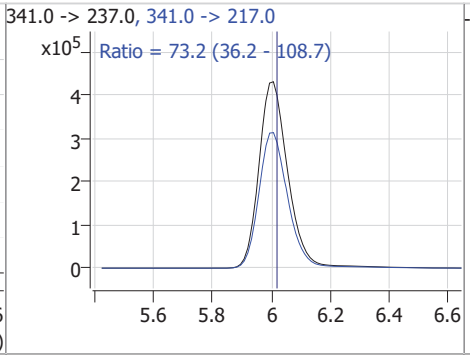


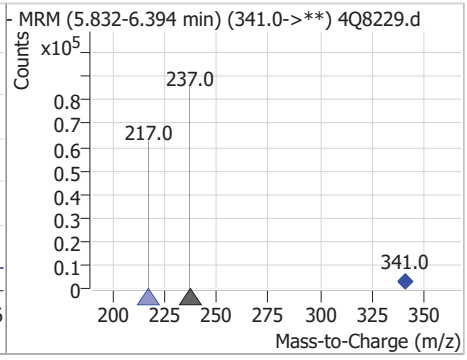




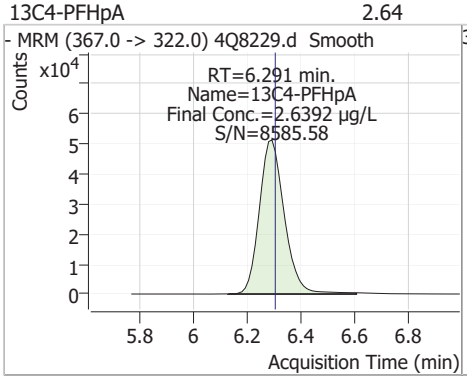
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	126.80	6.01	-0.01	2950310	341.0 -> 217.0	73.2	36.2	108.7

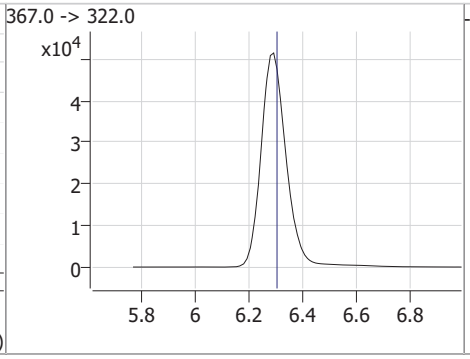


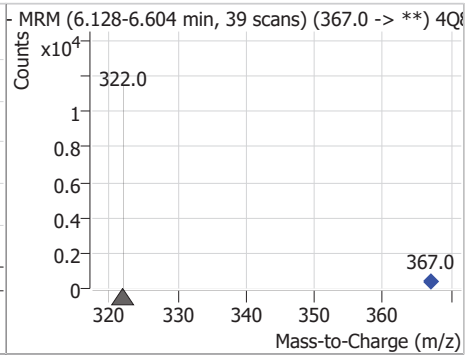




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.64	6.29	-0.01	330704				

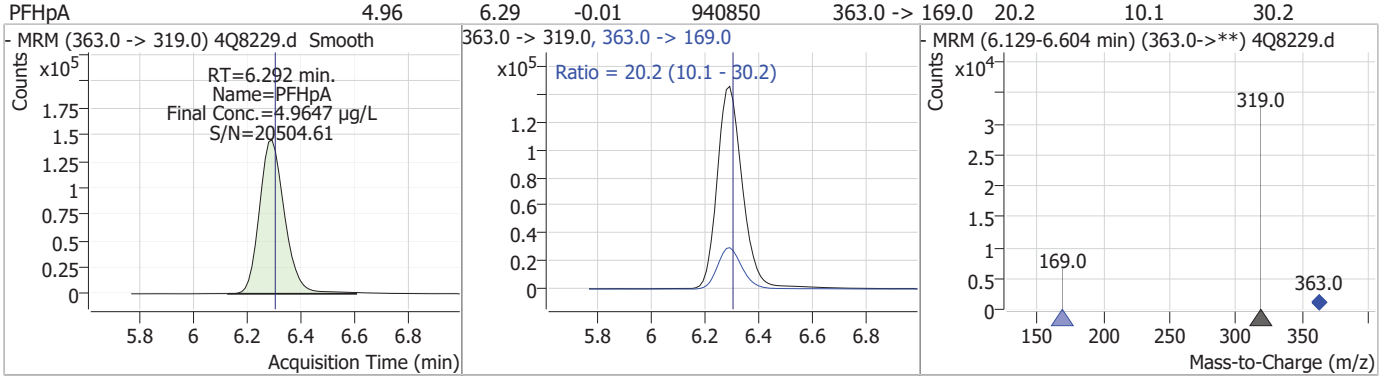




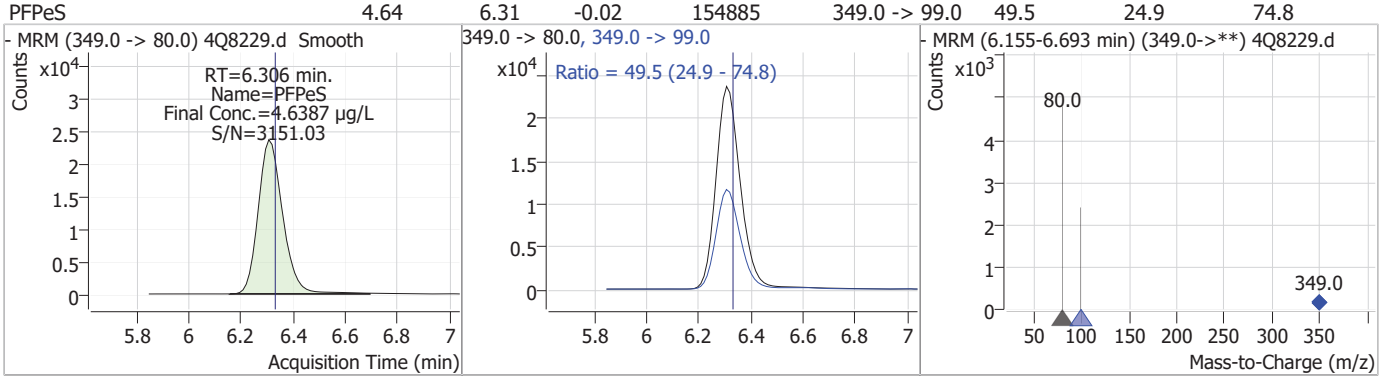


Perfluorinated Compounds by LC/MS/MS

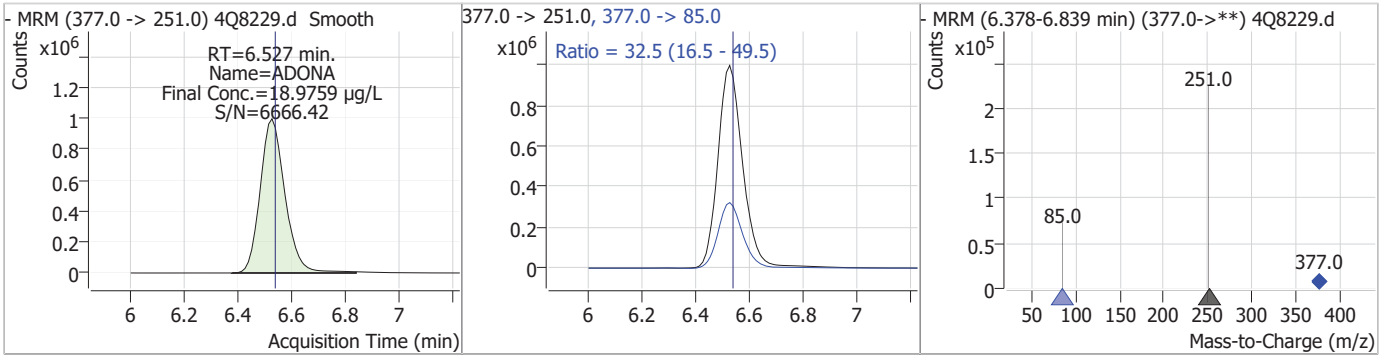
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	4.96	6.29	-0.01	940850	363.0 -> 169.0	20.2	10.1	30.2



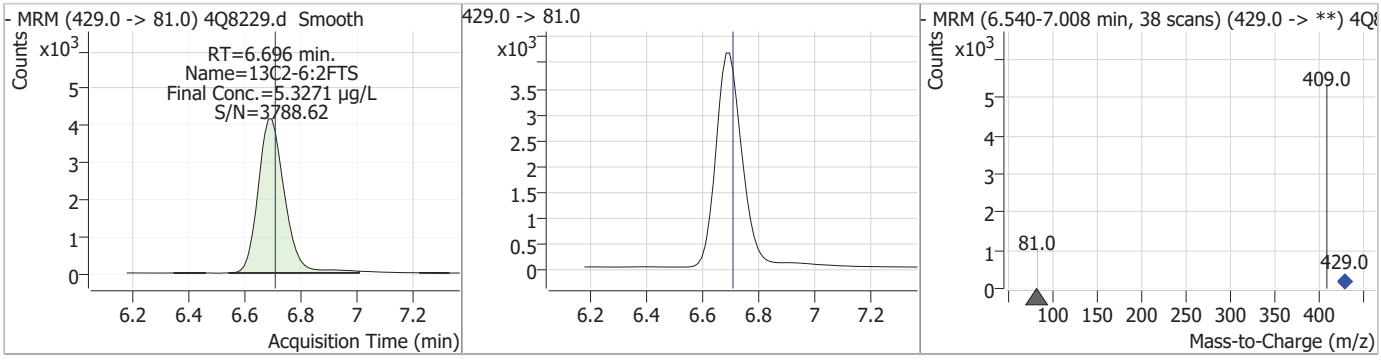
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	4.64	6.31	-0.02	154885	349.0 -> 99.0	49.5	24.9	74.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	18.98	6.53	-0.01	6363393	377.0 -> 85.0	32.5	16.5	49.5

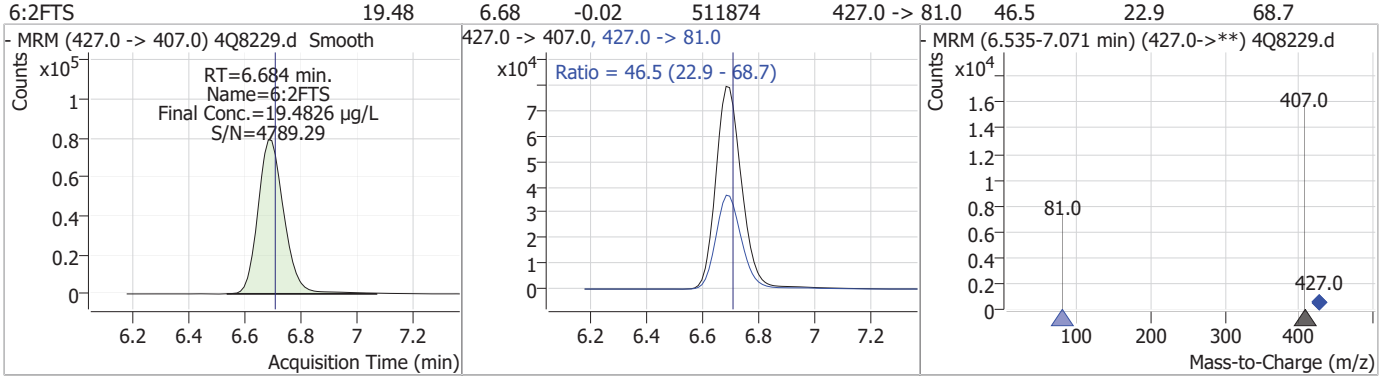


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.33	6.70	-0.01	27188				

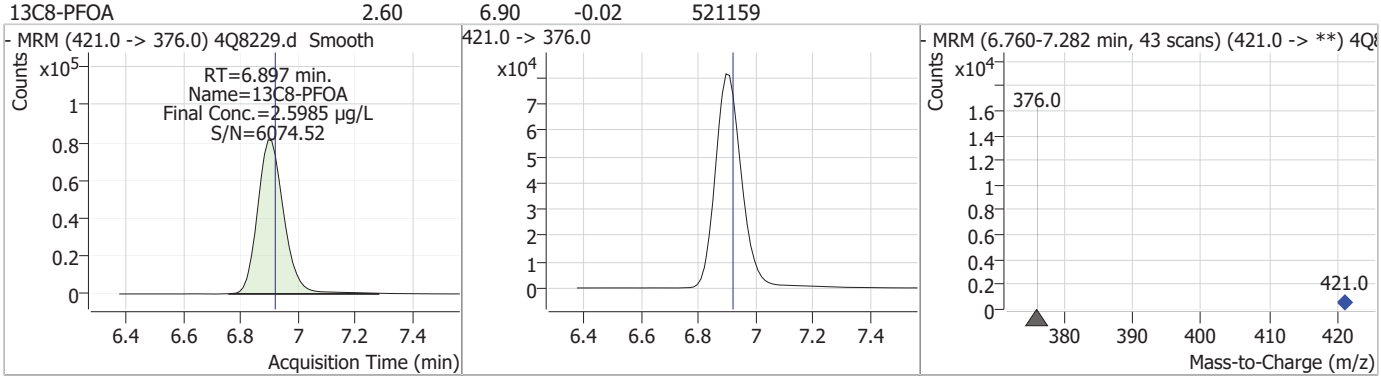


Perfluorinated Compounds by LC/MS/MS

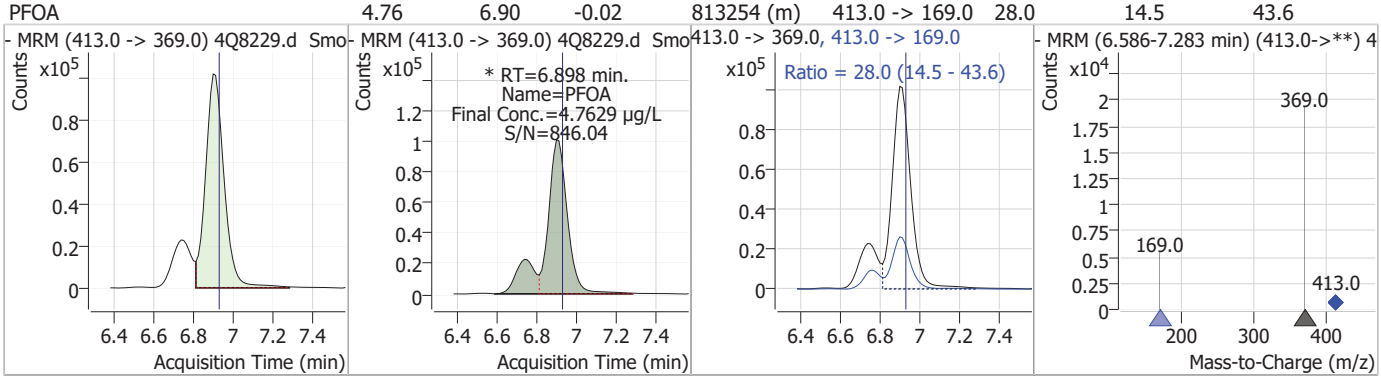
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	19.48	6.68	-0.02	511874	427.0 -> 81.0	46.5	22.9	68.7



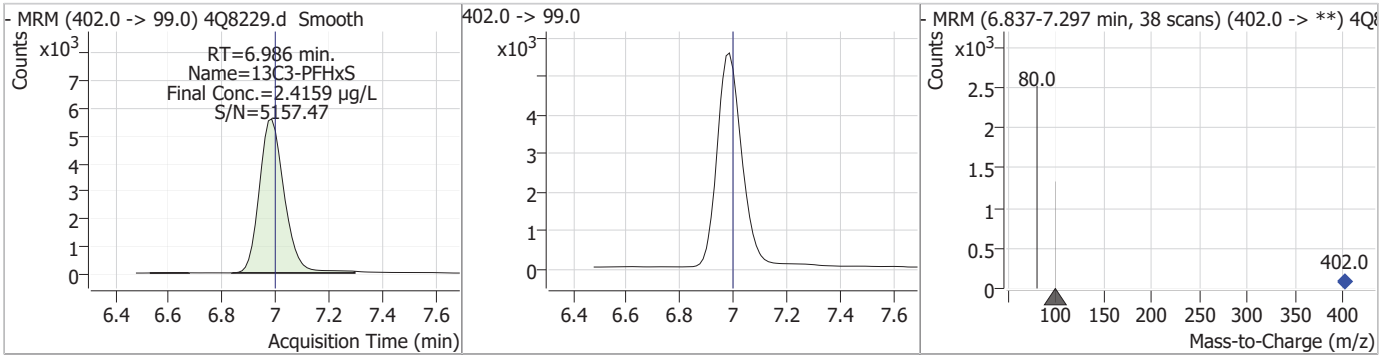
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.60	6.90	-0.02	521159				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	4.76	6.90	-0.02	813254 (m)	413.0 -> 169.0	28.0	14.5	43.6

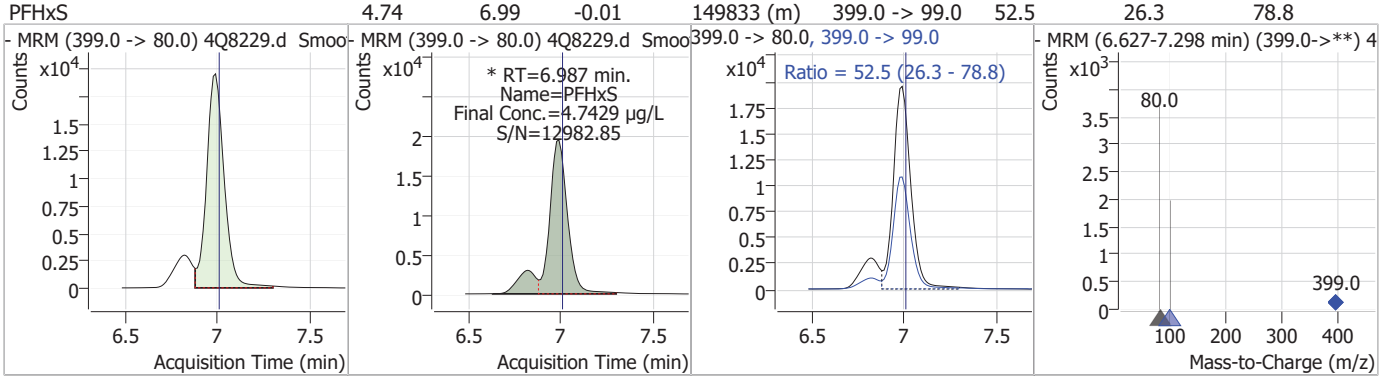


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.42	6.99	-0.01	36194				

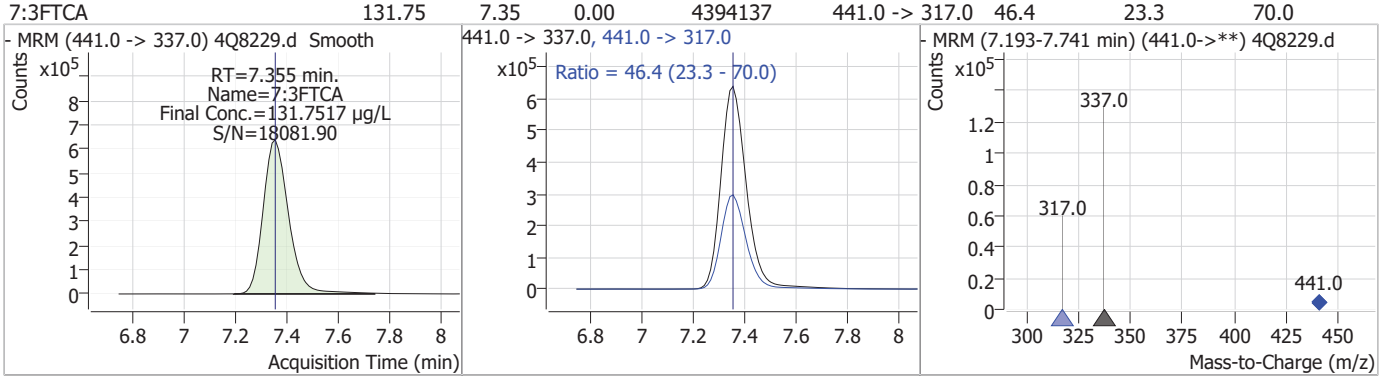


Perfluorinated Compounds by LC/MS/MS

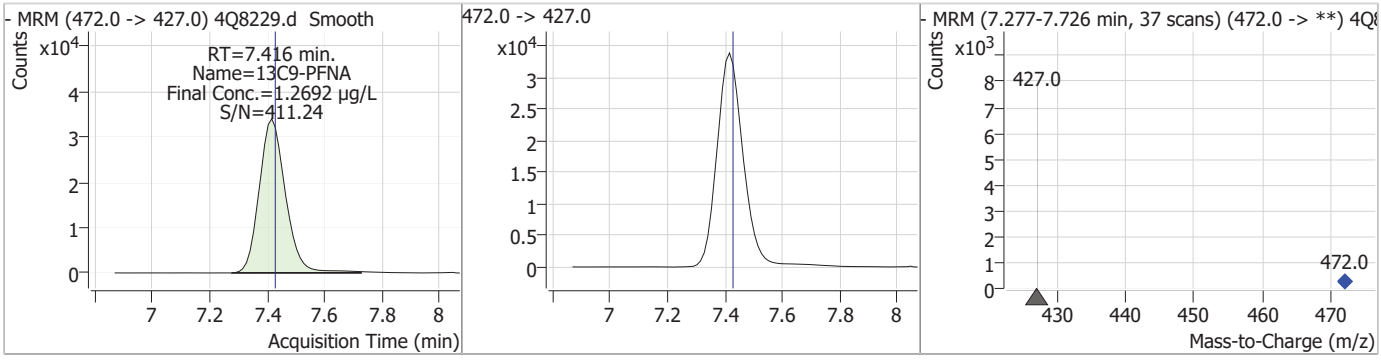
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	4.74	6.99	-0.01	149833 (m)	399.0 -> 99.0	52.5	26.3	78.8



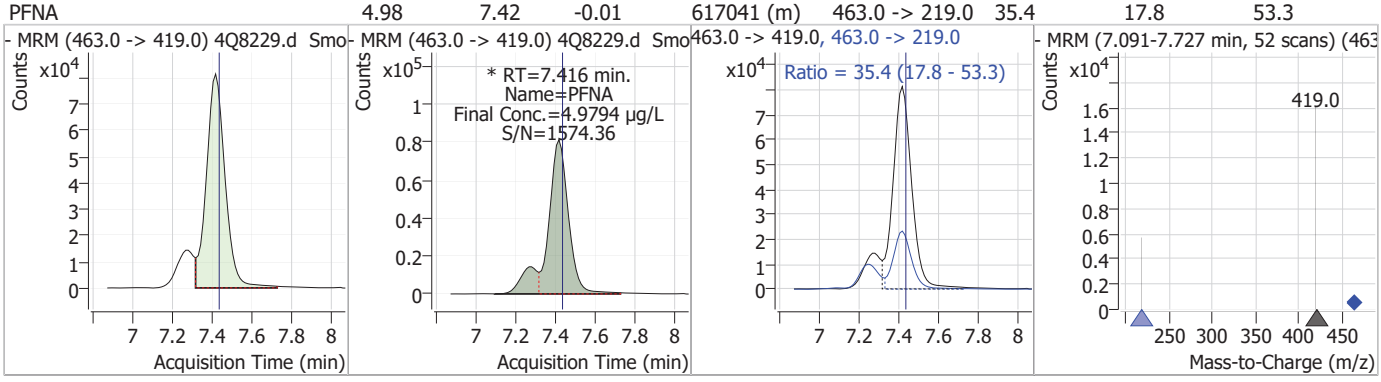
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	131.75	7.35	0.00	4394137	441.0 -> 317.0	46.4	23.3	70.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.27	7.42	-0.01	214826				

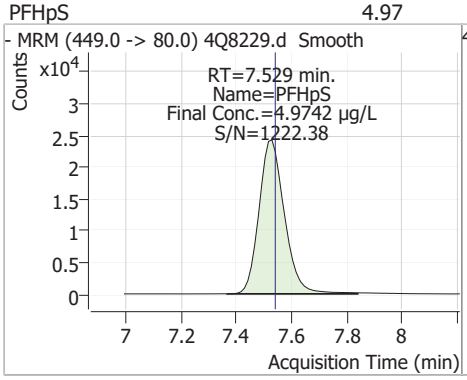


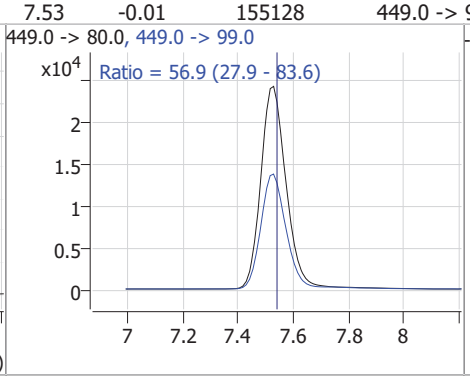
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	4.98	7.42	-0.01	617041 (m)	463.0 -> 219.0	35.4	17.8	53.3

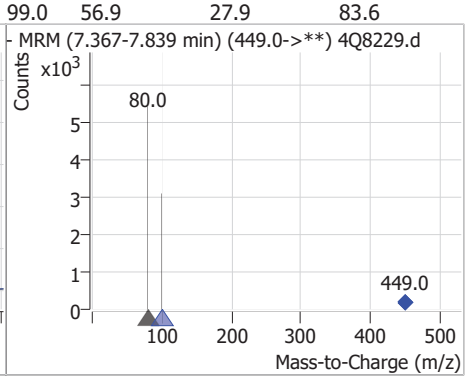


Perfluorinated Compounds by LC/MS/MS

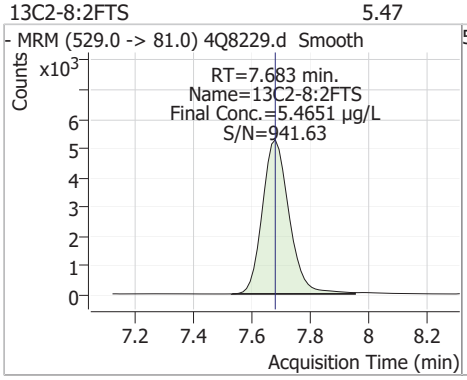
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	4.97	7.53	-0.01	155128	449.0 -> 99.0	56.9	27.9	83.6

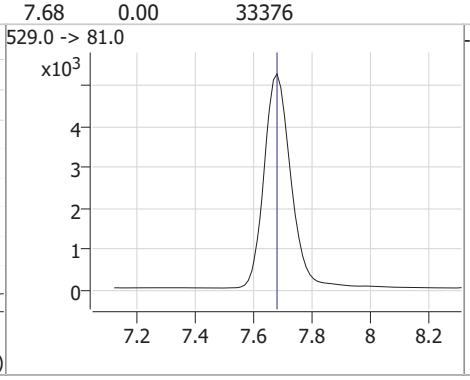


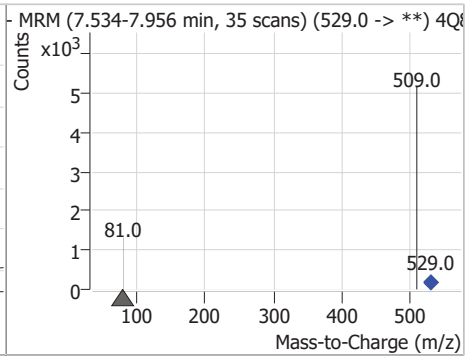




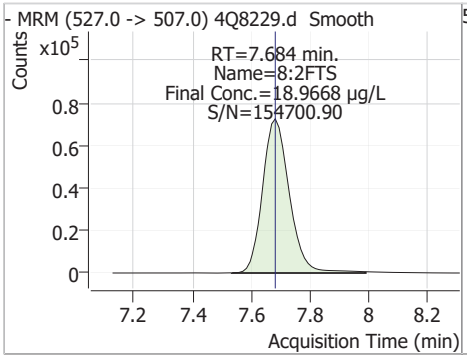
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.47	7.68	0.00	33376				

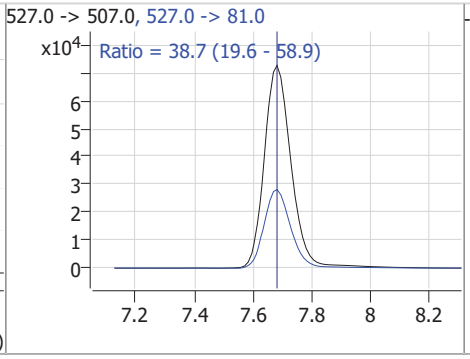


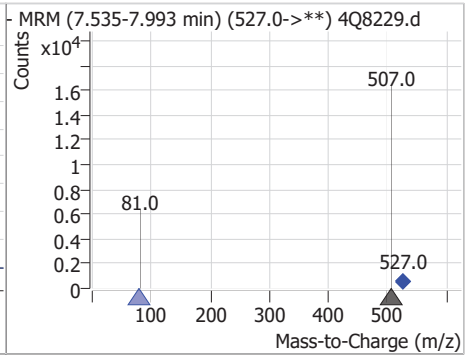




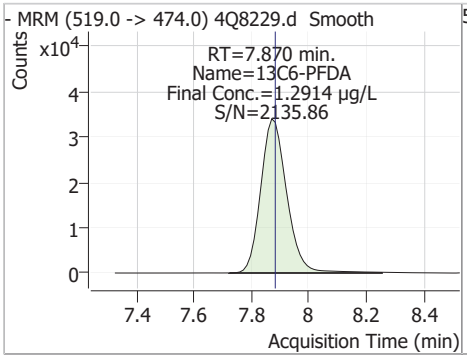
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	18.97	7.68	0.00	461400	527.0 -> 81.0	38.7	19.6	58.9

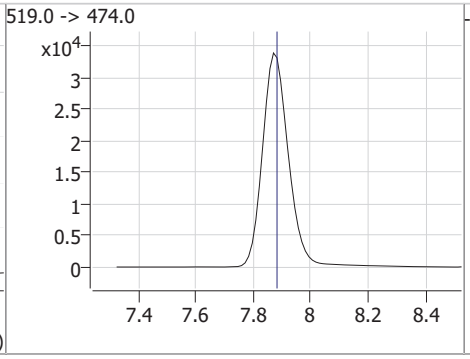


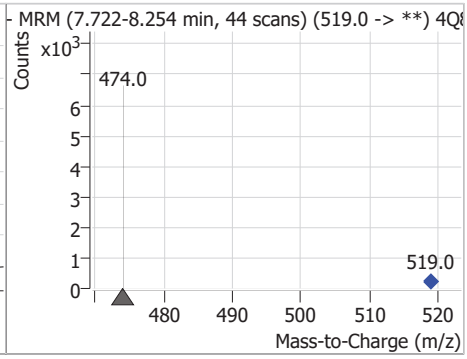




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.29	7.87	-0.01	213375				

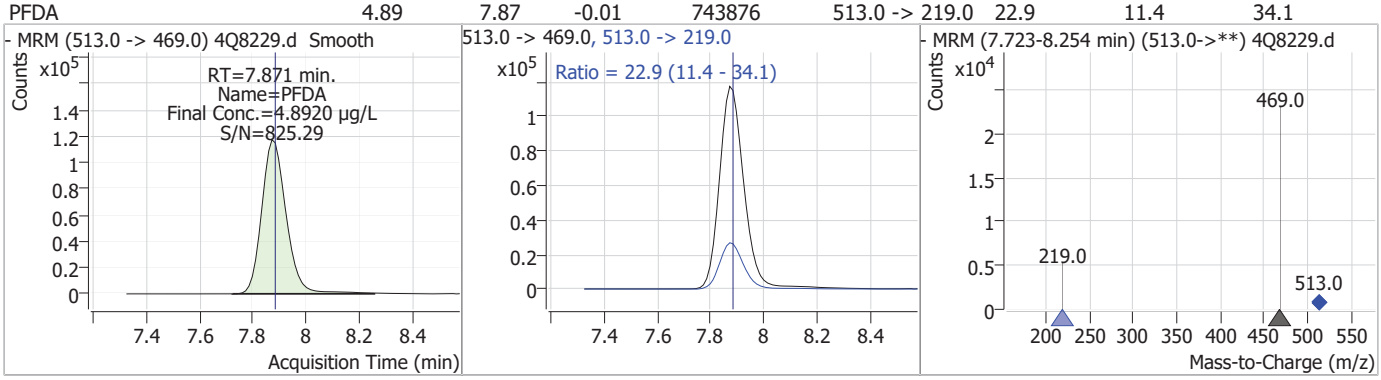




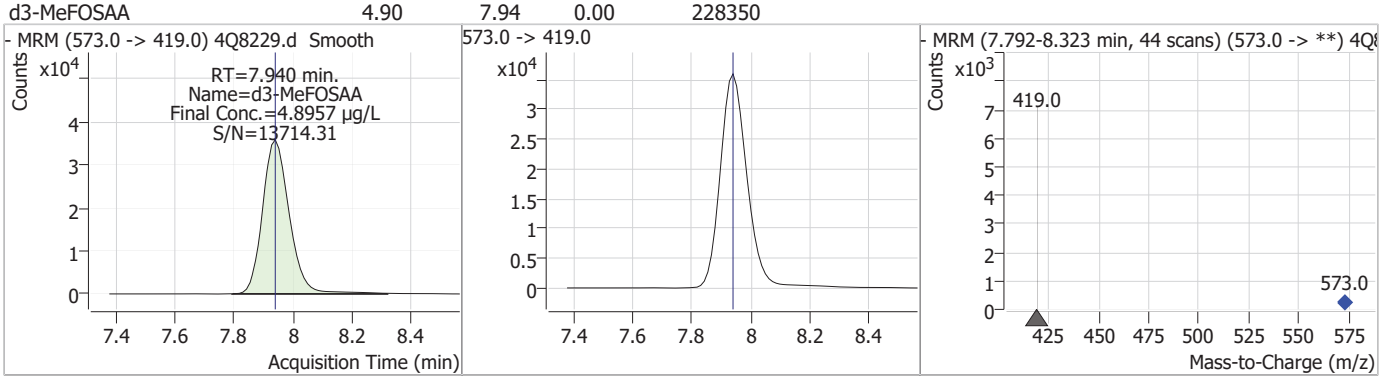


Perfluorinated Compounds by LC/MS/MS

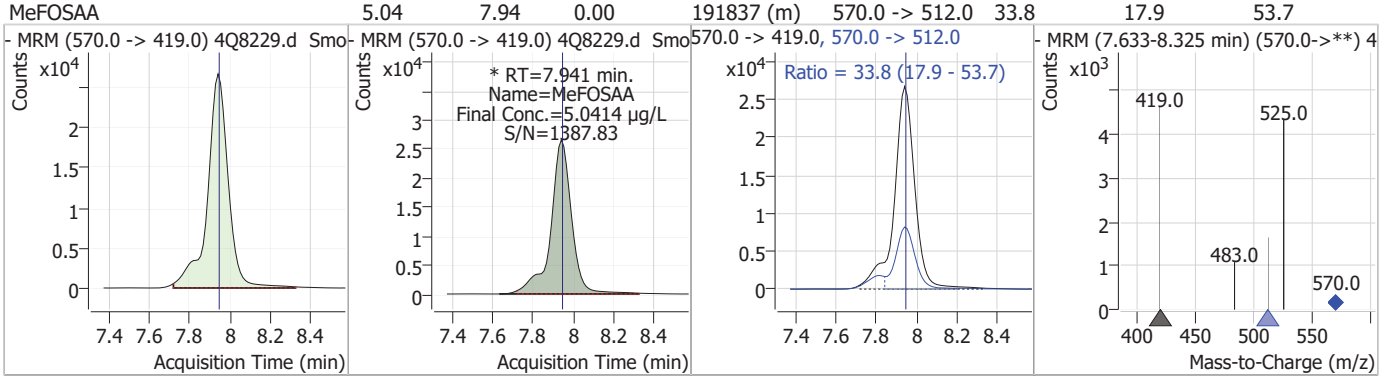
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	4.89	7.87	-0.01	743876	513.0 -> 219.0	22.9	11.4	34.1



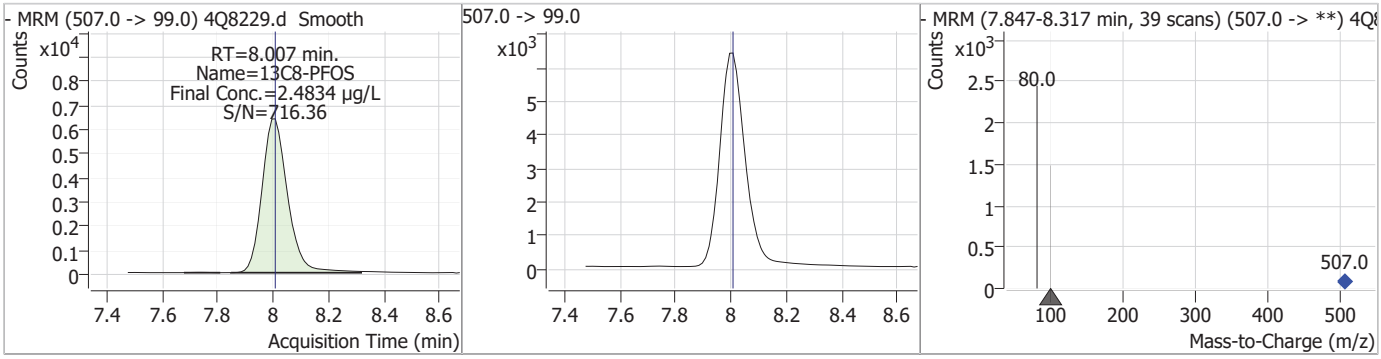
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.90	7.94	0.00	228350				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	5.04	7.94	0.00	191837 (m)	570.0 -> 512.0	33.8	17.9	53.7

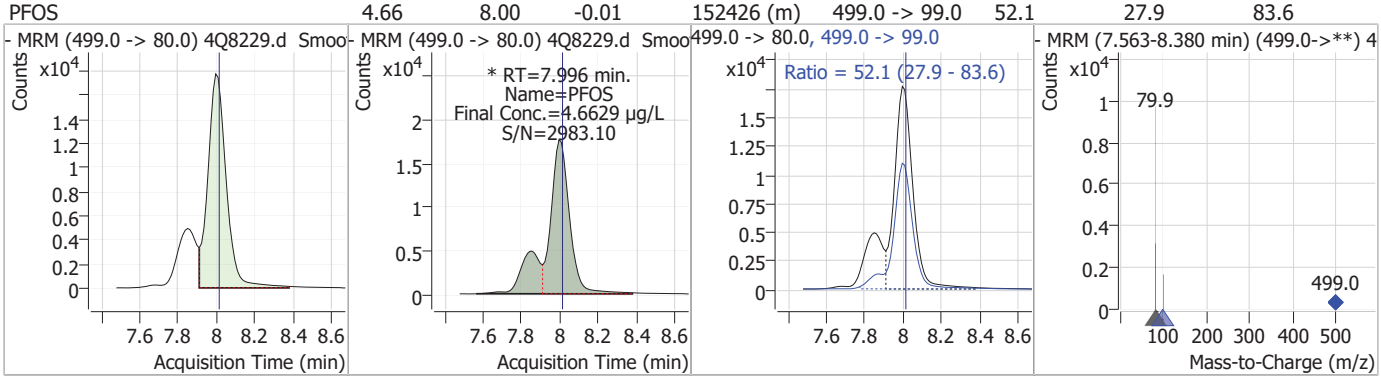


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.48	8.01	0.00	40922				

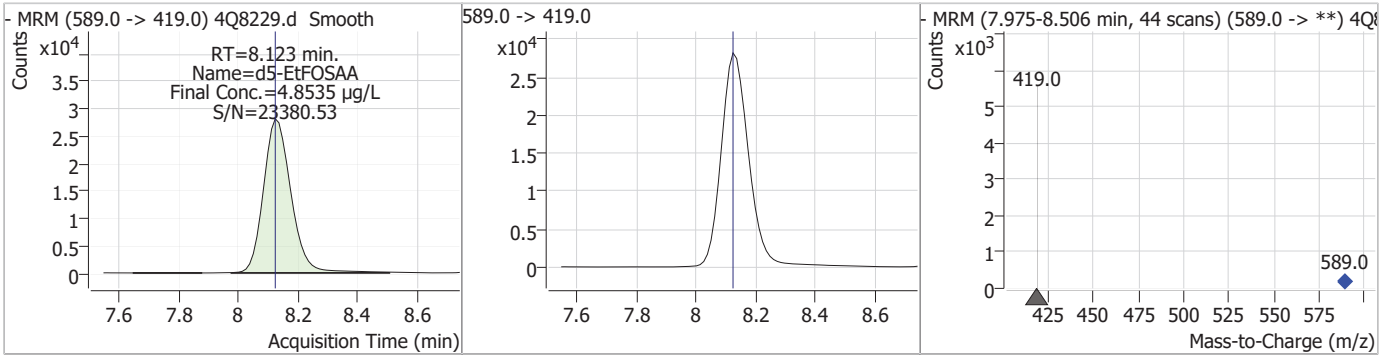


Perfluorinated Compounds by LC/MS/MS

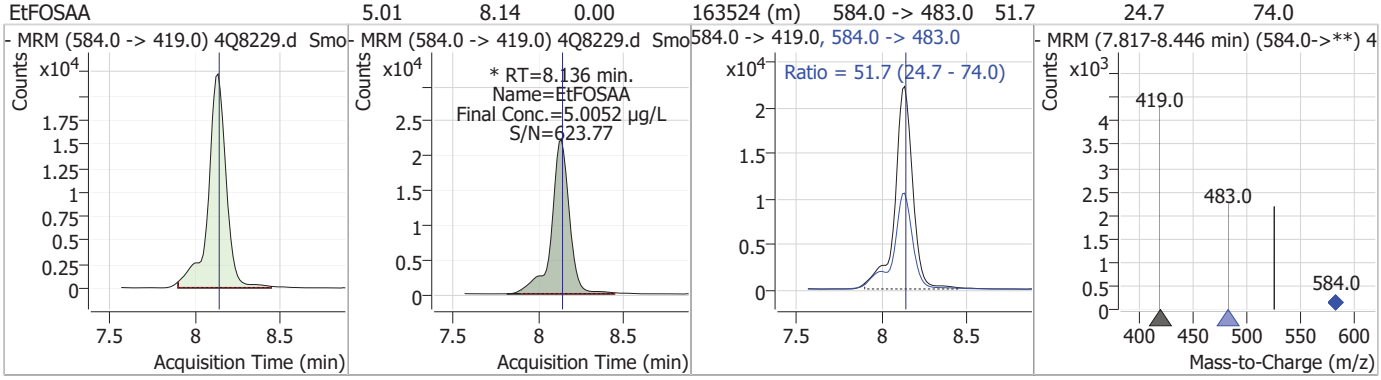
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.66	8.00	-0.01	152426 (m)	499.0 -> 99.0	52.1	27.9	83.6



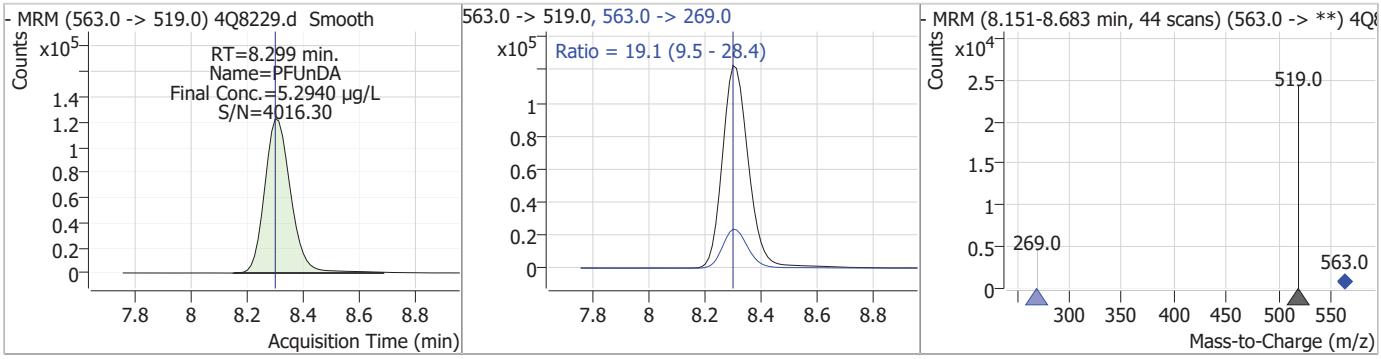
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.85	8.12	0.00	180748				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	5.01	8.14	0.00	163524 (m)	584.0 -> 483.0	51.7	24.7	74.0

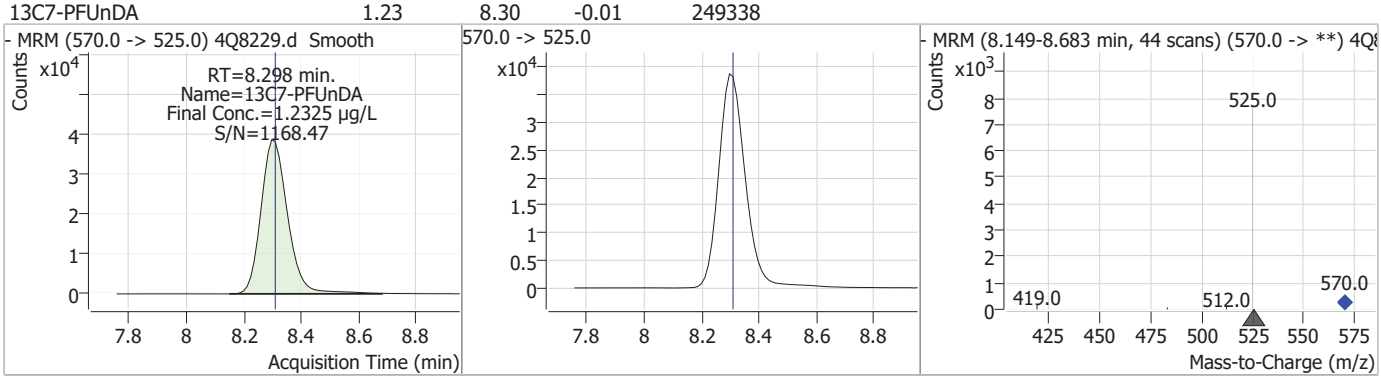


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	5.29	8.30	0.00	791096	563.0 -> 269.0	19.1	9.5	28.4

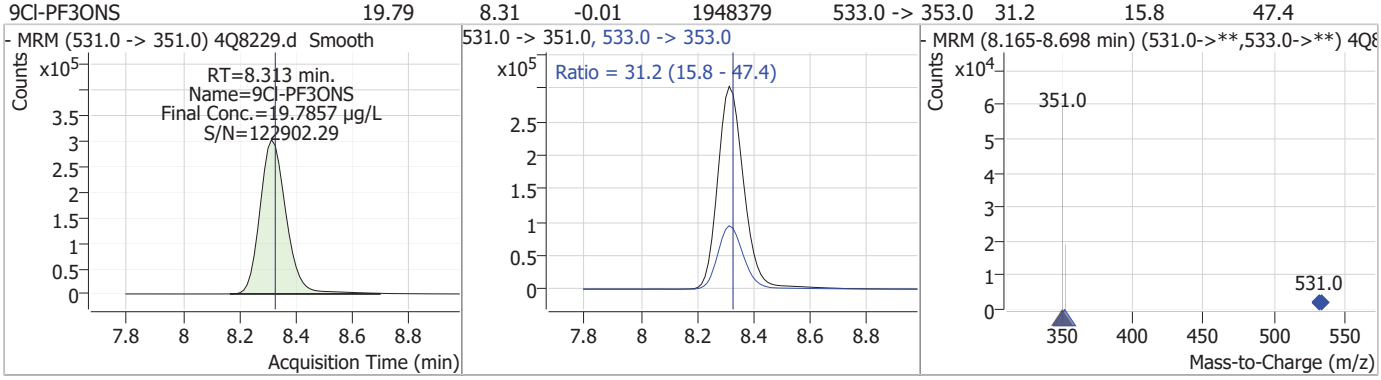


Perfluorinated Compounds by LC/MS/MS

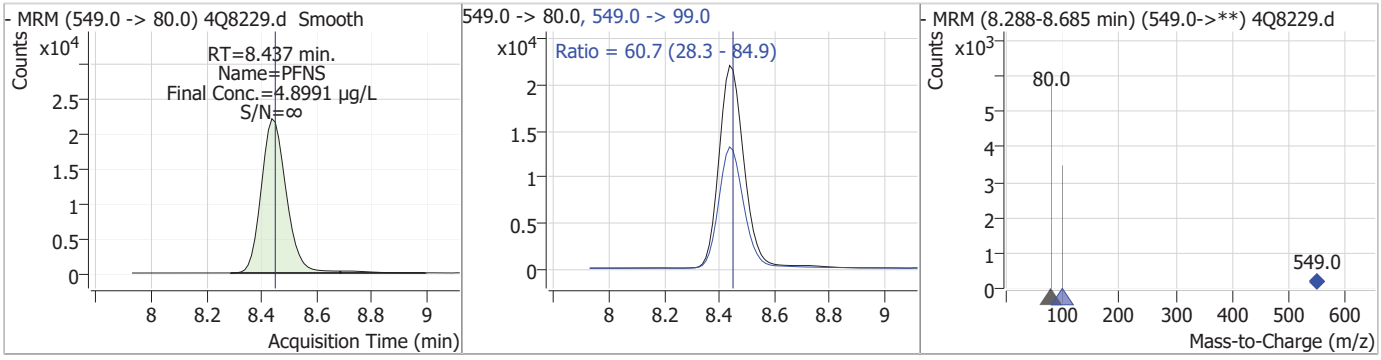
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.23	8.30	-0.01	249338				



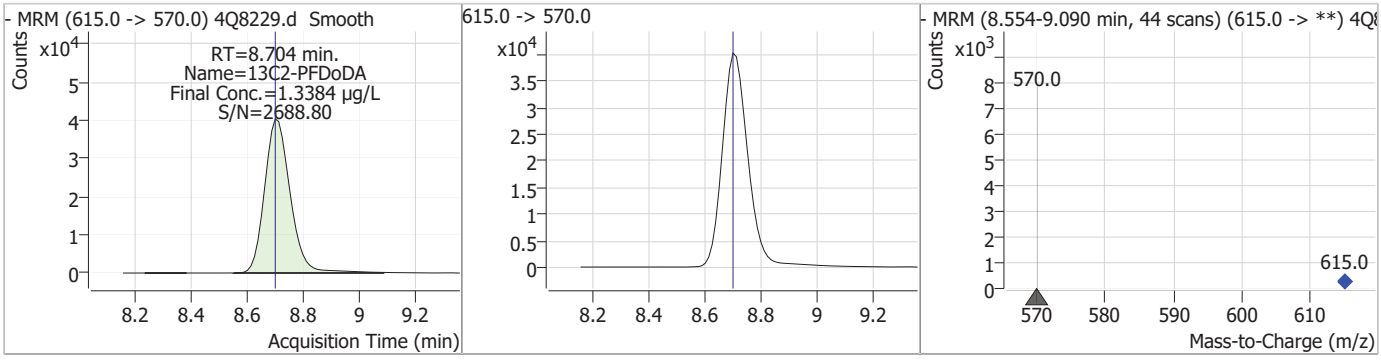
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	19.79	8.31	-0.01	1948379	533.0 -> 353.0	31.2	15.8	47.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	4.90	8.44	-0.01	138403	549.0 -> 99.0	60.7	28.3	84.9

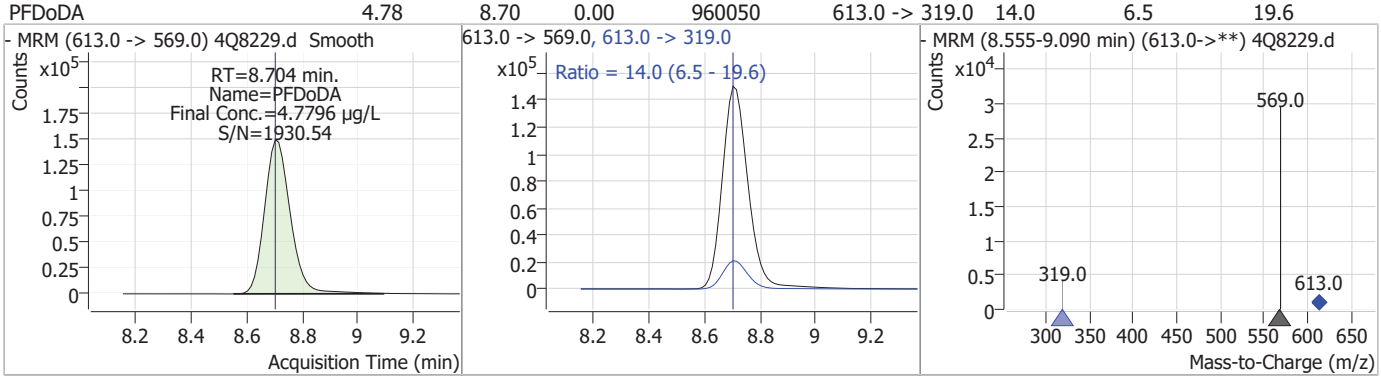


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.34	8.70	0.00	255490				

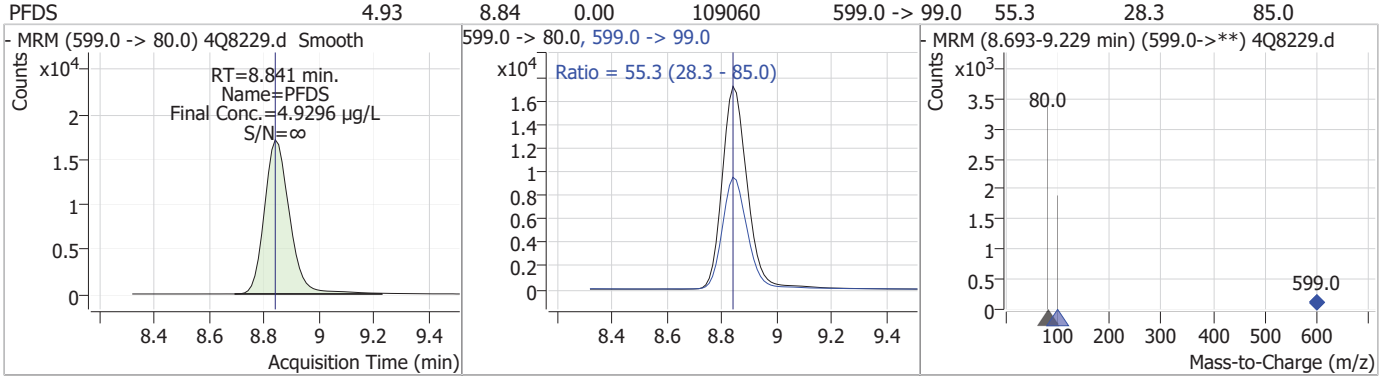


Perfluorinated Compounds by LC/MS/MS

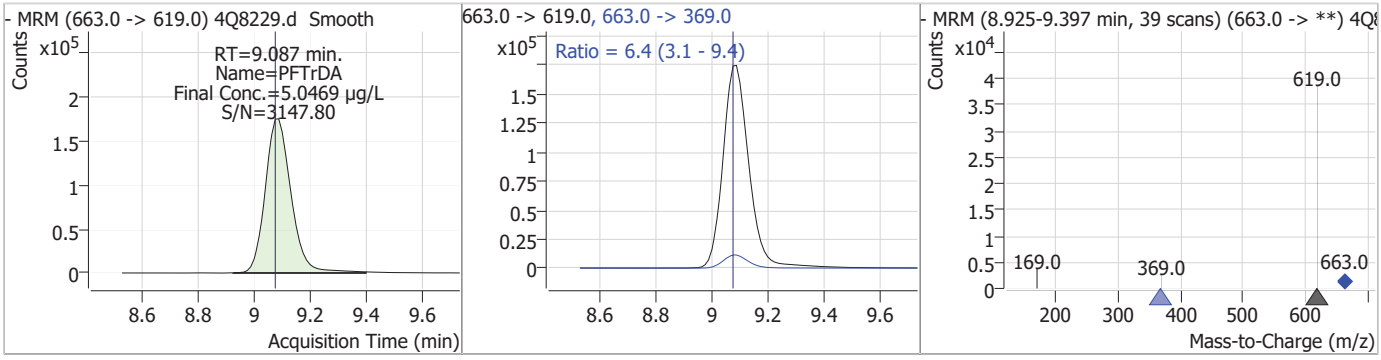
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	4.78	8.70	0.00	960050	613.0 -> 319.0	14.0	6.5	19.6



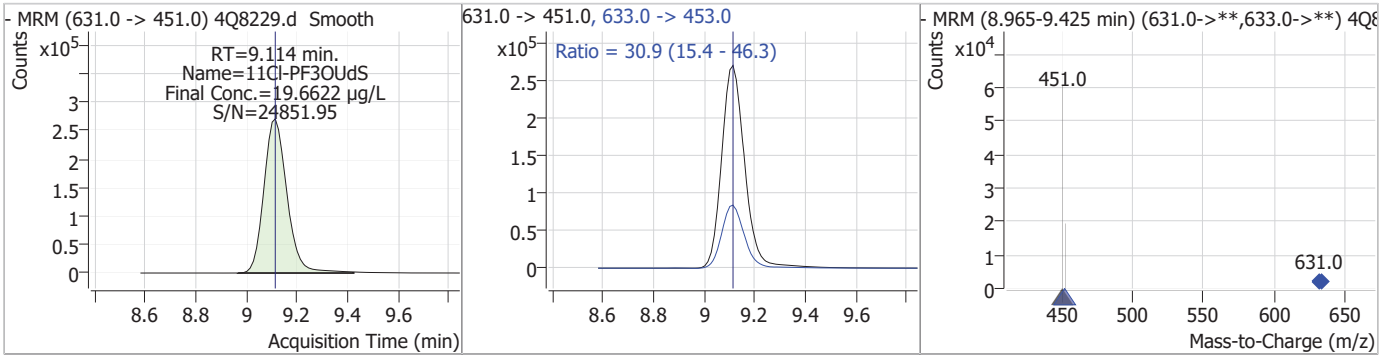
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	4.93	8.84	0.00	109060	599.0 -> 99.0	55.3	28.3	85.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	5.05	9.09	0.01	1116750	663.0 -> 369.0	6.4	3.1	9.4

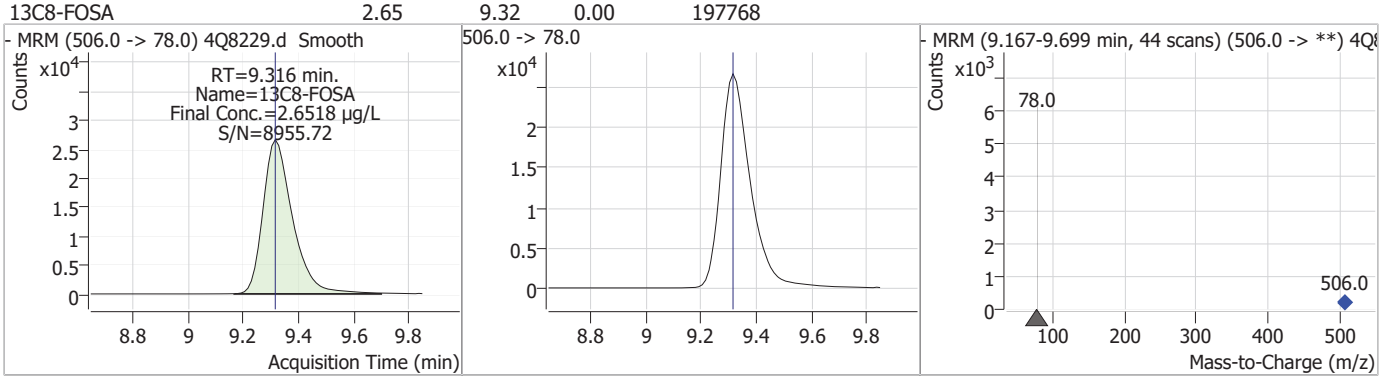


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	19.66	9.11	0.00	1712883	633.0 -> 453.0	30.9	15.4	46.3

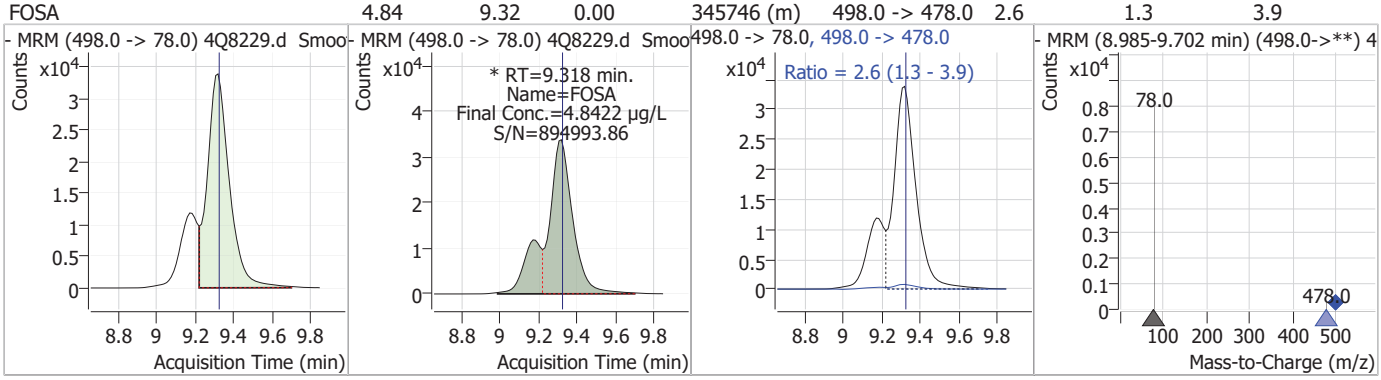


Perfluorinated Compounds by LC/MS/MS

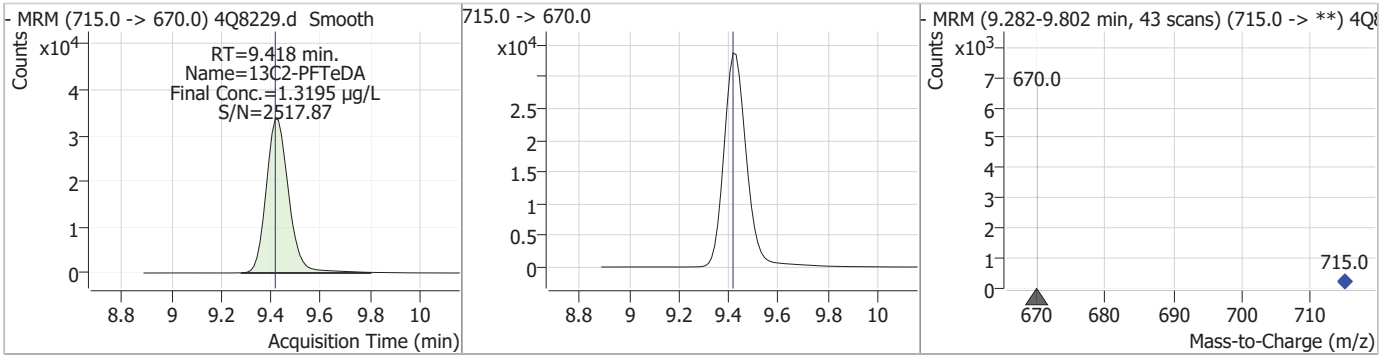
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.65	9.32	0.00	197768				



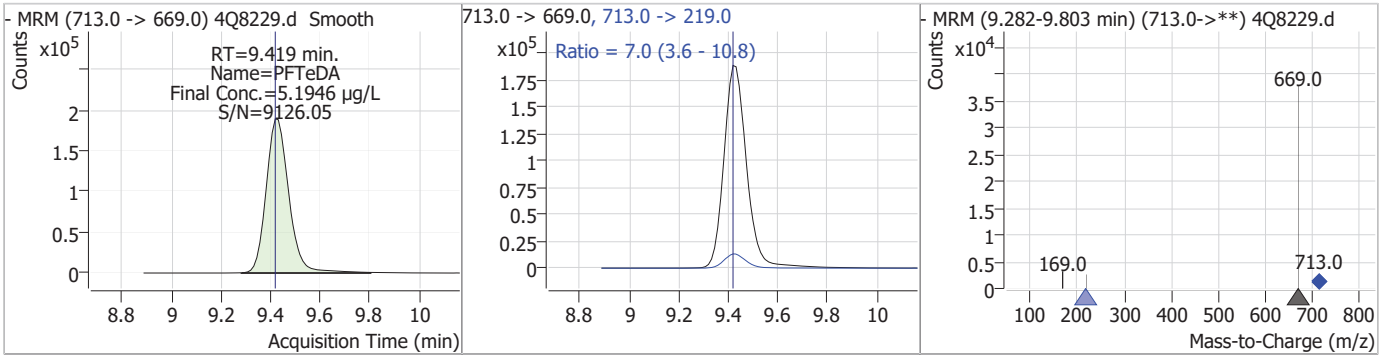
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	4.84	9.32	0.00	345746 (m)	498.0 -> 478.0	2.6	1.3	3.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.32	9.42	0.00	212836				

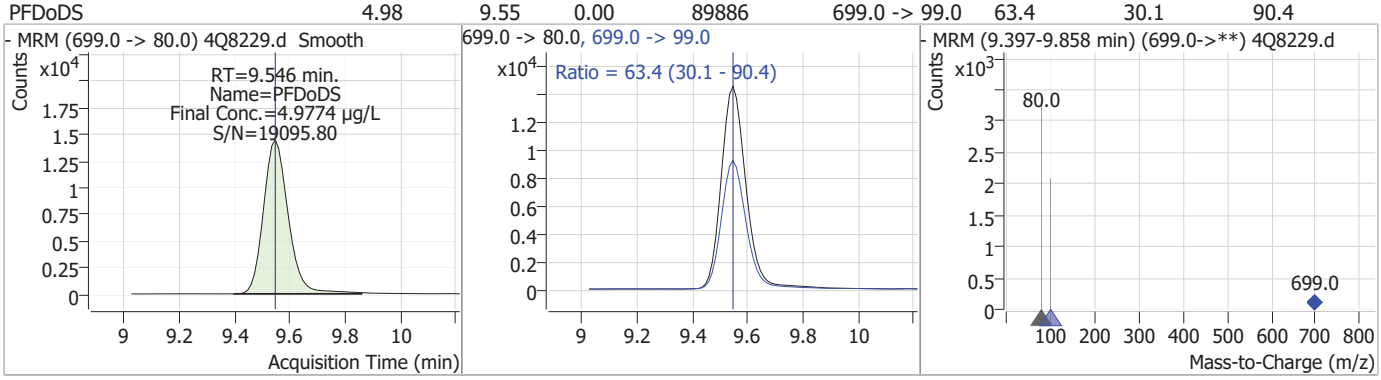


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	5.19	9.42	0.00	1200939	713.0 -> 219.0	7.0	3.6	10.8

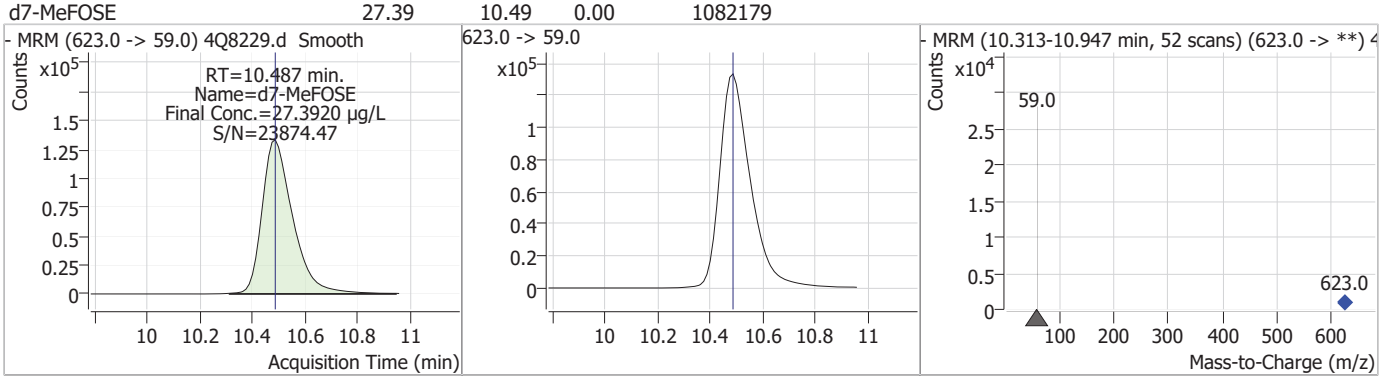


Perfluorinated Compounds by LC/MS/MS

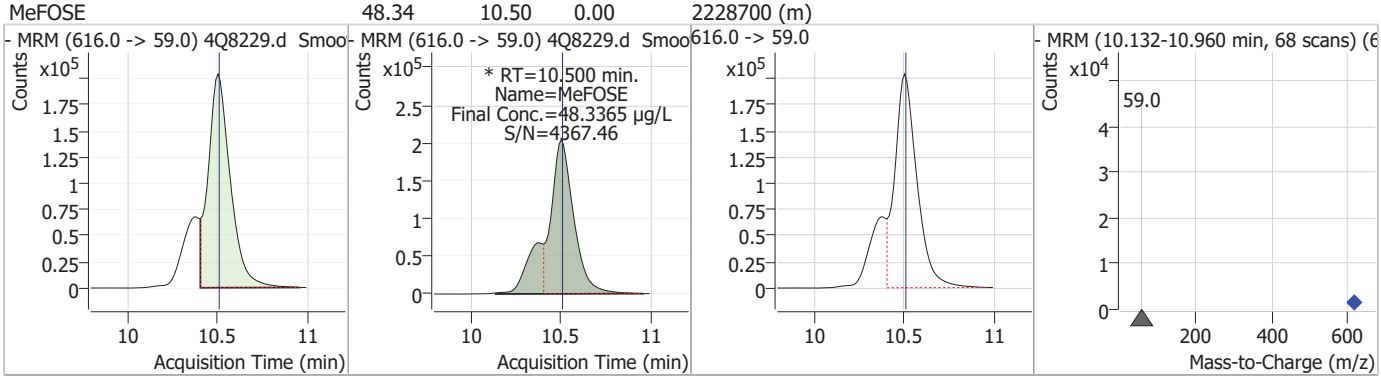
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	4.98	9.55	0.00	89886	699.0 -> 99.0	63.4	30.1	90.4



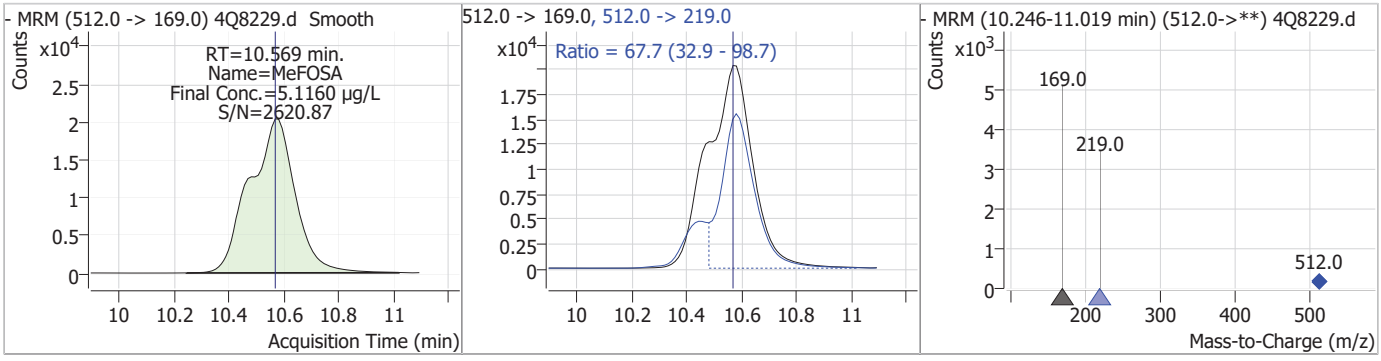
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	27.39	10.49	0.00	1082179				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	48.34	10.50	0.00	2228700 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	5.12	10.57	0.00	235092	512.0 -> 219.0	67.7	32.9	98.7



7.5.15

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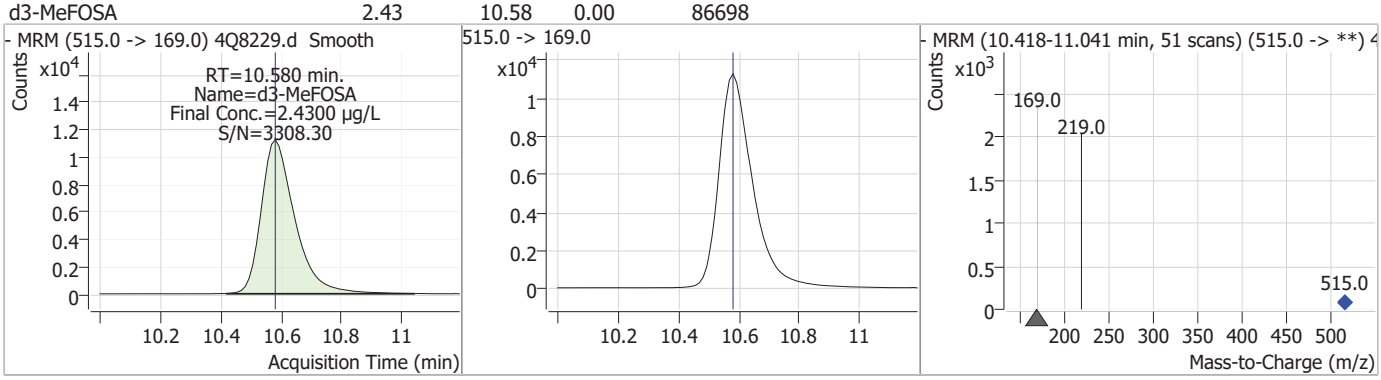
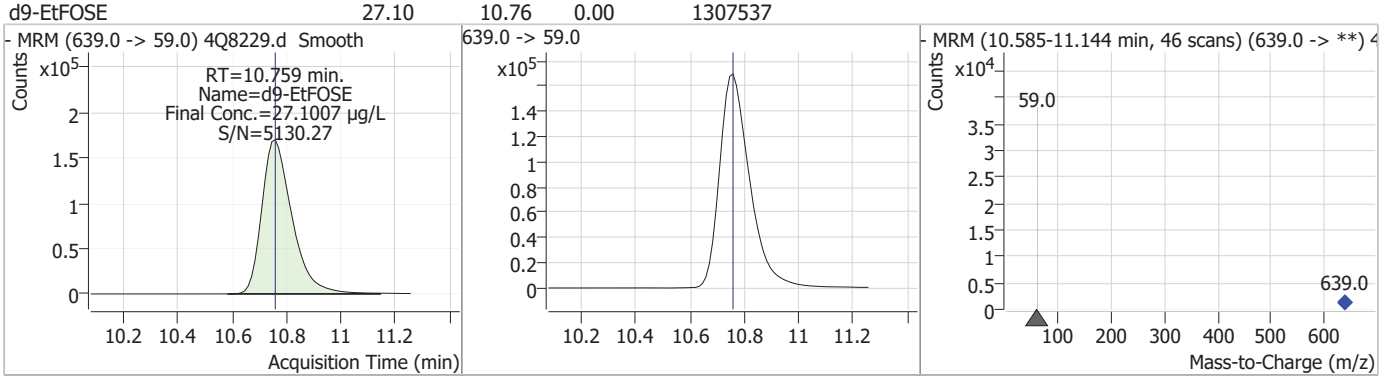
Perfluorinated Compounds by LC/MS/MS

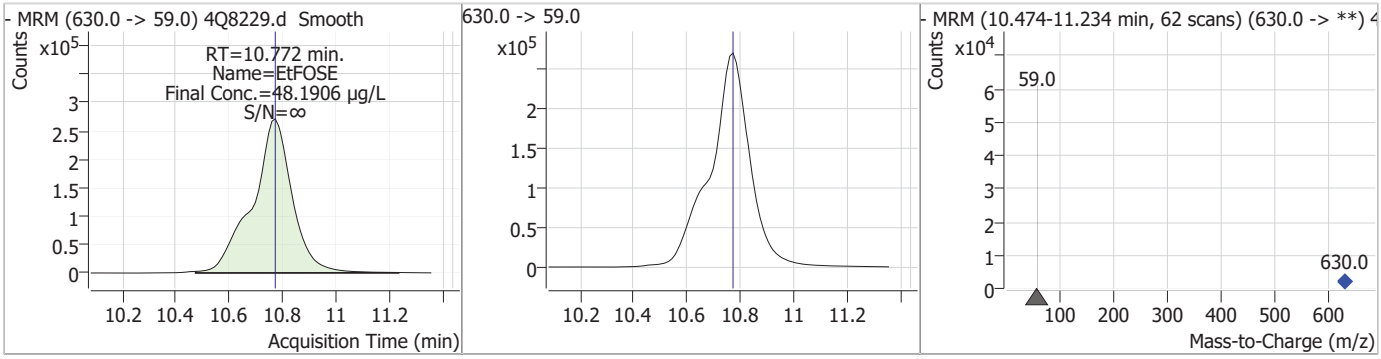
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.43	10.58	0.00	86698				



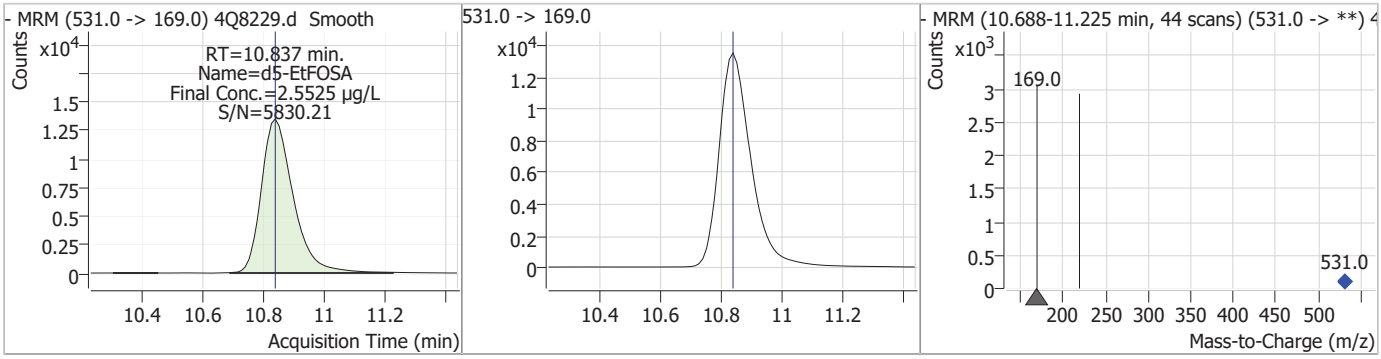
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	27.10	10.76	0.00	1307537				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	48.19	10.77	0.00	2809366				

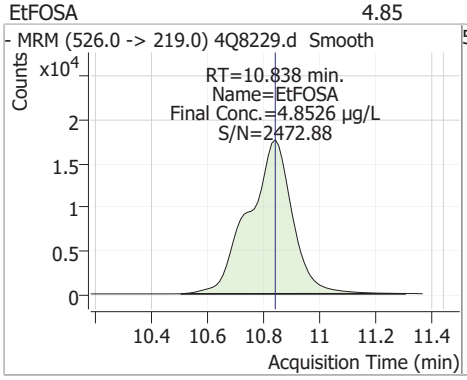


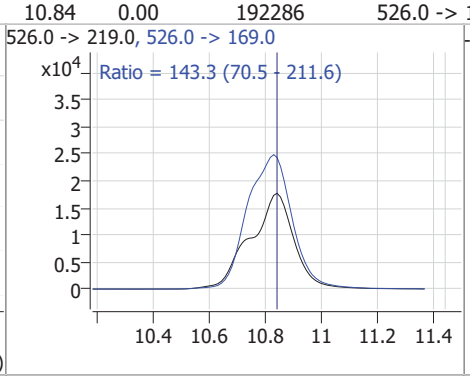
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.55	10.84	0.00	98146				

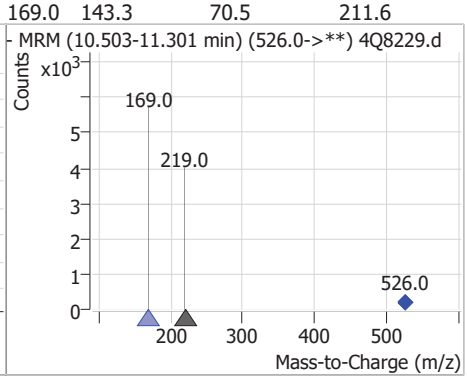


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	4.85	10.84	0.00	192286	526.0 -> 169.0	143.3	70.5	211.6







7.5.15

7

Manual Integration Approval Summary

Sample Number: T4Q140-RT
Lab FileID: 4Q8229.D
Injection Time: 05/02/25 13:33
Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.42	Split peak
MeFOSAA	2355-31-9		7.94	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.32	Split peak
MeFOSE	24448-09-7		10.50	Split peak

QQQ Check Tune Report

Agilent | Trusted Answers

Instrument Name	LCMST1Q
MS Model	6470A
MS Instrument Serial	SG2007G106
Software_Firmware Version	10.1.67, FW: A.00.08.112
Tune Date & Time	12 May 2025 14:49:53
File Path	D:\MassHunter\Tune\QQQ\G6470A\atunes.TUNE.XML
Ion Source	AJS ESI
Ionization Mode	AJS ESI
Tuned Resolution	Unit Only [Wide & Widest Not Tuned]
Vacuum Pressure	1.08E+0 [R] (Torr); 3.75E-5 [H] (Torr)

Source Parameters

Parameter	Negative
Gas Temp (°C)	300
Gas Flow (l/min)	8
Nebulizer (psi)	15
Capillary (V)	3500
Nozzle Voltage (V)	1500
Sheath Gas Temp (°C)	250
Sheath Gas Flow (l/min)	7

QQQ Check Tune Report

Agilent | Trusted Answers

Negative Results

Analyzer: MS1 Polarity: Negative Width: Unit

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	113.04	0.05	Pass	0.70	0.62	-0.08	Pass	279689
302.00	302.04	0.04	Pass	0.70	0.64	-0.06	Pass	83707
601.98	601.99	0.01	Pass	0.70	0.65	-0.05	Pass	152458
1033.99	1033.92	-0.07	Pass	0.70	0.67	-0.03	Pass	204189
1633.95	1633.84	-0.11	Pass	0.70	0.65	-0.05	Pass	201264
2233.91	2233.74	-0.17	Pass	0.70	0.64	-0.06	Pass	77607

Analyzer: MS2 Polarity: Negative Width: Unit

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.05	0.05	Pass	0.70	0.62	-0.08	Pass	72411
112.99	112.99	0.00	Pass	0.70	0.68	-0.02	Pass	241187
302.00	302.00	0.00	Pass	0.70	0.69	-0.01	Pass	124736
601.98	601.93	-0.05	Pass	0.70	0.69	-0.01	Pass	209249
1033.99	1033.90	-0.09	Pass	0.70	0.70	0.00	Pass	582569
1633.95	1633.80	-0.15	Pass	0.70	0.70	0.00	Pass	1283037
2233.91	2233.72	-0.19	Pass	0.70	0.76	0.06	Pass	1152736

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/15/25 05:29

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26029.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/14/2025 4:38:33 PM
Sample Name : IC361-1
Vial : P1-A2
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : t1q361.batch.bin
Sample Information : OP63461,T1Q361,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	182500	10.00 µg/L	0.000
M5-PFPeA	4.636	268.0 -> 223.0	109181	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	60794	2.50 µg/L	0.000
M4-PFHpA	6.565	367.0 -> 322.0	51599	2.50 µg/L	0.012
M8-PFOA	7.148	421.0 -> 376.0	84099	2.50 µg/L	0.000
M9-PFNA	7.669	472.0 -> 427.0	29222	1.25 µg/L	0.012
M6-PFDA	8.139	519.0 -> 474.0	29897	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	43536	1.25 µg/L	0.000
M2-PFDoDA	9.027	615.0 -> 570.0	40435	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	17166	1.25 µg/L	0.000
M8-FOSA	9.334	506.0 -> 78.0	19585	2.50 µg/L	0.000
M3-PFBS	5.711	302.0 -> 99.0	7281	2.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	6960	2.50 µg/L	0.000
M8-PFOS	8.316	507.0 -> 99.0	7472	2.50 µg/L	0.012
M2-4:2FTS	5.446	329.0 -> 81.0	1598	5.00 µg/L	0.000
M2-6:2FTS	6.934	429.0 -> 81.0	2742	5.00 µg/L	0.012
M2-8:2FTS	7.927	529.0 -> 81.0	4186	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	38565	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	22236	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	31643	5.00 µg/L	0.000
M7-MeFOSE	10.510	623.0 -> 59.0	97831	25.00 µg/L	0.000
M9-EtFOSE	10.780	639.0 -> 59.0	119950	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	15380	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	15104	2.50 µg/L	0.000
13C4-PFOS	8.317	503.0 -> 80.0	13167	2.50 µg/L	0.012
13C3-PFBA	3.263	216.0 -> 172.0	78423	5.00 µg/L	0.013
18O2-PFHxS	7.274	403.0 -> 84.0	8655	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	89972	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	26221	1.25 µg/L	0.000
13C5-PFNA	7.669	468.0 -> 423.0	31175	1.25 µg/L	0.012
13C2-PFHxA	5.760	315.0 -> 270.0	60553	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1598	5.53 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 110.6%	
13C2-6:2FTS	6.934	429.0 -> 81.0	2742	4.89 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.9%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4186	4.75 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.0%	
13C2-PFDoDA	9.027	615.0 -> 570.0	40435	1.14 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.9%	
13C2-PFTeDA	9.772	715.0 -> 670.0	17166	1.15 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.7%	
13C3-PFBS	5.711	302.0 -> 99.0	7281	2.52 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.8%	
13C3-PFHxS	7.275	402.0 -> 99.0	6960	2.40 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.2%		
13C4-PFBA	3.260	217.0 -> 172.0	182500	9.79 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 97.9%		
13C4-PFHpA	6.565	367.0 -> 322.0	51599	2.46 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.3%		
13C5-PFHxA	5.759	318.0 -> 273.0	60794	2.36 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.4%		
13C5-PFPeA	4.636	268.0 -> 223.0	109181	4.92 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.4%		
13C6-PFDA	8.139	519.0 -> 474.0	29897	1.18 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.2%		
13C7-PFUnDA	8.595	570.0 -> 525.0	43536	1.18 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.5%		
13C8-FOSA	9.334	506.0 -> 78.0	19585	2.44 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.4%		
13C8-PFOA	7.148	421.0 -> 376.0	84099	2.57 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.7%		
13C8-PFOS	8.316	507.0 -> 99.0	7472	2.47 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.7%		
13C9-PFNA	7.669	472.0 -> 427.0	29222	1.15 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.9%		
d3-MeFOSAA	8.161	573.0 -> 419.0	38565	4.81 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.2%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	22236	9.85 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.5%		
d3-MeFOSA	10.601	515.0 -> 169.0	15104	2.42 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.0%		
d5-EtFOSAA	8.358	589.0 -> 419.0	31643	4.85 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.0%		
d7-MeFOSE	10.510	623.0 -> 59.0	97831	23.73 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 94.9%		
d9-EtFOSE	10.780	639.0 -> 59.0	119950	24.57 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 98.3%		
d5-EtFOSA	10.859	531.0 -> 169.0	15380	2.42 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.6%		
Target Compounds						QValue
4:2FTS	5.447	327.0 -> 307.0	1926	0.65 µg/L		73
		327.0 -> 81.0	1157			
6:2FTS	6.934	427.0 -> 407.0	2156	0.61 µg/L		95
		427.0 -> 81.0	844			
8:2FTS	7.927	527.0 -> 507.0	2609	0.69 µg/L		93
		527.0 -> 81.0	862			
EtFOSAA	8.371	584.0 -> 419.0	809	0.16 µg/L	m	74
		584.0 -> 483.0	706			
FOSA	9.324	498.0 -> 78.0	1160	0.17 µg/L	m	98
		498.0 -> 478.0	68			
MeFOSAA	8.175	570.0 -> 419.0	1109	0.18 µg/L	#m	66
		570.0 -> 512.0	640			
PFBA	3.254	213.0 -> 169.0	3688	0.72 µg/L		100
PFBS	5.700	299.0 -> 80.0	1396	0.17 µg/L		92
		299.0 -> 99.0	613			
PFDA	8.140	513.0 -> 469.0	3813	0.19 µg/L		94
		513.0 -> 219.0	724			
PFDoDA	9.027	613.0 -> 569.0	5678	0.19 µg/L		98
		613.0 -> 319.0	688			
PFDS	9.193	599.0 -> 80.0	602	0.17 µg/L		90

Perfluorinated Compounds by LC/MS/MS

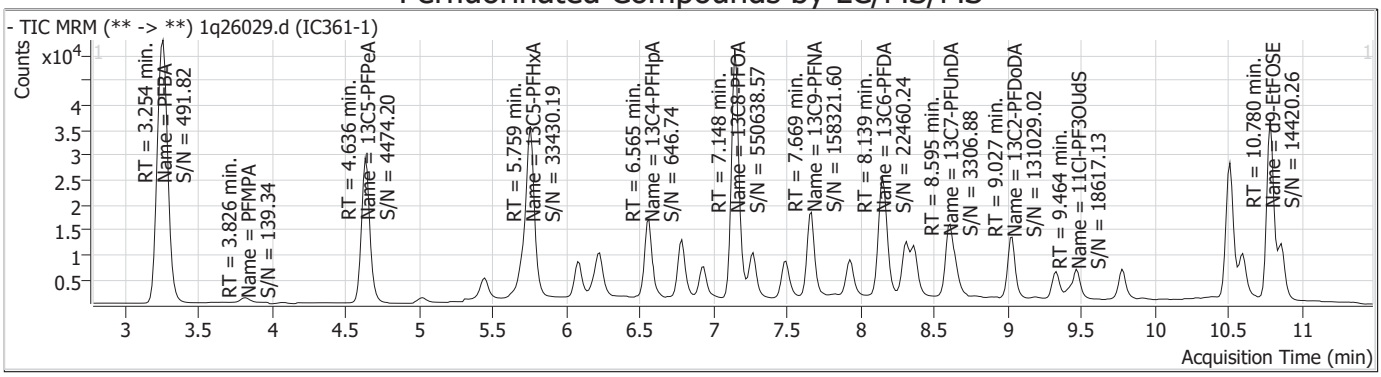
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	347				
PFHpA	6.566	363.0 -> 319.0	5098	0.18	µg/L		85
		363.0 -> 169.0	1116				
PFHpS	7.822	449.0 -> 80.0	922	0.19	µg/L		85
		449.0 -> 99.0	373				
PFHxA	5.761	313.0 -> 269.0	4387	0.20	µg/L	#	95
		313.0 -> 119.0	207				
PFHxS	7.276	399.0 -> 80.0	982	0.18	µg/L	m	94
		399.0 -> 99.0	463				
PFNA	7.669	463.0 -> 419.0	2721	0.19	µg/L	m	88
		463.0 -> 219.0	618				
PFNS	8.785	549.0 -> 80.0	467	0.17	µg/L		89
		549.0 -> 99.0	224				
PFOA	7.149	413.0 -> 369.0	5690	0.20	µg/L	m	98
		413.0 -> 169.0	1128				
PFOS	8.318	499.0 -> 80.0	1312	0.21	µg/L	m	90
		499.0 -> 99.0	510				
PFPeA	4.638	263.0 -> 219.0	6746	0.35	µg/L		100
PFPeS	6.630	349.0 -> 80.0	722	0.19	µg/L		96
		349.0 -> 99.0	352				
PFTeDA	9.773	713.0 -> 669.0	3748	0.20	µg/L		99
		713.0 -> 219.0	300				
PFTrDA	9.412	663.0 -> 619.0	5495	0.19	µg/L		99
		663.0 -> 369.0	365				
PFUnDA	8.596	563.0 -> 519.0	4986	0.17	µg/L		86
		563.0 -> 269.0	1000				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	15932	0.66	µg/L		99
		633.0 -> 453.0	4827				
9Cl-PF3ONS	8.648	531.0 -> 351.0	13540	0.69	µg/L		98
		533.0 -> 353.0	4057				
ADONA	6.789	377.0 -> 251.0	32647	0.67	µg/L		99
		377.0 -> 85.0	9180				
HFPO-DA	6.088	285.0 -> 169.0	1502	0.70	µg/L		98
		285.0 -> 185.0	130				
3:3FTCA	4.072	241.0 -> 177.0	1018	0.98	µg/L		95
		241.0 -> 117.0	53				
5:3FTCA	6.229	341.0 -> 237.0	18594	4.72	µg/L		97
		341.0 -> 217.0	12708				
7:3FTCA	7.495	441.0 -> 337.0	20124	4.52	µg/L		96
		441.0 -> 317.0	8534				
EtFOSA	10.872	526.0 -> 219.0	1186	0.18	µg/L	m	92
		526.0 -> 169.0	1446				
EtFOSE	10.794	630.0 -> 59.0	9142	1.75	µg/L		100
MeFOSA	10.603	512.0 -> 169.0	1496	0.19	µg/L	m	92
		512.0 -> 219.0	1106				
MeFOSE	10.523	616.0 -> 59.0	7325	1.84	µg/L	m	100
PFDoDS	9.912	699.0 -> 80.0	572	0.17	µg/L		98
		699.0 -> 99.0	332				
NFDHA	5.651	295.0 -> 201.0	514	0.35	µg/L	#	71
		201.0 -> 85.0	3232				
		295.0 -> 85.0	249				
PFMBA	5.027	279.0 -> 85.0	3836	0.37	µg/L		100
PFMPA	3.826	229.0 -> 85.0	4107	0.35	µg/L		100
PFEESA	6.194	315.0 -> 135.0	6941	0.33	µg/L		99
		315.0 -> 69.0	648				

 # = Qualifier out of range, m = manually integrated, + = Area summed

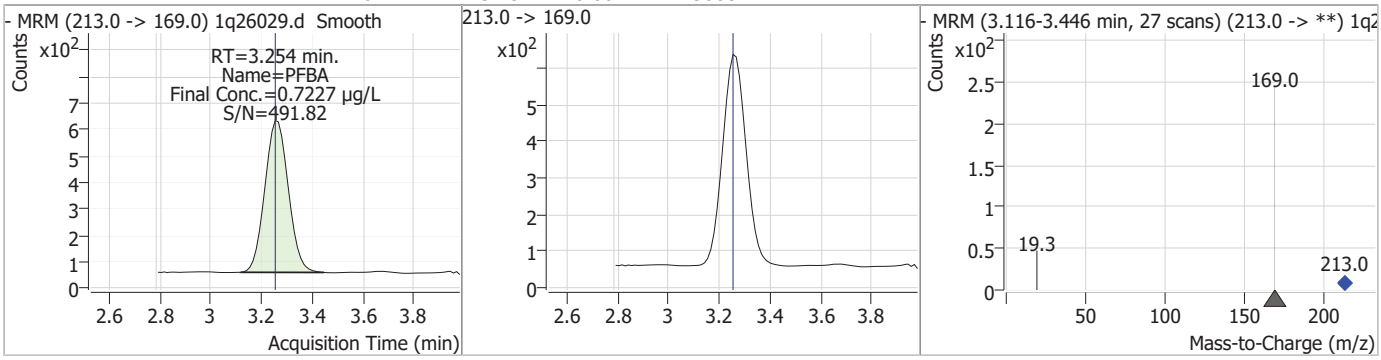
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

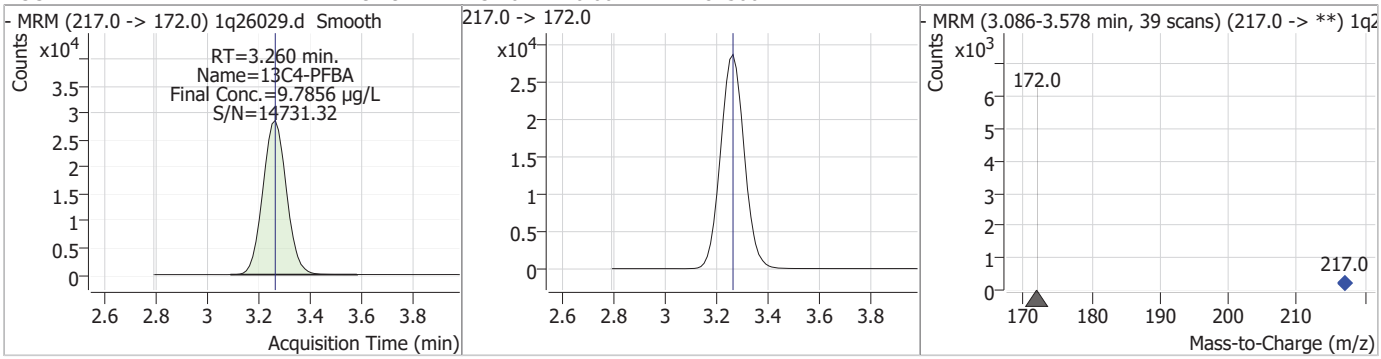
Perfluorinated Compounds by LC/MS/MS



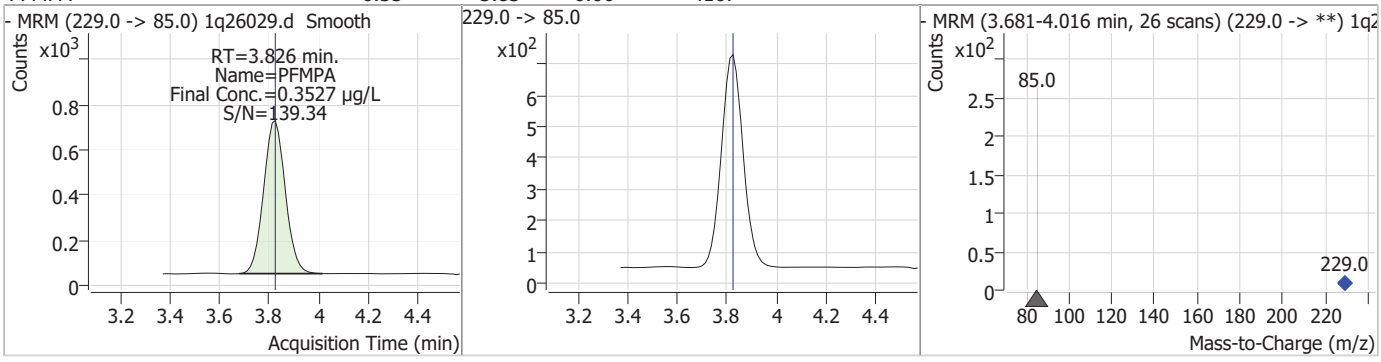
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.72	3.25	0.00	3688				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.79	3.26	0.00	182500				

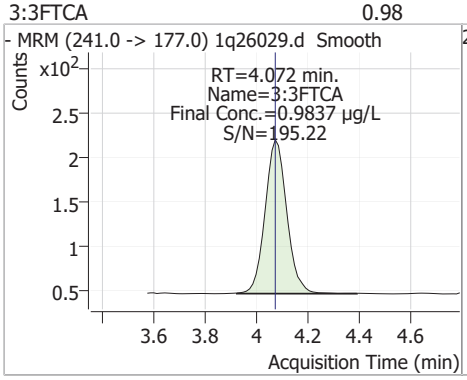


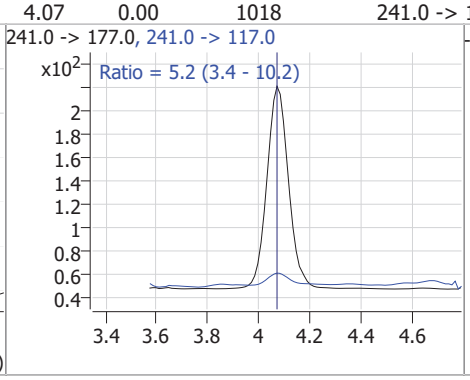
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.35	3.83	0.00	4107				

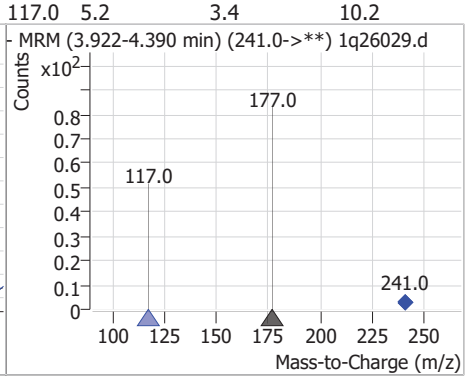


Perfluorinated Compounds by LC/MS/MS

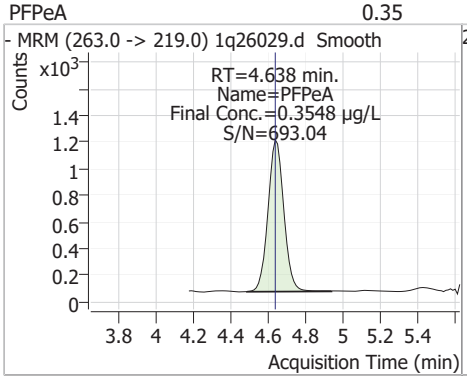
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	0.98	4.07	0.00	1018	241.0 -> 117.0	5.2	3.4	10.2

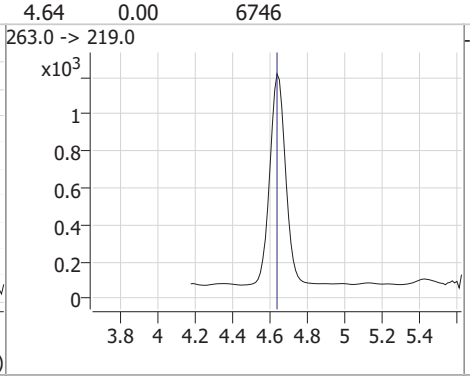


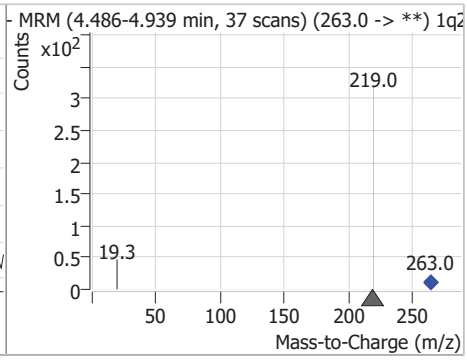




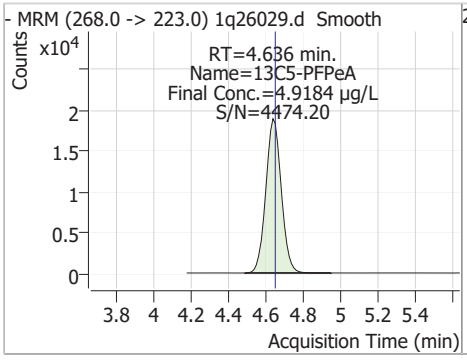
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.35	4.64	0.00	6746				

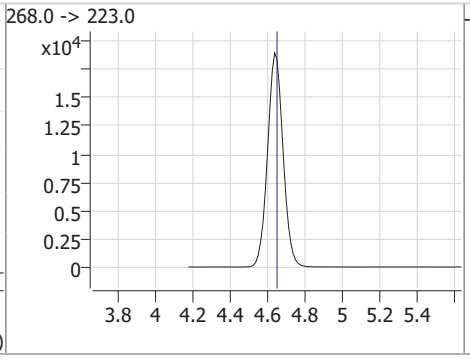


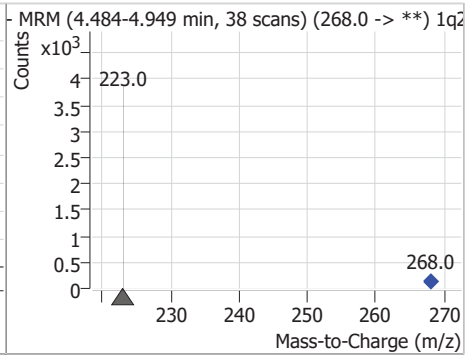




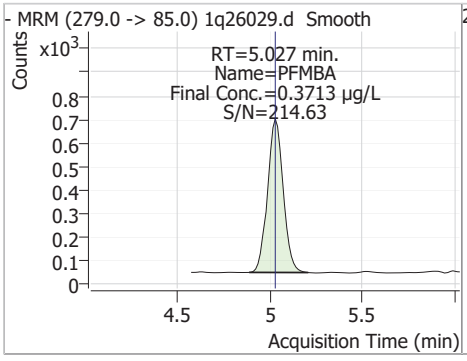
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.92	4.64	-0.01	109181				

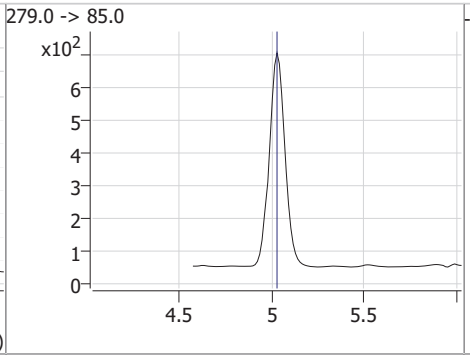


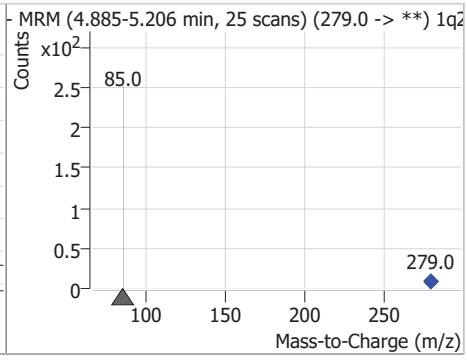




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.37	5.03	0.00	3836				

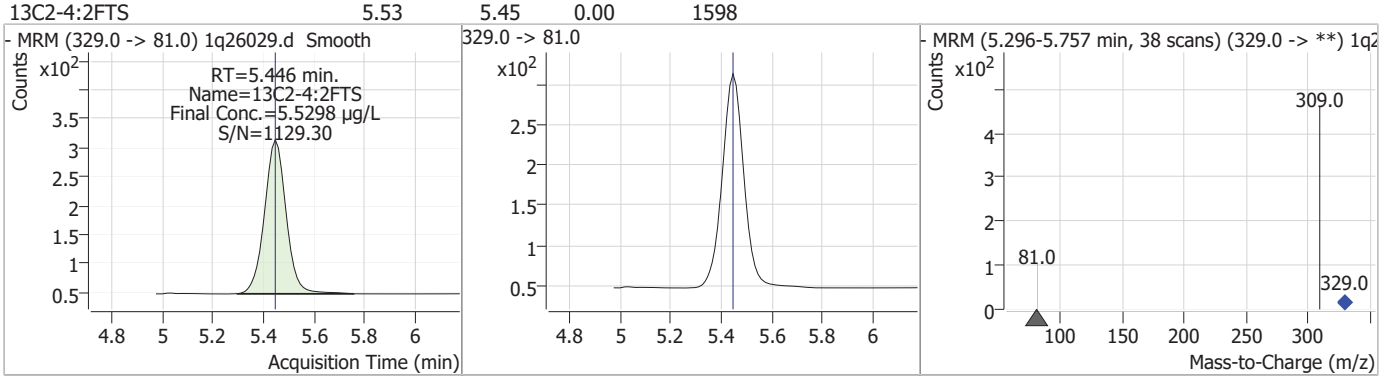




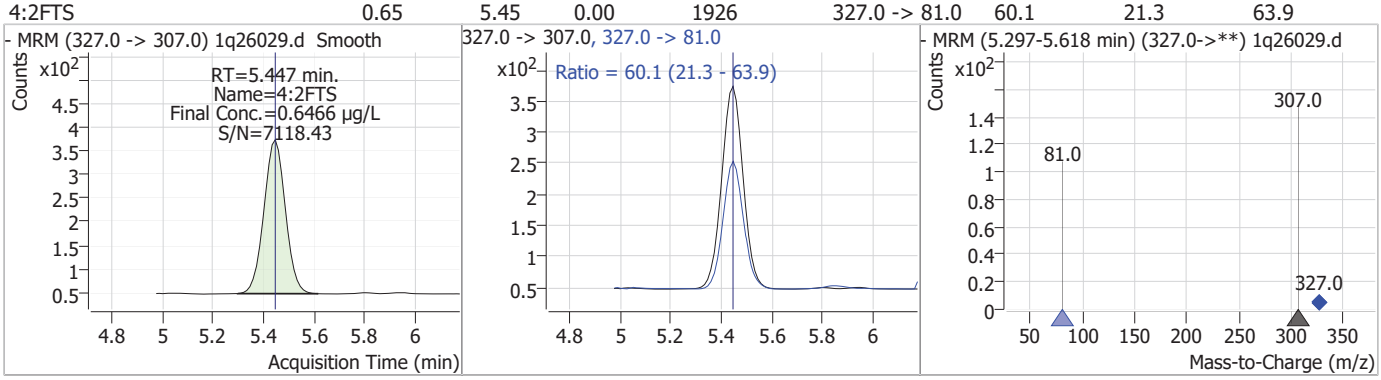


Perfluorinated Compounds by LC/MS/MS

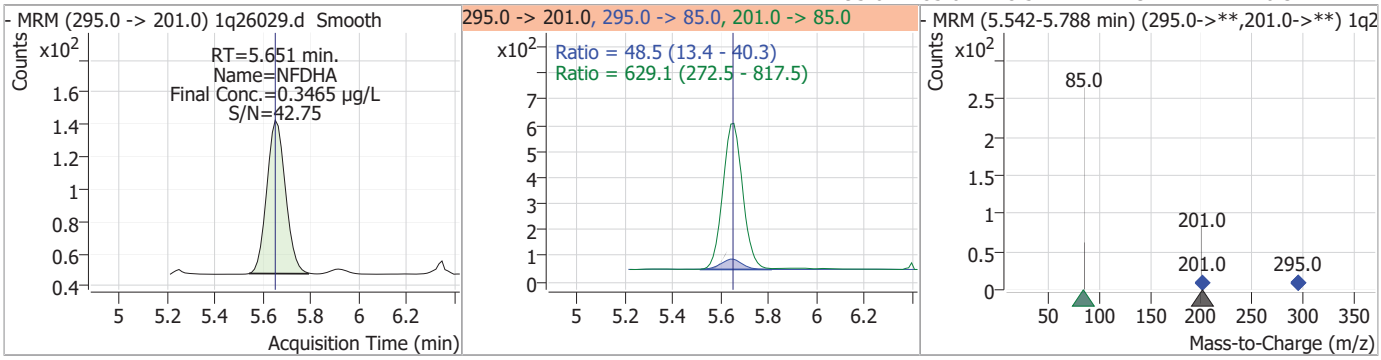
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.53	5.45	0.00	1598				



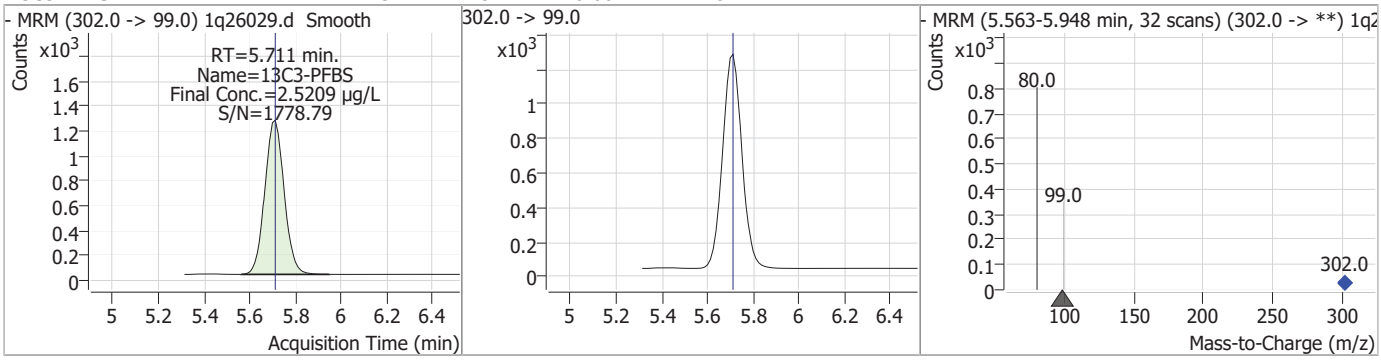
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	0.65	5.45	0.00	1926	327.0 -> 81.0	60.1	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.35	5.65	0.00	514	201.0 -> 85.0	629.1	272.5	817.5
					295.0 -> 85.0	48.5	13.4	40.3

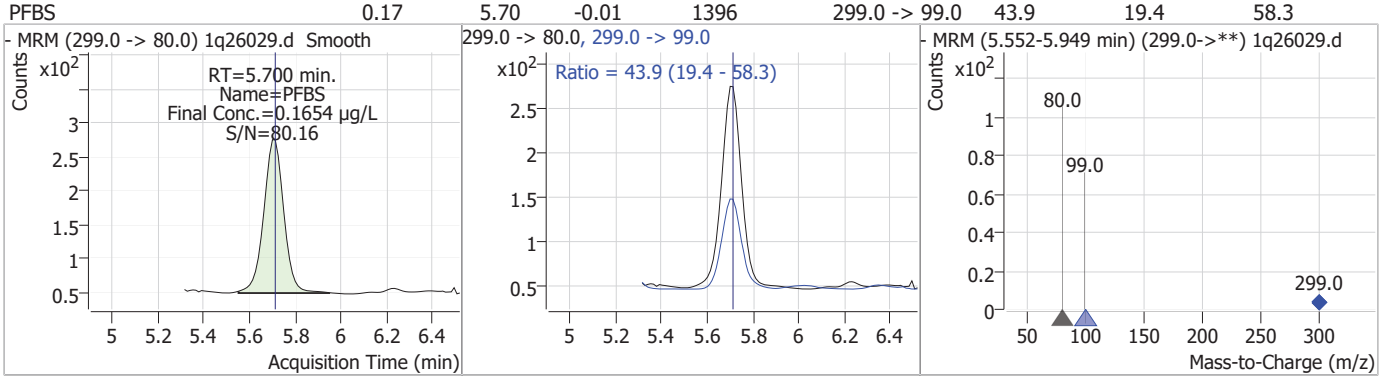


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.52	5.71	0.00	7281				

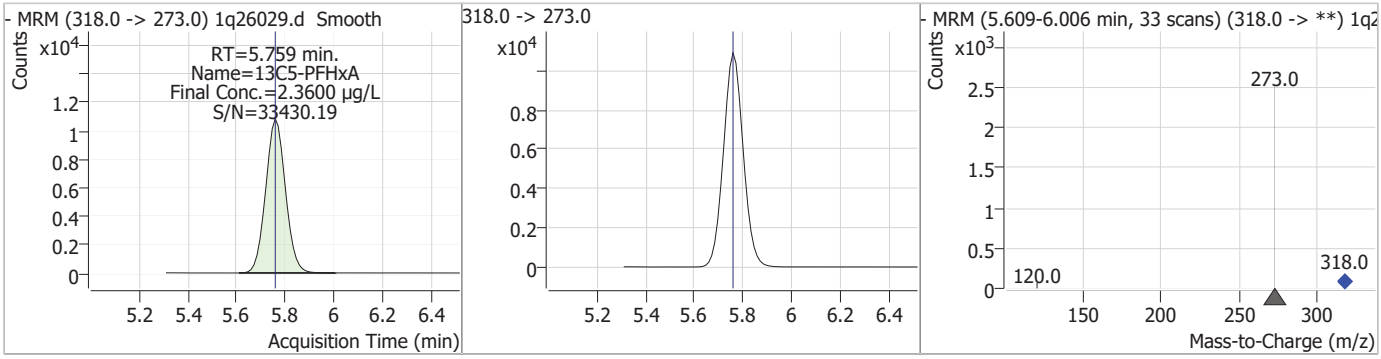


Perfluorinated Compounds by LC/MS/MS

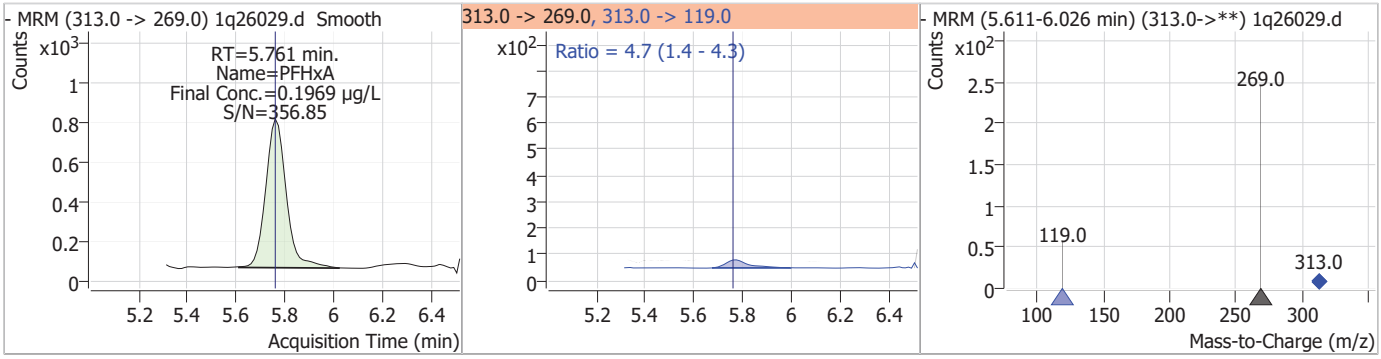
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.17	5.70	-0.01	1396	299.0 -> 99.0	43.9	19.4	58.3



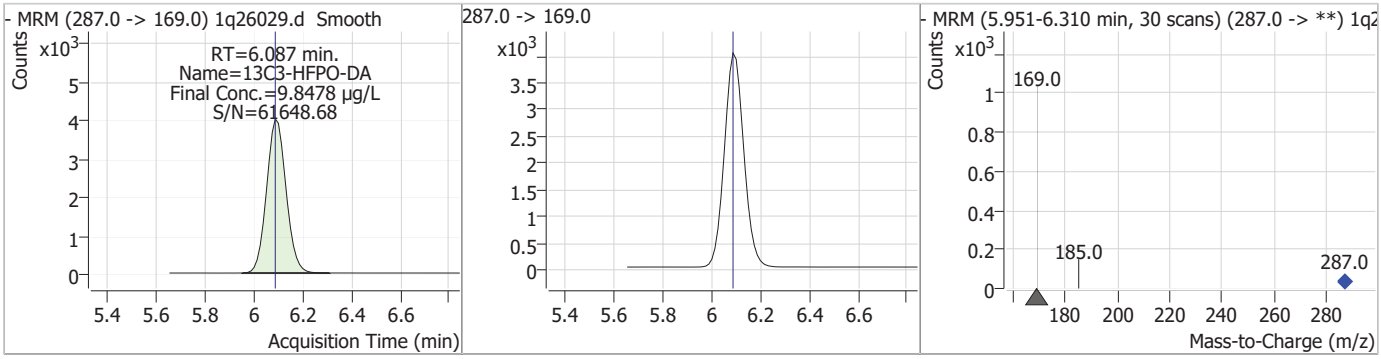
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.36	5.76	0.00	60794				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.20	5.76	0.00	4387	313.0 -> 119.0	4.7	1.4	4.3

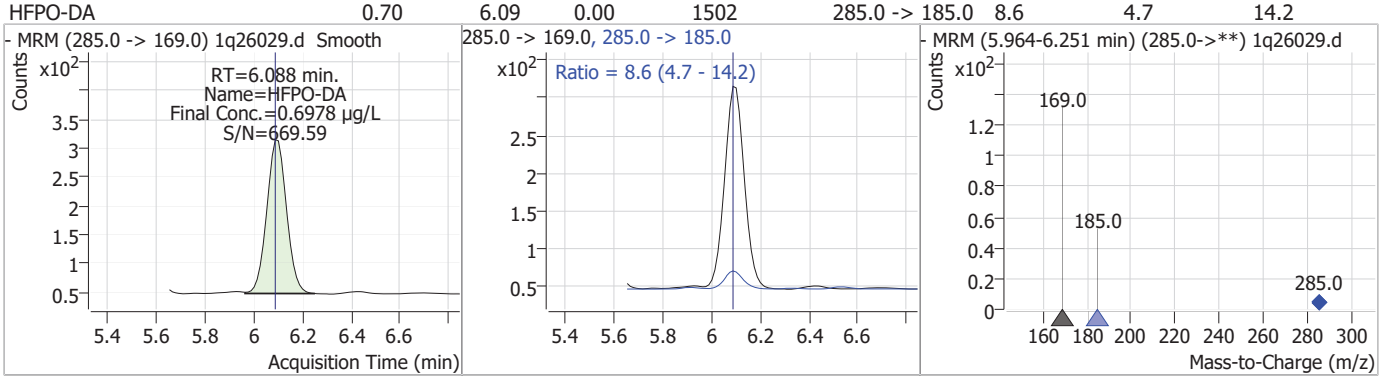


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.85	6.09	0.00	22236				

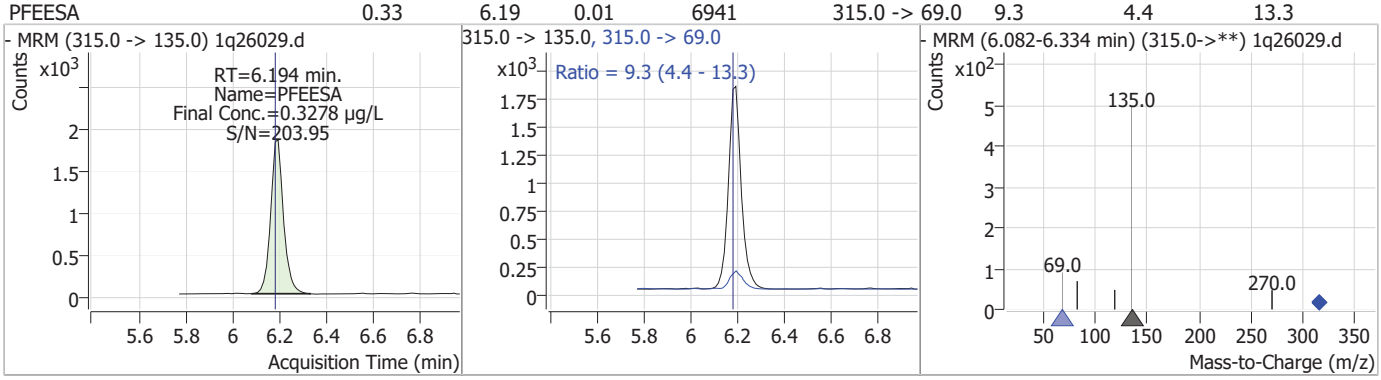


Perfluorinated Compounds by LC/MS/MS

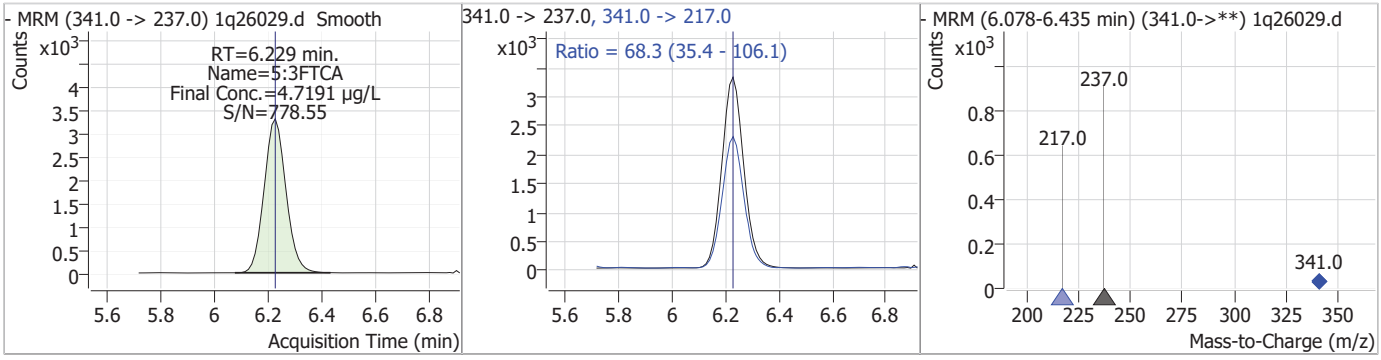
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	0.70	6.09	0.00	1502	285.0 -> 185.0	8.6	4.7	14.2



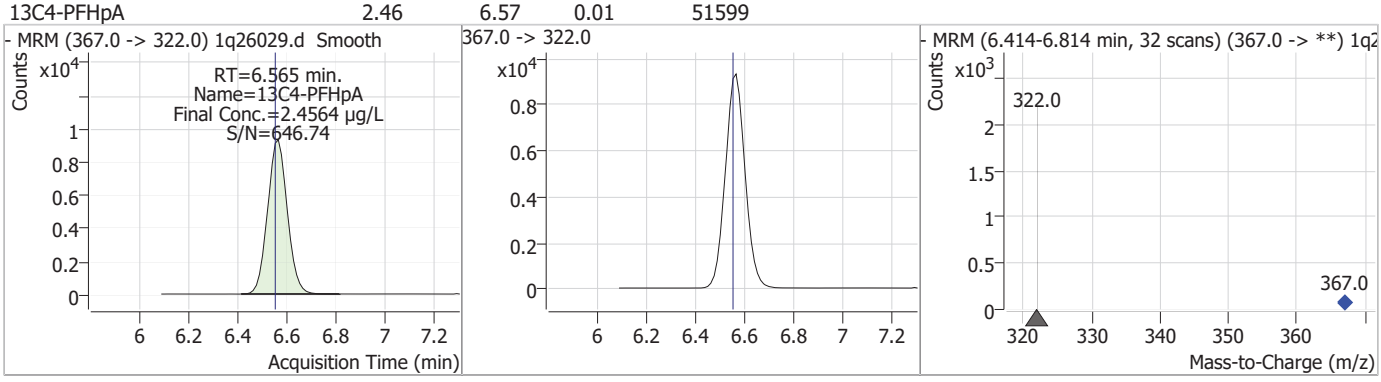
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.33	6.19	0.01	6941	315.0 -> 69.0	9.3	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	4.72	6.23	0.00	18594	341.0 -> 217.0	68.3	35.4	106.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.46	6.57	0.01	51599				

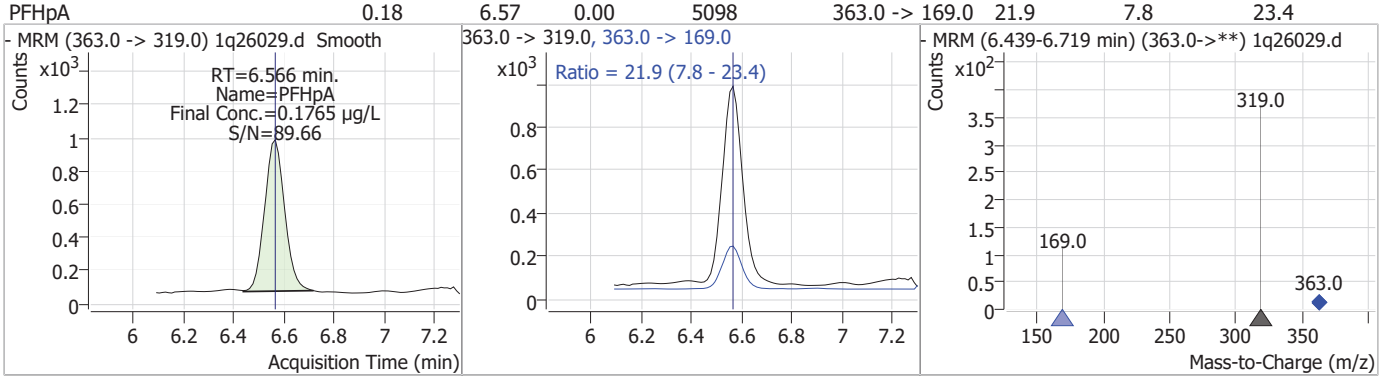


7.6.2

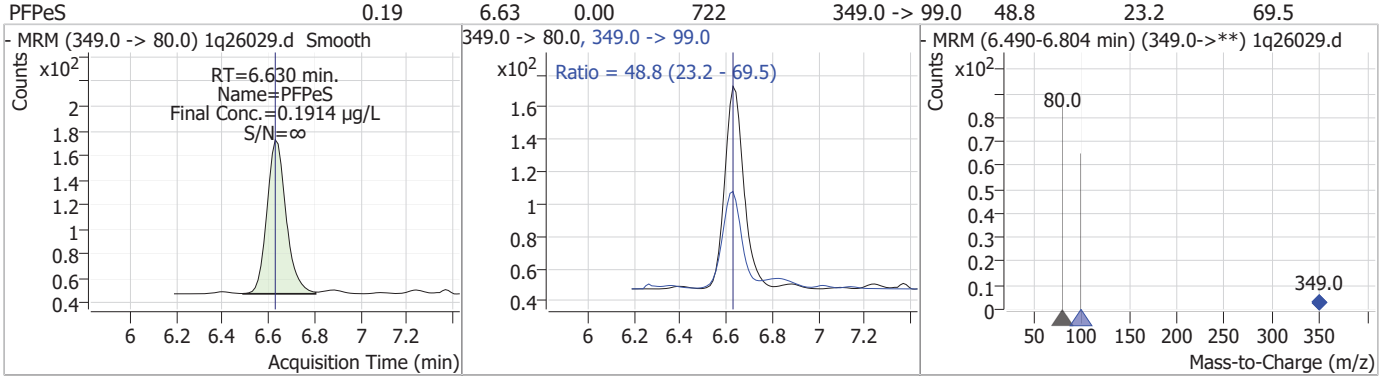
7

Perfluorinated Compounds by LC/MS/MS

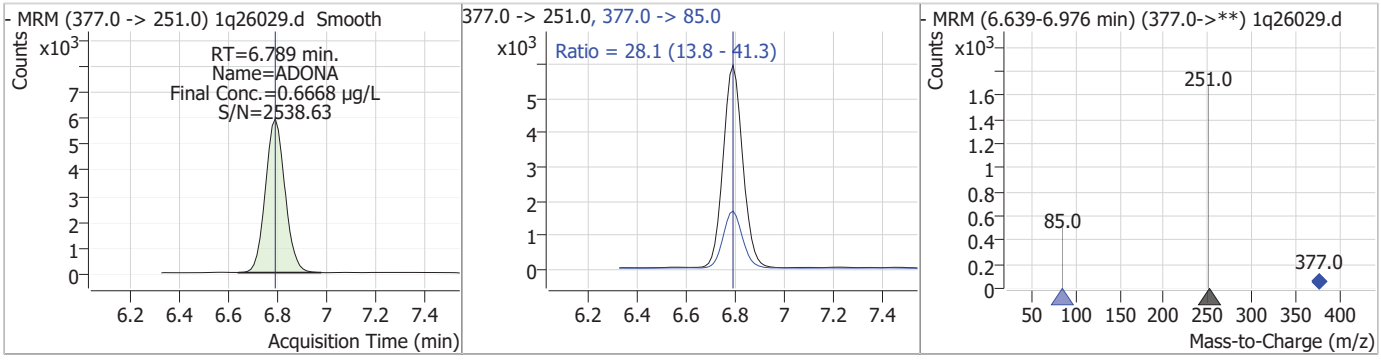
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.18	6.57	0.00	5098	363.0 -> 169.0	21.9	7.8	23.4



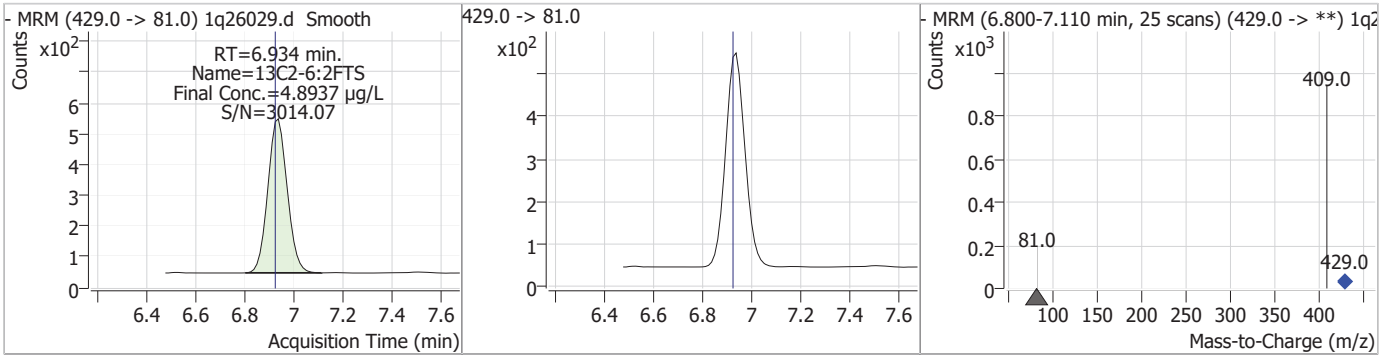
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.19	6.63	0.00	722	349.0 -> 99.0	48.8	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	0.67	6.79	0.00	32647	377.0 -> 85.0	28.1	13.8	41.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.89	6.93	0.01	2742				

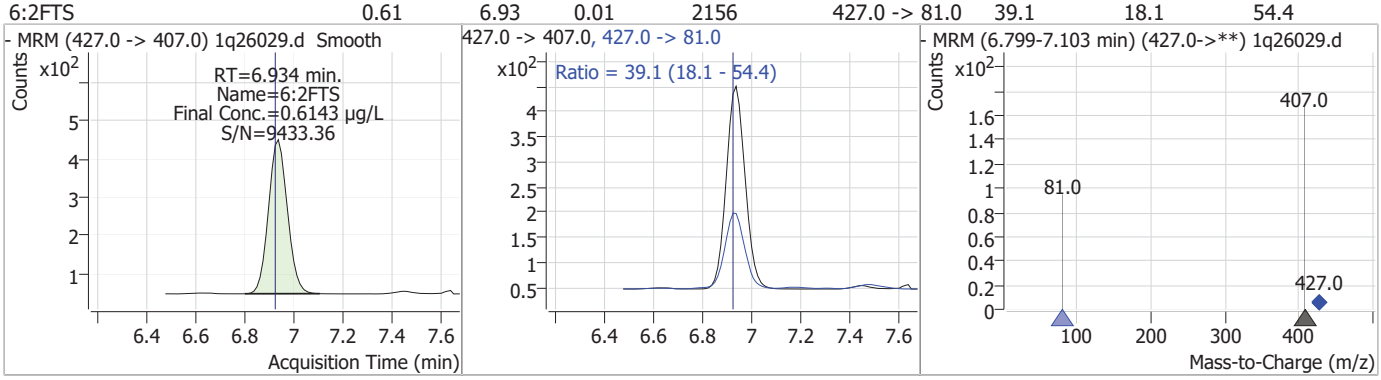


7.6.2

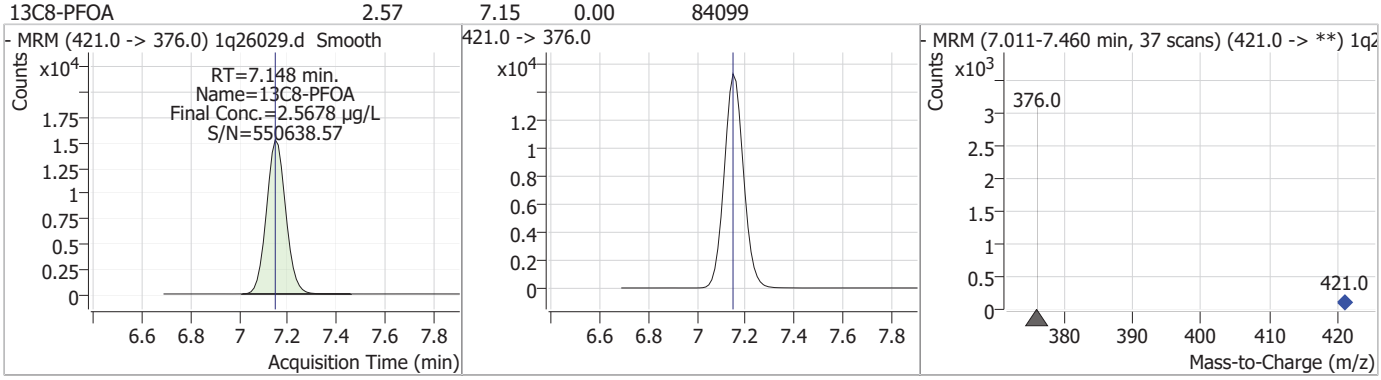
7

Perfluorinated Compounds by LC/MS/MS

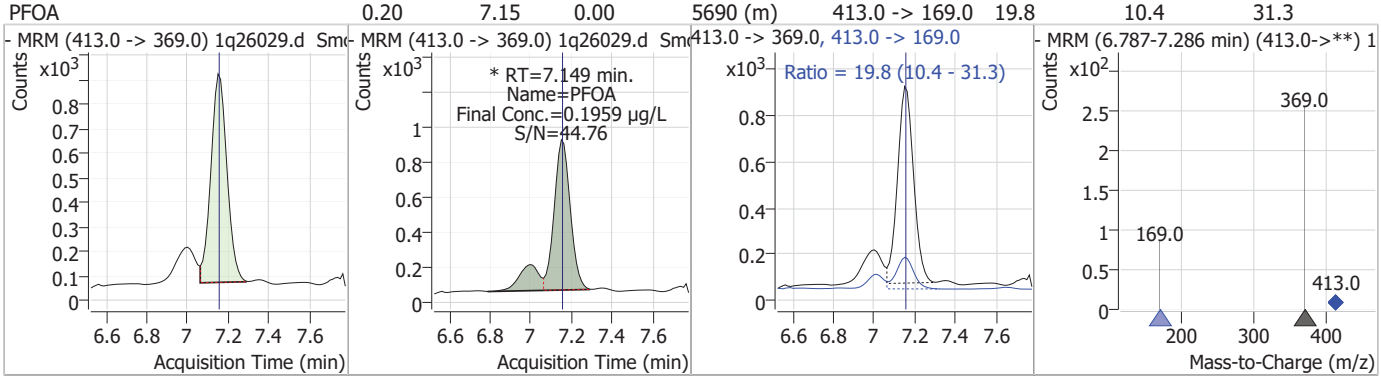
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.61	6.93	0.01	2156	427.0 -> 81.0	39.1	18.1	54.4



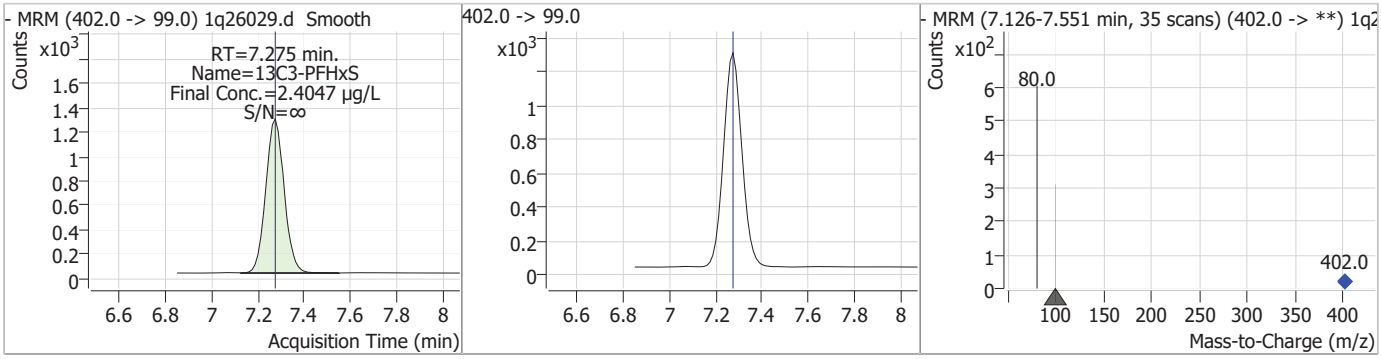
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.57	7.15	0.00	84099				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.20	7.15	0.00	5690 (m)	413.0 -> 169.0	19.8	10.4	31.3

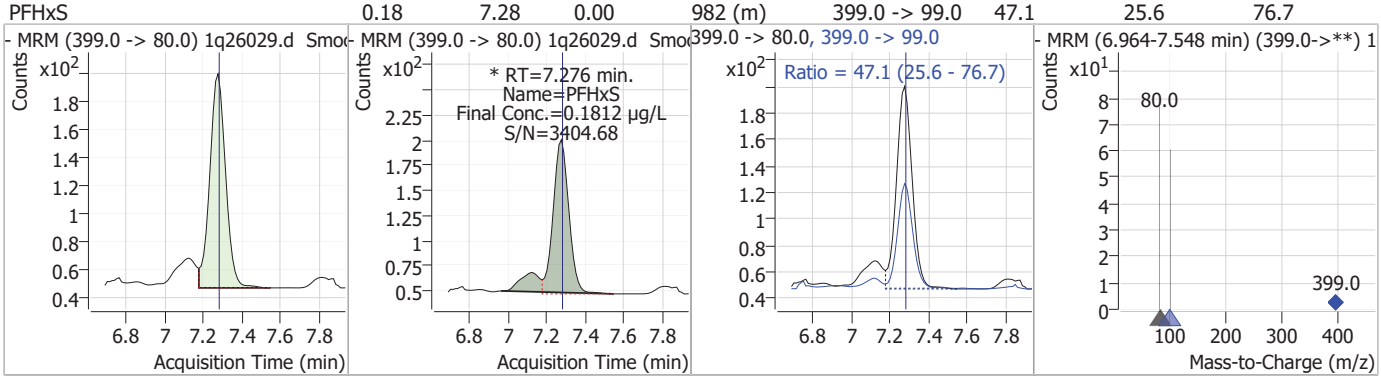


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.40	7.27	0.00	6960				

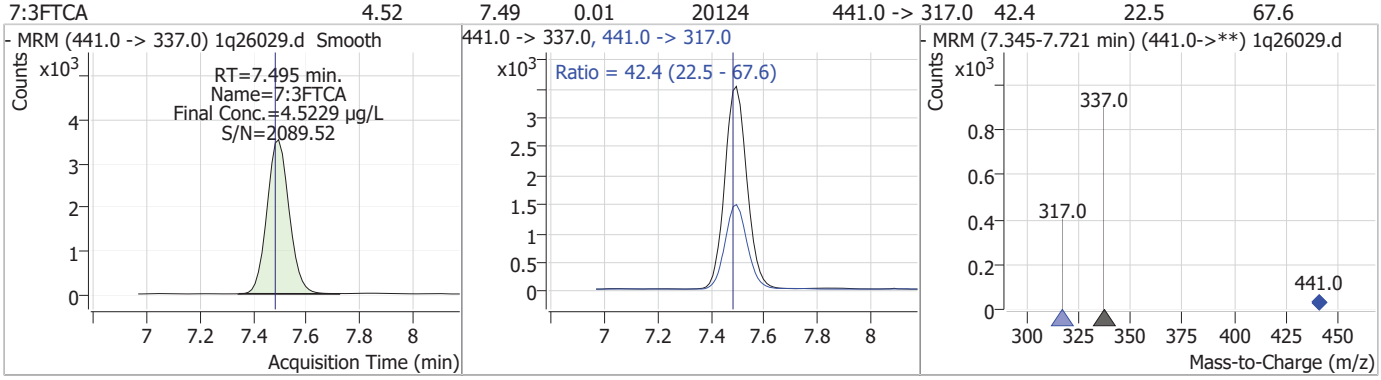


Perfluorinated Compounds by LC/MS/MS

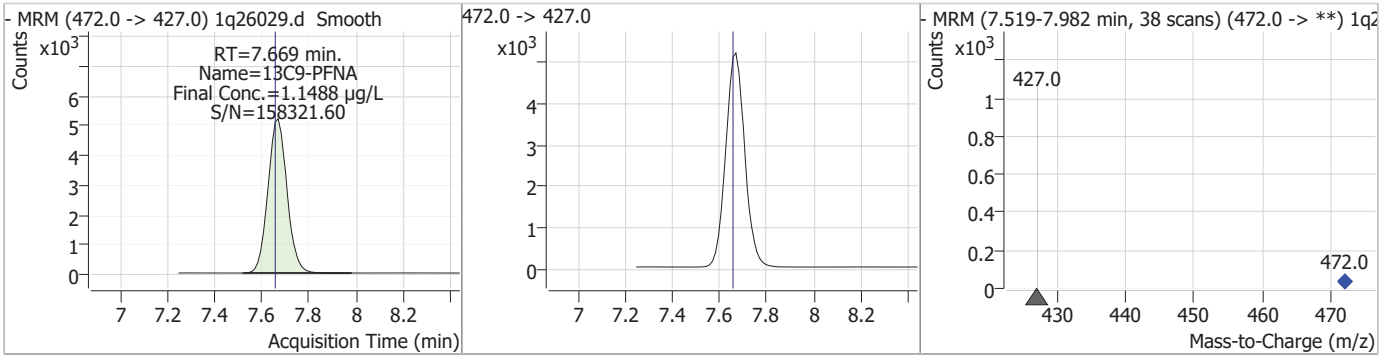
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.18	7.28	0.00	982 (m)	399.0 -> 99.0	47.1	25.6	76.7



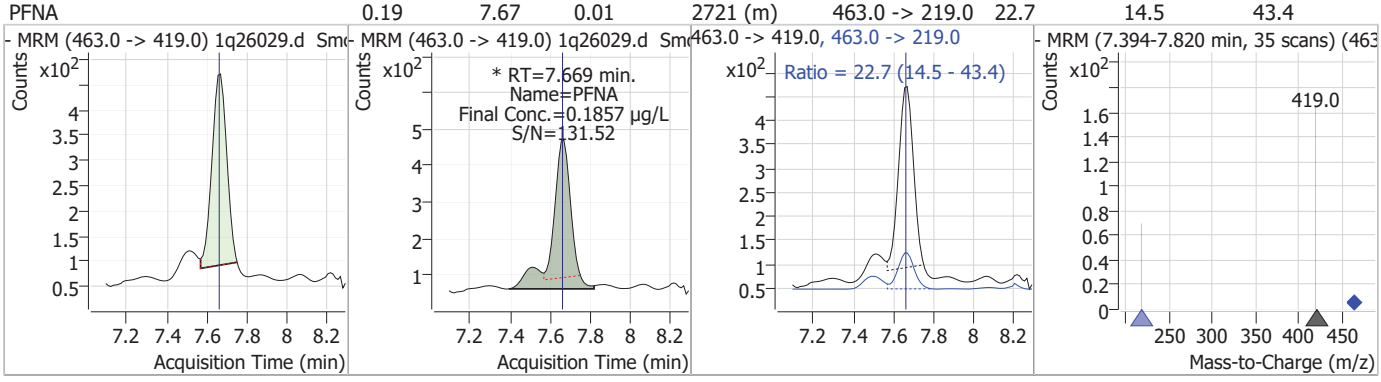
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	4.52	7.49	0.01	20124	441.0 -> 317.0	42.4	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.15	7.67	0.01	29222				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.19	7.67	0.01	2721 (m)	463.0 -> 219.0	22.7	14.5	43.4



7.6.2

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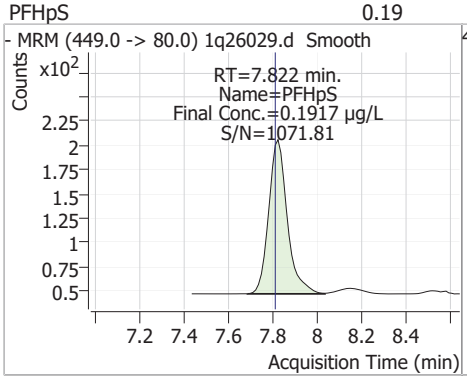
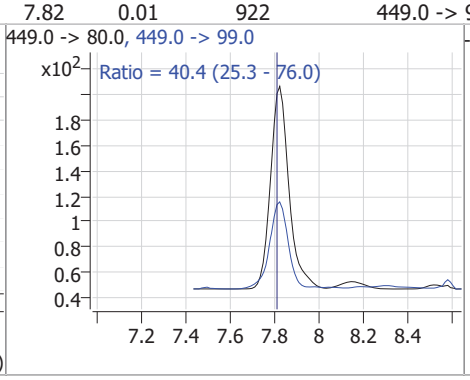
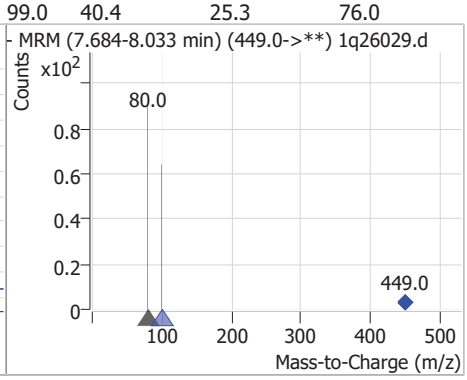
Perfluorinated Compounds by LC/MS/MS

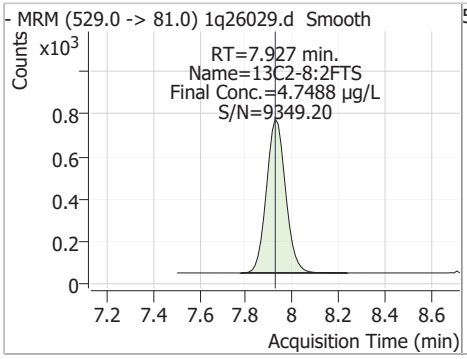
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.19	7.82	0.01	922	449.0 -> 99.0	40.4	25.3	76.0

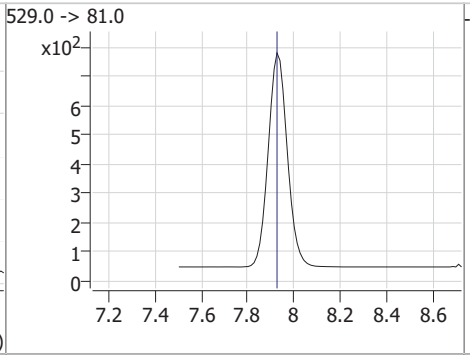


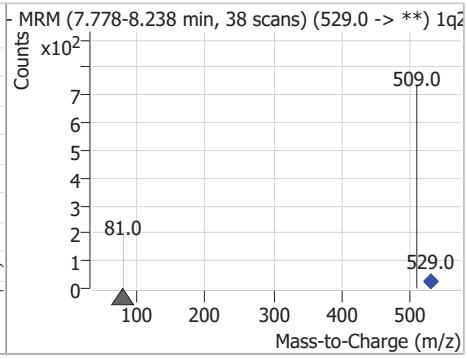




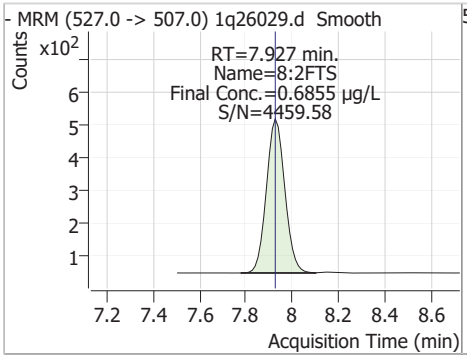
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.75	7.93	0.00	4186				

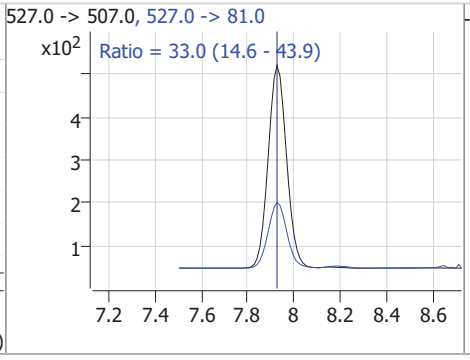


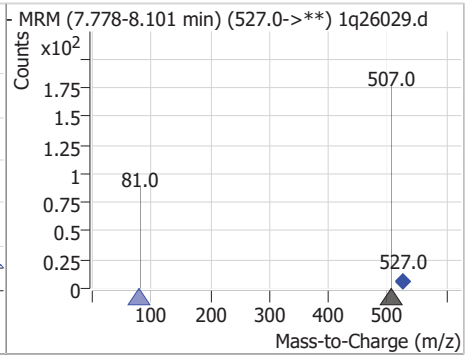




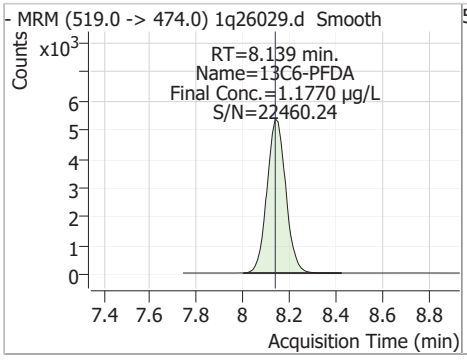
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.69	7.93	0.00	2609	527.0 -> 81.0	33.0	14.6	43.9

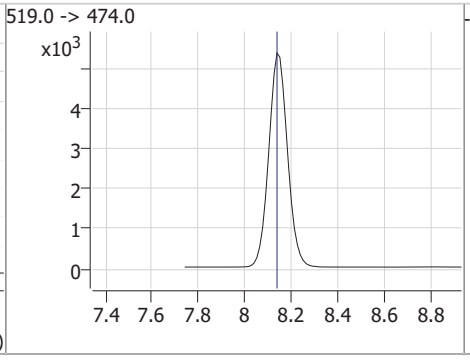


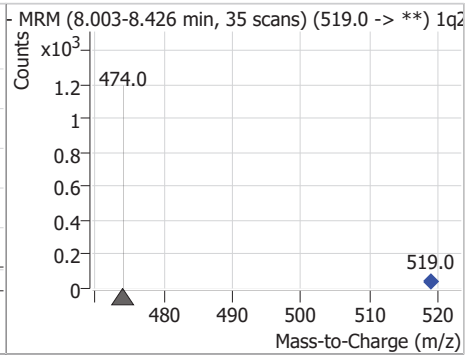




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.18	8.14	0.00	29897				







7.6.2

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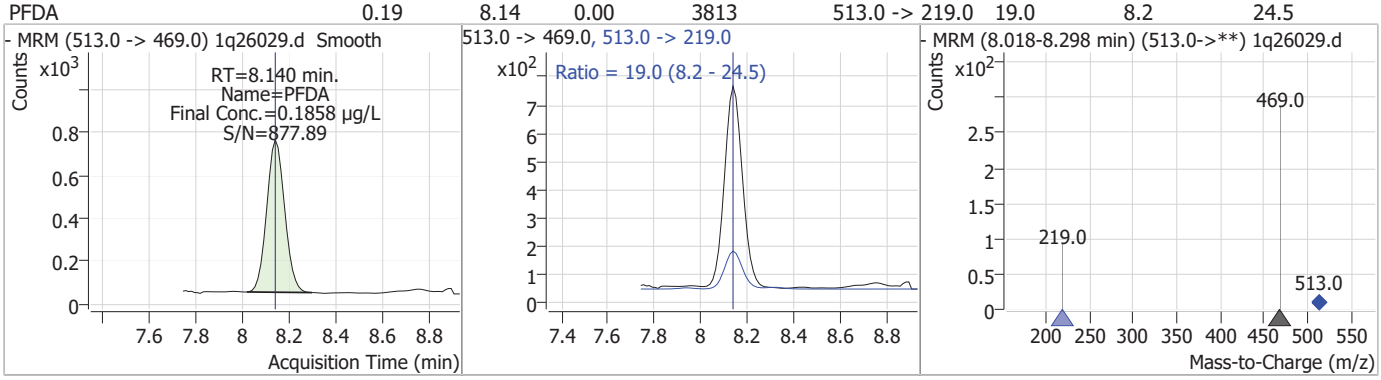
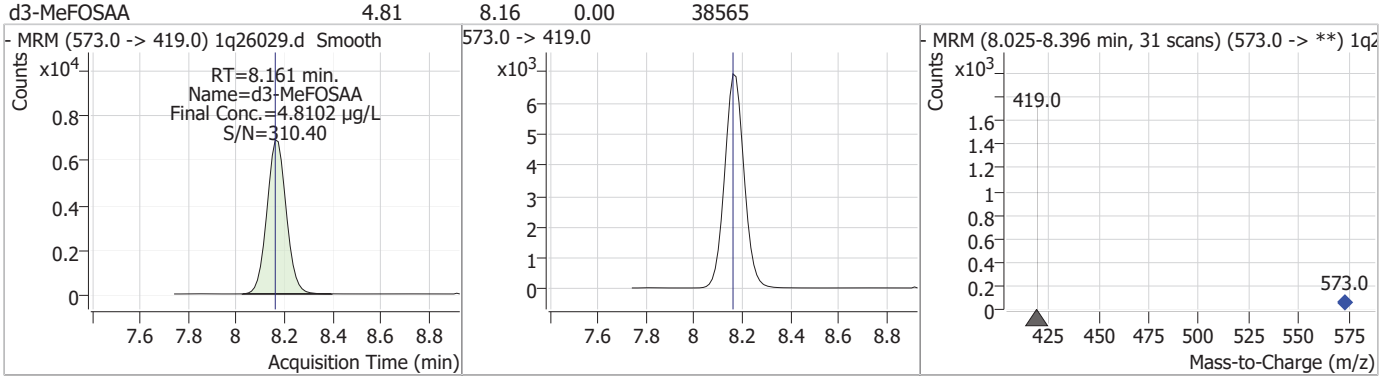
Perfluorinated Compounds by LC/MS/MS

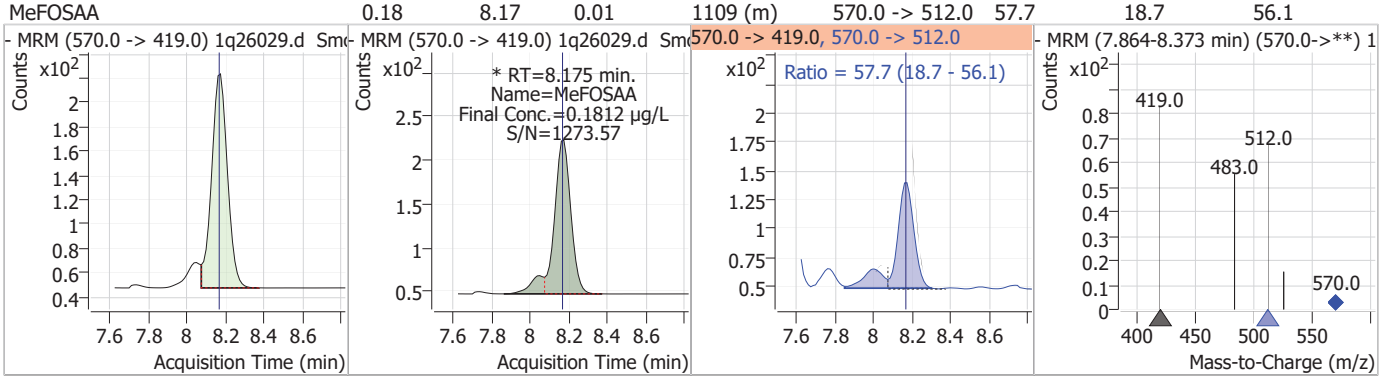
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.19	8.14	0.00	3813	513.0 -> 219.0	19.0	8.2	24.5



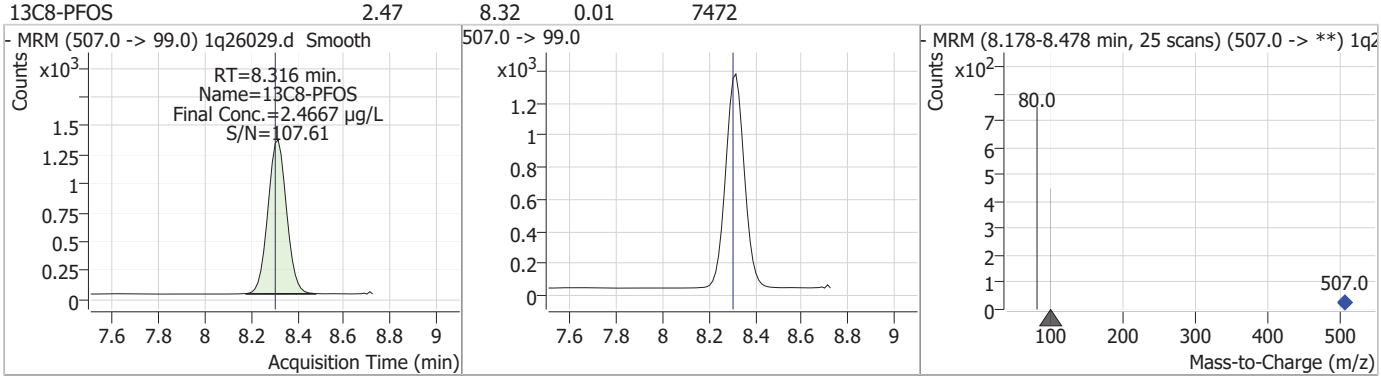
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.81	8.16	0.00	38565				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.18	8.17	0.01	1109 (m)	570.0 -> 512.0	57.7	18.7	56.1

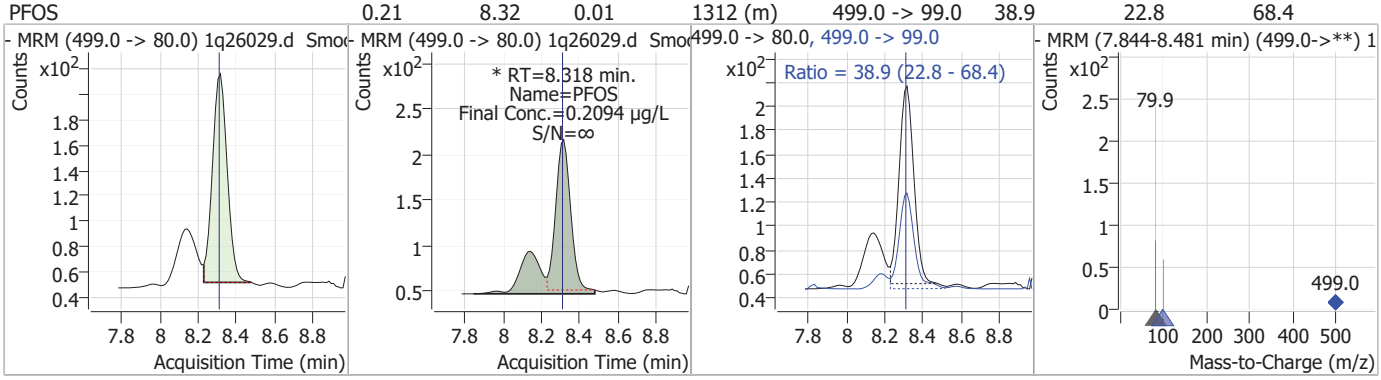


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.47	8.32	0.01	7472				

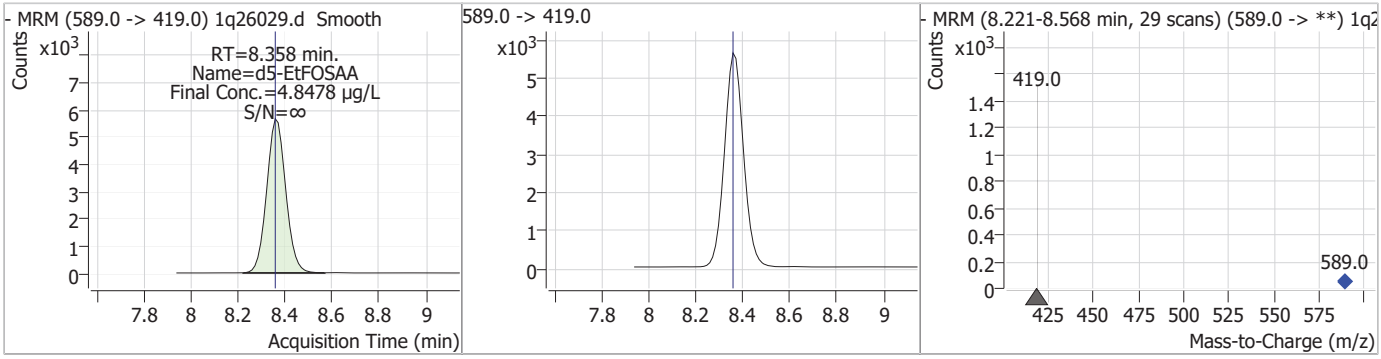


Perfluorinated Compounds by LC/MS/MS

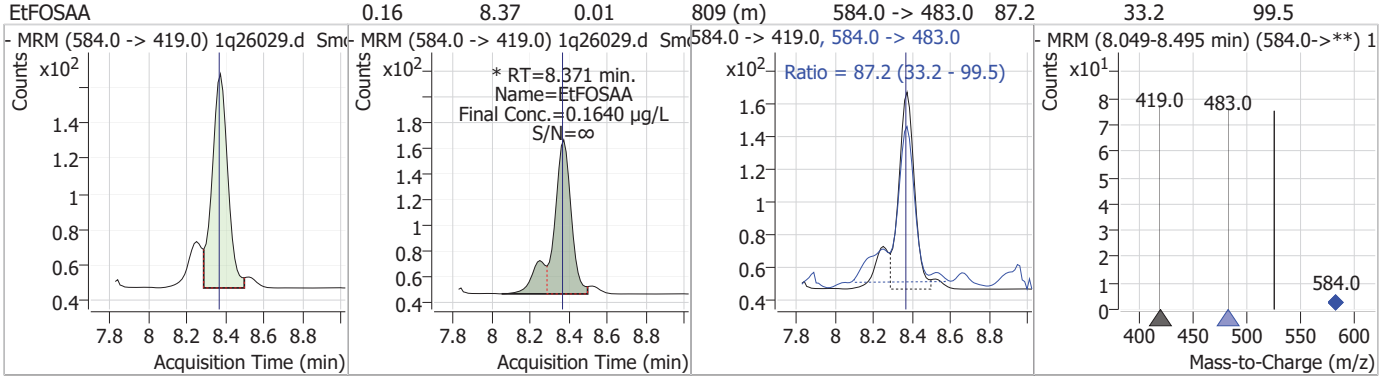
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.21	8.32	0.01	1312 (m)	499.0 -> 99.0	38.9	22.8	68.4



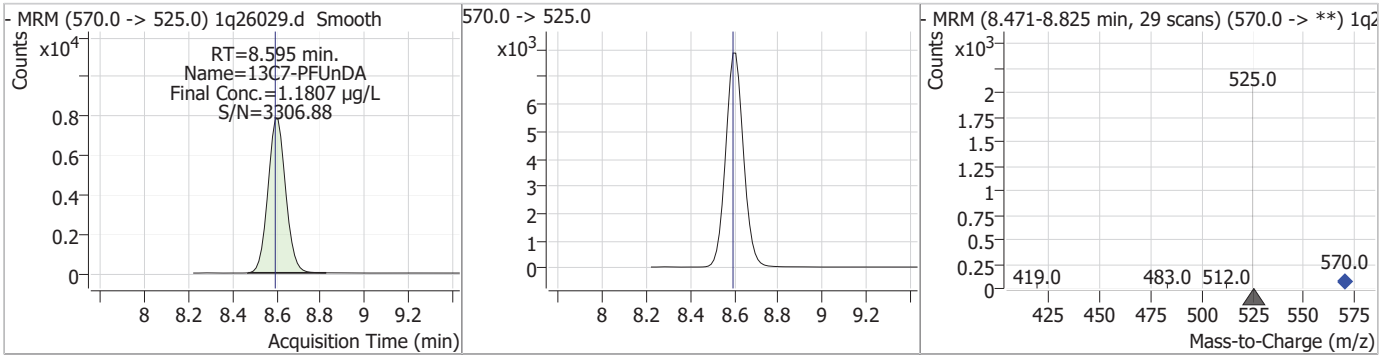
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.85	8.36	0.00	31643				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.16	8.37	0.01	809 (m)	584.0 -> 483.0	87.2	33.2	99.5

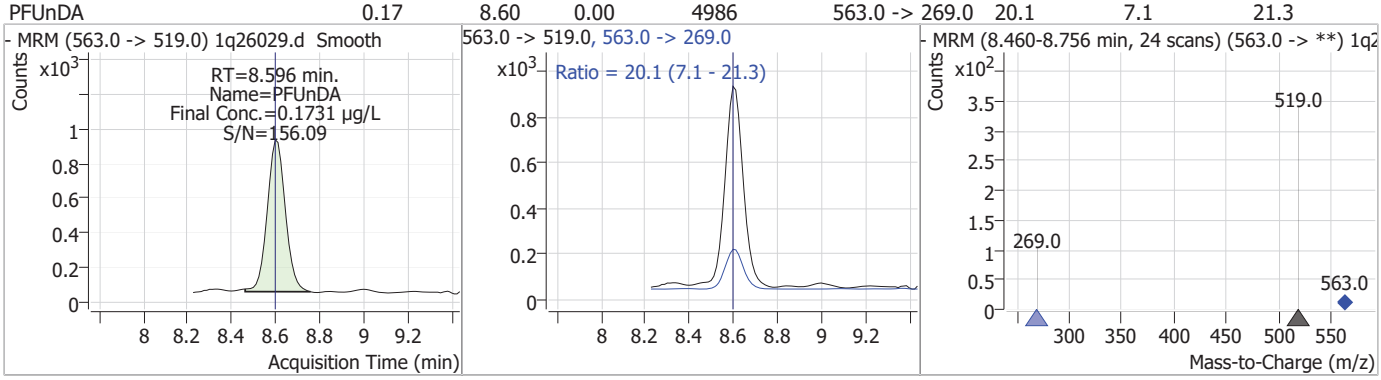


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.18	8.59	0.00	43536				

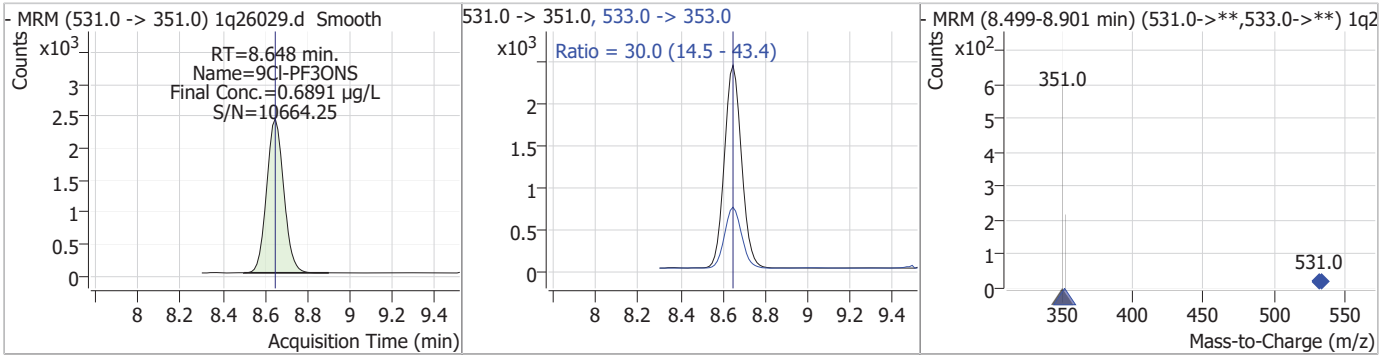


Perfluorinated Compounds by LC/MS/MS

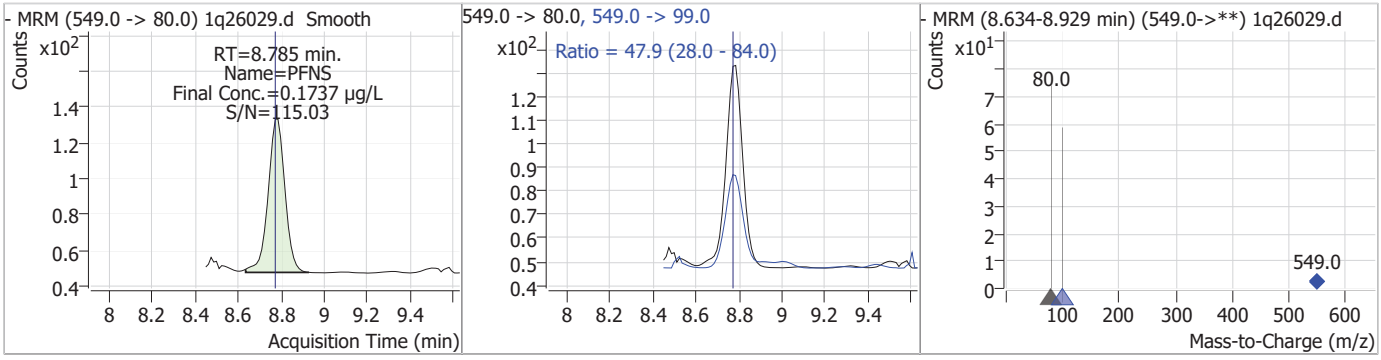
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.17	8.60	0.00	4986	563.0 -> 269.0	20.1	7.1	21.3



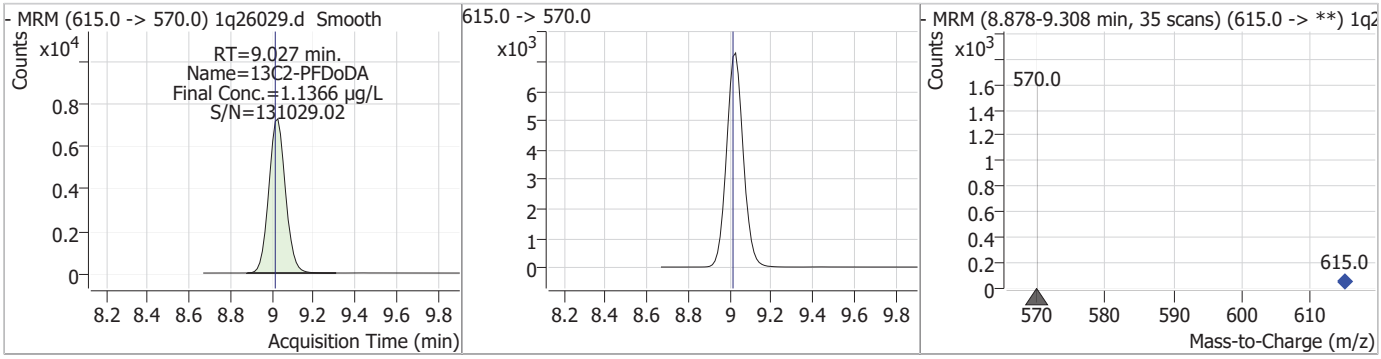
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	0.69	8.65	0.00	13540	533.0 -> 353.0	30.0	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.17	8.78	0.01	467	549.0 -> 99.0	47.9	28.0	84.0

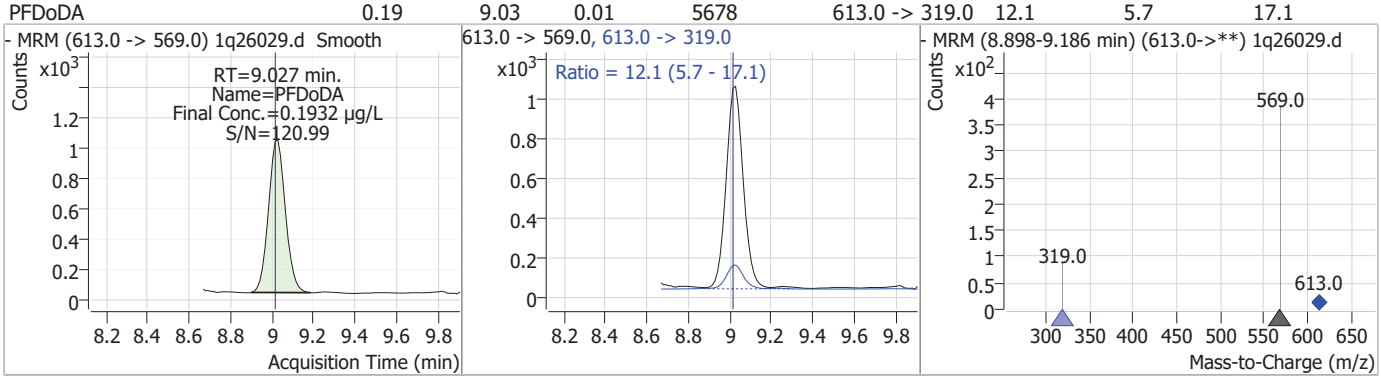


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.14	9.03	0.01	40435				

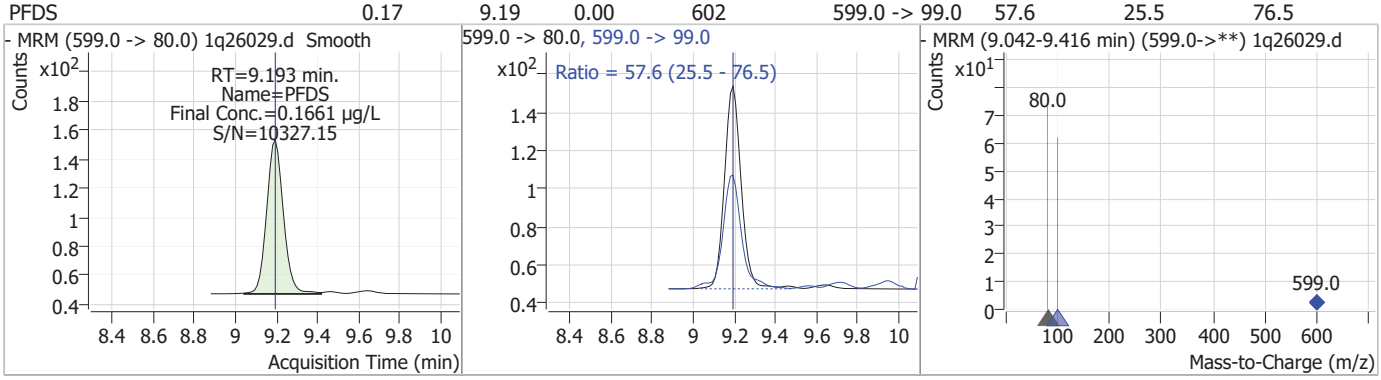


Perfluorinated Compounds by LC/MS/MS

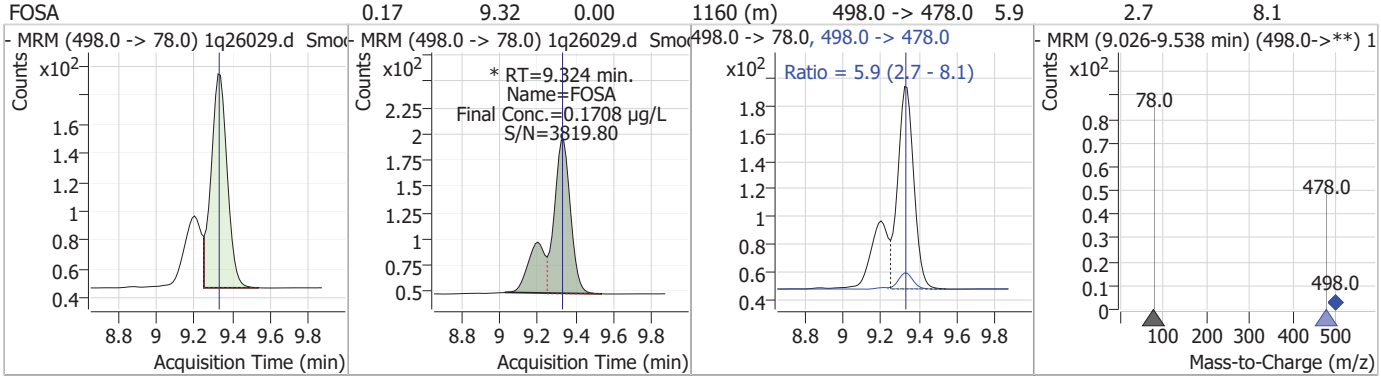
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.19	9.03	0.01	5678	613.0 -> 319.0	12.1	5.7	17.1



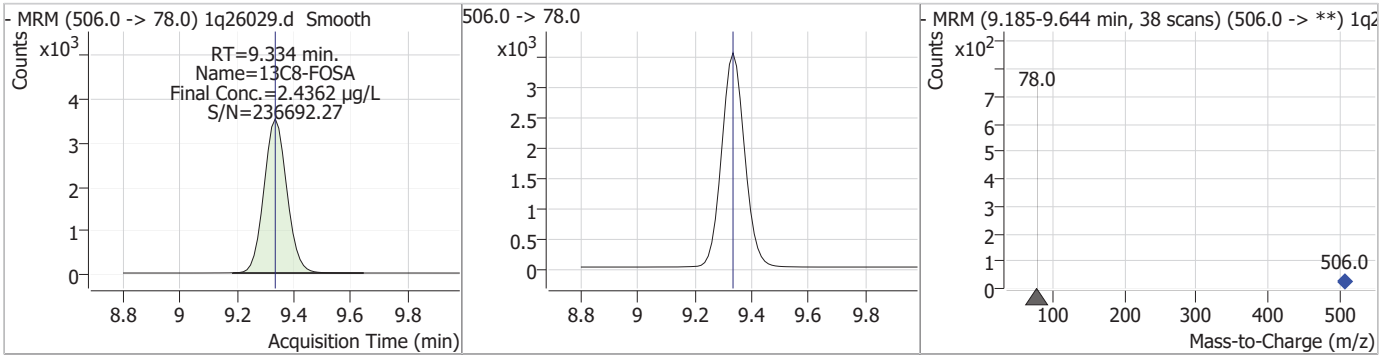
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.17	9.19	0.00	602	599.0 -> 99.0	57.6	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.17	9.32	0.00	1160 (m)	498.0 -> 478.0	5.9	2.7	8.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.44	9.33	0.00	19585				



7.6.2

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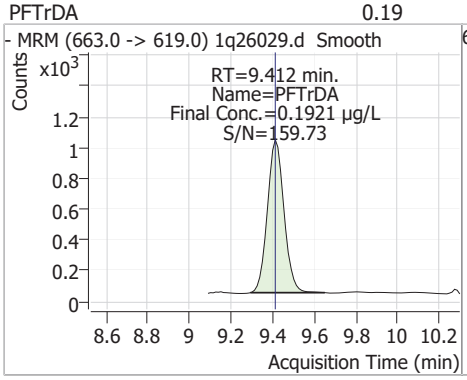
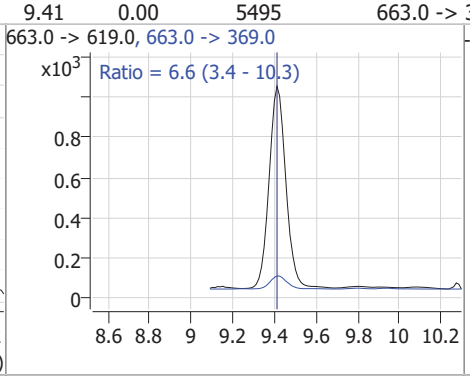
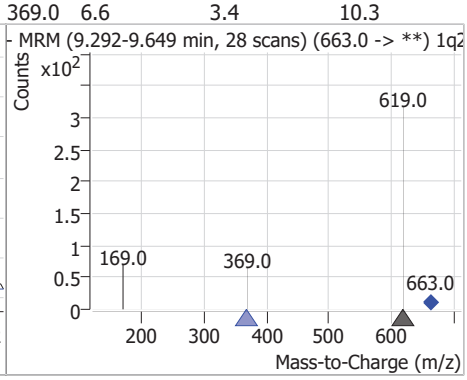
Perfluorinated Compounds by LC/MS/MS

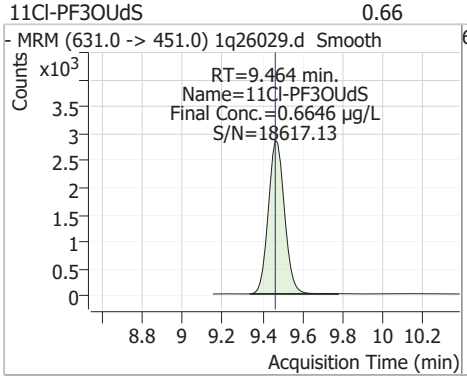
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.19	9.41	0.00	5495	663.0 -> 369.0	6.6	3.4	10.3

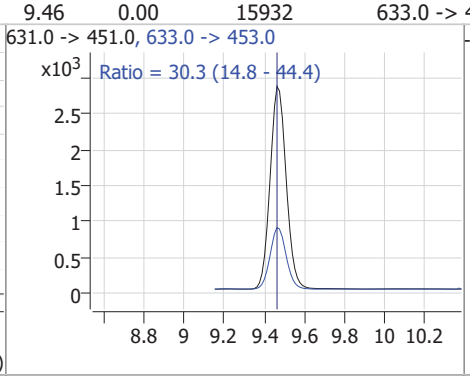


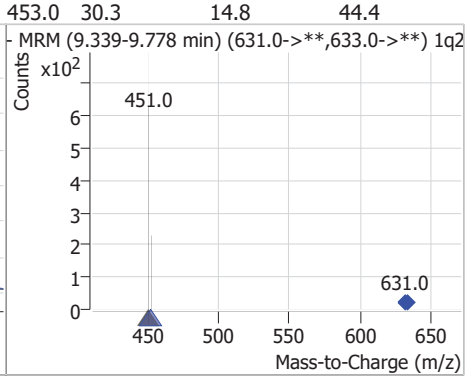




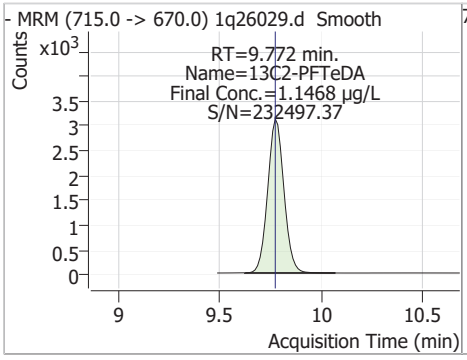
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	0.66	9.46	0.00	15932	633.0 -> 453.0	30.3	14.8	44.4

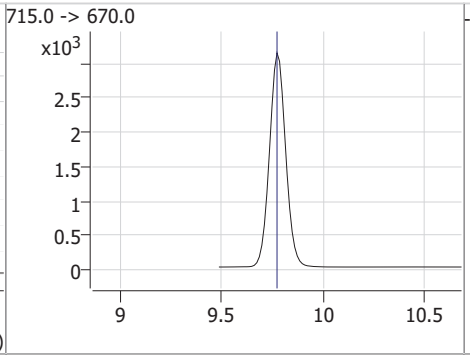


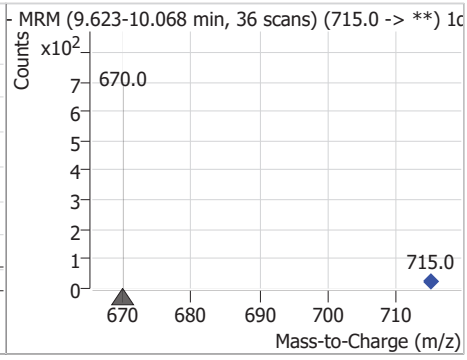




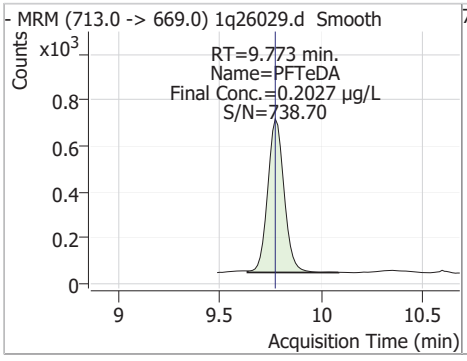
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.15	9.77	0.00	17166				

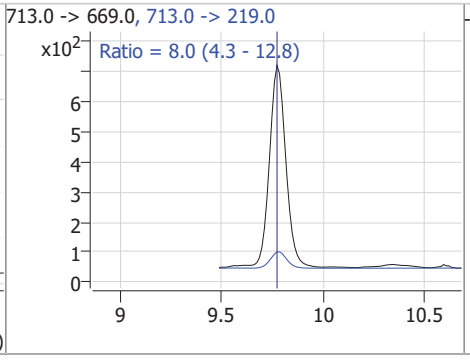


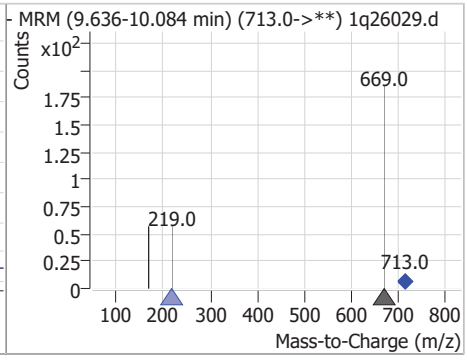




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.20	9.77	0.00	3748	713.0 -> 219.0	8.0	4.3	12.8

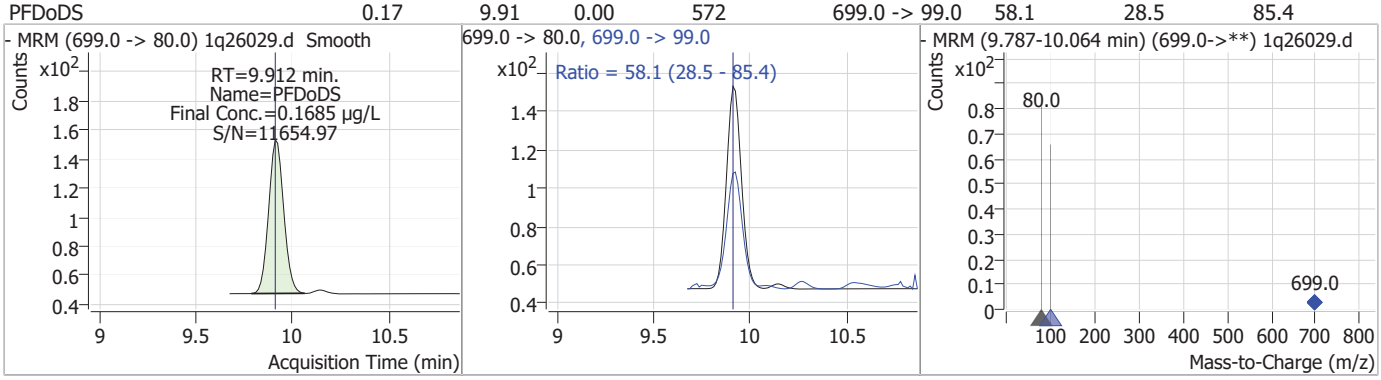




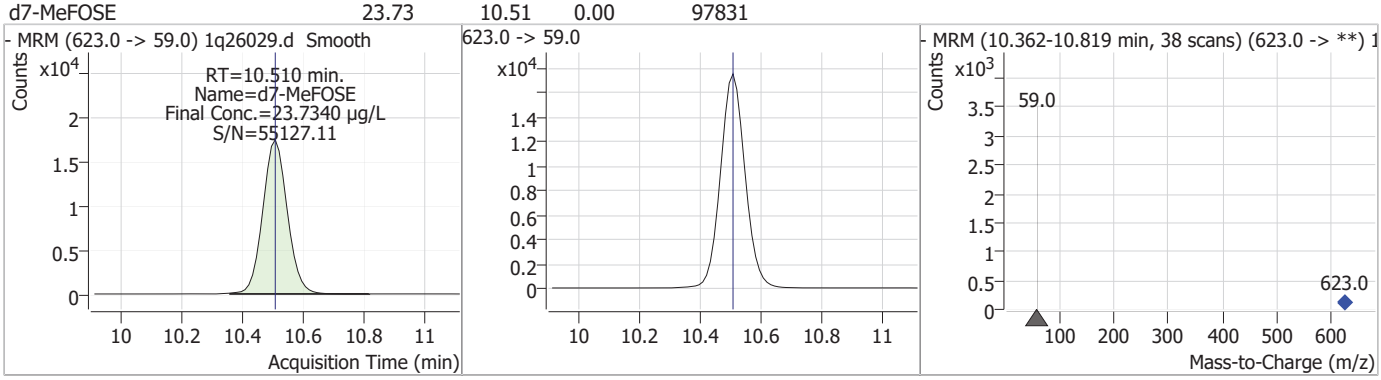


Perfluorinated Compounds by LC/MS/MS

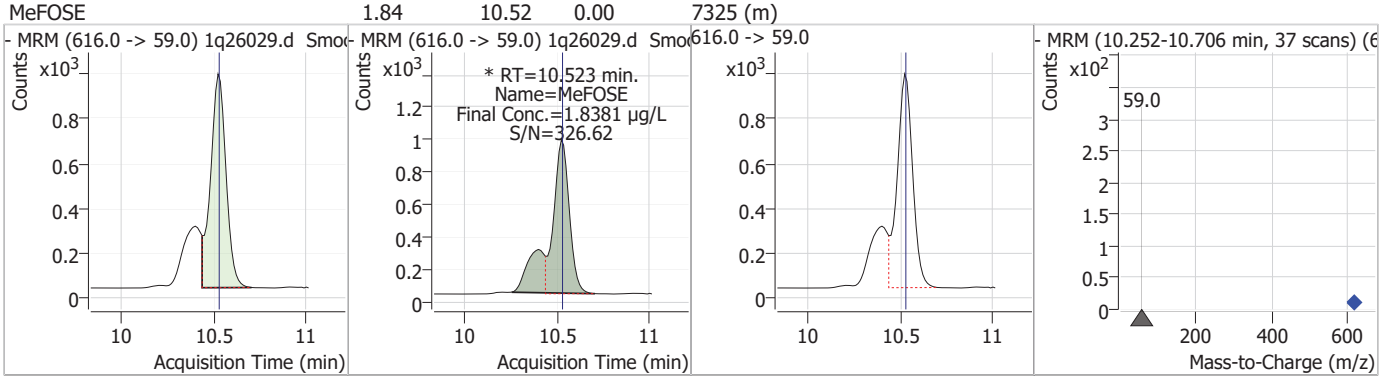
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.17	9.91	0.00	572	699.0 -> 99.0	58.1	28.5	85.4



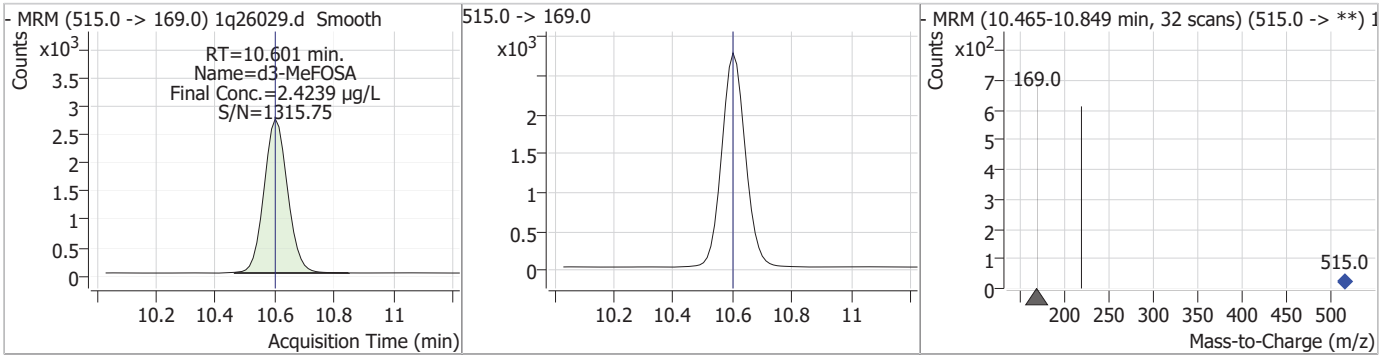
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.73	10.51	0.00	97831				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	1.84	10.52	0.00	7325 (m)				

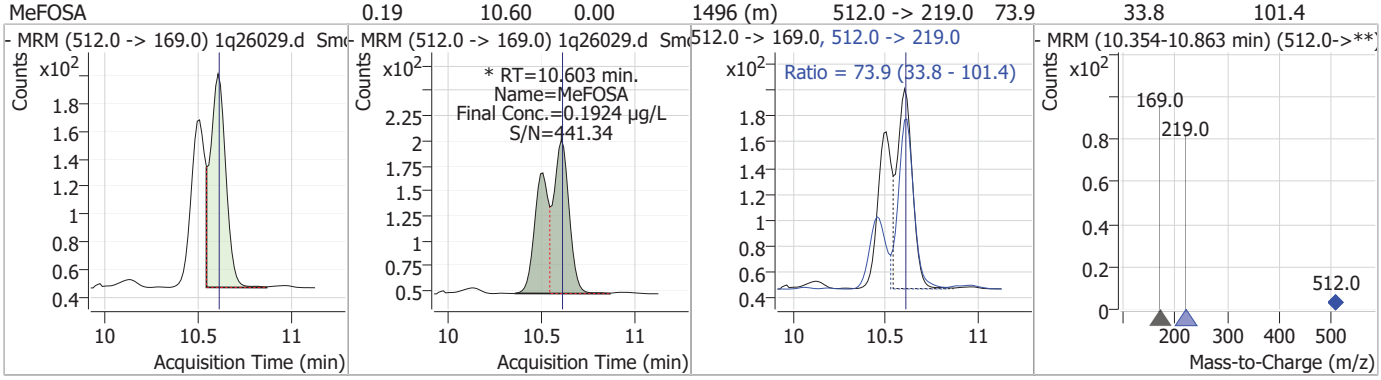


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.42	10.60	0.00	15104				

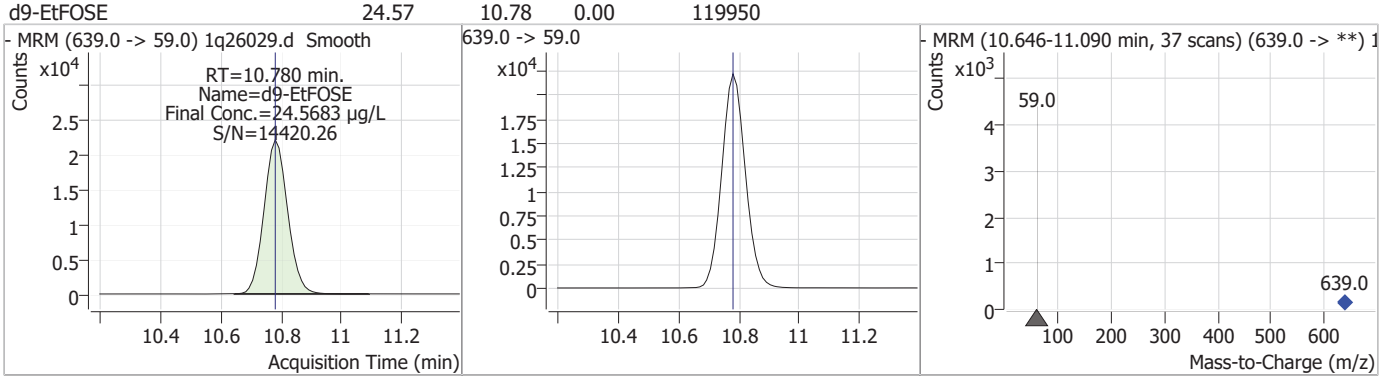


Perfluorinated Compounds by LC/MS/MS

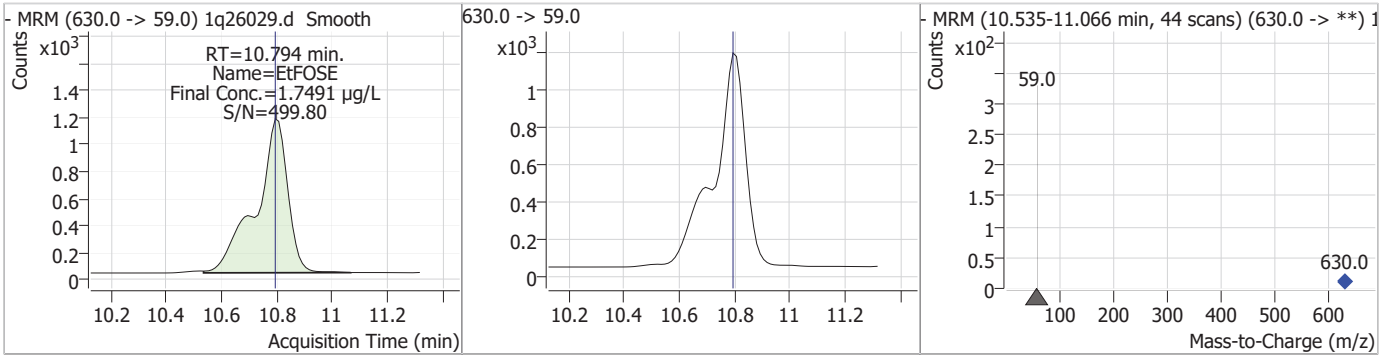
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.19	10.60	0.00	1496 (m)	512.0 -> 219.0	73.9	33.8	101.4



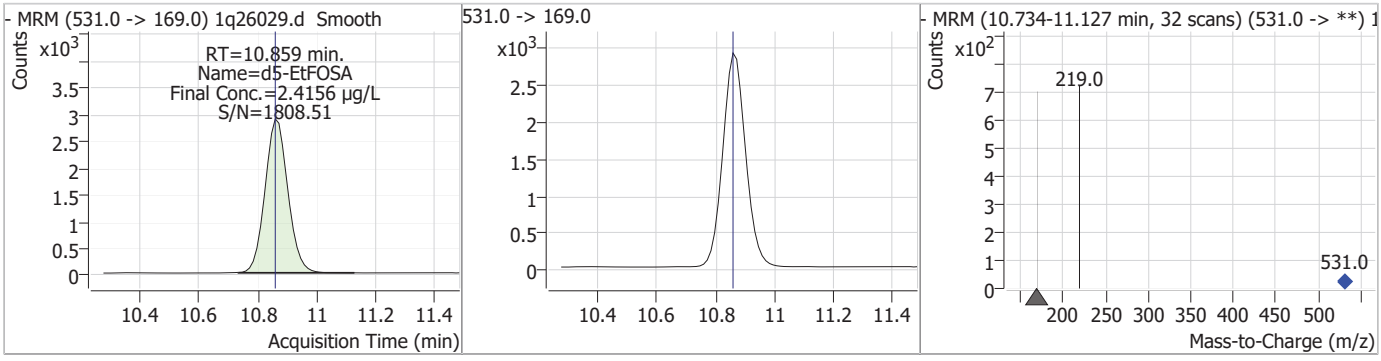
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.57	10.78	0.00	119950				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	1.75	10.79	0.00	9142				

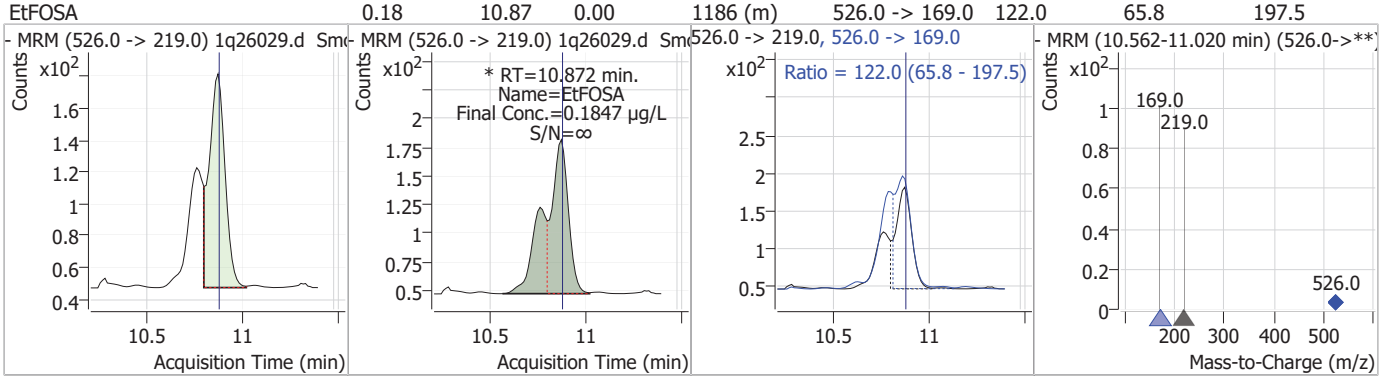


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.42	10.86	0.00	15380				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.18	10.87	0.00	1186 (m)	526.0 -> 169.0	122.0	65.8	197.5



Manual Integration Approval Summary

Sample Number: T1Q361-IC361
Lab FileID: 1Q26029.D
Injection Time: 05/14/25 16:38

Method: EPA 1633
Analyst approved: 05/15/25 01:25 Rensel John Romano
Supervisor approved: 05/15/25 05:29 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.67	Split peak
MeFOSAA	2355-31-9		8.18	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Split peak
PFOSA	754-91-6		9.32	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSA	4151-50-2		10.87	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/15/25 05:29

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26030.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/14/2025 4:53:27 PM
Sample Name : IC361-2
Vial : P1-A3
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : t1q361.batch.bin
Sample Information : OP63461,T1Q361,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	192843	10.00 µg/L	0.000
M5-PFPeA	4.636	268.0 -> 223.0	115548	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	66955	2.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	54891	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	86900	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	30983	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	33140	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	45834	1.25 µg/L	0.000
M2-PFDoDA	9.027	615.0 -> 570.0	43751	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	18463	1.25 µg/L	0.000
M8-FOSA	9.334	506.0 -> 78.0	20798	2.50 µg/L	0.000
M3-PFBS	5.711	302.0 -> 99.0	6789	2.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	7667	2.50 µg/L	0.000
M8-PFOS	8.316	507.0 -> 99.0	7842	2.50 µg/L	0.012
M2-4:2FTS	5.446	329.0 -> 81.0	1367	5.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	2863	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	4365	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	41844	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	23726	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	35018	5.00 µg/L	0.000
M7-MeFOSE	10.510	623.0 -> 59.0	105417	25.00 µg/L	0.000
M9-EtFOSE	10.780	639.0 -> 59.0	125280	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	15964	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	15236	2.50 µg/L	0.000
13C4-PFOS	8.317	503.0 -> 80.0	13299	2.50 µg/L	0.012
13C3-PFBA	3.251	216.0 -> 172.0	81018	5.00 µg/L	0.000
18O2-PFHxS	7.274	403.0 -> 84.0	8627	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	94516	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	26565	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	30384	1.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	60551	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1367	4.75 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.9%	
13C2-6:2FTS	6.922	429.0 -> 81.0	2863	5.13 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.5%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4365	4.97 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.4%	
13C2-PFDoDA	9.027	615.0 -> 570.0	43751	1.21 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.1%	
13C2-PFTeDA	9.772	715.0 -> 670.0	18463	1.22 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.4%	
13C3-PFBS	5.711	302.0 -> 99.0	6789	2.36 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.3%	
13C3-PFHxS	7.275	402.0 -> 99.0	7667	2.66 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.3%		
13C4-PFBA	3.260	217.0 -> 172.0	192843	10.01 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.1%		
13C4-PFHpA	6.553	367.0 -> 322.0	54891	2.61 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.5%		
13C5-PFHxA	5.759	318.0 -> 273.0	66955	2.60 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.0%		
13C5-PFPeA	4.636	268.0 -> 223.0	115548	5.21 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.1%		
13C6-PFDA	8.139	519.0 -> 474.0	33140	1.29 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.0%		
13C7-PFUnDA	8.595	570.0 -> 525.0	45834	1.23 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.2%		
13C8-FOSA	9.334	506.0 -> 78.0	20798	2.56 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.5%		
13C8-PFOA	7.148	421.0 -> 376.0	86900	2.53 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.0%		
13C8-PFOS	8.316	507.0 -> 99.0	7842	2.56 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.5%		
13C9-PFNA	7.656	472.0 -> 427.0	30983	1.25 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.0%		
d3-MeFOSAA	8.161	573.0 -> 419.0	41844	5.17 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.3%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	23726	10.51 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 105.1%		
d3-MeFOSA	10.601	515.0 -> 169.0	15236	2.42 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.8%		
d5-EtFOSAA	8.358	589.0 -> 419.0	35018	5.31 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.2%		
d7-MeFOSE	10.510	623.0 -> 59.0	105417	25.32 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 101.3%		
d9-EtFOSE	10.780	639.0 -> 59.0	125280	25.41 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 101.6%		
d5-EtFOSA	10.859	531.0 -> 169.0	15964	2.48 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.3%		
Target Compounds						QValue
4:2FTS	5.434	327.0 -> 307.0	3624	1.42 µg/L		98
		327.0 -> 81.0	1596			
6:2FTS	6.922	427.0 -> 407.0	4758	1.30 µg/L		93
		427.0 -> 81.0	1918			
8:2FTS	7.927	527.0 -> 507.0	5636	1.42 µg/L		98
		527.0 -> 81.0	1718			
EtFOSAA	8.371	584.0 -> 419.0	1584	0.29 µg/L	m	84
		584.0 -> 483.0	1256			
FOSA	9.324	498.0 -> 78.0	2509	0.35 µg/L	m	94
		498.0 -> 478.0	88			
MeFOSAA	8.162	570.0 -> 419.0	2380	0.36 µg/L	m	86
		570.0 -> 512.0	1083			
PFBA	3.254	213.0 -> 169.0	7207	1.34 µg/L		100
PFBS	5.700	299.0 -> 80.0	2696	0.34 µg/L		87
		299.0 -> 99.0	1262			
PFDA	8.140	513.0 -> 469.0	6531	0.29 µg/L		98
		513.0 -> 219.0	1002			
PFDoDA	9.027	613.0 -> 569.0	10570	0.33 µg/L		97
		613.0 -> 319.0	1322			
PFDS	9.193	599.0 -> 80.0	1263	0.33 µg/L		98

Perfluorinated Compounds by LC/MS/MS

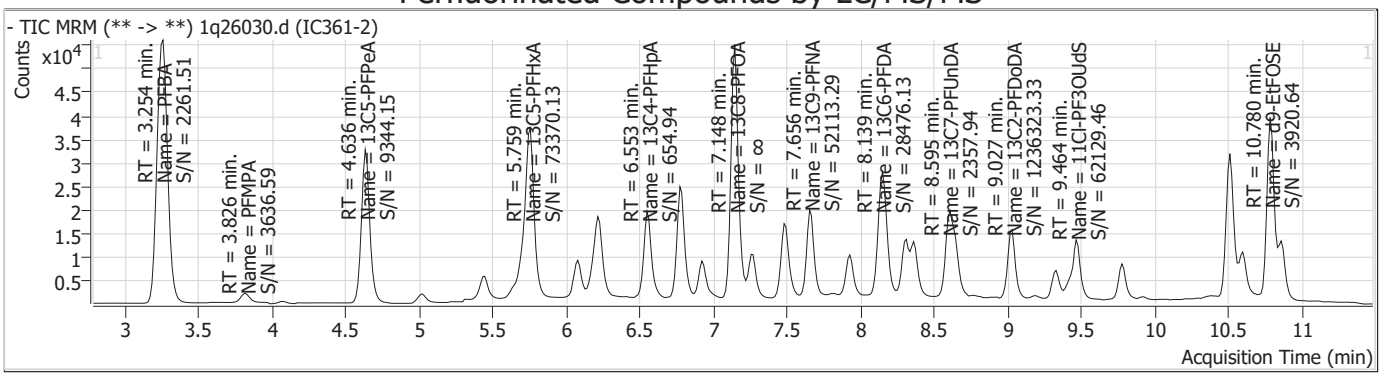
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	659				
PFHpA	6.554	363.0 -> 319.0	10344	0.34	µg/L		91
		363.0 -> 169.0	2021				
PFHpS	7.809	449.0 -> 80.0	1503	0.28	µg/L		93
		449.0 -> 99.0	838				
PFHxA	5.761	313.0 -> 269.0	8585	0.35	µg/L		99
		313.0 -> 119.0	223				
PFHxS	7.276	399.0 -> 80.0	1742	0.29	µg/L	m	93
		399.0 -> 99.0	973				
PFNA	7.657	463.0 -> 419.0	5229	0.34	µg/L	m	100
		463.0 -> 219.0	1519				
PFNS	8.772	549.0 -> 80.0	923	0.33	µg/L		83
		549.0 -> 99.0	402				
PFOA	7.149	413.0 -> 369.0	10295	0.34	µg/L	m	99
		413.0 -> 169.0	2213				
PFOS	8.318	499.0 -> 80.0	2178	0.33	µg/L	m	93
		499.0 -> 99.0	1093				
PFPeA	4.638	263.0 -> 219.0	13515	0.67	µg/L		100
PFPeS	6.617	349.0 -> 80.0	1194	0.34	µg/L		95
		349.0 -> 99.0	596				
PFTeDA	9.773	713.0 -> 669.0	7011	0.35	µg/L		99
		713.0 -> 219.0	571				
PFTrDA	9.412	663.0 -> 619.0	9923	0.32	µg/L		99
		663.0 -> 369.0	705				
PFUnDA	8.596	563.0 -> 519.0	10683	0.35	µg/L		99
		563.0 -> 269.0	1575				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	33247	1.30	µg/L		100
		633.0 -> 453.0	9836				
9Cl-PF3ONS	8.648	531.0 -> 351.0	26542	1.27	µg/L		97
		533.0 -> 353.0	8174				
ADONA	6.776	377.0 -> 251.0	68628	1.31	µg/L		97
		377.0 -> 85.0	17678				
HFPO-DA	6.088	285.0 -> 169.0	2894	1.26	µg/L		94
		285.0 -> 185.0	339				
3:3FTCA	4.072	241.0 -> 177.0	1906	1.74	µg/L		100
		241.0 -> 117.0	126				
5:3FTCA	6.229	341.0 -> 237.0	37195	8.57	µg/L		91
		341.0 -> 217.0	23430				
7:3FTCA	7.482	441.0 -> 337.0	42320	8.64	µg/L		97
		441.0 -> 317.0	18352				
EtFOSA	10.872	526.0 -> 219.0	2220	0.33	µg/L	m	79
		526.0 -> 169.0	3480				
EtFOSE	10.806	630.0 -> 59.0	18530	3.39	µg/L		100
MeFOSA	10.603	512.0 -> 169.0	2794	0.36	µg/L	m	97
		512.0 -> 219.0	1825				
MeFOSE	10.523	616.0 -> 59.0	14665	3.42	µg/L	m	100
PFDoDS	9.912	699.0 -> 80.0	1314	0.37	µg/L		97
		699.0 -> 99.0	780				
NFDHA	5.651	295.0 -> 201.0	1147	0.70	µg/L		93
		201.0 -> 85.0	6009				
		295.0 -> 85.0	326				
PFMBA	5.027	279.0 -> 85.0	7310	0.67	µg/L		100
PFMPA	3.826	229.0 -> 85.0	8382	0.68	µg/L		100
PFEESA	6.182	315.0 -> 135.0	14147	0.61	µg/L		99
		315.0 -> 69.0	1309				

 # = Qualifier out of range, m = manually integrated, + = Area summed

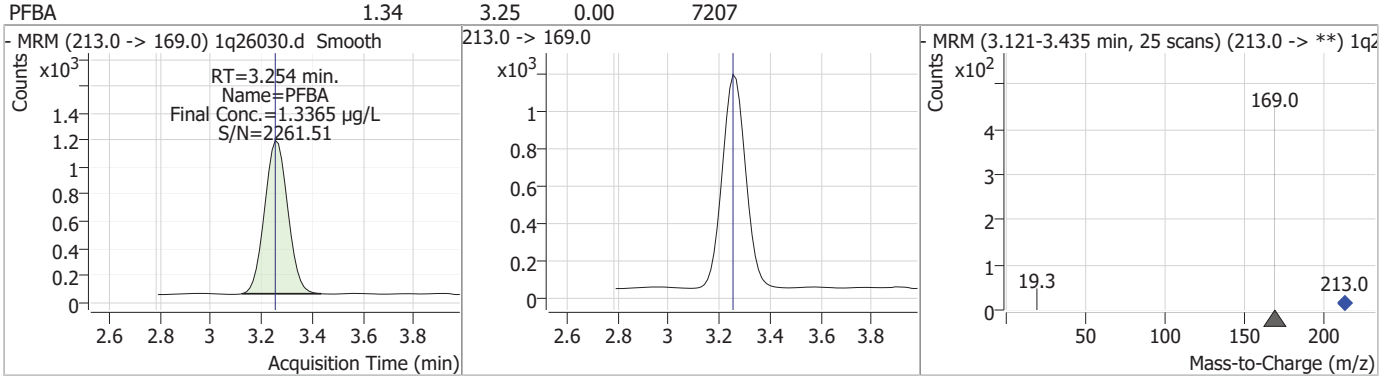
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

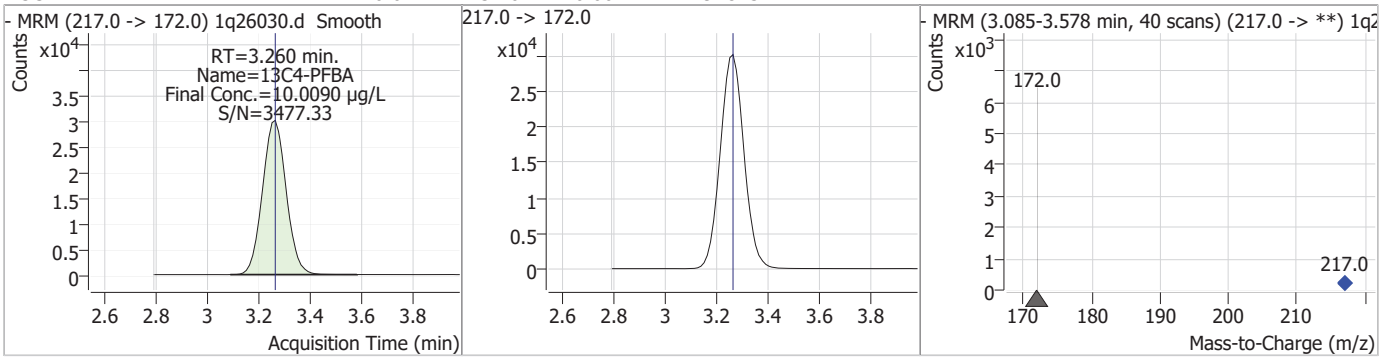
Perfluorinated Compounds by LC/MS/MS



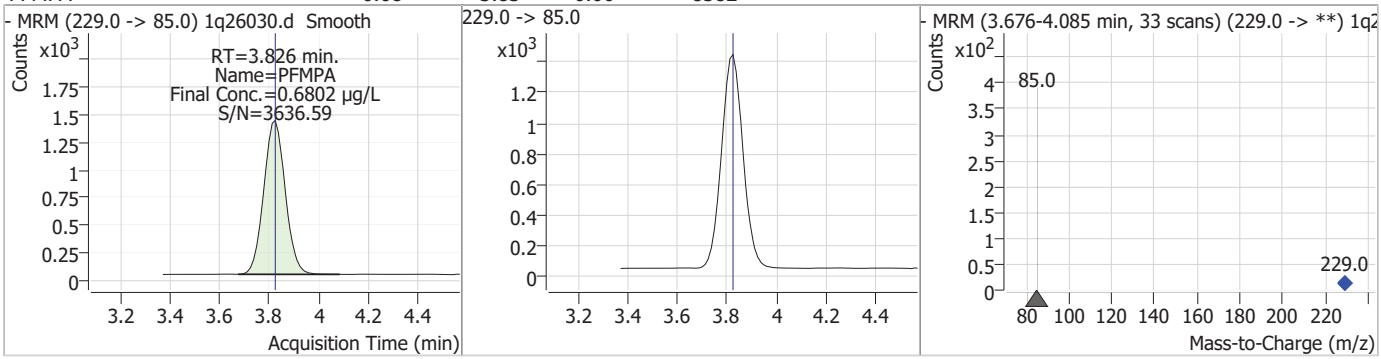
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	1.34	3.25	0.00	7207				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.01	3.26	0.00	192843				

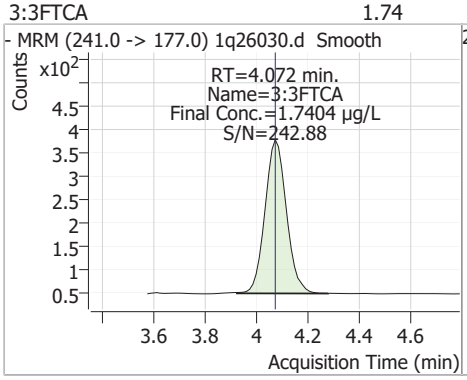


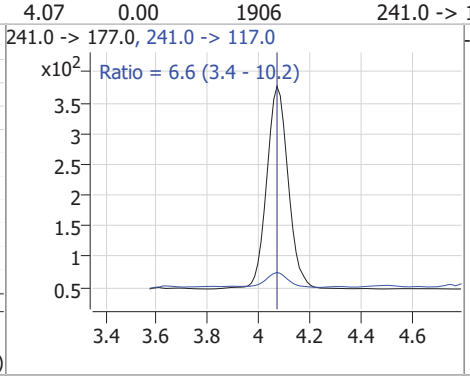
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.68	3.83	0.00	8382				

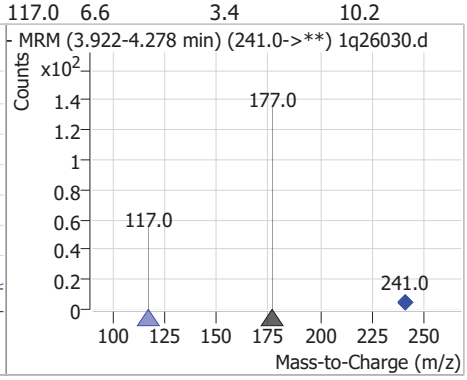


Perfluorinated Compounds by LC/MS/MS

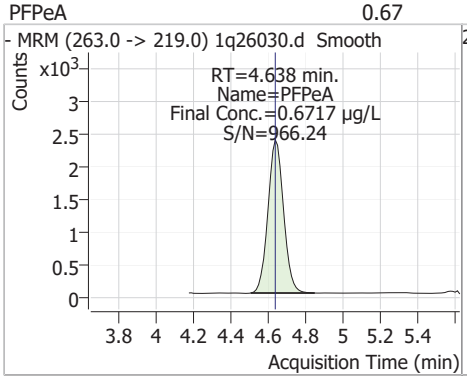
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	1.74	4.07	0.00	1906	241.0 -> 117.0	6.6	3.4	10.2

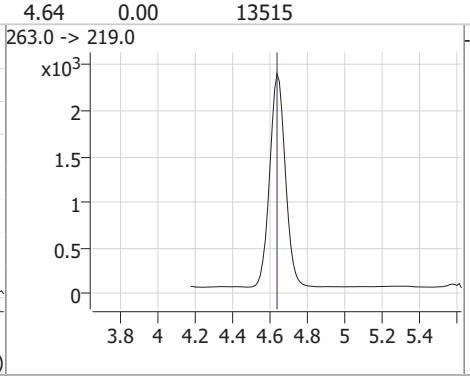


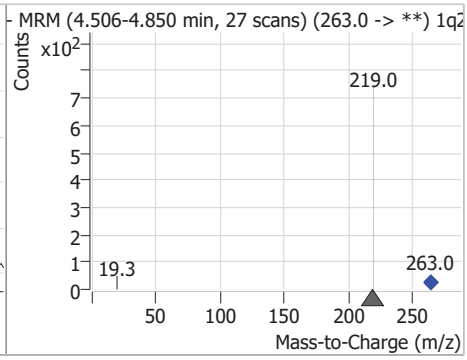




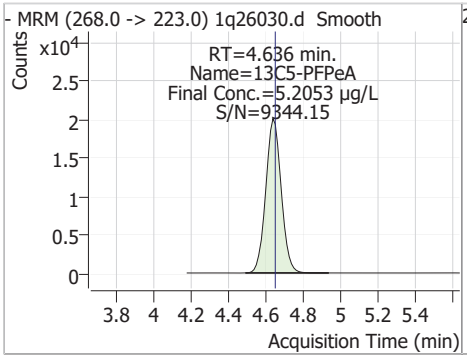
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.67	4.64	0.00	13515				

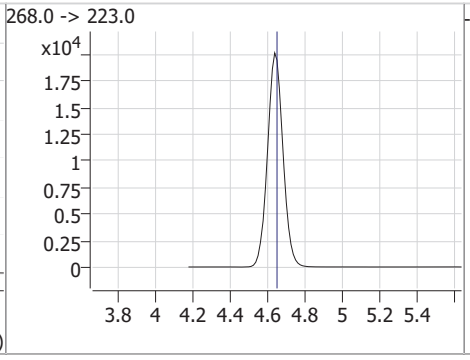


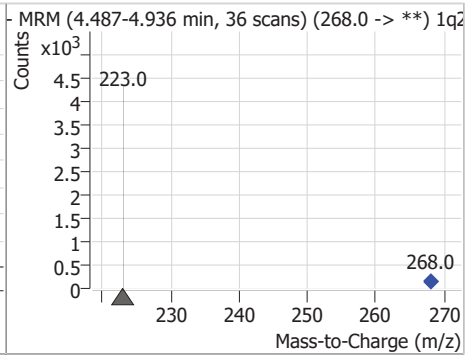




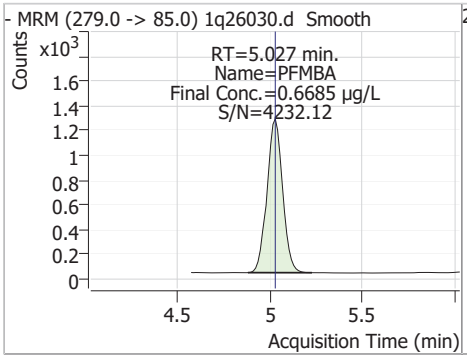
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.21	4.64	-0.01	115548				

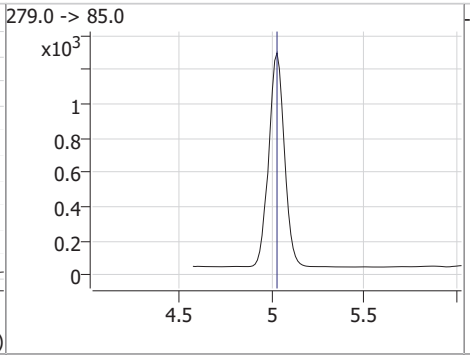


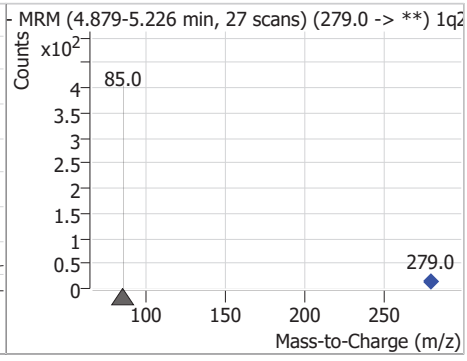




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.67	5.03	0.00	7310				

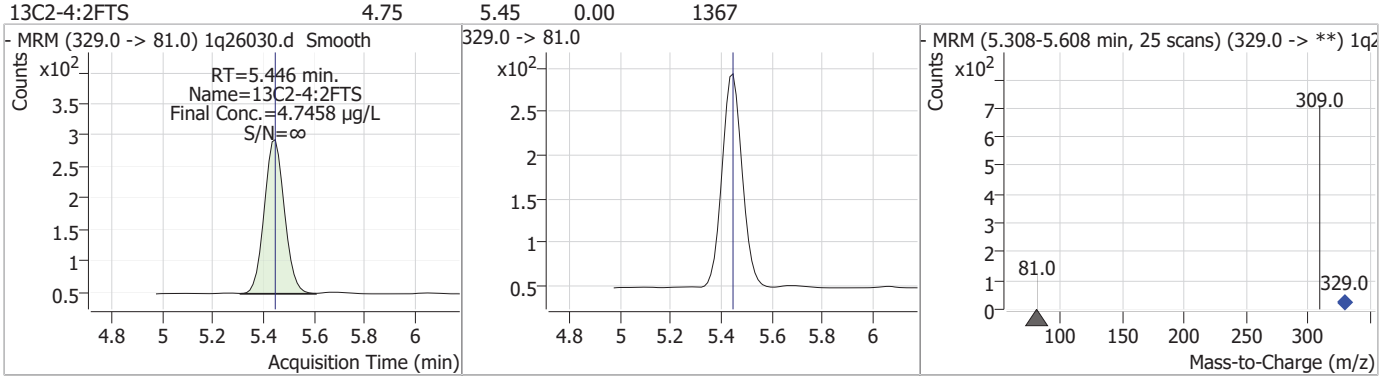




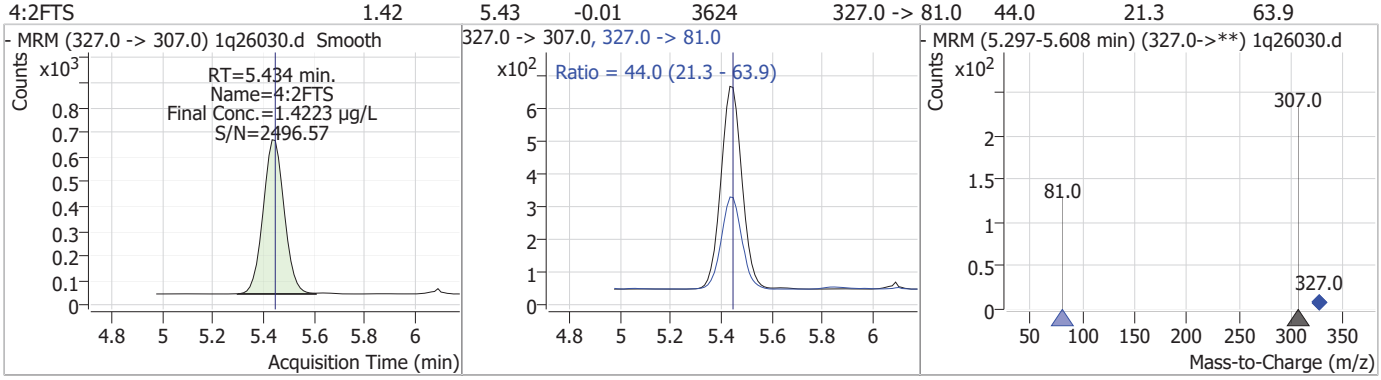


Perfluorinated Compounds by LC/MS/MS

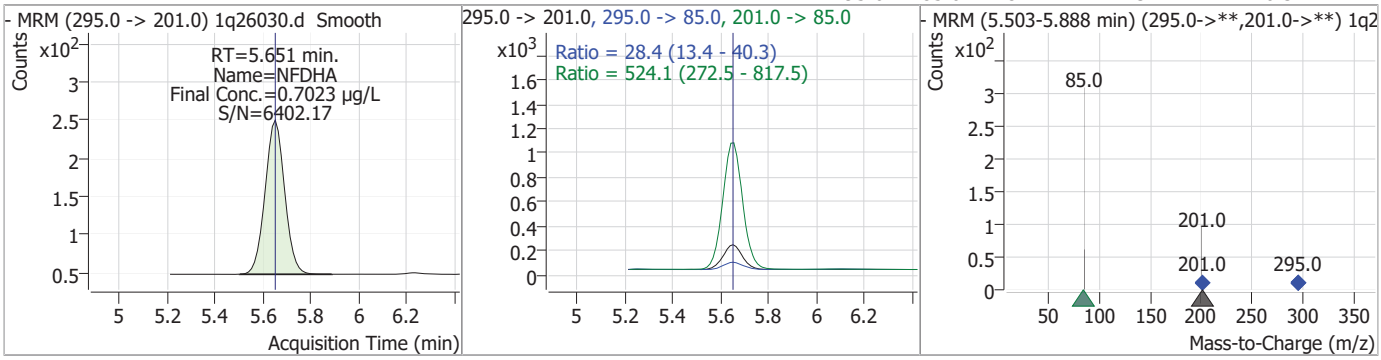
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.75	5.45	0.00	1367				



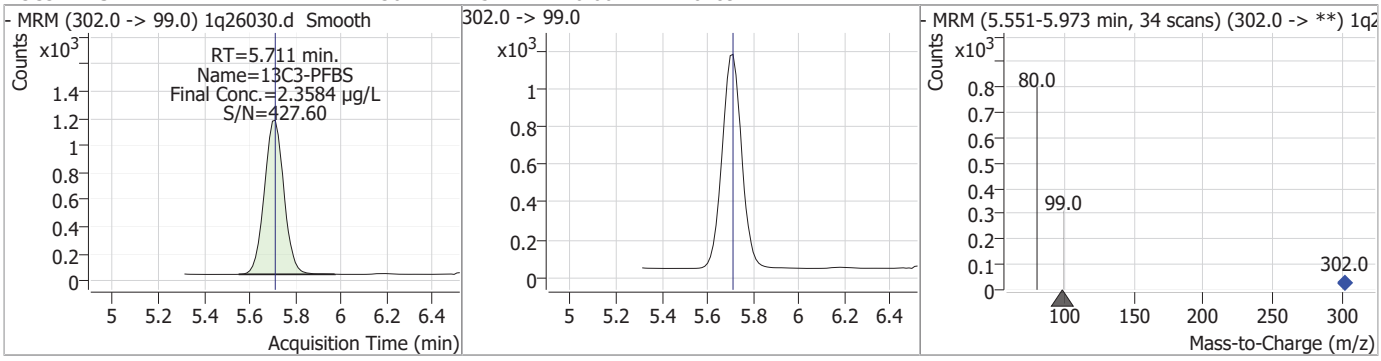
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	1.42	5.43	-0.01	3624	327.0 -> 81.0	44.0	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.70	5.65	0.00	1147	201.0 -> 85.0	524.1	272.5	817.5
					295.0 -> 85.0	28.4	13.4	40.3

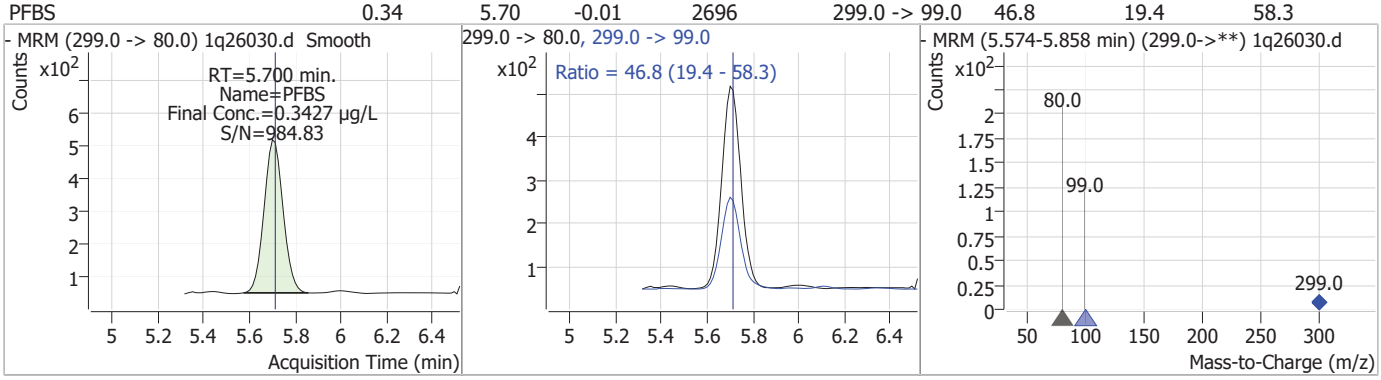


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.36	5.71	0.00	6789				

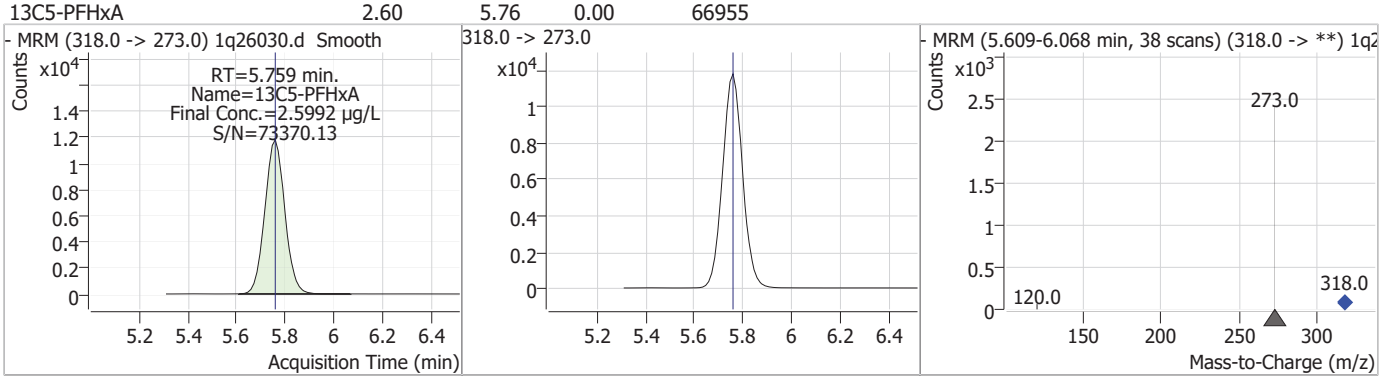


Perfluorinated Compounds by LC/MS/MS

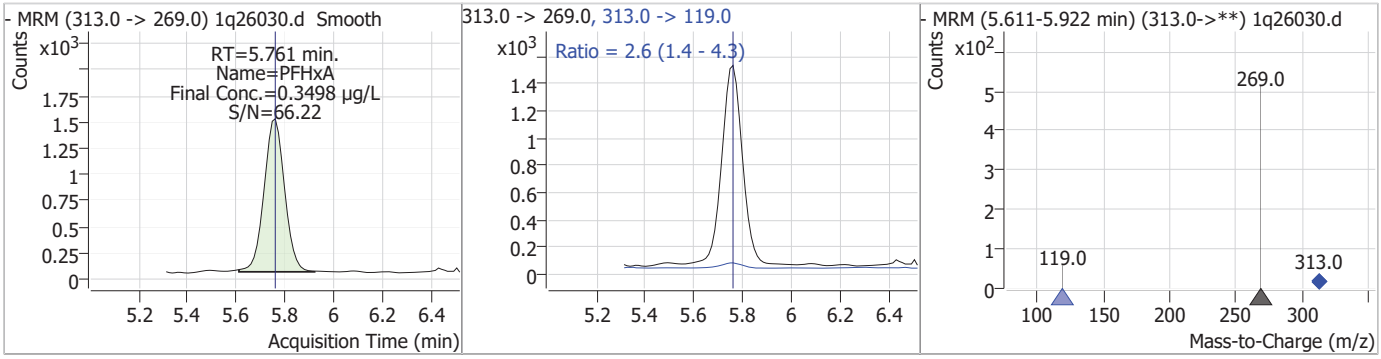
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.34	5.70	-0.01	2696	299.0 -> 99.0	46.8	19.4	58.3



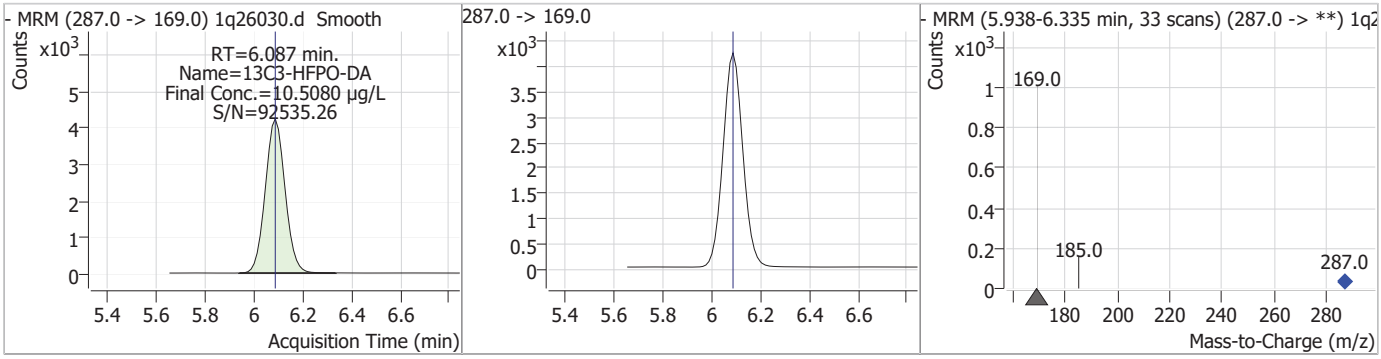
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.60	5.76	0.00	66955				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.35	5.76	0.00	8585	313.0 -> 119.0	2.6	1.4	4.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.51	6.09	0.00	23726				

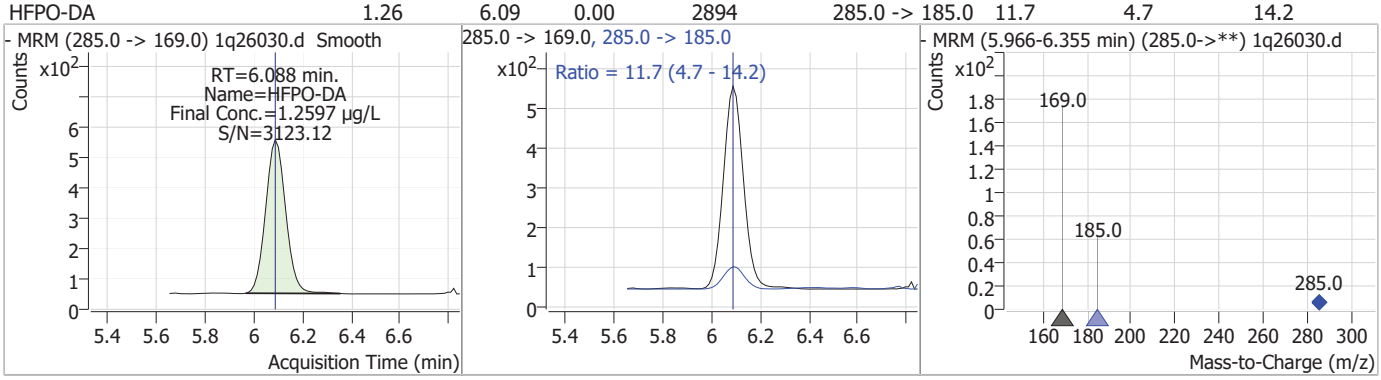


7.6.3

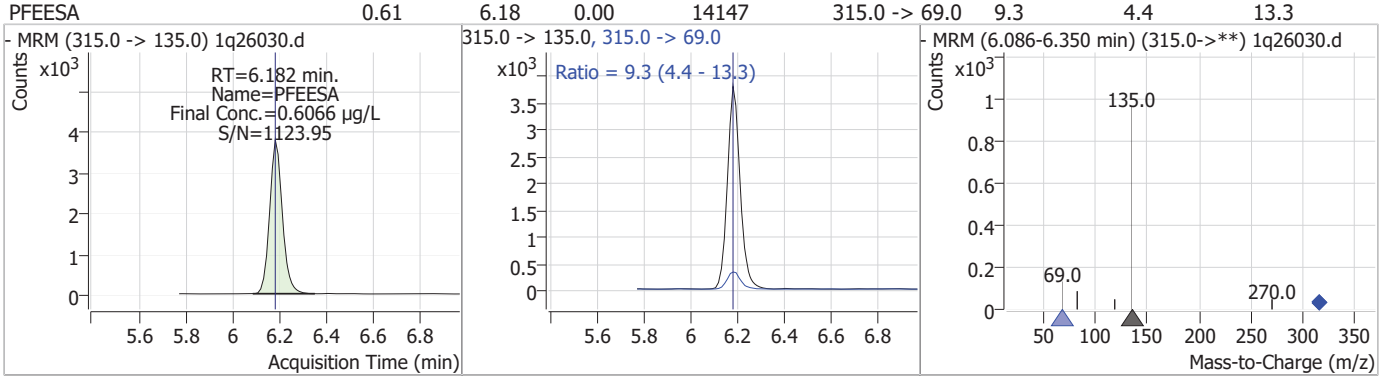
7

Perfluorinated Compounds by LC/MS/MS

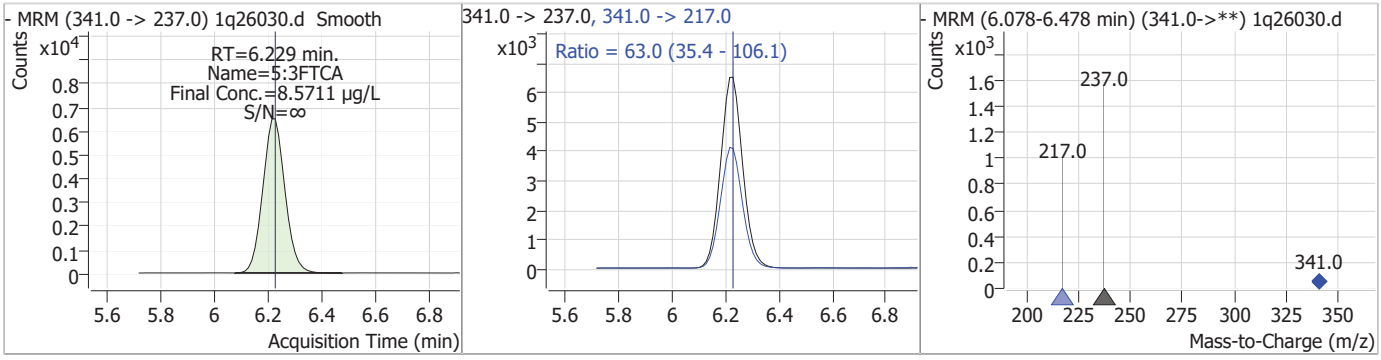
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	1.26	6.09	0.00	2894	285.0 -> 185.0	11.7	4.7	14.2



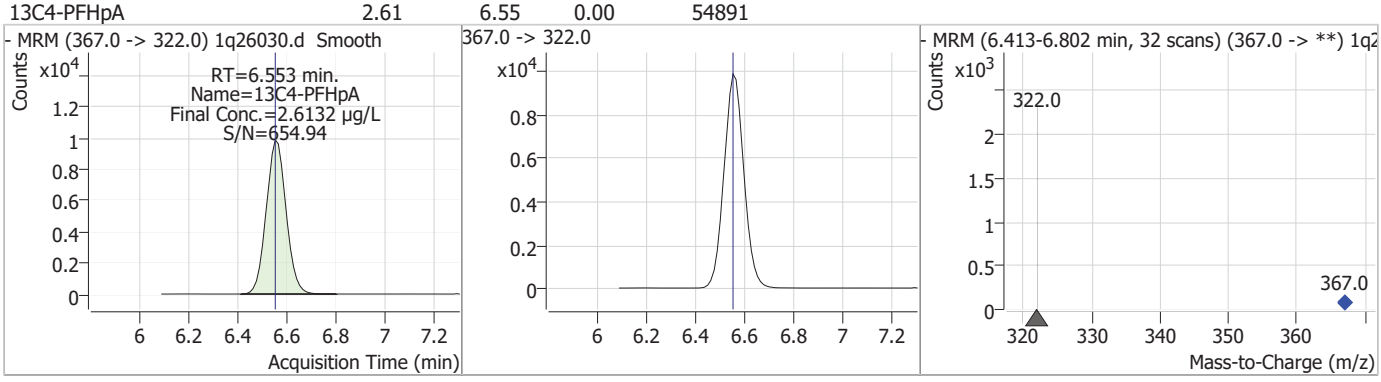
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.61	6.18	0.00	14147	315.0 -> 69.0	9.3	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	8.57	6.23	0.00	37195	341.0 -> 217.0	63.0	35.4	106.1

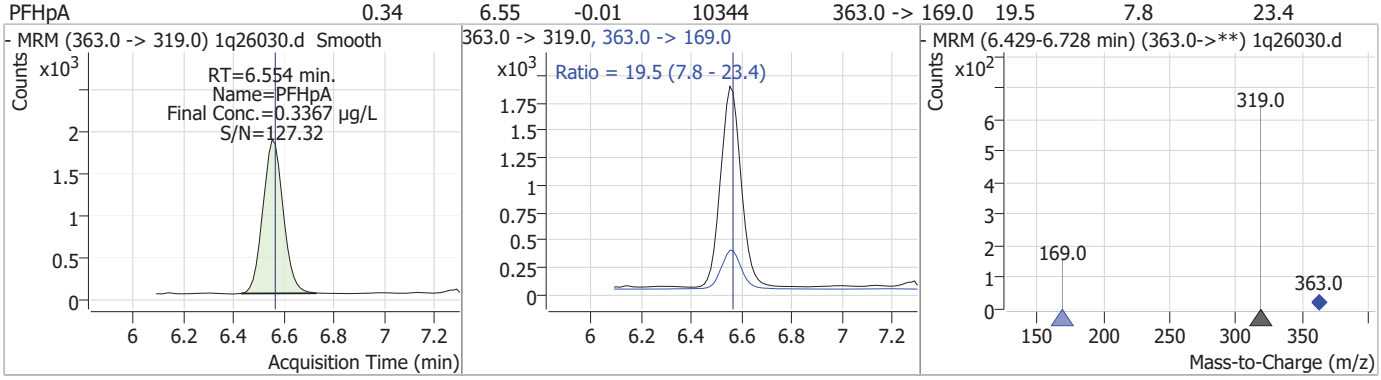


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.61	6.55	0.00	54891				

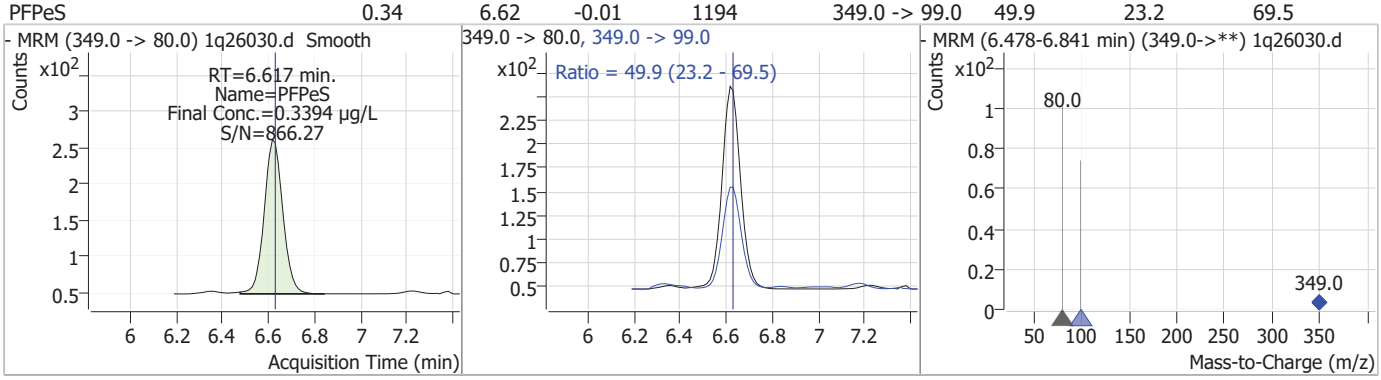


Perfluorinated Compounds by LC/MS/MS

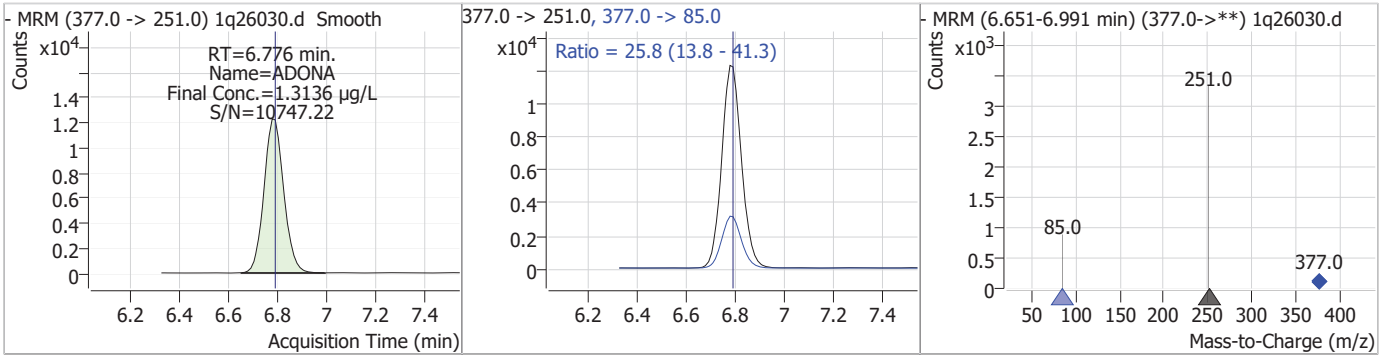
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.34	6.55	-0.01	10344	363.0 -> 169.0	19.5	7.8	23.4



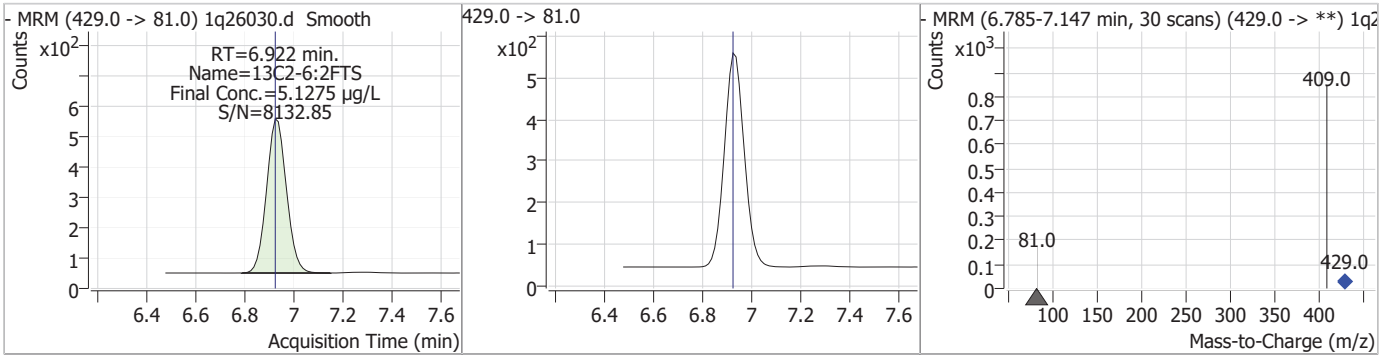
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.34	6.62	-0.01	1194	349.0 -> 99.0	49.9	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	1.31	6.78	-0.01	68628	377.0 -> 85.0	25.8	13.8	41.3

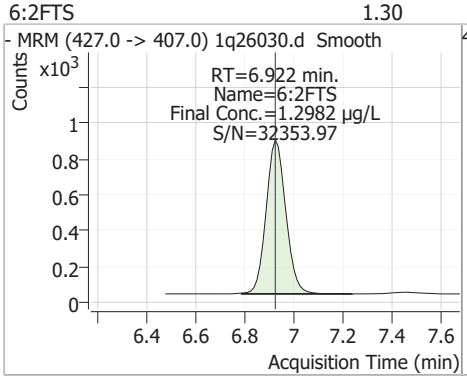


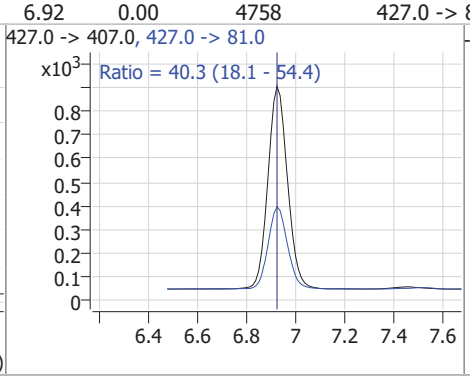
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.13	6.92	0.00	2863				

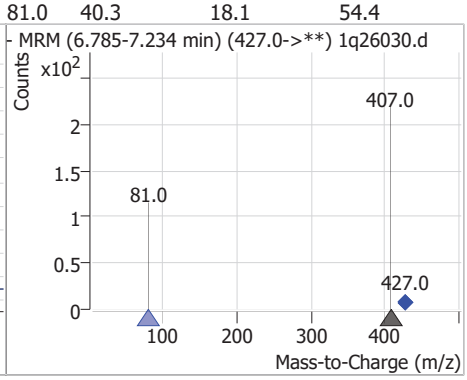


Perfluorinated Compounds by LC/MS/MS

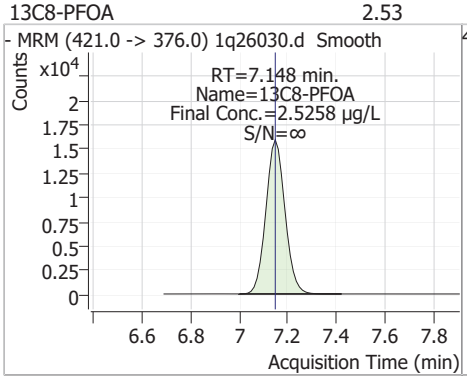
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	1.30	6.92	0.00	4758	427.0 -> 81.0	40.3	18.1	54.4

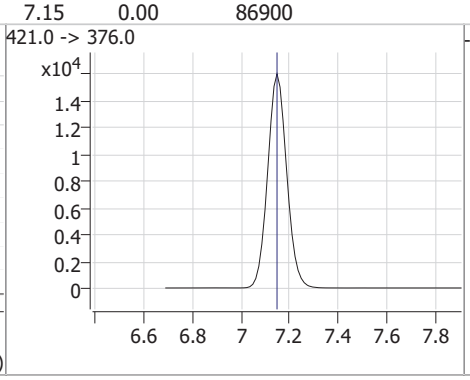


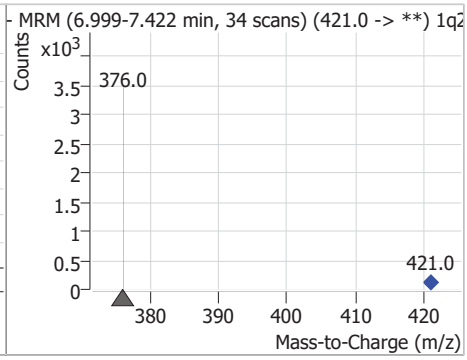




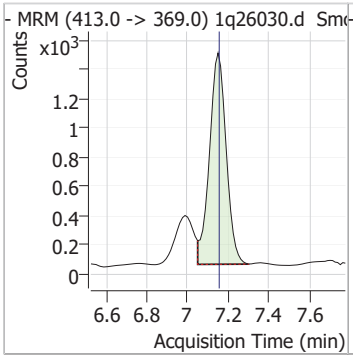
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.53	7.15	0.00	86900				

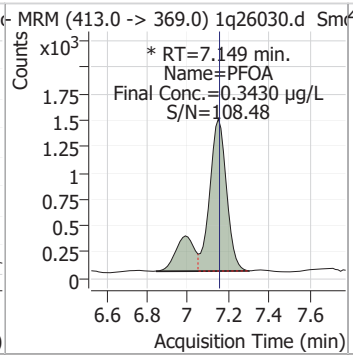


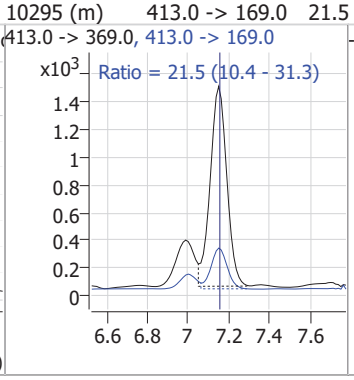


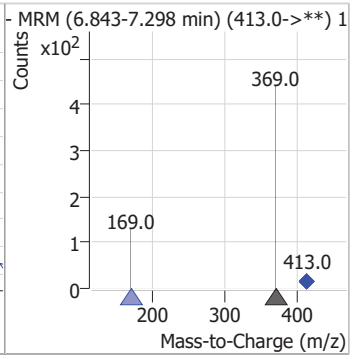


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.34	7.15	0.00	10295 (m)	413.0 -> 169.0	21.5	10.4	31.3

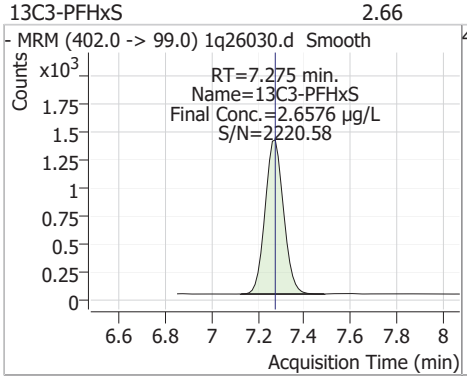


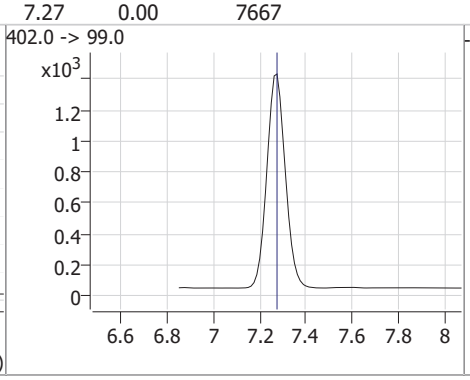


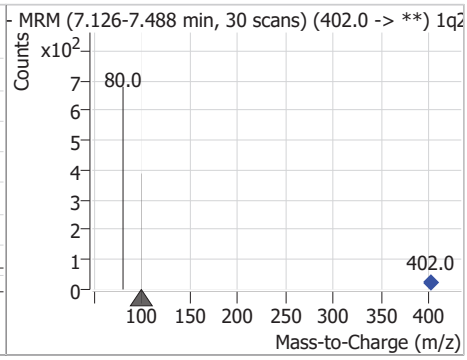




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.66	7.27	0.00	7667				

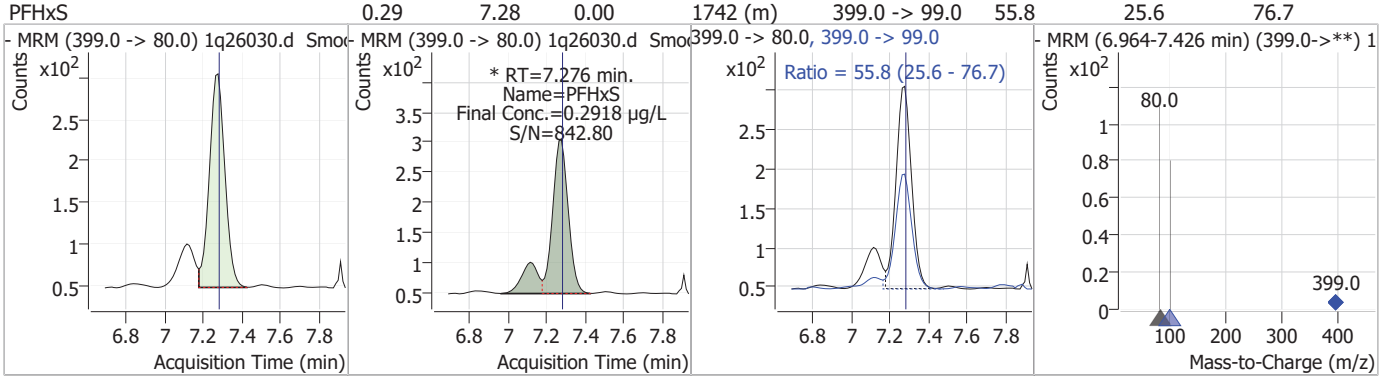




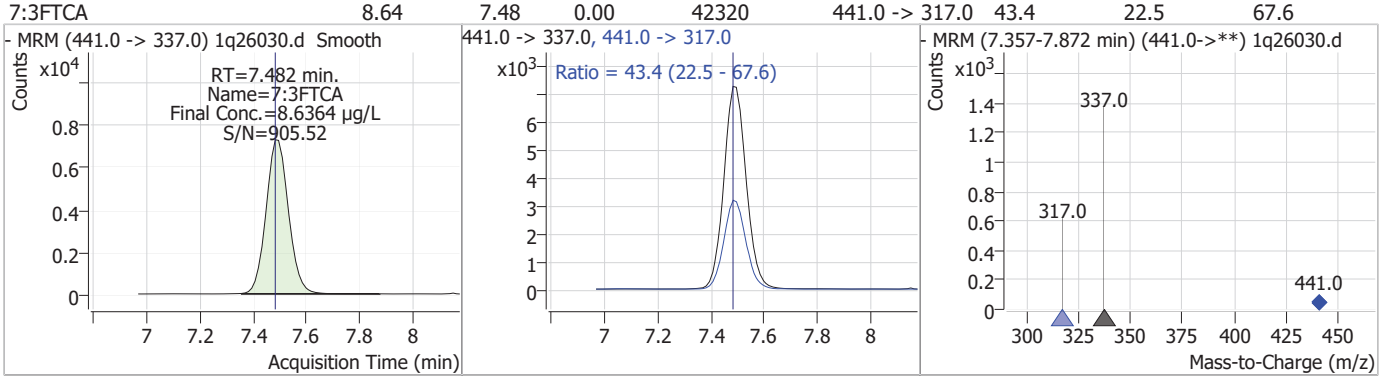


Perfluorinated Compounds by LC/MS/MS

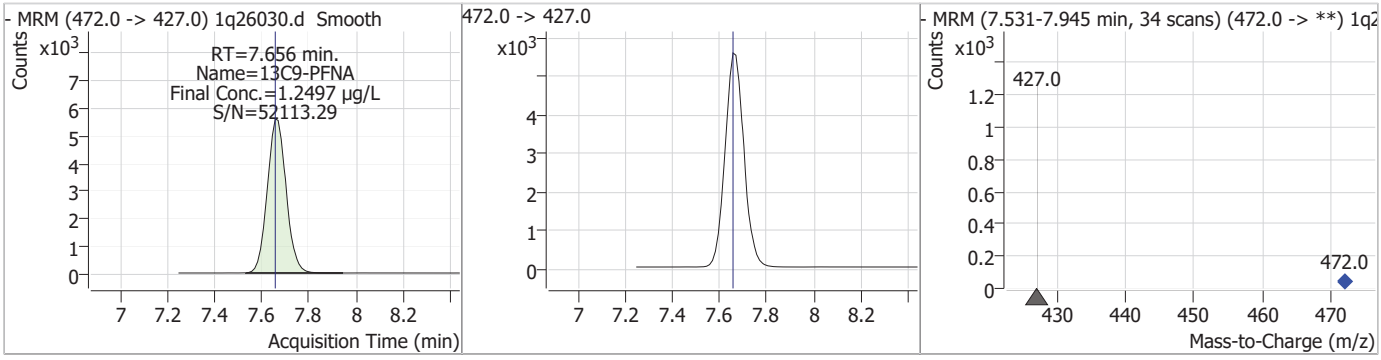
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.29	7.28	0.00	1742 (m)	399.0 -> 99.0	55.8	25.6	76.7



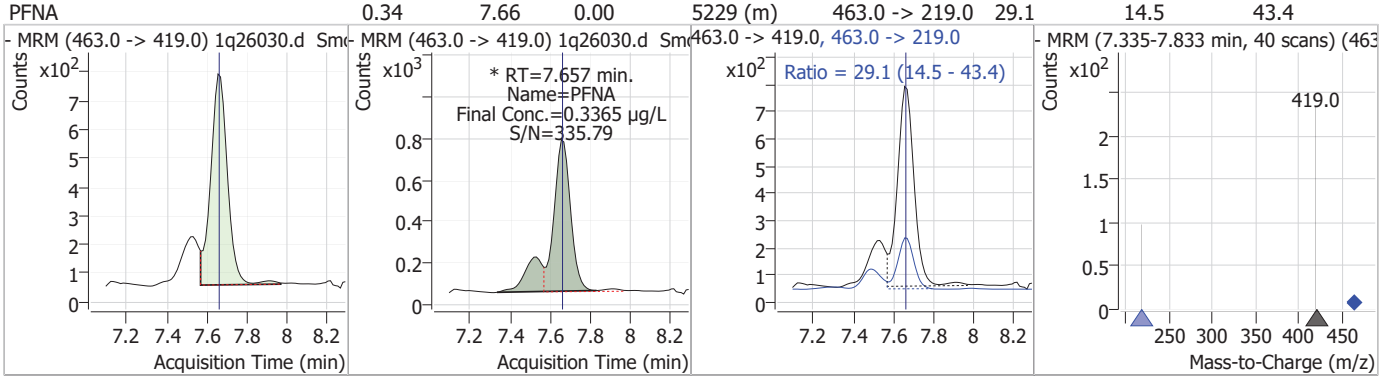
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	8.64	7.48	0.00	42320	441.0 -> 317.0	43.4	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.25	7.66	0.00	30983				

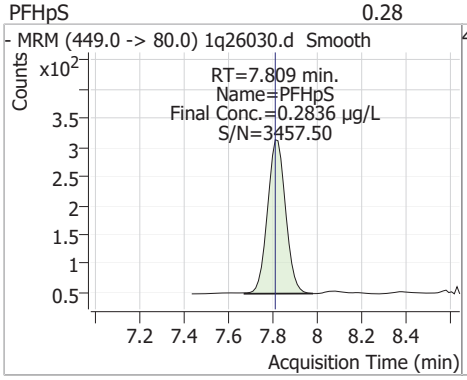


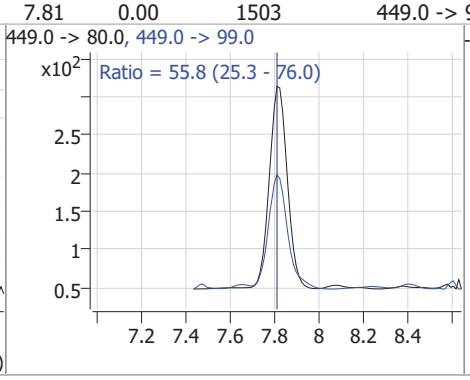
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.34	7.66	0.00	5229 (m)	463.0 -> 219.0	29.1	14.5	43.4

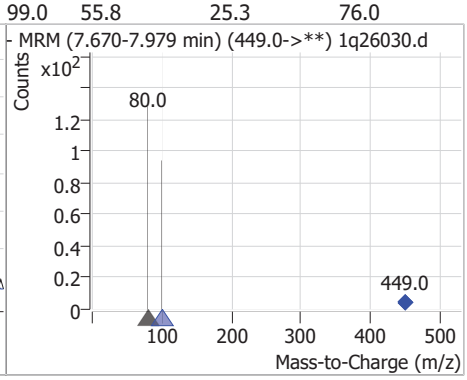


Perfluorinated Compounds by LC/MS/MS

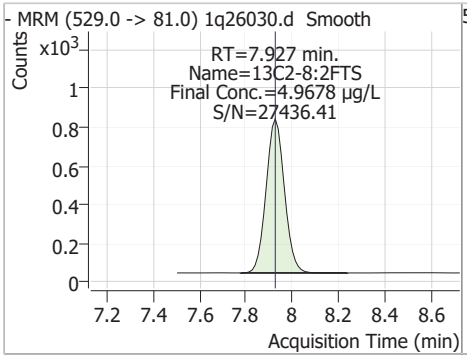
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.28	7.81	0.00	1503	449.0 -> 99.0	55.8	25.3	76.0

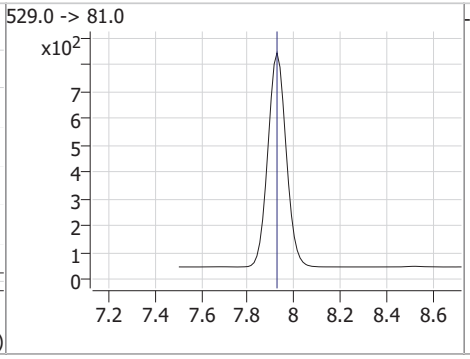


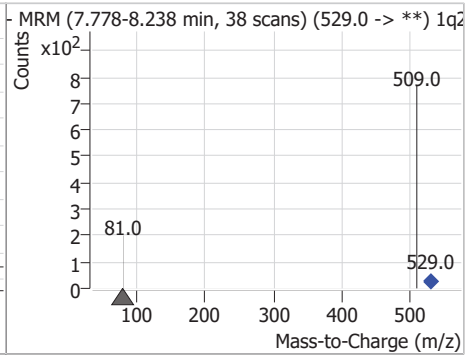




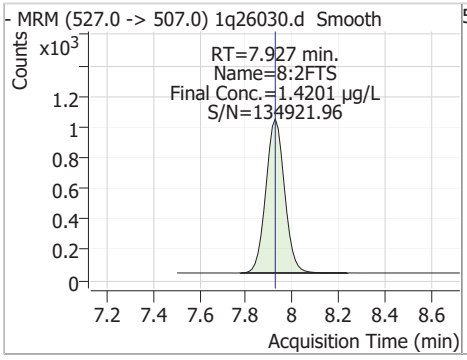
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.97	7.93	0.00	4365				

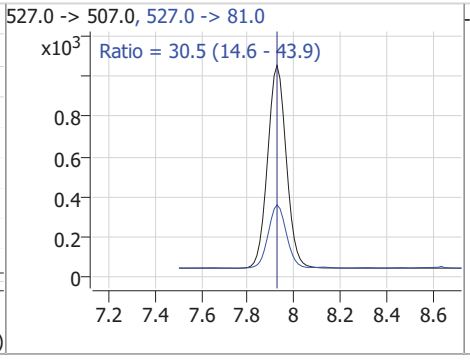


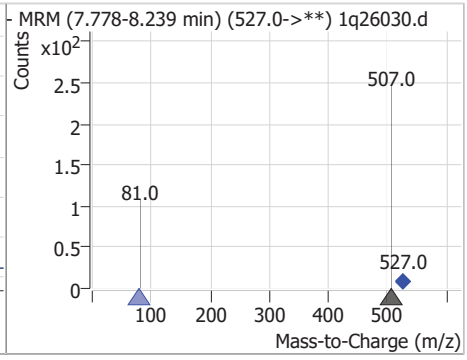




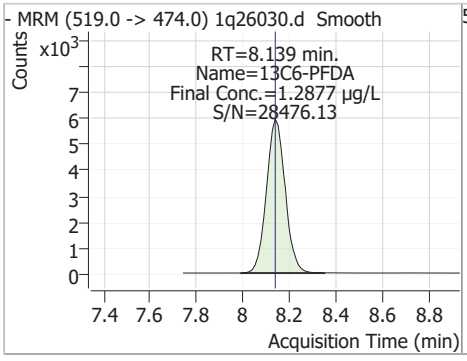
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	1.42	7.93	0.00	5636	527.0 -> 81.0	30.5	14.6	43.9

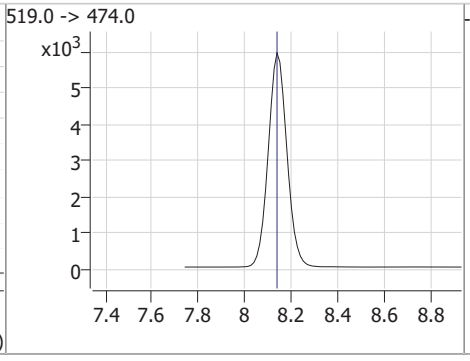


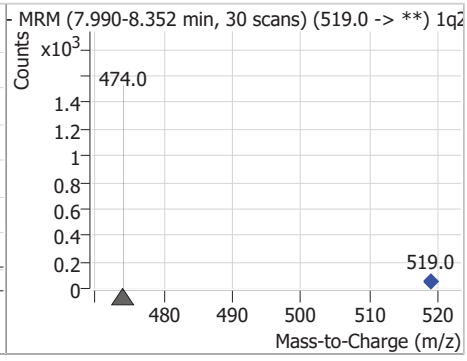




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.29	8.14	0.00	33140				







7.6.3

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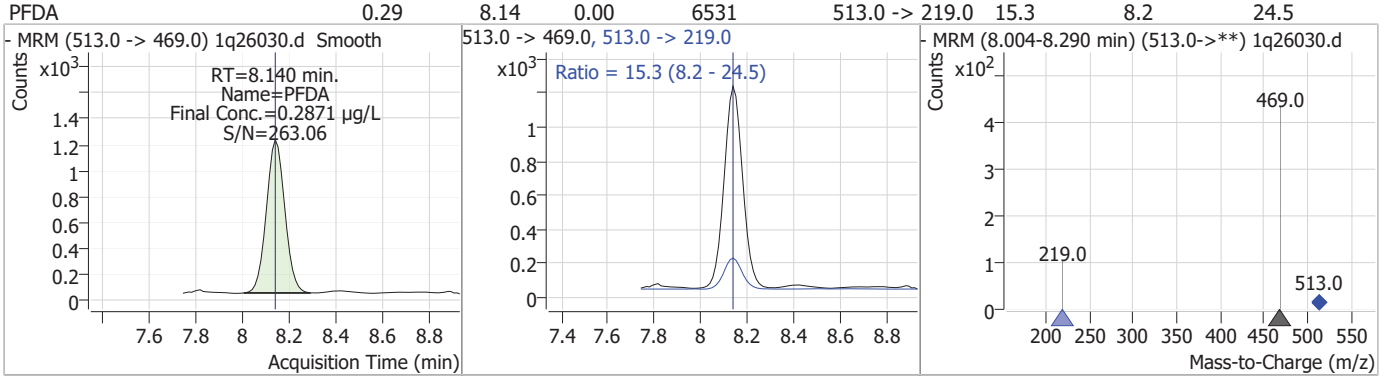
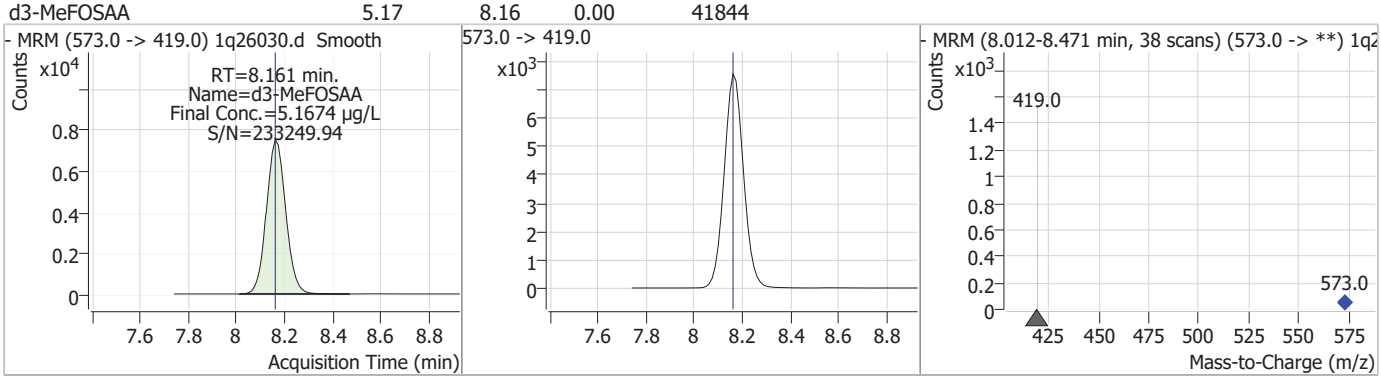
Perfluorinated Compounds by LC/MS/MS

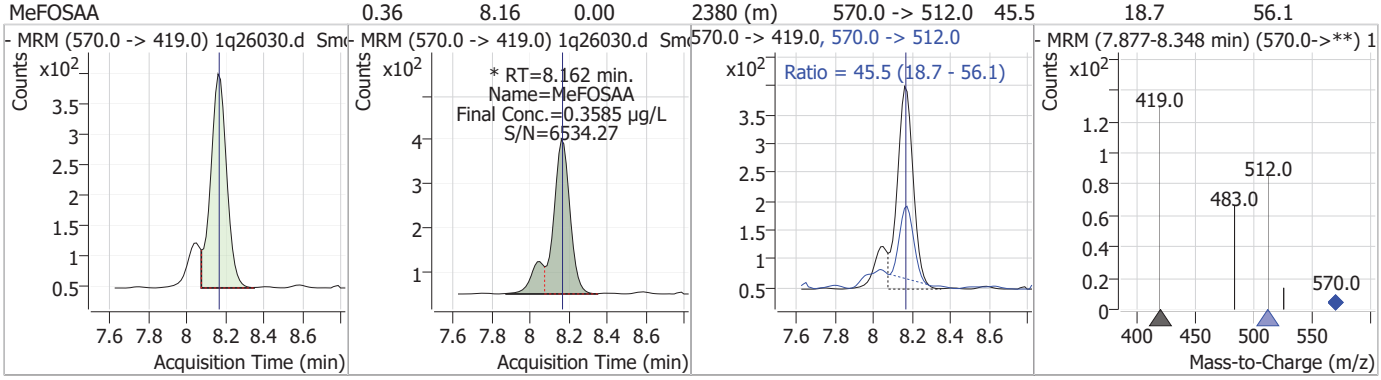
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.29	8.14	0.00	6531	513.0 -> 219.0	15.3	8.2	24.5



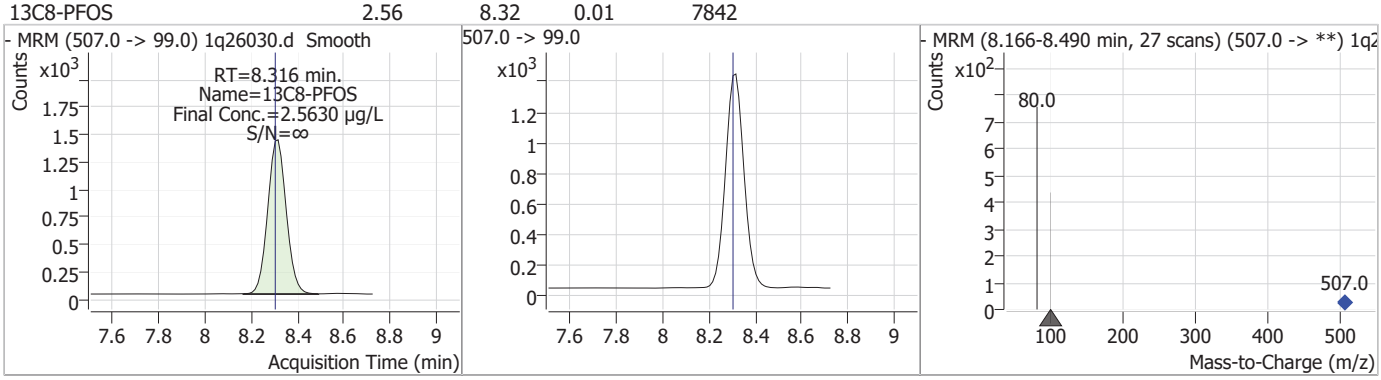
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.17	8.16	0.00	41844				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.36	8.16	0.00	2380 (m)	570.0 -> 512.0	45.5	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.56	8.32	0.01	7842				



7.6.3

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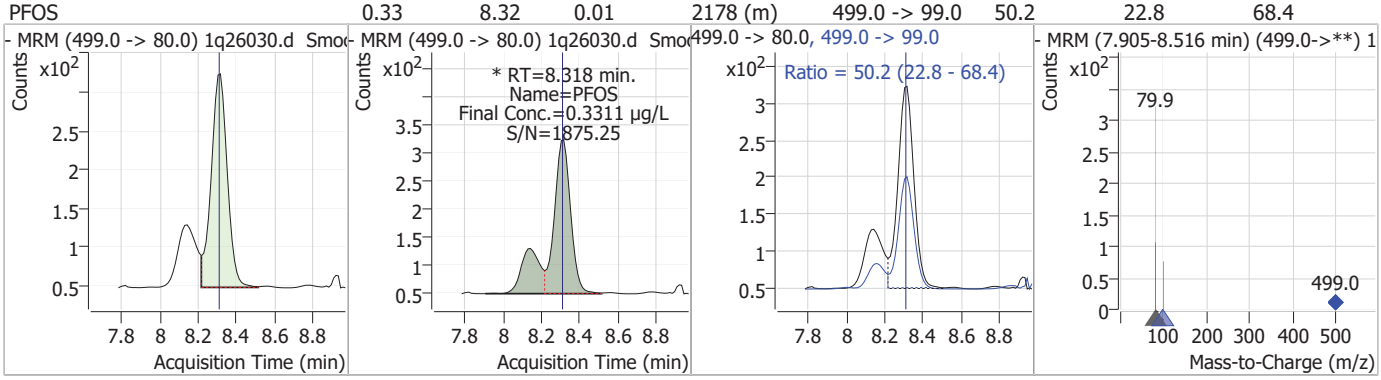
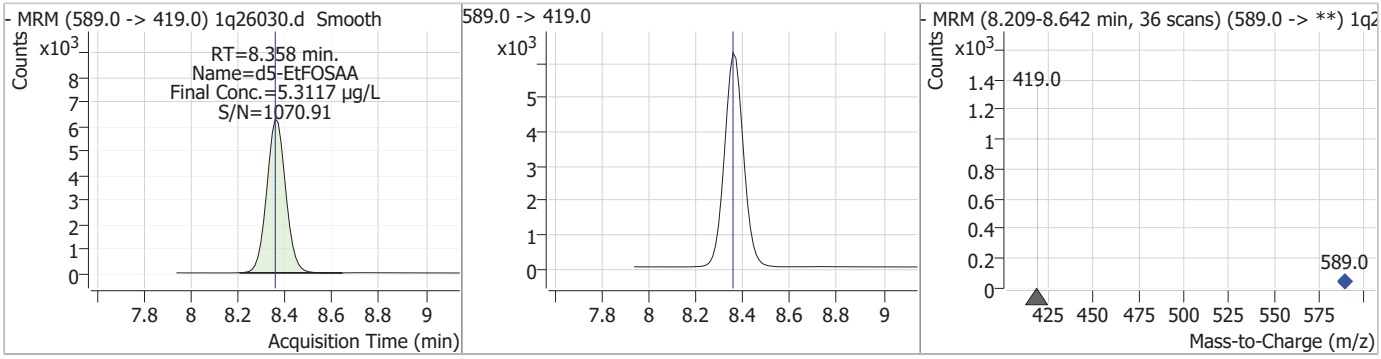
Perfluorinated Compounds by LC/MS/MS

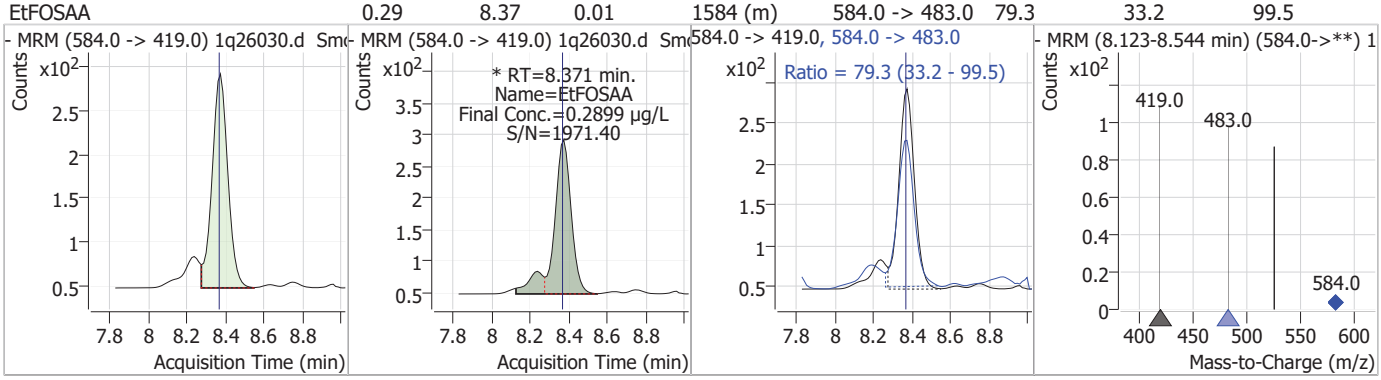
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.33	8.32	0.01	2178 (m)	499.0 -> 99.0	50.2	22.8	68.4



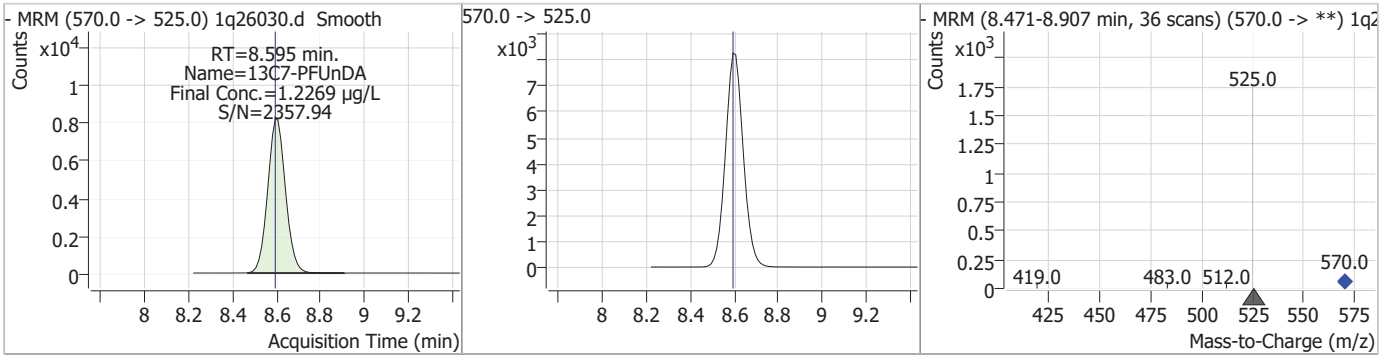
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.31	8.36	0.00	35018				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.29	8.37	0.01	1584 (m)	584.0 -> 483.0	79.3	33.2	99.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.23	8.59	0.00	45834				



7.6.3

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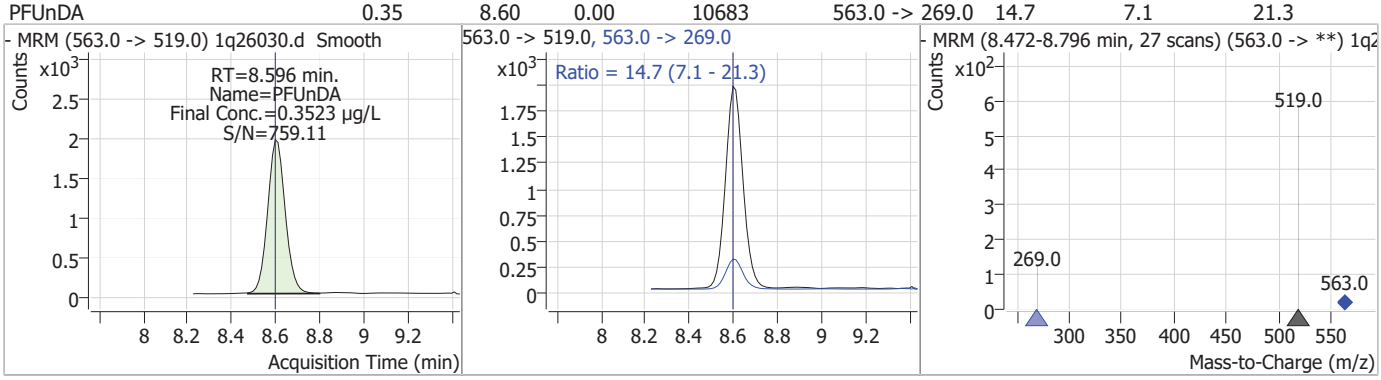
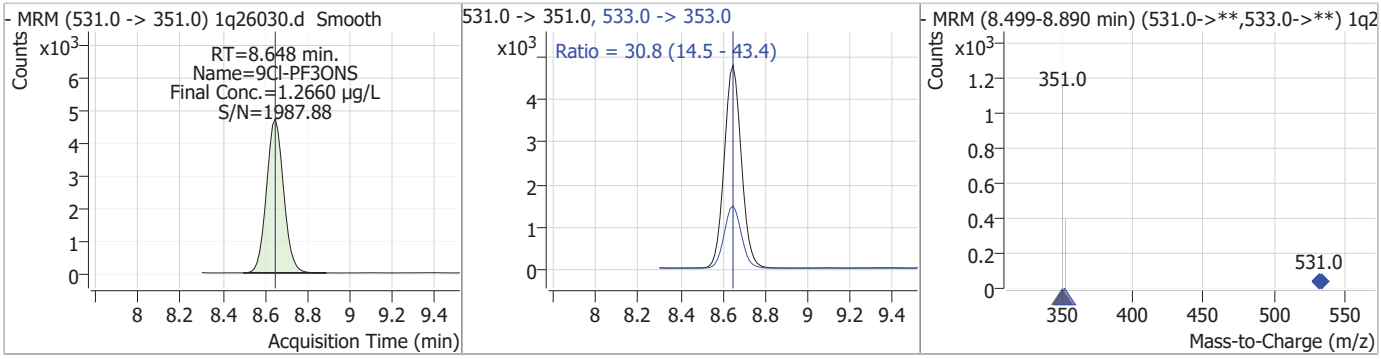
Perfluorinated Compounds by LC/MS/MS

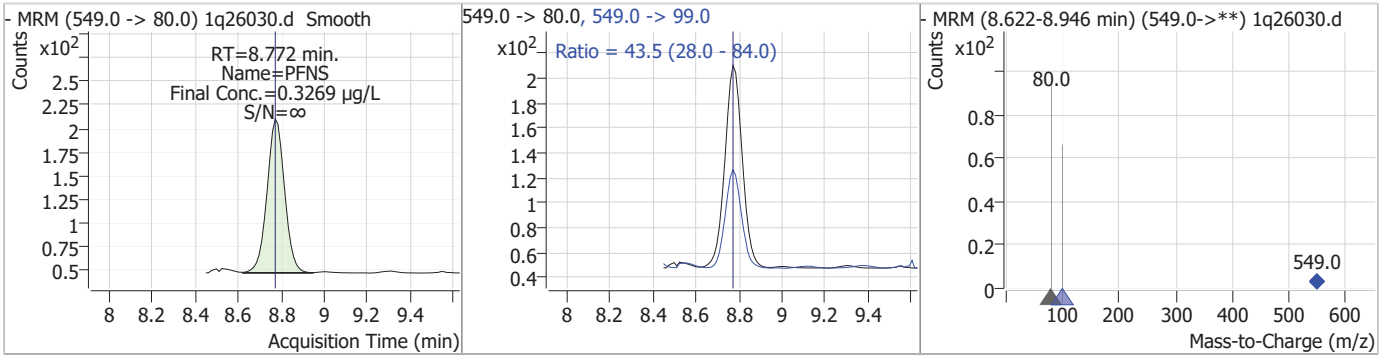
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.35	8.60	0.00	10683	563.0 -> 269.0	14.7	7.1	21.3



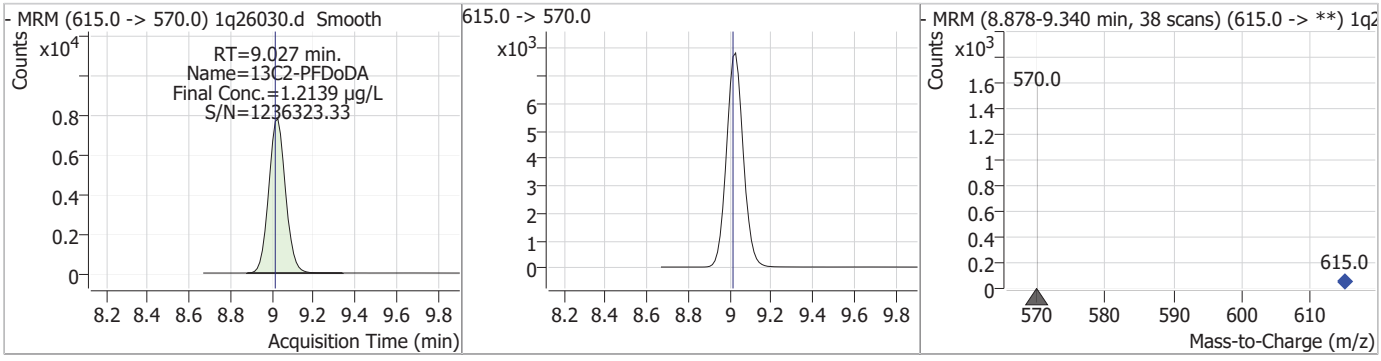
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	1.27	8.65	0.00	26542	533.0 -> 353.0	30.8	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.33	8.77	0.00	923	549.0 -> 99.0	43.5	28.0	84.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.21	9.03	0.01	43751				



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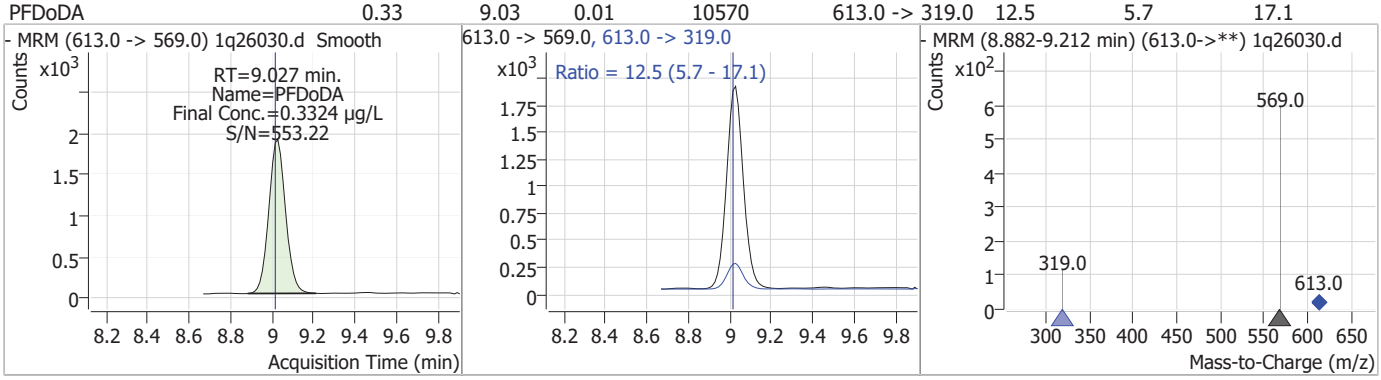
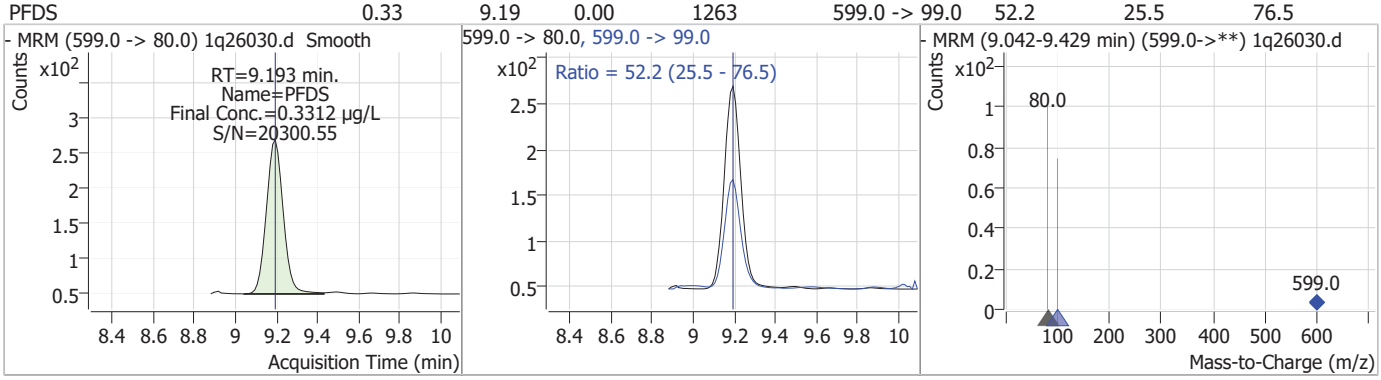
Perfluorinated Compounds by LC/MS/MS

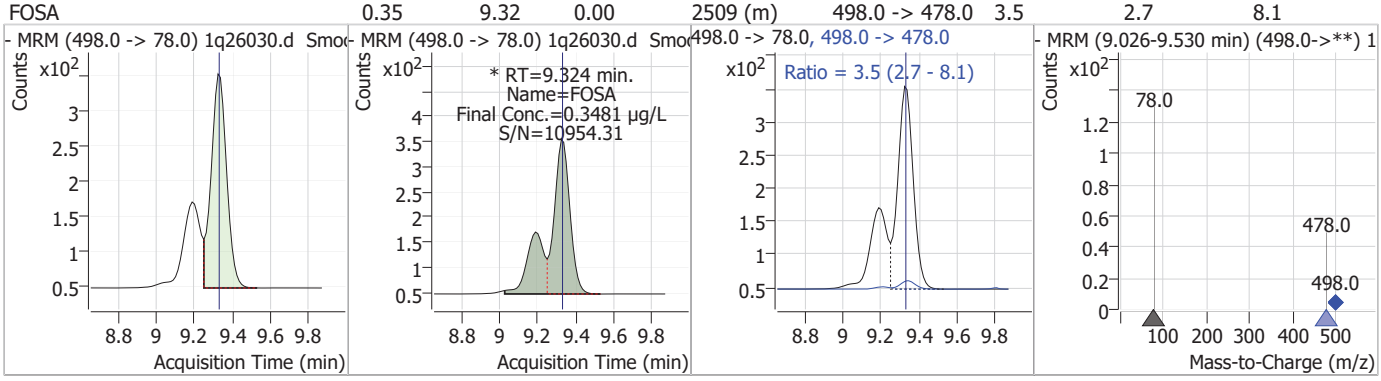
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.33	9.03	0.01	10570	613.0 -> 319.0	12.5	5.7	17.1



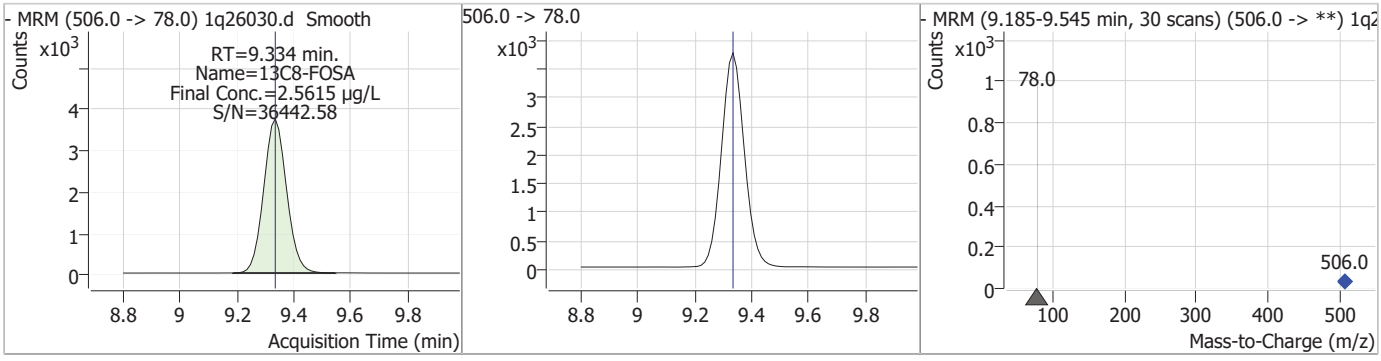
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.33	9.19	0.00	1263	599.0 -> 99.0	52.2	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.35	9.32	0.00	2509 (m)	498.0 -> 478.0	3.5	2.7	8.1

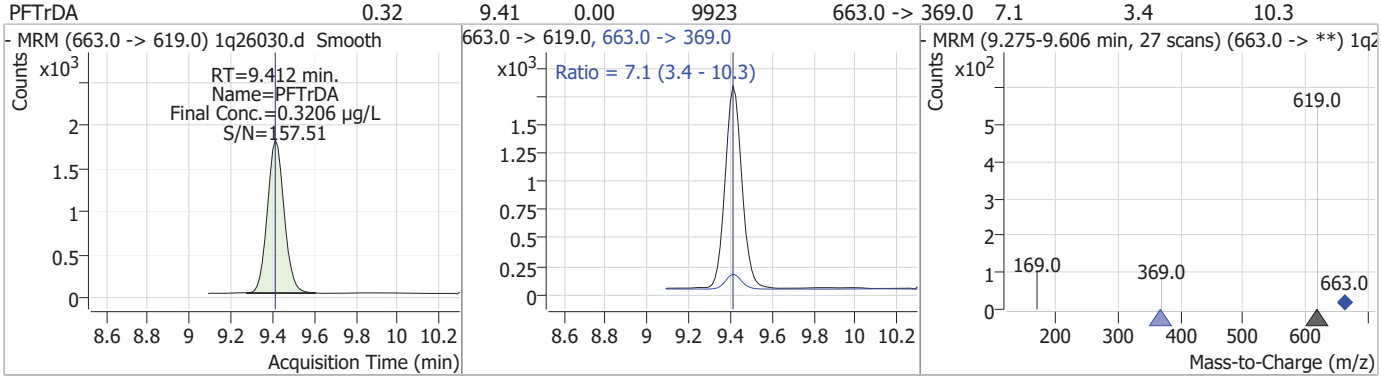


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.56	9.33	0.00	20798				

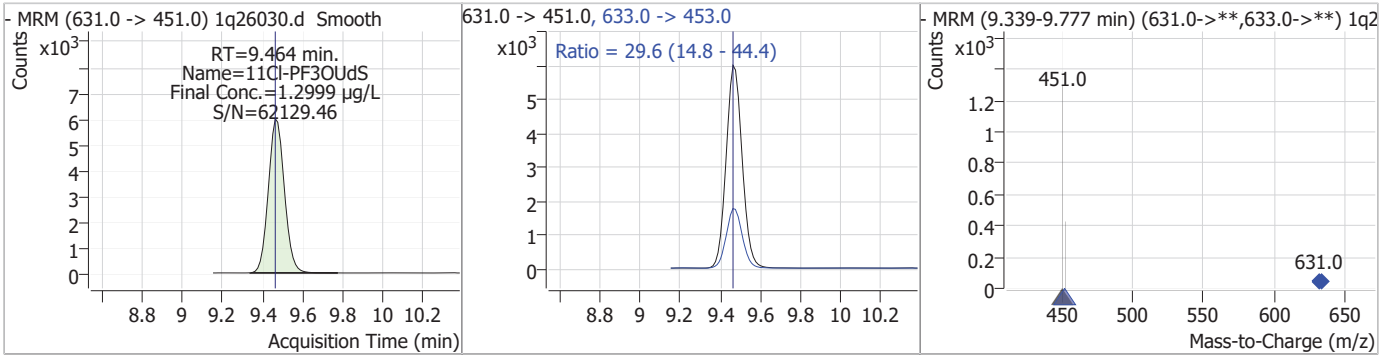


Perfluorinated Compounds by LC/MS/MS

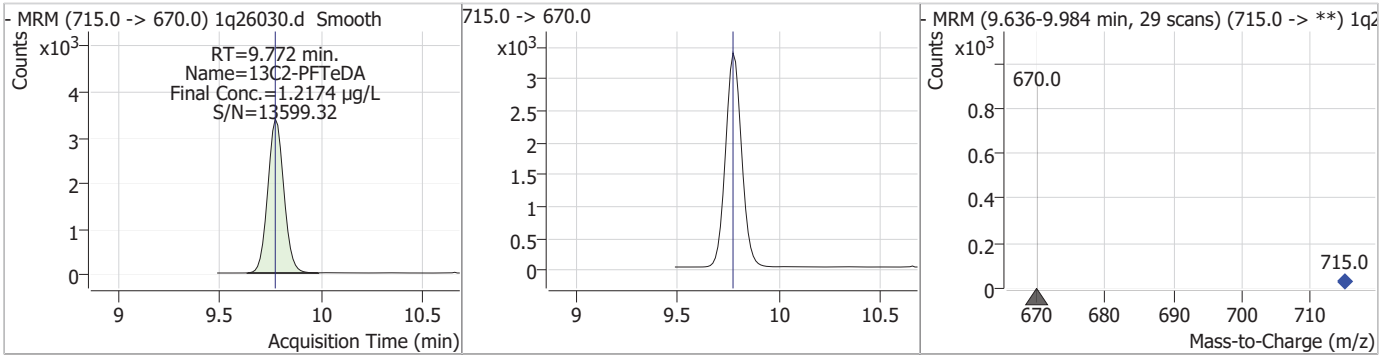
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.32	9.41	0.00	9923	663.0 -> 369.0	7.1	3.4	10.3



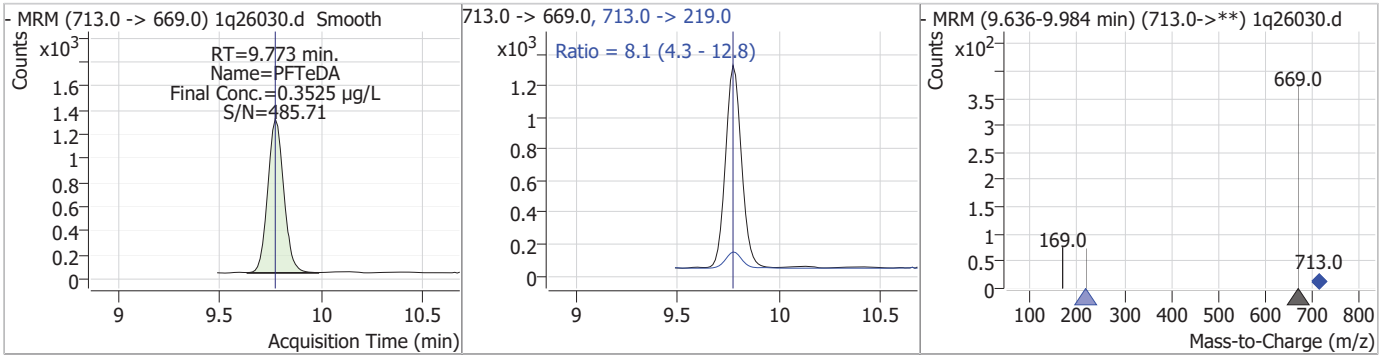
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	1.30	9.46	0.00	33247	633.0 -> 453.0	29.6	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.22	9.77	0.00	18463				

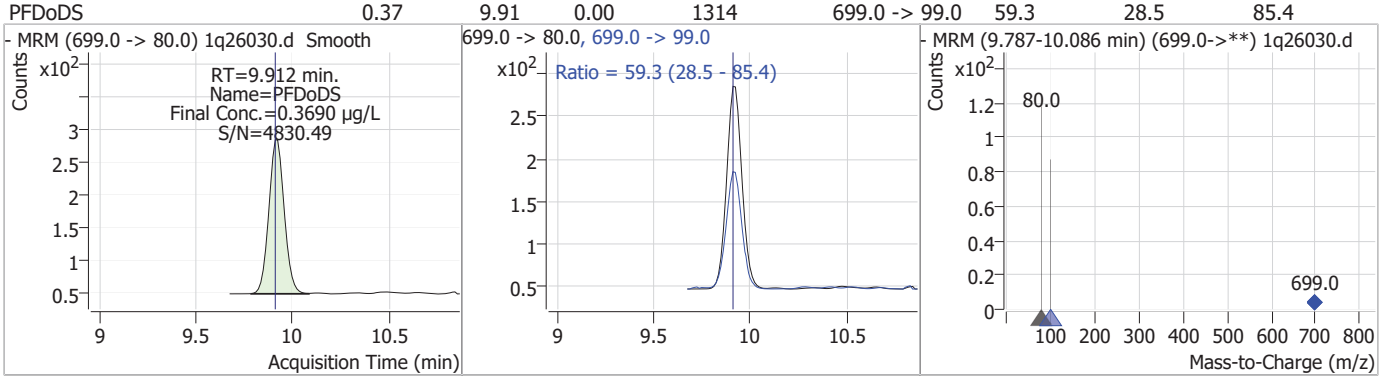


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.35	9.77	0.00	7011	713.0 -> 219.0	8.1	4.3	12.8

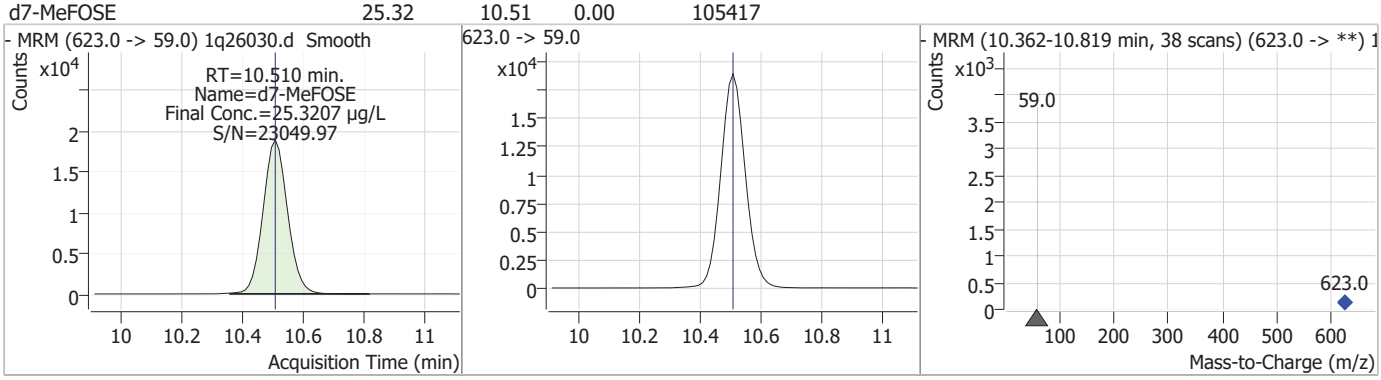


Perfluorinated Compounds by LC/MS/MS

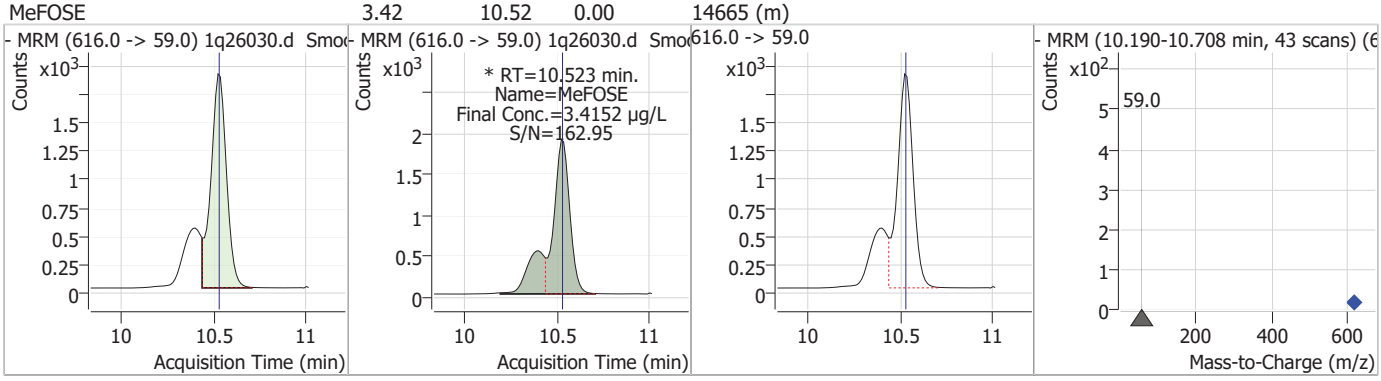
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.37	9.91	0.00	1314	699.0 -> 99.0	59.3	28.5	85.4



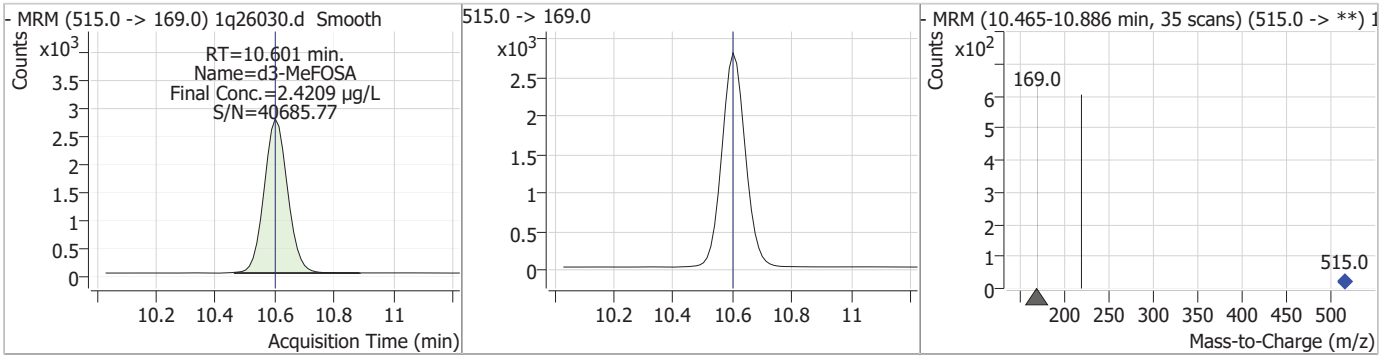
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.32	10.51	0.00	105417				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	3.42	10.52	0.00	14665 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.42	10.60	0.00	15236				



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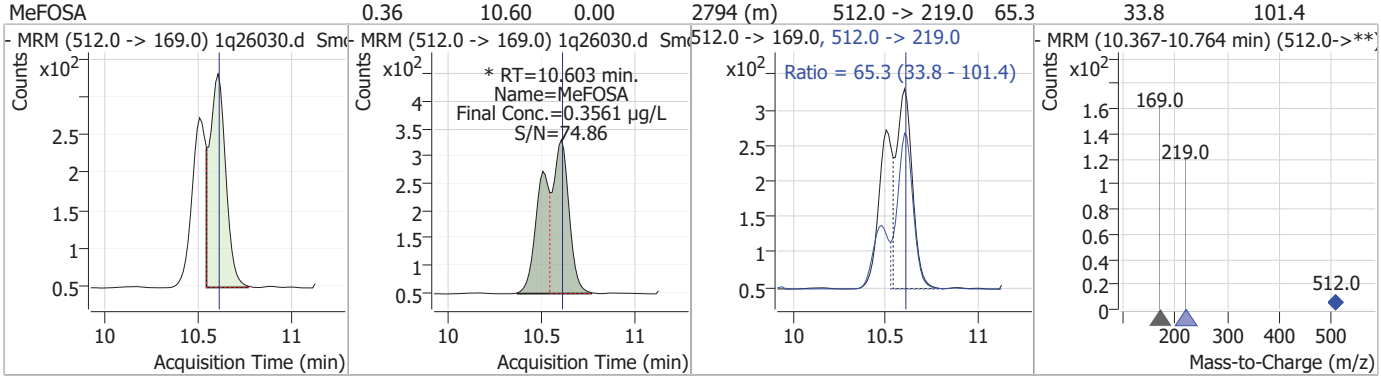
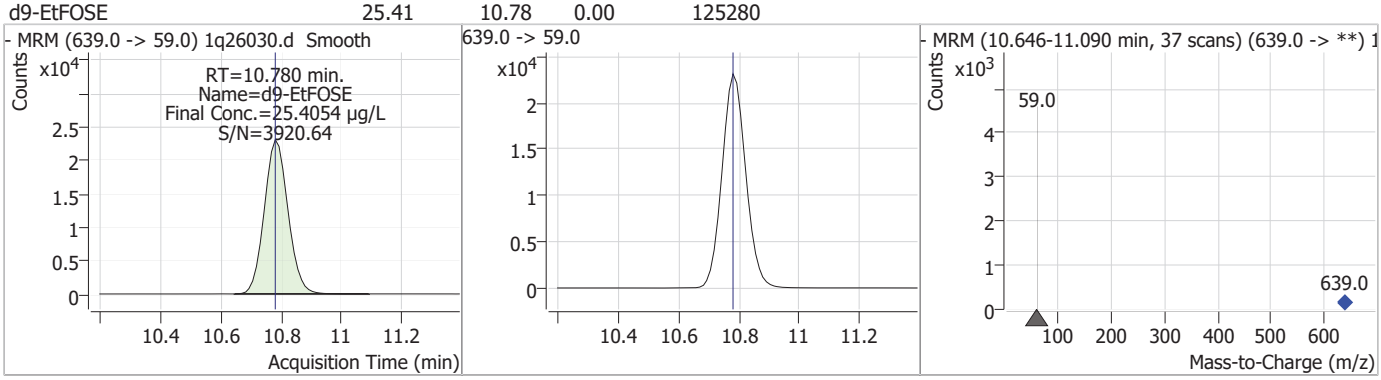
Perfluorinated Compounds by LC/MS/MS

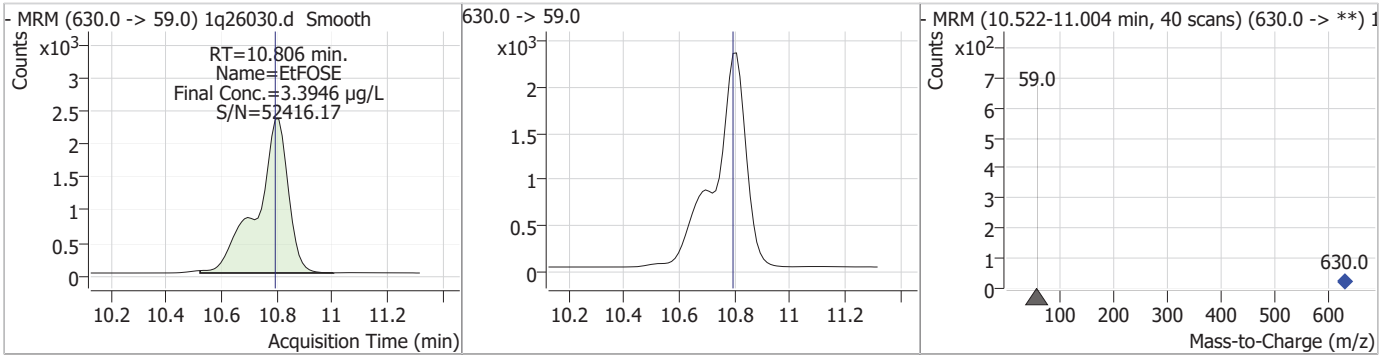
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.36	10.60	0.00	2794 (m)	512.0 -> 219.0	65.3	33.8	101.4



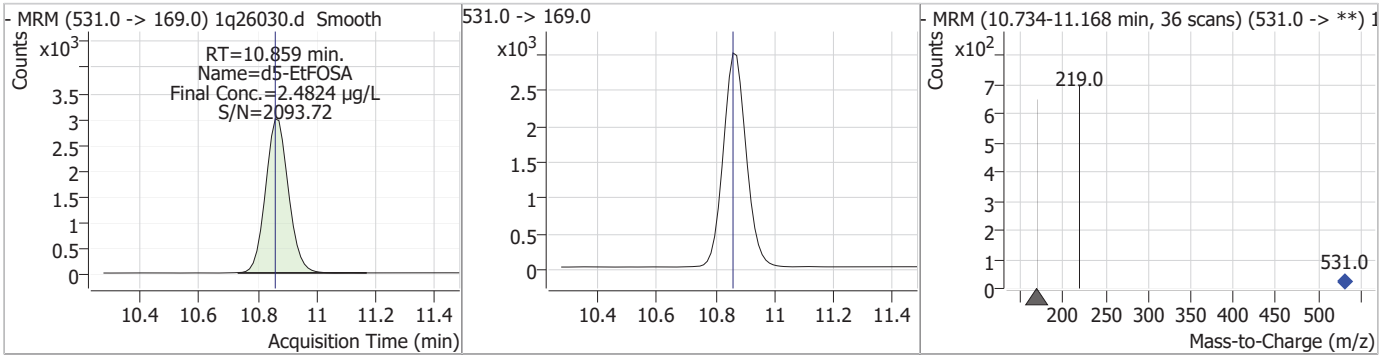
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.41	10.78	0.00	125280				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	3.39	10.81	0.01	18530				

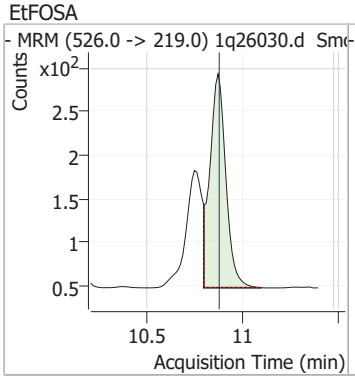


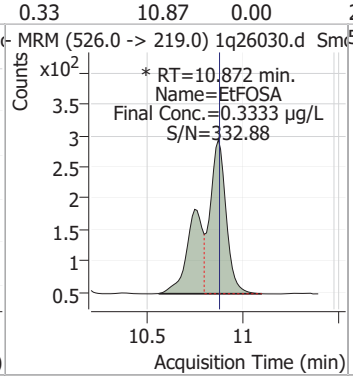
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.48	10.86	0.00	15964				

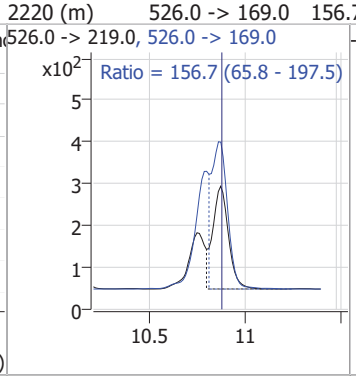


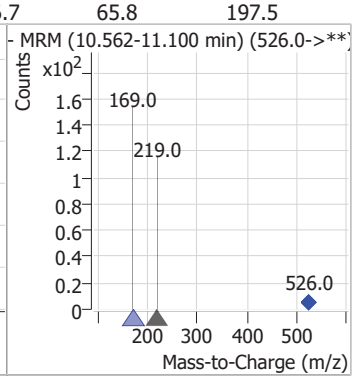
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.33	10.87	0.00	2220 (m)	526.0 -> 169.0	156.7	65.8	197.5









7.6.3

7

Manual Integration Approval Summary

Sample Number: T1Q361-IC361
Lab FileID: 1Q26030.D
Injection Time: 05/14/25 16:53

Method: EPA 1633
Analyst approved: 05/15/25 01:25 Rensel John Romano
Supervisor approved: 05/15/25 05:29 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.66	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Split peak
PFOSA	754-91-6		9.32	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSA	4151-50-2		10.87	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/15/25 05:29

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26031.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/14/2025 5:08:21 PM
Sample Name : IC361-3
Vial : P1-A4
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : t1q361.batch.bin
Sample Information : OP63461,T1Q361,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.248	217.0 -> 172.0	187212	10.00 µg/L	-0.012
M5-PFPeA	4.636	268.0 -> 223.0	113553	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	64652	2.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	52193	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	84049	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	31300	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	31424	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	46026	1.25 µg/L	0.000
M2-PFDoDA	9.027	615.0 -> 570.0	43119	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	18240	1.25 µg/L	0.000
M8-FOSA	9.334	506.0 -> 78.0	19513	2.50 µg/L	0.000
M3-PFBS	5.699	302.0 -> 99.0	7077	2.50 µg/L	-0.012
M3-PFHxS	7.263	402.0 -> 99.0	7190	2.50 µg/L	-0.012
M8-PFOS	8.316	507.0 -> 99.0	7637	2.50 µg/L	0.012
M2-4:2FTS	5.434	329.0 -> 81.0	1626	5.00 µg/L	-0.012
M2-6:2FTS	6.922	429.0 -> 81.0	3048	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	4835	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	40788	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	23159	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	31373	5.00 µg/L	0.000
M7-MeFOSE	10.510	623.0 -> 59.0	104026	25.00 µg/L	0.000
M9-EtFOSE	10.780	639.0 -> 59.0	122621	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	15645	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	15275	2.50 µg/L	0.000
13C4-PFOS	8.317	503.0 -> 80.0	13656	2.50 µg/L	0.012
13C3-PFBA	3.251	216.0 -> 172.0	78059	5.00 µg/L	0.000
18O2-PFHxS	7.274	403.0 -> 84.0	8405	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	93023	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	23260	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	30404	1.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	60911	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.434	329.0 -> 81.0	1626	5.79 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 115.9%	
13C2-6:2FTS	6.922	429.0 -> 81.0	3048	5.60 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 112.0%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4835	5.65 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 113.0%	
13C2-PFDoDA	9.027	615.0 -> 570.0	43119	1.37 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 109.3%	
13C2-PFTeDA	9.772	715.0 -> 670.0	18240	1.37 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 109.9%	
13C3-PFBS	5.699	302.0 -> 99.0	7077	2.52 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.9%	
13C3-PFHxS	7.263	402.0 -> 99.0	7190	2.56 µg/L	-0.012

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.3%		
13C4-PFBA	3.248	217.0 -> 172.0	187212	10.09 µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.9%		
13C4-PFHpA	6.553	367.0 -> 322.0	52193	2.47 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.8%		
13C5-PFHxA	5.759	318.0 -> 273.0	64652	2.49 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.8%		
13C5-PFPeA	4.636	268.0 -> 223.0	113553	5.09 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.7%		
13C6-PFDA	8.139	519.0 -> 474.0	31424	1.39 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 111.6%		
13C7-PFUnDA	8.595	570.0 -> 525.0	46026	1.41 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 112.6%		
13C8-FOSA	9.334	506.0 -> 78.0	19513	2.34 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.6%		
13C8-PFOA	7.148	421.0 -> 376.0	84049	2.48 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.3%		
13C8-PFOS	8.316	507.0 -> 99.0	7637	2.43 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.2%		
13C9-PFNA	7.656	472.0 -> 427.0	31300	1.26 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.9%		
d3-MeFOSAA	8.161	573.0 -> 419.0	40788	4.91 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.1%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	23159	10.20 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 102.0%		
d3-MeFOSA	10.601	515.0 -> 169.0	15275	2.36 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.5%		
d5-EtFOSAA	8.358	589.0 -> 419.0	31373	4.63 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.7%		
d7-MeFOSE	10.510	623.0 -> 59.0	104026	24.33 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.3%		
d9-EtFOSE	10.780	639.0 -> 59.0	122621	24.22 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 96.9%		
d5-EtFOSA	10.859	531.0 -> 169.0	15645	2.37 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.8%		
Target Compounds						QValue
4:2FTS	5.434	327.0 -> 307.0	12396	4.09 µg/L		91
		327.0 -> 81.0	5985			
6:2FTS	6.922	427.0 -> 407.0	17631	4.52 µg/L		93
		427.0 -> 81.0	5620			
8:2FTS	7.927	527.0 -> 507.0	19693	4.48 µg/L		99
		527.0 -> 81.0	5700			
EtFOSAA	8.371	584.0 -> 419.0	6823	1.39 µg/L	m	89
		584.0 -> 483.0	3942			
FOSA	9.337	498.0 -> 78.0	8344	1.23 µg/L	m	100
		498.0 -> 478.0	459			
MeFOSAA	8.162	570.0 -> 419.0	7341	1.13 µg/L	m	97
		570.0 -> 512.0	2865			
PFBA	3.254	213.0 -> 169.0	25638	4.90 µg/L		100
PFBS	5.700	299.0 -> 80.0	8856	1.08 µg/L		94
		299.0 -> 99.0	3778			
PFDA	8.140	513.0 -> 469.0	25876	1.20 µg/L		95
		513.0 -> 219.0	3643			
PFDoDA	9.027	613.0 -> 569.0	36811	1.17 µg/L		97
		613.0 -> 319.0	4634			
PFDS	9.193	599.0 -> 80.0	4641	1.21 µg/L		98

Perfluorinated Compounds by LC/MS/MS

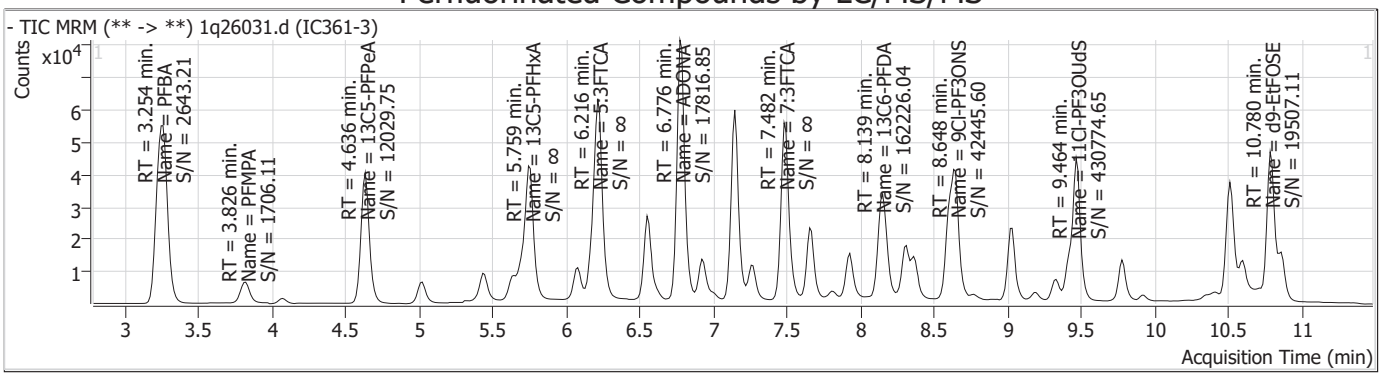
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	2299				
PFHpA	6.554	363.0 -> 319.0	35271	1.21	µg/L		95
		363.0 -> 169.0	6291				
PFHpS	7.809	449.0 -> 80.0	5672	1.14	µg/L		93
		449.0 -> 99.0	3167				
PFHxA	5.761	313.0 -> 269.0	28483	1.20	µg/L		97
		313.0 -> 119.0	1100				
PFHxS	7.264	399.0 -> 80.0	6001	1.07	µg/L	m	92
		399.0 -> 99.0	3415				
PFNA	7.657	463.0 -> 419.0	18602	1.18	µg/L	m	97
		463.0 -> 219.0	5662				
PFNS	8.772	549.0 -> 80.0	3397	1.24	µg/L		97
		549.0 -> 99.0	1827				
PFOA	7.149	413.0 -> 369.0	33451	1.15	µg/L	m	97
		413.0 -> 169.0	7384				
PFOS	8.318	499.0 -> 80.0	6913	1.08	µg/L	m	92
		499.0 -> 99.0	3496				
PFPeA	4.638	263.0 -> 219.0	47767	2.42	µg/L		100
PFPeS	6.630	349.0 -> 80.0	4336	1.18	µg/L		87
		349.0 -> 99.0	1629				
PFTeDA	9.773	713.0 -> 669.0	22375	1.14	µg/L		98
		713.0 -> 219.0	2033				
PFTrDA	9.412	663.0 -> 619.0	36723	1.20	µg/L		100
		663.0 -> 369.0	2485				
PFUnDA	8.596	563.0 -> 519.0	35772	1.17	µg/L		99
		563.0 -> 269.0	4906				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	118343	4.74	µg/L		98
		633.0 -> 453.0	33847				
9Cl-PF3ONS	8.648	531.0 -> 351.0	98098	4.79	µg/L		99
		533.0 -> 353.0	27974				
ADONA	6.776	377.0 -> 251.0	234473	4.60	µg/L		98
		377.0 -> 85.0	62586				
HFPO-DA	6.088	285.0 -> 169.0	11295	5.04	µg/L		95
		285.0 -> 185.0	882				
3:3FTCA	4.072	241.0 -> 177.0	6313	5.87	µg/L		98
		241.0 -> 117.0	482				
5:3FTCA	6.216	341.0 -> 237.0	129577	30.92	µg/L		97
		341.0 -> 217.0	88663				
7:3FTCA	7.482	441.0 -> 337.0	145707	30.79	µg/L		97
		441.0 -> 317.0	63090				
EtFOSA	10.872	526.0 -> 219.0	8025	1.23	µg/L	m	99
		526.0 -> 169.0	10670				
EtFOSE	10.794	630.0 -> 59.0	65966	12.35	µg/L		100
MeFOSA	10.603	512.0 -> 169.0	9228	1.17	µg/L	m	97
		512.0 -> 219.0	6431				
MeFOSE	10.523	616.0 -> 59.0	51295	12.11	µg/L	m	100
PFDoDS	9.924	699.0 -> 80.0	3985	1.15	µg/L		97
		699.0 -> 99.0	2343				
NFDHA	5.639	295.0 -> 201.0	4473	2.84	µg/L		75
		201.0 -> 85.0	20972				
		295.0 -> 85.0	1191				
PFMBA	5.027	279.0 -> 85.0	26179	2.44	µg/L		100
PFMPA	3.826	229.0 -> 85.0	29132	2.41	µg/L		100
PFEESA	6.182	315.0 -> 135.0	49426	2.19	µg/L		99
		315.0 -> 69.0	4221				

 # = Qualifier out of range, m = manually integrated, + = Area summed

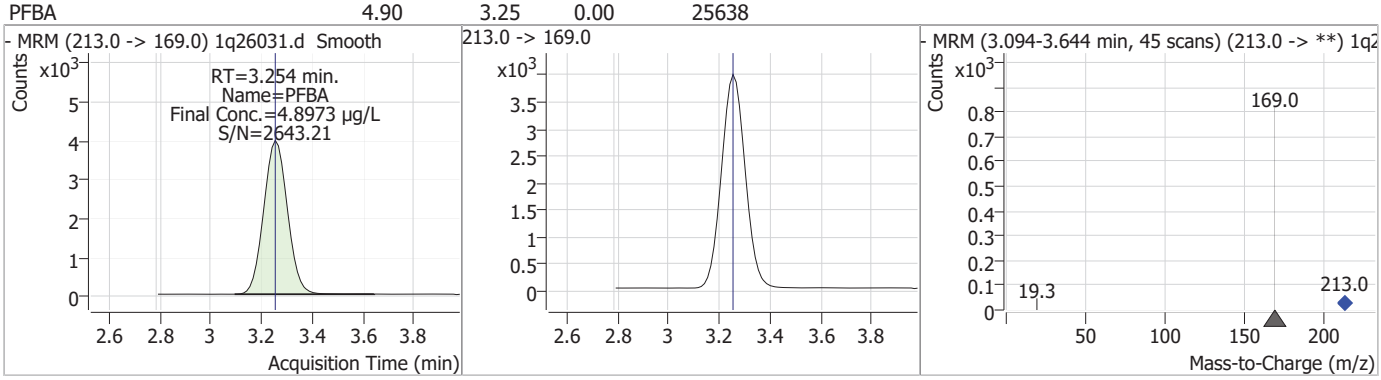
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

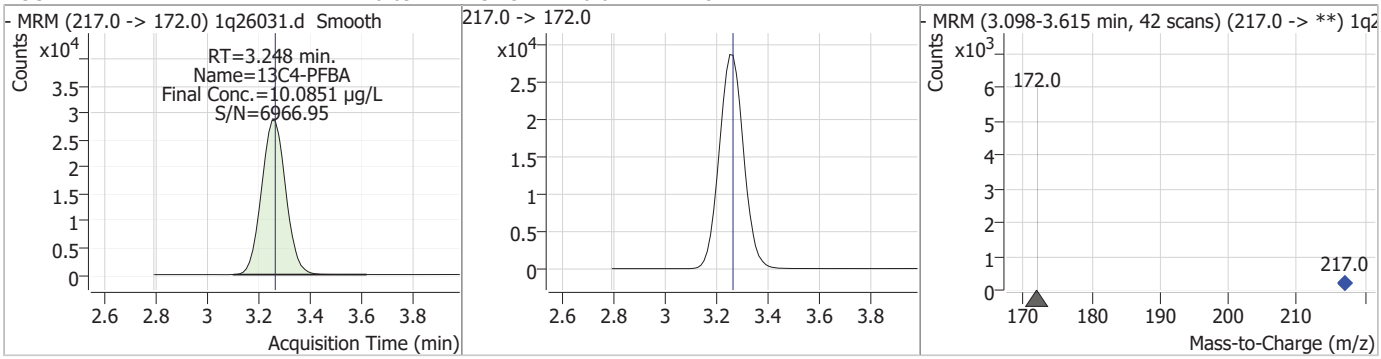
Perfluorinated Compounds by LC/MS/MS



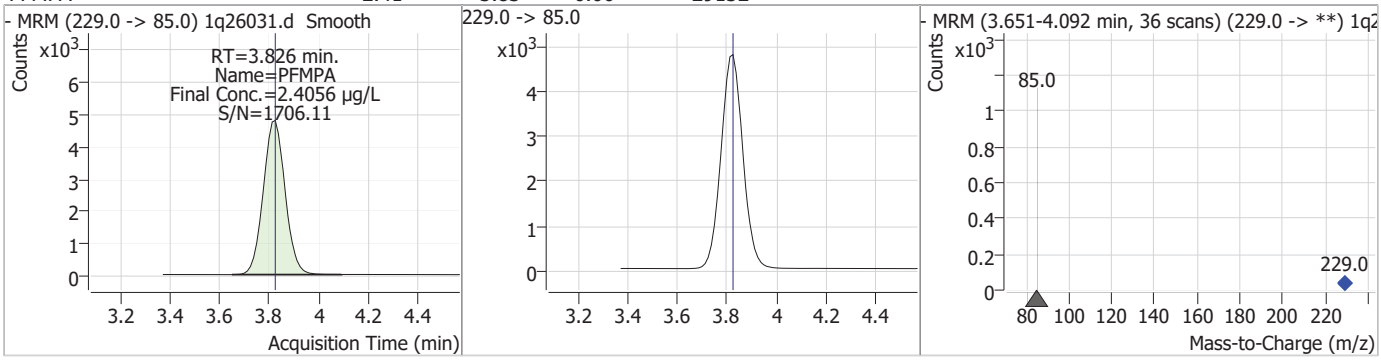
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	4.90	3.25	0.00	25638				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.09	3.25	-0.01	187212				

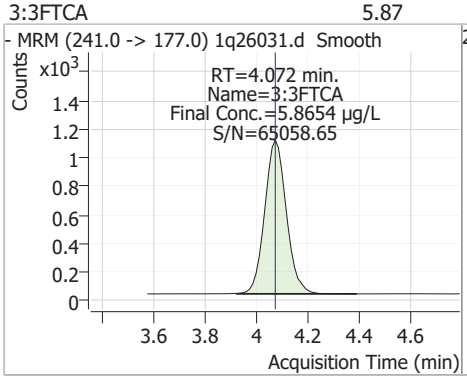


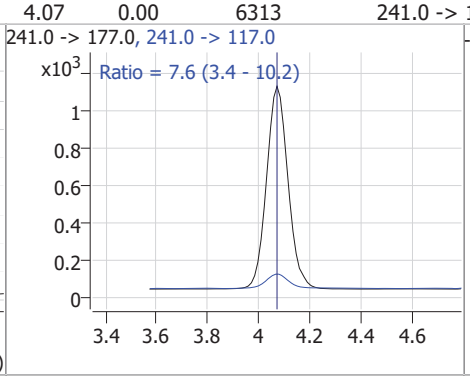
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	2.41	3.83	0.00	29132				

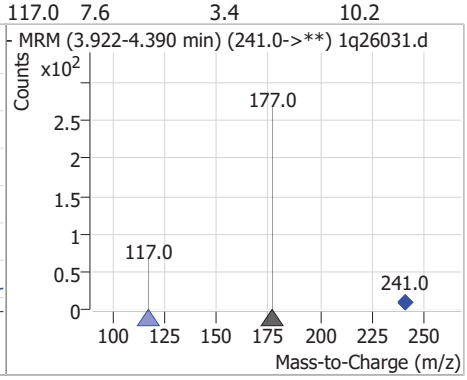


Perfluorinated Compounds by LC/MS/MS

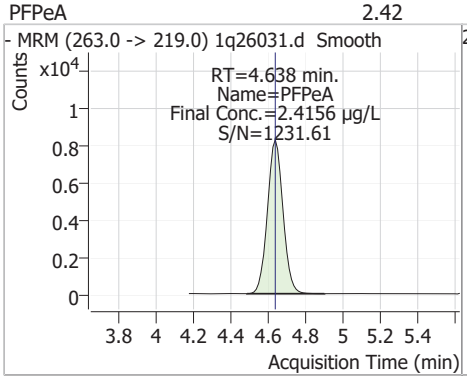
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	5.87	4.07	0.00	6313	241.0 -> 117.0	7.6	3.4	10.2

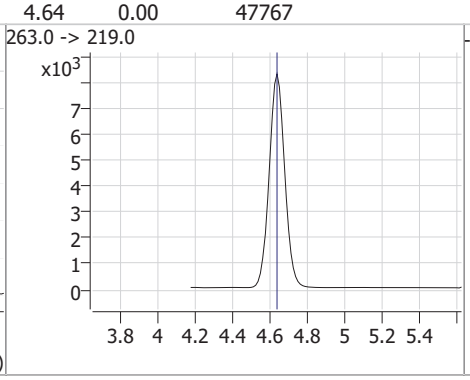


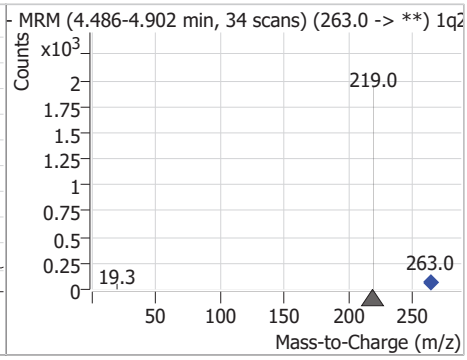




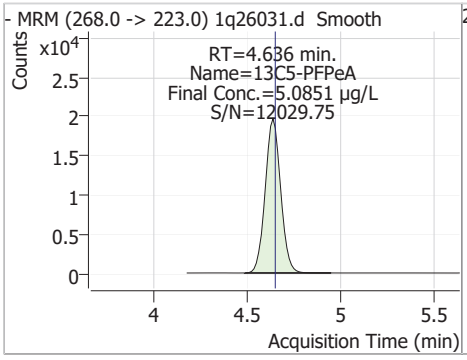
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	2.42	4.64	0.00	47767				

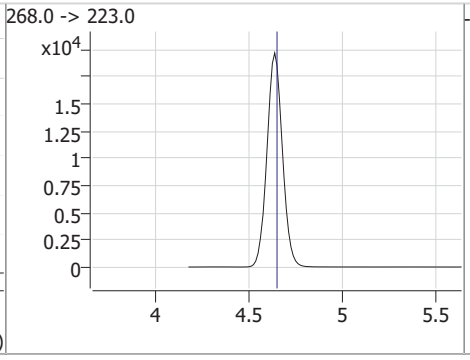


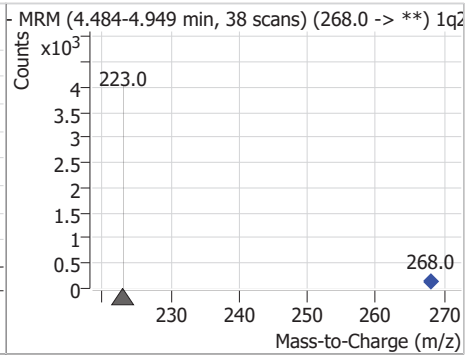




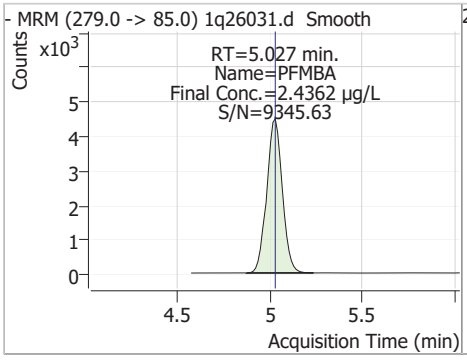
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.09	4.64	-0.01	113553				

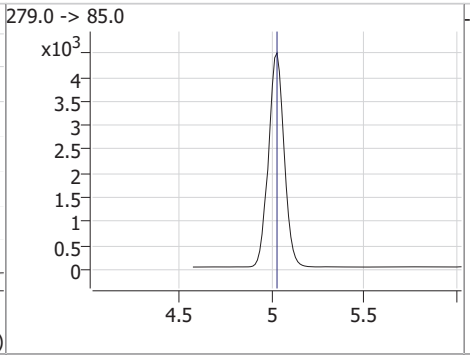


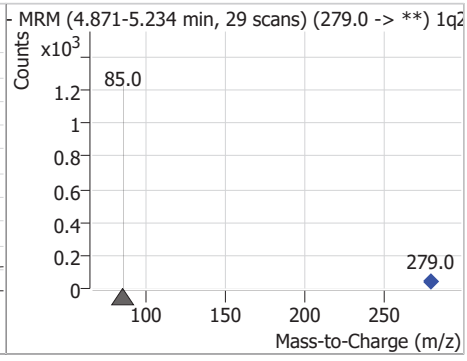




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	2.44	5.03	0.00	26179				

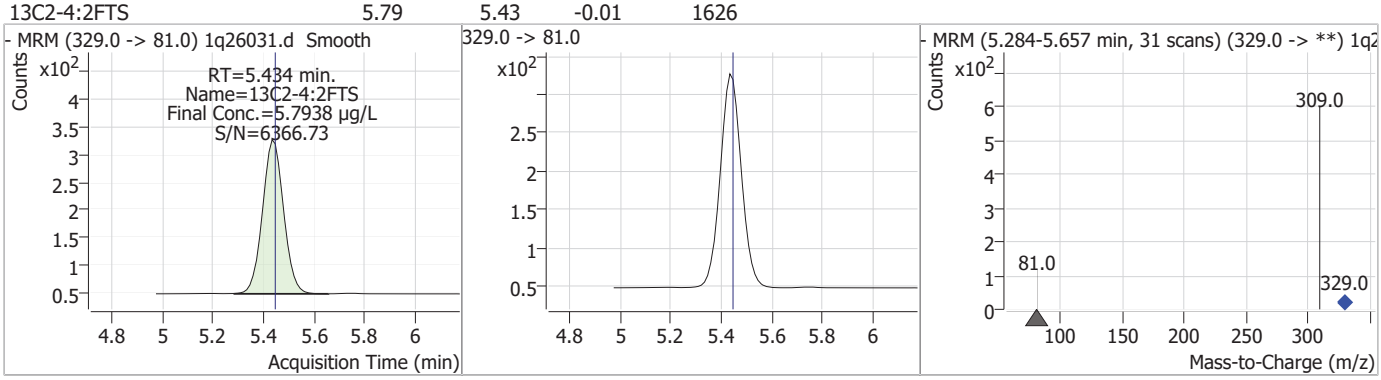




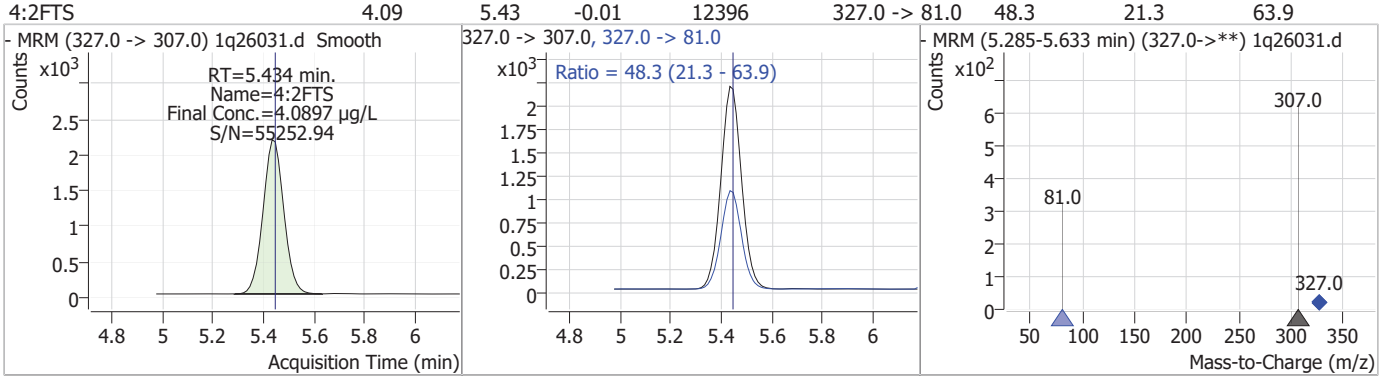


Perfluorinated Compounds by LC/MS/MS

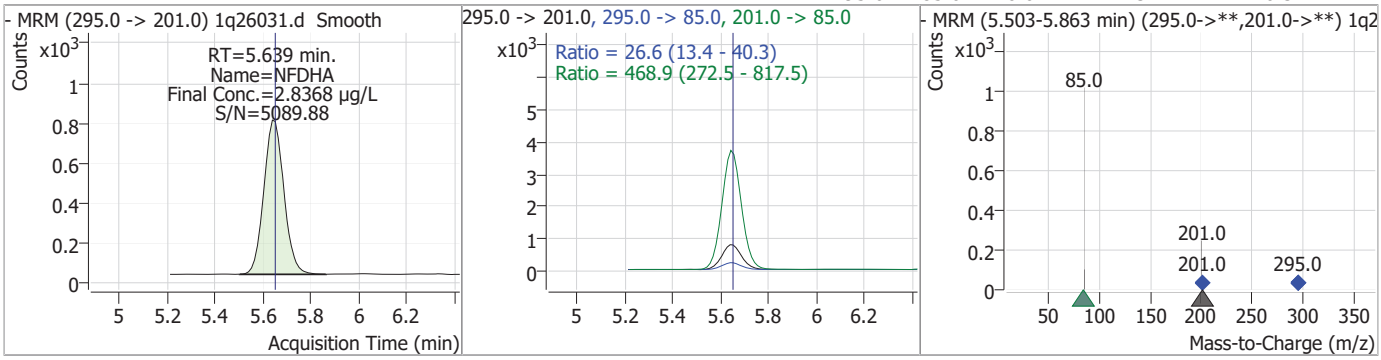
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.79	5.43	-0.01	1626				



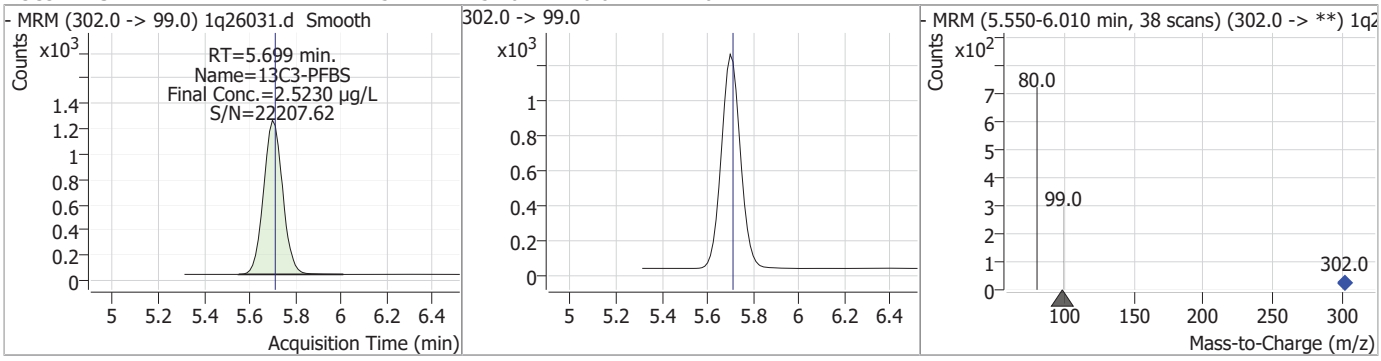
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	4.09	5.43	-0.01	12396	327.0 -> 81.0	48.3	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	2.84	5.64	-0.01	4473	201.0 -> 85.0	468.9	272.5	817.5
					295.0 -> 85.0	26.6	13.4	40.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.52	5.70	-0.01	7077				



7.6.4

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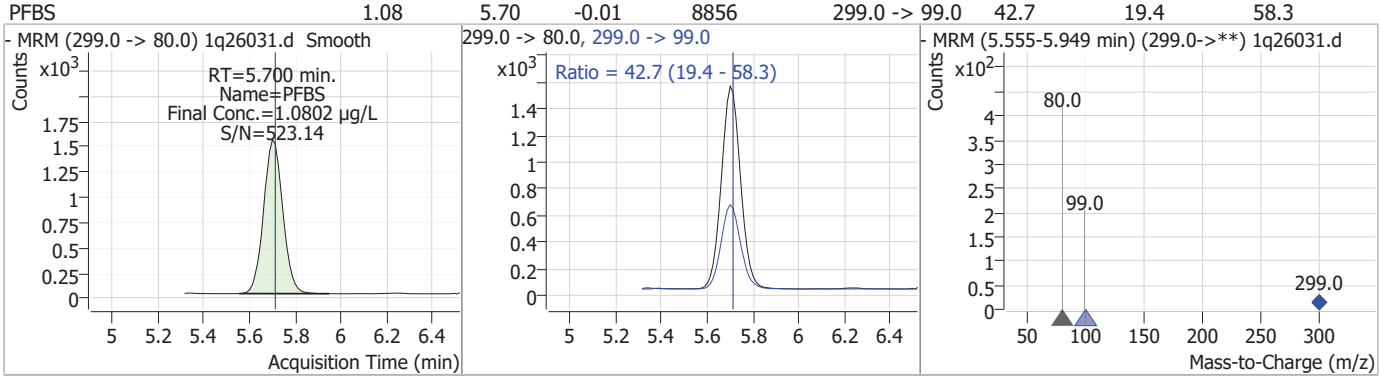
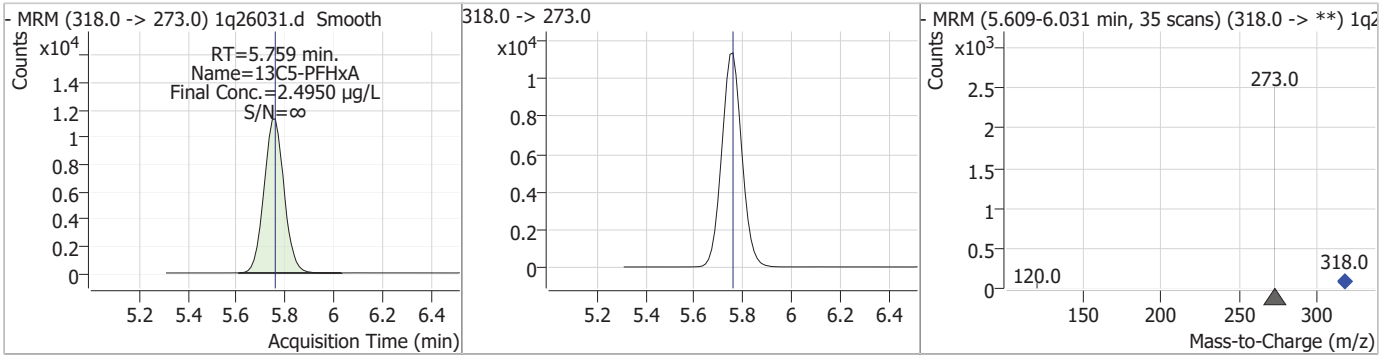
Perfluorinated Compounds by LC/MS/MS

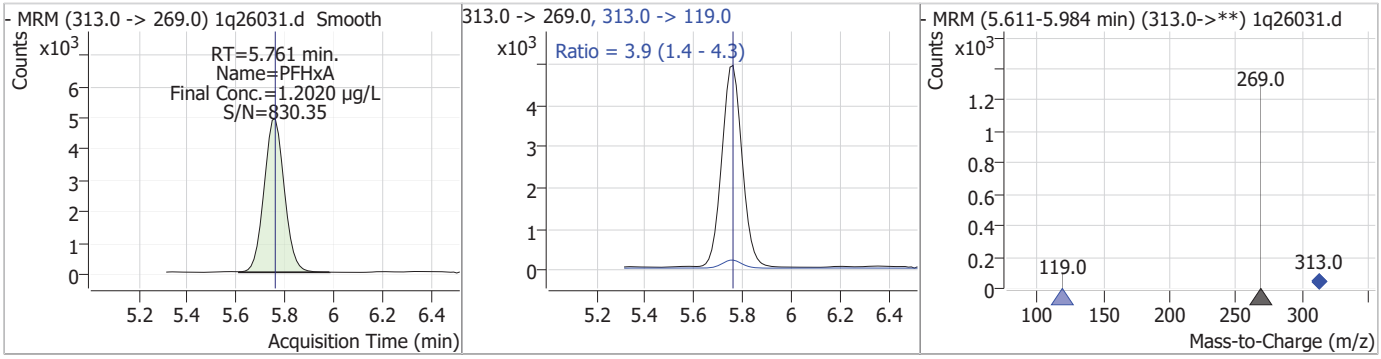
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	1.08	5.70	-0.01	8856	299.0 -> 99.0	42.7	19.4	58.3



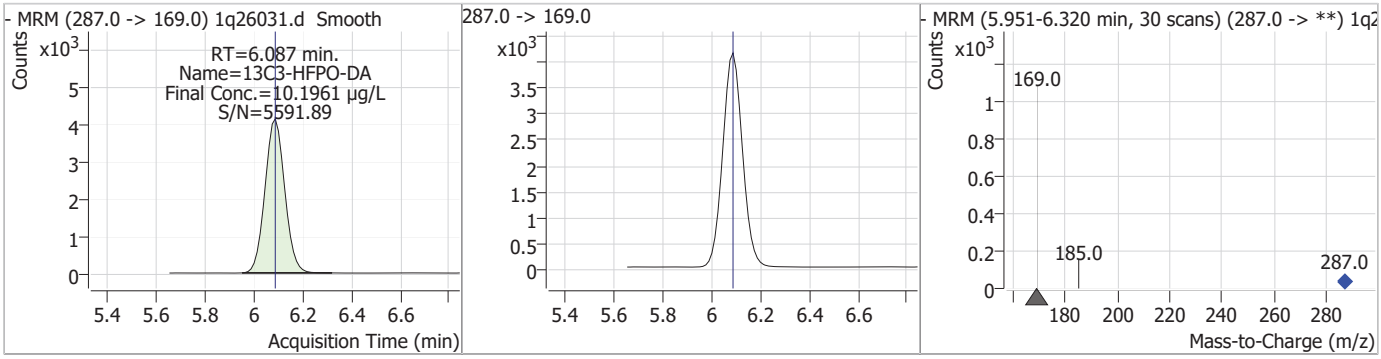
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.49	5.76	0.00	64652				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	1.20	5.76	0.00	28483	313.0 -> 119.0	3.9	1.4	4.3

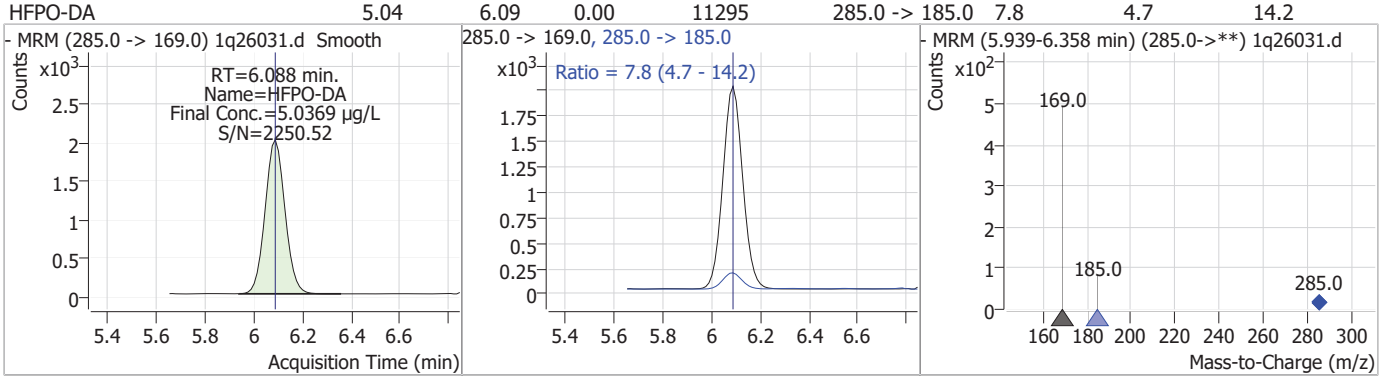


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.20	6.09	0.00	23159				

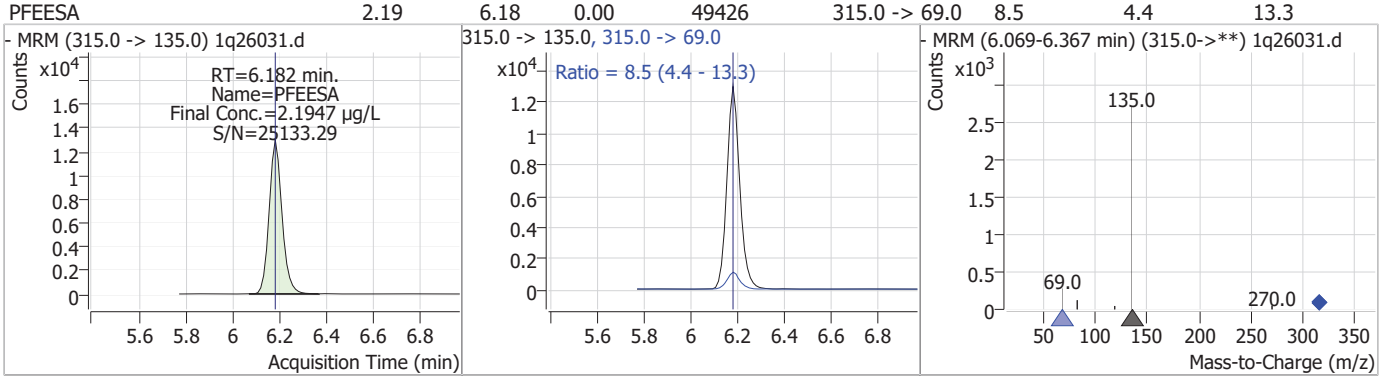


Perfluorinated Compounds by LC/MS/MS

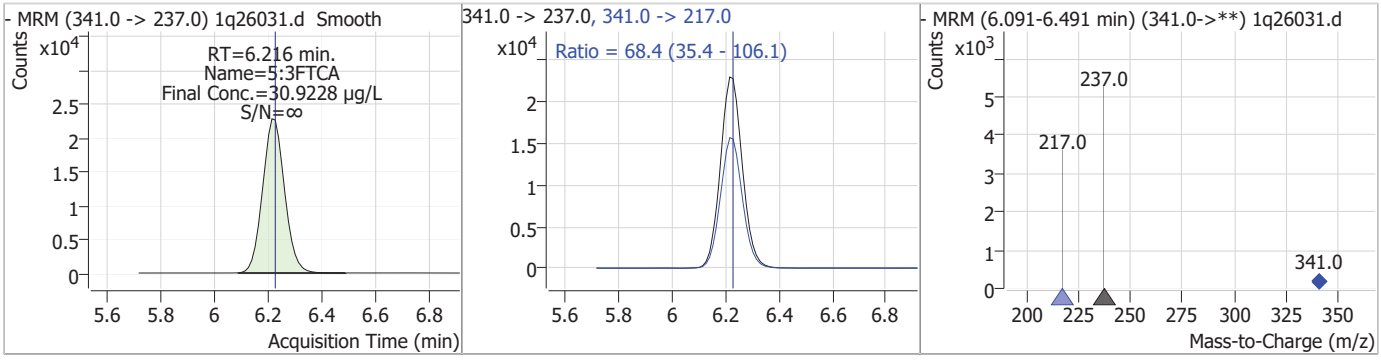
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	5.04	6.09	0.00	11295	285.0 -> 185.0	7.8	4.7	14.2



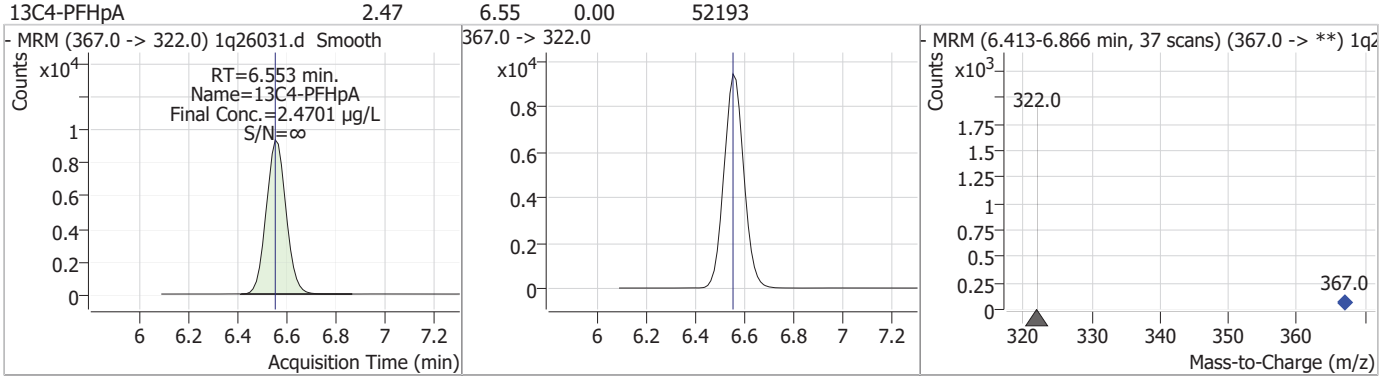
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	2.19	6.18	0.00	49426	315.0 -> 69.0	8.5	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	30.92	6.22	-0.01	129577	341.0 -> 217.0	68.4	35.4	106.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.47	6.55	0.00	52193				



7.6.4

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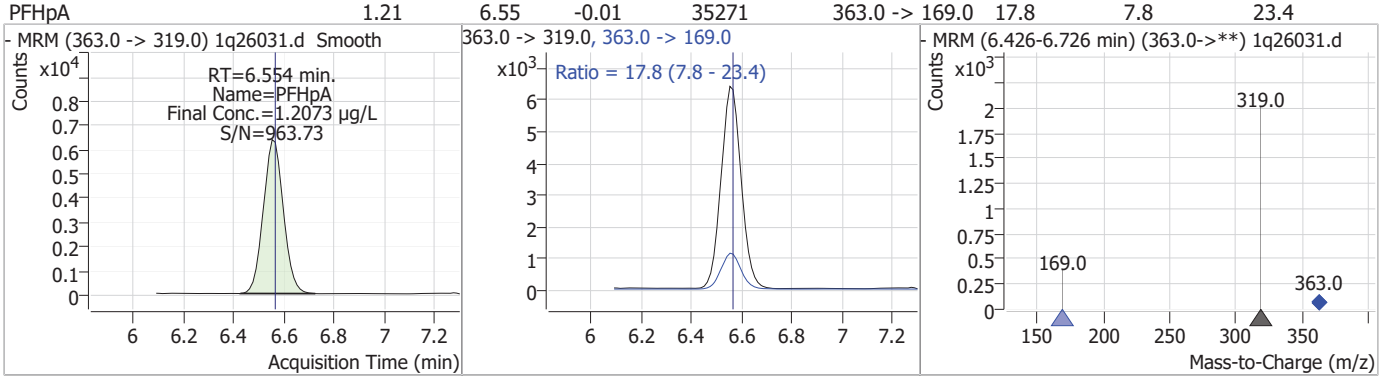
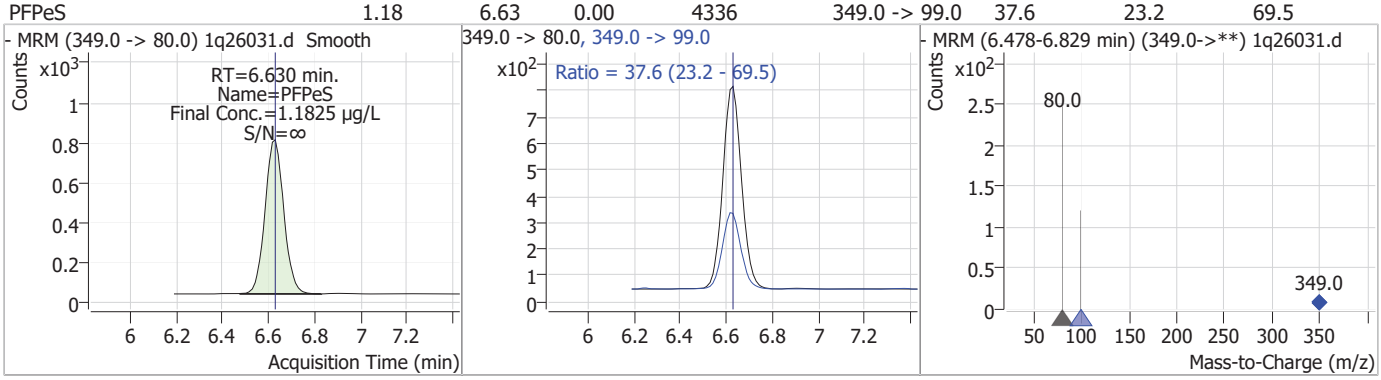
Perfluorinated Compounds by LC/MS/MS

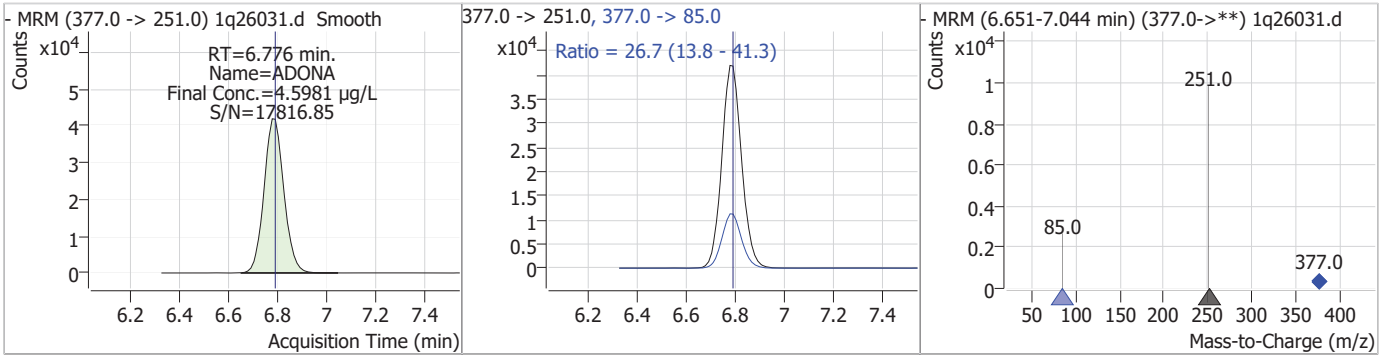
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	1.21	6.55	-0.01	35271	363.0 -> 169.0	17.8	7.8	23.4



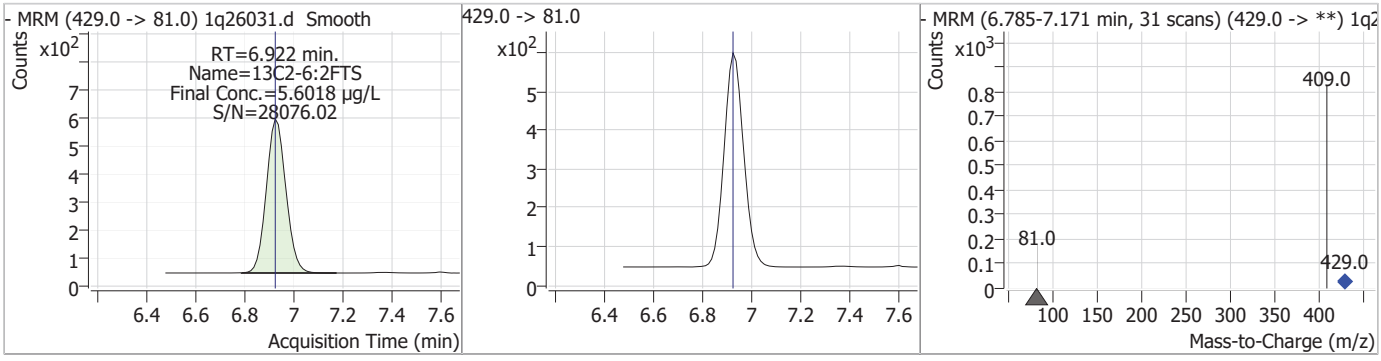
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	1.18	6.63	0.00	4336	349.0 -> 99.0	37.6	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	4.60	6.78	-0.01	234473	377.0 -> 85.0	26.7	13.8	41.3

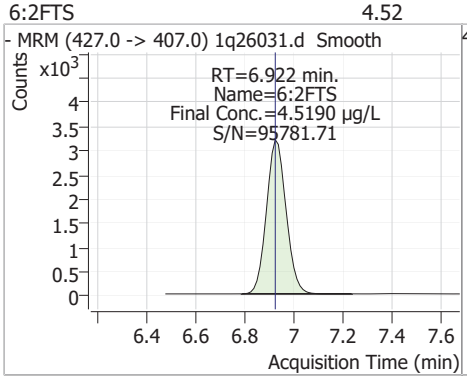


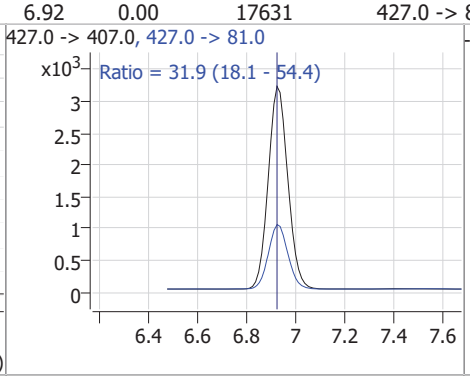
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.60	6.92	0.00	3048				

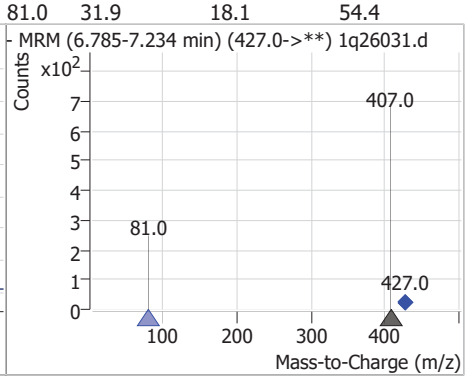


Perfluorinated Compounds by LC/MS/MS

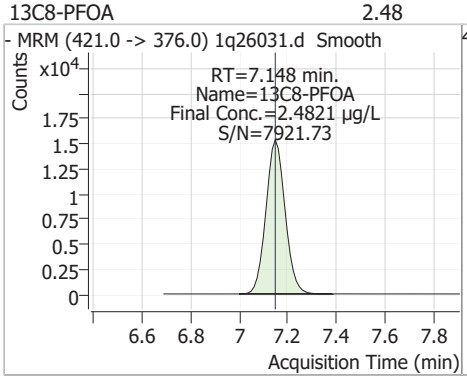
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	4.52	6.92	0.00	17631	427.0 -> 81.0	31.9	18.1	54.4

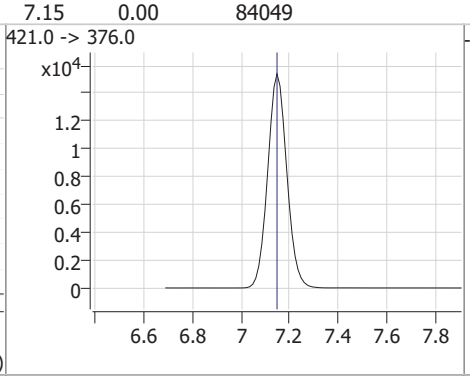


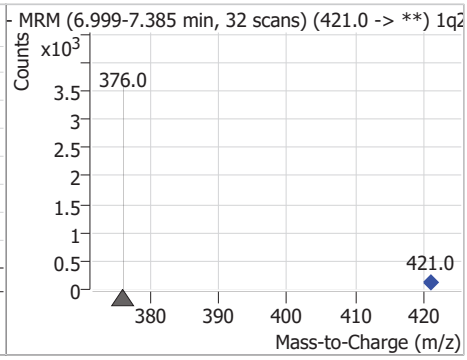




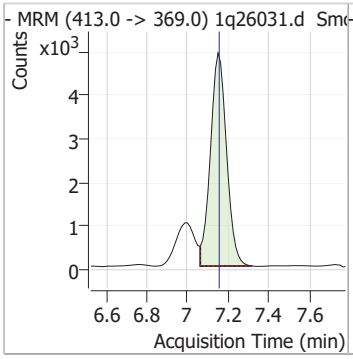
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.48	7.15	0.00	84049				

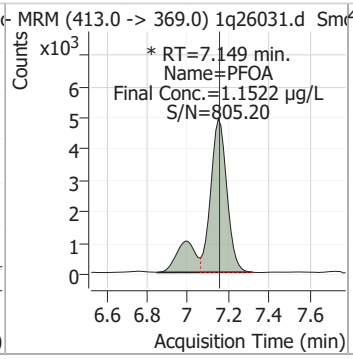


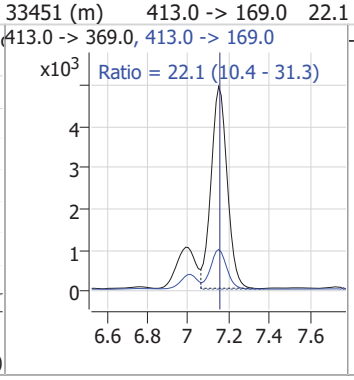


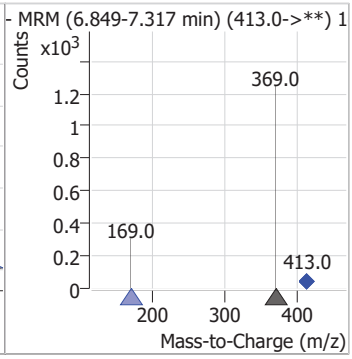


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	1.15	7.15	0.00	33451 (m)	413.0 -> 169.0	22.1	10.4	31.3

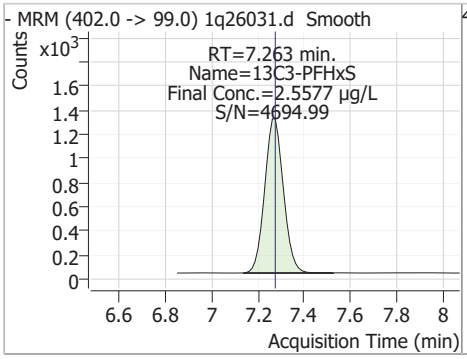


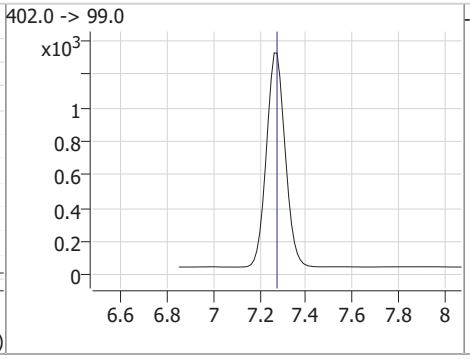


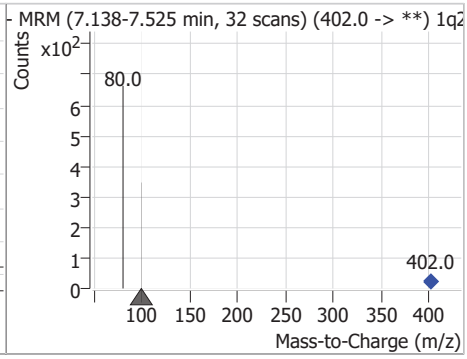




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.56	7.26	-0.01	7190				

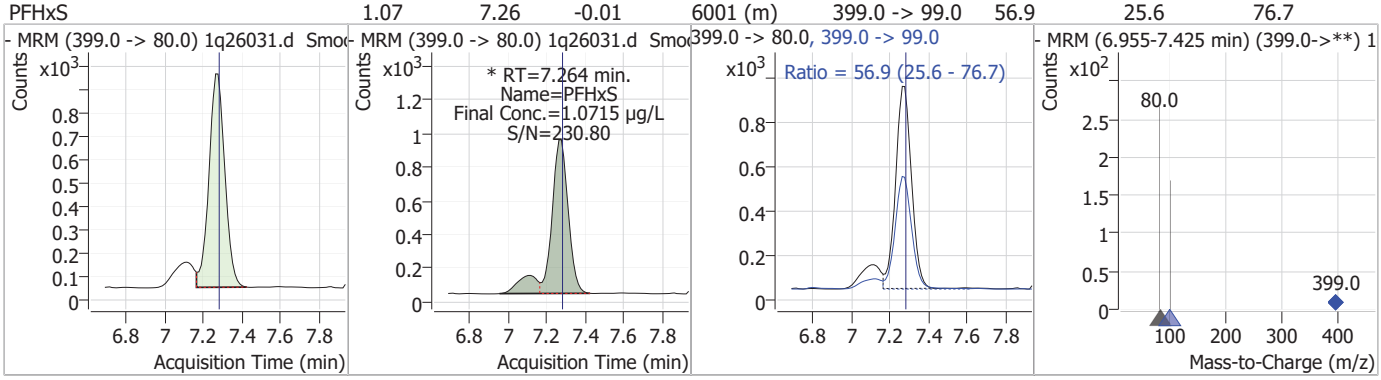




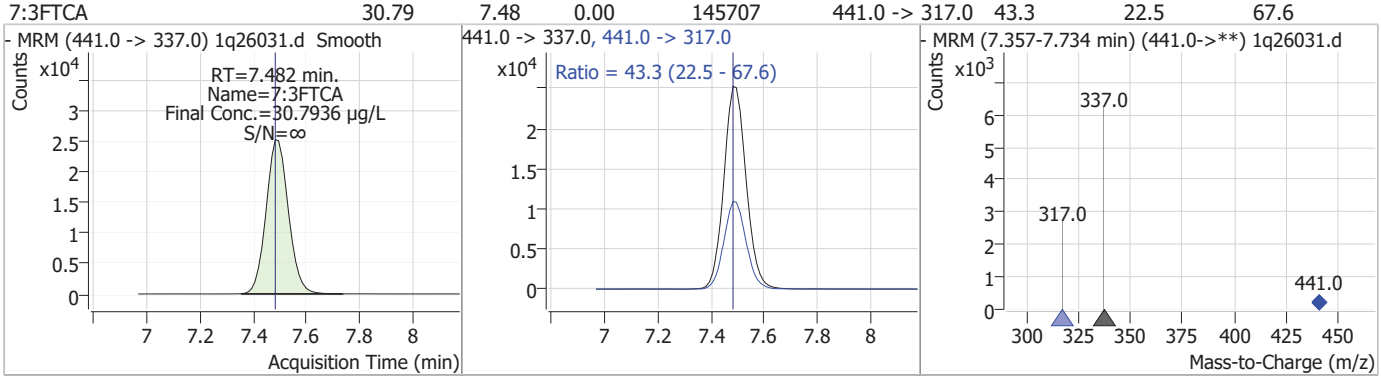


Perfluorinated Compounds by LC/MS/MS

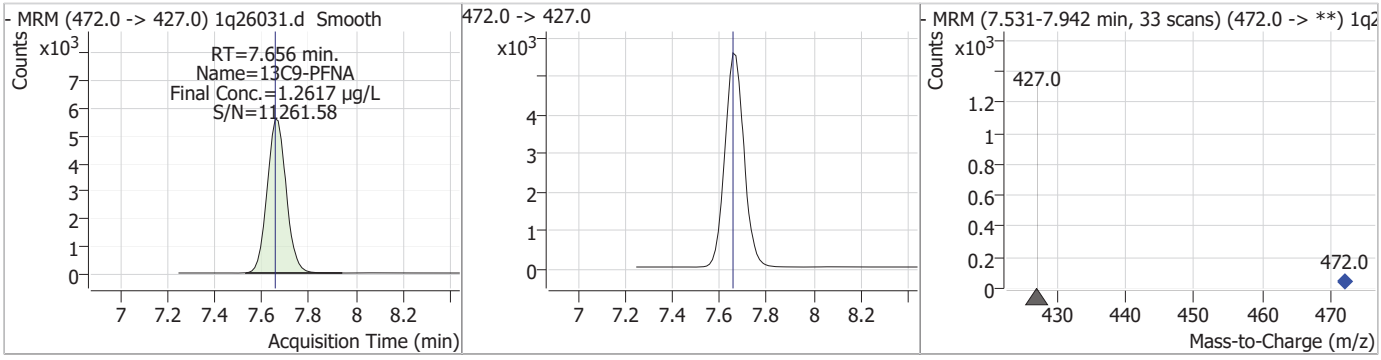
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	1.07	7.26	-0.01	6001 (m)	399.0 -> 99.0	56.9	25.6	76.7



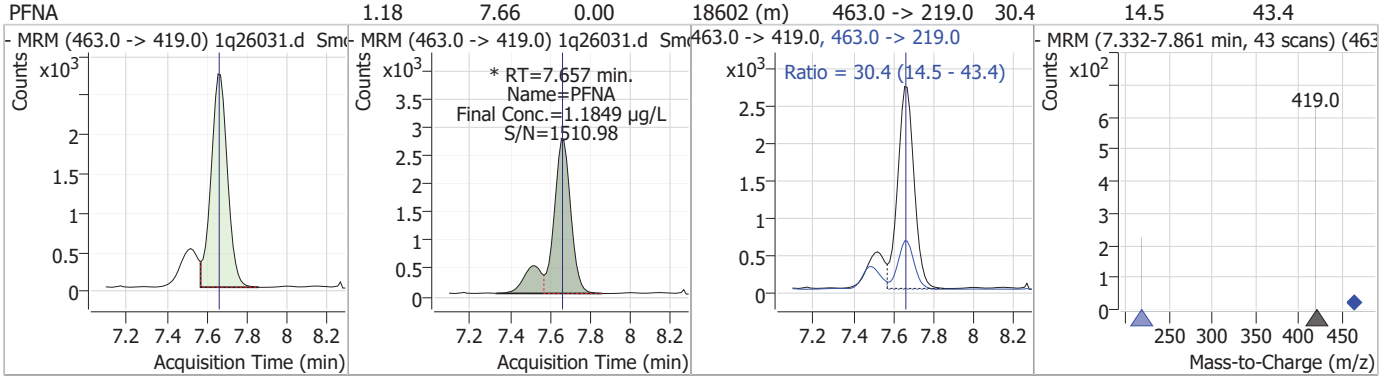
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	30.79	7.48	0.00	145707	441.0 -> 317.0	43.3	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.26	7.66	0.00	31300				

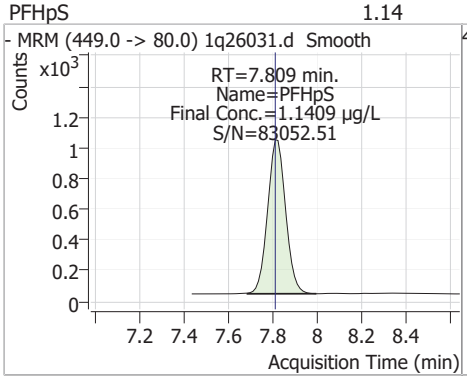


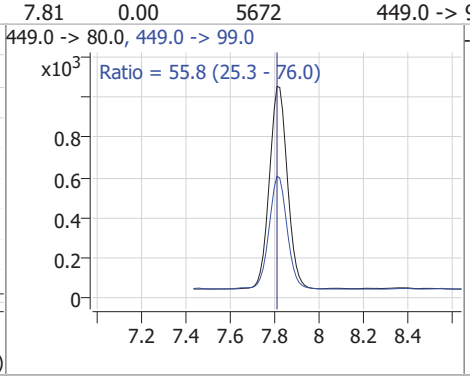
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	1.18	7.66	0.00	18602 (m)	463.0 -> 219.0	30.4	14.5	43.4

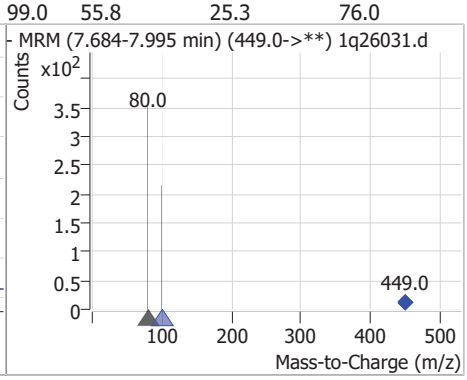


Perfluorinated Compounds by LC/MS/MS

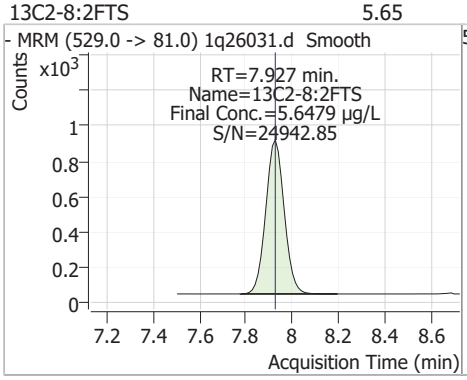
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	1.14	7.81	0.00	5672	449.0 -> 99.0	55.8	25.3	76.0

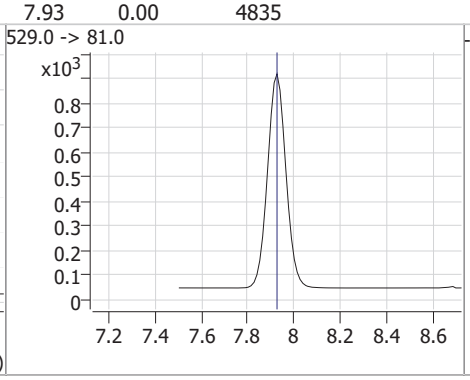


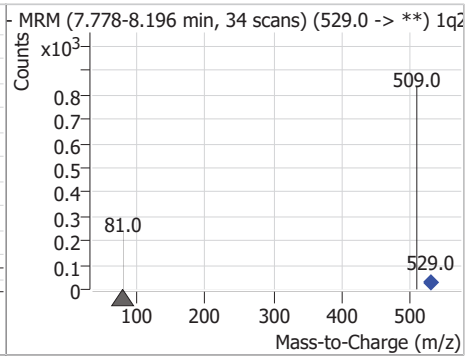




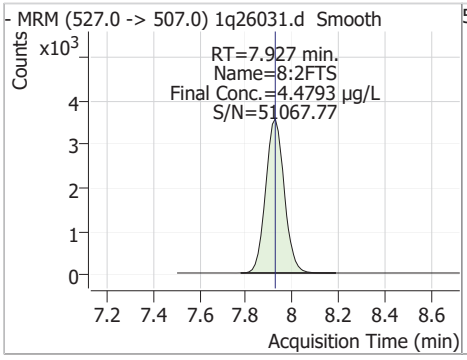
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.65	7.93	0.00	4835				

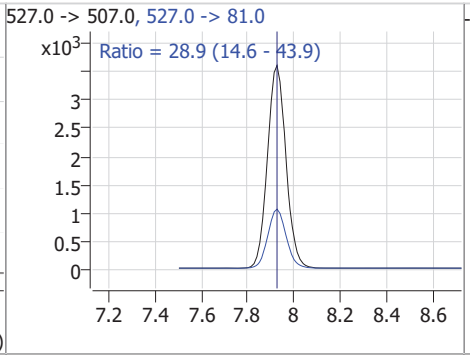


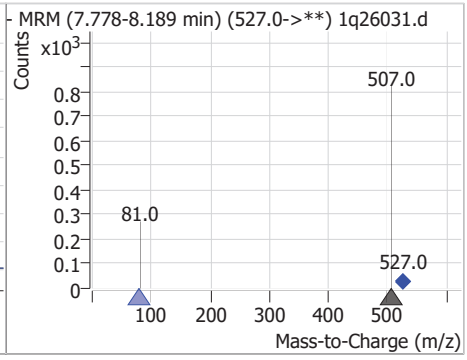




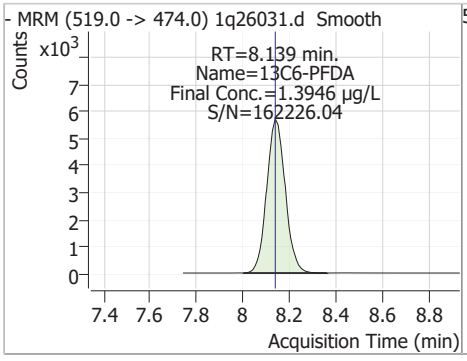
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	4.48	7.93	0.00	19693	527.0 -> 81.0	28.9	14.6	43.9

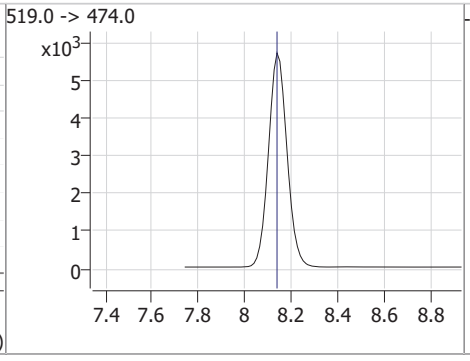


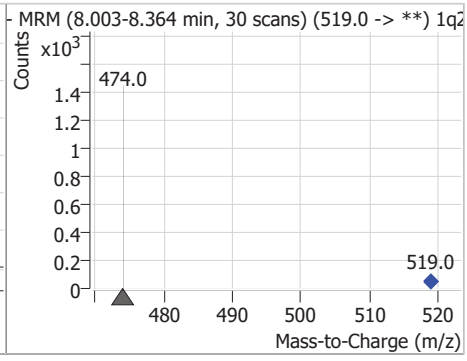




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.39	8.14	0.00	31424				

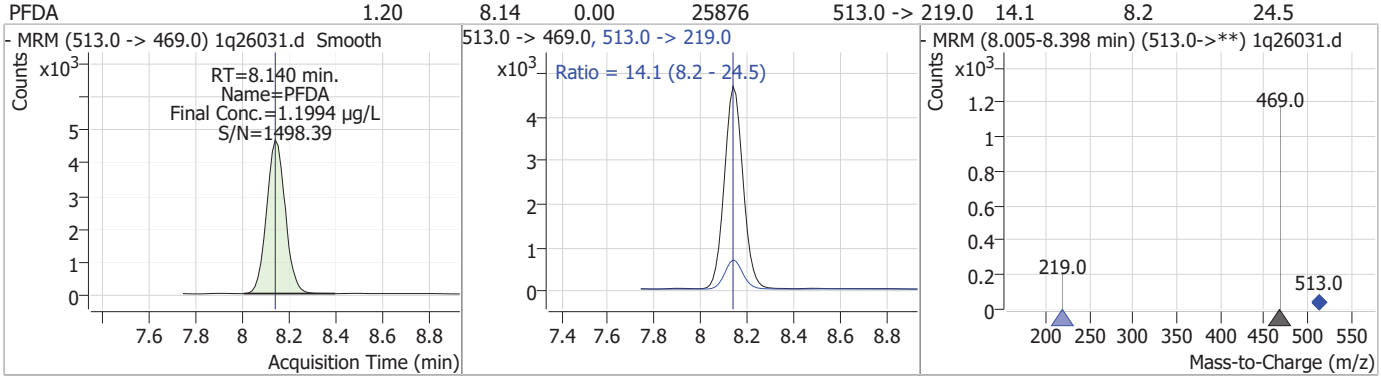




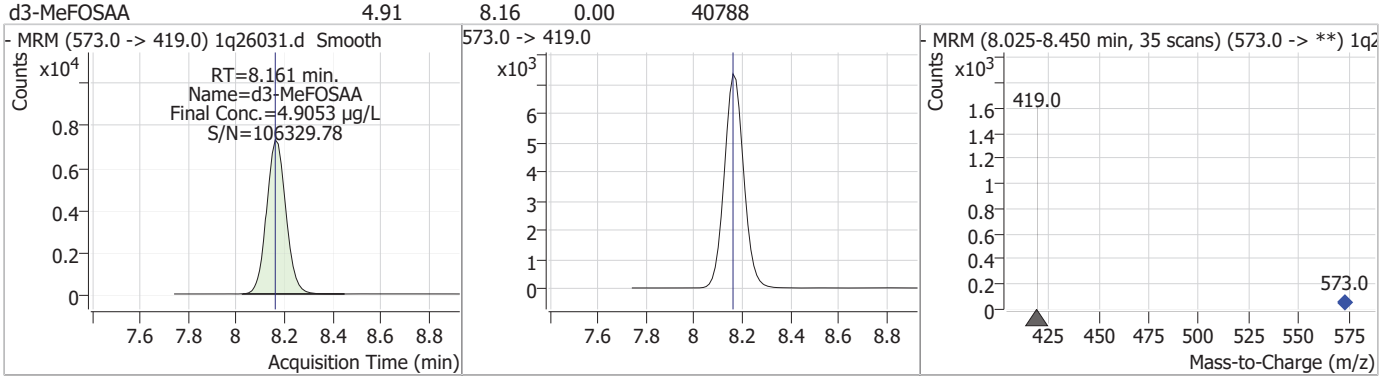


Perfluorinated Compounds by LC/MS/MS

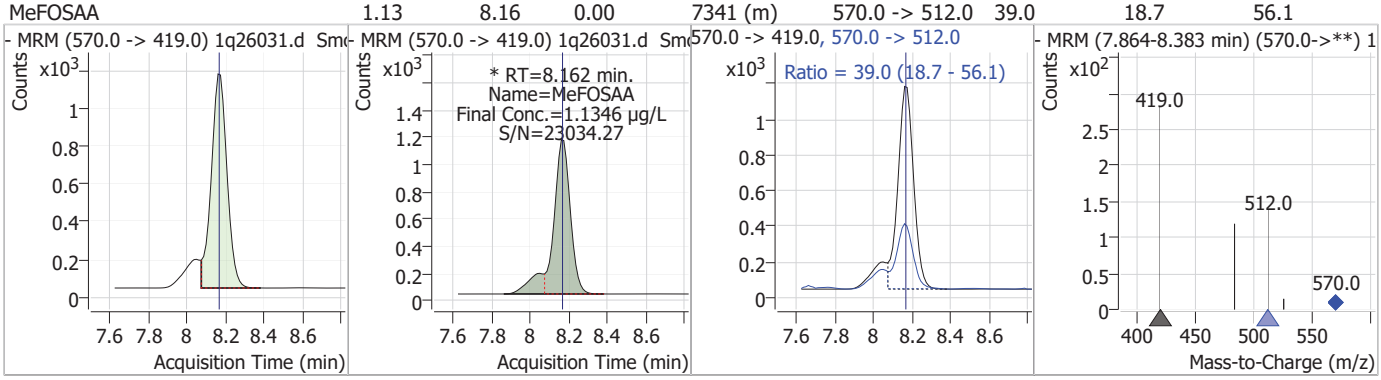
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	1.20	8.14	0.00	25876	513.0 -> 219.0	14.1	8.2	24.5



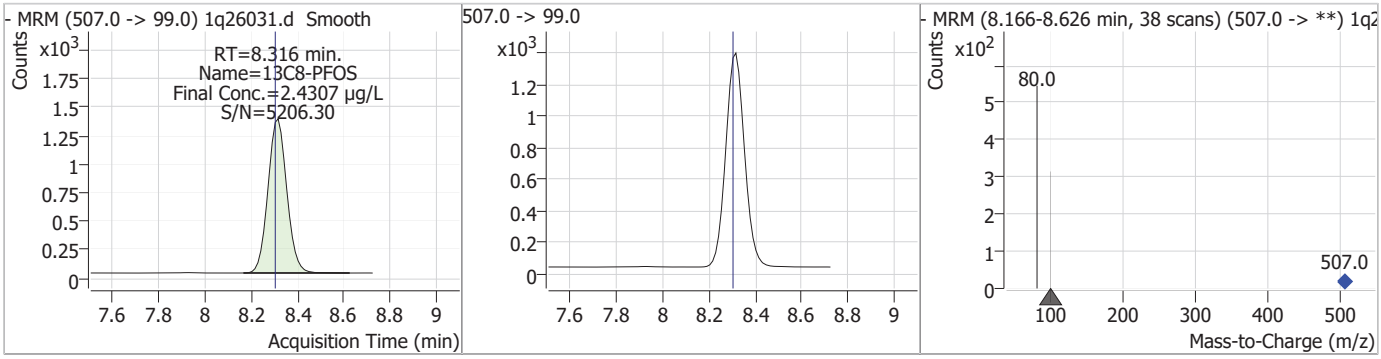
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.91	8.16	0.00	40788				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	1.13	8.16	0.00	7341 (m)	570.0 -> 512.0	39.0	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.43	8.32	0.01	7637				



7.6.4

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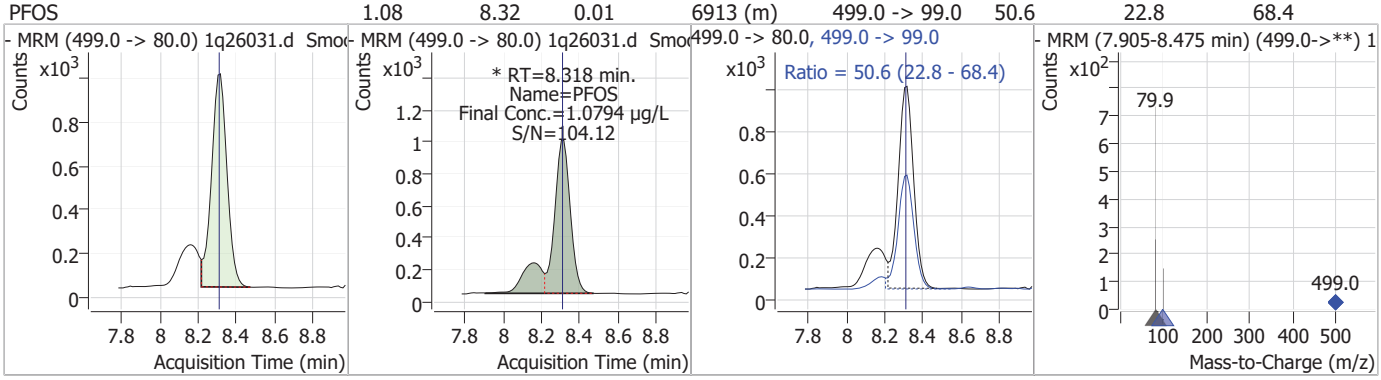
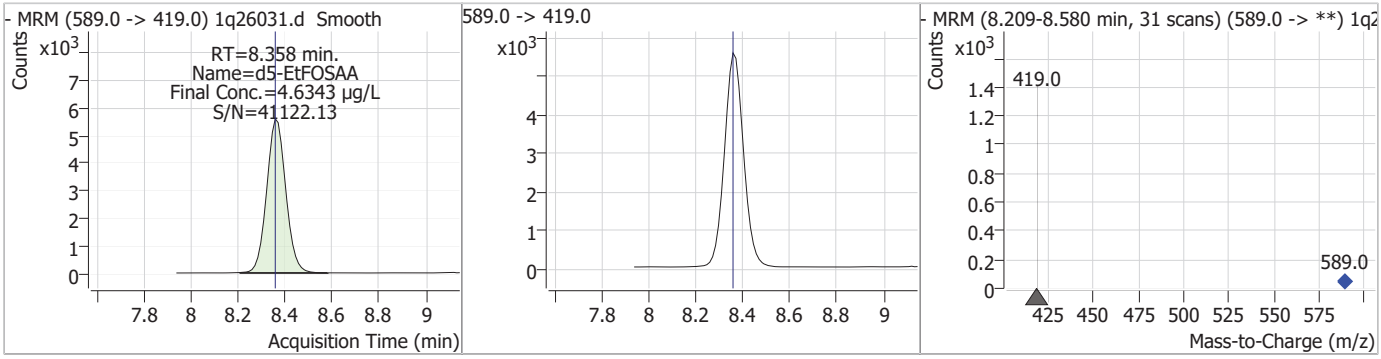
Perfluorinated Compounds by LC/MS/MS

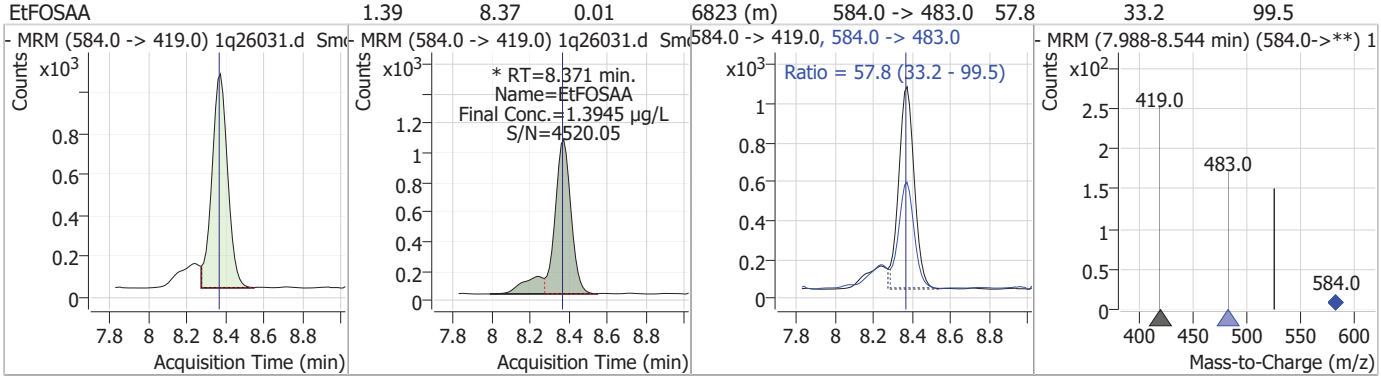
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	1.08	8.32	0.01	6913 (m)	499.0 -> 99.0	50.6	22.8	68.4



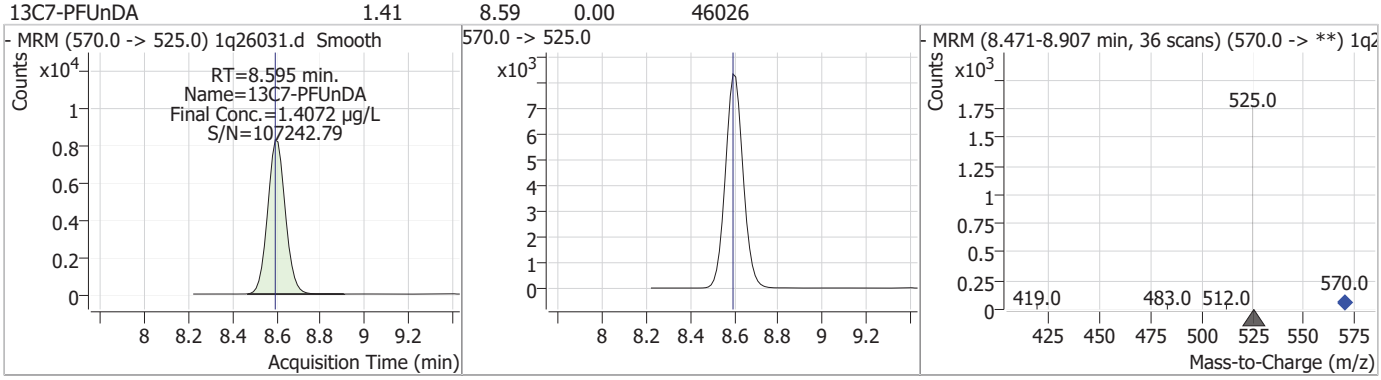
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.63	8.36	0.00	31373				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	1.39	8.37	0.01	6823 (m)	584.0 -> 483.0	57.8	33.2	99.5

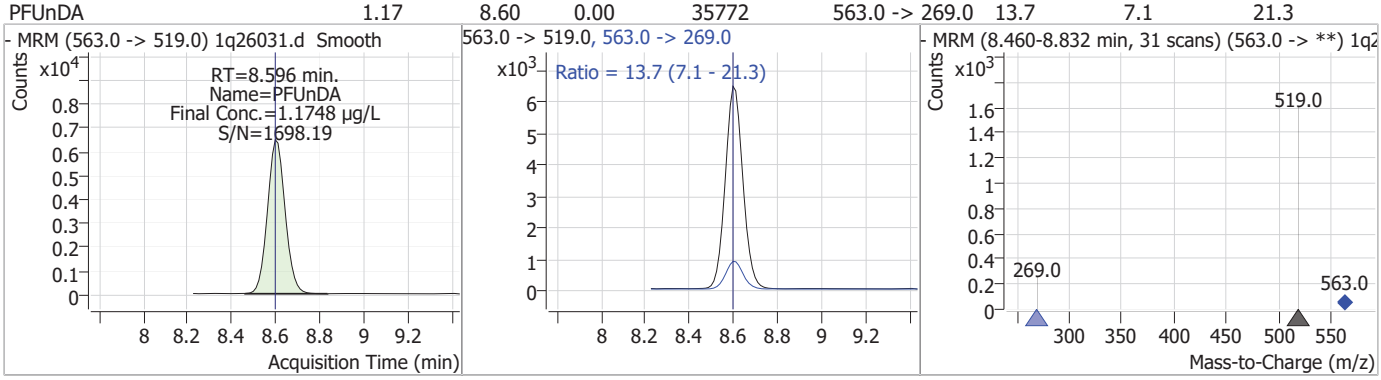


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.41	8.59	0.00	46026				

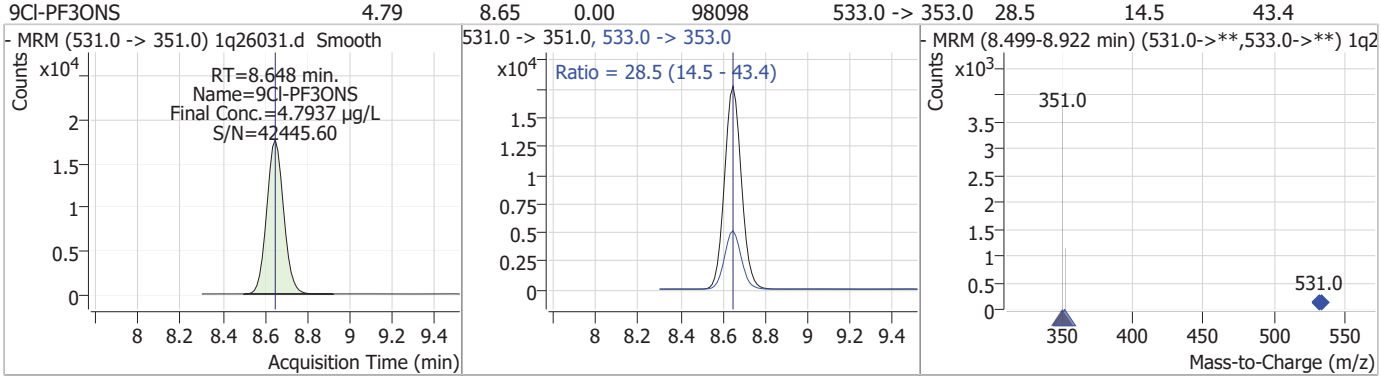


Perfluorinated Compounds by LC/MS/MS

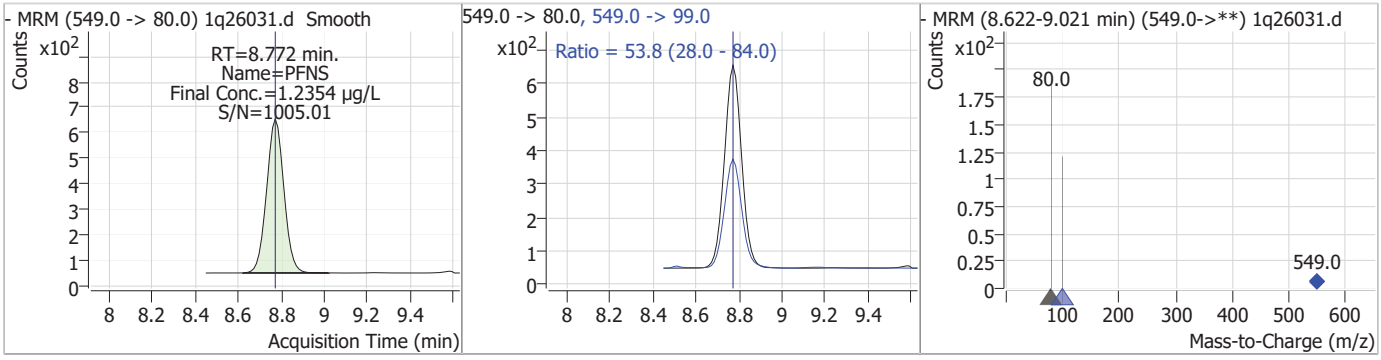
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	1.17	8.60	0.00	35772	563.0 -> 269.0	13.7	7.1	21.3



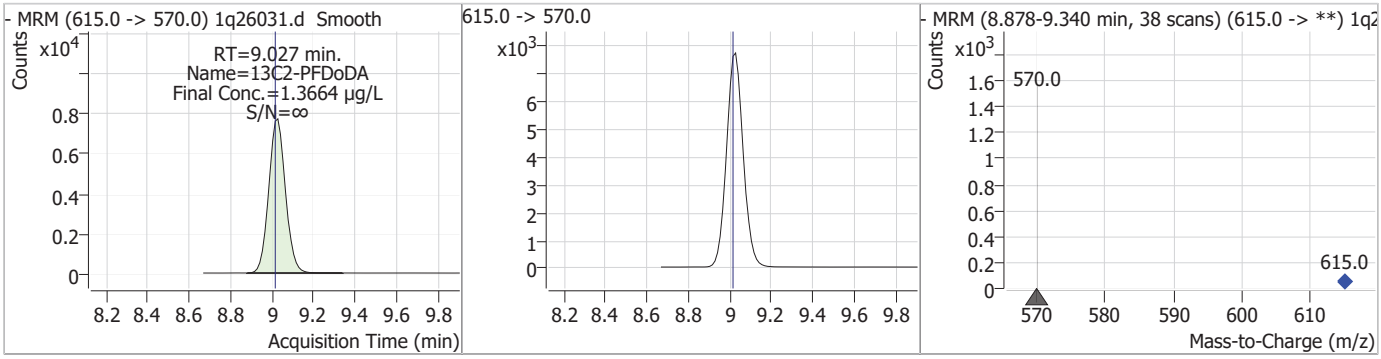
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	4.79	8.65	0.00	98098	533.0 -> 353.0	28.5	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	1.24	8.77	0.00	3397	549.0 -> 99.0	53.8	28.0	84.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.37	9.03	0.01	43119				



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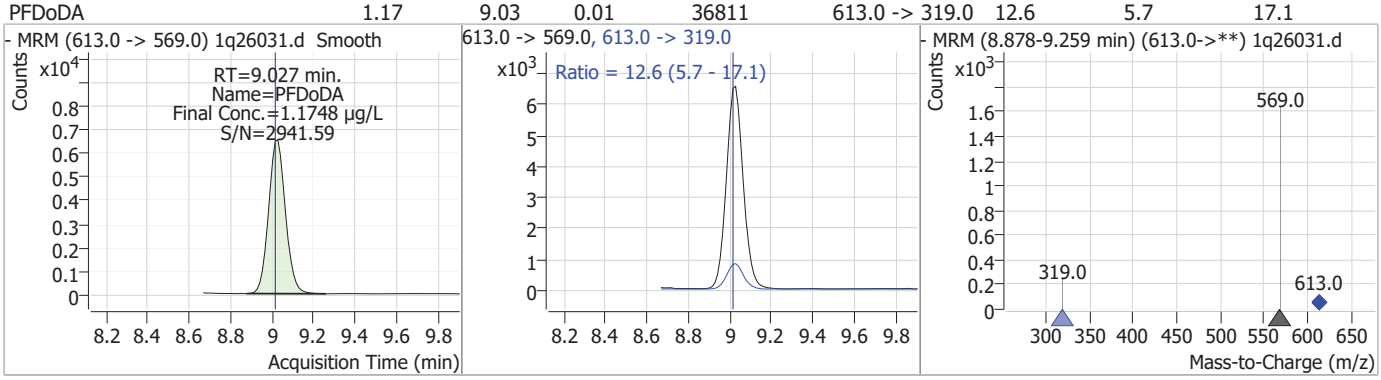
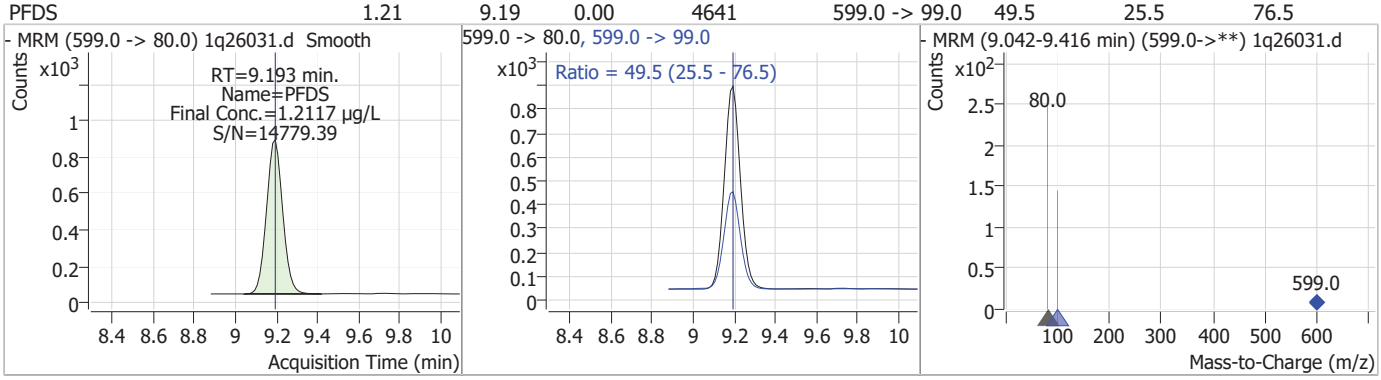
Perfluorinated Compounds by LC/MS/MS

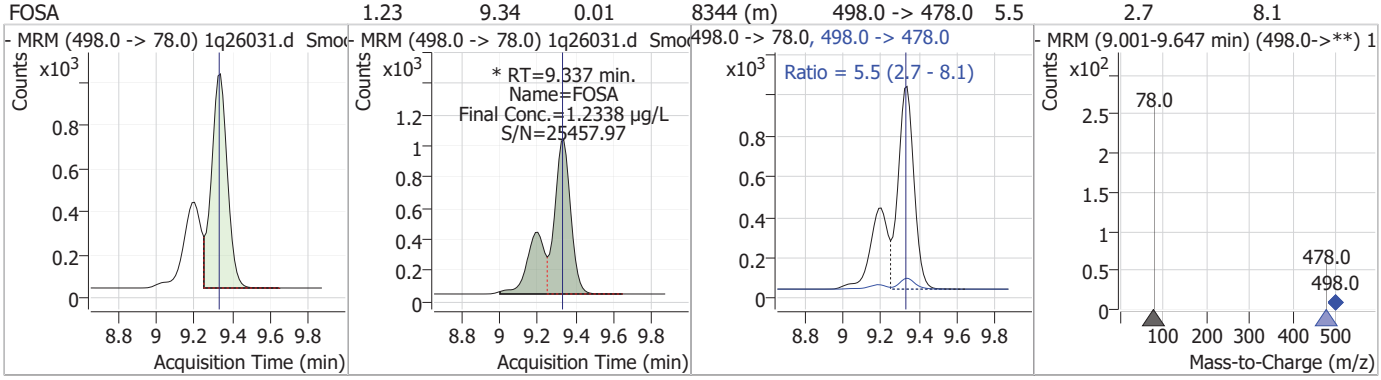
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	1.17	9.03	0.01	36811	613.0 -> 319.0	12.6	5.7	17.1



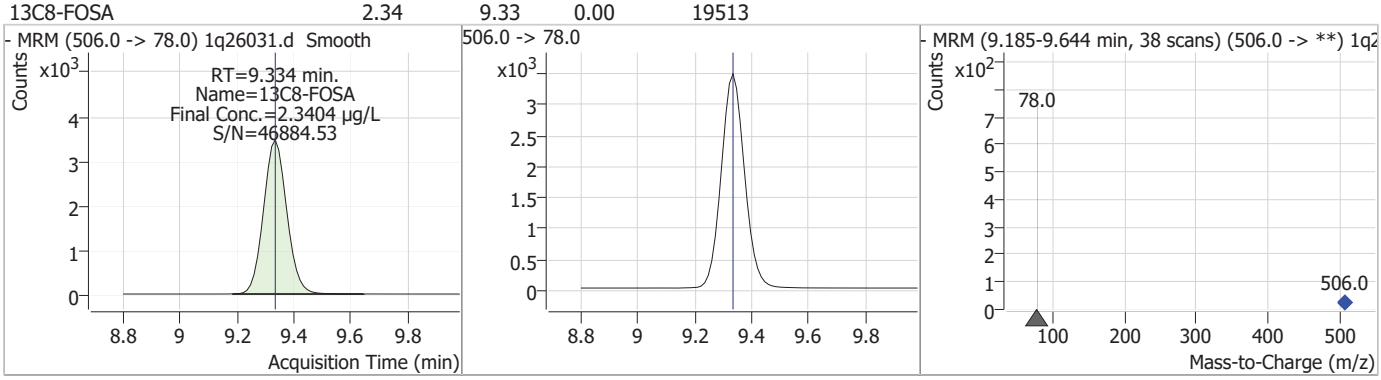
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	1.21	9.19	0.00	4641	599.0 -> 99.0	49.5	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	1.23	9.34	0.01	8344 (m)	498.0 -> 478.0	5.5	2.7	8.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.34	9.33	0.00	19513				



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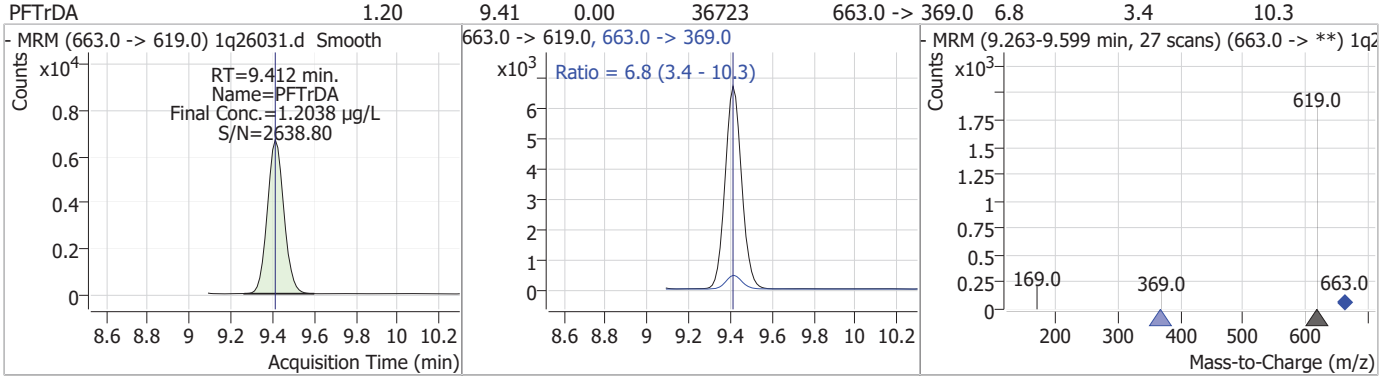
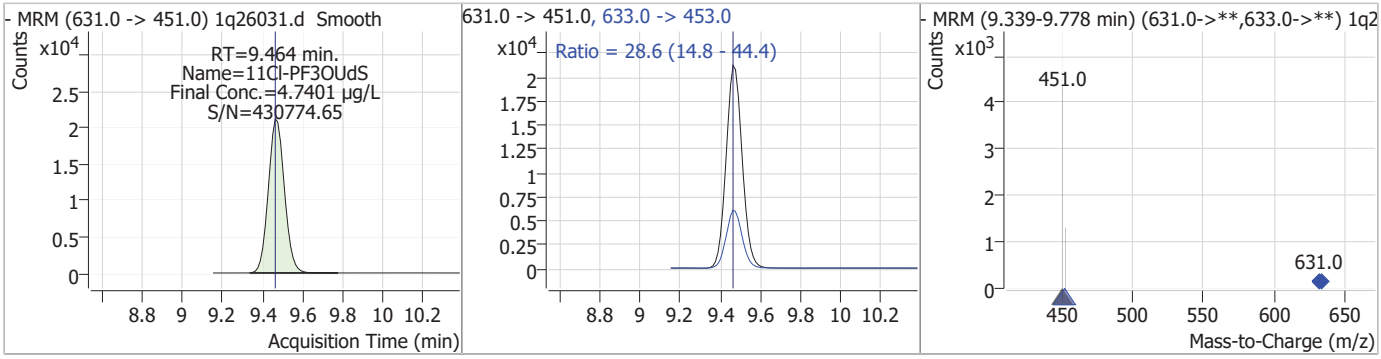
Perfluorinated Compounds by LC/MS/MS

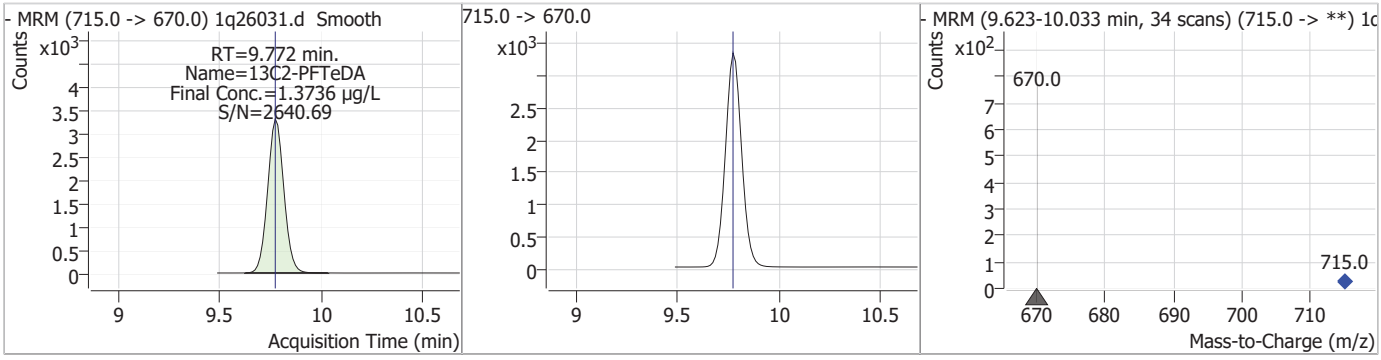
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	1.20	9.41	0.00	36723	663.0 -> 369.0	6.8	3.4	10.3



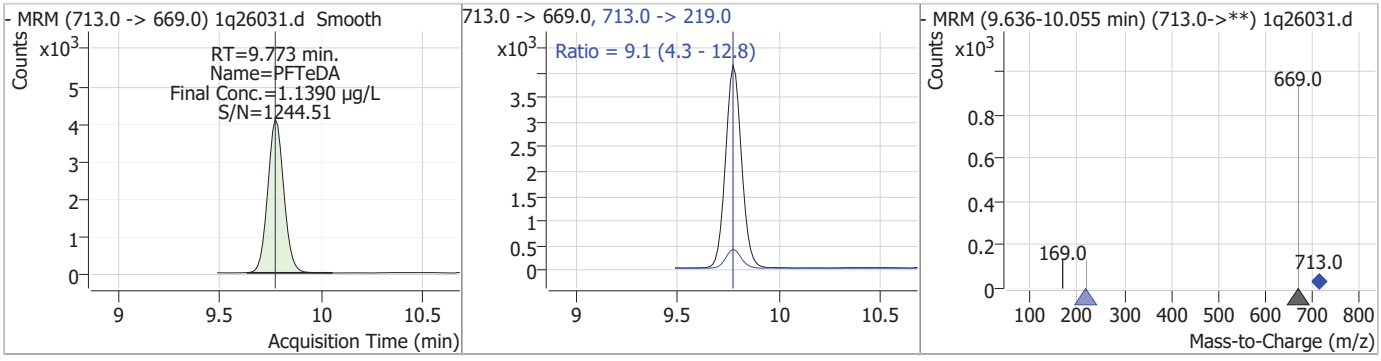
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	4.74	9.46	0.00	118343	633.0 -> 453.0	28.6	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.37	9.77	0.00	18240				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	1.14	9.77	0.00	22375	713.0 -> 219.0	9.1	4.3	12.8



7.6.4

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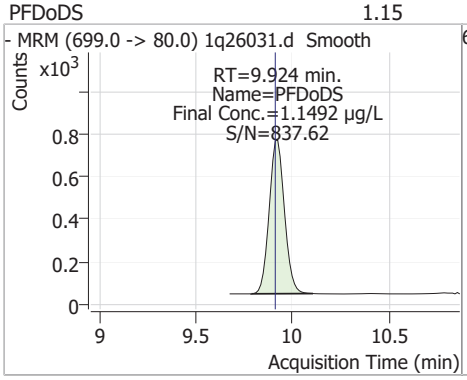
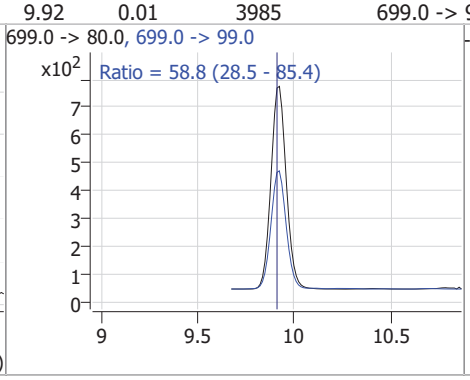
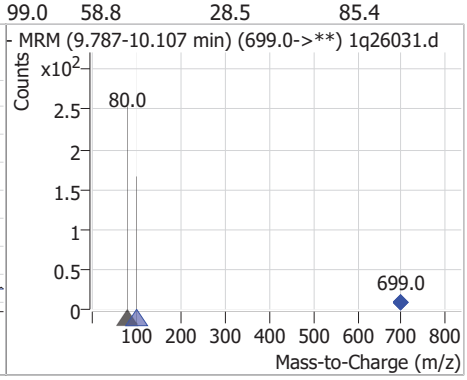
Perfluorinated Compounds by LC/MS/MS

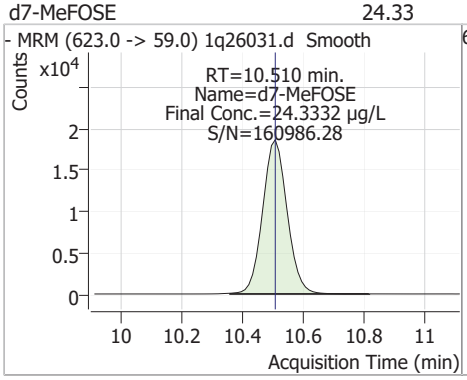
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	1.15	9.92	0.01	3985	699.0 -> 99.0	58.8	28.5	85.4

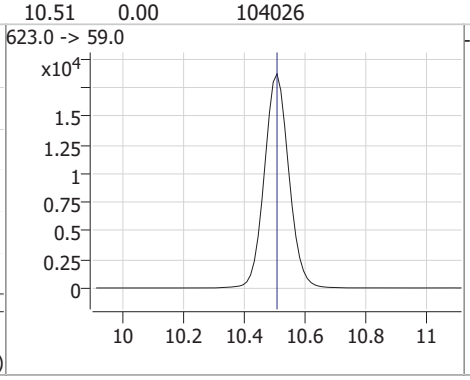


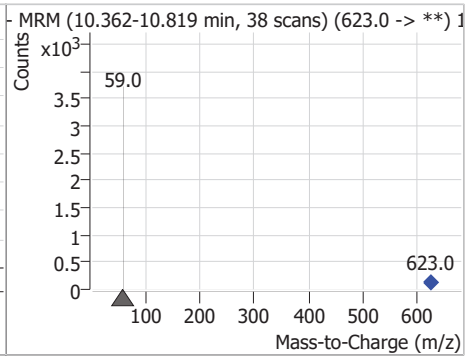




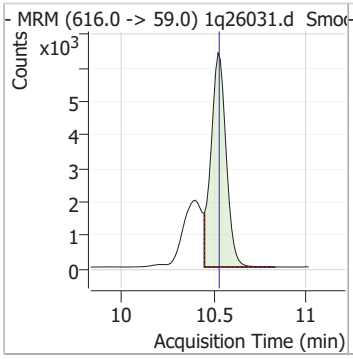
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.33	10.51	0.00	104026				

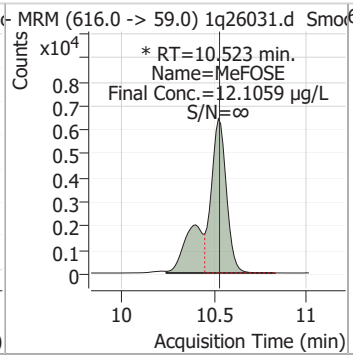


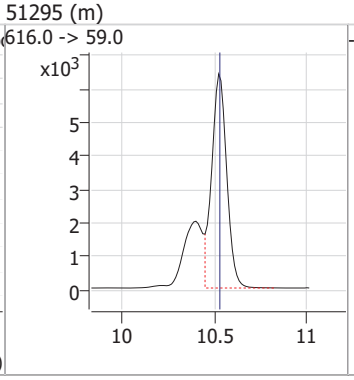


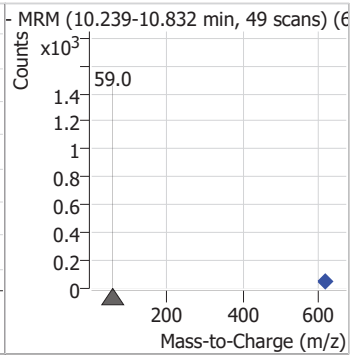


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	12.11	10.52	0.00	51295 (m)				

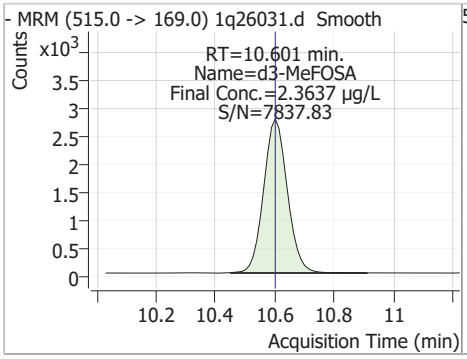


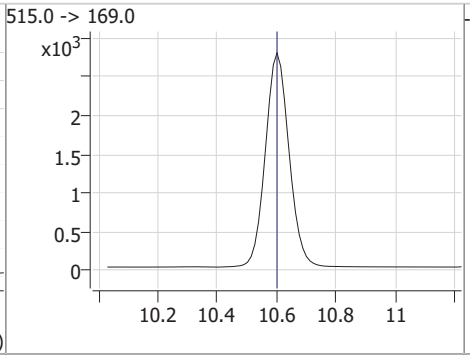


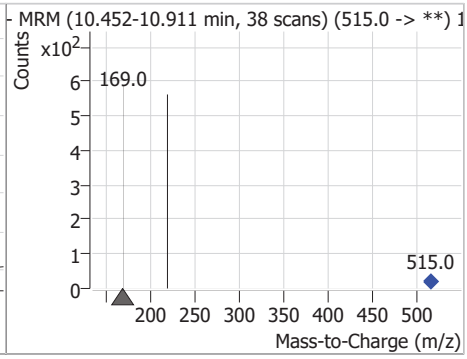




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.36	10.60	0.00	15275				







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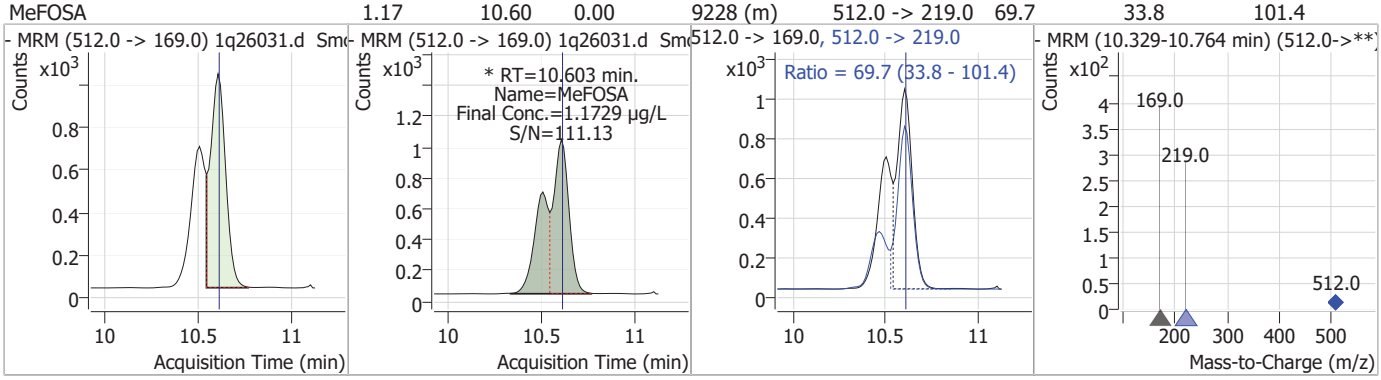
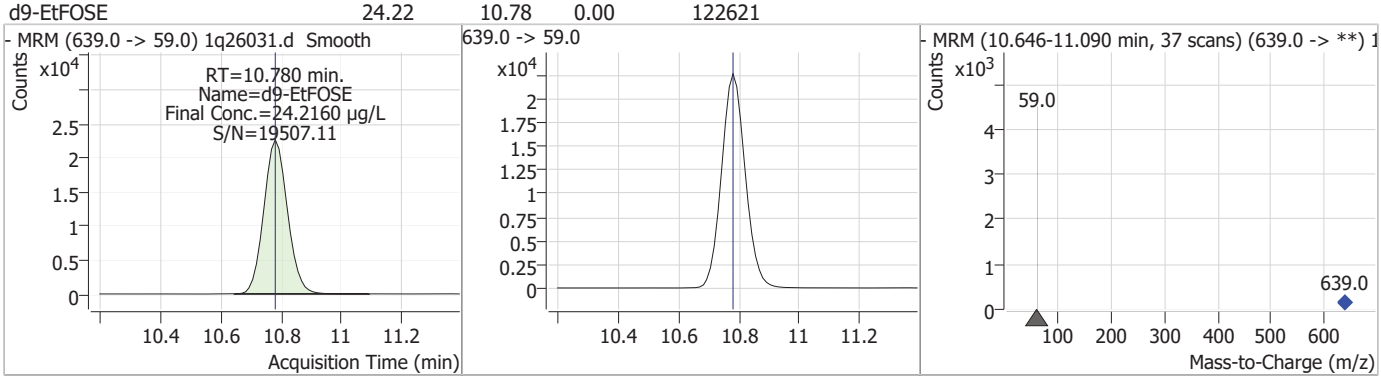
Perfluorinated Compounds by LC/MS/MS

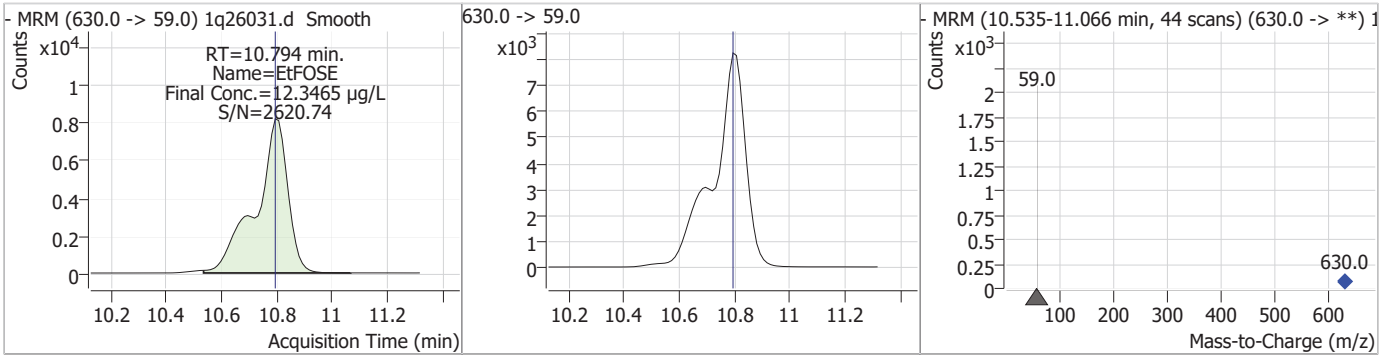
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	1.17	10.60	0.00	9228 (m)	512.0 -> 219.0	69.7	33.8	101.4



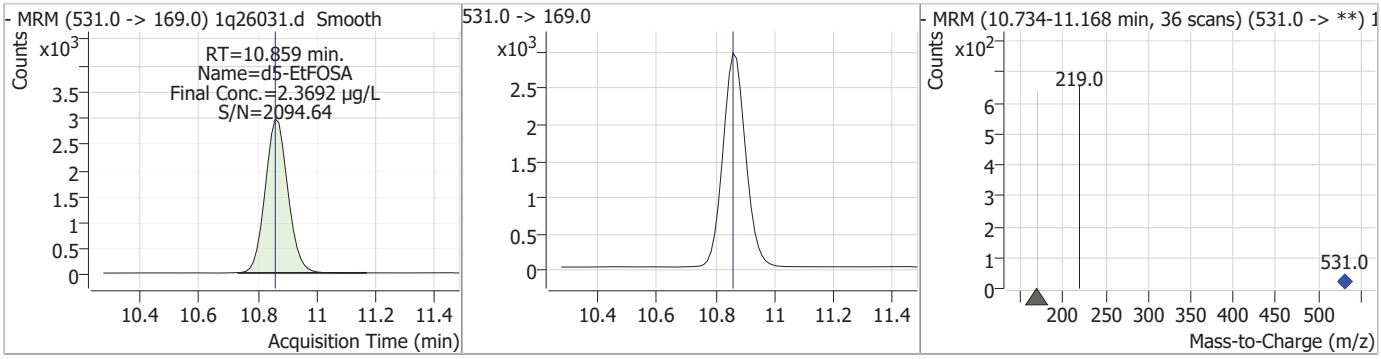
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.22	10.78	0.00	122621				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	12.35	10.79	0.00	65966				

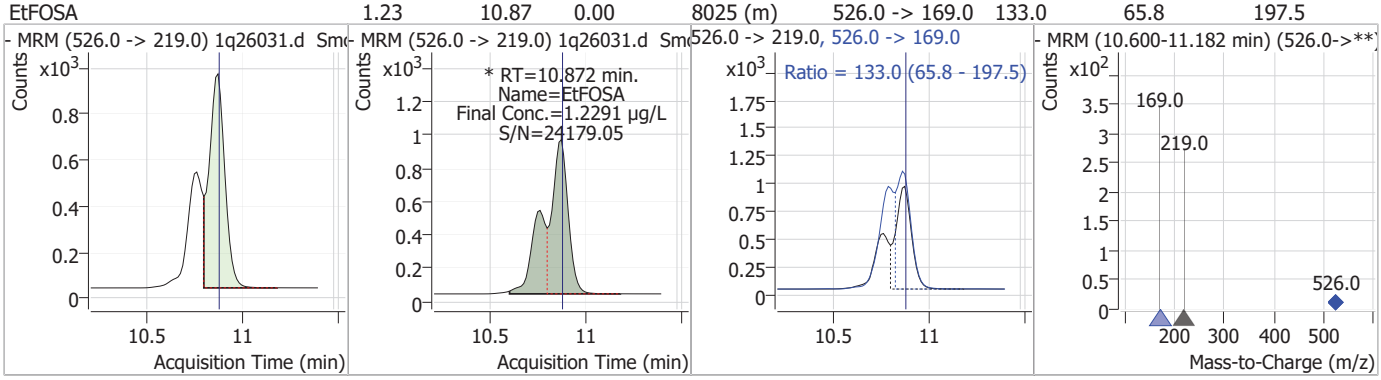


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.37	10.86	0.00	15645				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	1.23	10.87	0.00	8025 (m)	526.0 -> 169.0	133.0	65.8	197.5



7.6.4

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Manual Integration Approval Summary

Sample Number: T1Q361-IC361
Lab FileID: 1Q26031.D
Injection Time: 05/14/25 17:08

Method: EPA 1633
Analyst approved: 05/15/25 01:25 Rensel John Romano
Supervisor approved: 05/15/25 05:29 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.26	Split peak
Perfluorononanoic acid	375-95-1		7.66	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Split peak
PFOSA	754-91-6		9.34	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSA	4151-50-2		10.87	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/15/25 05:29

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26032.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/14/2025 5:23:15 PM
Sample Name : ICC361-4
Vial : P1-A5
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : t1q361.batch.bin
Sample Information : OP63461,T1Q361,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	185362	10.00 µg/L	0.000
M5-PFPeA	4.648	268.0 -> 223.0	113677	5.00 µg/L	0.000
M5-PFHxA	5.759	318.0 -> 273.0	67160	2.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	52427	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	87433	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	31919	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	30432	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	45025	1.25 µg/L	0.000
M2-PFDoDA	9.014	615.0 -> 570.0	42198	1.25 µg/L	0.000
M2-PFTeDA	9.772	715.0 -> 670.0	17280	1.25 µg/L	0.000
M8-FOSA	9.334	506.0 -> 78.0	20281	2.50 µg/L	0.000
M3-PFBS	5.711	302.0 -> 99.0	7372	2.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	7106	2.50 µg/L	0.000
M8-PFOS	8.304	507.0 -> 99.0	7524	2.50 µg/L	0.000
M2-4:2FTS	5.446	329.0 -> 81.0	1452	5.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	2767	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	4172	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	41332	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	22355	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	31767	5.00 µg/L	0.000
M7-MeFOSE	10.510	623.0 -> 59.0	104941	25.00 µg/L	0.000
M9-EtFOSE	10.780	639.0 -> 59.0	124014	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	16545	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	15452	2.50 µg/L	0.000
13C4-PFOS	8.304	503.0 -> 80.0	13216	2.50 µg/L	0.000
13C3-PFBA	3.251	216.0 -> 172.0	77395	5.00 µg/L	0.000
18O2-PFHxS	7.274	403.0 -> 84.0	8151	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	93971	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	24464	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	30619	1.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	61785	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1452	5.33 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.7%	
13C2-6:2FTS	6.922	429.0 -> 81.0	2767	5.24 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.9%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4172	5.03 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.5%	
13C2-PFDoDA	9.014	615.0 -> 570.0	42198	1.27 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.7%	
13C2-PFTeDA	9.772	715.0 -> 670.0	17280	1.24 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.0%	
13C3-PFBS	5.711	302.0 -> 99.0	7372	2.71 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 108.4%	
13C3-PFHxS	7.275	402.0 -> 99.0	7106	2.61 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.3%		
13C4-PFBA	3.260	217.0 -> 172.0	185362	10.07 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.7%		
13C4-PFHpA	6.553	367.0 -> 322.0	52427	2.45 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.8%		
13C5-PFHxA	5.759	318.0 -> 273.0	67160	2.56 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.2%		
13C5-PFPeA	4.648	268.0 -> 223.0	113677	5.02 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.4%		
13C6-PFDA	8.139	519.0 -> 474.0	30432	1.28 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.7%		
13C7-PFUnDA	8.595	570.0 -> 525.0	45025	1.31 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.7%		
13C8-FOSA	9.334	506.0 -> 78.0	20281	2.51 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.5%		
13C8-PFOA	7.148	421.0 -> 376.0	87433	2.56 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.2%		
13C8-PFOS	8.304	507.0 -> 99.0	7524	2.47 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.0%		
13C9-PFNA	7.656	472.0 -> 427.0	31919	1.28 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.2%		
d3-MeFOSAA	8.161	573.0 -> 419.0	41332	5.14 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.7%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	22355	9.70 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 97.0%		
d3-MeFOSA	10.601	515.0 -> 169.0	15452	2.47 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.8%		
d5-EtFOSAA	8.358	589.0 -> 419.0	31767	4.85 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.0%		
d7-MeFOSE	10.510	623.0 -> 59.0	104941	25.36 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 101.5%		
d9-EtFOSE	10.780	639.0 -> 59.0	124014	25.31 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 101.2%		
d5-EtFOSA	10.859	531.0 -> 169.0	16545	2.59 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.6%		
Target Compounds						QValue
4:2FTS	5.447	327.0 -> 307.0	25970	9.60 µg/L		100
		327.0 -> 81.0	11068			
6:2FTS	6.922	427.0 -> 407.0	34543	9.75 µg/L		100
		427.0 -> 81.0	12529			
8:2FTS	7.927	527.0 -> 507.0	38394	10.12 µg/L		100
		527.0 -> 81.0	11240			
EtFOSAA	8.359	584.0 -> 419.0	12641	2.55 µg/L	m	100
		584.0 -> 483.0	8387			
FOSA	9.324	498.0 -> 78.0	17754	2.53 µg/L	m	100
		498.0 -> 478.0	953			
MeFOSAA	8.162	570.0 -> 419.0	16510	2.52 µg/L	m	100
		570.0 -> 512.0	6176			
PFBA	3.254	213.0 -> 169.0	52112	10.05 µg/L		100
PFBS	5.713	299.0 -> 80.0	18248	2.14 µg/L		100
		299.0 -> 99.0	7092			
PFDA	8.140	513.0 -> 469.0	54453	2.61 µg/L		100
		513.0 -> 219.0	8902			
PFDoDA	9.015	613.0 -> 569.0	78653	2.56 µg/L		100
		613.0 -> 319.0	8970			
PFDS	9.193	599.0 -> 80.0	8715	2.33 µg/L		100

Perfluorinated Compounds by LC/MS/MS

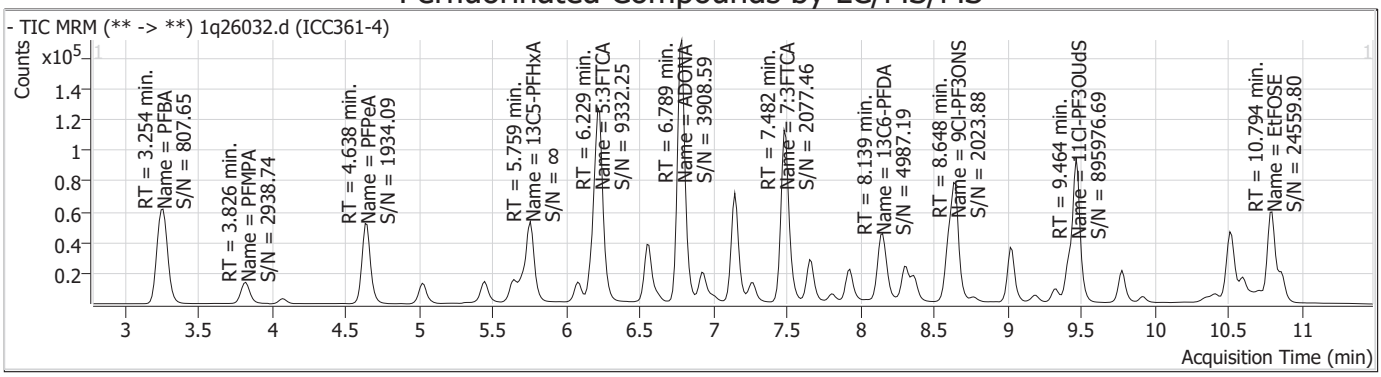
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	4443				
PFHpA	6.566	363.0 -> 319.0	75675	2.58	µg/L		100
		363.0 -> 169.0	11809				
PFHpS	7.809	449.0 -> 80.0	12063	2.46	µg/L		100
		449.0 -> 99.0	6110				
PFHxA	5.761	313.0 -> 269.0	59507	2.42	µg/L		100
		313.0 -> 119.0	1717				
PFHxS	7.276	399.0 -> 80.0	12674	2.29	µg/L	m	100
		399.0 -> 99.0	6477				
PFNA	7.657	463.0 -> 419.0	37269	2.33	µg/L	m	100
		463.0 -> 219.0	10777				
PFNS	8.772	549.0 -> 80.0	6845	2.53	µg/L		100
		549.0 -> 99.0	3832				
PFOA	7.149	413.0 -> 369.0	73208	2.42	µg/L	m	100
		413.0 -> 169.0	15266				
PFOS	8.305	499.0 -> 80.0	14366	2.28	µg/L	m	100
		499.0 -> 99.0	6552				
PFPeA	4.638	263.0 -> 219.0	98525	4.98	µg/L		100
PFPeS	6.630	349.0 -> 80.0	8780	2.30	µg/L		100
		349.0 -> 99.0	4069				
PFTeDA	9.773	713.0 -> 669.0	47222	2.54	µg/L		100
		713.0 -> 219.0	4028				
PFTrDA	9.412	663.0 -> 619.0	76698	2.57	µg/L		100
		663.0 -> 369.0	5274				
PFUnDA	8.596	563.0 -> 519.0	74618	2.51	µg/L		100
		563.0 -> 269.0	10592				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	247786	10.28	µg/L		100
		633.0 -> 453.0	73407				
9Cl-PF3ONS	8.648	531.0 -> 351.0	198558	10.05	µg/L		100
		533.0 -> 353.0	57509				
ADONA	6.789	377.0 -> 251.0	491399	9.98	µg/L		100
		377.0 -> 85.0	135335				
HFPO-DA	6.088	285.0 -> 169.0	21036	9.72	µg/L		100
		285.0 -> 185.0	1994				
3:3FTCA	4.072	241.0 -> 177.0	12672	11.76	µg/L		100
		241.0 -> 117.0	863				
5:3FTCA	6.229	341.0 -> 237.0	263210	60.47	µg/L		100
		341.0 -> 217.0	186109				
7:3FTCA	7.482	441.0 -> 337.0	298202	60.67	µg/L		100
		441.0 -> 317.0	134443				
EtFOSA	10.872	526.0 -> 219.0	16575	2.40	µg/L	m	100
		526.0 -> 169.0	21822				
EtFOSE	10.794	630.0 -> 59.0	136884	25.33	µg/L		100
MeFOSA	10.603	512.0 -> 169.0	19905	2.50	µg/L	m	100
		512.0 -> 219.0	13459				
MeFOSE	10.523	616.0 -> 59.0	105111	24.59	µg/L	m	100
PFDoDS	9.912	699.0 -> 80.0	8600	2.52	µg/L		100
		699.0 -> 99.0	4893				
NFDHA	5.651	295.0 -> 201.0	7986	4.88	µg/L		100
		201.0 -> 85.0	43521				
		295.0 -> 85.0	2146				
PFMBA	5.027	279.0 -> 85.0	52430	4.87	µg/L		100
PFMPA	3.826	229.0 -> 85.0	60027	4.95	µg/L		100
PFEESA	6.182	315.0 -> 135.0	105691	4.52	µg/L		100
		315.0 -> 69.0	9339				

 # = Qualifier out of range, m = manually integrated, + = Area summed

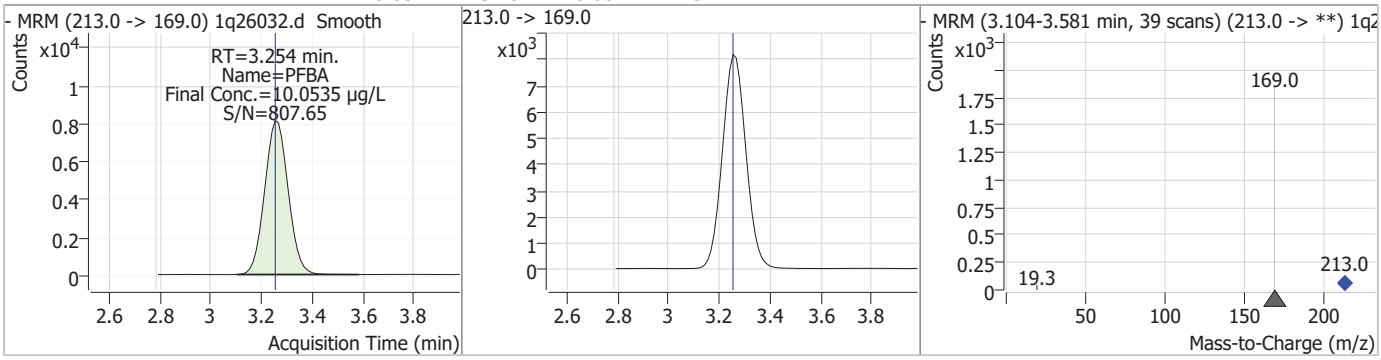
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

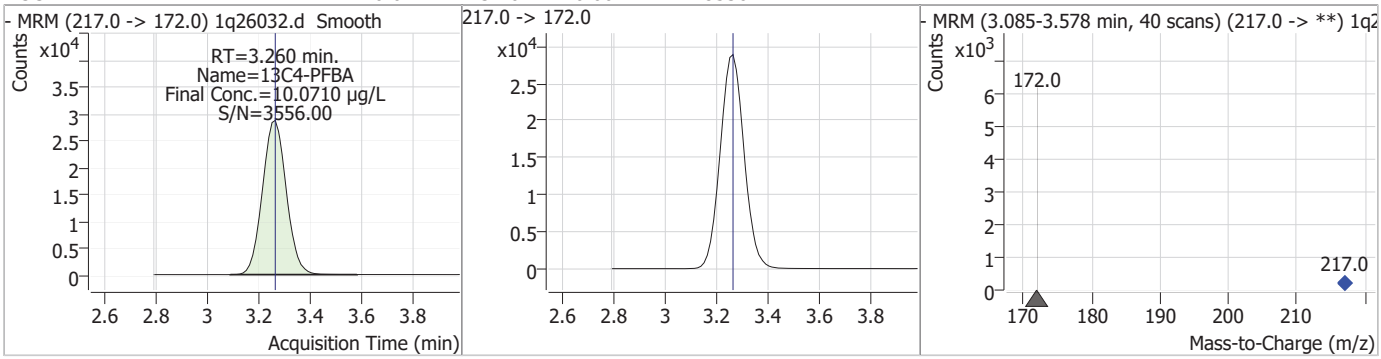
Perfluorinated Compounds by LC/MS/MS



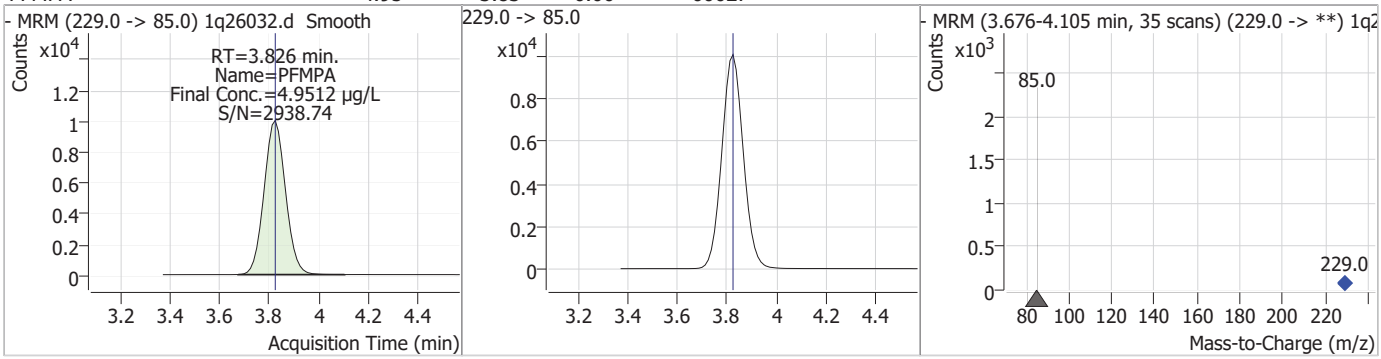
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.05	3.25	0.00	52112				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.07	3.26	0.00	185362				

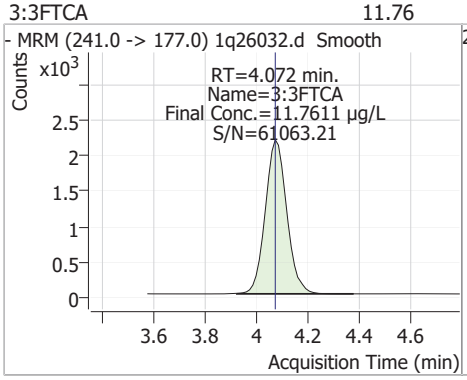


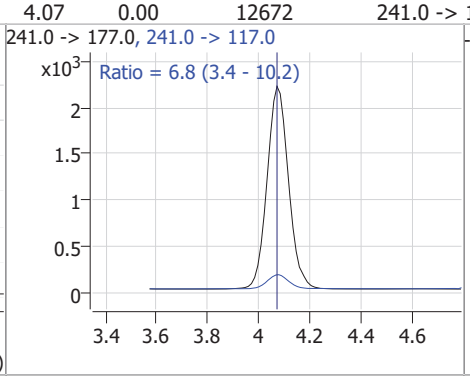
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	4.95	3.83	0.00	60027				

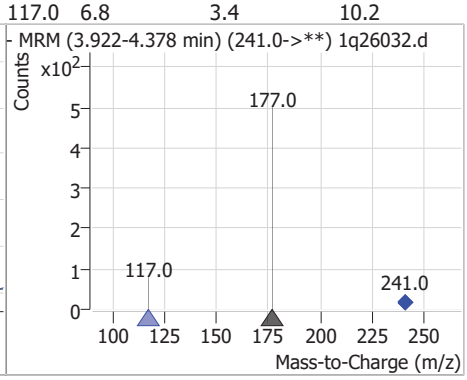


Perfluorinated Compounds by LC/MS/MS

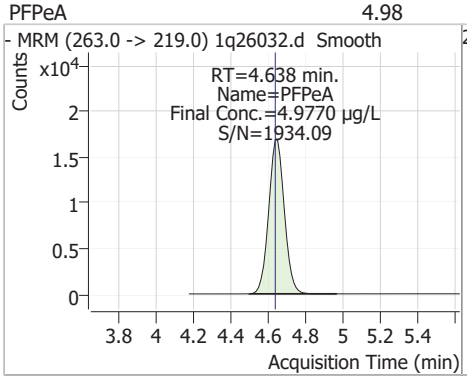
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	11.76	4.07	0.00	12672	241.0 -> 117.0	6.8	3.4	10.2

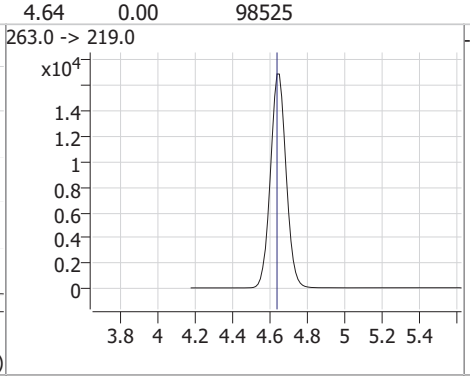


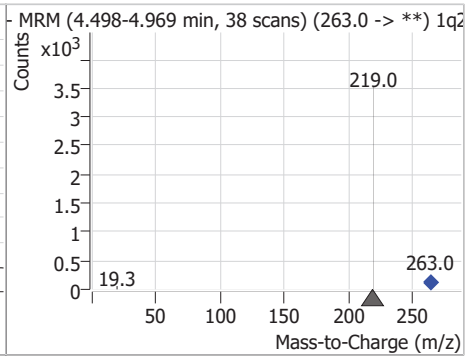




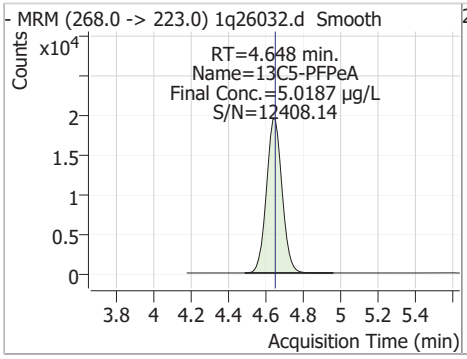
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	4.98	4.64	0.00	98525				

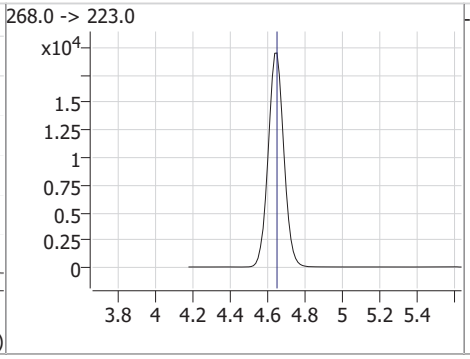


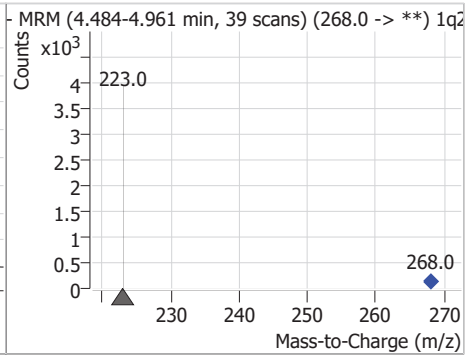




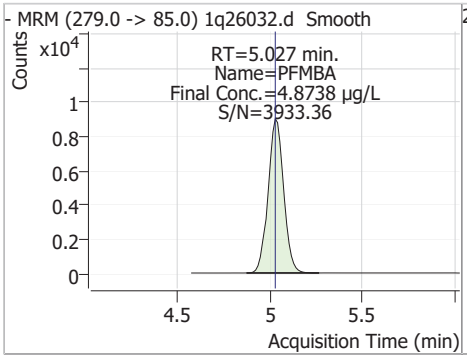
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.02	4.65	0.00	113677				

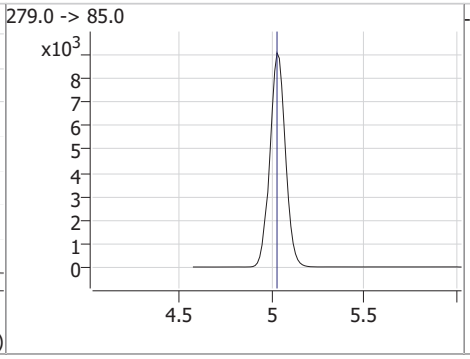


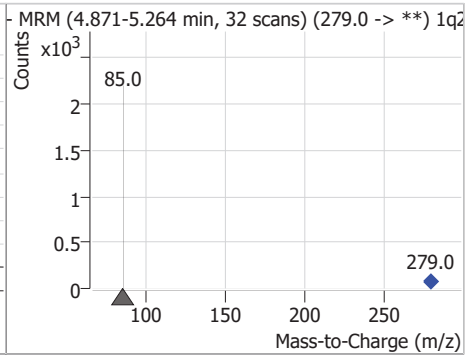




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.87	5.03	0.00	52430				

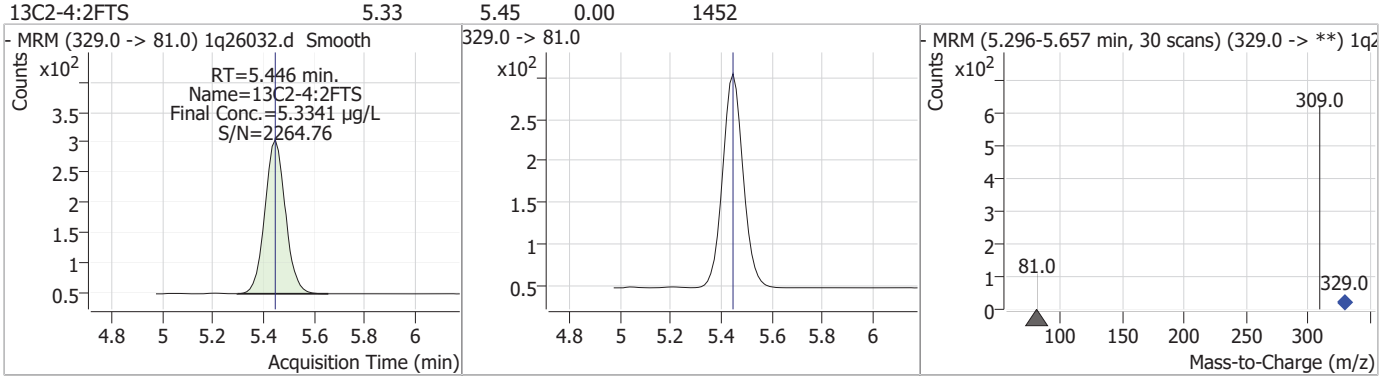




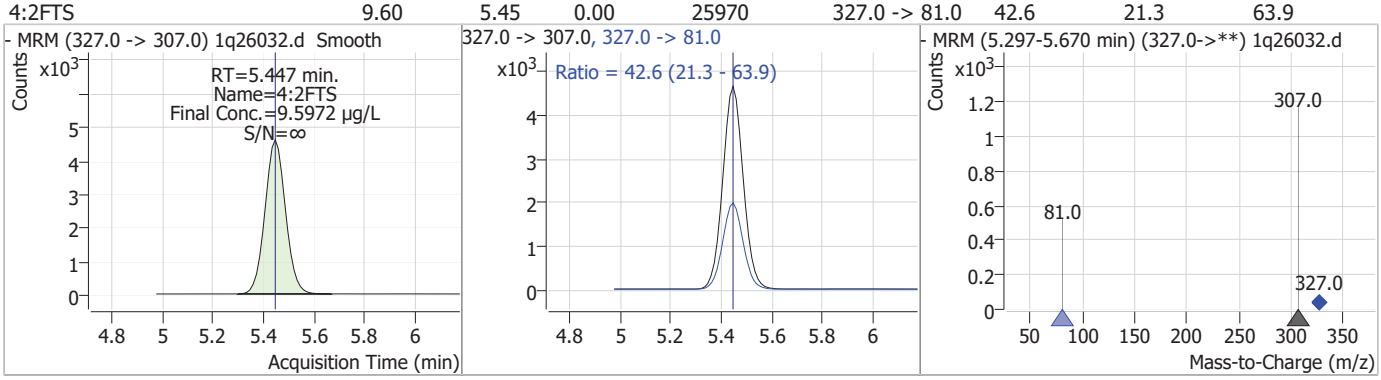


Perfluorinated Compounds by LC/MS/MS

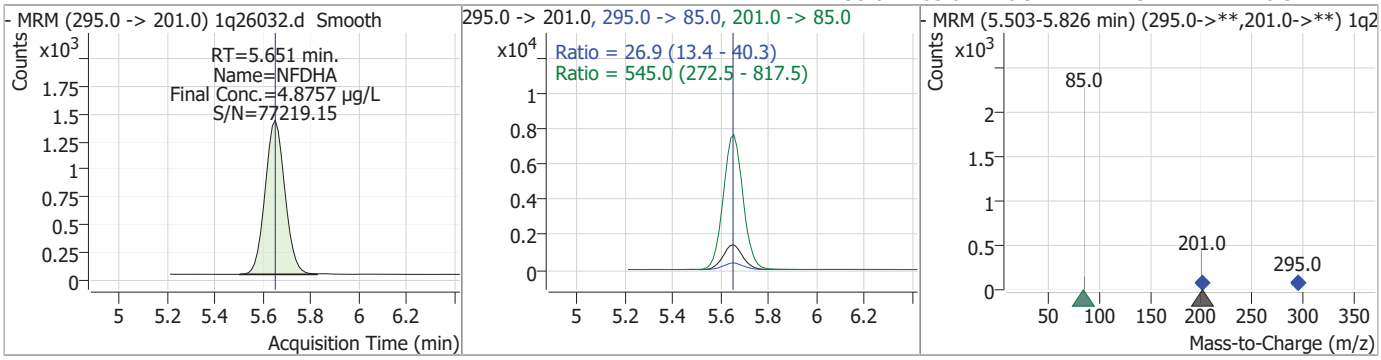
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.33	5.45	0.00	1452				



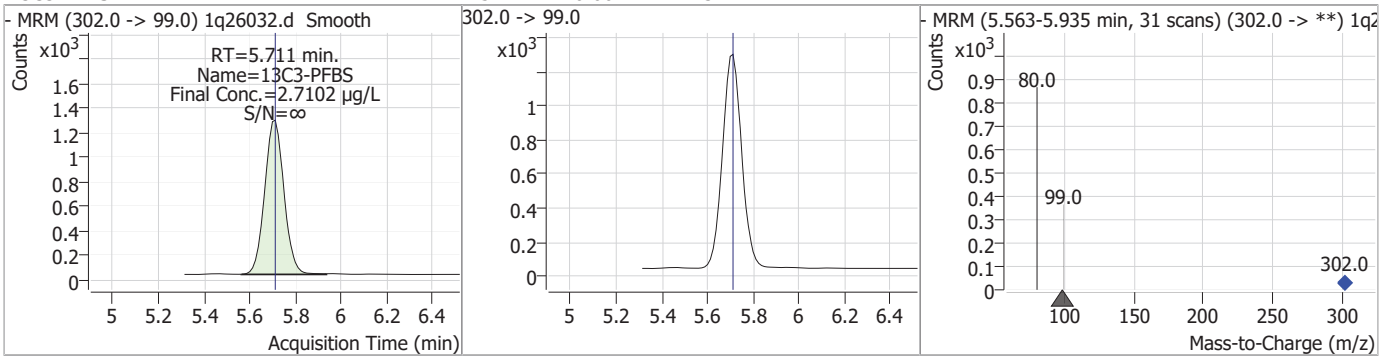
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.60	5.45	0.00	25970	327.0 -> 81.0	42.6	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	4.88	5.65	0.00	7986	201.0 -> 85.0	545.0	272.5	817.5
					295.0 -> 85.0	26.9	13.4	40.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.71	5.71	0.00	7372				

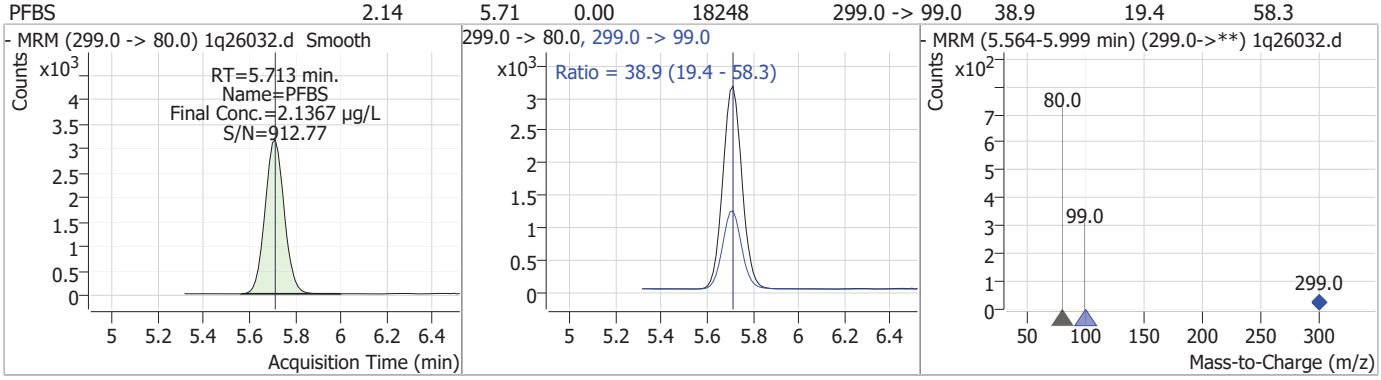


7.6.5

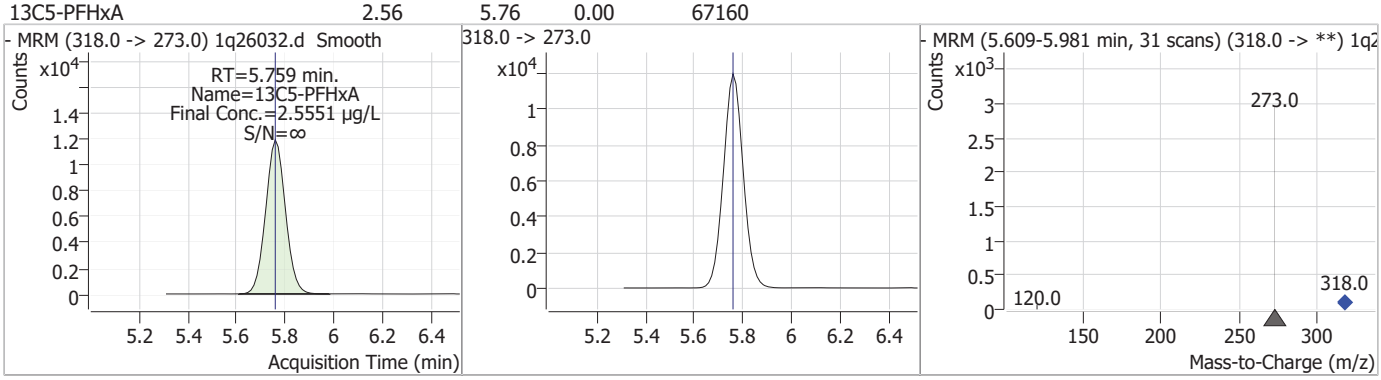
7

Perfluorinated Compounds by LC/MS/MS

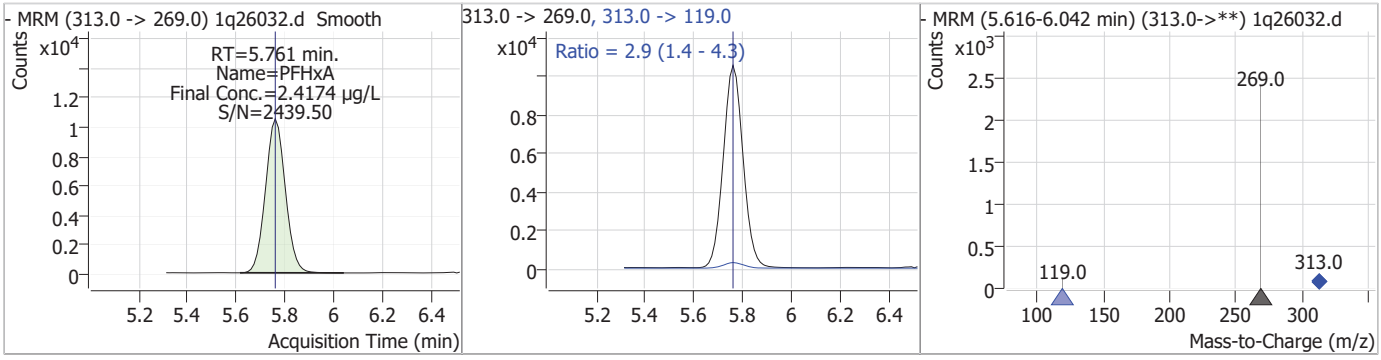
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.14	5.71	0.00	18248	299.0 -> 99.0	38.9	19.4	58.3



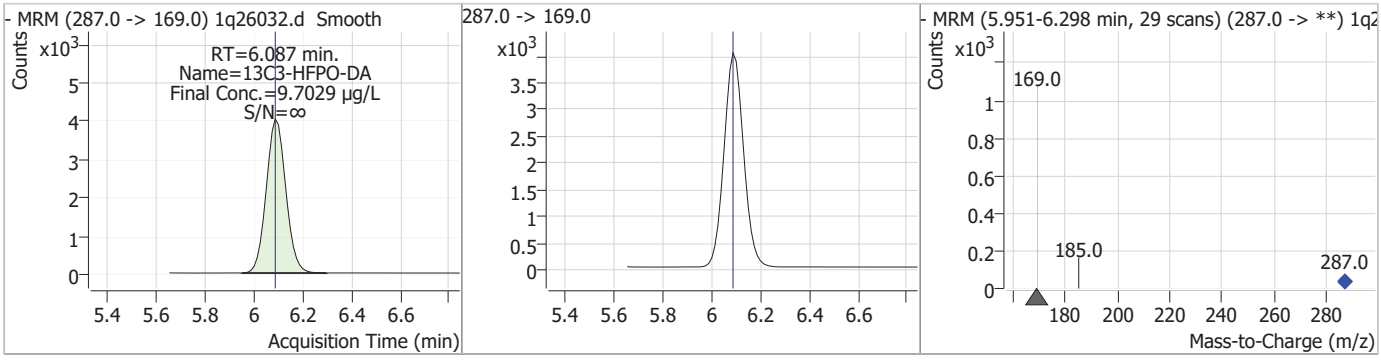
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.56	5.76	0.00	67160				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.42	5.76	0.00	59507	313.0 -> 119.0	2.9	1.4	4.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.70	6.09	0.00	22355				



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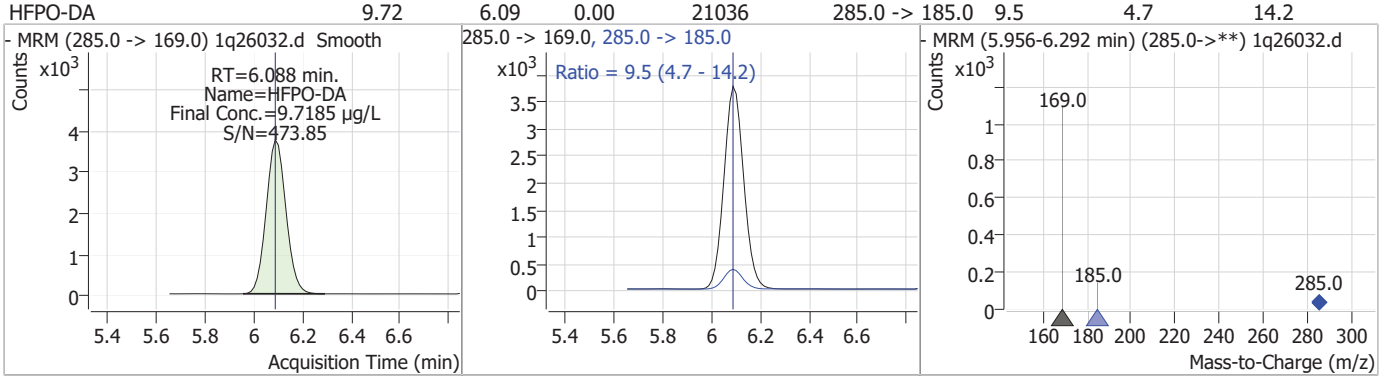
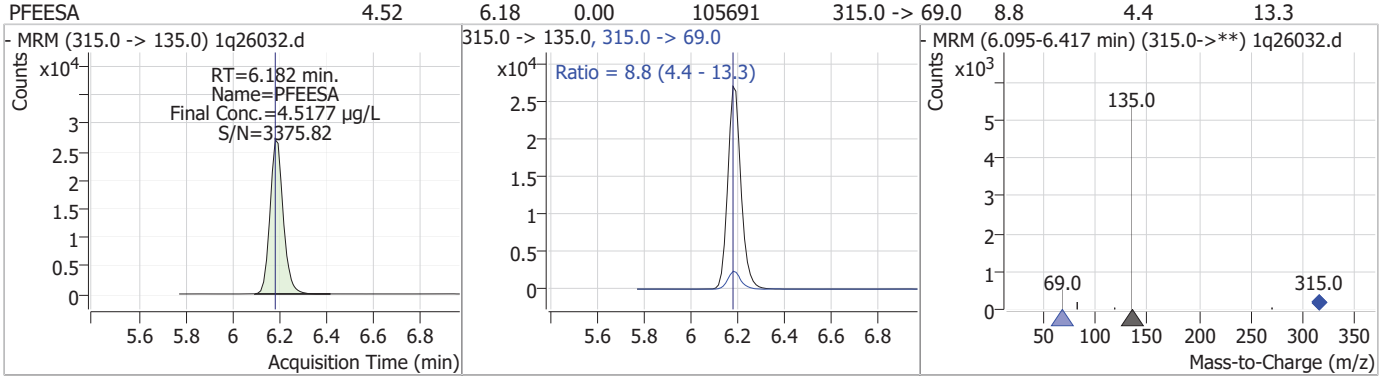
Perfluorinated Compounds by LC/MS/MS

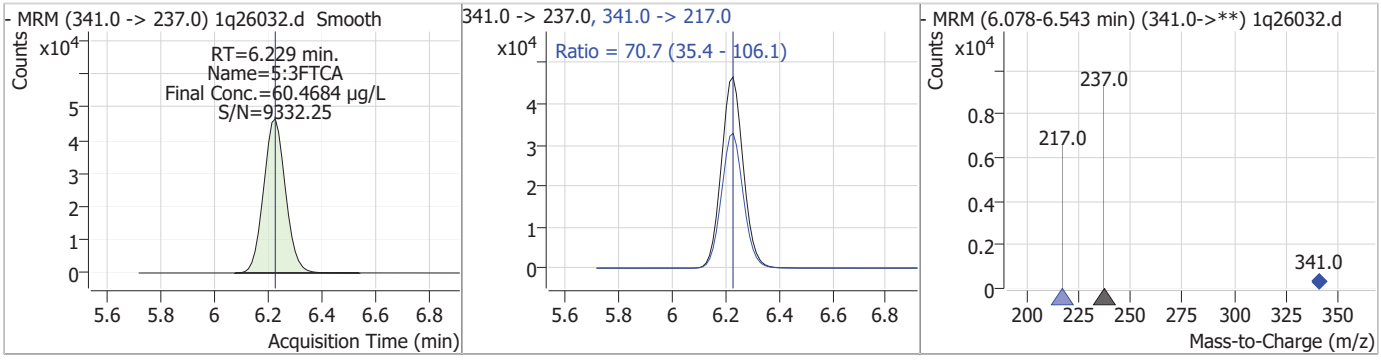
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	9.72	6.09	0.00	21036	285.0 -> 185.0	9.5	4.7	14.2



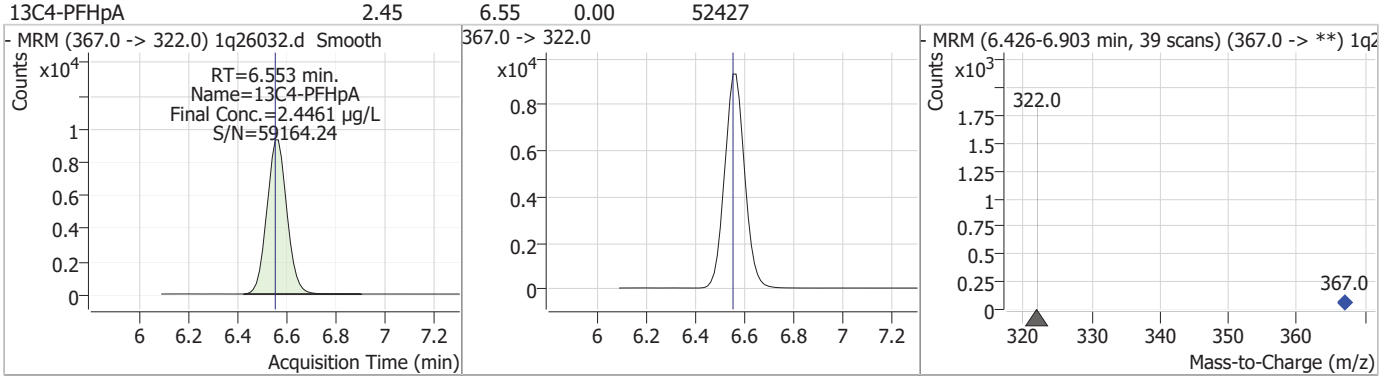
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.52	6.18	0.00	105691	315.0 -> 69.0	8.8	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	60.47	6.23	0.00	263210	341.0 -> 217.0	70.7	35.4	106.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.45	6.55	0.00	52427				



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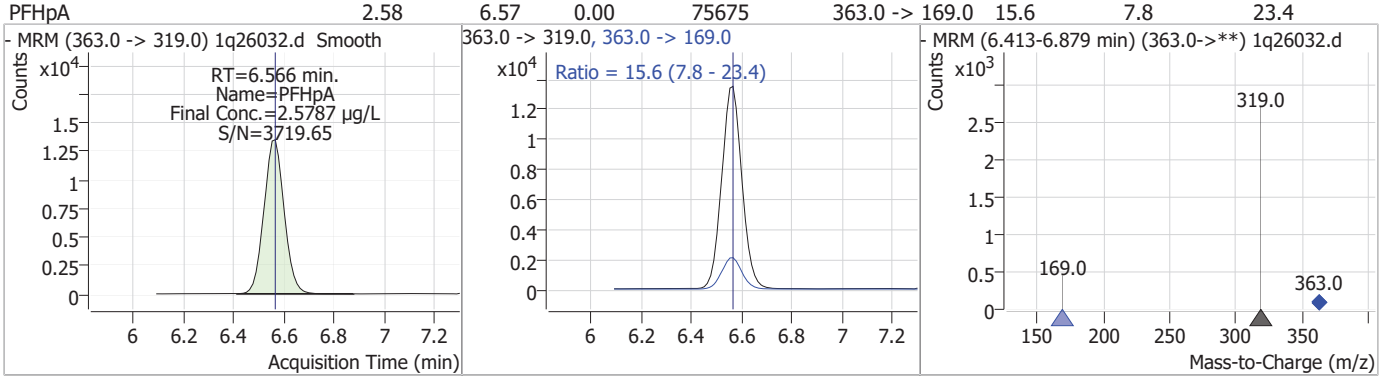
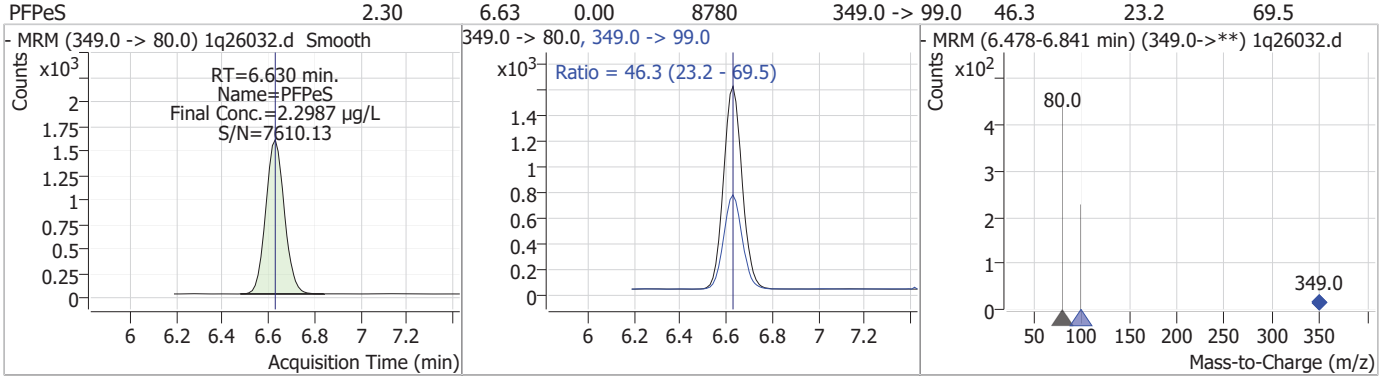
Perfluorinated Compounds by LC/MS/MS

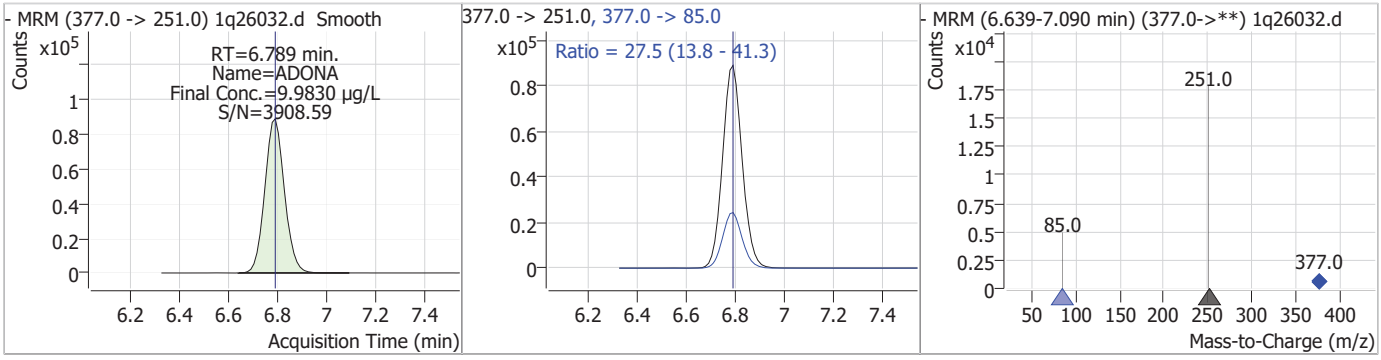
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.58	6.57	0.00	75675	363.0 -> 169.0	15.6	7.8	23.4



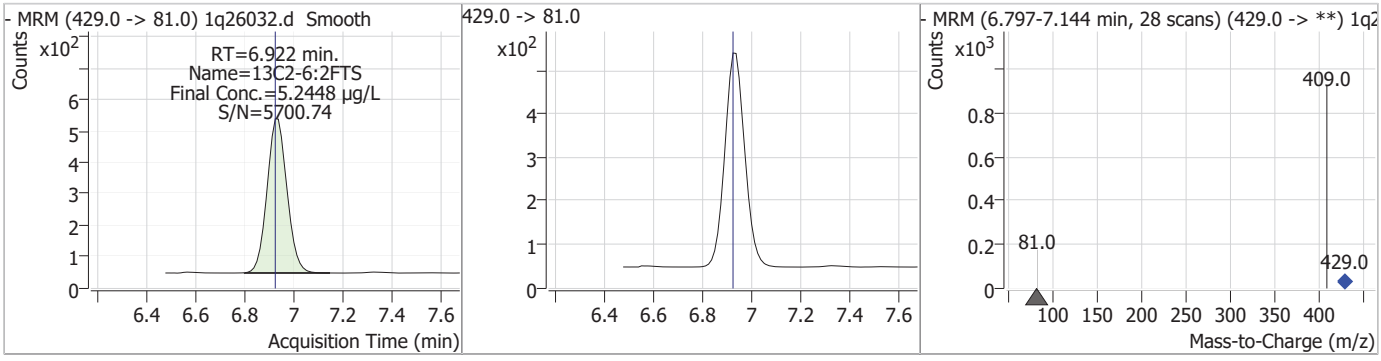
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.30	6.63	0.00	8780	349.0 -> 99.0	46.3	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	9.98	6.79	0.00	491399	377.0 -> 85.0	27.5	13.8	41.3

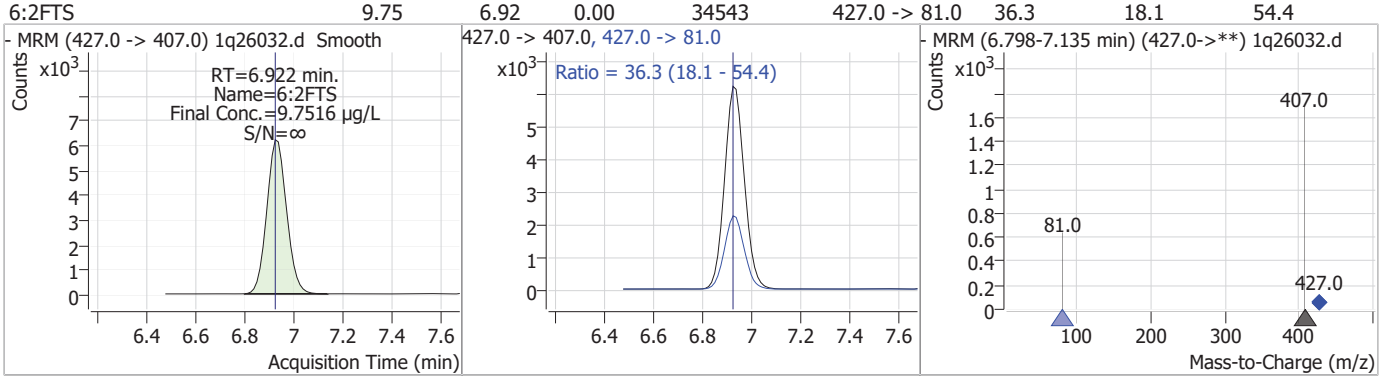


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.24	6.92	0.00	2767				

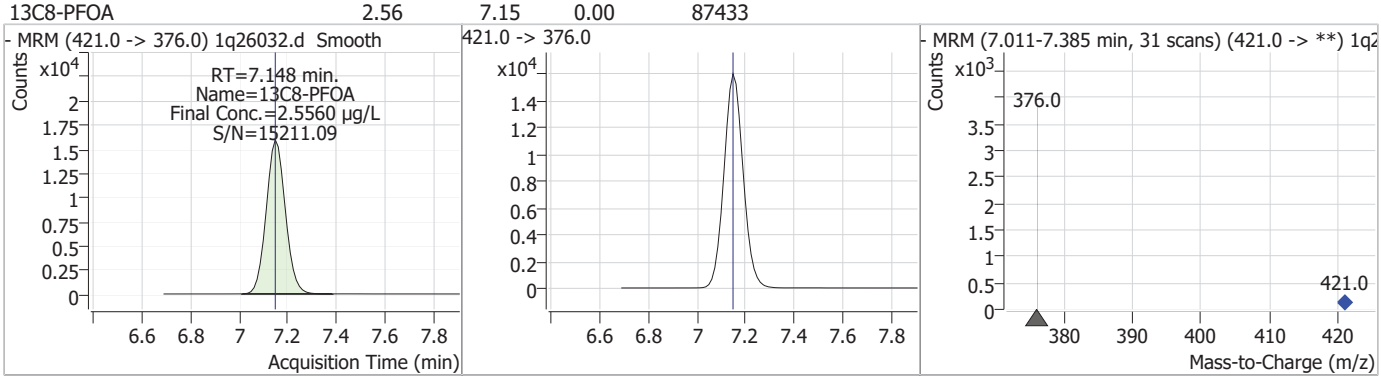


Perfluorinated Compounds by LC/MS/MS

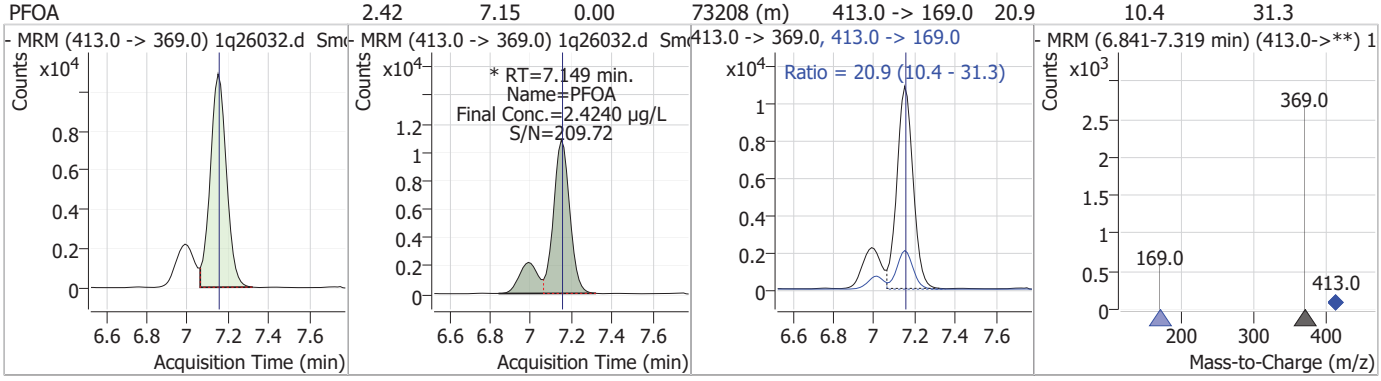
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.75	6.92	0.00	34543	427.0 -> 81.0	36.3	18.1	54.4



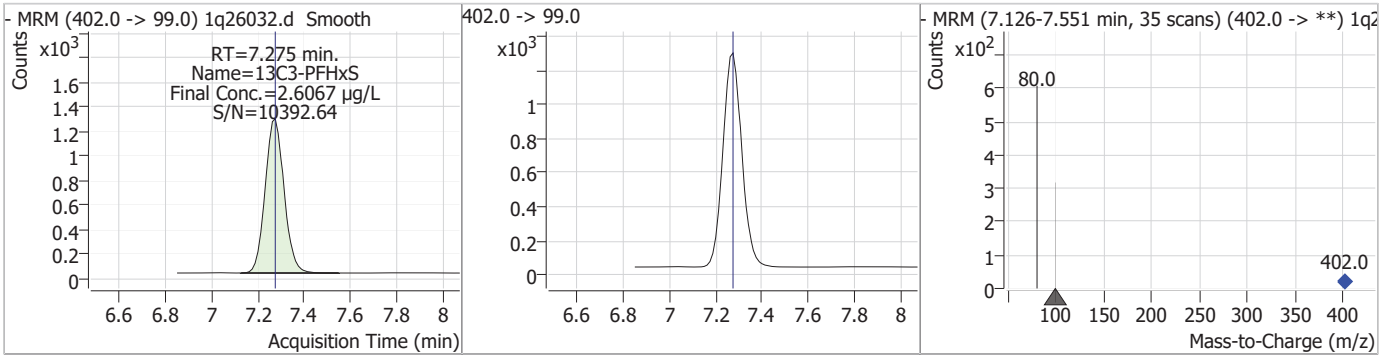
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.56	7.15	0.00	87433				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.42	7.15	0.00	73208 (m)	413.0 -> 169.0	20.9	10.4	31.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.61	7.27	0.00	7106				



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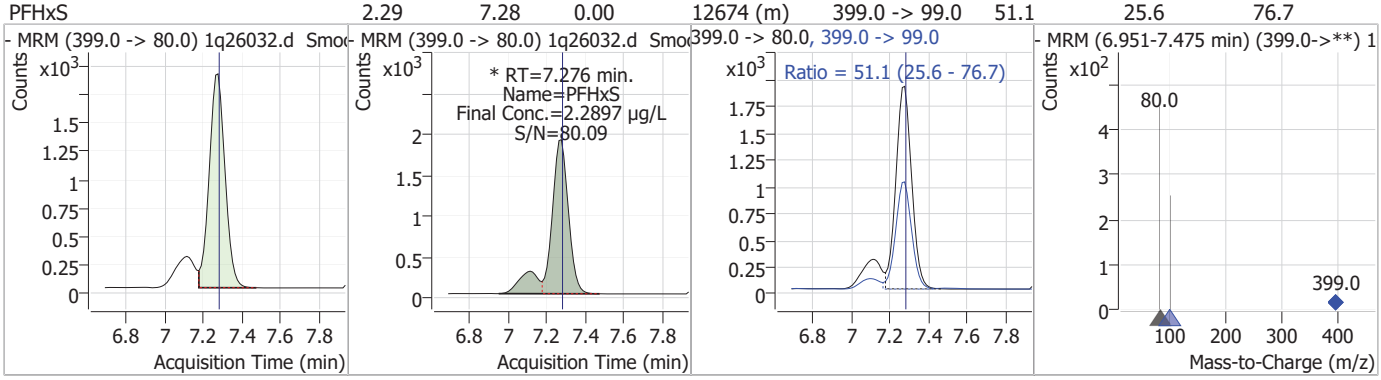
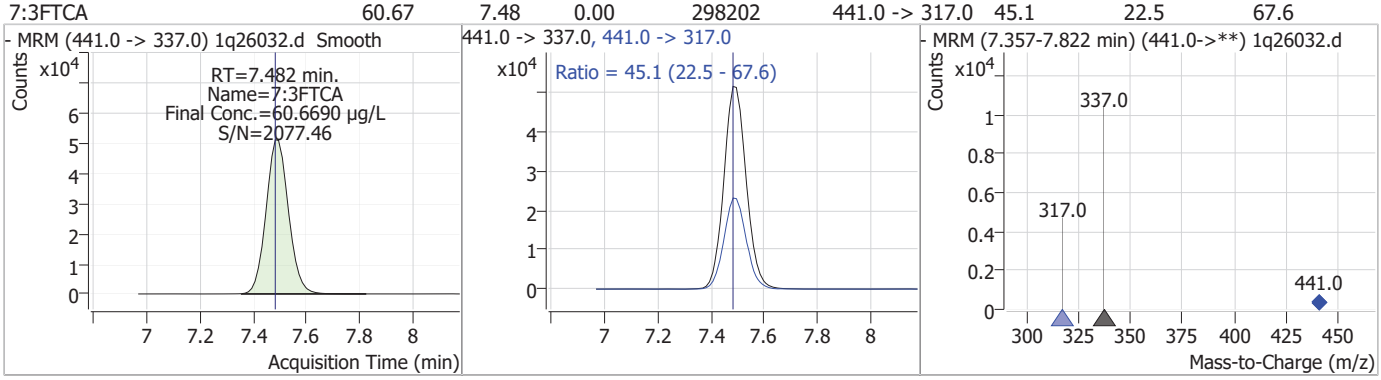
Perfluorinated Compounds by LC/MS/MS

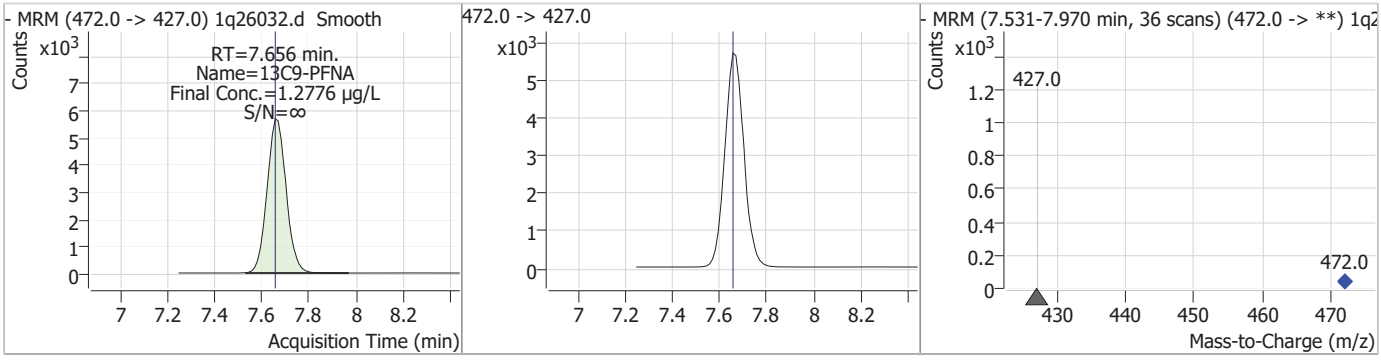
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.29	7.28	0.00	12674 (m)	399.0 -> 99.0	51.1	25.6	76.7



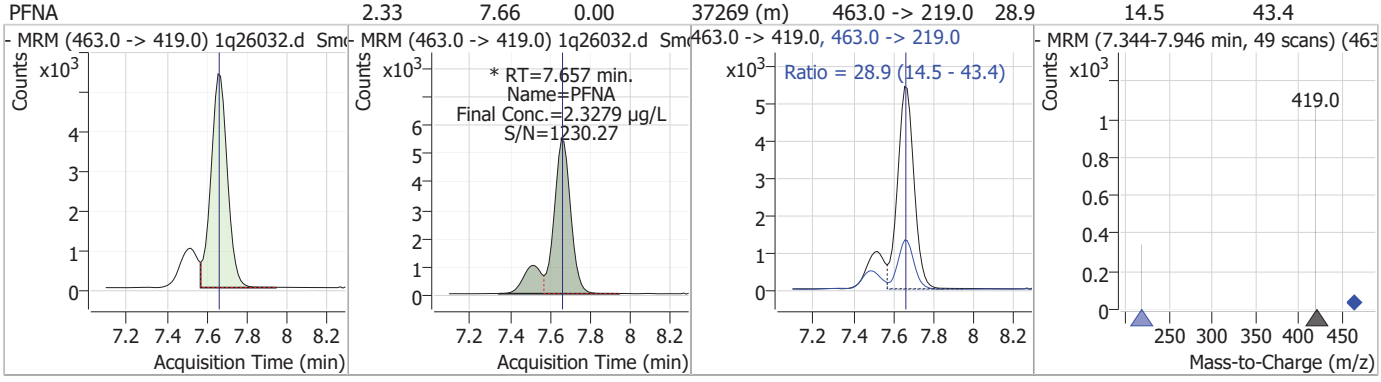
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	60.67	7.48	0.00	298202	441.0 -> 317.0	45.1	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.28	7.66	0.00	31919				

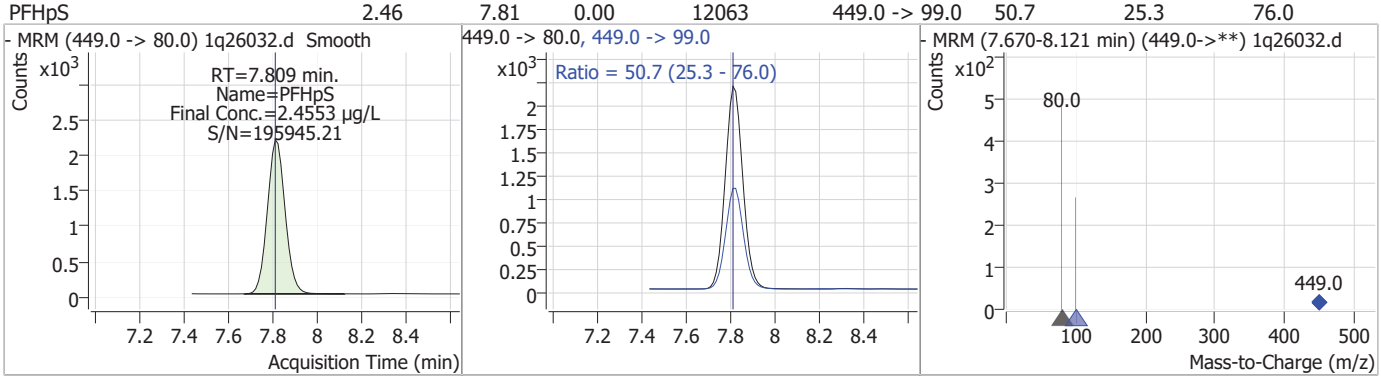


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.33	7.66	0.00	37269 (m)	463.0 -> 219.0	28.9	14.5	43.4

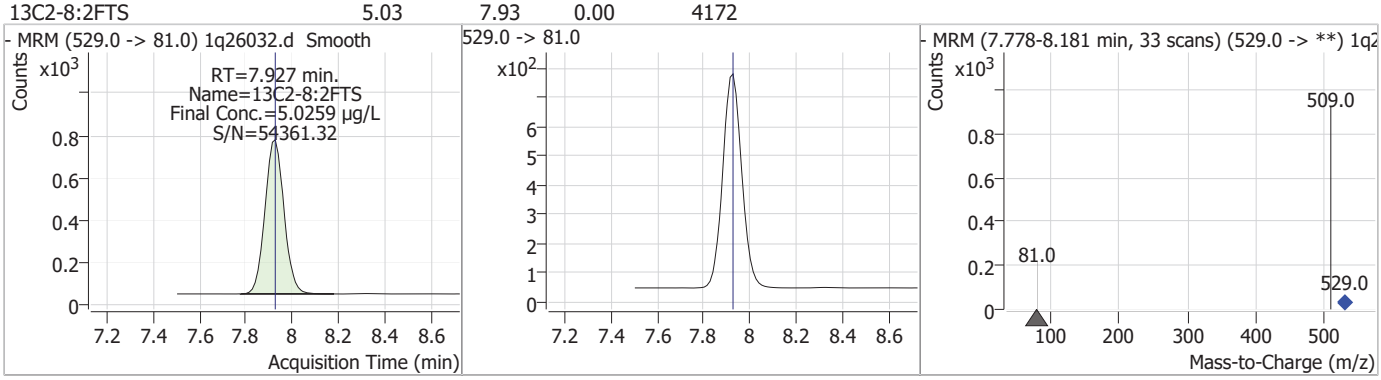


Perfluorinated Compounds by LC/MS/MS

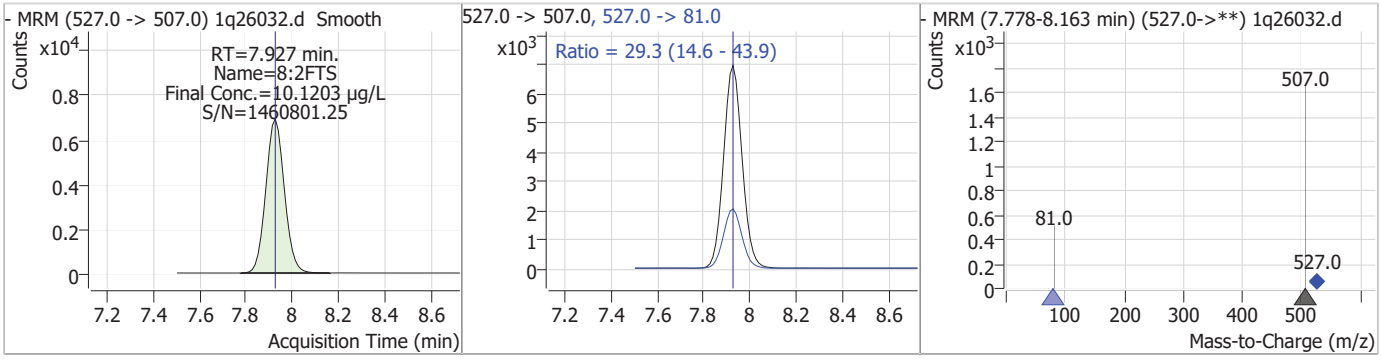
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.46	7.81	0.00	12063	449.0 -> 99.0	50.7	25.3	76.0



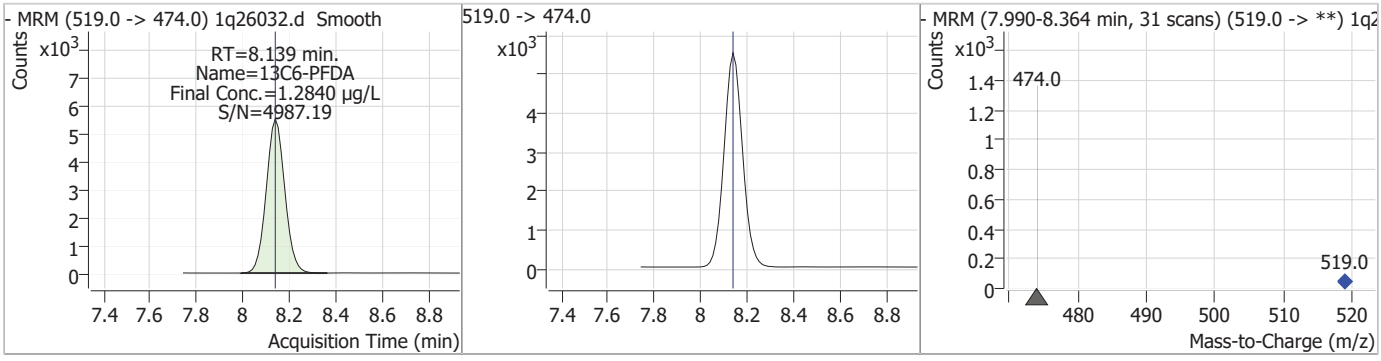
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.03	7.93	0.00	4172				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.12	7.93	0.00	38394	527.0 -> 81.0	29.3	14.6	43.9

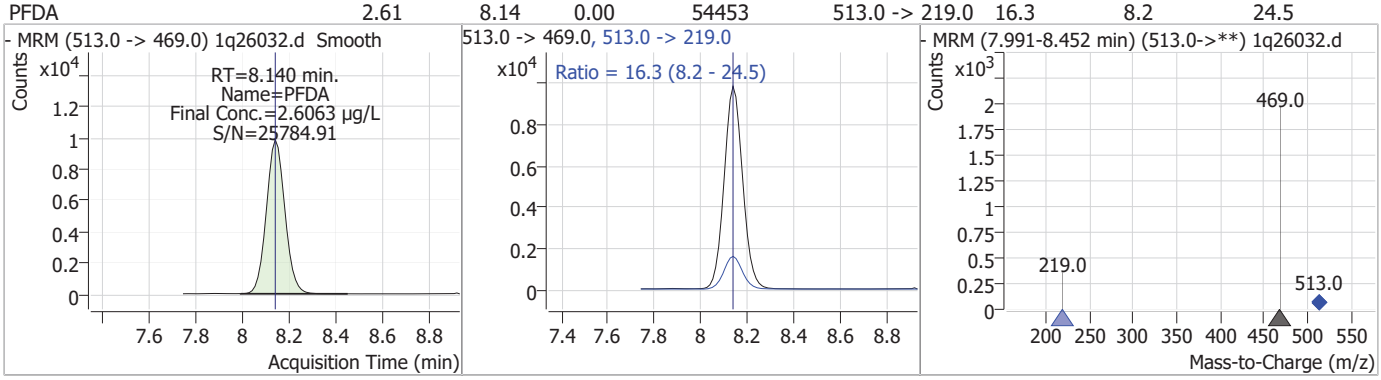


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.28	8.14	0.00	30432				

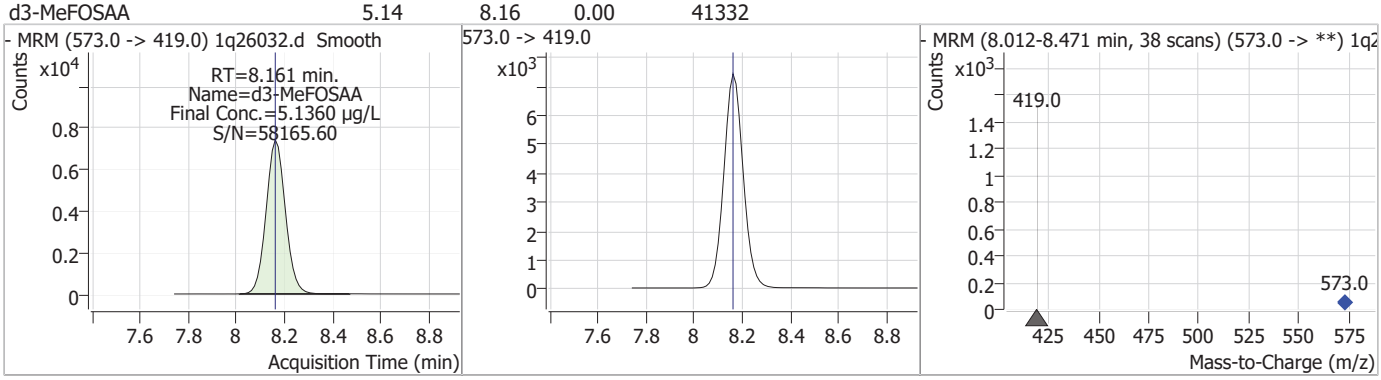


Perfluorinated Compounds by LC/MS/MS

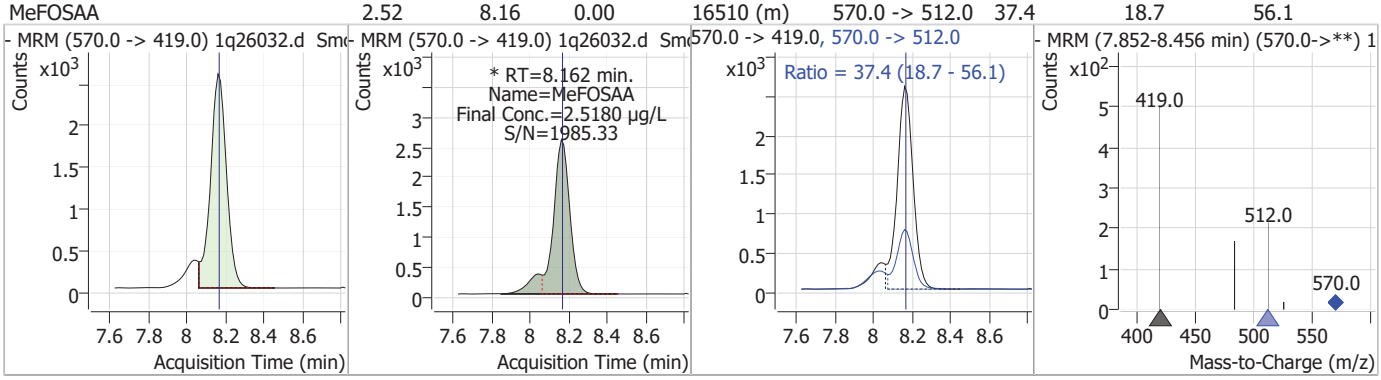
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.61	8.14	0.00	54453	513.0 -> 219.0	16.3	8.2	24.5



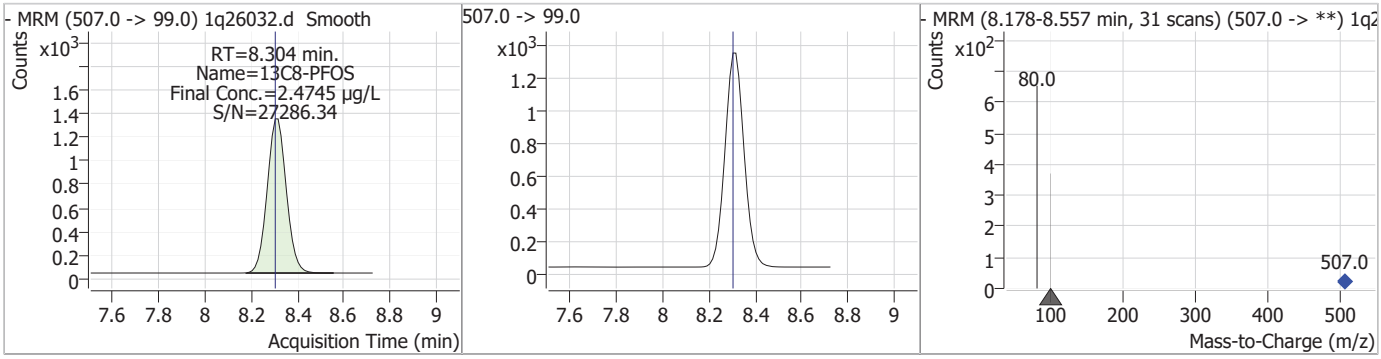
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.14	8.16	0.00	41332				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.52	8.16	0.00	16510 (m)	570.0 -> 512.0	37.4	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.47	8.30	0.00	7524				



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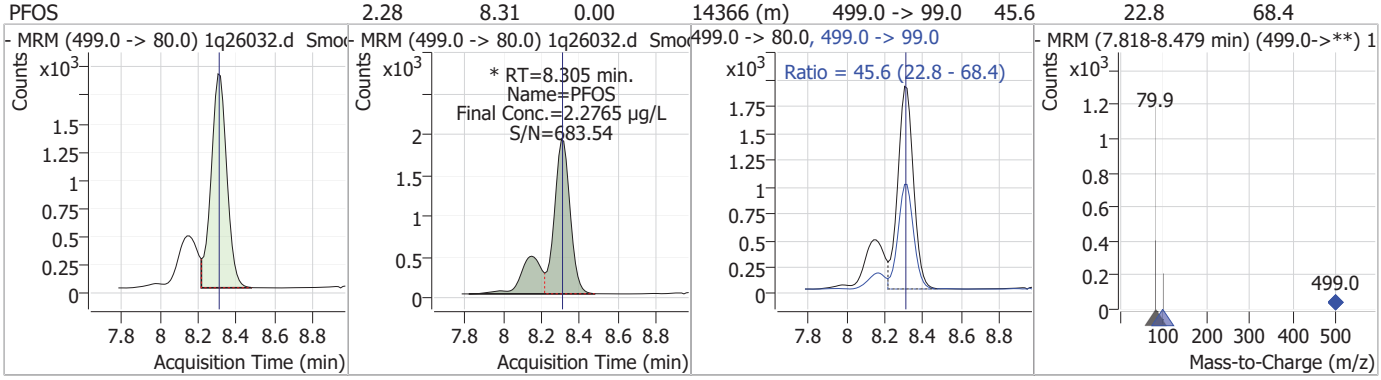
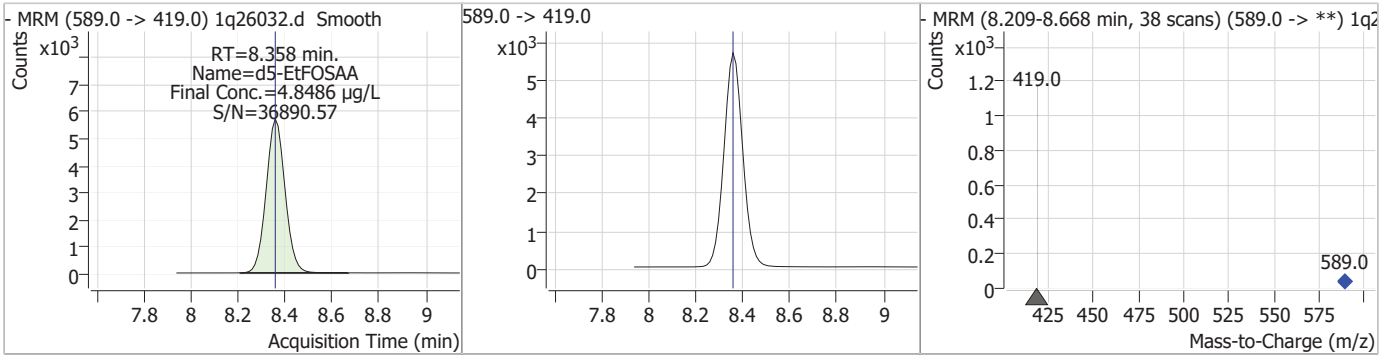
Perfluorinated Compounds by LC/MS/MS

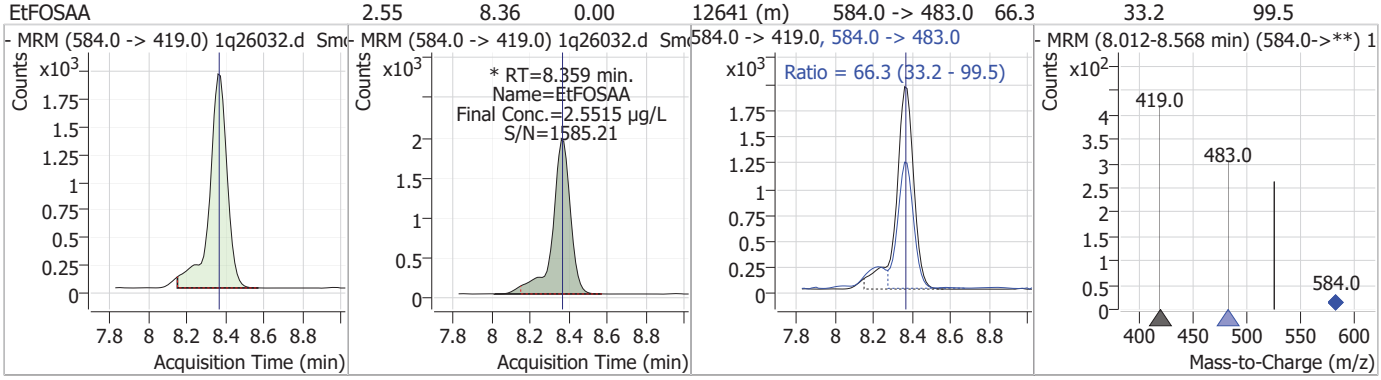
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.28	8.31	0.00	14366 (m)	499.0 -> 99.0	45.6	22.8	68.4



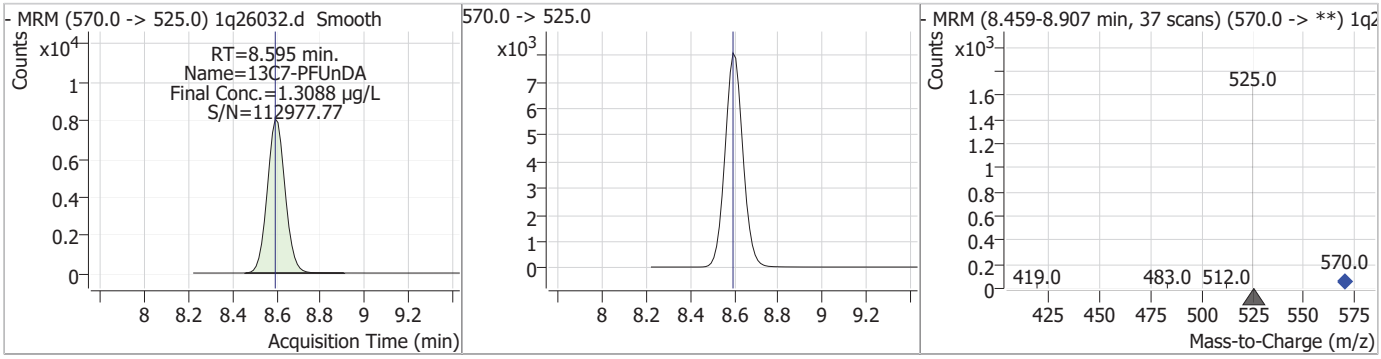
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.85	8.36	0.00	31767				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.55	8.36	0.00	12641 (m)	584.0 -> 483.0	66.3	33.2	99.5

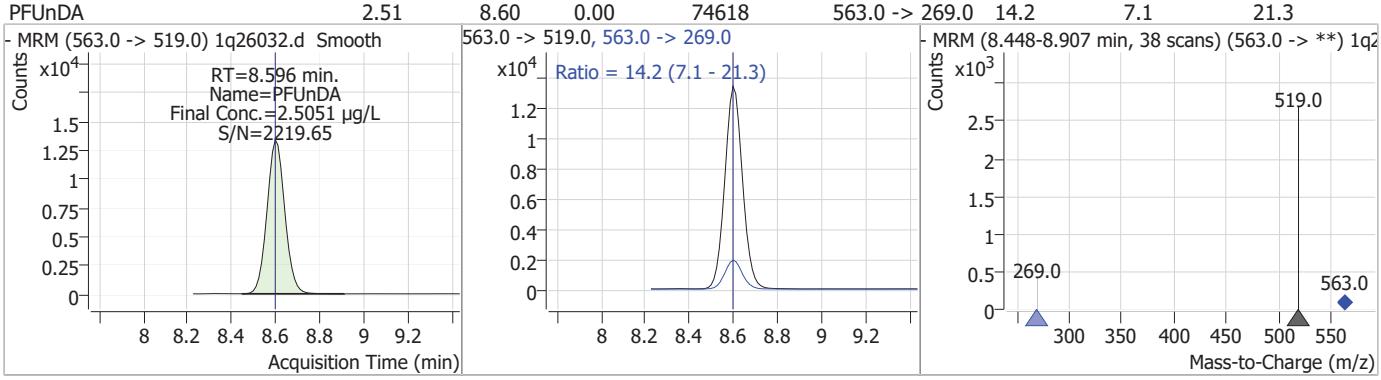


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.31	8.59	0.00	45025				

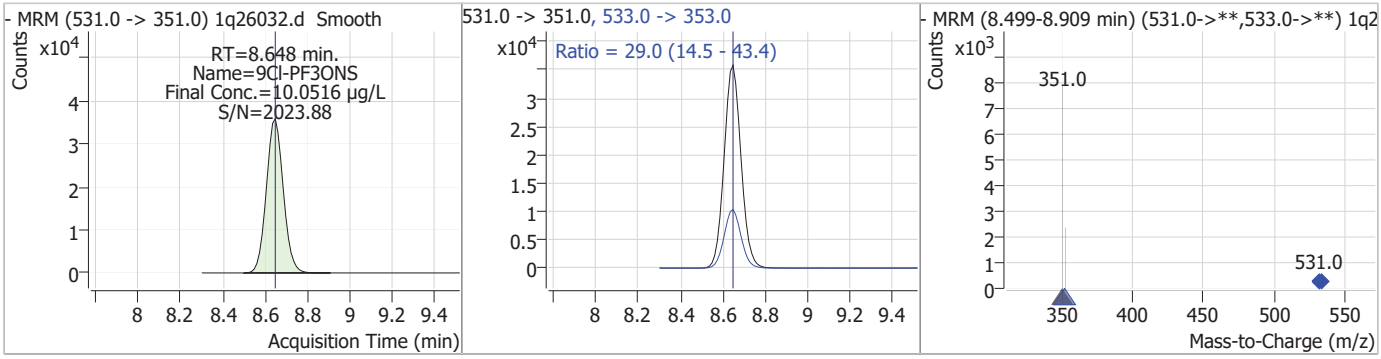


Perfluorinated Compounds by LC/MS/MS

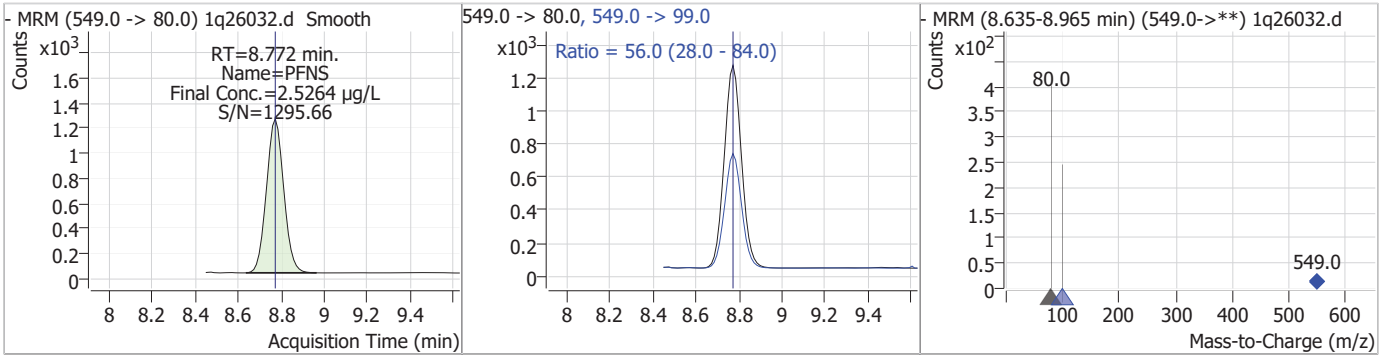
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.51	8.60	0.00	74618	563.0 -> 269.0	14.2	7.1	21.3



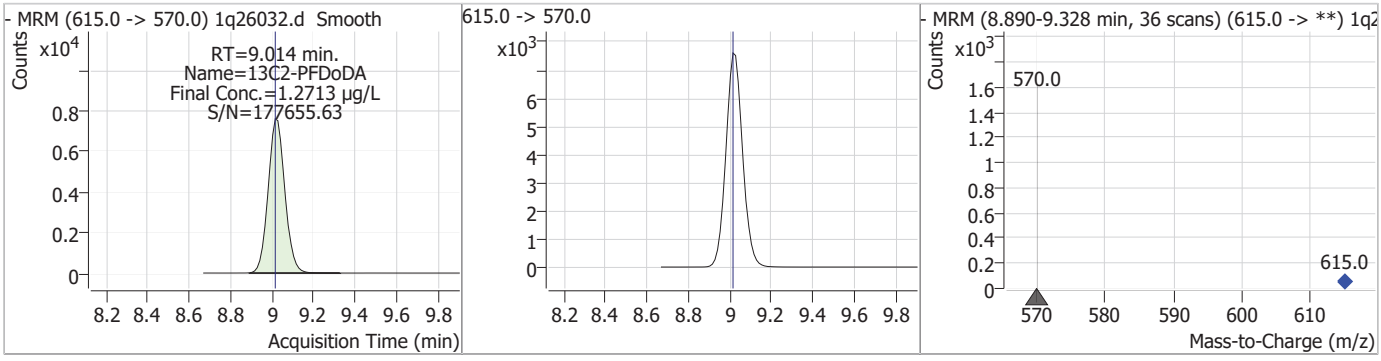
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	10.05	8.65	0.00	198558	533.0 -> 353.0	29.0	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.53	8.77	0.00	6845	549.0 -> 99.0	56.0	28.0	84.0

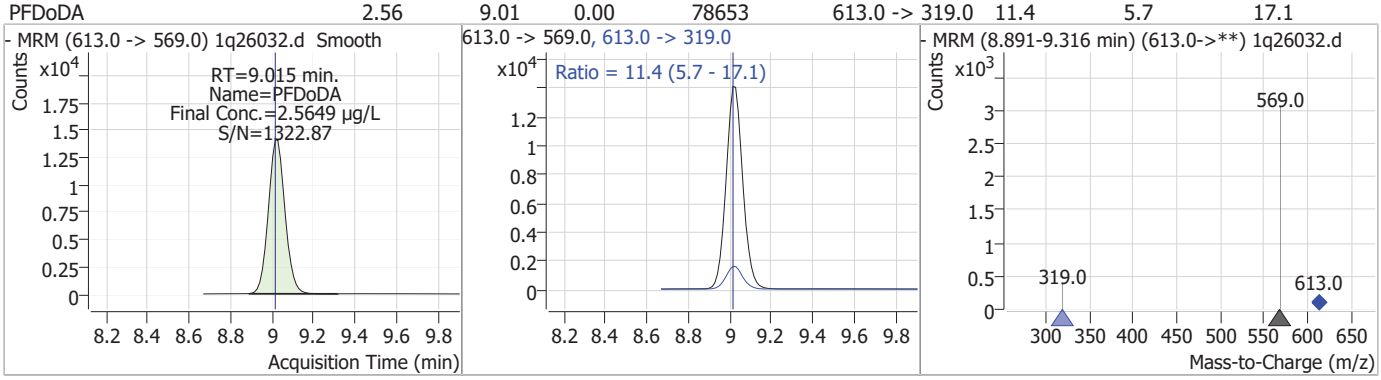


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.27	9.01	0.00	42198				

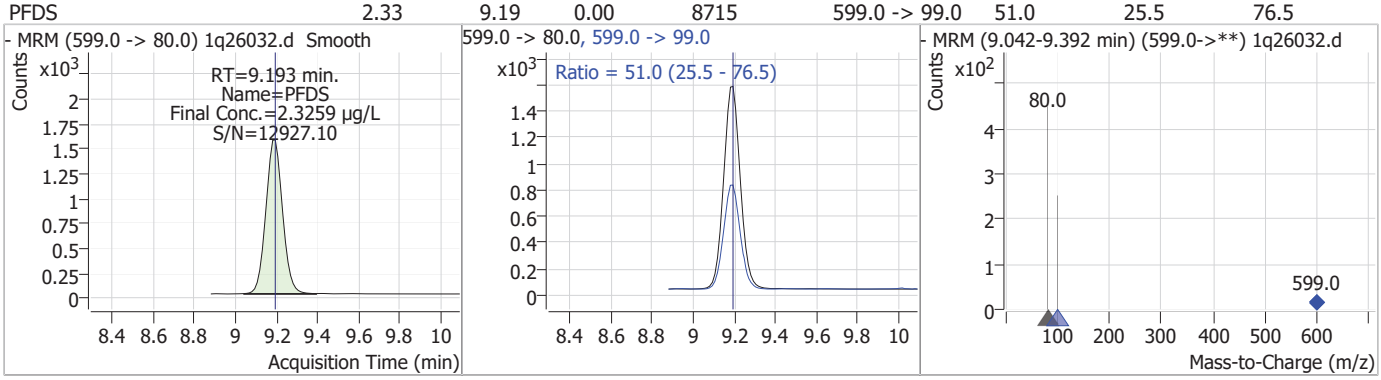


Perfluorinated Compounds by LC/MS/MS

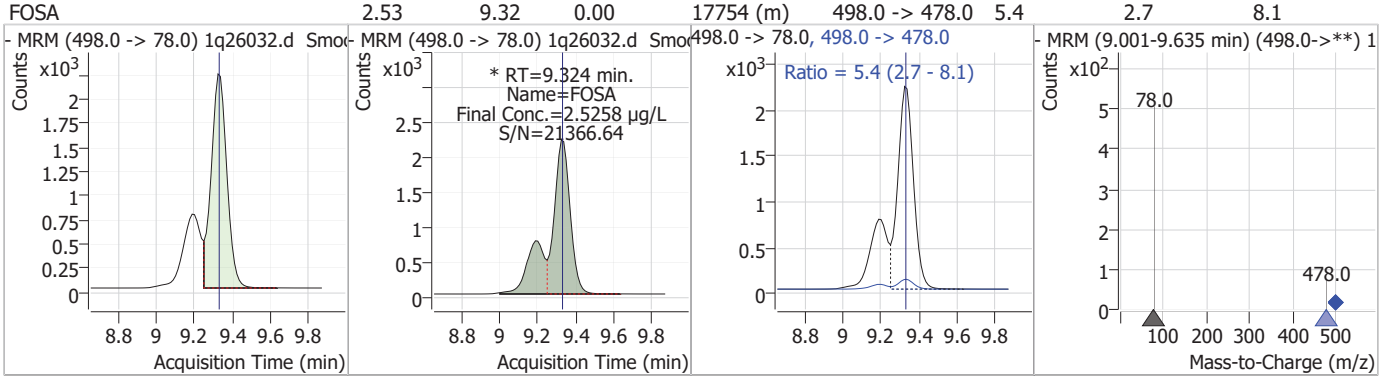
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.56	9.01	0.00	78653	613.0 -> 319.0	11.4	5.7	17.1



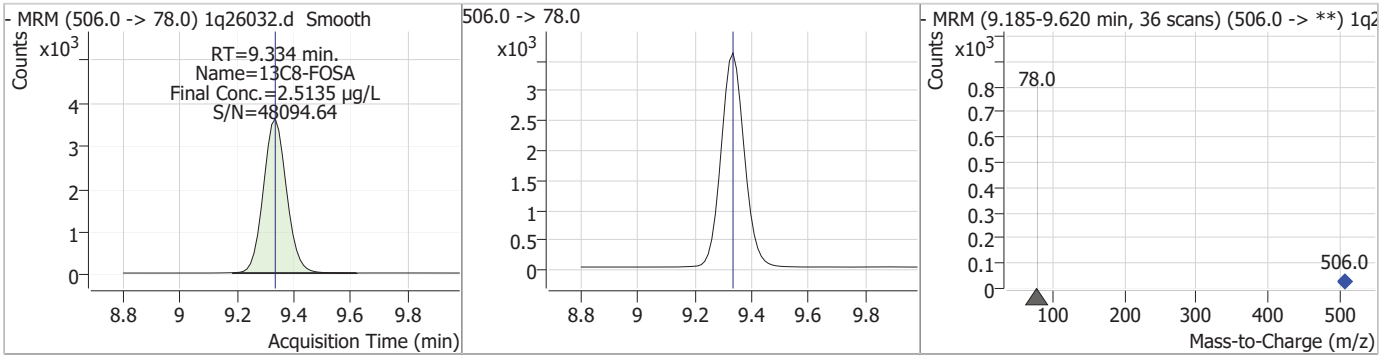
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.33	9.19	0.00	8715	599.0 -> 99.0	51.0	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.53	9.32	0.00	17754 (m)	498.0 -> 478.0	5.4	2.7	8.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.51	9.33	0.00	20281				



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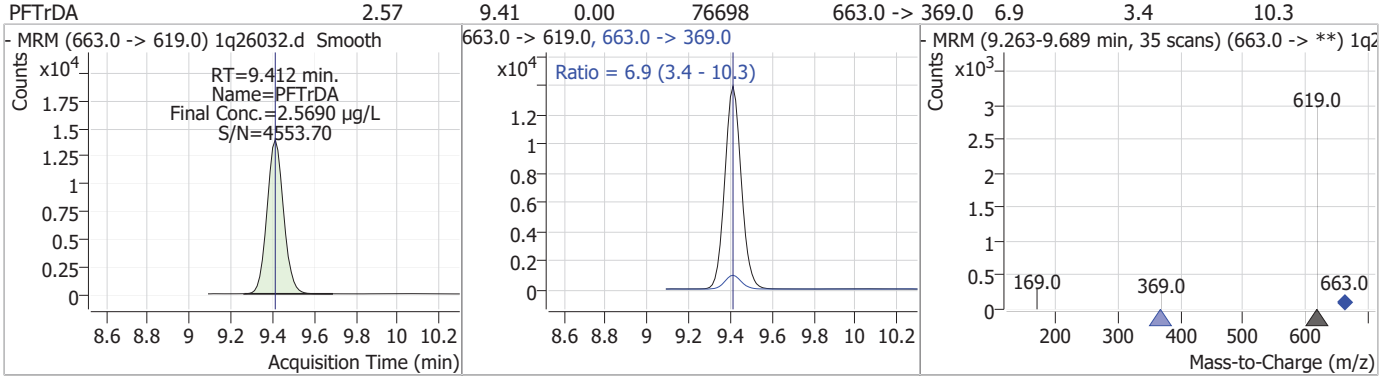
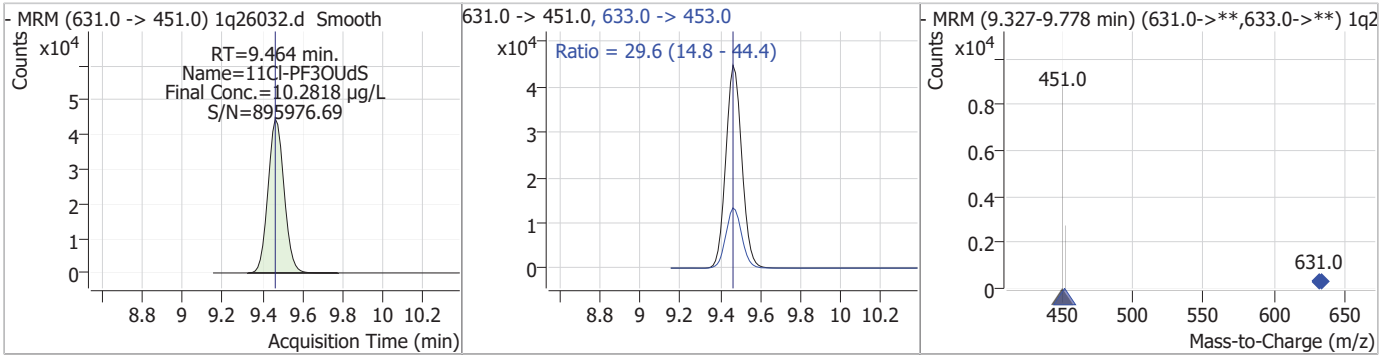
Perfluorinated Compounds by LC/MS/MS

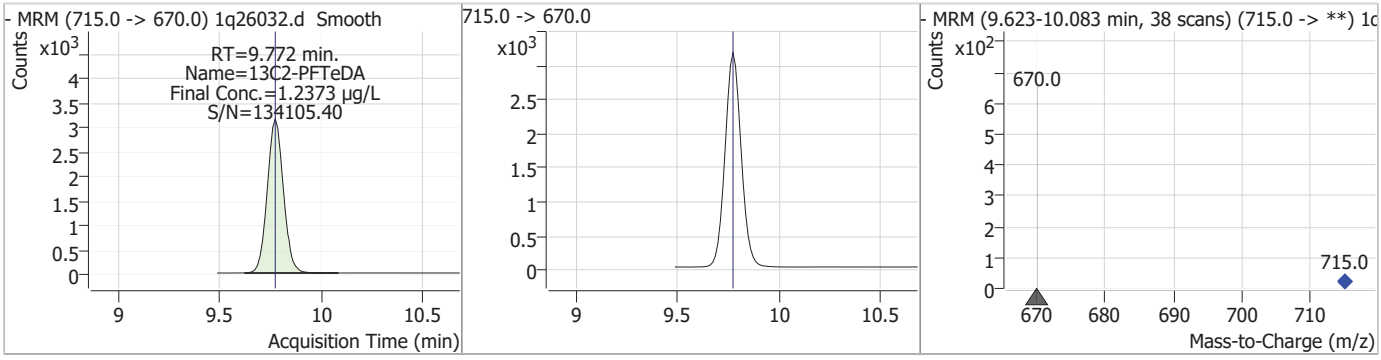
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.57	9.41	0.00	76698	663.0 -> 369.0	6.9	3.4	10.3



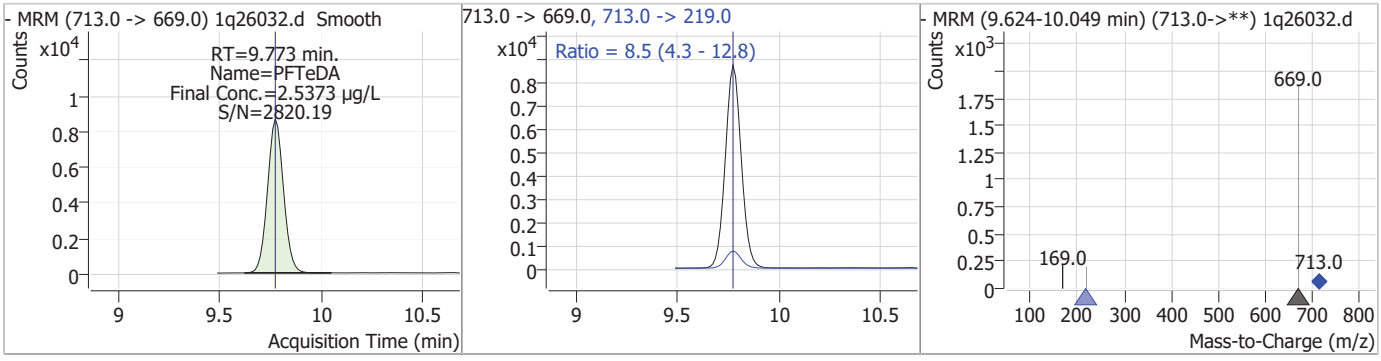
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	10.28	9.46	0.00	247786	633.0 -> 453.0	29.6	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.24	9.77	0.00	17280				

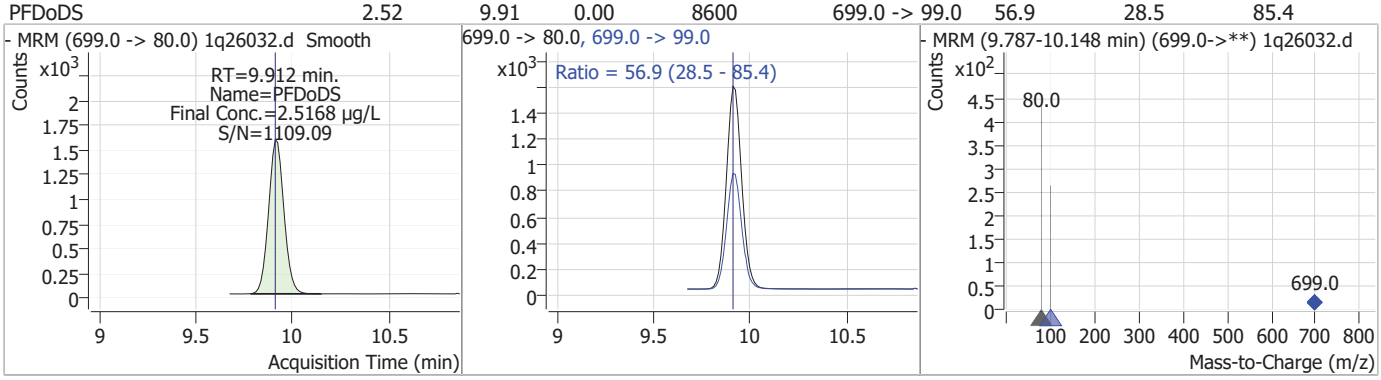


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.54	9.77	0.00	47222	713.0 -> 219.0	8.5	4.3	12.8

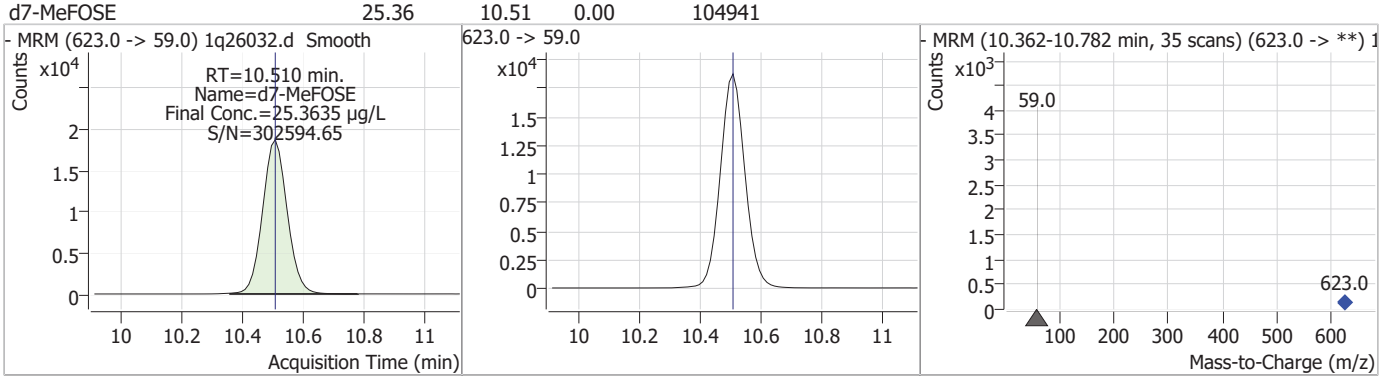


Perfluorinated Compounds by LC/MS/MS

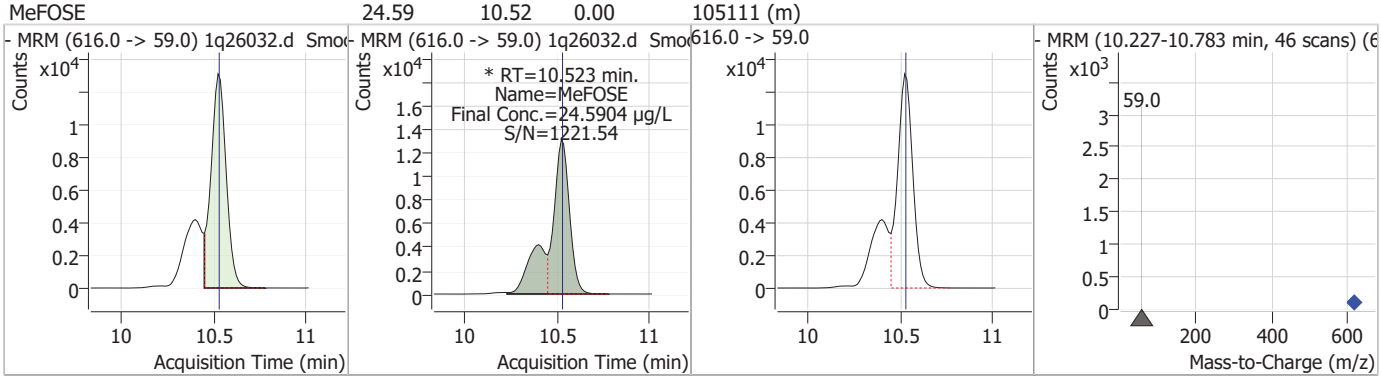
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.52	9.91	0.00	8600	699.0 -> 99.0	56.9	28.5	85.4



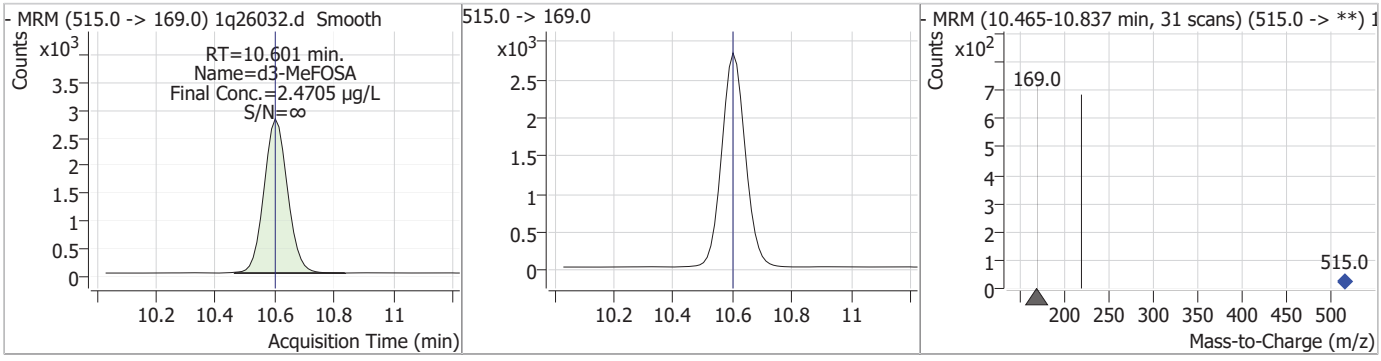
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.36	10.51	0.00	104941				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	24.59	10.52	0.00	105111 (m)				

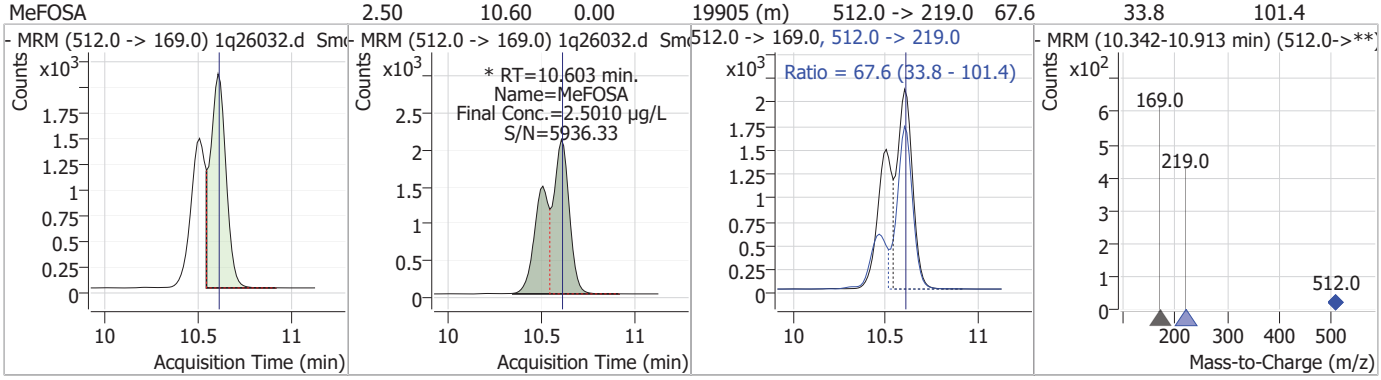


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.47	10.60	0.00	15452				

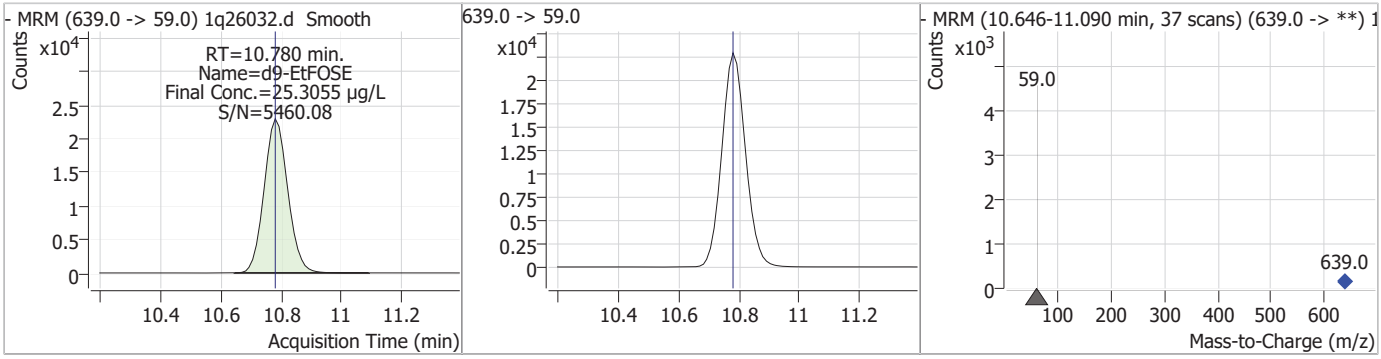


Perfluorinated Compounds by LC/MS/MS

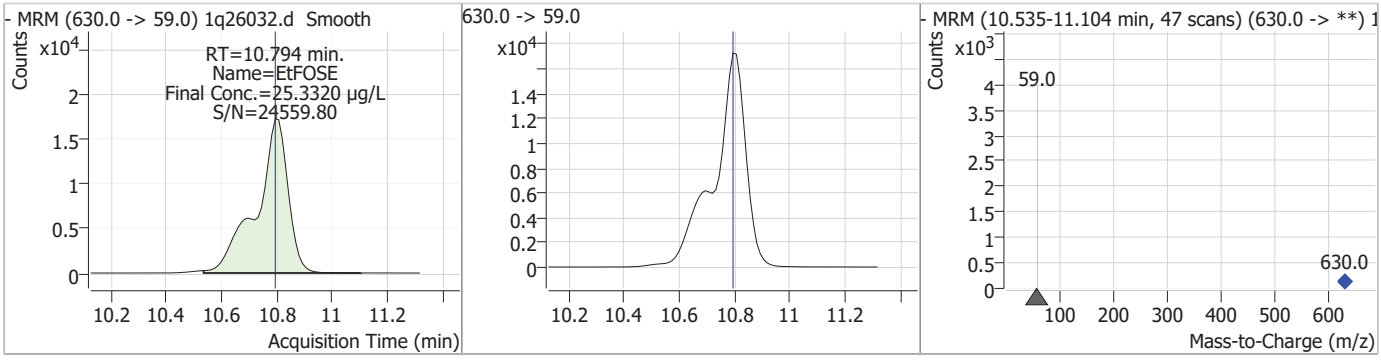
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.50	10.60	0.00	19905 (m)	512.0 -> 219.0	67.6	33.8	101.4



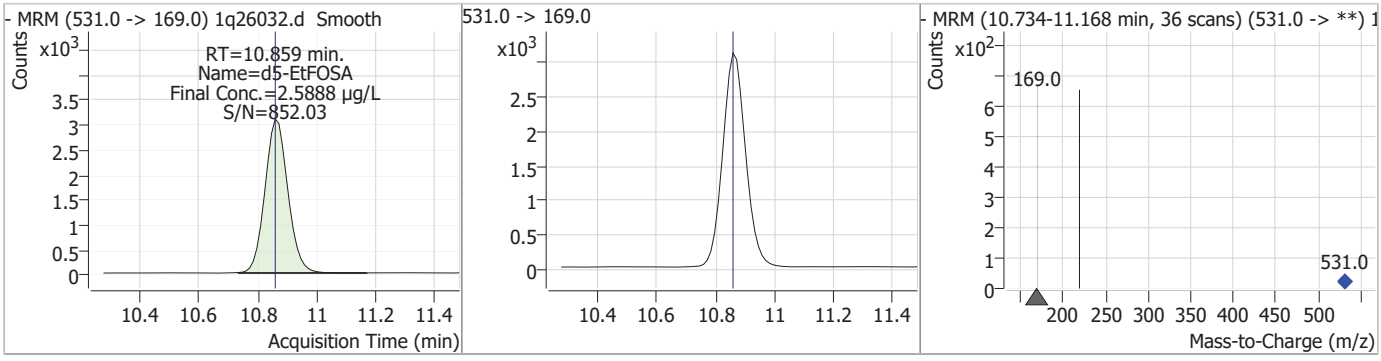
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.31	10.78	0.00	124014				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.33	10.79	0.00	136884				

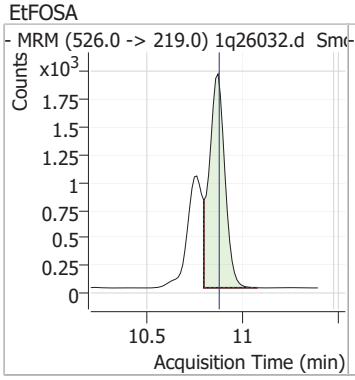


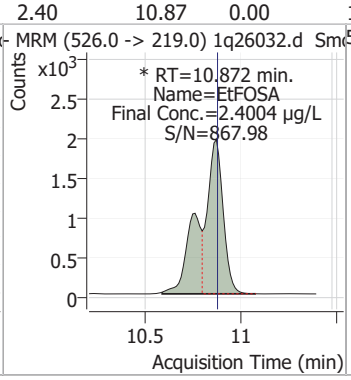
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.59	10.86	0.00	16545				

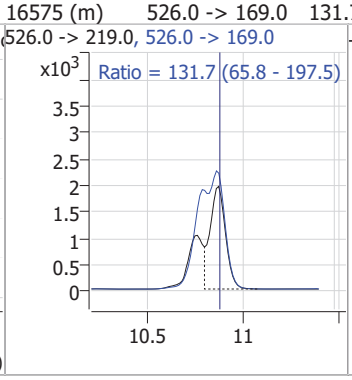


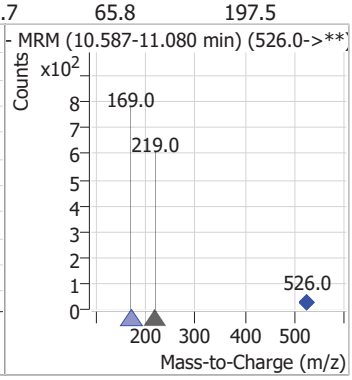
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.40	10.87	0.00	16575 (m)	526.0 -> 169.0	131.7	65.8	197.5









7.6.5

7

Manual Integration Approval Summary

Sample Number: T1Q361-ICC361
Lab FileID: 1Q26032.D
Injection Time: 05/14/25 17:23
Method: EPA 1633
Analyst approved: 05/15/25 01:25 Rensel John Romano
Supervisor approved: 05/15/25 05:29 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.66	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.30	Split peak
EtFOSAA	2991-50-6		8.36	Split peak
PFOSA	754-91-6		9.32	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSA	4151-50-2		10.87	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/15/25 05:29

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26033.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/14/2025 5:38:09 PM
Sample Name : IC361-5
Vial : P1-A6
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : t1q361.batch.bin
Sample Information : OP63461,T1Q361,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	189045	10.00 µg/L	0.000
M5-PFPeA	4.636	268.0 -> 223.0	116641	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	67024	2.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	54362	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	89272	2.50 µg/L	0.000
M9-PFNA	7.669	472.0 -> 427.0	31633	1.25 µg/L	0.012
M6-PFDA	8.139	519.0 -> 474.0	31716	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	45106	1.25 µg/L	0.000
M2-PFDoDA	9.027	615.0 -> 570.0	44472	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	19077	1.25 µg/L	0.000
M8-FOSA	9.334	506.0 -> 78.0	19672	2.50 µg/L	0.000
M3-PFBS	5.711	302.0 -> 99.0	7724	2.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	7376	2.50 µg/L	0.000
M8-PFOS	8.316	507.0 -> 99.0	7599	2.50 µg/L	0.012
M2-4:2FTS	5.446	329.0 -> 81.0	1411	5.00 µg/L	0.000
M2-6:2FTS	6.934	429.0 -> 81.0	2823	5.00 µg/L	0.012
M2-8:2FTS	7.927	529.0 -> 81.0	4417	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	40626	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	23248	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	33759	5.00 µg/L	0.000
M7-MeFOSE	10.510	623.0 -> 59.0	106118	25.00 µg/L	0.000
M9-EtFOSE	10.780	639.0 -> 59.0	126540	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	16594	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	15451	2.50 µg/L	0.000
13C4-PFOS	8.317	503.0 -> 80.0	13415	2.50 µg/L	0.012
13C3-PFBA	3.263	216.0 -> 172.0	80708	5.00 µg/L	0.013
18O2-PFHxS	7.274	403.0 -> 84.0	9172	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	100004	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	26877	1.25 µg/L	0.000
13C5-PFNA	7.669	468.0 -> 423.0	31376	1.25 µg/L	0.012
13C2-PFHxA	5.760	315.0 -> 270.0	64706	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1411	4.61 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.1%	
13C2-6:2FTS	6.934	429.0 -> 81.0	2823	4.76 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.1%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4417	4.73 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.6%	
13C2-PFDoDA	9.027	615.0 -> 570.0	44472	1.22 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.6%	
13C2-PFTeDA	9.772	715.0 -> 670.0	19077	1.24 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.5%	
13C3-PFBS	5.711	302.0 -> 99.0	7724	2.52 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.9%	
13C3-PFHxS	7.275	402.0 -> 99.0	7376	2.40 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.2%		
13C4-PFBA	3.260	217.0 -> 172.0	189045	9.85 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.5%		
13C4-PFHpA	6.553	367.0 -> 322.0	54362	2.42 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.9%		
13C5-PFHxA	5.759	318.0 -> 273.0	67024	2.43 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.4%		
13C5-PFPeA	4.636	268.0 -> 223.0	116641	4.92 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.3%		
13C6-PFDA	8.139	519.0 -> 474.0	31716	1.22 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.5%		
13C7-PFUnDA	8.595	570.0 -> 525.0	45106	1.19 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.5%		
13C8-FOSA	9.334	506.0 -> 78.0	19672	2.40 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.1%		
13C8-PFOA	7.148	421.0 -> 376.0	89272	2.45 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.1%		
13C8-PFOS	8.316	507.0 -> 99.0	7599	2.46 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.5%		
13C9-PFNA	7.669	472.0 -> 427.0	31633	1.24 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.8%		
d3-MeFOSAA	8.161	573.0 -> 419.0	40626	4.97 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.5%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	23248	9.64 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 96.4%		
d3-MeFOSA	10.601	515.0 -> 169.0	15451	2.43 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.4%		
d5-EtFOSAA	8.358	589.0 -> 419.0	33759	5.08 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.5%		
d7-MeFOSE	10.510	623.0 -> 59.0	106118	25.27 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 101.1%		
d9-EtFOSE	10.780	639.0 -> 59.0	126540	25.44 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 101.8%		
d5-EtFOSA	10.859	531.0 -> 169.0	16594	2.56 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.3%		
Target Compounds						QValue
4:2FTS	5.447	327.0 -> 307.0	51623	19.63 µg/L		95
		327.0 -> 81.0	23519			
6:2FTS	6.922	427.0 -> 407.0	73649	20.38 µg/L		97
		427.0 -> 81.0	25438			
8:2FTS	7.927	527.0 -> 507.0	80959	20.16 µg/L		98
		527.0 -> 81.0	24491			
EtFOSAA	8.371	584.0 -> 419.0	24905	4.73 µg/L	m	95
		584.0 -> 483.0	15574			
FOSA	9.337	498.0 -> 78.0	35396	5.19 µg/L	m	100
		498.0 -> 478.0	1963			
MeFOSAA	8.162	570.0 -> 419.0	33679	5.23 µg/L	m	99
		570.0 -> 512.0	12312			
PFBA	3.254	213.0 -> 169.0	106951	20.23 µg/L		100
PFBS	5.713	299.0 -> 80.0	37553	4.20 µg/L		96
		299.0 -> 99.0	15430			
PFDA	8.140	513.0 -> 469.0	110828	5.09 µg/L		99
		513.0 -> 219.0	17673			
PFDoDA	9.027	613.0 -> 569.0	163521	5.06 µg/L		100
		613.0 -> 319.0	18677			
PFDS	9.193	599.0 -> 80.0	18911	5.04 µg/L		92

Perfluorinated Compounds by LC/MS/MS

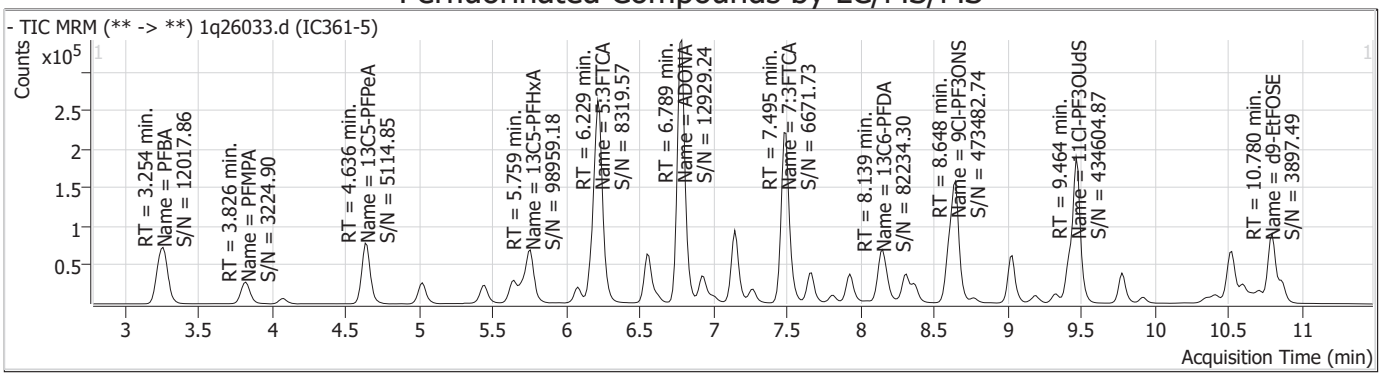
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	8546				
PFHpA	6.554	363.0 -> 319.0	151940	4.99	µg/L		95
		363.0 -> 169.0	26726				
PFHpS	7.822	449.0 -> 80.0	23061	4.52	µg/L		96
		449.0 -> 99.0	12288				
PFHxA	5.761	313.0 -> 269.0	117795	4.80	µg/L		99
		313.0 -> 119.0	3682				
PFHxS	7.276	399.0 -> 80.0	25983	4.52	µg/L	m	100
		399.0 -> 99.0	13301				
PFNA	7.669	463.0 -> 419.0	80640	5.08	µg/L	m	94
		463.0 -> 219.0	20896				
PFNS	8.772	549.0 -> 80.0	13567	4.96	µg/L		100
		549.0 -> 99.0	7645				
PFOA	7.149	413.0 -> 369.0	150800	4.89	µg/L	m	99
		413.0 -> 169.0	32167				
PFOS	8.318	499.0 -> 80.0	28688	4.50	µg/L	m	95
		499.0 -> 99.0	13946				
PFPeA	4.638	263.0 -> 219.0	201510	9.92	µg/L		100
PFPeS	6.630	349.0 -> 80.0	17804	4.45	µg/L		97
		349.0 -> 99.0	7894				
PFTeDA	9.773	713.0 -> 669.0	101547	4.94	µg/L		97
		713.0 -> 219.0	7619				
PFTrDA	9.412	663.0 -> 619.0	158846	5.05	µg/L		100
		663.0 -> 369.0	11114				
PFUnDA	8.596	563.0 -> 519.0	155818	5.22	µg/L		97
		563.0 -> 269.0	23857				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	500277	19.96	µg/L		100
		633.0 -> 453.0	149252				
9Cl-PF3ONS	8.648	531.0 -> 351.0	406018	19.76	µg/L		98
		533.0 -> 353.0	121906				
ADONA	6.789	377.0 -> 251.0	992371	19.39	µg/L		100
		377.0 -> 85.0	271789				
HFPO-DA	6.088	285.0 -> 169.0	45741	20.32	µg/L		96
		285.0 -> 185.0	3660				
3:3FTCA	4.072	241.0 -> 177.0	25997	23.51	µg/L		98
		241.0 -> 117.0	1988				
5:3FTCA	6.229	341.0 -> 237.0	544094	125.25	µg/L		99
		341.0 -> 217.0	378625				
7:3FTCA	7.495	441.0 -> 337.0	600744	122.47	µg/L		98
		441.0 -> 317.0	264610				
EtFOSA	10.872	526.0 -> 219.0	33619	4.85	µg/L	m	94
		526.0 -> 169.0	46661				
EtFOSE	10.806	630.0 -> 59.0	278898	50.58	µg/L		100
MeFOSA	10.603	512.0 -> 169.0	41020	5.15	µg/L	m	99
		512.0 -> 219.0	27950				
MeFOSE	10.523	616.0 -> 59.0	217287	50.27	µg/L	m	100
PFDoDS	9.924	699.0 -> 80.0	17257	5.00	µg/L		99
		699.0 -> 99.0	9934				
NFDHA	5.651	295.0 -> 201.0	15677	9.59	µg/L		91
		201.0 -> 85.0	89568				
		295.0 -> 85.0	4675				
PFMBA	5.027	279.0 -> 85.0	108886	9.86	µg/L		100
PFMPA	3.826	229.0 -> 85.0	124115	9.98	µg/L		100
PFEESA	6.182	315.0 -> 135.0	208428	8.93	µg/L		100
		315.0 -> 69.0	18257				

 # = Qualifier out of range, m = manually integrated, + = Area summed

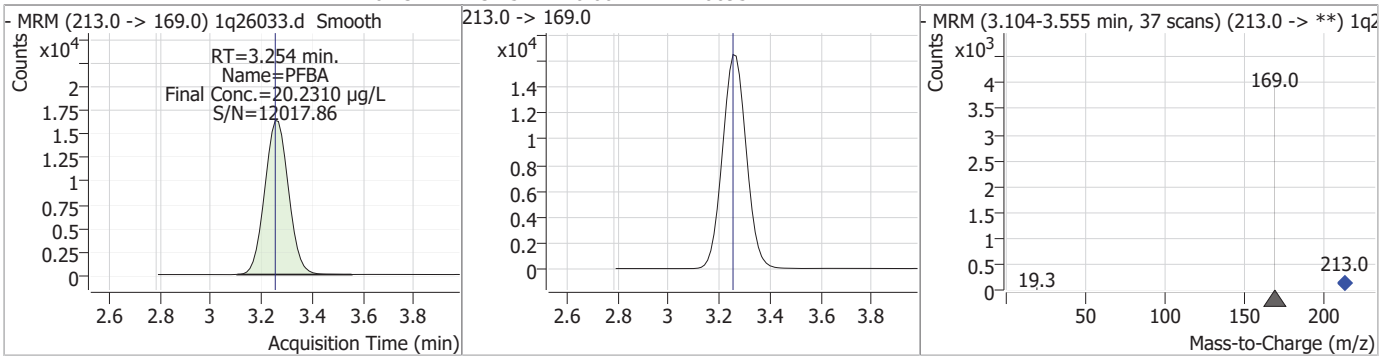
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

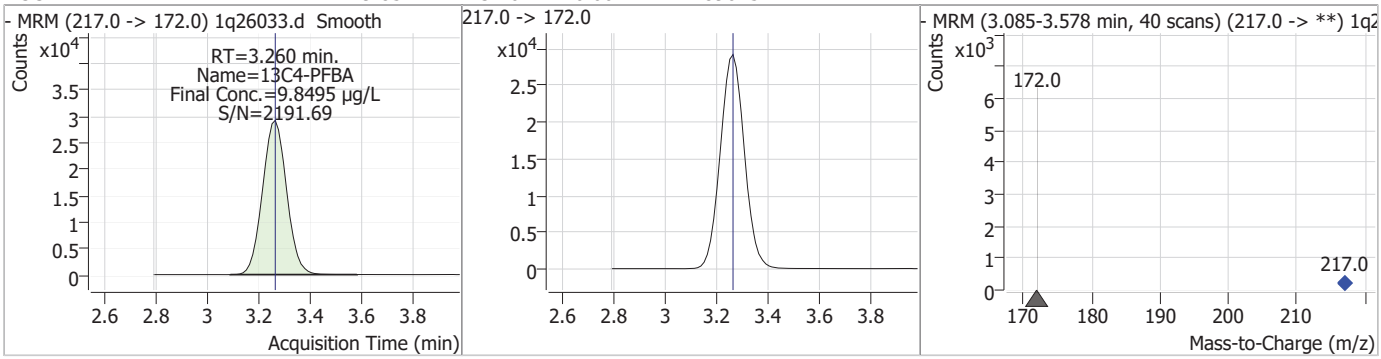
Perfluorinated Compounds by LC/MS/MS



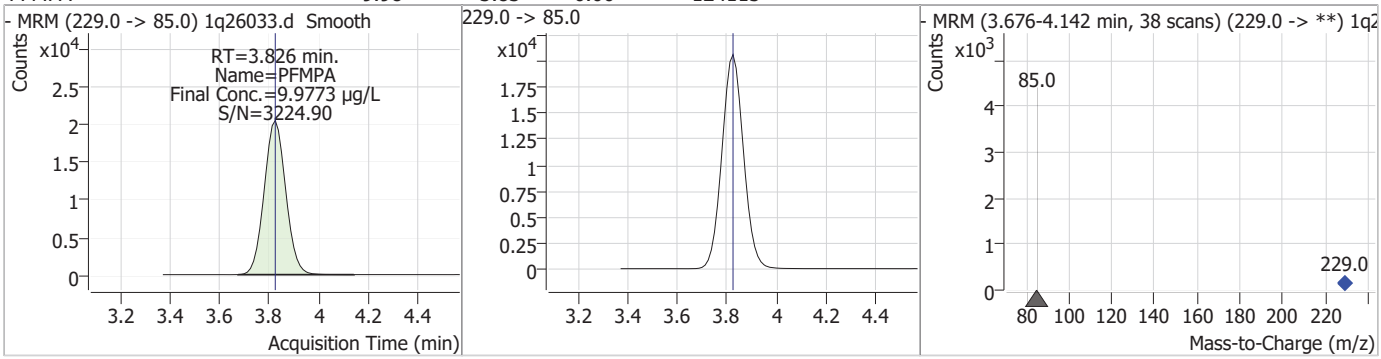
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	20.23	3.25	0.00	106951				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.85	3.26	0.00	189045				

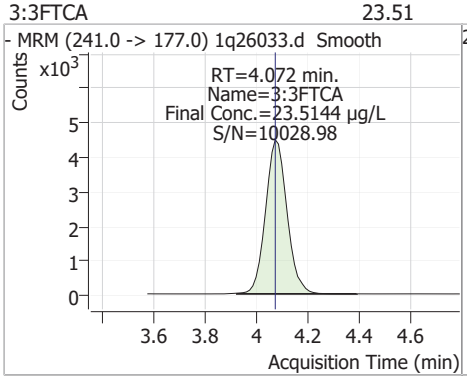


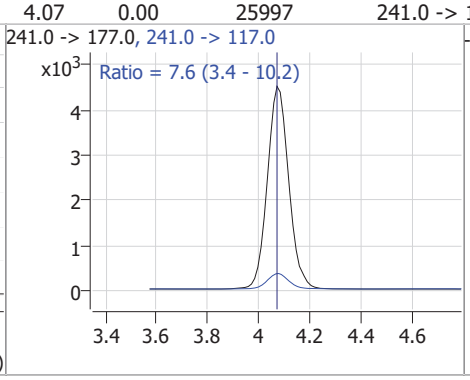
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	9.98	3.83	0.00	124115				

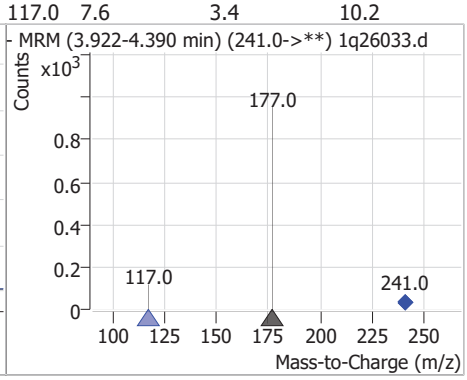


Perfluorinated Compounds by LC/MS/MS

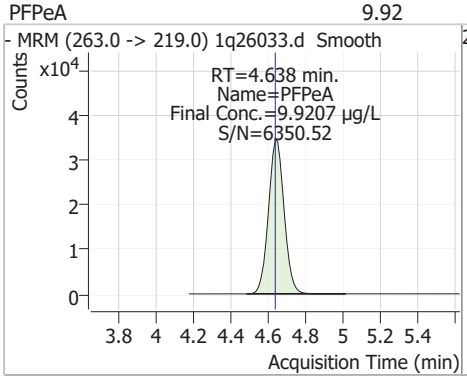
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	23.51	4.07	0.00	25997	241.0 -> 117.0	7.6	3.4	10.2

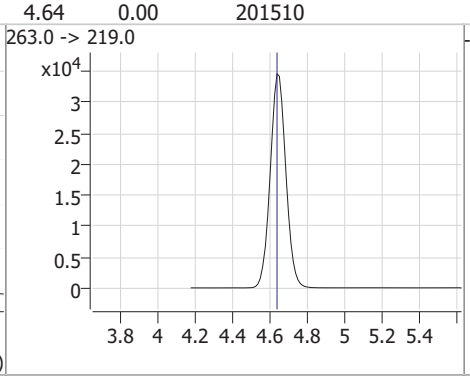


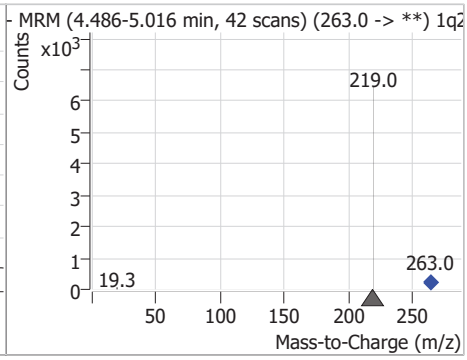




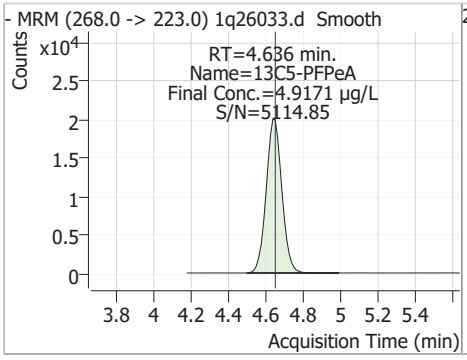
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	9.92	4.64	0.00	201510				

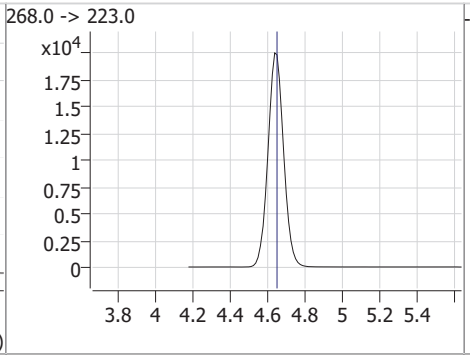


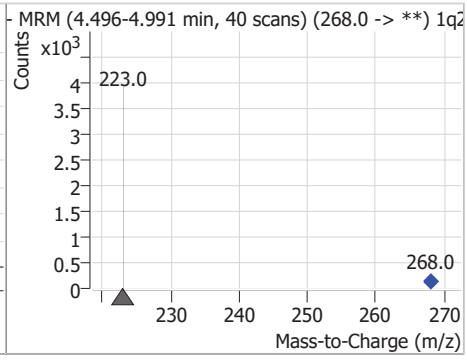




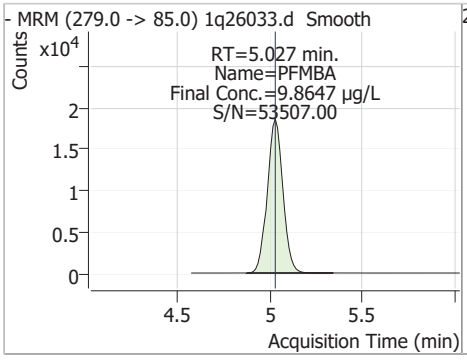
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.92	4.64	-0.01	116641				

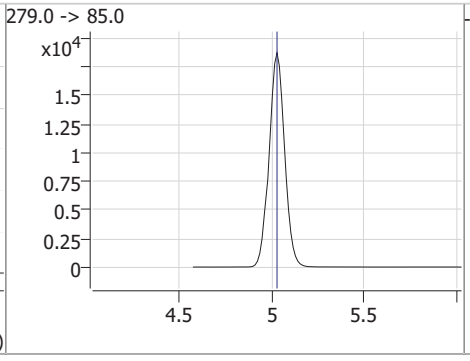


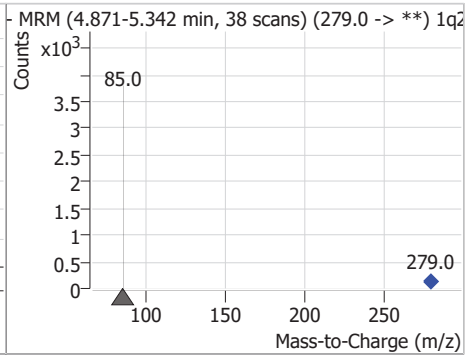




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	9.86	5.03	0.00	108886				







7.6.9

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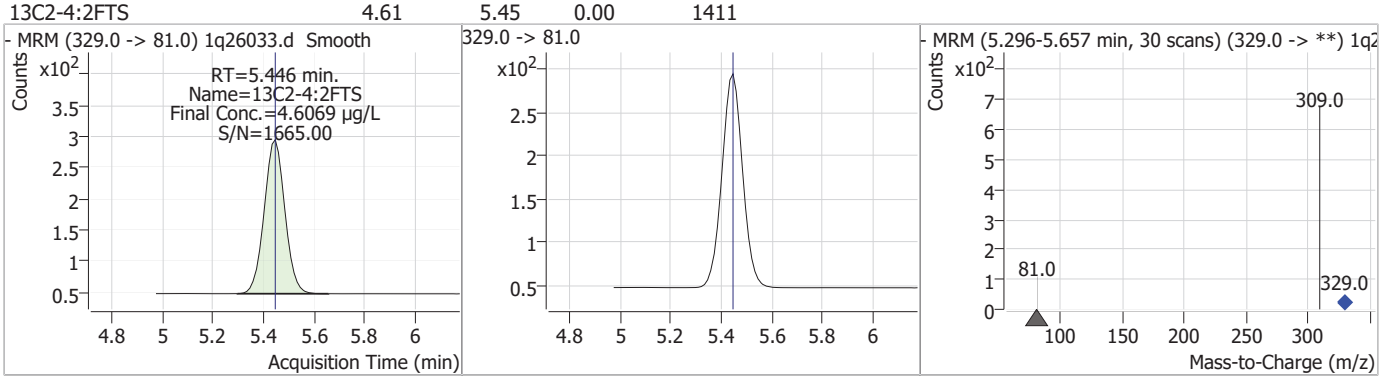
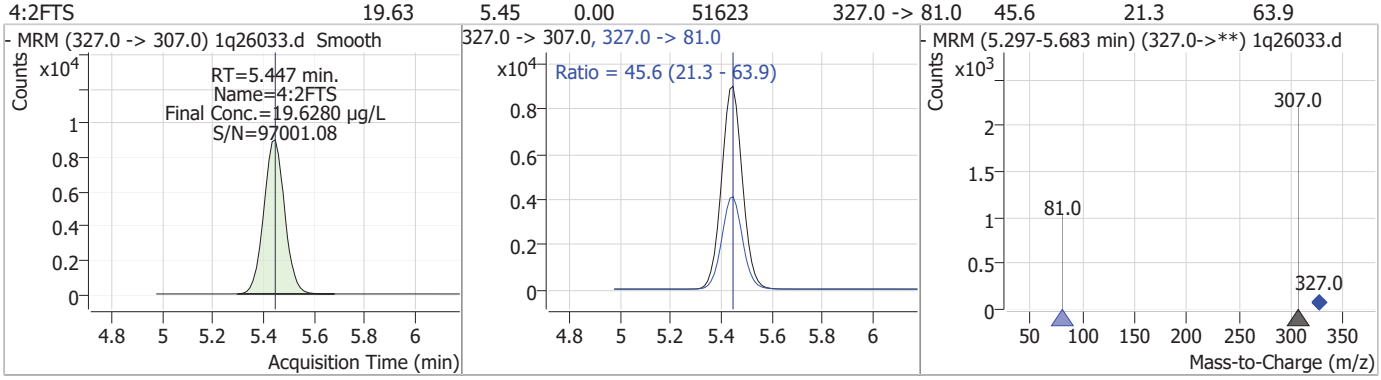
Perfluorinated Compounds by LC/MS/MS

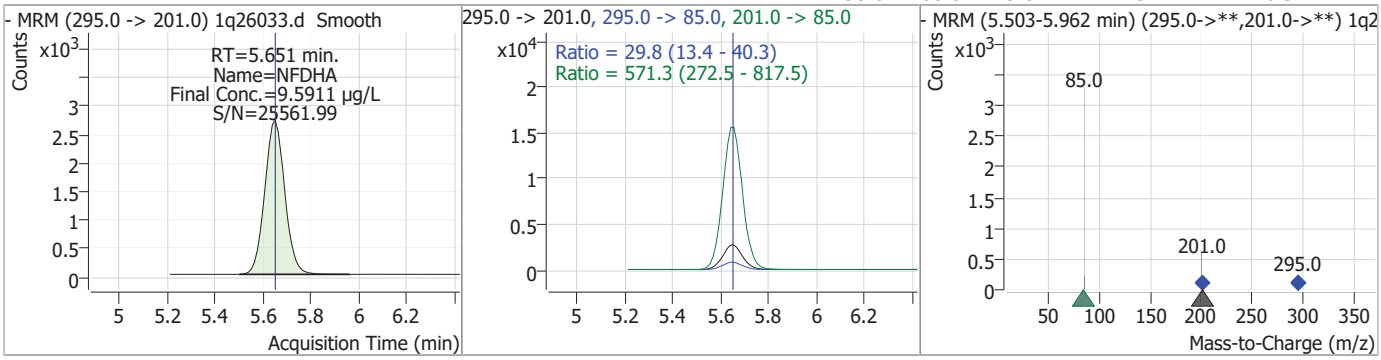
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.61	5.45	0.00	1411				



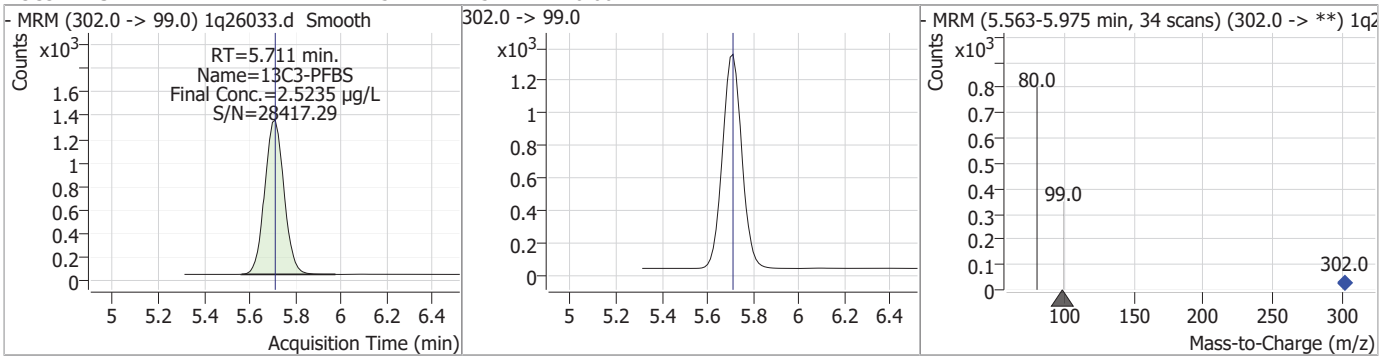
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	19.63	5.45	0.00	51623	327.0 -> 81.0	45.6	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	9.59	5.65	0.00	15677	201.0 -> 85.0	571.3	272.5	817.5
					295.0 -> 85.0	29.8	13.4	40.3

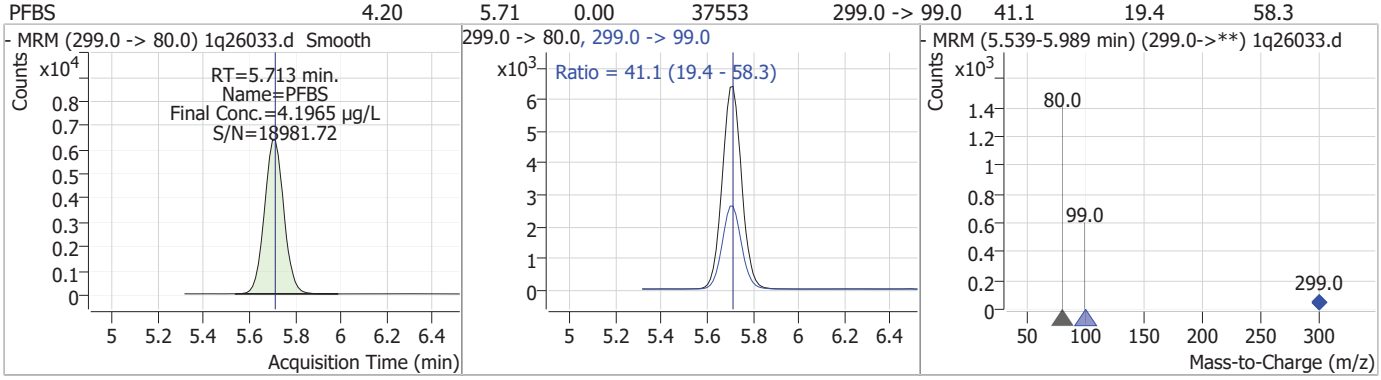


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.52	5.71	0.00	7724				

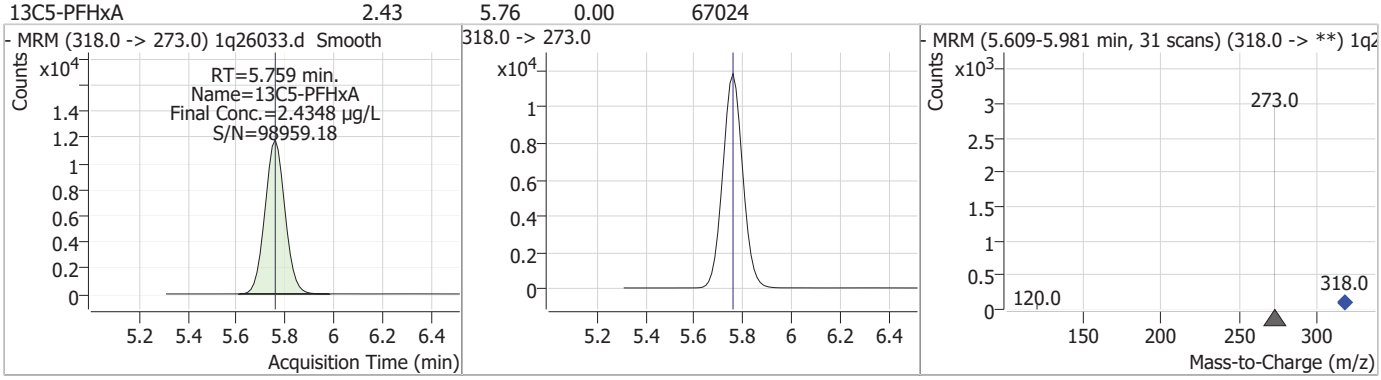


Perfluorinated Compounds by LC/MS/MS

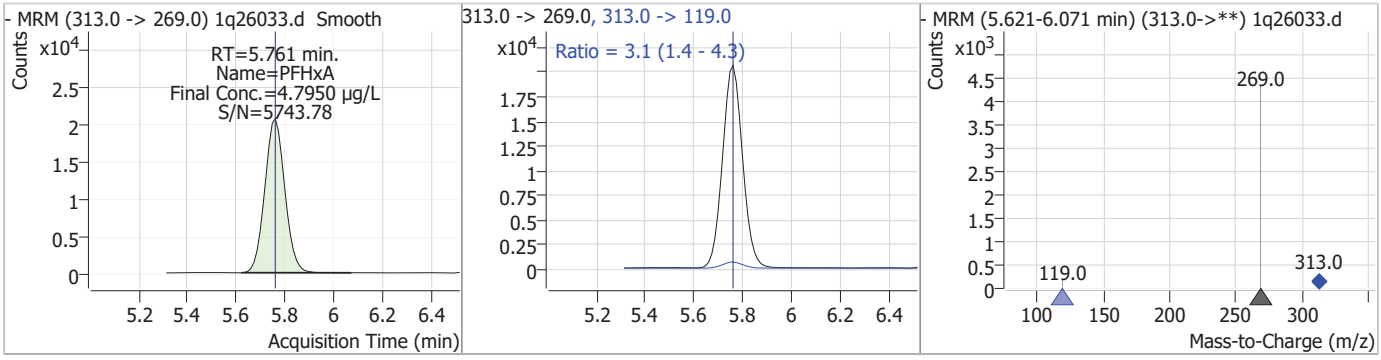
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.20	5.71	0.00	37553	299.0 -> 99.0	41.1	19.4	58.3



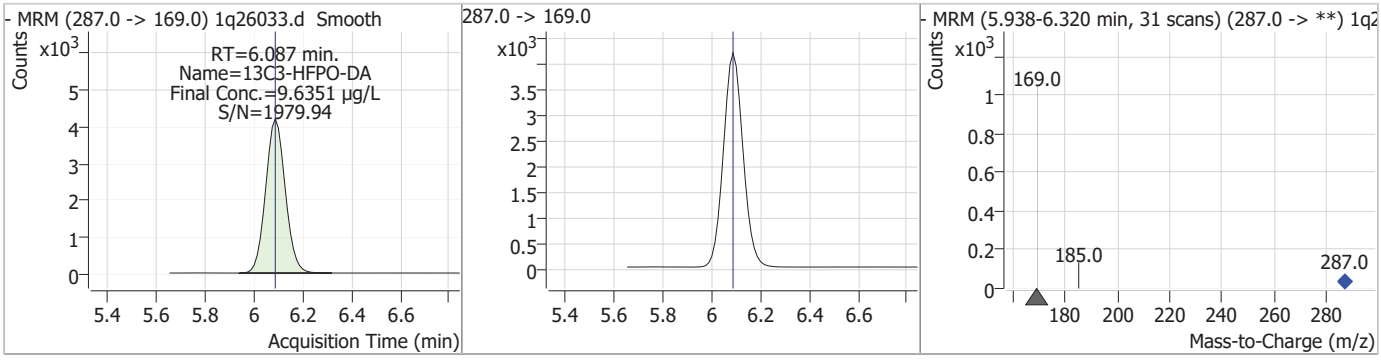
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.43	5.76	0.00	67024				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	4.80	5.76	0.00	117795	313.0 -> 119.0	3.1	1.4	4.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.64	6.09	0.00	23248				



7.6.9

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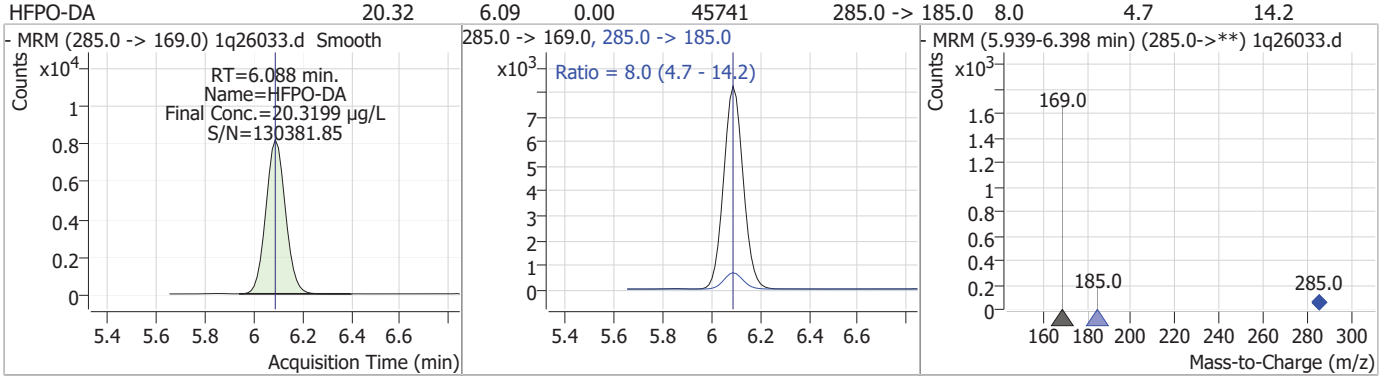
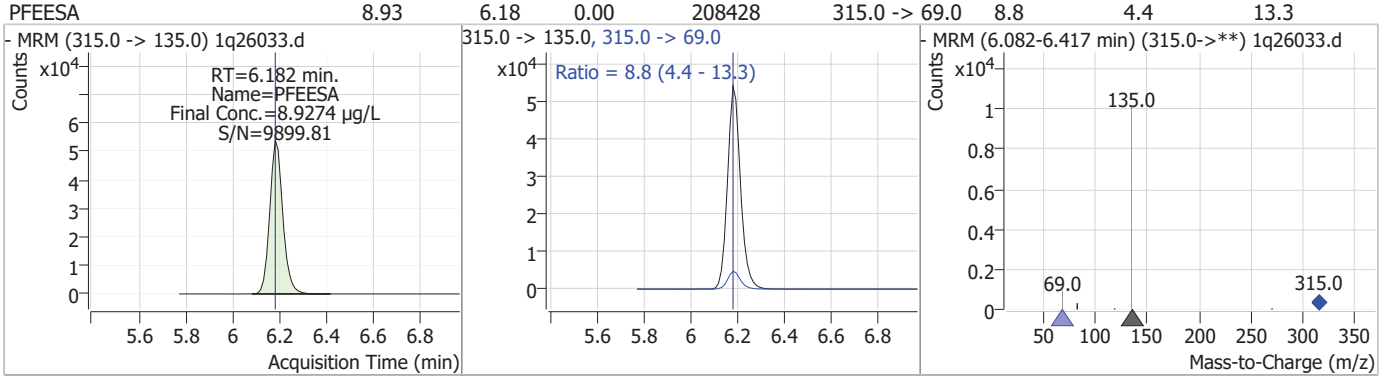
Perfluorinated Compounds by LC/MS/MS

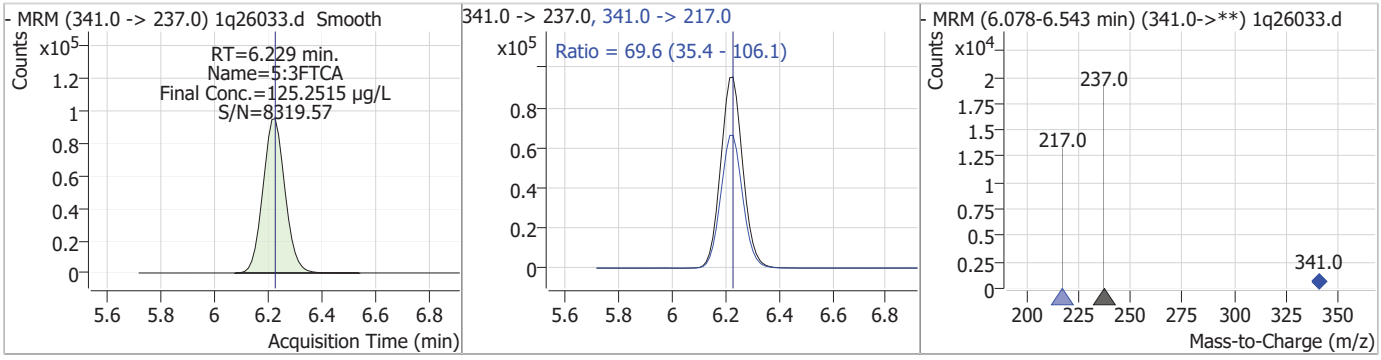
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	20.32	6.09	0.00	45741	285.0 -> 185.0	8.0	4.7	14.2



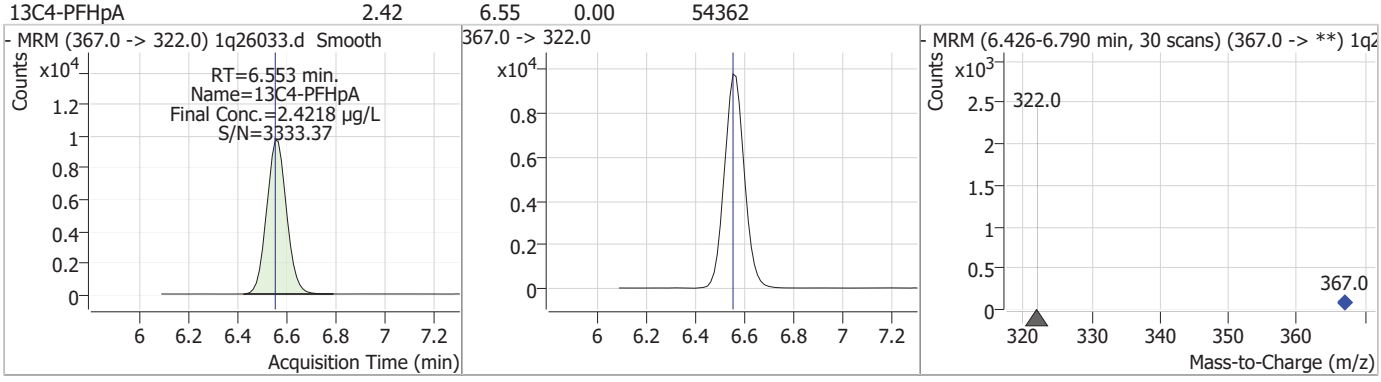
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	8.93	6.18	0.00	208428	315.0 -> 69.0	8.8	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	125.25	6.23	0.00	544094	341.0 -> 217.0	69.6	35.4	106.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.42	6.55	0.00	54362				



7.6.9

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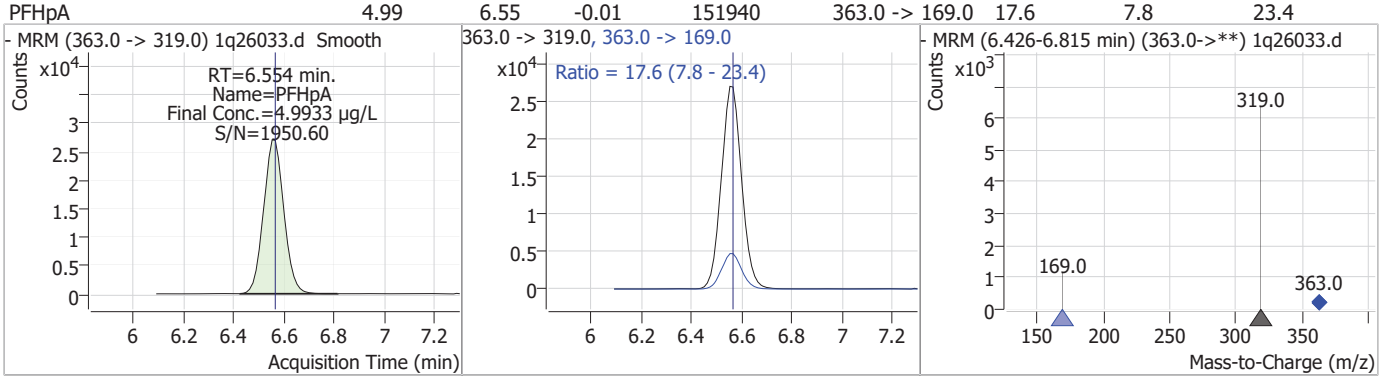
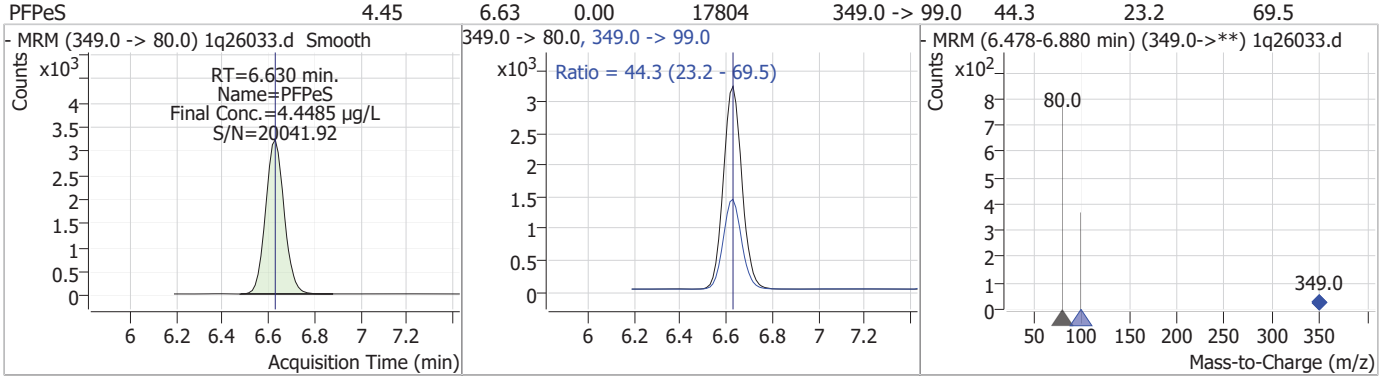
Perfluorinated Compounds by LC/MS/MS

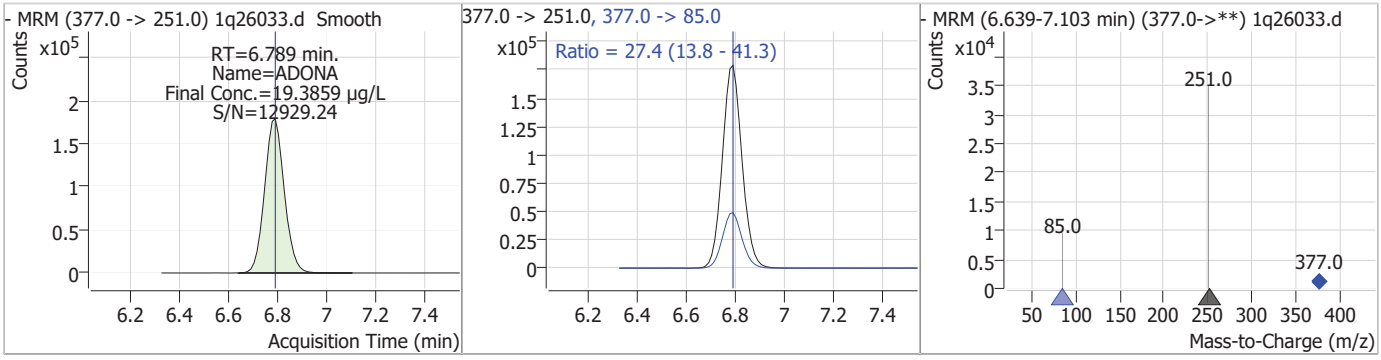
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	4.99	6.55	-0.01	151940	363.0 -> 169.0	17.6	7.8	23.4



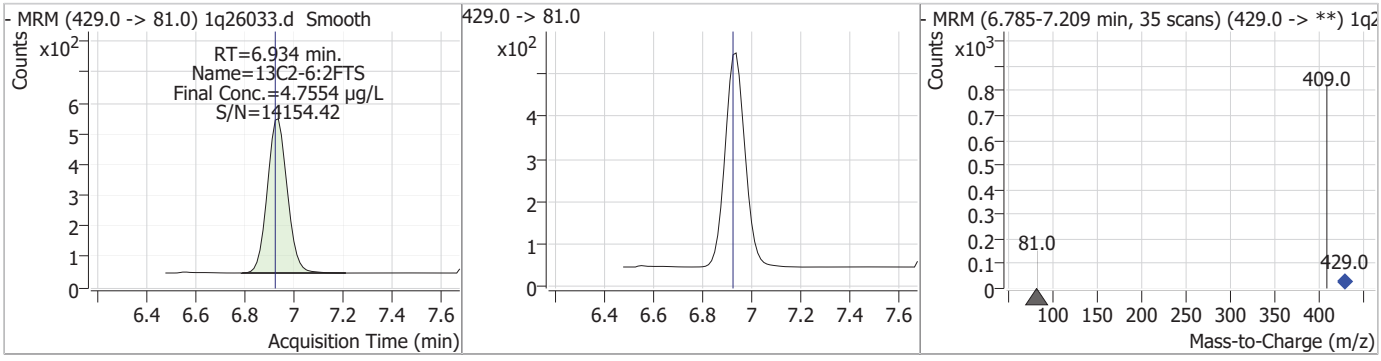
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	4.45	6.63	0.00	17804	349.0 -> 99.0	44.3	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	19.39	6.79	0.00	992371	377.0 -> 85.0	27.4	13.8	41.3

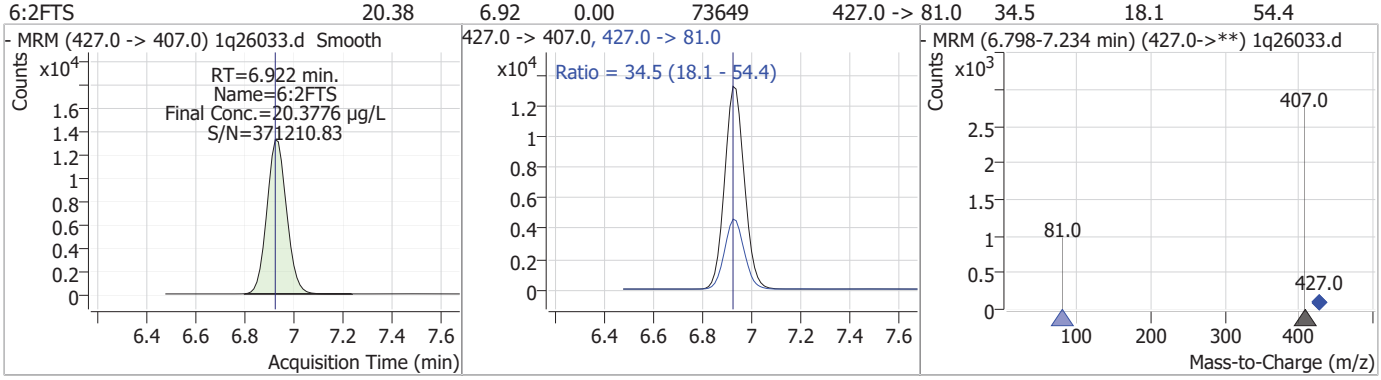


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.76	6.93	0.01	2823				

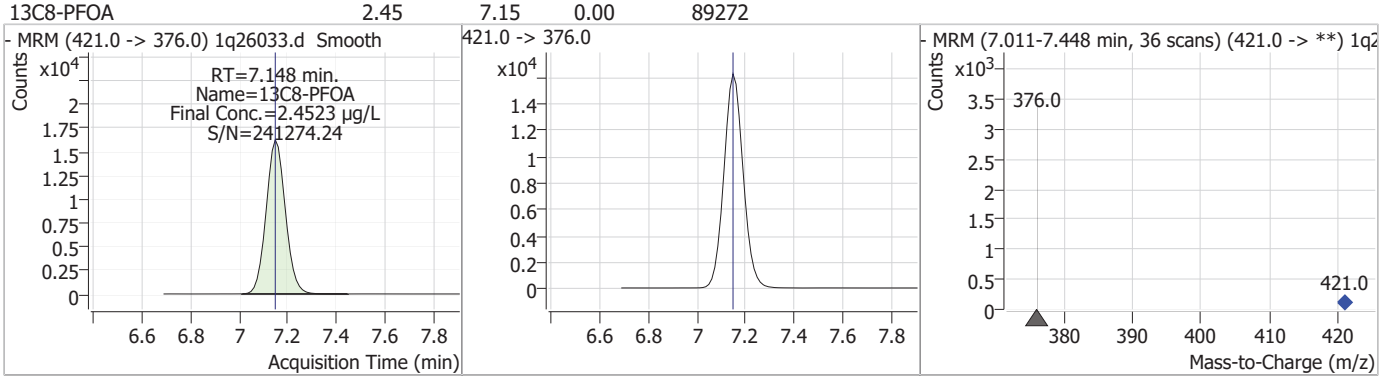


Perfluorinated Compounds by LC/MS/MS

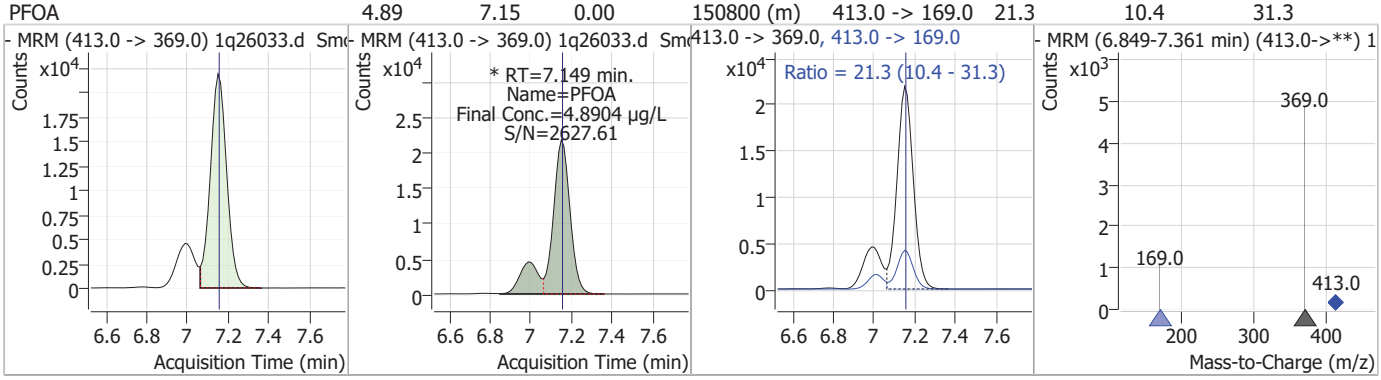
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	20.38	6.92	0.00	73649	427.0 -> 81.0	34.5	18.1	54.4



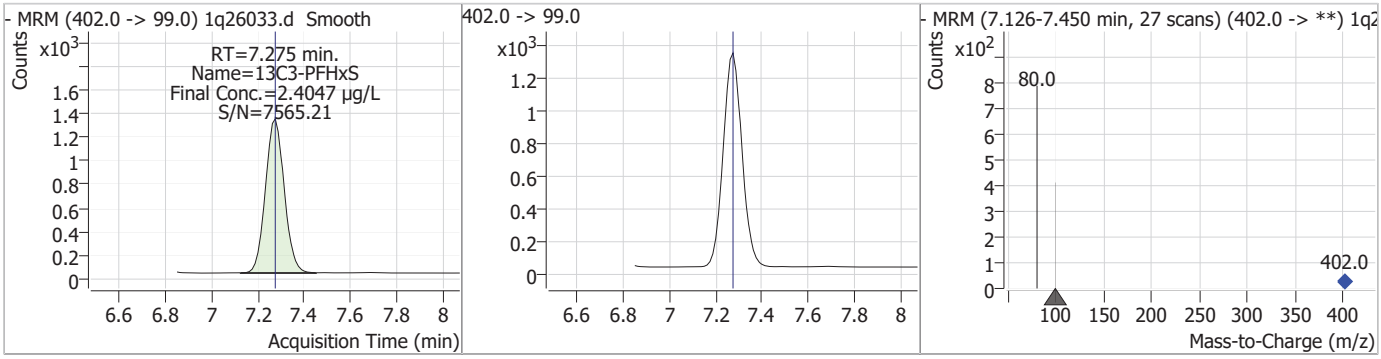
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.45	7.15	0.00	89272				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	4.89	7.15	0.00	150800 (m)	413.0 -> 169.0	21.3	10.4	31.3

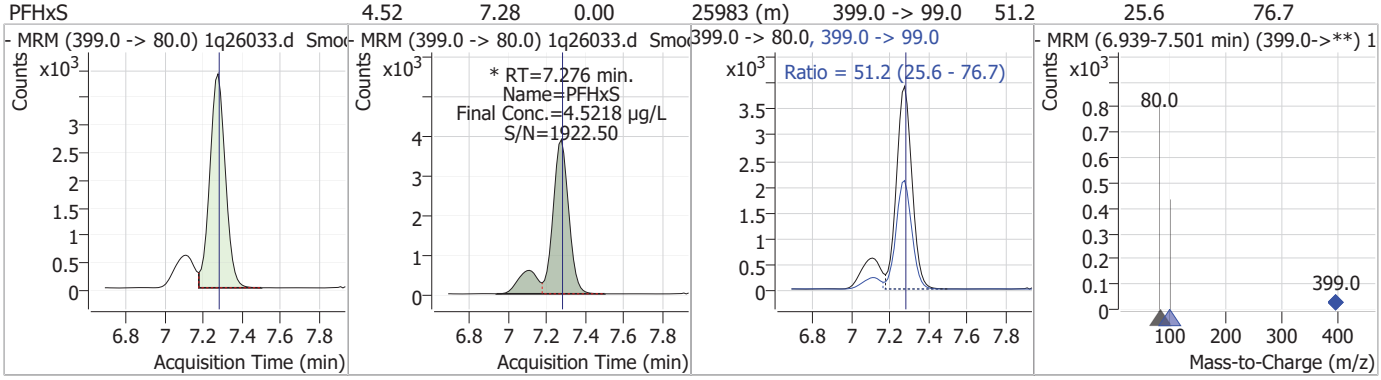


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.40	7.27	0.00	7376				

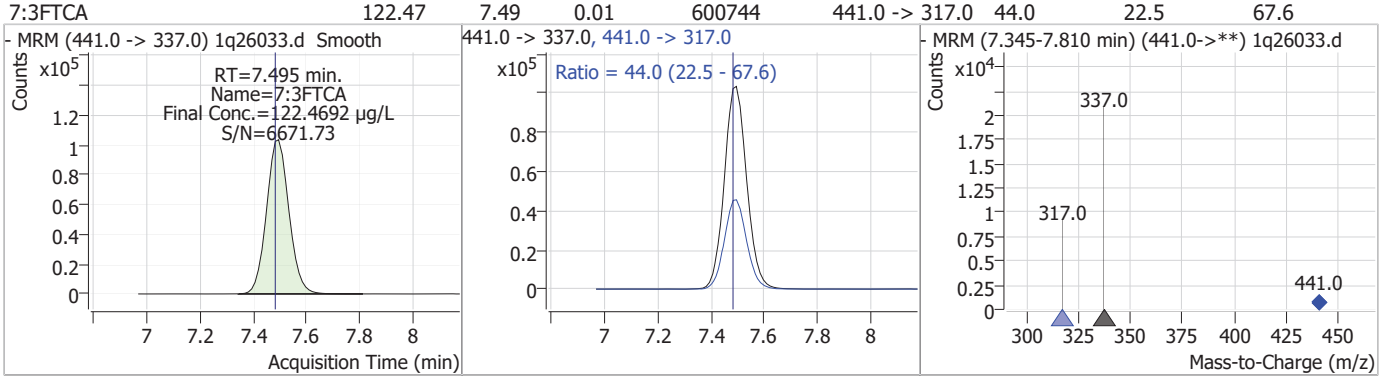


Perfluorinated Compounds by LC/MS/MS

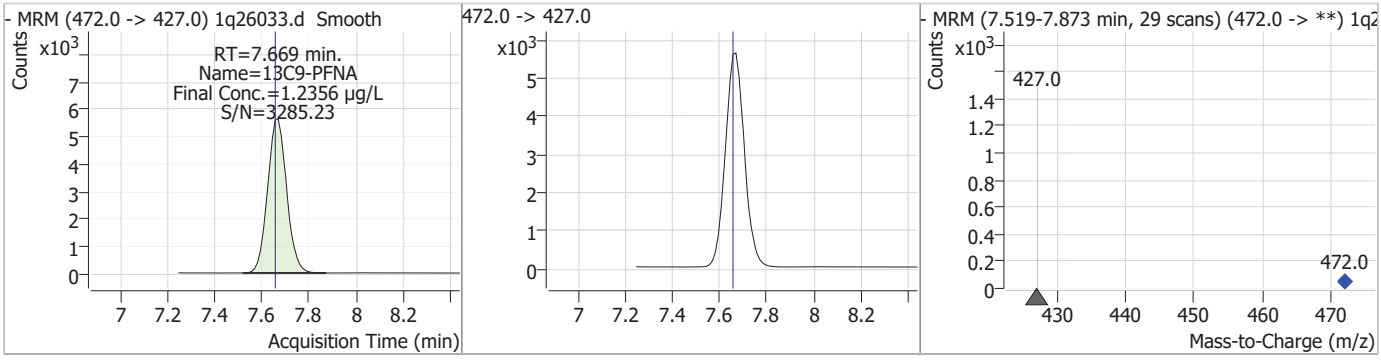
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	4.52	7.28	0.00	25983 (m)	399.0 -> 99.0	51.2	25.6	76.7



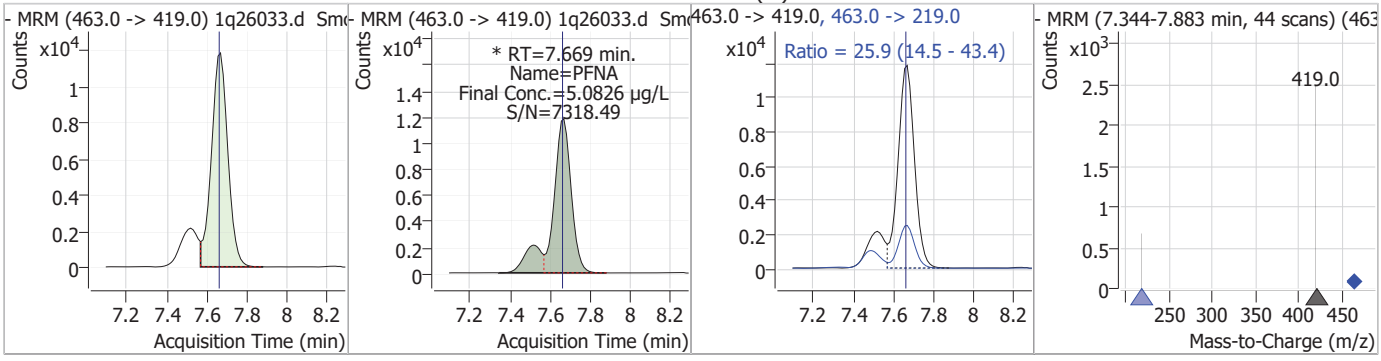
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	122.47	7.49	0.01	600744	441.0 -> 317.0	44.0	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.24	7.67	0.01	31633				

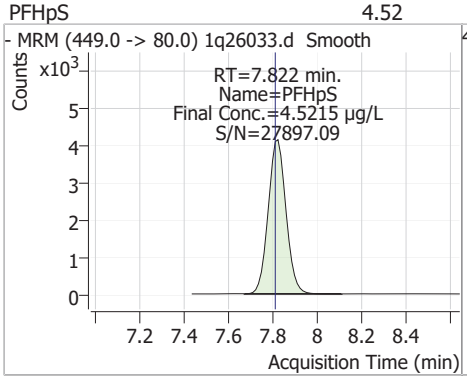


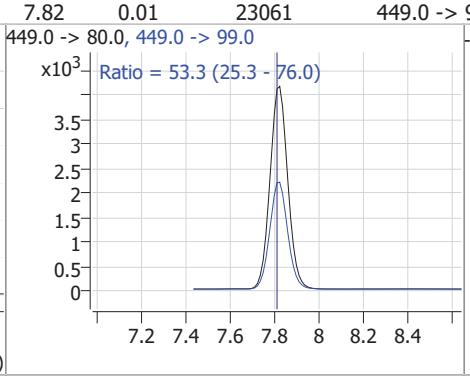
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	5.08	7.67	0.01	80640 (m)	463.0 -> 219.0	25.9	14.5	43.4

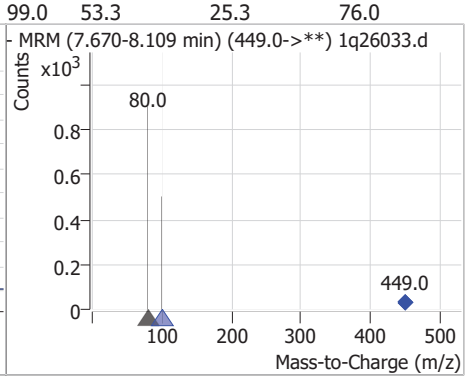


Perfluorinated Compounds by LC/MS/MS

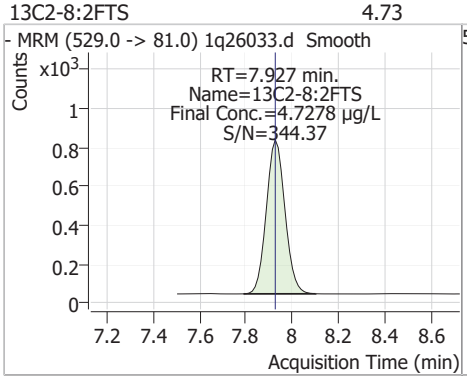
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	4.52	7.82	0.01	23061	449.0 -> 99.0	53.3	25.3	76.0

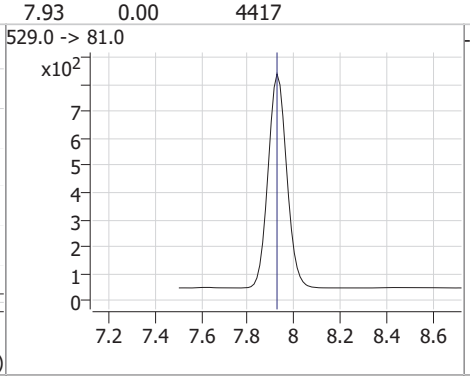


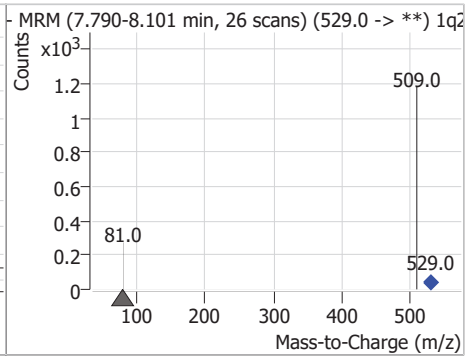




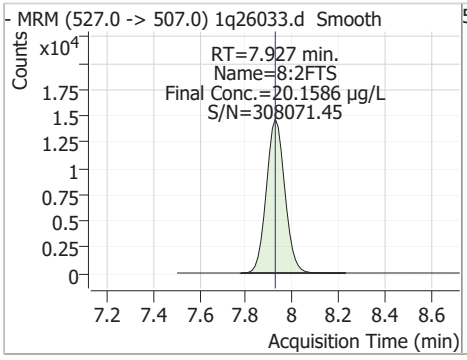
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.73	7.93	0.00	4417				

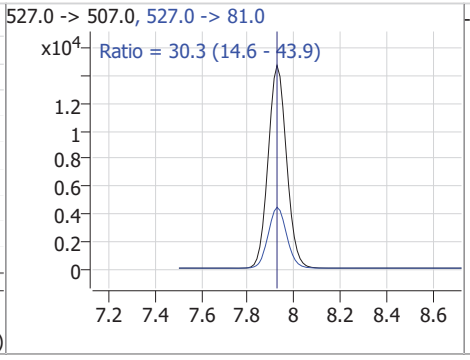


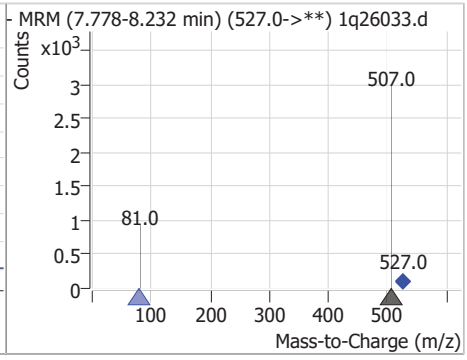




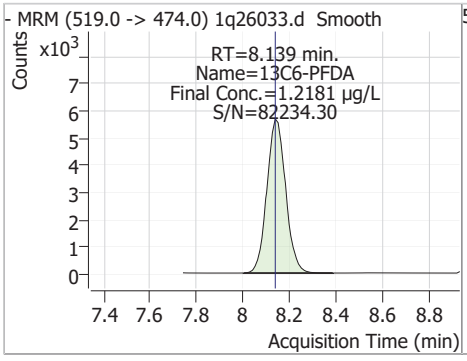
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	20.16	7.93	0.00	80959	527.0 -> 81.0	30.3	14.6	43.9

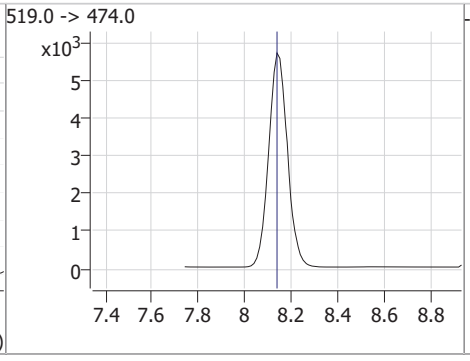


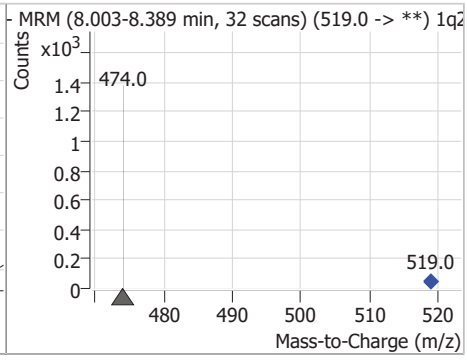




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.22	8.14	0.00	31716				

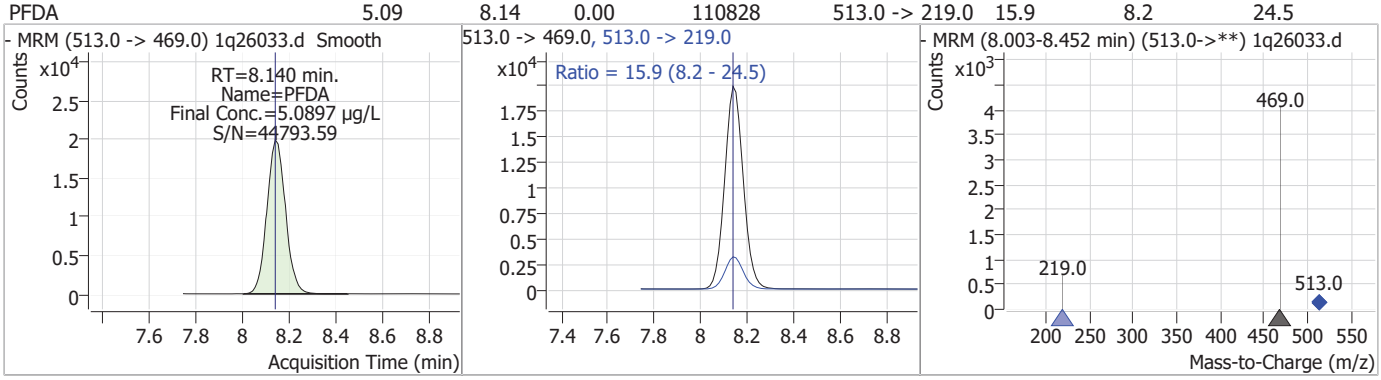




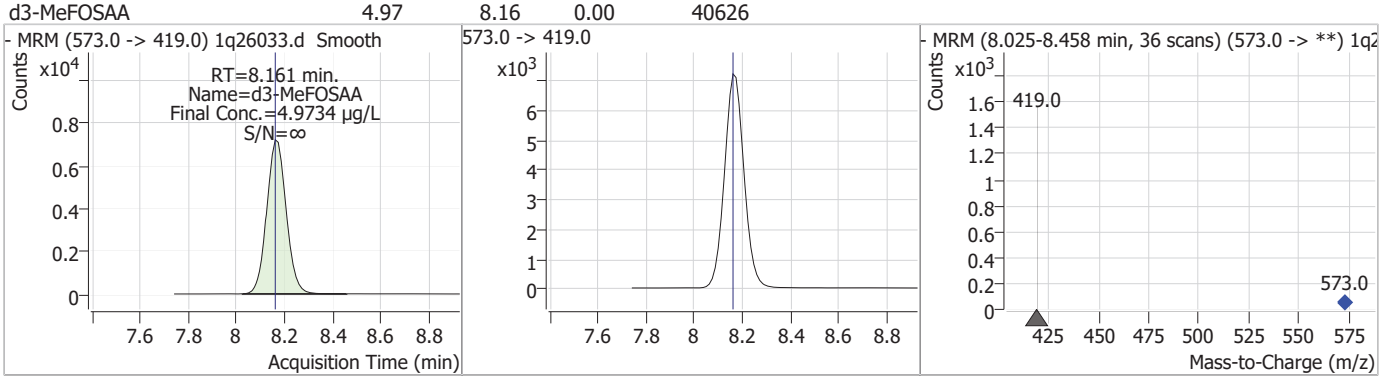


Perfluorinated Compounds by LC/MS/MS

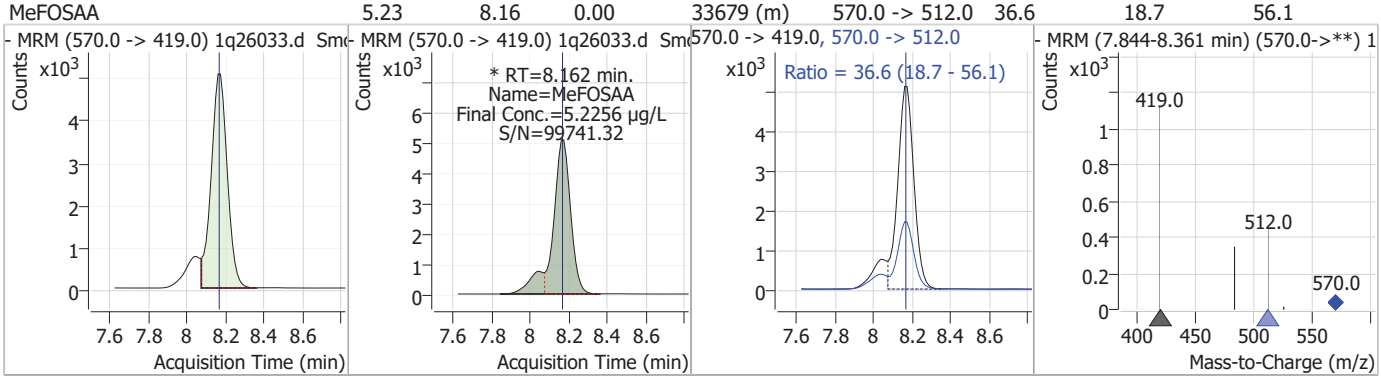
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	5.09	8.14	0.00	110828	513.0 -> 219.0	15.9	8.2	24.5



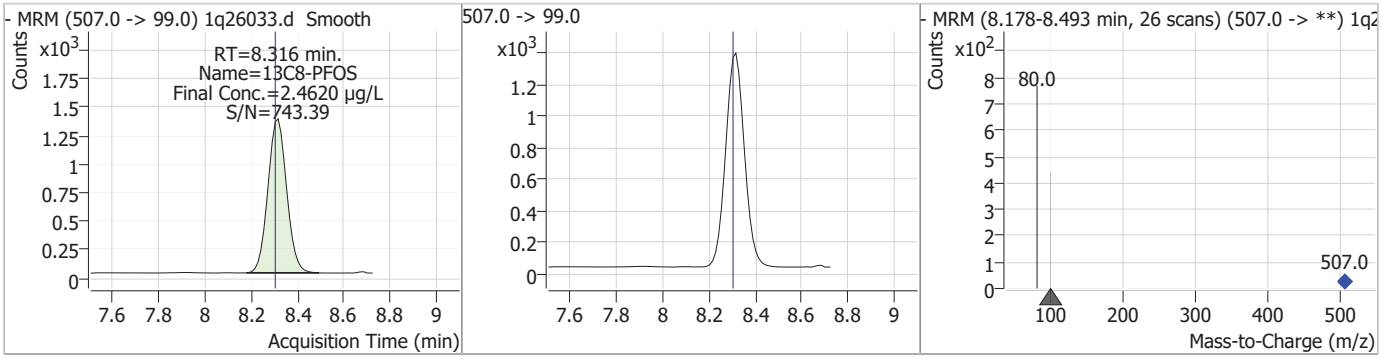
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.97	8.16	0.00	40626				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	5.23	8.16	0.00	33679 (m)	570.0 -> 512.0	36.6	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.46	8.32	0.01	7599				



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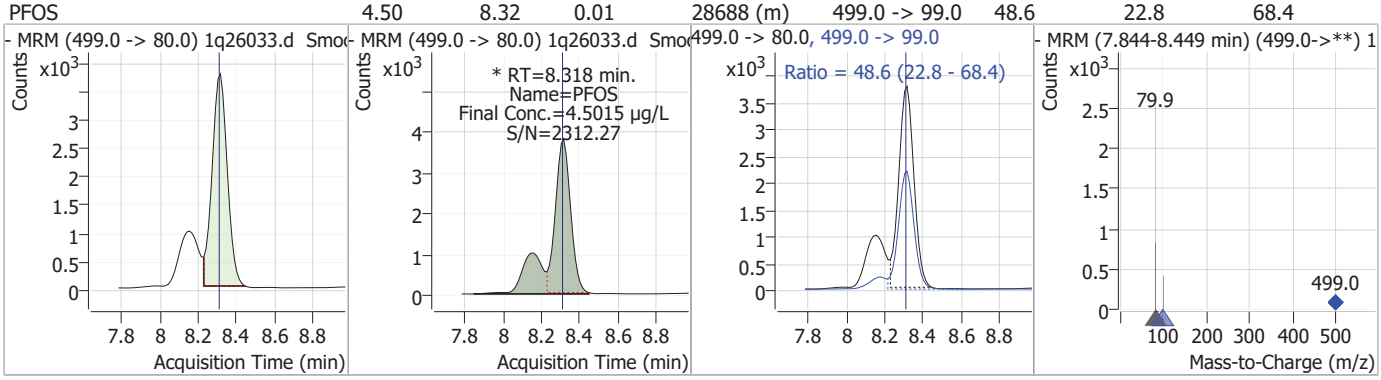
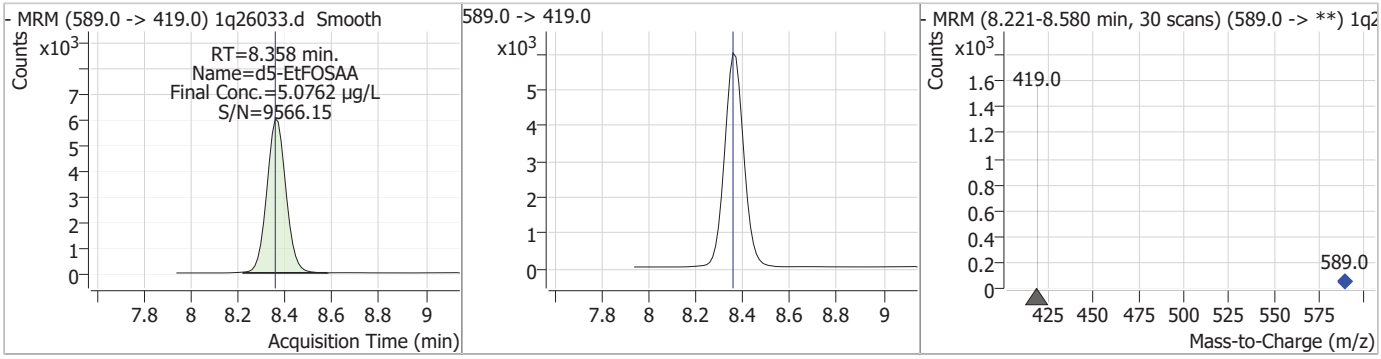
Perfluorinated Compounds by LC/MS/MS

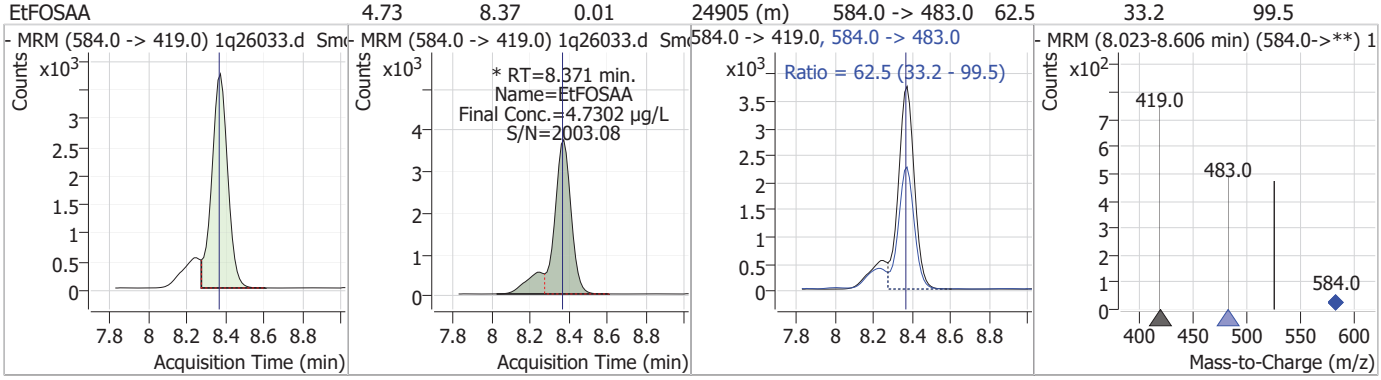
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.50	8.32	0.01	28688 (m)	499.0 -> 99.0	48.6	22.8	68.4



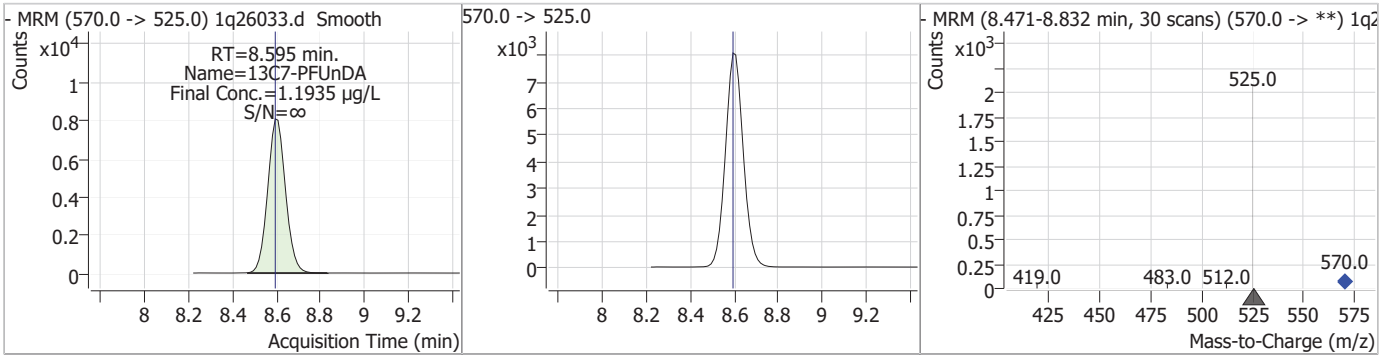
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.08	8.36	0.00	33759				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	4.73	8.37	0.01	24905 (m)	584.0 -> 483.0	62.5	33.2	99.5

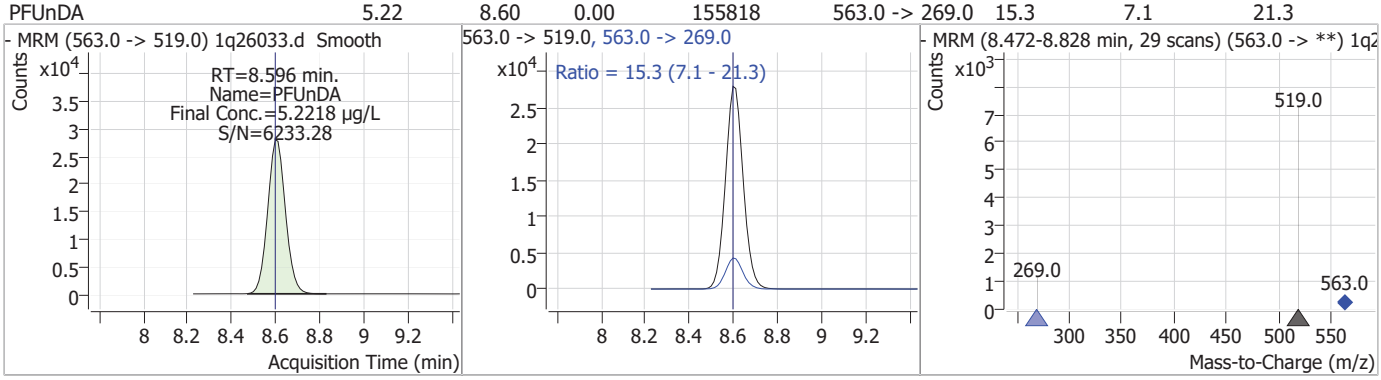


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.19	8.59	0.00	45106				

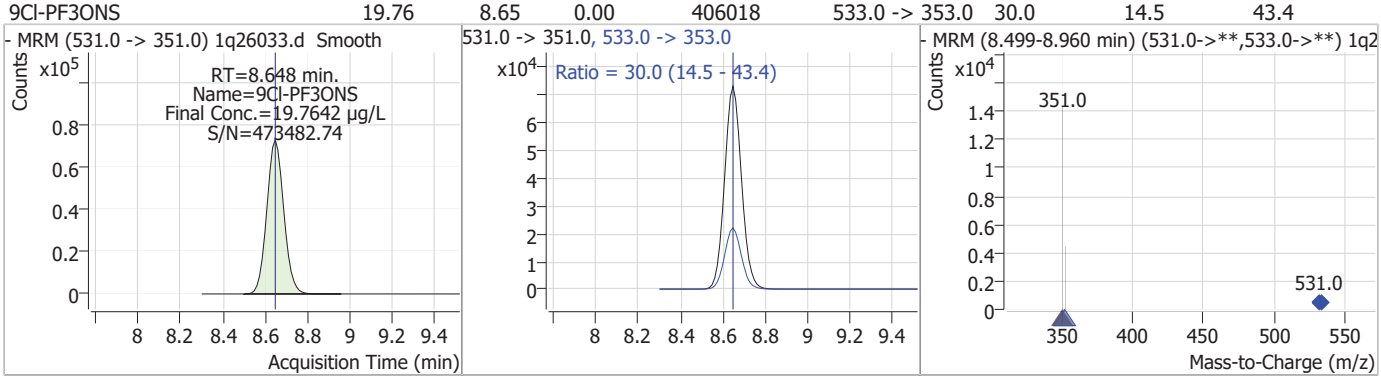


Perfluorinated Compounds by LC/MS/MS

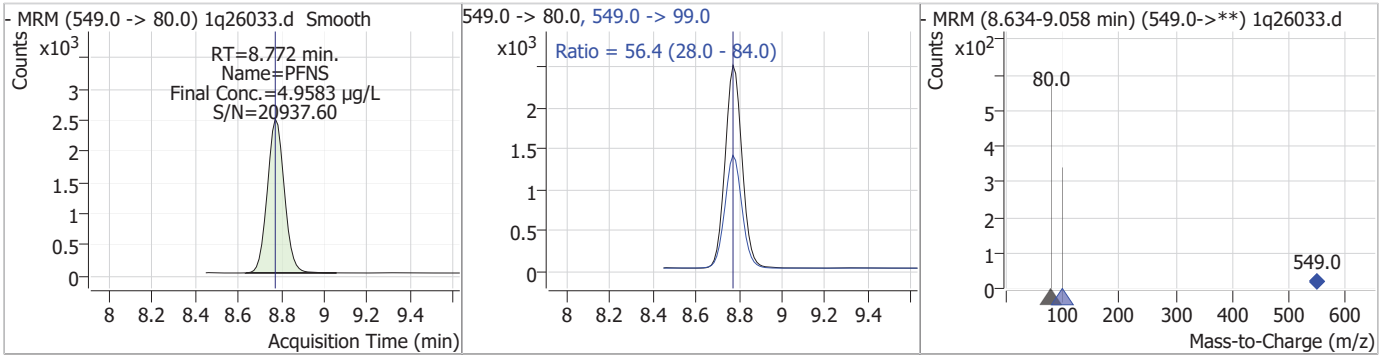
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	5.22	8.60	0.00	155818	563.0 -> 269.0	15.3	7.1	21.3



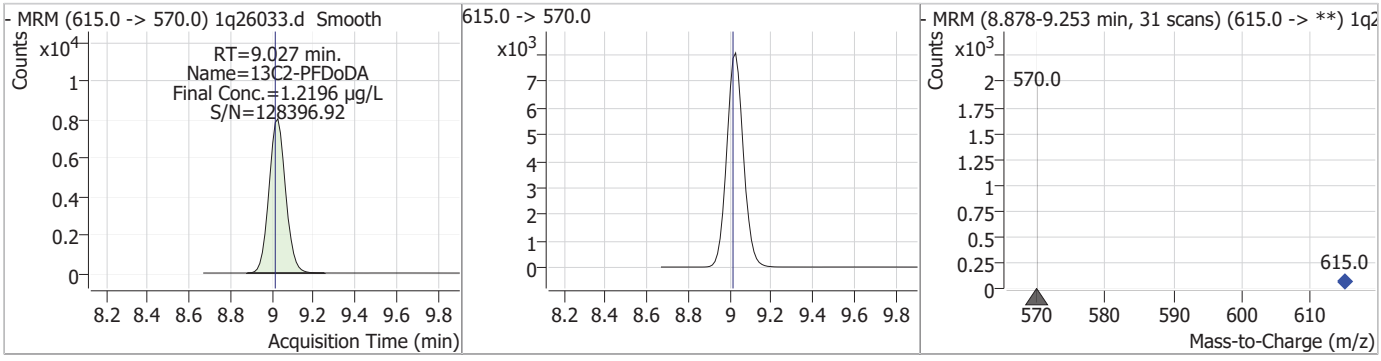
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	19.76	8.65	0.00	406018	533.0 -> 353.0	30.0	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	4.96	8.77	0.00	13567	549.0 -> 99.0	56.4	28.0	84.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.22	9.03	0.01	44472				



7.6.9

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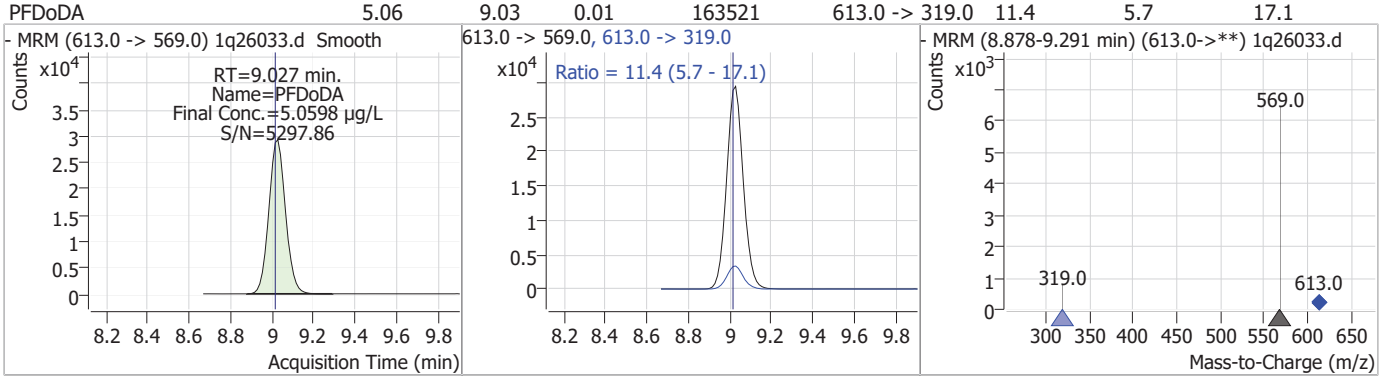
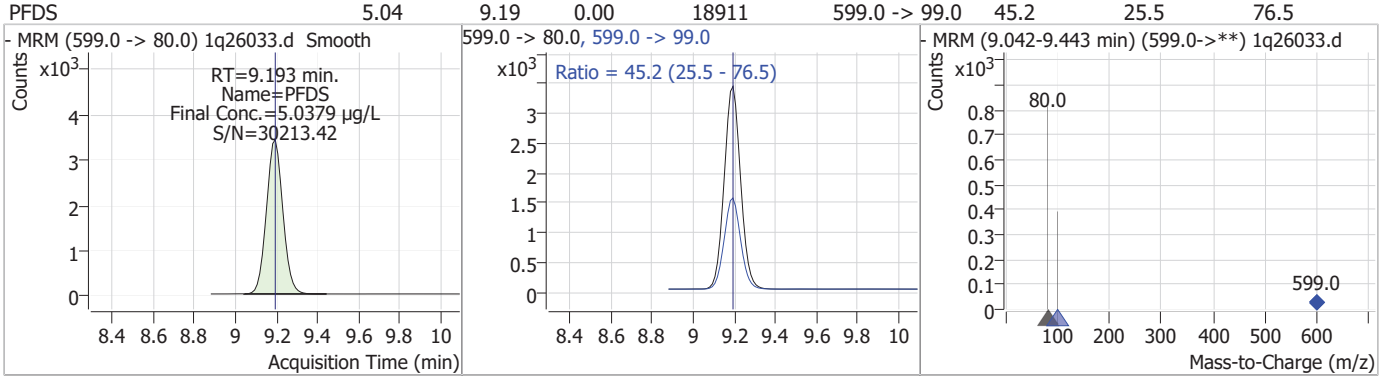
Perfluorinated Compounds by LC/MS/MS

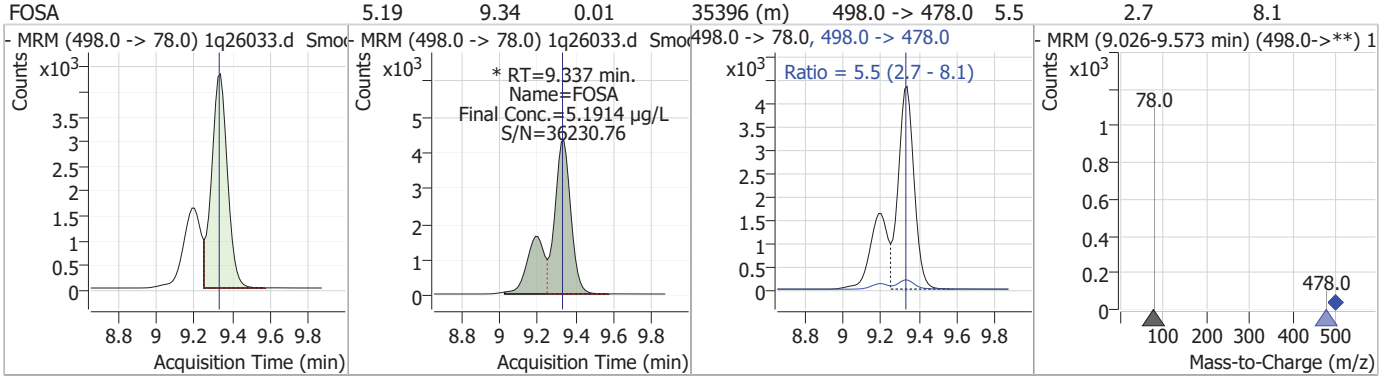
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	5.06	9.03	0.01	163521	613.0 -> 319.0	11.4	5.7	17.1



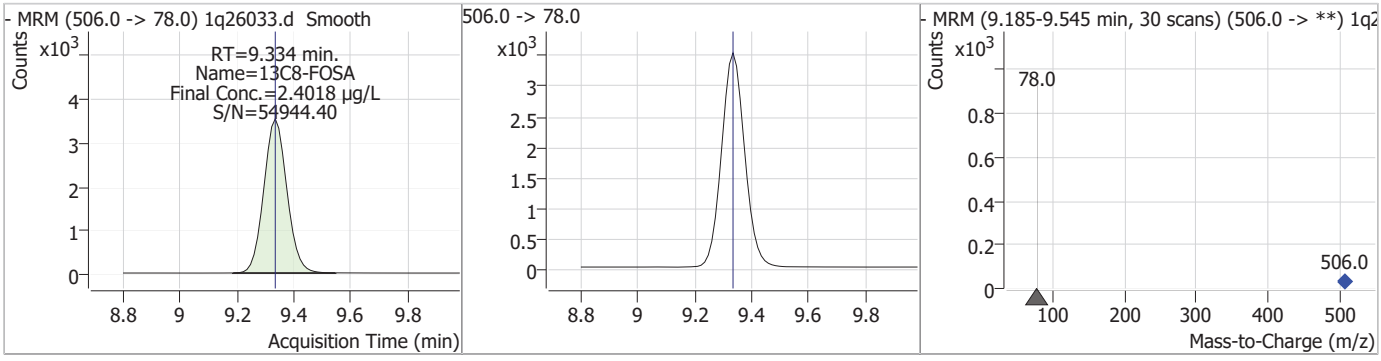
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	5.04	9.19	0.00	18911	599.0 -> 99.0	45.2	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	5.19	9.34	0.01	35396 (m)	498.0 -> 478.0	5.5	2.7	8.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.40	9.33	0.00	19672				



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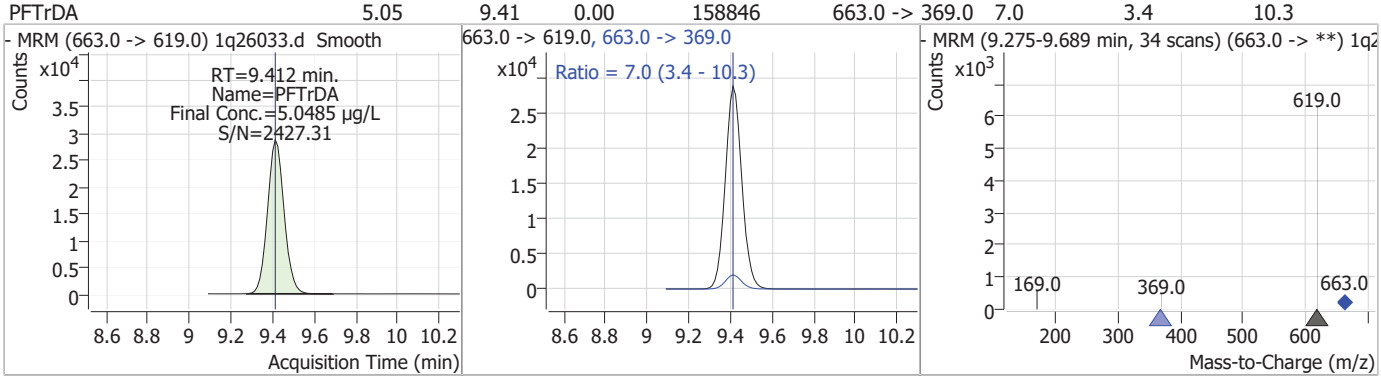
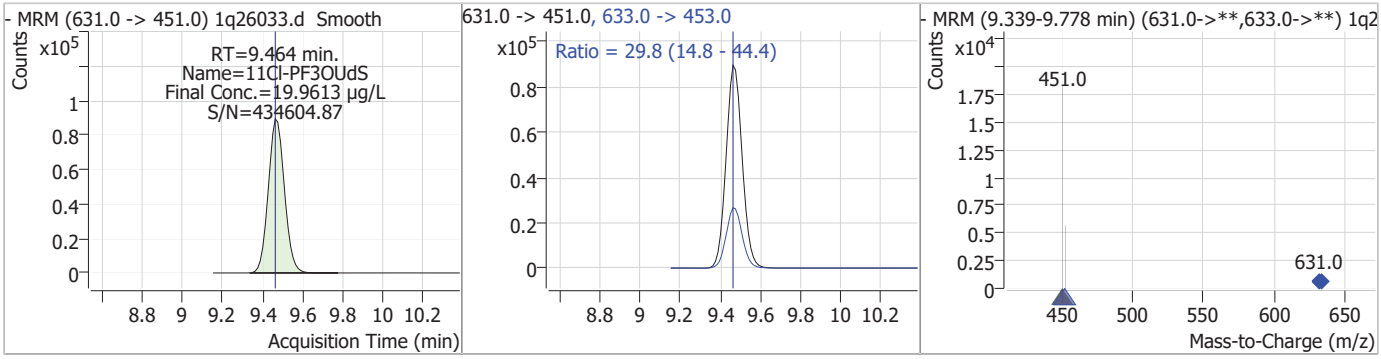
Perfluorinated Compounds by LC/MS/MS

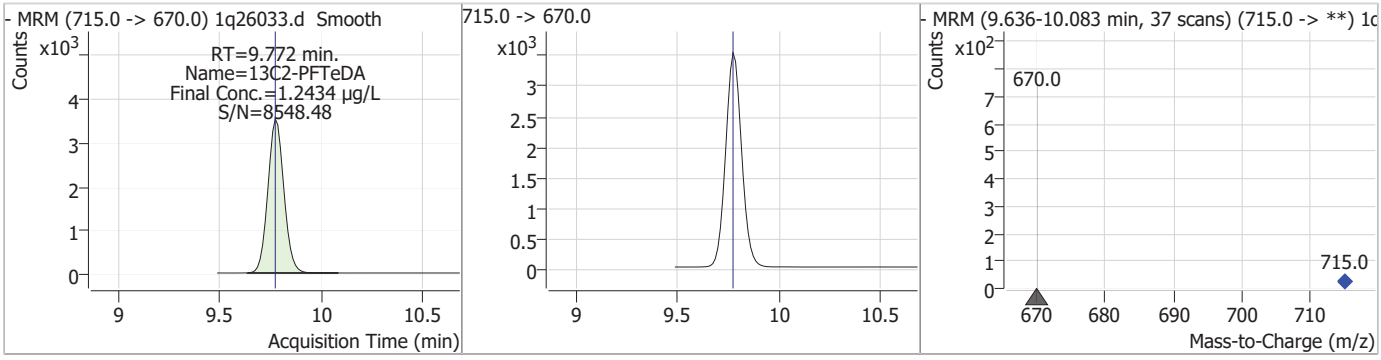
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	5.05	9.41	0.00	158846	663.0 -> 369.0	7.0	3.4	10.3



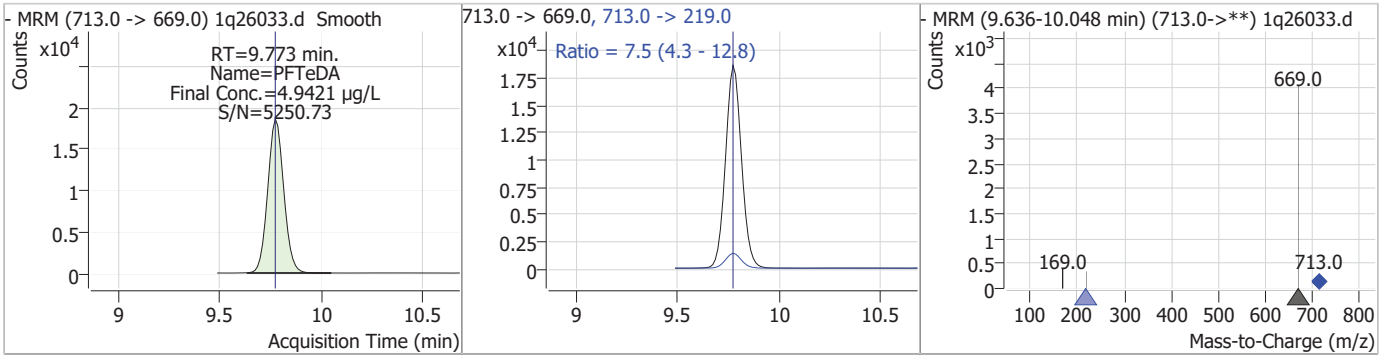
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	19.96	9.46	0.00	500277	633.0 -> 453.0	29.8	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.24	9.77	0.00	19077				

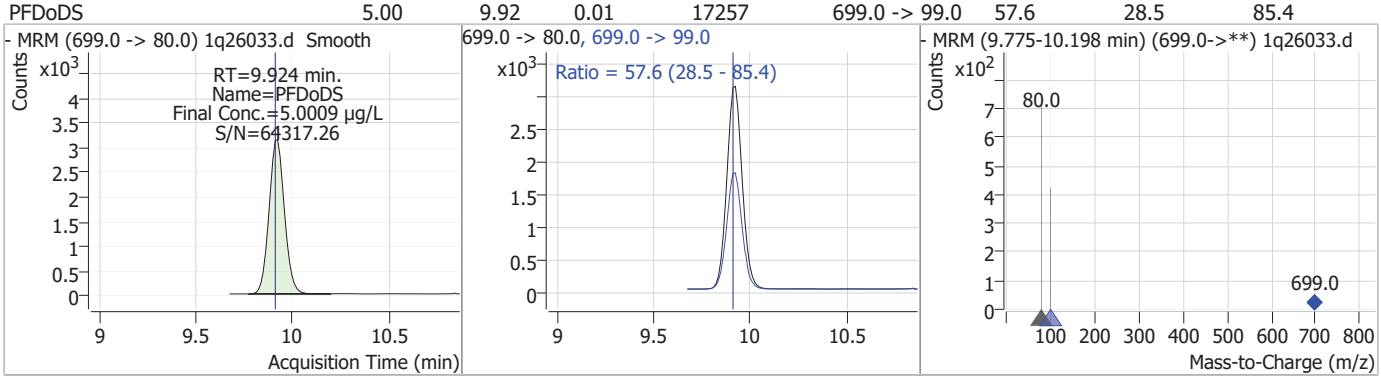


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	4.94	9.77	0.00	101547	713.0 -> 219.0	7.5	4.3	12.8

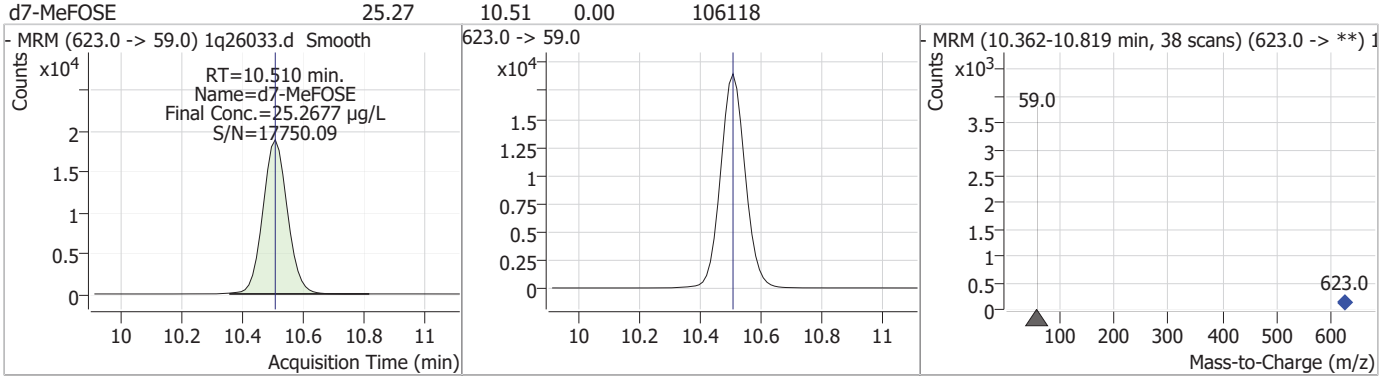


Perfluorinated Compounds by LC/MS/MS

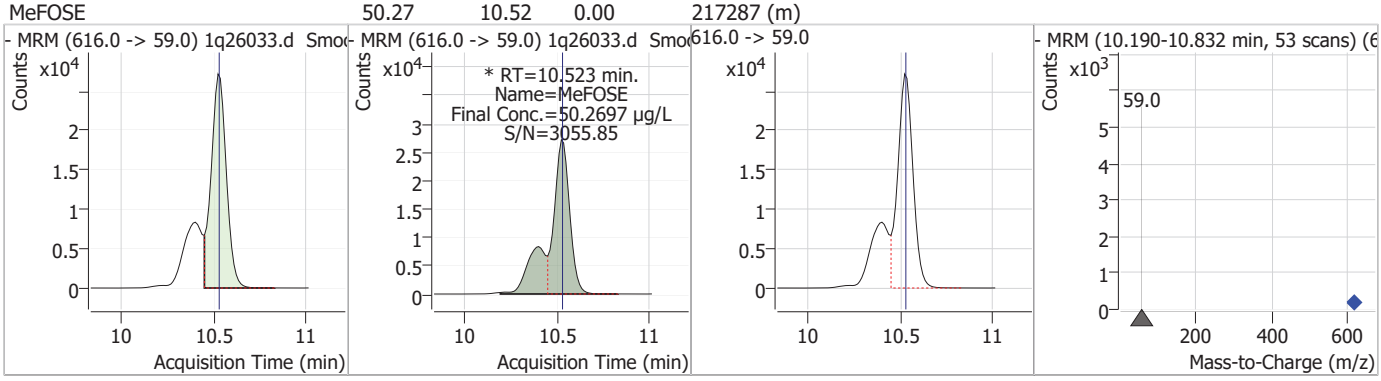
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	5.00	9.92	0.01	17257	699.0 -> 99.0	57.6	28.5	85.4



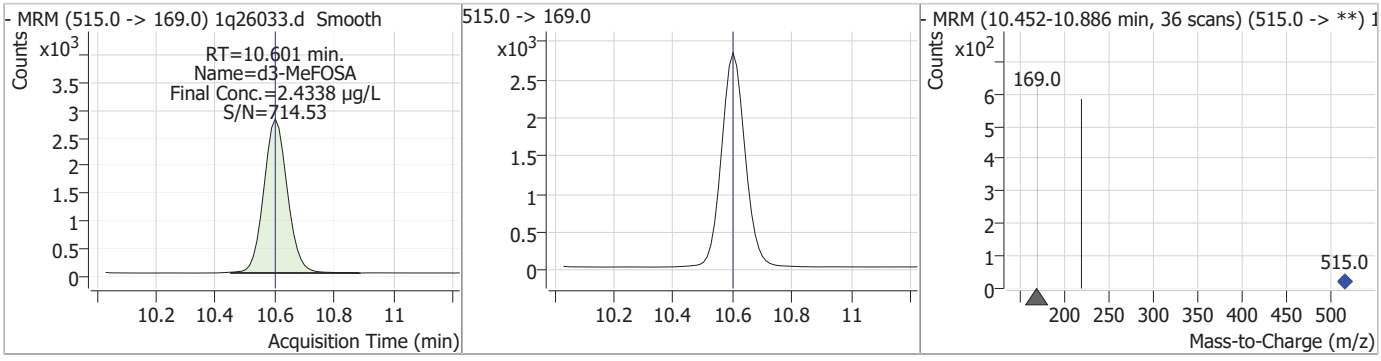
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.27	10.51	0.00	106118				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	50.27	10.52	0.00	217287 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.43	10.60	0.00	15451				



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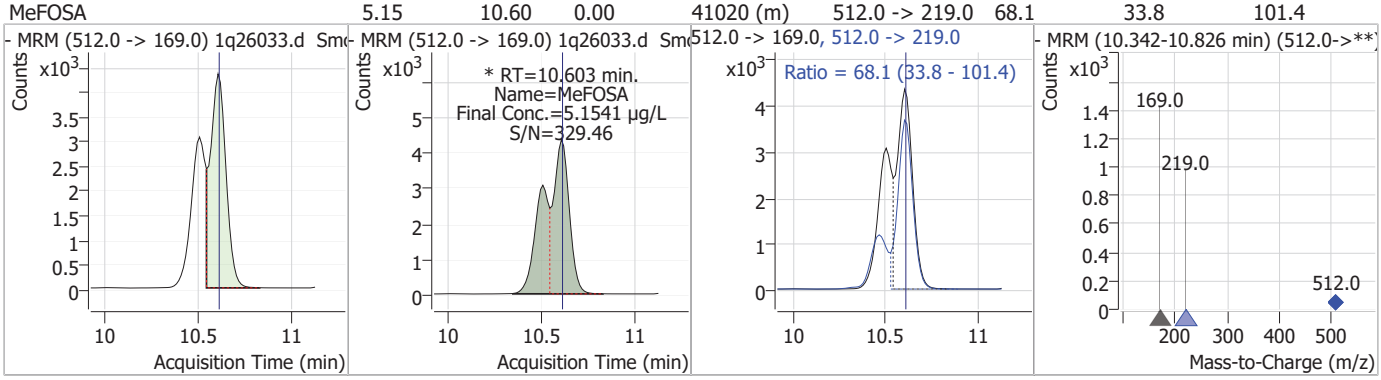
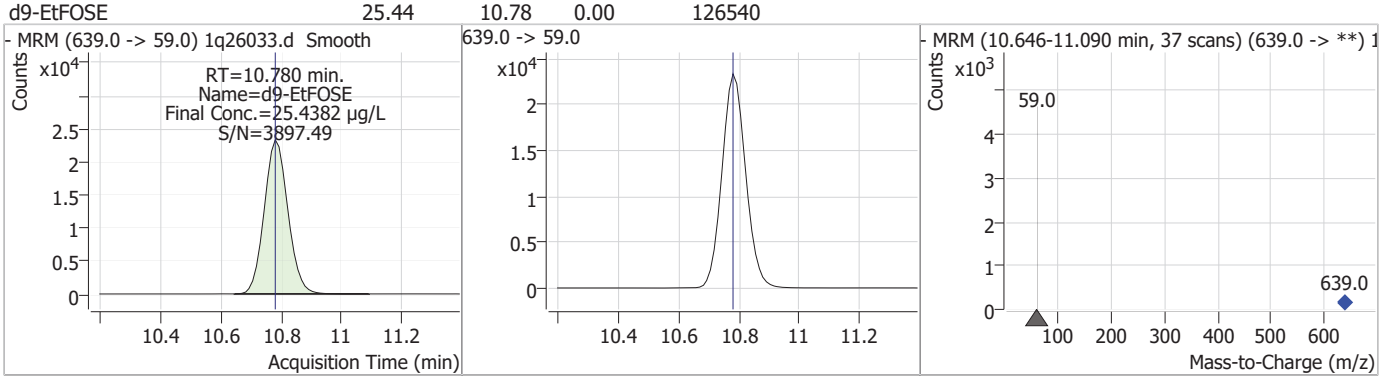
Perfluorinated Compounds by LC/MS/MS

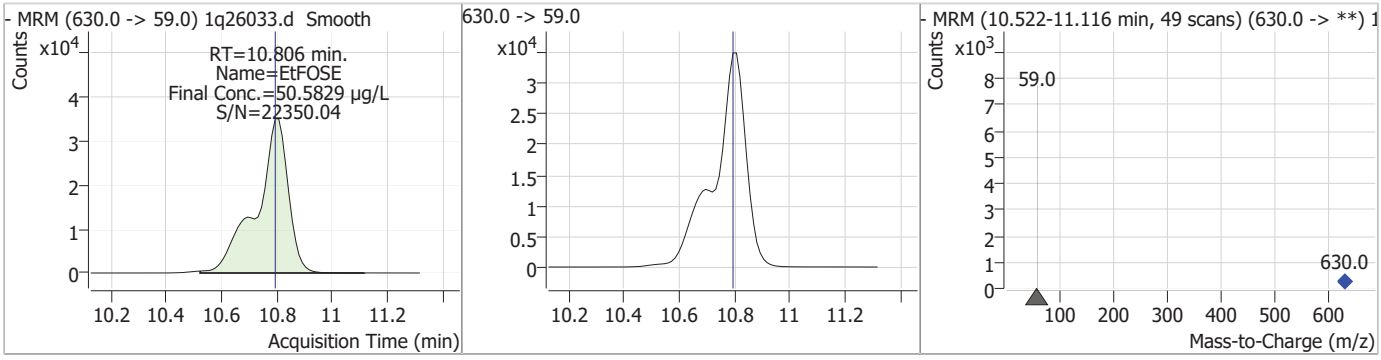
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	5.15	10.60	0.00	41020 (m)	512.0 -> 219.0	68.1	33.8	101.4



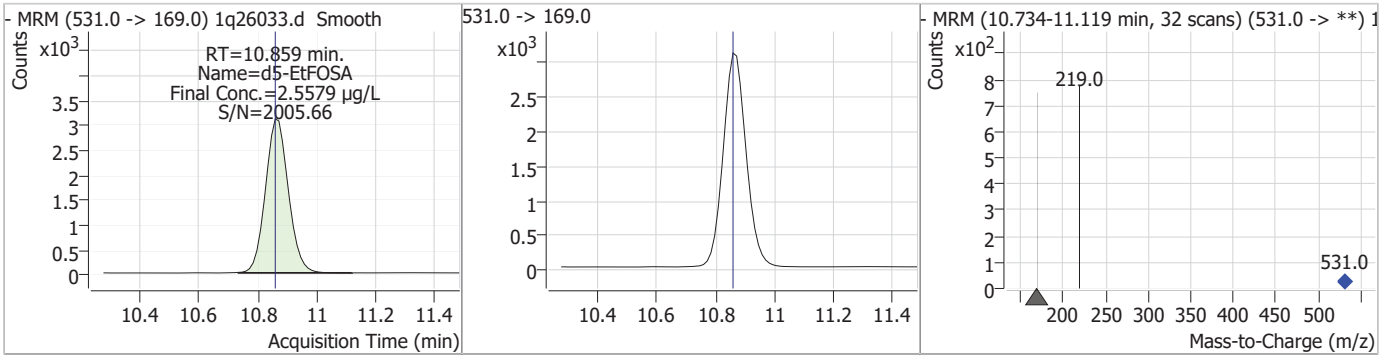
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.44	10.78	0.00	126540				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	50.58	10.81	0.01	278898				

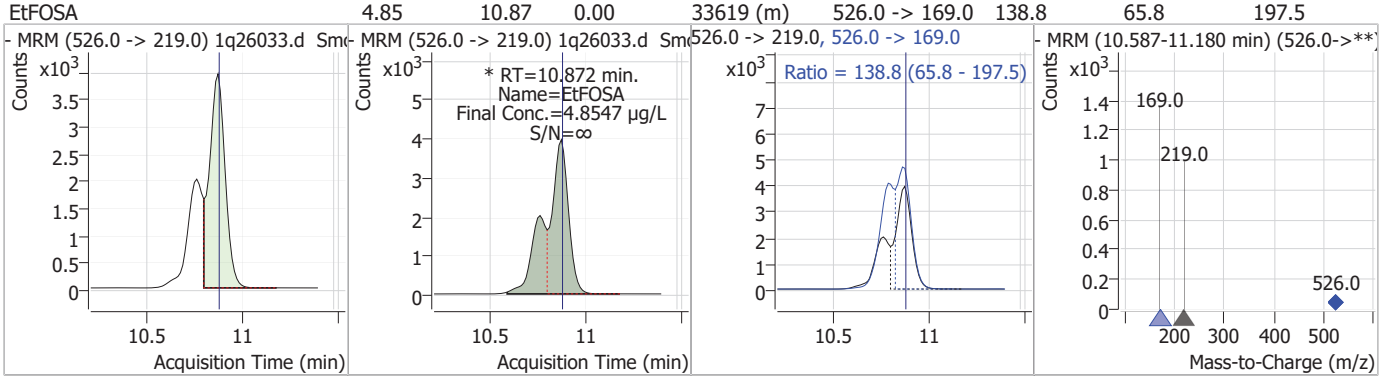


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.56	10.86	0.00	16594				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	4.85	10.87	0.00	33619 (m)	526.0 -> 169.0	138.8	65.8	197.5



7.6.9

7

Manual Integration Approval Summary

Sample Number: T1Q361-IC361
Lab FileID: 1Q26033.D
Injection Time: 05/14/25 17:38
Method: EPA 1633
Analyst approved: 05/15/25 01:25 Rensel John Romano
Supervisor approved: 05/15/25 05:29 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.67	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Split peak
PFOSA	754-91-6		9.34	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSA	4151-50-2		10.87	Split peak

1Q26034.D

Manual Integrations APPROVED (compounds with "m" flag)

Althea Mae Medina 05/15/25 05:29

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26034.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/14/2025 5:53:07 PM
Sample Name : IC361-6
Vial : P1-A7
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : t1q361.batch.bin
Sample Information : OP63461,T1Q361,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	184953	10.00 µg/L	0.000
M5-PFPeA	4.636	268.0 -> 223.0	113025	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	65710	2.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	55498	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	86620	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	31859	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	31106	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	45967	1.25 µg/L	0.000
M2-PFDoDA	9.027	615.0 -> 570.0	43842	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	18334	1.25 µg/L	0.000
M8-FOSA	9.334	506.0 -> 78.0	21079	2.50 µg/L	0.000
M3-PFBS	5.711	302.0 -> 99.0	7348	2.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	7347	2.50 µg/L	0.000
M8-PFOS	8.304	507.0 -> 99.0	8080	2.50 µg/L	0.000
M2-4:2FTS	5.446	329.0 -> 81.0	1365	5.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	2970	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	3999	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	41667	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	23356	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	33709	5.00 µg/L	0.000
M7-MeFOSE	10.510	623.0 -> 59.0	106591	25.00 µg/L	0.000
M9-EtFOSE	10.780	639.0 -> 59.0	125211	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	16292	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	16029	2.50 µg/L	0.000
13C4-PFOS	8.317	503.0 -> 80.0	13307	2.50 µg/L	0.012
13C3-PFBA	3.263	216.0 -> 172.0	76088	5.00 µg/L	0.013
18O2-PFHxS	7.274	403.0 -> 84.0	8538	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	95454	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	25305	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	30800	1.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	61511	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1365	4.79 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.7%	
13C2-6:2FTS	6.922	429.0 -> 81.0	2970	5.37 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.5%	
13C2-8:2FTS	7.927	529.0 -> 81.0	3999	4.60 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.0%	
13C2-PFDoDA	9.027	615.0 -> 570.0	43842	1.28 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.2%	
13C2-PFTeDA	9.772	715.0 -> 670.0	18334	1.27 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.5%	
13C3-PFBS	5.711	302.0 -> 99.0	7348	2.58 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.2%	
13C3-PFHxS	7.275	402.0 -> 99.0	7347	2.57 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.9%		
13C4-PFBA	3.260	217.0 -> 172.0	184953	10.22 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 102.2%		
13C4-PFHpA	6.553	367.0 -> 322.0	55498	2.60 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.0%		
13C5-PFHxA	5.759	318.0 -> 273.0	65710	2.51 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.4%		
13C5-PFPeA	4.636	268.0 -> 223.0	113025	5.01 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.2%		
13C6-PFDA	8.139	519.0 -> 474.0	31106	1.27 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.5%		
13C7-PFUnDA	8.595	570.0 -> 525.0	45967	1.29 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.3%		
13C8-FOSA	9.334	506.0 -> 78.0	21079	2.59 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.8%		
13C8-PFOA	7.148	421.0 -> 376.0	86620	2.49 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.7%		
13C8-PFOS	8.304	507.0 -> 99.0	8080	2.64 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.6%		
13C9-PFNA	7.656	472.0 -> 427.0	31859	1.27 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.4%		
d3-MeFOSAA	8.161	573.0 -> 419.0	41667	5.14 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.8%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	23356	10.18 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.8%		
d3-MeFOSA	10.601	515.0 -> 169.0	16029	2.55 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.8%		
d5-EtFOSAA	8.358	589.0 -> 419.0	33709	5.11 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.2%		
d7-MeFOSE	10.510	623.0 -> 59.0	106591	25.59 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 102.3%		
d9-EtFOSE	10.780	639.0 -> 59.0	125211	25.37 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 101.5%		
d5-EtFOSA	10.859	531.0 -> 169.0	16292	2.53 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.3%		
Target Compounds						QValue
4:2FTS	5.447	327.0 -> 307.0	129945	51.08 µg/L		97
		327.0 -> 81.0	57618			
6:2FTS	6.922	427.0 -> 407.0	181065	47.63 µg/L		96
		427.0 -> 81.0	61265			
8:2FTS	7.927	527.0 -> 507.0	199911	54.98 µg/L		97
		527.0 -> 81.0	62176			
EtFOSAA	8.371	584.0 -> 419.0	67220	12.79 µg/L	m	88
		584.0 -> 483.0	38363			
FOSA	9.324	498.0 -> 78.0	91259	12.49 µg/L	m	96
		498.0 -> 478.0	3730			
MeFOSAA	8.162	570.0 -> 419.0	80798	12.22 µg/L	m	99
		570.0 -> 512.0	29620			
PFBA	3.254	213.0 -> 169.0	262696	50.79 µg/L		100
PFBS	5.713	299.0 -> 80.0	95620	11.23 µg/L		98
		299.0 -> 99.0	38122			
PFDA	8.140	513.0 -> 469.0	275850	12.92 µg/L		99
		513.0 -> 219.0	44171			
PFDoDA	9.027	613.0 -> 569.0	413381	12.98 µg/L		100
		613.0 -> 319.0	47823			
PFDS	9.193	599.0 -> 80.0	47434	12.40 µg/L		95

Perfluorinated Compounds by LC/MS/MS

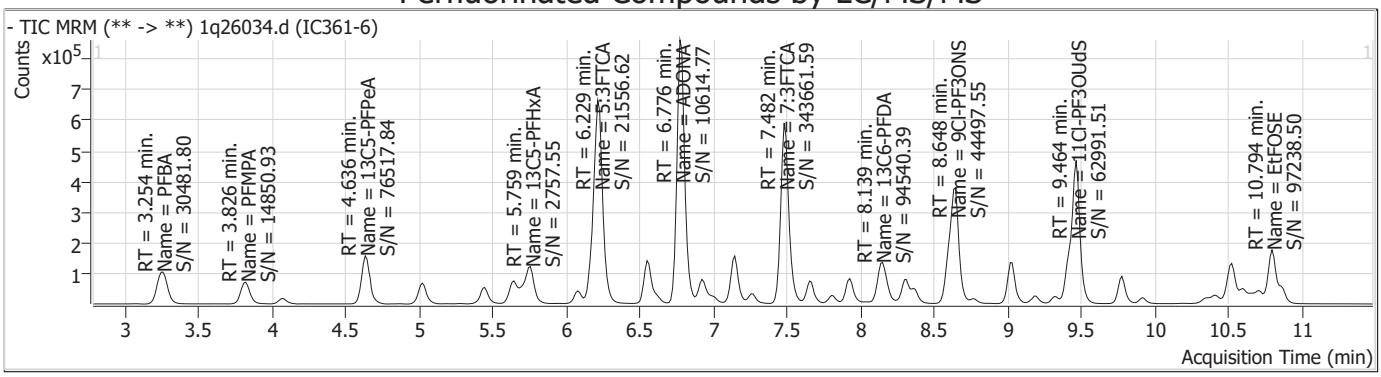
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	22409				
PFHpA	6.554	363.0 -> 319.0	389921	12.55	µg/L		95
		363.0 -> 169.0	69253				
PFHpS	7.809	449.0 -> 80.0	64846	12.77	µg/L		98
		449.0 -> 99.0	32080				
PFHxA	5.761	313.0 -> 269.0	310221	12.88	µg/L		100
		313.0 -> 119.0	8805				
PFHxS	7.276	399.0 -> 80.0	67052	11.72	µg/L	m	98
		399.0 -> 99.0	35051				
PFNA	7.657	463.0 -> 419.0	205447	12.86	µg/L	m	96
		463.0 -> 219.0	54724				
PFNS	8.772	549.0 -> 80.0	33674	11.57	µg/L		98
		549.0 -> 99.0	18436				
PFOA	7.149	413.0 -> 369.0	390089	13.04	µg/L	m	98
		413.0 -> 169.0	84319				
PFOS	8.318	499.0 -> 80.0	73822	10.89	µg/L	m	97
		499.0 -> 99.0	34921				
PFPeA	4.638	263.0 -> 219.0	514902	26.16	µg/L		100
PFPeS	6.630	349.0 -> 80.0	43910	11.53	µg/L		97
		349.0 -> 99.0	19329				
PFTeDA	9.773	713.0 -> 669.0	254143	12.87	µg/L		99
		713.0 -> 219.0	20345				
PFTrDA	9.412	663.0 -> 619.0	408452	13.17	µg/L		100
		663.0 -> 369.0	28743				
PFUnDA	8.596	563.0 -> 519.0	386141	12.70	µg/L		99
		563.0 -> 269.0	55721				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	1239103	49.21	µg/L		99
		633.0 -> 453.0	376016				
9Cl-PF3ONS	8.648	531.0 -> 351.0	1004866	48.69	µg/L		98
		533.0 -> 353.0	302852				
ADONA	6.776	377.0 -> 251.0	2500287	48.62	µg/L		100
		377.0 -> 85.0	692004				
HFPO-DA	6.088	285.0 -> 169.0	119349	52.77	µg/L		96
		285.0 -> 185.0	9590				
3:3FTCA	4.072	241.0 -> 177.0	67155	62.69	µg/L		99
		241.0 -> 117.0	4733				
5:3FTCA	6.229	341.0 -> 237.0	1377884	323.54	µg/L		99
		341.0 -> 217.0	957655				
7:3FTCA	7.482	441.0 -> 337.0	1566709	325.78	µg/L		99
		441.0 -> 317.0	696484				
EtFOSA	10.872	526.0 -> 219.0	86174	12.67	µg/L	m	95
		526.0 -> 169.0	118149				
EtFOSE	10.794	630.0 -> 59.0	698752	128.08	µg/L	m	100
MeFOSA	10.603	512.0 -> 169.0	102729	12.44	µg/L	m	99
		512.0 -> 219.0	70607				
MeFOSE	10.523	616.0 -> 59.0	554370	127.69	µg/L	m	100
PFDoDS	9.912	699.0 -> 80.0	43082	11.74	µg/L		98
		699.0 -> 99.0	23833				
NFDHA	5.651	295.0 -> 201.0	42127	26.29	µg/L		97
		201.0 -> 85.0	225204				
		295.0 -> 85.0	11608				
PFMBA	5.027	279.0 -> 85.0	275193	25.73	µg/L		100
PFMPA	3.826	229.0 -> 85.0	311757	25.86	µg/L		100
PFEESA	6.182	315.0 -> 135.0	534430	23.35	µg/L		100
		315.0 -> 69.0	47650				

 # = Qualifier out of range, m = manually integrated, + = Area summed

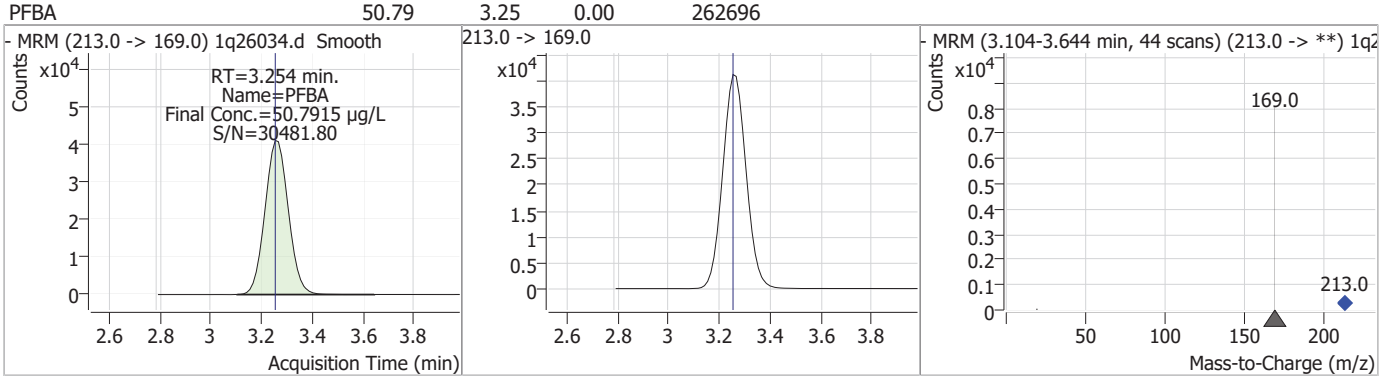
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

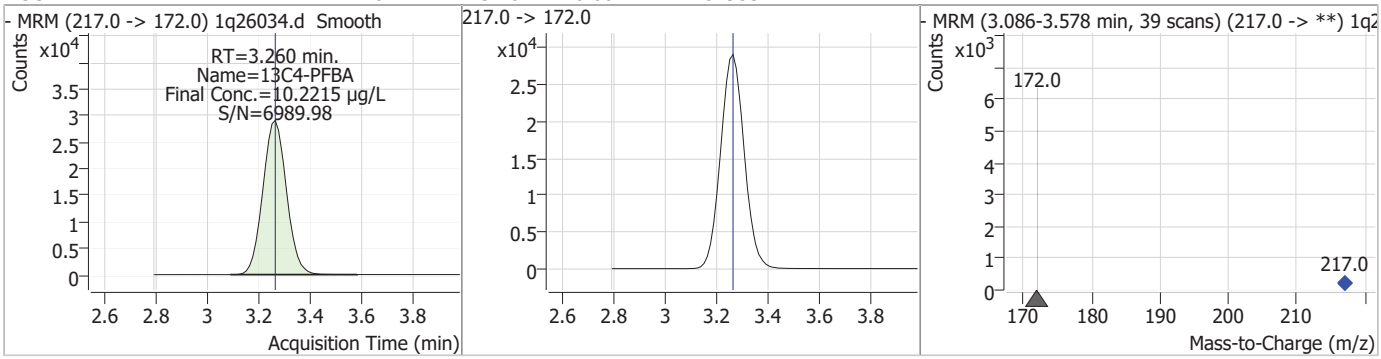
Perfluorinated Compounds by LC/MS/MS



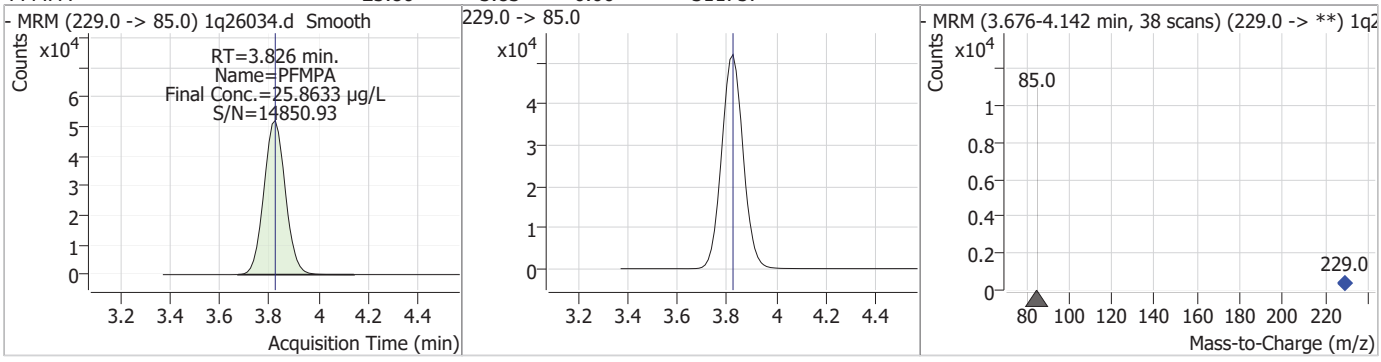
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	50.79	3.25	0.00	262696				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.22	3.26	0.00	184953				

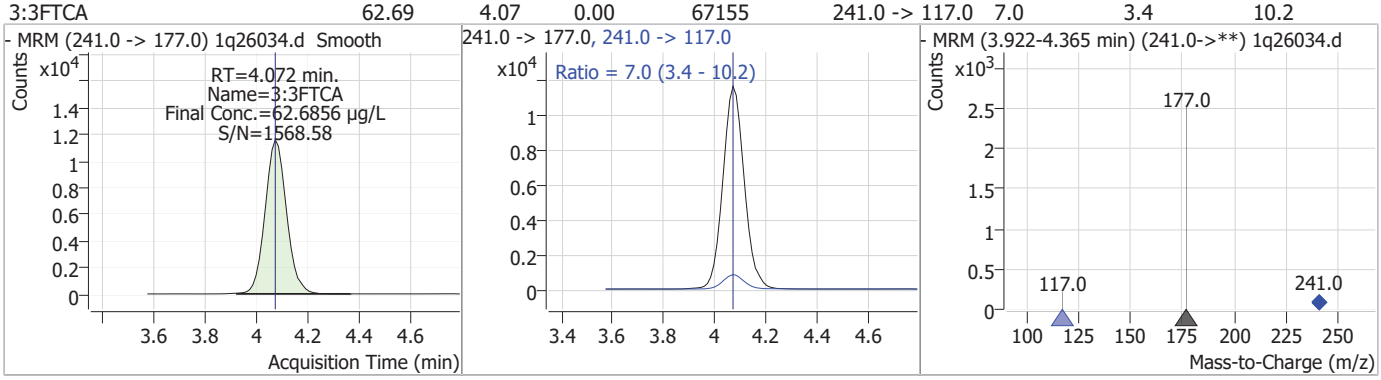


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	25.86	3.83	0.00	311757				

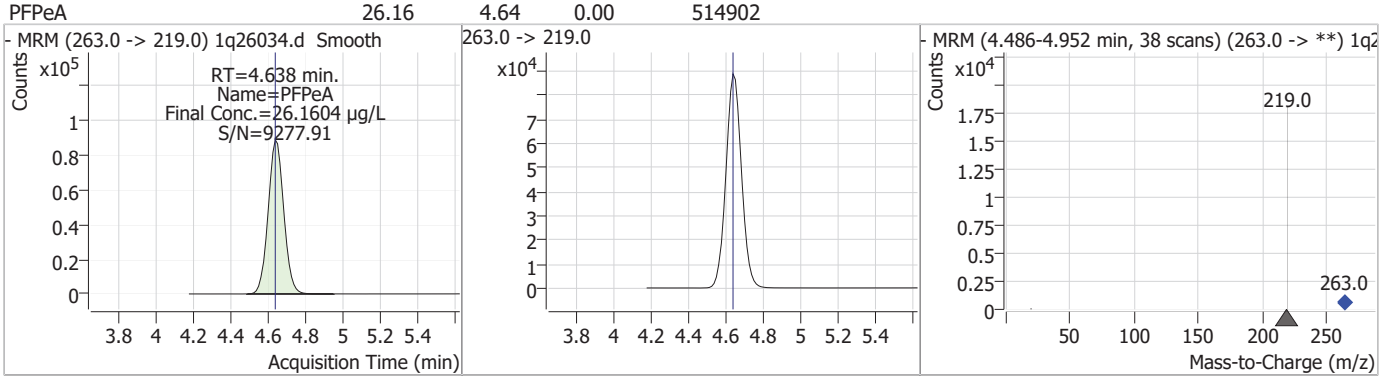


Perfluorinated Compounds by LC/MS/MS

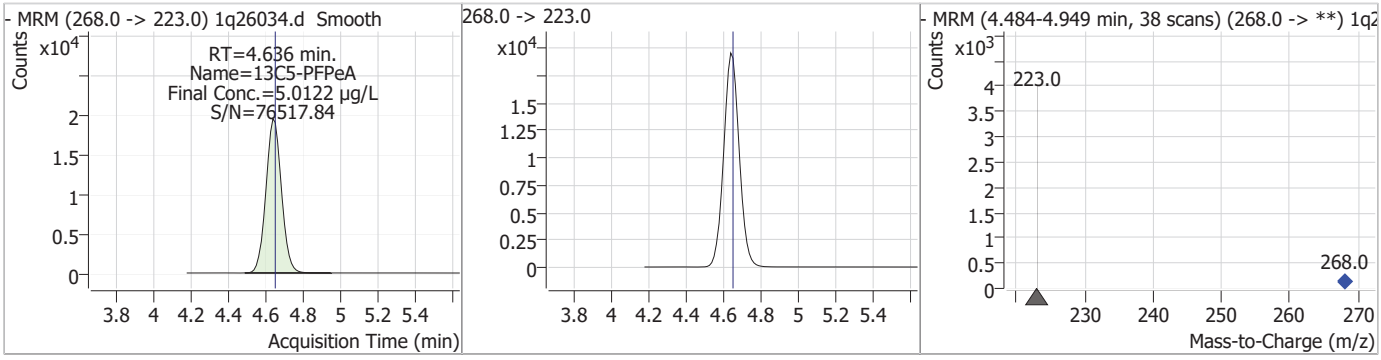
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	62.69	4.07	0.00	67155	241.0 -> 117.0	7.0	3.4	10.2



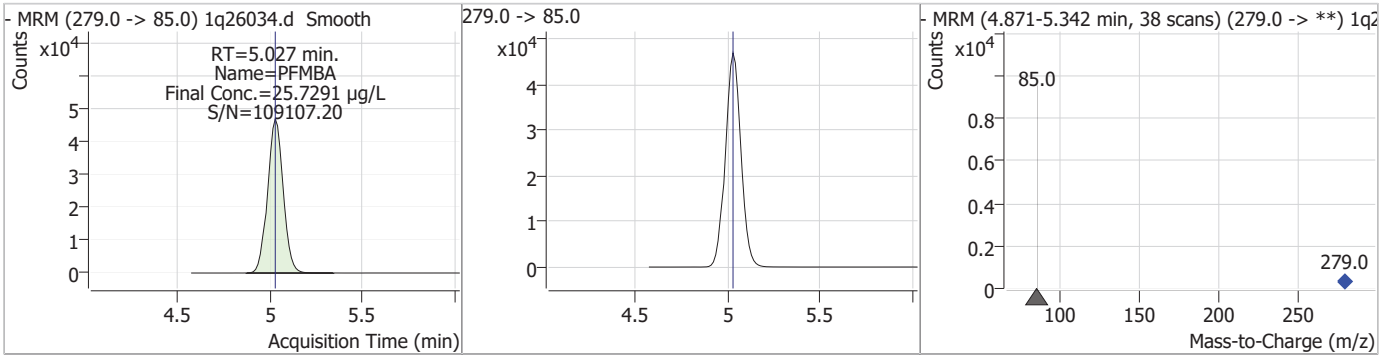
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	26.16	4.64	0.00	514902				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.01	4.64	-0.01	113025				

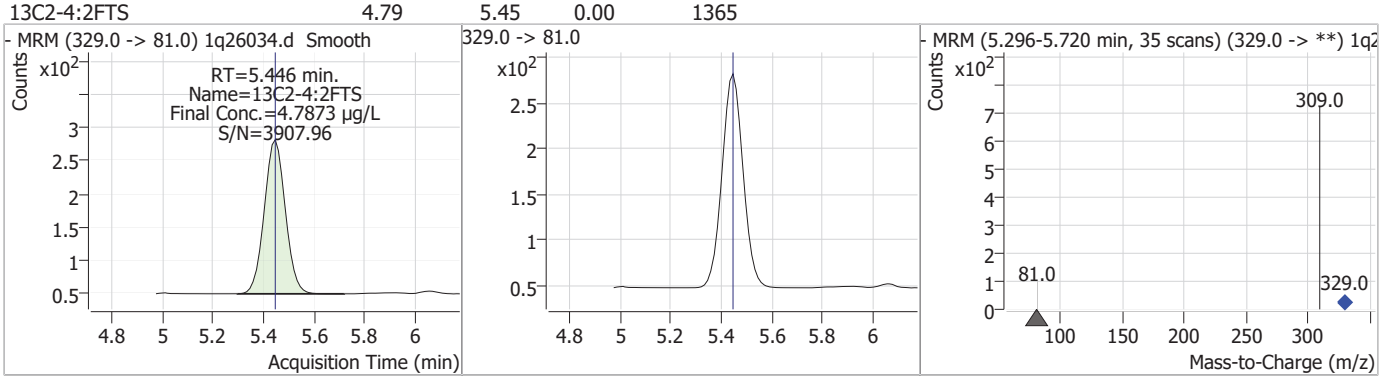


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	25.73	5.03	0.00	275193				

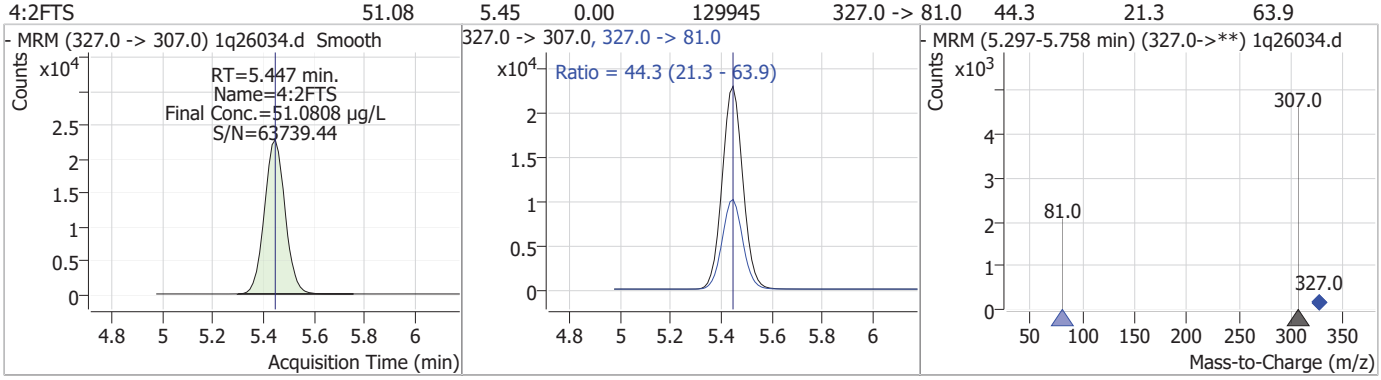


Perfluorinated Compounds by LC/MS/MS

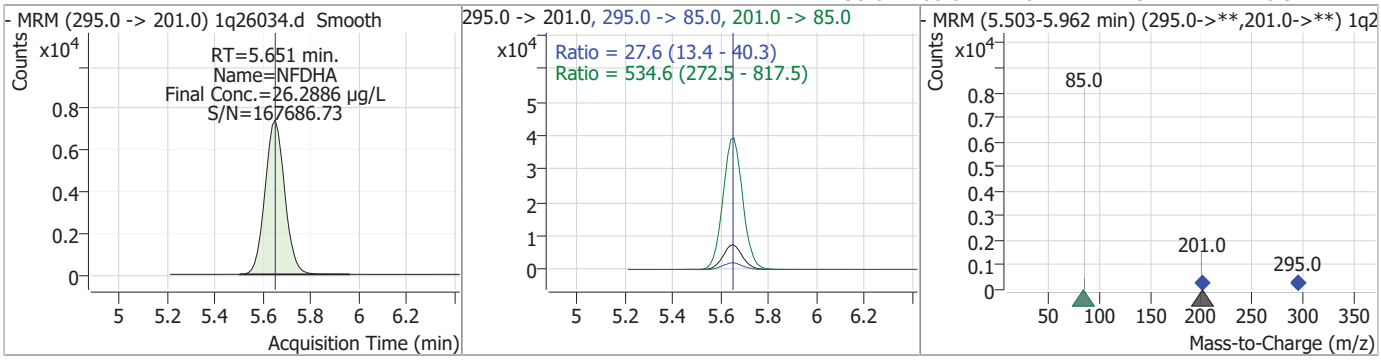
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.79	5.45	0.00	1365				



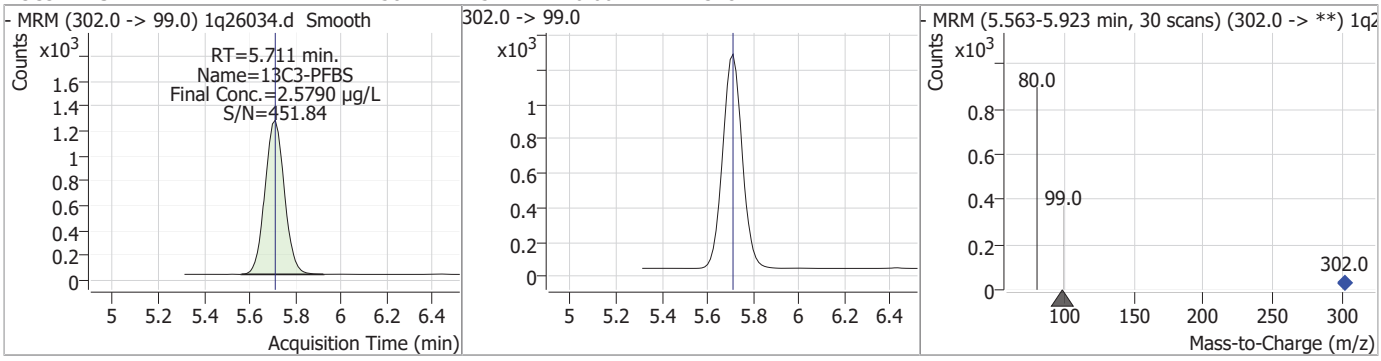
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	51.08	5.45	0.00	129945	327.0 -> 81.0	44.3	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	26.29	5.65	0.00	42127	201.0 -> 85.0	534.6	272.5	817.5
					295.0 -> 85.0	27.6	13.4	40.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.58	5.71	0.00	7348				

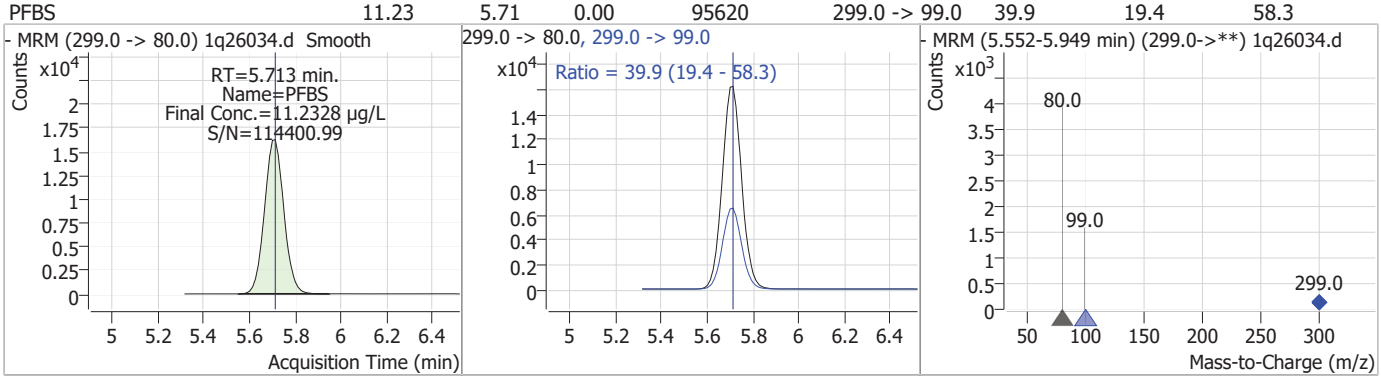


7.6.7

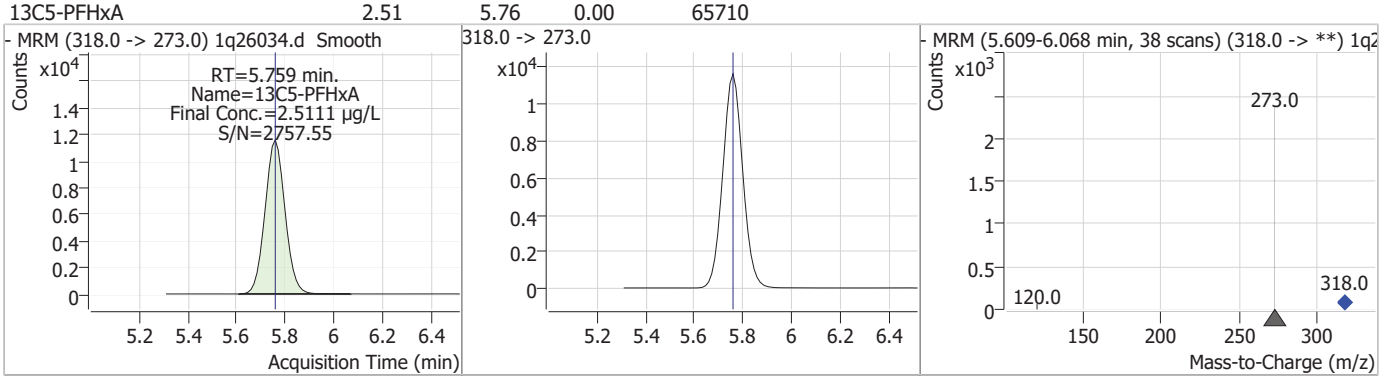
7

Perfluorinated Compounds by LC/MS/MS

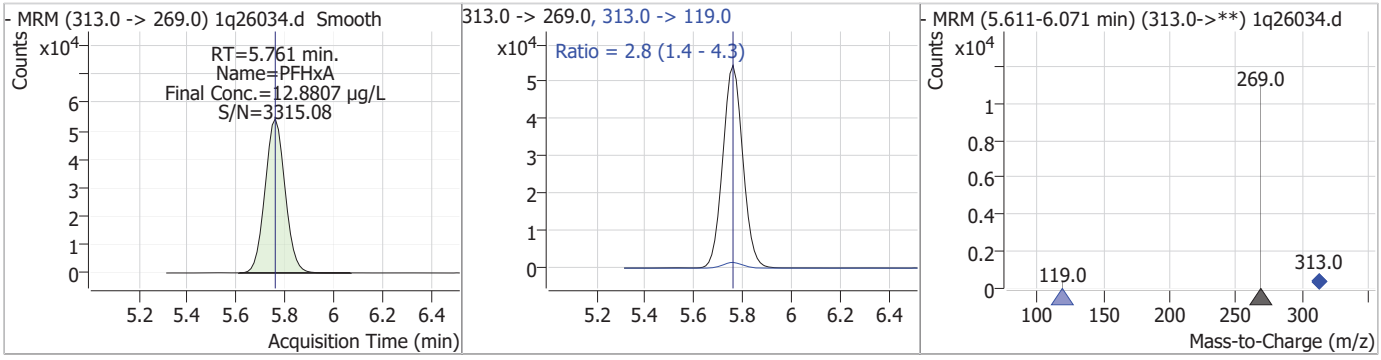
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	11.23	5.71	0.00	95620	299.0 -> 99.0	39.9	19.4	58.3



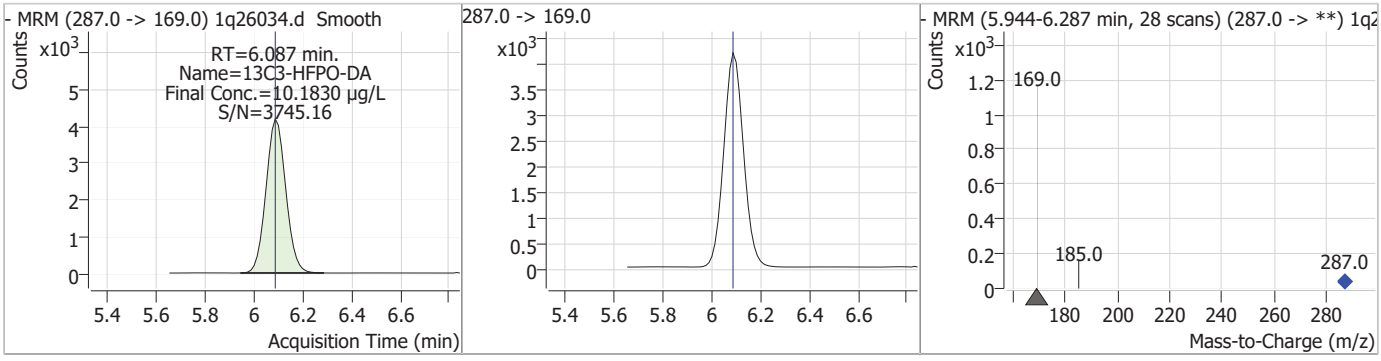
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.51	5.76	0.00	65710				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	12.88	5.76	0.00	310221	313.0 -> 119.0	2.8	1.4	4.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.18	6.09	0.00	23356				

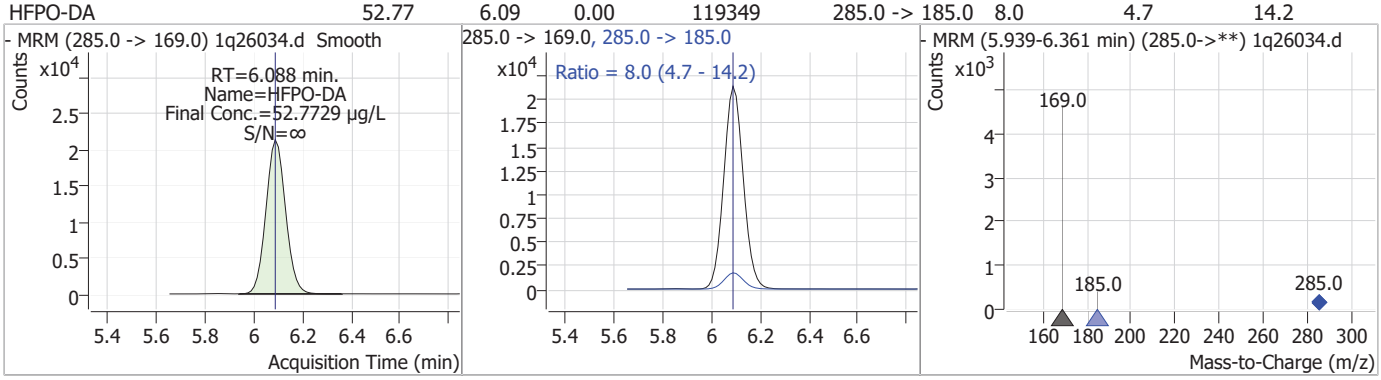


7.6.7

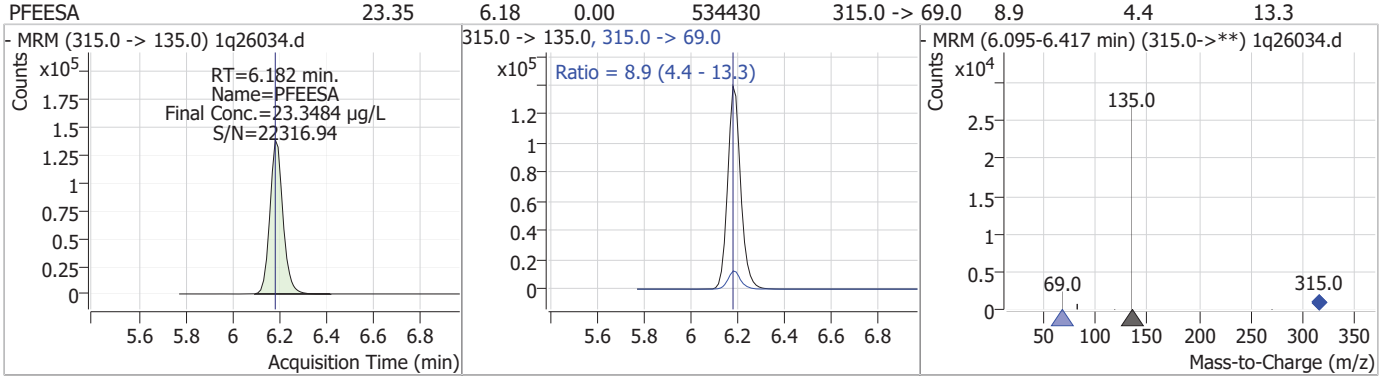
7

Perfluorinated Compounds by LC/MS/MS

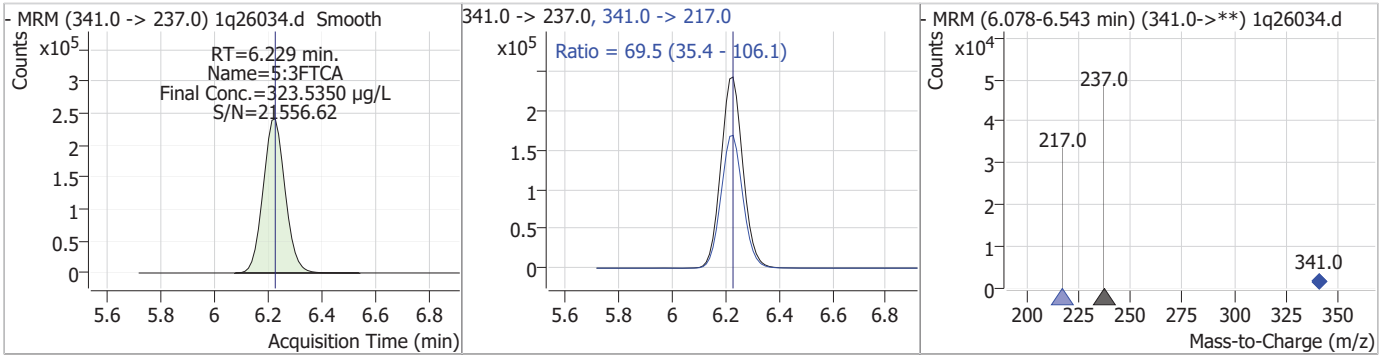
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	52.77	6.09	0.00	119349	285.0 -> 185.0	8.0	4.7	14.2



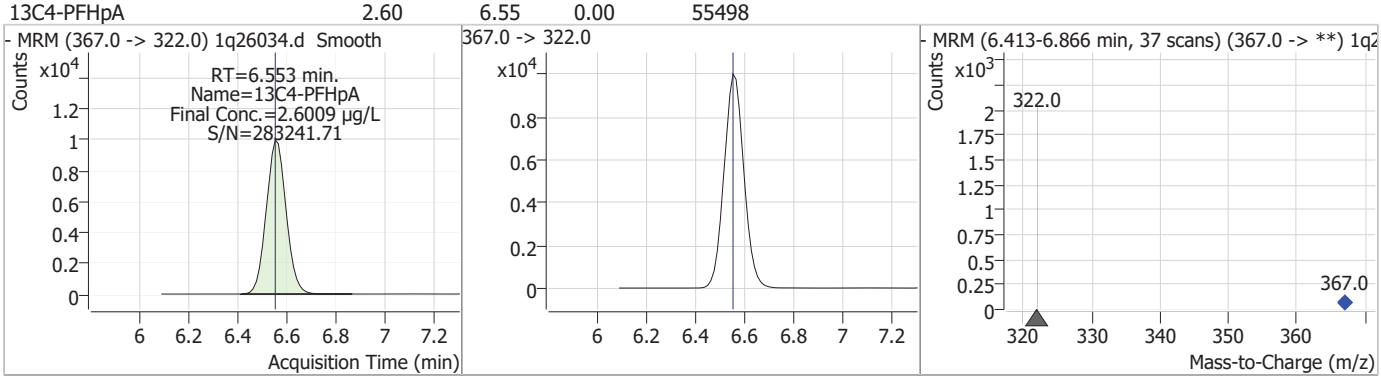
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	23.35	6.18	0.00	534430	315.0 -> 69.0	8.9	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	323.54	6.23	0.00	1377884	341.0 -> 217.0	69.5	35.4	106.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.60	6.55	0.00	55498				



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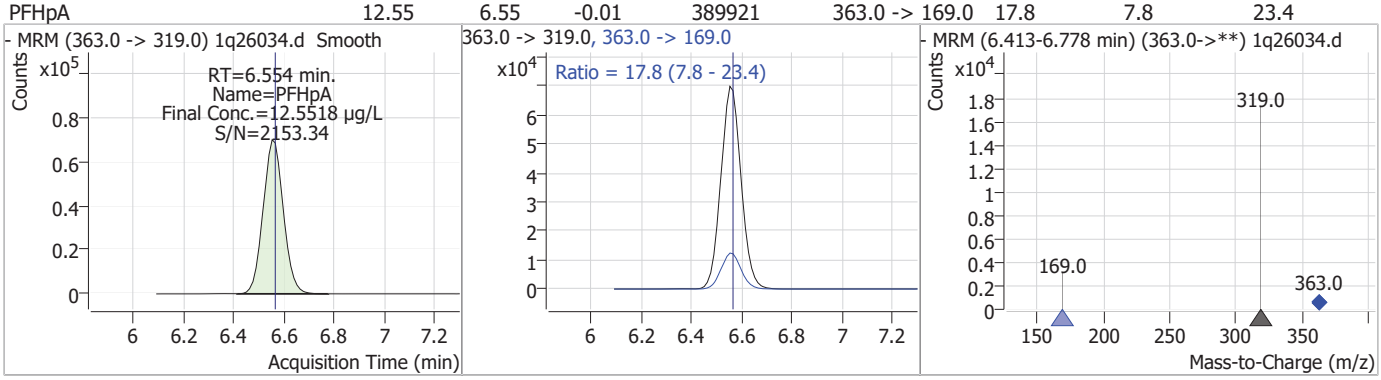
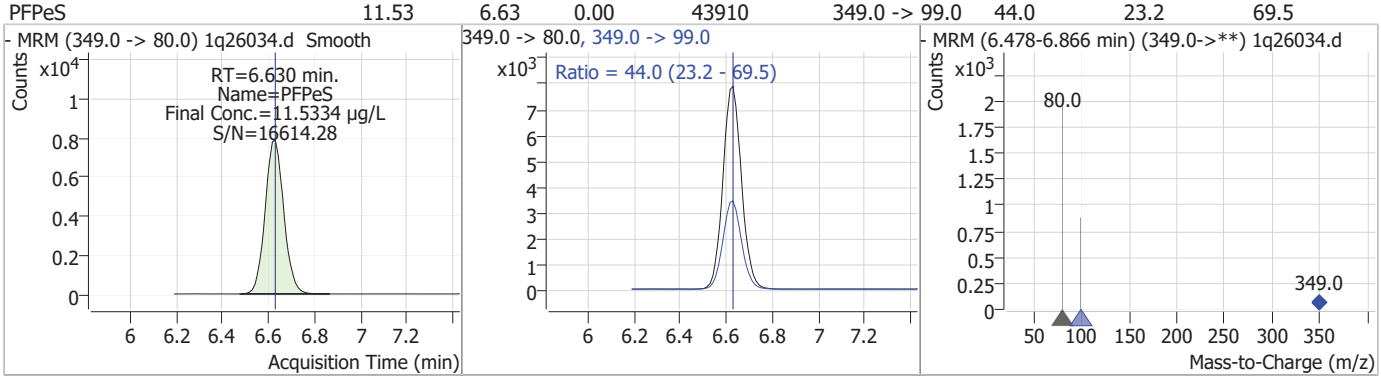
Perfluorinated Compounds by LC/MS/MS

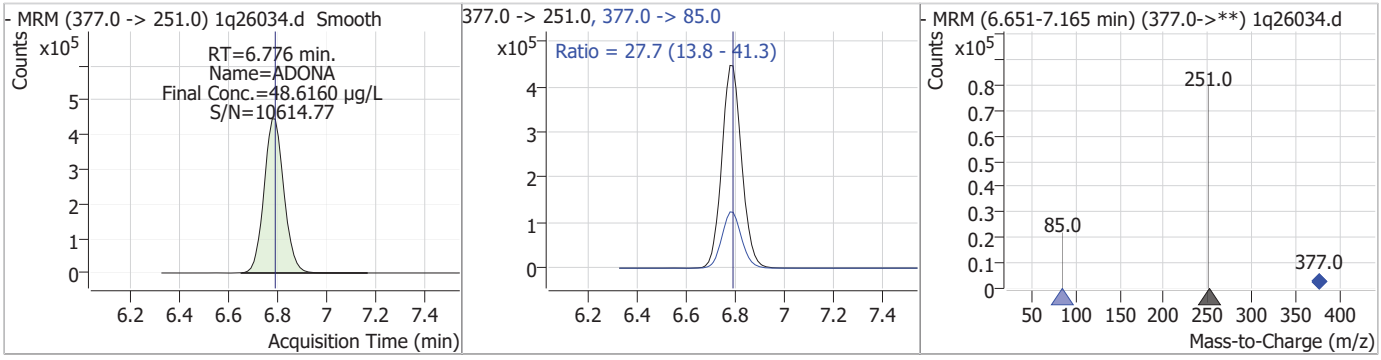
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	12.55	6.55	-0.01	389921	363.0 -> 169.0	17.8	7.8	23.4



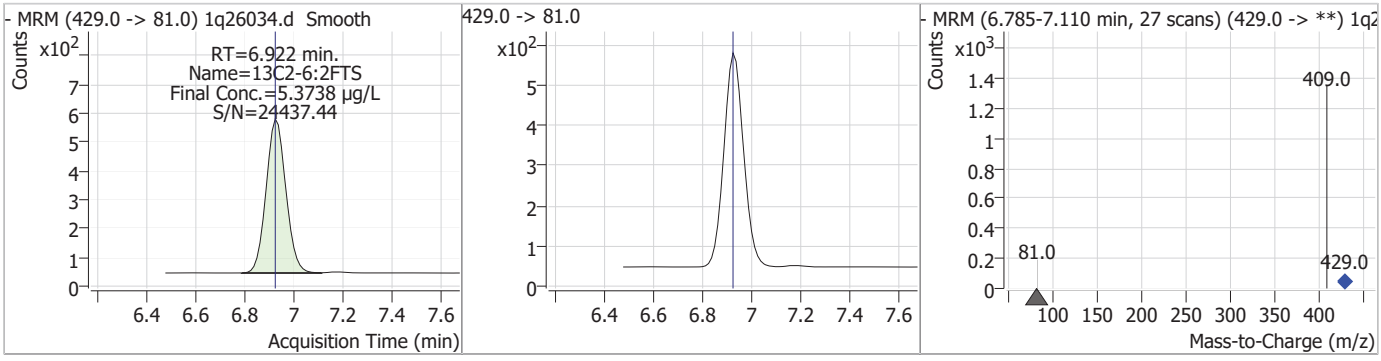
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	11.53	6.63	0.00	43910	349.0 -> 99.0	44.0	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	48.62	6.78	-0.01	2500287	377.0 -> 85.0	27.7	13.8	41.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.37	6.92	0.00	2970				



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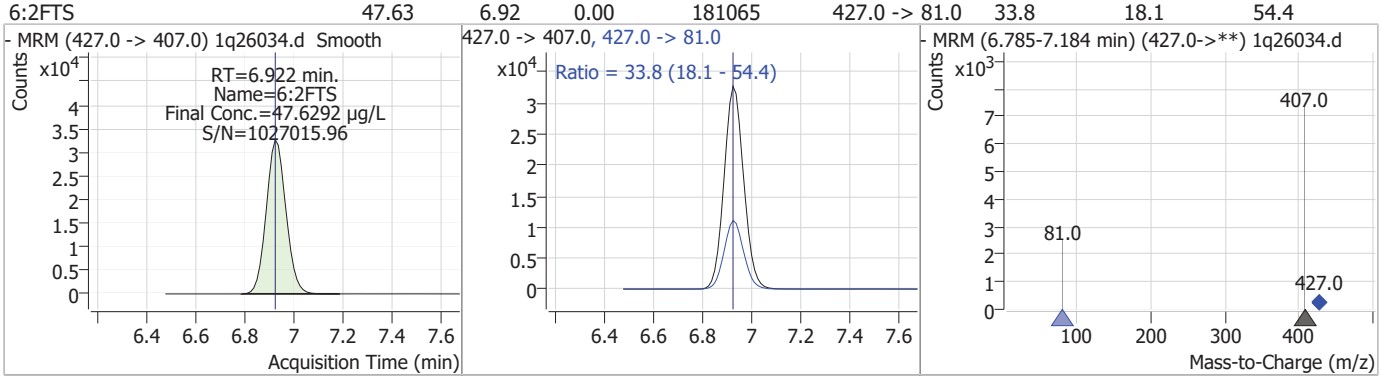
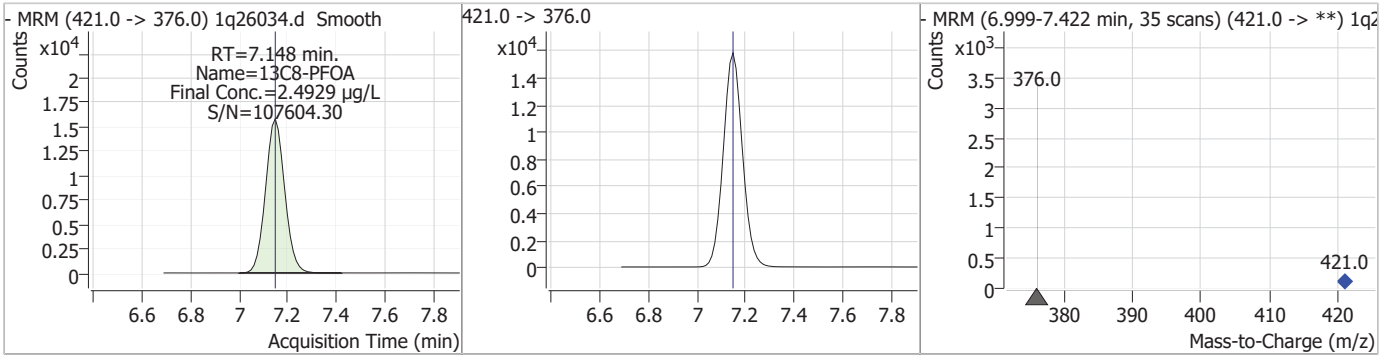
Perfluorinated Compounds by LC/MS/MS

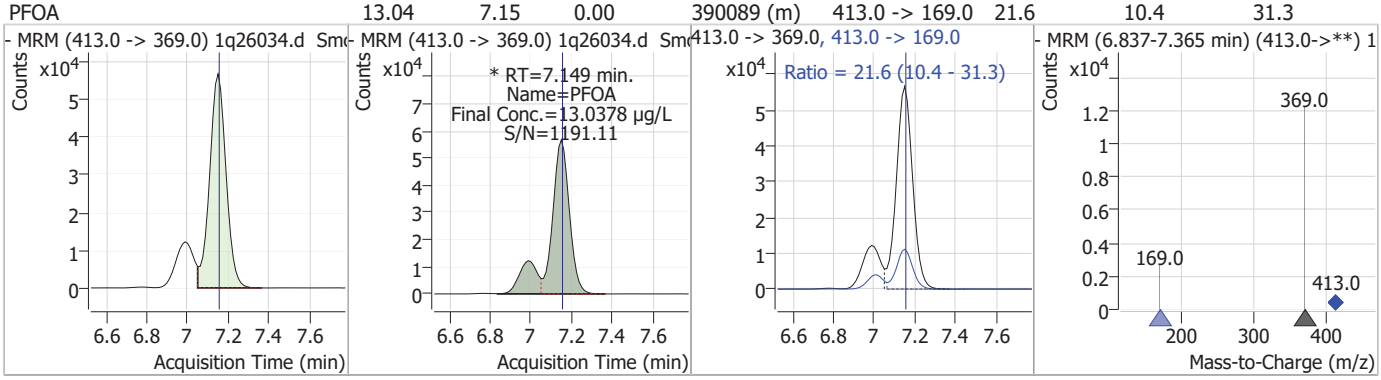
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	47.63	6.92	0.00	181065	427.0 -> 81.0	33.8	18.1	54.4



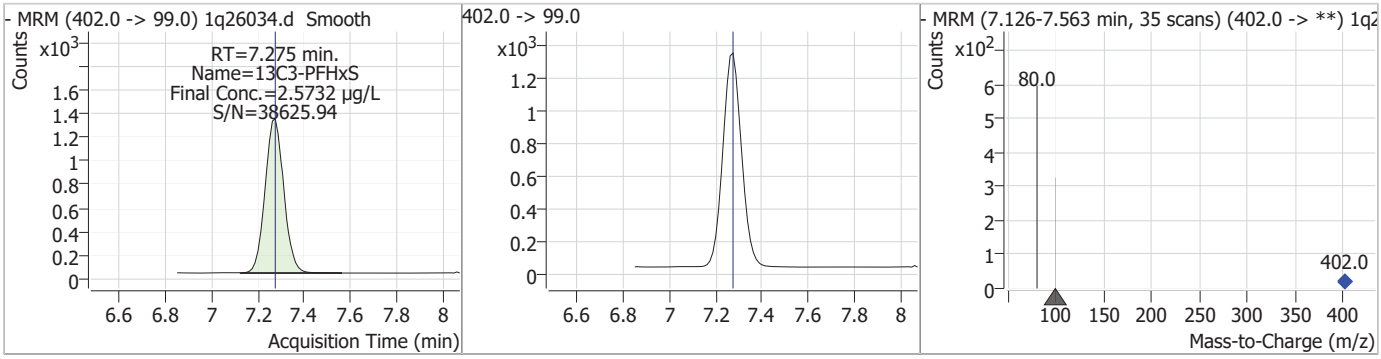
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.49	7.15	0.00	86620				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	13.04	7.15	0.00	390089 (m)	413.0 -> 169.0	21.6	10.4	31.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.57	7.27	0.00	7347				



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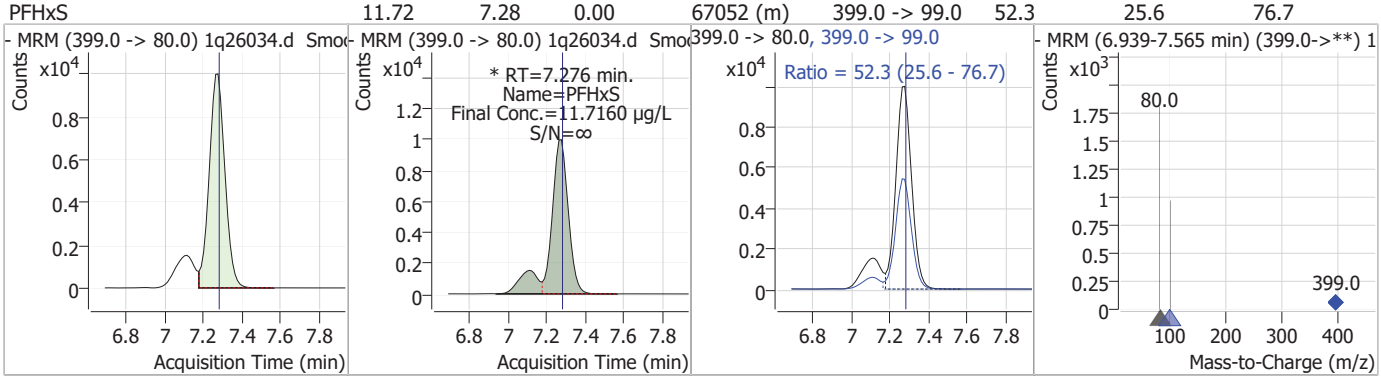
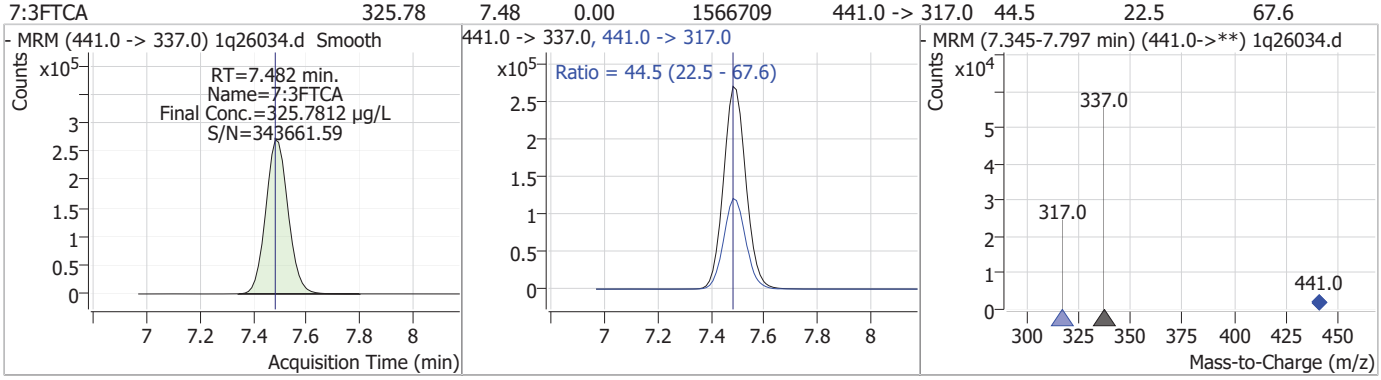
Perfluorinated Compounds by LC/MS/MS

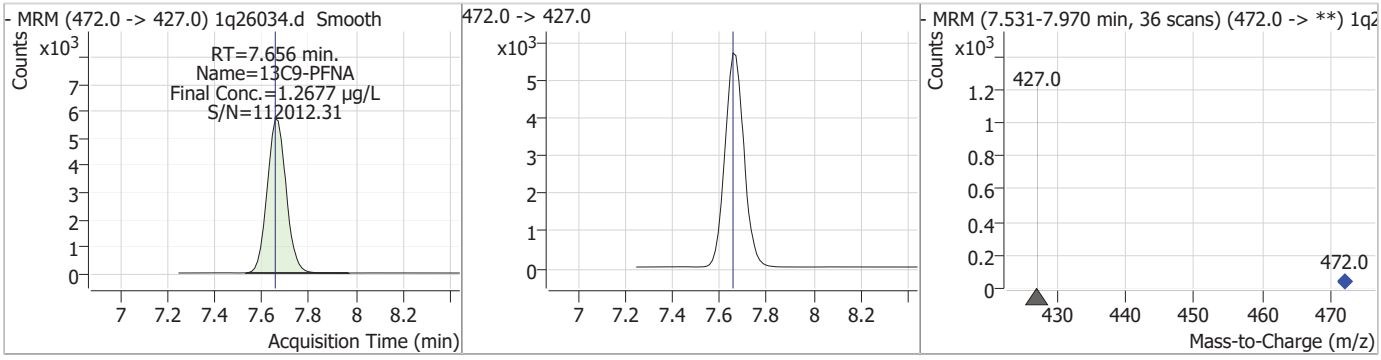
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	11.72	7.28	0.00	67052 (m)	399.0 -> 99.0	52.3	25.6	76.7



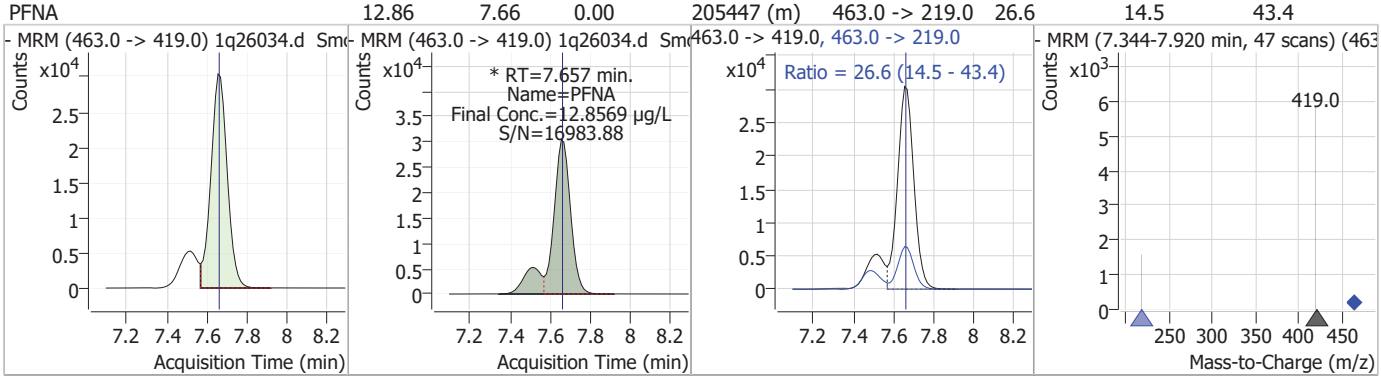
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	325.78	7.48	0.00	1566709	441.0 -> 317.0	44.5	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.27	7.66	0.00	31859				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	12.86	7.66	0.00	205447 (m)	463.0 -> 219.0	26.6	14.5	43.4



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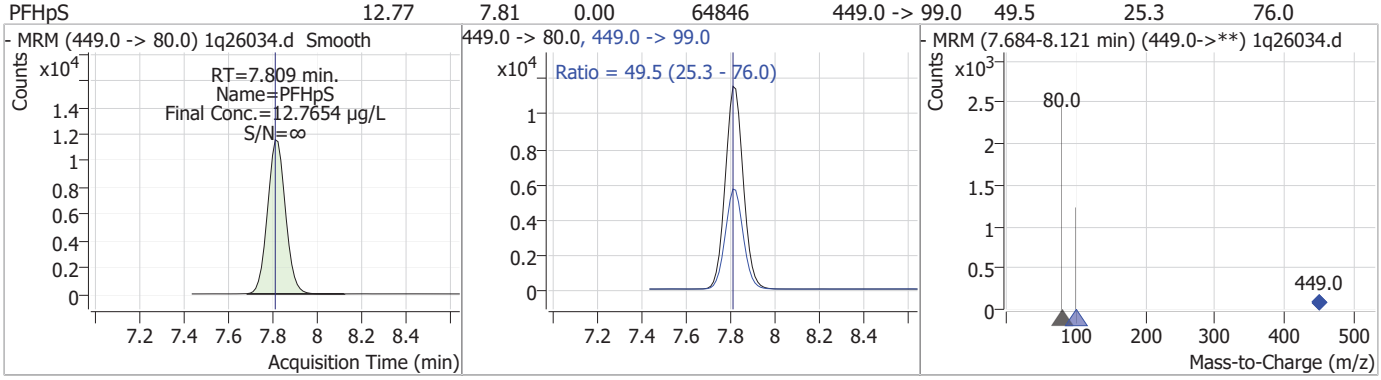
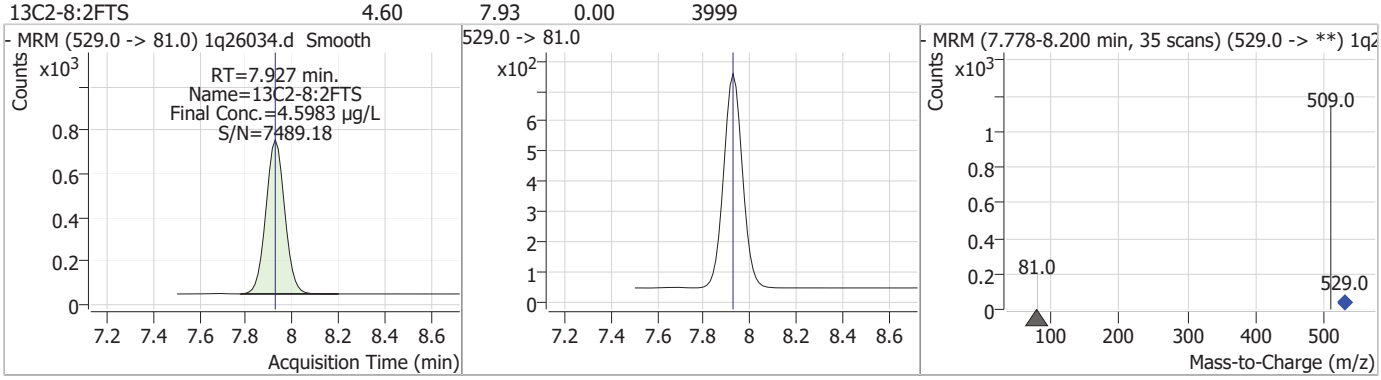
Perfluorinated Compounds by LC/MS/MS

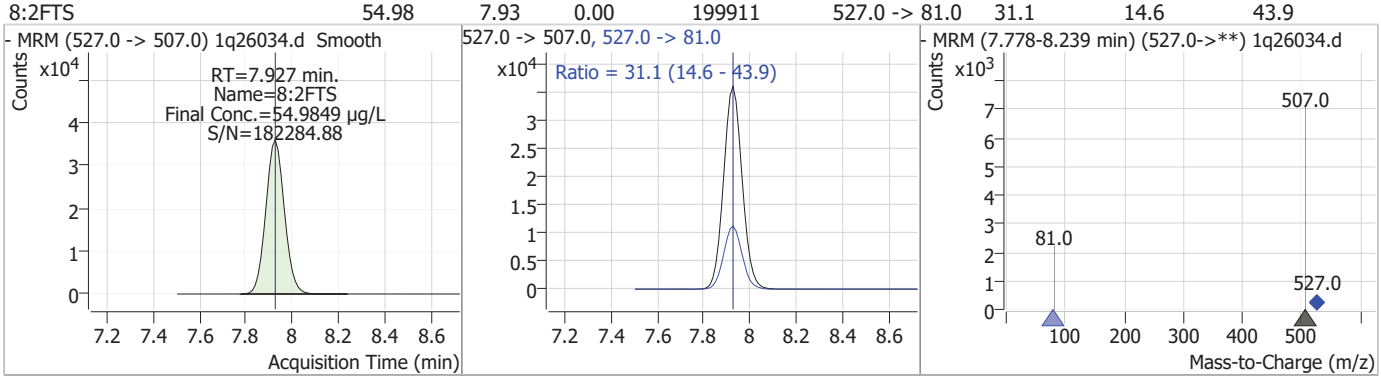
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	12.77	7.81	0.00	64846	449.0 -> 99.0	49.5	25.3	76.0



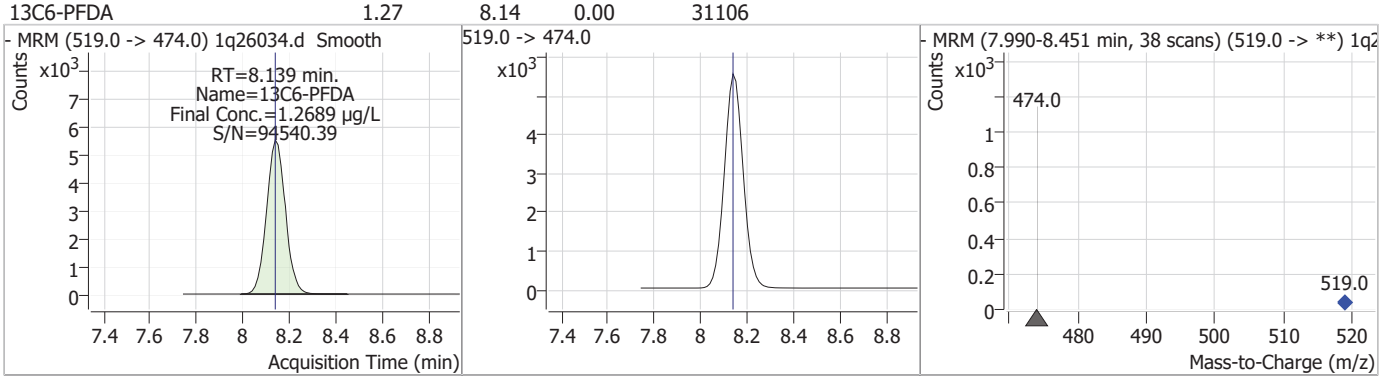
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.60	7.93	0.00	3999				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	54.98	7.93	0.00	199911	527.0 -> 81.0	31.1	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.27	8.14	0.00	31106				



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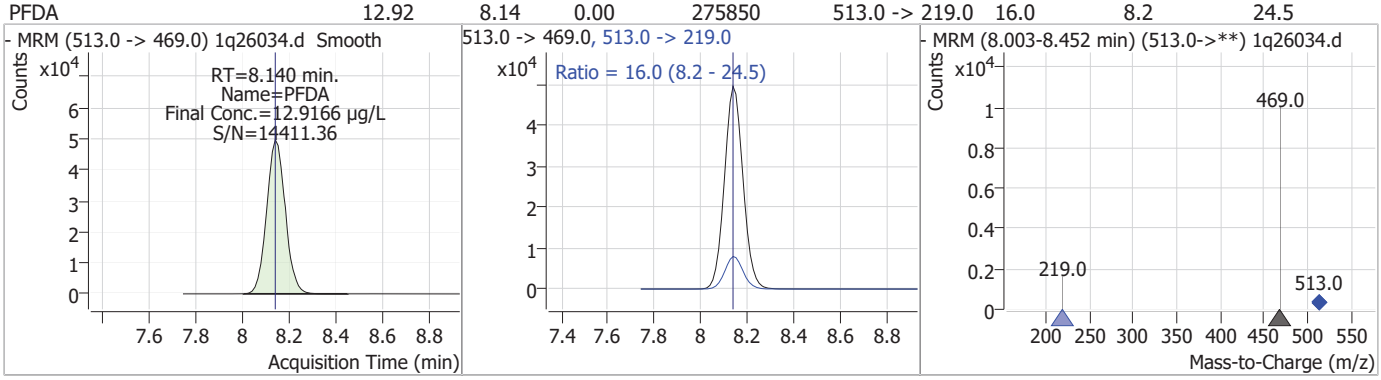
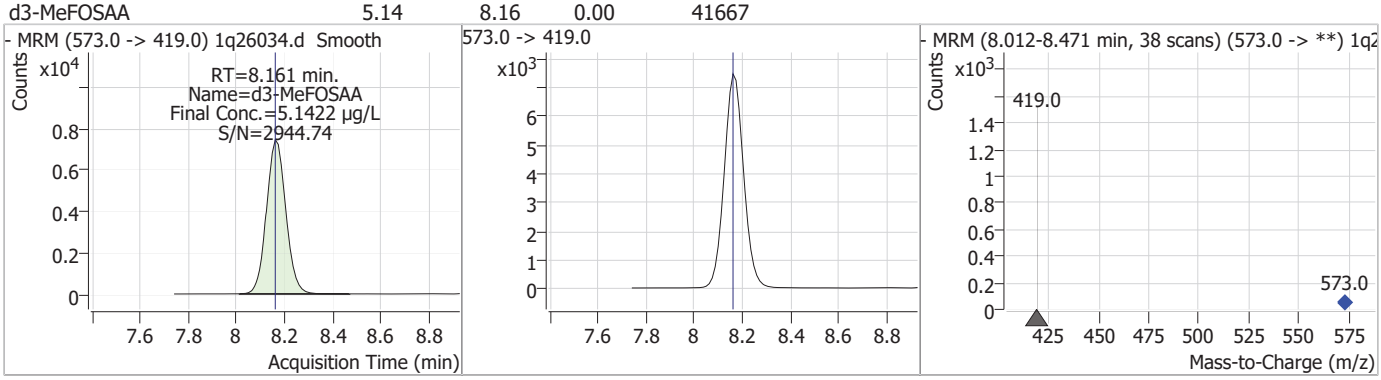
Perfluorinated Compounds by LC/MS/MS

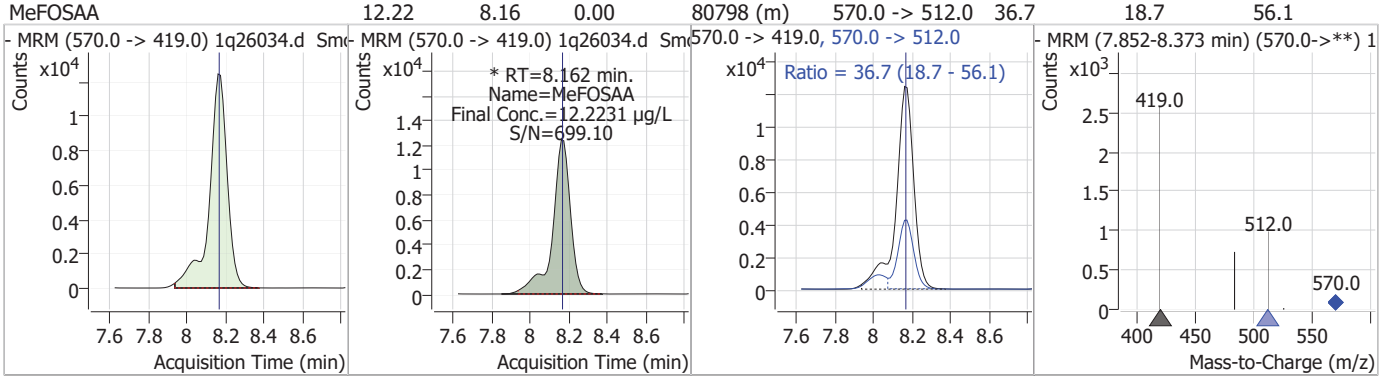
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	12.92	8.14	0.00	275850	513.0 -> 219.0	16.0	8.2	24.5



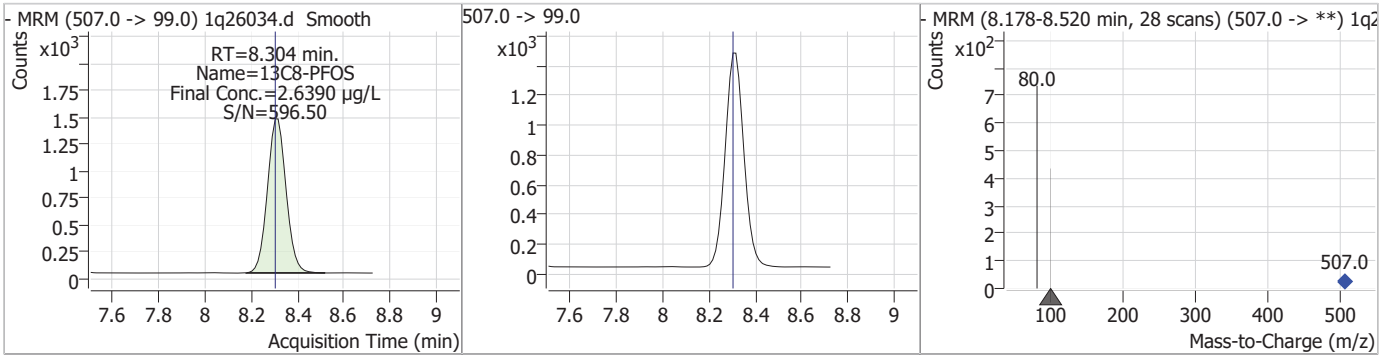
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.14	8.16	0.00	41667				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	12.22	8.16	0.00	80798 (m)	570.0 -> 512.0	36.7	18.7	56.1

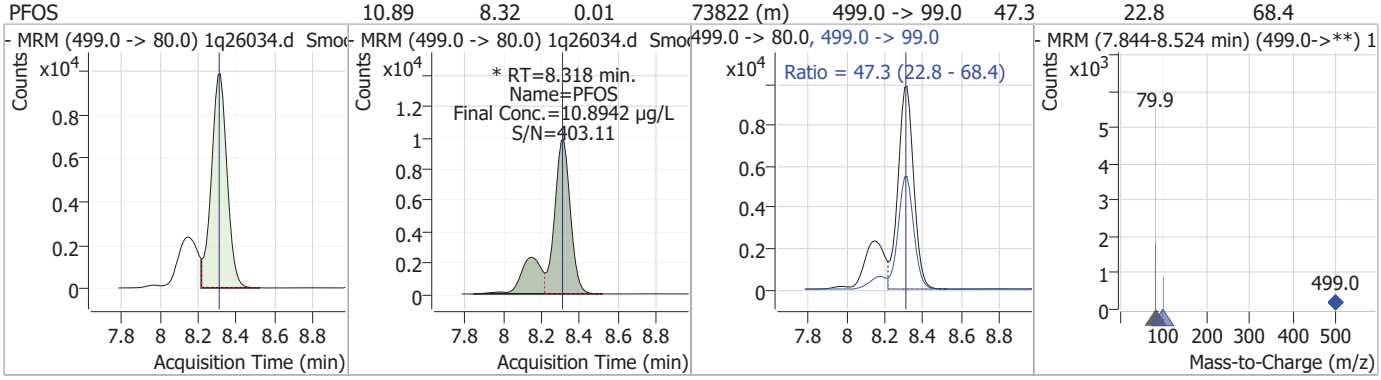


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.64	8.30	0.00	8080				

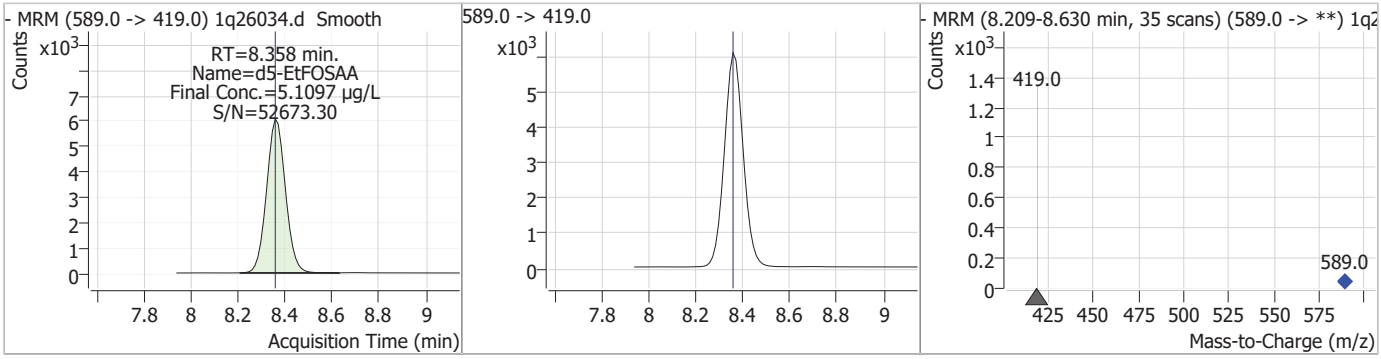


Perfluorinated Compounds by LC/MS/MS

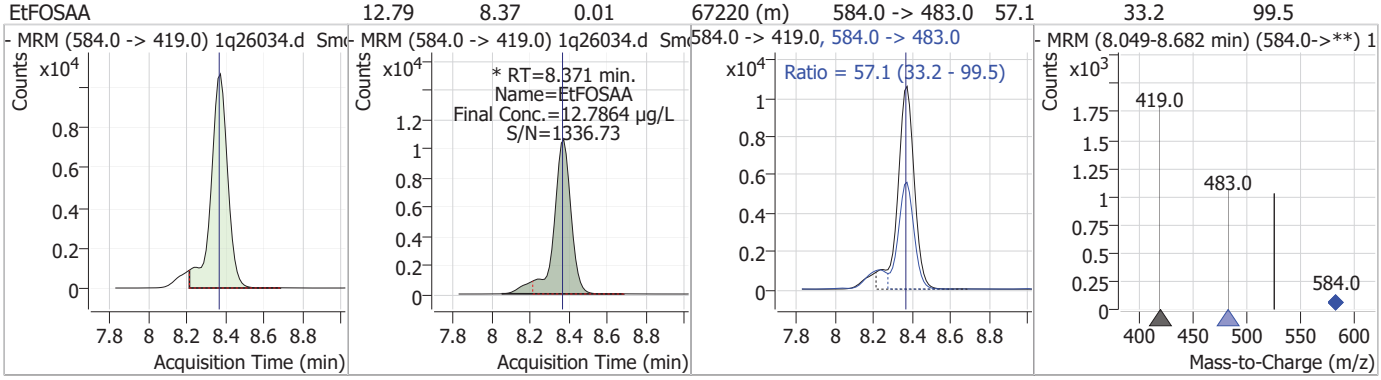
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	10.89	8.32	0.01	73822 (m)	499.0 -> 99.0	47.3	22.8	68.4



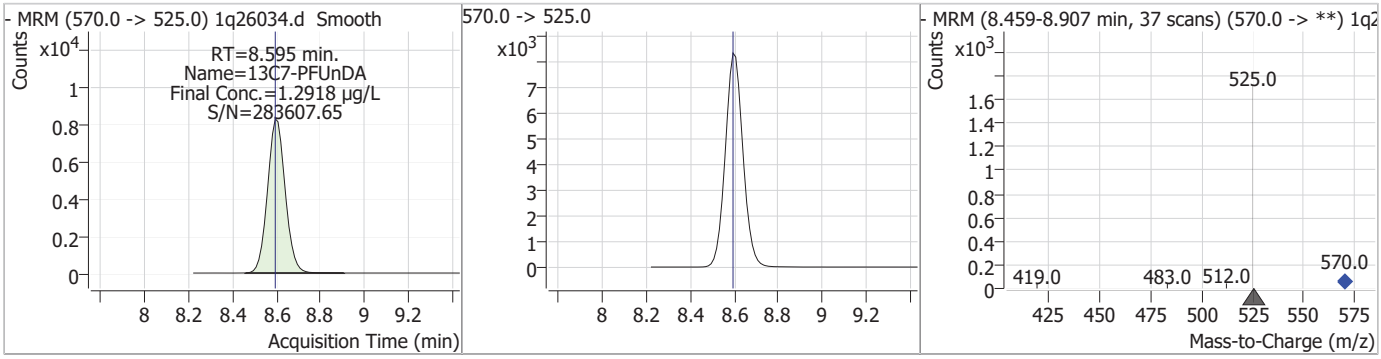
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.11	8.36	0.00	33709				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	12.79	8.37	0.01	67220 (m)	584.0 -> 483.0	57.1	33.2	99.5

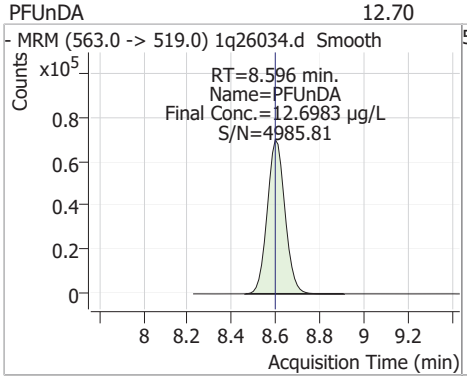


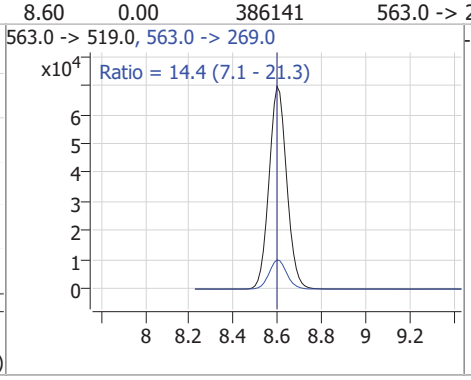
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.29	8.59	0.00	45967				

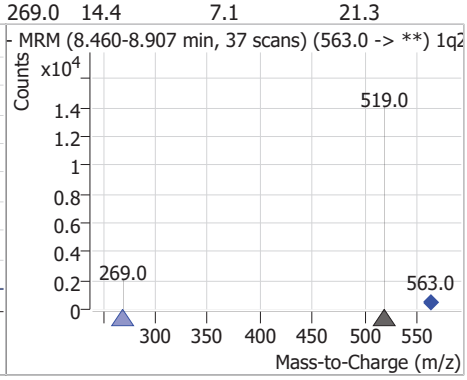


Perfluorinated Compounds by LC/MS/MS

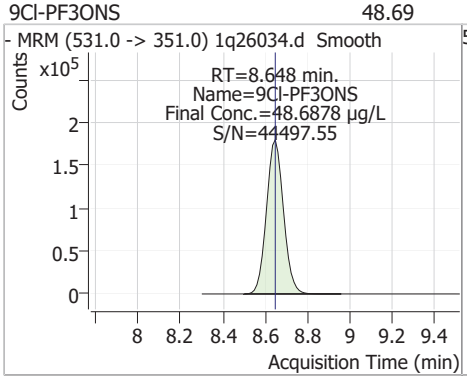
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	12.70	8.60	0.00	386141	563.0 -> 269.0	14.4	7.1	21.3

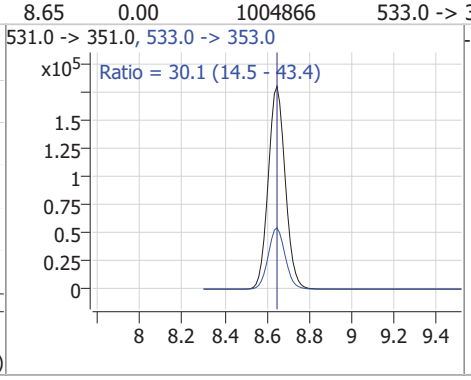


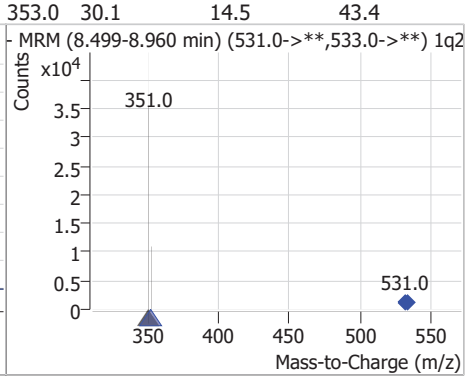




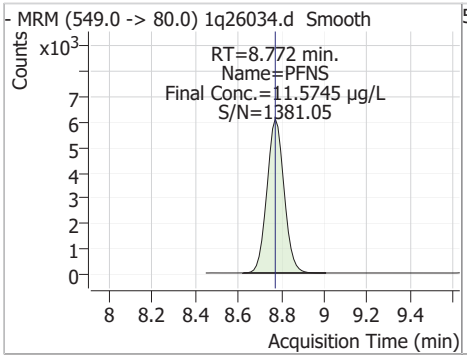
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	48.69	8.65	0.00	1004866	533.0 -> 353.0	30.1	14.5	43.4

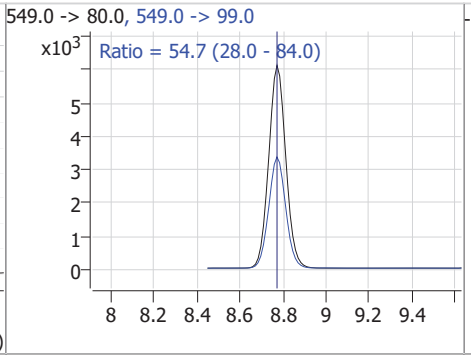


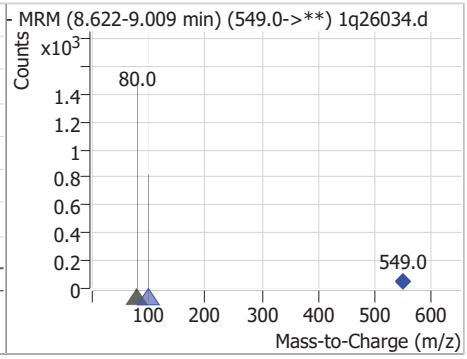




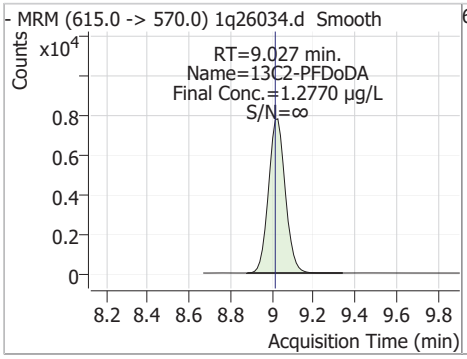
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	11.57	8.77	0.00	33674	549.0 -> 99.0	54.7	28.0	84.0

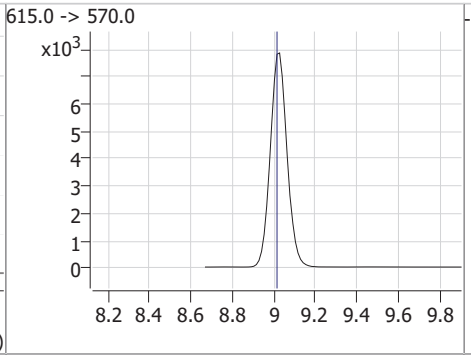


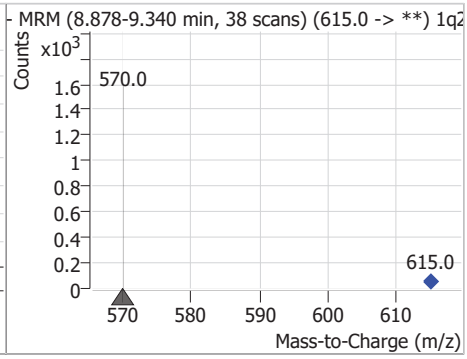




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.28	9.03	0.01	43842				







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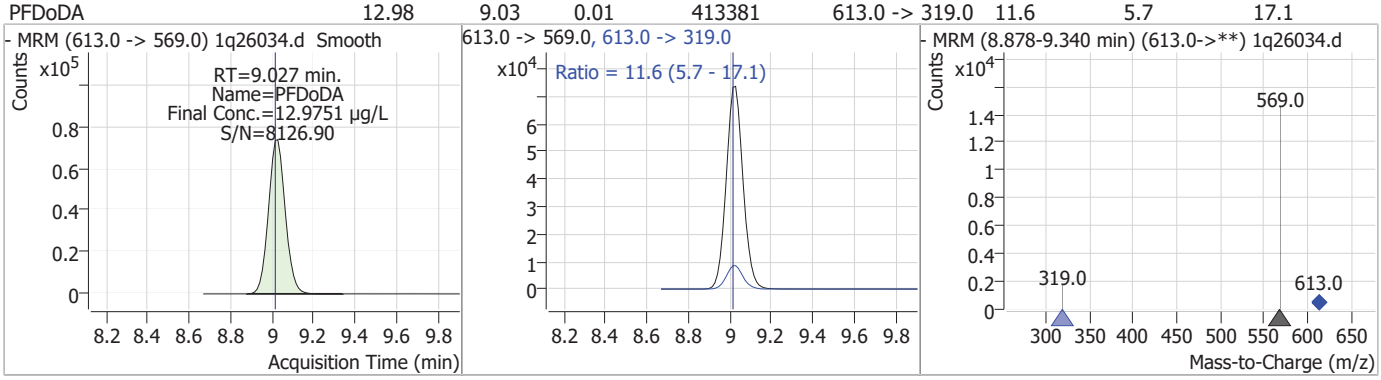
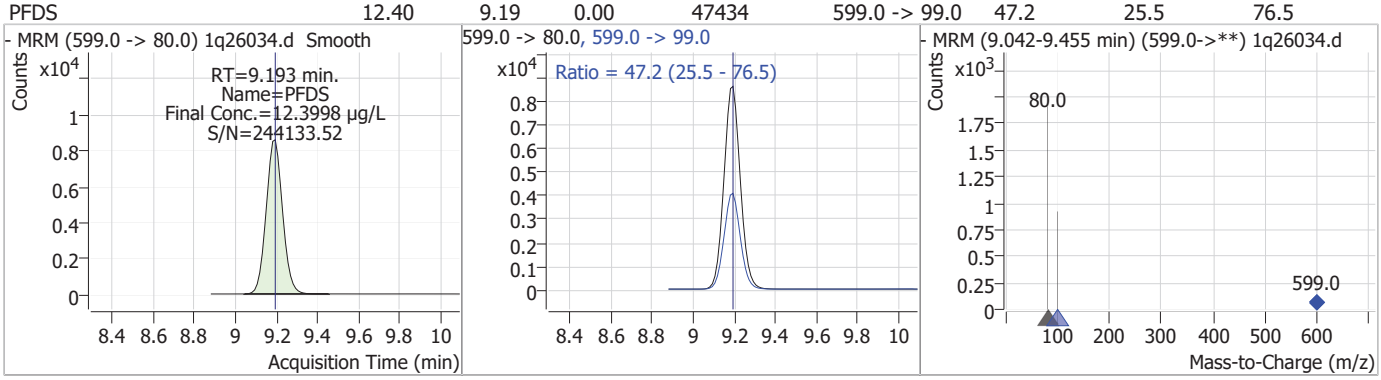
Perfluorinated Compounds by LC/MS/MS

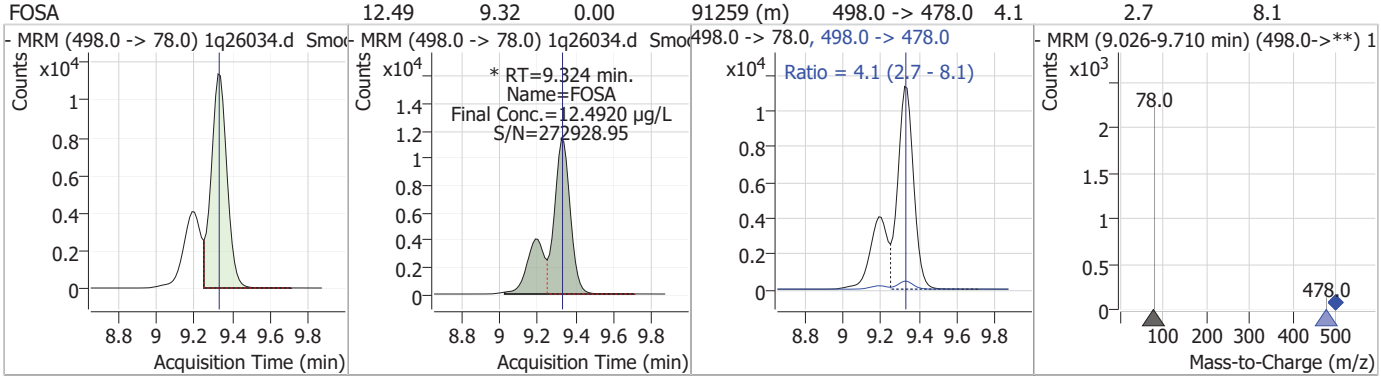
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	12.98	9.03	0.01	413381	613.0 -> 319.0	11.6	5.7	17.1



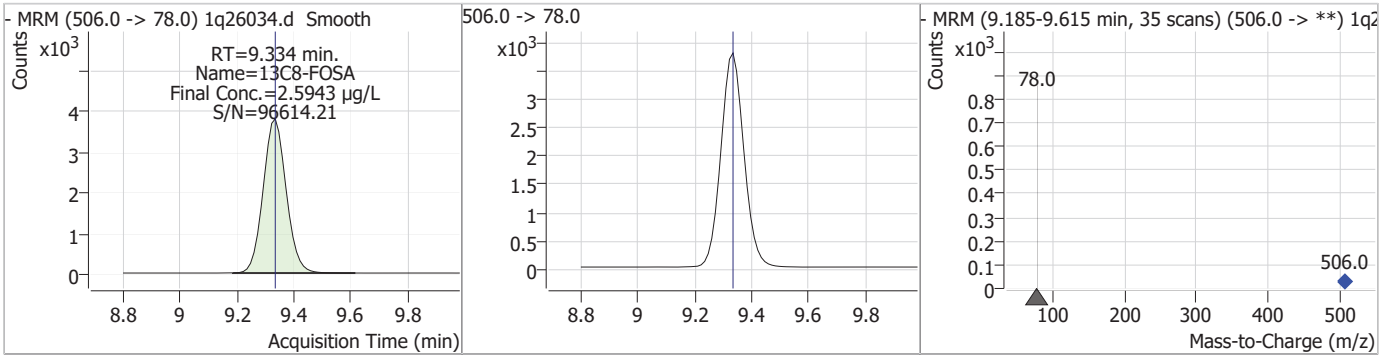
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	12.40	9.19	0.00	47434	599.0 -> 99.0	47.2	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	12.49	9.32	0.00	91259 (m)	498.0 -> 478.0	4.1	2.7	8.1

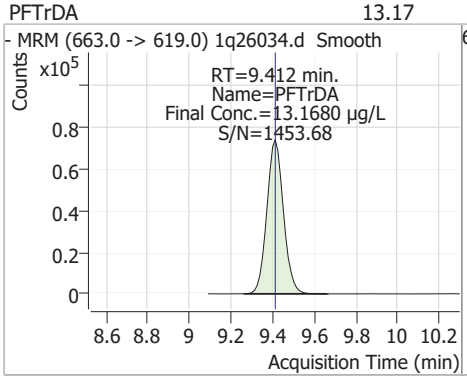


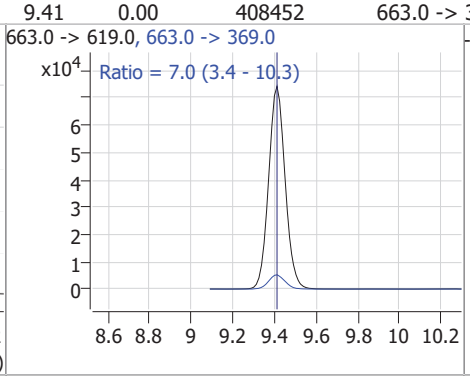
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.59	9.33	0.00	21079				

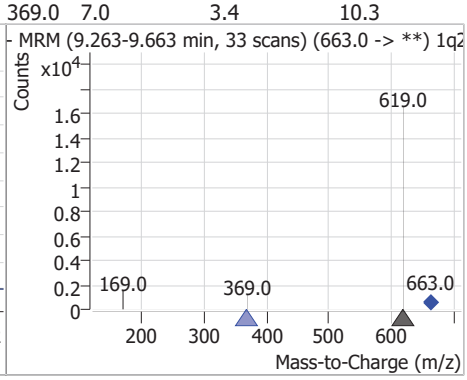


Perfluorinated Compounds by LC/MS/MS

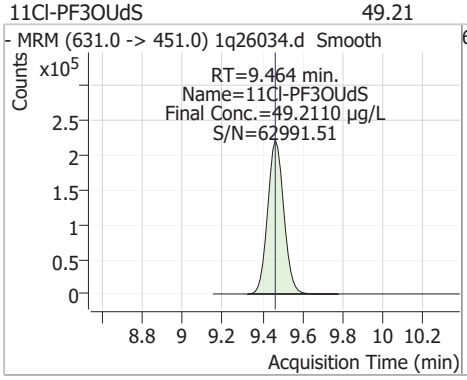
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	13.17	9.41	0.00	408452	663.0 -> 369.0	7.0	3.4	10.3

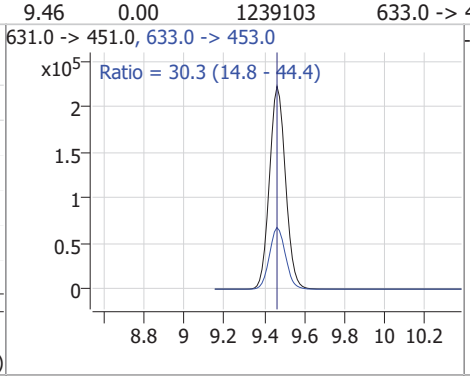


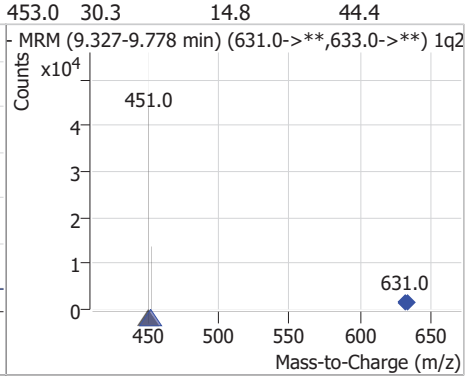




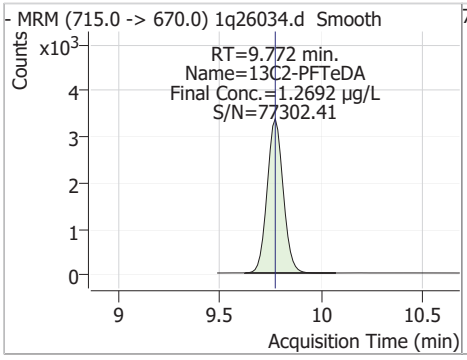
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	49.21	9.46	0.00	1239103	633.0 -> 453.0	30.3	14.8	44.4

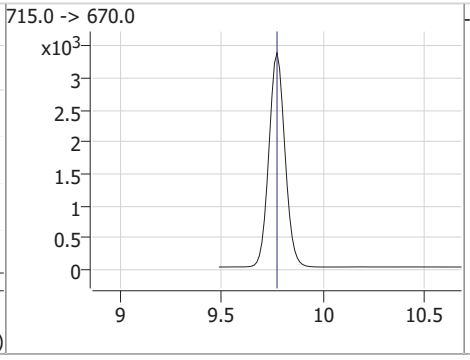


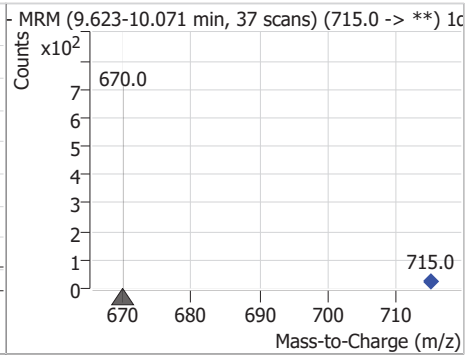




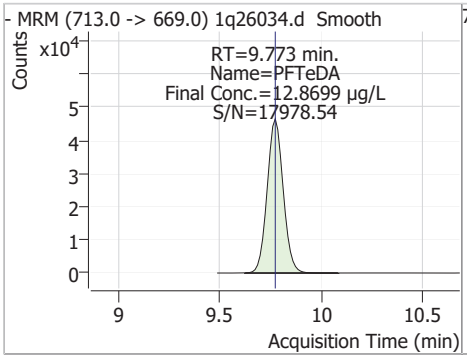
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.27	9.77	0.00	18334				

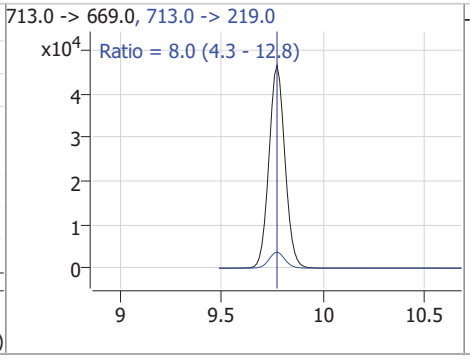


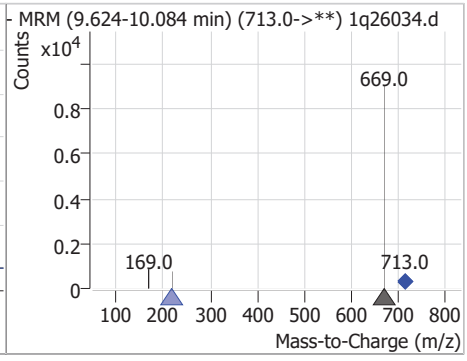




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	12.87	9.77	0.00	254143	713.0 -> 219.0	8.0	4.3	12.8

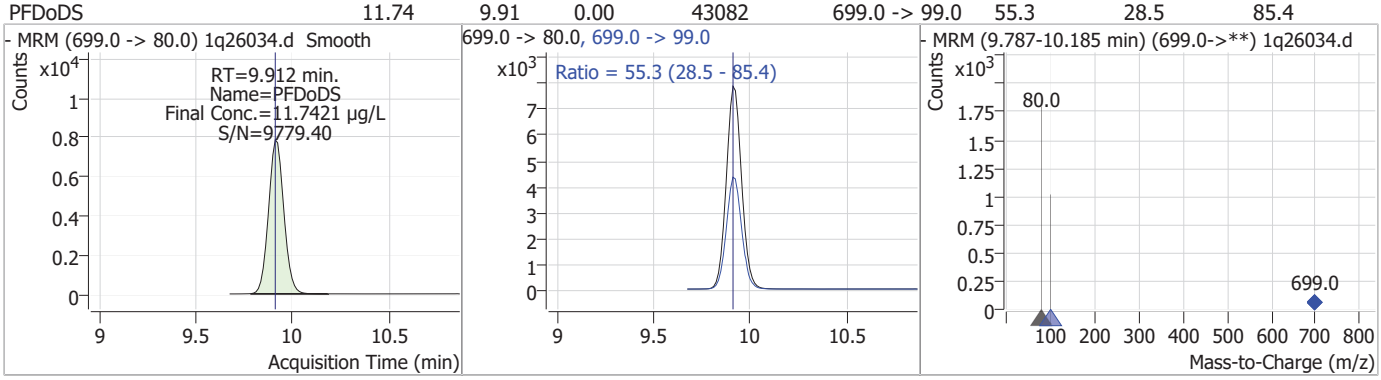




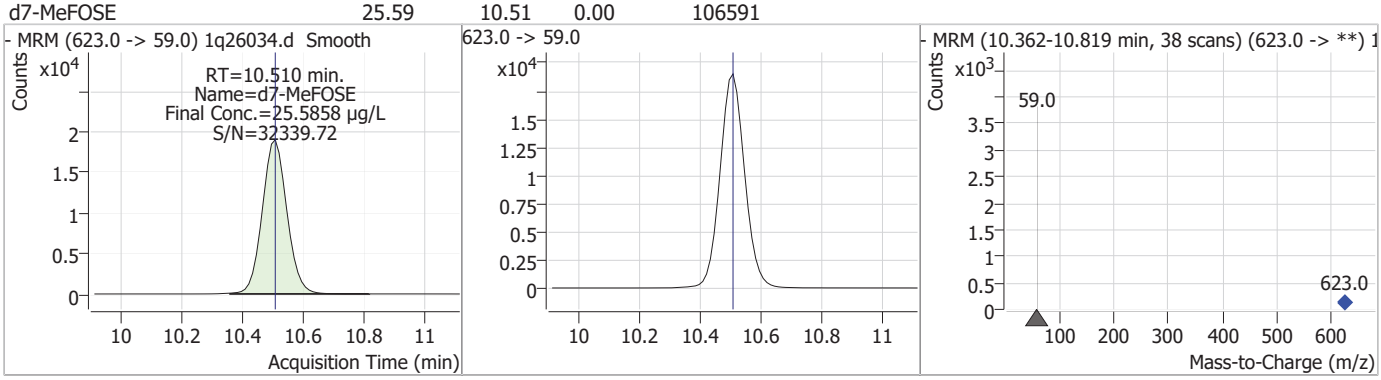


Perfluorinated Compounds by LC/MS/MS

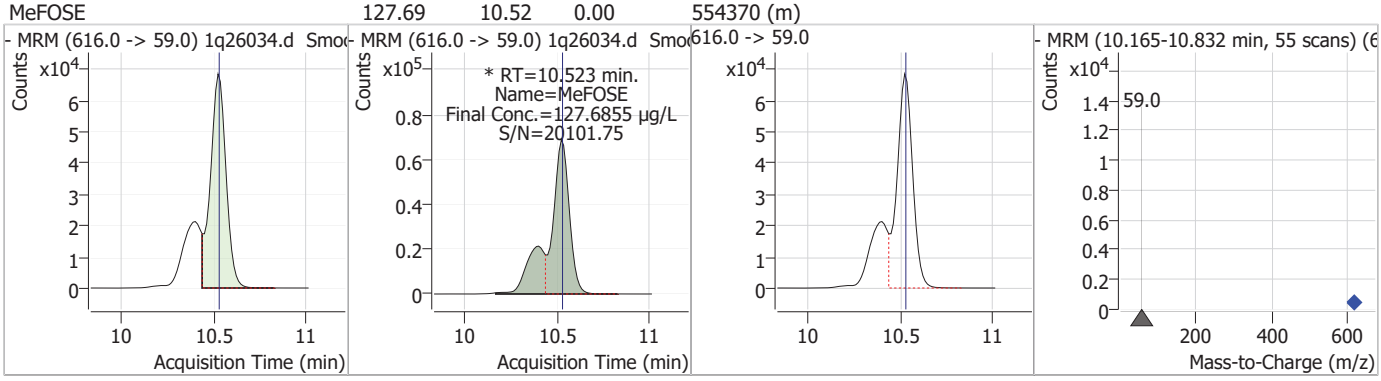
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	11.74	9.91	0.00	43082	699.0 -> 99.0	55.3	28.5	85.4



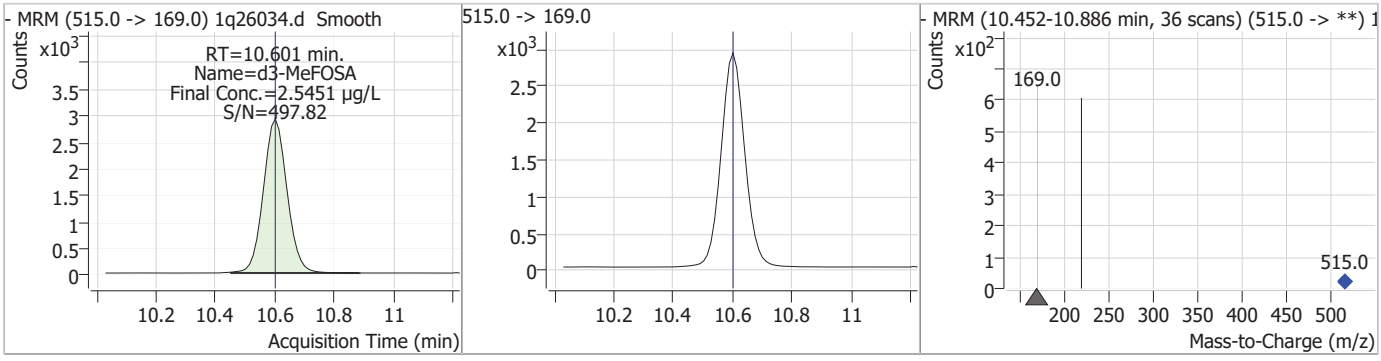
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.59	10.51	0.00	106591				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	127.69	10.52	0.00	554370 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.55	10.60	0.00	16029				



7.6.7

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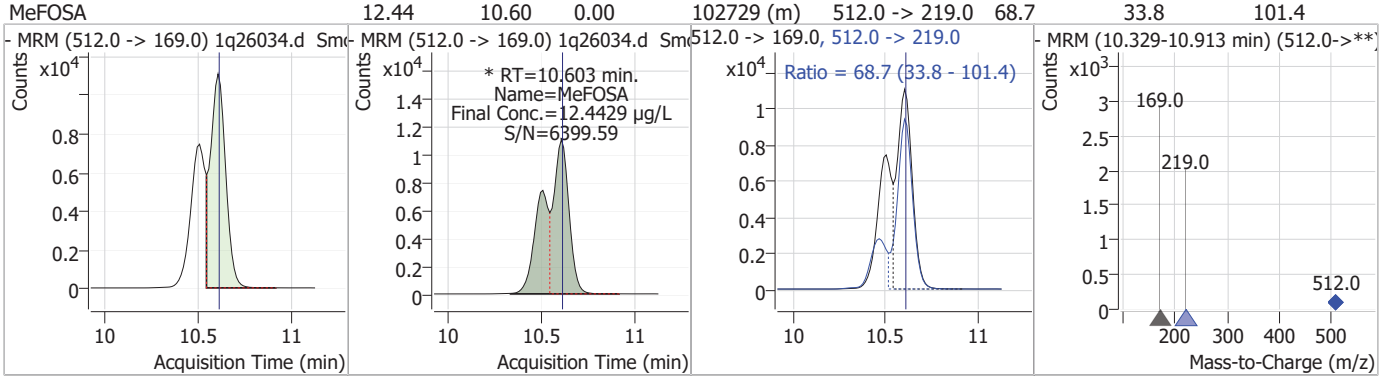
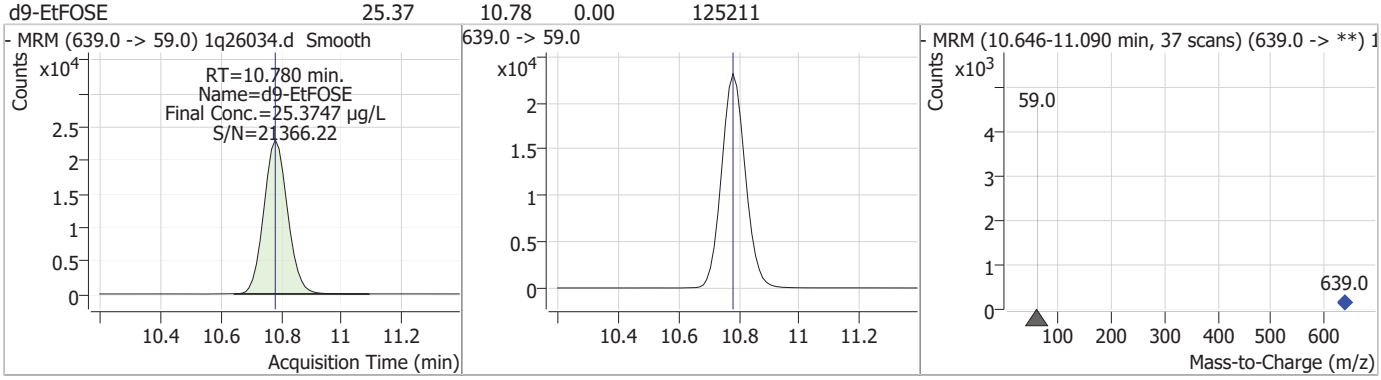
Perfluorinated Compounds by LC/MS/MS

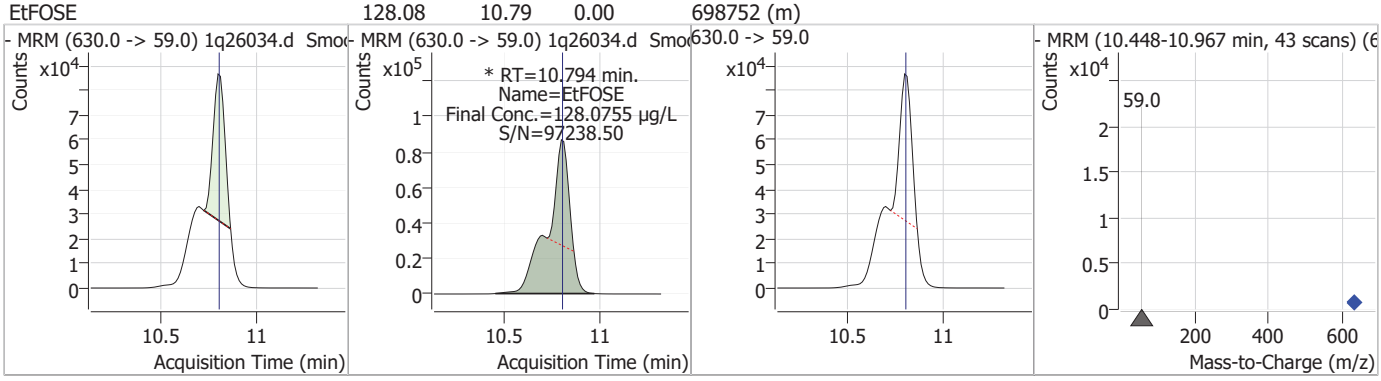
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	12.44	10.60	0.00	102729 (m)	512.0 -> 219.0	68.7	33.8	101.4



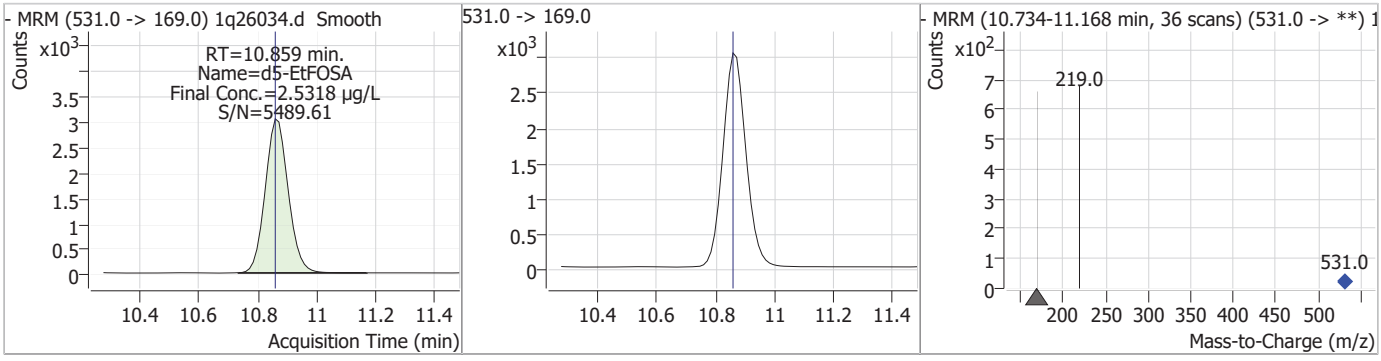
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.37	10.78	0.00	125211				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	128.08	10.79	0.00	698752 (m)				

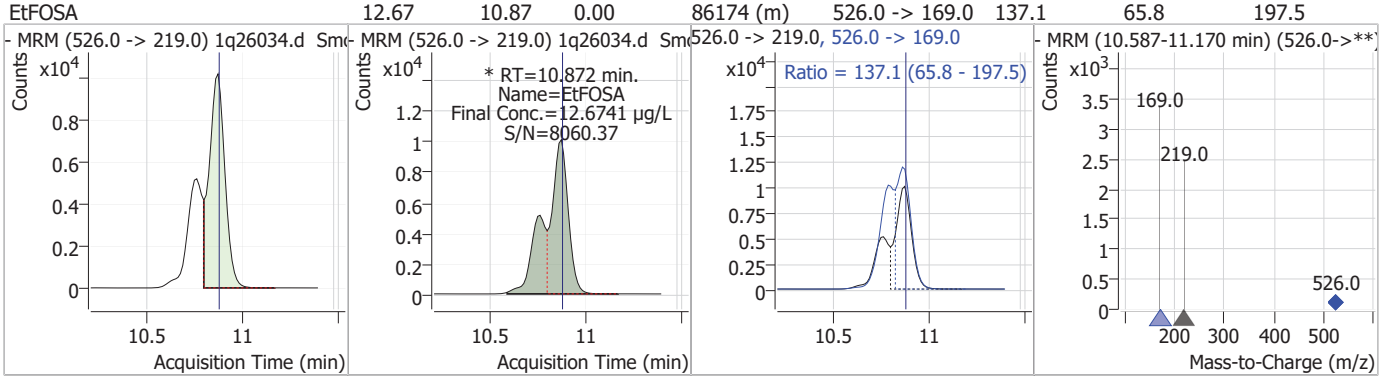


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.53	10.86	0.00	16292				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	12.67	10.87	0.00	86174 (m)	526.0 -> 169.0	137.1	65.8	197.5



7.6.7

7

Manual Integration Approval Summary

Sample Number: T1Q361-IC361
Lab FileID: 1Q26034.D
Injection Time: 05/14/25 17:53
Method: EPA 1633
Analyst approved: 05/15/25 01:25 Rensel John Romano
Supervisor approved: 05/15/25 05:29 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.66	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Split peak
PFOSA	754-91-6		9.32	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSE	1691-99-2		10.79	Split peak
EtFOSA	4151-50-2		10.87	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/15/25 05:29

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26035.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/14/2025 6:08:04 PM
Sample Name : IC361-7
Vial : P1-A8
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : t1q361.batch.bin
Sample Information : OP63461,T1Q361,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	177570	10.00 µg/L	0.000
M5-PFPeA	4.636	268.0 -> 223.0	113558	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	64555	2.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	54456	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	87212	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	31666	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	31426	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	45338	1.25 µg/L	0.000
M2-PFDoDA	9.027	615.0 -> 570.0	43703	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	19480	1.25 µg/L	0.000
M8-FOSA	9.334	506.0 -> 78.0	20816	2.50 µg/L	0.000
M3-PFBS	5.711	302.0 -> 99.0	7482	2.50 µg/L	0.000
M3-PFHxS	7.263	402.0 -> 99.0	7298	2.50 µg/L	-0.012
M8-PFOS	8.316	507.0 -> 99.0	7727	2.50 µg/L	0.012
M2-4:2FTS	5.446	329.0 -> 81.0	1424	5.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	2762	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	4651	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	40411	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	23330	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	33181	5.00 µg/L	0.000
M7-MeFOSE	10.510	623.0 -> 59.0	103905	25.00 µg/L	0.000
M9-EtFOSE	10.780	639.0 -> 59.0	122622	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	16440	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	15714	2.50 µg/L	0.000
13C4-PFOS	8.304	503.0 -> 80.0	13425	2.50 µg/L	0.000
13C3-PFBA	3.251	216.0 -> 172.0	75562	5.00 µg/L	0.000
18O2-PFHxS	7.274	403.0 -> 84.0	9135	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	100959	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	25483	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	31260	1.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	62981	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1424	4.67 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.4%	
13C2-6:2FTS	6.922	429.0 -> 81.0	2762	4.67 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.4%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4651	5.00 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.0%	
13C2-PFDoDA	9.027	615.0 -> 570.0	43703	1.26 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.1%	
13C2-PFTeDA	9.772	715.0 -> 670.0	19480	1.34 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 107.1%	
13C3-PFBS	5.711	302.0 -> 99.0	7482	2.45 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.2%	
13C3-PFHxS	7.263	402.0 -> 99.0	7298	2.39 µg/L	-0.012

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.6%		
13C4-PFBA	3.260	217.0 -> 172.0	177570	9.88 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.8%		
13C4-PFHpA	6.553	367.0 -> 322.0	54456	2.49 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.7%		
13C5-PFHxA	5.759	318.0 -> 273.0	64555	2.41 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.4%		
13C5-PFPeA	4.636	268.0 -> 223.0	113558	4.92 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.4%		
13C6-PFDA	8.139	519.0 -> 474.0	31426	1.27 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.8%		
13C7-PFUnDA	8.595	570.0 -> 525.0	45338	1.27 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.2%		
13C8-FOSA	9.334	506.0 -> 78.0	20816	2.54 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.6%		
13C8-PFOA	7.148	421.0 -> 376.0	87212	2.37 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.9%		
13C8-PFOS	8.316	507.0 -> 99.0	7727	2.50 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.1%		
13C9-PFNA	7.656	472.0 -> 427.0	31666	1.24 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.3%		
d3-MeFOSAA	8.161	573.0 -> 419.0	40411	4.94 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.9%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	23330	9.93 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.3%		
d3-MeFOSA	10.601	515.0 -> 169.0	15714	2.47 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.9%		
d5-EtFOSAA	8.358	589.0 -> 419.0	33181	4.99 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.7%		
d7-MeFOSE	10.510	623.0 -> 59.0	103905	24.72 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 98.9%		
d9-EtFOSE	10.780	639.0 -> 59.0	122622	24.63 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 98.5%		
d5-EtFOSA	10.859	531.0 -> 169.0	16440	2.53 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.3%		
Target Compounds						QValue
4:2FTS	5.447	327.0 -> 307.0	260743	98.22 µg/L		97
		327.0 -> 81.0	115279			
6:2FTS	6.922	427.0 -> 407.0	363758	102.89 µg/L		96
		427.0 -> 81.0	123855			
8:2FTS	7.927	527.0 -> 507.0	414143	97.92 µg/L		99
		527.0 -> 81.0	124154			
EtFOSAA	8.371	584.0 -> 419.0	144703	27.96 µg/L	m	89
		584.0 -> 483.0	82876			
FOSA	9.324	498.0 -> 78.0	187516	25.99 µg/L	m	97
		498.0 -> 478.0	7979			
MeFOSAA	8.162	570.0 -> 419.0	169481	26.44 µg/L	m	100
		570.0 -> 512.0	63437			
PFBA	3.254	213.0 -> 169.0	532695	107.28 µg/L		100
PFBS	5.700	299.0 -> 80.0	199529	23.02 µg/L		100
		299.0 -> 99.0	77894			
PFDA	8.140	513.0 -> 469.0	576133	26.70 µg/L		99
		513.0 -> 219.0	91208			
PFDoDA	9.015	613.0 -> 569.0	851411	26.81 µg/L		100
		613.0 -> 319.0	98055			
PFDS	9.193	599.0 -> 80.0	96575	25.60 µg/L		95

Perfluorinated Compounds by LC/MS/MS

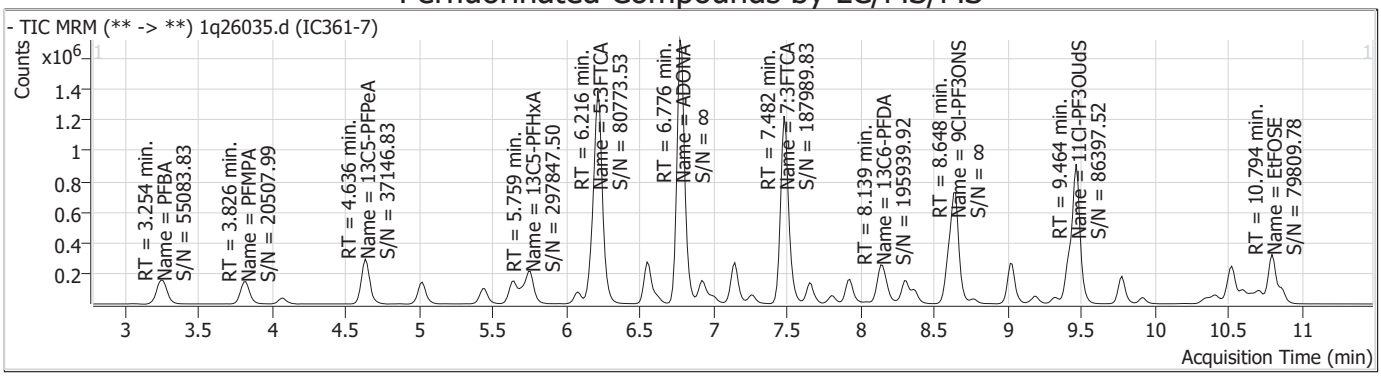
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	45716				
PFHpA	6.554	363.0 -> 319.0	806324	26.45	µg/L		96
		363.0 -> 169.0	139443				
PFHpS	7.809	449.0 -> 80.0	131358	26.03	µg/L		96
		449.0 -> 99.0	62559				
PFHxA	5.761	313.0 -> 269.0	640871	27.09	µg/L		100
		313.0 -> 119.0	17524				
PFHxS	7.264	399.0 -> 80.0	140766	24.76	µg/L	m	97
		399.0 -> 99.0	69392				
PFNA	7.657	463.0 -> 419.0	432185	27.21	µg/L	m	96
		463.0 -> 219.0	116727				
PFNS	8.772	549.0 -> 80.0	67729	24.34	µg/L		96
		549.0 -> 99.0	35918				
PFOA	7.149	413.0 -> 369.0	812851	26.98	µg/L	m	97
		413.0 -> 169.0	181849				
PFOS	8.318	499.0 -> 80.0	150239	23.18	µg/L	m	96
		499.0 -> 99.0	72592				
PFPeA	4.638	263.0 -> 219.0	1054788	53.34	µg/L		100
PFPeS	6.630	349.0 -> 80.0	93906	24.22	µg/L		95
		349.0 -> 99.0	40129				
PFTeDA	9.773	713.0 -> 669.0	525866	25.06	µg/L		99
		713.0 -> 219.0	42312				
PFTrDA	9.412	663.0 -> 619.0	832163	26.91	µg/L		100
		663.0 -> 369.0	57521				
PFUnDA	8.596	563.0 -> 519.0	794385	26.49	µg/L		98
		563.0 -> 269.0	120126				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	2435753	96.85	µg/L		99
		633.0 -> 453.0	727971				
9Cl-PF3ONS	8.648	531.0 -> 351.0	1949141	94.55	µg/L		98
		533.0 -> 353.0	587176				
ADONA	6.776	377.0 -> 251.0	5027760	97.87	µg/L		100
		377.0 -> 85.0	1387172				
HFPO-DA	6.088	285.0 -> 169.0	243887	107.96	µg/L		96
		285.0 -> 185.0	19536				
3:3FTCA	4.072	241.0 -> 177.0	143213	133.05	µg/L		100
		241.0 -> 117.0	9628				
5:3FTCA	6.216	341.0 -> 237.0	2844949	679.95	µg/L		100
		341.0 -> 217.0	2012252				
7:3FTCA	7.482	441.0 -> 337.0	3224943	682.58	µg/L		99
		441.0 -> 317.0	1468032				
EtFOSA	10.872	526.0 -> 219.0	181705	26.48	µg/L	m	97
		526.0 -> 169.0	245151				
EtFOSE	10.794	630.0 -> 59.0	1424384	266.59	µg/L	m	100
MeFOSA	10.603	512.0 -> 169.0	218135	26.95	µg/L	m	100
		512.0 -> 219.0	148018				
MeFOSE	10.523	616.0 -> 59.0	1139214	269.17	µg/L	m	100
PFDoDS	9.912	699.0 -> 80.0	88449	25.21	µg/L		99
		699.0 -> 99.0	51121				
NFDHA	5.651	295.0 -> 201.0	83257	52.88	µg/L		96
		201.0 -> 85.0	462906				
		295.0 -> 85.0	21701				
PFMBA	5.027	279.0 -> 85.0	574002	53.41	µg/L		100
PFMPA	3.826	229.0 -> 85.0	646738	53.40	µg/L		100
PFEESA	6.182	315.0 -> 135.0	1079437	48.00	µg/L		99
		315.0 -> 69.0	97176				

 # = Qualifier out of range, m = manually integrated, + = Area summed

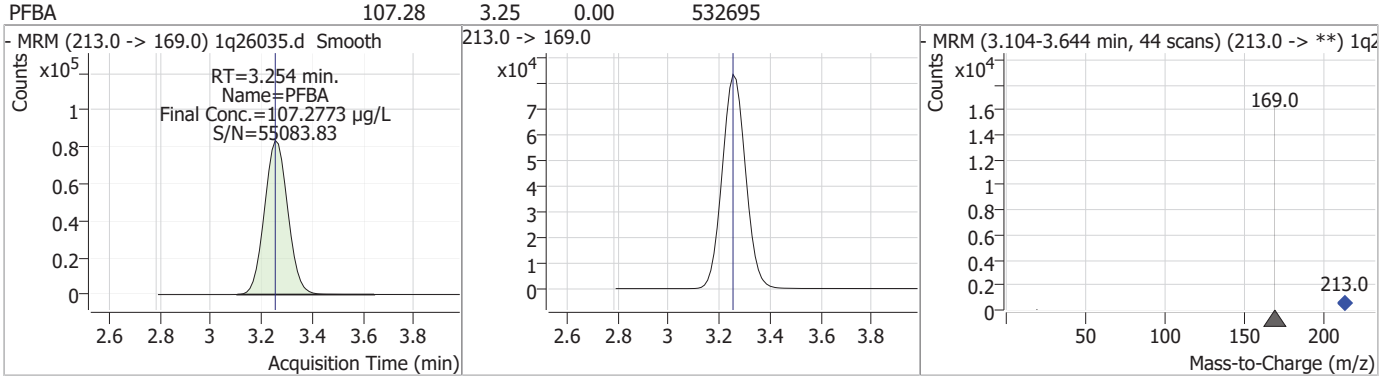
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

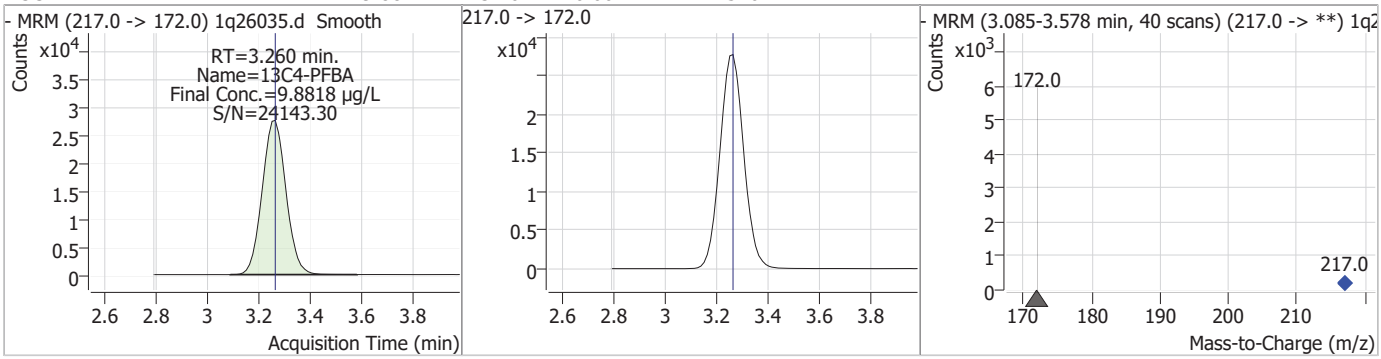
Perfluorinated Compounds by LC/MS/MS



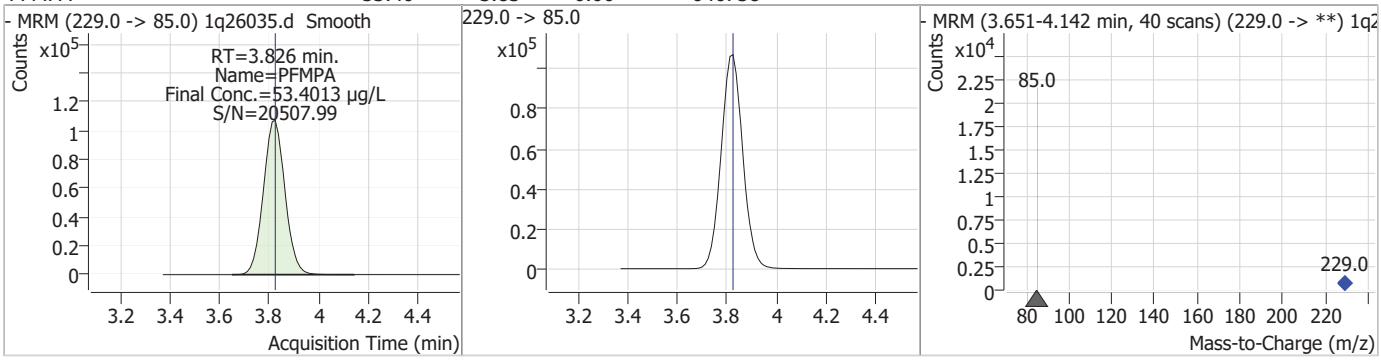
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	107.28	3.25	0.00	532695				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.88	3.26	0.00	177570				

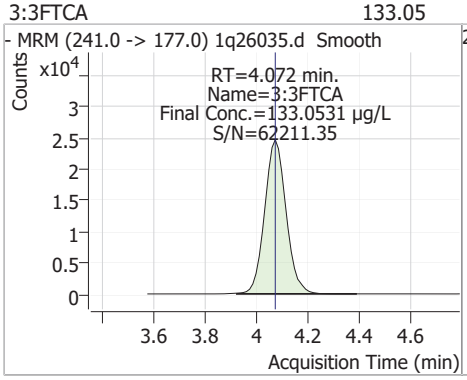


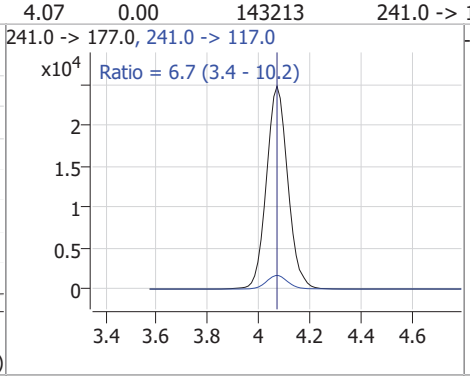
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	53.40	3.83	0.00	646738				

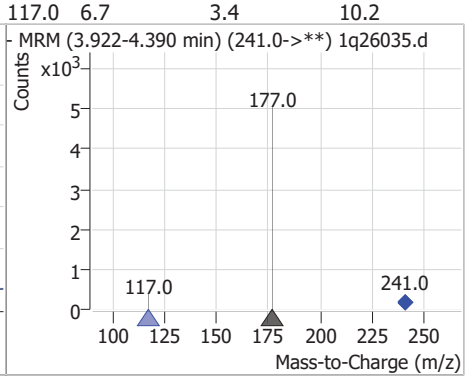


Perfluorinated Compounds by LC/MS/MS

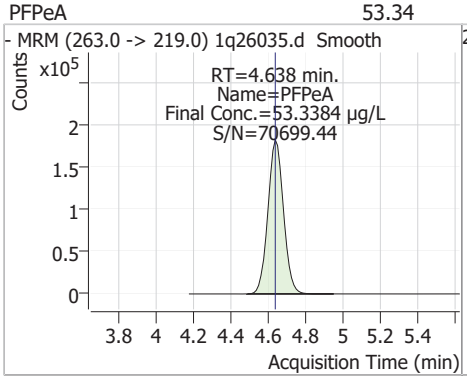
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	133.05	4.07	0.00	143213	241.0 -> 117.0	6.7	3.4	10.2

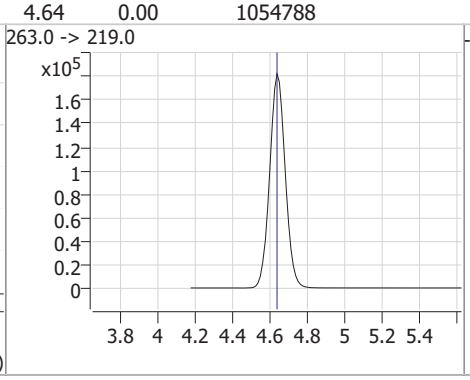


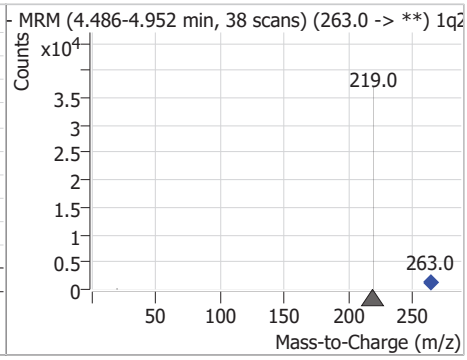




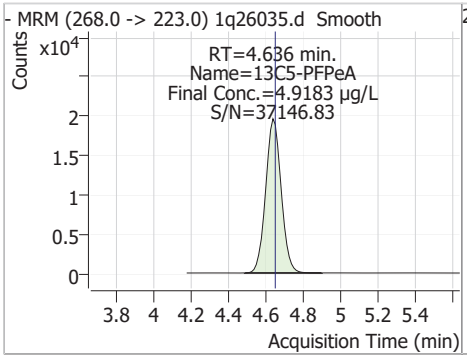
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	53.34	4.64	0.00	1054788				

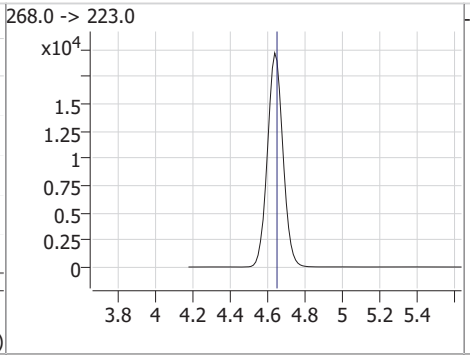


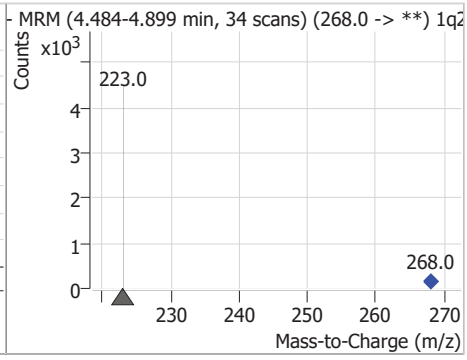




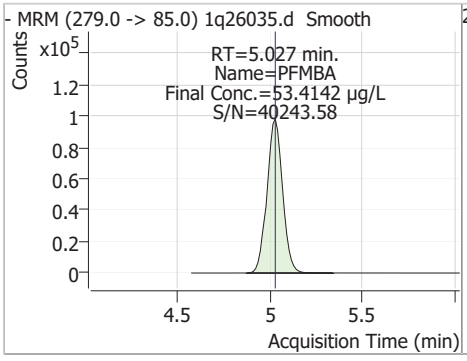
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.92	4.64	-0.01	113558				

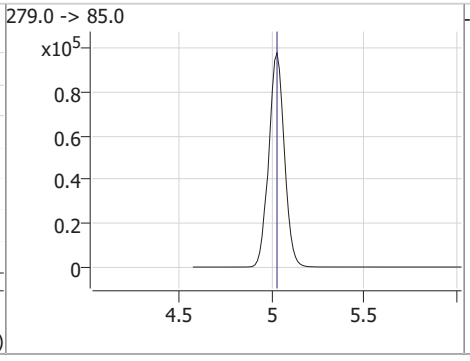


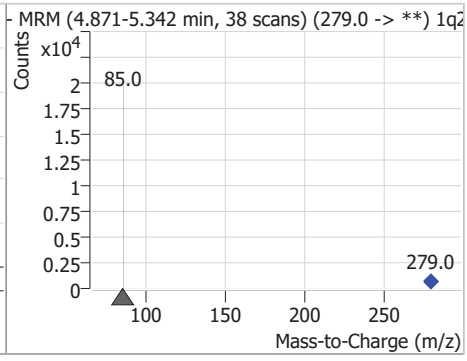




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	53.41	5.03	0.00	574002				





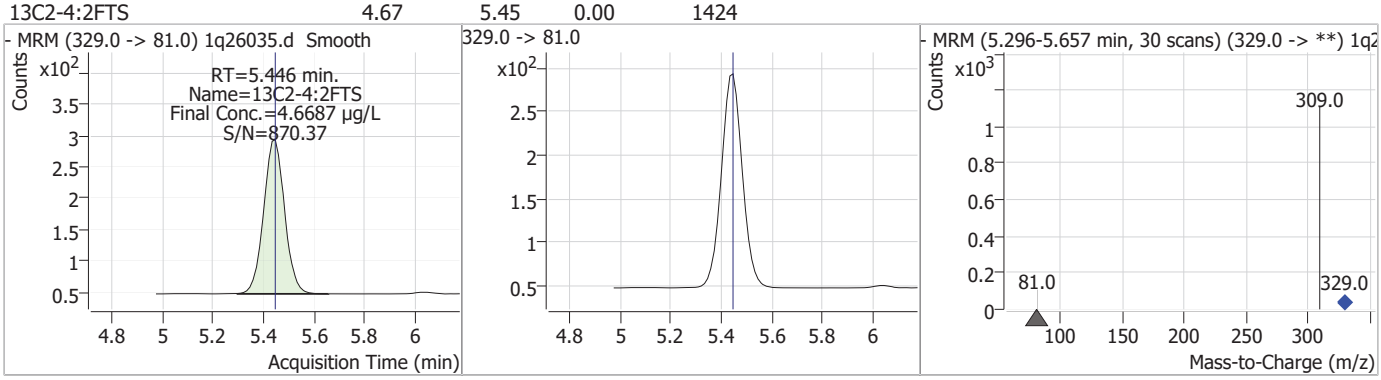


7.6.8

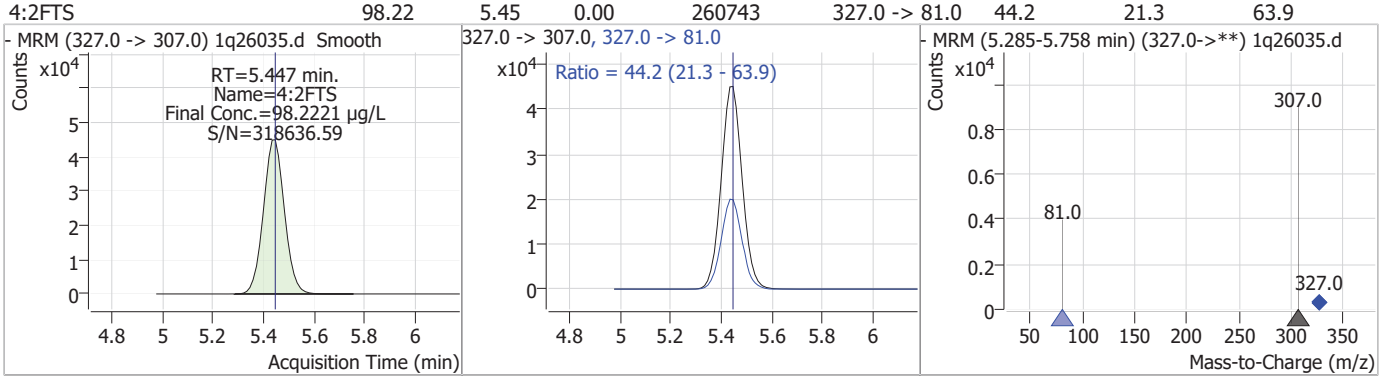
7

Perfluorinated Compounds by LC/MS/MS

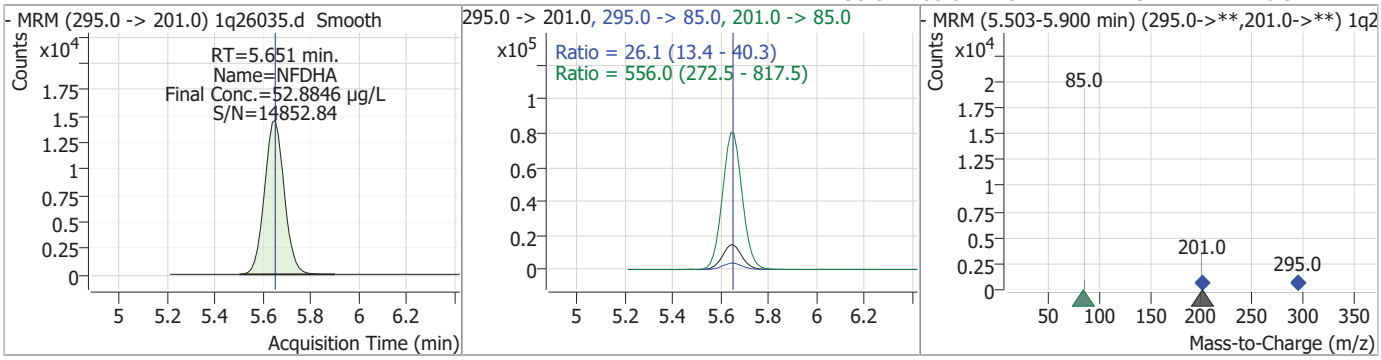
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.67	5.45	0.00	1424				



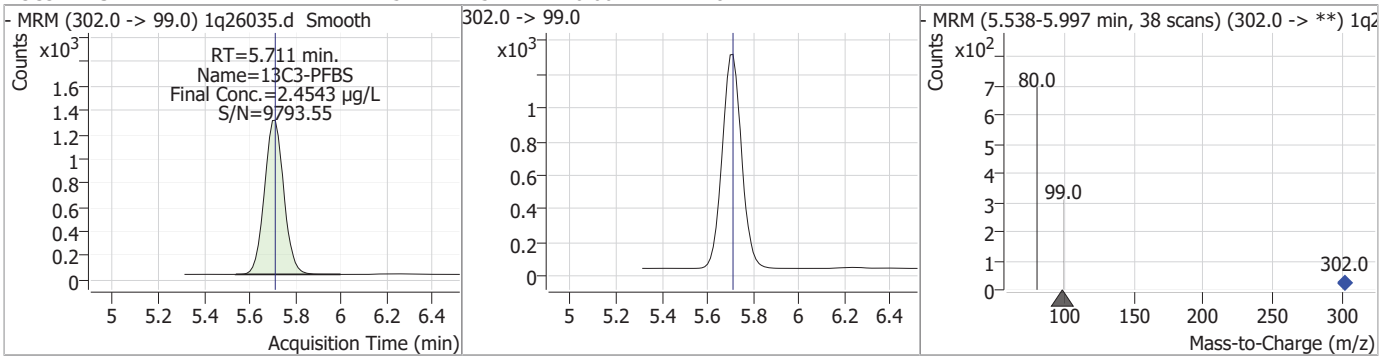
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	98.22	5.45	0.00	260743	327.0 -> 81.0	44.2	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	52.88	5.65	0.00	83257	201.0 -> 85.0	556.0	272.5	817.5
					295.0 -> 85.0	26.1	13.4	40.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.45	5.71	0.00	7482				

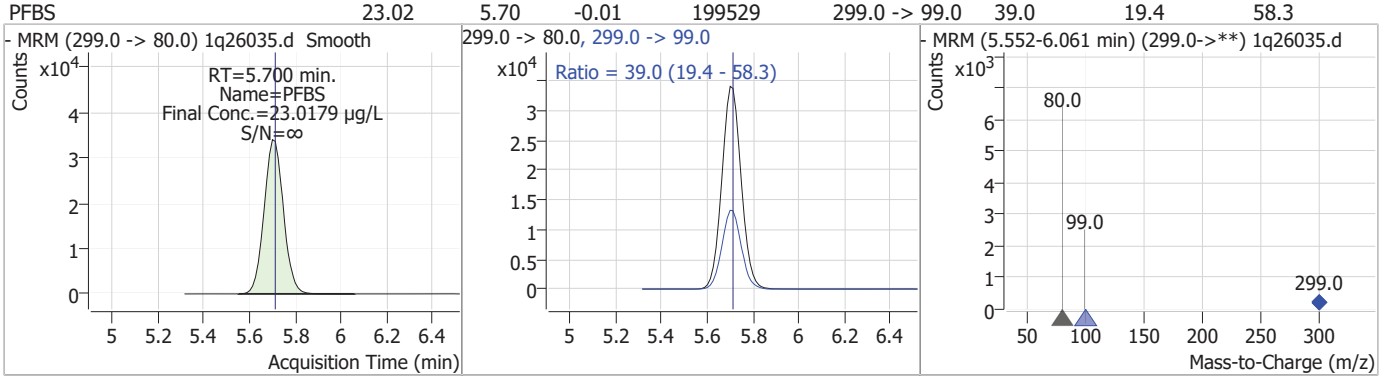


7.6.8

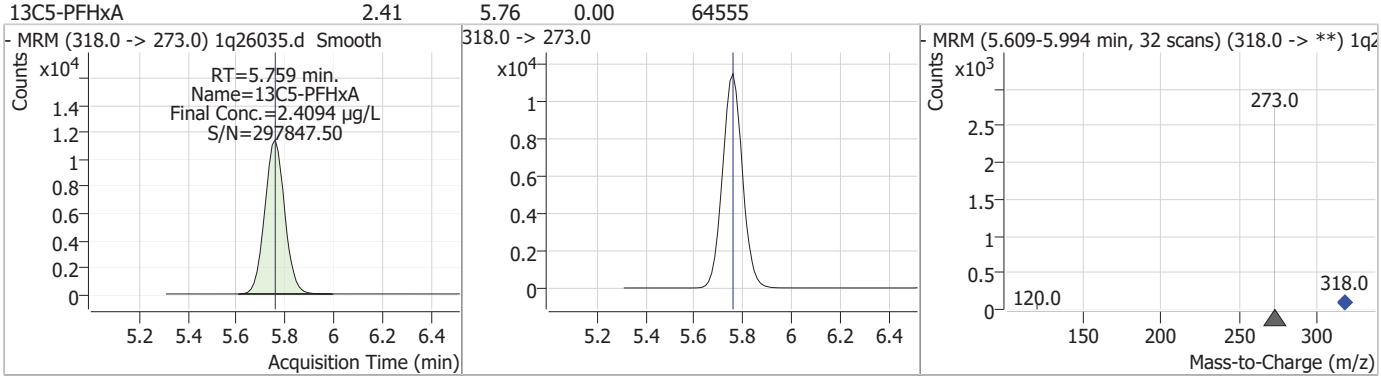
7

Perfluorinated Compounds by LC/MS/MS

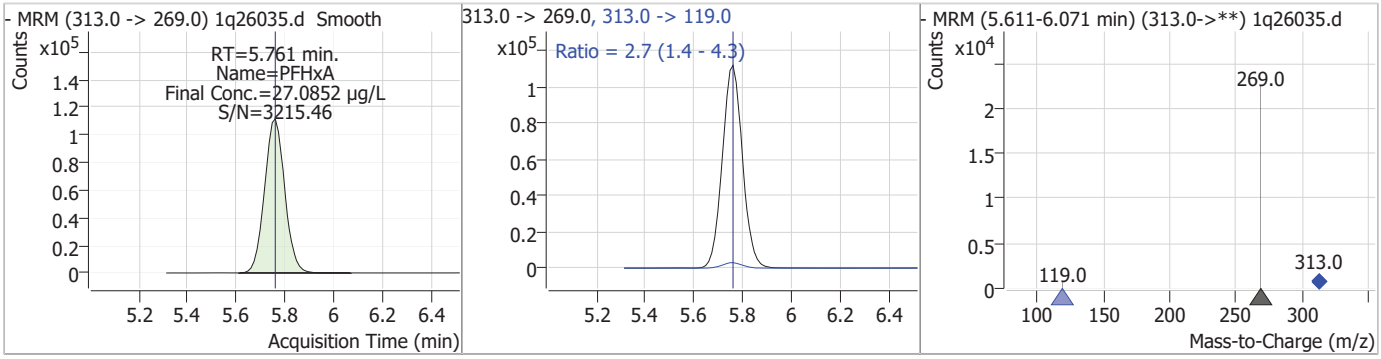
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	23.02	5.70	-0.01	199529	299.0 -> 99.0	39.0	19.4	58.3



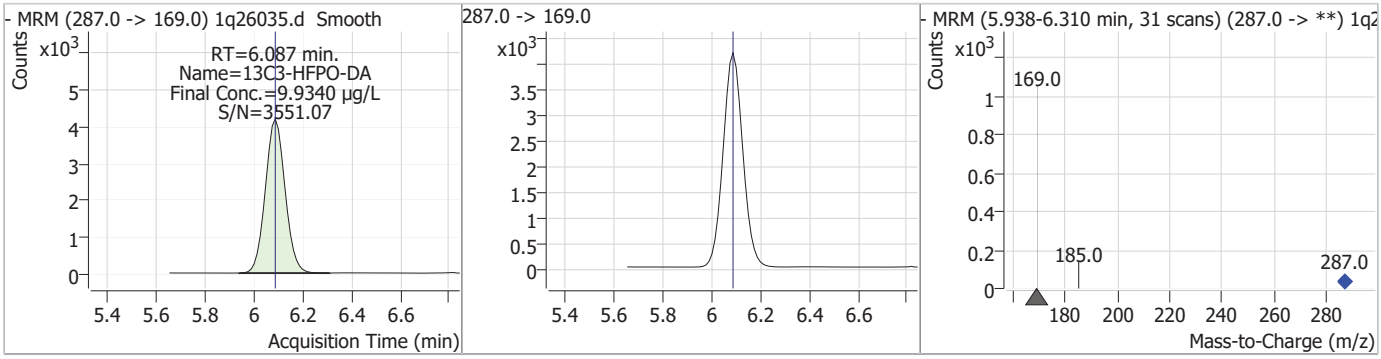
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.41	5.76	0.00	64555				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	27.09	5.76	0.00	640871	313.0 -> 119.0	2.7	1.4	4.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.93	6.09	0.00	23330				

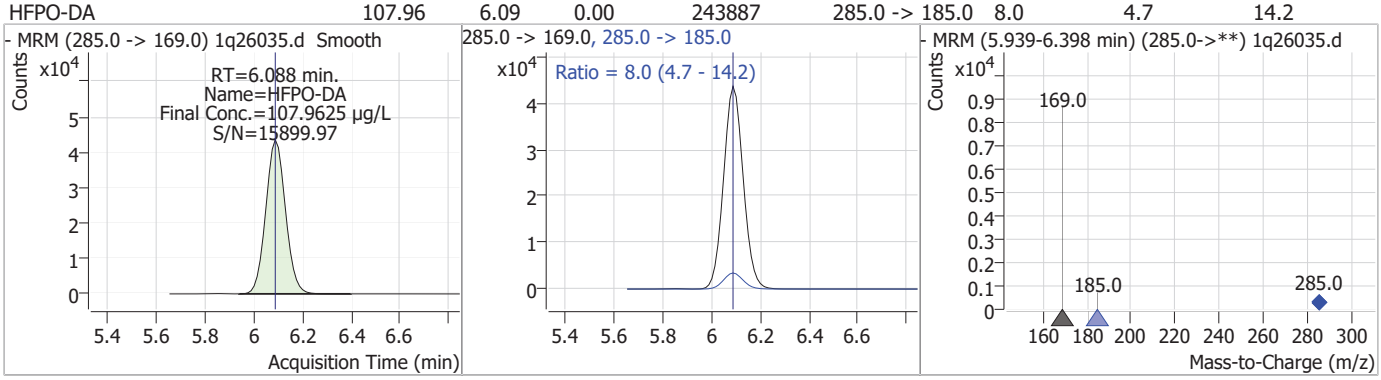


7.6.8

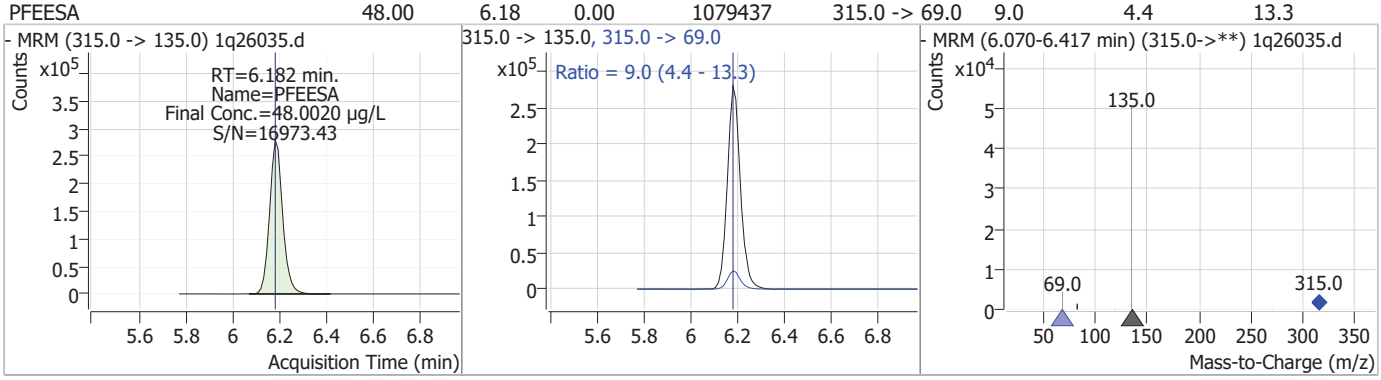
7

Perfluorinated Compounds by LC/MS/MS

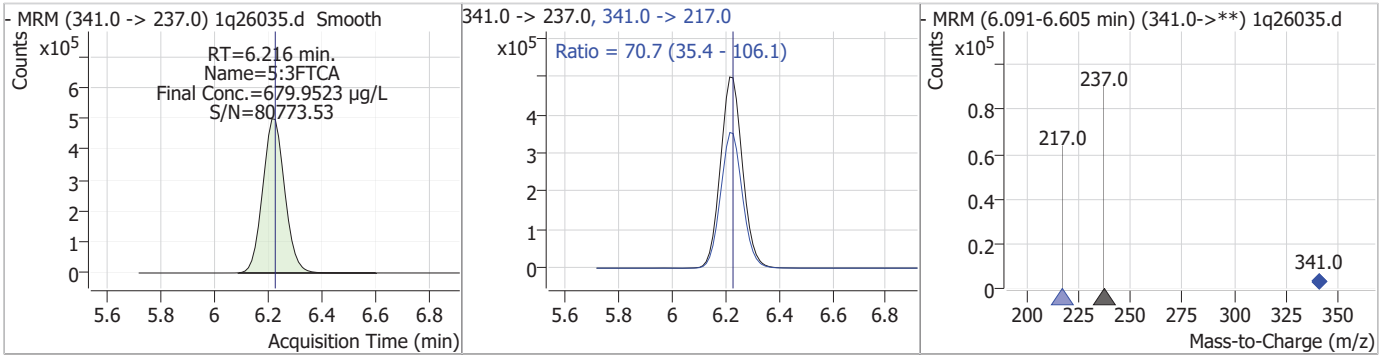
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	107.96	6.09	0.00	243887	285.0 -> 185.0	8.0	4.7	14.2



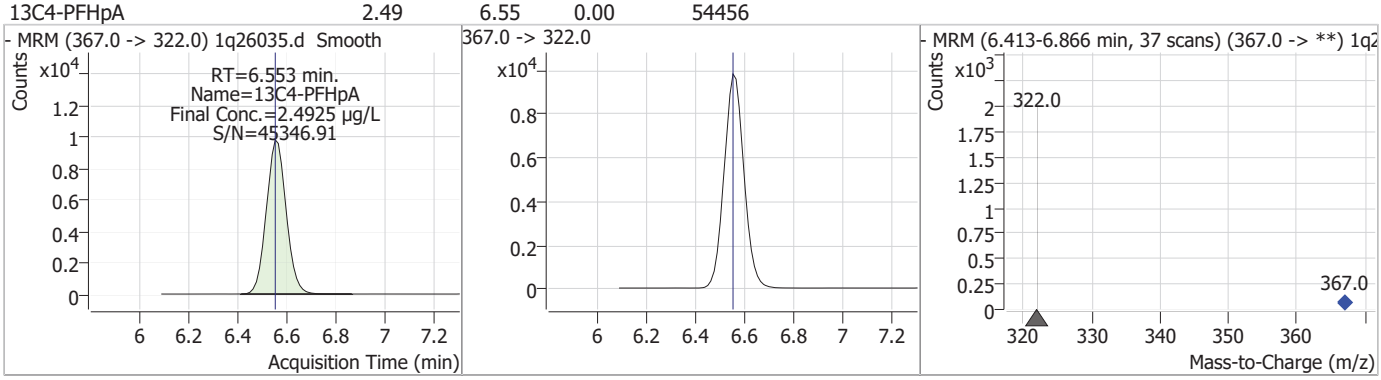
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	48.00	6.18	0.00	1079437	315.0 -> 69.0	9.0	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	679.95	6.22	-0.01	2844949	341.0 -> 217.0	70.7	35.4	106.1

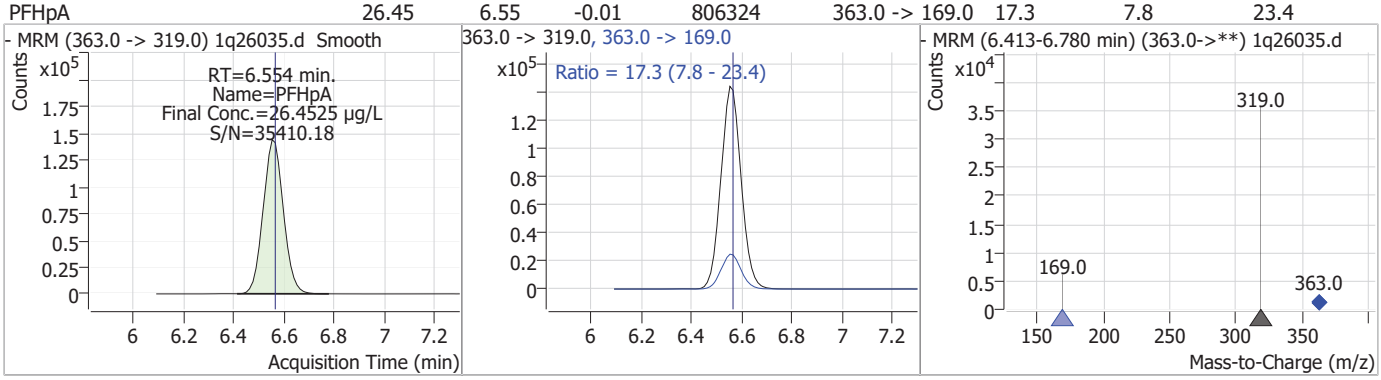


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.49	6.55	0.00	54456				

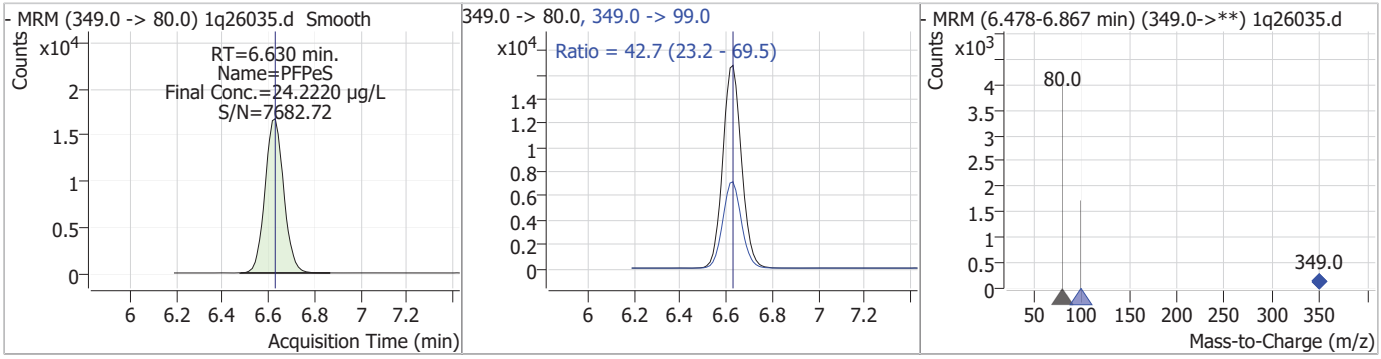


Perfluorinated Compounds by LC/MS/MS

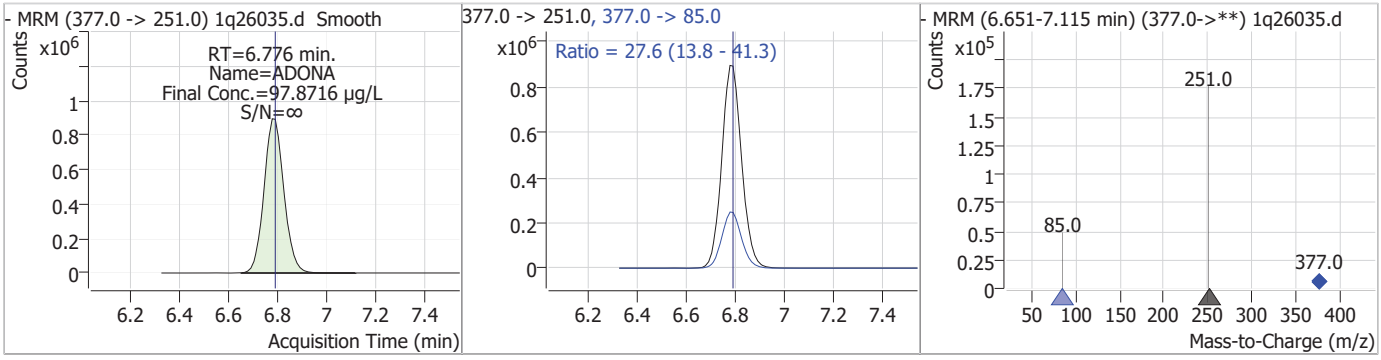
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	26.45	6.55	-0.01	806324	363.0 -> 169.0	17.3	7.8	23.4



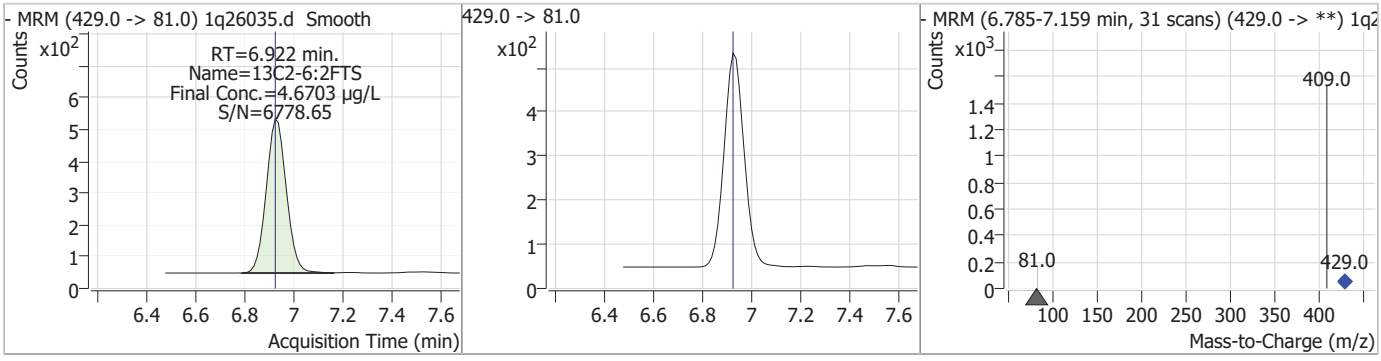
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	24.22	6.63	0.00	93906	349.0 -> 99.0	42.7	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	97.87	6.78	-0.01	5027760	377.0 -> 85.0	27.6	13.8	41.3

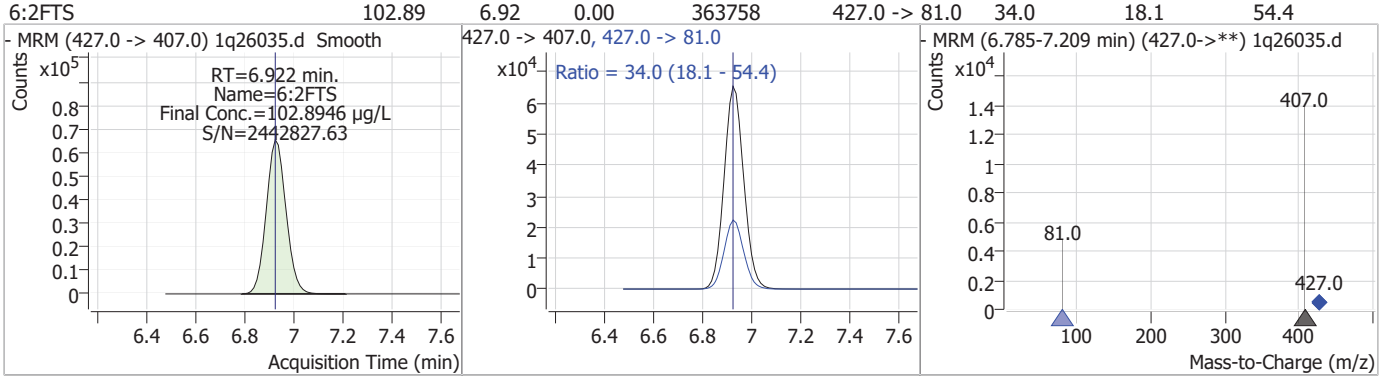


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.67	6.92	0.00	2762				

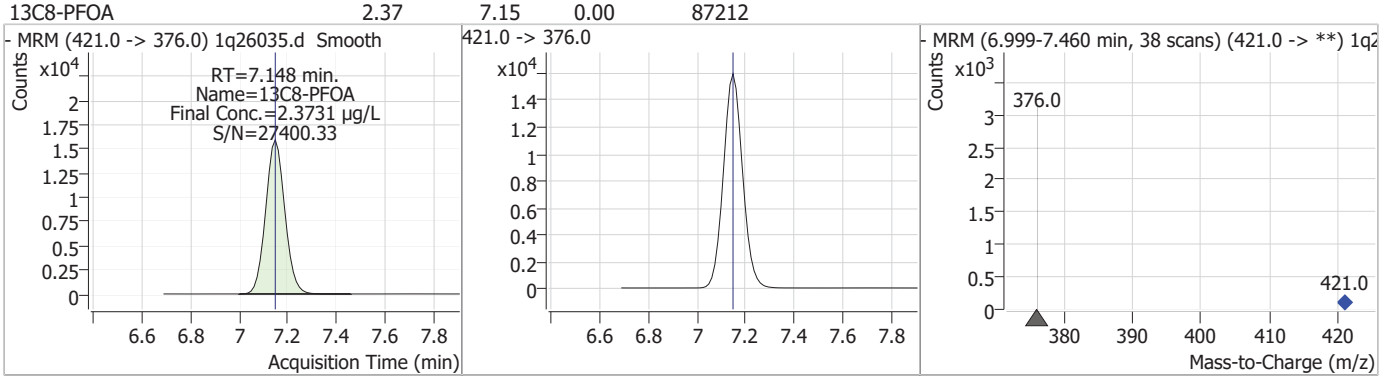


Perfluorinated Compounds by LC/MS/MS

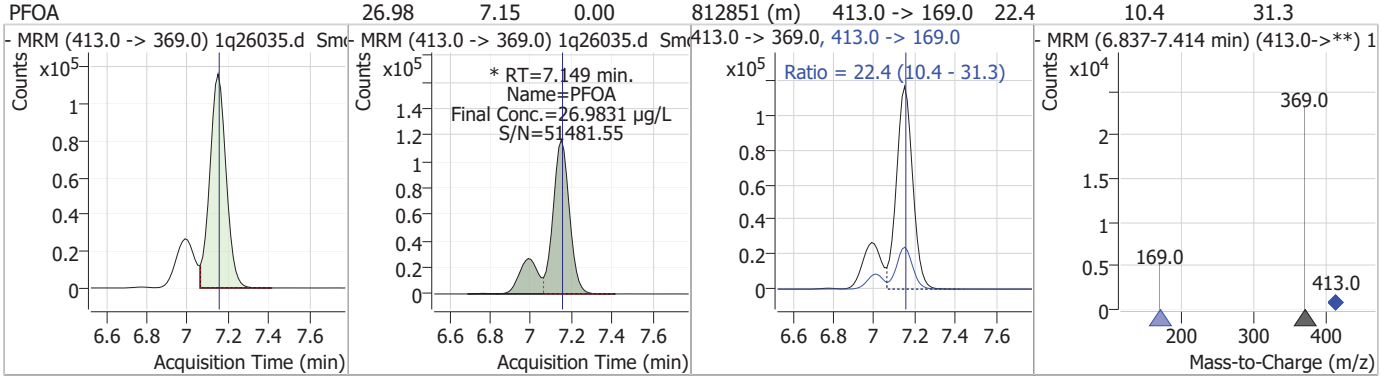
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	102.89	6.92	0.00	363758	427.0 -> 81.0	34.0	18.1	54.4



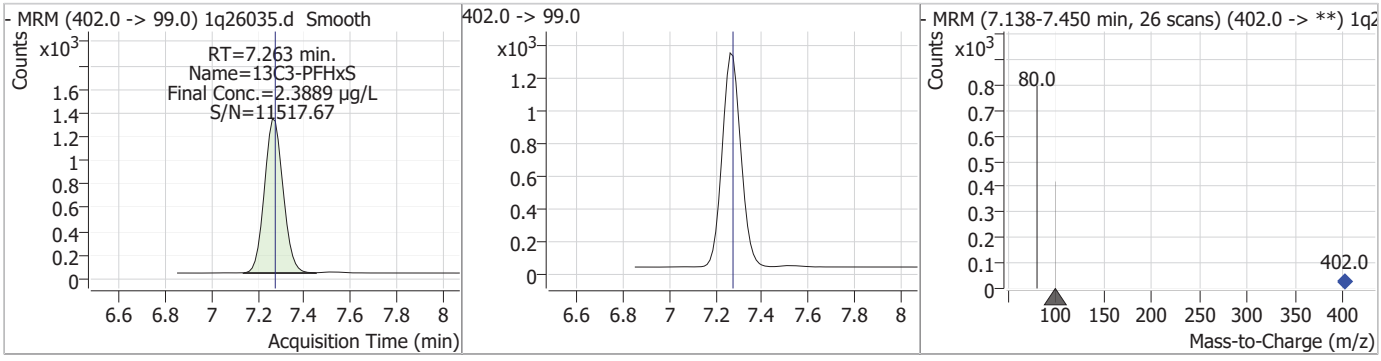
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.37	7.15	0.00	87212				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	26.98	7.15	0.00	812851 (m)	413.0 -> 169.0	22.4	10.4	31.3

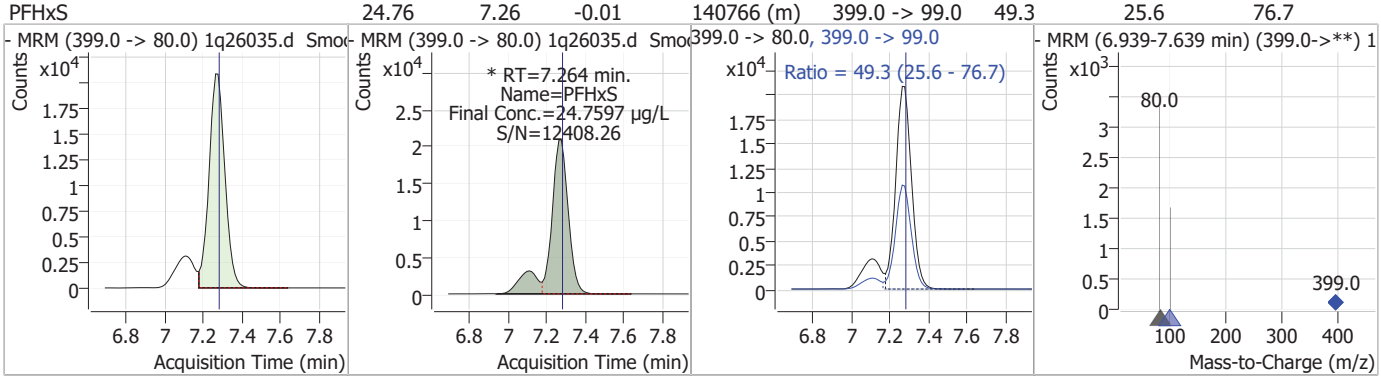


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.39	7.26	-0.01	7298				

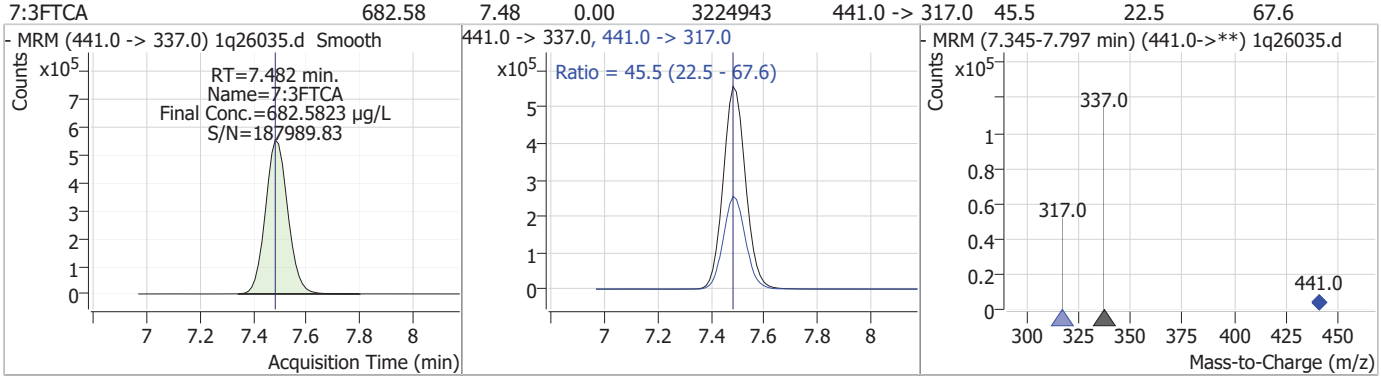


Perfluorinated Compounds by LC/MS/MS

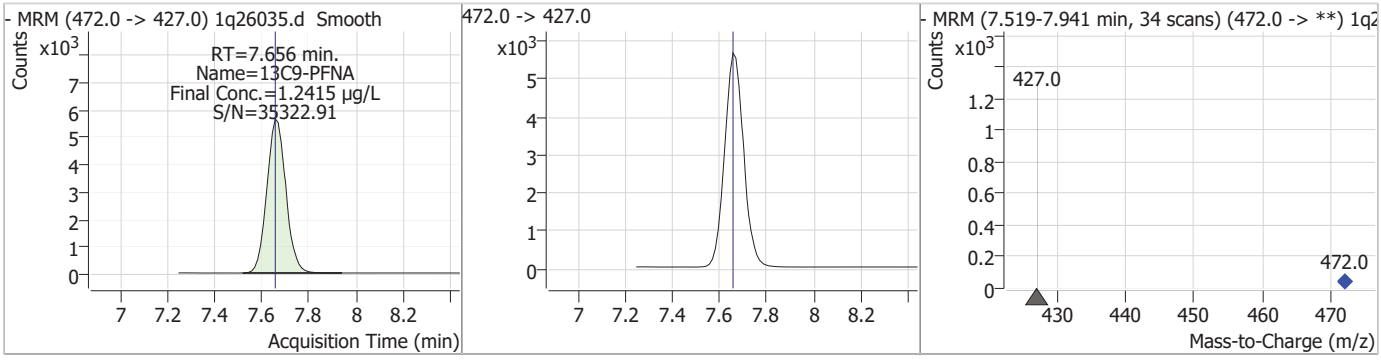
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	24.76	7.26	-0.01	140766 (m)	399.0 -> 99.0	49.3	25.6	76.7



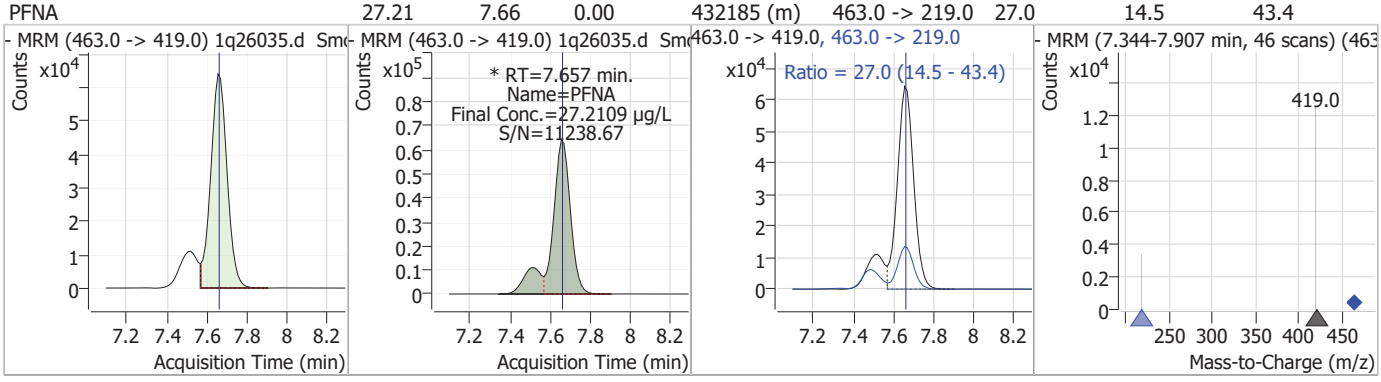
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	682.58	7.48	0.00	3224943	441.0 -> 317.0	45.5	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.24	7.66	0.00	31666				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	27.21	7.66	0.00	432185 (m)	463.0 -> 219.0	27.0	14.5	43.4



7.6.8

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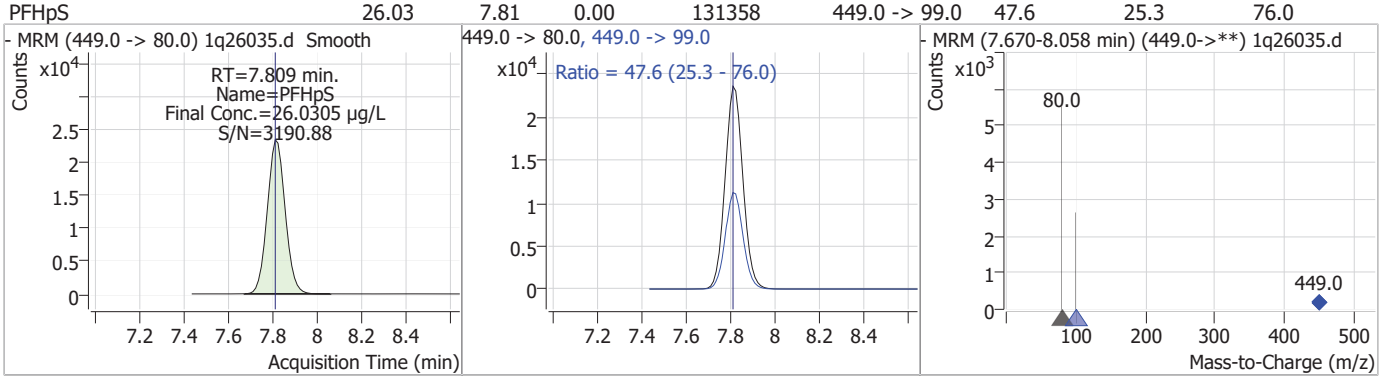
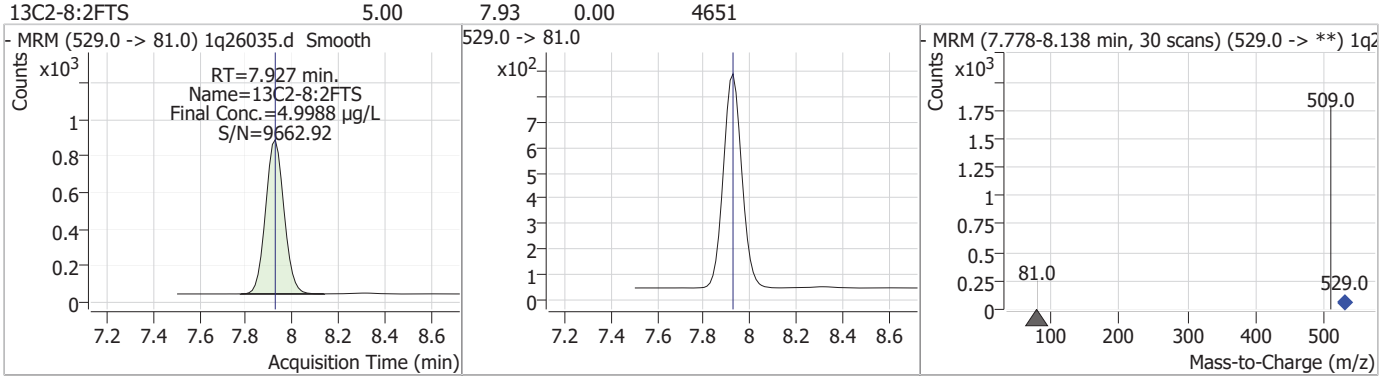
Perfluorinated Compounds by LC/MS/MS

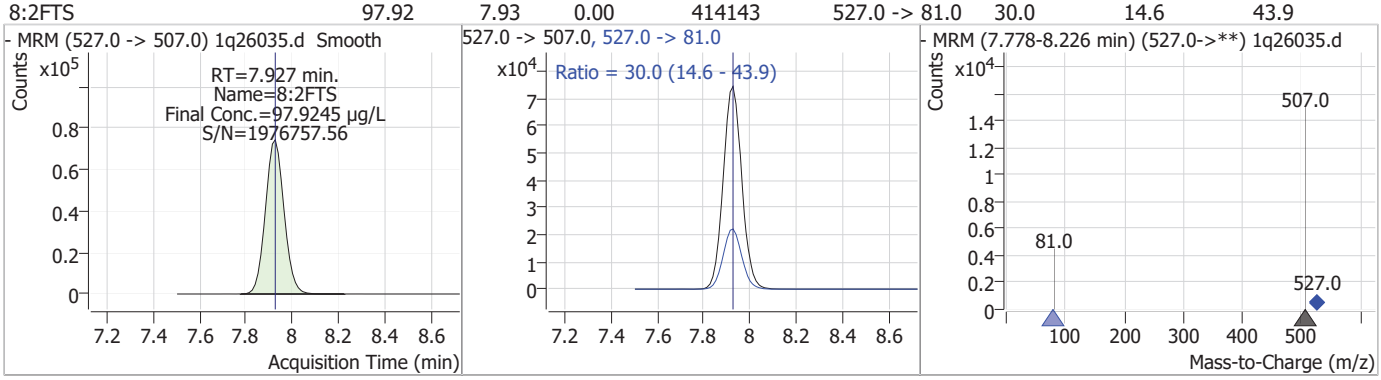
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	26.03	7.81	0.00	131358	449.0 -> 99.0	47.6	25.3	76.0



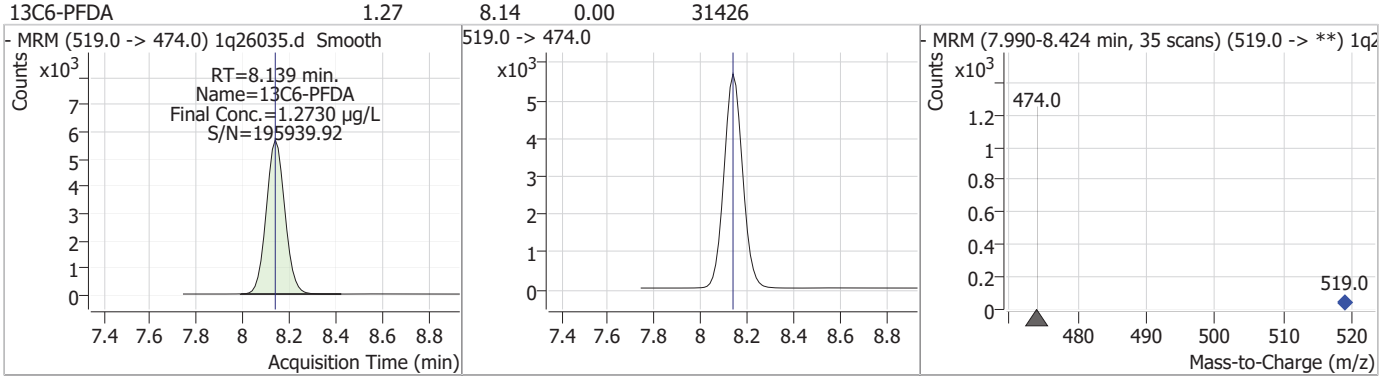
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.00	7.93	0.00	4651				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	97.92	7.93	0.00	414143	527.0 -> 81.0	30.0	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.27	8.14	0.00	31426				



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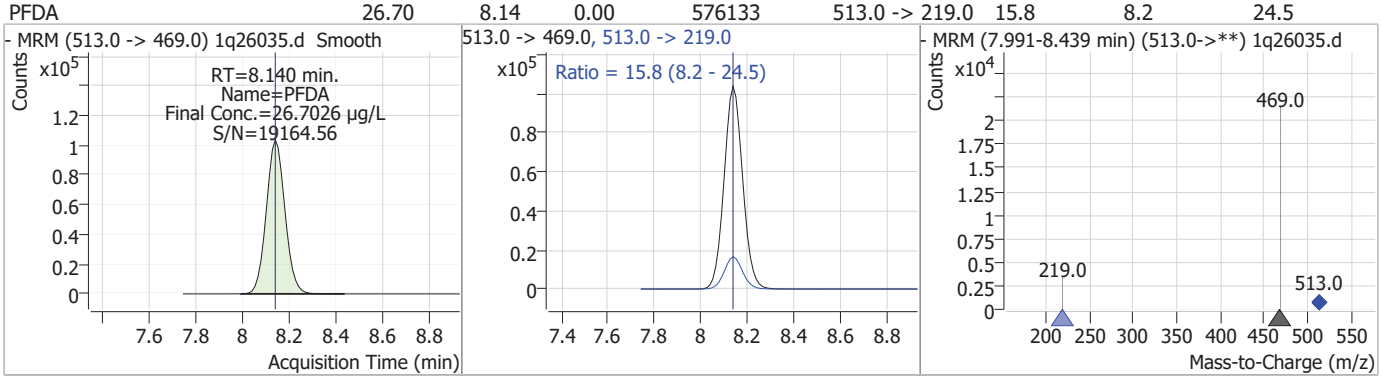
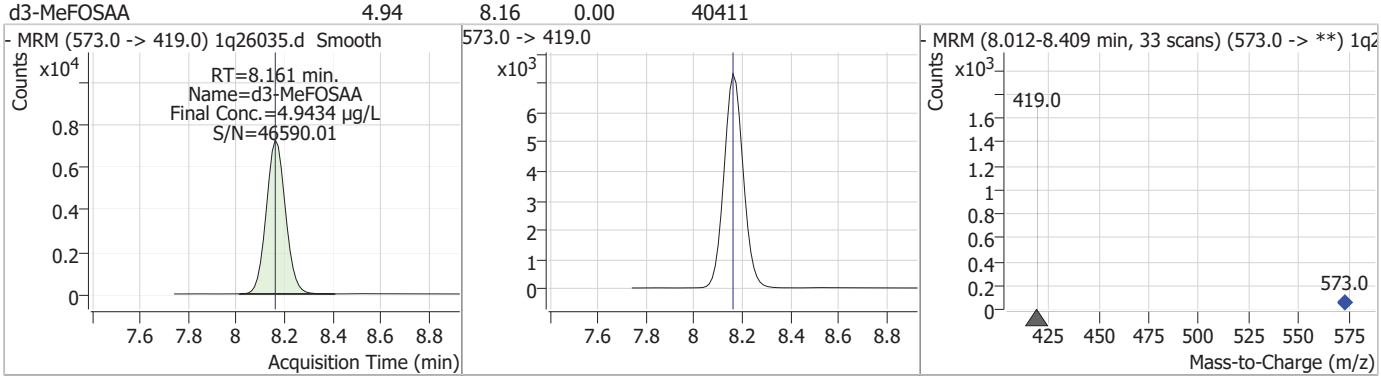
Perfluorinated Compounds by LC/MS/MS

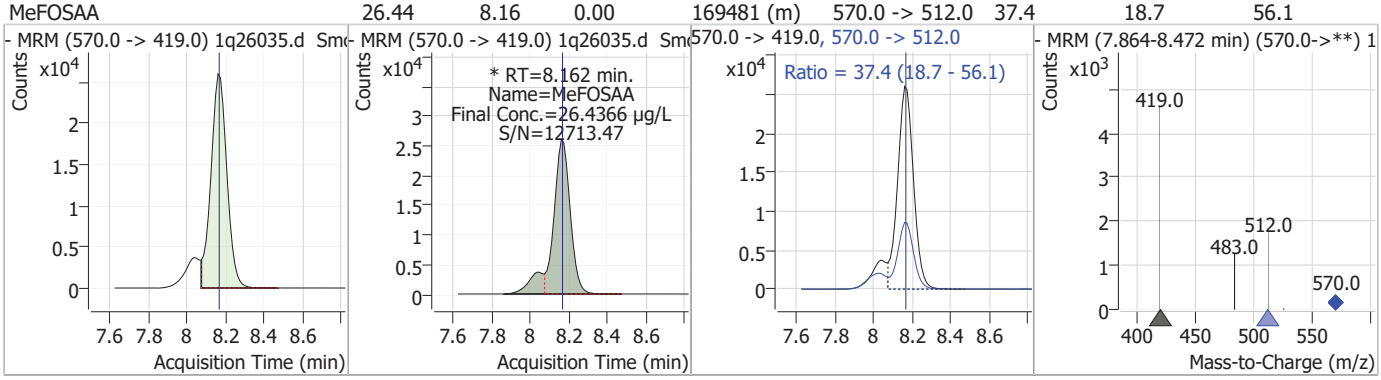
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	26.70	8.14	0.00	576133	513.0 -> 219.0	15.8	8.2	24.5



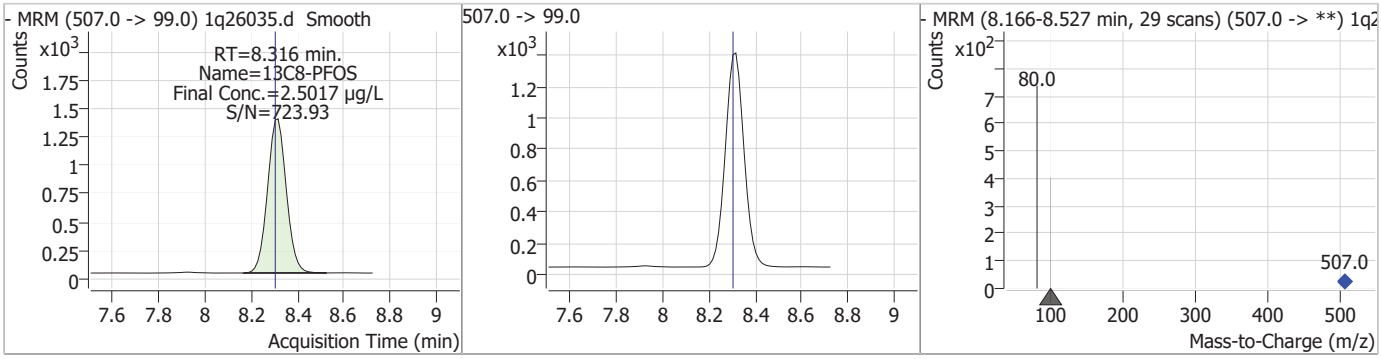
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.94	8.16	0.00	40411				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	26.44	8.16	0.00	169481 (m)	570.0 -> 512.0	37.4	18.7	56.1

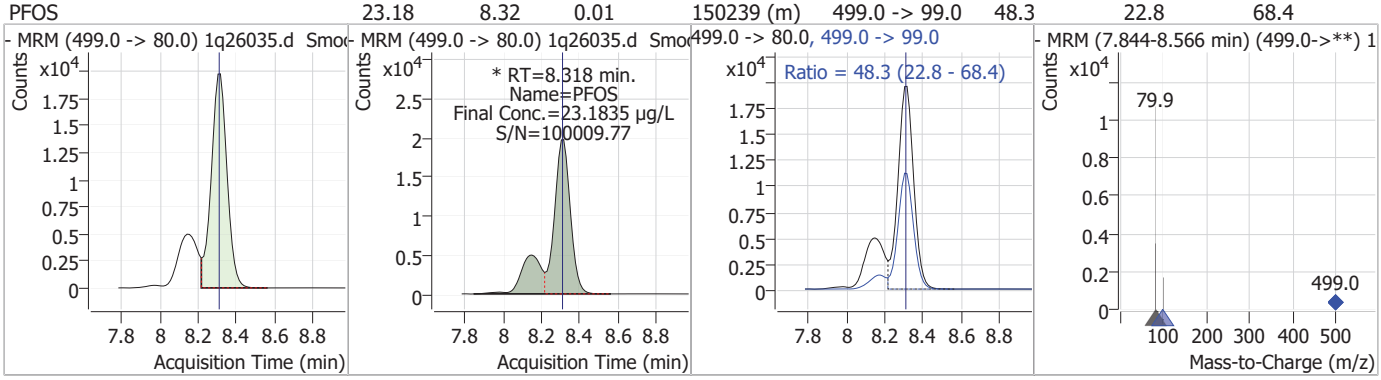


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.50	8.32	0.01	7727				

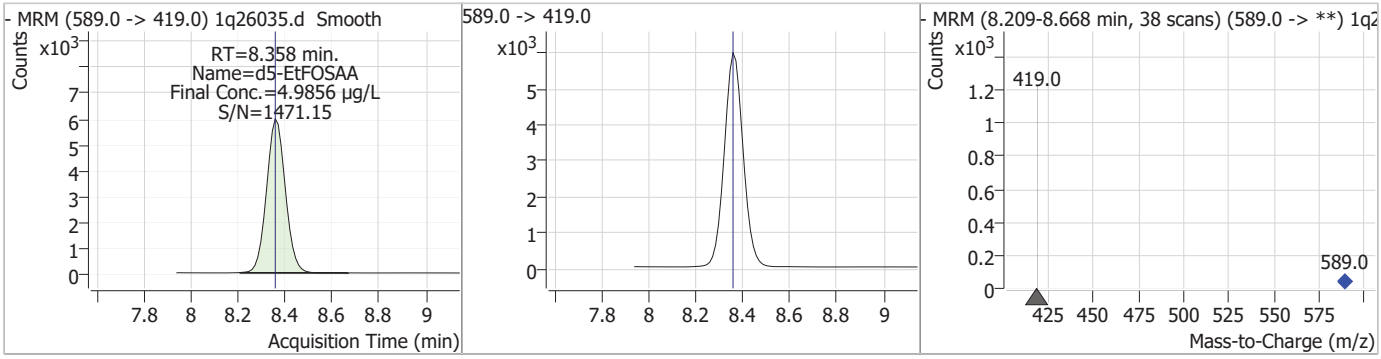


Perfluorinated Compounds by LC/MS/MS

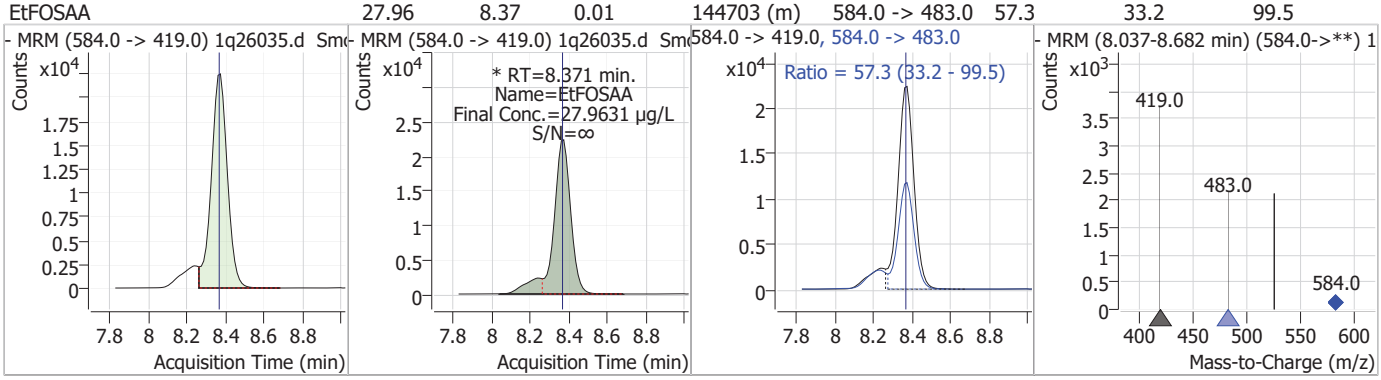
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	23.18	8.32	0.01	150239 (m)	499.0 -> 99.0	48.3	22.8	68.4



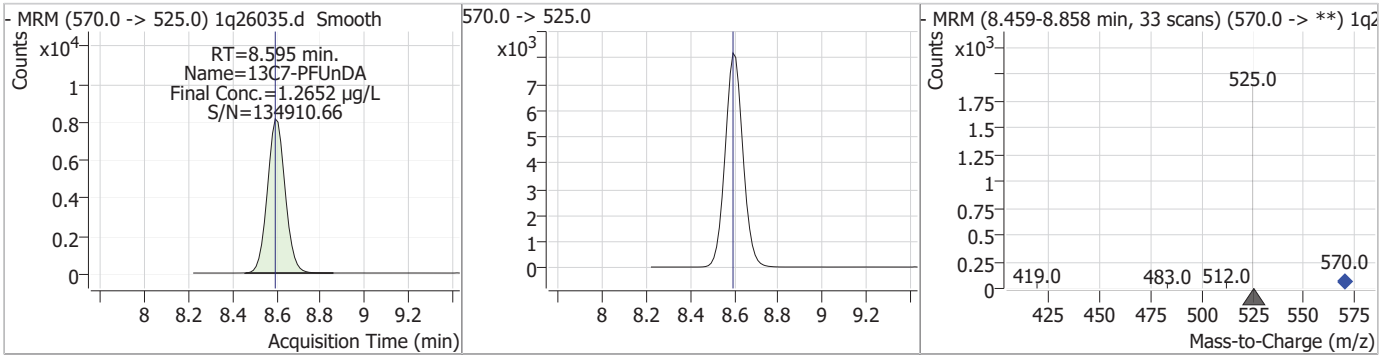
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.99	8.36	0.00	33181				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	27.96	8.37	0.01	144703 (m)	584.0 -> 483.0	57.3	33.2	99.5

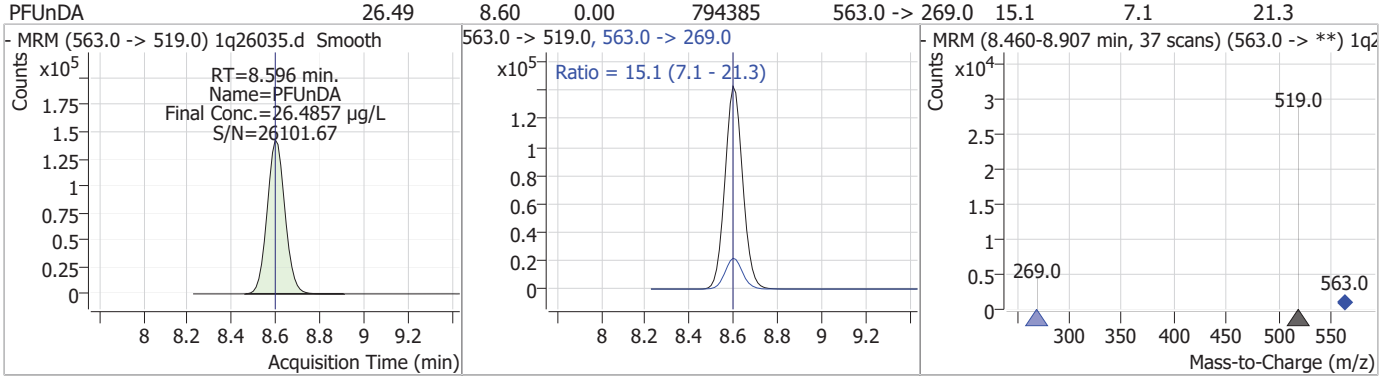


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.27	8.59	0.00	45338				

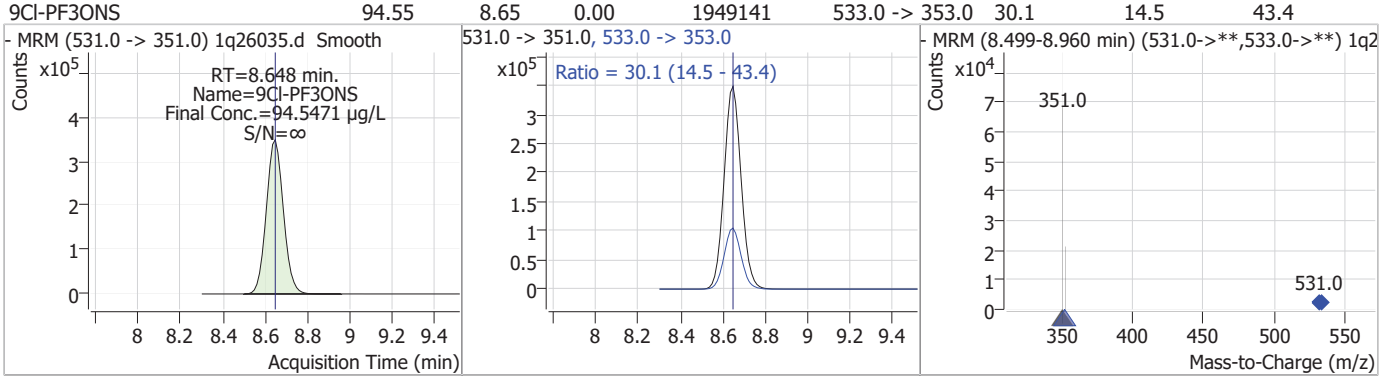


Perfluorinated Compounds by LC/MS/MS

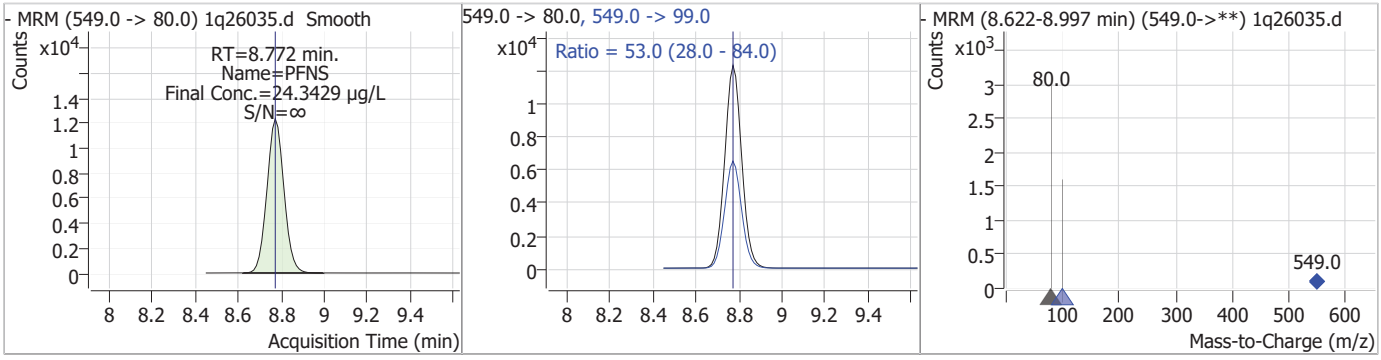
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	26.49	8.60	0.00	794385	563.0 -> 269.0	15.1	7.1	21.3



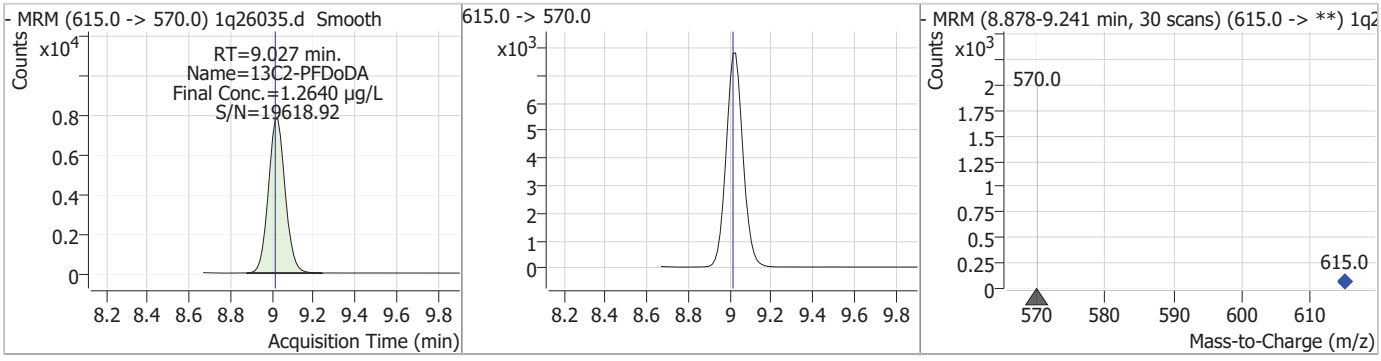
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	94.55	8.65	0.00	1949141	533.0 -> 353.0	30.1	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	24.34	8.77	0.00	67729	549.0 -> 99.0	53.0	28.0	84.0

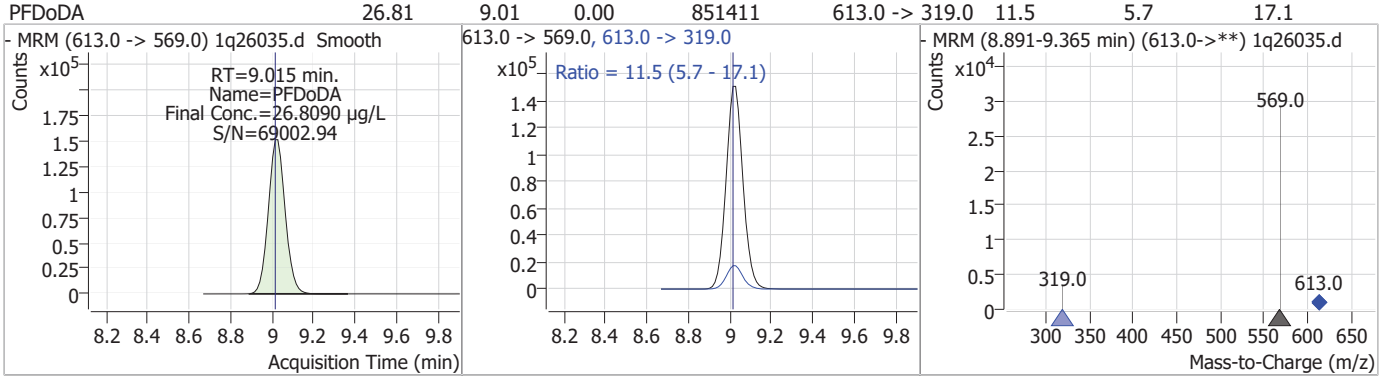


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.26	9.03	0.01	43703				

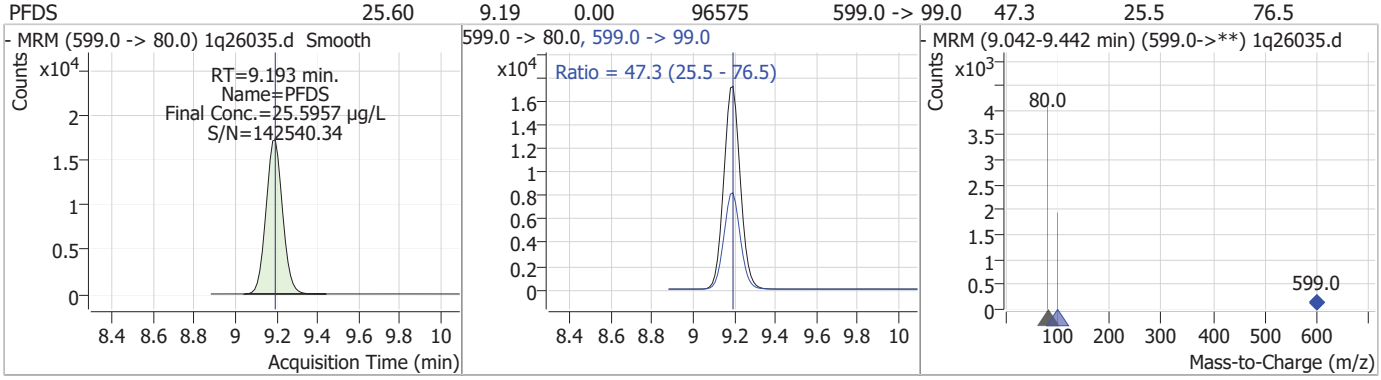


Perfluorinated Compounds by LC/MS/MS

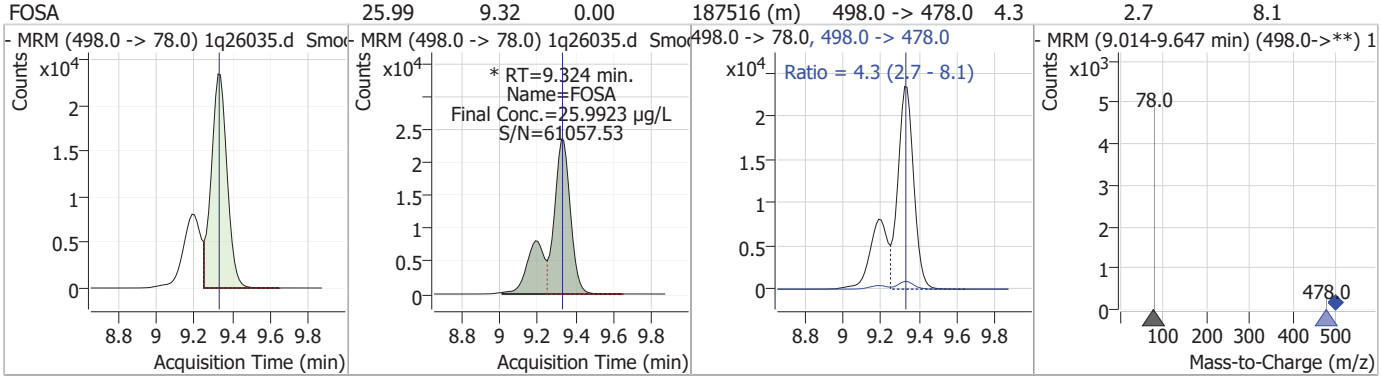
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	26.81	9.01	0.00	851411	613.0 -> 319.0	11.5	5.7	17.1



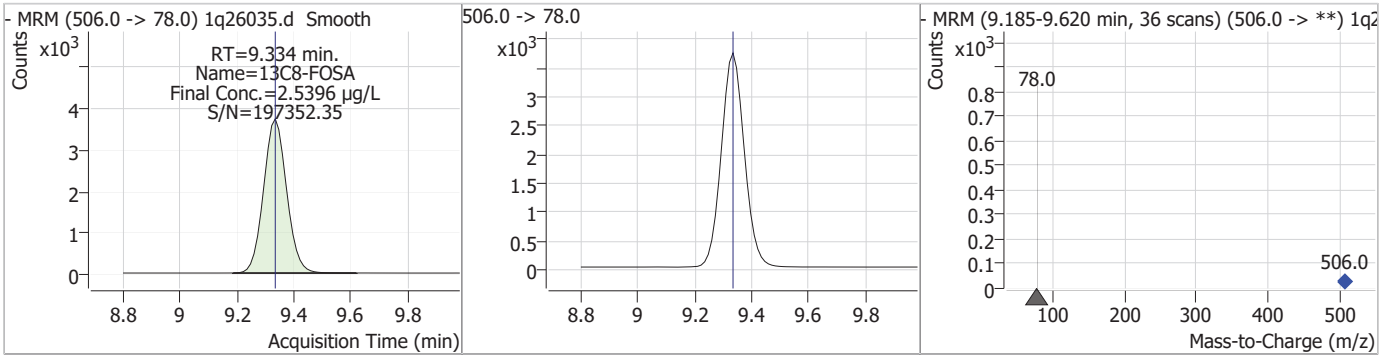
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	25.60	9.19	0.00	96575	599.0 -> 99.0	47.3	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	25.99	9.32	0.00	187516 (m)	498.0 -> 478.0	4.3	2.7	8.1

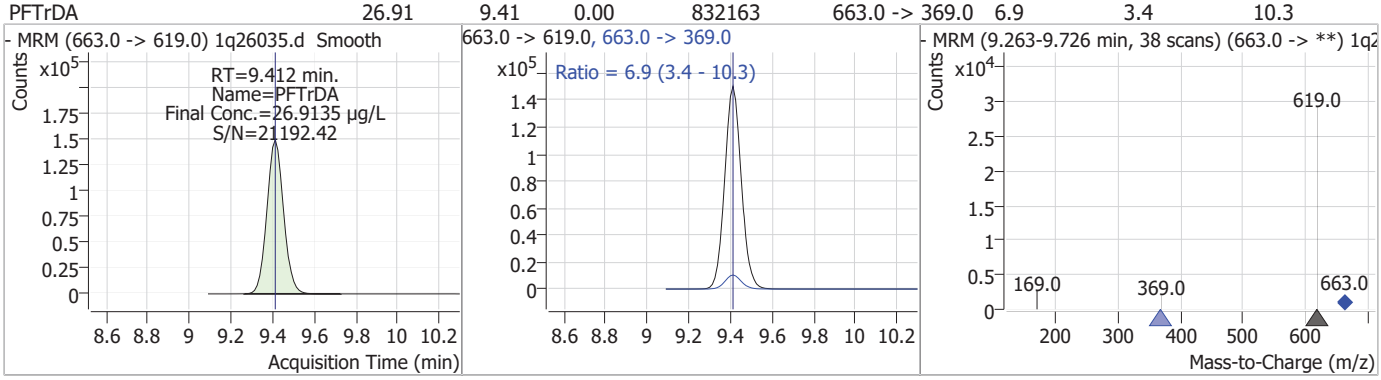


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.54	9.33	0.00	20816				

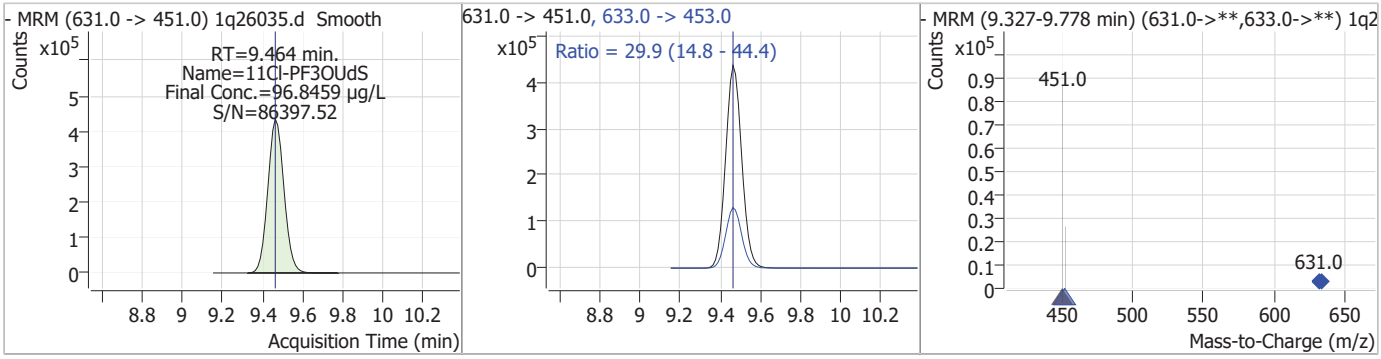


Perfluorinated Compounds by LC/MS/MS

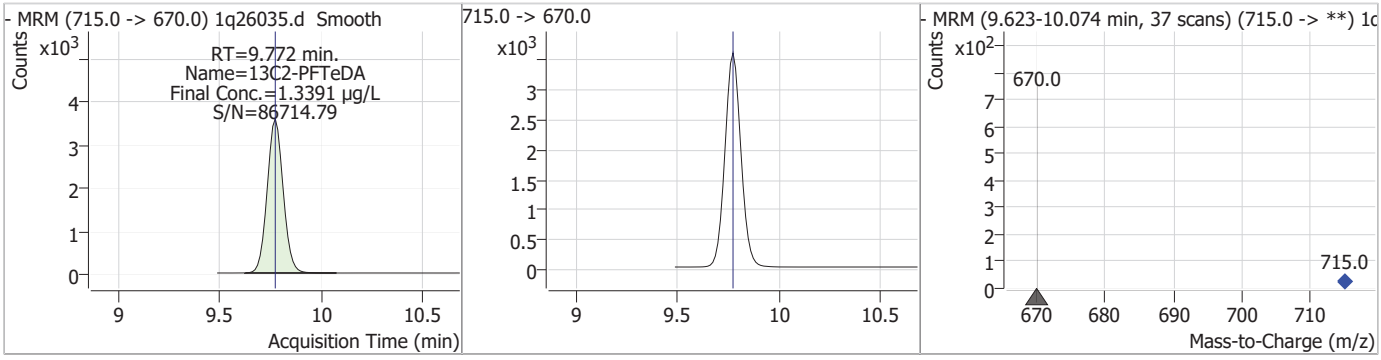
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	26.91	9.41	0.00	832163	663.0 -> 369.0	6.9	3.4	10.3



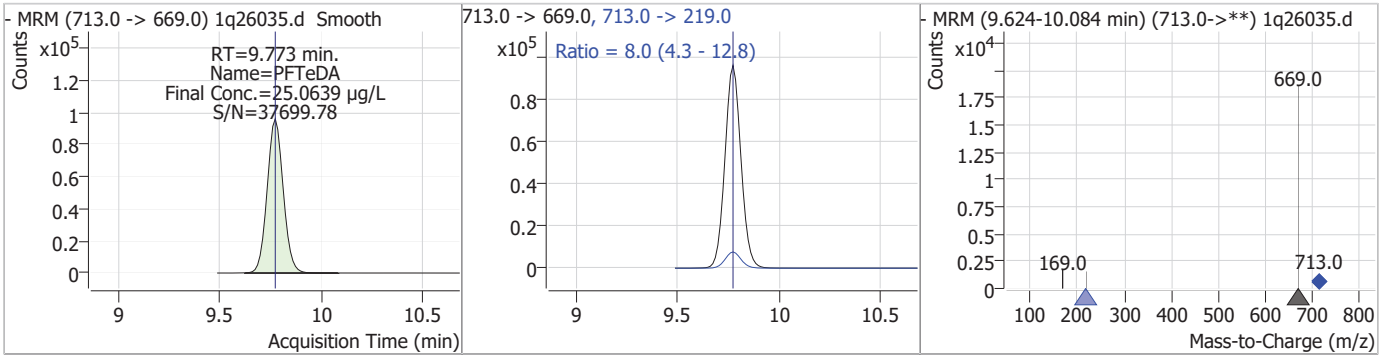
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	96.85	9.46	0.00	2435753	633.0 -> 453.0	29.9	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.34	9.77	0.00	19480				

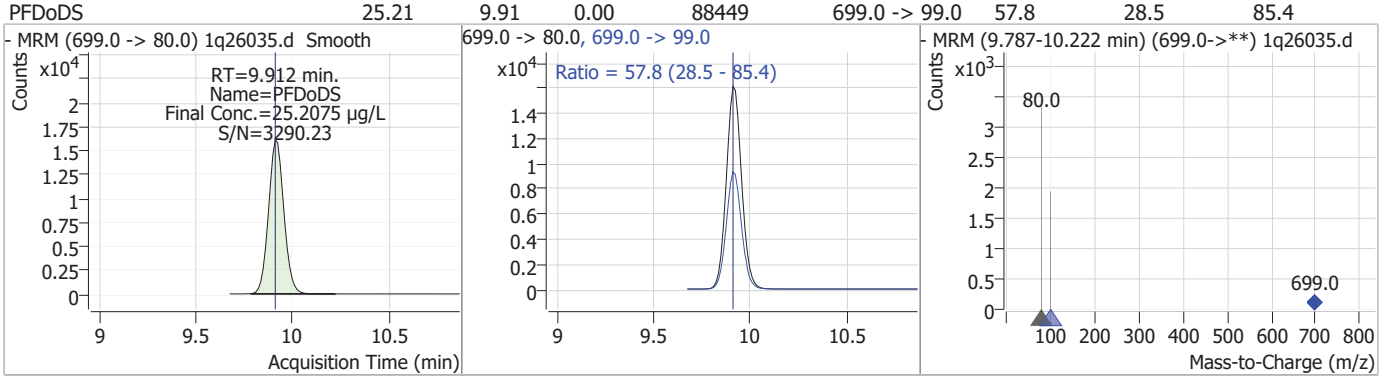


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	25.06	9.77	0.00	525866	713.0 -> 219.0	8.0	4.3	12.8

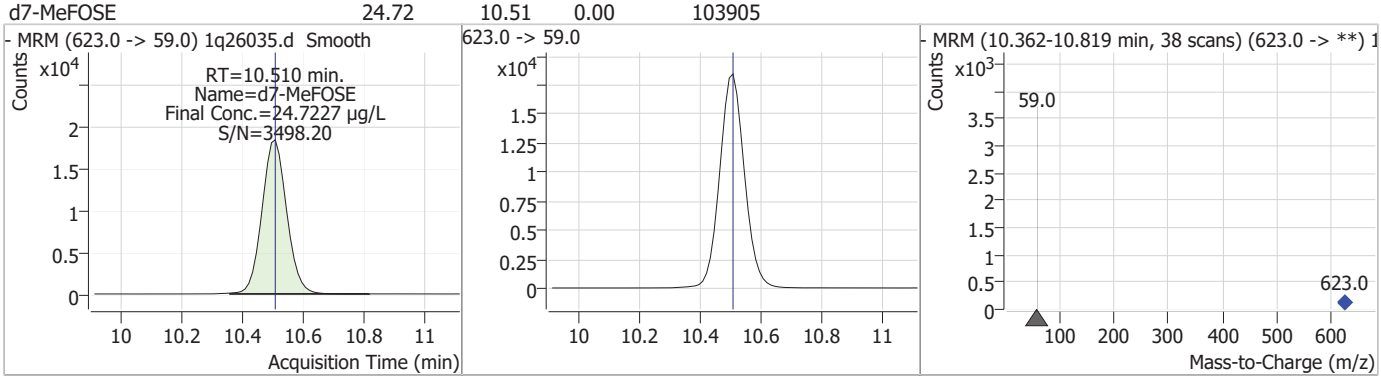


Perfluorinated Compounds by LC/MS/MS

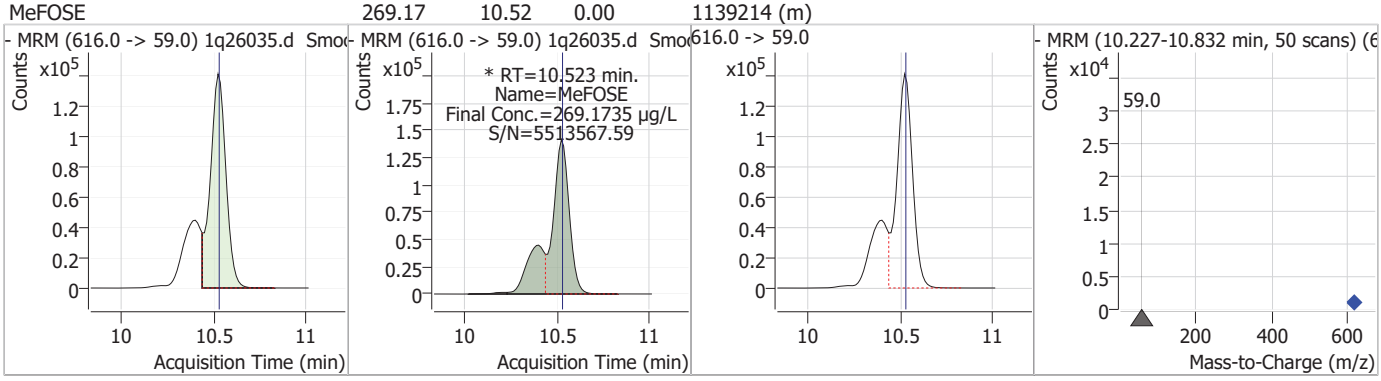
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	25.21	9.91	0.00	88449	699.0 -> 99.0	57.8	28.5	85.4



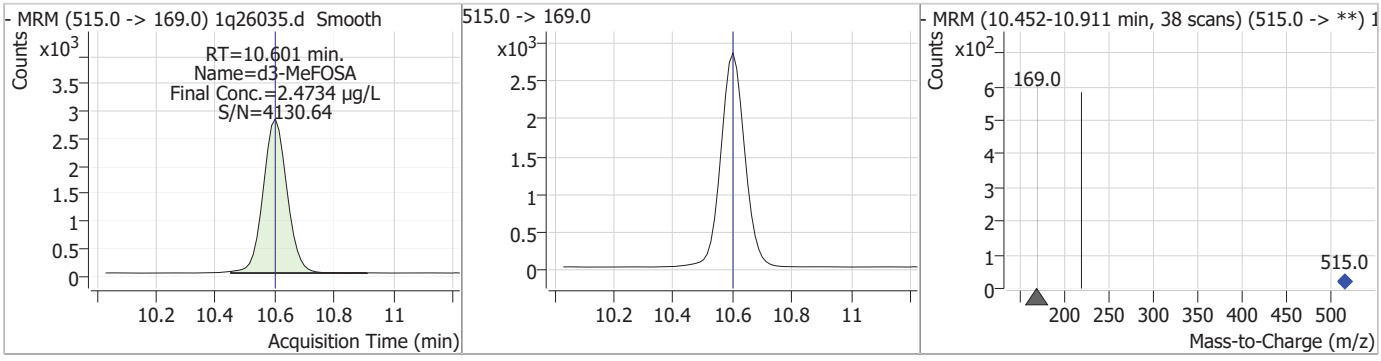
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.72	10.51	0.00	103905				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	269.17	10.52	0.00	1139214 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.47	10.60	0.00	15714				



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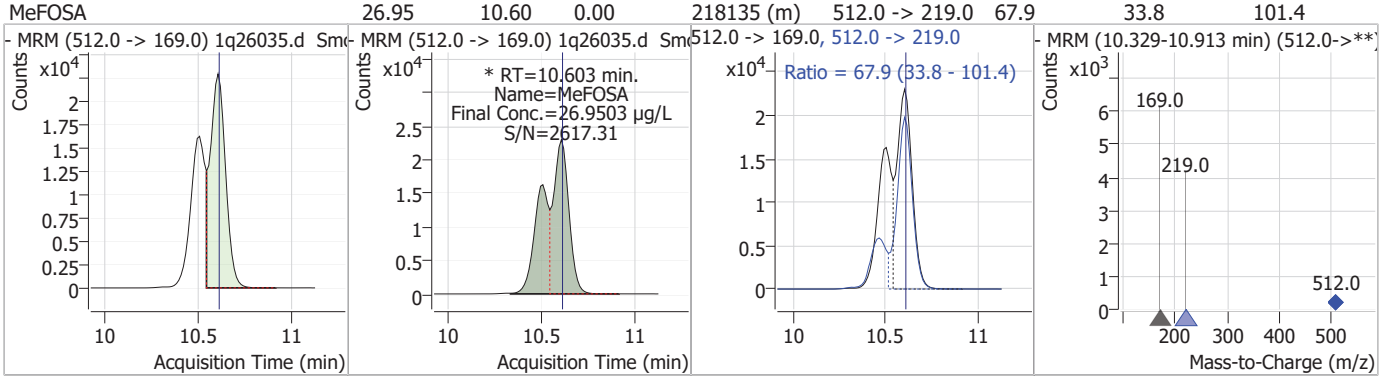
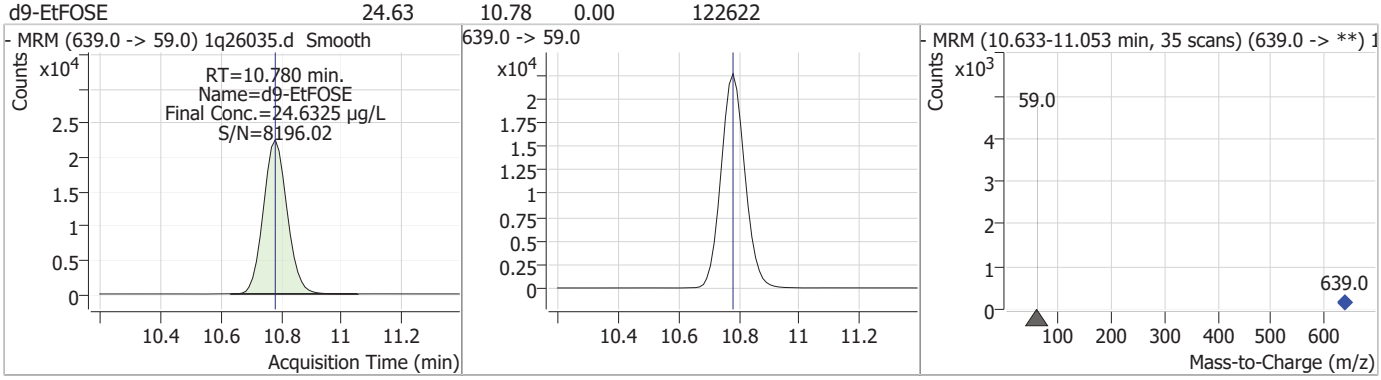
Perfluorinated Compounds by LC/MS/MS

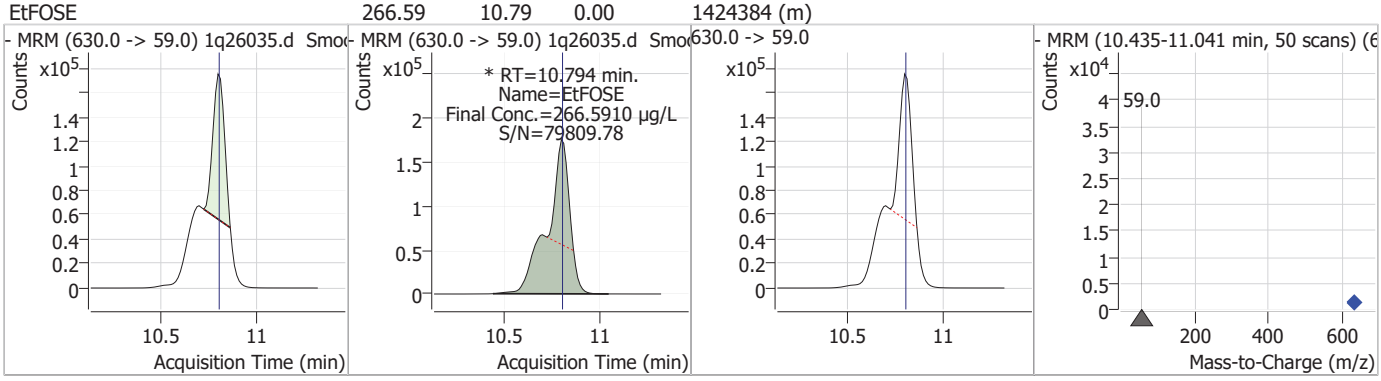
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	26.95	10.60	0.00	218135 (m)	512.0 -> 219.0	67.9	33.8	101.4



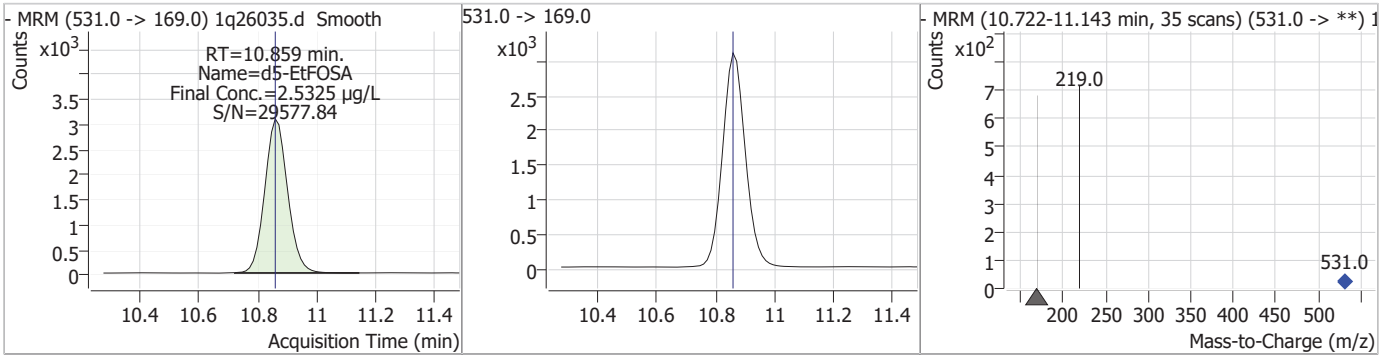
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.63	10.78	0.00	122622				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	266.59	10.79	0.00	1424384 (m)				

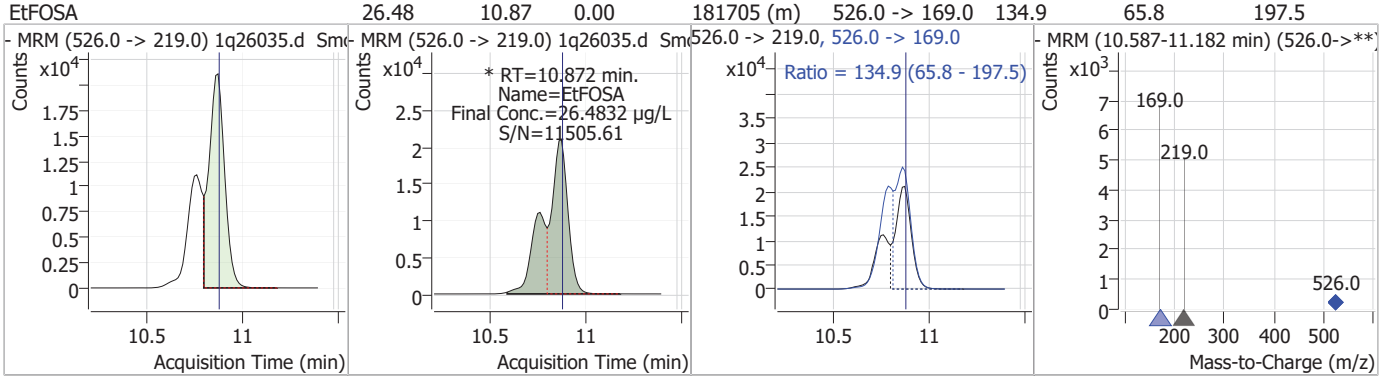


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.53	10.86	0.00	16440				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	26.48	10.87	0.00	181705 (m)	526.0 -> 169.0	134.9	65.8	197.5



7.6.8

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Manual Integration Approval Summary

Sample Number: T1Q361-IC361
Lab FileID: 1Q26035.D
Injection Time: 05/14/25 18:08
Method: EPA 1633
Analyst approved: 05/15/25 01:25 Rensel John Romano
Supervisor approved: 05/15/25 05:29 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.26	Split peak
Perfluorononanoic acid	375-95-1		7.66	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Split peak
PFOSA	754-91-6		9.32	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSE	1691-99-2		10.79	Split peak
EtFOSA	4151-50-2		10.87	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/15/25 05:29

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26036.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/14/2025 6:22:58 PM
Sample Name : IC361-8
Vial : P1-A9
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : t1q361.batch.bin
Sample Information : OP63461,T1Q361,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	147661	10.00 µg/L	0.000
M5-PFPeA	4.636	268.0 -> 223.0	96967	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	60213	2.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	46556	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	82049	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	28154	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	25622	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	38185	1.25 µg/L	0.000
M2-PFDoDA	9.027	615.0 -> 570.0	40940	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	16154	1.25 µg/L	0.000
M8-FOSA	9.334	506.0 -> 78.0	18112	2.50 µg/L	0.000
M3-PFBS	5.699	302.0 -> 99.0	6365	2.50 µg/L	-0.012
M3-PFHxS	7.275	402.0 -> 99.0	6587	2.50 µg/L	0.000
M8-PFOS	8.304	507.0 -> 99.0	6432	2.50 µg/L	0.000
M2-4:2FTS	5.446	329.0 -> 81.0	1239	5.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	2295	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	4405	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	34030	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	20012	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	29191	5.00 µg/L	0.000
M7-MeFOSE	10.510	623.0 -> 59.0	91253	25.00 µg/L	0.000
M9-EtFOSE	10.780	639.0 -> 59.0	105503	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	13846	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	15414	2.50 µg/L	0.000
13C4-PFOS	8.304	503.0 -> 80.0	11354	2.50 µg/L	0.000
13C3-PFBA	3.251	216.0 -> 172.0	61499	5.00 µg/L	0.000
18O2-PFHxS	7.262	403.0 -> 84.0	8184	2.50 µg/L	-0.012
13C4-PFOA	7.149	417.0 -> 372.0	88389	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	24119	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	26192	1.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	53705	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1239	4.53 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.7%	
13C2-6:2FTS	6.922	429.0 -> 81.0	2295	4.33 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 86.7%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4405	5.28 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.7%	
13C2-PFDoDA	9.027	615.0 -> 570.0	40940	1.25 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.1%	
13C2-PFTeDA	9.772	715.0 -> 670.0	16154	1.17 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.9%	
13C3-PFBS	5.699	302.0 -> 99.0	6365	2.33 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.2%	
13C3-PFHxS	7.275	402.0 -> 99.0	6587	2.41 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.3%		
13C4-PFBA	3.260	217.0 -> 172.0	147661	10.10 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.0%		
13C4-PFHpA	6.553	367.0 -> 322.0	46556	2.50 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.0%		
13C5-PFHxA	5.759	318.0 -> 273.0	60213	2.64 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.4%		
13C5-PFPeA	4.636	268.0 -> 223.0	96967	4.93 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.5%		
13C6-PFDA	8.139	519.0 -> 474.0	25622	1.10 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.7%		
13C7-PFUnDA	8.595	570.0 -> 525.0	38185	1.13 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.1%		
13C8-FOSA	9.334	506.0 -> 78.0	18112	2.61 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.5%		
13C8-PFOA	7.148	421.0 -> 376.0	82049	2.55 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.0%		
13C8-PFOS	8.304	507.0 -> 99.0	6432	2.46 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.5%		
13C9-PFNA	7.656	472.0 -> 427.0	28154	1.32 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.4%		
d3-MeFOSAA	8.161	573.0 -> 419.0	34030	4.92 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.4%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	20012	9.99 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.9%		
d3-MeFOSA	10.601	515.0 -> 169.0	15414	2.87 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 114.7%		
d5-EtFOSAA	8.358	589.0 -> 419.0	29191	5.19 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.7%		
d7-MeFOSE	10.510	623.0 -> 59.0	91253	25.67 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 102.7%		
d9-EtFOSE	10.780	639.0 -> 59.0	105503	25.06 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.2%		
d5-EtFOSA	10.859	531.0 -> 169.0	13846	2.52 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.9%		
Target Compounds						QValue
4:2FTS	5.434	327.0 -> 307.0	600318	259.96 µg/L		99
		327.0 -> 81.0	261261			
6:2FTS	6.922	427.0 -> 407.0	838379	285.35 µg/L		96
		427.0 -> 81.0	284197			
8:2FTS	7.927	527.0 -> 507.0	1006991	251.41 µg/L		99
		527.0 -> 81.0	291466			
EtFOSAA	8.359	584.0 -> 419.0	350364	76.96 µg/L	m	90
		584.0 -> 483.0	203285			
FOSA	9.324	498.0 -> 78.0	471146	75.06 µg/L	m	97
		498.0 -> 478.0	20532			
MeFOSAA	8.162	570.0 -> 419.0	405761	75.16 µg/L	m	99
		570.0 -> 512.0	154763			
PFBA	3.254	213.0 -> 169.0	1214326	294.08 µg/L		100
PFBS	5.700	299.0 -> 80.0	475100	64.43 µg/L		98
		299.0 -> 99.0	189365			
PFDA	8.140	513.0 -> 469.0	1354546	77.00 µg/L		100
		513.0 -> 219.0	220484			
PFDoDA	9.027	613.0 -> 569.0	2072491	69.66 µg/L		99
		613.0 -> 319.0	242680			
PFDS	9.193	599.0 -> 80.0	226083	71.15 µg/L		98

Perfluorinated Compounds by LC/MS/MS

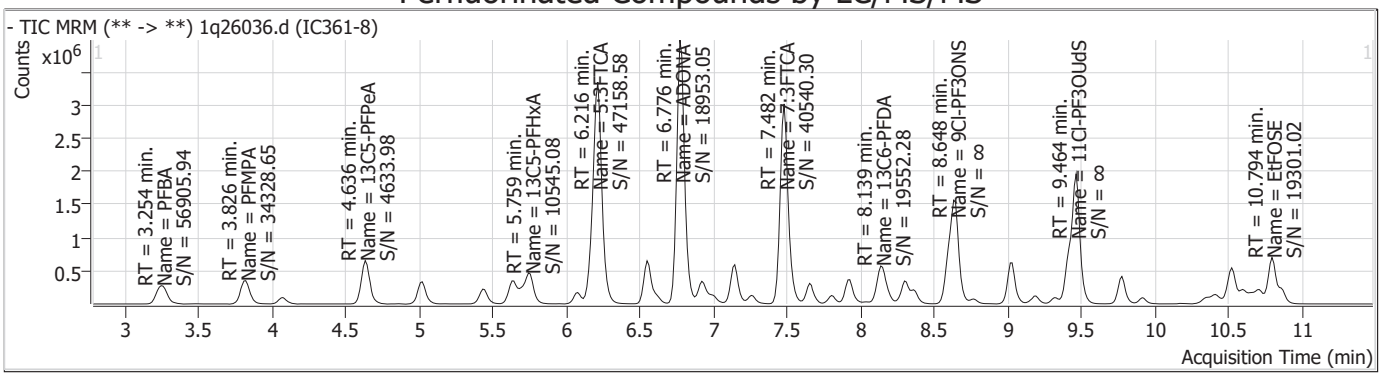
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	111853				
PFHpA	6.554	363.0 -> 319.0	1983048	76.10	µg/L		95
		363.0 -> 169.0	350179				
PFHpS	7.809	449.0 -> 80.0	312670	68.65	µg/L		97
		449.0 -> 99.0	152733				
PFHxA	5.761	313.0 -> 269.0	1572087	71.23	µg/L		100
		313.0 -> 119.0	45864				
PFHxS	7.264	399.0 -> 80.0	344369	67.12	µg/L	m	100
		399.0 -> 99.0	176298				
PFNA	7.657	463.0 -> 419.0	1074952	76.12	µg/L	m	98
		463.0 -> 219.0	297518				
PFNS	8.772	549.0 -> 80.0	161688	69.81	µg/L		98
		549.0 -> 99.0	87635				
PFOA	7.149	413.0 -> 369.0	2074743	73.21	µg/L	m	97
		413.0 -> 169.0	463856				
PFOS	8.305	499.0 -> 80.0	364203	67.51	µg/L	m	97
		499.0 -> 99.0	173732				
PFPeA	4.638	263.0 -> 219.0	2546666	150.81	µg/L		100
PFPeS	6.617	349.0 -> 80.0	221250	67.08	µg/L		95
		349.0 -> 99.0	95740				
PFTeDA	9.773	713.0 -> 669.0	1259593	72.40	µg/L		99
		713.0 -> 219.0	103078				
PFTrDA	9.412	663.0 -> 619.0	2005675	69.24	µg/L		100
		663.0 -> 369.0	140213				
PFUnDA	8.596	563.0 -> 519.0	1881948	74.50	µg/L		99
		563.0 -> 269.0	278328				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	5338734	247.46	µg/L		100
		633.0 -> 453.0	1580400				
9Cl-PF3ONS	8.648	531.0 -> 351.0	4226647	239.01	µg/L		98
		533.0 -> 353.0	1270140				
ADONA	6.776	377.0 -> 251.0	11757289	266.81	µg/L		99
		377.0 -> 85.0	3151813				
HFPO-DA	6.088	285.0 -> 169.0	586232	302.53	µg/L		96
		285.0 -> 185.0	46744				
3:3FTCA	4.072	241.0 -> 177.0	361557	393.38	µg/L		100
		241.0 -> 117.0	24619				
5:3FTCA	6.216	341.0 -> 237.0	6809967	1744.99	µg/L		99
		341.0 -> 217.0	4851785				
7:3FTCA	7.482	441.0 -> 337.0	7996195	1814.51	µg/L		99
		441.0 -> 317.0	3539783				
EtFOSA	10.872	526.0 -> 219.0	453511	78.48	µg/L	m	98
		526.0 -> 169.0	608673				
EtFOSE	10.794	630.0 -> 59.0	3370758	733.24	µg/L	m	100
MeFOSA	10.603	512.0 -> 169.0	548364	69.07	µg/L	m	99
		512.0 -> 219.0	376083				
MeFOSE	10.523	616.0 -> 59.0	2721371	732.16	µg/L	m	100
PFDoDS	9.912	699.0 -> 80.0	204732	70.09	µg/L		98
		699.0 -> 99.0	119808				
NFDHA	5.639	295.0 -> 201.0	197806	134.71	µg/L		96
		201.0 -> 85.0	1103148				
		295.0 -> 85.0	52908				
PFMBA	5.027	279.0 -> 85.0	1379769	150.36	µg/L		100
PFMPA	3.826	229.0 -> 85.0	1571043	151.92	µg/L		100
PFEESA	6.182	315.0 -> 135.0	2554252	121.78	µg/L		99
		315.0 -> 69.0	231676				

 # = Qualifier out of range, m = manually integrated, + = Area summed

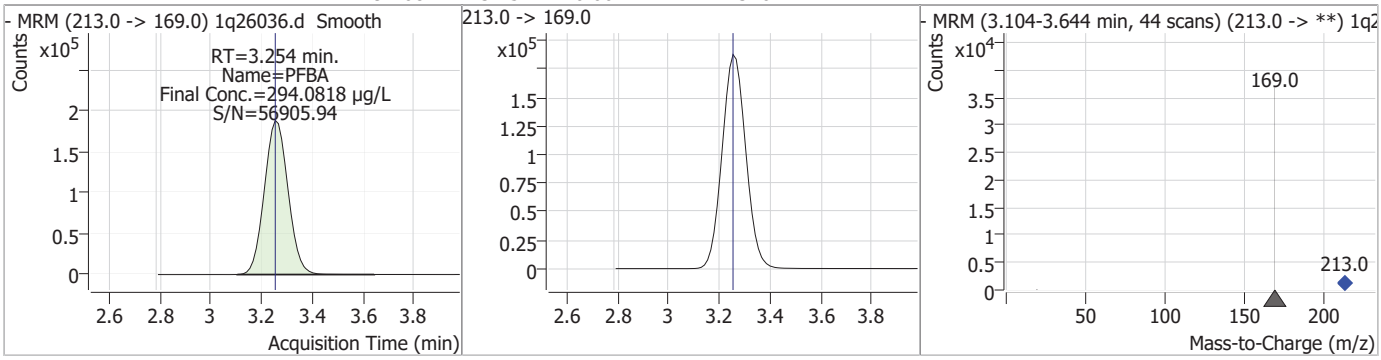
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

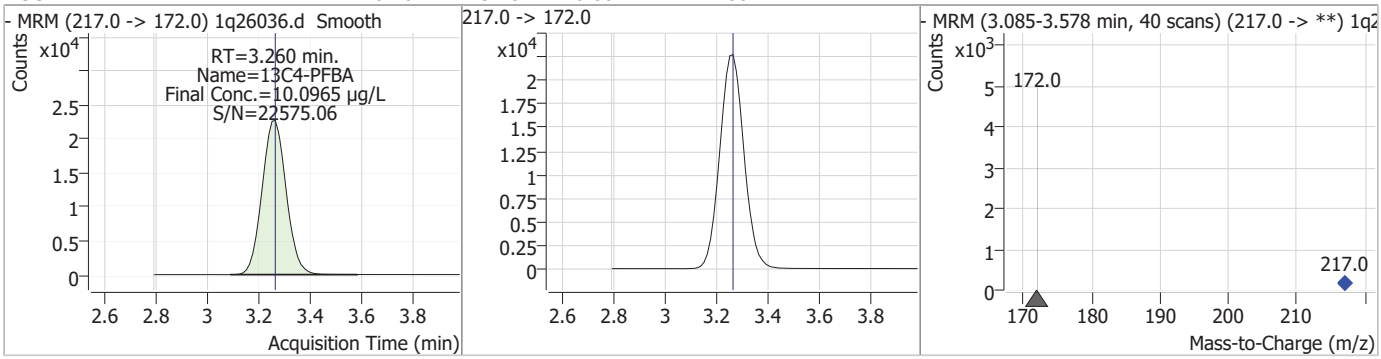
Perfluorinated Compounds by LC/MS/MS



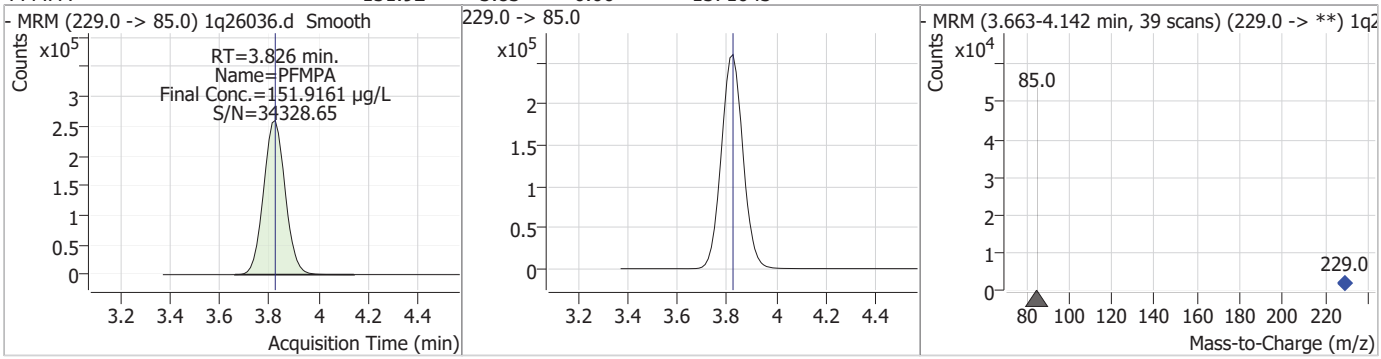
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	294.08	3.25	0.00	1214326				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.10	3.26	0.00	147661				

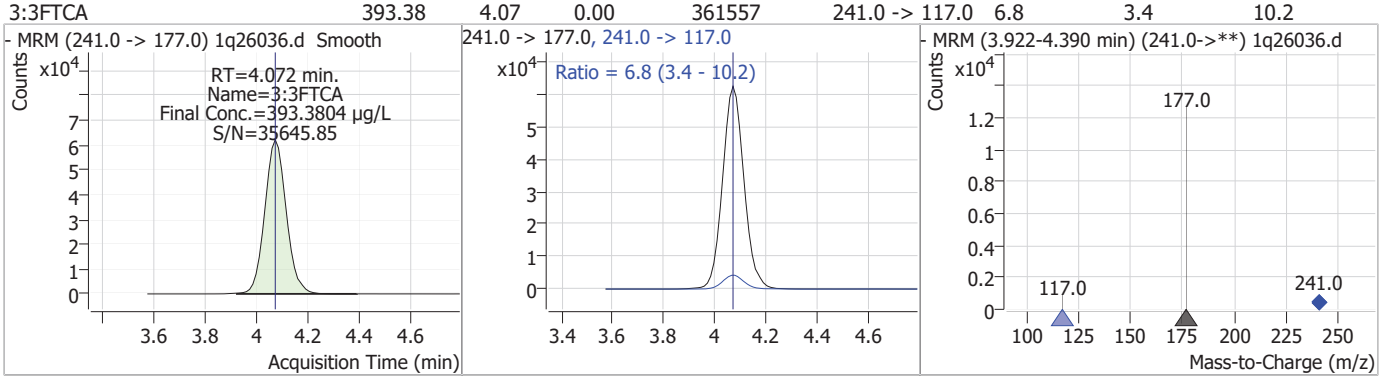


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	151.92	3.83	0.00	1571043				

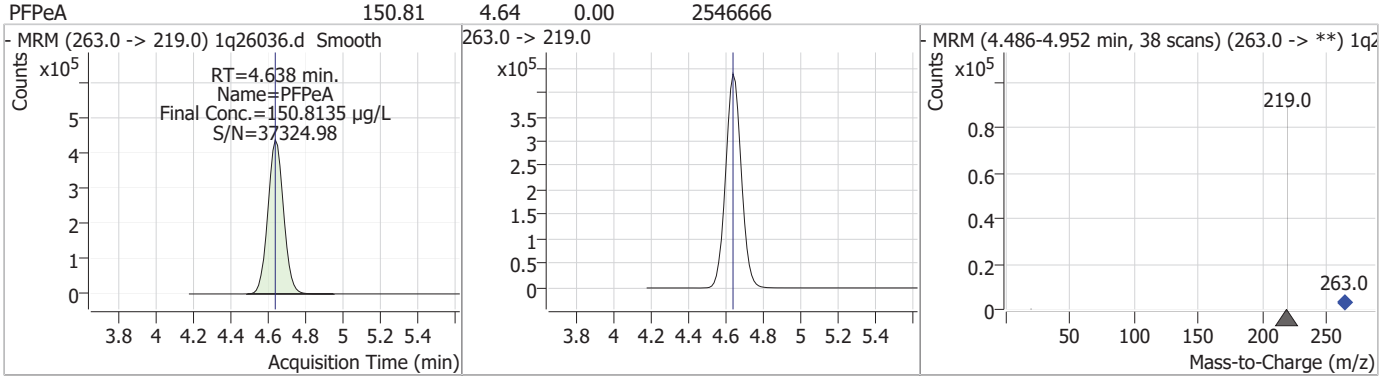


Perfluorinated Compounds by LC/MS/MS

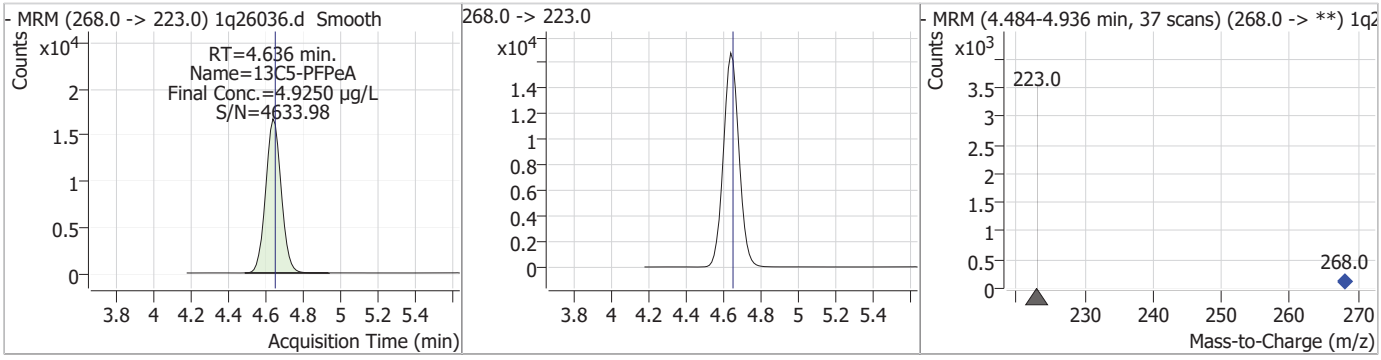
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	393.38	4.07	0.00	361557	241.0 -> 117.0	6.8	3.4	10.2



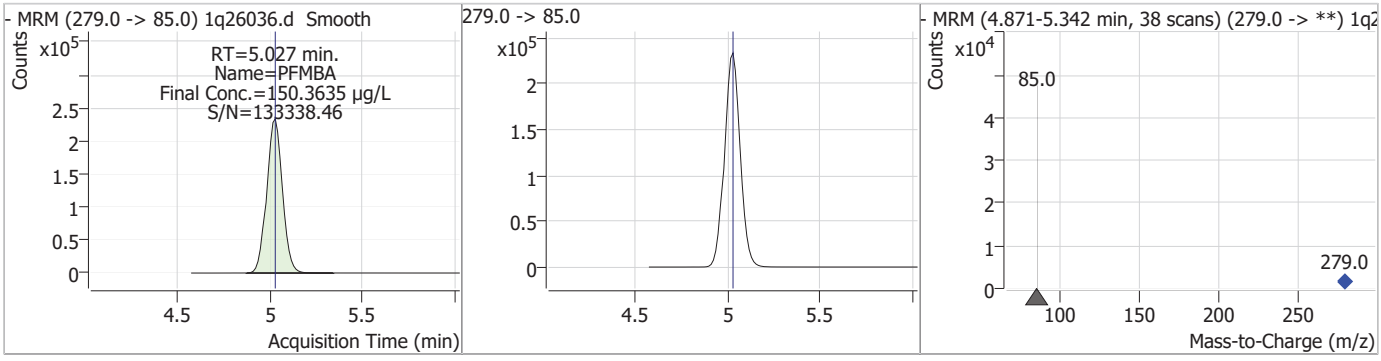
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	150.81	4.64	0.00	2546666				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.93	4.64	-0.01	96967				

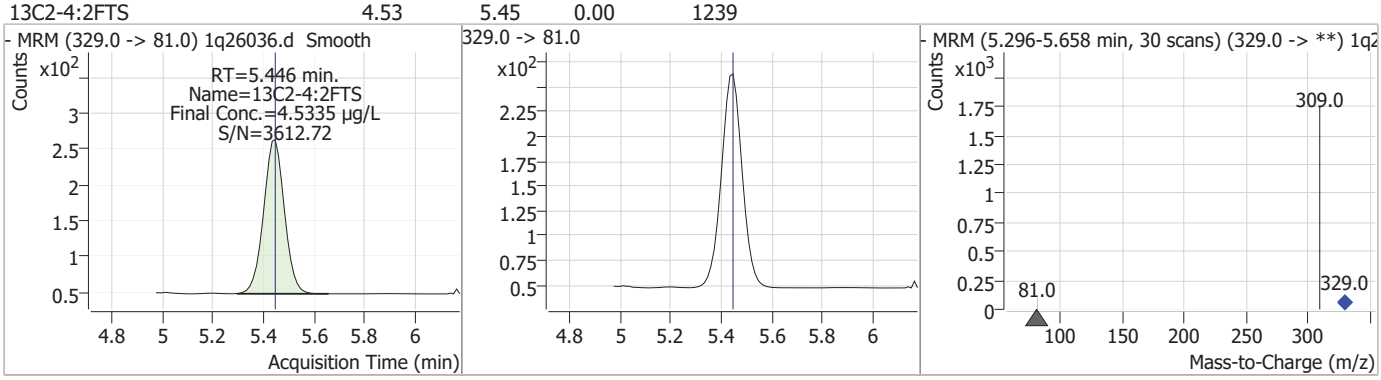


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	150.36	5.03	0.00	1379769				

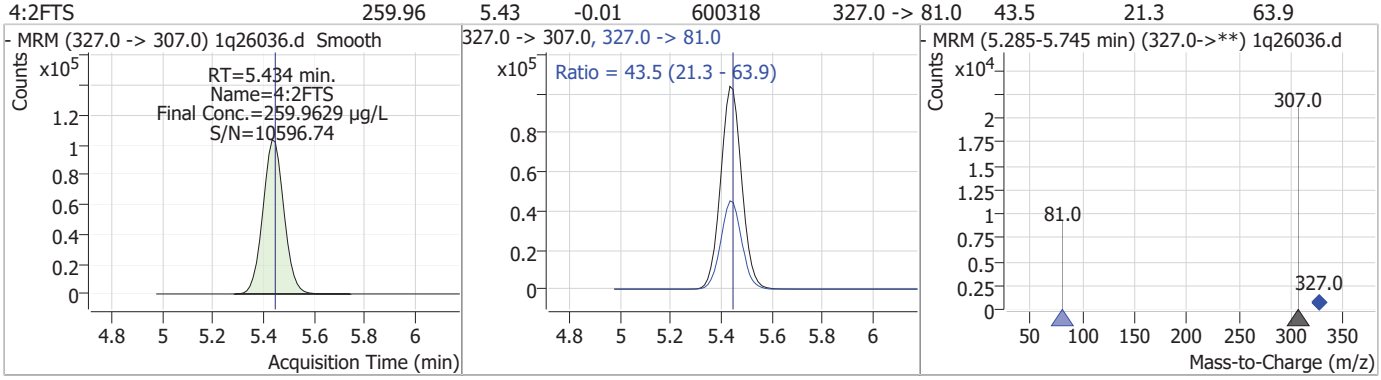


Perfluorinated Compounds by LC/MS/MS

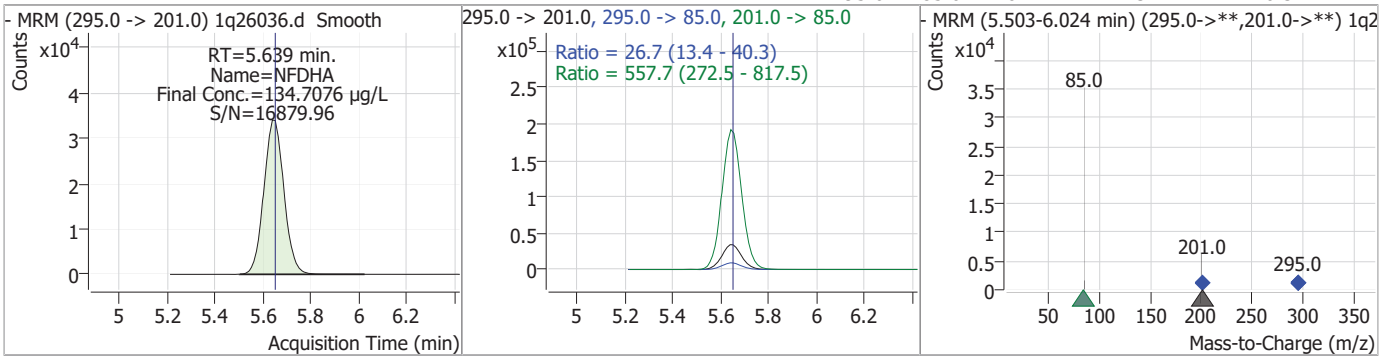
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.53	5.45	0.00	1239				



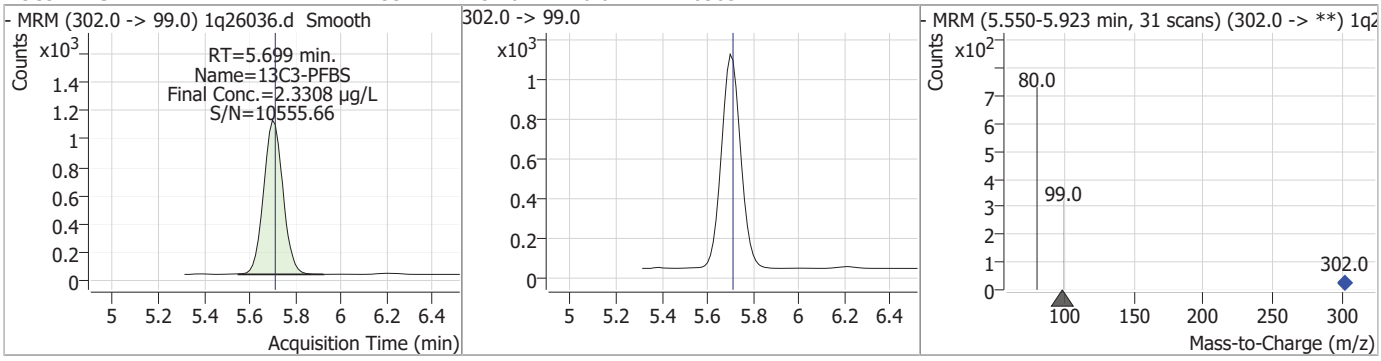
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	259.96	5.43	-0.01	600318	327.0 -> 81.0	43.5	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	134.71	5.64	-0.01	197806	201.0 -> 85.0	557.7	272.5	817.5
					295.0 -> 85.0	26.7	13.4	40.3

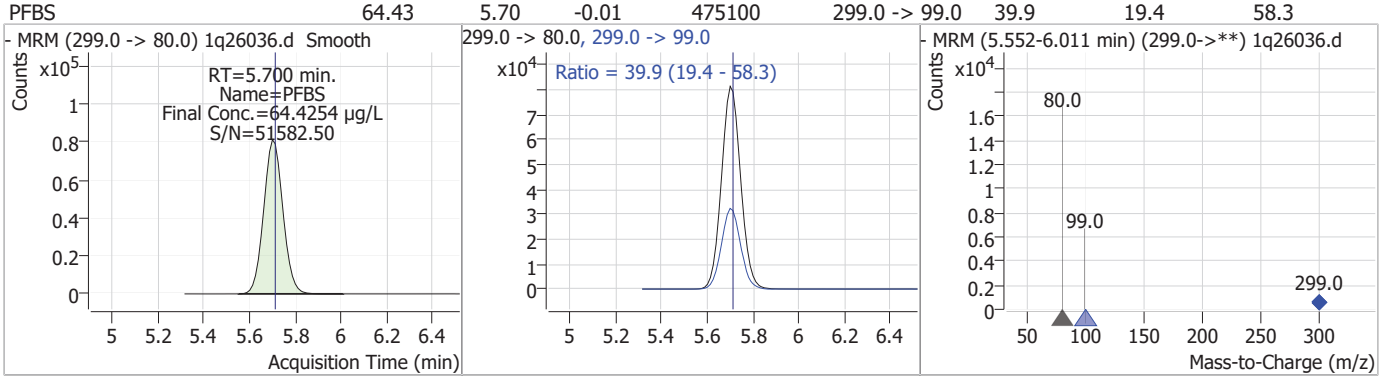


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.33	5.70	-0.01	6365				

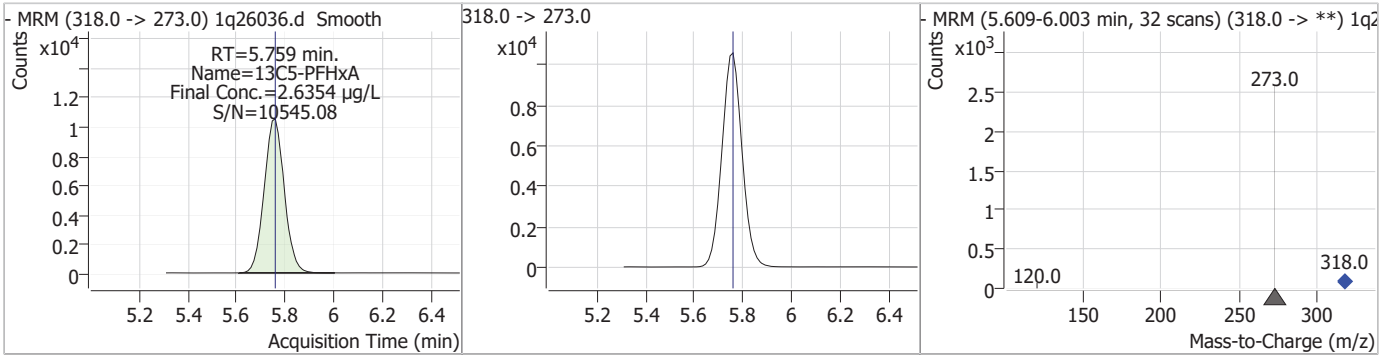


Perfluorinated Compounds by LC/MS/MS

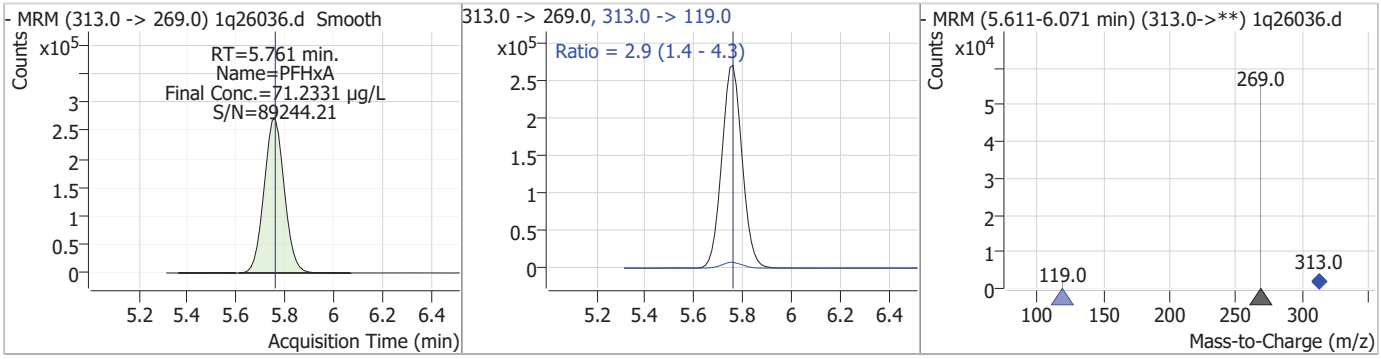
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	64.43	5.70	-0.01	475100	299.0 -> 99.0	39.9	19.4	58.3



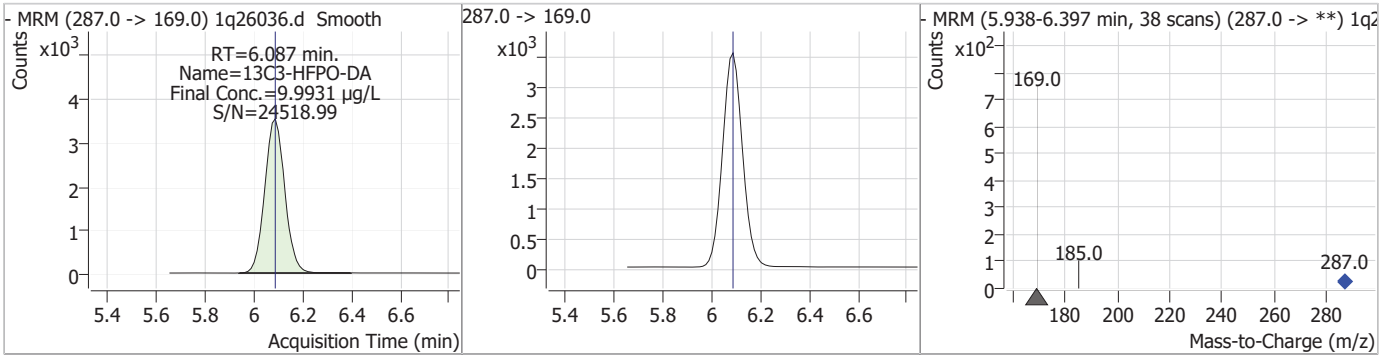
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.64	5.76	0.00	60213				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	71.23	5.76	0.00	1572087	313.0 -> 119.0	2.9	1.4	4.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.99	6.09	0.00	20012				

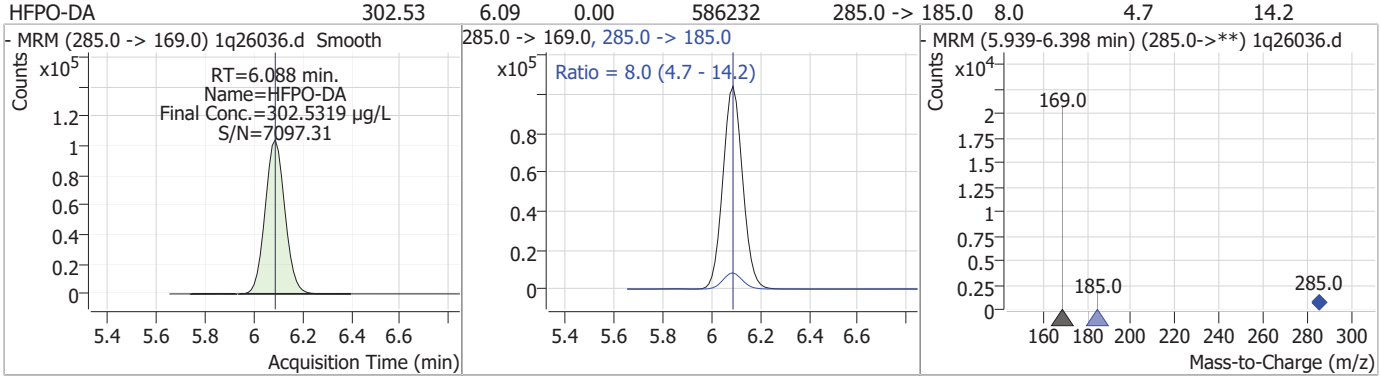


7.6.9

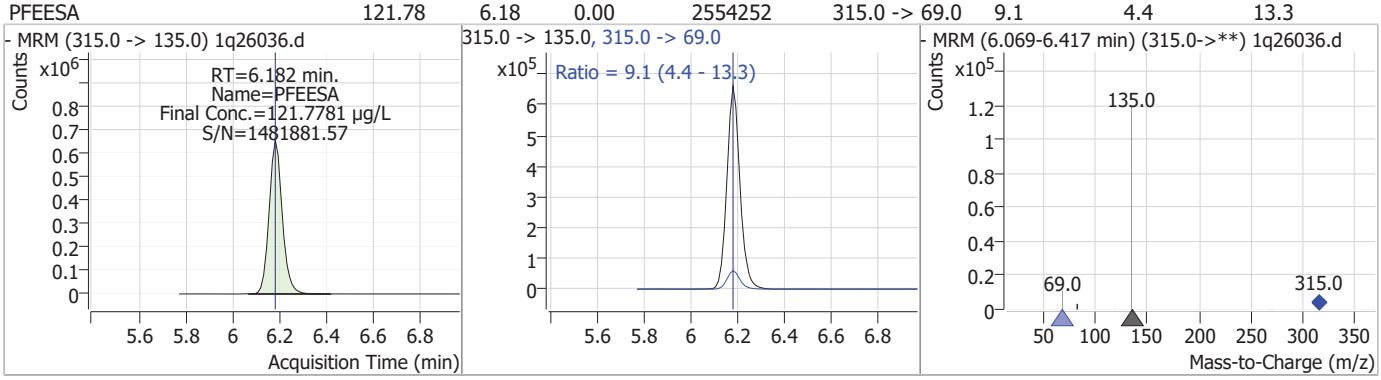
7

Perfluorinated Compounds by LC/MS/MS

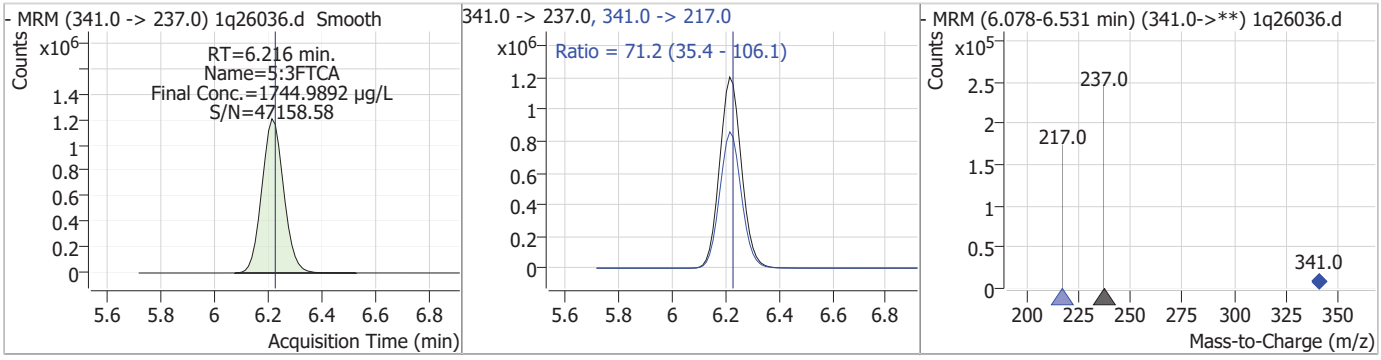
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	302.53	6.09	0.00	586232	285.0 -> 185.0	8.0	4.7	14.2



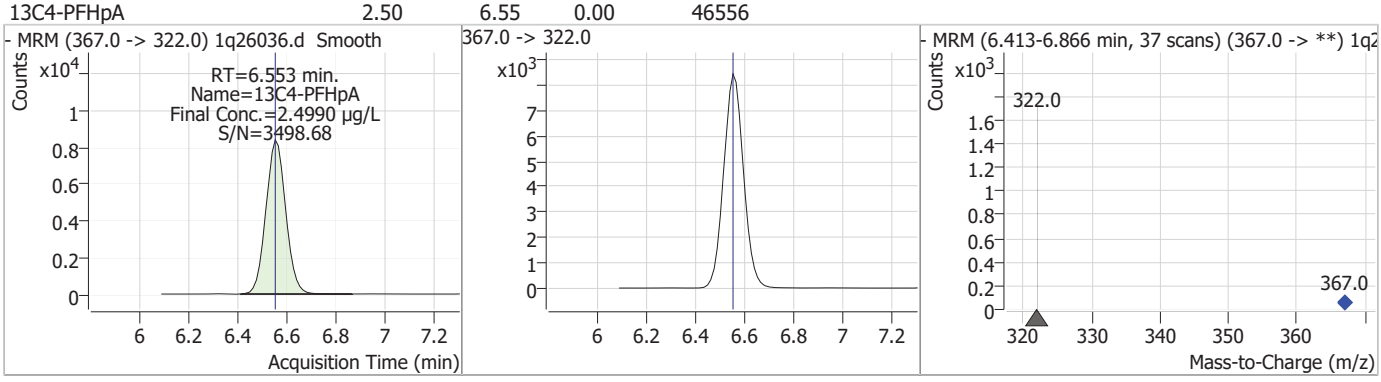
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	121.78	6.18	0.00	2554252	315.0 -> 69.0	9.1	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	1744.99	6.22	-0.01	6809967	341.0 -> 217.0	71.2	35.4	106.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.50	6.55	0.00	46556				

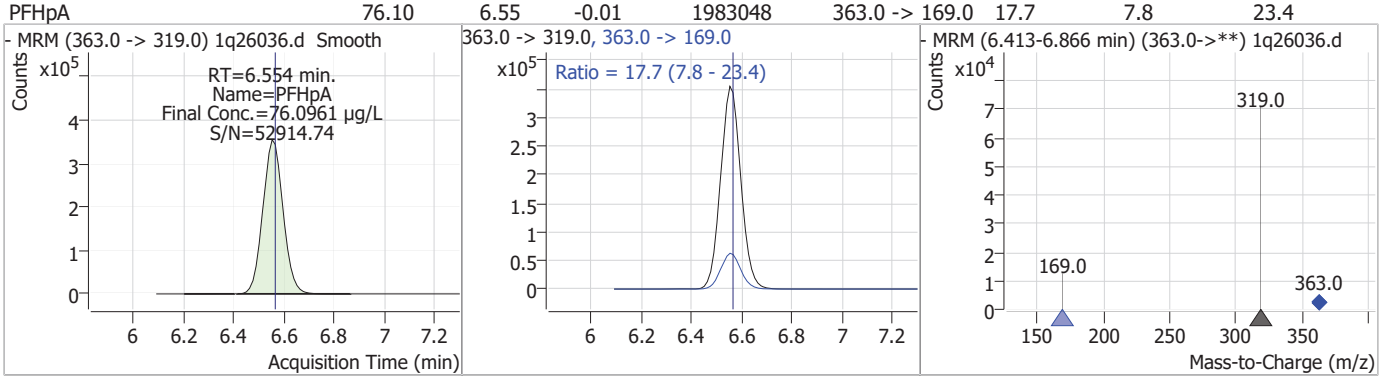


7.6.9

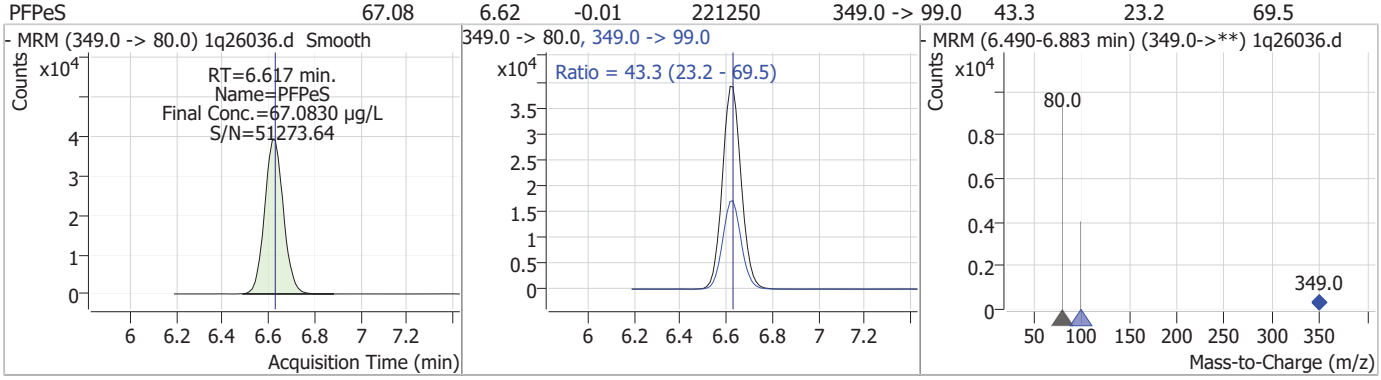
7

Perfluorinated Compounds by LC/MS/MS

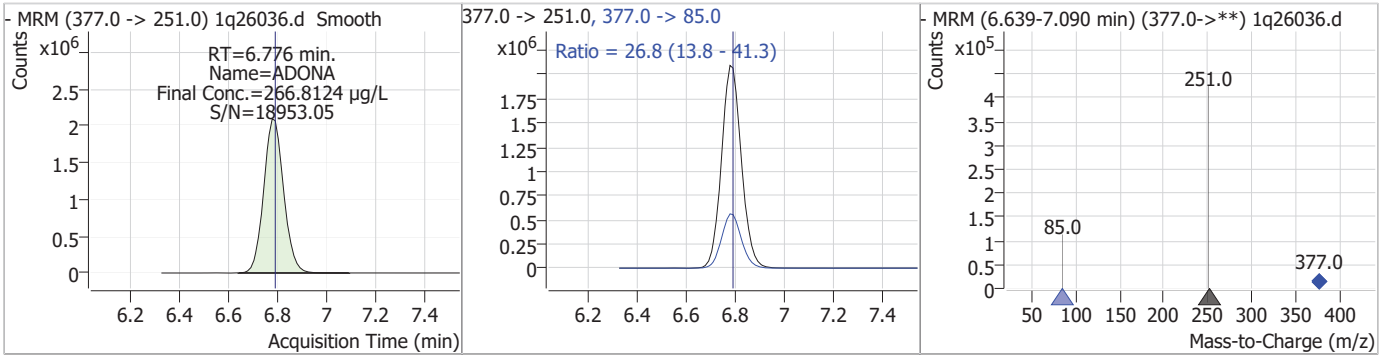
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	76.10	6.55	-0.01	1983048	363.0 -> 169.0	17.7	7.8	23.4



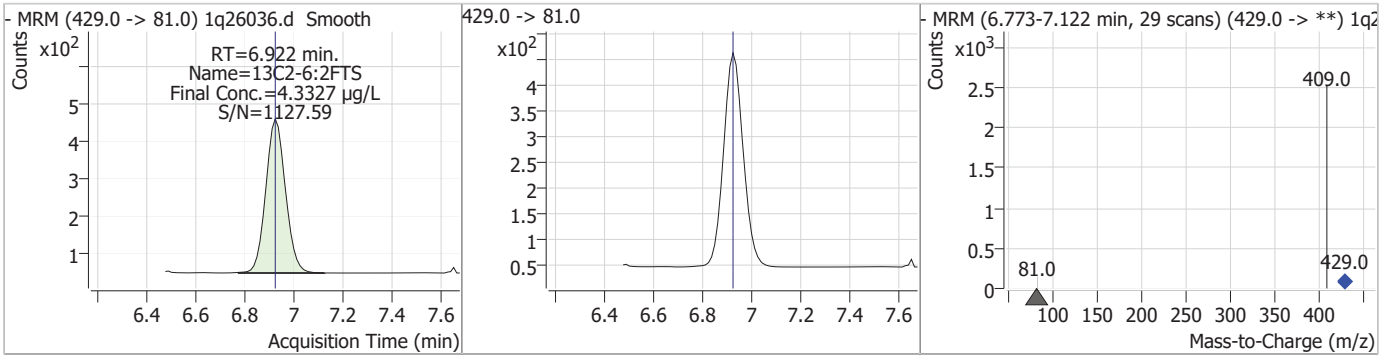
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	67.08	6.62	-0.01	221250	349.0 -> 99.0	43.3	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	266.81	6.78	-0.01	11757289	377.0 -> 85.0	26.8	13.8	41.3

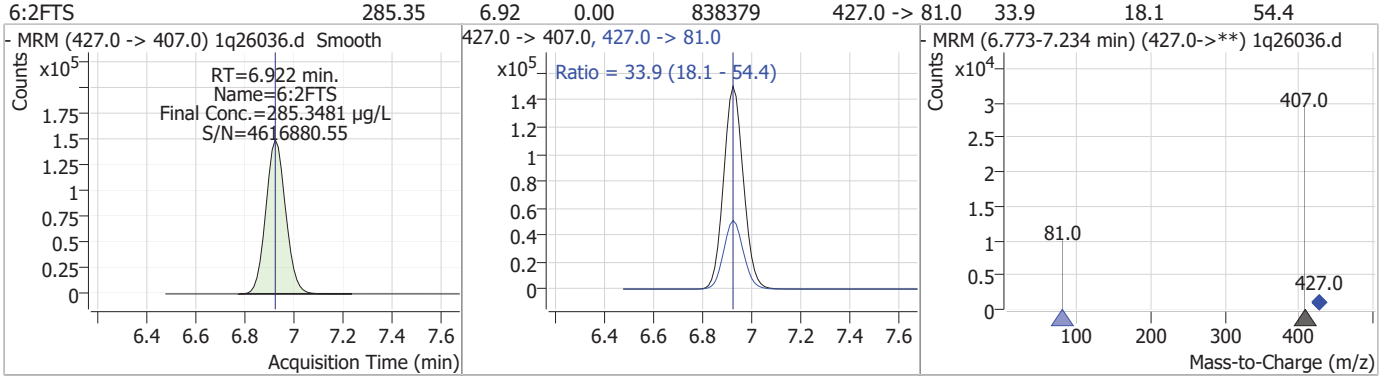


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.33	6.92	0.00	2295				

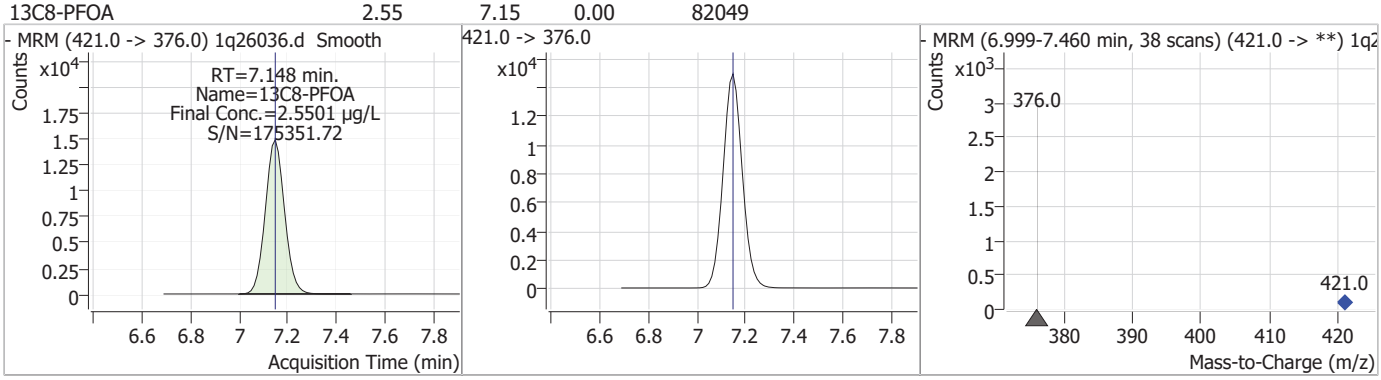


Perfluorinated Compounds by LC/MS/MS

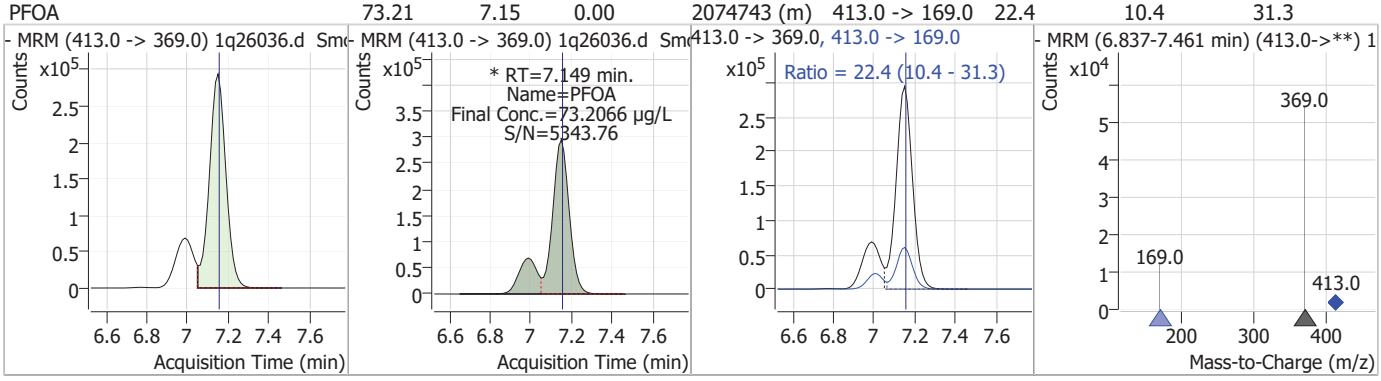
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	285.35	6.92	0.00	838379	427.0 -> 81.0	33.9	18.1	54.4



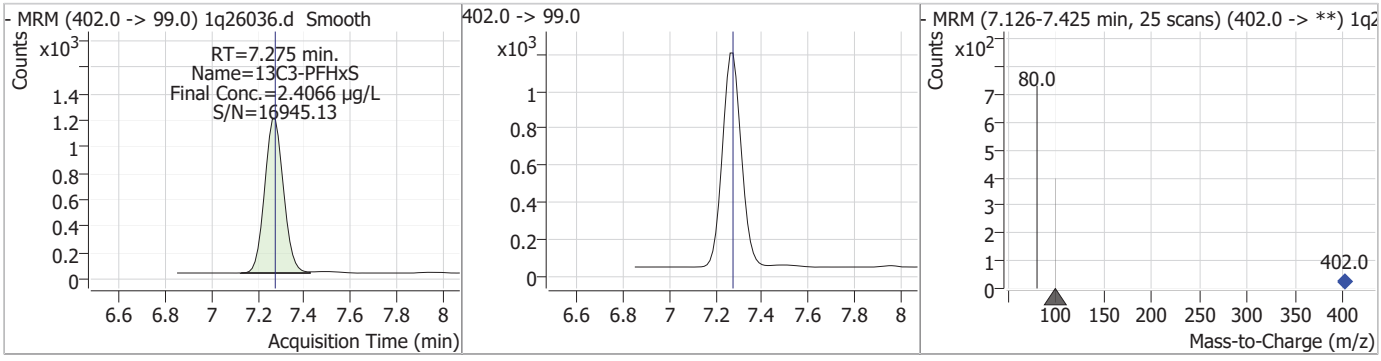
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.55	7.15	0.00	82049				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	73.21	7.15	0.00	2074743 (m)	413.0 -> 169.0	22.4	10.4	31.3

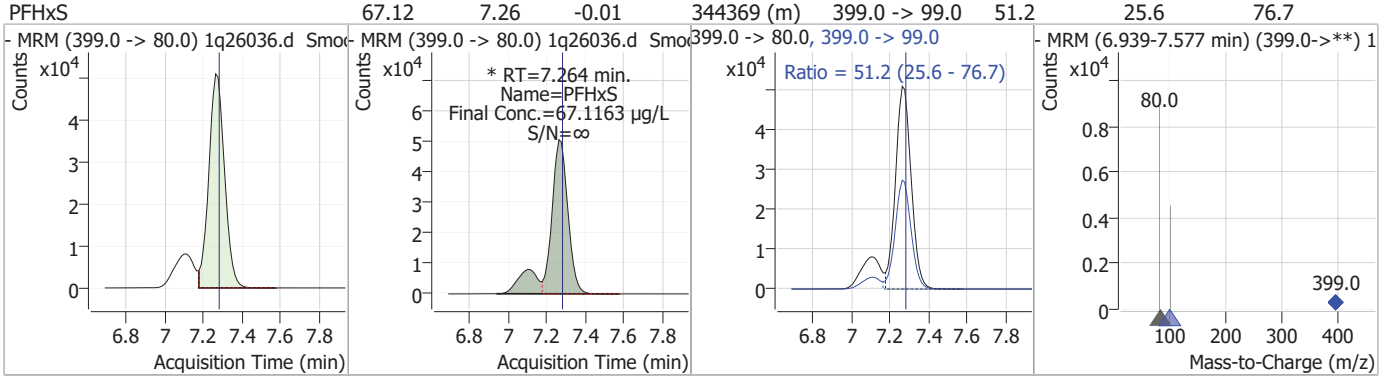


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.41	7.27	0.00	6587				

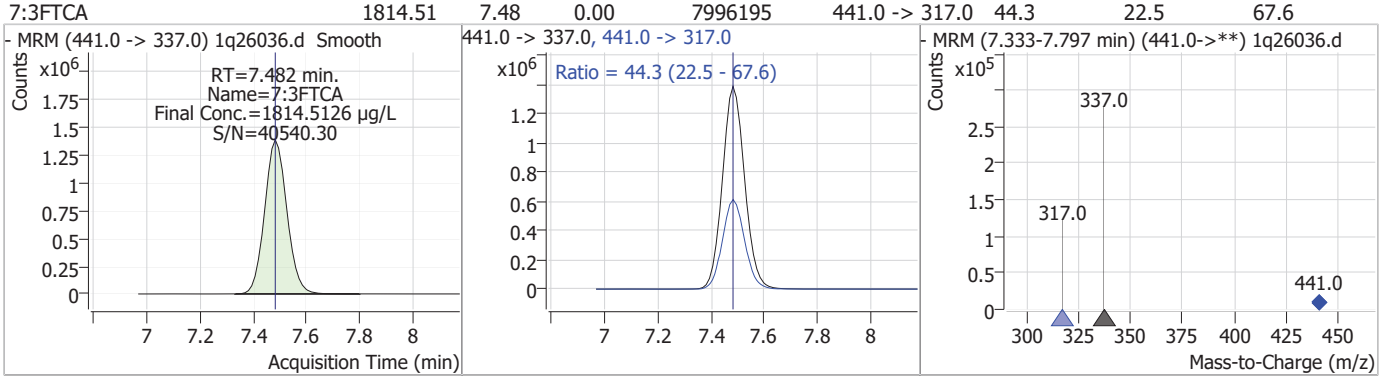


Perfluorinated Compounds by LC/MS/MS

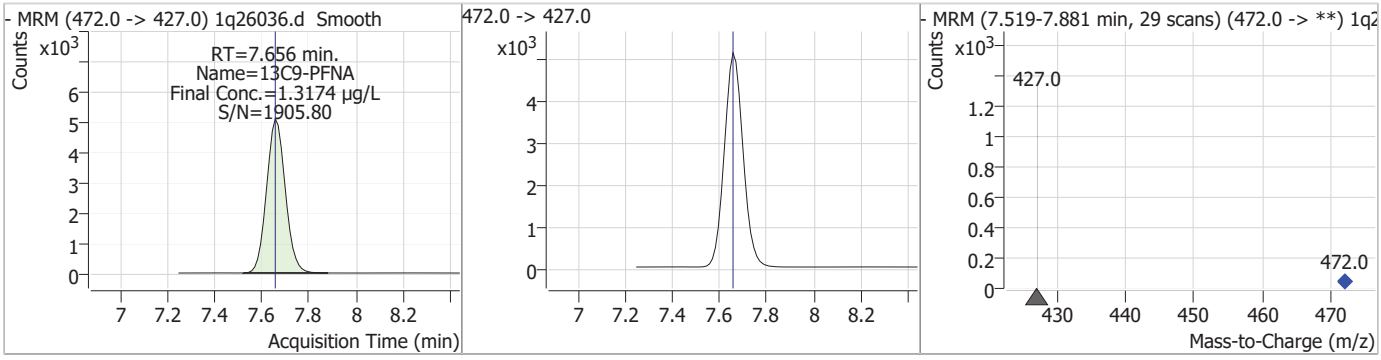
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	67.12	7.26	-0.01	344369 (m)	399.0 -> 99.0	51.2	25.6	76.7



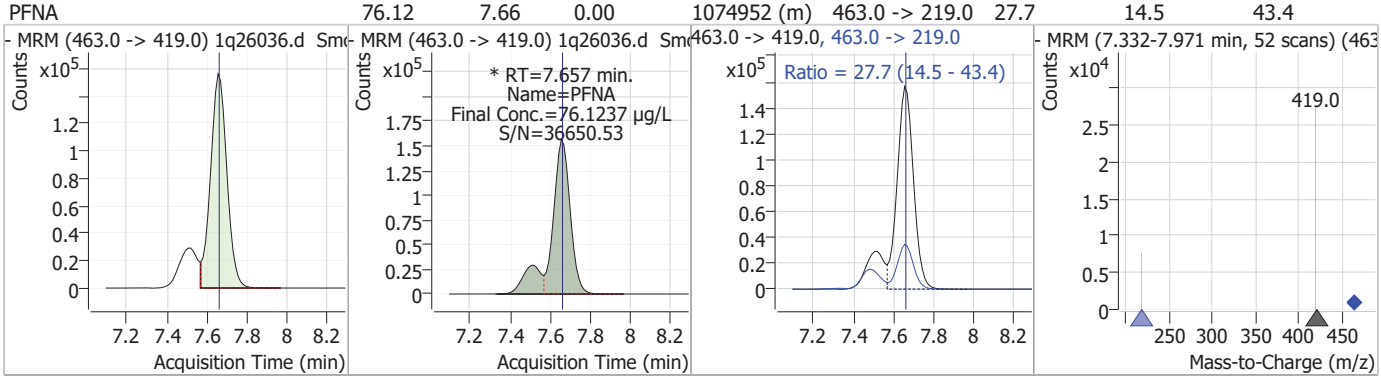
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	1814.51	7.48	0.00	7996195	441.0 -> 317.0	44.3	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.32	7.66	0.00	28154				

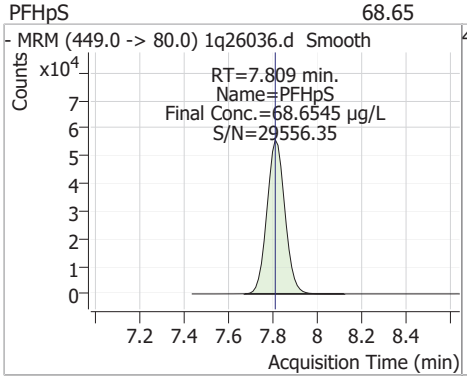


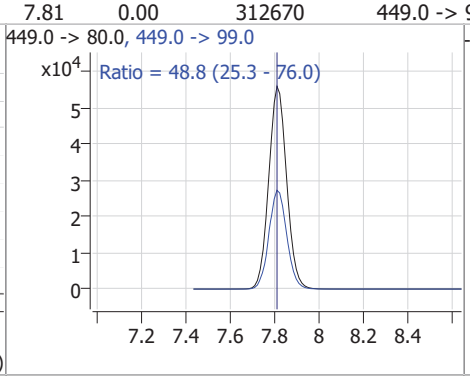
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	76.12	7.66	0.00	1074952 (m)	463.0 -> 219.0	27.7	14.5	43.4

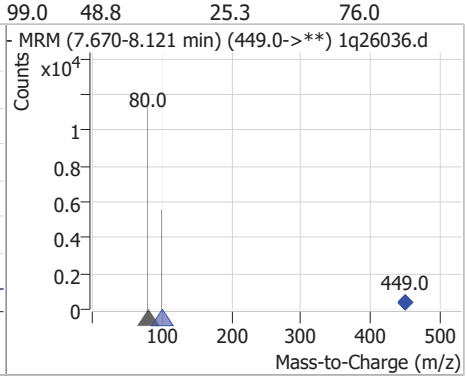


Perfluorinated Compounds by LC/MS/MS

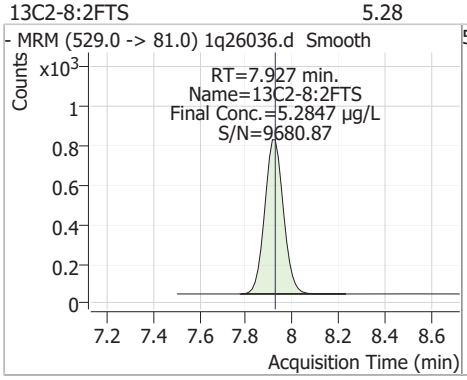
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	68.65	7.81	0.00	312670	449.0 -> 99.0	48.8	25.3	76.0

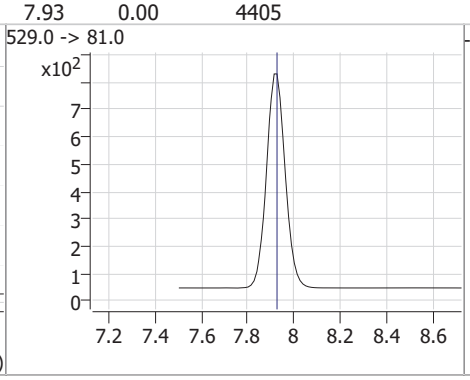


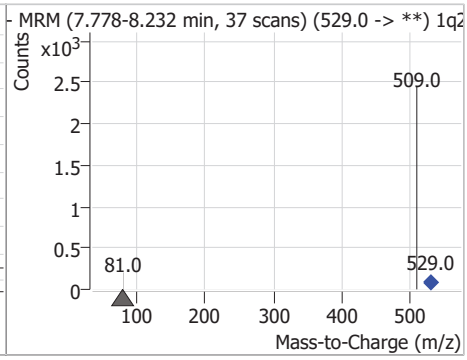




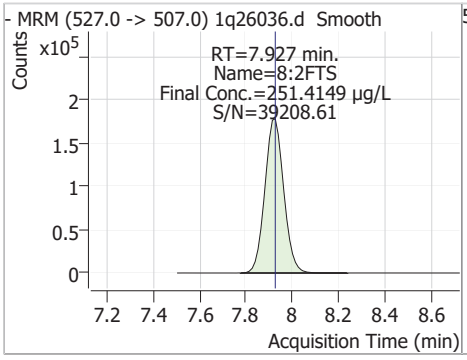
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.28	7.93	0.00	4405				

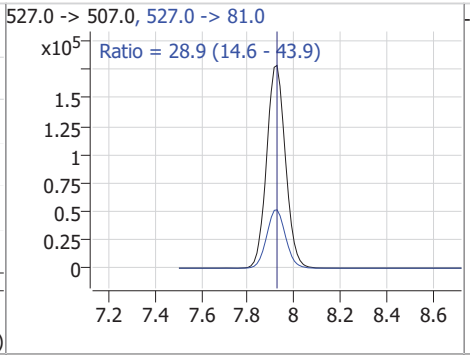


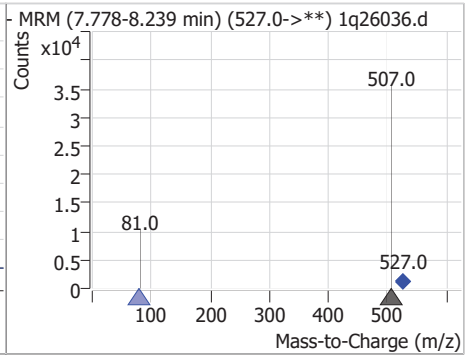




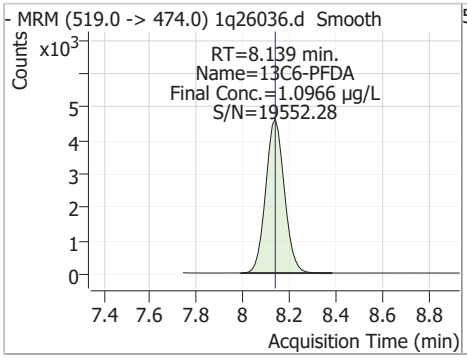
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	251.41	7.93	0.00	1006991	527.0 -> 81.0	28.9	14.6	43.9

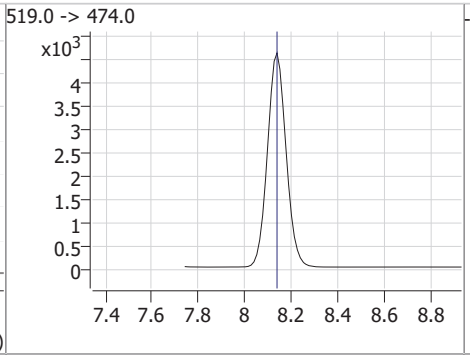


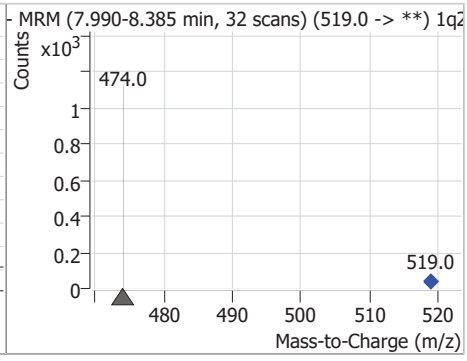




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.10	8.14	0.00	25622				

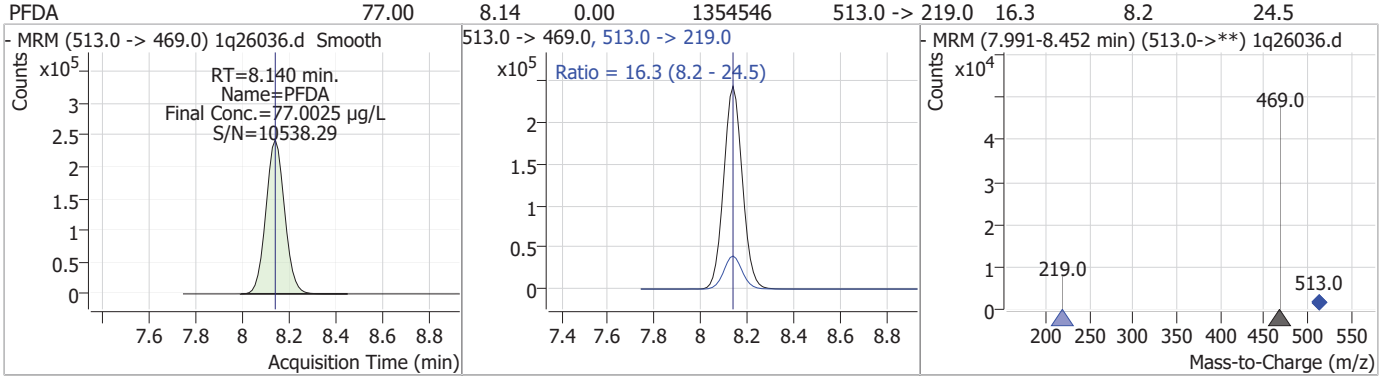




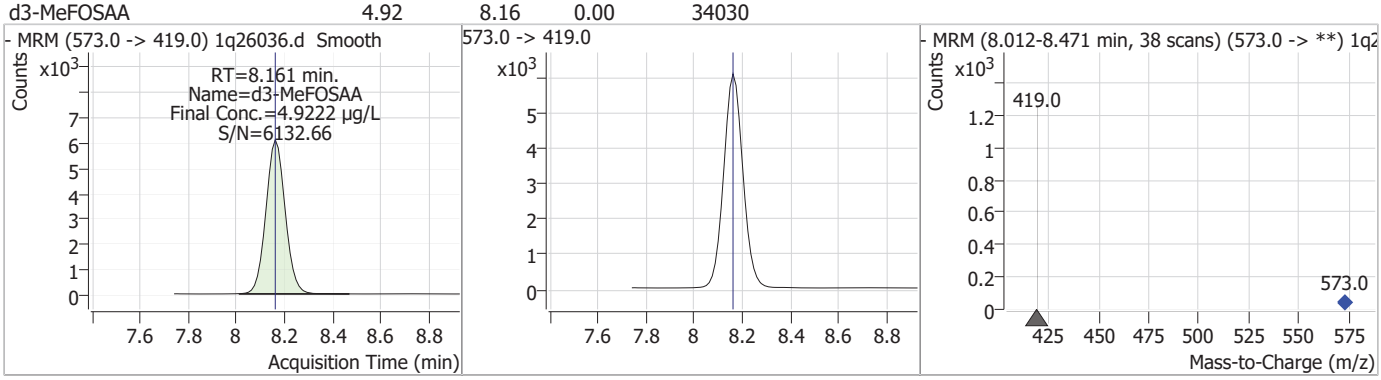


Perfluorinated Compounds by LC/MS/MS

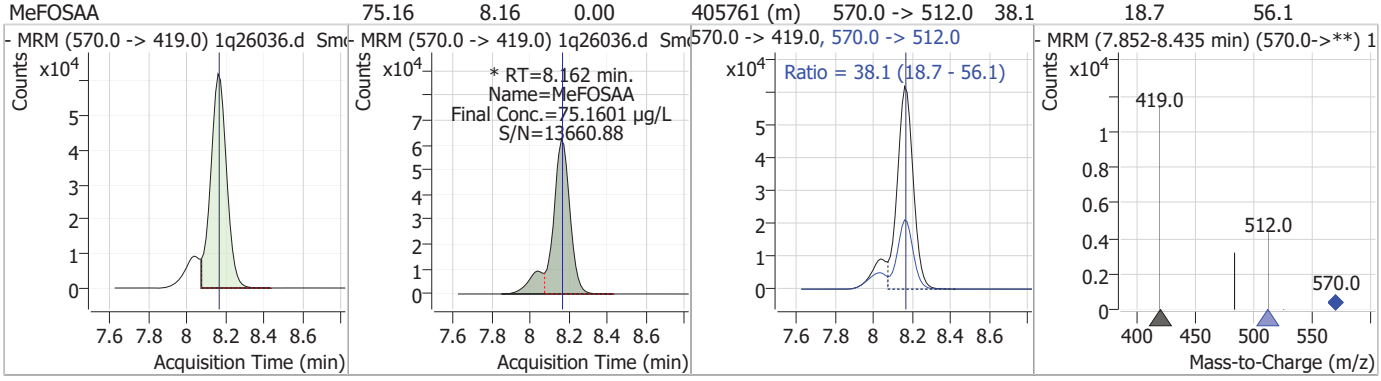
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	77.00	8.14	0.00	1354546	513.0 -> 219.0	16.3	8.2	24.5



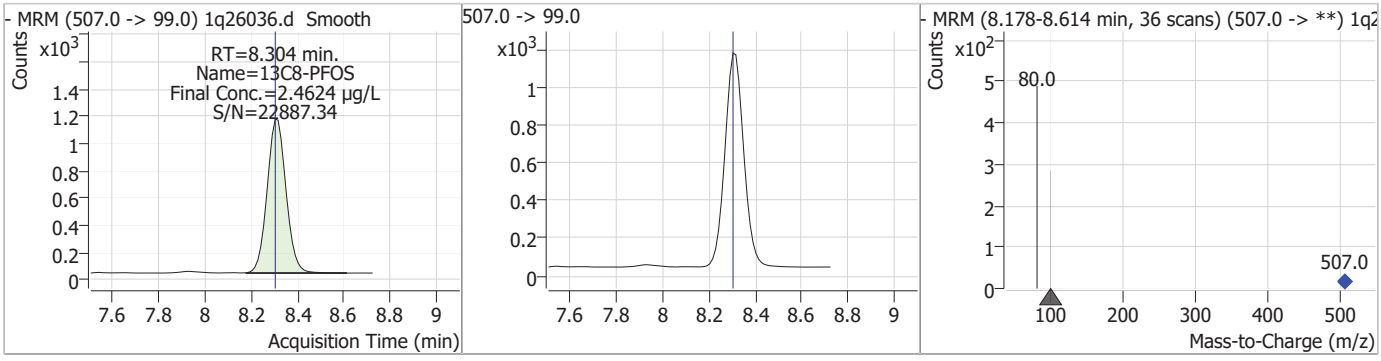
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.92	8.16	0.00	34030				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	75.16	8.16	0.00	405761 (m)	570.0 -> 512.0	38.1	18.7	56.1

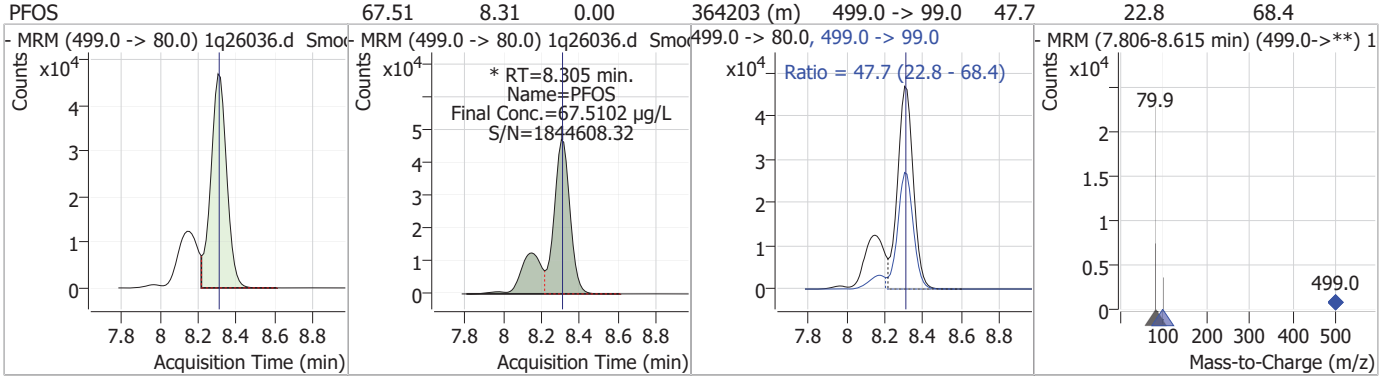


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.46	8.30	0.00	6432				

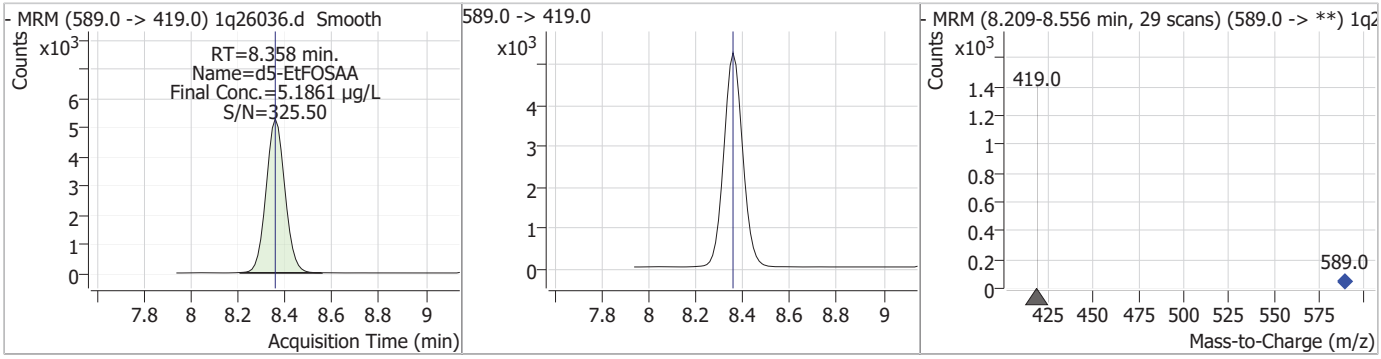


Perfluorinated Compounds by LC/MS/MS

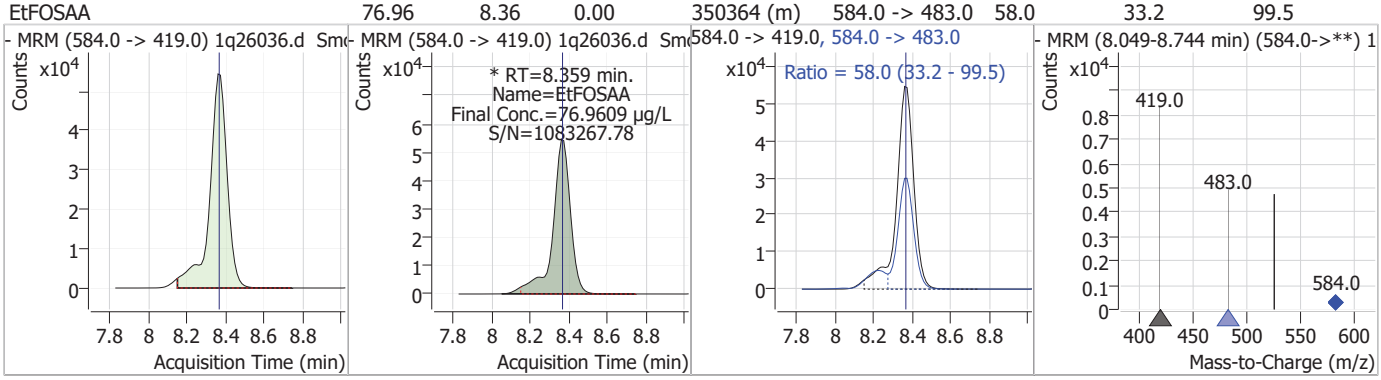
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	67.51	8.31	0.00	364203 (m)	499.0 -> 99.0	47.7	22.8	68.4



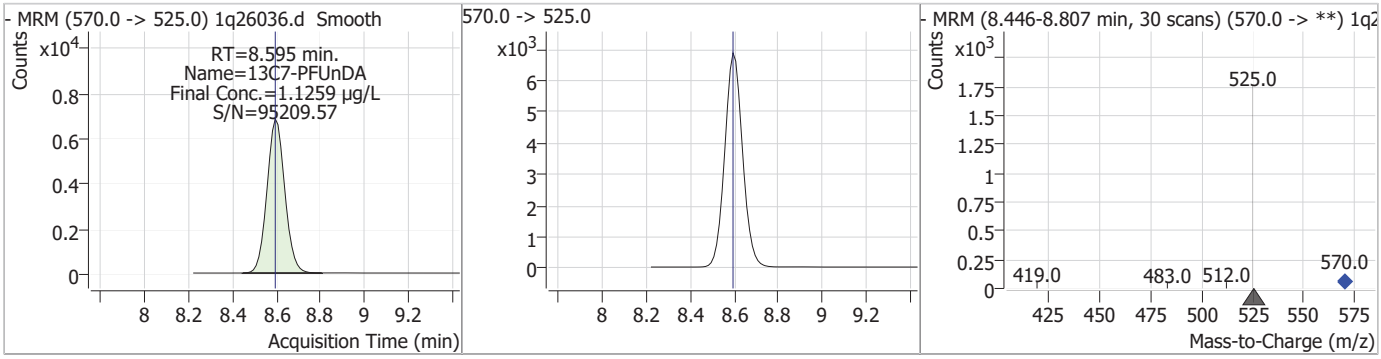
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.19	8.36	0.00	29191				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	76.96	8.36	0.00	350364 (m)	584.0 -> 483.0	58.0	33.2	99.5

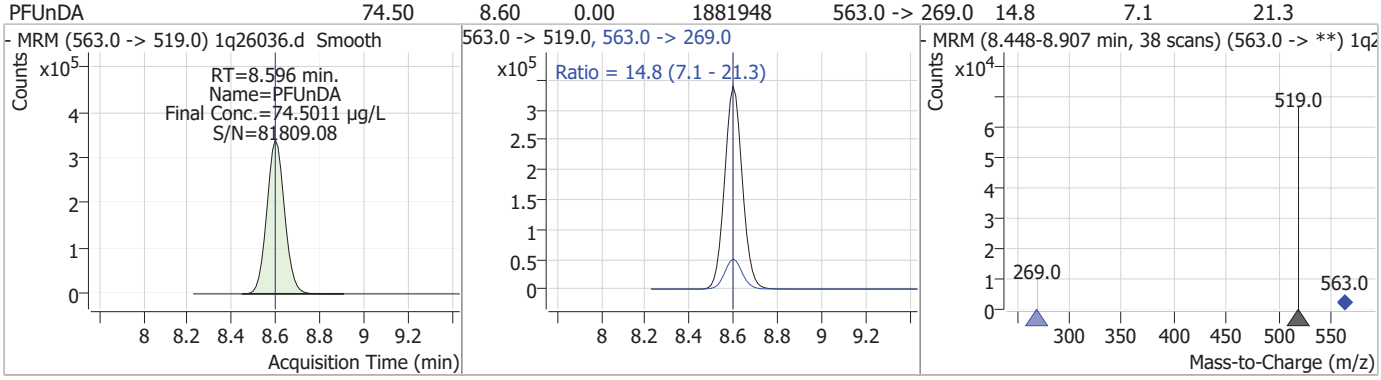


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.13	8.59	0.00	38185				

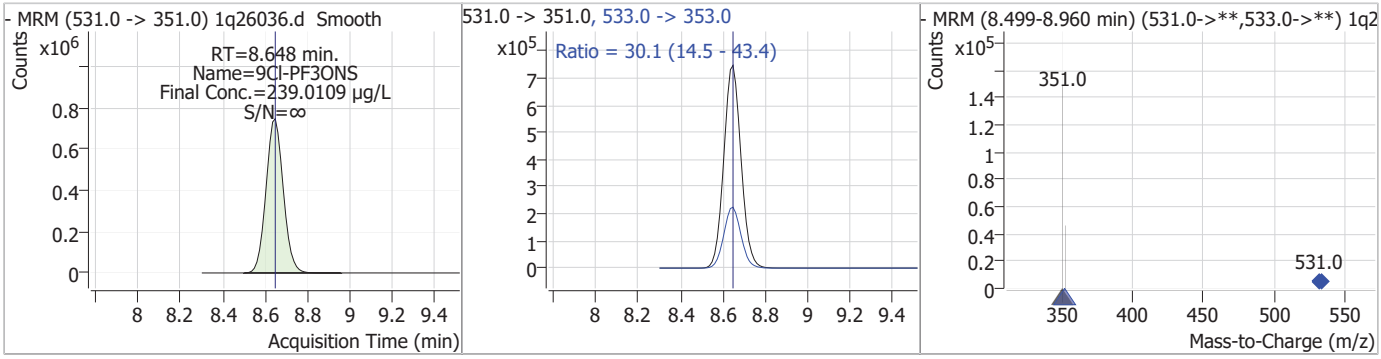


Perfluorinated Compounds by LC/MS/MS

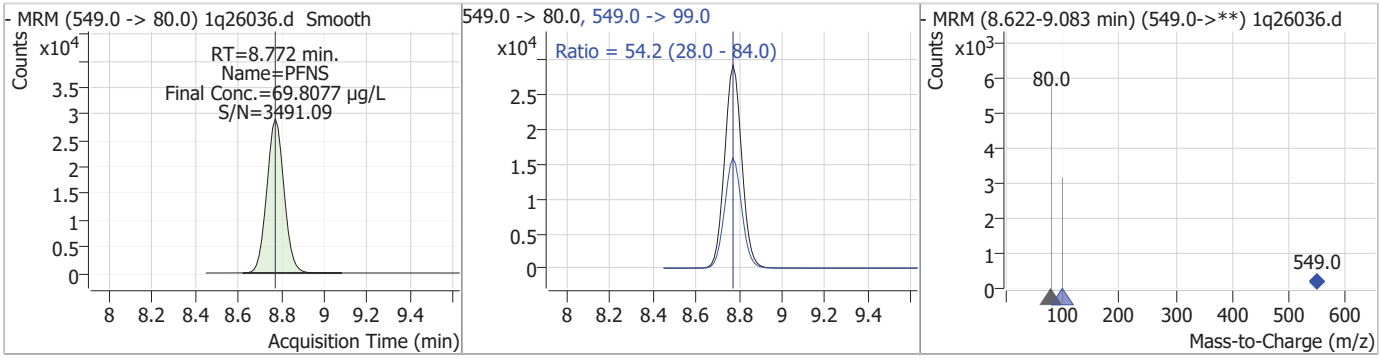
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	74.50	8.60	0.00	1881948	563.0 -> 269.0	14.8	7.1	21.3



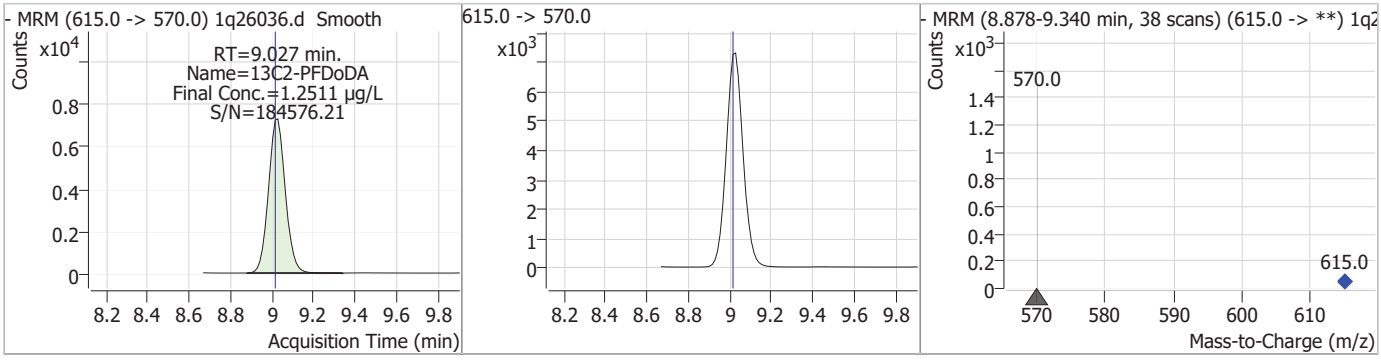
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	239.01	8.65	0.00	4226647	533.0 -> 353.0	30.1	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	69.81	8.77	0.00	161688	549.0 -> 99.0	54.2	28.0	84.0

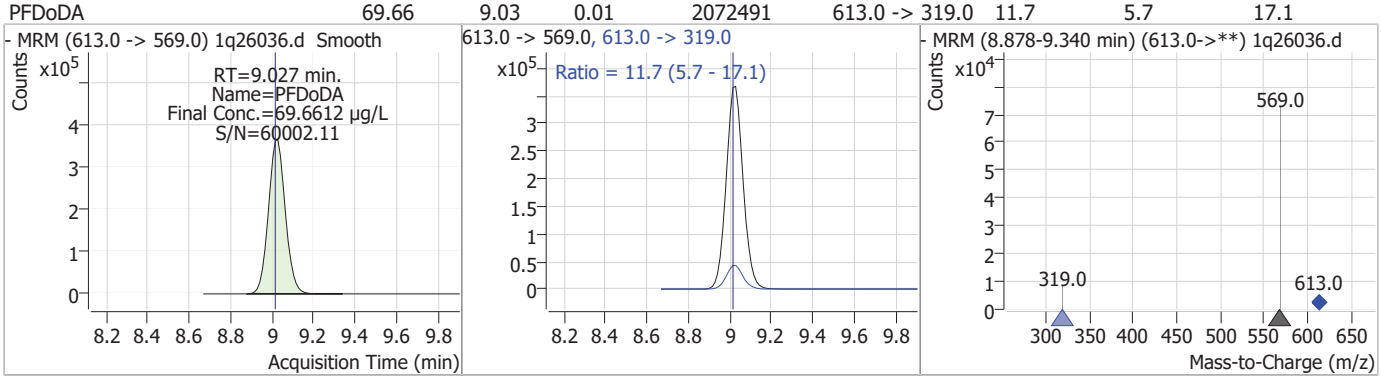


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.25	9.03	0.01	40940				

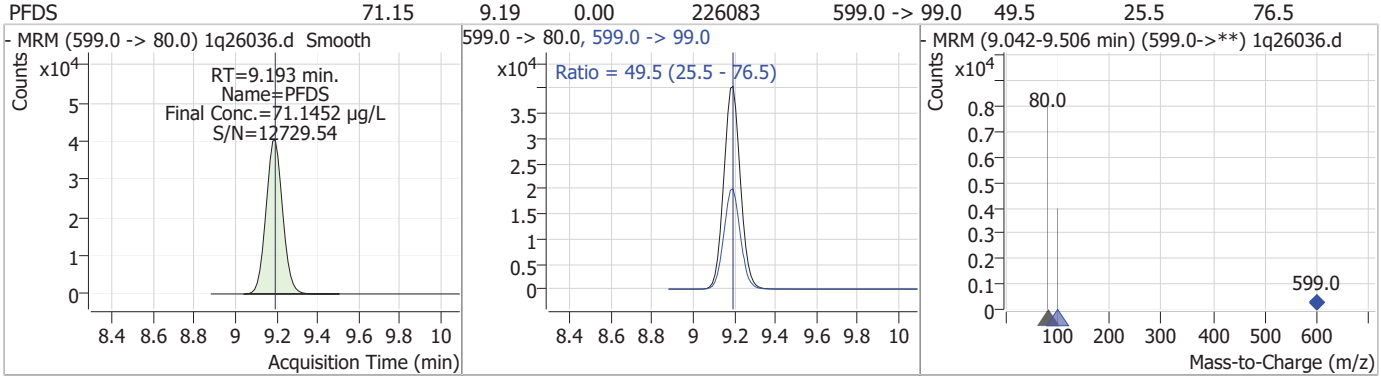


Perfluorinated Compounds by LC/MS/MS

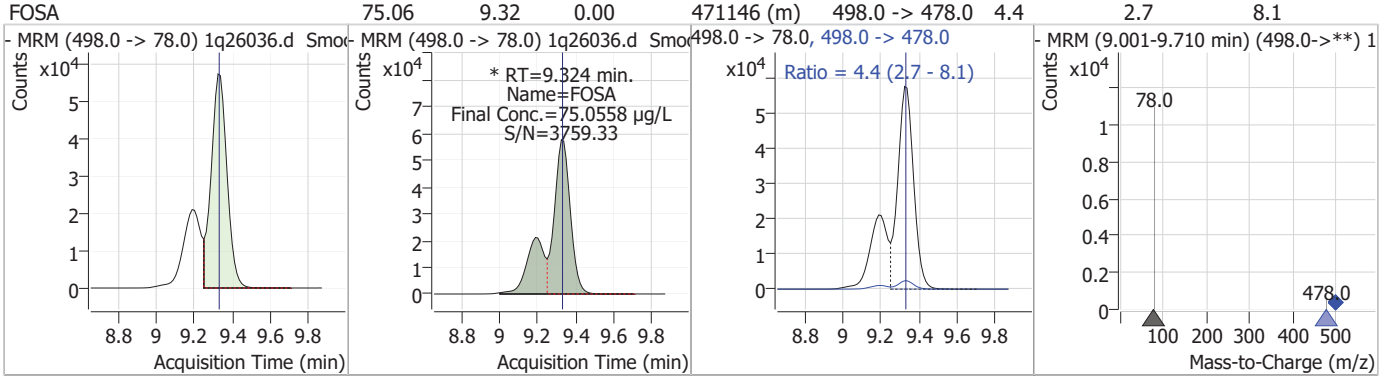
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	69.66	9.03	0.01	2072491	613.0 -> 319.0	11.7	5.7	17.1



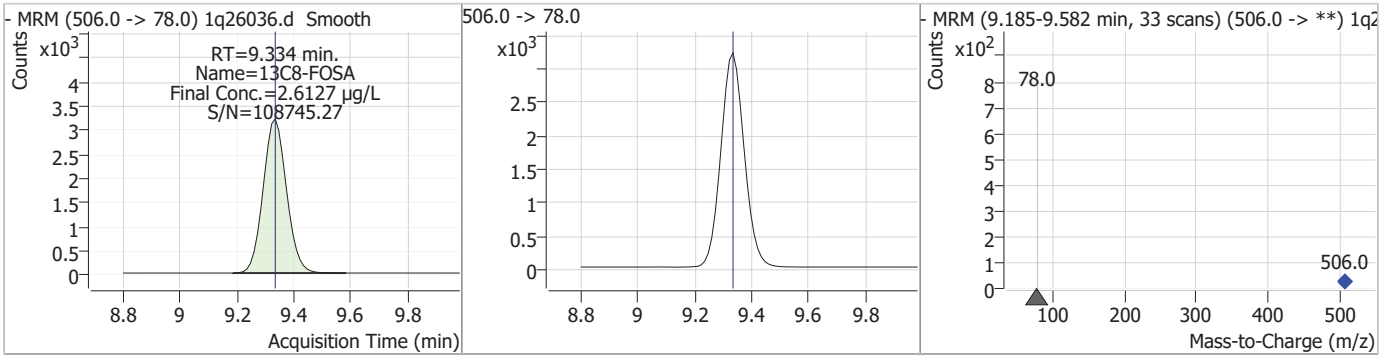
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	71.15	9.19	0.00	226083	599.0 -> 99.0	49.5	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	75.06	9.32	0.00	471146 (m)	498.0 -> 478.0	4.4	2.7	8.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.61	9.33	0.00	18112				



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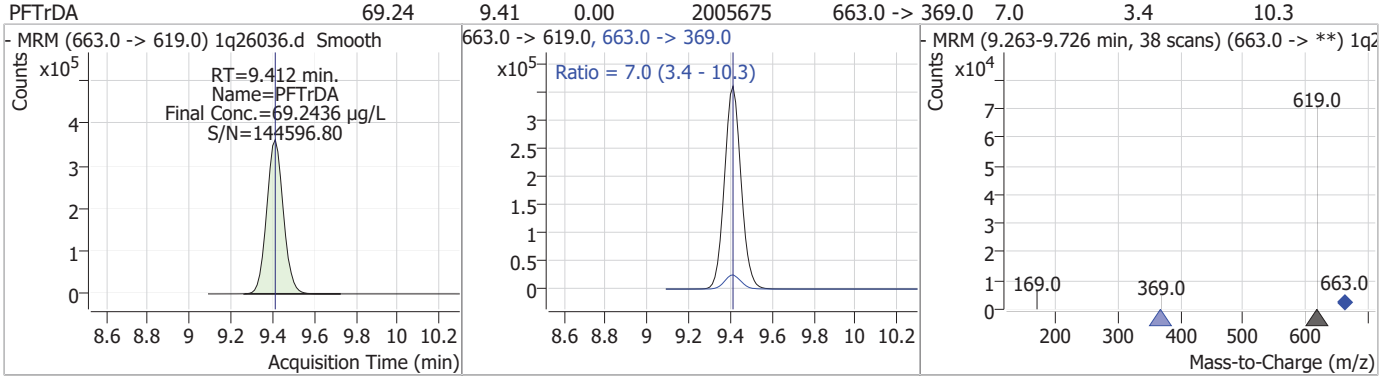
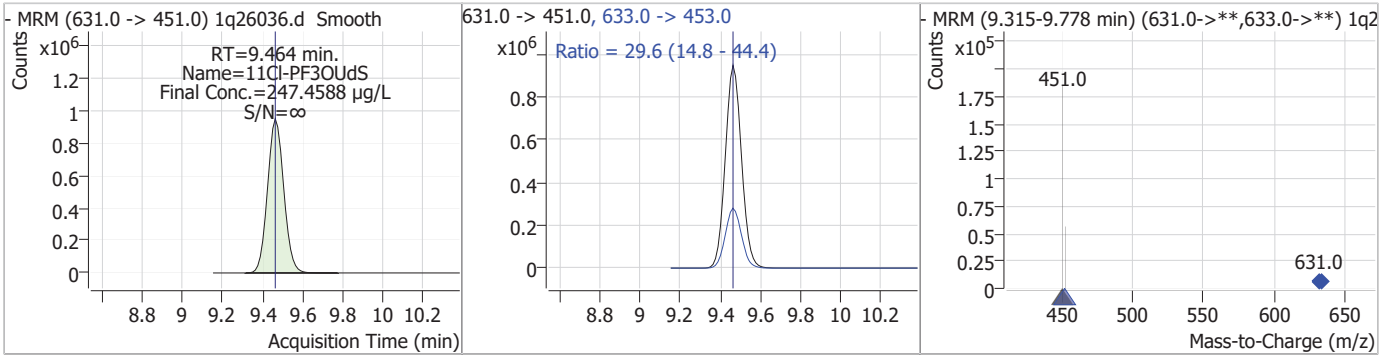
Perfluorinated Compounds by LC/MS/MS

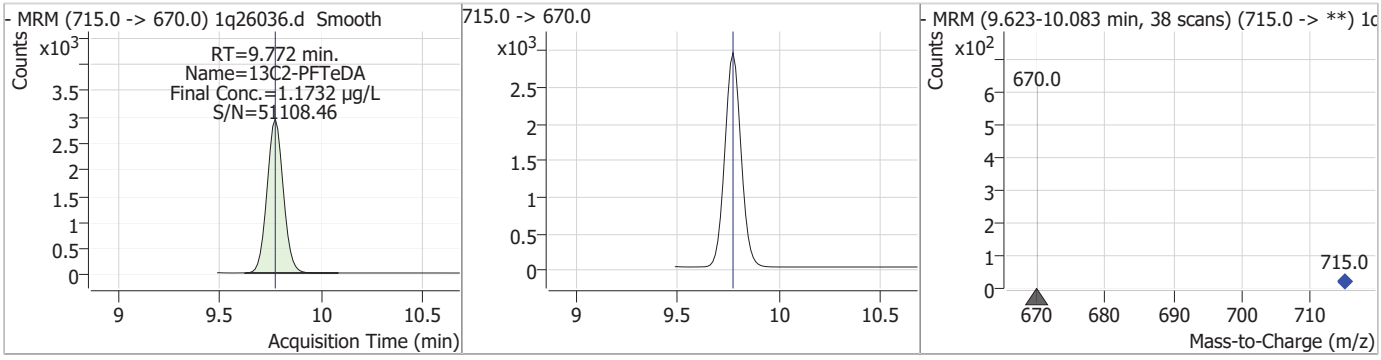
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	69.24	9.41	0.00	2005675	663.0 -> 369.0	7.0	3.4	10.3



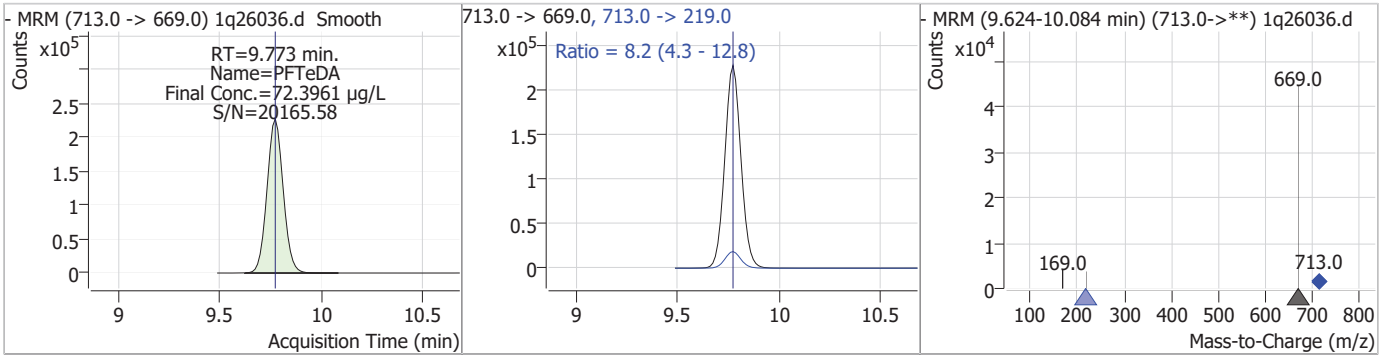
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	247.46	9.46	0.00	5338734	633.0 -> 453.0	29.6	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.17	9.77	0.00	16154				

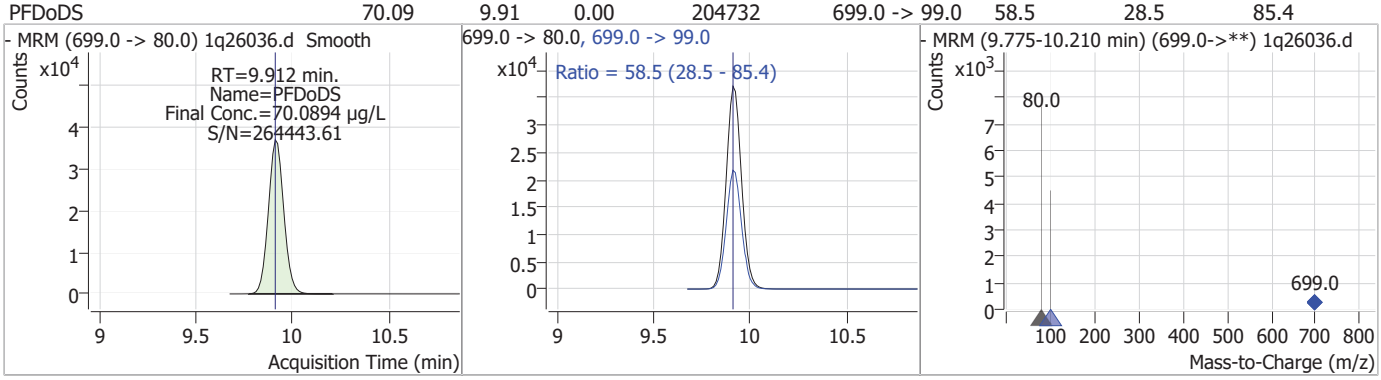


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	72.40	9.77	0.00	1259593	713.0 -> 219.0	8.2	4.3	12.8

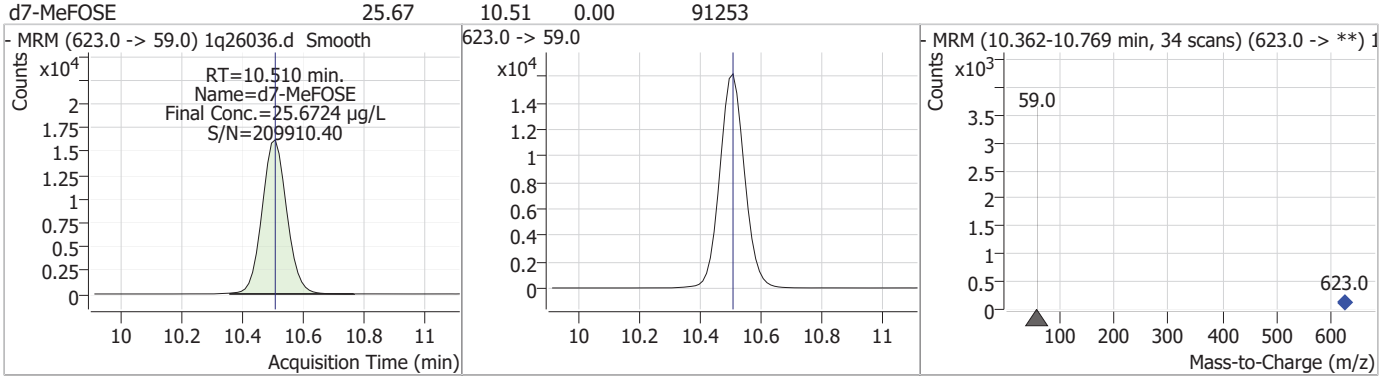


Perfluorinated Compounds by LC/MS/MS

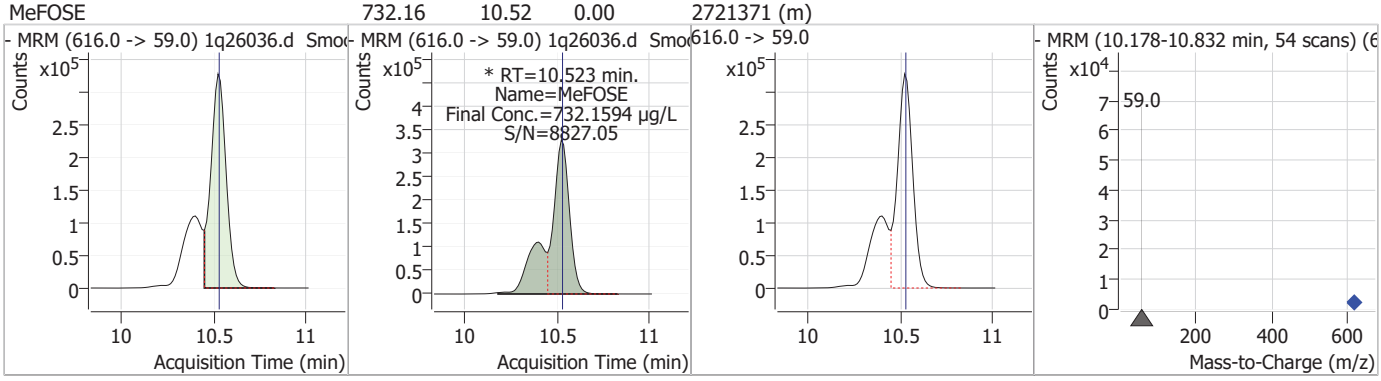
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	70.09	9.91	0.00	204732	699.0 -> 99.0	58.5	28.5	85.4



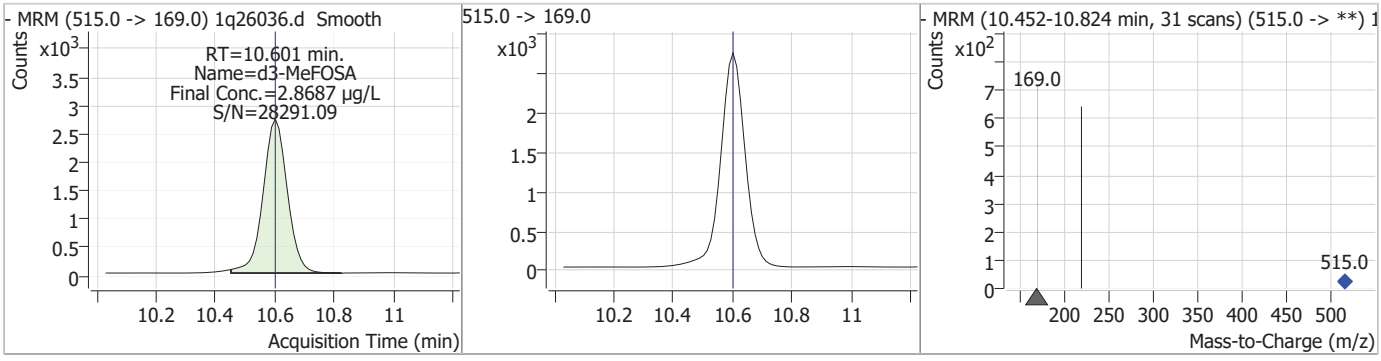
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.67	10.51	0.00	91253				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	732.16	10.52	0.00	2721371 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.87	10.60	0.00	15414				



7.6.9

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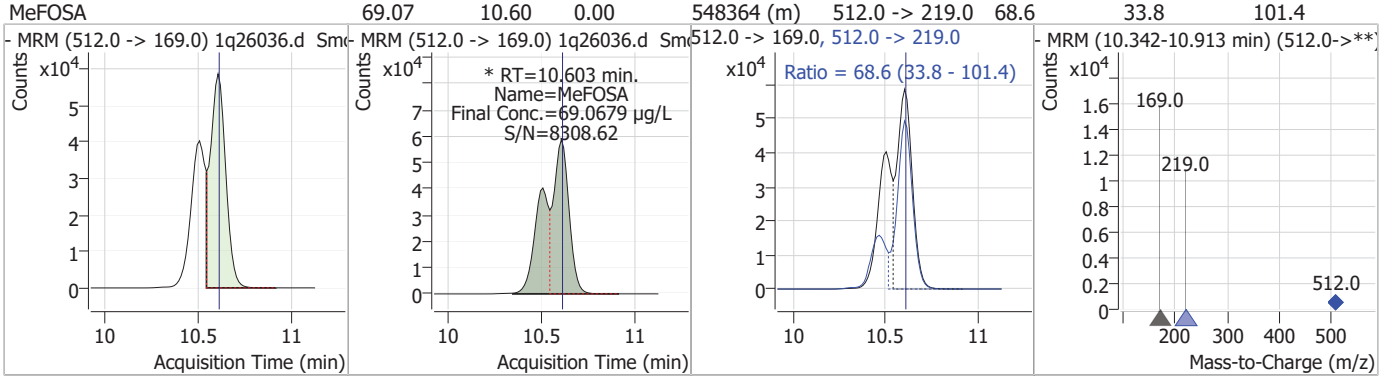
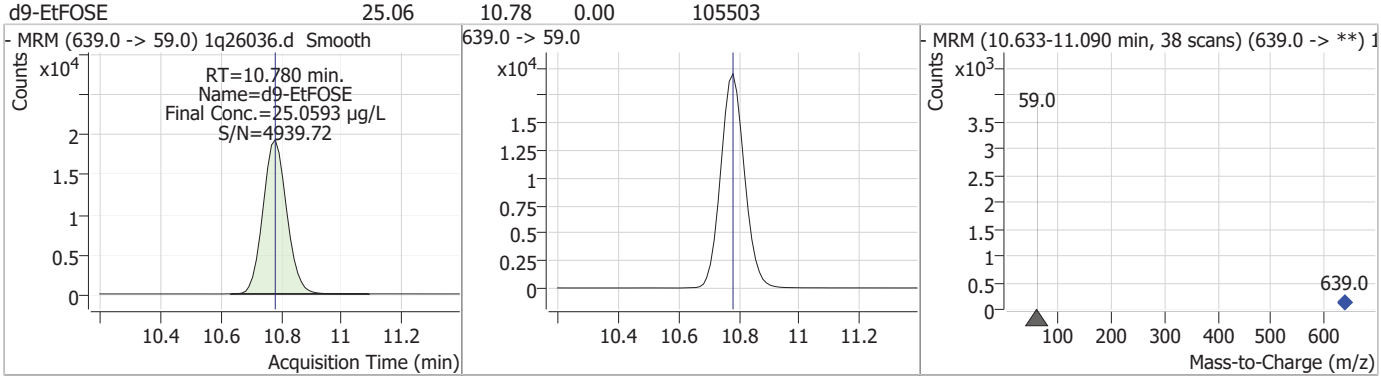
Perfluorinated Compounds by LC/MS/MS

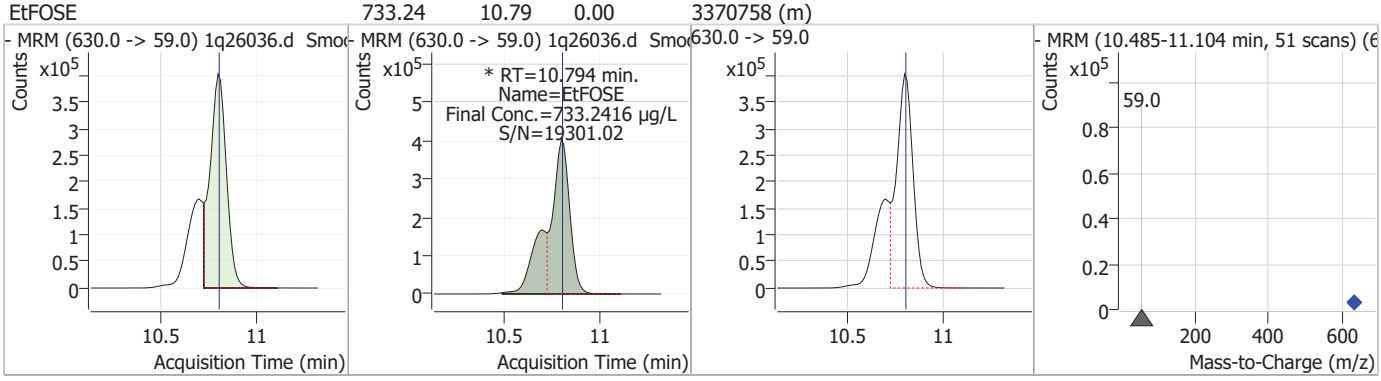
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	69.07	10.60	0.00	548364 (m)	512.0 -> 219.0	68.6	33.8	101.4



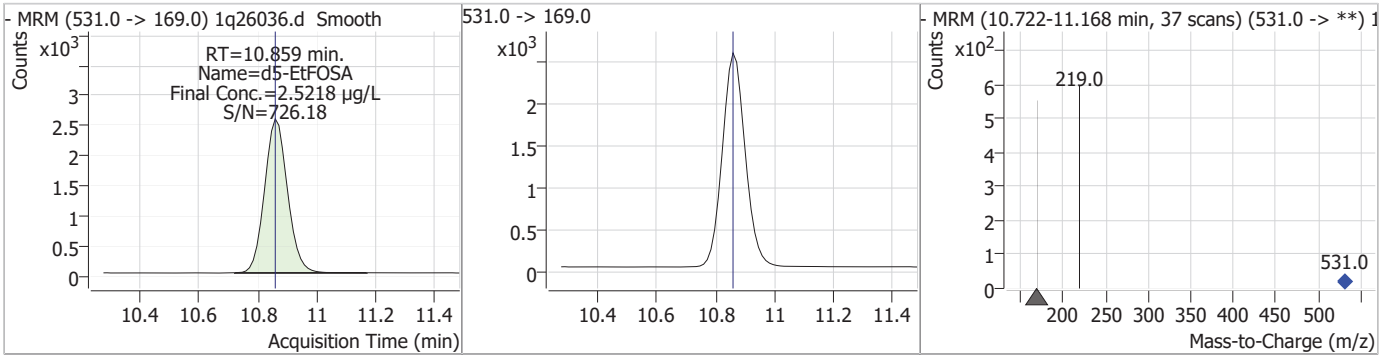
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.06	10.78	0.00	105503				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	733.24	10.79	0.00	3370758 (m)				

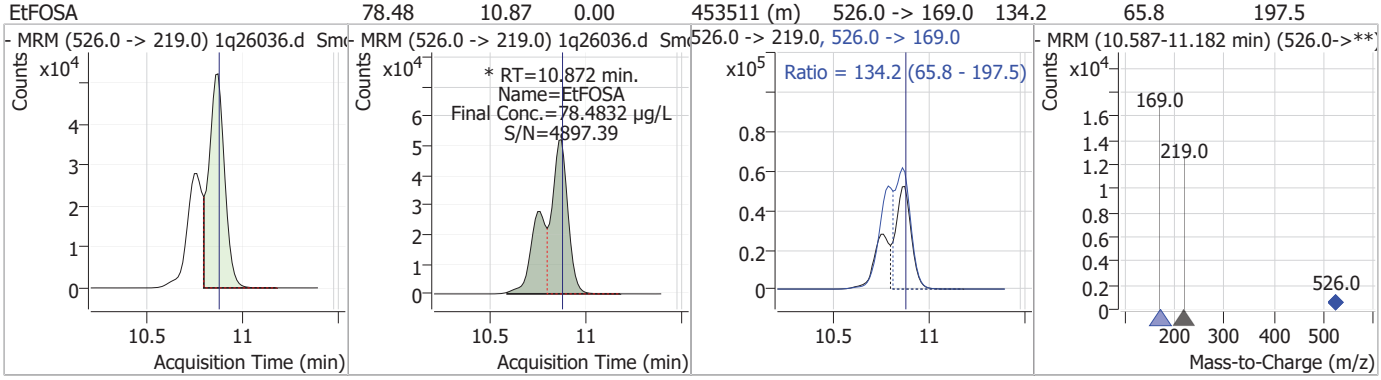


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.52	10.86	0.00	13846				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	78.48	10.87	0.00	453511 (m)	526.0 -> 169.0	134.2	65.8	197.5



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Manual Integration Approval Summary

Sample Number: T1Q361-IC361
Lab FileID: 1Q26036.D
Injection Time: 05/14/25 18:22

Method: EPA 1633
Analyst approved: 05/15/25 01:25 Rensel John Romano
Supervisor approved: 05/15/25 05:29 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.26	Split peak
Perfluorononanoic acid	375-95-1		7.66	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.30	Split peak
EtFOSAA	2991-50-6		8.36	Split peak
PFOSA	754-91-6		9.32	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSE	1691-99-2		10.79	Split peak
EtFOSA	4151-50-2		10.87	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/15/25 05:29

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26038.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/14/2025 6:52:46 PM
Sample Name : ICV361-4
Vial : P1-B2
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : t1q361.batch.bin
Sample Information : OP63461,T1Q361,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	181567	10.00 µg/L	0.000
M5-PFPeA	4.636	268.0 -> 223.0	111178	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	63803	2.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	52179	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	82463	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	30765	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	29518	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	45407	1.25 µg/L	0.000
M2-PFDoDA	9.014	615.0 -> 570.0	39522	1.25 µg/L	0.000
M2-PFTeDA	9.772	715.0 -> 670.0	17235	1.25 µg/L	0.000
M8-FOSA	9.334	506.0 -> 78.0	20329	2.50 µg/L	0.000
M3-PFBS	5.711	302.0 -> 99.0	7202	2.50 µg/L	0.000
M3-PFHxS	7.263	402.0 -> 99.0	7465	2.50 µg/L	-0.012
M8-PFOS	8.304	507.0 -> 99.0	7426	2.50 µg/L	0.000
M2-4:2FTS	5.446	329.0 -> 81.0	1339	5.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	2828	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	3760	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	40839	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	21845	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	32263	5.00 µg/L	0.000
M7-MeFOSE	10.510	623.0 -> 59.0	101089	25.00 µg/L	0.000
M9-EtFOSE	10.780	639.0 -> 59.0	118799	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	15045	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	14707	2.50 µg/L	0.000
13C4-PFOS	8.304	503.0 -> 80.0	12863	2.50 µg/L	0.000
13C3-PFBA	3.263	216.0 -> 172.0	77334	5.00 µg/L	0.013
18O2-PFHxS	7.274	403.0 -> 84.0	8715	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	91830	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	24896	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	28620	1.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	59723	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1339	4.60 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.1%	
13C2-6:2FTS	6.922	429.0 -> 81.0	2828	5.01 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.3%	
13C2-8:2FTS	7.927	529.0 -> 81.0	3760	4.24 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 84.7%	
13C2-PFDoDA	9.014	615.0 -> 570.0	39522	1.17 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.6%	
13C2-PFTeDA	9.772	715.0 -> 670.0	17235	1.21 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.0%	
13C3-PFBS	5.711	302.0 -> 99.0	7202	2.48 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.1%	
13C3-PFHxS	7.263	402.0 -> 99.0	7465	2.56 µg/L	-0.012

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.5%		
13C4-PFBA	3.260	217.0 -> 172.0	181567	9.87 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.7%		
13C4-PFHpA	6.553	367.0 -> 322.0	52179	2.52 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.7%		
13C5-PFHxA	5.759	318.0 -> 273.0	63803	2.51 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.4%		
13C5-PFPeA	4.636	268.0 -> 223.0	111178	5.08 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.6%		
13C6-PFDA	8.139	519.0 -> 474.0	29518	1.22 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.9%		
13C7-PFUnDA	8.595	570.0 -> 525.0	45407	1.30 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.8%		
13C8-FOSA	9.334	506.0 -> 78.0	20329	2.59 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.5%		
13C8-PFOA	7.148	421.0 -> 376.0	82463	2.47 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.7%		
13C8-PFOS	8.304	507.0 -> 99.0	7426	2.51 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.4%		
13C9-PFNA	7.656	472.0 -> 427.0	30765	1.32 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.4%		
d3-MeFOSAA	8.161	573.0 -> 419.0	40839	5.21 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.3%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	21845	9.81 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.1%		
d3-MeFOSA	10.601	515.0 -> 169.0	14707	2.42 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.6%		
d5-EtFOSAA	8.358	589.0 -> 419.0	32263	5.06 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.2%		
d7-MeFOSE	10.510	623.0 -> 59.0	101089	25.10 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.4%		
d9-EtFOSE	10.780	639.0 -> 59.0	118799	24.91 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 99.6%		
d5-EtFOSA	10.859	531.0 -> 169.0	15045	2.42 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.7%		
Target Compounds						QValue
4:2FTS	5.447	327.0 -> 307.0	24394	9.77 µg/L		94
		327.0 -> 81.0	11281			
6:2FTS	6.922	427.0 -> 407.0	34221	9.45 µg/L		96
		427.0 -> 81.0	11585			
8:2FTS	7.927	527.0 -> 507.0	35992	10.53 µg/L		99
		527.0 -> 81.0	10679			
EtFOSAA	8.359	584.0 -> 419.0	12079	2.40 µg/L	m	100
		584.0 -> 483.0	8021			
FOSA	9.324	498.0 -> 78.0	17117	2.43 µg/L	m	100
		498.0 -> 478.0	928			
MeFOSAA	8.162	570.0 -> 419.0	14671	2.26 µg/L	m	97
		570.0 -> 512.0	5745			
PFBA	3.266	213.0 -> 169.0	50306	9.91 µg/L		100
PFBS	5.713	299.0 -> 80.0	17669	2.12 µg/L		98
		299.0 -> 99.0	7107			
PFDA	8.140	513.0 -> 469.0	50867	2.51 µg/L		100
		513.0 -> 219.0	8214			
PFDoDA	9.015	613.0 -> 569.0	75389	2.62 µg/L		99
		613.0 -> 319.0	8826			
PFDS	9.181	599.0 -> 80.0	8954	2.37 µg/L		99

Perfluorinated Compounds by LC/MS/MS

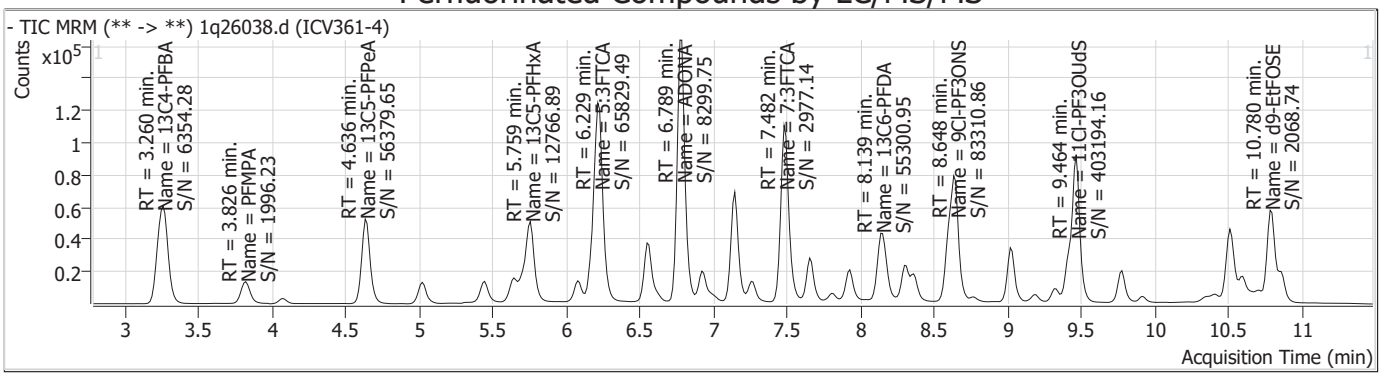
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	4615				
PFHpA	6.554	363.0 -> 319.0	72518	2.48	µg/L		96
		363.0 -> 169.0	12469				
PFHpS	7.809	449.0 -> 80.0	12095	2.34	µg/L		98
		449.0 -> 99.0	6306				
PFHxA	5.761	313.0 -> 269.0	58792	2.51	µg/L		99
		313.0 -> 119.0	1806				
PFHxS	7.264	399.0 -> 80.0	12257	2.11	µg/L	m	96
		399.0 -> 99.0	6564				
PFNA	7.657	463.0 -> 419.0	38328	2.48	µg/L	m	97
		463.0 -> 219.0	10405				
PFNS	8.772	549.0 -> 80.0	6334	2.37	µg/L		96
		549.0 -> 99.0	3360				
PFOA	7.149	413.0 -> 369.0	72221	2.54	µg/L	m	97
		413.0 -> 169.0	16012				
PFOS	8.305	499.0 -> 80.0	14067	2.26	µg/L	m	91
		499.0 -> 99.0	7228				
PFPeA	4.638	263.0 -> 219.0	99624	5.15	µg/L		100
PFPeS	6.630	349.0 -> 80.0	8154	2.19	µg/L		99
		349.0 -> 99.0	3808				
PFTeDA	9.773	713.0 -> 669.0	45994	2.48	µg/L		100
		713.0 -> 219.0	3864				
PFTrDA	9.412	663.0 -> 619.0	76727	2.74	µg/L		99
		663.0 -> 369.0	5462				
PFUnDA	8.596	563.0 -> 519.0	73950	2.46	µg/L		100
		563.0 -> 269.0	10519				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	240512	10.21	µg/L		98
		633.0 -> 453.0	74306				
9Cl-PF3ONS	8.648	531.0 -> 351.0	198036	10.26	µg/L		100
		533.0 -> 353.0	56995				
ADONA	6.789	377.0 -> 251.0	478432	9.95	µg/L		100
		377.0 -> 85.0	131603				
HFPO-DA	6.088	285.0 -> 169.0	22604	10.69	µg/L		96
		285.0 -> 185.0	1816				
3:3FTCA	4.072	241.0 -> 177.0	12662	12.02	µg/L		99
		241.0 -> 117.0	896				
5:3FTCA	6.229	341.0 -> 237.0	259451	62.74	µg/L		98
		341.0 -> 217.0	179489				
7:3FTCA	7.482	441.0 -> 337.0	292504	62.64	µg/L		99
		441.0 -> 317.0	130261				
EtFOSA	10.872	526.0 -> 219.0	15927	2.54	µg/L	m	94
		526.0 -> 169.0	22114				
EtFOSE	10.794	630.0 -> 59.0	134733	26.03	µg/L	m	100
MeFOSA	10.603	512.0 -> 169.0	18573	2.45	µg/L	m	93
		512.0 -> 219.0	13578				
MeFOSE	10.523	616.0 -> 59.0	104019	25.26	µg/L	m	100
PFDoDS	9.912	699.0 -> 80.0	8255	2.45	µg/L		99
		699.0 -> 99.0	4746				
NFDHA	5.651	295.0 -> 201.0	8388	5.39	µg/L		91
		201.0 -> 85.0	43438				
		295.0 -> 85.0	2190				
PFMBA	5.027	279.0 -> 85.0	52789	5.02	µg/L		100
PFMPA	3.826	229.0 -> 85.0	59661	5.03	µg/L		100
PFEESA	6.182	315.0 -> 135.0	103673	4.66	µg/L		99
		315.0 -> 69.0	8567				

 # = Qualifier out of range, m = manually integrated, + = Area summed

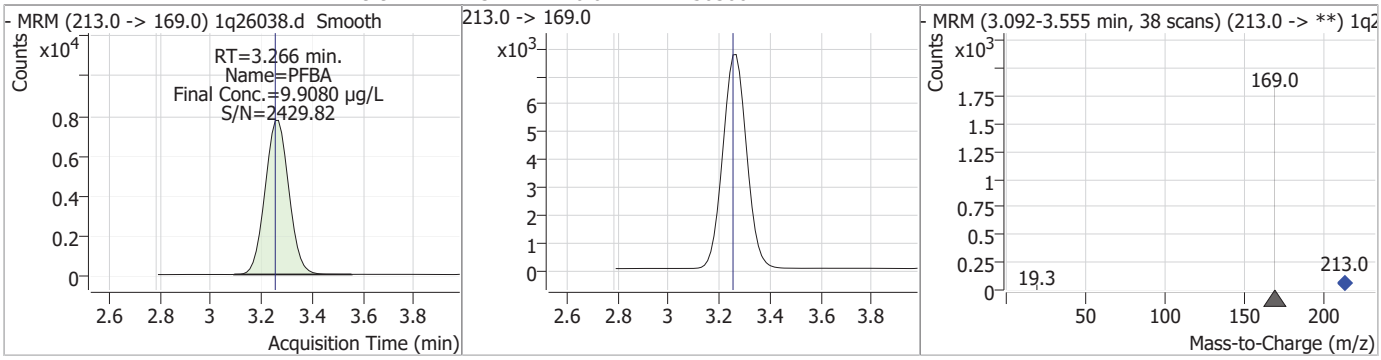
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

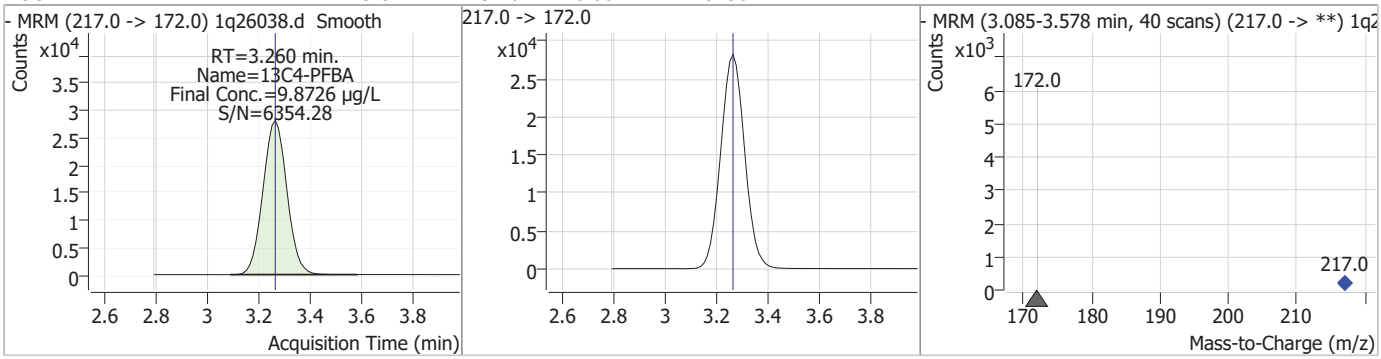
Perfluorinated Compounds by LC/MS/MS



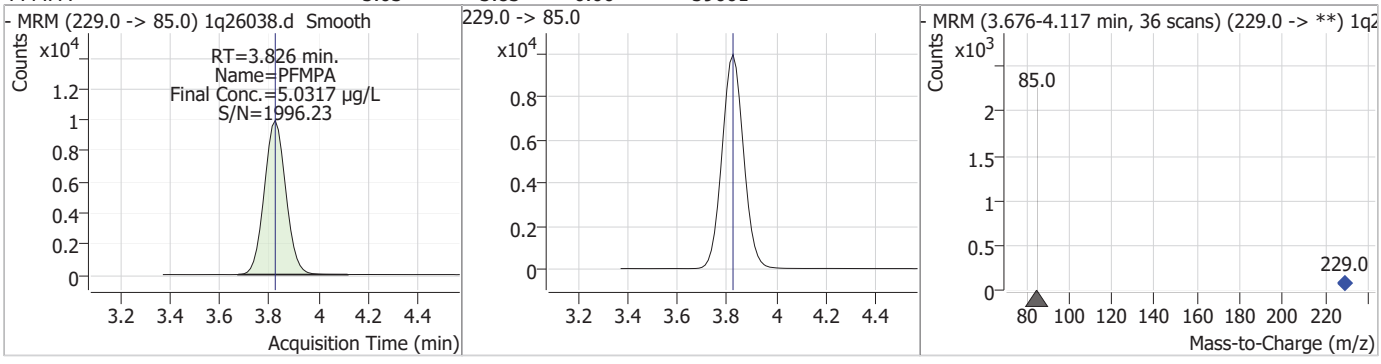
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.91	3.27	0.01	50306				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.87	3.26	0.00	181567				

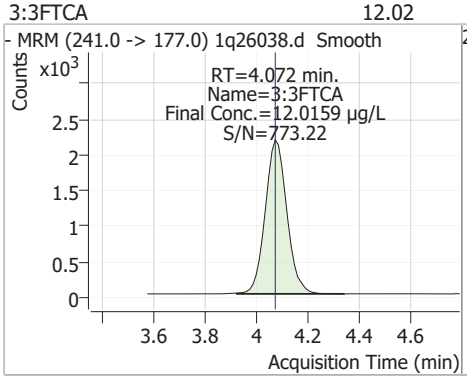


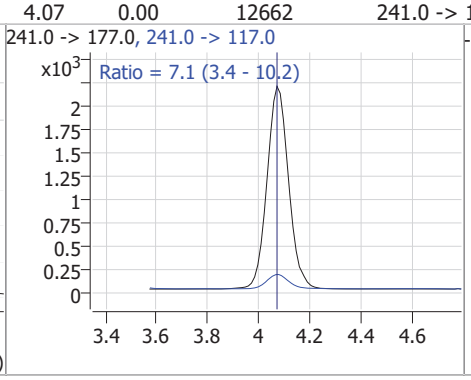
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.03	3.83	0.00	59661				

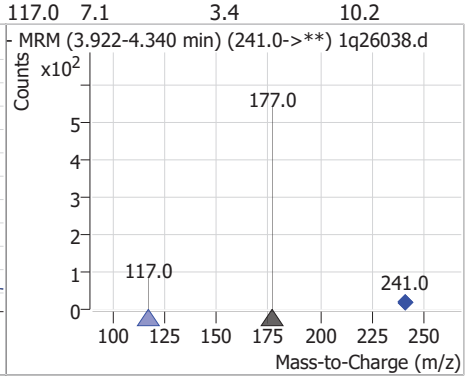


Perfluorinated Compounds by LC/MS/MS

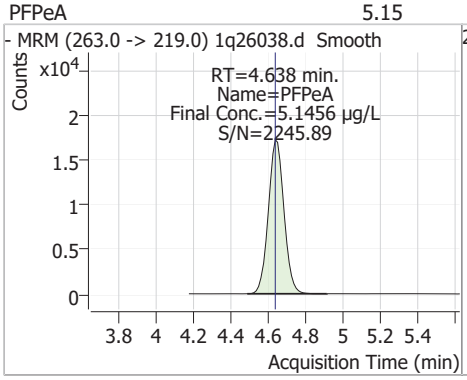
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.02	4.07	0.00	12662	241.0 -> 117.0	7.1	3.4	10.2

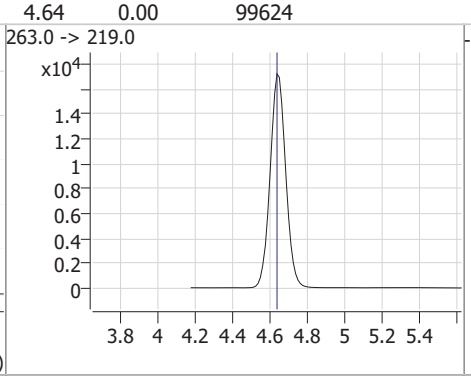


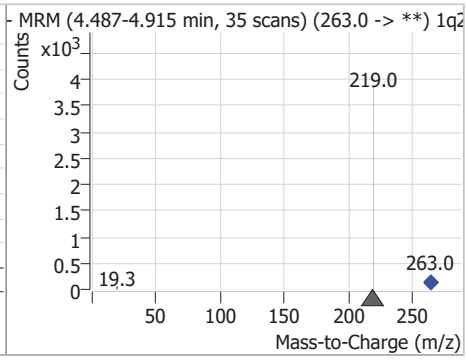




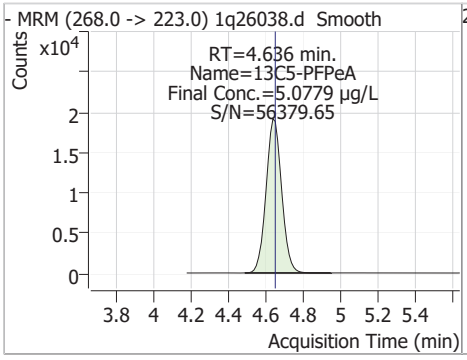
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.15	4.64	0.00	99624				

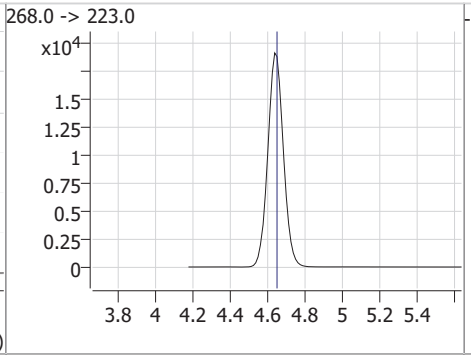


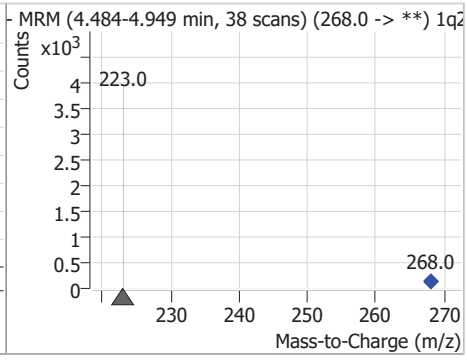




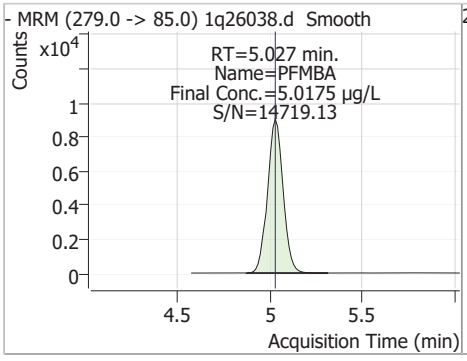
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.08	4.64	-0.01	111178				

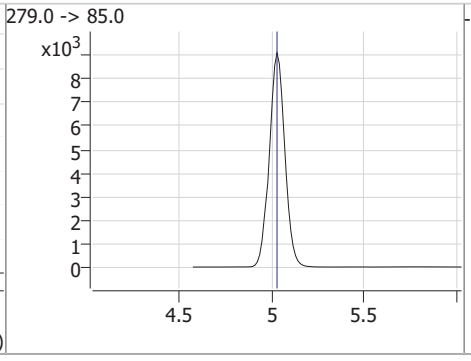


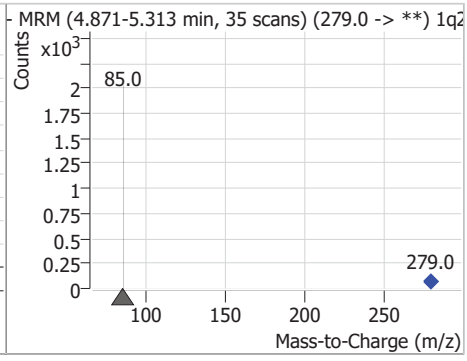




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.02	5.03	0.00	52789				

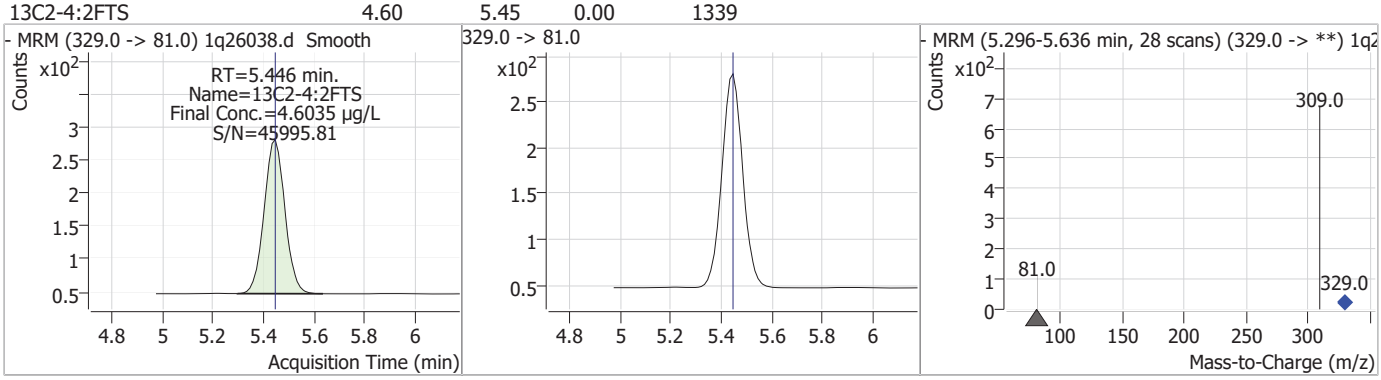




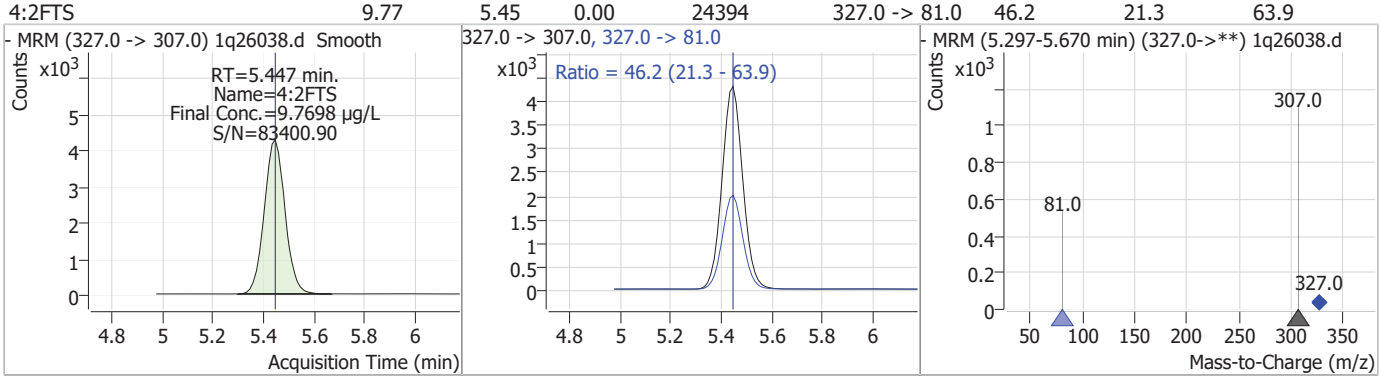


Perfluorinated Compounds by LC/MS/MS

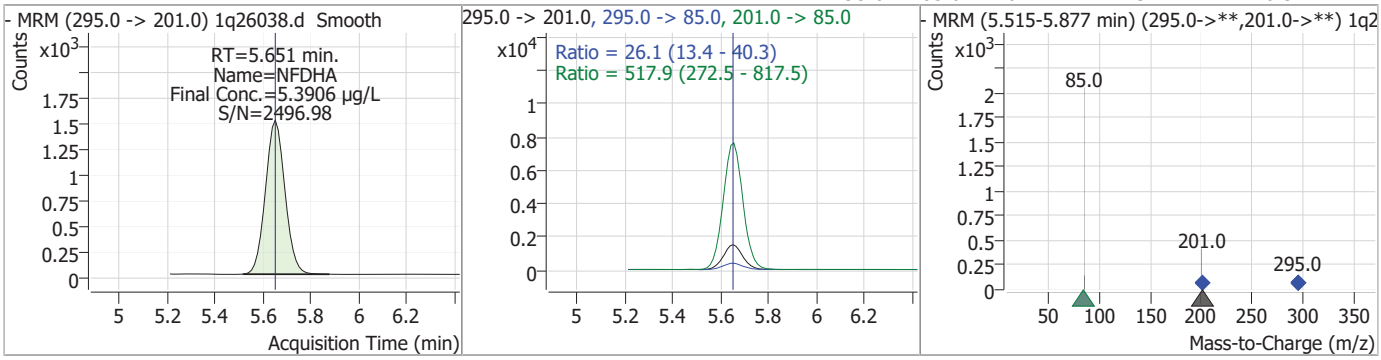
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.60	5.45	0.00	1339				



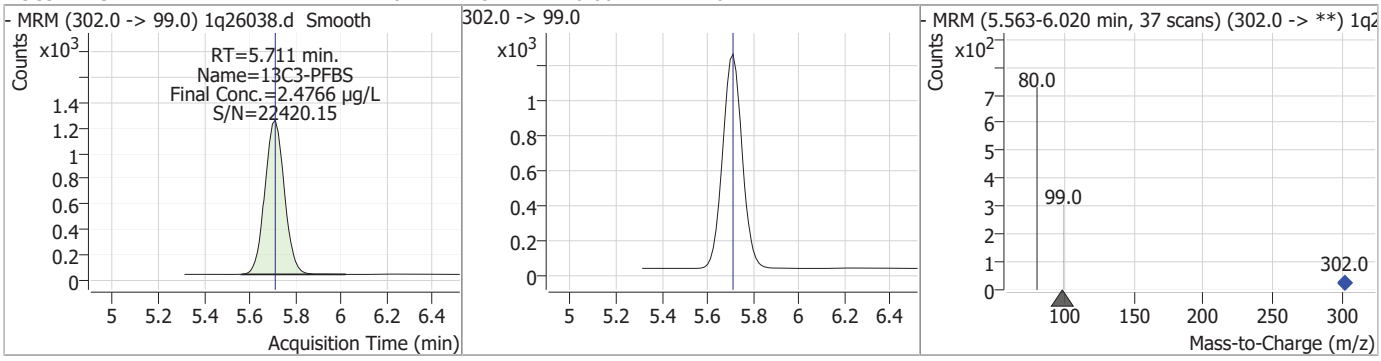
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.77	5.45	0.00	24394	327.0 -> 81.0	46.2	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.39	5.65	0.00	8388	201.0 -> 85.0	517.9	272.5	817.5
					295.0 -> 85.0	26.1	13.4	40.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.48	5.71	0.00	7202				



7.6.10

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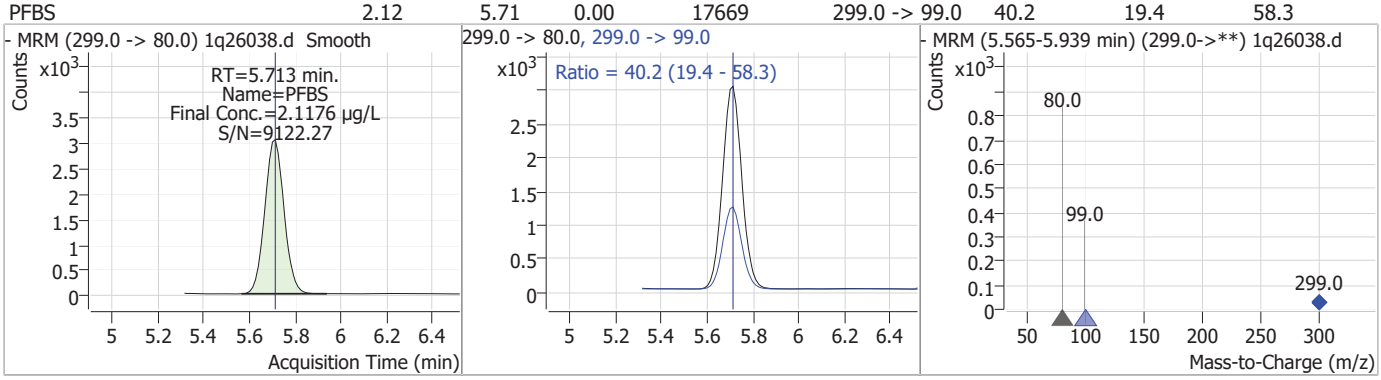
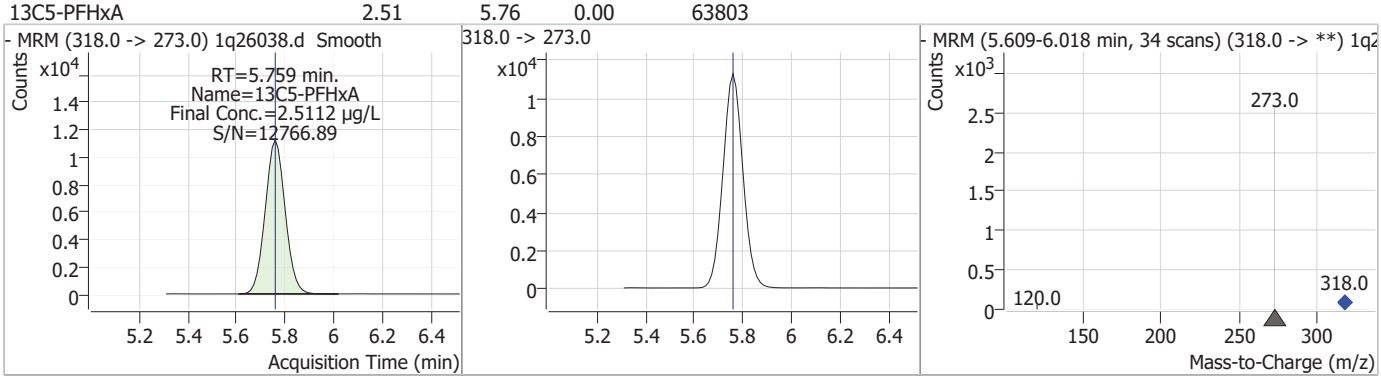
Perfluorinated Compounds by LC/MS/MS

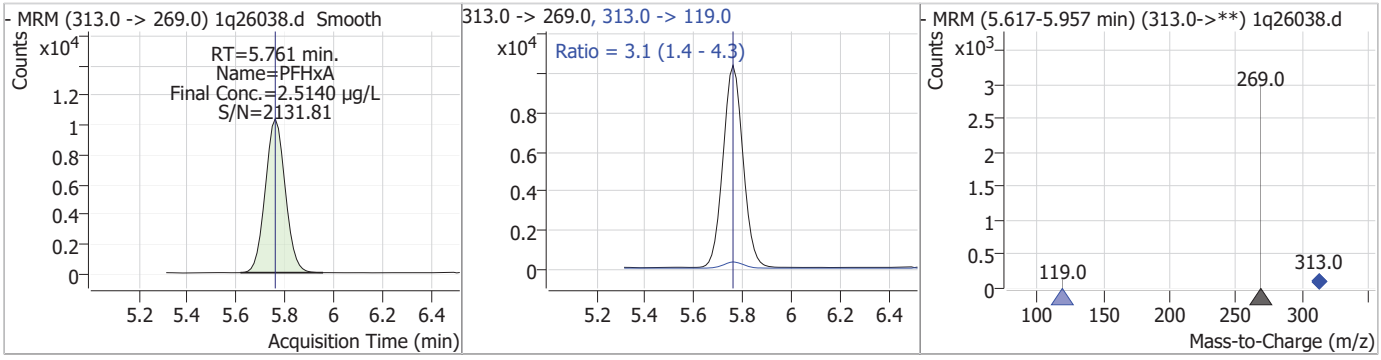
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.12	5.71	0.00	17669	299.0 -> 99.0	40.2	19.4	58.3



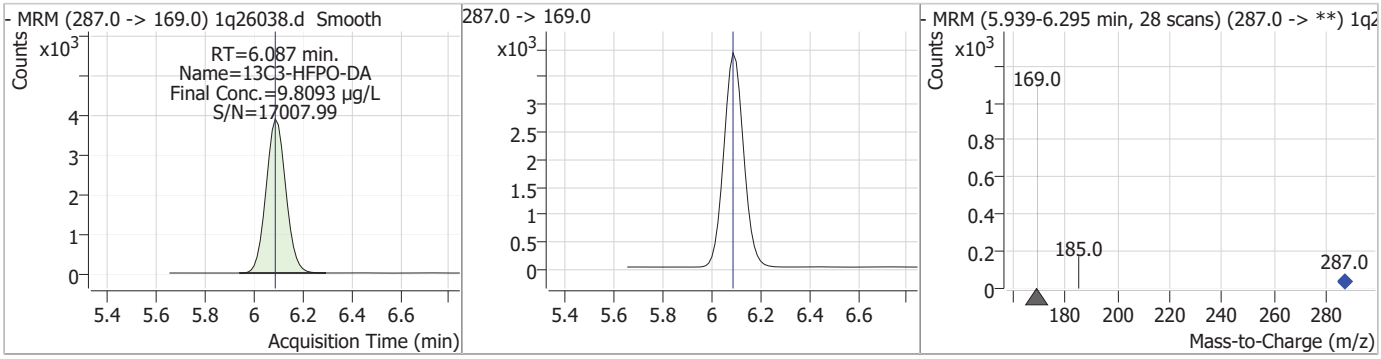
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.51	5.76	0.00	63803				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.51	5.76	0.00	58792	313.0 -> 119.0	3.1	1.4	4.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.81	6.09	0.00	21845				



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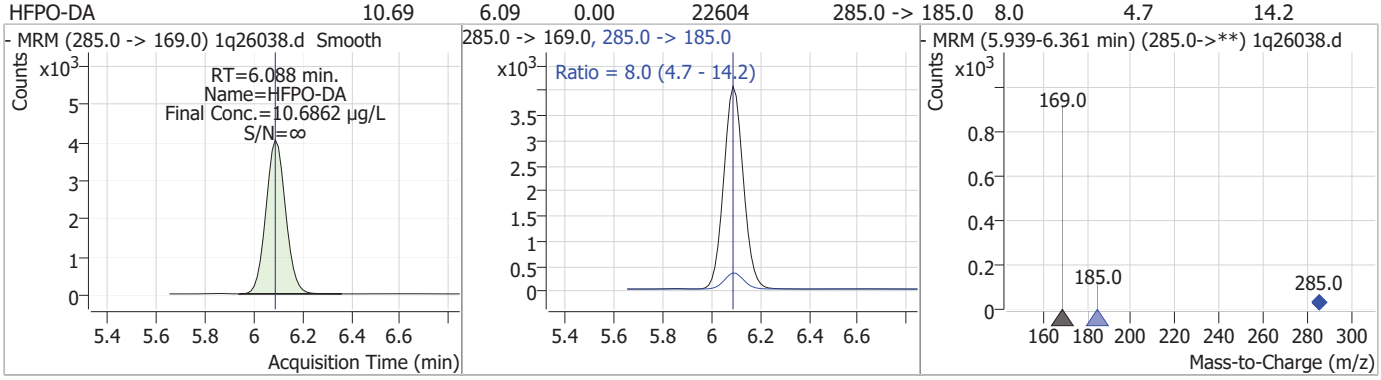
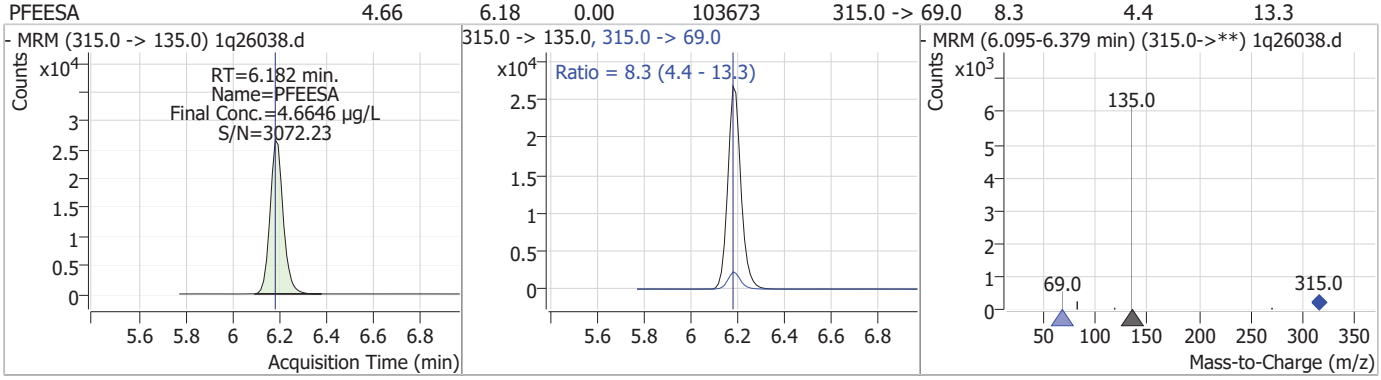
Perfluorinated Compounds by LC/MS/MS

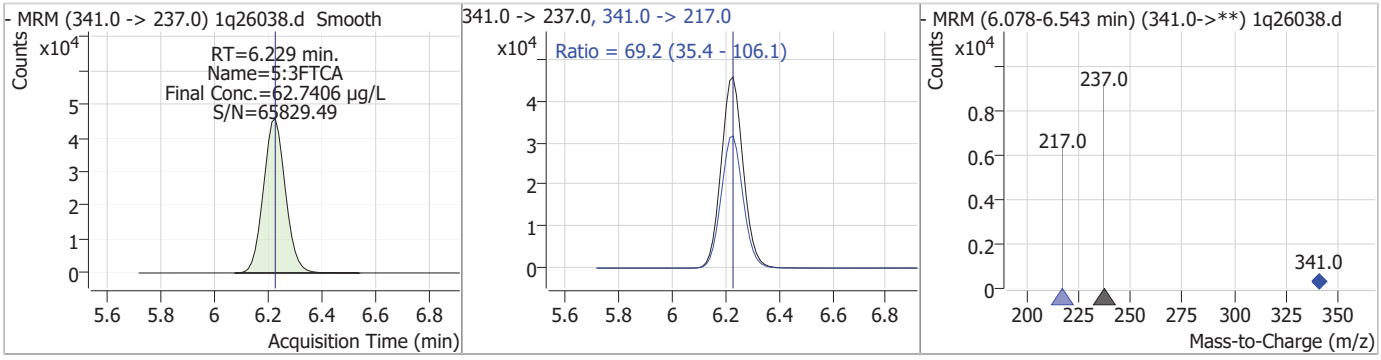
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.69	6.09	0.00	22604	285.0 -> 185.0	8.0	4.7	14.2



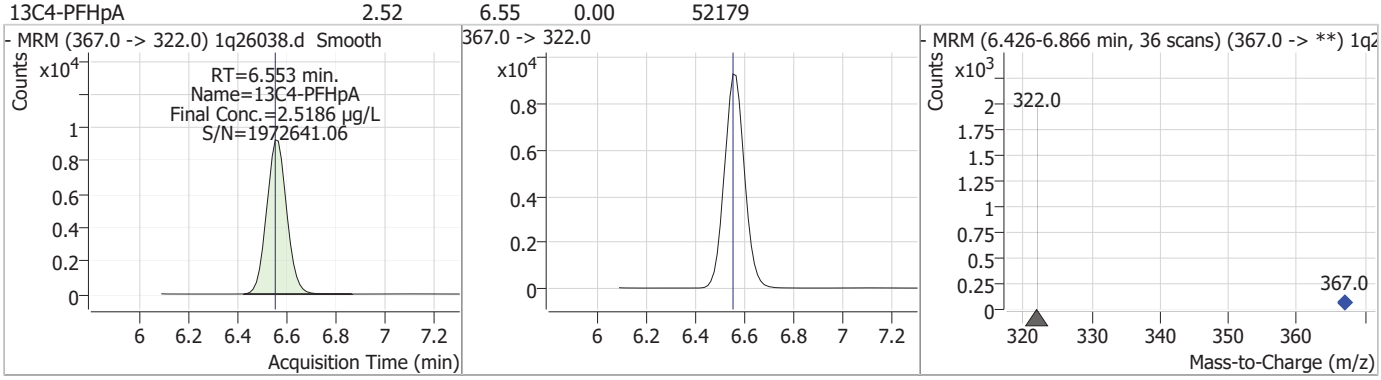
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.66	6.18	0.00	103673	315.0 -> 69.0	8.3	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	62.74	6.23	0.00	259451	341.0 -> 217.0	69.2	35.4	106.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.52	6.55	0.00	52179				



7.6.10

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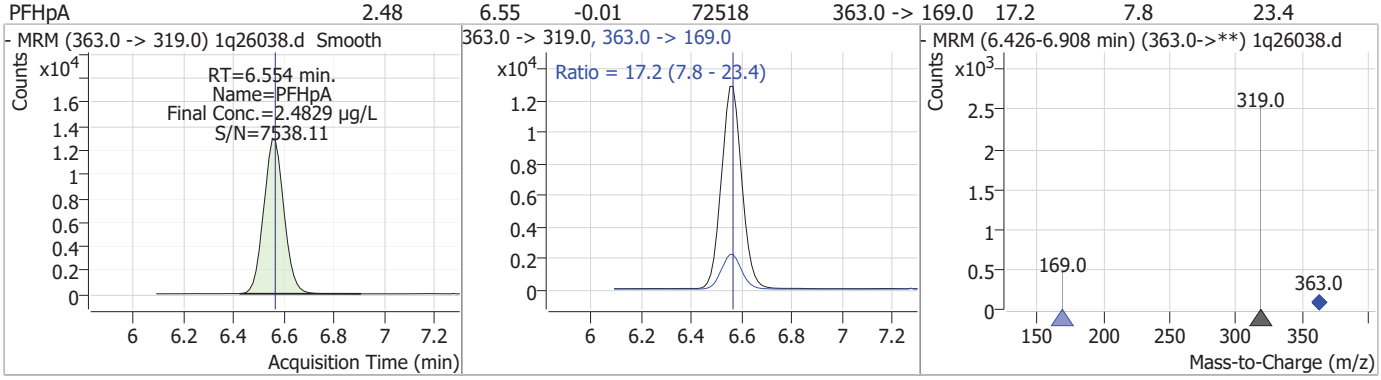
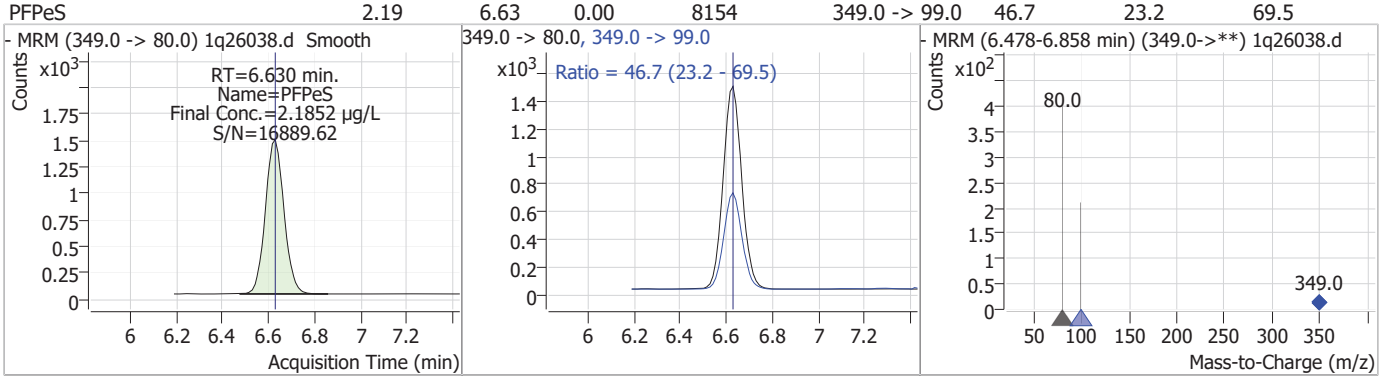
Perfluorinated Compounds by LC/MS/MS

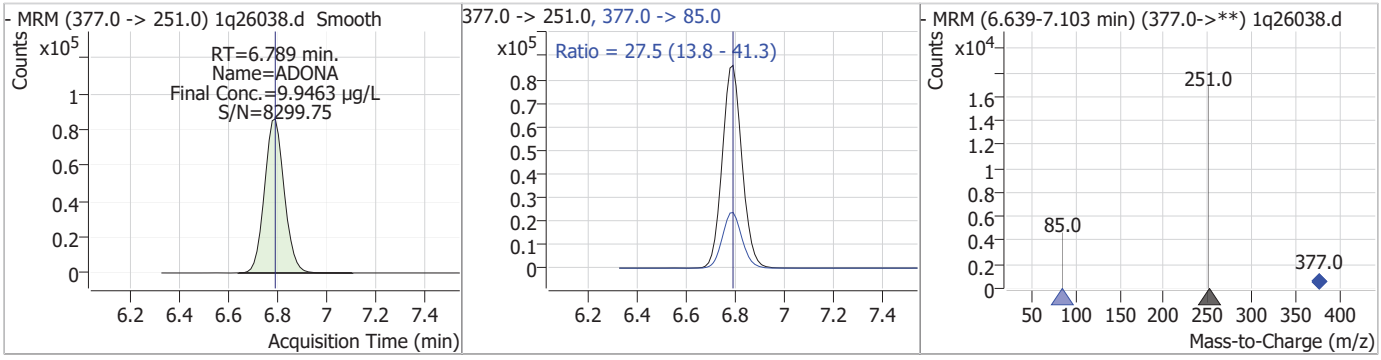
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.48	6.55	-0.01	72518	363.0 -> 169.0	17.2	7.8	23.4



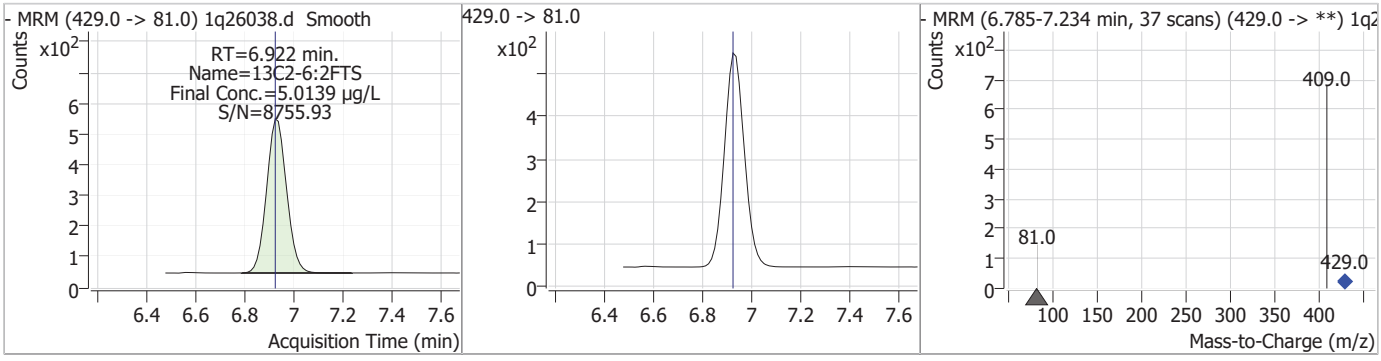
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.19	6.63	0.00	8154	349.0 -> 99.0	46.7	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	9.95	6.79	0.00	478432	377.0 -> 85.0	27.5	13.8	41.3

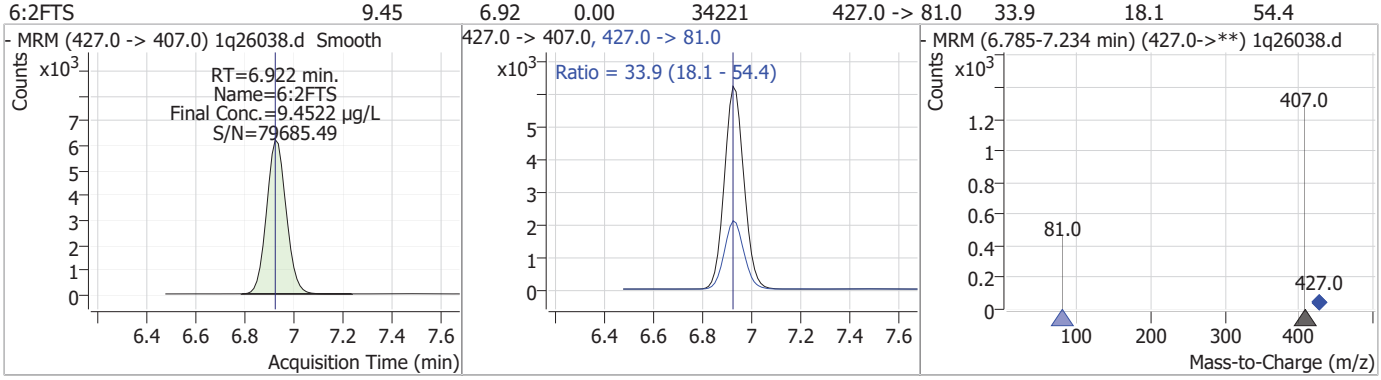


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.01	6.92	0.00	2828				

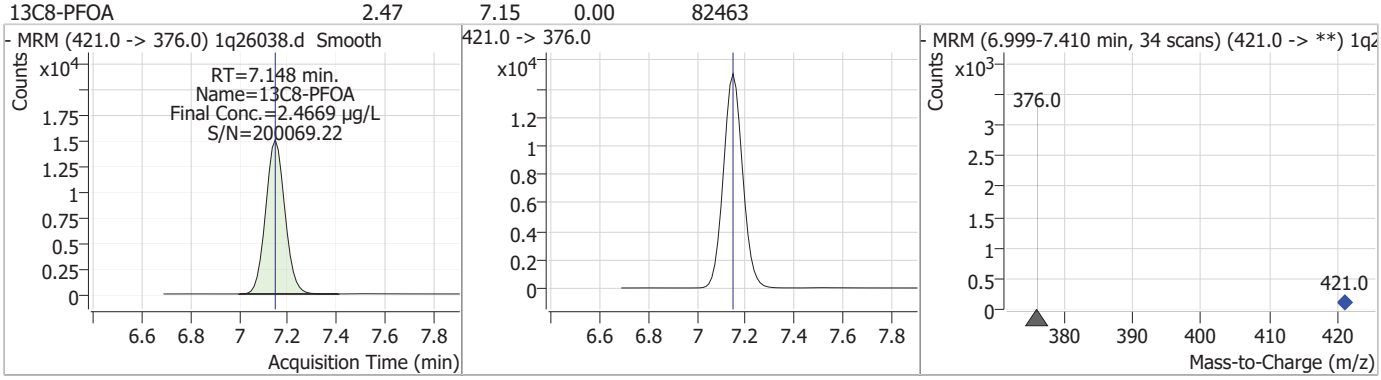


Perfluorinated Compounds by LC/MS/MS

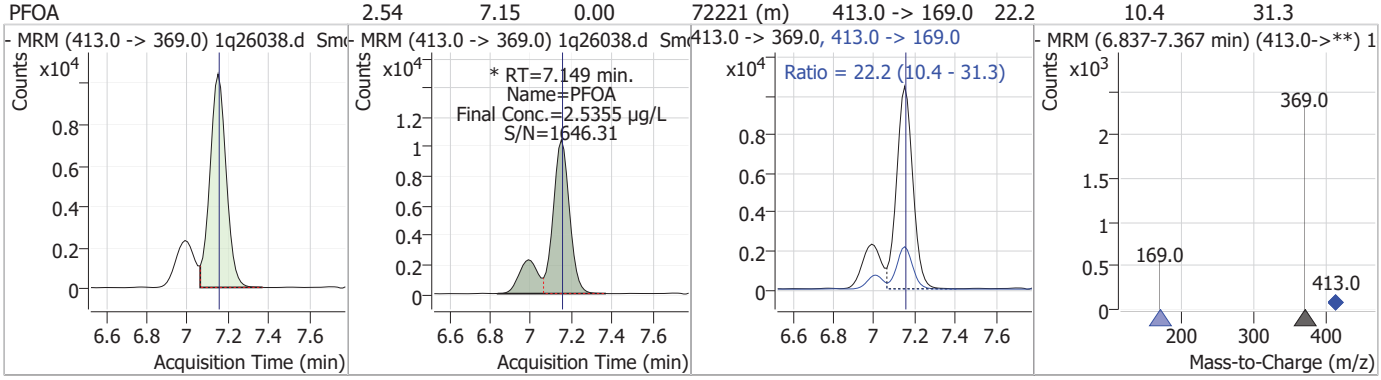
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.45	6.92	0.00	34221	427.0 -> 81.0	33.9	18.1	54.4



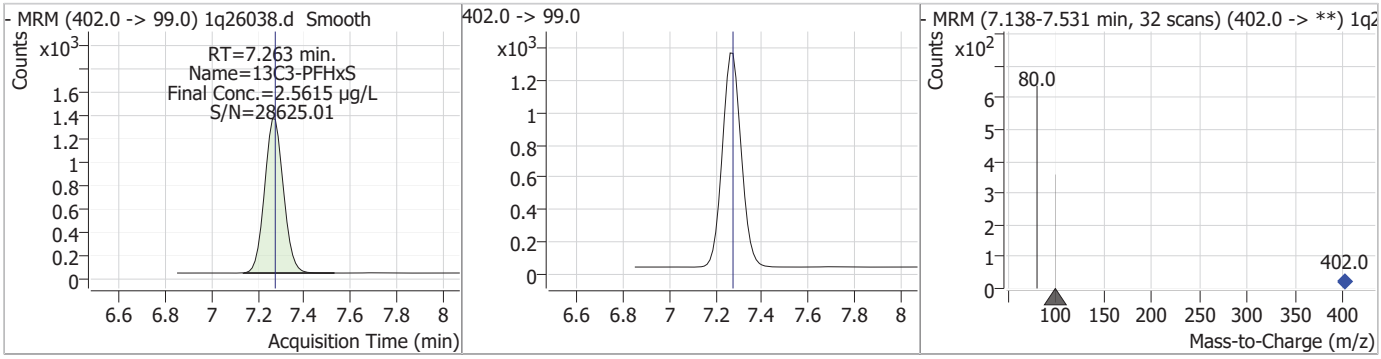
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.47	7.15	0.00	82463				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.54	7.15	0.00	72221 (m)	413.0 -> 169.0	22.2	10.4	31.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.56	7.26	-0.01	7465				



7.6.10

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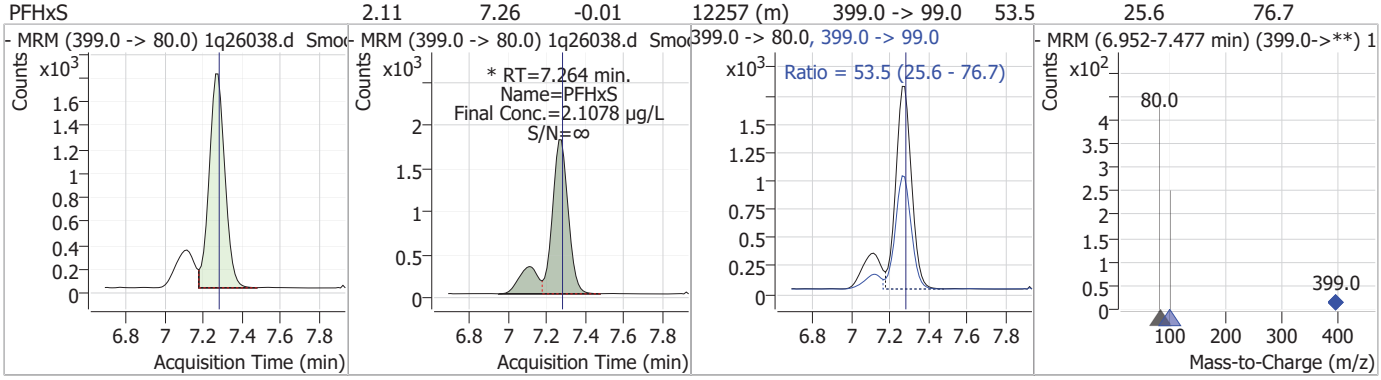
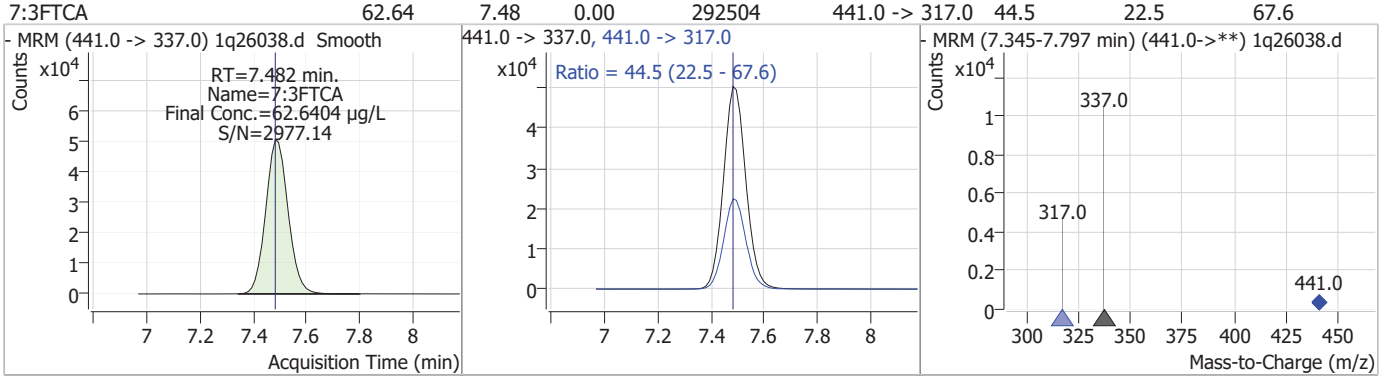
Perfluorinated Compounds by LC/MS/MS

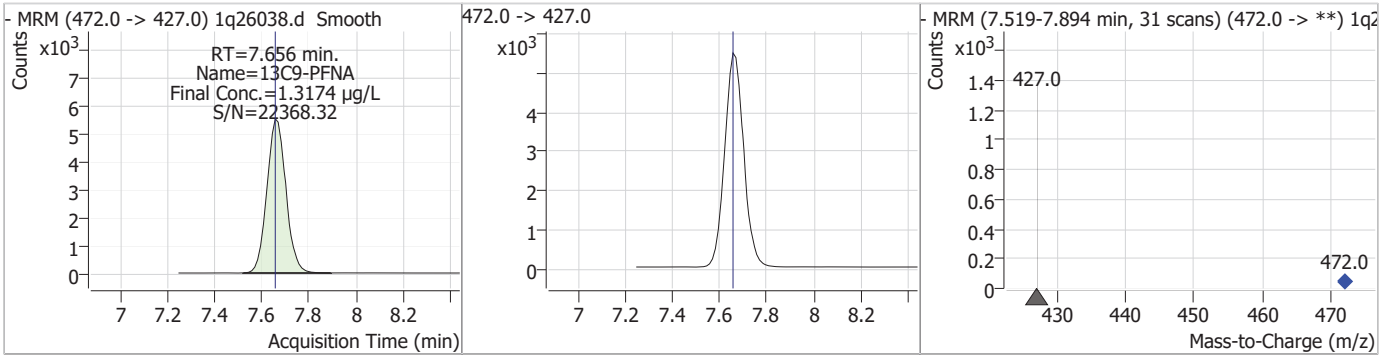
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.11	7.26	-0.01	12257 (m)	399.0 -> 99.0	53.5	25.6	76.7



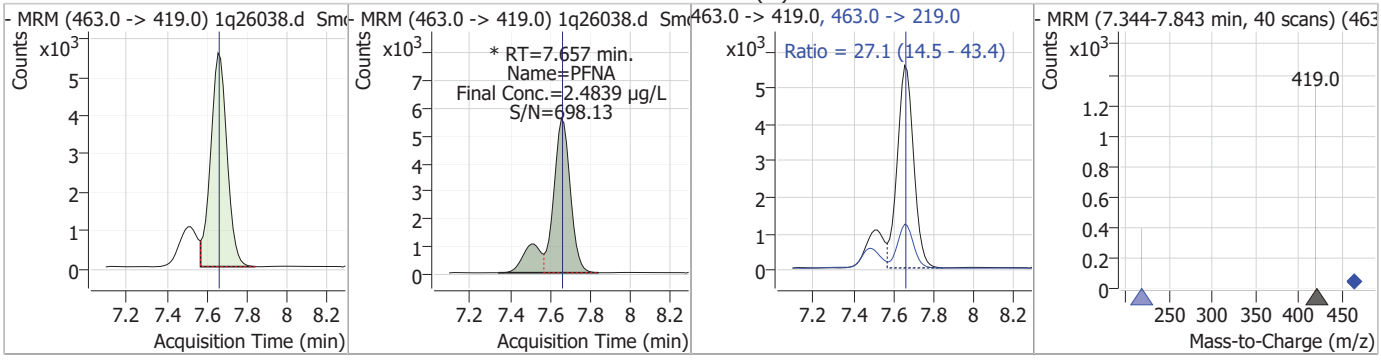
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	62.64	7.48	0.00	292504	441.0 -> 317.0	44.5	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.32	7.66	0.00	30765				

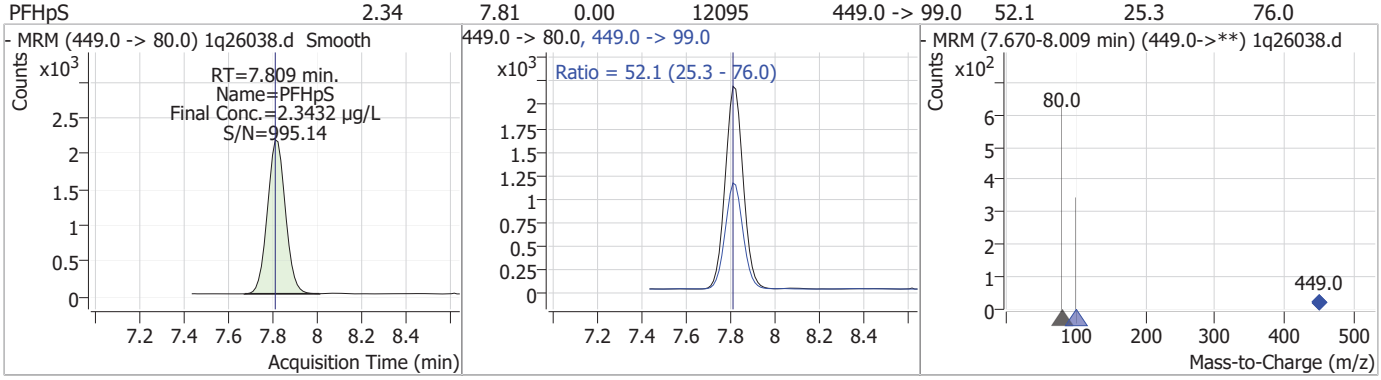


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.48	7.66	0.00	38328 (m)	463.0 -> 219.0	27.1	14.5	43.4

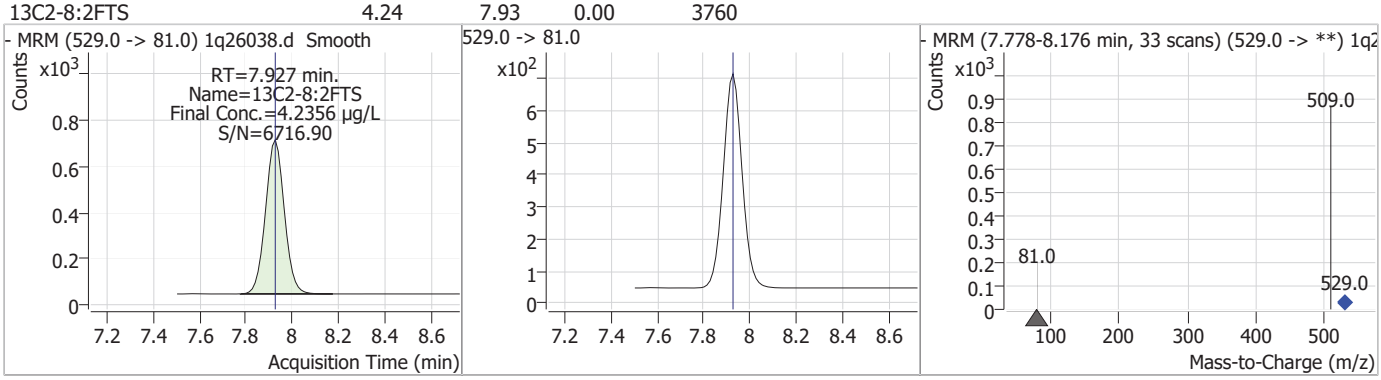


Perfluorinated Compounds by LC/MS/MS

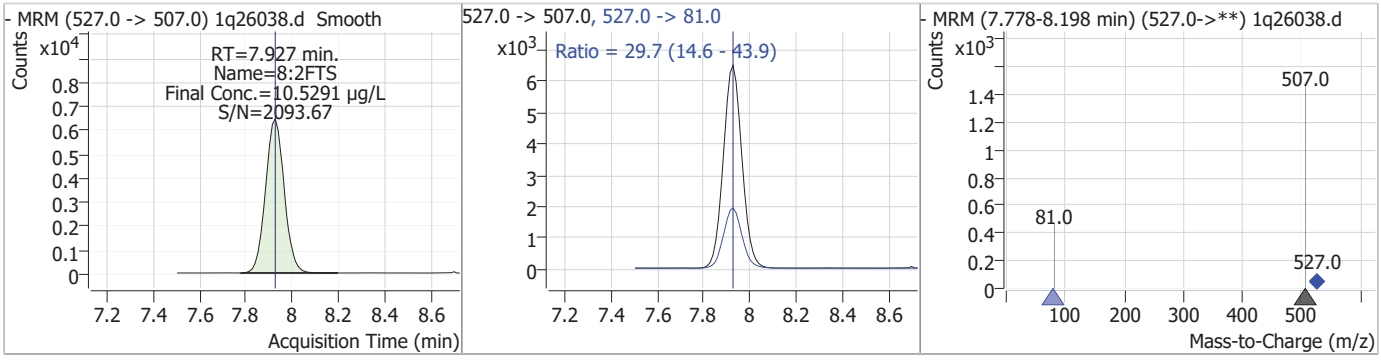
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.34	7.81	0.00	12095	449.0 -> 99.0	52.1	25.3	76.0



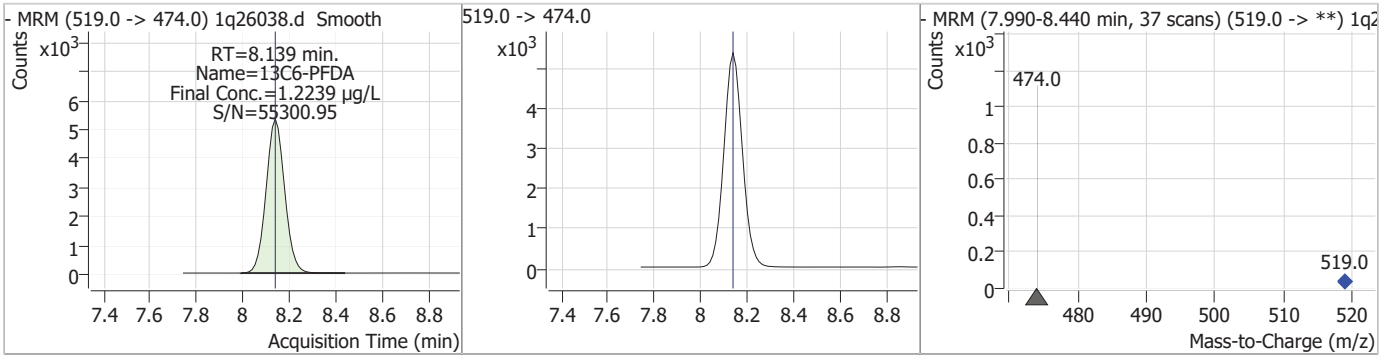
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.24	7.93	0.00	3760				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.53	7.93	0.00	35992	527.0 -> 81.0	29.7	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.22	8.14	0.00	29518				



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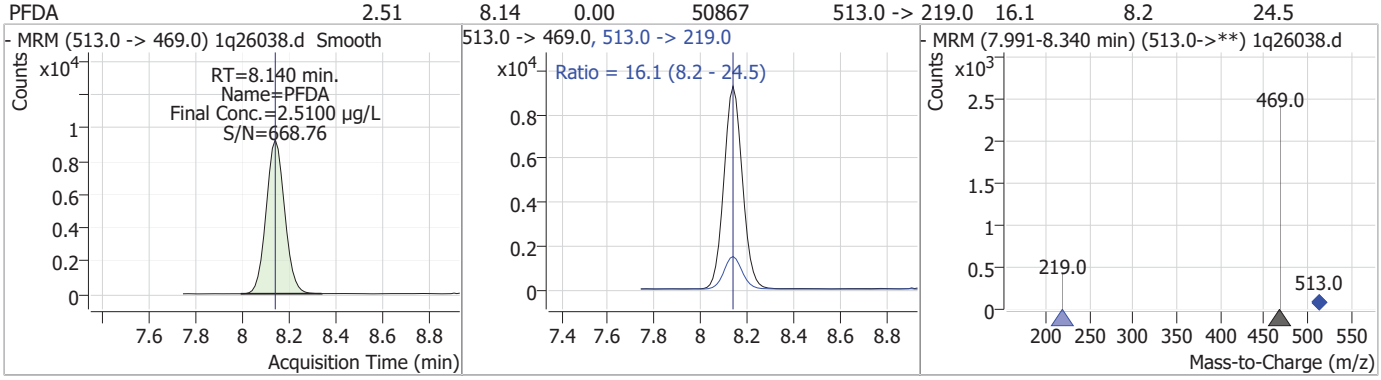
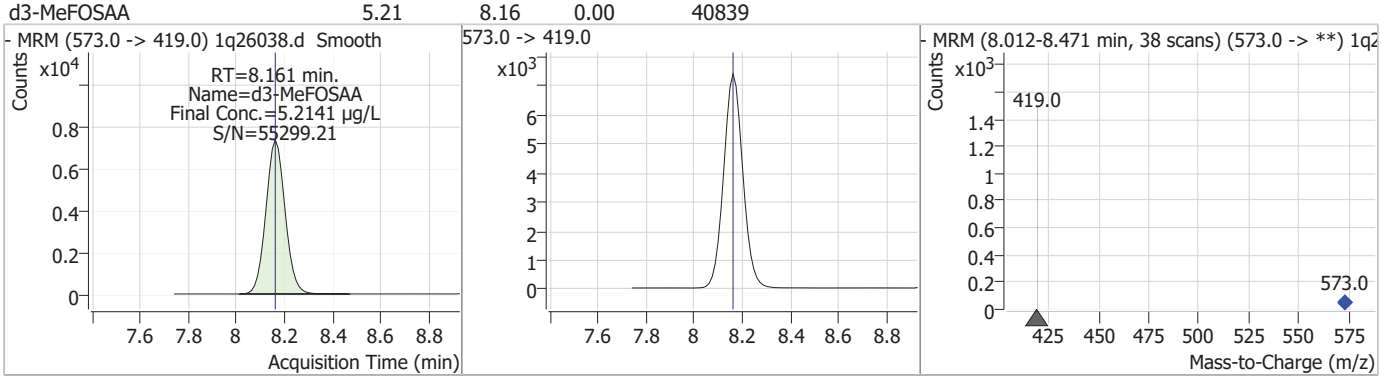
Perfluorinated Compounds by LC/MS/MS

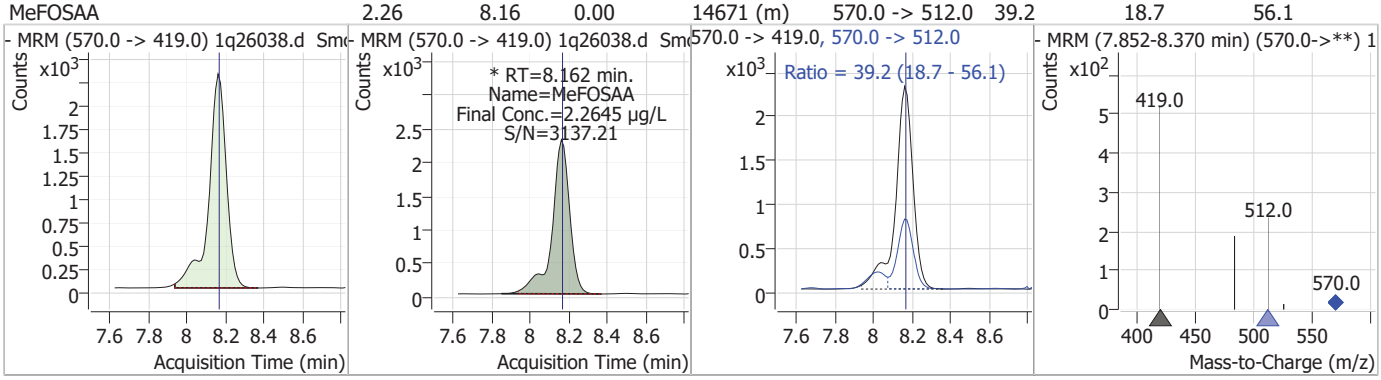
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.51	8.14	0.00	50867	513.0 -> 219.0	16.1	8.2	24.5



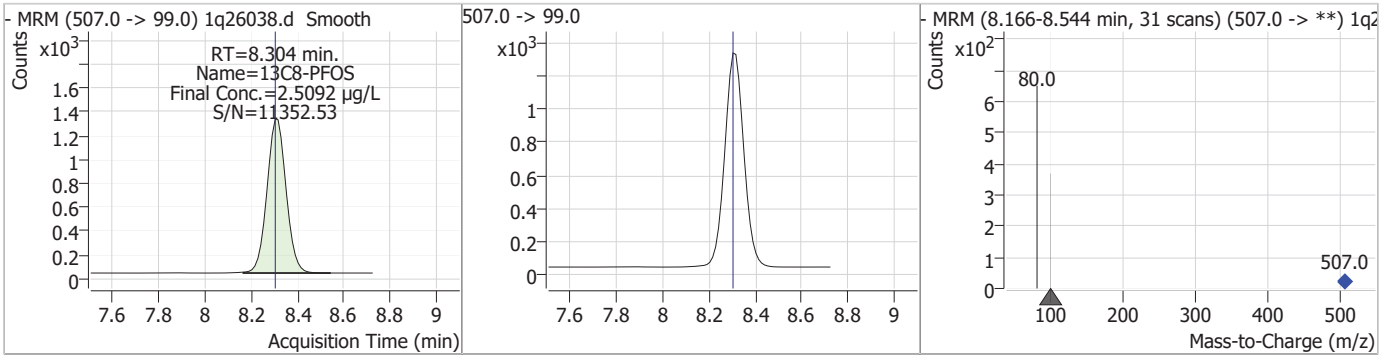
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.21	8.16	0.00	40839				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.26	8.16	0.00	14671 (m)	570.0 -> 512.0	39.2	18.7	56.1

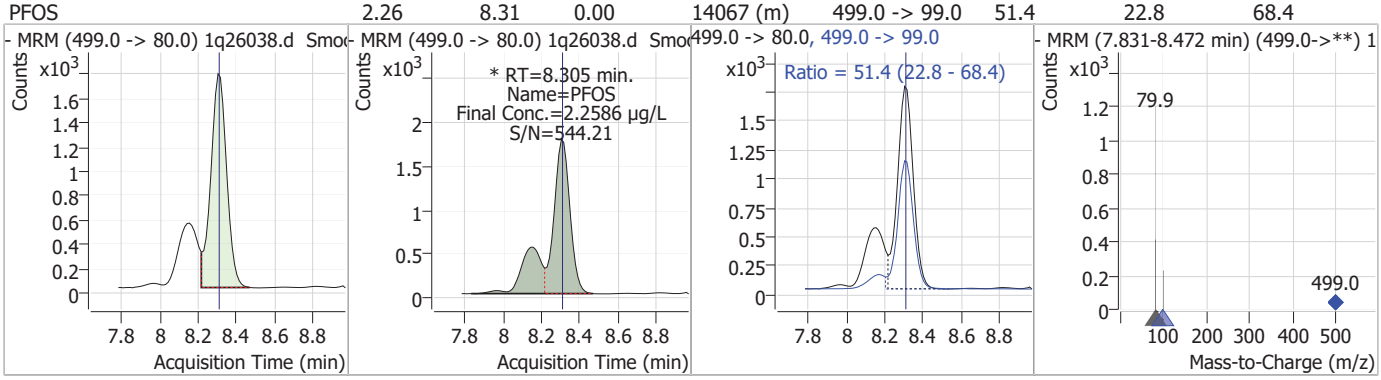


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.51	8.30	0.00	7426				

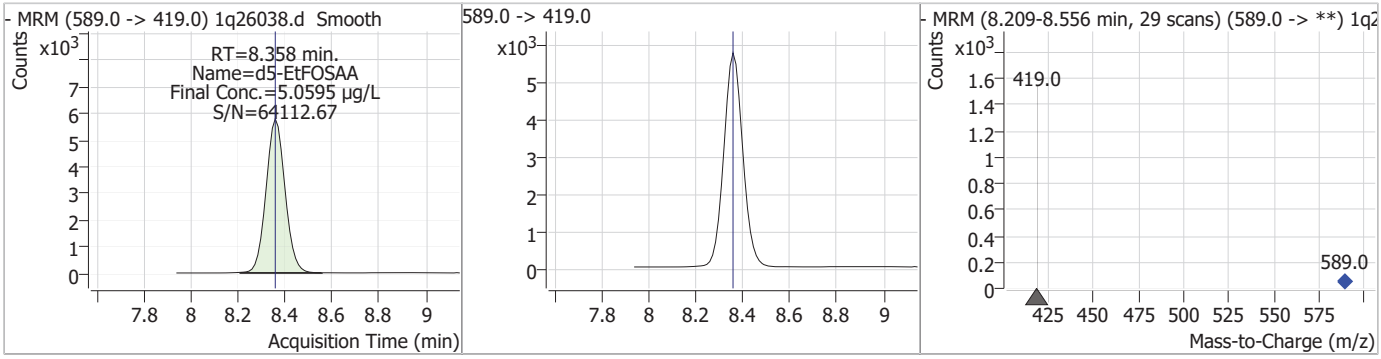


Perfluorinated Compounds by LC/MS/MS

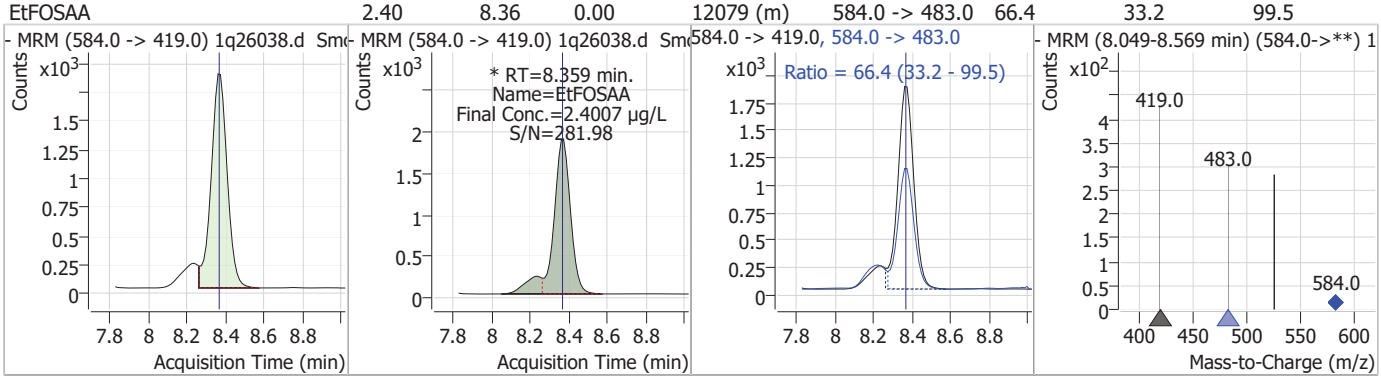
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.26	8.31	0.00	14067 (m)	499.0 -> 99.0	51.4	22.8	68.4



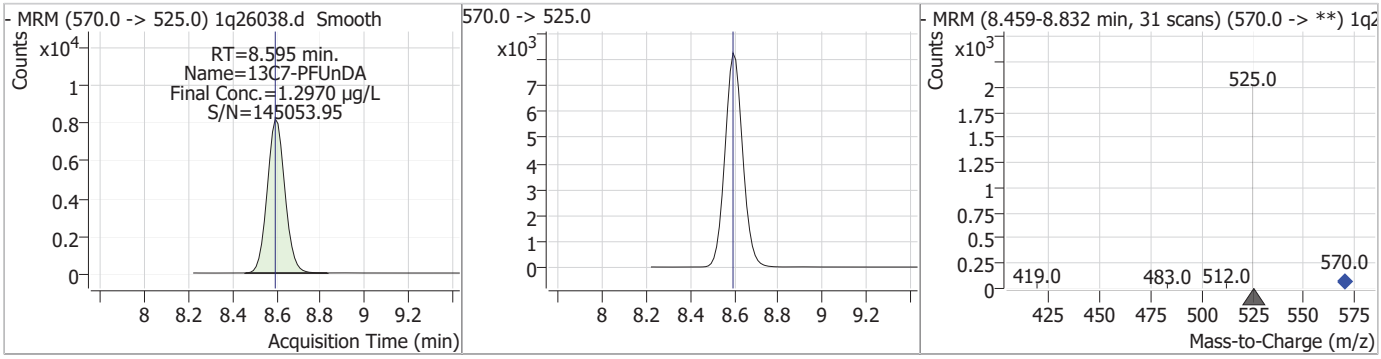
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.06	8.36	0.00	32263				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.40	8.36	0.00	12079 (m)	584.0 -> 483.0	66.4	33.2	99.5

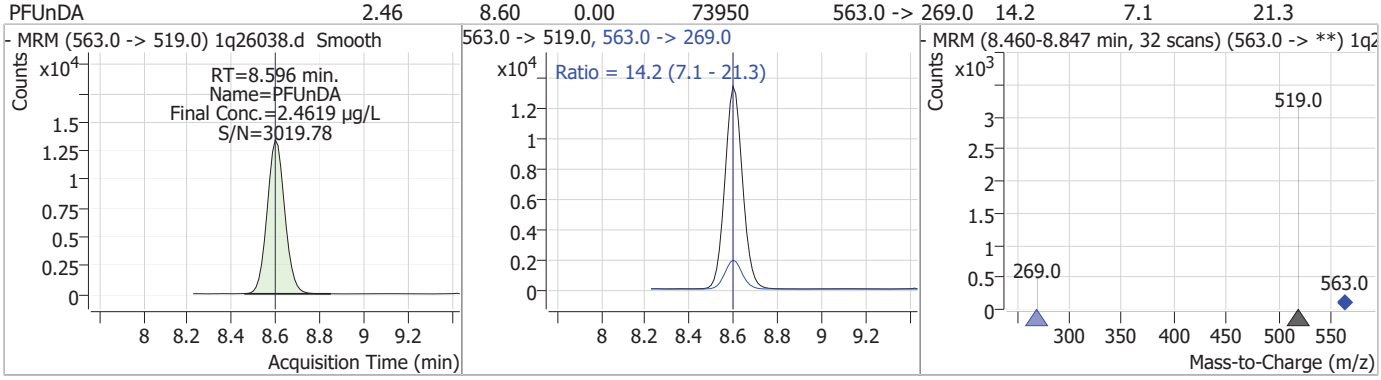


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.30	8.59	0.00	45407				

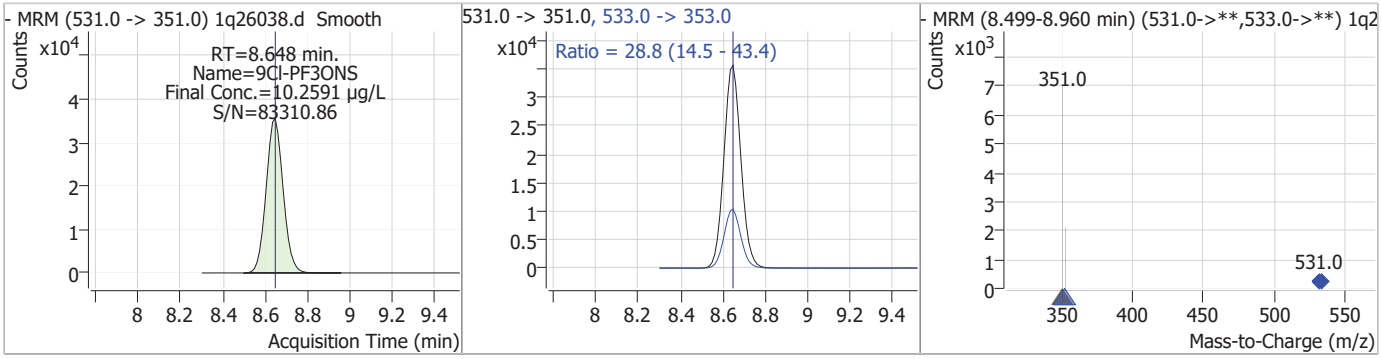


Perfluorinated Compounds by LC/MS/MS

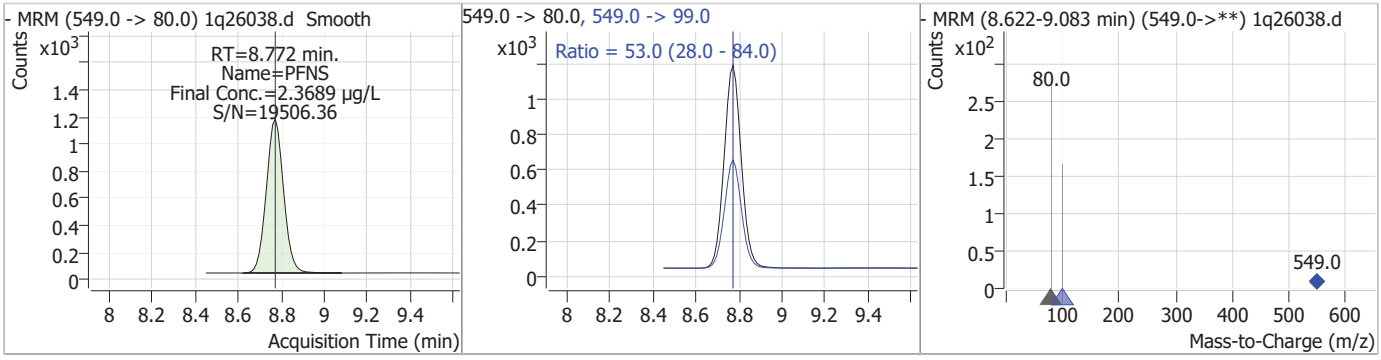
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.46	8.60	0.00	73950	563.0 -> 269.0	14.2	7.1	21.3



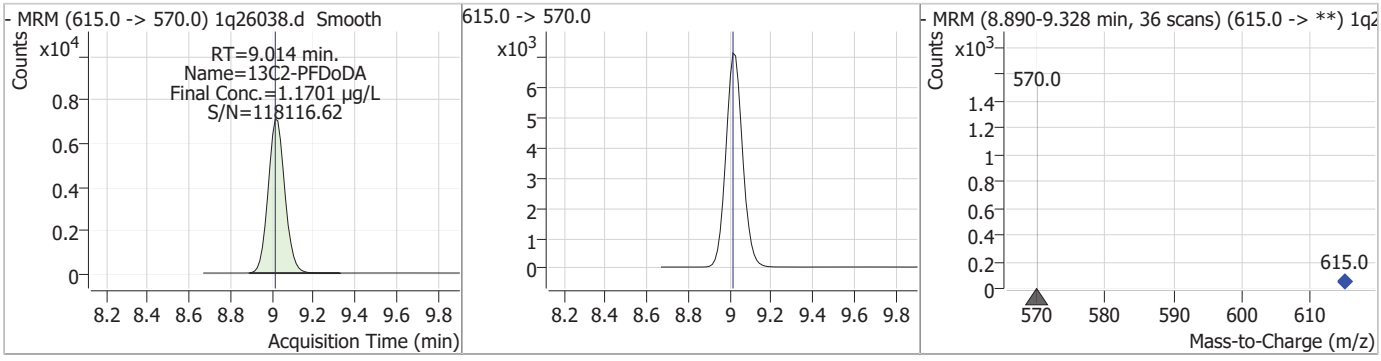
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	10.26	8.65	0.00	198036	533.0 -> 353.0	28.8	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.37	8.77	0.00	6334	549.0 -> 99.0	53.0	28.0	84.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.17	9.01	0.00	39522				



7.6.10

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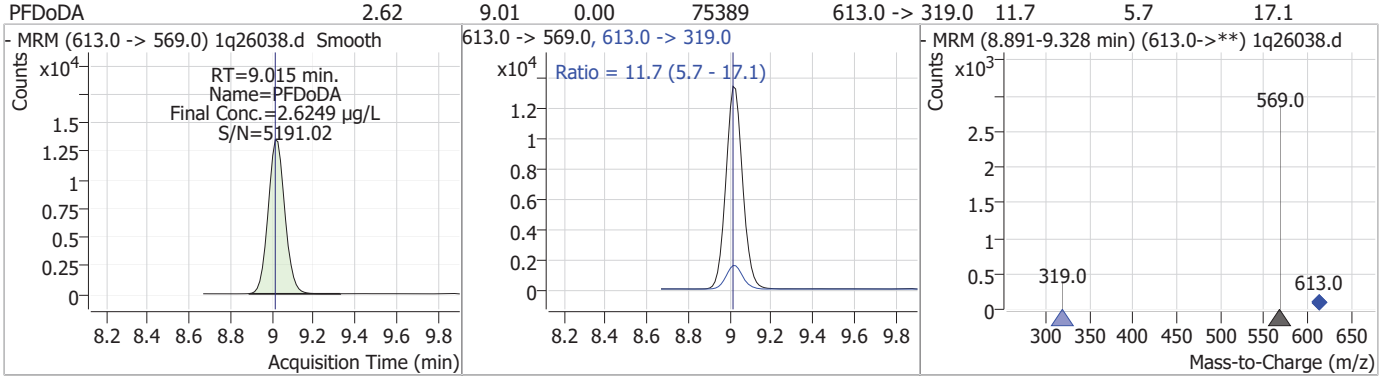
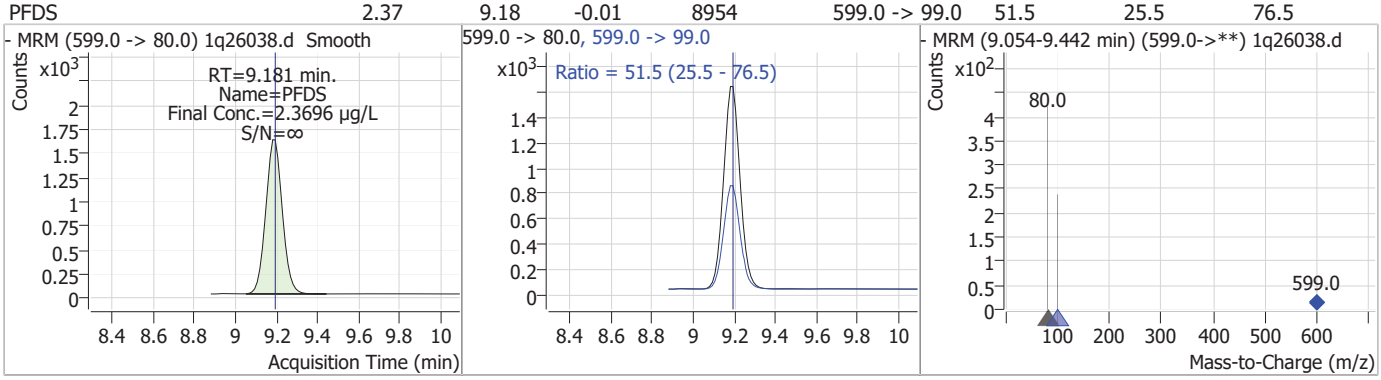
Perfluorinated Compounds by LC/MS/MS

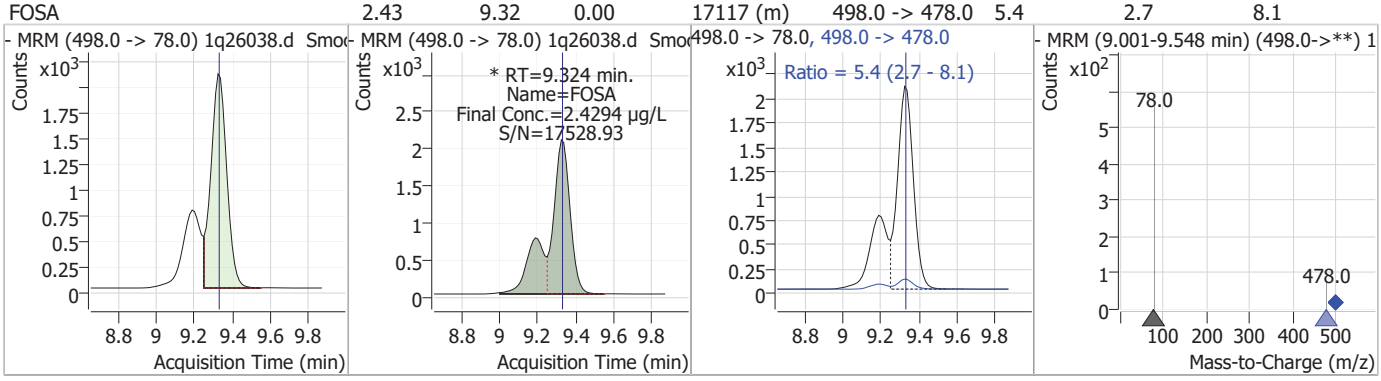
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.62	9.01	0.00	75389	613.0 -> 319.0	11.7	5.7	17.1



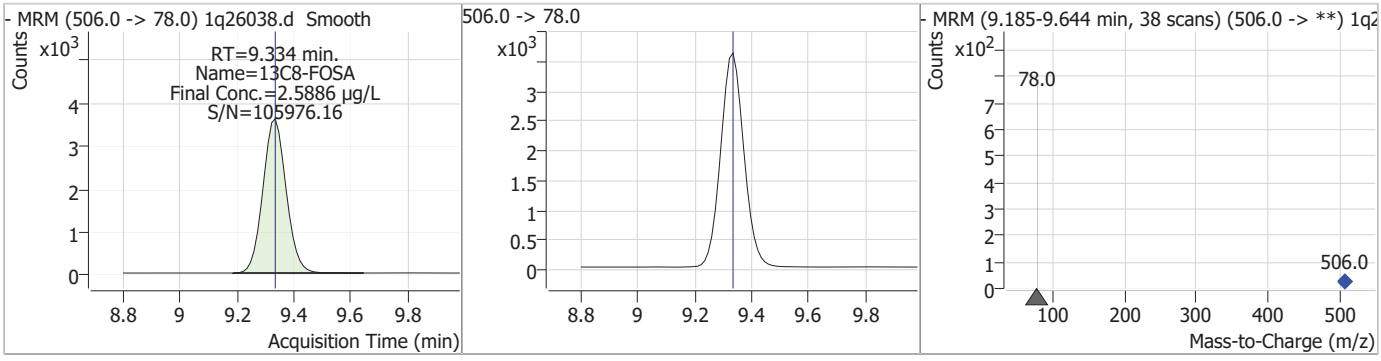
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.37	9.18	-0.01	8954	599.0 -> 99.0	51.5	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.43	9.32	0.00	17117 (m)	498.0 -> 478.0	5.4	2.7	8.1

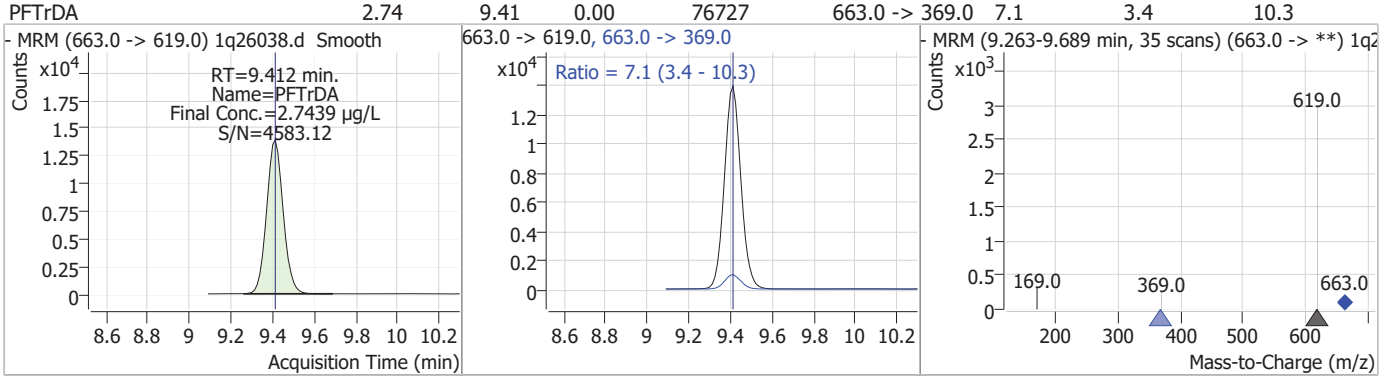


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.59	9.33	0.00	20329				

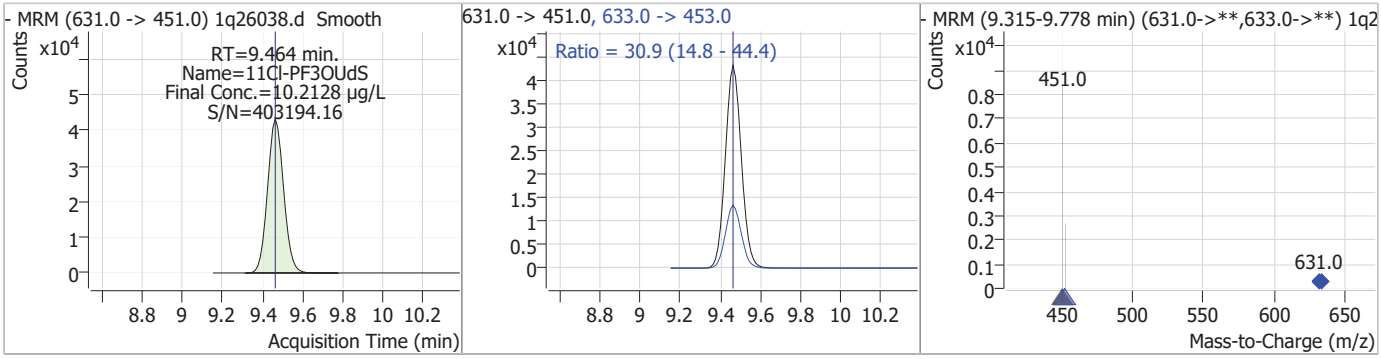


Perfluorinated Compounds by LC/MS/MS

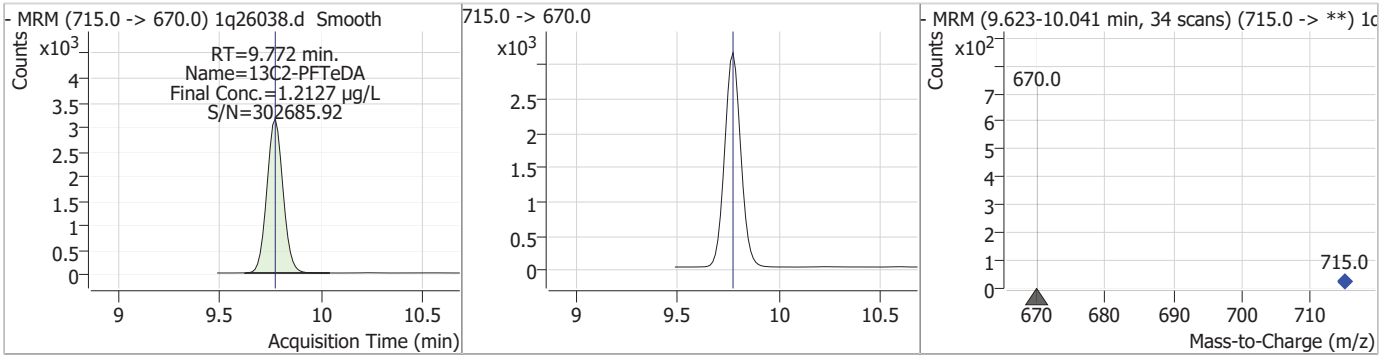
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.74	9.41	0.00	76727	663.0 -> 369.0	7.1	3.4	10.3



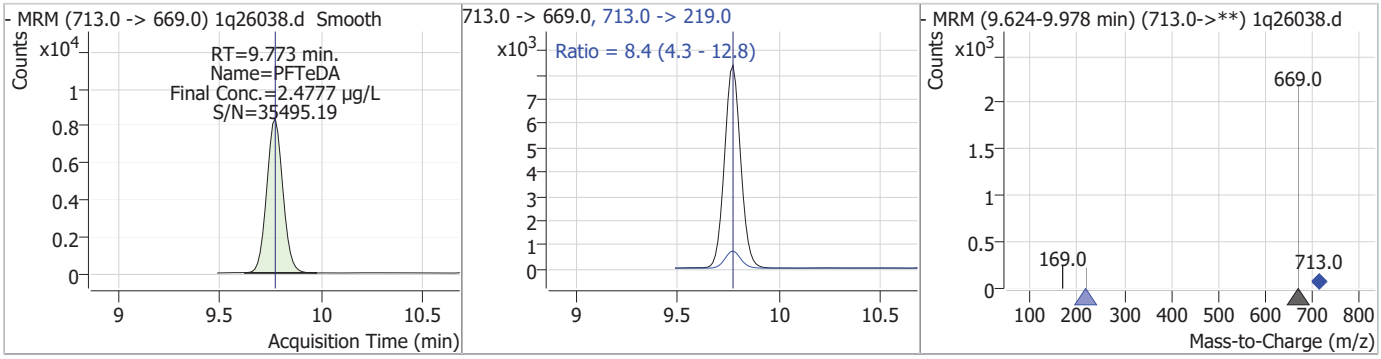
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	10.21	9.46	0.00	240512	633.0 -> 453.0	30.9	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.21	9.77	0.00	17235				

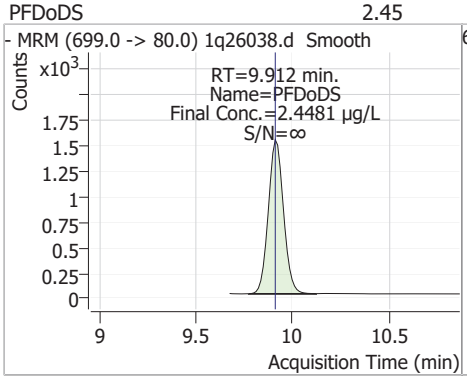


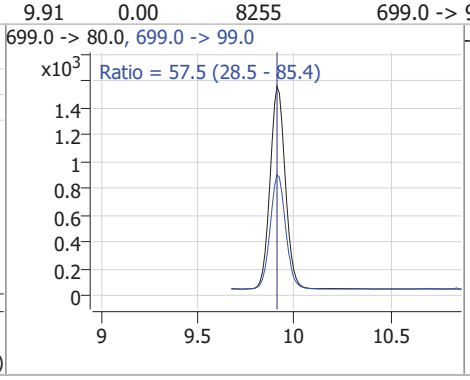
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.48	9.77	0.00	45994	713.0 -> 219.0	8.4	4.3	12.8

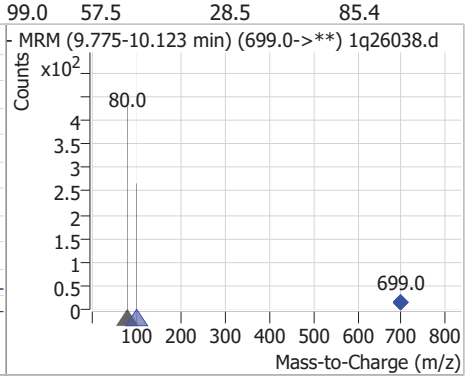


Perfluorinated Compounds by LC/MS/MS

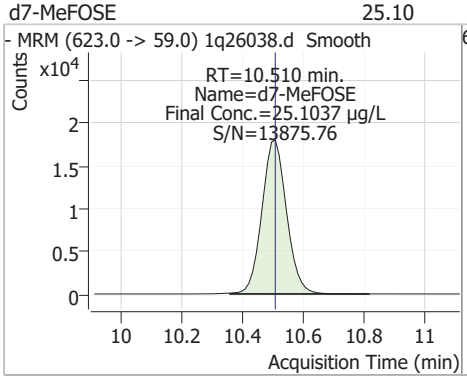
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.45	9.91	0.00	8255	699.0 -> 99.0	57.5	28.5	85.4

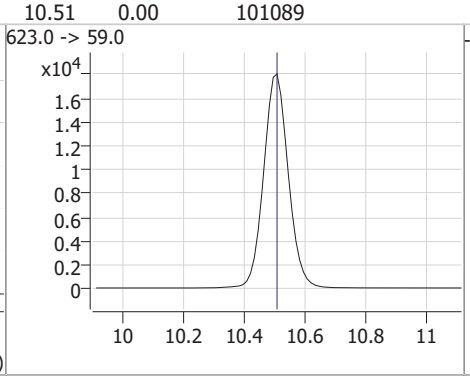


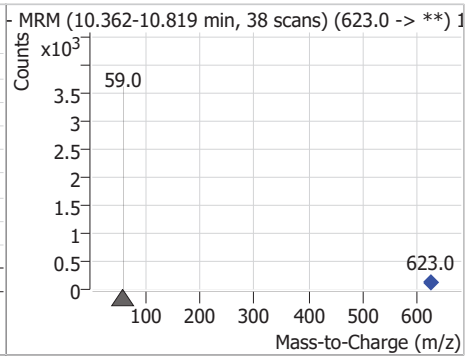




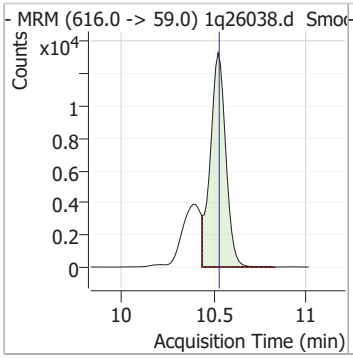
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.10	10.51	0.00	101089				

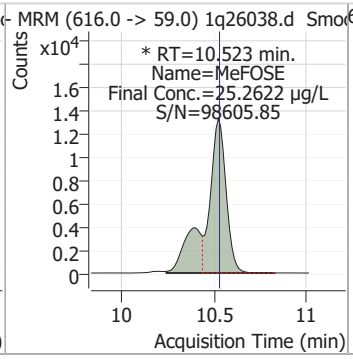


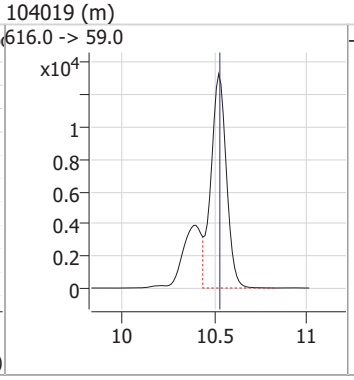


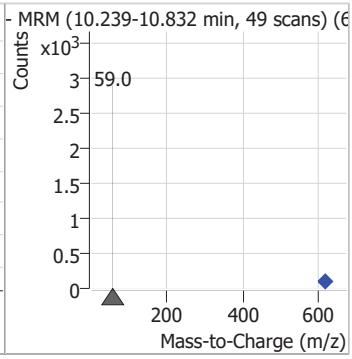


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.26	10.52	0.00	104019 (m)				

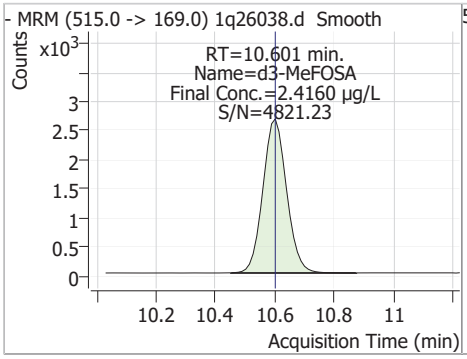


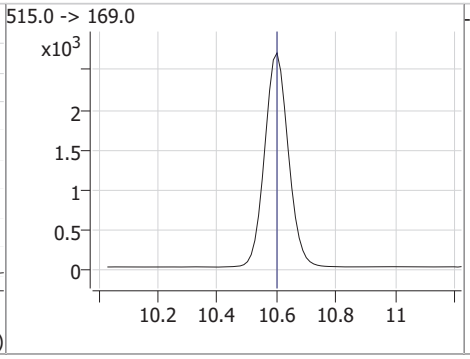


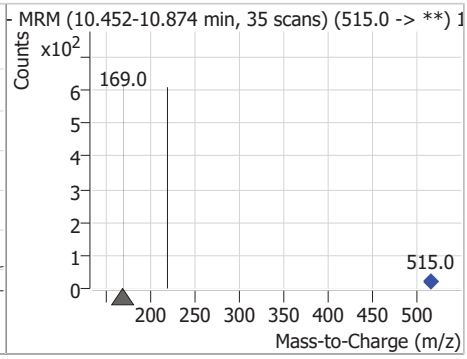




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.42	10.60	0.00	14707				

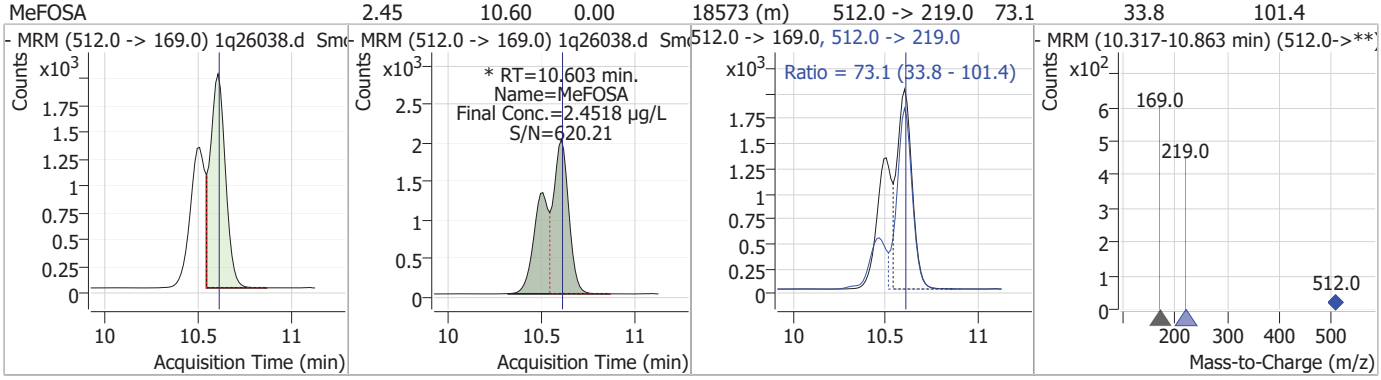




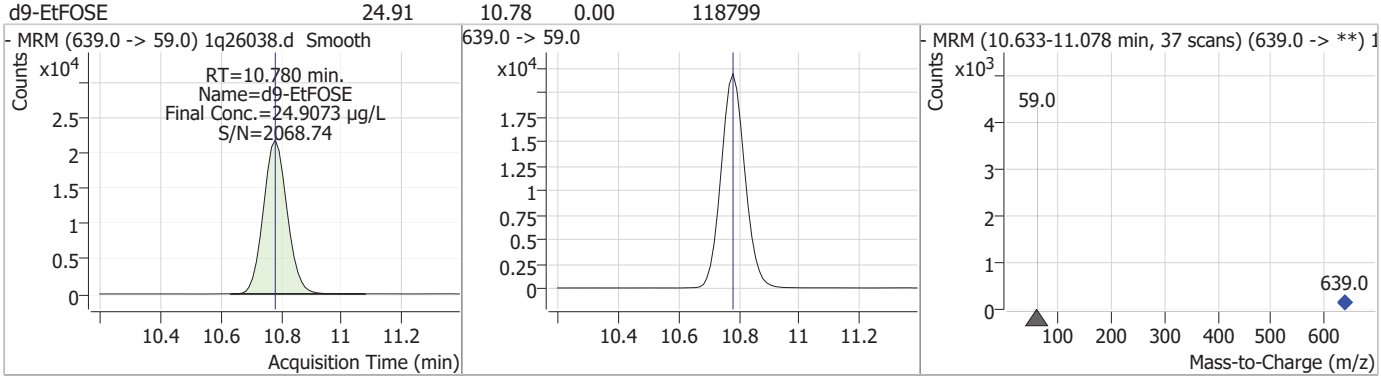


Perfluorinated Compounds by LC/MS/MS

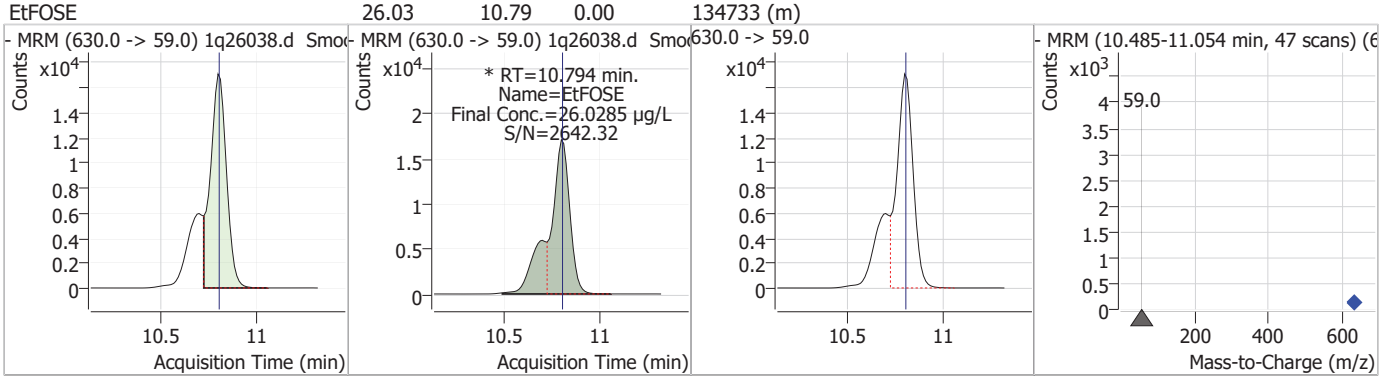
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.45	10.60	0.00	18573 (m)	512.0 -> 219.0	73.1	33.8	101.4



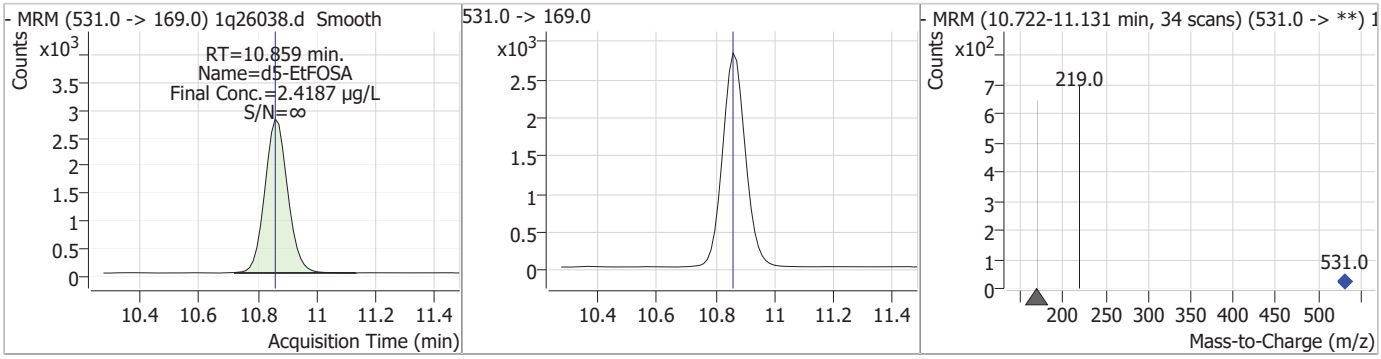
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.91	10.78	0.00	118799				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	26.03	10.79	0.00	134733 (m)				

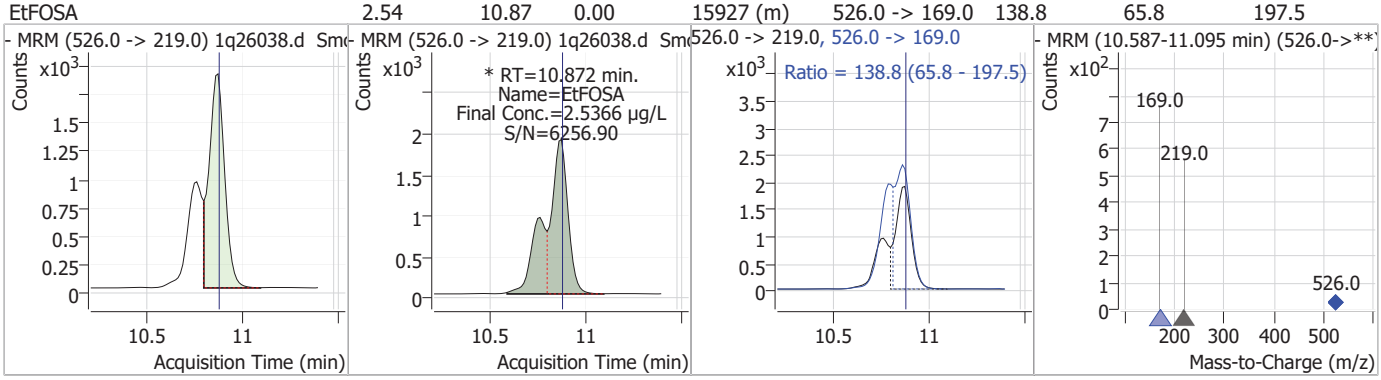


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.42	10.86	0.00	15045				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.54	10.87	0.00	15927 (m)	526.0 -> 169.0	138.8	65.8	197.5



Manual Integration Approval Summary

Sample Number: T1Q361-ICV361
Lab FileID: 1Q26038.D
Injection Time: 05/14/25 18:52

Method: EPA 1633
Analyst approved: 05/15/25 01:25 Rensel John Romano
Supervisor approved: 05/15/25 05:29 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.26	Split peak
Perfluorononanoic acid	375-95-1		7.66	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.30	Split peak
EtFOSAA	2991-50-6		8.36	Split peak
PFOSA	754-91-6		9.32	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSE	1691-99-2		10.79	Split peak
EtFOSA	4151-50-2		10.87	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/15/25 05:29

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26039.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/14/2025 7:07:40 PM
Sample Name : CC361-4
Vial : P1-A5
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : t1q361.batch.bin
Sample Information : OP63461,T1Q361,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	189626	10.00 µg/L	0.000
M5-PFPeA	4.636	268.0 -> 223.0	115380	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	69183	2.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	53432	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	84665	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	30922	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	32065	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	47404	1.25 µg/L	0.000
M2-PFDoDA	9.014	615.0 -> 570.0	44085	1.25 µg/L	0.000
M2-PFTeDA	9.772	715.0 -> 670.0	18495	1.25 µg/L	0.000
M8-FOSA	9.321	506.0 -> 78.0	20757	2.50 µg/L	-0.012
M3-PFBS	5.711	302.0 -> 99.0	7392	2.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	8236	2.50 µg/L	0.000
M8-PFOS	8.304	507.0 -> 99.0	7282	2.50 µg/L	0.000
M2-4:2FTS	5.446	329.0 -> 81.0	1334	5.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	2896	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	4001	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	42637	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	23160	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	34326	5.00 µg/L	0.000
M7-MeFOSE	10.510	623.0 -> 59.0	105021	25.00 µg/L	0.000
M9-EtFOSE	10.780	639.0 -> 59.0	126263	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	15265	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	16756	2.50 µg/L	0.000
13C4-PFOS	8.304	503.0 -> 80.0	13608	2.50 µg/L	0.000
13C3-PFBA	3.263	216.0 -> 172.0	78776	5.00 µg/L	0.013
18O2-PFHxS	7.274	403.0 -> 84.0	8555	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	95698	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	25775	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	30892	1.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	62227	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1334	4.67 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.4%	
13C2-6:2FTS	6.922	429.0 -> 81.0	2896	5.23 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.6%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4001	4.59 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.8%	
13C2-PFDoDA	9.014	615.0 -> 570.0	44085	1.26 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.9%	
13C2-PFTeDA	9.772	715.0 -> 670.0	18495	1.26 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.6%	
13C3-PFBS	5.711	302.0 -> 99.0	7392	2.59 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.6%	
13C3-PFHxS	7.275	402.0 -> 99.0	8236	2.88 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 115.1%		
13C4-PFBA	3.260	217.0 -> 172.0	189626	10.12 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.2%		
13C4-PFHpA	6.553	367.0 -> 322.0	53432	2.48 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.0%		
13C5-PFHxA	5.759	318.0 -> 273.0	69183	2.61 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.5%		
13C5-PFPeA	4.636	268.0 -> 223.0	115380	5.06 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.2%		
13C6-PFDA	8.139	519.0 -> 474.0	32065	1.28 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.7%		
13C7-PFUnDA	8.595	570.0 -> 525.0	47404	1.31 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.6%		
13C8-FOSA	9.321	506.0 -> 78.0	20757	2.50 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.9%		
13C8-PFOA	7.148	421.0 -> 376.0	84665	2.43 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.2%		
13C8-PFOS	8.304	507.0 -> 99.0	7282	2.33 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.0%		
13C9-PFNA	7.656	472.0 -> 427.0	30922	1.23 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.1%		
d3-MeFOSAA	8.161	573.0 -> 419.0	42637	5.15 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.9%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	23160	9.98 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.8%		
d3-MeFOSA	10.601	515.0 -> 169.0	16756	2.60 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.1%		
d5-EtFOSAA	8.358	589.0 -> 419.0	34326	5.09 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.8%		
d7-MeFOSE	10.510	623.0 -> 59.0	105021	24.65 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 98.6%		
d9-EtFOSE	10.780	639.0 -> 59.0	126263	25.02 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.1%		
d5-EtFOSA	10.859	531.0 -> 169.0	15265	2.32 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.8%		
Target Compounds						QValue
4:2FTS	5.447	327.0 -> 307.0	26392	10.61 µg/L		97
		327.0 -> 81.0	11706			
6:2FTS	6.922	427.0 -> 407.0	34600	9.33 µg/L		98
		427.0 -> 81.0	12933			
8:2FTS	7.927	527.0 -> 507.0	37803	10.39 µg/L		96
		527.0 -> 81.0	11799			
EtFOSAA	8.359	584.0 -> 419.0	13529	2.53 µg/L	m	92
		584.0 -> 483.0	8064			
FOSA	9.324	498.0 -> 78.0	18205	2.53 µg/L	m	96
		498.0 -> 478.0	757			
MeFOSAA	8.162	570.0 -> 419.0	15815	2.34 µg/L	m	87
		570.0 -> 512.0	7124			
PFBA	3.254	213.0 -> 169.0	51905	9.79 µg/L		100
PFBS	5.713	299.0 -> 80.0	18683	2.18 µg/L		98
		299.0 -> 99.0	7531			
PFDA	8.140	513.0 -> 469.0	54647	2.48 µg/L		99
		513.0 -> 219.0	8608			
PFDoDA	9.015	613.0 -> 569.0	81591	2.55 µg/L		98
		613.0 -> 319.0	9888			
PFDS	9.181	599.0 -> 80.0	9187	2.33 µg/L		96

Perfluorinated Compounds by LC/MS/MS

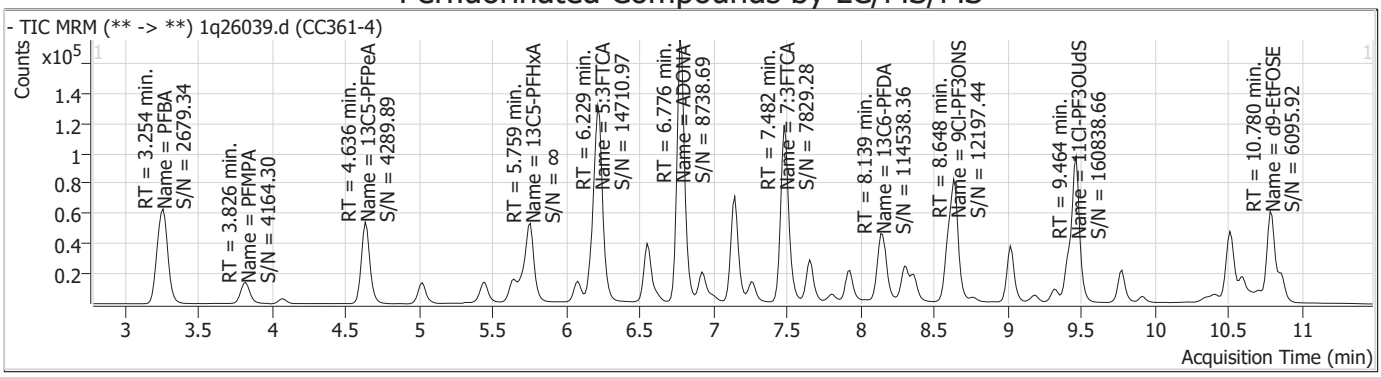
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	4407				
PFHpA	6.554	363.0 -> 319.0	76491	2.56	µg/L		98
		363.0 -> 169.0	12460				
PFHpS	7.809	449.0 -> 80.0	12055	2.12	µg/L		95
		449.0 -> 99.0	6534				
PFHxA	5.761	313.0 -> 269.0	60518	2.39	µg/L		100
		313.0 -> 119.0	1833				
PFHxS	7.264	399.0 -> 80.0	13384	2.09	µg/L	m	99
		399.0 -> 99.0	6770				
PFNA	7.657	463.0 -> 419.0	38547	2.49	µg/L	m	100
		463.0 -> 219.0	11106				
PFNS	8.772	549.0 -> 80.0	6785	2.59	µg/L		94
		549.0 -> 99.0	3499				
PFOA	7.149	413.0 -> 369.0	77130	2.64	µg/L	m	99
		413.0 -> 169.0	16350				
PFOS	8.305	499.0 -> 80.0	15082	2.47	µg/L	m	95
		499.0 -> 99.0	7414				
PFPeA	4.638	263.0 -> 219.0	102198	5.09	µg/L		100
PFPeS	6.630	349.0 -> 80.0	8820	2.30	µg/L		98
		349.0 -> 99.0	3972				
PFTeDA	9.773	713.0 -> 669.0	49382	2.48	µg/L		99
		713.0 -> 219.0	4067				
PFTrDA	9.412	663.0 -> 619.0	83131	2.67	µg/L		99
		663.0 -> 369.0	5487				
PFUnDA	8.596	563.0 -> 519.0	74802	2.39	µg/L		99
		563.0 -> 269.0	10870				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	258808	10.37	µg/L		100
		633.0 -> 453.0	76558				
9Cl-PF3ONS	8.648	531.0 -> 351.0	201325	9.84	µg/L		96
		533.0 -> 353.0	62589				
ADONA	6.776	377.0 -> 251.0	502837	9.86	µg/L		100
		377.0 -> 85.0	138531				
HFPO-DA	6.088	285.0 -> 169.0	24331	10.85	µg/L		97
		285.0 -> 185.0	2080				
3:3FTCA	4.072	241.0 -> 177.0	12881	11.78	µg/L		97
		241.0 -> 117.0	1008				
5:3FTCA	6.229	341.0 -> 237.0	268945	59.98	µg/L		100
		341.0 -> 217.0	190134				
7:3FTCA	7.482	441.0 -> 337.0	313836	61.98	µg/L		97
		441.0 -> 317.0	134717				
EtFOSA	10.872	526.0 -> 219.0	16702	2.62	µg/L	m	96
		526.0 -> 169.0	22769				
EtFOSE	10.794	630.0 -> 59.0	140048	25.46	µg/L	m	100
MeFOSA	10.603	512.0 -> 169.0	20258	2.35	µg/L	m	96
		512.0 -> 219.0	14328				
MeFOSE	10.523	616.0 -> 59.0	108789	25.43	µg/L	m	100
PFDoDS	9.912	699.0 -> 80.0	8743	2.64	µg/L		95
		699.0 -> 99.0	5292				
NFDHA	5.651	295.0 -> 201.0	8500	5.04	µg/L		96
		201.0 -> 85.0	45315				
		295.0 -> 85.0	2273				
PFMBA	5.027	279.0 -> 85.0	55225	5.06	µg/L		100
PFMPA	3.826	229.0 -> 85.0	62001	5.04	µg/L		100
PFEESA	6.182	315.0 -> 135.0	108440	4.50	µg/L		99
		315.0 -> 69.0	9013				

 # = Qualifier out of range, m = manually integrated, + = Area summed

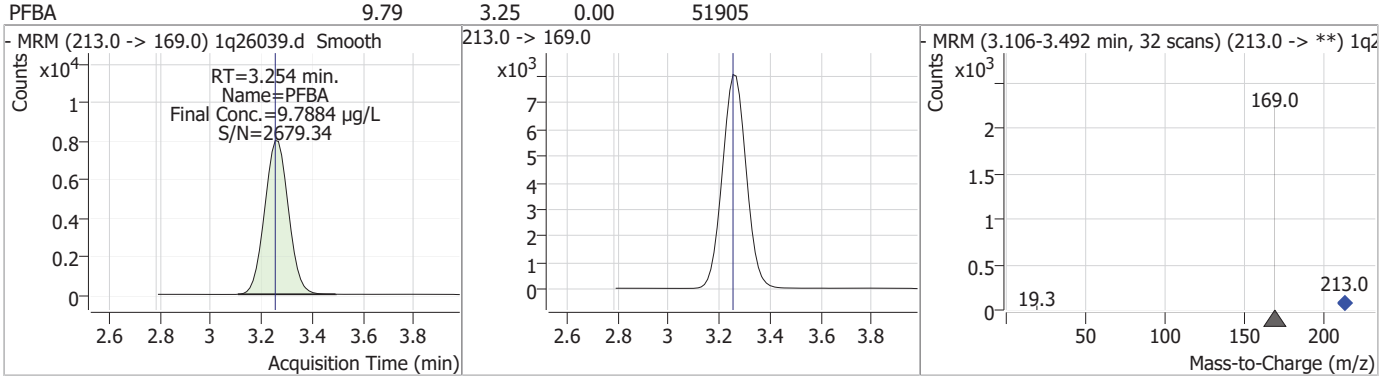
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

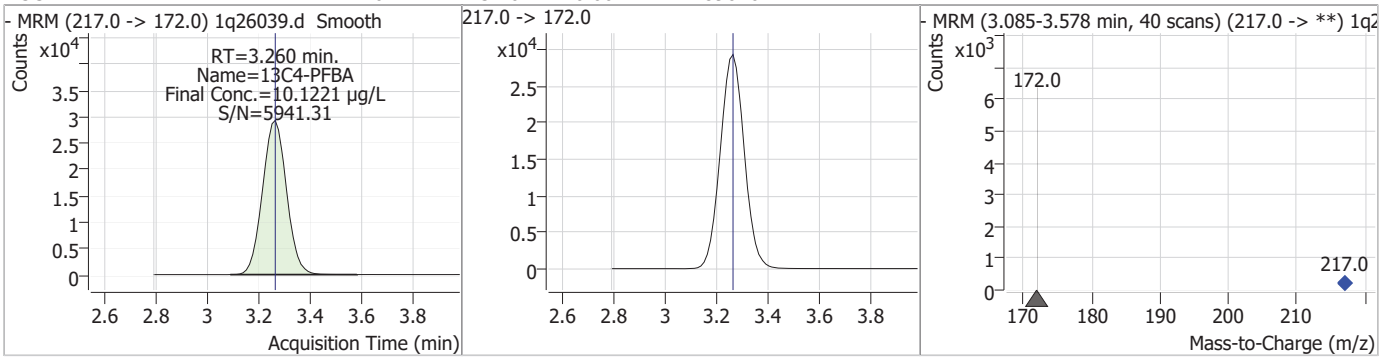
Perfluorinated Compounds by LC/MS/MS



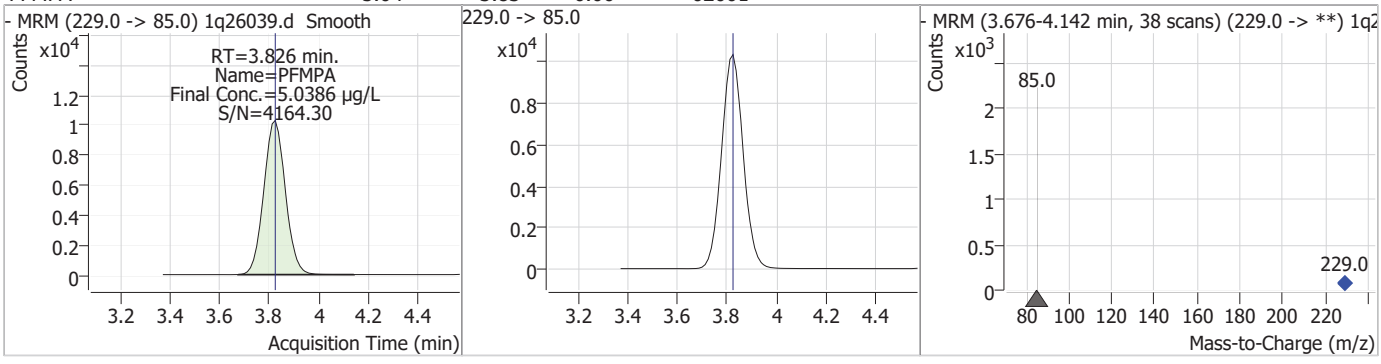
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.79	3.25	0.00	51905				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.12	3.26	0.00	189626				

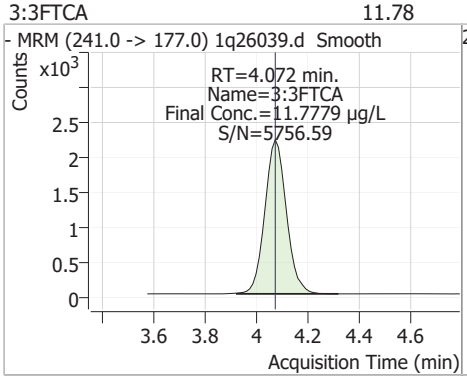


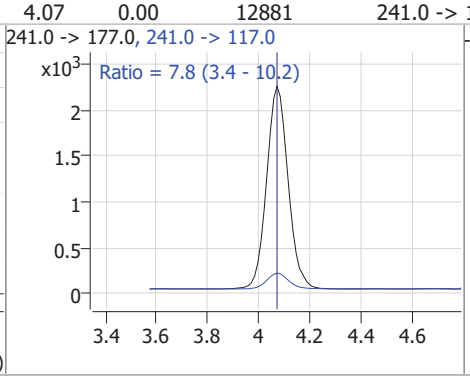
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.04	3.83	0.00	62001				

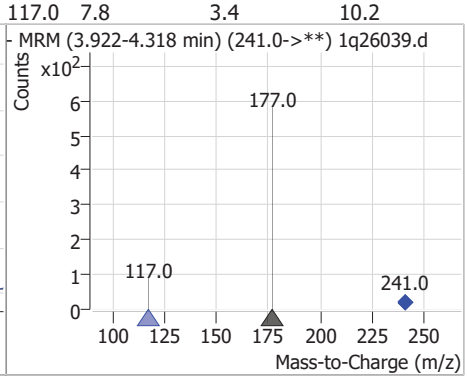


Perfluorinated Compounds by LC/MS/MS

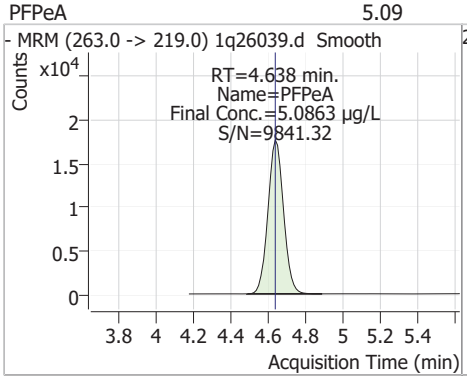
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	11.78	4.07	0.00	12881	241.0 -> 117.0	7.8	3.4	10.2

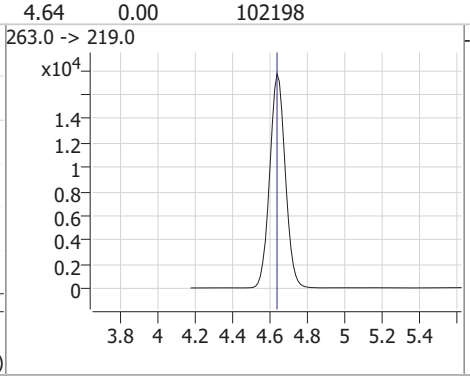


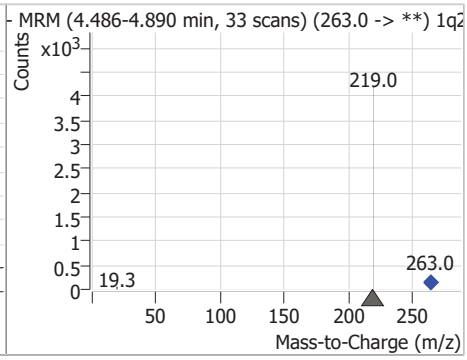




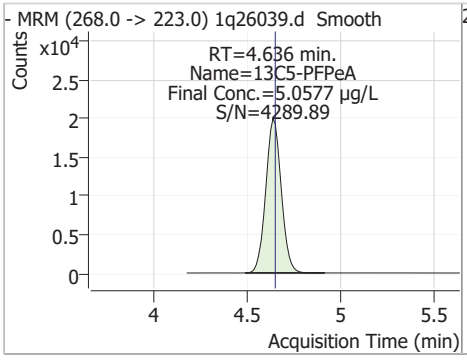
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.09	4.64	0.00	102198				

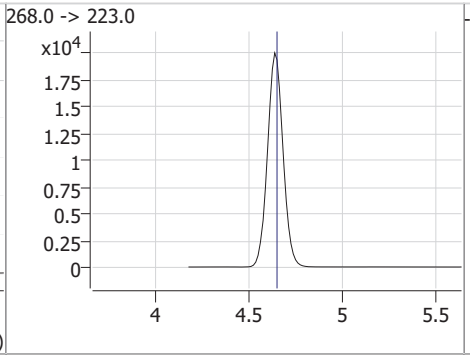


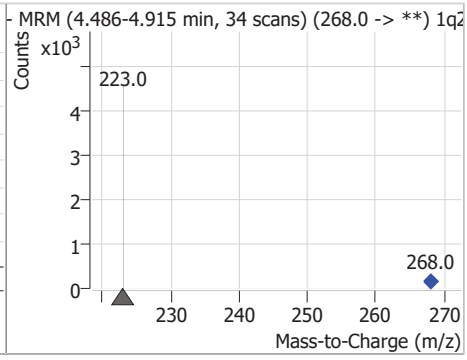




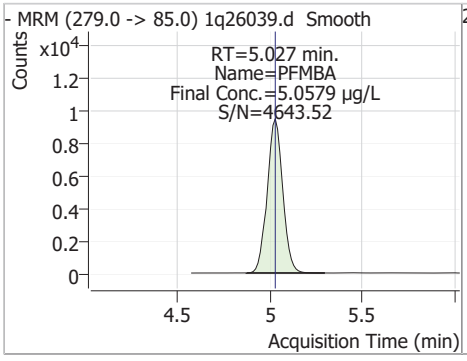
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.06	4.64	-0.01	115380				

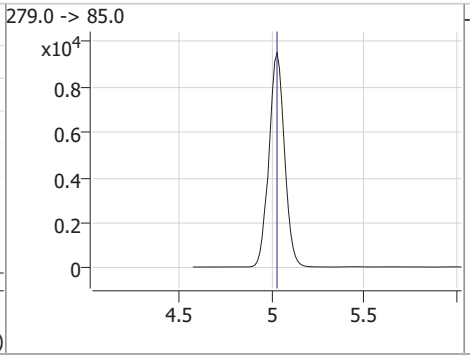


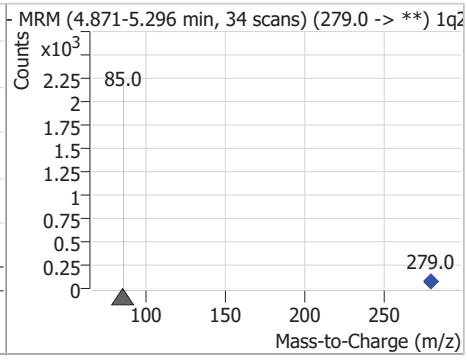




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.06	5.03	0.00	55225				

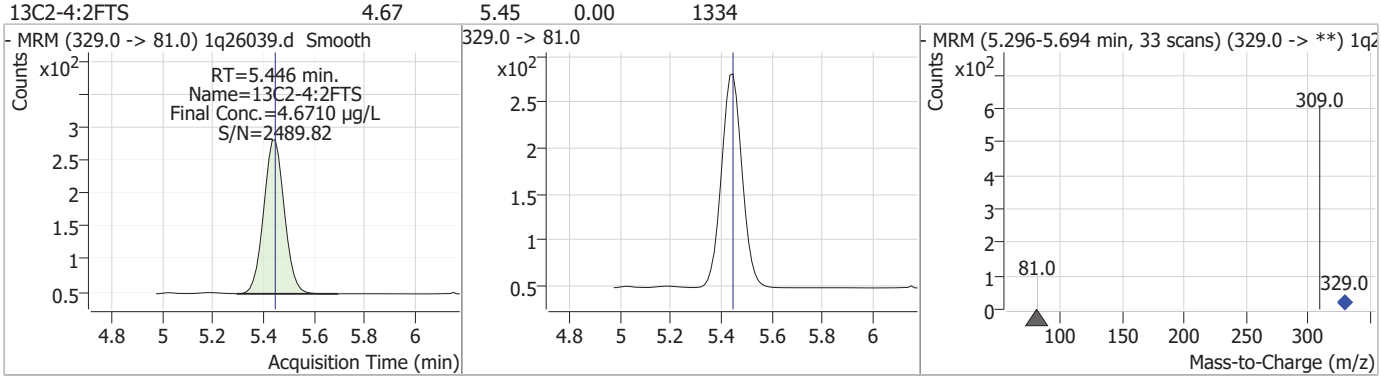




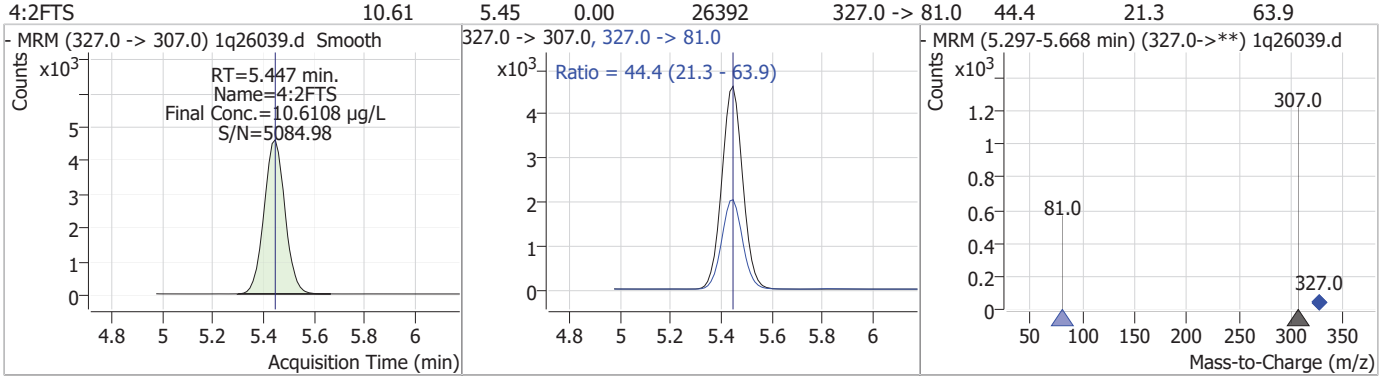


Perfluorinated Compounds by LC/MS/MS

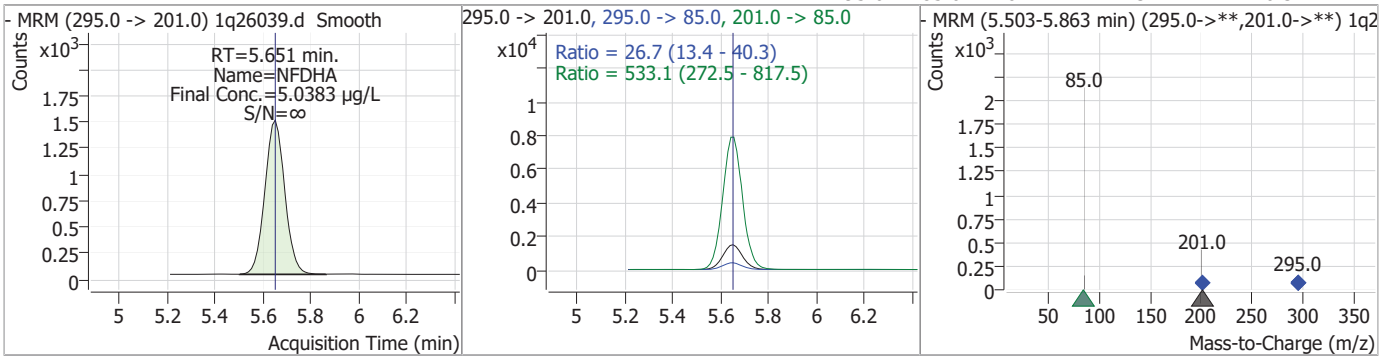
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.67	5.45	0.00	1334				



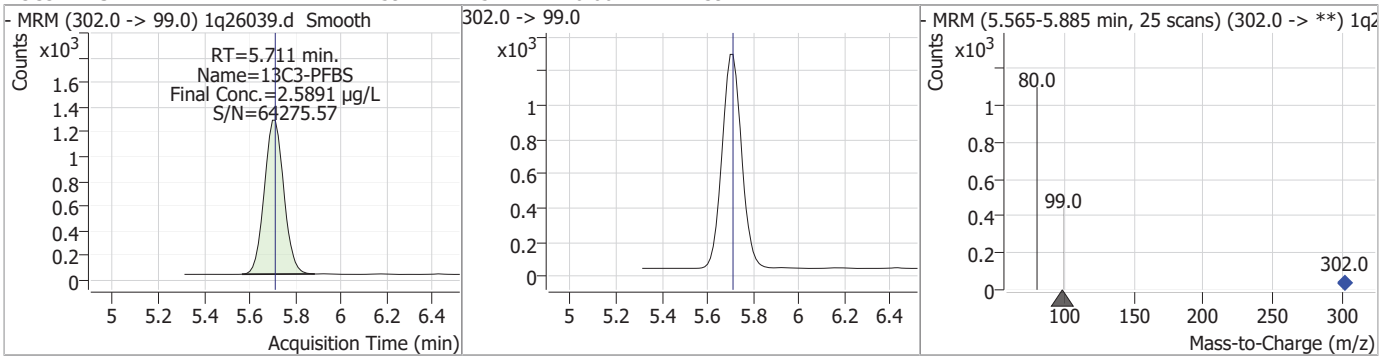
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	10.61	5.45	0.00	26392	327.0 -> 81.0	44.4	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.04	5.65	0.00	8500	201.0 -> 85.0	533.1	272.5	817.5
					295.0 -> 85.0	26.7	13.4	40.3

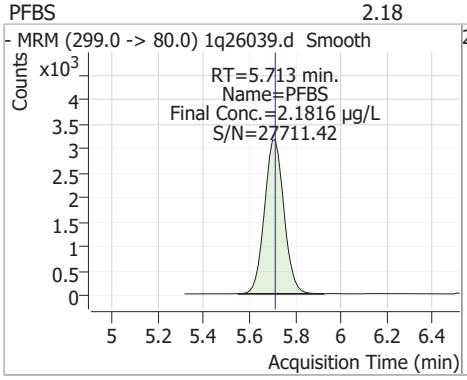


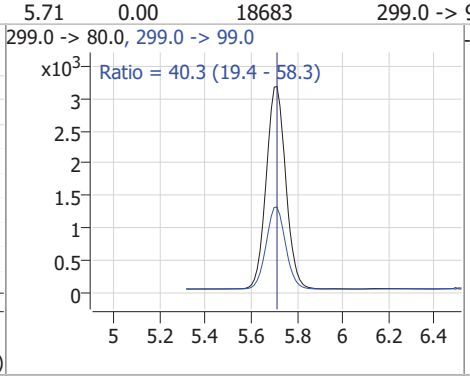
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.59	5.71	0.00	7392				

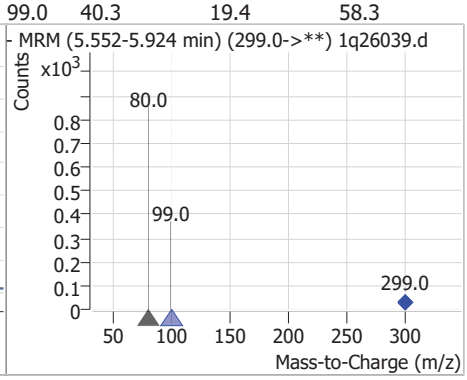


Perfluorinated Compounds by LC/MS/MS

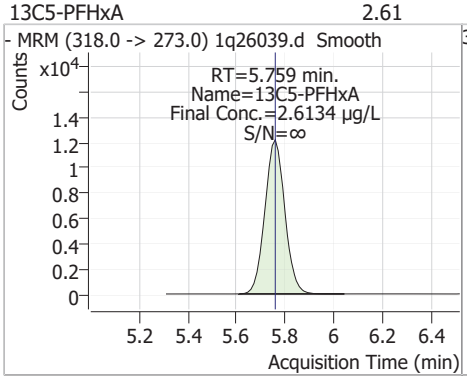
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.18	5.71	0.00	18683	299.0 -> 99.0	40.3	19.4	58.3

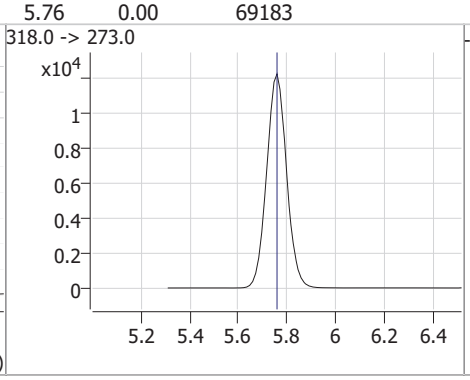


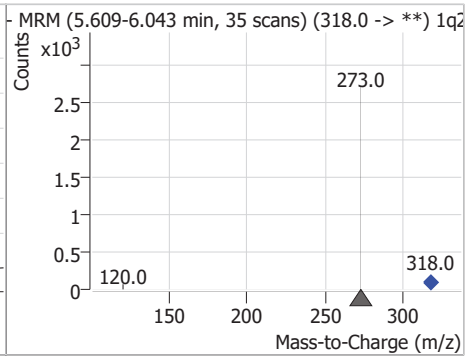




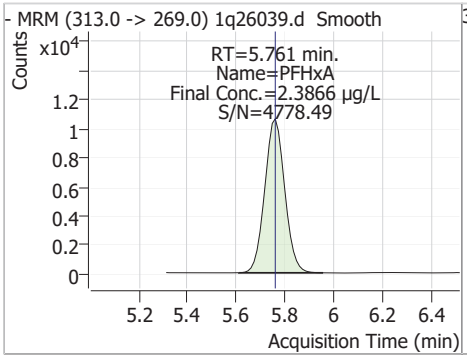
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.61	5.76	0.00	69183				

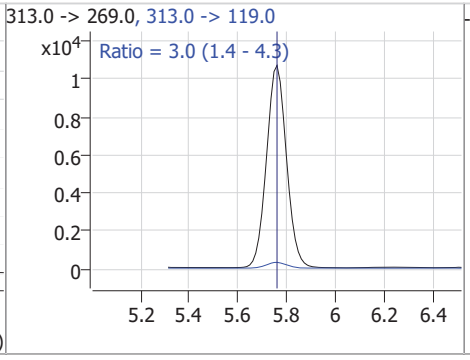


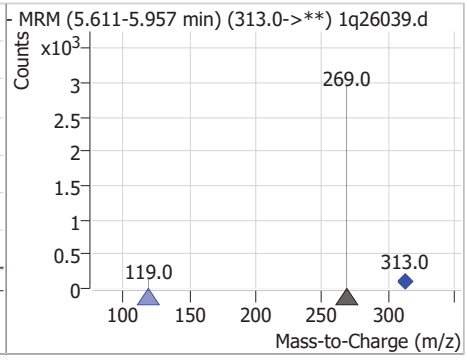




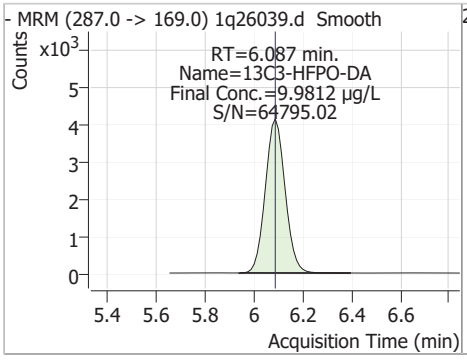
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.39	5.76	0.00	60518	313.0 -> 119.0	3.0	1.4	4.3

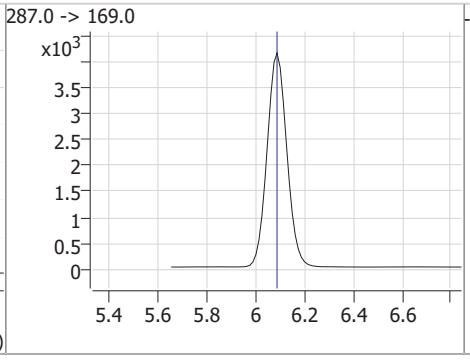


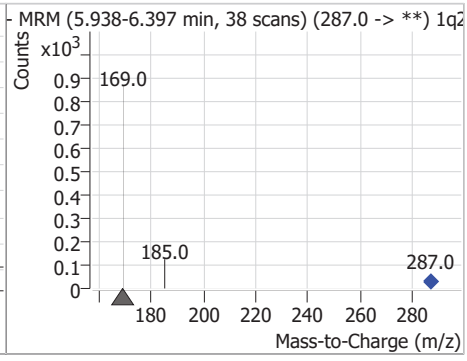




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.98	6.09	0.00	23160				







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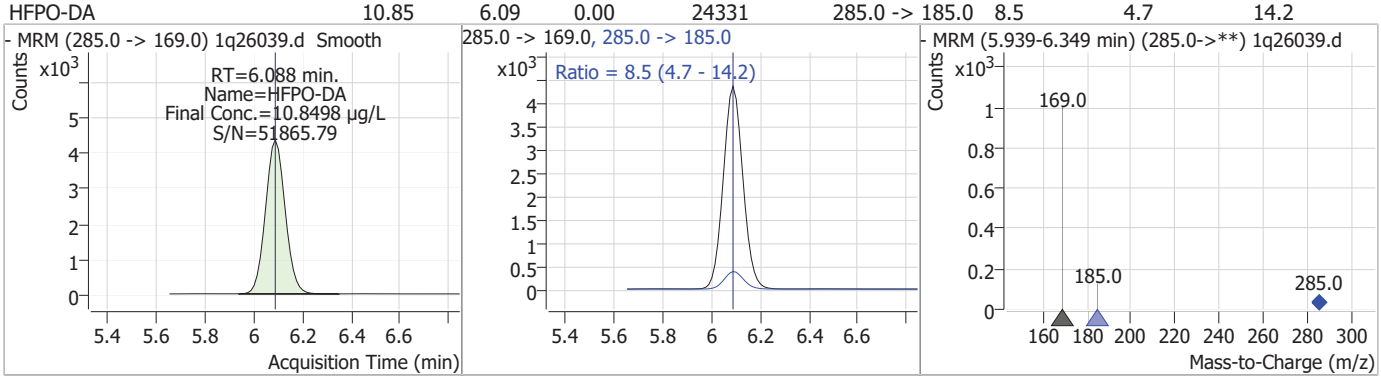
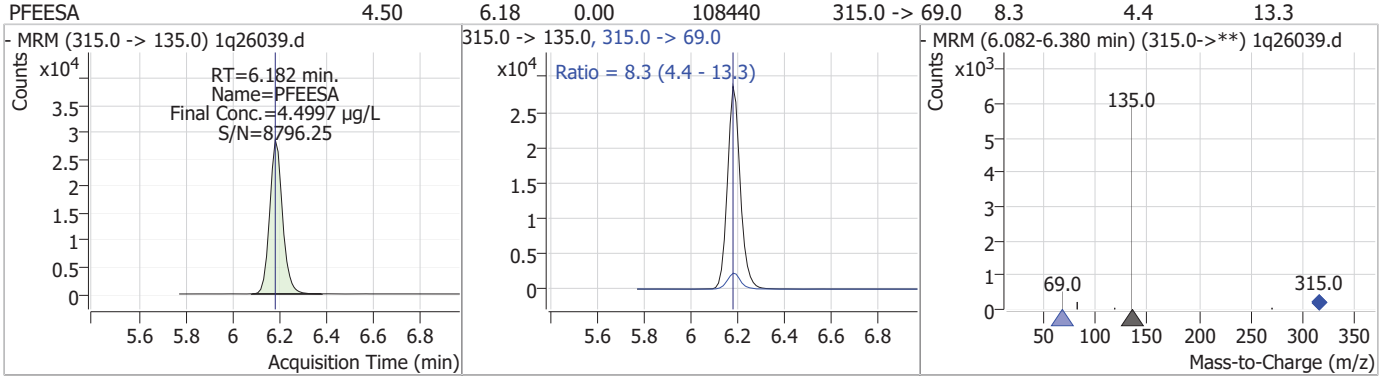
Perfluorinated Compounds by LC/MS/MS

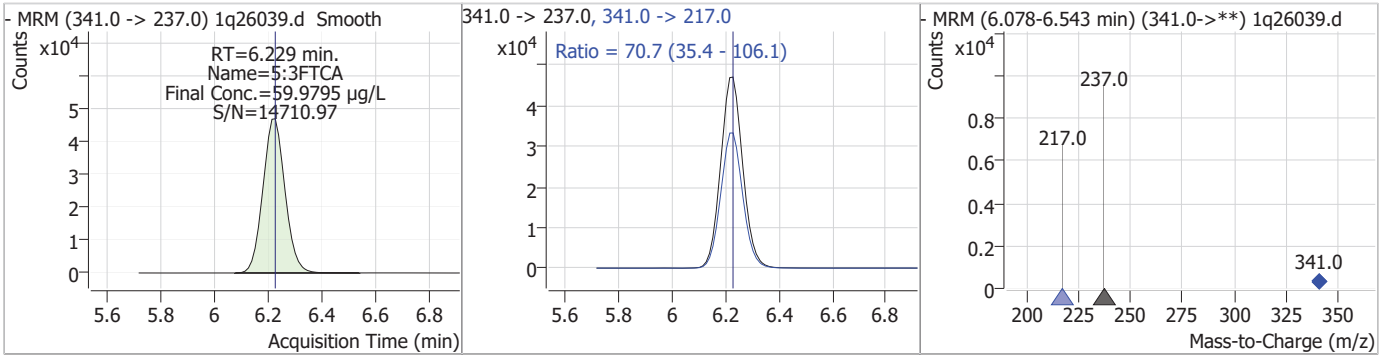
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.85	6.09	0.00	24331	285.0 -> 185.0	8.5	4.7	14.2



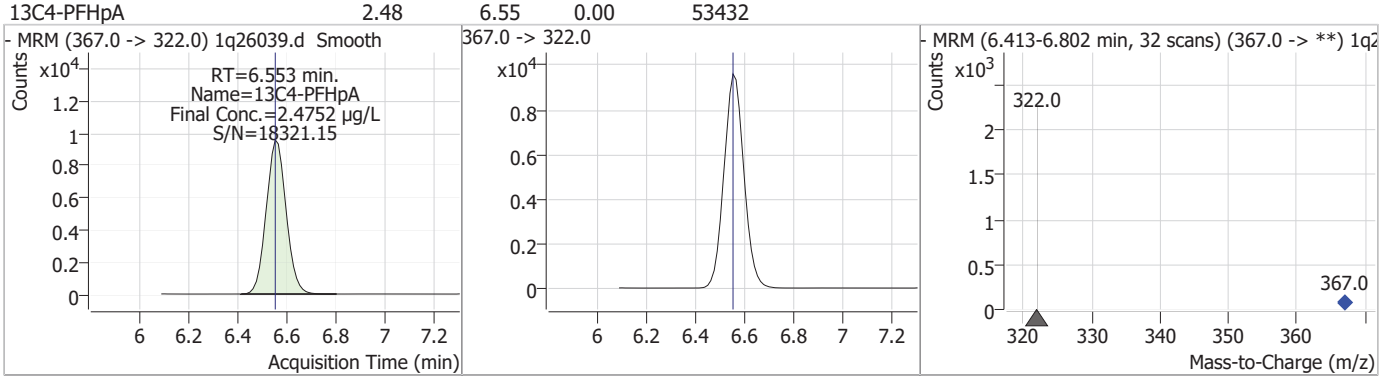
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.50	6.18	0.00	108440	315.0 -> 69.0	8.3	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	59.98	6.23	0.00	268945	341.0 -> 217.0	70.7	35.4	106.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.48	6.55	0.00	53432				



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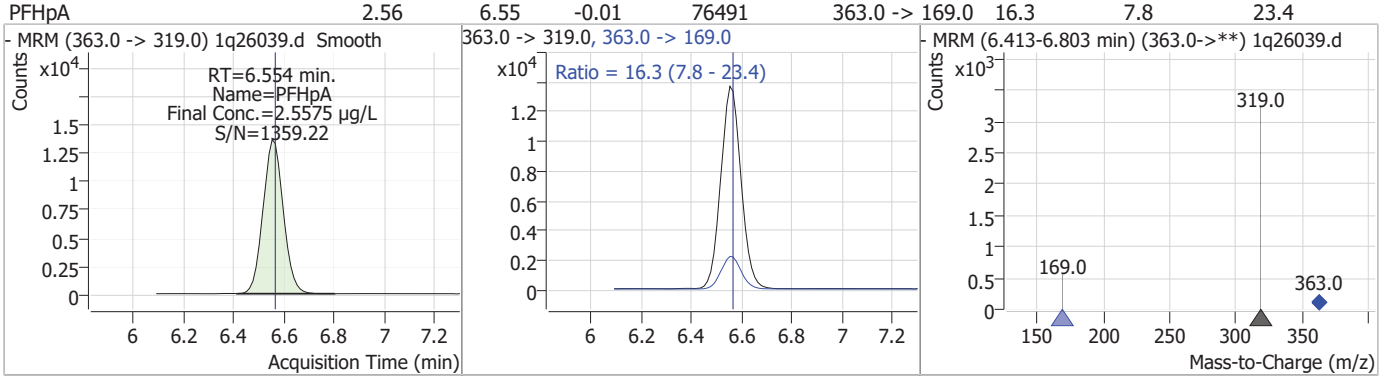
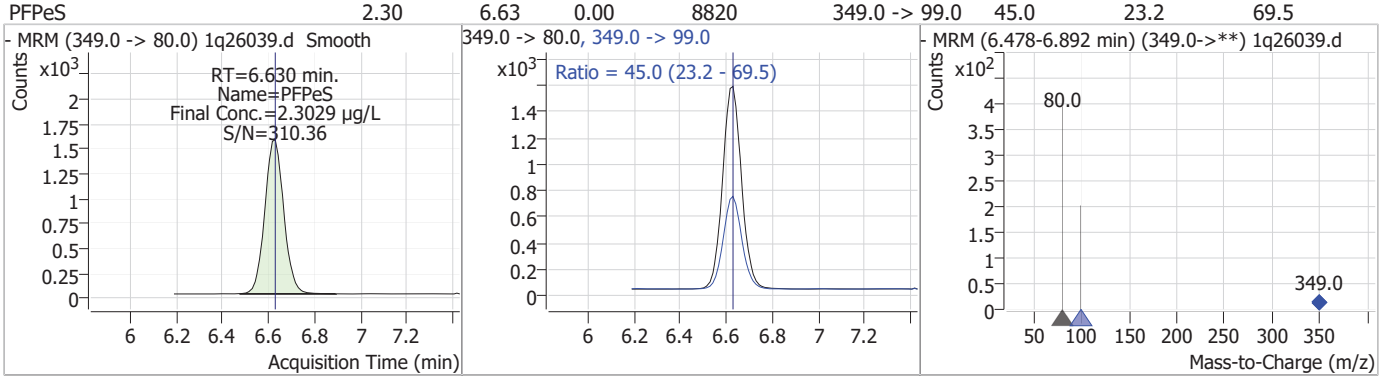
Perfluorinated Compounds by LC/MS/MS

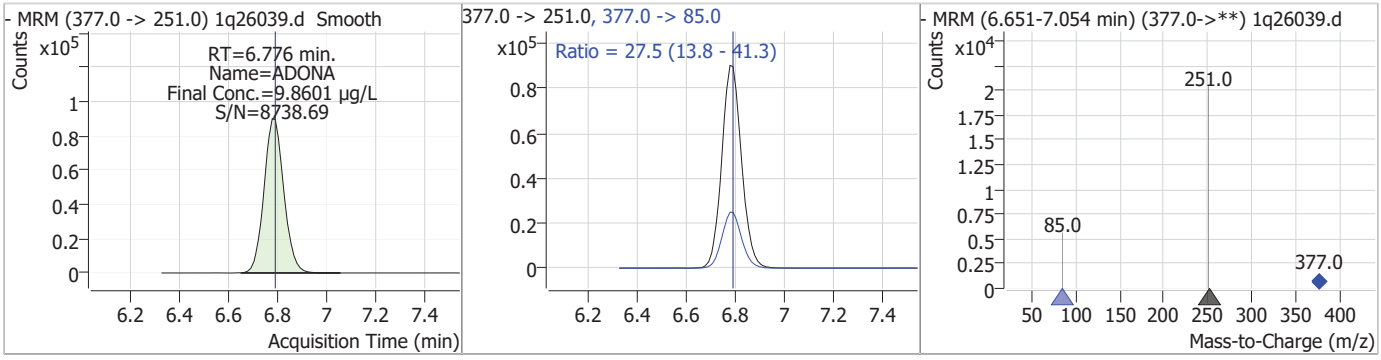
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.56	6.55	-0.01	76491	363.0 -> 169.0	16.3	7.8	23.4



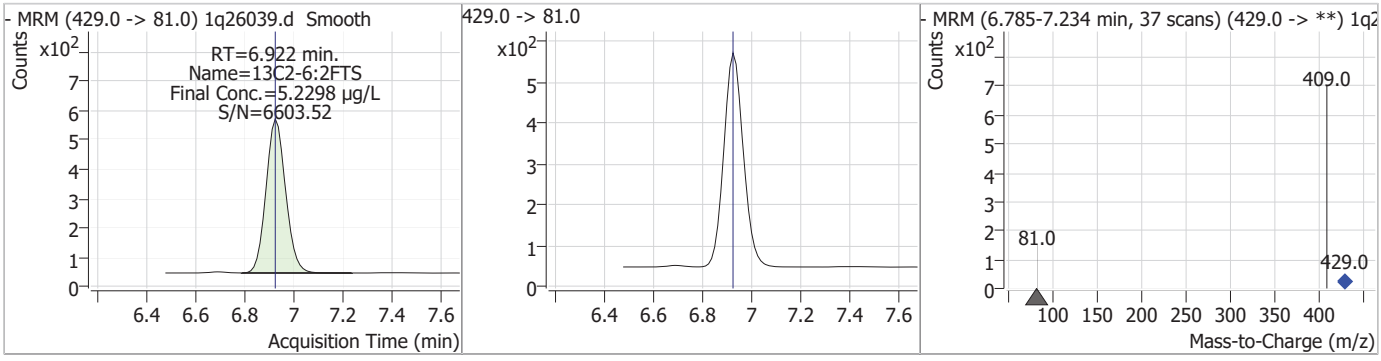
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.30	6.63	0.00	8820	349.0 -> 99.0	45.0	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	9.86	6.78	-0.01	502837	377.0 -> 85.0	27.5	13.8	41.3

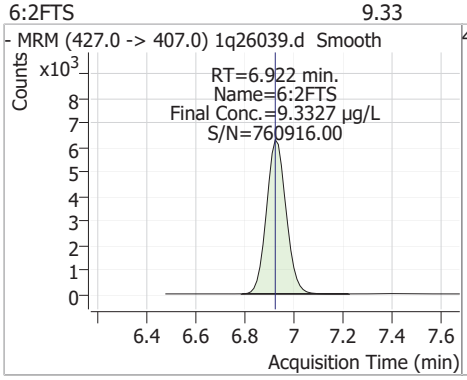


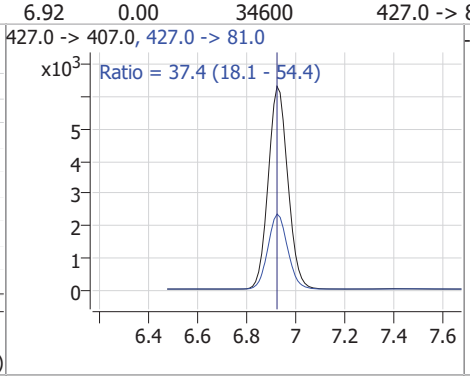
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.23	6.92	0.00	2896				

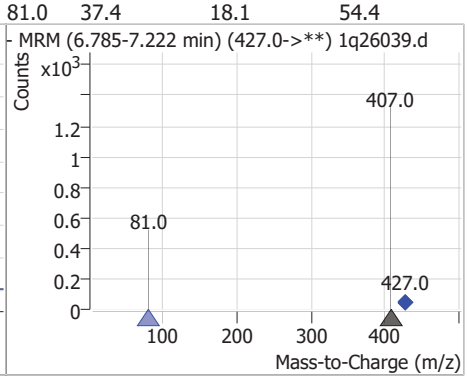


Perfluorinated Compounds by LC/MS/MS

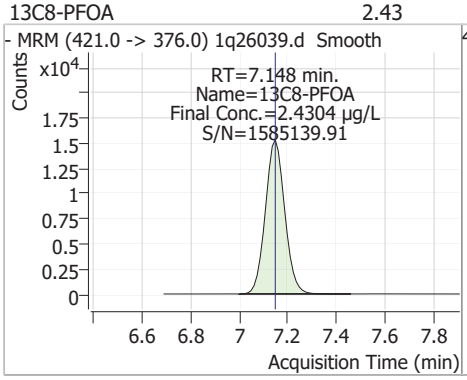
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.33	6.92	0.00	34600	427.0 -> 81.0	37.4	18.1	54.4

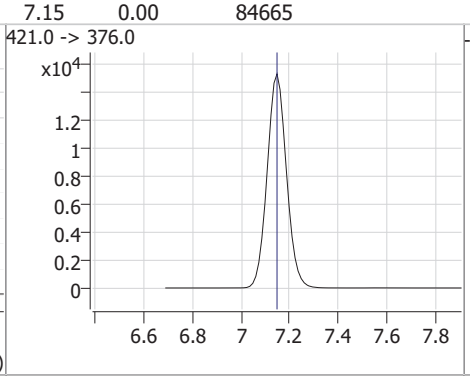


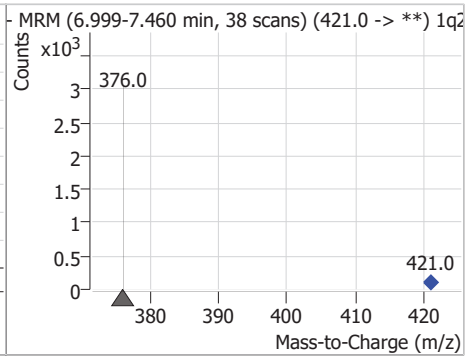




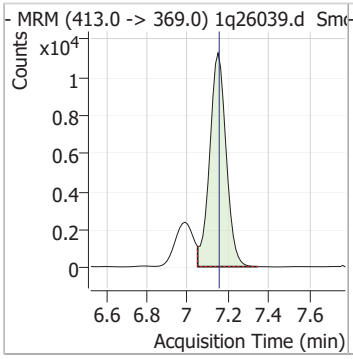
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.43	7.15	0.00	84665				

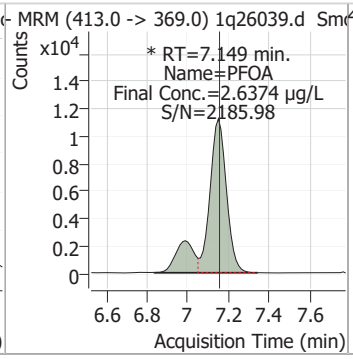


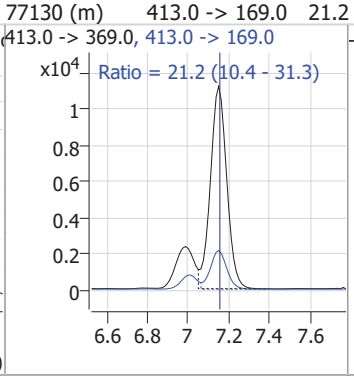


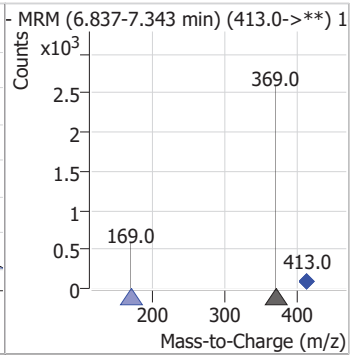


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.64	7.15	0.00	77130 (m)	413.0 -> 169.0	21.2	10.4	31.3

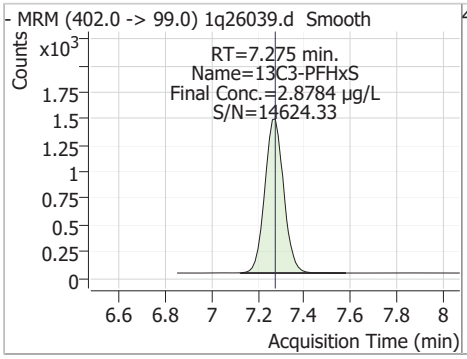


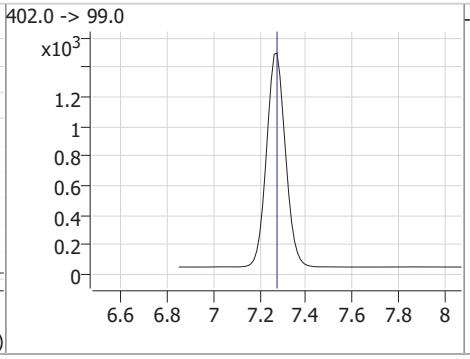


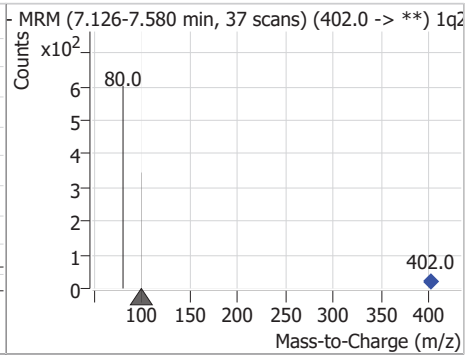




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.88	7.27	0.00	8236				

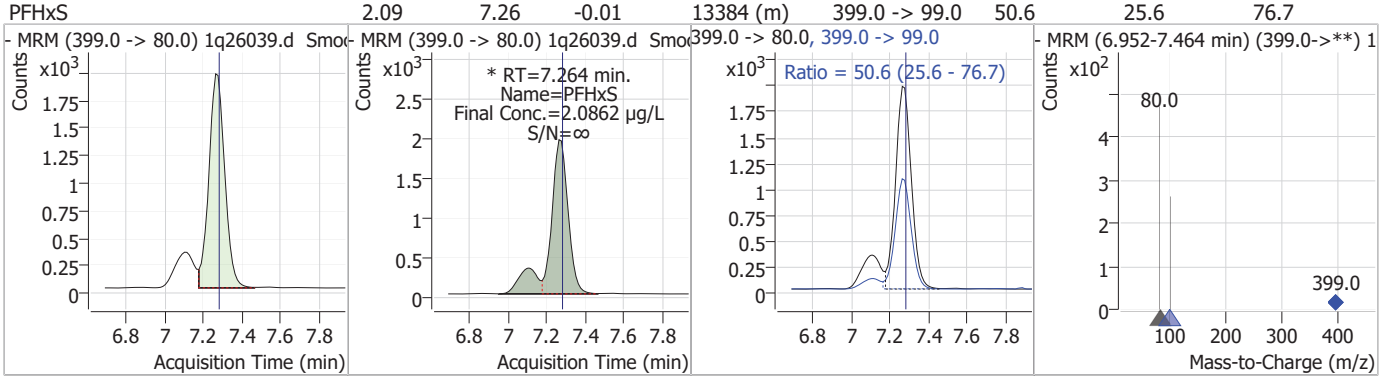




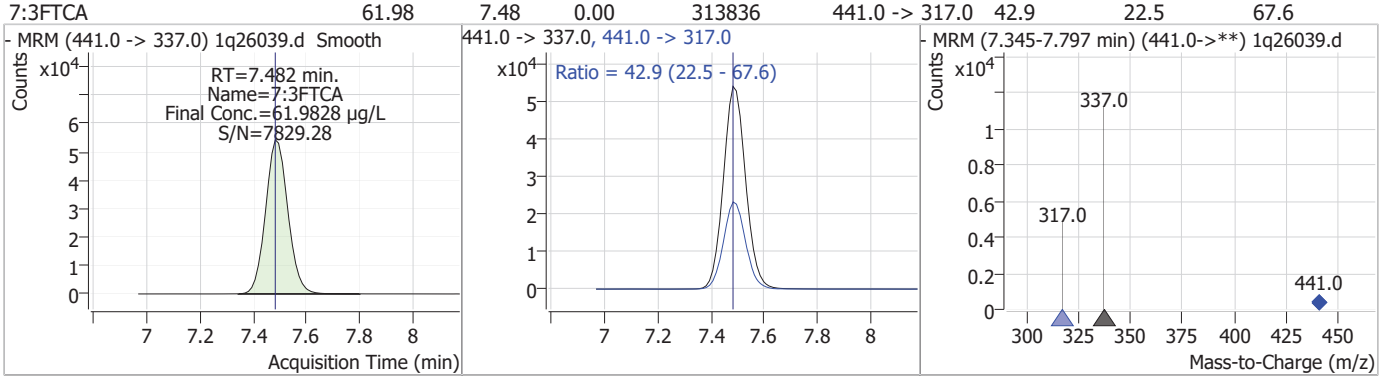


Perfluorinated Compounds by LC/MS/MS

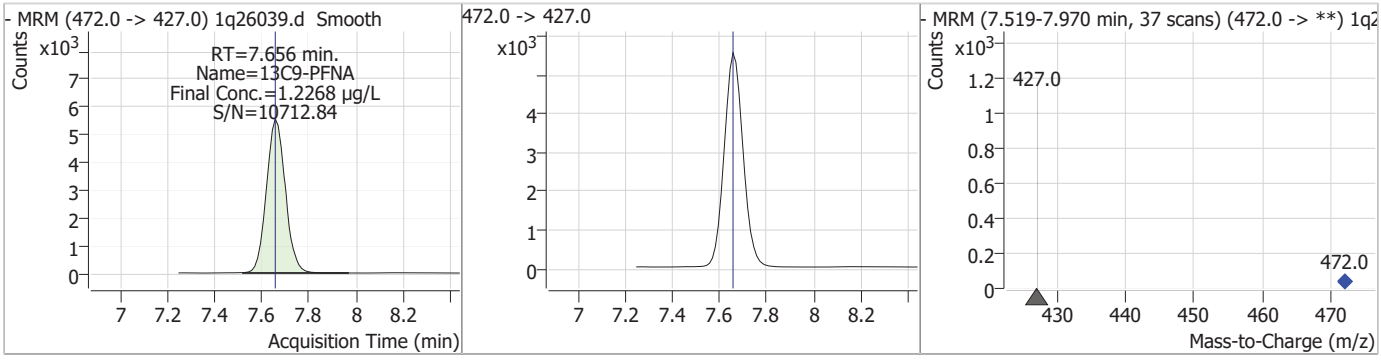
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.09	7.26	-0.01	13384 (m)	399.0 -> 99.0	50.6	25.6	76.7



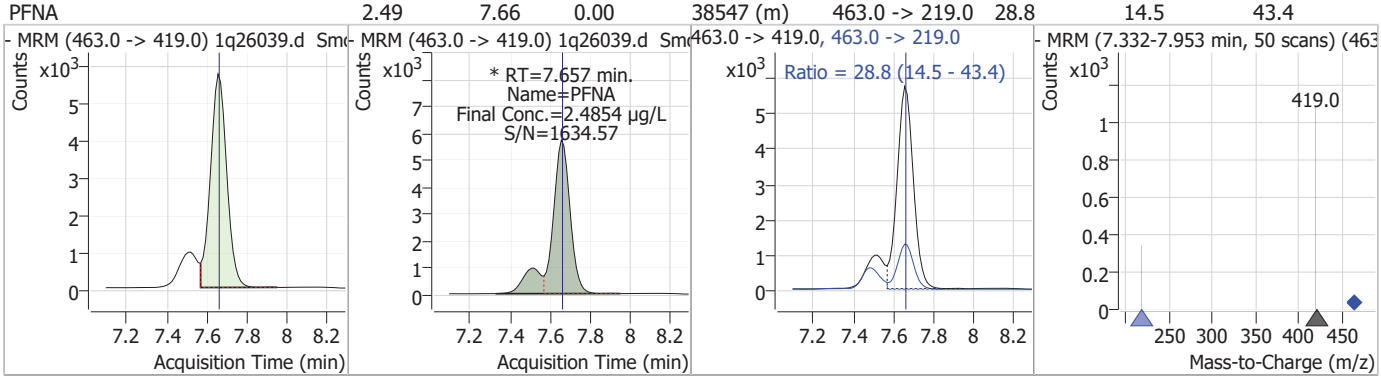
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	61.98	7.48	0.00	313836	441.0 -> 317.0	42.9	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.23	7.66	0.00	30922				

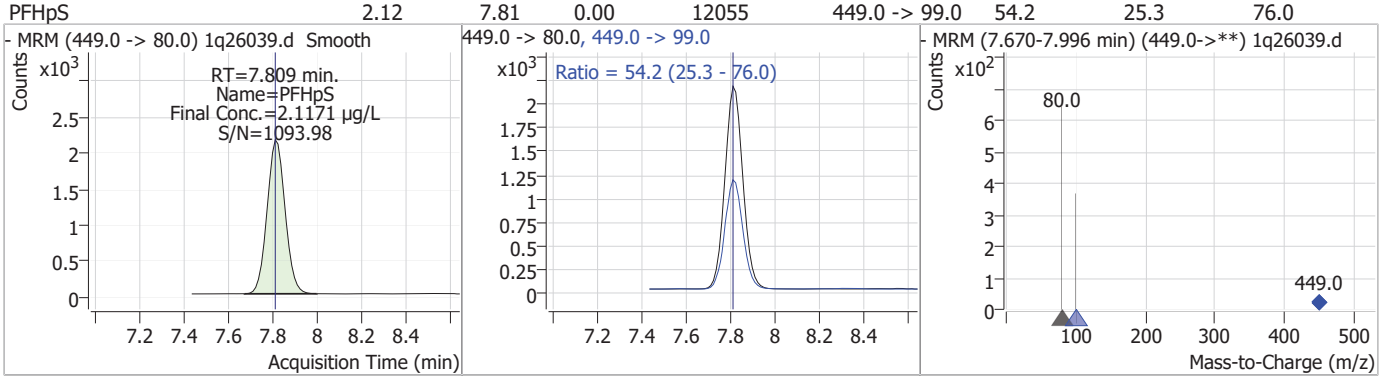


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.49	7.66	0.00	38547 (m)	463.0 -> 219.0	28.8	14.5	43.4

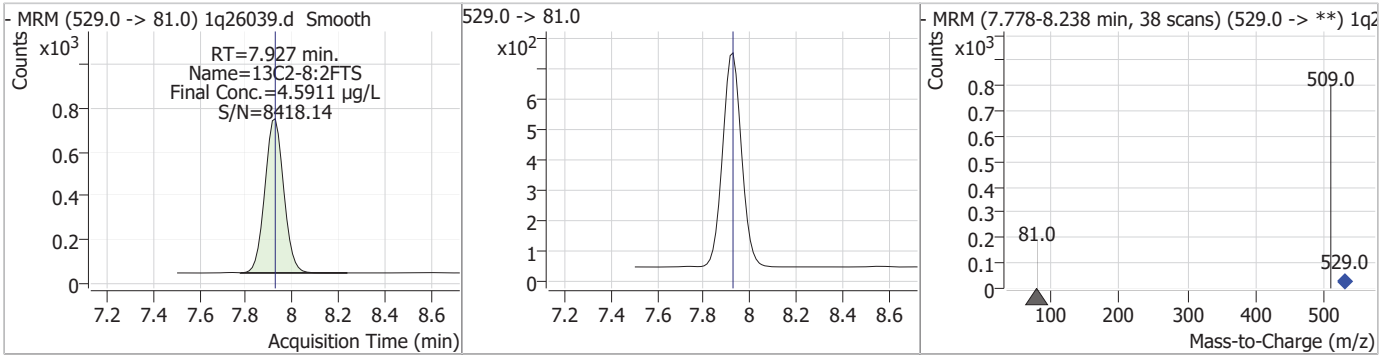


Perfluorinated Compounds by LC/MS/MS

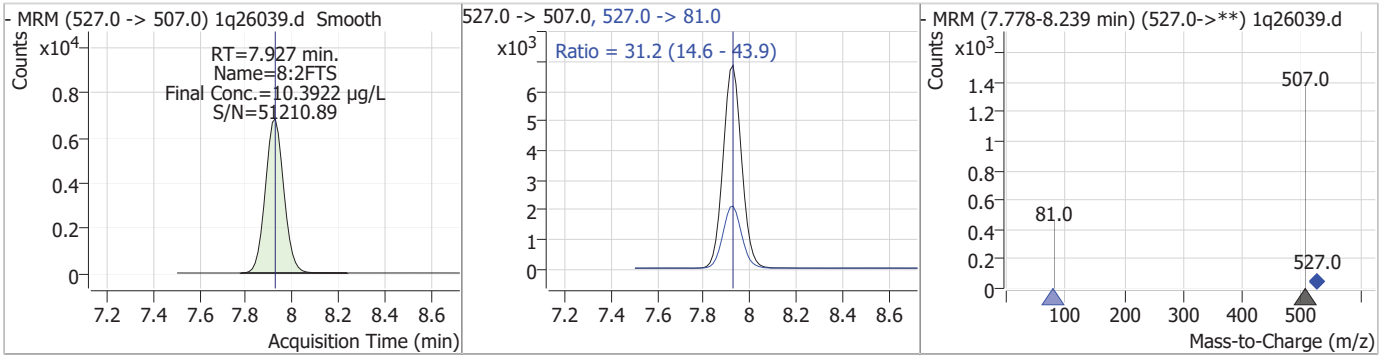
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.12	7.81	0.00	12055	449.0 -> 99.0	54.2	25.3	76.0



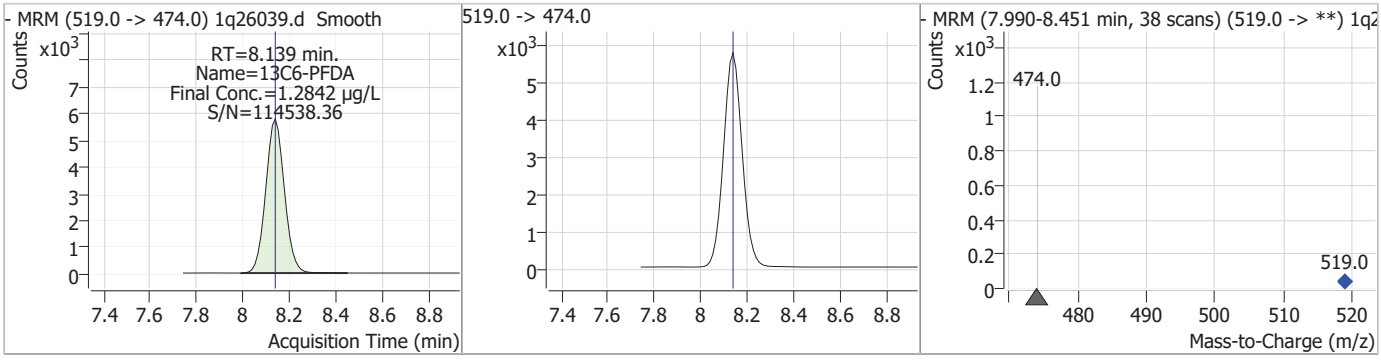
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.59	7.93	0.00	4001				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.39	7.93	0.00	37803	527.0 -> 81.0	31.2	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.28	8.14	0.00	32065				



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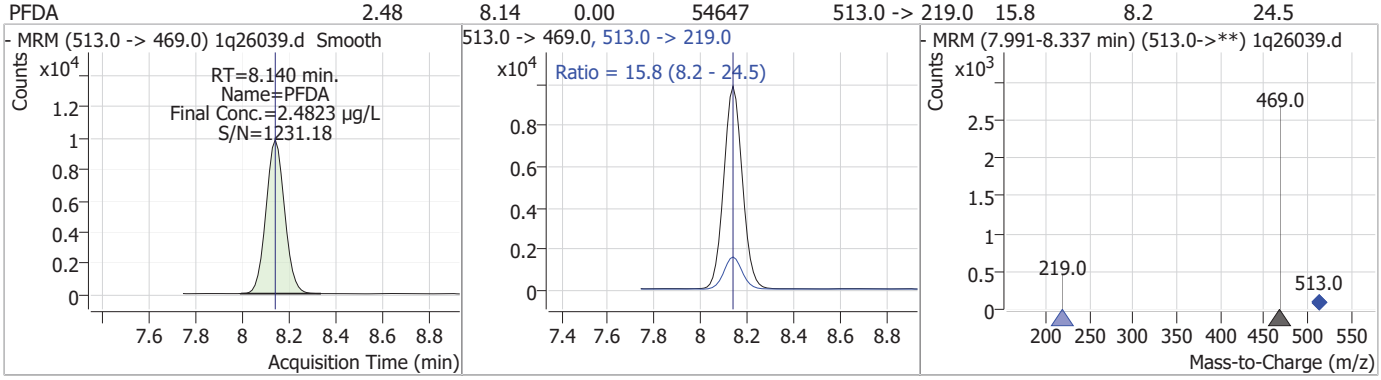
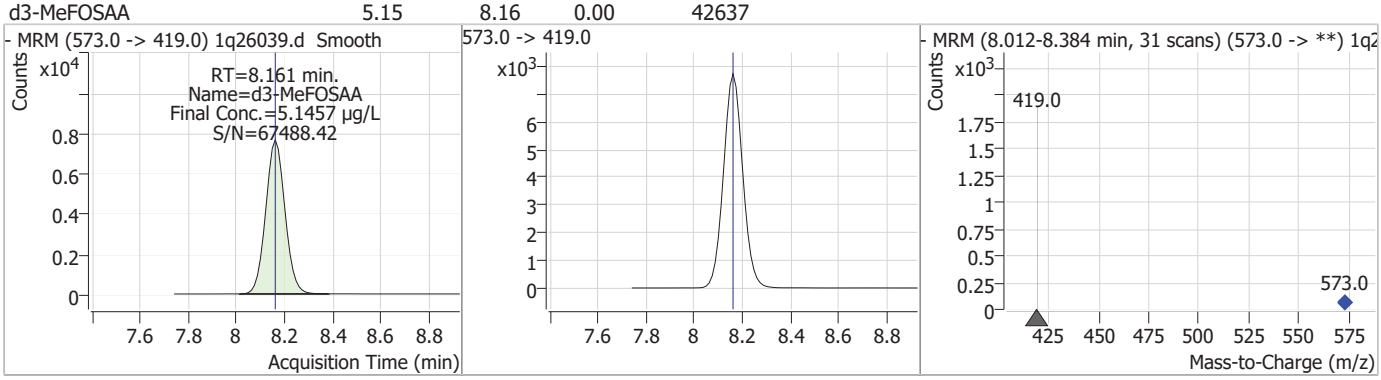
Perfluorinated Compounds by LC/MS/MS

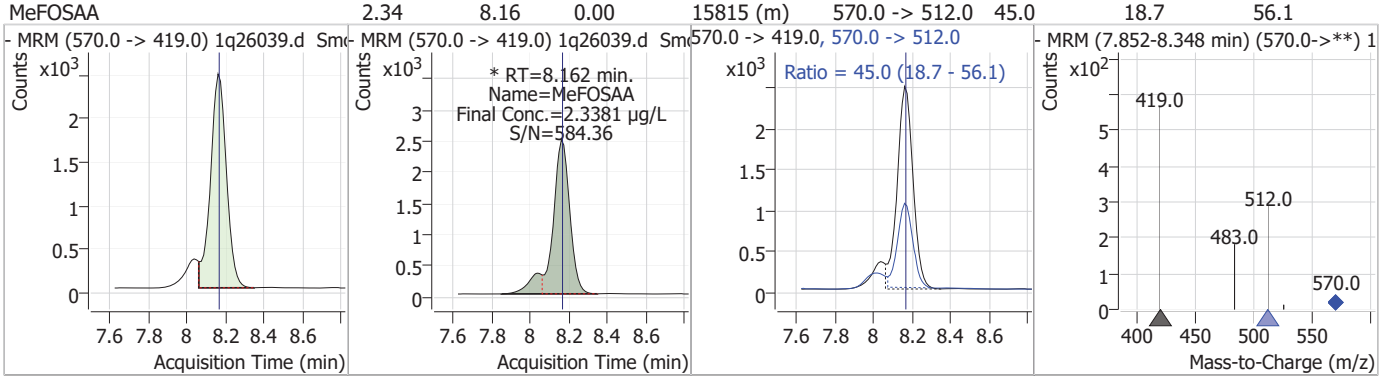
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.48	8.14	0.00	54647	513.0 -> 219.0	15.8	8.2	24.5



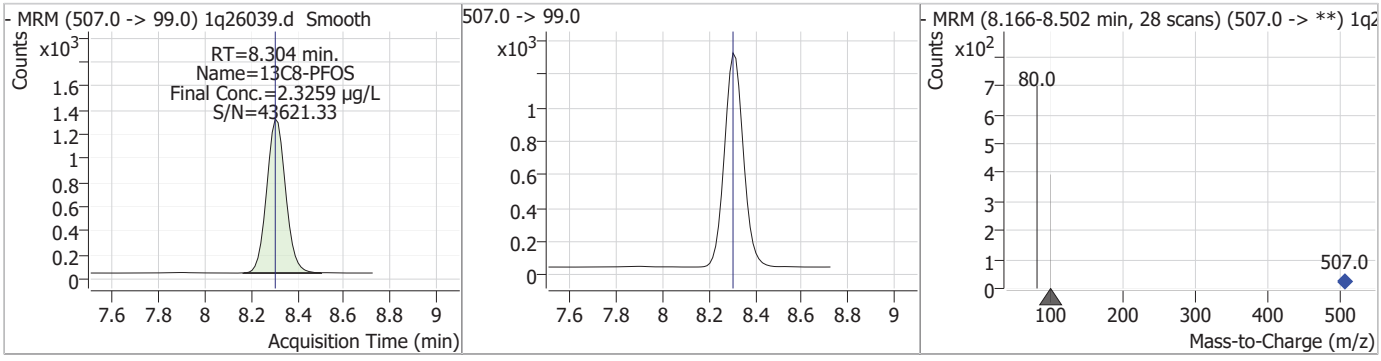
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.15	8.16	0.00	42637				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.34	8.16	0.00	15815 (m)	570.0 -> 512.0	45.0	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.33	8.30	0.00	7282				



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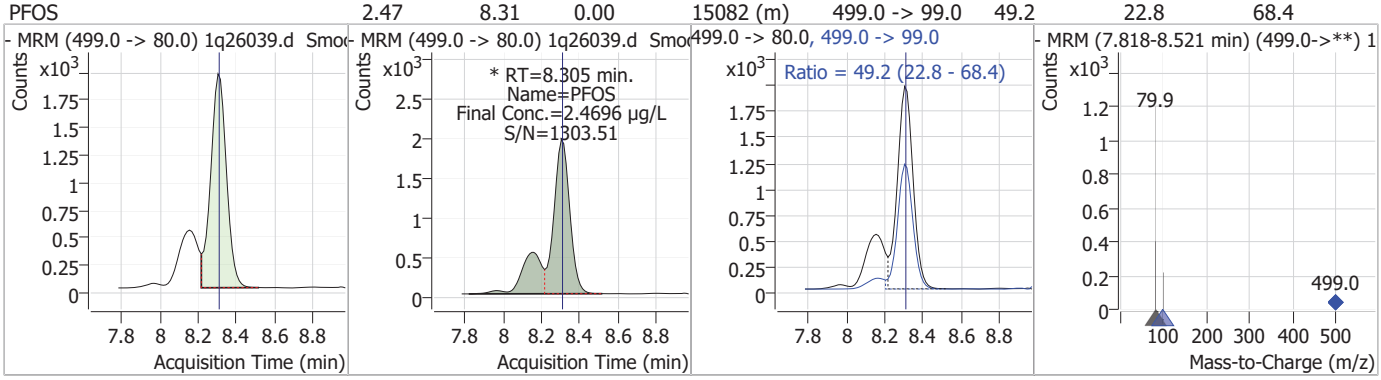
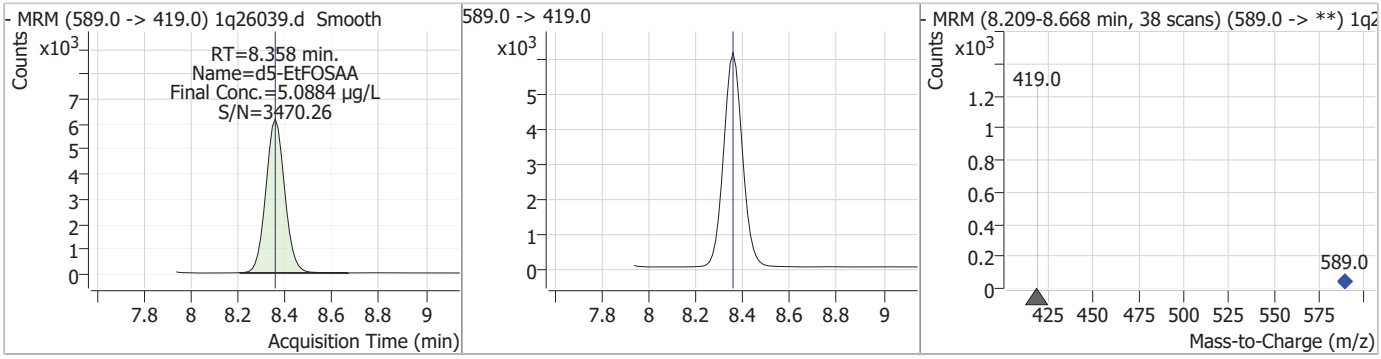
Perfluorinated Compounds by LC/MS/MS

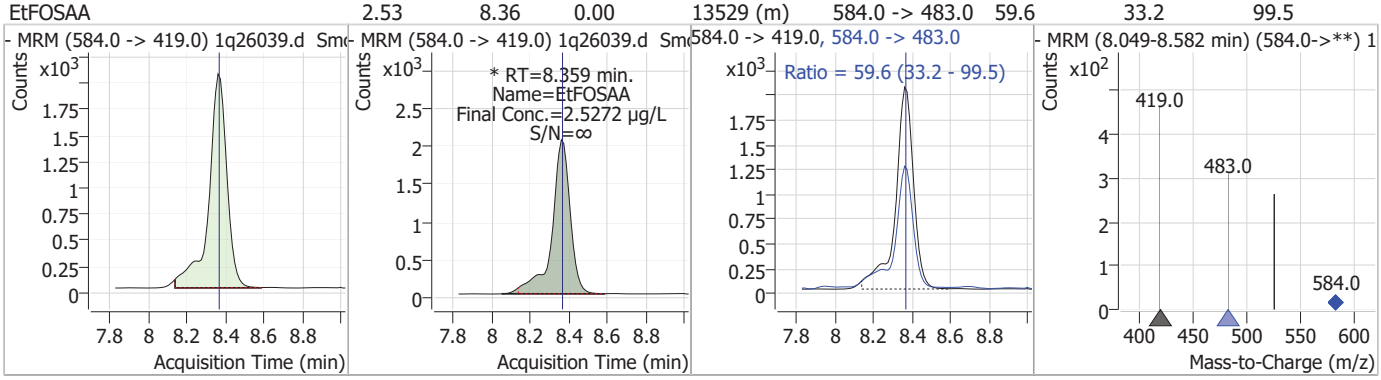
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.47	8.31	0.00	15082 (m)	499.0 -> 99.0	49.2	22.8	68.4



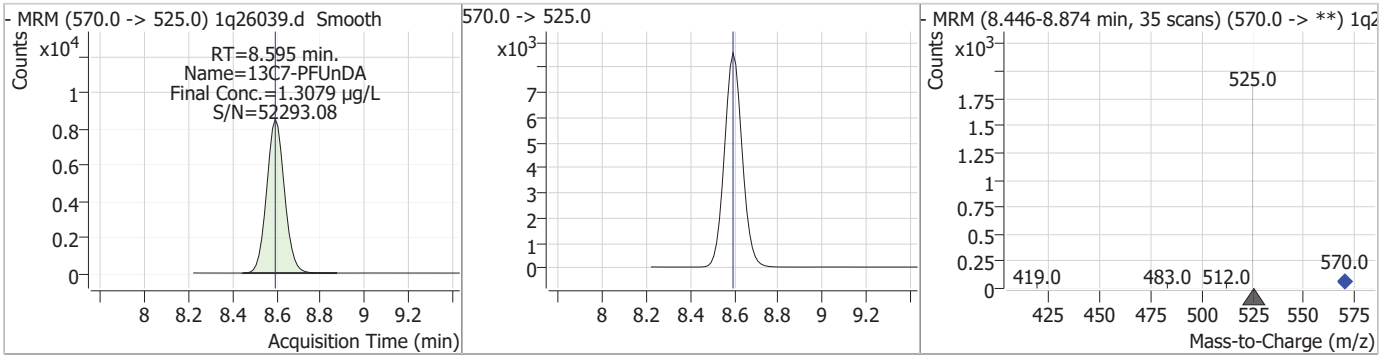
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.09	8.36	0.00	34326				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.53	8.36	0.00	13529 (m)	584.0 -> 483.0	59.6	33.2	99.5

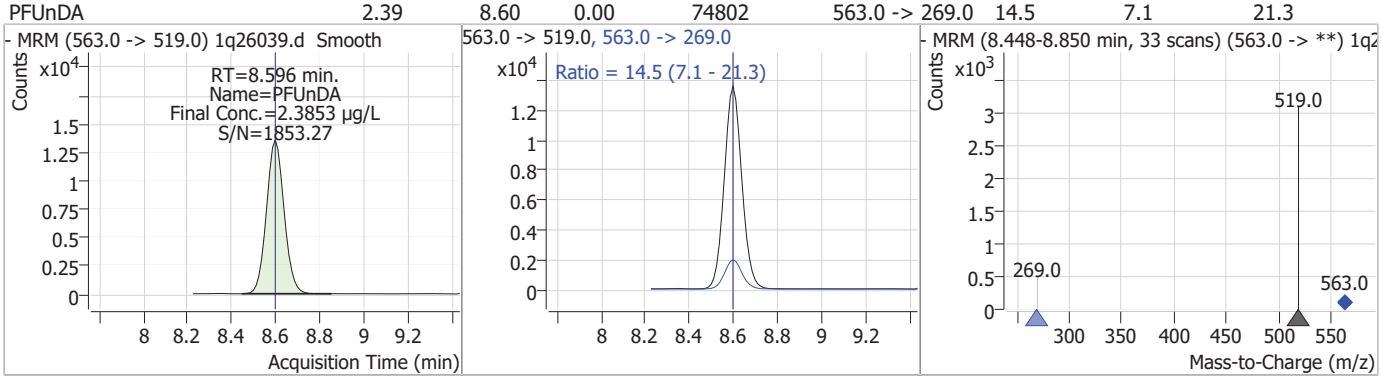


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.31	8.59	0.00	47404				

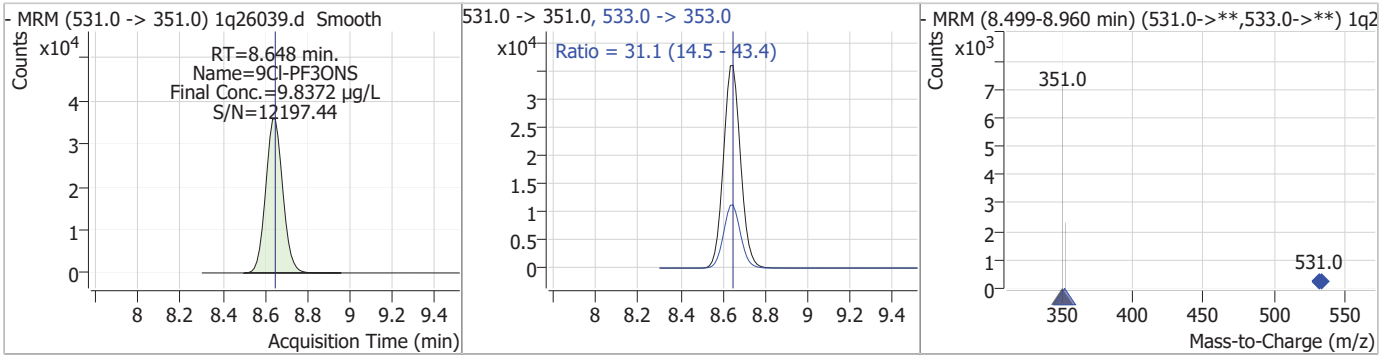


Perfluorinated Compounds by LC/MS/MS

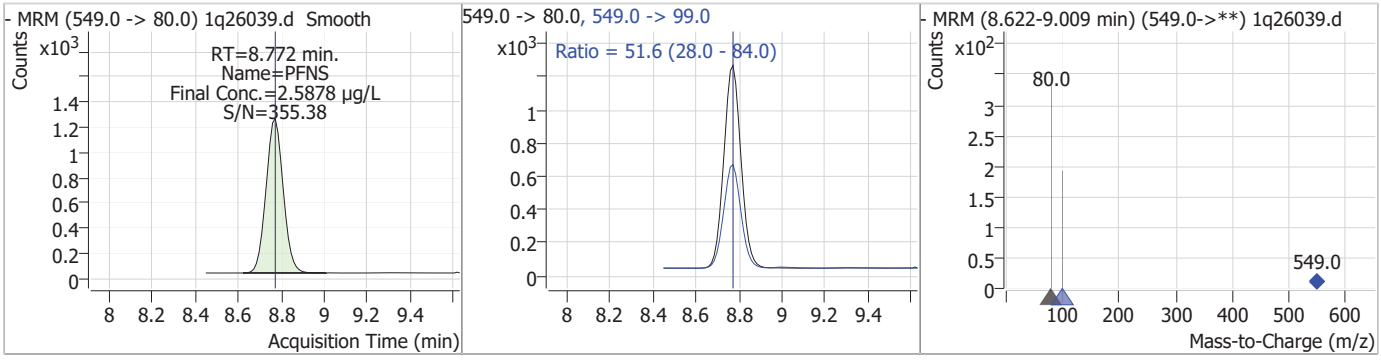
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.39	8.60	0.00	74802	563.0 -> 269.0	14.5	7.1	21.3



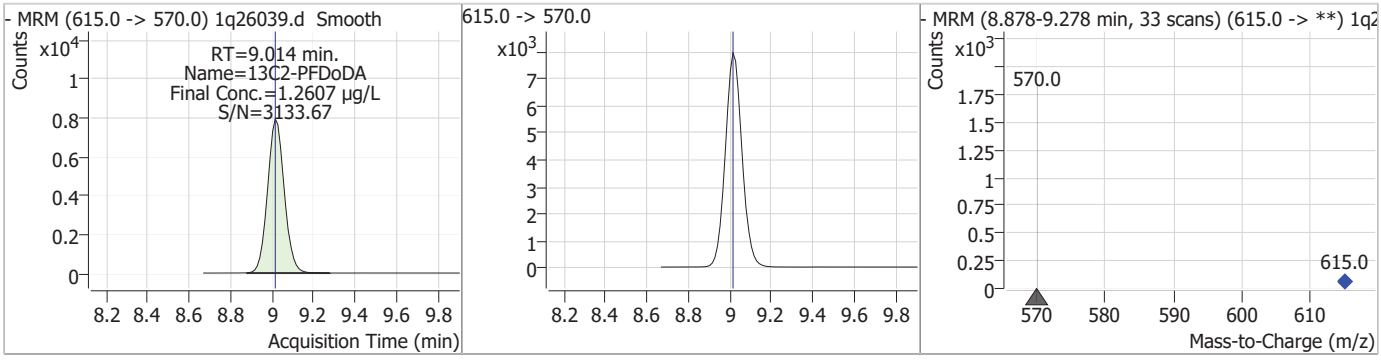
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.84	8.65	0.00	201325	533.0 -> 353.0	31.1	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.59	8.77	0.00	6785	549.0 -> 99.0	51.6	28.0	84.0

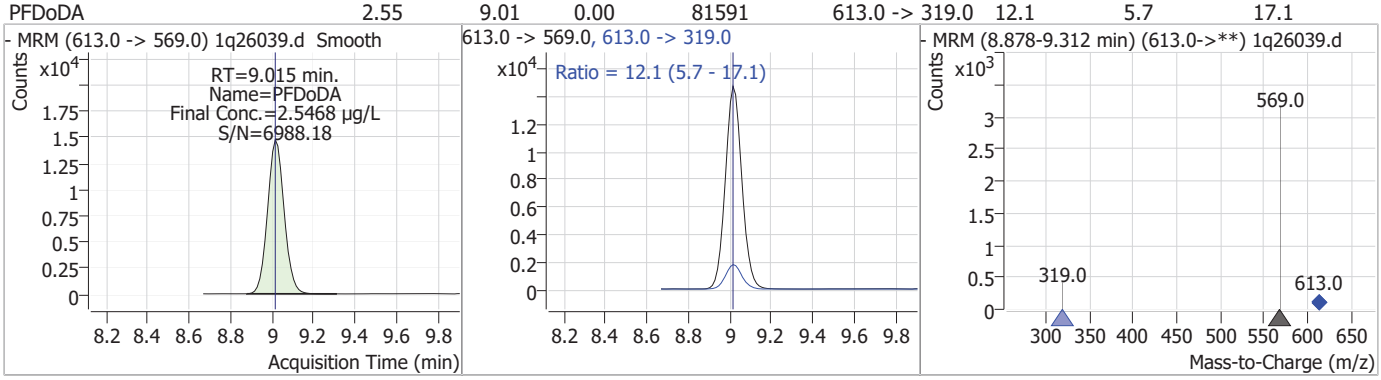


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.26	9.01	0.00	44085				

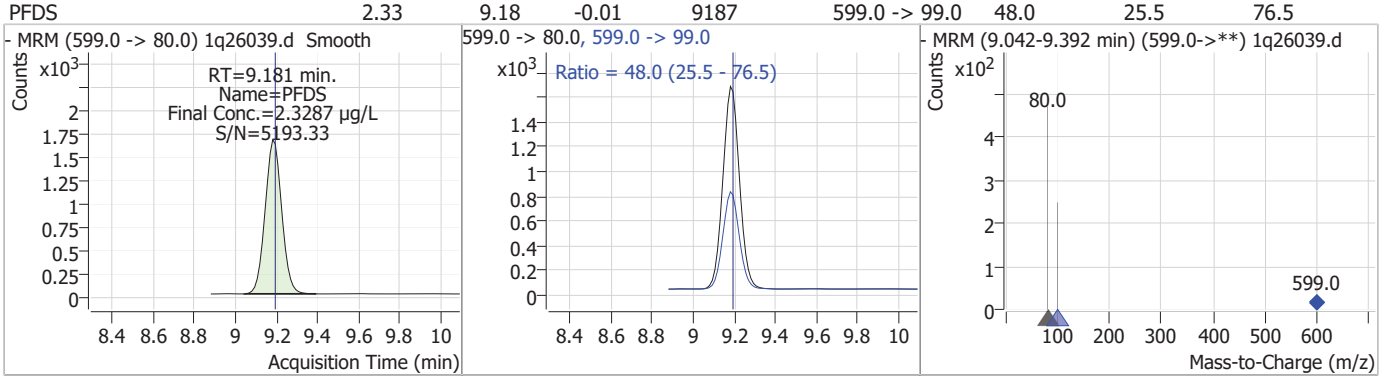


Perfluorinated Compounds by LC/MS/MS

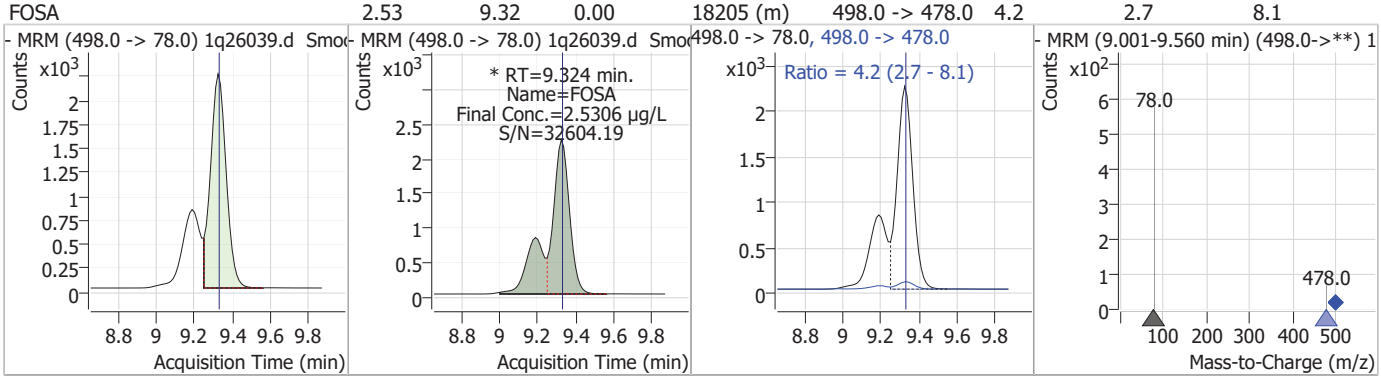
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.55	9.01	0.00	81591	613.0 -> 319.0	12.1	5.7	17.1



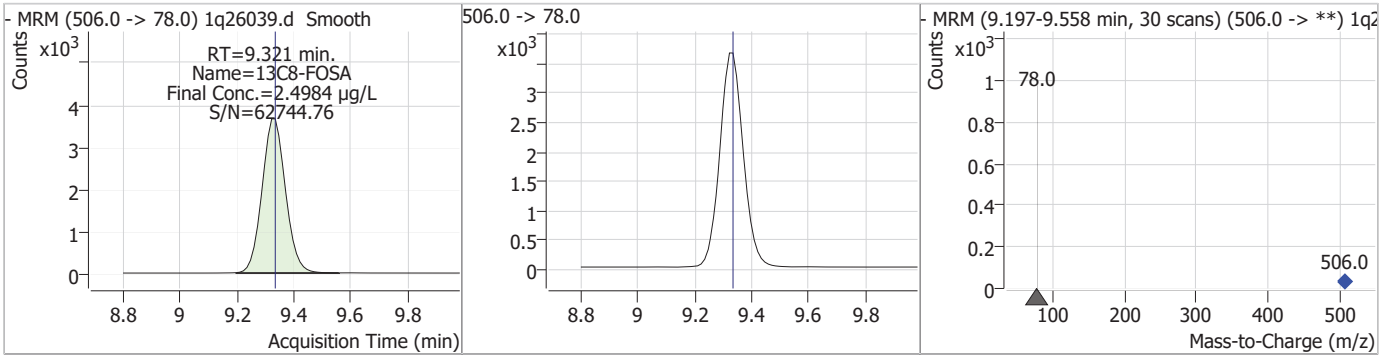
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.33	9.18	-0.01	9187	599.0 -> 99.0	48.0	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.53	9.32	0.00	18205 (m)	498.0 -> 478.0	4.2	2.7	8.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.50	9.32	-0.01	20757				



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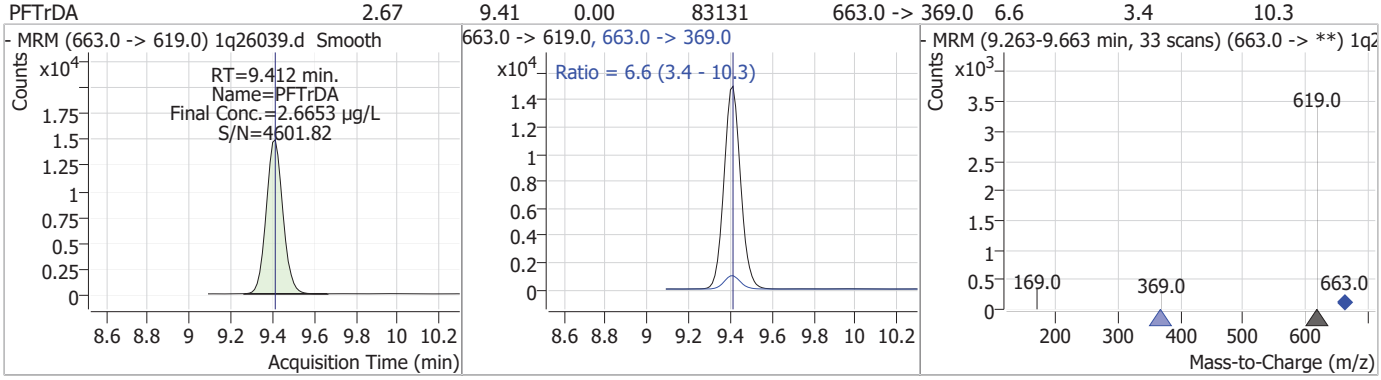
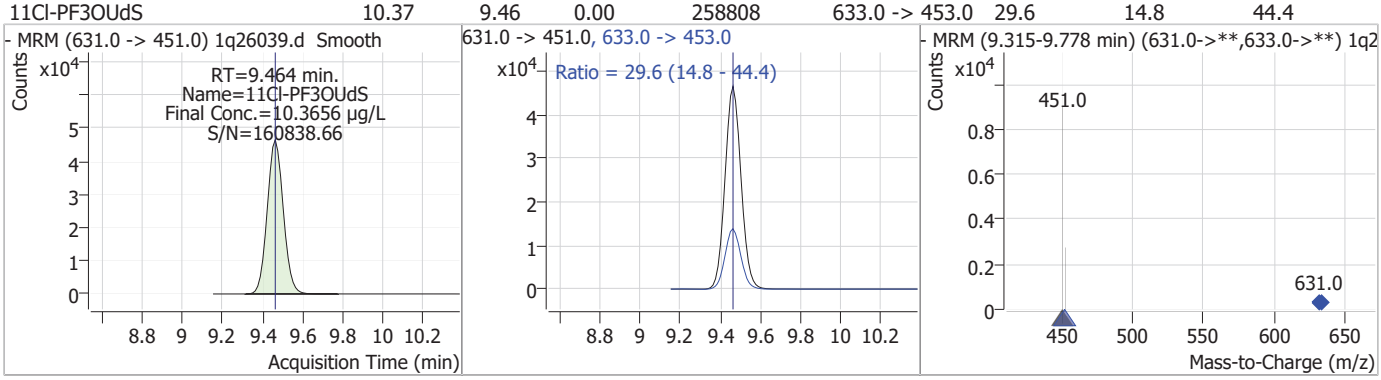
Perfluorinated Compounds by LC/MS/MS

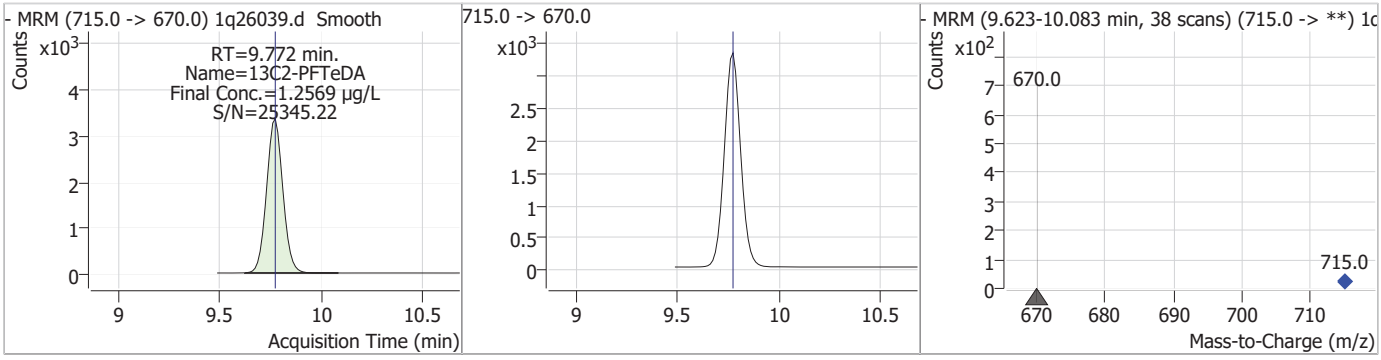
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.67	9.41	0.00	83131	663.0 -> 369.0	6.6	3.4	10.3



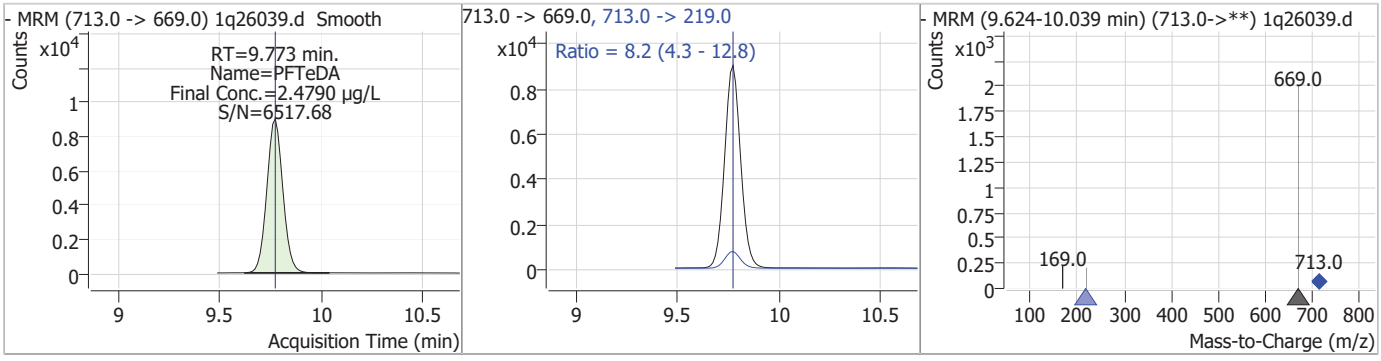
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	10.37	9.46	0.00	258808	633.0 -> 453.0	29.6	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.26	9.77	0.00	18495				

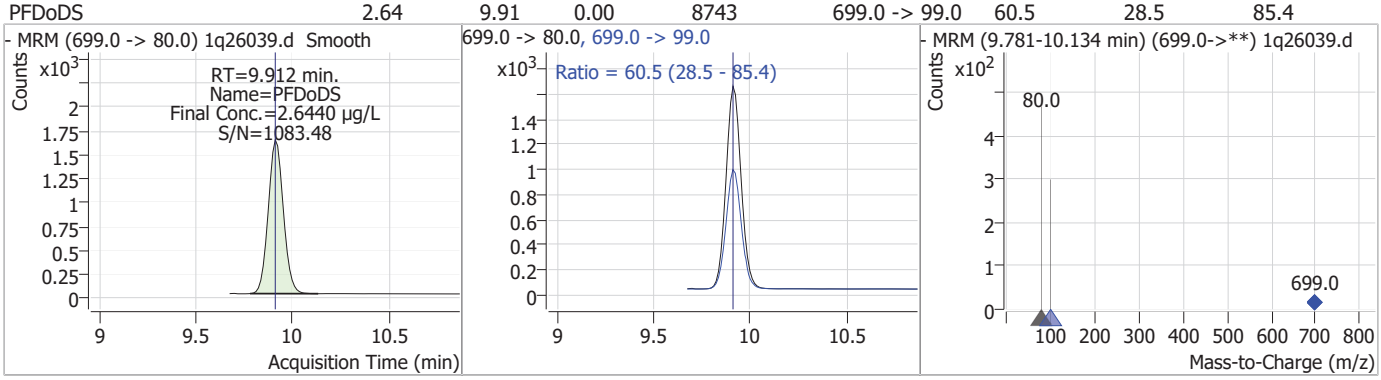


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.48	9.77	0.00	49382	713.0 -> 219.0	8.2	4.3	12.8

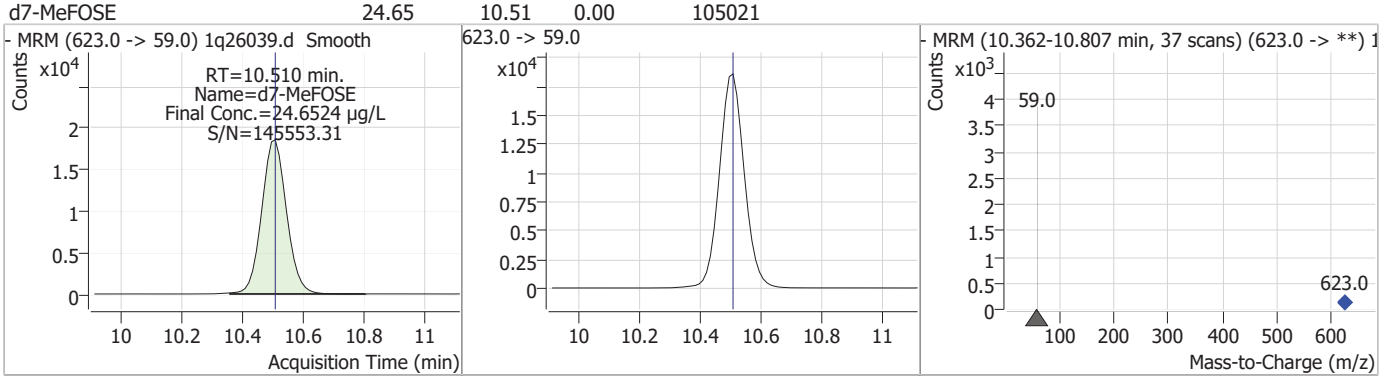


Perfluorinated Compounds by LC/MS/MS

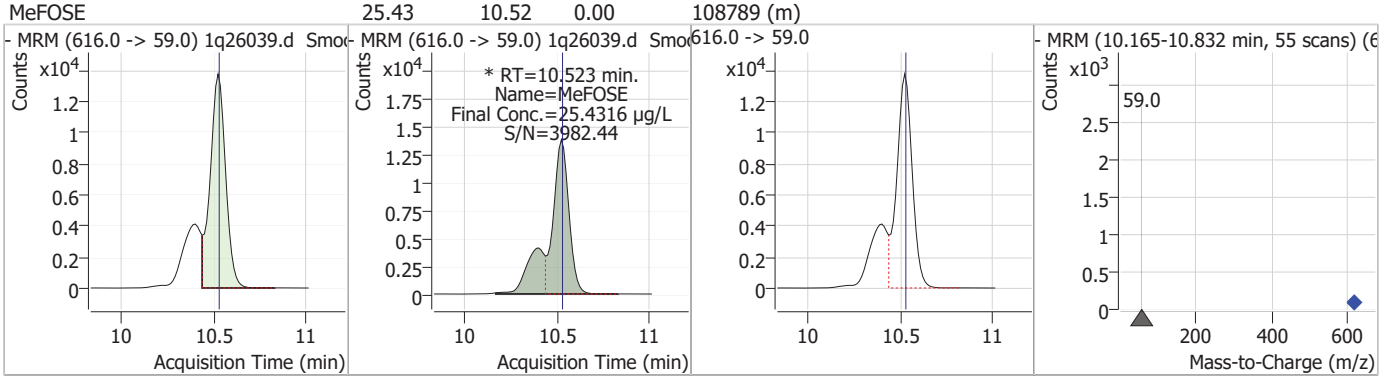
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.64	9.91	0.00	8743	699.0 -> 99.0	60.5	28.5	85.4



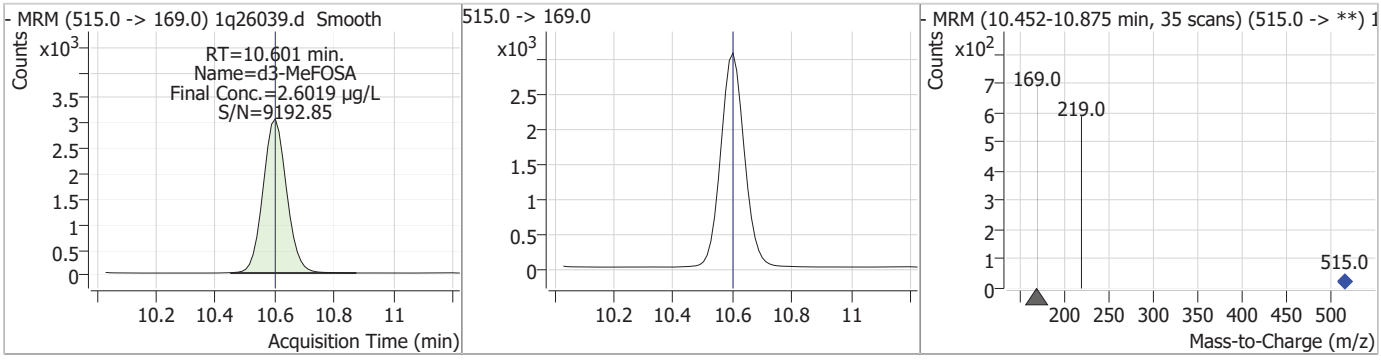
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.65	10.51	0.00	105021				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.43	10.52	0.00	108789 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.60	10.60	0.00	16756				



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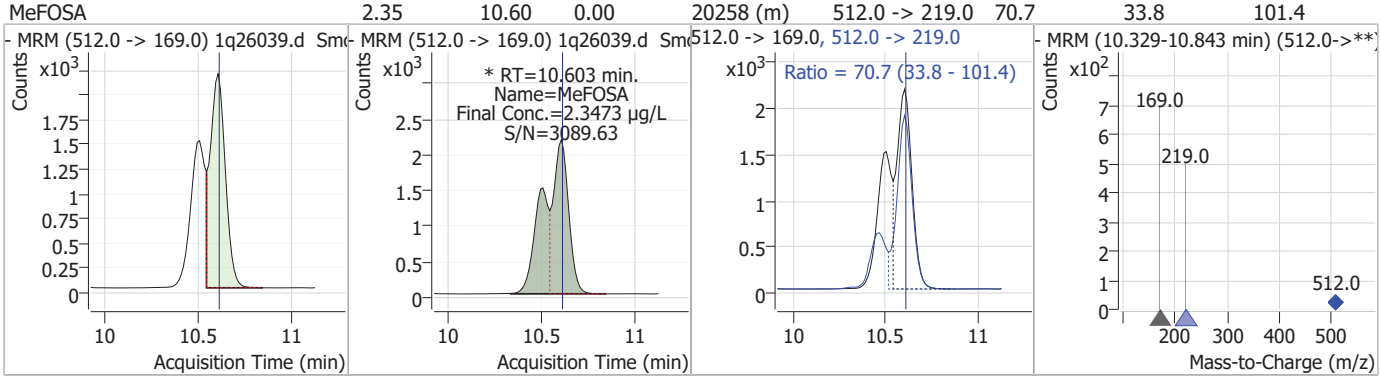
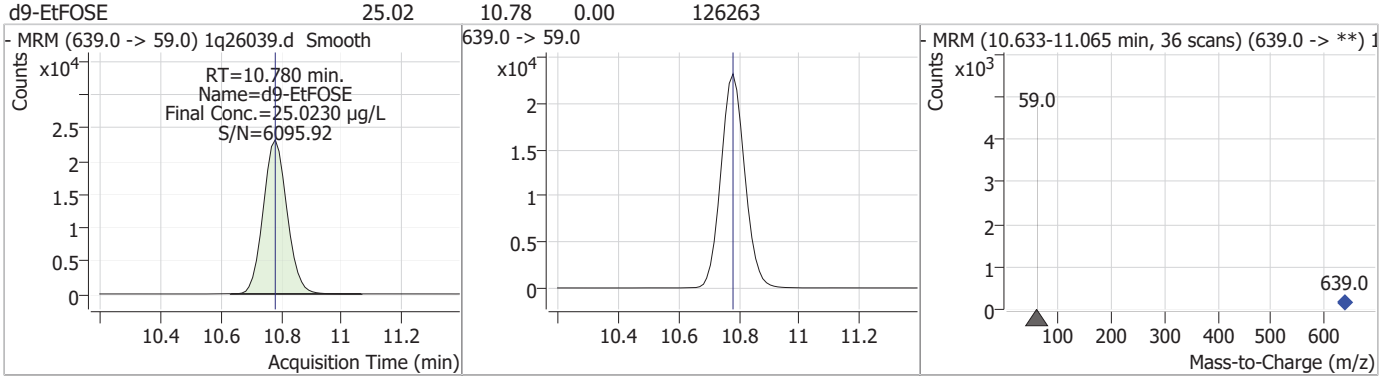
Perfluorinated Compounds by LC/MS/MS

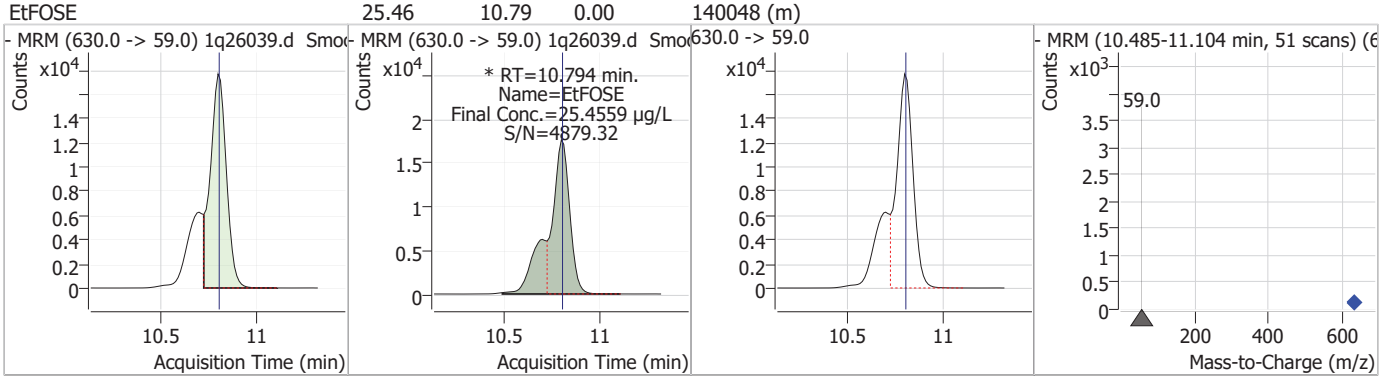
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.35	10.60	0.00	20258 (m)	512.0 -> 219.0	70.7	33.8	101.4



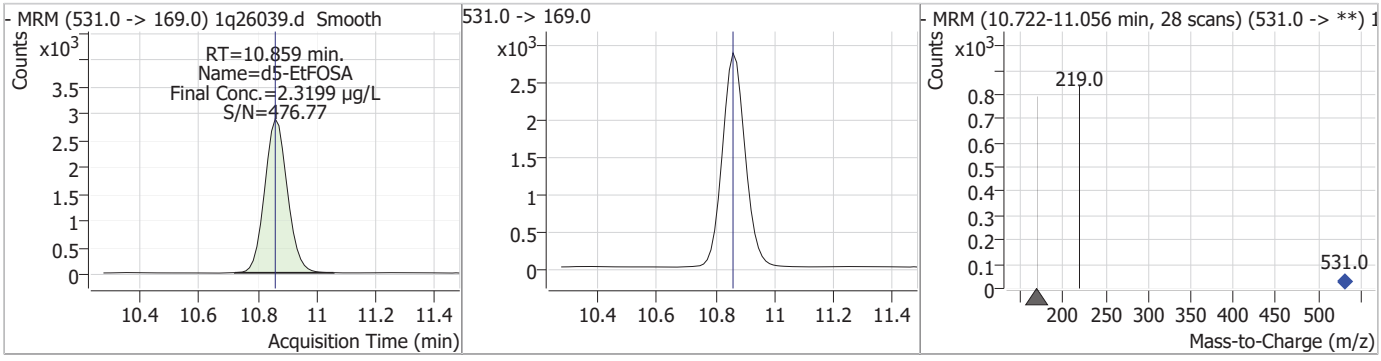
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.02	10.78	0.00	126263				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.46	10.79	0.00	140048 (m)				

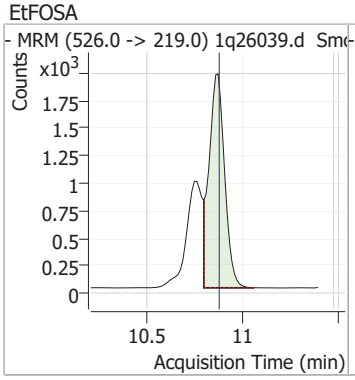


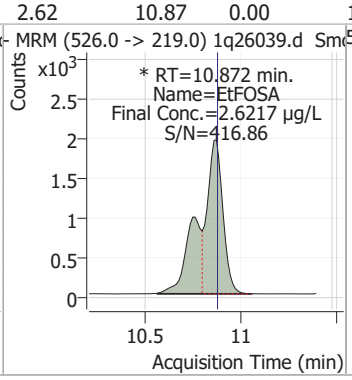
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.32	10.86	0.00	15265				

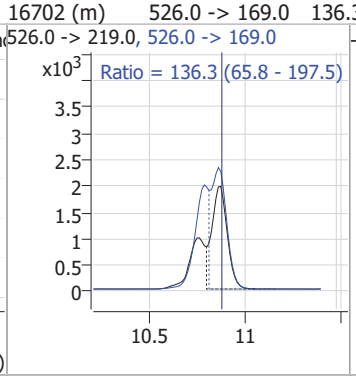


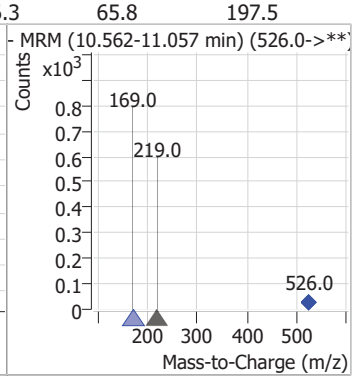
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.62	10.87	0.00	16702 (m)	526.0 -> 169.0	136.3	65.8	197.5









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Manual Integration Approval Summary

Sample Number: T1Q361-CC361
Lab FileID: 1Q26039.D
Injection Time: 05/14/25 19:07

Method: EPA 1633
Analyst approved: 05/15/25 01:25 Rensel John Romano
Supervisor approved: 05/15/25 05:29 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.26	Split peak
Perfluorononanoic acid	375-95-1		7.66	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.30	Split peak
EtFOSAA	2991-50-6		8.36	Split peak
PFOSA	754-91-6		9.32	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSE	1691-99-2		10.79	Split peak
EtFOSA	4151-50-2		10.87	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/15/25 05:29

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26040.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/14/2025 7:22:34 PM
Sample Name : CC361-1.0LL
Vial : P1-A2
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : t1q361.batch.bin
Sample Information : OP63461,T1Q361,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	180793	10.00 µg/L	0.000
M5-PFPeA	4.636	268.0 -> 223.0	110426	5.00 µg/L	-0.012
M5-PFHxA	5.746	318.0 -> 273.0	62787	2.50 µg/L	-0.012
M4-PFHpA	6.553	367.0 -> 322.0	50966	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	82469	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	28907	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	28984	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	44035	1.25 µg/L	0.000
M2-PFDoDA	9.014	615.0 -> 570.0	41399	1.25 µg/L	0.000
M2-PFTeDA	9.772	715.0 -> 670.0	17642	1.25 µg/L	0.000
M8-FOSA	9.334	506.0 -> 78.0	19086	2.50 µg/L	0.000
M3-PFBS	5.699	302.0 -> 99.0	6944	2.50 µg/L	-0.012
M3-PFHxS	7.263	402.0 -> 99.0	6994	2.50 µg/L	-0.012
M8-PFOS	8.304	507.0 -> 99.0	7041	2.50 µg/L	0.000
M2-4:2FTS	5.446	329.0 -> 81.0	1619	5.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	2859	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	4149	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	38789	5.00 µg/L	0.000
M3-HFPO-DA	6.075	287.0 -> 169.0	20980	10.00 µg/L	-0.012
M5-EtFOSAA	8.358	589.0 -> 419.0	30947	5.00 µg/L	0.000
M7-MeFOSE	10.510	623.0 -> 59.0	100475	25.00 µg/L	0.000
M9-EtFOSE	10.780	639.0 -> 59.0	118314	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	14737	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	14724	2.50 µg/L	0.000
13C4-PFOS	8.304	503.0 -> 80.0	13777	2.50 µg/L	0.000
13C3-PFBA	3.263	216.0 -> 172.0	77443	5.00 µg/L	0.013
18O2-PFHxS	7.262	403.0 -> 84.0	7594	2.50 µg/L	-0.012
13C4-PFOA	7.149	417.0 -> 372.0	89972	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	24786	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	29232	1.25 µg/L	0.000
13C2-PFHxA	5.747	315.0 -> 270.0	60844	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1619	6.39 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 127.8%	
13C2-6:2FTS	6.922	429.0 -> 81.0	2859	5.82 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 116.3%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4149	5.36 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.3%	
13C2-PFDoDA	9.014	615.0 -> 570.0	41399	1.23 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.5%	
13C2-PFTeDA	9.772	715.0 -> 670.0	17642	1.25 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.7%	
13C3-PFBS	5.699	302.0 -> 99.0	6944	2.74 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 109.6%	
13C3-PFHxS	7.263	402.0 -> 99.0	6994	2.75 µg/L	-0.012

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 110.2%		
13C4-PFBA	3.260	217.0 -> 172.0	180793	9.82 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.2%		
13C4-PFHpA	6.553	367.0 -> 322.0	50966	2.41 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.6%		
13C5-PFHxA	5.746	318.0 -> 273.0	62787	2.43 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.0%		
13C5-PFPeA	4.636	268.0 -> 223.0	110426	4.95 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.0%		
13C6-PFDA	8.139	519.0 -> 474.0	28984	1.21 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.6%		
13C7-PFUnDA	8.595	570.0 -> 525.0	44035	1.26 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.1%		
13C8-FOSA	9.334	506.0 -> 78.0	19086	2.27 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.8%		
13C8-PFOA	7.148	421.0 -> 376.0	82469	2.52 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.7%		
13C8-PFOS	8.304	507.0 -> 99.0	7041	2.22 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 88.9%		
13C9-PFNA	7.656	472.0 -> 427.0	28907	1.21 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.0%		
d3-MeFOSAA	8.161	573.0 -> 419.0	38789	4.62 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.5%		
13C3-HFPO-DA	6.075	287.0 -> 169.0	20980	9.25 µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 92.5%		
d3-MeFOSA	10.601	515.0 -> 169.0	14724	2.26 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.3%		
d5-EtFOSAA	8.358	589.0 -> 419.0	30947	4.53 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.6%		
d7-MeFOSE	10.510	623.0 -> 59.0	100475	23.30 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 93.2%		
d9-EtFOSE	10.780	639.0 -> 59.0	118314	23.16 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 92.6%		
d5-EtFOSA	10.859	531.0 -> 169.0	14737	2.21 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 88.5%		
Target Compounds						QValue
4:2FTS	5.434	327.0 -> 307.0	1681	0.56 µg/L		86
		327.0 -> 81.0	862			
6:2FTS	6.922	427.0 -> 407.0	2302	0.63 µg/L		97
		427.0 -> 81.0	798			
8:2FTS	7.915	527.0 -> 507.0	3433	0.91 µg/L		89
		527.0 -> 81.0	794			
EtFOSAA	8.359	584.0 -> 419.0	841	0.17 µg/L	m	90
		584.0 -> 483.0	494			
FOSA	9.324	498.0 -> 78.0	1357	0.21 µg/L	m	95
		498.0 -> 478.0	50			
MeFOSAA	8.162	570.0 -> 419.0	1066	0.17 µg/L	m	73
		570.0 -> 512.0	570			
PFBA	3.254	213.0 -> 169.0	3767	0.75 µg/L		100
PFBS	5.700	299.0 -> 80.0	1332	0.17 µg/L		87
		299.0 -> 99.0	410			
PFDA	8.140	513.0 -> 469.0	3544	0.18 µg/L		100
		513.0 -> 219.0	571			
PFDoDA	9.015	613.0 -> 569.0	5977	0.20 µg/L		100
		613.0 -> 319.0	692			
PFDS	9.181	599.0 -> 80.0	525	0.14 µg/L		99

Perfluorinated Compounds by LC/MS/MS

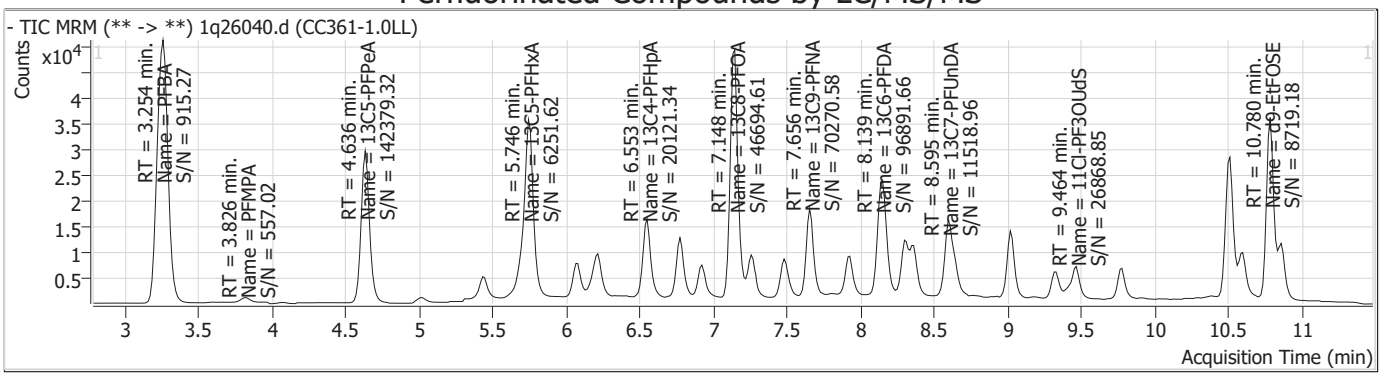
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	273				
PFHpA	6.554	363.0 -> 319.0	4752	0.17	µg/L		87
		363.0 -> 169.0	1011				
PFHpS	7.809	449.0 -> 80.0	996	0.21	µg/L		86
		449.0 -> 99.0	602				
PFHxA	5.748	313.0 -> 269.0	4368	0.19	µg/L		99
		313.0 -> 119.0	119				
PFHxS	7.264	399.0 -> 80.0	1057	0.19	µg/L	m	94
		399.0 -> 99.0	493				
PFNA	7.657	463.0 -> 419.0	2723	0.19	µg/L	m	86
		463.0 -> 219.0	994				
PFNS	8.772	549.0 -> 80.0	522	0.21	µg/L		91
		549.0 -> 99.0	260				
PFOA	7.149	413.0 -> 369.0	5341	0.19	µg/L	m	89
		413.0 -> 169.0	1394				
PFOS	8.305	499.0 -> 80.0	1209	0.20	µg/L	m	94
		499.0 -> 99.0	600				
PFPeA	4.638	263.0 -> 219.0	6928	0.36	µg/L		100
PFPeS	6.617	349.0 -> 80.0	697	0.19	µg/L		88
		349.0 -> 99.0	267				
PFTeDA	9.773	713.0 -> 669.0	3010	0.16	µg/L		98
		713.0 -> 219.0	273				
PFTrDA	9.412	663.0 -> 619.0	5317	0.18	µg/L		96
		663.0 -> 369.0	449				
PFUnDA	8.596	563.0 -> 519.0	5480	0.19	µg/L		98
		563.0 -> 269.0	739				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	17116	0.76	µg/L		97
		633.0 -> 453.0	4828				
9Cl-PF3ONS	8.648	531.0 -> 351.0	13687	0.74	µg/L		100
		533.0 -> 353.0	3975				
ADONA	6.776	377.0 -> 251.0	32315	0.70	µg/L		98
		377.0 -> 85.0	8627				
HFPO-DA	6.088	285.0 -> 169.0	1516	0.75	µg/L		92
		285.0 -> 185.0	100				
3:3FTCA	4.072	241.0 -> 177.0	948	0.91	µg/L		97
		241.0 -> 117.0	73				
5:3FTCA	6.216	341.0 -> 237.0	17376	4.27	µg/L		96
		341.0 -> 217.0	11647				
7:3FTCA	7.482	441.0 -> 337.0	19221	4.18	µg/L		95
		441.0 -> 317.0	9235				
EtFOSA	10.860	526.0 -> 219.0	1191	0.19	µg/L	m	92
		526.0 -> 169.0	1462				
EtFOSE	10.794	630.0 -> 59.0	9540	1.85	µg/L	m	100
MeFOSA	10.603	512.0 -> 169.0	1354	0.18	µg/L	m	94
		512.0 -> 219.0	982				
MeFOSE	10.523	616.0 -> 59.0	7548	1.84	µg/L	m	100
PFDoDS	9.912	699.0 -> 80.0	508	0.16	µg/L		69
		699.0 -> 99.0	404				
NFDHA	5.651	295.0 -> 201.0	500	0.33	µg/L		78
		201.0 -> 85.0	3054				
		295.0 -> 85.0	163				
PFMBA	5.027	279.0 -> 85.0	3827	0.37	µg/L		100
PFMPA	3.826	229.0 -> 85.0	4120	0.35	µg/L		100
PFEESA	6.182	315.0 -> 135.0	6844	0.31	µg/L		97
		315.0 -> 69.0	676				

 # = Qualifier out of range, m = manually integrated, + = Area summed

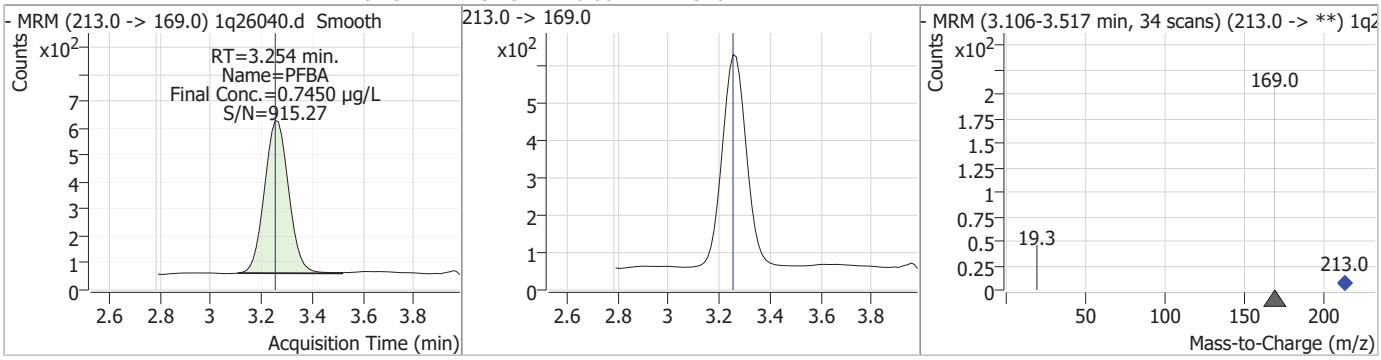
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

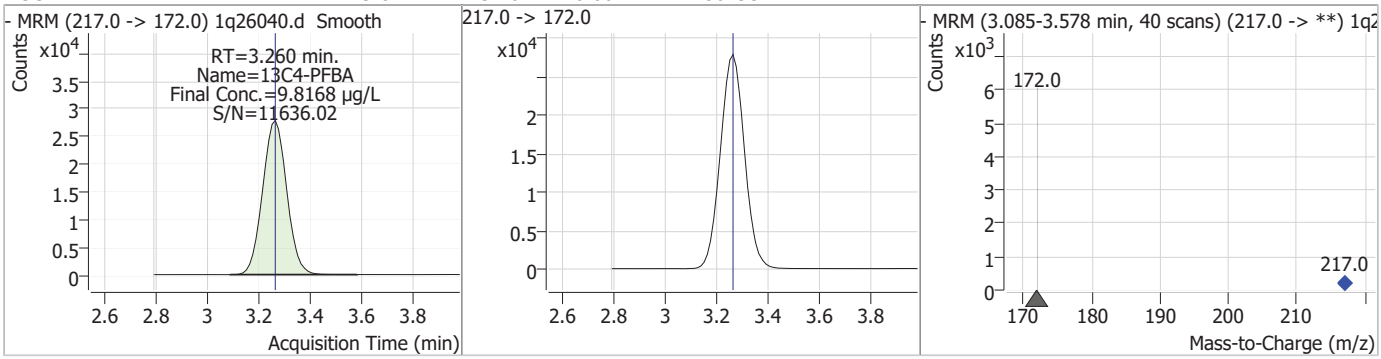
Perfluorinated Compounds by LC/MS/MS



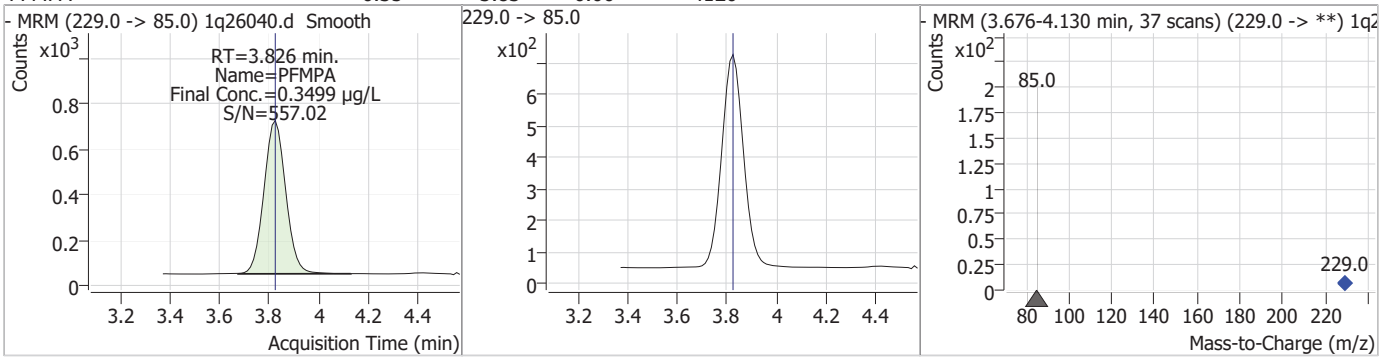
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.75	3.25	0.00	3767				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.82	3.26	0.00	180793				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.35	3.83	0.00	4120				



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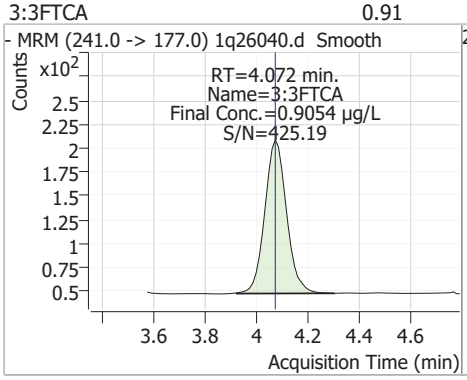
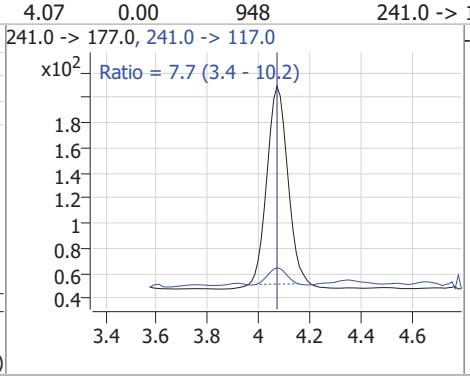
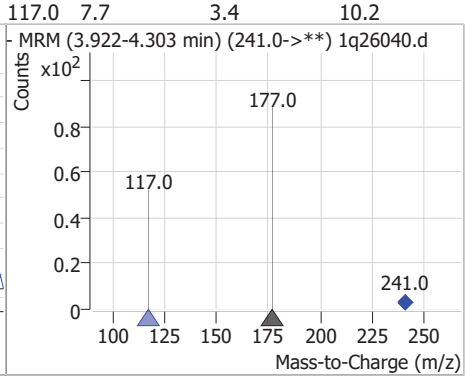
Perfluorinated Compounds by LC/MS/MS

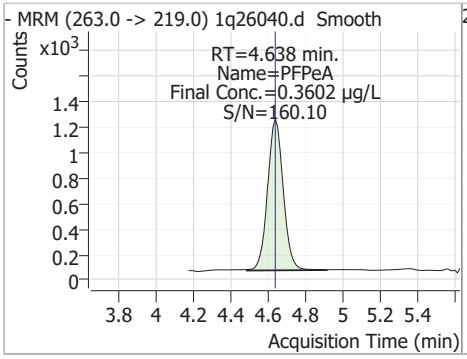
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	0.91	4.07	0.00	948	241.0 -> 117.0	7.7	3.4	10.2

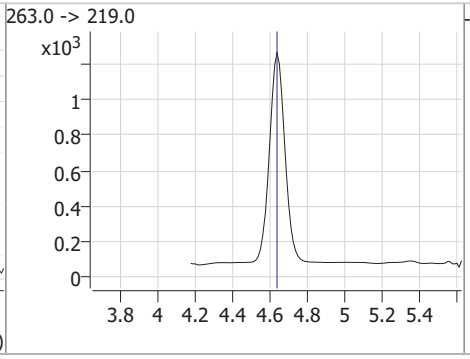


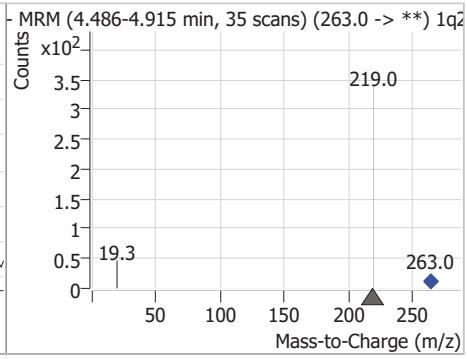




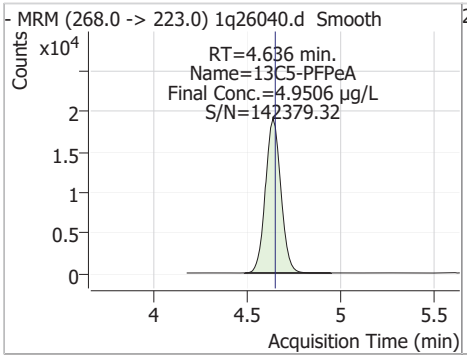
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.36	4.64	0.00	6928				

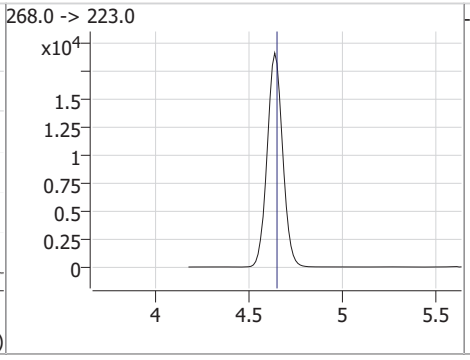


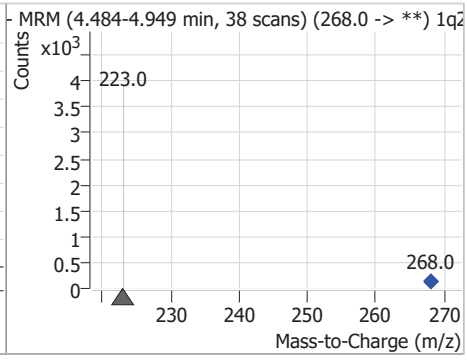




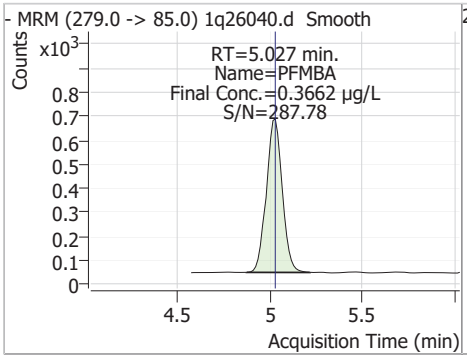
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.95	4.64	-0.01	110426				

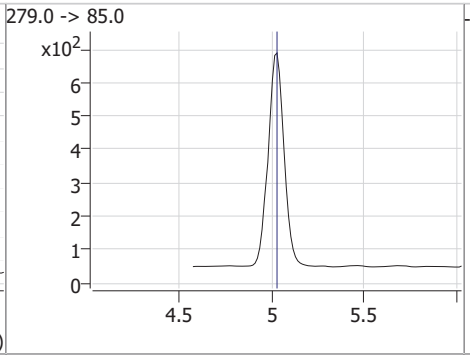


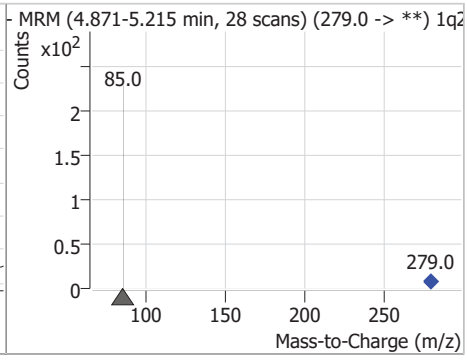




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.37	5.03	0.00	3827				

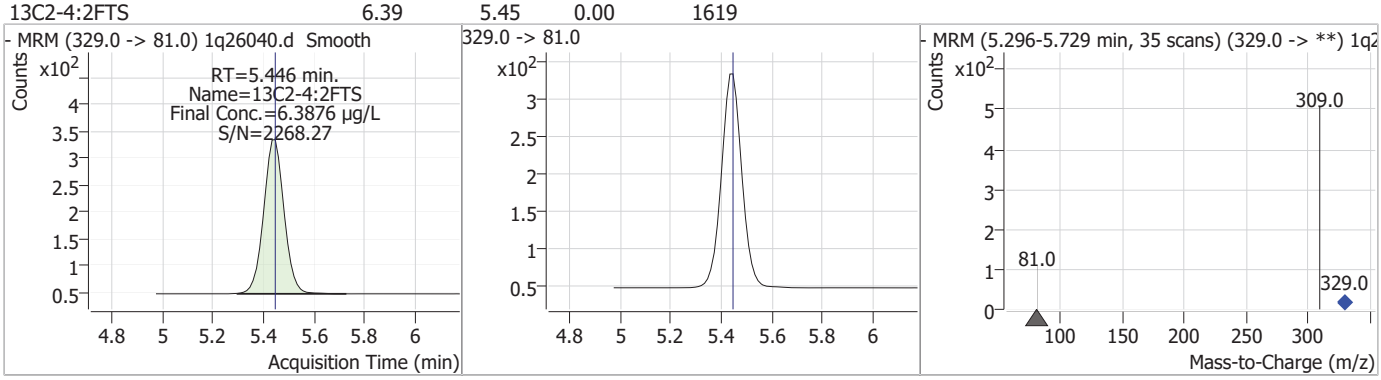




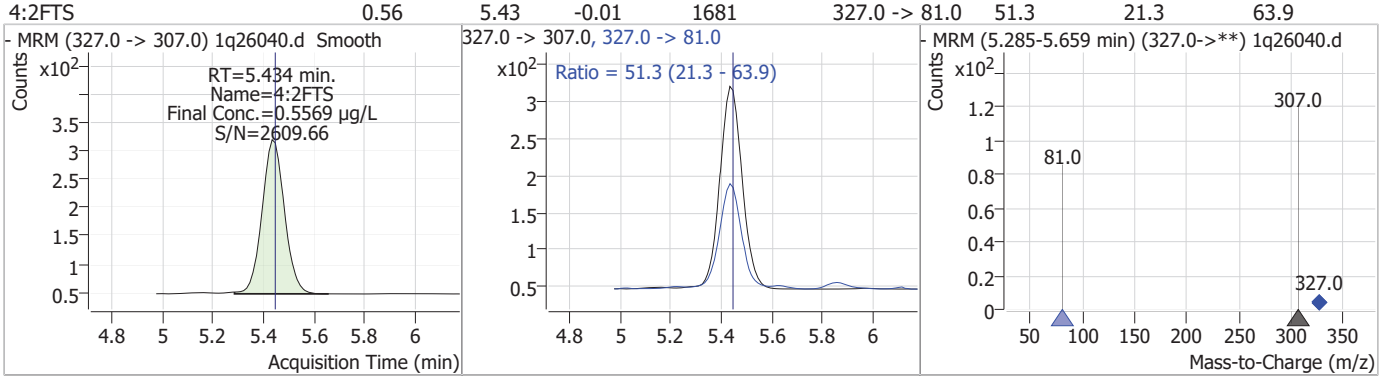


Perfluorinated Compounds by LC/MS/MS

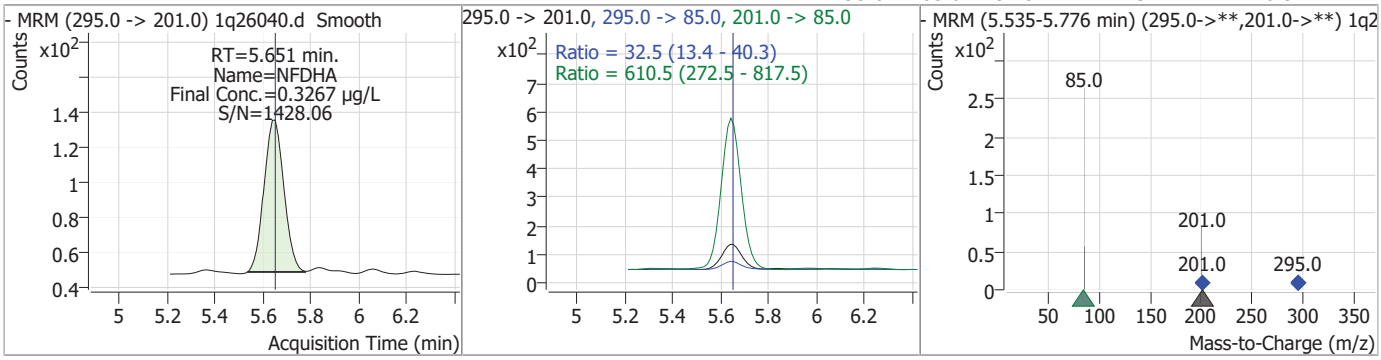
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	6.39	5.45	0.00	1619				



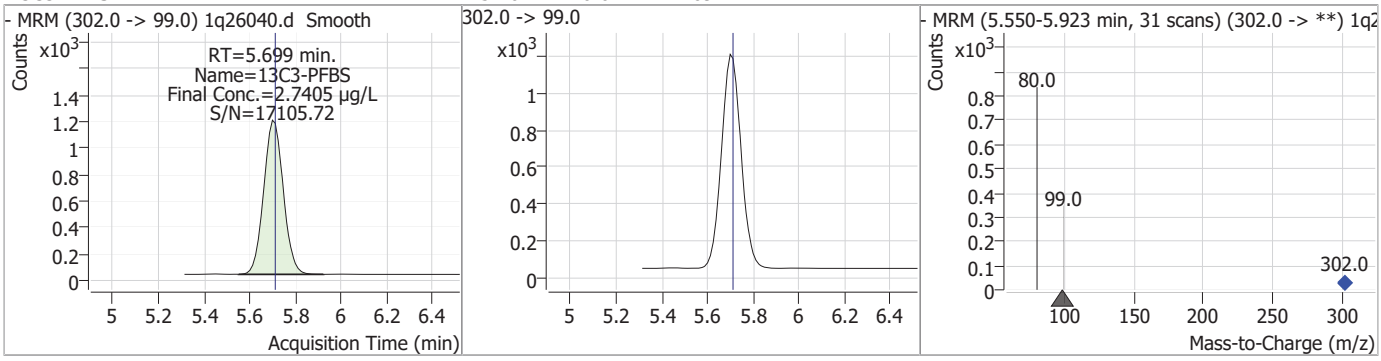
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	0.56	5.43	-0.01	1681	327.0 -> 81.0	51.3	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.33	5.65	0.00	500	201.0 -> 85.0	610.5	272.5	817.5
					295.0 -> 85.0	32.5	13.4	40.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.74	5.70	-0.01	6944				



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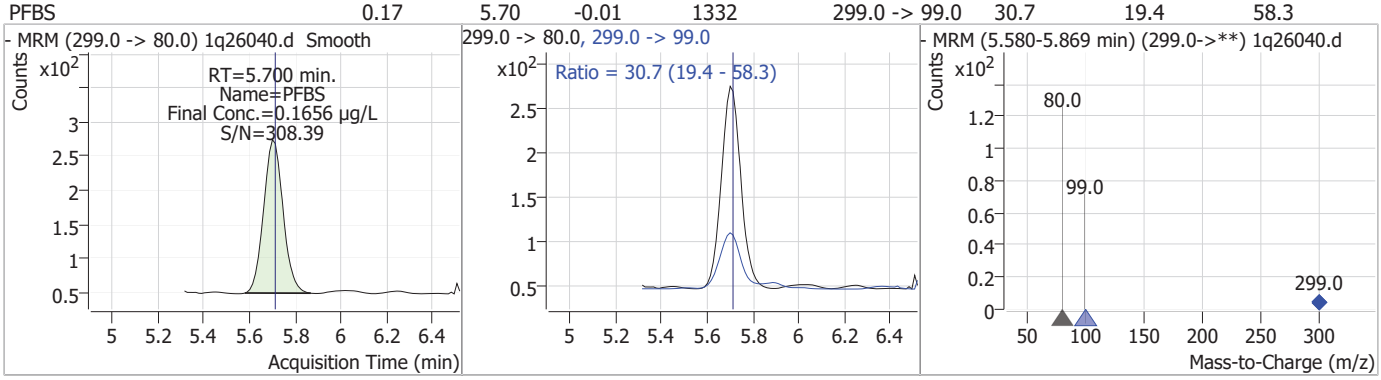
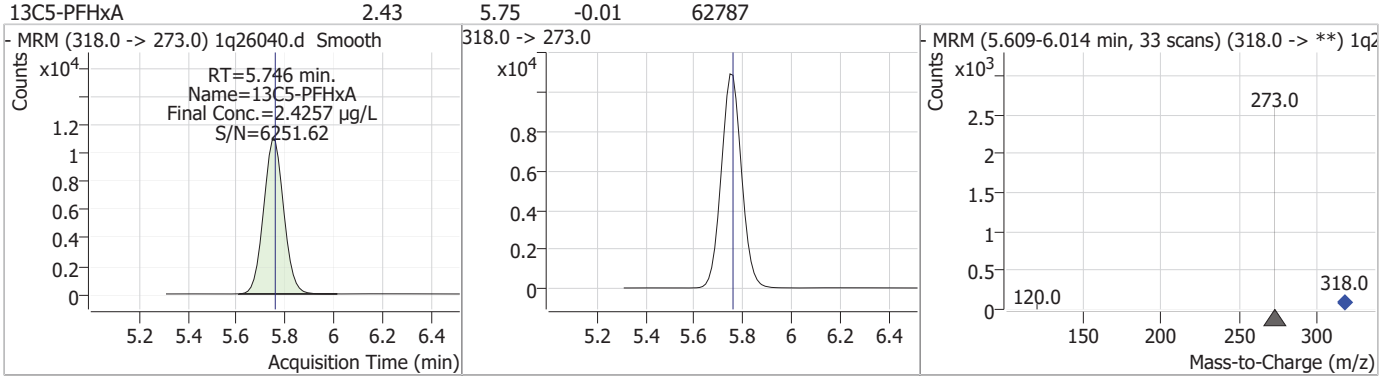
Perfluorinated Compounds by LC/MS/MS

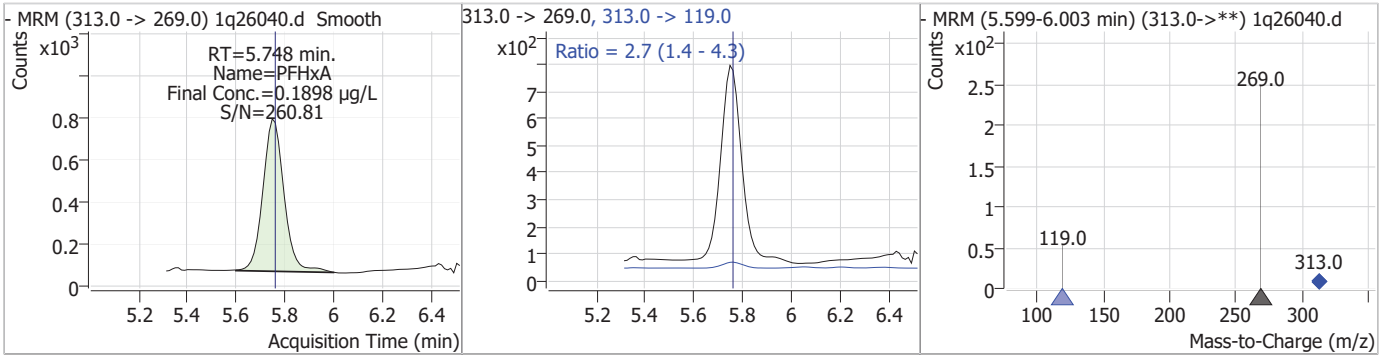
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.17	5.70	-0.01	1332	299.0 -> 99.0	30.7	19.4	58.3



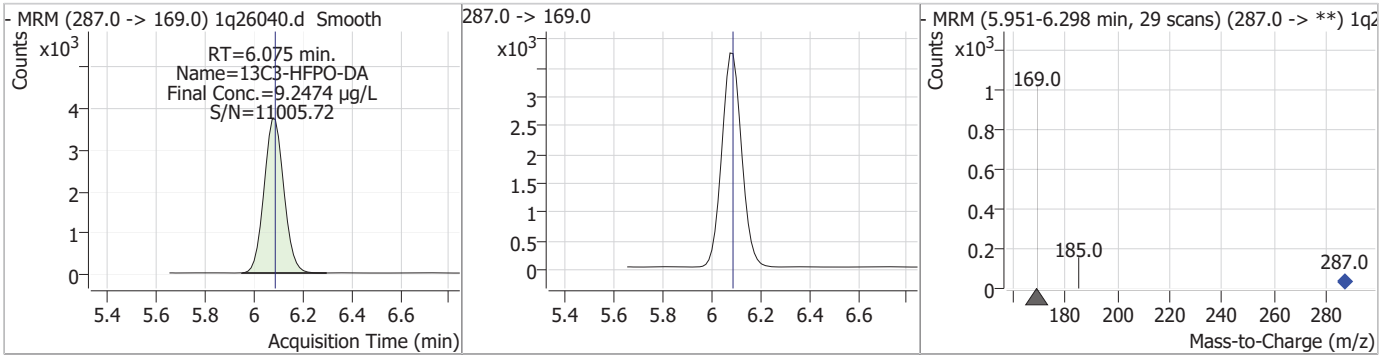
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.43	5.75	-0.01	62787				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.19	5.75	-0.01	4368	313.0 -> 119.0	2.7	1.4	4.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.25	6.07	-0.01	20980				



7.6.12

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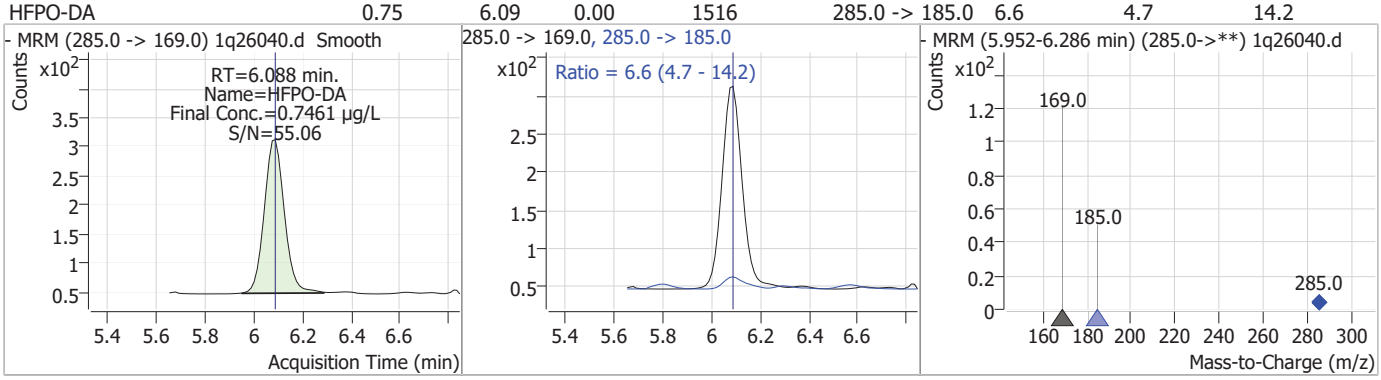
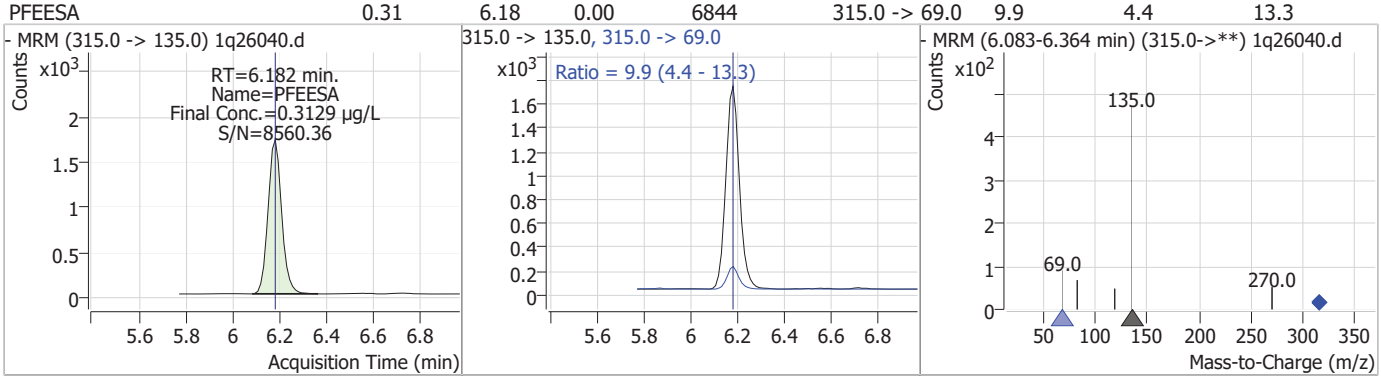
Perfluorinated Compounds by LC/MS/MS

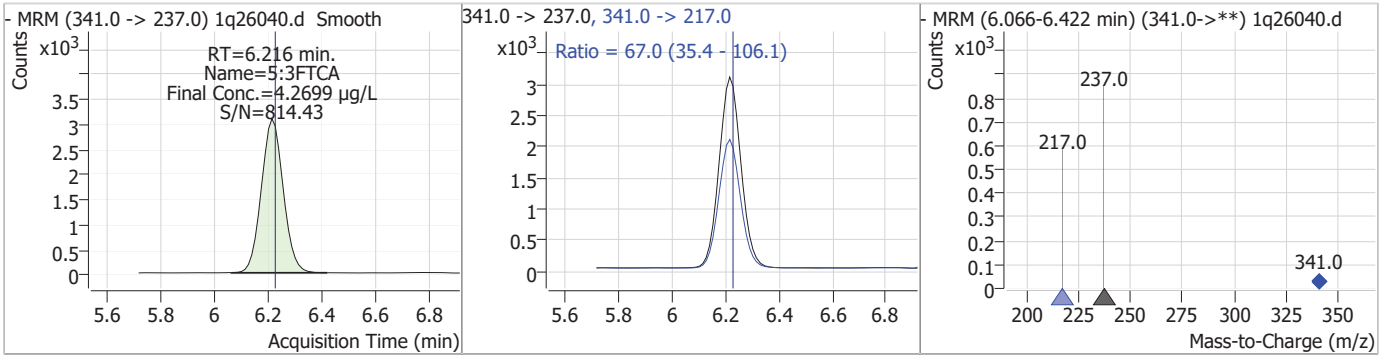
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	0.75	6.09	0.00	1516	285.0 -> 185.0	6.6	4.7	14.2



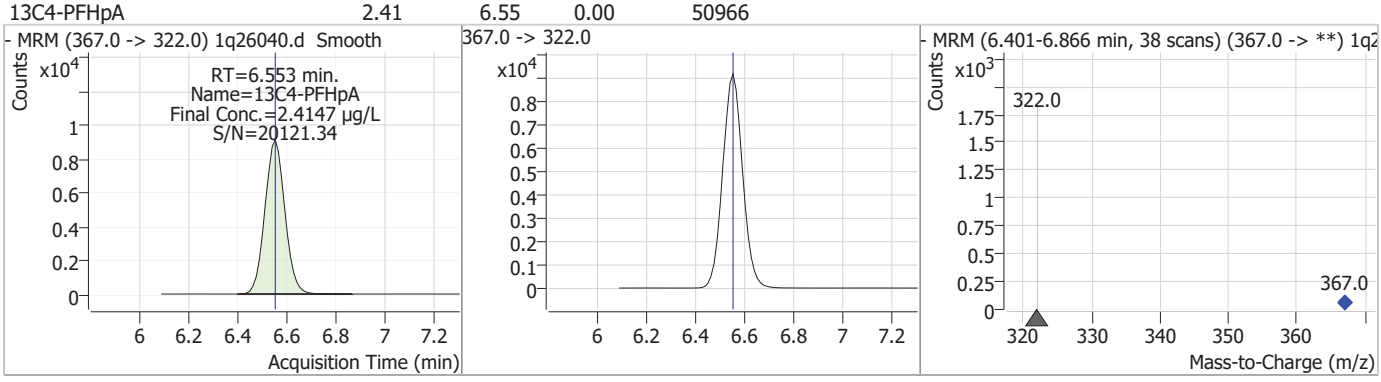
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.31	6.18	0.00	6844	315.0 -> 69.0	9.9	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	4.27	6.22	-0.01	17376	341.0 -> 217.0	67.0	35.4	106.1

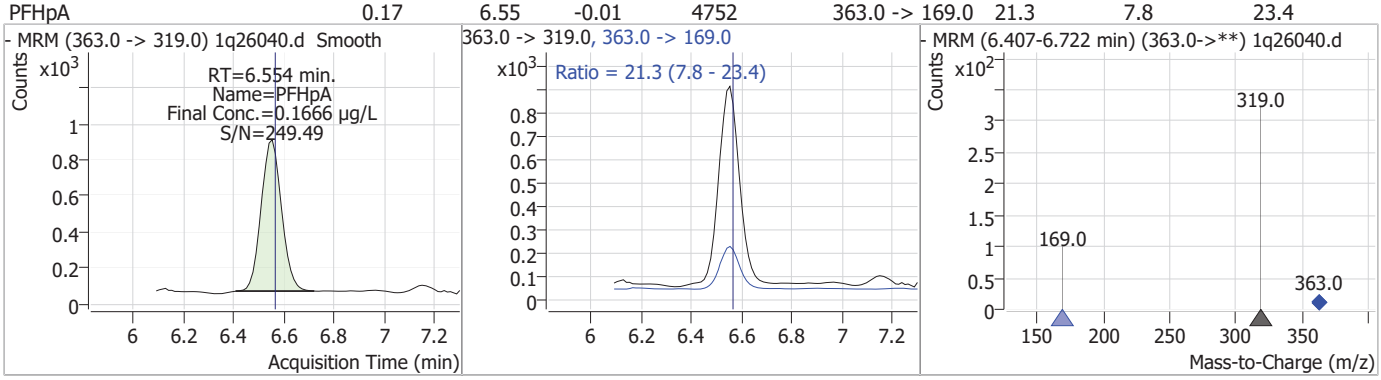


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.41	6.55	0.00	50966				

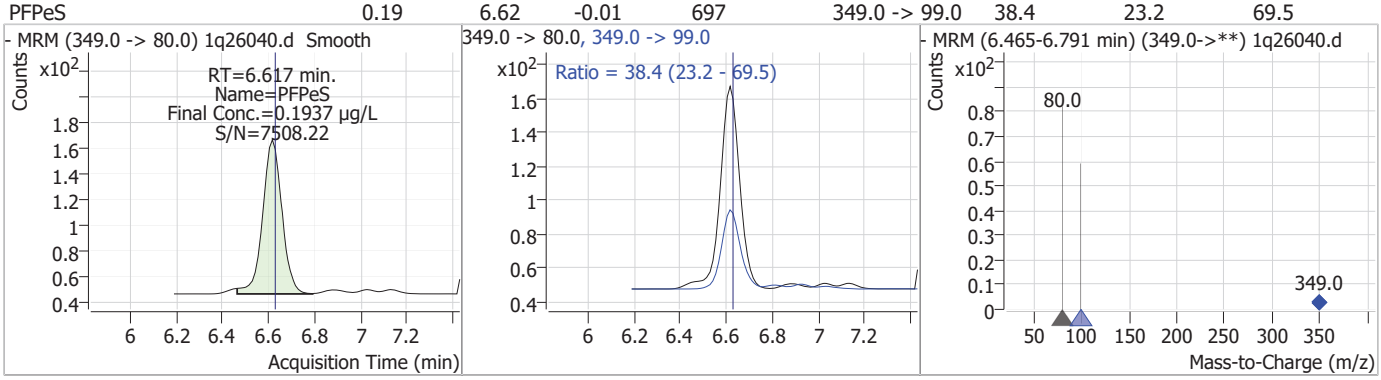


Perfluorinated Compounds by LC/MS/MS

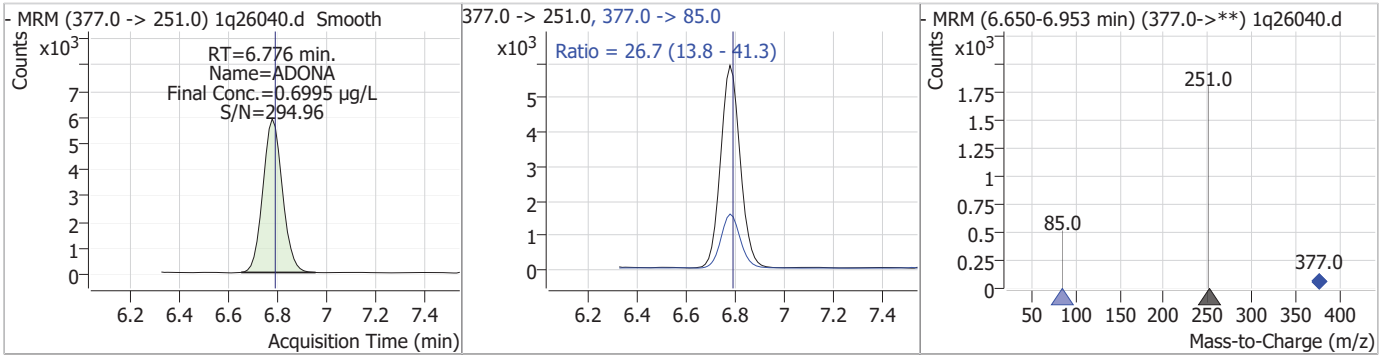
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.17	6.55	-0.01	4752	363.0 -> 169.0	21.3	7.8	23.4



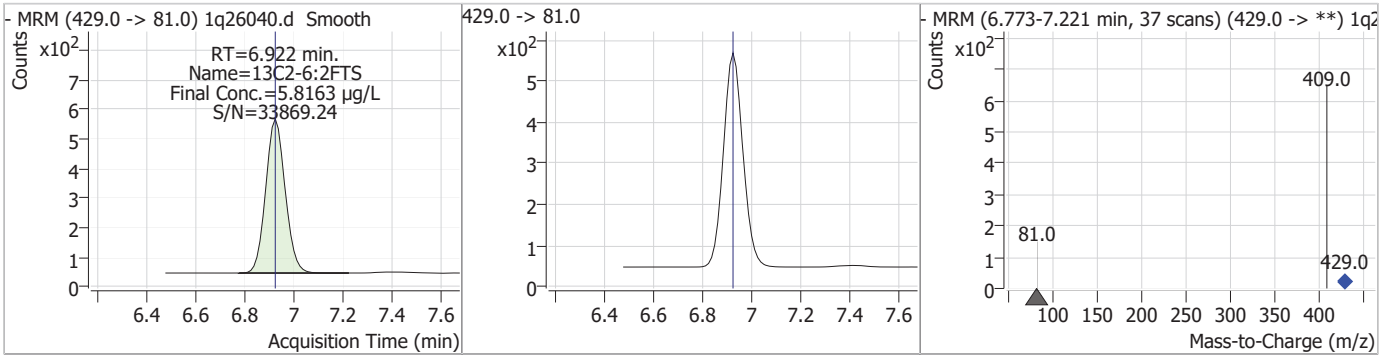
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.19	6.62	-0.01	697	349.0 -> 99.0	38.4	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	0.70	6.78	-0.01	32315	377.0 -> 85.0	26.7	13.8	41.3

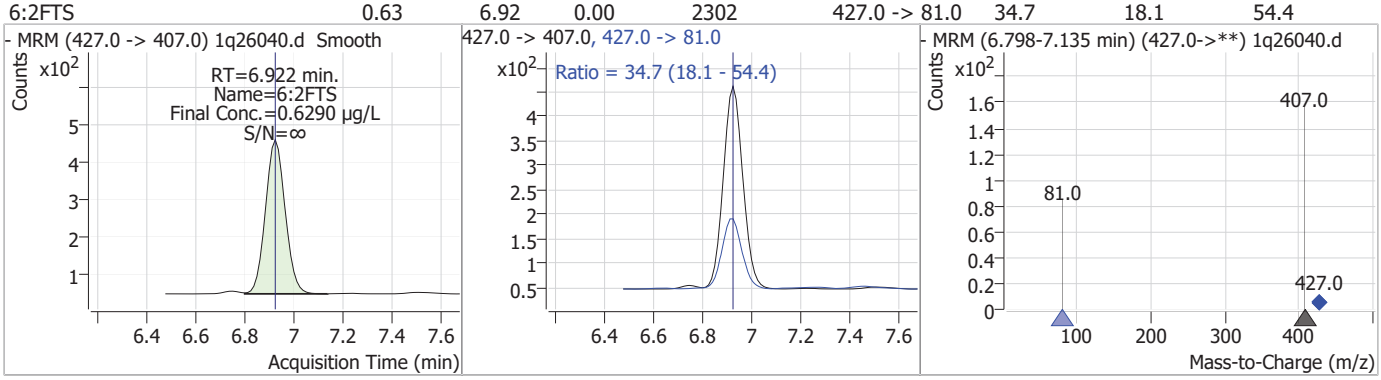


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.82	6.92	0.00	2859				

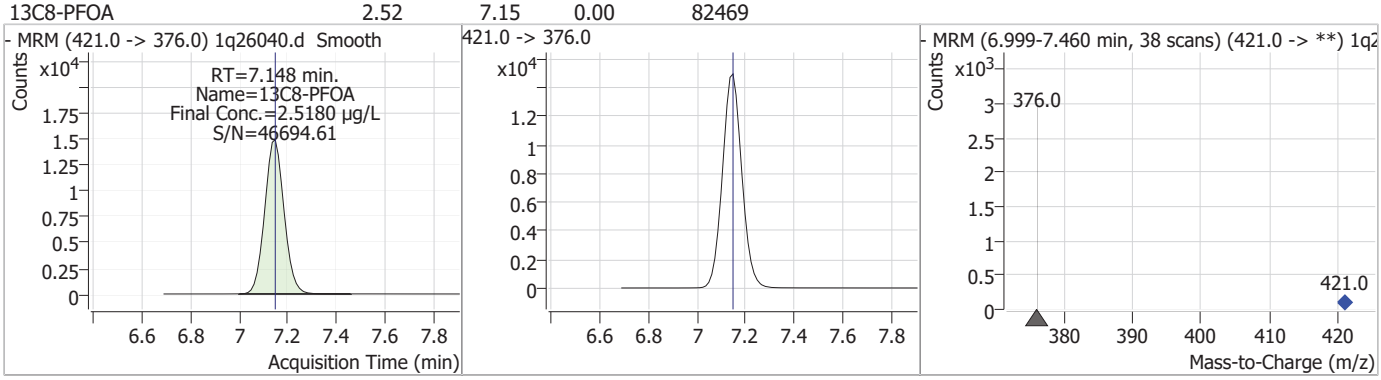


Perfluorinated Compounds by LC/MS/MS

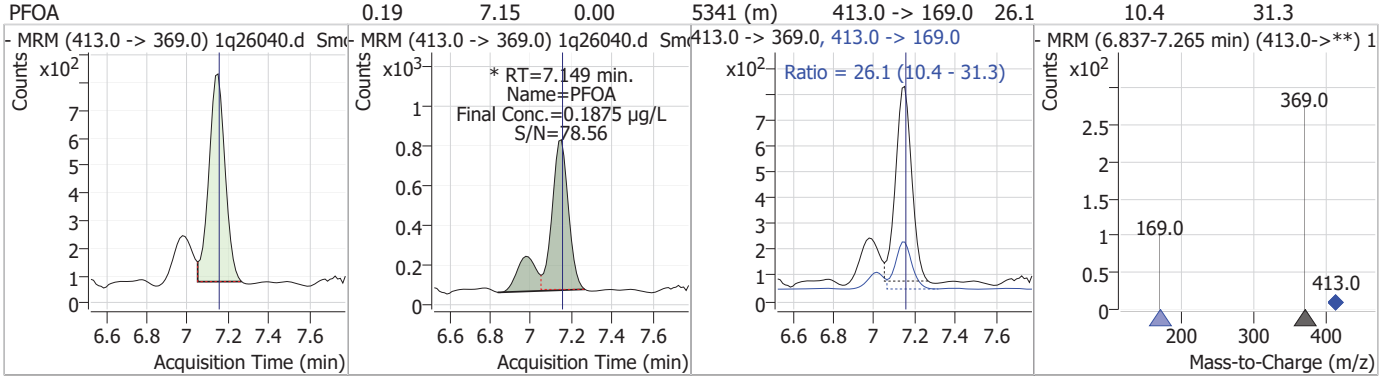
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.63	6.92	0.00	2302	427.0 -> 81.0	34.7	18.1	54.4



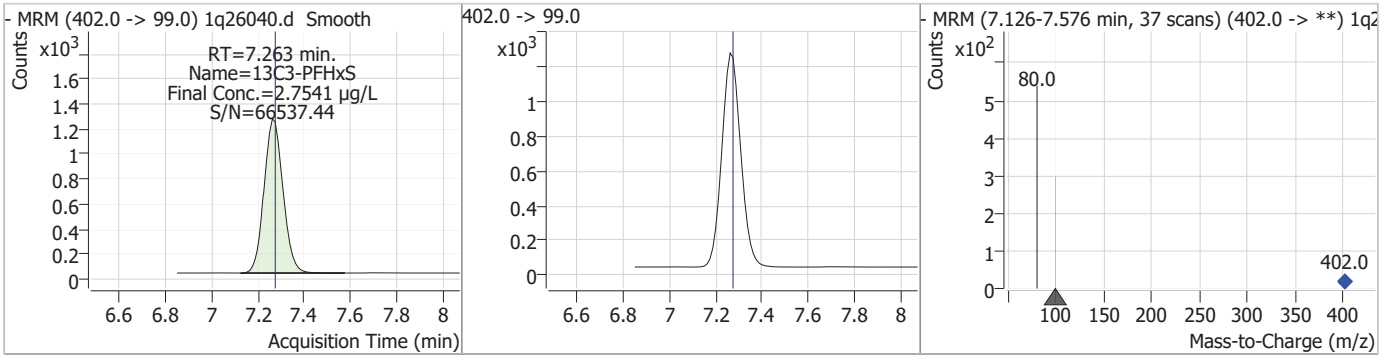
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.52	7.15	0.00	82469				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.19	7.15	0.00	5341 (m)	413.0 -> 169.0	26.1	10.4	31.3

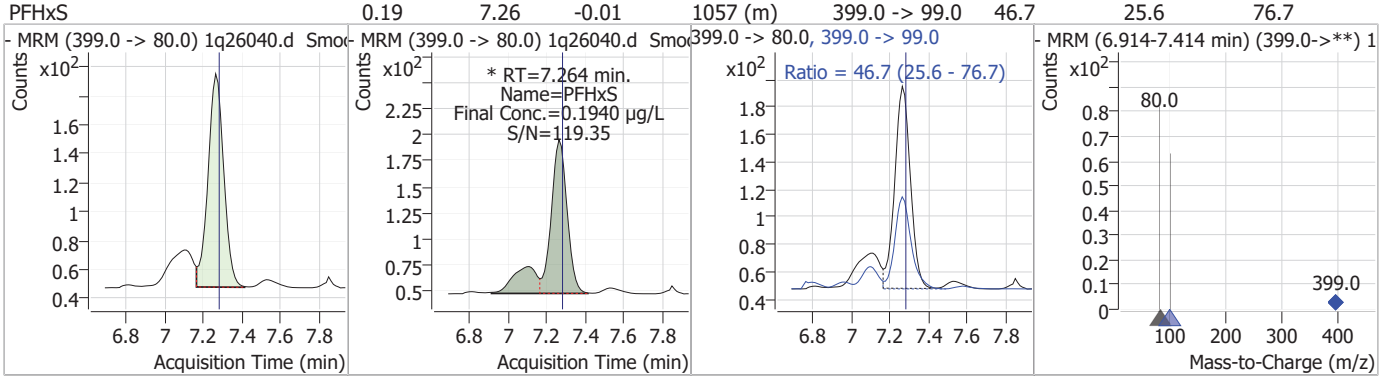


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.75	7.26	-0.01	6994				

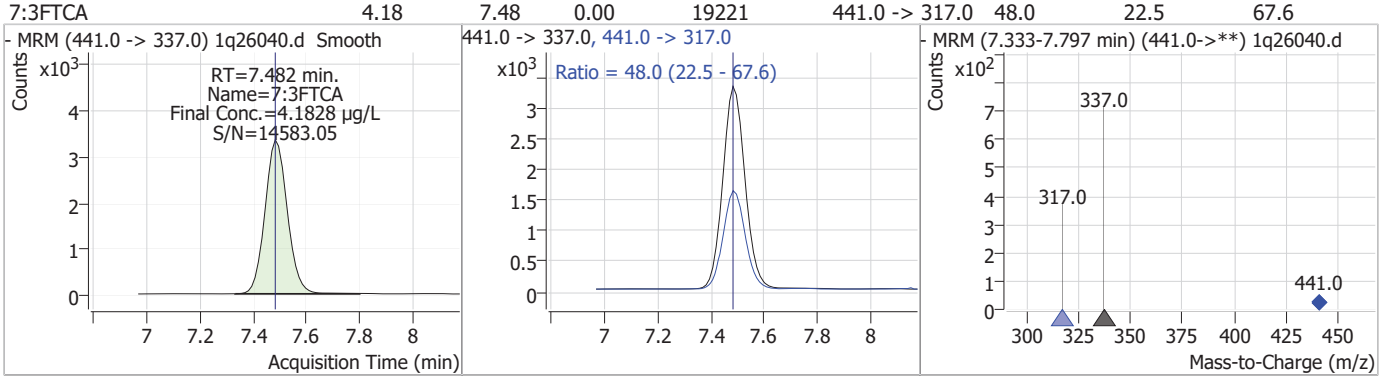


Perfluorinated Compounds by LC/MS/MS

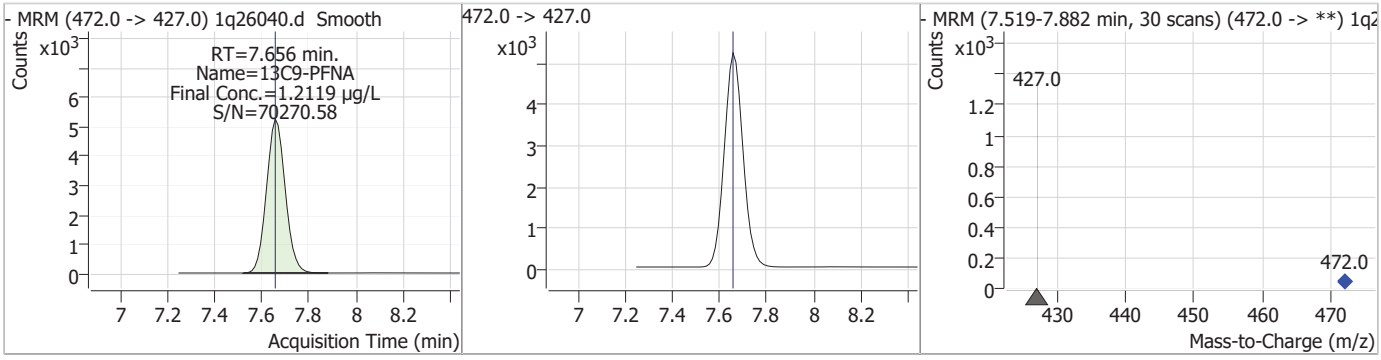
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.19	7.26	-0.01	1057 (m)	399.0 -> 99.0	46.7	25.6	76.7



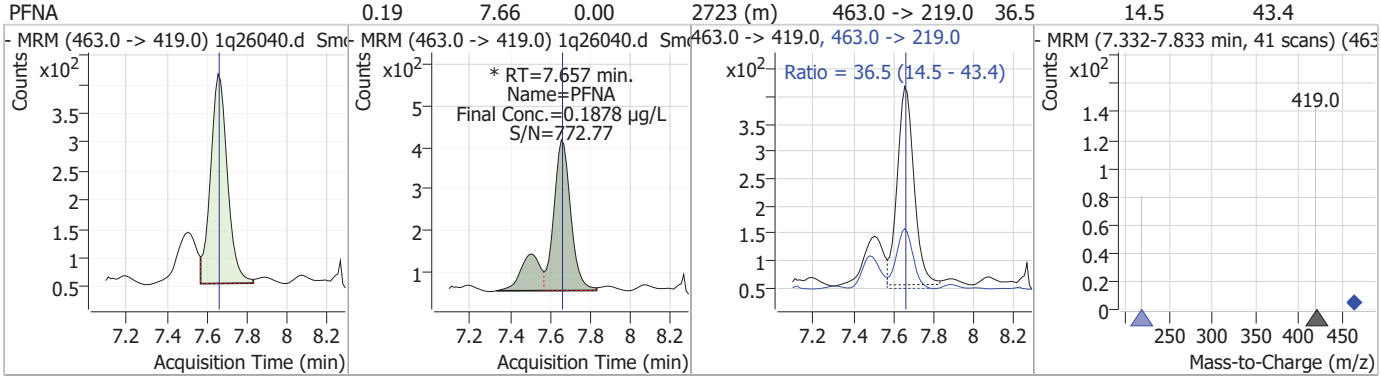
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	4.18	7.48	0.00	19221	441.0 -> 317.0	48.0	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.21	7.66	0.00	28907				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.19	7.66	0.00	2723 (m)	463.0 -> 219.0	36.5	14.5	43.4



7.6.12

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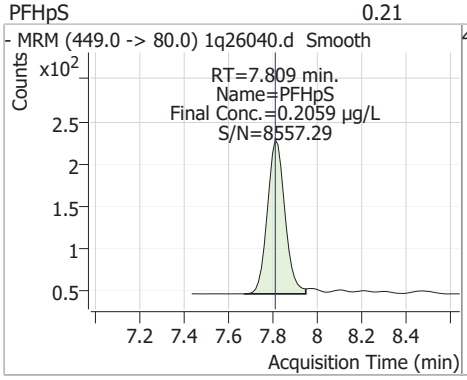
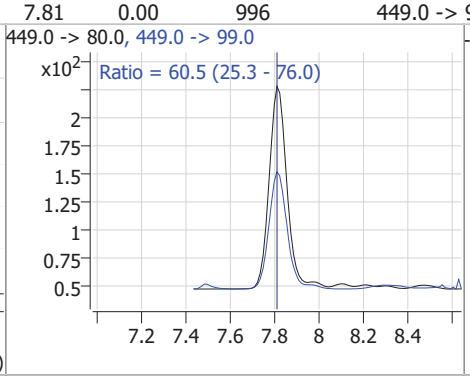
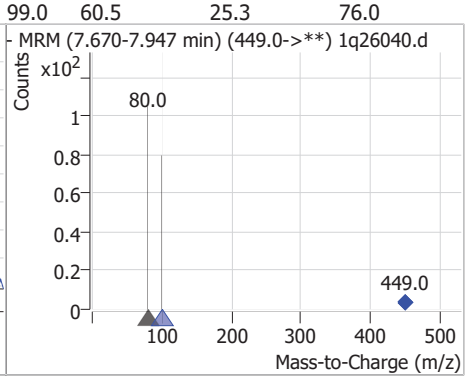
Perfluorinated Compounds by LC/MS/MS

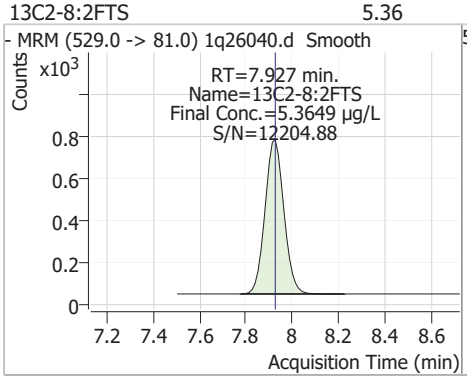
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.21	7.81	0.00	996	449.0 -> 99.0	60.5	25.3	76.0

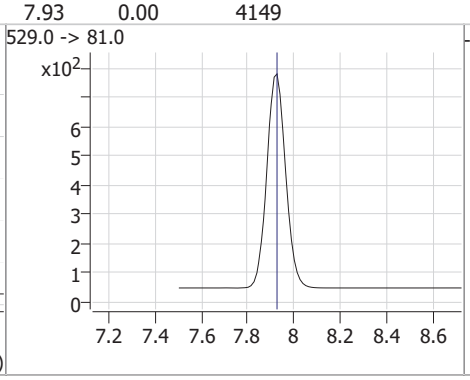


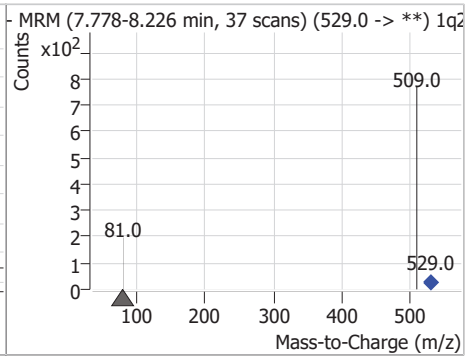




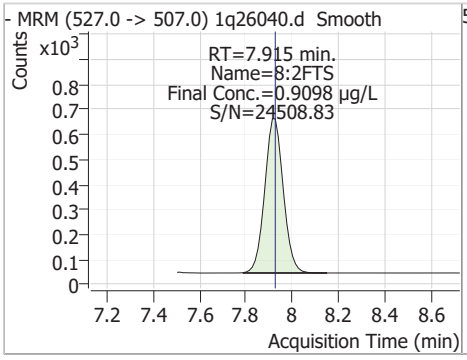
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.36	7.93	0.00	4149				

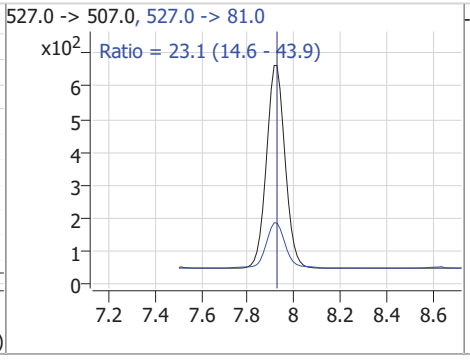


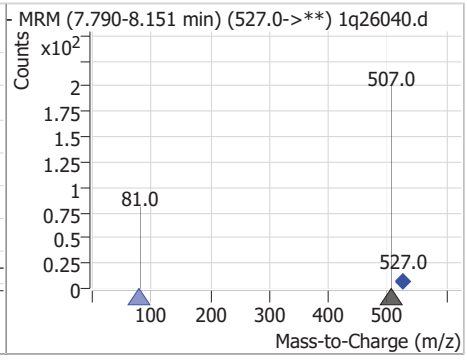




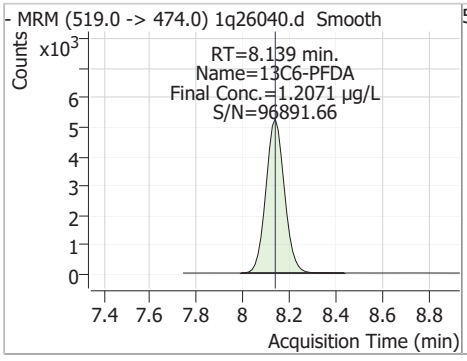
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.91	7.92	-0.01	3433	527.0 -> 81.0	23.1	14.6	43.9

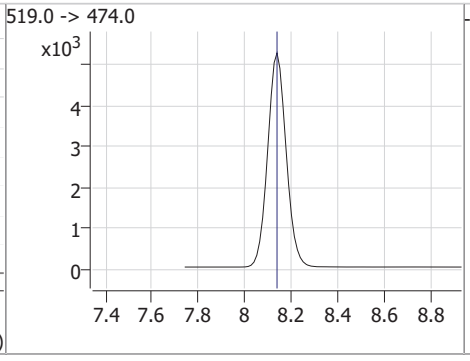


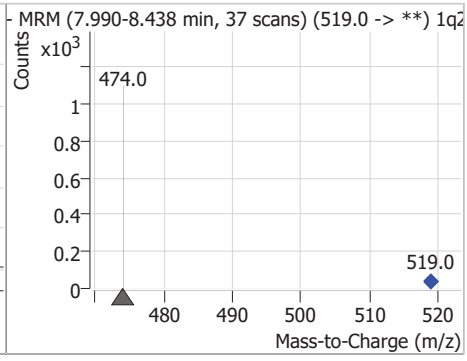




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.21	8.14	0.00	28984				

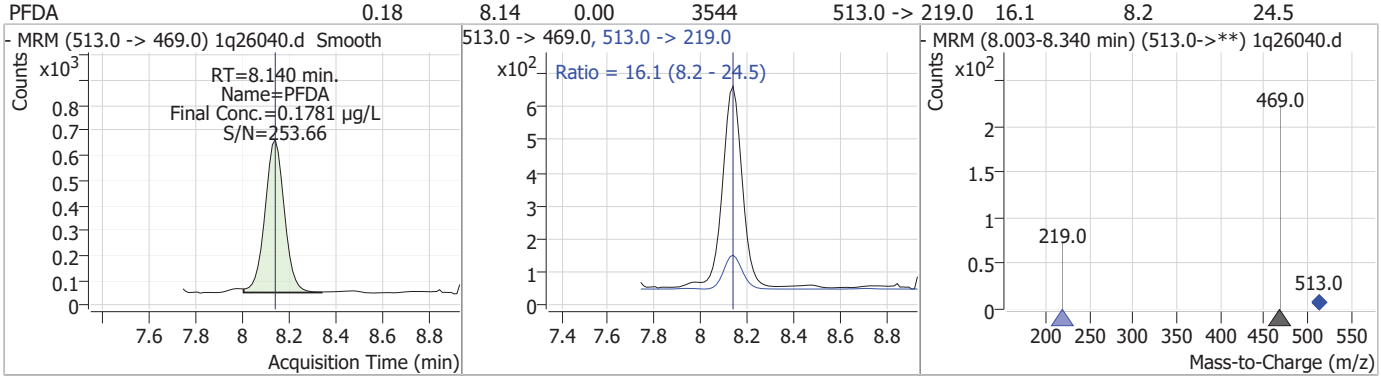




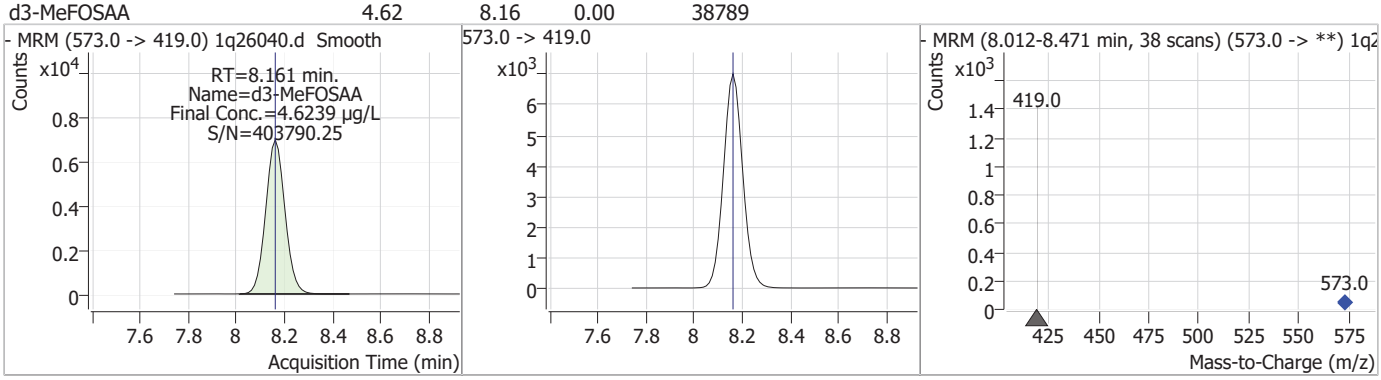


Perfluorinated Compounds by LC/MS/MS

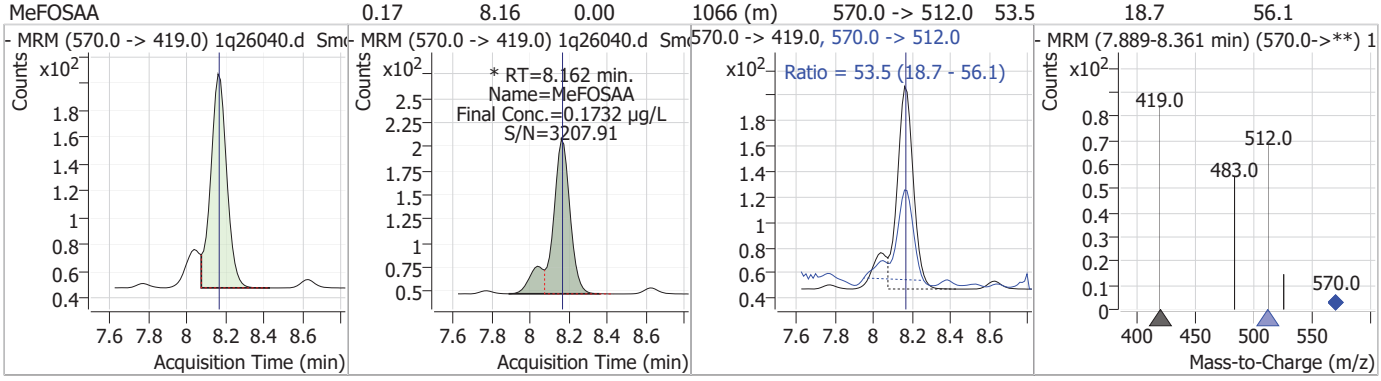
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.18	8.14	0.00	3544	513.0 -> 219.0	16.1	8.2	24.5



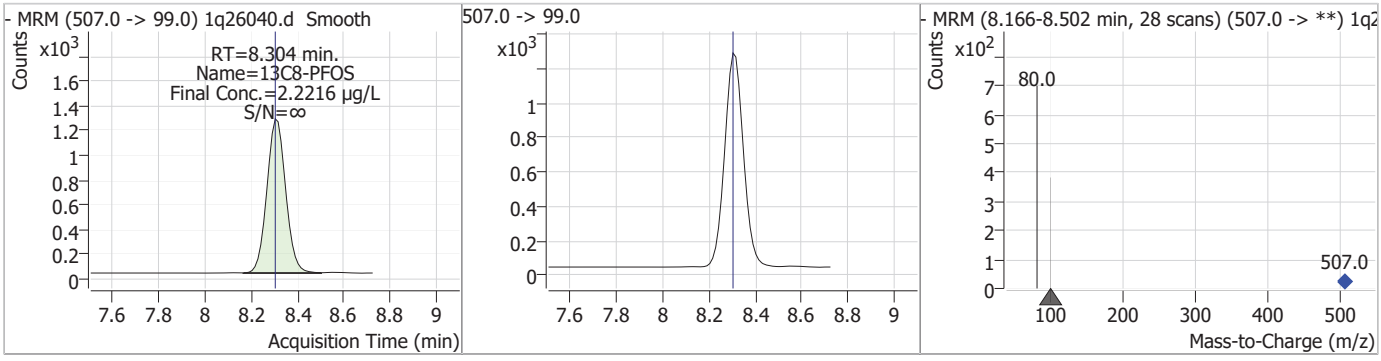
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.62	8.16	0.00	38789				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.17	8.16	0.00	1066 (m)	570.0 -> 512.0	53.5	18.7	56.1

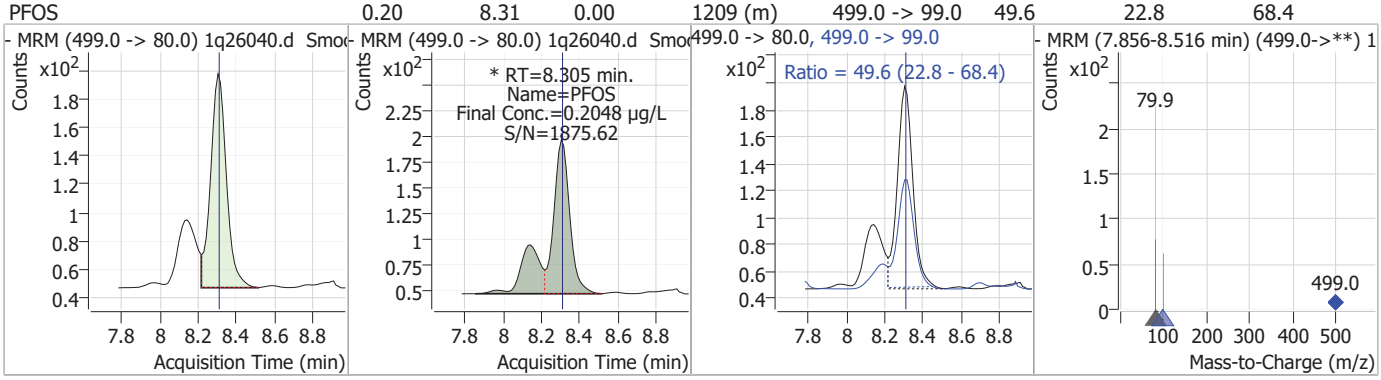


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.22	8.30	0.00	7041				

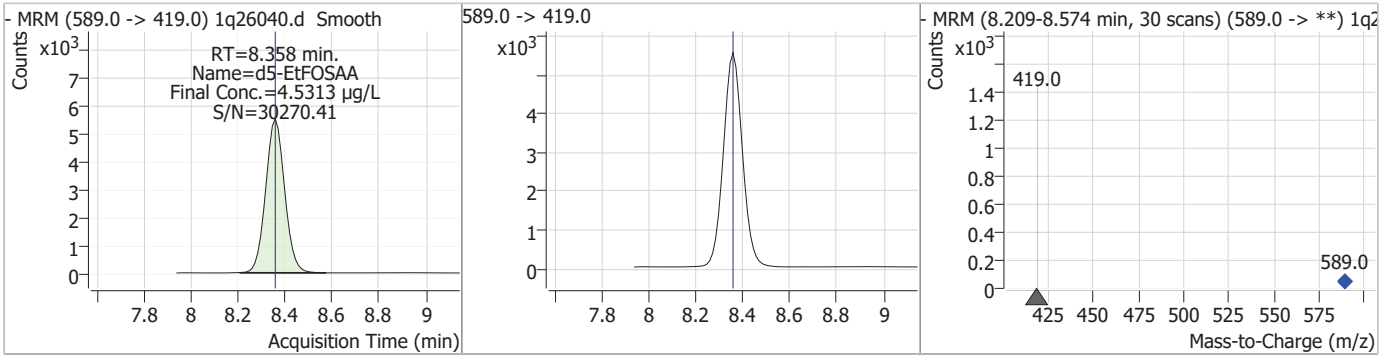


Perfluorinated Compounds by LC/MS/MS

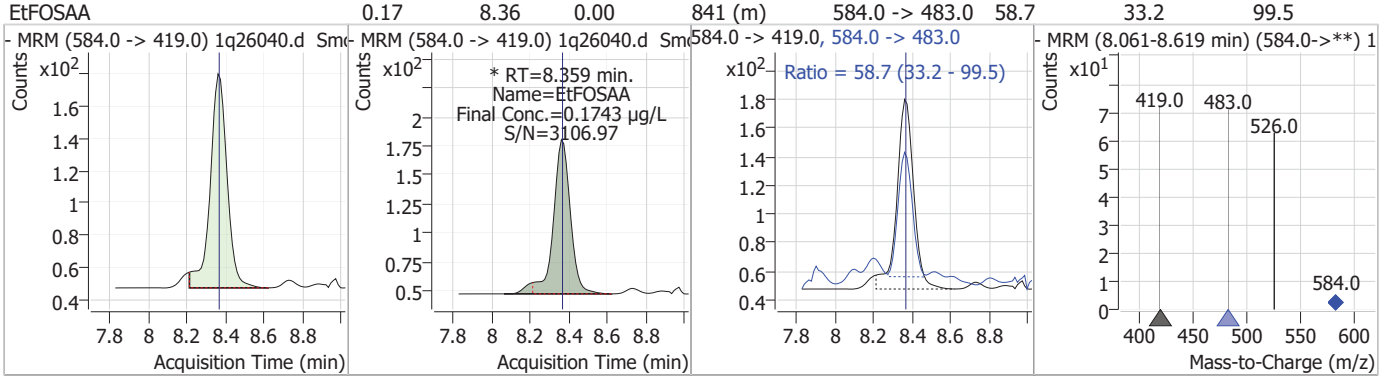
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.20	8.31	0.00	1209 (m)	499.0 -> 99.0	49.6	22.8	68.4



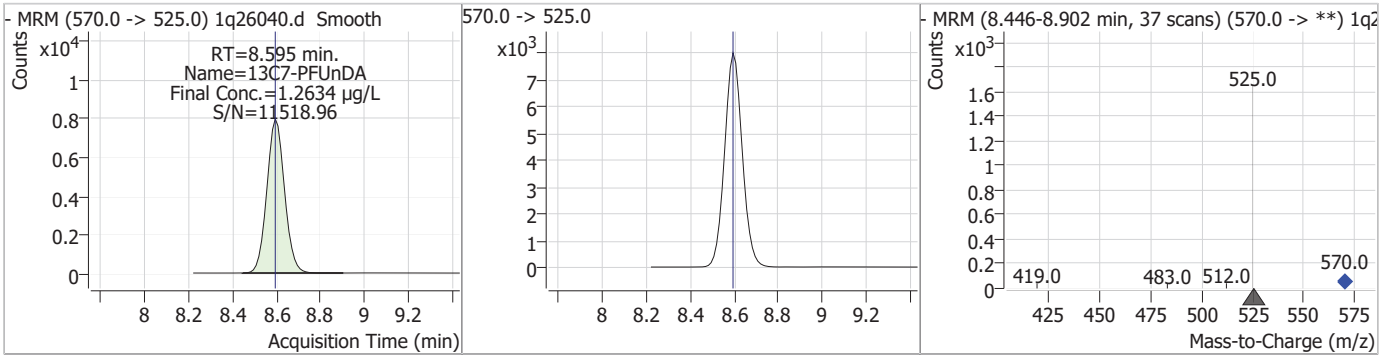
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.53	8.36	0.00	30947				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.17	8.36	0.00	841 (m)	584.0 -> 483.0	58.7	33.2	99.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.26	8.59	0.00	44035				



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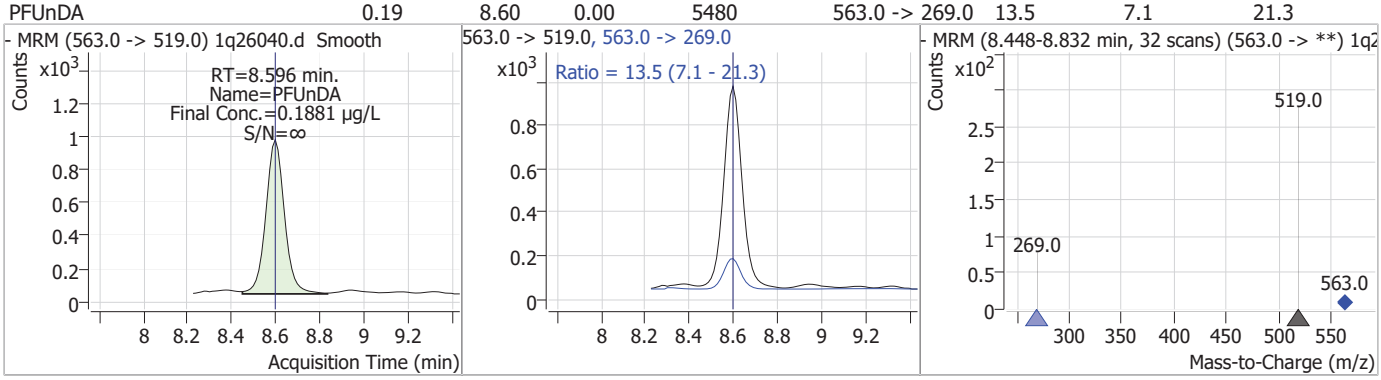
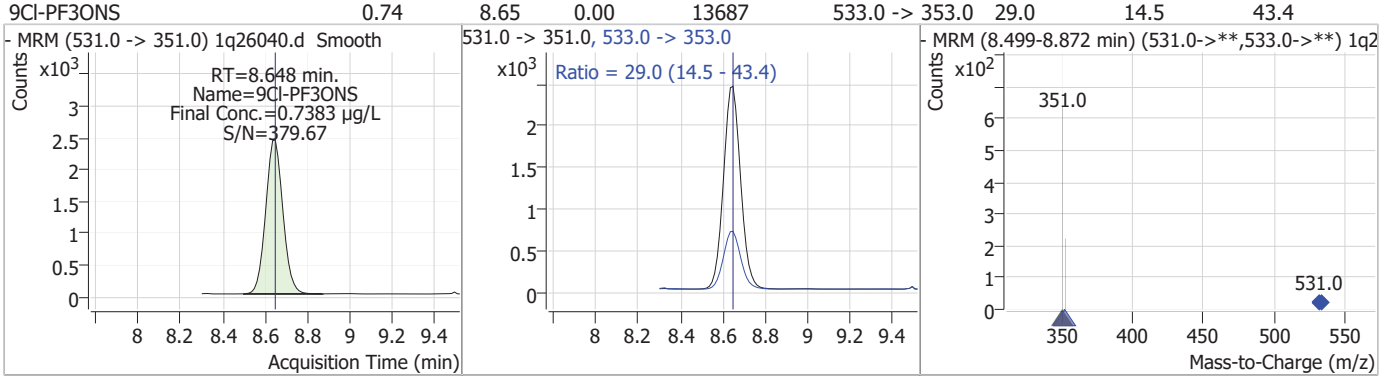
Perfluorinated Compounds by LC/MS/MS

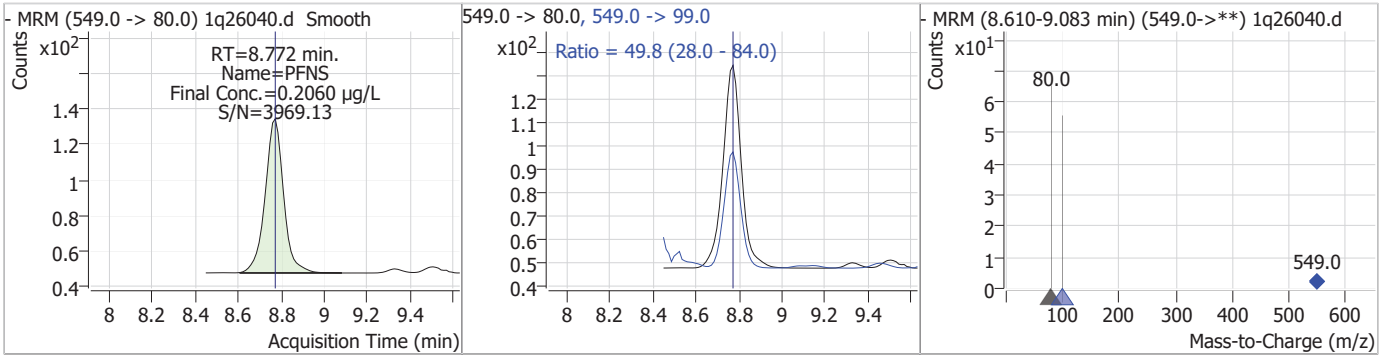
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.19	8.60	0.00	5480	563.0 -> 269.0	13.5	7.1	21.3



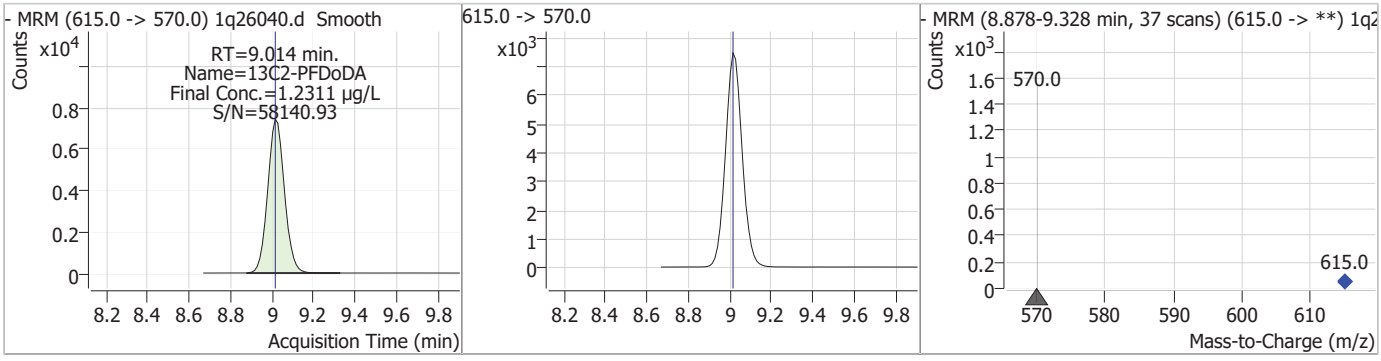
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	0.74	8.65	0.00	13687	533.0 -> 353.0	29.0	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.21	8.77	0.00	522	549.0 -> 99.0	49.8	28.0	84.0

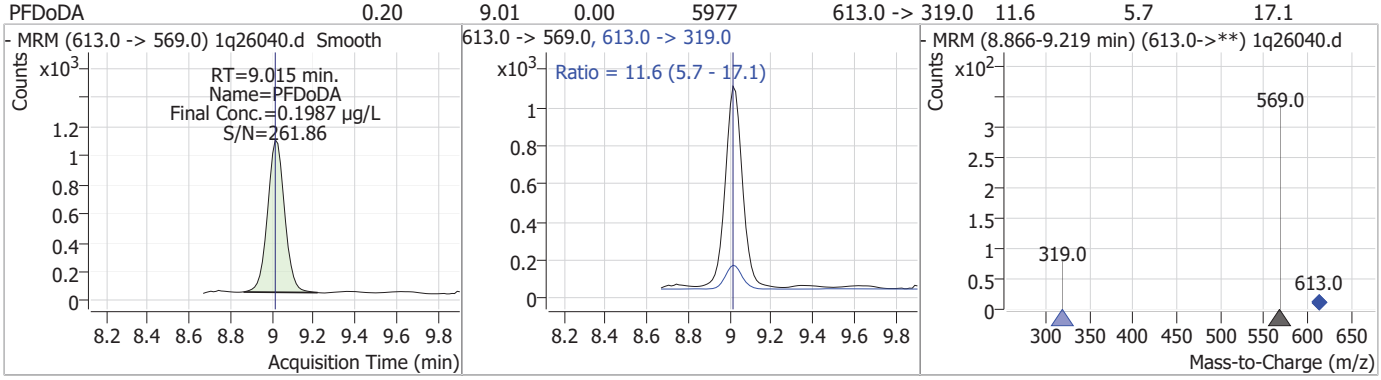


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.23	9.01	0.00	41399				

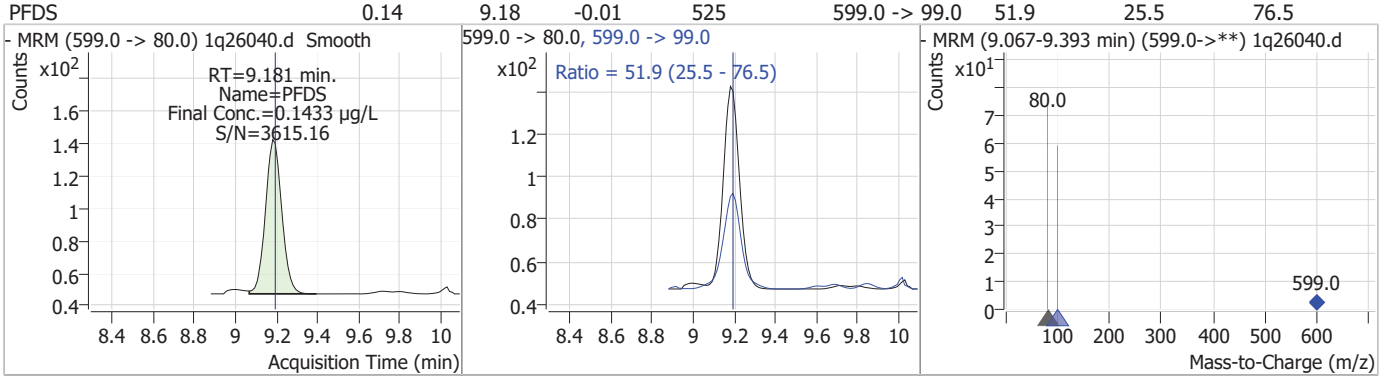


Perfluorinated Compounds by LC/MS/MS

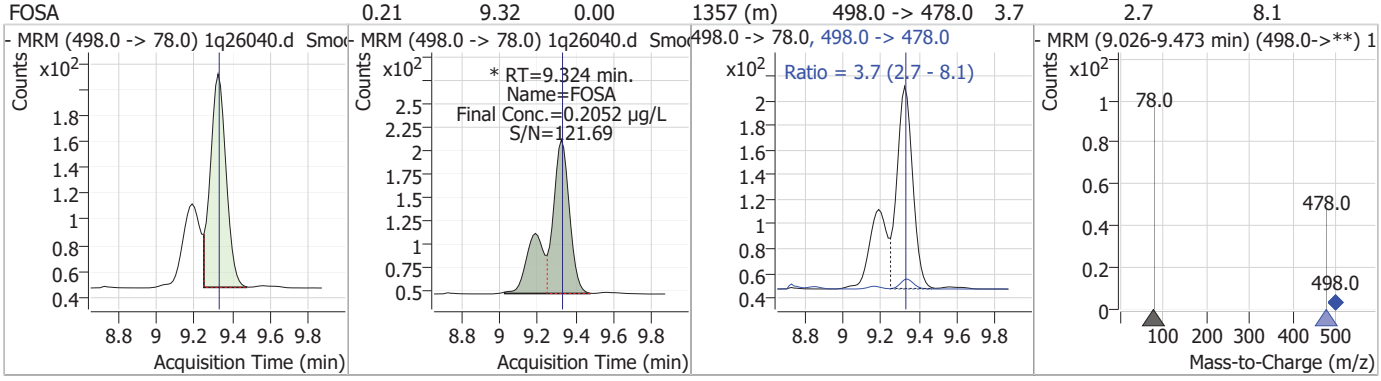
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.20	9.01	0.00	5977	613.0 -> 319.0	11.6	5.7	17.1



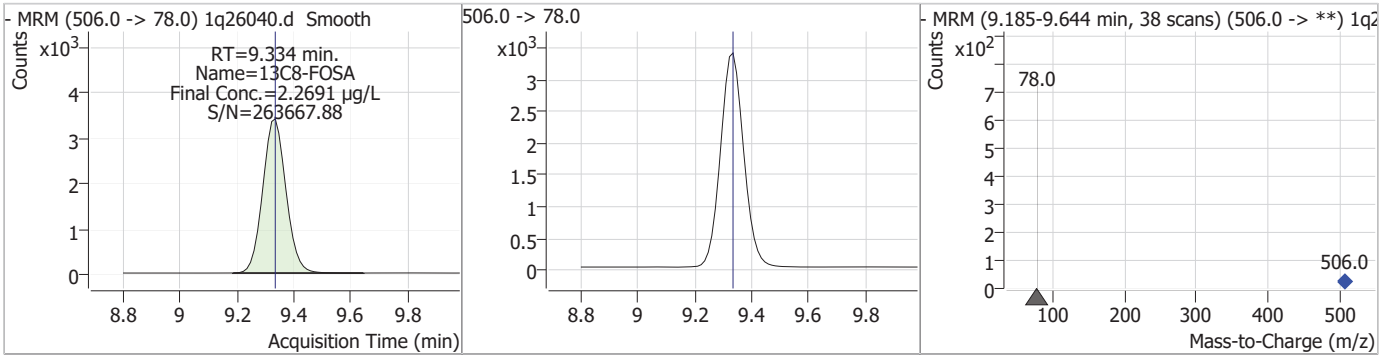
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.14	9.18	-0.01	525	599.0 -> 99.0	51.9	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.21	9.32	0.00	1357 (m)	498.0 -> 478.0	3.7	2.7	8.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.27	9.33	0.00	19086				



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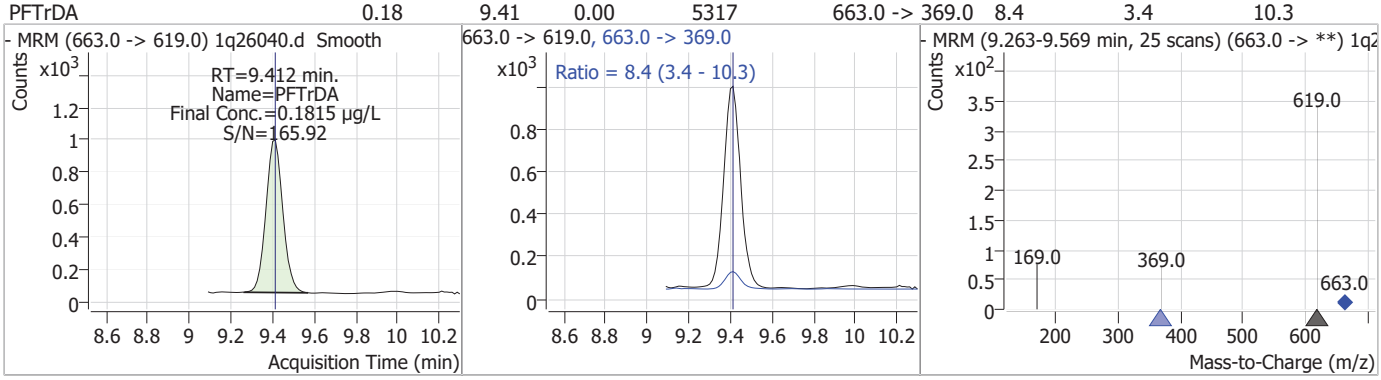
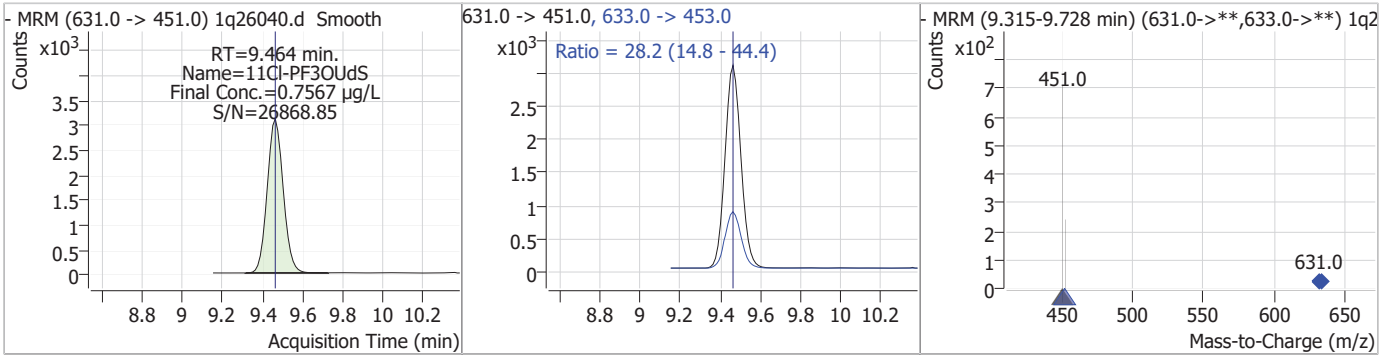
Perfluorinated Compounds by LC/MS/MS

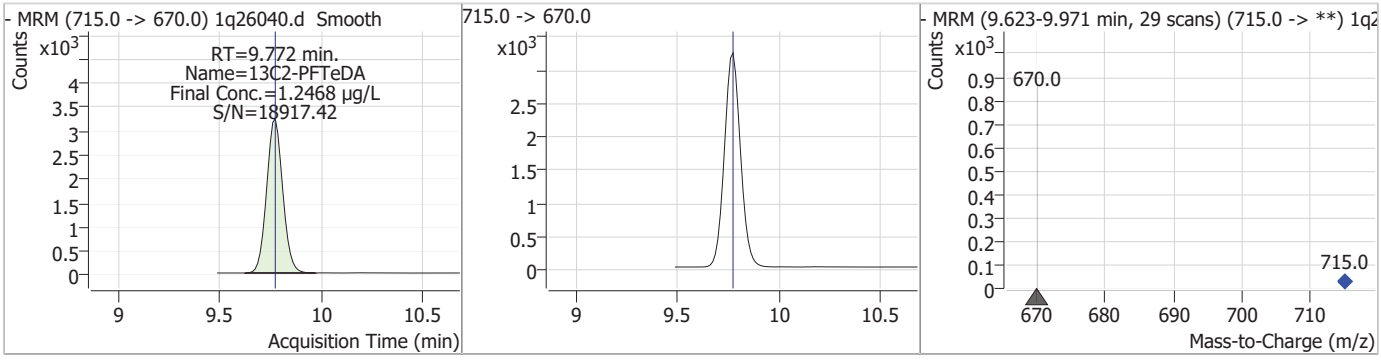
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.18	9.41	0.00	5317	663.0 -> 369.0	8.4	3.4	10.3



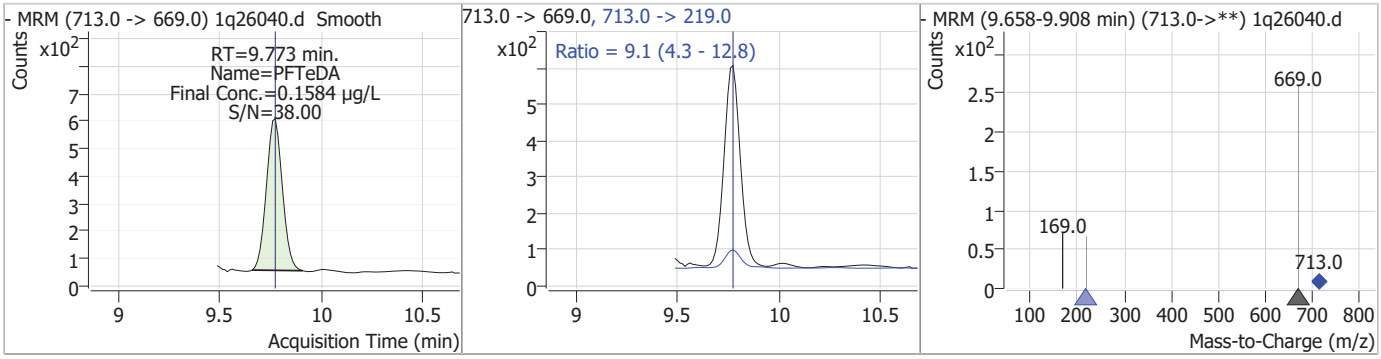
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	0.76	9.46	0.00	17116	633.0 -> 453.0	28.2	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.25	9.77	0.00	17642				

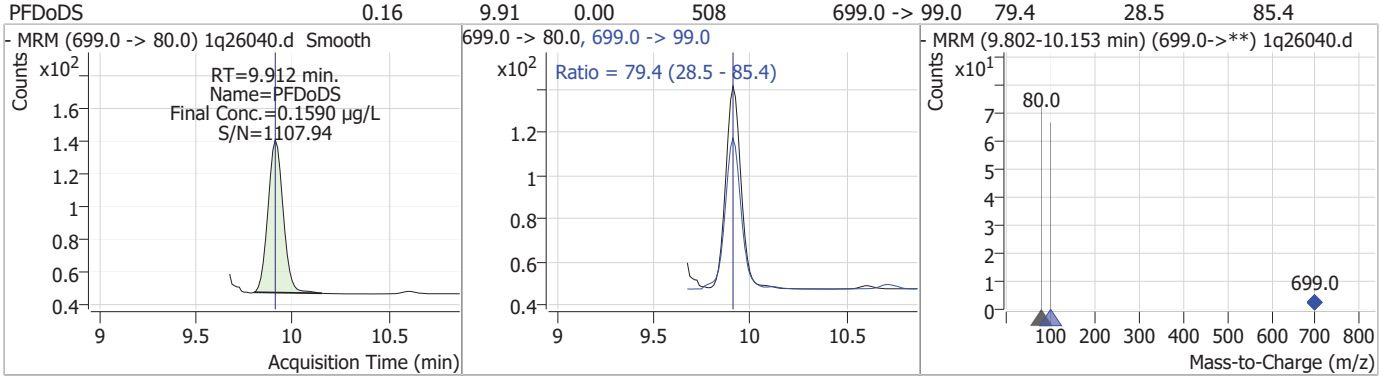


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.16	9.77	0.00	3010	713.0 -> 219.0	9.1	4.3	12.8

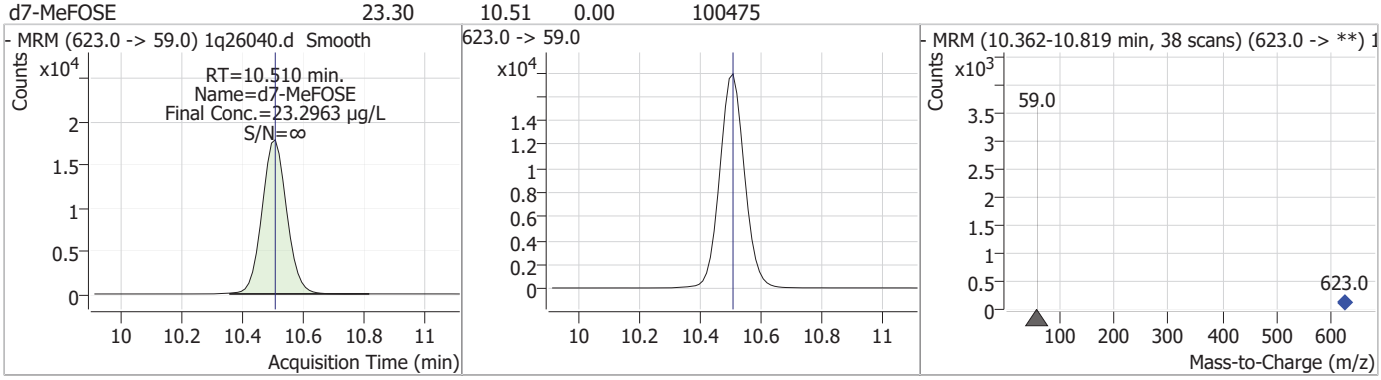


Perfluorinated Compounds by LC/MS/MS

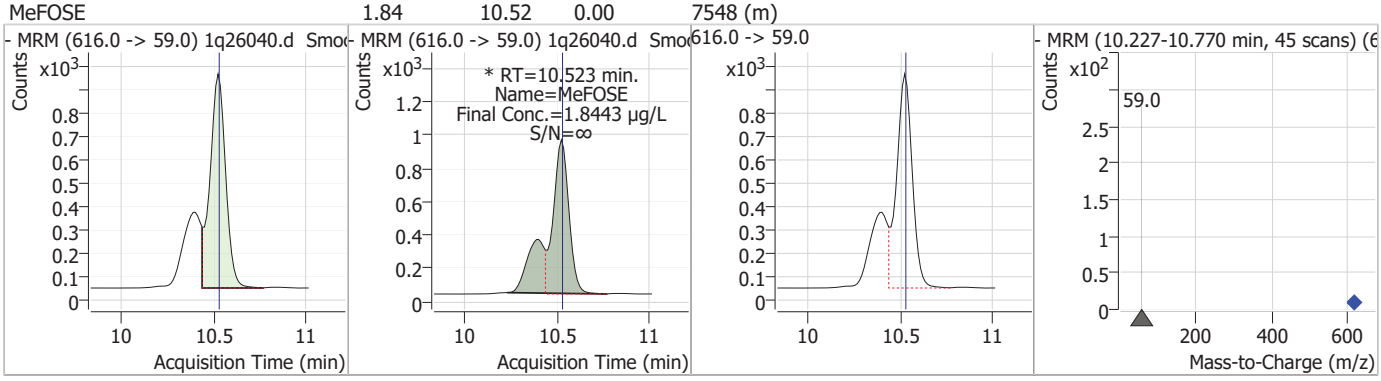
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.16	9.91	0.00	508	699.0 -> 99.0	79.4	28.5	85.4



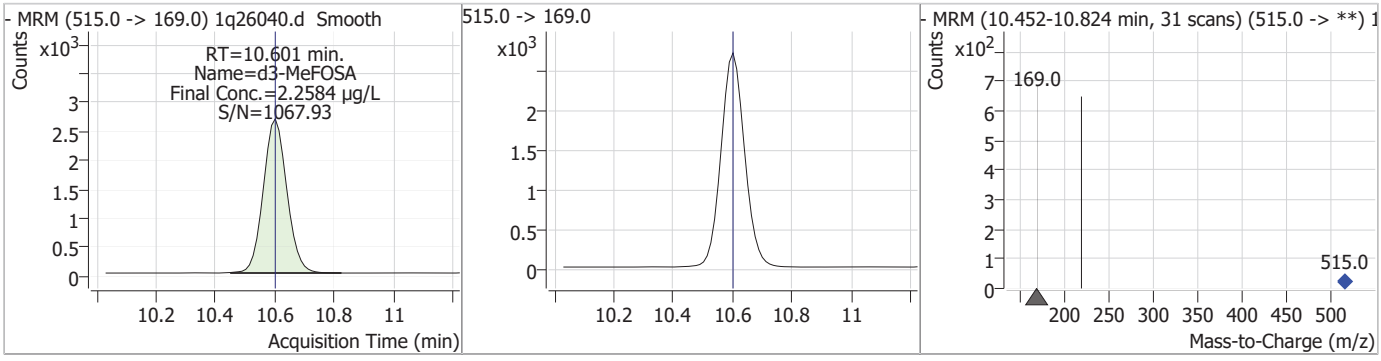
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.30	10.51	0.00	100475				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	1.84	10.52	0.00	7548 (m)				

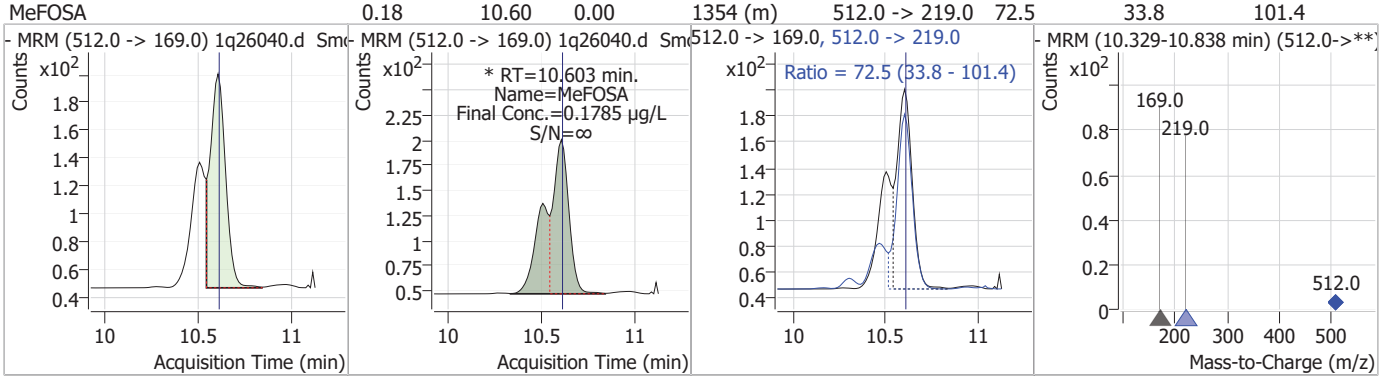


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.26	10.60	0.00	14724				

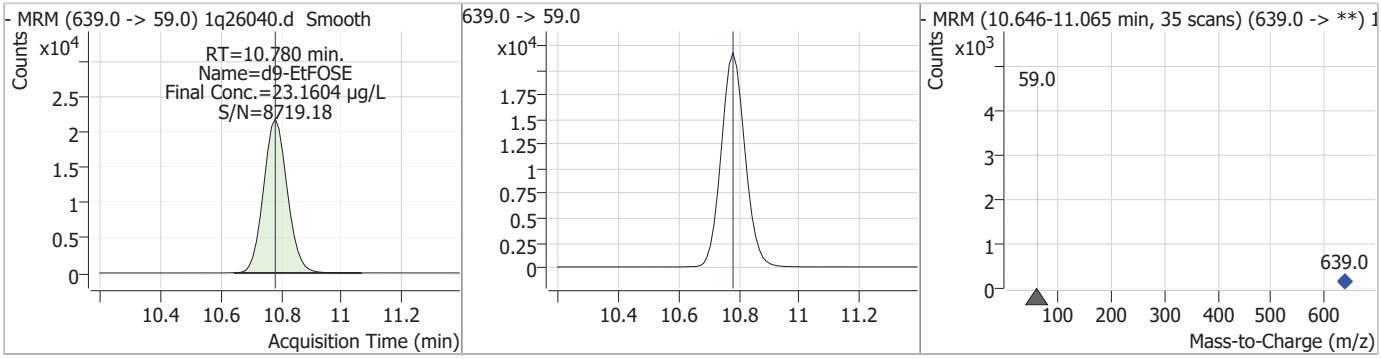


Perfluorinated Compounds by LC/MS/MS

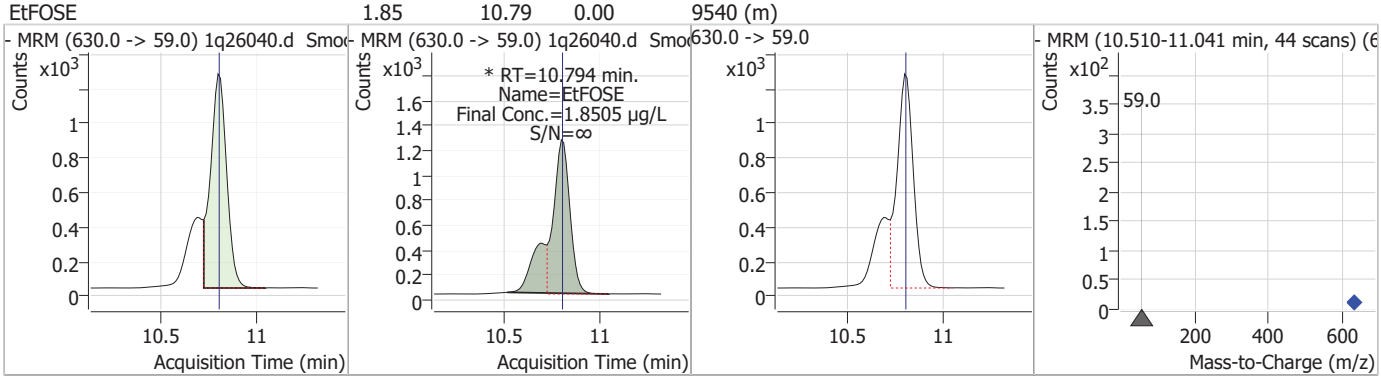
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.18	10.60	0.00	1354 (m)	512.0 -> 219.0	72.5	33.8	101.4



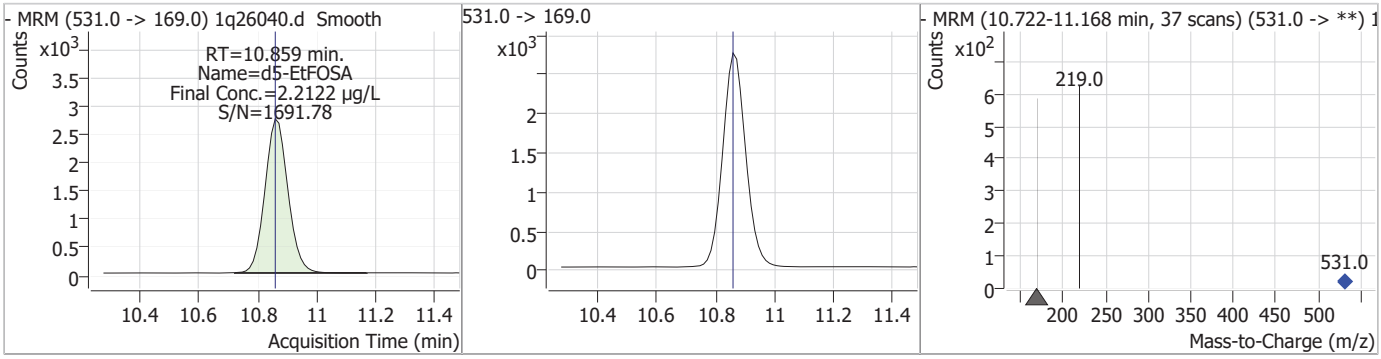
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.16	10.78	0.00	118314				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	1.85	10.79	0.00	9540 (m)				

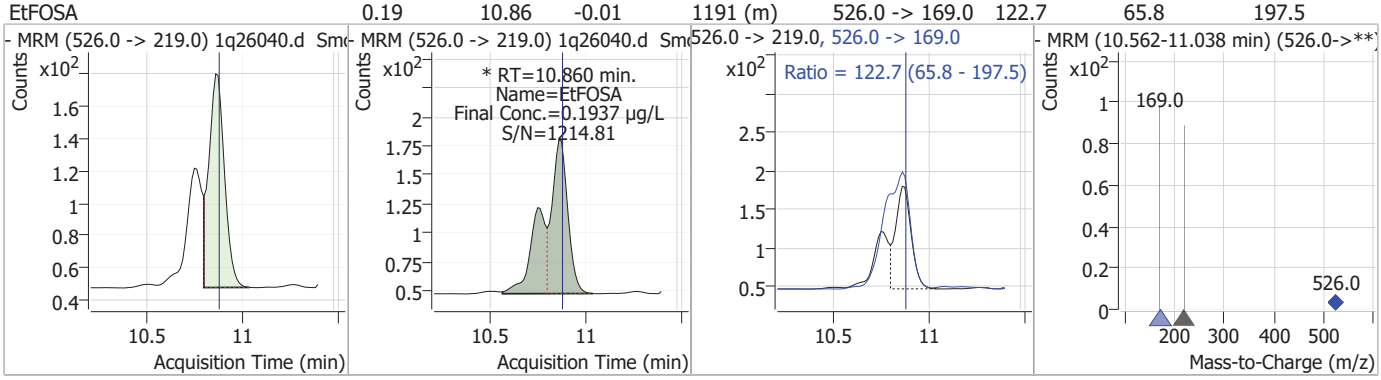


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.21	10.86	0.00	14737				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.19	10.86	-0.01	1191 (m)	526.0 -> 169.0	122.7	65.8	197.5



7.6.12

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Manual Integration Approval Summary

Sample Number: T1Q361-CC361
Lab FileID: 1Q26040.D
Injection Time: 05/14/25 19:22

Method: EPA 1633
Analyst approved: 05/15/25 01:25 Rensel John Romano
Supervisor approved: 05/15/25 05:29 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.26	Split peak
Perfluorononanoic acid	375-95-1		7.66	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.30	Split peak
EtFOSAA	2991-50-6		8.36	Split peak
PFOSA	754-91-6		9.32	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSE	1691-99-2		10.79	Split peak
EtFOSA	4151-50-2		10.86	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/16/25 06:10

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26063.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/15/2025 11:31:28 AM
Sample Name : CC361-4
Vial : P1-A5
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : T1Q362.batch.bin
Sample Information : OP63461,T1Q362,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	202570	10.00 µg/L	0.000
M5-PFPeA	4.648	268.0 -> 223.0	121789	5.00 µg/L	0.000
M5-PFHxA	5.759	318.0 -> 273.0	68179	2.50 µg/L	0.000
M4-PFHpA	6.565	367.0 -> 322.0	53907	2.50 µg/L	0.012
M8-PFOA	7.148	421.0 -> 376.0	85617	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	30264	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	29244	1.25 µg/L	0.000
M7-PFUnDA	8.607	570.0 -> 525.0	45312	1.25 µg/L	0.012
M2-PFDoDA	9.027	615.0 -> 570.0	43124	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	17346	1.25 µg/L	0.000
M8-FOSA	9.346	506.0 -> 78.0	22054	2.50 µg/L	0.012
M3-PFBS	5.711	302.0 -> 99.0	7805	2.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	7358	2.50 µg/L	0.000
M8-PFOS	8.316	507.0 -> 99.0	7024	2.50 µg/L	0.012
M2-4:2FTS	5.446	329.0 -> 81.0	1645	5.00 µg/L	0.000
M2-6:2FTS	6.934	429.0 -> 81.0	2884	5.00 µg/L	0.012
M2-8:2FTS	7.927	529.0 -> 81.0	4146	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	41683	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	19790	10.00 µg/L	0.000
M5-EtFOSAA	8.370	589.0 -> 419.0	33013	5.00 µg/L	0.012
M7-MeFOSE	10.498	623.0 -> 59.0	116173	25.00 µg/L	-0.012
M9-EtFOSE	10.768	639.0 -> 59.0	137671	25.00 µg/L	-0.012
M5-EtFOSA	10.859	531.0 -> 169.0	16617	2.50 µg/L	0.000
M3-MeFOSA	10.589	515.0 -> 169.0	16890	2.50 µg/L	-0.012
13C4-PFOS	8.317	503.0 -> 80.0	13025	2.50 µg/L	0.012
13C3-PFBA	3.263	216.0 -> 172.0	84360	5.00 µg/L	0.013
18O2-PFHxS	7.274	403.0 -> 84.0	8312	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	93896	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	23096	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	28777	1.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	63019	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1645	5.93 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 118.6%	
13C2-6:2FTS	6.934	429.0 -> 81.0	2884	5.36 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.2%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4146	4.90 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.9%	
13C2-PFDoDA	9.027	615.0 -> 570.0	43124	1.38 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 110.1%	
13C2-PFTeDA	9.772	715.0 -> 670.0	17346	1.32 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.3%	
13C3-PFBS	5.711	302.0 -> 99.0	7805	2.81 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 112.6%	
13C3-PFHxS	7.275	402.0 -> 99.0	7358	2.65 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.9%		
13C4-PFBA	3.260	217.0 -> 172.0	202570	10.10 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.0%		
13C4-PFHpA	6.565	367.0 -> 322.0	53907	2.47 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.6%		
13C5-PFHxA	5.759	318.0 -> 273.0	68179	2.54 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.7%		
13C5-PFPeA	4.648	268.0 -> 223.0	121789	5.27 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.4%		
13C6-PFDA	8.139	519.0 -> 474.0	29244	1.31 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.6%		
13C7-PFUnDA	8.607	570.0 -> 525.0	45312	1.40 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 111.6%		
13C8-FOSA	9.346	506.0 -> 78.0	22054	2.77 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 110.9%		
13C8-PFOA	7.148	421.0 -> 376.0	85617	2.50 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.2%		
13C8-PFOS	8.316	507.0 -> 99.0	7024	2.34 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.8%		
13C9-PFNA	7.656	472.0 -> 427.0	30264	1.29 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.1%		
d3-MeFOSAA	8.161	573.0 -> 419.0	41683	5.26 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.1%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	19790	8.42 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 84.2%		
d3-MeFOSA	10.589	515.0 -> 169.0	16890	2.74 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 109.6%		
d5-EtFOSAA	8.370	589.0 -> 419.0	33013	5.11 µg/L		0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.3%		
d7-MeFOSE	10.498	623.0 -> 59.0	116173	28.49 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 114.0%		
d9-EtFOSE	10.768	639.0 -> 59.0	137671	28.51 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 114.0%		
d5-EtFOSA	10.859	531.0 -> 169.0	16617	2.64 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.5%		
Target Compounds						QValue
4:2FTS	5.447	327.0 -> 307.0	26306	8.58 µg/L		98
		327.0 -> 81.0	11506			
6:2FTS	6.922	427.0 -> 407.0	36236	9.82 µg/L		95
		427.0 -> 81.0	12028			
8:2FTS	7.927	527.0 -> 507.0	38613	10.24 µg/L		92
		527.0 -> 81.0	12997			
EtFOSAA	8.371	584.0 -> 419.0	13998	2.72 µg/L	m	86
		584.0 -> 483.0	7740			
FOSA	9.349	498.0 -> 78.0	19270	2.52 µg/L	m	99
		498.0 -> 478.0	960			
MeFOSAA	8.175	570.0 -> 419.0	17107	2.59 µg/L	m	96
		570.0 -> 512.0	6845			
PFBA	3.266	213.0 -> 169.0	55053	9.72 µg/L		100
PFBS	5.713	299.0 -> 80.0	18969	2.10 µg/L		100
		299.0 -> 99.0	7413			
PFDA	8.140	513.0 -> 469.0	50414	2.51 µg/L		100
		513.0 -> 219.0	8202			
PFDoDA	9.027	613.0 -> 569.0	78535	2.51 µg/L		99
		613.0 -> 319.0	9344			
PFDS	9.193	599.0 -> 80.0	9517	2.52 µg/L		91

Perfluorinated Compounds by LC/MS/MS

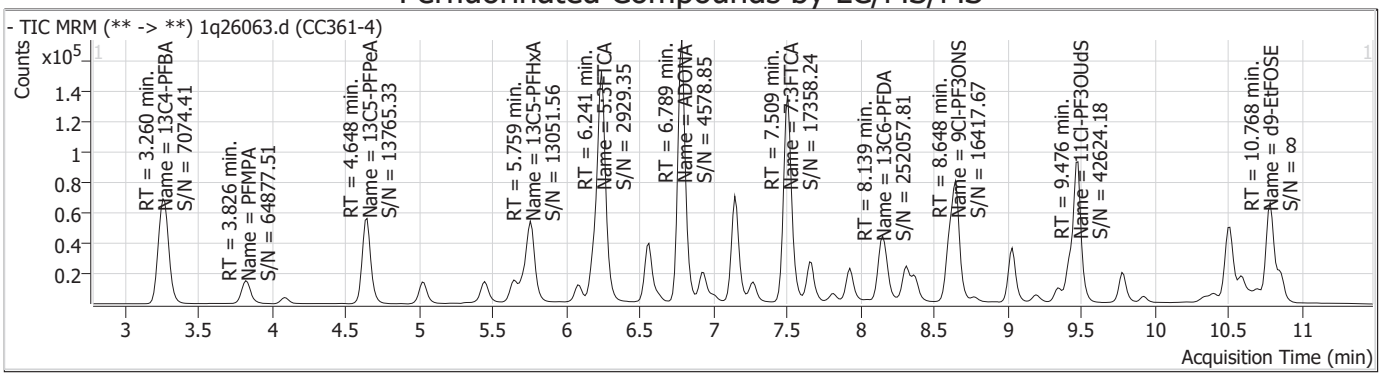
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	4248				
PFHpA	6.566	363.0 -> 319.0	76437	2.53	µg/L		96
		363.0 -> 169.0	13235				
PFHpS	7.822	449.0 -> 80.0	12588	2.47	µg/L		97
		449.0 -> 99.0	6673				
PFHxA	5.761	313.0 -> 269.0	62160	2.49	µg/L		99
		313.0 -> 119.0	1655				
PFHxS	7.276	399.0 -> 80.0	12823	2.24	µg/L	m	92
		399.0 -> 99.0	7223				
PFNA	7.669	463.0 -> 419.0	37656	2.48	µg/L	m	100
		463.0 -> 219.0	10966				
PFNS	8.772	549.0 -> 80.0	6739	2.66	µg/L		93
		549.0 -> 99.0	4116				
PFOA	7.149	413.0 -> 369.0	73888	2.50	µg/L	m	99
		413.0 -> 169.0	15748				
PFOS	8.318	499.0 -> 80.0	14202	2.41	µg/L	m	94
		499.0 -> 99.0	7052				
PFPeA	4.650	263.0 -> 219.0	107294	5.06	µg/L		100
PFPeS	6.630	349.0 -> 80.0	8594	2.12	µg/L		99
		349.0 -> 99.0	3900				
PFTeDA	9.773	713.0 -> 669.0	46375	2.48	µg/L		99
		713.0 -> 219.0	3706				
PFTrDA	9.412	663.0 -> 619.0	78159	2.56	µg/L		99
		663.0 -> 369.0	5069				
PFUnDA	8.596	563.0 -> 519.0	74029	2.47	µg/L		98
		563.0 -> 269.0	11228				
11Cl-PF3OUdS	9.476	631.0 -> 451.0	253627	11.89	µg/L		99
		633.0 -> 453.0	76848				
9Cl-PF3ONS	8.648	531.0 -> 351.0	204088	11.67	µg/L		98
		533.0 -> 353.0	61558				
ADONA	6.789	377.0 -> 251.0	489863	11.24	µg/L		99
		377.0 -> 85.0	136577				
HFPO-DA	6.088	285.0 -> 169.0	19624	10.24	µg/L		94
		285.0 -> 185.0	1418				
3:3FTCA	4.084	241.0 -> 177.0	15928	13.80	µg/L		99
		241.0 -> 117.0	1152				
5:3FTCA	6.241	341.0 -> 237.0	331207	74.95	µg/L		98
		341.0 -> 217.0	229173				
7:3FTCA	7.509	441.0 -> 337.0	361995	72.55	µg/L		100
		441.0 -> 317.0	162973				
EtFOSA	10.860	526.0 -> 219.0	17183	2.48	µg/L	m	96
		526.0 -> 169.0	23429				
EtFOSE	10.794	630.0 -> 59.0	152758	25.47	µg/L	m	100
MeFOSA	10.590	512.0 -> 169.0	21079	2.42	µg/L	m	99
		512.0 -> 219.0	14157				
MeFOSE	10.511	616.0 -> 59.0	118359	25.01	µg/L	m	100
PFDoDS	9.924	699.0 -> 80.0	9182	2.88	µg/L		97
		699.0 -> 99.0	5010				
NFDHA	5.651	295.0 -> 201.0	6477	3.90	µg/L		46
		201.0 -> 85.0	45964				
		295.0 -> 85.0	1914				
PFMBA	5.027	279.0 -> 85.0	56856	4.93	µg/L		100
PFMPA	3.826	229.0 -> 85.0	65736	5.06	µg/L		100
PFEESA	6.194	315.0 -> 135.0	106627	4.49	µg/L		100
		315.0 -> 69.0	9518				

 # = Qualifier out of range, m = manually integrated, + = Area summed

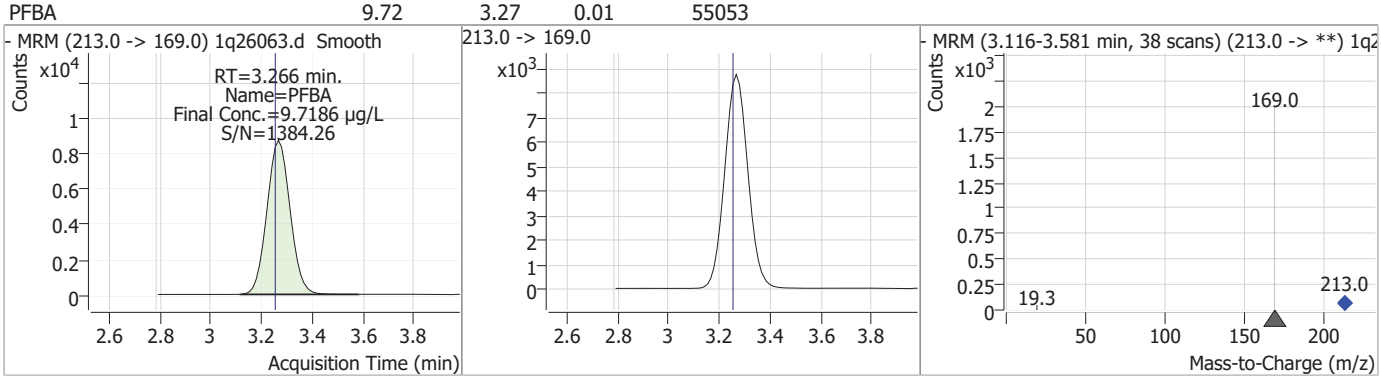
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

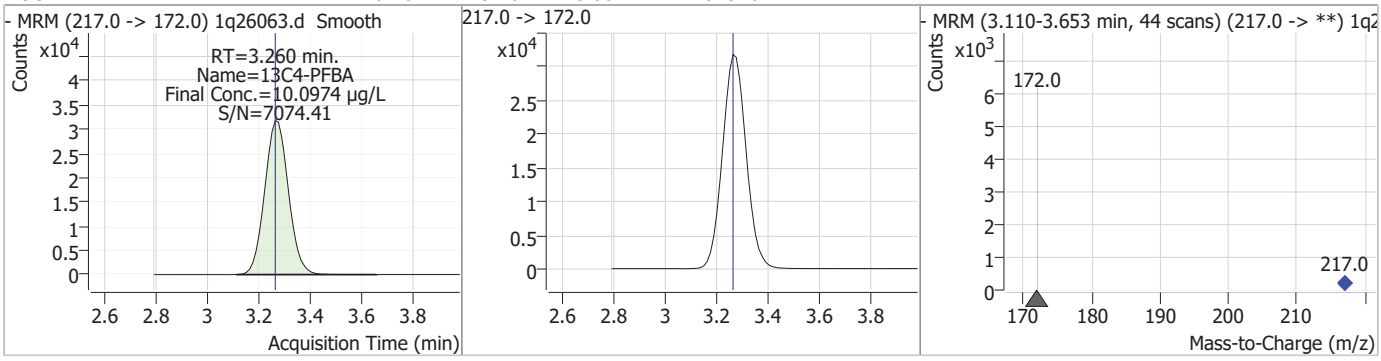
Perfluorinated Compounds by LC/MS/MS



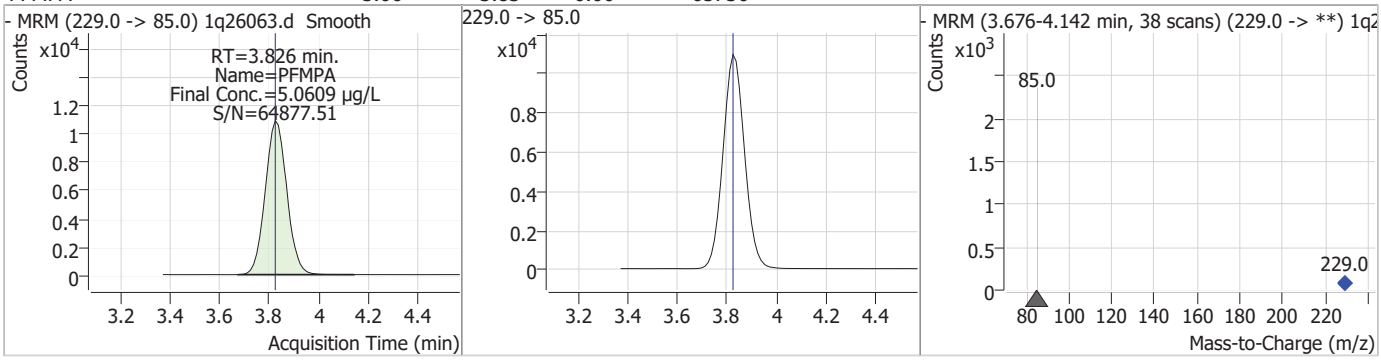
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.72	3.27	0.01	55053				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.10	3.26	0.00	202570				

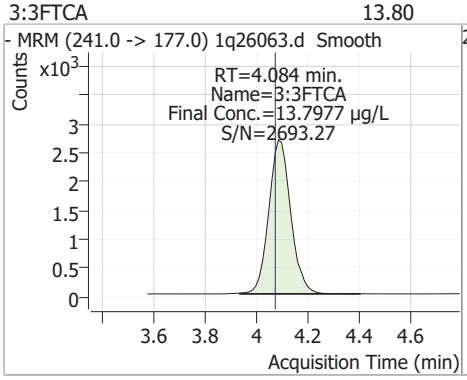


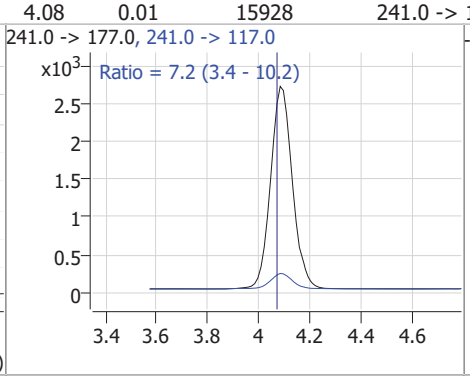
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.06	3.83	0.00	65736				

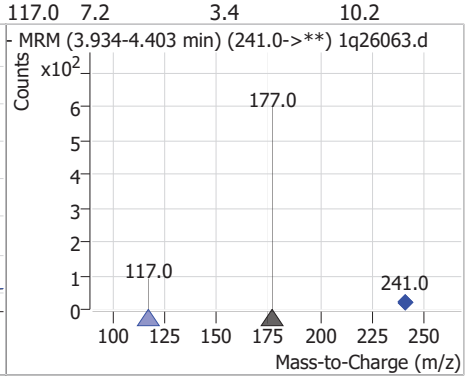


Perfluorinated Compounds by LC/MS/MS

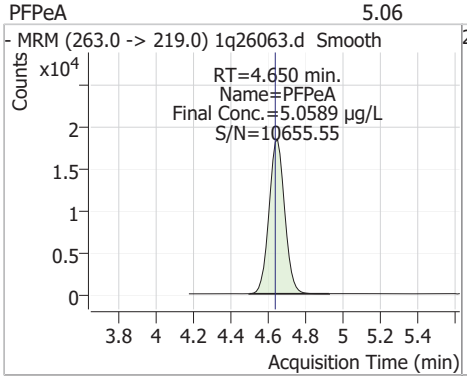
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	13.80	4.08	0.01	15928	241.0 -> 117.0	7.2	3.4	10.2

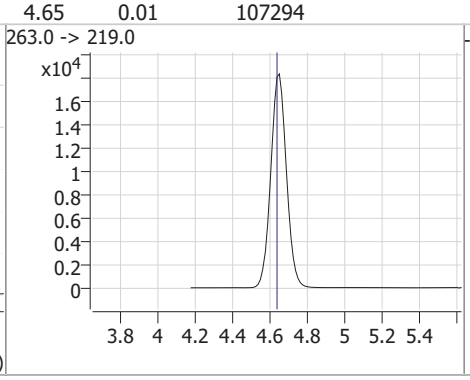


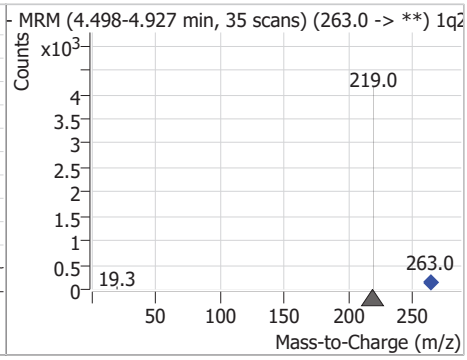




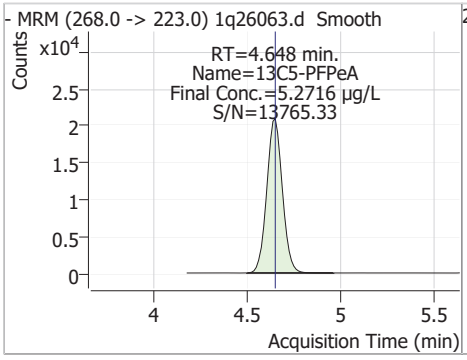
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.06	4.65	0.01	107294				

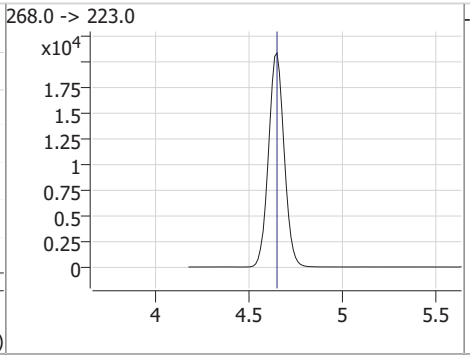


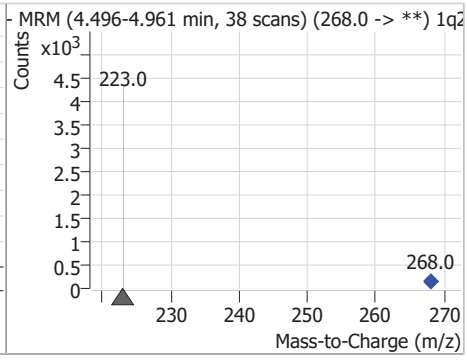




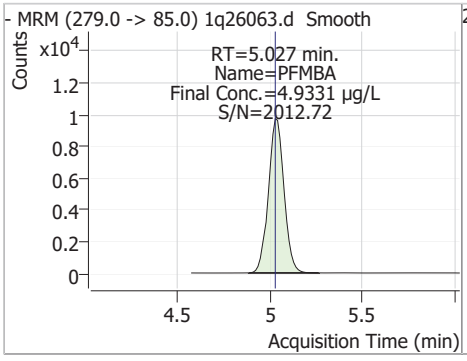
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.27	4.65	0.00	121789				

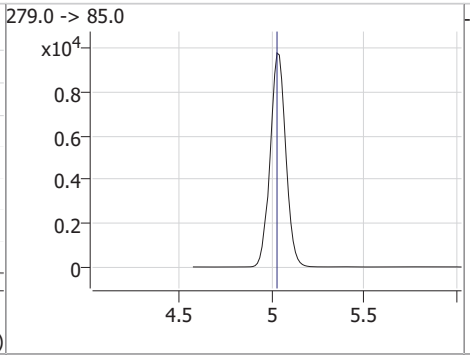


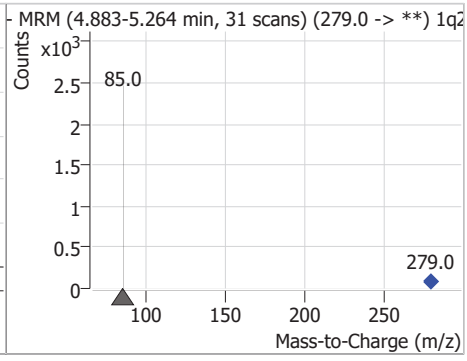




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.93	5.03	0.00	56856				

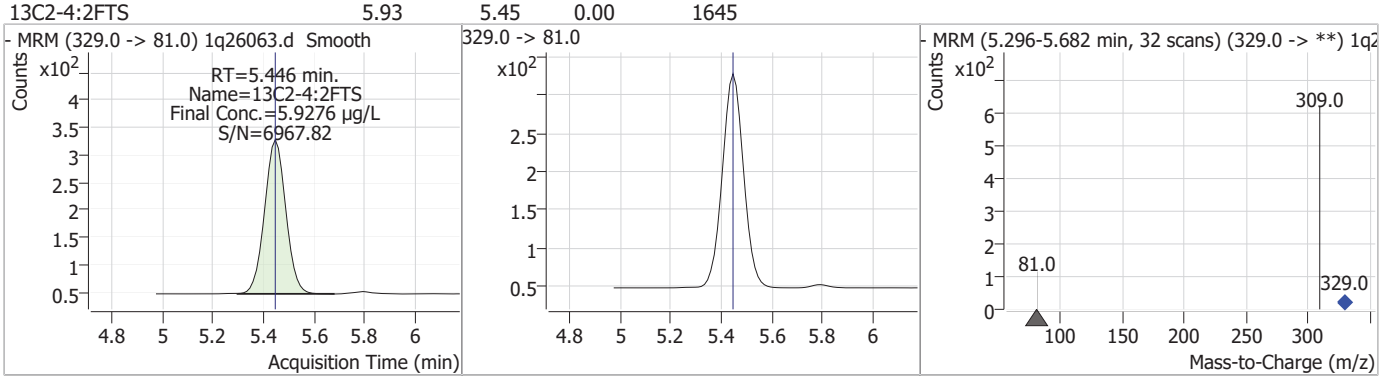




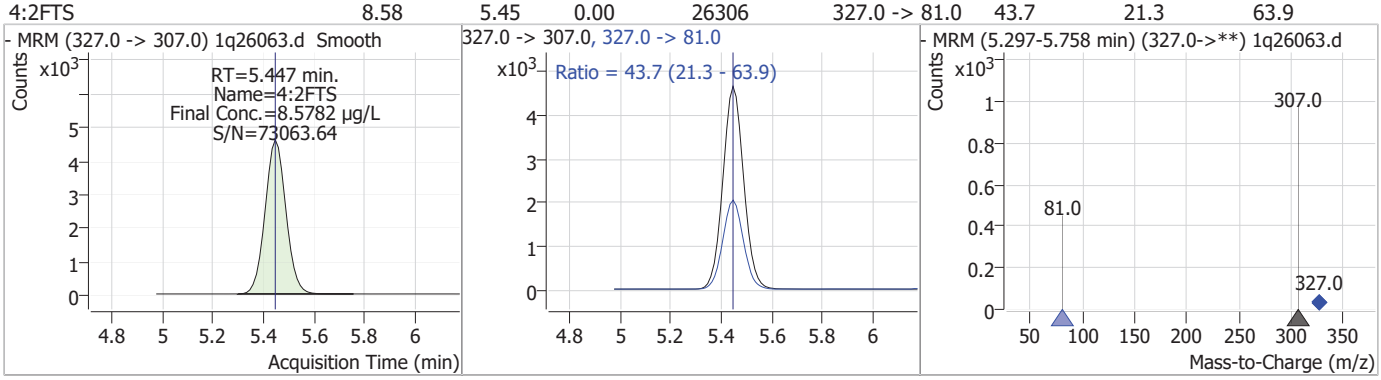


Perfluorinated Compounds by LC/MS/MS

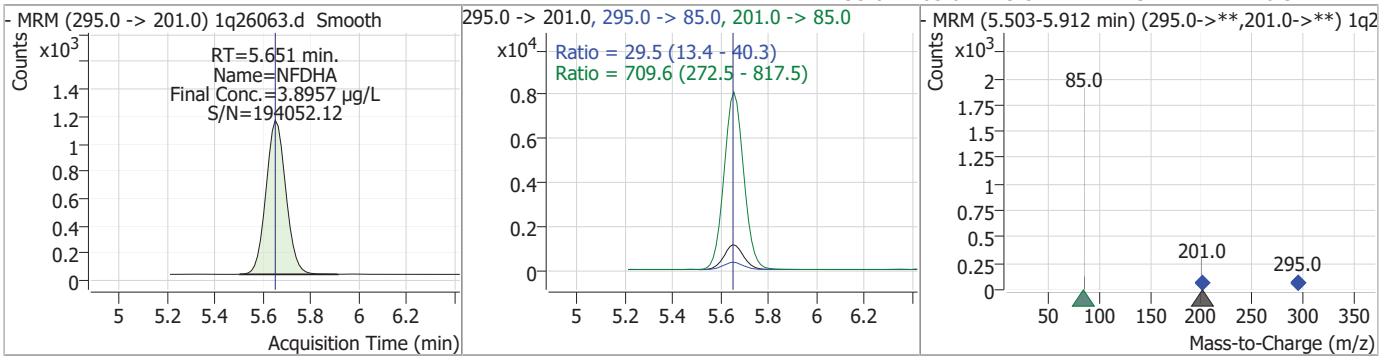
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.93	5.45	0.00	1645				



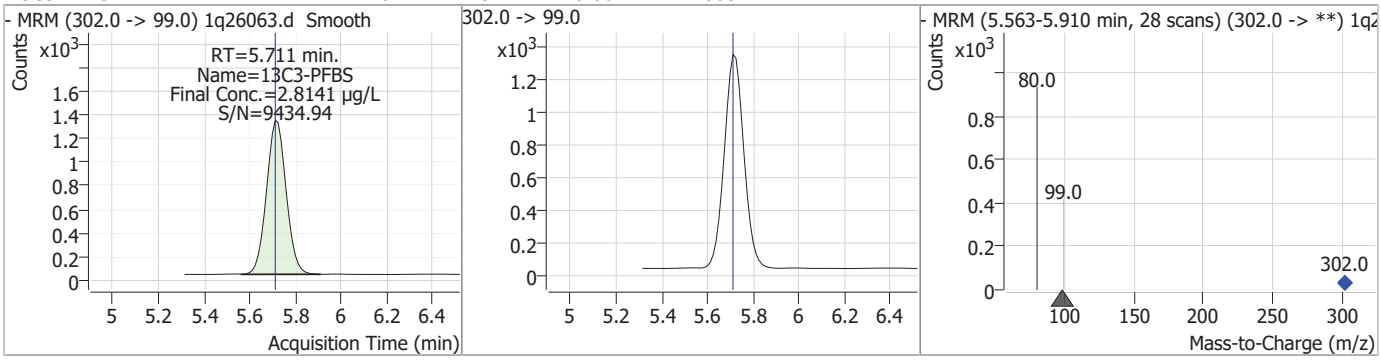
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	8.58	5.45	0.00	26306	327.0 -> 81.0	43.7	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	3.90	5.65	0.00	6477	201.0 -> 85.0	709.6	272.5	817.5
					295.0 -> 85.0	29.5	13.4	40.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.81	5.71	0.00	7805				



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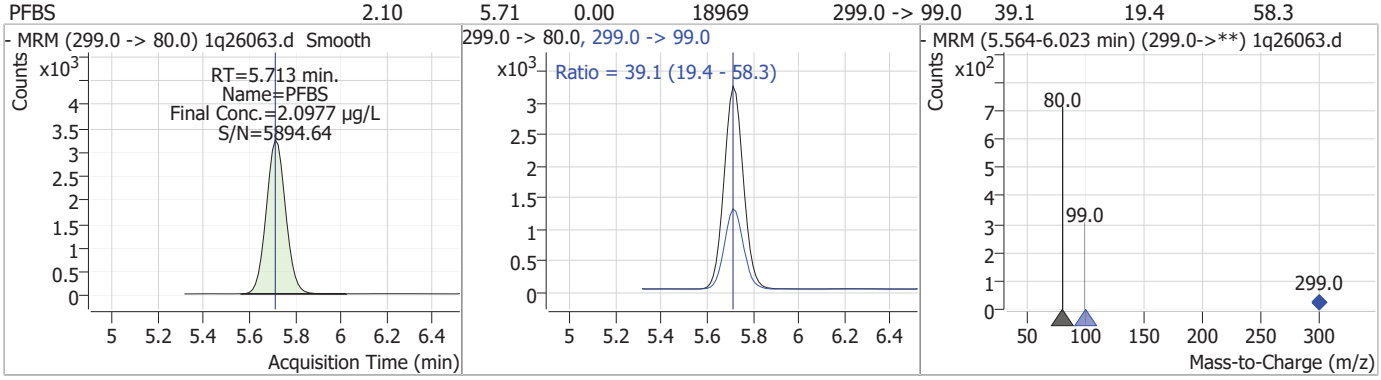
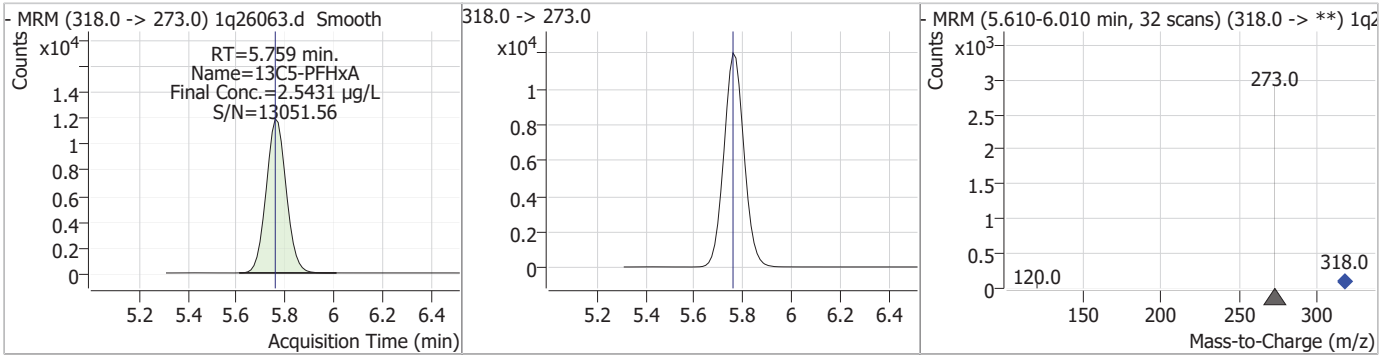
Perfluorinated Compounds by LC/MS/MS

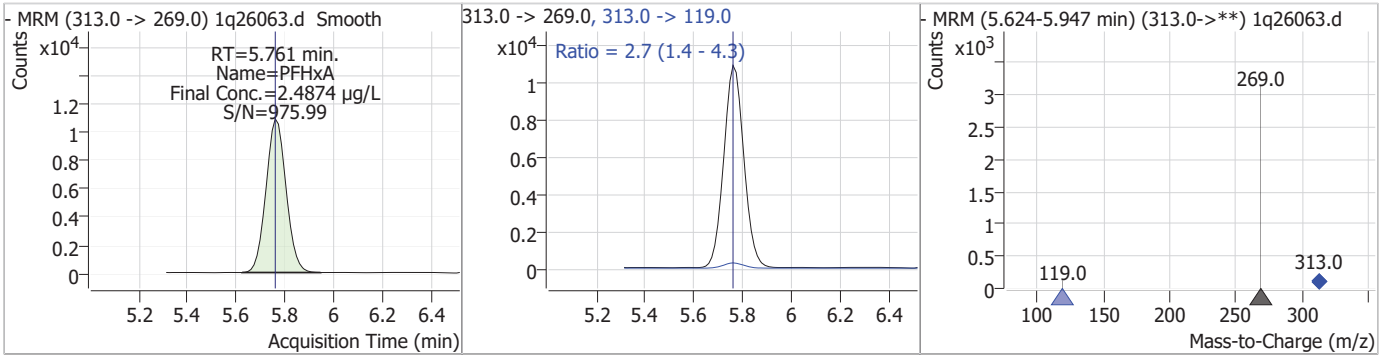
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.10	5.71	0.00	18969	299.0 -> 99.0	39.1	19.4	58.3



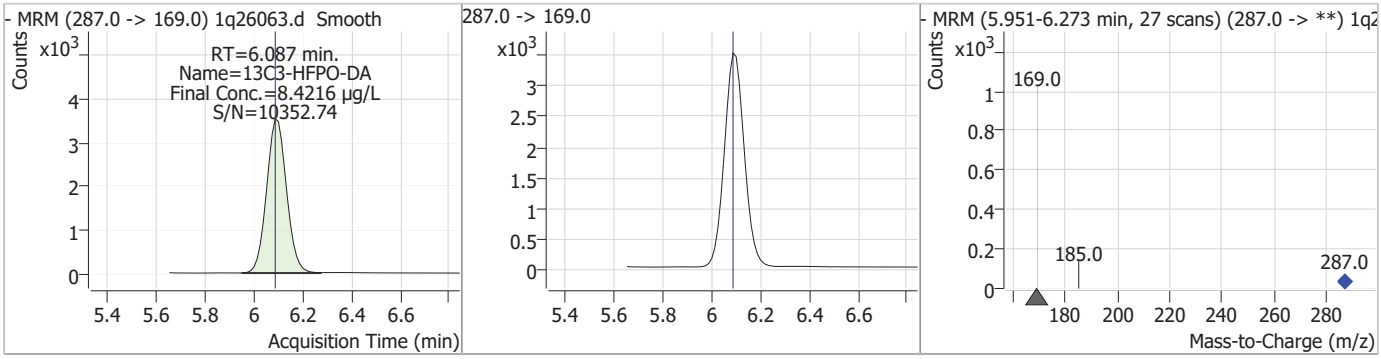
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.54	5.76	0.00	68179				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.49	5.76	0.00	62160	313.0 -> 119.0	2.7	1.4	4.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.42	6.09	0.00	19790				



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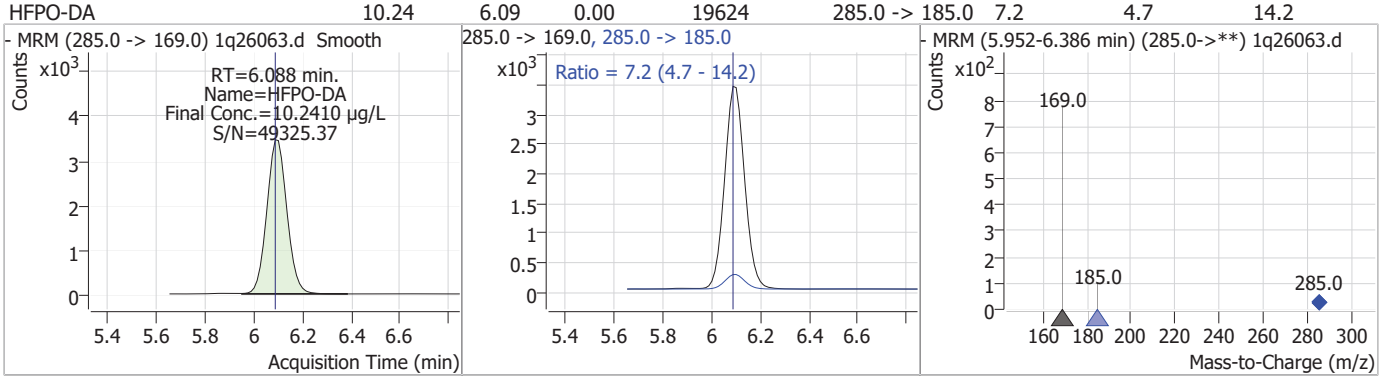
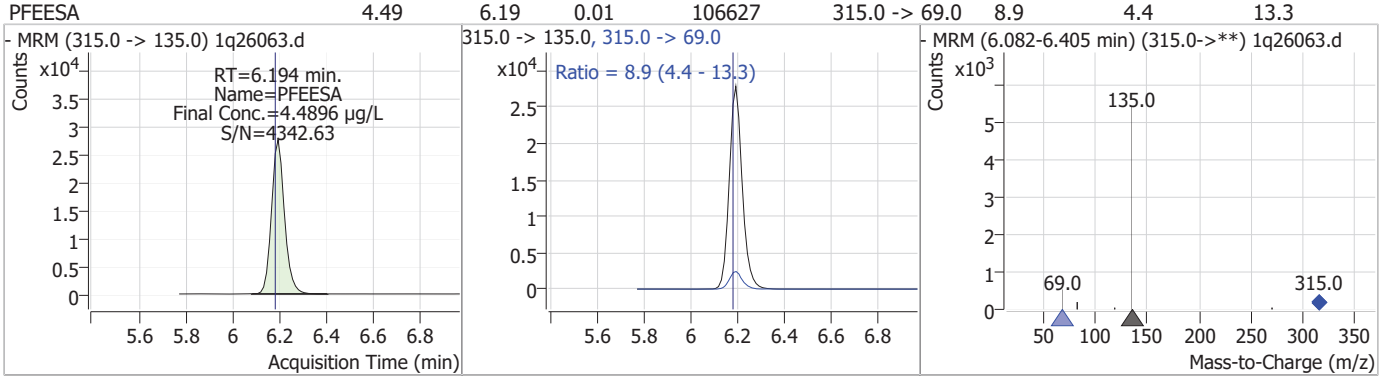
Perfluorinated Compounds by LC/MS/MS

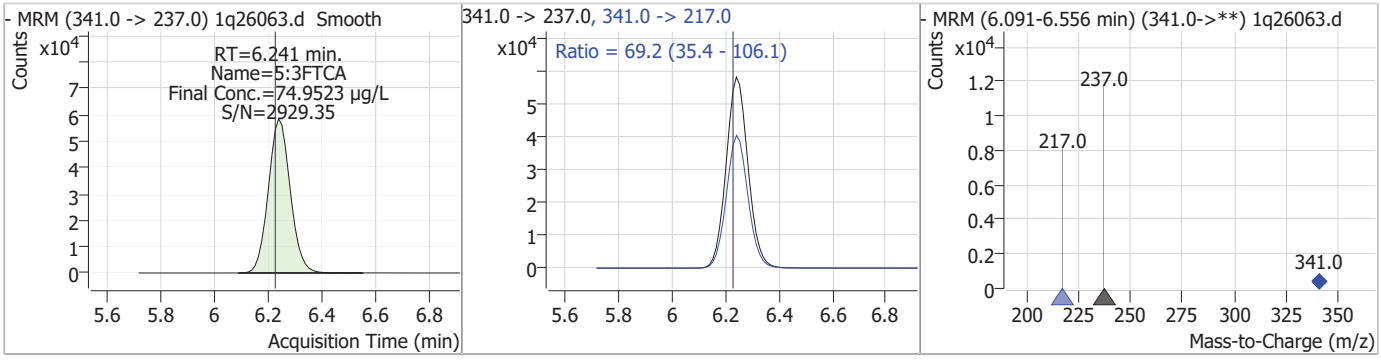
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.24	6.09	0.00	19624	285.0 -> 185.0	7.2	4.7	14.2



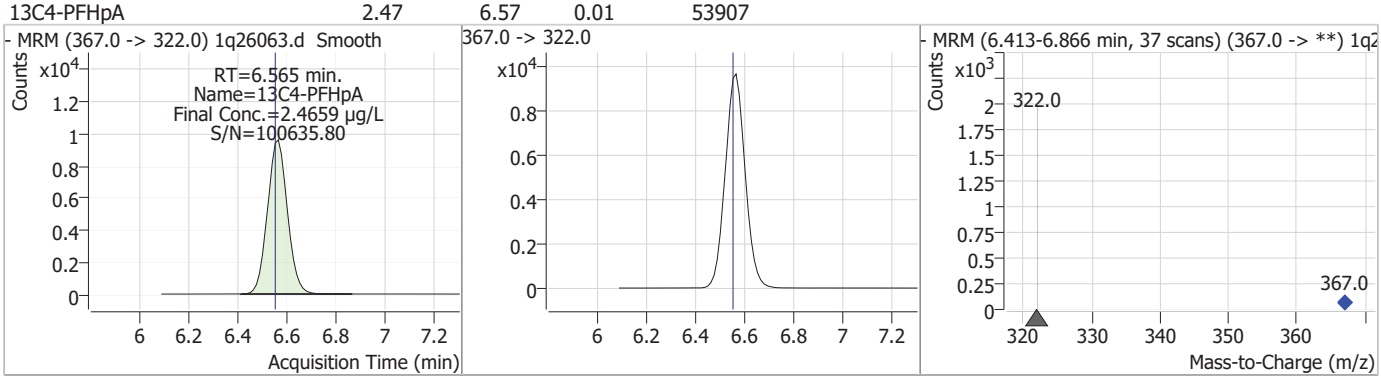
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.49	6.19	0.01	106627	315.0 -> 69.0	8.9	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	74.95	6.24	0.01	331207	341.0 -> 217.0	69.2	35.4	106.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.47	6.57	0.01	53907				



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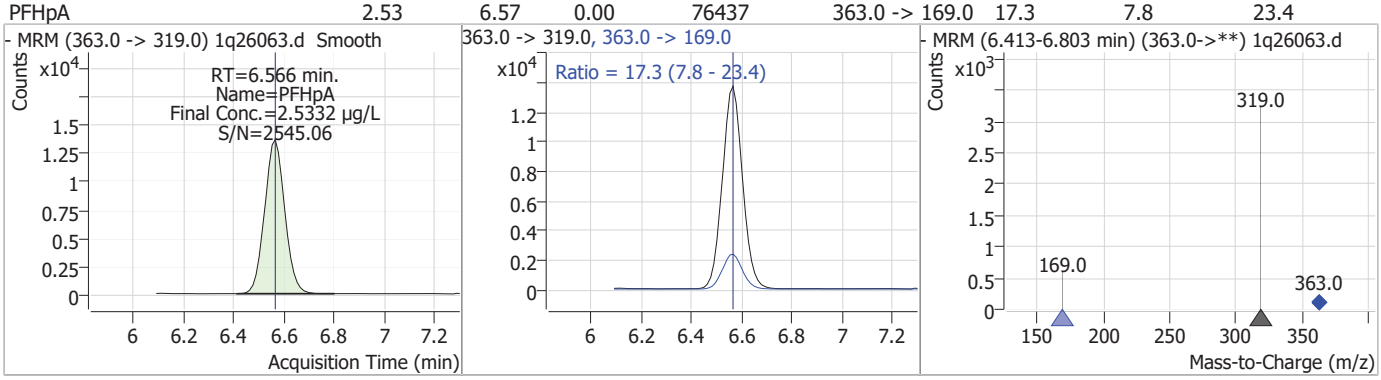
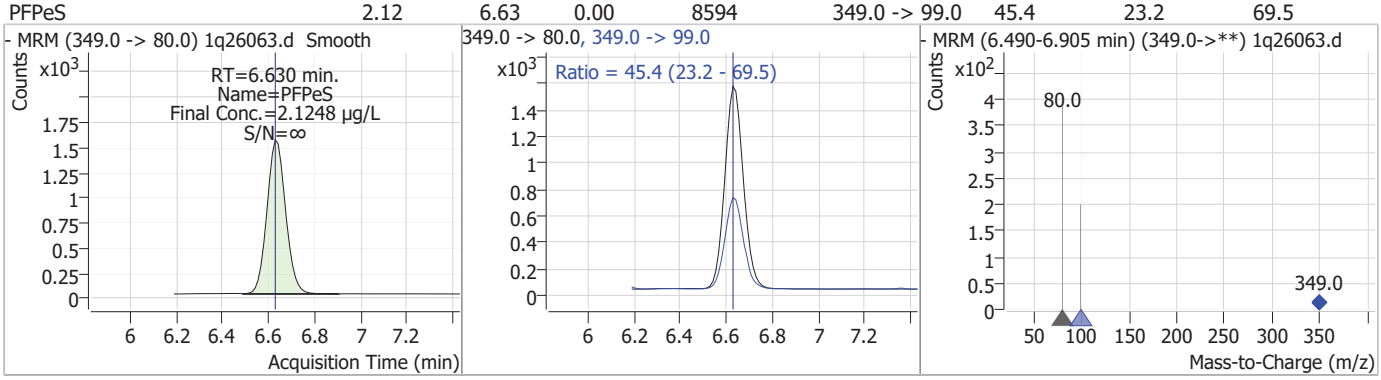
Perfluorinated Compounds by LC/MS/MS

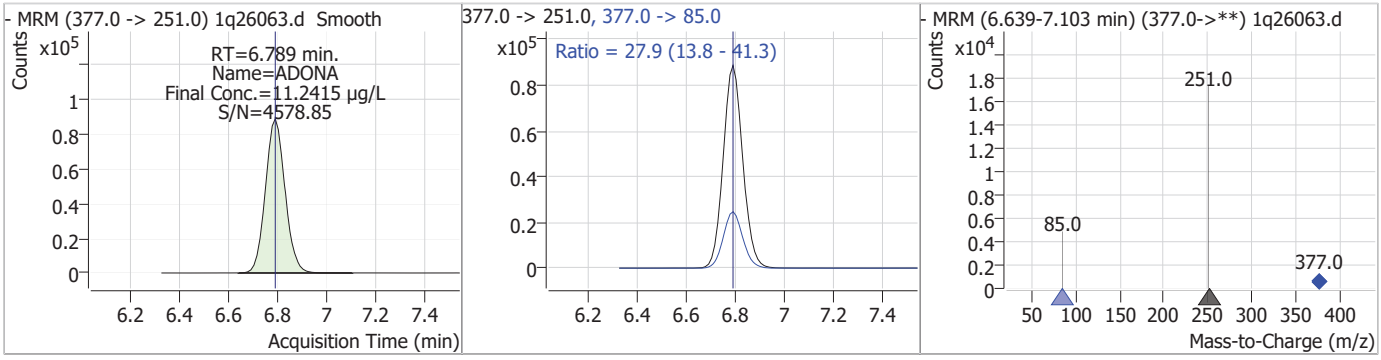
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.53	6.57	0.00	76437	363.0 -> 169.0	17.3	7.8	23.4



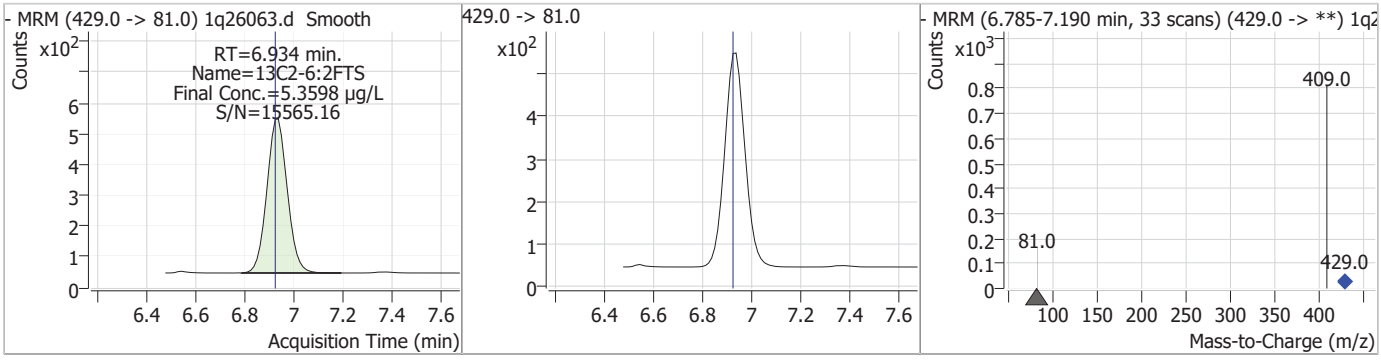
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.12	6.63	0.00	8594	349.0 -> 99.0	45.4	23.2	69.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	11.24	6.79	0.00	489863	377.0 -> 85.0	27.9	13.8	41.3

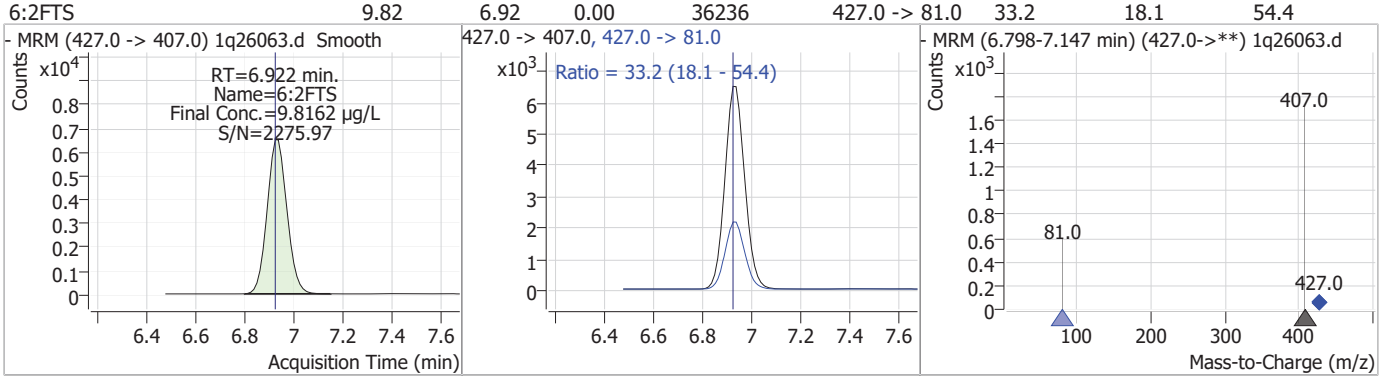


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.36	6.93	0.01	2884				

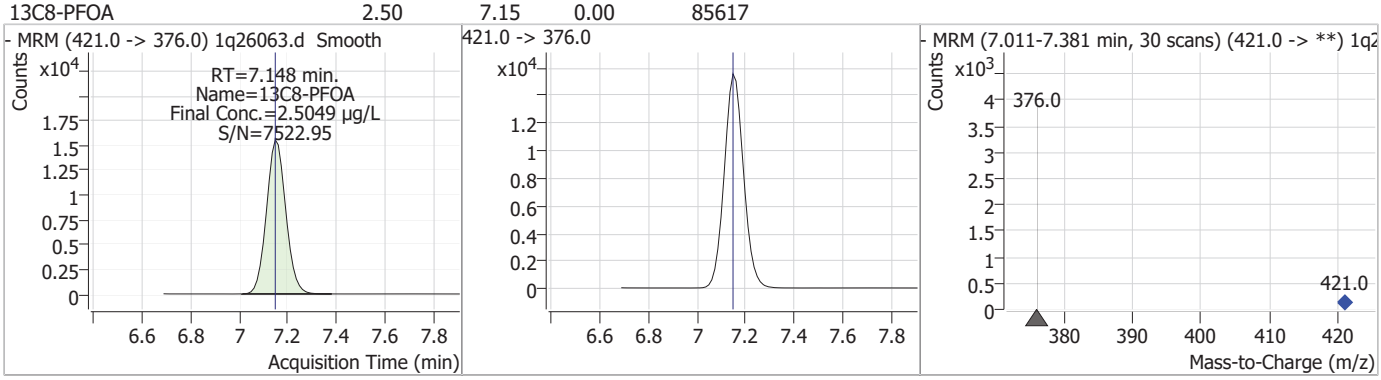


Perfluorinated Compounds by LC/MS/MS

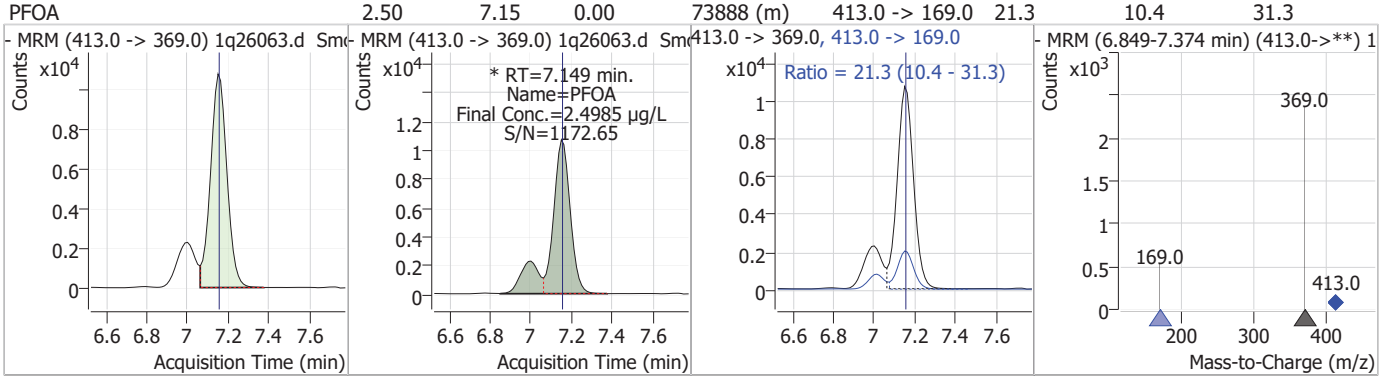
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.82	6.92	0.00	36236	427.0 -> 81.0	33.2	18.1	54.4



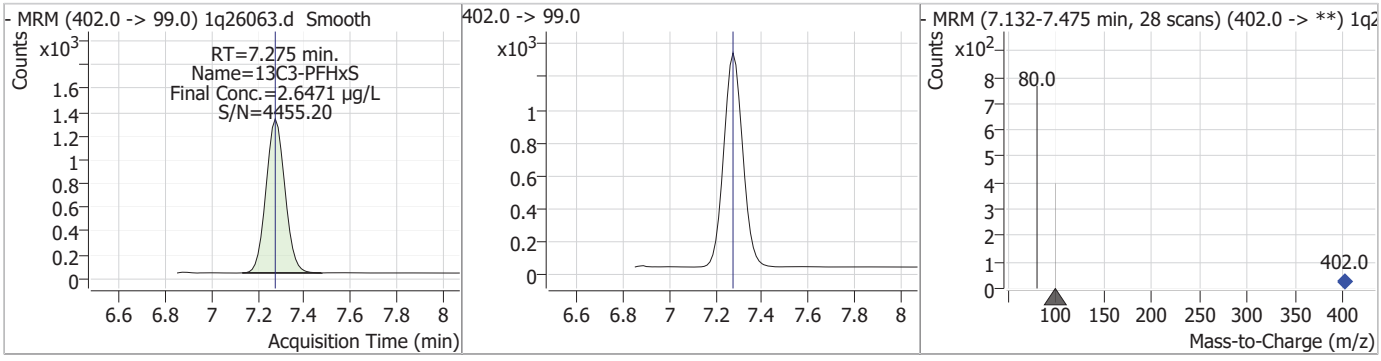
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.50	7.15	0.00	85617				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.50	7.15	0.00	73888 (m)	413.0 -> 169.0	21.3	10.4	31.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.65	7.27	0.00	7358				



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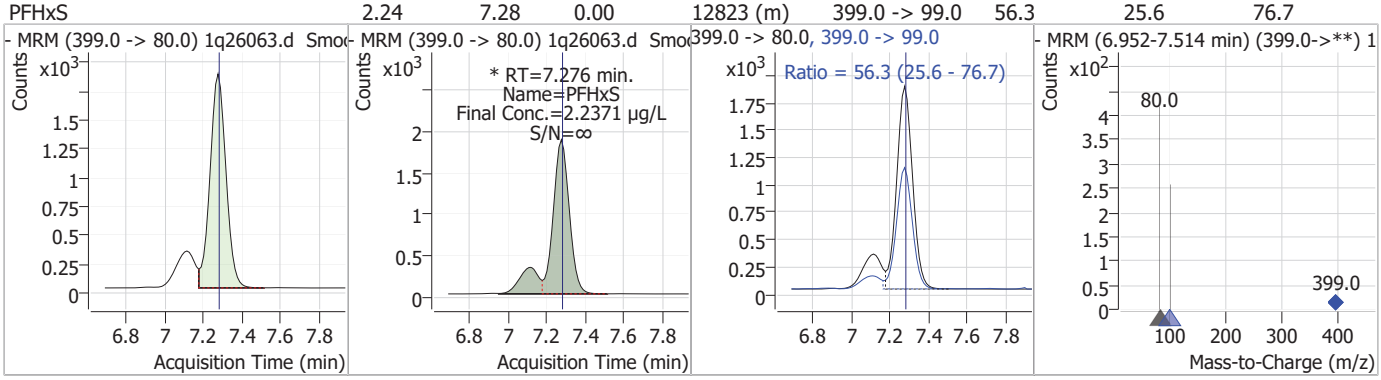
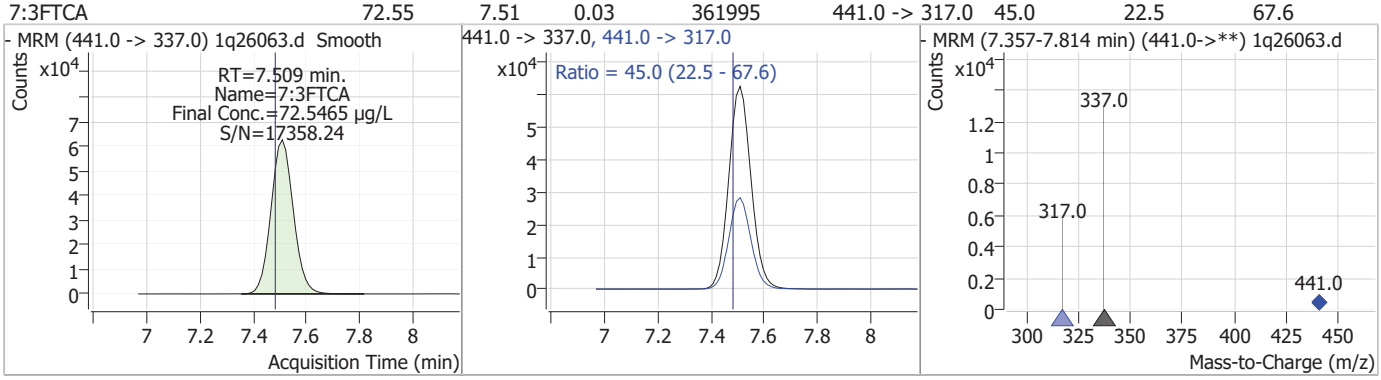
Perfluorinated Compounds by LC/MS/MS

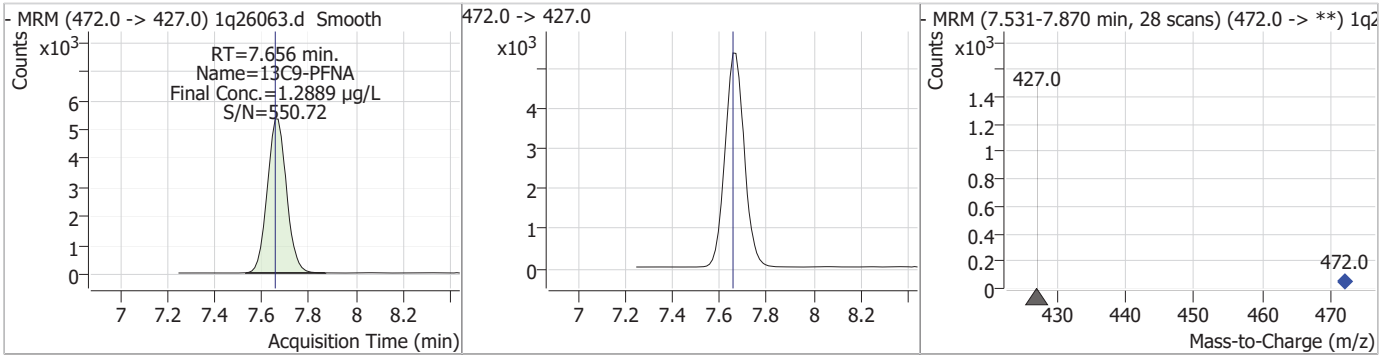
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.24	7.28	0.00	12823 (m)	399.0 -> 99.0	56.3	25.6	76.7



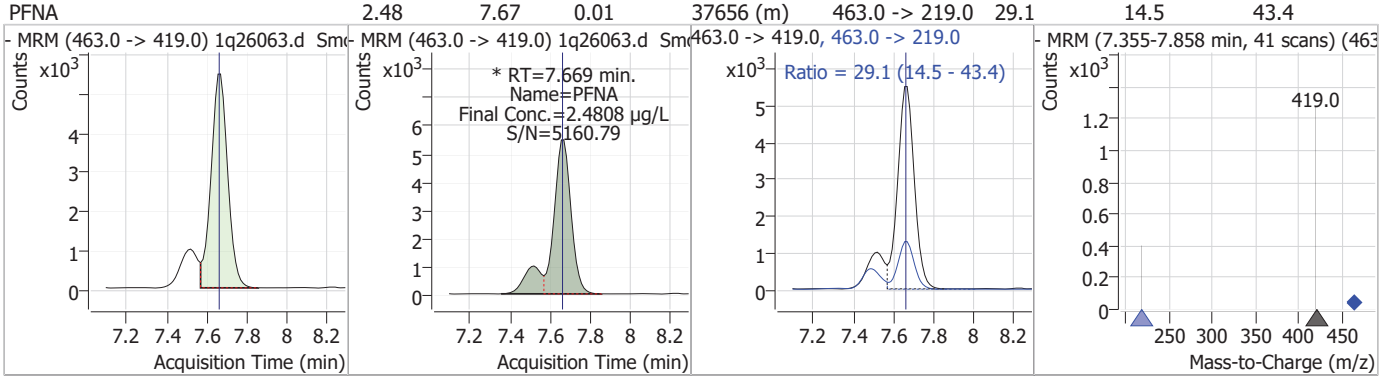
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	72.55	7.51	0.03	361995	441.0 -> 317.0	45.0	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.29	7.66	0.00	30264				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.48	7.67	0.01	37656 (m)	463.0 -> 219.0	29.1	14.5	43.4



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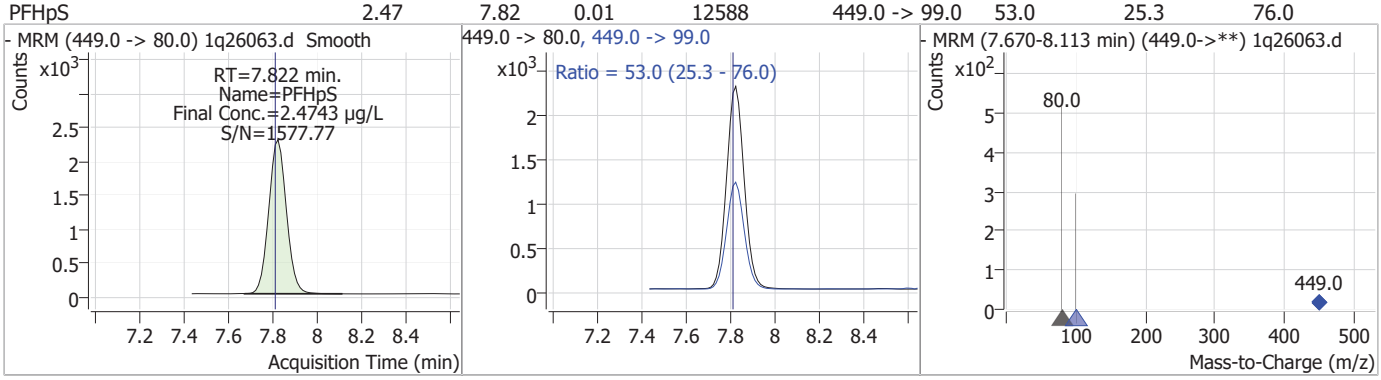
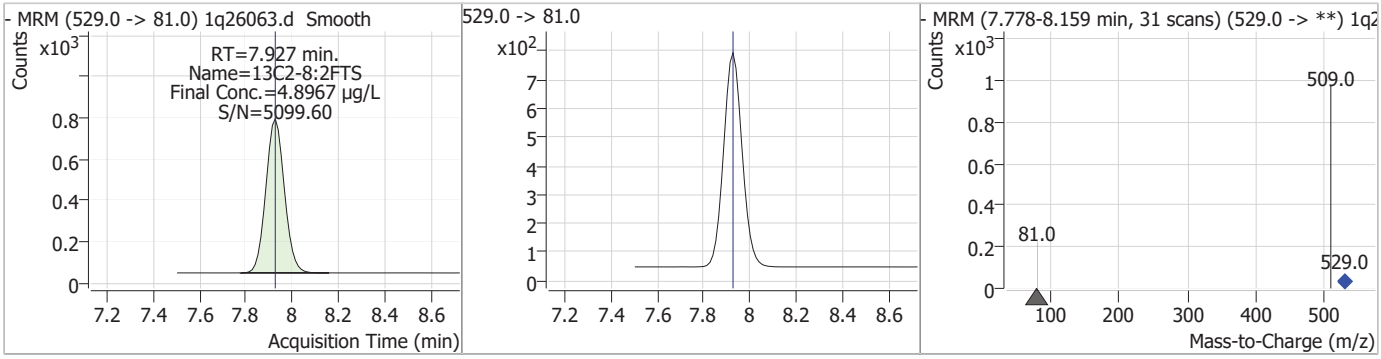
Perfluorinated Compounds by LC/MS/MS

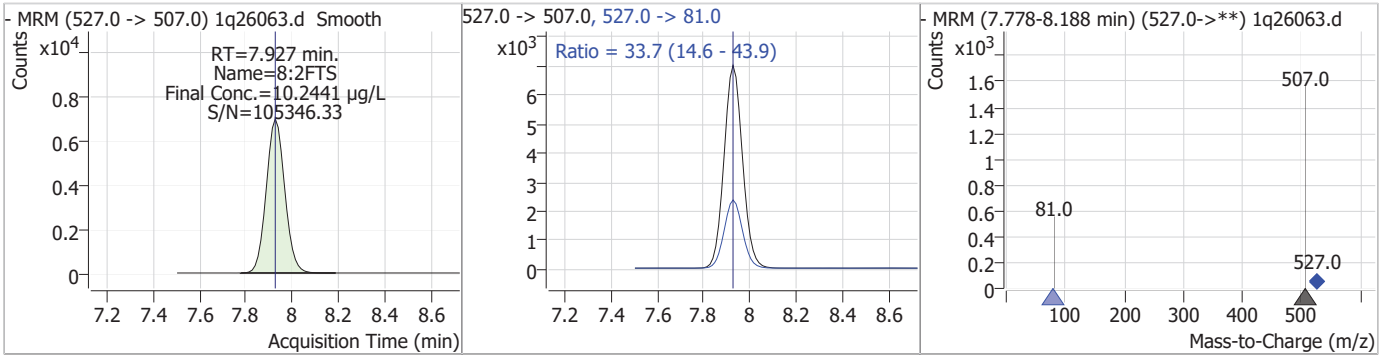
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.47	7.82	0.01	12588	449.0 -> 99.0	53.0	25.3	76.0



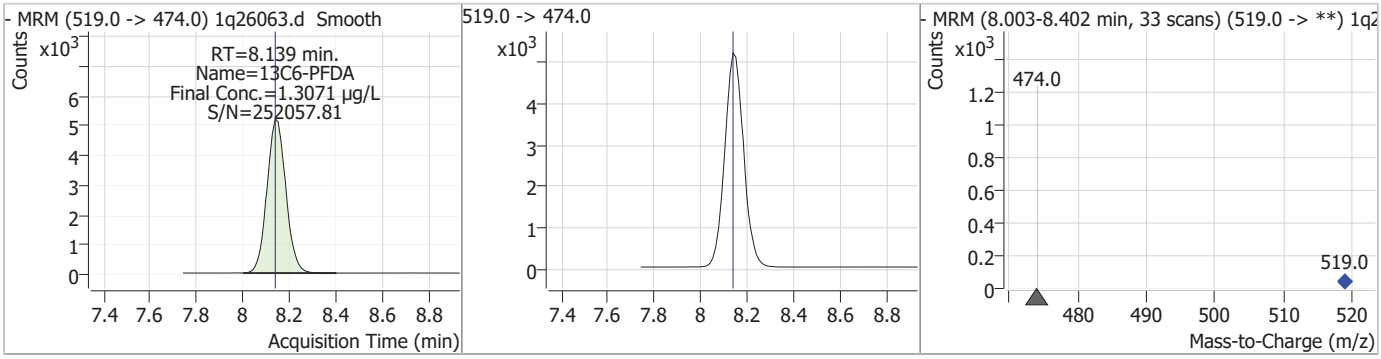
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.90	7.93	0.00	4146				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.24	7.93	0.00	38613	527.0 -> 81.0	33.7	14.6	43.9

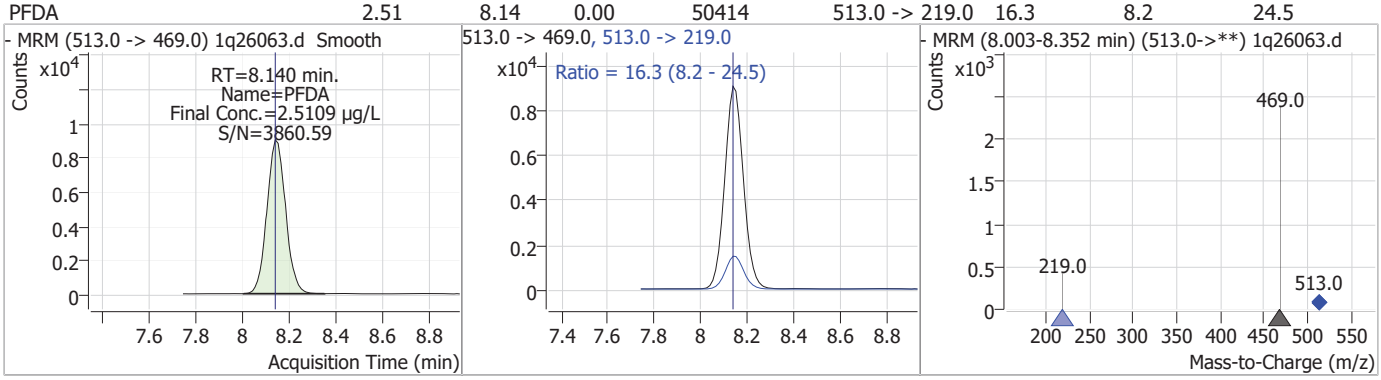


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.31	8.14	0.00	29244				

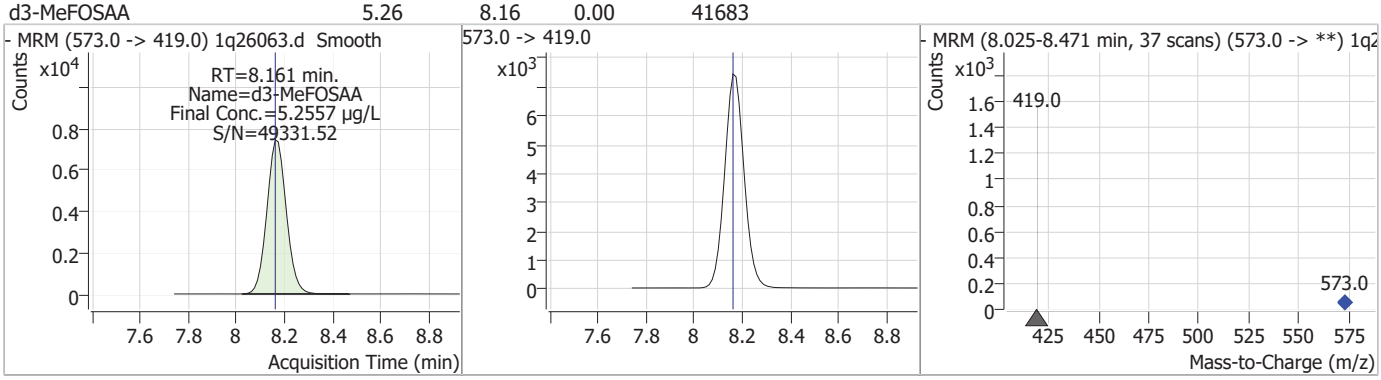


Perfluorinated Compounds by LC/MS/MS

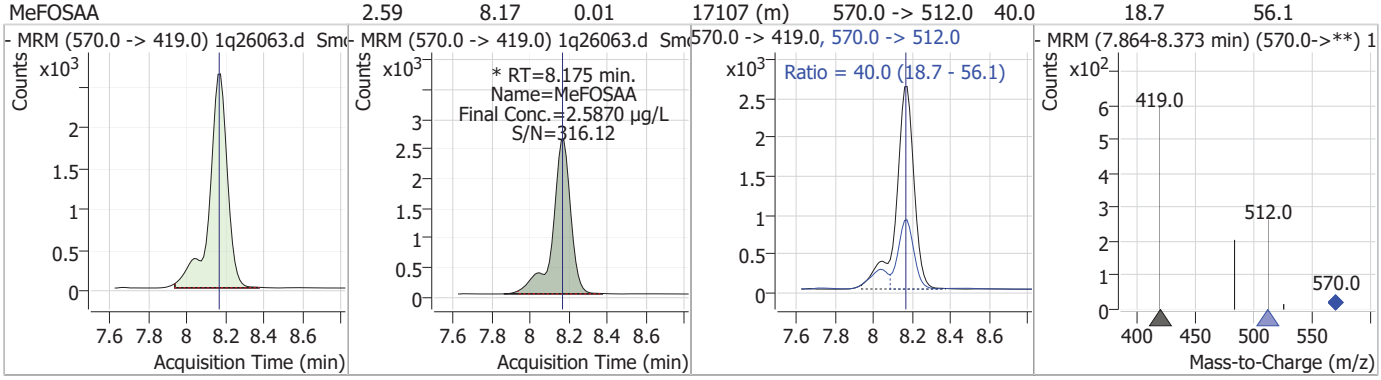
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.51	8.14	0.00	50414	513.0 -> 219.0	16.3	8.2	24.5



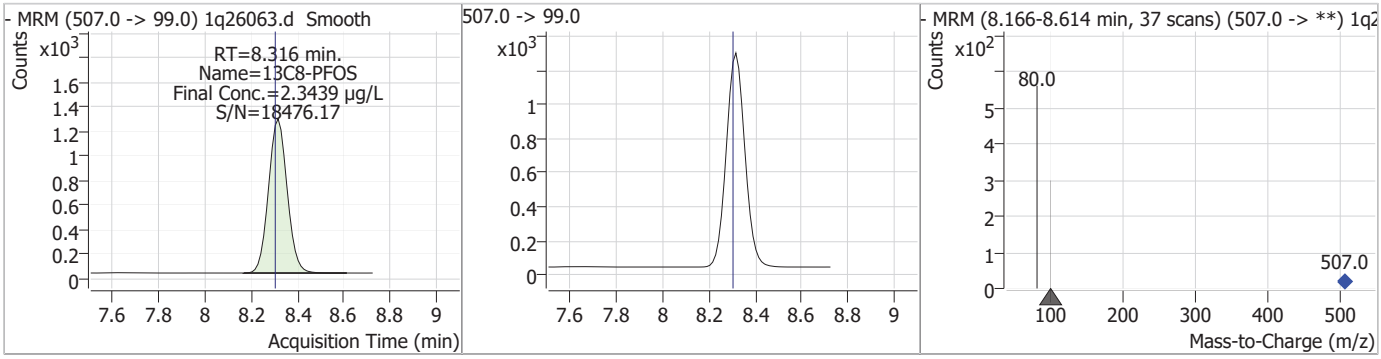
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.26	8.16	0.00	41683				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.59	8.17	0.01	17107 (m)	570.0 -> 512.0	40.0	18.7	56.1

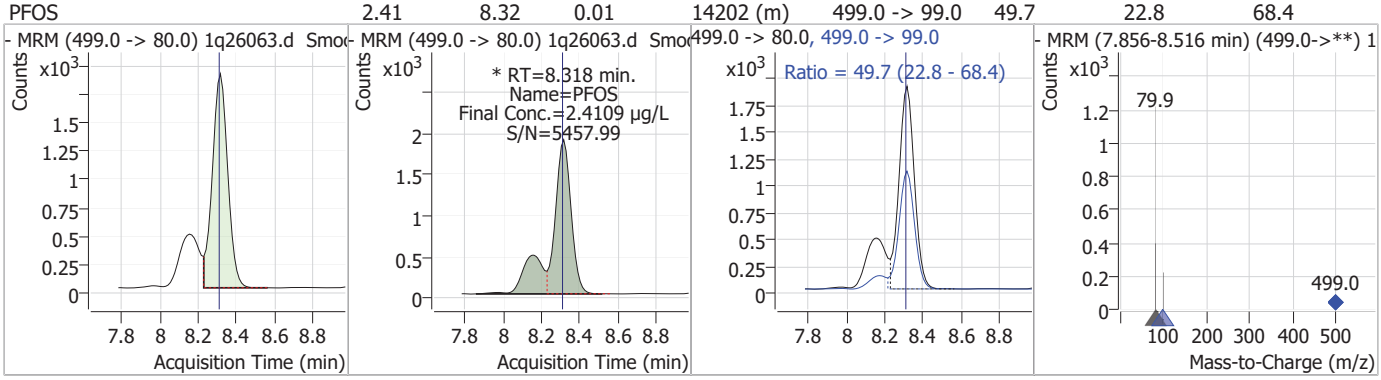


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.34	8.32	0.01	7024				

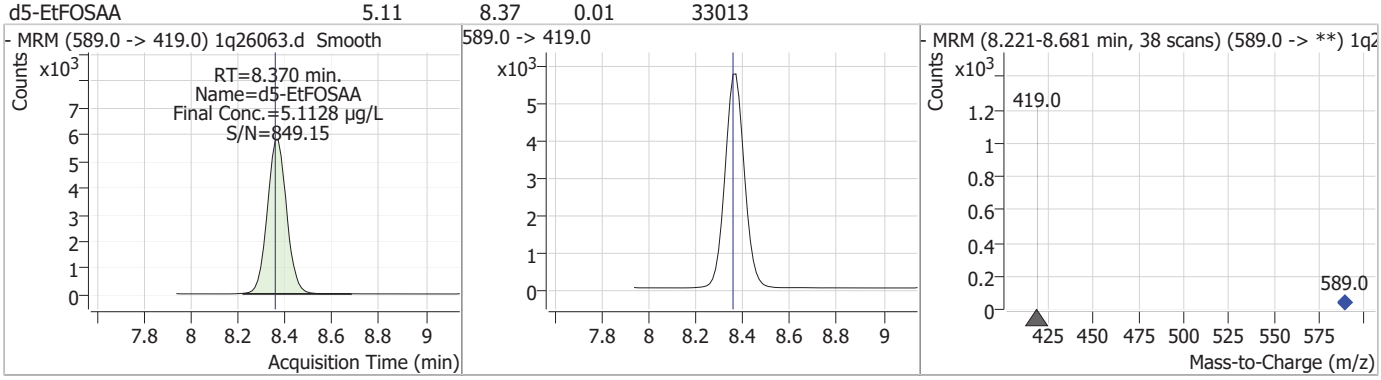


Perfluorinated Compounds by LC/MS/MS

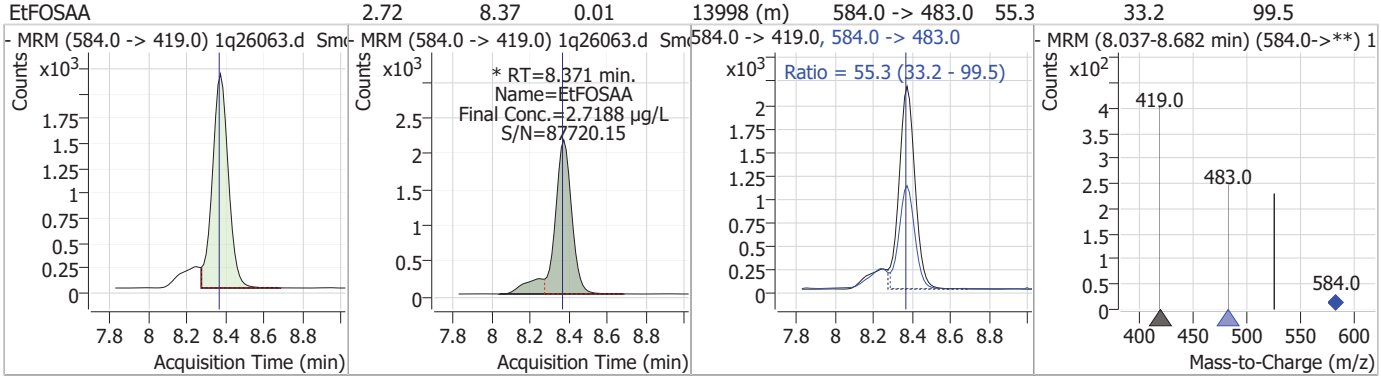
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.41	8.32	0.01	14202 (m)	499.0 -> 99.0	49.7	22.8	68.4



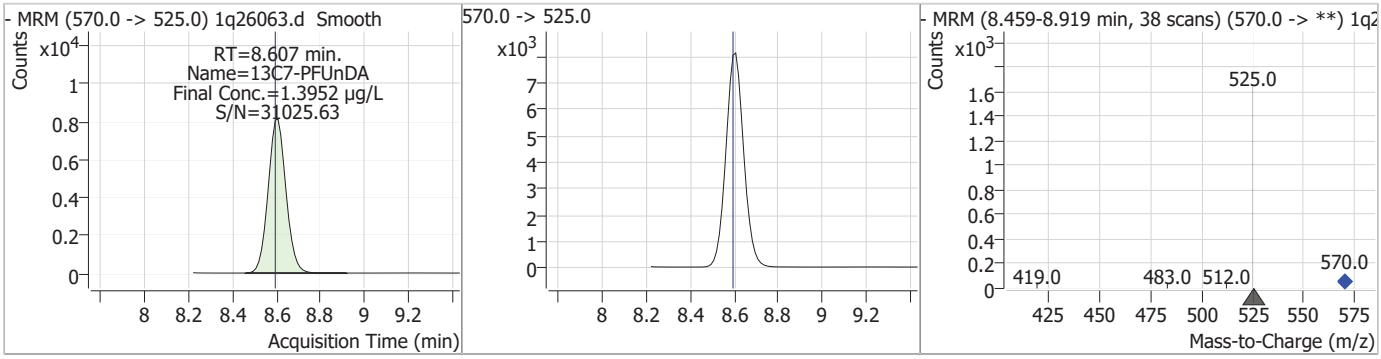
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.11	8.37	0.01	33013				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.72	8.37	0.01	13998 (m)	584.0 -> 483.0	55.3	33.2	99.5

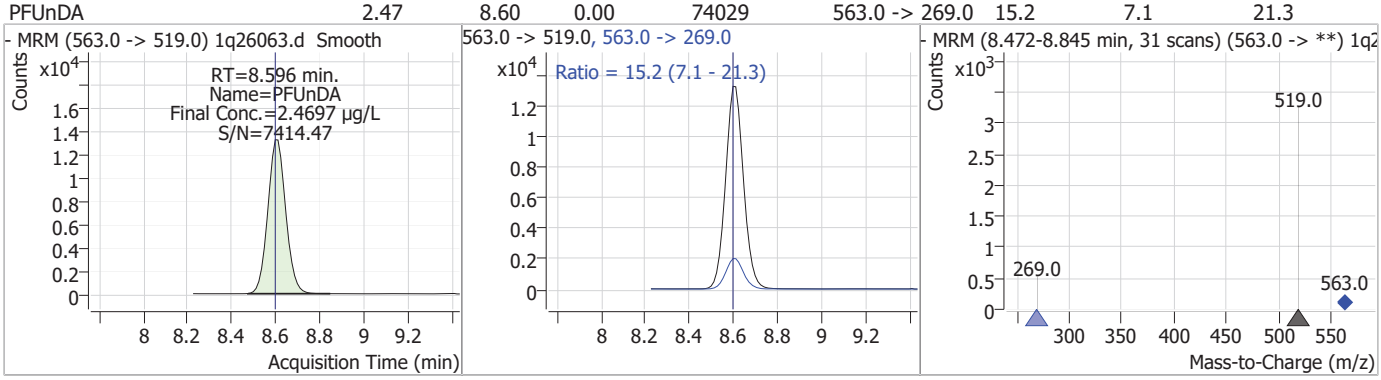


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.40	8.61	0.01	45312				

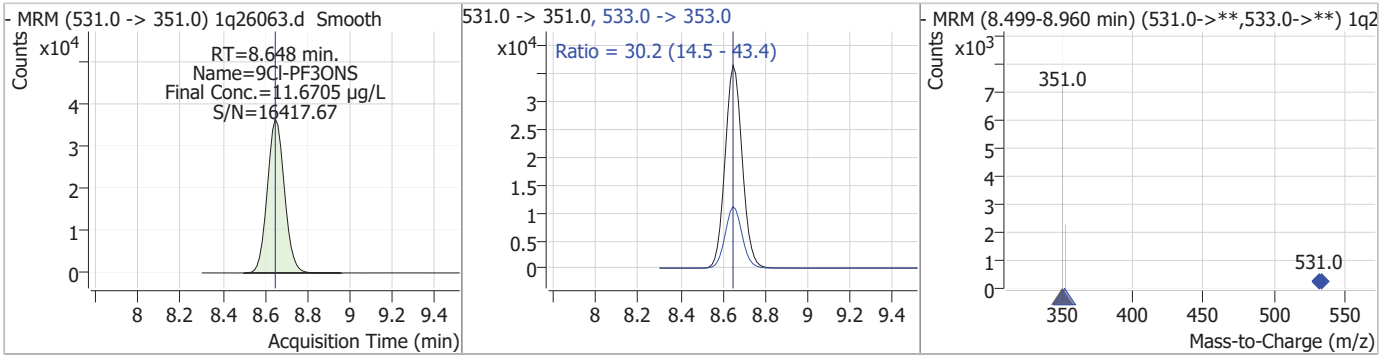


Perfluorinated Compounds by LC/MS/MS

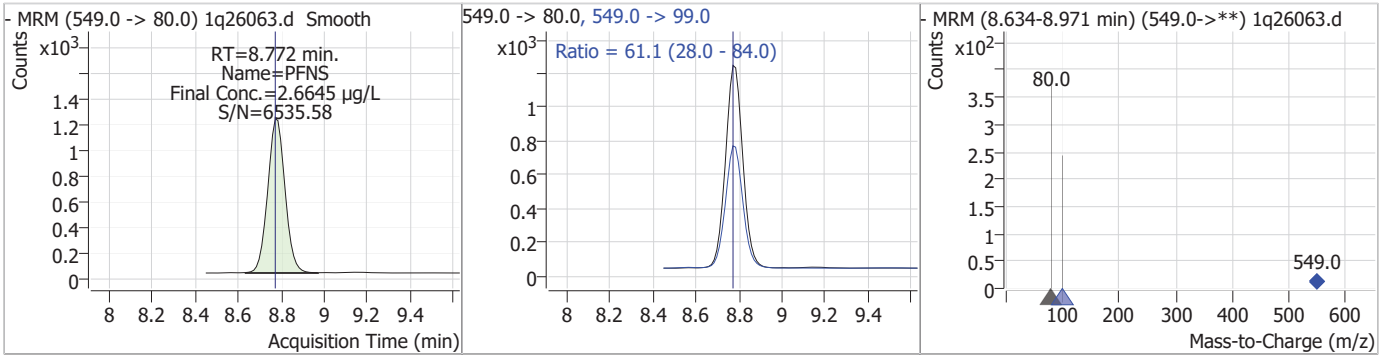
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.47	8.60	0.00	74029	563.0 -> 269.0	15.2	7.1	21.3



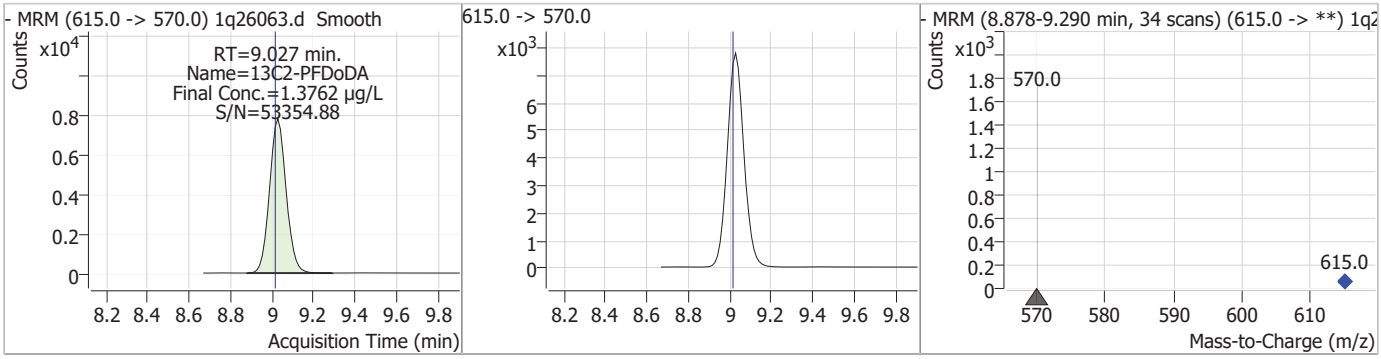
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	11.67	8.65	0.00	204088	533.0 -> 353.0	30.2	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.66	8.77	0.00	6739	549.0 -> 99.0	61.1	28.0	84.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.38	9.03	0.01	43124				



7.6.13

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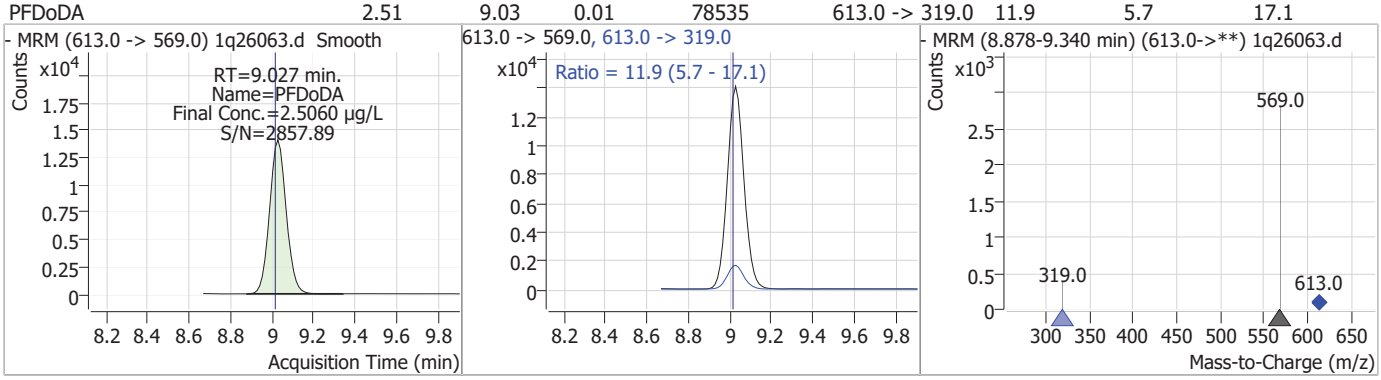
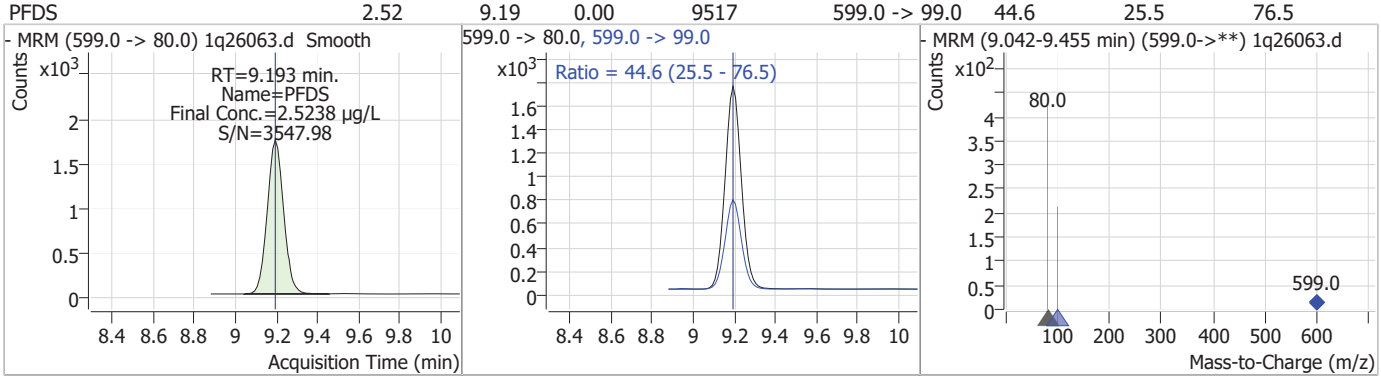
Perfluorinated Compounds by LC/MS/MS

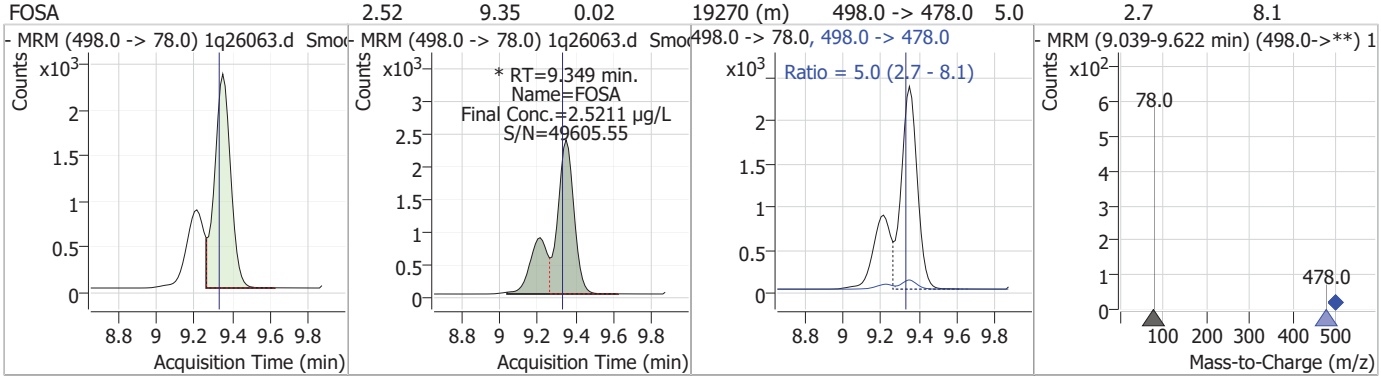
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.51	9.03	0.01	78535	613.0 -> 319.0	11.9	5.7	17.1



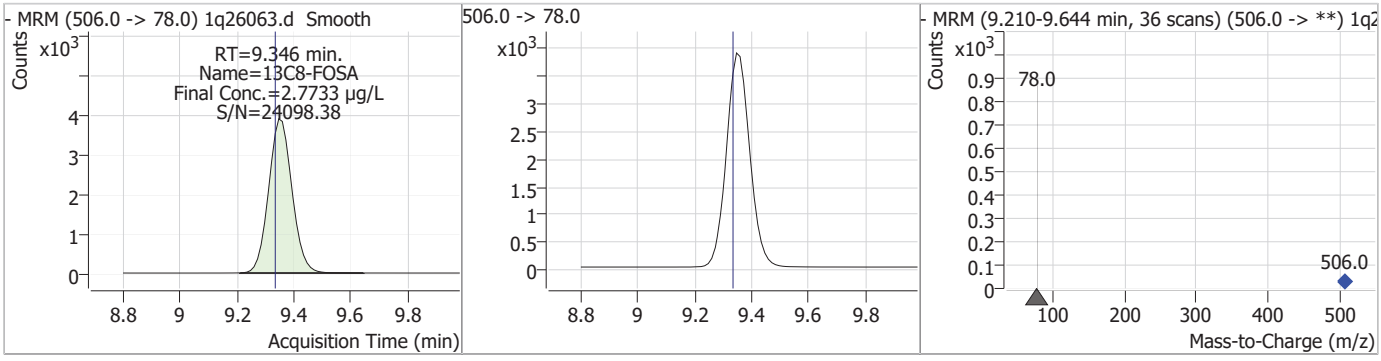
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.52	9.19	0.00	9517	599.0 -> 99.0	44.6	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.52	9.35	0.02	19270 (m)	498.0 -> 478.0	5.0	2.7	8.1

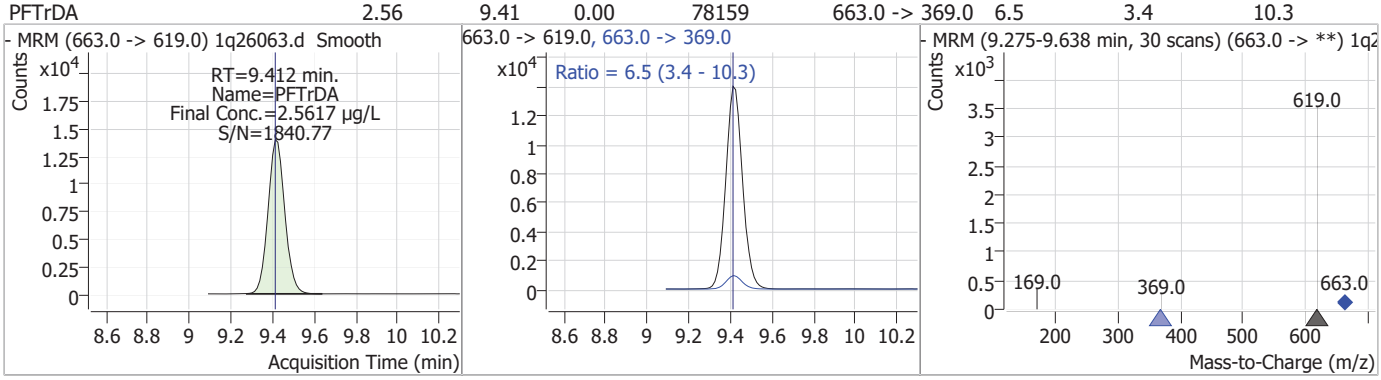


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.77	9.35	0.01	22054				

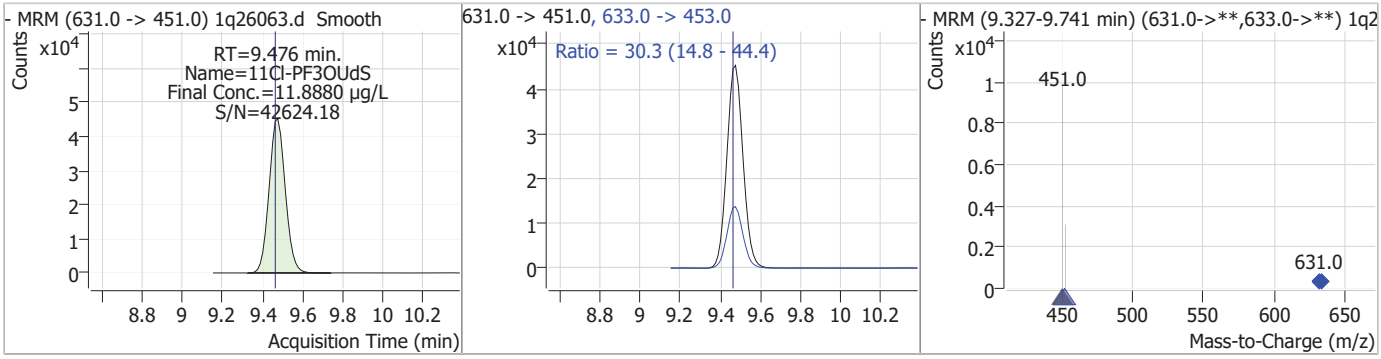


Perfluorinated Compounds by LC/MS/MS

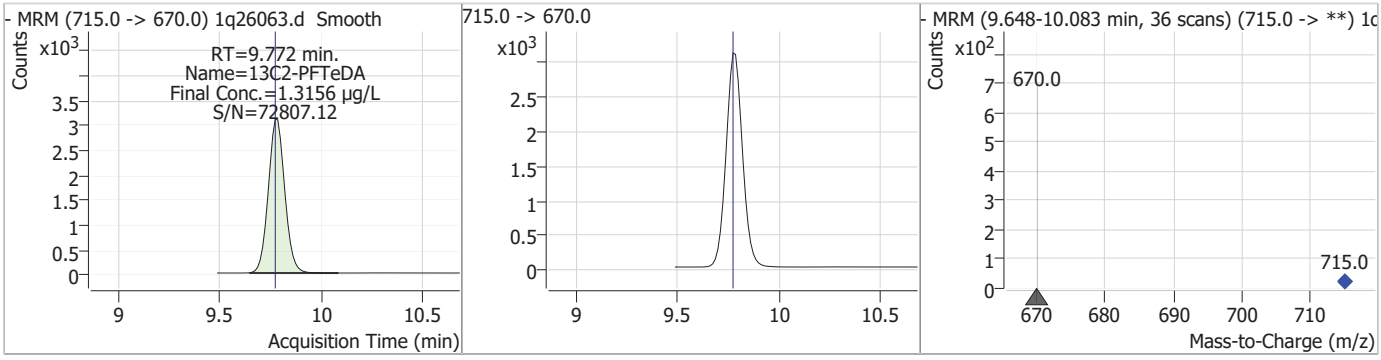
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.56	9.41	0.00	78159	663.0 -> 369.0	6.5	3.4	10.3



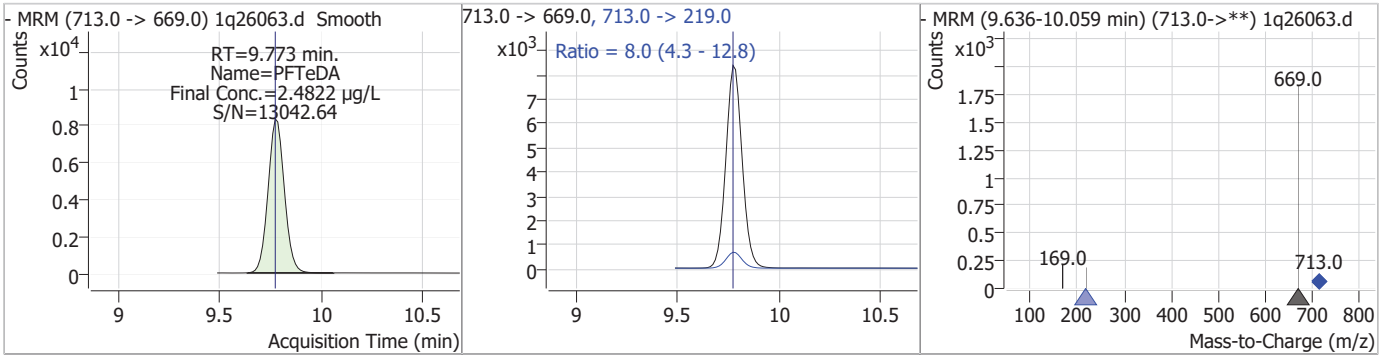
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	11.89	9.48	0.01	253627	633.0 -> 453.0	30.3	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.32	9.77	0.00	17346				

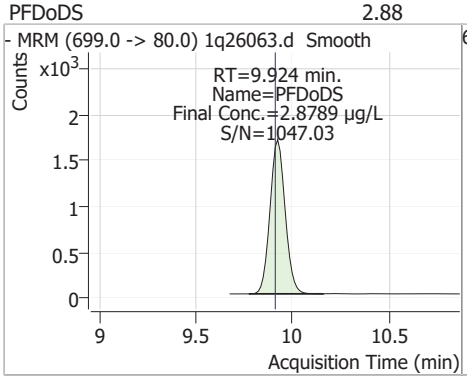


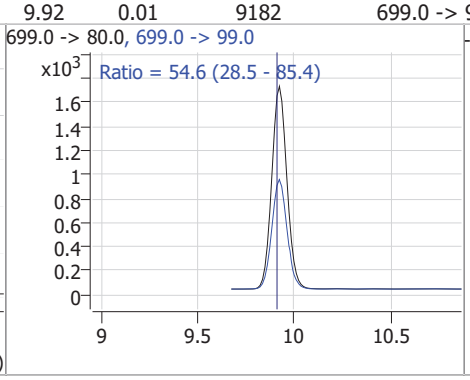
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.48	9.77	0.00	46375	713.0 -> 219.0	8.0	4.3	12.8

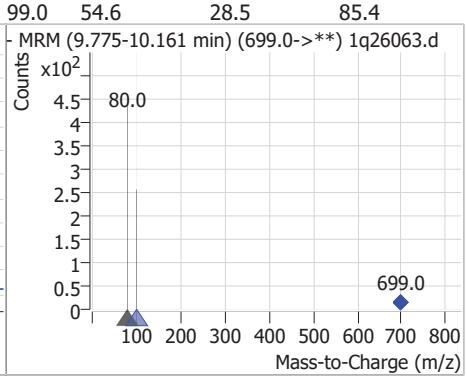


Perfluorinated Compounds by LC/MS/MS

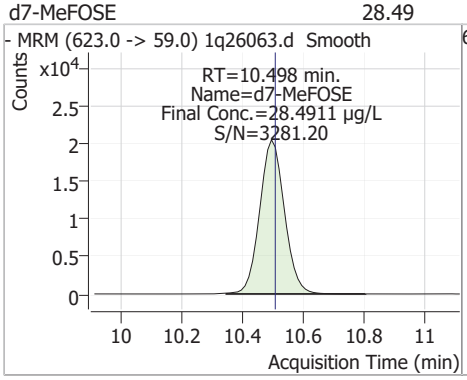
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.88	9.92	0.01	9182	699.0 -> 99.0	54.6	28.5	85.4

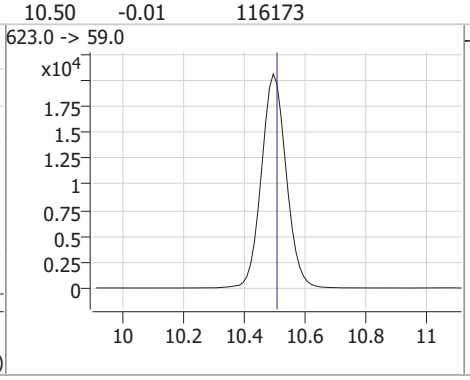


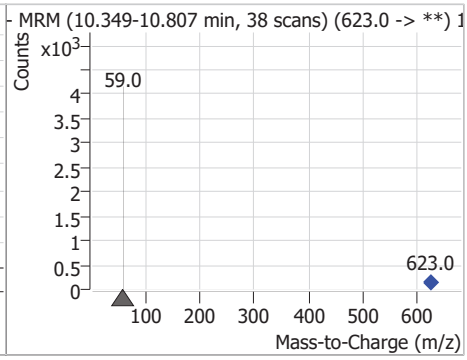




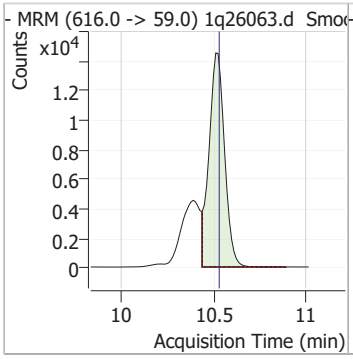
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	28.49	10.50	-0.01	116173				

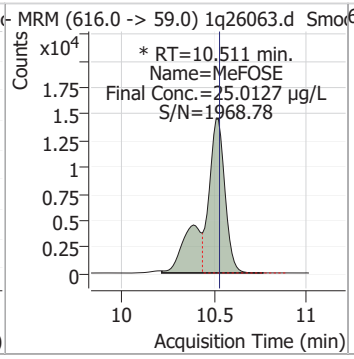


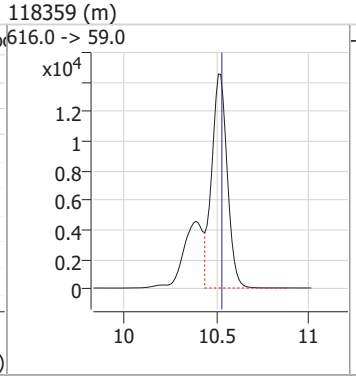


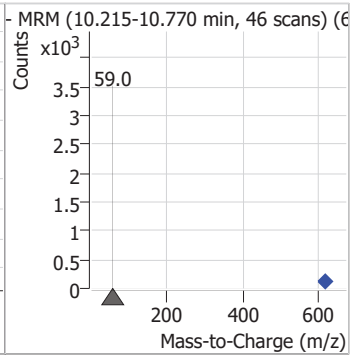


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.01	10.51	-0.01	118359 (m)				

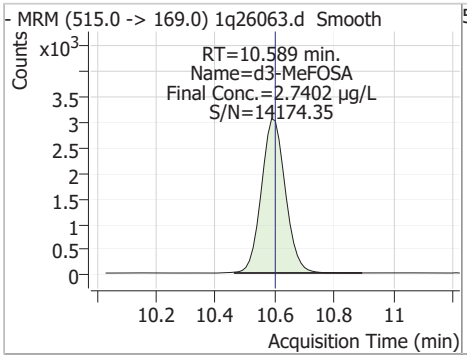


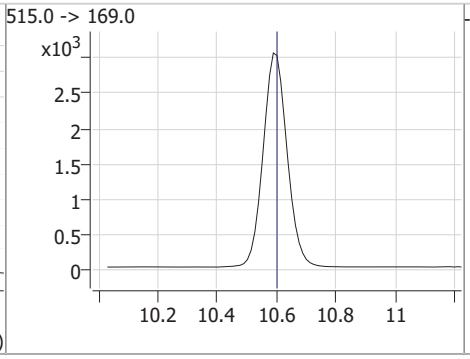


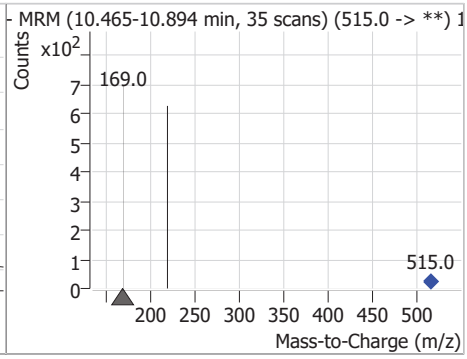




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.74	10.59	-0.01	16890				

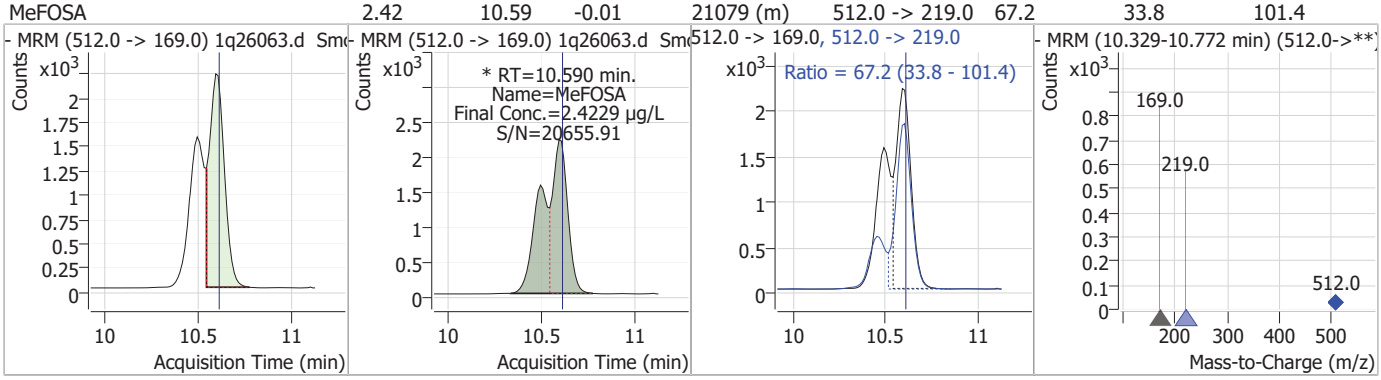




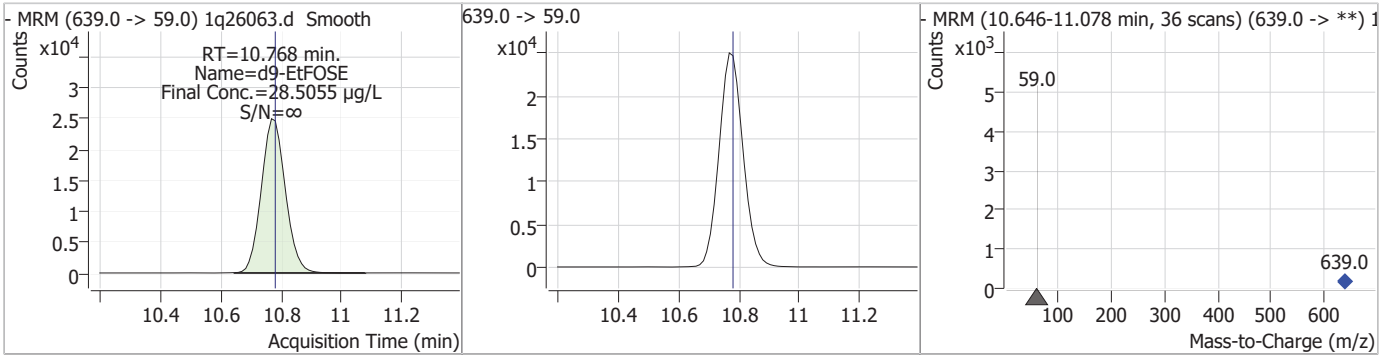


Perfluorinated Compounds by LC/MS/MS

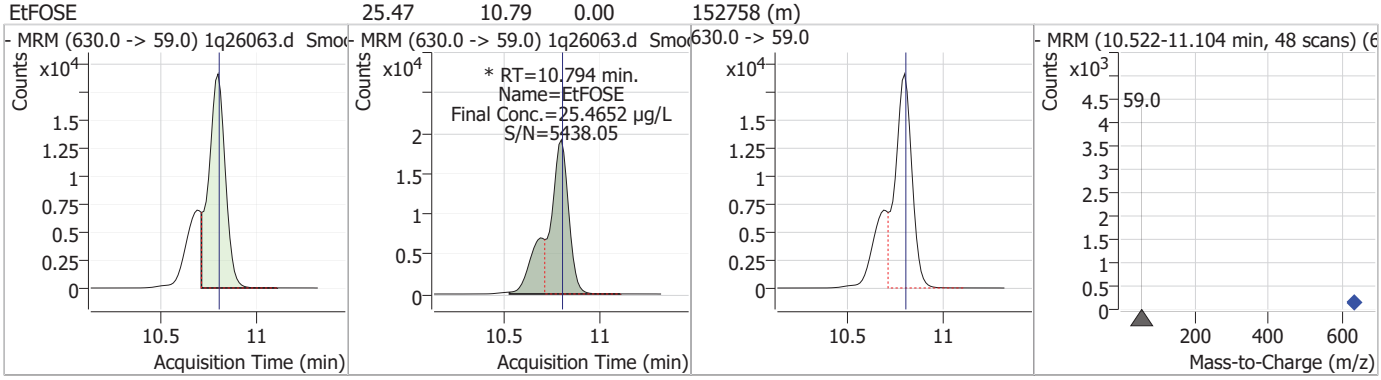
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.42	10.59	-0.01	21079 (m)	512.0 -> 219.0	67.2	33.8	101.4



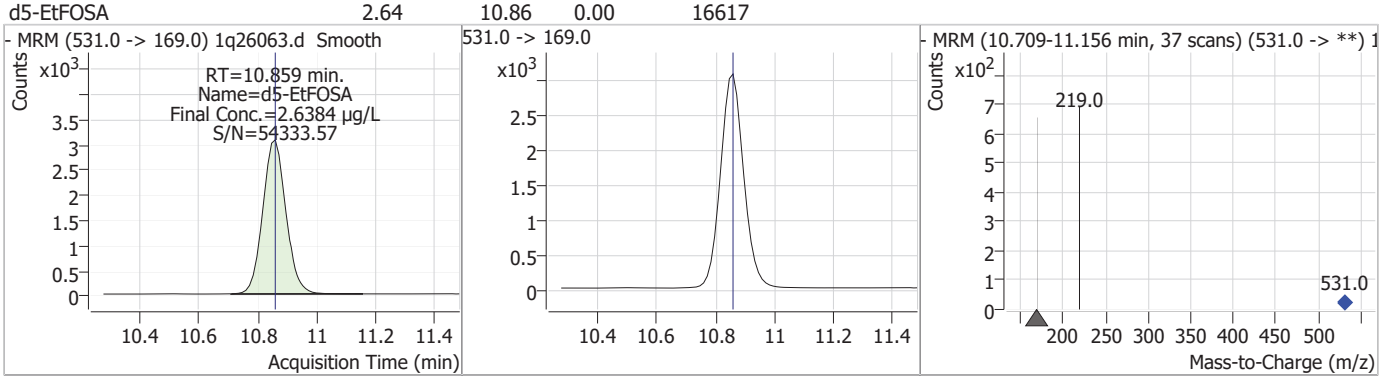
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	28.51	10.77	-0.01	137671				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.47	10.79	0.00	152758 (m)				

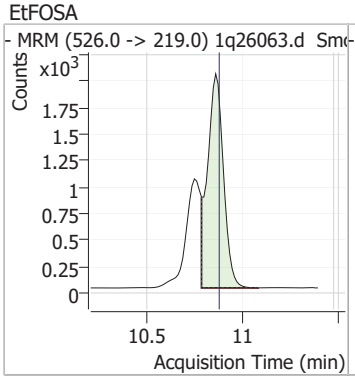


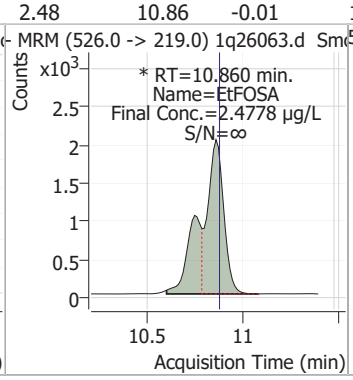
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.64	10.86	0.00	16617				

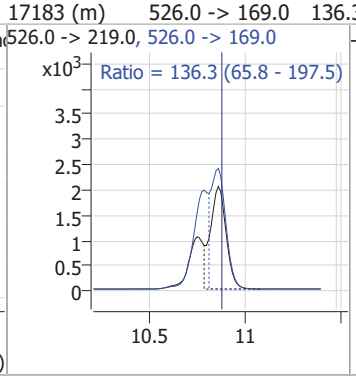


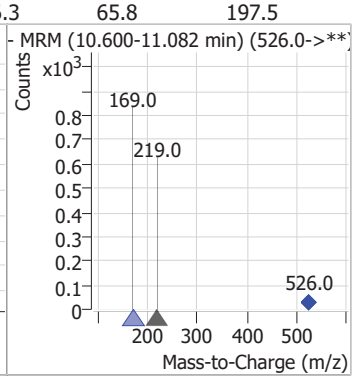
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.48	10.86	-0.01	17183 (m)	526.0 -> 169.0	136.3	65.8	197.5









7.6.13

7

Manual Integration Approval Summary

Sample Number: T1Q362-CC361
Lab FileID: 1Q26063.D
Injection Time: 05/15/25 11:31

Method: EPA 1633
Analyst approved: 05/16/25 02:49 Alodia Hana Barrogo
Supervisor approved: 05/16/25 06:10 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.67	Split peak
MeFOSAA	2355-31-9		8.18	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Split peak
PFOSA	754-91-6		9.35	Split peak
MeFOSE	24448-09-7		10.51	Split peak
MeFOSA	31506-32-8		10.59	Split peak
EtFOSE	1691-99-2		10.79	Split peak
EtFOSA	4151-50-2		10.86	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/16/25 06:10

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26064.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/15/2025 11:46:22 AM
Sample Name : CC361-1.0LL
Vial : P1-A2
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : T1Q362.batch.bin
Sample Information : OP63461,T1Q362,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	195188	10.00 µg/L	0.000
M5-PFPeA	4.636	268.0 -> 223.0	117010	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	66291	2.50 µg/L	0.000
M4-PFHpA	6.565	367.0 -> 322.0	51761	2.50 µg/L	0.012
M8-PFOA	7.148	421.0 -> 376.0	79205	2.50 µg/L	0.000
M9-PFNA	7.669	472.0 -> 427.0	29134	1.25 µg/L	0.012
M6-PFDA	8.152	519.0 -> 474.0	27919	1.25 µg/L	0.012
M7-PFUnDA	8.607	570.0 -> 525.0	43569	1.25 µg/L	0.012
M2-PFDoDA	9.027	615.0 -> 570.0	41222	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	17290	1.25 µg/L	0.000
M8-FOSA	9.346	506.0 -> 78.0	20467	2.50 µg/L	0.012
M3-PFBS	5.711	302.0 -> 99.0	6577	2.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	6705	2.50 µg/L	0.000
M8-PFOS	8.316	507.0 -> 99.0	7069	2.50 µg/L	0.012
M2-4:2FTS	5.446	329.0 -> 81.0	1471	5.00 µg/L	0.000
M2-6:2FTS	6.934	429.0 -> 81.0	2830	5.00 µg/L	0.012
M2-8:2FTS	7.927	529.0 -> 81.0	5150	5.00 µg/L	0.000
M3-MeFOSAA	8.173	573.0 -> 419.0	38446	5.00 µg/L	0.013
M3-HFPO-DA	6.087	287.0 -> 169.0	17258	10.00 µg/L	0.000
M5-EtFOSAA	8.370	589.0 -> 419.0	32115	5.00 µg/L	0.012
M7-MeFOSE	10.498	623.0 -> 59.0	109544	25.00 µg/L	-0.012
M9-EtFOSE	10.780	639.0 -> 59.0	131341	25.00 µg/L	0.000
M5-EtFOSA	10.859	531.0 -> 169.0	15399	2.50 µg/L	0.000
M3-MeFOSA	10.601	515.0 -> 169.0	15582	2.50 µg/L	0.000
13C4-PFOS	8.317	503.0 -> 80.0	13869	2.50 µg/L	0.012
13C3-PFBA	3.263	216.0 -> 172.0	83133	5.00 µg/L	0.013
18O2-PFHxS	7.274	403.0 -> 84.0	8545	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	90626	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	24611	1.25 µg/L	0.000
13C5-PFNA	7.669	468.0 -> 423.0	29039	1.25 µg/L	0.012
13C2-PFHxA	5.760	315.0 -> 270.0	62155	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1471	5.15 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.1%	
13C2-6:2FTS	6.934	429.0 -> 81.0	2830	5.12 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.3%	
13C2-8:2FTS	7.927	529.0 -> 81.0	5150	5.92 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 118.3%	
13C2-PFDoDA	9.027	615.0 -> 570.0	41222	1.23 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.8%	
13C2-PFTeDA	9.772	715.0 -> 670.0	17290	1.23 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.5%	
13C3-PFBS	5.711	302.0 -> 99.0	6577	2.31 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.3%	
13C3-PFHxS	7.275	402.0 -> 99.0	6705	2.35 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.8%		
13C4-PFBA	3.260	217.0 -> 172.0	195188	9.87 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.7%		
13C4-PFHpA	6.565	367.0 -> 322.0	51761	2.40 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.0%		
13C5-PFHxA	5.759	318.0 -> 273.0	66291	2.51 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.3%		
13C5-PFPeA	4.636	268.0 -> 223.0	117010	5.14 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.7%		
13C6-PFDA	8.152	519.0 -> 474.0	27919	1.17 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.7%		
13C7-PFUnDA	8.607	570.0 -> 525.0	43569	1.26 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.7%		
13C8-FOSA	9.346	506.0 -> 78.0	20467	2.42 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.7%		
13C8-PFOA	7.148	421.0 -> 376.0	79205	2.40 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.0%		
13C8-PFOS	8.316	507.0 -> 99.0	7069	2.22 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 88.6%		
13C9-PFNA	7.669	472.0 -> 427.0	29134	1.23 µg/L		0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.4%		
d3-MeFOSAA	8.173	573.0 -> 419.0	38446	4.55 µg/L		0.013
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.1%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	17258	7.45 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 74.5%		
d3-MeFOSA	10.601	515.0 -> 169.0	15582	2.37 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.0%		
d5-EtFOSAA	8.370	589.0 -> 419.0	32115	4.67 µg/L		0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.4%		
d7-MeFOSE	10.498	623.0 -> 59.0	109544	25.23 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.9%		
d9-EtFOSE	10.780	639.0 -> 59.0	131341	25.54 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 102.2%		
d5-EtFOSA	10.859	531.0 -> 169.0	15399	2.30 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.8%		
Target Compounds						QValue
4:2FTS	5.447	327.0 -> 307.0	1520	0.55 µg/L	#	63
		327.0 -> 81.0	1004			
6:2FTS	6.934	427.0 -> 407.0	2221	0.61 µg/L		94
		427.0 -> 81.0	889			
8:2FTS	7.927	527.0 -> 507.0	2951	0.63 µg/L		92
		527.0 -> 81.0	987			
EtFOSAA	8.371	584.0 -> 419.0	894	0.18 µg/L	#m	57
		584.0 -> 483.0	898			
FOSA	9.349	498.0 -> 78.0	1079	0.15 µg/L	#	92
		498.0 -> 478.0	87			
MeFOSAA	8.162	570.0 -> 419.0	1084	0.18 µg/L	m	79
		570.0 -> 512.0	543			
PFBA	3.266	213.0 -> 169.0	3891	0.71 µg/L		100
PFBS	5.713	299.0 -> 80.0	1155	0.15 µg/L		78
		299.0 -> 99.0	601			
PFDA	8.140	513.0 -> 469.0	3083	0.16 µg/L		82
		513.0 -> 219.0	746			
PFDoDA	9.027	613.0 -> 569.0	4906	0.16 µg/L		92
		613.0 -> 319.0	715			
PFDS	9.193	599.0 -> 80.0	666	0.18 µg/L		86

Perfluorinated Compounds by LC/MS/MS

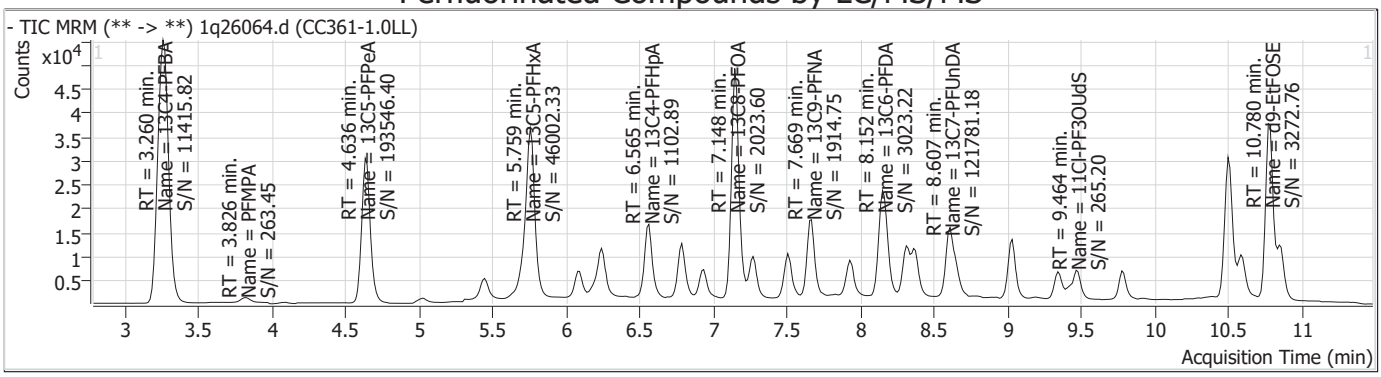
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	406				
PFHpA	6.566	363.0 -> 319.0	5427	0.19	µg/L		94
		363.0 -> 169.0	993				
PFHpS	7.822	449.0 -> 80.0	988	0.21	µg/L		71
		449.0 -> 99.0	299				
PFHxA	5.761	313.0 -> 269.0	4885	0.20	µg/L		99
		313.0 -> 119.0	120				
PFHxS	7.276	399.0 -> 80.0	1128	0.22	µg/L	m	97
		399.0 -> 99.0	549				
PFNA	7.669	463.0 -> 419.0	2628	0.18	µg/L	m	94
		463.0 -> 219.0	673				
PFNS	8.785	549.0 -> 80.0	641	0.25	µg/L		89
		549.0 -> 99.0	305				
PFOA	7.149	413.0 -> 369.0	5147	0.19	µg/L	m	85
		413.0 -> 169.0	1441				
PFOS	8.318	499.0 -> 80.0	1367	0.23	µg/L	m	93
		499.0 -> 99.0	560				
PFPeA	4.638	263.0 -> 219.0	7235	0.36	µg/L		100
PFPeS	6.630	349.0 -> 80.0	713	0.21	µg/L		77
		349.0 -> 99.0	220				
PFTeDA	9.773	713.0 -> 669.0	3259	0.18	µg/L		100
		713.0 -> 219.0	282				
PFTrDA	9.412	663.0 -> 619.0	5829	0.20	µg/L		99
		663.0 -> 369.0	424				
PFUnDA	8.596	563.0 -> 519.0	5260	0.18	µg/L		90
		563.0 -> 269.0	967				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	16753	0.90	µg/L		100
		633.0 -> 453.0	4998				
9Cl-PF3ONS	8.648	531.0 -> 351.0	13985	0.92	µg/L		98
		533.0 -> 353.0	3903				
ADONA	6.789	377.0 -> 251.0	32577	0.86	µg/L		97
		377.0 -> 85.0	8440				
HFPO-DA	6.101	285.0 -> 169.0	1519	0.91	µg/L		98
		285.0 -> 185.0	132				
3:3FTCA	4.084	241.0 -> 177.0	1140	1.03	µg/L		97
		241.0 -> 117.0	89				
5:3FTCA	6.241	341.0 -> 237.0	22787	5.30	µg/L		94
		341.0 -> 217.0	15021				
7:3FTCA	7.509	441.0 -> 337.0	24441	5.04	µg/L		96
		441.0 -> 317.0	10356				
EtFOSA	10.860	526.0 -> 219.0	1212	0.19	µg/L	m	96
		526.0 -> 169.0	1656				
EtFOSE	10.794	630.0 -> 59.0	10247	1.79	µg/L		100
MeFOSA	10.603	512.0 -> 169.0	1421	0.18	µg/L	m	81
		512.0 -> 219.0	1175				
MeFOSE	10.523	616.0 -> 59.0	8516	1.91	µg/L	m	100
PFDoDS	9.924	699.0 -> 80.0	643	0.20	µg/L		89
		699.0 -> 99.0	314				
NFDHA	5.651	295.0 -> 201.0	526	0.33	µg/L		92
		201.0 -> 85.0	2998				
		295.0 -> 85.0	136				
PFMBA	5.027	279.0 -> 85.0	3667	0.33	µg/L		100
PFMPA	3.826	229.0 -> 85.0	4616	0.37	µg/L		100
PFEESA	6.194	315.0 -> 135.0	6841	0.30	µg/L		99
		315.0 -> 69.0	624				

 # = Qualifier out of range, m = manually integrated, + = Area summed

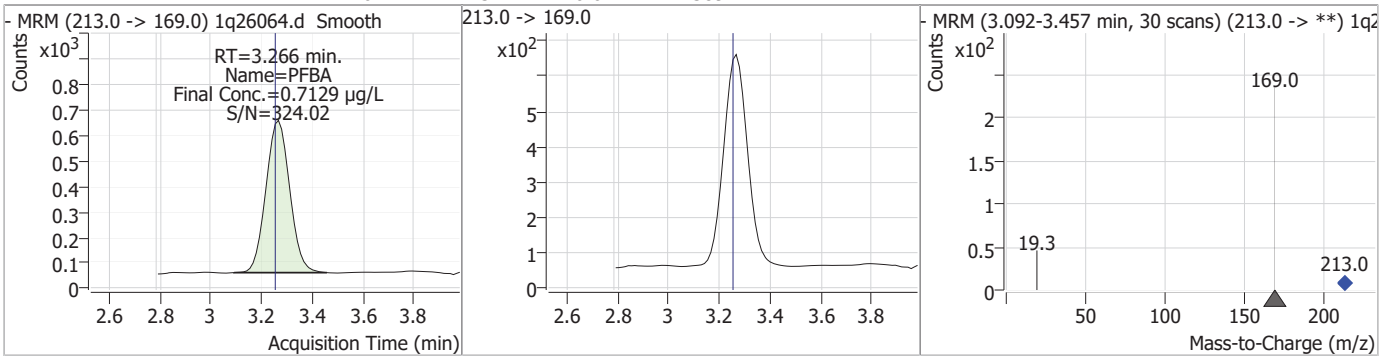
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

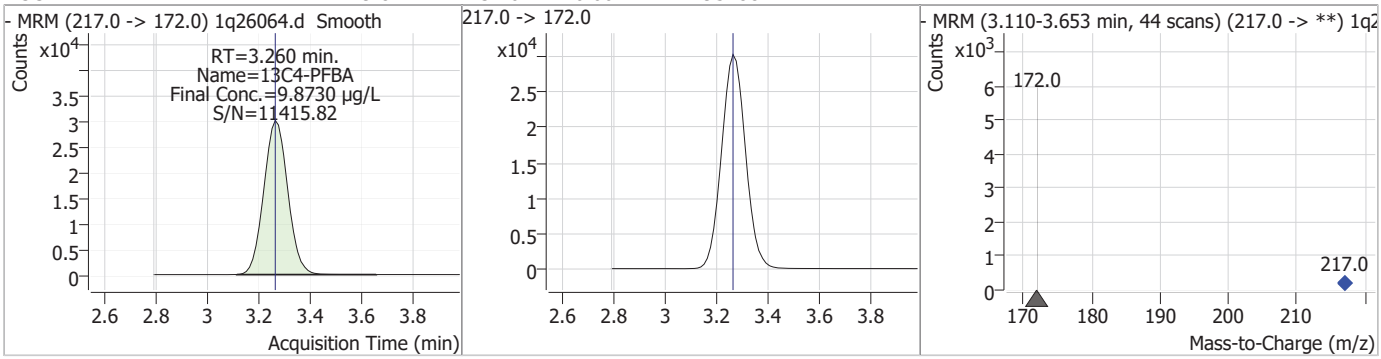
Perfluorinated Compounds by LC/MS/MS



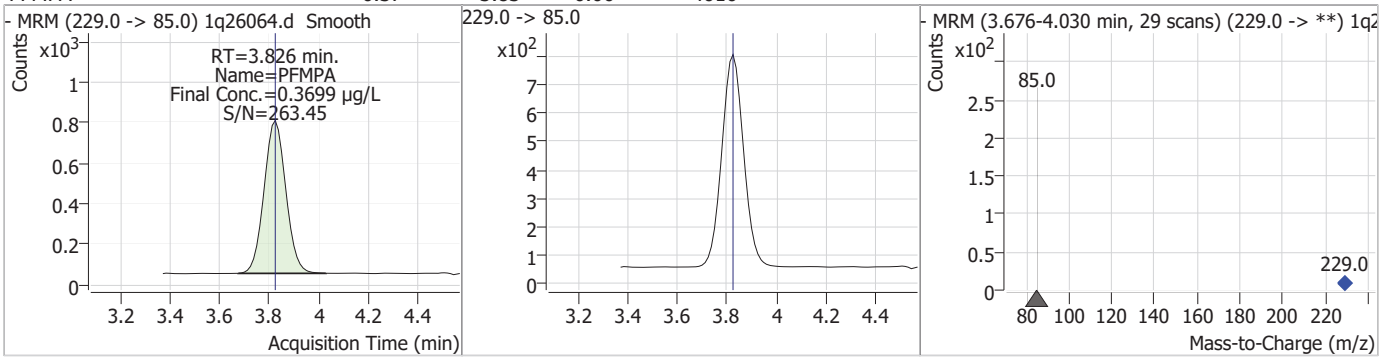
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.71	3.27	0.01	3891				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.87	3.26	0.00	195188				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.37	3.83	0.00	4616				



7.6.14

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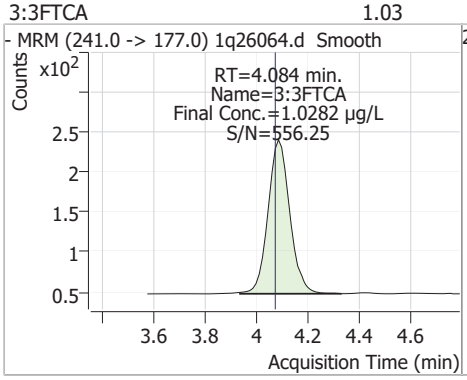
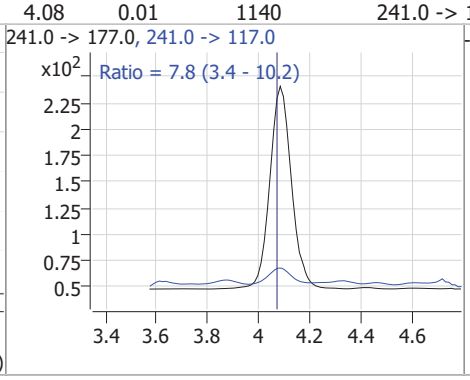
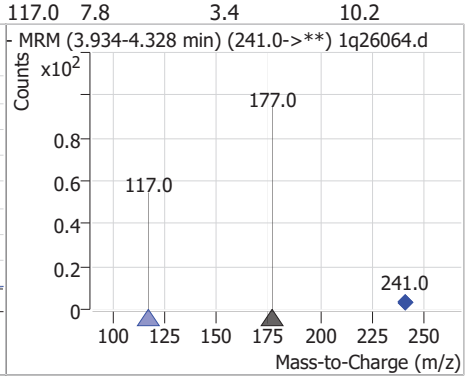
Perfluorinated Compounds by LC/MS/MS

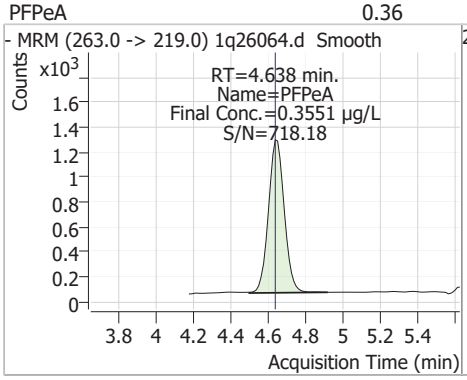
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	1.03	4.08	0.01	1140	241.0 -> 117.0	7.8	3.4	10.2

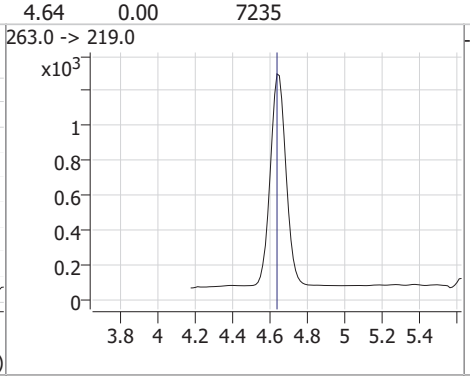


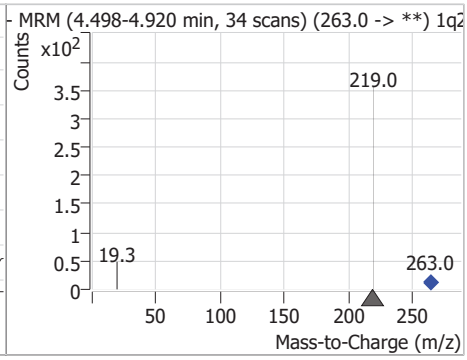




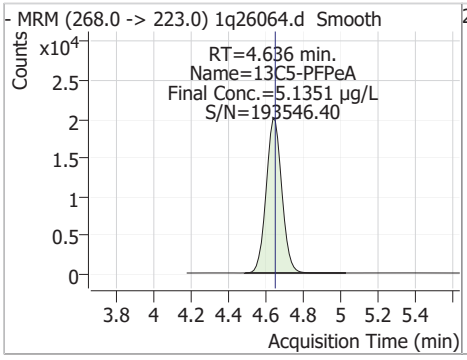
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.36	4.64	0.00	7235				

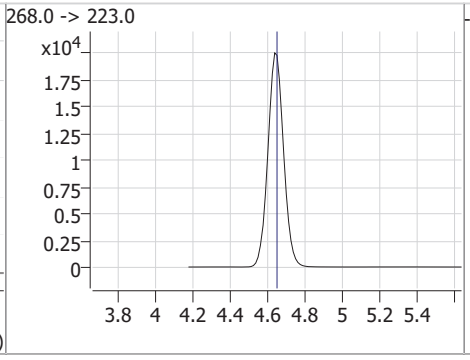


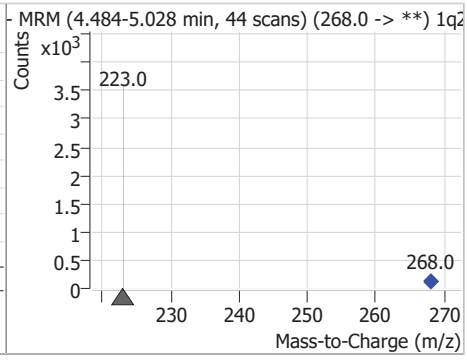




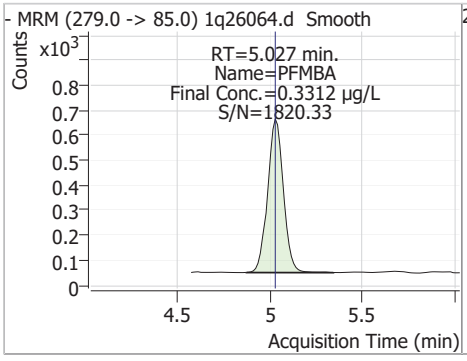
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.14	4.64	-0.01	117010				

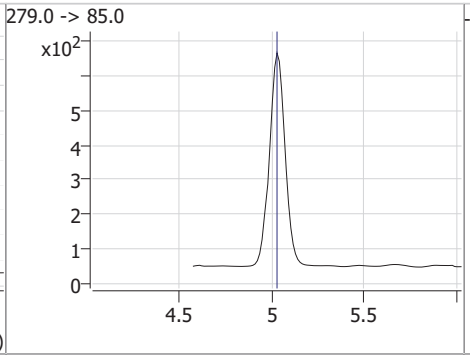


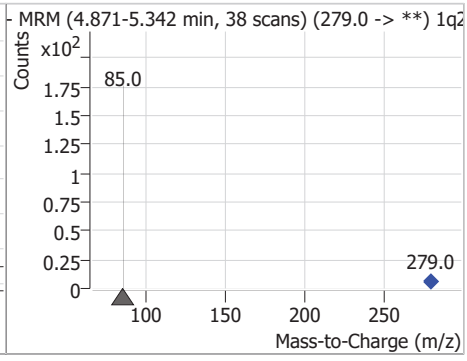




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.33	5.03	0.00	3667				







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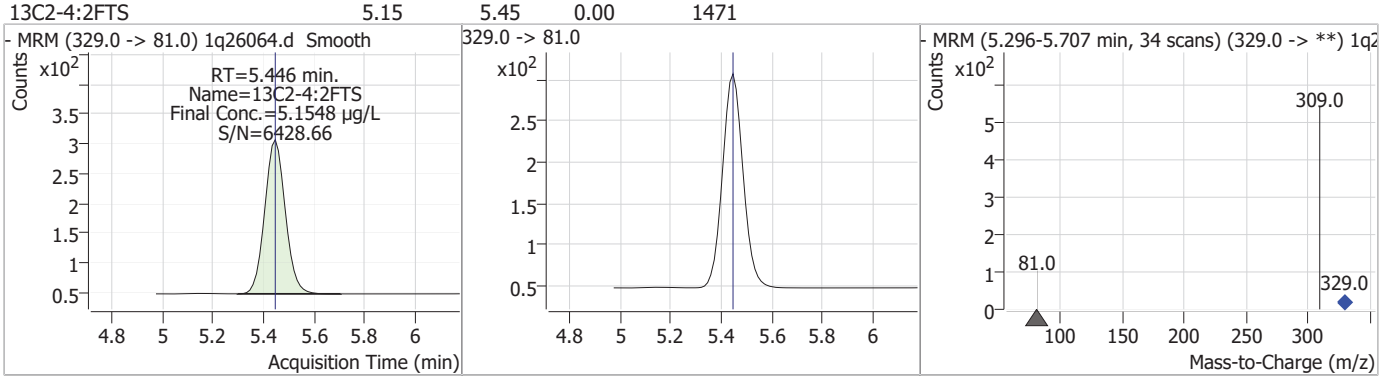
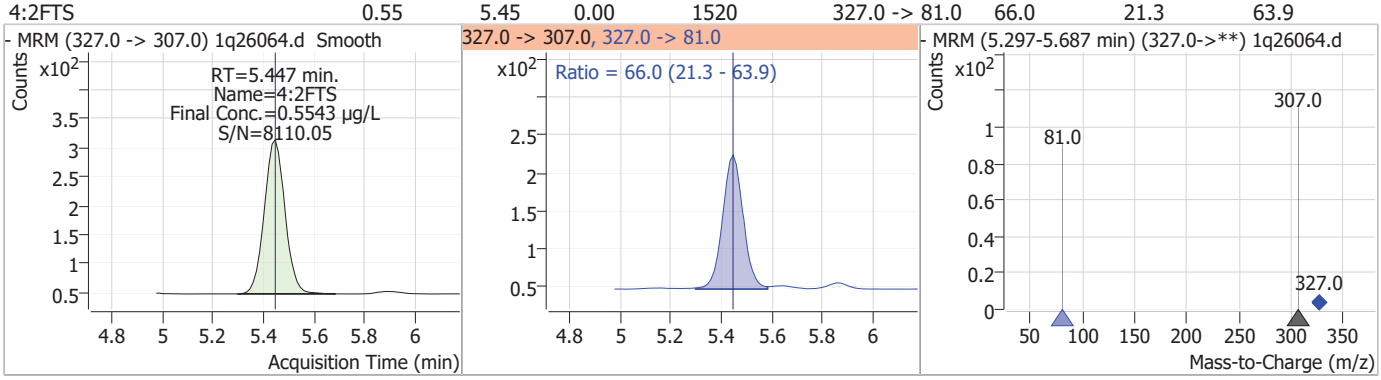
Perfluorinated Compounds by LC/MS/MS

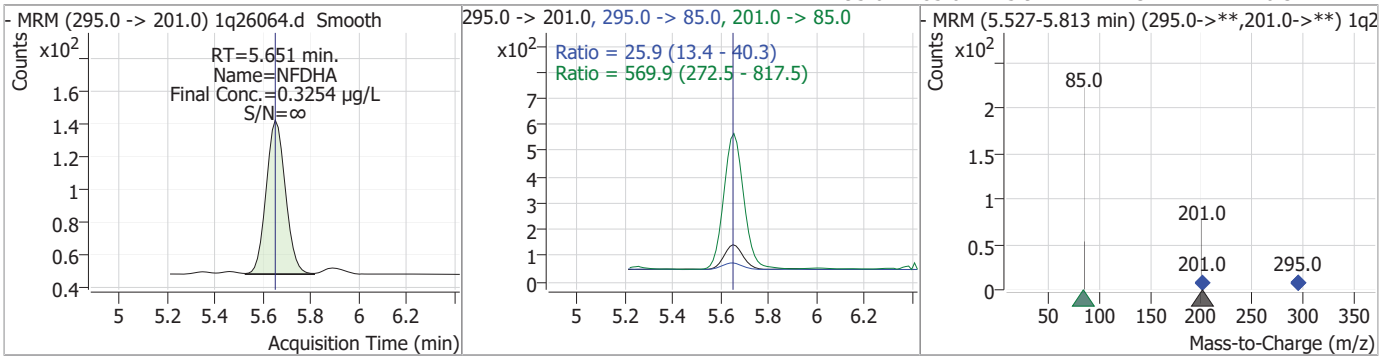
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.15	5.45	0.00	1471				



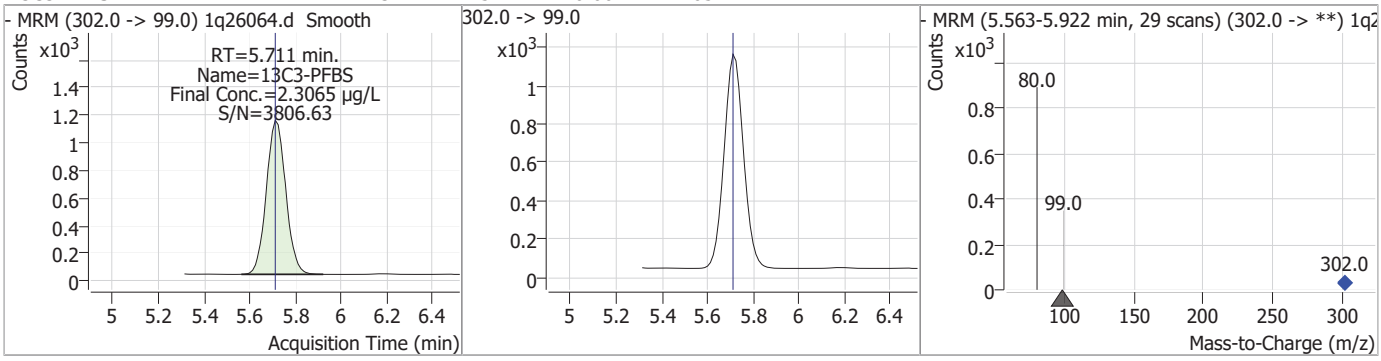
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	0.55	5.45	0.00	1520	327.0 -> 81.0	66.0	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.33	5.65	0.00	526	201.0 -> 85.0	569.9	272.5	817.5
					295.0 -> 85.0	25.9	13.4	40.3

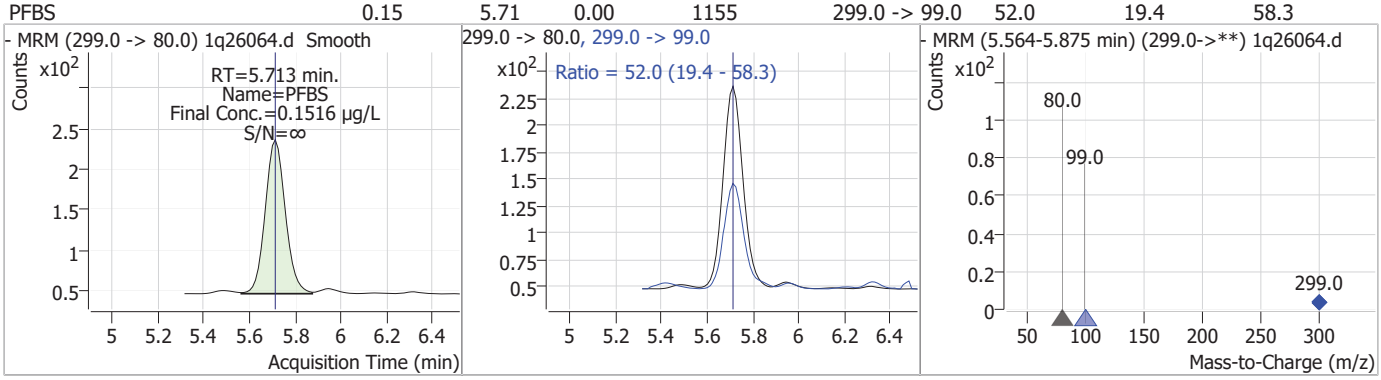


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.31	5.71	0.00	6577				

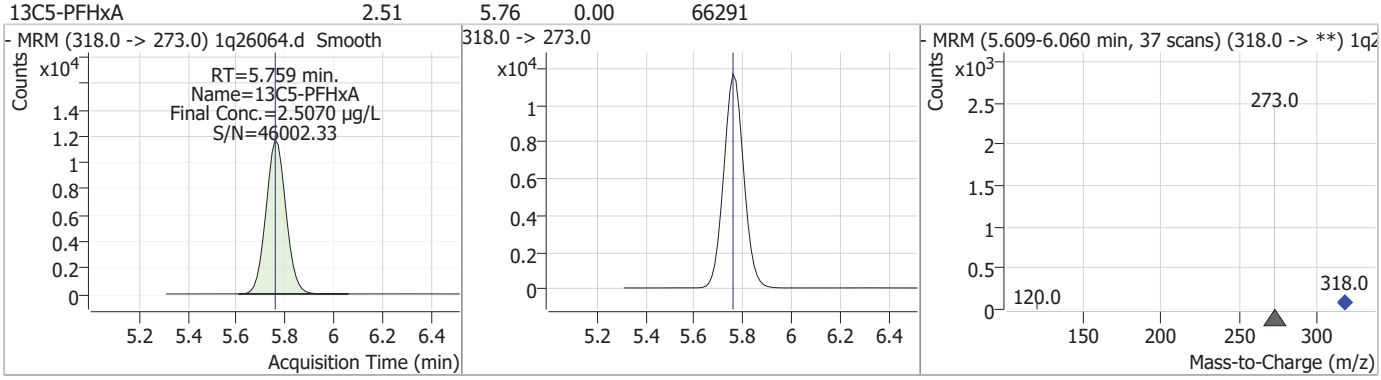


Perfluorinated Compounds by LC/MS/MS

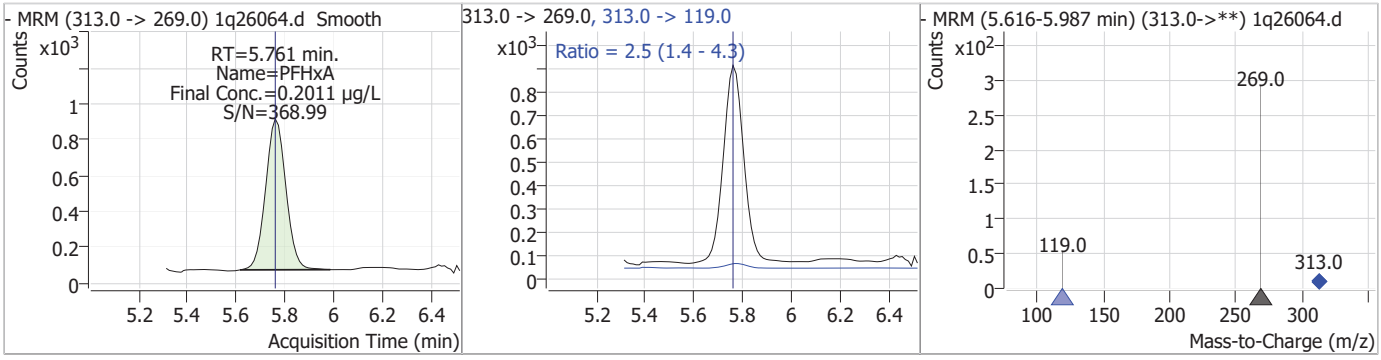
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.15	5.71	0.00	1155	299.0 -> 99.0	52.0	19.4	58.3



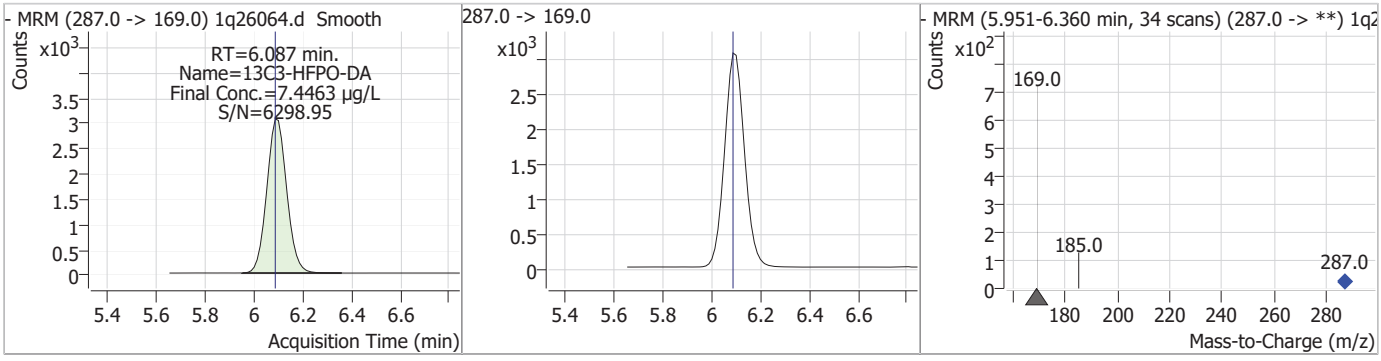
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.51	5.76	0.00	66291				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.20	5.76	0.00	4885	313.0 -> 119.0	2.5	1.4	4.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	7.45	6.09	0.00	17258				



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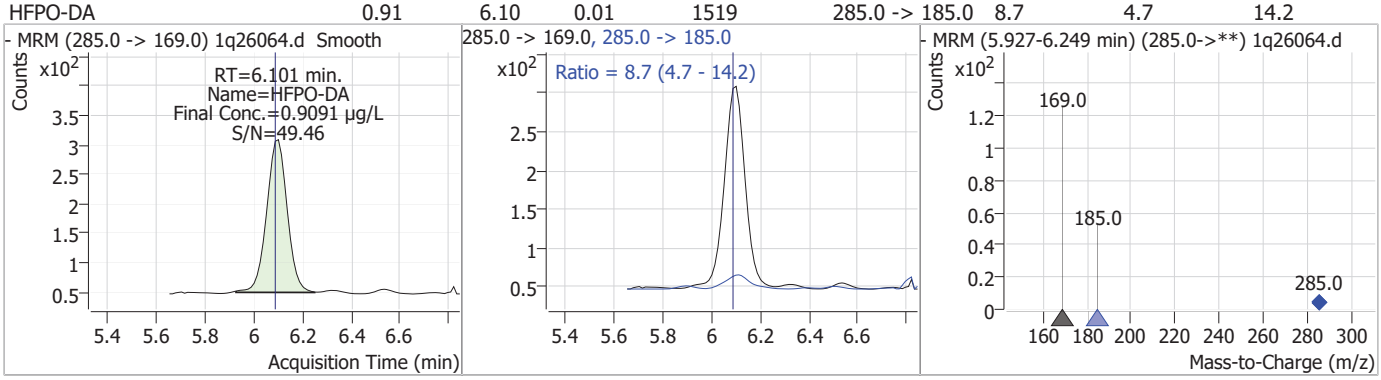
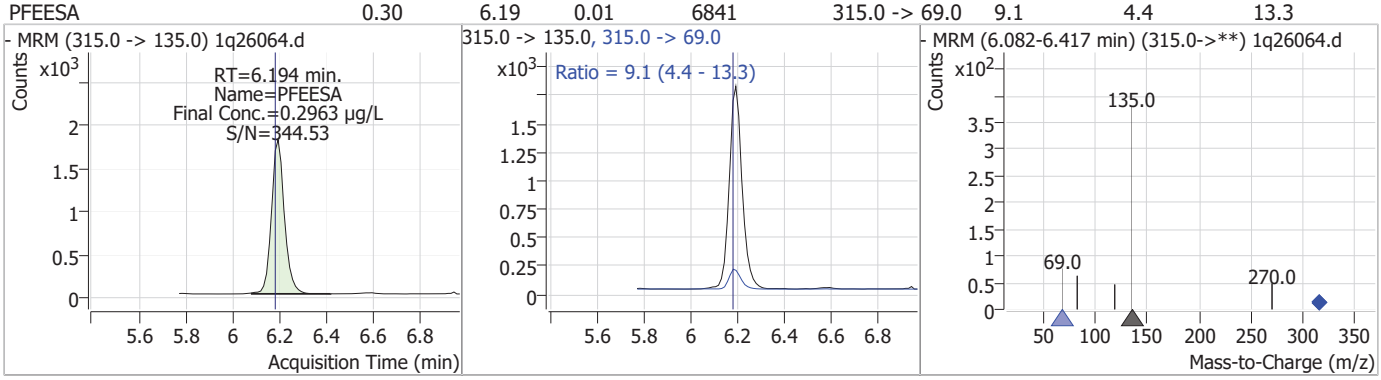
Perfluorinated Compounds by LC/MS/MS

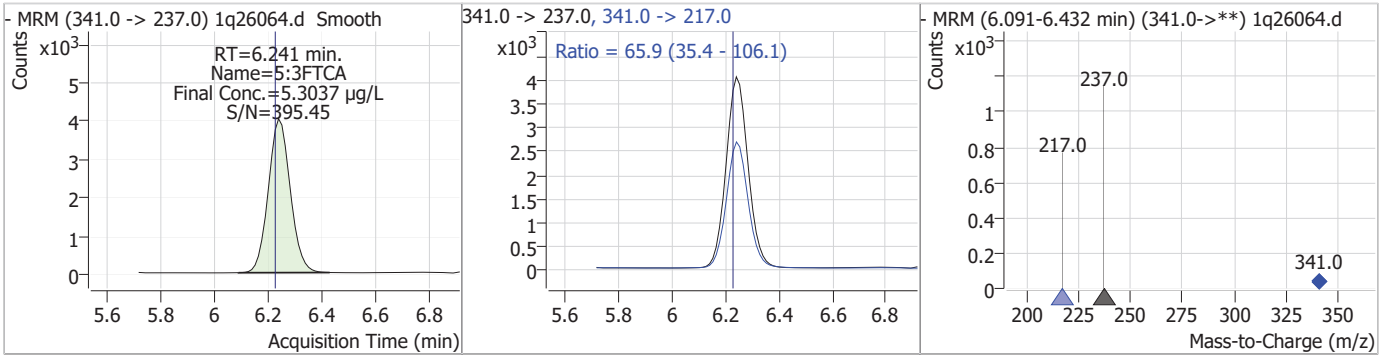
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	0.91	6.10	0.01	1519	285.0 -> 185.0	8.7	4.7	14.2



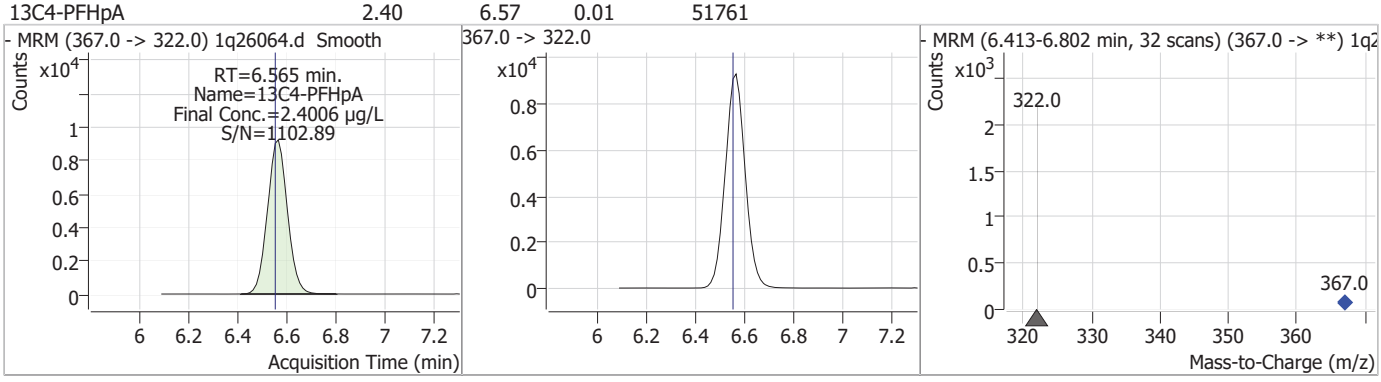
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.30	6.19	0.01	6841	315.0 -> 69.0	9.1	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	5.30	6.24	0.01	22787	341.0 -> 217.0	65.9	35.4	106.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.40	6.57	0.01	51761				



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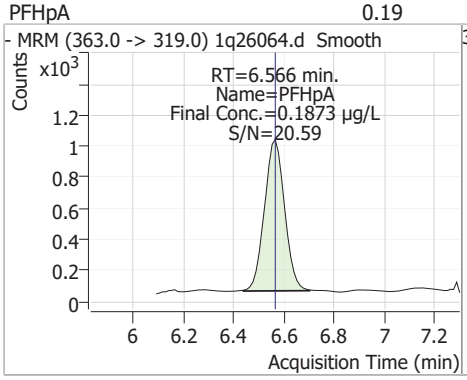
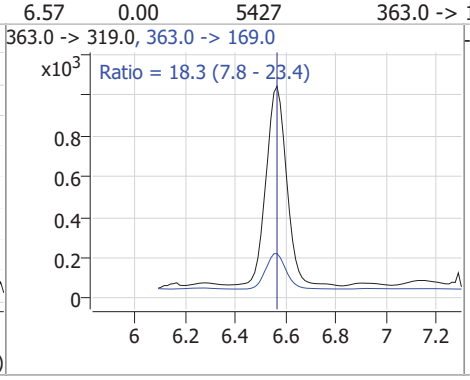
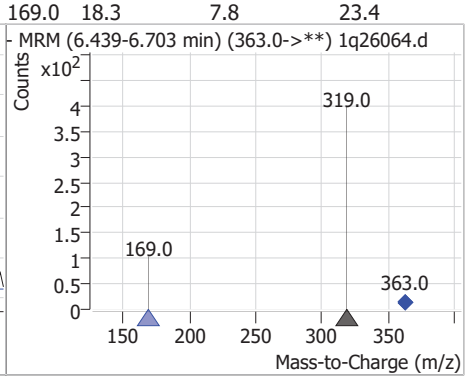
Perfluorinated Compounds by LC/MS/MS

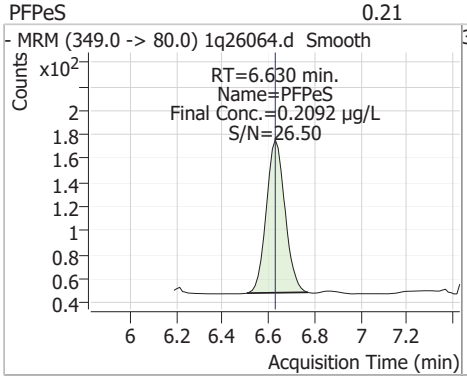
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.19	6.57	0.00	5427	363.0 -> 169.0	18.3	7.8	23.4

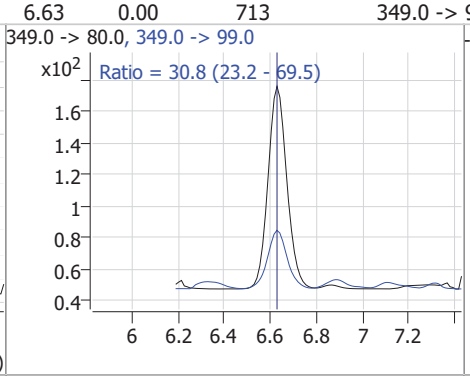


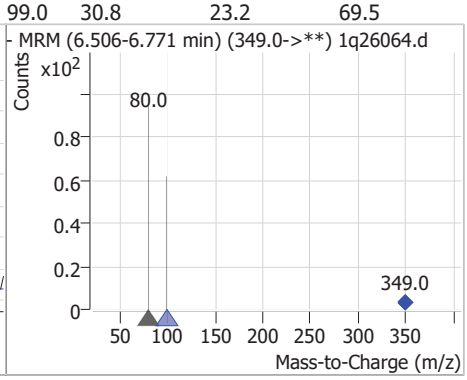




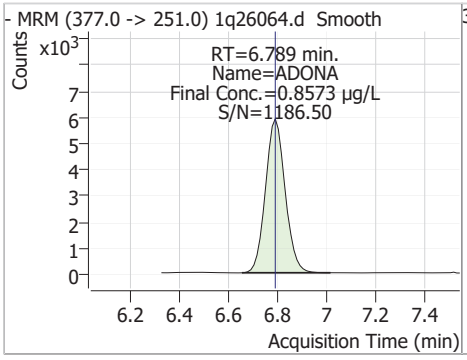
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.21	6.63	0.00	713	349.0 -> 99.0	30.8	23.2	69.5

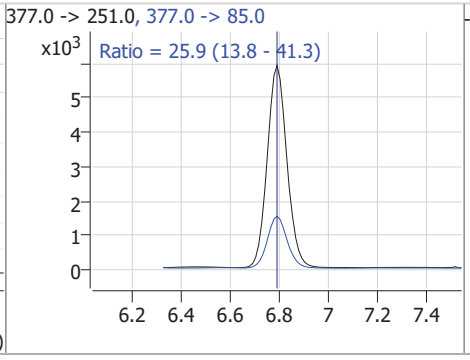


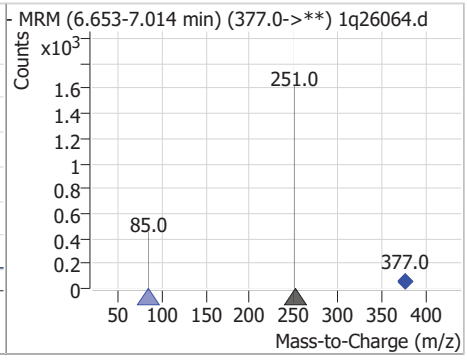




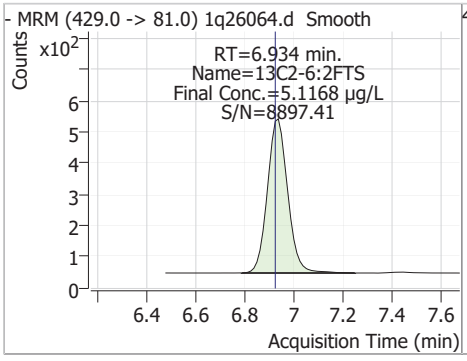
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	0.86	6.79	0.00	32577	377.0 -> 85.0	25.9	13.8	41.3

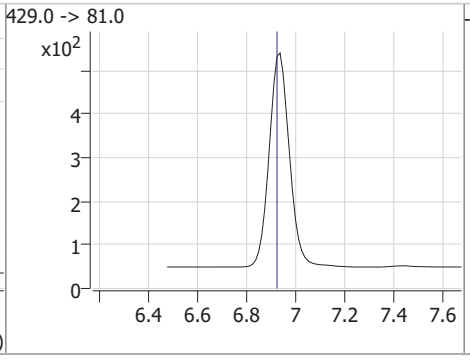


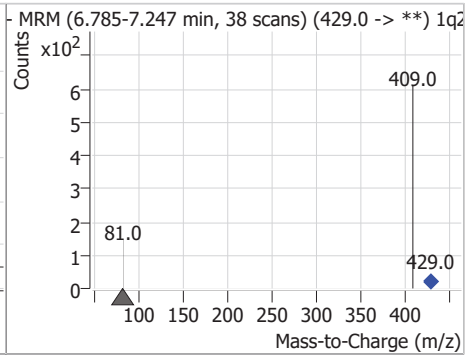




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.12	6.93	0.01	2830				







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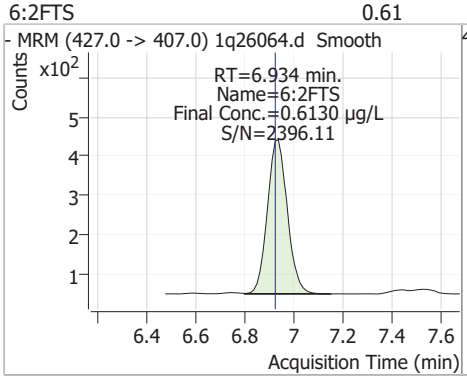
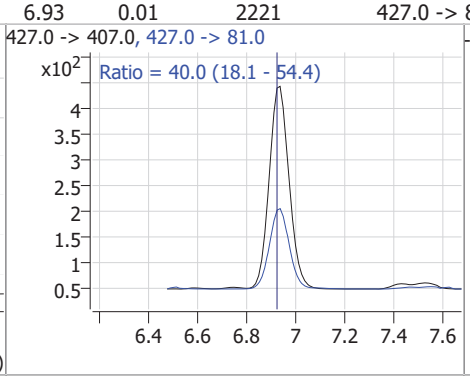
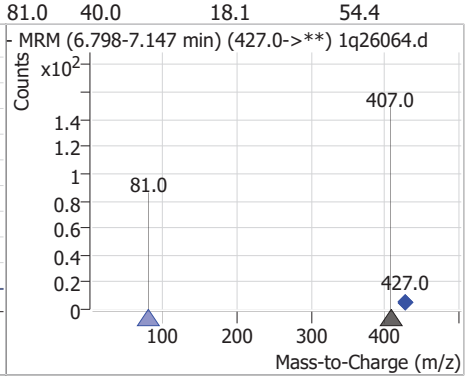
Perfluorinated Compounds by LC/MS/MS

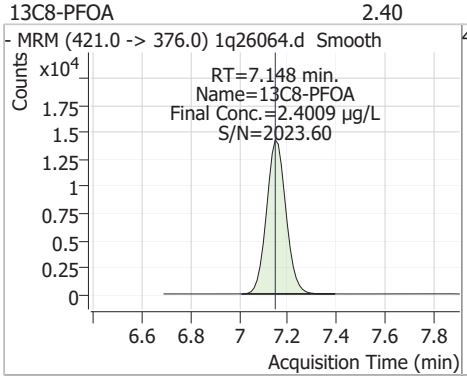
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.61	6.93	0.01	2221	427.0 -> 81.0	40.0	18.1	54.4

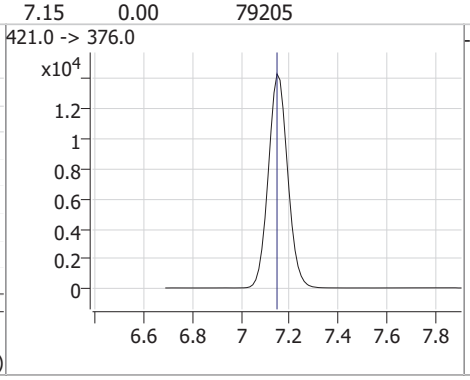


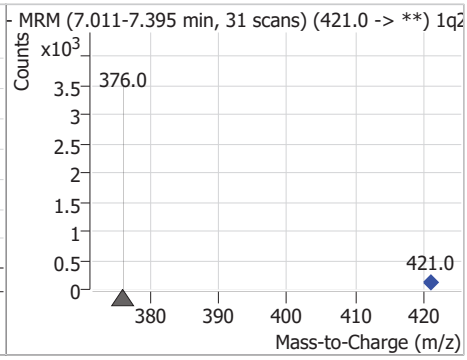




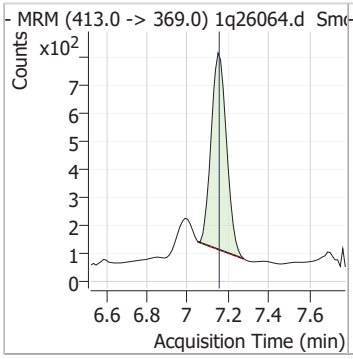
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.40	7.15	0.00	79205				

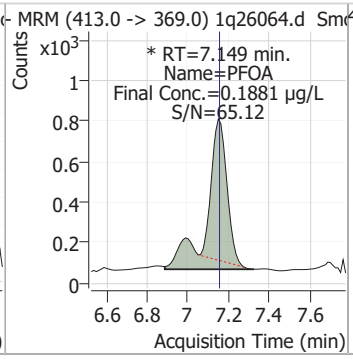


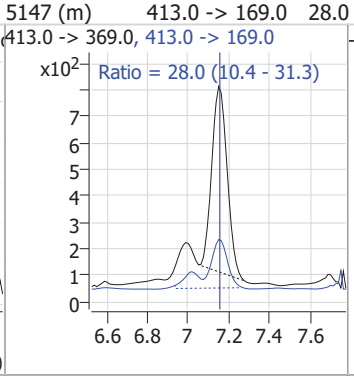


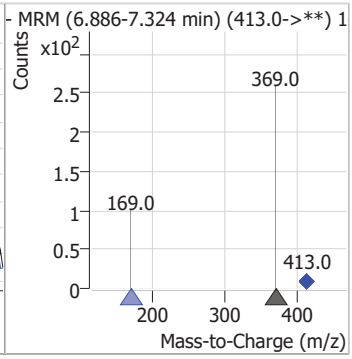


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.19	7.15	0.00	5147 (m)	413.0 -> 169.0	28.0	10.4	31.3

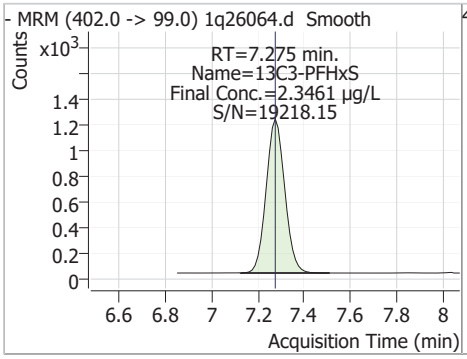


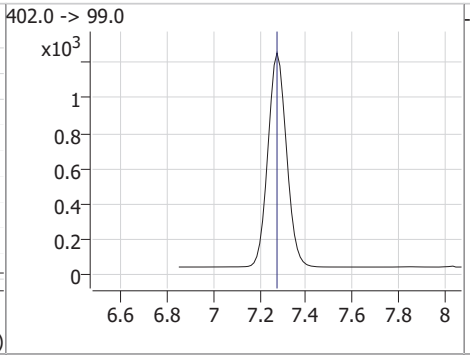


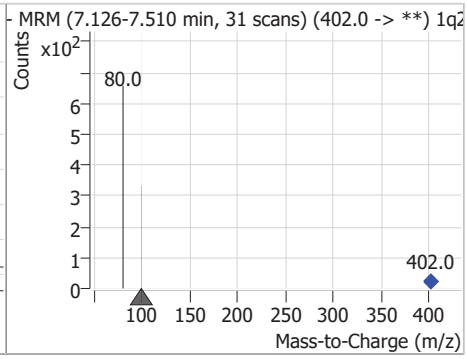




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.35	7.27	0.00	6705				

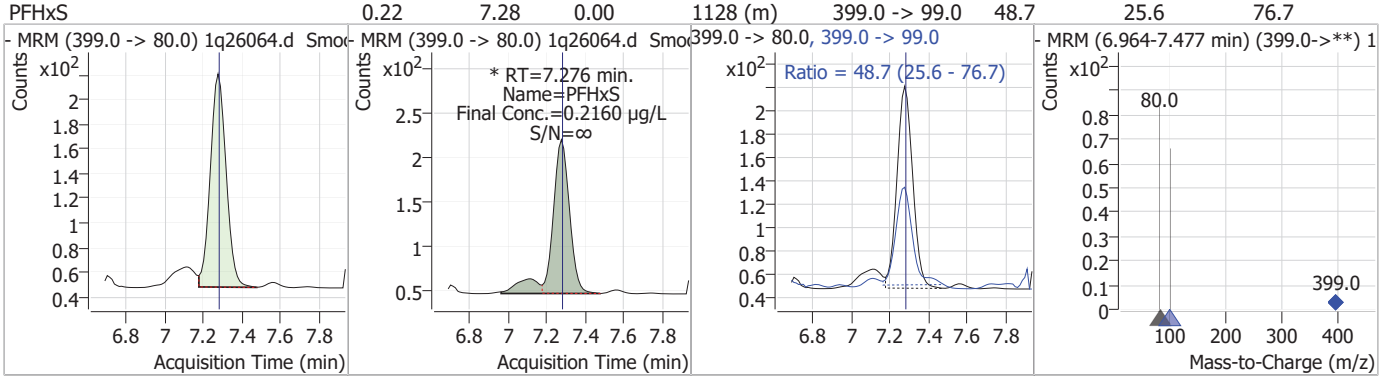




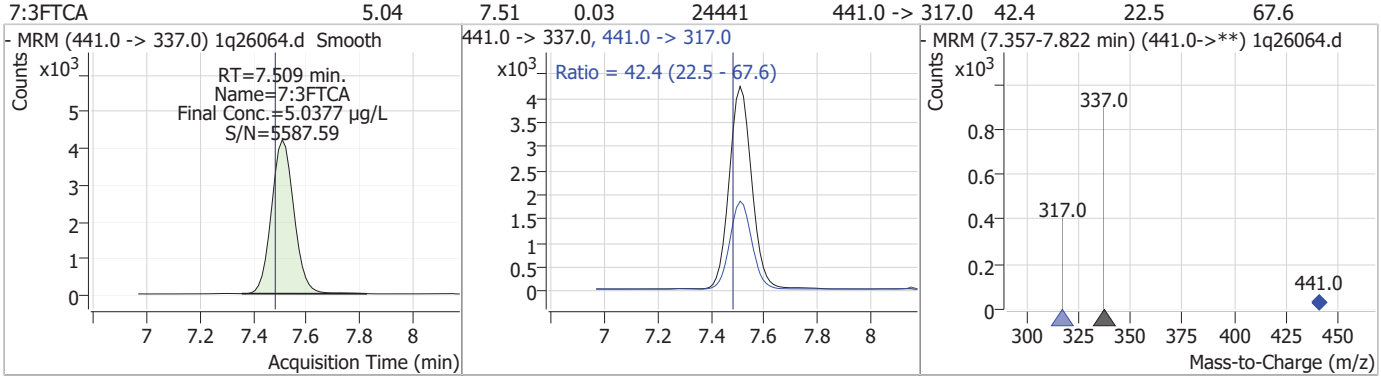


Perfluorinated Compounds by LC/MS/MS

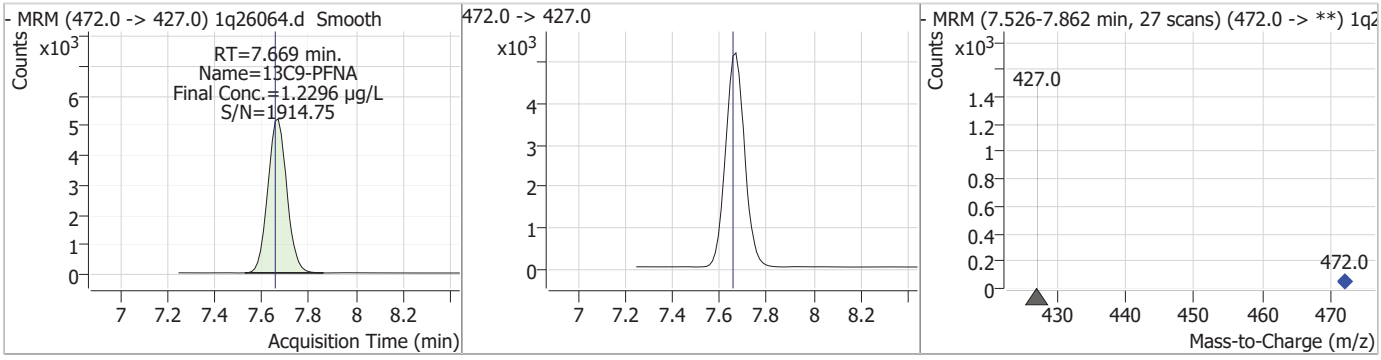
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.22	7.28	0.00	1128 (m)	399.0 -> 99.0	48.7	25.6	76.7



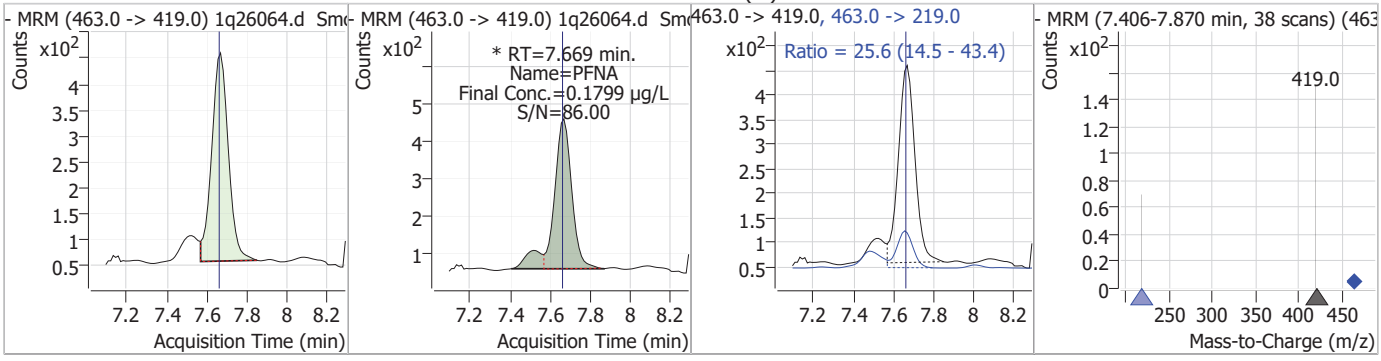
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	5.04	7.51	0.03	24441	441.0 -> 317.0	42.4	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.23	7.67	0.01	29134				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.18	7.67	0.01	2628 (m)	463.0 -> 219.0	25.6	14.5	43.4



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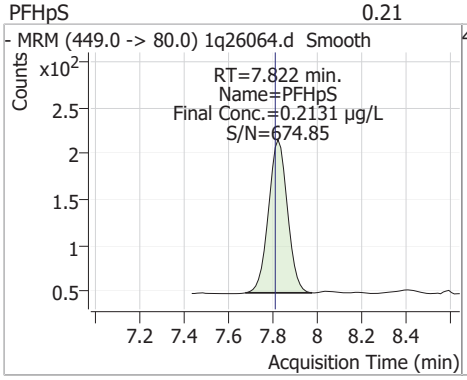
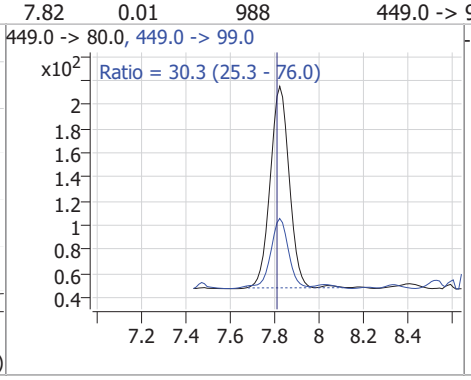
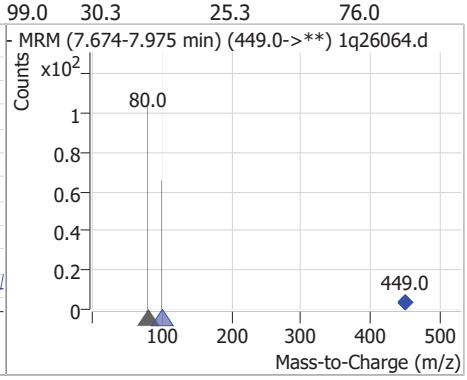
Perfluorinated Compounds by LC/MS/MS

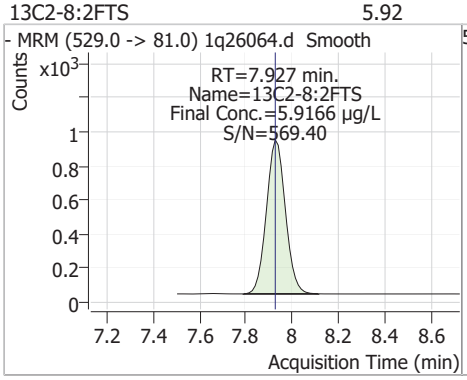
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.21	7.82	0.01	988	449.0 -> 99.0	30.3	25.3	76.0

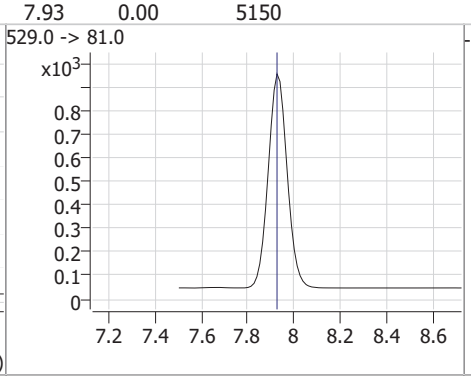


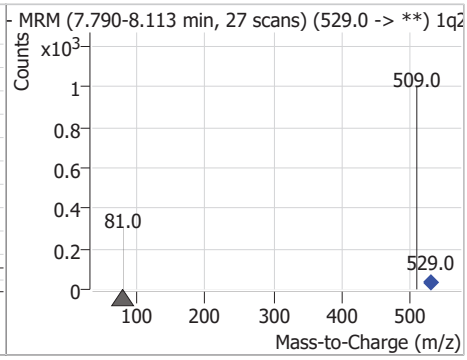




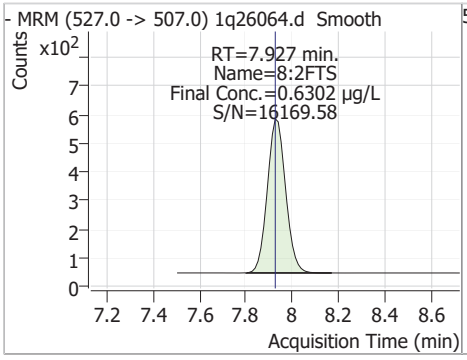
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.92	7.93	0.00	5150				

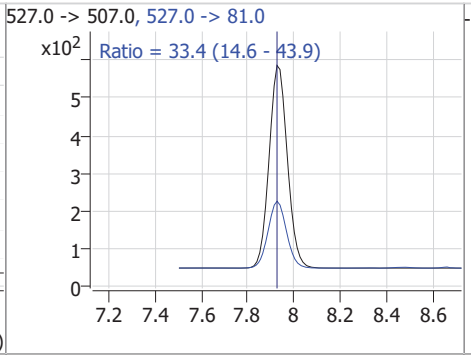


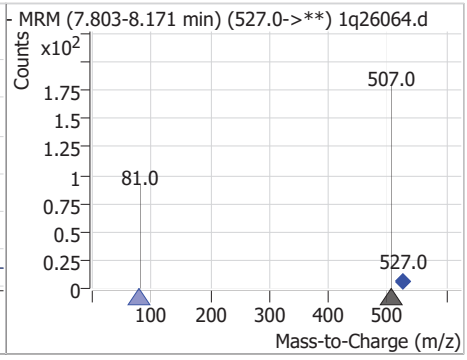




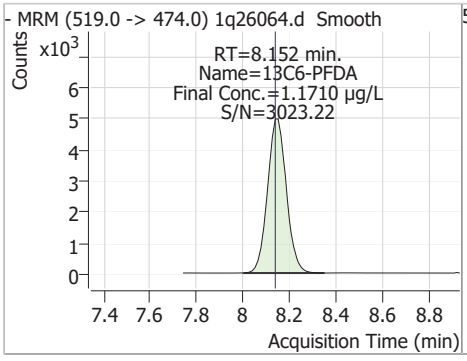
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.63	7.93	0.00	2951	527.0 -> 81.0	33.4	14.6	43.9

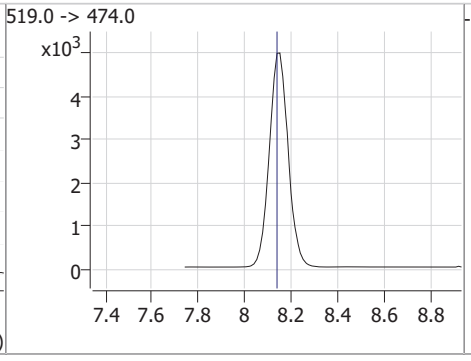


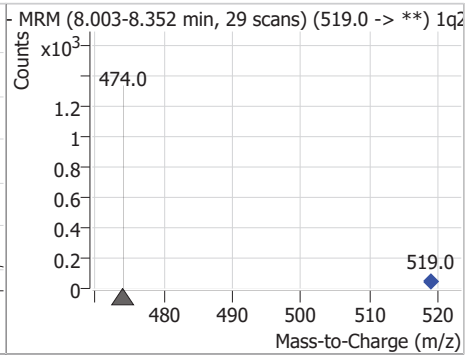




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.17	8.15	0.01	27919				

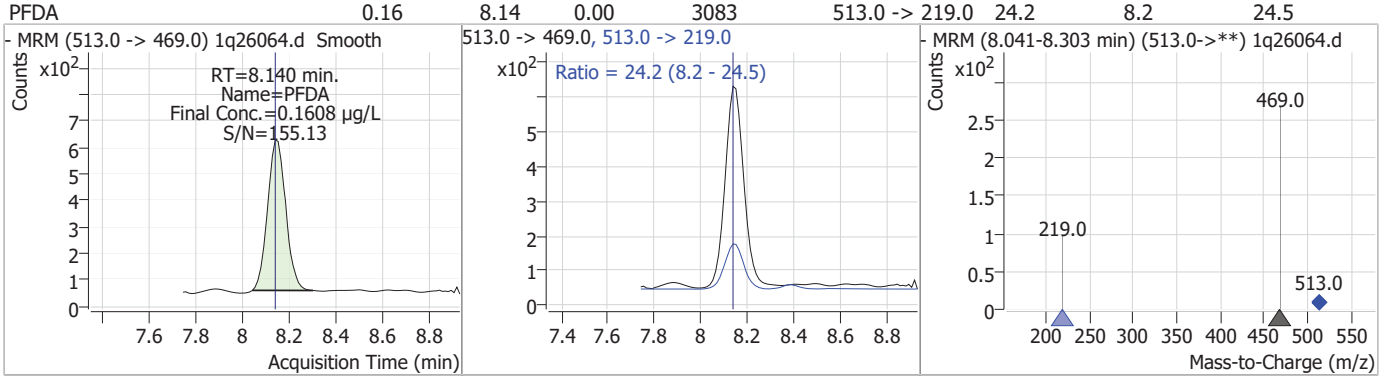




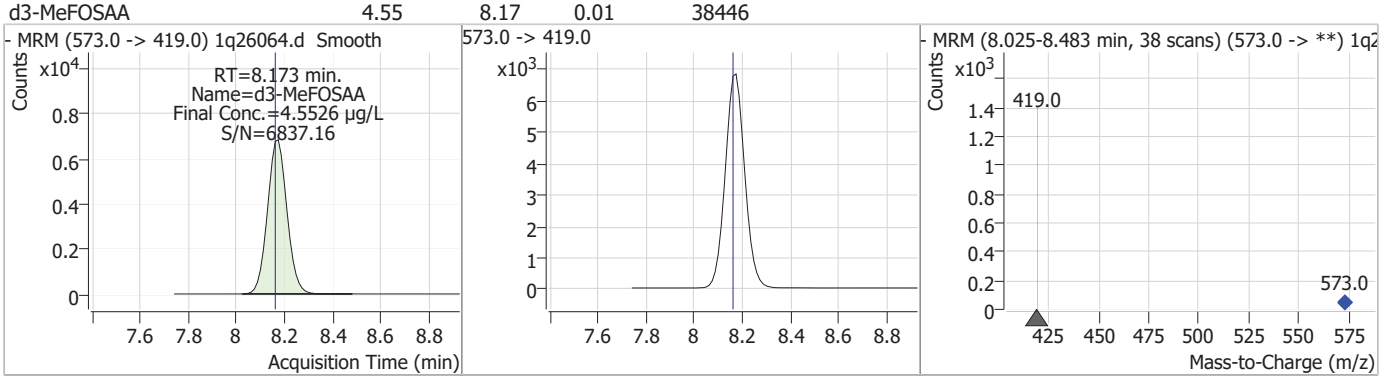


Perfluorinated Compounds by LC/MS/MS

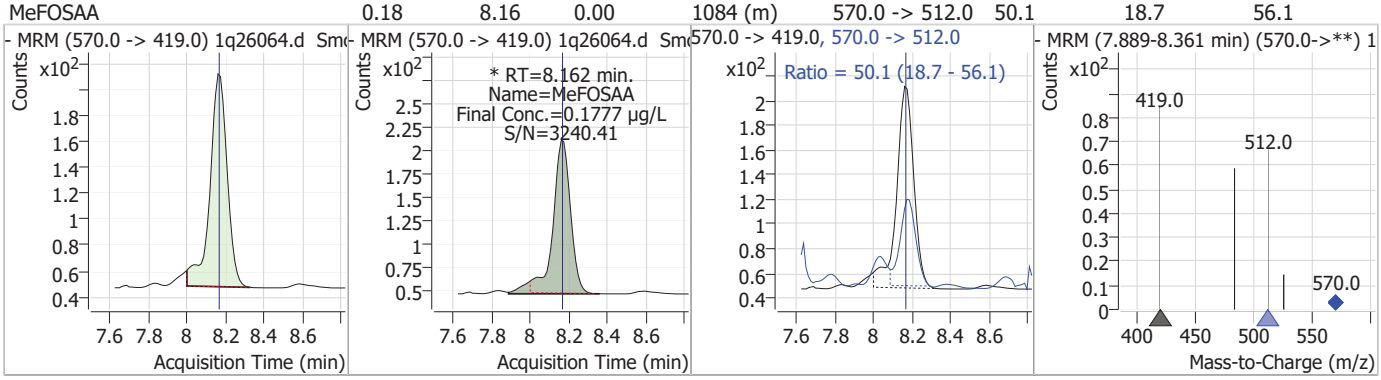
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.16	8.14	0.00	3083	513.0 -> 219.0	24.2	8.2	24.5



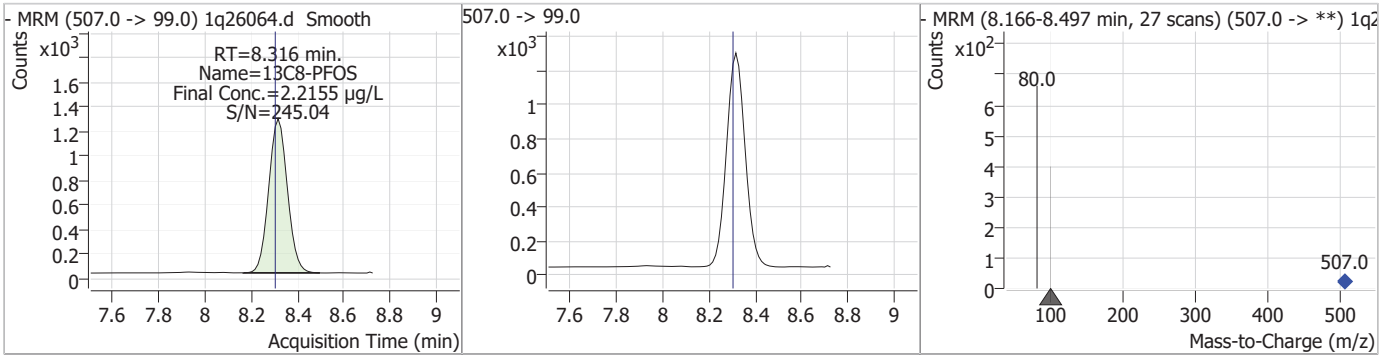
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.55	8.17	0.01	38446				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.18	8.16	0.00	1084 (m)	570.0 -> 512.0	50.1	18.7	56.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.22	8.32	0.01	7069				



7.6.14

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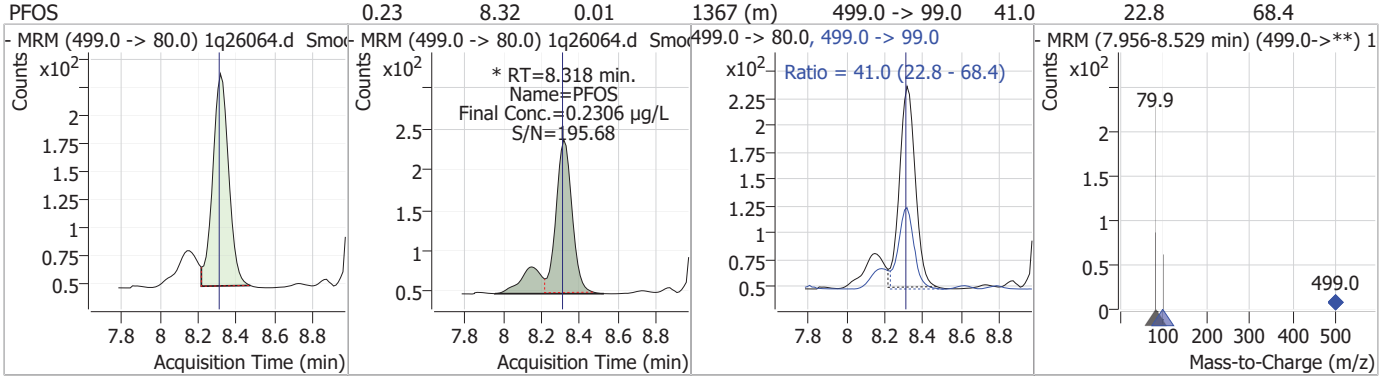
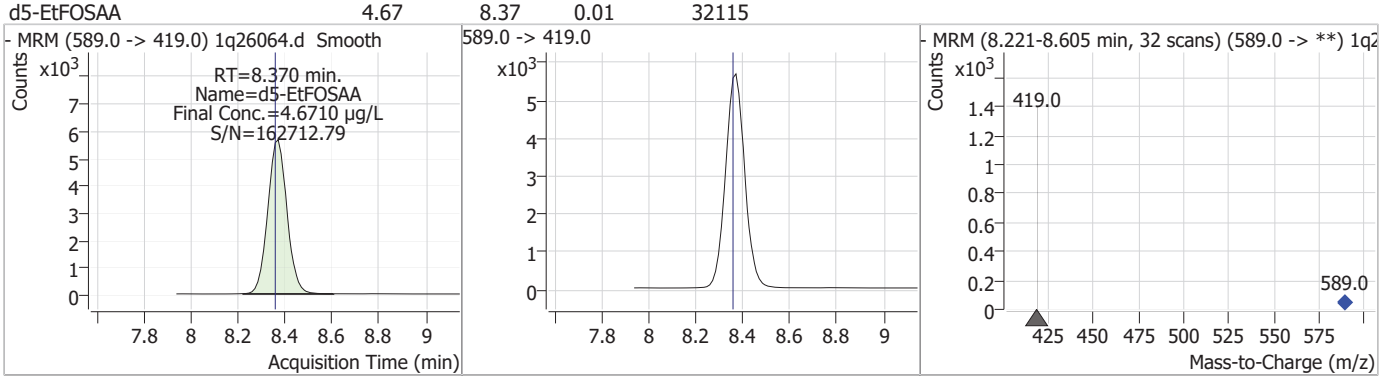
Perfluorinated Compounds by LC/MS/MS

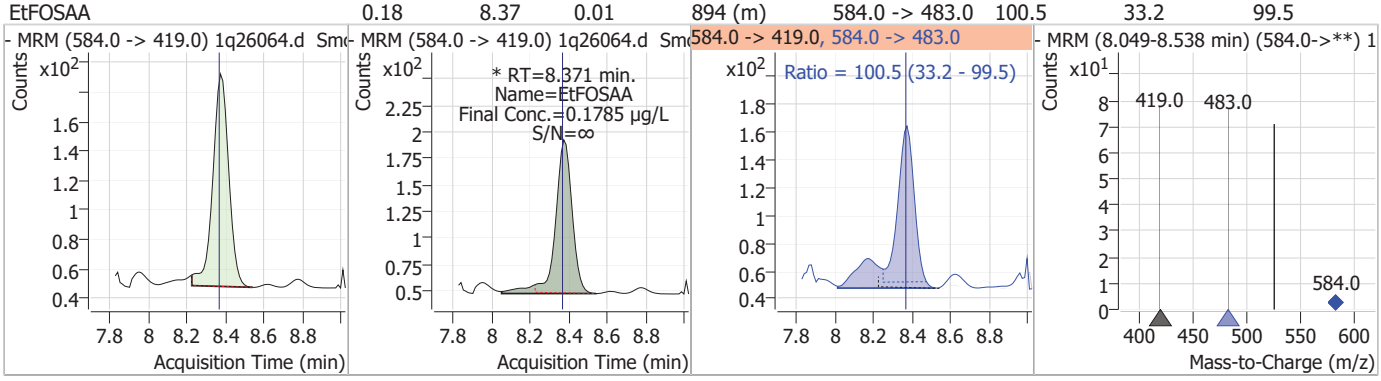
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.23	8.32	0.01	1367 (m)	499.0 -> 99.0	41.0	22.8	68.4



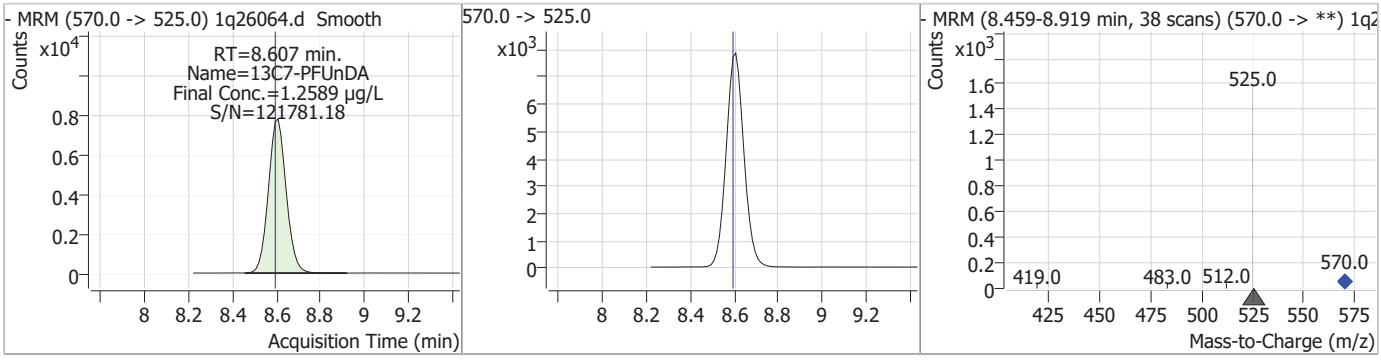
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.67	8.37	0.01	32115				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.18	8.37	0.01	894 (m)	584.0 -> 483.0	100.5	33.2	99.5

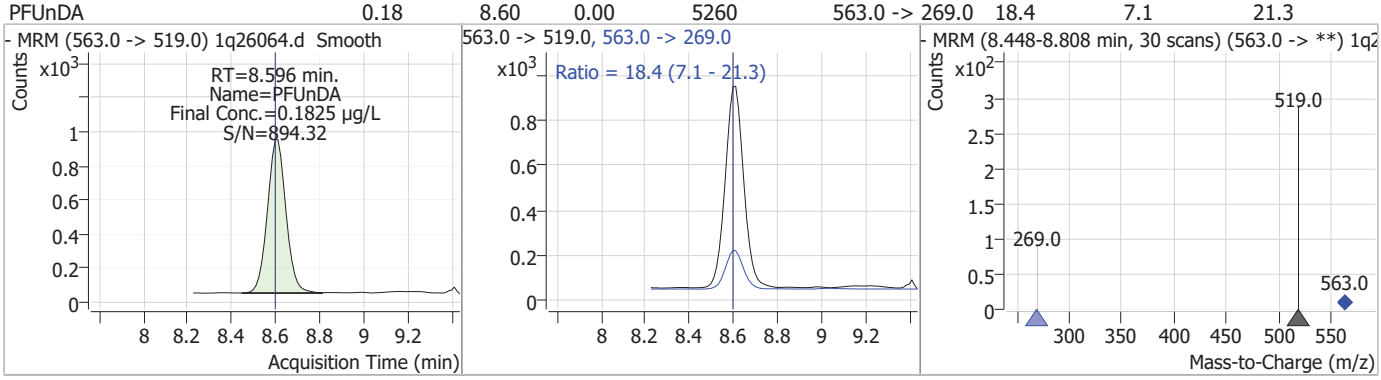


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.26	8.61	0.01	43569				

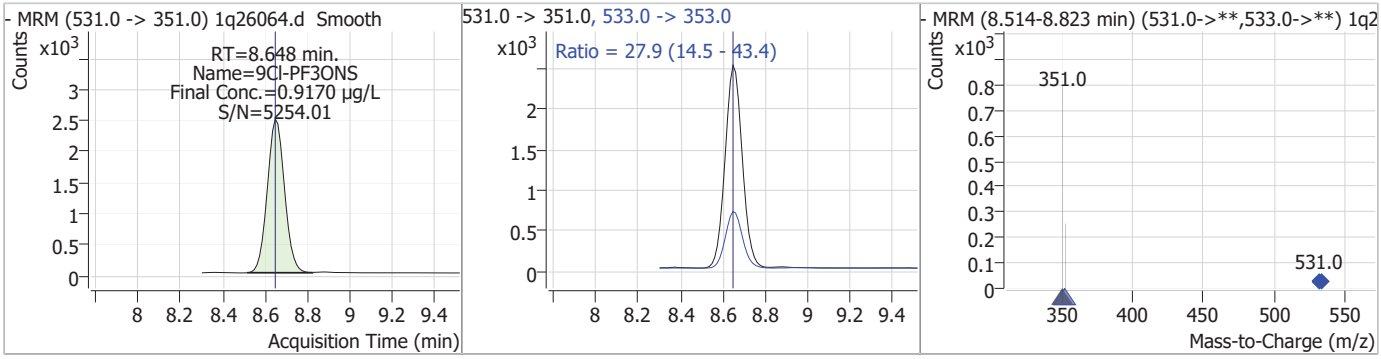


Perfluorinated Compounds by LC/MS/MS

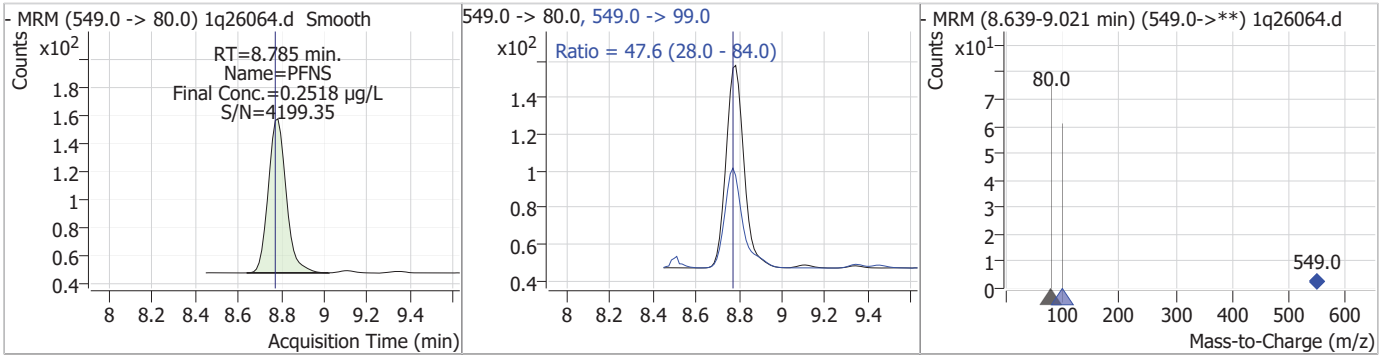
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.18	8.60	0.00	5260	563.0 -> 269.0	18.4	7.1	21.3



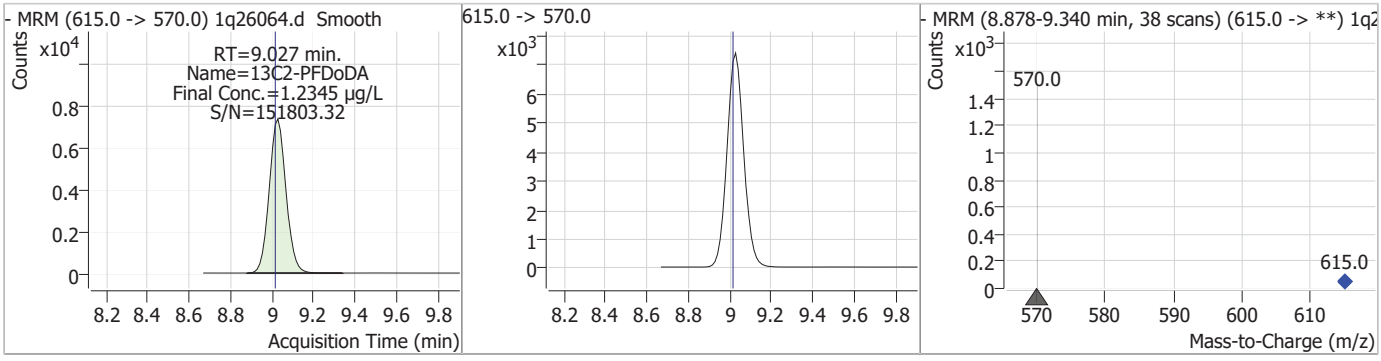
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	0.92	8.65	0.00	13985	533.0 -> 353.0	27.9	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.25	8.78	0.01	641	549.0 -> 99.0	47.6	28.0	84.0

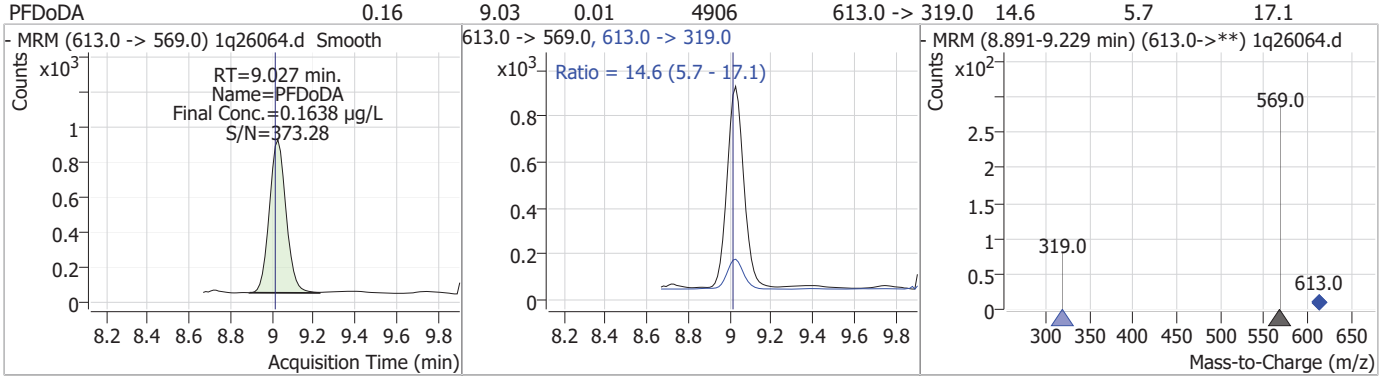


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.23	9.03	0.01	41222				

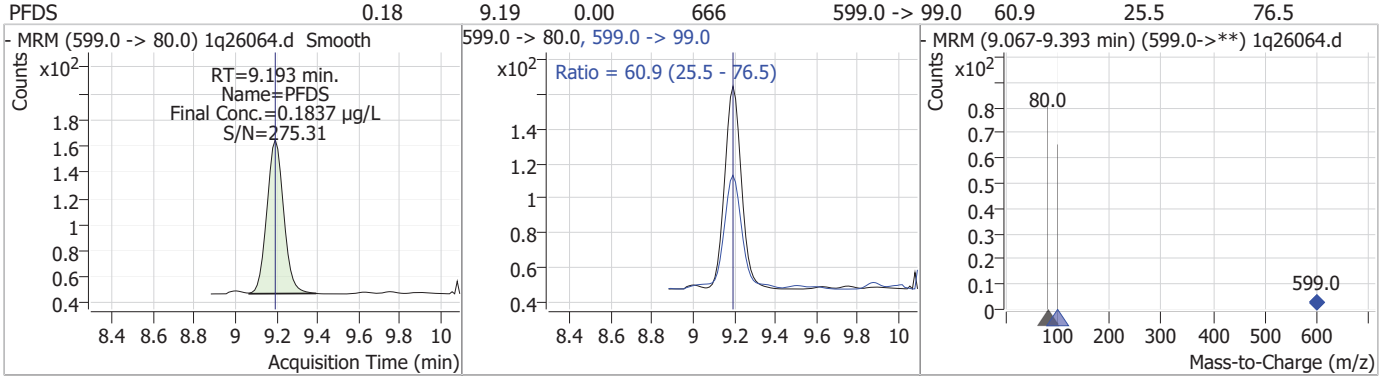


Perfluorinated Compounds by LC/MS/MS

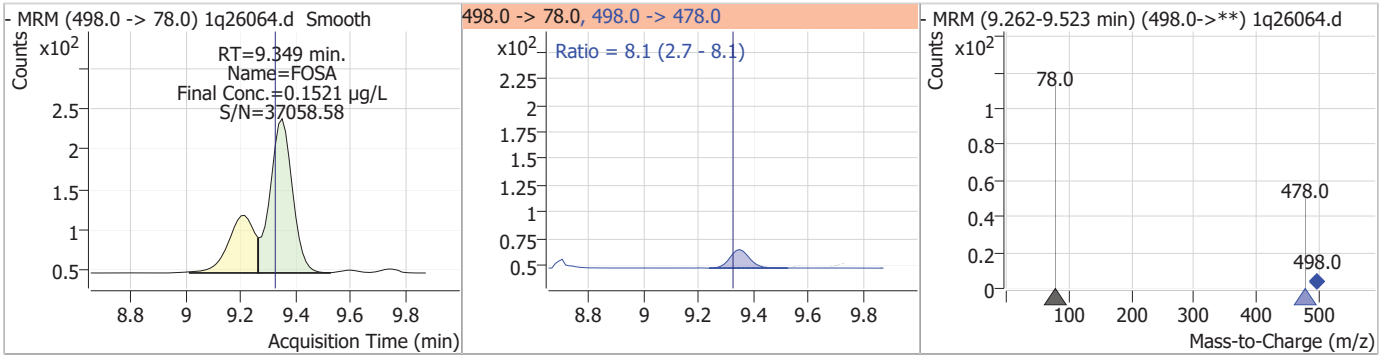
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.16	9.03	0.01	4906	613.0 -> 319.0	14.6	5.7	17.1



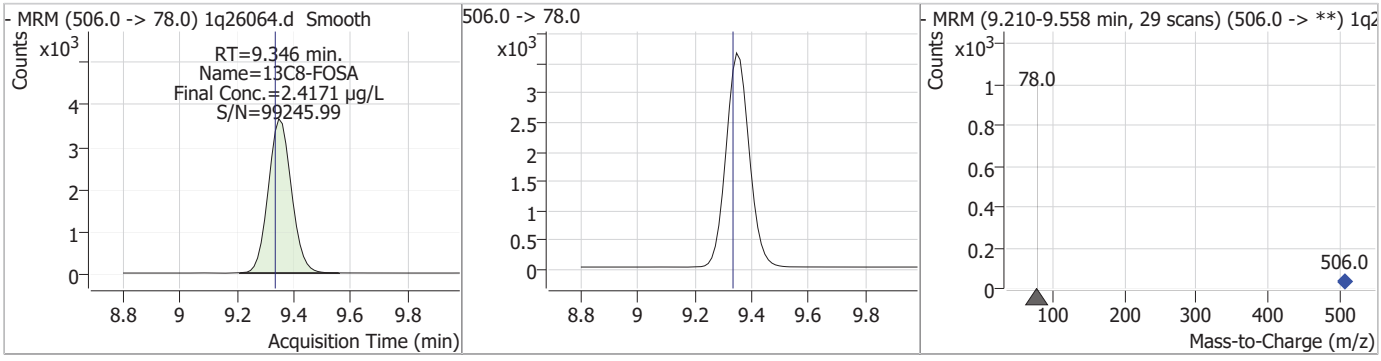
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.18	9.19	0.00	666	599.0 -> 99.0	60.9	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.15	9.35	0.02	1079	498.0 -> 478.0	8.1	2.7	8.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.42	9.35	0.01	20467				



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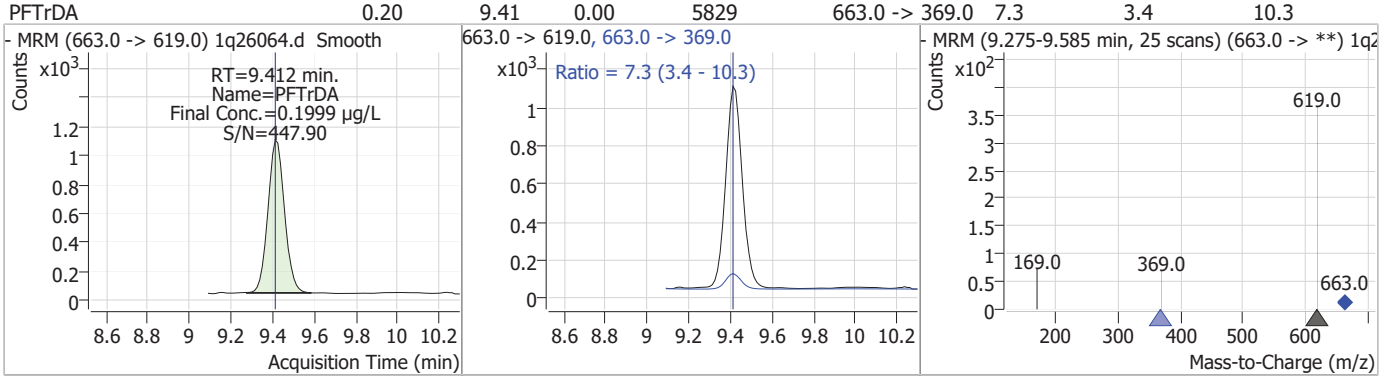
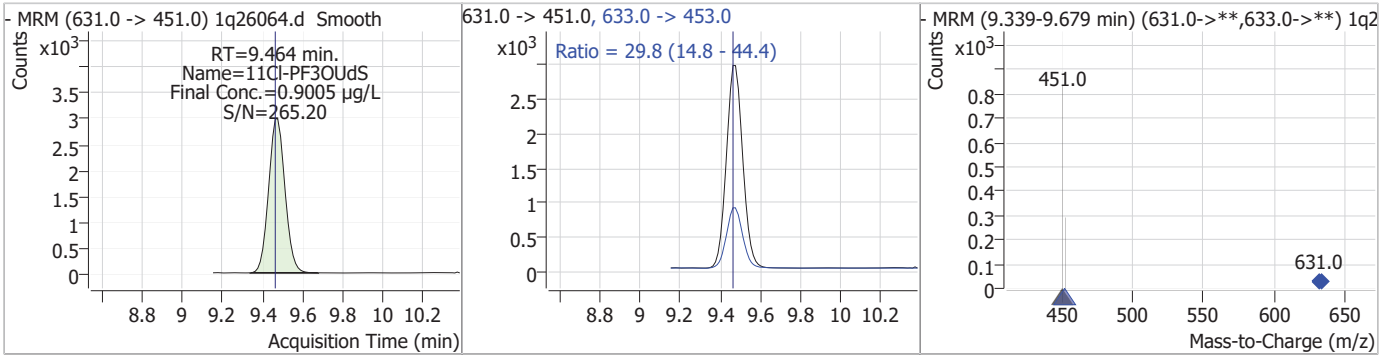
Perfluorinated Compounds by LC/MS/MS

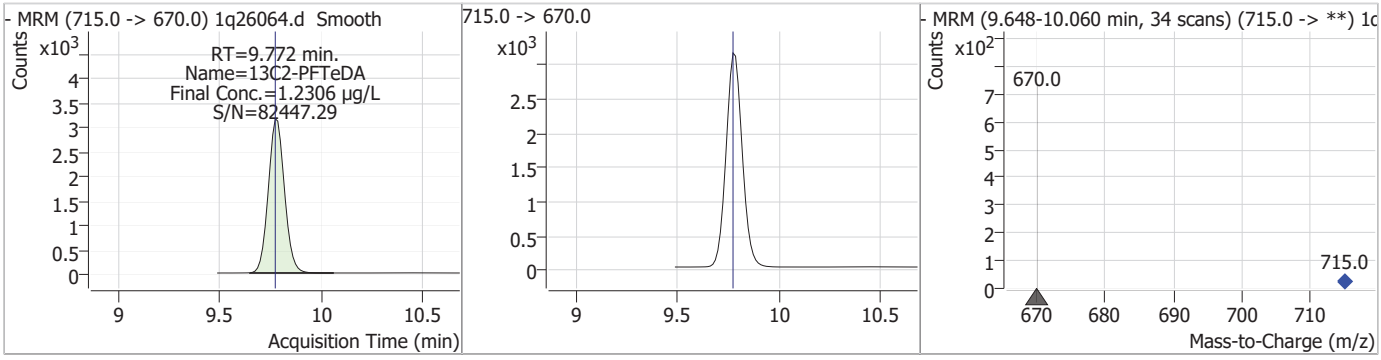
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.20	9.41	0.00	5829	663.0 -> 369.0	7.3	3.4	10.3



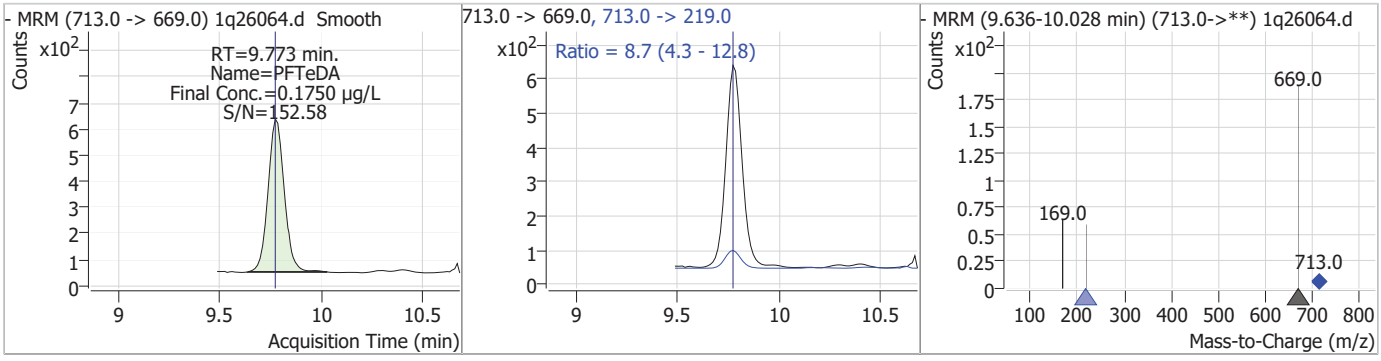
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	0.90	9.46	0.00	16753	633.0 -> 453.0	29.8	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.23	9.77	0.00	17290				

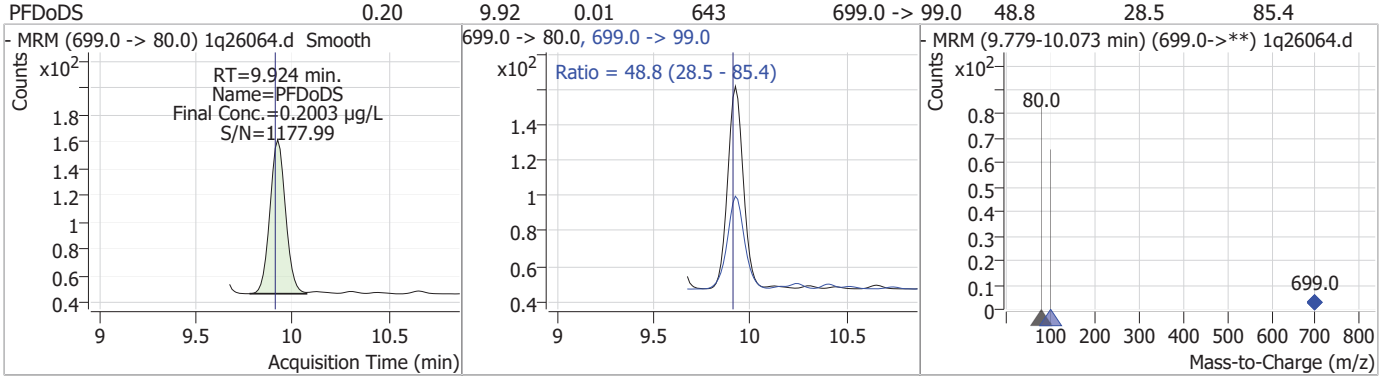


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.18	9.77	0.00	3259	713.0 -> 219.0	8.7	4.3	12.8

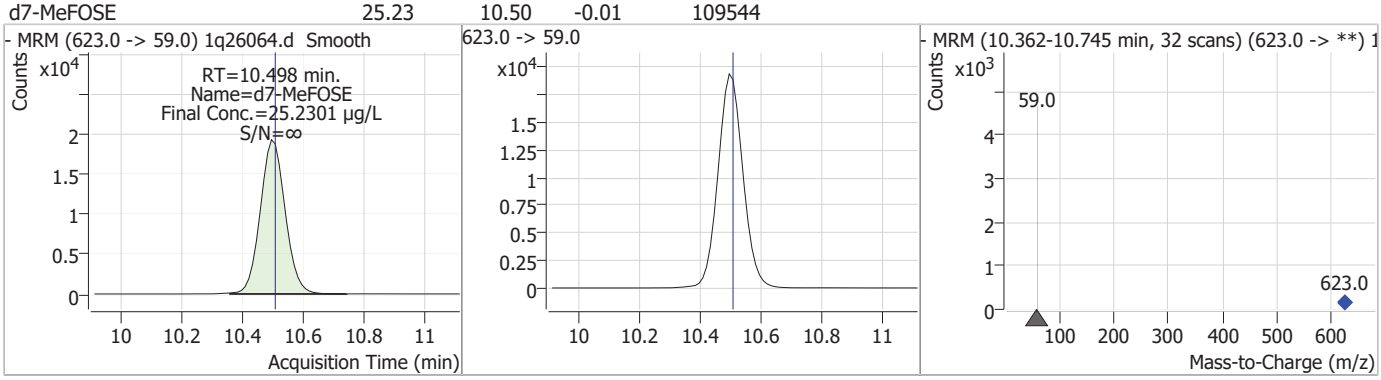


Perfluorinated Compounds by LC/MS/MS

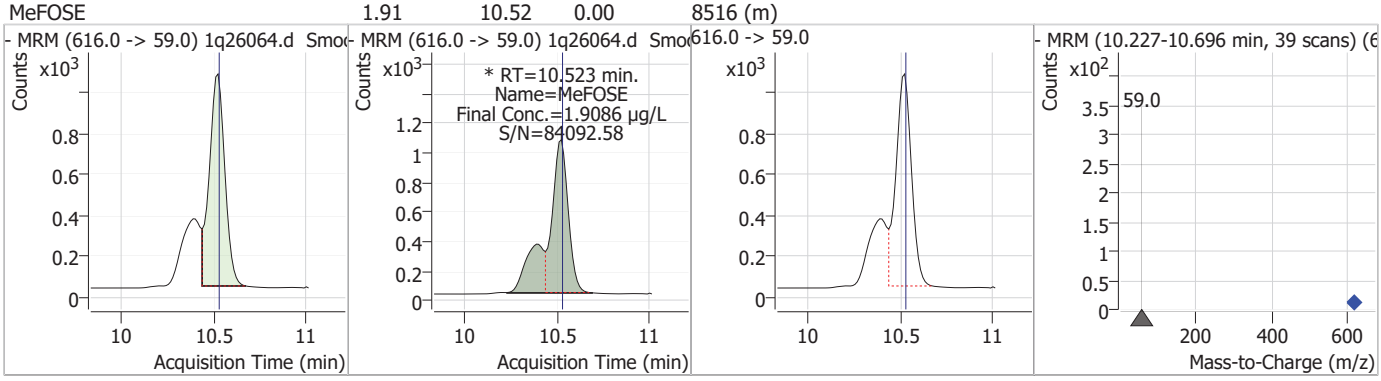
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.20	9.92	0.01	643	699.0 -> 99.0	48.8	28.5	85.4



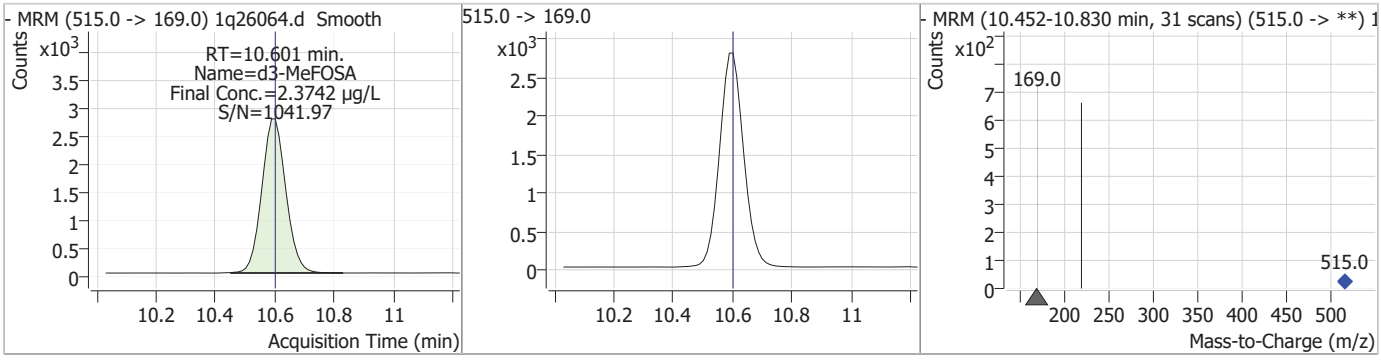
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.23	10.50	-0.01	109544				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	1.91	10.52	0.00	8516 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.37	10.60	0.00	15582				



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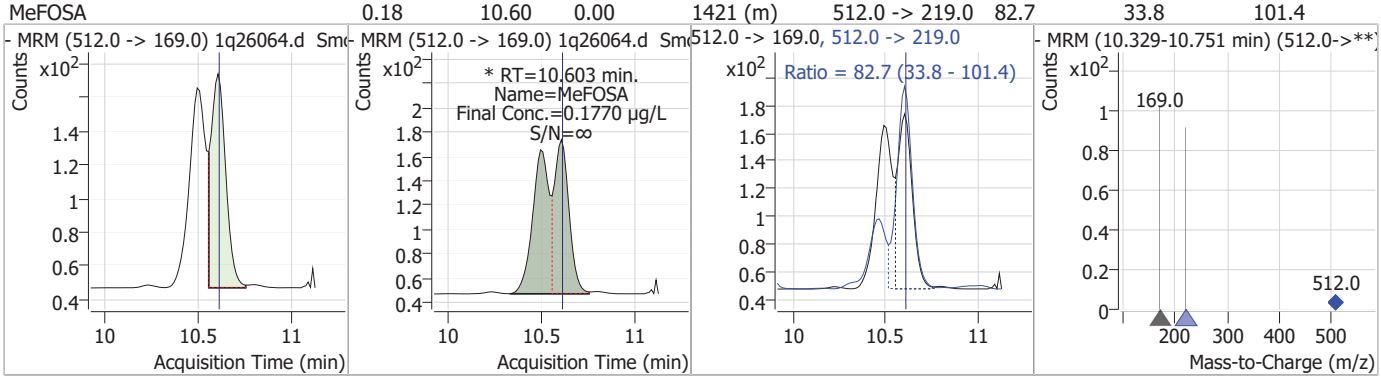
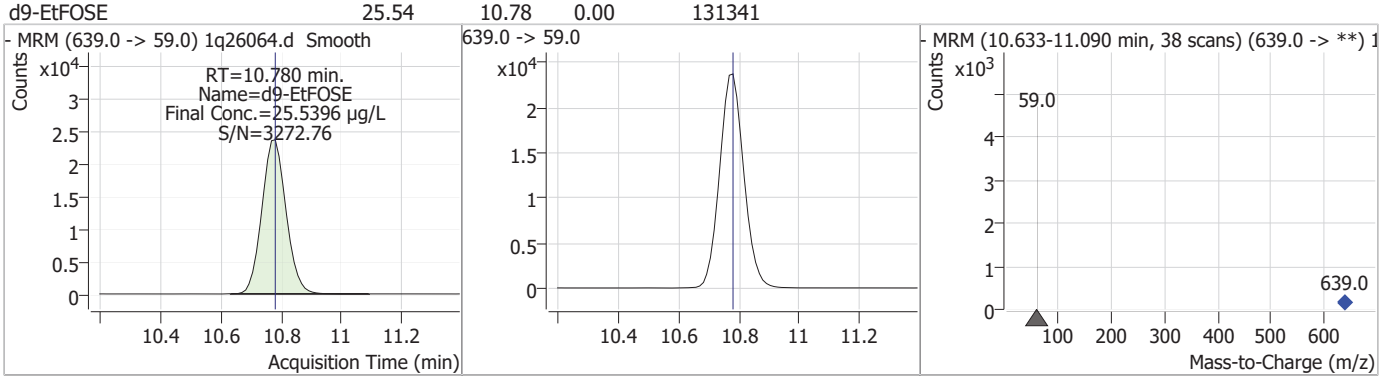
Perfluorinated Compounds by LC/MS/MS

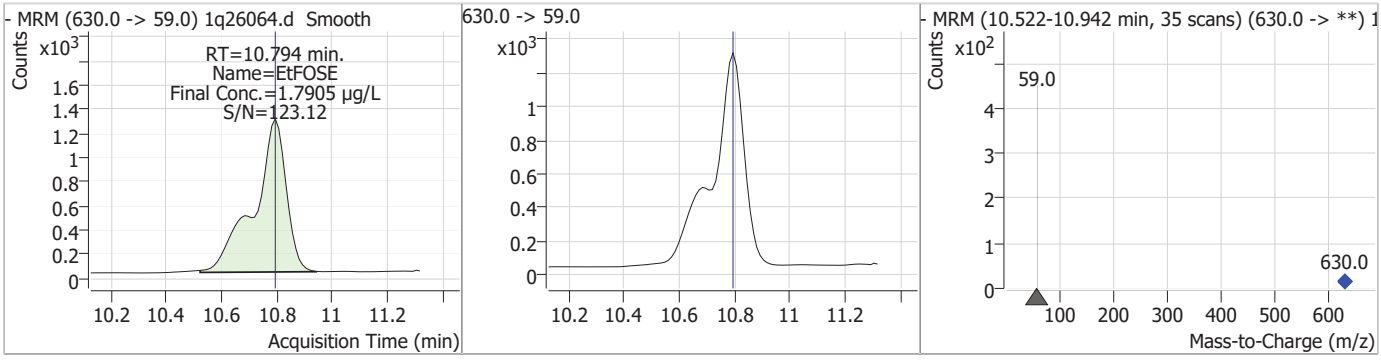
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.18	10.60	0.00	1421 (m)	512.0 -> 219.0	82.7	33.8	101.4



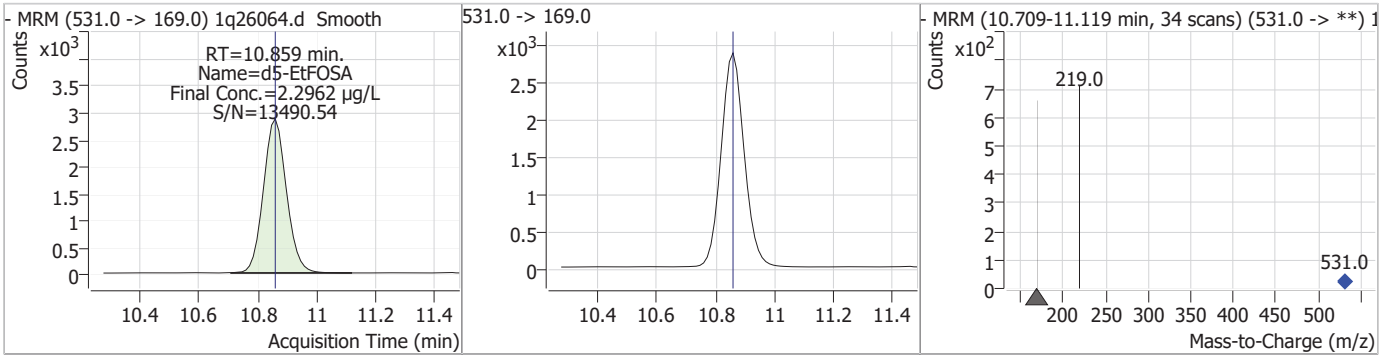
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.54	10.78	0.00	131341				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	1.79	10.79	0.00	10247				

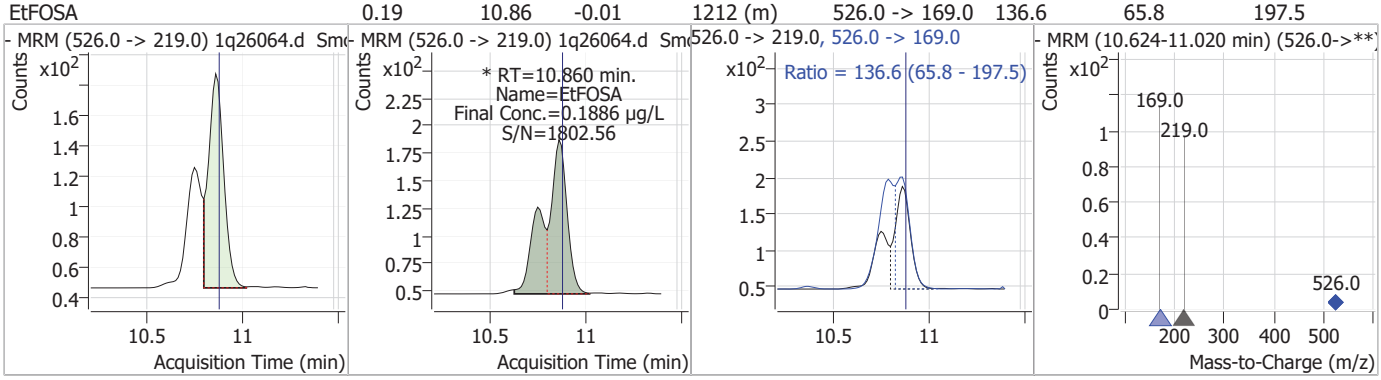


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.30	10.86	0.00	15399				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.19	10.86	-0.01	1212 (m)	526.0 -> 169.0	136.6	65.8	197.5



Manual Integration Approval Summary

Sample Number: T1Q362-CC361
Lab FileID: 1Q26064.D
Injection Time: 05/15/25 11:46
Method: EPA 1633
Analyst approved: 05/16/25 02:49 Alodia Hana Barrogo
Supervisor approved: 05/16/25 06:10 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.67	Split peak
MeFOSAA	2355-31-9		8.16	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Split peak
MeFOSE	24448-09-7		10.52	Split peak
MeFOSA	31506-32-8		10.60	Split peak
EtFOSA	4151-50-2		10.86	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/16/25 06:10

Perfluorinated Compounds by LC/MS/MS

Data File : 1q26085.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/15/2025 5:23:55 PM
Sample Name : cc361-4
Vial : P1-A5
DA Method File : 051425_1633_T1Q361.quantmethod.xml
Batch Name : T1Q362.batch.bin
Sample Information : OP63465,T1Q362,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.260	217.0 -> 172.0	200073	10.00 µg/L	0.000
M5-PFPeA	4.636	268.0 -> 223.0	119019	5.00 µg/L	-0.012
M5-PFHxA	5.759	318.0 -> 273.0	67367	2.50 µg/L	0.000
M4-PFHpA	6.553	367.0 -> 322.0	52571	2.50 µg/L	0.000
M8-PFOA	7.148	421.0 -> 376.0	85422	2.50 µg/L	0.000
M9-PFNA	7.656	472.0 -> 427.0	29984	1.25 µg/L	0.000
M6-PFDA	8.139	519.0 -> 474.0	29342	1.25 µg/L	0.000
M7-PFUnDA	8.595	570.0 -> 525.0	44039	1.25 µg/L	0.000
M2-PFDoDA	9.027	615.0 -> 570.0	43873	1.25 µg/L	0.012
M2-PFTeDA	9.772	715.0 -> 670.0	17618	1.25 µg/L	0.000
M8-FOSA	9.346	506.0 -> 78.0	22543	2.50 µg/L	0.012
M3-PFBS	5.711	302.0 -> 99.0	7977	2.50 µg/L	0.000
M3-PFHxS	7.275	402.0 -> 99.0	7395	2.50 µg/L	0.000
M8-PFOS	8.304	507.0 -> 99.0	8168	2.50 µg/L	0.000
M2-4:2FTS	5.446	329.0 -> 81.0	1496	5.00 µg/L	0.000
M2-6:2FTS	6.922	429.0 -> 81.0	3107	5.00 µg/L	0.000
M2-8:2FTS	7.927	529.0 -> 81.0	4572	5.00 µg/L	0.000
M3-MeFOSAA	8.161	573.0 -> 419.0	42907	5.00 µg/L	0.000
M3-HFPO-DA	6.087	287.0 -> 169.0	19280	10.00 µg/L	0.000
M5-EtFOSAA	8.358	589.0 -> 419.0	34368	5.00 µg/L	0.000
M7-MeFOSE	10.498	623.0 -> 59.0	115745	25.00 µg/L	-0.012
M9-EtFOSE	10.768	639.0 -> 59.0	135307	25.00 µg/L	-0.012
M5-EtFOSA	10.859	531.0 -> 169.0	16733	2.50 µg/L	0.000
M3-MeFOSA	10.589	515.0 -> 169.0	16194	2.50 µg/L	-0.012
13C4-PFOS	8.304	503.0 -> 80.0	13010	2.50 µg/L	0.000
13C3-PFBA	3.263	216.0 -> 172.0	83888	5.00 µg/L	0.013
18O2-PFHxS	7.274	403.0 -> 84.0	8650	2.50 µg/L	0.000
13C4-PFOA	7.149	417.0 -> 372.0	90804	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	25820	1.25 µg/L	0.000
13C5-PFNA	7.657	468.0 -> 423.0	30129	1.25 µg/L	0.000
13C2-PFHxA	5.760	315.0 -> 270.0	62431	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.446	329.0 -> 81.0	1496	5.18 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.6%	
13C2-6:2FTS	6.922	429.0 -> 81.0	3107	5.55 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 111.0%	
13C2-8:2FTS	7.927	529.0 -> 81.0	4572	5.19 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.8%	
13C2-PFDoDA	9.027	615.0 -> 570.0	43873	1.25 µg/L	0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.2%	
13C2-PFTeDA	9.772	715.0 -> 670.0	17618	1.20 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.6%	
13C3-PFBS	5.711	302.0 -> 99.0	7977	2.76 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 110.5%	
13C3-PFHxS	7.275	402.0 -> 99.0	7395	2.56 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.3%		
13C4-PFBA	3.260	217.0 -> 172.0	200073	10.03 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.3%		
13C4-PFHpA	6.553	367.0 -> 322.0	52571	2.43 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.1%		
13C5-PFHxA	5.759	318.0 -> 273.0	67367	2.54 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.5%		
13C5-PFPeA	4.636	268.0 -> 223.0	119019	5.20 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.0%		
13C6-PFDA	8.139	519.0 -> 474.0	29342	1.17 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.8%		
13C7-PFUnDA	8.595	570.0 -> 525.0	44039	1.21 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.0%		
13C8-FOSA	9.346	506.0 -> 78.0	22543	2.84 µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 113.5%		
13C8-PFOA	7.148	421.0 -> 376.0	85422	2.58 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.4%		
13C8-PFOS	8.304	507.0 -> 99.0	8168	2.73 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 109.2%		
13C9-PFNA	7.656	472.0 -> 427.0	29984	1.22 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.6%		
d3-MeFOSAA	8.161	573.0 -> 419.0	42907	5.42 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.3%		
13C3-HFPO-DA	6.087	287.0 -> 169.0	19280	8.28 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 82.8%		
d3-MeFOSA	10.589	515.0 -> 169.0	16194	2.63 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.2%		
d5-EtFOSAA	8.358	589.0 -> 419.0	34368	5.33 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.6%		
d7-MeFOSE	10.498	623.0 -> 59.0	115745	28.42 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 113.7%		
d9-EtFOSE	10.768	639.0 -> 59.0	135307	28.05 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 112.2%		
d5-EtFOSA	10.859	531.0 -> 169.0	16733	2.66 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.4%		
Target Compounds						**QValue**
4:2FTS	5.447	327.0 -> 307.0	28263	10.13 µg/L		96
		327.0 -> 81.0	12749			
6:2FTS	6.922	427.0 -> 407.0	39510	9.93 µg/L		97
		427.0 -> 81.0	13735			
8:2FTS	7.927	527.0 -> 507.0	43689	10.51 µg/L		98
		527.0 -> 81.0	13228			
EtFOSAA	8.371	584.0 -> 419.0	14100	2.63 µg/L	m	98
		584.0 -> 483.0	9582			
FOSA	9.349	498.0 -> 78.0	18309	2.34 µg/L	m	99
		498.0 -> 478.0	914			
MeFOSAA	8.162	570.0 -> 419.0	17463	2.57 µg/L	m	93
		570.0 -> 512.0	7239			
PFBA	3.266	213.0 -> 169.0	51734	9.25 µg/L		100
PFBS	5.713	299.0 -> 80.0	19210	2.08 µg/L		100
		299.0 -> 99.0	7483			
PFDA	8.140	513.0 -> 469.0	52799	2.62 µg/L		98
		513.0 -> 219.0	8191			
PFDoDA	9.027	613.0 -> 569.0	78927	2.48 µg/L		99
		613.0 -> 319.0	8739			
PFDS	9.193	599.0 -> 80.0	9333	2.55 µg/L		94

Perfluorinated Compounds by LC/MS/MS

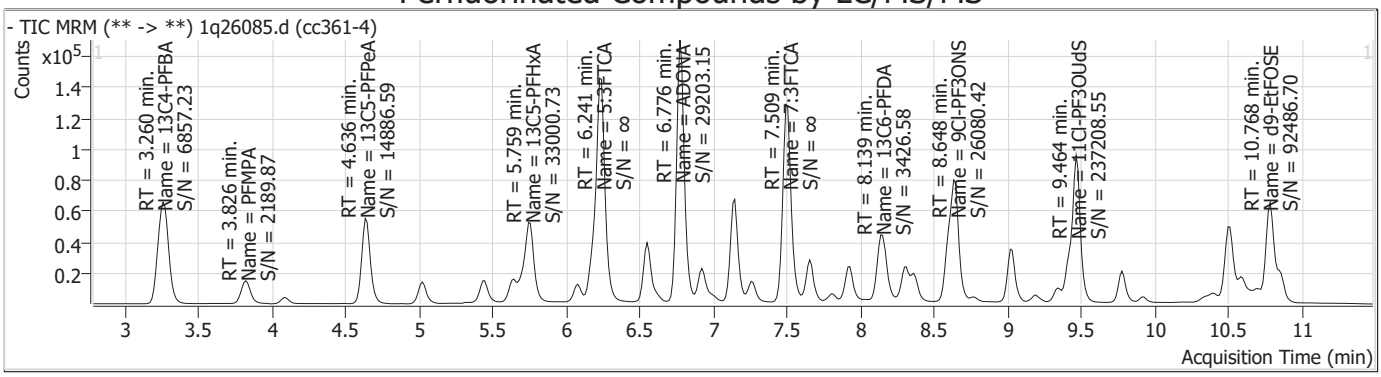
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	4396				
PFHpA	6.554	363.0 -> 319.0	76208	2.59	µg/L		97
		363.0 -> 169.0	12842				
PFHpS	7.809	449.0 -> 80.0	12066	2.36	µg/L		99
		449.0 -> 99.0	6193				
PFHxA	5.761	313.0 -> 269.0	62064	2.51	µg/L		99
		313.0 -> 119.0	1579				
PFHxS	7.264	399.0 -> 80.0	13258	2.30	µg/L	m	95
		399.0 -> 99.0	7192				
PFNA	7.657	463.0 -> 419.0	38224	2.54	µg/L	m	98
		463.0 -> 219.0	10554				
PFNS	8.772	549.0 -> 80.0	6992	2.38	µg/L		96
		549.0 -> 99.0	3692				
PFOA	7.149	413.0 -> 369.0	72185	2.45	µg/L	m	94
		413.0 -> 169.0	16983				
PFOS	8.305	499.0 -> 80.0	15170	2.21	µg/L	m	97
		499.0 -> 99.0	6597				
PFPeA	4.638	263.0 -> 219.0	106757	5.15	µg/L		100
PFPeS	6.630	349.0 -> 80.0	8244	1.99	µg/L		96
		349.0 -> 99.0	3599				
PFTeDA	9.773	713.0 -> 669.0	46684	2.46	µg/L		100
		713.0 -> 219.0	3950				
PFTrDA	9.412	663.0 -> 619.0	80002	2.58	µg/L		98
		663.0 -> 369.0	5075				
PFUnDA	8.596	563.0 -> 519.0	73762	2.53	µg/L		98
		563.0 -> 269.0	11136				
11Cl-PF3OUdS	9.464	631.0 -> 451.0	254225	12.23	µg/L		98
		633.0 -> 453.0	77594				
9Cl-PF3ONS	8.648	531.0 -> 351.0	207157	12.16	µg/L		99
		533.0 -> 353.0	59024				
ADONA	6.776	377.0 -> 251.0	489095	11.52	µg/L		99
		377.0 -> 85.0	136090				
HFPO-DA	6.088	285.0 -> 169.0	19898	10.66	µg/L		99
		285.0 -> 185.0	1795				
3:3FTCA	4.084	241.0 -> 177.0	15820	14.02	µg/L		99
		241.0 -> 117.0	1151				
5:3FTCA	6.241	341.0 -> 237.0	326375	74.75	µg/L		98
		341.0 -> 217.0	225581				
7:3FTCA	7.509	441.0 -> 337.0	358175	72.65	µg/L		97
		441.0 -> 317.0	155363				
EtFOSA	10.860	526.0 -> 219.0	16843	2.41	µg/L	m	95
		526.0 -> 169.0	23150				
EtFOSE	10.794	630.0 -> 59.0	155141	26.31	µg/L		100
MeFOSA	10.590	512.0 -> 169.0	20633	2.47	µg/L	m	98
		512.0 -> 219.0	13669				
MeFOSE	10.511	616.0 -> 59.0	118233	25.08	µg/L	m	100
PFDoDS	9.924	699.0 -> 80.0	8262	2.23	µg/L		98
		699.0 -> 99.0	4824				
NFDHA	5.651	295.0 -> 201.0	7382	4.49	µg/L		71
		201.0 -> 85.0	46800				
		295.0 -> 85.0	1946				
PFMBA	5.027	279.0 -> 85.0	55995	4.97	µg/L		100
PFMPA	3.826	229.0 -> 85.0	65368	5.15	µg/L		100
PFEESA	6.182	315.0 -> 135.0	104441	4.45	µg/L		99
		315.0 -> 69.0	8982				

 # = Qualifier out of range, m = manually integrated, + = Area summed

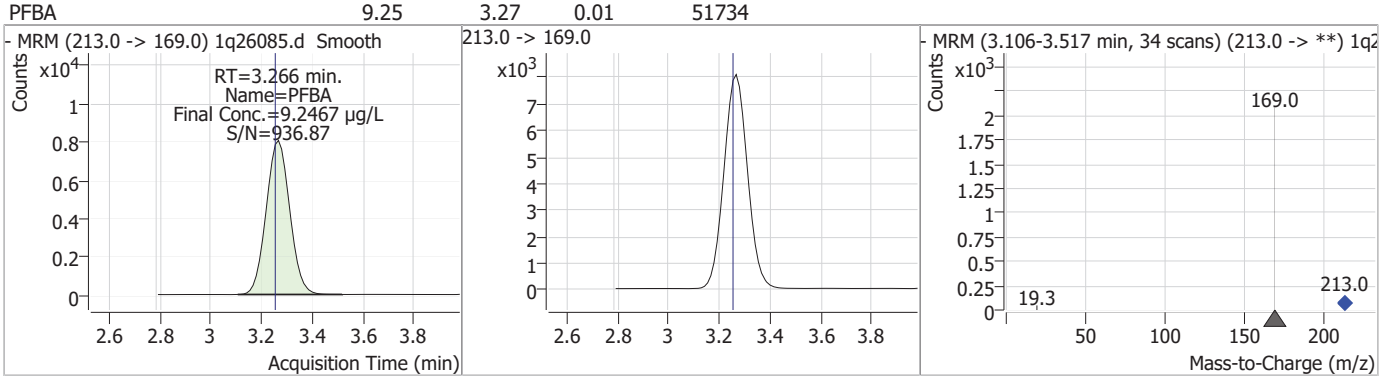
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

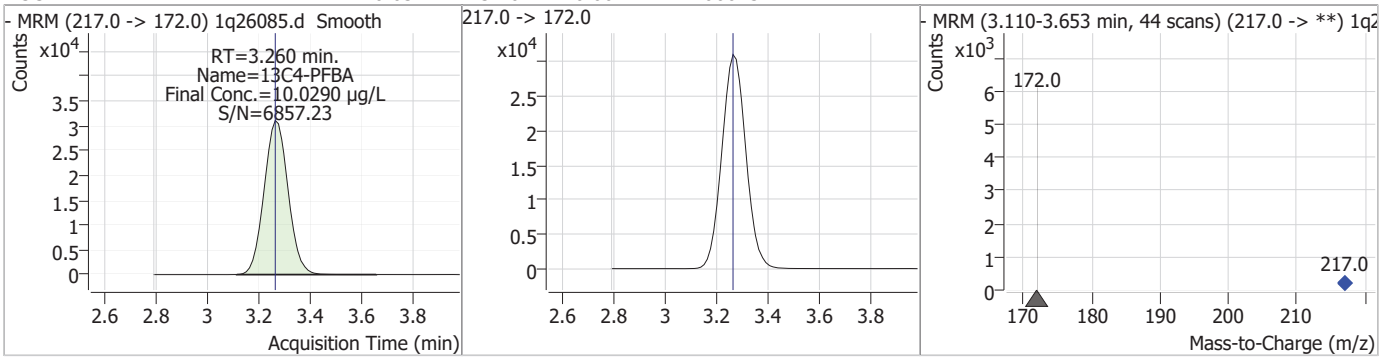
Perfluorinated Compounds by LC/MS/MS



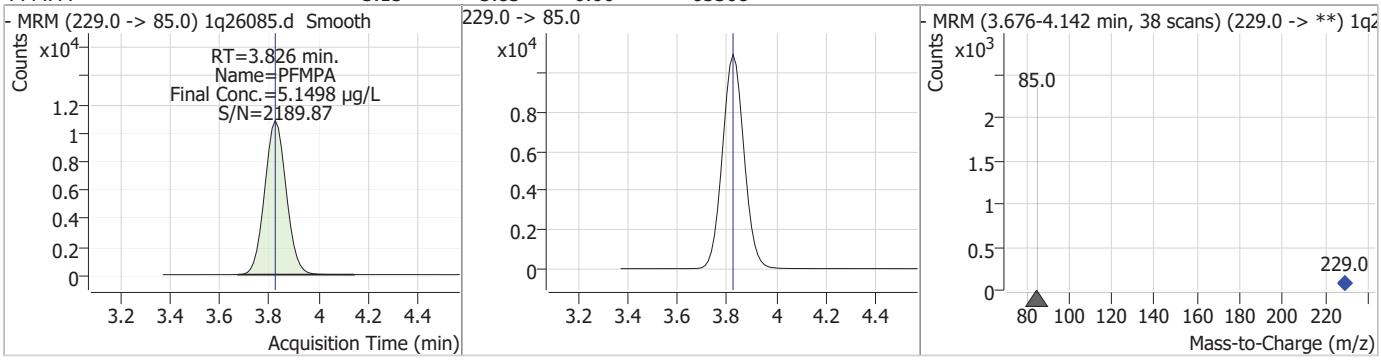
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.25	3.27	0.01	51734				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.03	3.26	0.00	200073				

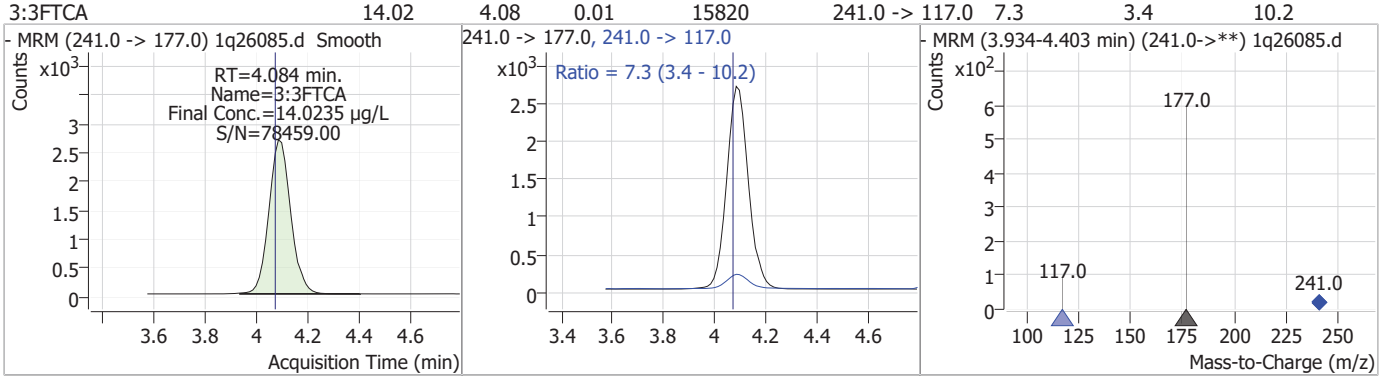


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.15	3.83	0.00	65368				

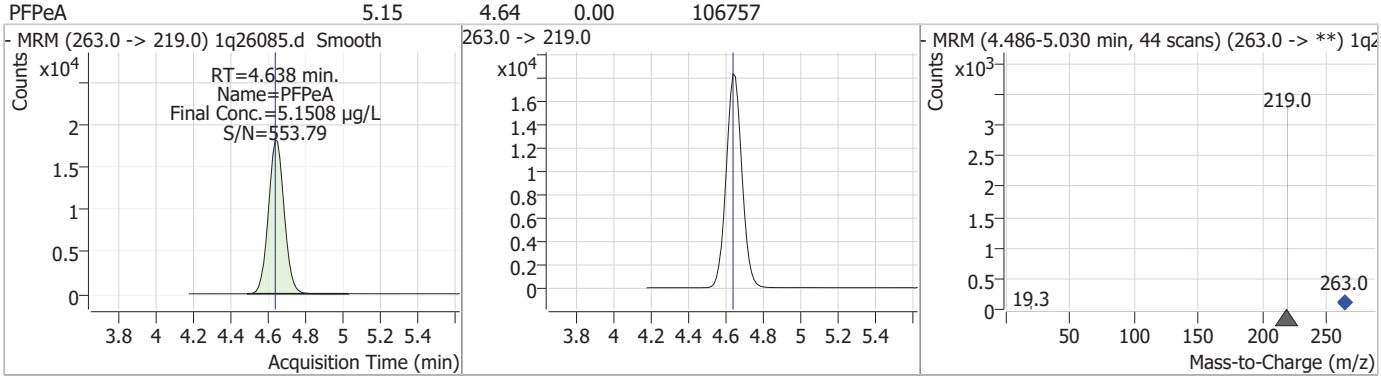


Perfluorinated Compounds by LC/MS/MS

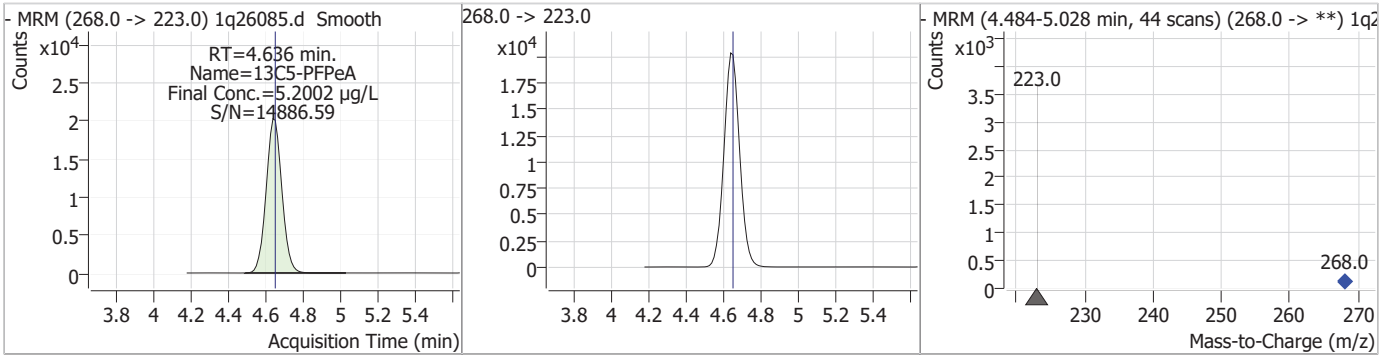
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	14.02	4.08	0.01	15820	241.0 -> 117.0	7.3	3.4	10.2



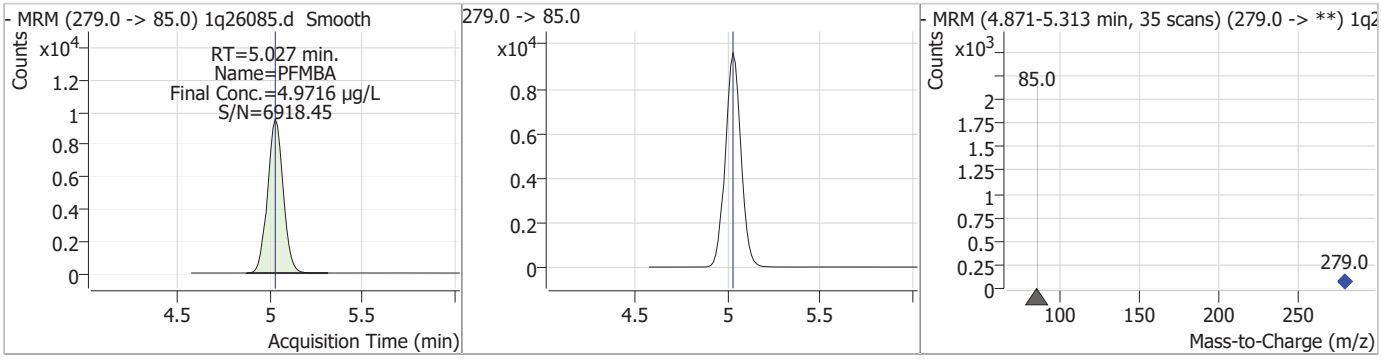
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.15	4.64	0.00	106757				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.20	4.64	-0.01	119019				

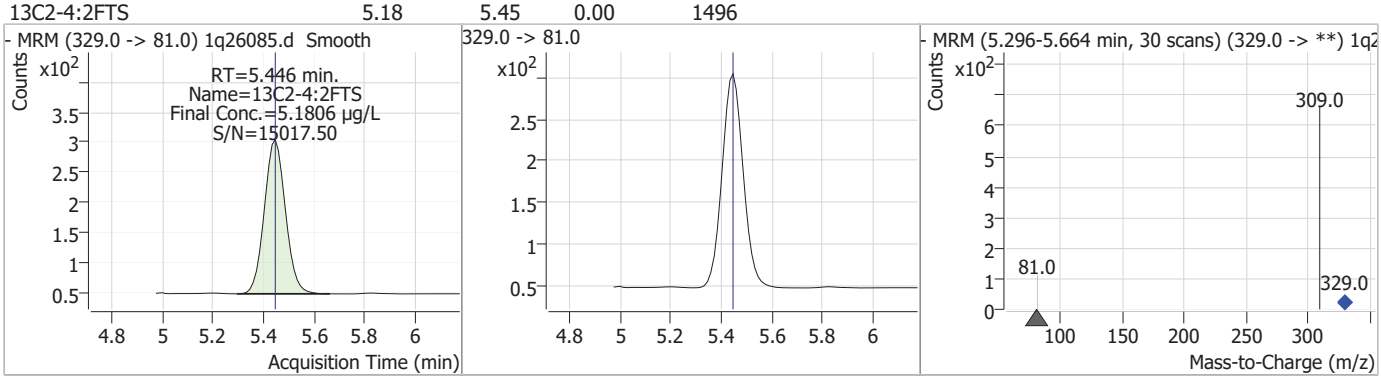


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.97	5.03	0.00	55995				

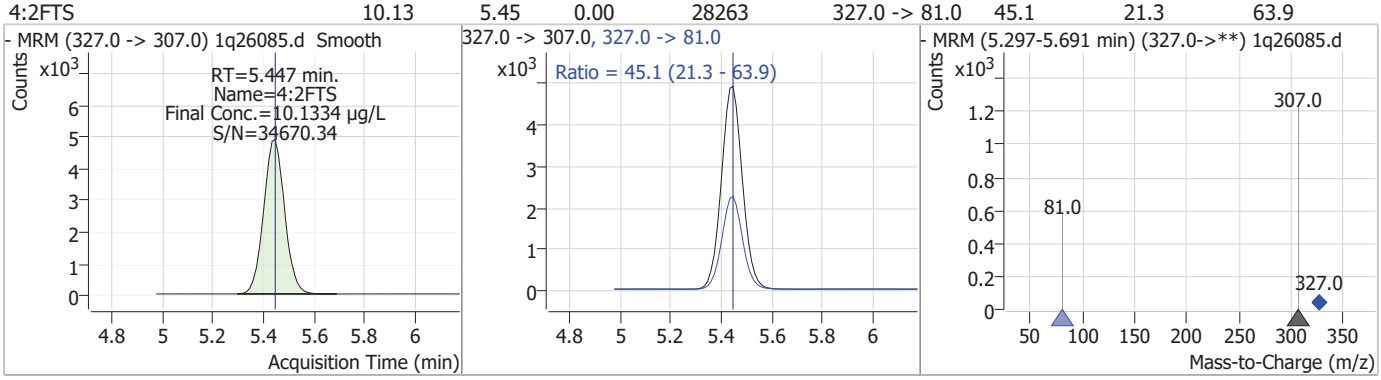


Perfluorinated Compounds by LC/MS/MS

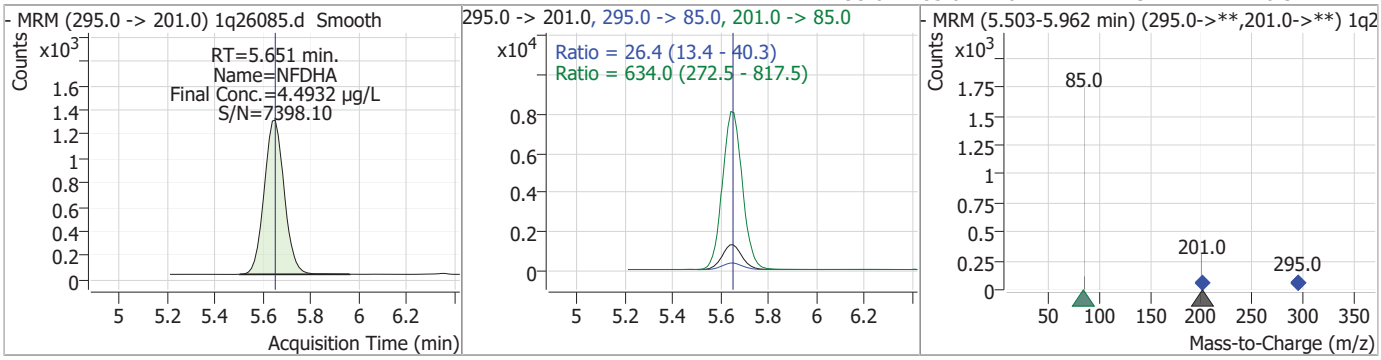
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.18	5.45	0.00	1496				



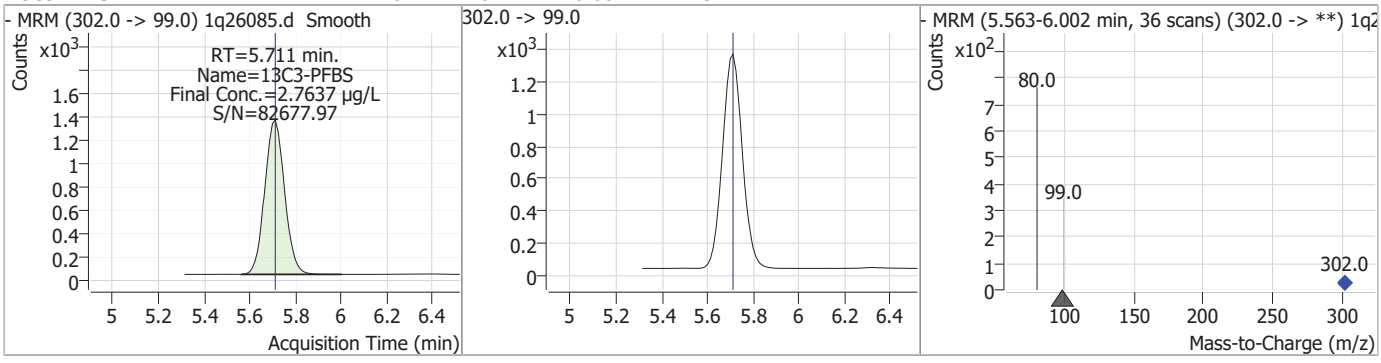
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	10.13	5.45	0.00	28263	327.0 -> 81.0	45.1	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	4.49	5.65	0.00	7382	201.0 -> 85.0	634.0	272.5	817.5
					295.0 -> 85.0	26.4	13.4	40.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.76	5.71	0.00	7977				



7.6.15

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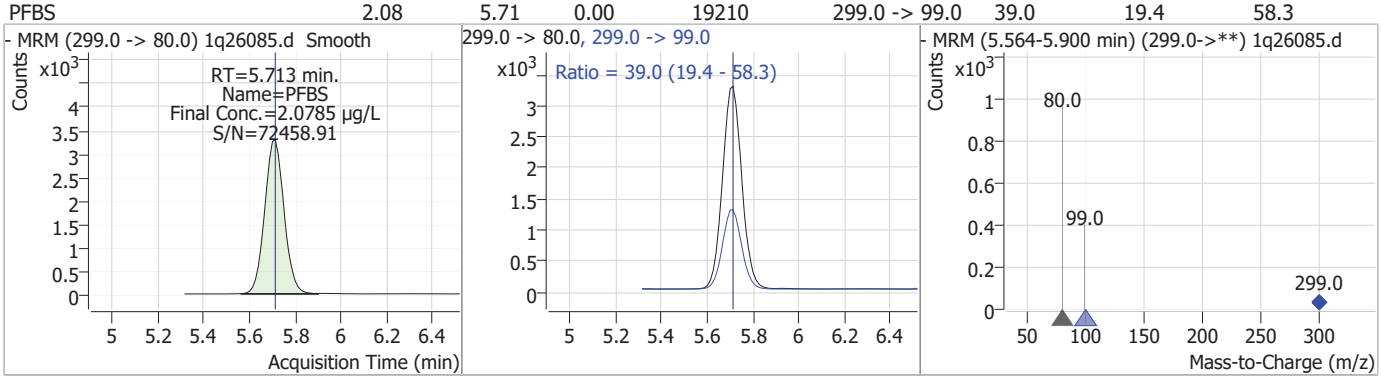
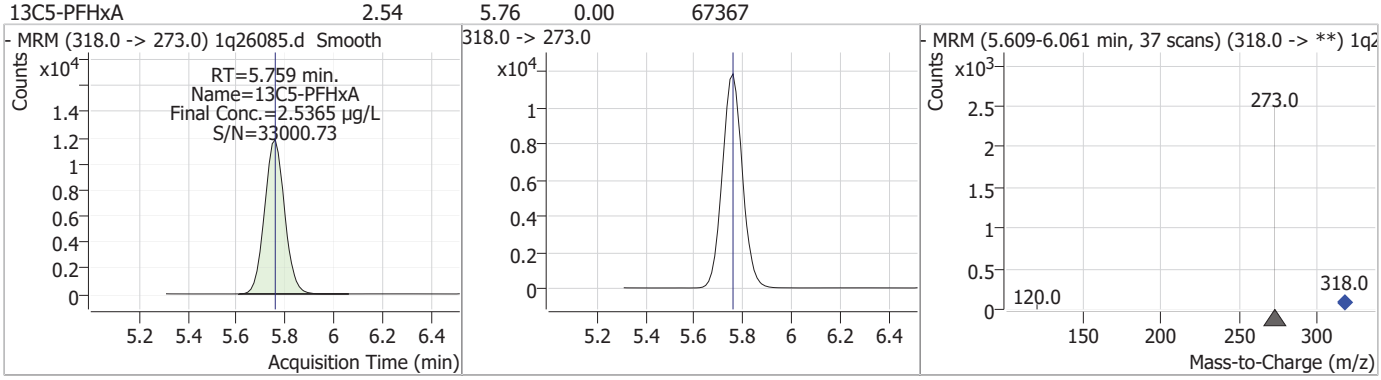
Perfluorinated Compounds by LC/MS/MS

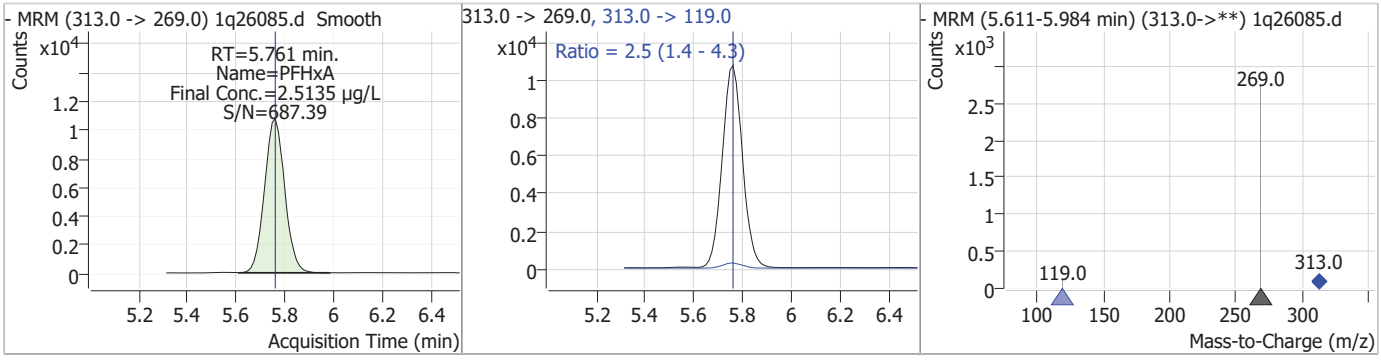
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.08	5.71	0.00	19210	299.0 -> 99.0	39.0	19.4	58.3



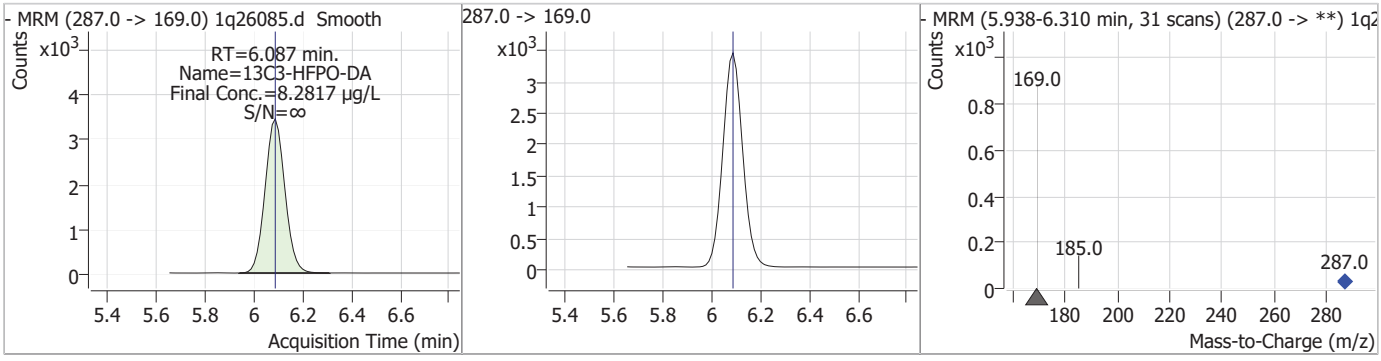
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.54	5.76	0.00	67367				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.51	5.76	0.00	62064	313.0 -> 119.0	2.5	1.4	4.3

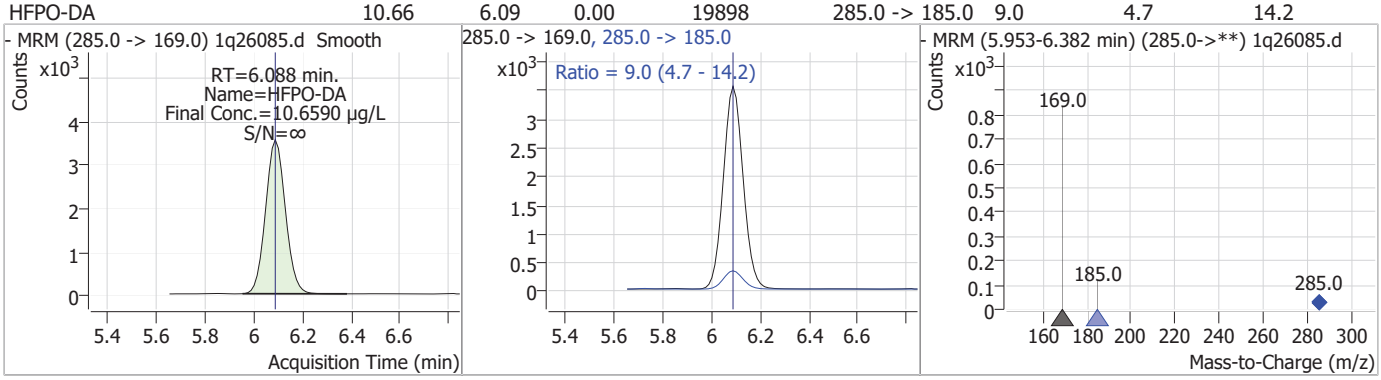


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.28	6.09	0.00	19280				

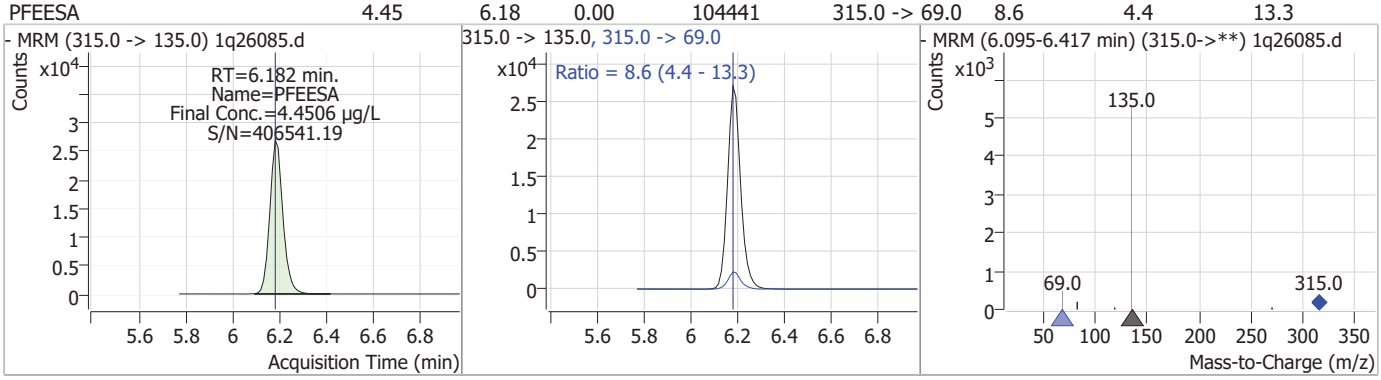


Perfluorinated Compounds by LC/MS/MS

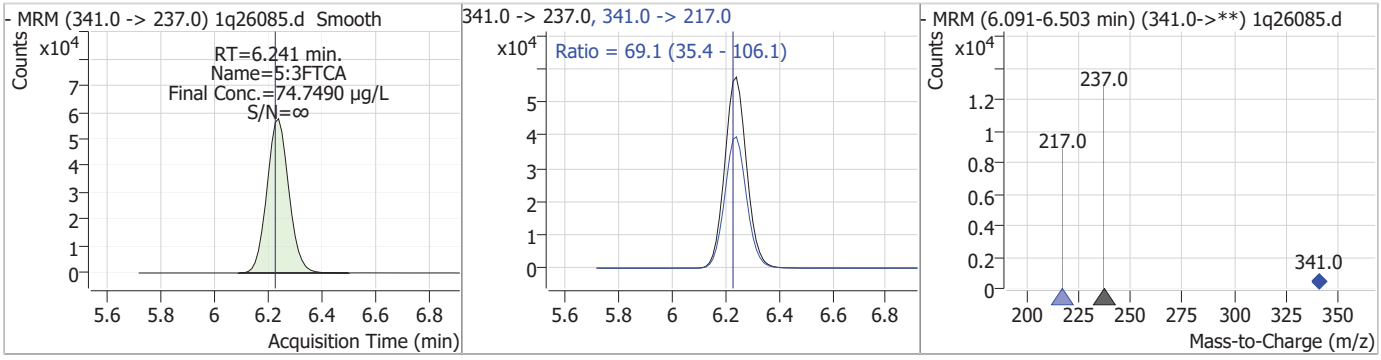
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.66	6.09	0.00	19898	285.0 -> 185.0	9.0	4.7	14.2



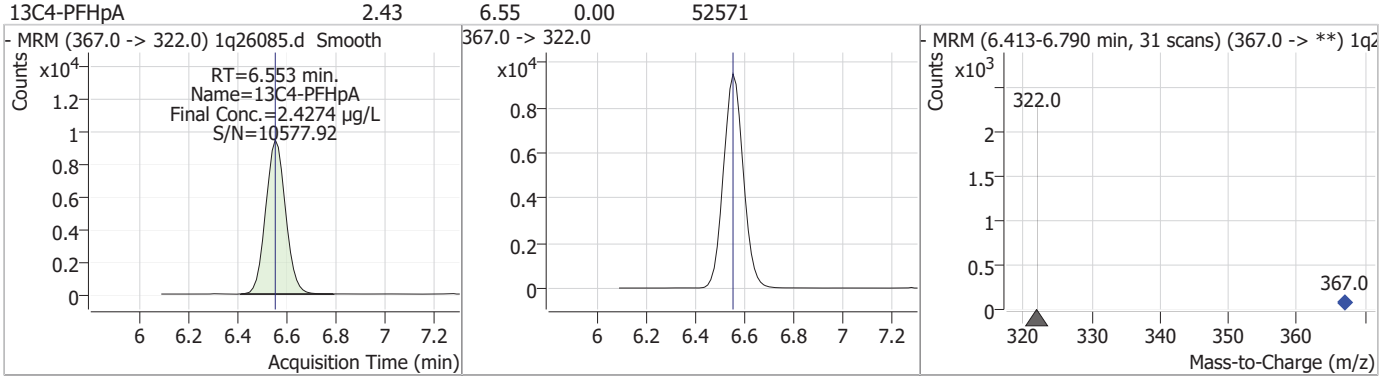
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.45	6.18	0.00	104441	315.0 -> 69.0	8.6	4.4	13.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	74.75	6.24	0.01	326375	341.0 -> 217.0	69.1	35.4	106.1

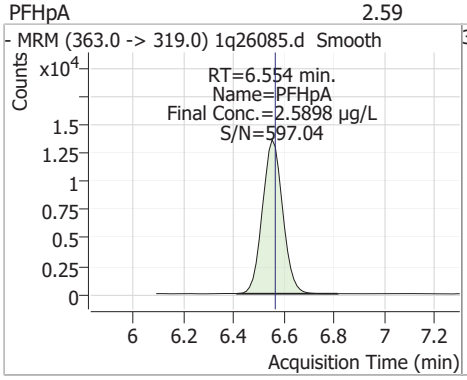


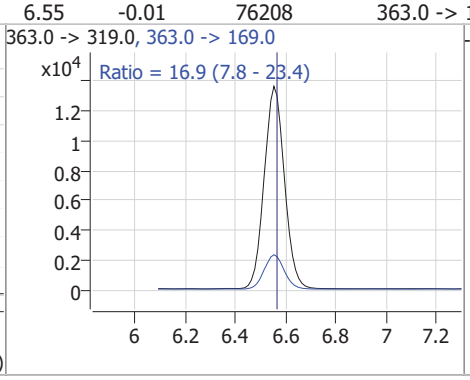
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.43	6.55	0.00	52571				

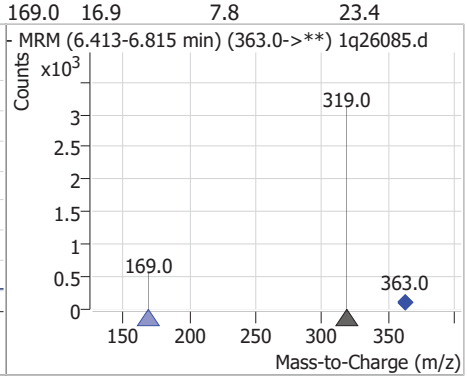


Perfluorinated Compounds by LC/MS/MS

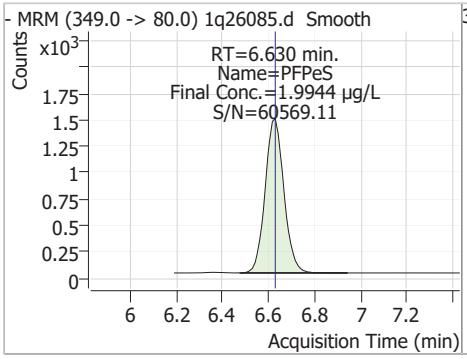
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.59	6.55	-0.01	76208	363.0 -> 169.0	16.9	7.8	23.4

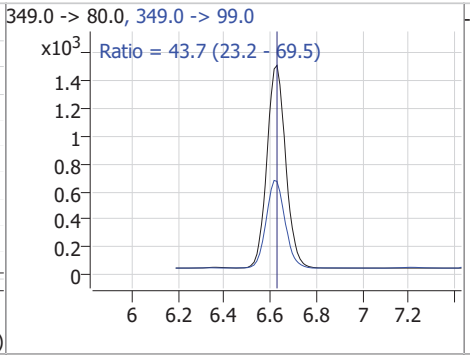


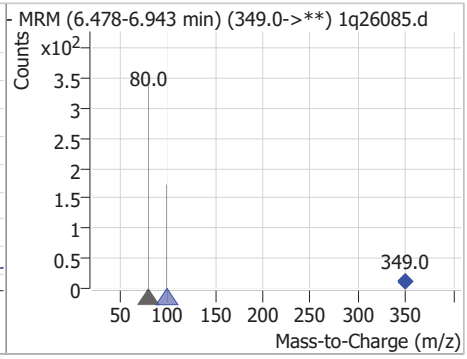




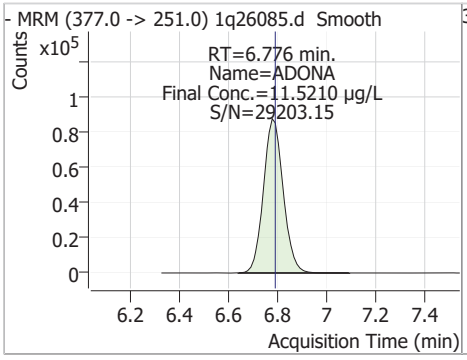
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	1.99	6.63	0.00	8244	349.0 -> 99.0	43.7	23.2	69.5

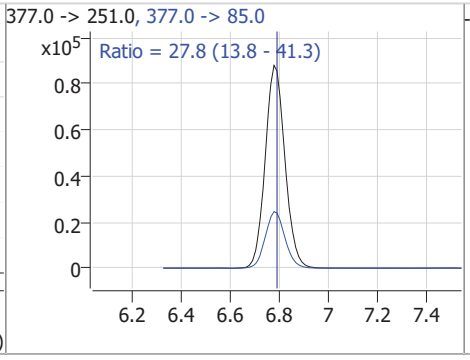


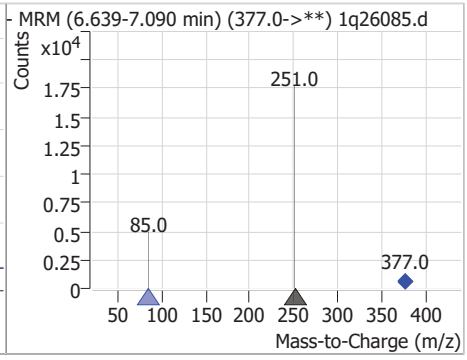




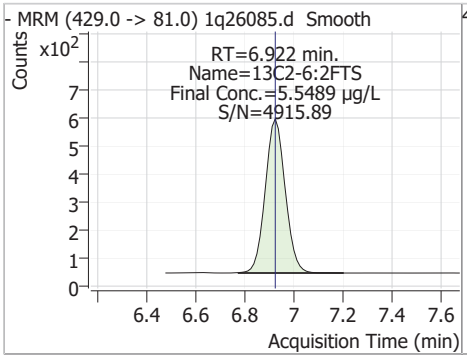
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	11.52	6.78	-0.01	489095	377.0 -> 85.0	27.8	13.8	41.3

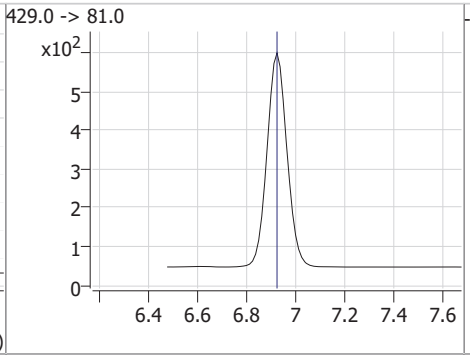


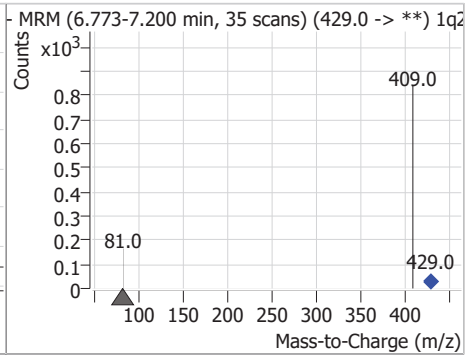




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.55	6.92	0.00	3107				

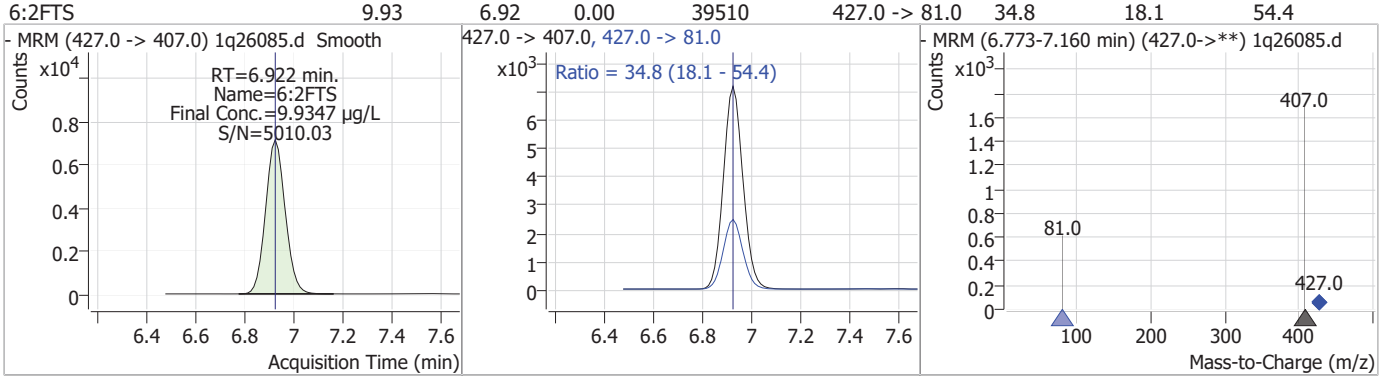




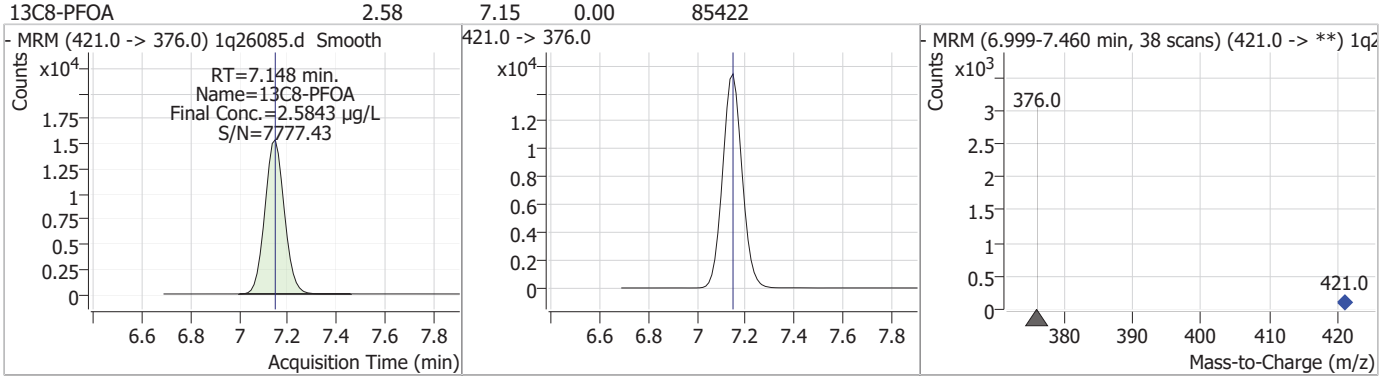


Perfluorinated Compounds by LC/MS/MS

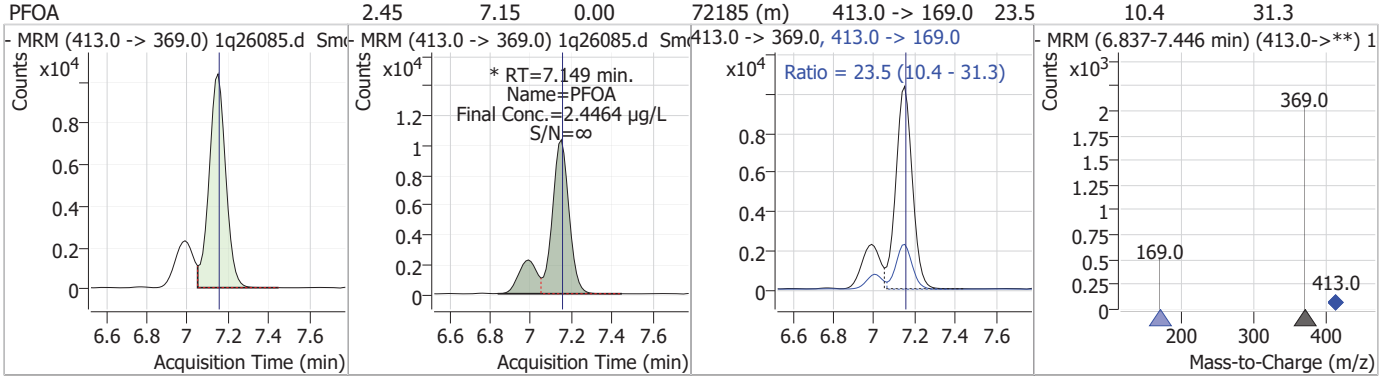
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.93	6.92	0.00	39510	427.0 -> 81.0	34.8	18.1	54.4



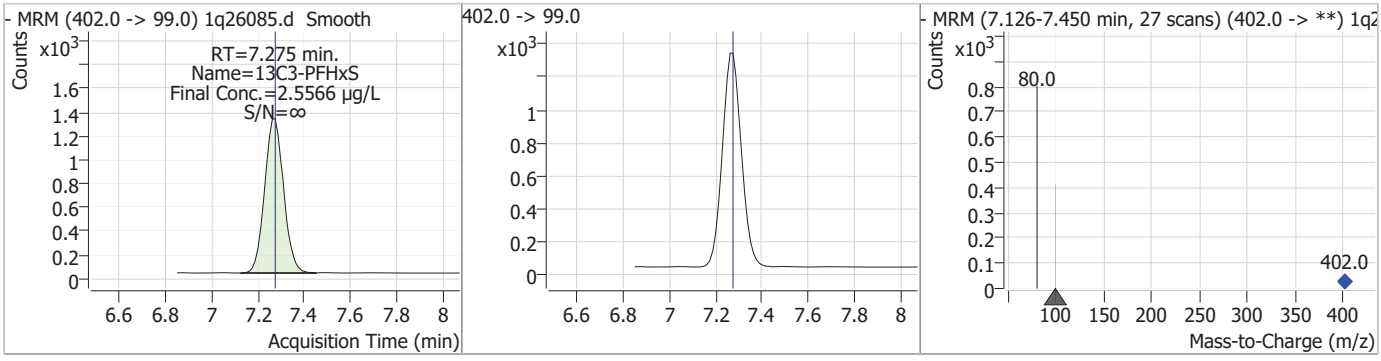
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.58	7.15	0.00	85422				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.45	7.15	0.00	72185 (m)	413.0 -> 169.0	23.5	10.4	31.3

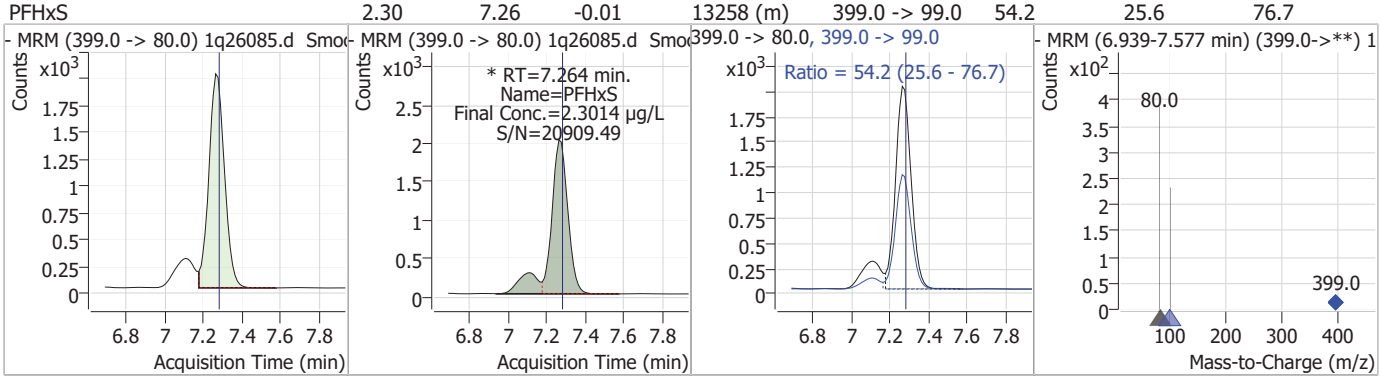


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.56	7.27	0.00	7395				

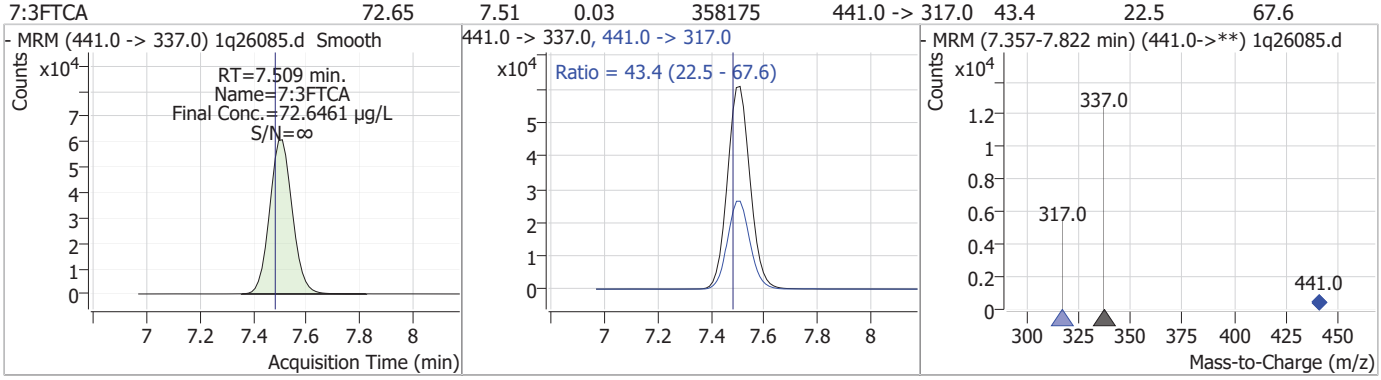


Perfluorinated Compounds by LC/MS/MS

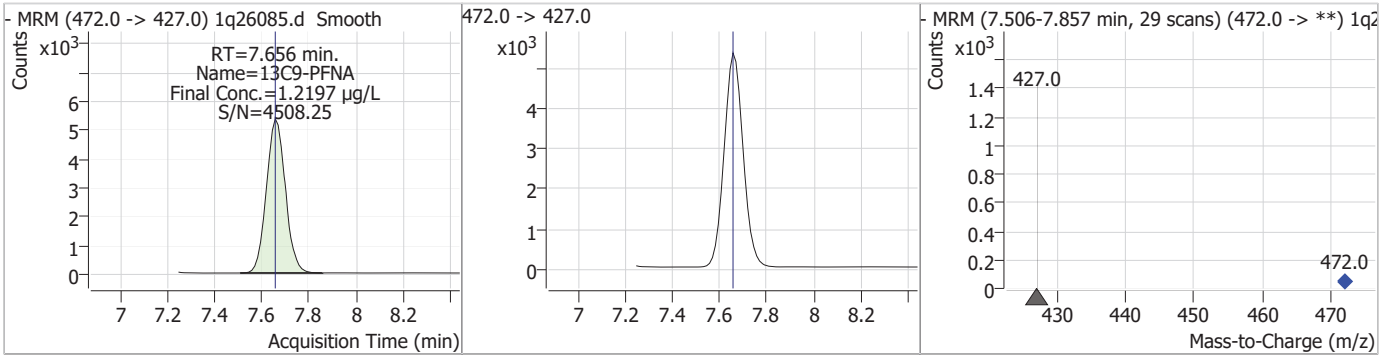
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.30	7.26	-0.01	13258 (m)	399.0 -> 99.0	54.2	25.6	76.7



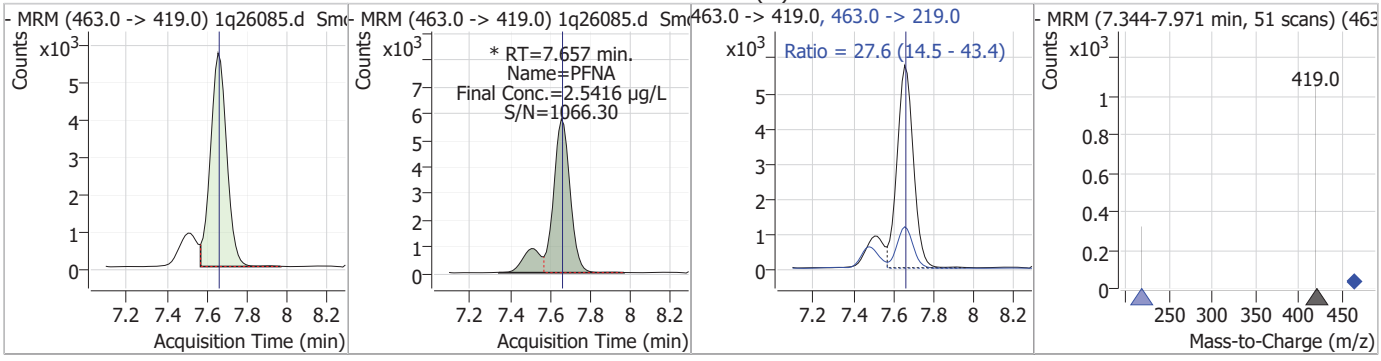
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	72.65	7.51	0.03	358175	441.0 -> 317.0	43.4	22.5	67.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.22	7.66	0.00	29984				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.54	7.66	0.00	38224 (m)	463.0 -> 219.0	27.6	14.5	43.4



7.6.15

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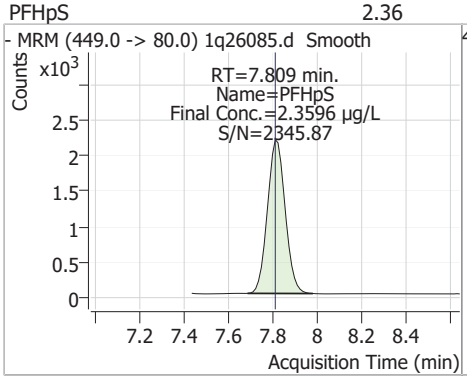
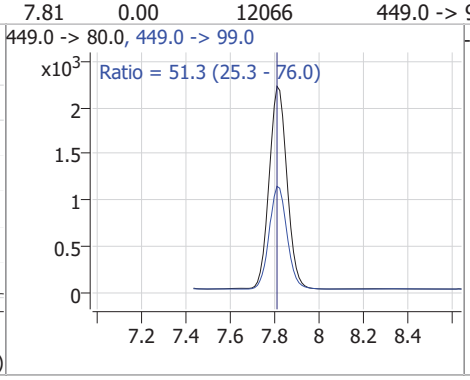
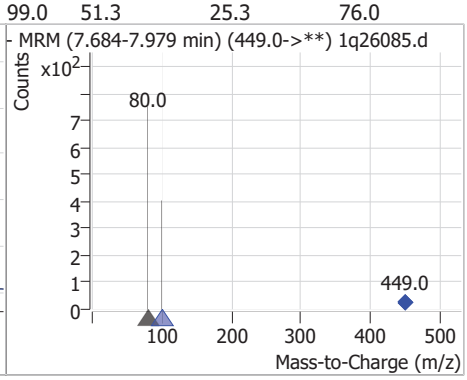
Perfluorinated Compounds by LC/MS/MS

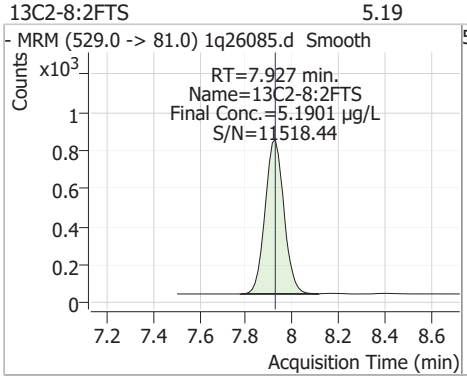
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.36	7.81	0.00	12066	449.0 -> 99.0	51.3	25.3	76.0

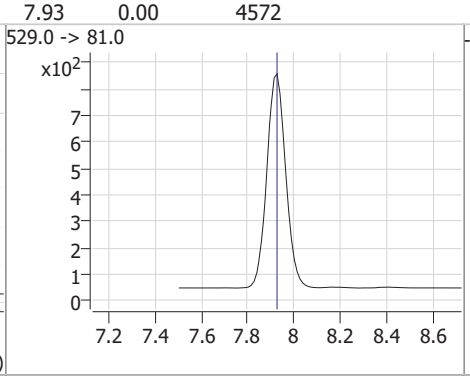


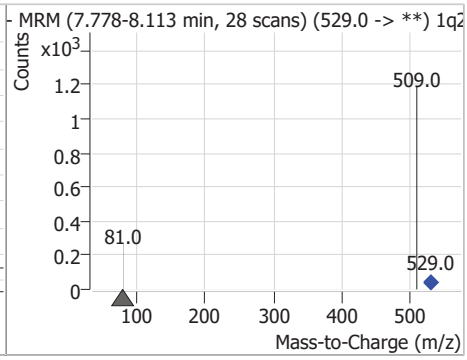




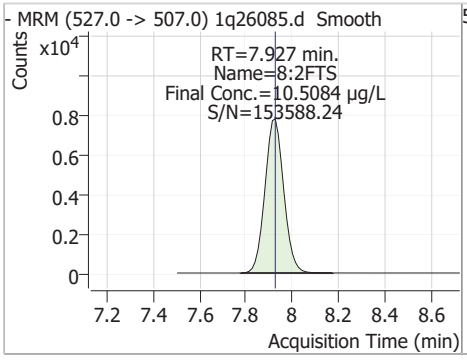
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.19	7.93	0.00	4572				

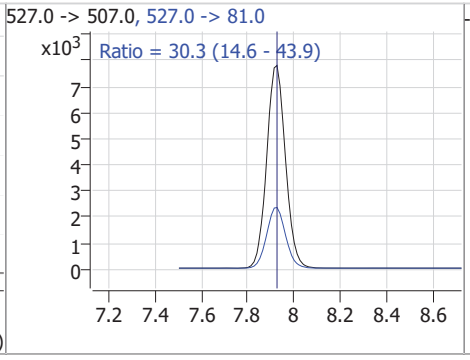


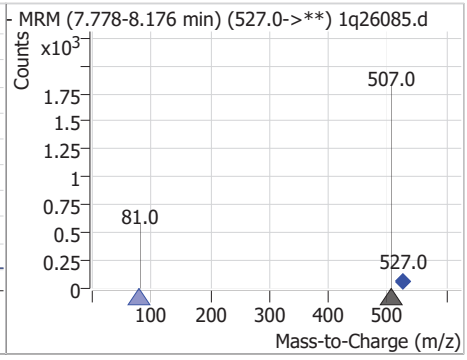




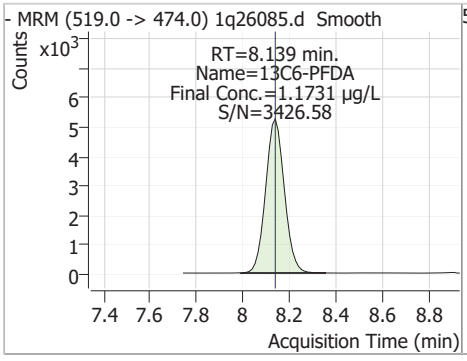
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.51	7.93	0.00	43689	527.0 -> 81.0	30.3	14.6	43.9

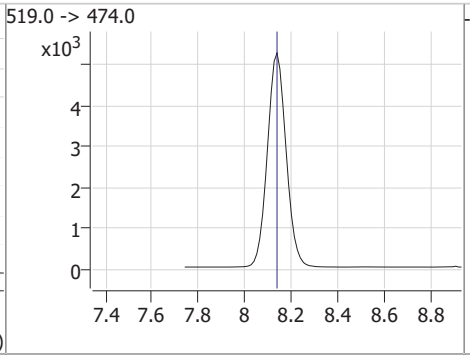


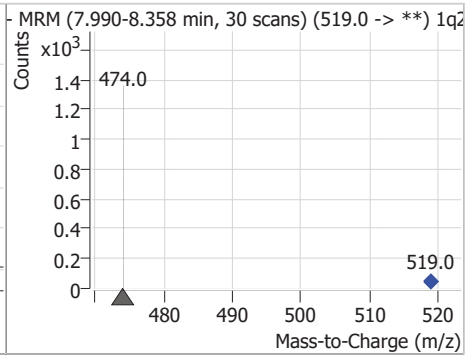




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.17	8.14	0.00	29342				

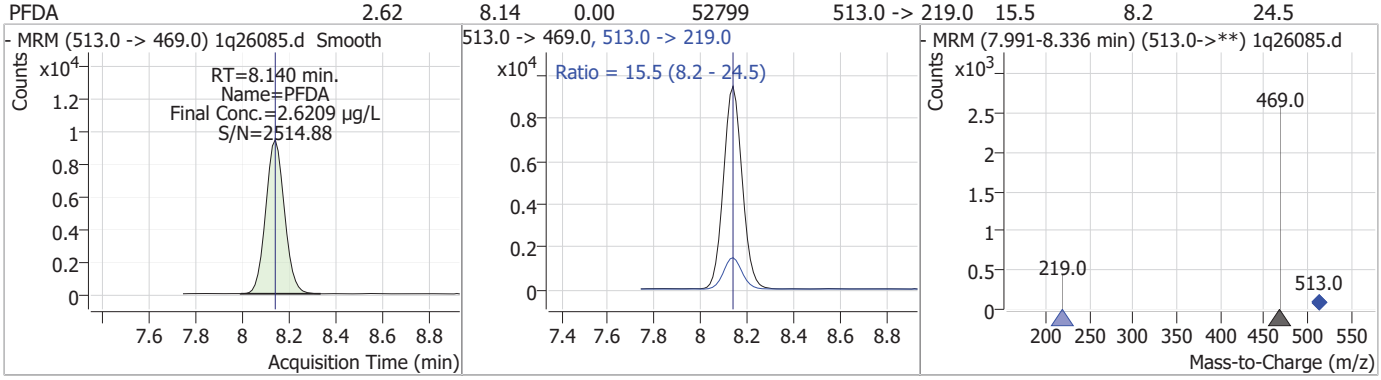




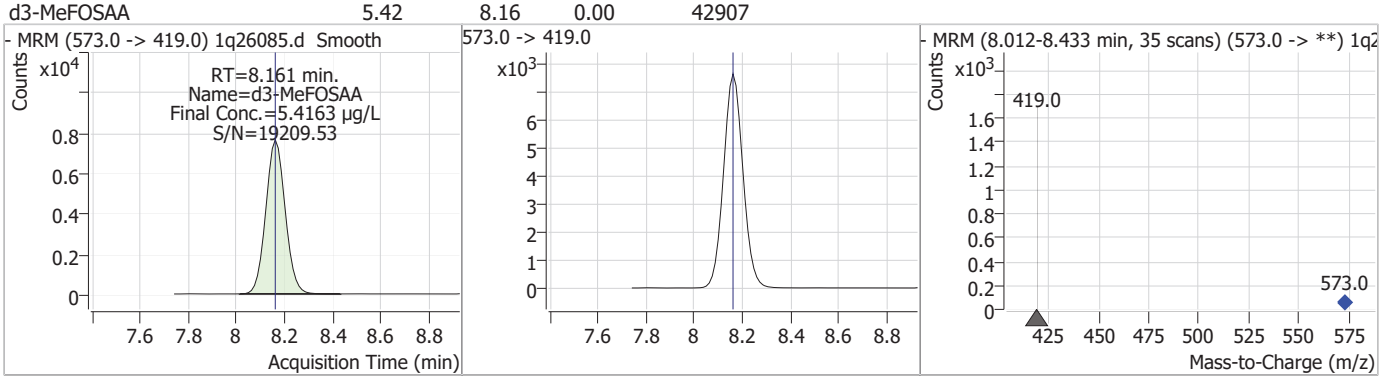


Perfluorinated Compounds by LC/MS/MS

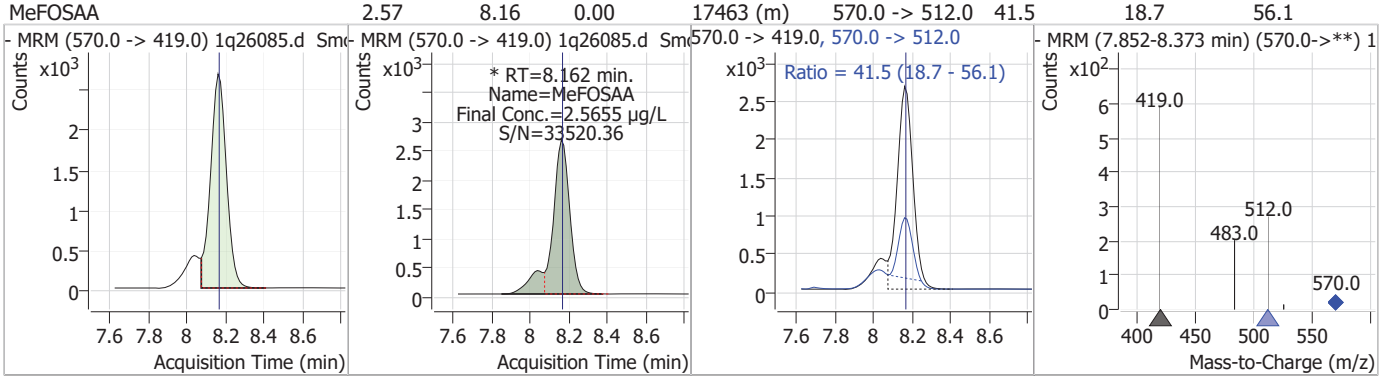
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.62	8.14	0.00	52799	513.0 -> 219.0	15.5	8.2	24.5



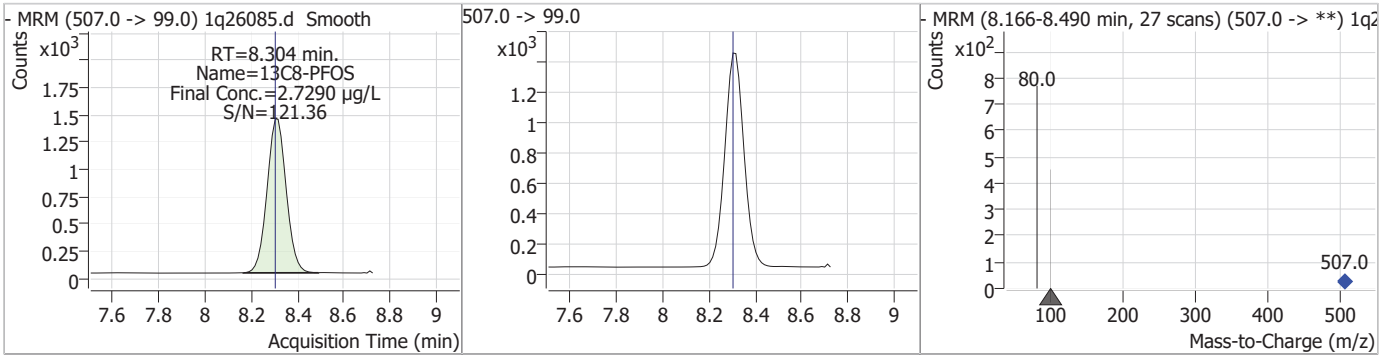
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.42	8.16	0.00	42907				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.57	8.16	0.00	17463 (m)	570.0 -> 512.0	41.5	18.7	56.1

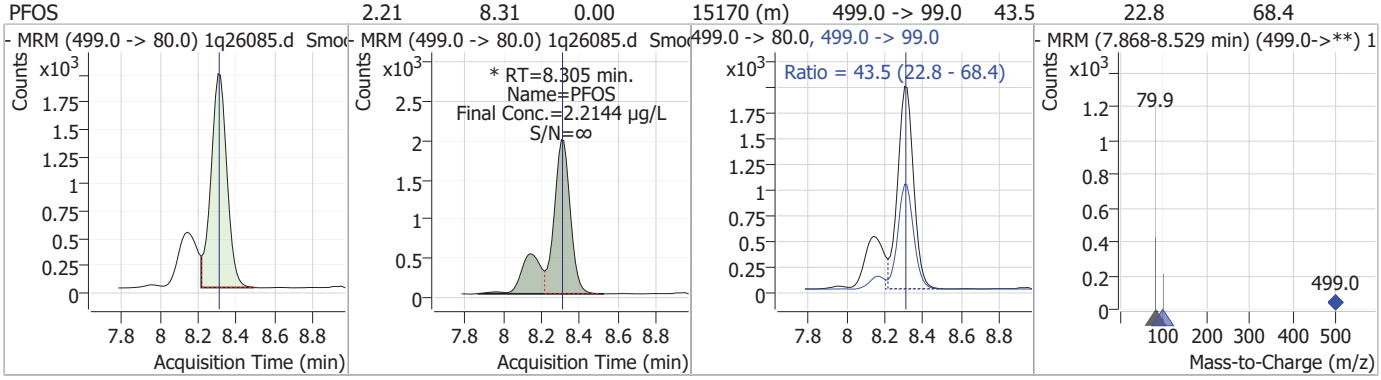


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.73	8.30	0.00	8168				

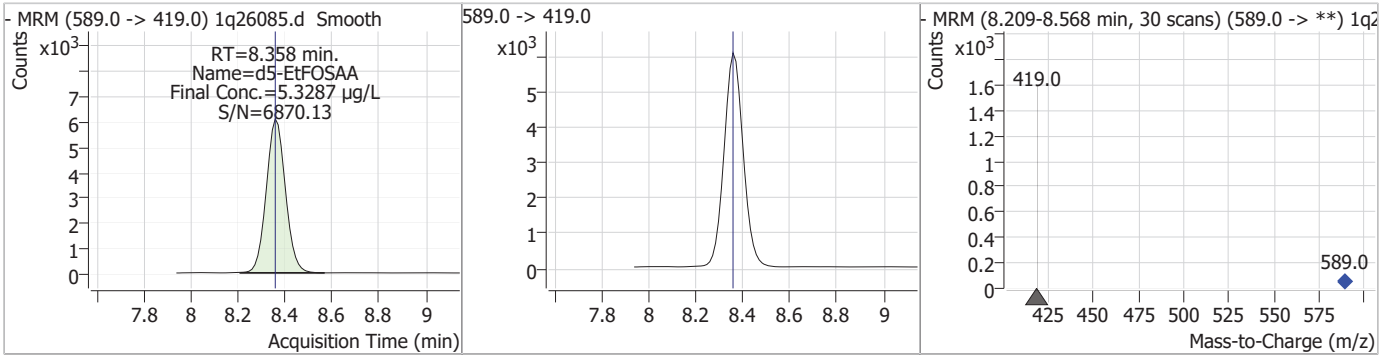


Perfluorinated Compounds by LC/MS/MS

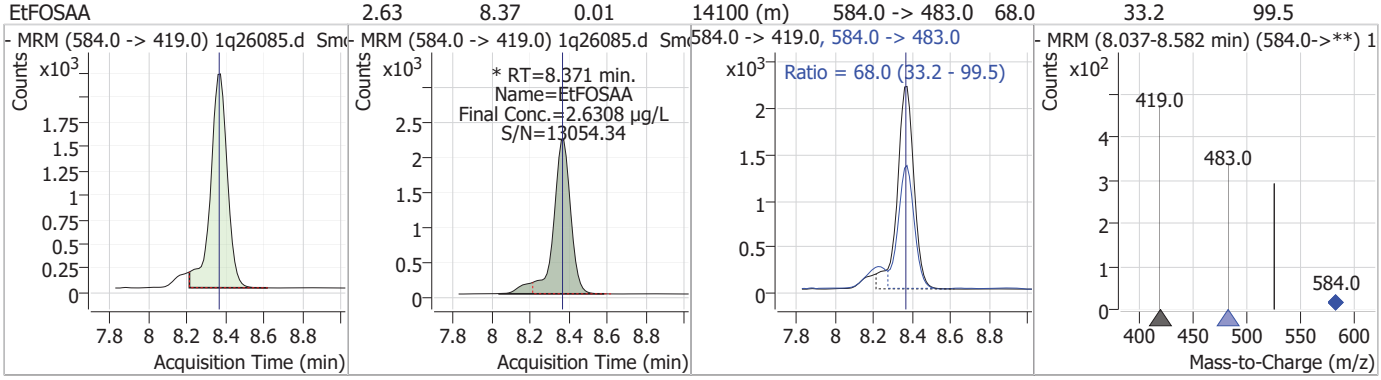
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.21	8.31	0.00	15170 (m)	499.0 -> 99.0	43.5	22.8	68.4



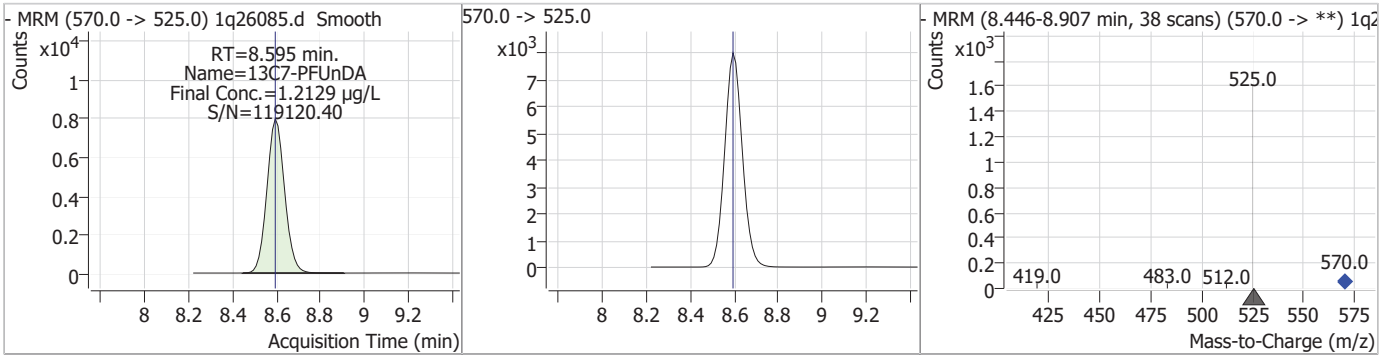
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.33	8.36	0.00	34368				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.63	8.37	0.01	14100 (m)	584.0 -> 483.0	68.0	33.2	99.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.21	8.59	0.00	44039				



7.6.15

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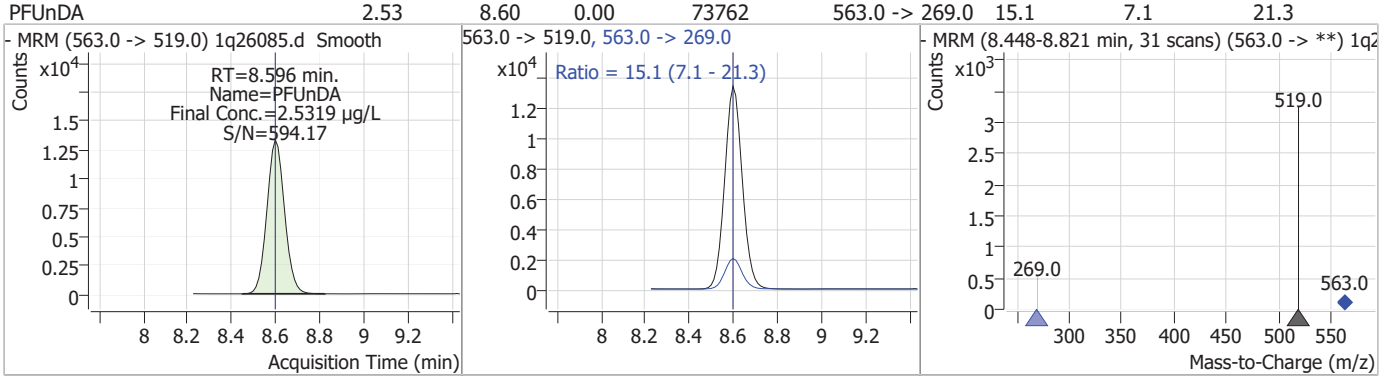
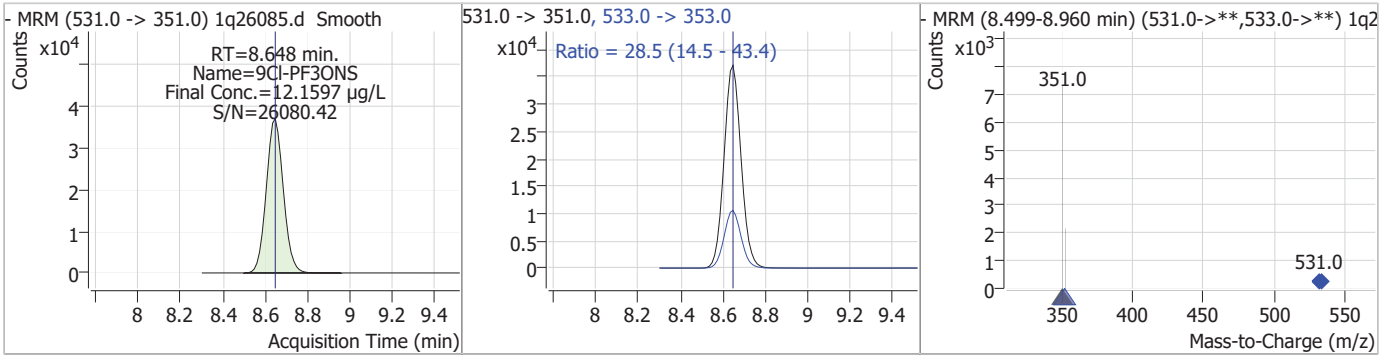
Perfluorinated Compounds by LC/MS/MS

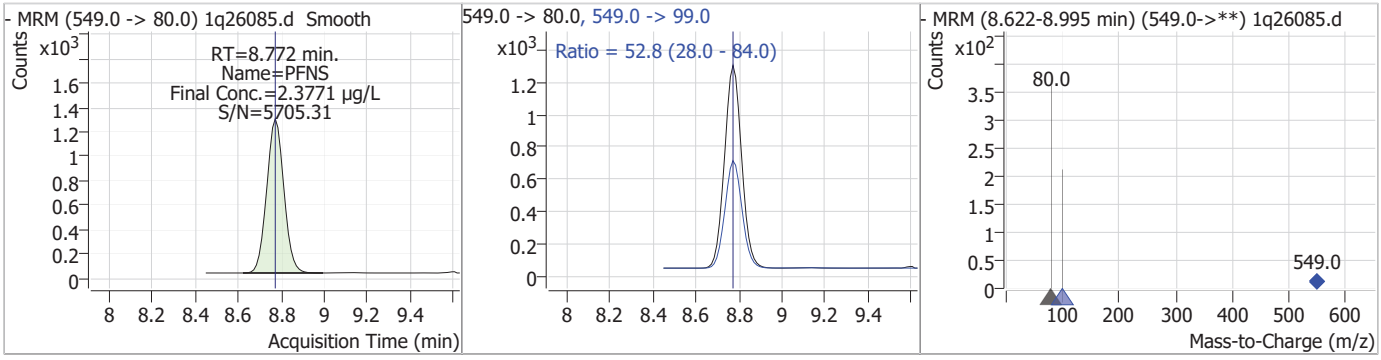
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.53	8.60	0.00	73762	563.0 -> 269.0	15.1	7.1	21.3



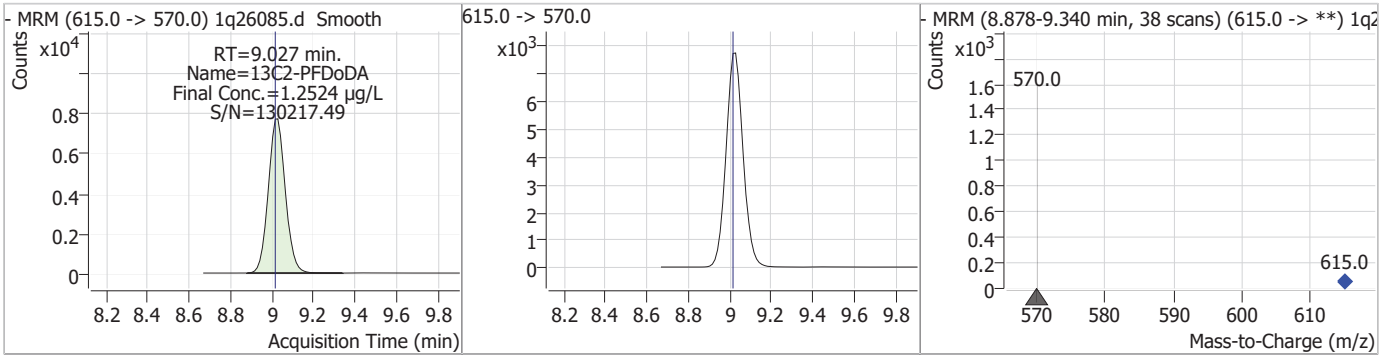
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	12.16	8.65	0.00	207157	533.0 -> 353.0	28.5	14.5	43.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.38	8.77	0.00	6992	549.0 -> 99.0	52.8	28.0	84.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.25	9.03	0.01	43873				

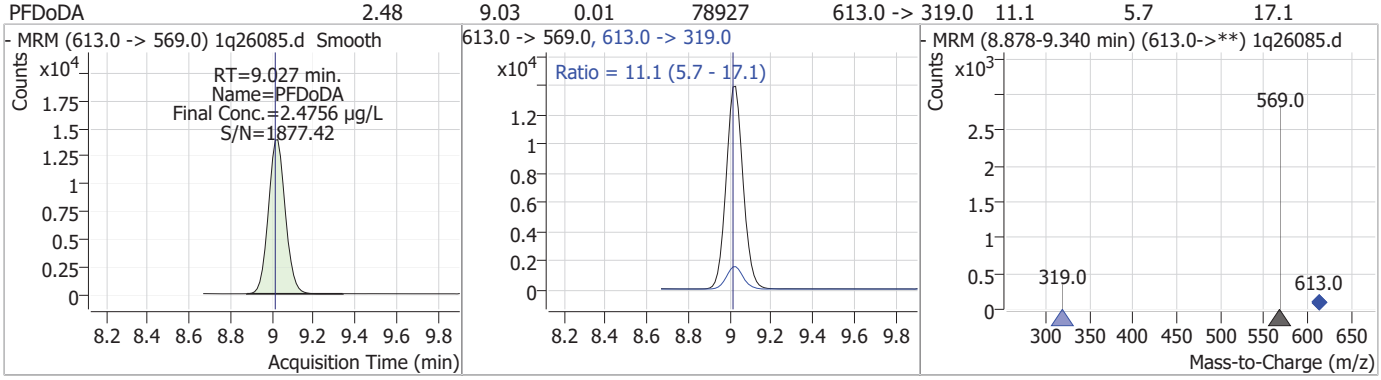


7.6.15

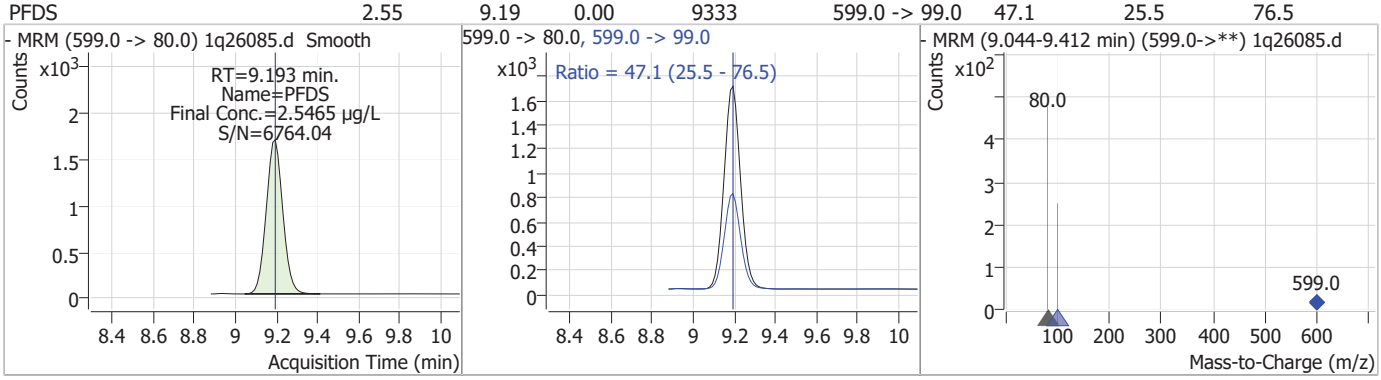
7

Perfluorinated Compounds by LC/MS/MS

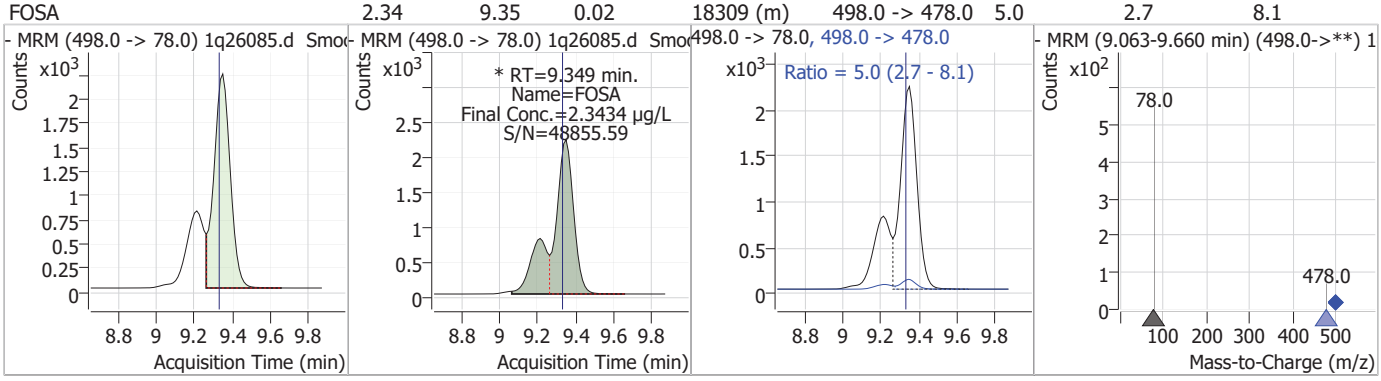
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.48	9.03	0.01	78927	613.0 -> 319.0	11.1	5.7	17.1



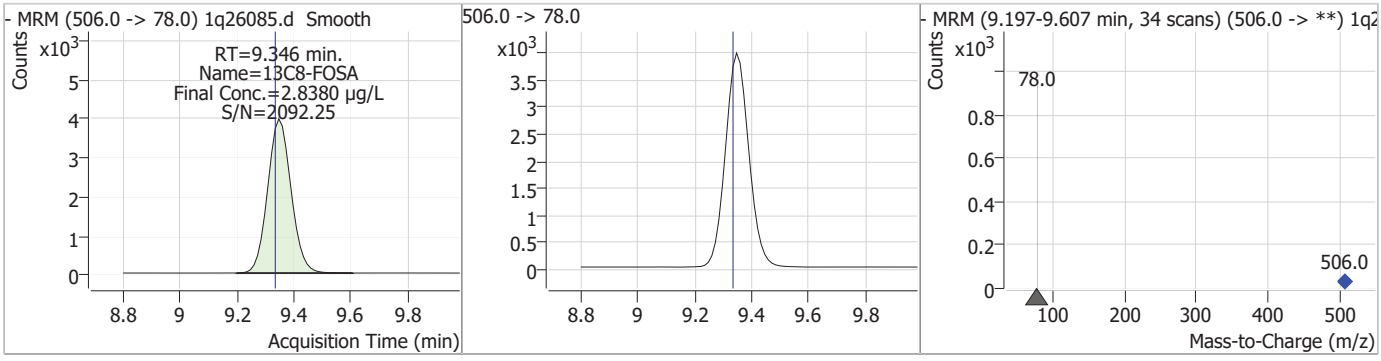
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.55	9.19	0.00	9333	599.0 -> 99.0	47.1	25.5	76.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.34	9.35	0.02	18309 (m)	498.0 -> 478.0	5.0	2.7	8.1

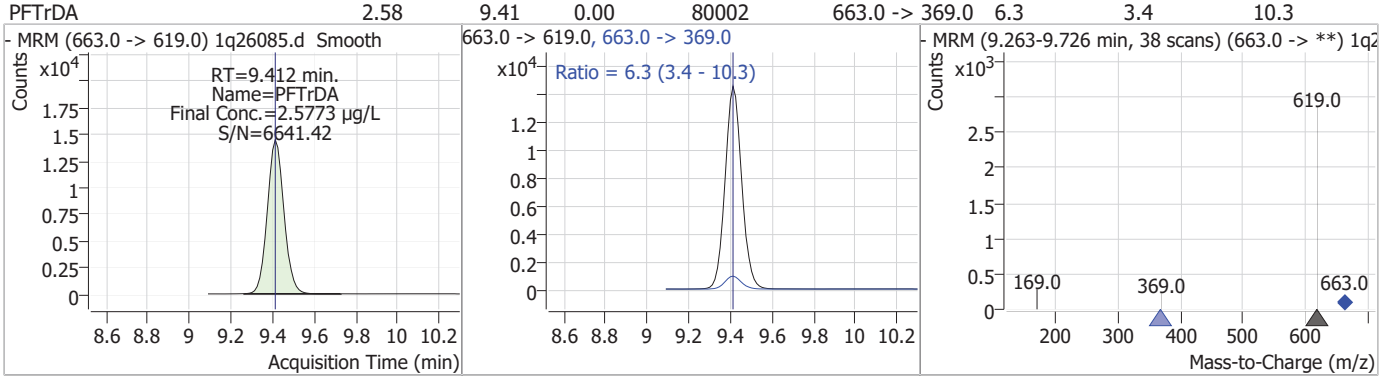


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.84	9.35	0.01	22543				

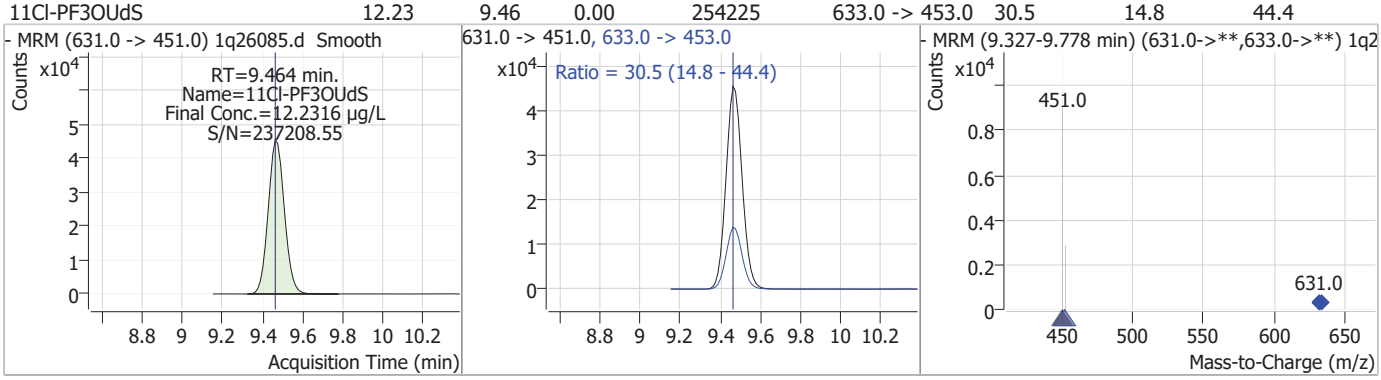


Perfluorinated Compounds by LC/MS/MS

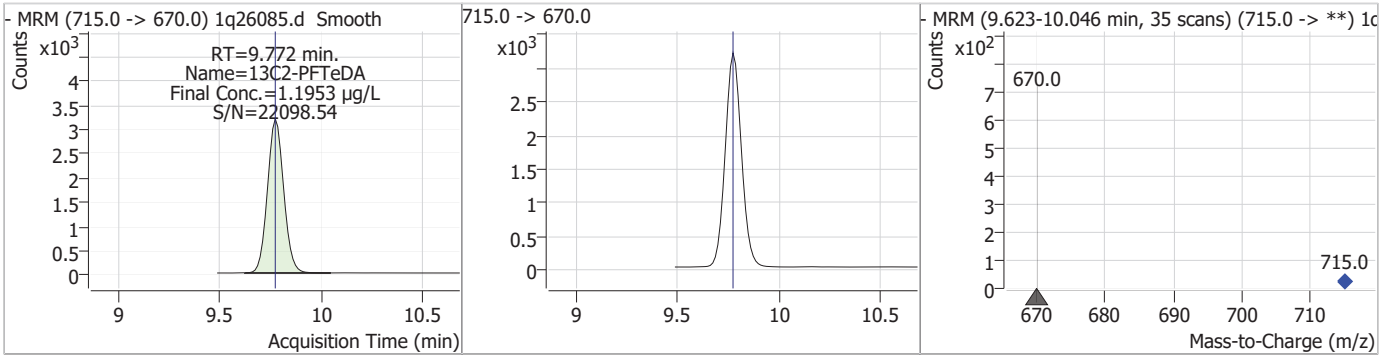
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.58	9.41	0.00	80002	663.0 -> 369.0	6.3	3.4	10.3



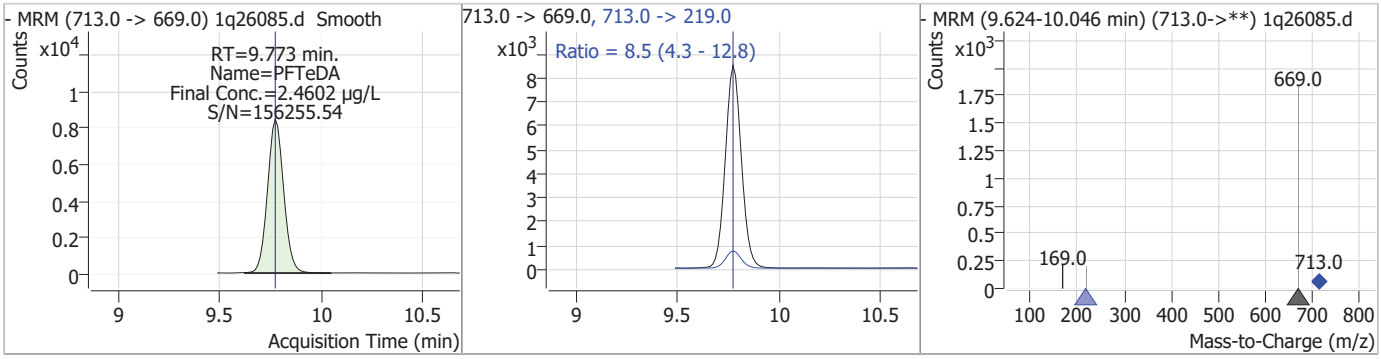
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	12.23	9.46	0.00	254225	633.0 -> 453.0	30.5	14.8	44.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.20	9.77	0.00	17618				

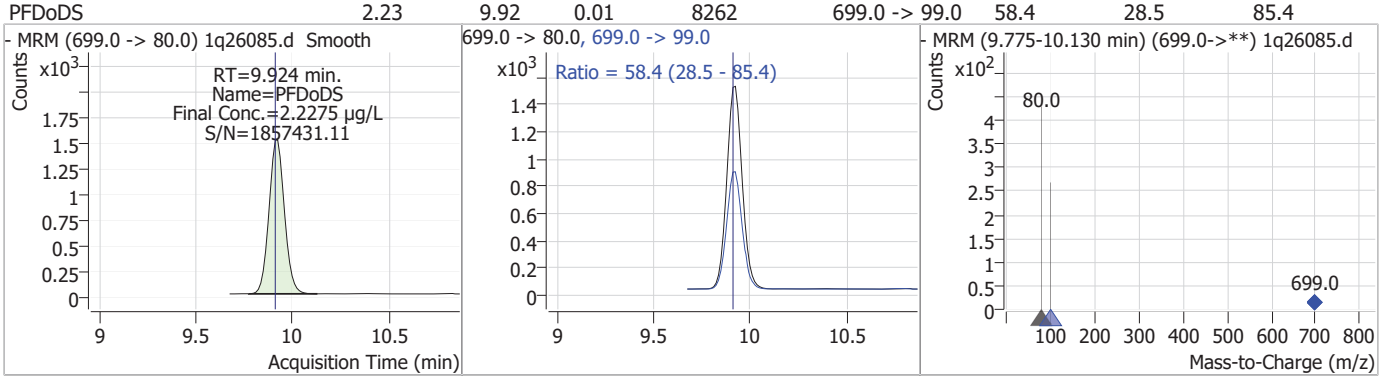


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.46	9.77	0.00	46684	713.0 -> 219.0	8.5	4.3	12.8

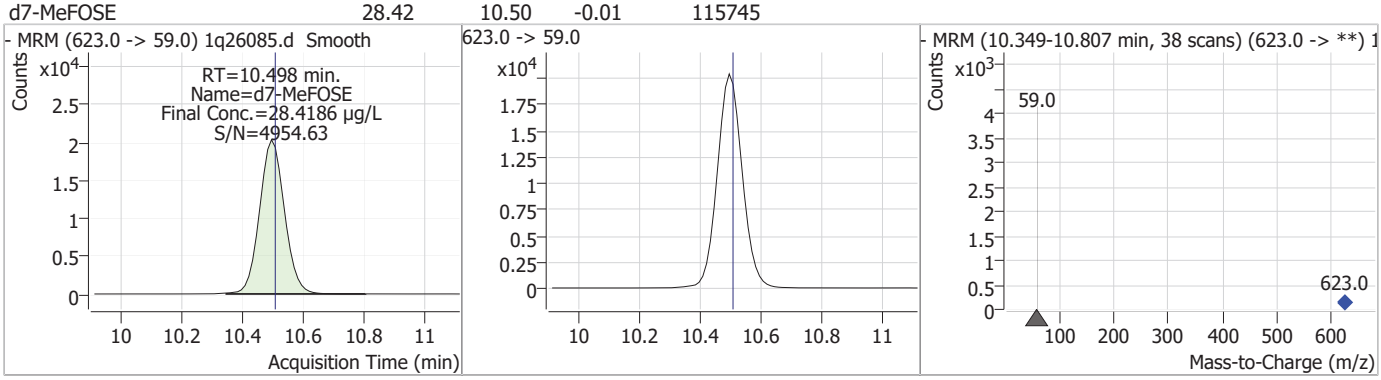


Perfluorinated Compounds by LC/MS/MS

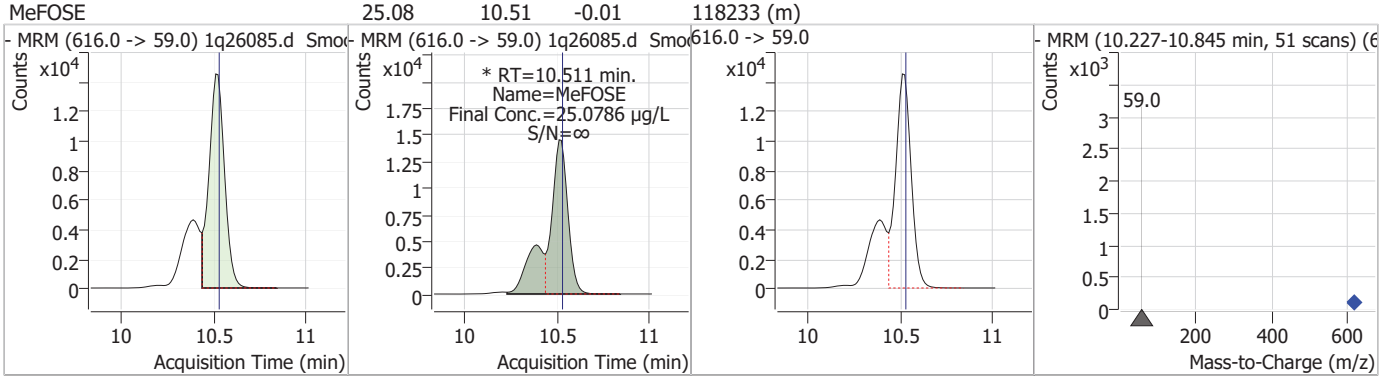
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.23	9.92	0.01	8262	699.0 -> 99.0	58.4	28.5	85.4



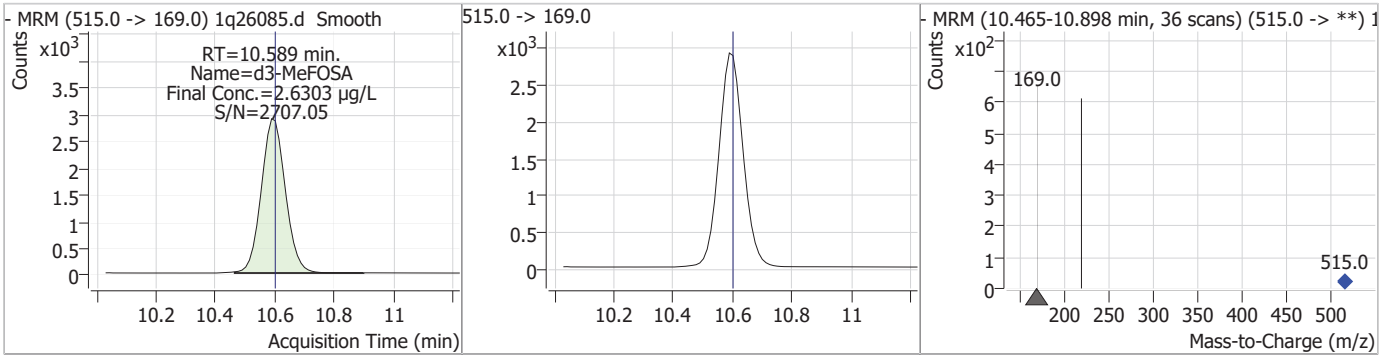
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	28.42	10.50	-0.01	115745				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.08	10.51	-0.01	118233 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.63	10.59	-0.01	16194				

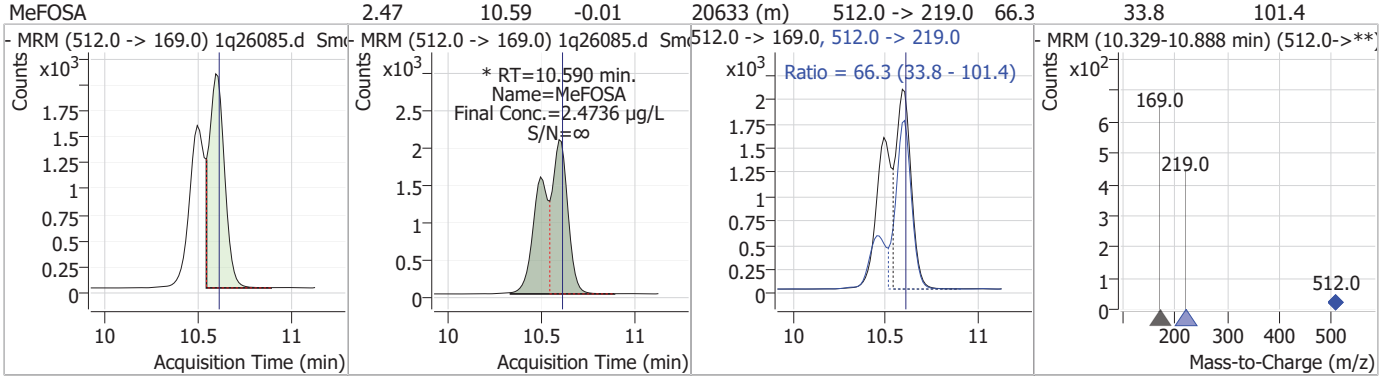


7.6.15

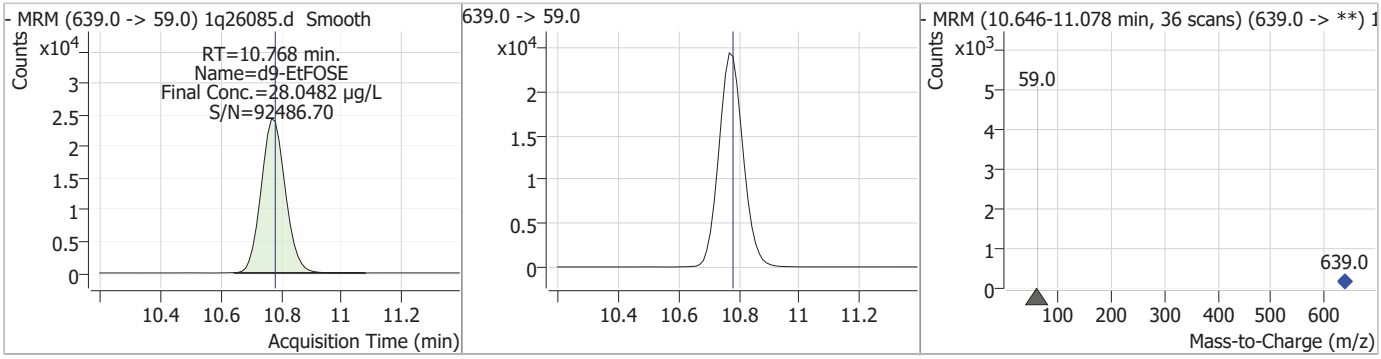
7

Perfluorinated Compounds by LC/MS/MS

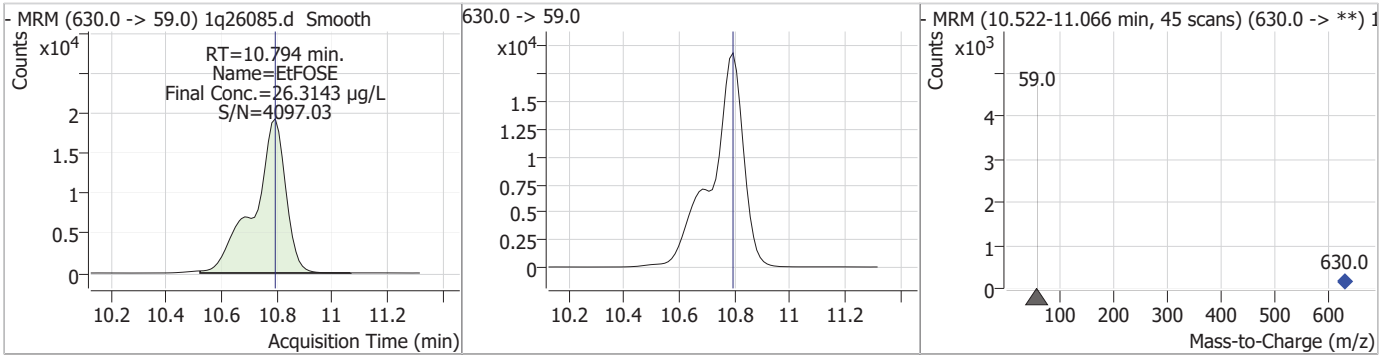
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.47	10.59	-0.01	20633 (m)	512.0 -> 219.0	66.3	33.8	101.4



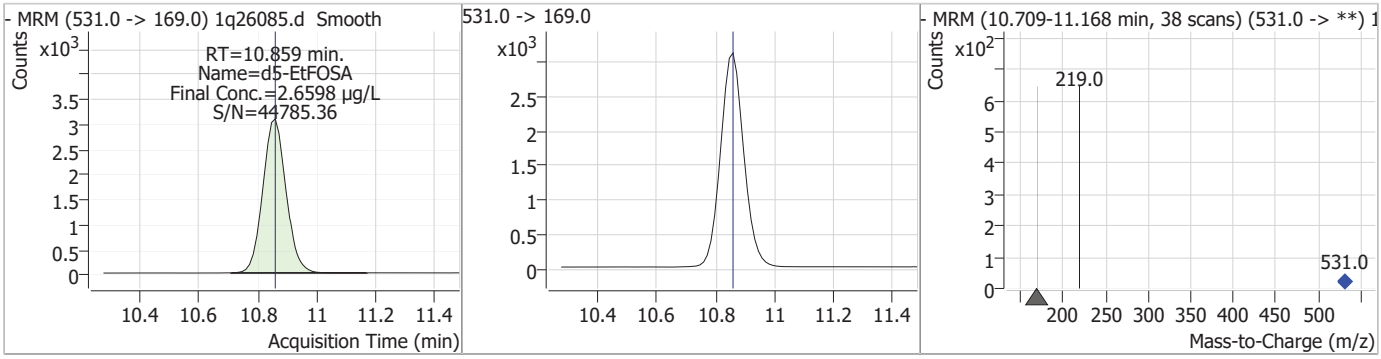
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	28.05	10.77	-0.01	135307				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	26.31	10.79	0.00	155141				

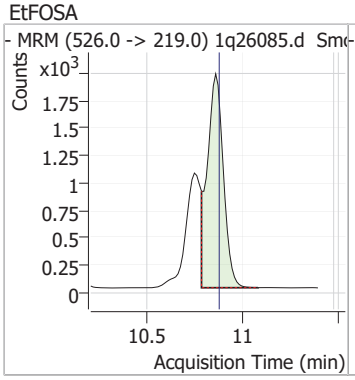


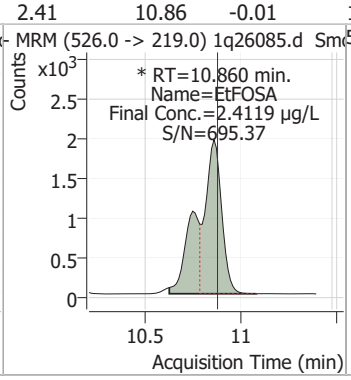
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.66	10.86	0.00	16733				

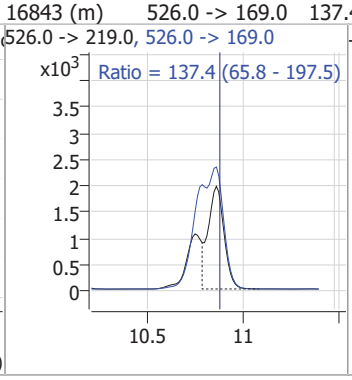


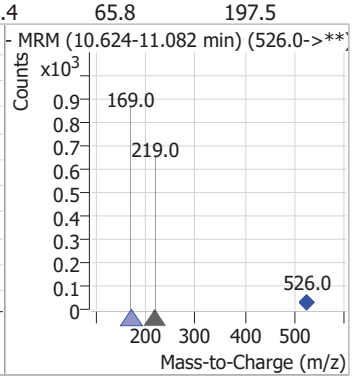
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.41	10.86	-0.01	16843 (m)	526.0 -> 169.0	137.4	65.8	197.5









Manual Integration Approval Summary

Sample Number: T1Q362-CC361
Lab FileID: 1Q26085.D
Injection Time: 05/15/25 17:23

Method: EPA 1633
Analyst approved: 05/16/25 02:49 Alodia Hana Barrogo
Supervisor approved: 05/16/25 06:10 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.15	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.26	Split peak
Perfluorononanoic acid	375-95-1		7.66	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.30	Split peak
EtFOSAA	2991-50-6		8.37	Split peak
PFOSA	754-91-6		9.35	Split peak
MeFOSE	24448-09-7		10.51	Split peak
MeFOSA	31506-32-8		10.59	Split peak
EtFOSA	4151-50-2		10.86	Split peak

QQQ Check Tune Report

Agilent | Trusted Answers

Instrument Name	PFAS 2
MS Model	G6470B
MS Instrument Serial	SG2212G201
Software_Firmware Version	10.1.67, FW: A.00.08.112
Tune Date & Time	05 May 2025 09:07:56
File Path	D:\MassHunter\Tune\QQQ\G6470B\atunes.TUNE.XML
Ion Source	AJS ESI
Ionization Mode	AJS ESI
Tuned Resolution	All
Vacuum Pressure	1.12E+0 [R] (Torr); 4.83E-5 [H] (Torr)

Source Parameters

Parameter	Negative
Gas Temp (°C)	300
Gas Flow (l/min)	8
Nebulizer (psi)	15
Capillary (V)	3500
Nozzle Voltage (V)	1500
Sheath Gas Temp (°C)	250
Sheath Gas Flow (l/min)	7

QQQ Check Tune Report

Agilent | Trusted Answers

Negative Results

Analyzer: MS1 Polarity: Negative Width: Unit

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	112.96	-0.03	Pass	0.70	0.78	0.08	Pass	237643
302.00	301.94	-0.06	Pass	0.70	0.79	0.09	Pass	60003
601.98	601.90	-0.08	Pass	0.70	0.76	0.06	Pass	263904
1033.99	1033.95	-0.04	Pass	0.70	0.78	0.08	Pass	665762
1633.95	1633.90	-0.05	Pass	0.70	0.72	0.02	Pass	1165151
2233.91	2233.89	-0.02	Pass	0.70	0.69	-0.01	Pass	803191

Analyzer: MS2 Polarity: Negative Width: Unit

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.02	0.02	Pass	0.70	0.71	0.01	Pass	62912
112.99	112.95	-0.04	Pass	0.70	0.77	0.07	Pass	149824
302.00	301.92	-0.08	Pass	0.70	0.78	0.08	Pass	56515
601.98	601.94	-0.04	Pass	0.70	0.77	0.07	Pass	148791
1033.99	1033.86	-0.13	Pass	0.70	0.77	0.07	Pass	432091
1633.95	1633.91	-0.04	Pass	0.70	0.69	-0.01	Pass	688808
2233.91	2233.91	0.00	Pass	0.70	0.70	0.00	Pass	288112

Analyzer: MS1 Polarity: Negative Width: Wide

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	112.90	-0.09	Pass	1.20	1.23	0.03	Pass	249545
302.00	301.91	-0.09	Pass	1.20	1.56	0.36	Pass	75625
601.98	601.79	-0.19	Pass	1.20	1.56	0.36	Pass	330793
1033.99	1033.86	-0.13	Pass	1.20	1.61	0.41	Pass	1216715
1633.95	1633.87	-0.08	Pass	1.20	1.41	0.21	Pass	2602281
2233.91	2233.71	-0.20	Pass	1.20	1.16	-0.04	Pass	1232478

Analyzer: MS2 Polarity: Negative Width: Wide

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	68.98	-0.02	Pass	1.20	1.09	-0.11	Pass	81582
112.99	112.92	-0.07	Pass	1.20	1.24	0.04	Pass	192290
302.00	301.88	-0.12	Pass	1.20	1.28	0.08	Pass	75434
601.98	601.88	-0.10	Pass	1.20	1.54	0.34	Pass	275460
1033.99	1033.87	-0.12	Pass	1.20	1.44	0.24	Pass	1127877
1633.95	1634.03	0.08	Pass	1.20	1.29	0.09	Pass	2371068
2233.91	2234.02	0.11	Pass	1.20	1.35	0.15	Pass	995484

Analyzer: MS1 Polarity: Negative Width: Widest

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	112.74	-0.25	Pass	2.50	2.55	0.05	Pass	326042
302.00	301.82	-0.18	Pass	2.50	2.70	0.20	Pass	103053
601.98	601.88	-0.10	Pass	2.50	3.08	0.58	Pass	513219
1033.99	1033.95	-0.04	Pass	2.50	2.91	0.41	Pass	2374163
1633.95	1633.94	-0.01	Pass	2.50	2.99	0.49	Pass	5631599
2233.91	2233.83	-0.08	Pass	2.50	2.52	0.02	Pass	4216552

Analyzer: MS2 Polarity: Negative Width: Widest

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	68.93	-0.07	Pass	2.50	2.60	0.10	Pass	109007
112.99	112.91	-0.08	Pass	2.50	2.65	0.15	Pass	316099
302.00	301.97	-0.03	Pass	2.50	2.76	0.26	Pass	111592
601.98	601.91	-0.07	Pass	2.50	3.05	0.55	Pass	508088
1033.99	1033.91	-0.08	Pass	2.50	2.83	0.33	Pass	2072448
1633.95	1633.98	0.03	Pass	2.50	2.43	-0.07	Pass	4852252
2233.91	2233.82	-0.09	Pass	2.50	2.24	-0.26	Pass	2970884

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/12/25 11:57

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33662.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/9/2025 3:09:12 PM
Sample Name : IC344-1
Vial : P1-A2
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q344.batch.bin
Sample Information : OP62666,T2Q344,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	3.263	217.0 -> 172.0	115452	10.00	µg/L	0.000
M5-PFPeA	4.637	268.0 -> 223.0	61133	5.00	µg/L	0.000
M5-PFHxA	5.745	318.0 -> 273.0	35088	2.50	µg/L	0.000
M4-PFHpA	6.540	367.0 -> 322.0	27588	2.50	µg/L	0.000
M8-PFOA	7.124	421.0 -> 376.0	59498	2.50	µg/L	0.000
M9-PFNA	7.644	472.0 -> 427.0	24817	1.25	µg/L	0.000
M6-PFDA	8.140	519.0 -> 474.0	17577	1.25	µg/L	0.000
M7-PFUnDA	8.596	570.0 -> 525.0	26471	1.25	µg/L	-0.012
M2-PFDoDA	9.028	615.0 -> 570.0	28597	1.25	µg/L	-0.012
M2-PFTeDA	9.796	715.0 -> 670.0	21629	1.25	µg/L	0.000
M8-FOSA	9.345	506.0 -> 78.0	19045	2.50	µg/L	0.000
M3-PFBS	5.699	302.0 -> 99.0	5714	2.50	µg/L	0.000
M3-PFHxS	7.250	402.0 -> 99.0	6663	2.50	µg/L	0.000
M8-PFOS	8.315	507.0 -> 99.0	6292	2.50	µg/L	0.000
M2-4:2FTS	5.433	329.0 -> 81.0	1402	5.00	µg/L	0.000
M2-6:2FTS	6.897	429.0 -> 81.0	3229	5.00	µg/L	-0.012
M2-8:2FTS	7.914	529.0 -> 81.0	5442	5.00	µg/L	0.000
M3-MeFOSAA	8.160	573.0 -> 419.0	41226	5.00	µg/L	0.000
M3-HFPO-DA	6.074	287.0 -> 169.0	22903	10.00	µg/L	0.000
M5-EtFOSAA	8.356	589.0 -> 419.0	33927	5.00	µg/L	0.000
M7-MeFOSE	10.520	623.0 -> 59.0	170260	25.00	µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	245632	25.00	µg/L	0.000
M5-EtFOSA	10.895	531.0 -> 169.0	15938	2.50	µg/L	0.000
M3-MeFOSA	10.624	515.0 -> 169.0	15478	2.50	µg/L	0.000
13C4-PFOS	8.316	503.0 -> 80.0	11388	2.50	µg/L	0.000
13C3-PFBA	3.265	216.0 -> 172.0	49482	5.00	µg/L	0.000
18O2-PFHxS	7.262	403.0 -> 84.0	7984	2.50	µg/L	0.000
13C4-PFOA	7.124	417.0 -> 372.0	60898	2.50	µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	17004	1.25	µg/L	0.000
13C5-PFNA	7.645	468.0 -> 423.0	23196	1.25	µg/L	0.000
13C2-PFHxA	5.746	315.0 -> 270.0	31767	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.433	329.0 -> 81.0	1402	4.85	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.1%		
13C2-6:2FTS	6.897	429.0 -> 81.0	3229	5.17	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.4%		
13C2-8:2FTS	7.914	529.0 -> 81.0	5442	5.40	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.0%		
13C2-PFDoDA	9.028	615.0 -> 570.0	28597	1.23	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.5%		
13C2-PFTeDA	9.796	715.0 -> 670.0	21629	1.20	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.0%		
13C3-PFBS	5.699	302.0 -> 99.0	5714	2.54	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.7%		
13C3-PFHxS	7.250	402.0 -> 99.0	6663	2.45	µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.9%		
13C4-PFBA	3.263	217.0 -> 172.0	115452	9.92 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.2%		
13C4-PFHpA	6.540	367.0 -> 322.0	27588	2.49 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.6%		
13C5-PFHxA	5.745	318.0 -> 273.0	35088	2.52 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.9%		
13C5-PFPeA	4.637	268.0 -> 223.0	61133	5.15 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.1%		
13C6-PFDA	8.140	519.0 -> 474.0	17577	1.24 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.3%		
13C7-PFUnDA	8.596	570.0 -> 525.0	26471	1.19 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.4%		
13C8-FOSA	9.345	506.0 -> 78.0	19045	2.42 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.7%		
13C8-PFOA	7.124	421.0 -> 376.0	59498	2.39 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.5%		
13C8-PFOS	8.315	507.0 -> 99.0	6292	2.53 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.3%		
13C9-PFNA	7.644	472.0 -> 427.0	24817	1.23 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.0%		
d3-MeFOSAA	8.160	573.0 -> 419.0	41226	5.07 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.4%		
13C3-HFPO-DA	6.074	287.0 -> 169.0	22903	10.49 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 104.9%		
d3-MeFOSA	10.624	515.0 -> 169.0	15478	2.53 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.1%		
d5-EtFOSAA	8.356	589.0 -> 419.0	33927	5.17 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.4%		
d7-MeFOSE	10.520	623.0 -> 59.0	170260	25.43 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 101.7%		
d9-EtFOSE	10.803	639.0 -> 59.0	245632	26.14 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 104.5%		
d5-EtFOSA	10.895	531.0 -> 169.0	15938	2.58 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.2%		
Target Compounds						QValue
4:2FTS	5.433	327.0 -> 307.0	1342	0.66 µg/L		89
		327.0 -> 81.0	813			
6:2FTS	6.898	427.0 -> 407.0	3111	0.81 µg/L		99
		427.0 -> 81.0	1160			
8:2FTS	7.915	527.0 -> 507.0	2480	0.63 µg/L		96
		527.0 -> 81.0	1121			
EtFOSAA	8.370	584.0 -> 419.0	1099	0.20 µg/L	#m	49
		584.0 -> 483.0	905			
FOSA	9.348	498.0 -> 78.0	1143	0.17 µg/L	m	96
		498.0 -> 478.0	60			
MeFOSAA	8.149	570.0 -> 419.0	1271	0.21 µg/L	m	96
		570.0 -> 512.0	432			
PFBA	3.255	213.0 -> 169.0	2277	0.75 µg/L		100
PFBS	5.700	299.0 -> 80.0	1185	0.16 µg/L		100
		299.0 -> 99.0	426			
PFDA	8.128	513.0 -> 469.0	2557	0.19 µg/L		92
		513.0 -> 219.0	351			
PFDoDA	9.041	613.0 -> 569.0	3635	0.18 µg/L	m	94
		613.0 -> 319.0	471			
PFDS	9.206	599.0 -> 80.0	692	0.21 µg/L		93

Perfluorinated Compounds by LC/MS/MS

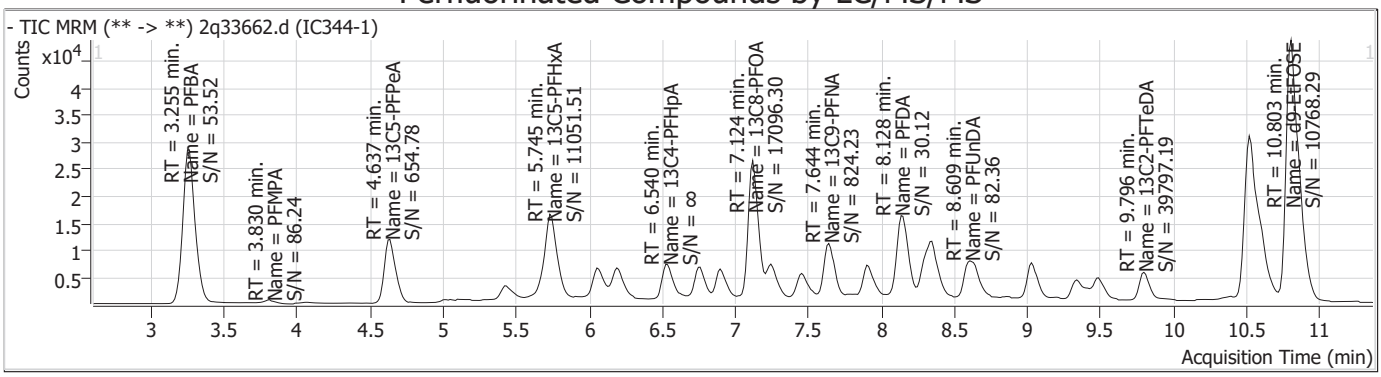
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	294				
PFHpA	6.541	363.0 -> 319.0	3801	0.22	µg/L	m	92
		363.0 -> 169.0	549				
PFHpS	7.809	449.0 -> 80.0	943	0.20	µg/L	m	84
		449.0 -> 99.0	378				
PFHxA	5.748	313.0 -> 269.0	2369	0.20	µg/L		99
		313.0 -> 119.0	67				
PFHxS	7.252	399.0 -> 80.0	1017	0.20	µg/L	m	81
		399.0 -> 99.0	415				
PFNA	7.645	463.0 -> 419.0	2341	0.21	µg/L	m	91
		463.0 -> 219.0	544				
PFNS	8.796	549.0 -> 80.0	419	0.20	µg/L		76
		549.0 -> 99.0	166				
PFOA	7.125	413.0 -> 369.0	3497	0.19	µg/L	m	94
		413.0 -> 169.0	880				
PFOS	8.317	499.0 -> 80.0	1325	0.23	µg/L	m	85
		499.0 -> 99.0	485				
PFPeA	4.640	263.0 -> 219.0	3919	0.36	µg/L		100
PFPeS	6.604	349.0 -> 80.0	459	0.18	µg/L	m	83
		349.0 -> 99.0	241				
PFTeDA	9.796	713.0 -> 669.0	3721	0.20	µg/L		100
		713.0 -> 169.0	295				
PFTrDA	9.439	663.0 -> 619.0	4253	0.18	µg/L		91
		663.0 -> 169.0	541				
PFUnDA	8.609	563.0 -> 519.0	3341	0.19	µg/L	m	92
		563.0 -> 269.0	788				
11Cl-PF3OUdS	9.490	631.0 -> 451.0	13446	0.67	µg/L		98
		633.0 -> 453.0	3912				
9Cl-PF3ONS	8.660	531.0 -> 351.0	10465	0.65	µg/L		96
		533.0 -> 353.0	3203				
ADONA	6.765	377.0 -> 251.0	22214	0.65	µg/L		99
		377.0 -> 85.0	6820				
HFPO-DA	6.062	285.0 -> 169.0	1580	0.71	µg/L		98
		285.0 -> 185.0	123				
3:3FTCA	4.065	241.0 -> 177.0	826	0.93	µg/L		96
		241.0 -> 117.0	45				
5:3FTCA	6.204	341.0 -> 237.0	13862	4.63	µg/L		97
		341.0 -> 217.0	9581				
7:3FTCA	7.458	441.0 -> 337.0	16641	4.28	µg/L		96
		441.0 -> 317.0	7219				
EtFOSA	10.895	526.0 -> 219.0	1262	0.19	µg/L	m	90
		526.0 -> 169.0	1544				
EtFOSE	10.817	630.0 -> 59.0	16791	1.76	µg/L		100
MeFOSA	10.626	512.0 -> 169.0	1369	0.18	µg/L		98
		512.0 -> 219.0	941				
MeFOSE	10.544	616.0 -> 59.0	11420	1.78	µg/L	m	100
PFDoDS	9.948	699.0 -> 80.0	597	0.18	µg/L		77
		699.0 -> 99.0	389				
NFDHA	5.626	295.0 -> 201.0	372	0.38	µg/L		98
		201.0 -> 85.0	2224				
		295.0 -> 85.0	106				
PFMBA	5.015	279.0 -> 85.0	2392	0.38	µg/L		100
PFMPA	3.830	229.0 -> 85.0	3250	0.36	µg/L		100
PFEESA	6.180	315.0 -> 135.0	4846	0.33	µg/L		99
		315.0 -> 69.0	500				

 # = Qualifier out of range, m = manually integrated, + = Area summed

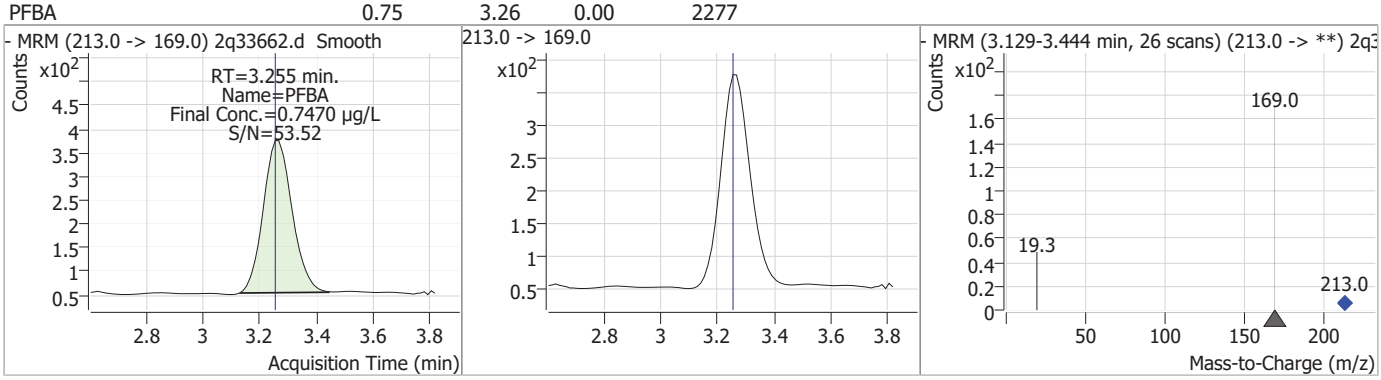
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

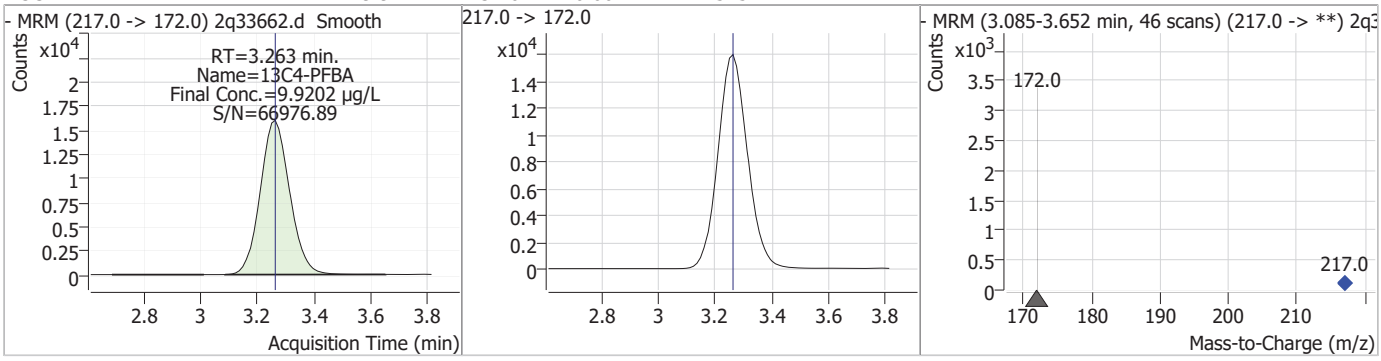
Perfluorinated Compounds by LC/MS/MS



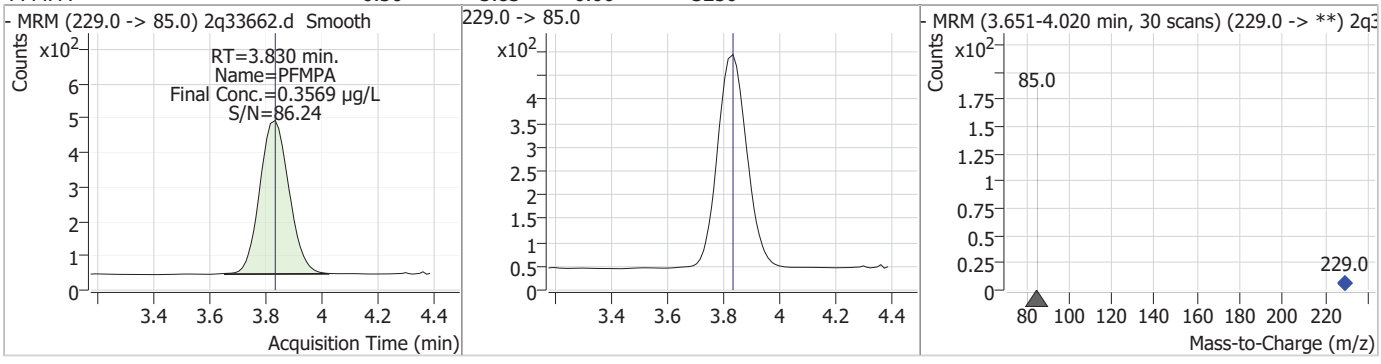
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.75	3.26	0.00	2277				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.92	3.26	0.00	115452				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.36	3.83	0.00	3250				



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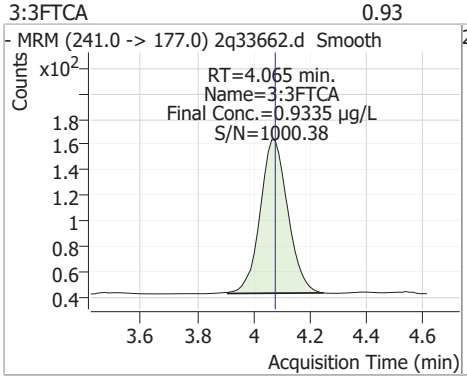
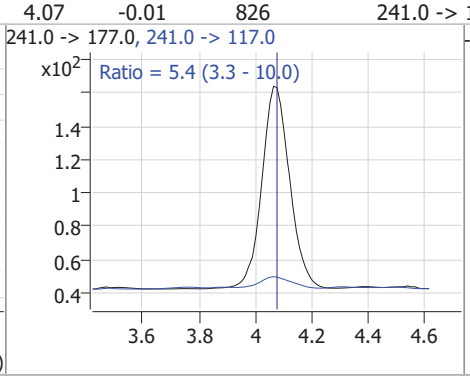
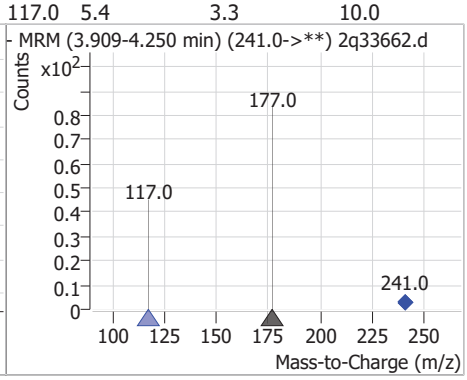
Perfluorinated Compounds by LC/MS/MS

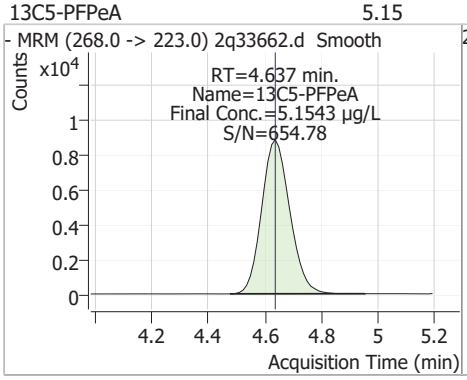
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	0.93	4.07	-0.01	826	241.0 -> 117.0	5.4	3.3	10.0

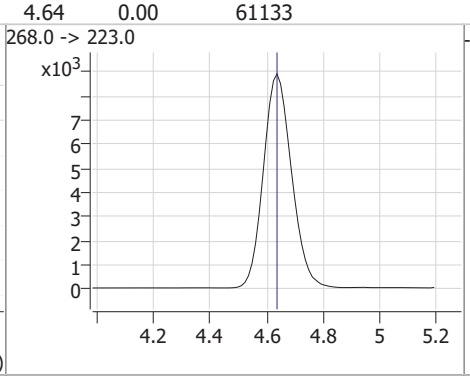


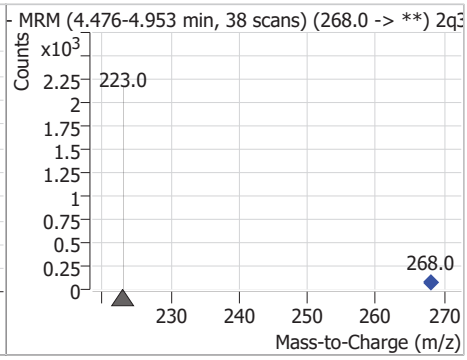




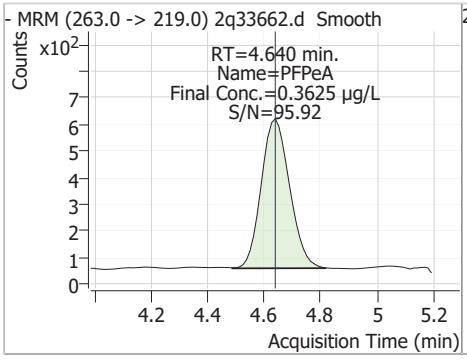
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.15	4.64	0.00	61133				

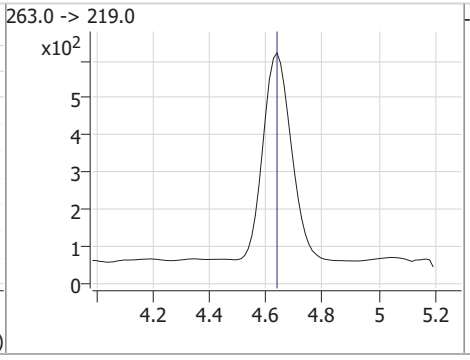


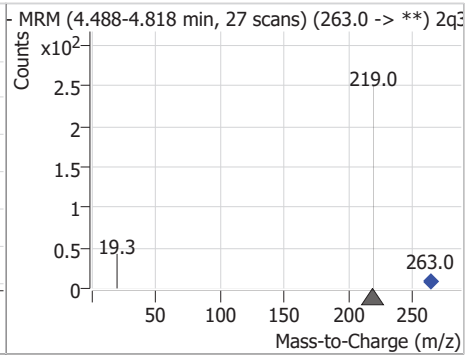




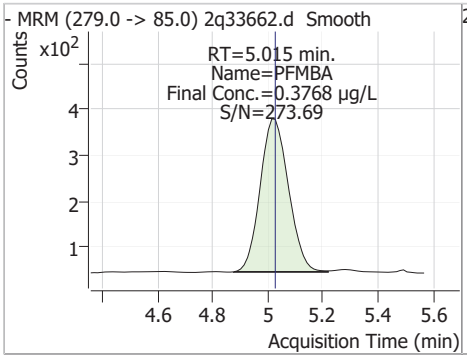
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.36	4.64	0.00	3919				

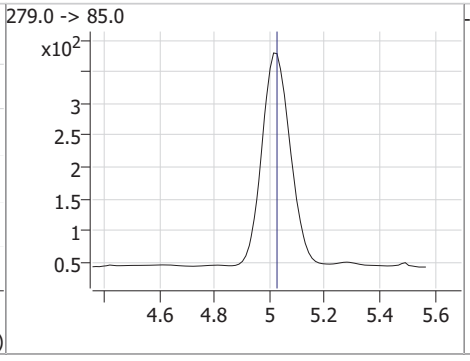


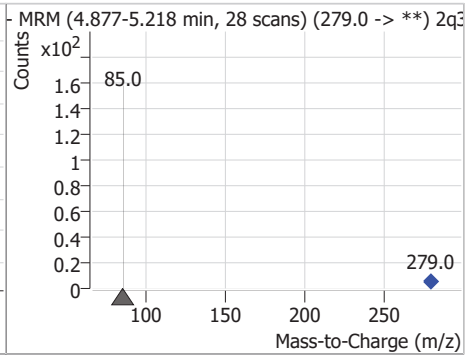




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.38	5.01	-0.01	2392				

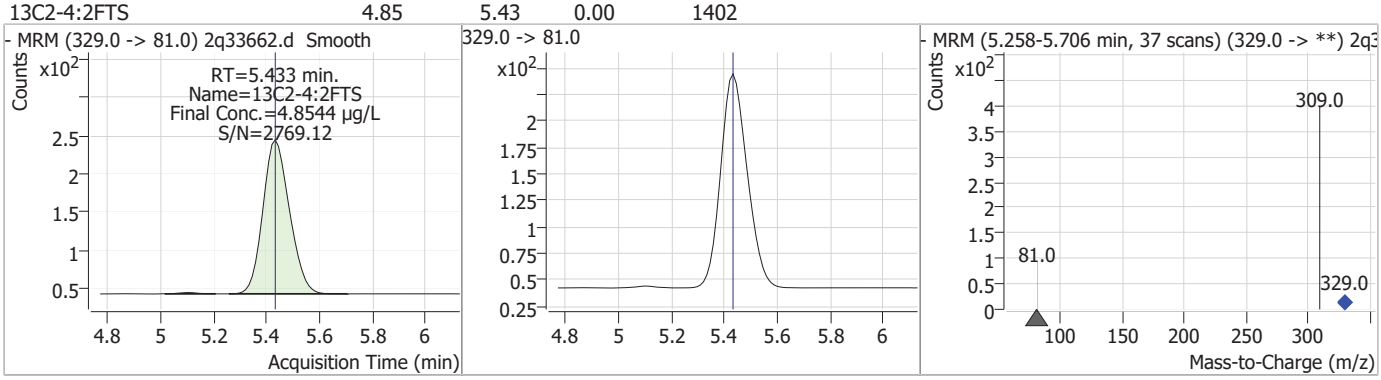




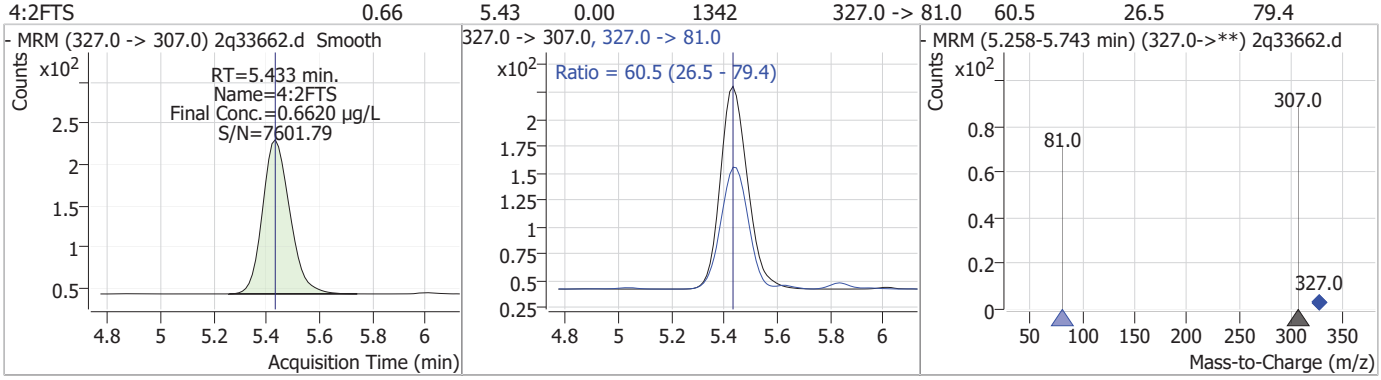


Perfluorinated Compounds by LC/MS/MS

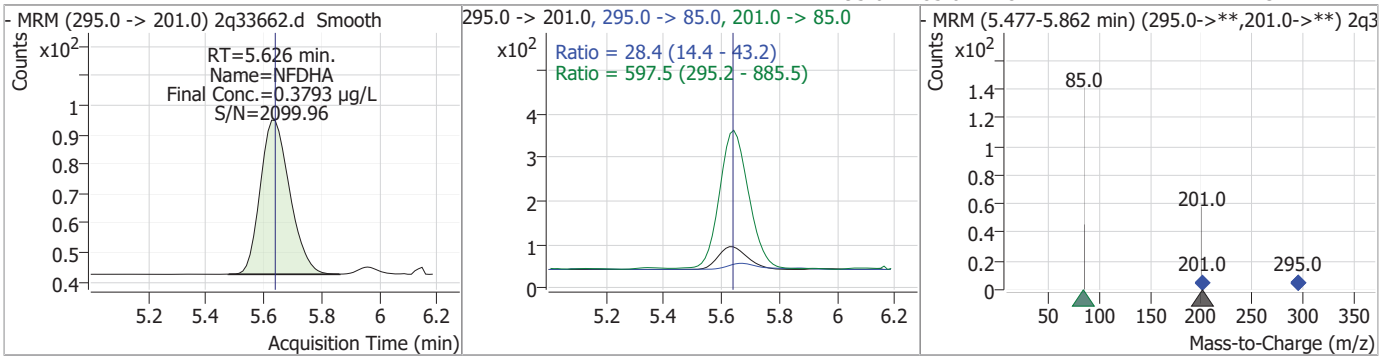
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.85	5.43	0.00	1402				



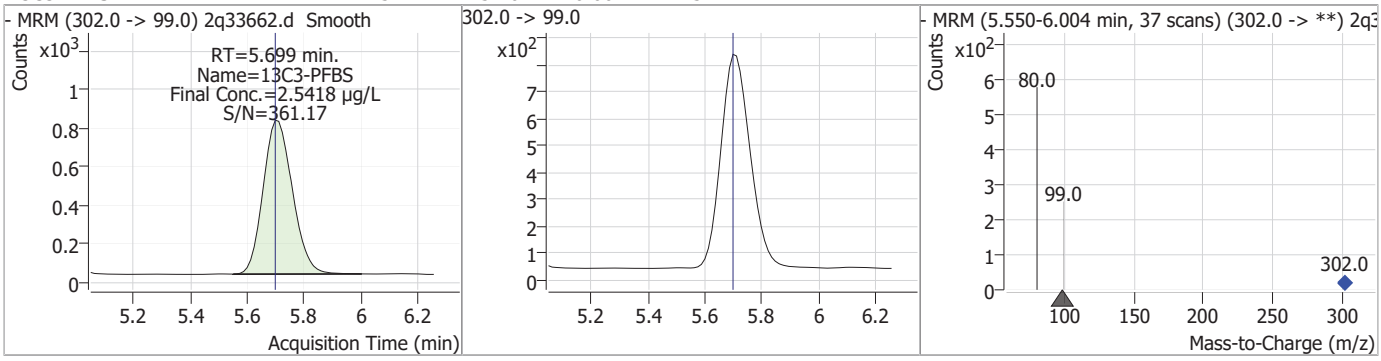
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	0.66	5.43	0.00	1342	327.0 -> 81.0	60.5	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.38	5.63	-0.01	372	201.0 -> 85.0	597.5	295.2	885.5
					295.0 -> 85.0	28.4	14.4	43.2

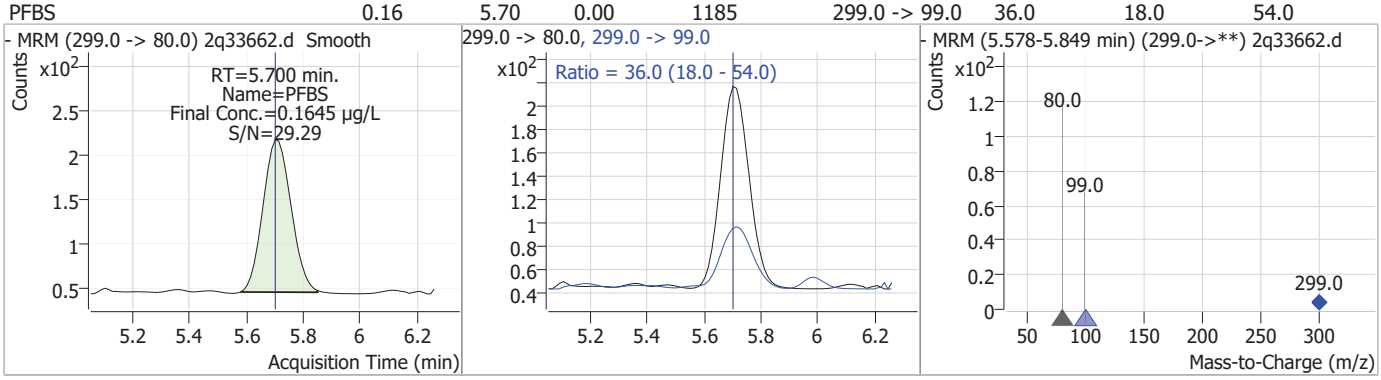


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.54	5.70	0.00	5714				

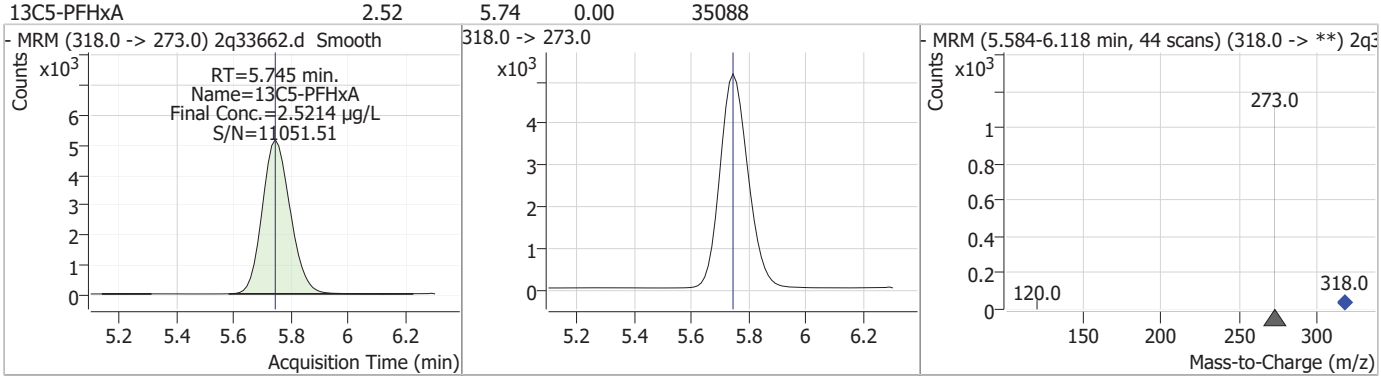


Perfluorinated Compounds by LC/MS/MS

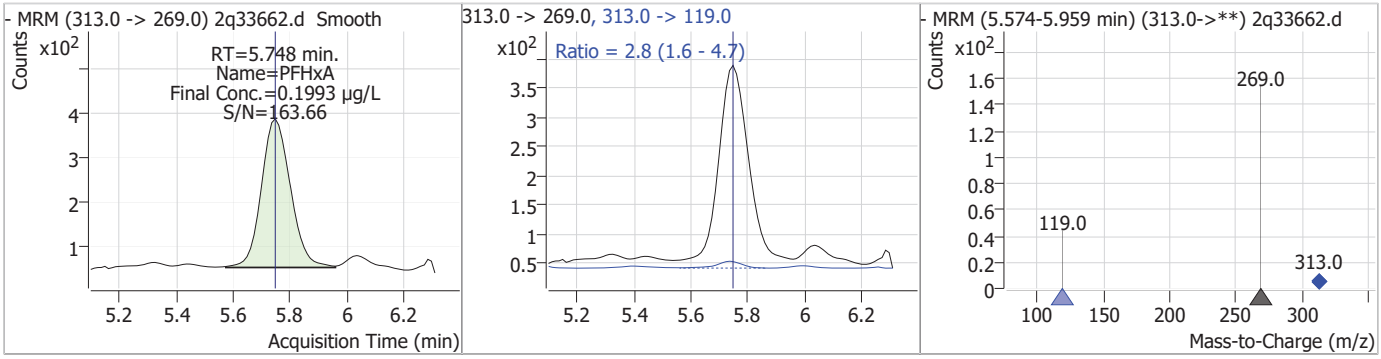
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.16	5.70	0.00	1185	299.0 -> 99.0	36.0	18.0	54.0



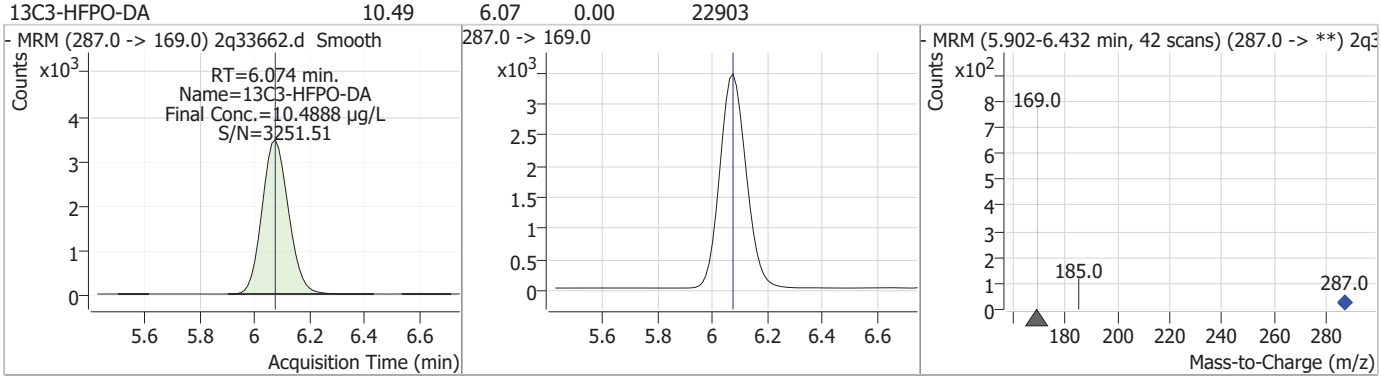
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.52	5.74	0.00	35088				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.20	5.75	0.00	2369	313.0 -> 119.0	2.8	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.49	6.07	0.00	22903				



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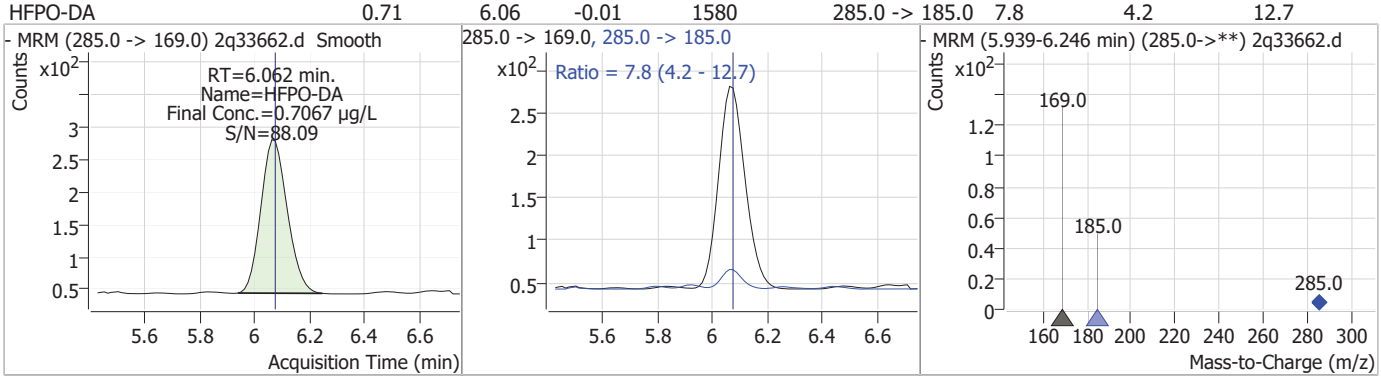
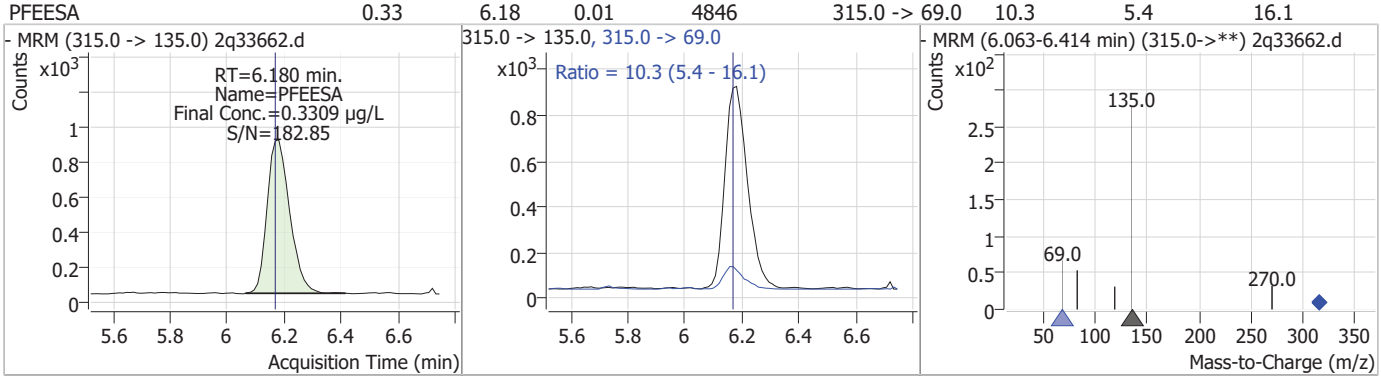
Perfluorinated Compounds by LC/MS/MS

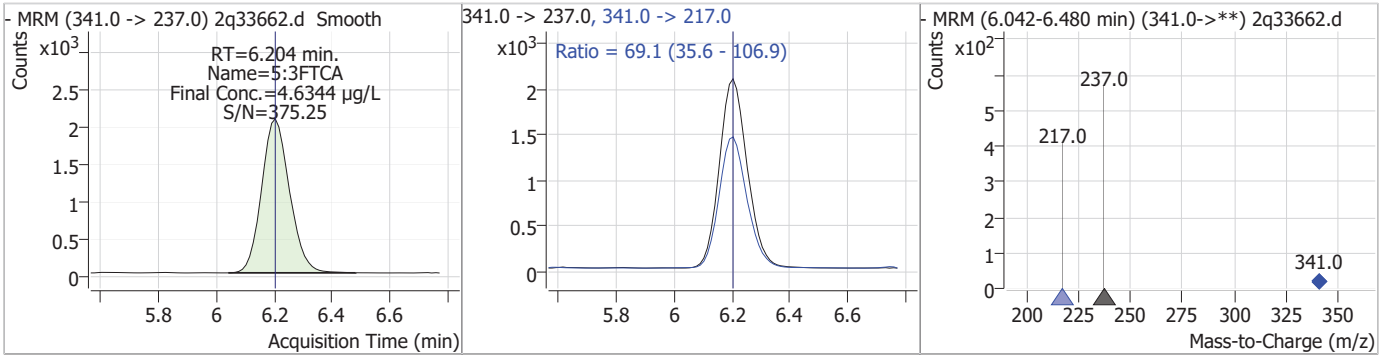
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	0.71	6.06	-0.01	1580	285.0 -> 185.0	7.8	4.2	12.7



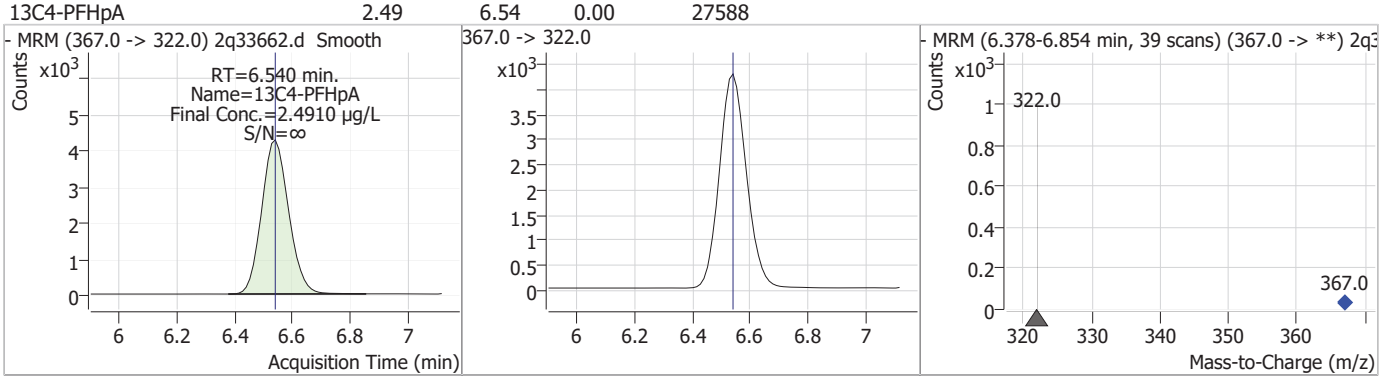
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.33	6.18	0.01	4846	315.0 -> 69.0	10.3	5.4	16.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	4.63	6.20	0.00	13862	341.0 -> 217.0	69.1	35.6	106.9

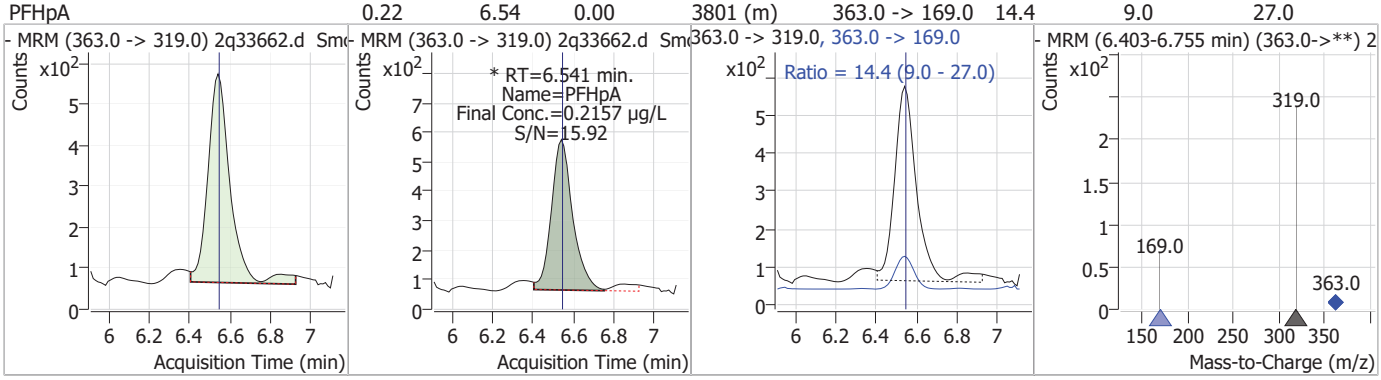


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.49	6.54	0.00	27588				

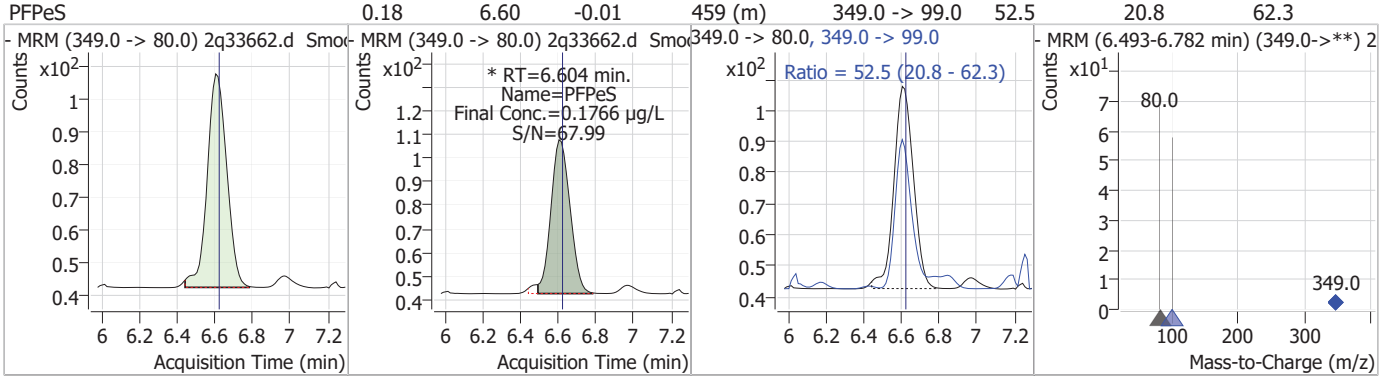


Perfluorinated Compounds by LC/MS/MS

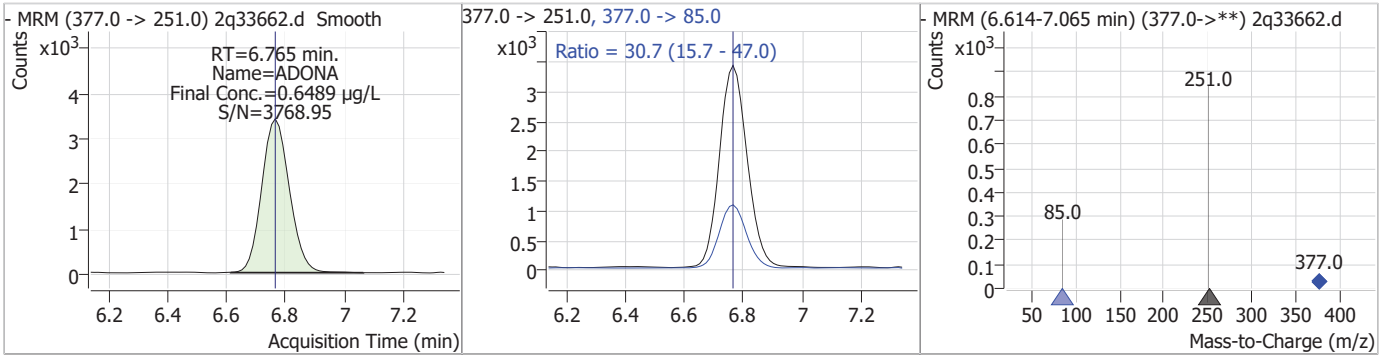
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.22	6.54	0.00	3801 (m)	363.0 -> 169.0	14.4	9.0	27.0



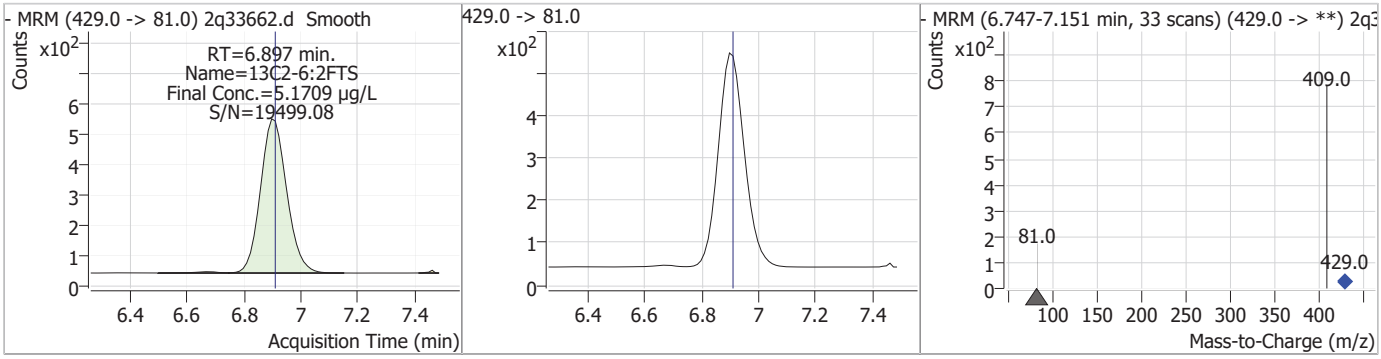
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.18	6.60	-0.01	459 (m)	349.0 -> 99.0	52.5	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	0.65	6.77	0.00	22214	377.0 -> 85.0	30.7	15.7	47.0

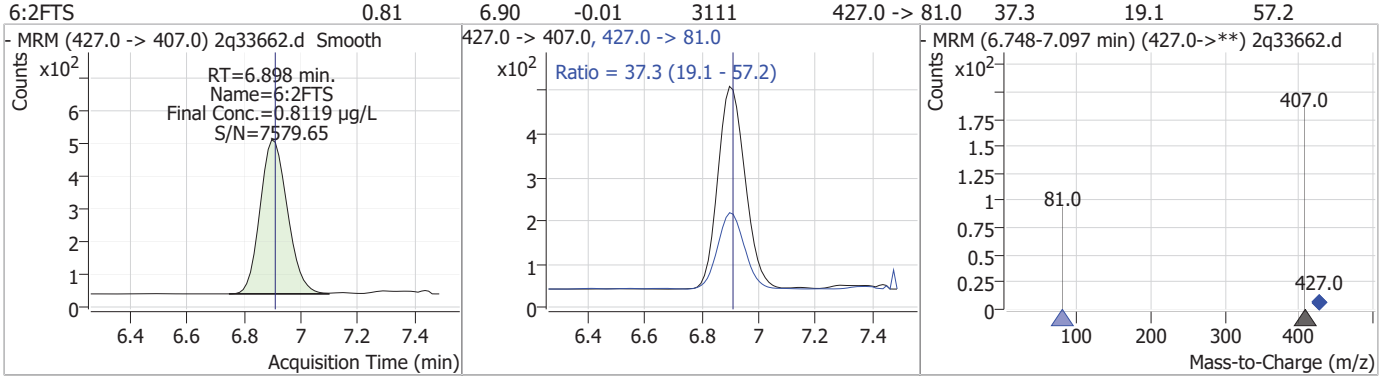


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.17	6.90	-0.01	3229				

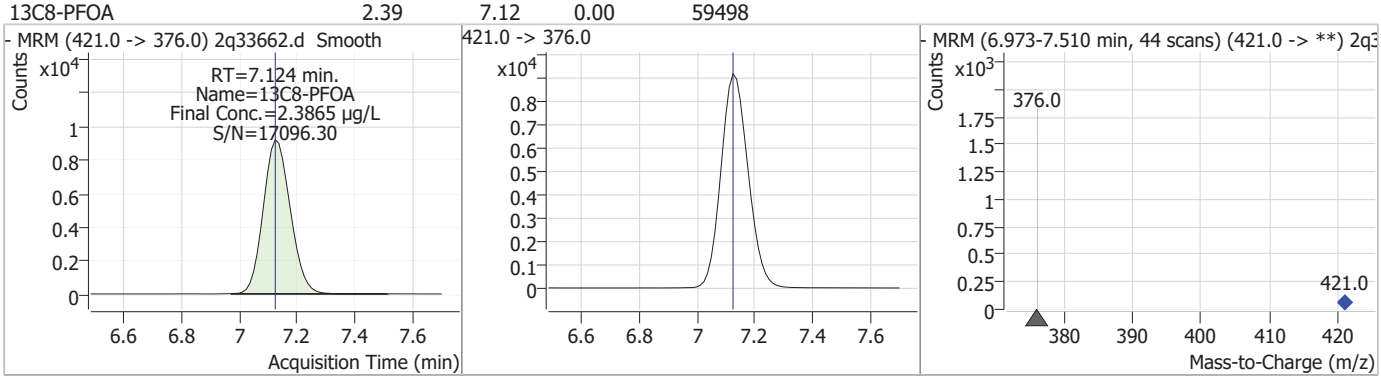


Perfluorinated Compounds by LC/MS/MS

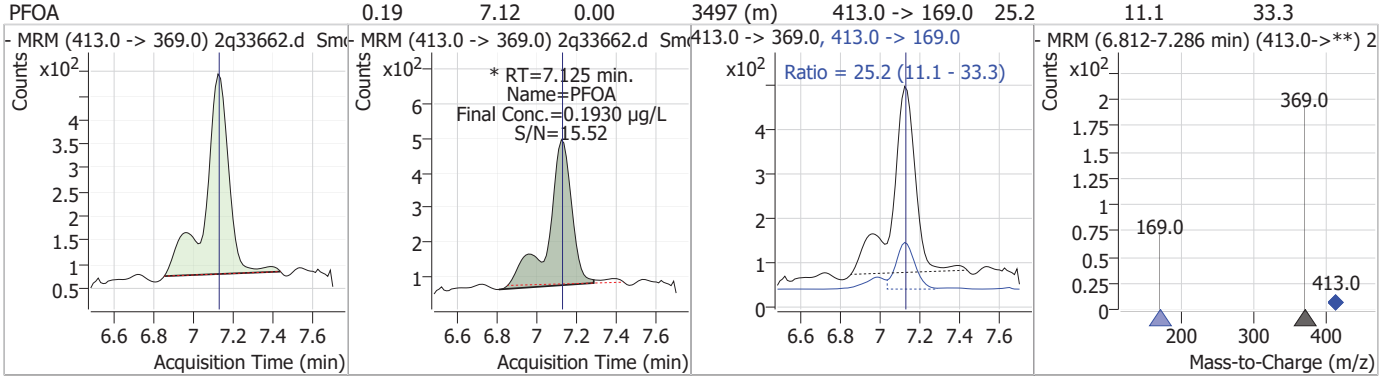
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.81	6.90	-0.01	3111	427.0 -> 81.0	37.3	19.1	57.2



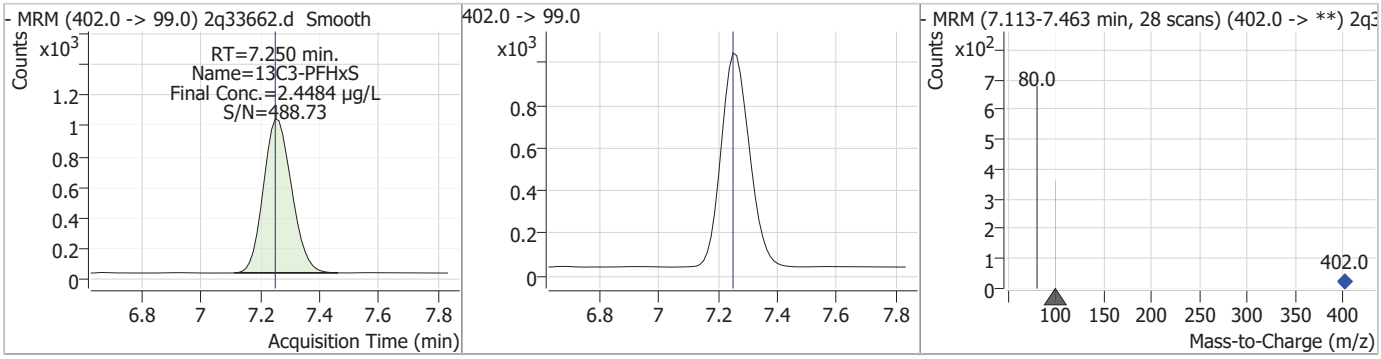
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.39	7.12	0.00	59498				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.19	7.12	0.00	3497 (m)	413.0 -> 169.0	25.2	11.1	33.3

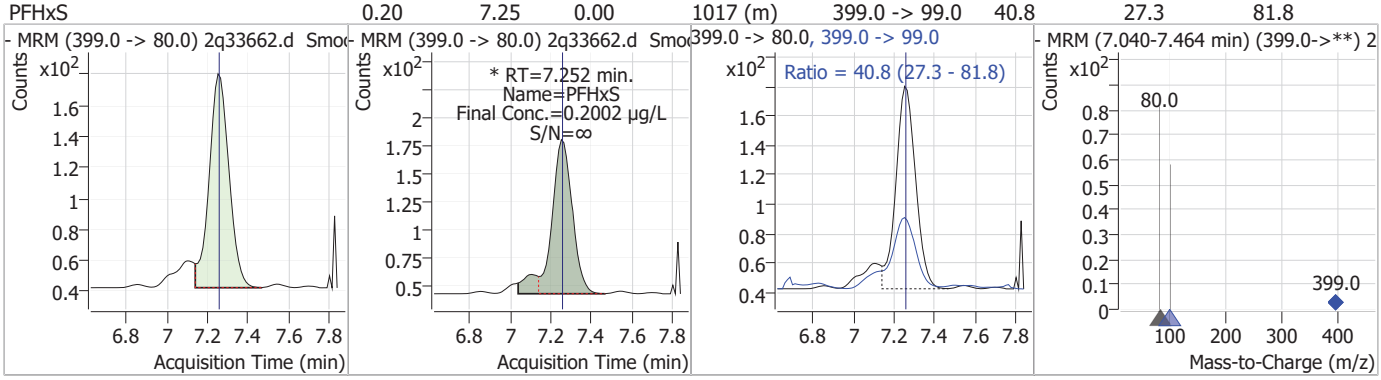


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.45	7.25	0.00	6663				

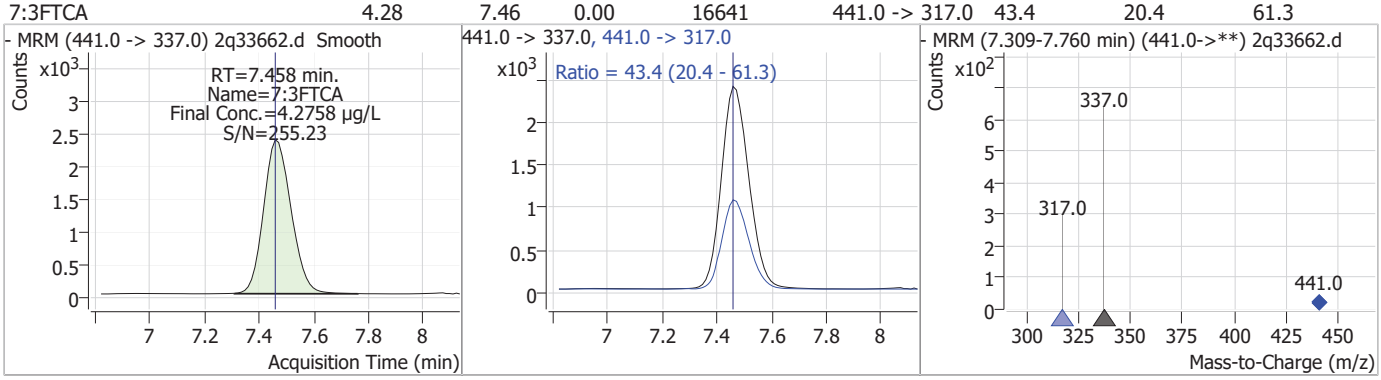


Perfluorinated Compounds by LC/MS/MS

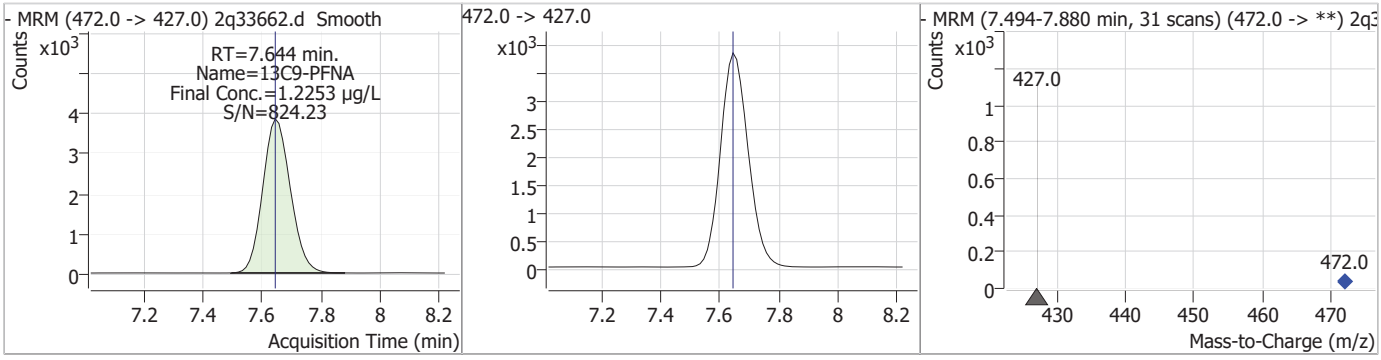
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.20	7.25	0.00	1017 (m)	399.0 -> 99.0	40.8	27.3	81.8



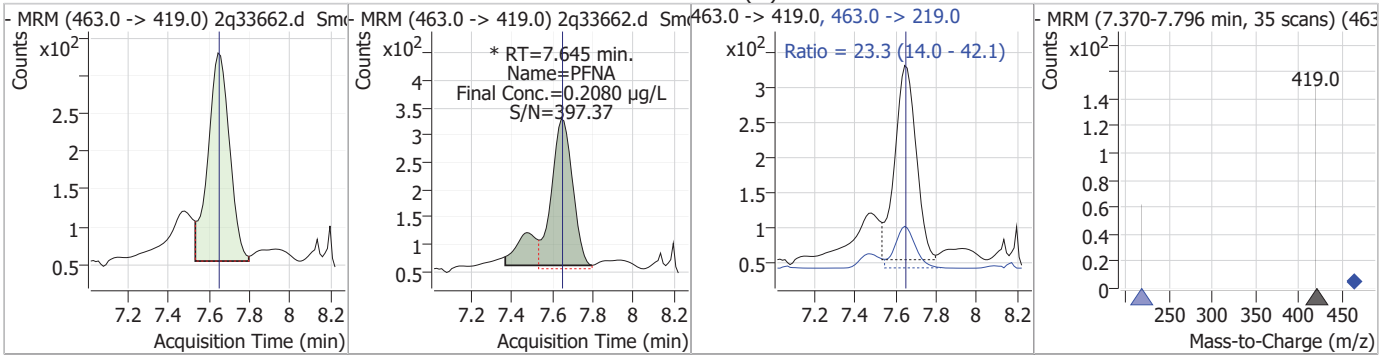
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	4.28	7.46	0.00	16641	441.0 -> 317.0	43.4	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.23	7.64	0.00	24817				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.21	7.64	0.00	2341 (m)	463.0 -> 219.0	23.3	14.0	42.1



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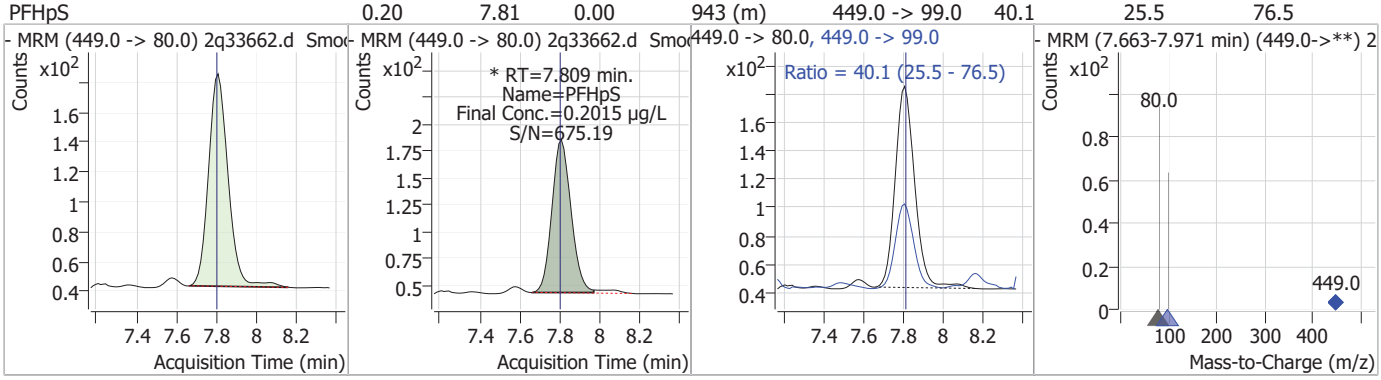
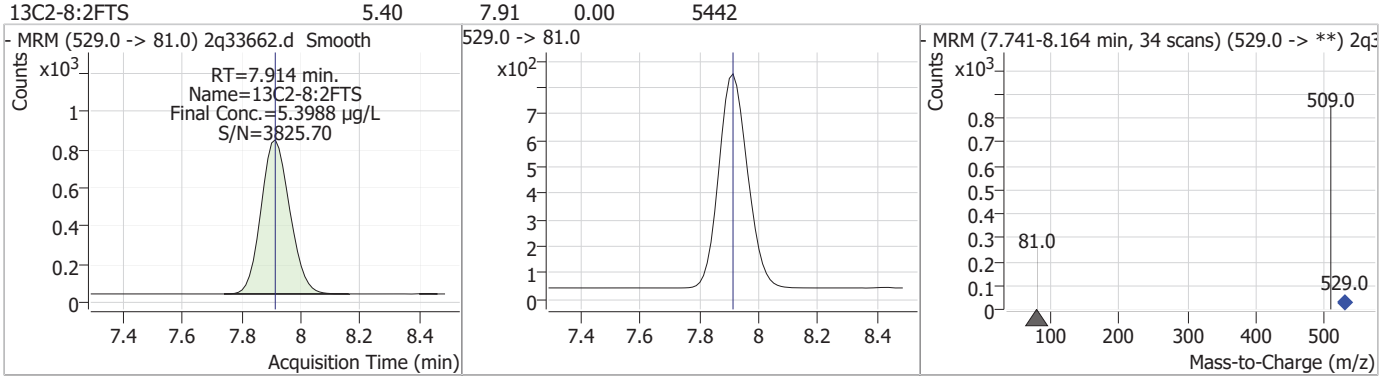
Perfluorinated Compounds by LC/MS/MS

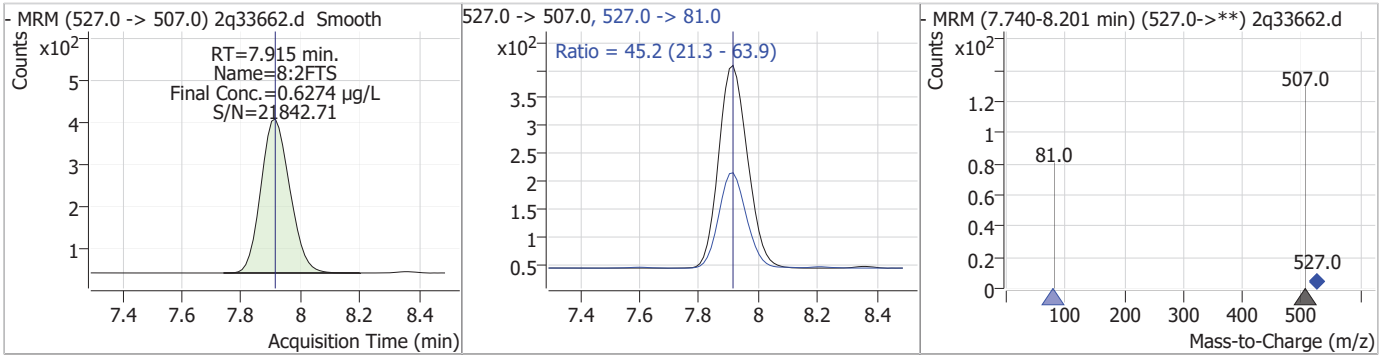
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.20	7.81	0.00	943 (m)	449.0 -> 99.0	40.1	25.5	76.5



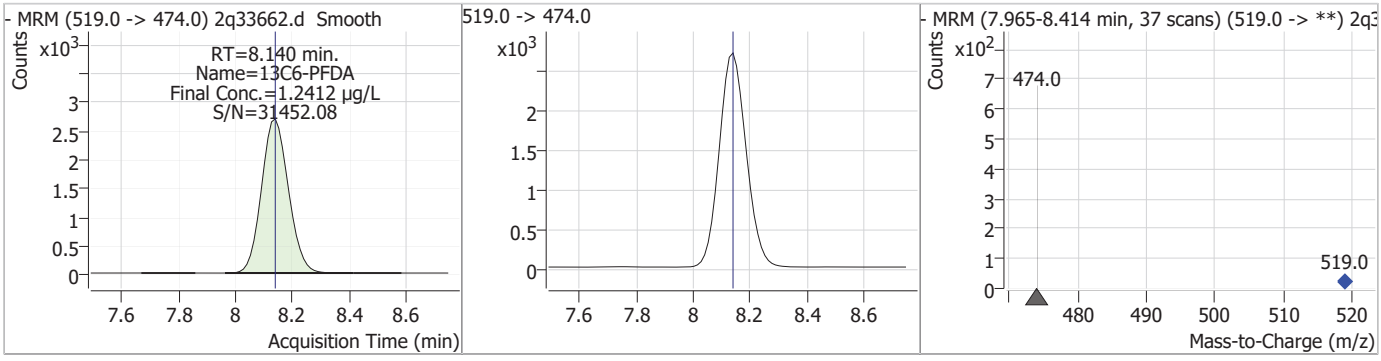
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.40	7.91	0.00	5442				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.63	7.91	0.00	2480	527.0 -> 81.0	45.2	21.3	63.9

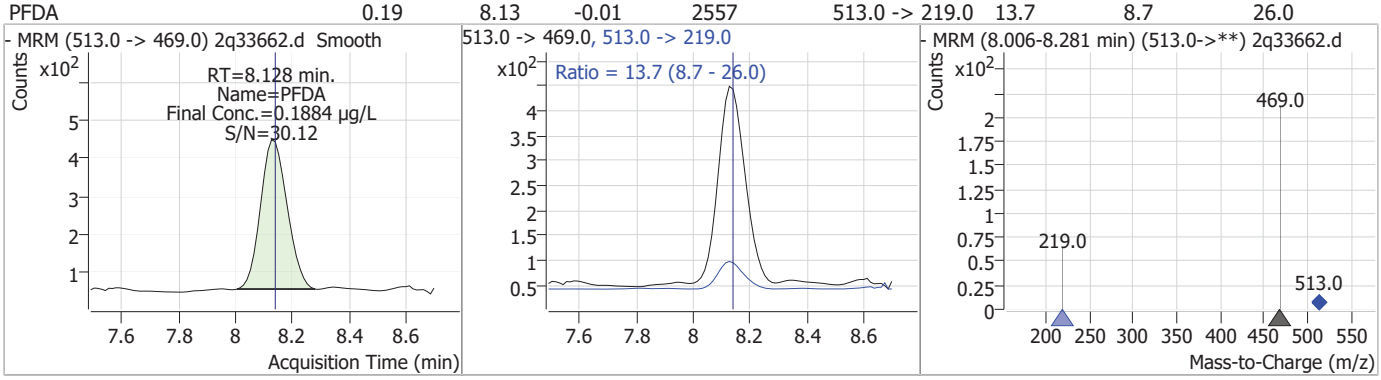


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.24	8.14	0.00	17577				

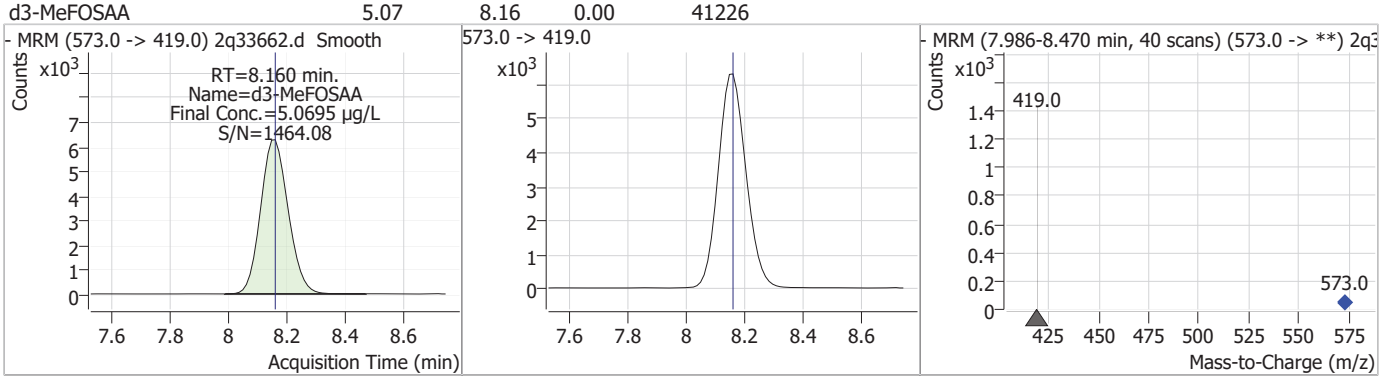


Perfluorinated Compounds by LC/MS/MS

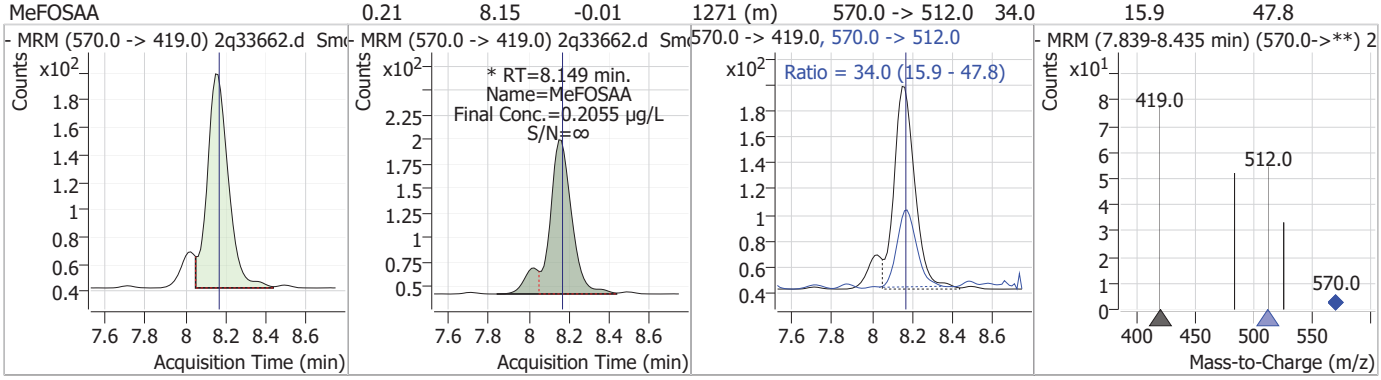
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.19	8.13	-0.01	2557	513.0 -> 219.0	13.7	8.7	26.0



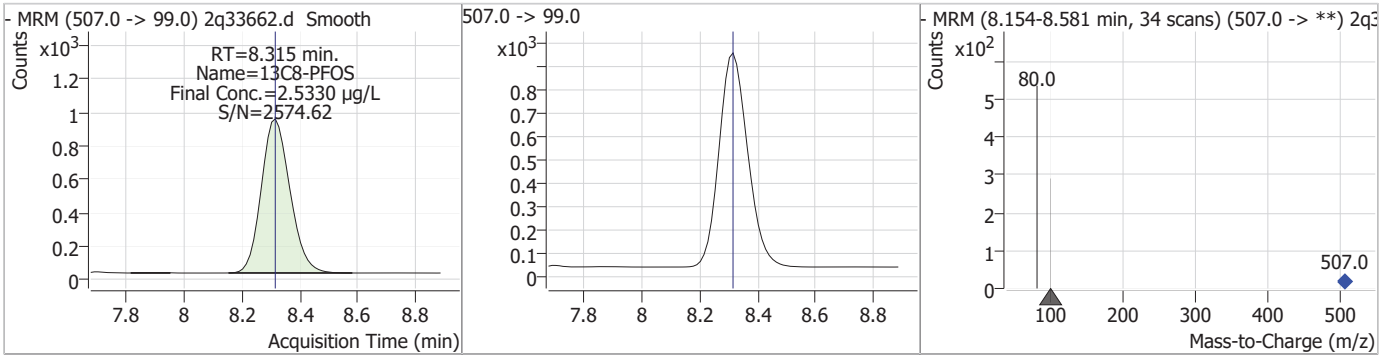
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.07	8.16	0.00	41226				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.21	8.15	-0.01	1271 (m)	570.0 -> 512.0	34.0	15.9	47.8

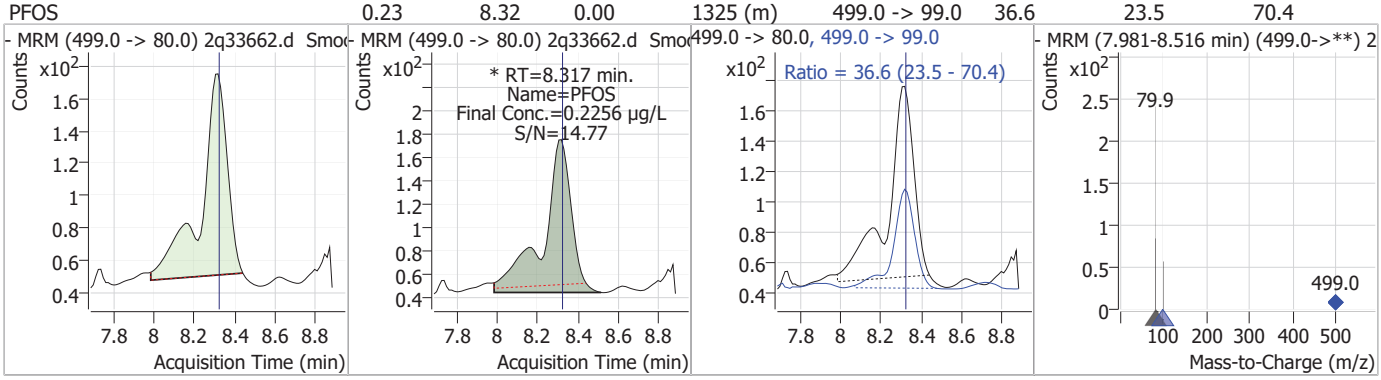


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.53	8.32	0.00	6292				

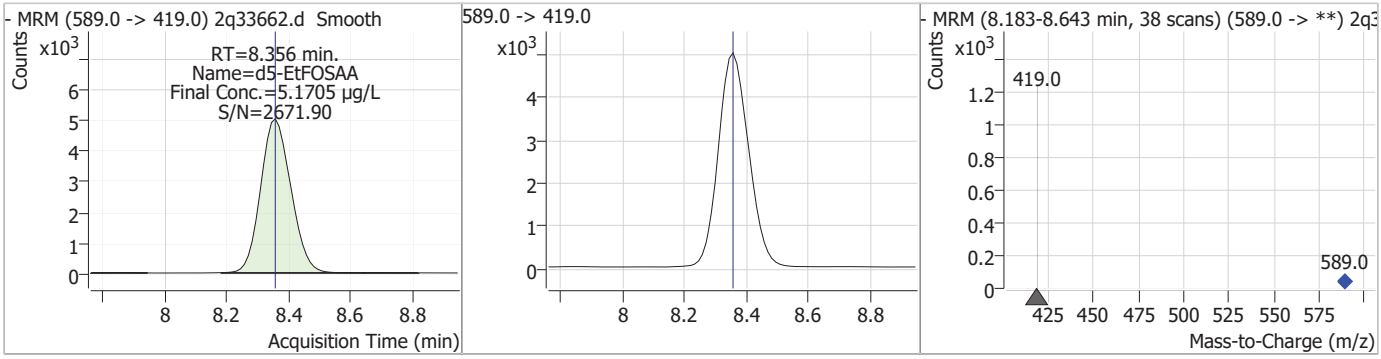


Perfluorinated Compounds by LC/MS/MS

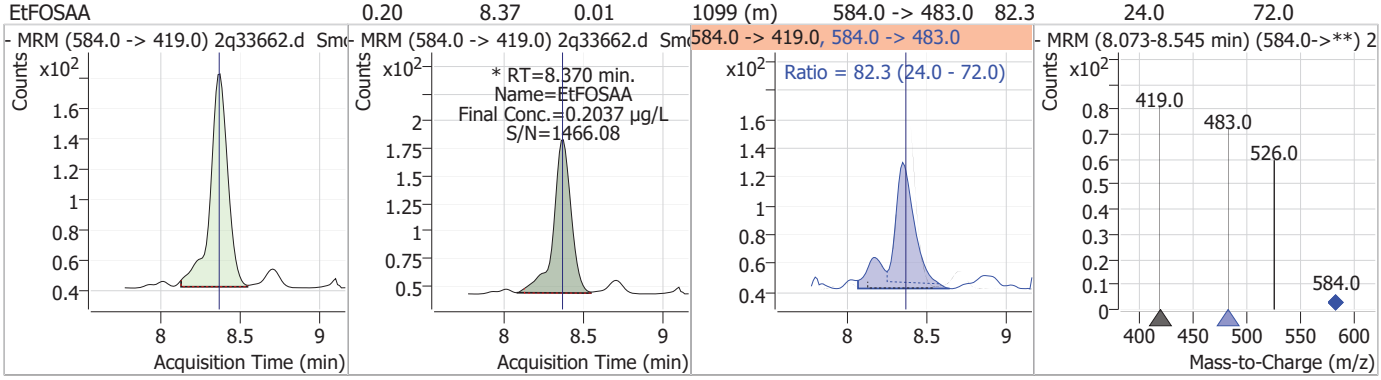
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.23	8.32	0.00	1325 (m)	499.0 -> 99.0	36.6	23.5	70.4



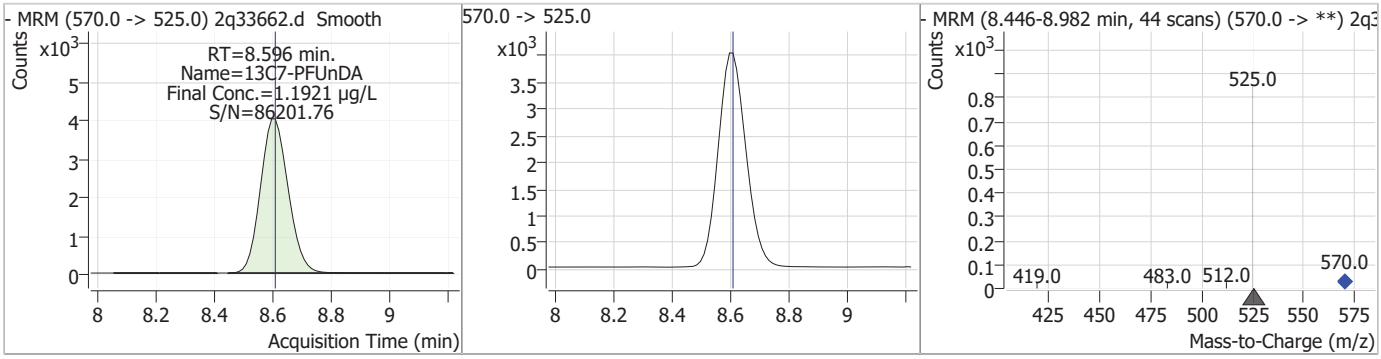
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.17	8.36	0.00	33927				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.20	8.37	0.01	1099 (m)	584.0 -> 483.0	82.3	24.0	72.0

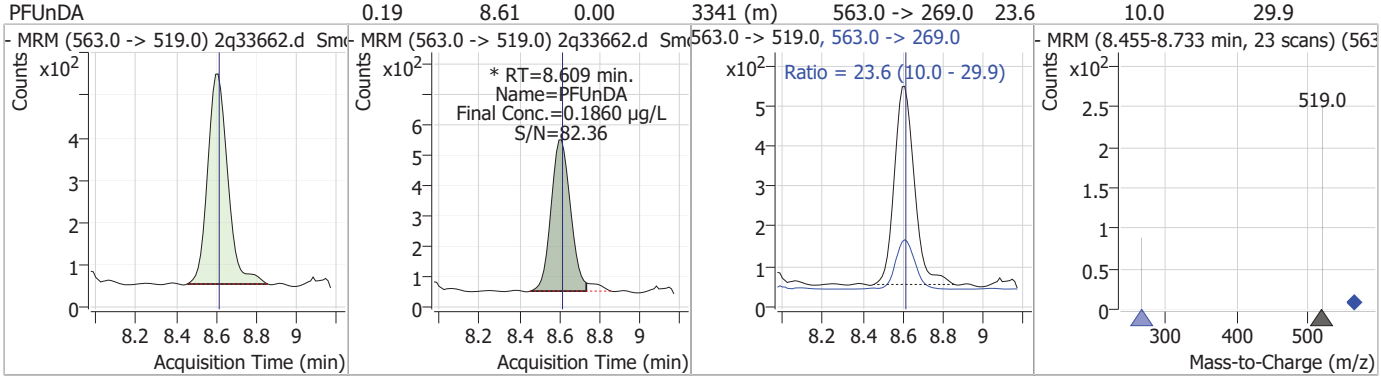


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.19	8.60	-0.01	26471				

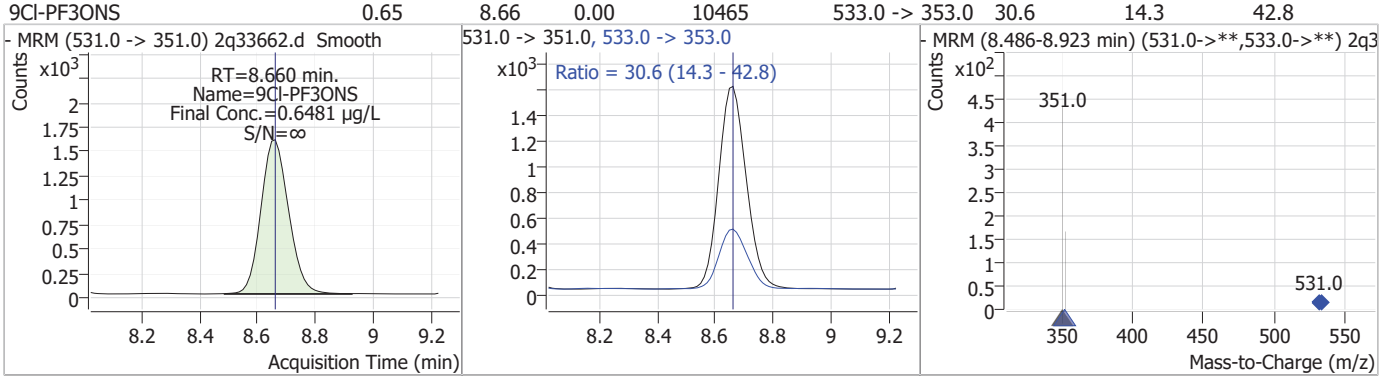


Perfluorinated Compounds by LC/MS/MS

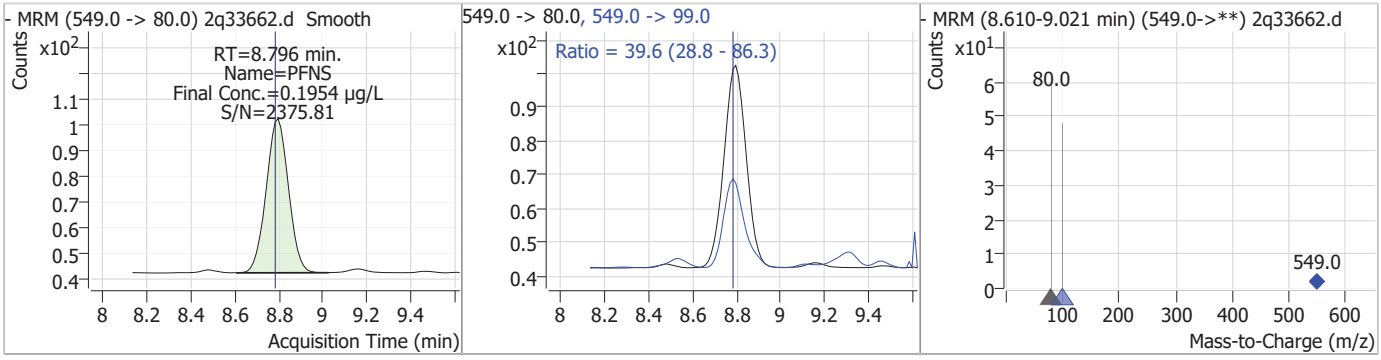
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.19	8.61	0.00	3341 (m)	563.0 -> 269.0	23.6	10.0	29.9



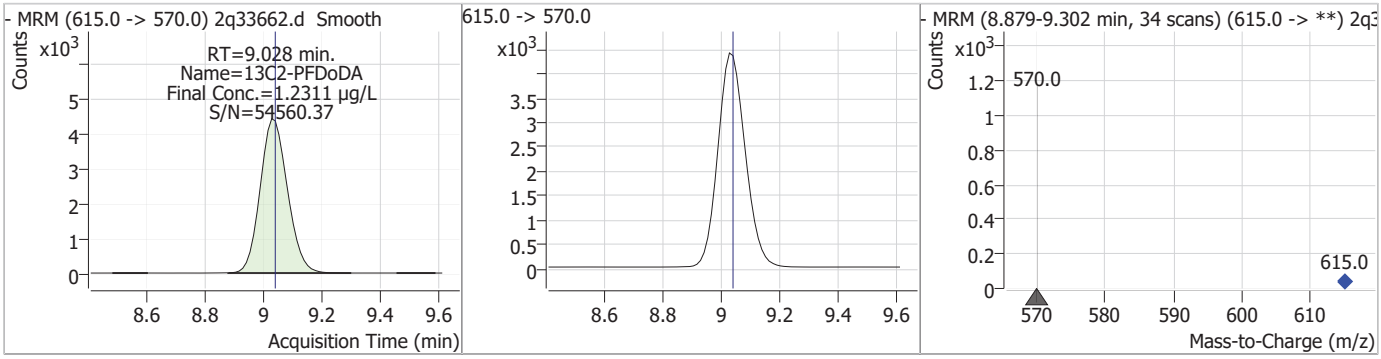
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	0.65	8.66	0.00	10465	533.0 -> 353.0	30.6	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.20	8.80	0.01	419	549.0 -> 99.0	39.6	28.8	86.3

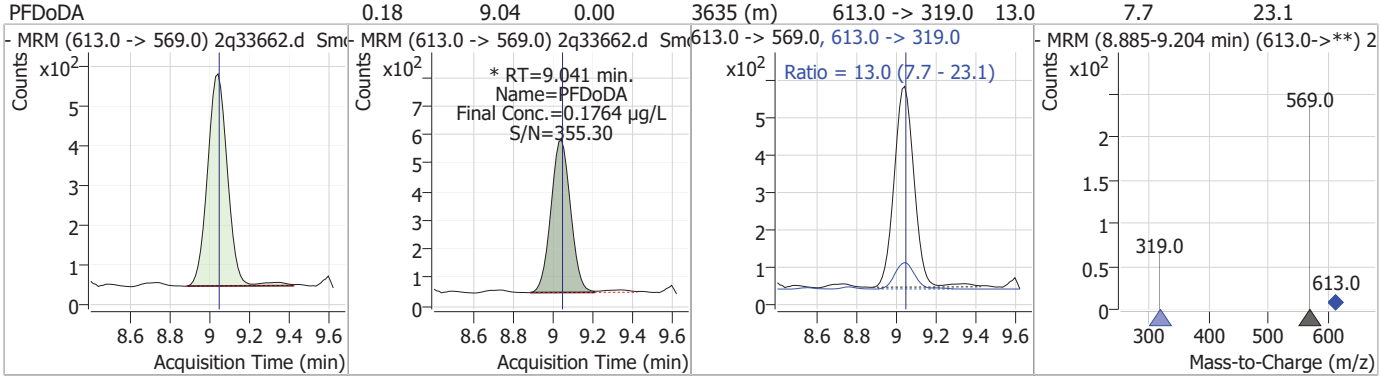


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.23	9.03	-0.01	28597				

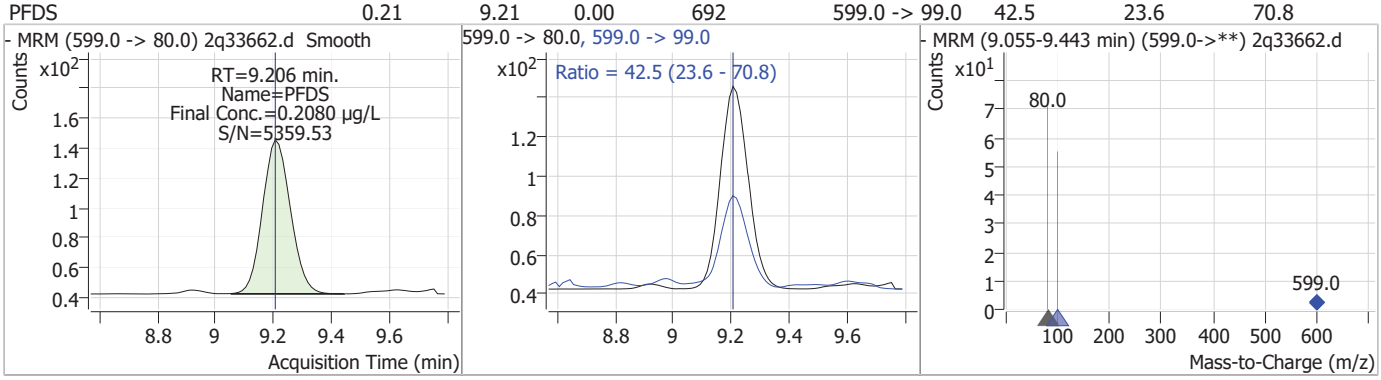


Perfluorinated Compounds by LC/MS/MS

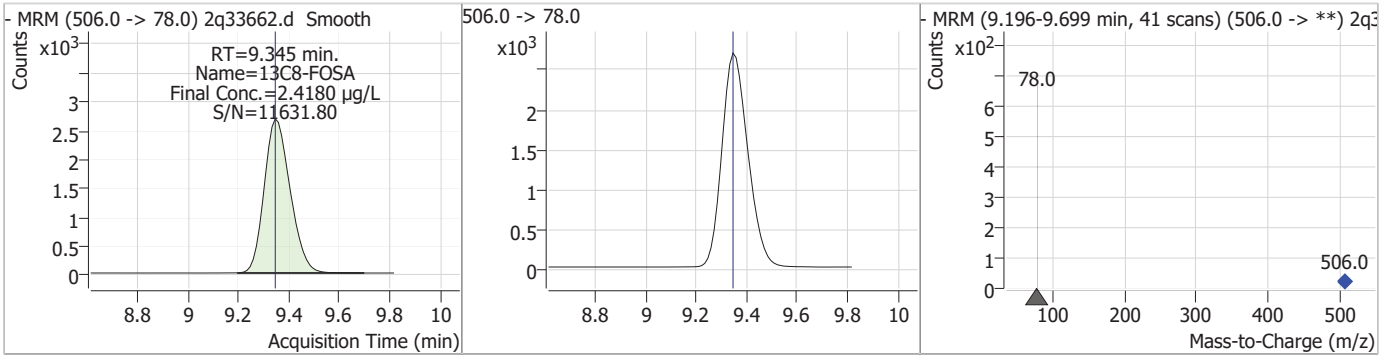
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.18	9.04	0.00	3635 (m)	613.0 -> 319.0	13.0	7.7	23.1



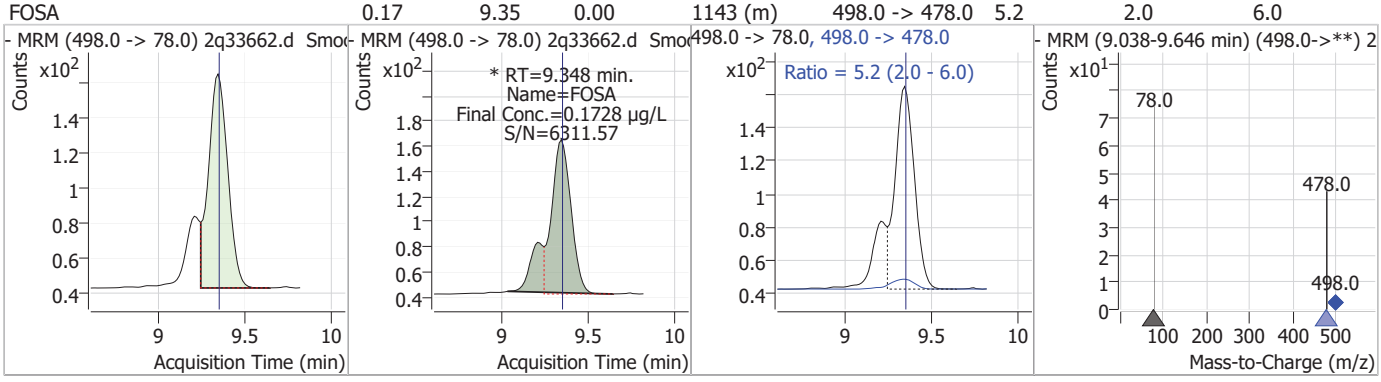
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.21	9.21	0.00	692	599.0 -> 99.0	42.5	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.42	9.35	0.00	19045				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.17	9.35	0.00	1143 (m)	498.0 -> 478.0	5.2	2.0	6.0



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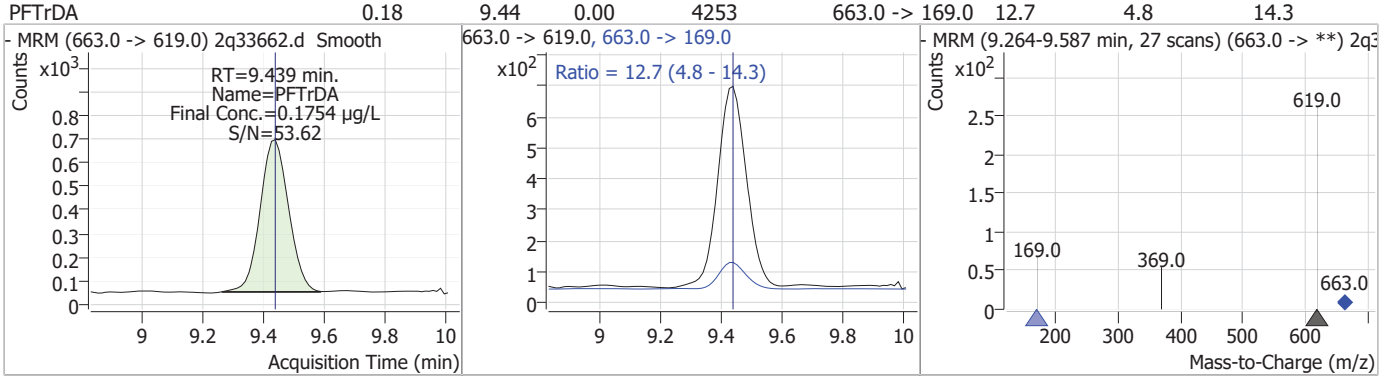
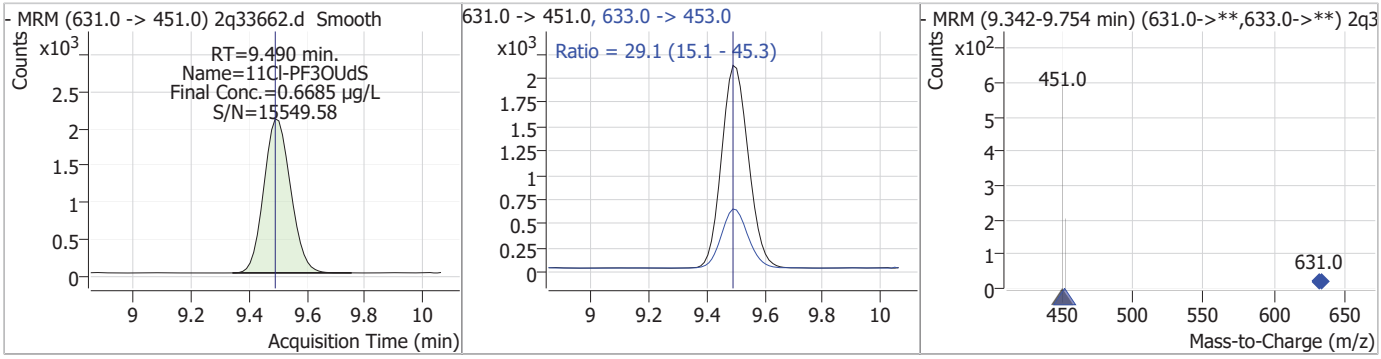
Perfluorinated Compounds by LC/MS/MS

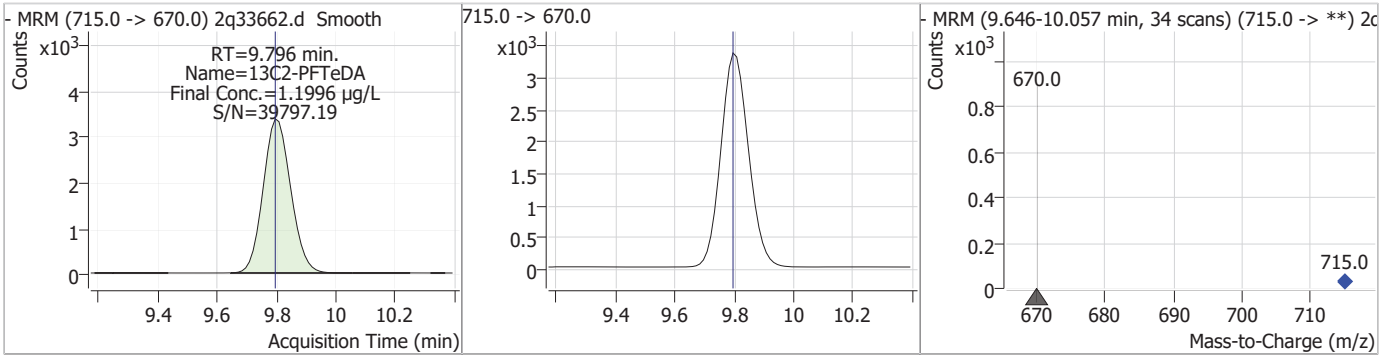
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.18	9.44	0.00	4253	663.0 -> 169.0	12.7	4.8	14.3



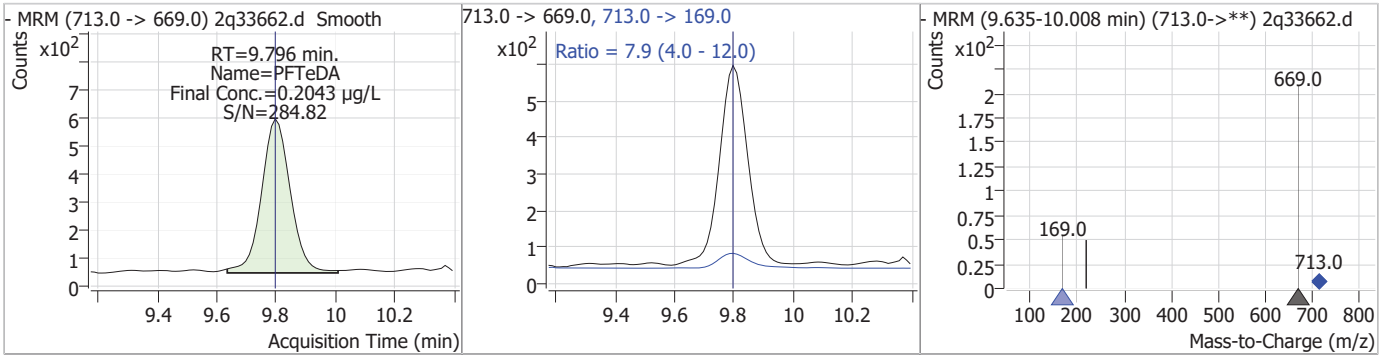
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	0.67	9.49	0.00	13446	633.0 -> 453.0	29.1	15.1	45.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.20	9.80	0.00	21629				

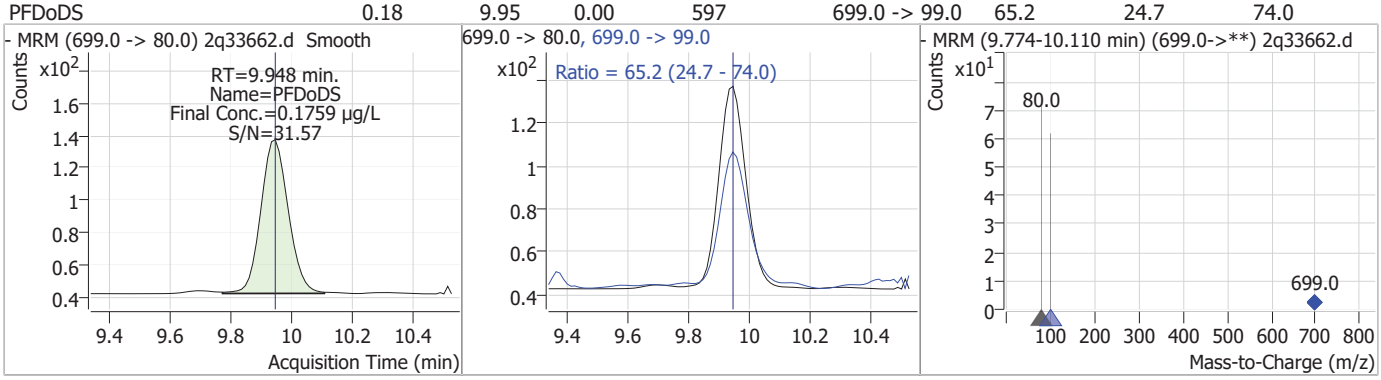


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.20	9.80	0.00	3721	713.0 -> 169.0	7.9	4.0	12.0

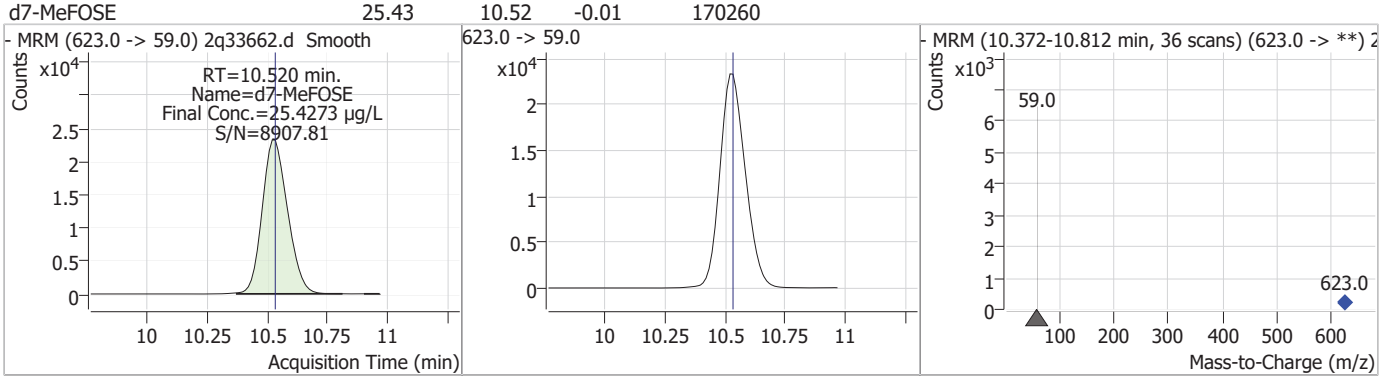


Perfluorinated Compounds by LC/MS/MS

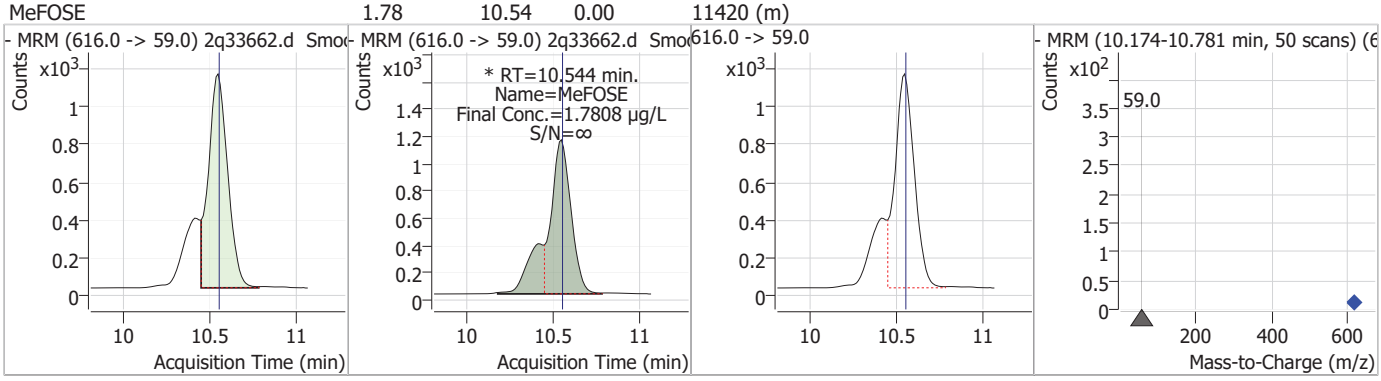
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.18	9.95	0.00	597	699.0 -> 99.0	65.2	24.7	74.0



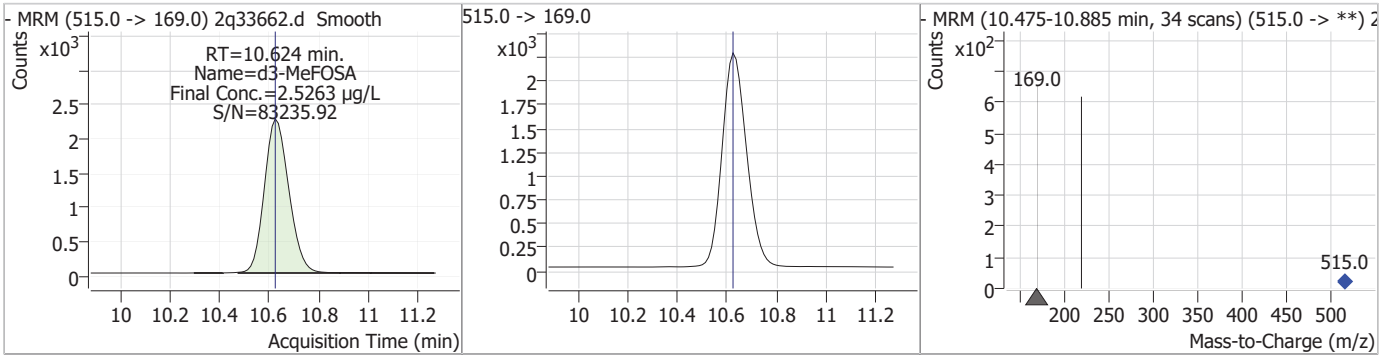
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.43	10.52	-0.01	170260				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	1.78	10.54	0.00	11420 (m)				

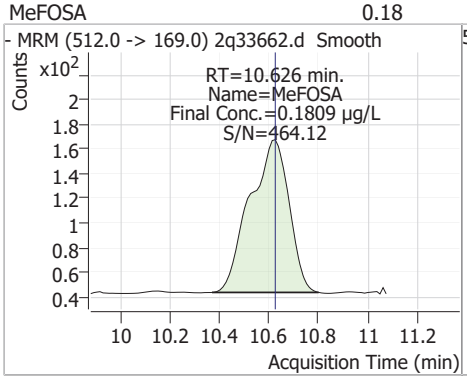


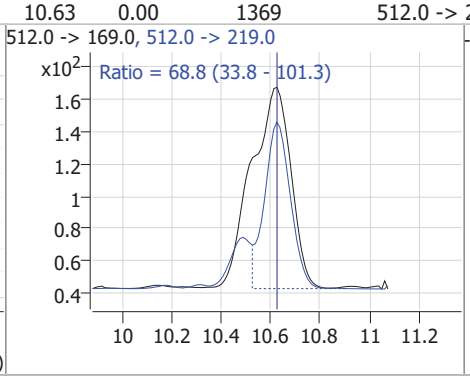
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.53	10.62	0.00	15478				

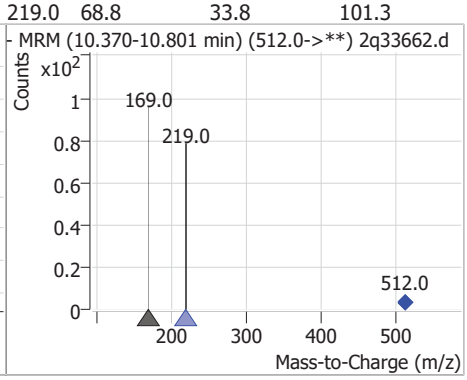


Perfluorinated Compounds by LC/MS/MS

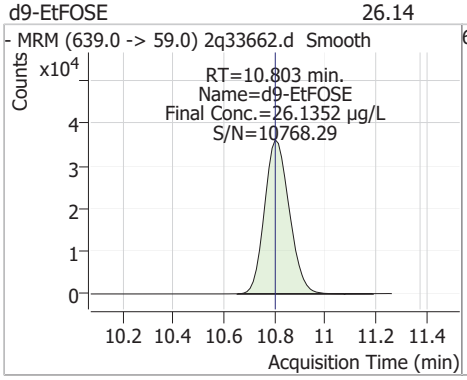
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.18	10.63	0.00	1369	512.0 -> 219.0	68.8	33.8	101.3

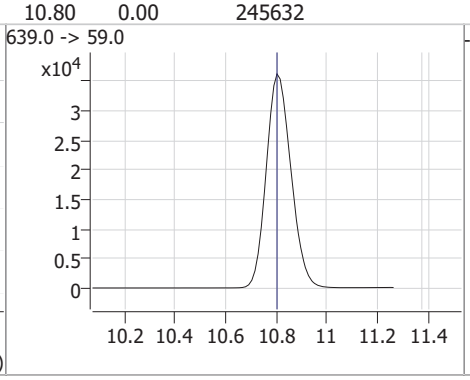


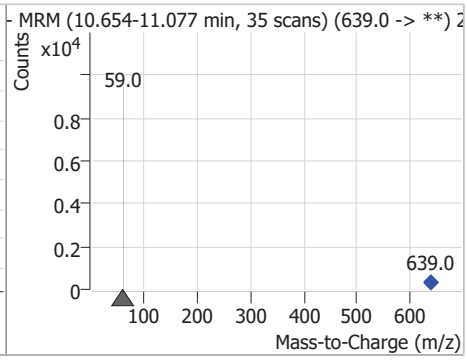




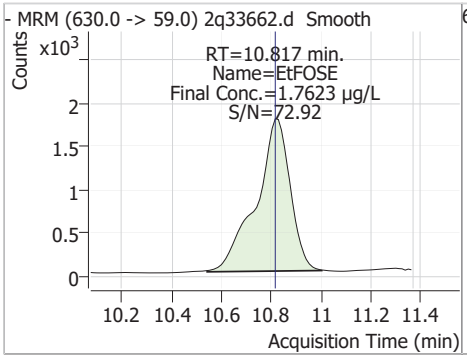
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	26.14	10.80	0.00	245632				

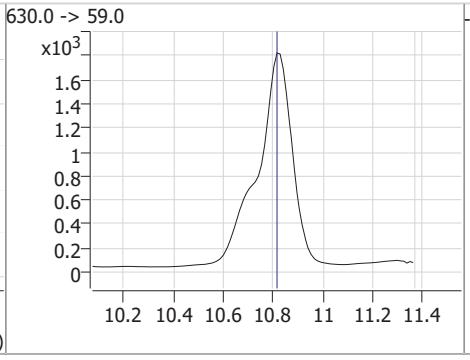


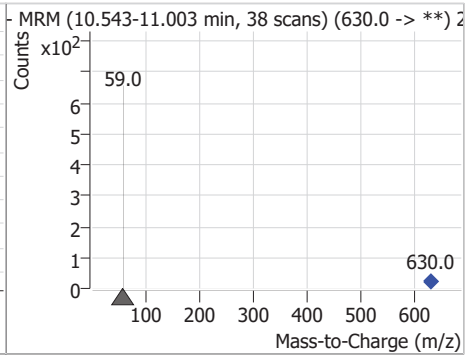




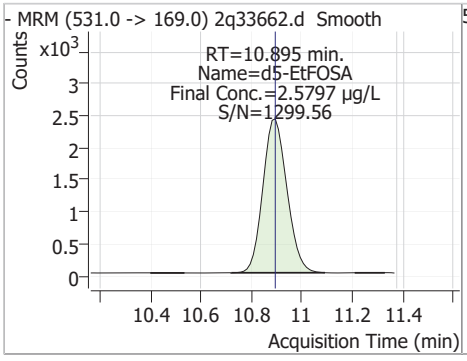
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	1.76	10.82	0.00	16791				

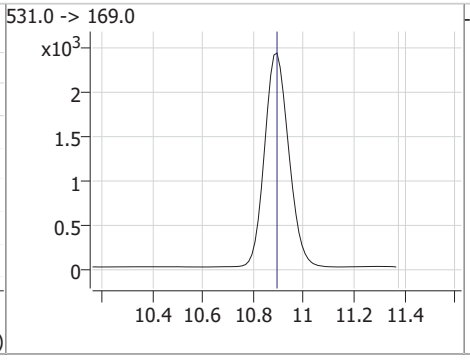


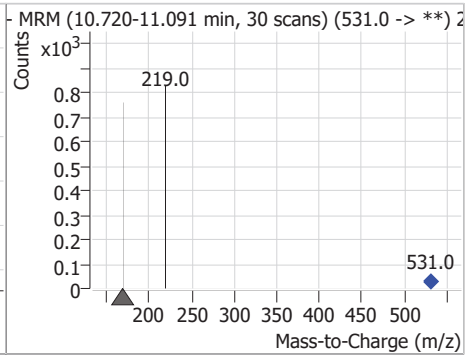




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.58	10.89	0.00	15938				





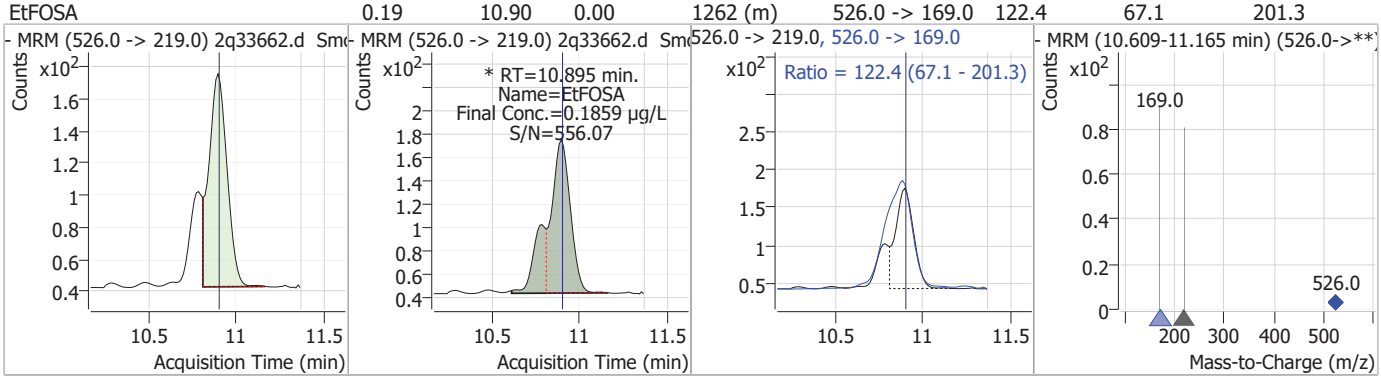


7.6.17

7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.19	10.90	0.00	1262 (m)	526.0 -> 169.0	122.4	67.1	201.3



Manual Integration Approval Summary

Sample Number: T2Q344-IC344
Lab FileID: 2Q33662.D
Injection Time: 05/09/25 15:09
Method: EPA 1633
Analyst approved: 05/10/25 01:15 Josephus Gimenez
Supervisor approved: 05/12/25 11:57 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluoroheptanoic acid	375-85-9		6.54	Poor instrument integration
Perfluoropentanesulfonic acid	2706-91-4		6.60	Poor instrument integration
Perfluorooctanoic acid	335-67-1		7.12	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.25	Split peak
Perfluorononanoic acid	375-95-1		7.64	Split peak
Perfluoroheptanesulfonic acid	375-92-8		7.81	Poor instrument integration
MeFOSAA	2355-31-9		8.15	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Split peak
Perfluoroundecanoic acid	2058-94-8		8.61	Poor instrument integration
Perfluorododecanoic acid	307-55-1		9.04	Poor instrument integration
PFOSA	754-91-6		9.35	Split peak
MeFOSE	24448-09-7		10.54	Split peak
EtFOSA	4151-50-2		10.89	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/12/25 11:57

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33663.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/9/2025 3:22:35 PM
Sample Name : IC344-2
Vial : P1-A3
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q344.batch.bin
Sample Information : OP62666,T2Q344,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	121821	10.00 µg/L	0.000
M5-PFPeA	4.637	268.0 -> 223.0	63498	5.00 µg/L	0.000
M5-PFHxA	5.745	318.0 -> 273.0	36861	2.50 µg/L	0.000
M4-PFHpA	6.540	367.0 -> 322.0	29601	2.50 µg/L	0.000
M8-PFOA	7.124	421.0 -> 376.0	65548	2.50 µg/L	0.000
M9-PFNA	7.644	472.0 -> 427.0	25531	1.25 µg/L	0.000
M6-PFDA	8.127	519.0 -> 474.0	19264	1.25 µg/L	-0.013
M7-PFUnDA	8.608	570.0 -> 525.0	28979	1.25 µg/L	0.000
M2-PFDoDA	9.028	615.0 -> 570.0	29247	1.25 µg/L	-0.012
M2-PFTeDA	9.796	715.0 -> 670.0	21862	1.25 µg/L	0.000
M8-FOSA	9.345	506.0 -> 78.0	20661	2.50 µg/L	0.000
M3-PFBS	5.699	302.0 -> 99.0	5824	2.50 µg/L	0.000
M3-PFHxS	7.250	402.0 -> 99.0	7006	2.50 µg/L	0.000
M8-PFOS	8.315	507.0 -> 99.0	6249	2.50 µg/L	0.000
M2-4:2FTS	5.420	329.0 -> 81.0	1532	5.00 µg/L	-0.012
M2-6:2FTS	6.897	429.0 -> 81.0	3230	5.00 µg/L	-0.012
M2-8:2FTS	7.914	529.0 -> 81.0	4843	5.00 µg/L	0.000
M3-MeFOSAA	8.160	573.0 -> 419.0	43489	5.00 µg/L	0.000
M3-HFPO-DA	6.074	287.0 -> 169.0	24686	10.00 µg/L	0.000
M5-EtFOSAA	8.356	589.0 -> 419.0	33743	5.00 µg/L	0.000
M7-MeFOSE	10.520	623.0 -> 59.0	179752	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	257654	25.00 µg/L	0.000
M5-EtFOSA	10.895	531.0 -> 169.0	16477	2.50 µg/L	0.000
M3-MeFOSA	10.624	515.0 -> 169.0	15328	2.50 µg/L	0.000
13C4-PFOS	8.316	503.0 -> 80.0	11714	2.50 µg/L	0.000
13C3-PFBA	3.253	216.0 -> 172.0	51903	5.00 µg/L	-0.012
18O2-PFHxS	7.250	403.0 -> 84.0	8461	2.50 µg/L	-0.012
13C4-PFOA	7.124	417.0 -> 372.0	62122	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	18792	1.25 µg/L	0.000
13C5-PFNA	7.645	468.0 -> 423.0	23326	1.25 µg/L	0.000
13C2-PFHxA	5.746	315.0 -> 270.0	33698	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.420	329.0 -> 81.0	1532	5.00 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.1%	
13C2-6:2FTS	6.897	429.0 -> 81.0	3230	4.88 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.6%	
13C2-8:2FTS	7.914	529.0 -> 81.0	4843	4.53 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.7%	
13C2-PFDoDA	9.028	615.0 -> 570.0	29247	1.14 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.1%	
13C2-PFTeDA	9.796	715.0 -> 670.0	21862	1.10 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.8%	
13C3-PFBS	5.699	302.0 -> 99.0	5824	2.44 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.8%	
13C3-PFHxS	7.250	402.0 -> 99.0	7006	2.43 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.2%		
13C4-PFBA	3.263	217.0 -> 172.0	121821	9.98 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.8%		
13C4-PFHpA	6.540	367.0 -> 322.0	29601	2.52 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.8%		
13C5-PFHxA	5.745	318.0 -> 273.0	36861	2.50 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.9%		
13C5-PFPeA	4.637	268.0 -> 223.0	63498	5.05 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.9%		
13C6-PFDA	8.127	519.0 -> 474.0	19264	1.23 µg/L		-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.5%		
13C7-PFUnDA	8.608	570.0 -> 525.0	28979	1.18 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.5%		
13C8-FOSA	9.345	506.0 -> 78.0	20661	2.55 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.0%		
13C8-PFOA	7.124	421.0 -> 376.0	65548	2.58 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.1%		
13C8-PFOS	8.315	507.0 -> 99.0	6249	2.45 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.8%		
13C9-PFNA	7.644	472.0 -> 427.0	25531	1.25 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.3%		
d3-MeFOSAA	8.160	573.0 -> 419.0	43489	5.20 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.0%		
13C3-HFPO-DA	6.074	287.0 -> 169.0	24686	10.66 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 106.6%		
d3-MeFOSA	10.624	515.0 -> 169.0	15328	2.43 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.3%		
d5-EtFOSAA	8.356	589.0 -> 419.0	33743	5.00 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.0%		
d7-MeFOSE	10.520	623.0 -> 59.0	179752	26.10 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 104.4%		
d9-EtFOSE	10.803	639.0 -> 59.0	257654	26.65 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 106.6%		
d5-EtFOSA	10.895	531.0 -> 169.0	16477	2.59 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.7%		
Target Compounds						QValue
4:2FTS	5.433	327.0 -> 307.0	3244	1.46 µg/L		96
		327.0 -> 81.0	1810			
6:2FTS	6.898	427.0 -> 407.0	5179	1.35 µg/L		97
		427.0 -> 81.0	2061			
8:2FTS	7.915	527.0 -> 507.0	5213	1.48 µg/L		100
		527.0 -> 81.0	2222			
EtFOSAA	8.357	584.0 -> 419.0	1874	0.35 µg/L	m	80
		584.0 -> 483.0	1148			
FOSA	9.348	498.0 -> 78.0	2611	0.36 µg/L	m	99
		498.0 -> 478.0	116			
MeFOSAA	8.149	570.0 -> 419.0	2402	0.37 µg/L	m	95
		570.0 -> 512.0	833			
PFBA	3.255	213.0 -> 169.0	4936	1.53 µg/L		100
PFBS	5.713	299.0 -> 80.0	2332	0.32 µg/L		95
		299.0 -> 99.0	771			
PFDA	8.141	513.0 -> 469.0	4916	0.33 µg/L		92
		513.0 -> 219.0	680			
PFDoDA	9.029	613.0 -> 569.0	7325	0.35 µg/L		99
		613.0 -> 319.0	1165			
PFDS	9.206	599.0 -> 80.0	1277	0.35 µg/L		83

Perfluorinated Compounds by LC/MS/MS

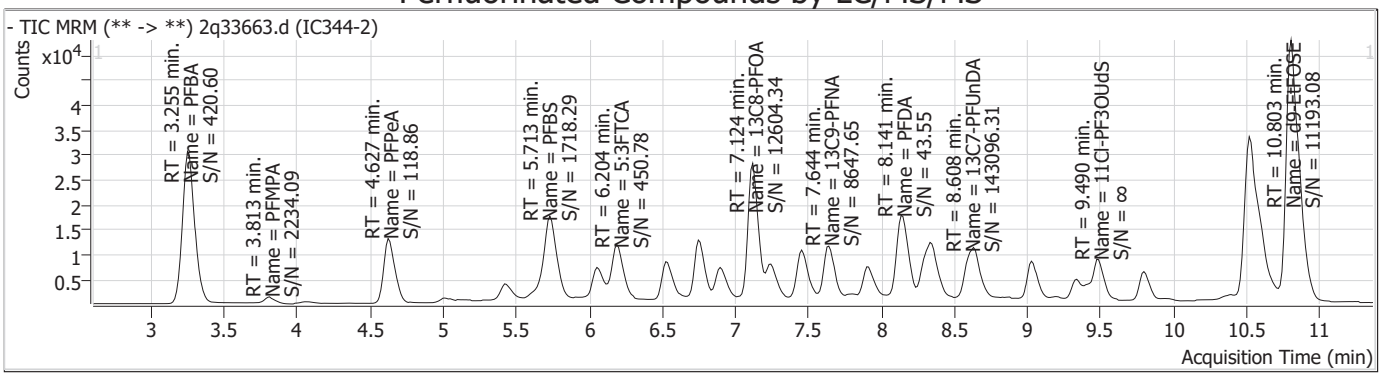
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	457				
PFHpA	6.541	363.0 -> 319.0	6268	0.33	µg/L		95
		363.0 -> 169.0	1263				
PFHpS	7.809	449.0 -> 80.0	1595	0.32	µg/L		80
		449.0 -> 99.0	597				
PFHxA	5.748	313.0 -> 269.0	4278	0.34	µg/L		100
		313.0 -> 119.0	129				
PFHxS	7.252	399.0 -> 80.0	1873	0.35	µg/L	m	100
		399.0 -> 99.0	1022				
PFNA	7.645	463.0 -> 419.0	4329	0.37	µg/L	m	91
		463.0 -> 219.0	1008				
PFNS	8.784	549.0 -> 80.0	795	0.37	µg/L		100
		549.0 -> 99.0	457				
PFOA	7.125	413.0 -> 369.0	7243	0.36	µg/L	m	99
		413.0 -> 169.0	1578				
PFOS	8.317	499.0 -> 80.0	1973	0.34	µg/L	m	94
		499.0 -> 99.0	1001				
PFPeA	4.627	263.0 -> 219.0	7683	0.68	µg/L		100
PFPeS	6.617	349.0 -> 80.0	839	0.32	µg/L		92
		349.0 -> 99.0	305				
PFTeDA	9.796	713.0 -> 669.0	5984	0.33	µg/L		97
		713.0 -> 169.0	533				
PFTrDA	9.426	663.0 -> 619.0	8940	0.36	µg/L		98
		663.0 -> 169.0	911				
PFUnDA	8.609	563.0 -> 519.0	6658	0.34	µg/L	m	100
		563.0 -> 269.0	1321				
11Cl-PF3OUdS	9.490	631.0 -> 451.0	26831	1.24	µg/L		99
		633.0 -> 453.0	8259				
9Cl-PF3ONS	8.660	531.0 -> 351.0	22223	1.28	µg/L		96
		533.0 -> 353.0	6852				
ADONA	6.765	377.0 -> 251.0	44760	1.21	µg/L		98
		377.0 -> 85.0	14420				
HFPO-DA	6.075	285.0 -> 169.0	3266	1.36	µg/L	#	87
		285.0 -> 185.0	431				
3:3FTCA	4.065	241.0 -> 177.0	1671	1.82	µg/L		93
		241.0 -> 117.0	150				
5:3FTCA	6.204	341.0 -> 237.0	27662	8.80	µg/L		98
		341.0 -> 217.0	19357				
7:3FTCA	7.458	441.0 -> 337.0	35719	8.74	µg/L		98
		441.0 -> 317.0	15158				
EtFOSA	10.895	526.0 -> 219.0	2578	0.37	µg/L		97
		526.0 -> 169.0	3380				
EtFOSE	10.817	630.0 -> 59.0	34401	3.44	µg/L		100
MeFOSA	10.626	512.0 -> 169.0	2725	0.36	µg/L		98
		512.0 -> 219.0	1876				
MeFOSE	10.544	616.0 -> 59.0	23611	3.49	µg/L	m	100
PFDoDS	9.948	699.0 -> 80.0	1102	0.33	µg/L		89
		699.0 -> 99.0	630				
NFDHA	5.639	295.0 -> 201.0	830	0.81	µg/L		96
		201.0 -> 85.0	4801				
		295.0 -> 85.0	298				
PFMBA	5.015	279.0 -> 85.0	4674	0.71	µg/L		100
PFMPA	3.813	229.0 -> 85.0	6850	0.72	µg/L		100
PFEESA	6.168	315.0 -> 135.0	9787	0.64	µg/L		96
		315.0 -> 69.0	1198				

 # = Qualifier out of range, m = manually integrated, + = Area summed

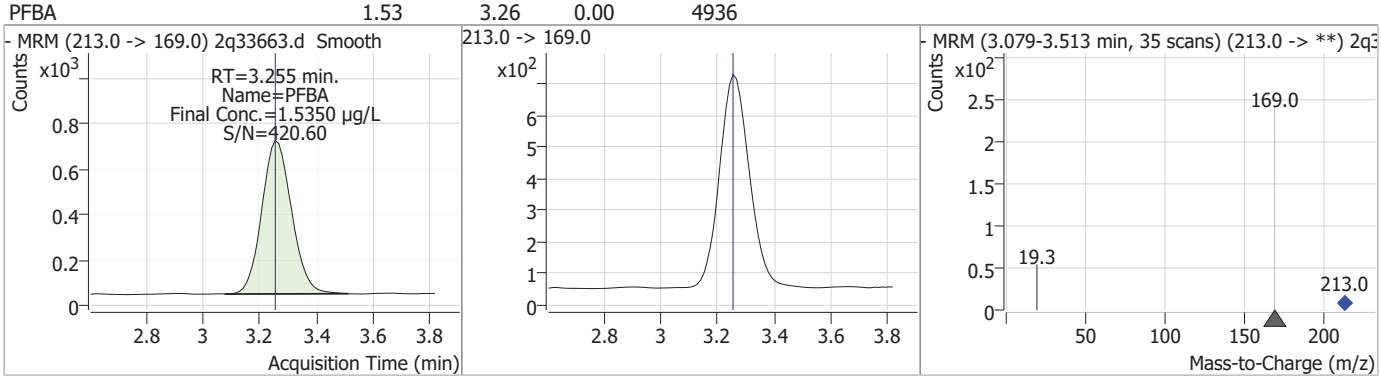
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

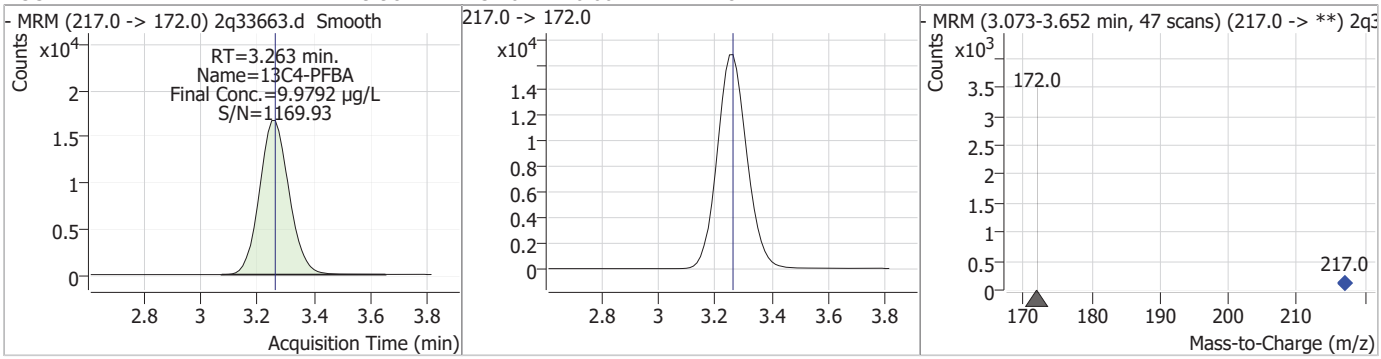
Perfluorinated Compounds by LC/MS/MS



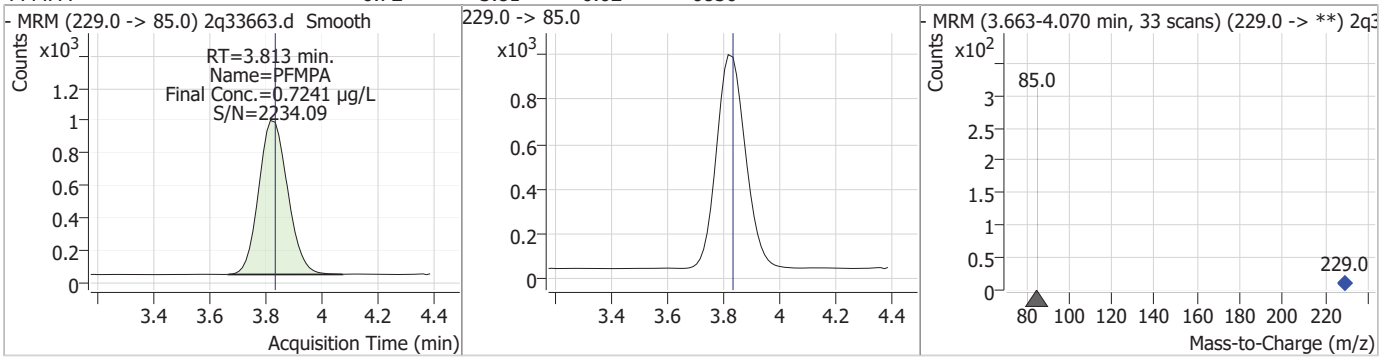
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	1.53	3.26	0.00	4936				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.98	3.26	0.00	121821				

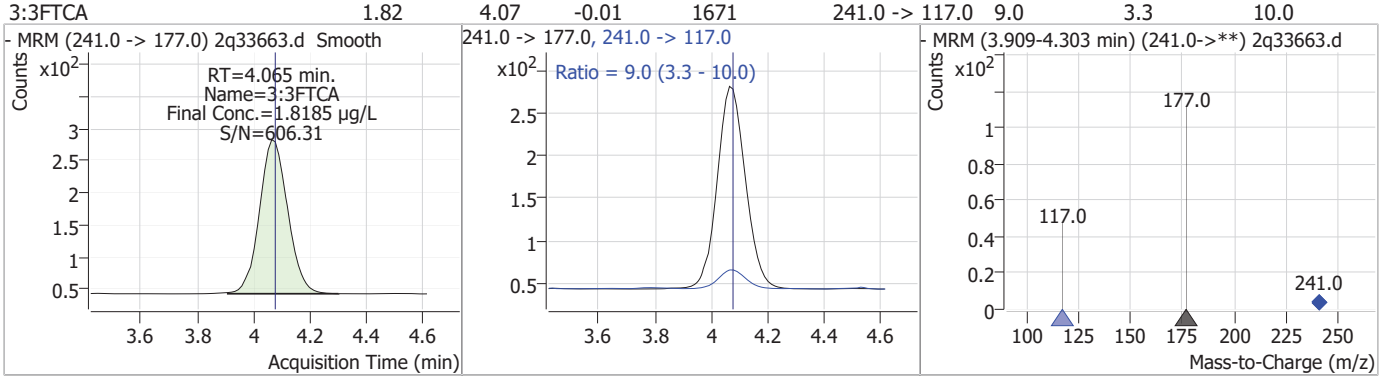


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.72	3.81	-0.02	6850				

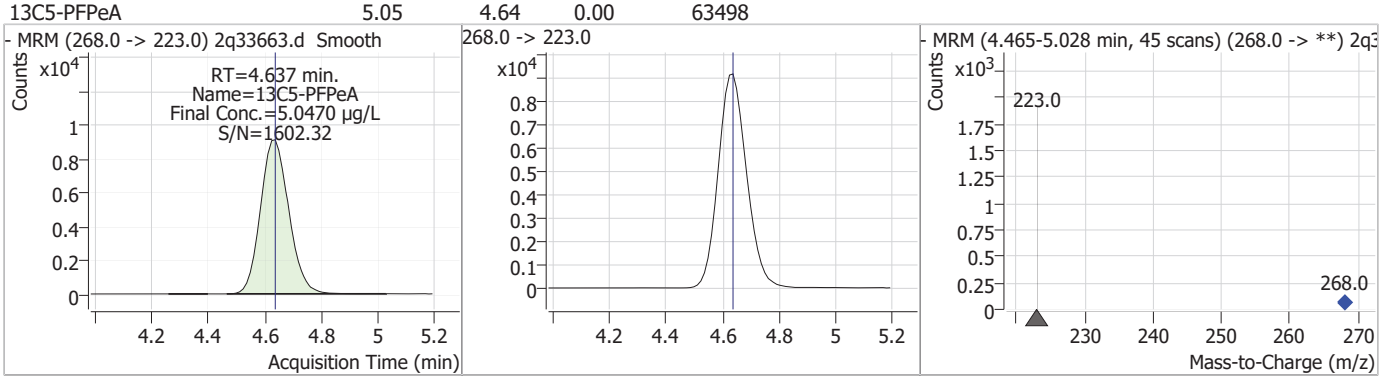


Perfluorinated Compounds by LC/MS/MS

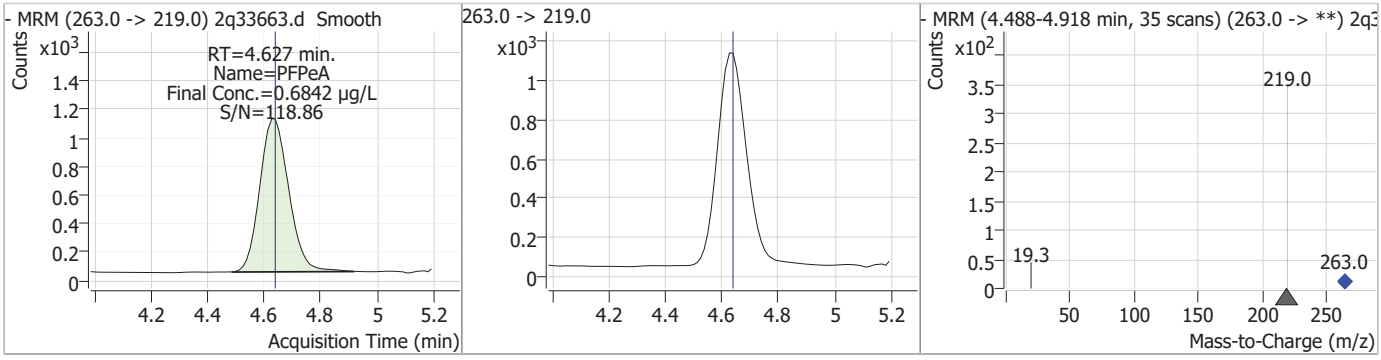
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	1.82	4.07	-0.01	1671	241.0 -> 117.0	9.0	3.3	10.0



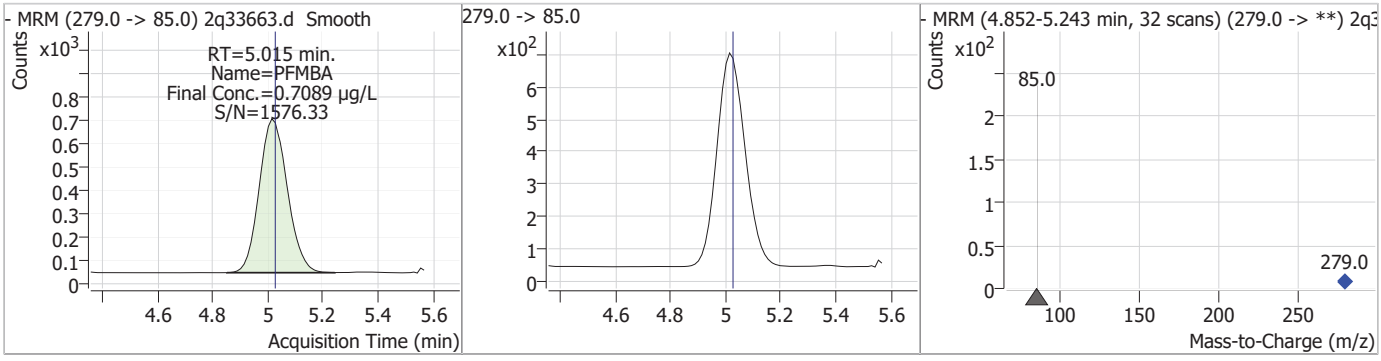
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.05	4.64	0.00	63498				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.68	4.63	-0.01	7683				

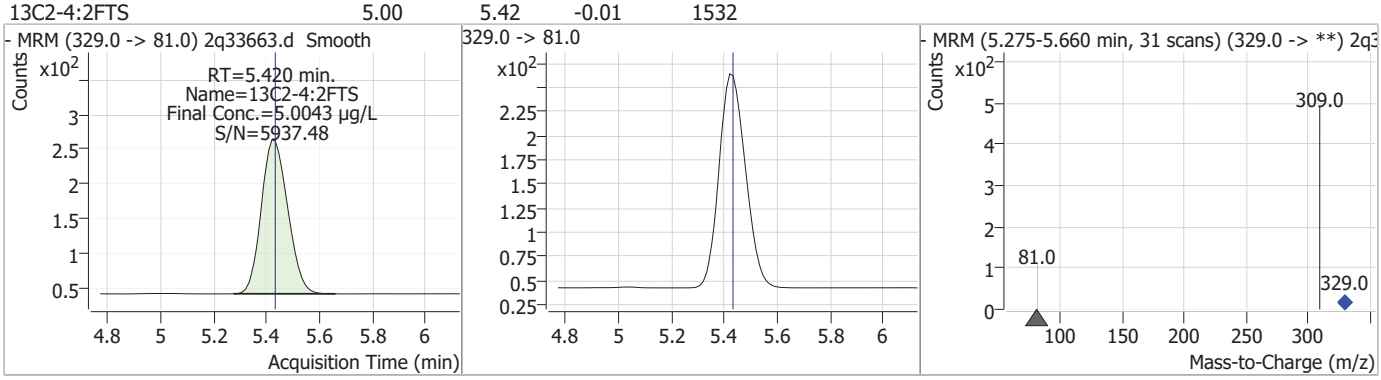


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.71	5.01	-0.01	4674				

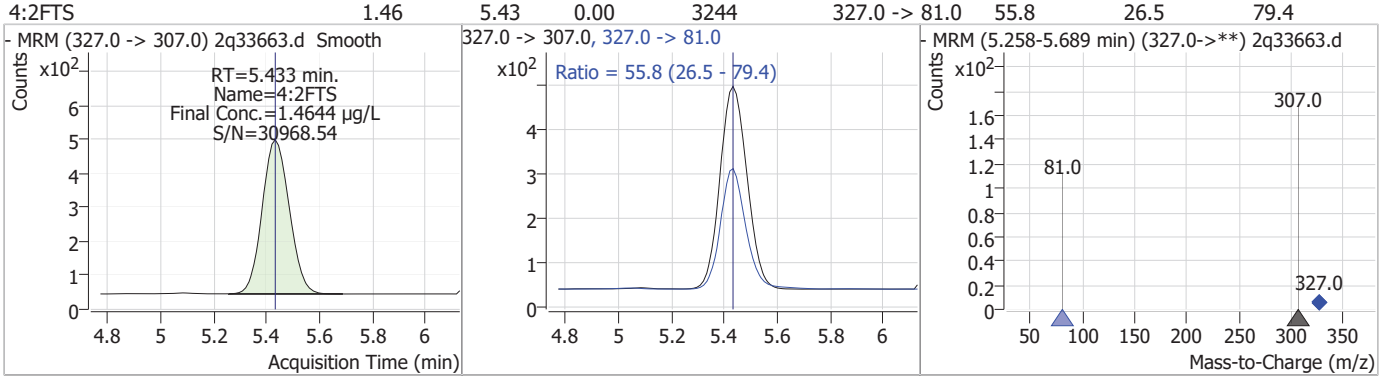


Perfluorinated Compounds by LC/MS/MS

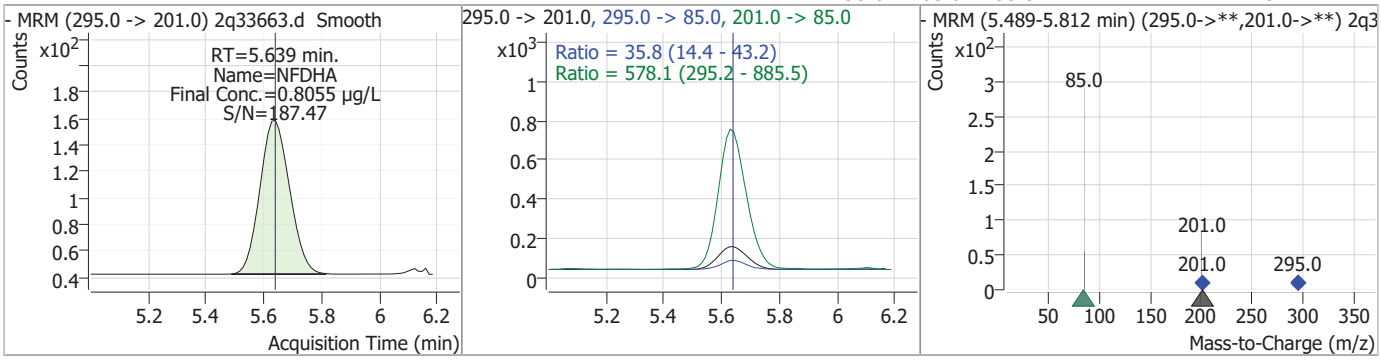
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.00	5.42	-0.01	1532				



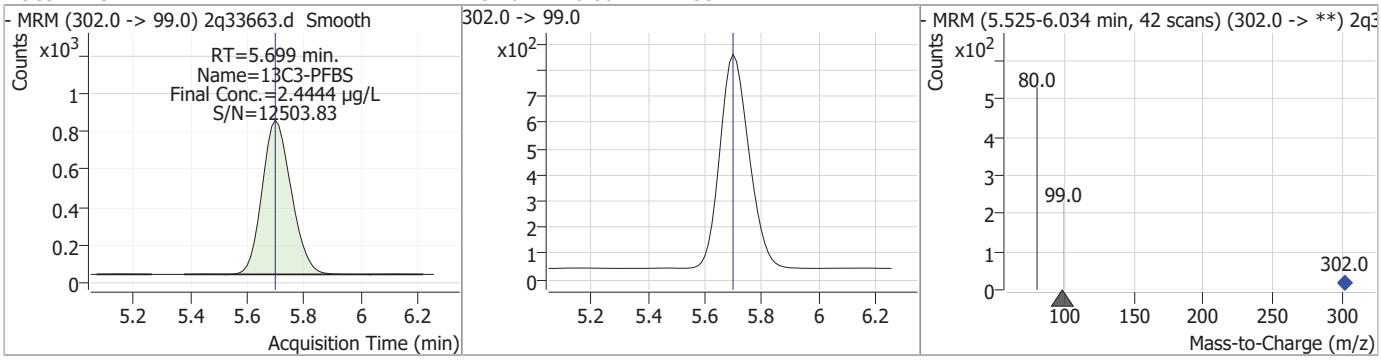
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	1.46	5.43	0.00	3244	327.0 -> 81.0	55.8	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.81	5.64	0.00	830	201.0 -> 85.0	578.1	295.2	885.5
					295.0 -> 85.0	35.8	14.4	43.2

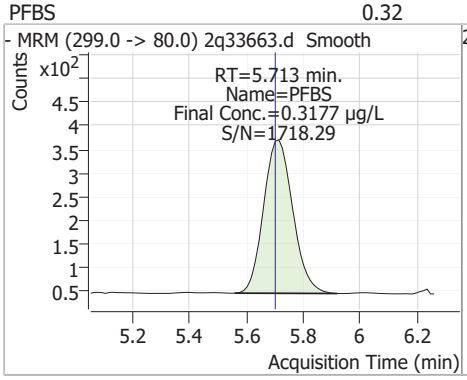


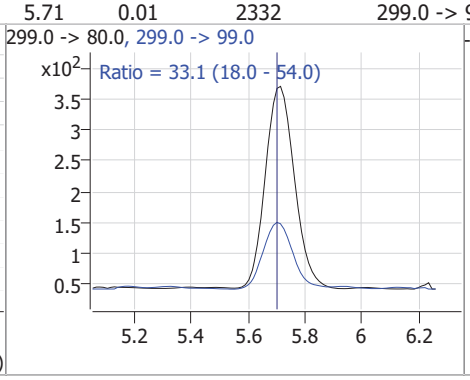
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.44	5.70	0.00	5824				

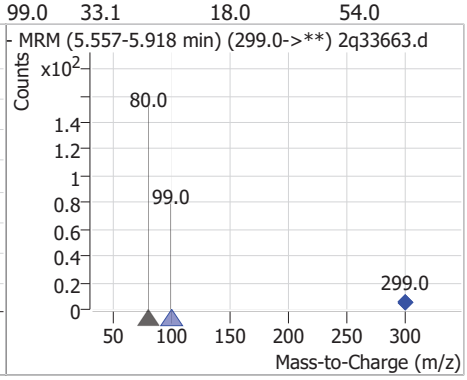


Perfluorinated Compounds by LC/MS/MS

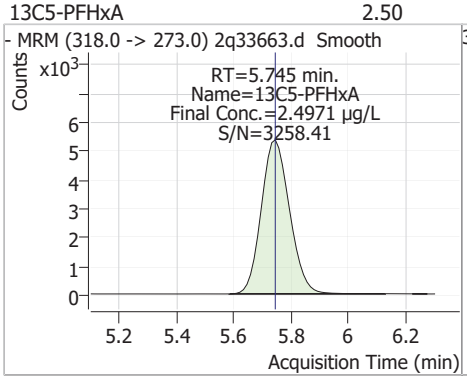
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.32	5.71	0.01	2332	299.0 -> 99.0	33.1	18.0	54.0

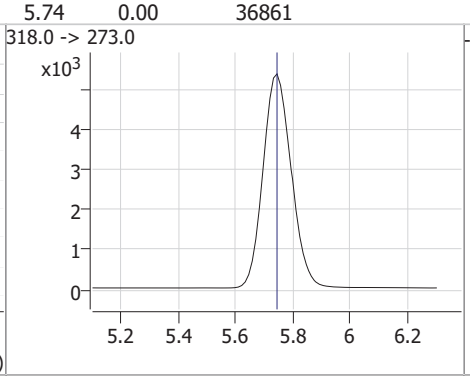


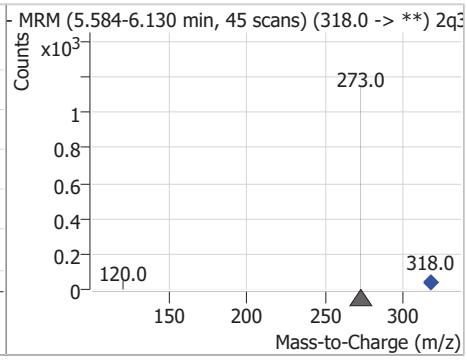




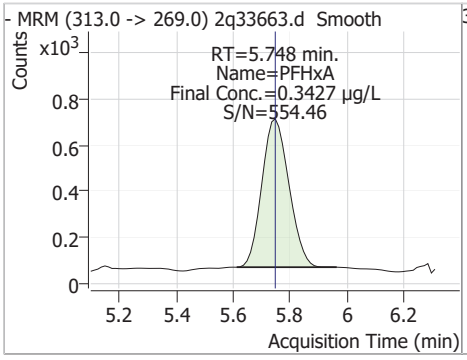
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.50	5.74	0.00	36861				

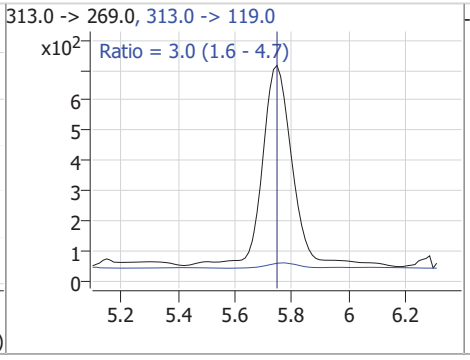


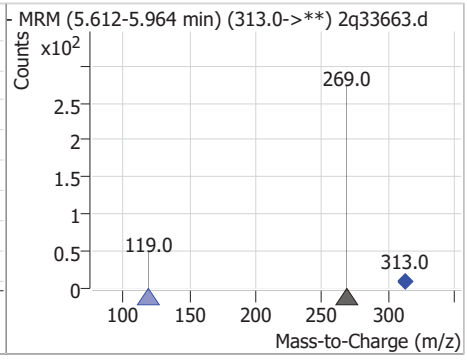




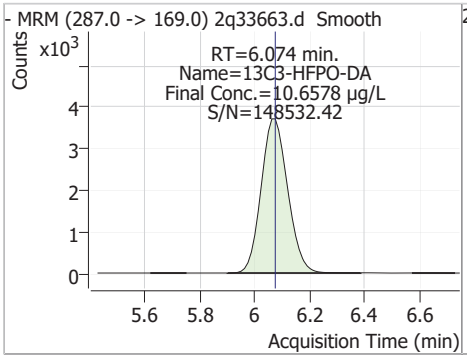
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.34	5.75	0.00	4278	313.0 -> 119.0	3.0	1.6	4.7

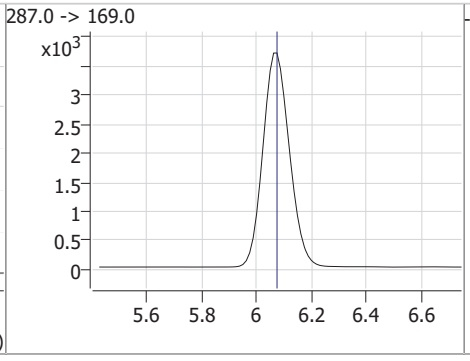


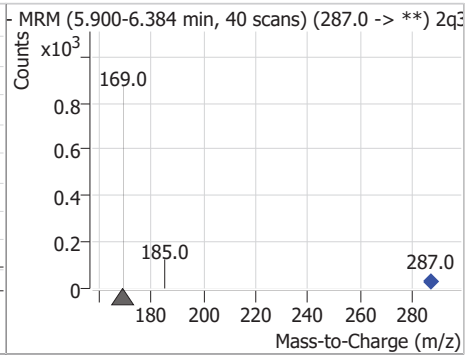




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.66	6.07	0.00	24686				







7.6.18

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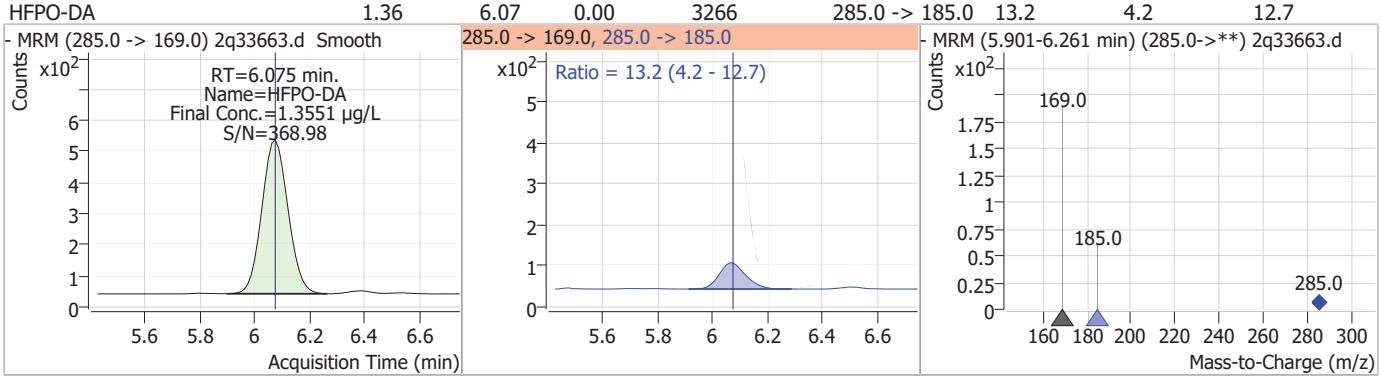
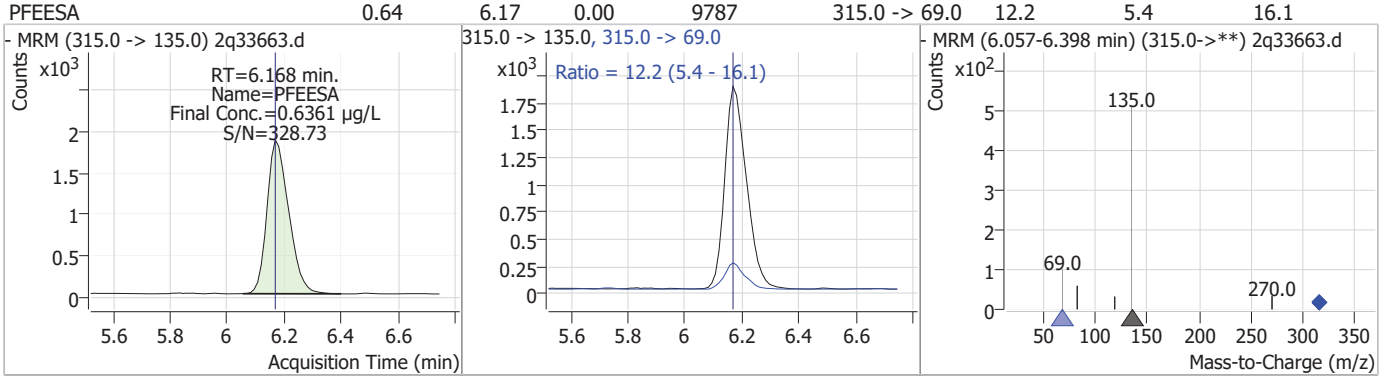
Perfluorinated Compounds by LC/MS/MS

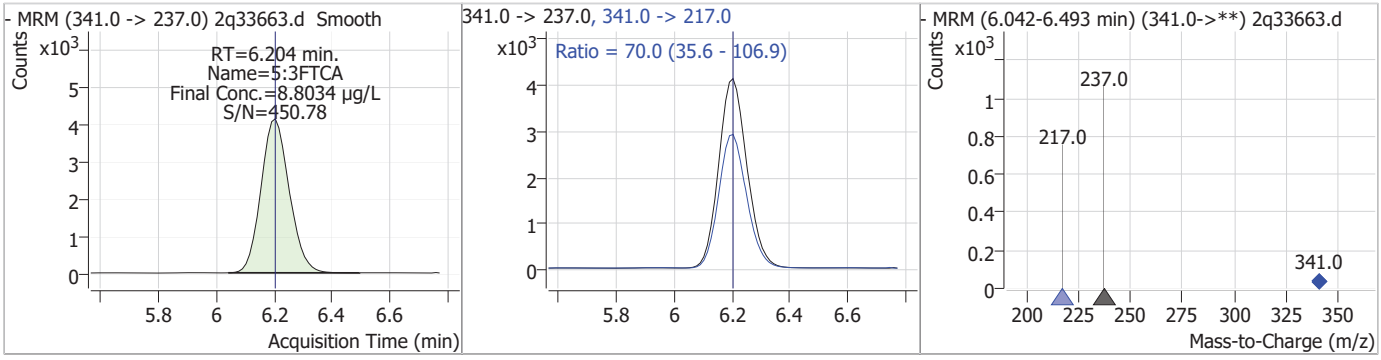
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	1.36	6.07	0.00	3266	285.0 -> 185.0	13.2	4.2	12.7



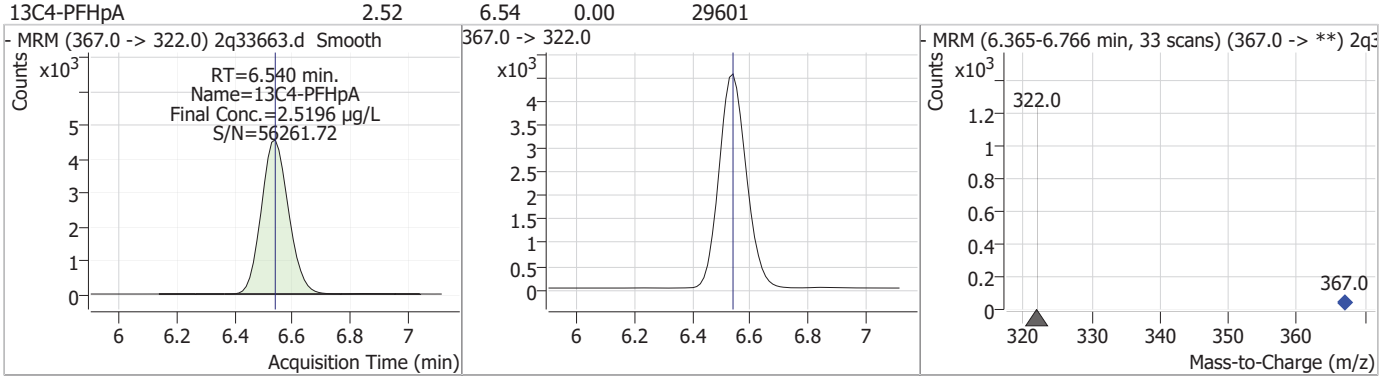
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.64	6.17	0.00	9787	315.0 -> 69.0	12.2	5.4	16.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	8.80	6.20	0.00	27662	341.0 -> 217.0	70.0	35.6	106.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.52	6.54	0.00	29601				

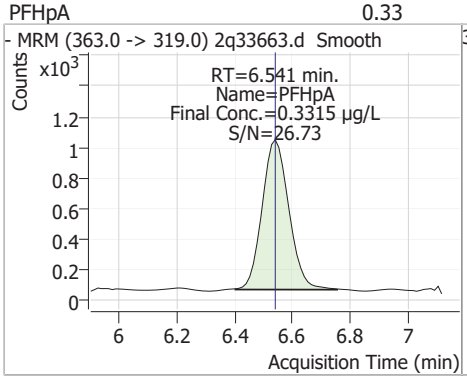


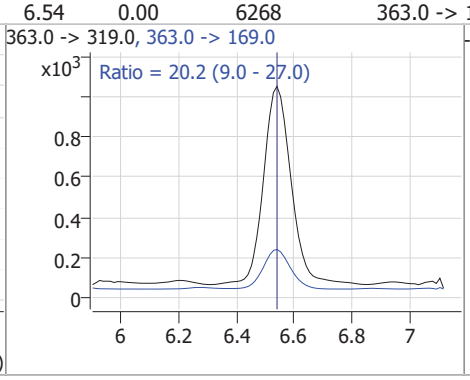
7.6.18

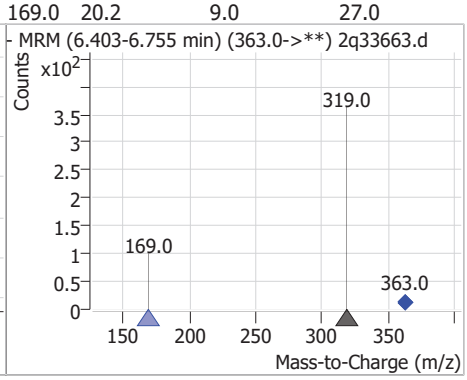
7

Perfluorinated Compounds by LC/MS/MS

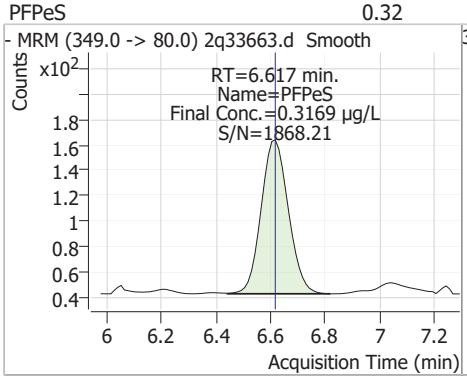
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.33	6.54	0.00	6268	363.0 -> 169.0	20.2	9.0	27.0

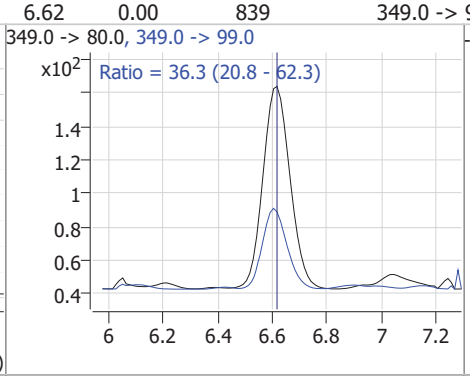


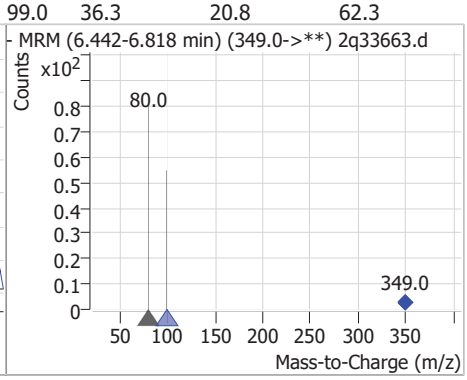




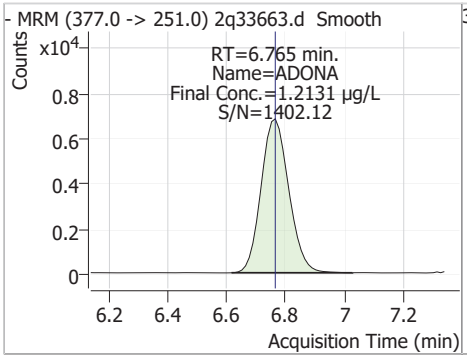
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.32	6.62	0.00	839	349.0 -> 99.0	36.3	20.8	62.3

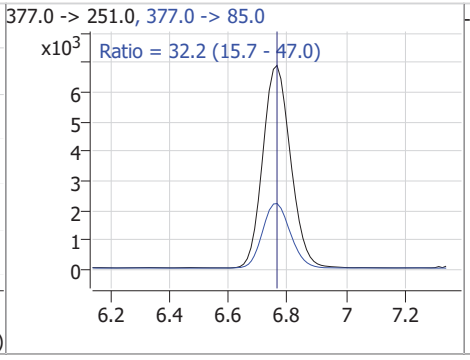


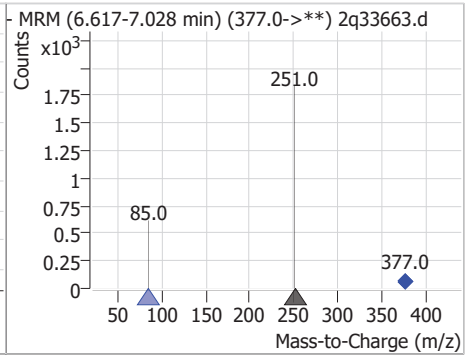




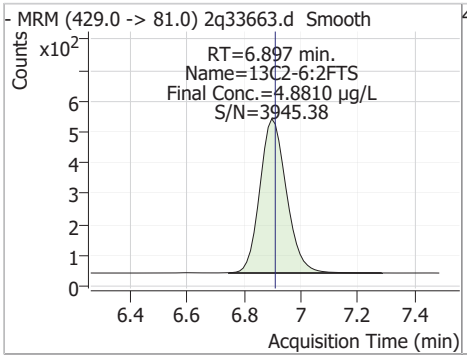
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	1.21	6.77	0.00	44760	377.0 -> 85.0	32.2	15.7	47.0

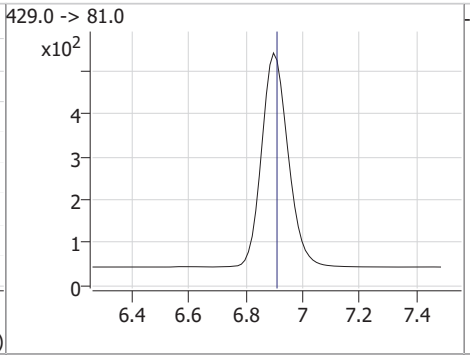


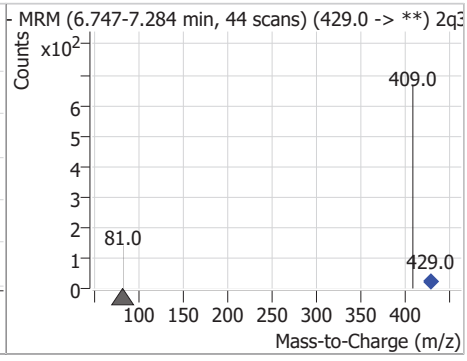




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.88	6.90	-0.01	3230				







7.6.18

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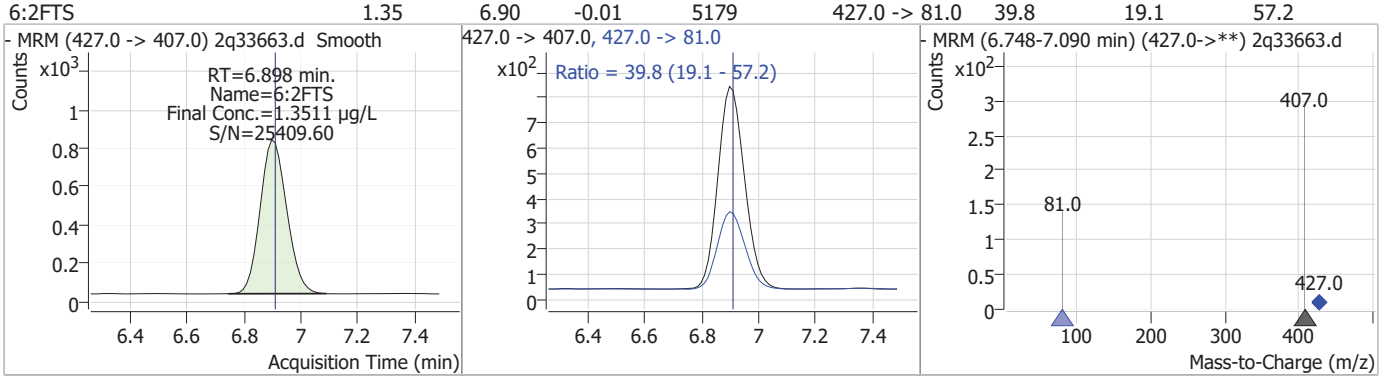
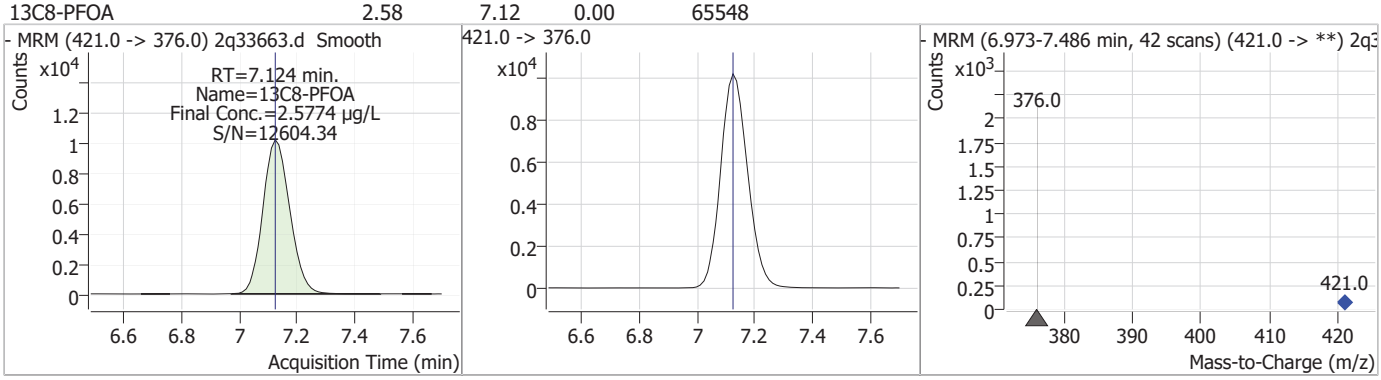
Perfluorinated Compounds by LC/MS/MS

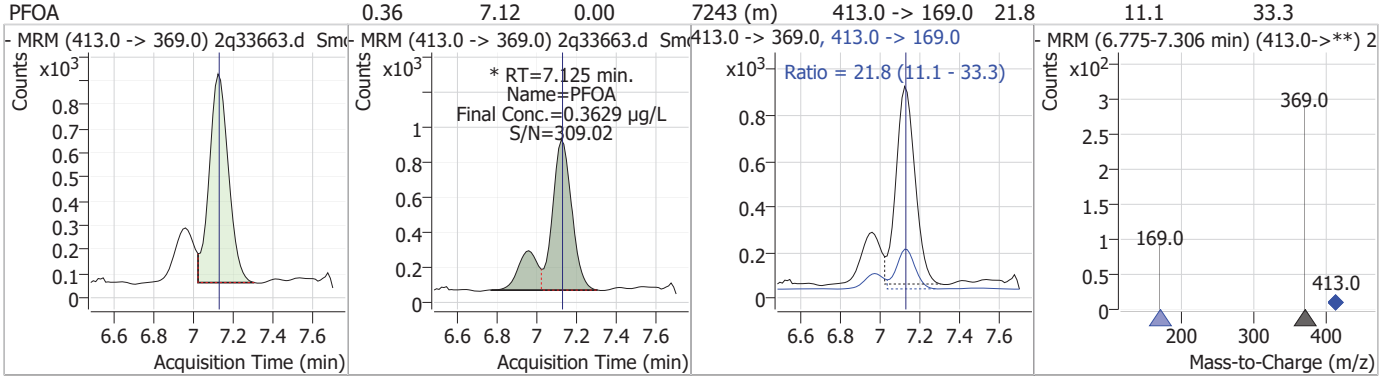
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	1.35	6.90	-0.01	5179	427.0 -> 81.0	39.8	19.1	57.2



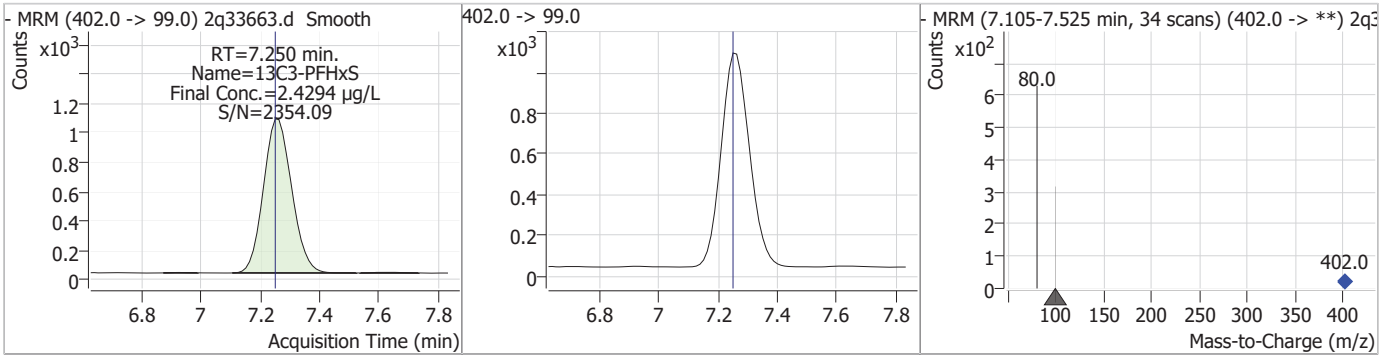
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.58	7.12	0.00	65548				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.36	7.12	0.00	7243 (m)	413.0 -> 169.0	21.8	11.1	33.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.43	7.25	0.00	7006				



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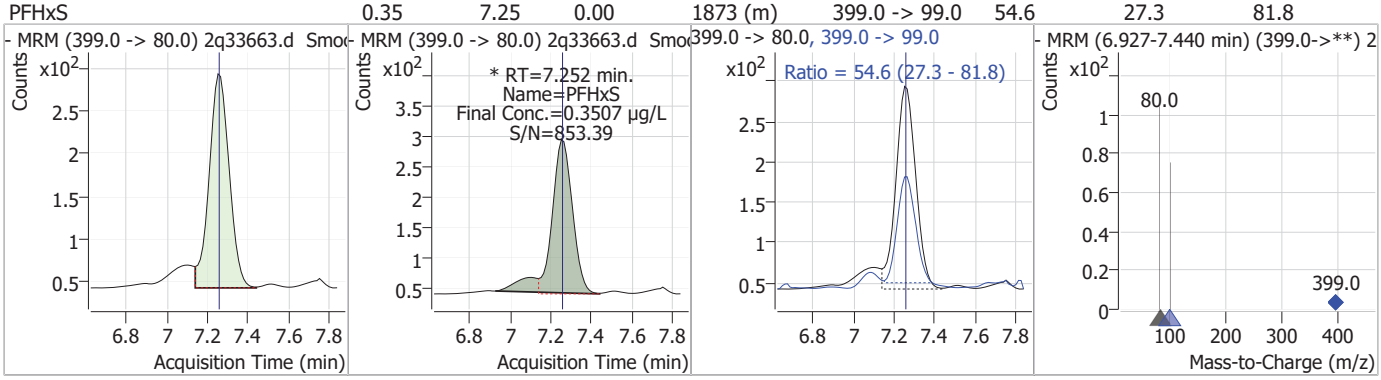
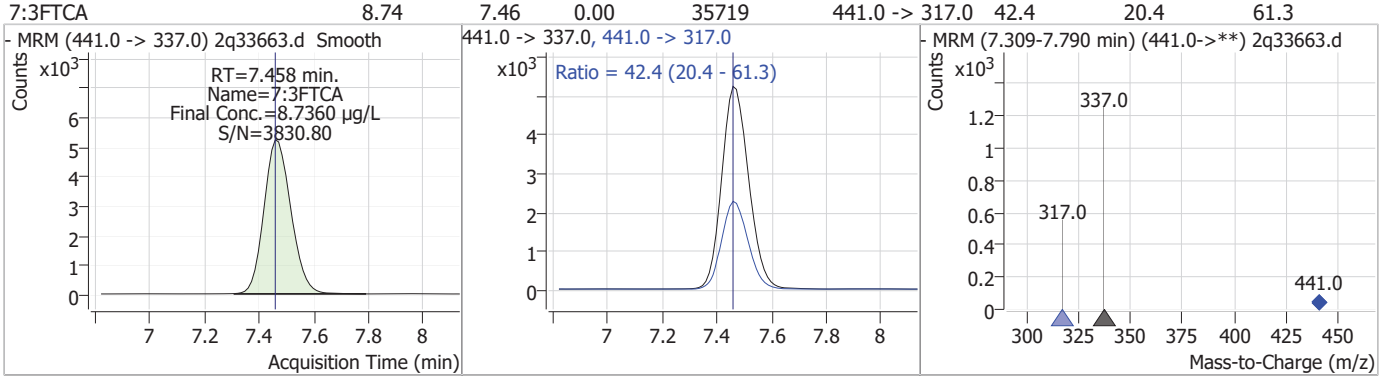
Perfluorinated Compounds by LC/MS/MS

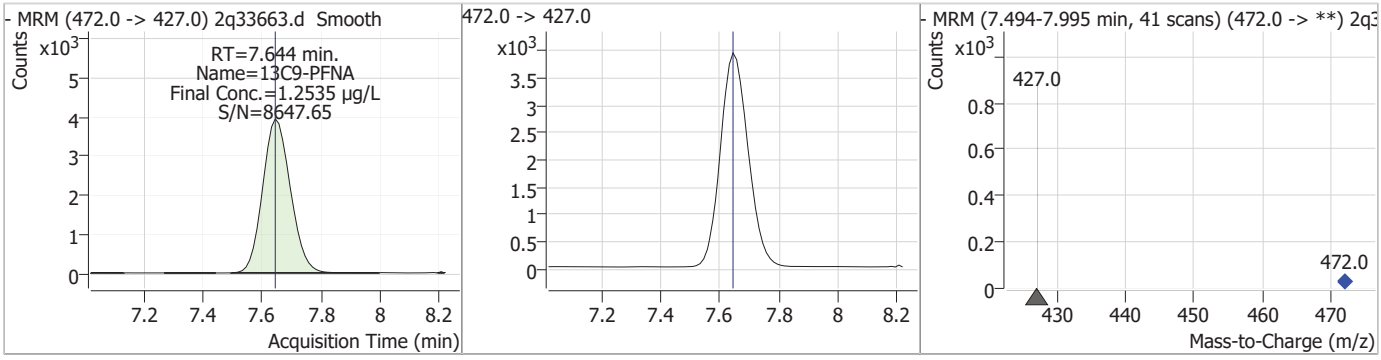
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.35	7.25	0.00	1873 (m)	399.0 -> 99.0	54.6	27.3	81.8



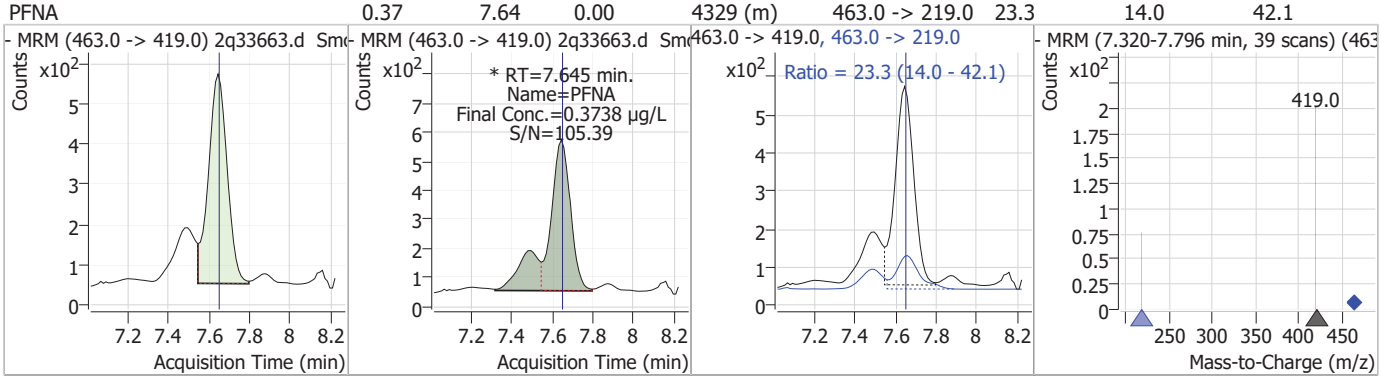
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	8.74	7.46	0.00	35719	441.0 -> 317.0	42.4	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.25	7.64	0.00	25531				

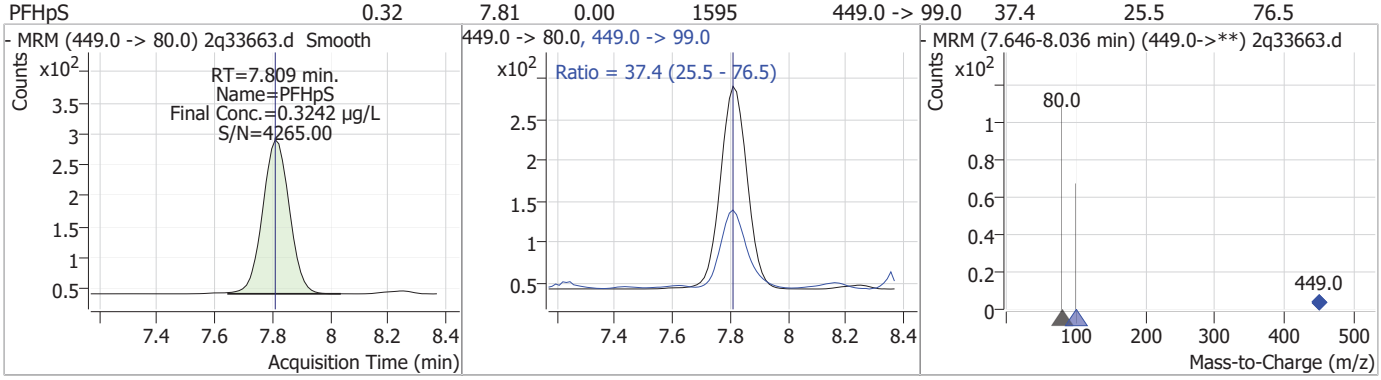


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.37	7.64	0.00	4329 (m)	463.0 -> 219.0	23.3	14.0	42.1

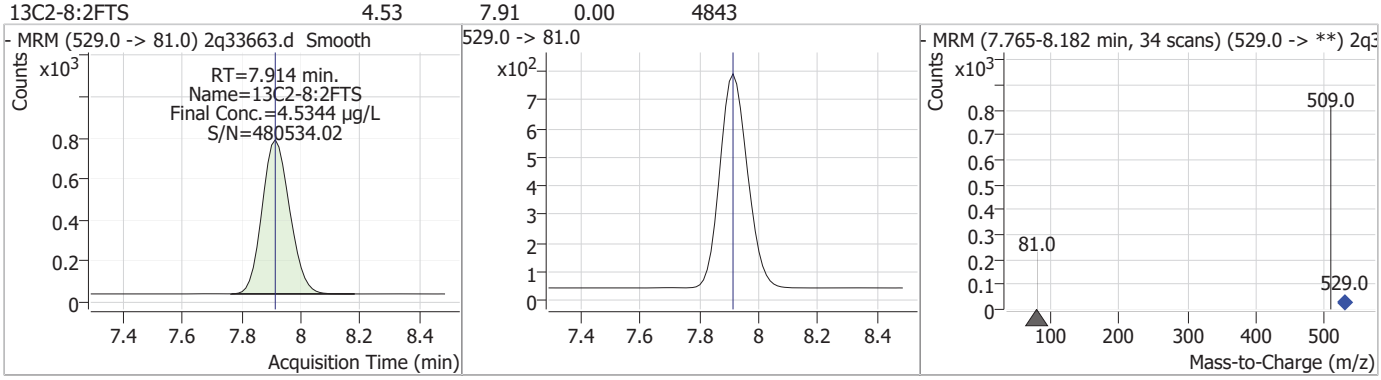


Perfluorinated Compounds by LC/MS/MS

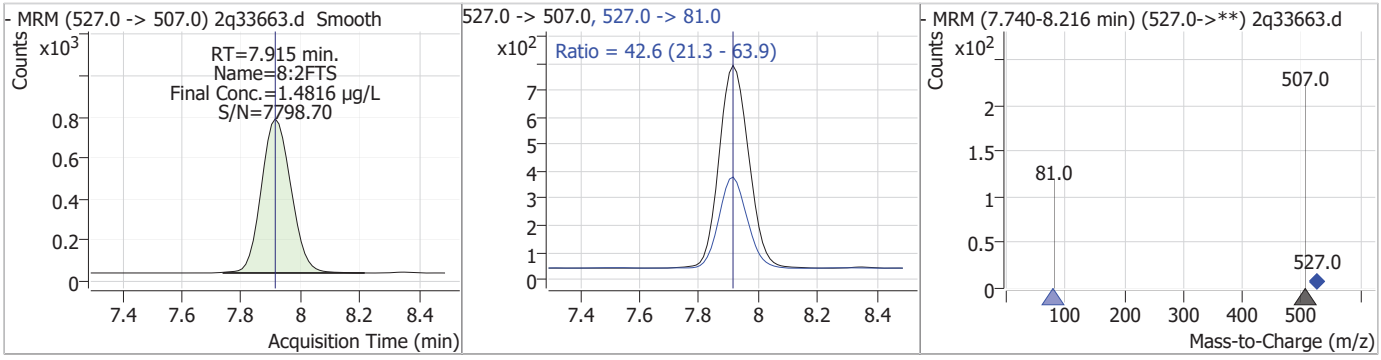
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.32	7.81	0.00	1595	449.0 -> 99.0	37.4	25.5	76.5



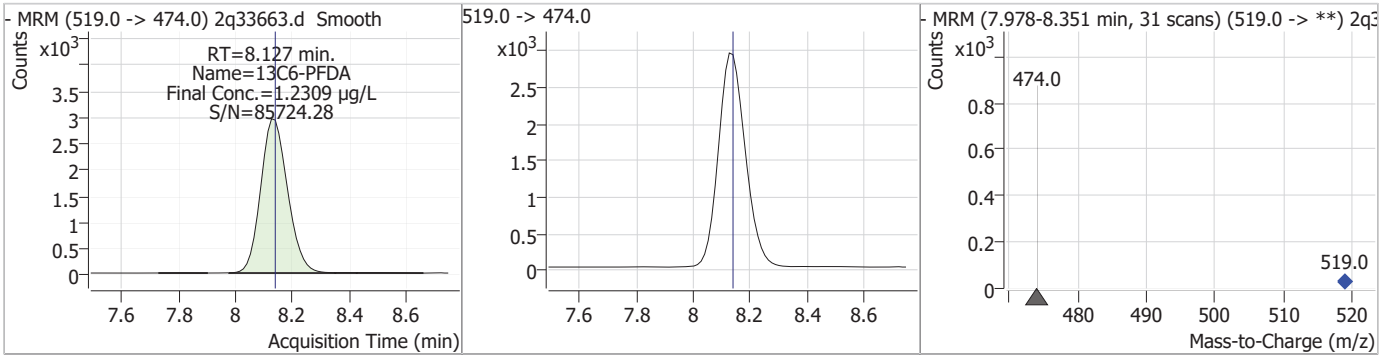
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.53	7.91	0.00	4843				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	1.48	7.91	0.00	5213	527.0 -> 81.0	42.6	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.23	8.13	-0.01	19264				



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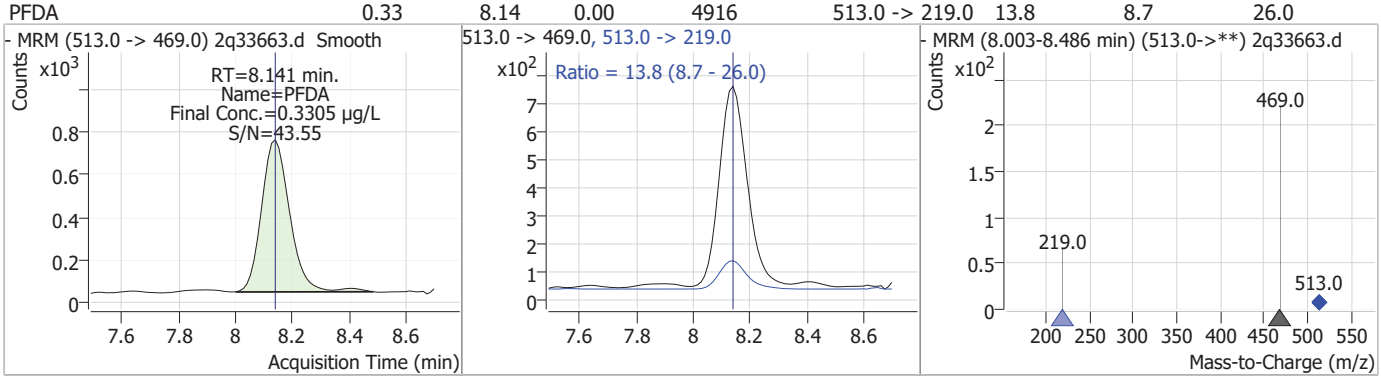
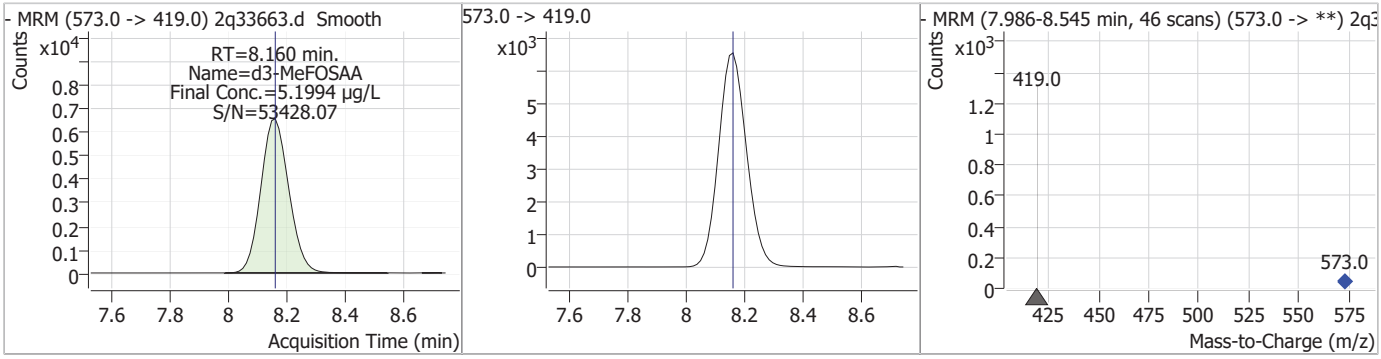
Perfluorinated Compounds by LC/MS/MS

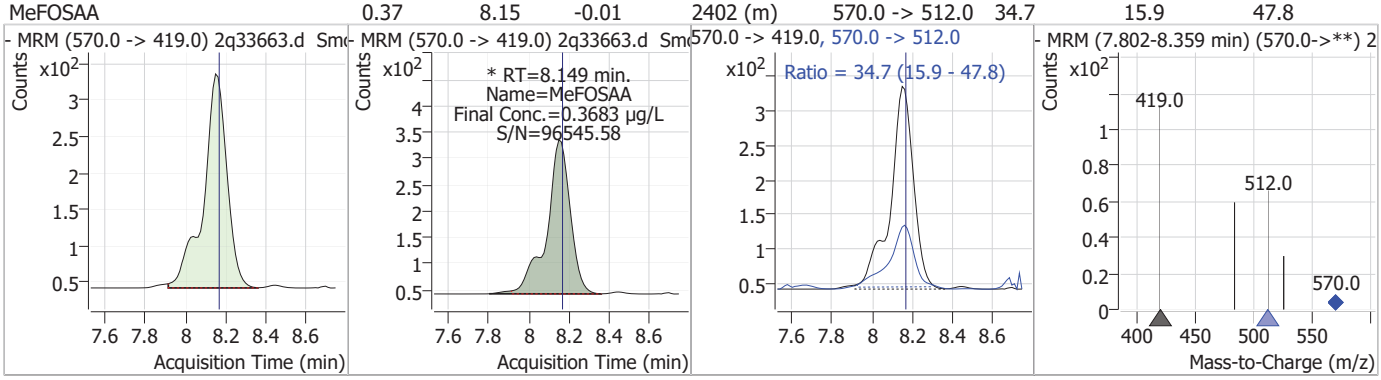
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.33	8.14	0.00	4916	513.0 -> 219.0	13.8	8.7	26.0



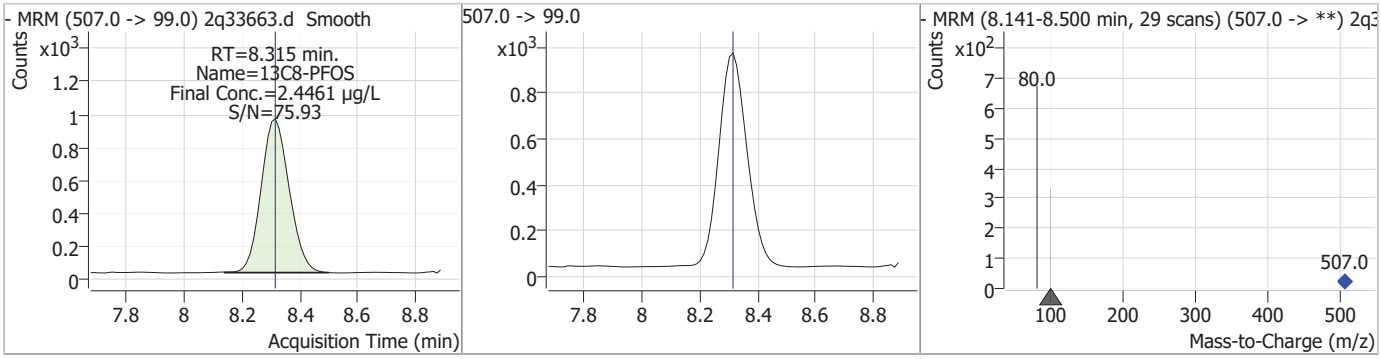
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.20	8.16	0.00	43489				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.37	8.15	-0.01	2402 (m)	570.0 -> 512.0	34.7	15.9	47.8

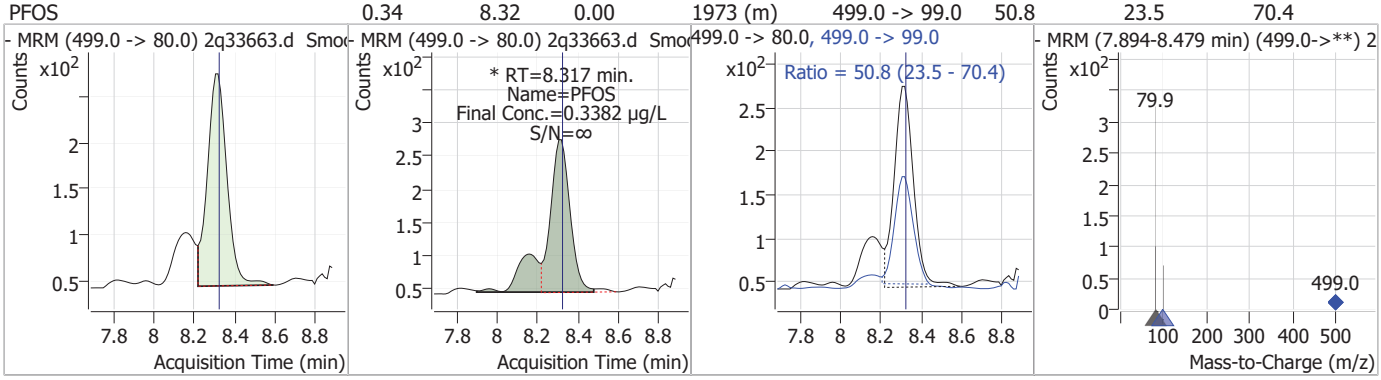


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.45	8.32	0.00	6249				

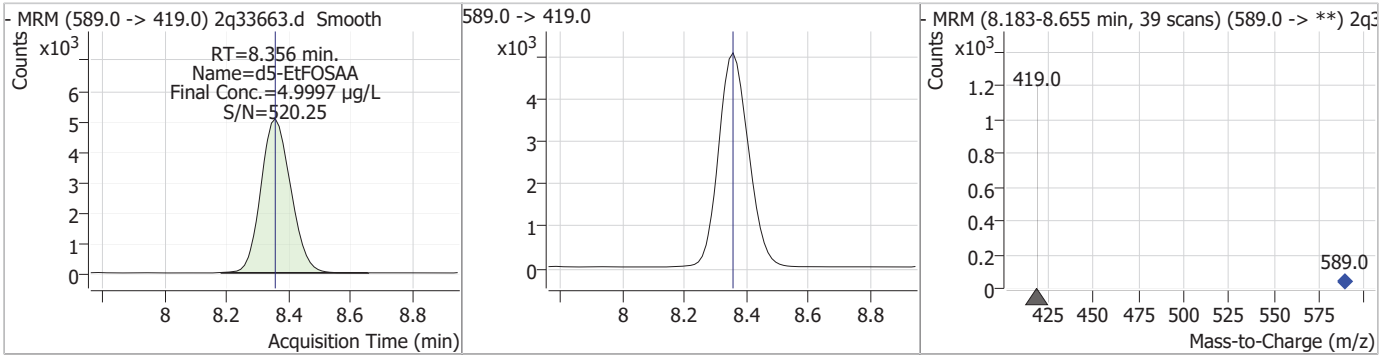


Perfluorinated Compounds by LC/MS/MS

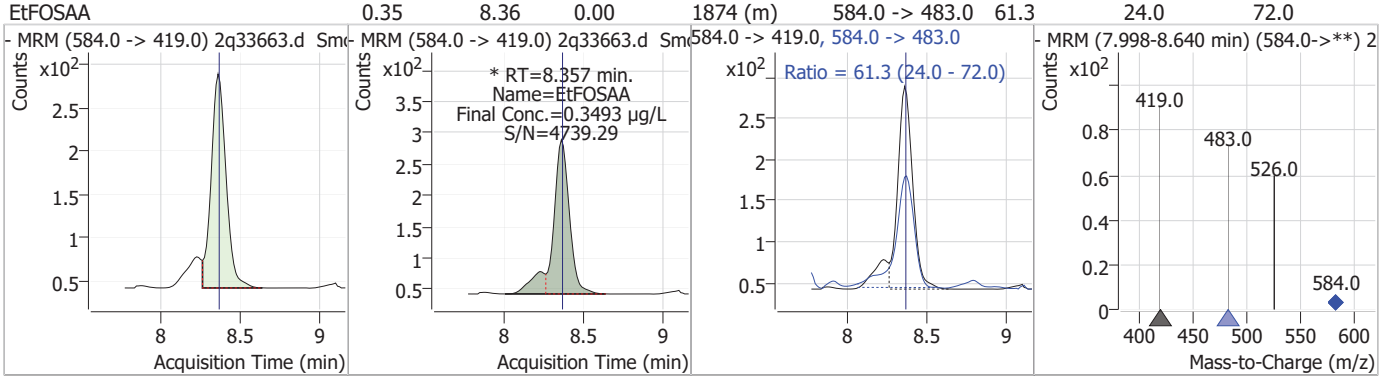
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.34	8.32	0.00	1973 (m)	499.0 -> 99.0	50.8	23.5	70.4



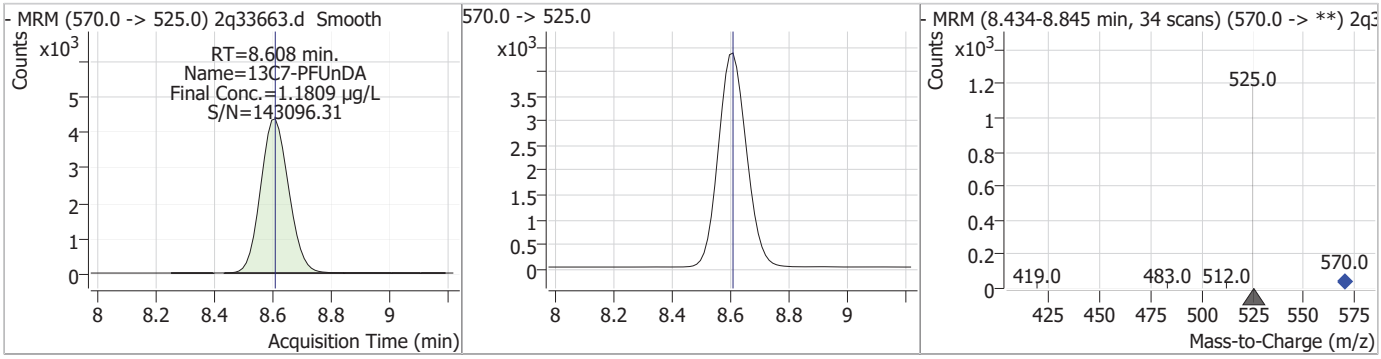
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.00	8.36	0.00	33743				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.35	8.36	0.00	1874 (m)	584.0 -> 483.0	61.3	24.0	72.0

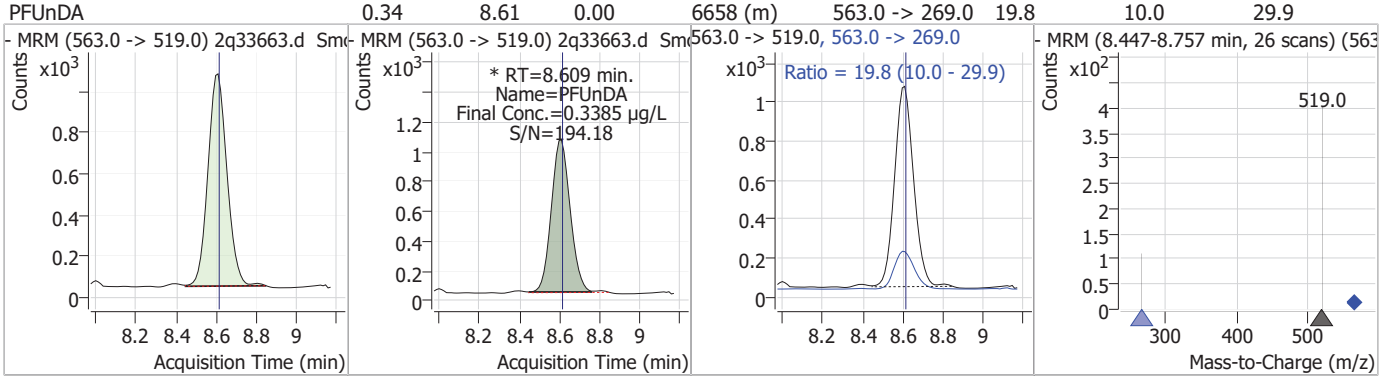


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.18	8.61	0.00	28979				

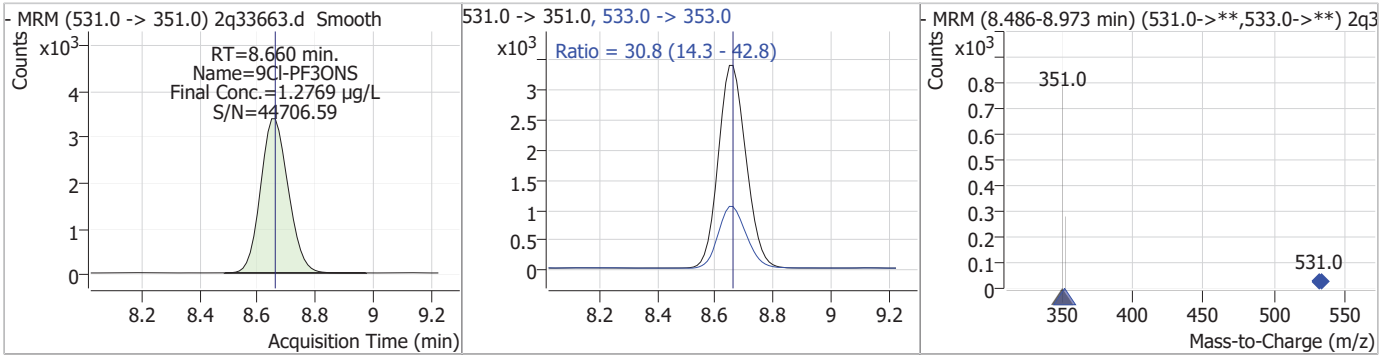


Perfluorinated Compounds by LC/MS/MS

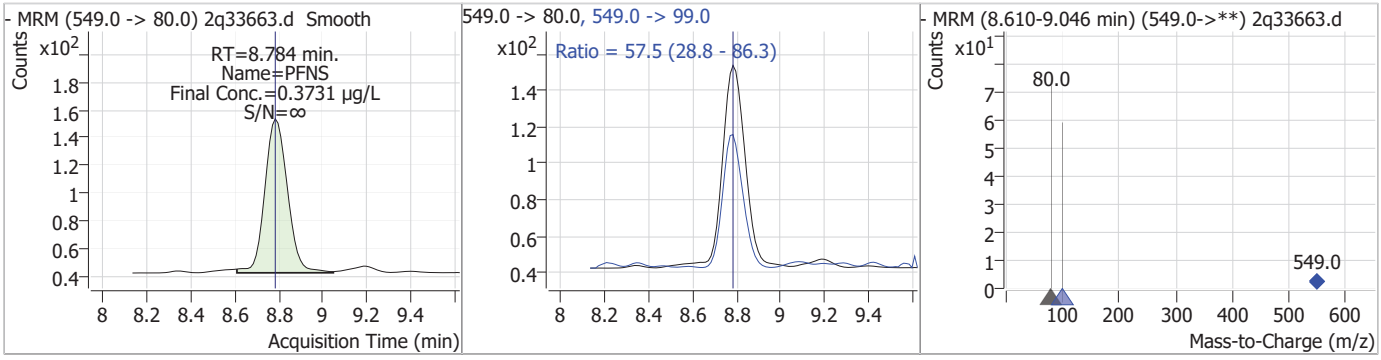
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.34	8.61	0.00	6658 (m)	563.0 -> 269.0	19.8	10.0	29.9



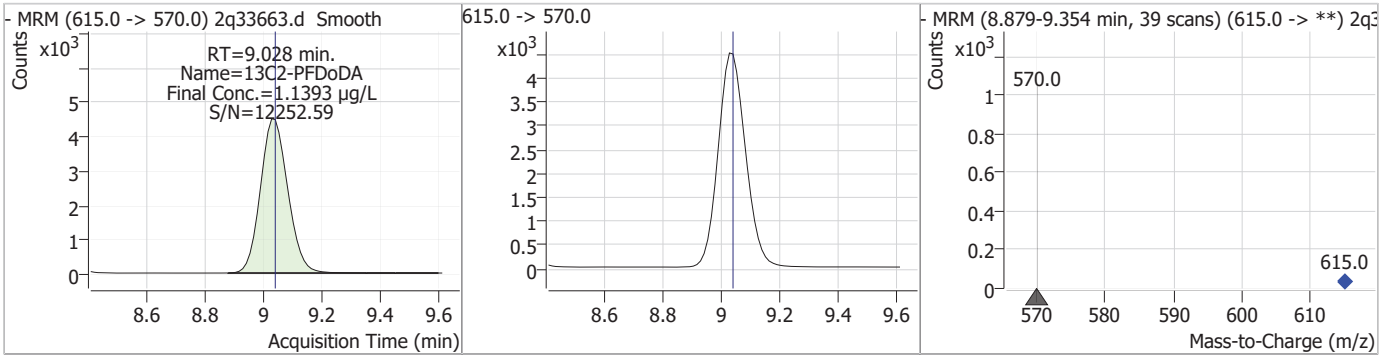
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	1.28	8.66	0.00	22223	533.0 -> 353.0	30.8	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.37	8.78	0.00	795	549.0 -> 99.0	57.5	28.8	86.3

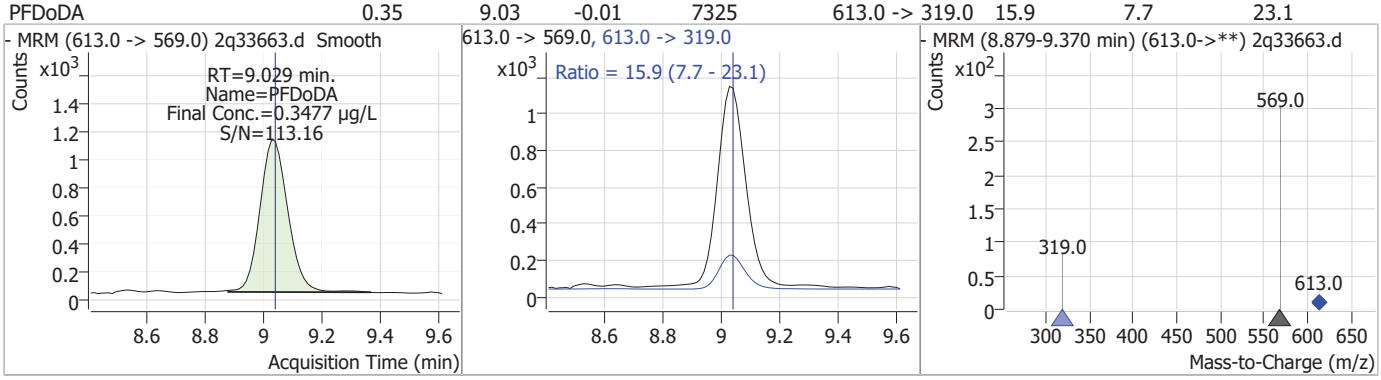


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.14	9.03	-0.01	29247				

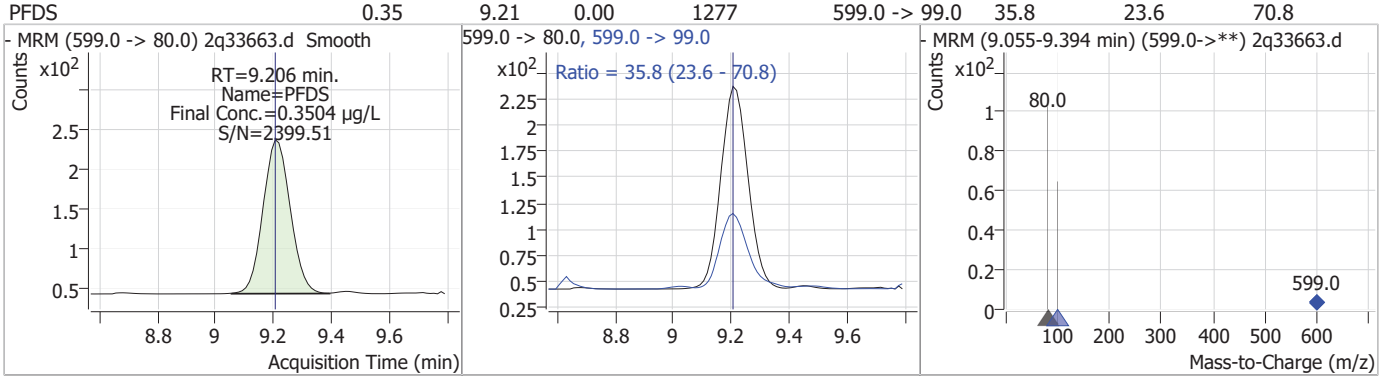


Perfluorinated Compounds by LC/MS/MS

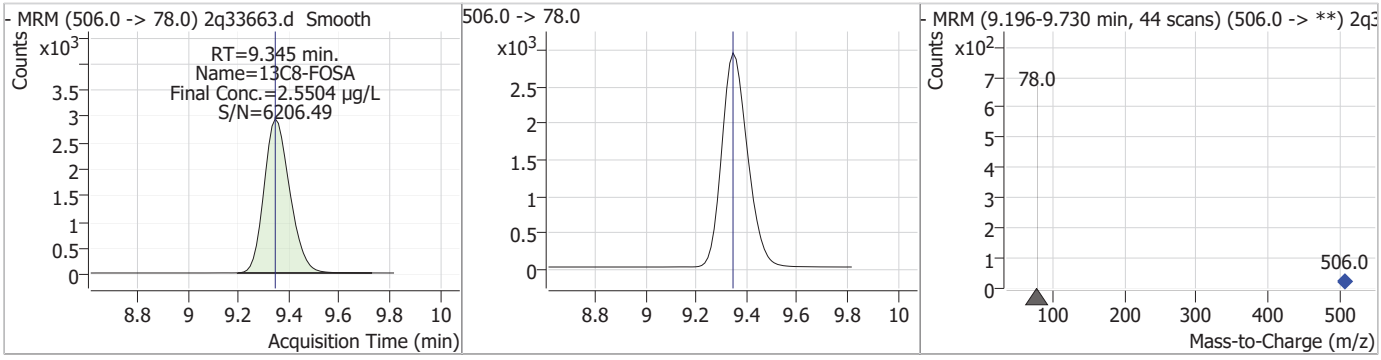
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.35	9.03	-0.01	7325	613.0 -> 319.0	15.9	7.7	23.1



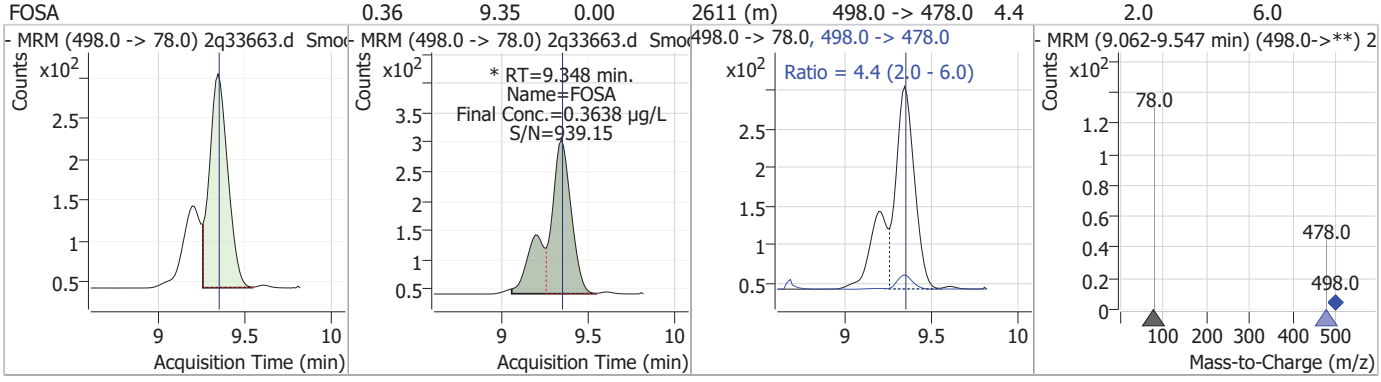
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.35	9.21	0.00	1277	599.0 -> 99.0	35.8	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.55	9.35	0.00	20661				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.36	9.35	0.00	2611 (m)	498.0 -> 478.0	4.4	2.0	6.0



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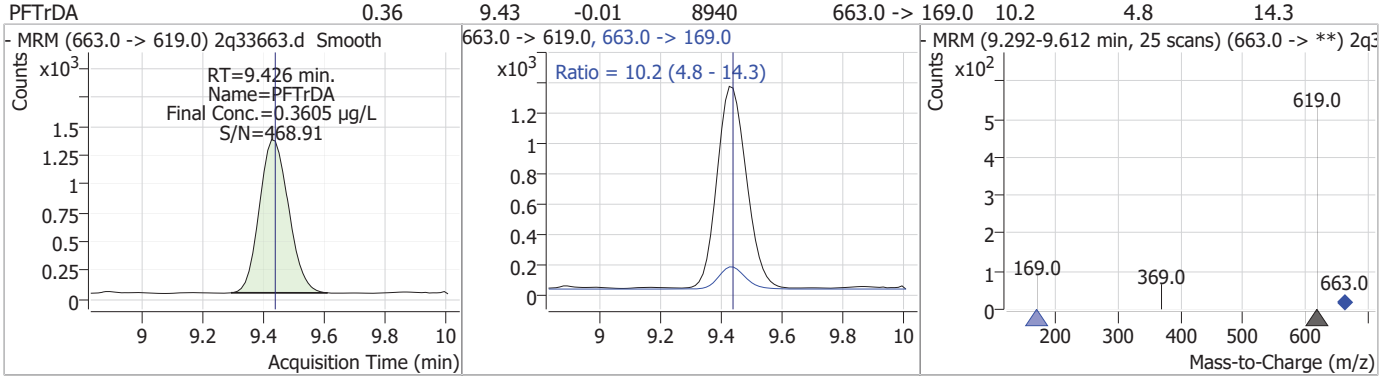
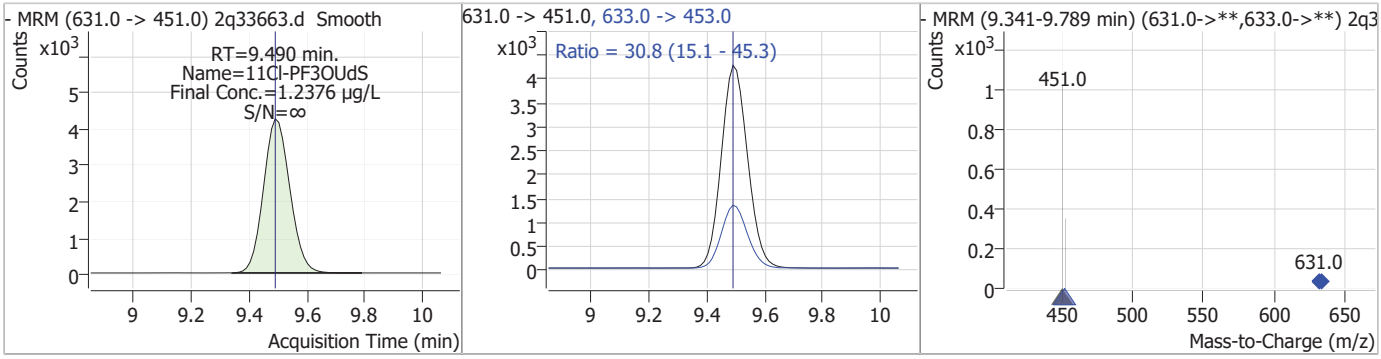
Perfluorinated Compounds by LC/MS/MS

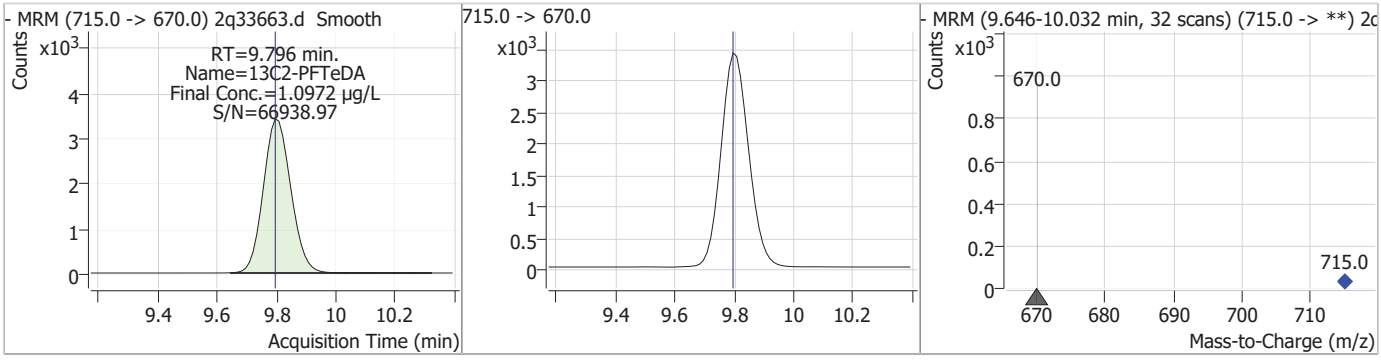
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.36	9.43	-0.01	8940	663.0 -> 169.0	10.2	4.8	14.3



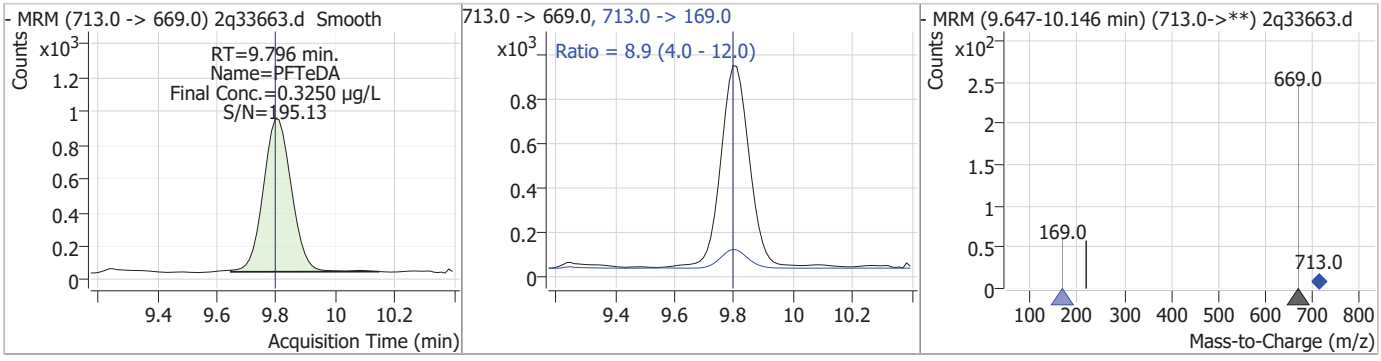
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	1.24	9.49	0.00	26831	633.0 -> 453.0	30.8	15.1	45.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.10	9.80	0.00	21862				

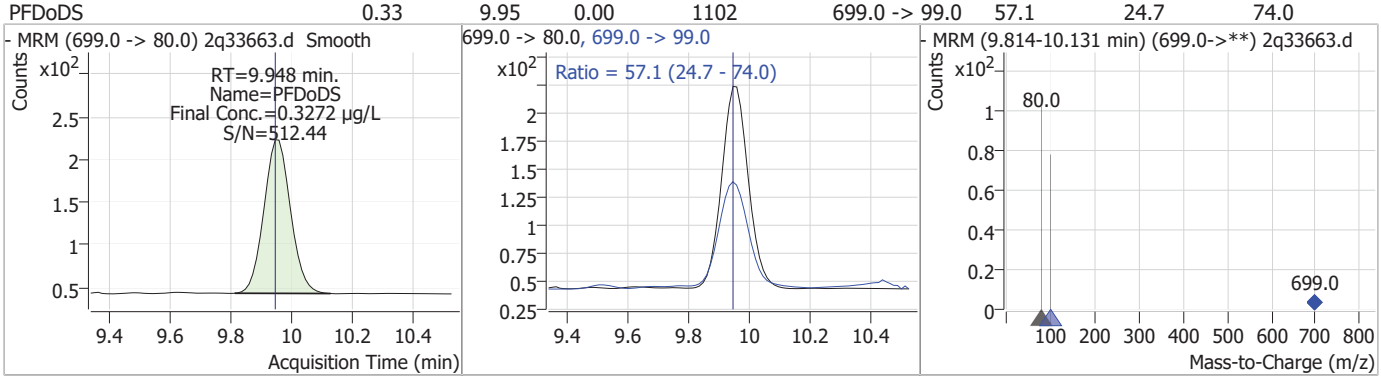


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.33	9.80	0.00	5984	713.0 -> 169.0	8.9	4.0	12.0

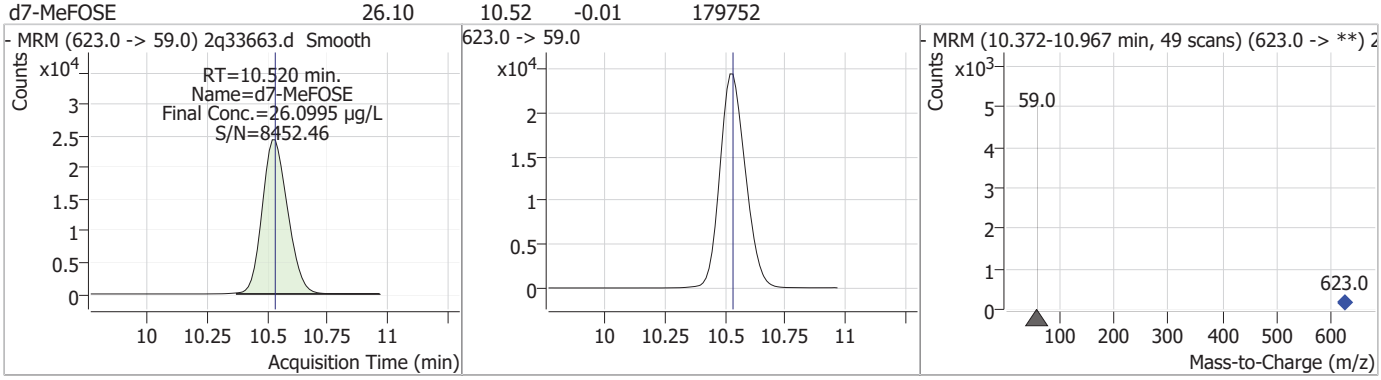


Perfluorinated Compounds by LC/MS/MS

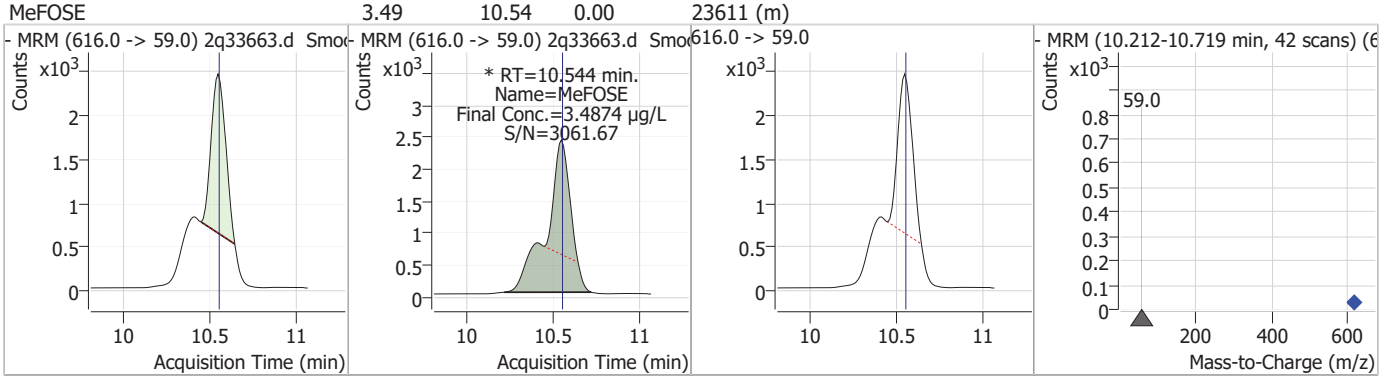
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.33	9.95	0.00	1102	699.0 -> 99.0	57.1	24.7	74.0



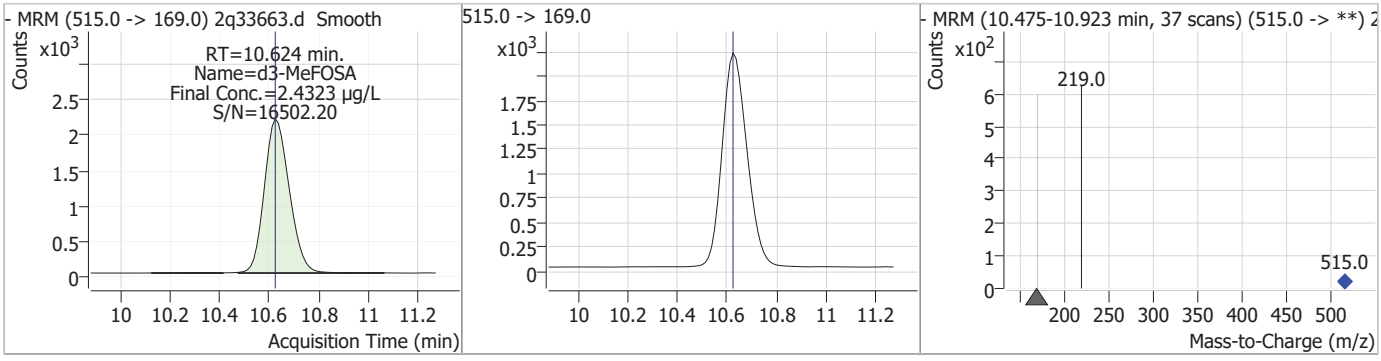
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	26.10	10.52	-0.01	179752				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	3.49	10.54	0.00	23611 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.43	10.62	0.00	15328				



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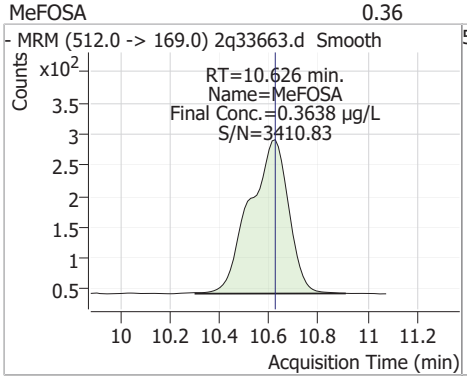
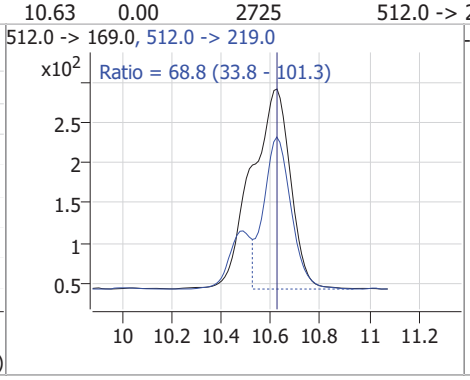
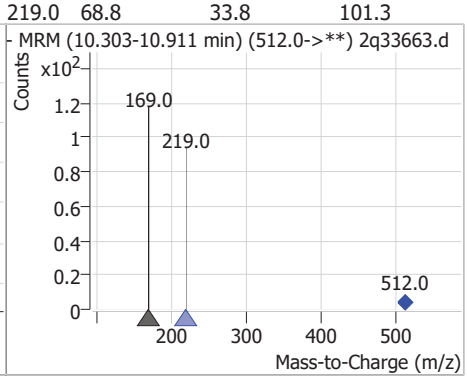
Perfluorinated Compounds by LC/MS/MS

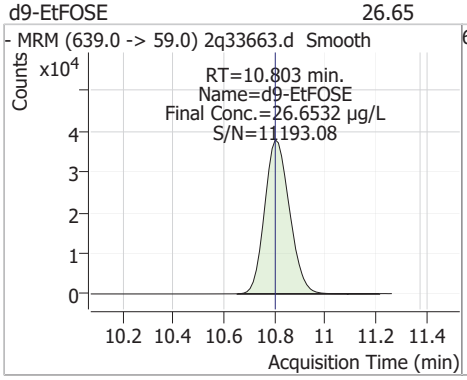
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.36	10.63	0.00	2725	512.0 -> 219.0	68.8	33.8	101.3

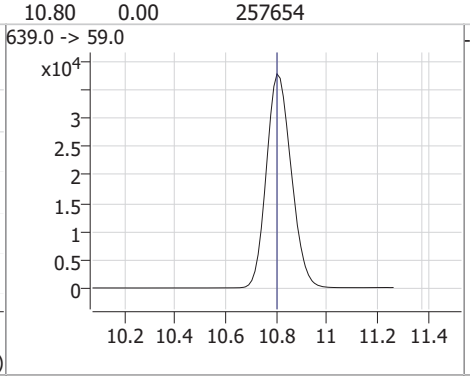


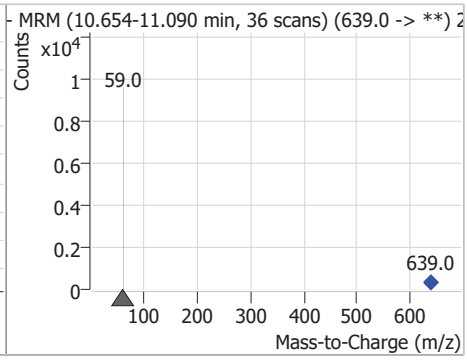




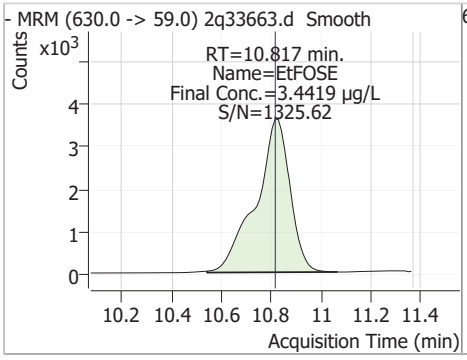
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	26.65	10.80	0.00	257654				

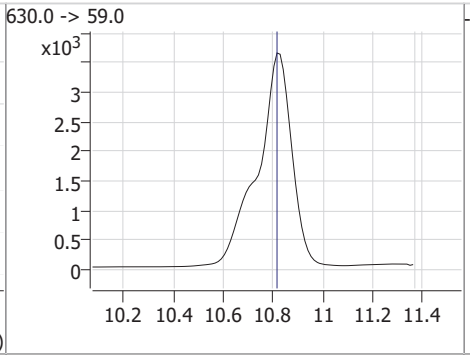


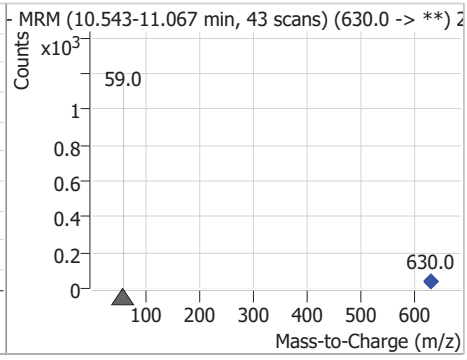




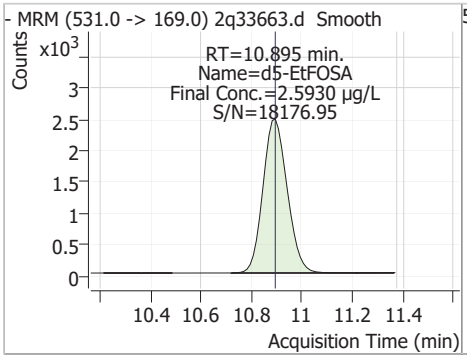
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	3.44	10.82	0.00	34401				

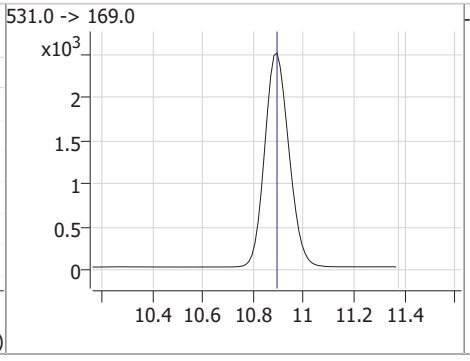


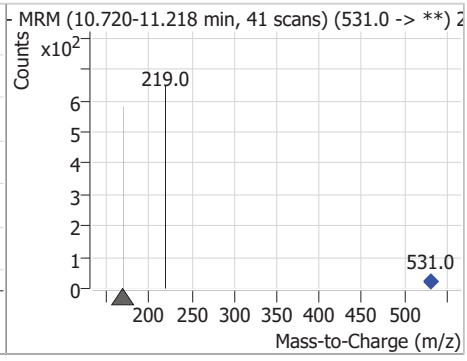




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.59	10.89	0.00	16477				





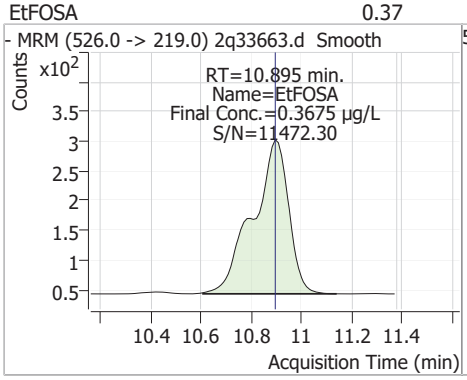


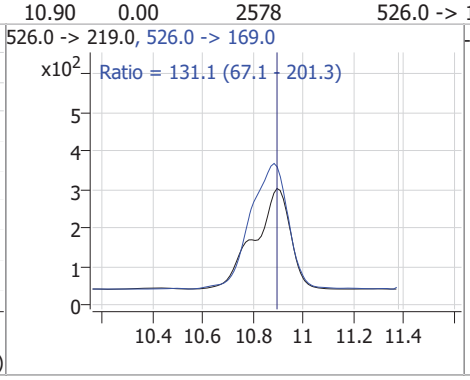
7.6.18

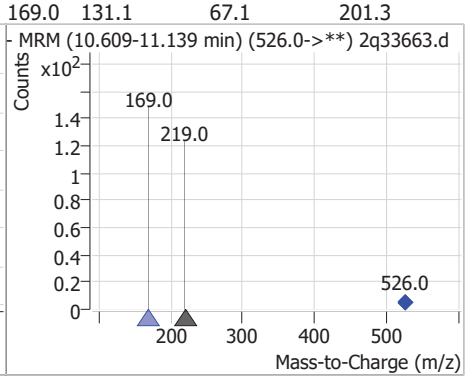
7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.37	10.90	0.00	2578	526.0 -> 169.0	131.1	67.1	201.3







7.6.18

7

Manual Integration Approval Summary

Sample Number: T2Q344-IC344
Lab FileID: 2Q33663.D
Injection Time: 05/09/25 15:22
Method: EPA 1633
Analyst approved: 05/10/25 01:15 Josephus Gimenez
Supervisor approved: 05/12/25 11:57 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.12	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.25	Split peak
Perfluorononanoic acid	375-95-1		7.64	Split peak
MeFOSAA	2355-31-9		8.15	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.36	Split peak
Perfluoroundecanoic acid	2058-94-8		8.61	Poor instrument integration
PFOSA	754-91-6		9.35	Split peak
MeFOSE	24448-09-7		10.54	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/12/25 11:57

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33664.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/9/2025 3:35:59 PM
Sample Name : IC344-3
Vial : P1-A4
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q344.batch.bin
Sample Information : OP62666,T2Q344,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	120108	10.00 µg/L	0.000
M5-PFPeA	4.637	268.0 -> 223.0	64387	5.00 µg/L	0.000
M5-PFHxA	5.745	318.0 -> 273.0	37691	2.50 µg/L	0.000
M4-PFHpA	6.540	367.0 -> 322.0	28874	2.50 µg/L	0.000
M8-PFOA	7.124	421.0 -> 376.0	65416	2.50 µg/L	0.000
M9-PFNA	7.644	472.0 -> 427.0	25536	1.25 µg/L	0.000
M6-PFDA	8.140	519.0 -> 474.0	17993	1.25 µg/L	0.000
M7-PFUnDA	8.608	570.0 -> 525.0	28013	1.25 µg/L	0.000
M2-PFDoDA	9.040	615.0 -> 570.0	29731	1.25 µg/L	0.000
M2-PFTeDA	9.796	715.0 -> 670.0	23164	1.25 µg/L	0.000
M8-FOSA	9.345	506.0 -> 78.0	20696	2.50 µg/L	0.000
M3-PFBS	5.699	302.0 -> 99.0	5334	2.50 µg/L	0.000
M3-PFHxS	7.250	402.0 -> 99.0	6607	2.50 µg/L	0.000
M8-PFOS	8.315	507.0 -> 99.0	6749	2.50 µg/L	0.000
M2-4:2FTS	5.433	329.0 -> 81.0	1605	5.00 µg/L	0.000
M2-6:2FTS	6.910	429.0 -> 81.0	3385	5.00 µg/L	0.000
M2-8:2FTS	7.914	529.0 -> 81.0	5253	5.00 µg/L	0.000
M3-MeFOSAA	8.160	573.0 -> 419.0	43816	5.00 µg/L	0.000
M3-HFPO-DA	6.074	287.0 -> 169.0	23401	10.00 µg/L	0.000
M5-EtFOSAA	8.356	589.0 -> 419.0	35080	5.00 µg/L	0.000
M7-MeFOSE	10.532	623.0 -> 59.0	181227	25.00 µg/L	0.000
M9-EtFOSE	10.803	639.0 -> 59.0	257830	25.00 µg/L	0.000
M5-EtFOSA	10.895	531.0 -> 169.0	16106	2.50 µg/L	0.000
M3-MeFOSA	10.624	515.0 -> 169.0	15898	2.50 µg/L	0.000
13C4-PFOS	8.316	503.0 -> 80.0	12383	2.50 µg/L	0.000
13C3-PFBA	3.253	216.0 -> 172.0	50894	5.00 µg/L	-0.012
18O2-PFHxS	7.250	403.0 -> 84.0	7843	2.50 µg/L	-0.012
13C4-PFOA	7.124	417.0 -> 372.0	62703	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	16606	1.25 µg/L	0.000
13C5-PFNA	7.645	468.0 -> 423.0	24300	1.25 µg/L	0.000
13C2-PFHxA	5.746	315.0 -> 270.0	34292	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.433	329.0 -> 81.0	1605	5.66 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 113.2%	
13C2-6:2FTS	6.910	429.0 -> 81.0	3385	5.52 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 110.3%	
13C2-8:2FTS	7.914	529.0 -> 81.0	5253	5.31 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.1%	
13C2-PFDoDA	9.040	615.0 -> 570.0	29731	1.31 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.8%	
13C2-PFTeDA	9.796	715.0 -> 670.0	23164	1.32 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.2%	
13C3-PFBS	5.699	302.0 -> 99.0	5334	2.42 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.6%	
13C3-PFHxS	7.250	402.0 -> 99.0	6607	2.47 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.9%		
13C4-PFBA	3.263	217.0 -> 172.0	120108	10.03 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.3%		
13C4-PFHpA	6.540	367.0 -> 322.0	28874	2.42 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.6%		
13C5-PFHxA	5.745	318.0 -> 273.0	37691	2.51 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.4%		
13C5-PFPeA	4.637	268.0 -> 223.0	64387	5.03 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.6%		
13C6-PFDA	8.140	519.0 -> 474.0	17993	1.30 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.1%		
13C7-PFUnDA	8.608	570.0 -> 525.0	28013	1.29 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.3%		
13C8-FOSA	9.345	506.0 -> 78.0	20696	2.42 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.7%		
13C8-PFOA	7.124	421.0 -> 376.0	65416	2.55 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.9%		
13C8-PFOS	8.315	507.0 -> 99.0	6749	2.50 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.0%		
13C9-PFNA	7.644	472.0 -> 427.0	25536	1.20 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.3%		
d3-MeFOSAA	8.160	573.0 -> 419.0	43816	4.96 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.1%		
13C3-HFPO-DA	6.074	287.0 -> 169.0	23401	9.93 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.3%		
d3-MeFOSA	10.624	515.0 -> 169.0	15898	2.39 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.5%		
d5-EtFOSAA	8.356	589.0 -> 419.0	35080	4.92 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.3%		
d7-MeFOSE	10.532	623.0 -> 59.0	181227	24.89 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 99.6%		
d9-EtFOSE	10.803	639.0 -> 59.0	257830	25.23 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.9%		
d5-EtFOSA	10.895	531.0 -> 169.0	16106	2.40 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.9%		
Target Compounds						QValue
4:2FTS	5.433	327.0 -> 307.0	10495	4.52 µg/L		97
		327.0 -> 81.0	5305			
6:2FTS	6.898	427.0 -> 407.0	18184	4.53 µg/L		97
		427.0 -> 81.0	7288			
8:2FTS	7.915	527.0 -> 507.0	19483	5.11 µg/L		95
		527.0 -> 81.0	7675			
EtFOSAA	8.357	584.0 -> 419.0	6402	1.15 µg/L	m	99
		584.0 -> 483.0	3038			
FOSA	9.335	498.0 -> 78.0	9113	1.27 µg/L	m	98
		498.0 -> 478.0	300			
MeFOSAA	8.161	570.0 -> 419.0	7361	1.12 µg/L	m	96
		570.0 -> 512.0	2197			
PFBA	3.255	213.0 -> 169.0	15148	4.78 µg/L		100
PFBS	5.700	299.0 -> 80.0	7766	1.15 µg/L		93
		299.0 -> 99.0	3132			
PFDA	8.128	513.0 -> 469.0	15917	1.15 µg/L		97
		513.0 -> 219.0	2964			
PFDoDA	9.041	613.0 -> 569.0	25621	1.20 µg/L		100
		613.0 -> 319.0	3953			
PFDS	9.206	599.0 -> 80.0	4256	1.21 µg/L		97

Perfluorinated Compounds by LC/MS/MS

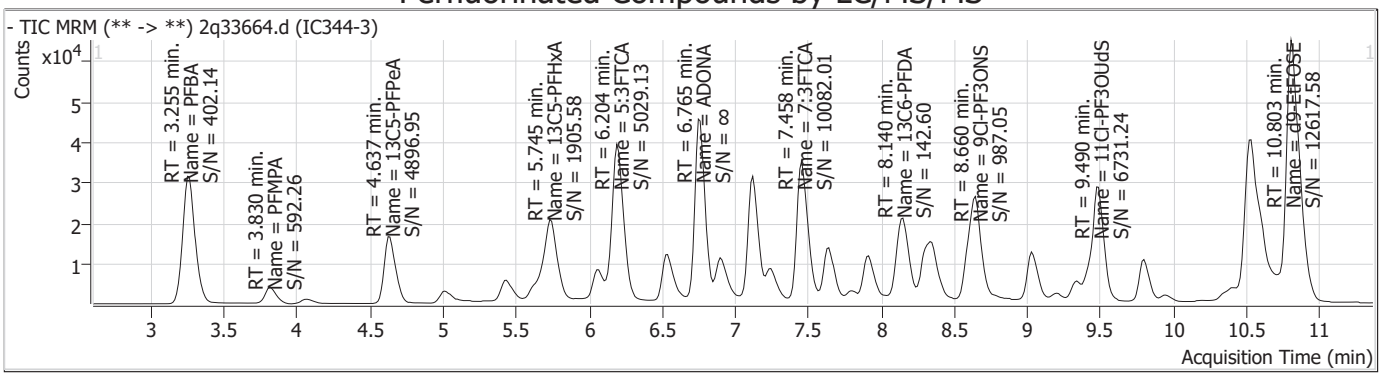
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	1932				
PFHpA	6.541	363.0 -> 319.0	22631	1.23	µg/L		99
		363.0 -> 169.0	4015				
PFHpS	7.809	449.0 -> 80.0	5636	1.21	µg/L		96
		449.0 -> 99.0	2727				
PFHxA	5.748	313.0 -> 269.0	15154	1.19	µg/L		99
		313.0 -> 119.0	527				
PFHxS	7.252	399.0 -> 80.0	5902	1.17	µg/L	m	92
		399.0 -> 99.0	2897				
PFNA	7.645	463.0 -> 419.0	13293	1.15	µg/L	m	95
		463.0 -> 219.0	4053				
PFNS	8.784	549.0 -> 80.0	2829	1.23	µg/L		78
		549.0 -> 99.0	1176				
PFOA	7.125	413.0 -> 369.0	23456	1.18	µg/L	m	99
		413.0 -> 169.0	5280				
PFOS	8.305	499.0 -> 80.0	6599	1.05	µg/L	m	93
		499.0 -> 99.0	2789				
PFPeA	4.640	263.0 -> 219.0	27350	2.40	µg/L		100
PFPeS	6.617	349.0 -> 80.0	2931	1.21	µg/L		97
		349.0 -> 99.0	1264				
PFTeDA	9.796	713.0 -> 669.0	23944	1.23	µg/L		99
		713.0 -> 169.0	1828				
PFTrDA	9.426	663.0 -> 619.0	30452	1.21	µg/L		100
		663.0 -> 169.0	2875				
PFUnDA	8.609	563.0 -> 519.0	23794	1.25	µg/L		97
		563.0 -> 269.0	4408				
11Cl-PF3OUdS	9.490	631.0 -> 451.0	98174	4.78	µg/L		98
		633.0 -> 453.0	28793				
9Cl-PF3ONS	8.660	531.0 -> 351.0	78809	4.78	µg/L		100
		533.0 -> 353.0	22459				
ADONA	6.765	377.0 -> 251.0	171067	4.89	µg/L		97
		377.0 -> 85.0	50863				
HFPO-DA	6.075	285.0 -> 169.0	10831	4.74	µg/L		97
		285.0 -> 185.0	1036				
3:3FTCA	4.078	241.0 -> 177.0	5543	5.95	µg/L		95
		241.0 -> 117.0	458				
5:3FTCA	6.204	341.0 -> 237.0	100518	31.29	µg/L		98
		341.0 -> 217.0	70243				
7:3FTCA	7.458	441.0 -> 337.0	126232	30.19	µg/L		99
		441.0 -> 317.0	52802				
EtFOSA	10.895	526.0 -> 219.0	8545	1.25	µg/L		96
		526.0 -> 169.0	11025				
EtFOSE	10.817	630.0 -> 59.0	121960	12.19	µg/L		100
MeFOSA	10.626	512.0 -> 169.0	9693	1.25	µg/L		97
		512.0 -> 219.0	6753				
MeFOSE	10.544	616.0 -> 59.0	79123	11.59	µg/L	m	100
PFDoDS	9.948	699.0 -> 80.0	4552	1.25	µg/L		96
		699.0 -> 99.0	2385				
NFDHA	5.639	295.0 -> 201.0	2329	2.21	µg/L		79
		201.0 -> 85.0	15306				
		295.0 -> 85.0	851				
PFMBA	5.015	279.0 -> 85.0	16212	2.42	µg/L		100
PFMPA	3.830	229.0 -> 85.0	23070	2.40	µg/L		100
PFEESA	6.168	315.0 -> 135.0	34388	2.19	µg/L		99
		315.0 -> 69.0	3547				

 # = Qualifier out of range, m = manually integrated, + = Area summed

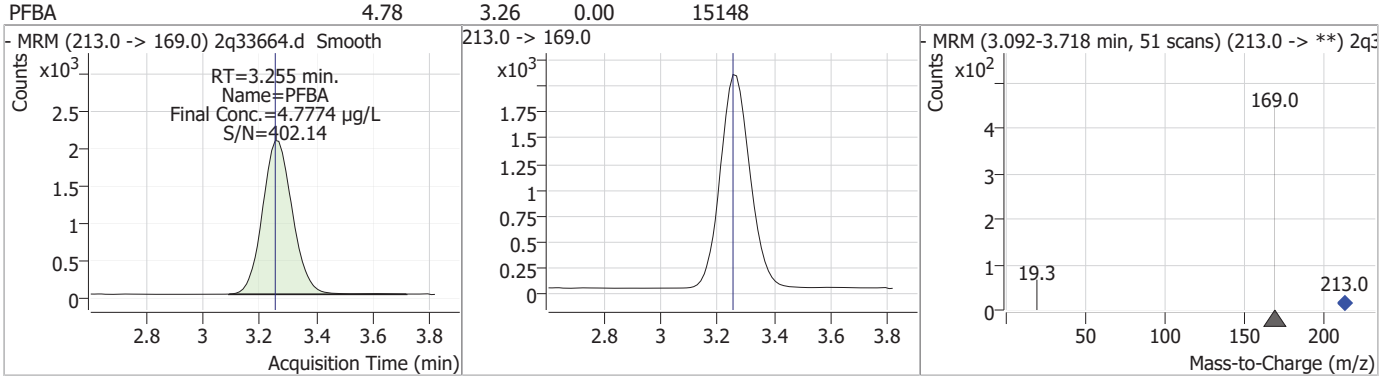
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

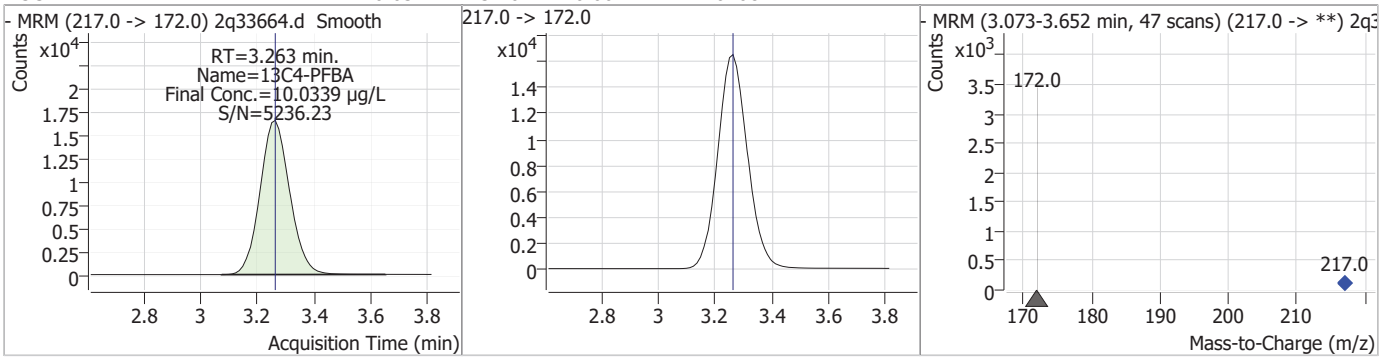
Perfluorinated Compounds by LC/MS/MS



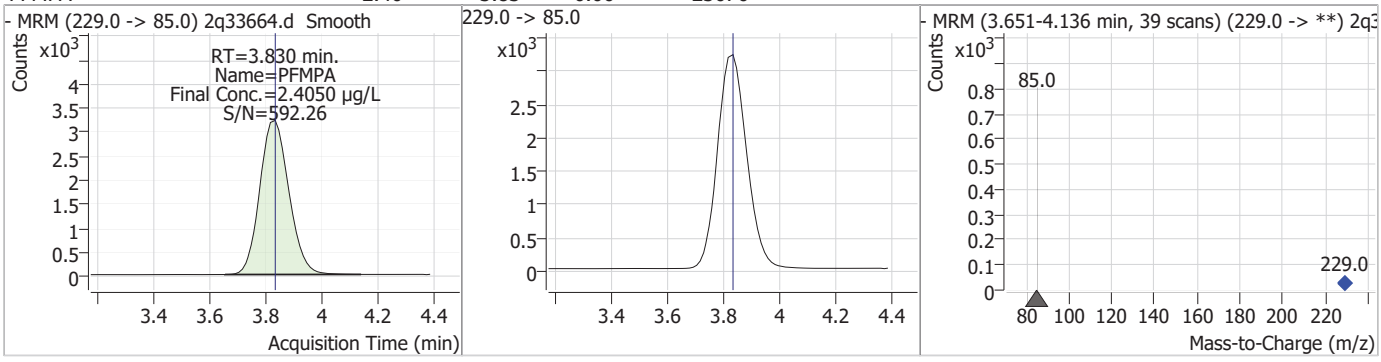
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	4.78	3.26	0.00	15148				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.03	3.26	0.00	120108				

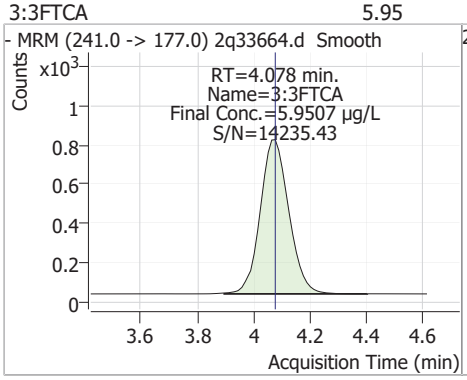


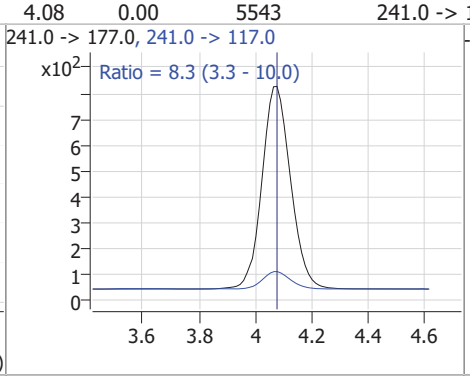
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	2.40	3.83	0.00	23070				

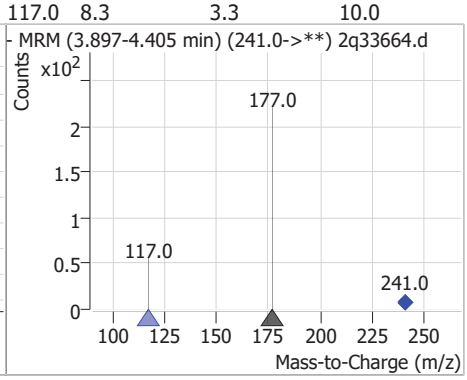


Perfluorinated Compounds by LC/MS/MS

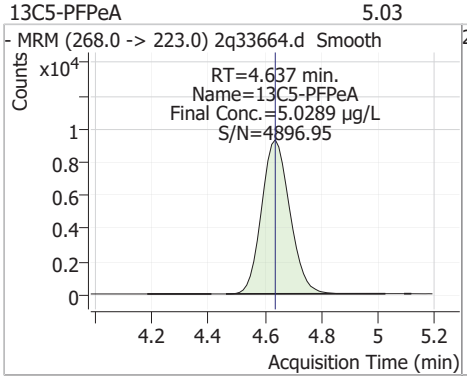
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	5.95	4.08	0.00	5543	241.0 -> 117.0	8.3	3.3	10.0

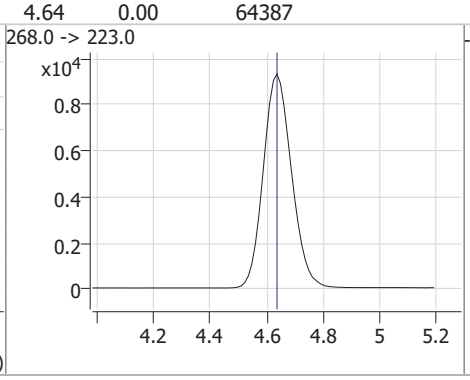


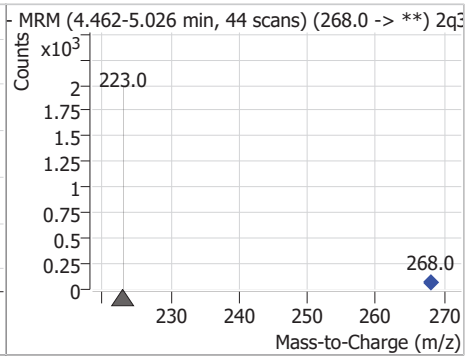




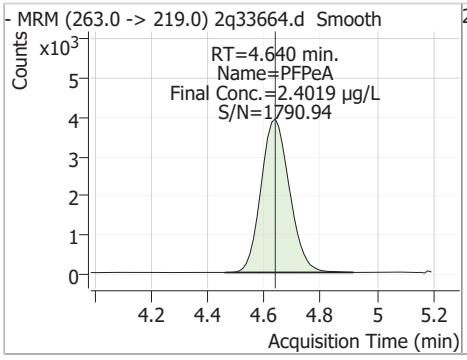
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.03	4.64	0.00	64387				

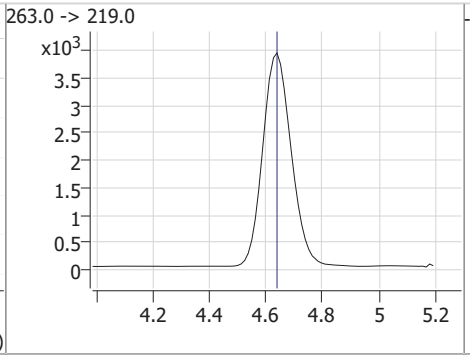


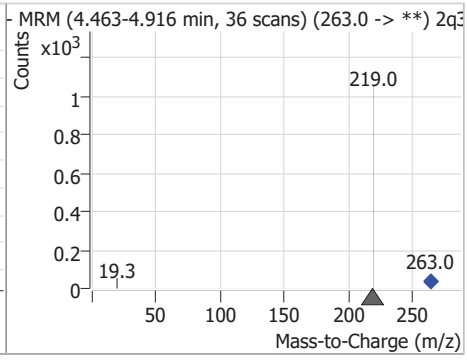




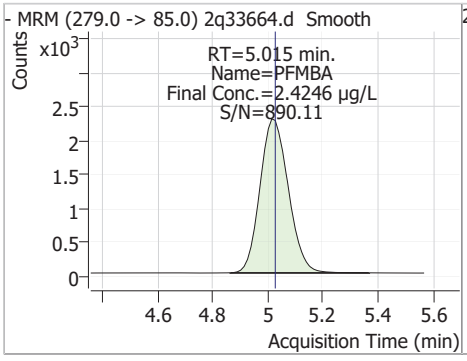
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	2.40	4.64	0.00	27350				

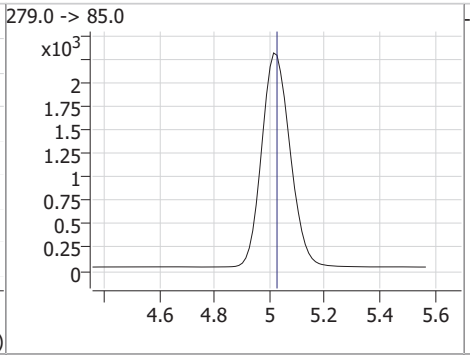


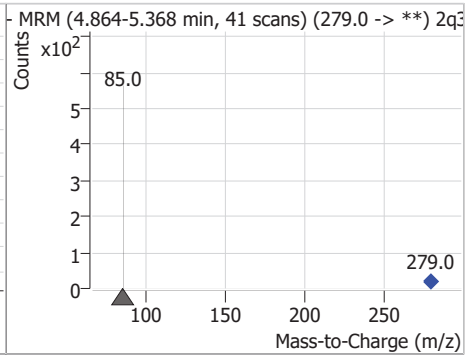




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	2.42	5.01	-0.01	16212				







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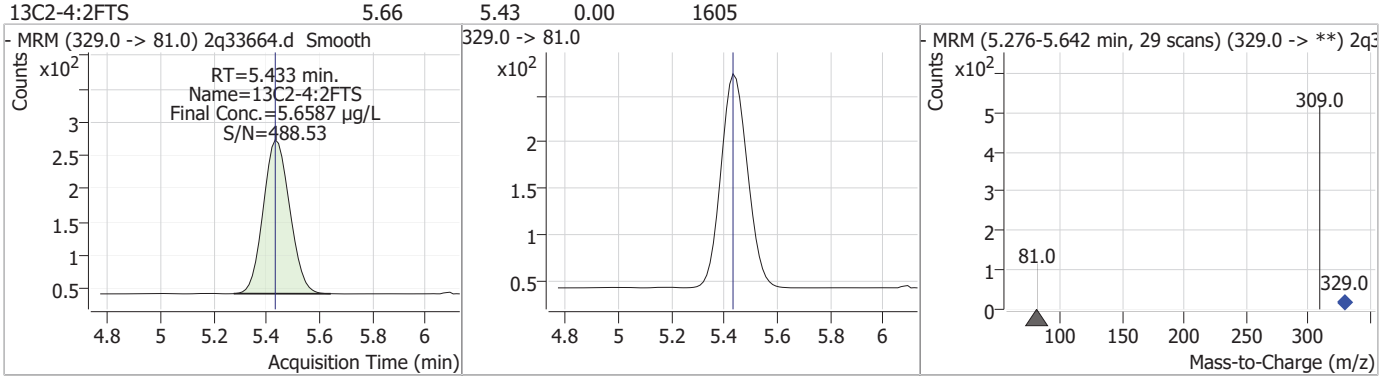
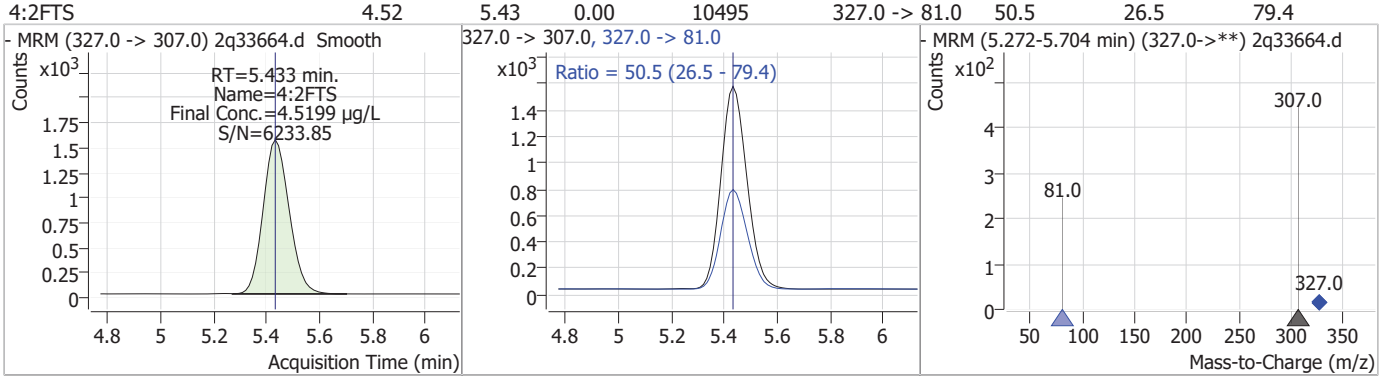
Perfluorinated Compounds by LC/MS/MS

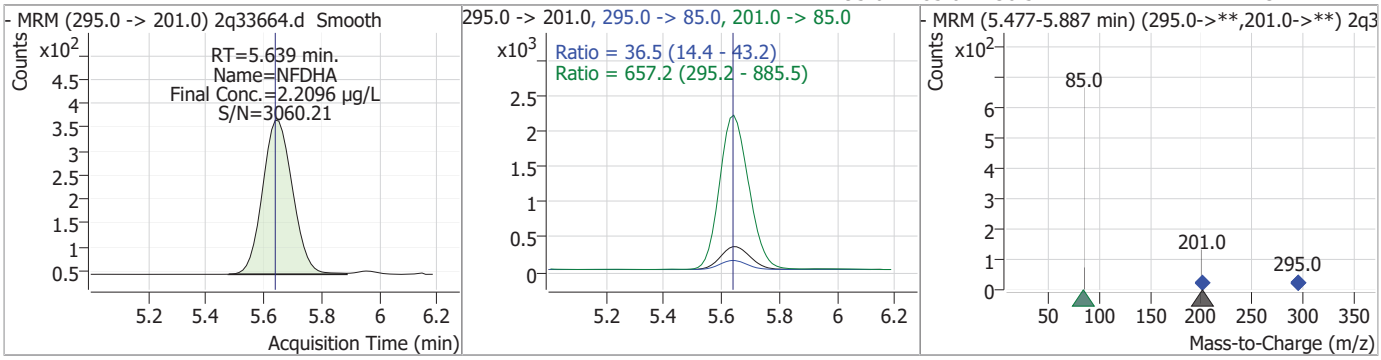
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.66	5.43	0.00	1605				



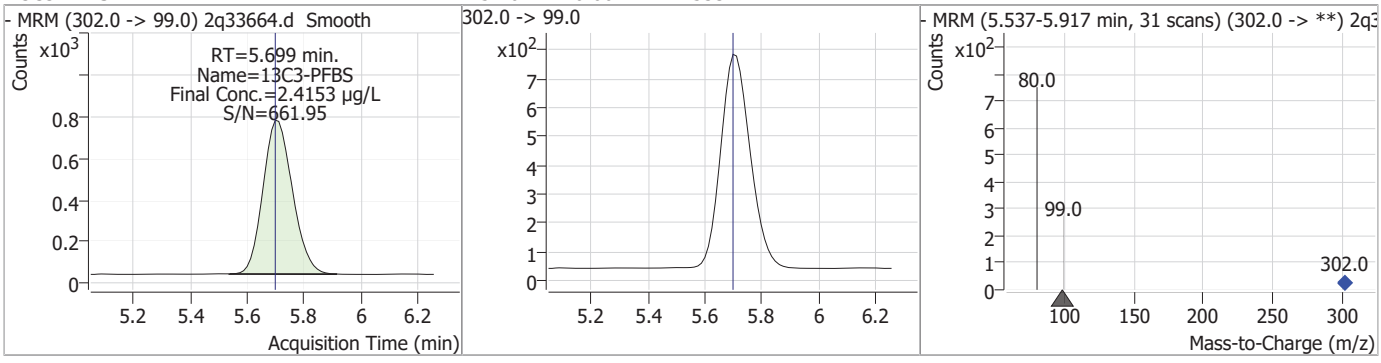
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	4.52	5.43	0.00	10495	327.0 -> 81.0	50.5	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	2.21	5.64	0.00	2329	201.0 -> 85.0	657.2	295.2	885.5
					295.0 -> 85.0	36.5	14.4	43.2

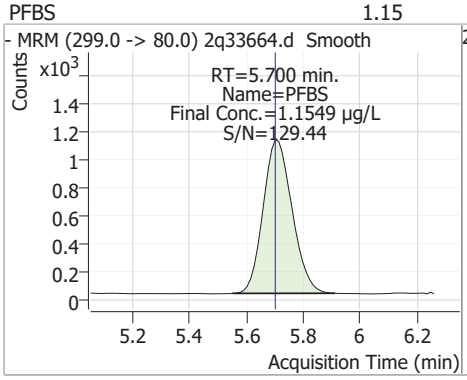


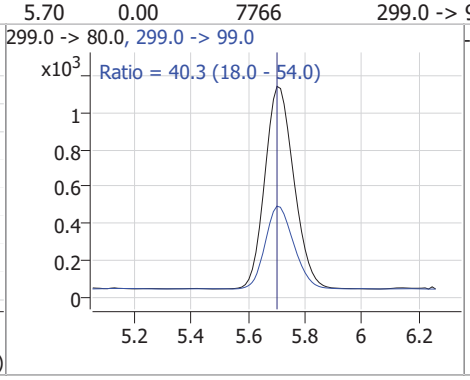
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.42	5.70	0.00	5334				

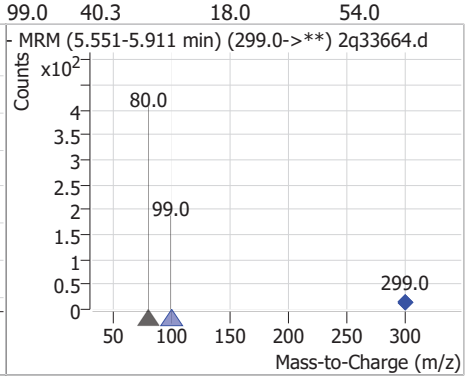


Perfluorinated Compounds by LC/MS/MS

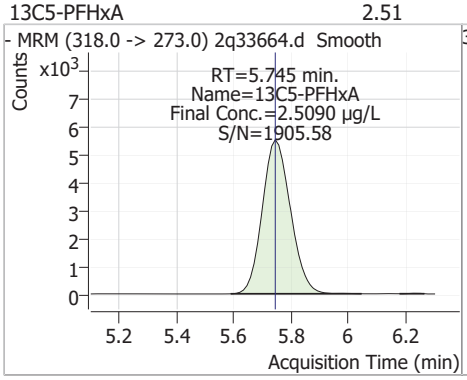
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	1.15	5.70	0.00	7766	299.0 -> 99.0	40.3	18.0	54.0

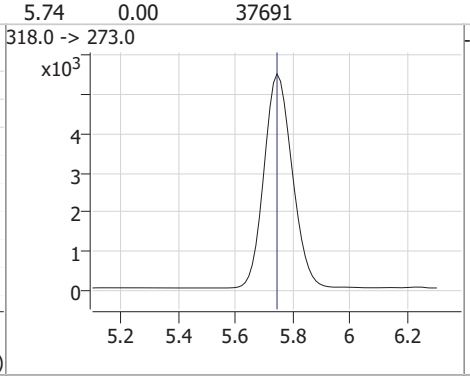


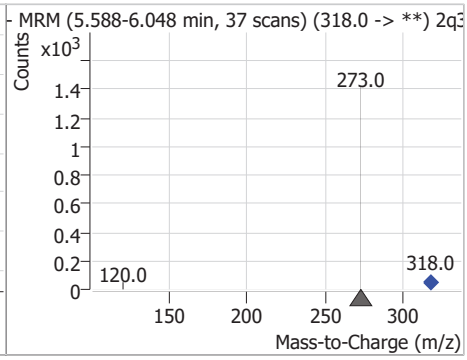




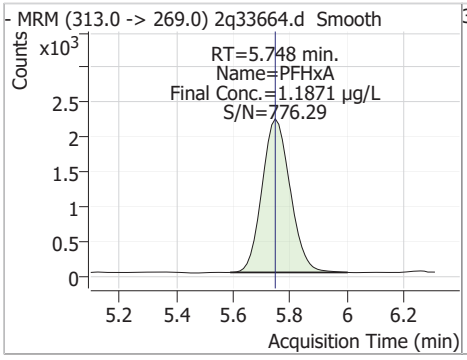
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.51	5.74	0.00	37691				

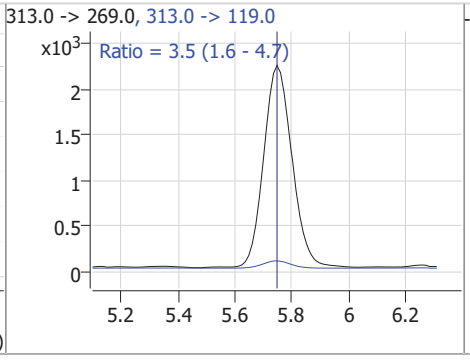


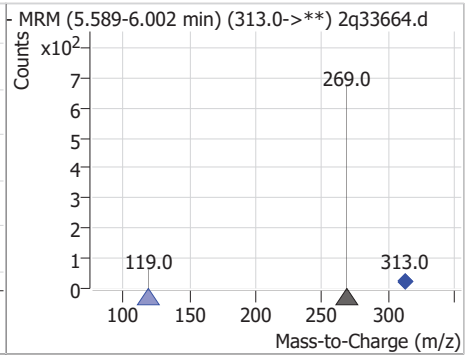




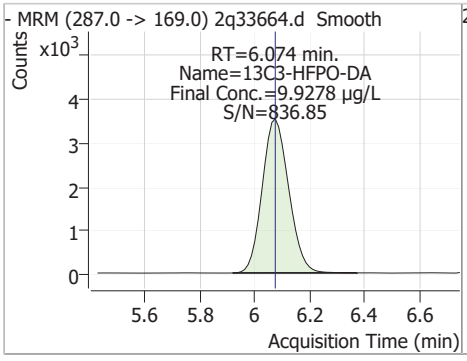
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	1.19	5.75	0.00	15154	313.0 -> 119.0	3.5	1.6	4.7

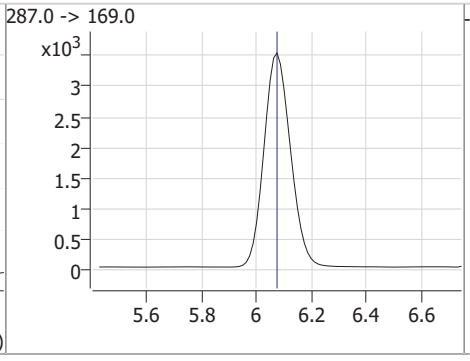


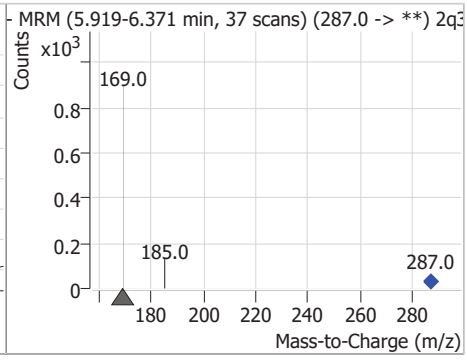




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.93	6.07	0.00	23401				







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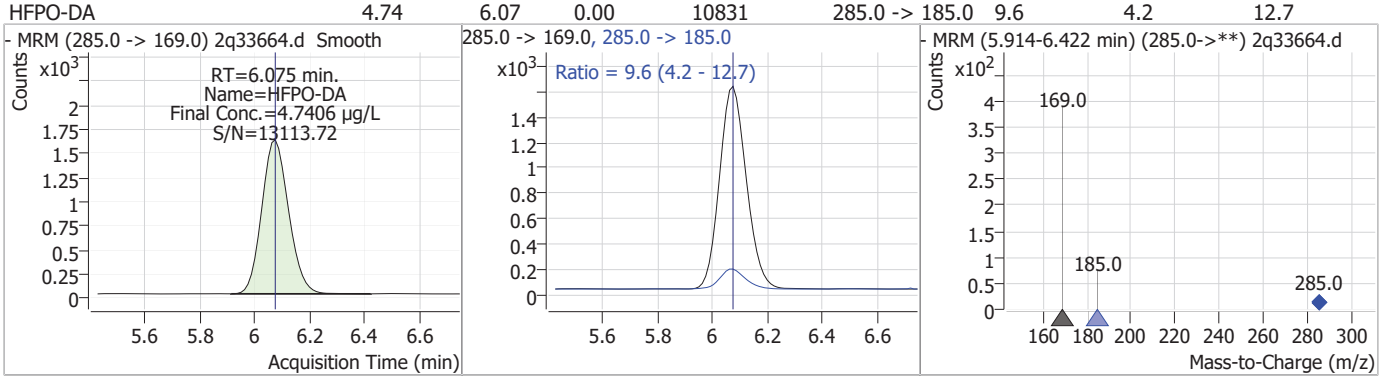
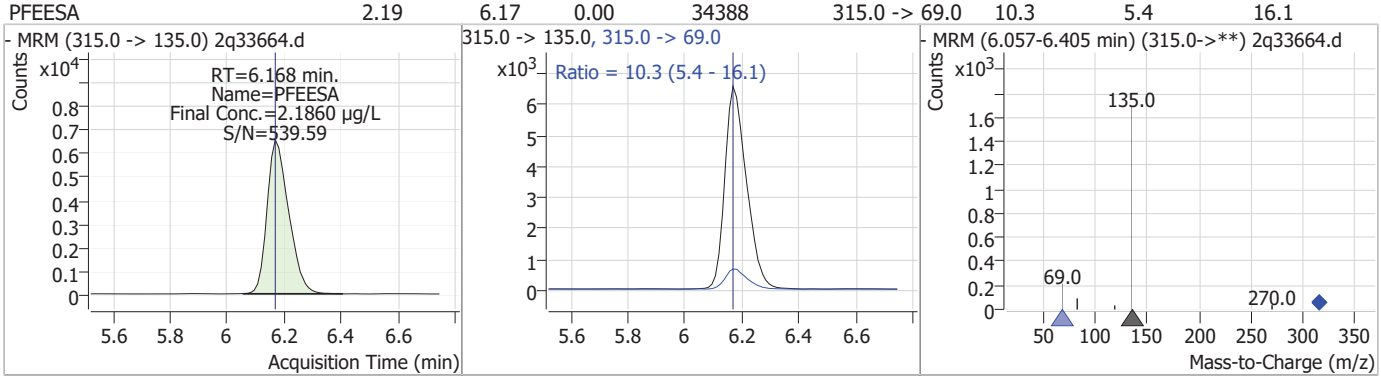
Perfluorinated Compounds by LC/MS/MS

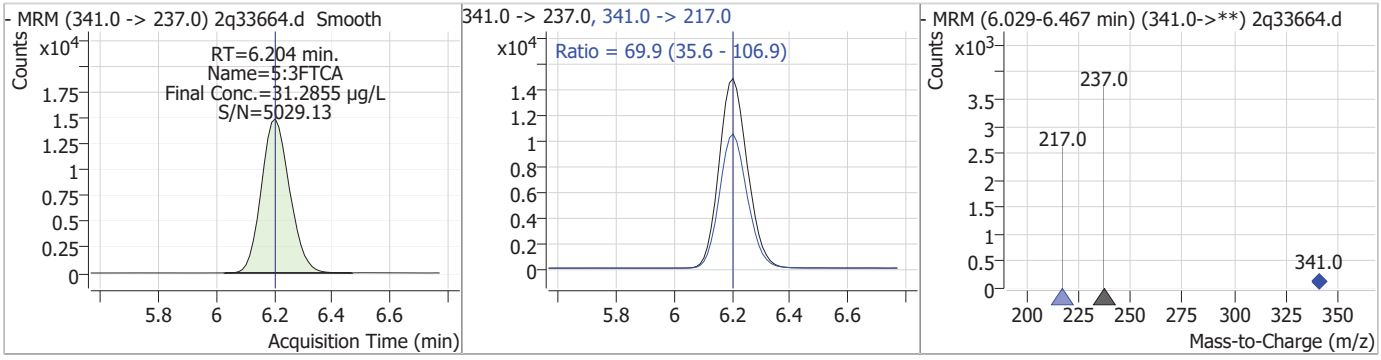
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	4.74	6.07	0.00	10831	285.0 -> 185.0	9.6	4.2	12.7



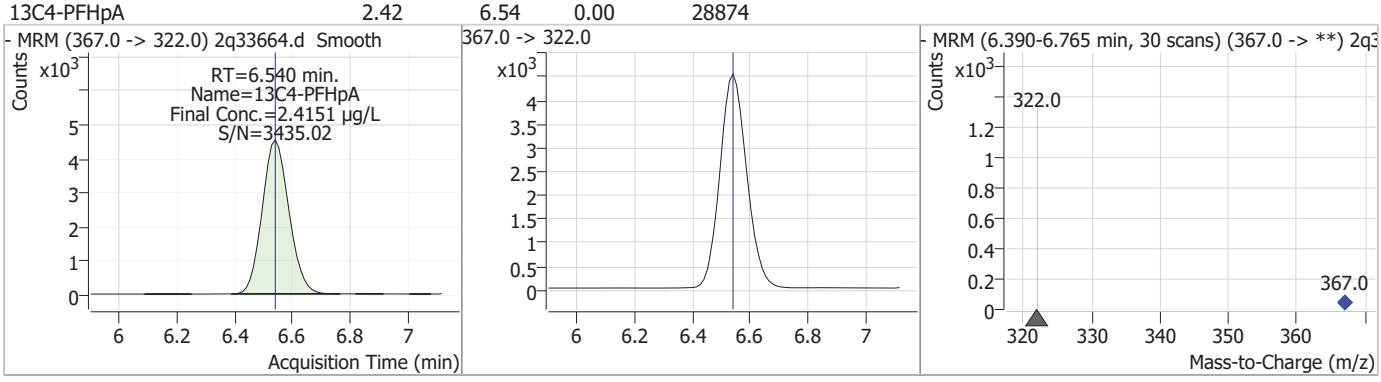
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	2.19	6.17	0.00	34388	315.0 -> 69.0	10.3	5.4	16.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	31.29	6.20	0.00	100518	341.0 -> 217.0	69.9	35.6	106.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.42	6.54	0.00	28874				



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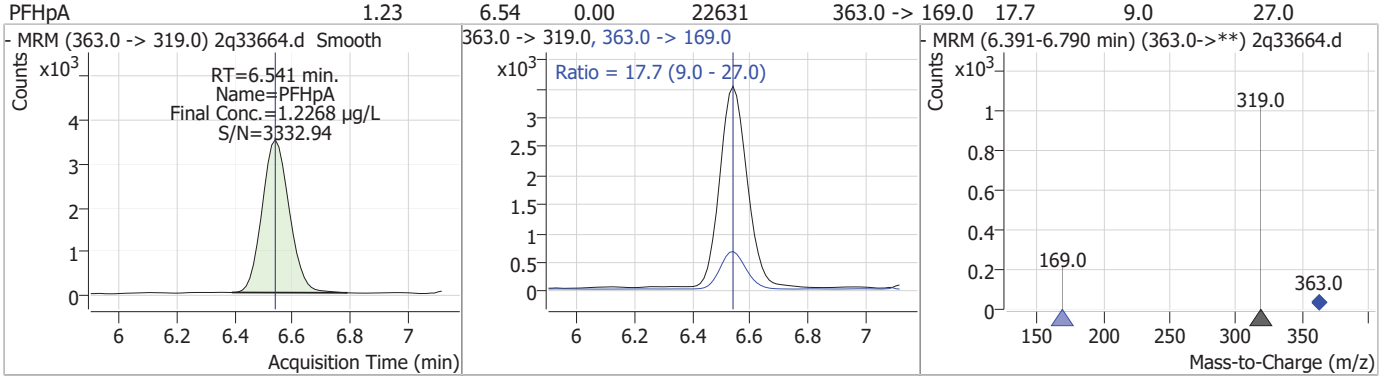
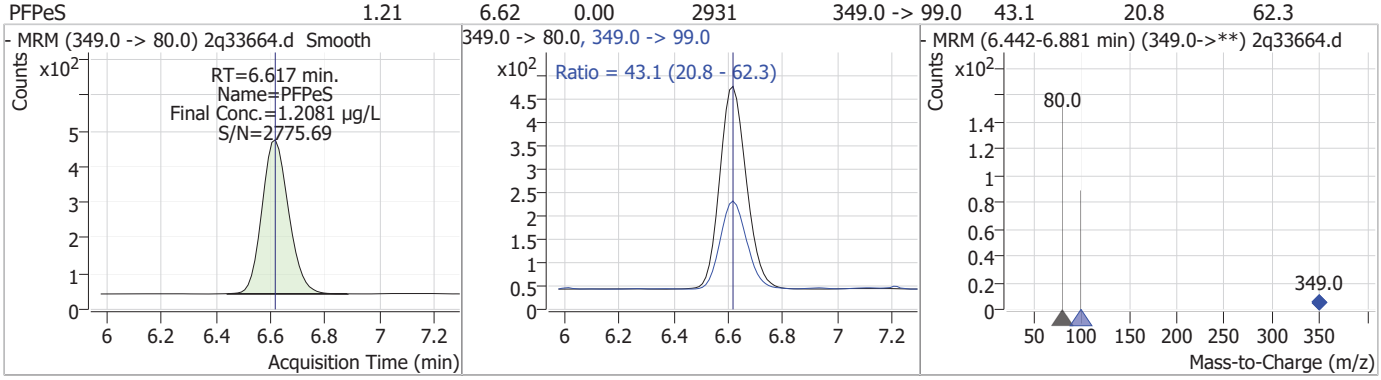
Perfluorinated Compounds by LC/MS/MS

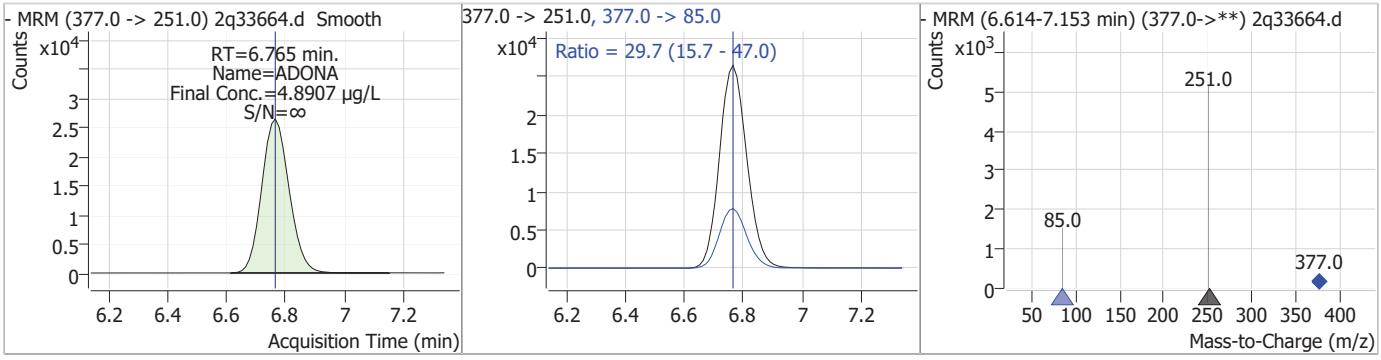
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	1.23	6.54	0.00	22631	363.0 -> 169.0	17.7	9.0	27.0



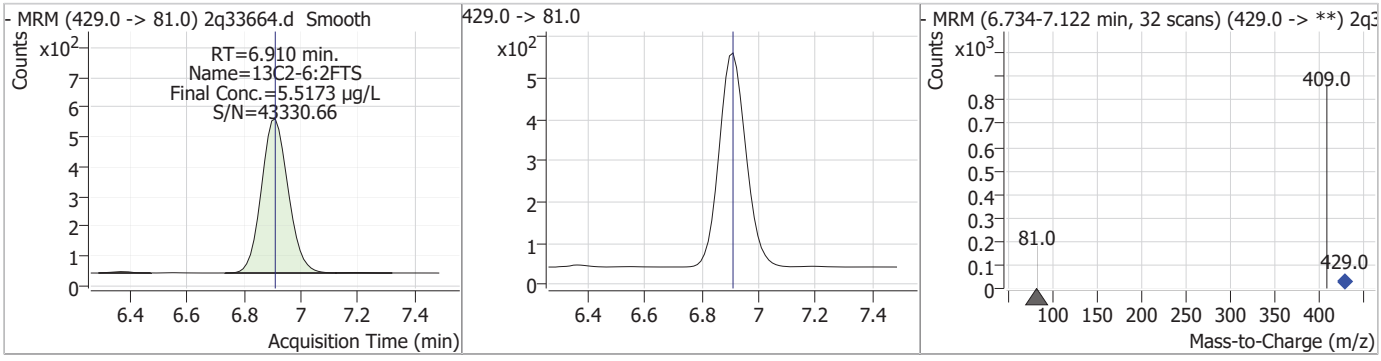
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	1.21	6.62	0.00	2931	349.0 -> 99.0	43.1	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	4.89	6.77	0.00	171067	377.0 -> 85.0	29.7	15.7	47.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.52	6.91	0.00	3385				



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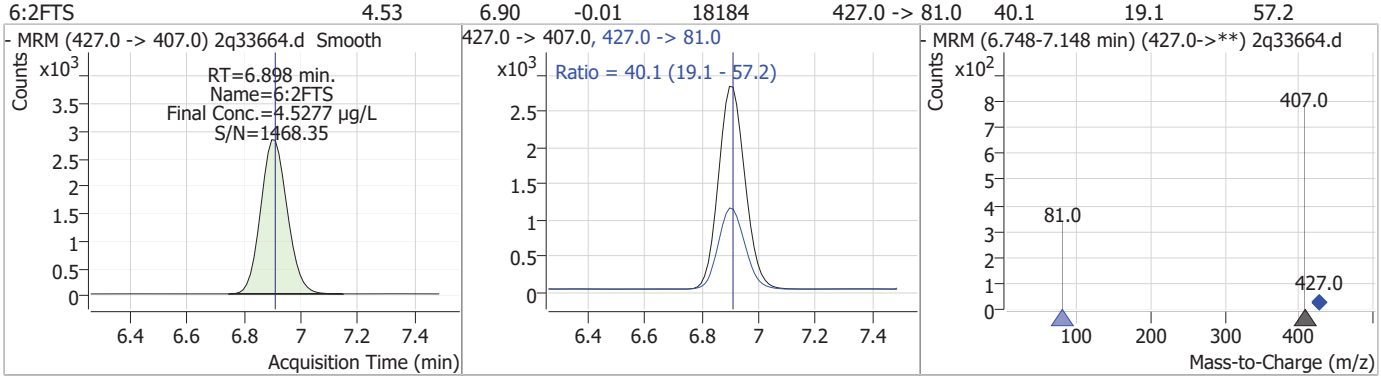
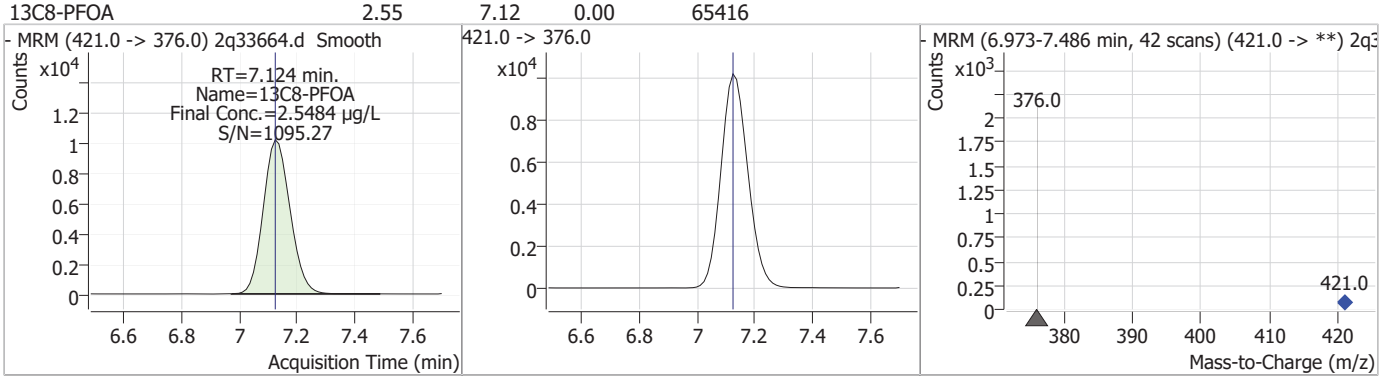
Perfluorinated Compounds by LC/MS/MS

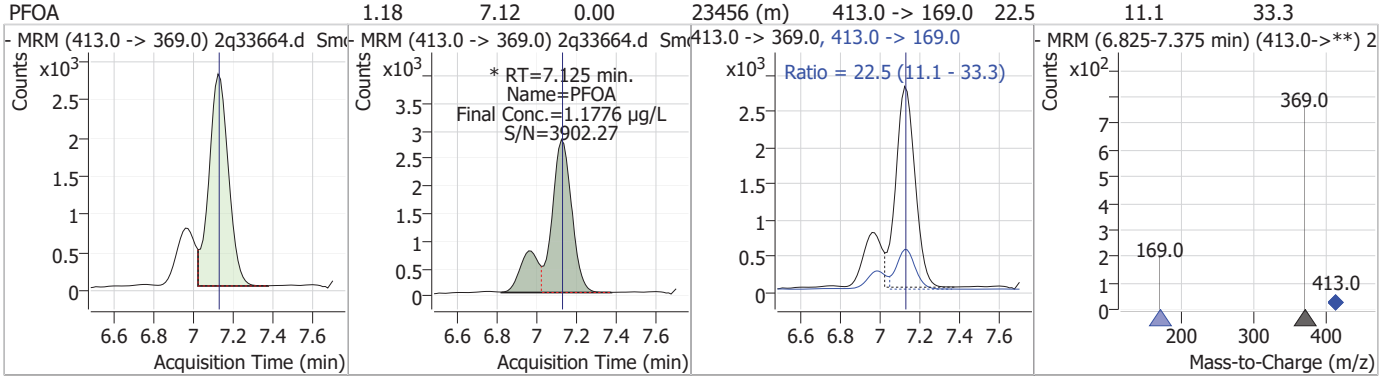
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	4.53	6.90	-0.01	18184	427.0 -> 81.0	40.1	19.1	57.2



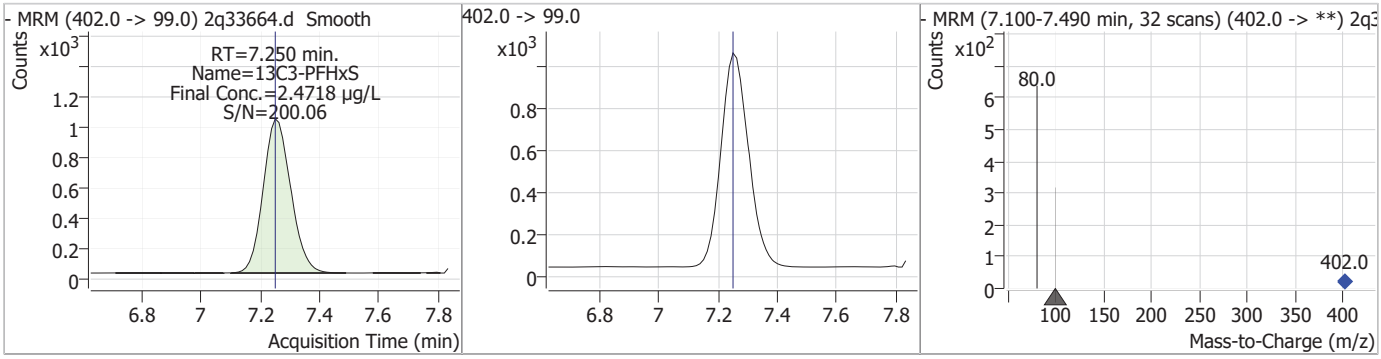
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.55	7.12	0.00	65416				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	1.18	7.12	0.00	23456 (m)	413.0 -> 169.0	22.5	11.1	33.3

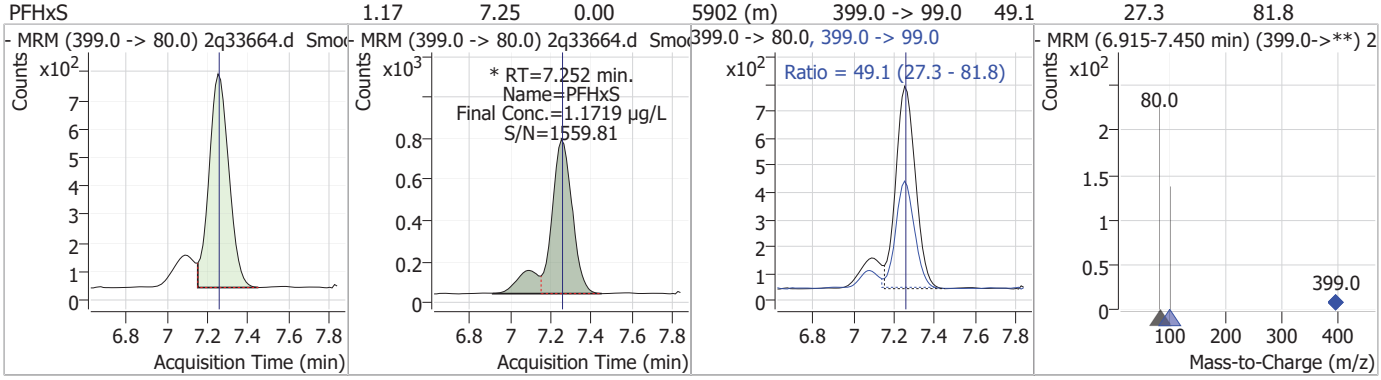


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.47	7.25	0.00	6607				

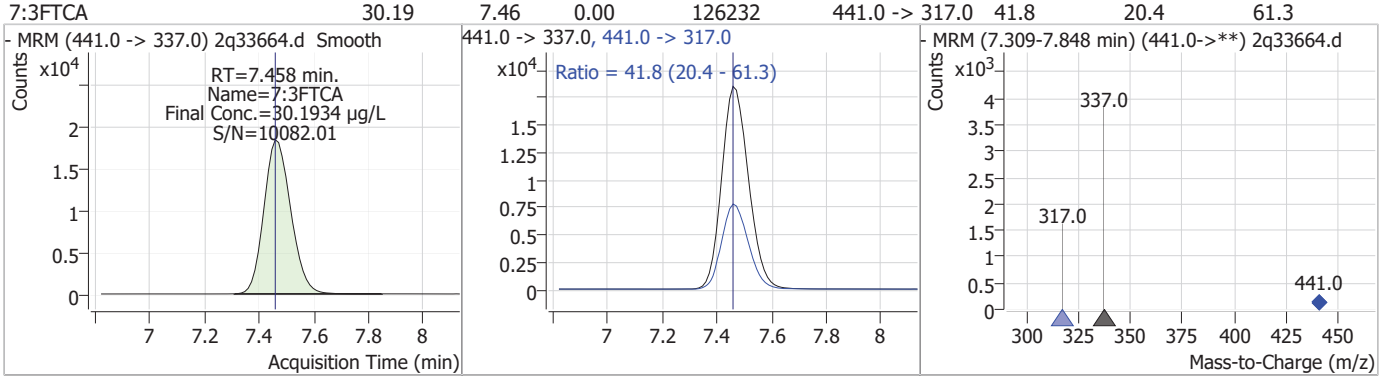


Perfluorinated Compounds by LC/MS/MS

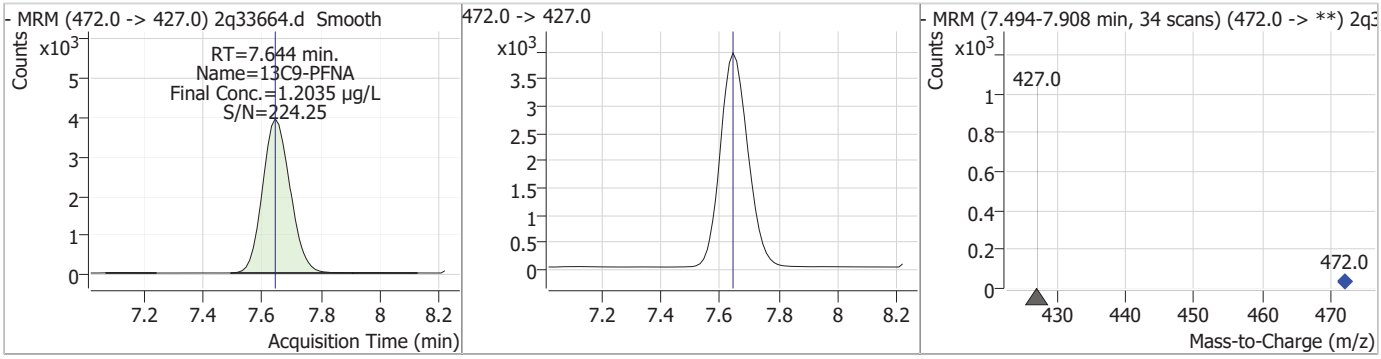
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	1.17	7.25	0.00	5902 (m)	399.0 -> 99.0	49.1	27.3	81.8



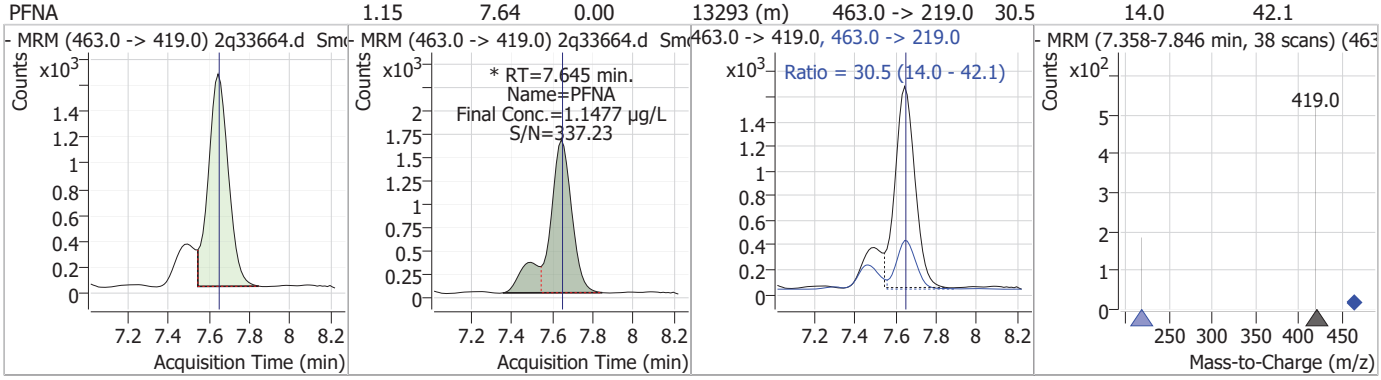
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	30.19	7.46	0.00	126232	441.0 -> 317.0	41.8	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.20	7.64	0.00	25536				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	1.15	7.64	0.00	13293 (m)	463.0 -> 219.0	30.5	14.0	42.1



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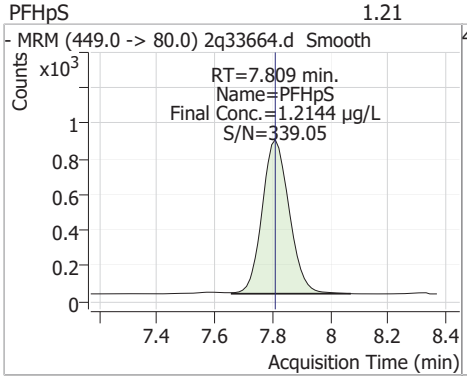
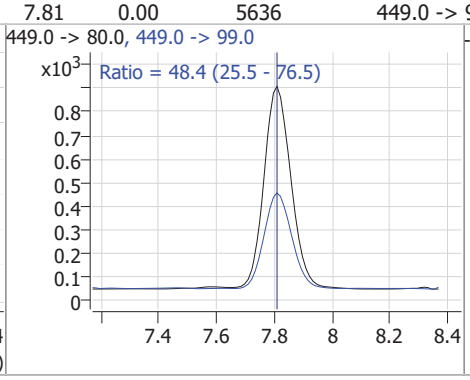
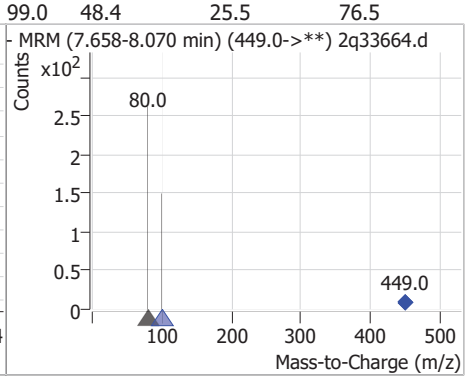
Perfluorinated Compounds by LC/MS/MS

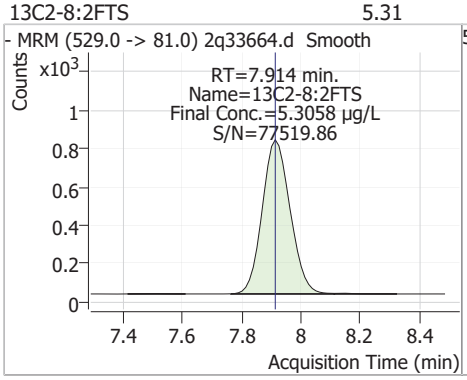
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	1.21	7.81	0.00	5636	449.0 -> 99.0	48.4	25.5	76.5

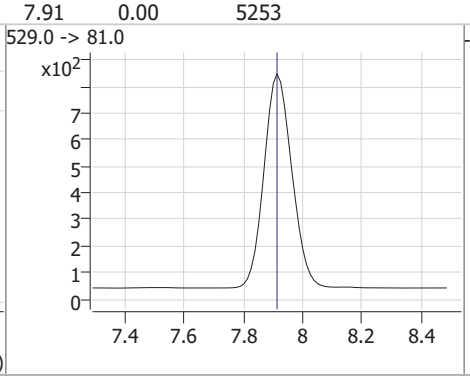


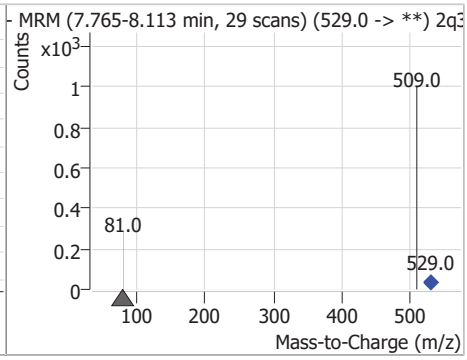




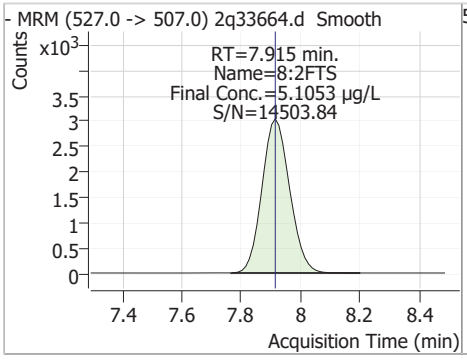
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.31	7.91	0.00	5253				

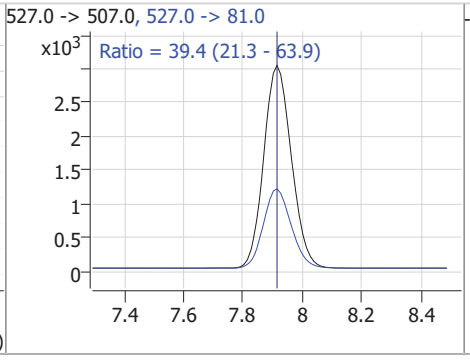


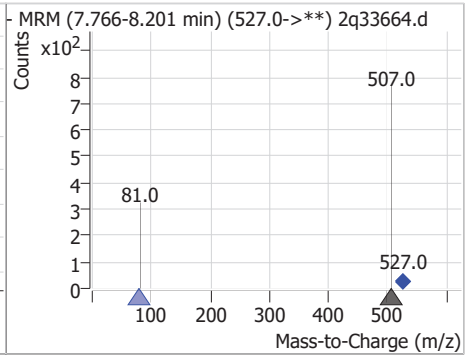




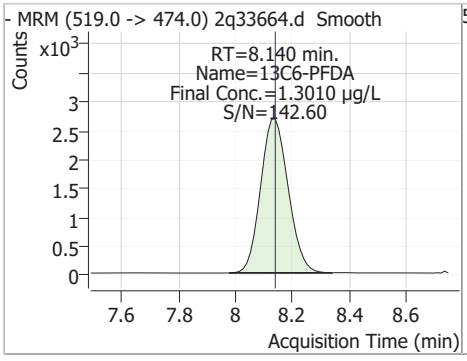
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	5.11	7.91	0.00	19483	527.0 -> 81.0	39.4	21.3	63.9

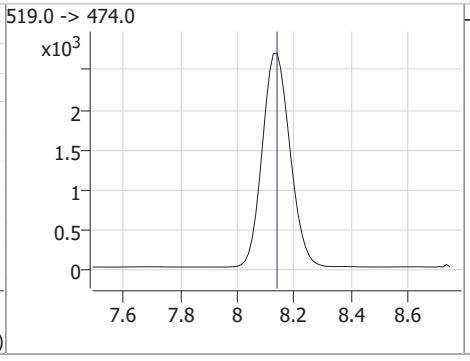


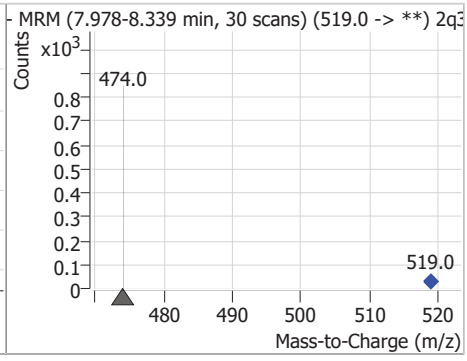




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.30	8.14	0.00	17993				

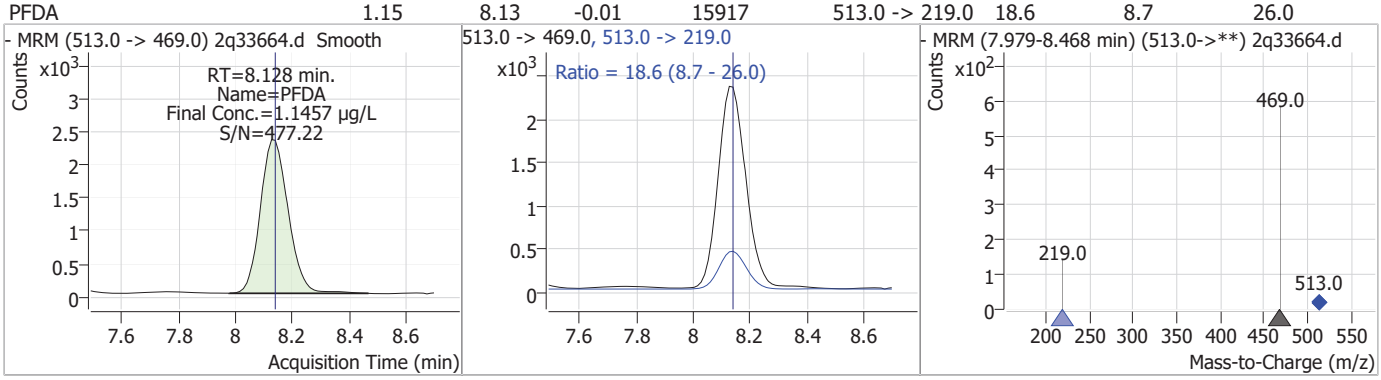




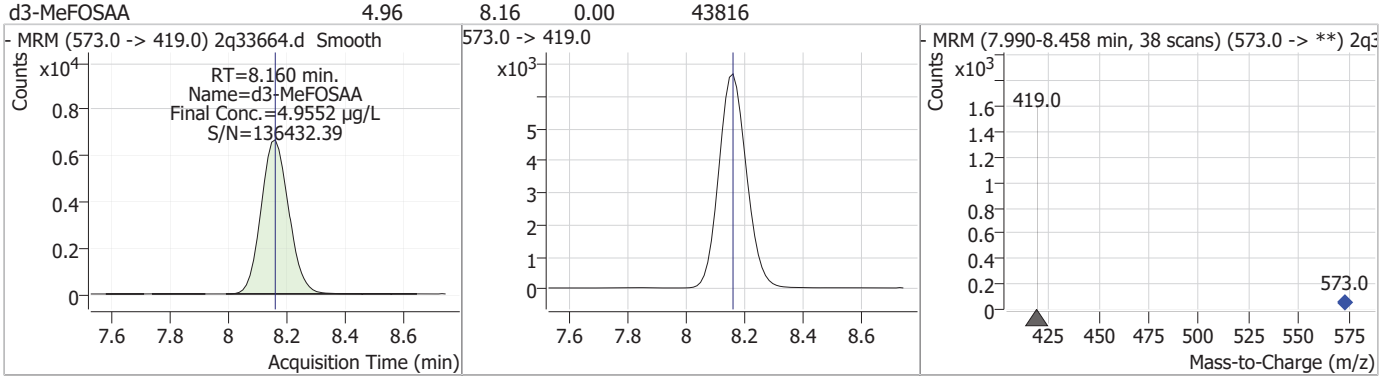


Perfluorinated Compounds by LC/MS/MS

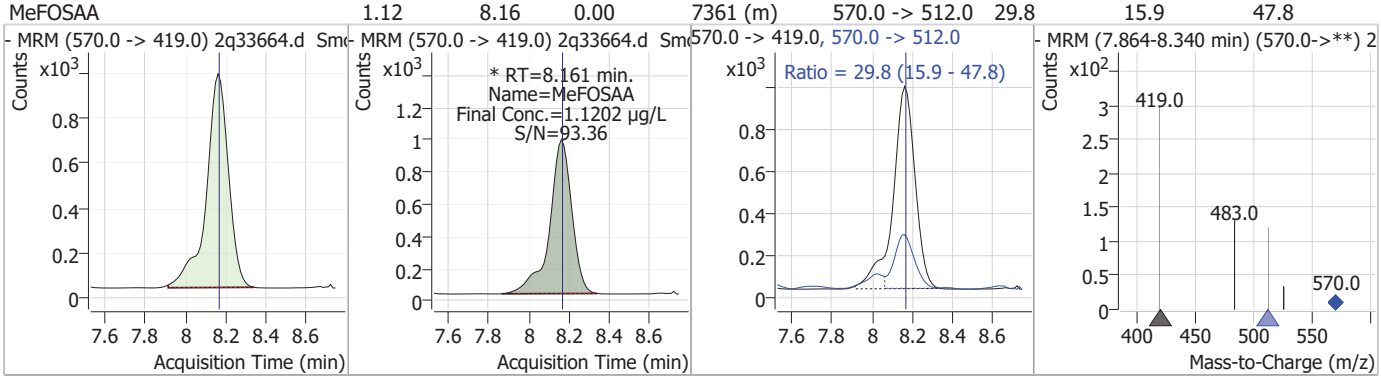
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	1.15	8.13	-0.01	15917	513.0 -> 219.0	18.6	8.7	26.0



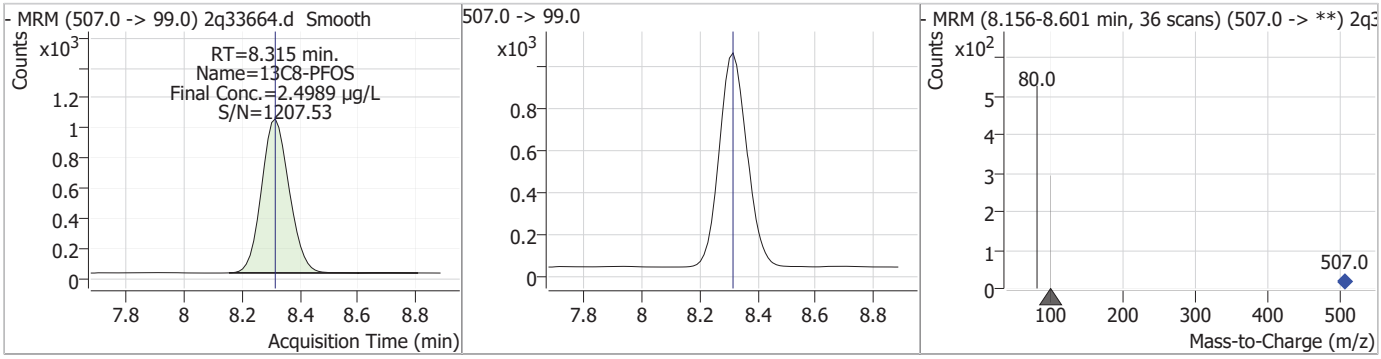
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.96	8.16	0.00	43816				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	1.12	8.16	0.00	7361 (m)	570.0 -> 512.0	29.8	15.9	47.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.50	8.32	0.00	6749				



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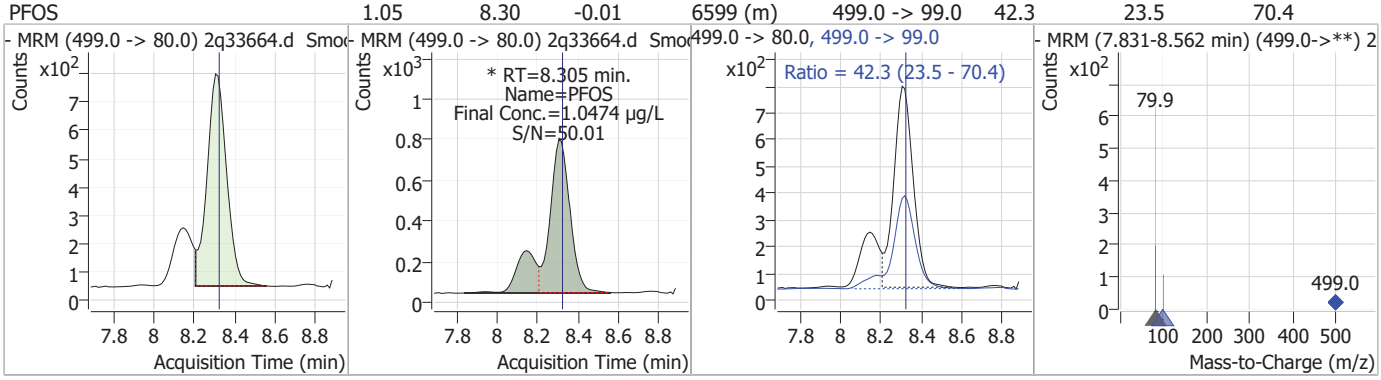
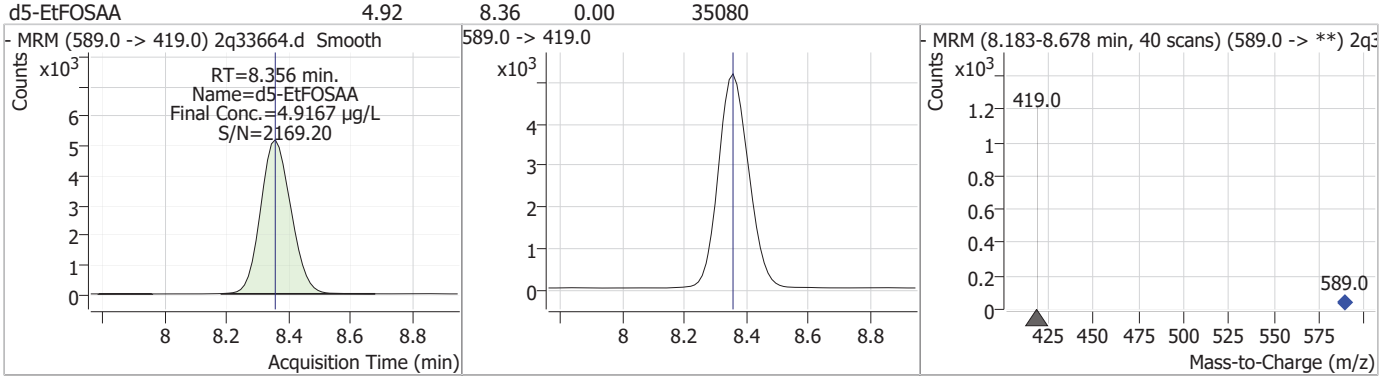
Perfluorinated Compounds by LC/MS/MS

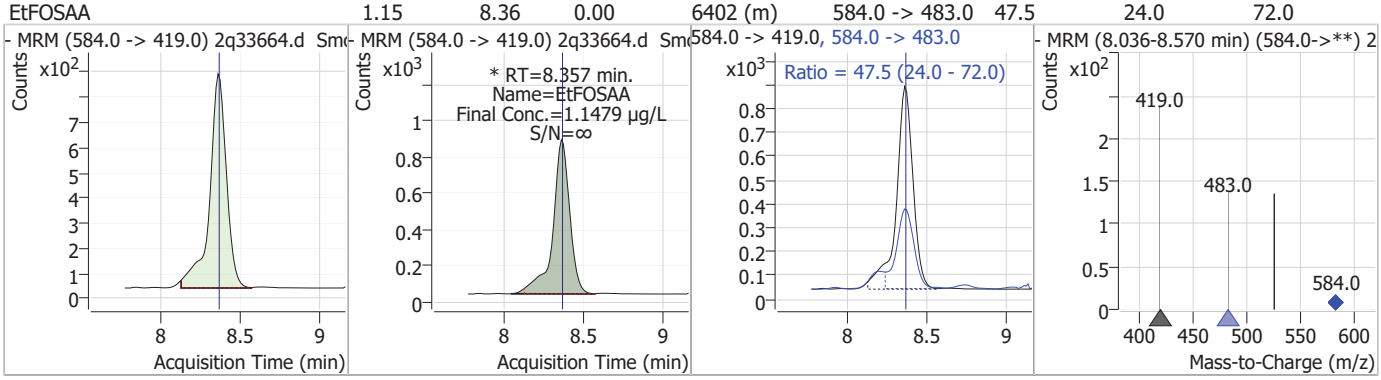
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	1.05	8.30	-0.01	6599 (m)	499.0 -> 99.0	42.3	23.5	70.4



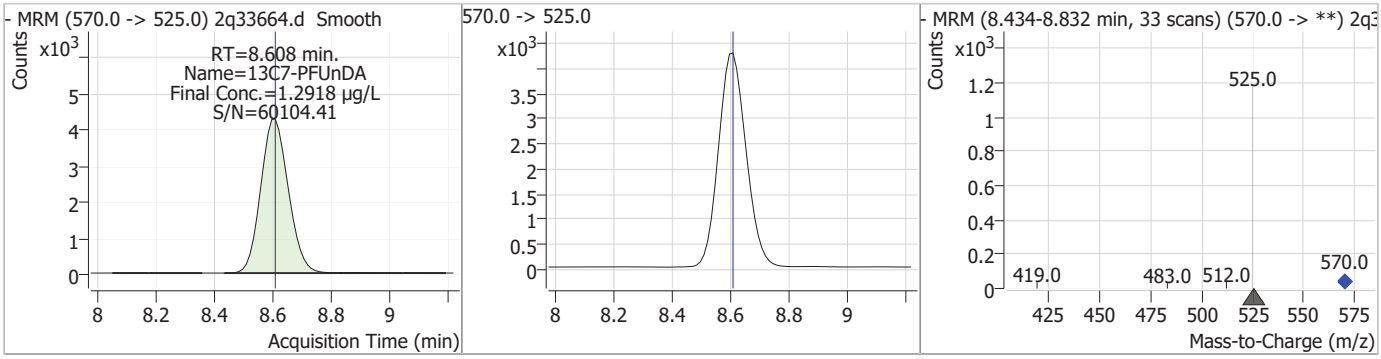
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.92	8.36	0.00	35080				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	1.15	8.36	0.00	6402 (m)	584.0 -> 483.0	47.5	24.0	72.0

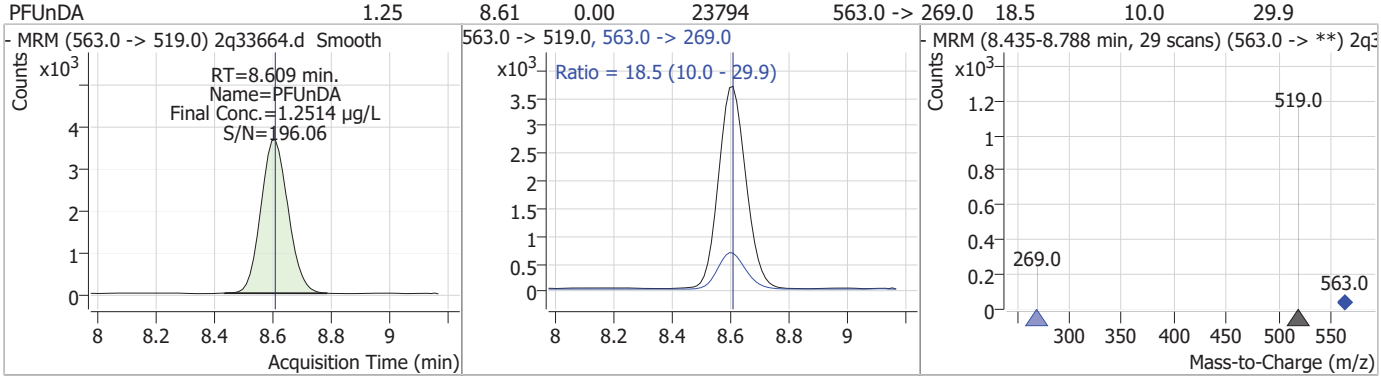


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.29	8.61	0.00	28013				

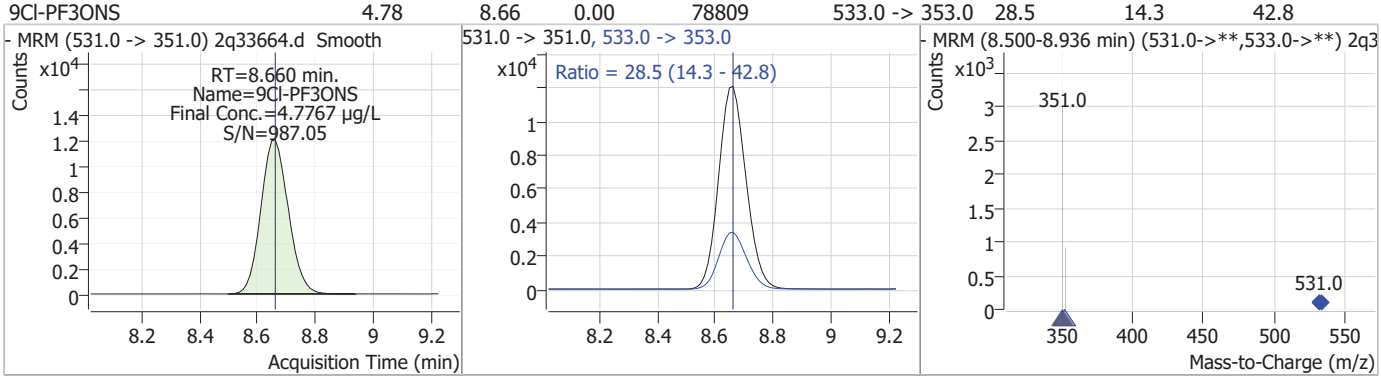


Perfluorinated Compounds by LC/MS/MS

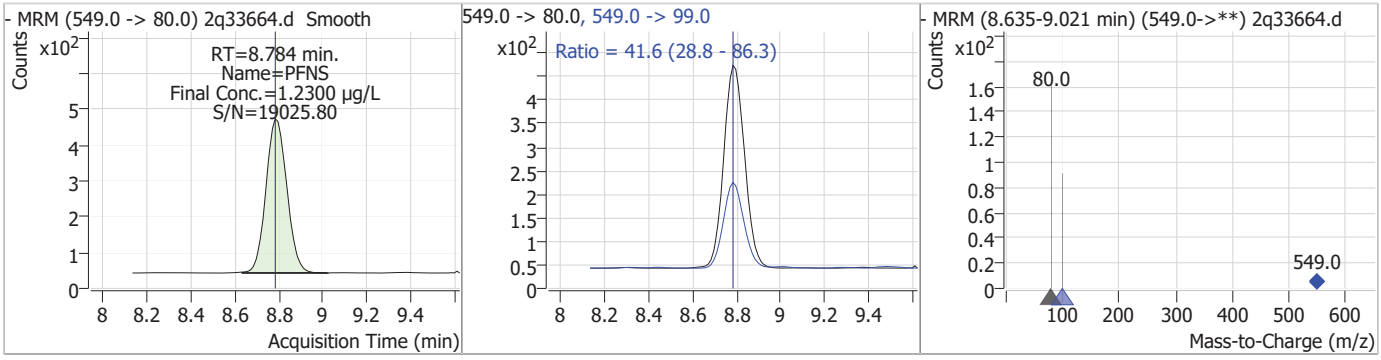
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	1.25	8.61	0.00	23794	563.0 -> 269.0	18.5	10.0	29.9



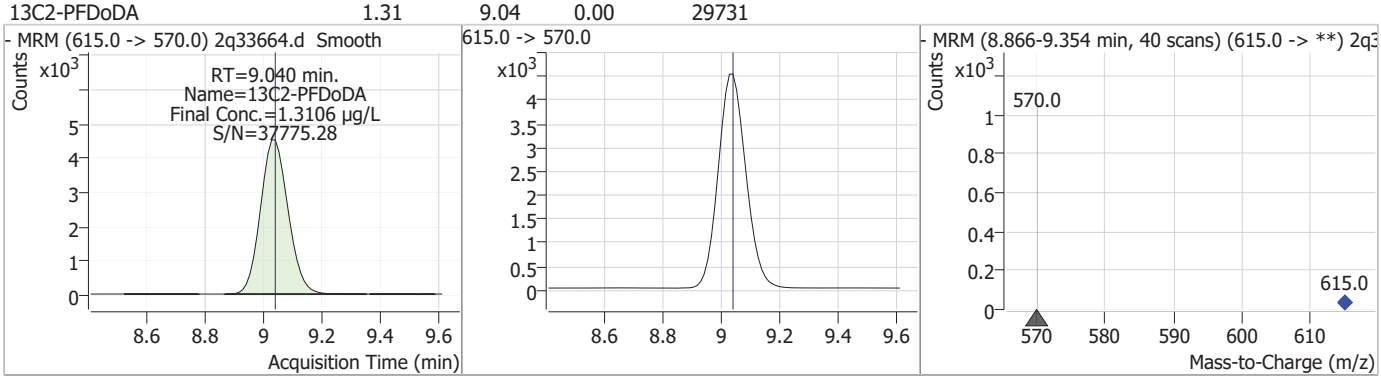
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	4.78	8.66	0.00	78809	533.0 -> 353.0	28.5	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	1.23	8.78	0.00	2829	549.0 -> 99.0	41.6	28.8	86.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.31	9.04	0.00	29731				



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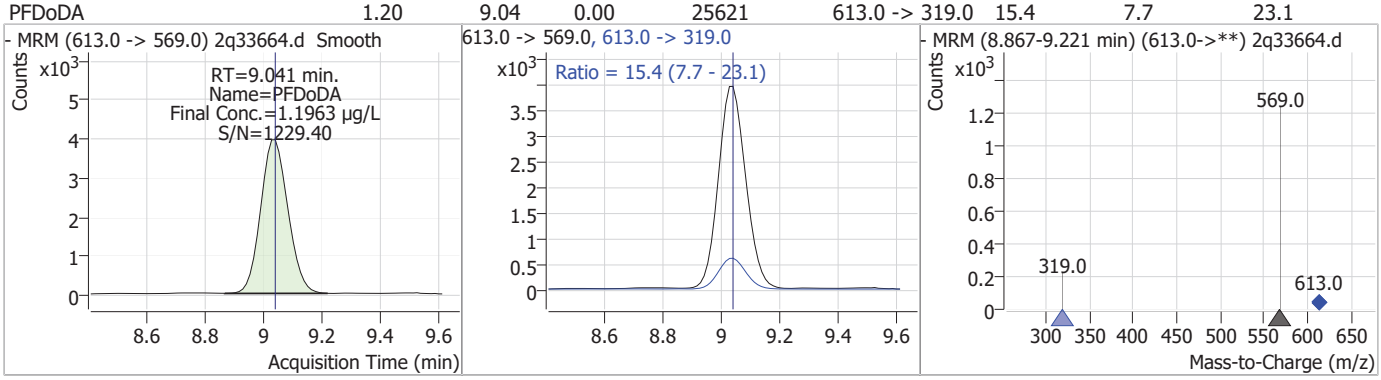
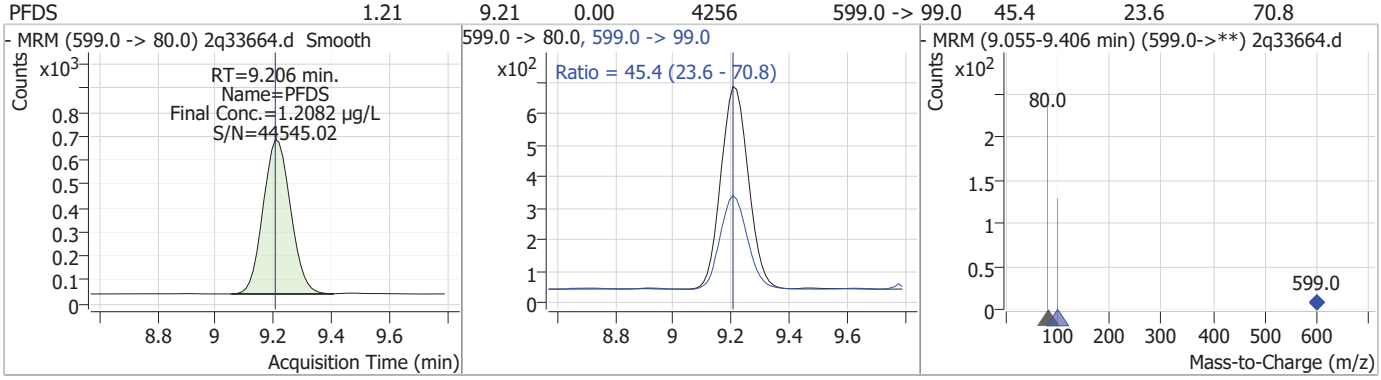
Perfluorinated Compounds by LC/MS/MS

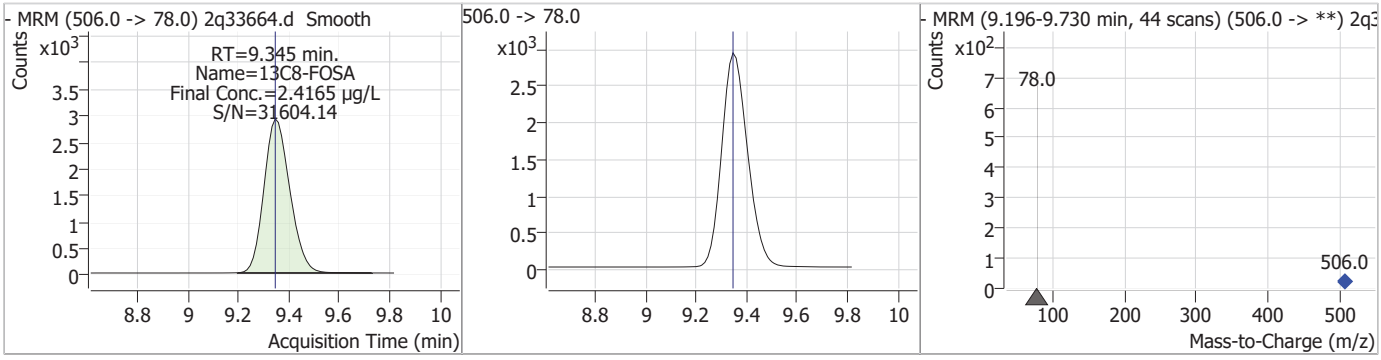
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	1.20	9.04	0.00	25621	613.0 -> 319.0	15.4	7.7	23.1



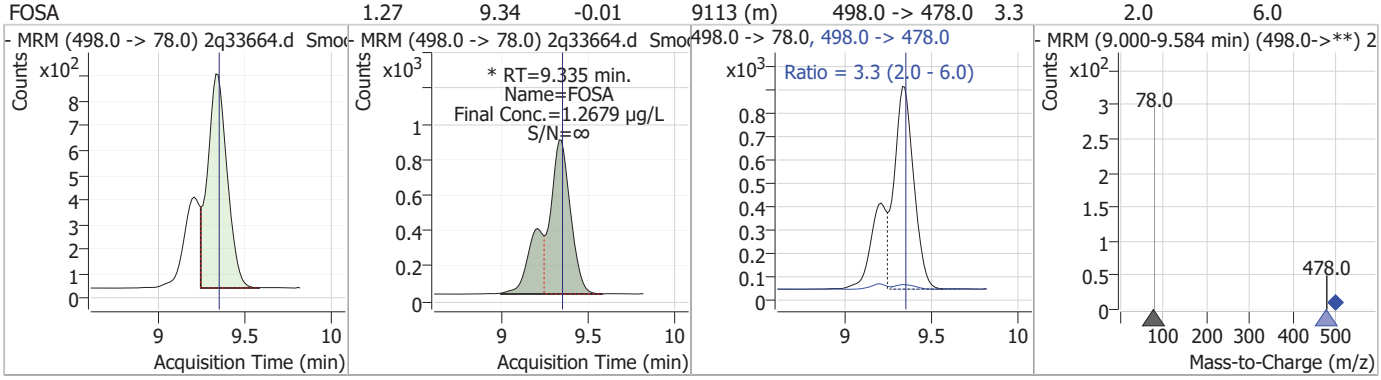
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	1.21	9.21	0.00	4256	599.0 -> 99.0	45.4	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.42	9.35	0.00	20696				

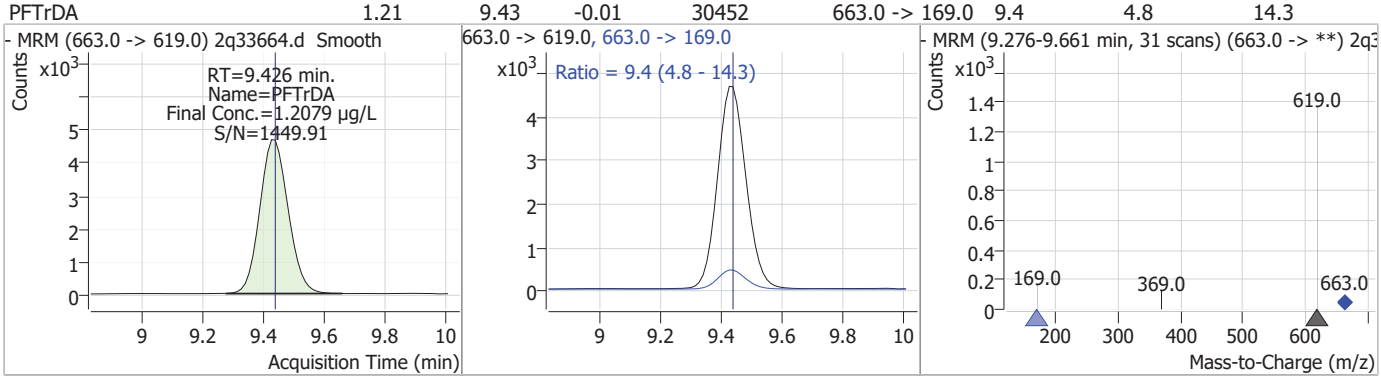


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	1.27	9.34	-0.01	9113 (m)	498.0 -> 478.0	3.3	2.0	6.0

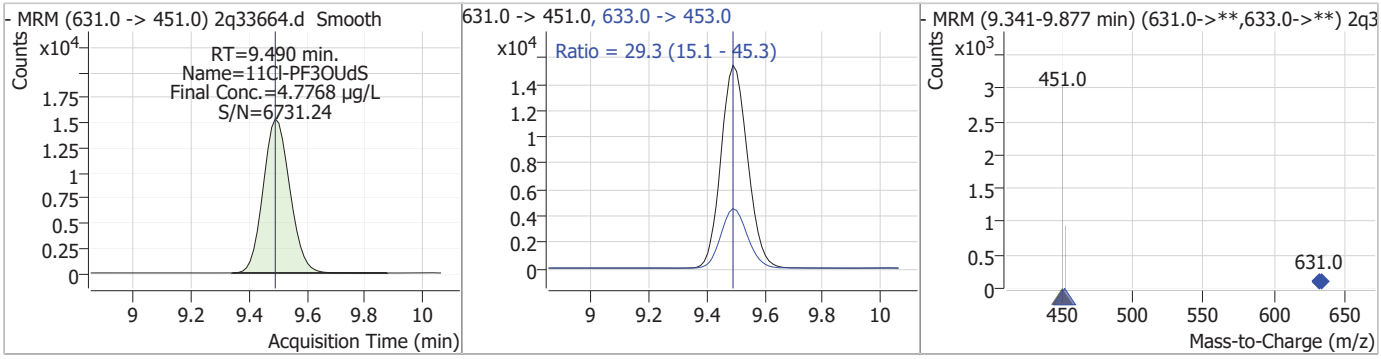


Perfluorinated Compounds by LC/MS/MS

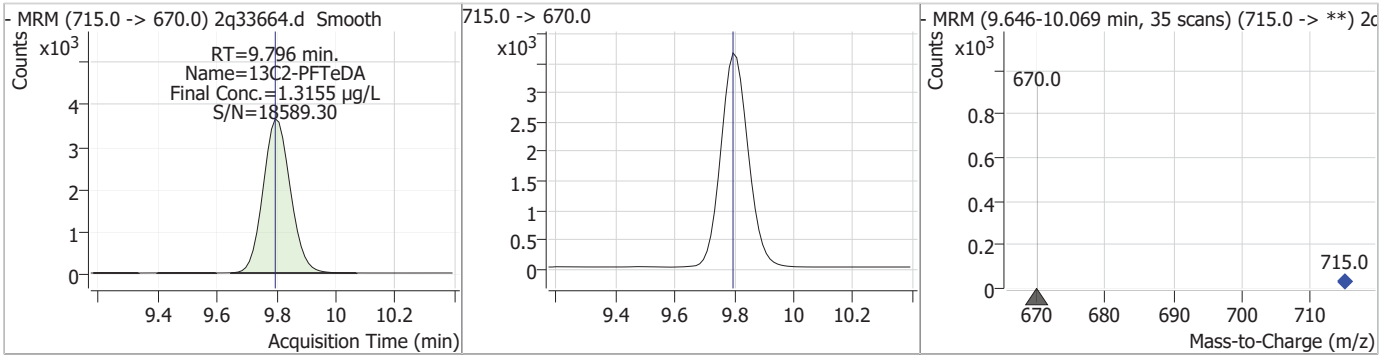
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	1.21	9.43	-0.01	30452	663.0 -> 169.0	9.4	4.8	14.3



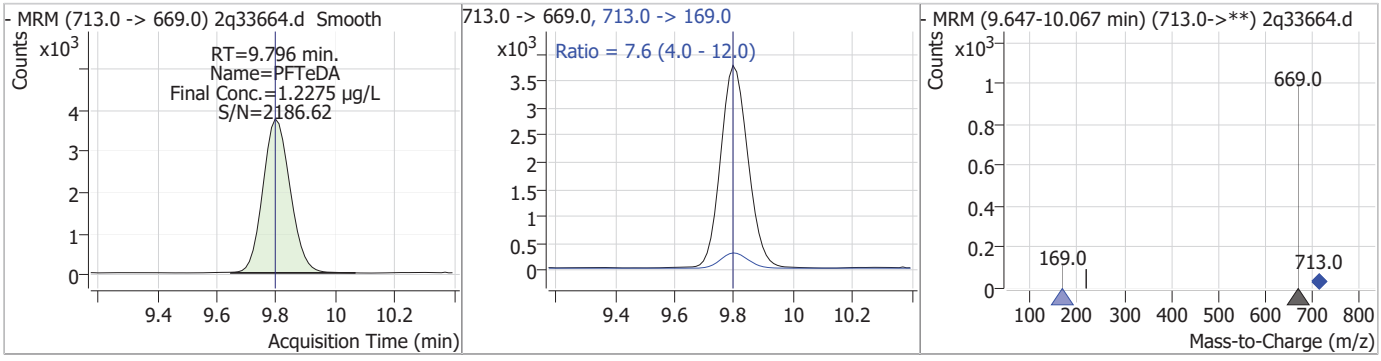
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	4.78	9.49	0.00	98174	633.0 -> 453.0	29.3	15.1	45.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.32	9.80	0.00	23164				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	1.23	9.80	0.00	23944	713.0 -> 169.0	7.6	4.0	12.0



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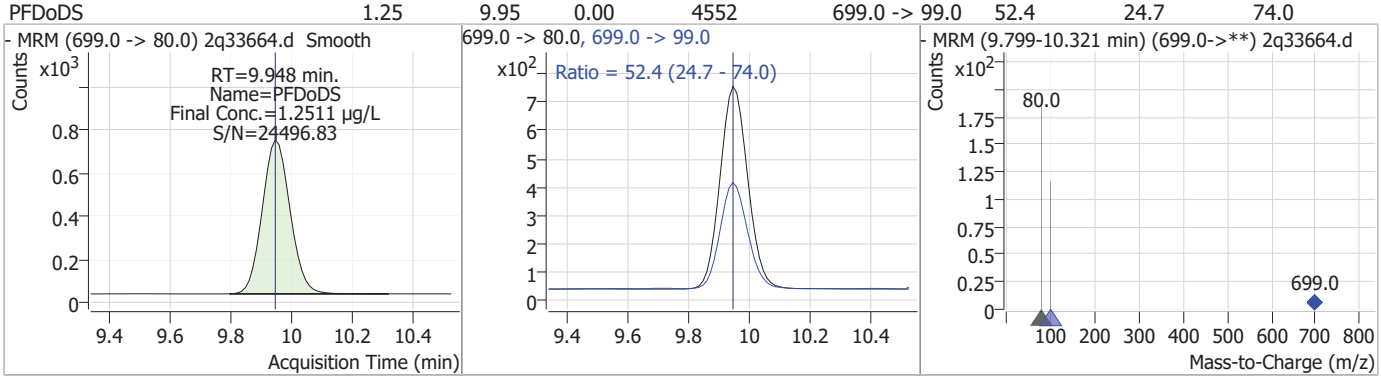
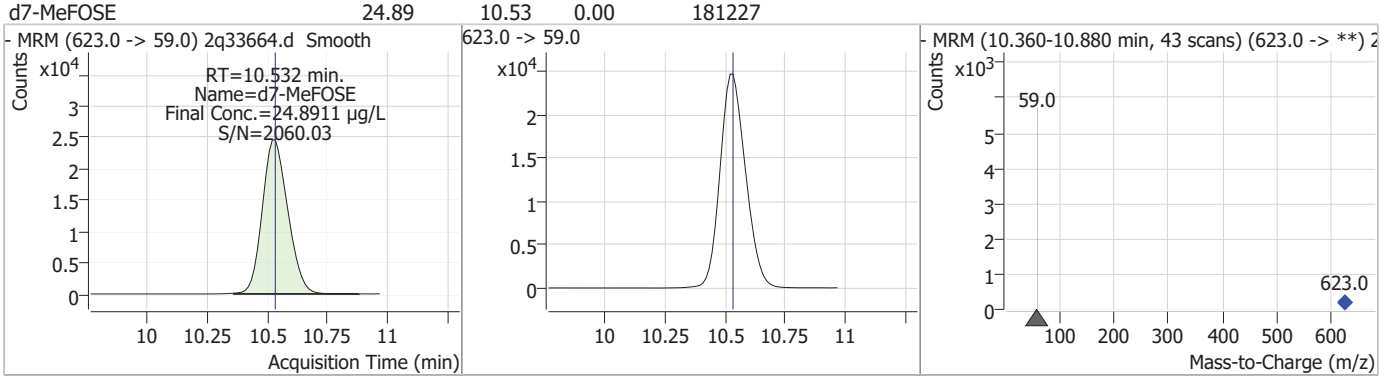
Perfluorinated Compounds by LC/MS/MS

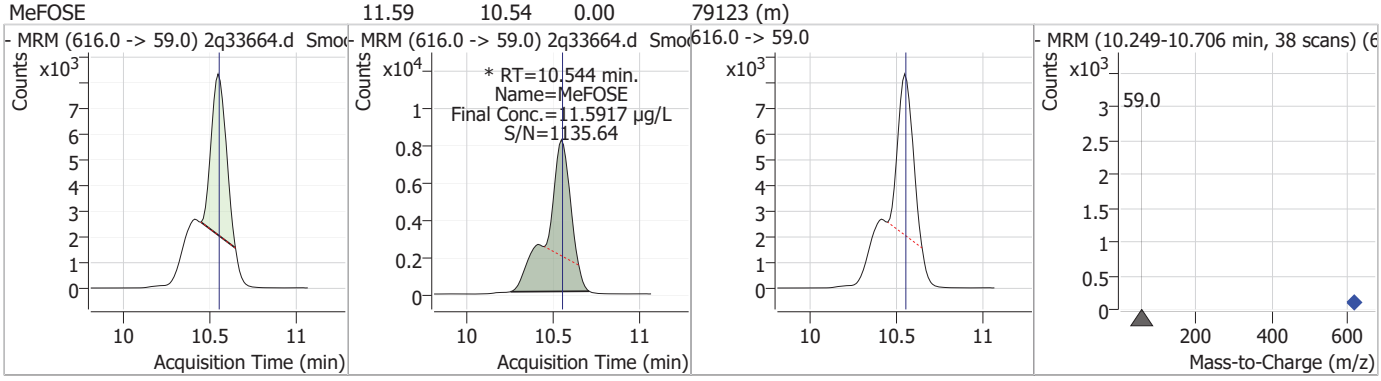
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	1.25	9.95	0.00	4552	699.0 -> 99.0	52.4	24.7	74.0



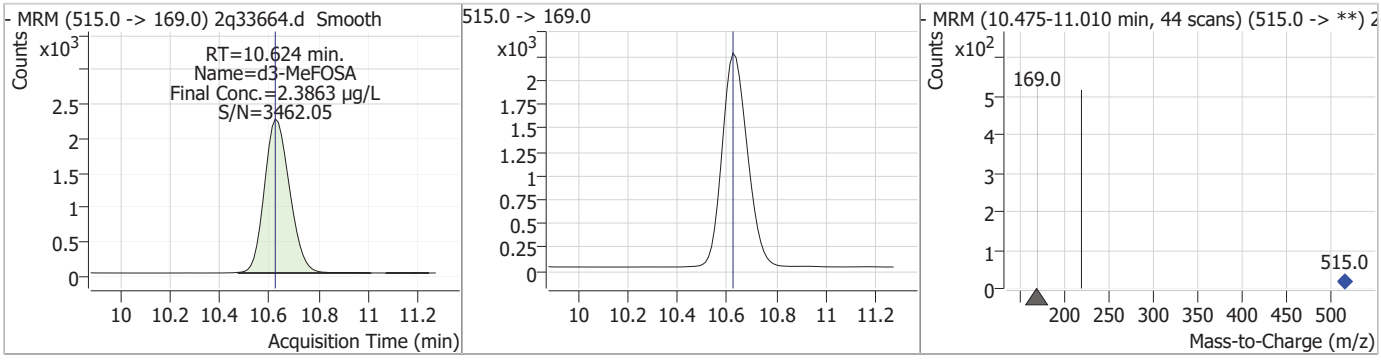
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.89	10.53	0.00	181227				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	11.59	10.54	0.00	79123 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.39	10.62	0.00	15898				



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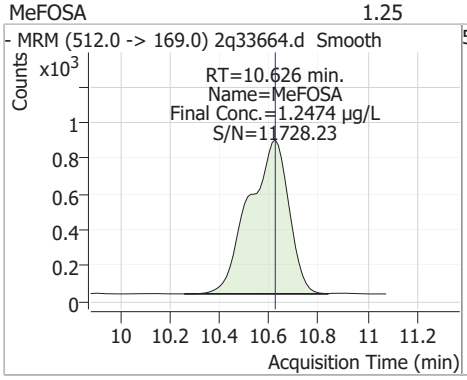
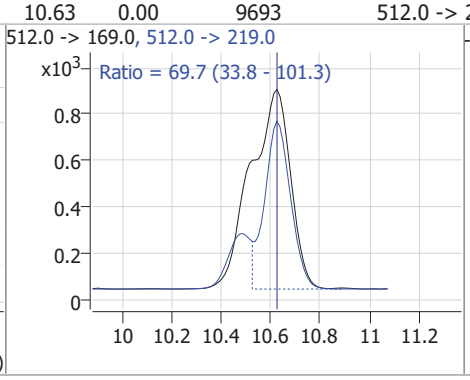
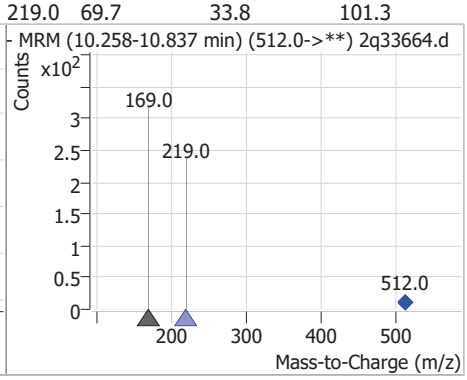
Perfluorinated Compounds by LC/MS/MS

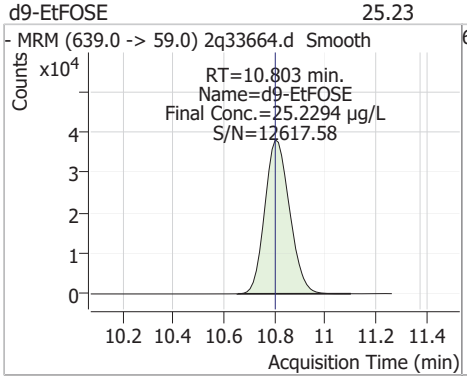
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	1.25	10.63	0.00	9693	512.0 -> 219.0	69.7	33.8	101.3

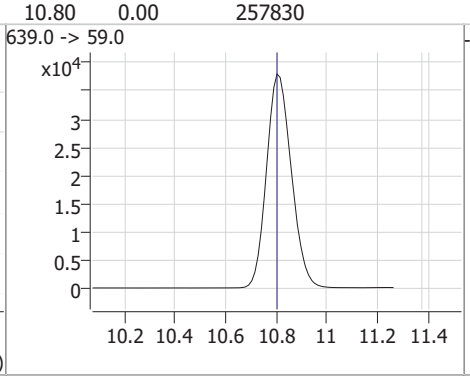


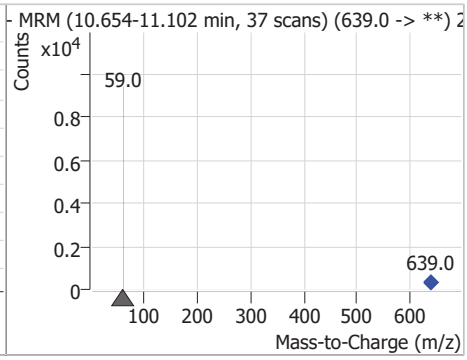




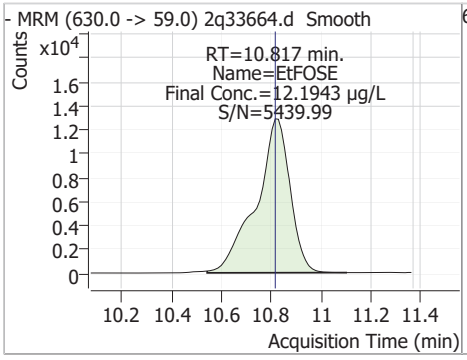
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.23	10.80	0.00	257830				

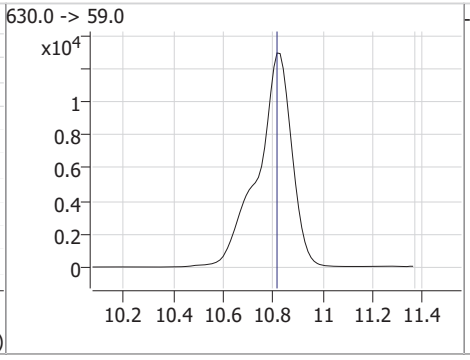


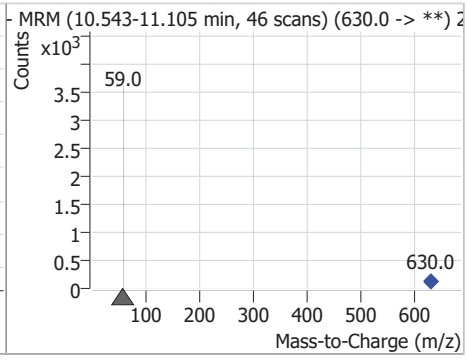




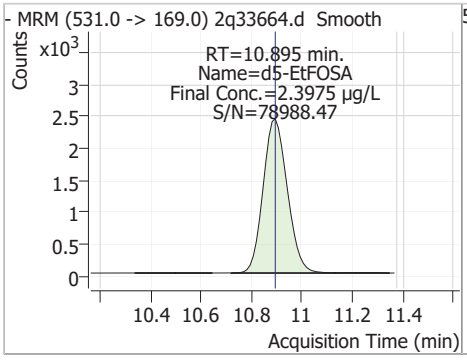
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	12.19	10.82	0.00	121960				

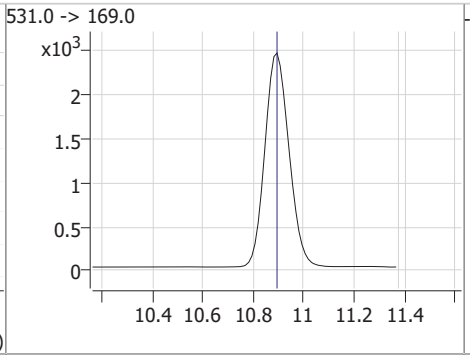


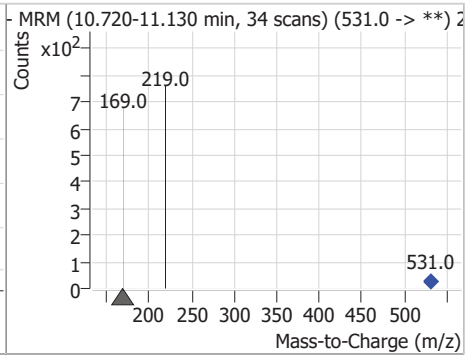




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.40	10.89	0.00	16106				





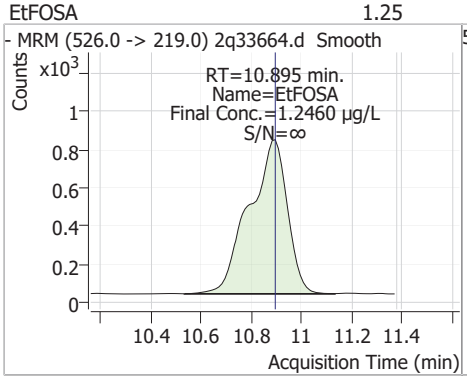


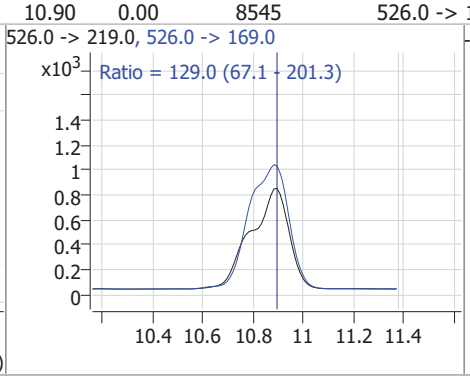
7.6.19

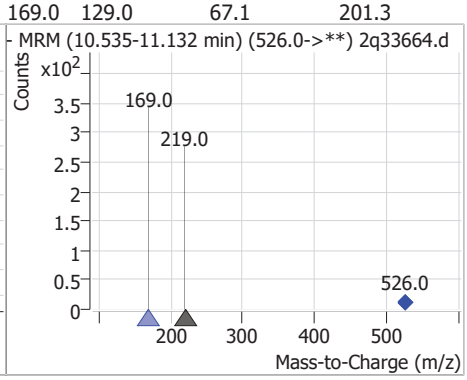
7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	1.25	10.90	0.00	8545	526.0 -> 169.0	129.0	67.1	201.3







7.6.19

7

Manual Integration Approval Summary

Sample Number: T2Q344-IC344
Lab FileID: 2Q33664.D
Injection Time: 05/09/25 15:35
Method: EPA 1633
Analyst approved: 05/10/25 01:15 Josephus Gimenez
Supervisor approved: 05/12/25 11:57 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.12	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.25	Split peak
Perfluorononanoic acid	375-95-1		7.64	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.30	Split peak
EtFOSAA	2991-50-6		8.36	Split peak
PFOSA	754-91-6		9.34	Split peak
MeFOSE	24448-09-7		10.54	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/12/25 11:57

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33665.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/9/2025 3:49:23 PM
Sample Name : ICC344-4
Vial : P1-A5
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q344.batch.bin
Sample Information : OP62666,T2Q344,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	121638	10.00 µg/L	0.000
M5-PFPeA	4.637	268.0 -> 223.0	65226	5.00 µg/L	0.000
M5-PFHxA	5.745	318.0 -> 273.0	38785	2.50 µg/L	0.000
M4-PFHpA	6.540	367.0 -> 322.0	31149	2.50 µg/L	0.000
M8-PFOA	7.124	421.0 -> 376.0	66845	2.50 µg/L	0.000
M9-PFNA	7.644	472.0 -> 427.0	26755	1.25 µg/L	0.000
M6-PFDA	8.140	519.0 -> 474.0	17887	1.25 µg/L	0.000
M7-PFUnDA	8.608	570.0 -> 525.0	29295	1.25 µg/L	0.000
M2-PFDoDA	9.040	615.0 -> 570.0	29689	1.25 µg/L	0.000
M2-PFTeDA	9.796	715.0 -> 670.0	22957	1.25 µg/L	0.000
M8-FOSA	9.345	506.0 -> 78.0	21270	2.50 µg/L	0.000
M3-PFBS	5.699	302.0 -> 99.0	6269	2.50 µg/L	0.000
M3-PFHxS	7.250	402.0 -> 99.0	7138	2.50 µg/L	0.000
M8-PFOS	8.315	507.0 -> 99.0	6846	2.50 µg/L	0.000
M2-4:2FTS	5.433	329.0 -> 81.0	1772	5.00 µg/L	0.000
M2-6:2FTS	6.910	429.0 -> 81.0	3386	5.00 µg/L	0.000
M2-8:2FTS	7.914	529.0 -> 81.0	5072	5.00 µg/L	0.000
M3-MeFOSAA	8.160	573.0 -> 419.0	43965	5.00 µg/L	0.000
M3-HFPO-DA	6.074	287.0 -> 169.0	23796	10.00 µg/L	0.000
M5-EtFOSAA	8.356	589.0 -> 419.0	35591	5.00 µg/L	0.000
M7-MeFOSE	10.532	623.0 -> 59.0	180212	25.00 µg/L	0.000
M9-EtFOSE	10.803	639.0 -> 59.0	254244	25.00 µg/L	0.000
M5-EtFOSA	10.895	531.0 -> 169.0	16364	2.50 µg/L	0.000
M3-MeFOSA	10.624	515.0 -> 169.0	16608	2.50 µg/L	0.000
13C4-PFOS	8.316	503.0 -> 80.0	11835	2.50 µg/L	0.000
13C3-PFBA	3.265	216.0 -> 172.0	50766	5.00 µg/L	0.000
18O2-PFHxS	7.262	403.0 -> 84.0	7968	2.50 µg/L	0.000
13C4-PFOA	7.124	417.0 -> 372.0	65091	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	17485	1.25 µg/L	0.000
13C5-PFNA	7.645	468.0 -> 423.0	23780	1.25 µg/L	0.000
13C2-PFHxA	5.746	315.0 -> 270.0	33859	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.433	329.0 -> 81.0	1772	6.15 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 123.0%	
13C2-6:2FTS	6.910	429.0 -> 81.0	3386	5.43 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.7%	
13C2-8:2FTS	7.914	529.0 -> 81.0	5072	5.04 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.8%	
13C2-PFDoDA	9.040	615.0 -> 570.0	29689	1.24 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.4%	
13C2-PFTeDA	9.796	715.0 -> 670.0	22957	1.24 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.1%	
13C3-PFBS	5.699	302.0 -> 99.0	6269	2.79 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 111.8%	
13C3-PFHxS	7.250	402.0 -> 99.0	7138	2.63 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.1%		
13C4-PFBA	3.263	217.0 -> 172.0	121638	10.19 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.9%		
13C4-PFHpA	6.540	367.0 -> 322.0	31149	2.64 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.5%		
13C5-PFHxA	5.745	318.0 -> 273.0	38785	2.61 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.6%		
13C5-PFPeA	4.637	268.0 -> 223.0	65226	5.16 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.2%		
13C6-PFDA	8.140	519.0 -> 474.0	17887	1.23 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.3%		
13C7-PFUnDA	8.608	570.0 -> 525.0	29295	1.28 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.6%		
13C8-FOSA	9.345	506.0 -> 78.0	21270	2.60 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.9%		
13C8-PFOA	7.124	421.0 -> 376.0	66845	2.51 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.3%		
13C8-PFOS	8.315	507.0 -> 99.0	6846	2.65 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.1%		
13C9-PFNA	7.644	472.0 -> 427.0	26755	1.29 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.1%		
d3-MeFOSAA	8.160	573.0 -> 419.0	43965	5.20 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.0%		
13C3-HFPO-DA	6.074	287.0 -> 169.0	23796	10.22 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 102.2%		
d3-MeFOSA	10.624	515.0 -> 169.0	16608	2.61 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.3%		
d5-EtFOSAA	8.356	589.0 -> 419.0	35591	5.22 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.4%		
d7-MeFOSE	10.532	623.0 -> 59.0	180212	25.90 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 103.6%		
d9-EtFOSE	10.803	639.0 -> 59.0	254244	26.03 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 104.1%		
d5-EtFOSA	10.895	531.0 -> 169.0	16364	2.55 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.9%		
Target Compounds						QValue
4:2FTS	5.433	327.0 -> 307.0	21324	8.32 µg/L		100
		327.0 -> 81.0	11283			
6:2FTS	6.910	427.0 -> 407.0	38124	9.49 µg/L		100
		427.0 -> 81.0	14527			
8:2FTS	7.915	527.0 -> 507.0	36106	9.80 µg/L		100
		527.0 -> 81.0	15382			
EtFOSAA	8.357	584.0 -> 419.0	14120	2.50 µg/L	m	100
		584.0 -> 483.0	6781			
FOSA	9.348	498.0 -> 78.0	18347	2.48 µg/L	m	100
		498.0 -> 478.0	729			
MeFOSAA	8.161	570.0 -> 419.0	15479	2.35 µg/L	m	100
		570.0 -> 512.0	4931			
PFBA	3.255	213.0 -> 169.0	31457	9.80 µg/L		100
PFBS	5.700	299.0 -> 80.0	16084	2.03 µg/L		100
		299.0 -> 99.0	5786			
PFDA	8.141	513.0 -> 469.0	34042	2.47 µg/L		100
		513.0 -> 219.0	5901			
PFDoDA	9.041	613.0 -> 569.0	52758	2.47 µg/L		100
		613.0 -> 319.0	8127			
PFDS	9.206	599.0 -> 80.0	8046	2.18 µg/L		100

Perfluorinated Compounds by LC/MS/MS

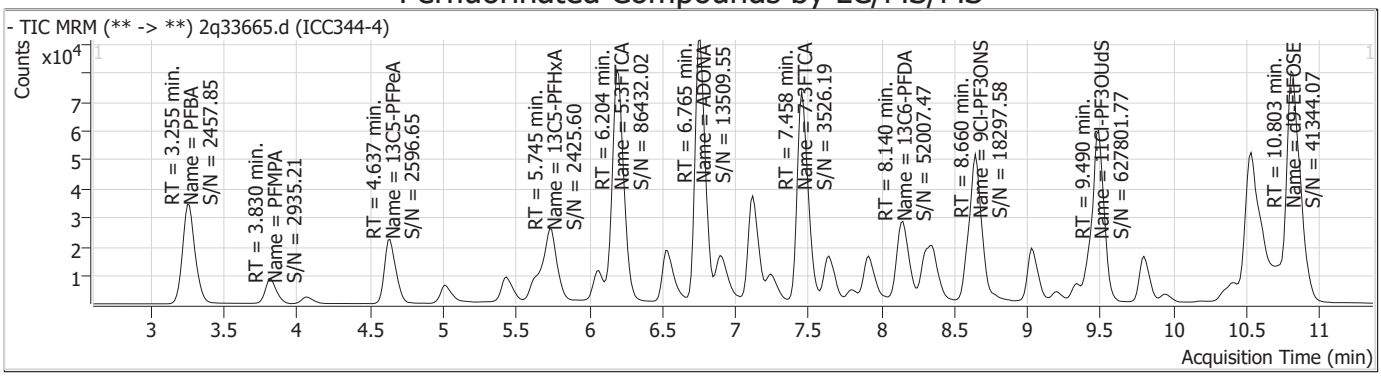
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	3797				
PFHpA	6.541	363.0 -> 319.0	47171	2.37	µg/L		100
		363.0 -> 169.0	8501				
PFHpS	7.809	449.0 -> 80.0	11248	2.24	µg/L		100
		449.0 -> 99.0	5740				
PFHxA	5.748	313.0 -> 269.0	32293	2.46	µg/L		100
		313.0 -> 119.0	1006				
PFHxS	7.252	399.0 -> 80.0	11513	2.12	µg/L	m	100
		399.0 -> 99.0	6279				
PFNA	7.645	463.0 -> 419.0	27680	2.28	µg/L	m	100
		463.0 -> 219.0	7776				
PFNS	8.784	549.0 -> 80.0	4725	2.03	µg/L		100
		549.0 -> 99.0	2719				
PFOA	7.125	413.0 -> 369.0	49031	2.41	µg/L	m	100
		413.0 -> 169.0	10895				
PFOS	8.317	499.0 -> 80.0	13450	2.10	µg/L	m	100
		499.0 -> 99.0	6309				
PFPeA	4.640	263.0 -> 219.0	57602	4.99	µg/L		100
PFPeS	6.617	349.0 -> 80.0	6043	2.12	µg/L		100
		349.0 -> 99.0	2508				
PFTeDA	9.796	713.0 -> 669.0	48531	2.51	µg/L		100
		713.0 -> 169.0	3885				
PFTrDA	9.439	663.0 -> 619.0	65611	2.61	µg/L		100
		663.0 -> 169.0	6260				
PFUnDA	8.609	563.0 -> 519.0	48559	2.44	µg/L		100
		563.0 -> 269.0	9694				
11Cl-PF3OUdS	9.490	631.0 -> 451.0	206293	9.87	µg/L		100
		633.0 -> 453.0	62344				
9Cl-PF3ONS	8.660	531.0 -> 351.0	165294	9.85	µg/L		100
		533.0 -> 353.0	47216				
ADONA	6.765	377.0 -> 251.0	347197	9.76	µg/L		100
		377.0 -> 85.0	108723				
HFPO-DA	6.075	285.0 -> 169.0	24464	10.53	µg/L		100
		285.0 -> 185.0	2078				
3:3FTCA	4.078	241.0 -> 177.0	11626	12.32	µg/L		100
		241.0 -> 117.0	778				
5:3FTCA	6.204	341.0 -> 237.0	206502	62.46	µg/L		100
		341.0 -> 217.0	147225				
7:3FTCA	7.458	441.0 -> 337.0	266031	61.84	µg/L		100
		441.0 -> 317.0	108758				
EtFOSA	10.895	526.0 -> 219.0	16636	2.39	µg/L		100
		526.0 -> 169.0	22326				
EtFOSE	10.817	630.0 -> 59.0	251843	25.54	µg/L		100
MeFOSA	10.626	512.0 -> 169.0	20547	2.53	µg/L		100
		512.0 -> 219.0	13870				
MeFOSE	10.544	616.0 -> 59.0	173162	25.51	µg/L	m	100
PFDoDS	9.948	699.0 -> 80.0	8572	2.32	µg/L		100
		699.0 -> 99.0	4231				
NFDHA	5.639	295.0 -> 201.0	5638	5.20	µg/L		100
		201.0 -> 85.0	33285				
		295.0 -> 85.0	1623				
PFMBA	5.027	279.0 -> 85.0	33411	4.93	µg/L		100
PFMPA	3.830	229.0 -> 85.0	48967	5.04	µg/L		100
PFEESA	6.168	315.0 -> 135.0	72865	4.50	µg/L		100
		315.0 -> 69.0	7812				

 # = Qualifier out of range, m = manually integrated, + = Area summed

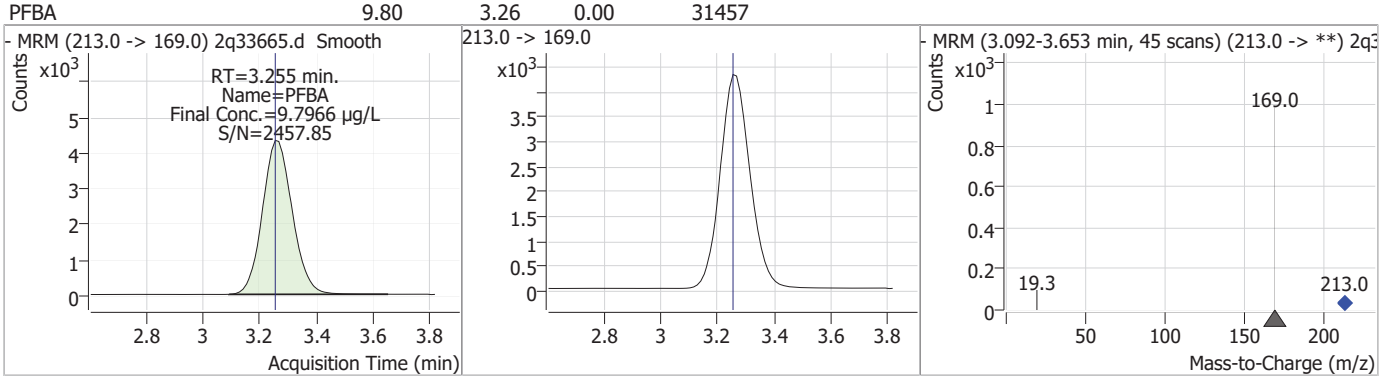
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

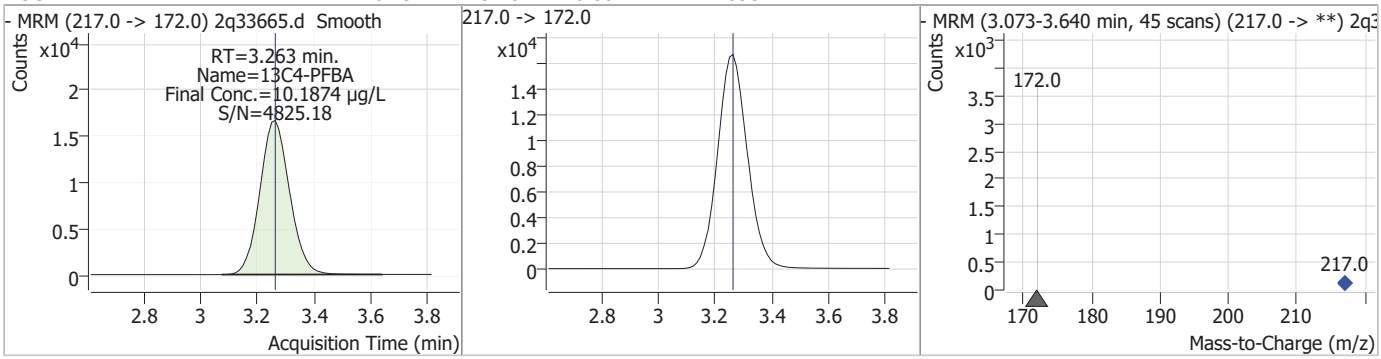
Perfluorinated Compounds by LC/MS/MS



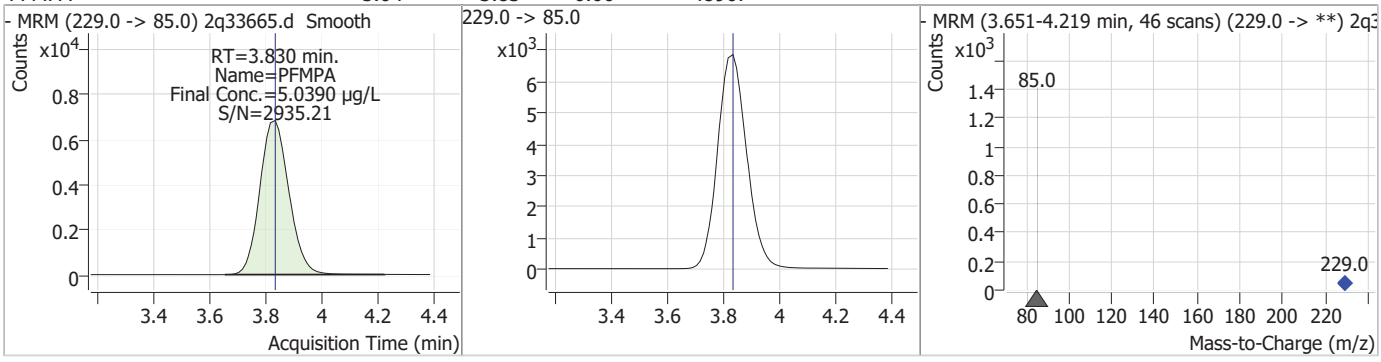
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.80	3.26	0.00	31457				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.19	3.26	0.00	121638				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.04	3.83	0.00	48967				

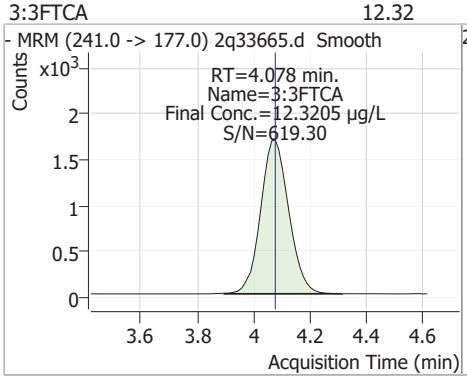


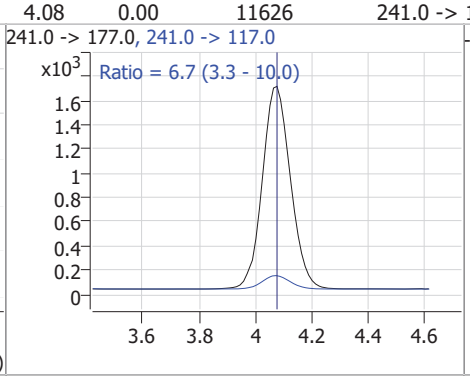
7.6.20

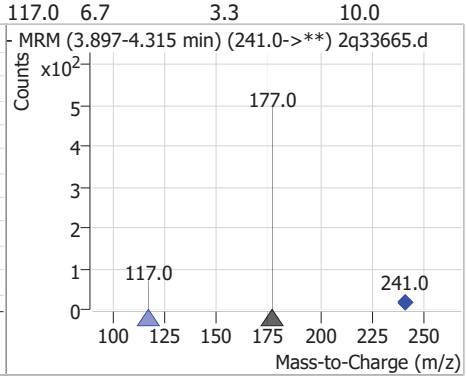
7

Perfluorinated Compounds by LC/MS/MS

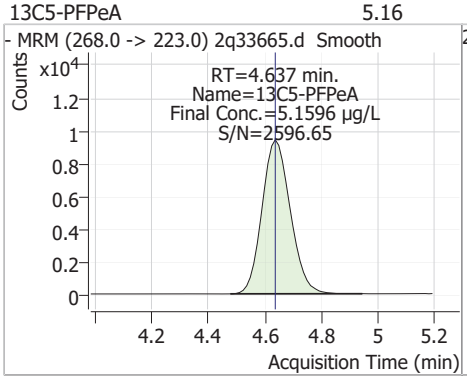
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.32	4.08	0.00	11626	241.0 -> 117.0	6.7	3.3	10.0

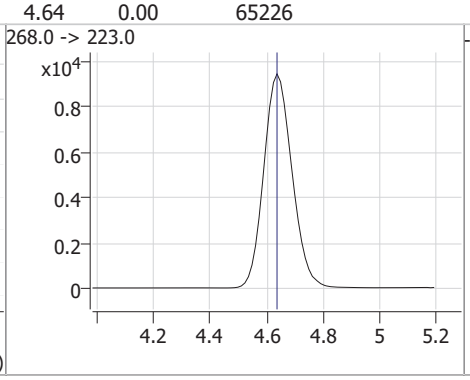


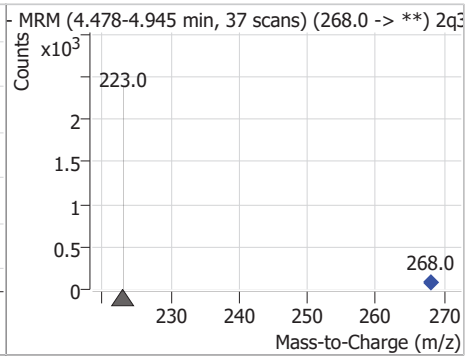




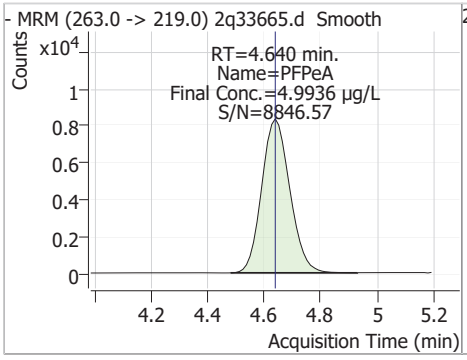
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.16	4.64	0.00	65226				

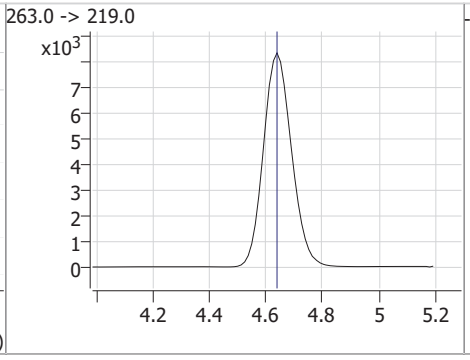


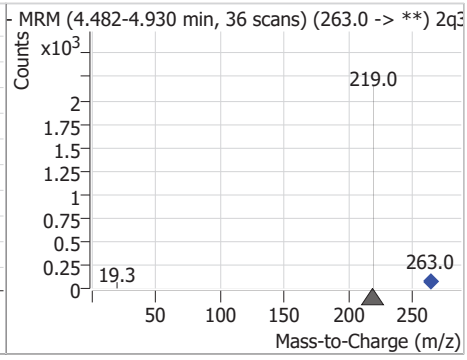




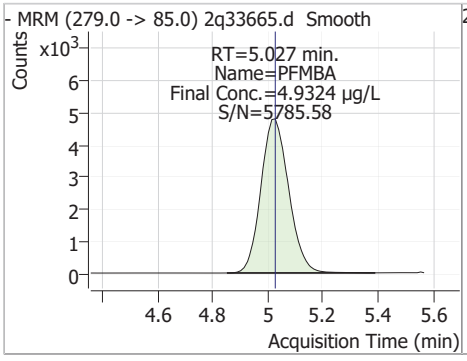
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	4.99	4.64	0.00	57602				

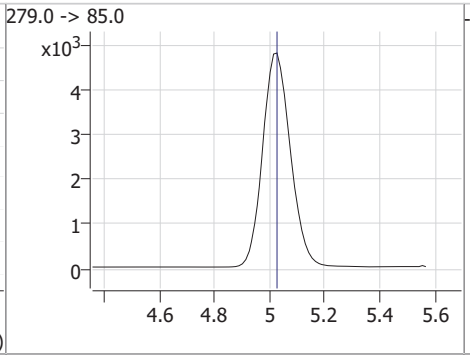


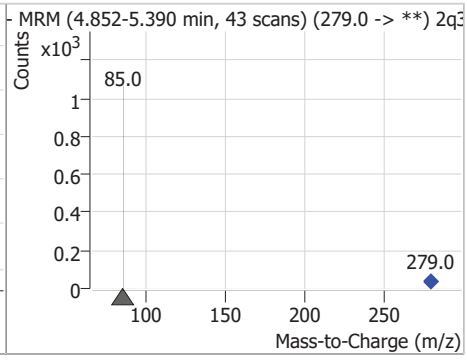




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.93	5.03	0.00	33411				







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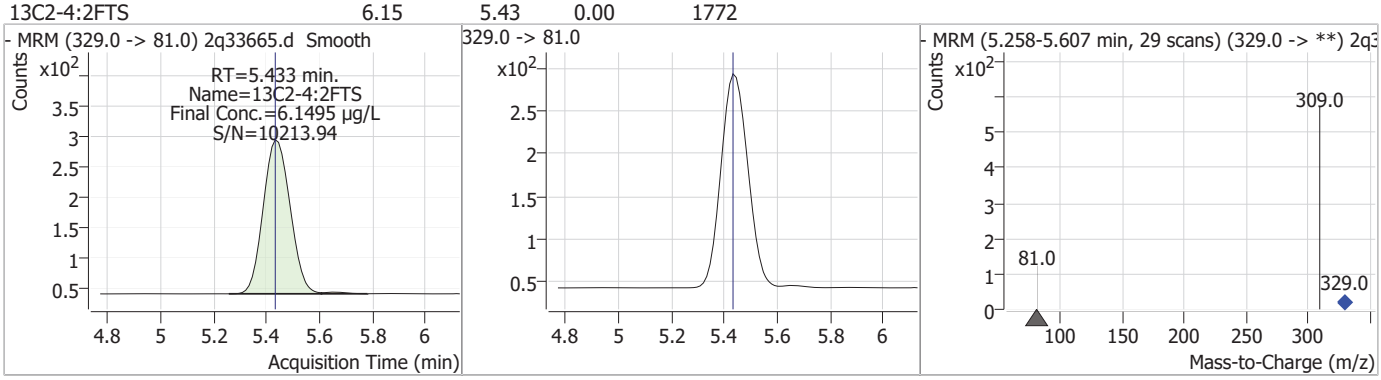
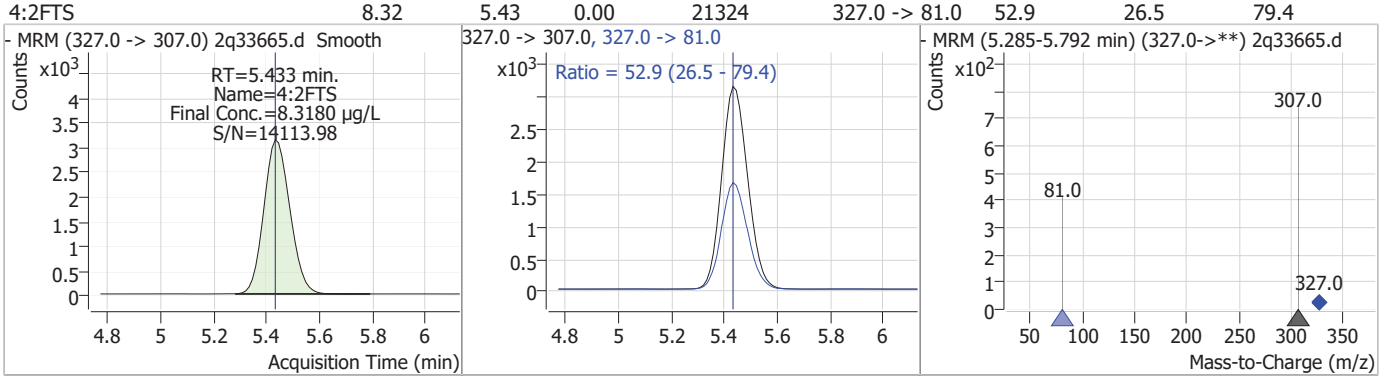
Perfluorinated Compounds by LC/MS/MS

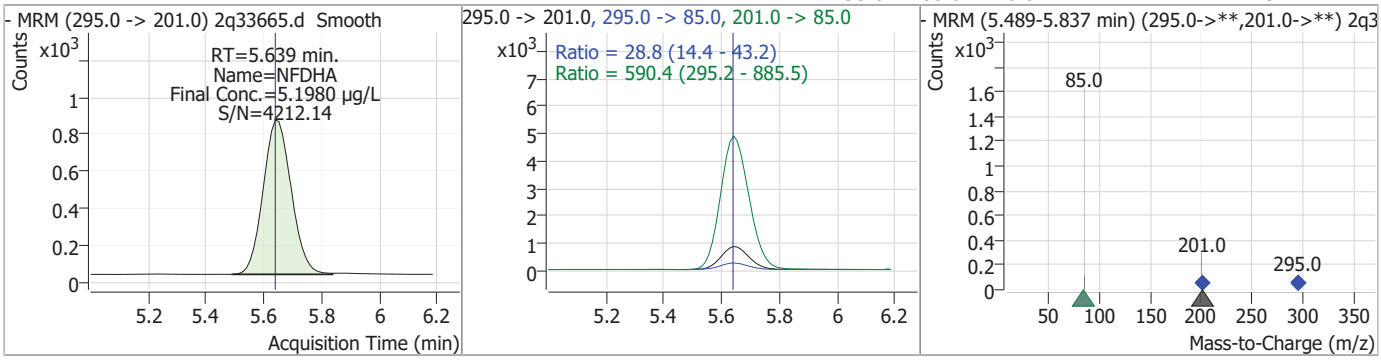
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	6.15	5.43	0.00	1772				



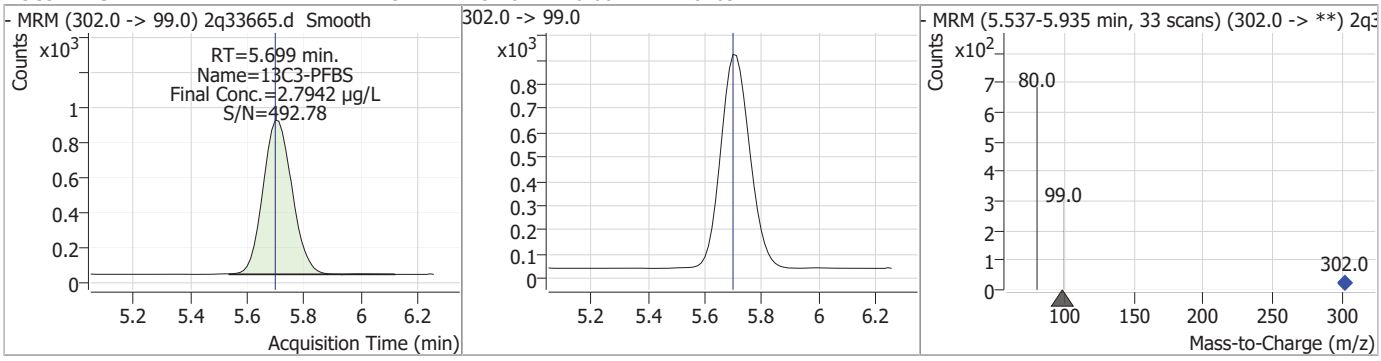
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	8.32	5.43	0.00	21324	327.0 -> 81.0	52.9	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.20	5.64	0.00	5638	201.0 -> 85.0	590.4	295.2	885.5
					295.0 -> 85.0	28.8	14.4	43.2

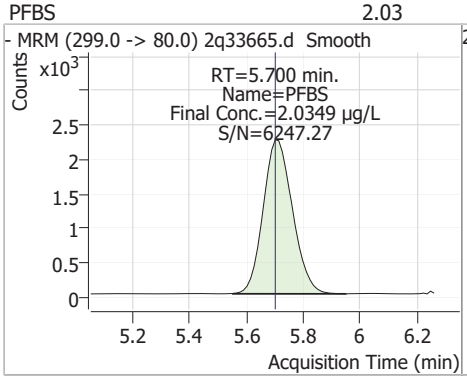


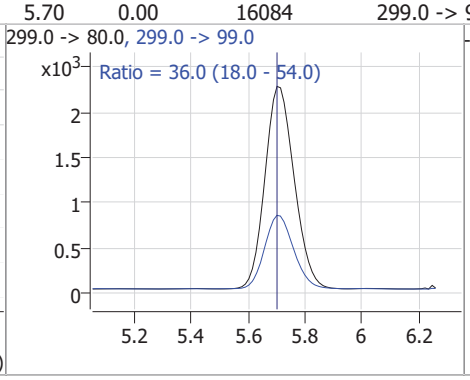
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.79	5.70	0.00	6269				

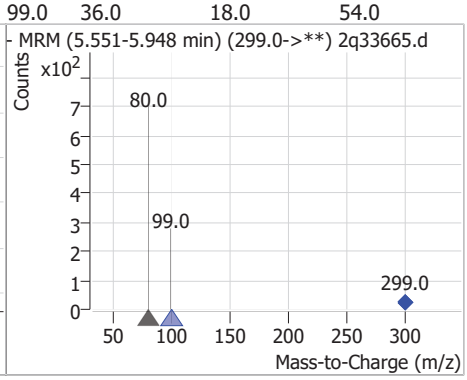


Perfluorinated Compounds by LC/MS/MS

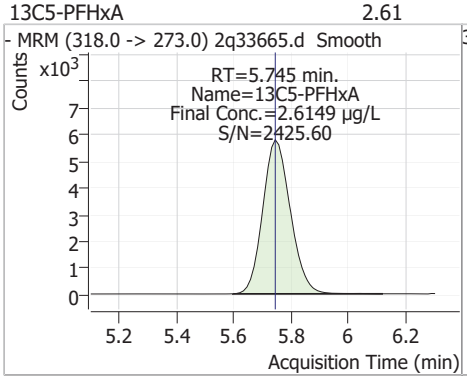
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.03	5.70	0.00	16084	299.0 -> 99.0	36.0	18.0	54.0

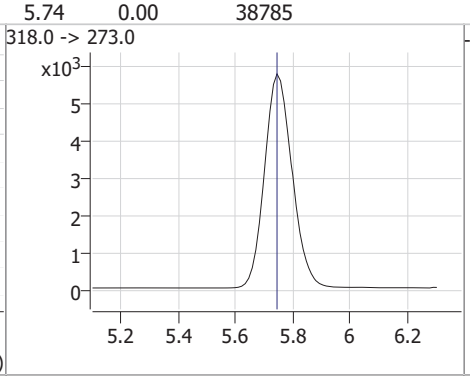


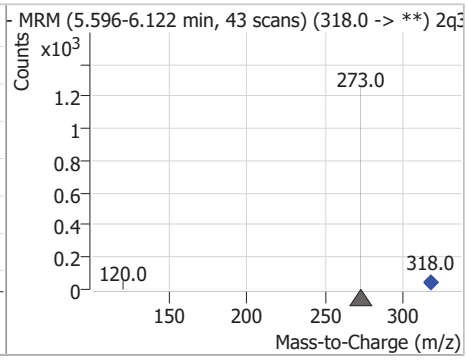




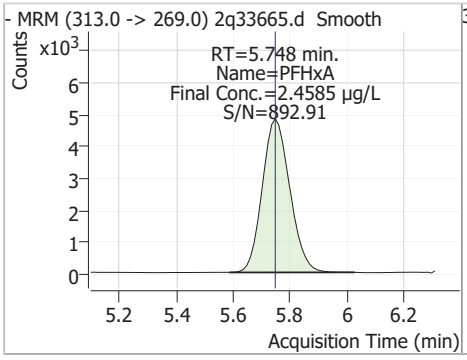
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.61	5.74	0.00	38785				

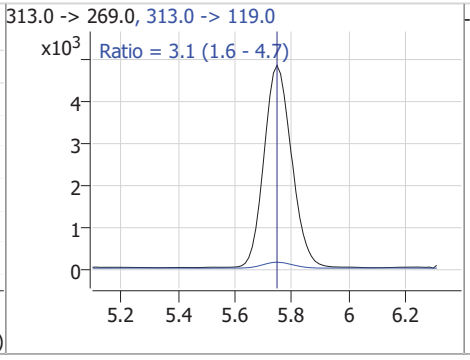


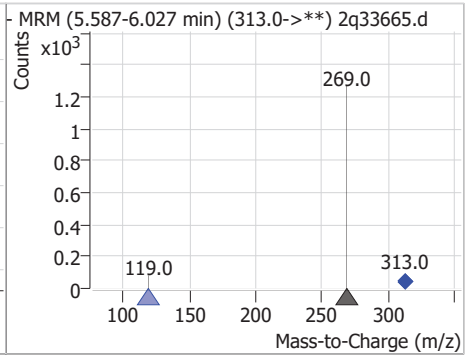




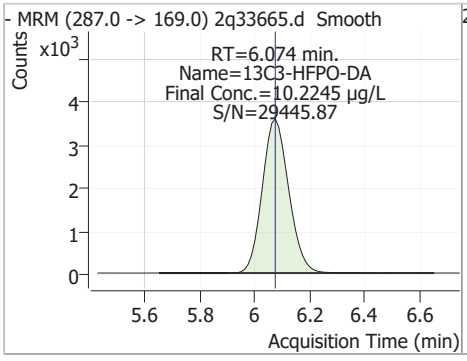
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.46	5.75	0.00	32293	313.0 -> 119.0	3.1	1.6	4.7

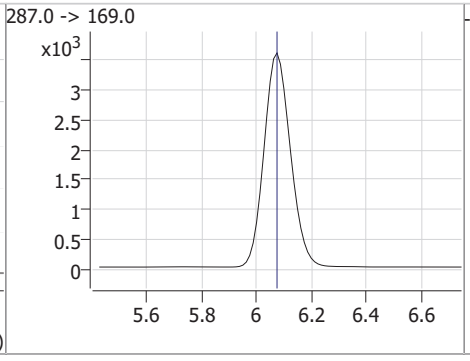


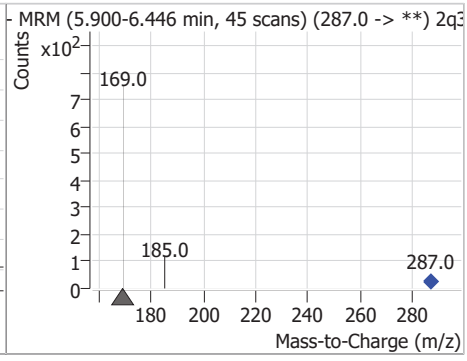




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.22	6.07	0.00	23796				







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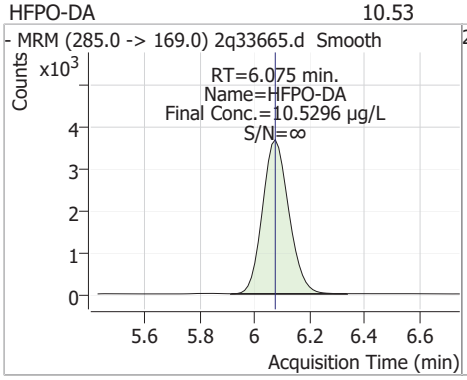
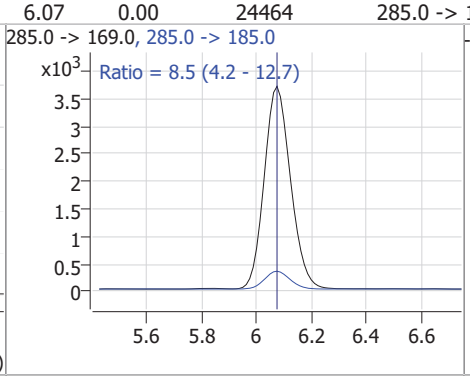
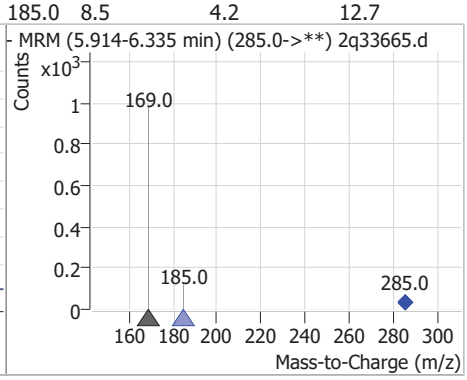
Perfluorinated Compounds by LC/MS/MS

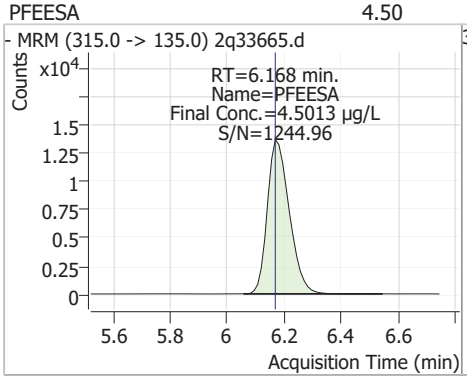
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.53	6.07	0.00	24464	285.0 -> 185.0	8.5	4.2	12.7

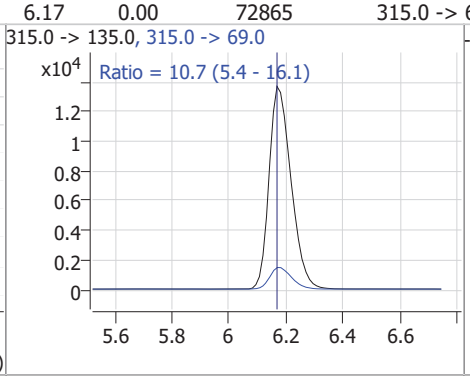


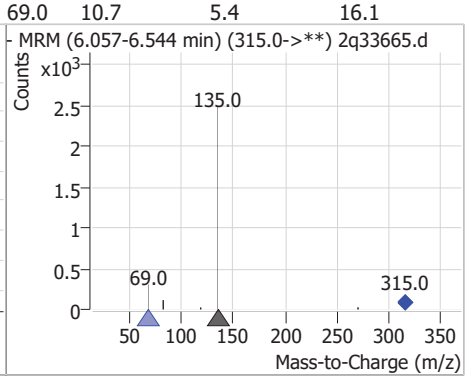




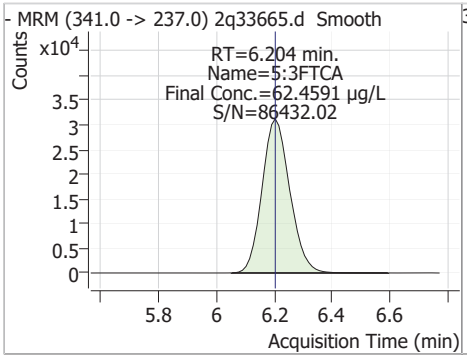
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.50	6.17	0.00	72865	315.0 -> 69.0	10.7	5.4	16.1

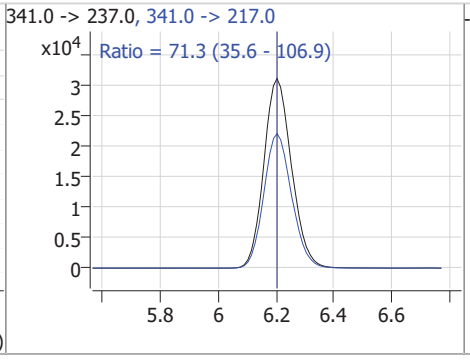


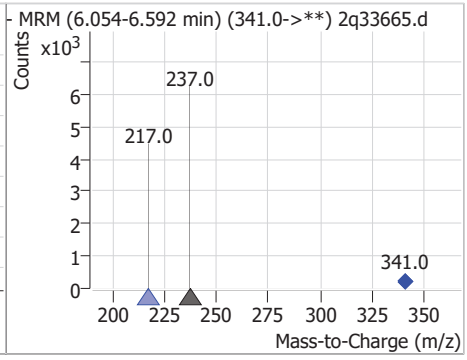




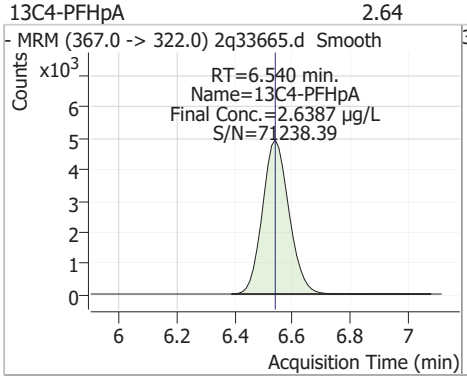
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	62.46	6.20	0.00	206502	341.0 -> 217.0	71.3	35.6	106.9

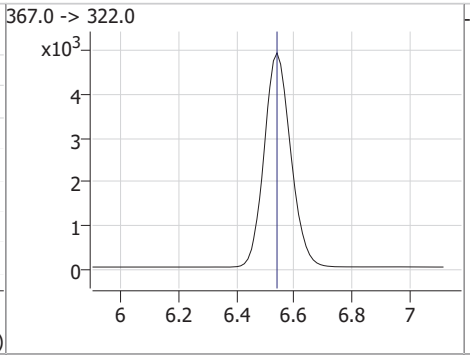


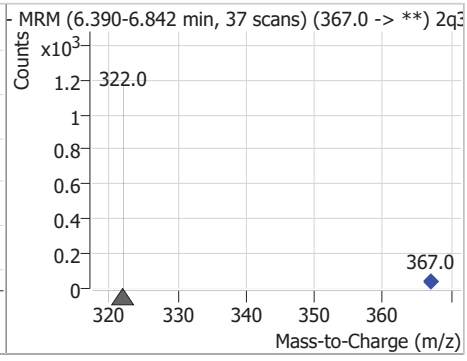




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.64	6.54	0.00	31149				







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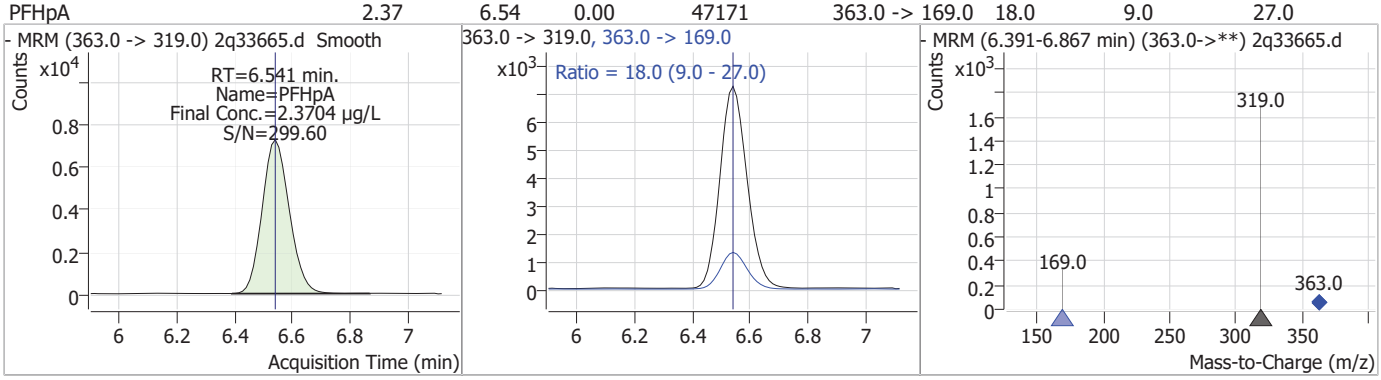
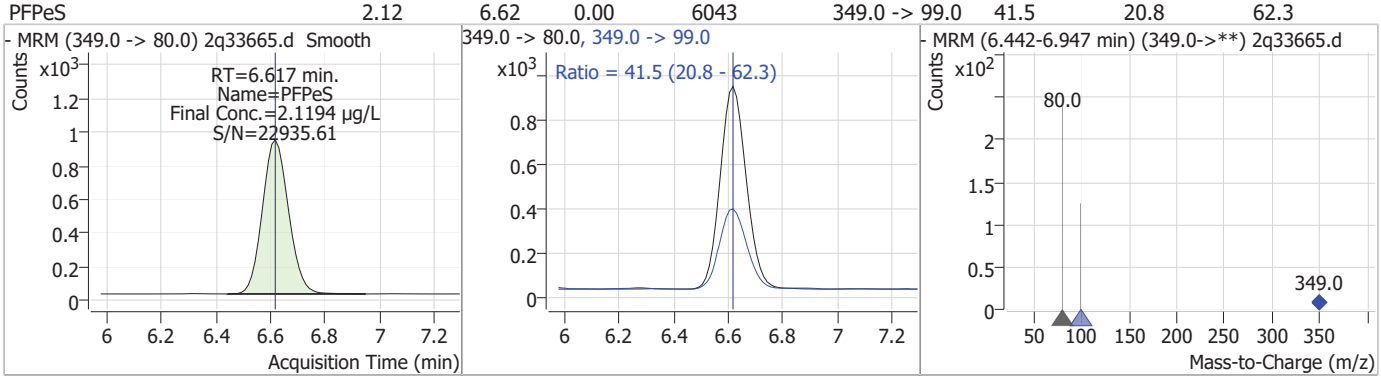
Perfluorinated Compounds by LC/MS/MS

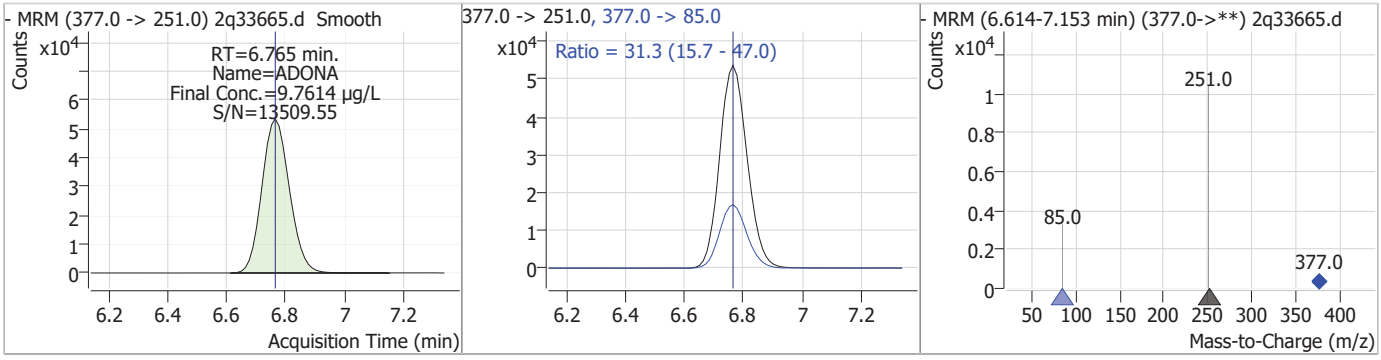
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.37	6.54	0.00	47171	363.0 -> 169.0	18.0	9.0	27.0



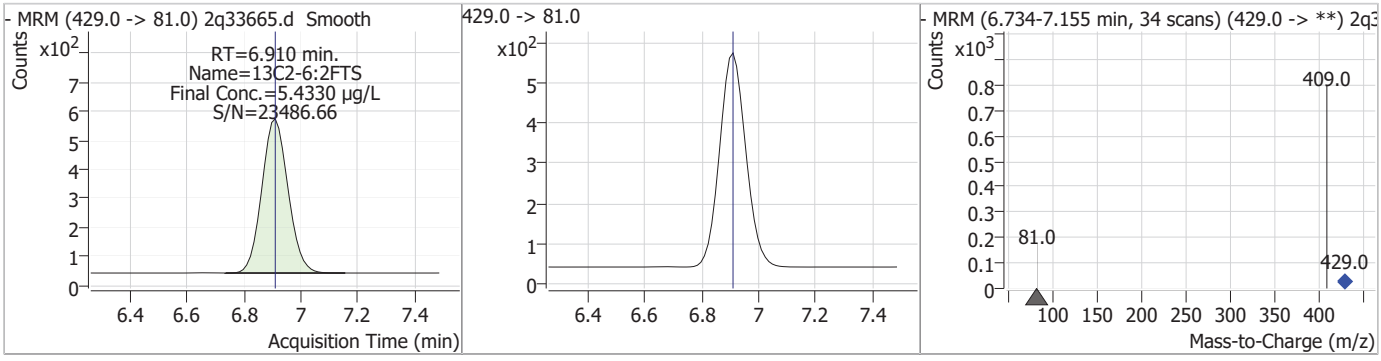
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.12	6.62	0.00	6043	349.0 -> 99.0	41.5	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	9.76	6.77	0.00	347197	377.0 -> 85.0	31.3	15.7	47.0

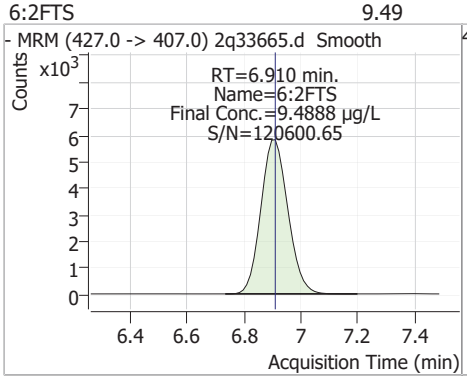


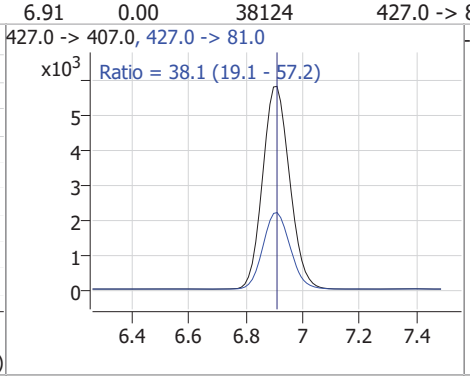
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.43	6.91	0.00	3386				

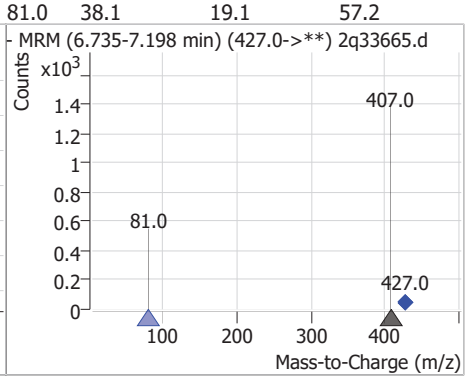


Perfluorinated Compounds by LC/MS/MS

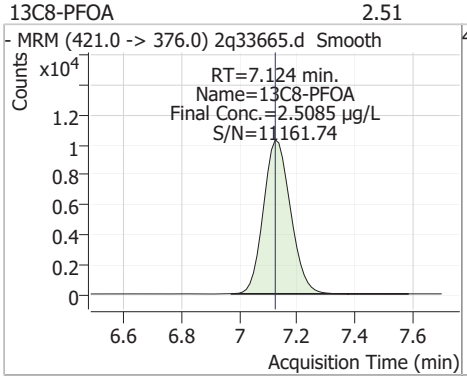
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.49	6.91	0.00	38124	427.0 -> 81.0	38.1	19.1	57.2

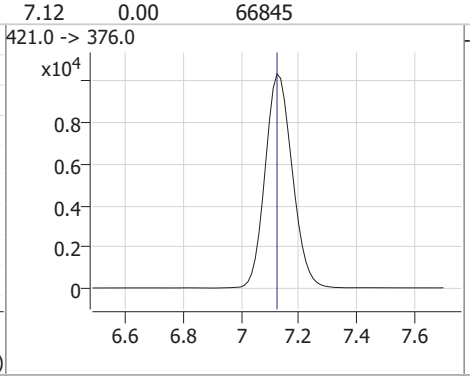


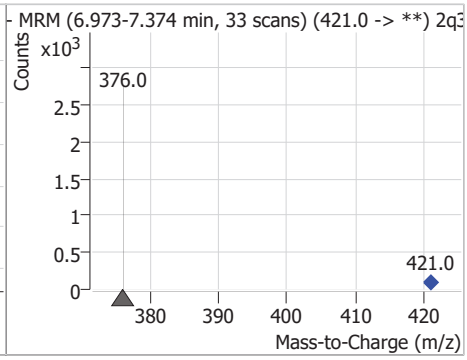




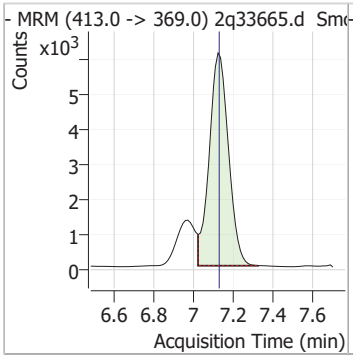
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.51	7.12	0.00	66845				

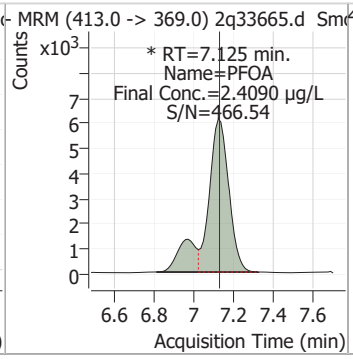


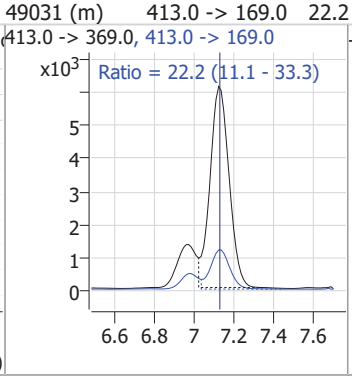


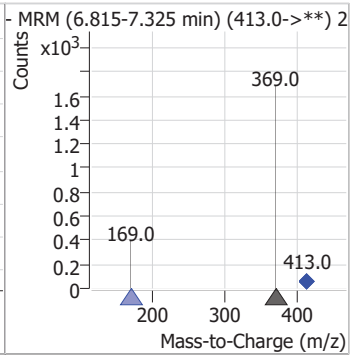


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.41	7.12	0.00	49031 (m)	413.0 -> 169.0	22.2	11.1	33.3

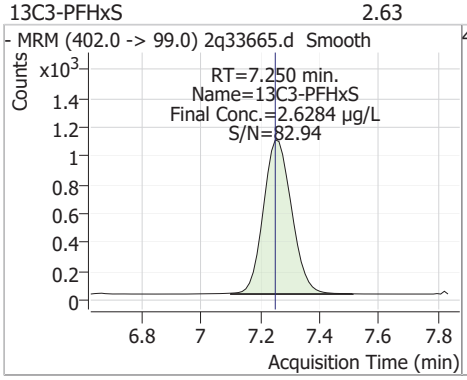


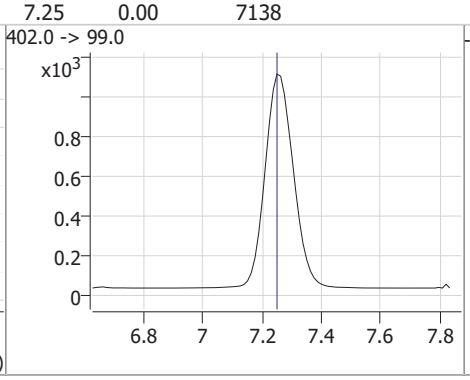


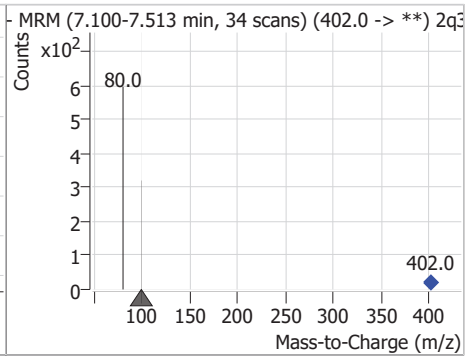




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.63	7.25	0.00	7138				







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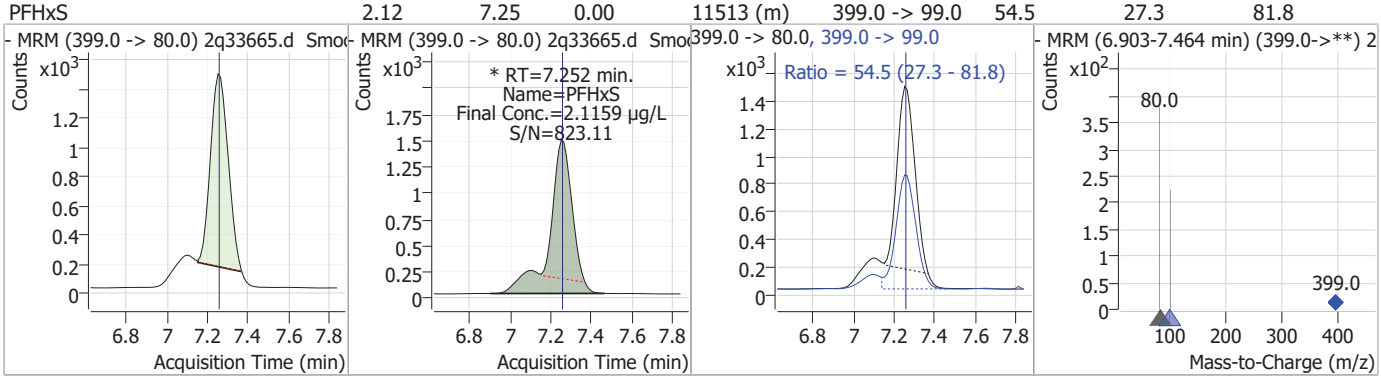
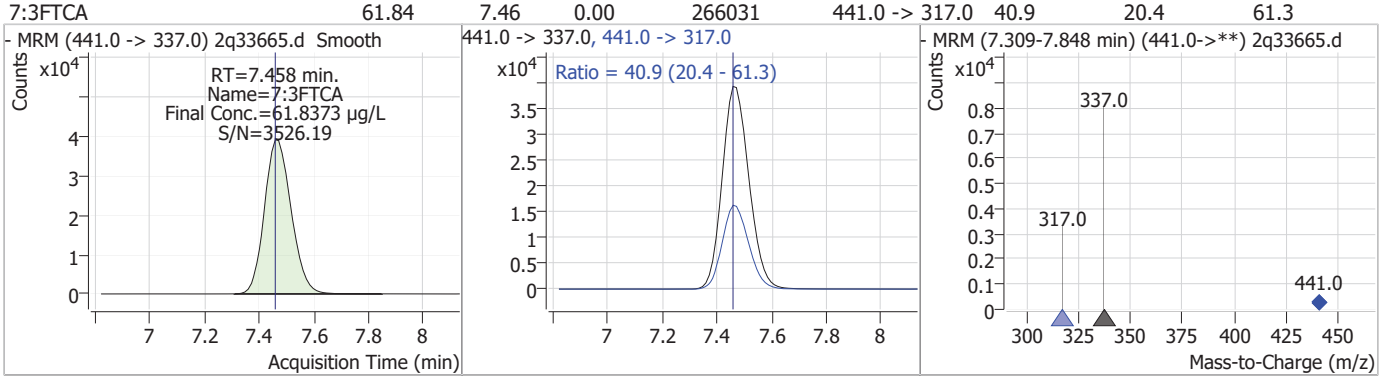
Perfluorinated Compounds by LC/MS/MS

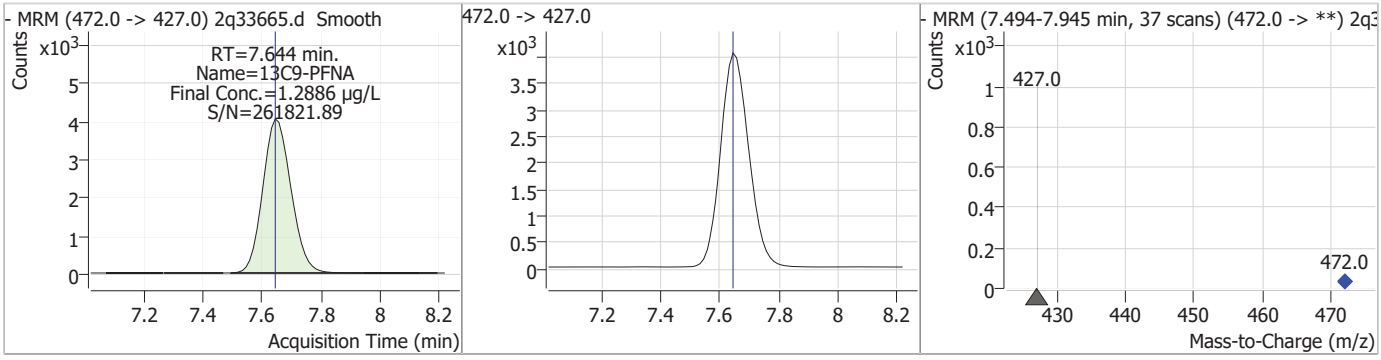
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.12	7.25	0.00	11513 (m)	399.0 -> 99.0	54.5	27.3	81.8



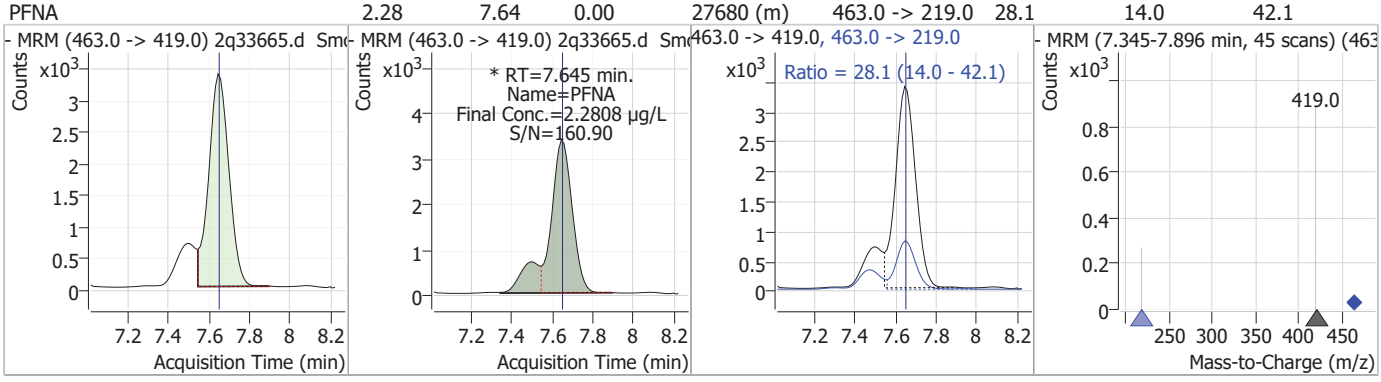
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	61.84	7.46	0.00	266031	441.0 -> 317.0	40.9	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.29	7.64	0.00	26755				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.28	7.64	0.00	27680 (m)	463.0 -> 219.0	28.1	14.0	42.1



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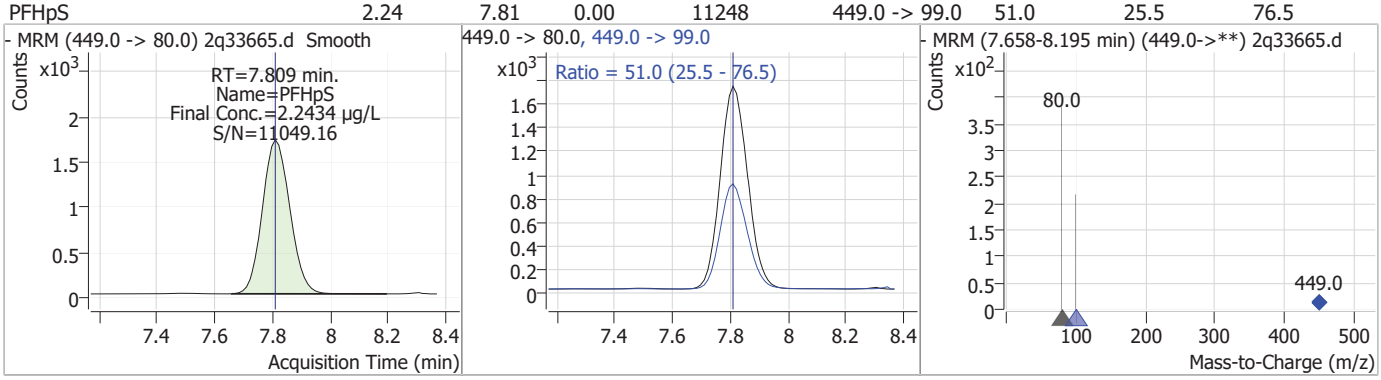
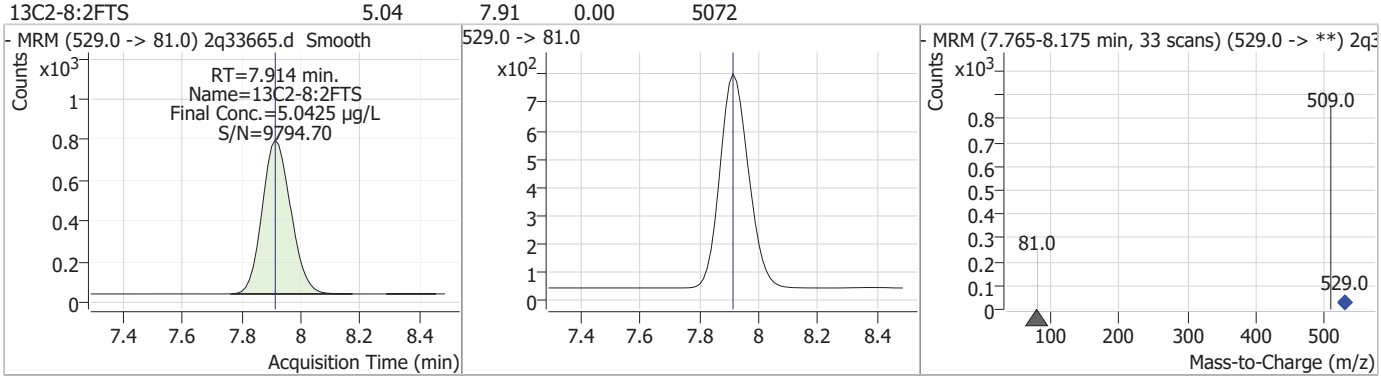
Perfluorinated Compounds by LC/MS/MS

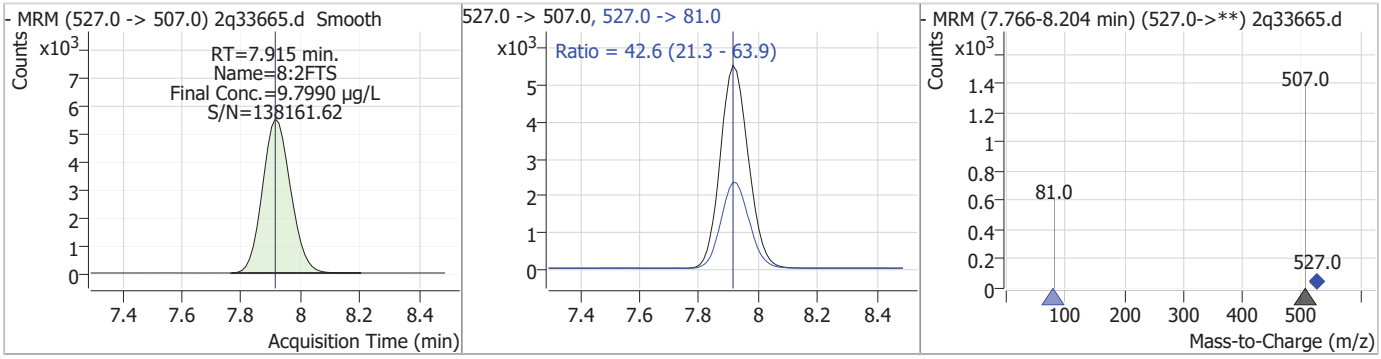
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.24	7.81	0.00	11248	449.0 -> 99.0	51.0	25.5	76.5



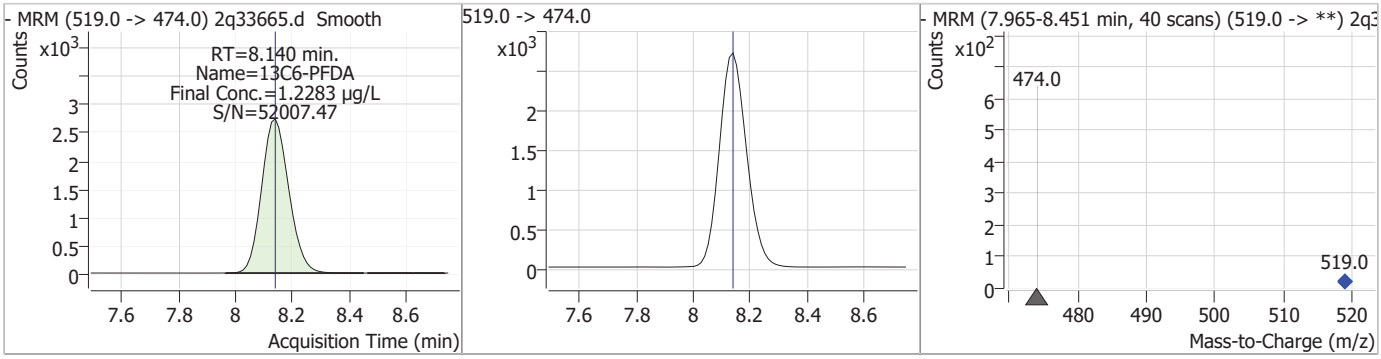
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.04	7.91	0.00	5072				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	9.80	7.91	0.00	36106	527.0 -> 81.0	42.6	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.23	8.14	0.00	17887				



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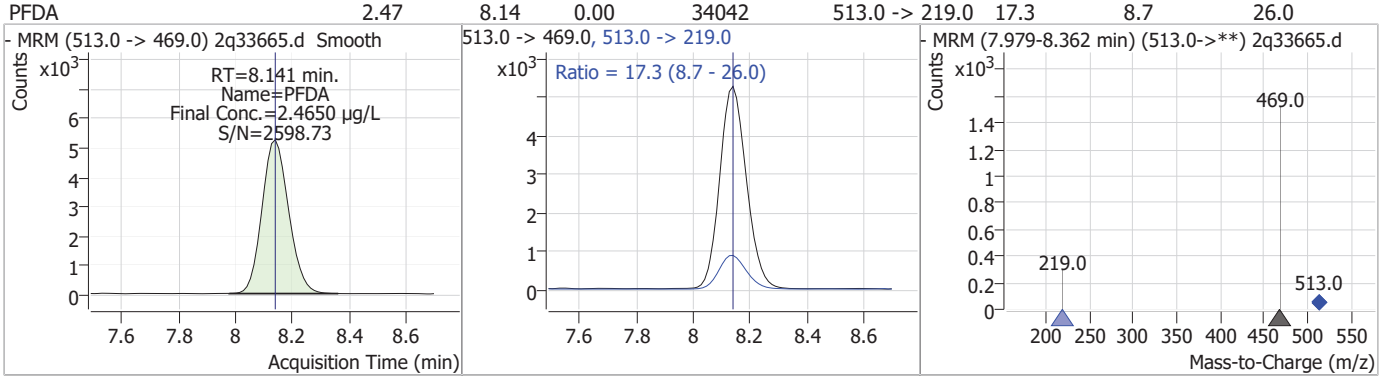
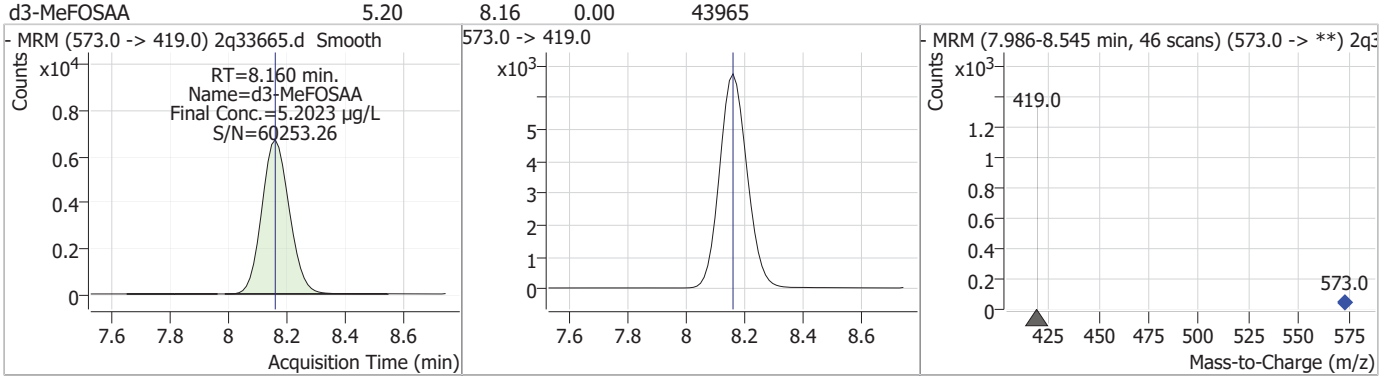
Perfluorinated Compounds by LC/MS/MS

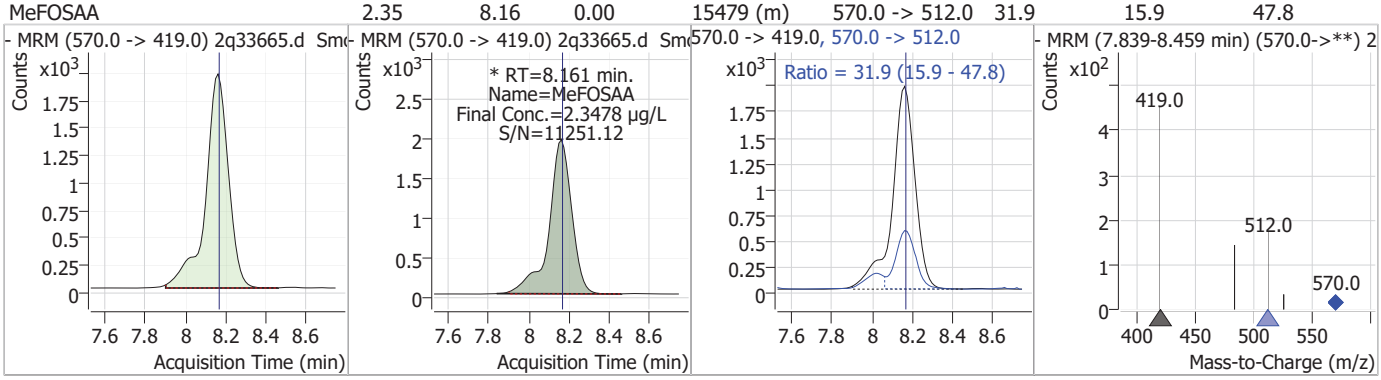
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.47	8.14	0.00	34042	513.0 -> 219.0	17.3	8.7	26.0



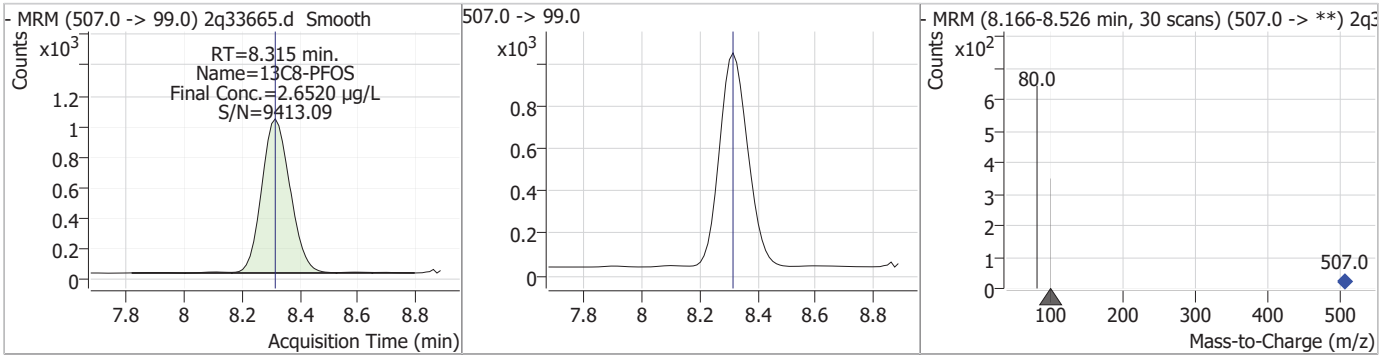
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.20	8.16	0.00	43965				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.35	8.16	0.00	15479 (m)	570.0 -> 512.0	31.9	15.9	47.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.65	8.32	0.00	6846				



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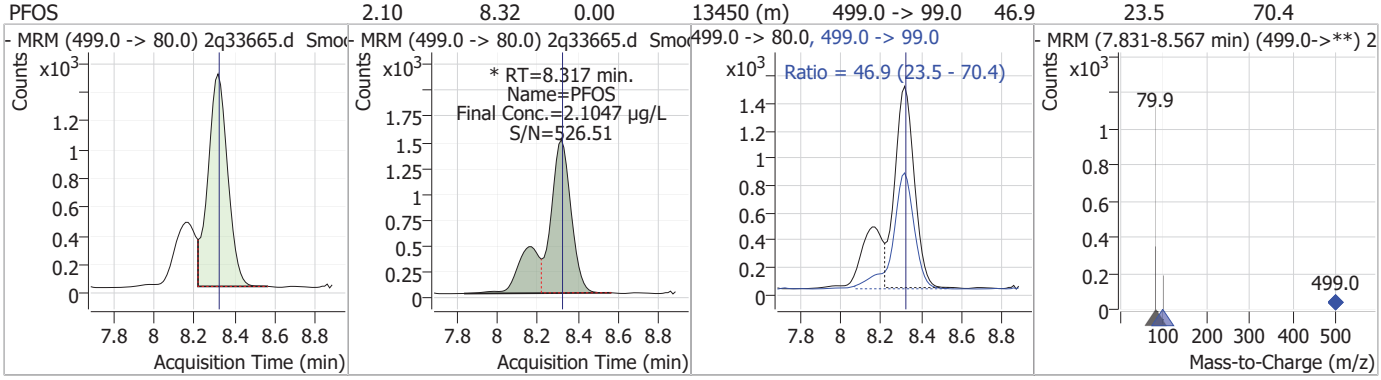
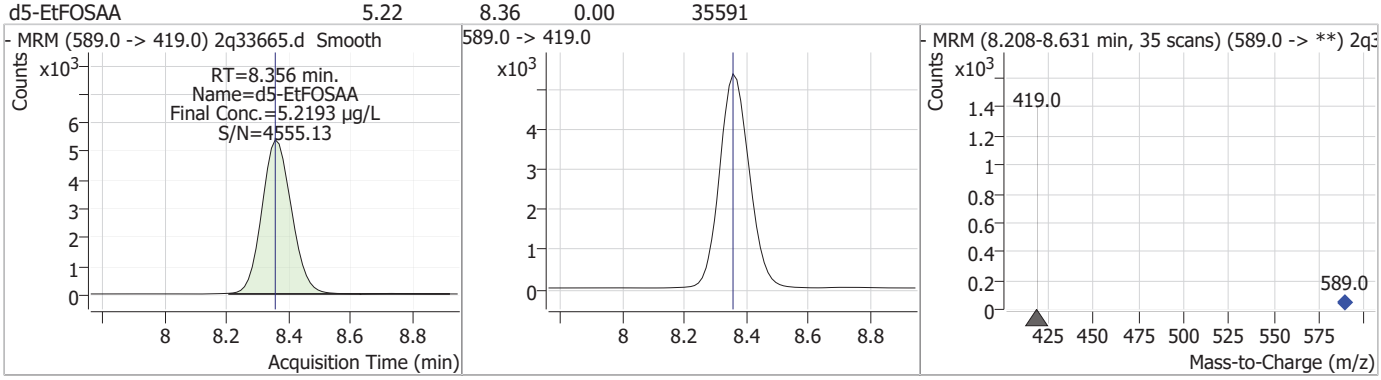
Perfluorinated Compounds by LC/MS/MS

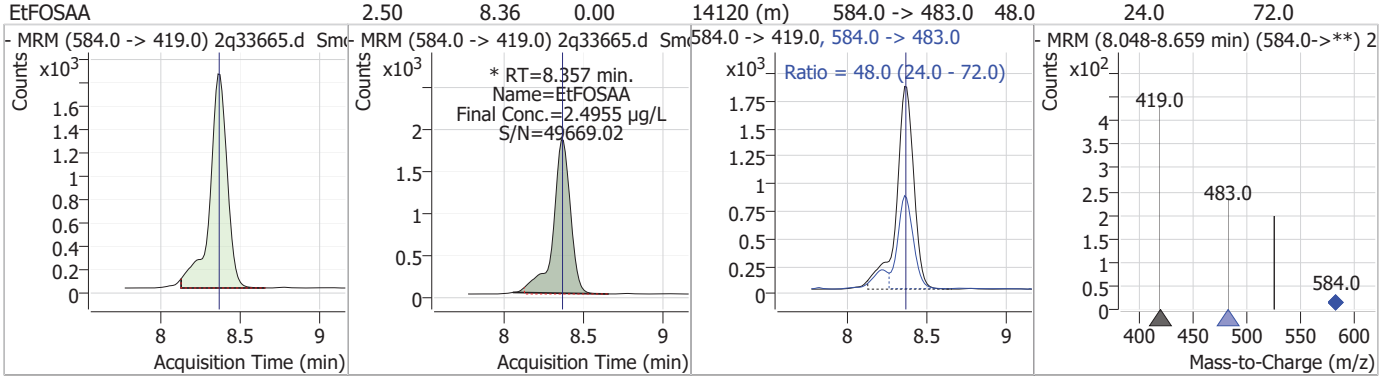
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.10	8.32	0.00	13450 (m)	499.0 -> 99.0	46.9	23.5	70.4



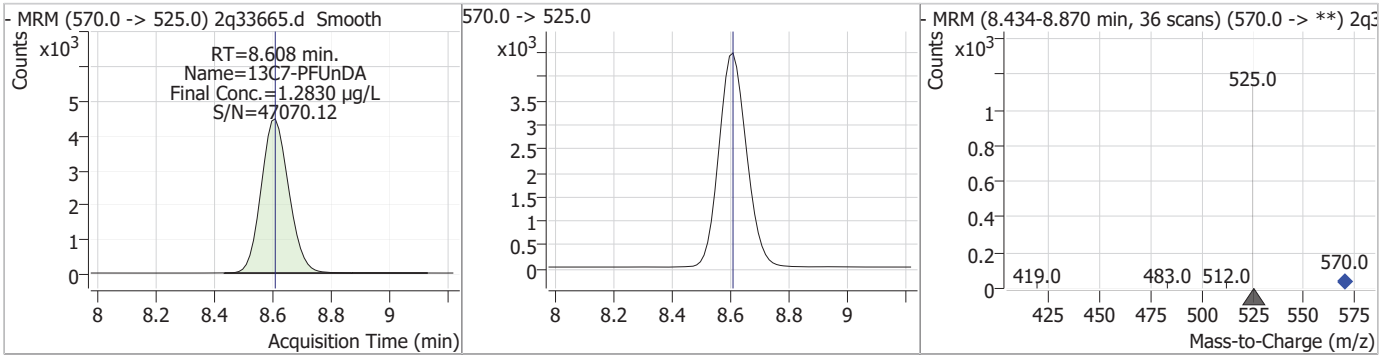
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.22	8.36	0.00	35591				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.50	8.36	0.00	14120 (m)	584.0 -> 483.0	48.0	24.0	72.0

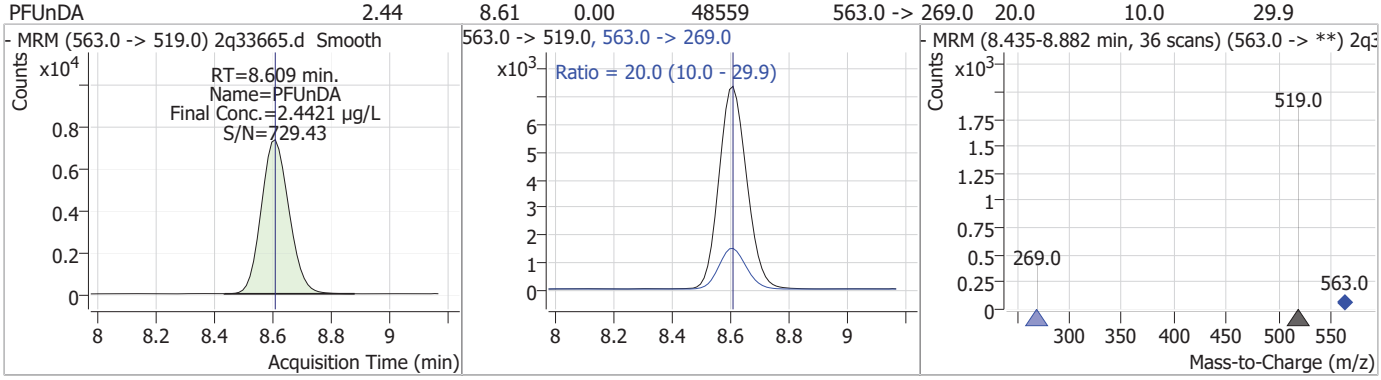


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.28	8.61	0.00	29295				

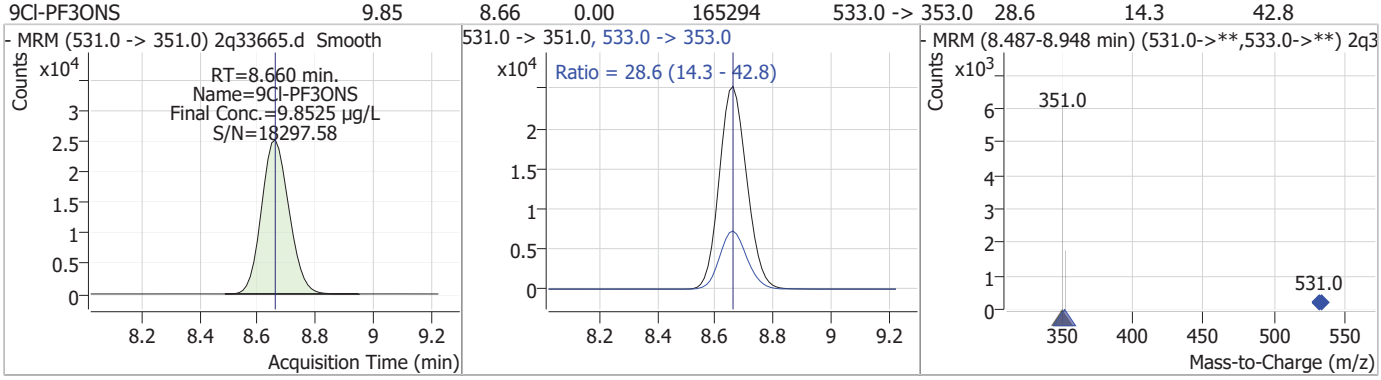


Perfluorinated Compounds by LC/MS/MS

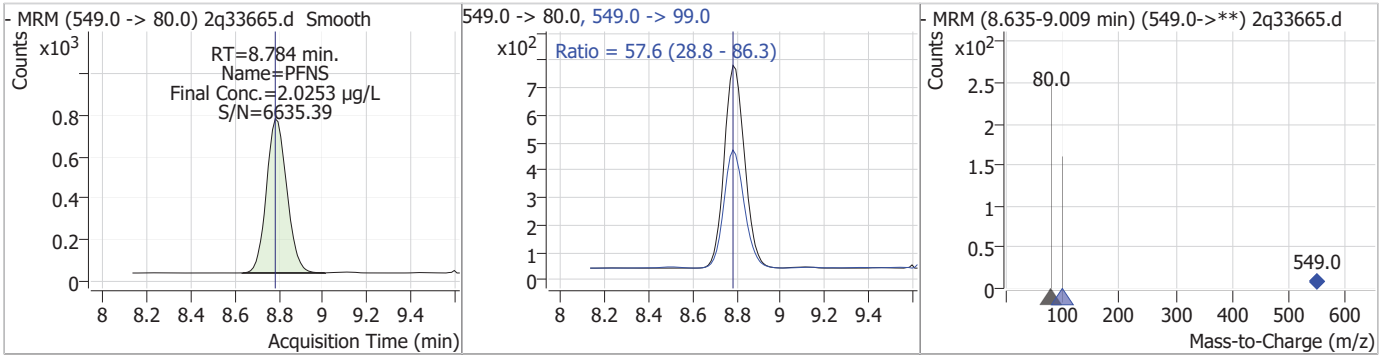
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.44	8.61	0.00	48559	563.0 -> 269.0	20.0	10.0	29.9



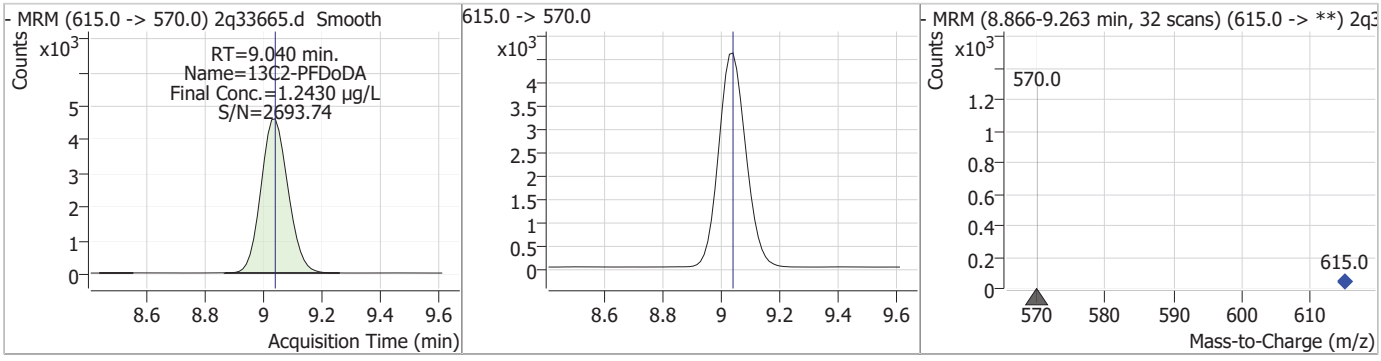
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.85	8.66	0.00	165294	533.0 -> 353.0	28.6	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.03	8.78	0.00	4725	549.0 -> 99.0	57.6	28.8	86.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.24	9.04	0.00	29689				



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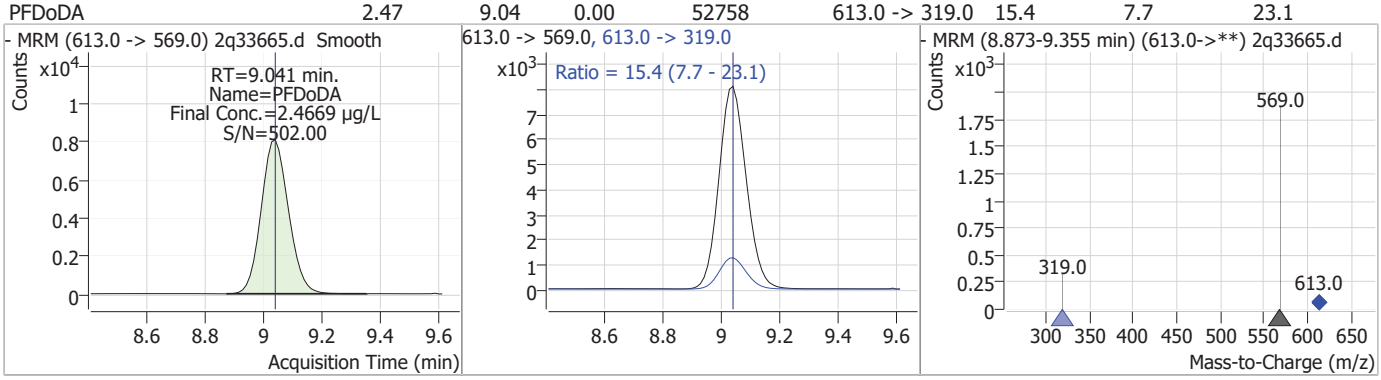
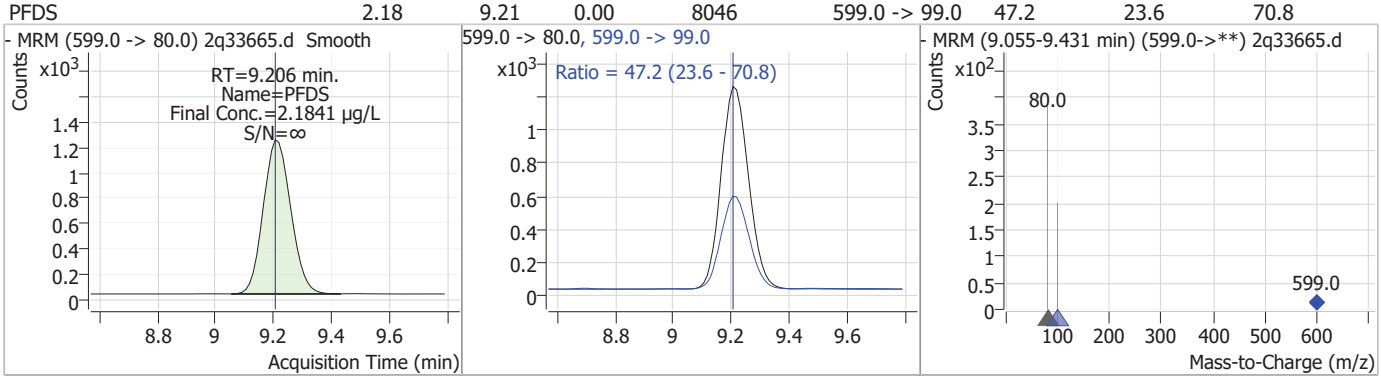
Perfluorinated Compounds by LC/MS/MS

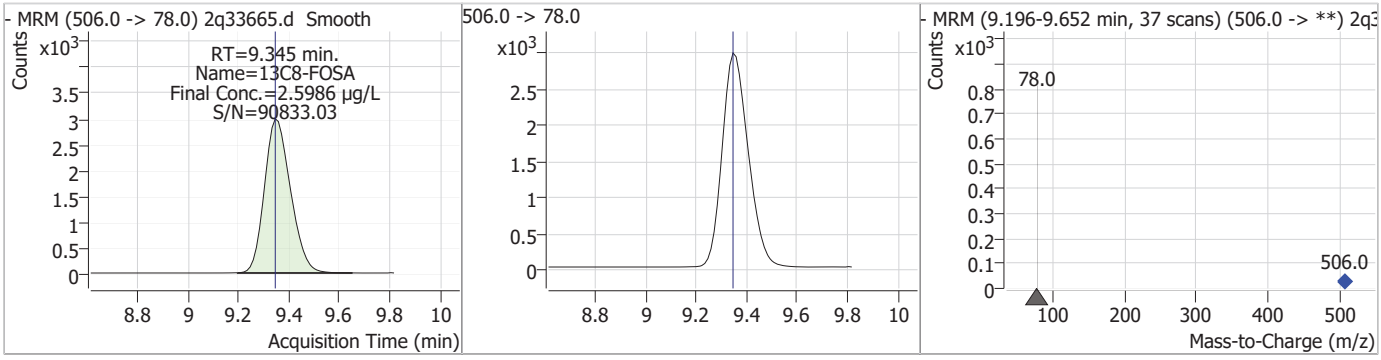
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.47	9.04	0.00	52758	613.0 -> 319.0	15.4	7.7	23.1



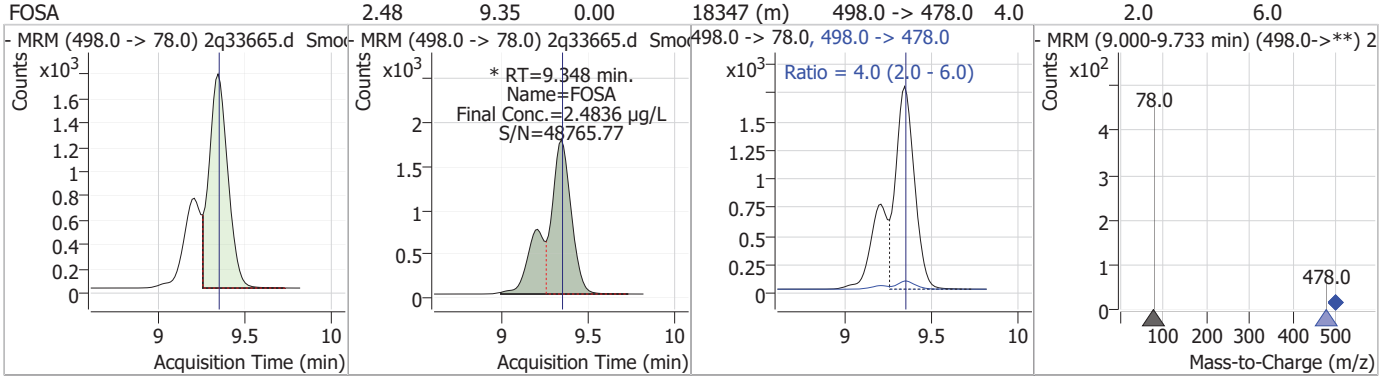
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.18	9.21	0.00	8046	599.0 -> 99.0	47.2	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.60	9.35	0.00	21270				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.48	9.35	0.00	18347 (m)	498.0 -> 478.0	4.0	2.0	6.0



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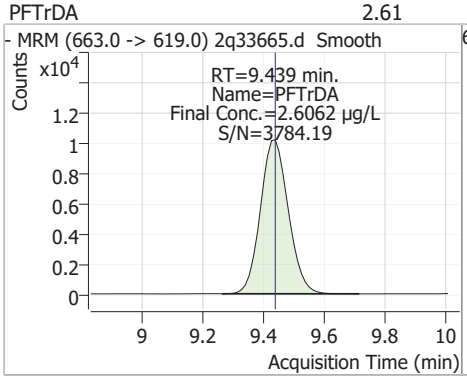
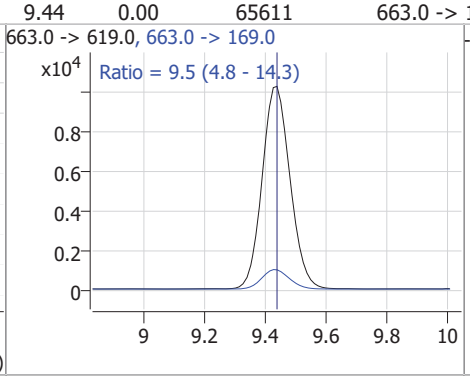
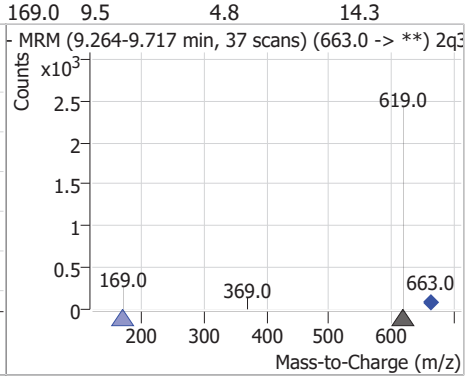
Perfluorinated Compounds by LC/MS/MS

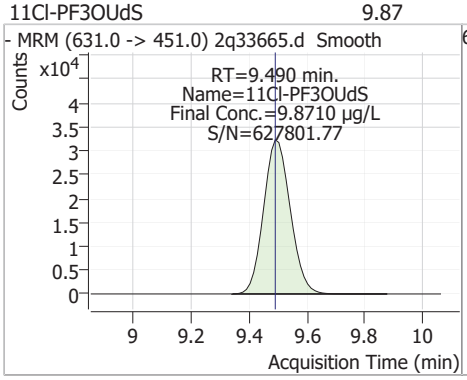
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.61	9.44	0.00	65611	663.0 -> 169.0	9.5	4.8	14.3

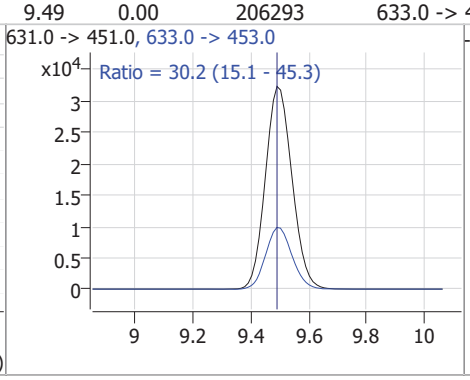


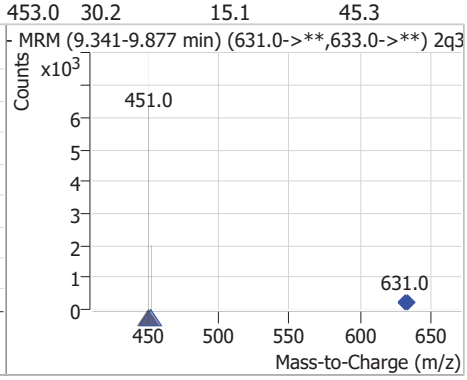




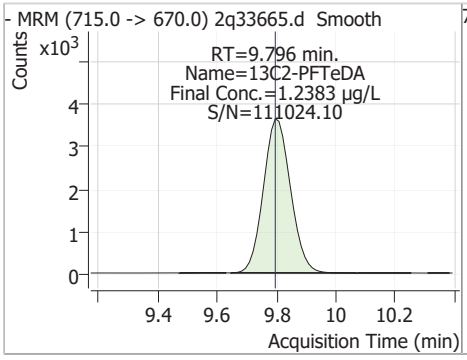
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.87	9.49	0.00	206293	633.0 -> 453.0	30.2	15.1	45.3

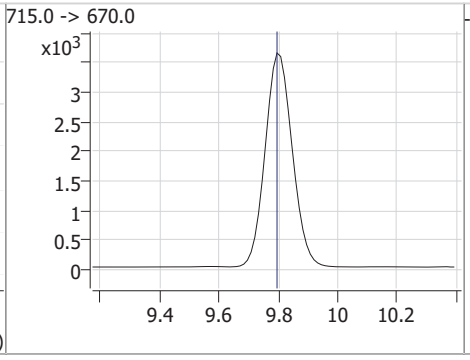


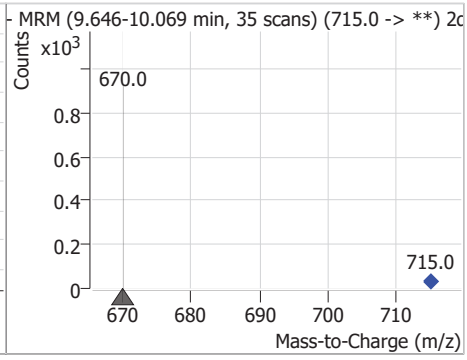




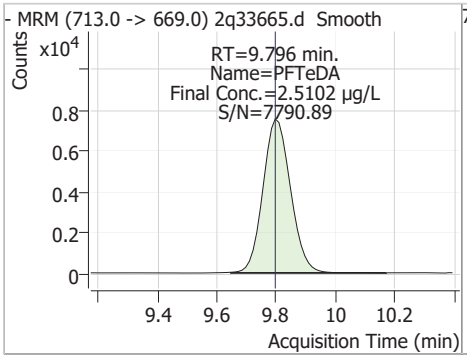
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.24	9.80	0.00	22957				

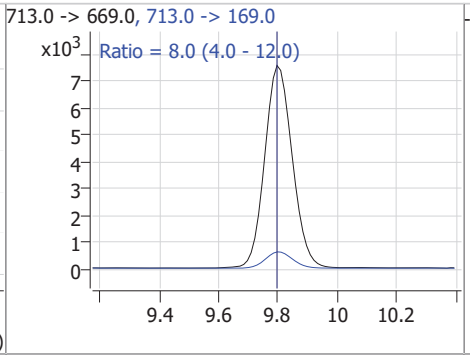


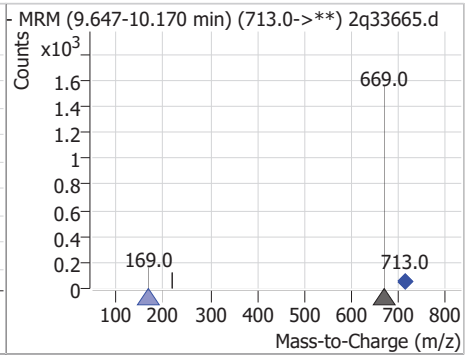




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.51	9.80	0.00	48531	713.0 -> 169.0	8.0	4.0	12.0







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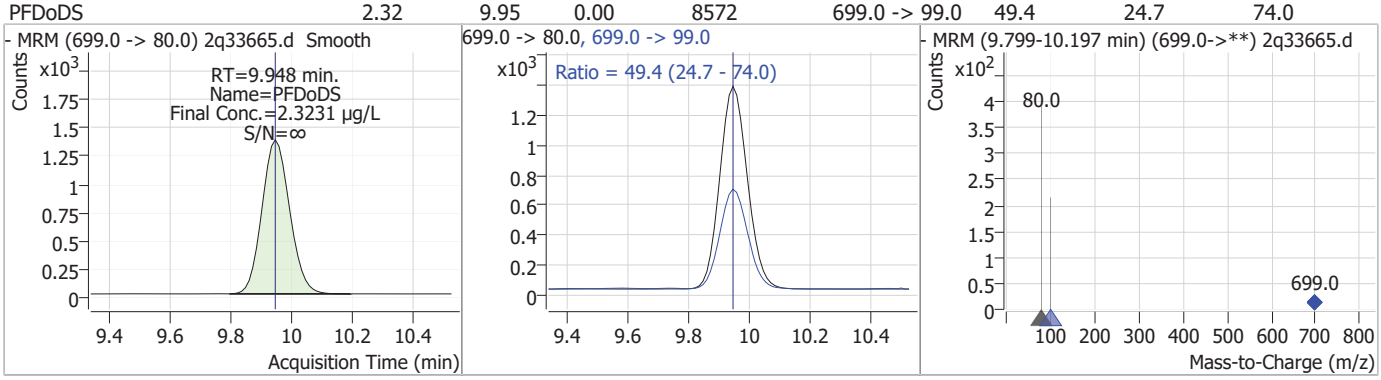
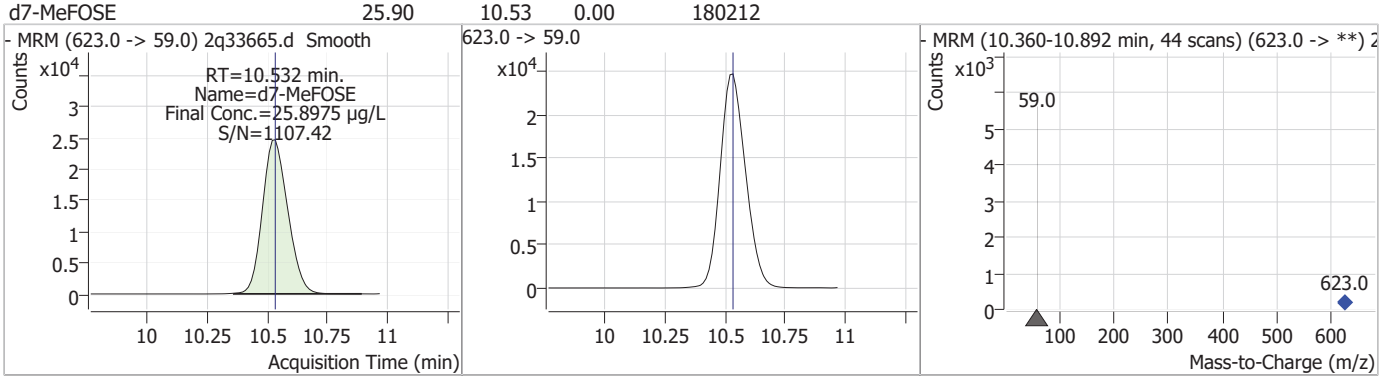
Perfluorinated Compounds by LC/MS/MS

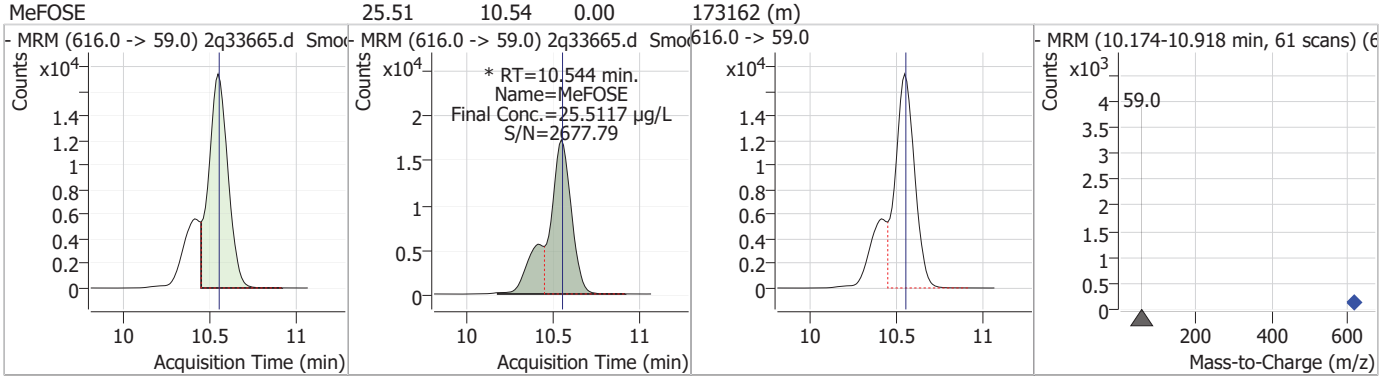
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.32	9.95	0.00	8572	699.0 -> 99.0	49.4	24.7	74.0



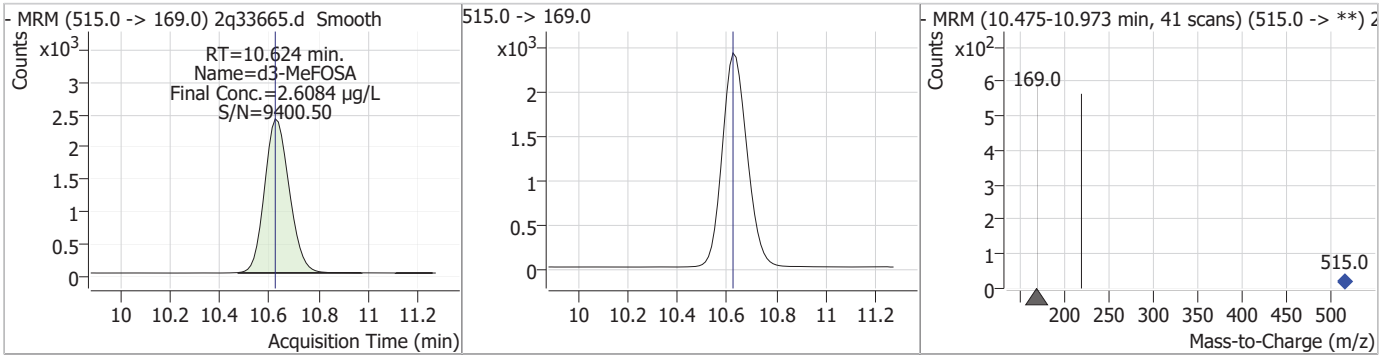
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.90	10.53	0.00	180212				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.51	10.54	0.00	173162 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.61	10.62	0.00	16608				

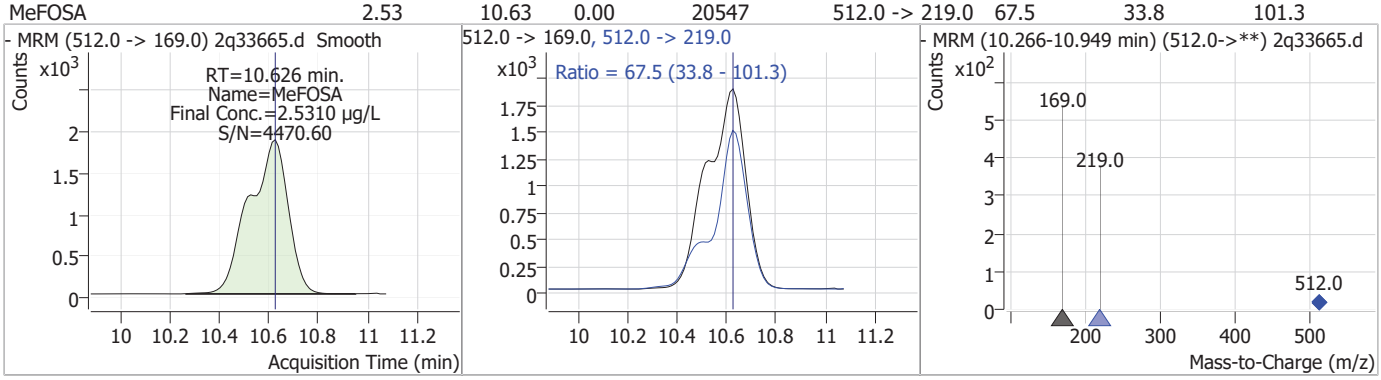


7.6.20

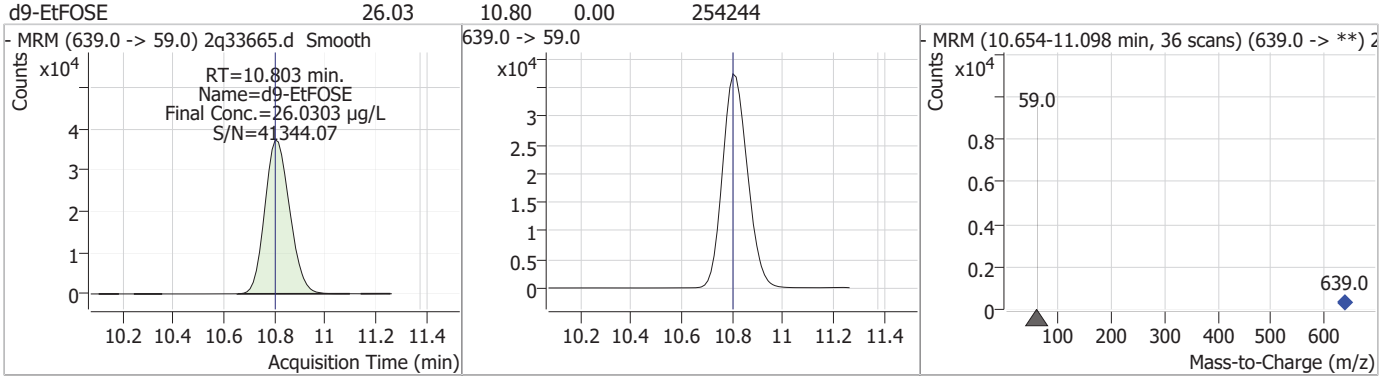
7

Perfluorinated Compounds by LC/MS/MS

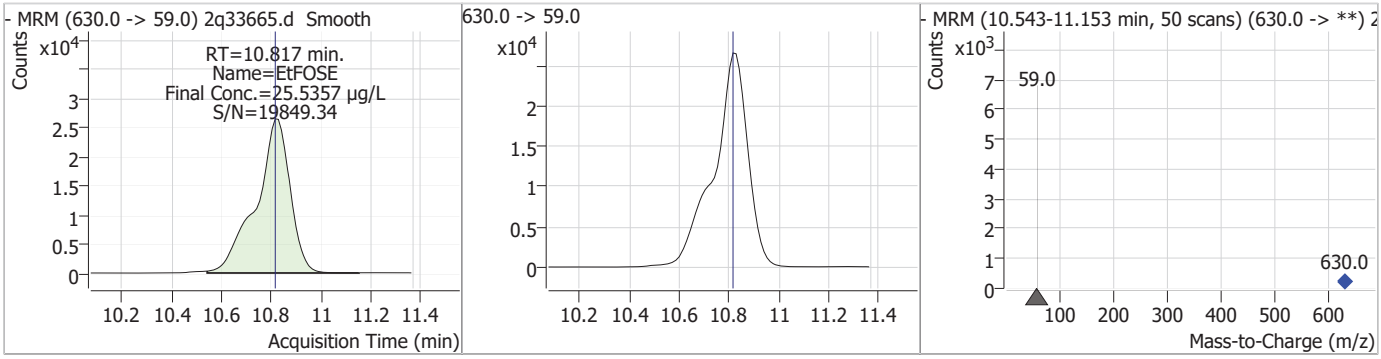
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.53	10.63	0.00	20547	512.0 -> 219.0	67.5	33.8	101.3



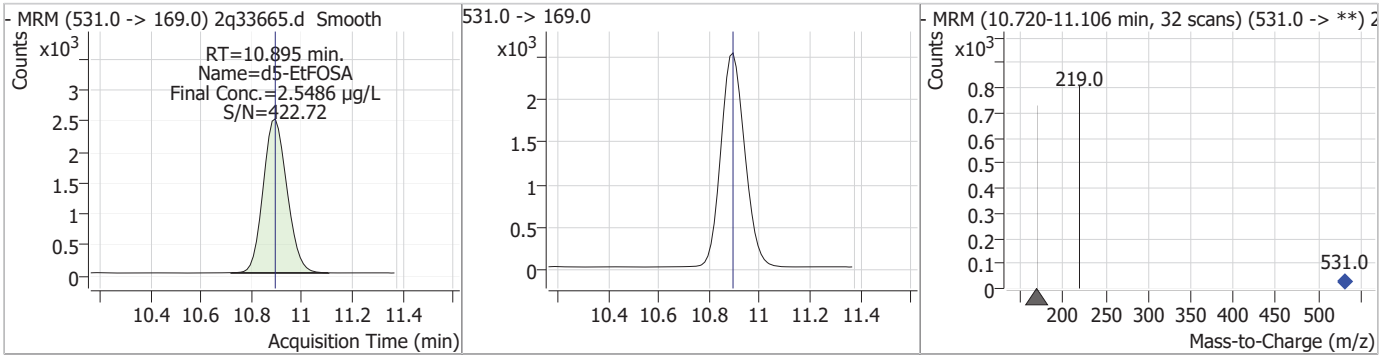
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	26.03	10.80	0.00	254244				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.54	10.82	0.00	251843				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.55	10.89	0.00	16364				



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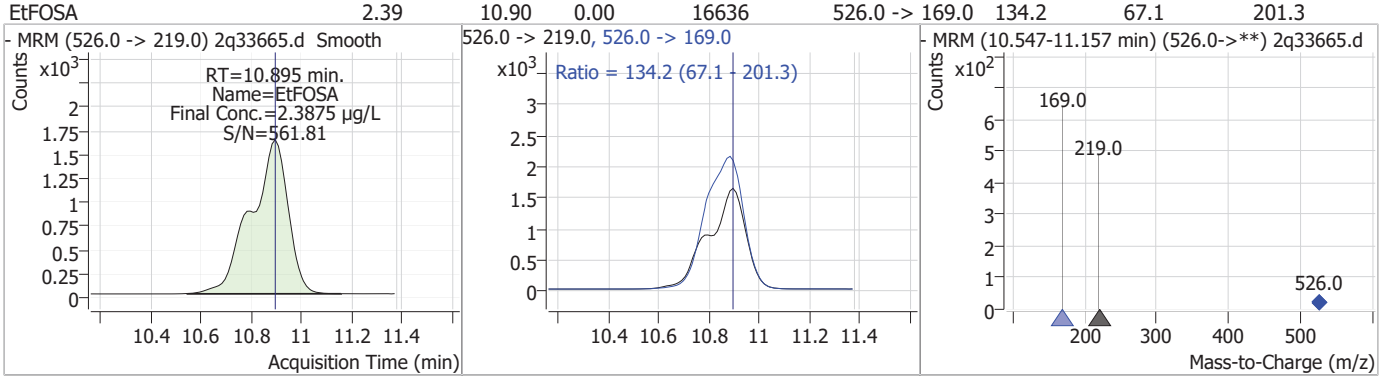
7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.39	10.90	0.00	16636	526.0 -> 169.0	134.2	67.1	201.3



7.6.20

7

Manual Integration Approval Summary

Sample Number: T2Q344-ICC344
Lab FileID: 2Q33665.D
Injection Time: 05/09/25 15:49
Method: EPA 1633
Analyst approved: 05/10/25 01:15 Josephus Gimenez
Supervisor approved: 05/12/25 11:57 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.12	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.25	Split peak
Perfluorononanoic acid	375-95-1		7.64	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.36	Split peak
PFOSA	754-91-6		9.35	Split peak
MeFOSE	24448-09-7		10.54	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/12/25 11:57

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33666.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/9/2025 4:02:47 PM
Sample Name : IC344-5
Vial : P1-A6
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q344.batch.bin
Sample Information : OP62666,T2Q344,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	3.263	217.0 -> 172.0	120998	10.00	µg/L	0.000
M5-PFPeA	4.637	268.0 -> 223.0	64716	5.00	µg/L	0.000
M5-PFHxA	5.745	318.0 -> 273.0	38283	2.50	µg/L	0.000
M4-PFHpA	6.540	367.0 -> 322.0	30018	2.50	µg/L	0.000
M8-PFOA	7.124	421.0 -> 376.0	67832	2.50	µg/L	0.000
M9-PFNA	7.644	472.0 -> 427.0	26821	1.25	µg/L	0.000
M6-PFDA	8.140	519.0 -> 474.0	18655	1.25	µg/L	0.000
M7-PFUnDA	8.608	570.0 -> 525.0	28962	1.25	µg/L	0.000
M2-PFDoDA	9.040	615.0 -> 570.0	29193	1.25	µg/L	0.000
M2-PFTeDA	9.796	715.0 -> 670.0	22434	1.25	µg/L	0.000
M8-FOSA	9.345	506.0 -> 78.0	20416	2.50	µg/L	0.000
M3-PFBS	5.699	302.0 -> 99.0	5733	2.50	µg/L	0.000
M3-PFHxS	7.263	402.0 -> 99.0	6664	2.50	µg/L	0.012
M8-PFOS	8.315	507.0 -> 99.0	6681	2.50	µg/L	0.000
M2-4:2FTS	5.433	329.0 -> 81.0	1529	5.00	µg/L	0.000
M2-6:2FTS	6.897	429.0 -> 81.0	3102	5.00	µg/L	-0.012
M2-8:2FTS	7.914	529.0 -> 81.0	4920	5.00	µg/L	0.000
M3-MeFOSAA	8.160	573.0 -> 419.0	42568	5.00	µg/L	0.000
M3-HFPO-DA	6.074	287.0 -> 169.0	22086	10.00	µg/L	0.000
M5-EtFOSAA	8.356	589.0 -> 419.0	33900	5.00	µg/L	0.000
M7-MeFOSE	10.532	623.0 -> 59.0	176558	25.00	µg/L	0.000
M9-EtFOSE	10.803	639.0 -> 59.0	249753	25.00	µg/L	0.000
M5-EtFOSA	10.895	531.0 -> 169.0	16332	2.50	µg/L	0.000
M3-MeFOSA	10.624	515.0 -> 169.0	15705	2.50	µg/L	0.000
13C4-PFOS	8.316	503.0 -> 80.0	11792	2.50	µg/L	0.000
13C3-PFBA	3.265	216.0 -> 172.0	51249	5.00	µg/L	0.000
18O2-PFHxS	7.250	403.0 -> 84.0	8081	2.50	µg/L	-0.012
13C4-PFOA	7.124	417.0 -> 372.0	65193	2.50	µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	16988	1.25	µg/L	0.000
13C5-PFNA	7.645	468.0 -> 423.0	25567	1.25	µg/L	0.000
13C2-PFHxA	5.746	315.0 -> 270.0	35273	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.433	329.0 -> 81.0	1529	5.23	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.6%		
13C2-6:2FTS	6.897	429.0 -> 81.0	3102	4.91	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.2%		
13C2-8:2FTS	7.914	529.0 -> 81.0	4920	4.82	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.5%		
13C2-PFDoDA	9.040	615.0 -> 570.0	29193	1.26	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.6%		
13C2-PFTeDA	9.796	715.0 -> 670.0	22434	1.25	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.6%		
13C3-PFBS	5.699	302.0 -> 99.0	5733	2.52	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.8%		
13C3-PFHxS	7.263	402.0 -> 99.0	6664	2.42	µg/L	0.012

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.8%		
13C4-PFBA	3.263	217.0 -> 172.0	120998	10.04 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.4%		
13C4-PFHpA	6.540	367.0 -> 322.0	30018	2.44 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.6%		
13C5-PFHxA	5.745	318.0 -> 273.0	38283	2.48 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.1%		
13C5-PFPeA	4.637	268.0 -> 223.0	64716	4.91 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.3%		
13C6-PFDA	8.140	519.0 -> 474.0	18655	1.32 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.5%		
13C7-PFUnDA	8.608	570.0 -> 525.0	28962	1.31 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.4%		
13C8-FOSA	9.345	506.0 -> 78.0	20416	2.50 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.1%		
13C8-PFOA	7.124	421.0 -> 376.0	67832	2.54 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.7%		
13C8-PFOS	8.315	507.0 -> 99.0	6681	2.60 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.9%		
13C9-PFNA	7.644	472.0 -> 427.0	26821	1.20 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.1%		
d3-MeFOSAA	8.160	573.0 -> 419.0	42568	5.06 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.1%		
13C3-HFPO-DA	6.074	287.0 -> 169.0	22086	9.11 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 91.1%		
d3-MeFOSA	10.624	515.0 -> 169.0	15705	2.48 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.0%		
d5-EtFOSAA	8.356	589.0 -> 419.0	33900	4.99 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.8%		
d7-MeFOSE	10.532	623.0 -> 59.0	176558	25.46 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 101.9%		
d9-EtFOSE	10.803	639.0 -> 59.0	249753	25.66 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 102.7%		
d5-EtFOSA	10.895	531.0 -> 169.0	16332	2.55 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.1%		
Target Compounds						QValue
4:2FTS	5.433	327.0 -> 307.0	39646	17.93 µg/L		97
		327.0 -> 81.0	21945			
6:2FTS	6.898	427.0 -> 407.0	72861	19.79 µg/L		99
		427.0 -> 81.0	28261			
8:2FTS	7.915	527.0 -> 507.0	71817	20.09 µg/L		96
		527.0 -> 81.0	28835			
EtFOSAA	8.357	584.0 -> 419.0	27493	5.10 µg/L	m	96
		584.0 -> 483.0	12526			
FOSA	9.348	498.0 -> 78.0	35457	5.00 µg/L	m	99
		498.0 -> 478.0	1325			
MeFOSAA	8.161	570.0 -> 419.0	30973	4.85 µg/L	m	95
		570.0 -> 512.0	9074			
PFBA	3.255	213.0 -> 169.0	61601	19.29 µg/L		100
PFBS	5.700	299.0 -> 80.0	31816	4.40 µg/L		97
		299.0 -> 99.0	11985			
PFDA	8.141	513.0 -> 469.0	70641	4.90 µg/L		99
		513.0 -> 219.0	11779			
PFDoDA	9.041	613.0 -> 569.0	109576	5.21 µg/L		100
		613.0 -> 319.0	17076			
PFDS	9.206	599.0 -> 80.0	16579	4.55 µg/L		97

Perfluorinated Compounds by LC/MS/MS

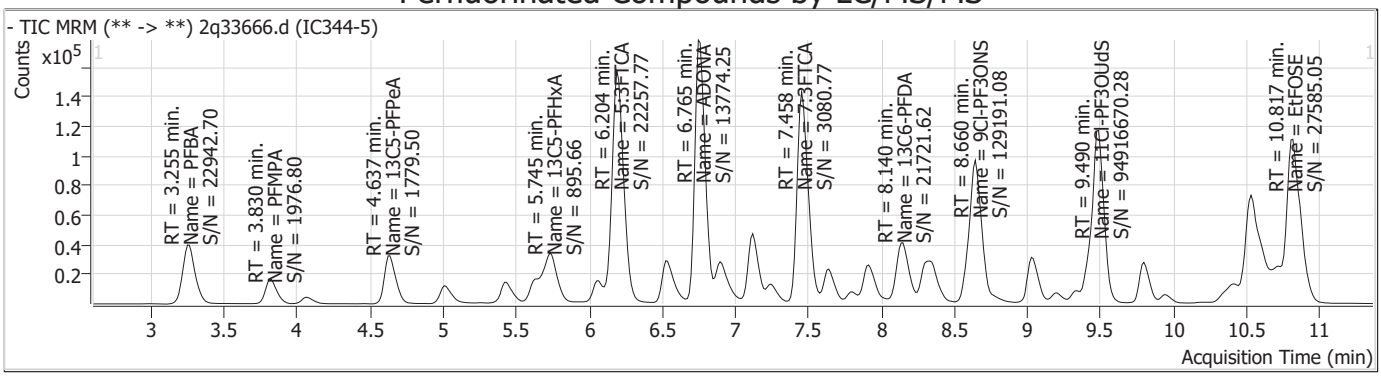
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	7523				
PFHpA	6.541	363.0 -> 319.0	94469	4.93	µg/L		99
		363.0 -> 169.0	16736				
PFHpS	7.809	449.0 -> 80.0	22655	4.84	µg/L		96
		449.0 -> 99.0	10846				
PFHxA	5.748	313.0 -> 269.0	62115	4.79	µg/L		99
		313.0 -> 119.0	2169				
PFHxS	7.252	399.0 -> 80.0	23367	4.60	µg/L	m	92
		399.0 -> 99.0	11437				
PFNA	7.645	463.0 -> 419.0	58876	4.84	µg/L	m	93
		463.0 -> 219.0	14464				
PFNS	8.784	549.0 -> 80.0	10656	4.68	µg/L		83
		549.0 -> 99.0	4818				
PFOA	7.125	413.0 -> 369.0	97496	4.72	µg/L	m	98
		413.0 -> 169.0	22695				
PFOS	8.317	499.0 -> 80.0	27222	4.36	µg/L	m	96
		499.0 -> 99.0	12028				
PFPeA	4.640	263.0 -> 219.0	114141	9.97	µg/L		100
PFPeS	6.617	349.0 -> 80.0	12365	4.74	µg/L		98
		349.0 -> 99.0	5288				
PFTeDA	9.796	713.0 -> 669.0	98258	5.20	µg/L		99
		713.0 -> 169.0	7572				
PFTrDA	9.426	663.0 -> 619.0	127948	5.17	µg/L		98
		663.0 -> 169.0	12989				
PFUnDA	8.609	563.0 -> 519.0	95254	4.85	µg/L		98
		563.0 -> 269.0	18390				
11Cl-PF3OUdS	9.490	631.0 -> 451.0	414581	21.37	µg/L		98
		633.0 -> 453.0	119726				
9Cl-PF3ONS	8.660	531.0 -> 351.0	327680	21.04	µg/L		99
		533.0 -> 353.0	95565				
ADONA	6.765	377.0 -> 251.0	682801	20.68	µg/L		100
		377.0 -> 85.0	211995				
HFPO-DA	6.075	285.0 -> 169.0	45791	21.24	µg/L		94
		285.0 -> 185.0	4805				
3:3FTCA	4.078	241.0 -> 177.0	22397	23.92	µg/L		99
		241.0 -> 117.0	1609				
5:3FTCA	6.204	341.0 -> 237.0	406941	124.70	µg/L		99
		341.0 -> 217.0	293875				
7:3FTCA	7.458	441.0 -> 337.0	533771	125.70	µg/L		99
		441.0 -> 317.0	216141				
EtFOSA	10.895	526.0 -> 219.0	33397	4.80	µg/L		100
		526.0 -> 169.0	44985				
EtFOSE	10.817	630.0 -> 59.0	489842	50.56	µg/L		100
MeFOSA	10.626	512.0 -> 169.0	38613	5.03	µg/L		100
		512.0 -> 219.0	26082				
MeFOSE	10.544	616.0 -> 59.0	337856	50.81	µg/L	m	100
PFDoDS	9.948	699.0 -> 80.0	16912	4.70	µg/L		92
		699.0 -> 99.0	9237				
NFDHA	5.639	295.0 -> 201.0	10227	9.55	µg/L		88
		201.0 -> 85.0	64159				
		295.0 -> 85.0	3298				
PFMBA	5.015	279.0 -> 85.0	66148	9.84	µg/L		100
PFMPA	3.830	229.0 -> 85.0	95048	9.86	µg/L		100
PFEESA	6.168	315.0 -> 135.0	139824	8.75	µg/L		100
		315.0 -> 69.0	15214				

 # = Qualifier out of range, m = manually integrated, + = Area summed

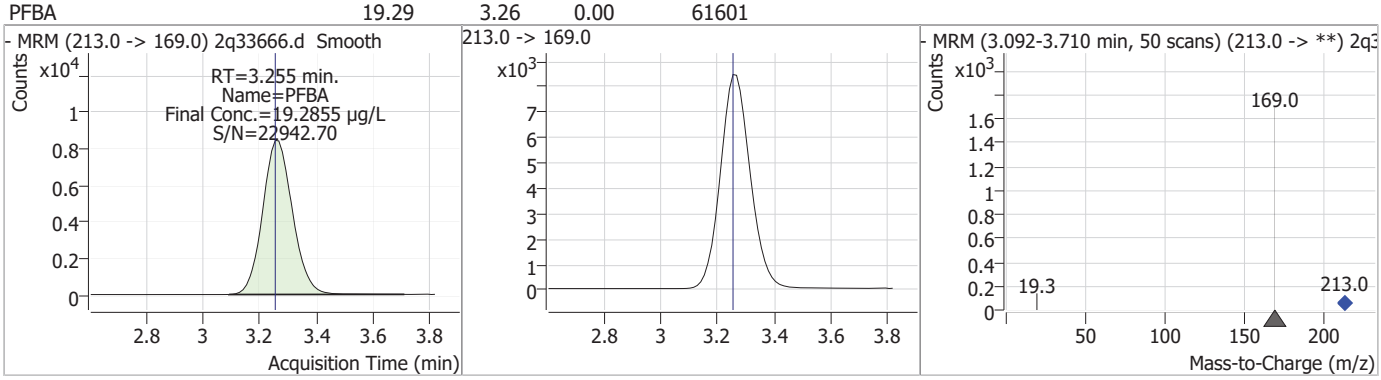
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

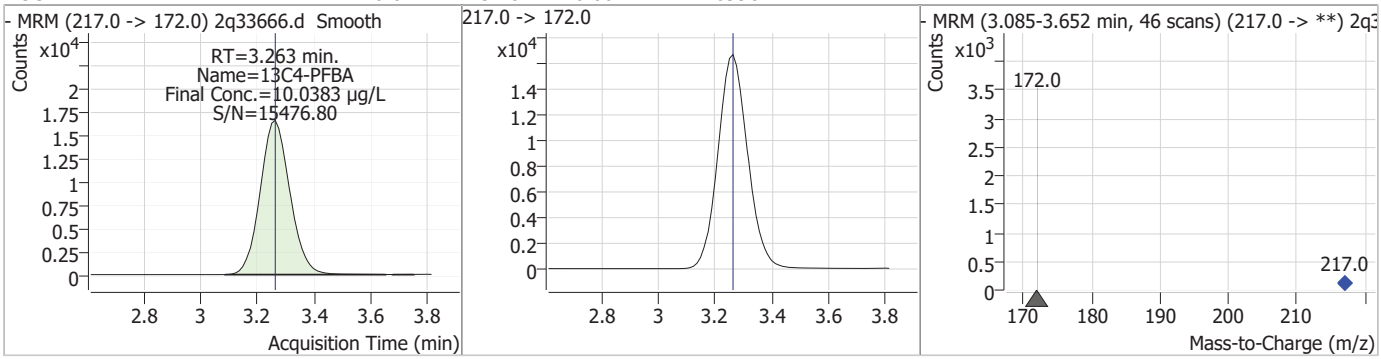
Perfluorinated Compounds by LC/MS/MS



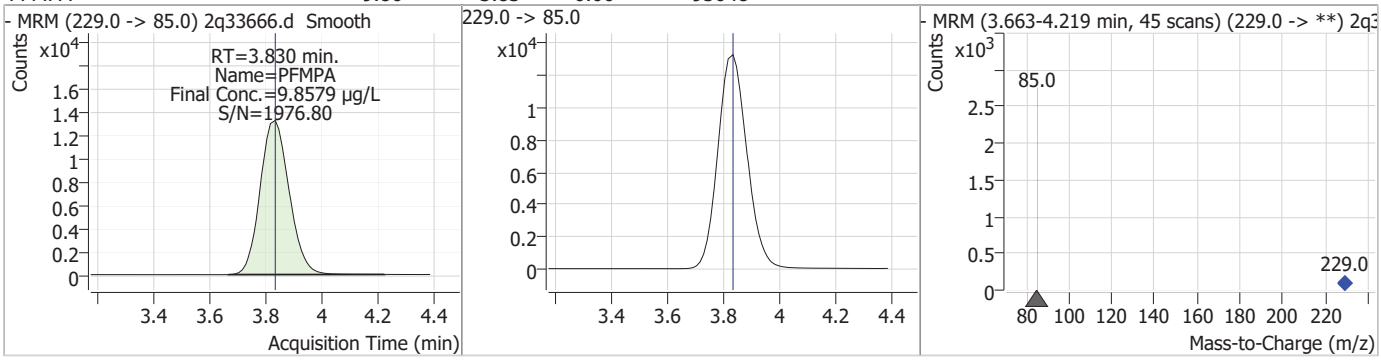
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	19.29	3.26	0.00	61601				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.04	3.26	0.00	120998				

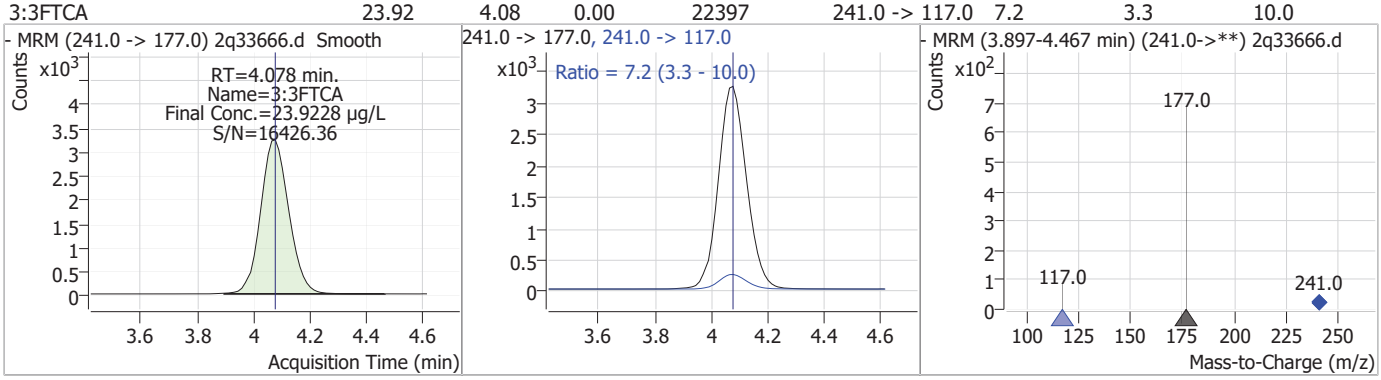


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	9.86	3.83	0.00	95048				

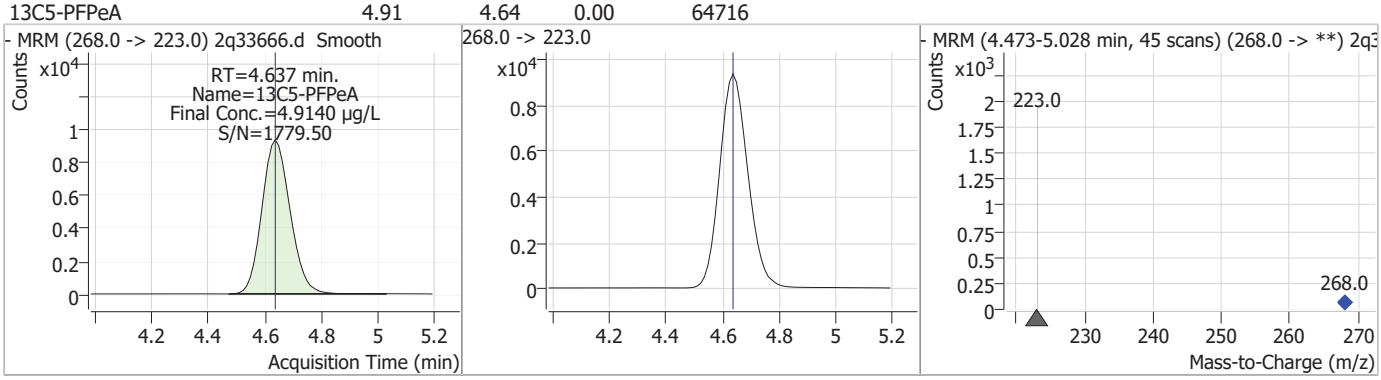


Perfluorinated Compounds by LC/MS/MS

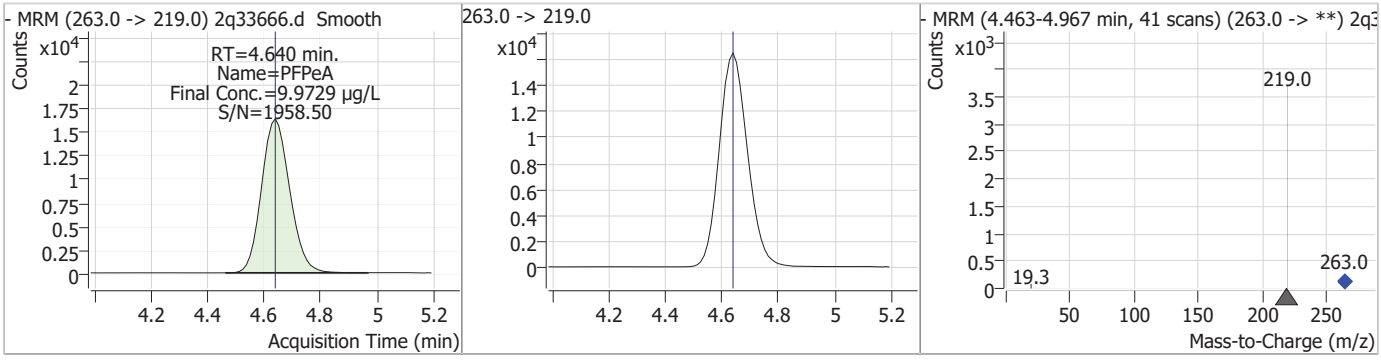
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	23.92	4.08	0.00	22397	241.0 -> 117.0	7.2	3.3	10.0



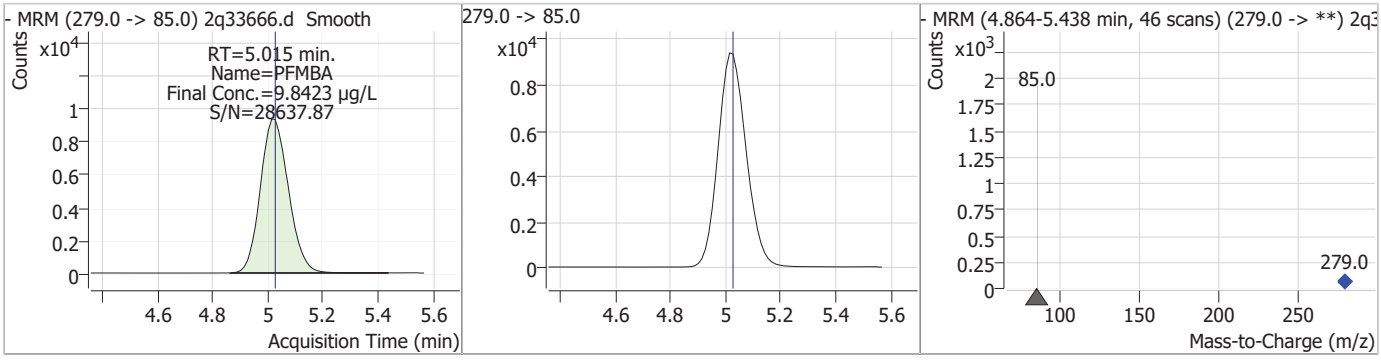
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.91	4.64	0.00	64716				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	9.97	4.64	0.00	114141				

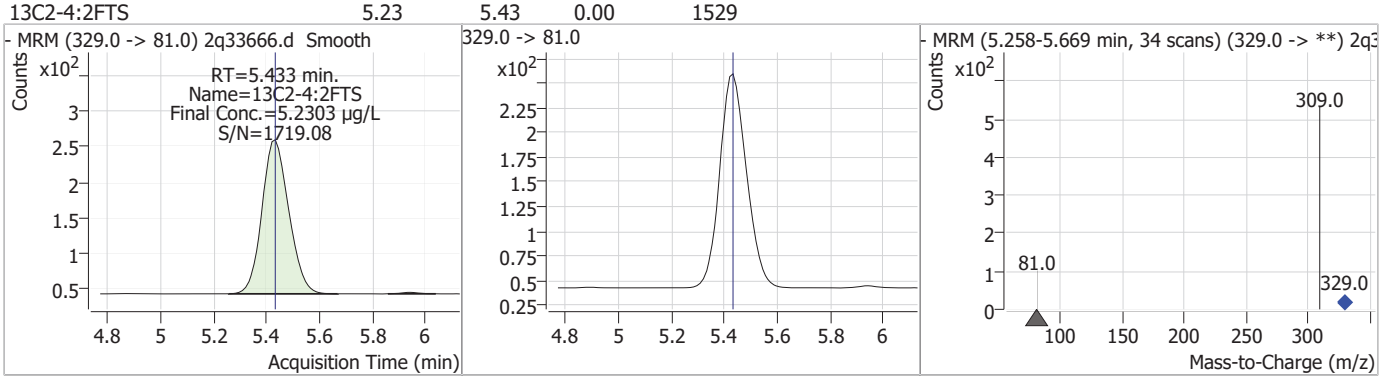


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	9.84	5.01	-0.01	66148				

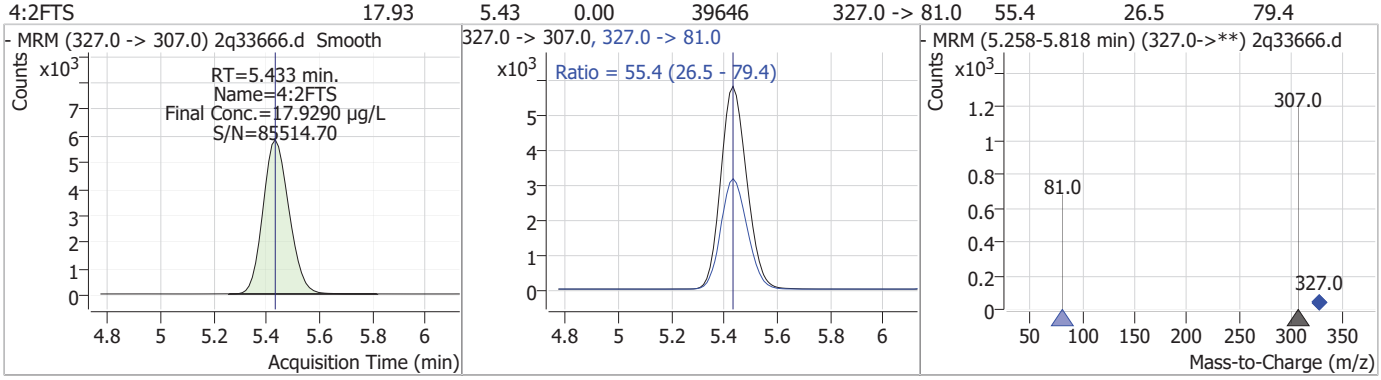


Perfluorinated Compounds by LC/MS/MS

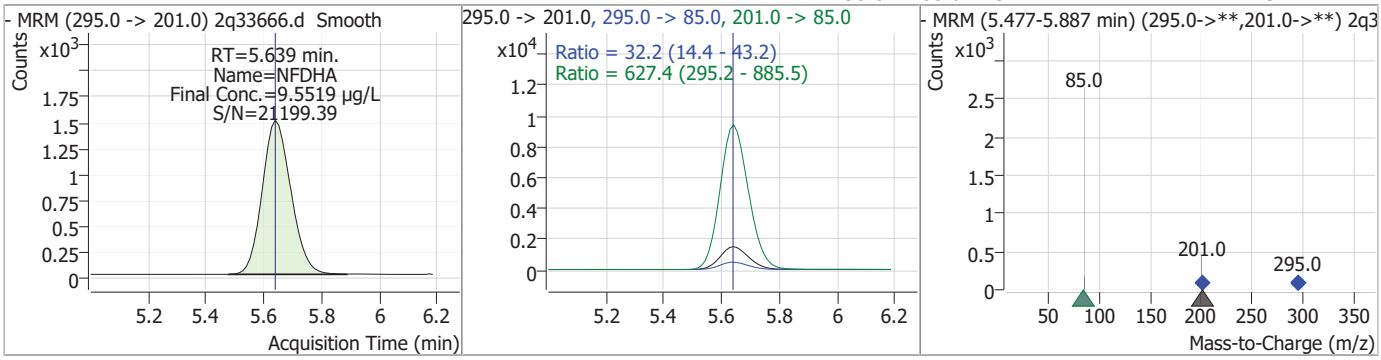
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.23	5.43	0.00	1529				



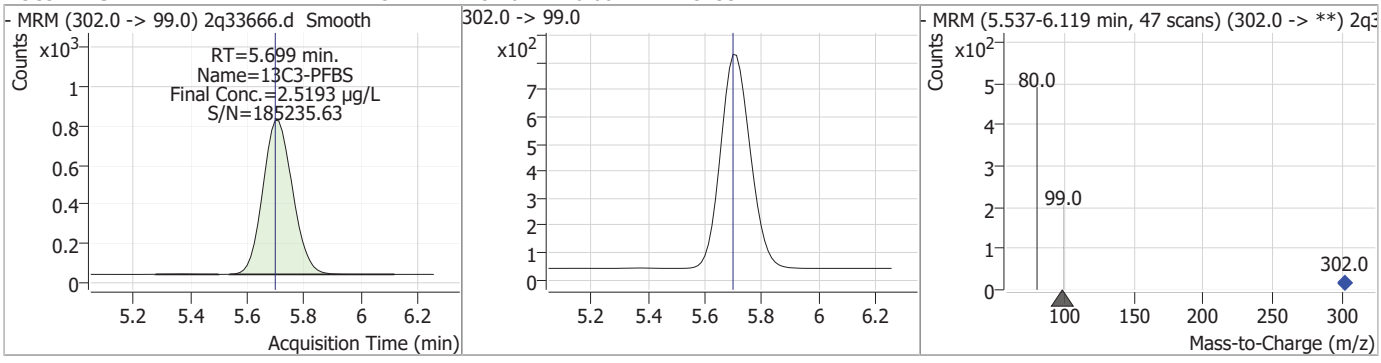
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	17.93	5.43	0.00	39646	327.0 -> 81.0	55.4	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	9.55	5.64	0.00	10227	201.0 -> 85.0	627.4	295.2	885.5
					295.0 -> 85.0	32.2	14.4	43.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.52	5.70	0.00	5733				



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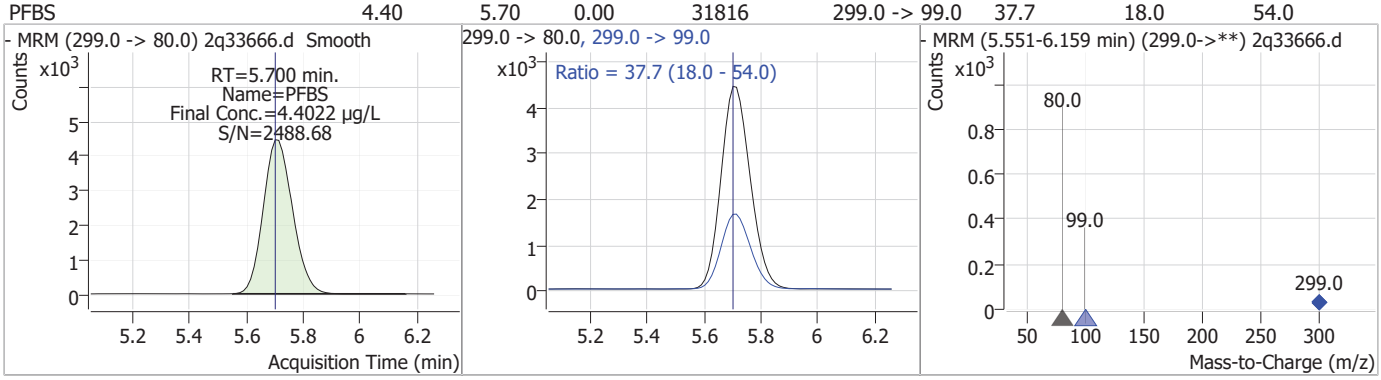
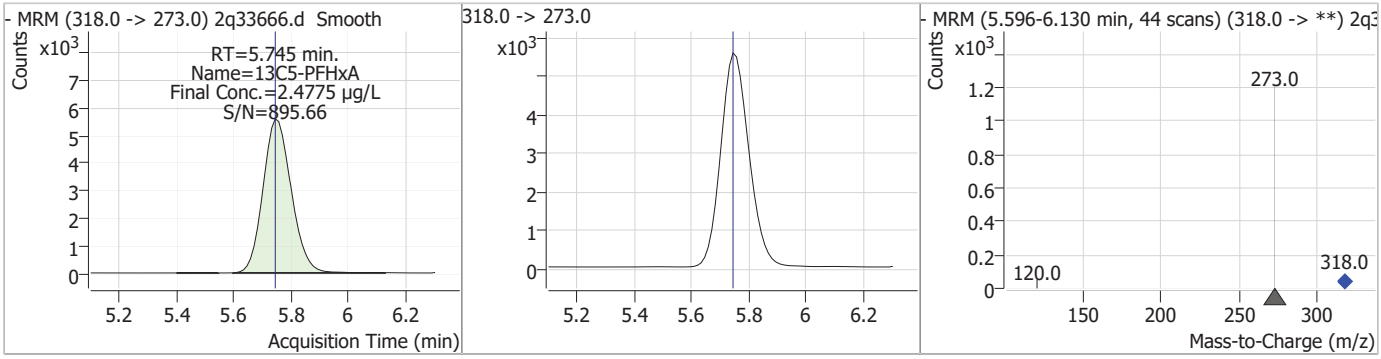
Perfluorinated Compounds by LC/MS/MS

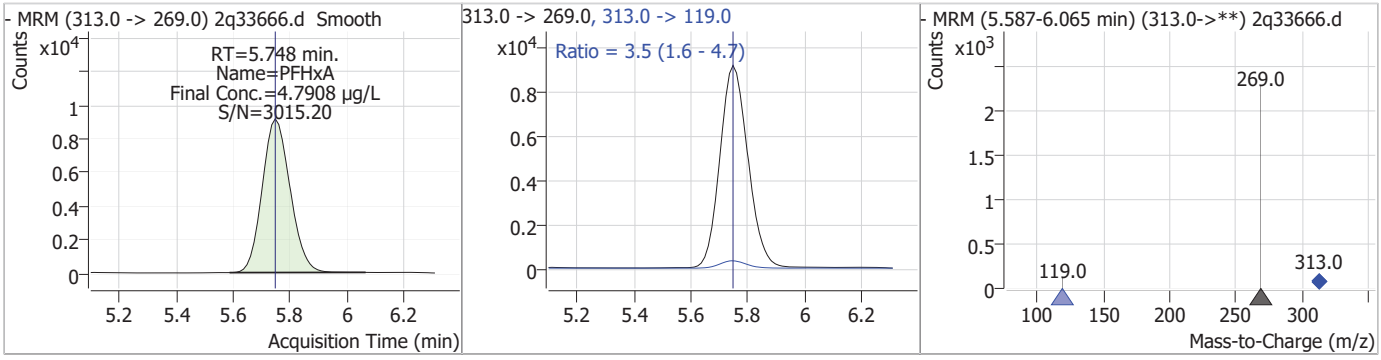
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.40	5.70	0.00	31816	299.0 -> 99.0	37.7	18.0	54.0



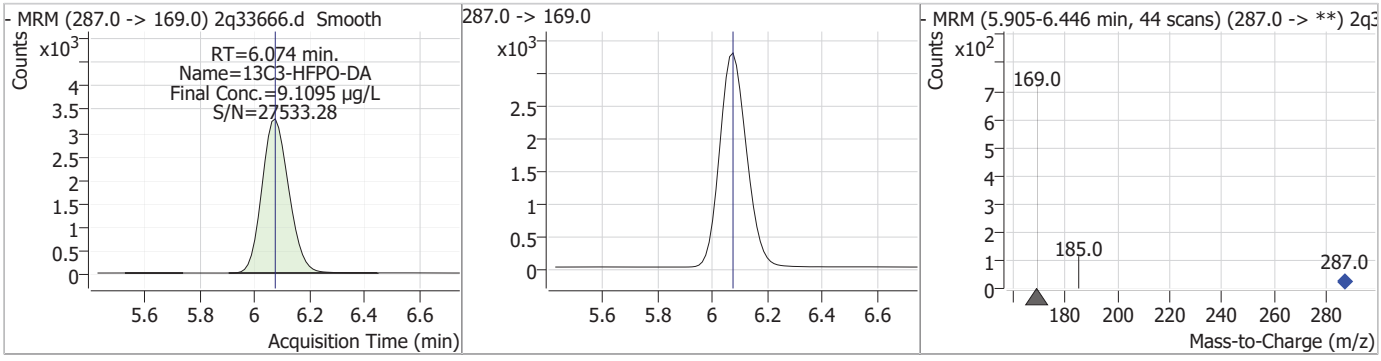
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.48	5.74	0.00	38283				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	4.79	5.75	0.00	62115	313.0 -> 119.0	3.5	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.11	6.07	0.00	22086				



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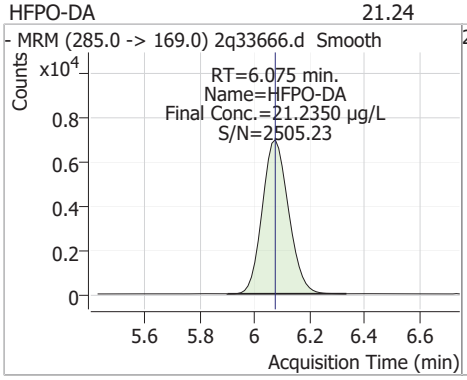
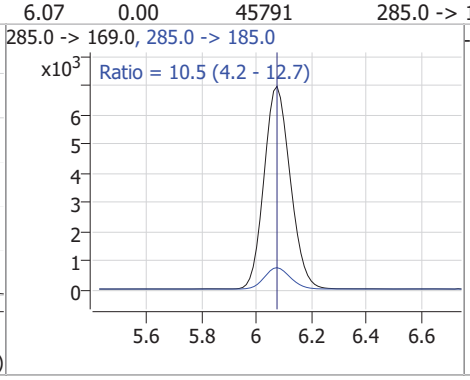
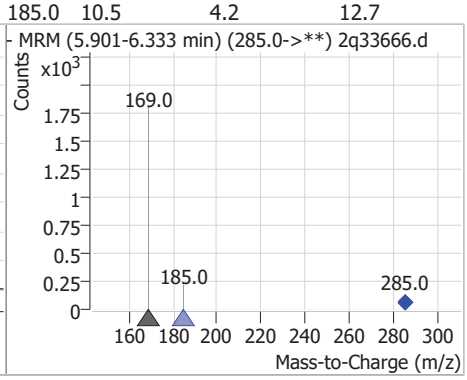
Perfluorinated Compounds by LC/MS/MS

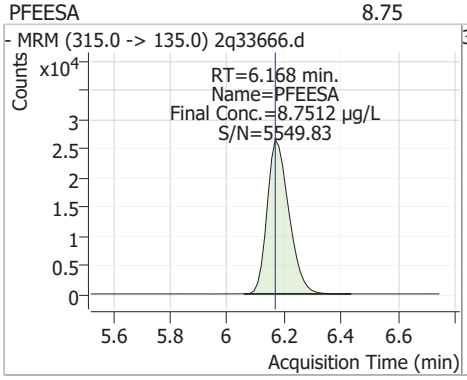
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	21.24	6.07	0.00	45791	285.0 -> 185.0	10.5	4.2	12.7

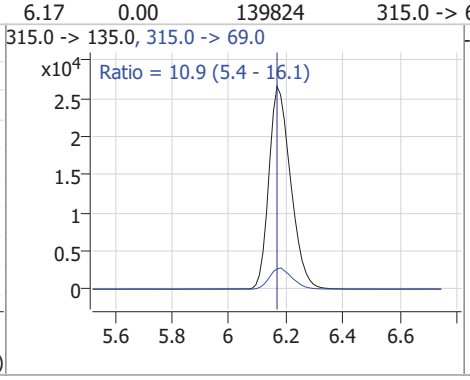


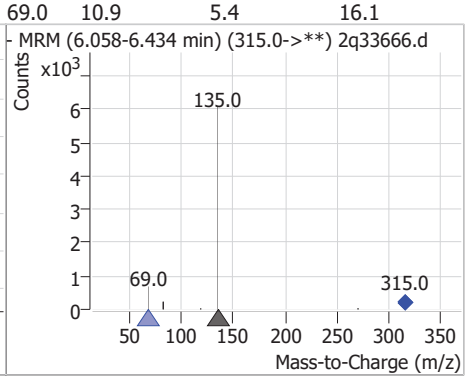




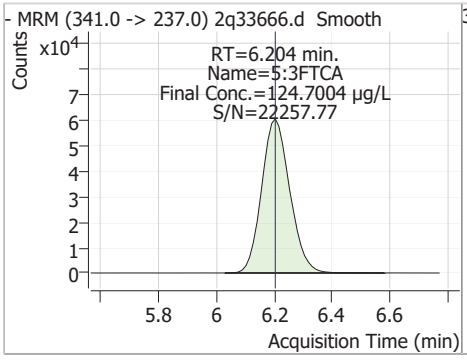
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	8.75	6.17	0.00	139824	315.0 -> 69.0	10.9	5.4	16.1

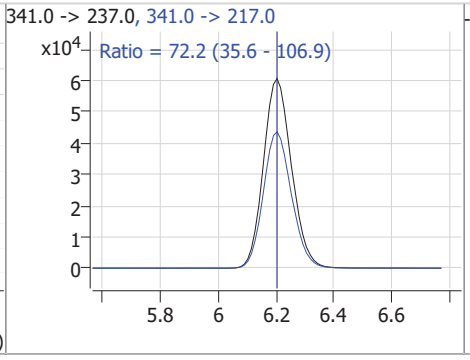


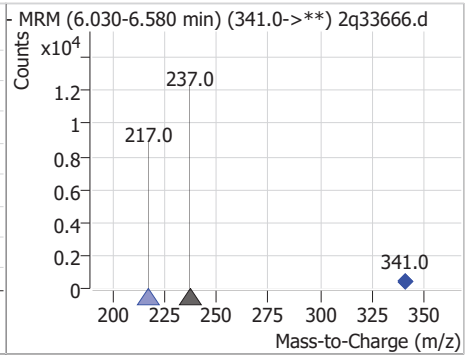




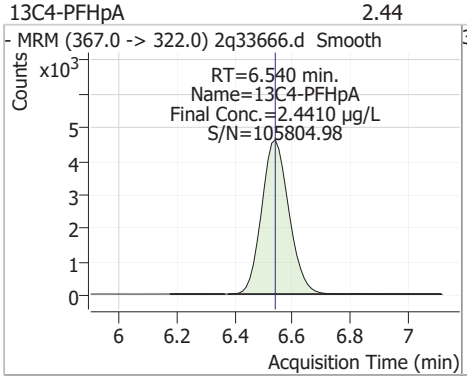
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	124.70	6.20	0.00	406941	341.0 -> 217.0	72.2	35.6	106.9

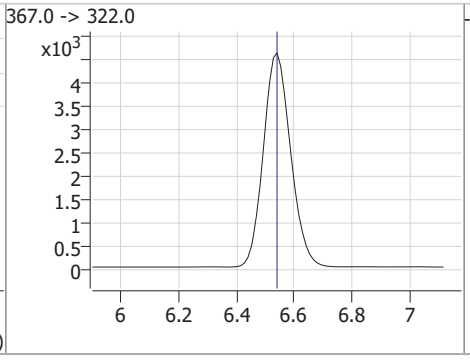


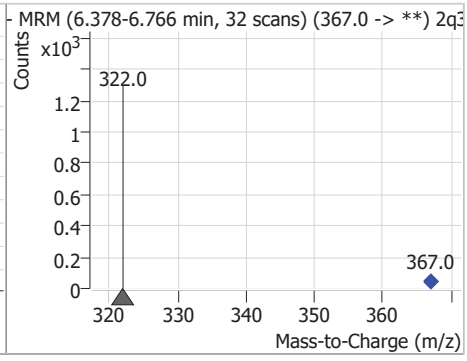




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.44	6.54	0.00	30018				







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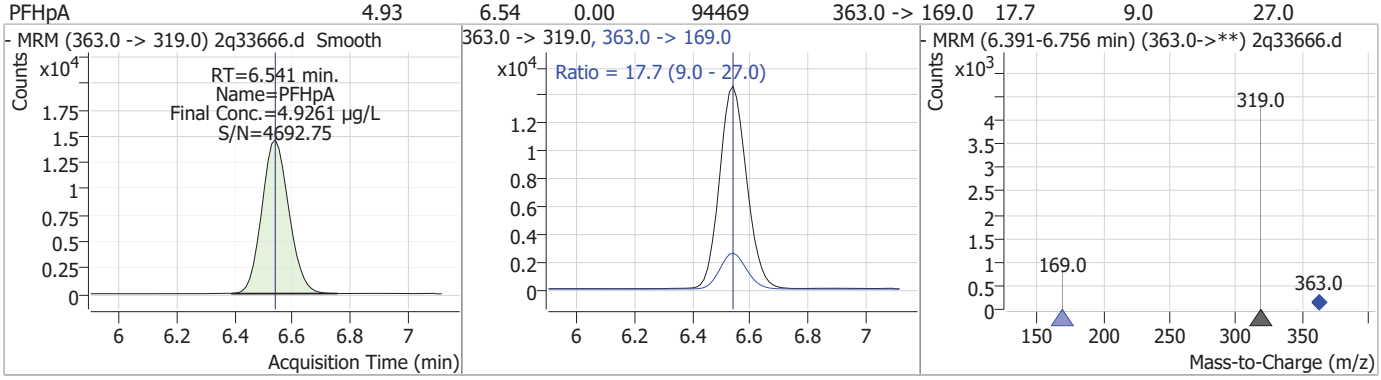
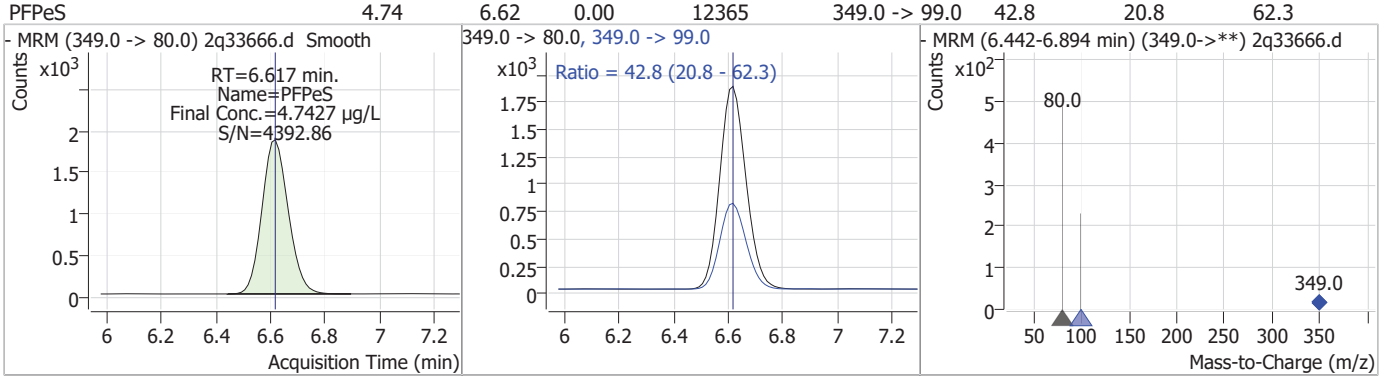
Perfluorinated Compounds by LC/MS/MS

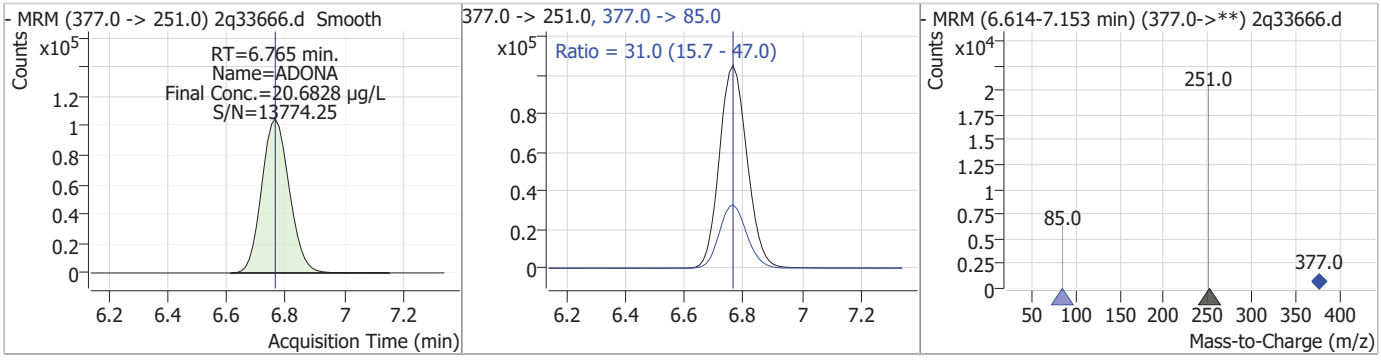
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	4.93	6.54	0.00	94469	363.0 -> 169.0	17.7	9.0	27.0



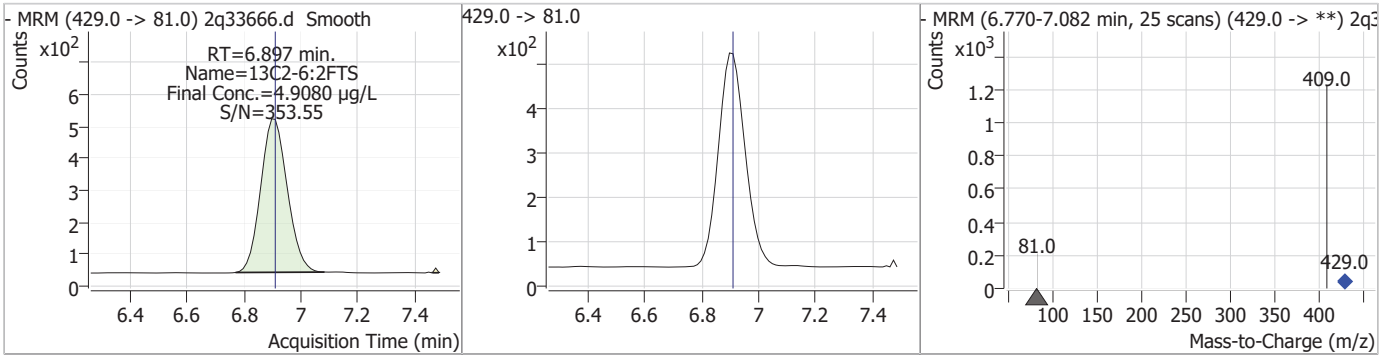
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	4.74	6.62	0.00	12365	349.0 -> 99.0	42.8	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	20.68	6.77	0.00	682801	377.0 -> 85.0	31.0	15.7	47.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.91	6.90	-0.01	3102				



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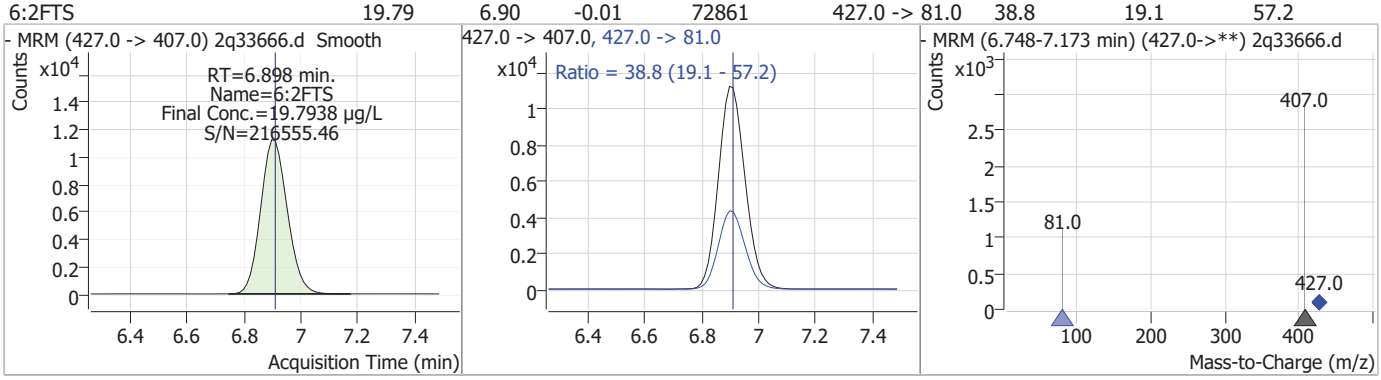
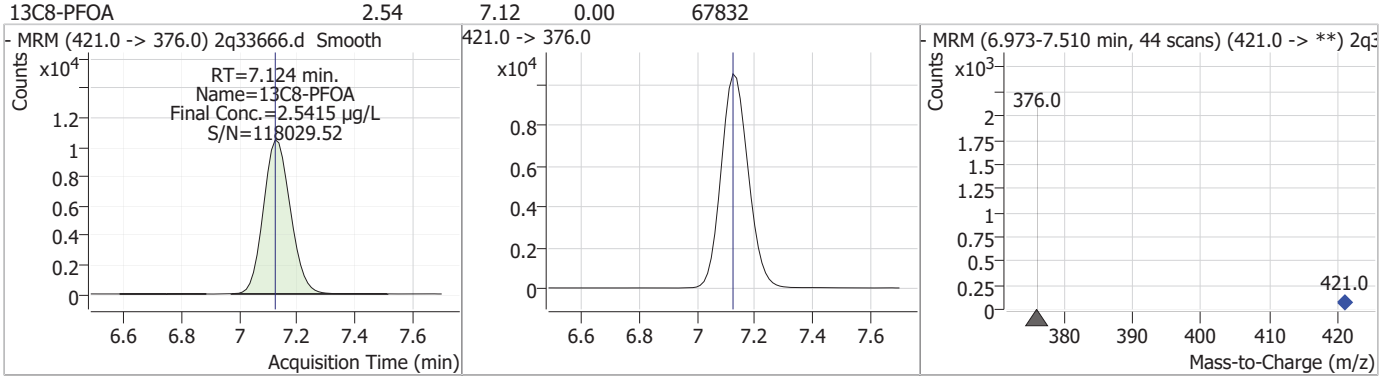
Perfluorinated Compounds by LC/MS/MS

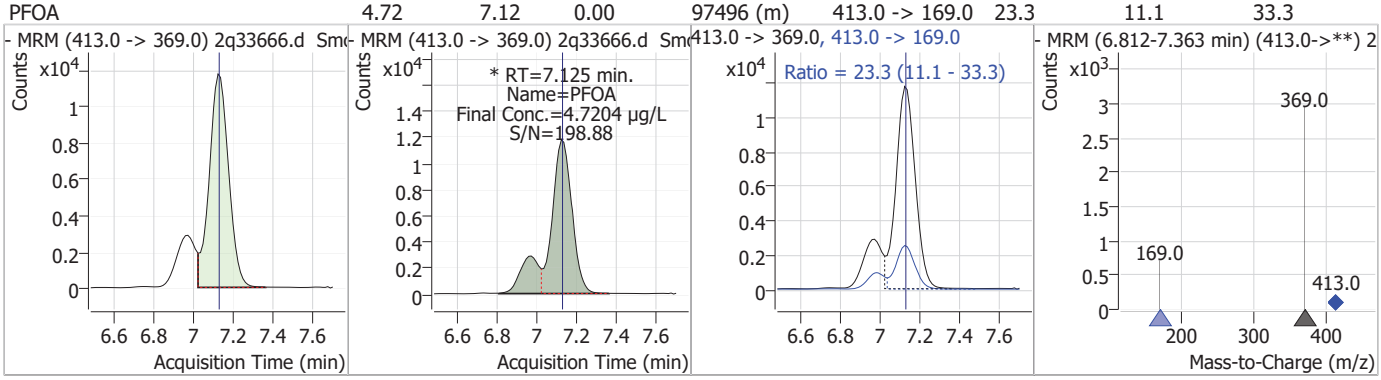
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	19.79	6.90	-0.01	72861	427.0 -> 81.0	38.8	19.1	57.2



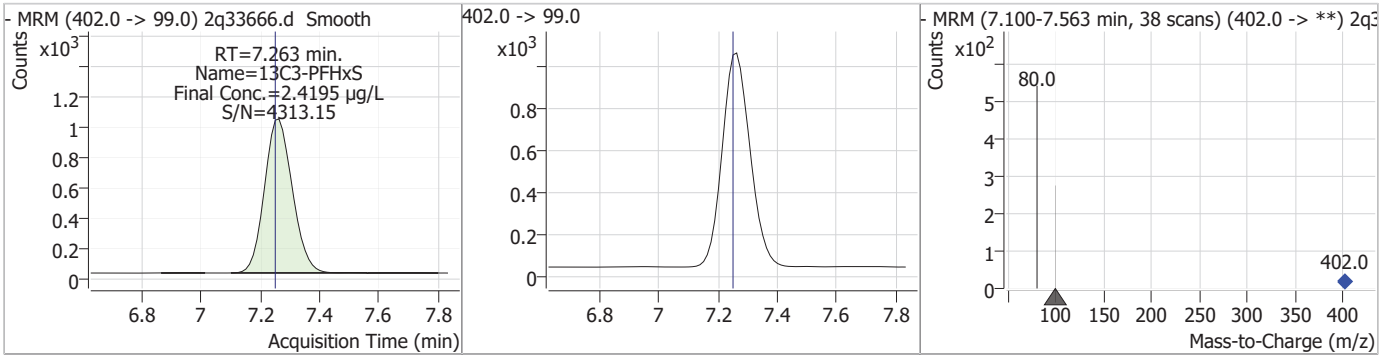
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.54	7.12	0.00	67832				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	4.72	7.12	0.00	97496 (m)	413.0 -> 169.0	23.3	11.1	33.3

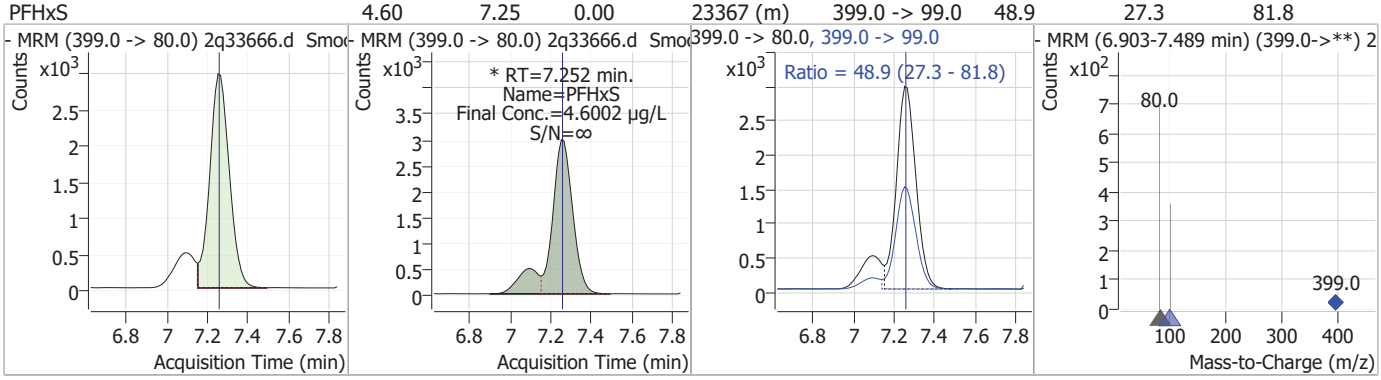


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.42	7.26	0.01	6664				

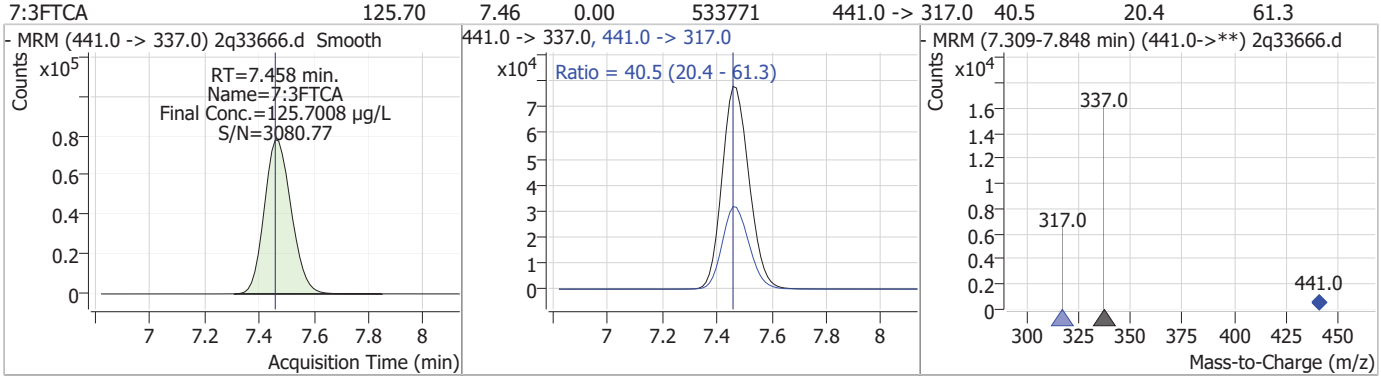


Perfluorinated Compounds by LC/MS/MS

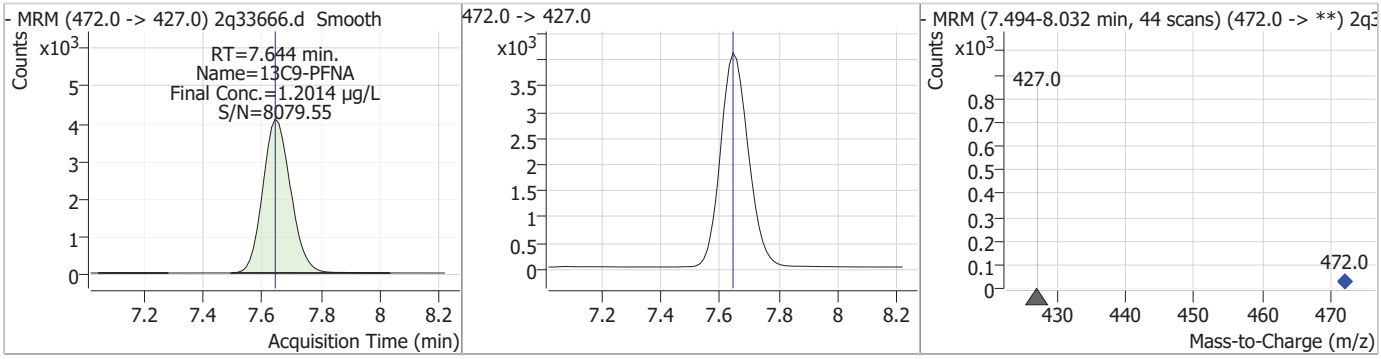
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	4.60	7.25	0.00	23367 (m)	399.0 -> 99.0	48.9	27.3	81.8



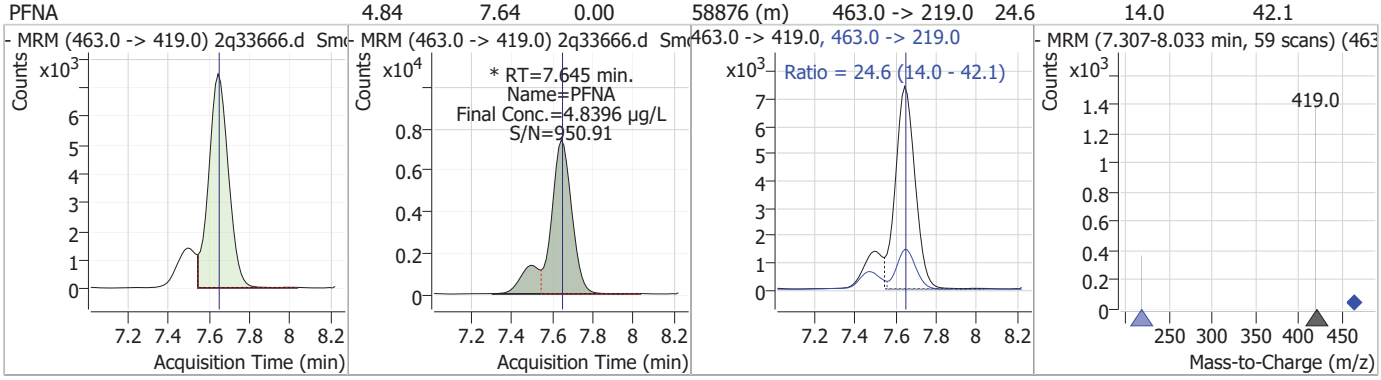
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	125.70	7.46	0.00	533771	441.0 -> 317.0	40.5	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.20	7.64	0.00	26821				

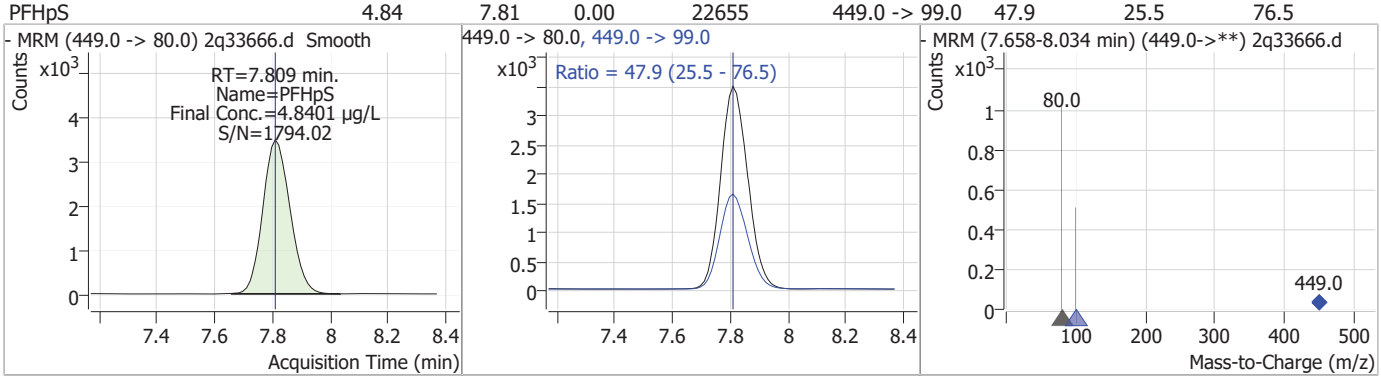


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	4.84	7.64	0.00	58876 (m)	463.0 -> 219.0	24.6	14.0	42.1

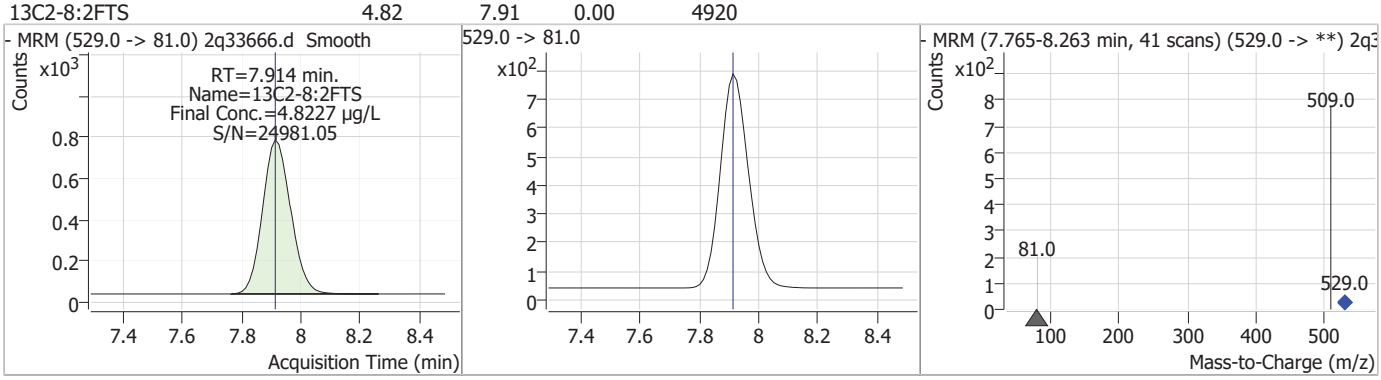


Perfluorinated Compounds by LC/MS/MS

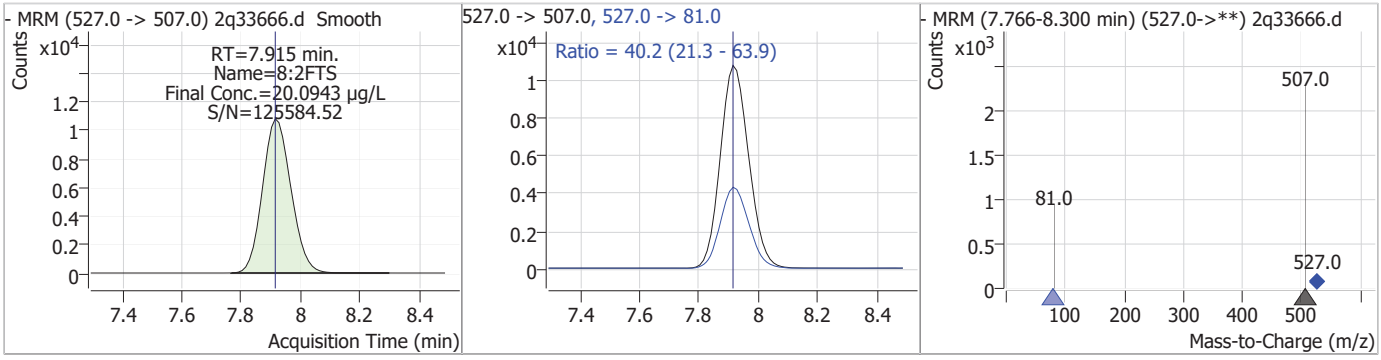
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	4.84	7.81	0.00	22655	449.0 -> 99.0	47.9	25.5	76.5



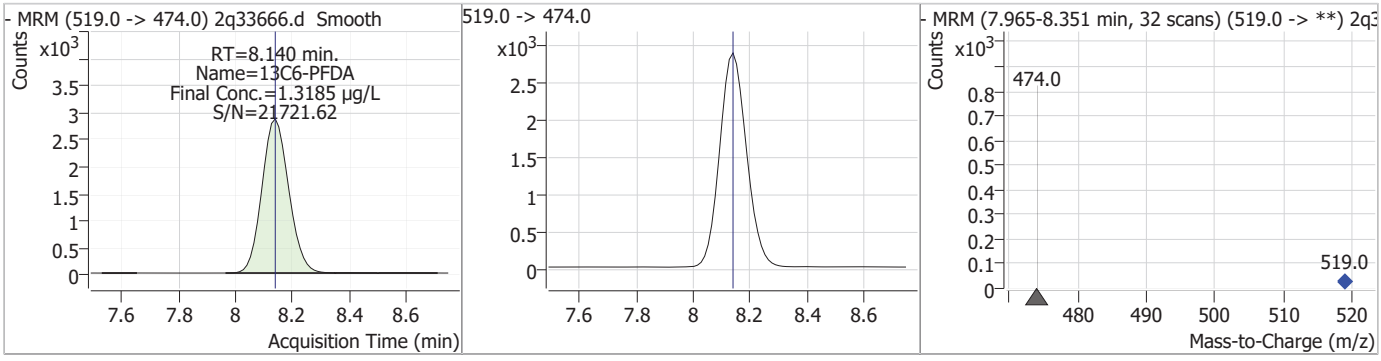
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.82	7.91	0.00	4920				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	20.09	7.91	0.00	71817	527.0 -> 81.0	40.2	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.32	8.14	0.00	18655				



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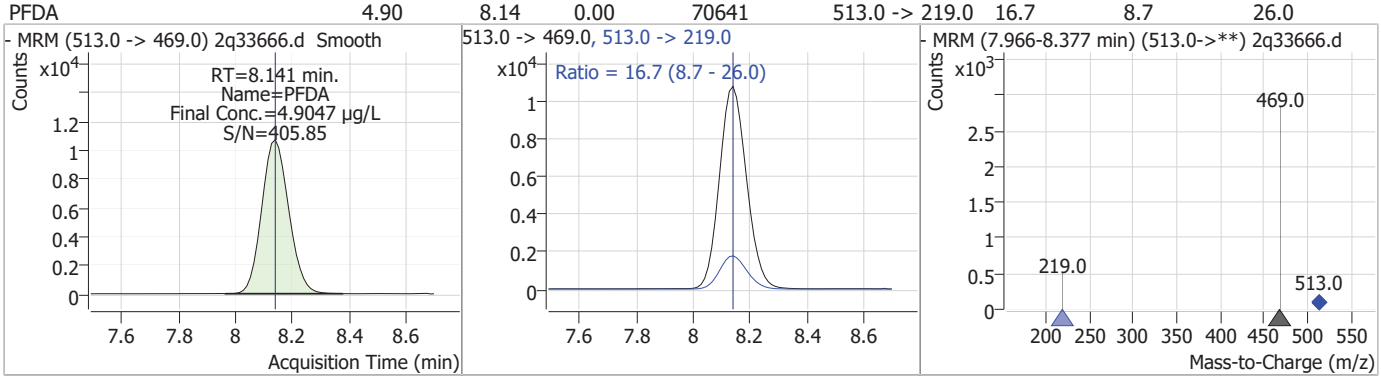
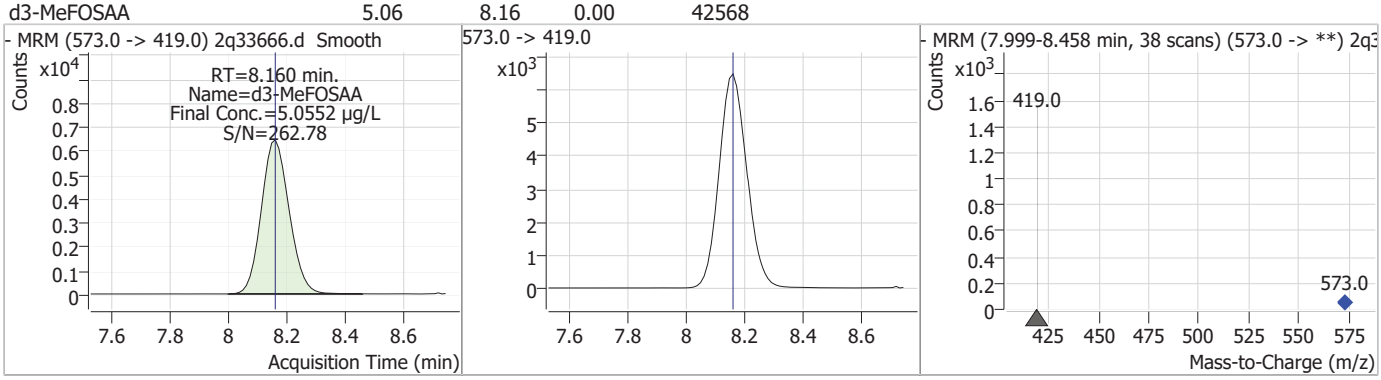
Perfluorinated Compounds by LC/MS/MS

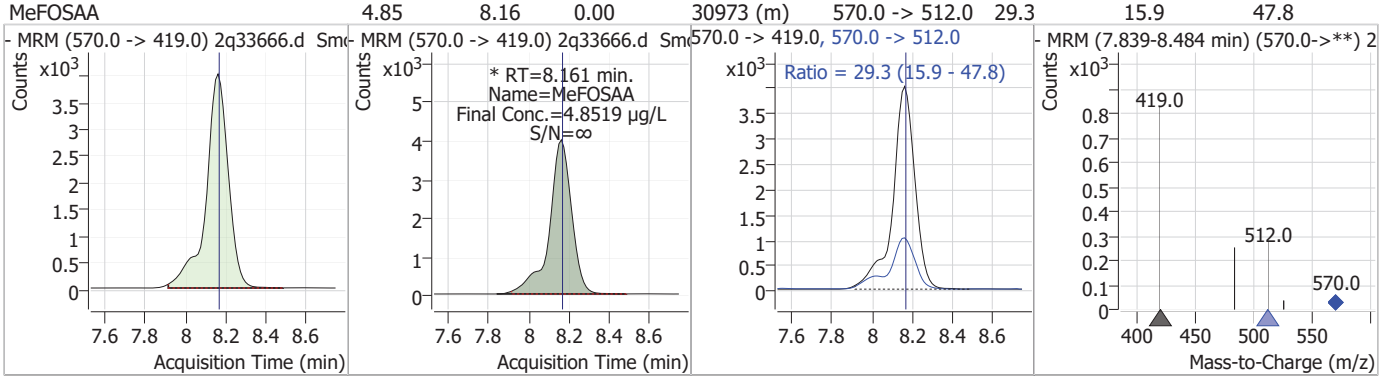
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	4.90	8.14	0.00	70641	513.0 -> 219.0	16.7	8.7	26.0



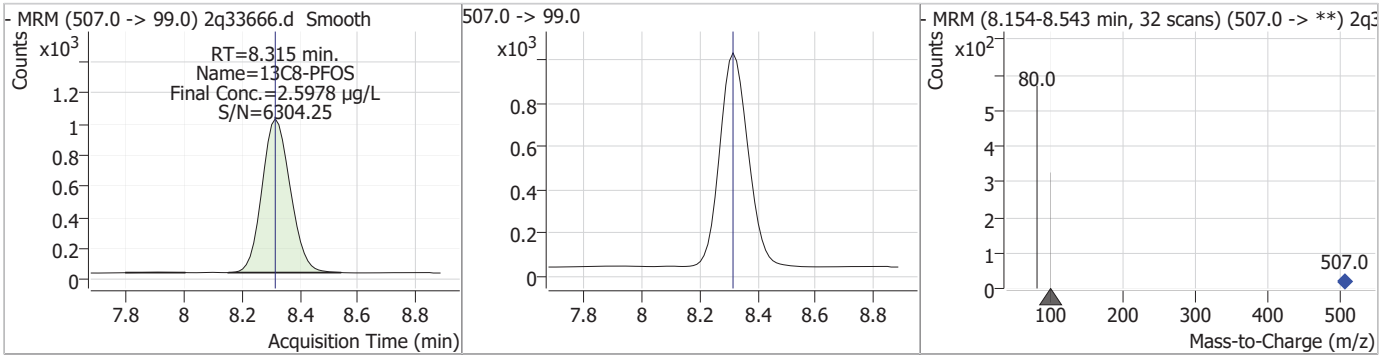
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.06	8.16	0.00	42568				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	4.85	8.16	0.00	30973 (m)	570.0 -> 512.0	29.3	15.9	47.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.60	8.32	0.00	6681				



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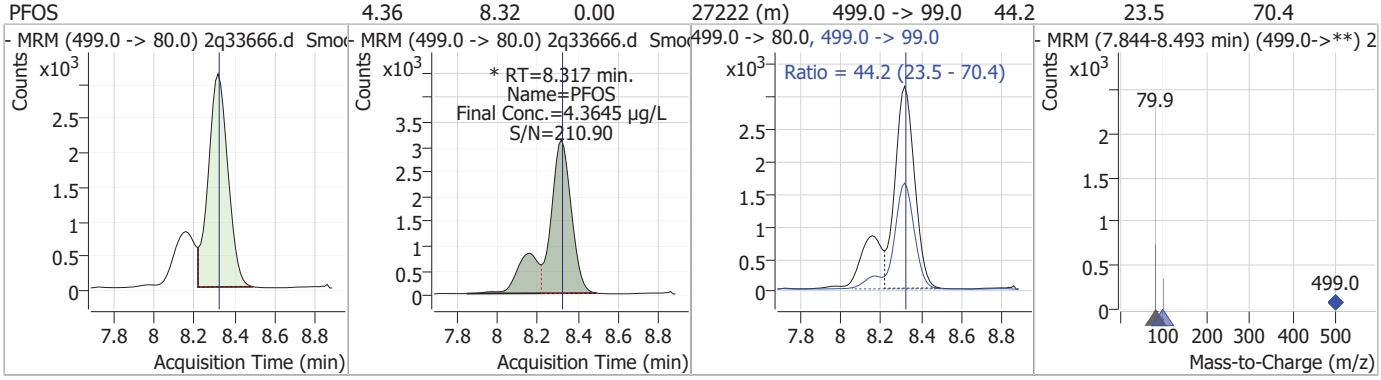
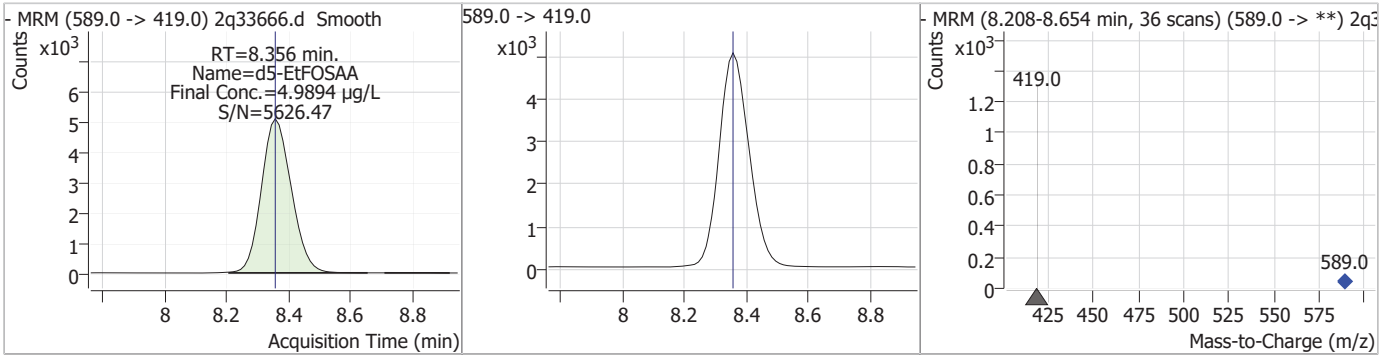
Perfluorinated Compounds by LC/MS/MS

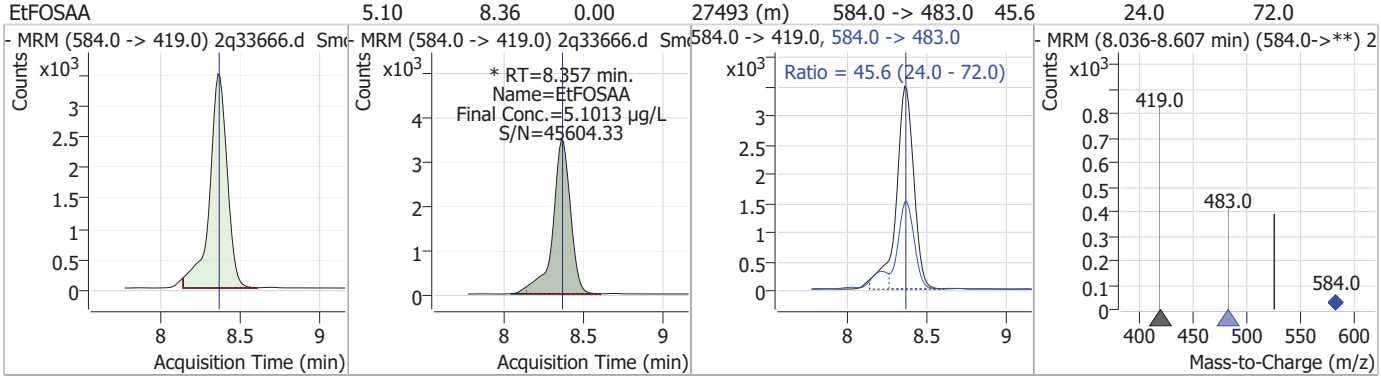
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.36	8.32	0.00	27222 (m)	499.0 -> 99.0	44.2	23.5	70.4



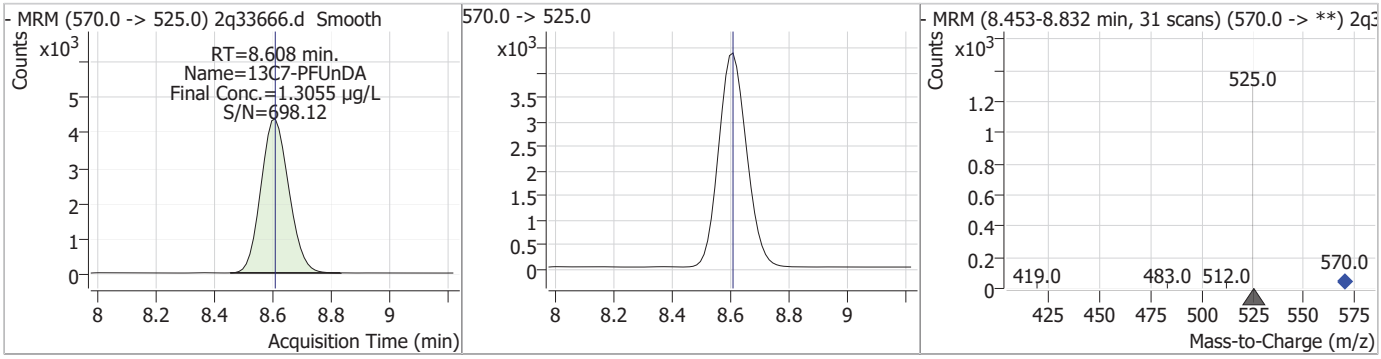
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.99	8.36	0.00	33900				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	5.10	8.36	0.00	27493 (m)	584.0 -> 483.0	45.6	24.0	72.0

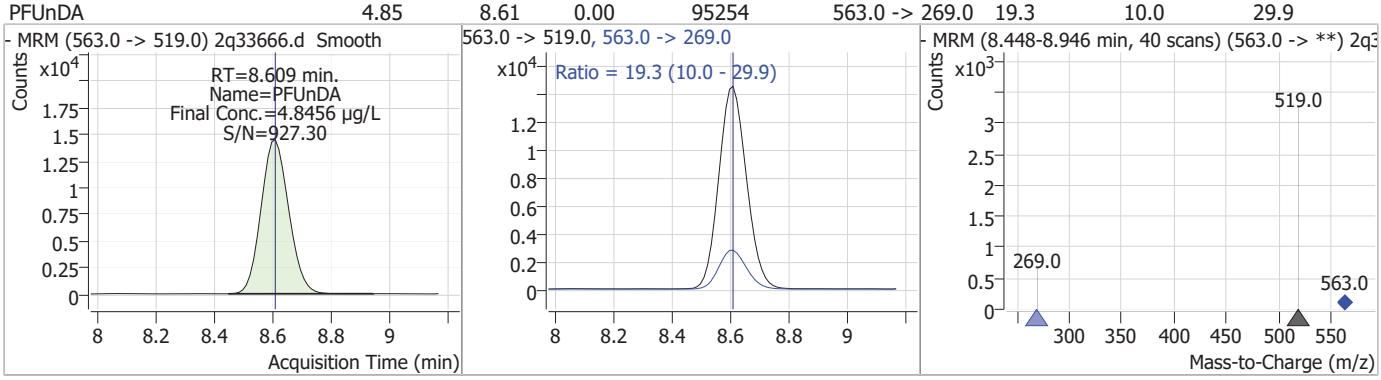


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.31	8.61	0.00	28962				

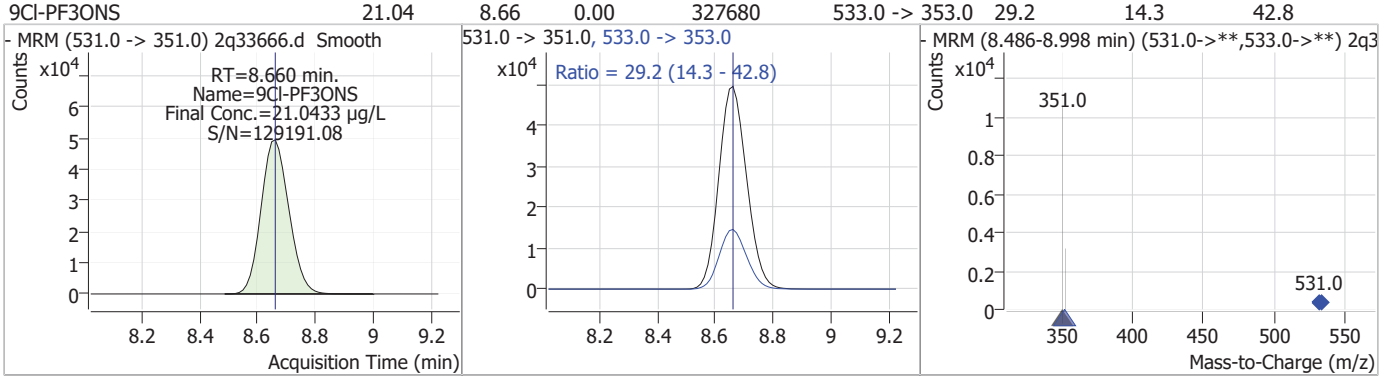


Perfluorinated Compounds by LC/MS/MS

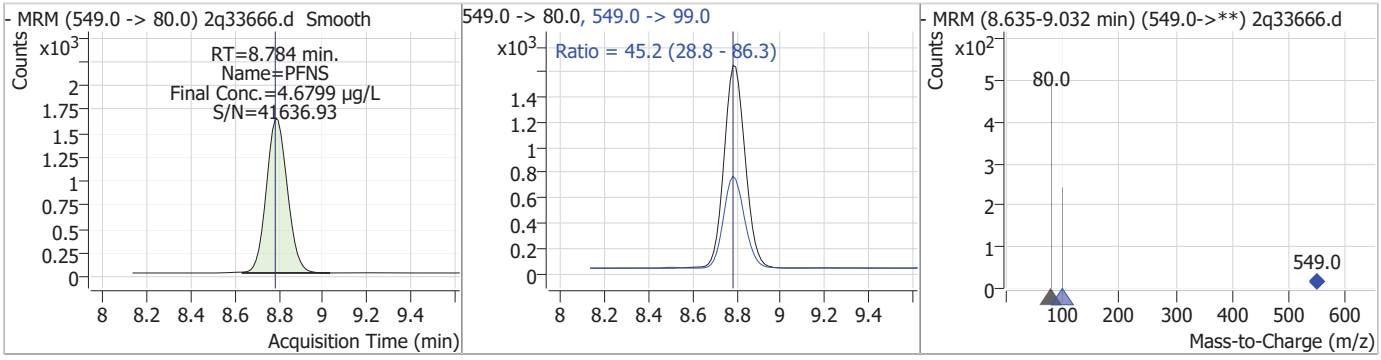
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	4.85	8.61	0.00	95254	563.0 -> 269.0	19.3	10.0	29.9



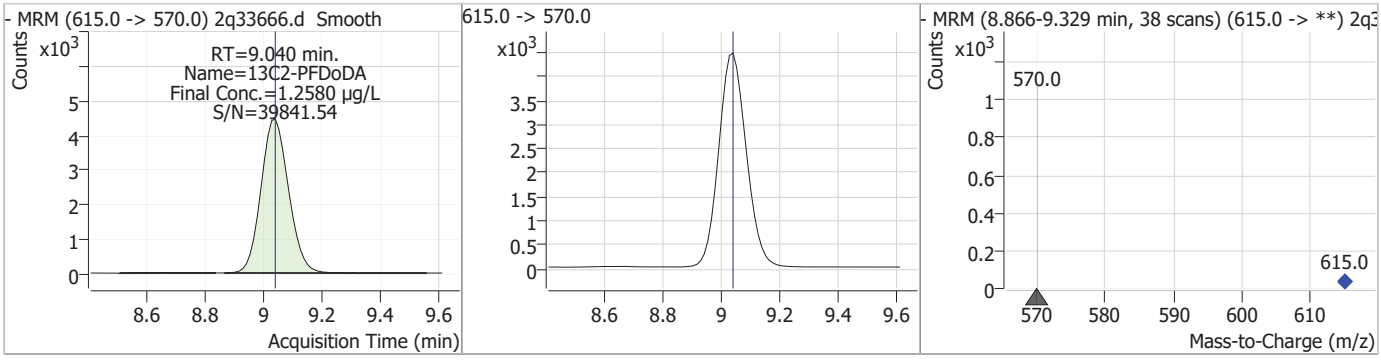
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	21.04	8.66	0.00	327680	533.0 -> 353.0	29.2	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	4.68	8.78	0.00	10656	549.0 -> 99.0	45.2	28.8	86.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.26	9.04	0.00	29193				



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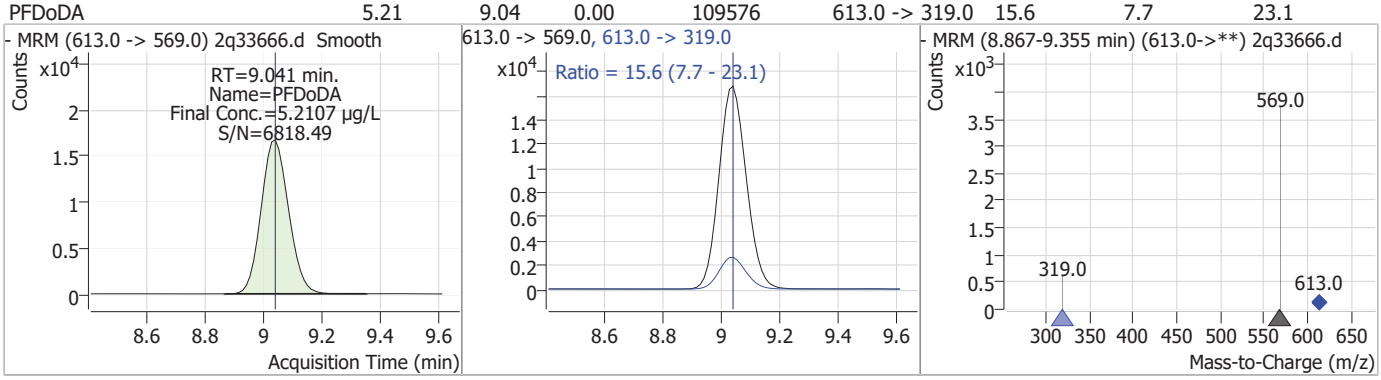
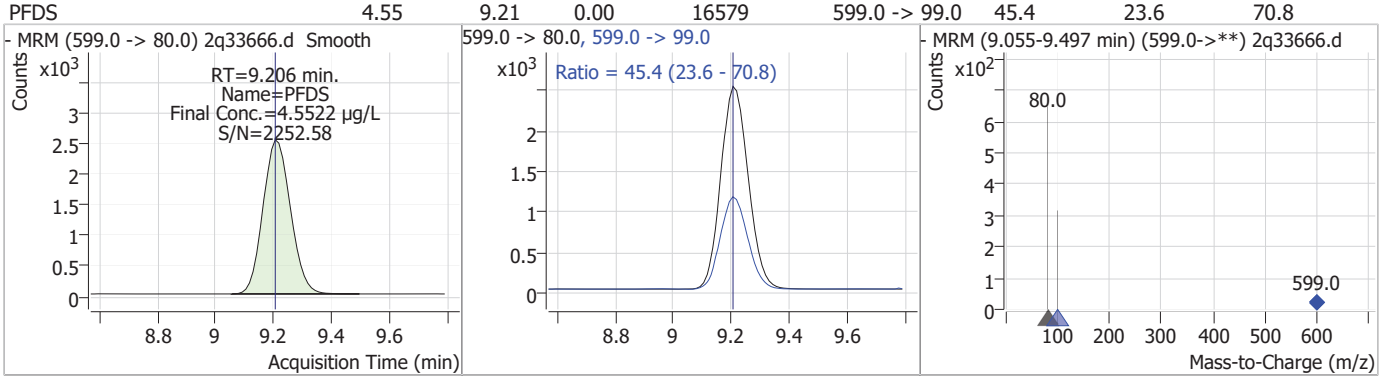
Perfluorinated Compounds by LC/MS/MS

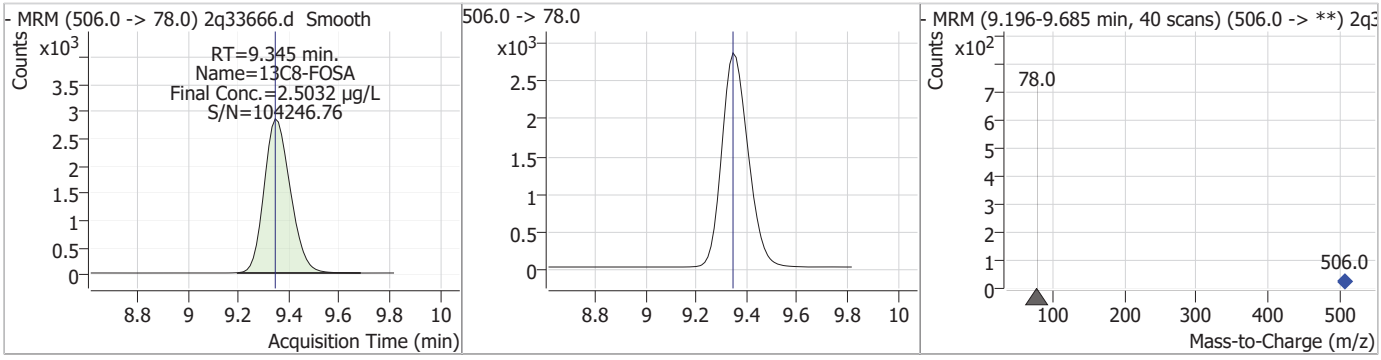
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	5.21	9.04	0.00	109576	613.0 -> 319.0	15.6	7.7	23.1



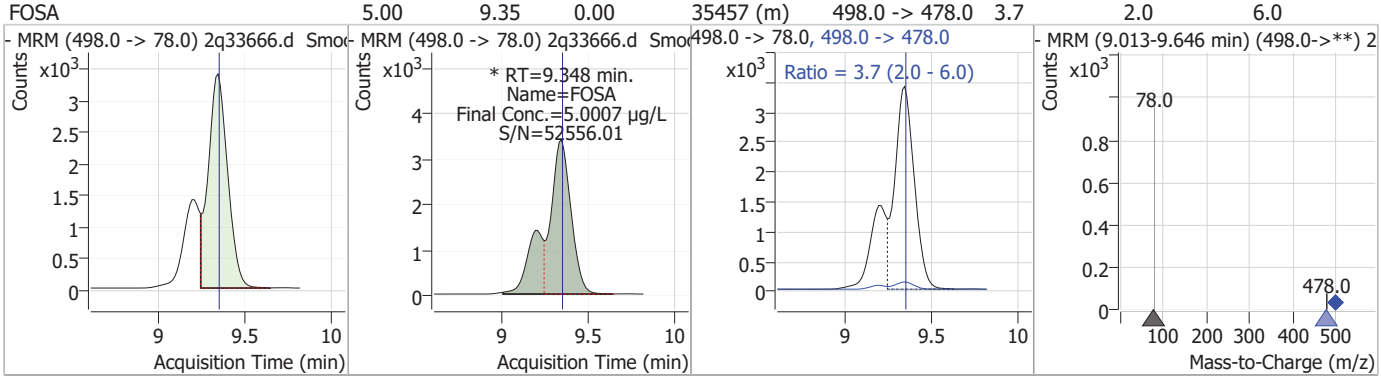
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	4.55	9.21	0.00	16579	599.0 -> 99.0	45.4	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.50	9.35	0.00	20416				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	5.00	9.35	0.00	35457 (m)	498.0 -> 478.0	3.7	2.0	6.0



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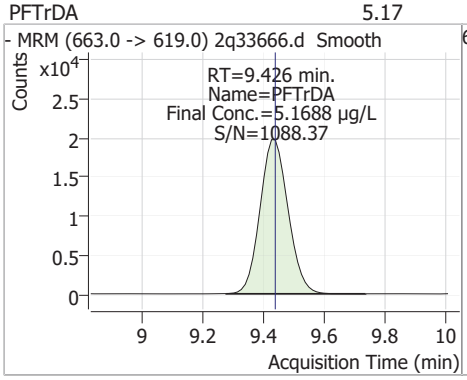
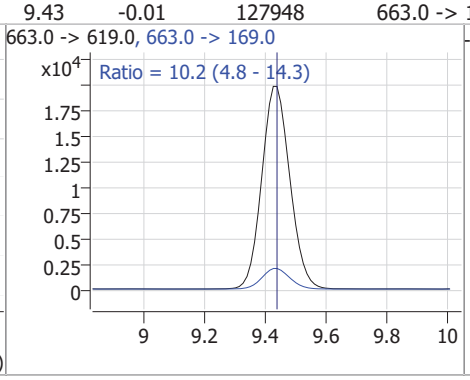
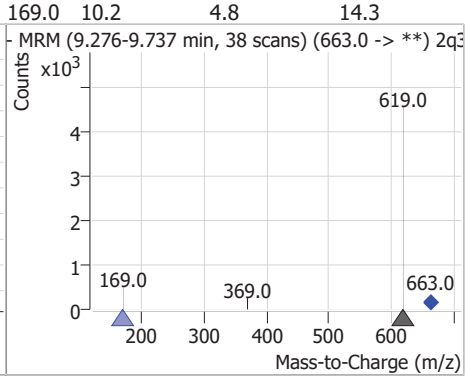
Perfluorinated Compounds by LC/MS/MS

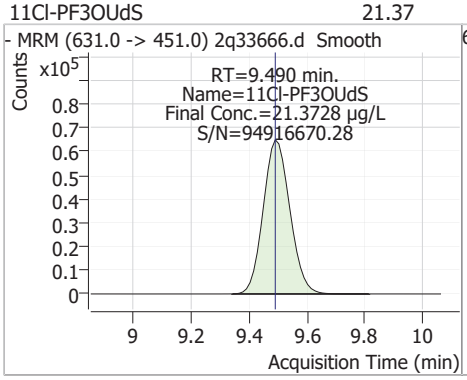
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	5.17	9.43	-0.01	127948	663.0 -> 169.0	10.2	4.8	14.3

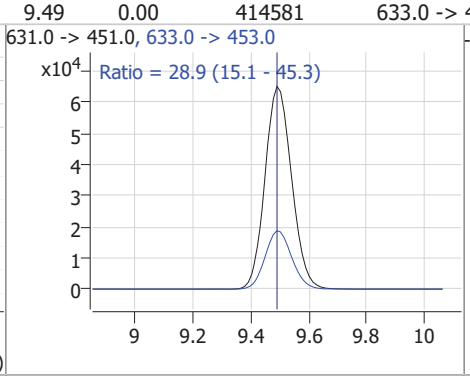


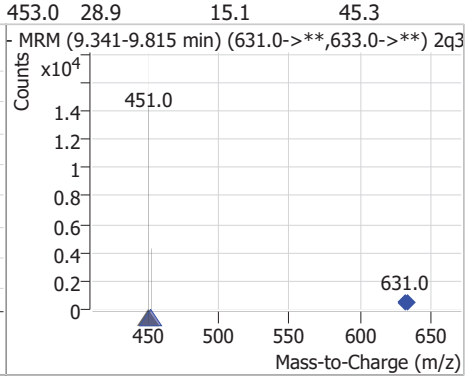




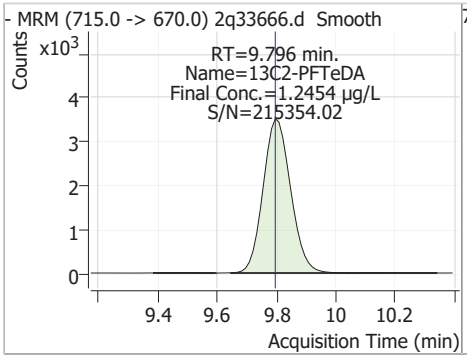
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	21.37	9.49	0.00	414581	633.0 -> 453.0	28.9	15.1	45.3

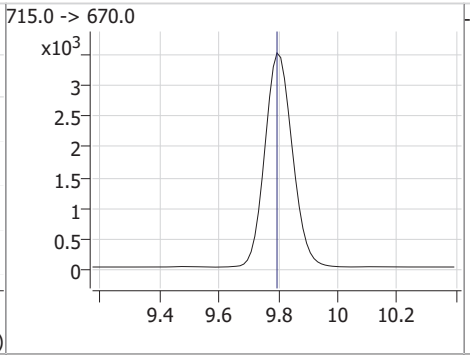


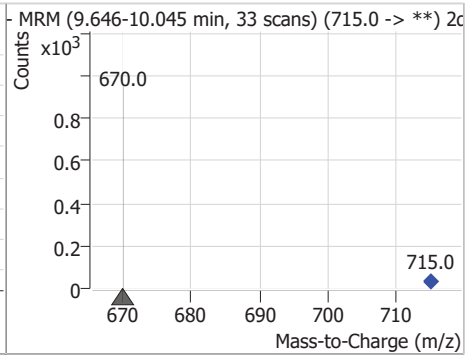




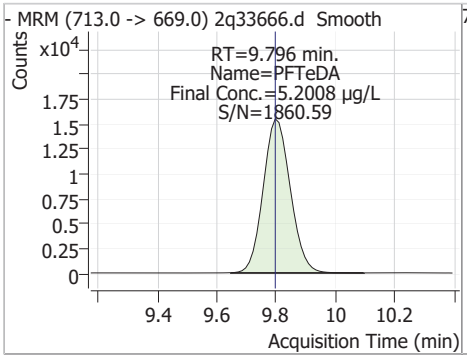
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.25	9.80	0.00	22434				

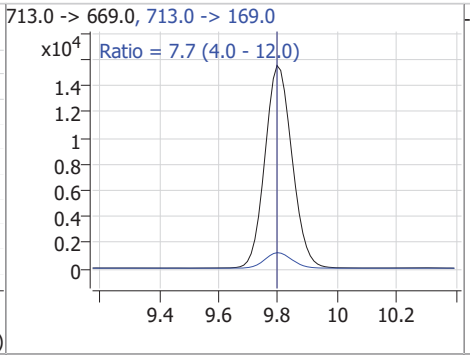


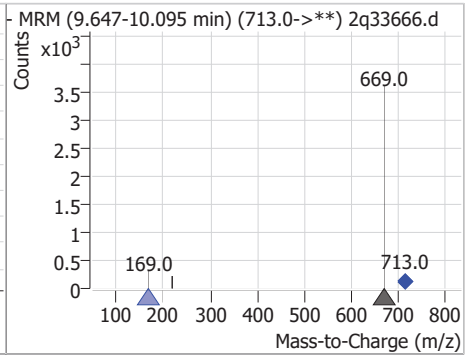




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	5.20	9.80	0.00	98258	713.0 -> 169.0	7.7	4.0	12.0







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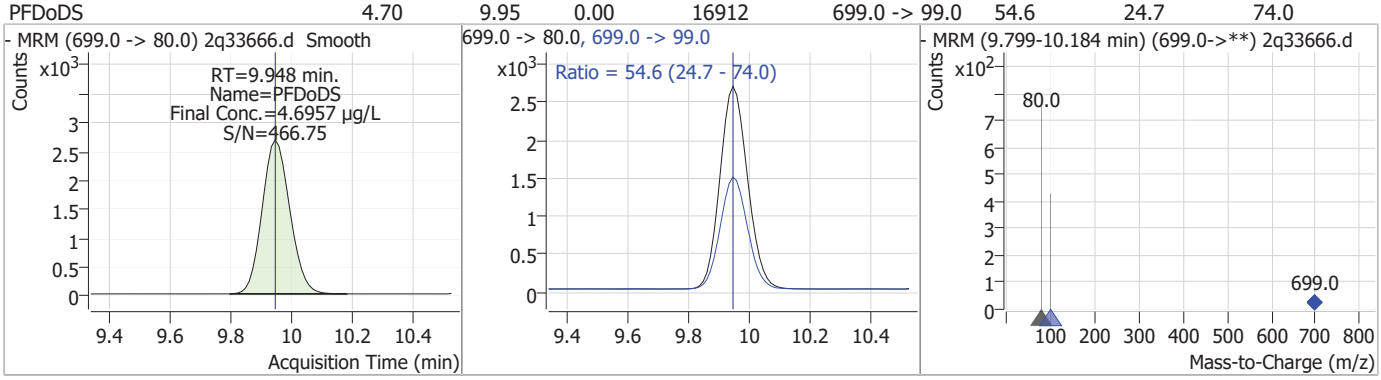
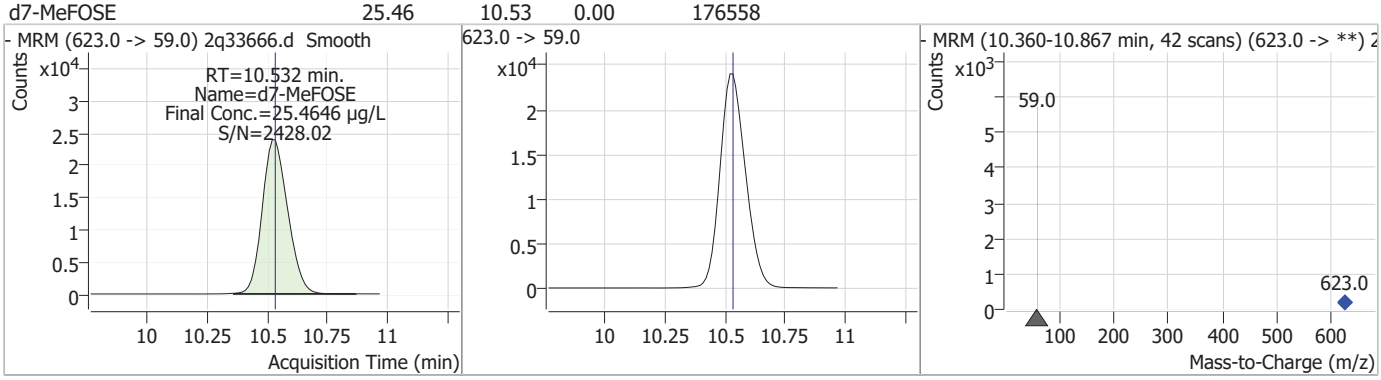
Perfluorinated Compounds by LC/MS/MS

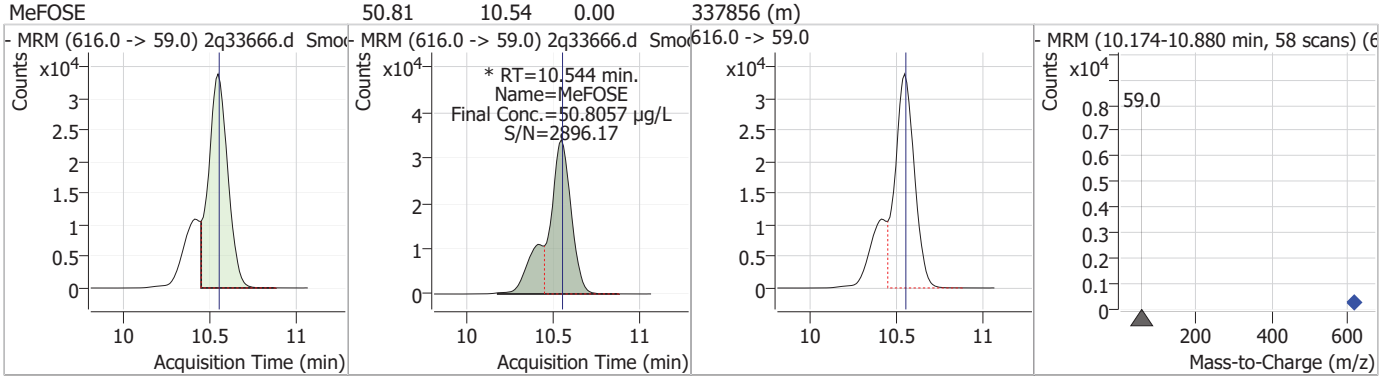
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	4.70	9.95	0.00	16912	699.0 -> 99.0	54.6	24.7	74.0



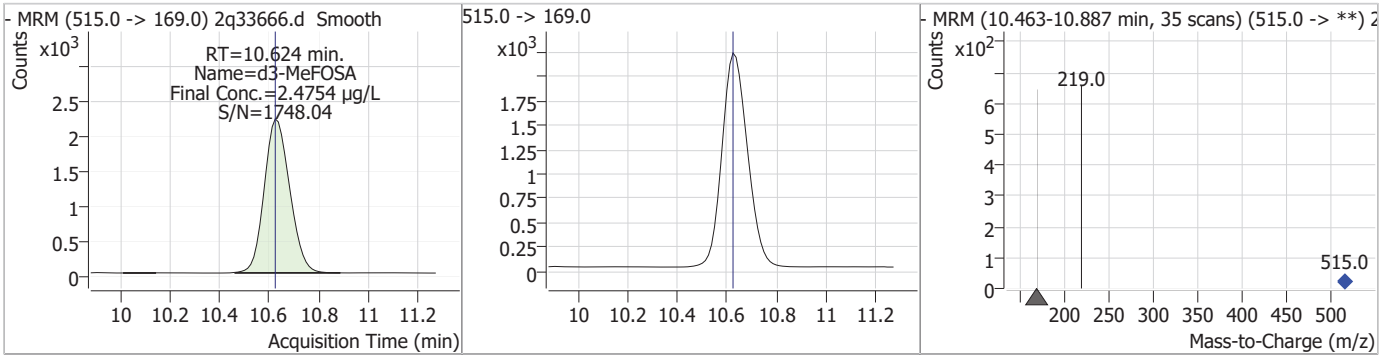
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.46	10.53	0.00	176558				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	50.81	10.54	0.00	337856 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.48	10.62	0.00	15705				



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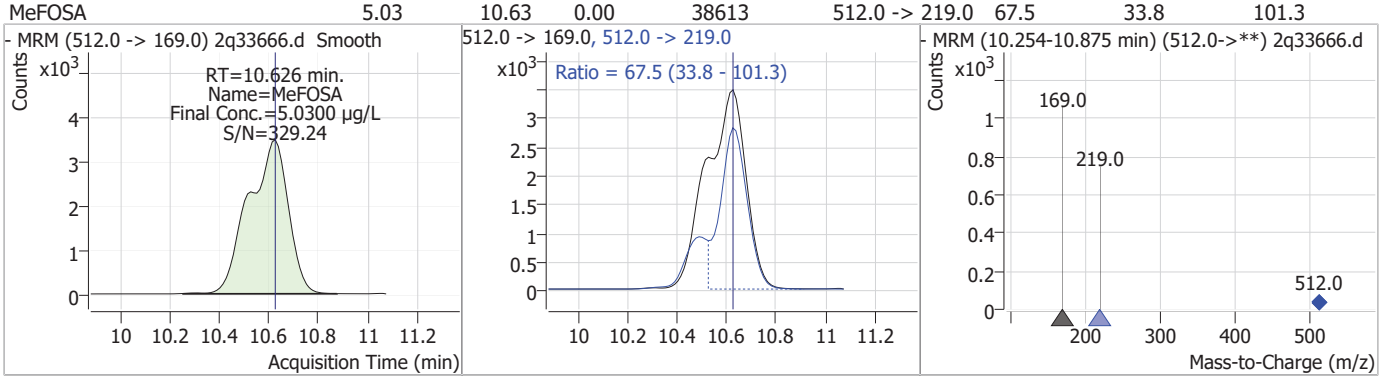
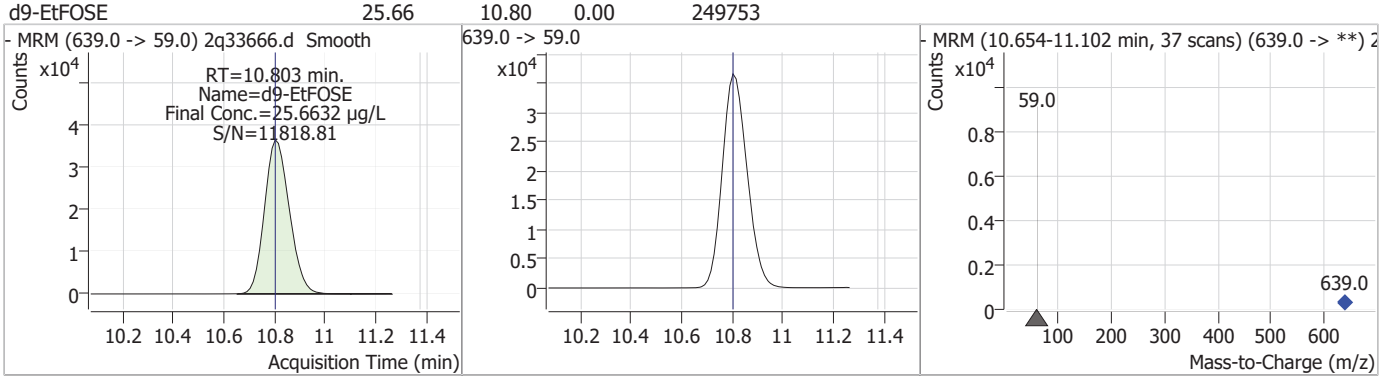
Perfluorinated Compounds by LC/MS/MS

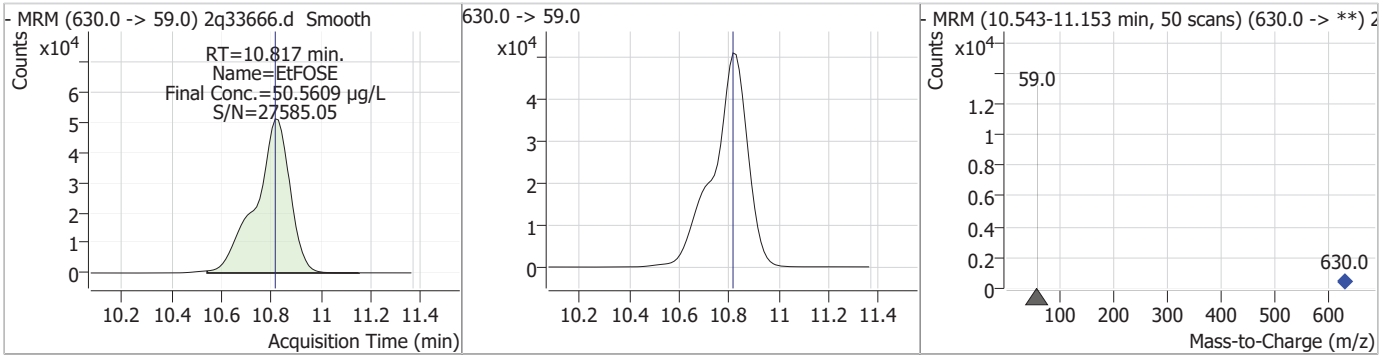
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	5.03	10.63	0.00	38613	512.0 -> 219.0	67.5	33.8	101.3



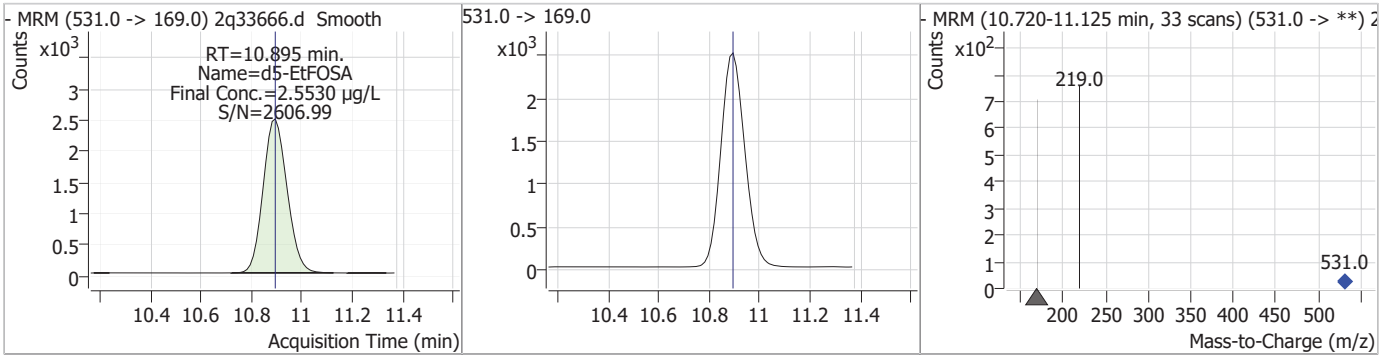
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.66	10.80	0.00	249753				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	50.56	10.82	0.00	489842				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.55	10.89	0.00	16332				



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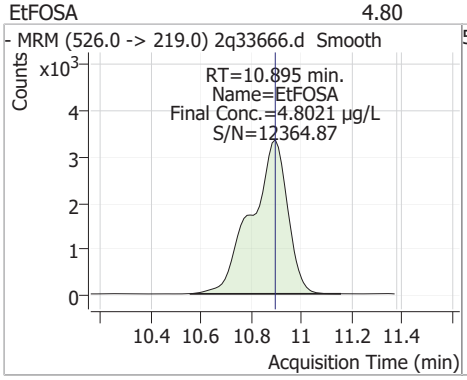
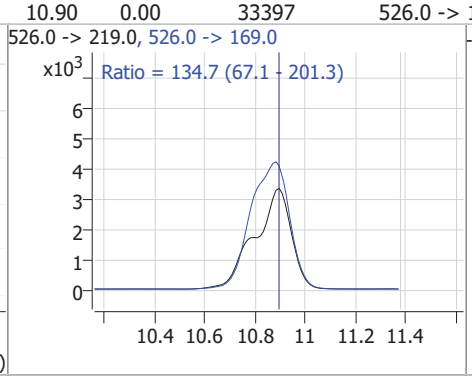
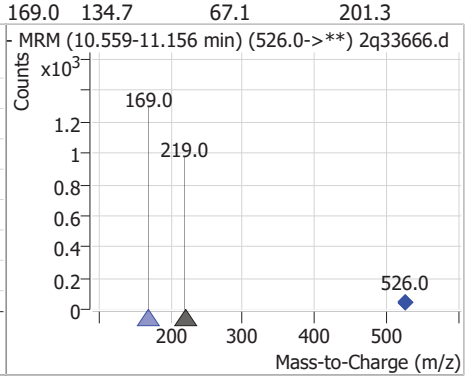
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	4.80	10.90	0.00	33397	526.0 -> 169.0	134.7	67.1	201.3







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Manual Integration Approval Summary

Sample Number: T2Q344-IC344
Lab FileID: 2Q33666.D
Injection Time: 05/09/25 16:02
Method: EPA 1633
Analyst approved: 05/10/25 01:15 Josephus Gimenez
Supervisor approved: 05/12/25 11:57 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.12	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.25	Split peak
Perfluorononanoic acid	375-95-1		7.64	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.36	Split peak
PFOSA	754-91-6		9.35	Split peak
MeFOSE	24448-09-7		10.54	Split peak

2Q33667.D

Manual Integrations APPROVED (compounds with "m" flag)

Olga Azarian 05/12/25 11:57

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33667.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/9/2025 4:16:11 PM
Sample Name : IC344-6
Vial : P1-A7
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q344.batch.bin
Sample Information : OP62666,T2Q344,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	118399	10.00 µg/L	0.000
M5-PFPeA	4.637	268.0 -> 223.0	64133	5.00 µg/L	0.000
M5-PFHxA	5.745	318.0 -> 273.0	36640	2.50 µg/L	0.000
M4-PFHpA	6.540	367.0 -> 322.0	30411	2.50 µg/L	0.000
M8-PFOA	7.124	421.0 -> 376.0	67012	2.50 µg/L	0.000
M9-PFNA	7.644	472.0 -> 427.0	26303	1.25 µg/L	0.000
M6-PFDA	8.140	519.0 -> 474.0	18095	1.25 µg/L	0.000
M7-PFUnDA	8.608	570.0 -> 525.0	29809	1.25 µg/L	0.000
M2-PFDoDA	9.028	615.0 -> 570.0	29408	1.25 µg/L	-0.012
M2-PFTeDA	9.796	715.0 -> 670.0	22840	1.25 µg/L	0.000
M8-FOSA	9.345	506.0 -> 78.0	20751	2.50 µg/L	0.000
M3-PFBS	5.711	302.0 -> 99.0	5822	2.50 µg/L	0.012
M3-PFHxS	7.250	402.0 -> 99.0	6820	2.50 µg/L	0.000
M8-PFOS	8.315	507.0 -> 99.0	6166	2.50 µg/L	0.000
M2-4:2FTS	5.445	329.0 -> 81.0	1424	5.00 µg/L	0.012
M2-6:2FTS	6.910	429.0 -> 81.0	3256	5.00 µg/L	0.000
M2-8:2FTS	7.914	529.0 -> 81.0	4965	5.00 µg/L	0.000
M3-MeFOSAA	8.160	573.0 -> 419.0	42188	5.00 µg/L	0.000
M3-HFPO-DA	6.074	287.0 -> 169.0	23575	10.00 µg/L	0.000
M5-EtFOSAA	8.356	589.0 -> 419.0	34499	5.00 µg/L	0.000
M7-MeFOSE	10.532	623.0 -> 59.0	174696	25.00 µg/L	0.000
M9-EtFOSE	10.803	639.0 -> 59.0	246808	25.00 µg/L	0.000
M5-EtFOSA	10.895	531.0 -> 169.0	16160	2.50 µg/L	0.000
M3-MeFOSA	10.624	515.0 -> 169.0	16195	2.50 µg/L	0.000
13C4-PFOS	8.316	503.0 -> 80.0	12378	2.50 µg/L	0.000
13C3-PFBA	3.265	216.0 -> 172.0	48878	5.00 µg/L	0.000
18O2-PFHxS	7.250	403.0 -> 84.0	7777	2.50 µg/L	-0.012
13C4-PFOA	7.124	417.0 -> 372.0	63709	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	16560	1.25 µg/L	0.000
13C5-PFNA	7.645	468.0 -> 423.0	23133	1.25 µg/L	0.000
13C2-PFHxA	5.746	315.0 -> 270.0	33542	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.445	329.0 -> 81.0	1424	5.06 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.2%	
13C2-6:2FTS	6.910	429.0 -> 81.0	3256	5.35 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.1%	
13C2-8:2FTS	7.914	529.0 -> 81.0	4965	5.06 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.1%	
13C2-PFDoDA	9.028	615.0 -> 570.0	29408	1.30 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.0%	
13C2-PFTeDA	9.796	715.0 -> 670.0	22840	1.30 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.1%	
13C3-PFBS	5.711	302.0 -> 99.0	5822	2.66 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.3%	
13C3-PFHxS	7.250	402.0 -> 99.0	6820	2.57 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.9%		
13C4-PFBA	3.263	217.0 -> 172.0	118399	10.30 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 103.0%		
13C4-PFHpA	6.540	367.0 -> 322.0	30411	2.60 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.0%		
13C5-PFHxA	5.745	318.0 -> 273.0	36640	2.49 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.7%		
13C5-PFPeA	4.637	268.0 -> 223.0	64133	5.12 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.4%		
13C6-PFDA	8.140	519.0 -> 474.0	18095	1.31 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.0%		
13C7-PFUnDA	8.608	570.0 -> 525.0	29809	1.38 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 110.3%		
13C8-FOSA	9.345	506.0 -> 78.0	20751	2.42 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.0%		
13C8-PFOA	7.124	421.0 -> 376.0	67012	2.57 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.8%		
13C8-PFOS	8.315	507.0 -> 99.0	6166	2.28 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.4%		
13C9-PFNA	7.644	472.0 -> 427.0	26303	1.30 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.2%		
d3-MeFOSAA	8.160	573.0 -> 419.0	42188	4.77 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.5%		
13C3-HFPO-DA	6.074	287.0 -> 169.0	23575	10.23 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 102.3%		
d3-MeFOSA	10.624	515.0 -> 169.0	16195	2.43 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.3%		
d5-EtFOSAA	8.356	589.0 -> 419.0	34499	4.84 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.7%		
d7-MeFOSE	10.532	623.0 -> 59.0	174696	24.00 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 96.0%		
d9-EtFOSE	10.803	639.0 -> 59.0	246808	24.16 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 96.6%		
d5-EtFOSA	10.895	531.0 -> 169.0	16160	2.41 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.3%		
Target Compounds						QValue
4:2FTS	5.433	327.0 -> 307.0	100265	48.69 µg/L		99
		327.0 -> 81.0	52662			
6:2FTS	6.898	427.0 -> 407.0	179247	46.39 µg/L		98
		427.0 -> 81.0	66464			
8:2FTS	7.915	527.0 -> 507.0	189454	52.53 µg/L		95
		527.0 -> 81.0	74353			
EtFOSAA	8.357	584.0 -> 419.0	67869	12.37 µg/L	m	98
		584.0 -> 483.0	33633			
FOSA	9.348	498.0 -> 78.0	92592	12.85 µg/L	m	99
		498.0 -> 478.0	3257			
MeFOSAA	8.161	570.0 -> 419.0	82080	12.97 µg/L	m	95
		570.0 -> 512.0	24045			
PFBA	3.268	213.0 -> 169.0	156598	50.10 µg/L		100
PFBS	5.713	299.0 -> 80.0	82278	11.21 µg/L		100
		299.0 -> 99.0	29478			
PFDA	8.141	513.0 -> 469.0	177303	12.69 µg/L		99
		513.0 -> 219.0	29914			
PFDoDA	9.041	613.0 -> 569.0	283841	13.40 µg/L		99
		613.0 -> 319.0	42529			
PFDS	9.206	599.0 -> 80.0	42148	11.24 µg/L		99

Perfluorinated Compounds by LC/MS/MS

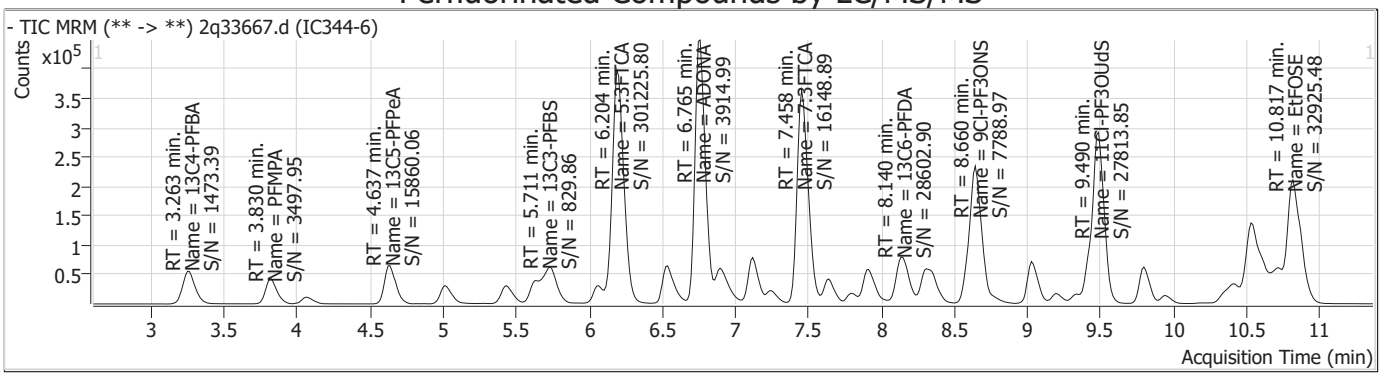
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	19561				
PFHpA	6.541	363.0 -> 319.0	241665	12.44	µg/L		99
		363.0 -> 169.0	42466				
PFHpS	7.809	449.0 -> 80.0	59174	12.35	µg/L		91
		449.0 -> 99.0	26559				
PFHxA	5.748	313.0 -> 269.0	166149	13.39	µg/L		100
		313.0 -> 119.0	5319				
PFHxS	7.252	399.0 -> 80.0	57908	11.14	µg/L	m	95
		399.0 -> 99.0	29658				
PFNA	7.645	463.0 -> 419.0	151496	12.70	µg/L	m	95
		463.0 -> 219.0	38570				
PFNS	8.784	549.0 -> 80.0	26974	12.84	µg/L		92
		549.0 -> 99.0	13881				
PFOA	7.125	413.0 -> 369.0	258887	12.69	µg/L	m	98
		413.0 -> 169.0	55494				
PFOS	8.317	499.0 -> 80.0	68563	11.91	µg/L	m	96
		499.0 -> 99.0	30323				
PFPeA	4.640	263.0 -> 219.0	294224	25.94	µg/L		100
PFPeS	6.617	349.0 -> 80.0	31386	11.85	µg/L		97
		349.0 -> 99.0	12441				
PFTeDA	9.796	713.0 -> 669.0	250589	13.03	µg/L		99
		713.0 -> 169.0	18929				
PFTrDA	9.439	663.0 -> 619.0	331723	13.30	µg/L		100
		663.0 -> 169.0	32061				
PFUnDA	8.609	563.0 -> 519.0	252412	12.48	µg/L		95
		563.0 -> 269.0	44627				
11Cl-PF3OUdS	9.490	631.0 -> 451.0	1026908	49.60	µg/L		100
		633.0 -> 453.0	308980				
9Cl-PF3ONS	8.660	531.0 -> 351.0	810278	48.75	µg/L		98
		533.0 -> 353.0	239699				
ADONA	6.765	377.0 -> 251.0	1718742	48.78	µg/L		99
		377.0 -> 85.0	549902				
HFPO-DA	6.075	285.0 -> 169.0	117378	51.00	µg/L		96
		285.0 -> 185.0	11670				
3:3FTCA	4.078	241.0 -> 177.0	57899	62.40	µg/L		99
		241.0 -> 117.0	4027				
5:3FTCA	6.204	341.0 -> 237.0	1036981	332.01	µg/L		100
		341.0 -> 217.0	739144				
7:3FTCA	7.458	441.0 -> 337.0	1361750	335.06	µg/L		99
		441.0 -> 317.0	561639				
EtFOSA	10.895	526.0 -> 219.0	87146	12.66	µg/L		98
		526.0 -> 169.0	114483				
EtFOSE	10.817	630.0 -> 59.0	1219421	127.37	µg/L		100
MeFOSA	10.626	512.0 -> 169.0	101100	12.77	µg/L		97
		512.0 -> 219.0	70288				
MeFOSE	10.544	616.0 -> 59.0	856589	130.18	µg/L	m	100
PFDoDS	9.948	699.0 -> 80.0	42862	12.90	µg/L		95
		699.0 -> 99.0	22557				
NFDHA	5.639	295.0 -> 201.0	26098	25.47	µg/L		88
		201.0 -> 85.0	163864				
		295.0 -> 85.0	8563				
PFMBA	5.027	279.0 -> 85.0	170491	25.60	µg/L		100
PFMPA	3.830	229.0 -> 85.0	244626	25.60	µg/L		100
PFEESA	6.168	315.0 -> 135.0	360747	23.59	µg/L		99
		315.0 -> 69.0	37694				

 # = Qualifier out of range, m = manually integrated, + = Area summed

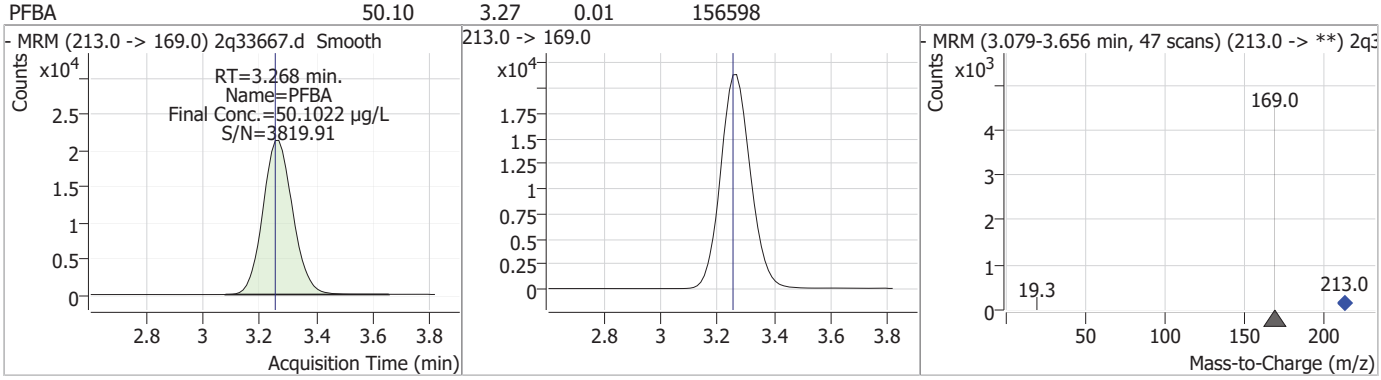
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

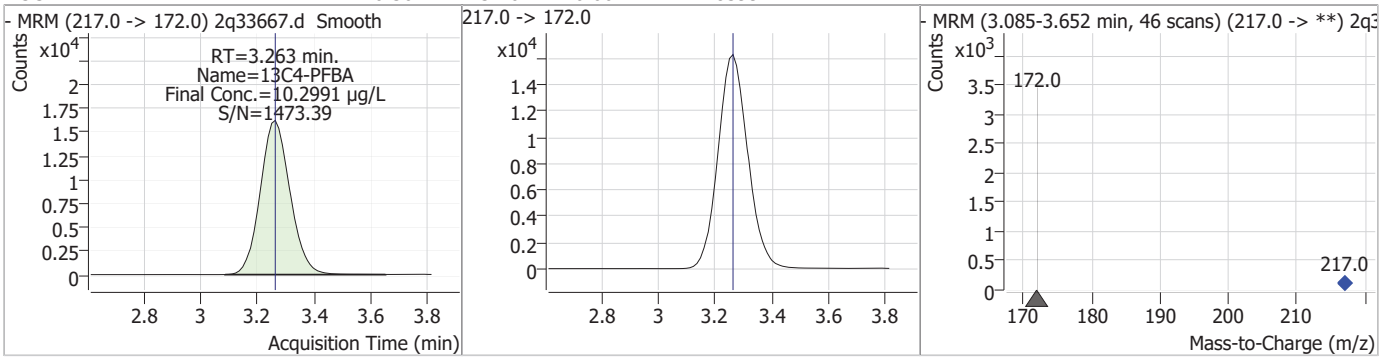
Perfluorinated Compounds by LC/MS/MS



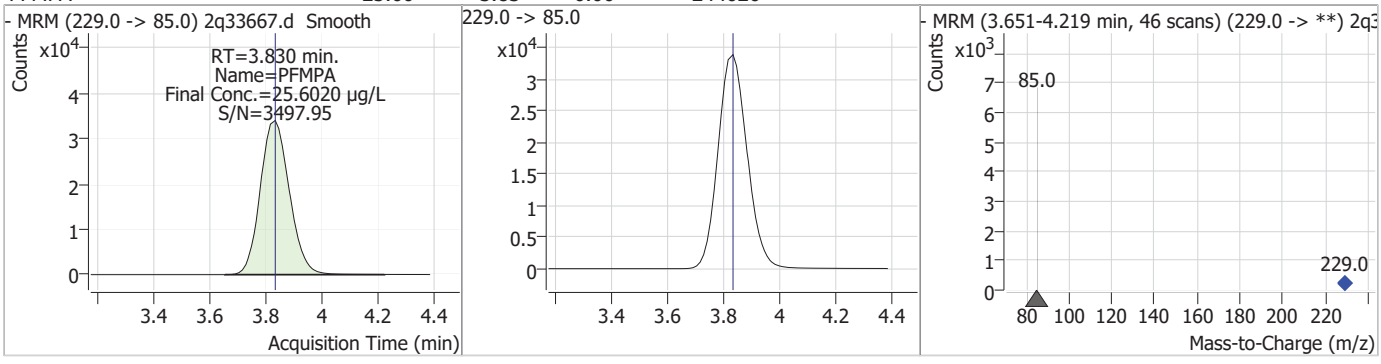
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	50.10	3.27	0.01	156598				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.30	3.26	0.00	118399				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	25.60	3.83	0.00	244626				



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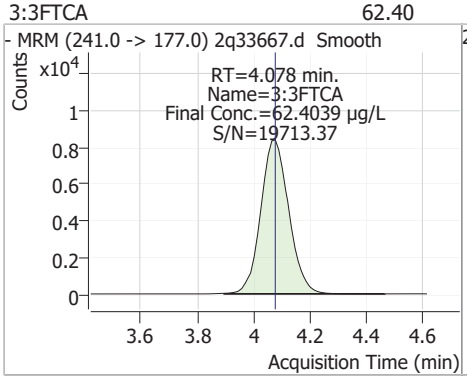
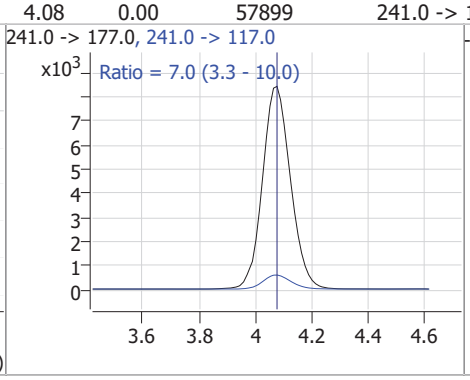
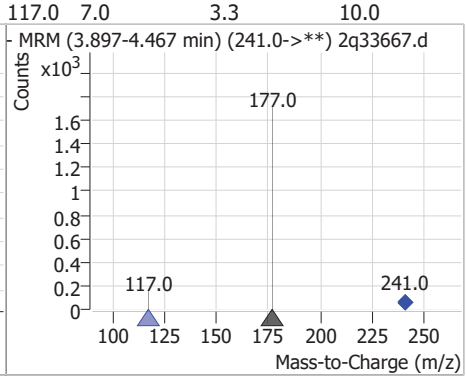
Perfluorinated Compounds by LC/MS/MS

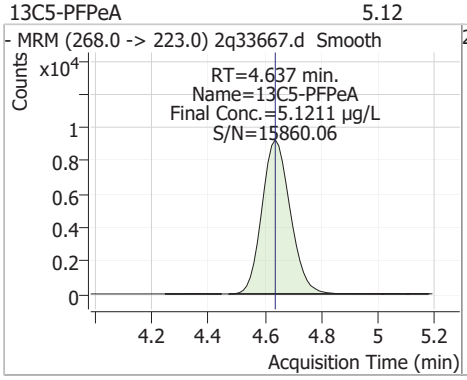
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	62.40	4.08	0.00	57899	241.0 -> 117.0	7.0	3.3	10.0

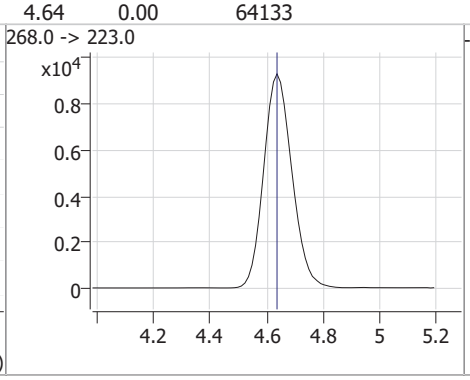


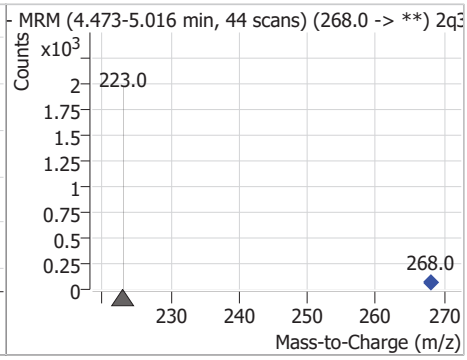




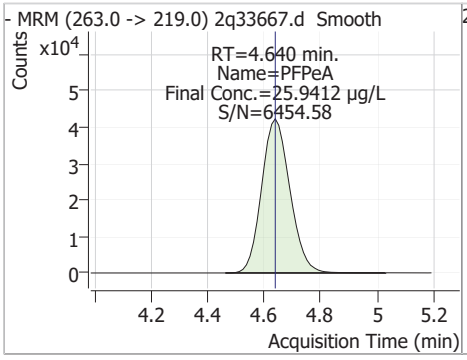
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.12	4.64	0.00	64133				

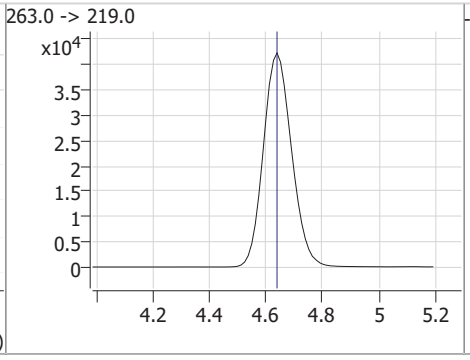


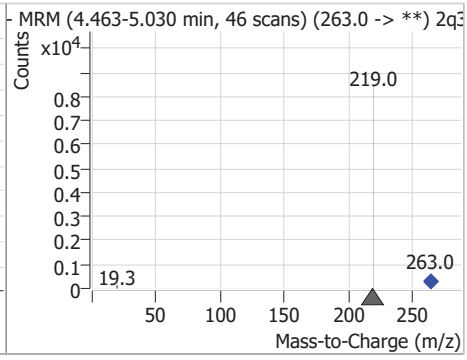




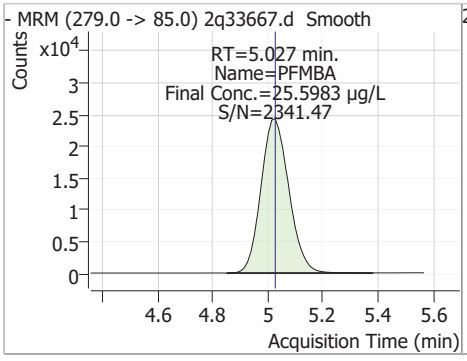
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	25.94	4.64	0.00	294224				

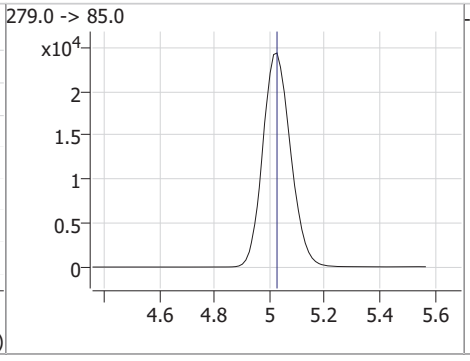


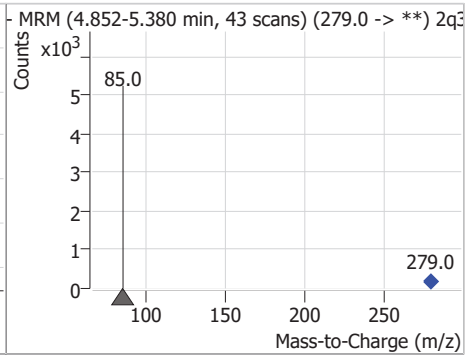




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	25.60	5.03	0.00	170491				







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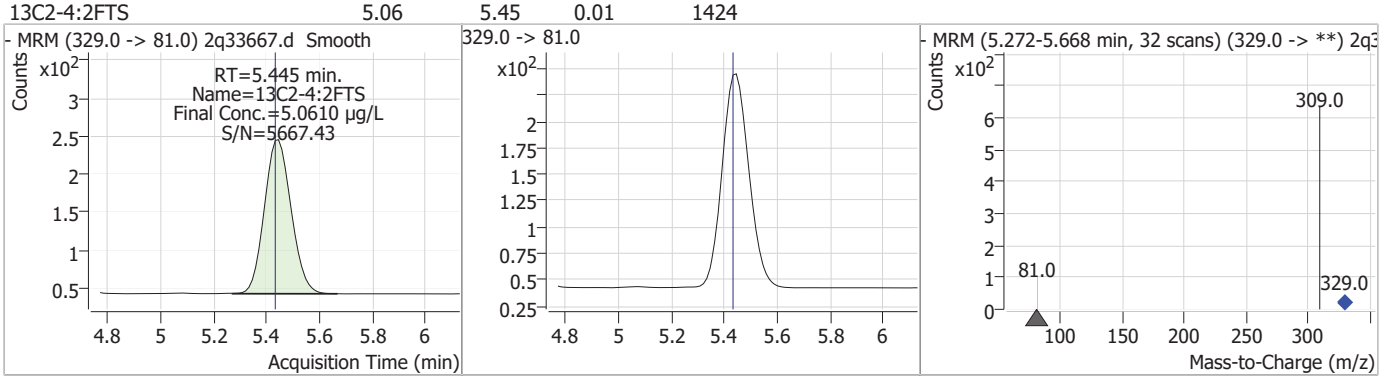
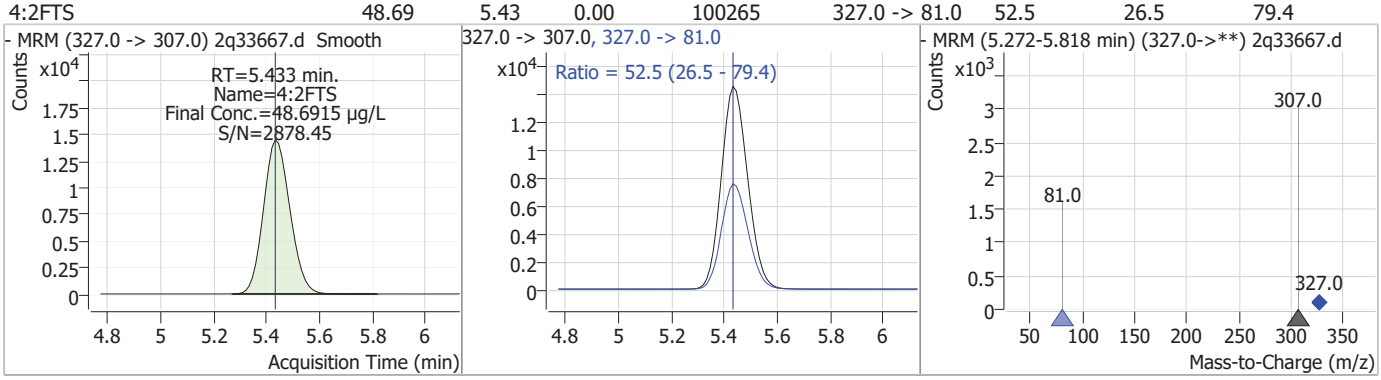
Perfluorinated Compounds by LC/MS/MS

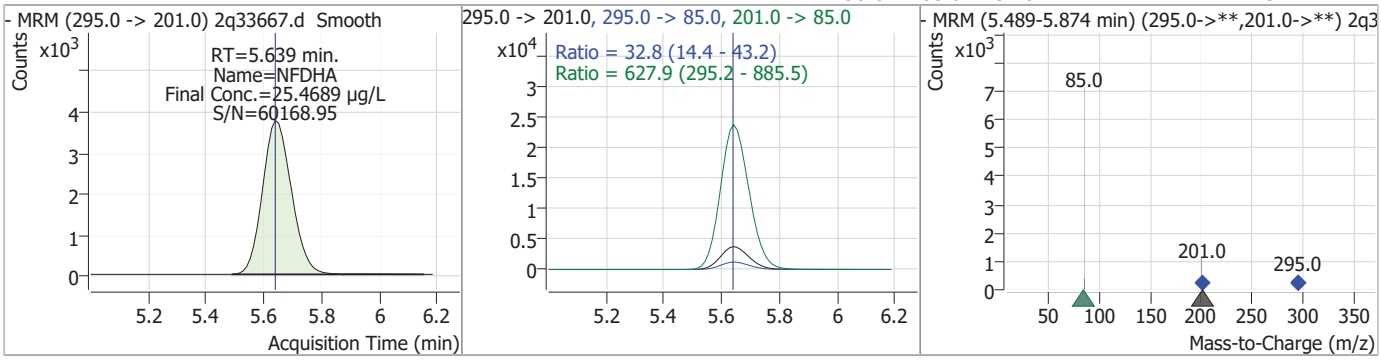
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.06	5.45	0.01	1424				



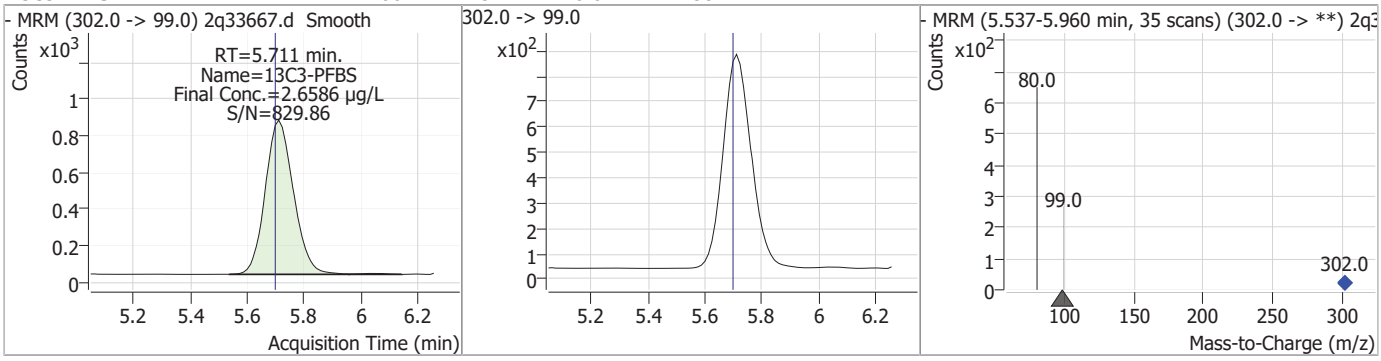
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	48.69	5.43	0.00	100265	327.0 -> 81.0	52.5	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	25.47	5.64	0.00	26098	201.0 -> 85.0	627.9	295.2	885.5
					295.0 -> 85.0	32.8	14.4	43.2

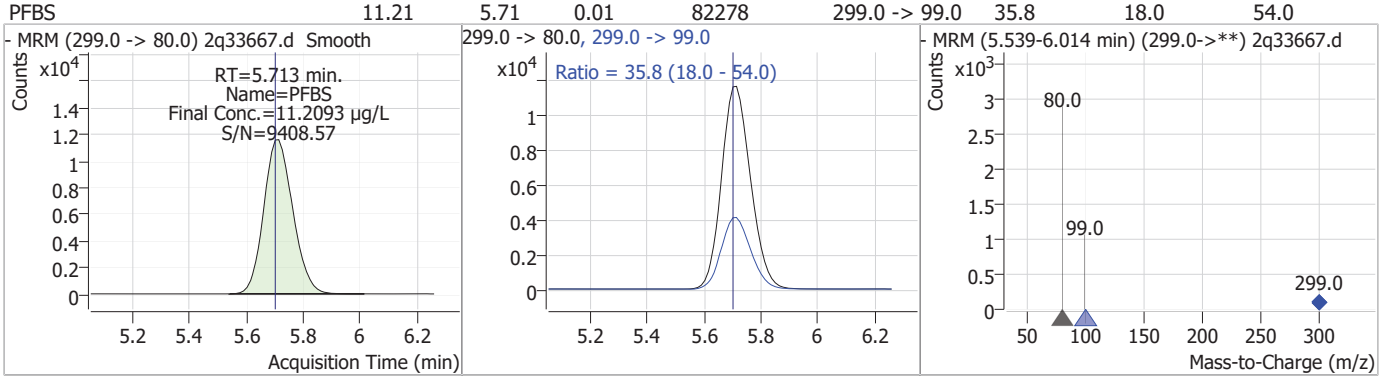


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.66	5.71	0.01	5822				

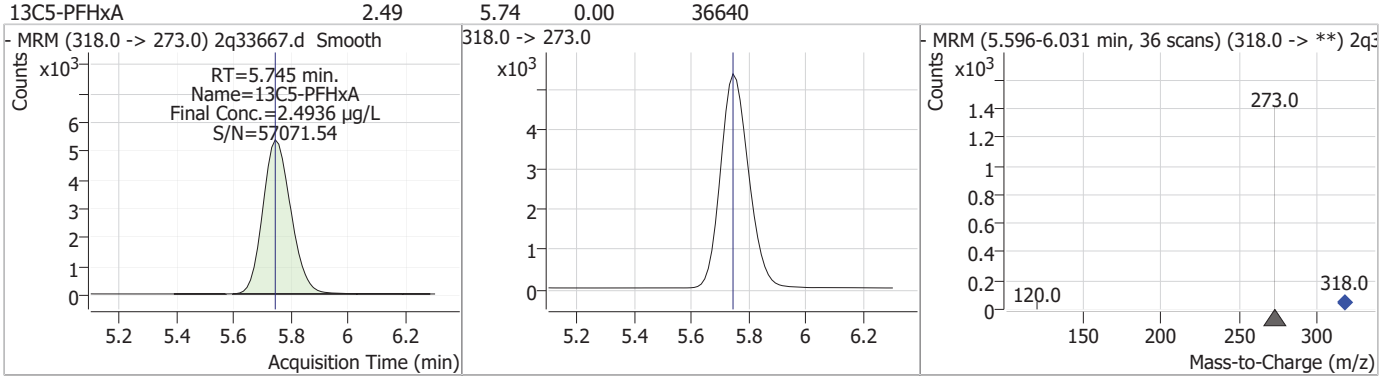


Perfluorinated Compounds by LC/MS/MS

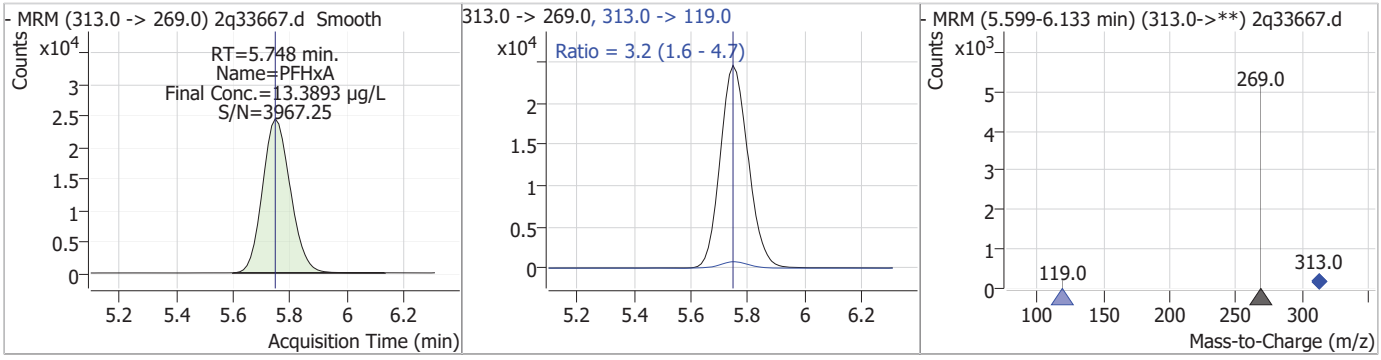
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	11.21	5.71	0.01	82278	299.0 -> 99.0	35.8	18.0	54.0



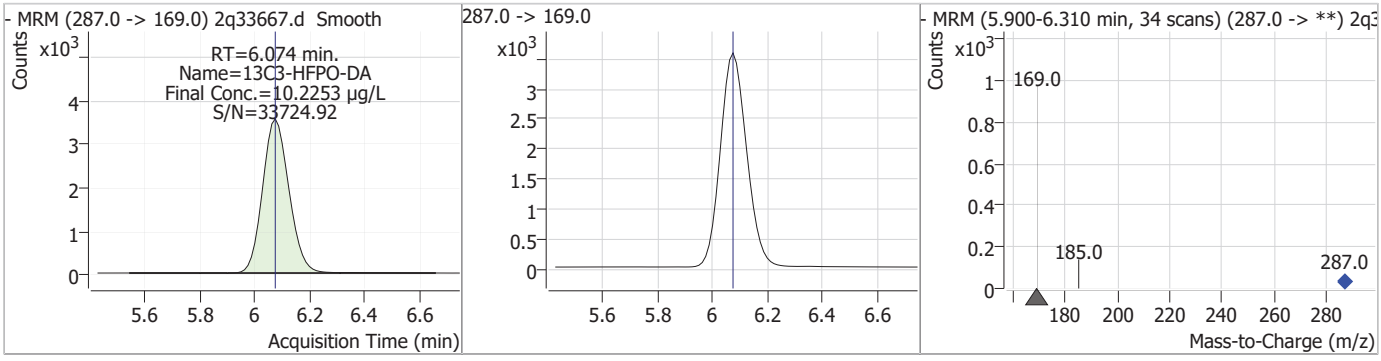
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.49	5.74	0.00	36640				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	13.39	5.75	0.00	166149	313.0 -> 119.0	3.2	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.23	6.07	0.00	23575				



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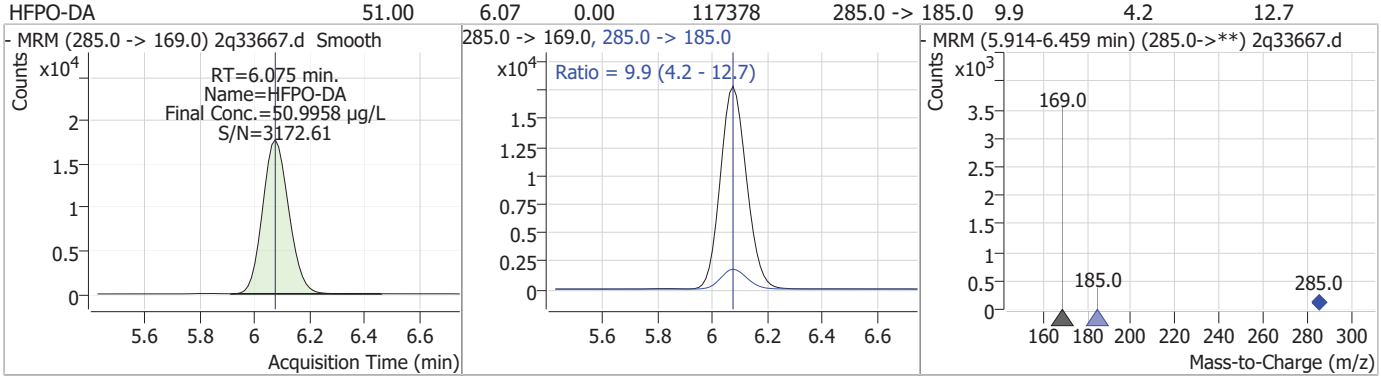
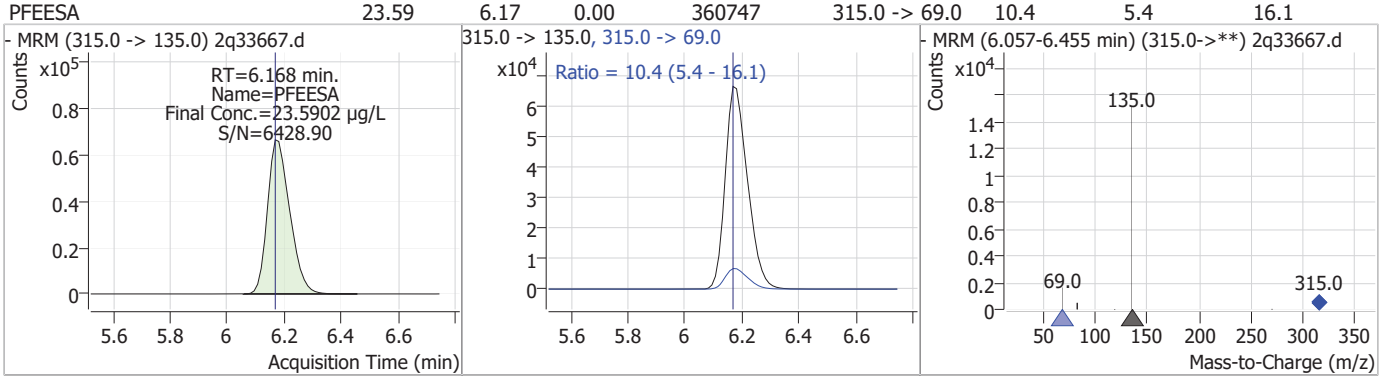
Perfluorinated Compounds by LC/MS/MS

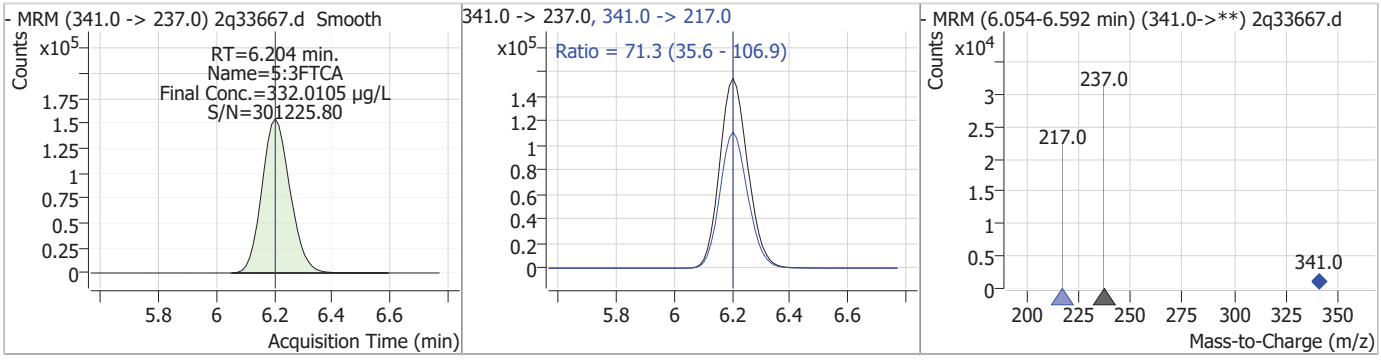
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	51.00	6.07	0.00	117378	285.0 -> 185.0	9.9	4.2	12.7



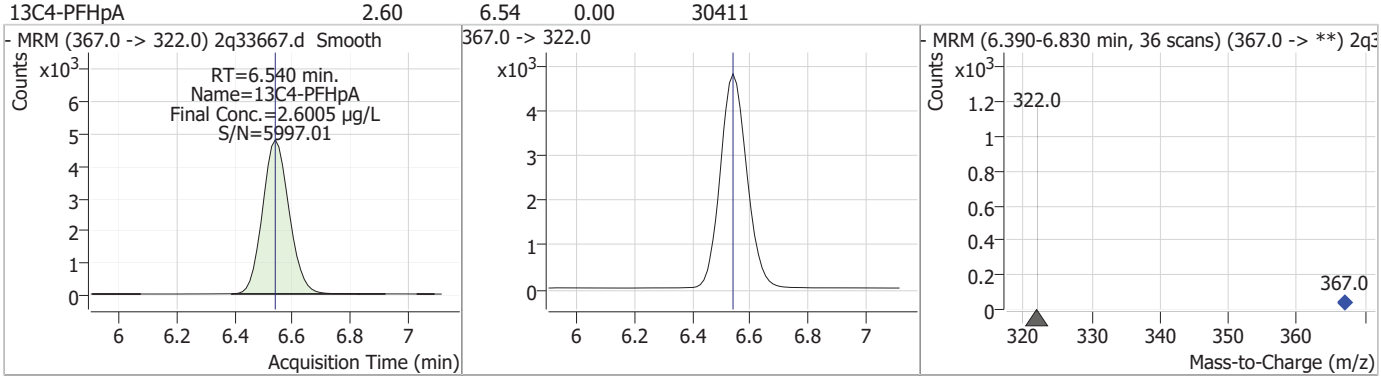
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	23.59	6.17	0.00	360747	315.0 -> 69.0	10.4	5.4	16.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	332.01	6.20	0.00	1036981	341.0 -> 217.0	71.3	35.6	106.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.60	6.54	0.00	30411				



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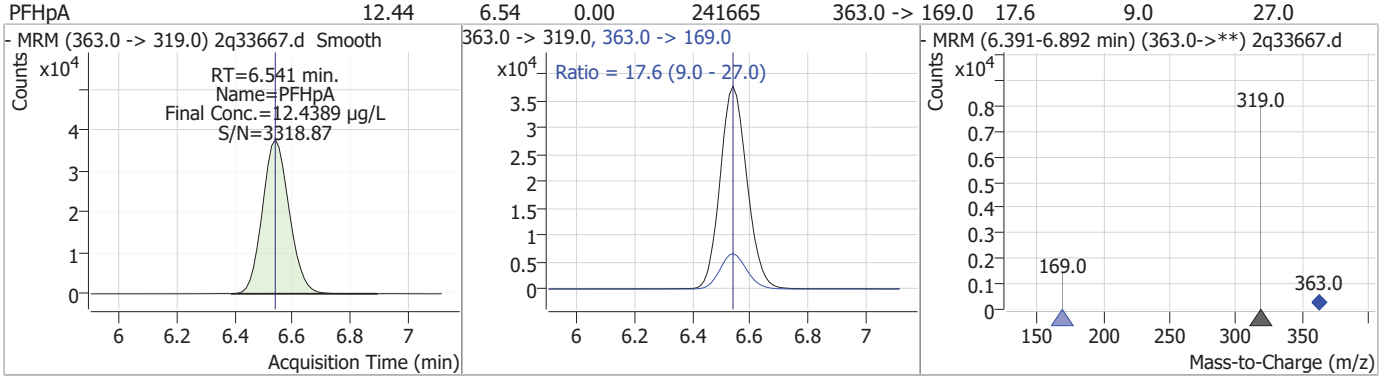
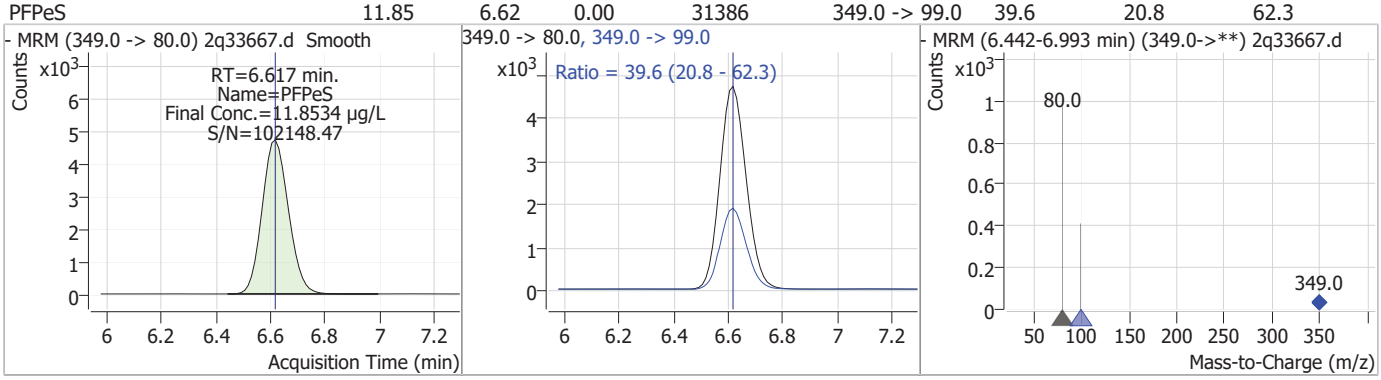
Perfluorinated Compounds by LC/MS/MS

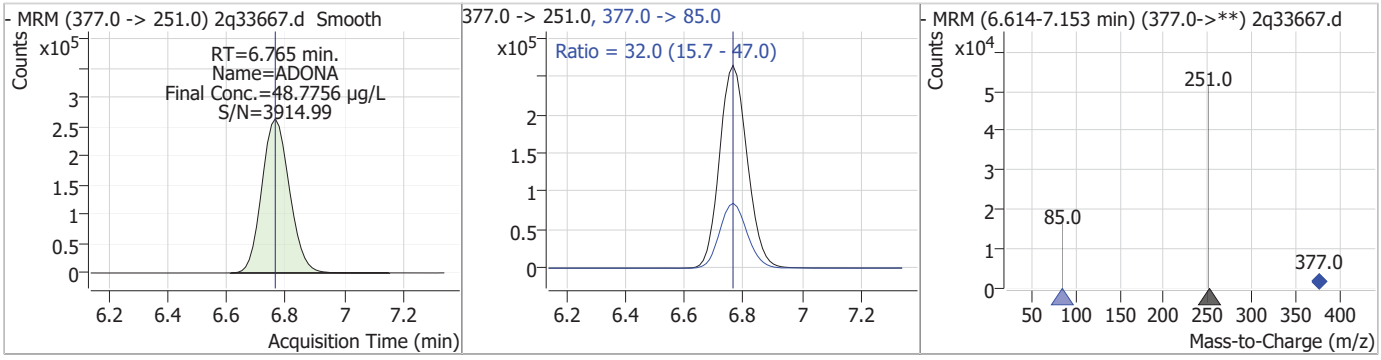
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	12.44	6.54	0.00	241665	363.0 -> 169.0	17.6	9.0	27.0



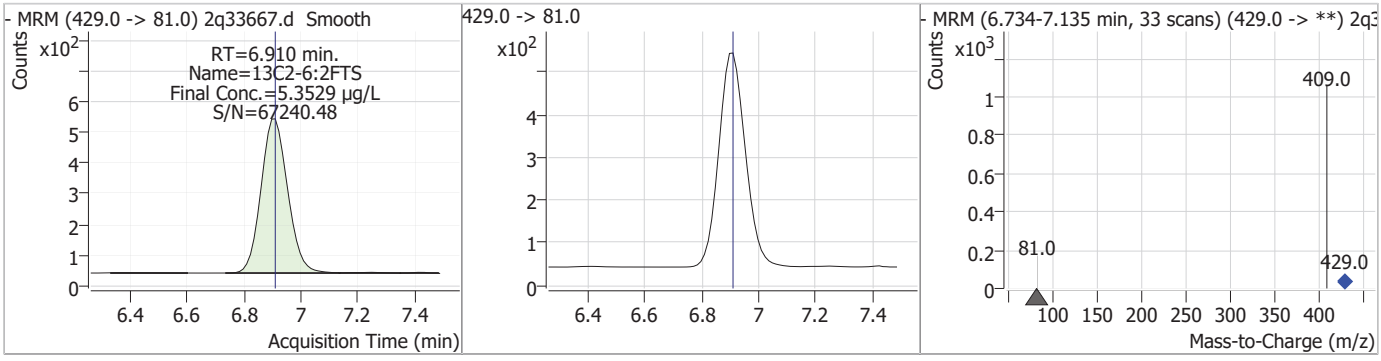
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	11.85	6.62	0.00	31386	349.0 -> 99.0	39.6	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	48.78	6.77	0.00	1718742	377.0 -> 85.0	32.0	15.7	47.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.35	6.91	0.00	3256				



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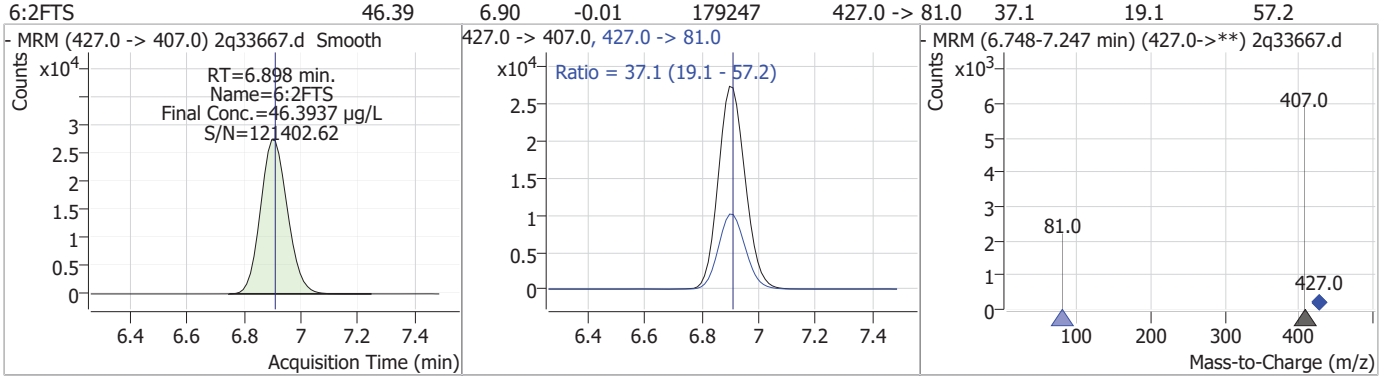
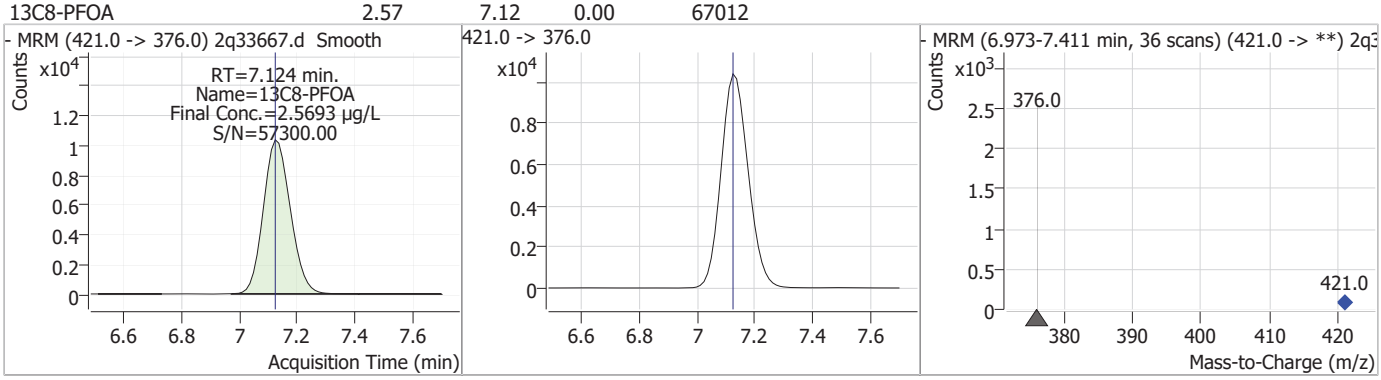
Perfluorinated Compounds by LC/MS/MS

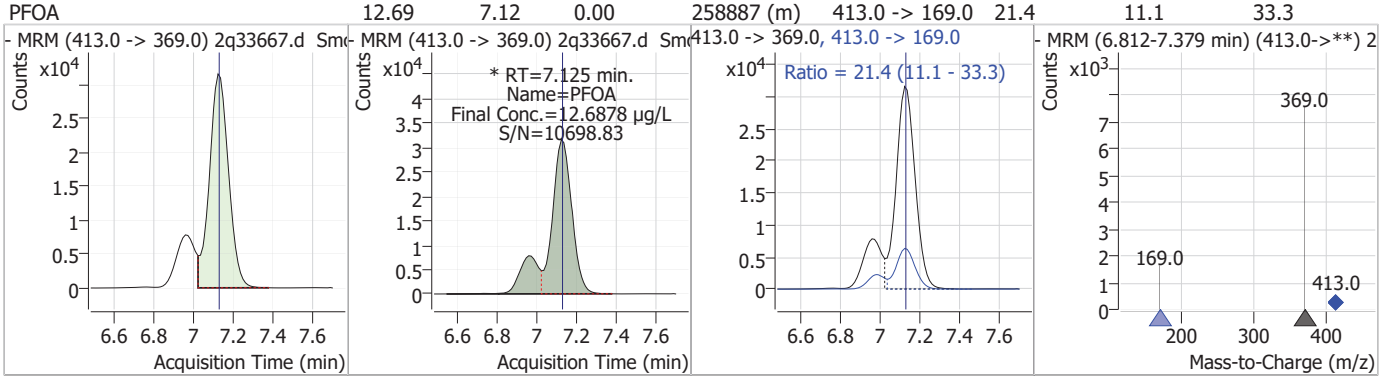
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	46.39	6.90	-0.01	179247	427.0 -> 81.0	37.1	19.1	57.2



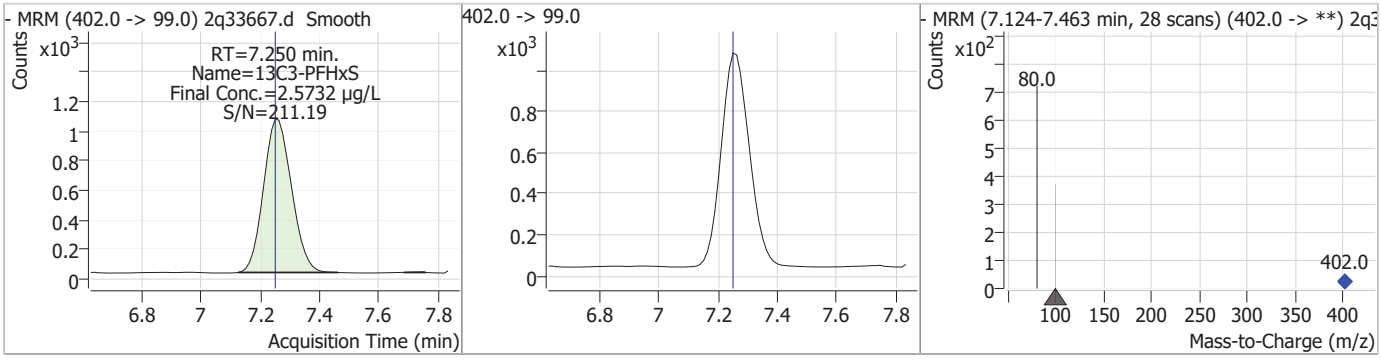
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.57	7.12	0.00	67012				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	12.69	7.12	0.00	258887 (m)	413.0 -> 169.0	21.4	11.1	33.3

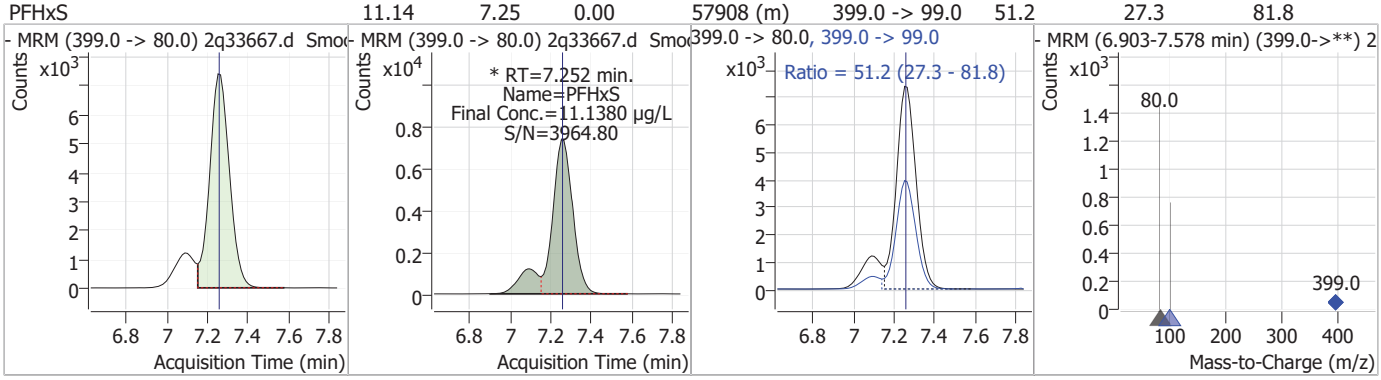


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.57	7.25	0.00	6820				

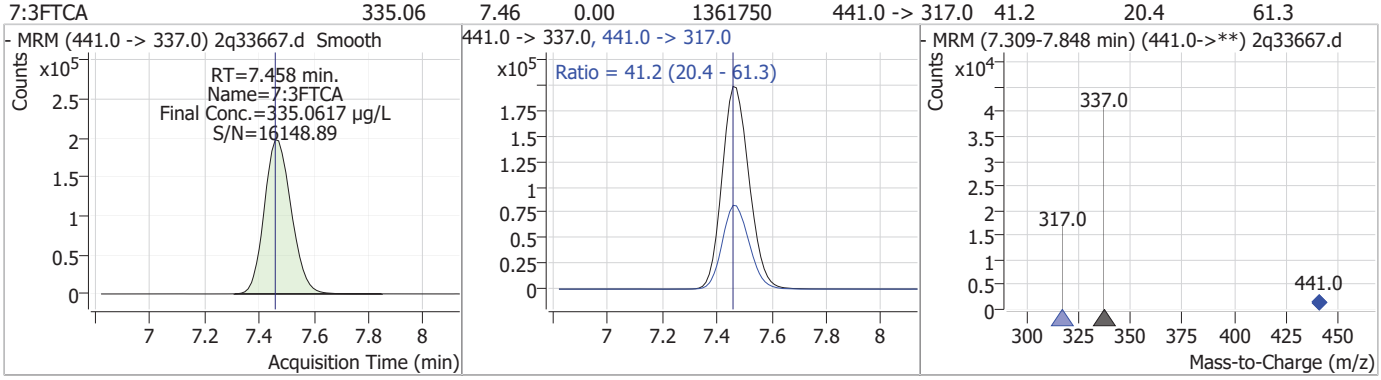


Perfluorinated Compounds by LC/MS/MS

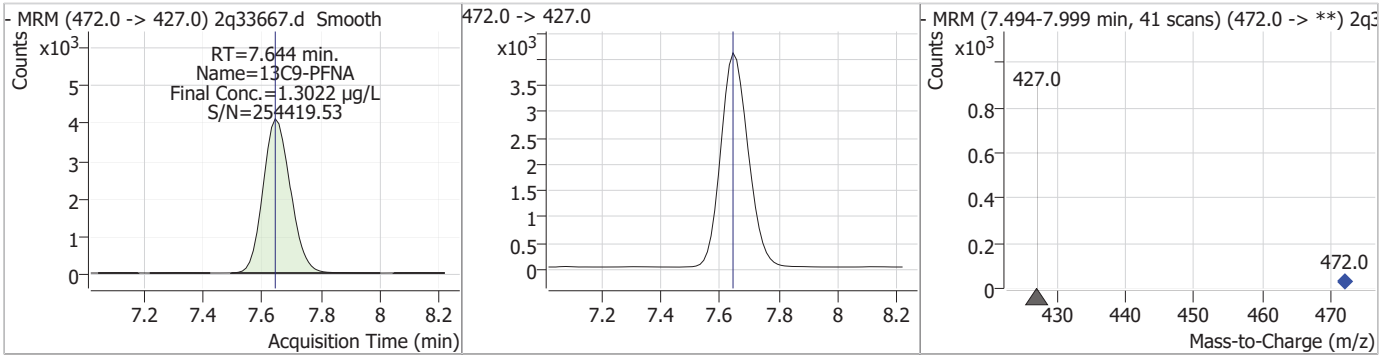
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	11.14	7.25	0.00	57908 (m)	399.0 -> 99.0	51.2	27.3	81.8



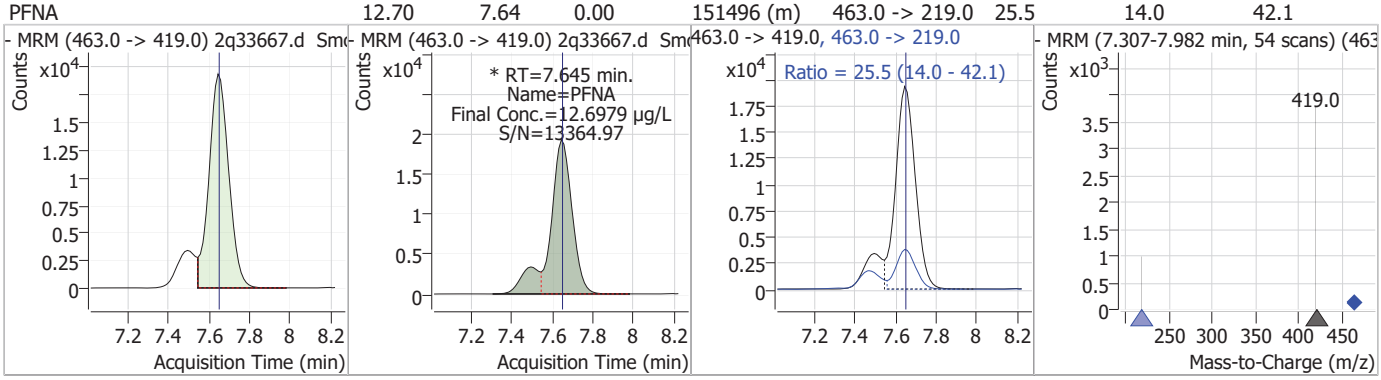
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	335.06	7.46	0.00	1361750	441.0 -> 317.0	41.2	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.30	7.64	0.00	26303				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	12.70	7.64	0.00	151496 (m)	463.0 -> 219.0	25.5	14.0	42.1



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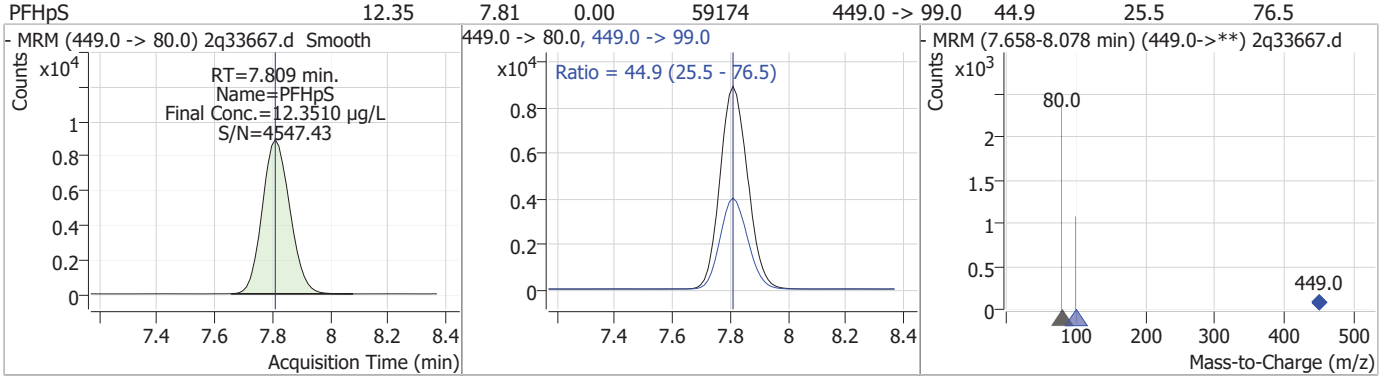
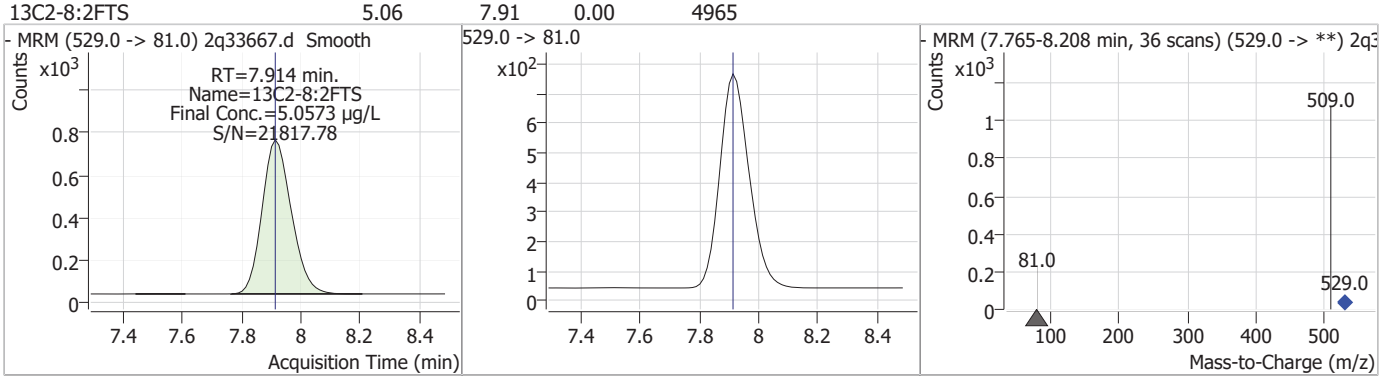
Perfluorinated Compounds by LC/MS/MS

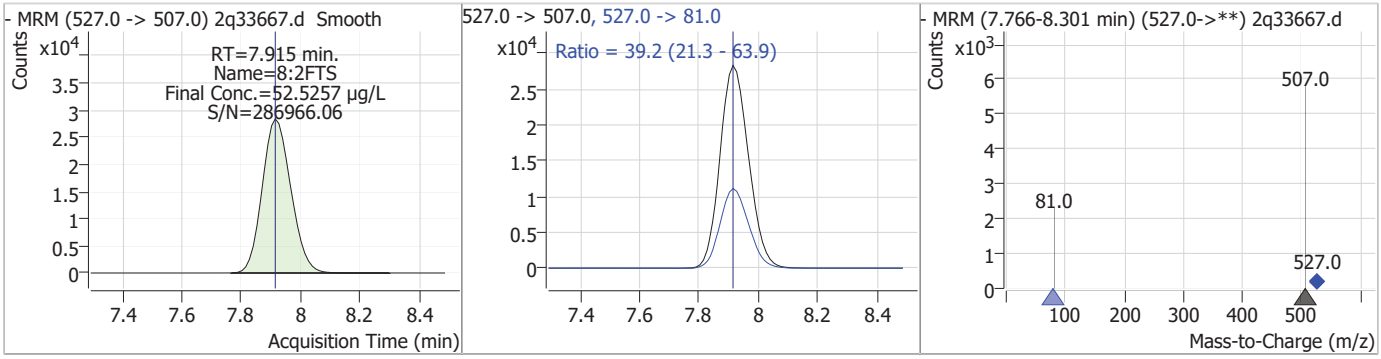
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	12.35	7.81	0.00	59174	449.0 -> 99.0	44.9	25.5	76.5



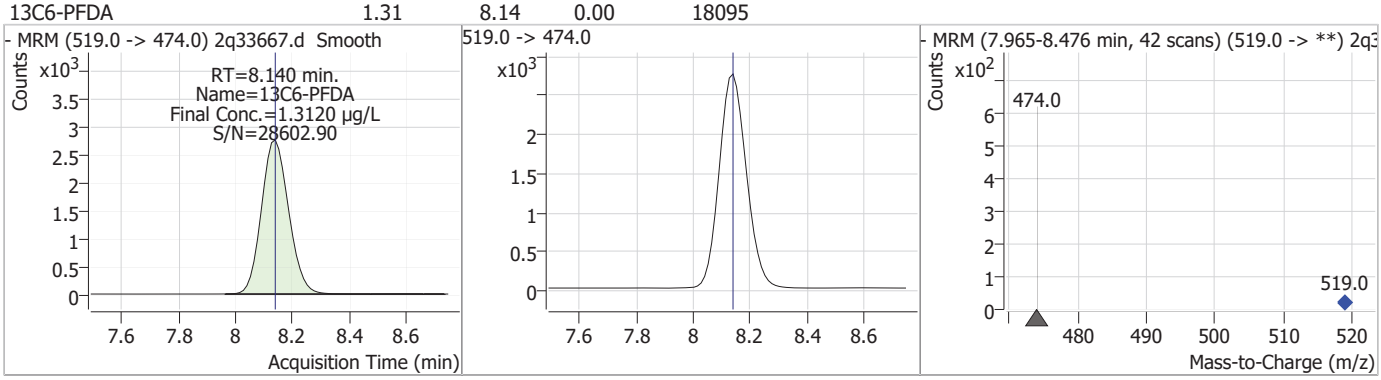
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.06	7.91	0.00	4965				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	52.53	7.91	0.00	189454	527.0 -> 81.0	39.2	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.31	8.14	0.00	18095				



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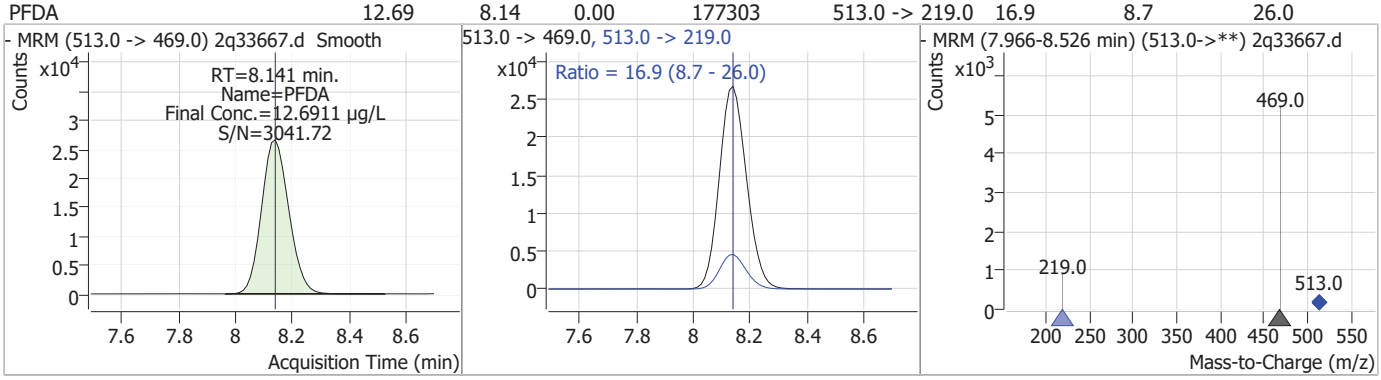
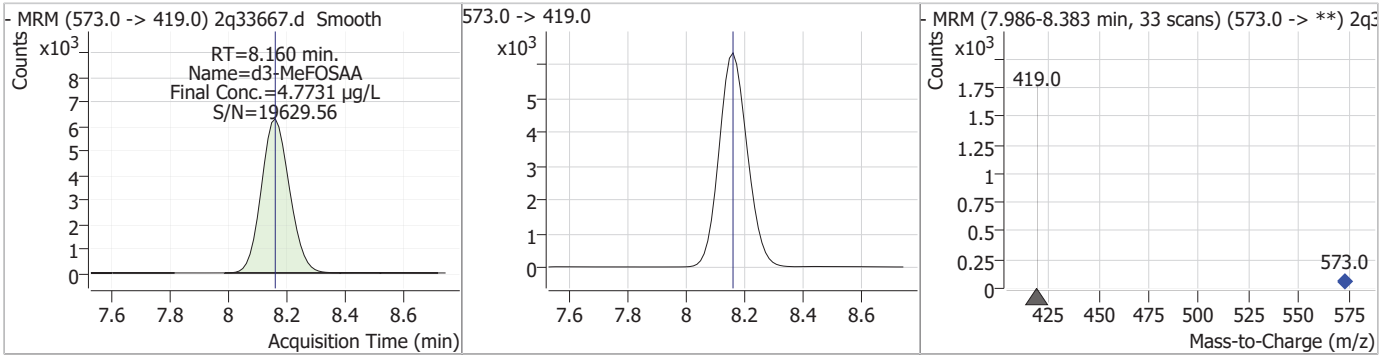
Perfluorinated Compounds by LC/MS/MS

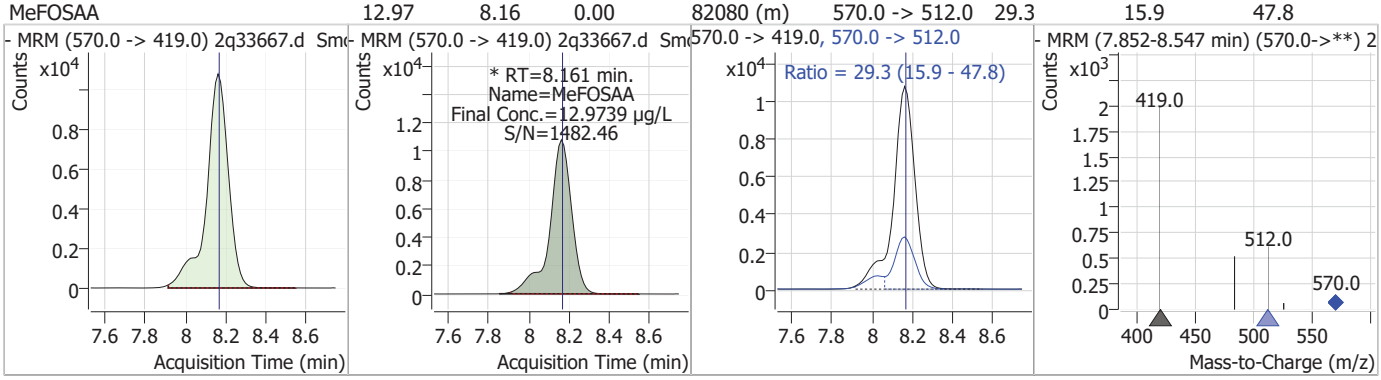
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	12.69	8.14	0.00	177303	513.0 -> 219.0	16.9	8.7	26.0



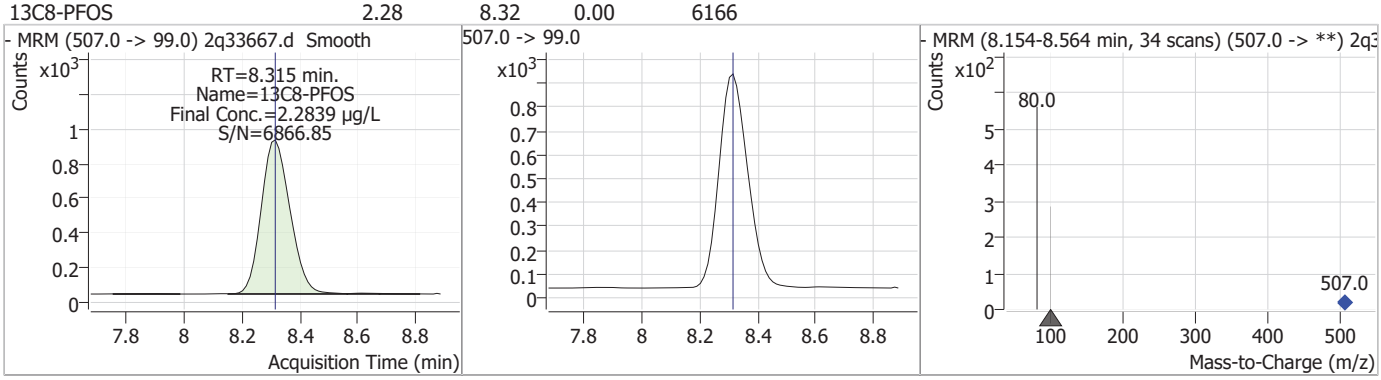
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.77	8.16	0.00	42188				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	12.97	8.16	0.00	82080 (m)	570.0 -> 512.0	29.3	15.9	47.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.28	8.32	0.00	6166				



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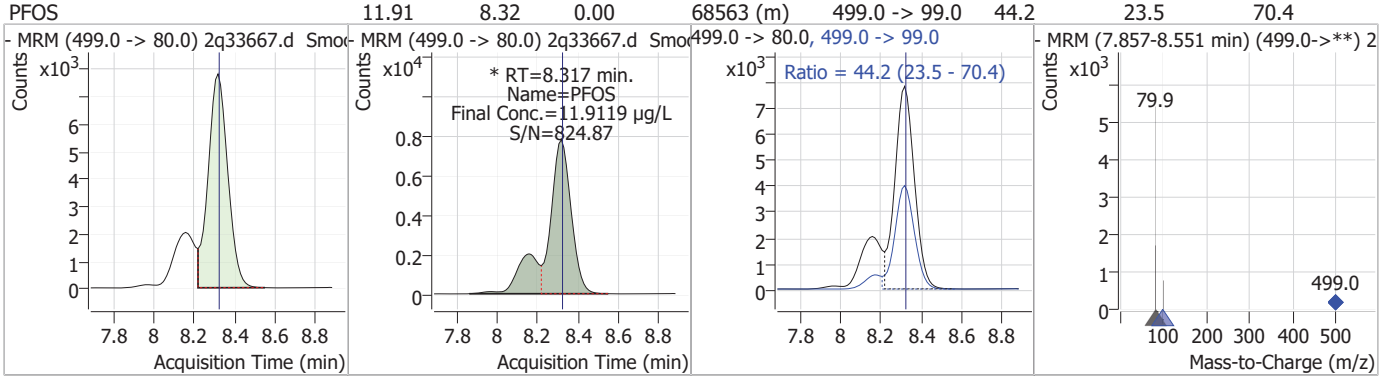
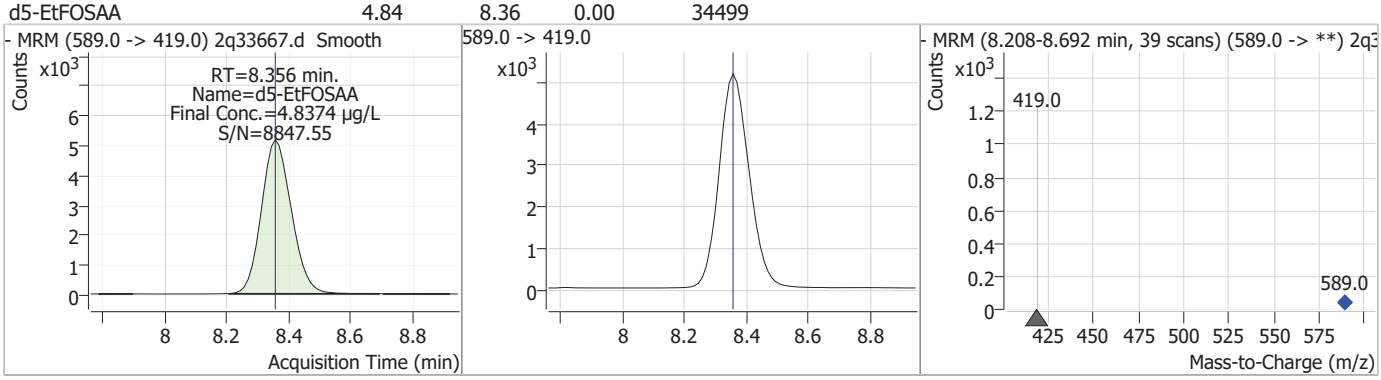
Perfluorinated Compounds by LC/MS/MS

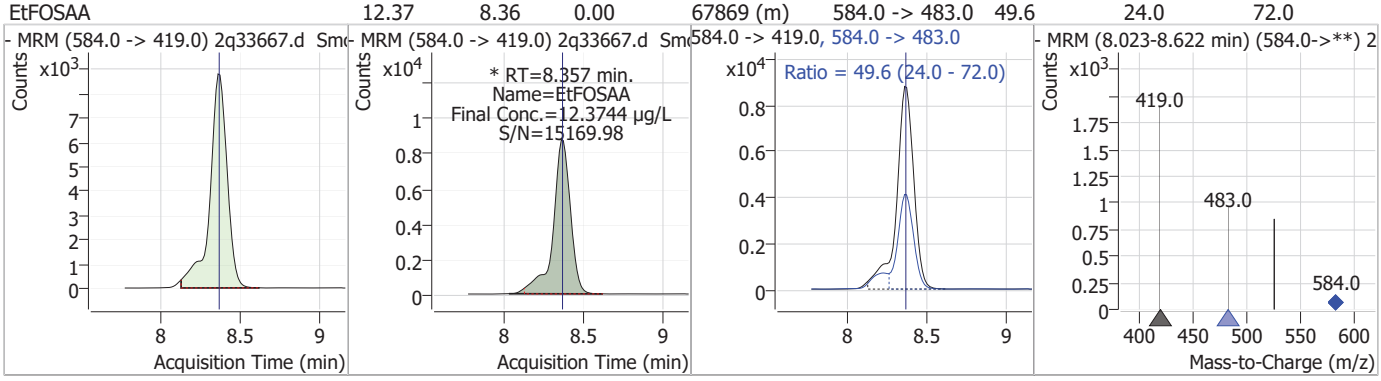
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	11.91	8.32	0.00	68563 (m)	499.0 -> 99.0	44.2	23.5	70.4



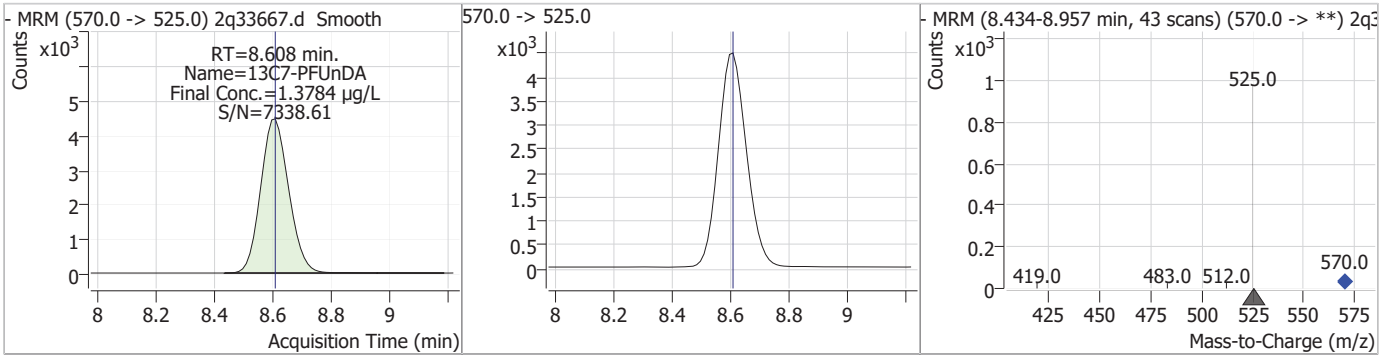
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.84	8.36	0.00	34499				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	12.37	8.36	0.00	67869 (m)	584.0 -> 483.0	49.6	24.0	72.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.38	8.61	0.00	29809				



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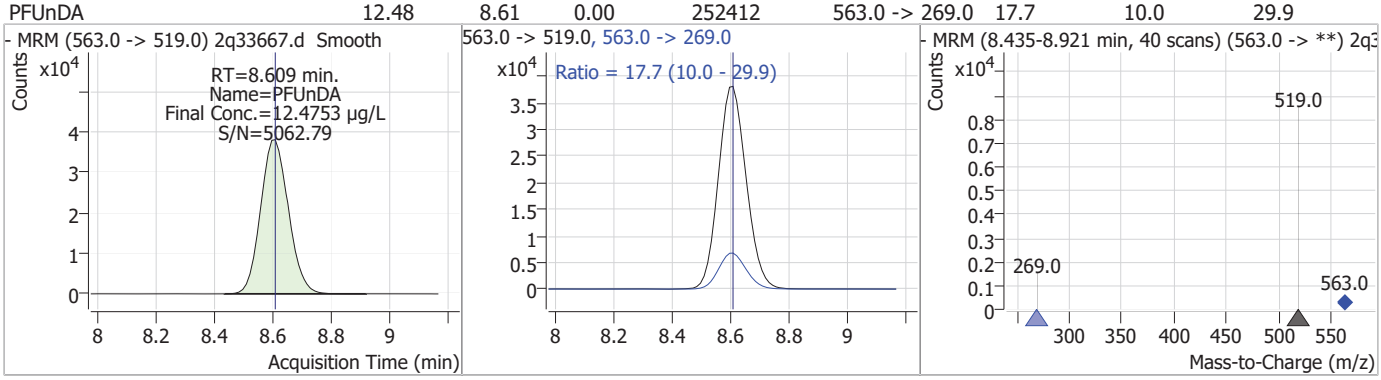
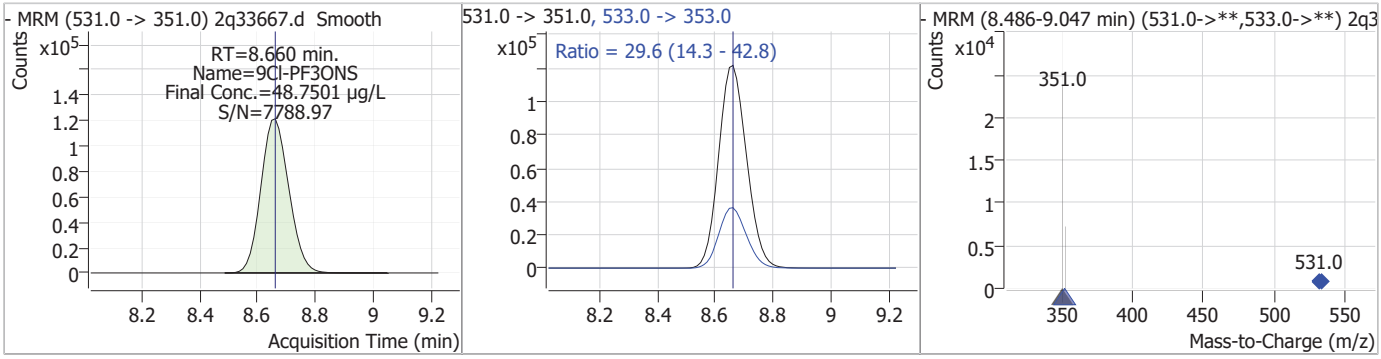
Perfluorinated Compounds by LC/MS/MS

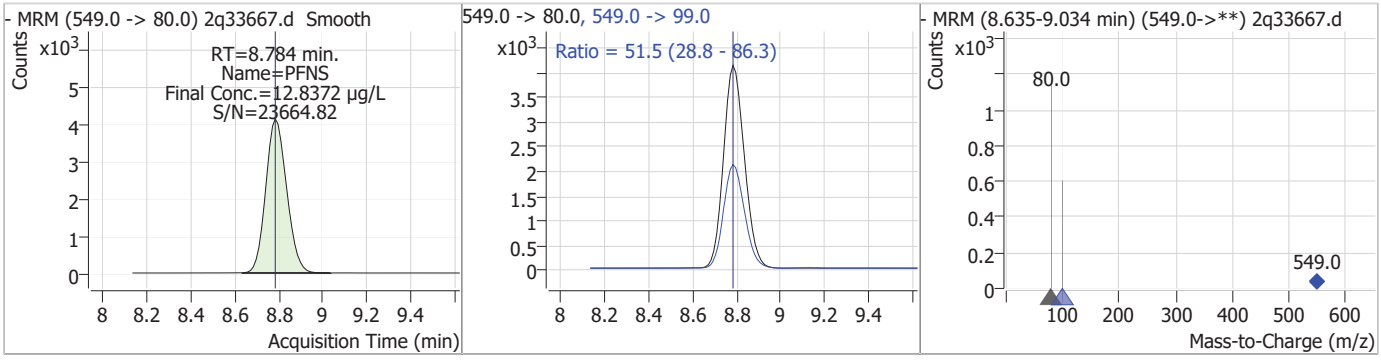
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	12.48	8.61	0.00	252412	563.0 -> 269.0	17.7	10.0	29.9



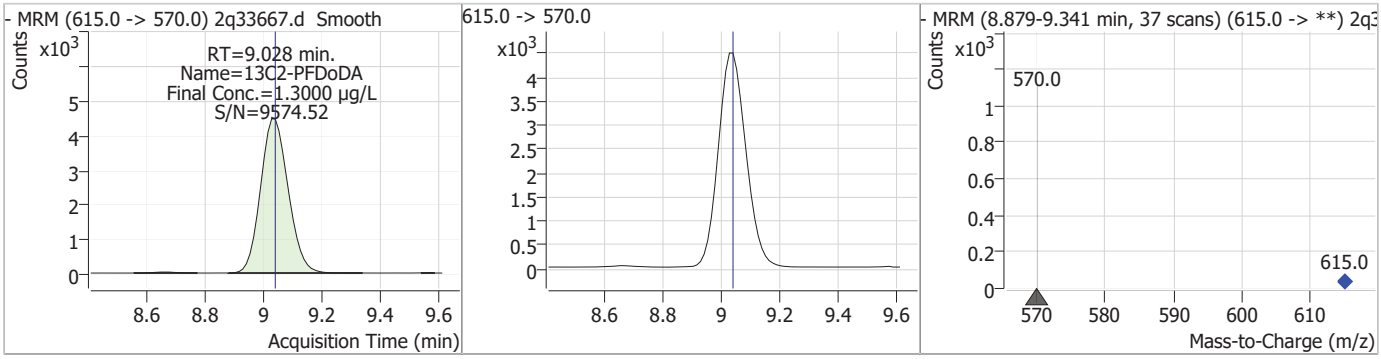
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	48.75	8.66	0.00	810278	533.0 -> 353.0	29.6	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	12.84	8.78	0.00	26974	549.0 -> 99.0	51.5	28.8	86.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.30	9.03	-0.01	29408				



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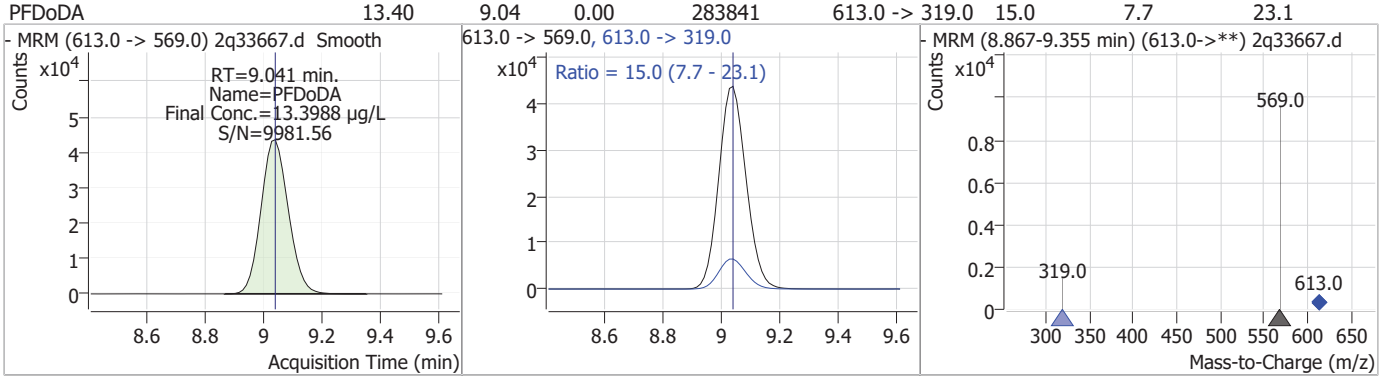
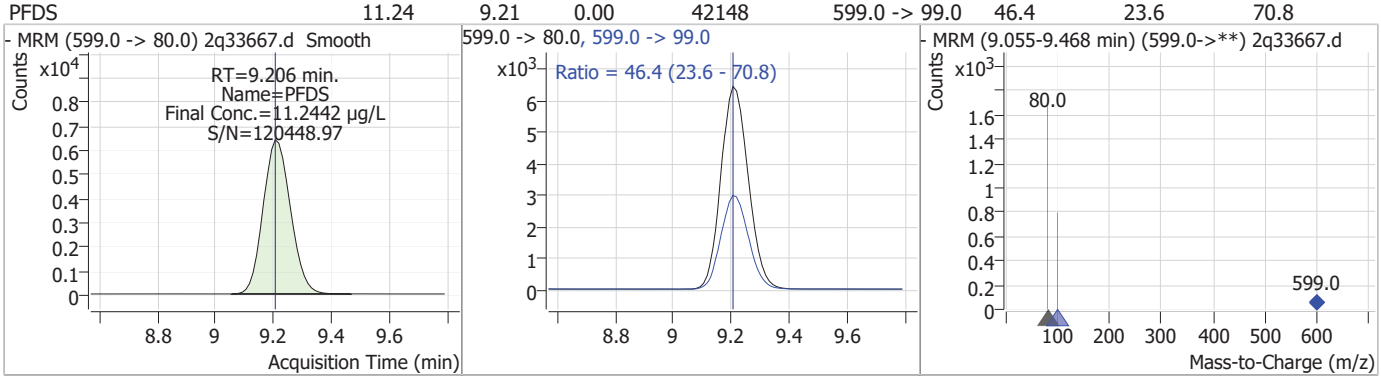
Perfluorinated Compounds by LC/MS/MS

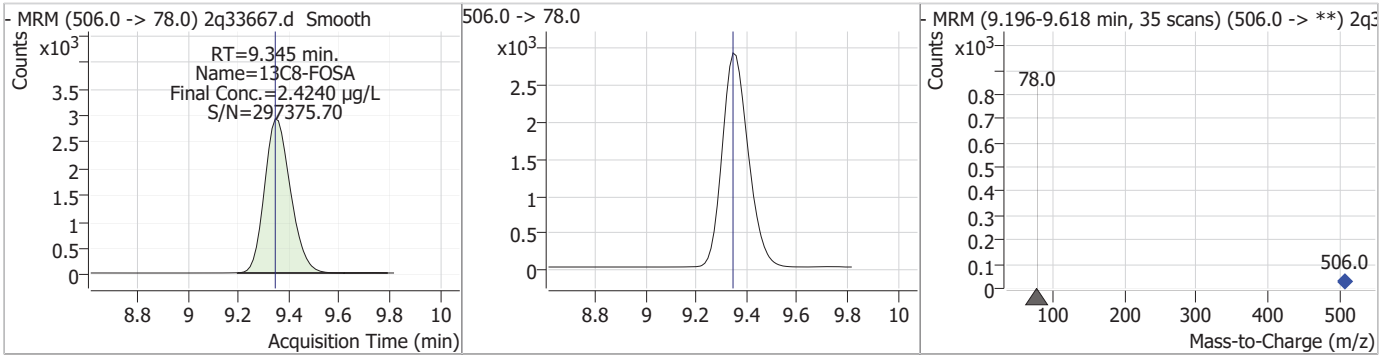
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	13.40	9.04	0.00	283841	613.0 -> 319.0	15.0	7.7	23.1



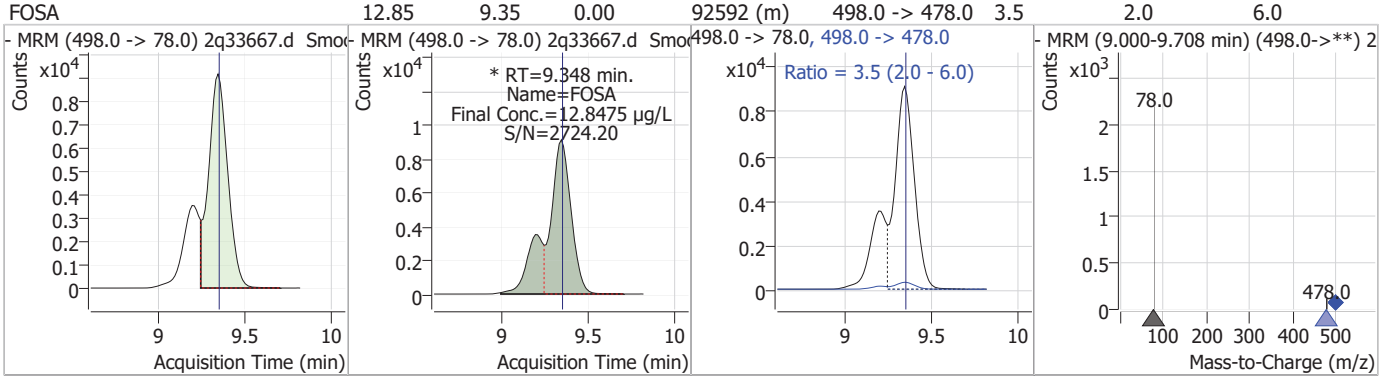
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	11.24	9.21	0.00	42148	599.0 -> 99.0	46.4	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.42	9.35	0.00	20751				

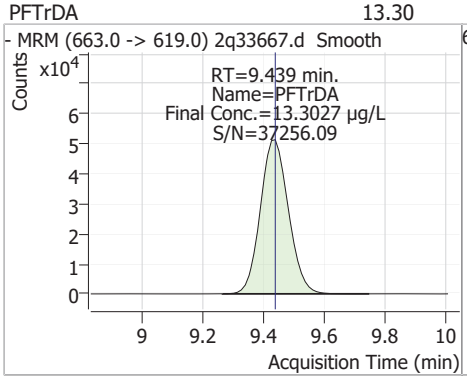


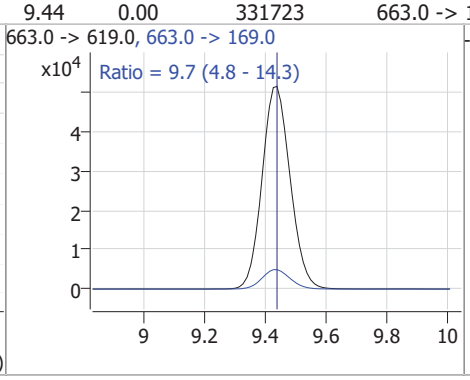
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	12.85	9.35	0.00	92592 (m)	498.0 -> 478.0	3.5	2.0	6.0

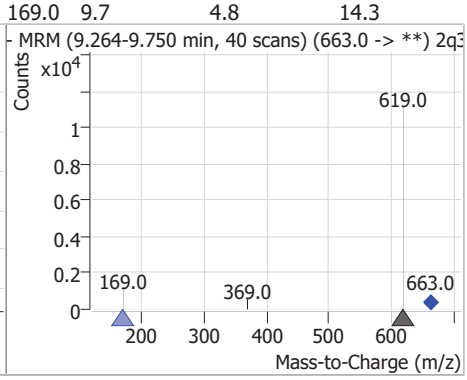


Perfluorinated Compounds by LC/MS/MS

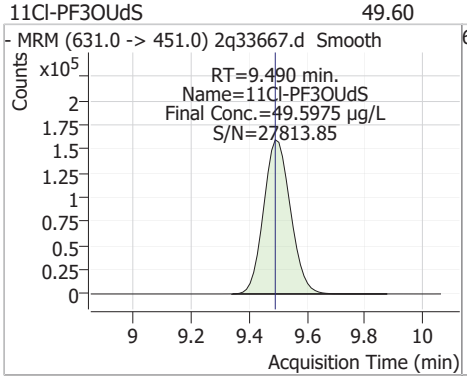
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	13.30	9.44	0.00	331723	663.0 -> 169.0	9.7	4.8	14.3

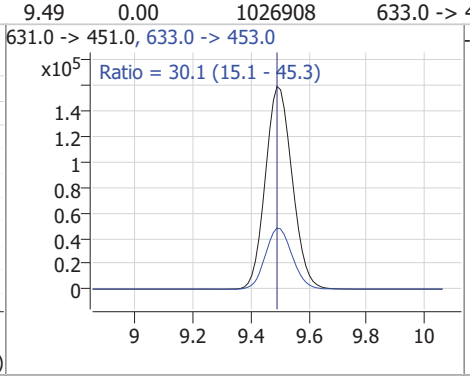


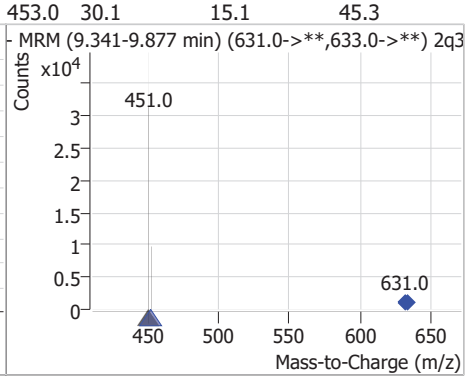




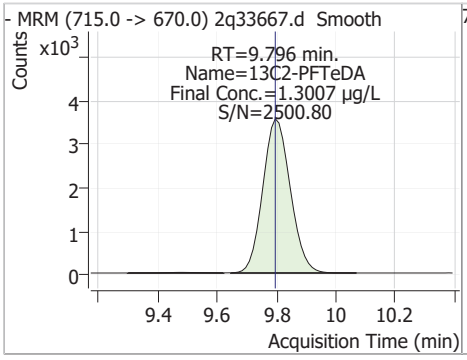
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	49.60	9.49	0.00	1026908	633.0 -> 453.0	30.1	15.1	45.3

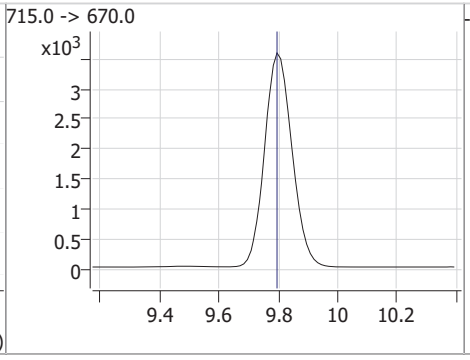


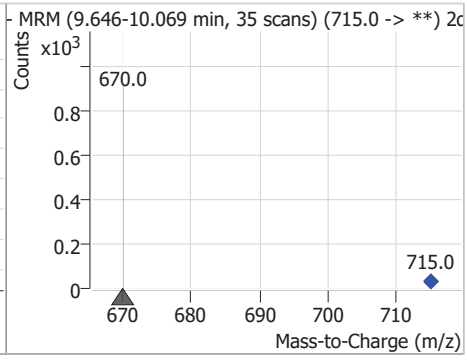




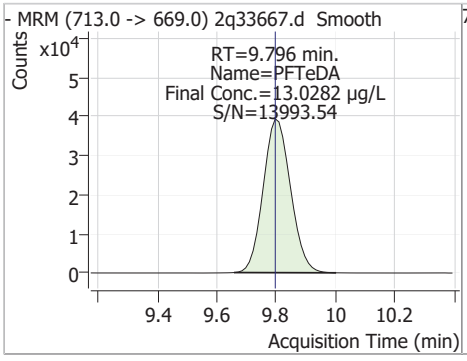
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.30	9.80	0.00	22840				

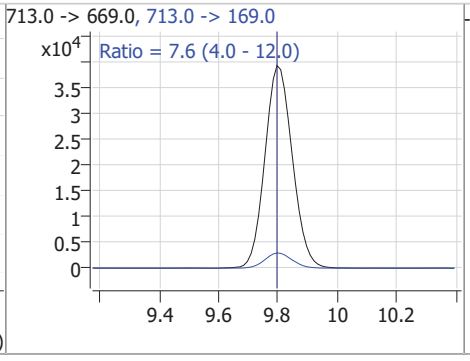


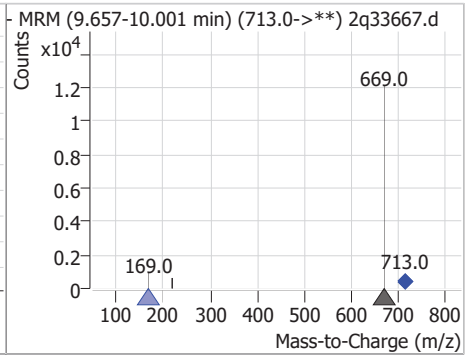




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	13.03	9.80	0.00	250589	713.0 -> 169.0	7.6	4.0	12.0







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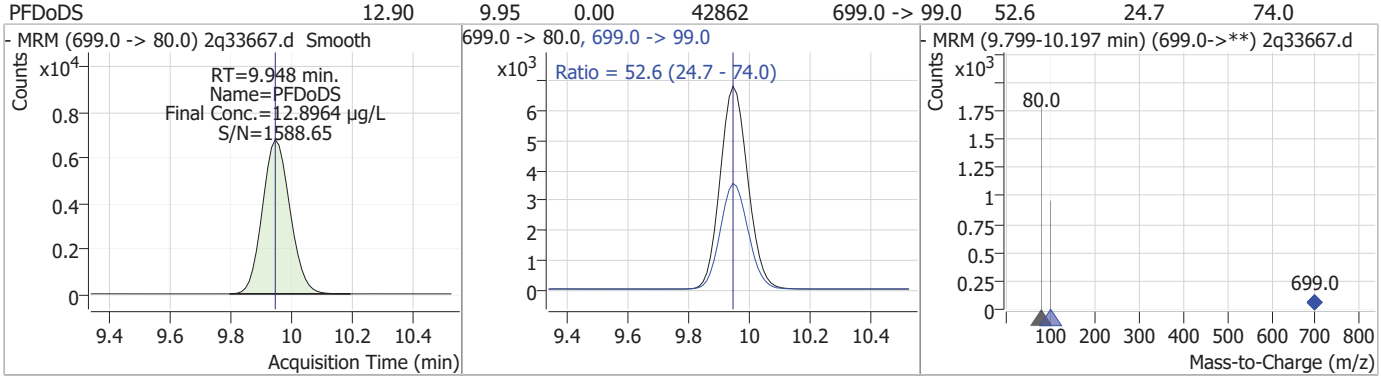
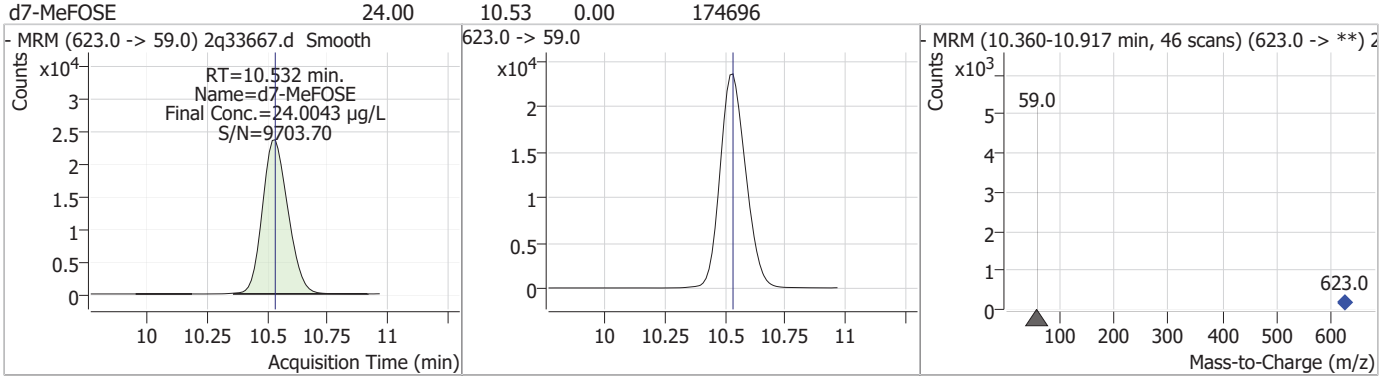
Perfluorinated Compounds by LC/MS/MS

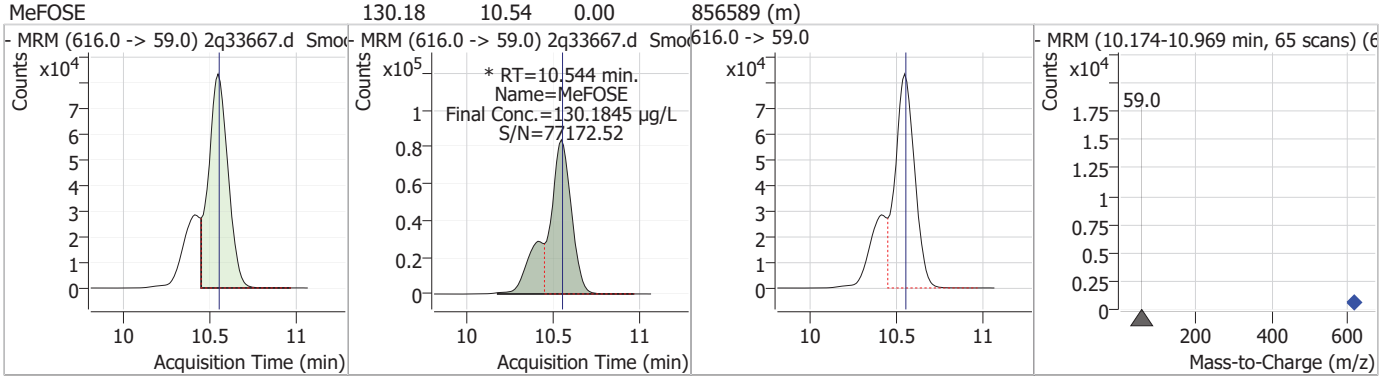
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	12.90	9.95	0.00	42862	699.0 -> 99.0	52.6	24.7	74.0



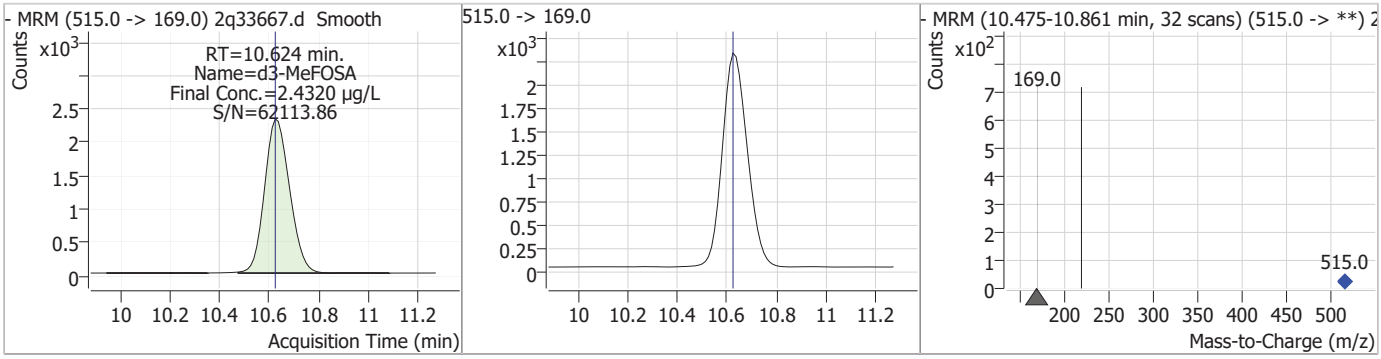
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.00	10.53	0.00	174696				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	130.18	10.54	0.00	856589 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.43	10.62	0.00	16195				



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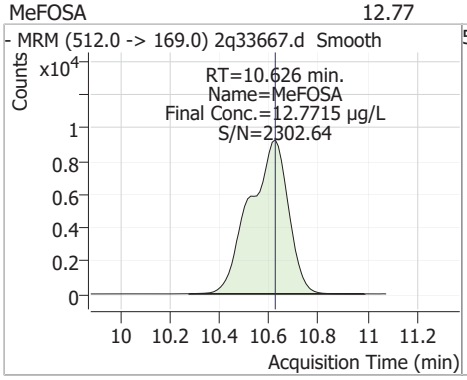
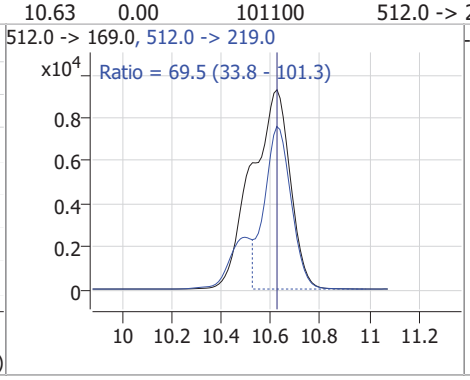
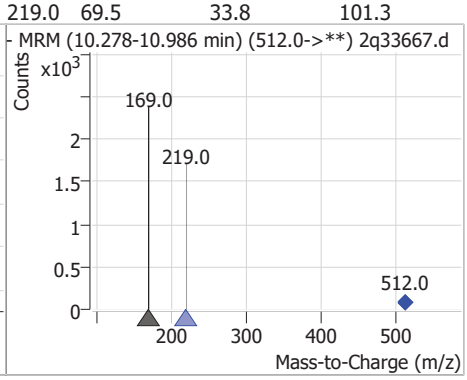
Perfluorinated Compounds by LC/MS/MS

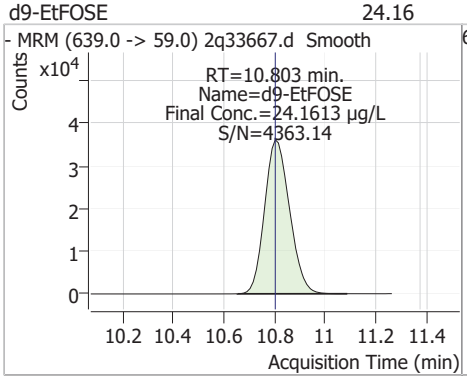
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	12.77	10.63	0.00	101100	512.0 -> 219.0	69.5	33.8	101.3

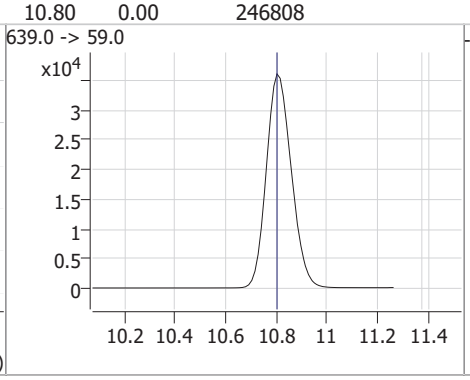


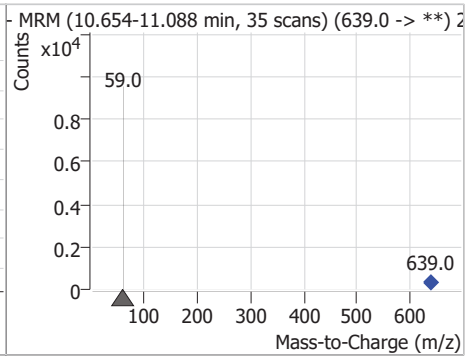




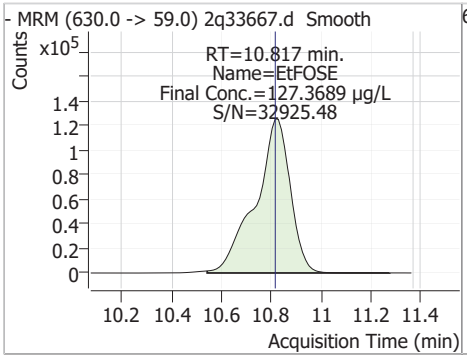
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.16	10.80	0.00	246808				

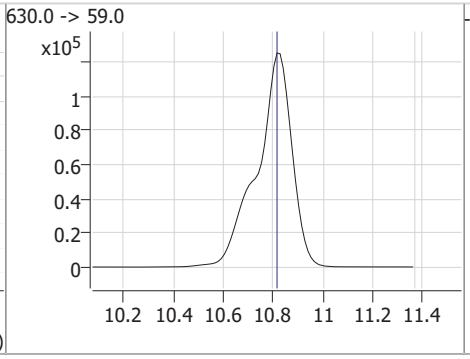


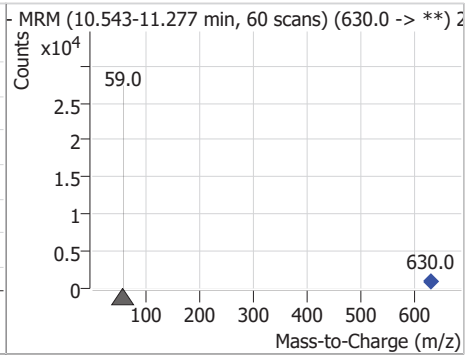




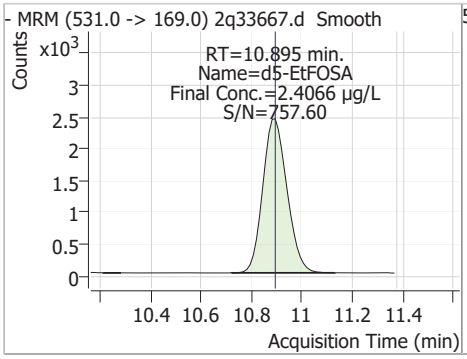
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	127.37	10.82	0.00	1219421				

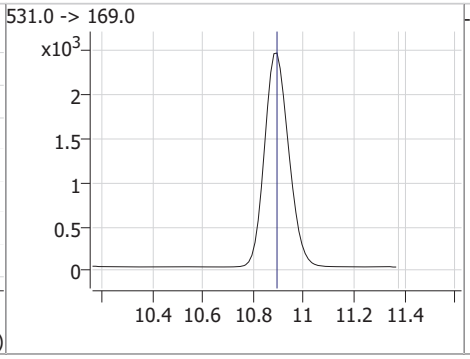


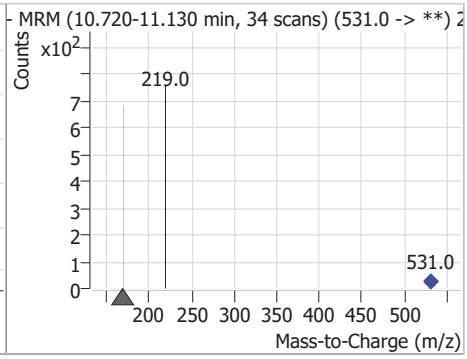




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.41	10.89	0.00	16160				







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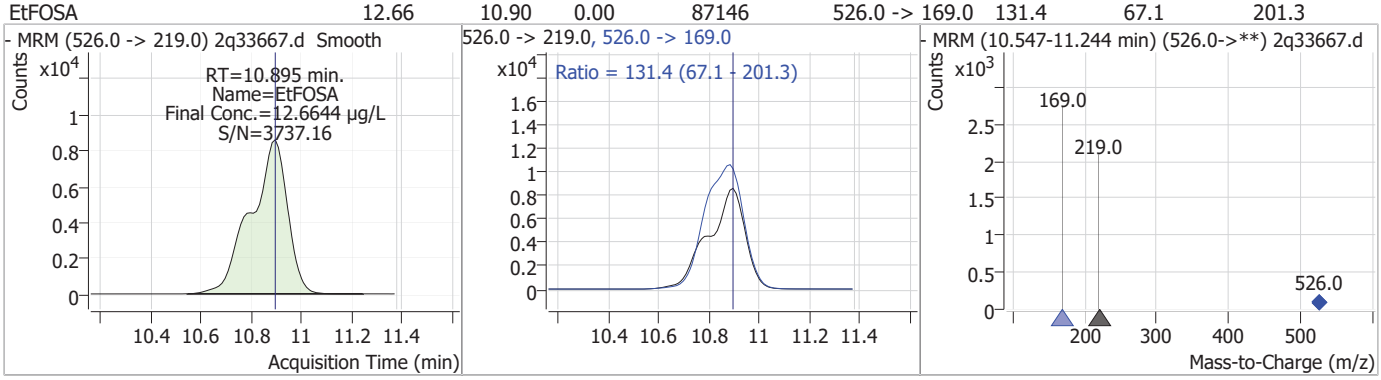
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	12.66	10.90	0.00	87146	526.0 -> 169.0	131.4	67.1	201.3



7.6.22

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Manual Integration Approval Summary

Sample Number: T2Q344-IC344
Lab FileID: 2Q33667.D
Injection Time: 05/09/25 16:16
Method: EPA 1633
Analyst approved: 05/10/25 01:15 Josephus Gimenez
Supervisor approved: 05/12/25 11:57 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.12	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.25	Split peak
Perfluorononanoic acid	375-95-1		7.64	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.36	Split peak
PFOSA	754-91-6		9.35	Split peak
MeFOSE	24448-09-7		10.54	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/12/25 11:57

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33668.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/9/2025 4:29:37 PM
Sample Name : IC344-7
Vial : P1-A8
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q344.batch.bin
Sample Information : OP62666,T2Q344,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	111373	10.00 µg/L	0.000
M5-PFPeA	4.637	268.0 -> 223.0	61286	5.00 µg/L	0.000
M5-PFHxA	5.745	318.0 -> 273.0	37175	2.50 µg/L	0.000
M4-PFHpA	6.540	367.0 -> 322.0	28167	2.50 µg/L	0.000
M8-PFOA	7.124	421.0 -> 376.0	64841	2.50 µg/L	0.000
M9-PFNA	7.644	472.0 -> 427.0	25293	1.25 µg/L	0.000
M6-PFDA	8.140	519.0 -> 474.0	17250	1.25 µg/L	0.000
M7-PFUnDA	8.608	570.0 -> 525.0	27117	1.25 µg/L	0.000
M2-PFDoDA	9.040	615.0 -> 570.0	29052	1.25 µg/L	0.000
M2-PFTeDA	9.796	715.0 -> 670.0	23695	1.25 µg/L	0.000
M8-FOSA	9.345	506.0 -> 78.0	19889	2.50 µg/L	0.000
M3-PFBS	5.699	302.0 -> 99.0	5404	2.50 µg/L	0.000
M3-PFHxS	7.250	402.0 -> 99.0	6966	2.50 µg/L	0.000
M8-PFOS	8.315	507.0 -> 99.0	6286	2.50 µg/L	0.000
M2-4:2FTS	5.420	329.0 -> 81.0	1200	5.00 µg/L	-0.012
M2-6:2FTS	6.897	429.0 -> 81.0	3012	5.00 µg/L	-0.012
M2-8:2FTS	7.914	529.0 -> 81.0	4972	5.00 µg/L	0.000
M3-MeFOSAA	8.160	573.0 -> 419.0	41565	5.00 µg/L	0.000
M3-HFPO-DA	6.074	287.0 -> 169.0	22564	10.00 µg/L	0.000
M5-EtFOSAA	8.356	589.0 -> 419.0	33929	5.00 µg/L	0.000
M7-MeFOSE	10.520	623.0 -> 59.0	166894	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	231803	25.00 µg/L	0.000
M5-EtFOSA	10.895	531.0 -> 169.0	15165	2.50 µg/L	0.000
M3-MeFOSA	10.624	515.0 -> 169.0	15139	2.50 µg/L	0.000
13C4-PFOS	8.316	503.0 -> 80.0	11543	2.50 µg/L	0.000
13C3-PFBA	3.265	216.0 -> 172.0	48658	5.00 µg/L	0.000
18O2-PFHxS	7.250	403.0 -> 84.0	8174	2.50 µg/L	-0.012
13C4-PFOA	7.124	417.0 -> 372.0	65271	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	16590	1.25 µg/L	0.000
13C5-PFNA	7.645	468.0 -> 423.0	22710	1.25 µg/L	0.000
13C2-PFHxA	5.746	315.0 -> 270.0	33921	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.420	329.0 -> 81.0	1200	4.06 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 81.2%	
13C2-6:2FTS	6.897	429.0 -> 81.0	3012	4.71 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.2%	
13C2-8:2FTS	7.914	529.0 -> 81.0	4972	4.82 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.4%	
13C2-PFDoDA	9.040	615.0 -> 570.0	29052	1.28 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.6%	
13C2-PFTeDA	9.796	715.0 -> 670.0	23695	1.35 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 107.8%	
13C3-PFBS	5.699	302.0 -> 99.0	5404	2.35 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.9%	
13C3-PFHxS	7.250	402.0 -> 99.0	6966	2.50 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.0%		
13C4-PFBA	3.263	217.0 -> 172.0	111373	9.73 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 97.3%		
13C4-PFHpA	6.540	367.0 -> 322.0	28167	2.38 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.3%		
13C5-PFHxA	5.745	318.0 -> 273.0	37175	2.50 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.1%		
13C5-PFPeA	4.637	268.0 -> 223.0	61286	4.84 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.8%		
13C6-PFDA	8.140	519.0 -> 474.0	17250	1.25 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.9%		
13C7-PFUnDA	8.608	570.0 -> 525.0	27117	1.25 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.1%		
13C8-FOSA	9.345	506.0 -> 78.0	19889	2.49 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.7%		
13C8-PFOA	7.124	421.0 -> 376.0	64841	2.43 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.1%		
13C8-PFOS	8.315	507.0 -> 99.0	6286	2.50 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.9%		
13C9-PFNA	7.644	472.0 -> 427.0	25293	1.28 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.0%		
d3-MeFOSAA	8.160	573.0 -> 419.0	41565	5.04 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.9%		
13C3-HFPO-DA	6.074	287.0 -> 169.0	22564	9.68 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 96.8%		
d3-MeFOSA	10.624	515.0 -> 169.0	15139	2.44 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.5%		
d5-EtFOSAA	8.356	589.0 -> 419.0	33929	5.10 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.0%		
d7-MeFOSE	10.520	623.0 -> 59.0	166894	24.59 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 98.4%		
d9-EtFOSE	10.803	639.0 -> 59.0	231803	24.33 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.3%		
d5-EtFOSA	10.895	531.0 -> 169.0	15165	2.42 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.9%		
Target Compounds						QValue
4:2FTS	5.433	327.0 -> 307.0	190160	109.53 µg/L		99
		327.0 -> 81.0	99269			
6:2FTS	6.898	427.0 -> 407.0	334652	93.63 µg/L		99
		427.0 -> 81.0	124667			
8:2FTS	7.915	527.0 -> 507.0	353108	97.76 µg/L		96
		527.0 -> 81.0	141081			
EtFOSAA	8.357	584.0 -> 419.0	136928	25.38 µg/L	m	99
		584.0 -> 483.0	66741			
FOSA	9.348	498.0 -> 78.0	182226	26.38 µg/L	m	99
		498.0 -> 478.0	6922			
MeFOSAA	8.161	570.0 -> 419.0	166564	26.72 µg/L	m	93
		570.0 -> 512.0	46408			
PFBA	3.255	213.0 -> 169.0	312513	106.29 µg/L		100
PFBS	5.700	299.0 -> 80.0	162527	23.86 µg/L		98
		299.0 -> 99.0	60267			
PFDA	8.141	513.0 -> 469.0	362491	27.22 µg/L		100
		513.0 -> 219.0	62111			
PFDoDA	9.041	613.0 -> 569.0	560799	26.80 µg/L		99
		613.0 -> 319.0	87905			
PFDS	9.206	599.0 -> 80.0	85712	25.14 µg/L		98

Perfluorinated Compounds by LC/MS/MS

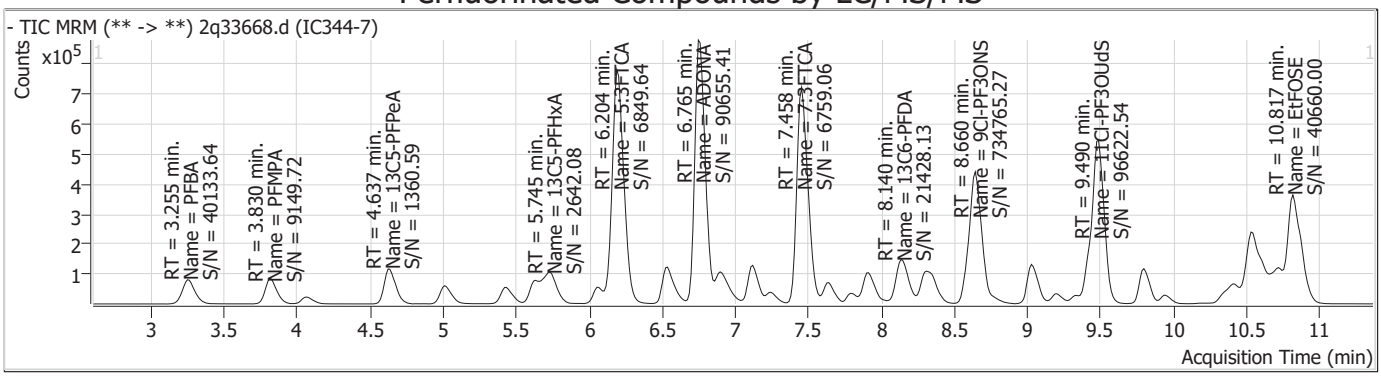
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	39517				
PFHpA	6.541	363.0 -> 319.0	494961	27.51	µg/L		99
		363.0 -> 169.0	86152				
PFHpS	7.809	449.0 -> 80.0	118471	24.21	µg/L		96
		449.0 -> 99.0	57344				
PFHxA	5.748	313.0 -> 269.0	323889	25.73	µg/L		100
		313.0 -> 119.0	9986				
PFHxS	7.252	399.0 -> 80.0	119645	22.53	µg/L	m	92
		399.0 -> 99.0	58238				
PFNA	7.645	463.0 -> 419.0	307498	26.80	µg/L	m	94
		463.0 -> 219.0	76454				
PFNS	8.784	549.0 -> 80.0	53425	24.94	µg/L		86
		549.0 -> 99.0	25405				
PFOA	7.125	413.0 -> 369.0	527171	26.70	µg/L	m	99
		413.0 -> 169.0	113692				
PFOS	8.317	499.0 -> 80.0	137937	23.51	µg/L	m	97
		499.0 -> 99.0	61923				
PFPeA	4.640	263.0 -> 219.0	587819	54.23	µg/L		100
PFPeS	6.617	349.0 -> 80.0	62923	25.60	µg/L		98
		349.0 -> 99.0	25362				
PFTeDA	9.796	713.0 -> 669.0	504146	25.27	µg/L		99
		713.0 -> 169.0	38452				
PFTrDA	9.426	663.0 -> 619.0	651045	26.43	µg/L		100
		663.0 -> 169.0	62578				
PFUnDA	8.609	563.0 -> 519.0	502698	27.31	µg/L		97
		563.0 -> 269.0	93220				
11Cl-PF3OUdS	9.490	631.0 -> 451.0	1975463	99.69	µg/L		99
		633.0 -> 453.0	602899				
9Cl-PF3ONS	8.660	531.0 -> 351.0	1563757	98.30	µg/L		98
		533.0 -> 353.0	465860				
ADONA	6.765	377.0 -> 251.0	3431483	101.74	µg/L		100
		377.0 -> 85.0	1070105				
HFPO-DA	6.075	285.0 -> 169.0	238107	108.08	µg/L		97
		285.0 -> 185.0	22979				
3:3FTCA	4.078	241.0 -> 177.0	118296	133.42	µg/L		100
		241.0 -> 117.0	7866				
5:3FTCA	6.204	341.0 -> 237.0	2047980	646.26	µg/L		99
		341.0 -> 217.0	1473685				
7:3FTCA	7.458	441.0 -> 337.0	2719523	659.51	µg/L		99
		441.0 -> 317.0	1130971				
EtFOSA	10.895	526.0 -> 219.0	175157	27.12	µg/L		99
		526.0 -> 169.0	233669				
EtFOSE	10.817	630.0 -> 59.0	2377733	264.43	µg/L		100
MeFOSA	10.626	512.0 -> 169.0	199755	26.99	µg/L		98
		512.0 -> 219.0	137761				
MeFOSE	10.544	616.0 -> 59.0	1691998	269.17	µg/L	m	100
PFDoDS	9.948	699.0 -> 80.0	89086	26.29	µg/L		94
		699.0 -> 99.0	47500				
NFDHA	5.639	295.0 -> 201.0	53326	51.29	µg/L		89
		201.0 -> 85.0	333755				
		295.0 -> 85.0	17094				
PFMBA	5.015	279.0 -> 85.0	338287	53.15	µg/L		100
PFMPA	3.830	229.0 -> 85.0	490447	53.71	µg/L		100
PFEESA	6.168	315.0 -> 135.0	719593	46.38	µg/L		100
		315.0 -> 69.0	76160				

 # = Qualifier out of range, m = manually integrated, + = Area summed

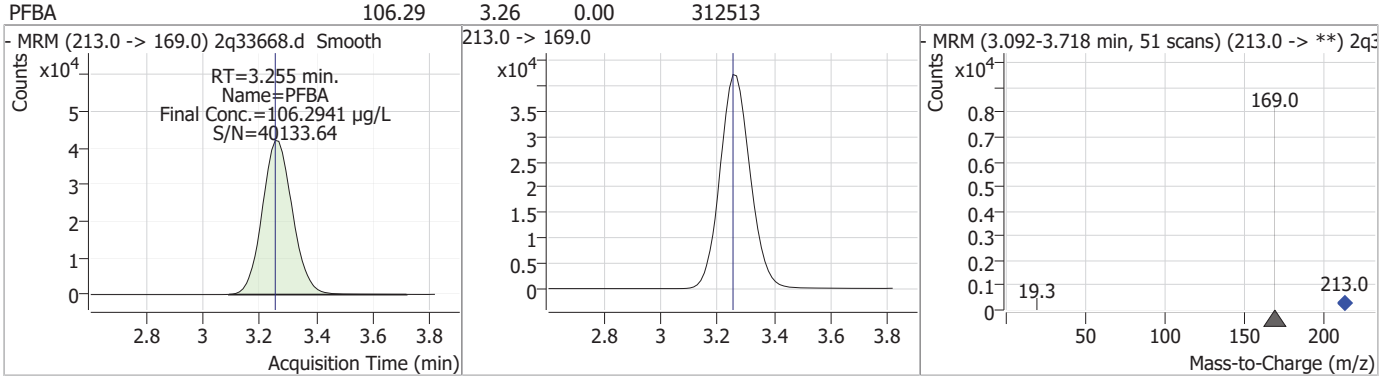
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

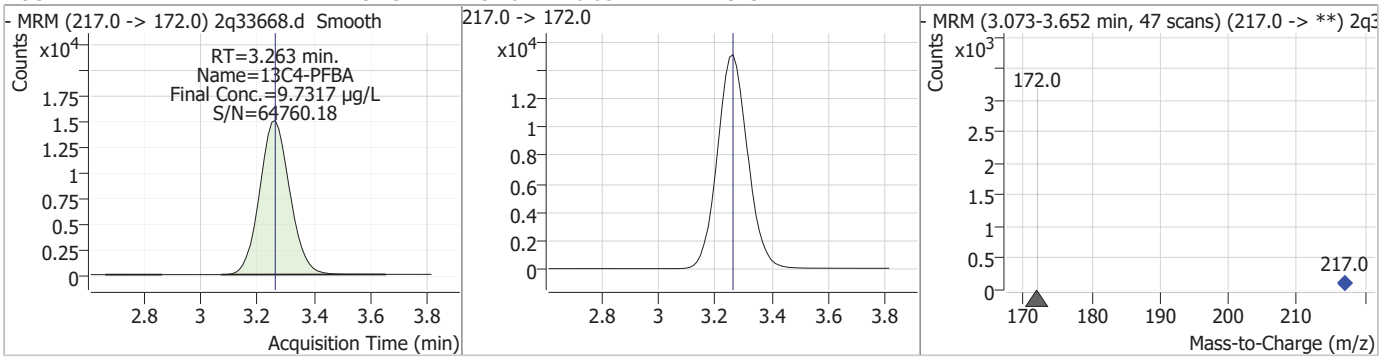
Perfluorinated Compounds by LC/MS/MS



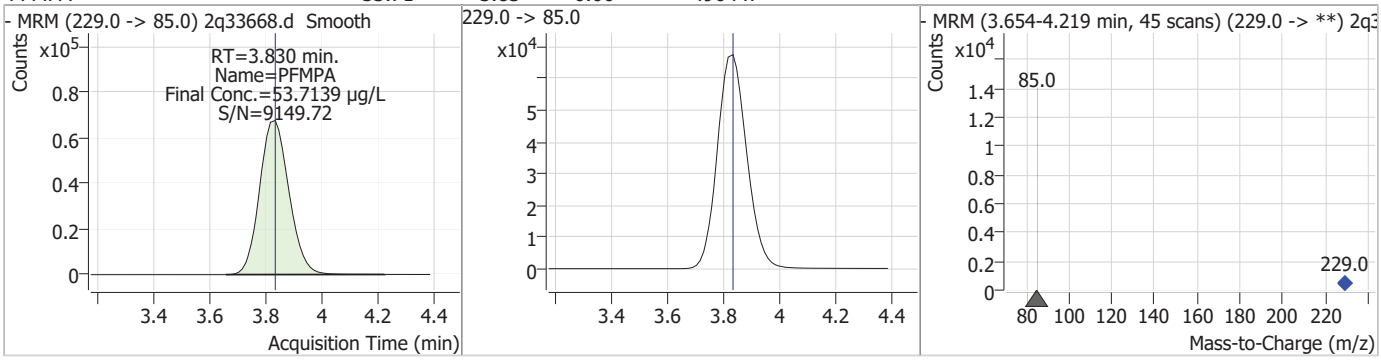
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	106.29	3.26	0.00	312513				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.73	3.26	0.00	111373				

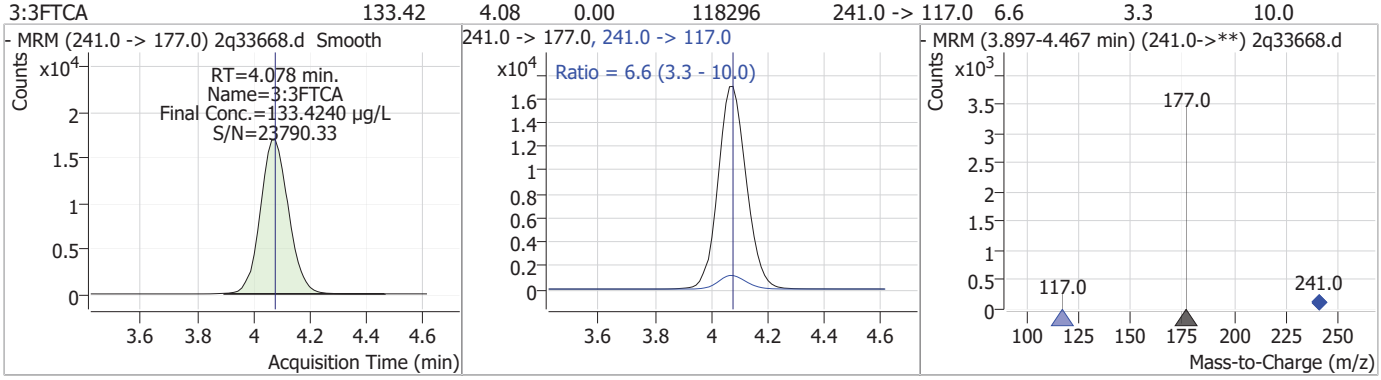


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	53.71	3.83	0.00	490447				

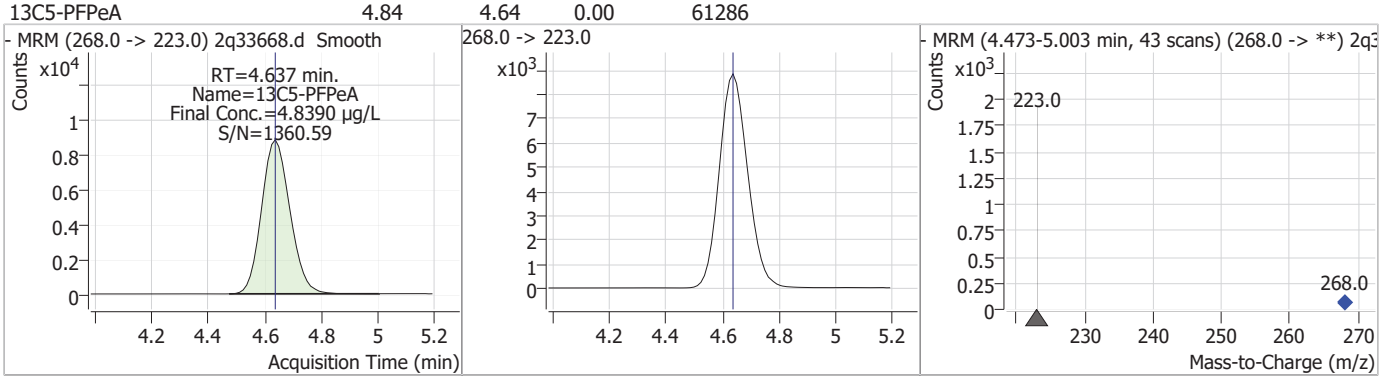


Perfluorinated Compounds by LC/MS/MS

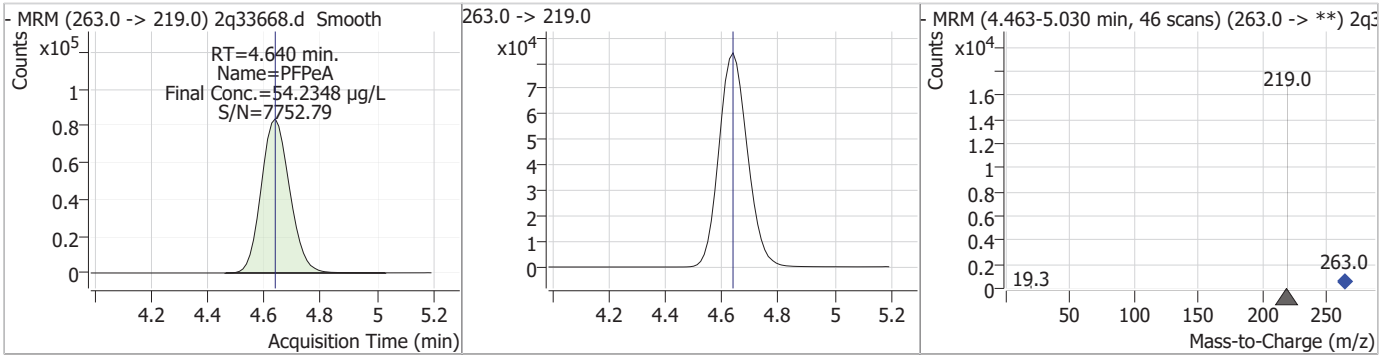
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	133.42	4.08	0.00	118296	241.0 -> 117.0	6.6	3.3	10.0



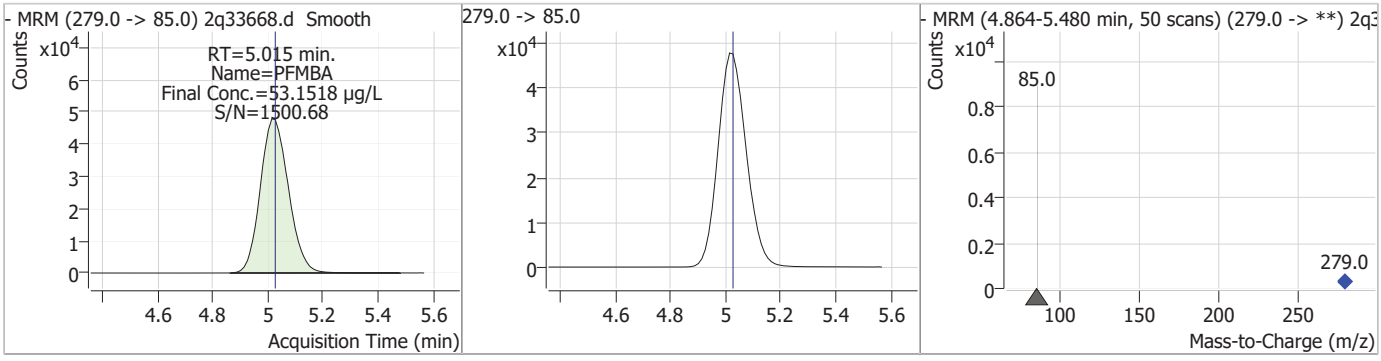
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.84	4.64	0.00	61286				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	54.23	4.64	0.00	587819				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	53.15	5.01	-0.01	338287				



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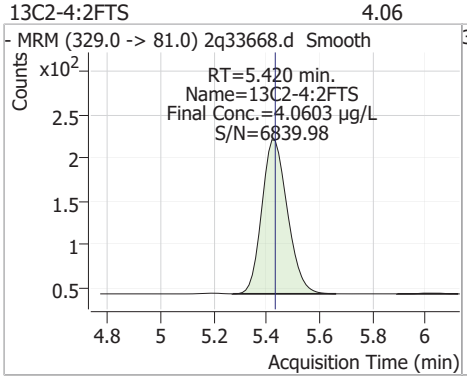
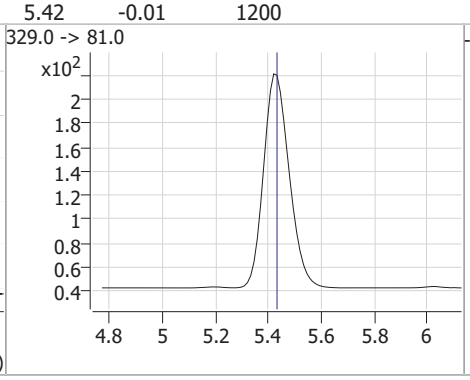
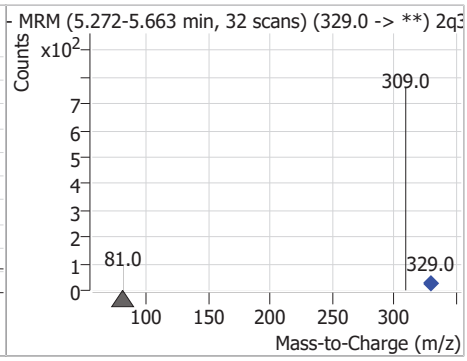
Perfluorinated Compounds by LC/MS/MS

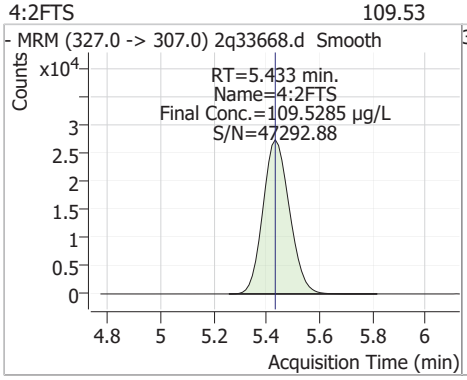
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.06	5.42	-0.01	1200				

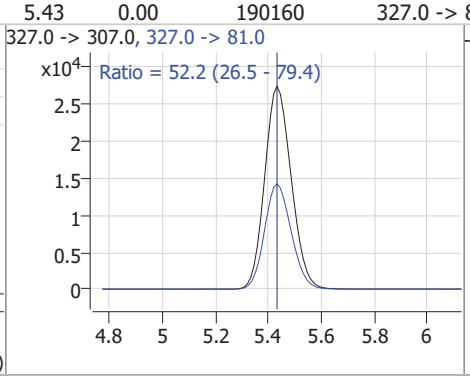


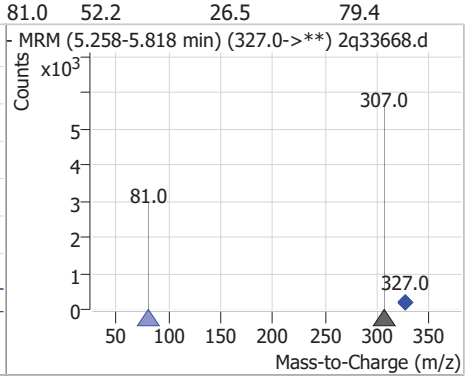




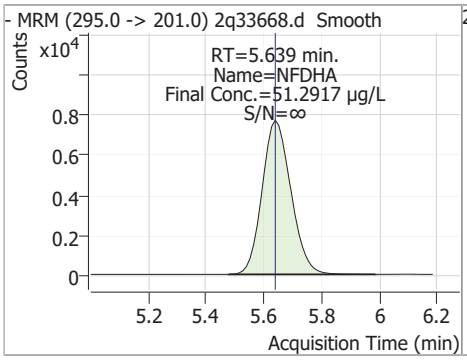
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	109.53	5.43	0.00	190160	327.0 -> 81.0	52.2	26.5	79.4

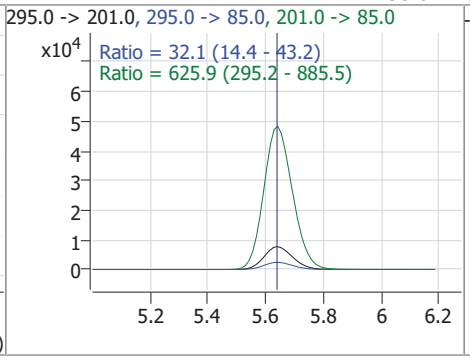


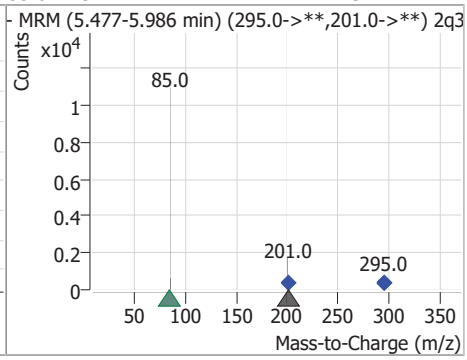




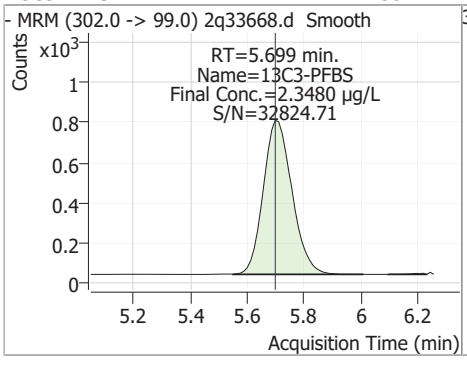
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	51.29	5.64	0.00	53326	201.0 -> 85.0	625.9	295.2	885.5
					295.0 -> 85.0	32.1	14.4	43.2

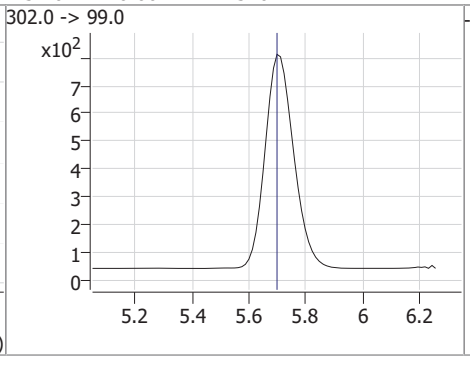


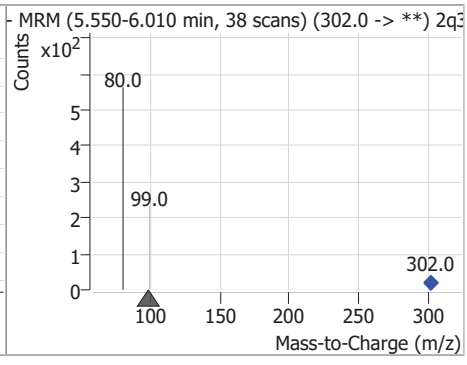




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.35	5.70	0.00	5404				







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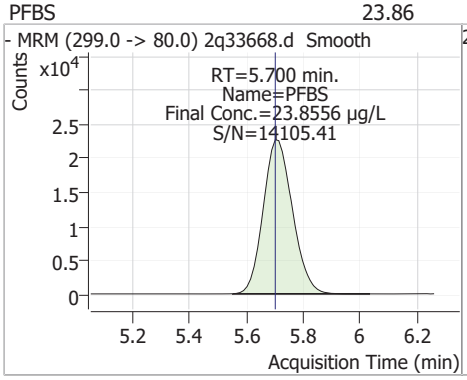
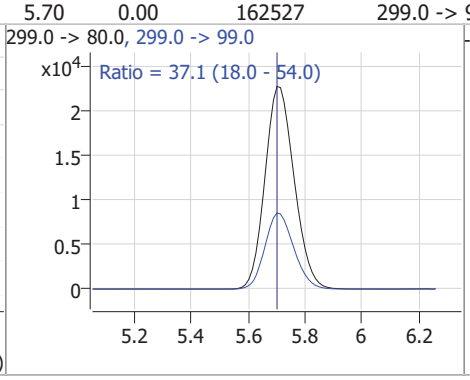
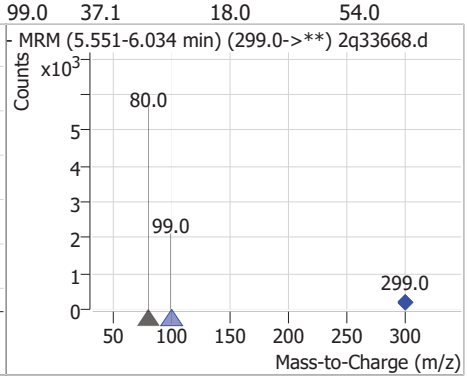
Perfluorinated Compounds by LC/MS/MS

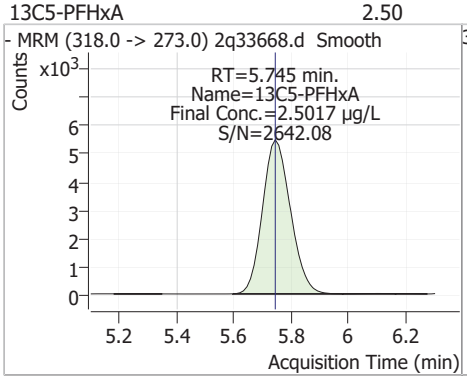
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	23.86	5.70	0.00	162527	299.0 -> 99.0	37.1	18.0	54.0

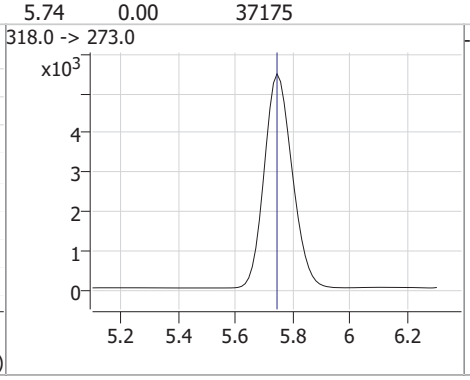


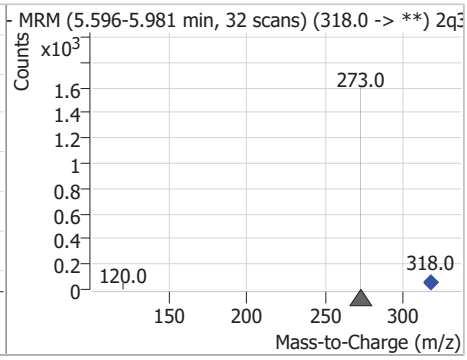




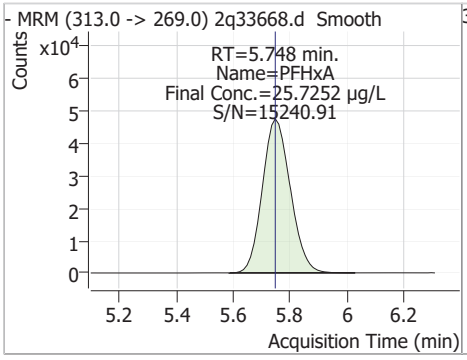
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.50	5.74	0.00	37175				

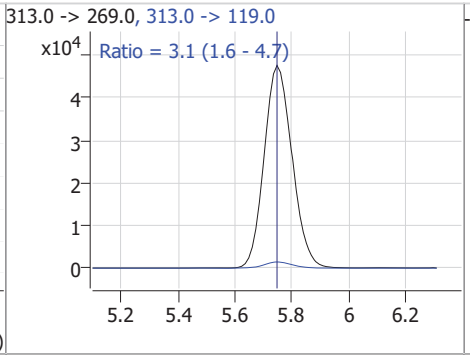


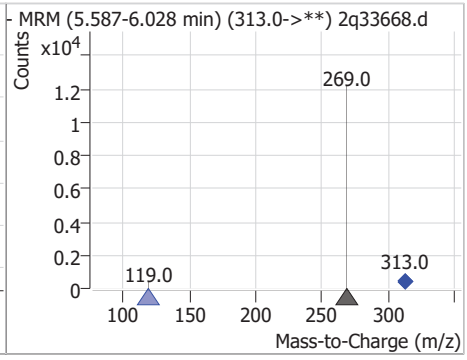




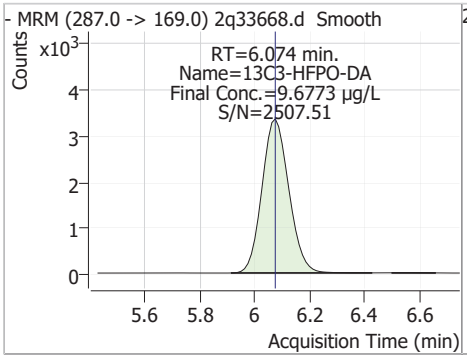
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	25.73	5.75	0.00	323889	313.0 -> 119.0	3.1	1.6	4.7

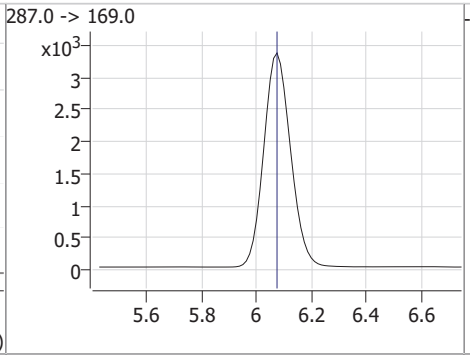


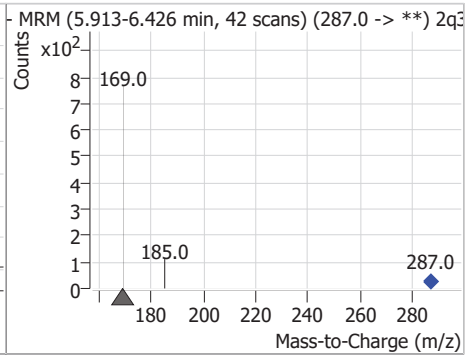




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.68	6.07	0.00	22564				







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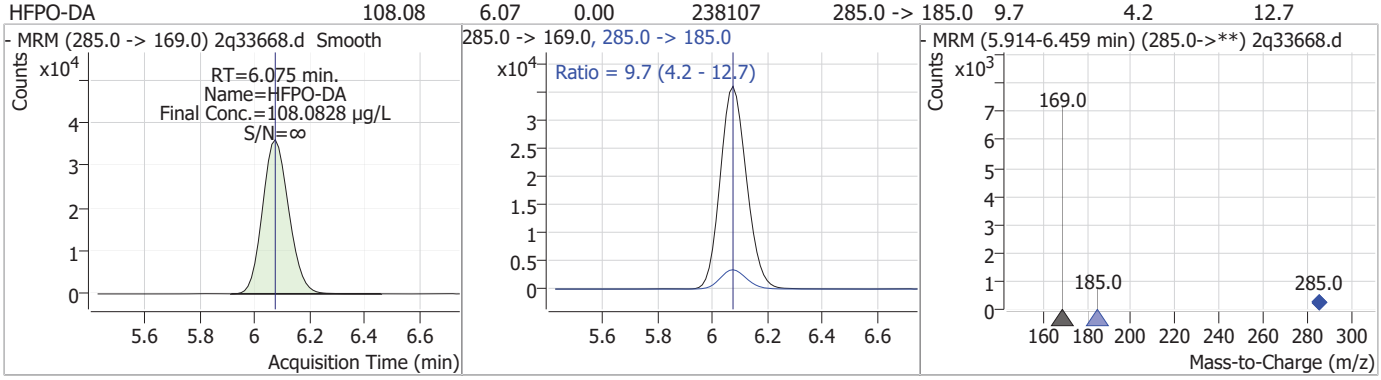
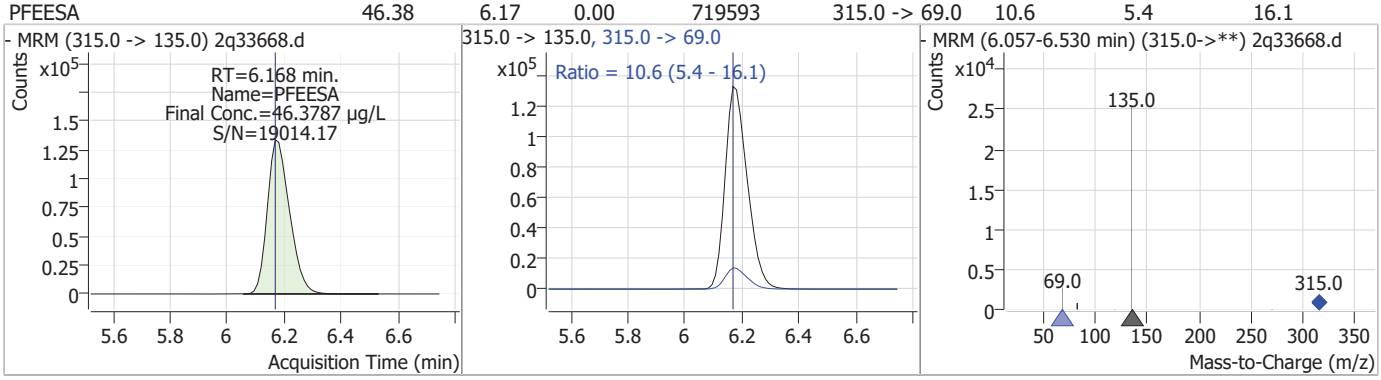
Perfluorinated Compounds by LC/MS/MS

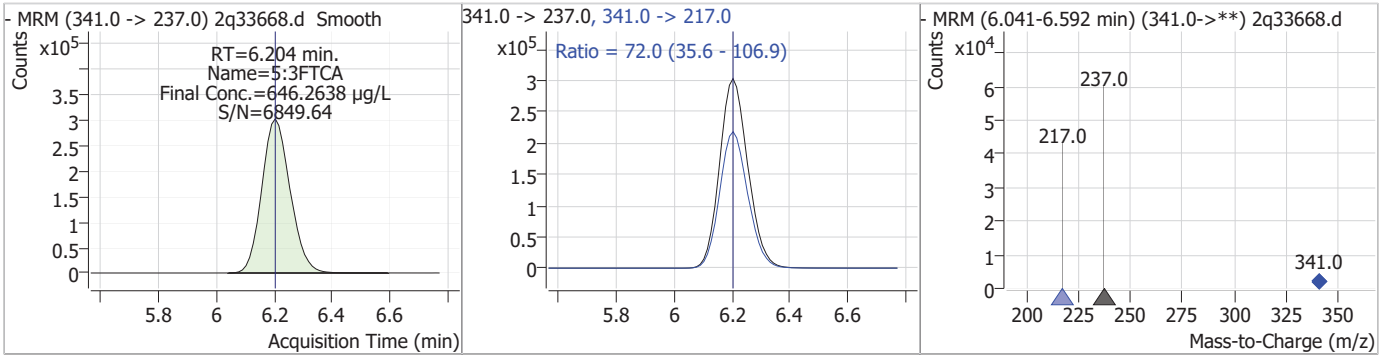
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	108.08	6.07	0.00	238107	285.0 -> 185.0	9.7	4.2	12.7



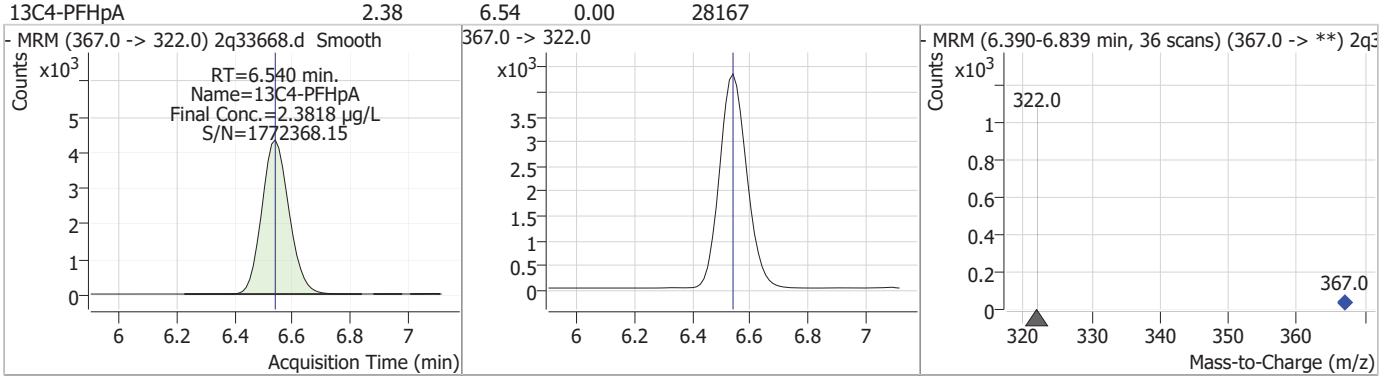
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	46.38	6.17	0.00	719593	315.0 -> 69.0	10.6	5.4	16.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	646.26	6.20	0.00	2047980	341.0 -> 217.0	72.0	35.6	106.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.38	6.54	0.00	28167				



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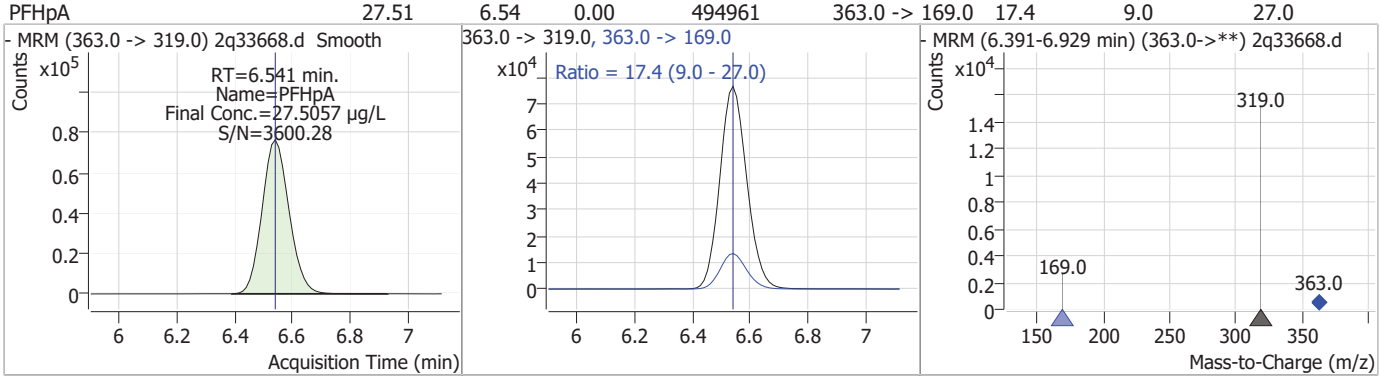
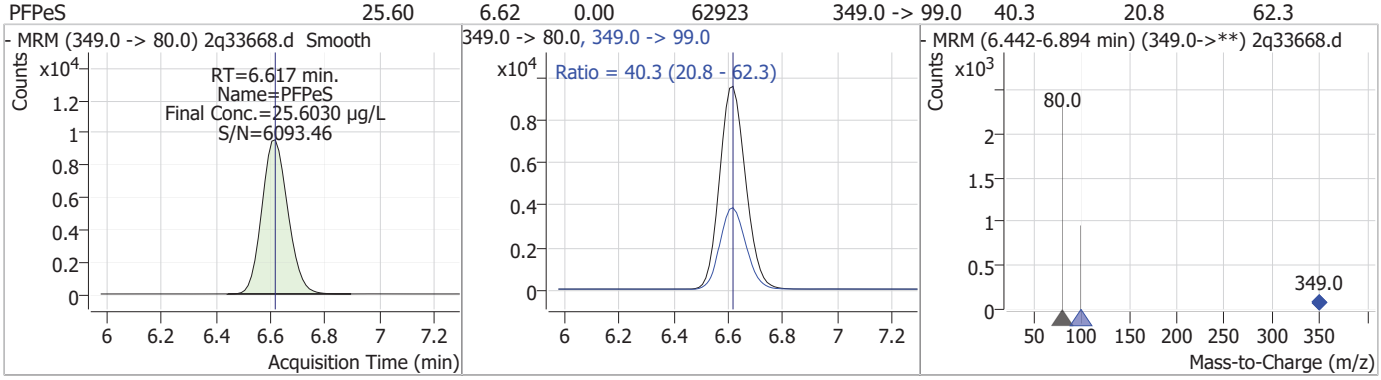
Perfluorinated Compounds by LC/MS/MS

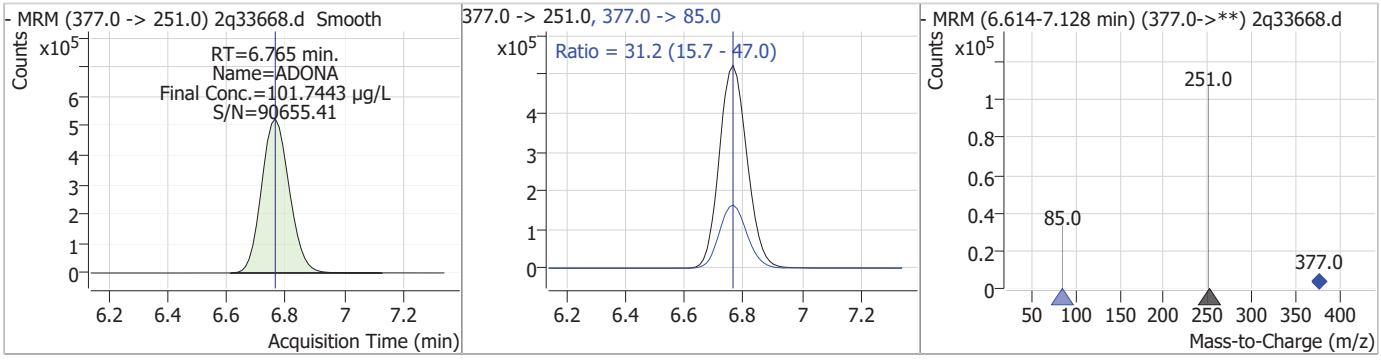
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	27.51	6.54	0.00	494961	363.0 -> 169.0	17.4	9.0	27.0



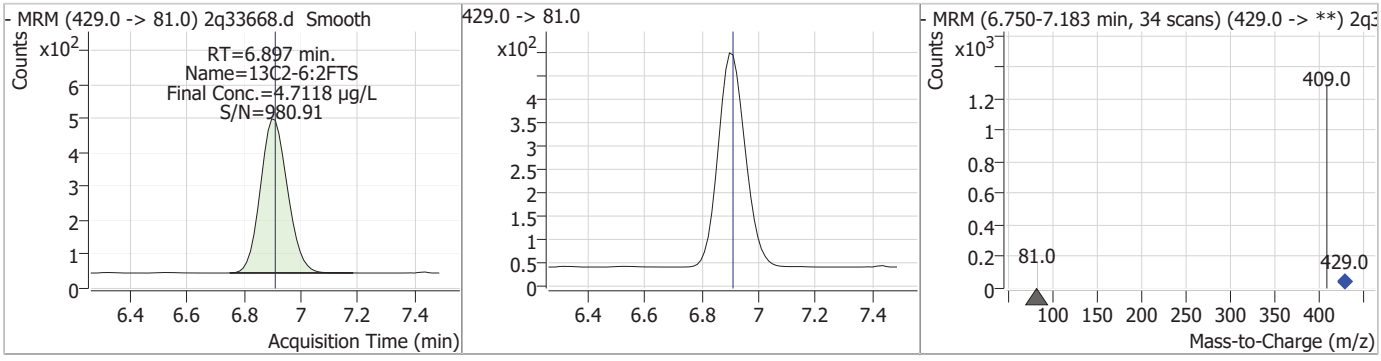
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	25.60	6.62	0.00	62923	349.0 -> 99.0	40.3	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	101.74	6.77	0.00	3431483	377.0 -> 85.0	31.2	15.7	47.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.71	6.90	-0.01	3012				



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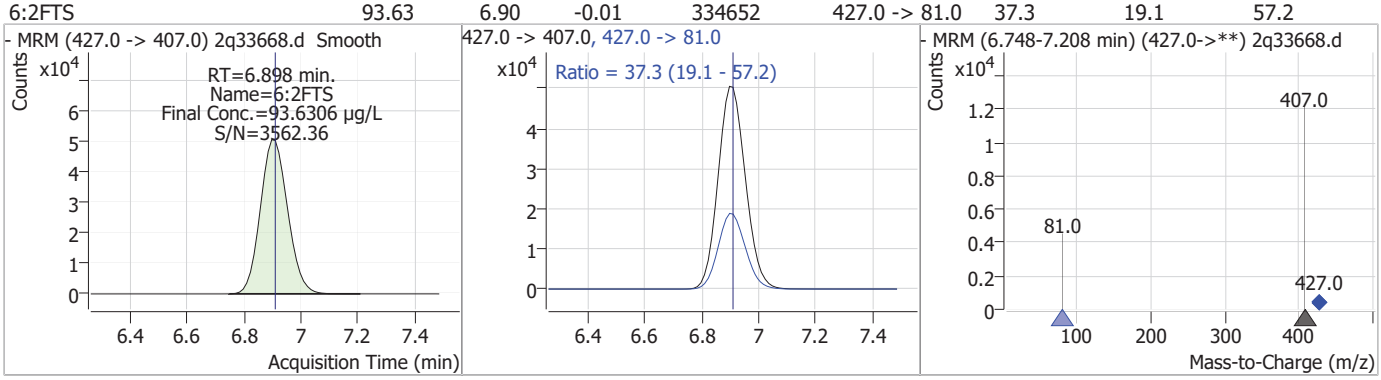
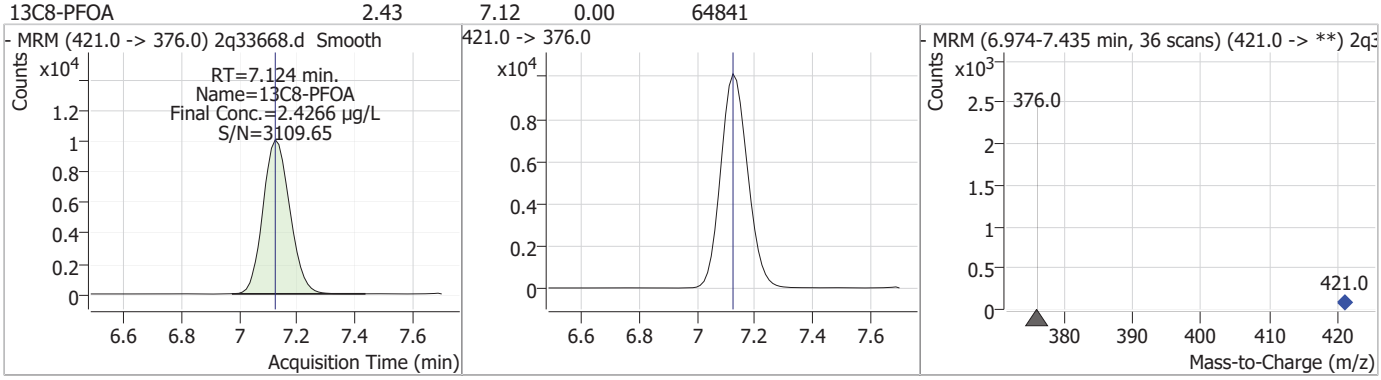
Perfluorinated Compounds by LC/MS/MS

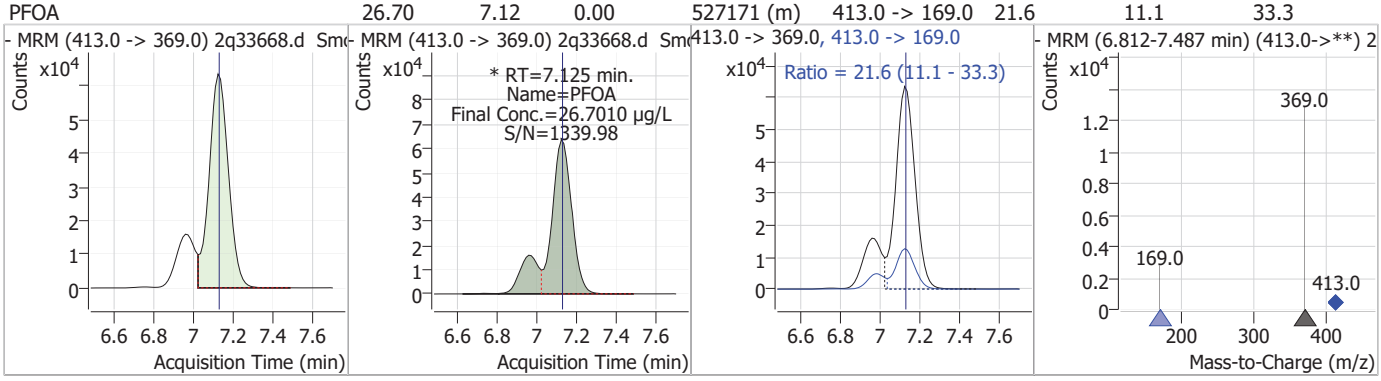
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	93.63	6.90	-0.01	334652	427.0 -> 81.0	37.3	19.1	57.2



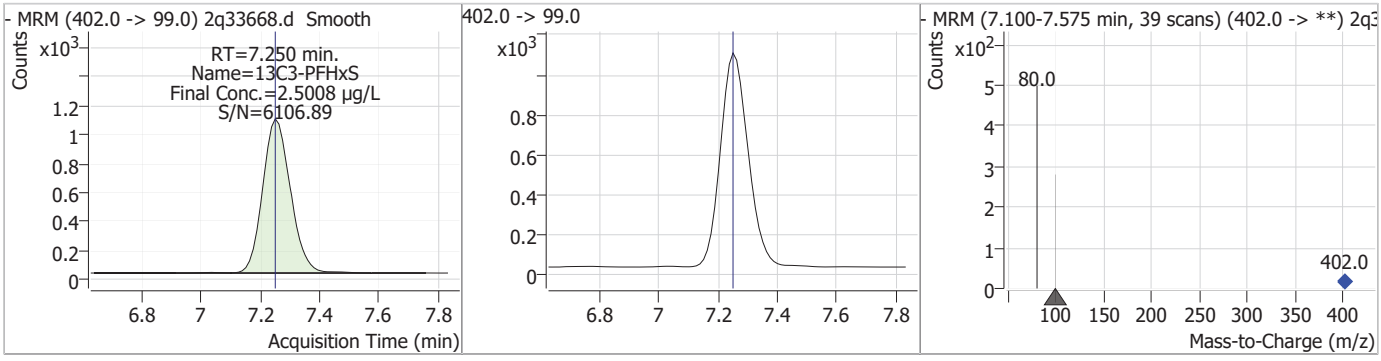
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.43	7.12	0.00	64841				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	26.70	7.12	0.00	527171 (m)	413.0 -> 169.0	21.6	11.1	33.3

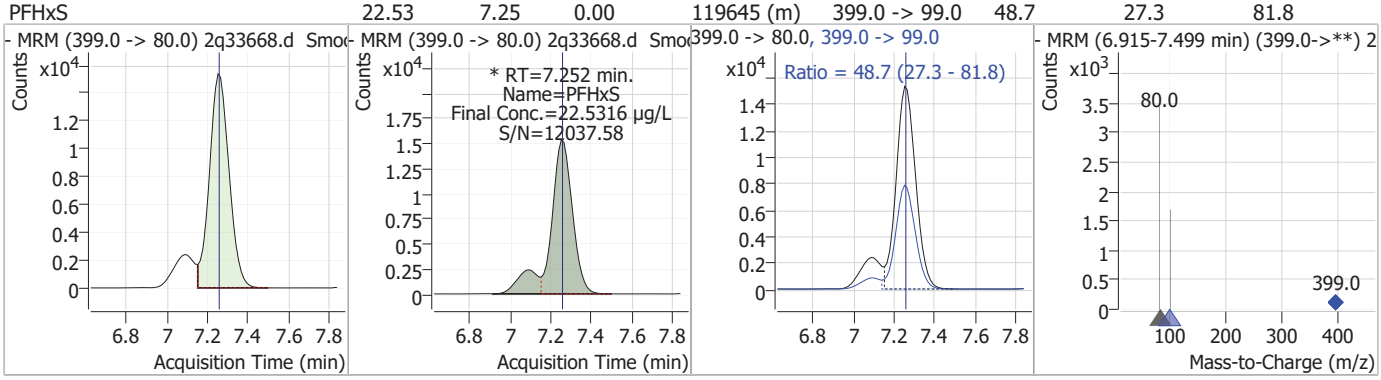


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.50	7.25	0.00	6966				

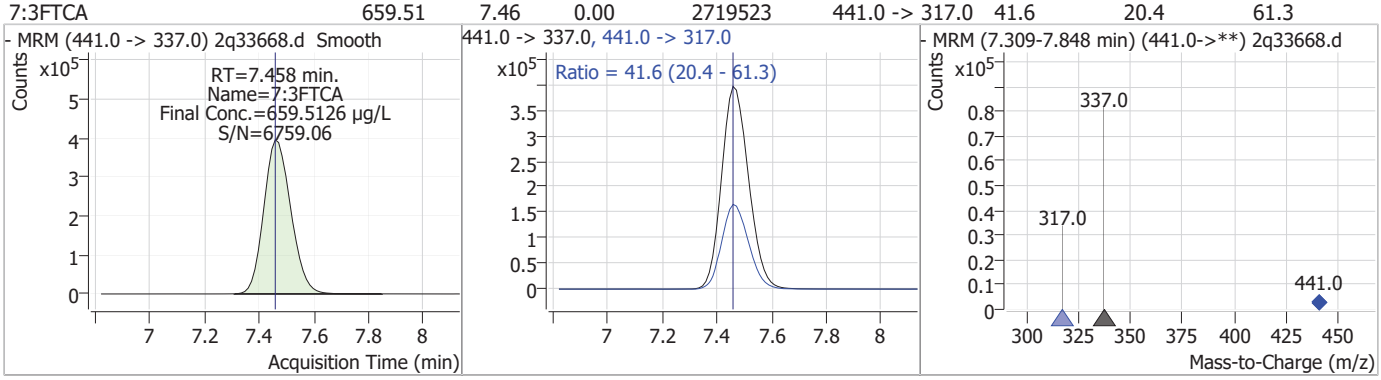


Perfluorinated Compounds by LC/MS/MS

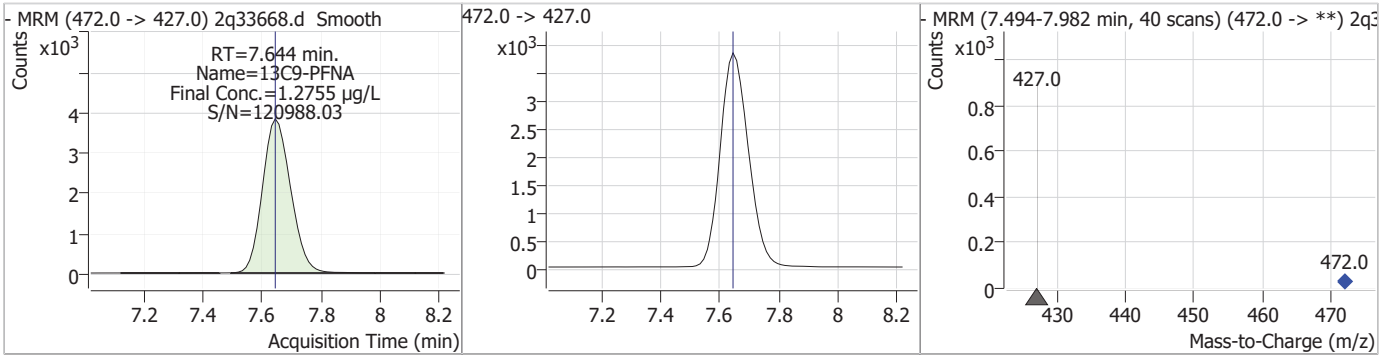
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	22.53	7.25	0.00	119645 (m)	399.0 -> 99.0	48.7	27.3	81.8



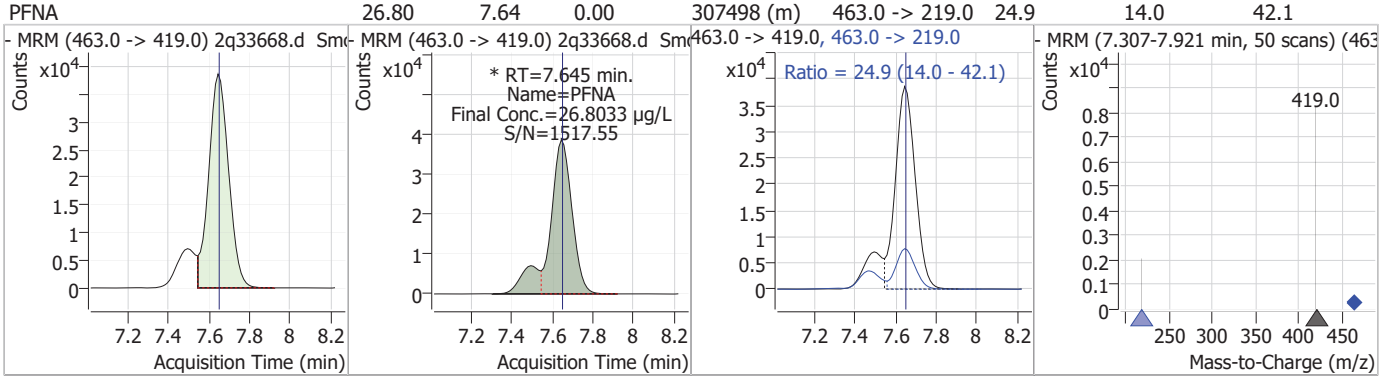
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	659.51	7.46	0.00	2719523	441.0 -> 317.0	41.6	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.28	7.64	0.00	25293				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	26.80	7.64	0.00	307498 (m)	463.0 -> 219.0	24.9	14.0	42.1



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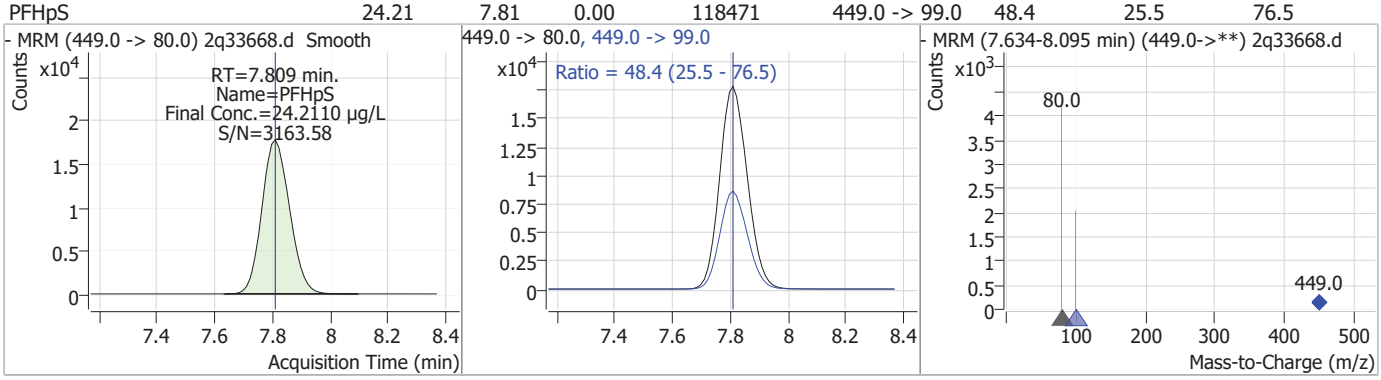
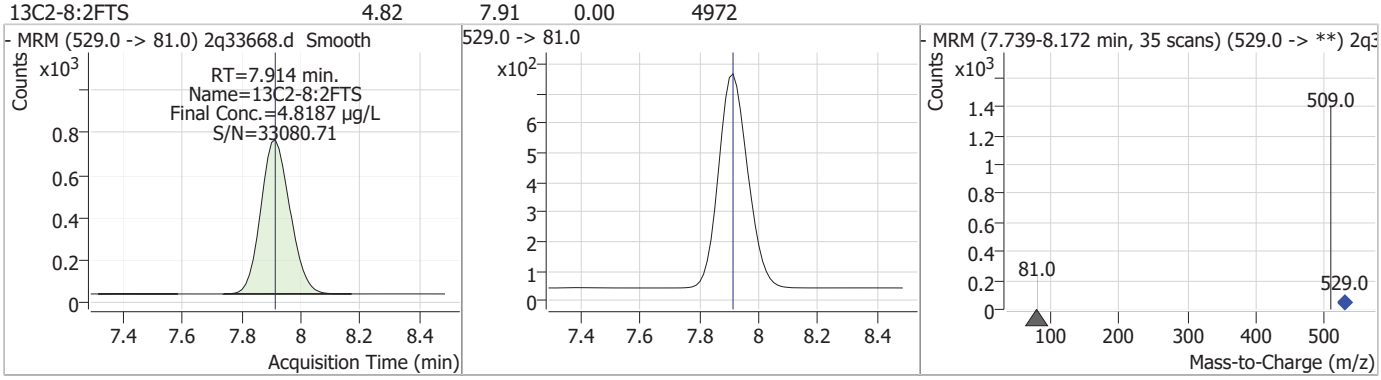
Perfluorinated Compounds by LC/MS/MS

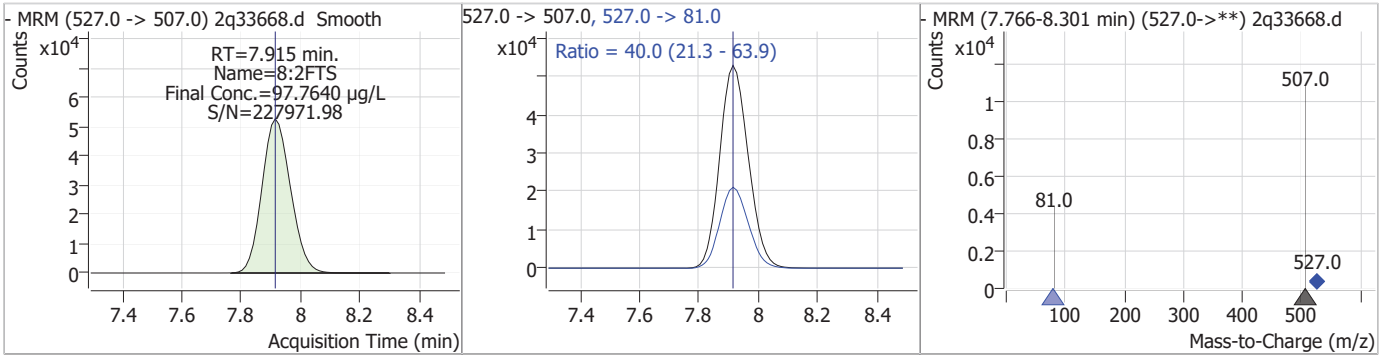
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	24.21	7.81	0.00	118471	449.0 -> 99.0	48.4	25.5	76.5



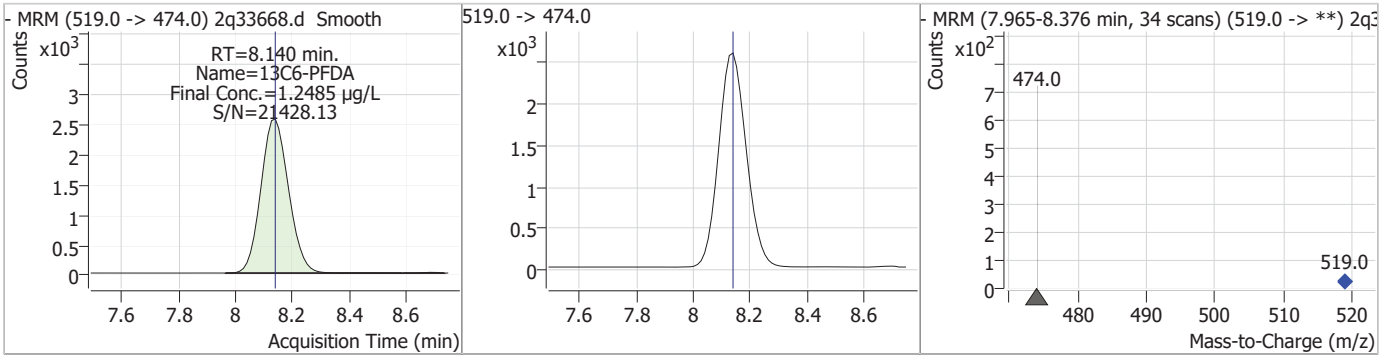
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.82	7.91	0.00	4972				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	97.76	7.91	0.00	353108	527.0 -> 81.0	40.0	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.25	8.14	0.00	17250				



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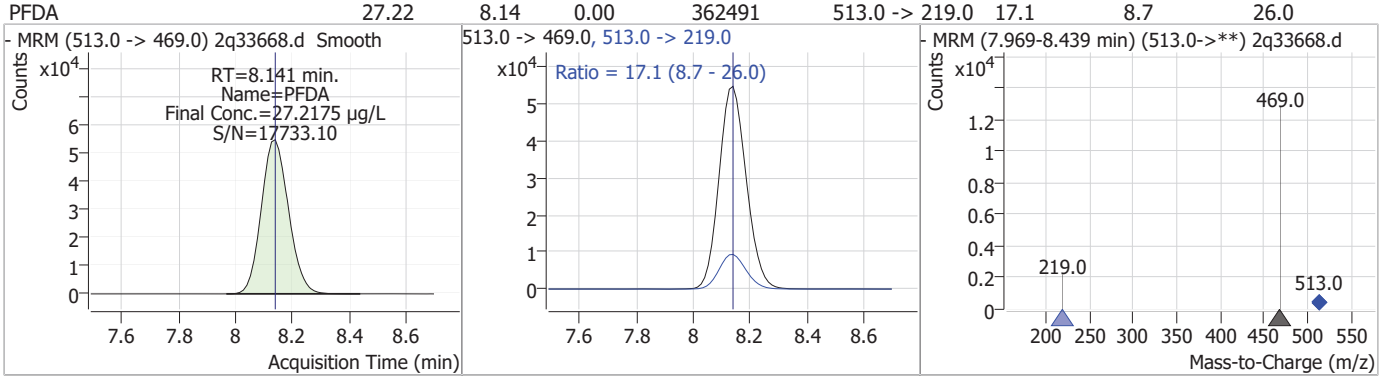
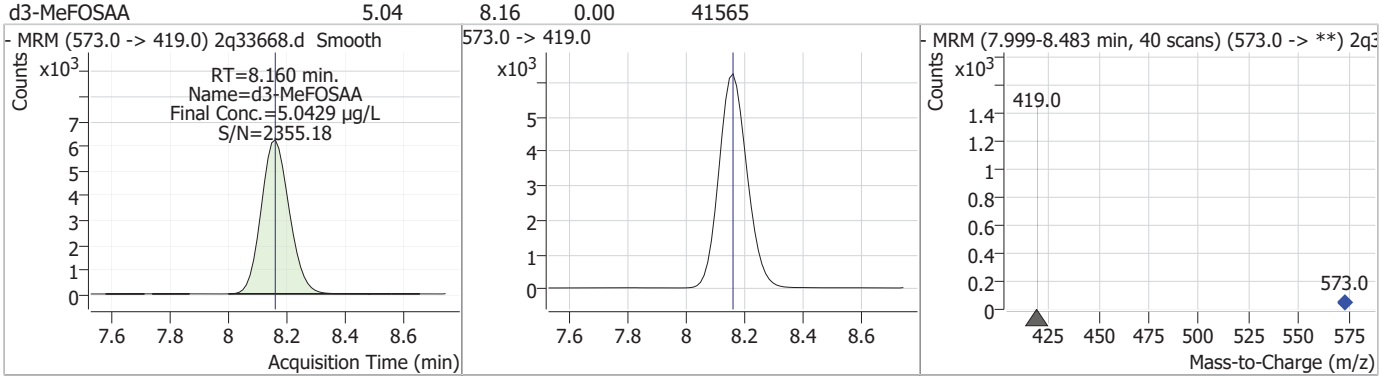
Perfluorinated Compounds by LC/MS/MS

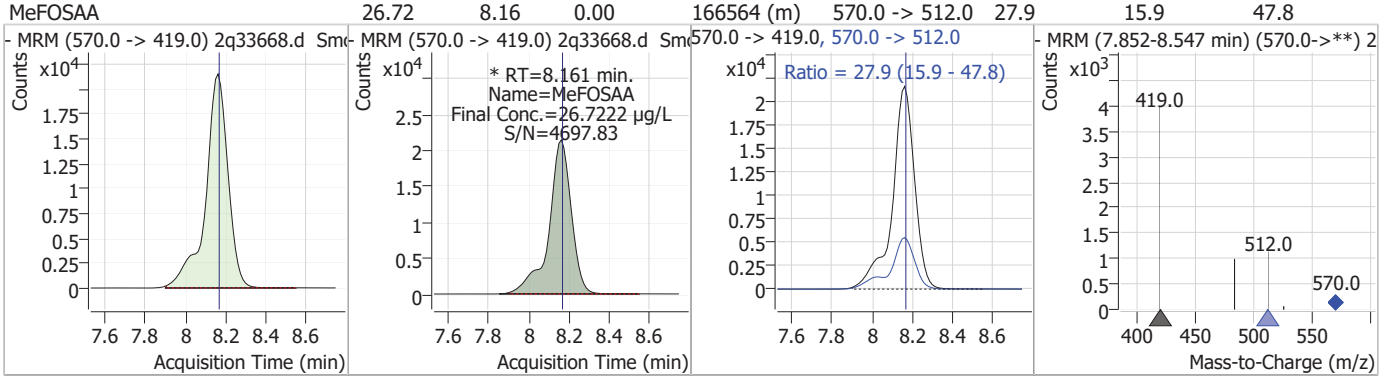
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	27.22	8.14	0.00	362491	513.0 -> 219.0	17.1	8.7	26.0



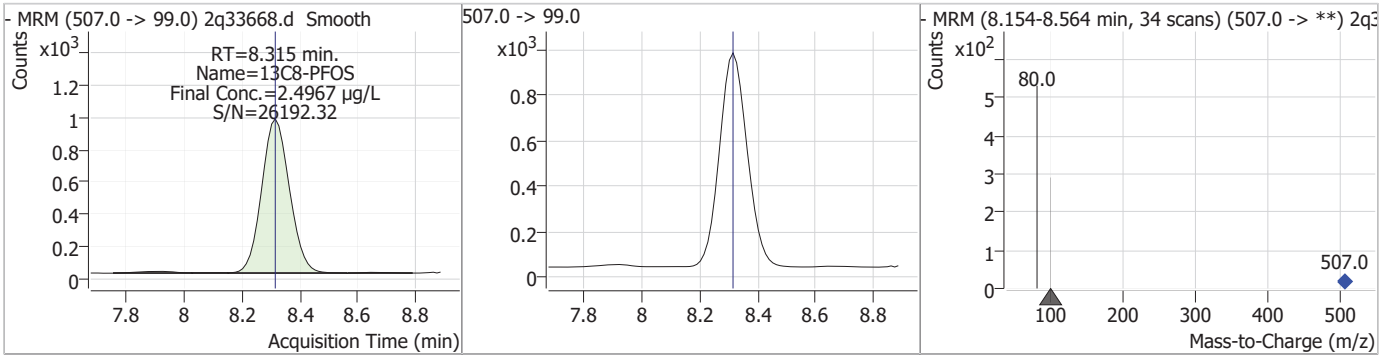
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.04	8.16	0.00	41565				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	26.72	8.16	0.00	166564 (m)	570.0 -> 512.0	27.9	15.9	47.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.50	8.32	0.00	6286				



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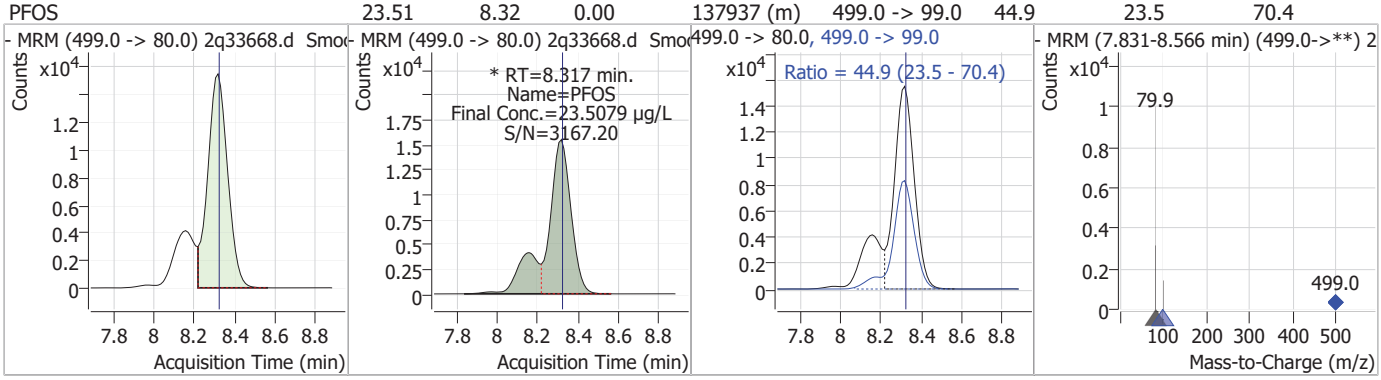
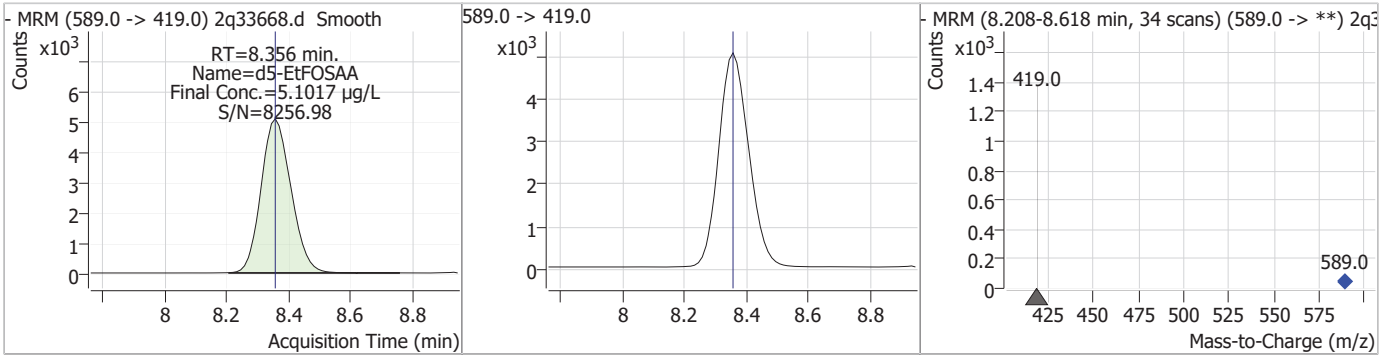
Perfluorinated Compounds by LC/MS/MS

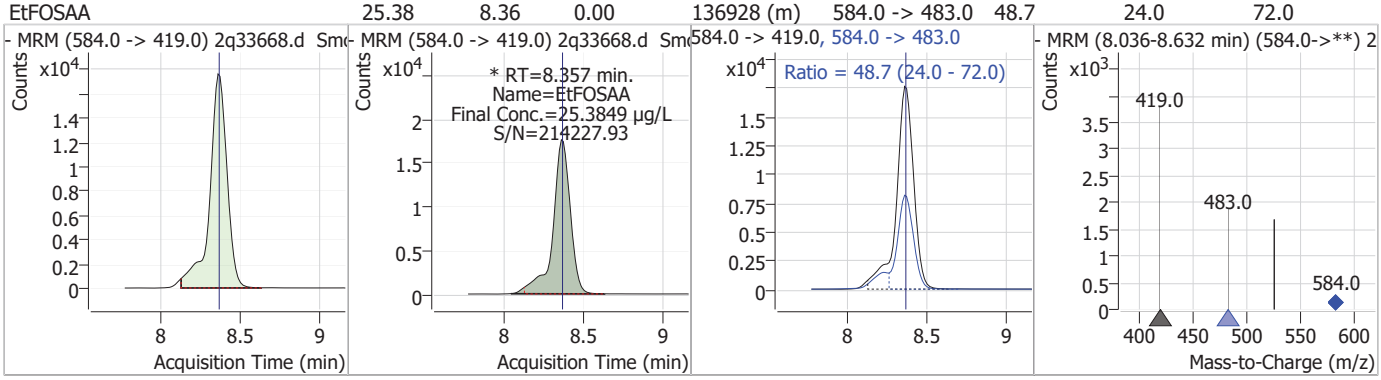
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	23.51	8.32	0.00	137937 (m)	499.0 -> 99.0	44.9	23.5	70.4



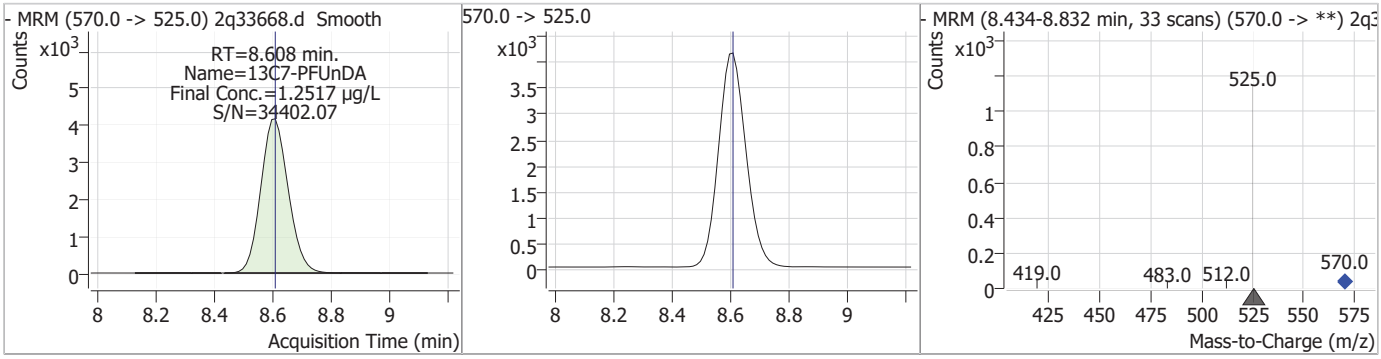
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.10	8.36	0.00	33929				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	25.38	8.36	0.00	136928 (m)	584.0 -> 483.0	48.7	24.0	72.0

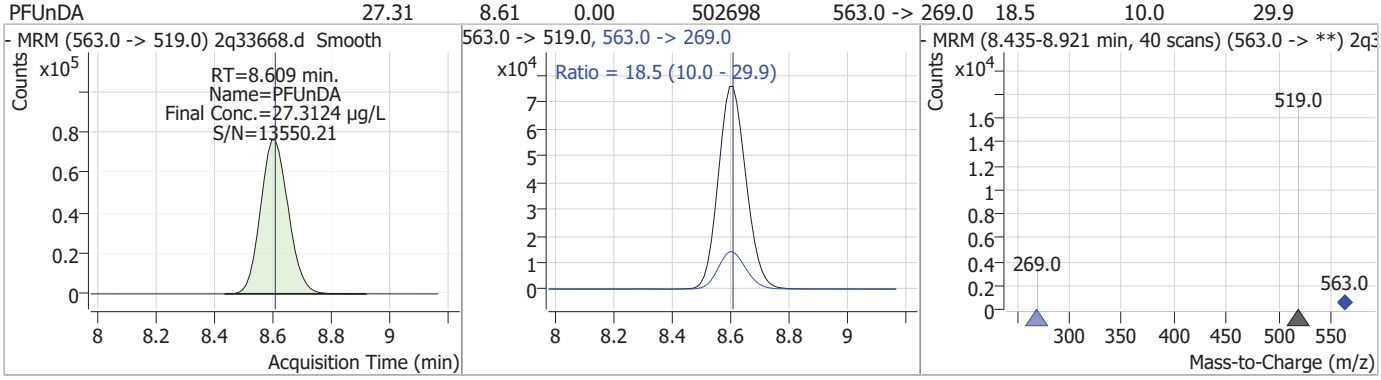


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.25	8.61	0.00	27117				

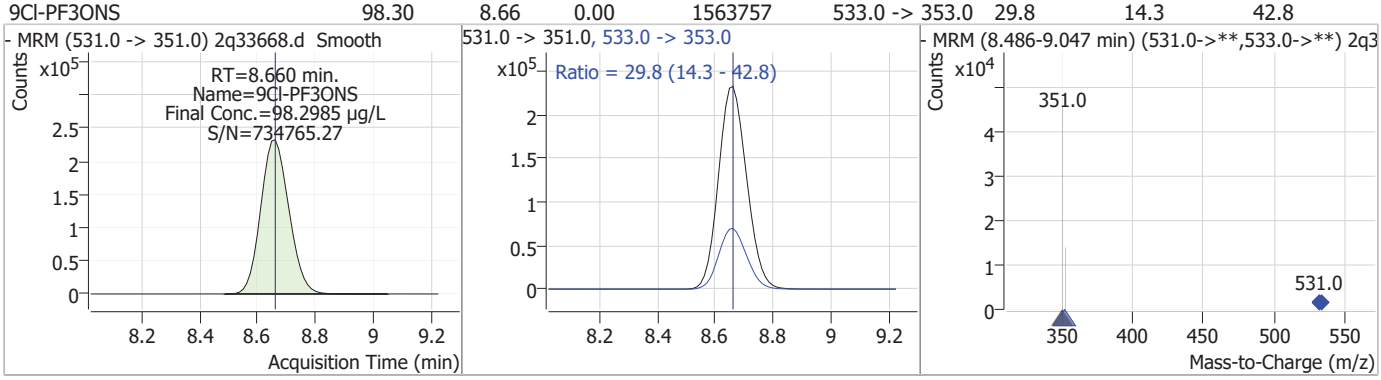


Perfluorinated Compounds by LC/MS/MS

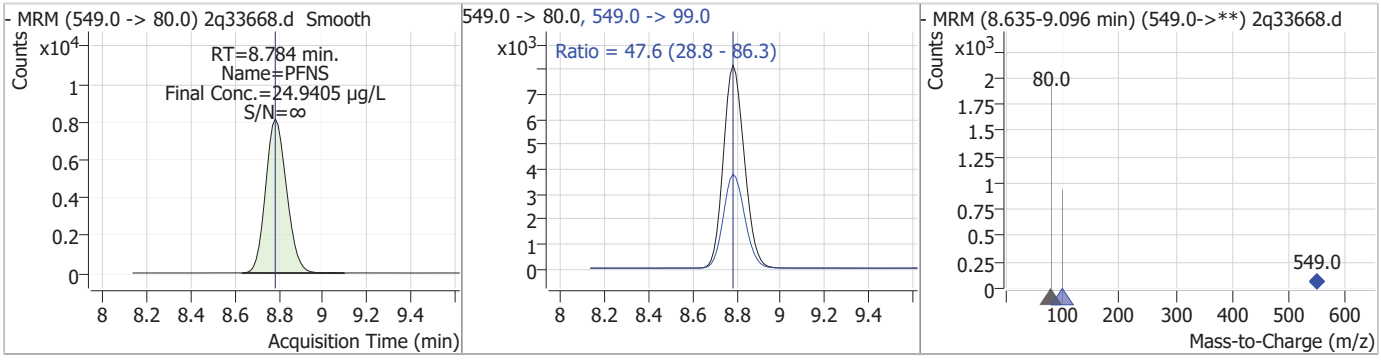
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	27.31	8.61	0.00	502698	563.0 -> 269.0	18.5	10.0	29.9



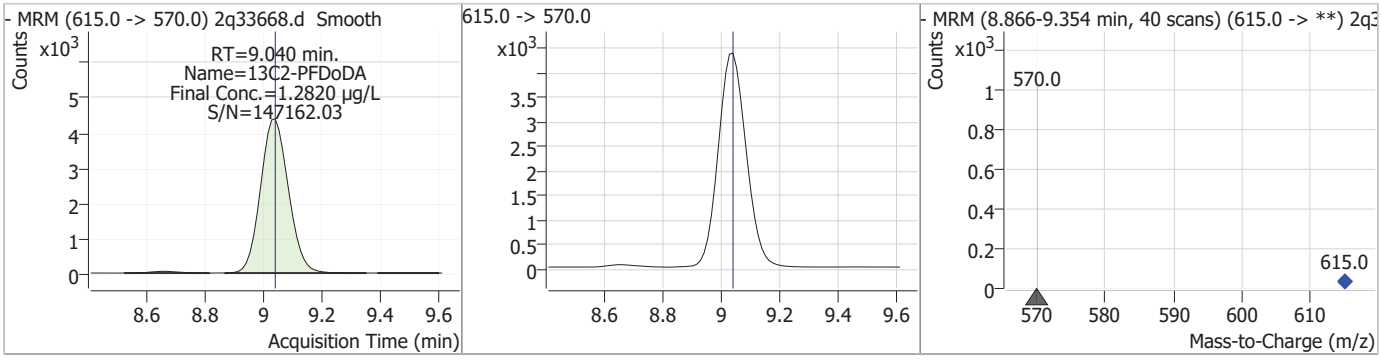
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	98.30	8.66	0.00	1563757	533.0 -> 353.0	29.8	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	24.94	8.78	0.00	53425	549.0 -> 99.0	47.6	28.8	86.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.28	9.04	0.00	29052				



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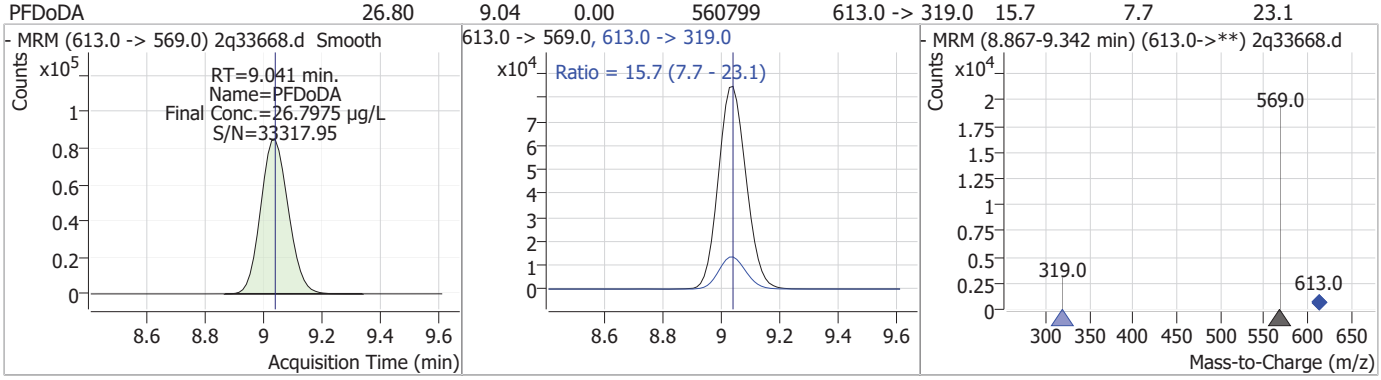
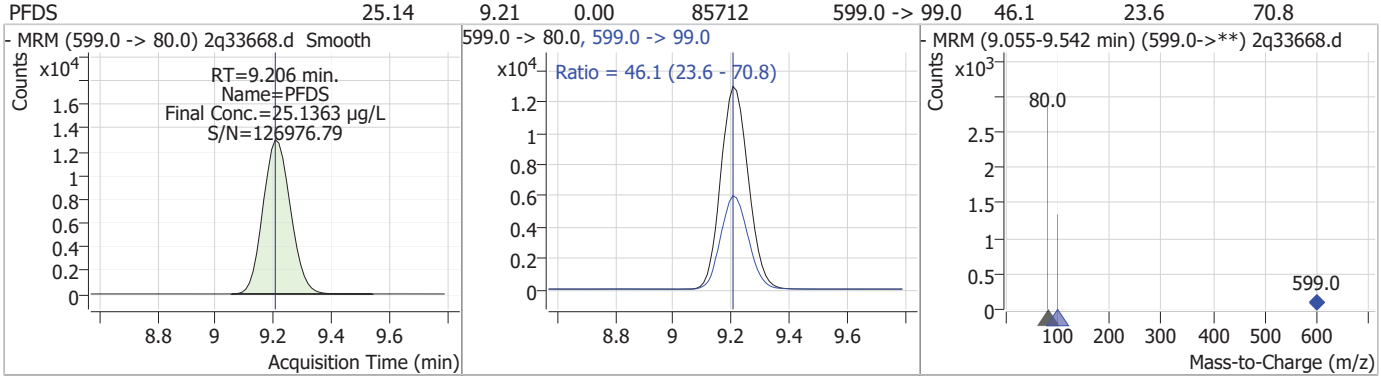
Perfluorinated Compounds by LC/MS/MS

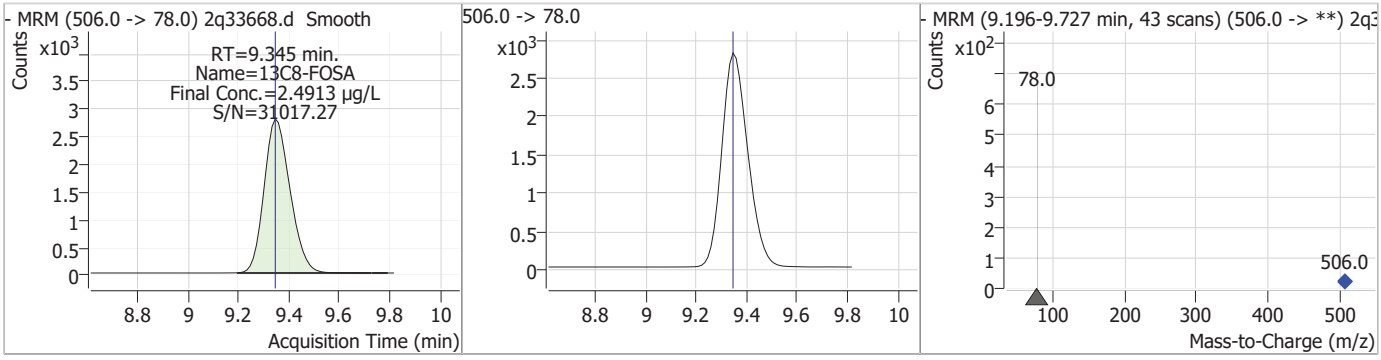
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	26.80	9.04	0.00	560799	613.0 -> 319.0	15.7	7.7	23.1



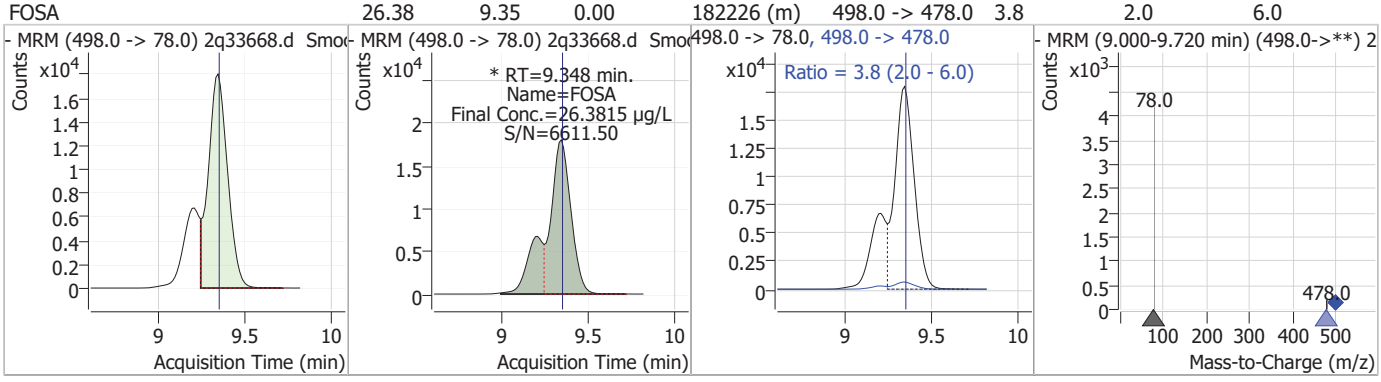
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	25.14	9.21	0.00	85712	599.0 -> 99.0	46.1	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.49	9.35	0.00	19889				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	26.38	9.35	0.00	182226 (m)	498.0 -> 478.0	3.8	2.0	6.0



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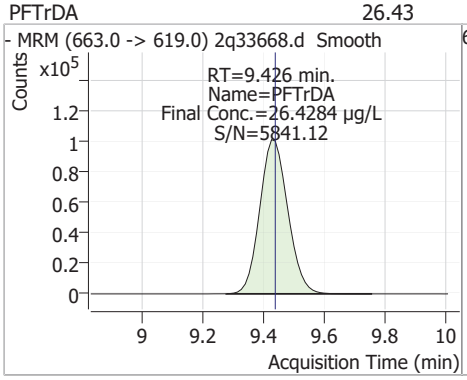
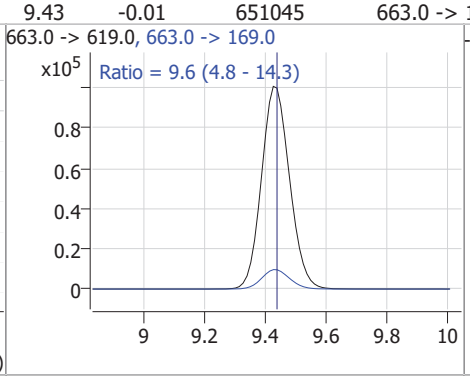
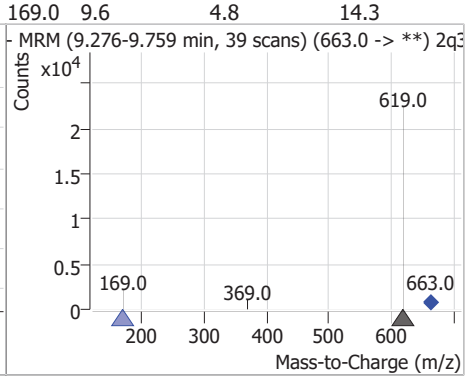
Perfluorinated Compounds by LC/MS/MS

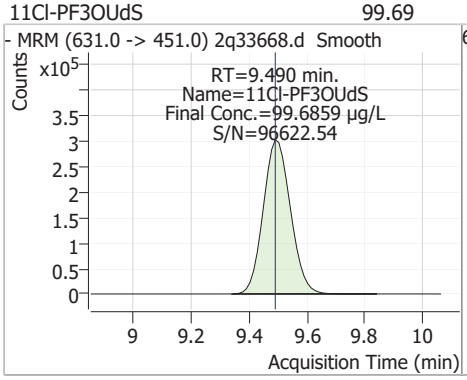
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	26.43	9.43	-0.01	651045	663.0 -> 169.0	9.6	4.8	14.3

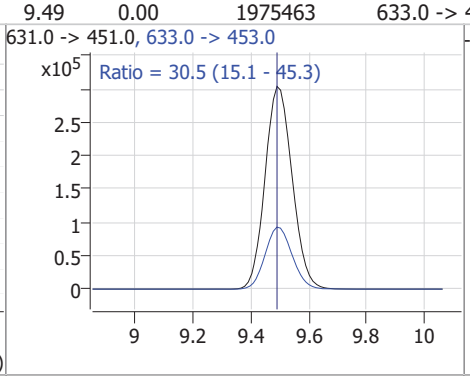


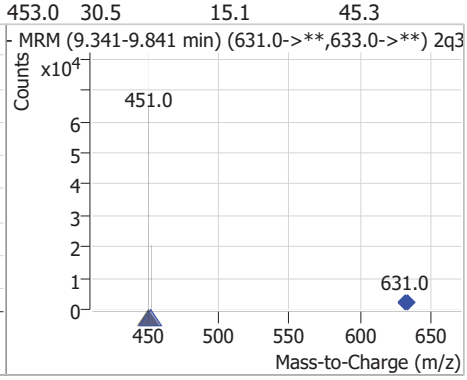




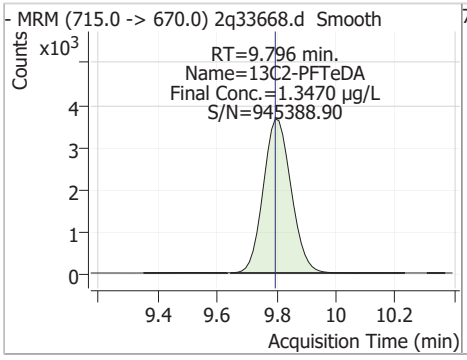
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	99.69	9.49	0.00	1975463	633.0 -> 453.0	30.5	15.1	45.3

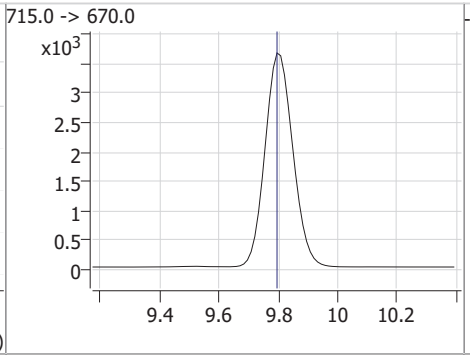


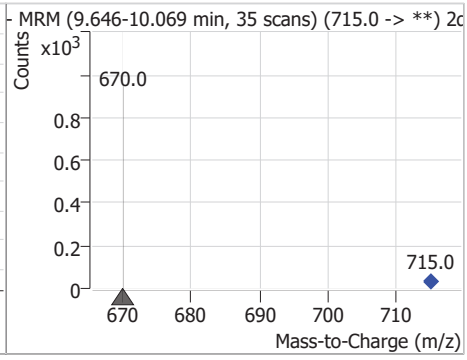




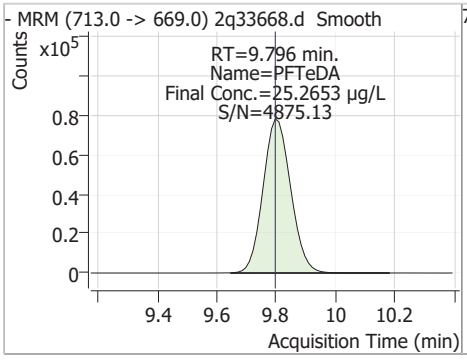
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.35	9.80	0.00	23695				

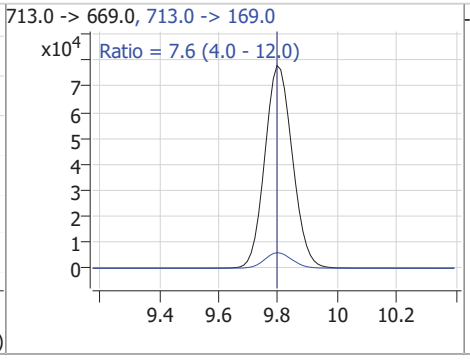


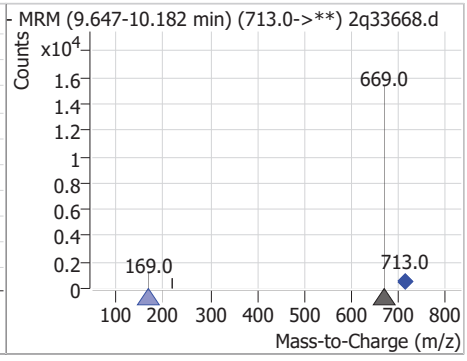




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	25.27	9.80	0.00	504146	713.0 -> 169.0	7.6	4.0	12.0







7.6.23

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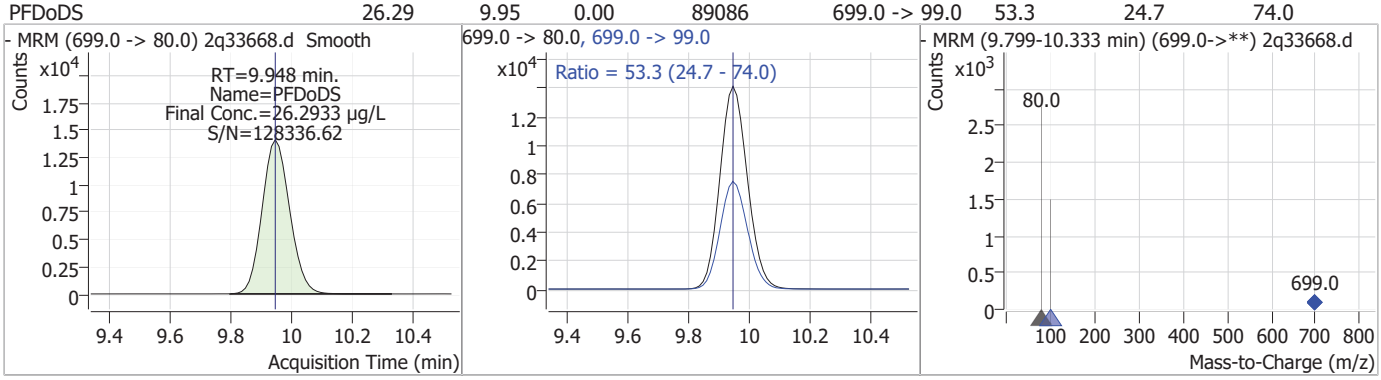
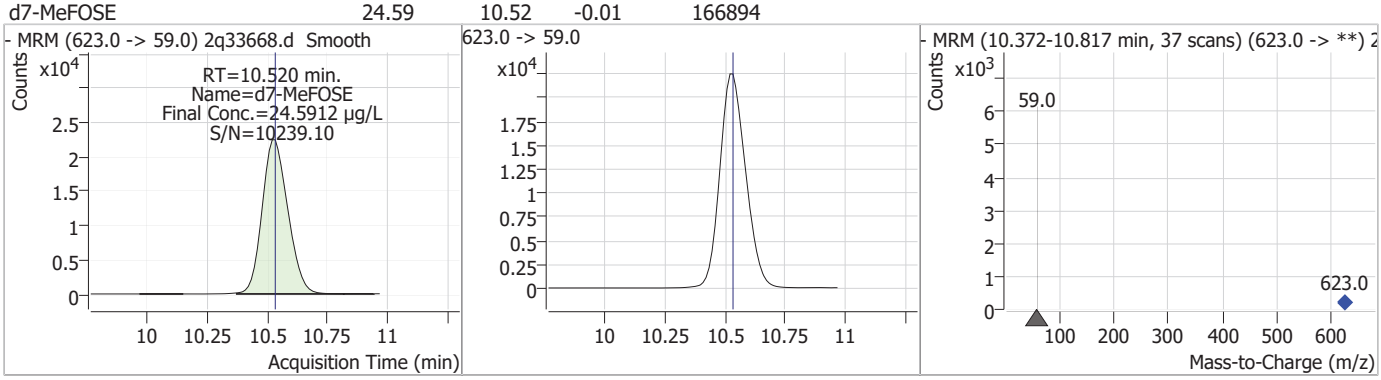
Perfluorinated Compounds by LC/MS/MS

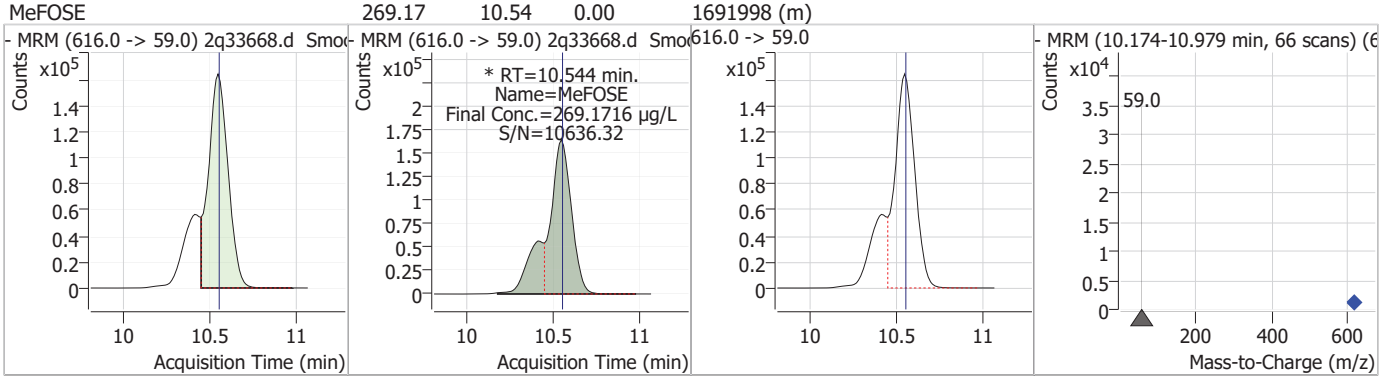
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	26.29	9.95	0.00	89086	699.0 -> 99.0	53.3	24.7	74.0



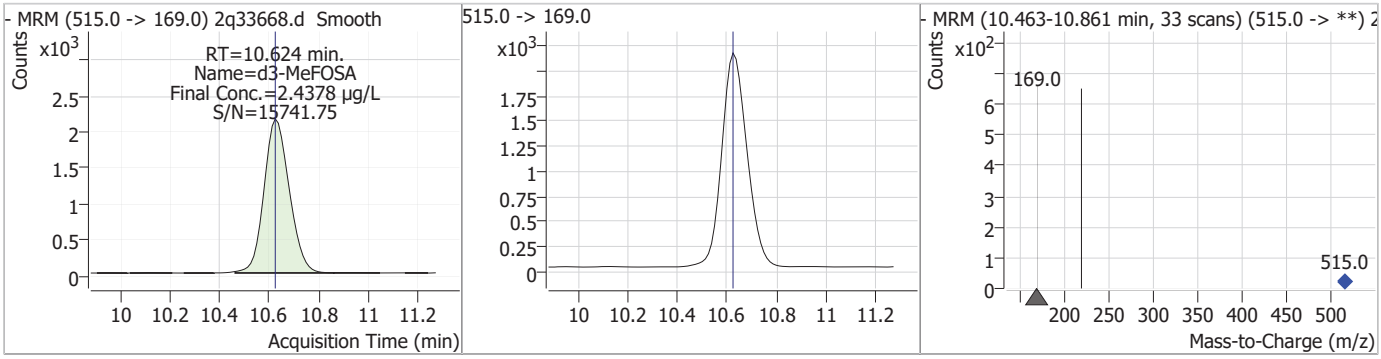
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.59	10.52	-0.01	166894				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	269.17	10.54	0.00	1691998 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.44	10.62	0.00	15139				



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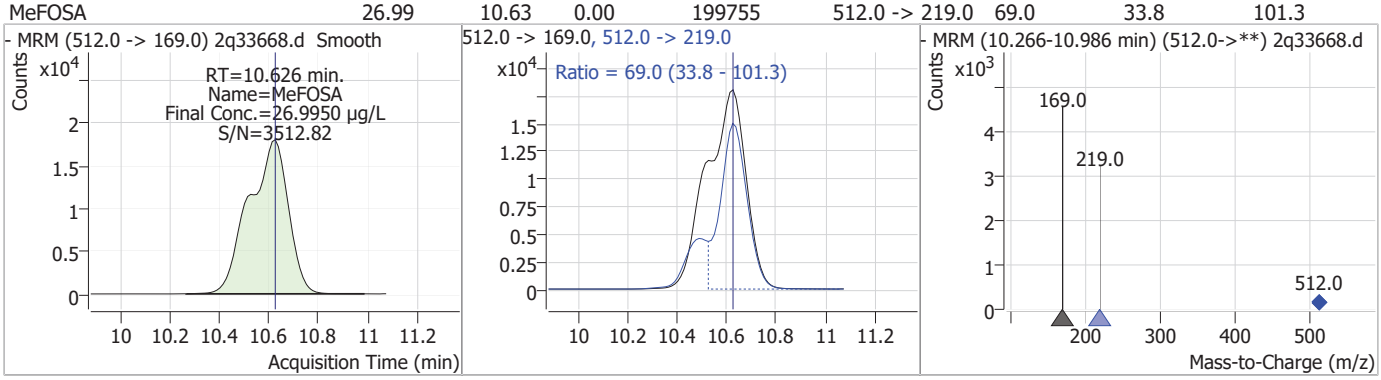
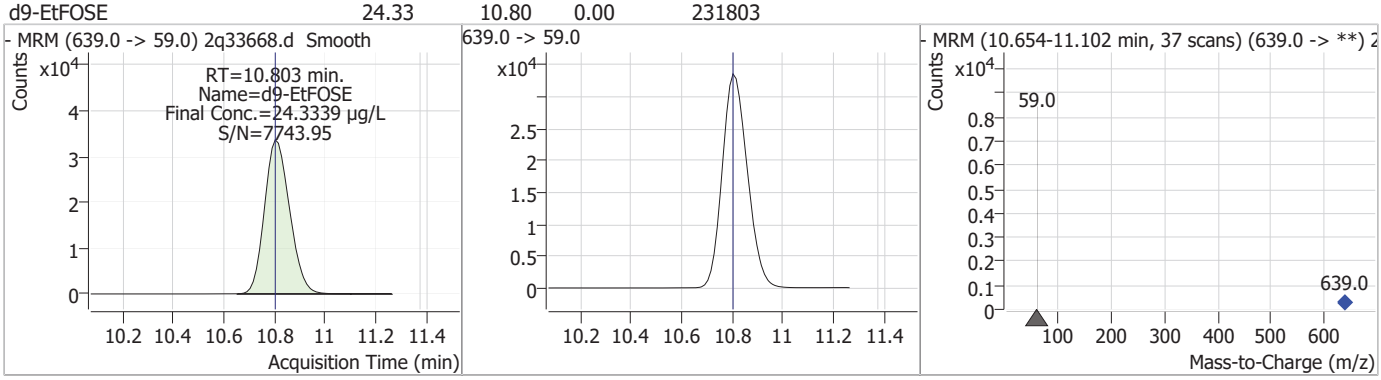
7

Perfluorinated Compounds by LC/MS/MS

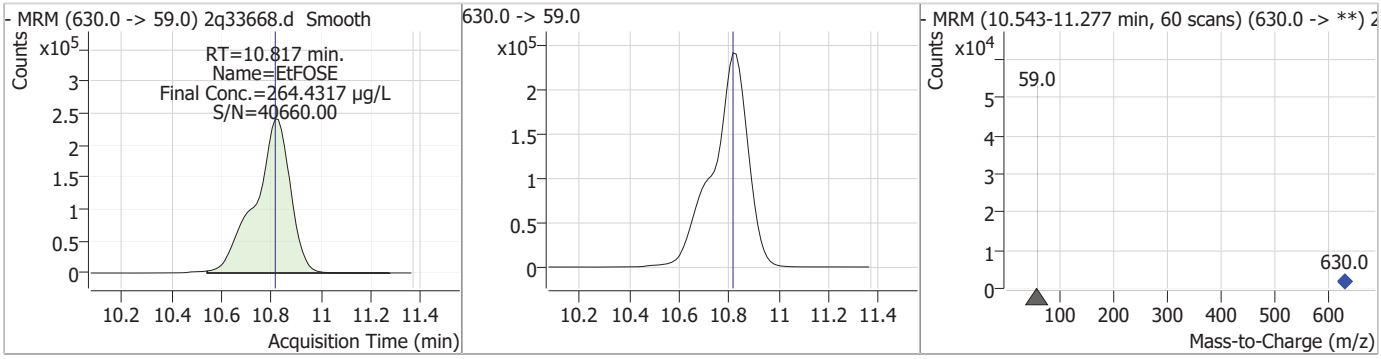
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	26.99	10.63	0.00	199755	512.0 -> 219.0	69.0	33.8	101.3



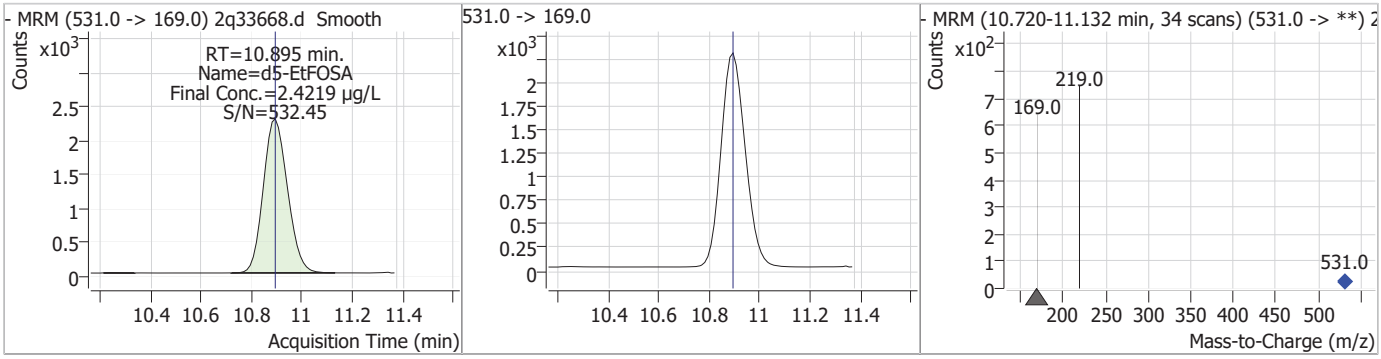
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.33	10.80	0.00	231803				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	264.43	10.82	0.00	2377733				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.42	10.89	0.00	15165				



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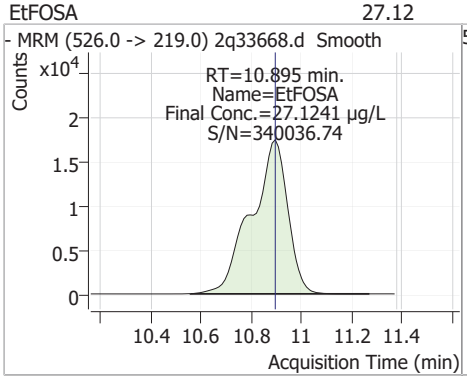
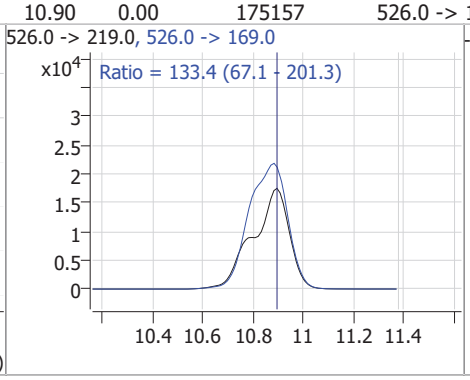
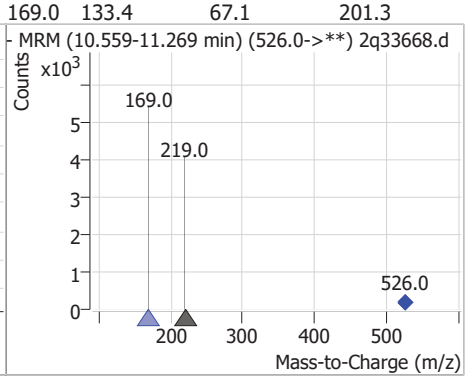
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	27.12	10.90	0.00	175157	526.0 -> 169.0	133.4	67.1	201.3







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7

Manual Integration Approval Summary

Sample Number: T2Q344-IC344
Lab FileID: 2Q33668.D
Injection Time: 05/09/25 16:29
Method: EPA 1633
Analyst approved: 05/10/25 01:15 Josephus Gimenez
Supervisor approved: 05/12/25 11:57 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.12	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.25	Split peak
Perfluorononanoic acid	375-95-1		7.64	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.36	Split peak
PFOSA	754-91-6		9.35	Split peak
MeFOSE	24448-09-7		10.54	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/12/25 11:57

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33669.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/9/2025 4:43:00 PM
Sample Name : IC344-8
Vial : P1-A9
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q344.batch.bin
Sample Information : OP62666,T2Q344,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	102465	10.00 µg/L	0.000
M5-PFPeA	4.637	268.0 -> 223.0	58624	5.00 µg/L	0.000
M5-PFHxA	5.745	318.0 -> 273.0	34635	2.50 µg/L	0.000
M4-PFHpA	6.540	367.0 -> 322.0	29039	2.50 µg/L	0.000
M8-PFOA	7.124	421.0 -> 376.0	60762	2.50 µg/L	0.000
M9-PFNA	7.644	472.0 -> 427.0	25028	1.25 µg/L	0.000
M6-PFDA	8.127	519.0 -> 474.0	15379	1.25 µg/L	-0.013
M7-PFUnDA	8.596	570.0 -> 525.0	24051	1.25 µg/L	-0.012
M2-PFDoDA	9.028	615.0 -> 570.0	27852	1.25 µg/L	-0.012
M2-PFTeDA	9.796	715.0 -> 670.0	21972	1.25 µg/L	0.000
M8-FOSA	9.345	506.0 -> 78.0	19625	2.50 µg/L	0.000
M3-PFBS	5.699	302.0 -> 99.0	5064	2.50 µg/L	0.000
M3-PFHxS	7.250	402.0 -> 99.0	6802	2.50 µg/L	0.000
M8-PFOS	8.315	507.0 -> 99.0	5935	2.50 µg/L	0.000
M2-4:2FTS	5.433	329.0 -> 81.0	1137	5.00 µg/L	0.000
M2-6:2FTS	6.897	429.0 -> 81.0	2485	5.00 µg/L	-0.012
M2-8:2FTS	7.914	529.0 -> 81.0	5002	5.00 µg/L	0.000
M3-MeFOSAA	8.160	573.0 -> 419.0	36677	5.00 µg/L	0.000
M3-HFPO-DA	6.074	287.0 -> 169.0	22080	10.00 µg/L	0.000
M5-EtFOSAA	8.356	589.0 -> 419.0	29992	5.00 µg/L	0.000
M7-MeFOSE	10.520	623.0 -> 59.0	151721	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	196453	25.00 µg/L	0.000
M5-EtFOSA	10.895	531.0 -> 169.0	14812	2.50 µg/L	0.000
M3-MeFOSA	10.624	515.0 -> 169.0	15875	2.50 µg/L	0.000
13C4-PFOS	8.316	503.0 -> 80.0	10923	2.50 µg/L	0.000
13C3-PFBA	3.253	216.0 -> 172.0	44409	5.00 µg/L	-0.012
18O2-PFHxS	7.250	403.0 -> 84.0	7894	2.50 µg/L	-0.012
13C4-PFOA	7.124	417.0 -> 372.0	60782	2.50 µg/L	0.000
13C2-PFDA	8.127	515.0 -> 470.0	16496	1.25 µg/L	-0.013
13C5-PFNA	7.645	468.0 -> 423.0	22930	1.25 µg/L	0.000
13C2-PFHxA	5.746	315.0 -> 270.0	33153	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.433	329.0 -> 81.0	1137	3.98 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 79.6%	
13C2-6:2FTS	6.897	429.0 -> 81.0	2485	4.02 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 80.5%	
13C2-8:2FTS	7.914	529.0 -> 81.0	5002	5.02 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.4%	
13C2-PFDoDA	9.028	615.0 -> 570.0	27852	1.24 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.9%	
13C2-PFTeDA	9.796	715.0 -> 670.0	21972	1.26 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.5%	
13C3-PFBS	5.699	302.0 -> 99.0	5064	2.28 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.1%	
13C3-PFHxS	7.250	402.0 -> 99.0	6802	2.53 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.1%		
13C4-PFBA	3.263	217.0 -> 172.0	102465	9.81 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.1%		
13C4-PFHpA	6.540	367.0 -> 322.0	29039	2.51 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.5%		
13C5-PFHxA	5.745	318.0 -> 273.0	34635	2.38 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.4%		
13C5-PFPeA	4.637	268.0 -> 223.0	58624	4.74 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.7%		
13C6-PFDA	8.127	519.0 -> 474.0	15379	1.12 µg/L		-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.6%		
13C7-PFUnDA	8.596	570.0 -> 525.0	24051	1.12 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.3%		
13C8-FOSA	9.345	506.0 -> 78.0	19625	2.60 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.9%		
13C8-PFOA	7.124	421.0 -> 376.0	60762	2.44 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.7%		
13C8-PFOS	8.315	507.0 -> 99.0	5935	2.49 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.7%		
13C9-PFNA	7.644	472.0 -> 427.0	25028	1.25 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.0%		
d3-MeFOSAA	8.160	573.0 -> 419.0	36677	4.70 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.0%		
13C3-HFPO-DA	6.074	287.0 -> 169.0	22080	9.69 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 96.9%		
d3-MeFOSA	10.624	515.0 -> 169.0	15875	2.70 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 108.1%		
d5-EtFOSAA	8.356	589.0 -> 419.0	29992	4.77 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.3%		
d7-MeFOSE	10.520	623.0 -> 59.0	151721	23.62 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 94.5%		
d9-EtFOSE	10.803	639.0 -> 59.0	196453	21.79 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 87.2%		
d5-EtFOSA	10.895	531.0 -> 169.0	14812	2.50 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.0%		
Target Compounds						QValue
4:2FTS	5.433	327.0 -> 307.0	434006	263.97 µg/L		100
		327.0 -> 81.0	228959			
6:2FTS	6.898	427.0 -> 407.0	760989	258.09 µg/L		98
		427.0 -> 81.0	282945			
8:2FTS	7.915	527.0 -> 507.0	850185	233.97 µg/L		93
		527.0 -> 81.0	323617			
EtFOSAA	8.357	584.0 -> 419.0	347440	72.87 µg/L	m	99
		584.0 -> 483.0	168957			
FOSA	9.348	498.0 -> 78.0	483800	70.98 µg/L	m	99
		498.0 -> 478.0	17590			
MeFOSAA	8.161	570.0 -> 419.0	391589	71.20 µg/L	m	97
		570.0 -> 512.0	119089			
PFBA	3.255	213.0 -> 169.0	772609	285.63 µg/L		100
PFBS	5.700	299.0 -> 80.0	401743	62.93 µg/L		97
		299.0 -> 99.0	152438			
PFDA	8.141	513.0 -> 469.0	923243	77.75 µg/L		99
		513.0 -> 219.0	156843			
PFDoDA	9.029	613.0 -> 569.0	1402903	69.93 µg/L		98
		613.0 -> 319.0	228076			
PFDS	9.206	599.0 -> 80.0	217023	71.76 µg/L		98

Perfluorinated Compounds by LC/MS/MS

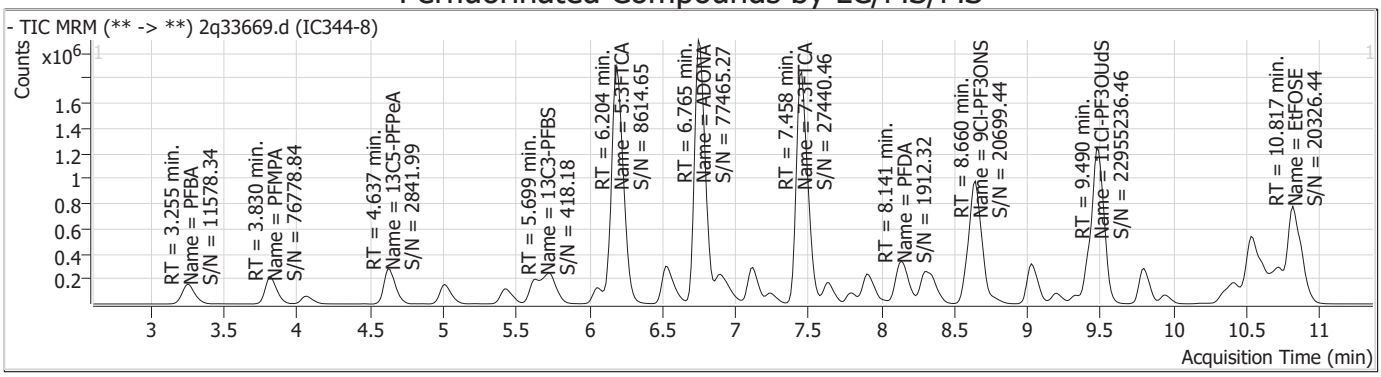
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	98901				
PFHpA	6.541	363.0 -> 319.0	1255530	67.68	µg/L		100
		363.0 -> 169.0	227416				
PFHpS	7.809	449.0 -> 80.0	303478	63.51	µg/L		94
		449.0 -> 99.0	141785				
PFHxA	5.748	313.0 -> 269.0	846845	72.19	µg/L		99
		313.0 -> 119.0	24800				
PFHxS	7.252	399.0 -> 80.0	304822	58.79	µg/L	m	93
		399.0 -> 99.0	150726				
PFNA	7.645	463.0 -> 419.0	808326	71.20	µg/L	m	94
		463.0 -> 219.0	201664				
PFNS	8.784	549.0 -> 80.0	129965	64.25	µg/L		90
		549.0 -> 99.0	64899				
PFOA	7.125	413.0 -> 369.0	1381611	74.68	µg/L	m	99
		413.0 -> 169.0	302068				
PFOS	8.317	499.0 -> 80.0	349322	63.04	µg/L	m	96
		499.0 -> 99.0	154755				
PFPeA	4.640	263.0 -> 219.0	1502446	144.92	µg/L		100
PFPeS	6.617	349.0 -> 80.0	160589	69.73	µg/L		99
		349.0 -> 99.0	67425				
PFTeDA	9.796	713.0 -> 669.0	1257032	67.94	µg/L		99
		713.0 -> 169.0	95993				
PFTrDA	9.426	663.0 -> 619.0	1561504	66.12	µg/L		100
		663.0 -> 169.0	150185				
PFUnDA	8.597	563.0 -> 519.0	1210477	74.15	µg/L		97
		563.0 -> 269.0	224492				
11Cl-PF3OUdS	9.490	631.0 -> 451.0	4610545	237.76	µg/L		100
		633.0 -> 453.0	1403581				
9Cl-PF3ONS	8.660	531.0 -> 351.0	3584750	230.28	µg/L		97
		533.0 -> 353.0	1077481				
ADONA	6.765	377.0 -> 251.0	8327665	252.33	µg/L		100
		377.0 -> 85.0	2597212				
HFPO-DA	6.075	285.0 -> 169.0	596151	276.54	µg/L		97
		285.0 -> 185.0	56884				
3:3FTCA	4.065	241.0 -> 177.0	317155	373.96	µg/L		99
		241.0 -> 117.0	20037				
5:3FTCA	6.204	341.0 -> 237.0	5066427	1716.01	µg/L		100
		341.0 -> 217.0	3598820				
7:3FTCA	7.458	441.0 -> 337.0	7099180	1847.87	µg/L		99
		441.0 -> 317.0	2933081				
EtFOSA	10.895	526.0 -> 219.0	449976	71.34	µg/L		98
		526.0 -> 169.0	592204				
EtFOSE	10.817	630.0 -> 59.0	5589330	733.45	µg/L		100
MeFOSA	10.626	512.0 -> 169.0	518116	66.77	µg/L		97
		512.0 -> 219.0	363993				
MeFOSE	10.544	616.0 -> 59.0	4127532	722.29	µg/L	m	100
PFDoDS	9.948	699.0 -> 80.0	221988	69.38	µg/L		94
		699.0 -> 99.0	118260				
NFDHA	5.639	295.0 -> 201.0	135797	140.19	µg/L		90
		201.0 -> 85.0	844362				
		295.0 -> 85.0	43139				
PFMBA	5.015	279.0 -> 85.0	870849	143.04	µg/L		100
PFMPA	3.830	229.0 -> 85.0	1254290	143.61	µg/L		100
PFEESA	6.168	315.0 -> 135.0	1764765	122.08	µg/L		100
		315.0 -> 69.0	187677				

 # = Qualifier out of range, m = manually integrated, + = Area summed

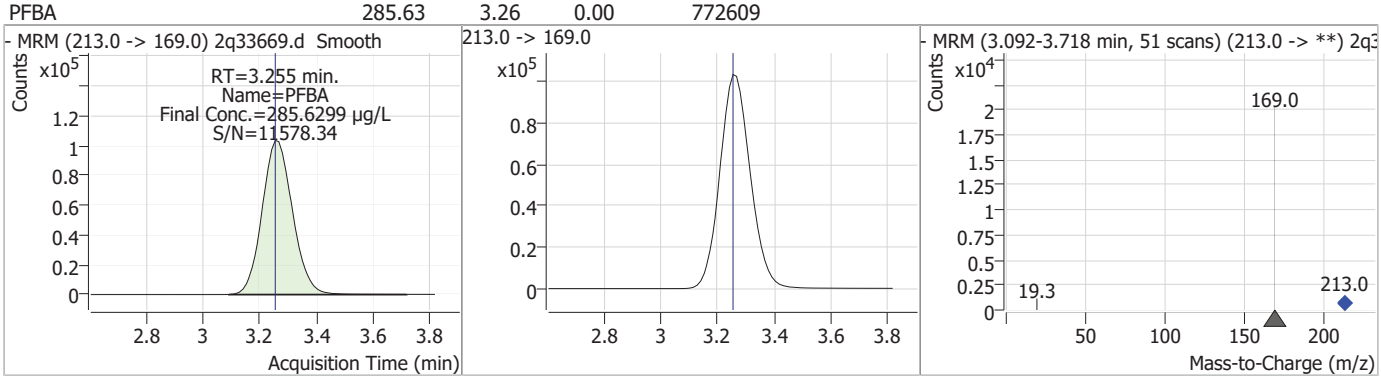
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

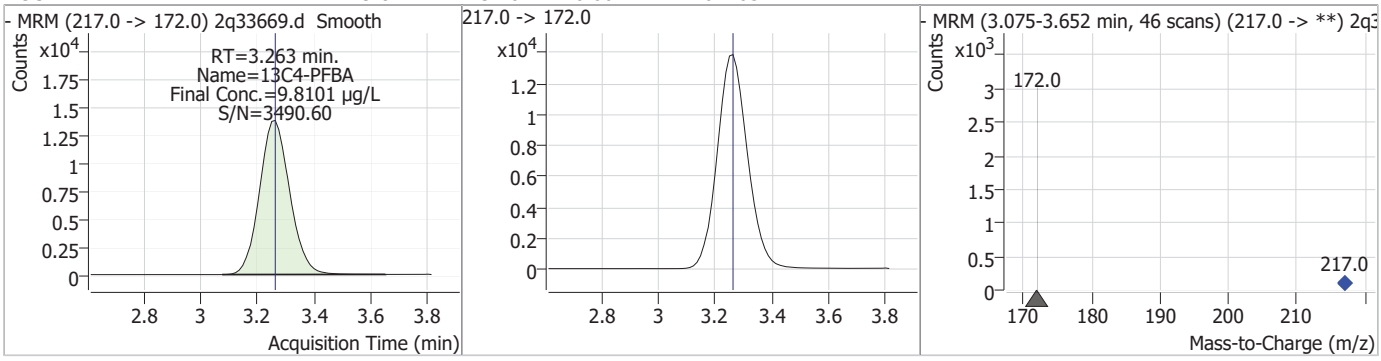
Perfluorinated Compounds by LC/MS/MS



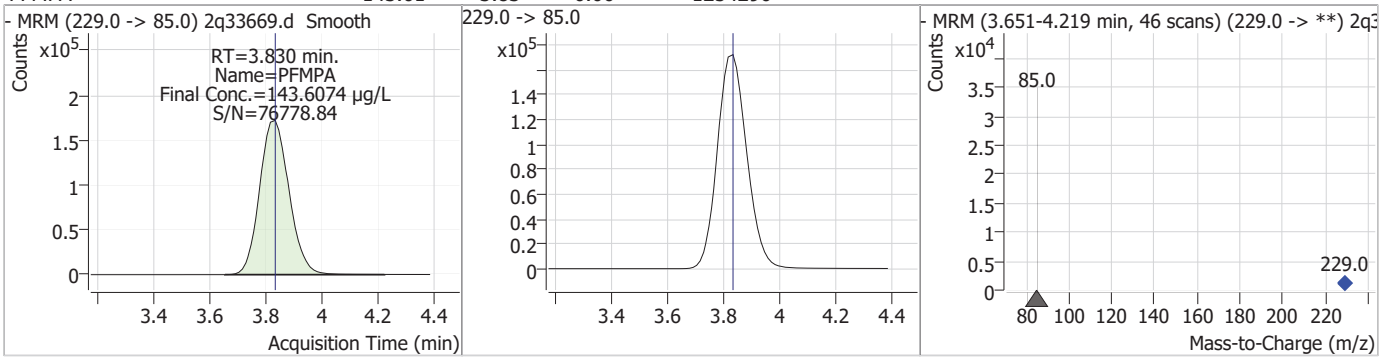
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	285.63	3.26	0.00	772609				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.81	3.26	0.00	102465				

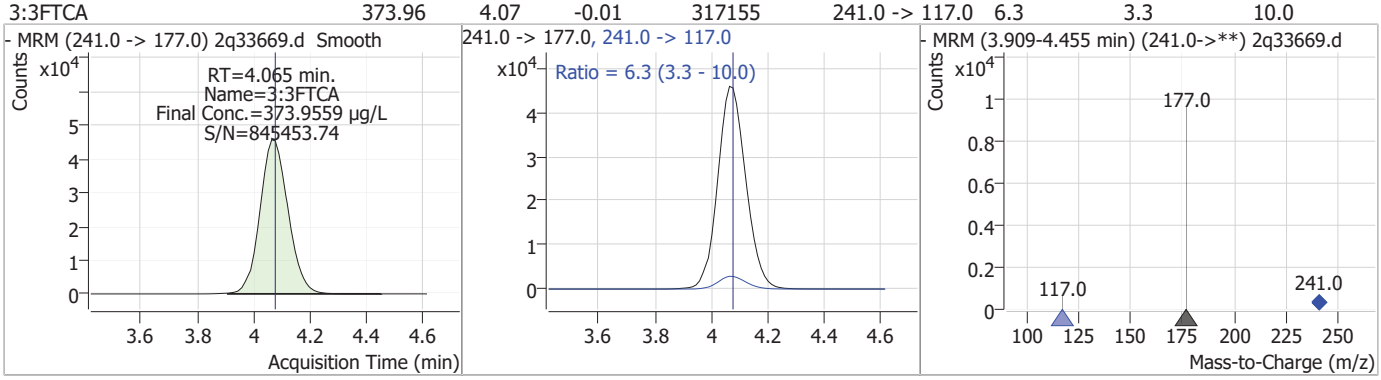


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	143.61	3.83	0.00	1254290				

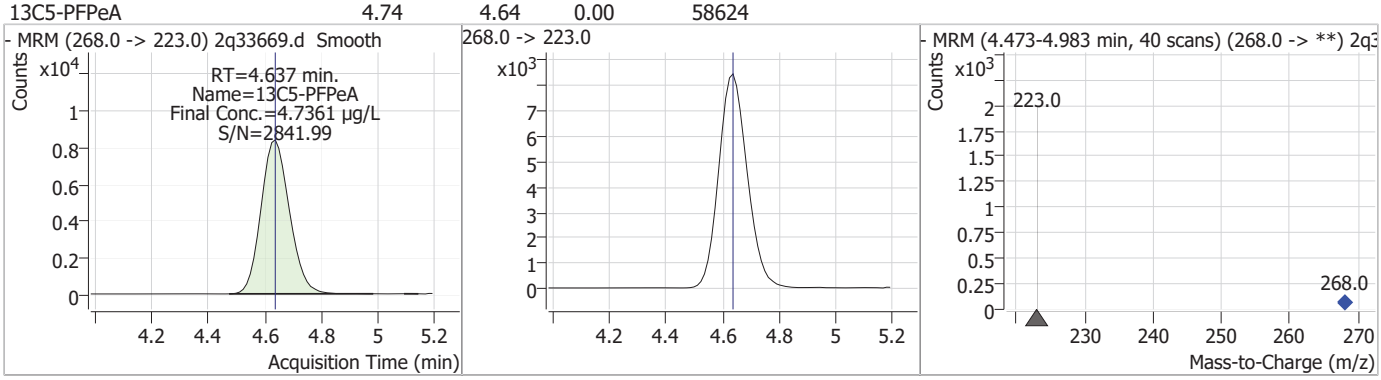


Perfluorinated Compounds by LC/MS/MS

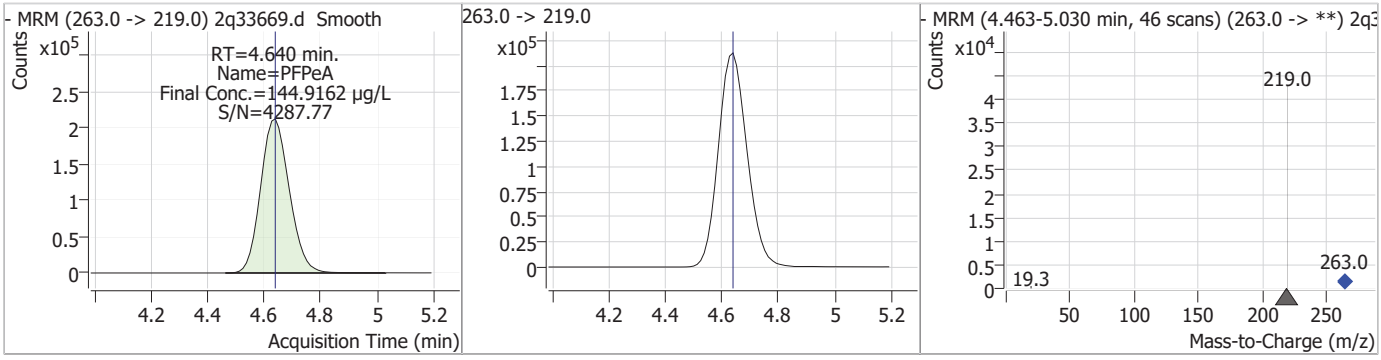
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	373.96	4.07	-0.01	317155	241.0 -> 117.0	6.3	3.3	10.0



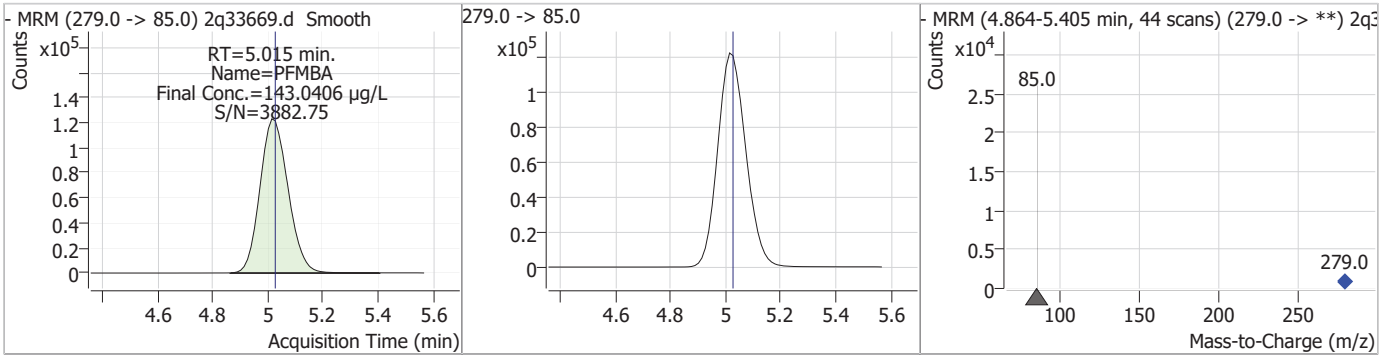
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.74	4.64	0.00	58624				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	144.92	4.64	0.00	1502446				

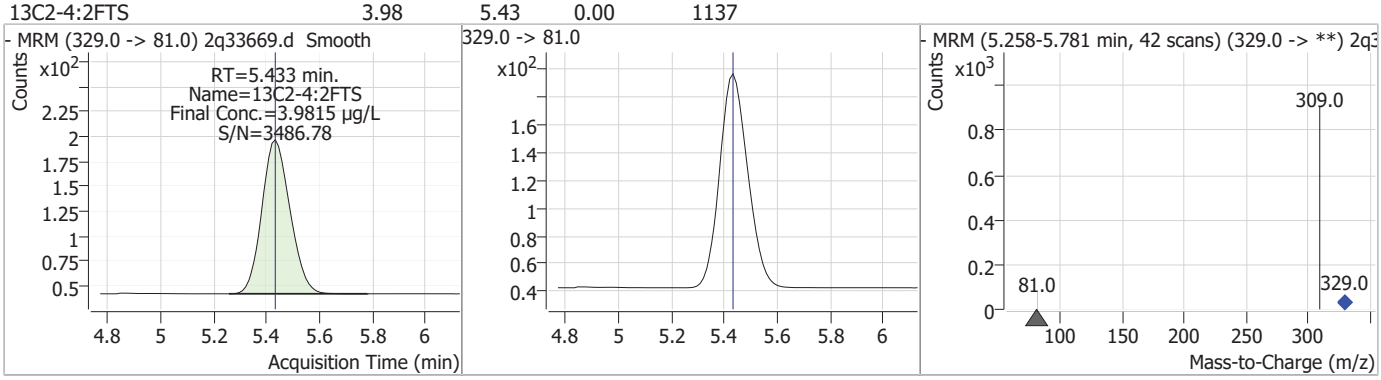


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	143.04	5.01	-0.01	870849				

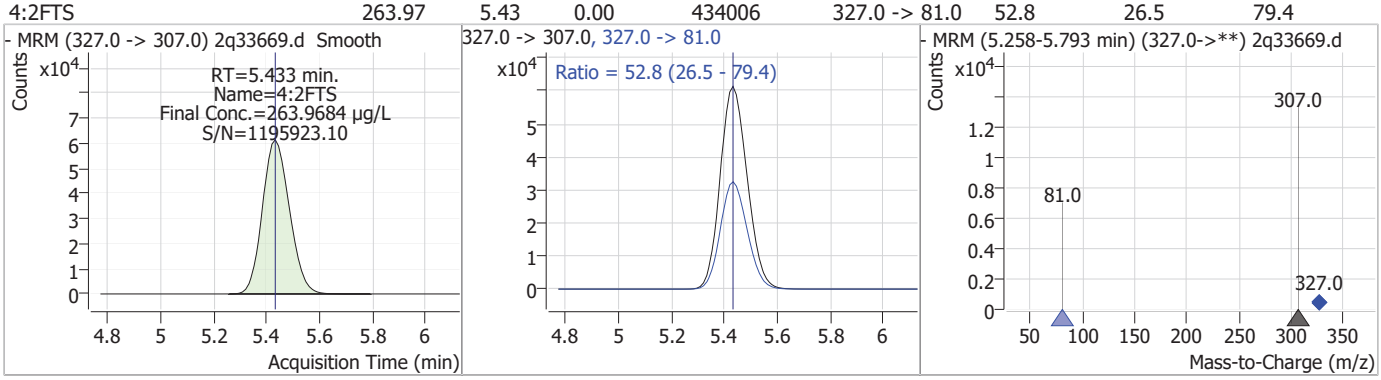


Perfluorinated Compounds by LC/MS/MS

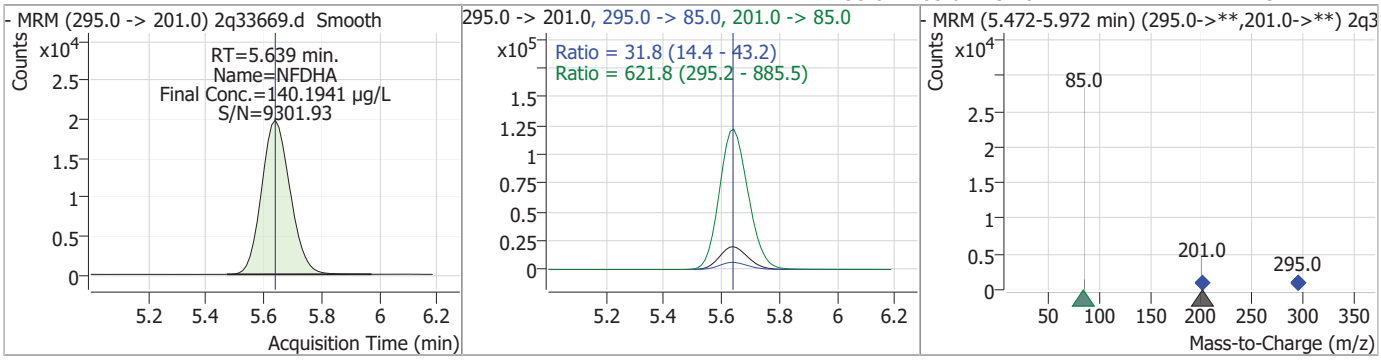
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	3.98	5.43	0.00	1137				



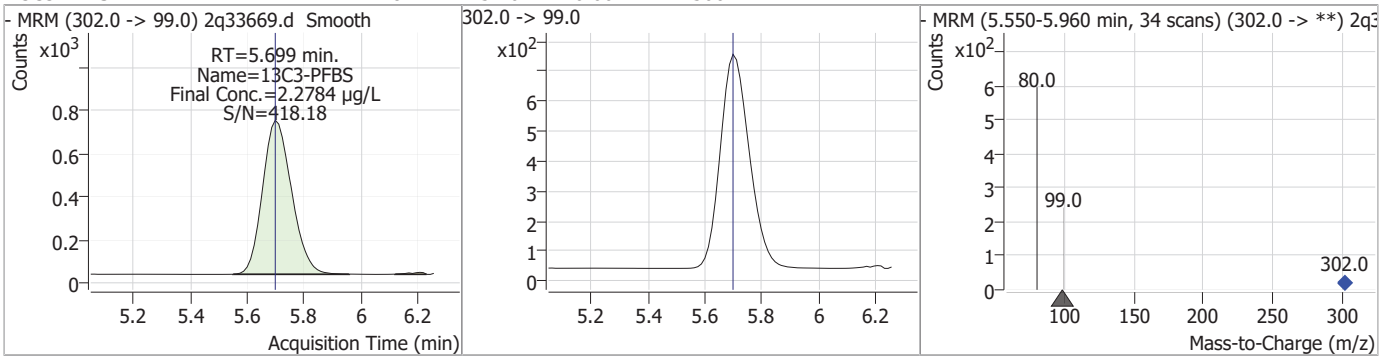
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	263.97	5.43	0.00	434006	327.0 -> 81.0	52.8	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	140.19	5.64	0.00	135797	201.0 -> 85.0	621.8	295.2	885.5
					295.0 -> 85.0	31.8	14.4	43.2

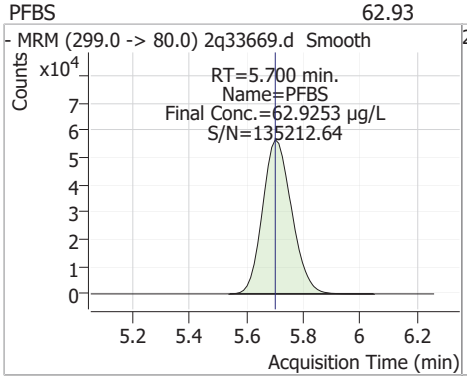


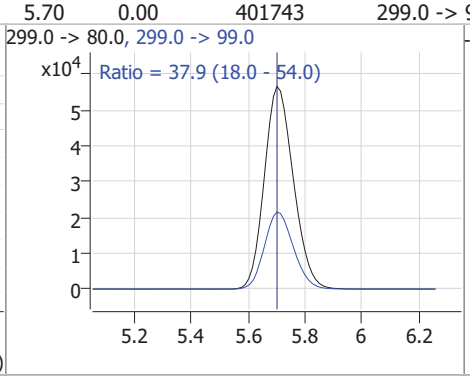
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.28	5.70	0.00	5064				

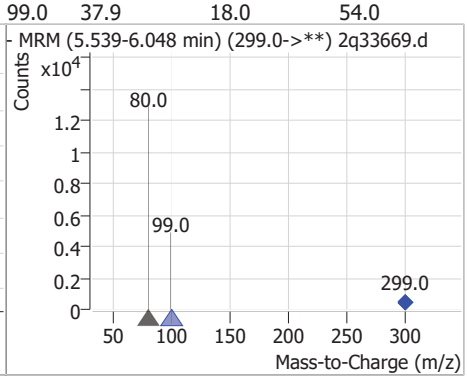


Perfluorinated Compounds by LC/MS/MS

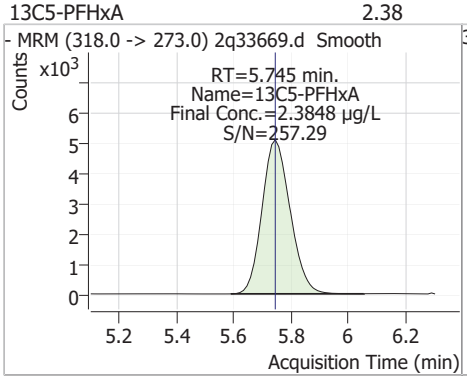
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	62.93	5.70	0.00	401743	299.0 -> 99.0	37.9	18.0	54.0

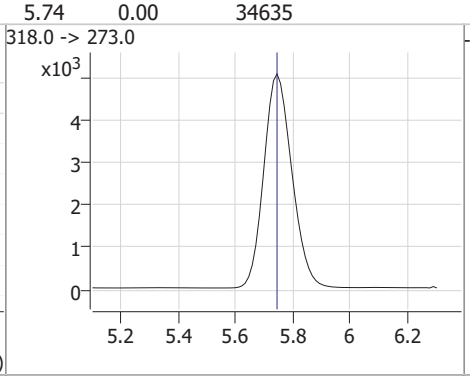


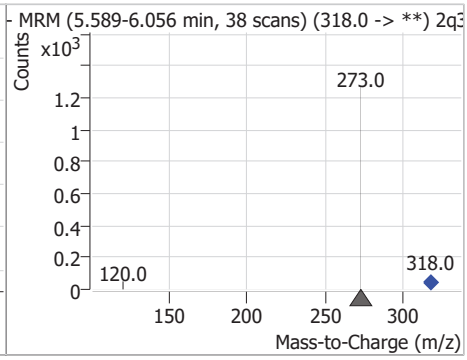




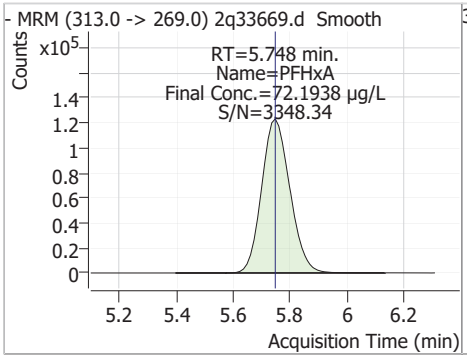
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.38	5.74	0.00	34635				

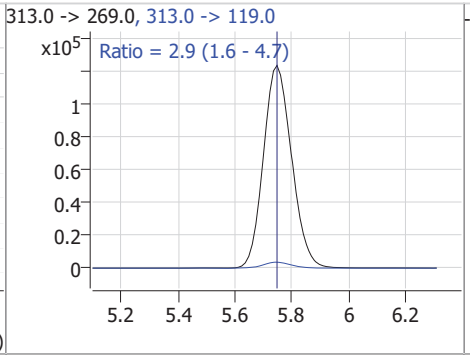


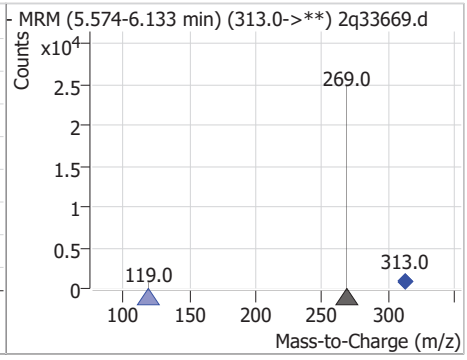




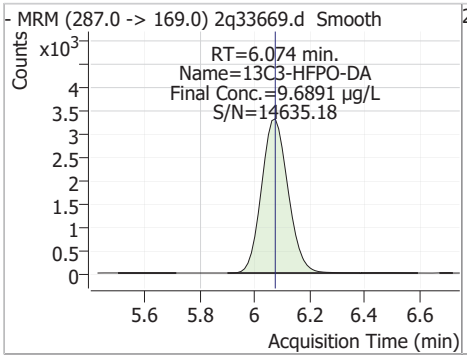
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	72.19	5.75	0.00	846845	313.0 -> 119.0	2.9	1.6	4.7

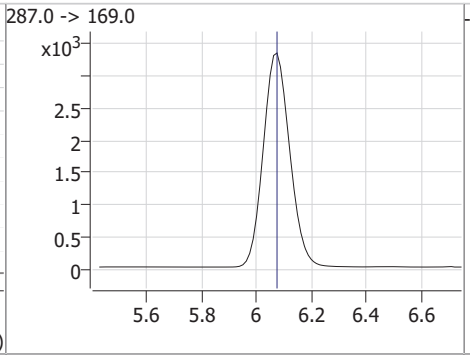


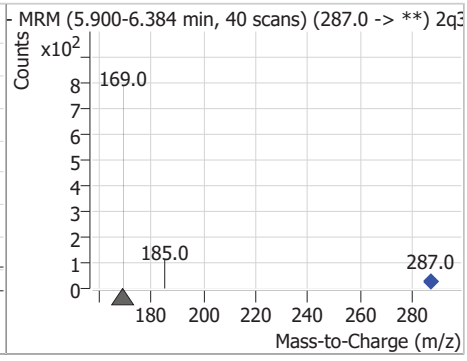




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.69	6.07	0.00	22080				







7.6.24

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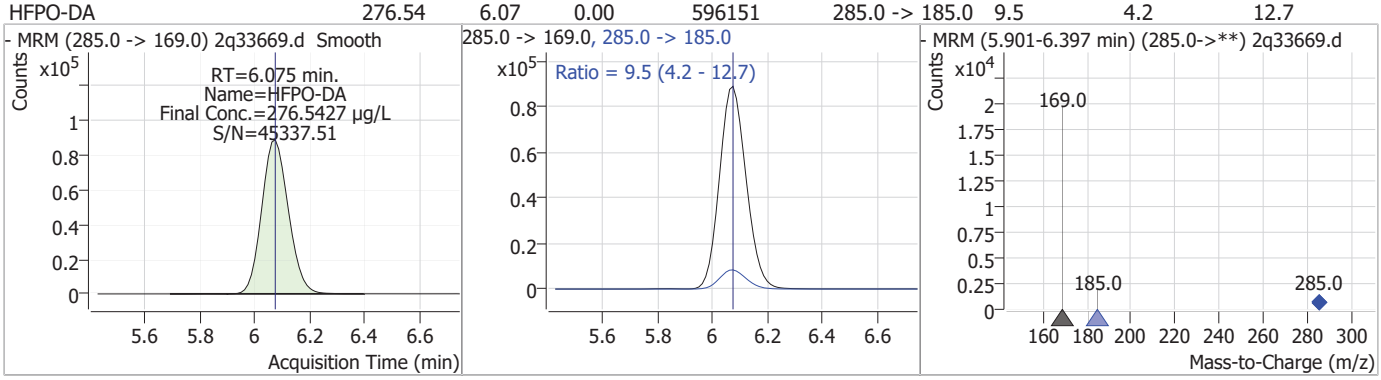
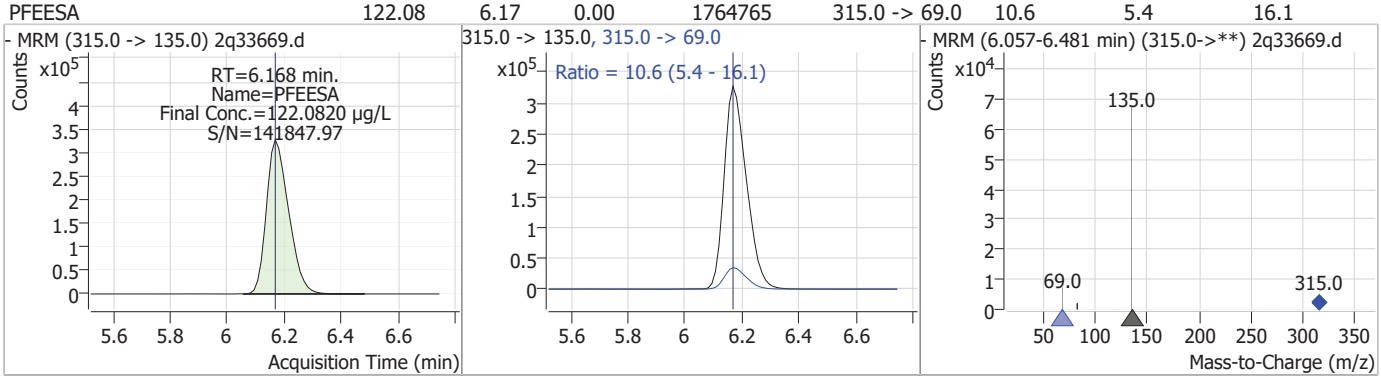
Perfluorinated Compounds by LC/MS/MS

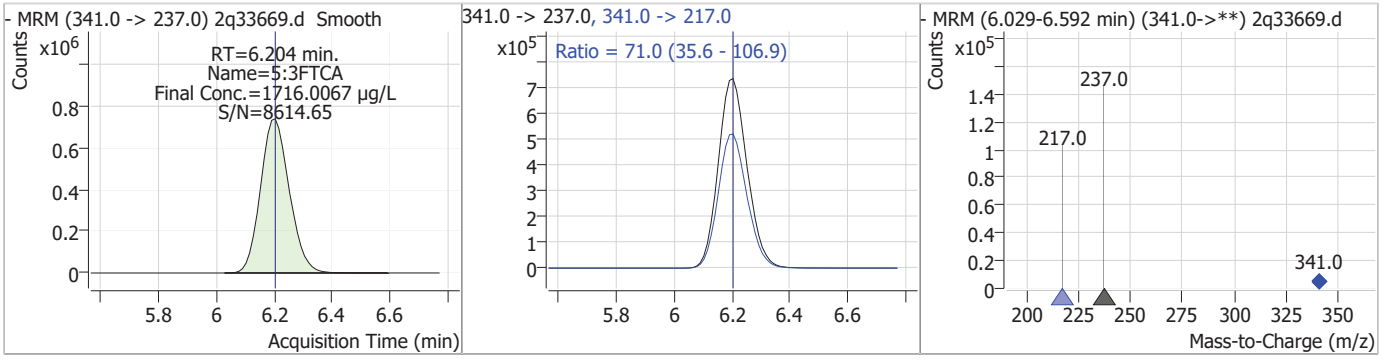
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	276.54	6.07	0.00	596151	285.0 -> 185.0	9.5	4.2	12.7



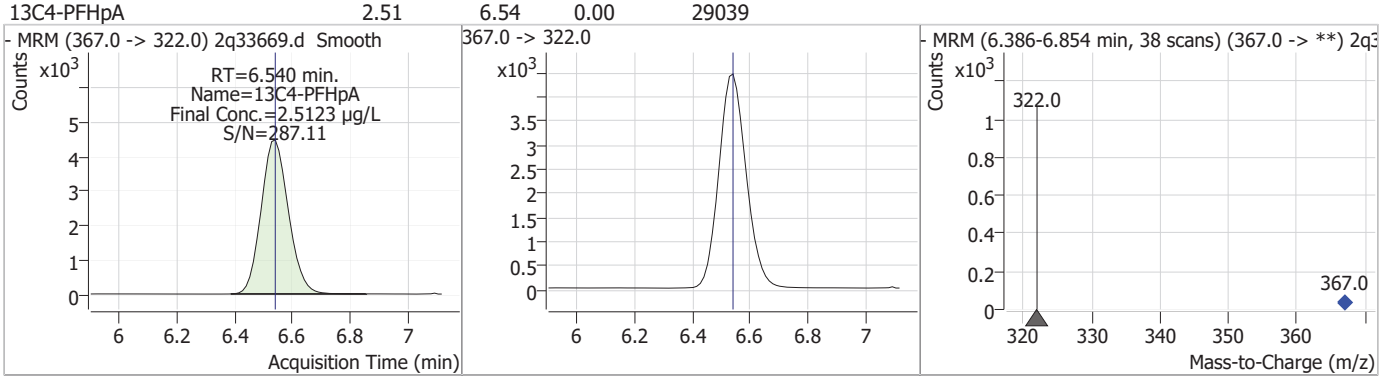
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	122.08	6.17	0.00	1764765	315.0 -> 69.0	10.6	5.4	16.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	1716.01	6.20	0.00	5066427	341.0 -> 217.0	71.0	35.6	106.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.51	6.54	0.00	29039				



7.6.24

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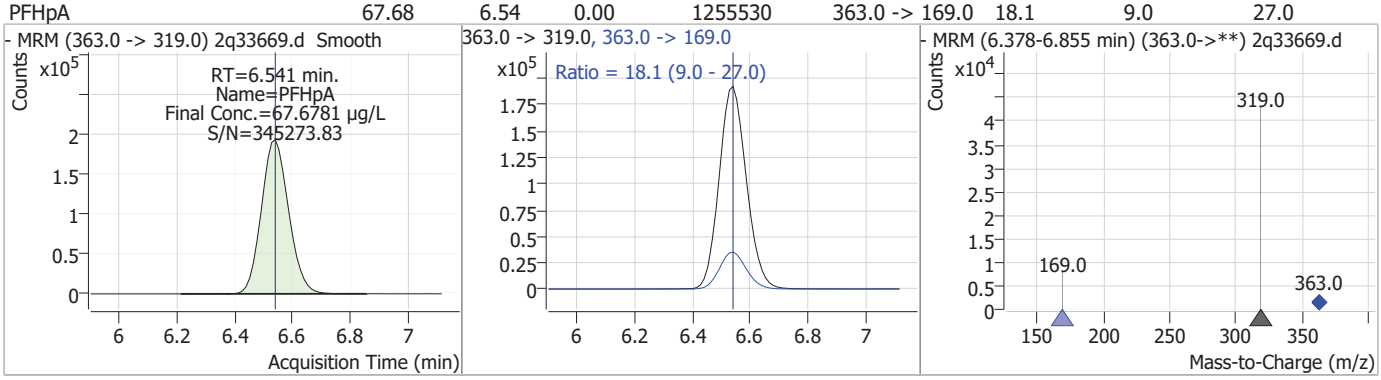
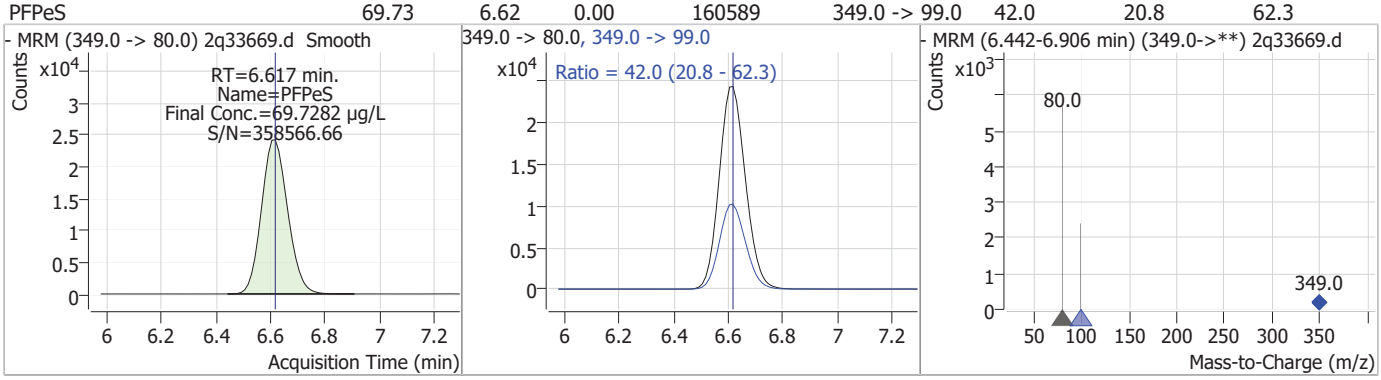
Perfluorinated Compounds by LC/MS/MS

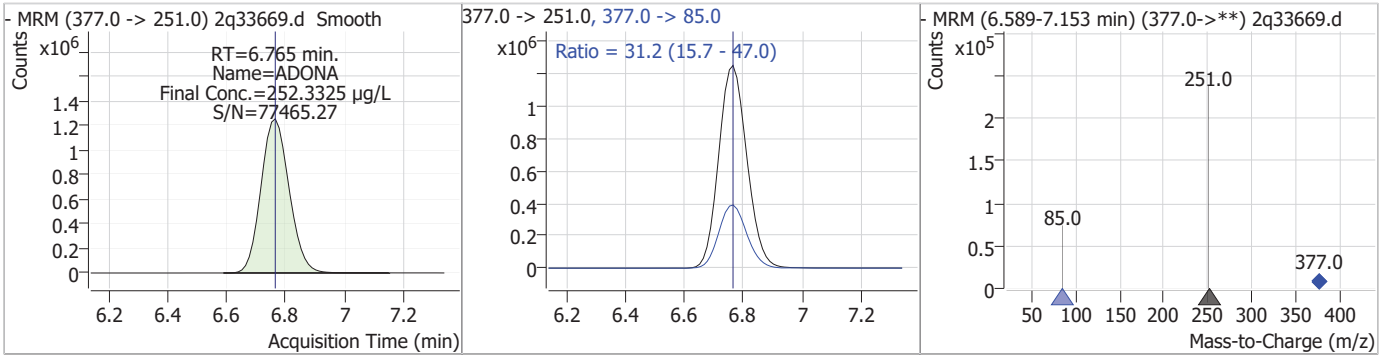
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	67.68	6.54	0.00	1255530	363.0 -> 169.0	18.1	9.0	27.0



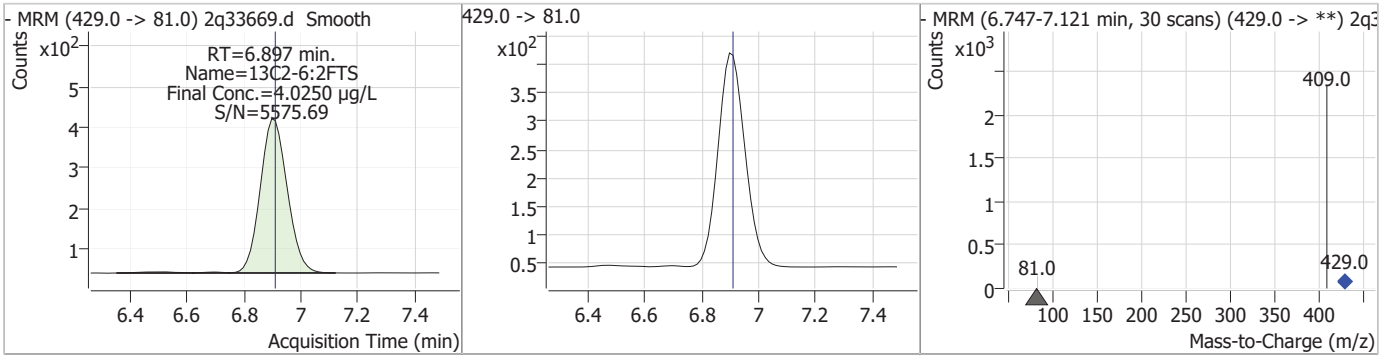
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	69.73	6.62	0.00	160589	349.0 -> 99.0	42.0	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	252.33	6.77	0.00	8327665	377.0 -> 85.0	31.2	15.7	47.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.02	6.90	-0.01	2485				



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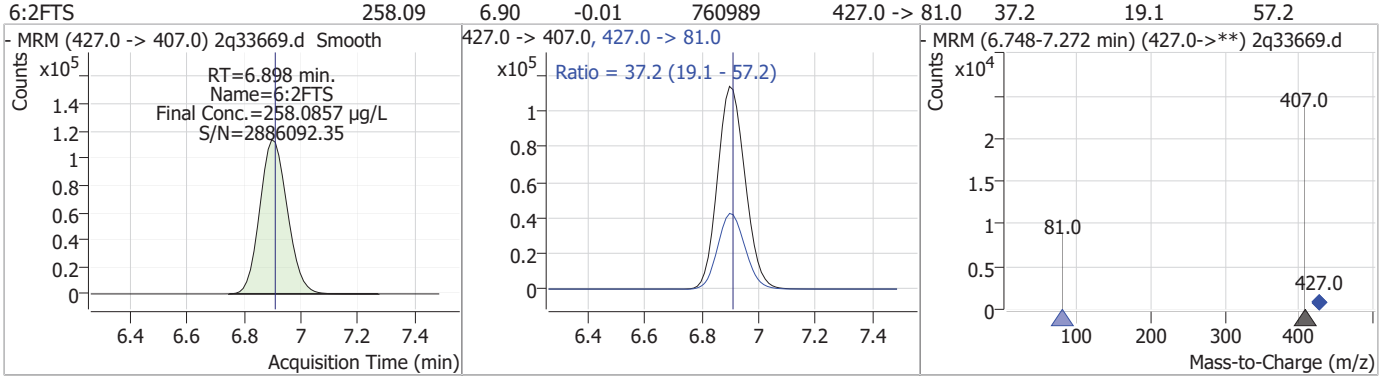
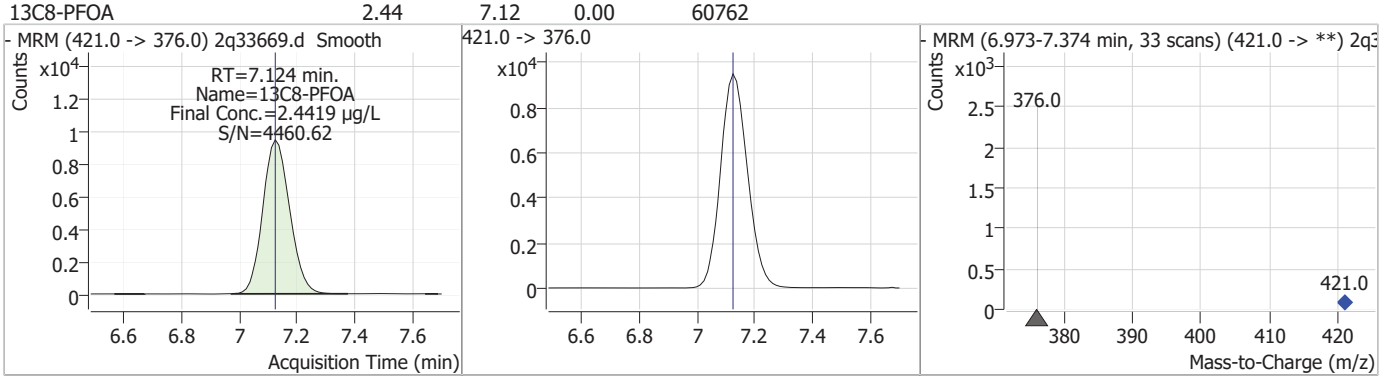
Perfluorinated Compounds by LC/MS/MS

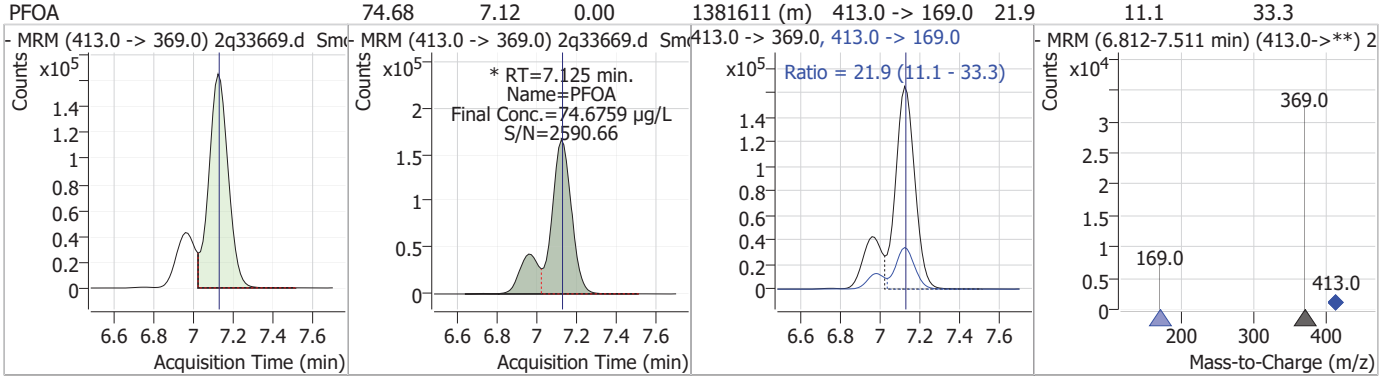
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	258.09	6.90	-0.01	760989	427.0 -> 81.0	37.2	19.1	57.2



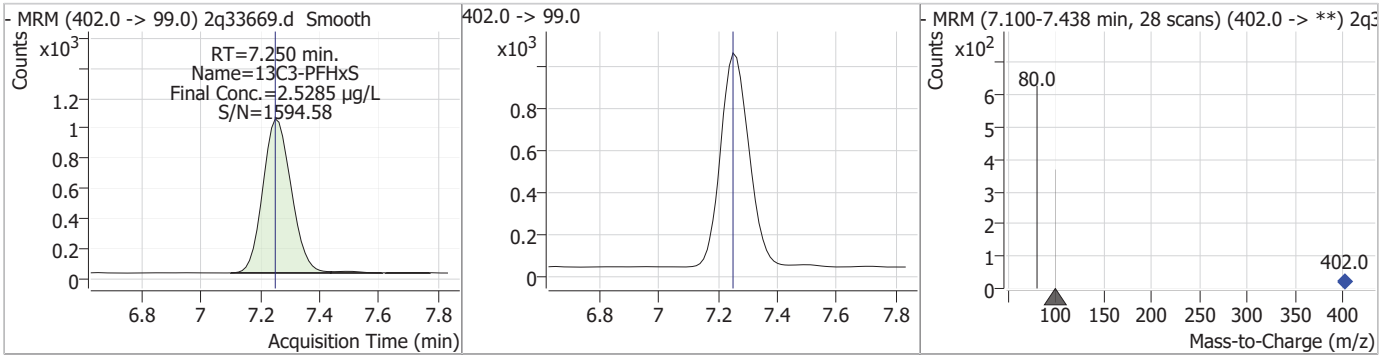
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.44	7.12	0.00	60762				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	74.68	7.12	0.00	1381611 (m)	413.0 -> 169.0	21.9	11.1	33.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.53	7.25	0.00	6802				



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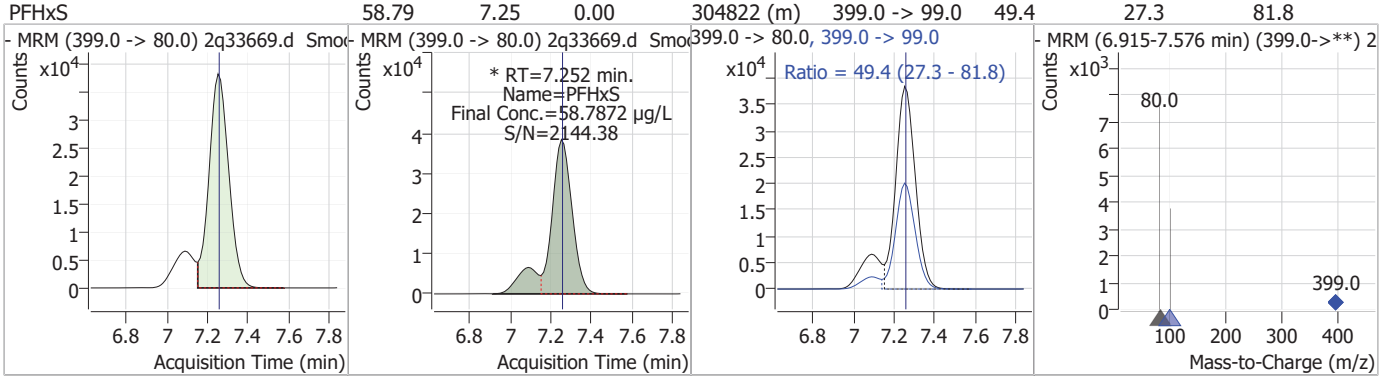
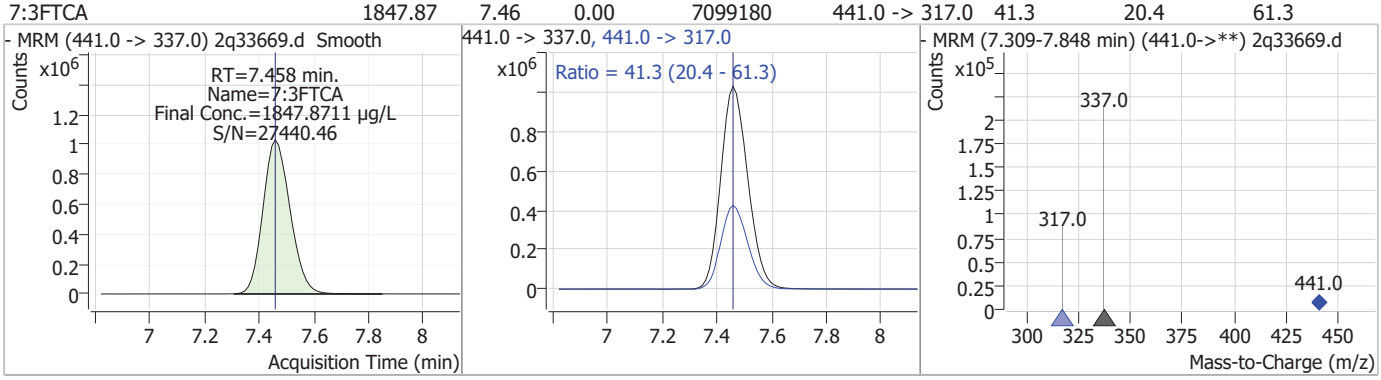
Perfluorinated Compounds by LC/MS/MS

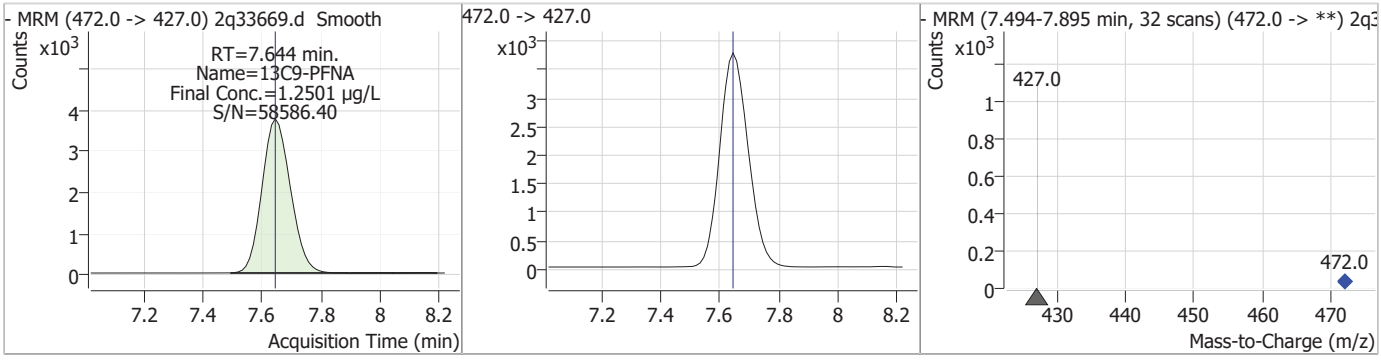
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	58.79	7.25	0.00	304822 (m)	399.0 -> 99.0	49.4	27.3	81.8



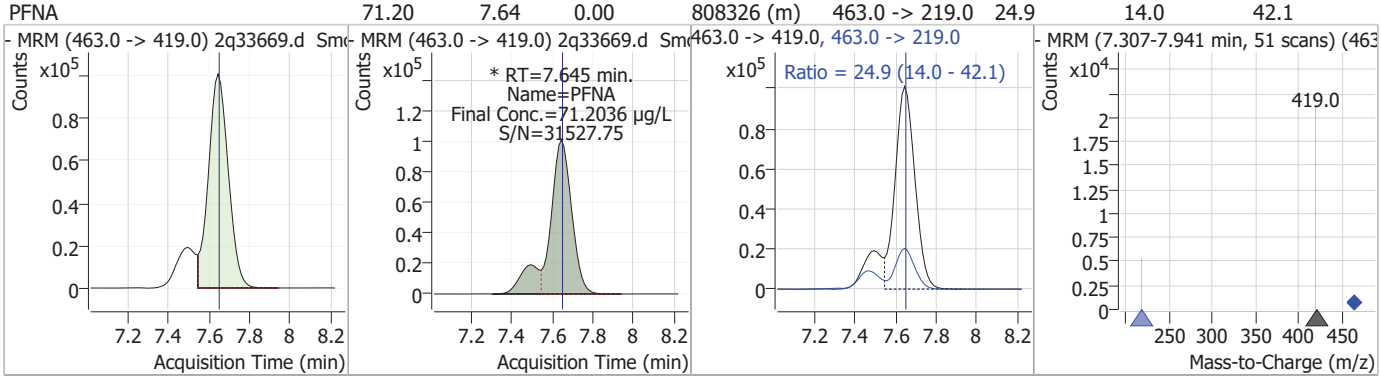
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	1847.87	7.46	0.00	7099180	441.0 -> 317.0	41.3	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.25	7.64	0.00	25028				

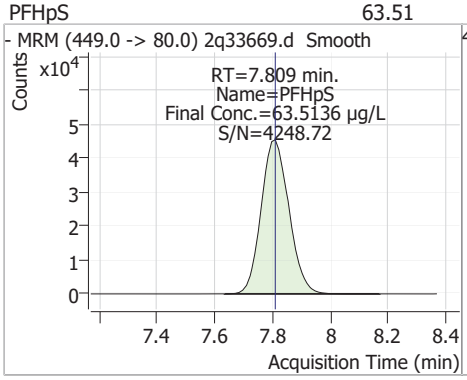


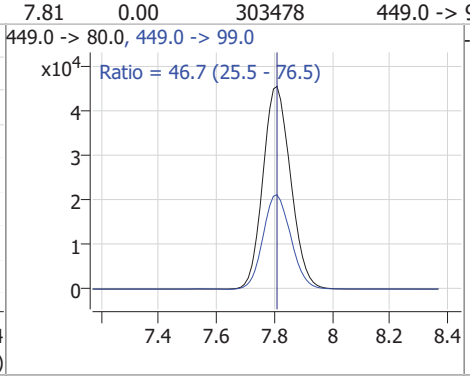
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	71.20	7.64	0.00	808326 (m)	463.0 -> 219.0	24.9	14.0	42.1

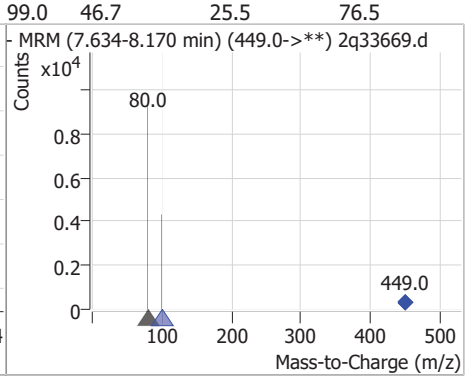


Perfluorinated Compounds by LC/MS/MS

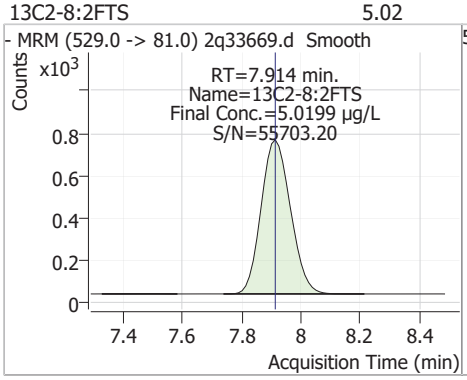
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	63.51	7.81	0.00	303478	449.0 -> 99.0	46.7	25.5	76.5

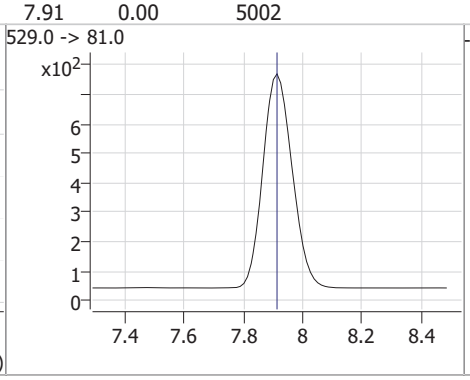


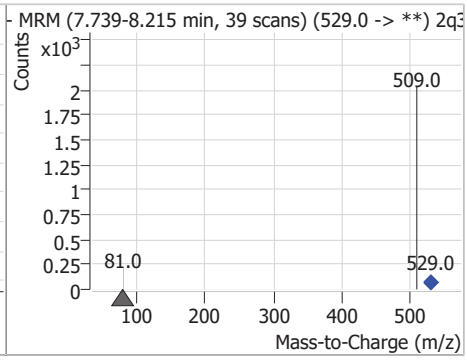




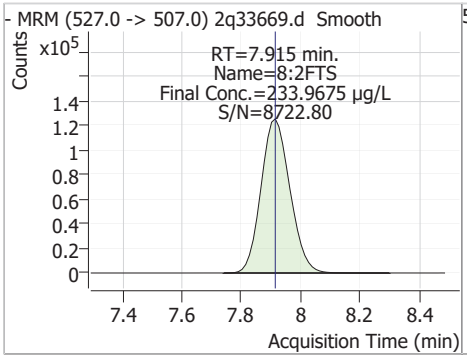
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.02	7.91	0.00	5002				

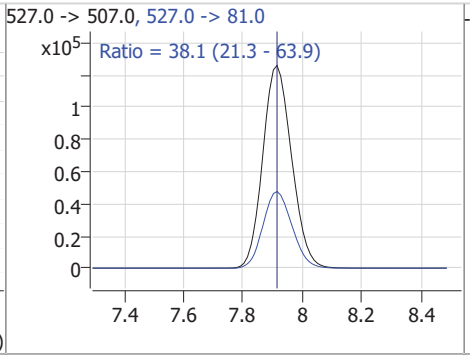


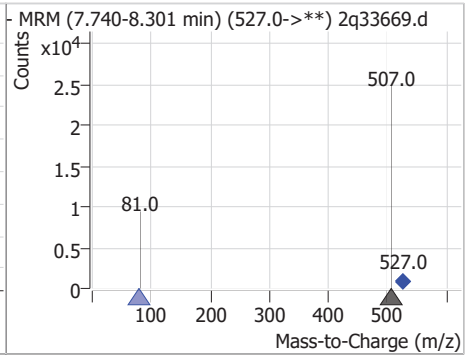




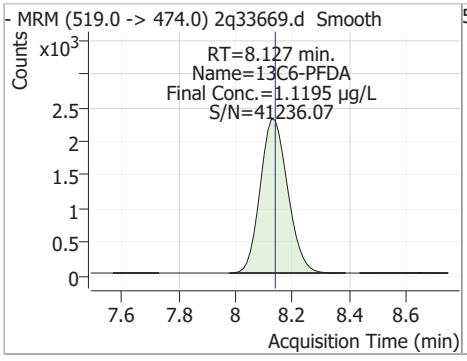
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	233.97	7.91	0.00	850185	527.0 -> 81.0	38.1	21.3	63.9

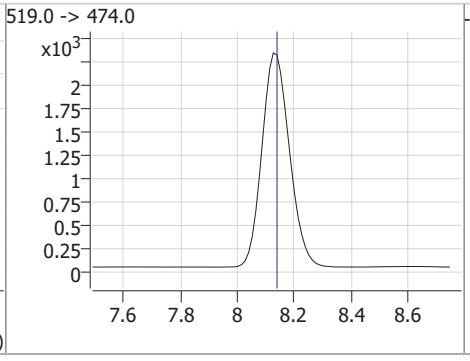


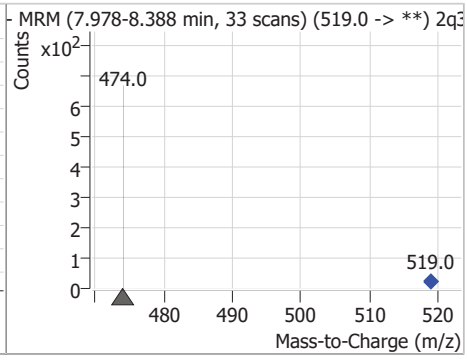




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.12	8.13	-0.01	15379				

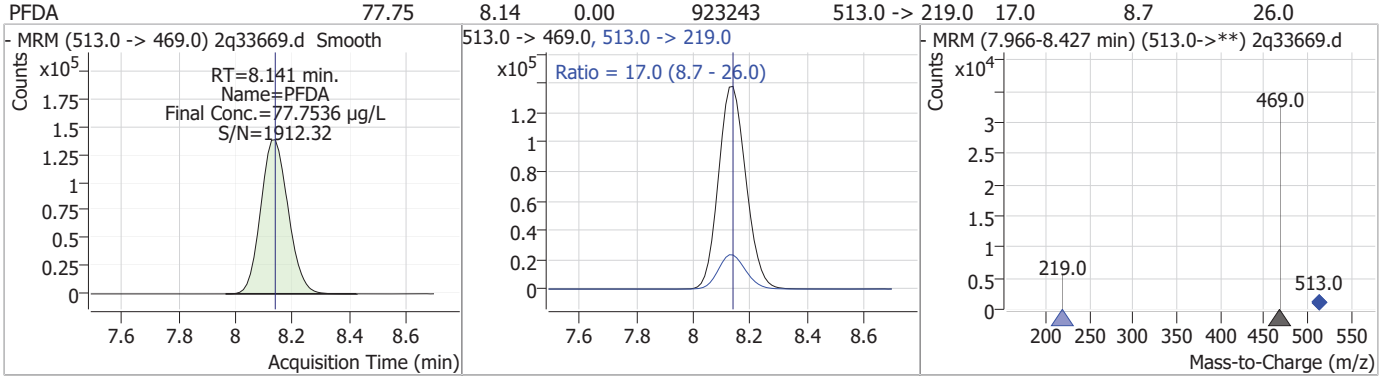




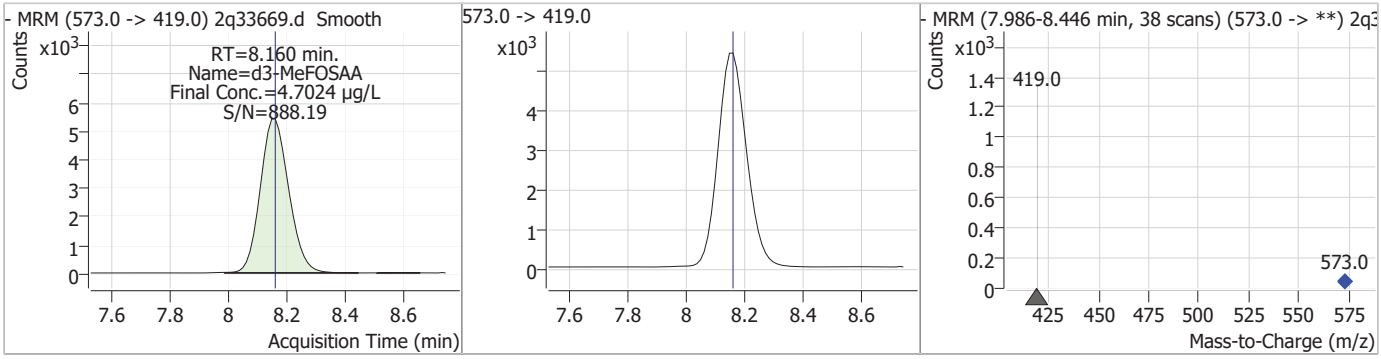


Perfluorinated Compounds by LC/MS/MS

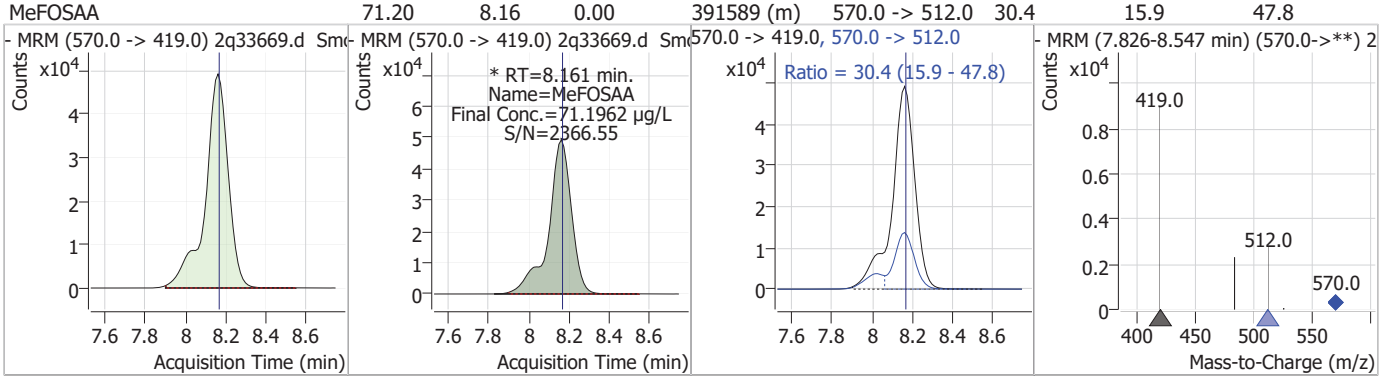
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	77.75	8.14	0.00	923243	513.0 -> 219.0	17.0	8.7	26.0



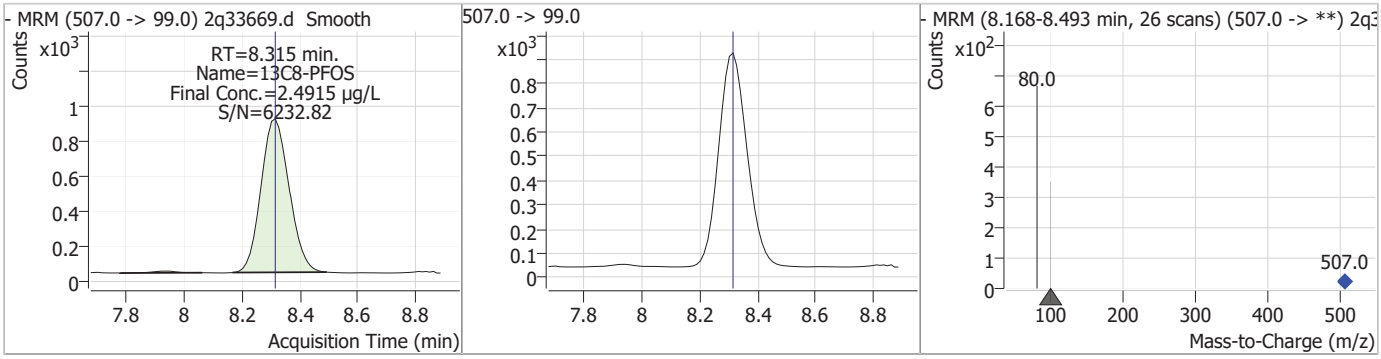
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.70	8.16	0.00	36677				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	71.20	8.16	0.00	391589 (m)	570.0 -> 512.0	30.4	15.9	47.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.49	8.32	0.00	5935				



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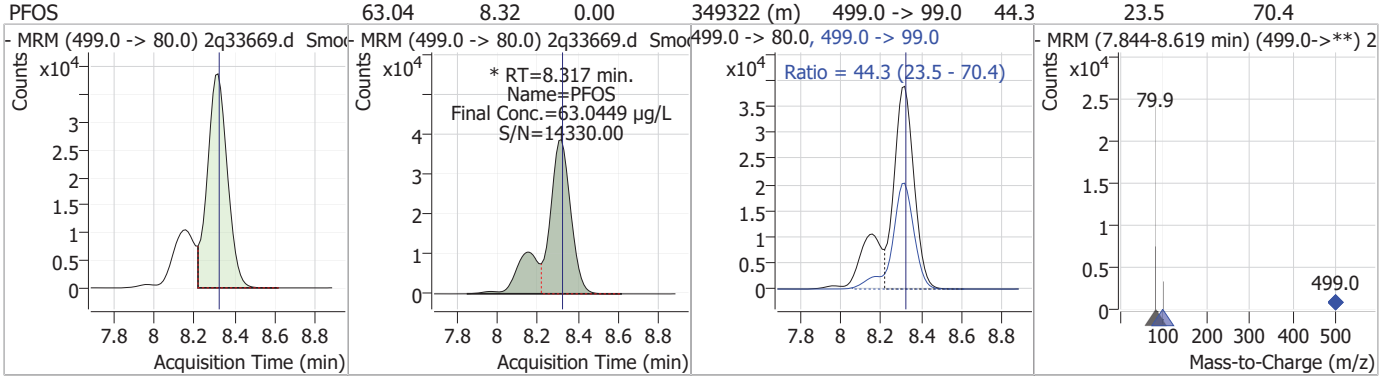
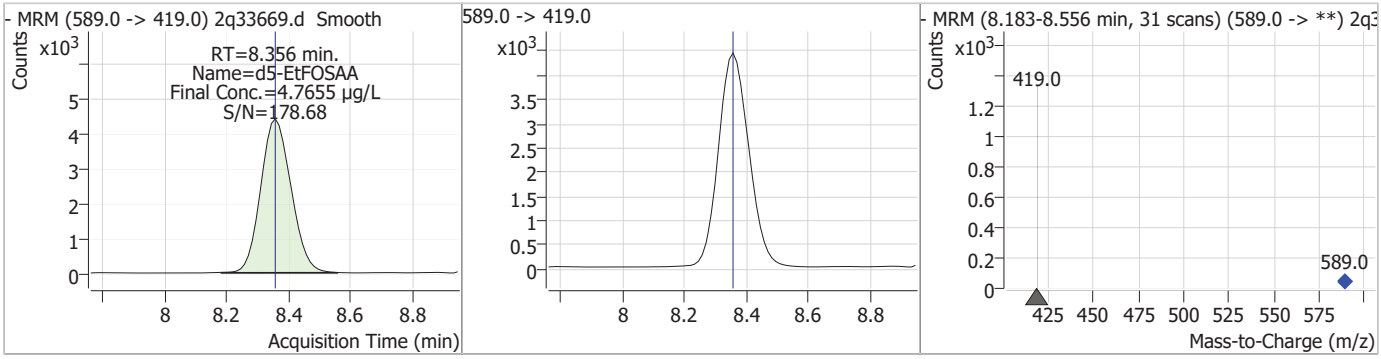
Perfluorinated Compounds by LC/MS/MS

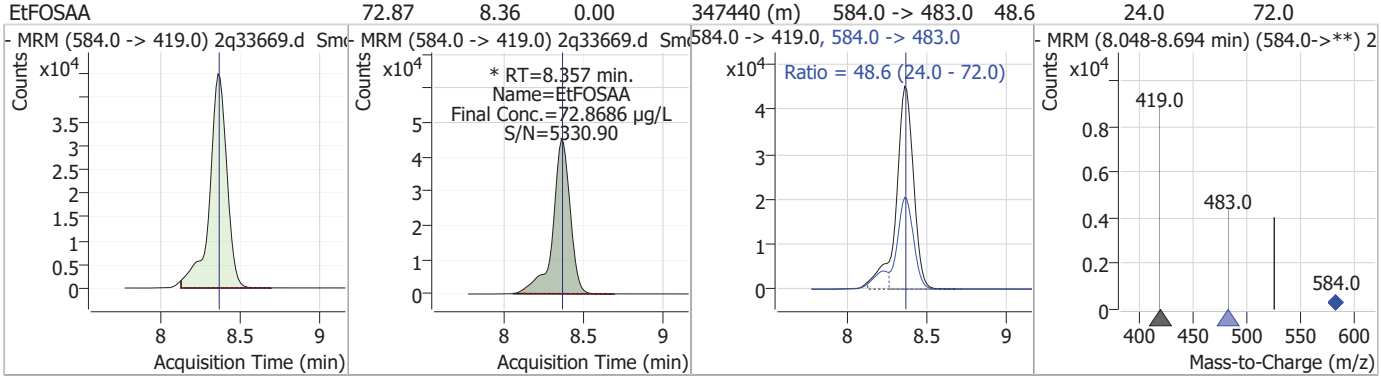
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	63.04	8.32	0.00	349322 (m)	499.0 -> 99.0	44.3	23.5	70.4



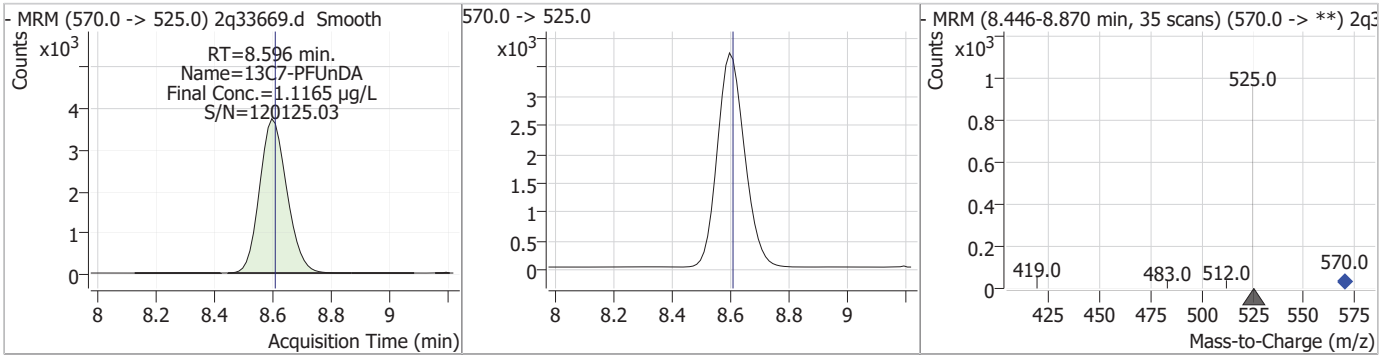
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.77	8.36	0.00	29992				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	72.87	8.36	0.00	347440 (m)	584.0 -> 483.0	48.6	24.0	72.0

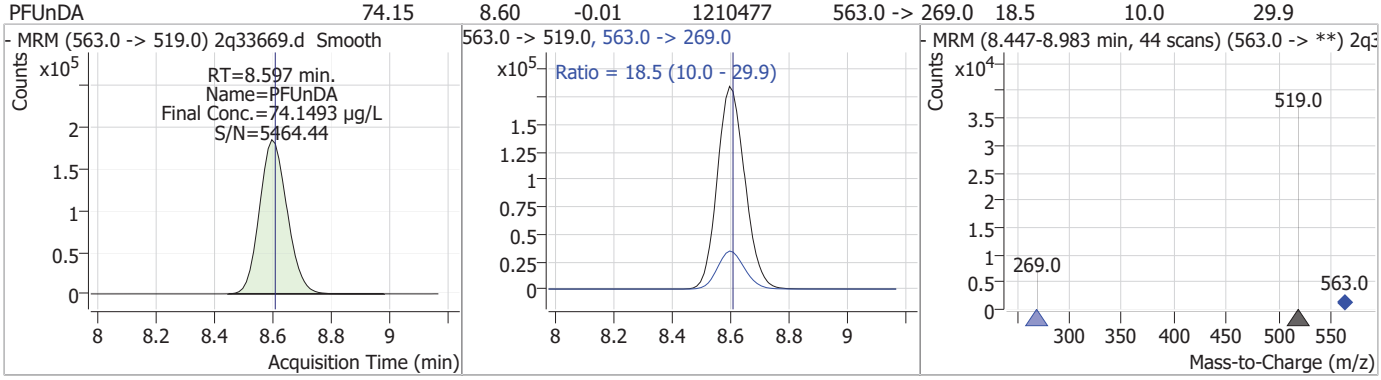


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.12	8.60	-0.01	24051				

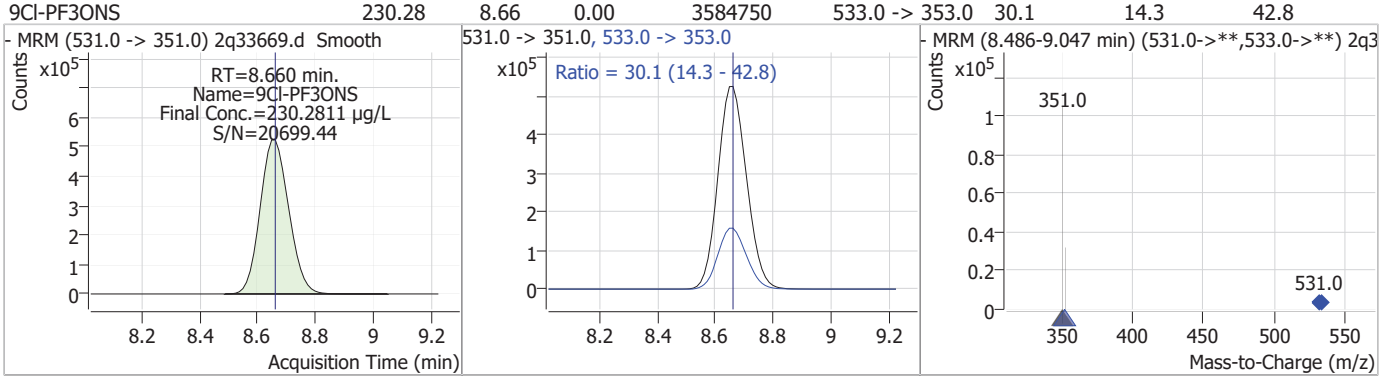


Perfluorinated Compounds by LC/MS/MS

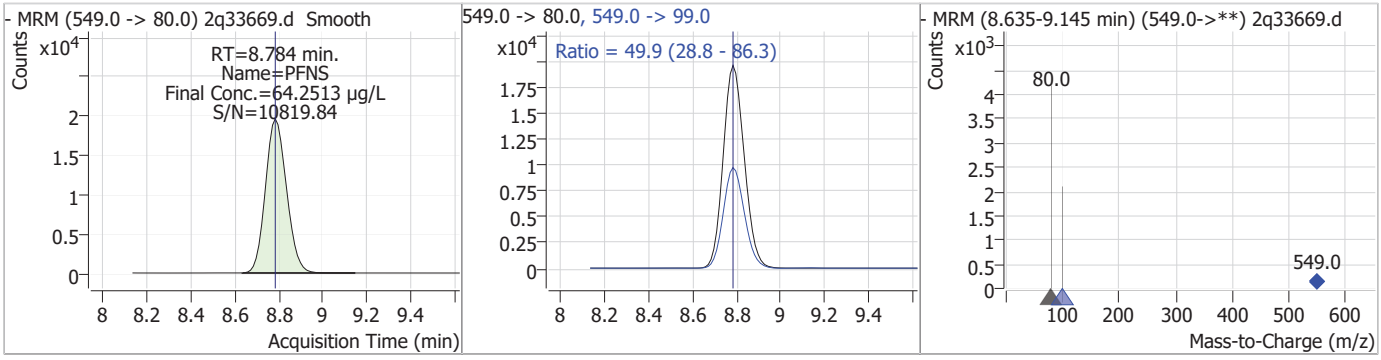
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	74.15	8.60	-0.01	1210477	563.0 -> 269.0	18.5	10.0	29.9



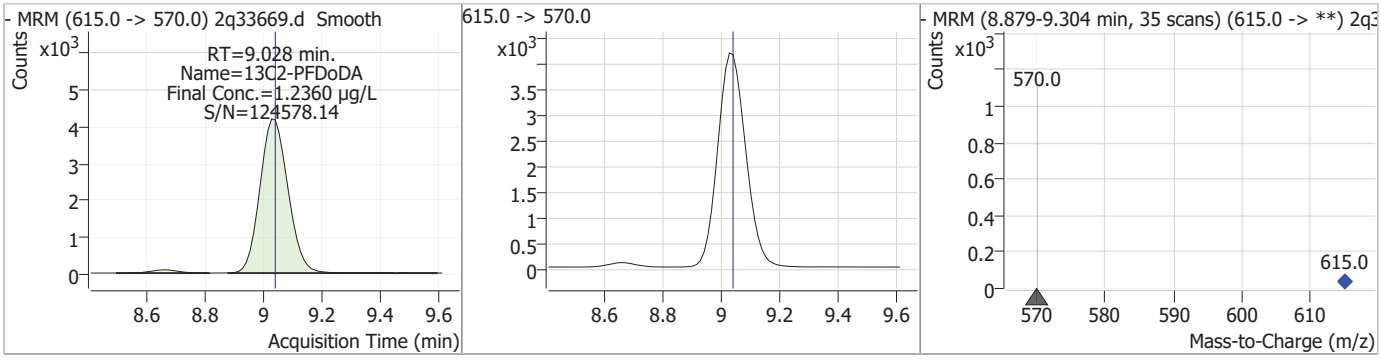
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	230.28	8.66	0.00	3584750	533.0 -> 353.0	30.1	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	64.25	8.78	0.00	129965	549.0 -> 99.0	49.9	28.8	86.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.24	9.03	-0.01	27852				



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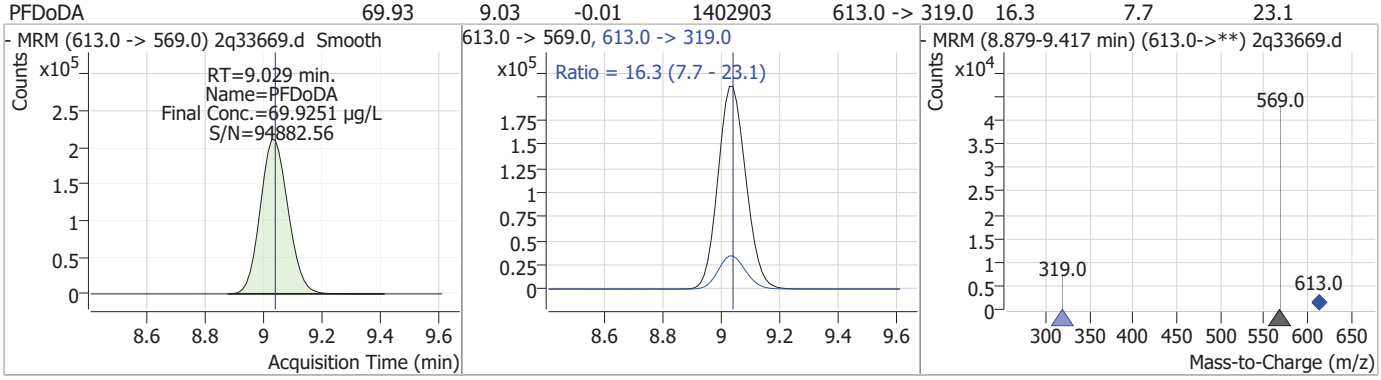
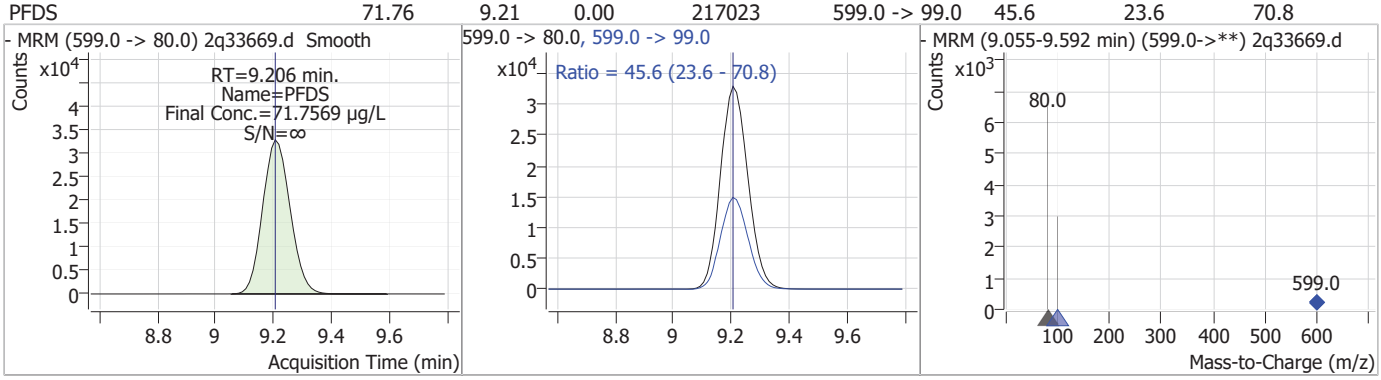
Perfluorinated Compounds by LC/MS/MS

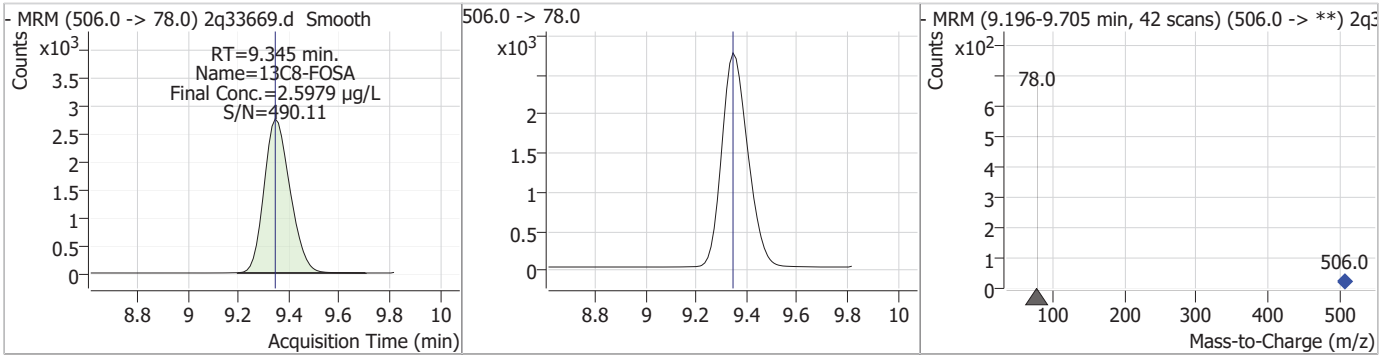
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	69.93	9.03	-0.01	1402903	613.0 -> 319.0	16.3	7.7	23.1



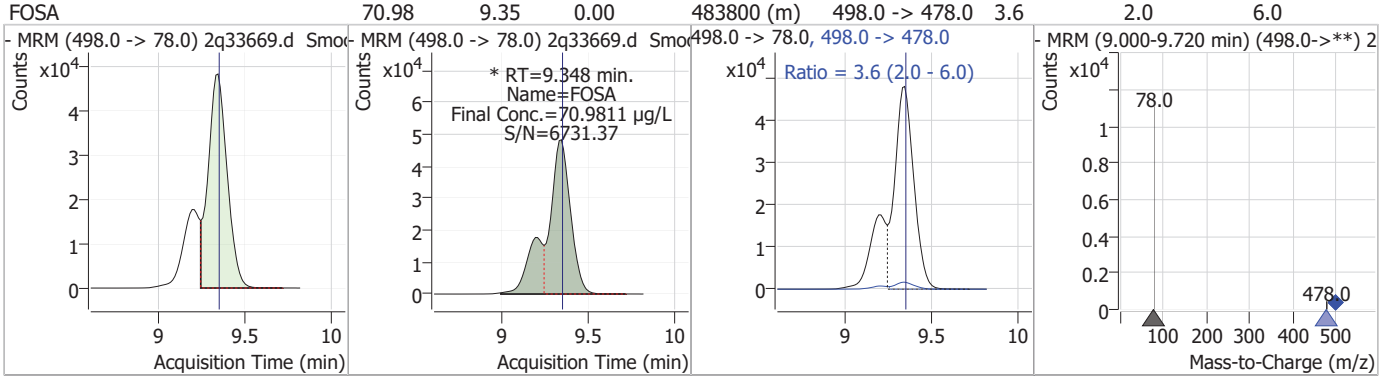
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	71.76	9.21	0.00	217023	599.0 -> 99.0	45.6	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.60	9.35	0.00	19625				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	70.98	9.35	0.00	483800 (m)	498.0 -> 478.0	3.6	2.0	6.0



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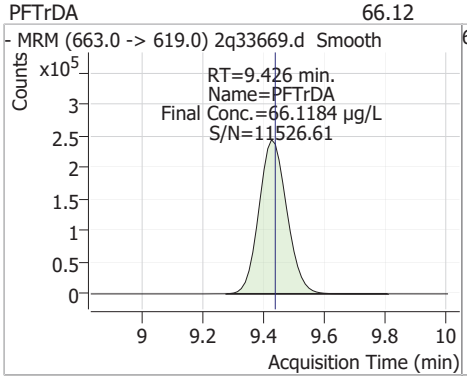
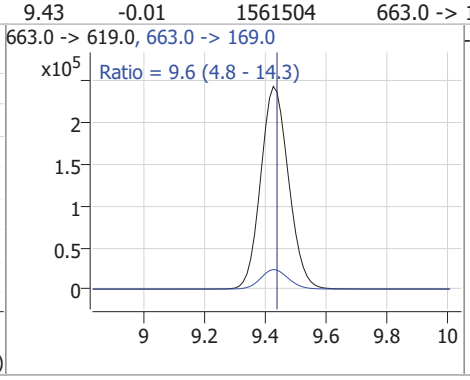
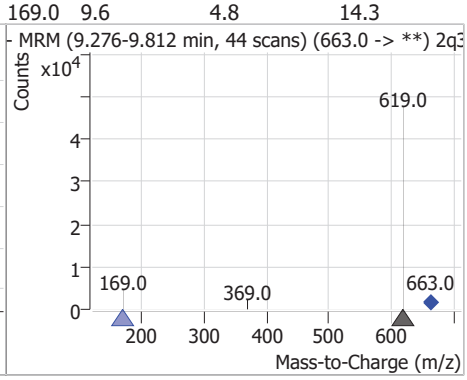
Perfluorinated Compounds by LC/MS/MS

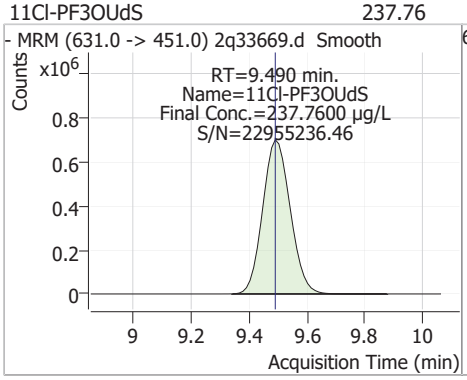
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	66.12	9.43	-0.01	1561504	663.0 -> 169.0	9.6	4.8	14.3

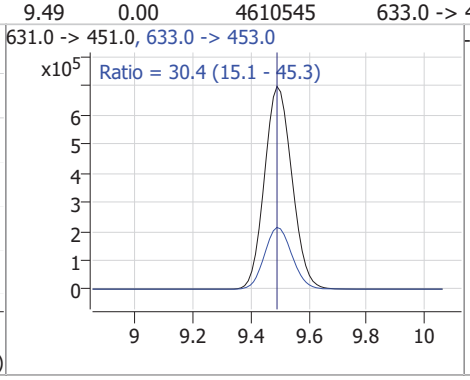


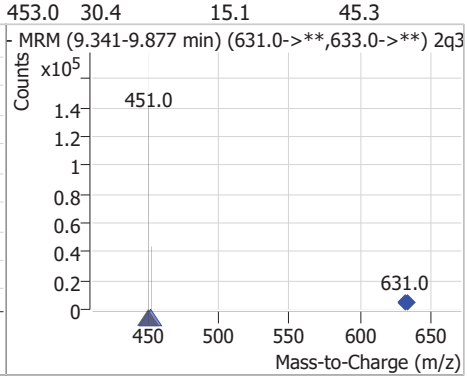




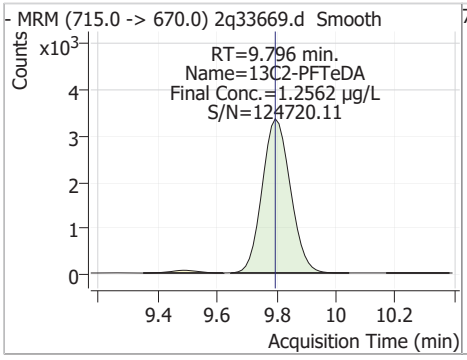
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	237.76	9.49	0.00	4610545	633.0 -> 453.0	30.4	15.1	45.3

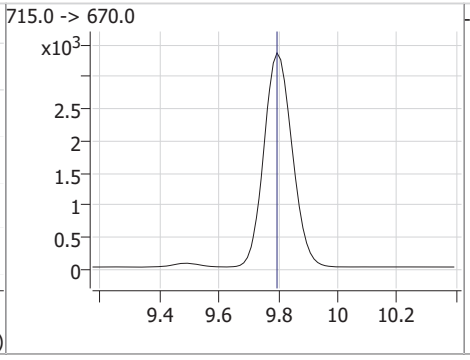


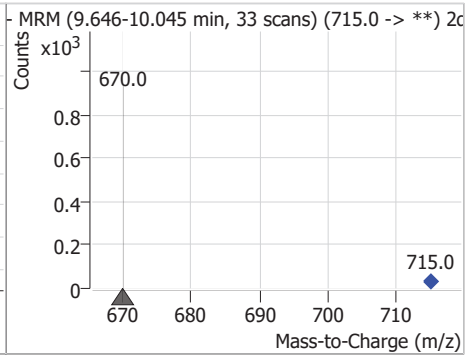




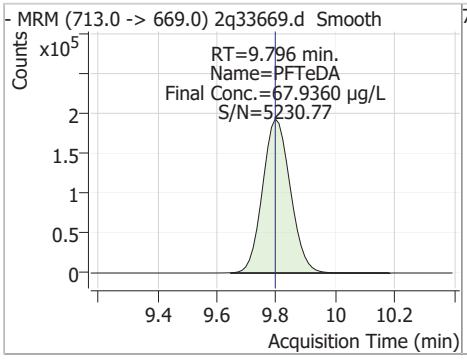
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.26	9.80	0.00	21972				

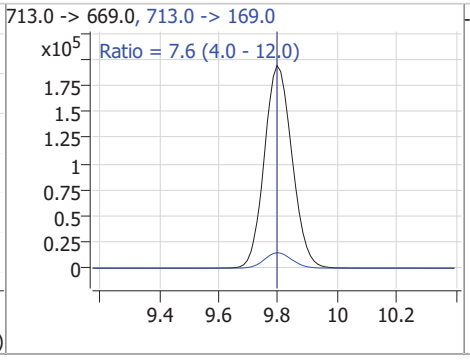


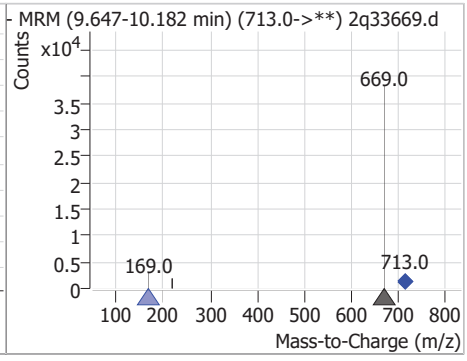




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	67.94	9.80	0.00	1257032	713.0 -> 169.0	7.6	4.0	12.0







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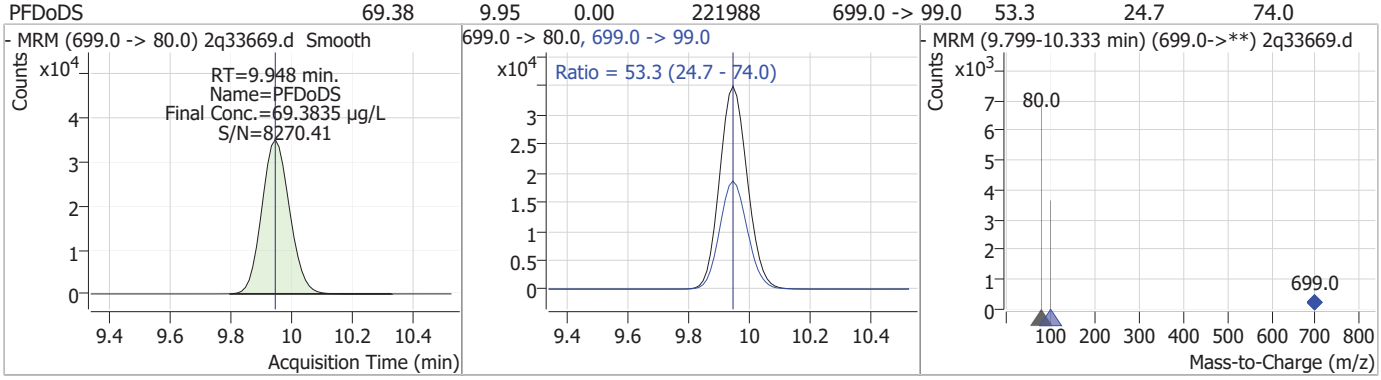
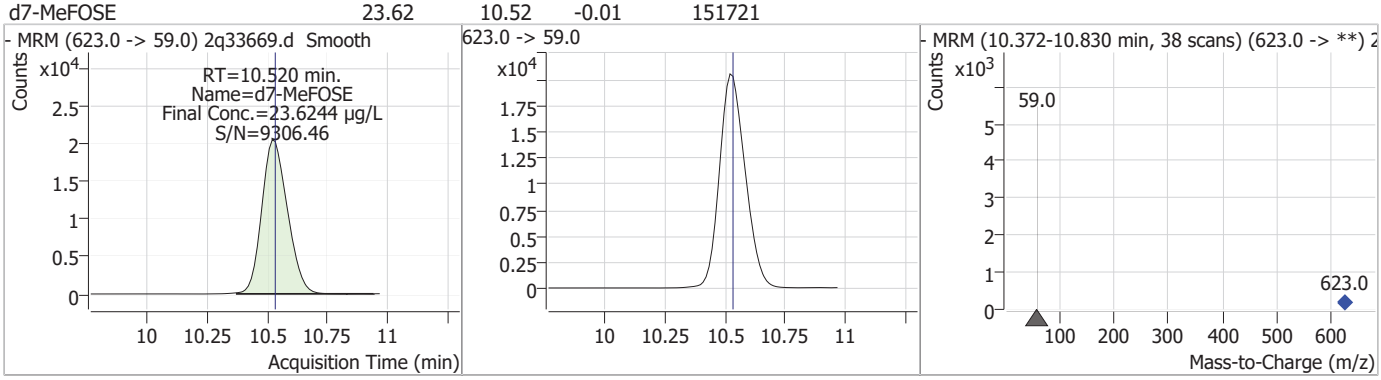
Perfluorinated Compounds by LC/MS/MS

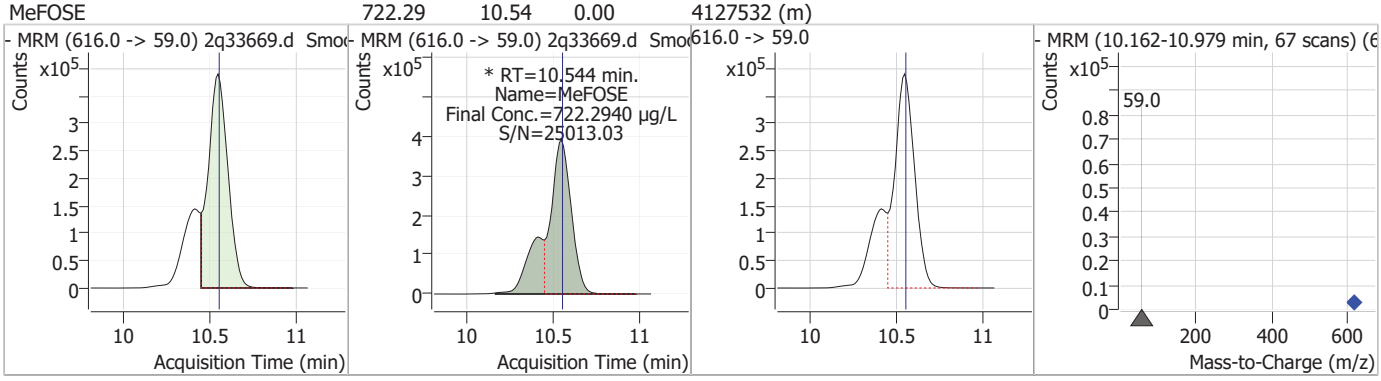
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	69.38	9.95	0.00	221988	699.0 -> 99.0	53.3	24.7	74.0



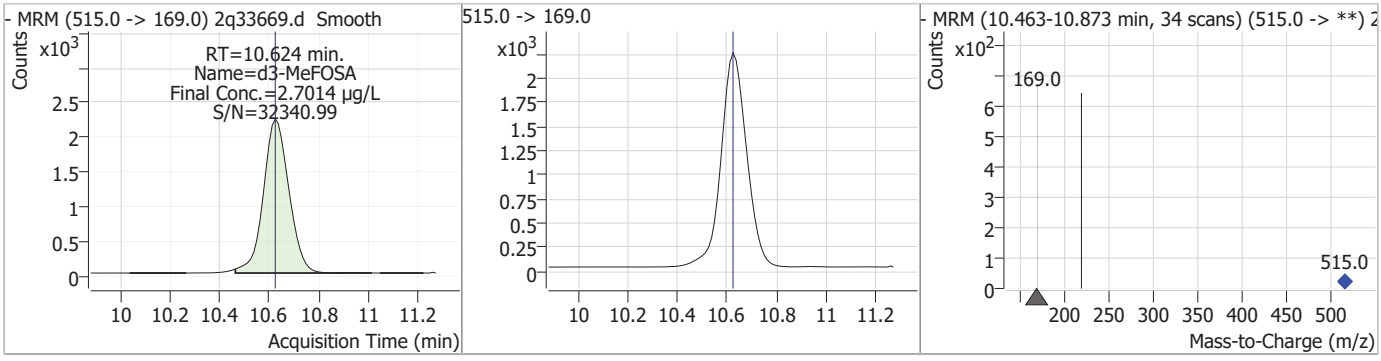
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.62	10.52	-0.01	151721				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	722.29	10.54	0.00	4127532 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.70	10.62	0.00	15875				



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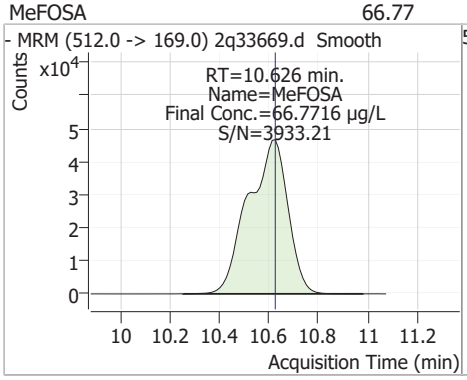
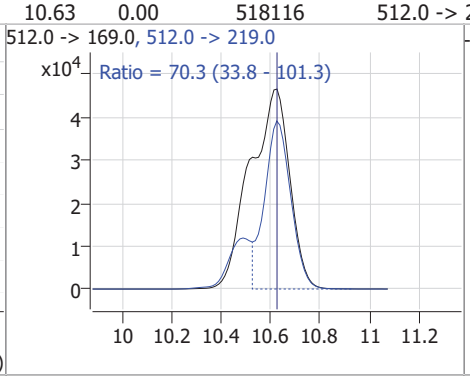
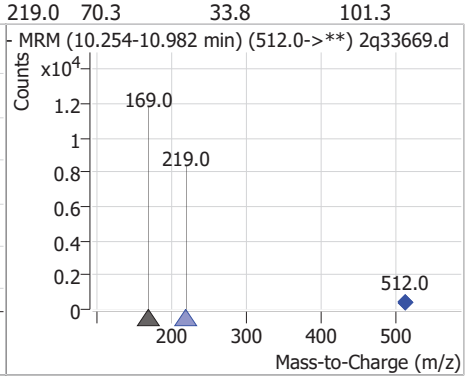
Perfluorinated Compounds by LC/MS/MS

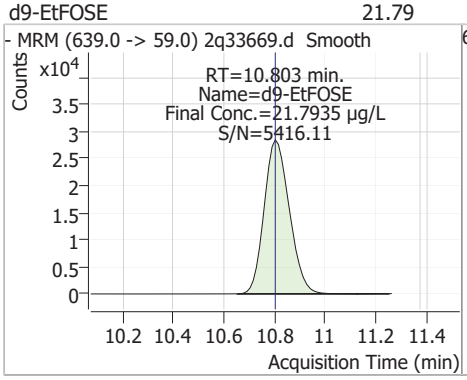
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	66.77	10.63	0.00	518116	512.0 -> 219.0	70.3	33.8	101.3

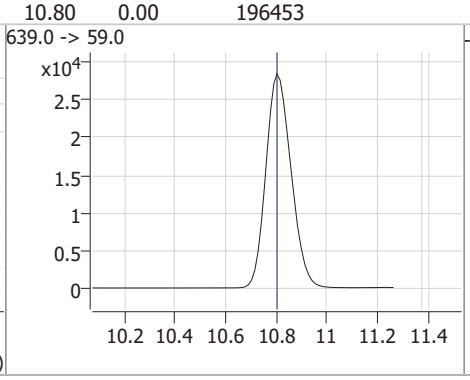


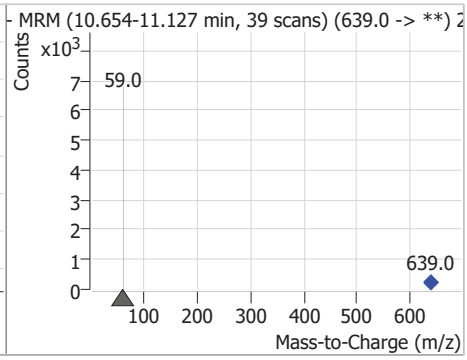




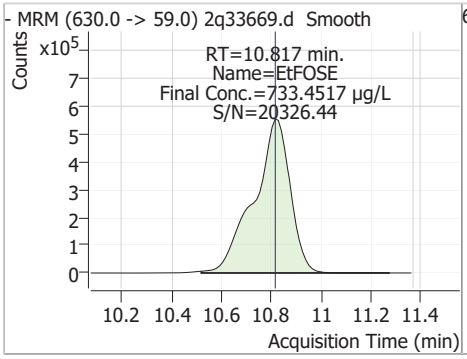
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	21.79	10.80	0.00	196453				

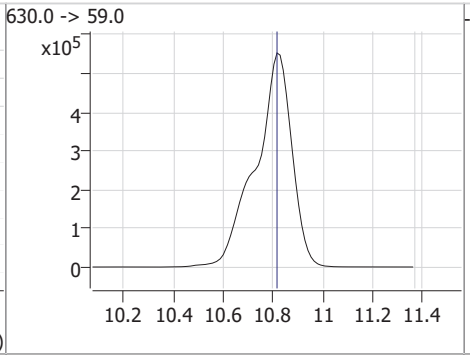


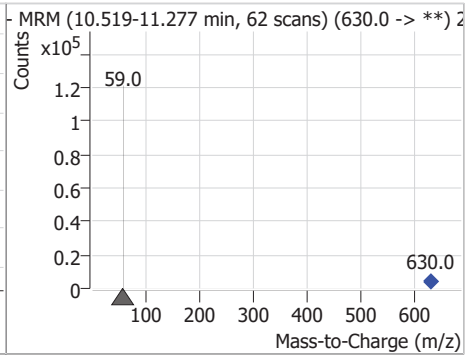




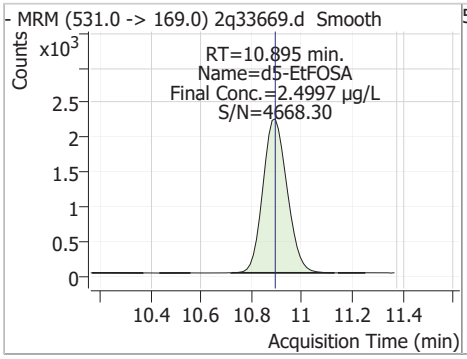
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	733.45	10.82	0.00	5589330				

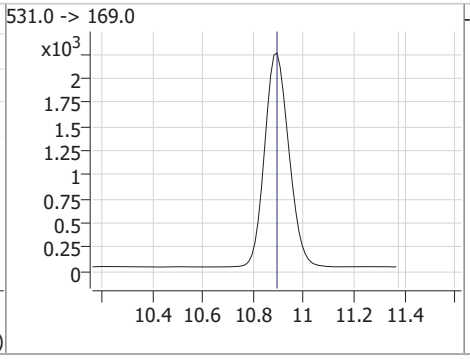


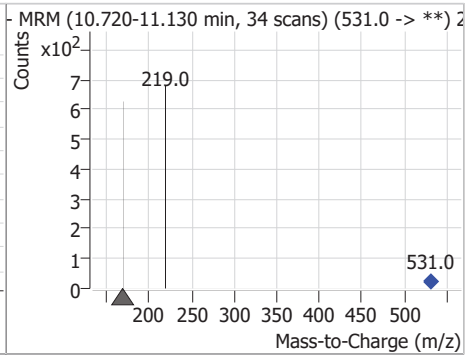




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.50	10.89	0.00	14812				





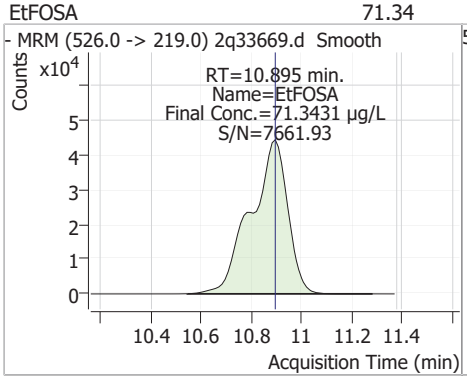


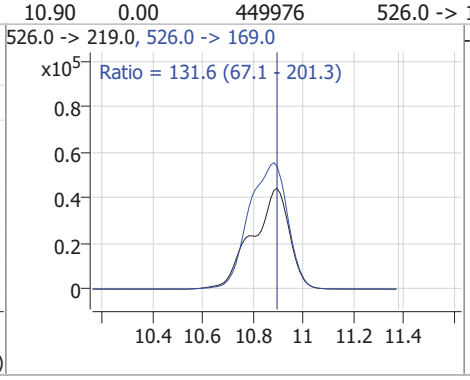
7.6.24

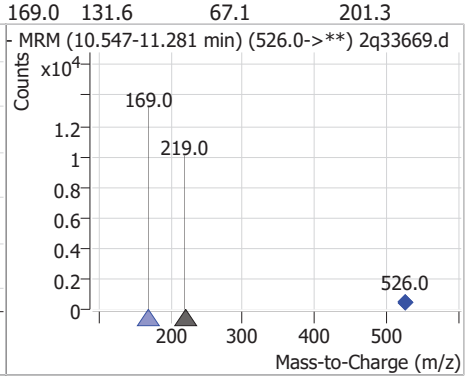
7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	71.34	10.90	0.00	449976	526.0 -> 169.0	131.6	67.1	201.3







7.6.24

7

Manual Integration Approval Summary

Sample Number: T2Q344-IC344
Lab FileID: 2Q33669.D
Injection Time: 05/09/25 16:43
Method: EPA 1633
Analyst approved: 05/10/25 01:15 Josephus Gimenez
Supervisor approved: 05/12/25 11:57 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.12	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.25	Split peak
Perfluorononanoic acid	375-95-1		7.64	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.36	Split peak
PFOSA	754-91-6		9.35	Split peak
MeFOSE	24448-09-7		10.54	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/12/25 11:57

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33671.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/9/2025 5:09:50 PM
Sample Name : ICV344-4
Vial : P1-B2
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q344.batch.bin
Sample Information : OP62666,T2Q344,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	114566	10.00 µg/L	0.000
M5-PFPeA	4.637	268.0 -> 223.0	60839	5.00 µg/L	0.000
M5-PFHxA	5.745	318.0 -> 273.0	37084	2.50 µg/L	0.000
M4-PFHpA	6.540	367.0 -> 322.0	28750	2.50 µg/L	0.000
M8-PFOA	7.124	421.0 -> 376.0	63312	2.50 µg/L	0.000
M9-PFNA	7.644	472.0 -> 427.0	24652	1.25 µg/L	0.000
M6-PFDA	8.140	519.0 -> 474.0	18405	1.25 µg/L	0.000
M7-PFUnDA	8.608	570.0 -> 525.0	28677	1.25 µg/L	0.000
M2-PFDoDA	9.040	615.0 -> 570.0	29379	1.25 µg/L	0.000
M2-PFTeDA	9.796	715.0 -> 670.0	21786	1.25 µg/L	0.000
M8-FOSA	9.345	506.0 -> 78.0	19793	2.50 µg/L	0.000
M3-PFBS	5.699	302.0 -> 99.0	5720	2.50 µg/L	0.000
M3-PFHxS	7.250	402.0 -> 99.0	7103	2.50 µg/L	0.000
M8-PFOS	8.315	507.0 -> 99.0	6160	2.50 µg/L	0.000
M2-4:2FTS	5.433	329.0 -> 81.0	1420	5.00 µg/L	0.000
M2-6:2FTS	6.910	429.0 -> 81.0	2924	5.00 µg/L	0.000
M2-8:2FTS	7.914	529.0 -> 81.0	4930	5.00 µg/L	0.000
M3-MeFOSAA	8.160	573.0 -> 419.0	41773	5.00 µg/L	0.000
M3-HFPO-DA	6.074	287.0 -> 169.0	22035	10.00 µg/L	0.000
M5-EtFOSAA	8.356	589.0 -> 419.0	32563	5.00 µg/L	0.000
M7-MeFOSE	10.520	623.0 -> 59.0	165620	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	237352	25.00 µg/L	0.000
M5-EtFOSA	10.895	531.0 -> 169.0	15588	2.50 µg/L	0.000
M3-MeFOSA	10.624	515.0 -> 169.0	14797	2.50 µg/L	0.000
13C4-PFOS	8.316	503.0 -> 80.0	11357	2.50 µg/L	0.000
13C3-PFBA	3.253	216.0 -> 172.0	48116	5.00 µg/L	-0.012
18O2-PFHxS	7.262	403.0 -> 84.0	7465	2.50 µg/L	0.000
13C4-PFOA	7.124	417.0 -> 372.0	62561	2.50 µg/L	0.000
13C2-PFDA	8.140	515.0 -> 470.0	16196	1.25 µg/L	0.000
13C5-PFNA	7.645	468.0 -> 423.0	23165	1.25 µg/L	0.000
13C2-PFHxA	5.746	315.0 -> 270.0	34448	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.433	329.0 -> 81.0	1420	5.26 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.2%	
13C2-6:2FTS	6.910	429.0 -> 81.0	2924	5.01 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.2%	
13C2-8:2FTS	7.914	529.0 -> 81.0	4930	5.23 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.6%	
13C2-PFDoDA	9.040	615.0 -> 570.0	29379	1.33 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.2%	
13C2-PFTeDA	9.796	715.0 -> 670.0	21786	1.27 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.5%	
13C3-PFBS	5.699	302.0 -> 99.0	5720	2.72 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 108.9%	
13C3-PFHxS	7.250	402.0 -> 99.0	7103	2.79 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 111.7%		
13C4-PFBA	3.263	217.0 -> 172.0	114566	10.12 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.2%		
13C4-PFHpA	6.540	367.0 -> 322.0	28750	2.39 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.8%		
13C5-PFHxA	5.745	318.0 -> 273.0	37084	2.46 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.3%		
13C5-PFPeA	4.637	268.0 -> 223.0	60839	4.73 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.6%		
13C6-PFDA	8.140	519.0 -> 474.0	18405	1.36 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 109.2%		
13C7-PFUnDA	8.608	570.0 -> 525.0	28677	1.36 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 108.5%		
13C8-FOSA	9.345	506.0 -> 78.0	19793	2.52 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.8%		
13C8-PFOA	7.124	421.0 -> 376.0	63312	2.47 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.9%		
13C8-PFOS	8.315	507.0 -> 99.0	6160	2.49 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.5%		
13C9-PFNA	7.644	472.0 -> 427.0	24652	1.22 µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.5%		
d3-MeFOSAA	8.160	573.0 -> 419.0	41773	5.15 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.0%		
13C3-HFPO-DA	6.074	287.0 -> 169.0	22035	9.31 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 93.1%		
d3-MeFOSA	10.624	515.0 -> 169.0	14797	2.42 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.9%		
d5-EtFOSAA	8.356	589.0 -> 419.0	32563	4.98 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.5%		
d7-MeFOSE	10.520	623.0 -> 59.0	165620	24.80 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 99.2%		
d9-EtFOSE	10.803	639.0 -> 59.0	237352	25.32 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 101.3%		
d5-EtFOSA	10.895	531.0 -> 169.0	15588	2.53 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.2%		
Target Compounds						QValue
4:2FTS	5.433	327.0 -> 307.0	19570	9.53 µg/L		98
		327.0 -> 81.0	10580			
6:2FTS	6.898	427.0 -> 407.0	36961	10.65 µg/L		99
		427.0 -> 81.0	13924			
8:2FTS	7.915	527.0 -> 507.0	32147	8.98 µg/L		99
		527.0 -> 81.0	13973			
EtFOSAA	8.370	584.0 -> 419.0	12544	2.42 µg/L	m	100
		584.0 -> 483.0	6001			
FOSA	9.348	498.0 -> 78.0	17169	2.50 µg/L	m	97
		498.0 -> 478.0	529			
MeFOSAA	8.161	570.0 -> 419.0	14882	2.38 µg/L	m	98
		570.0 -> 512.0	4588			
PFBA	3.255	213.0 -> 169.0	29792	9.85 µg/L		100
PFBS	5.700	299.0 -> 80.0	15266	2.12 µg/L		93
		299.0 -> 99.0	6102			
PFDA	8.141	513.0 -> 469.0	32535	2.29 µg/L		99
		513.0 -> 219.0	5711			
PFDoDA	9.041	613.0 -> 569.0	47806	2.26 µg/L		94
		613.0 -> 319.0	8508			
PFDS	9.206	599.0 -> 80.0	7757	2.15 µg/L		98

Perfluorinated Compounds by LC/MS/MS

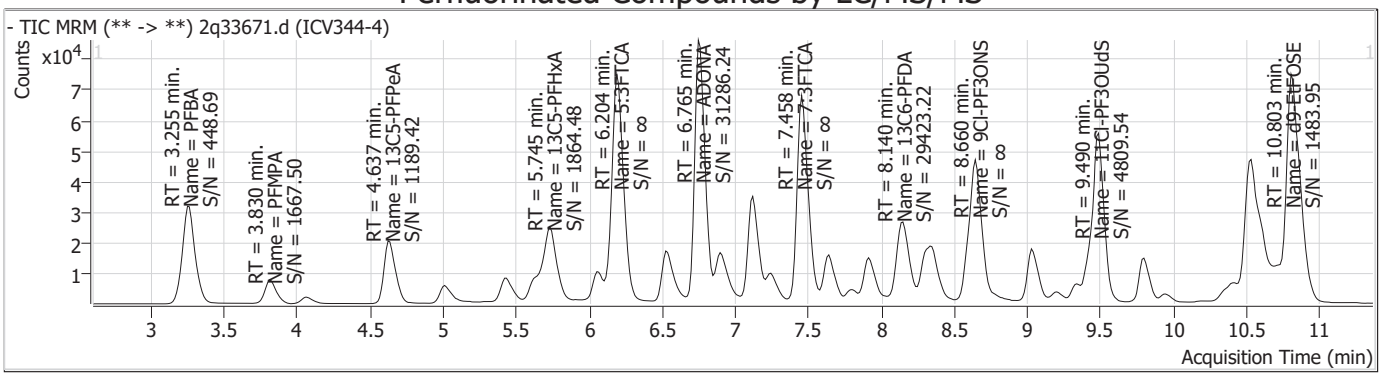
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	3770				
PFHpA	6.541	363.0 -> 319.0	43718	2.38	µg/L		98
		363.0 -> 169.0	8328				
PFHpS	7.809	449.0 -> 80.0	11641	2.33	µg/L		86
		449.0 -> 99.0	4812				
PFHxA	5.748	313.0 -> 269.0	29476	2.35	µg/L		99
		313.0 -> 119.0	1046				
PFHxS	7.252	399.0 -> 80.0	11068	2.04	µg/L	m	90
		399.0 -> 99.0	5233				
PFNA	7.645	463.0 -> 419.0	26819	2.40	µg/L	m	96
		463.0 -> 219.0	6982				
PFNS	8.784	549.0 -> 80.0	5289	2.52	µg/L		87
		549.0 -> 99.0	2526				
PFOA	7.125	413.0 -> 369.0	47214	2.45	µg/L	m	99
		413.0 -> 169.0	10695				
PFOS	8.317	499.0 -> 80.0	13296	2.31	µg/L	m	95
		499.0 -> 99.0	5824				
PFPeA	4.640	263.0 -> 219.0	53095	4.93	µg/L		100
PFPeS	6.617	349.0 -> 80.0	6358	2.44	µg/L		95
		349.0 -> 99.0	2428				
PFTeDA	9.796	713.0 -> 669.0	43353	2.36	µg/L		99
		713.0 -> 169.0	3634				
PFTrDA	9.426	663.0 -> 619.0	60185	2.42	µg/L		100
		663.0 -> 169.0	5694				
PFUnDA	8.609	563.0 -> 519.0	44911	2.31	µg/L		98
		563.0 -> 269.0	8512				
11Cl-PF3OUdS	9.490	631.0 -> 451.0	192871	9.97	µg/L		97
		633.0 -> 453.0	55445				
9Cl-PF3ONS	8.660	531.0 -> 351.0	152135	9.79	µg/L		99
		533.0 -> 353.0	44127				
ADONA	6.765	377.0 -> 251.0	326485	9.91	µg/L		99
		377.0 -> 85.0	100991				
HFPO-DA	6.075	285.0 -> 169.0	21673	10.07	µg/L		95
		285.0 -> 185.0	2212				
3:3FTCA	4.065	241.0 -> 177.0	10687	12.14	µg/L		97
		241.0 -> 117.0	825				
5:3FTCA	6.204	341.0 -> 237.0	194776	61.61	µg/L		98
		341.0 -> 217.0	135905				
7:3FTCA	7.458	441.0 -> 337.0	250764	60.96	µg/L		99
		441.0 -> 317.0	101619				
EtFOSA	10.895	526.0 -> 219.0	15910	2.40	µg/L		99
		526.0 -> 169.0	21538				
EtFOSE	10.817	630.0 -> 59.0	232275	25.23	µg/L		100
MeFOSA	10.626	512.0 -> 169.0	19038	2.63	µg/L		99
		512.0 -> 219.0	12704				
MeFOSE	10.544	616.0 -> 59.0	161541	25.90	µg/L	m	100
PFDoDS	9.948	699.0 -> 80.0	8164	2.46	µg/L		96
		699.0 -> 99.0	4251				
NFDHA	5.639	295.0 -> 201.0	5267	5.08	µg/L		95
		201.0 -> 85.0	30302				
		295.0 -> 85.0	1508				
PFMBA	5.015	279.0 -> 85.0	31495	4.98	µg/L		100
PFMPA	3.830	229.0 -> 85.0	44947	4.96	µg/L		100
PFEESA	6.168	315.0 -> 135.0	66524	4.30	µg/L		99
		315.0 -> 69.0	7485				

 # = Qualifier out of range, m = manually integrated, + = Area summed

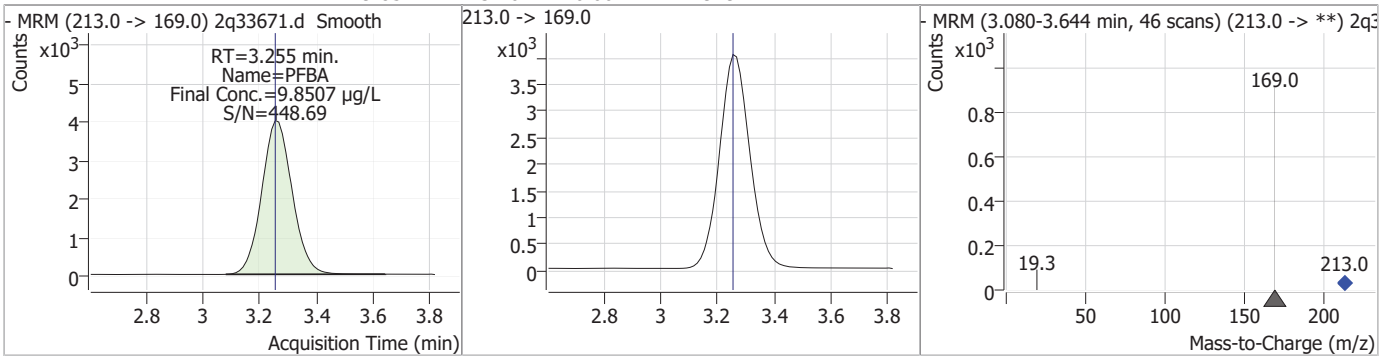
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

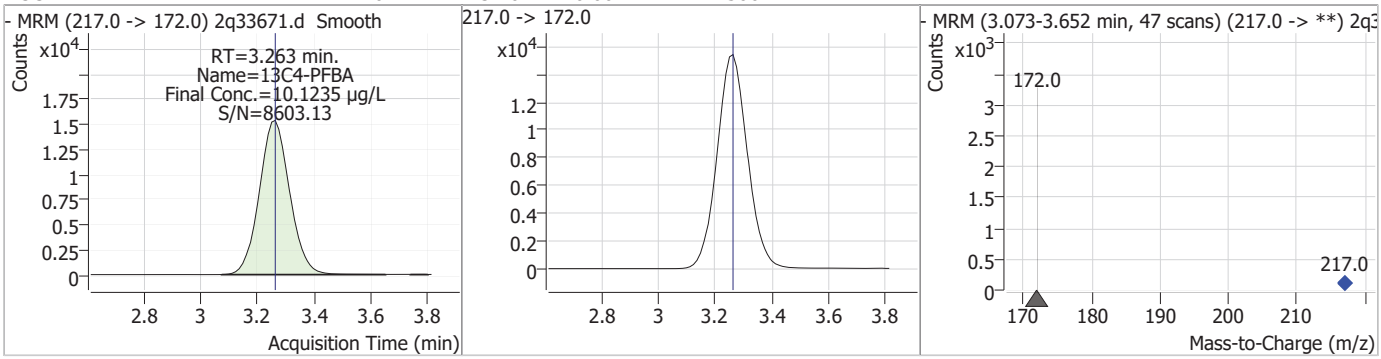
Perfluorinated Compounds by LC/MS/MS



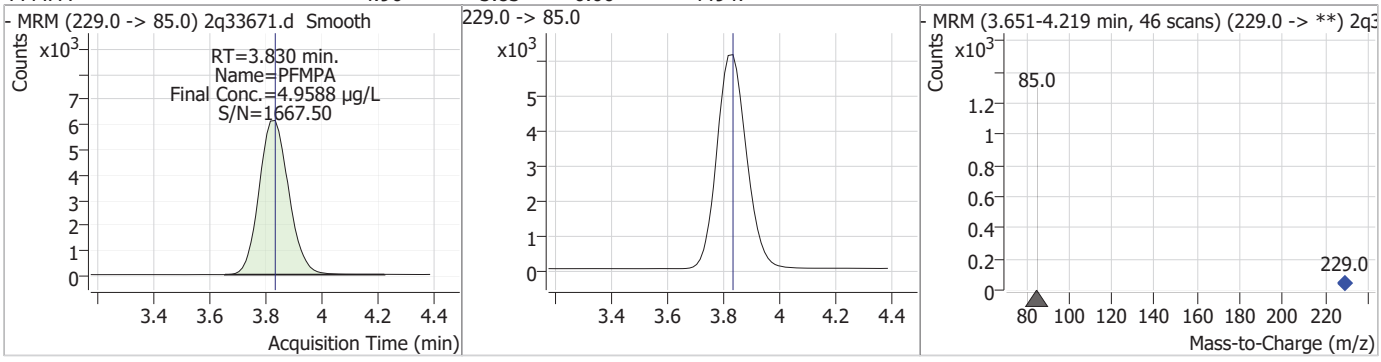
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.85	3.26	0.00	29792				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.12	3.26	0.00	114566				

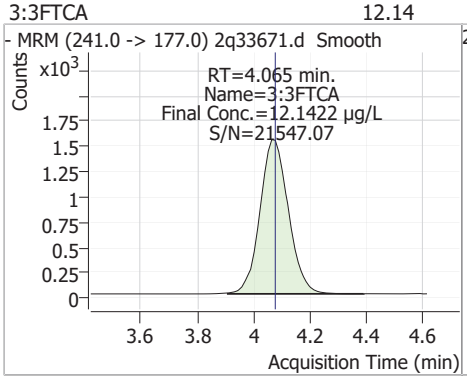


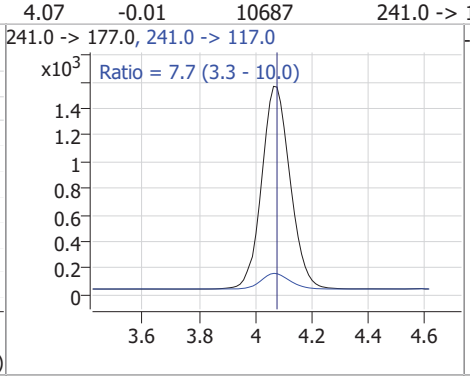
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	4.96	3.83	0.00	44947				

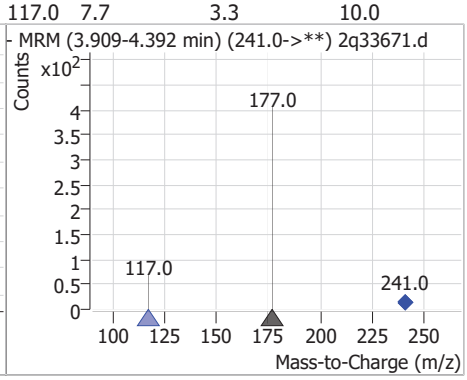


Perfluorinated Compounds by LC/MS/MS

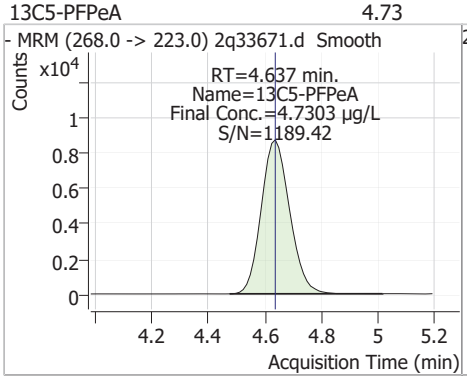
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.14	4.07	-0.01	10687	241.0 -> 117.0	7.7	3.3	10.0

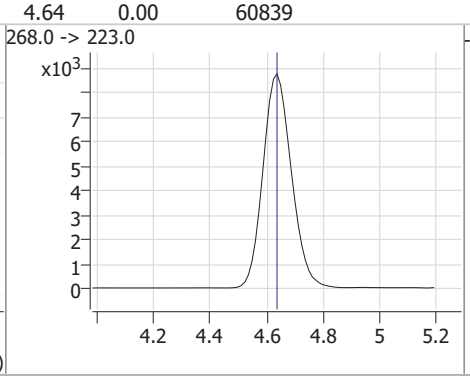


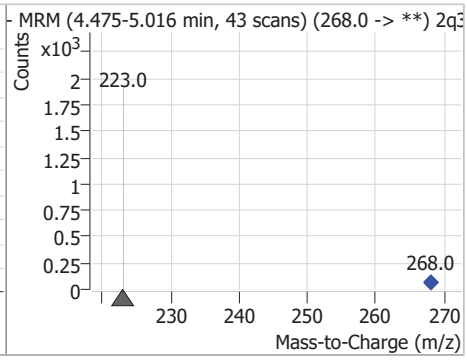




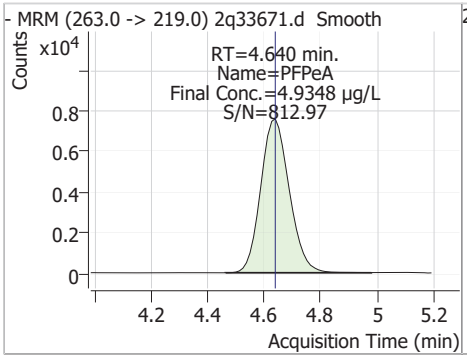
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.73	4.64	0.00	60839				

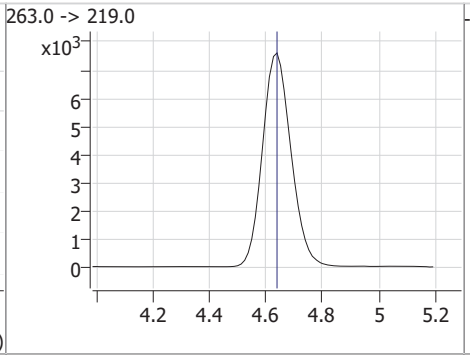


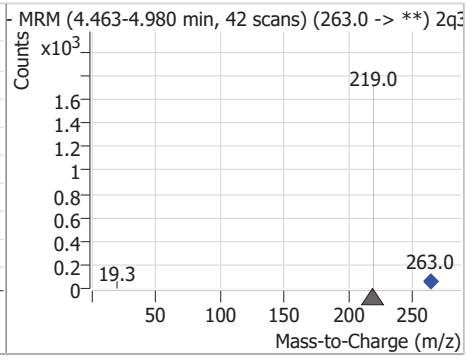




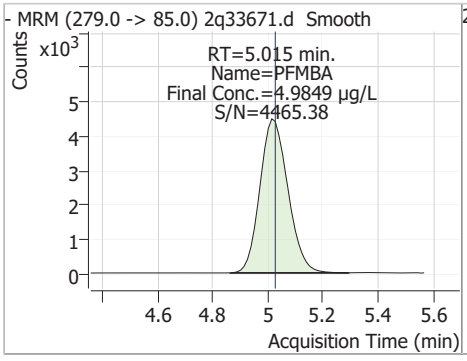
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	4.93	4.64	0.00	53095				

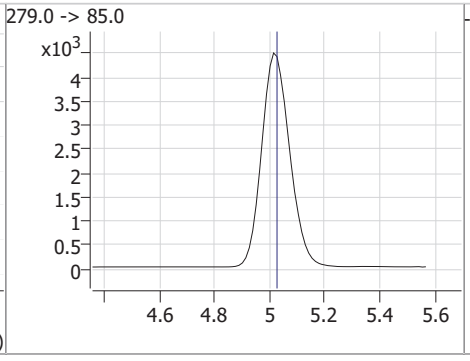


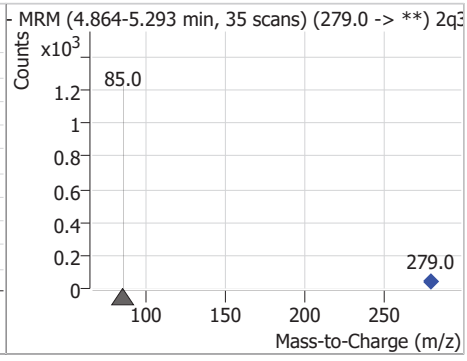




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.98	5.01	-0.01	31495				







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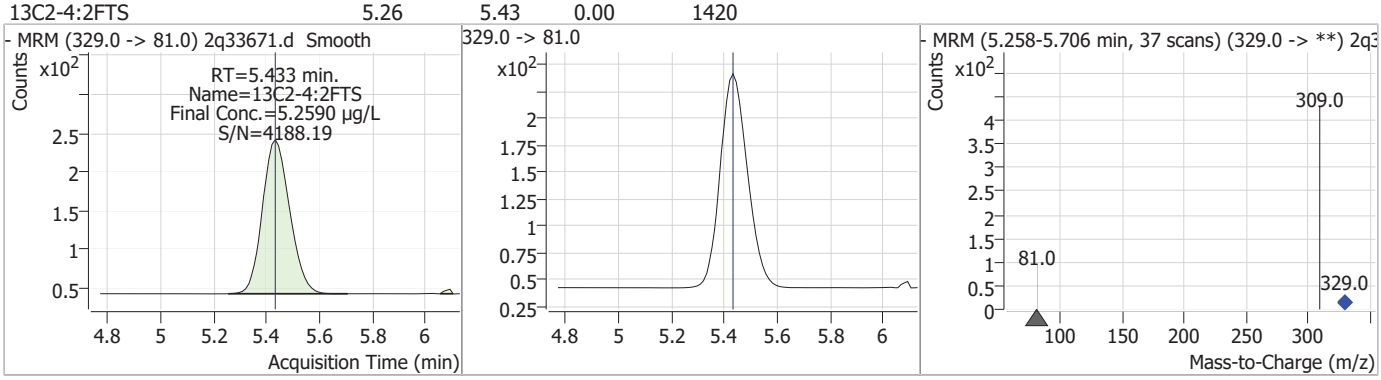
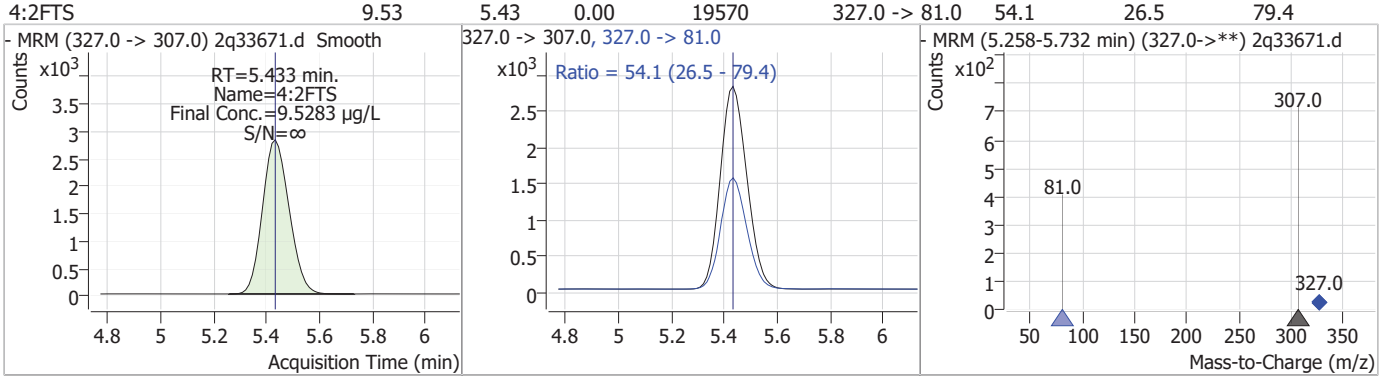
Perfluorinated Compounds by LC/MS/MS

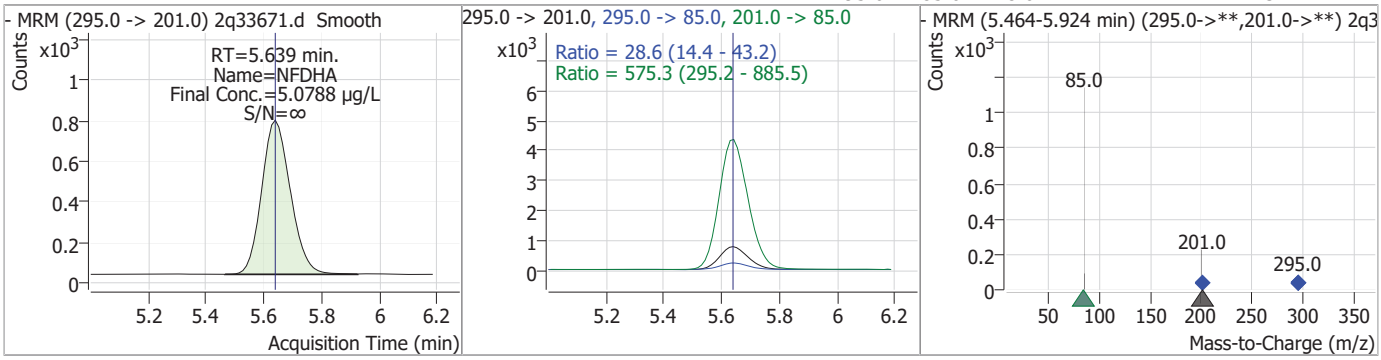
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.26	5.43	0.00	1420				



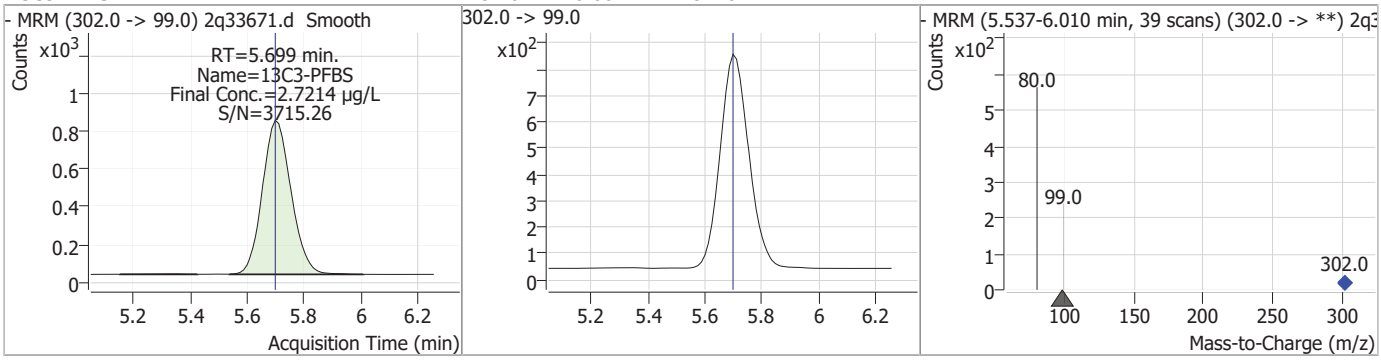
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.53	5.43	0.00	19570	327.0 -> 81.0	54.1	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.08	5.64	0.00	5267	201.0 -> 85.0	575.3	295.2	885.5
					295.0 -> 85.0	28.6	14.4	43.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.72	5.70	0.00	5720				



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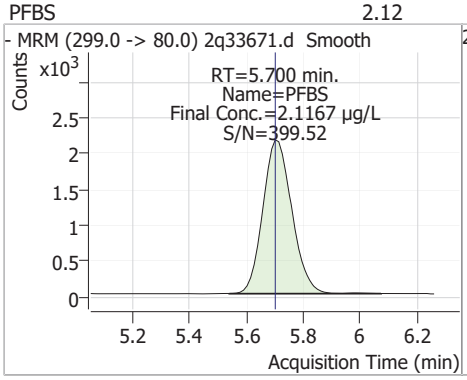
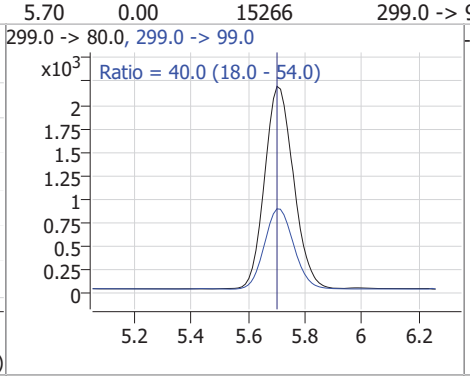
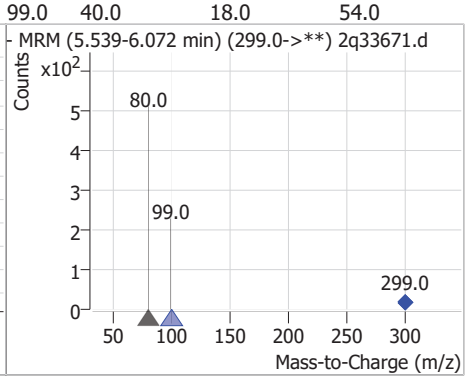
Perfluorinated Compounds by LC/MS/MS

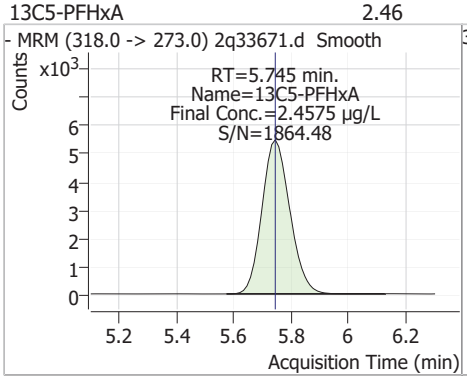
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.12	5.70	0.00	15266	299.0 -> 99.0	40.0	18.0	54.0

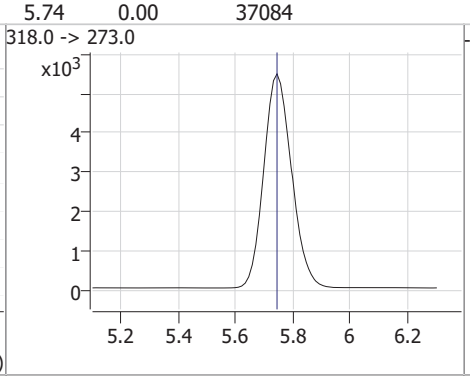


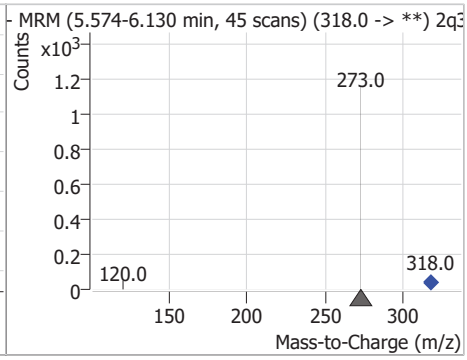




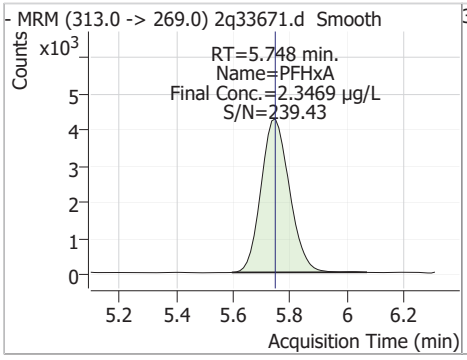
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.46	5.74	0.00	37084				

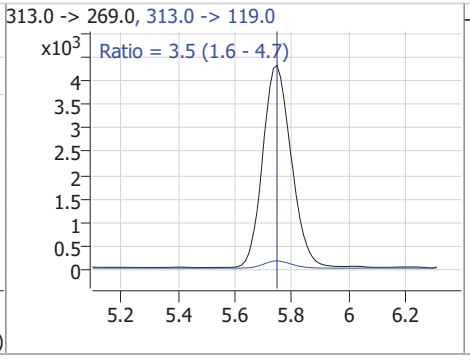


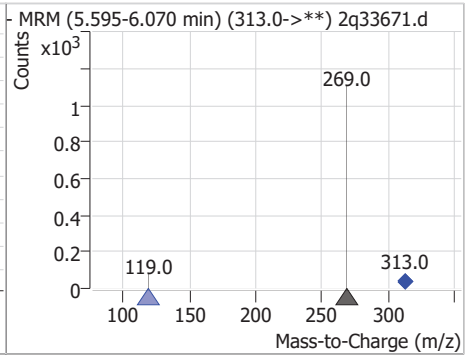




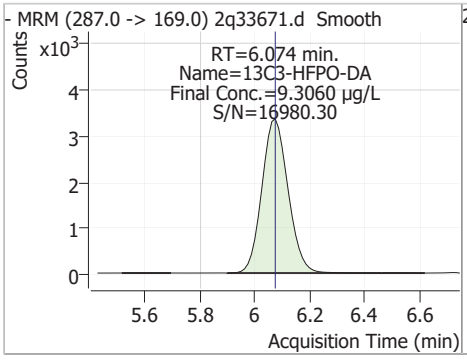
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.35	5.75	0.00	29476	313.0 -> 119.0	3.5	1.6	4.7

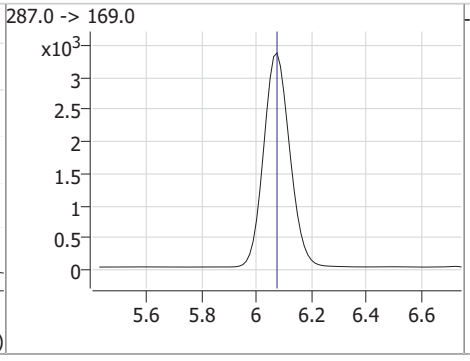


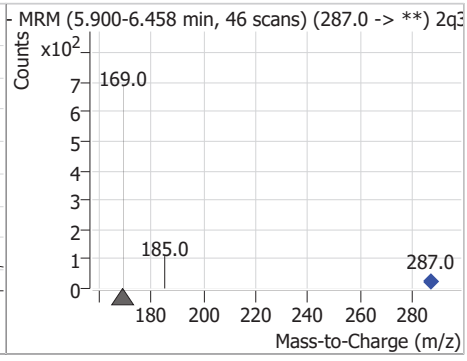




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.31	6.07	0.00	22035				







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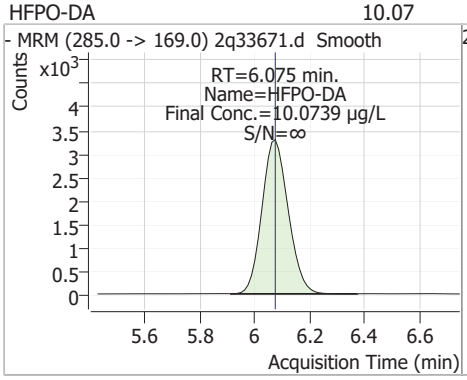
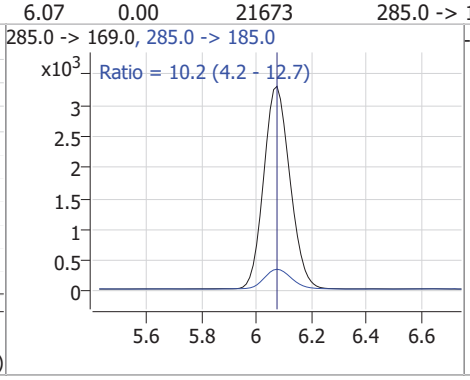
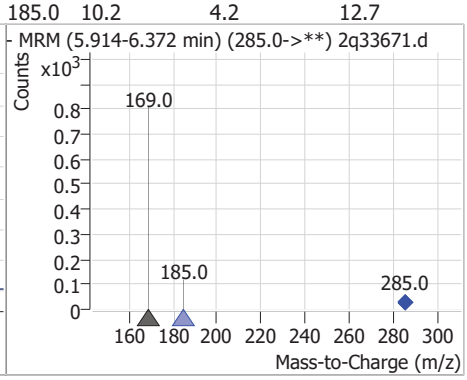
Perfluorinated Compounds by LC/MS/MS

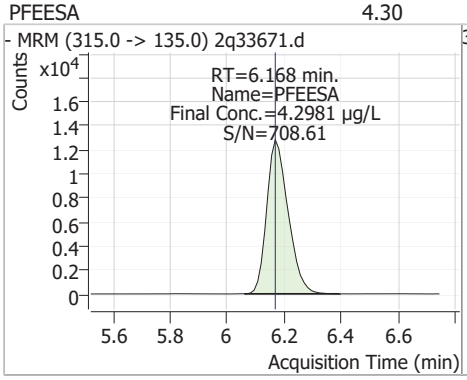
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.07	6.07	0.00	21673	285.0 -> 185.0	10.2	4.2	12.7

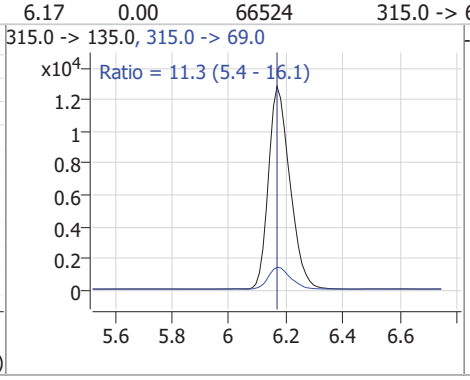


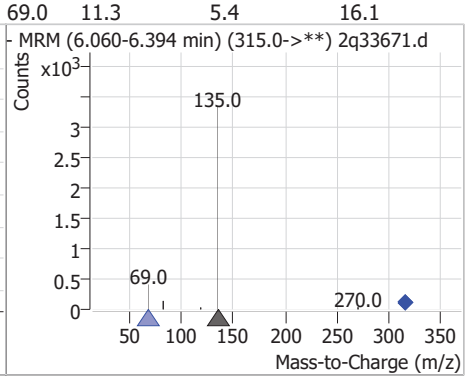




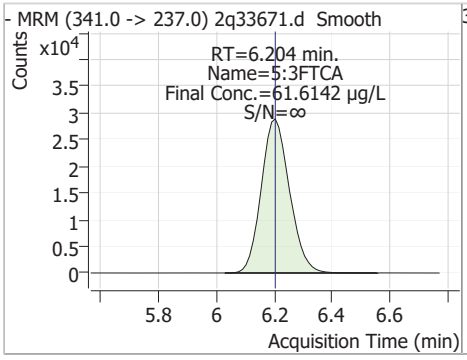
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.30	6.17	0.00	66524	315.0 -> 69.0	11.3	5.4	16.1

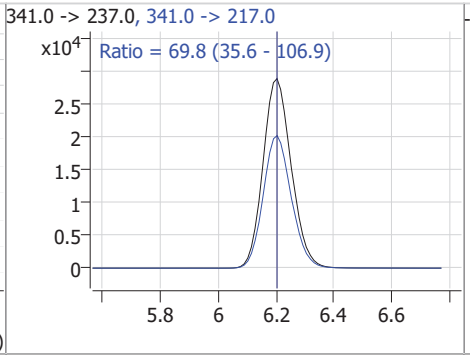


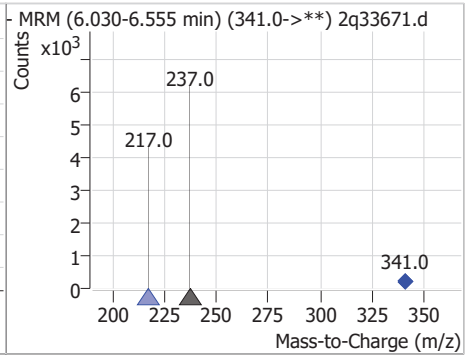




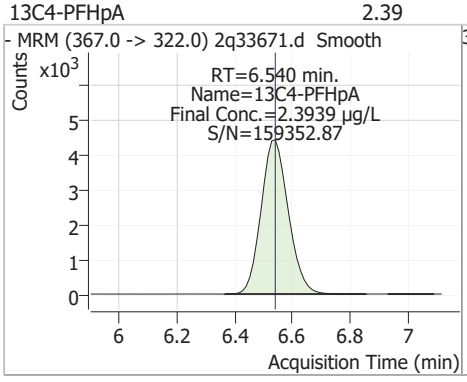
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	61.61	6.20	0.00	194776	341.0 -> 217.0	69.8	35.6	106.9

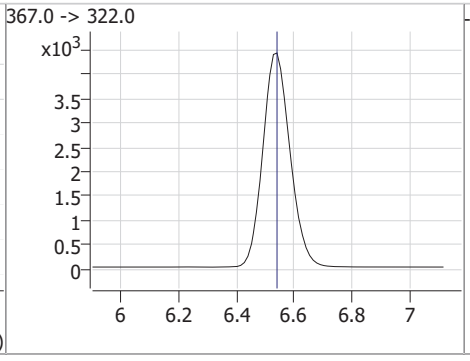


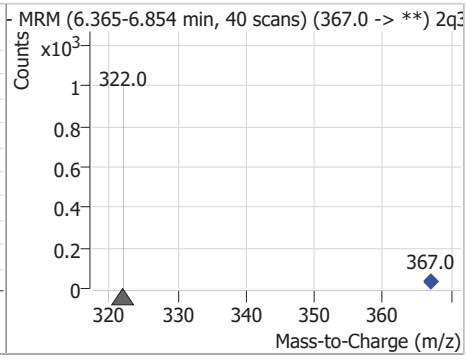




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.39	6.54	0.00	28750				







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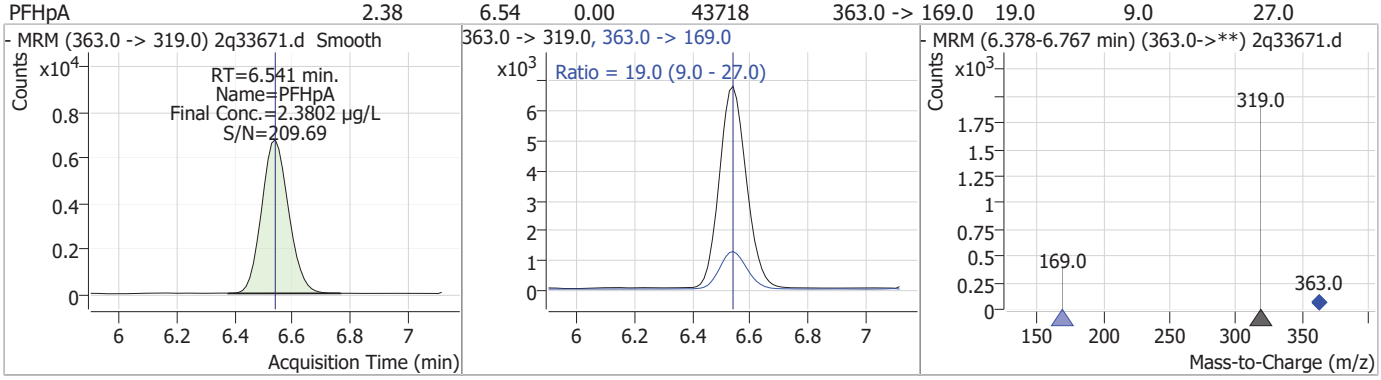
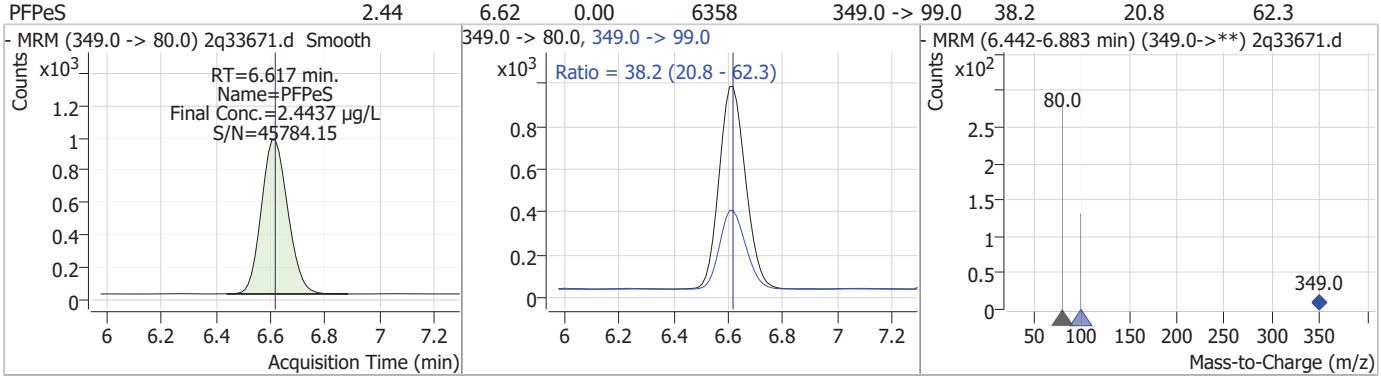
Perfluorinated Compounds by LC/MS/MS

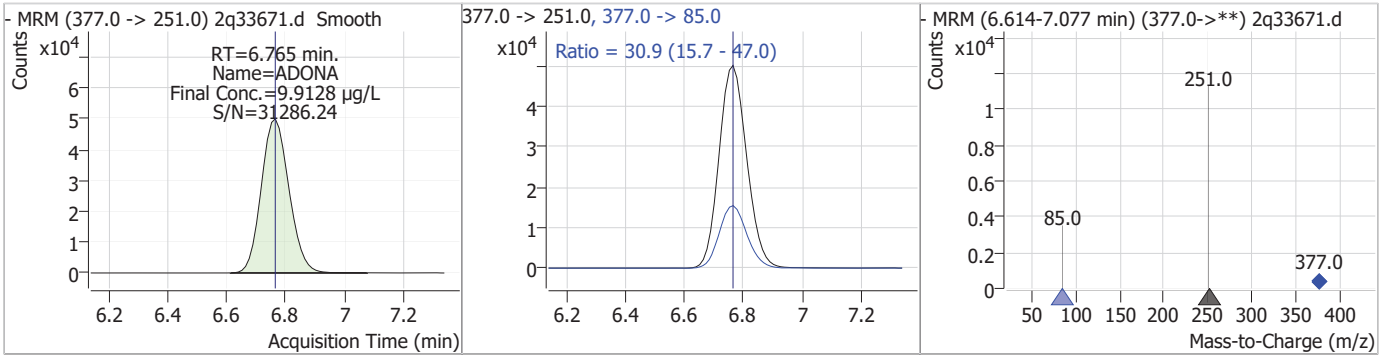
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.38	6.54	0.00	43718	363.0 -> 169.0	19.0	9.0	27.0



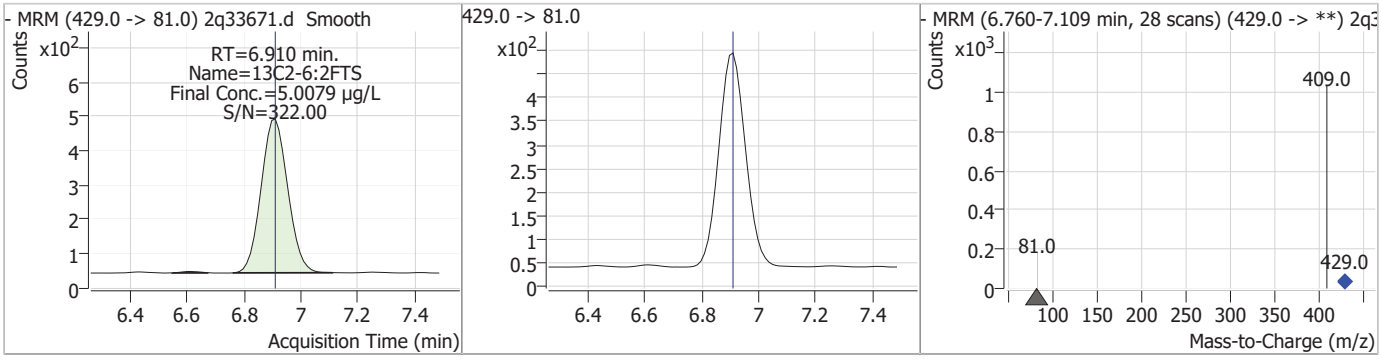
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.44	6.62	0.00	6358	349.0 -> 99.0	38.2	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	9.91	6.77	0.00	326485	377.0 -> 85.0	30.9	15.7	47.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.01	6.91	0.00	2924				



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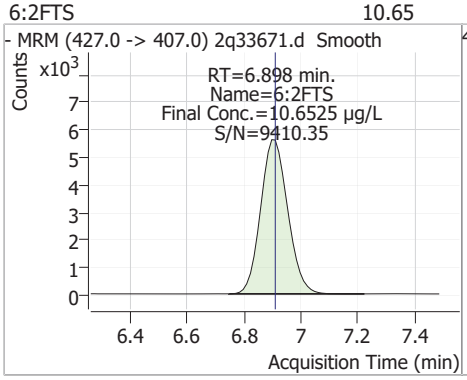
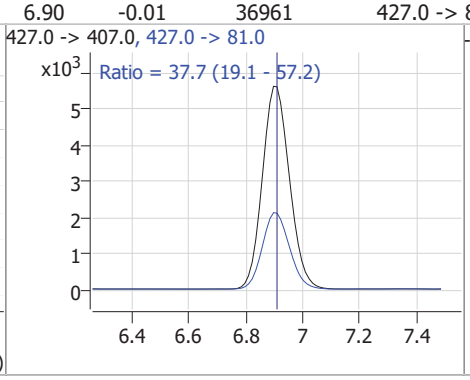
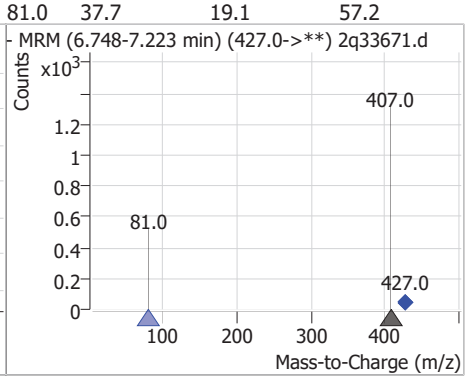
Perfluorinated Compounds by LC/MS/MS

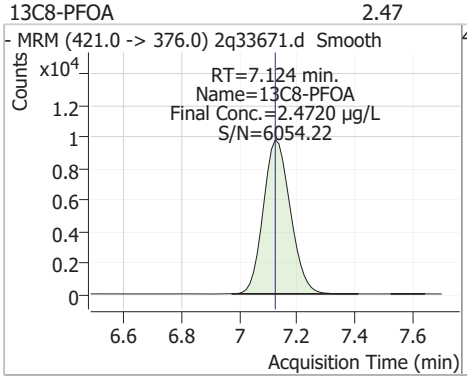
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	10.65	6.90	-0.01	36961	427.0 -> 81.0	37.7	19.1	57.2

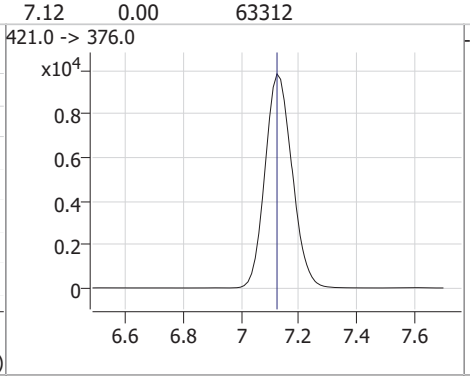


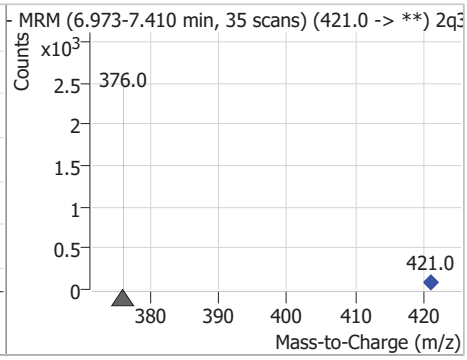




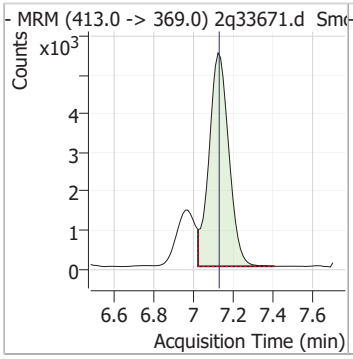
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.47	7.12	0.00	63312				

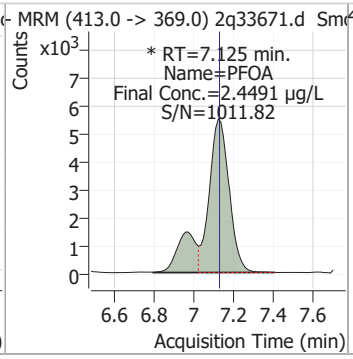


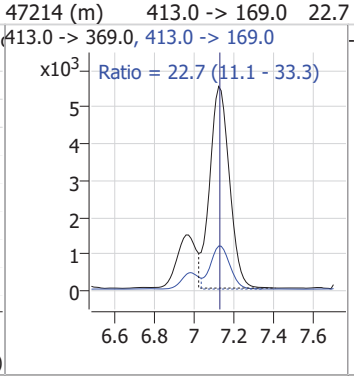


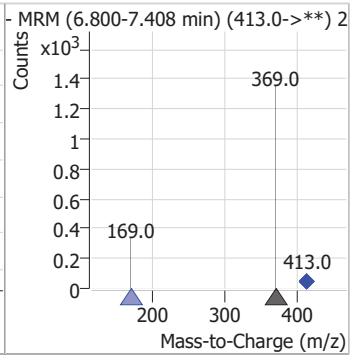


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.45	7.12	0.00	47214 (m)	413.0 -> 169.0	22.7	11.1	33.3

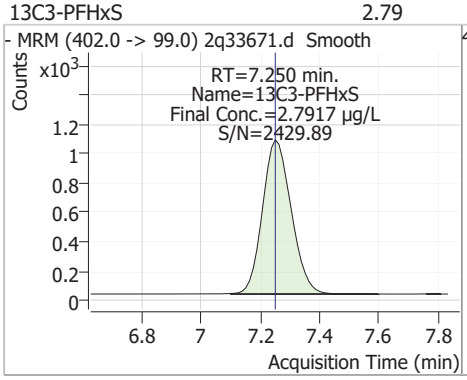


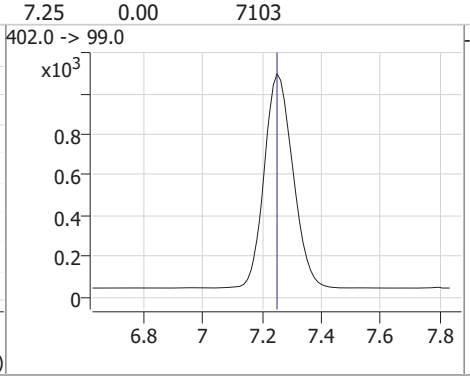


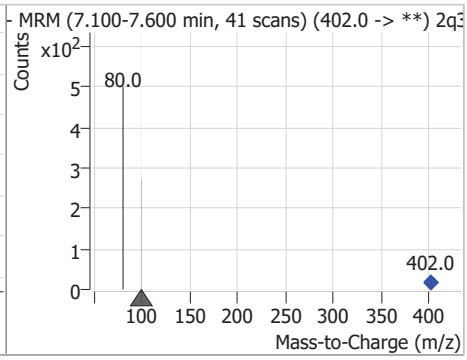




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.79	7.25	0.00	7103				

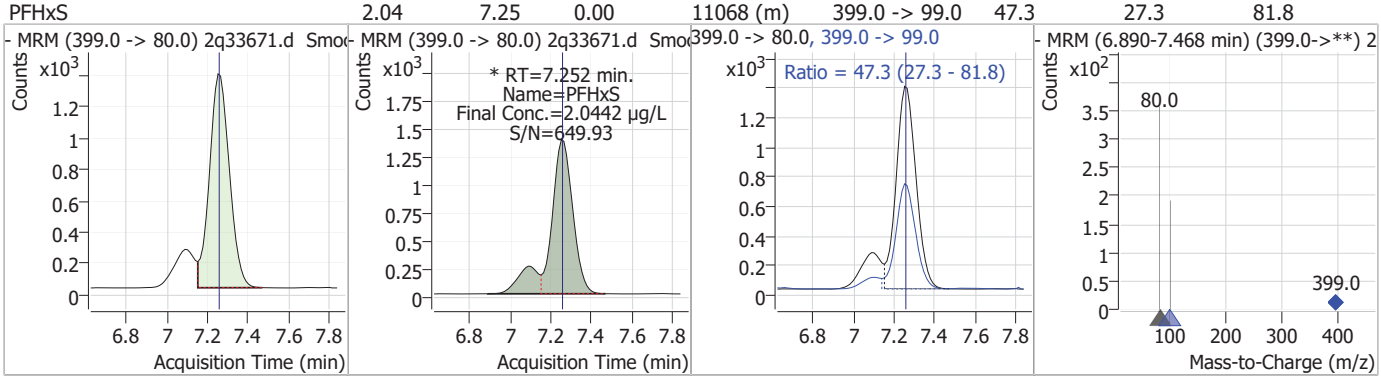




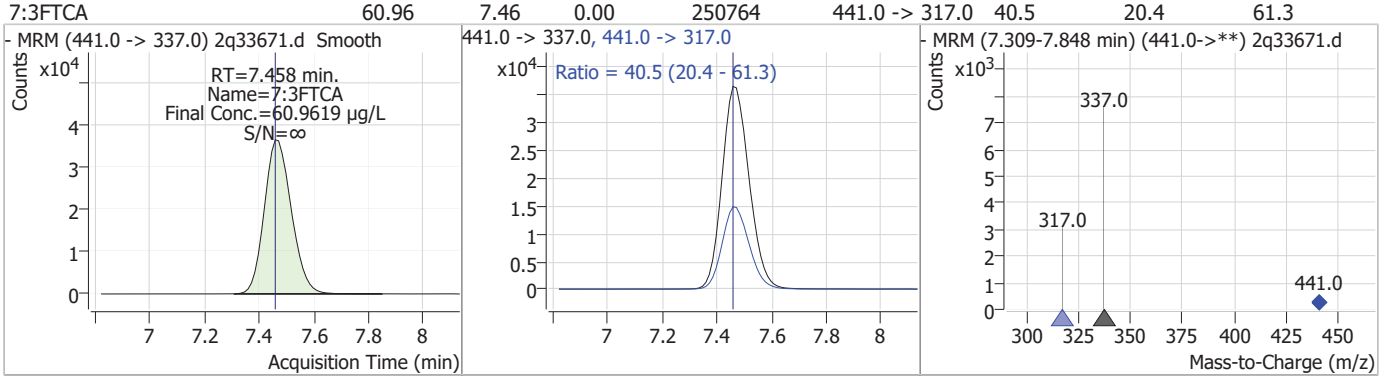


Perfluorinated Compounds by LC/MS/MS

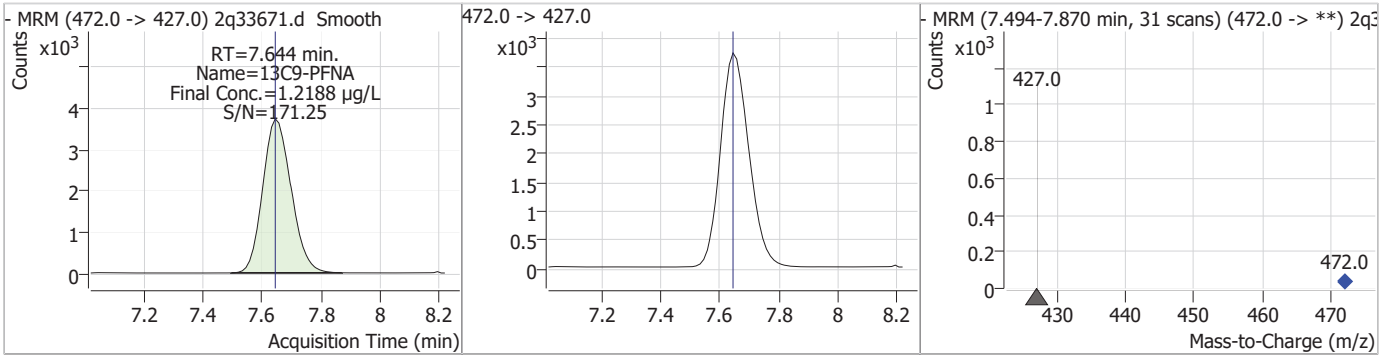
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.04	7.25	0.00	11068 (m)	399.0 -> 99.0	47.3	27.3	81.8



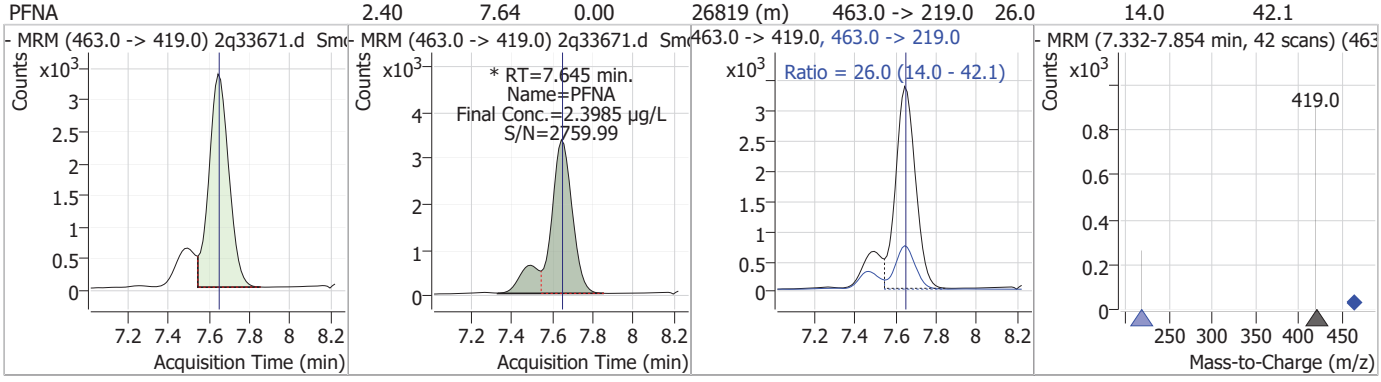
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	60.96	7.46	0.00	250764	441.0 -> 317.0	40.5	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.22	7.64	0.00	24652				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.40	7.64	0.00	26819 (m)	463.0 -> 219.0	26.0	14.0	42.1



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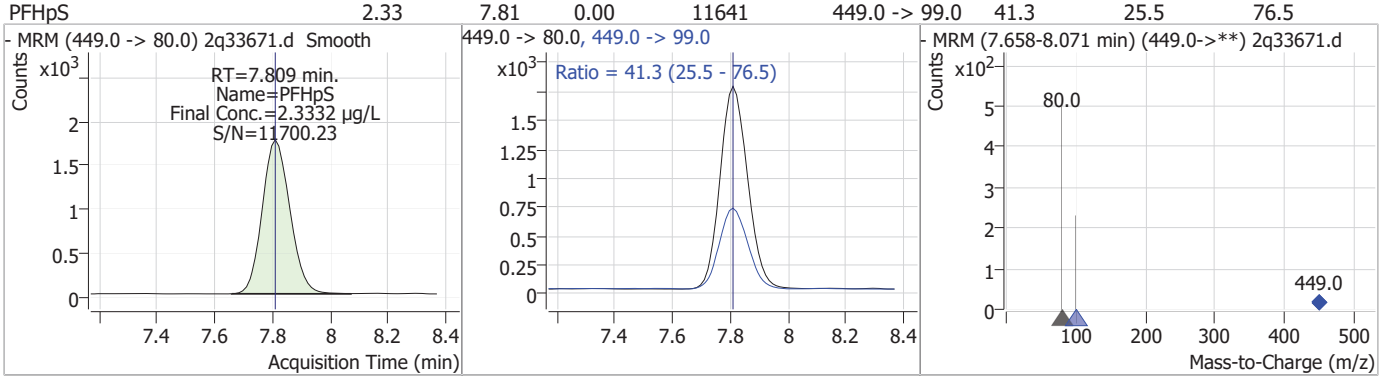
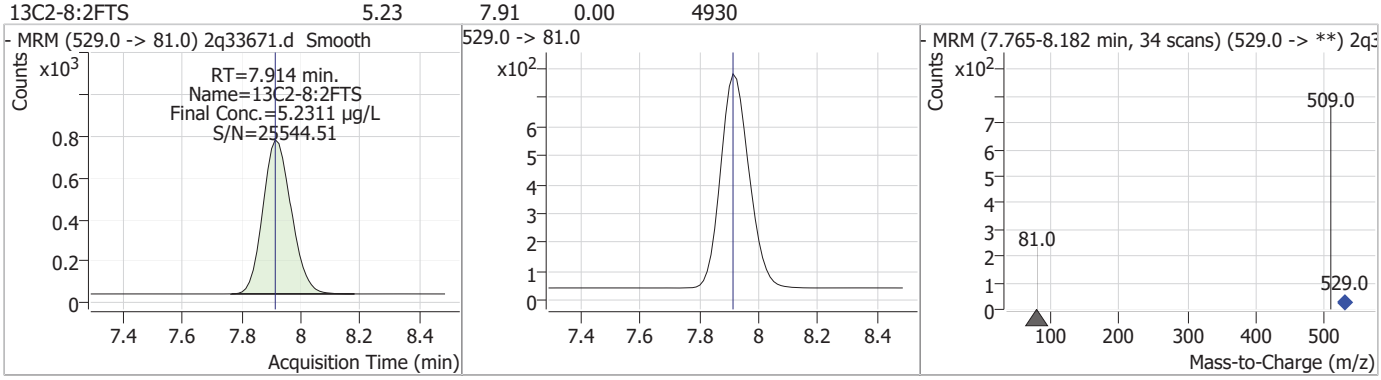
Perfluorinated Compounds by LC/MS/MS

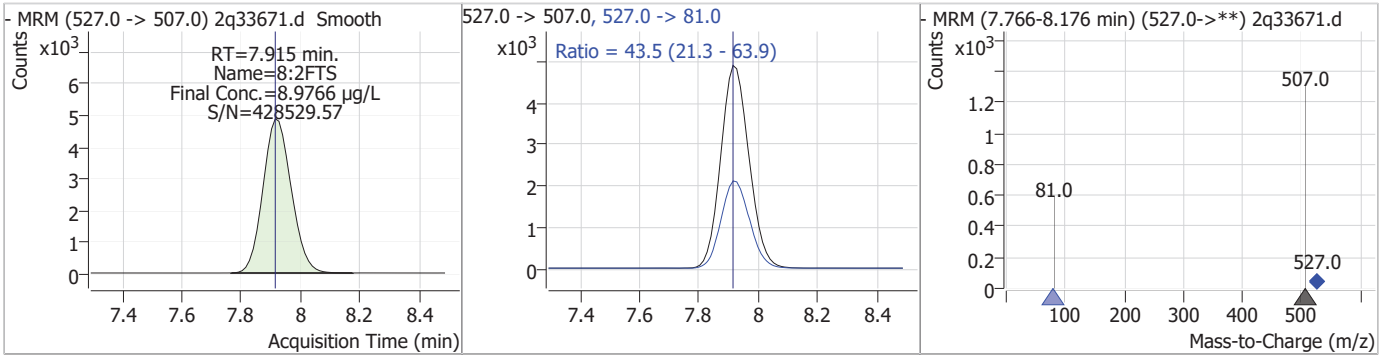
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.33	7.81	0.00	11641	449.0 -> 99.0	41.3	25.5	76.5



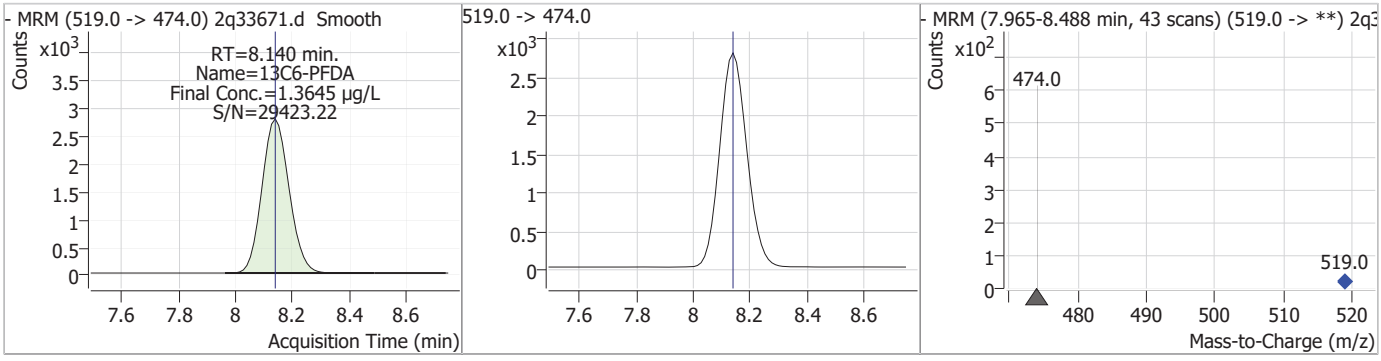
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.23	7.91	0.00	4930				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	8.98	7.91	0.00	32147	527.0 -> 81.0	43.5	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.36	8.14	0.00	18405				



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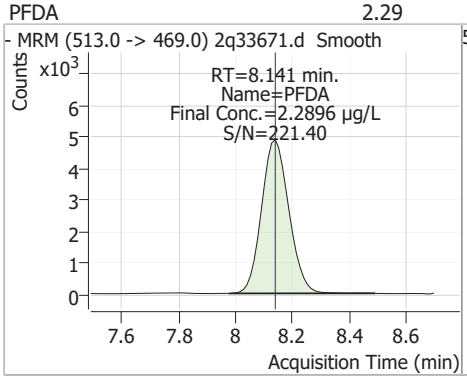
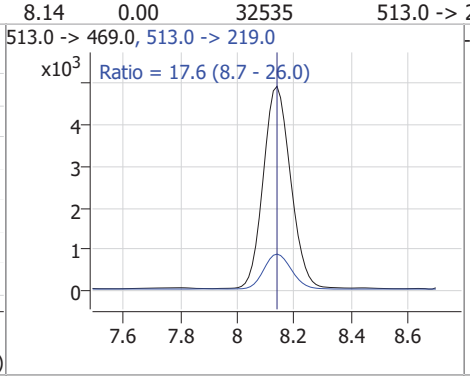
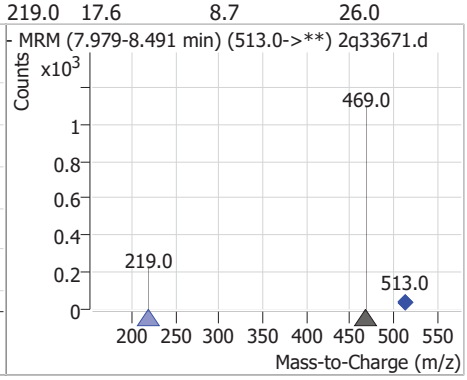
Perfluorinated Compounds by LC/MS/MS

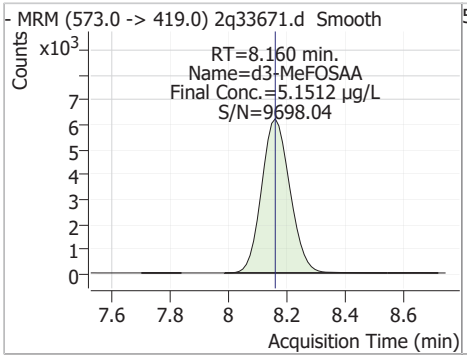
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.29	8.14	0.00	32535	513.0 -> 219.0	17.6	8.7	26.0

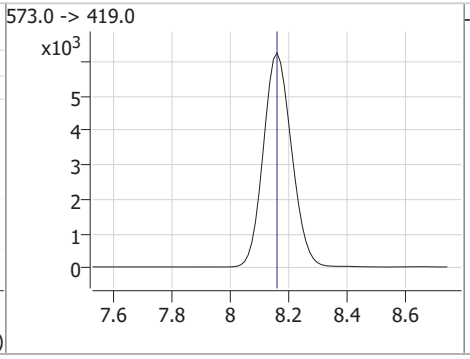


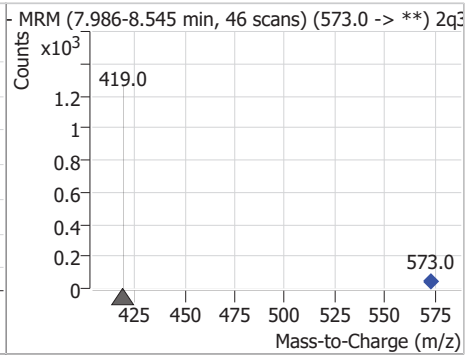




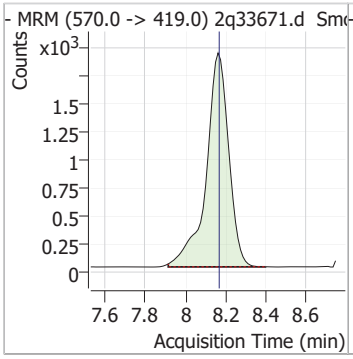
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.15	8.16	0.00	41773				

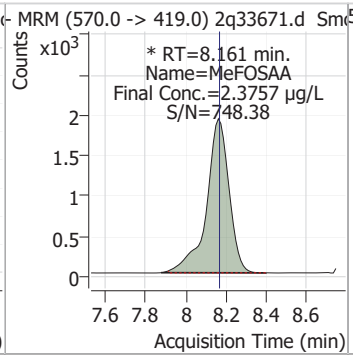


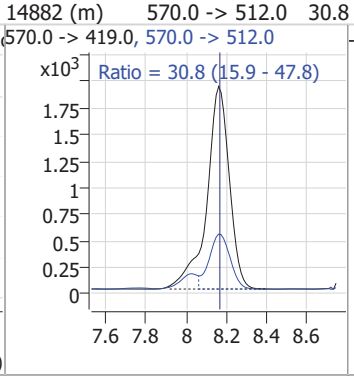


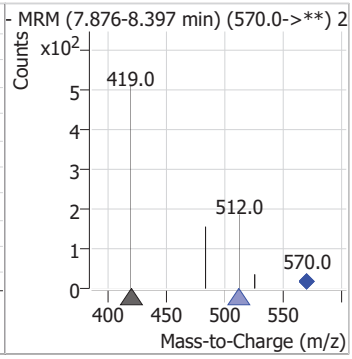


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.38	8.16	0.00	14882 (m)	570.0 -> 512.0	30.8	15.9	47.8

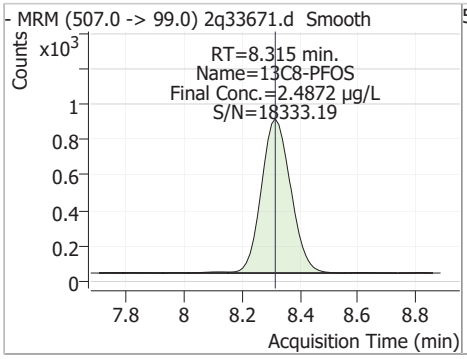


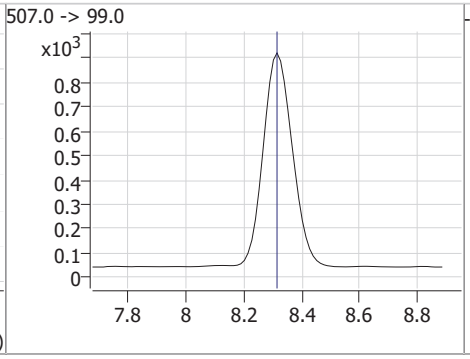


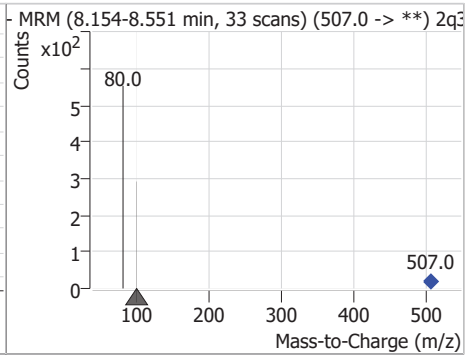




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.49	8.32	0.00	6160				

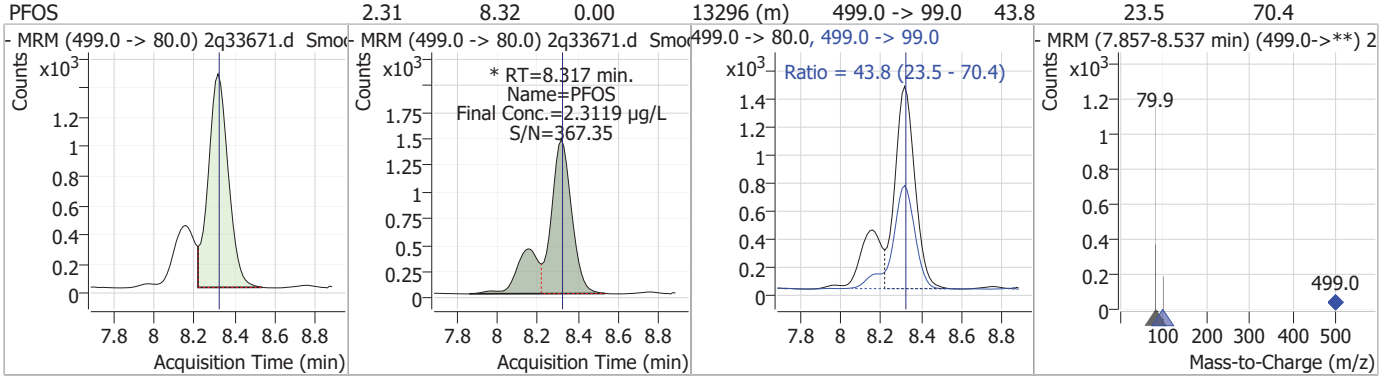




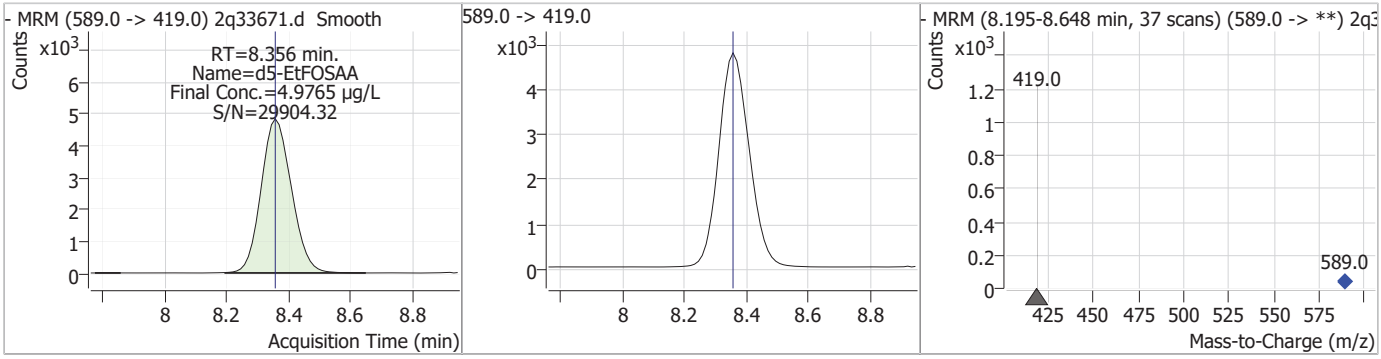


Perfluorinated Compounds by LC/MS/MS

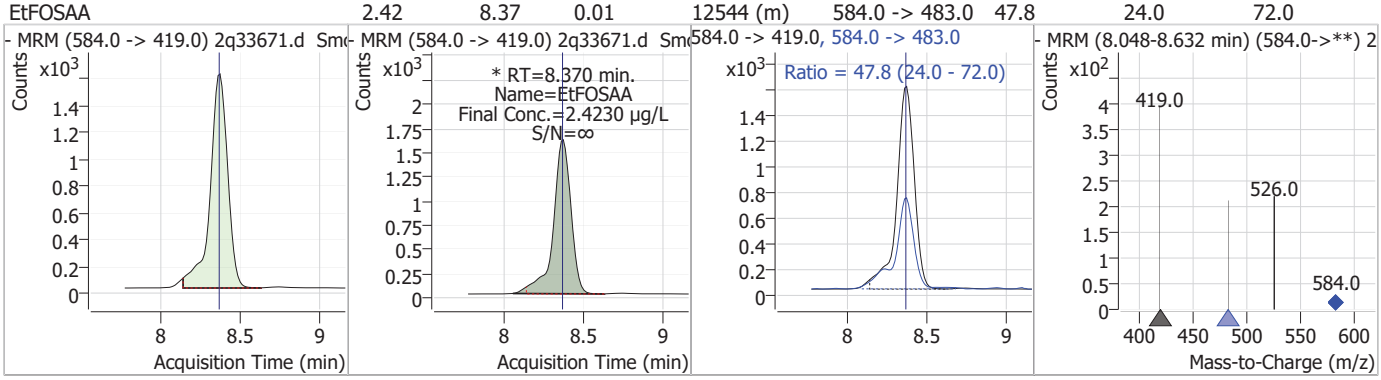
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.31	8.32	0.00	13296 (m)	499.0 -> 99.0	43.8	23.5	70.4



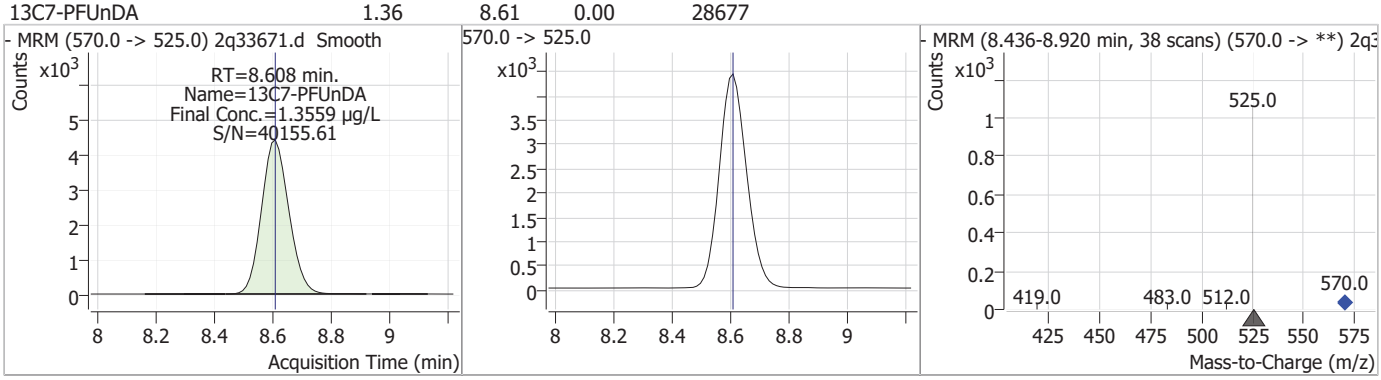
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.98	8.36	0.00	32563				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.42	8.37	0.01	12544 (m)	584.0 -> 483.0	47.8	24.0	72.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.36	8.61	0.00	28677				



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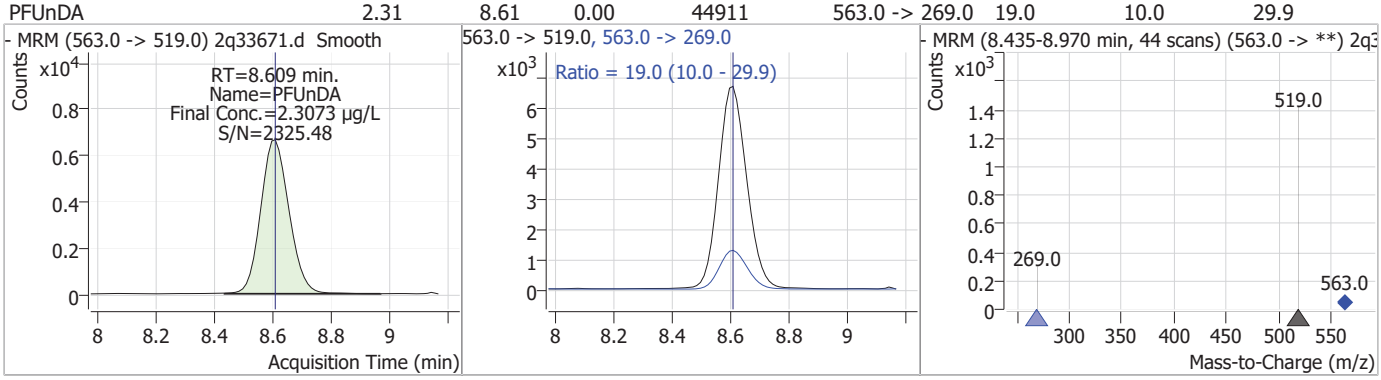
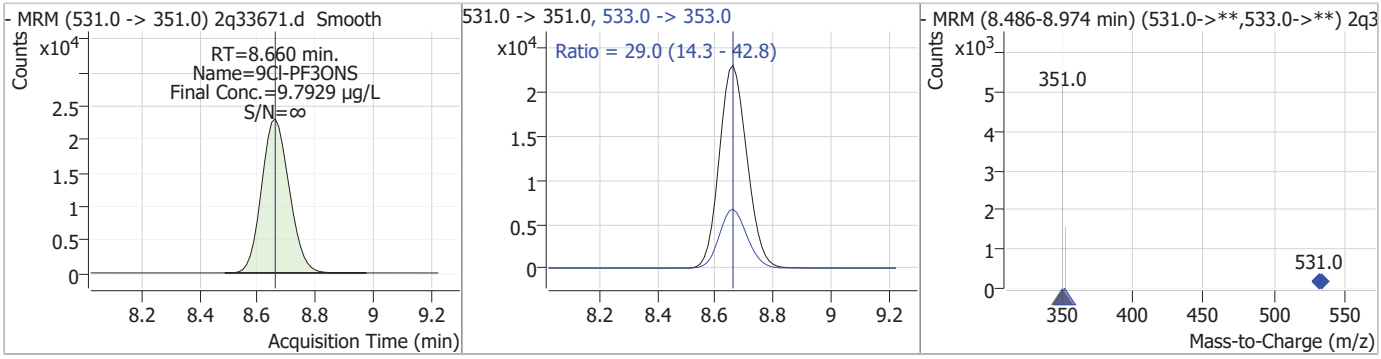
Perfluorinated Compounds by LC/MS/MS

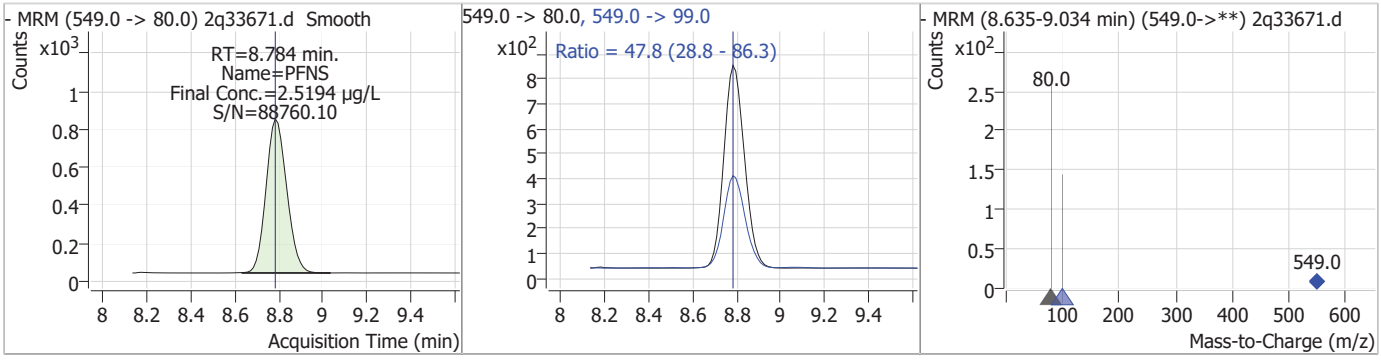
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.31	8.61	0.00	44911	563.0 -> 269.0	19.0	10.0	29.9



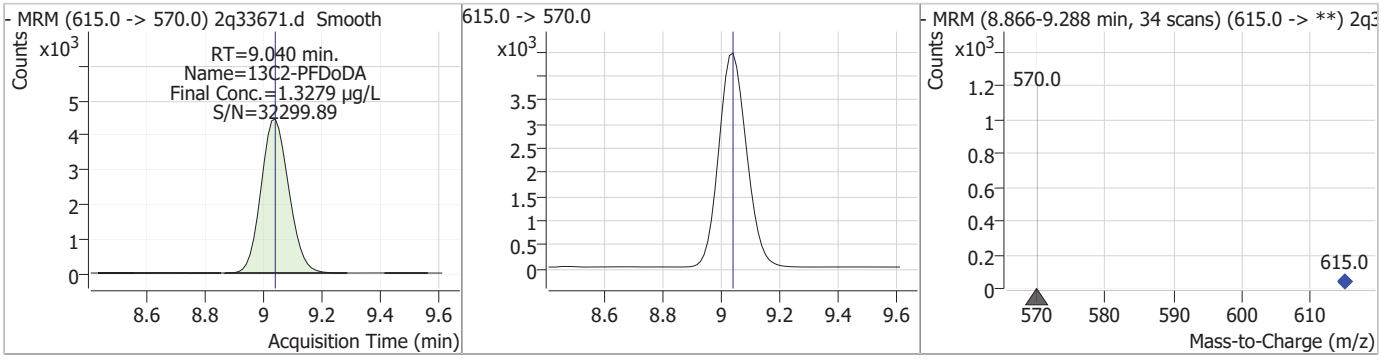
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.79	8.66	0.00	152135	533.0 -> 353.0	29.0	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.52	8.78	0.00	5289	549.0 -> 99.0	47.8	28.8	86.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.33	9.04	0.00	29379				



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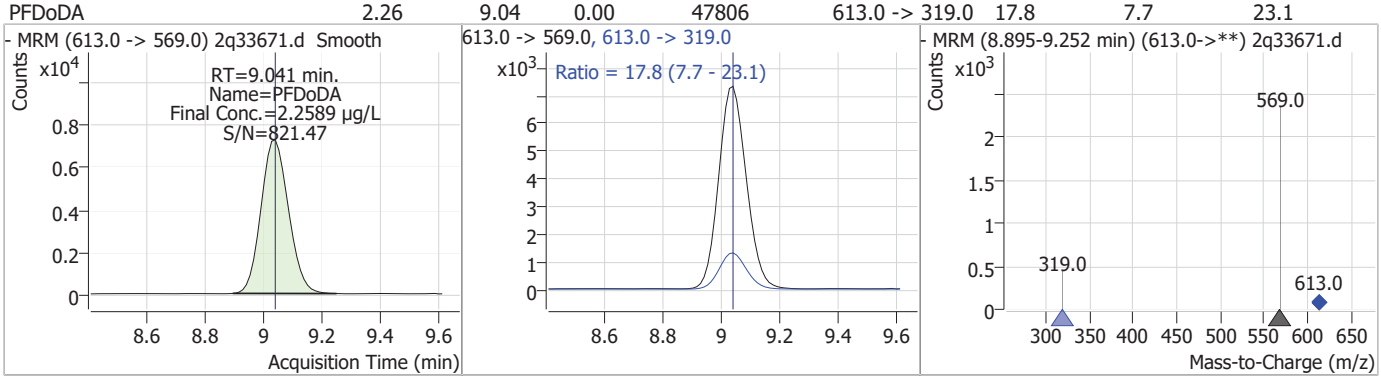
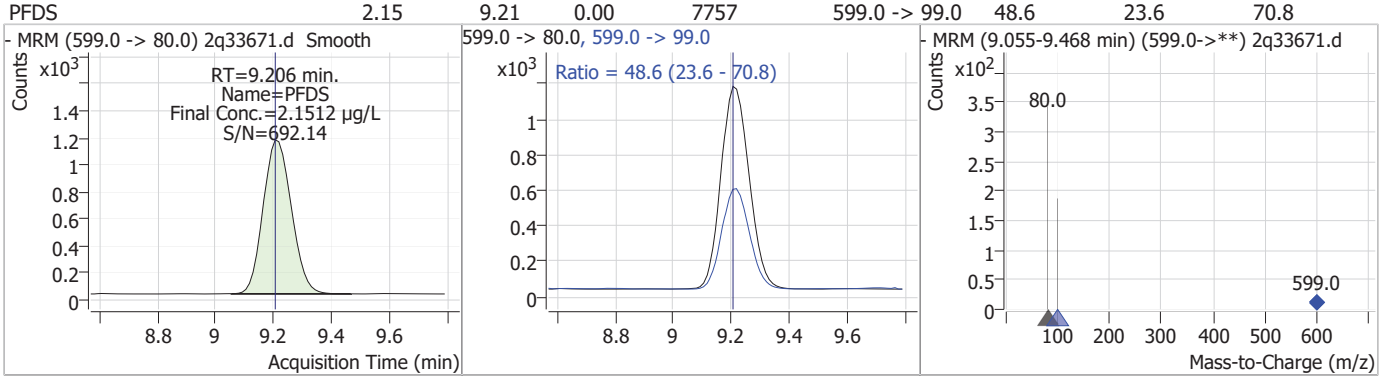
Perfluorinated Compounds by LC/MS/MS

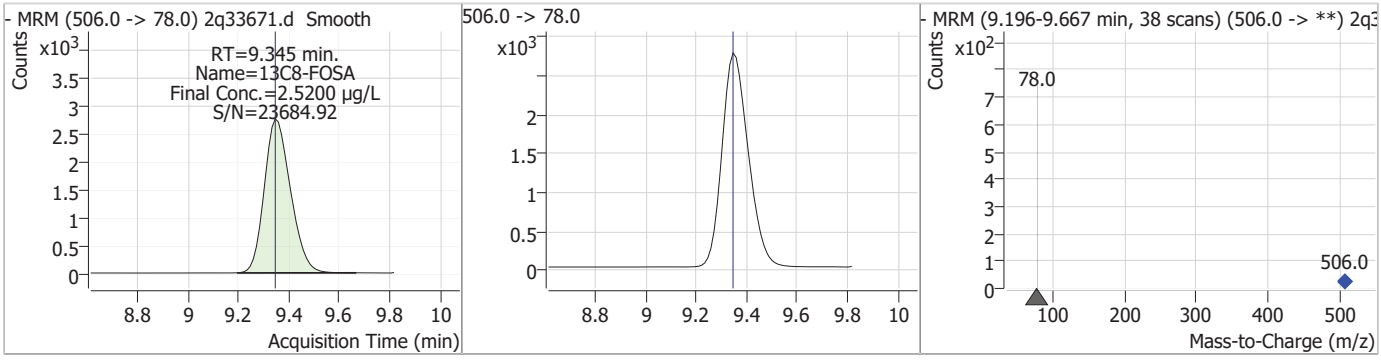
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.26	9.04	0.00	47806	613.0 -> 319.0	17.8	7.7	23.1



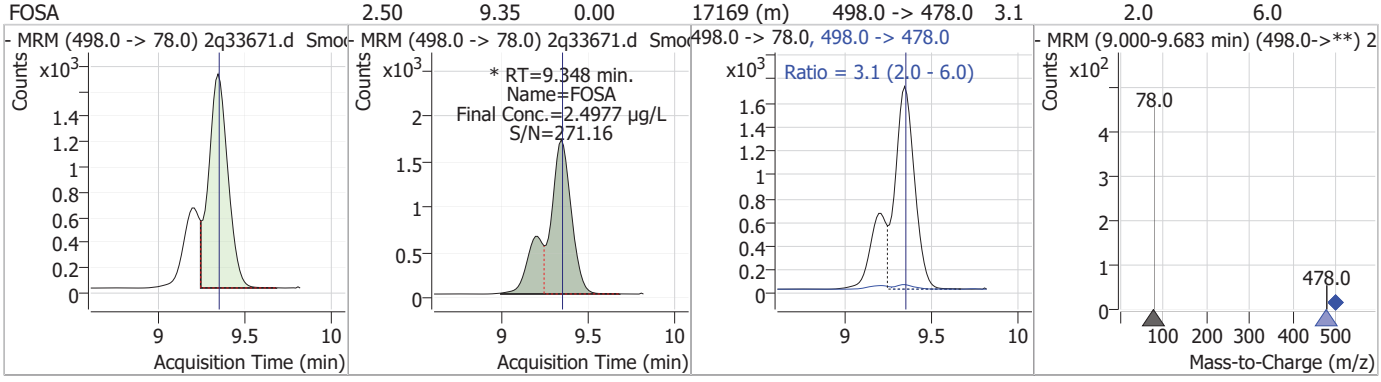
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.15	9.21	0.00	7757	599.0 -> 99.0	48.6	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.52	9.35	0.00	19793				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.50	9.35	0.00	17169 (m)	498.0 -> 478.0	3.1	2.0	6.0



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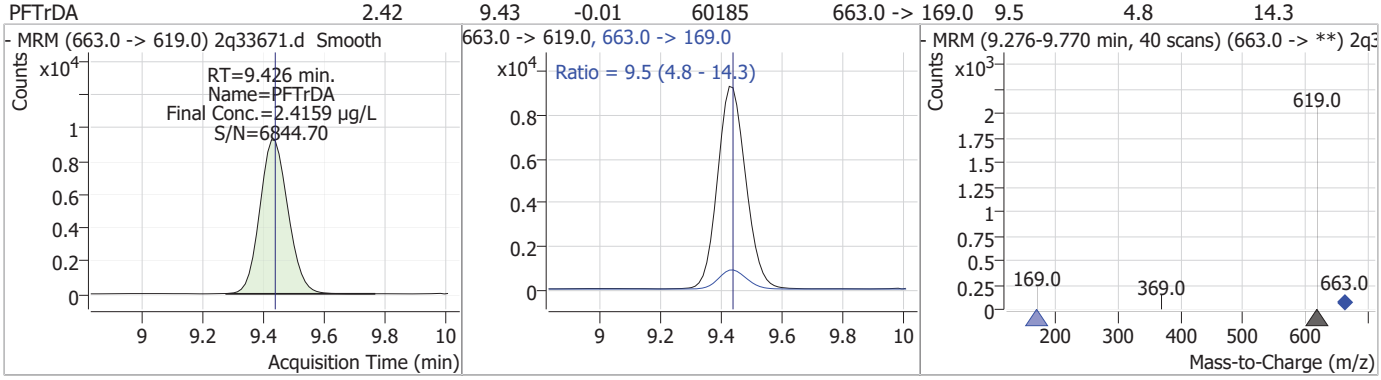
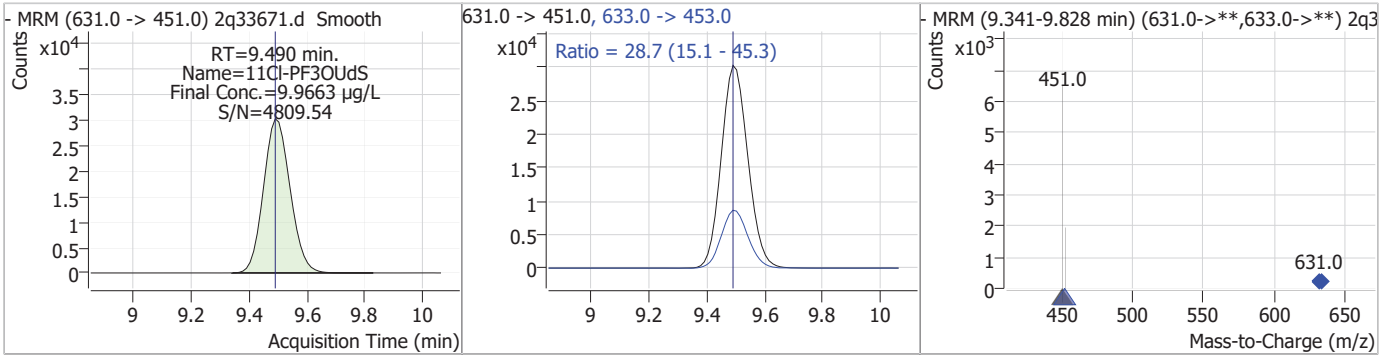
Perfluorinated Compounds by LC/MS/MS

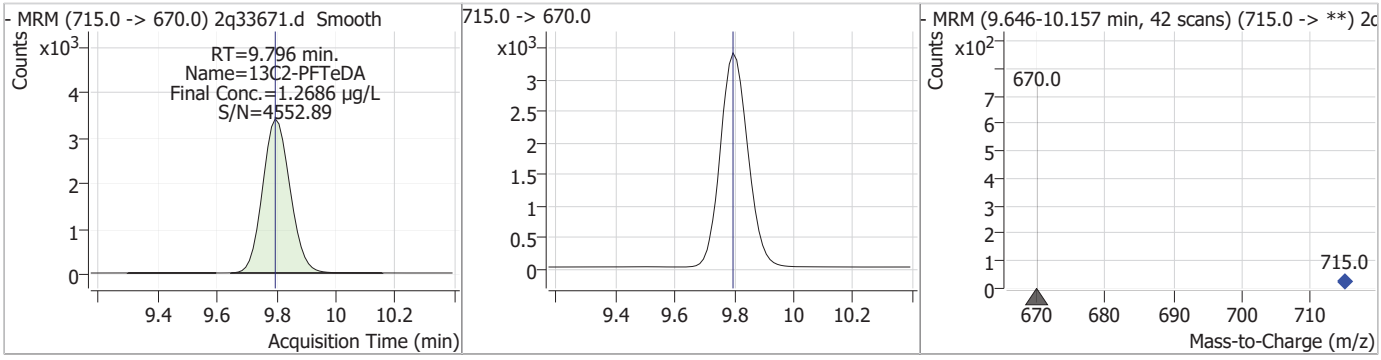
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.42	9.43	-0.01	60185	663.0 -> 169.0	9.5	4.8	14.3



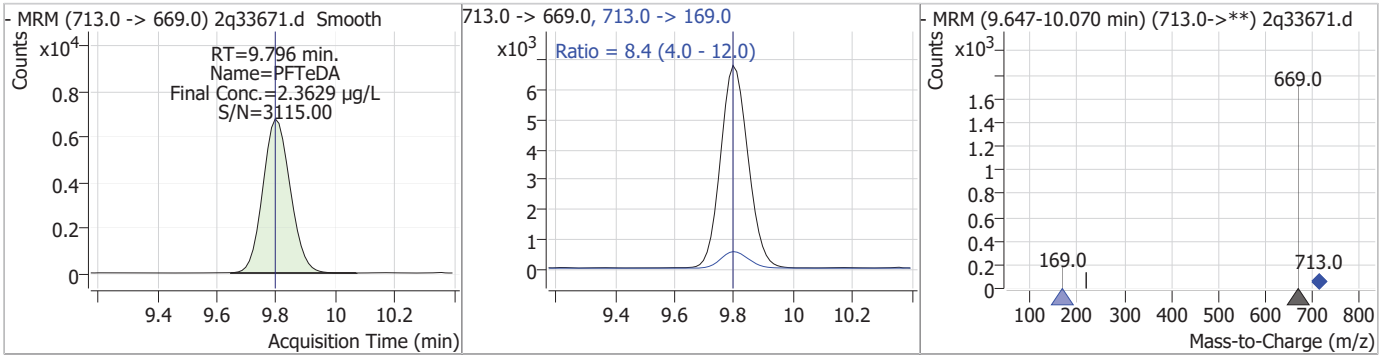
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.97	9.49	0.00	192871	633.0 -> 453.0	28.7	15.1	45.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.27	9.80	0.00	21786				

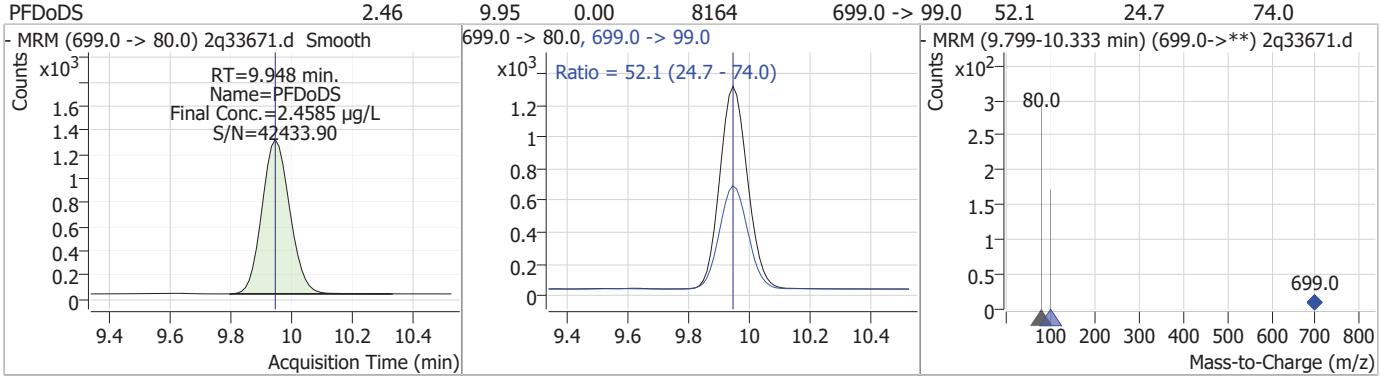


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.36	9.80	0.00	43353	713.0 -> 169.0	8.4	4.0	12.0

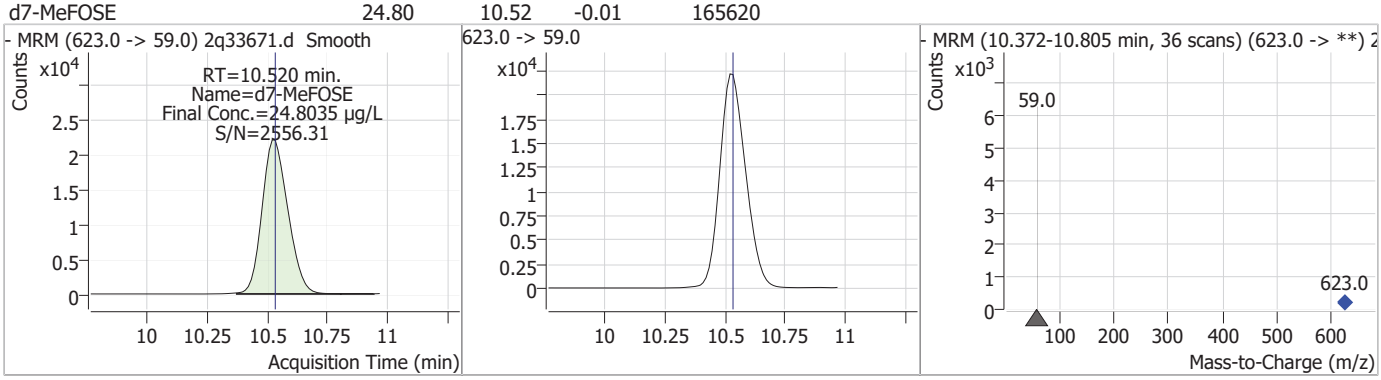


Perfluorinated Compounds by LC/MS/MS

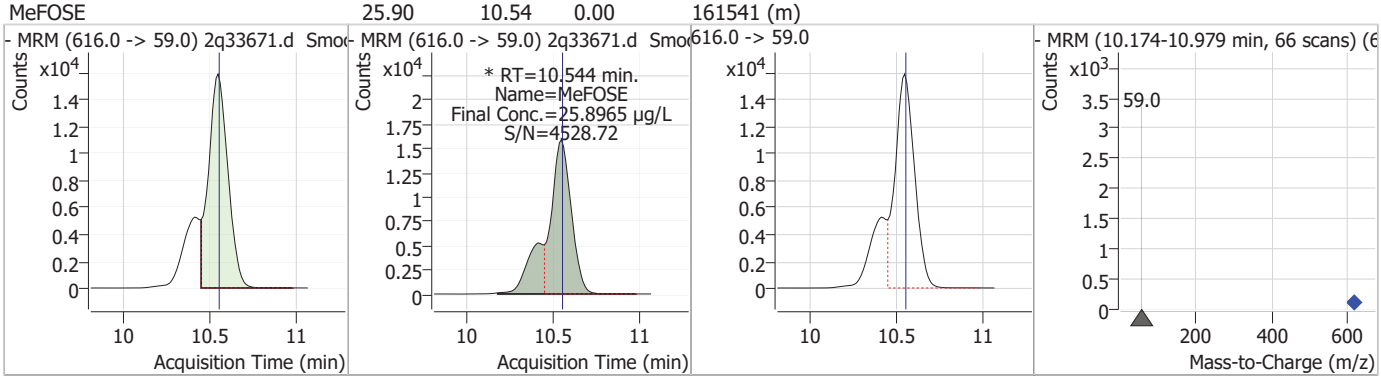
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.46	9.95	0.00	8164	699.0 -> 99.0	52.1	24.7	74.0



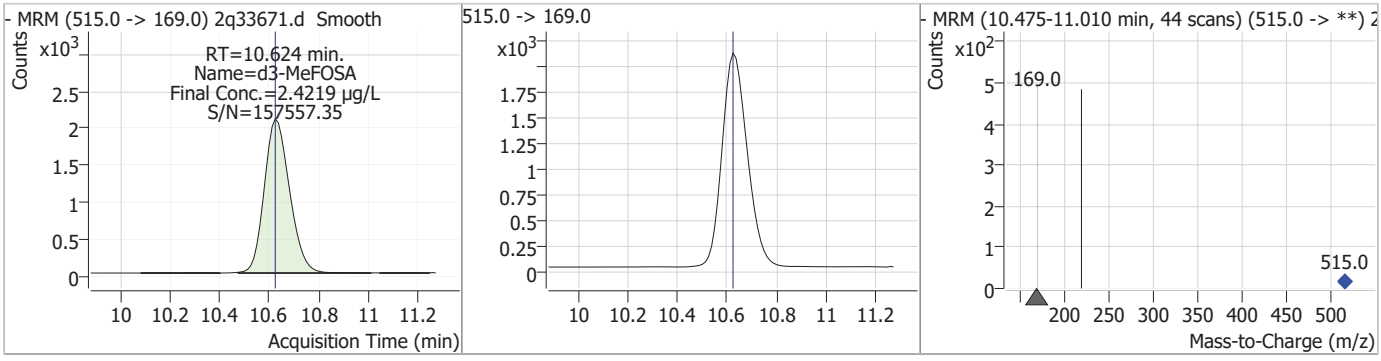
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.80	10.52	-0.01	165620				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.90	10.54	0.00	161541 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.42	10.62	0.00	14797				



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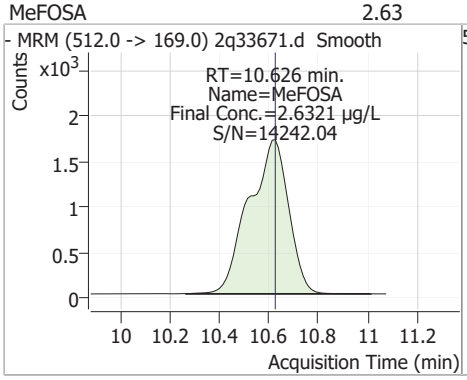
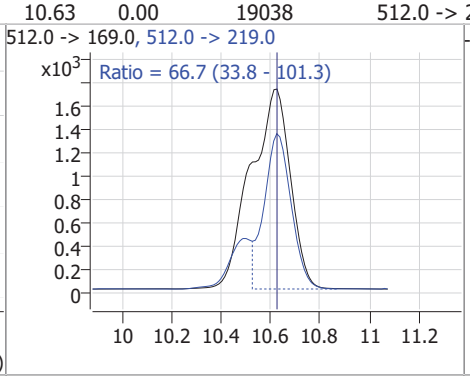
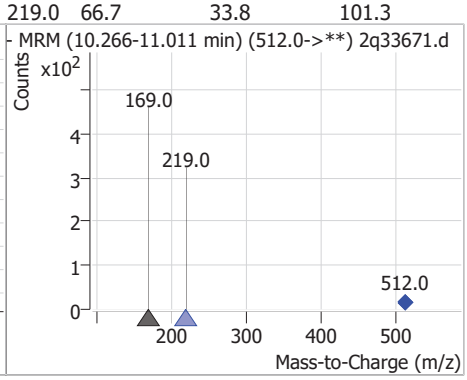
Perfluorinated Compounds by LC/MS/MS

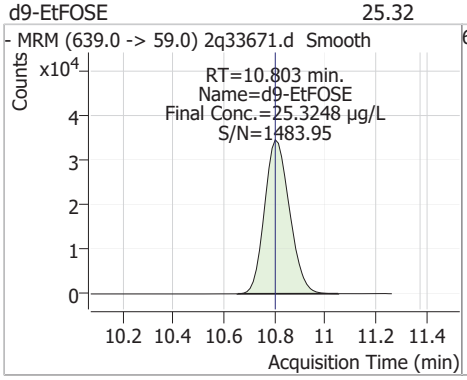
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.63	10.63	0.00	19038	512.0 -> 219.0	66.7	33.8	101.3

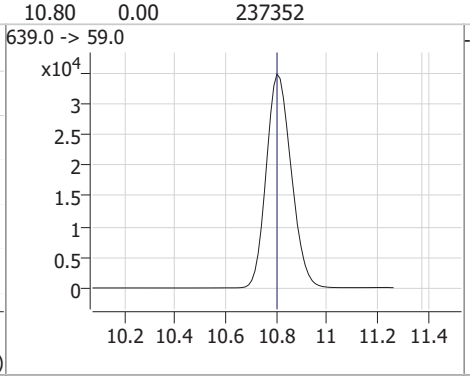


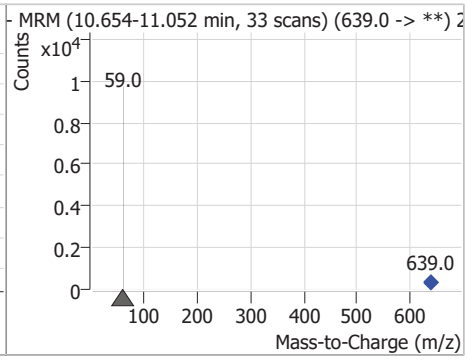




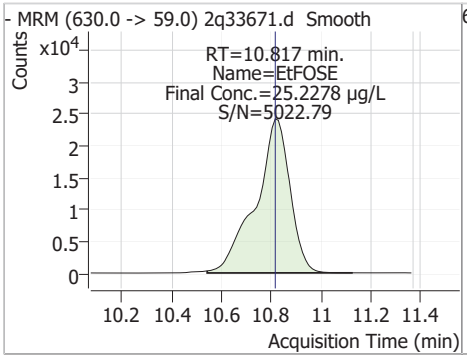
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.32	10.80	0.00	237352				

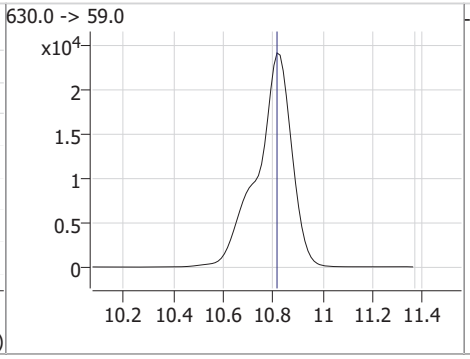


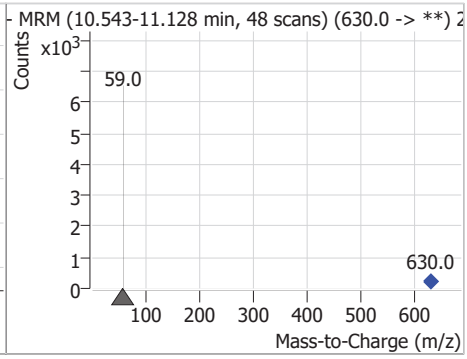




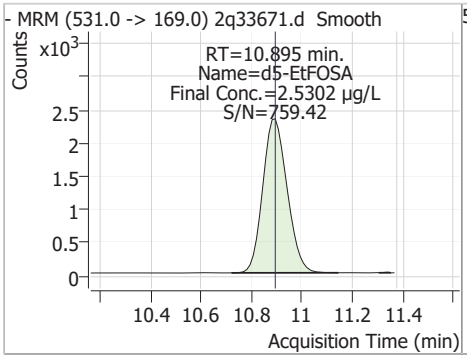
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.23	10.82	0.00	232275				

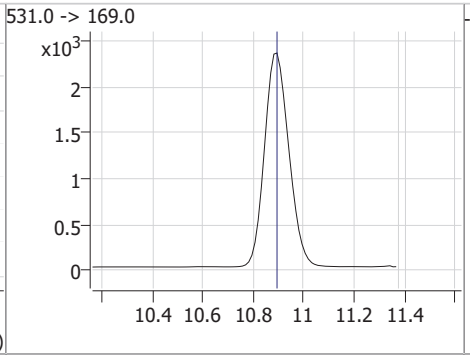


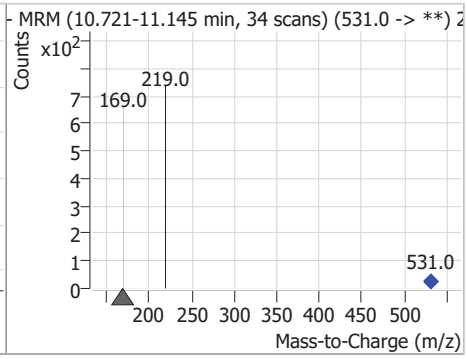




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.53	10.89	0.00	15588				







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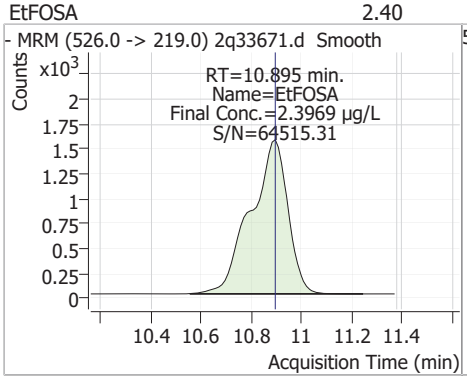
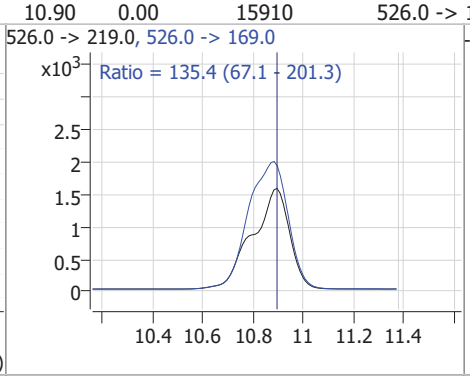
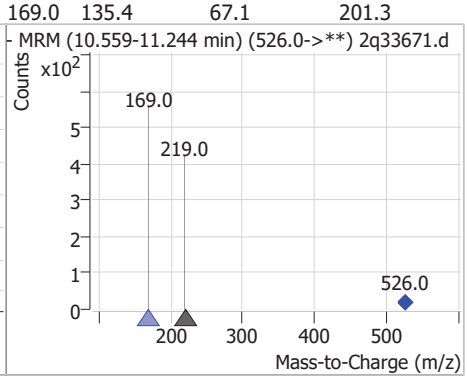
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.40	10.90	0.00	15910	526.0 -> 169.0	135.4	67.1	201.3







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7

Manual Integration Approval Summary

Sample Number: T2Q344-ICV344
Lab FileID: 2Q33671.D
Injection Time: 05/09/25 17:09
Method: EPA 1633
Analyst approved: 05/10/25 01:15 Josephus Gimenez
Supervisor approved: 05/12/25 11:57 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.12	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.25	Split peak
Perfluorononanoic acid	375-95-1		7.64	Split peak
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.32	Split peak
EtFOSAA	2991-50-6		8.37	Split peak
PFOSA	754-91-6		9.35	Split peak
MeFOSE	24448-09-7		10.54	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/15/25 12:46

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33745.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/12/2025 2:21:03 PM
Sample Name : CC344-4
Vial : P1-A5
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q345.batch.bin
Sample Information : OP62666,T2Q345,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.275	217.0 -> 172.0	117509	10.00 µg/L	0.012
M5-PFPeA	4.637	268.0 -> 223.0	63637	5.00 µg/L	0.000
M5-PFHxA	5.745	318.0 -> 273.0	36860	2.50 µg/L	0.000
M4-PFHpA	6.528	367.0 -> 322.0	28288	2.50 µg/L	-0.012
M8-PFOA	7.124	421.0 -> 376.0	65202	2.50 µg/L	0.000
M9-PFNA	7.632	472.0 -> 427.0	25879	1.25 µg/L	-0.012
M6-PFDA	8.127	519.0 -> 474.0	17936	1.25 µg/L	-0.013
M7-PFUnDA	8.583	570.0 -> 525.0	28187	1.25 µg/L	-0.024
M2-PFDoDA	9.016	615.0 -> 570.0	28411	1.25 µg/L	-0.025
M2-PFTeDA	9.783	715.0 -> 670.0	23370	1.25 µg/L	-0.012
M8-FOSA	9.333	506.0 -> 78.0	20200	2.50 µg/L	-0.013
M3-PFBS	5.699	302.0 -> 99.0	5332	2.50 µg/L	0.000
M3-PFHxS	7.250	402.0 -> 99.0	6972	2.50 µg/L	0.000
M8-PFOS	8.303	507.0 -> 99.0	6175	2.50 µg/L	-0.012
M2-4:2FTS	5.433	329.0 -> 81.0	1561	5.00 µg/L	0.000
M2-6:2FTS	6.897	429.0 -> 81.0	3241	5.00 µg/L	-0.012
M2-8:2FTS	7.902	529.0 -> 81.0	4941	5.00 µg/L	-0.012
M3-MeFOSAA	8.147	573.0 -> 419.0	41249	5.00 µg/L	-0.012
M3-HFPO-DA	6.062	287.0 -> 169.0	22515	10.00 µg/L	-0.012
M5-EtFOSAA	8.344	589.0 -> 419.0	34793	5.00 µg/L	-0.012
M7-MeFOSE	10.520	623.0 -> 59.0	162066	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	231207	25.00 µg/L	0.000
M5-EtFOSA	10.882	531.0 -> 169.0	15711	2.50 µg/L	-0.012
M3-MeFOSA	10.612	515.0 -> 169.0	14872	2.50 µg/L	-0.012
13C4-PFOS	8.304	503.0 -> 80.0	11767	2.50 µg/L	-0.012
13C3-PFBA	3.278	216.0 -> 172.0	49085	5.00 µg/L	0.012
18O2-PFHxS	7.250	403.0 -> 84.0	7802	2.50 µg/L	-0.012
13C4-PFOA	7.124	417.0 -> 372.0	64071	2.50 µg/L	0.000
13C2-PFDA	8.127	515.0 -> 470.0	17253	1.25 µg/L	-0.013
13C5-PFNA	7.632	468.0 -> 423.0	23031	1.25 µg/L	-0.012
13C2-PFHxA	5.746	315.0 -> 270.0	33371	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.433	329.0 -> 81.0	1561	5.83 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 116.6%	
13C2-6:2FTS	6.897	429.0 -> 81.0	3241	5.44 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.9%	
13C2-8:2FTS	7.902	529.0 -> 81.0	4941	4.94 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.8%	
13C2-PFDoDA	9.016	615.0 -> 570.0	28411	1.21 µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.8%	
13C2-PFTeDA	9.783	715.0 -> 670.0	23370	1.24 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.9%	
13C3-PFBS	5.699	302.0 -> 99.0	5332	2.46 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.3%	
13C3-PFHxS	7.250	402.0 -> 99.0	6972	2.59 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.7%		
13C4-PFBA	3.275	217.0 -> 172.0	117509	10.20 µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 102.0%		
13C4-PFHpA	6.528	367.0 -> 322.0	28288	2.44 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.5%		
13C5-PFHxA	5.745	318.0 -> 273.0	36860	2.51 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.5%		
13C5-PFPeA	4.637	268.0 -> 223.0	63637	5.05 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.1%		
13C6-PFDA	8.127	519.0 -> 474.0	17936	1.27 µg/L		-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.4%		
13C7-PFUnDA	8.583	570.0 -> 525.0	28187	1.23 µg/L		-0.024
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.6%		
13C8-FOSA	9.333	506.0 -> 78.0	20200	2.51 µg/L		-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.3%		
13C8-PFOA	7.124	421.0 -> 376.0	65202	2.53 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.3%		
13C8-PFOS	8.303	507.0 -> 99.0	6175	2.48 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.2%		
13C9-PFNA	7.632	472.0 -> 427.0	25879	1.29 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.2%		
d3-MeFOSAA	8.147	573.0 -> 419.0	41249	5.10 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.0%		
13C3-HFPO-DA	6.062	287.0 -> 169.0	22515	9.68 µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 96.8%		
d3-MeFOSA	10.612	515.0 -> 169.0	14872	2.38 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.1%		
d5-EtFOSAA	8.344	589.0 -> 419.0	34793	5.17 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.4%		
d7-MeFOSE	10.520	623.0 -> 59.0	162066	22.56 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 90.2%		
d9-EtFOSE	10.803	639.0 -> 59.0	231207	22.88 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 91.5%		
d5-EtFOSA	10.882	531.0 -> 169.0	15711	2.50 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.0%		
Target Compounds						QValue
4:2FTS	5.433	327.0 -> 307.0	20778	8.90 µg/L		97
		327.0 -> 81.0	11369			
6:2FTS	6.898	427.0 -> 407.0	36457	9.38 µg/L		100
		427.0 -> 81.0	13910			
8:2FTS	7.902	527.0 -> 507.0	37052	9.92 µg/L		97
		527.0 -> 81.0	14973			
EtFOSAA	8.345	584.0 -> 419.0	13333	2.50 µg/L		95
		584.0 -> 483.0	6842			
FOSA	9.335	498.0 -> 78.0	17931	3.39 µg/L	m	99
		498.0 -> 478.0	763			
MeFOSAA	8.149	570.0 -> 419.0	15668	2.62 µg/L		93
		570.0 -> 512.0	4383			
PFBA	3.280	213.0 -> 169.0	30134	10.12 µg/L		100
PFBS	5.700	299.0 -> 80.0	14959	2.14 µg/L		98
		299.0 -> 99.0	5555			
PFDA	8.128	513.0 -> 469.0	36287	2.68 µg/L		98
		513.0 -> 219.0	6609			
PFDoDA	9.016	613.0 -> 569.0	53793	2.62 µg/L		98
		613.0 -> 319.0	8837			
PFDS	9.194	599.0 -> 80.0	8192	2.42 µg/L		98

Perfluorinated Compounds by LC/MS/MS

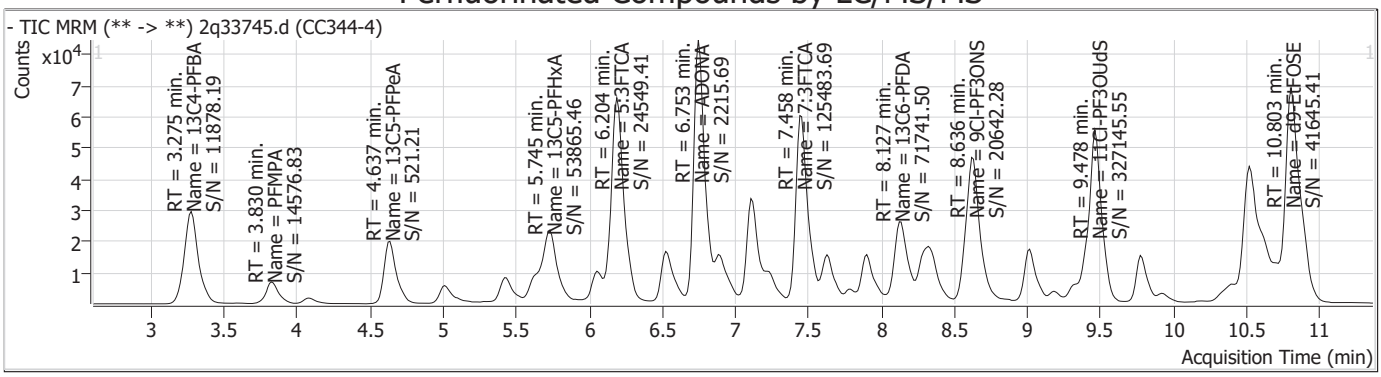
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	3964				
PFHpA	6.528	363.0 -> 319.0	47218	2.65	µg/L		99
		363.0 -> 169.0	8363				
PFHpS	7.797	449.0 -> 80.0	11372	2.30	µg/L		94
		449.0 -> 99.0	5333				
PFHxA	5.748	313.0 -> 269.0	32089	2.61	µg/L		99
		313.0 -> 119.0	882				
PFHxS	7.252	399.0 -> 80.0	11331	2.59	µg/L		92
		399.0 -> 99.0	5529				
PFNA	7.633	463.0 -> 419.0	29130	2.99	µg/L	m	93
		463.0 -> 219.0	7111				
PFNS	8.771	549.0 -> 80.0	5249	2.55	µg/L		92
		549.0 -> 99.0	2699				
PFOA	7.125	413.0 -> 369.0	49104	3.10	µg/L	m	100
		413.0 -> 169.0	10814				
PFOS	8.305	499.0 -> 80.0	12921	2.95	µg/L	m	100
		499.0 -> 99.0	6023				
PFPeA	4.640	263.0 -> 219.0	56485	5.01	µg/L		100
PFPeS	6.604	349.0 -> 80.0	6554	2.51	µg/L		99
		349.0 -> 99.0	2682				
PFTeDA	9.784	713.0 -> 669.0	47588	2.48	µg/L		99
		713.0 -> 169.0	3947				
PFTrDA	9.414	663.0 -> 619.0	63170	2.55	µg/L		99
		663.0 -> 169.0	6295				
PFUnDA	8.585	563.0 -> 519.0	48671	2.61	µg/L		96
		563.0 -> 269.0	8828				
11Cl-PF3OUdS	9.478	631.0 -> 451.0	202476	10.38	µg/L		97
		633.0 -> 453.0	58222				
9Cl-PF3ONS	8.636	531.0 -> 351.0	161135	10.27	µg/L		97
		533.0 -> 353.0	48622				
ADONA	6.753	377.0 -> 251.0	342367	10.44	µg/L		100
		377.0 -> 85.0	106647				
HFPO-DA	6.062	285.0 -> 169.0	23925	10.73	µg/L		95
		285.0 -> 185.0	2436				
3:3FTCA	4.090	241.0 -> 177.0	9796	11.06	µg/L		98
		241.0 -> 117.0	730				
5:3FTCA	6.204	341.0 -> 237.0	181230	59.62	µg/L		99
		341.0 -> 217.0	127913				
7:3FTCA	7.458	441.0 -> 337.0	240649	61.65	µg/L		100
		441.0 -> 317.0	97805				
EtFOSA	10.883	526.0 -> 219.0	15453	3.33	µg/L		92
		526.0 -> 169.0	22179				
EtFOSE	10.817	630.0 -> 59.0	228237	25.25	µg/L		100
MeFOSA	10.613	512.0 -> 169.0	18686	3.23	µg/L		98
		512.0 -> 219.0	12856				
MeFOSE	10.533	616.0 -> 59.0	156419	32.32	µg/L		100
PFDoDS	9.923	699.0 -> 80.0	8587	2.47	µg/L		91
		699.0 -> 99.0	4791				
NFDHA	5.639	295.0 -> 201.0	5656	5.54	µg/L		91
		201.0 -> 85.0	31948				
		295.0 -> 85.0	2031				
PFMBA	5.015	279.0 -> 85.0	33053	5.06	µg/L		100
PFMPA	3.830	229.0 -> 85.0	45081	4.84	µg/L		100
PFEESA	6.168	315.0 -> 135.0	69161	4.54	µg/L		98
		315.0 -> 69.0	8044				

 # = Qualifier out of range, m = manually integrated, + = Area summed

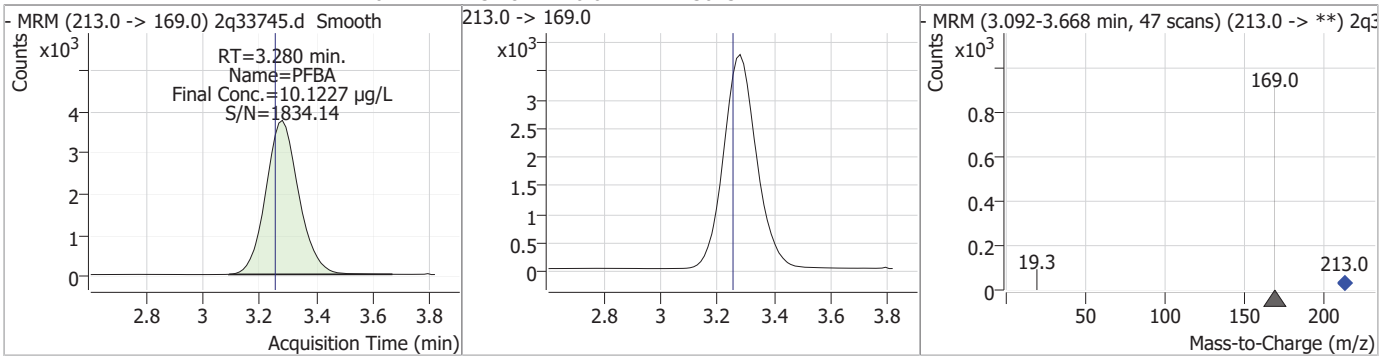
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

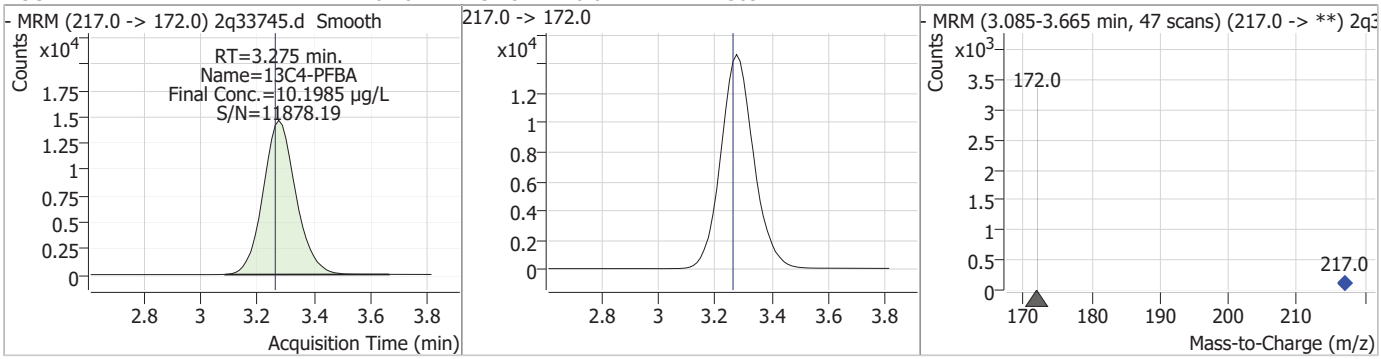
Perfluorinated Compounds by LC/MS/MS



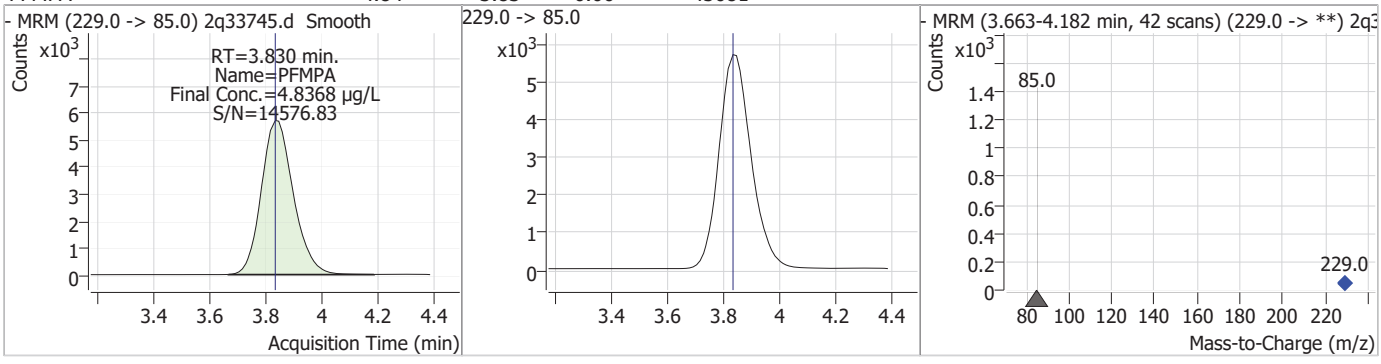
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.12	3.28	0.02	30134				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.20	3.28	0.01	117509				

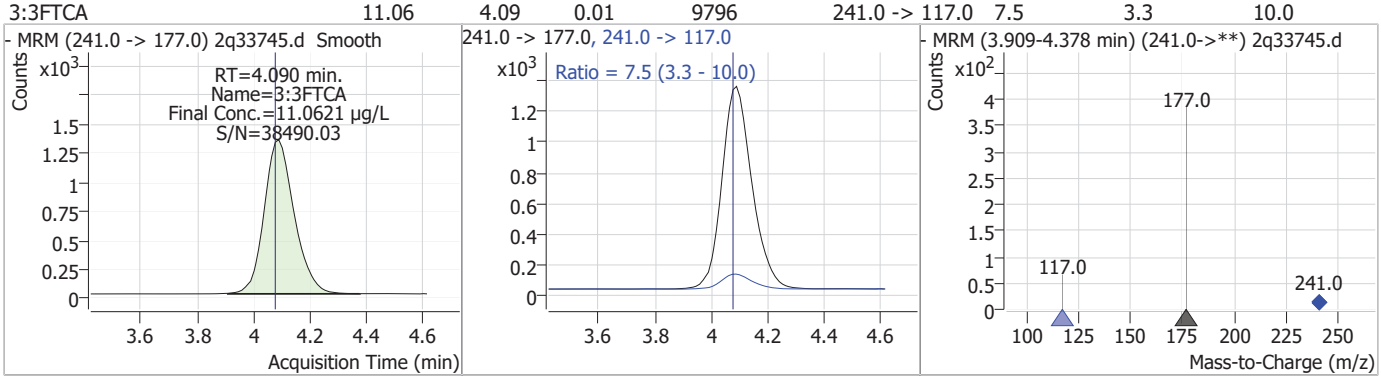


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	4.84	3.83	0.00	45081				

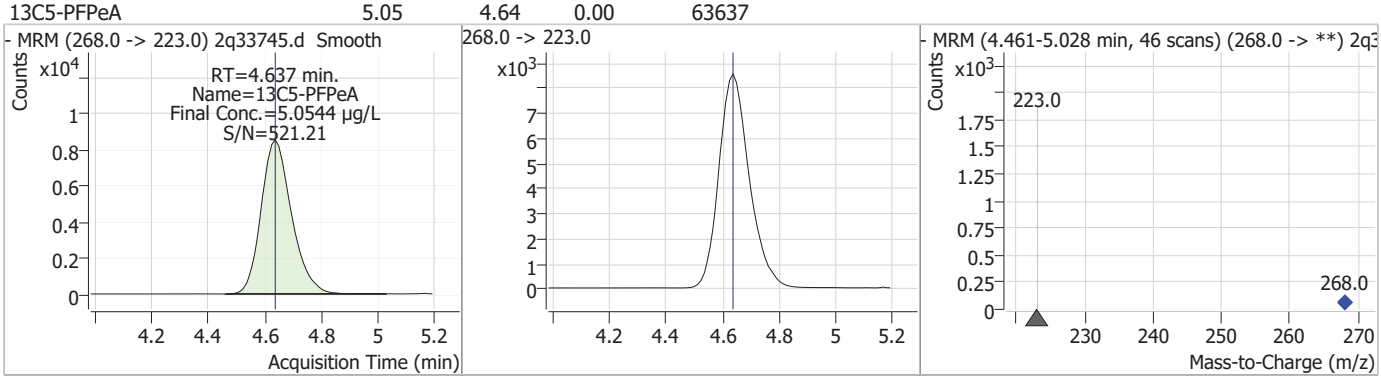


Perfluorinated Compounds by LC/MS/MS

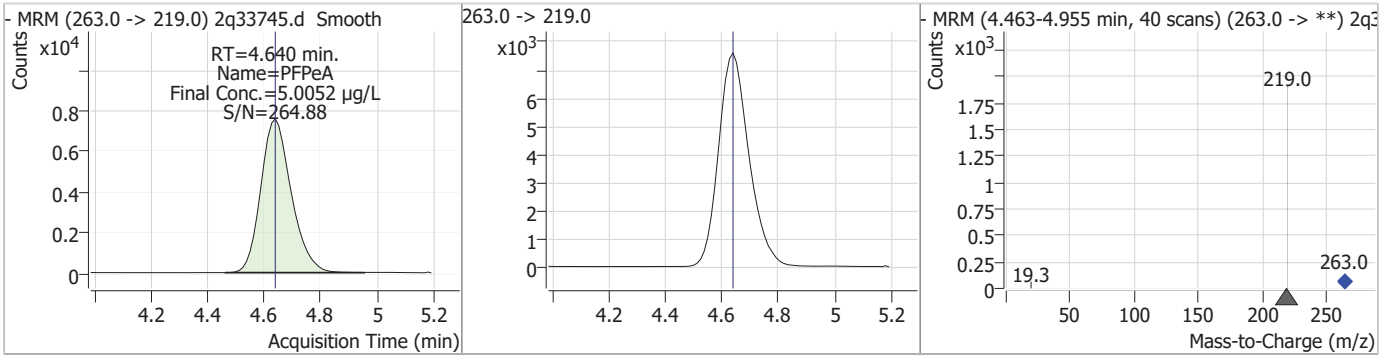
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	11.06	4.09	0.01	9796	241.0 -> 117.0	7.5	3.3	10.0



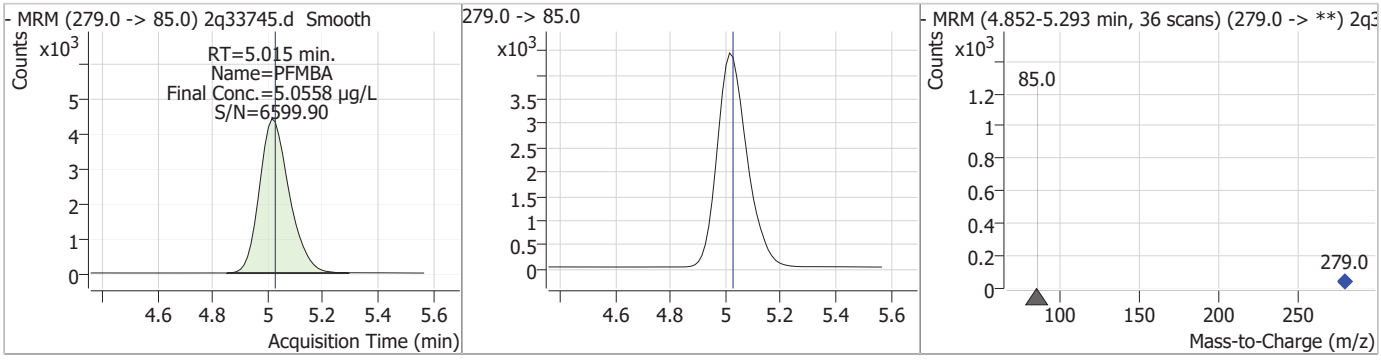
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.05	4.64	0.00	63637				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.01	4.64	0.00	56485				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.06	5.01	-0.01	33053				



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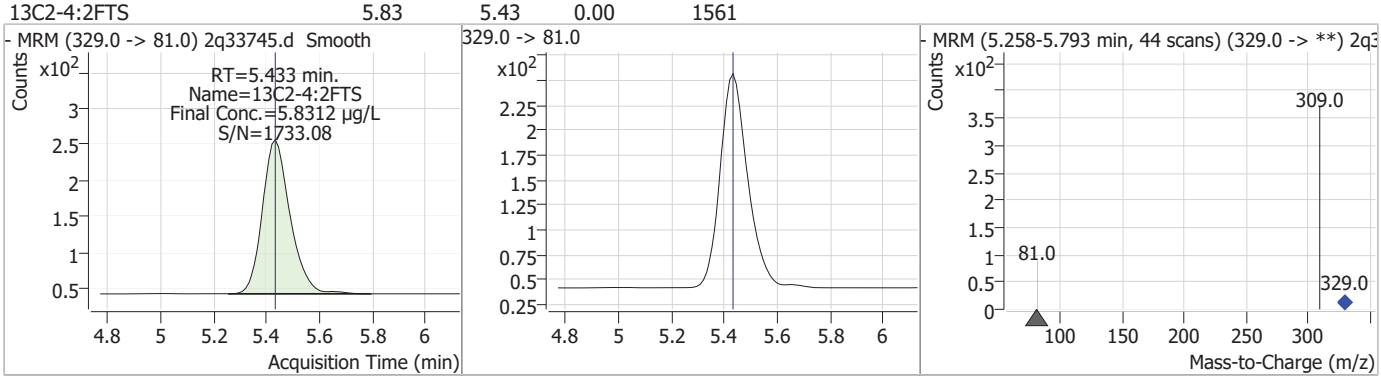
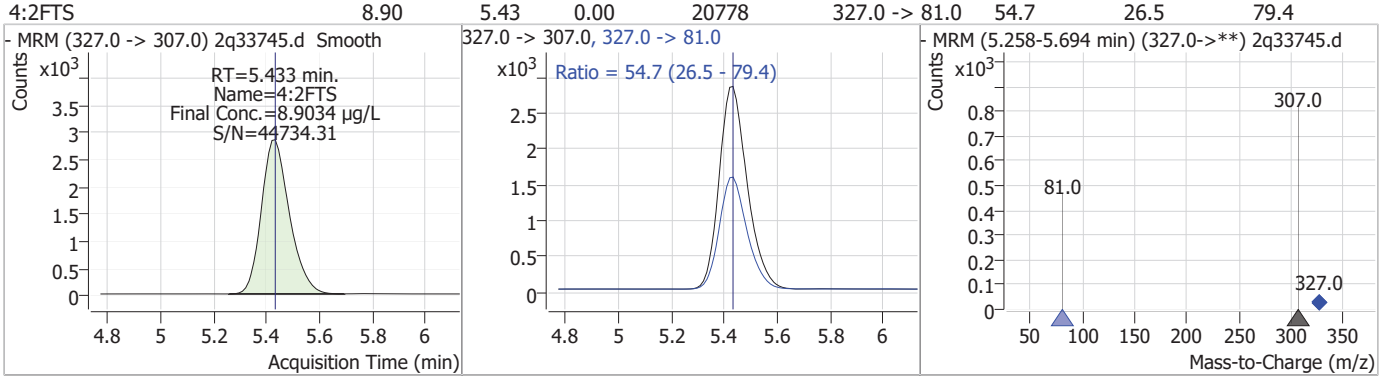
Perfluorinated Compounds by LC/MS/MS

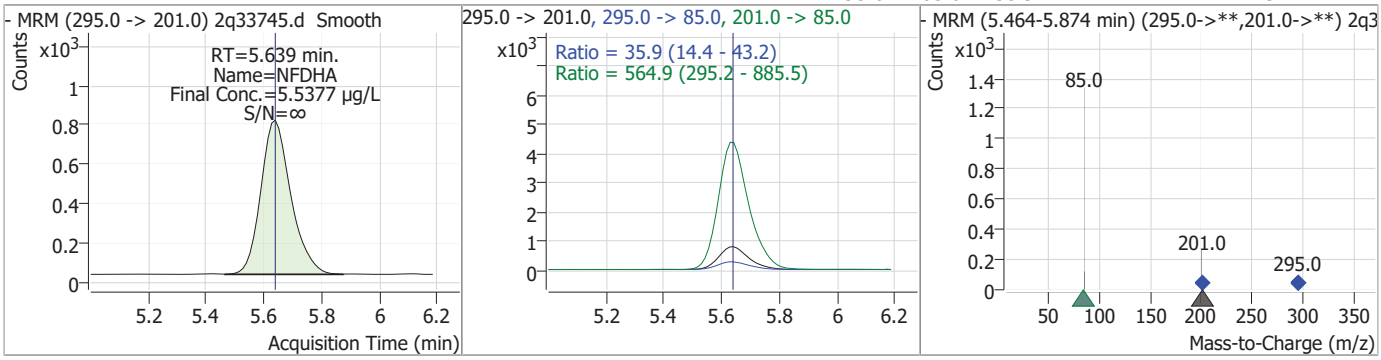
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.83	5.43	0.00	1561				



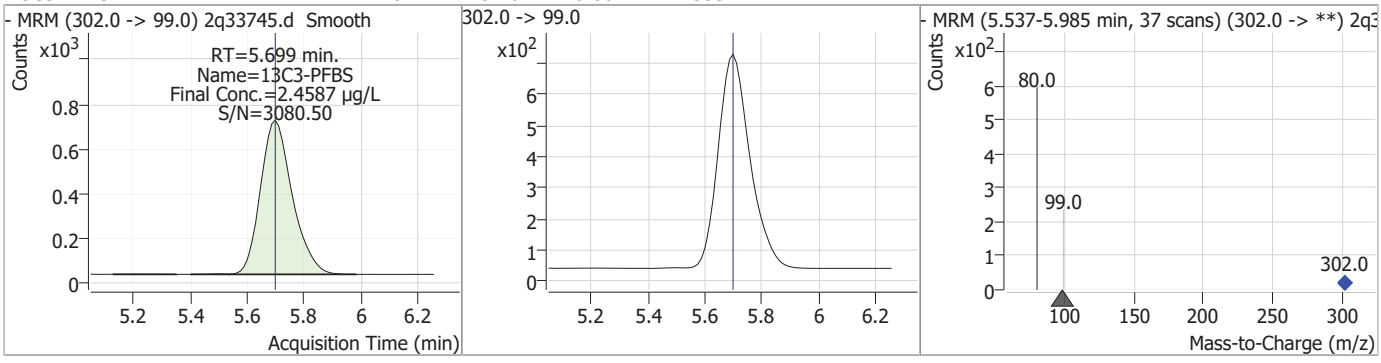
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	8.90	5.43	0.00	20778	327.0 -> 81.0	54.7	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.54	5.64	0.00	5656	201.0 -> 85.0	564.9	295.2	885.5
					295.0 -> 85.0	35.9	14.4	43.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.46	5.70	0.00	5332				



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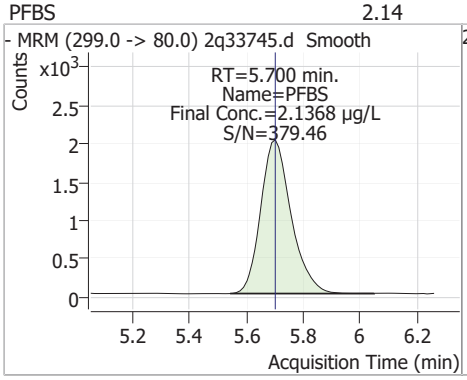
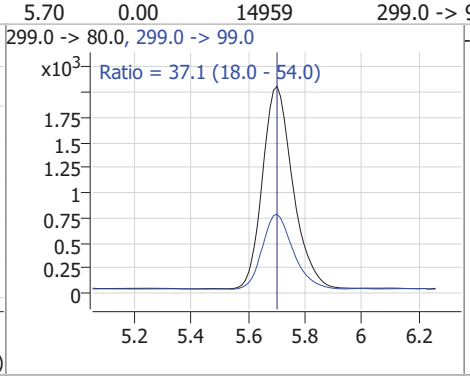
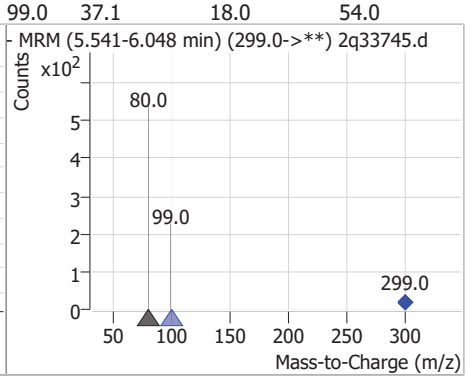
Perfluorinated Compounds by LC/MS/MS

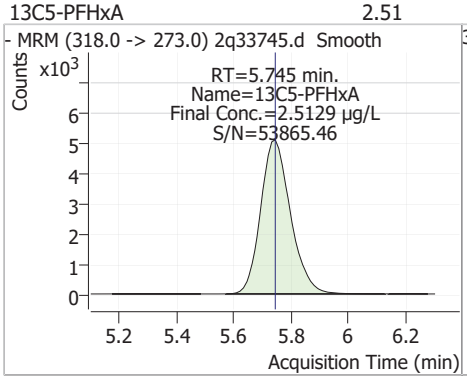
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.14	5.70	0.00	14959	299.0 -> 99.0	37.1	18.0	54.0

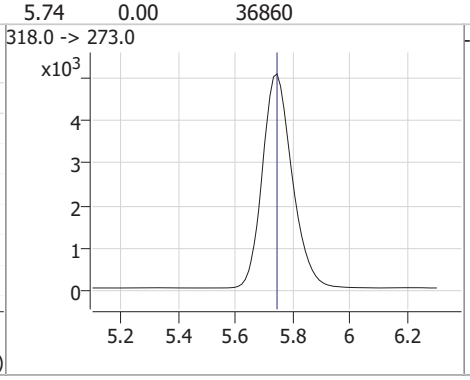


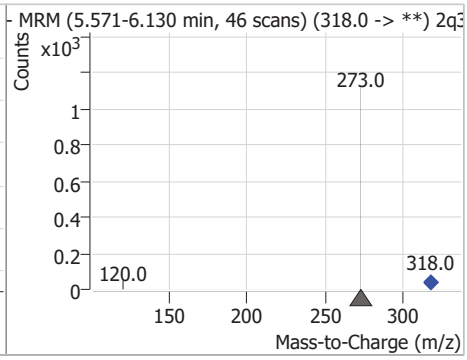




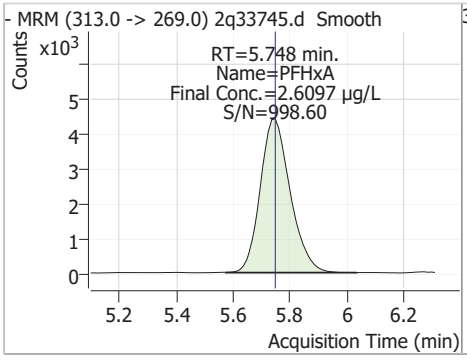
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.51	5.74	0.00	36860				

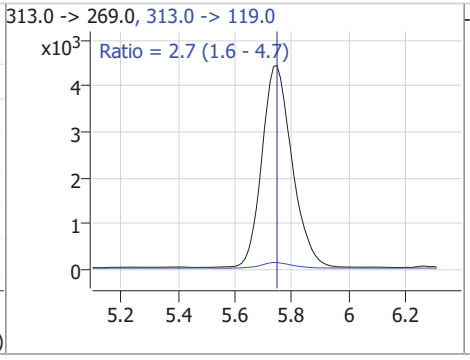


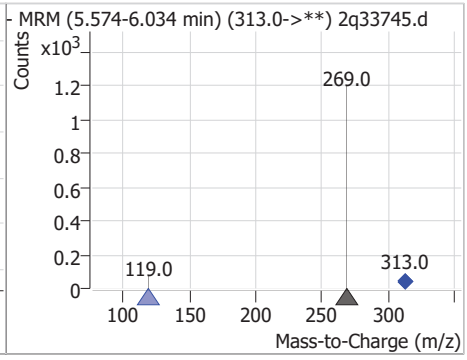




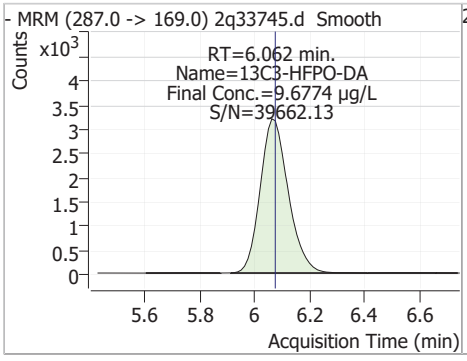
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.61	5.75	0.00	32089	313.0 -> 119.0	2.7	1.6	4.7

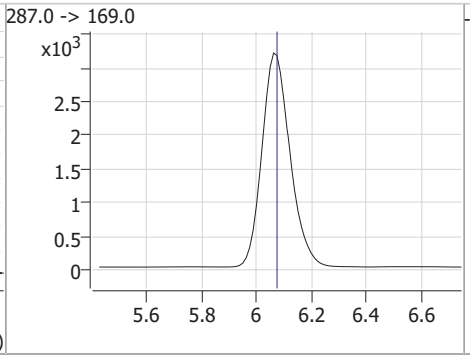


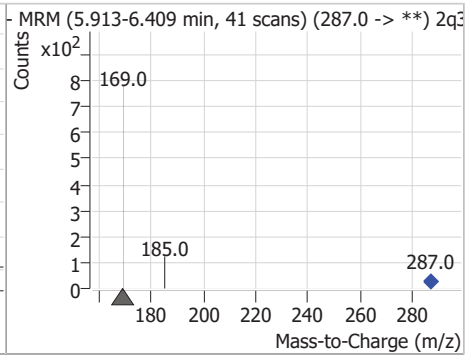




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.68	6.06	-0.01	22515				







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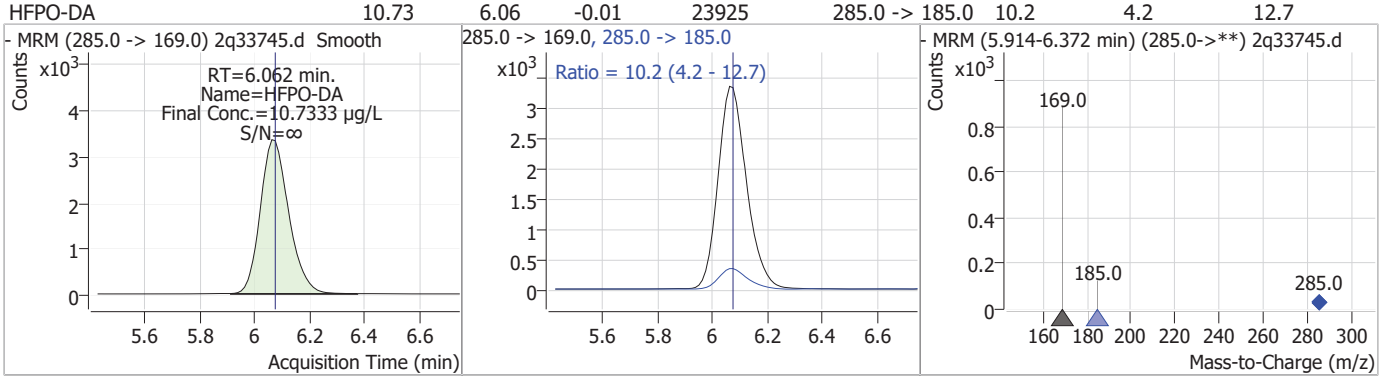
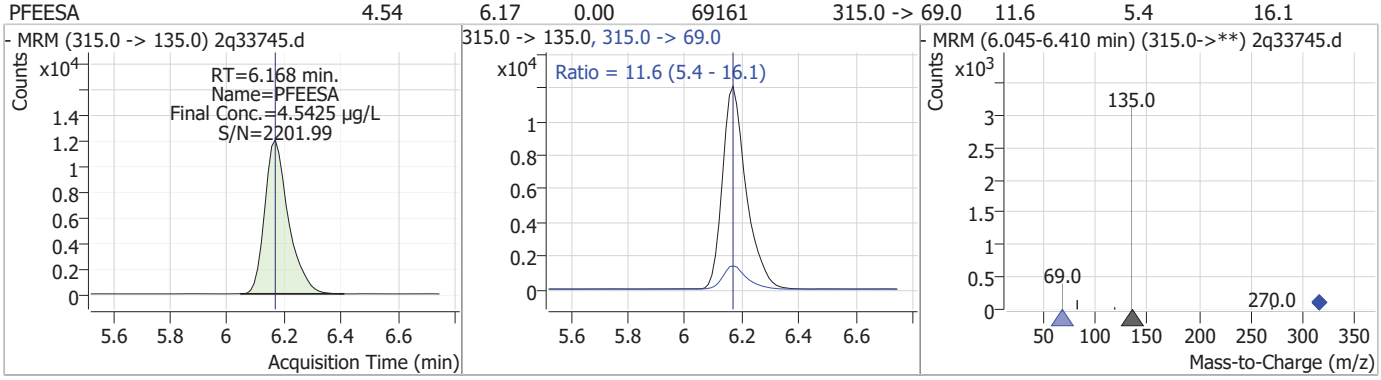
Perfluorinated Compounds by LC/MS/MS

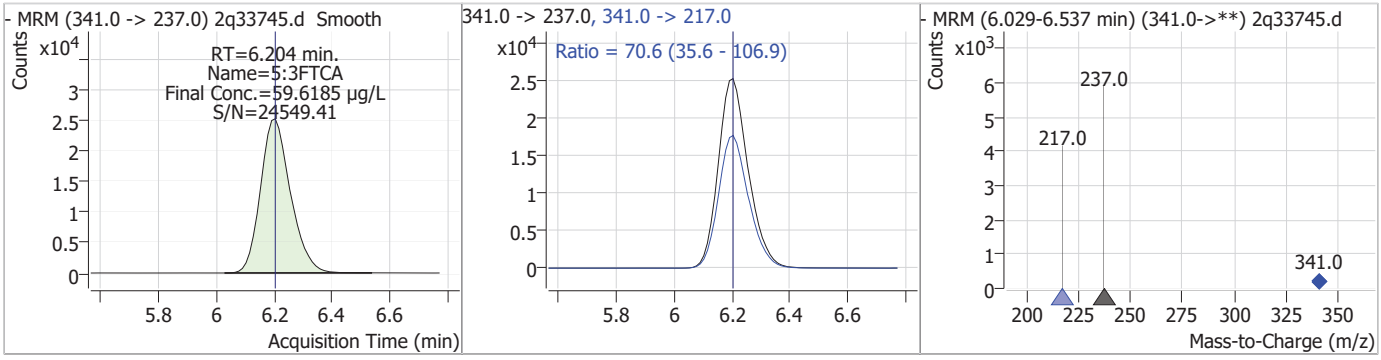
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.73	6.06	-0.01	23925	285.0 -> 185.0	10.2	4.2	12.7



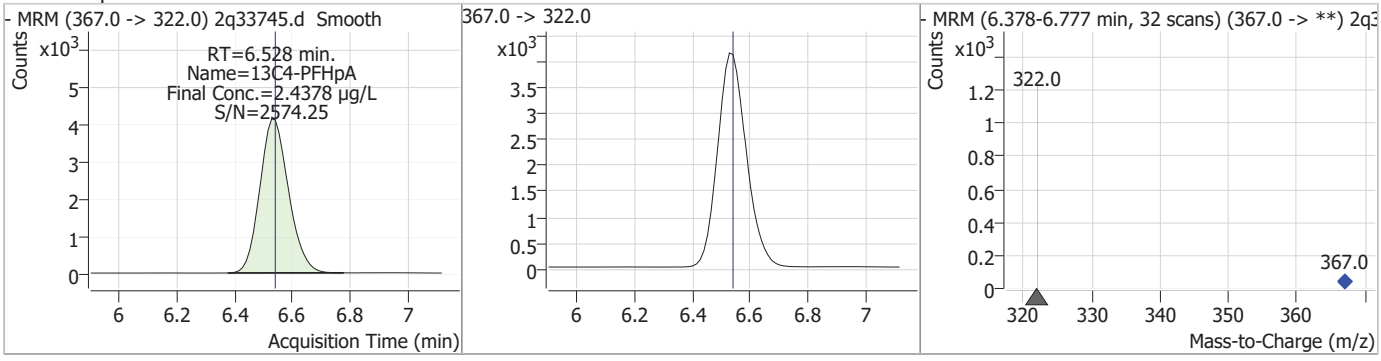
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.54	6.17	0.00	69161	315.0 -> 69.0	11.6	5.4	16.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	59.62	6.20	0.00	181230	341.0 -> 217.0	70.6	35.6	106.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.44	6.53	-0.01	28288				



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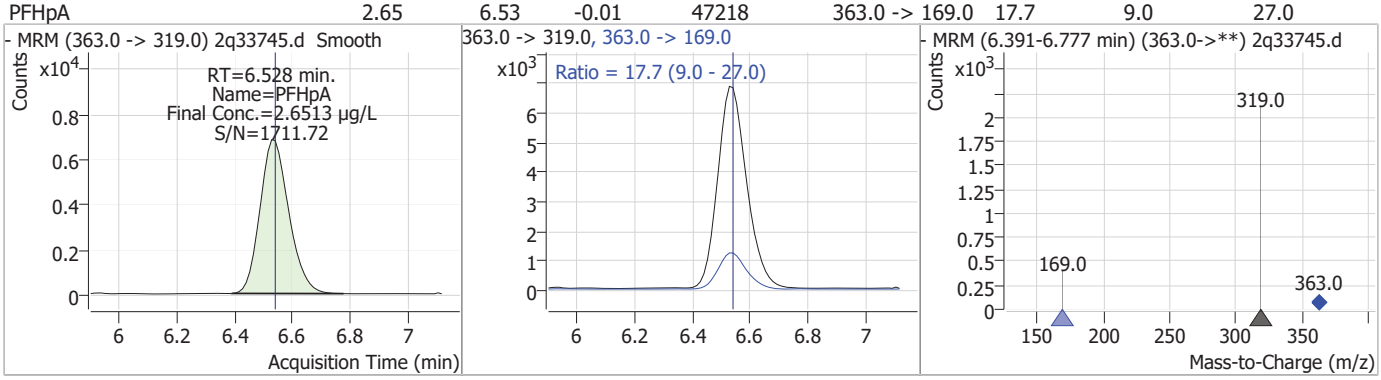
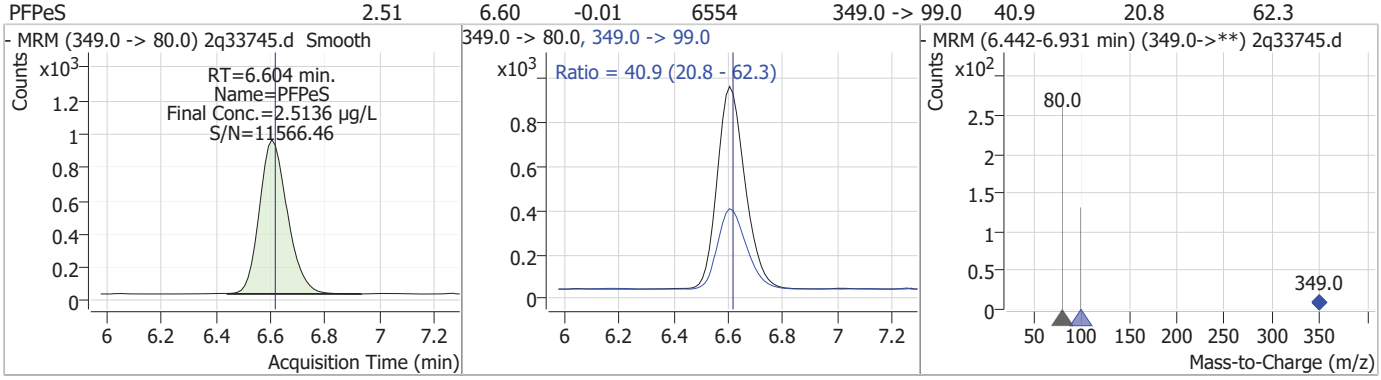
Perfluorinated Compounds by LC/MS/MS

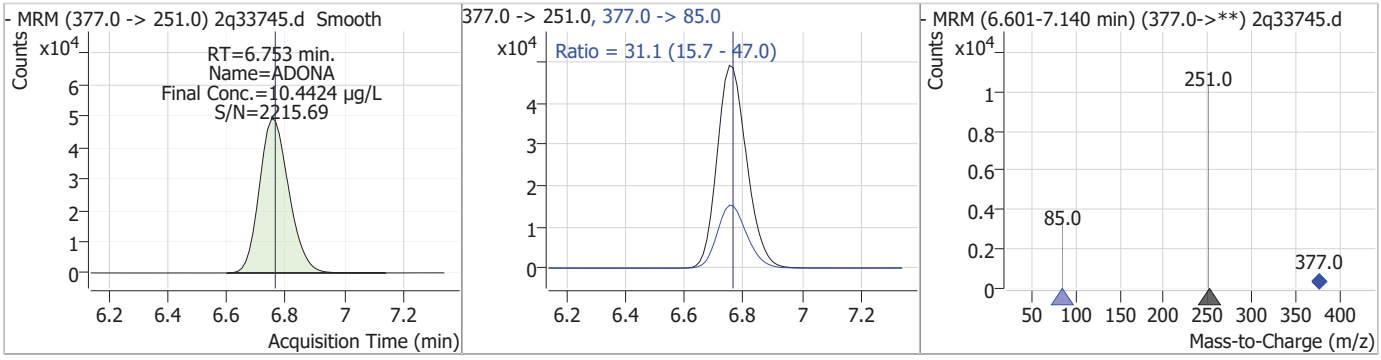
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.65	6.53	-0.01	47218	363.0 -> 169.0	17.7	9.0	27.0



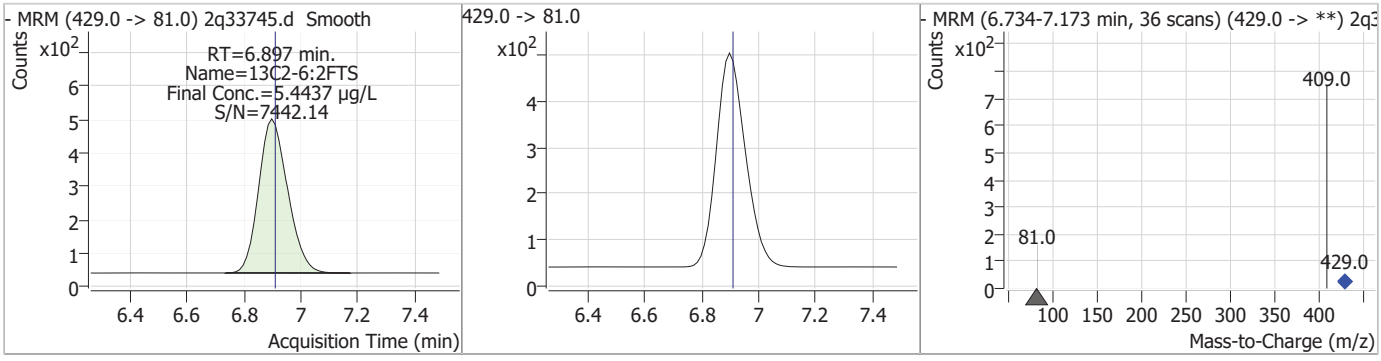
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.51	6.60	-0.01	6554	349.0 -> 99.0	40.9	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	10.44	6.75	-0.01	342367	377.0 -> 85.0	31.1	15.7	47.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.44	6.90	-0.01	3241				



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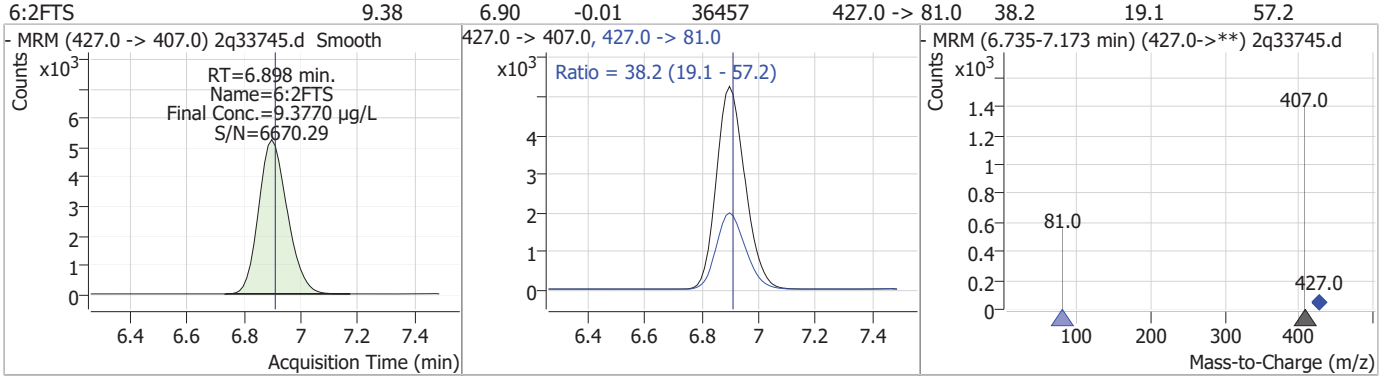
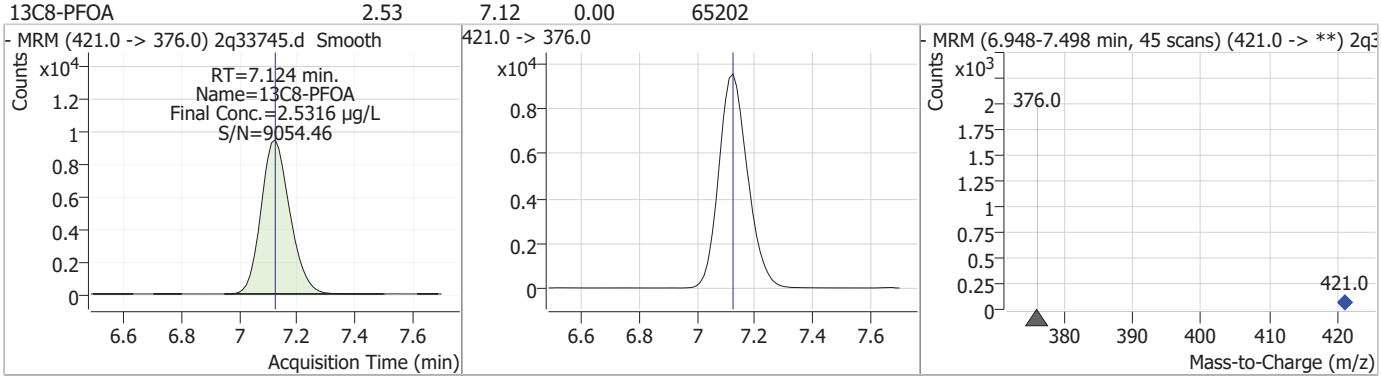
Perfluorinated Compounds by LC/MS/MS

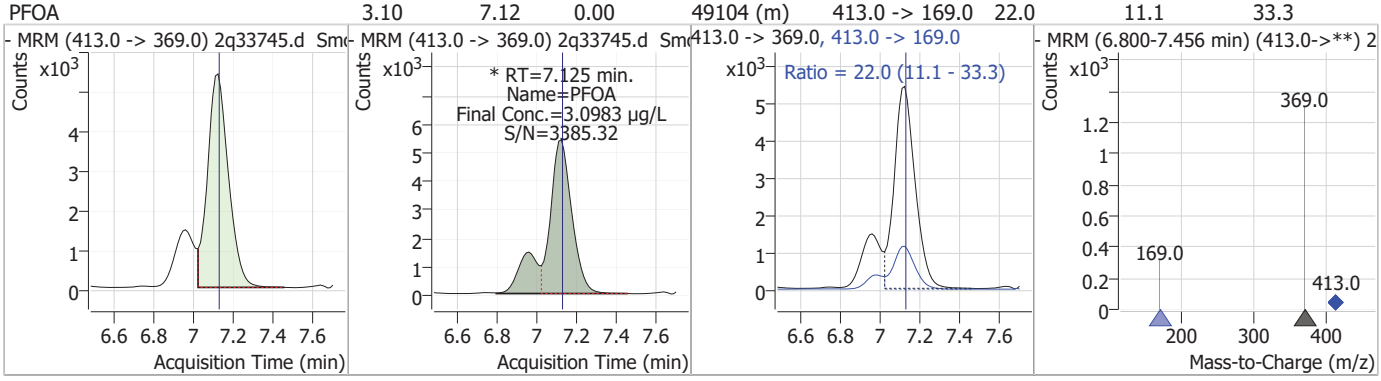
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.38	6.90	-0.01	36457	427.0 -> 81.0	38.2	19.1	57.2



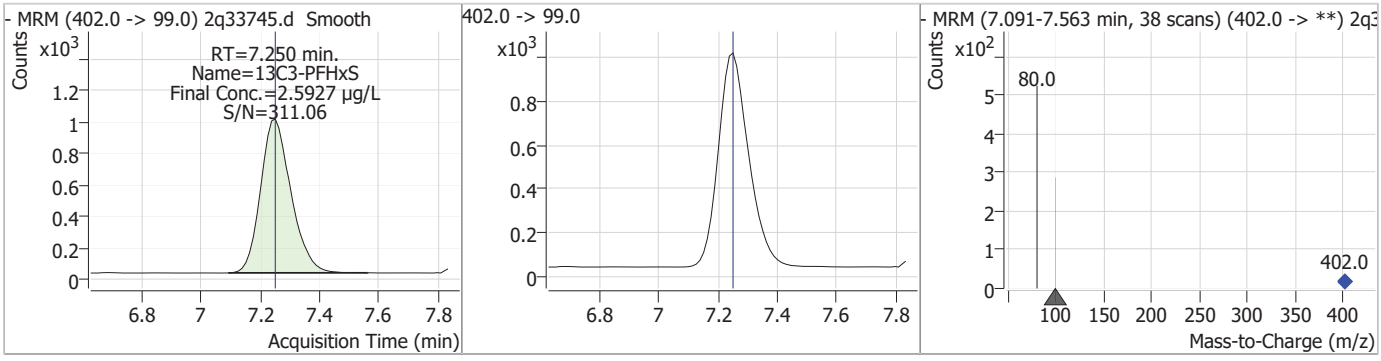
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.53	7.12	0.00	65202				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	3.10	7.12	0.00	49104 (m)	413.0 -> 169.0	22.0	11.1	33.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.59	7.25	0.00	6972				



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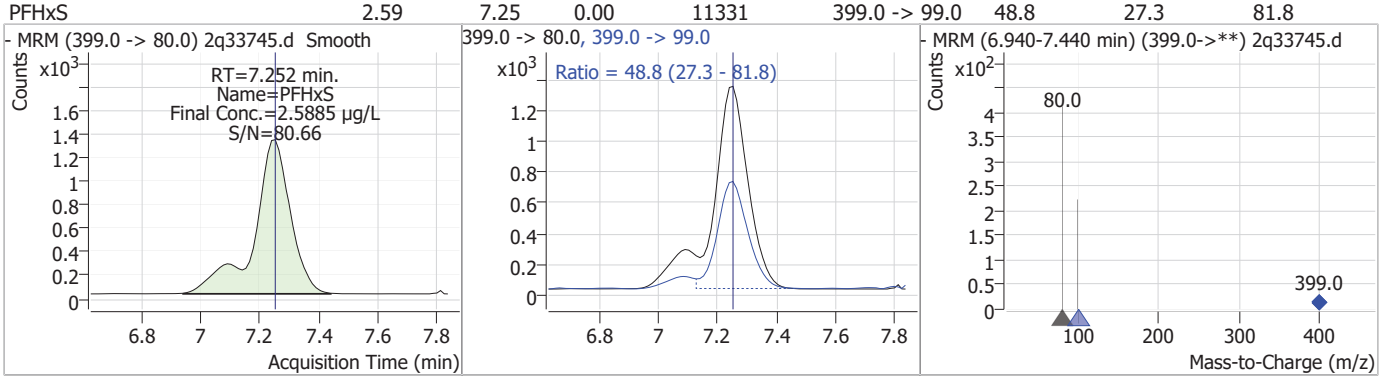
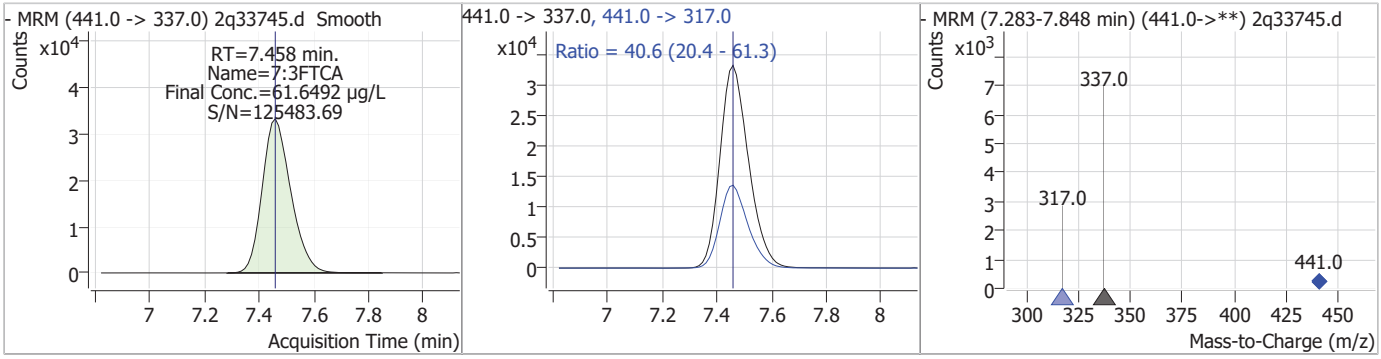
Perfluorinated Compounds by LC/MS/MS

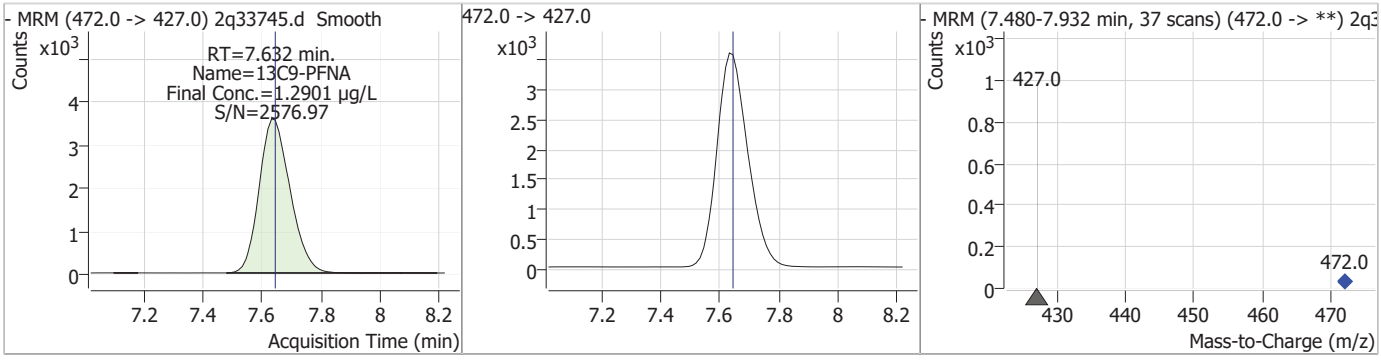
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.59	7.25	0.00	11331	399.0 -> 99.0	48.8	27.3	81.8



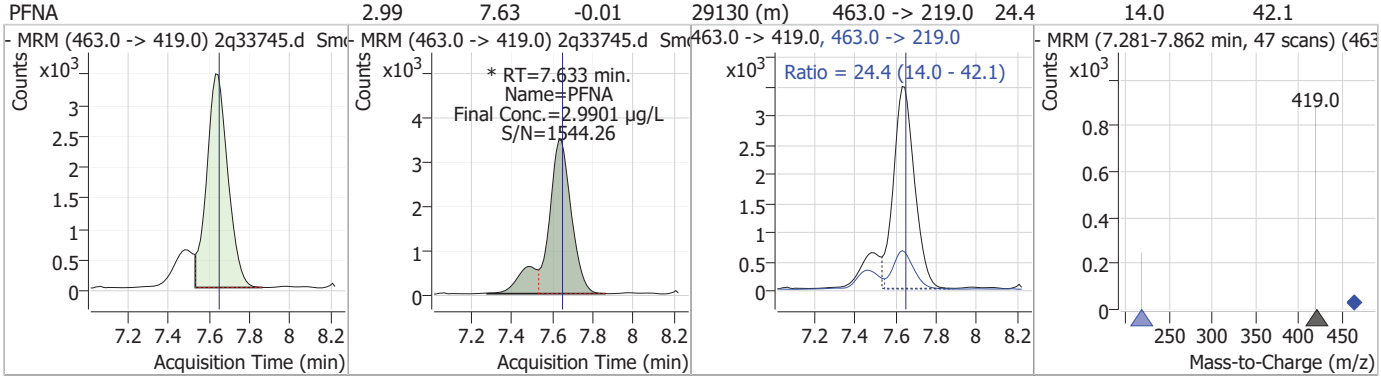
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	61.65	7.46	0.00	240649	441.0 -> 317.0	40.6	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.29	7.63	-0.01	25879				

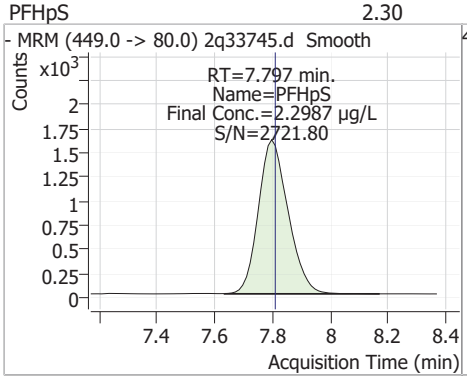


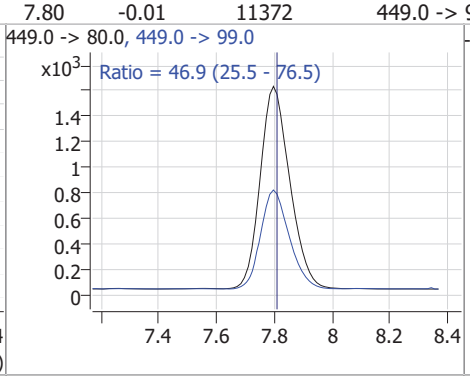
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.99	7.63	-0.01	29130 (m)	463.0 -> 219.0	24.4	14.0	42.1

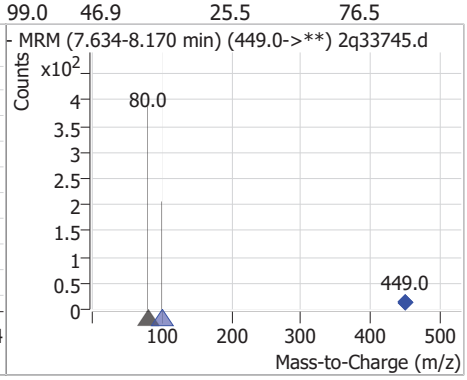


Perfluorinated Compounds by LC/MS/MS

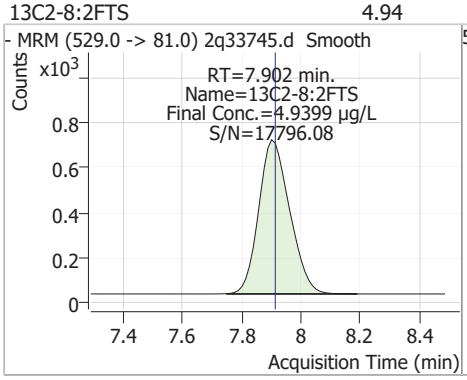
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.30	7.80	-0.01	11372	449.0 -> 99.0	46.9	25.5	76.5

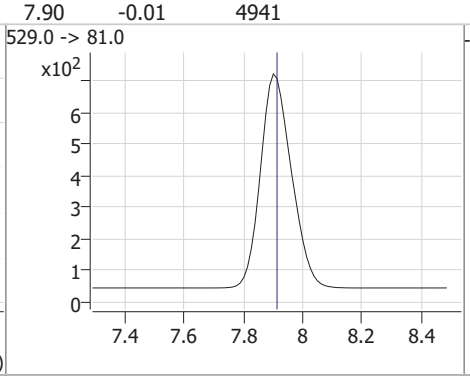


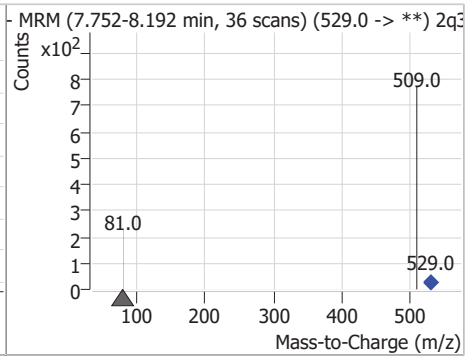




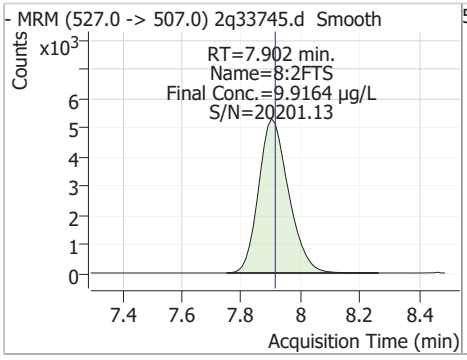
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.94	7.90	-0.01	4941				

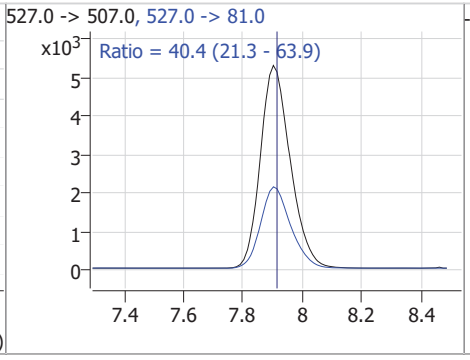


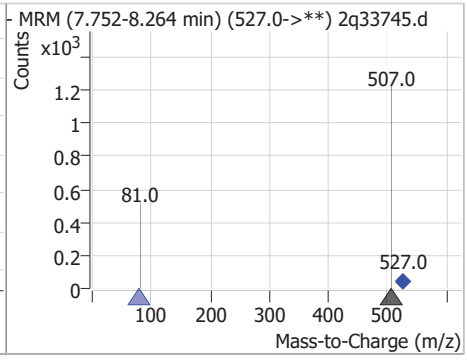




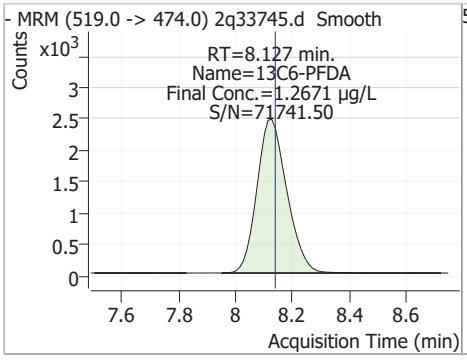
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	9.92	7.90	-0.01	37052	527.0 -> 81.0	40.4	21.3	63.9

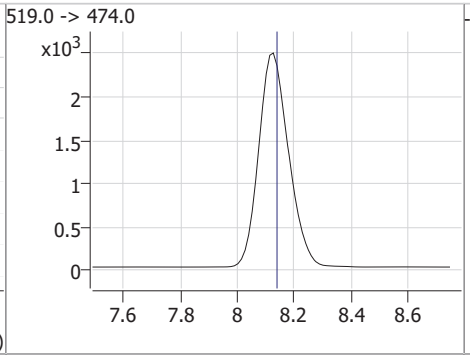


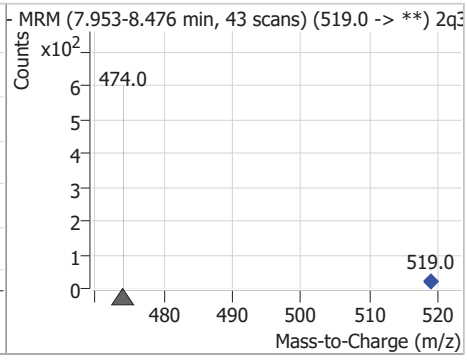




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.27	8.13	-0.01	17936				

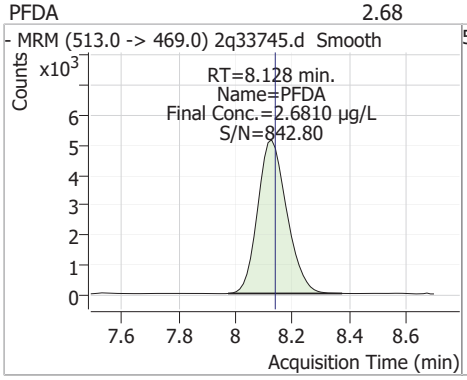


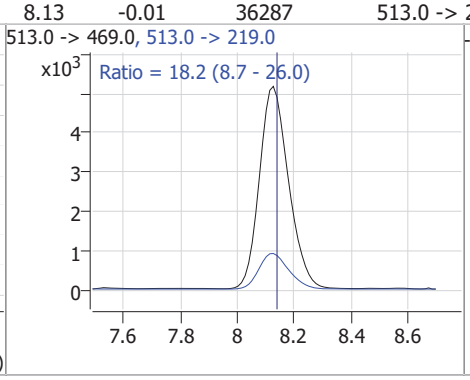


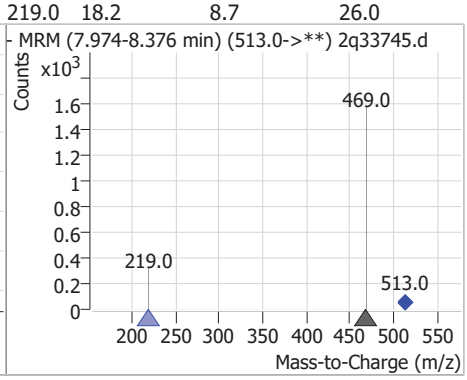


Perfluorinated Compounds by LC/MS/MS

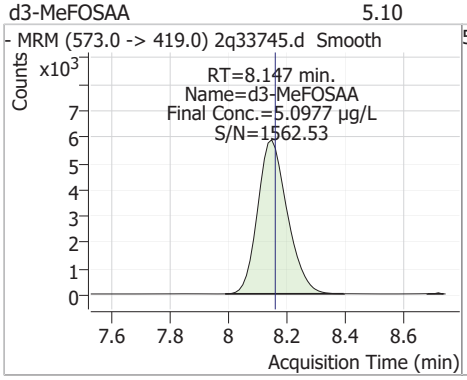
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.68	8.13	-0.01	36287	513.0 -> 219.0	18.2	8.7	26.0

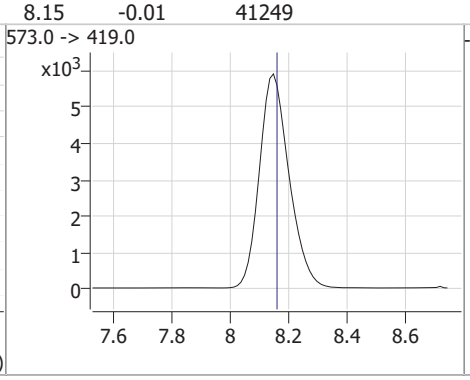


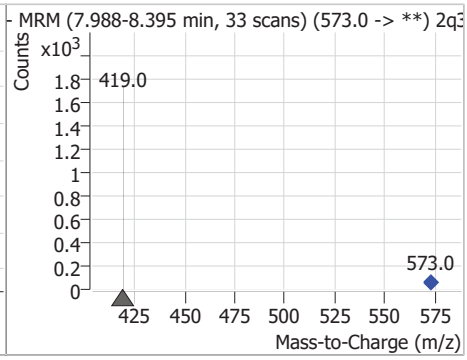




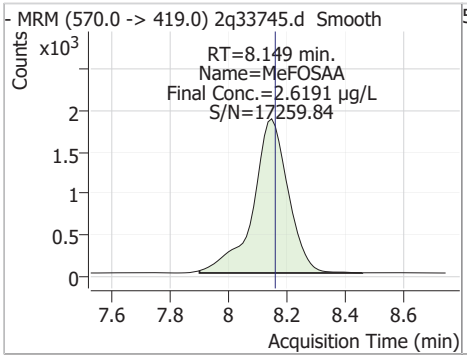
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.10	8.15	-0.01	41249				

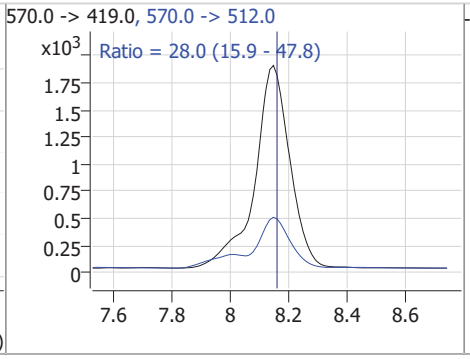


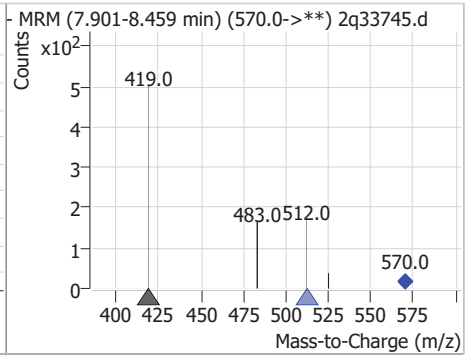




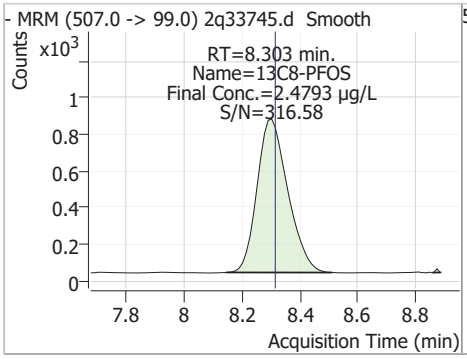
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.62	8.15	-0.01	15668	570.0 -> 512.0	28.0	15.9	47.8

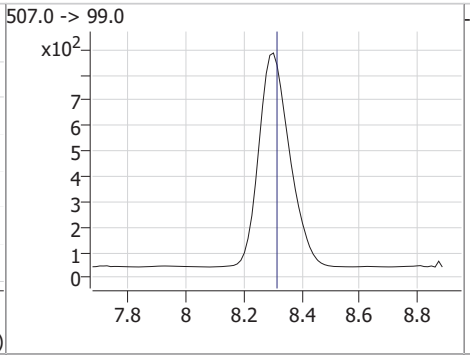


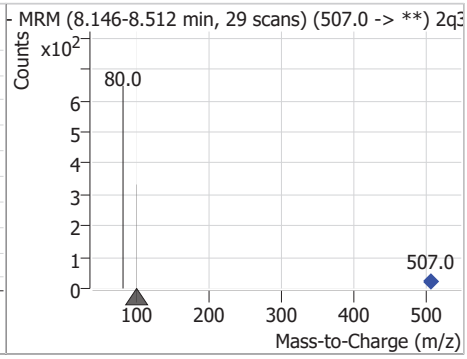




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.48	8.30	-0.01	6175				





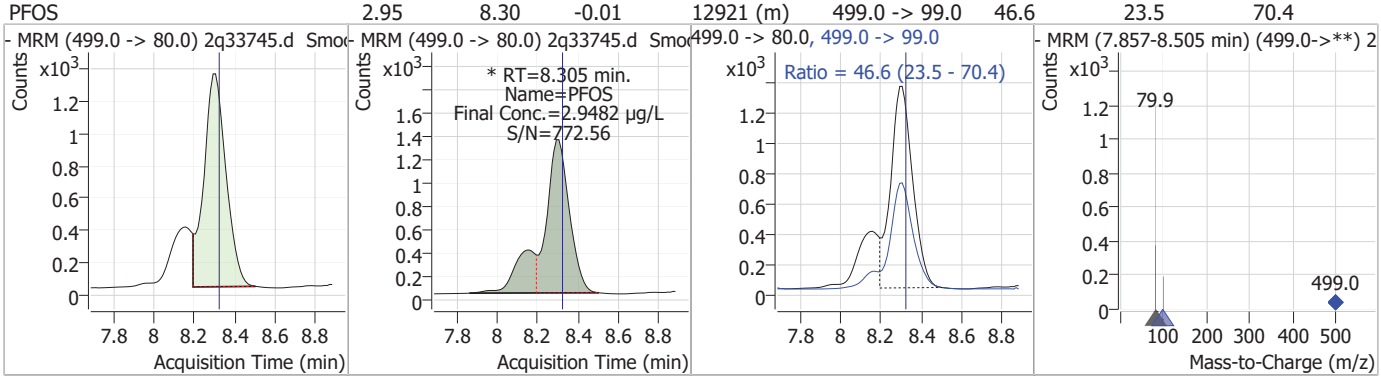


7.6.26

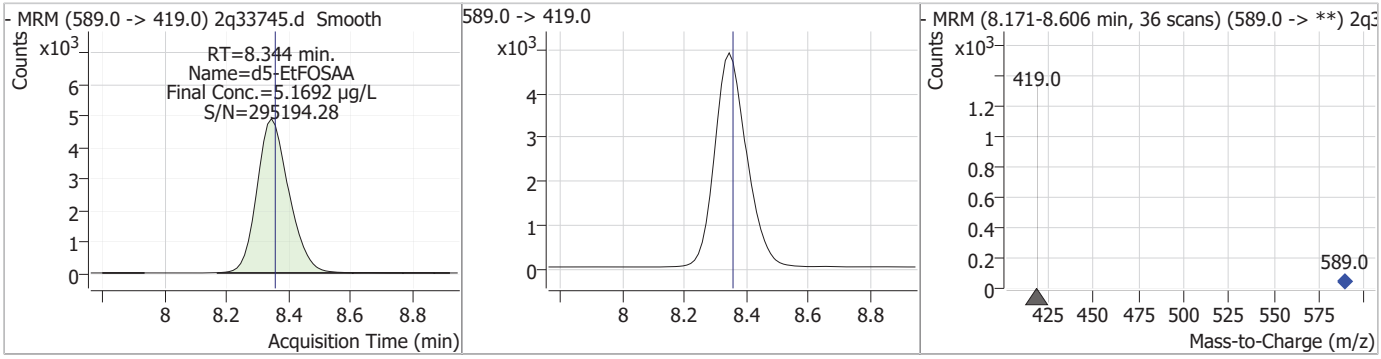
7

Perfluorinated Compounds by LC/MS/MS

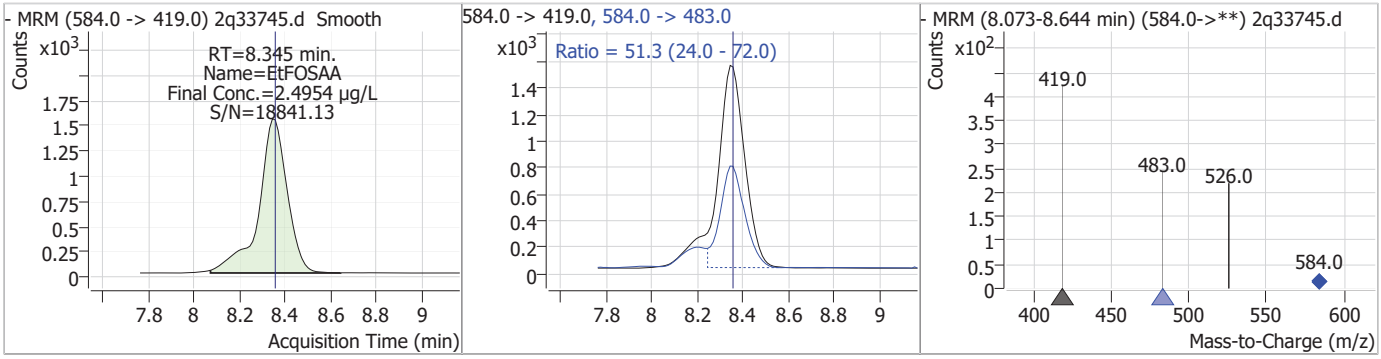
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.95	8.30	-0.01	12921 (m)	499.0 -> 99.0	46.6	23.5	70.4



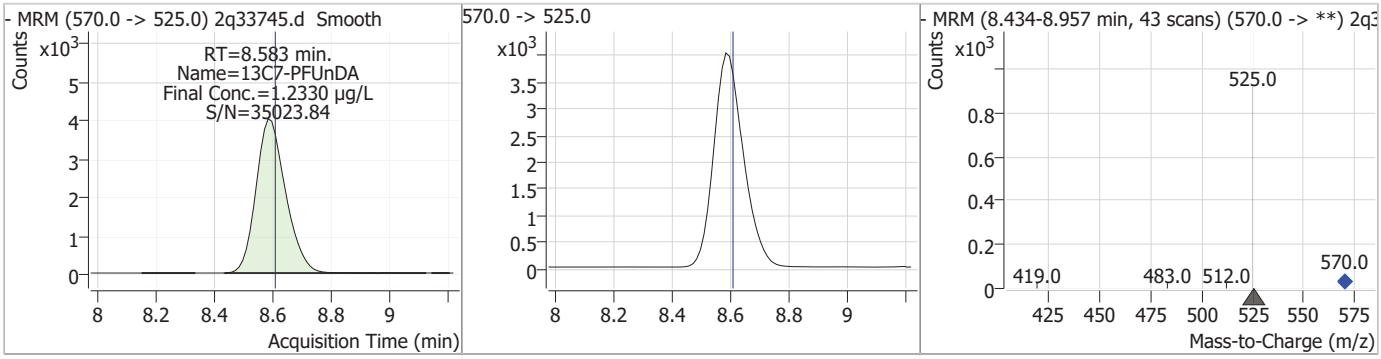
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.17	8.34	-0.01	34793				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.50	8.34	-0.01	13333	584.0 -> 483.0	51.3	24.0	72.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.23	8.58	-0.02	28187				



7.6.26

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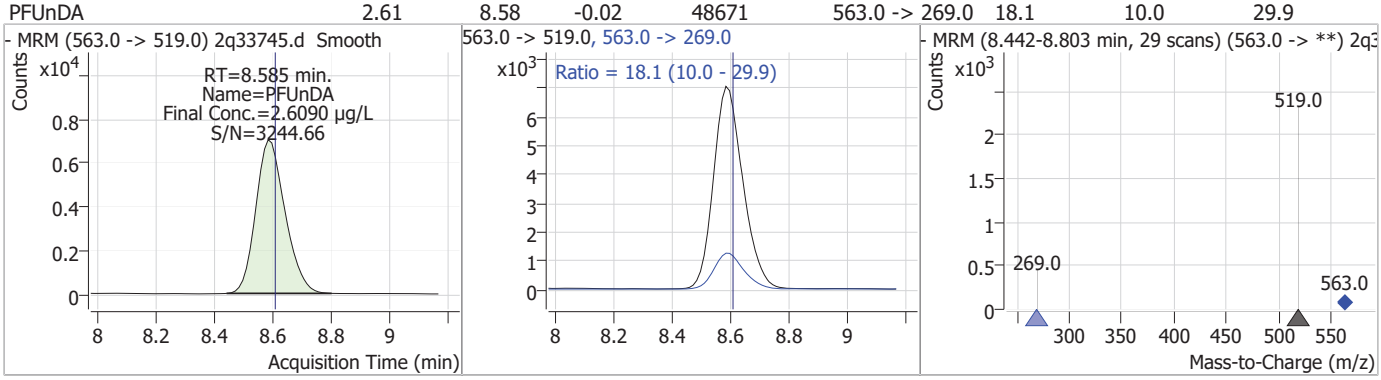
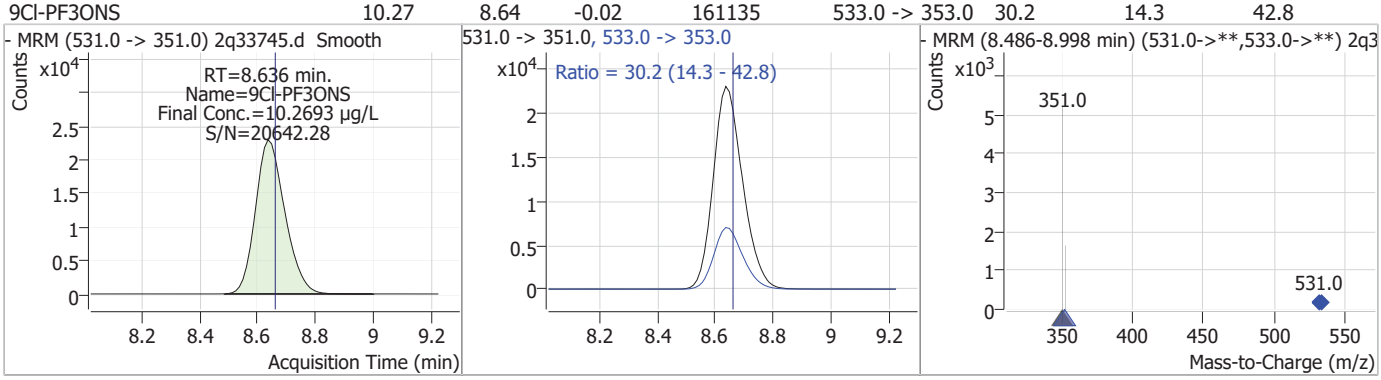
Perfluorinated Compounds by LC/MS/MS

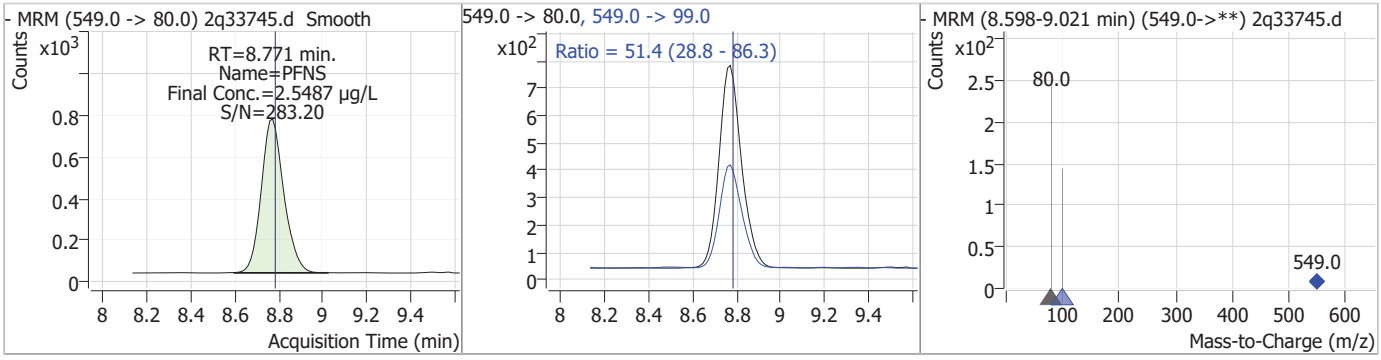
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.61	8.58	-0.02	48671	563.0 -> 269.0	18.1	10.0	29.9



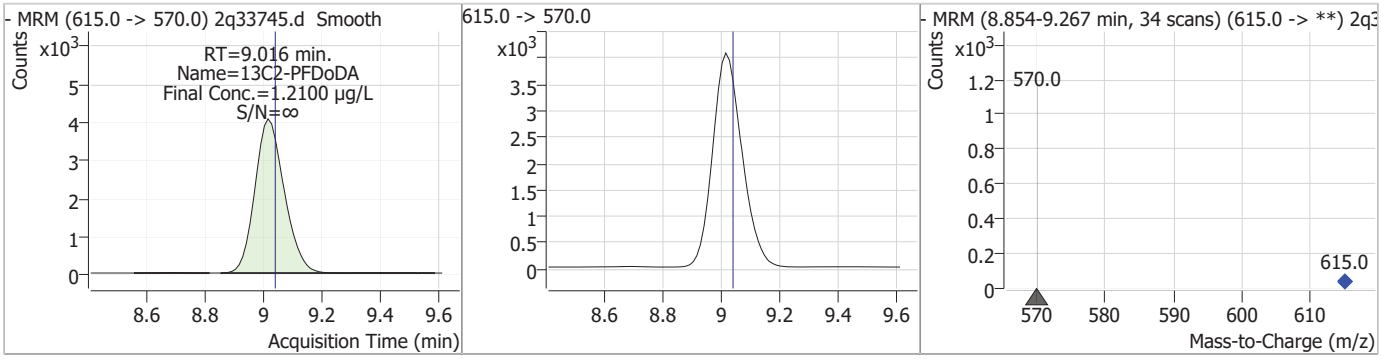
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	10.27	8.64	-0.02	161135	533.0 -> 353.0	30.2	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.55	8.77	-0.01	5249	549.0 -> 99.0	51.4	28.8	86.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.21	9.02	-0.02	28411				



7.6.26

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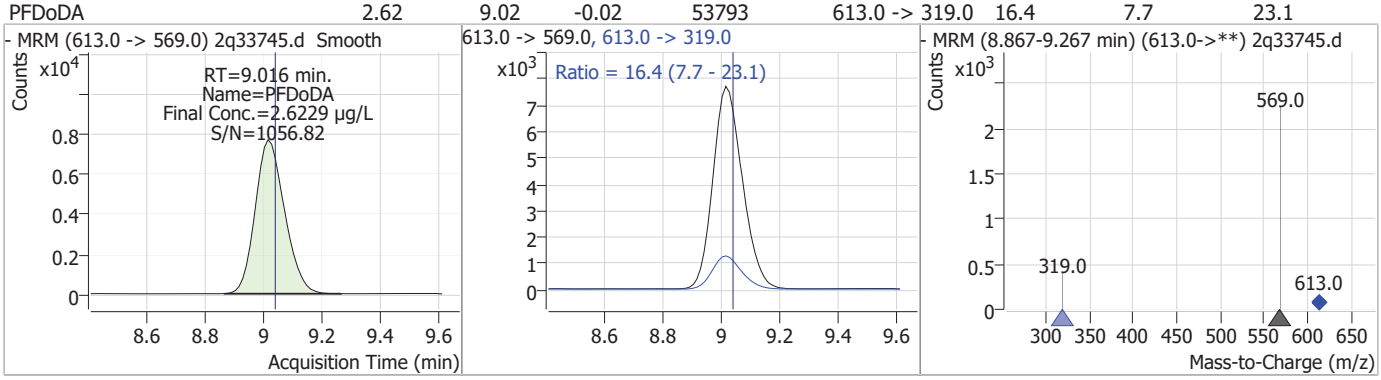
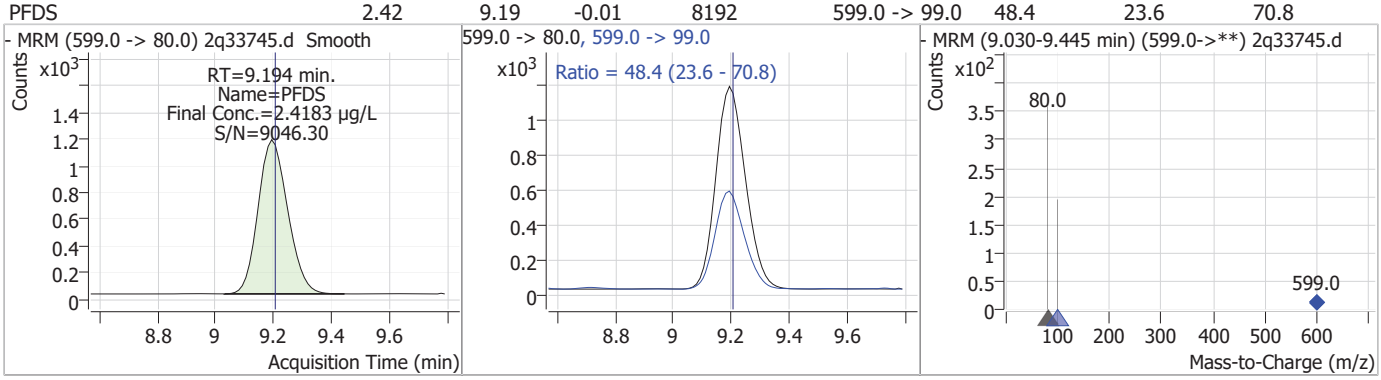
Perfluorinated Compounds by LC/MS/MS

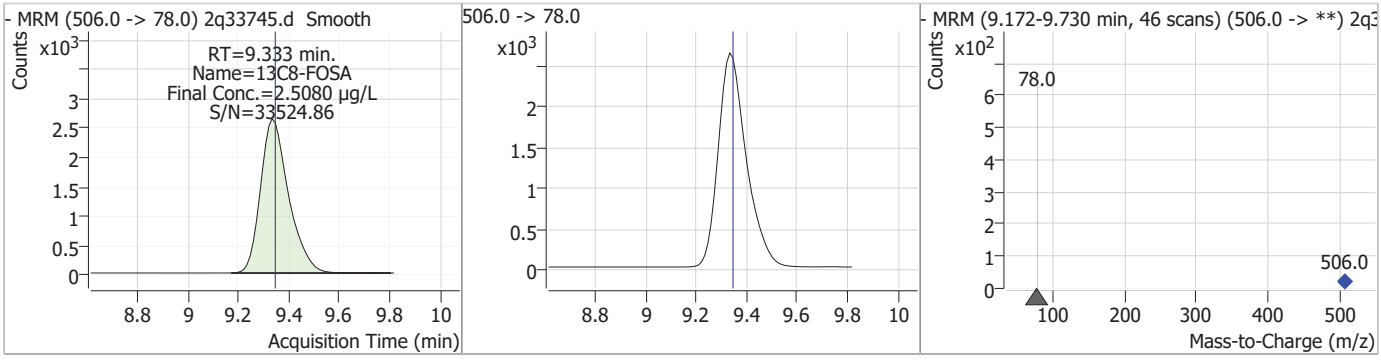
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.62	9.02	-0.02	53793	613.0 -> 319.0	16.4	7.7	23.1



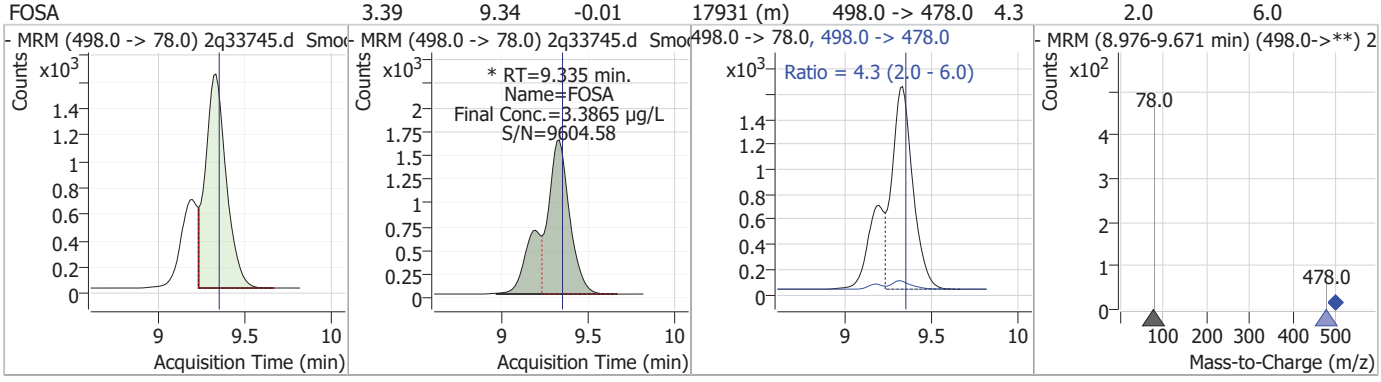
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.42	9.19	-0.01	8192	599.0 -> 99.0	48.4	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.51	9.33	-0.01	20200				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	3.39	9.34	-0.01	17931 (m)	498.0 -> 478.0	4.3	2.0	6.0

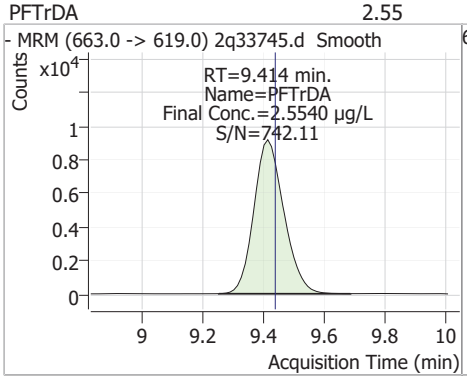


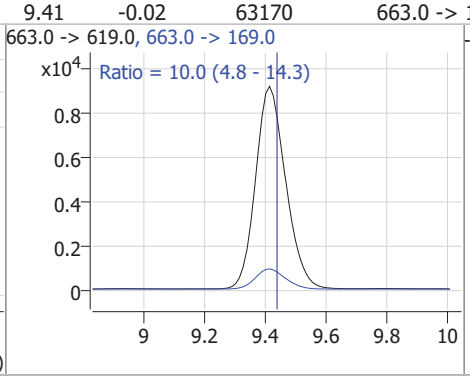
7.6.26

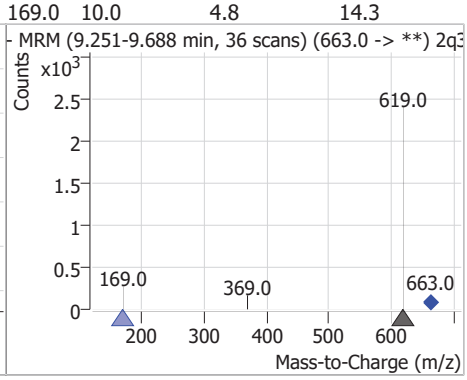
7

Perfluorinated Compounds by LC/MS/MS

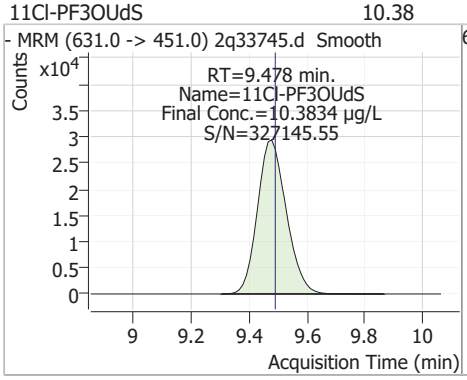
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.55	9.41	-0.02	63170	663.0 -> 169.0	10.0	4.8	14.3

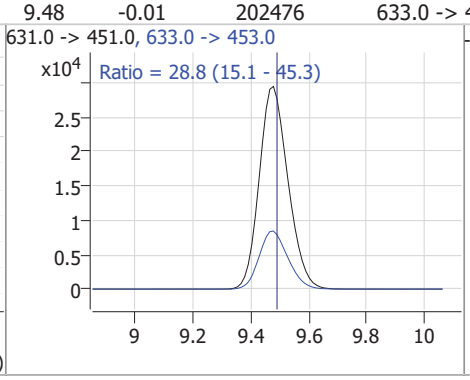


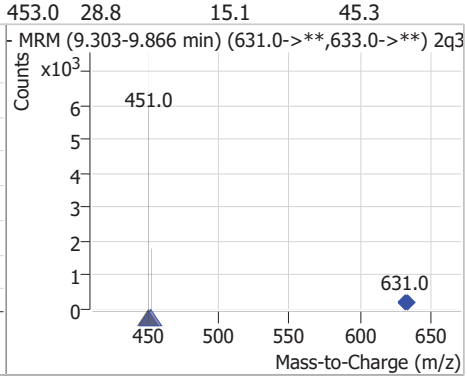




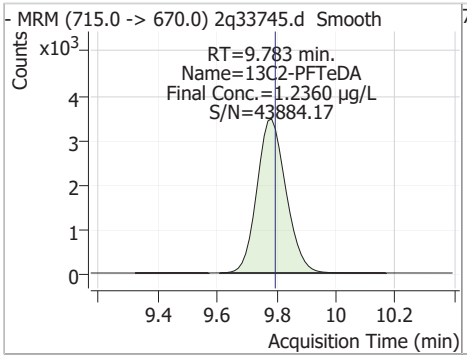
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	10.38	9.48	-0.01	202476	633.0 -> 453.0	28.8	15.1	45.3

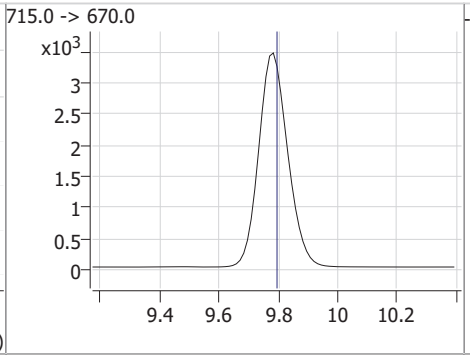


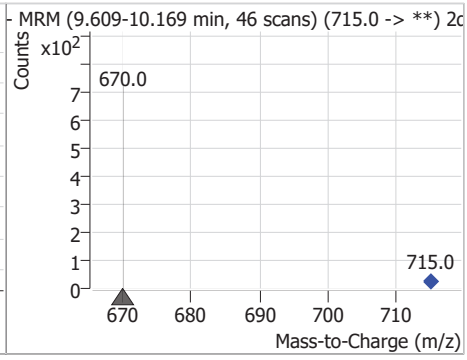




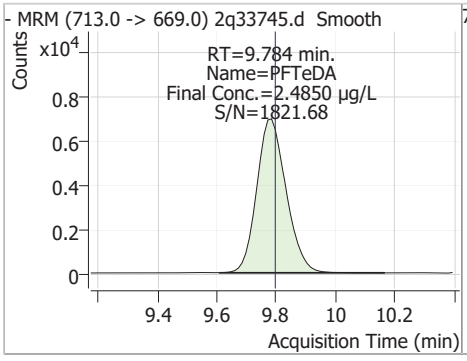
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.24	9.78	-0.01	23370				

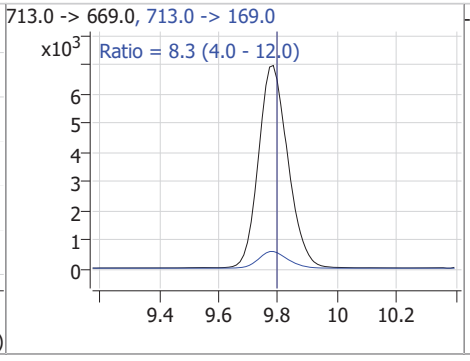


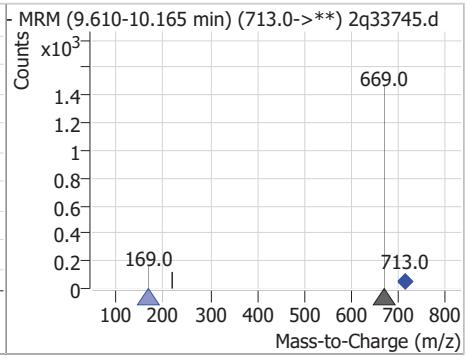




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.48	9.78	-0.01	47588	713.0 -> 169.0	8.3	4.0	12.0

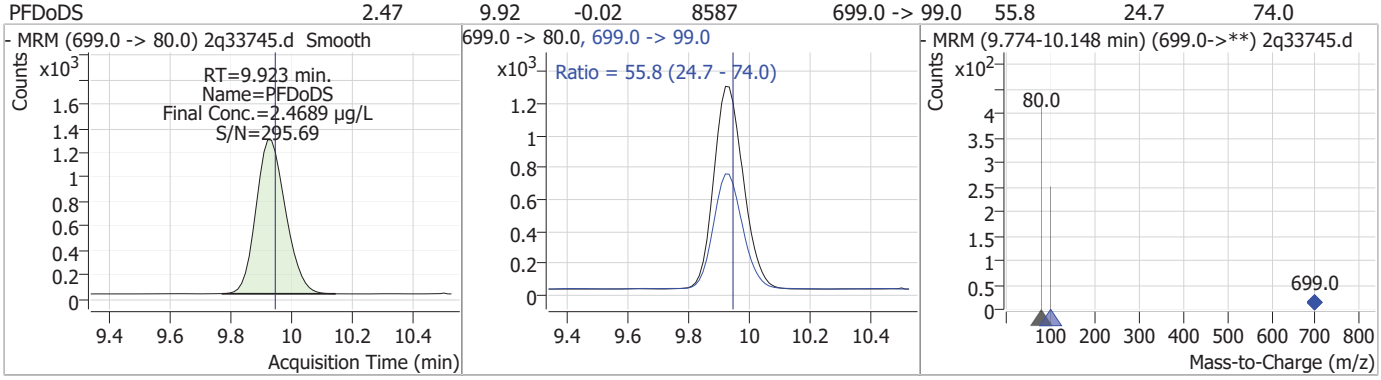




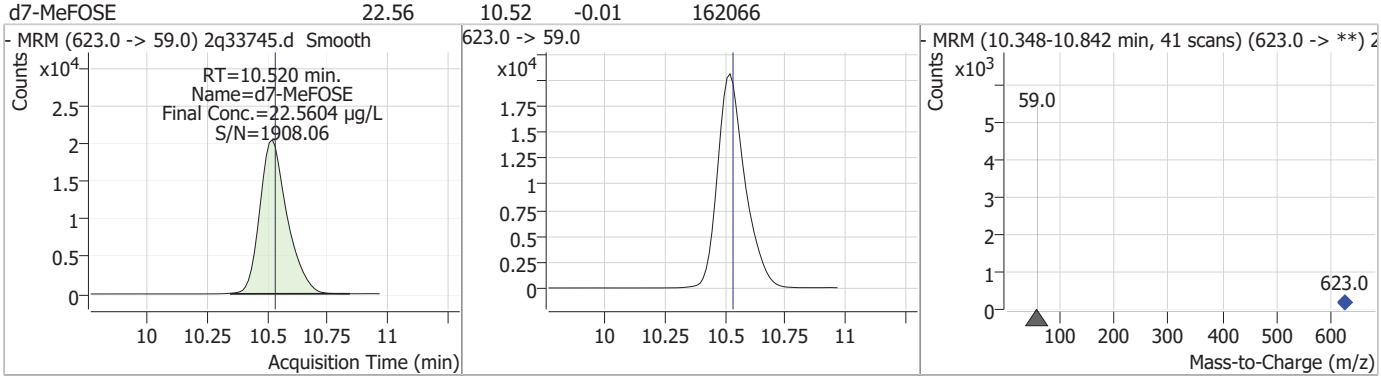


Perfluorinated Compounds by LC/MS/MS

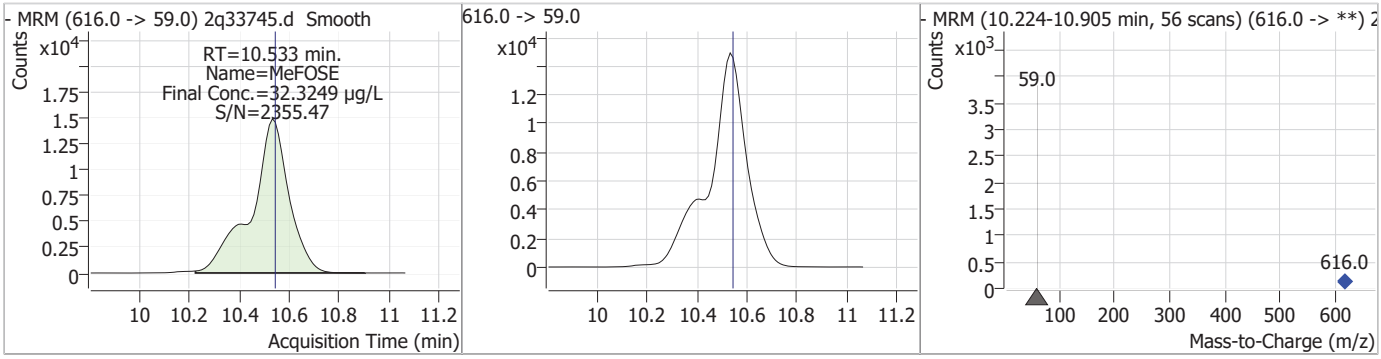
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.47	9.92	-0.02	8587	699.0 -> 99.0	55.8	24.7	74.0



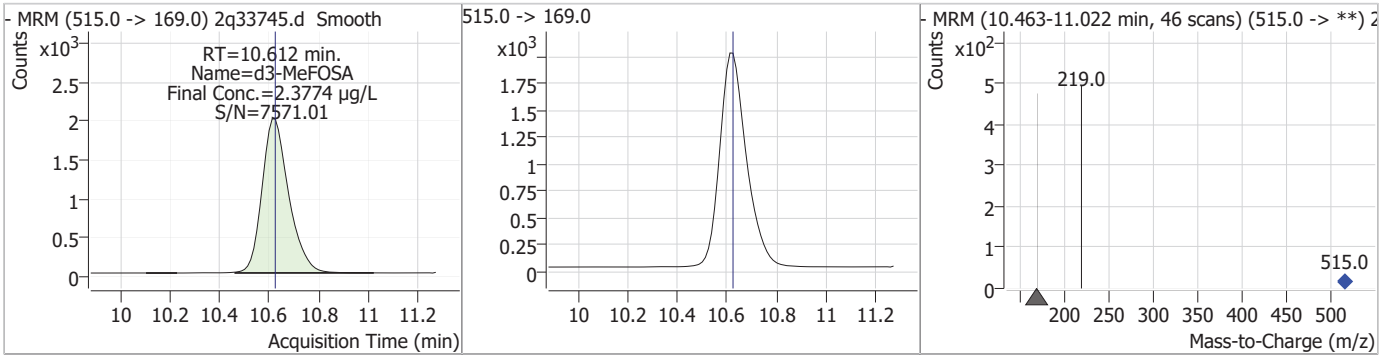
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.56	10.52	-0.01	162066				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	32.32	10.53	-0.01	156419				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.38	10.61	-0.01	14872				



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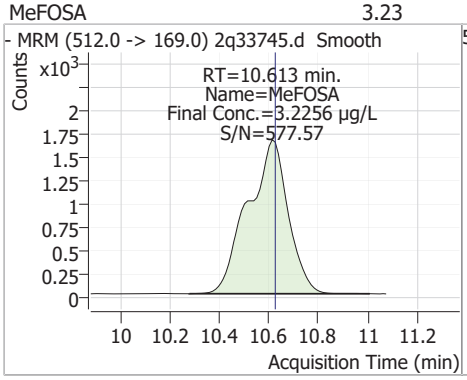
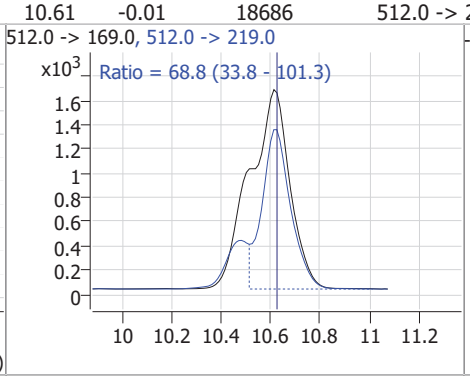
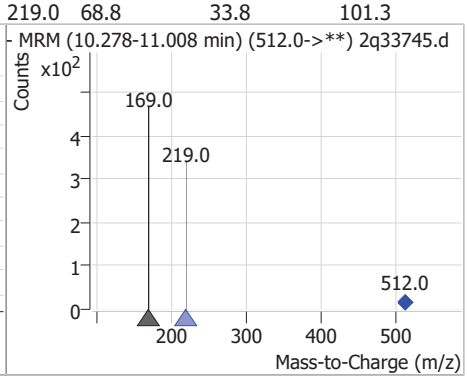
Perfluorinated Compounds by LC/MS/MS

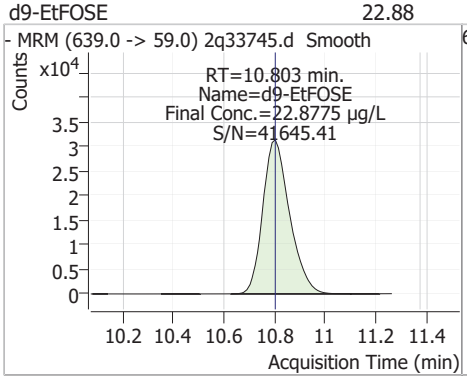
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	3.23	10.61	-0.01	18686	512.0 -> 219.0	68.8	33.8	101.3

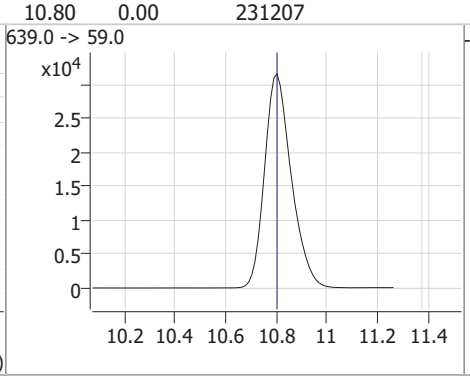


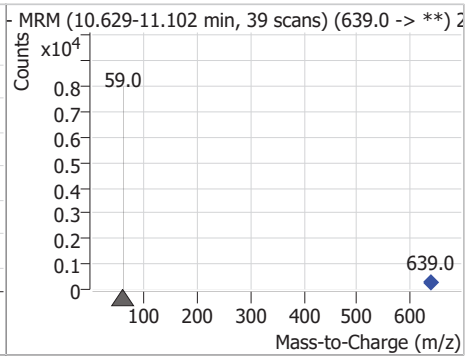




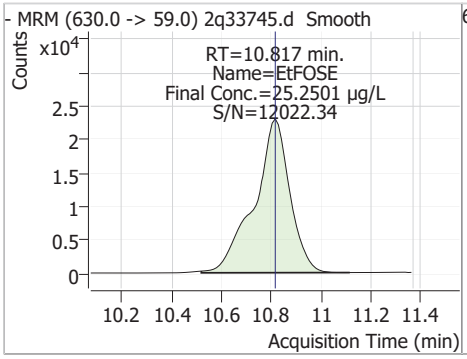
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.88	10.80	0.00	231207				

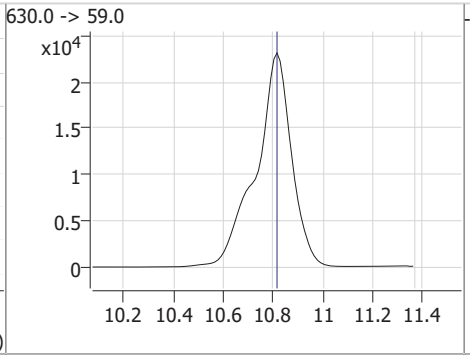


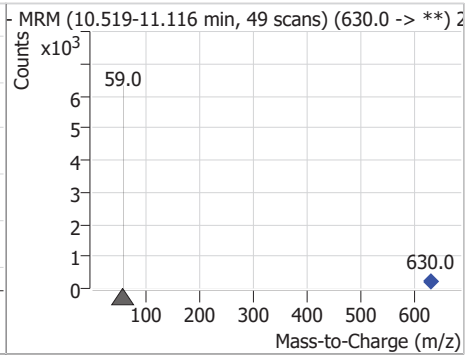




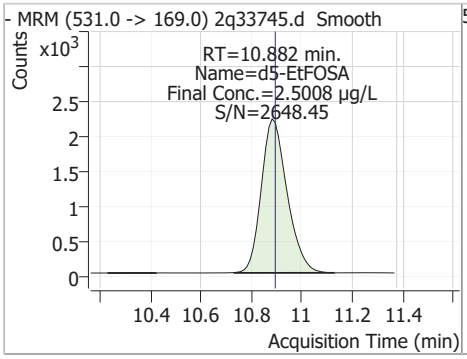
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.25	10.82	0.00	228237				

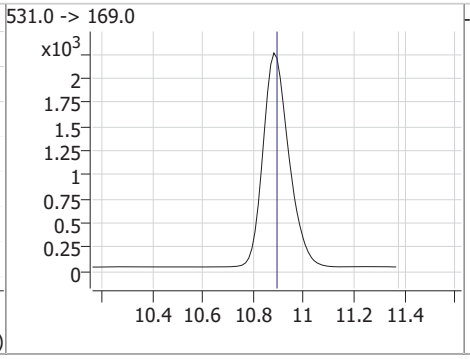


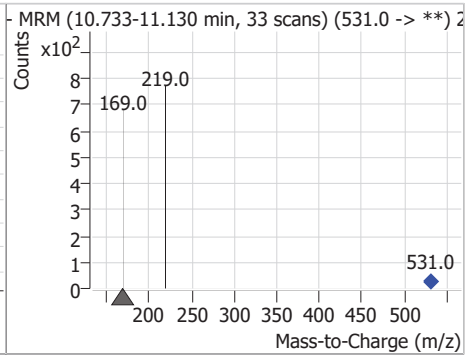




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.50	10.88	-0.01	15711				







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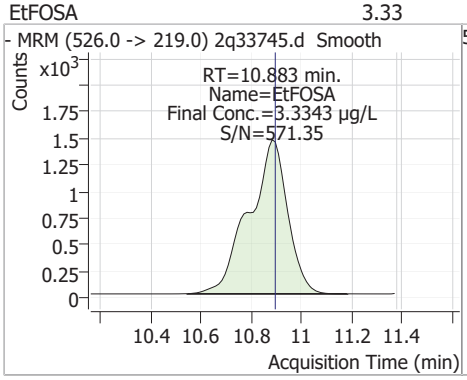
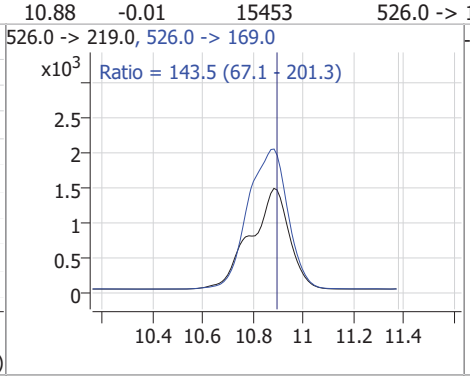
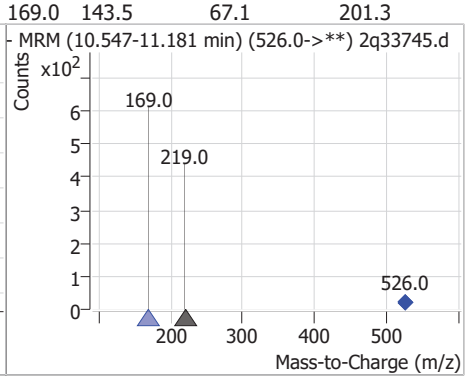
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	3.33	10.88	-0.01	15453	526.0 -> 169.0	143.5	67.1	201.3







7.6.26

7

Manual Integration Approval Summary

Sample Number: T2Q345-CC344
Lab FileID: 2Q33745.D
Injection Time: 05/12/25 14:21
Method: EPA 1633
Analyst approved: 05/15/25 12:38 Olga Azarian
Supervisor approved: 05/15/25 12:46 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.12	Split peak
Perfluorononanoic acid	375-95-1		7.63	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.30	Split peak
PFOSA	754-91-6		9.34	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/15/25 12:46

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33746.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/12/2025 2:34:50 PM
Sample Name : CC344-1.0LL
Vial : P1-A2
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q345.batch.bin
Sample Information : OP62666,T2Q345,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	109875	10.00 µg/L	0.000
M5-PFPeA	4.637	268.0 -> 223.0	58751	5.00 µg/L	0.000
M5-PFHxA	5.732	318.0 -> 273.0	33901	2.50 µg/L	-0.012
M4-PFHpA	6.528	367.0 -> 322.0	28654	2.50 µg/L	-0.012
M8-PFOA	7.111	421.0 -> 376.0	60074	2.50 µg/L	-0.013
M9-PFNA	7.632	472.0 -> 427.0	24379	1.25 µg/L	-0.012
M6-PFDA	8.114	519.0 -> 474.0	16963	1.25 µg/L	-0.025
M7-PFUnDA	8.583	570.0 -> 525.0	27326	1.25 µg/L	-0.024
M2-PFDoDA	9.016	615.0 -> 570.0	27537	1.25 µg/L	-0.025
M2-PFTeDA	9.783	715.0 -> 670.0	21676	1.25 µg/L	-0.012
M8-FOSA	9.333	506.0 -> 78.0	18928	2.50 µg/L	-0.013
M3-PFBS	5.699	302.0 -> 99.0	5313	2.50 µg/L	0.000
M3-PFHxS	7.238	402.0 -> 99.0	6907	2.50 µg/L	-0.012
M8-PFOS	8.303	507.0 -> 99.0	6166	2.50 µg/L	-0.012
M2-4:2FTS	5.420	329.0 -> 81.0	1462	5.00 µg/L	-0.012
M2-6:2FTS	6.897	429.0 -> 81.0	3117	5.00 µg/L	-0.012
M2-8:2FTS	7.902	529.0 -> 81.0	4846	5.00 µg/L	-0.012
M3-MeFOSAA	8.135	573.0 -> 419.0	38419	5.00 µg/L	-0.025
M3-HFPO-DA	6.062	287.0 -> 169.0	23016	10.00 µg/L	-0.012
M5-EtFOSAA	8.344	589.0 -> 419.0	33501	5.00 µg/L	-0.012
M7-MeFOSE	10.520	623.0 -> 59.0	155760	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	223499	25.00 µg/L	0.000
M5-EtFOSA	10.882	531.0 -> 169.0	15235	2.50 µg/L	-0.012
M3-MeFOSA	10.624	515.0 -> 169.0	14479	2.50 µg/L	0.000
13C4-PFOS	8.304	503.0 -> 80.0	11686	2.50 µg/L	-0.012
13C3-PFBA	3.265	216.0 -> 172.0	48124	5.00 µg/L	0.000
18O2-PFHxS	7.238	403.0 -> 84.0	7530	2.50 µg/L	-0.025
13C4-PFOA	7.111	417.0 -> 372.0	62324	2.50 µg/L	-0.013
13C2-PFDA	8.115	515.0 -> 470.0	16707	1.25 µg/L	-0.025
13C5-PFNA	7.632	468.0 -> 423.0	22286	1.25 µg/L	-0.012
13C2-PFHxA	5.733	315.0 -> 270.0	31875	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.420	329.0 -> 81.0	1462	5.66 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 113.2%	
13C2-6:2FTS	6.897	429.0 -> 81.0	3117	5.42 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.5%	
13C2-8:2FTS	7.902	529.0 -> 81.0	4846	5.02 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.4%	
13C2-PFDoDA	9.016	615.0 -> 570.0	27537	1.21 µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.9%	
13C2-PFTeDA	9.783	715.0 -> 670.0	21676	1.18 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.7%	
13C3-PFBS	5.699	302.0 -> 99.0	5313	2.54 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.5%	
13C3-PFHxS	7.238	402.0 -> 99.0	6907	2.66 µg/L	-0.012

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.5%		
13C4-PFBA	3.263	217.0 -> 172.0	109875	9.73 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 97.3%		
13C4-PFHpA	6.528	367.0 -> 322.0	28654	2.59 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.4%		
13C5-PFHxA	5.732	318.0 -> 273.0	33901	2.42 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.8%		
13C5-PFPeA	4.637	268.0 -> 223.0	58751	4.89 µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.7%		
13C6-PFDA	8.114	519.0 -> 474.0	16963	1.24 µg/L		-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.0%		
13C7-PFUnDA	8.583	570.0 -> 525.0	27326	1.23 µg/L		-0.024
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.8%		
13C8-FOSA	9.333	506.0 -> 78.0	18928	2.37 µg/L		-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.7%		
13C8-PFOA	7.111	421.0 -> 376.0	60074	2.40 µg/L		-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.9%		
13C8-PFOS	8.303	507.0 -> 99.0	6166	2.49 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.7%		
13C9-PFNA	7.632	472.0 -> 427.0	24379	1.26 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.5%		
d3-MeFOSAA	8.135	573.0 -> 419.0	38419	4.78 µg/L		-0.025
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.6%		
13C3-HFPO-DA	6.062	287.0 -> 169.0	23016	10.36 µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 103.6%		
d3-MeFOSA	10.624	515.0 -> 169.0	14479	2.33 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.2%		
d5-EtFOSAA	8.344	589.0 -> 419.0	33501	5.01 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.2%		
d7-MeFOSE	10.520	623.0 -> 59.0	155760	21.83 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 87.3%		
d9-EtFOSE	10.803	639.0 -> 59.0	223499	22.27 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 89.1%		
d5-EtFOSA	10.882	531.0 -> 169.0	15235	2.44 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.7%		
Target Compounds						QValue
4:2FTS	5.433	327.0 -> 307.0	1716	0.79 µg/L		99
		327.0 -> 81.0	899			
6:2FTS	6.898	427.0 -> 407.0	2784	0.74 µg/L		99
		427.0 -> 81.0	1038			
8:2FTS	7.902	527.0 -> 507.0	2874	0.78 µg/L		95
		527.0 -> 81.0	1324			
EtFOSAA	8.345	584.0 -> 419.0	1185	0.23 µg/L	m	82
		584.0 -> 483.0	423			
FOSA	9.323	498.0 -> 78.0	1278	0.26 µg/L		98
		498.0 -> 478.0	58			
MeFOSAA	8.161	570.0 -> 419.0	1107	0.20 µg/L	m	97
		570.0 -> 512.0	370			
PFBA	3.268	213.0 -> 169.0	2189	0.79 µg/L		100
PFBS	5.700	299.0 -> 80.0	1073	0.15 µg/L		96
		299.0 -> 99.0	361			
PFDA	8.115	513.0 -> 469.0	2899	0.23 µg/L		81
		513.0 -> 219.0	261			
PFDoDA	9.016	613.0 -> 569.0	3748	0.19 µg/L		97
		613.0 -> 319.0	629			
PFDS	9.181	599.0 -> 80.0	703	0.21 µg/L		90

Perfluorinated Compounds by LC/MS/MS

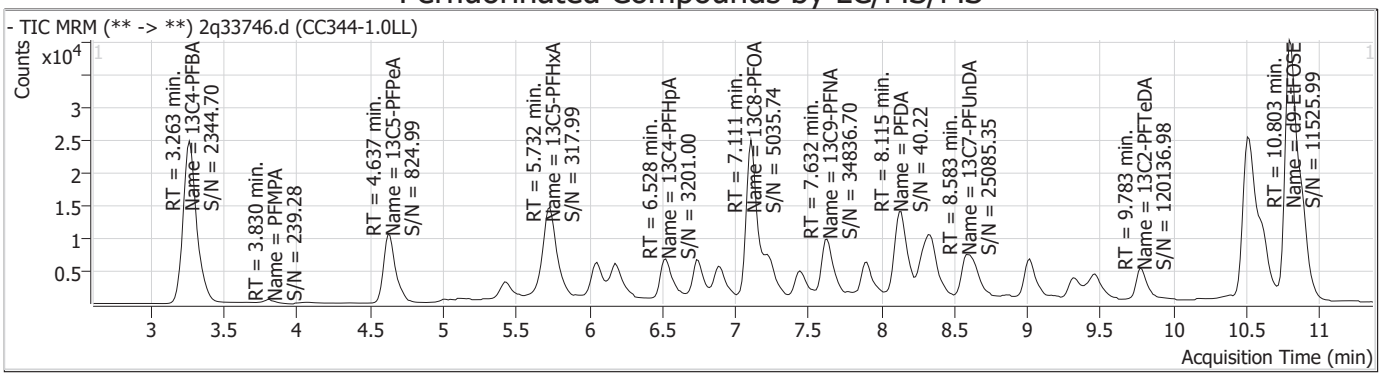
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	378				
PFHpA	6.528	363.0 -> 319.0	3280	0.18	µg/L		95
		363.0 -> 169.0	511				
PFHpS	7.797	449.0 -> 80.0	995	0.20	µg/L		87
		449.0 -> 99.0	415				
PFHxA	5.735	313.0 -> 269.0	2306	0.20	µg/L		100
		313.0 -> 119.0	71				
PFHxS	7.239	399.0 -> 80.0	944	0.22	µg/L	m	75
		399.0 -> 99.0	346				
PFNA	7.633	463.0 -> 419.0	2016	0.22	µg/L	m	91
		463.0 -> 219.0	472				
PFNS	8.771	549.0 -> 80.0	407	0.20	µg/L		74
		549.0 -> 99.0	157				
PFOA	7.112	413.0 -> 369.0	3346	0.23	µg/L		89
		413.0 -> 169.0	918				
PFOS	8.292	499.0 -> 80.0	1005	0.23	µg/L	m	93
		499.0 -> 99.0	519				
PFPeA	4.640	263.0 -> 219.0	3945	0.38	µg/L		100
PFPeS	6.604	349.0 -> 80.0	454	0.17	µg/L	#	43
		349.0 -> 99.0	349				
PFTeDA	9.784	713.0 -> 669.0	3177	0.18	µg/L		93
		713.0 -> 169.0	330				
PFTrDA	9.414	663.0 -> 619.0	4058	0.17	µg/L		89
		663.0 -> 169.0	553				
PFUnDA	8.585	563.0 -> 519.0	3458	0.19	µg/L		96
		563.0 -> 269.0	761				
11Cl-PF3OUdS	9.478	631.0 -> 451.0	13156	0.66	µg/L		99
		633.0 -> 453.0	3909				
9Cl-PF3ONS	8.636	531.0 -> 351.0	11533	0.72	µg/L		93
		533.0 -> 353.0	2865				
ADONA	6.753	377.0 -> 251.0	22394	0.67	µg/L		99
		377.0 -> 85.0	7101				
HFPO-DA	6.062	285.0 -> 169.0	1685	0.74	µg/L		92
		285.0 -> 185.0	194				
3:3FTCA	4.078	241.0 -> 177.0	721	0.88	µg/L		96
		241.0 -> 117.0	38				
5:3FTCA	6.191	341.0 -> 237.0	12329	4.41	µg/L		100
		341.0 -> 217.0	8789				
7:3FTCA	7.446	441.0 -> 337.0	16244	4.52	µg/L		96
		441.0 -> 317.0	6195				
EtFOSA	10.883	526.0 -> 219.0	1128	0.25	µg/L		84
		526.0 -> 169.0	1733				
EtFOSE	10.817	630.0 -> 59.0	16187	1.85	µg/L		100
MeFOSA	10.613	512.0 -> 169.0	1471	0.26	µg/L	m	97
		512.0 -> 219.0	954				
MeFOSE	10.533	616.0 -> 59.0	11029	2.37	µg/L		100
PFDoDS	9.936	699.0 -> 80.0	610	0.18	µg/L		98
		699.0 -> 99.0	311				
NFDHA	5.639	295.0 -> 201.0	412	0.44	µg/L		59
		201.0 -> 85.0	1889				
		295.0 -> 85.0	126				
PFMBA	5.015	279.0 -> 85.0	2200	0.36	µg/L		100
PFMPA	3.830	229.0 -> 85.0	3211	0.37	µg/L		100
PFEESA	6.168	315.0 -> 135.0	4989	0.36	µg/L		95
		315.0 -> 69.0	637				

 # = Qualifier out of range, m = manually integrated, + = Area summed

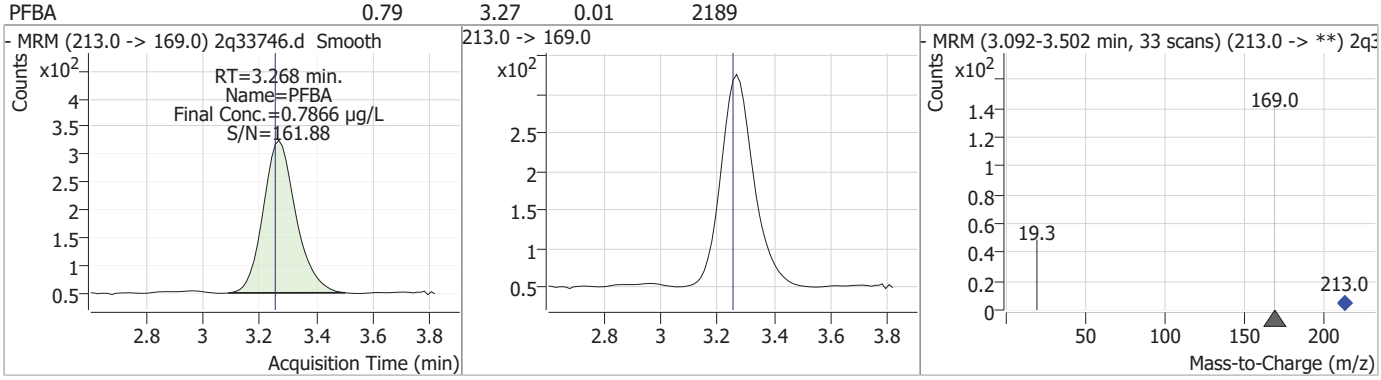
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

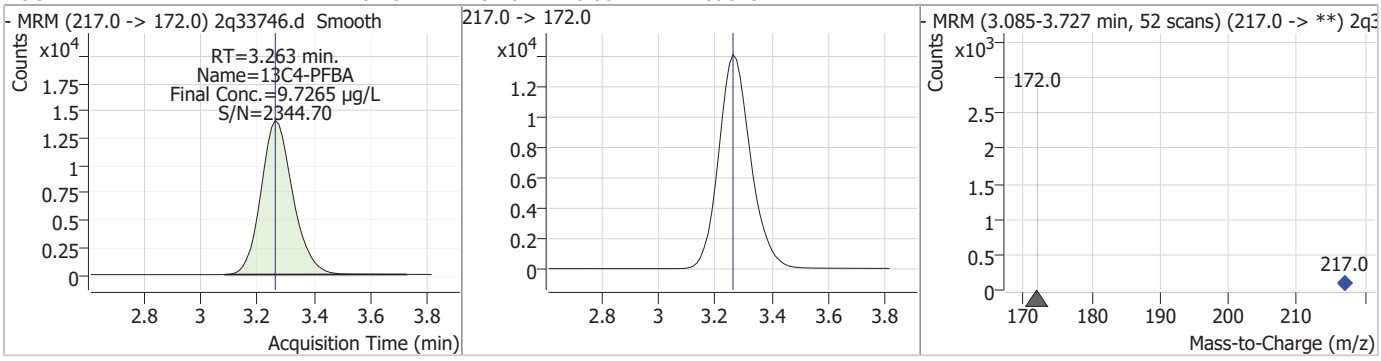
Perfluorinated Compounds by LC/MS/MS



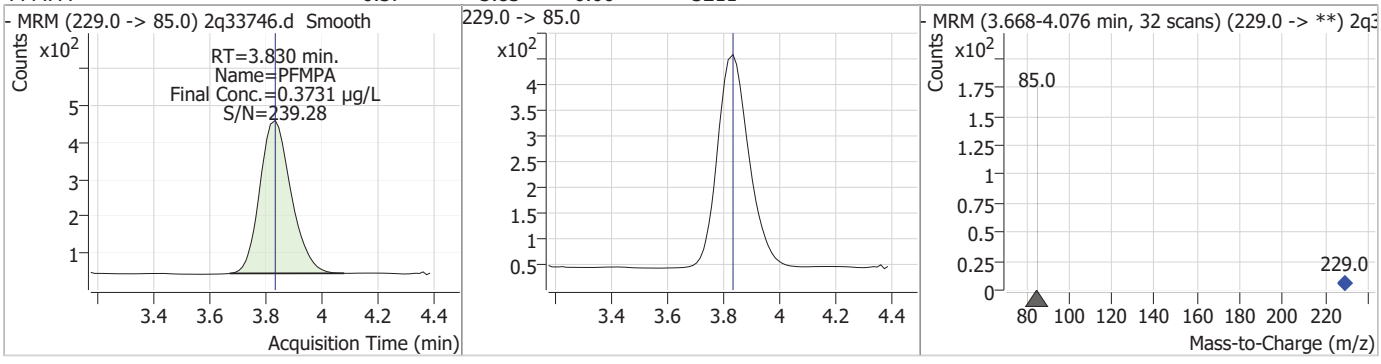
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.79	3.27	0.01	2189				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.73	3.26	0.00	109875				

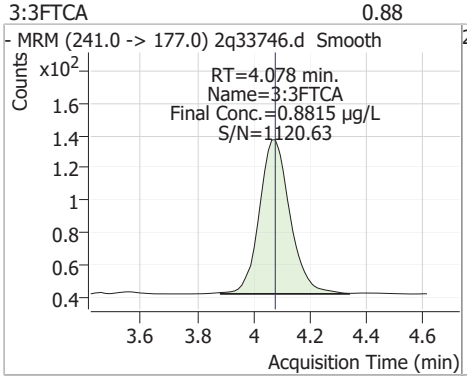


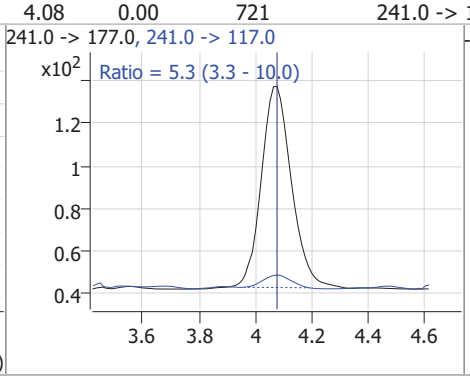
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.37	3.83	0.00	3211				

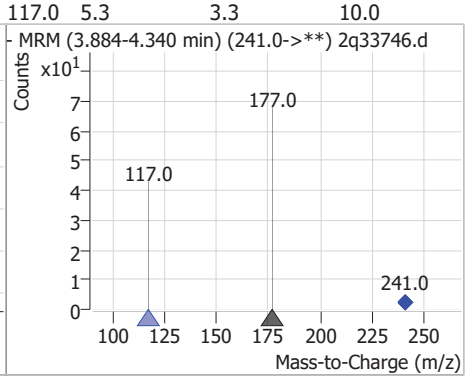


Perfluorinated Compounds by LC/MS/MS

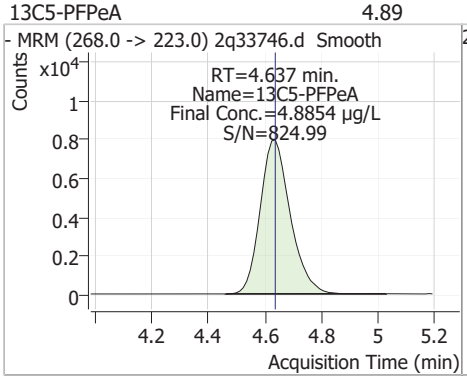
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	0.88	4.08	0.00	721	241.0 -> 117.0	5.3	3.3	10.0

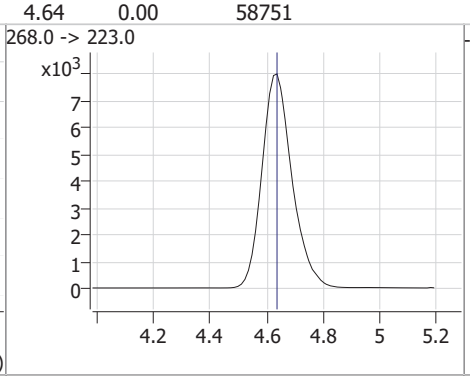


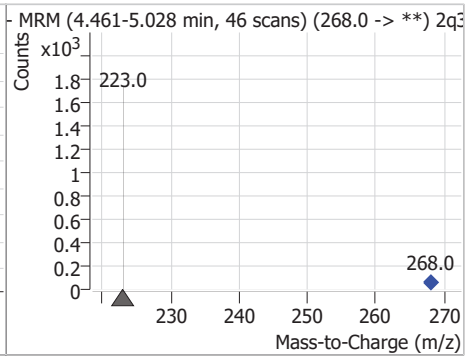




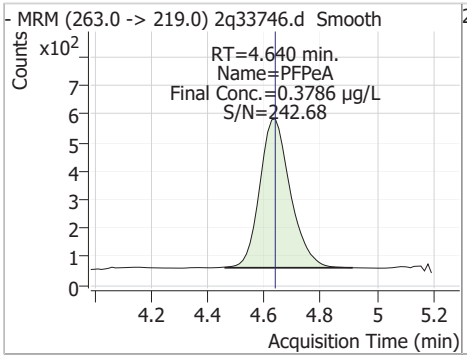
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.89	4.64	0.00	58751				

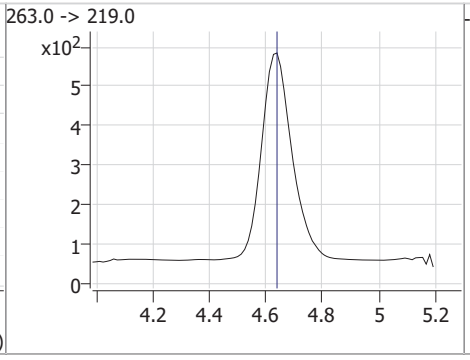


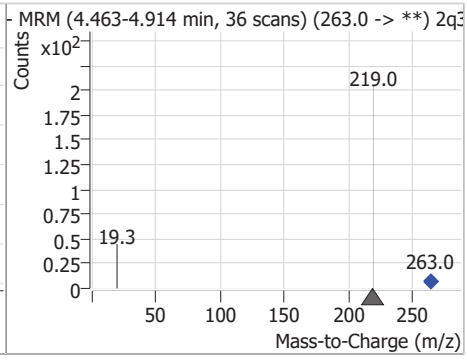




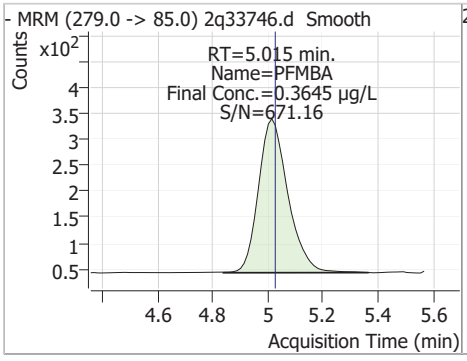
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.38	4.64	0.00	3945				

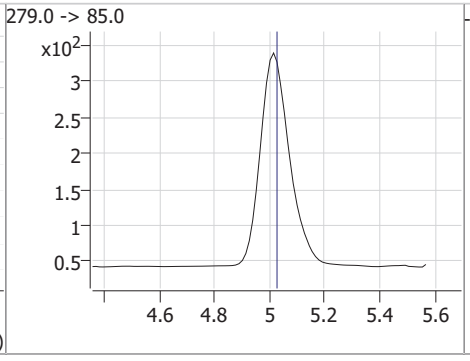


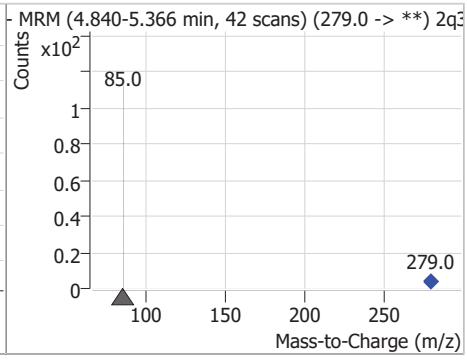




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.36	5.01	-0.01	2200				







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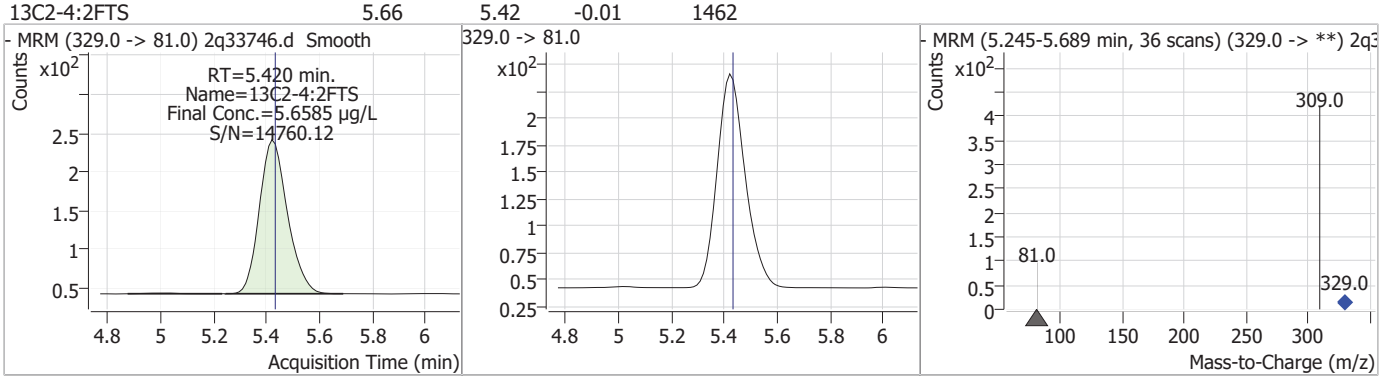
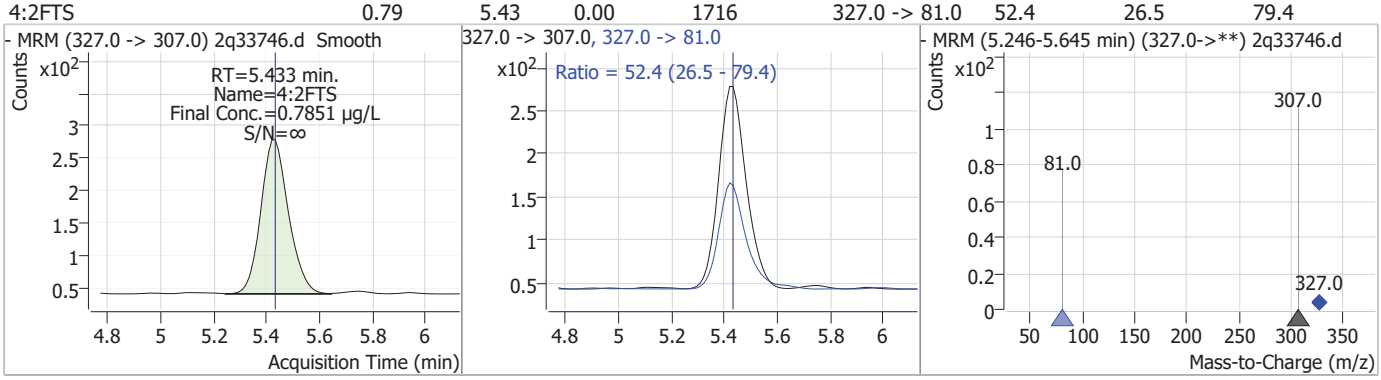
Perfluorinated Compounds by LC/MS/MS

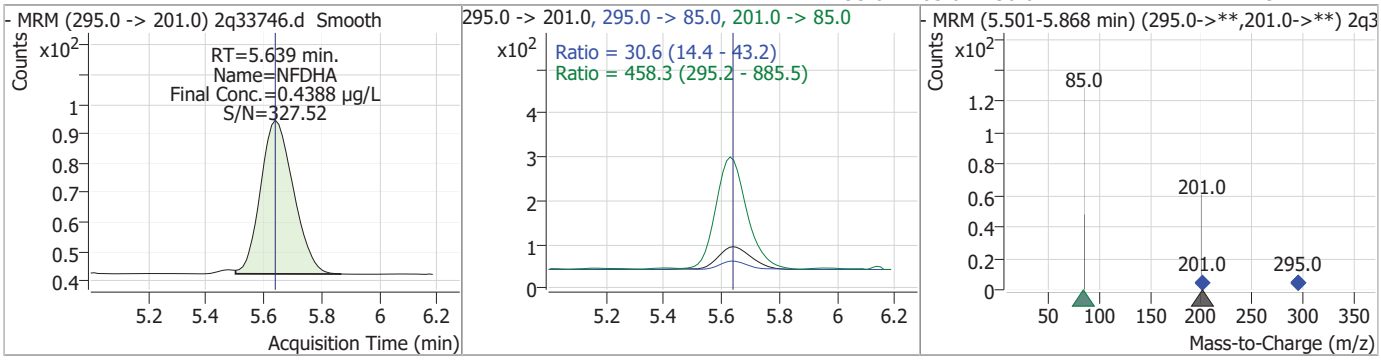
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.66	5.42	-0.01	1462				



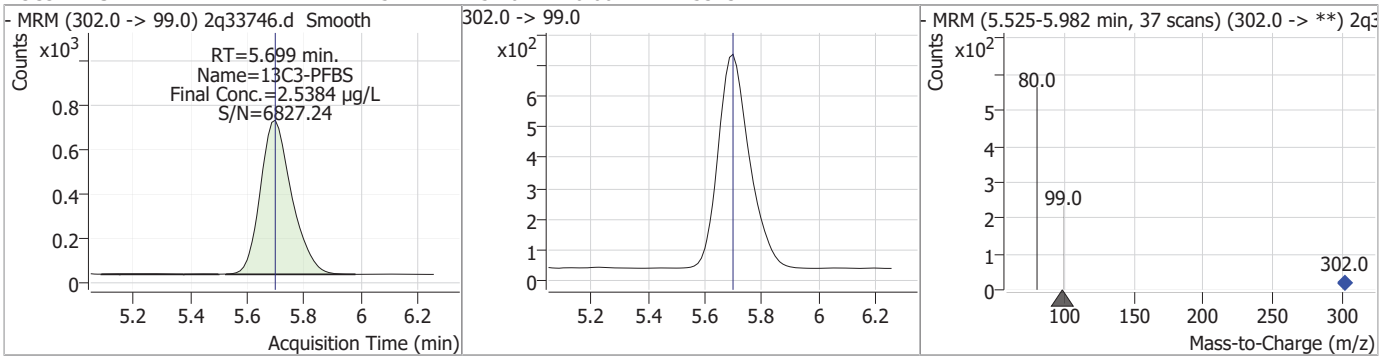
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	0.79	5.43	0.00	1716	327.0 -> 81.0	52.4	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.44	5.64	0.00	412	201.0 -> 85.0	458.3	295.2	885.5
					295.0 -> 85.0	30.6	14.4	43.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.54	5.70	0.00	5313				



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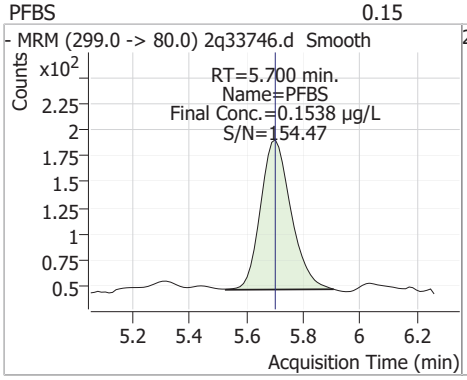
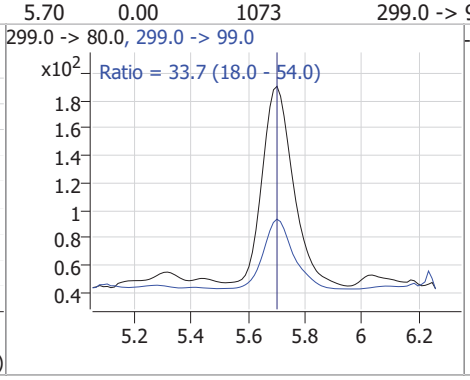
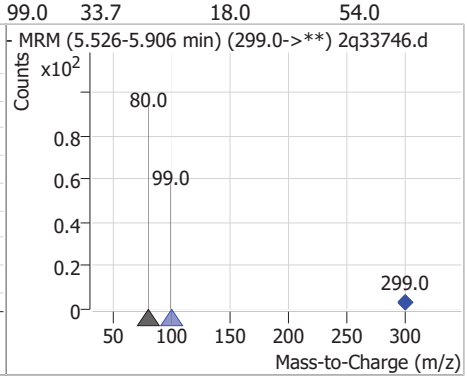
Perfluorinated Compounds by LC/MS/MS

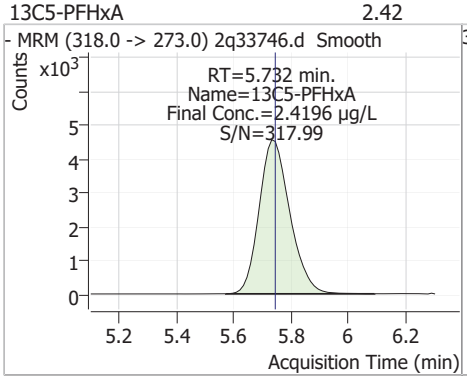
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.15	5.70	0.00	1073	299.0 -> 99.0	33.7	18.0	54.0

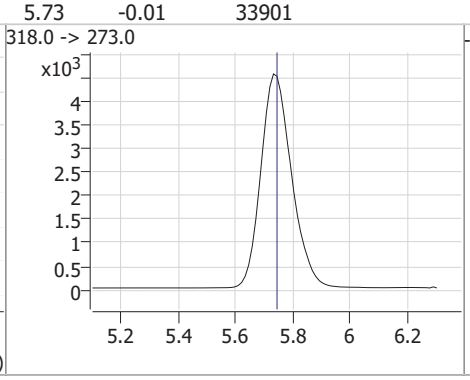


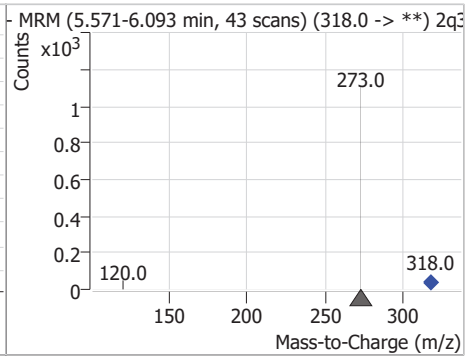




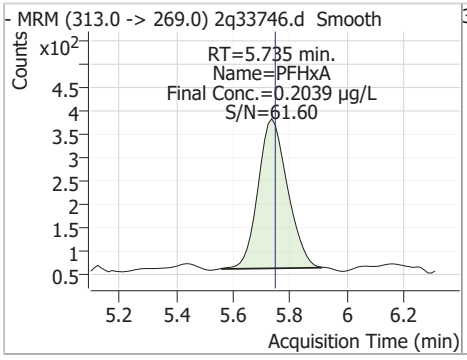
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.42	5.73	-0.01	33901				

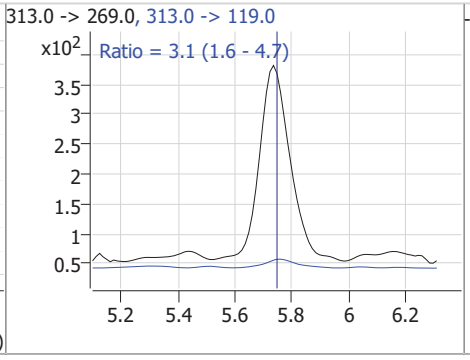


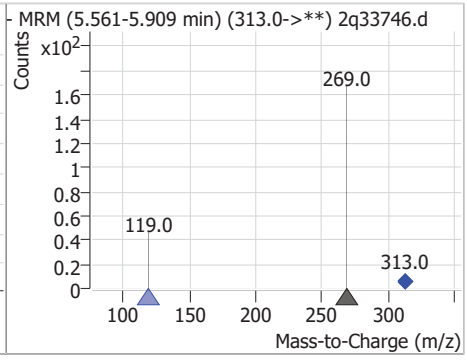




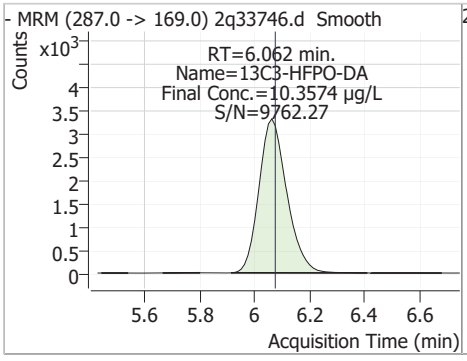
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.20	5.74	-0.01	2306	313.0 -> 119.0	3.1	1.6	4.7

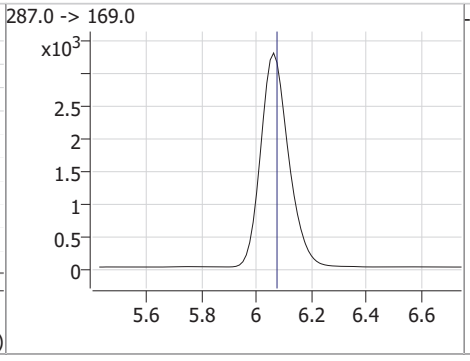


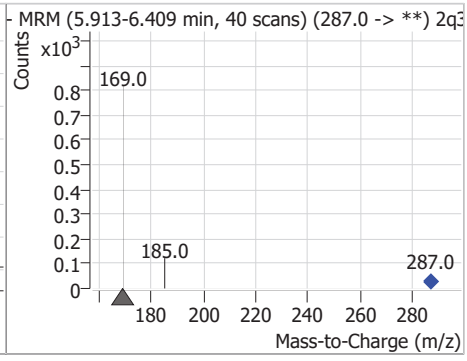




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.36	6.06	-0.01	23016				







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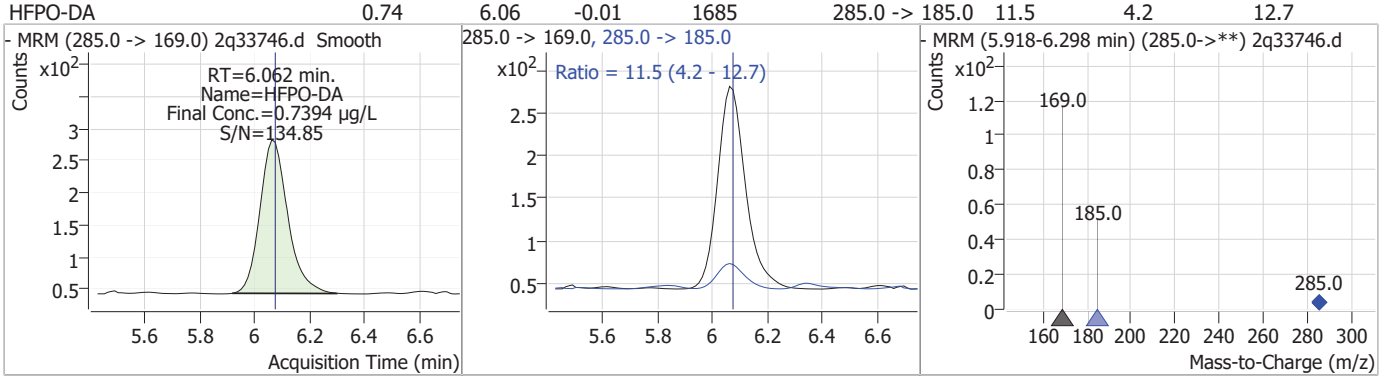
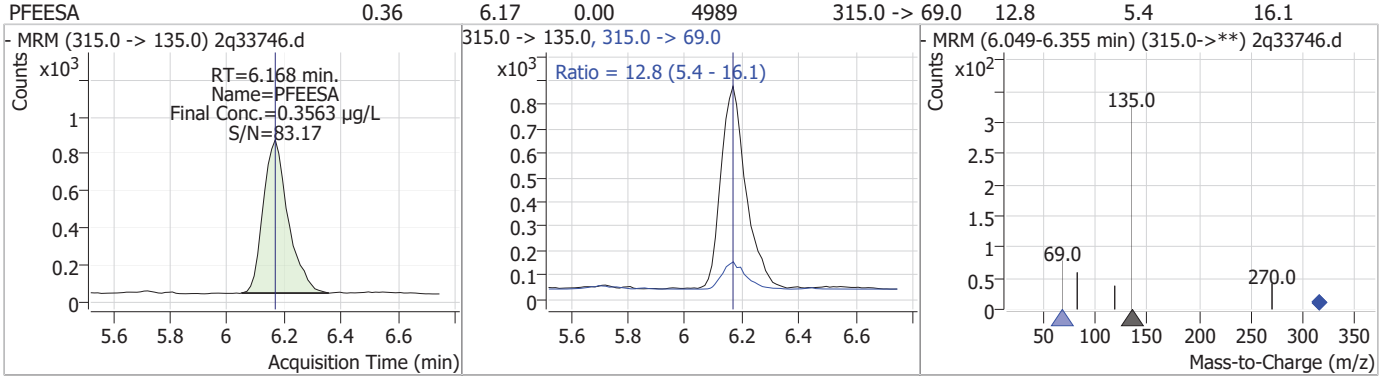
Perfluorinated Compounds by LC/MS/MS

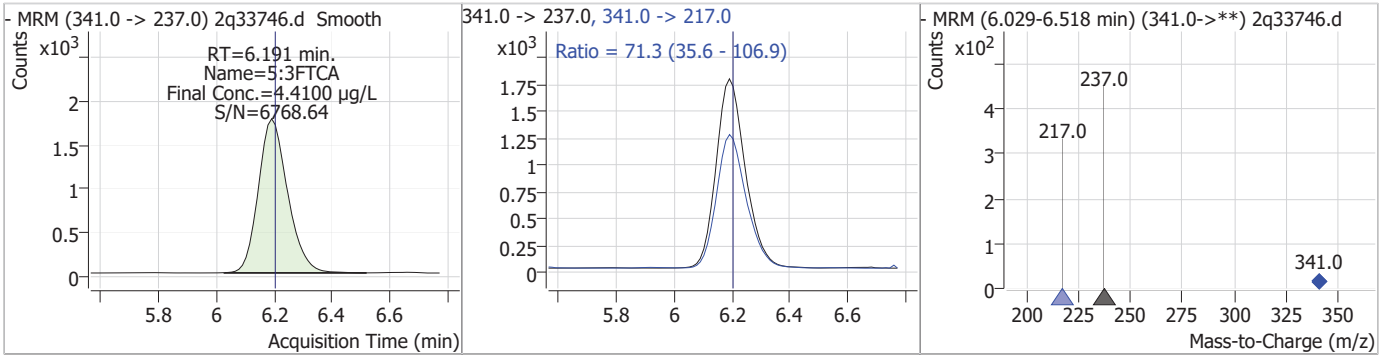
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	0.74	6.06	-0.01	1685	285.0 -> 185.0	11.5	4.2	12.7



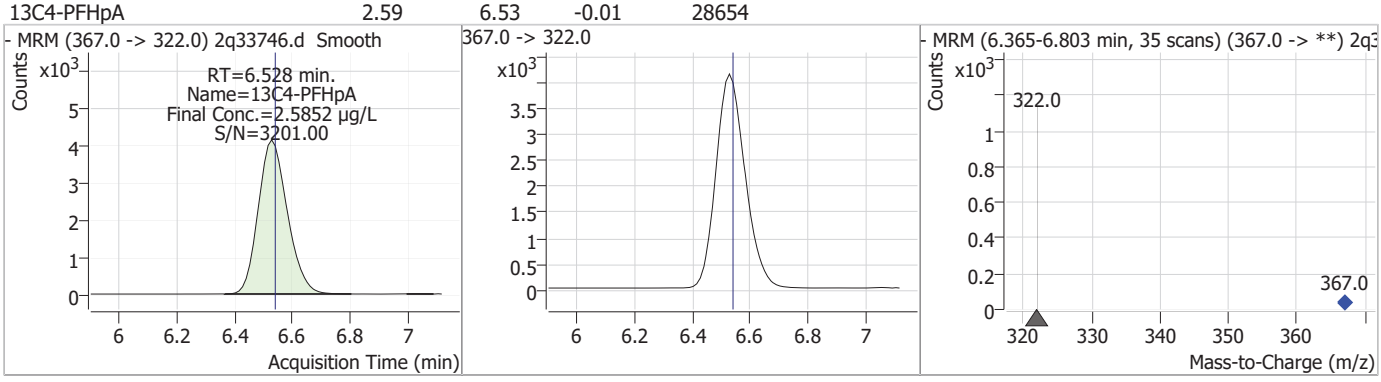
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.36	6.17	0.00	4989	315.0 -> 69.0	12.8	5.4	16.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	4.41	6.19	-0.01	12329	341.0 -> 217.0	71.3	35.6	106.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.59	6.53	-0.01	28654				



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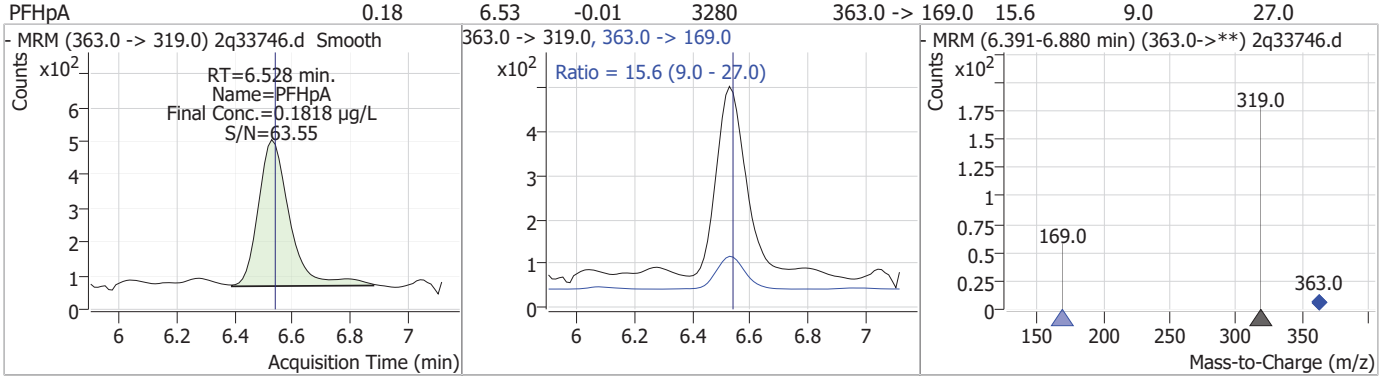
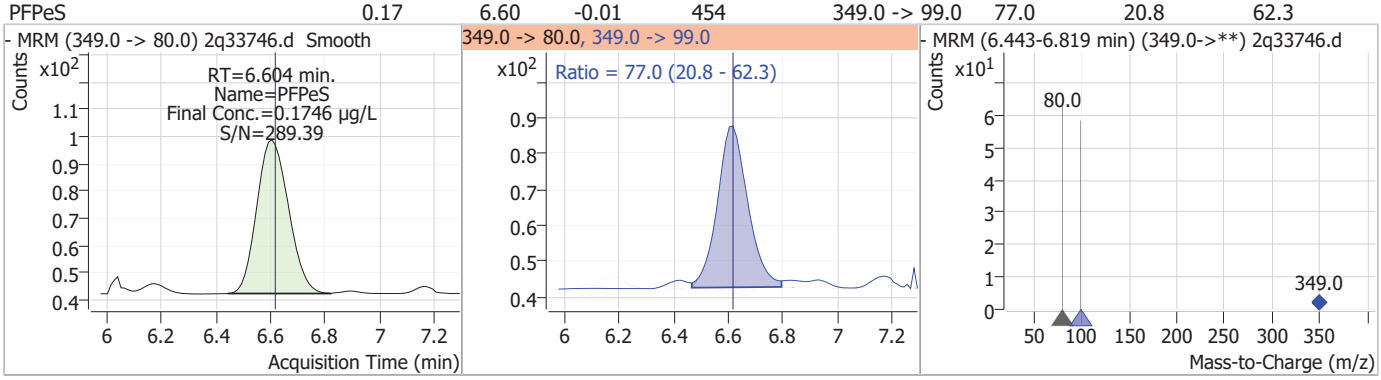
Perfluorinated Compounds by LC/MS/MS

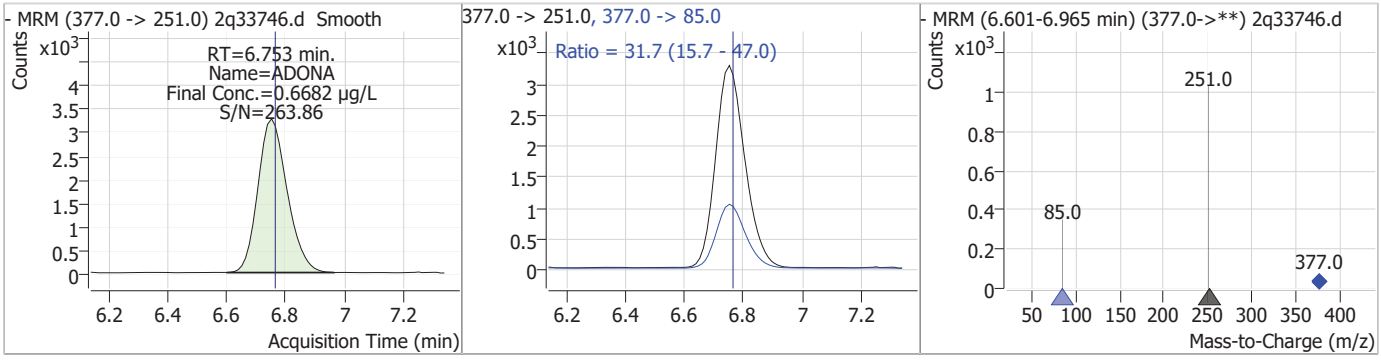
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.18	6.53	-0.01	3280	363.0 -> 169.0	15.6	9.0	27.0



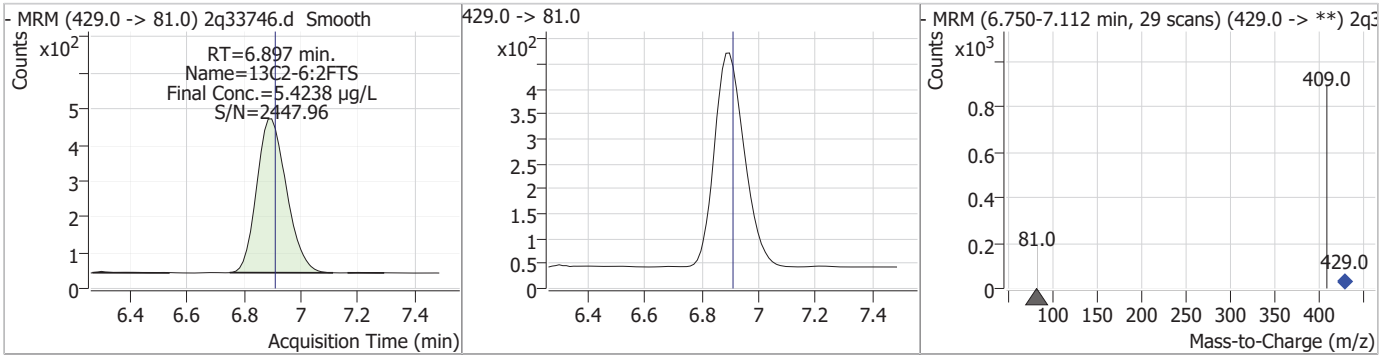
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.17	6.60	-0.01	454	349.0 -> 99.0	77.0	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	0.67	6.75	-0.01	22394	377.0 -> 85.0	31.7	15.7	47.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.42	6.90	-0.01	3117				



7.6.27

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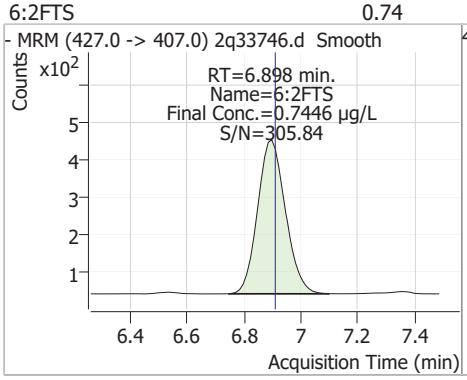
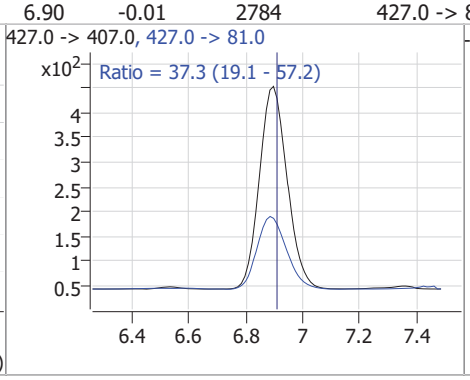
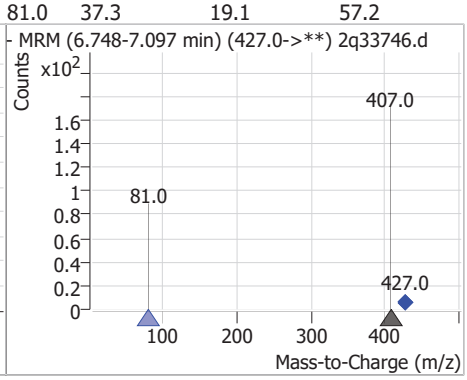
Perfluorinated Compounds by LC/MS/MS

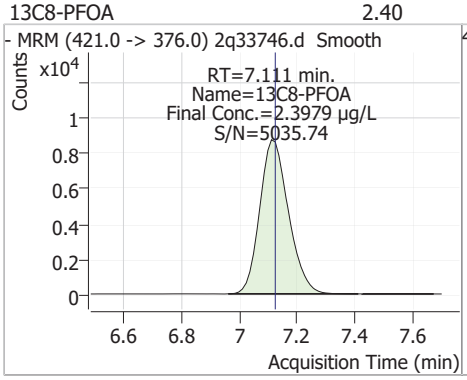
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.74	6.90	-0.01	2784	427.0 -> 81.0	37.3	19.1	57.2

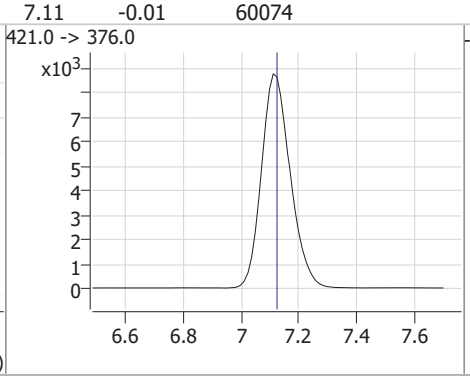


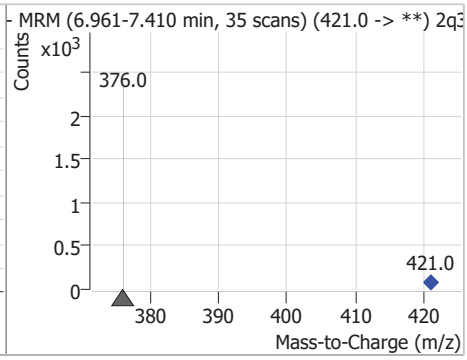




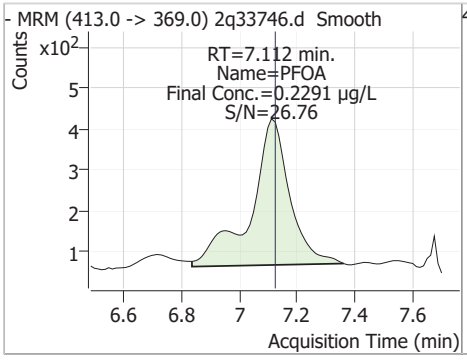
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.40	7.11	-0.01	60074				

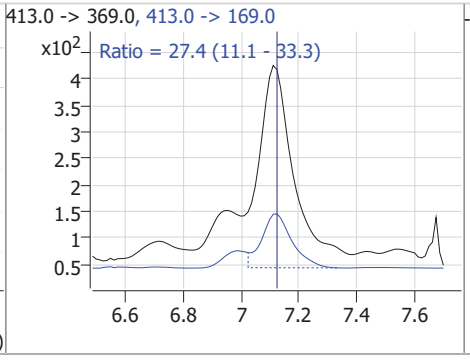


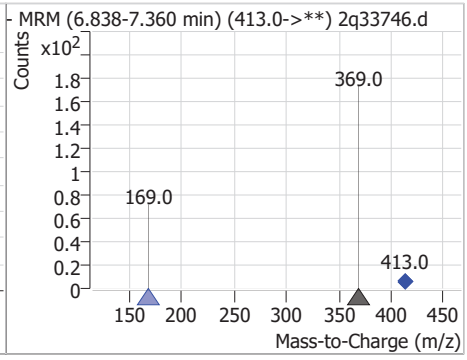




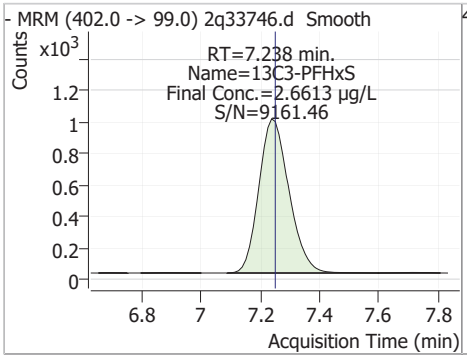
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.23	7.11	-0.01	3346	413.0 -> 169.0	27.4	11.1	33.3

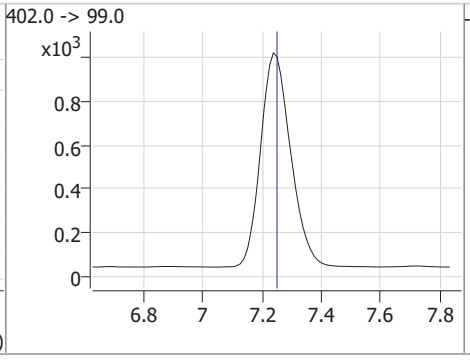


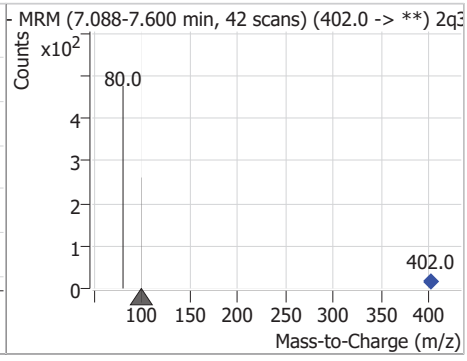




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.66	7.24	-0.01	6907				







7.6.27

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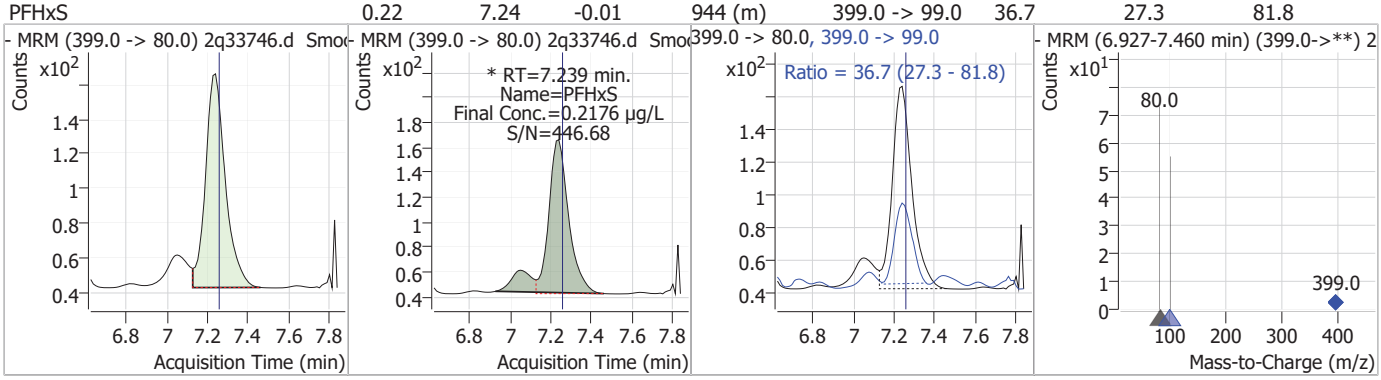
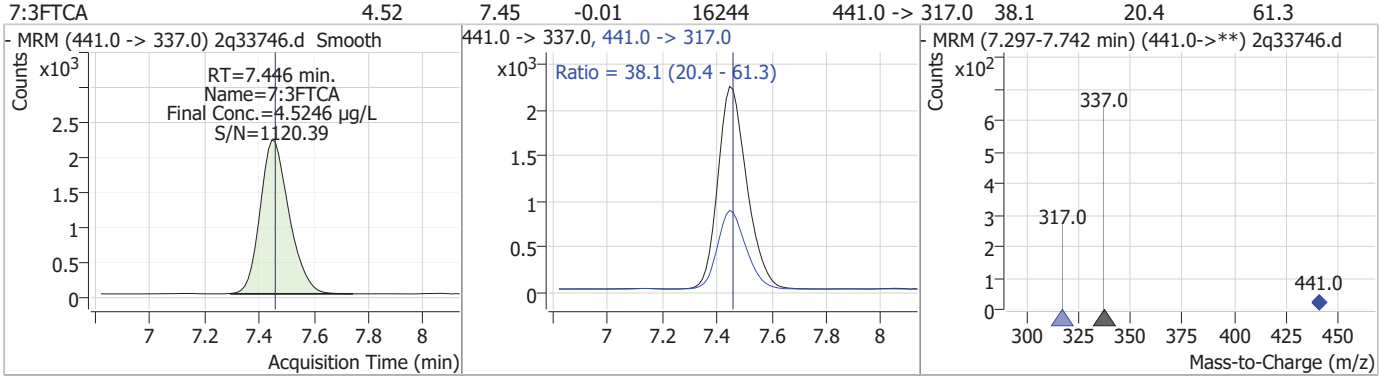
Perfluorinated Compounds by LC/MS/MS

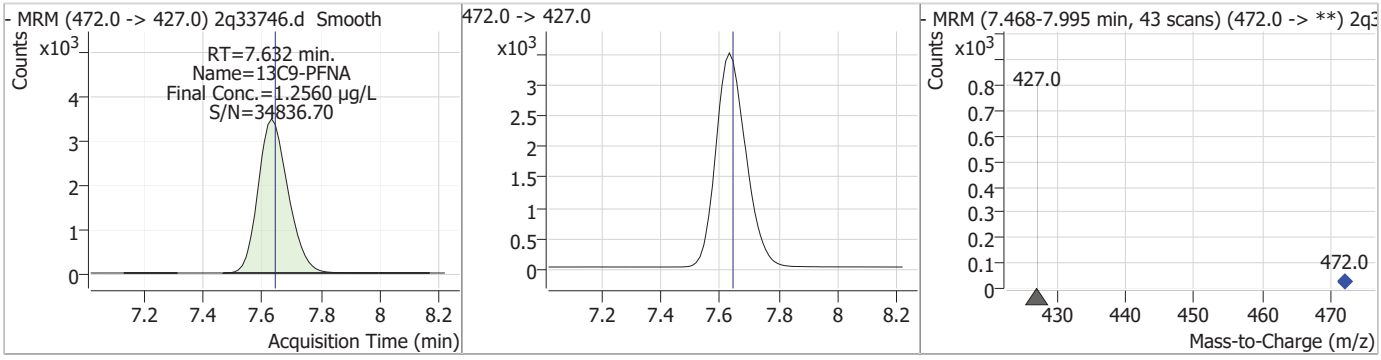
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.22	7.24	-0.01	944 (m)	399.0 -> 99.0	36.7	27.3	81.8



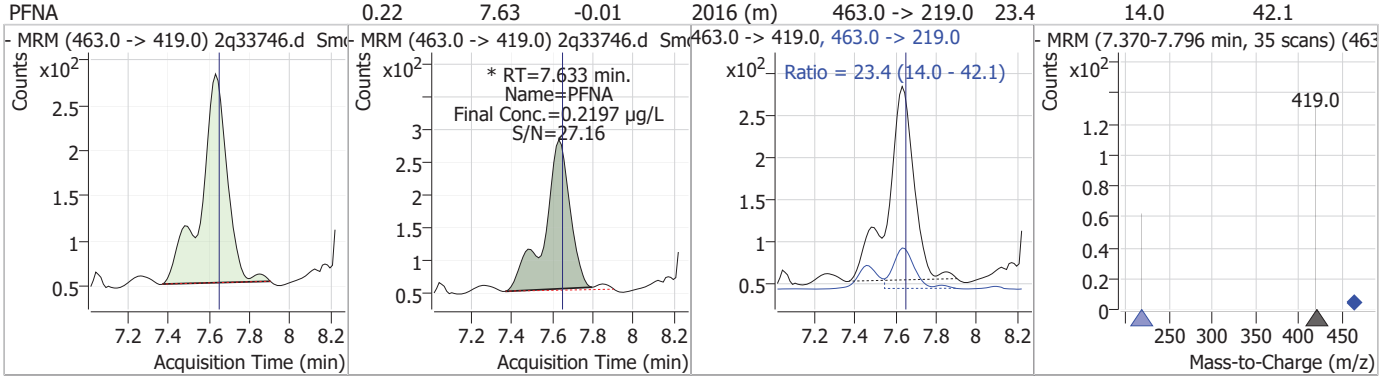
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	4.52	7.45	-0.01	16244	441.0 -> 317.0	38.1	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.26	7.63	-0.01	24379				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.22	7.63	-0.01	2016 (m)	463.0 -> 219.0	23.4	14.0	42.1

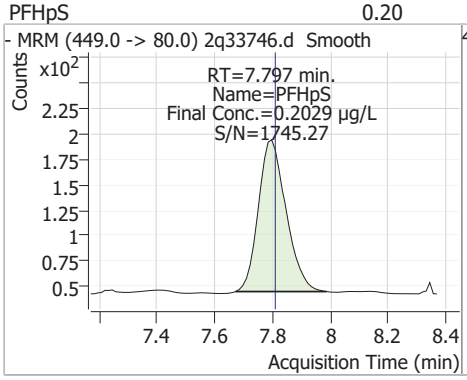


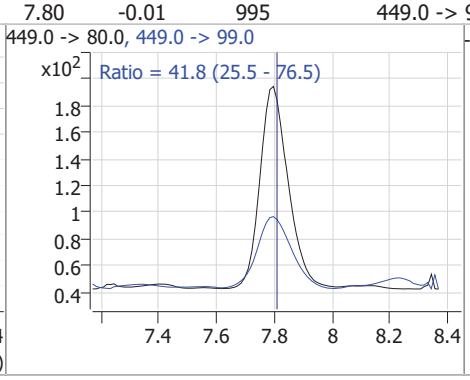
7.6.27

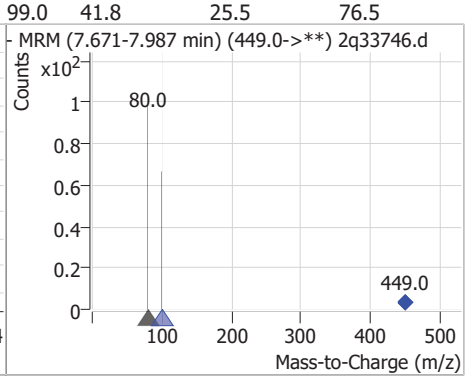
7

Perfluorinated Compounds by LC/MS/MS

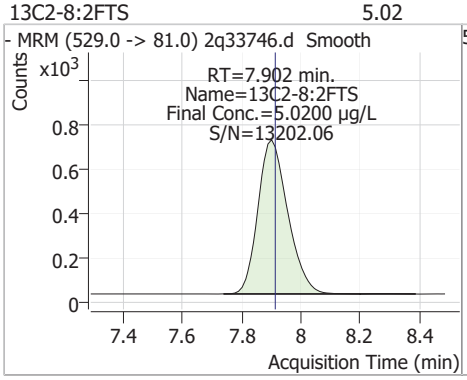
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.20	7.80	-0.01	995	449.0 -> 99.0	41.8	25.5	76.5

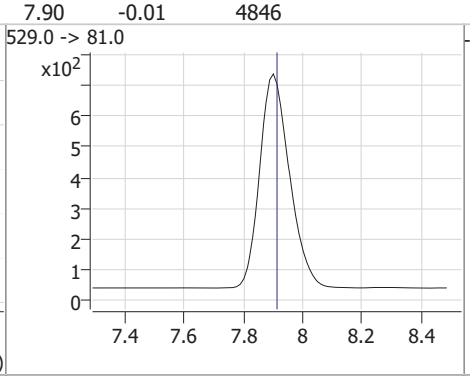


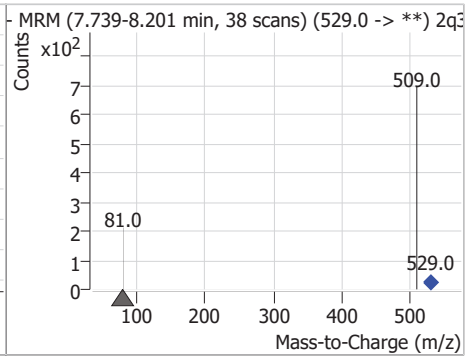




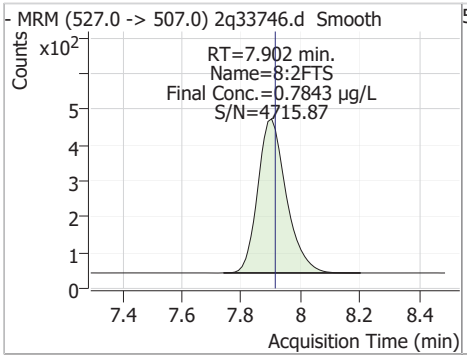
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.02	7.90	-0.01	4846				

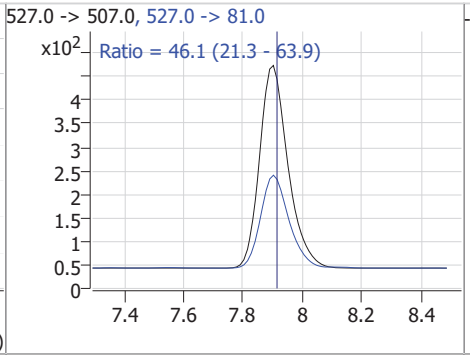


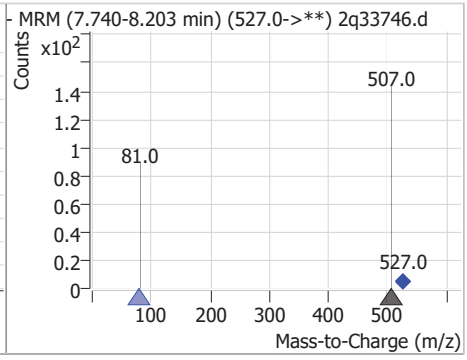




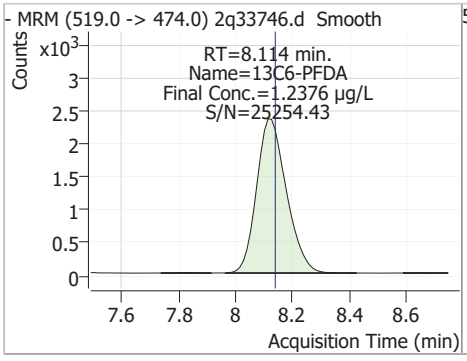
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.78	7.90	-0.01	2874	527.0 -> 81.0	46.1	21.3	63.9

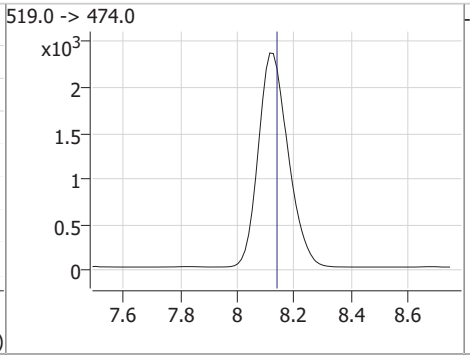


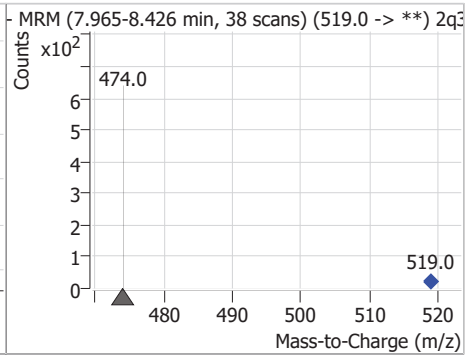




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.24	8.11	-0.03	16963				

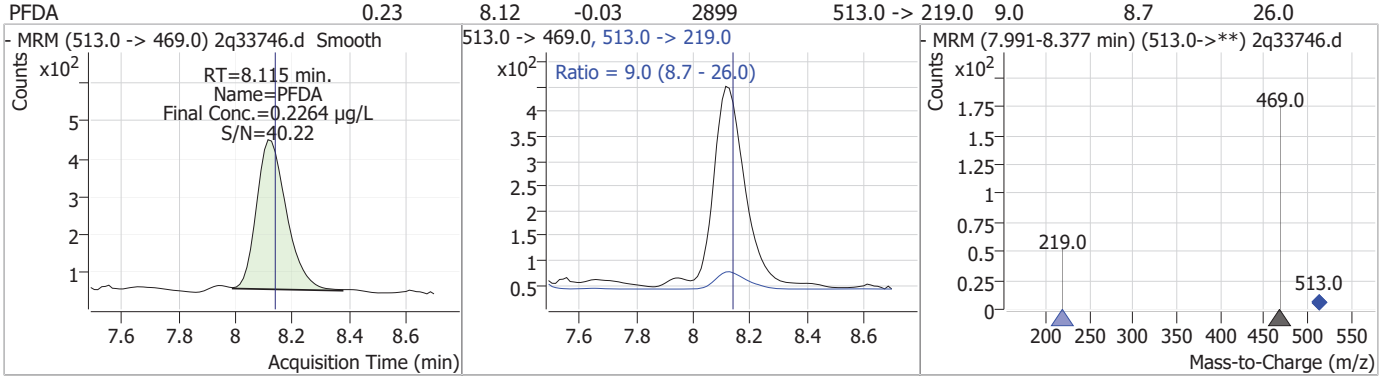




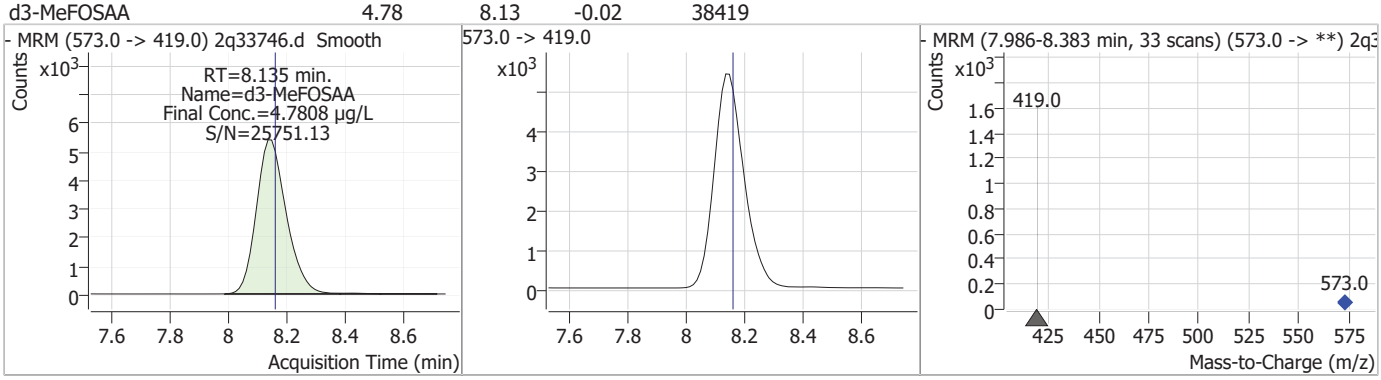


Perfluorinated Compounds by LC/MS/MS

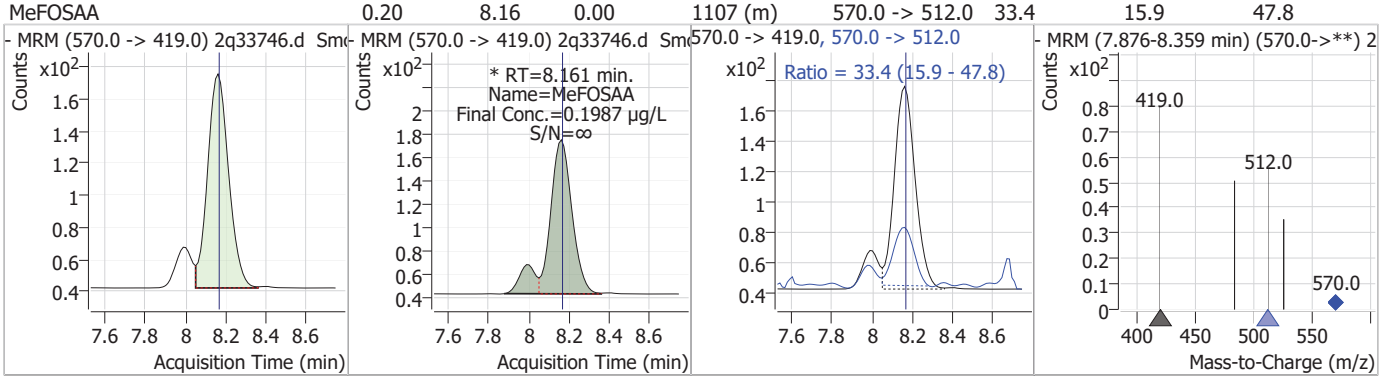
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.23	8.12	-0.03	2899	513.0 -> 219.0	9.0	8.7	26.0



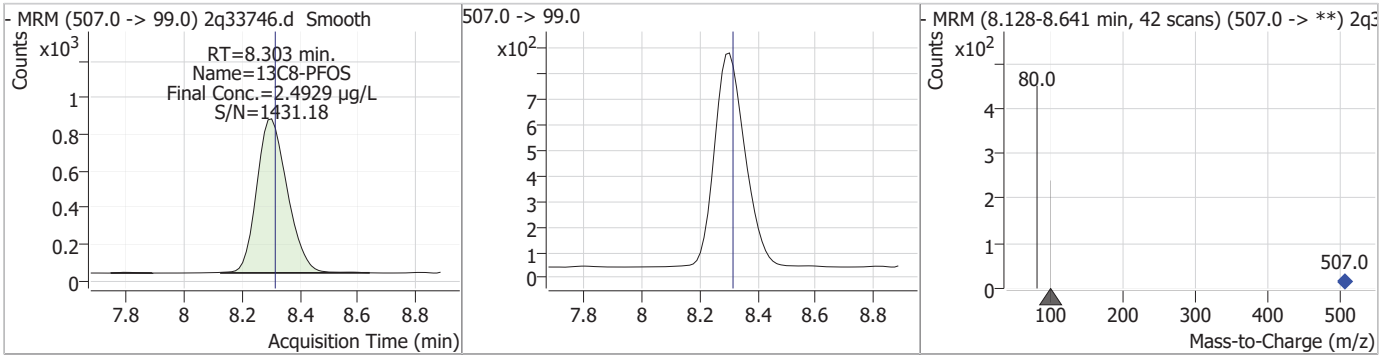
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.78	8.13	-0.02	38419				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.20	8.16	0.00	1107 (m)	570.0 -> 512.0	33.4	15.9	47.8

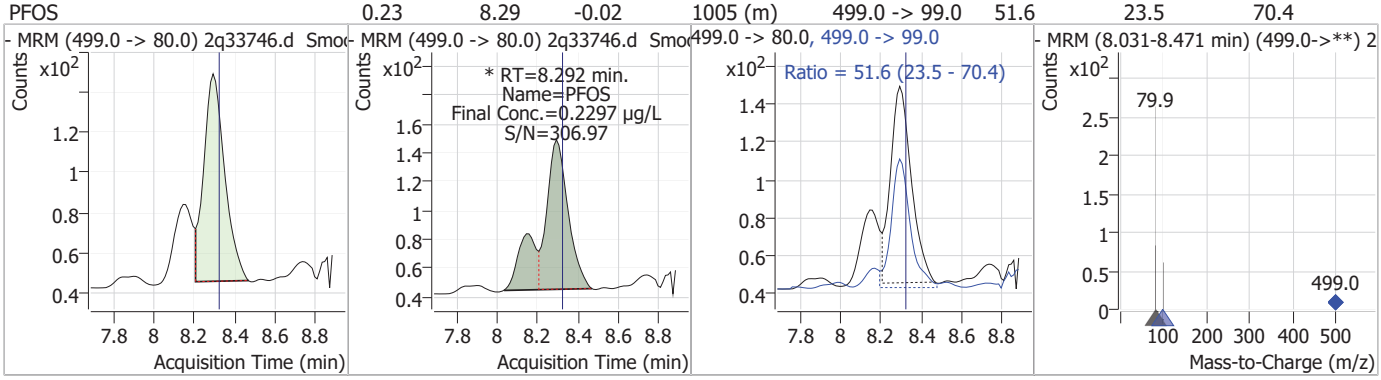


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.49	8.30	-0.01	6166				

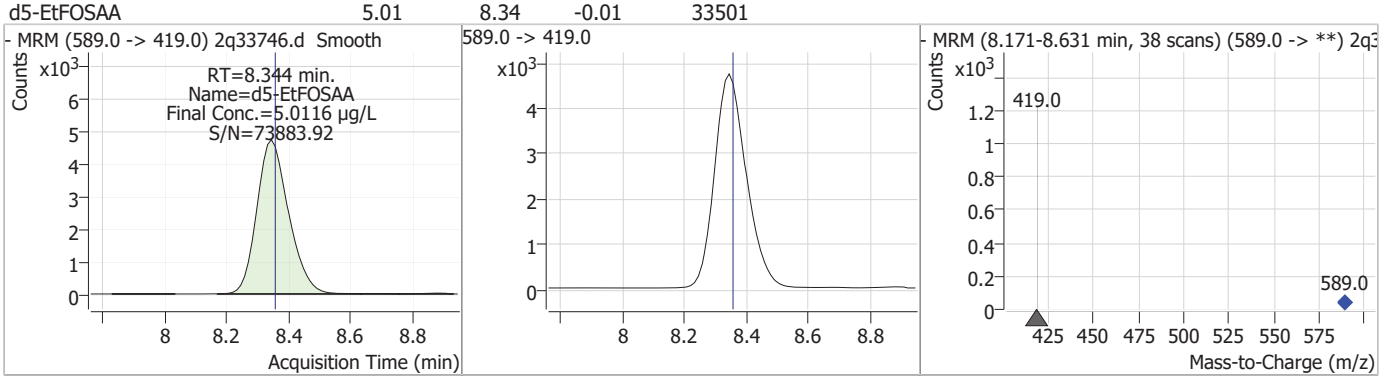


Perfluorinated Compounds by LC/MS/MS

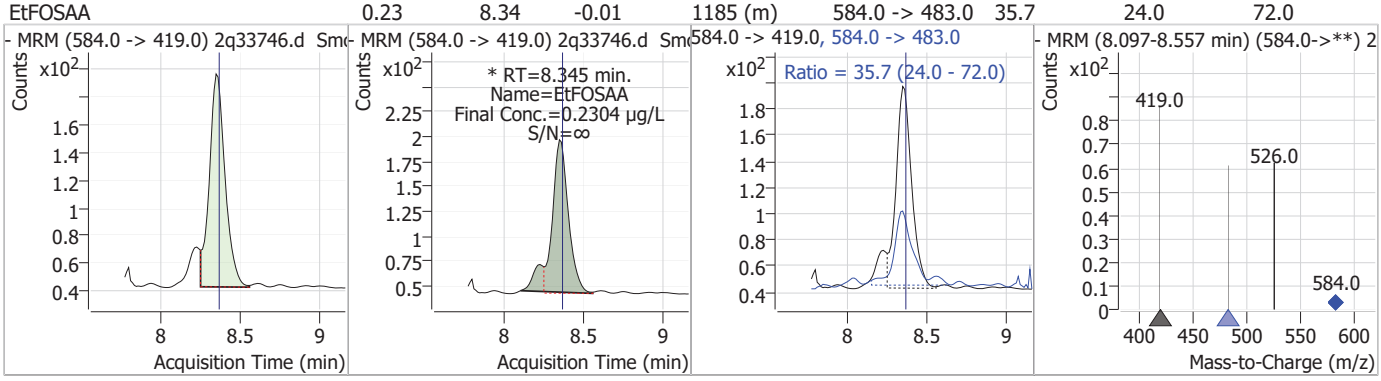
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.23	8.29	-0.02	1005 (m)	499.0 -> 99.0	51.6	23.5	70.4



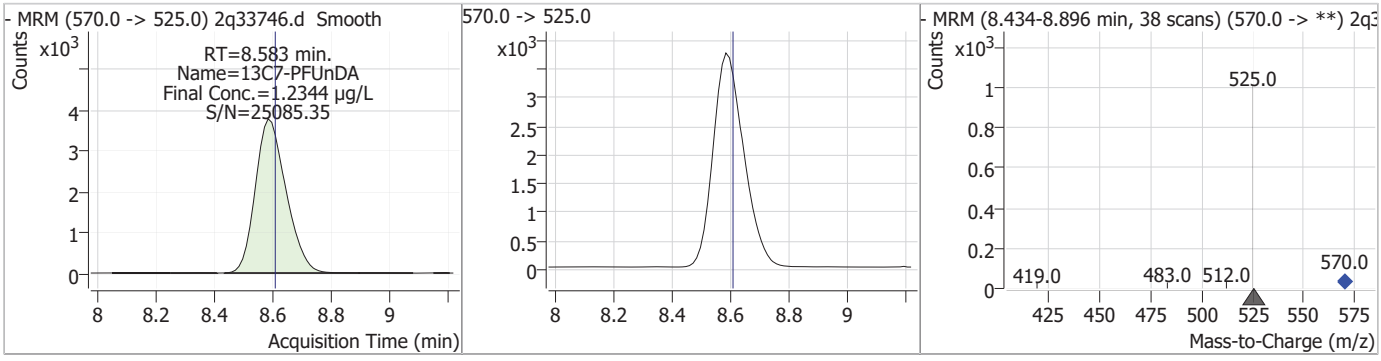
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.01	8.34	-0.01	33501				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.23	8.34	-0.01	1185 (m)	584.0 -> 483.0	35.7	24.0	72.0

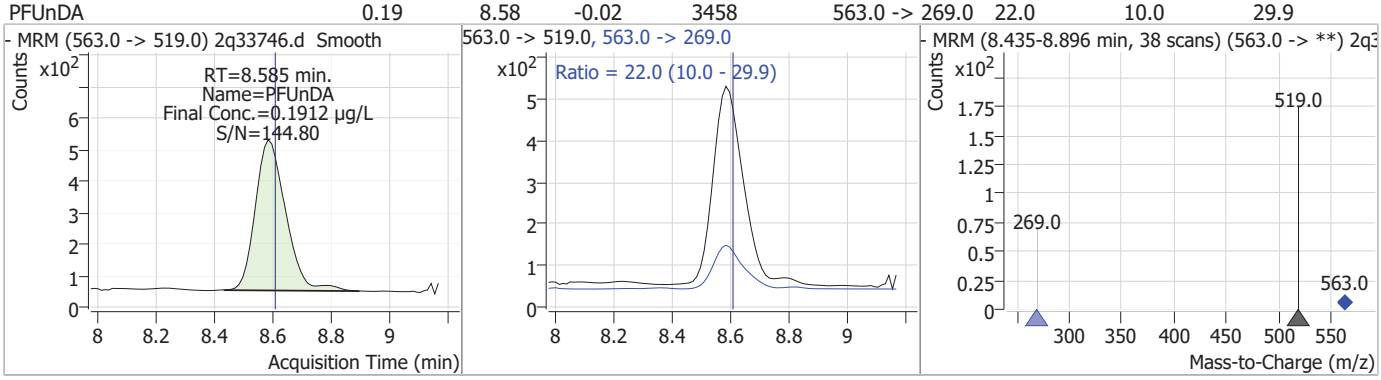


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.23	8.58	-0.02	27326				

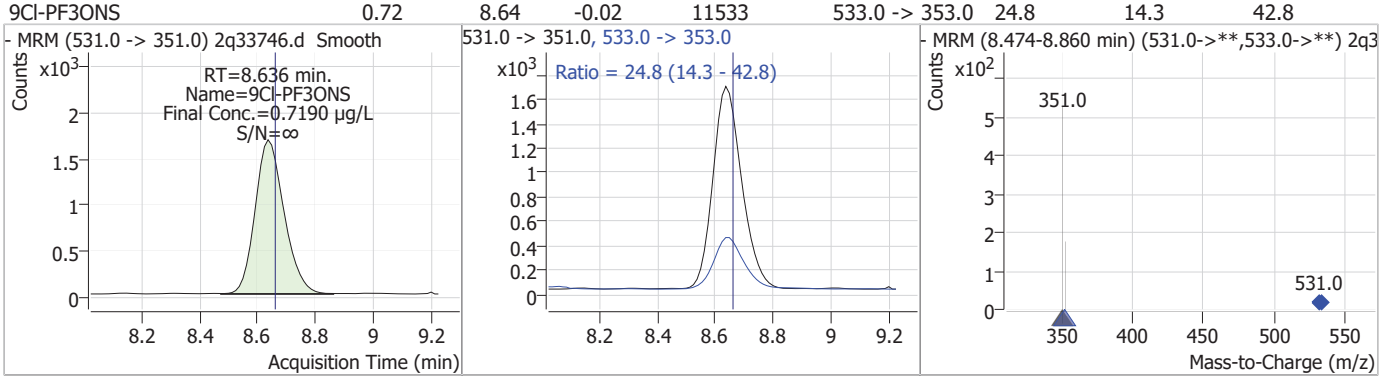


Perfluorinated Compounds by LC/MS/MS

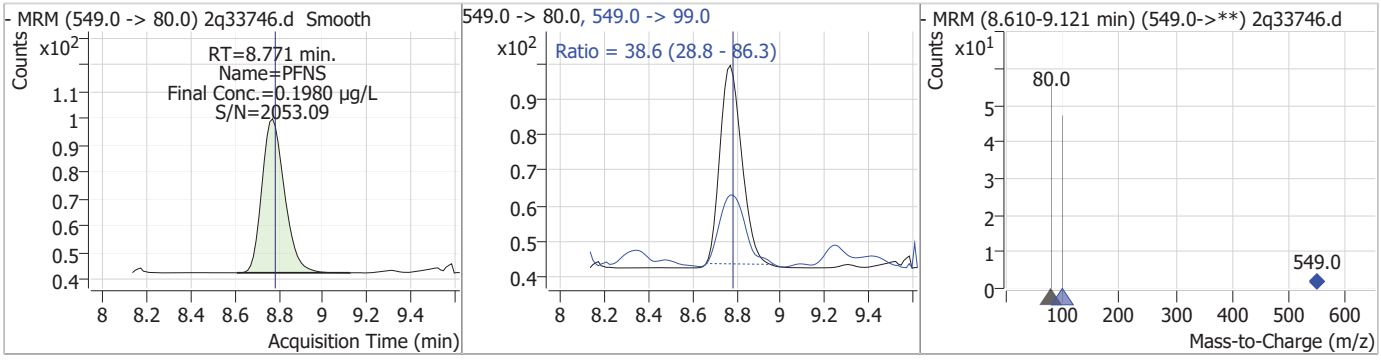
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.19	8.58	-0.02	3458	563.0 -> 269.0	22.0	10.0	29.9



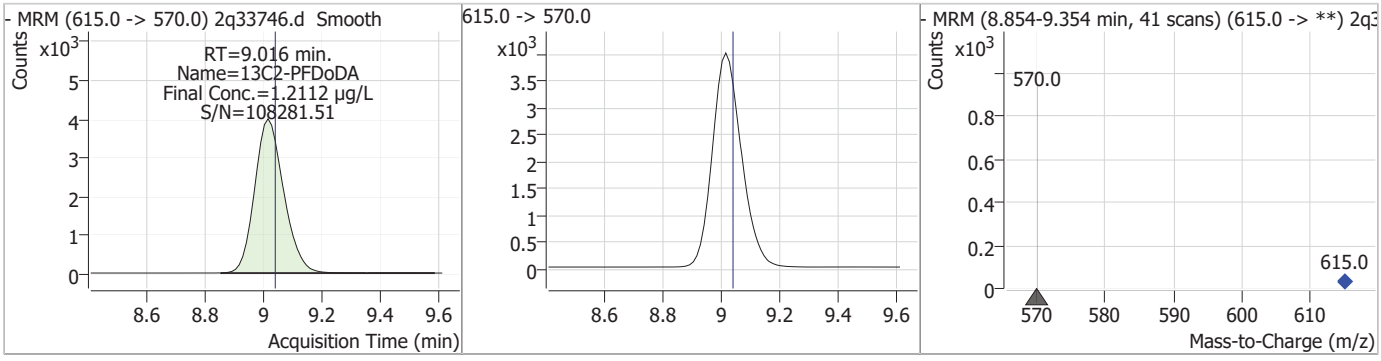
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	0.72	8.64	-0.02	11533	533.0 -> 353.0	24.8	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.20	8.77	-0.01	407	549.0 -> 99.0	38.6	28.8	86.3

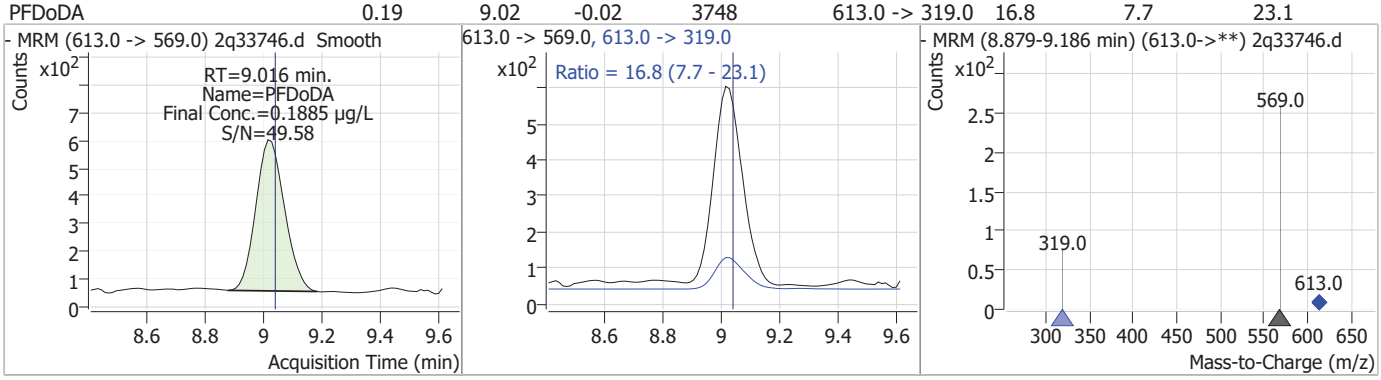


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.21	9.02	-0.02	27537				

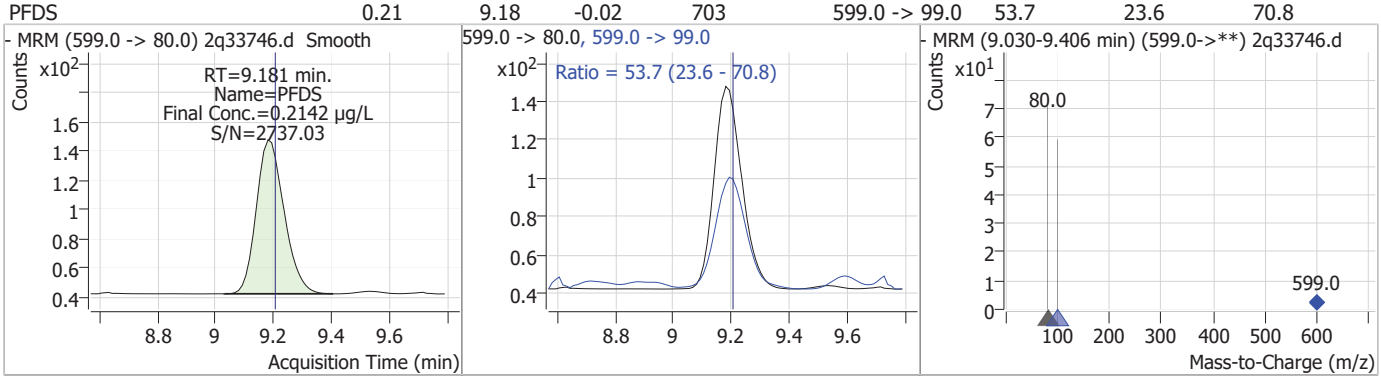


Perfluorinated Compounds by LC/MS/MS

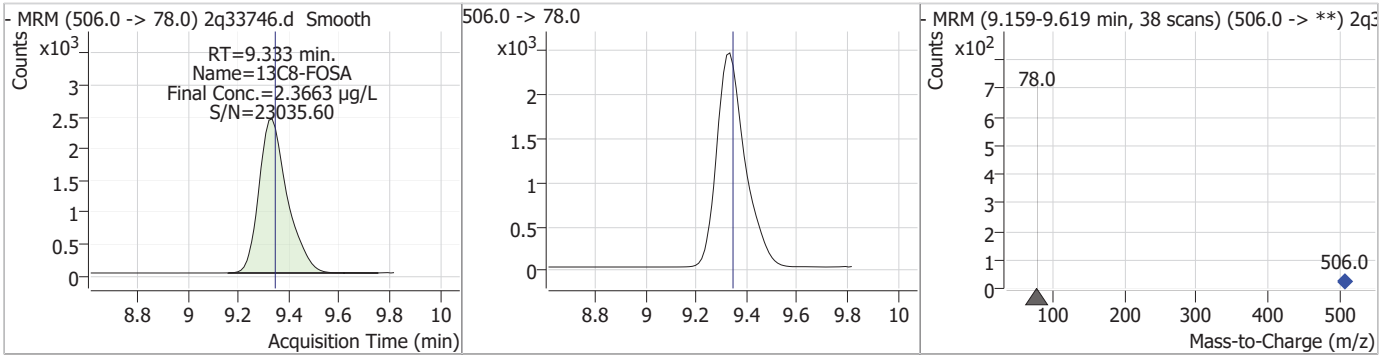
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.19	9.02	-0.02	3748	613.0 -> 319.0	16.8	7.7	23.1



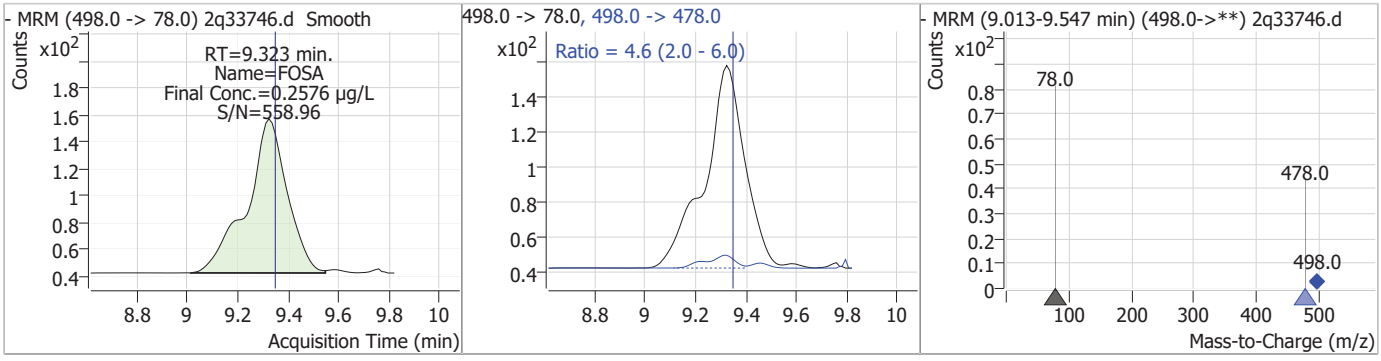
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.21	9.18	-0.02	703	599.0 -> 99.0	53.7	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.37	9.33	-0.01	18928				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.26	9.32	-0.02	1278	498.0 -> 478.0	4.6	2.0	6.0



7.6.27

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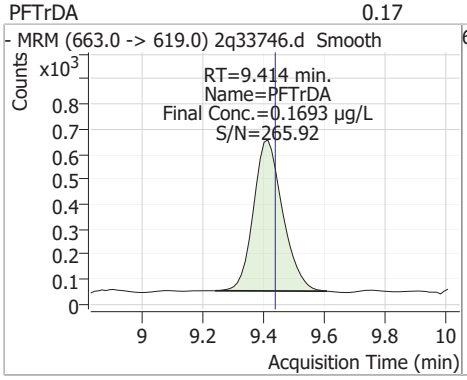
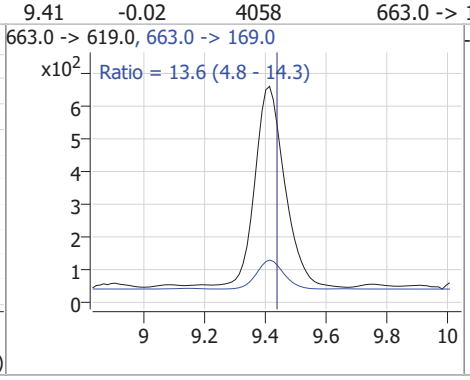
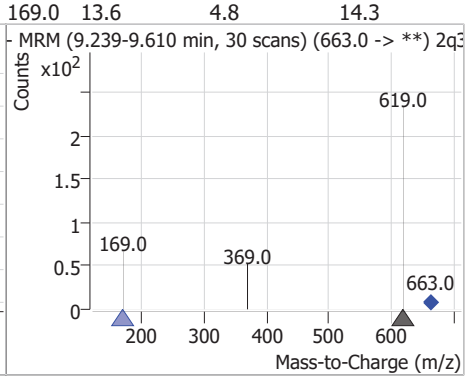
Perfluorinated Compounds by LC/MS/MS

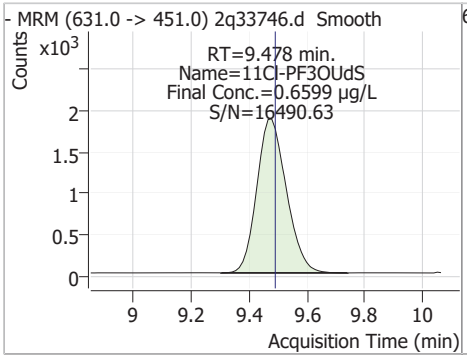
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.17	9.41	-0.02	4058	663.0 -> 169.0	13.6	4.8	14.3

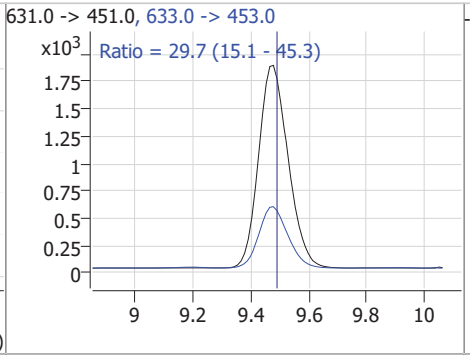


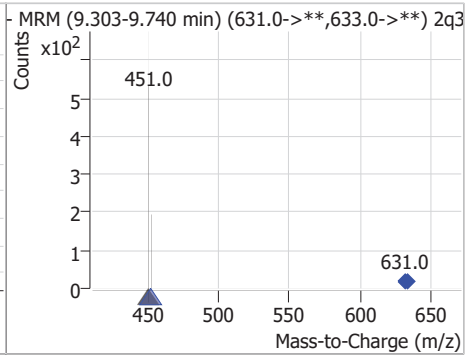




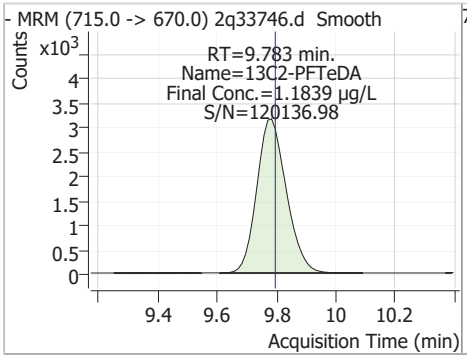
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	0.66	9.48	-0.01	13156	633.0 -> 453.0	29.7	15.1	45.3

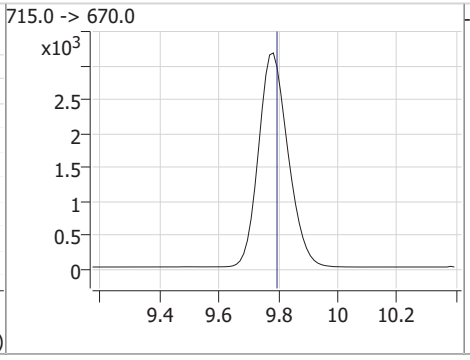


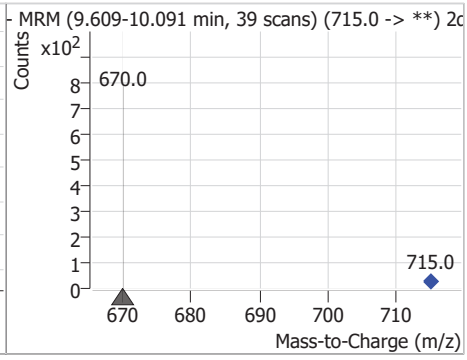




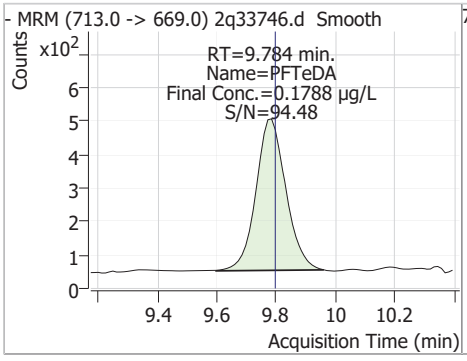
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.18	9.78	-0.01	21676				

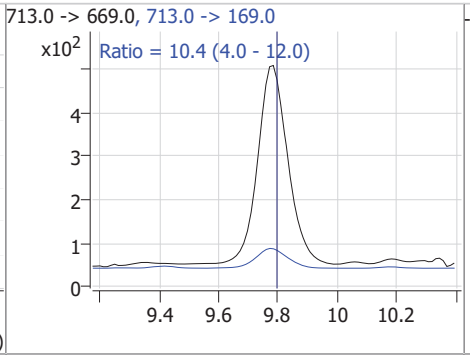


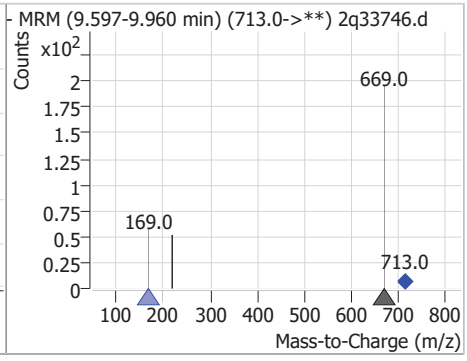




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.18	9.78	-0.01	3177	713.0 -> 169.0	10.4	4.0	12.0

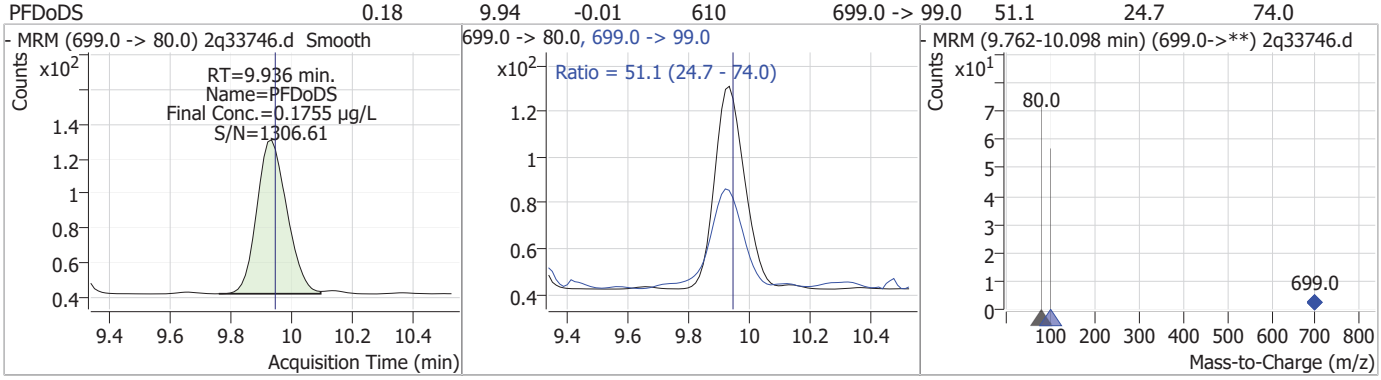




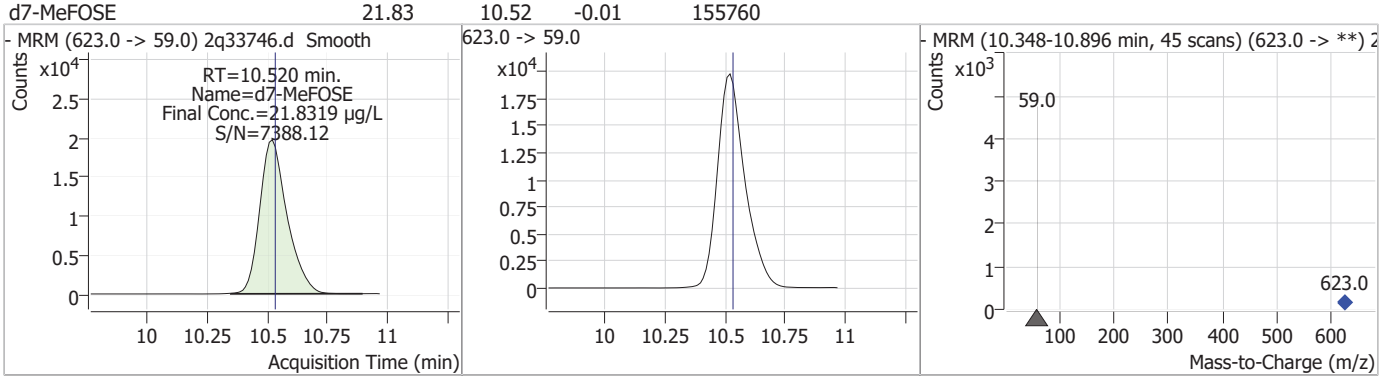


Perfluorinated Compounds by LC/MS/MS

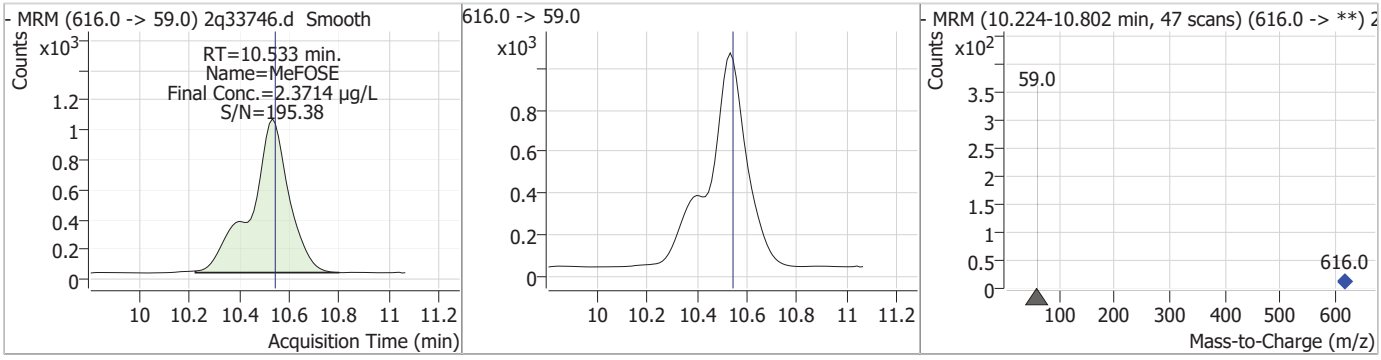
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.18	9.94	-0.01	610	699.0 -> 99.0	51.1	24.7	74.0



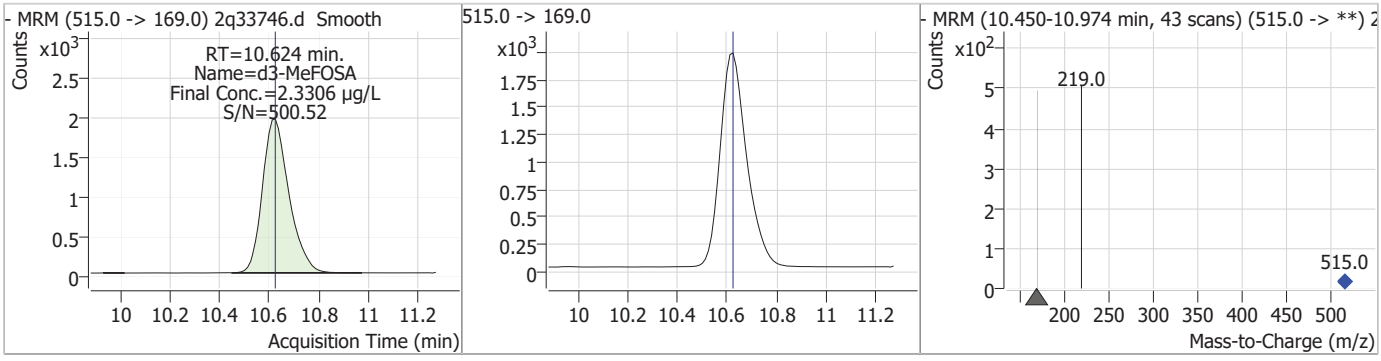
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	21.83	10.52	-0.01	155760				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	2.37	10.53	-0.01	11029				

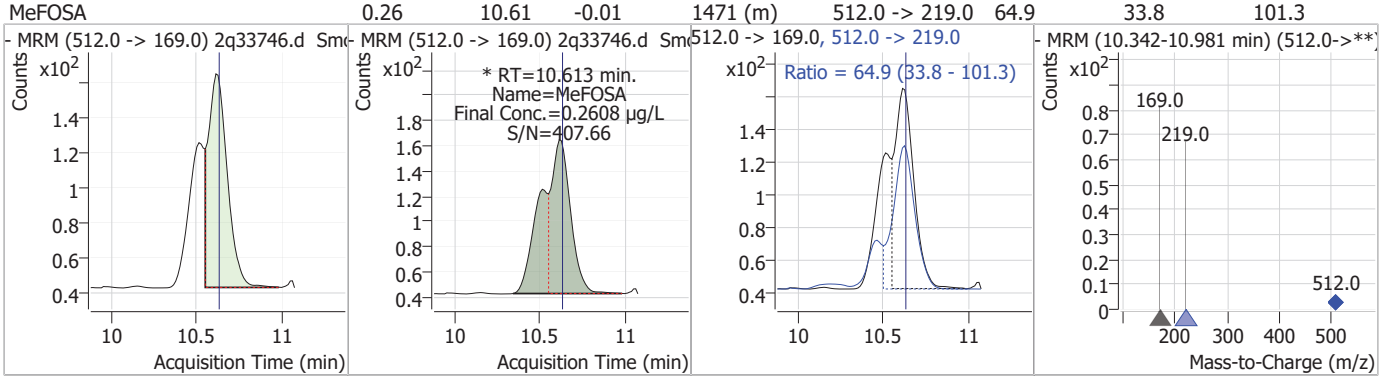


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.33	10.62	0.00	14479				

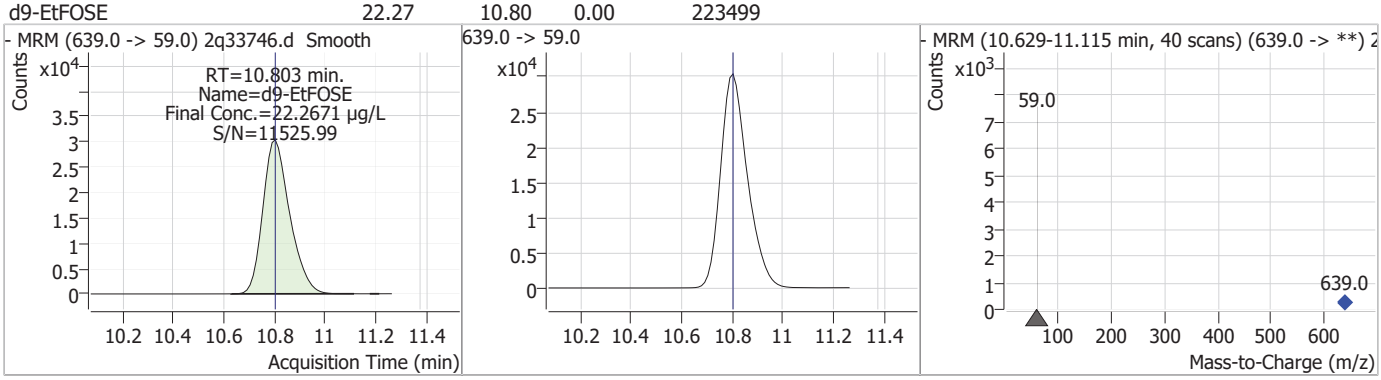


Perfluorinated Compounds by LC/MS/MS

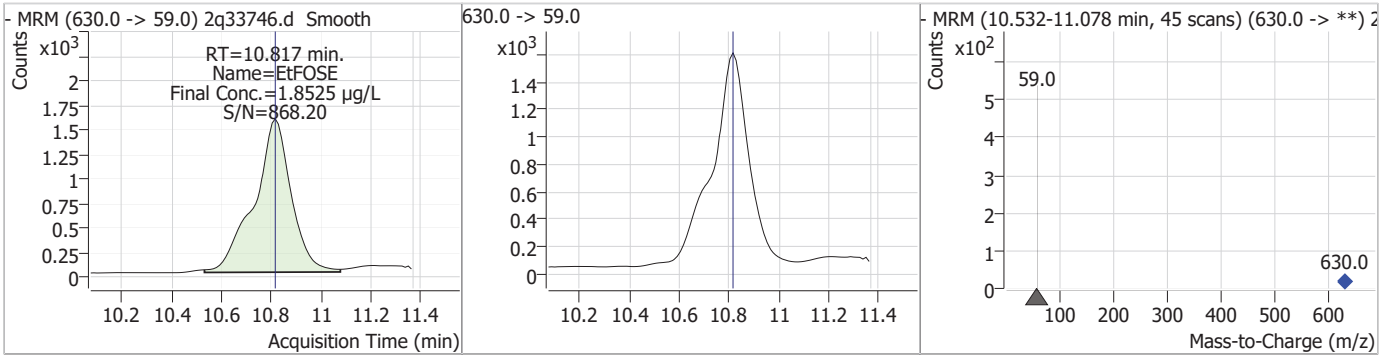
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.26	10.61	-0.01	1471 (m)	512.0 -> 219.0	64.9	33.8	101.3



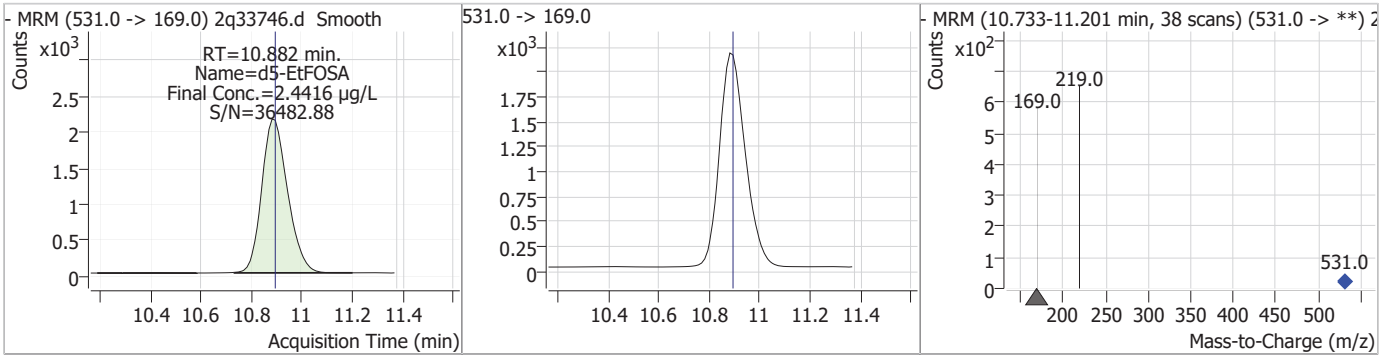
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.27	10.80	0.00	223499				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	1.85	10.82	0.00	16187				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.44	10.88	-0.01	15235				



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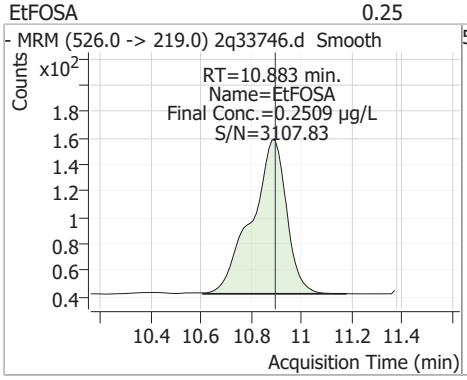
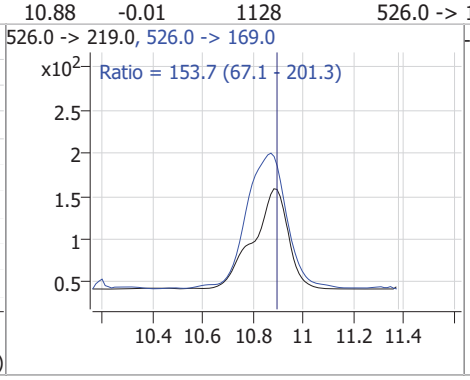
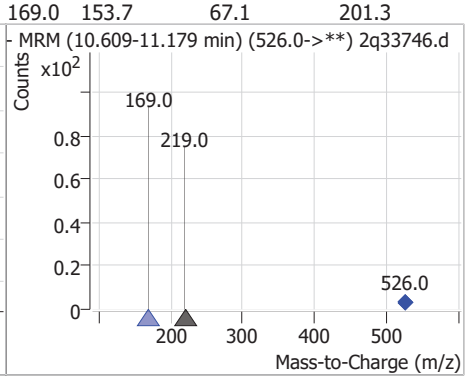
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.25	10.88	-0.01	1128	526.0 -> 169.0	153.7	67.1	201.3







7.6.27

7

Manual Integration Approval Summary

Sample Number: T2Q345-CC344
Lab FileID: 2Q33746.D
Injection Time: 05/12/25 14:34
Method: EPA 1633
Analyst approved: 05/15/25 12:38 Olga Azarian
Supervisor approved: 05/15/25 12:46 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		7.24	Split peak
Perfluorononanoic acid	375-95-1		7.63	Poor instrument integration
MeFOSAA	2355-31-9		8.16	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.29	Split peak
EtFOSAA	2991-50-6		8.35	Split peak
MeFOSA	31506-32-8		10.61	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/15/25 12:46

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33760.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/12/2025 6:55:20 PM
Sample Name : CC344-4
Vial : P1-A5
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q345.batch.bin
Sample Information : OP63419,T2Q345,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	114719	10.00 µg/L	0.000
M5-PFPeA	4.624	268.0 -> 223.0	63220	5.00 µg/L	-0.012
M5-PFHxA	5.732	318.0 -> 273.0	36126	2.50 µg/L	-0.012
M4-PFHpA	6.528	367.0 -> 322.0	29058	2.50 µg/L	-0.012
M8-PFOA	7.111	421.0 -> 376.0	67387	2.50 µg/L	-0.013
M9-PFNA	7.632	472.0 -> 427.0	27505	1.25 µg/L	-0.012
M6-PFDA	8.114	519.0 -> 474.0	17825	1.25 µg/L	-0.025
M7-PFUnDA	8.583	570.0 -> 525.0	30824	1.25 µg/L	-0.024
M2-PFDoDA	9.016	615.0 -> 570.0	29897	1.25 µg/L	-0.025
M2-PFTeDA	9.783	715.0 -> 670.0	23114	1.25 µg/L	-0.012
M8-FOSA	9.333	506.0 -> 78.0	20655	2.50 µg/L	-0.013
M3-PFBS	5.699	302.0 -> 99.0	5875	2.50 µg/L	0.000
M3-PFHxS	7.238	402.0 -> 99.0	6960	2.50 µg/L	-0.012
M8-PFOS	8.303	507.0 -> 99.0	6399	2.50 µg/L	-0.012
M2-4:2FTS	5.420	329.0 -> 81.0	1476	5.00 µg/L	-0.012
M2-6:2FTS	6.897	429.0 -> 81.0	3367	5.00 µg/L	-0.012
M2-8:2FTS	7.902	529.0 -> 81.0	5203	5.00 µg/L	-0.012
M3-MeFOSAA	8.135	573.0 -> 419.0	42656	5.00 µg/L	-0.025
M3-HFPO-DA	6.062	287.0 -> 169.0	26930	10.00 µg/L	-0.012
M5-EtFOSAA	8.344	589.0 -> 419.0	34761	5.00 µg/L	-0.012
M7-MeFOSE	10.520	623.0 -> 59.0	169503	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	238668	25.00 µg/L	0.000
M5-EtFOSA	10.882	531.0 -> 169.0	16374	2.50 µg/L	-0.012
M3-MeFOSA	10.624	515.0 -> 169.0	15651	2.50 µg/L	0.000
13C4-PFOS	8.291	503.0 -> 80.0	11858	2.50 µg/L	-0.025
13C3-PFBA	3.265	216.0 -> 172.0	48078	5.00 µg/L	0.000
18O2-PFHxS	7.238	403.0 -> 84.0	8230	2.50 µg/L	-0.025
13C4-PFOA	7.111	417.0 -> 372.0	64962	2.50 µg/L	-0.013
13C2-PFDA	8.115	515.0 -> 470.0	17906	1.25 µg/L	-0.025
13C5-PFNA	7.632	468.0 -> 423.0	23714	1.25 µg/L	-0.012
13C2-PFHxA	5.733	315.0 -> 270.0	33518	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.420	329.0 -> 81.0	1476	5.23 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.5%	
13C2-6:2FTS	6.897	429.0 -> 81.0	3367	5.36 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.2%	
13C2-8:2FTS	7.902	529.0 -> 81.0	5203	4.93 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.6%	
13C2-PFDoDA	9.016	615.0 -> 570.0	29897	1.23 µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.1%	
13C2-PFTeDA	9.783	715.0 -> 670.0	23114	1.18 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.2%	
13C3-PFBS	5.699	302.0 -> 99.0	5875	2.57 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.7%	
13C3-PFHxS	7.238	402.0 -> 99.0	6960	2.45 µg/L	-0.012

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.1%		
13C4-PFBA	3.263	217.0 -> 172.0	114719	10.16 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.6%		
13C4-PFHpA	6.528	367.0 -> 322.0	29058	2.49 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.7%		
13C5-PFHxA	5.732	318.0 -> 273.0	36126	2.45 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.1%		
13C5-PFPeA	4.624	268.0 -> 223.0	63220	5.00 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.0%		
13C6-PFDA	8.114	519.0 -> 474.0	17825	1.21 µg/L		-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.1%		
13C7-PFUnDA	8.583	570.0 -> 525.0	30824	1.30 µg/L		-0.024
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.9%		
13C8-FOSA	9.333	506.0 -> 78.0	20655	2.54 µg/L		-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.8%		
13C8-PFOA	7.111	421.0 -> 376.0	67387	2.58 µg/L		-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.2%		
13C8-PFOS	8.303	507.0 -> 99.0	6399	2.55 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.0%		
13C9-PFNA	7.632	472.0 -> 427.0	27505	1.33 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.5%		
d3-MeFOSAA	8.135	573.0 -> 419.0	42656	5.23 µg/L		-0.025
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.6%		
13C3-HFPO-DA	6.062	287.0 -> 169.0	26930	11.52 µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 115.2%		
d3-MeFOSA	10.624	515.0 -> 169.0	15651	2.48 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.3%		
d5-EtFOSAA	8.344	589.0 -> 419.0	34761	5.12 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.5%		
d7-MeFOSE	10.520	623.0 -> 59.0	169503	23.41 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 93.7%		
d9-EtFOSE	10.803	639.0 -> 59.0	238668	23.43 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 93.7%		
d5-EtFOSA	10.882	531.0 -> 169.0	16374	2.59 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.4%		
Target Compounds						QValue
4:2FTS	5.421	327.0 -> 307.0	20877	9.46 µg/L		92
		327.0 -> 81.0	12184			
6:2FTS	6.885	427.0 -> 407.0	38895	9.63 µg/L		97
		427.0 -> 81.0	15576			
8:2FTS	7.902	527.0 -> 507.0	37248	9.47 µg/L		100
		527.0 -> 81.0	15793			
EtFOSAA	8.345	584.0 -> 419.0	14146	2.65 µg/L	m	98
		584.0 -> 483.0	6945			
FOSA	9.323	498.0 -> 78.0	18316	3.38 µg/L	m	98
		498.0 -> 478.0	849			
MeFOSAA	8.149	570.0 -> 419.0	18069	2.92 µg/L	m	95
		570.0 -> 512.0	5225			
PFBA	3.268	213.0 -> 169.0	29790	10.25 µg/L		100
PFBS	5.700	299.0 -> 80.0	16668	2.16 µg/L		100
		299.0 -> 99.0	6012			
PFDA	8.115	513.0 -> 469.0	36891	2.74 µg/L		99
		513.0 -> 219.0	6538			
PFDoDA	9.016	613.0 -> 569.0	55573	2.57 µg/L		97
		613.0 -> 319.0	9355			
PFDS	9.194	599.0 -> 80.0	8714	2.35 µg/L		93

Perfluorinated Compounds by LC/MS/MS

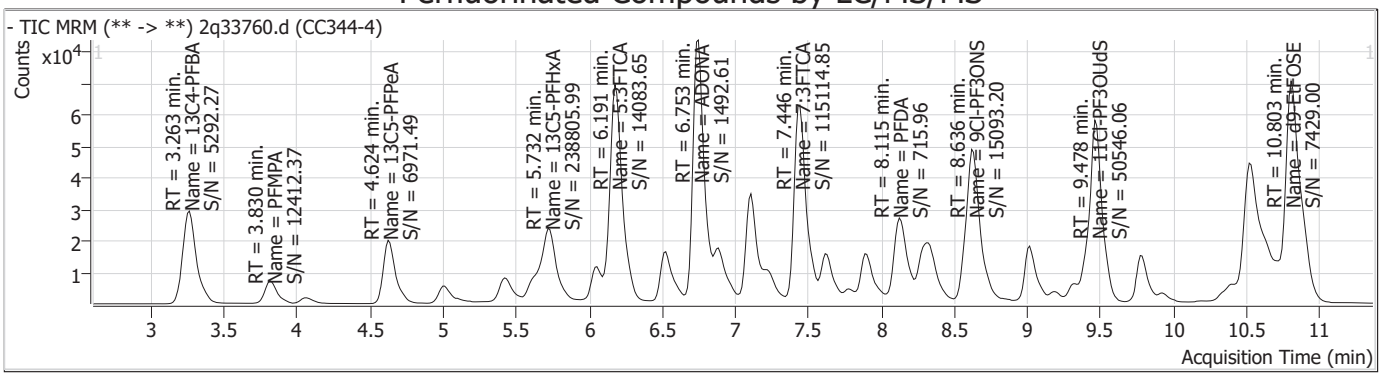
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	3726				
PFHpA	6.528	363.0 -> 319.0	46227	2.53	µg/L		99
		363.0 -> 169.0	8510				
PFHpS	7.797	449.0 -> 80.0	11842	2.40	µg/L		98
		449.0 -> 99.0	5904				
PFHxA	5.735	313.0 -> 269.0	32699	2.71	µg/L		98
		313.0 -> 119.0	1224				
PFHxS	7.239	399.0 -> 80.0	11978	2.74	µg/L	m	90
		399.0 -> 99.0	5696				
PFNA	7.633	463.0 -> 419.0	29228	2.82	µg/L	m	96
		463.0 -> 219.0	7556				
PFNS	8.771	549.0 -> 80.0	5605	2.63	µg/L		89
		549.0 -> 99.0	2787				
PFOA	7.112	413.0 -> 369.0	50851	3.10	µg/L	m	98
		413.0 -> 169.0	10872				
PFOS	8.292	499.0 -> 80.0	14366	3.16	µg/L	m	98
		499.0 -> 99.0	6557				
PFPeA	4.627	263.0 -> 219.0	56686	5.06	µg/L		100
PFPeS	6.604	349.0 -> 80.0	5961	2.07	µg/L		100
		349.0 -> 99.0	2470				
PFTeDA	9.784	713.0 -> 669.0	49486	2.61	µg/L		100
		713.0 -> 169.0	3972				
PFTrDA	9.414	663.0 -> 619.0	65548	2.52	µg/L		98
		663.0 -> 169.0	6665				
PFUnDA	8.585	563.0 -> 519.0	52515	2.57	µg/L		96
		563.0 -> 269.0	9521				
11Cl-PF3OUdS	9.478	631.0 -> 451.0	213910	9.17	µg/L		98
		633.0 -> 453.0	61773				
9Cl-PF3ONS	8.636	531.0 -> 351.0	171687	9.15	µg/L		100
		533.0 -> 353.0	49119				
ADONA	6.753	377.0 -> 251.0	350468	8.94	µg/L		98
		377.0 -> 85.0	106024				
HFPO-DA	6.062	285.0 -> 169.0	26401	9.90	µg/L		97
		285.0 -> 185.0	2522				
3:3FTCA	4.065	241.0 -> 177.0	10555	12.00	µg/L		98
		241.0 -> 117.0	780				
5:3FTCA	6.191	341.0 -> 237.0	188160	63.16	µg/L		98
		341.0 -> 217.0	130885				
7:3FTCA	7.446	441.0 -> 337.0	257064	67.19	µg/L		98
		441.0 -> 317.0	102107				
EtFOSA	10.883	526.0 -> 219.0	17179	3.56	µg/L		99
		526.0 -> 169.0	22883				
EtFOSE	10.817	630.0 -> 59.0	238908	25.60	µg/L		100
MeFOSA	10.613	512.0 -> 169.0	20217	3.32	µg/L		99
		512.0 -> 219.0	13882				
MeFOSE	10.533	616.0 -> 59.0	159743	31.56	µg/L		100
PFDoDS	9.936	699.0 -> 80.0	8644	2.40	µg/L		94
		699.0 -> 99.0	4610				
NFDHA	5.626	295.0 -> 201.0	5529	5.52	µg/L		93
		201.0 -> 85.0	31574				
		295.0 -> 85.0	1961				
PFMBA	5.015	279.0 -> 85.0	32873	5.06	µg/L		100
PFMPA	3.830	229.0 -> 85.0	46032	4.97	µg/L		100
PFEESA	6.168	315.0 -> 135.0	71526	4.79	µg/L		99
		315.0 -> 69.0	7879				

 # = Qualifier out of range, m = manually integrated, + = Area summed

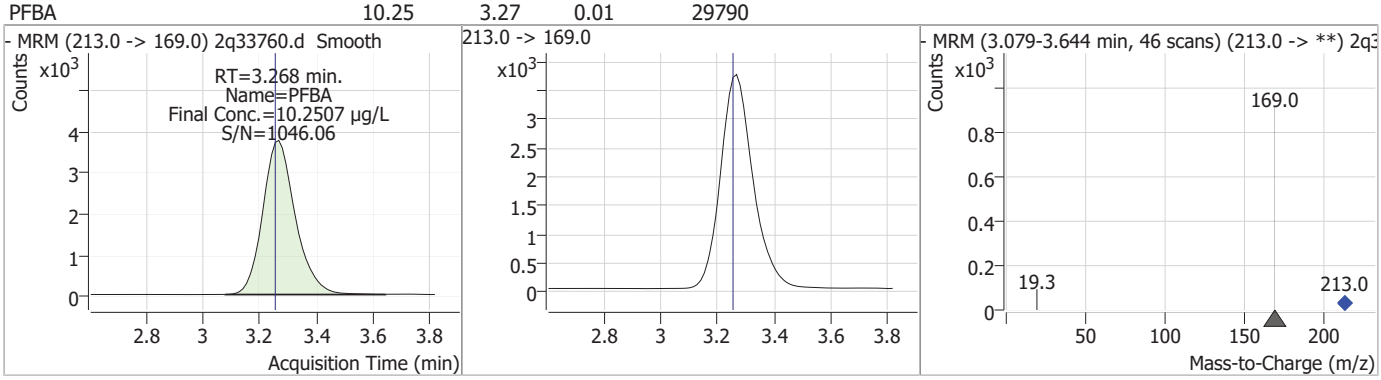
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

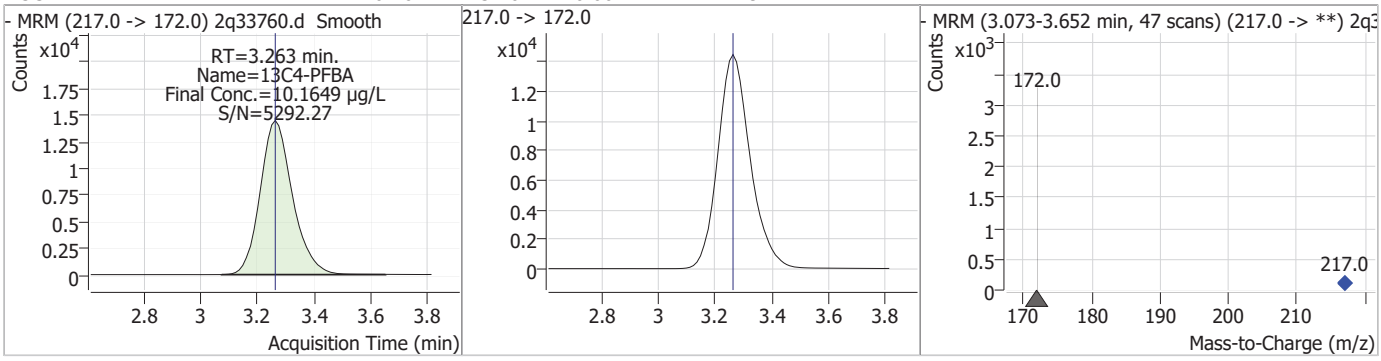
Perfluorinated Compounds by LC/MS/MS



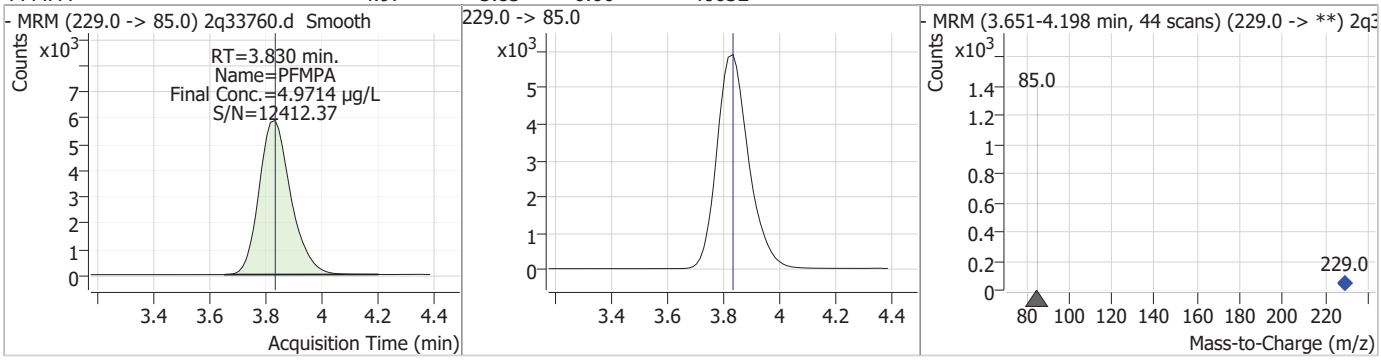
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.25	3.27	0.01	29790				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.16	3.26	0.00	114719				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	4.97	3.83	0.00	46032				



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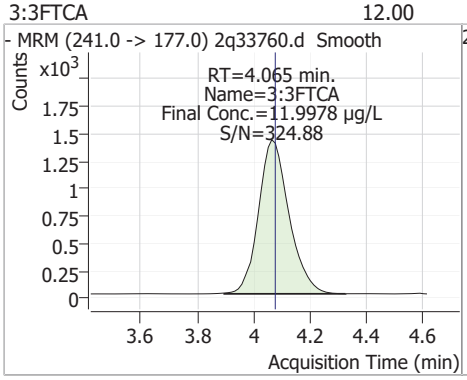
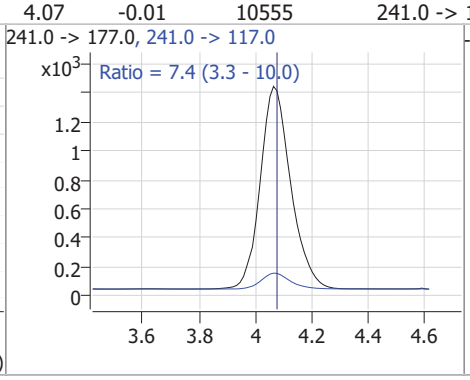
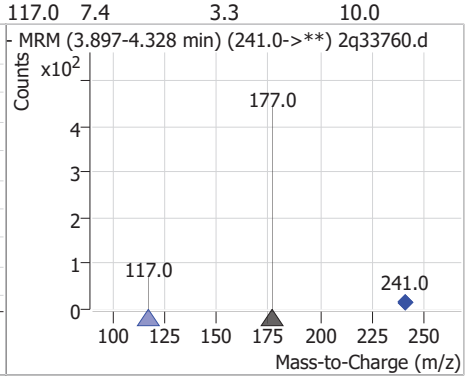
Perfluorinated Compounds by LC/MS/MS

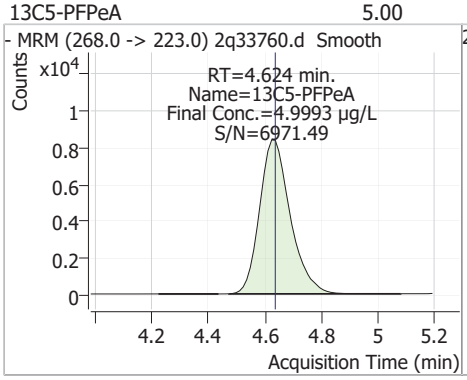
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.00	4.07	-0.01	10555	241.0 -> 117.0	7.4	3.3	10.0

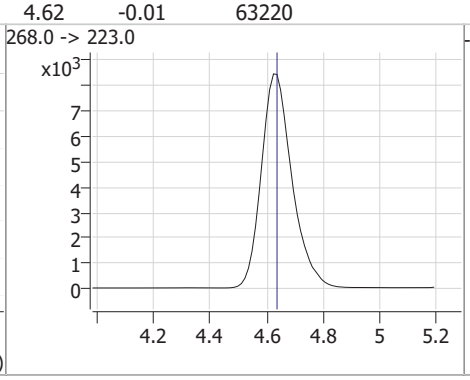


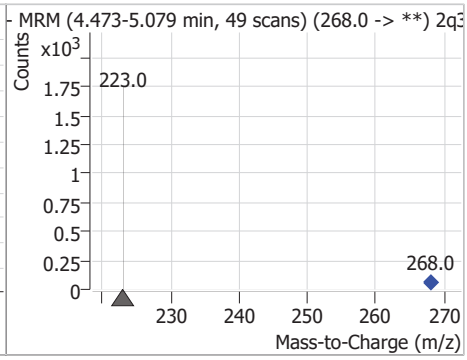




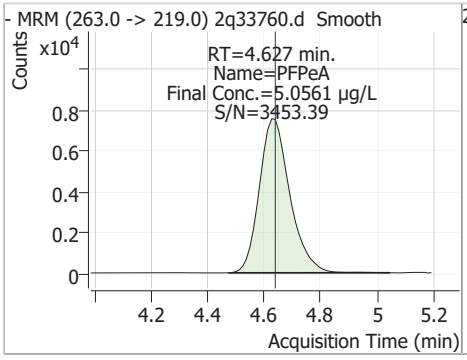
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.00	4.62	-0.01	63220				

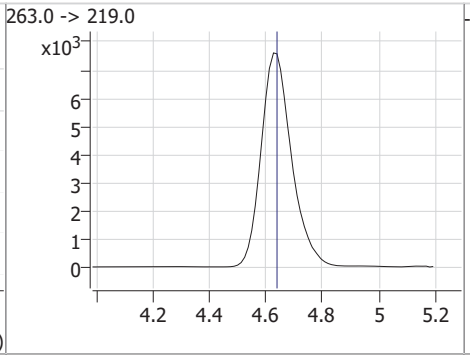


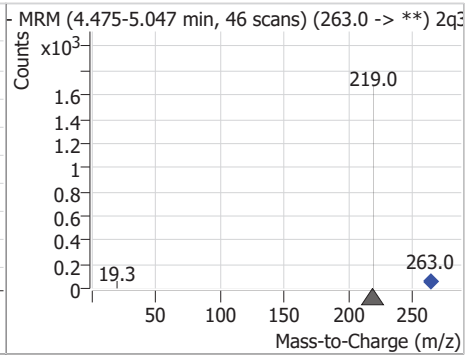




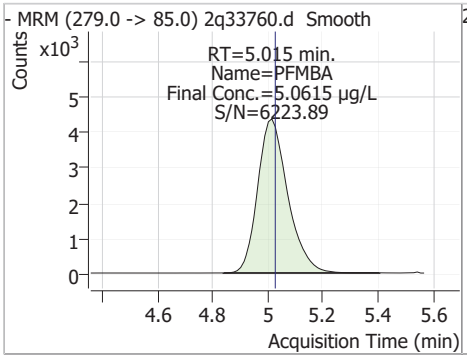
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.06	4.63	-0.01	56686				

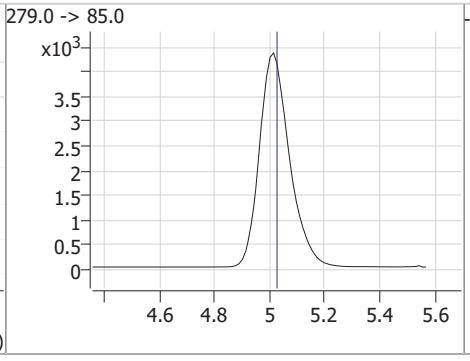


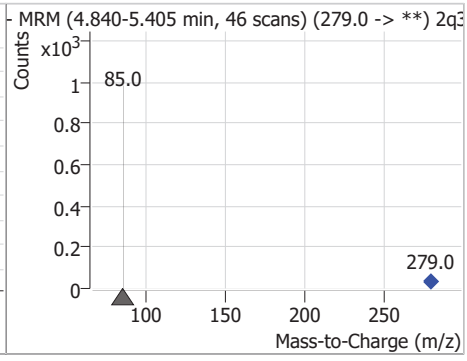




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.06	5.01	-0.01	32873				







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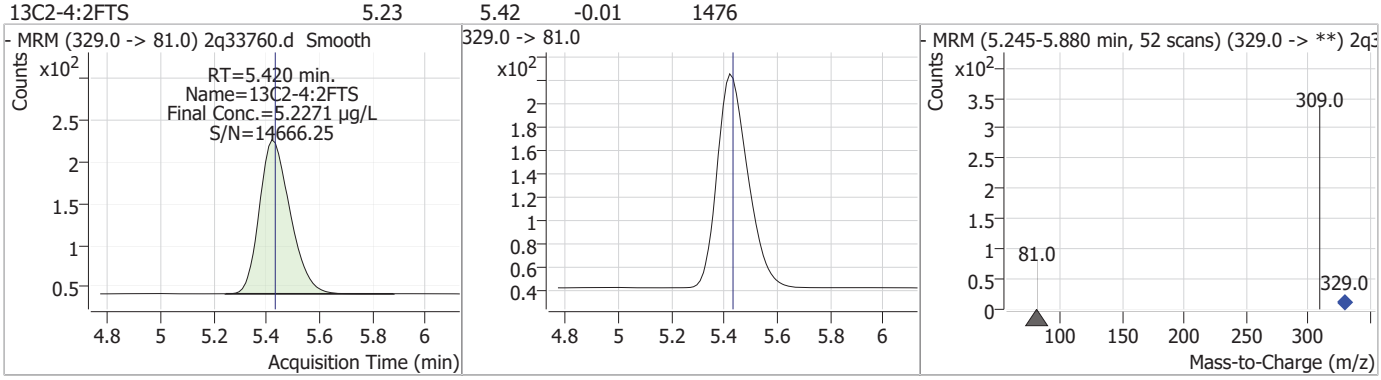
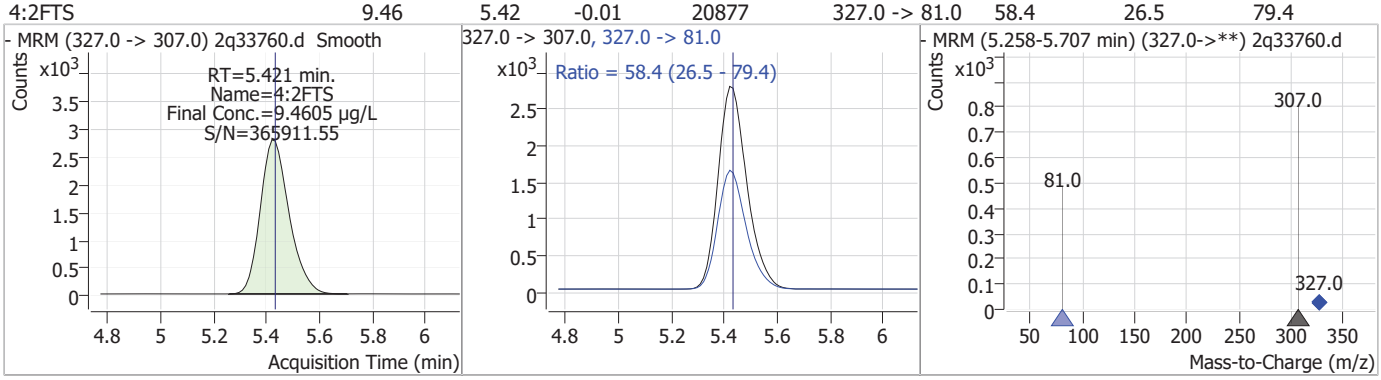
Perfluorinated Compounds by LC/MS/MS

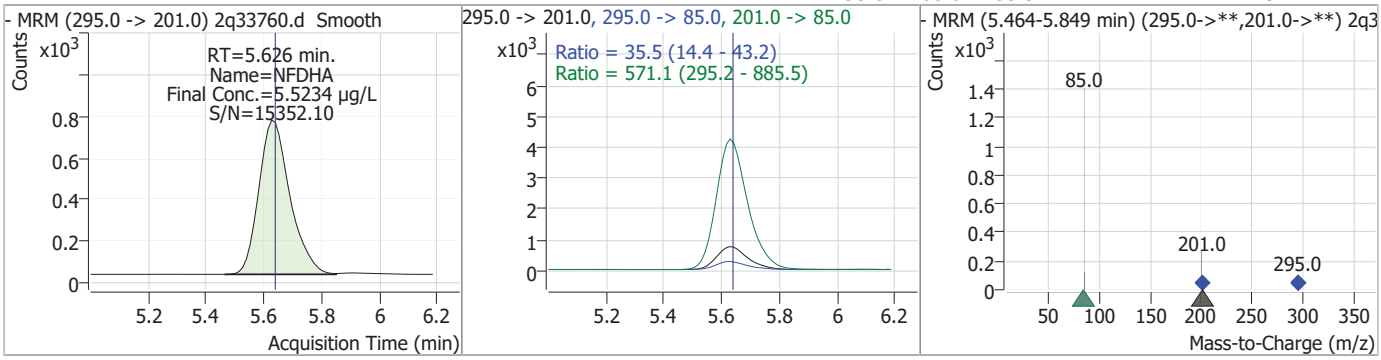
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.23	5.42	-0.01	1476				



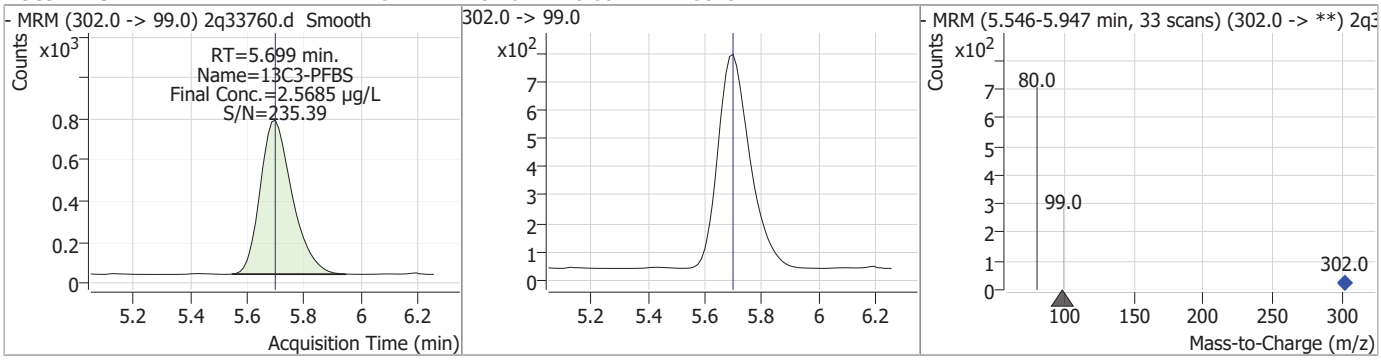
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.46	5.42	-0.01	20877	327.0 -> 81.0	58.4	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.52	5.63	-0.01	5529	201.0 -> 85.0	571.1	295.2	885.5
					295.0 -> 85.0	35.5	14.4	43.2

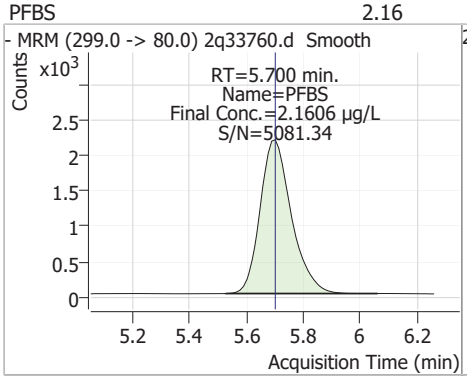


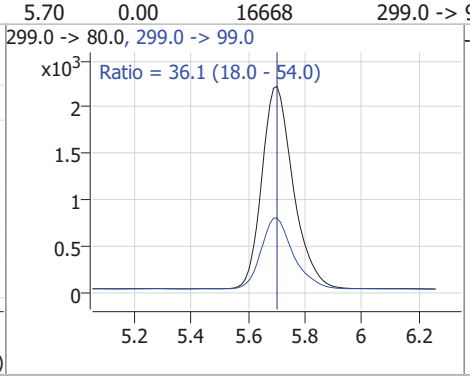
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.57	5.70	0.00	5875				

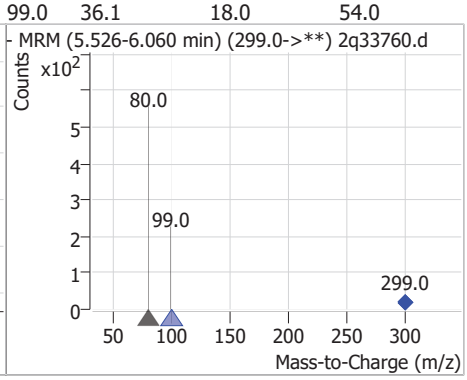


Perfluorinated Compounds by LC/MS/MS

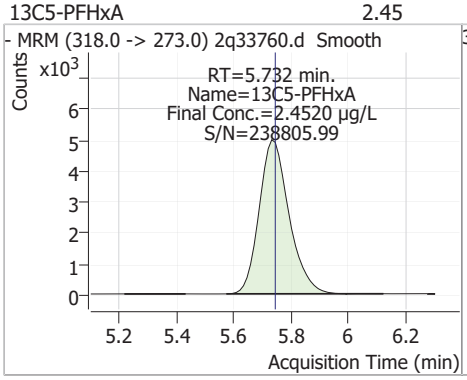
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.16	5.70	0.00	16668	299.0 -> 99.0	36.1	18.0	54.0

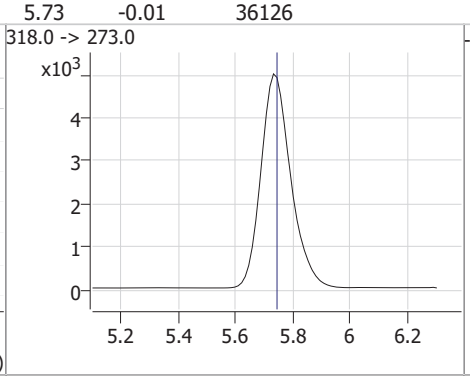


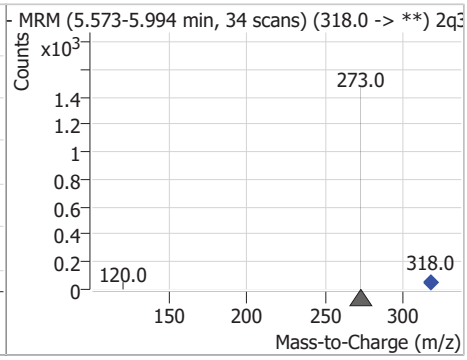




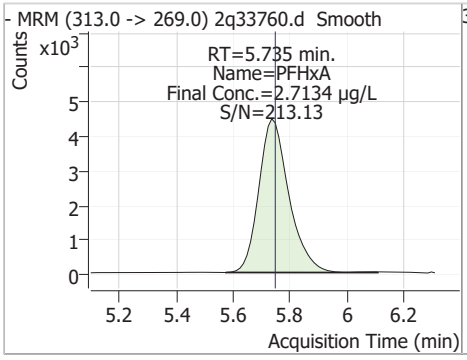
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.45	5.73	-0.01	36126				

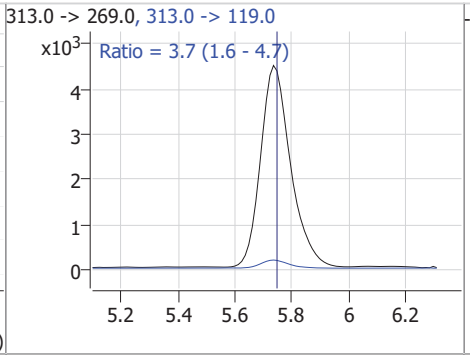


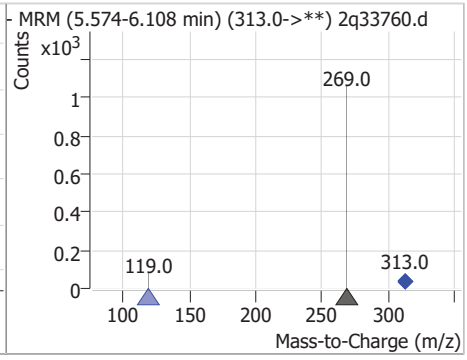




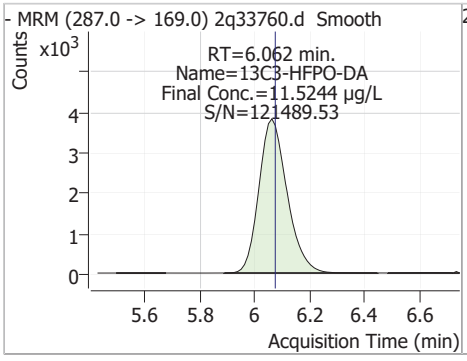
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.71	5.74	-0.01	32699	313.0 -> 119.0	3.7	1.6	4.7

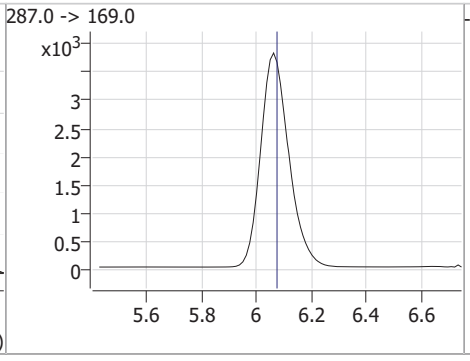


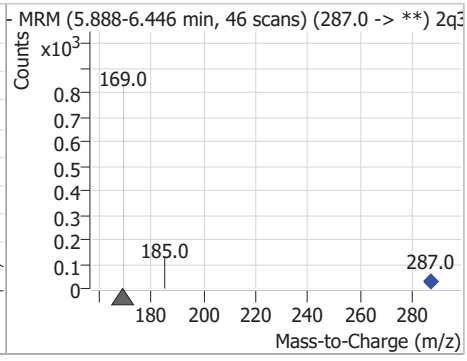




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	11.52	6.06	-0.01	26930				







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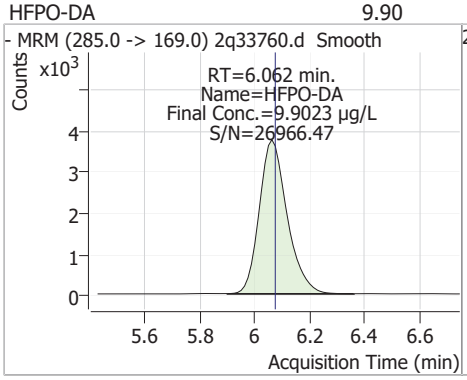
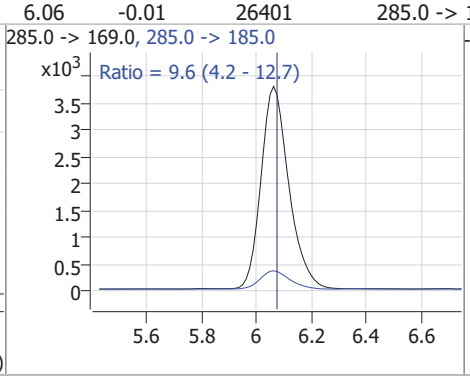
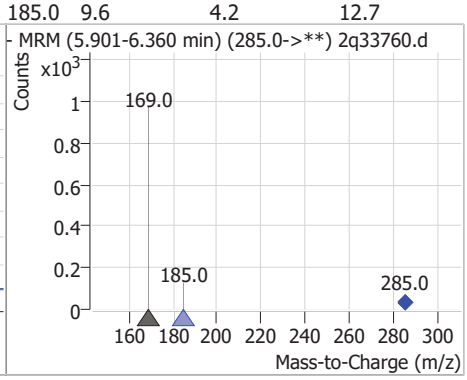
Perfluorinated Compounds by LC/MS/MS

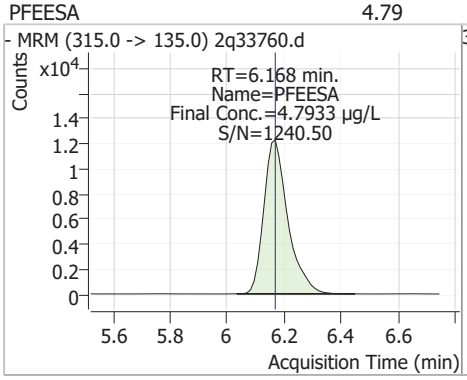
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	9.90	6.06	-0.01	26401	285.0 -> 185.0	9.6	4.2	12.7

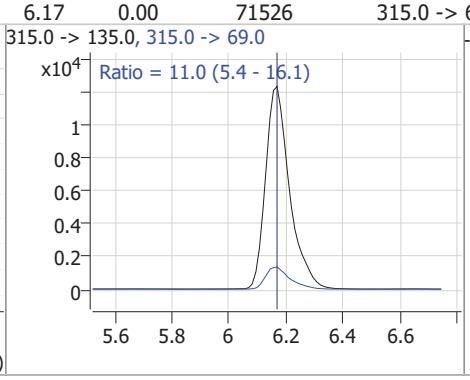


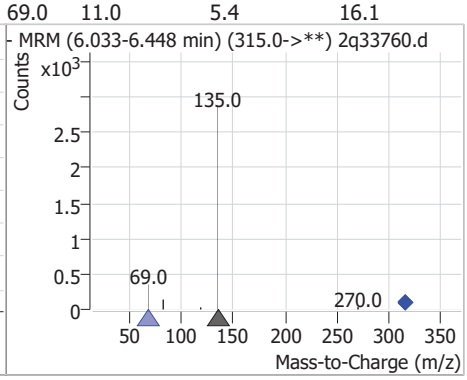




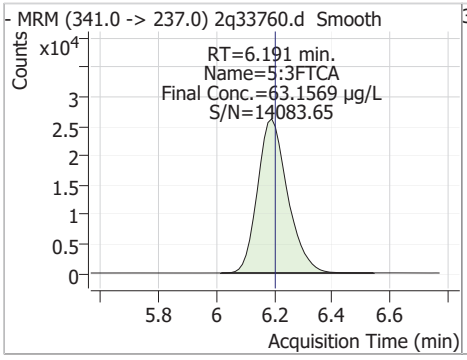
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.79	6.17	0.00	71526	315.0 -> 69.0	11.0	5.4	16.1

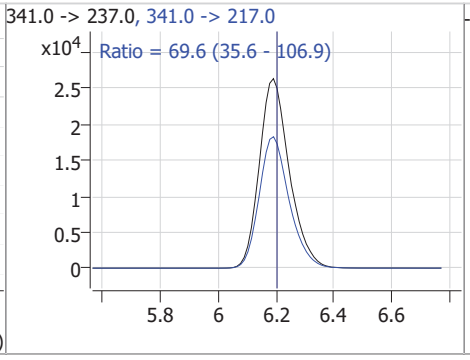


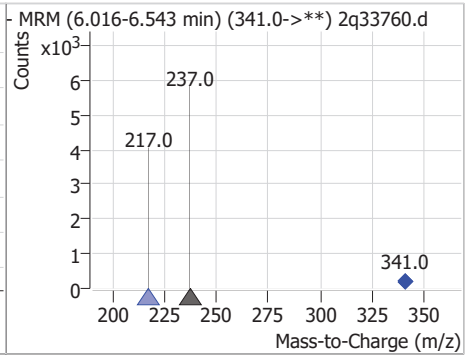




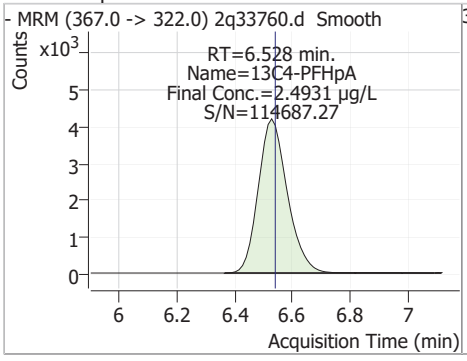
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	63.16	6.19	-0.01	188160	341.0 -> 217.0	69.6	35.6	106.9

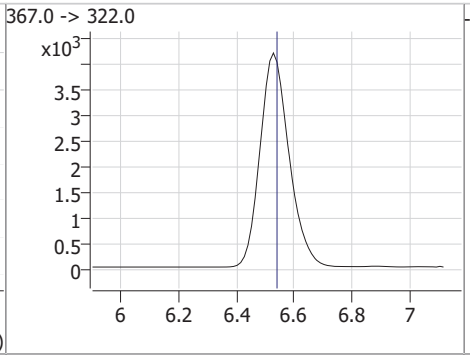


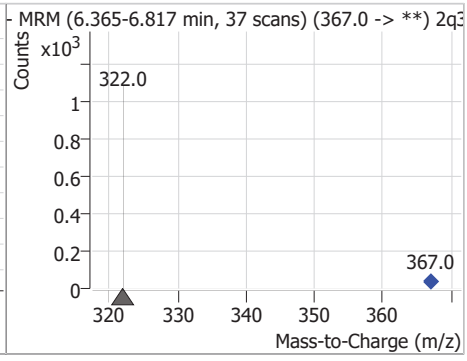




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.49	6.53	-0.01	29058				







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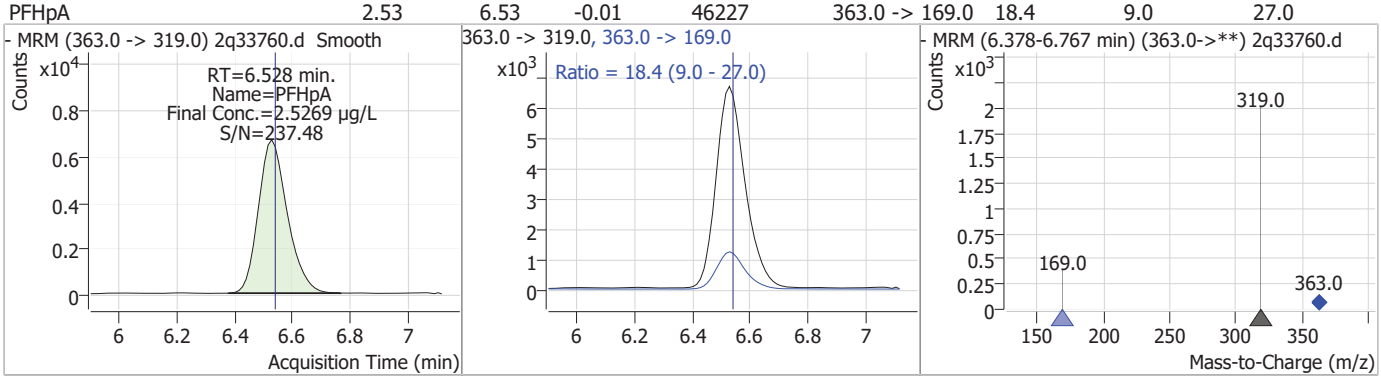
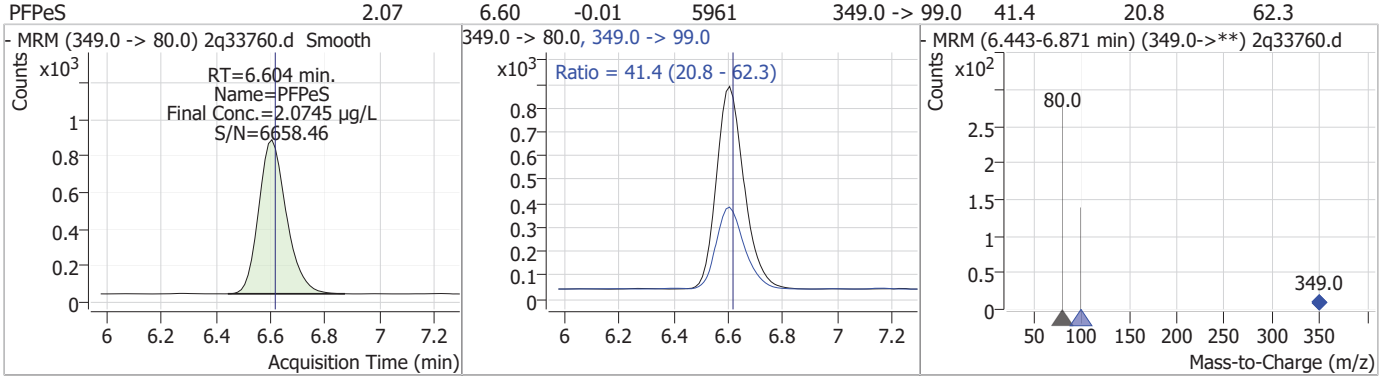
Perfluorinated Compounds by LC/MS/MS

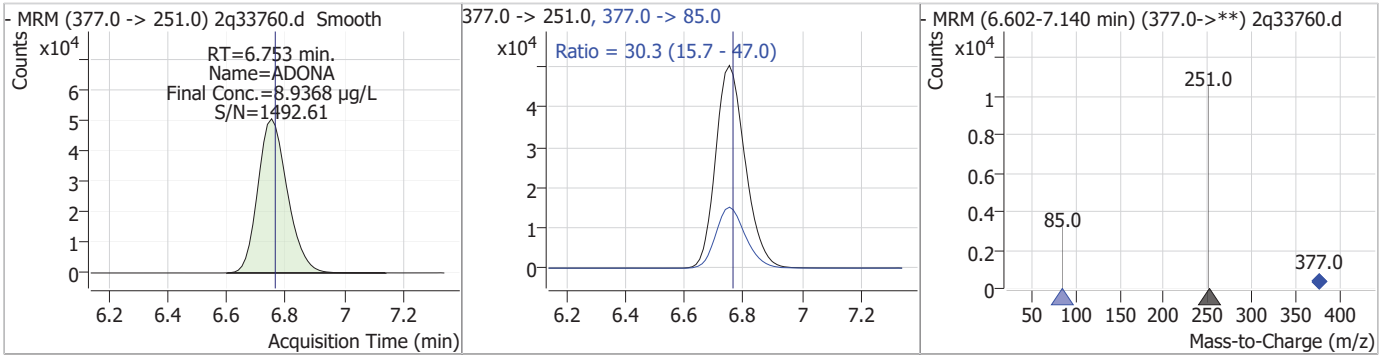
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.53	6.53	-0.01	46227	363.0 -> 169.0	18.4	9.0	27.0



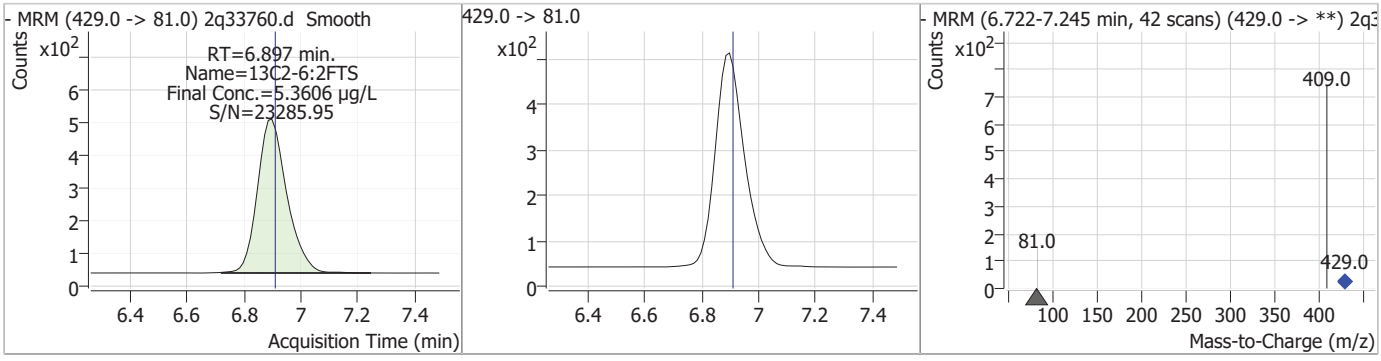
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.07	6.60	-0.01	5961	349.0 -> 99.0	41.4	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.94	6.75	-0.01	350468	377.0 -> 85.0	30.3	15.7	47.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.36	6.90	-0.01	3367				



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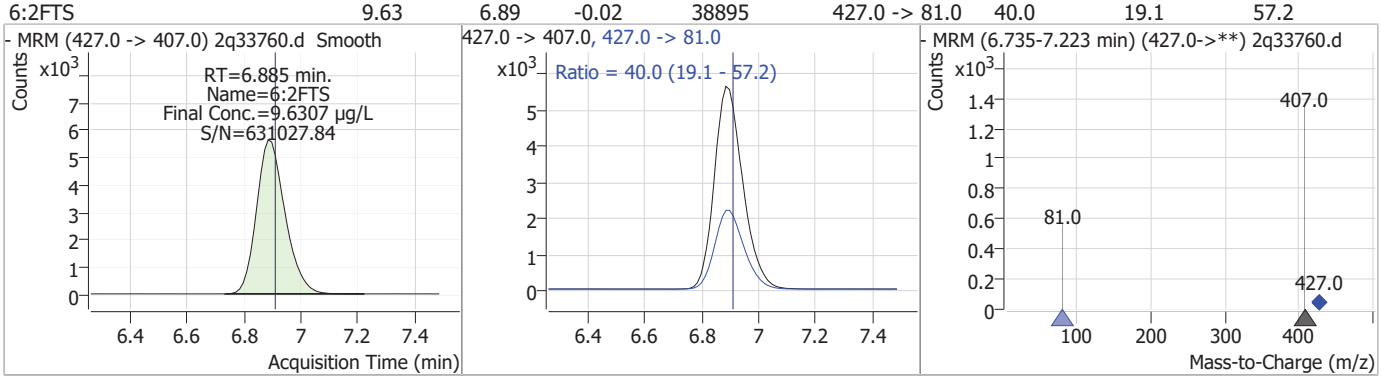
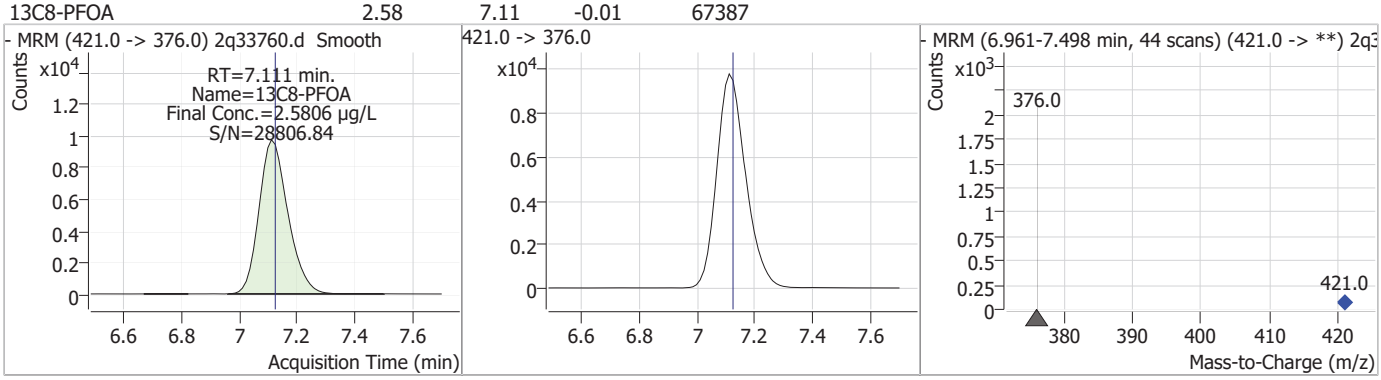
Perfluorinated Compounds by LC/MS/MS

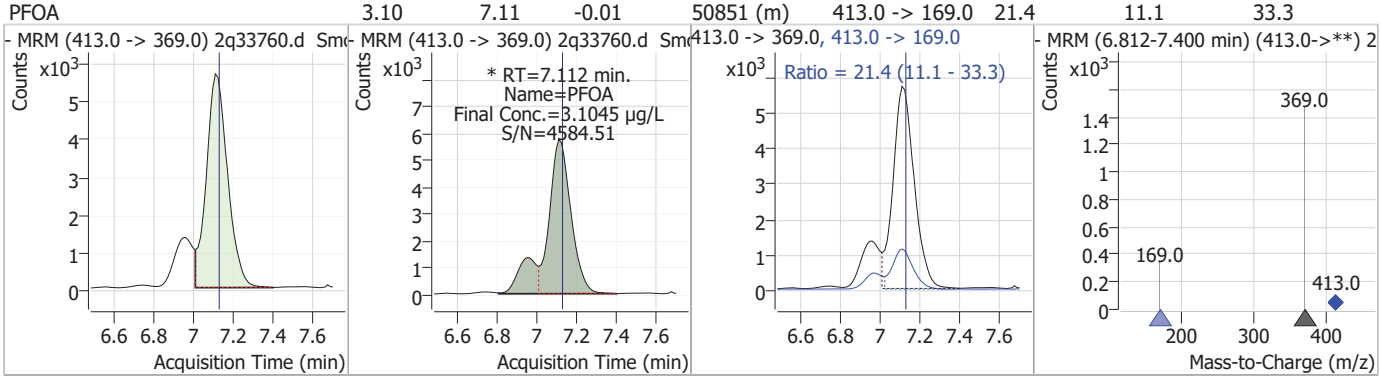
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.63	6.89	-0.02	38895	427.0 -> 81.0	40.0	19.1	57.2



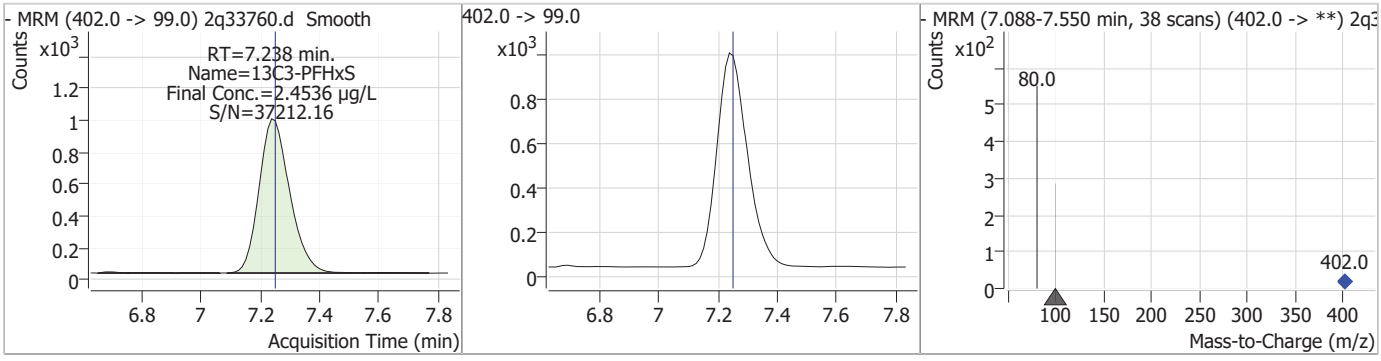
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.58	7.11	-0.01	67387				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	3.10	7.11	-0.01	50851 (m)	413.0 -> 169.0	21.4	11.1	33.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.45	7.24	-0.01	6960				



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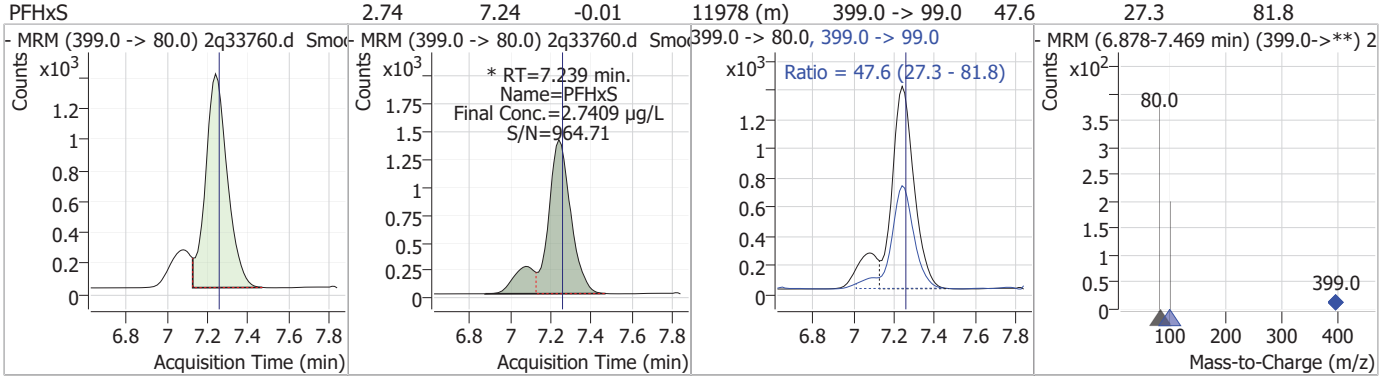
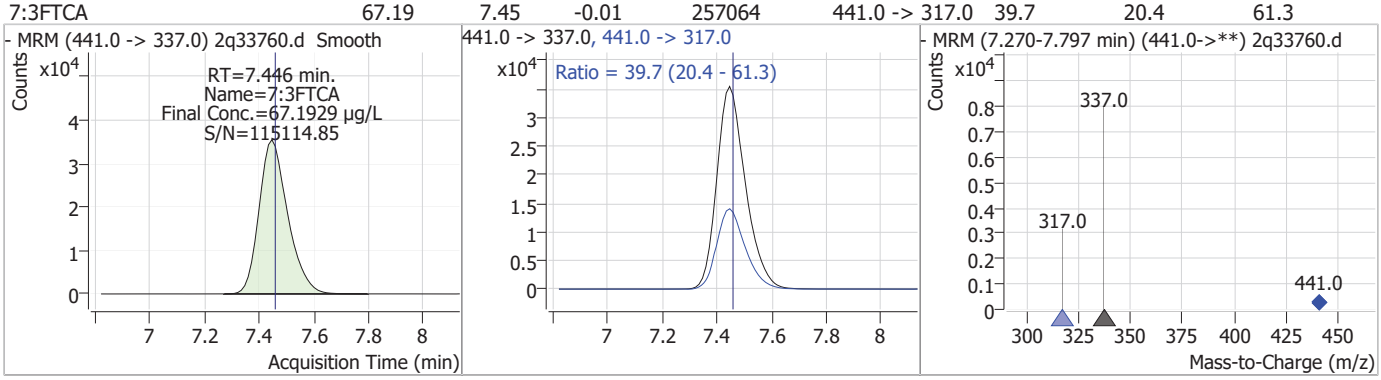
Perfluorinated Compounds by LC/MS/MS

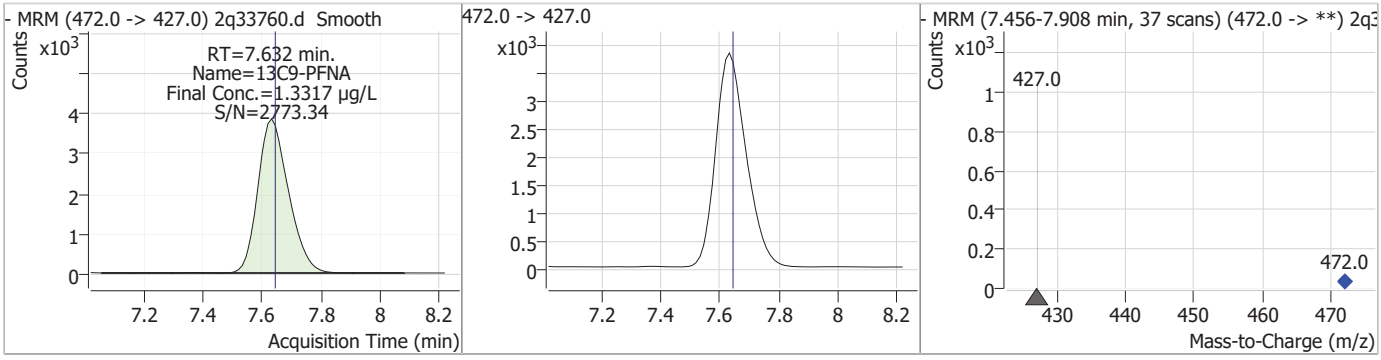
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.74	7.24	-0.01	11978 (m)	399.0 -> 99.0	47.6	27.3	81.8



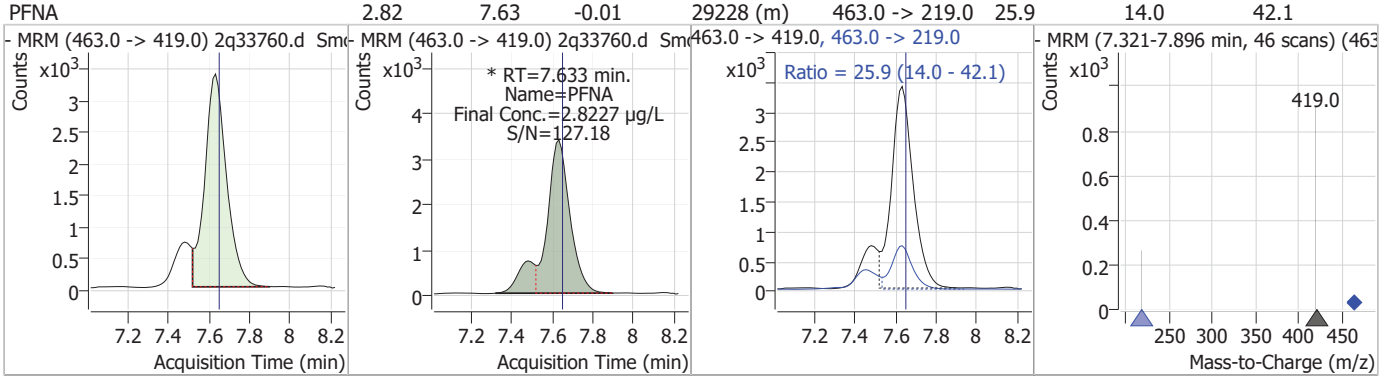
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	67.19	7.45	-0.01	257064	441.0 -> 317.0	39.7	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.33	7.63	-0.01	27505				

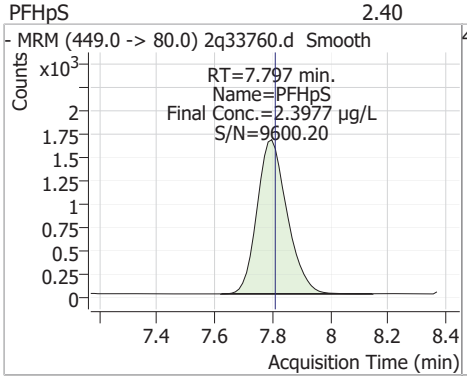


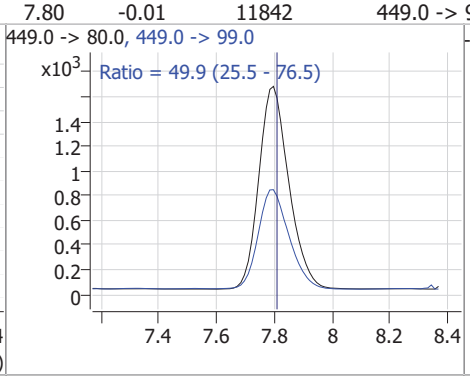
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.82	7.63	-0.01	29228 (m)	463.0 -> 219.0	25.9	14.0	42.1

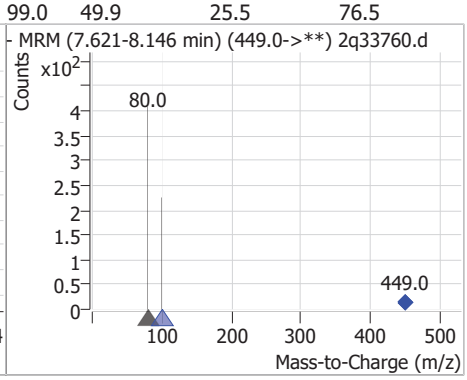


Perfluorinated Compounds by LC/MS/MS

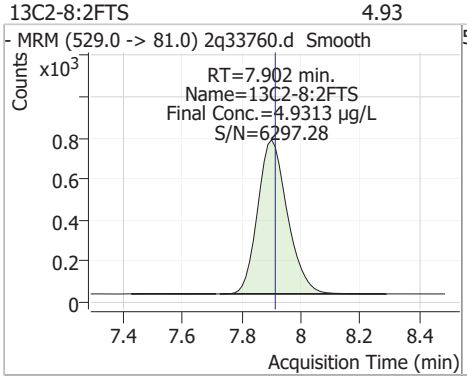
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.40	7.80	-0.01	11842	449.0 -> 99.0	49.9	25.5	76.5

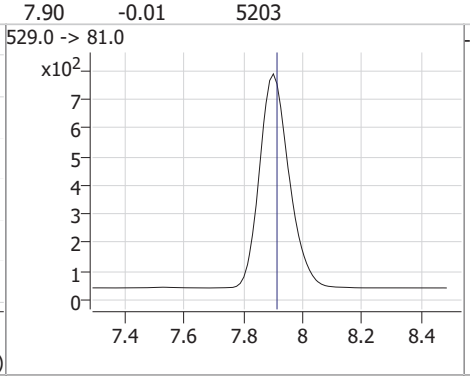


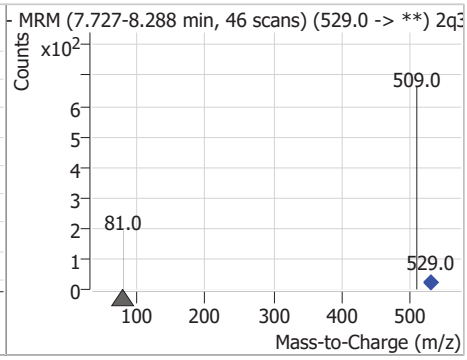




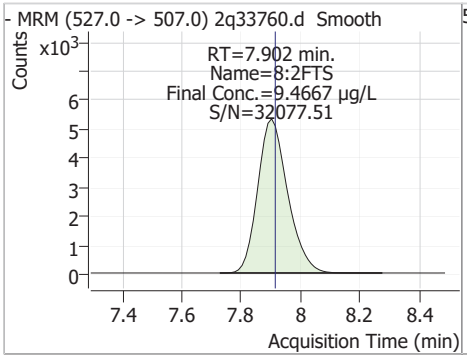
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.93	7.90	-0.01	5203				

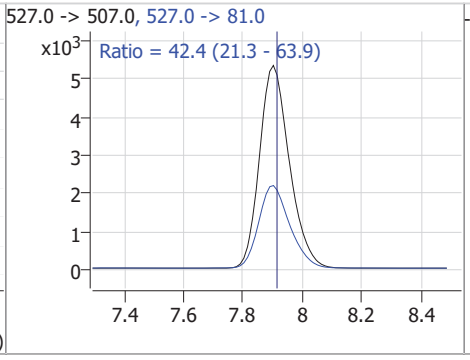


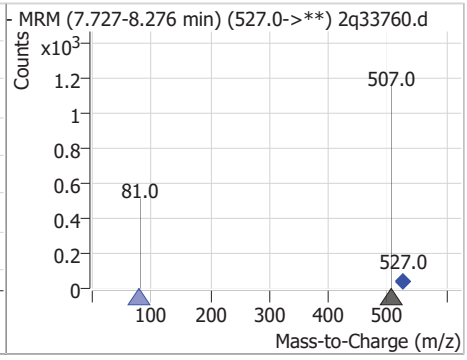




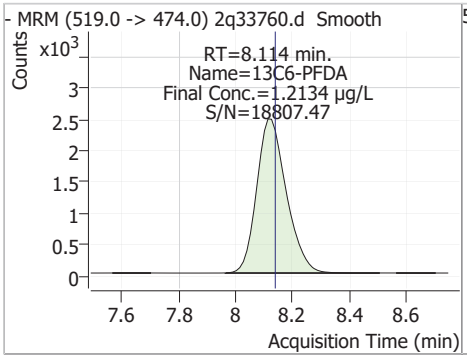
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	9.47	7.90	-0.01	37248	527.0 -> 81.0	42.4	21.3	63.9

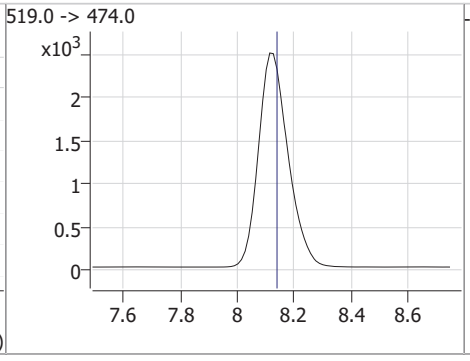


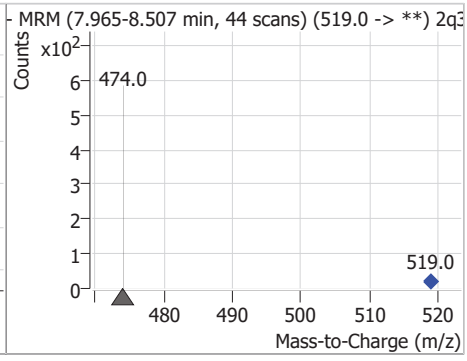




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.21	8.11	-0.03	17825				

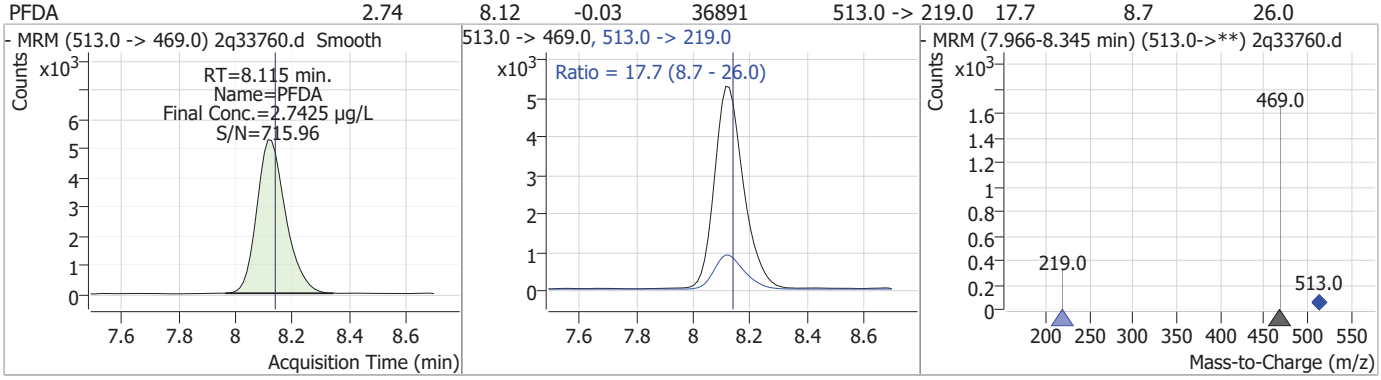




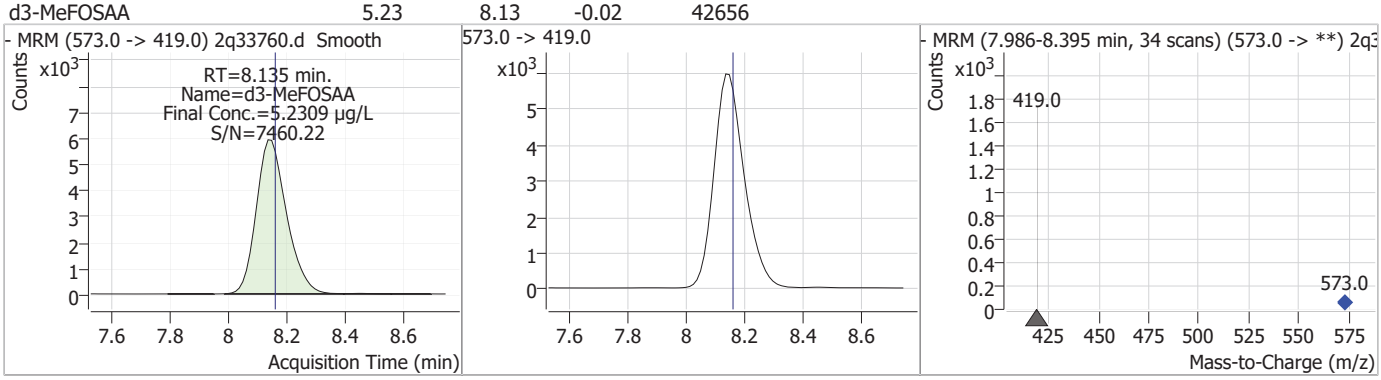


Perfluorinated Compounds by LC/MS/MS

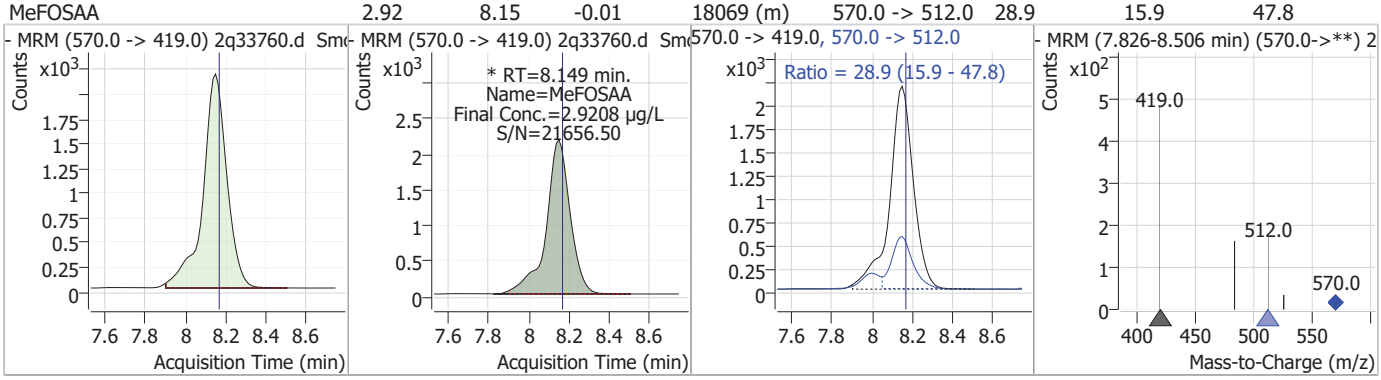
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.74	8.12	-0.03	36891	513.0 -> 219.0	17.7	8.7	26.0



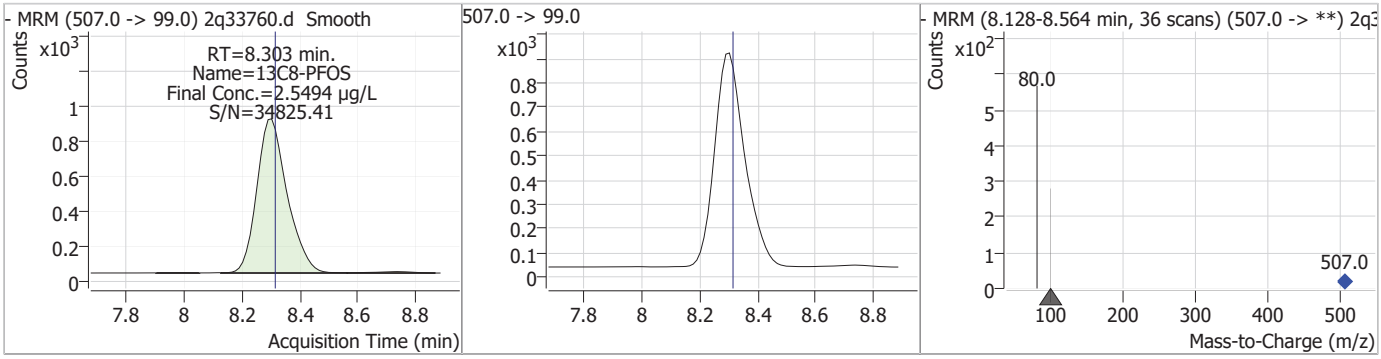
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.23	8.13	-0.02	42656				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.92	8.15	-0.01	18069 (m)	570.0 -> 512.0	28.9	15.9	47.8

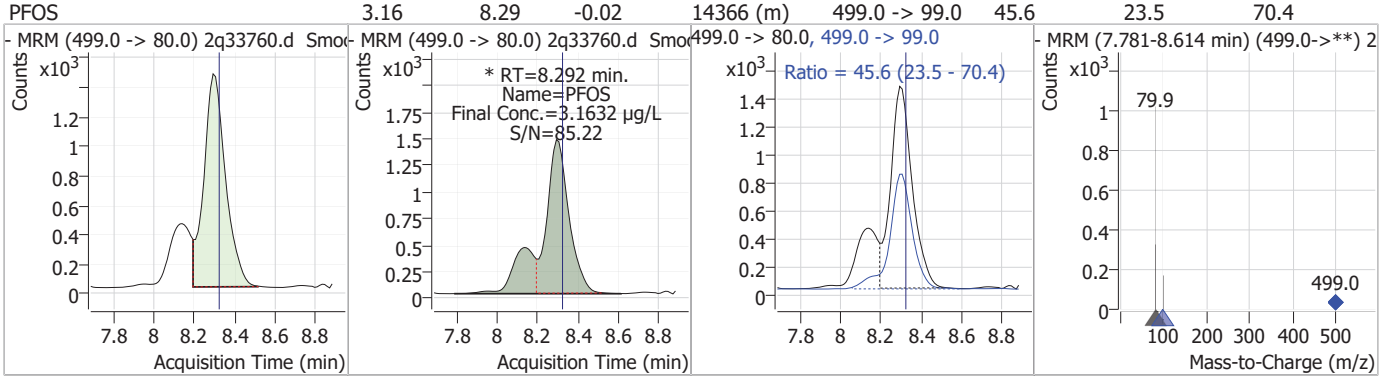


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.55	8.30	-0.01	6399				

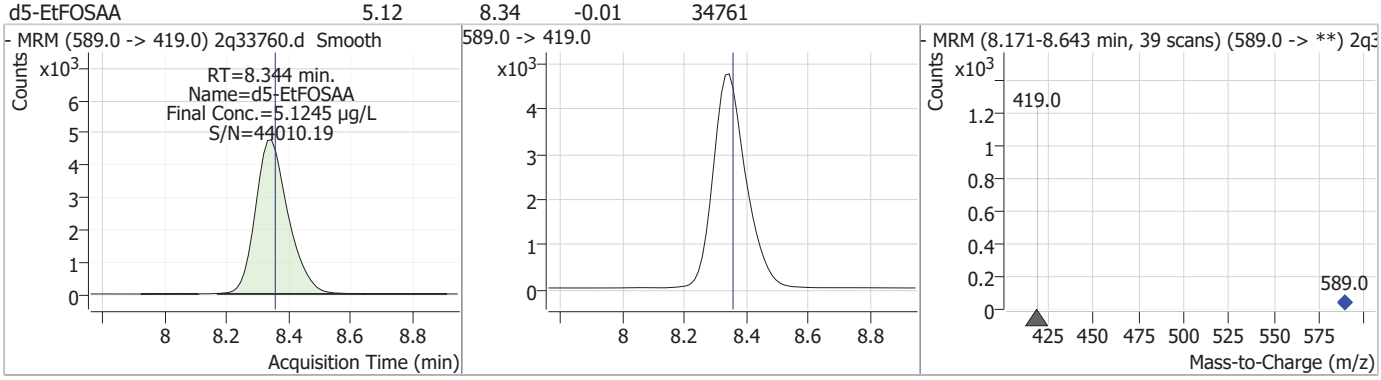


Perfluorinated Compounds by LC/MS/MS

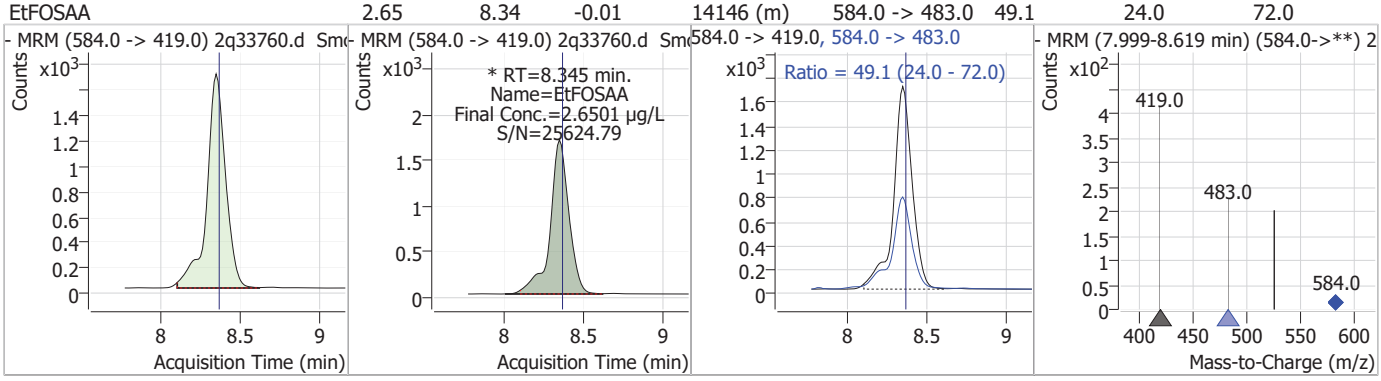
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	3.16	8.29	-0.02	14366 (m)	499.0 -> 99.0	45.6	23.5	70.4



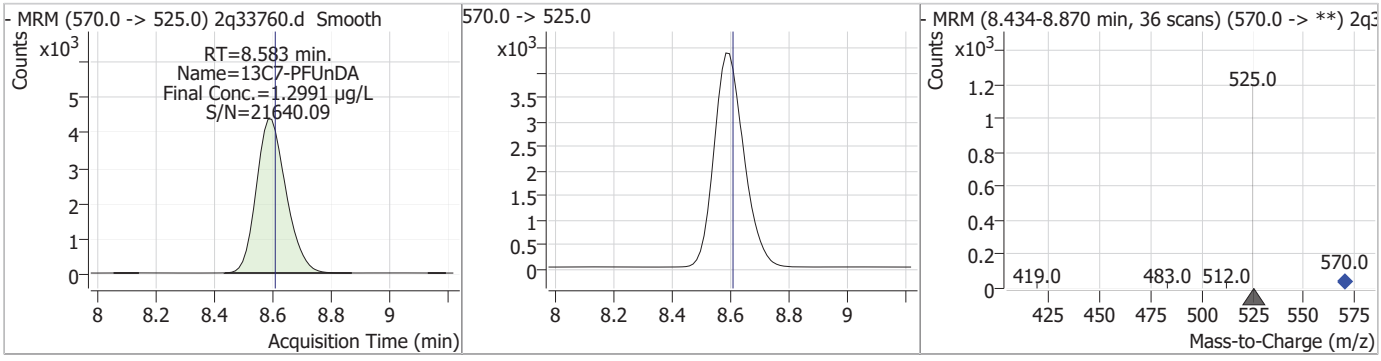
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.12	8.34	-0.01	34761				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.65	8.34	-0.01	14146 (m)	584.0 -> 483.0	49.1	24.0	72.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.30	8.58	-0.02	30824				



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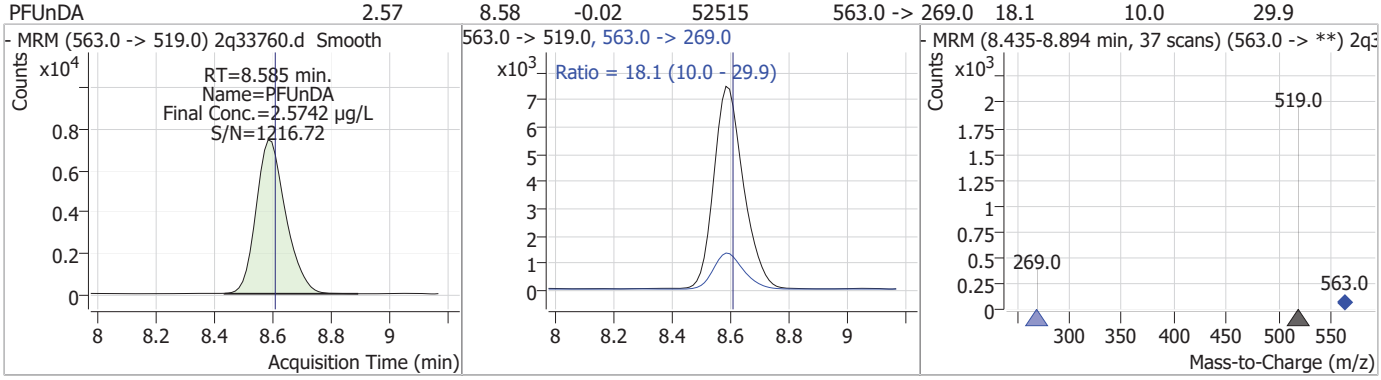
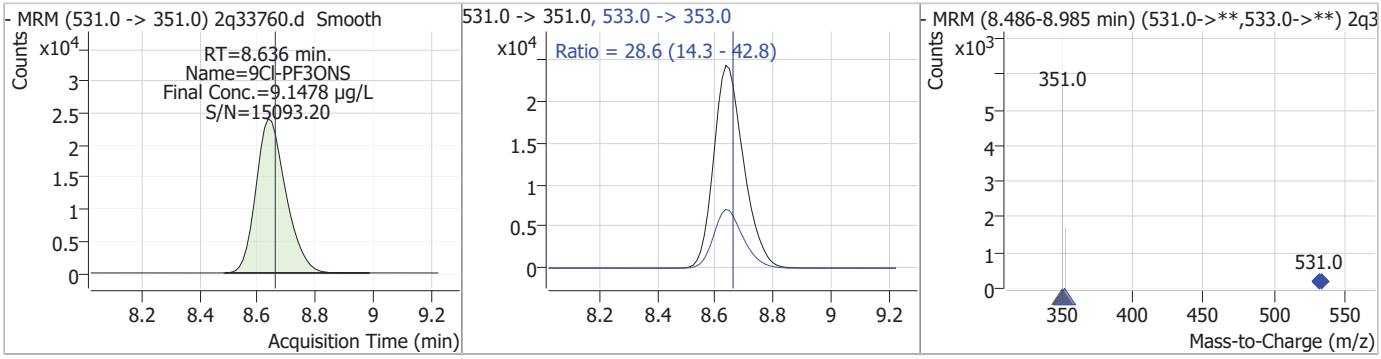
Perfluorinated Compounds by LC/MS/MS

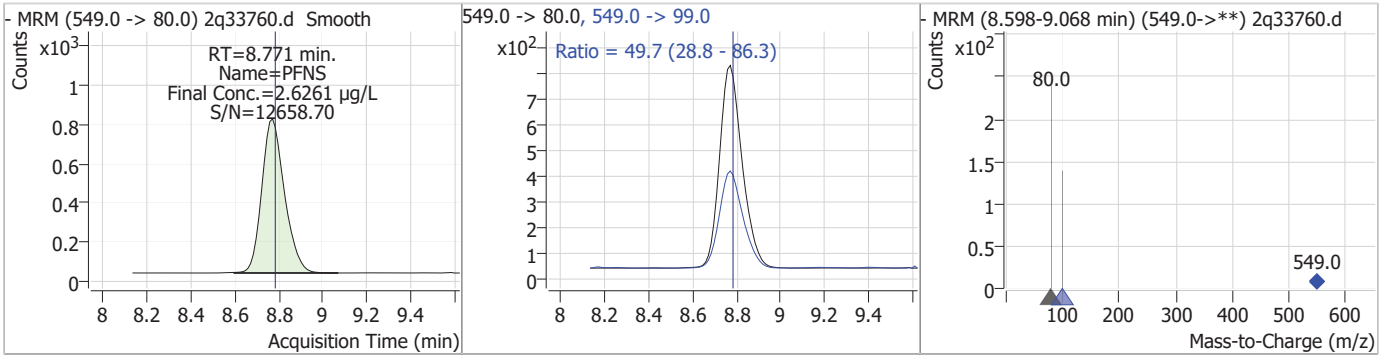
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.57	8.58	-0.02	52515	563.0 -> 269.0	18.1	10.0	29.9



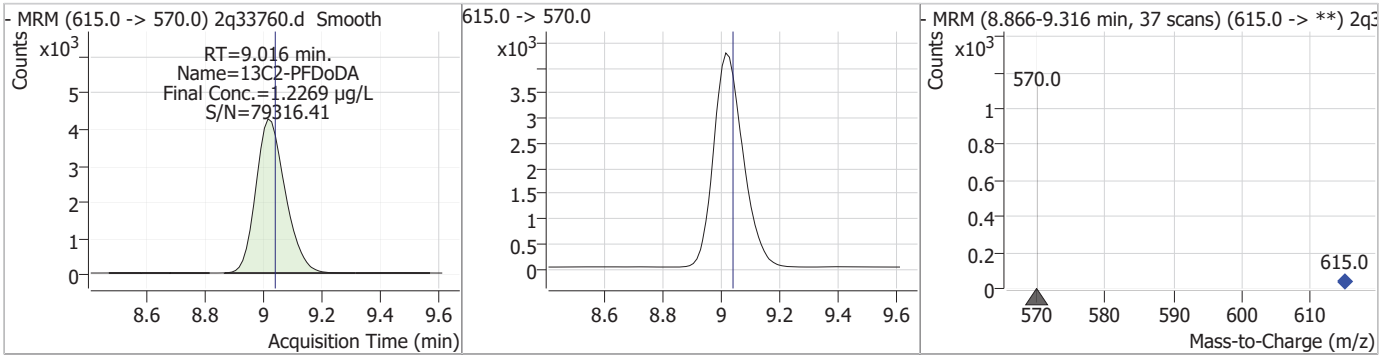
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.15	8.64	-0.02	171687	533.0 -> 353.0	28.6	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.63	8.77	-0.01	5605	549.0 -> 99.0	49.7	28.8	86.3

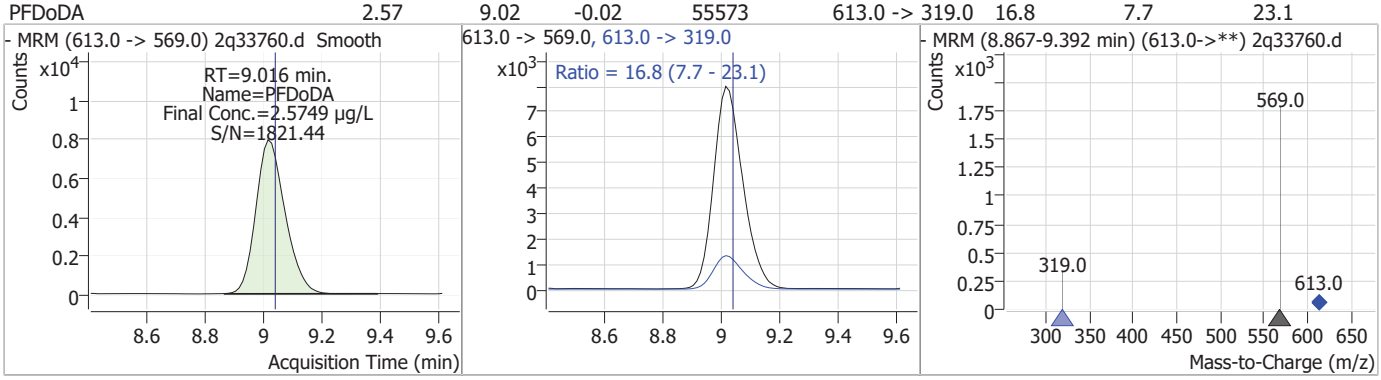


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.23	9.02	-0.02	29897				

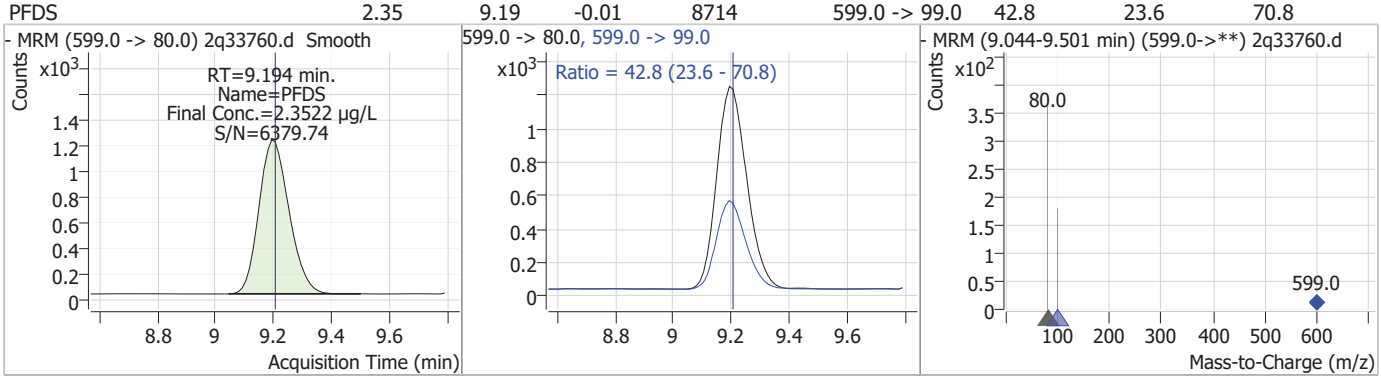


Perfluorinated Compounds by LC/MS/MS

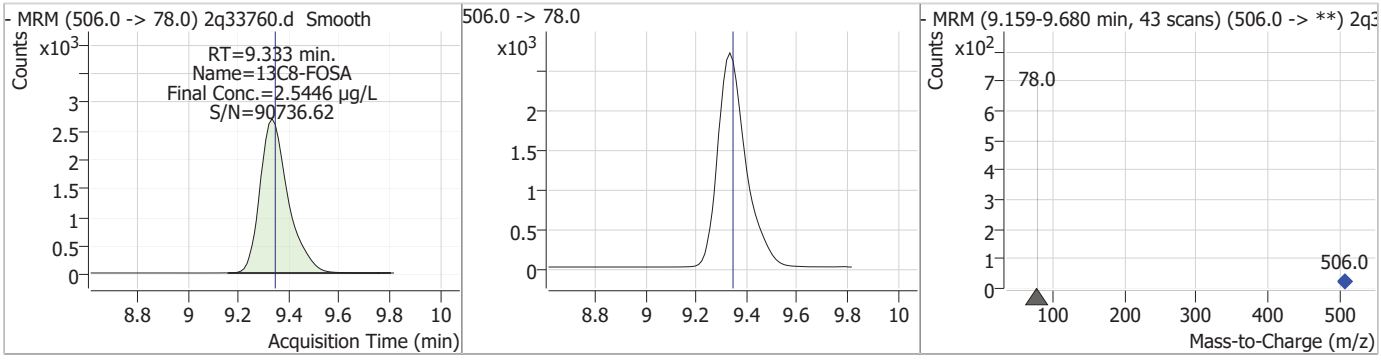
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.57	9.02	-0.02	55573	613.0 -> 319.0	16.8	7.7	23.1



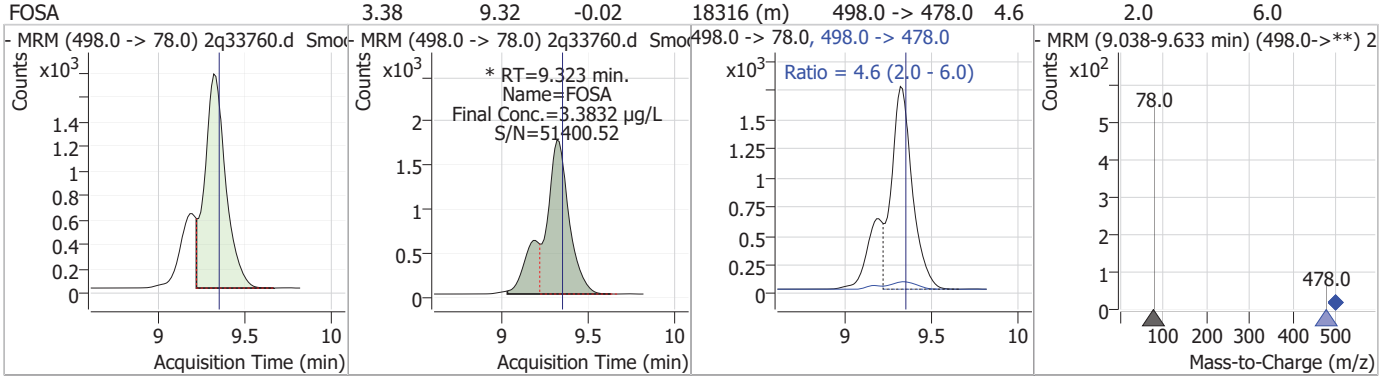
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.35	9.19	-0.01	8714	599.0 -> 99.0	42.8	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.54	9.33	-0.01	20655				

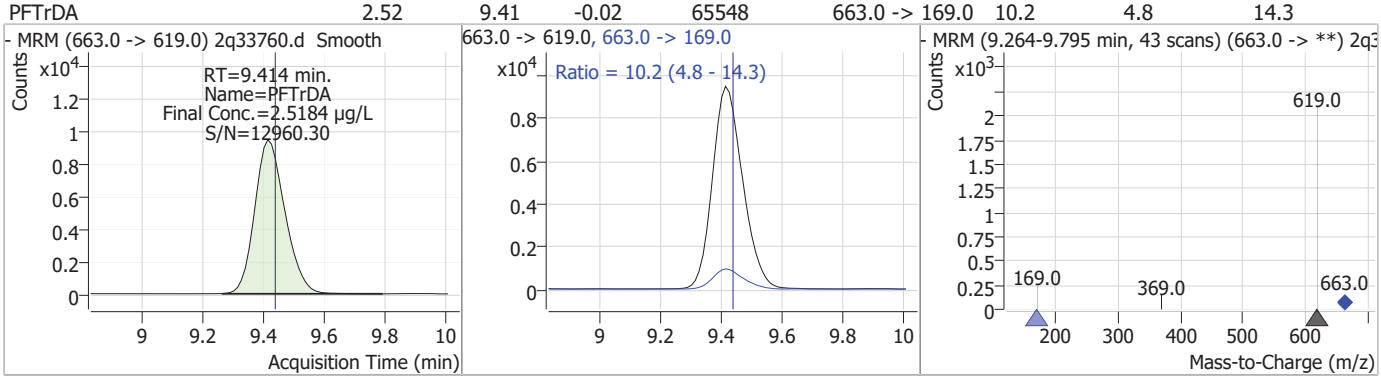


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	3.38	9.32	-0.02	18316 (m)	498.0 -> 478.0	4.6	2.0	6.0

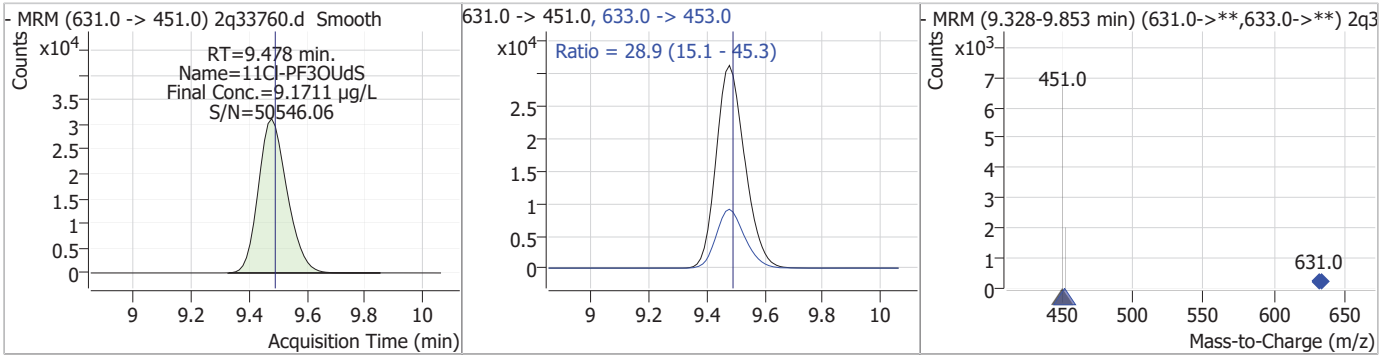


Perfluorinated Compounds by LC/MS/MS

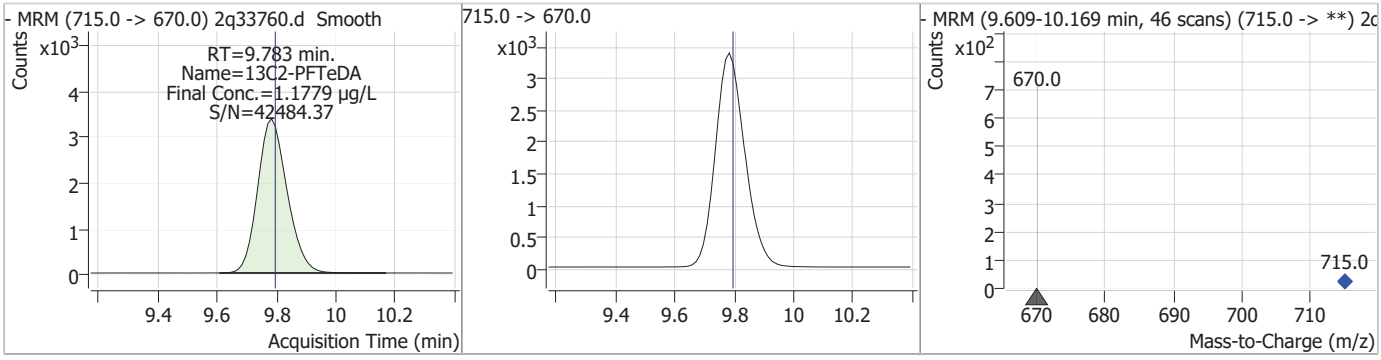
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.52	9.41	-0.02	65548	663.0 -> 169.0	10.2	4.8	14.3



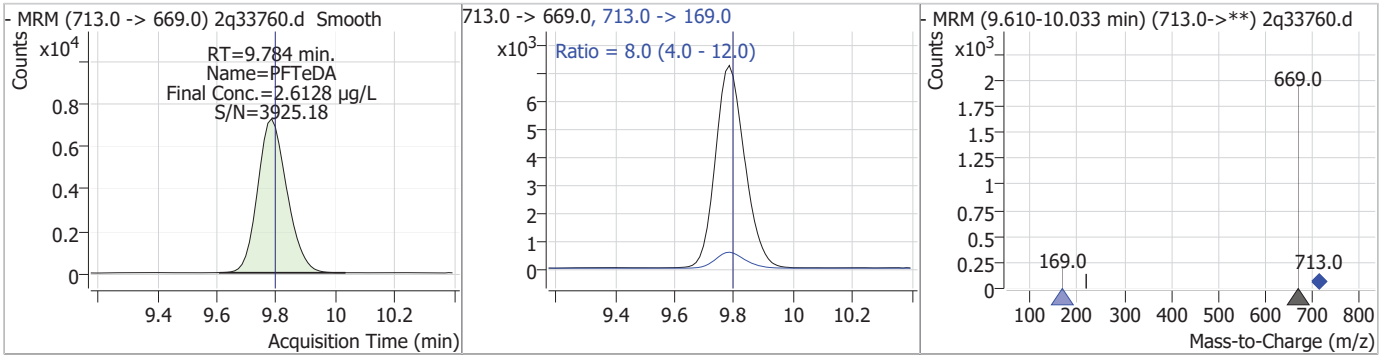
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.17	9.48	-0.01	213910	633.0 -> 453.0	28.9	15.1	45.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.18	9.78	-0.01	23114				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.61	9.78	-0.01	49486	713.0 -> 169.0	8.0	4.0	12.0



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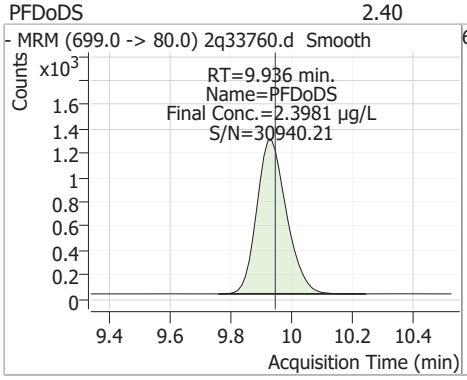
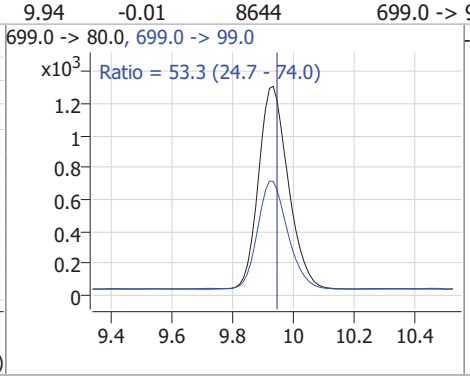
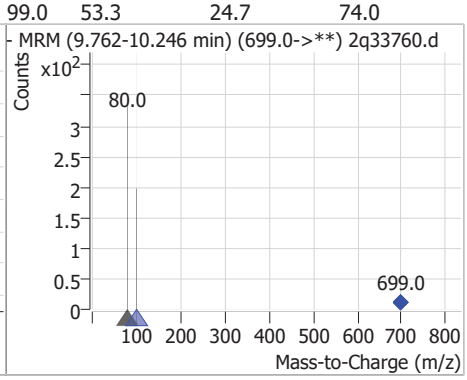
Perfluorinated Compounds by LC/MS/MS

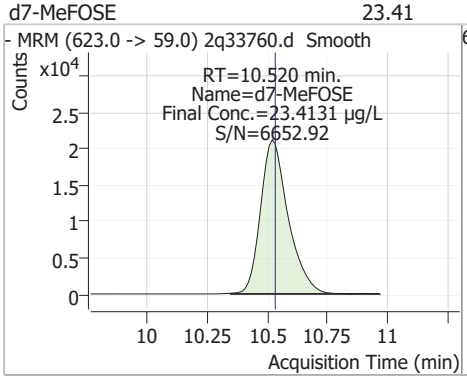
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.40	9.94	-0.01	8644	699.0 -> 99.0	53.3	24.7	74.0

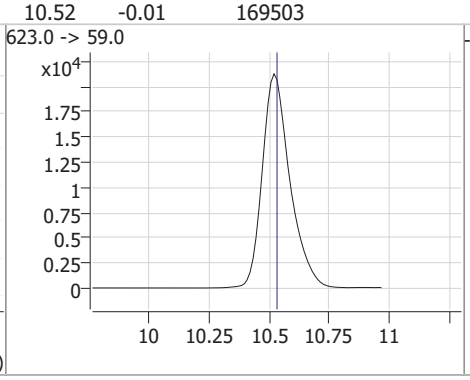


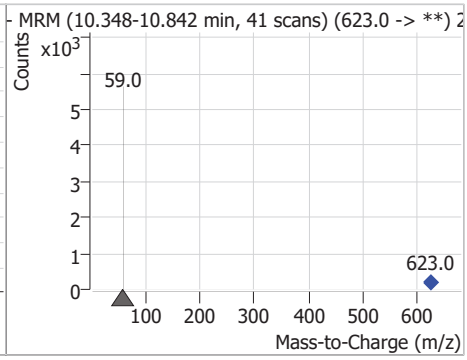




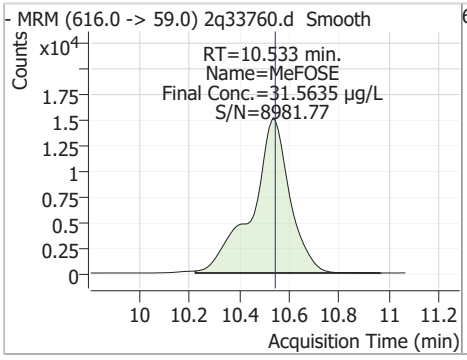
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.41	10.52	-0.01	169503				

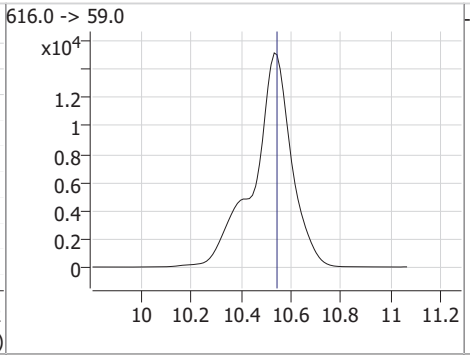


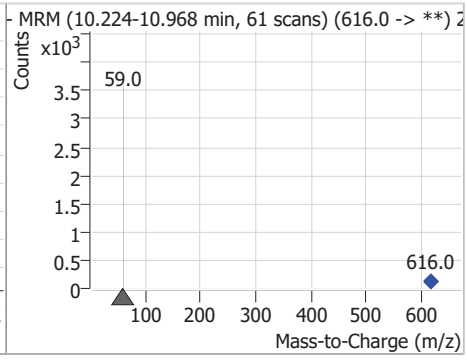




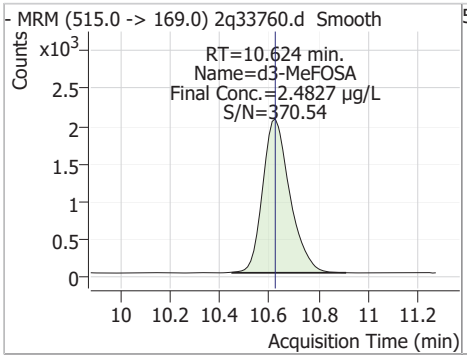
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	31.56	10.53	-0.01	159743				

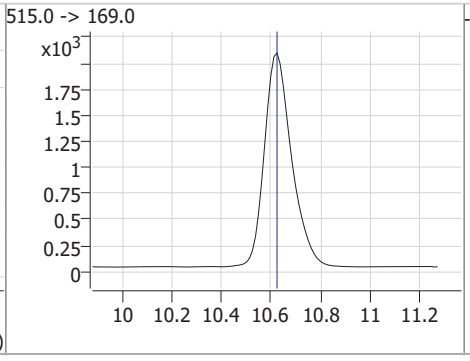


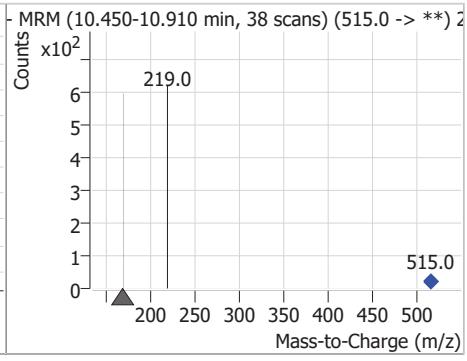




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.48	10.62	0.00	15651				







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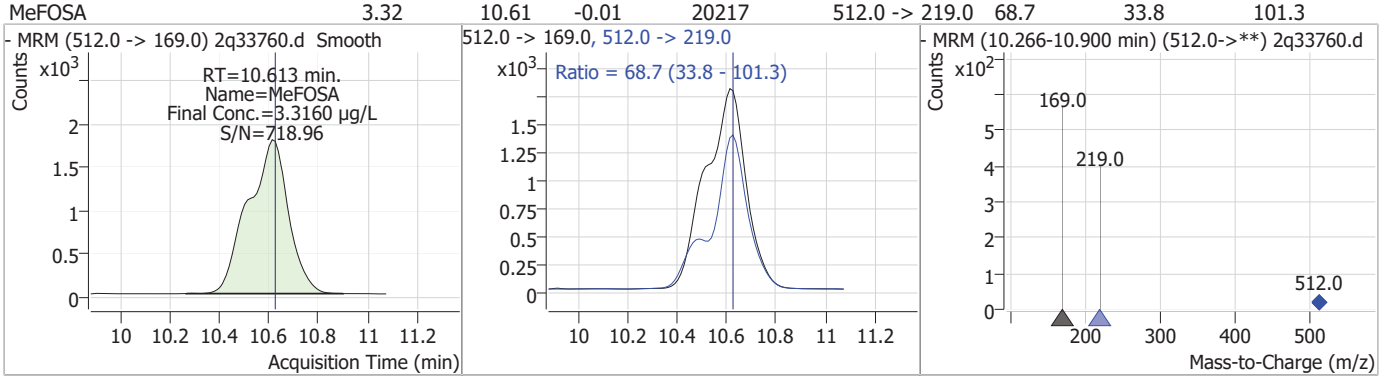
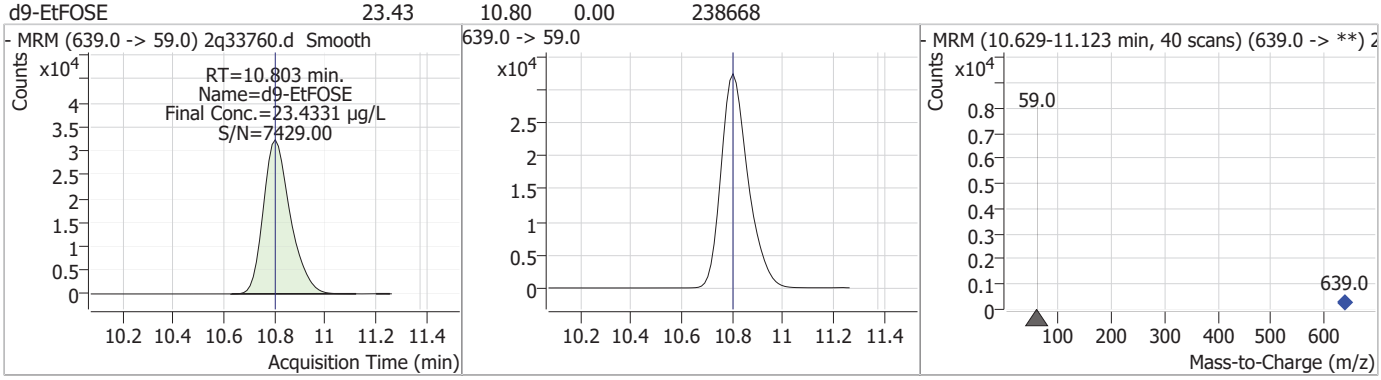
Perfluorinated Compounds by LC/MS/MS

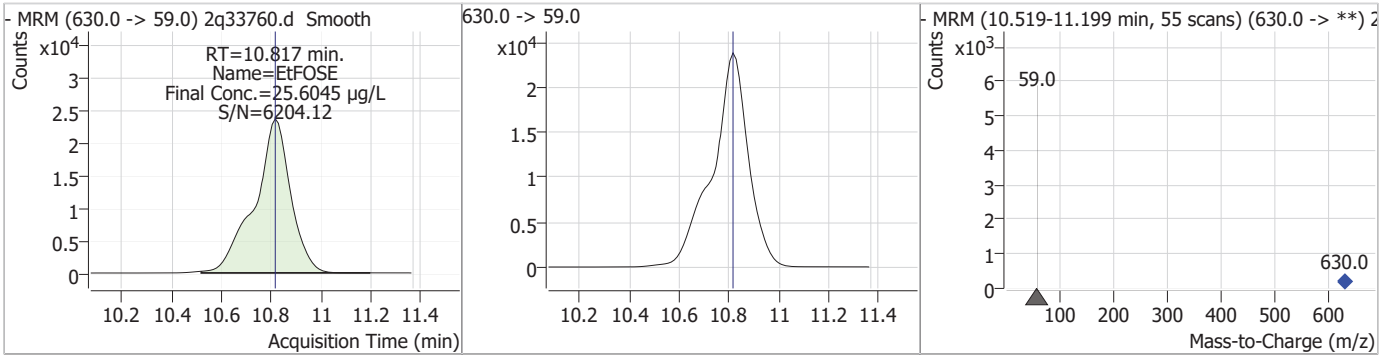
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	3.32	10.61	-0.01	20217	512.0 -> 219.0	68.7	33.8	101.3



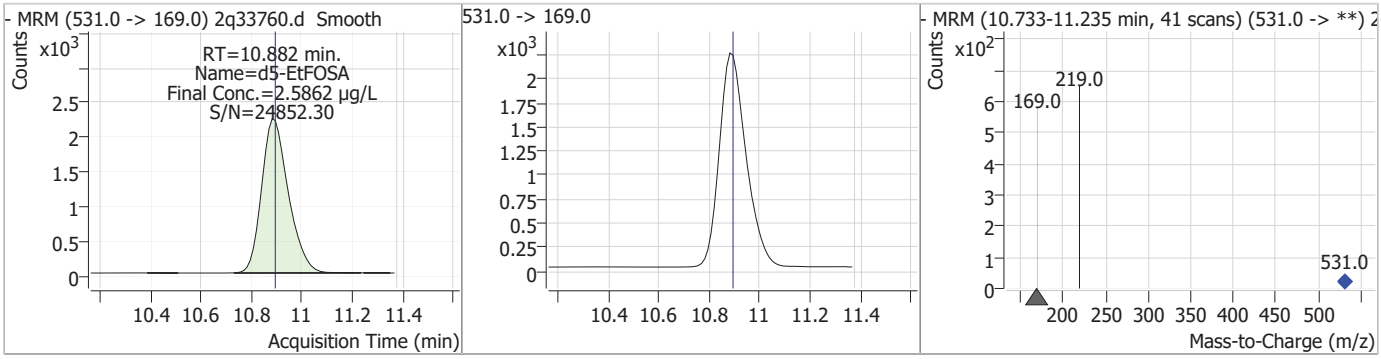
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.43	10.80	0.00	238668				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.60	10.82	0.00	238908				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.59	10.88	-0.01	16374				



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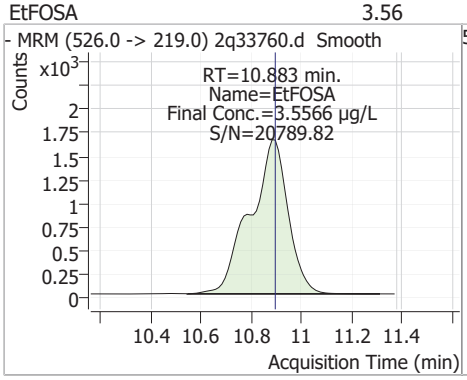
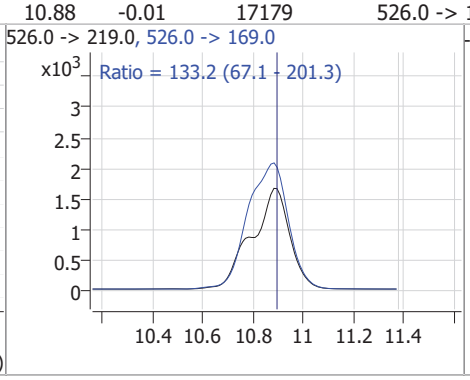
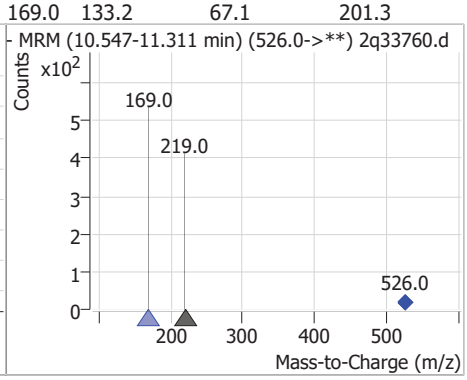
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	3.56	10.88	-0.01	17179	526.0 -> 169.0	133.2	67.1	201.3







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7

Manual Integration Approval Summary

Sample Number: T2Q345-CC344
Lab FileID: 2Q33760.D
Injection Time: 05/12/25 18:55
Method: EPA 1633
Analyst approved: 05/15/25 12:38 Olga Azarian
Supervisor approved: 05/15/25 12:46 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.11	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.24	Split peak
Perfluorononanoic acid	375-95-1		7.63	Split peak
MeFOSAA	2355-31-9		8.15	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.29	Split peak
EtFOSAA	2991-50-6		8.35	Poor instrument integration
PFOSA	754-91-6		9.32	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/15/25 12:46

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33784.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/13/2025 12:25:07 AM
Sample Name : CC344-4
Vial : P1-A5
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q345.batch.bin
Sample Information : OP63379,T2Q345,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.263	217.0 -> 172.0	117070	10.00 µg/L	0.000
M5-PFPeA	4.624	268.0 -> 223.0	63951	5.00 µg/L	-0.012
M5-PFHxA	5.732	318.0 -> 273.0	37673	2.50 µg/L	-0.012
M4-PFHpA	6.528	367.0 -> 322.0	30516	2.50 µg/L	-0.012
M8-PFOA	7.111	421.0 -> 376.0	67490	2.50 µg/L	-0.013
M9-PFNA	7.632	472.0 -> 427.0	27948	1.25 µg/L	-0.012
M6-PFDA	8.127	519.0 -> 474.0	18764	1.25 µg/L	-0.013
M7-PFUnDA	8.583	570.0 -> 525.0	30550	1.25 µg/L	-0.024
M2-PFDoDA	9.016	615.0 -> 570.0	29650	1.25 µg/L	-0.025
M2-PFTeDA	9.783	715.0 -> 670.0	24015	1.25 µg/L	-0.012
M8-FOSA	9.333	506.0 -> 78.0	21055	2.50 µg/L	-0.013
M3-PFBS	5.687	302.0 -> 99.0	6385	2.50 µg/L	-0.012
M3-PFHxS	7.238	402.0 -> 99.0	7717	2.50 µg/L	-0.012
M8-PFOS	8.303	507.0 -> 99.0	6858	2.50 µg/L	-0.012
M2-4:2FTS	5.420	329.0 -> 81.0	1447	5.00 µg/L	-0.012
M2-6:2FTS	6.885	429.0 -> 81.0	3306	5.00 µg/L	-0.025
M2-8:2FTS	7.902	529.0 -> 81.0	5247	5.00 µg/L	-0.012
M3-MeFOSAA	8.147	573.0 -> 419.0	44785	5.00 µg/L	-0.012
M3-HFPO-DA	6.062	287.0 -> 169.0	25988	10.00 µg/L	-0.012
M5-EtFOSAA	8.344	589.0 -> 419.0	36501	5.00 µg/L	-0.012
M7-MeFOSE	10.520	623.0 -> 59.0	172793	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	238714	25.00 µg/L	0.000
M5-EtFOSA	10.895	531.0 -> 169.0	16830	2.50 µg/L	0.000
M3-MeFOSA	10.624	515.0 -> 169.0	16320	2.50 µg/L	0.000
13C4-PFOS	8.304	503.0 -> 80.0	12166	2.50 µg/L	-0.012
13C3-PFBA	3.253	216.0 -> 172.0	49413	5.00 µg/L	-0.012
18O2-PFHxS	7.238	403.0 -> 84.0	8571	2.50 µg/L	-0.025
13C4-PFOA	7.111	417.0 -> 372.0	65379	2.50 µg/L	-0.013
13C2-PFDA	8.115	515.0 -> 470.0	18611	1.25 µg/L	-0.025
13C5-PFNA	7.632	468.0 -> 423.0	24245	1.25 µg/L	-0.012
13C2-PFHxA	5.733	315.0 -> 270.0	33609	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.420	329.0 -> 81.0	1447	4.92 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.4%	
13C2-6:2FTS	6.885	429.0 -> 81.0	3306	5.05 µg/L	-0.025
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.1%	
13C2-8:2FTS	7.902	529.0 -> 81.0	5247	4.77 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.5%	
13C2-PFDoDA	9.016	615.0 -> 570.0	29650	1.17 µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.6%	
13C2-PFTeDA	9.783	715.0 -> 670.0	24015	1.18 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.2%	
13C3-PFBS	5.687	302.0 -> 99.0	6385	2.68 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.2%	
13C3-PFHxS	7.238	402.0 -> 99.0	7717	2.61 µg/L	-0.012

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.5%		
13C4-PFBA	3.263	217.0 -> 172.0	117070	10.09 µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.9%		
13C4-PFHpA	6.528	367.0 -> 322.0	30516	2.61 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.4%		
13C5-PFHxA	5.732	318.0 -> 273.0	37673	2.55 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.0%		
13C5-PFPeA	4.624	268.0 -> 223.0	63951	5.04 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.9%		
13C6-PFDA	8.127	519.0 -> 474.0	18764	1.23 µg/L		-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.3%		
13C7-PFUnDA	8.583	570.0 -> 525.0	30550	1.24 µg/L		-0.024
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.1%		
13C8-FOSA	9.333	506.0 -> 78.0	21055	2.53 µg/L		-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.1%		
13C8-PFOA	7.111	421.0 -> 376.0	67490	2.57 µg/L		-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.7%		
13C8-PFOS	8.303	507.0 -> 99.0	6858	2.66 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.5%		
13C9-PFNA	7.632	472.0 -> 427.0	27948	1.32 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.9%		
d3-MeFOSAA	8.147	573.0 -> 419.0	44785	5.35 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.1%		
13C3-HFPO-DA	6.062	287.0 -> 169.0	25988	11.09 µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 110.9%		
d3-MeFOSA	10.624	515.0 -> 169.0	16320	2.52 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.9%		
d5-EtFOSAA	8.344	589.0 -> 419.0	36501	5.24 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.9%		
d7-MeFOSE	10.520	623.0 -> 59.0	172793	23.26 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 93.1%		
d9-EtFOSE	10.803	639.0 -> 59.0	238714	22.84 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 91.4%		
d5-EtFOSA	10.895	531.0 -> 169.0	16830	2.59 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.6%		
Target Compounds						QValue
4:2FTS	5.421	327.0 -> 307.0	22132	10.23 µg/L		98
		327.0 -> 81.0	12093			
6:2FTS	6.885	427.0 -> 407.0	40029	10.09 µg/L		97
		427.0 -> 81.0	14604			
8:2FTS	7.902	527.0 -> 507.0	38536	9.71 µg/L		100
		527.0 -> 81.0	16498			
EtFOSAA	8.345	584.0 -> 419.0	13198	2.35 µg/L	m	90
		584.0 -> 483.0	7189			
FOSA	9.323	498.0 -> 78.0	18536	3.36 µg/L	m	99
		498.0 -> 478.0	701			
MeFOSAA	8.149	570.0 -> 419.0	16844	2.59 µg/L	m	96
		570.0 -> 512.0	4973			
PFBA	3.255	213.0 -> 169.0	30206	10.18 µg/L		100
PFBS	5.688	299.0 -> 80.0	16701	1.99 µg/L		99
		299.0 -> 99.0	6136			
PFDA	8.115	513.0 -> 469.0	34255	2.42 µg/L		98
		513.0 -> 219.0	6195			
PFDoDA	9.016	613.0 -> 569.0	55060	2.57 µg/L		98
		613.0 -> 319.0	8915			
PFDS	9.194	599.0 -> 80.0	8308	2.26 µg/L		91

Perfluorinated Compounds by LC/MS/MS

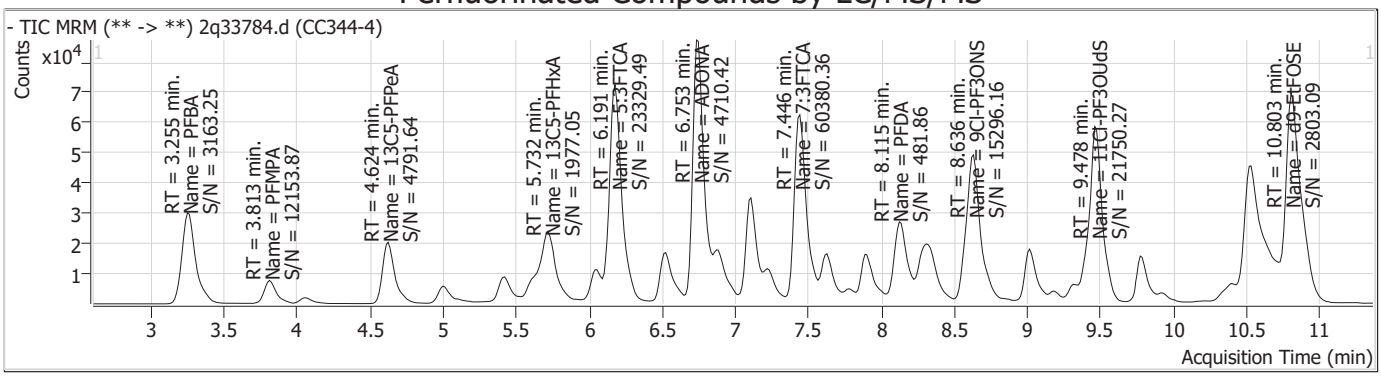
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	4404				
PFHpA	6.528	363.0 -> 319.0	47743	2.49	µg/L		99
		363.0 -> 169.0	8745				
PFHpS	7.797	449.0 -> 80.0	12640	2.31	µg/L		91
		449.0 -> 99.0	5641				
PFHxA	5.735	313.0 -> 269.0	31012	2.47	µg/L		99
		313.0 -> 119.0	1072				
PFHxS	7.239	399.0 -> 80.0	12057	2.49	µg/L	m	96
		399.0 -> 99.0	6244				
PFNA	7.633	463.0 -> 419.0	30403	2.89	µg/L	m	96
		463.0 -> 219.0	7940				
PFNS	8.771	549.0 -> 80.0	5938	2.60	µg/L		89
		549.0 -> 99.0	2923				
PFOA	7.112	413.0 -> 369.0	50231	3.06	µg/L	m	100
		413.0 -> 169.0	11138				
PFOS	8.292	499.0 -> 80.0	14861	3.05	µg/L	m	94
		499.0 -> 99.0	6392				
PFPeA	4.627	263.0 -> 219.0	57159	5.04	µg/L		100
PFPeS	6.604	349.0 -> 80.0	6537	2.09	µg/L		98
		349.0 -> 99.0	2806				
PFTeDA	9.784	713.0 -> 669.0	48793	2.48	µg/L		99
		713.0 -> 169.0	4020				
PFTrDA	9.414	663.0 -> 619.0	67084	2.60	µg/L		98
		663.0 -> 169.0	6892				
PFUnDA	8.585	563.0 -> 519.0	51346	2.54	µg/L		99
		563.0 -> 269.0	9956				
11Cl-PF3OUdS	9.478	631.0 -> 451.0	214644	9.54	µg/L		99
		633.0 -> 453.0	63949				
9Cl-PF3ONS	8.636	531.0 -> 351.0	173838	9.60	µg/L		98
		533.0 -> 353.0	51953				
ADONA	6.753	377.0 -> 251.0	361178	9.54	µg/L		99
		377.0 -> 85.0	111476				
HFPO-DA	6.062	285.0 -> 169.0	26104	10.15	µg/L		97
		285.0 -> 185.0	2467				
3:3FTCA	4.065	241.0 -> 177.0	10754	12.08	µg/L		99
		241.0 -> 117.0	765				
5:3FTCA	6.191	341.0 -> 237.0	193654	62.33	µg/L		99
		341.0 -> 217.0	136040				
7:3FTCA	7.446	441.0 -> 337.0	258010	64.67	µg/L		97
		441.0 -> 317.0	101203				
EtFOSA	10.895	526.0 -> 219.0	17857	3.60	µg/L		98
		526.0 -> 169.0	23559				
EtFOSE	10.817	630.0 -> 59.0	234545	25.13	µg/L		100
MeFOSA	10.626	512.0 -> 169.0	20250	3.19	µg/L		99
		512.0 -> 219.0	13788				
MeFOSE	10.544	616.0 -> 59.0	166260	32.23	µg/L	m	100
PFDoDS	9.936	699.0 -> 80.0	8637	2.24	µg/L		86
		699.0 -> 99.0	5082				
NFDHA	5.626	295.0 -> 201.0	6020	5.77	µg/L		80
		201.0 -> 85.0	31627				
		295.0 -> 85.0	1998				
PFMBA	5.002	279.0 -> 85.0	32939	5.01	µg/L		100
PFMPA	3.813	229.0 -> 85.0	47572	5.08	µg/L		100
PFEESA	6.156	315.0 -> 135.0	72960	4.69	µg/L		99
		315.0 -> 69.0	8180				

 # = Qualifier out of range, m = manually integrated, + = Area summed

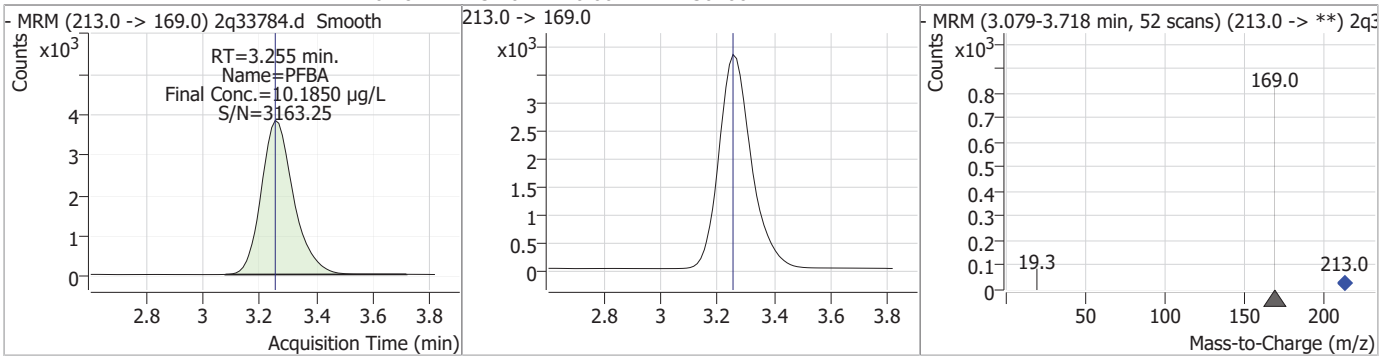
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

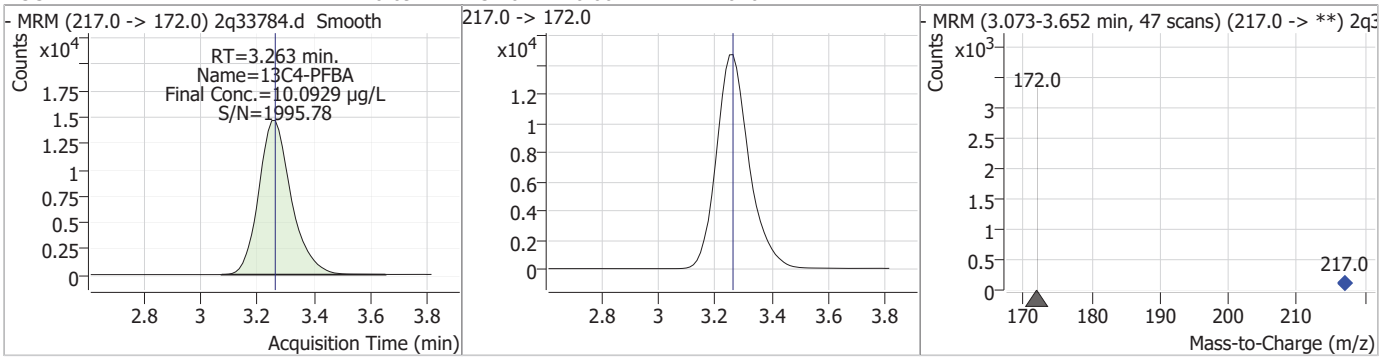
Perfluorinated Compounds by LC/MS/MS



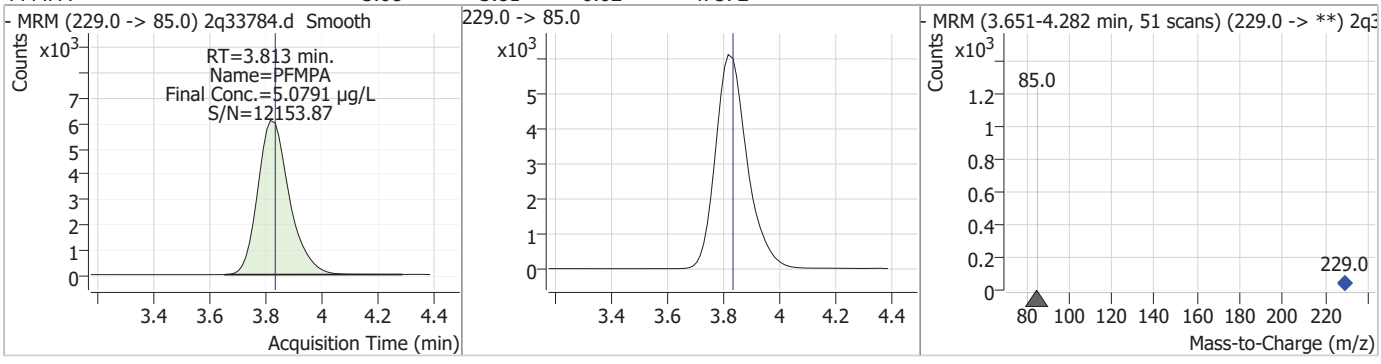
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.18	3.26	0.00	30206				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.09	3.26	0.00	117070				

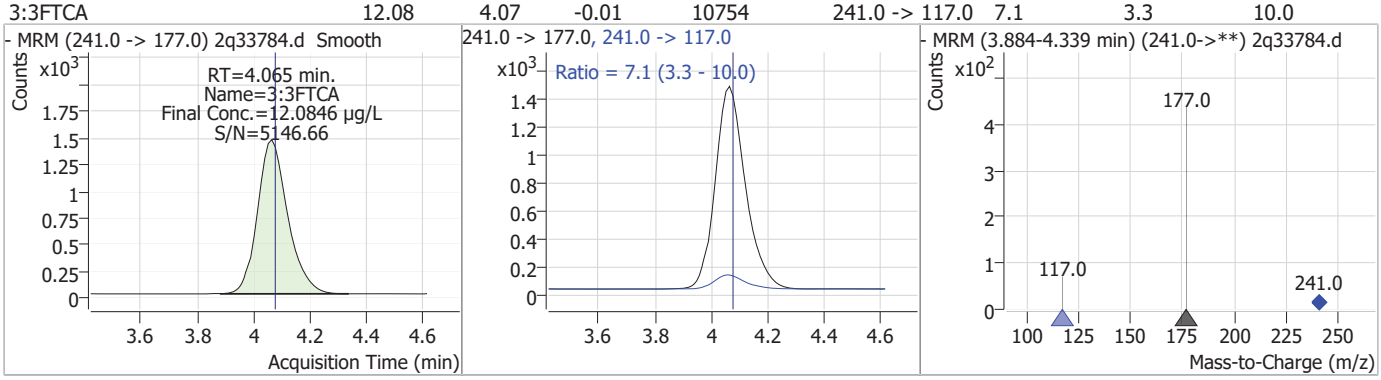


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.08	3.81	-0.02	47572				

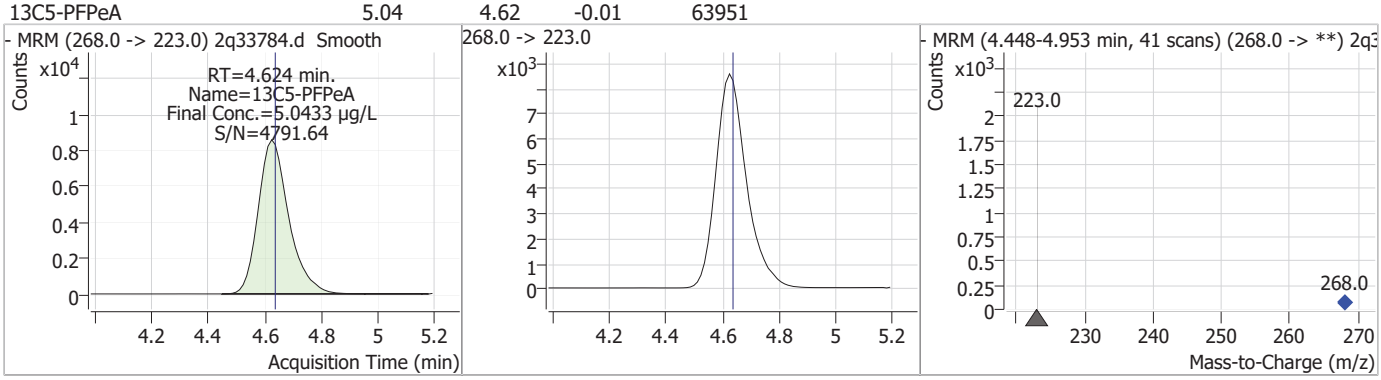


Perfluorinated Compounds by LC/MS/MS

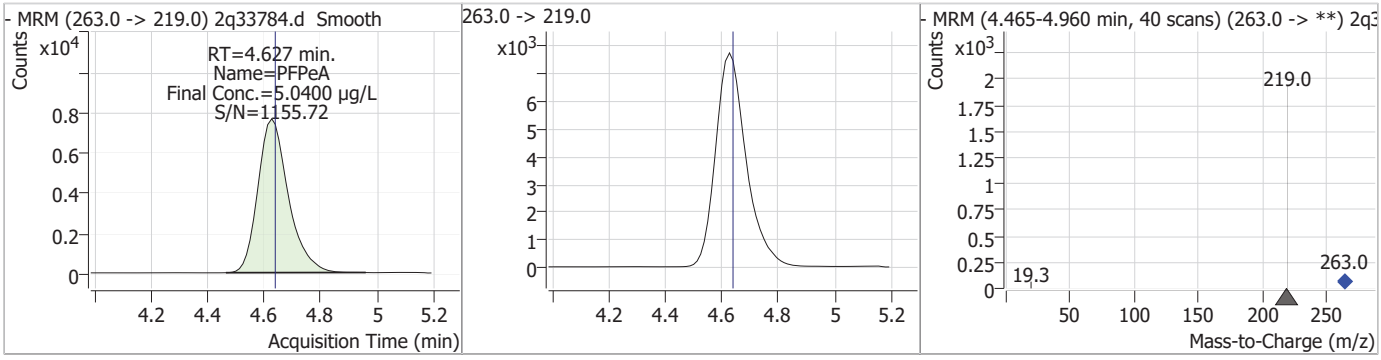
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.08	4.07	-0.01	10754	241.0 -> 117.0	7.1	3.3	10.0



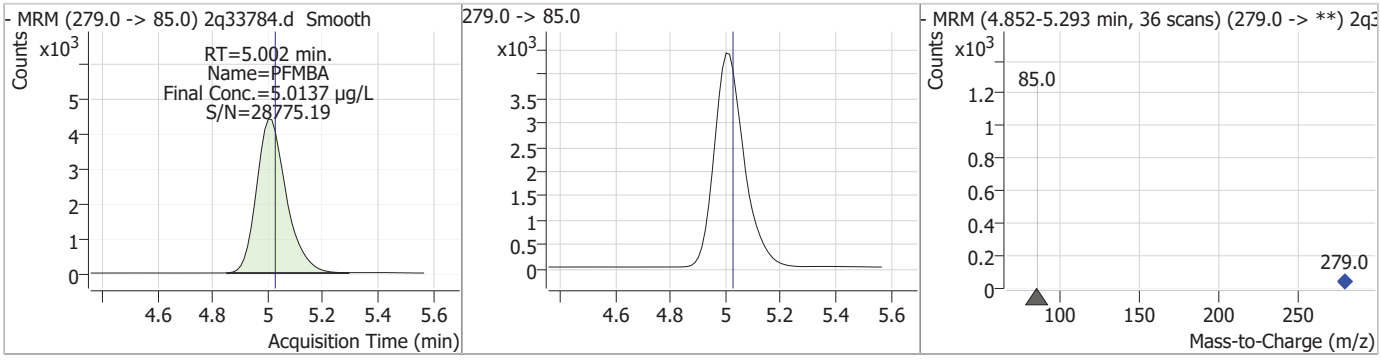
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.04	4.62	-0.01	63951				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.04	4.63	-0.01	57159				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.01	5.00	-0.02	32939				



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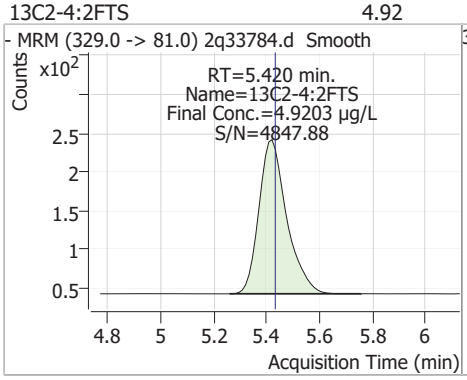
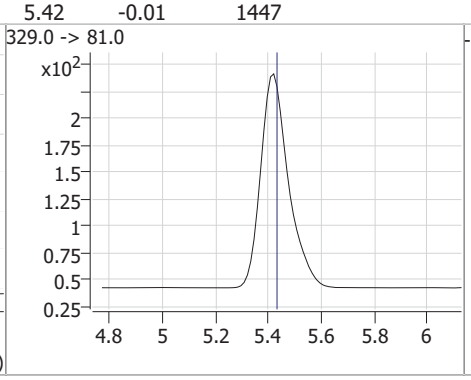
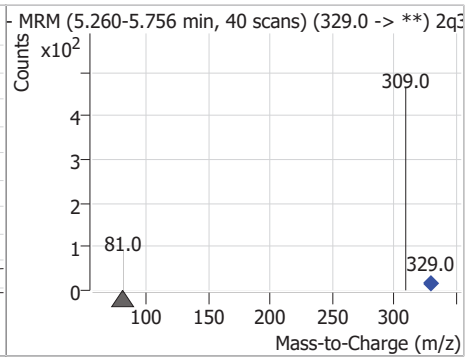
Perfluorinated Compounds by LC/MS/MS

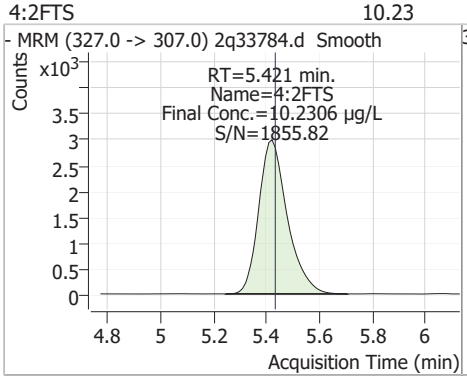
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.92	5.42	-0.01	1447				

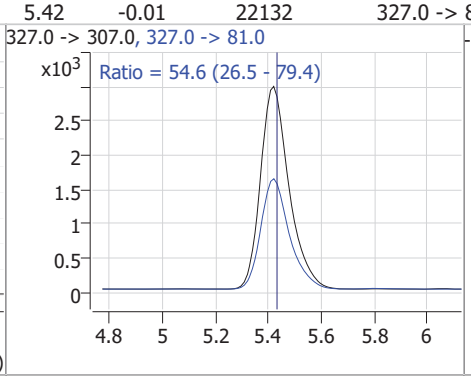


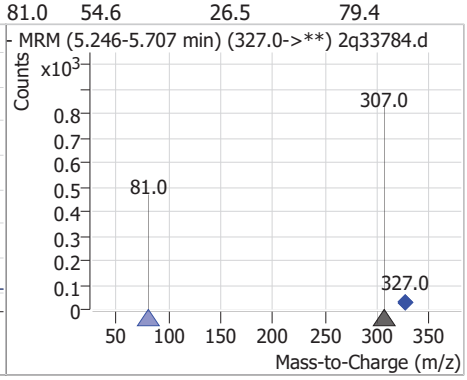




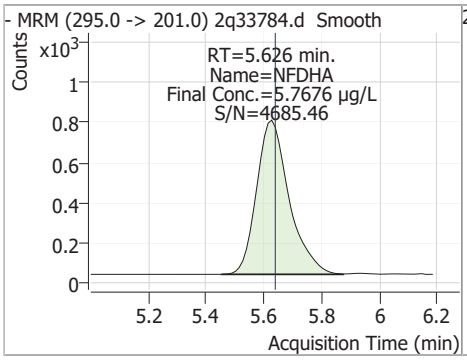
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	10.23	5.42	-0.01	22132	327.0 -> 81.0	54.6	26.5	79.4

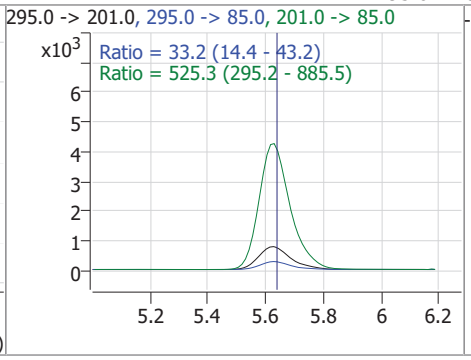


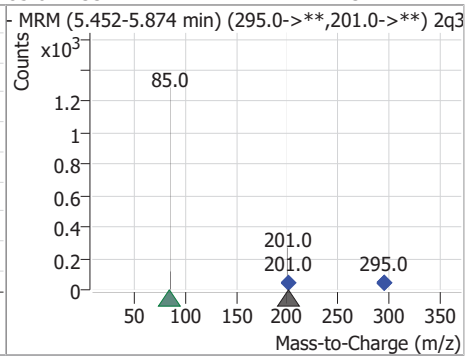




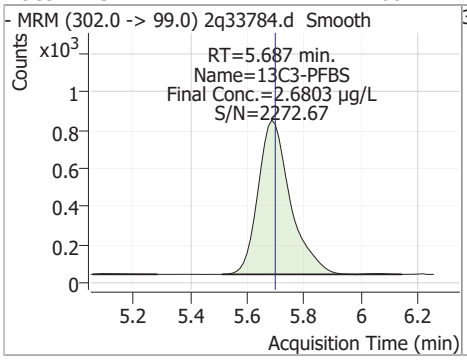
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.77	5.63	-0.01	6020	201.0 -> 85.0	525.3	295.2	885.5
					295.0 -> 85.0	33.2	14.4	43.2

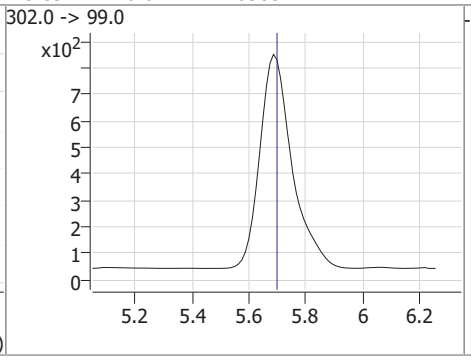


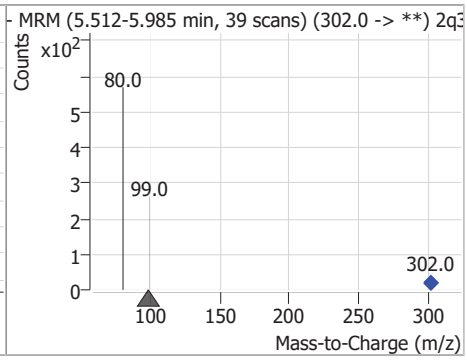




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.68	5.69	-0.01	6385				

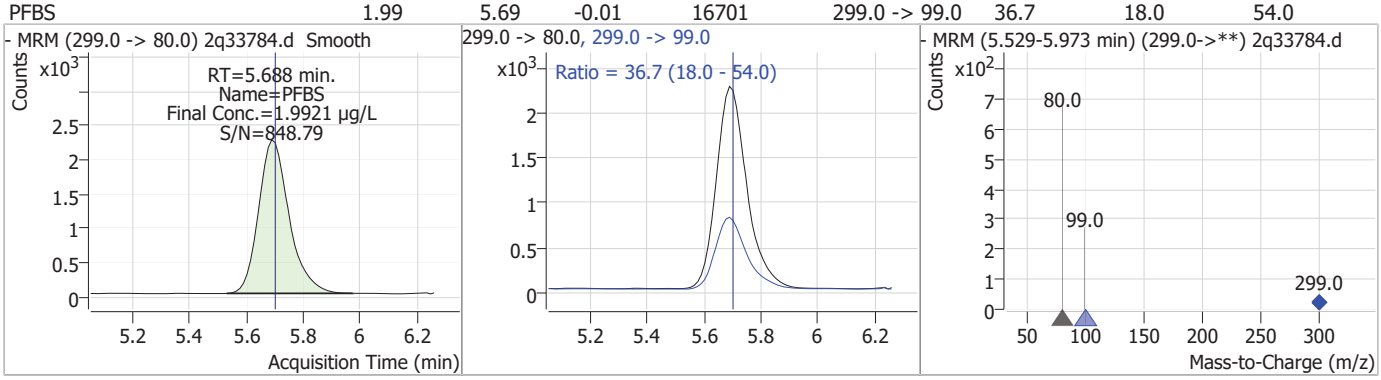




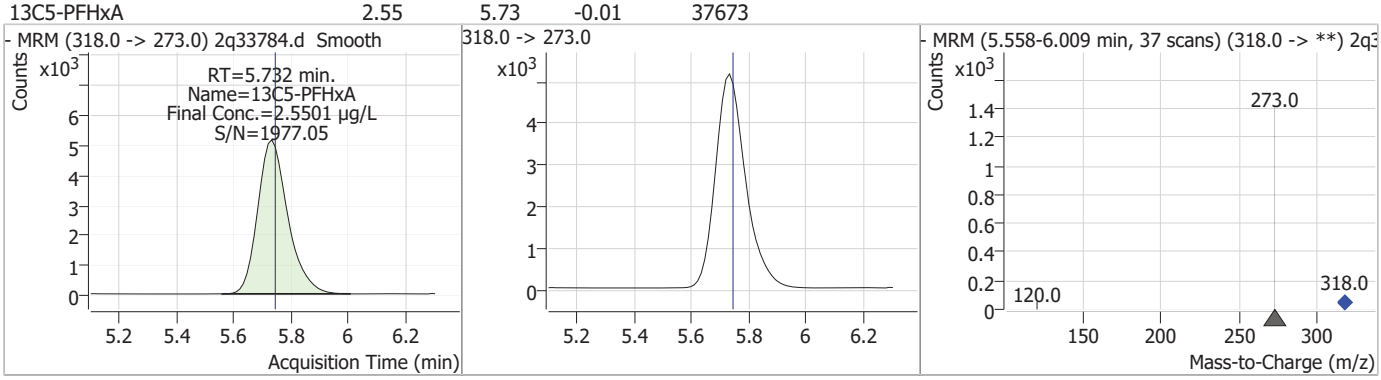


Perfluorinated Compounds by LC/MS/MS

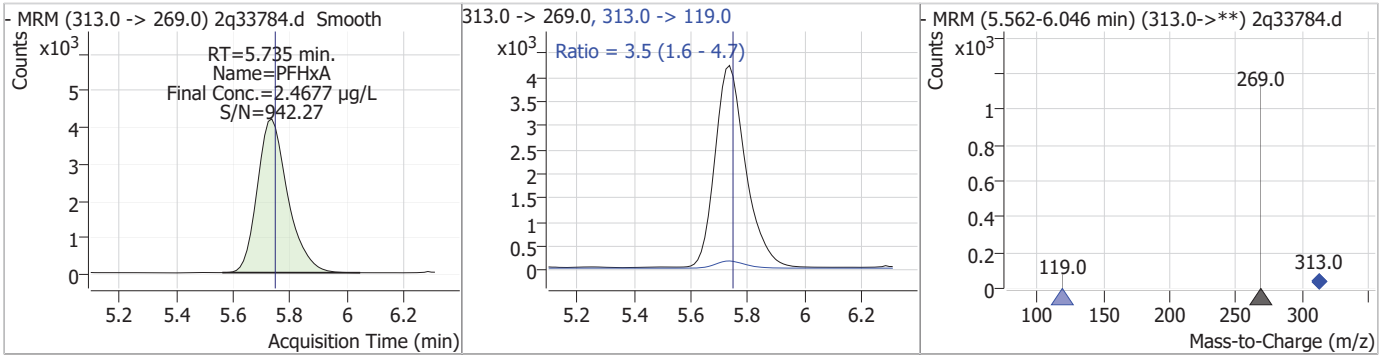
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	1.99	5.69	-0.01	16701	299.0 -> 99.0	36.7	18.0	54.0



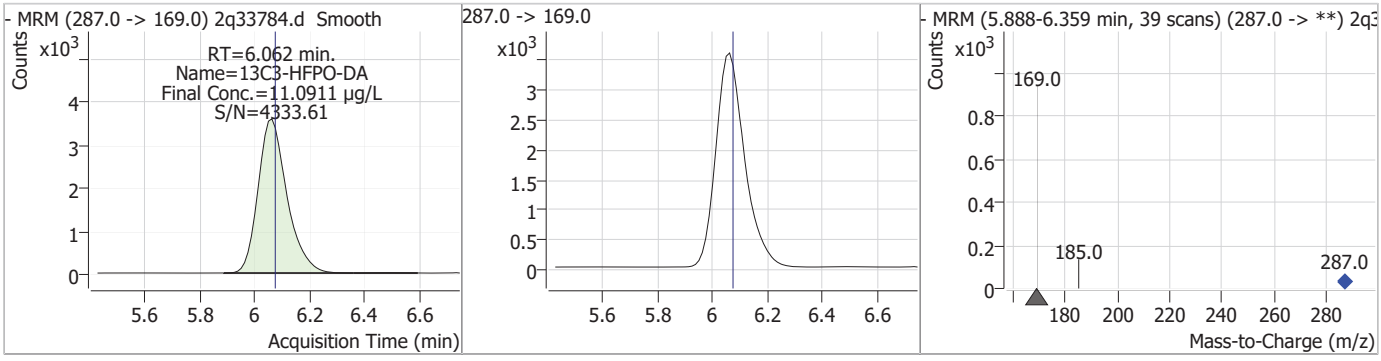
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.55	5.73	-0.01	37673				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.47	5.74	-0.01	31012	313.0 -> 119.0	3.5	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	11.09	6.06	-0.01	25988				



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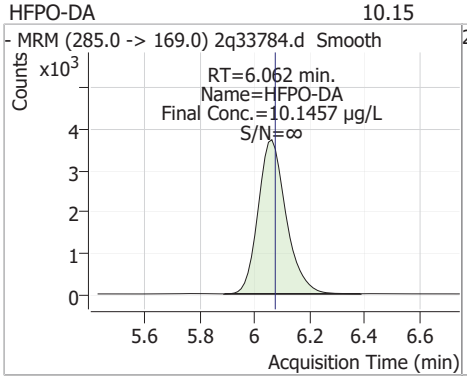
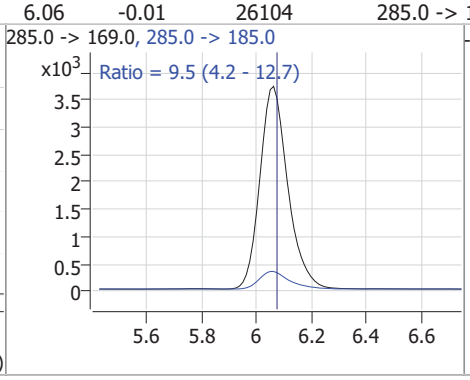
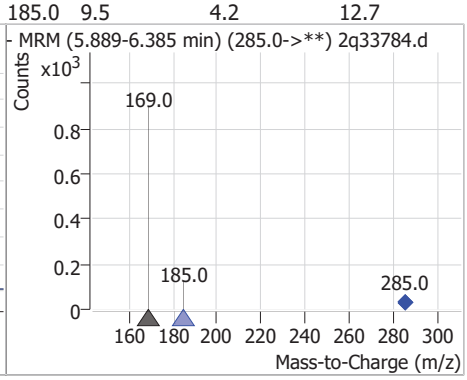
Perfluorinated Compounds by LC/MS/MS

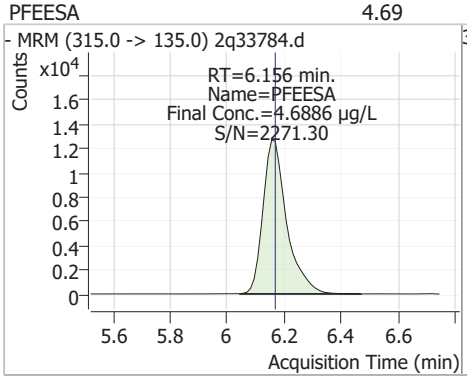
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.15	6.06	-0.01	26104	285.0 -> 185.0	9.5	4.2	12.7

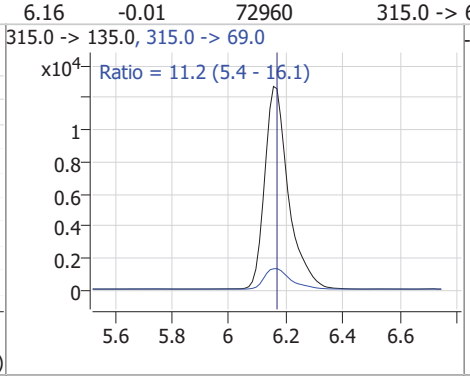


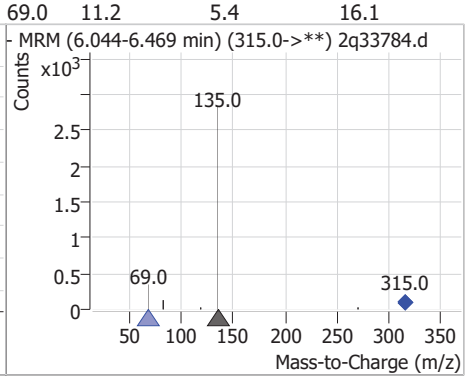




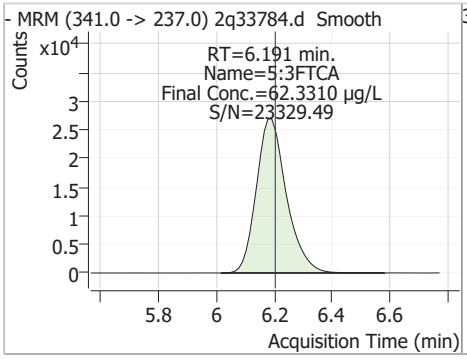
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.69	6.16	-0.01	72960	315.0 -> 69.0	11.2	5.4	16.1

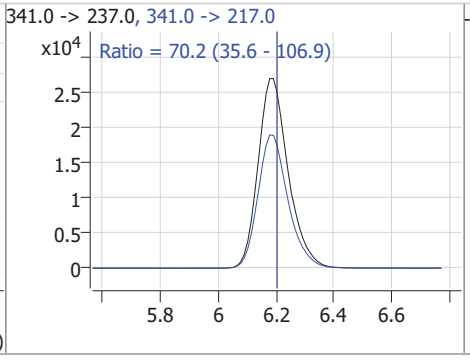


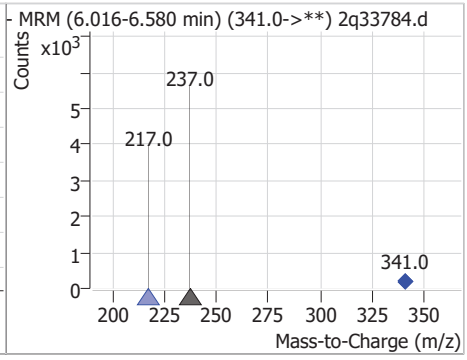




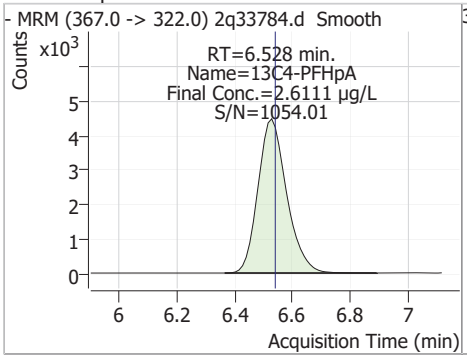
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	62.33	6.19	-0.01	193654	341.0 -> 217.0	70.2	35.6	106.9

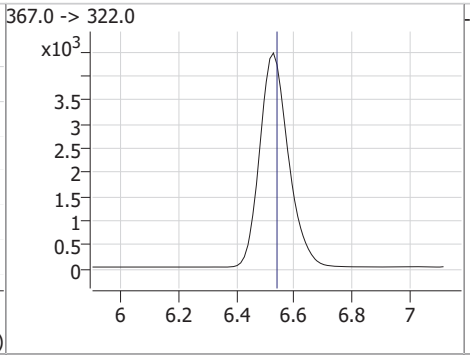


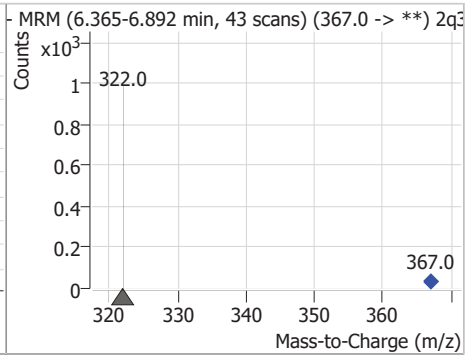




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.61	6.53	-0.01	30516				







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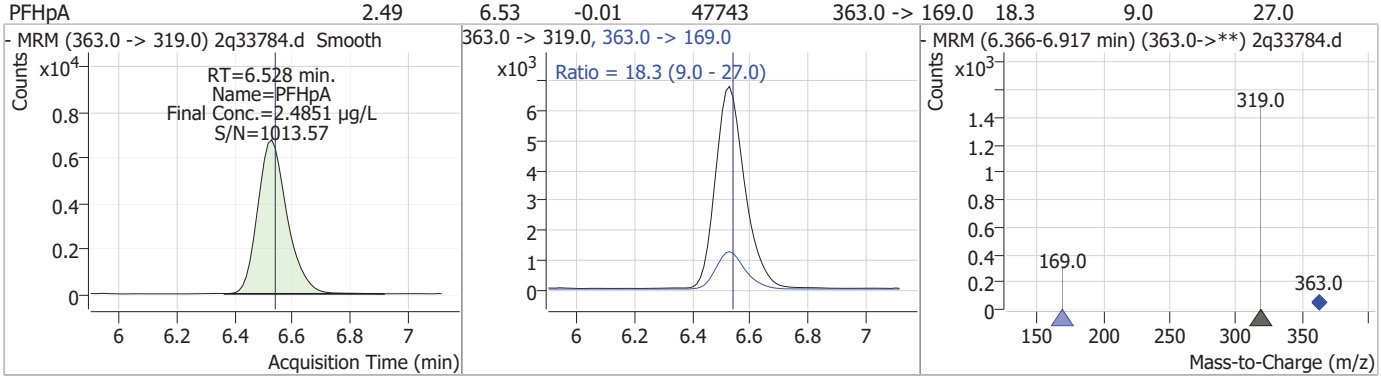
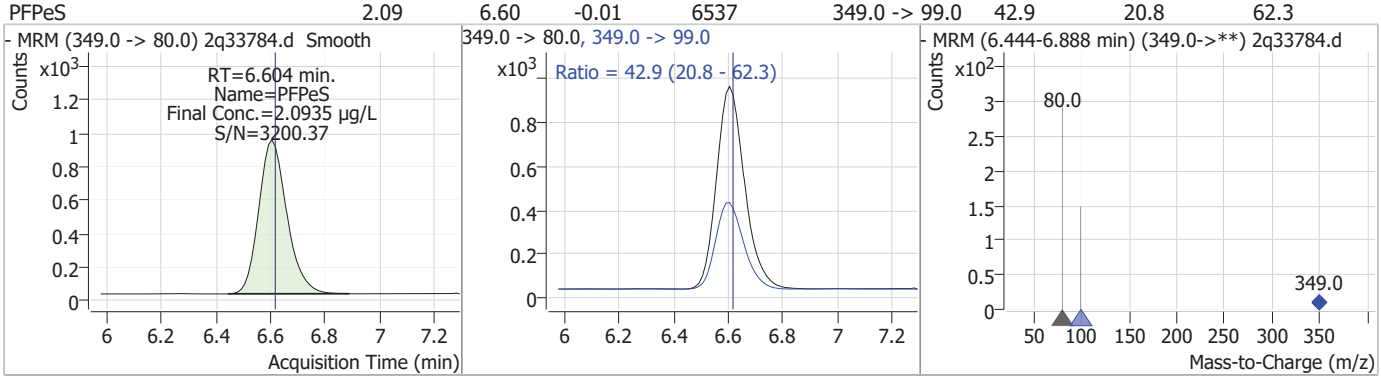
Perfluorinated Compounds by LC/MS/MS

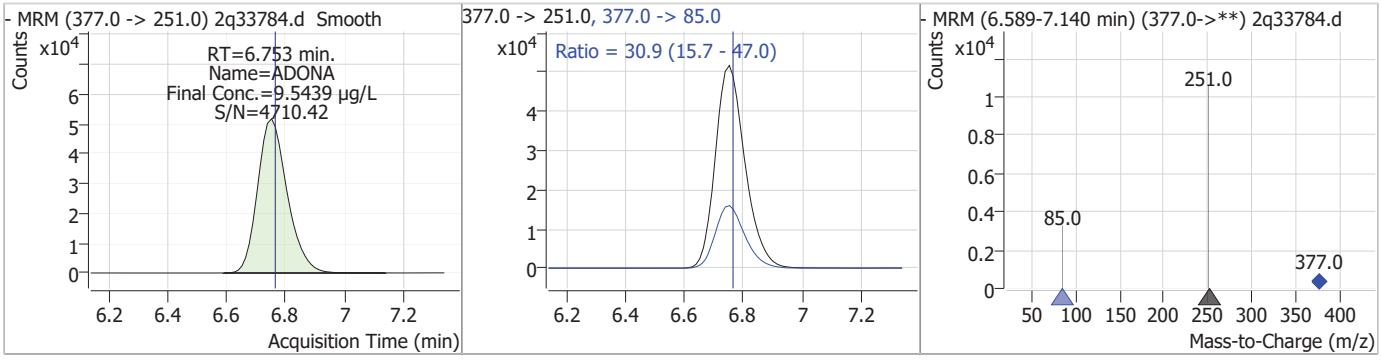
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.49	6.53	-0.01	47743	363.0 -> 169.0	18.3	9.0	27.0



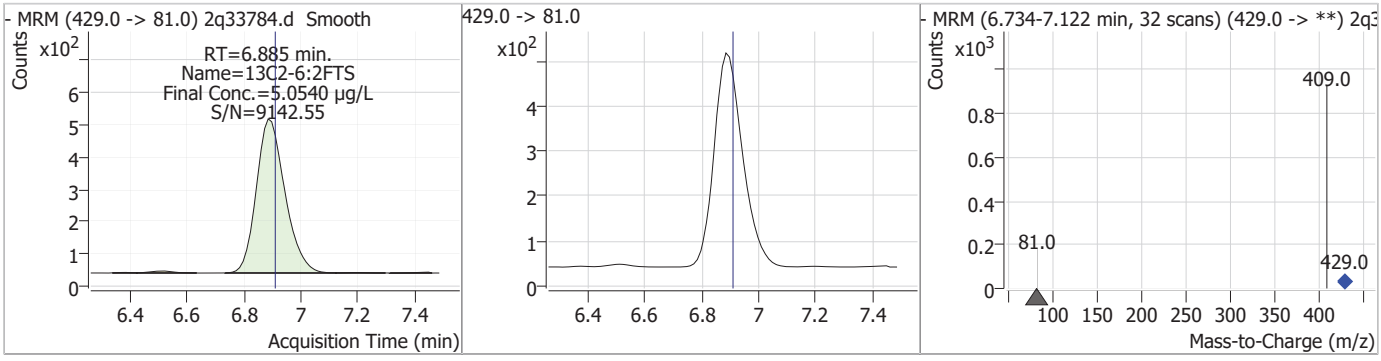
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.09	6.60	-0.01	6537	349.0 -> 99.0	42.9	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	9.54	6.75	-0.01	361178	377.0 -> 85.0	30.9	15.7	47.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.05	6.88	-0.02	3306				



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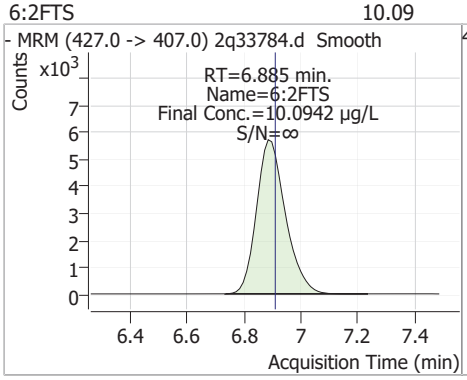
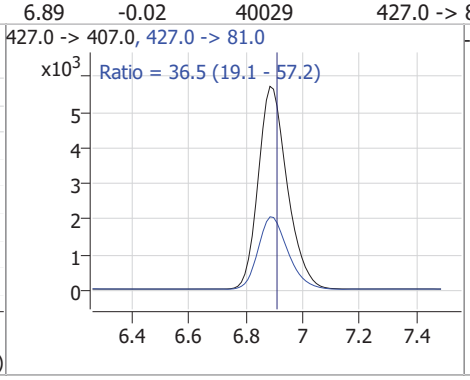
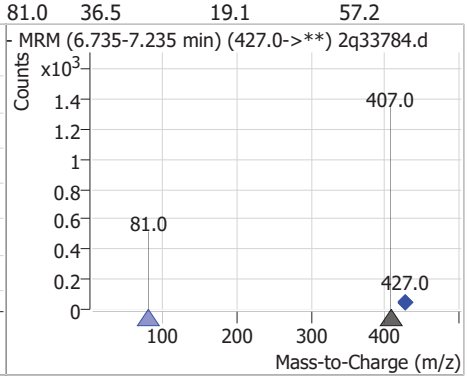
Perfluorinated Compounds by LC/MS/MS

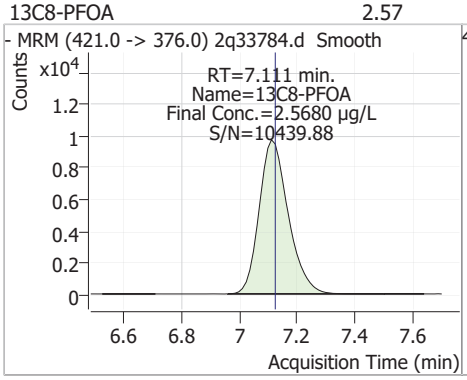
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	10.09	6.89	-0.02	40029	427.0 -> 81.0	36.5	19.1	57.2

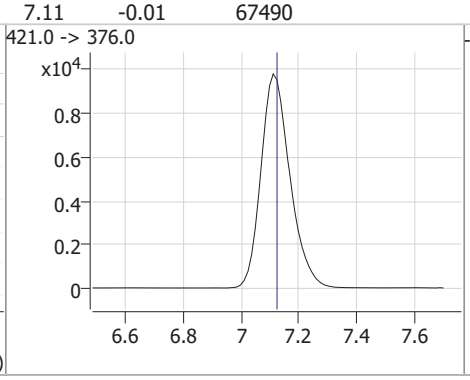


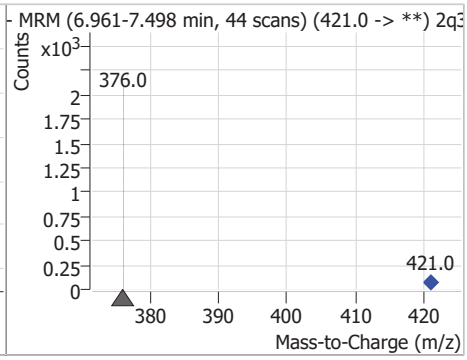




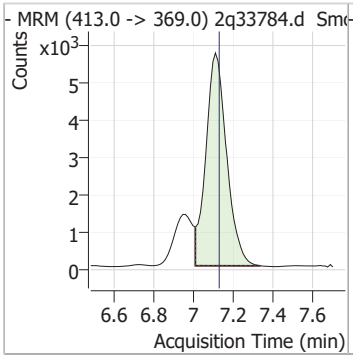
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.57	7.11	-0.01	67490				

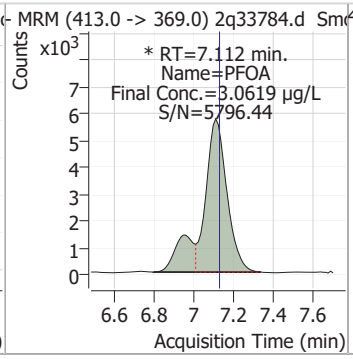


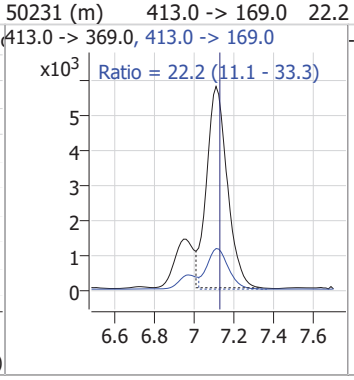


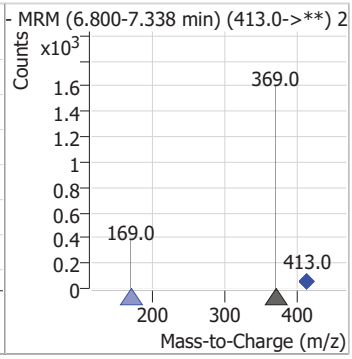


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	3.06	7.11	-0.01	50231 (m)	413.0 -> 169.0	22.2	11.1	33.3

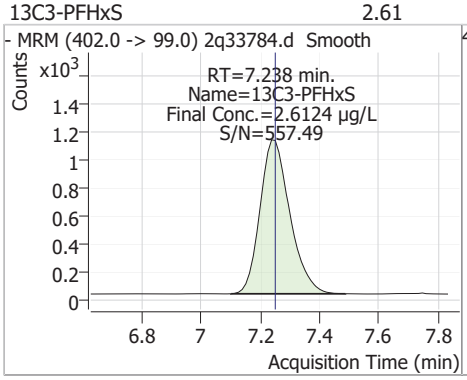


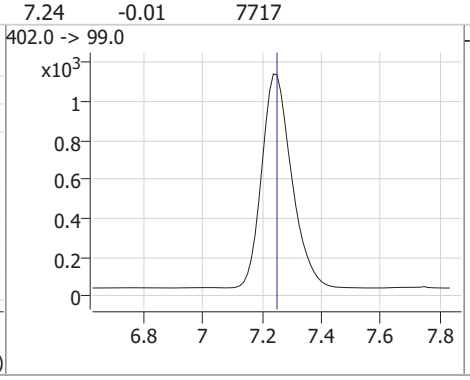


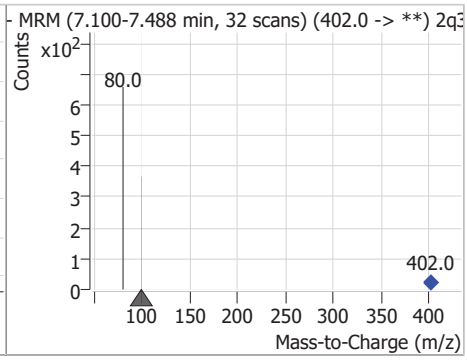




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.61	7.24	-0.01	7717				







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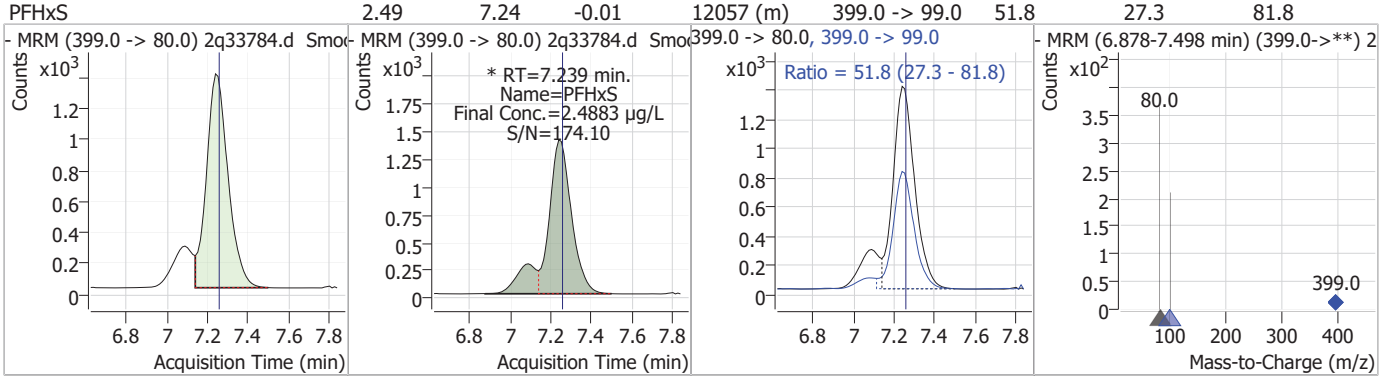
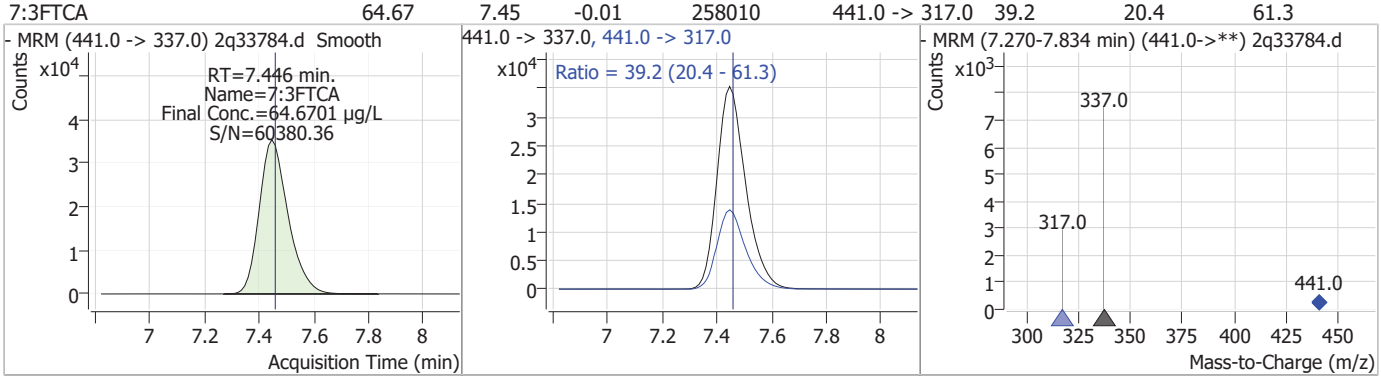
Perfluorinated Compounds by LC/MS/MS

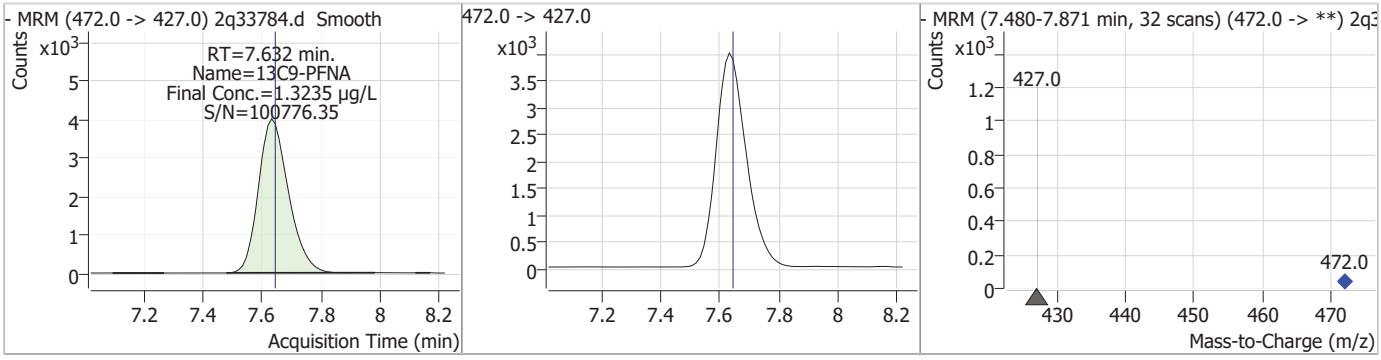
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.49	7.24	-0.01	12057 (m)	399.0 -> 99.0	51.8	27.3	81.8



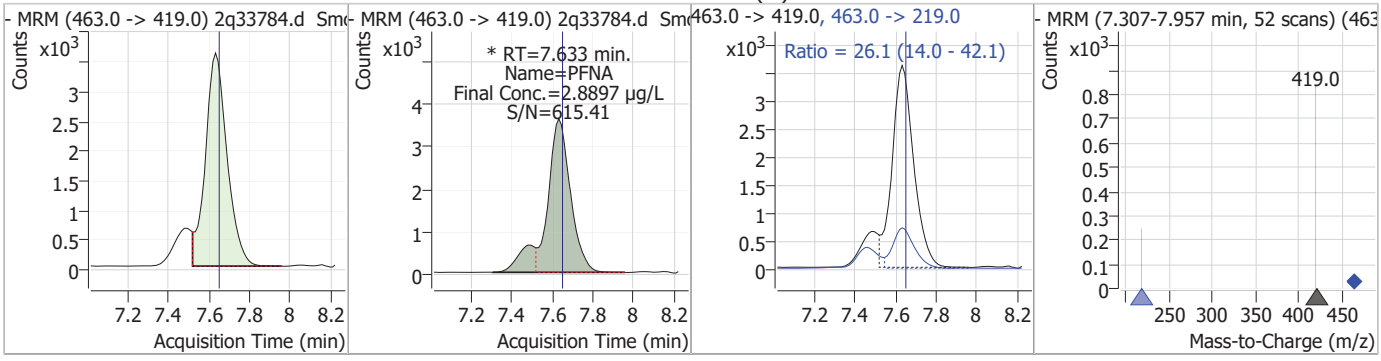
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	64.67	7.45	-0.01	258010	441.0 -> 317.0	39.2	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.32	7.63	-0.01	27948				

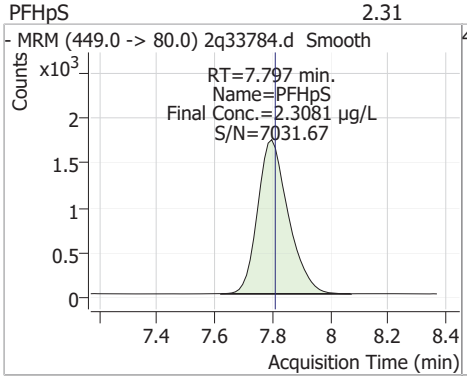


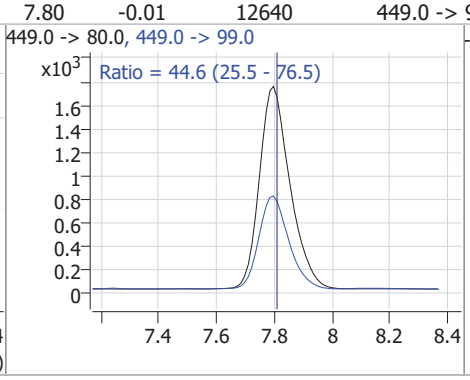
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.89	7.63	-0.01	30403 (m)	463.0 -> 219.0	26.1	14.0	42.1

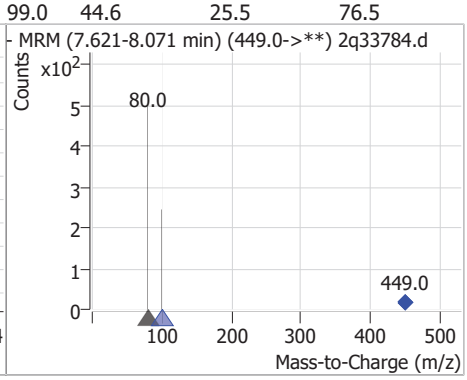


Perfluorinated Compounds by LC/MS/MS

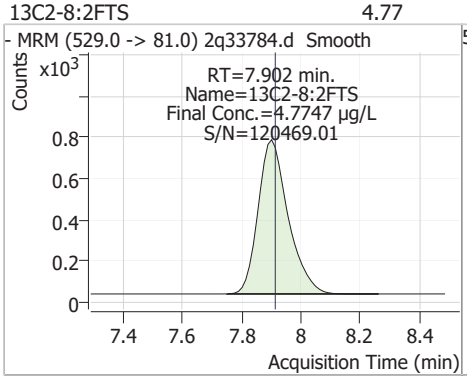
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.31	7.80	-0.01	12640	449.0 -> 99.0	44.6	25.5	76.5

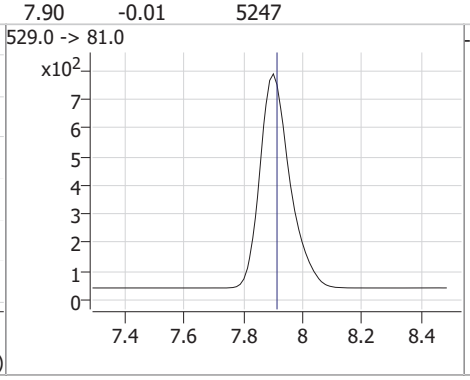


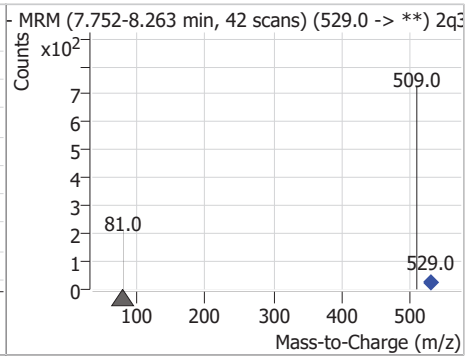




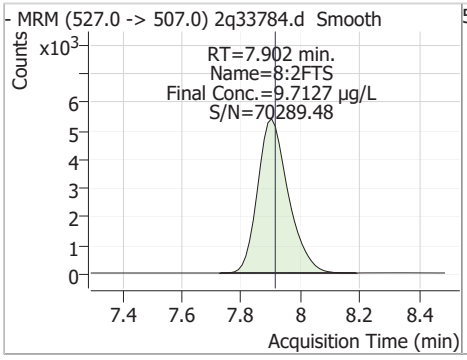
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.77	7.90	-0.01	5247				

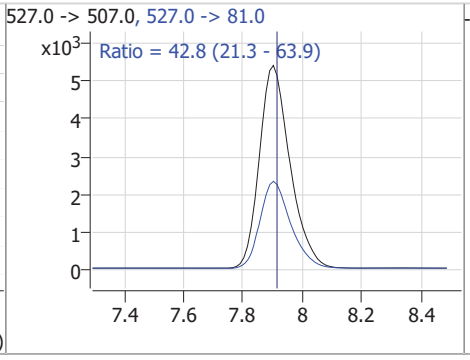


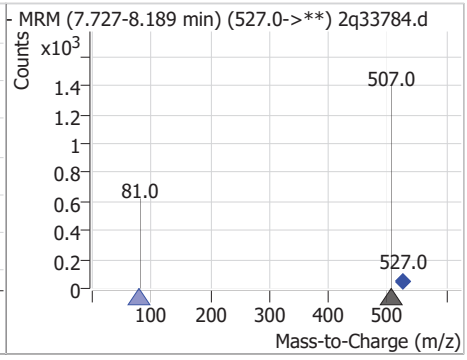




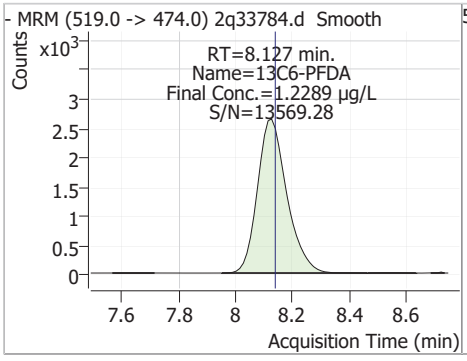
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	9.71	7.90	-0.01	38536	527.0 -> 81.0	42.8	21.3	63.9

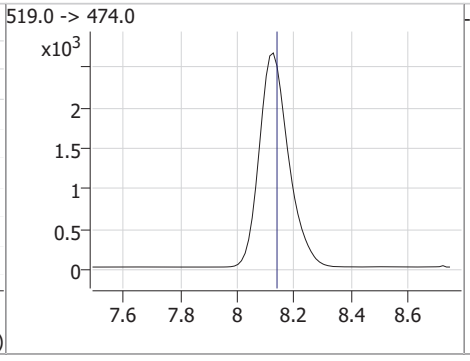


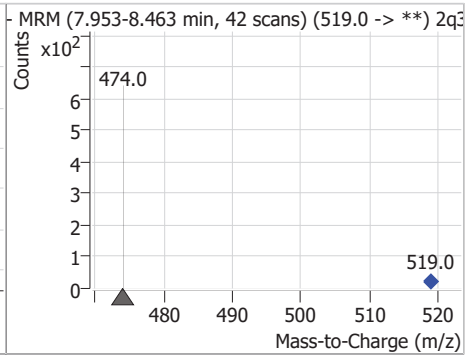




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.23	8.13	-0.01	18764				

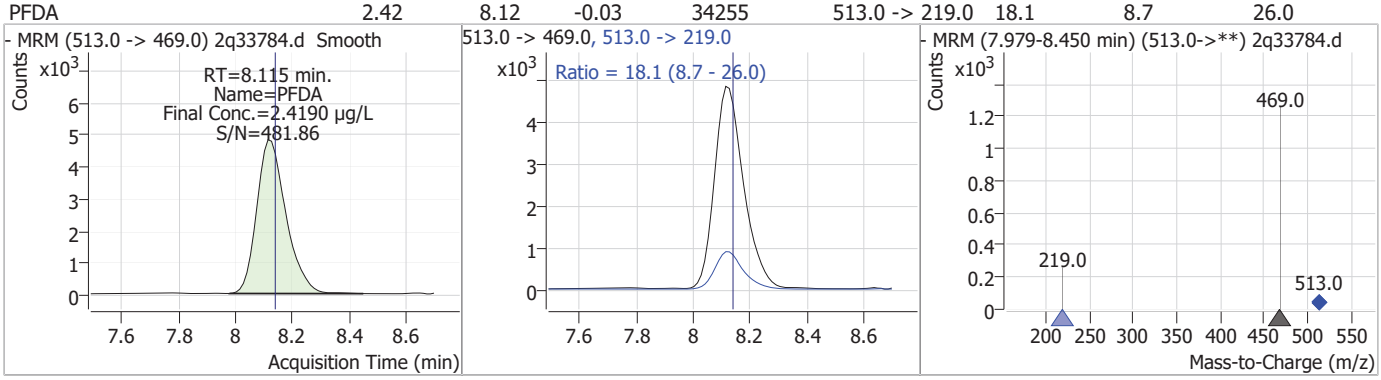




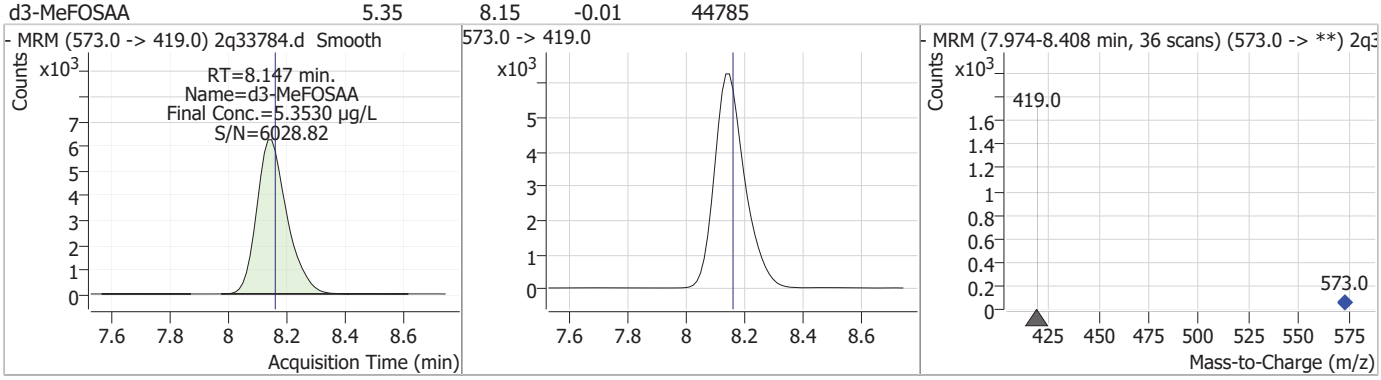


Perfluorinated Compounds by LC/MS/MS

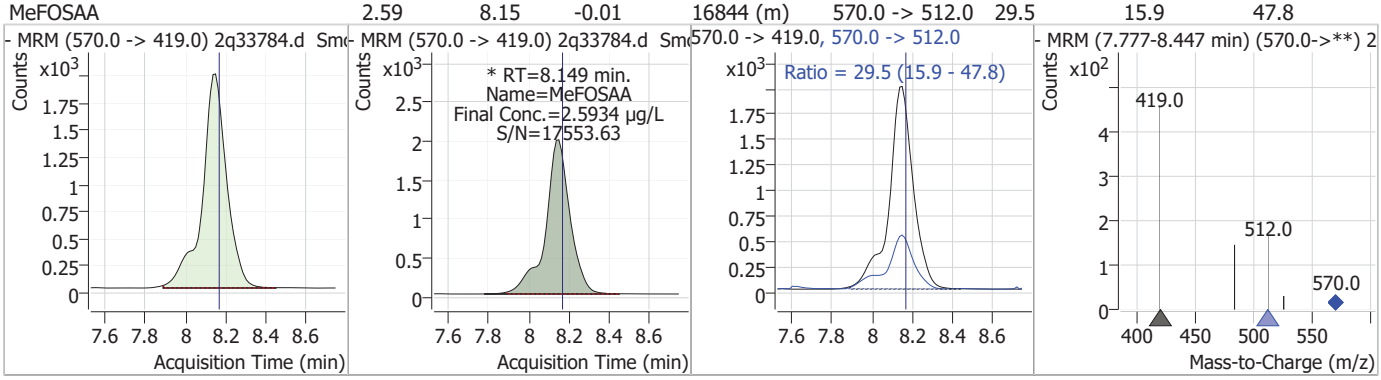
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.42	8.12	-0.03	34255	513.0 -> 219.0	18.1	8.7	26.0



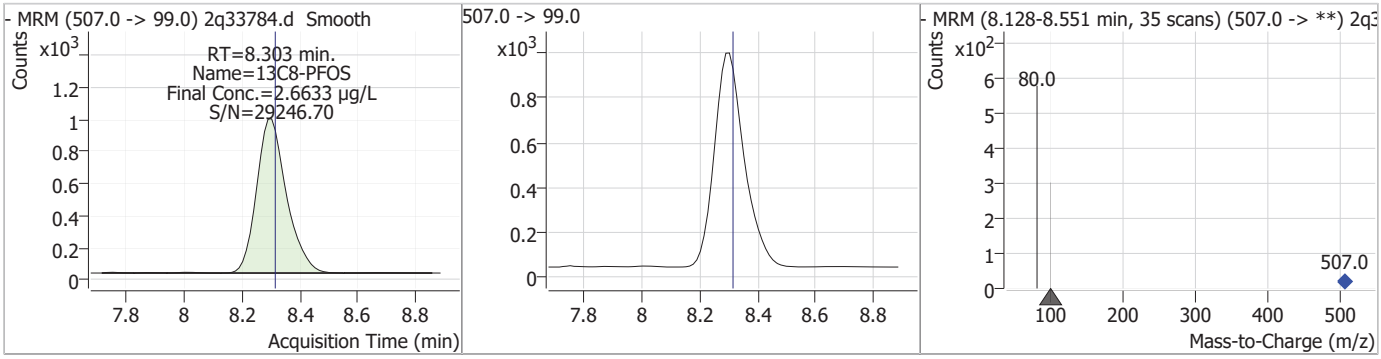
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.35	8.15	-0.01	44785				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.59	8.15	-0.01	16844 (m)	570.0 -> 512.0	29.5	15.9	47.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.66	8.30	-0.01	6858				



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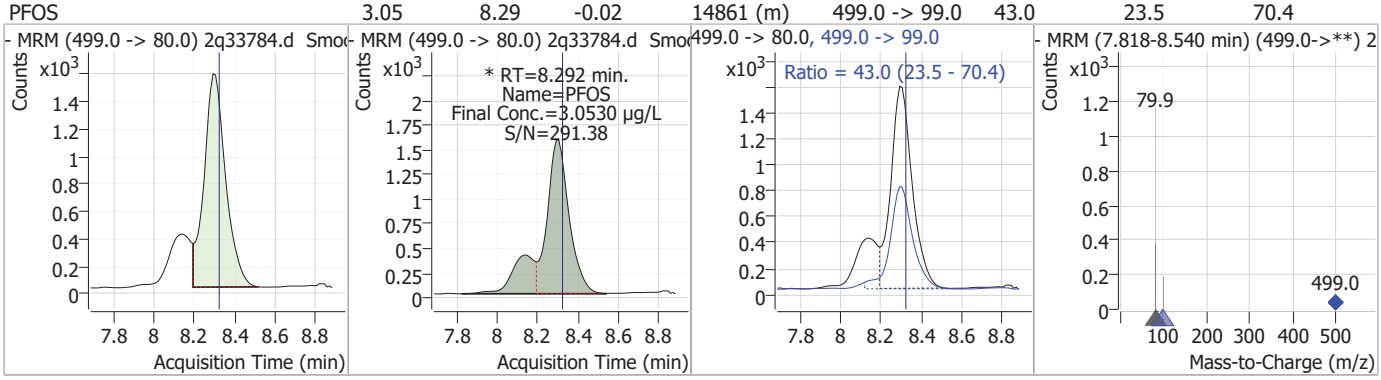
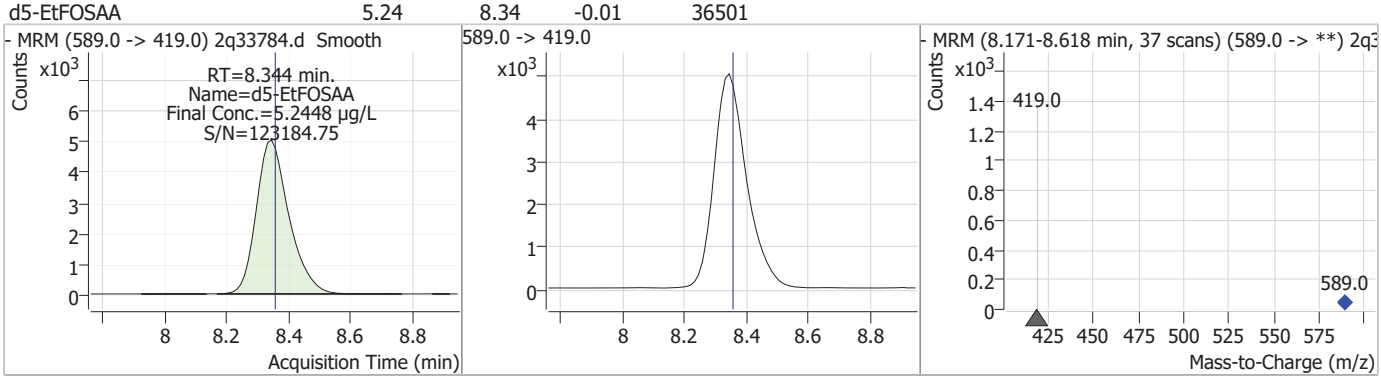
Perfluorinated Compounds by LC/MS/MS

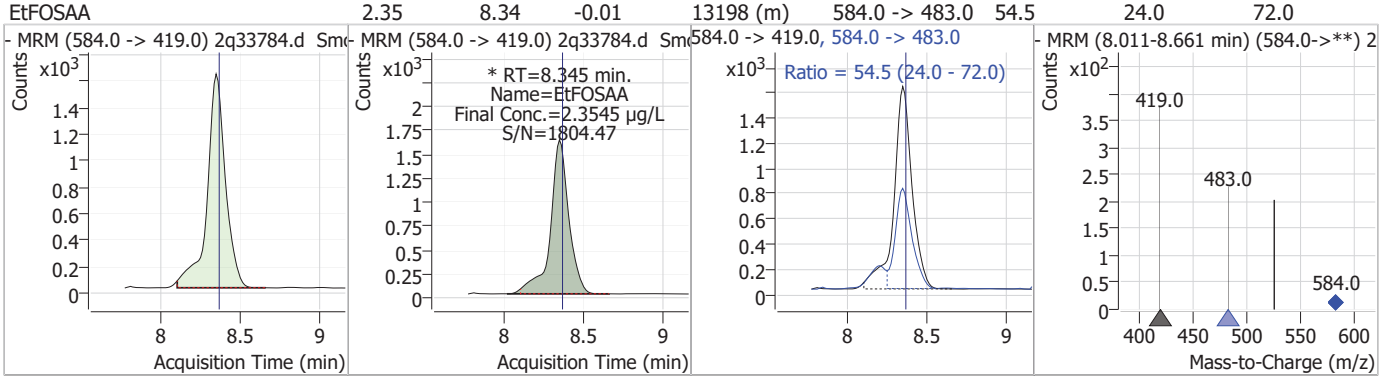
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	3.05	8.29	-0.02	14861 (m)	499.0 -> 99.0	43.0	23.5	70.4



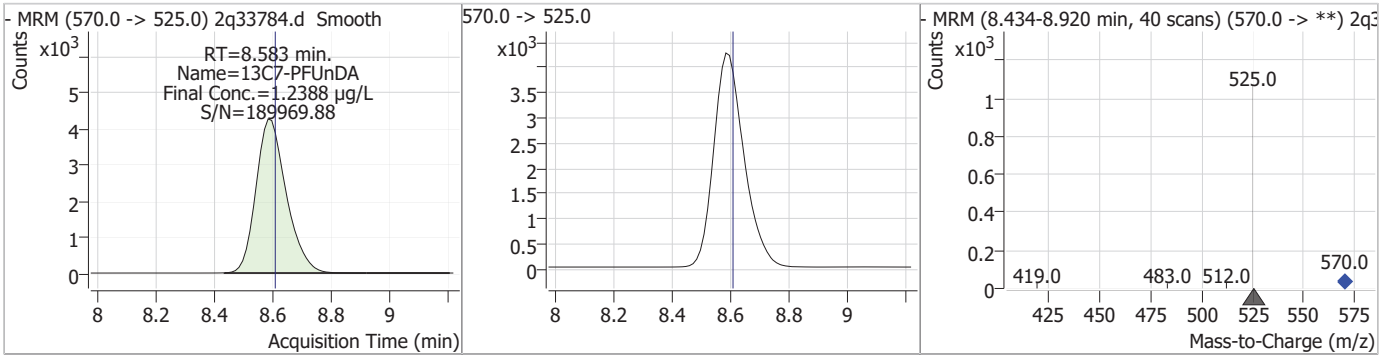
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.24	8.34	-0.01	36501				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.35	8.34	-0.01	13198 (m)	584.0 -> 483.0	54.5	24.0	72.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.24	8.58	-0.02	30550				



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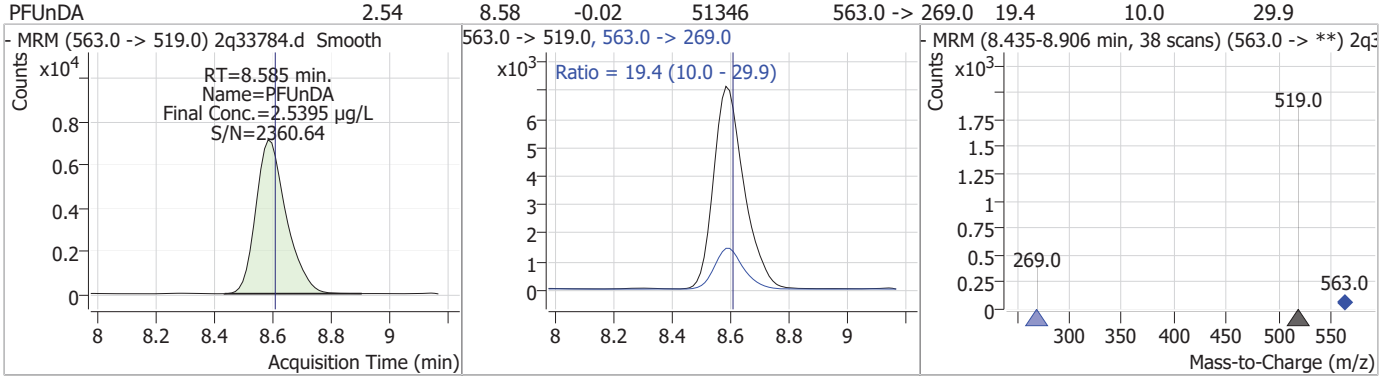
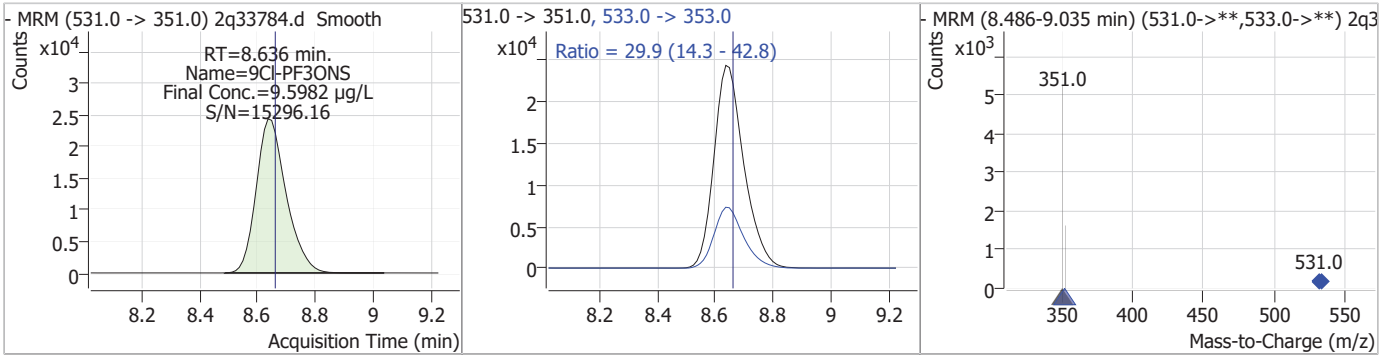
Perfluorinated Compounds by LC/MS/MS

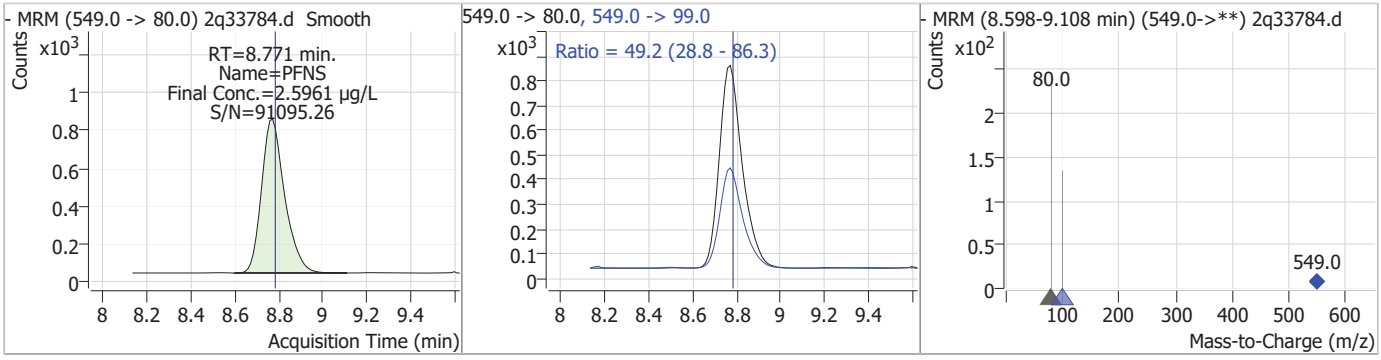
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.54	8.58	-0.02	51346	563.0 -> 269.0	19.4	10.0	29.9



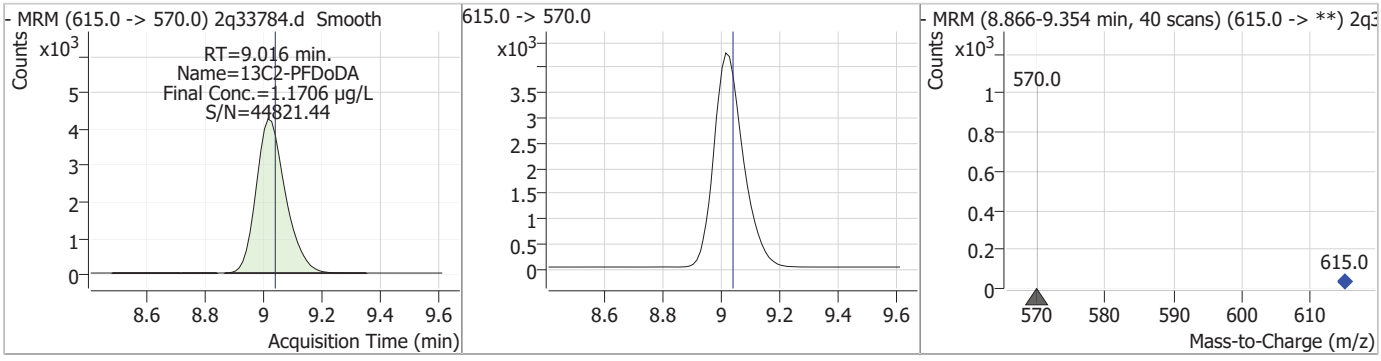
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.60	8.64	-0.02	173838	533.0 -> 353.0	29.9	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.60	8.77	-0.01	5938	549.0 -> 99.0	49.2	28.8	86.3

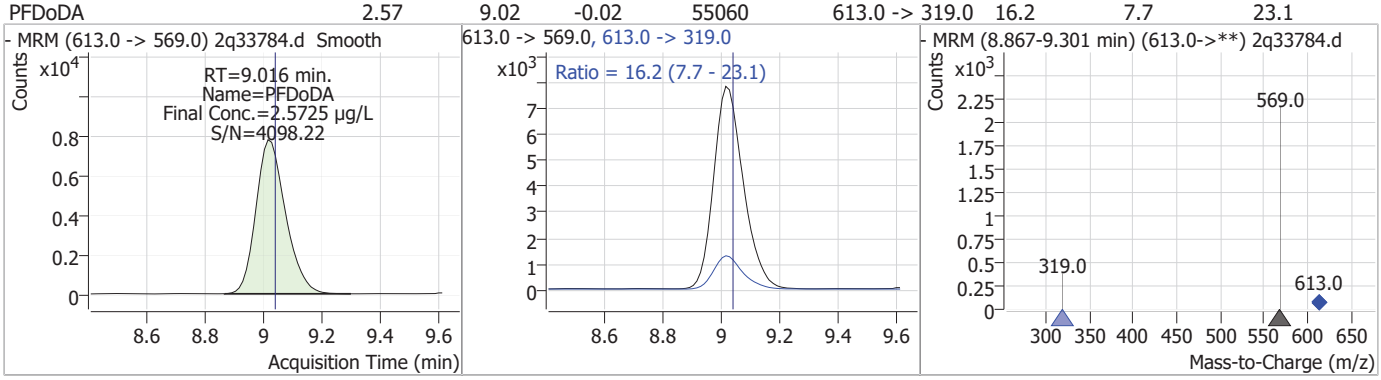


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.17	9.02	-0.02	29650				

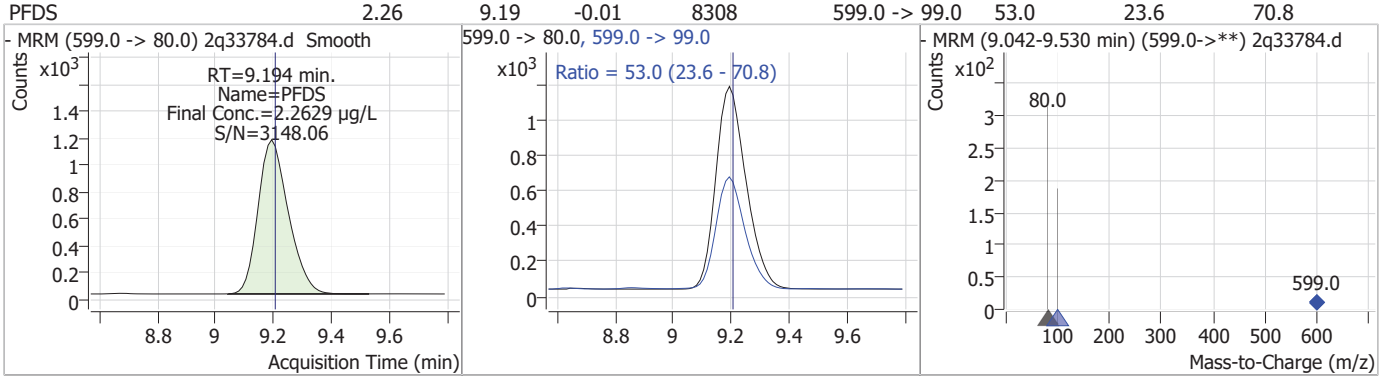


Perfluorinated Compounds by LC/MS/MS

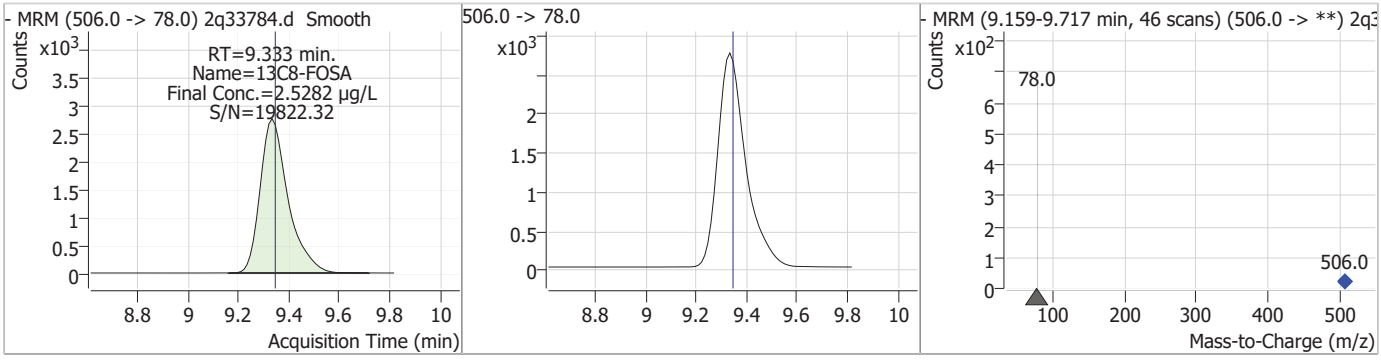
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.57	9.02	-0.02	55060	613.0 -> 319.0	16.2	7.7	23.1



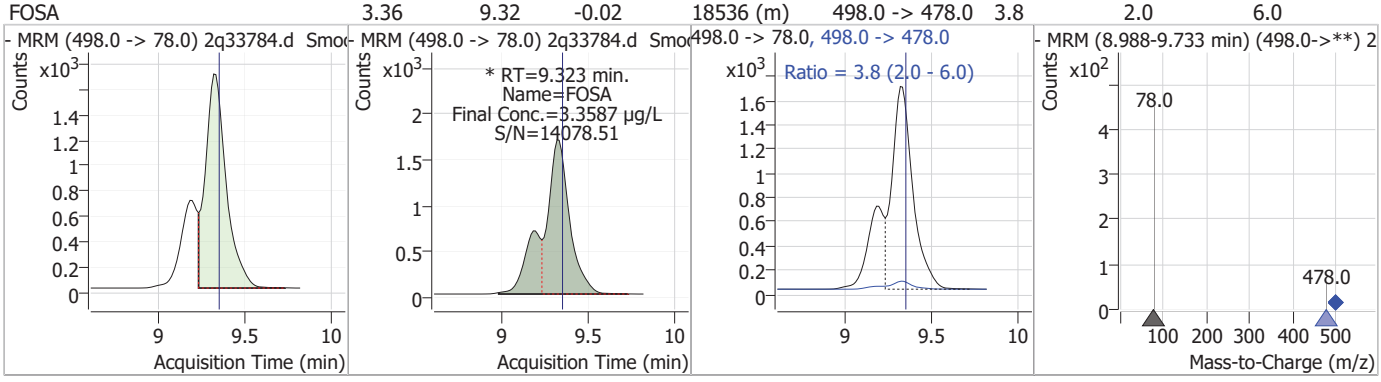
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.26	9.19	-0.01	8308	599.0 -> 99.0	53.0	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.53	9.33	-0.01	21055				

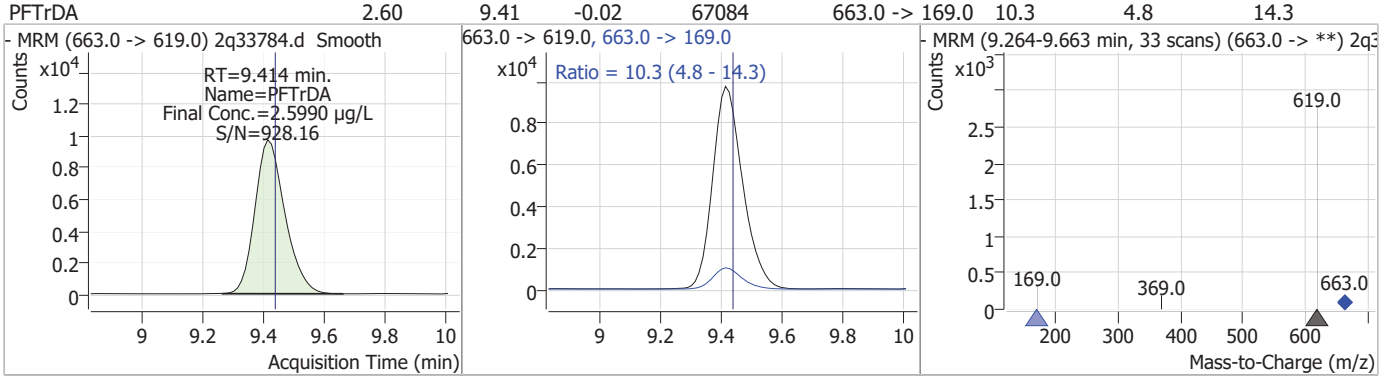


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	3.36	9.32	-0.02	18536 (m)	498.0 -> 478.0	3.8	2.0	6.0

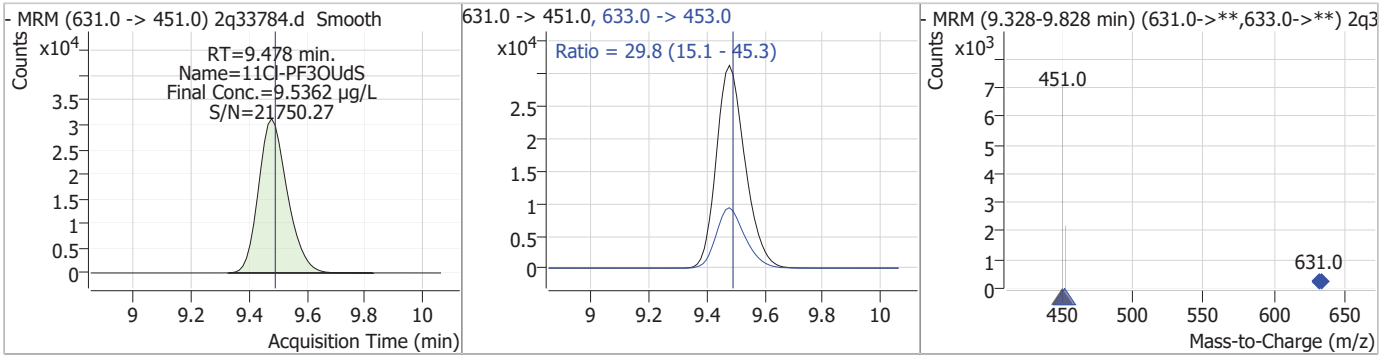


Perfluorinated Compounds by LC/MS/MS

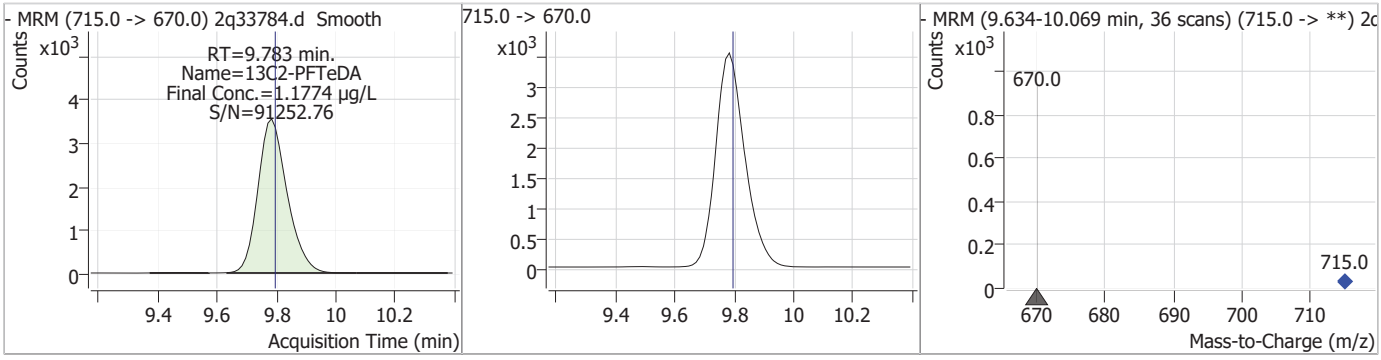
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.60	9.41	-0.02	67084	663.0 -> 169.0	10.3	4.8	14.3



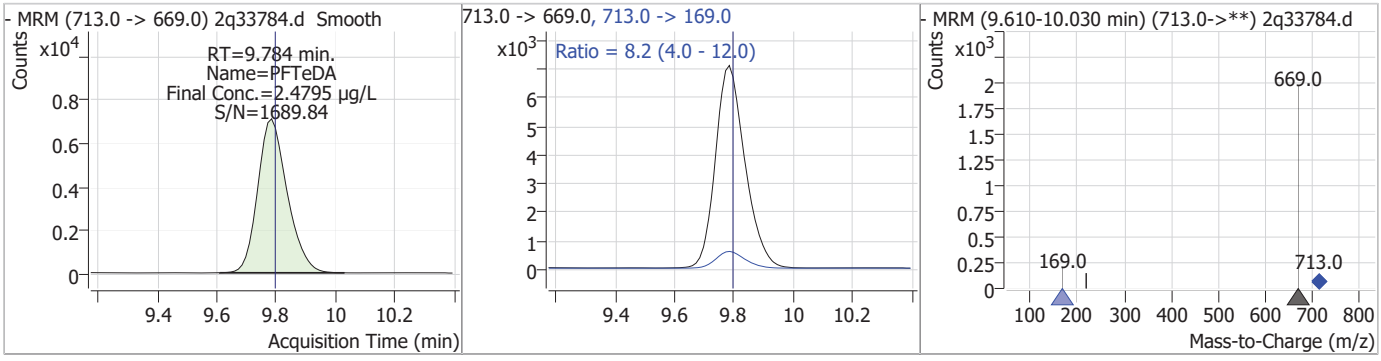
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.54	9.48	-0.01	214644	633.0 -> 453.0	29.8	15.1	45.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.18	9.78	-0.01	24015				

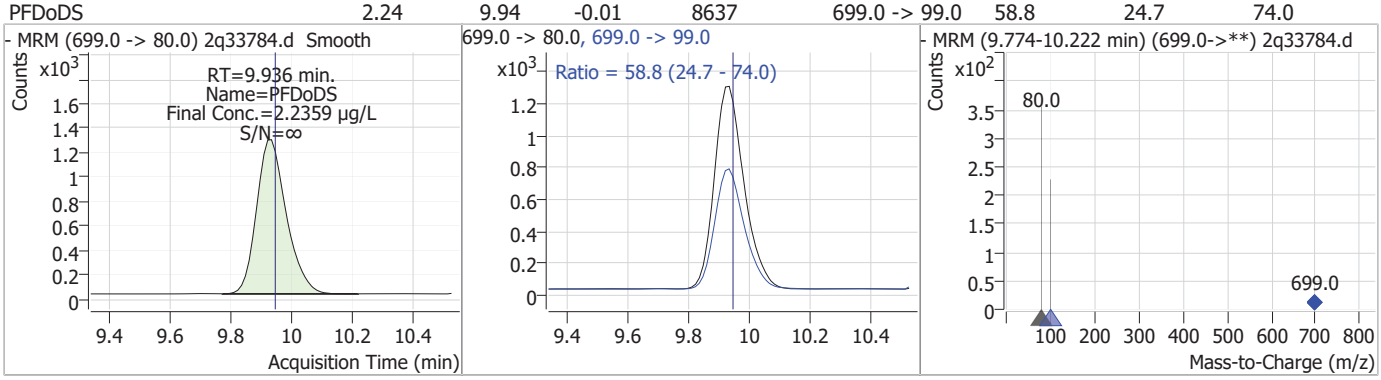


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.48	9.78	-0.01	48793	713.0 -> 169.0	8.2	4.0	12.0

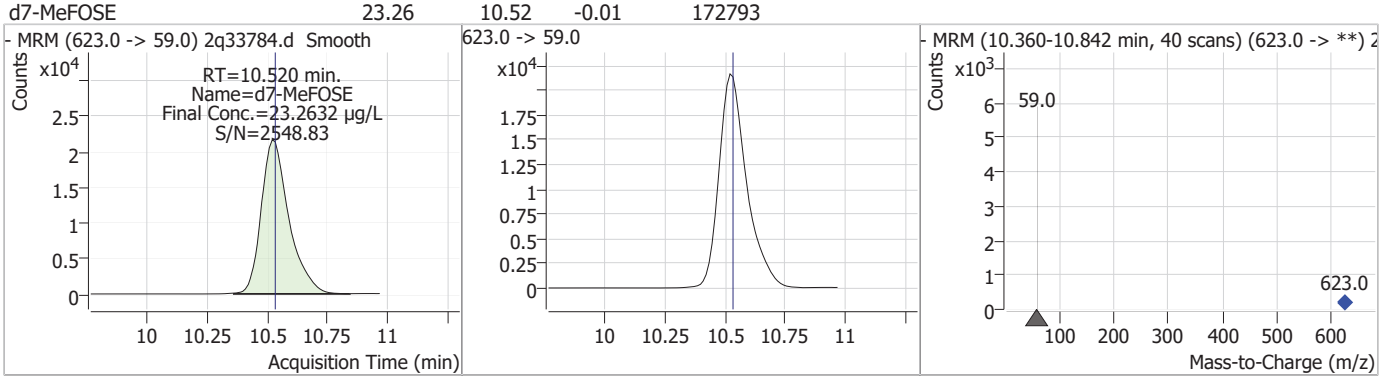


Perfluorinated Compounds by LC/MS/MS

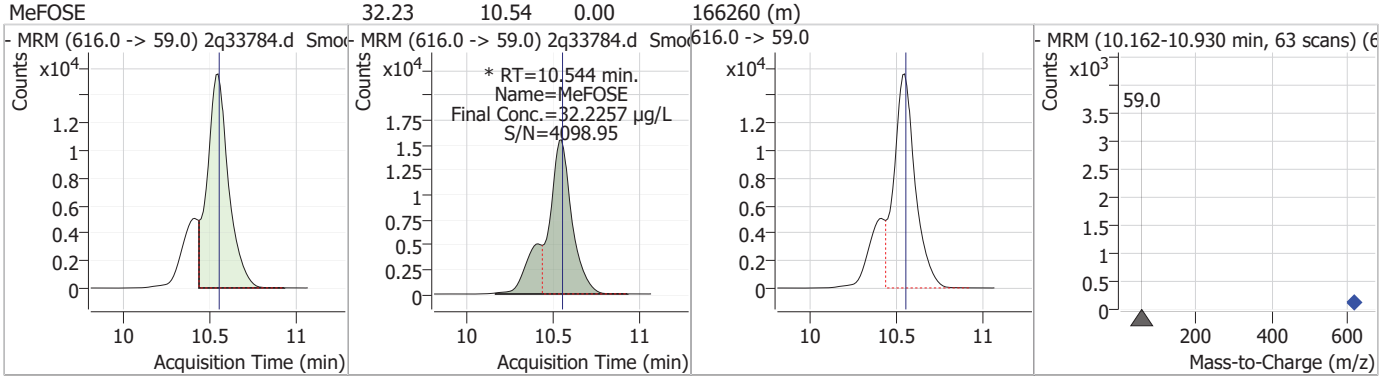
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.24	9.94	-0.01	8637	699.0 -> 99.0	58.8	24.7	74.0



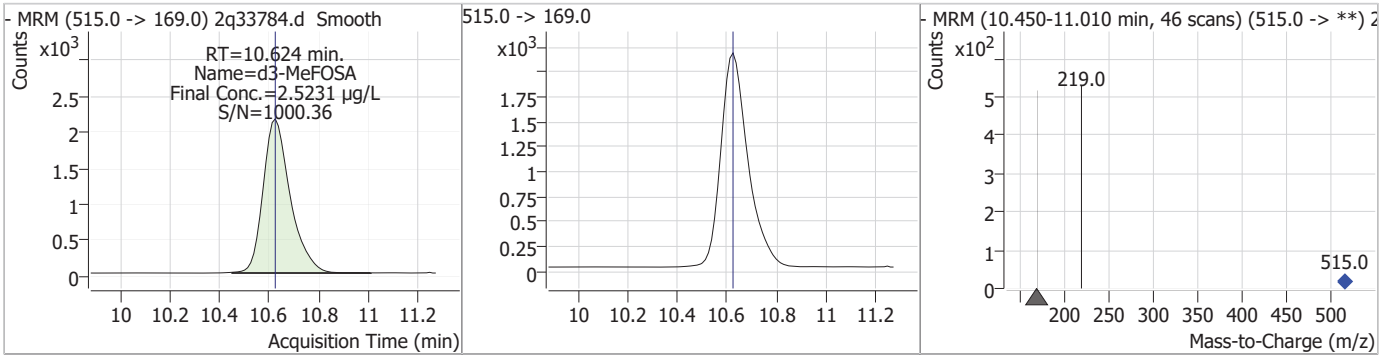
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.26	10.52	-0.01	172793				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	32.23	10.54	0.00	166260 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.52	10.62	0.00	16320				



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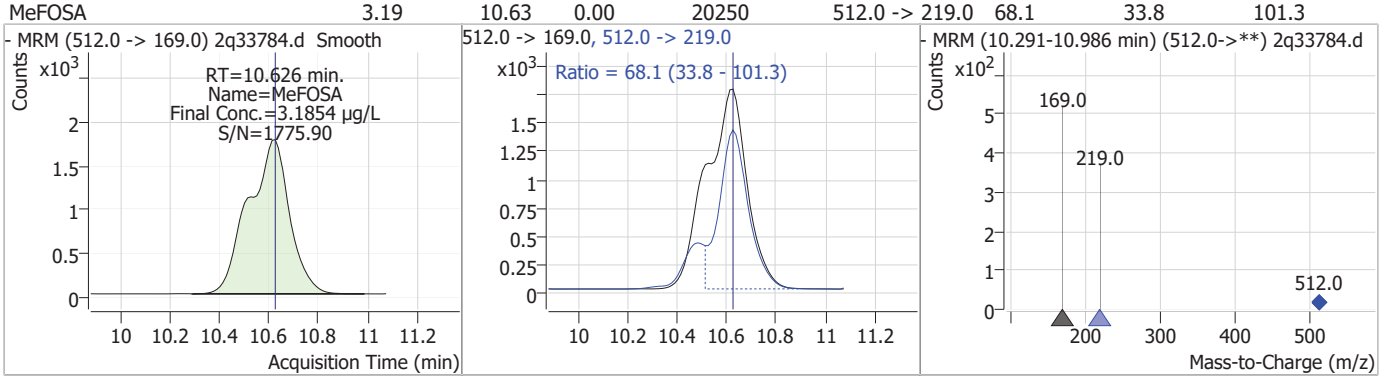
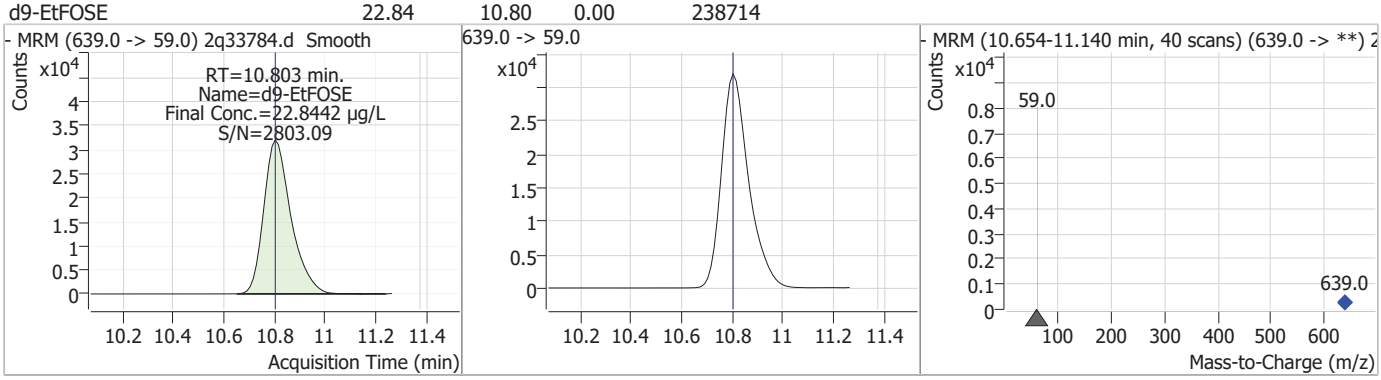
Perfluorinated Compounds by LC/MS/MS

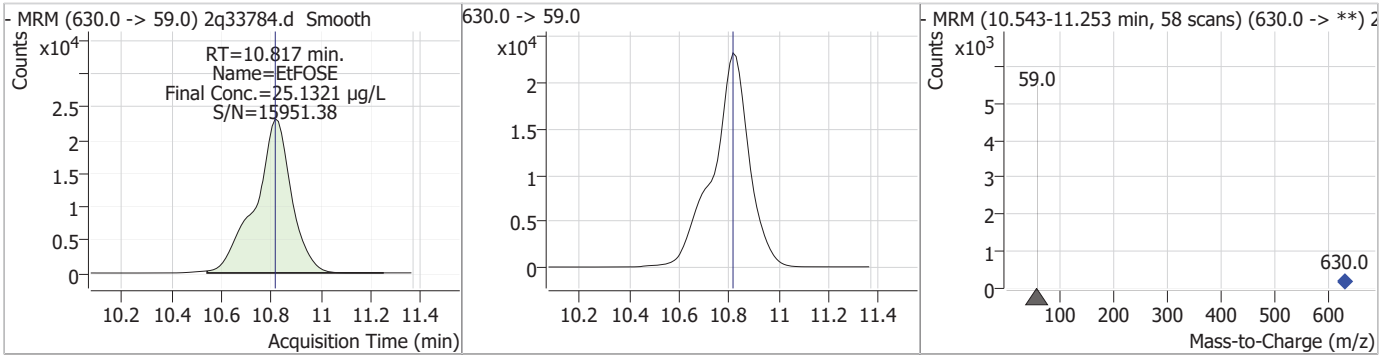
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	3.19	10.63	0.00	20250	512.0 -> 219.0	68.1	33.8	101.3



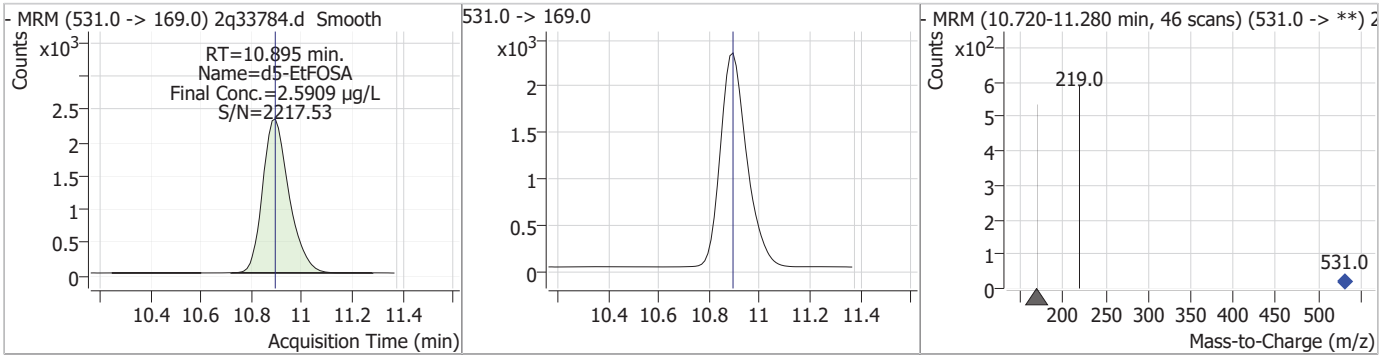
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.84	10.80	0.00	238714				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.13	10.82	0.00	234545				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.59	10.89	0.00	16830				



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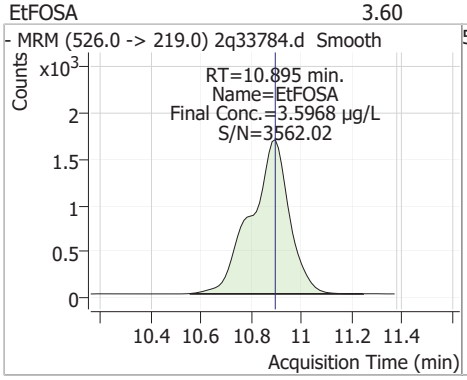
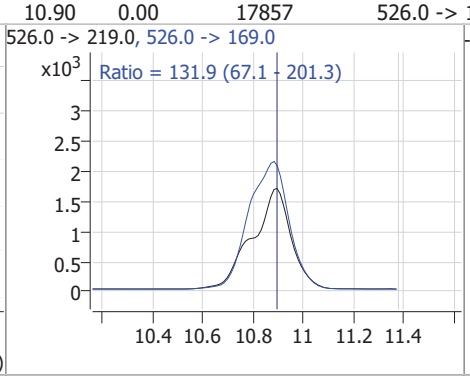
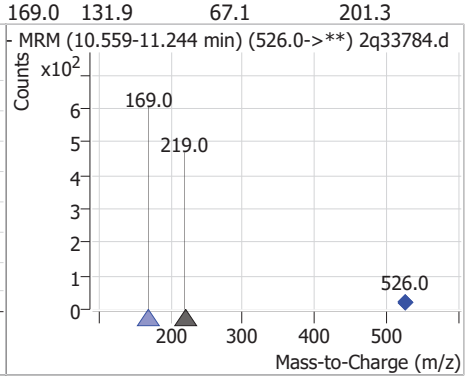
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	3.60	10.90	0.00	17857	526.0 -> 169.0	131.9	67.1	201.3







7.6.29

7

Manual Integration Approval Summary

Sample Number: T2Q345-CC344
Lab FileID: 2Q33784.D
Injection Time: 05/13/25 00:25
Method: EPA 1633
Analyst approved: 05/15/25 12:38 Olga Azarian
Supervisor approved: 05/15/25 12:46 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.11	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.24	Split peak
Perfluorononanoic acid	375-95-1		7.63	Split peak
MeFOSAA	2355-31-9		8.15	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.29	Split peak
EtFOSAA	2991-50-6		8.35	Poor instrument integration
PFOSA	754-91-6		9.32	Split peak
MeFOSE	24448-09-7		10.54	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/15/25 12:46

Perfluorinated Compounds by LC/MS/MS

Data File : 2q33798.d
Operator : victoril
Acq. Method : 1633.m
Acq. Date-Time : 5/13/2025 3:38:01 AM
Sample Name : ECC344-4
Vial : P1-A5
DA Method File : 050925_1633_T2Q344.quantmethod.xml
Batch Name : T2Q345.batch.bin
Sample Information : OP63380,T2Q345,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	3.250	217.0 -> 172.0	118757	10.00 µg/L	-0.012
M5-PFPeA	4.624	268.0 -> 223.0	65229	5.00 µg/L	-0.012
M5-PFHxA	5.732	318.0 -> 273.0	37067	2.50 µg/L	-0.012
M4-PFHpA	6.528	367.0 -> 322.0	31416	2.50 µg/L	-0.012
M8-PFOA	7.111	421.0 -> 376.0	69055	2.50 µg/L	-0.013
M9-PFNA	7.632	472.0 -> 427.0	26290	1.25 µg/L	-0.012
M6-PFDA	8.127	519.0 -> 474.0	18526	1.25 µg/L	-0.013
M7-PFUnDA	8.596	570.0 -> 525.0	30064	1.25 µg/L	-0.012
M2-PFDoDA	9.016	615.0 -> 570.0	31250	1.25 µg/L	-0.025
M2-PFTeDA	9.783	715.0 -> 670.0	23218	1.25 µg/L	-0.012
M8-FOSA	9.333	506.0 -> 78.0	20826	2.50 µg/L	-0.013
M3-PFBS	5.687	302.0 -> 99.0	6233	2.50 µg/L	-0.012
M3-PFHxS	7.250	402.0 -> 99.0	7439	2.50 µg/L	0.000
M8-PFOS	8.303	507.0 -> 99.0	7069	2.50 µg/L	-0.012
M2-4:2FTS	5.420	329.0 -> 81.0	1492	5.00 µg/L	-0.012
M2-6:2FTS	6.885	429.0 -> 81.0	3523	5.00 µg/L	-0.025
M2-8:2FTS	7.902	529.0 -> 81.0	5045	5.00 µg/L	-0.012
M3-MeFOSAA	8.147	573.0 -> 419.0	43949	5.00 µg/L	-0.012
M3-HFPO-DA	6.062	287.0 -> 169.0	25871	10.00 µg/L	-0.012
M5-EtFOSAA	8.344	589.0 -> 419.0	38343	5.00 µg/L	-0.012
M7-MeFOSE	10.520	623.0 -> 59.0	170633	25.00 µg/L	-0.012
M9-EtFOSE	10.803	639.0 -> 59.0	237553	25.00 µg/L	0.000
M5-EtFOSA	10.895	531.0 -> 169.0	16464	2.50 µg/L	0.000
M3-MeFOSA	10.624	515.0 -> 169.0	16509	2.50 µg/L	0.000
13C4-PFOS	8.304	503.0 -> 80.0	12434	2.50 µg/L	-0.012
13C3-PFBA	3.253	216.0 -> 172.0	50022	5.00 µg/L	-0.012
18O2-PFHxS	7.238	403.0 -> 84.0	8044	2.50 µg/L	-0.025
13C4-PFOA	7.124	417.0 -> 372.0	68183	2.50 µg/L	0.000
13C2-PFDA	8.127	515.0 -> 470.0	19071	1.25 µg/L	-0.013
13C5-PFNA	7.632	468.0 -> 423.0	25461	1.25 µg/L	-0.012
13C2-PFHxA	5.733	315.0 -> 270.0	34218	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.420	329.0 -> 81.0	1492	5.40 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.1%	
13C2-6:2FTS	6.885	429.0 -> 81.0	3523	5.74 µg/L	-0.025
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 114.8%	
13C2-8:2FTS	7.902	529.0 -> 81.0	5045	4.89 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.8%	
13C2-PFDoDA	9.016	615.0 -> 570.0	31250	1.20 µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.3%	
13C2-PFTeDA	9.783	715.0 -> 670.0	23218	1.11 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.9%	
13C3-PFBS	5.687	302.0 -> 99.0	6233	2.79 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 111.5%	
13C3-PFHxS	7.250	402.0 -> 99.0	7439	2.68 µg/L	0.000

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc. Units		Dev(Min)
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.3%		
13C4-PFBA	3.250	217.0 -> 172.0	118757	10.11 µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.1%		
13C4-PFHpA	6.528	367.0 -> 322.0	31416	2.64 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.6%		
13C5-PFHxA	5.732	318.0 -> 273.0	37067	2.46 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.6%		
13C5-PFPeA	4.624	268.0 -> 223.0	65229	5.05 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.1%		
13C6-PFDA	8.127	519.0 -> 474.0	18526	1.18 µg/L		-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.7%		
13C7-PFUnDA	8.596	570.0 -> 525.0	30064	1.19 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.2%		
13C8-FOSA	9.333	506.0 -> 78.0	20826	2.45 µg/L		-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.9%		
13C8-PFOA	7.111	421.0 -> 376.0	69055	2.52 µg/L		-0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.8%		
13C8-PFOS	8.303	507.0 -> 99.0	7069	2.69 µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.4%		
13C9-PFNA	7.632	472.0 -> 427.0	26290	1.19 µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.8%		
d3-MeFOSAA	8.147	573.0 -> 419.0	43949	5.14 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.8%		
13C3-HFPO-DA	6.062	287.0 -> 169.0	25871	10.84 µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 108.4%		
d3-MeFOSA	10.624	515.0 -> 169.0	16509	2.50 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.9%		
d5-EtFOSAA	8.344	589.0 -> 419.0	38343	5.39 µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.8%		
d7-MeFOSE	10.520	623.0 -> 59.0	170633	22.48 µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 89.9%		
d9-EtFOSE	10.803	639.0 -> 59.0	237553	22.24 µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 89.0%		
d5-EtFOSA	10.895	531.0 -> 169.0	16464	2.48 µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.2%		
Target Compounds						QValue
4:2FTS	5.421	327.0 -> 307.0	22187	9.95 µg/L		97
		327.0 -> 81.0	12284			
6:2FTS	6.898	427.0 -> 407.0	40534	9.59 µg/L		100
		427.0 -> 81.0	15472			
8:2FTS	7.902	527.0 -> 507.0	39490	10.35 µg/L		100
		527.0 -> 81.0	16819			
EtFOSAA	8.345	584.0 -> 419.0	15358	2.61 µg/L	m	99
		584.0 -> 483.0	7510			
FOSA	9.335	498.0 -> 78.0	18396	3.37 µg/L	m	100
		498.0 -> 478.0	736			
MeFOSAA	8.149	570.0 -> 419.0	17136	2.69 µg/L	m	97
		570.0 -> 512.0	5737			
PFBA	3.255	213.0 -> 169.0	31503	10.47 µg/L		100
PFBS	5.688	299.0 -> 80.0	16651	2.03 µg/L		96
		299.0 -> 99.0	6338			
PFDA	8.128	513.0 -> 469.0	36394	2.60 µg/L		97
		513.0 -> 219.0	6803			
PFDoDA	9.016	613.0 -> 569.0	56181	2.49 µg/L		97
		613.0 -> 319.0	9274			
PFDS	9.193	599.0 -> 80.0	8714	2.41 µg/L		99

Perfluorinated Compounds by LC/MS/MS

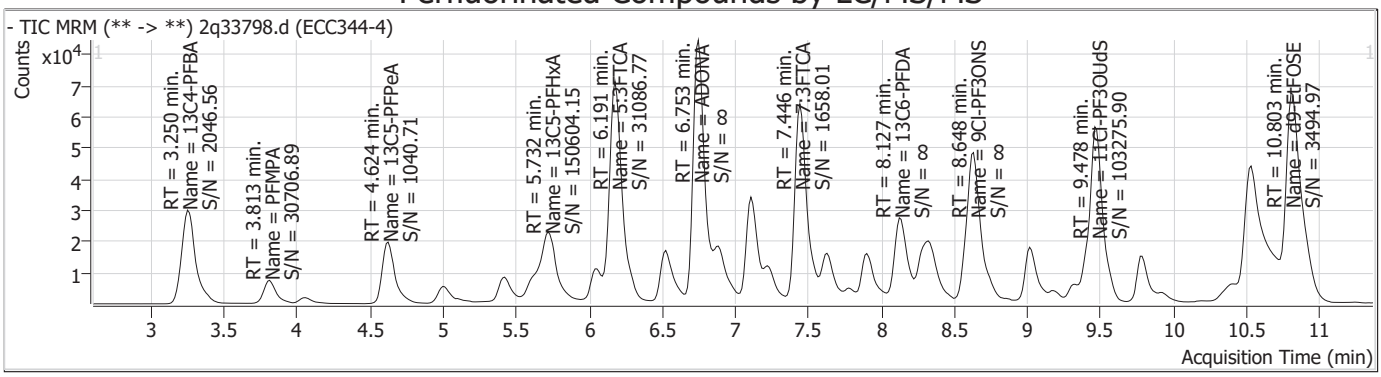
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
		599.0 -> 99.0	4168				
PFHpA	6.528	363.0 -> 319.0	48717	2.46	µg/L		99
		363.0 -> 169.0	8456				
PFHpS	7.797	449.0 -> 80.0	12008	2.27	µg/L		96
		449.0 -> 99.0	5753				
PFHxA	5.735	313.0 -> 269.0	31434	2.54	µg/L		100
		313.0 -> 119.0	977				
PFHxS	7.239	399.0 -> 80.0	11745	2.51	µg/L	m	97
		399.0 -> 99.0	6149				
PFNA	7.633	463.0 -> 419.0	30321	3.06	µg/L	m	95
		463.0 -> 219.0	7719				
PFNS	8.771	549.0 -> 80.0	5923	2.51	µg/L		87
		549.0 -> 99.0	2822				
PFOA	7.112	413.0 -> 369.0	52616	3.13	µg/L	m	97
		413.0 -> 169.0	11023				
PFOS	8.305	499.0 -> 80.0	15111	3.01	µg/L	m	98
		499.0 -> 99.0	6929				
PFPeA	4.627	263.0 -> 219.0	57361	4.96	µg/L		100
PFPeS	6.604	349.0 -> 80.0	6586	2.16	µg/L		99
		349.0 -> 99.0	2770				
PFTeDA	9.784	713.0 -> 669.0	50405	2.65	µg/L		100
		713.0 -> 169.0	4042				
PFTrDA	9.414	663.0 -> 619.0	67839	2.49	µg/L		99
		663.0 -> 169.0	6817				
PFUnDA	8.597	563.0 -> 519.0	52206	2.62	µg/L		98
		563.0 -> 269.0	9942				
11Cl-PF3OUdS	9.478	631.0 -> 451.0	213832	9.54	µg/L		99
		633.0 -> 453.0	63108				
9Cl-PF3ONS	8.648	531.0 -> 351.0	173412	9.62	µg/L		98
		533.0 -> 353.0	51025				
ADONA	6.753	377.0 -> 251.0	361114	9.59	µg/L		99
		377.0 -> 85.0	110692				
HFPO-DA	6.062	285.0 -> 169.0	26806	10.47	µg/L		97
		285.0 -> 185.0	2590				
3:3FTCA	4.065	241.0 -> 177.0	10994	12.11	µg/L		98
		241.0 -> 117.0	812				
5:3FTCA	6.191	341.0 -> 237.0	194786	63.72	µg/L		99
		341.0 -> 217.0	140098				
7:3FTCA	7.446	441.0 -> 337.0	261923	66.72	µg/L		99
		441.0 -> 317.0	105460				
EtFOSA	10.895	526.0 -> 219.0	18206	3.75	µg/L		93
		526.0 -> 169.0	22858				
EtFOSE	10.817	630.0 -> 59.0	235516	25.36	µg/L		100
MeFOSA	10.626	512.0 -> 169.0	20007	3.11	µg/L		96
		512.0 -> 219.0	14084				
MeFOSE	10.544	616.0 -> 59.0	163461	32.08	µg/L		100
PFDoDS	9.936	699.0 -> 80.0	8861	2.23	µg/L		98
		699.0 -> 99.0	4473				
NFDHA	5.626	295.0 -> 201.0	5412	5.27	µg/L		89
		201.0 -> 85.0	33658				
		295.0 -> 85.0	2092				
PFMBA	5.002	279.0 -> 85.0	33662	5.02	µg/L		100
PFMPA	3.813	229.0 -> 85.0	47833	5.01	µg/L		100
PFEESA	6.156	315.0 -> 135.0	74404	4.86	µg/L		100
		315.0 -> 69.0	8014				

 # = Qualifier out of range, m = manually integrated, + = Area summed

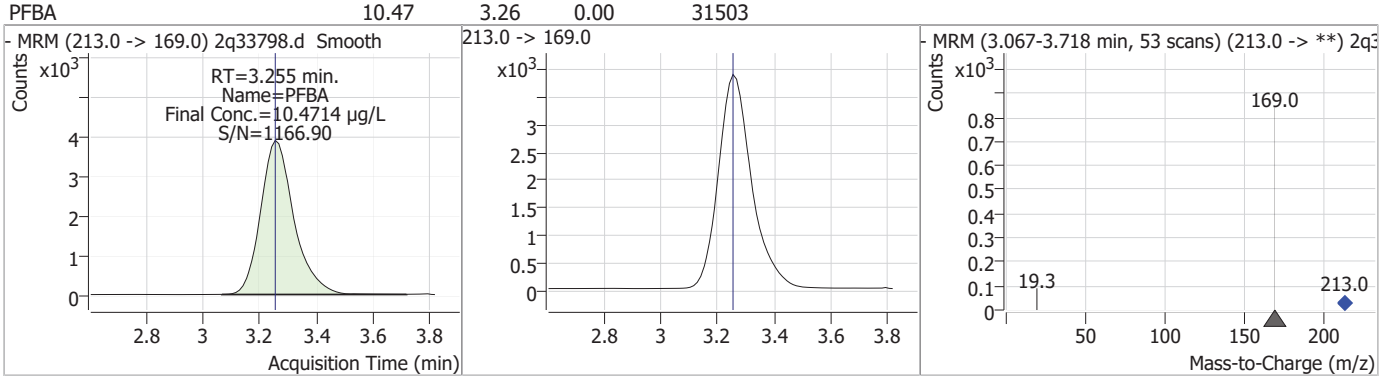
Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

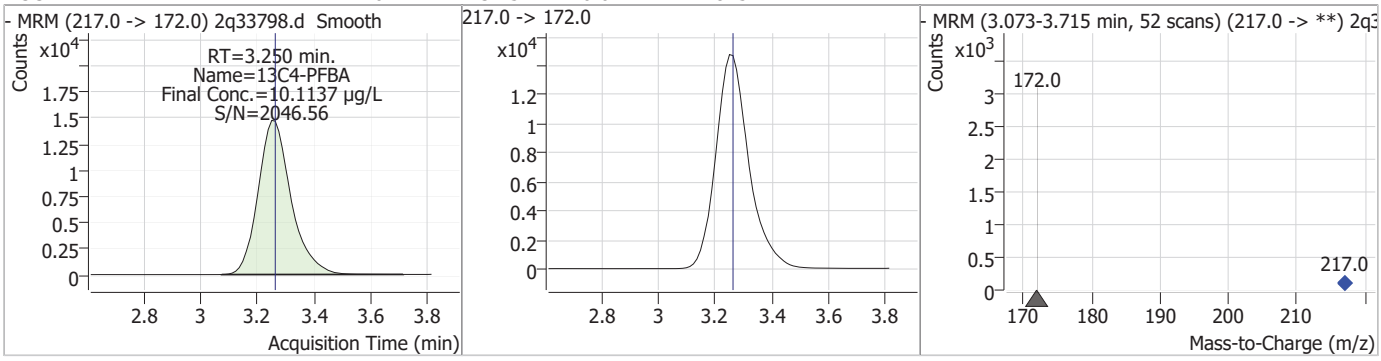
Perfluorinated Compounds by LC/MS/MS



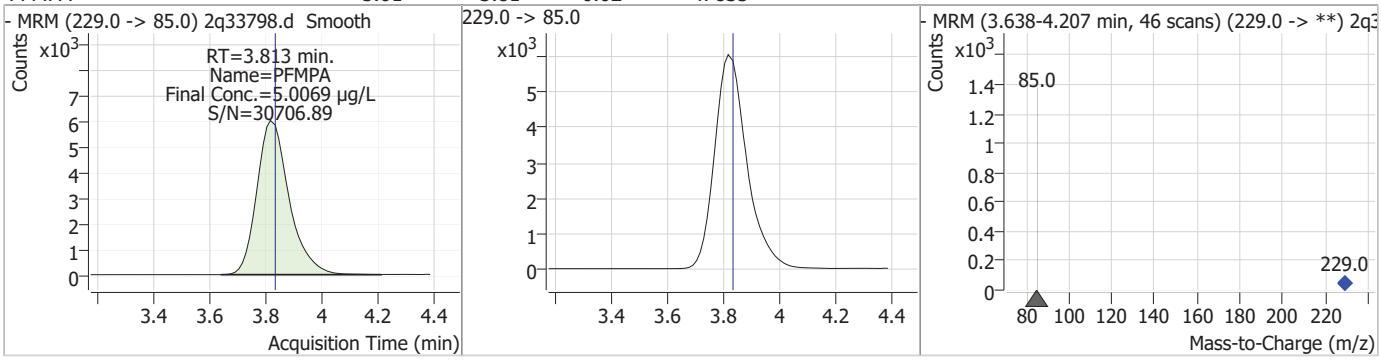
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.47	3.26	0.00	31503				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.11	3.25	-0.01	118757				

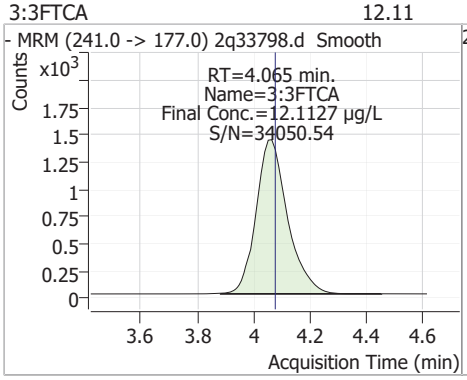


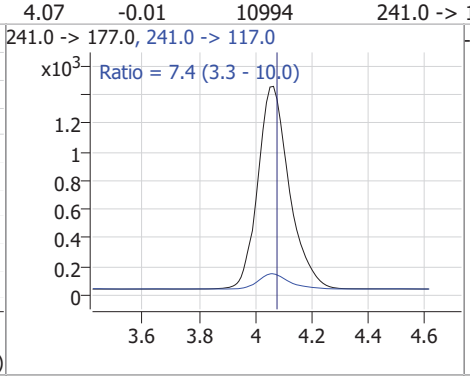
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.01	3.81	-0.02	47833				

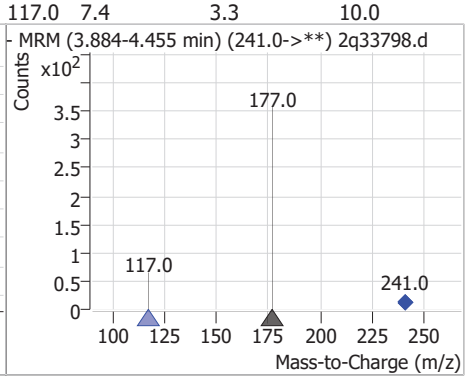


Perfluorinated Compounds by LC/MS/MS

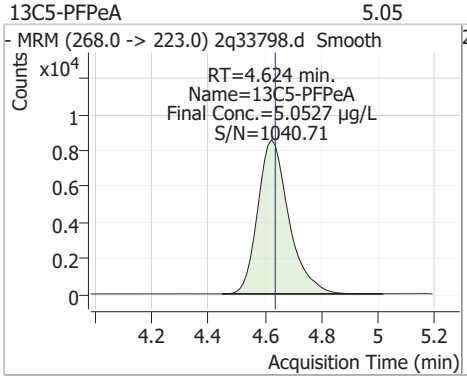
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.11	4.07	-0.01	10994	241.0 -> 117.0	7.4	3.3	10.0

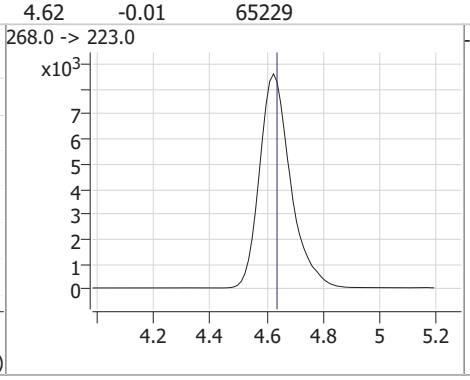


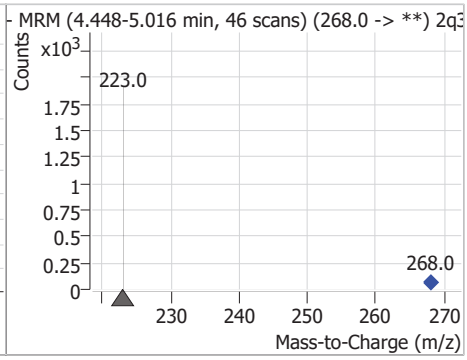




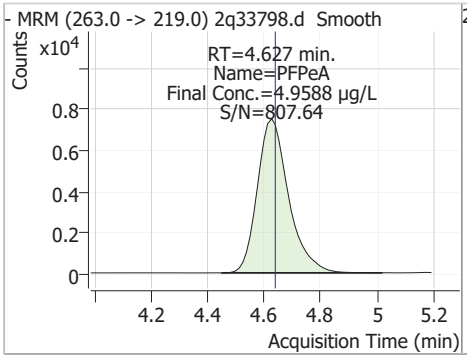
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.05	4.62	-0.01	65229				

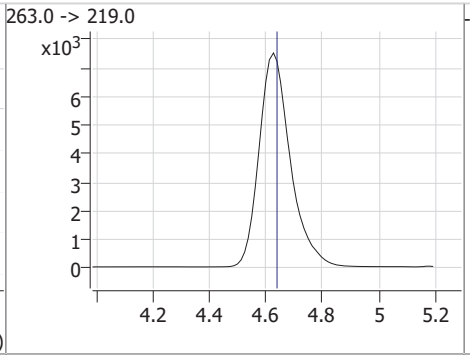


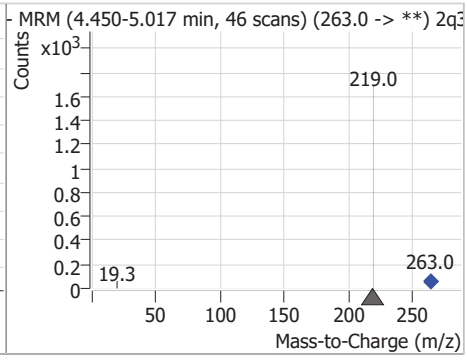




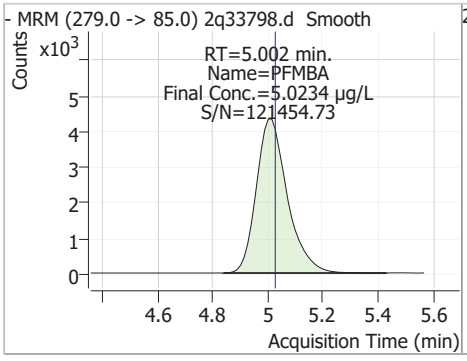
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	4.96	4.63	-0.01	57361				

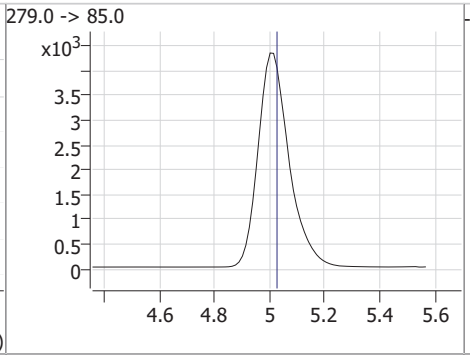


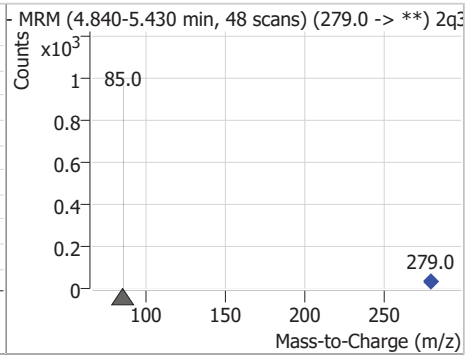




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.02	5.00	-0.02	33662				







7.6.30

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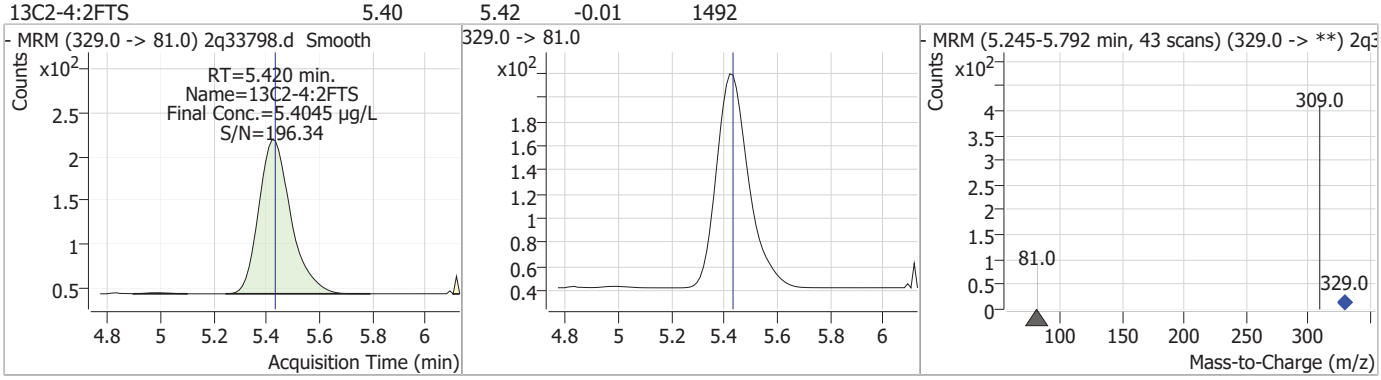
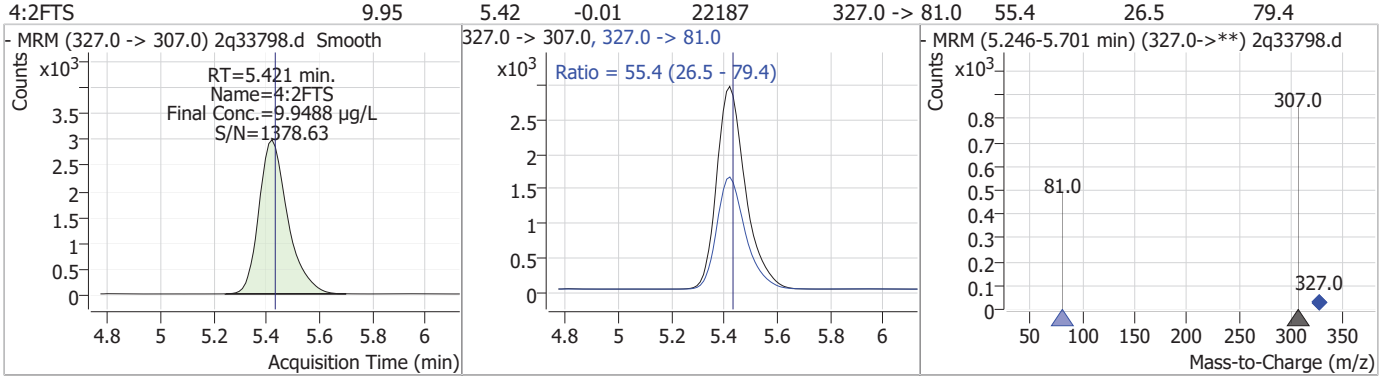
Perfluorinated Compounds by LC/MS/MS

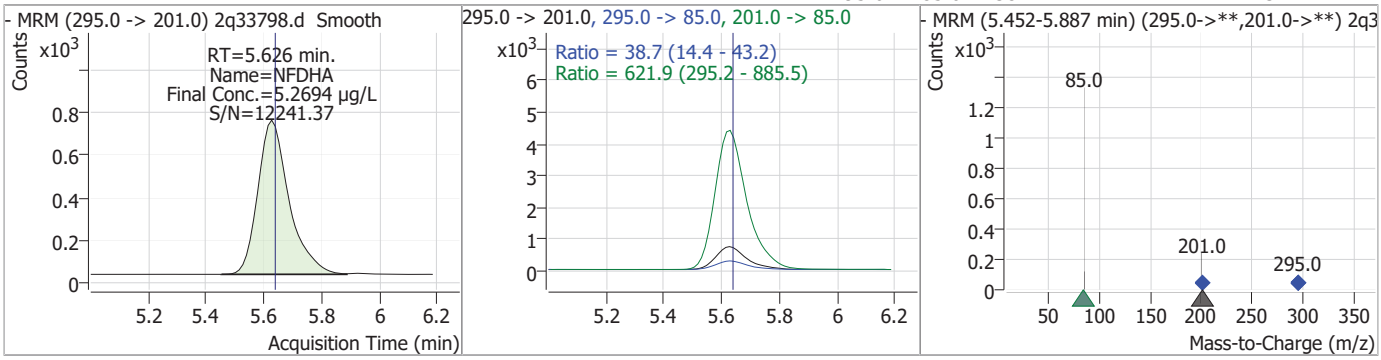
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.40	5.42	-0.01	1492				



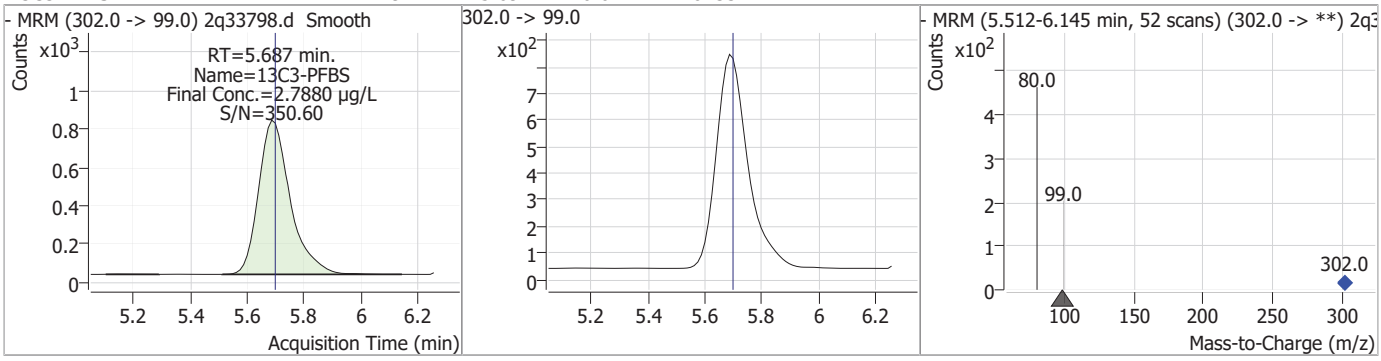
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.95	5.42	-0.01	22187	327.0 -> 81.0	55.4	26.5	79.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.27	5.63	-0.01	5412	201.0 -> 85.0	621.9	295.2	885.5
					295.0 -> 85.0	38.7	14.4	43.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.79	5.69	-0.01	6233				



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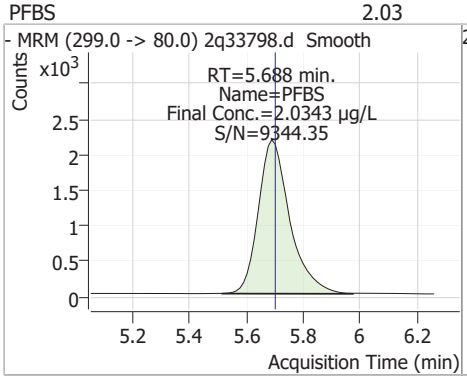
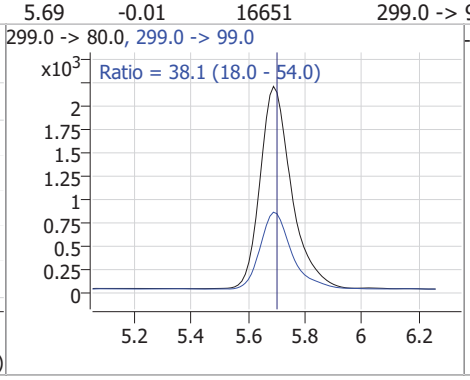
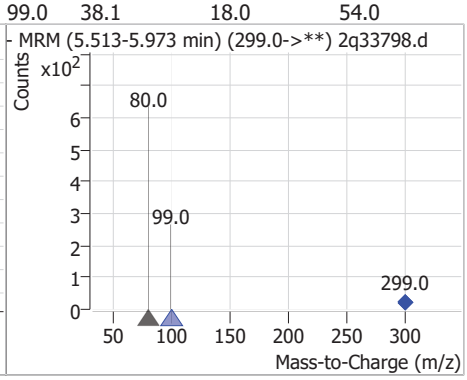
Perfluorinated Compounds by LC/MS/MS

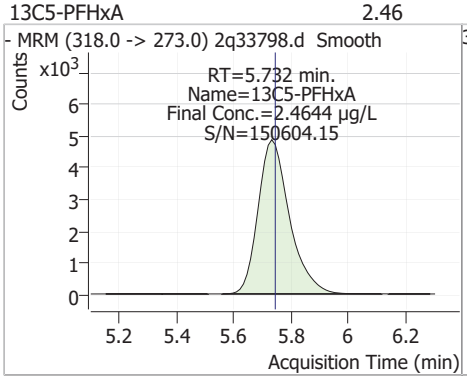
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.03	5.69	-0.01	16651	299.0 -> 99.0	38.1	18.0	54.0

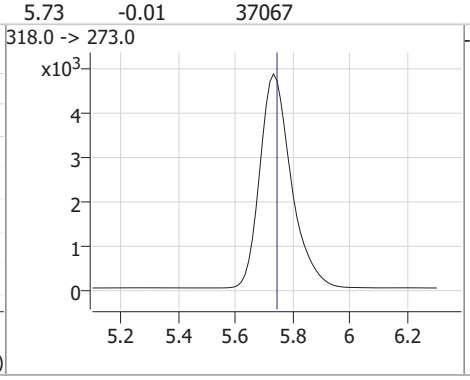


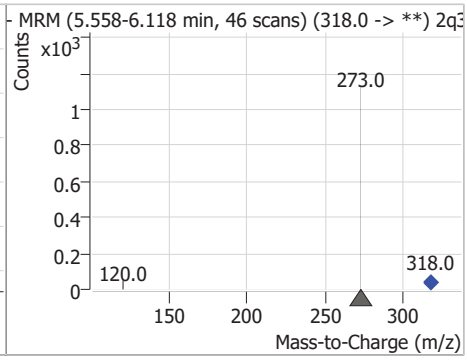




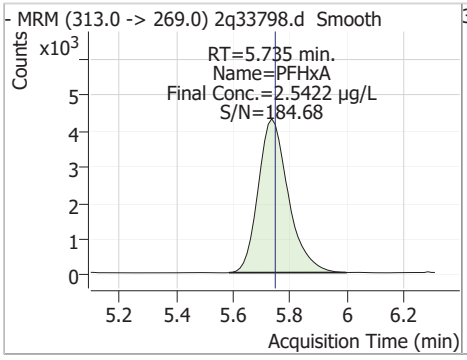
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.46	5.73	-0.01	37067				

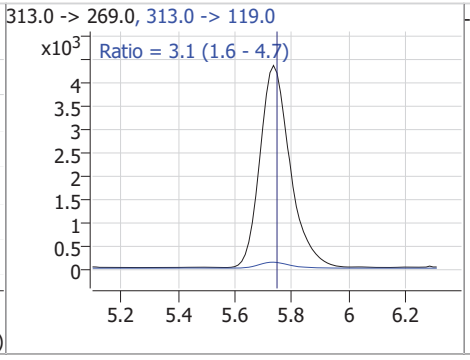


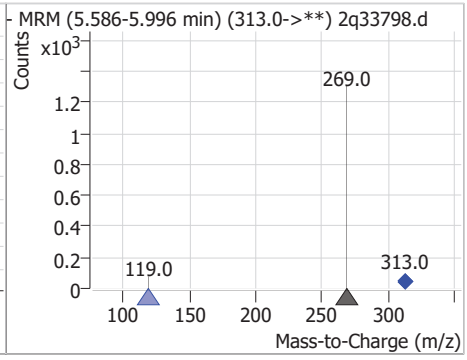




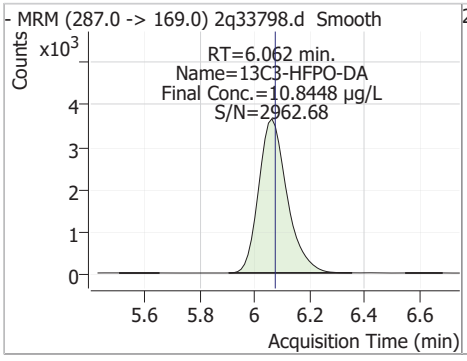
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.54	5.74	-0.01	31434	313.0 -> 119.0	3.1	1.6	4.7

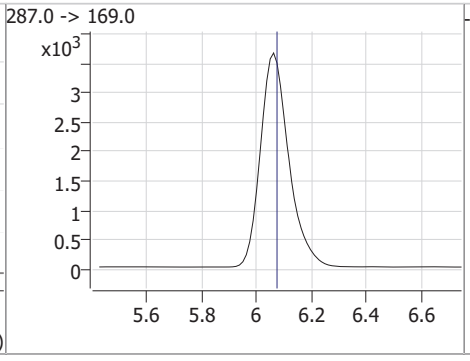


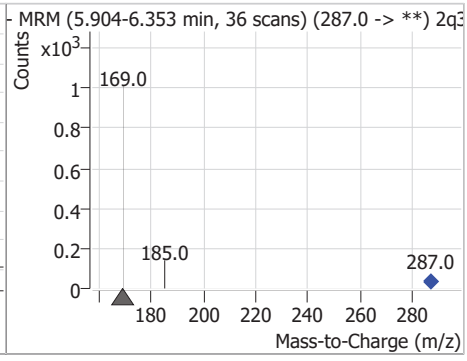




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.84	6.06	-0.01	25871				







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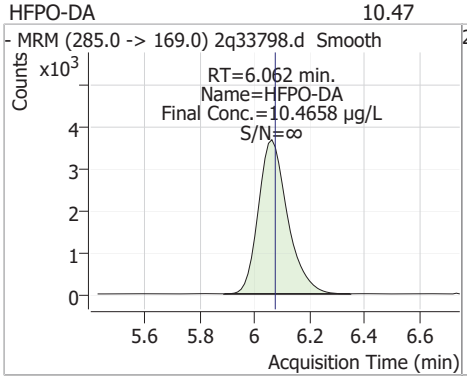
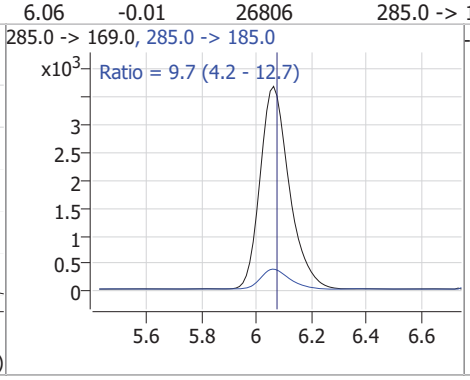
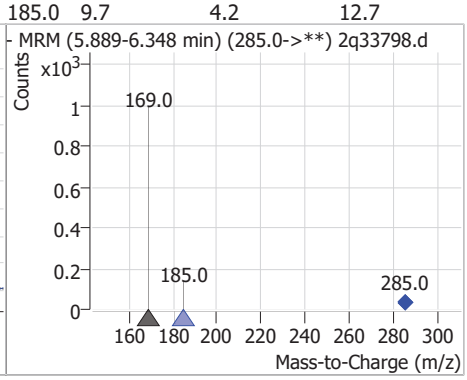
Perfluorinated Compounds by LC/MS/MS

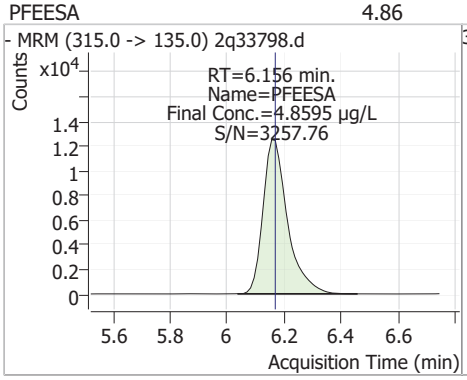
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.47	6.06	-0.01	26806	285.0 -> 185.0	9.7	4.2	12.7

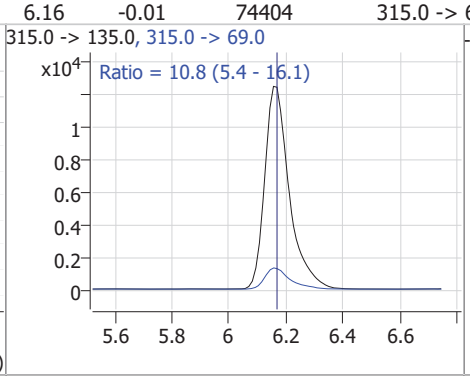


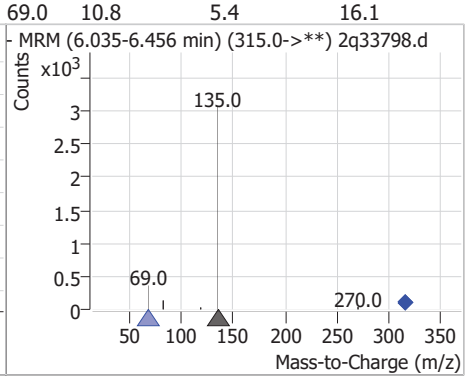




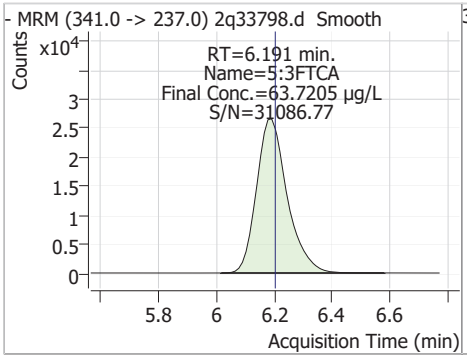
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.86	6.16	-0.01	74404	315.0 -> 69.0	10.8	5.4	16.1

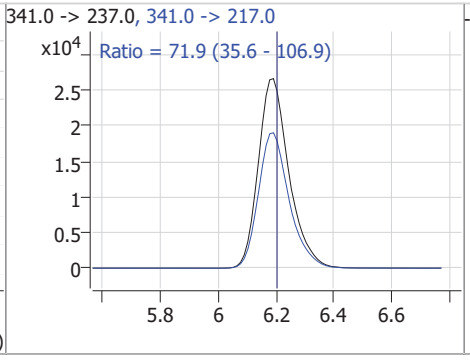


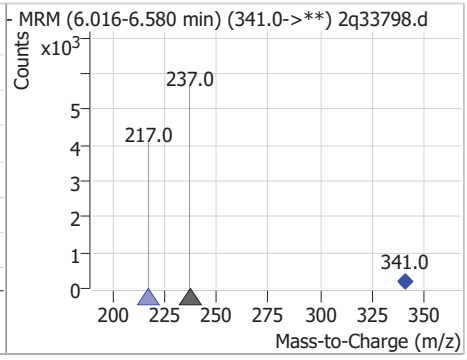




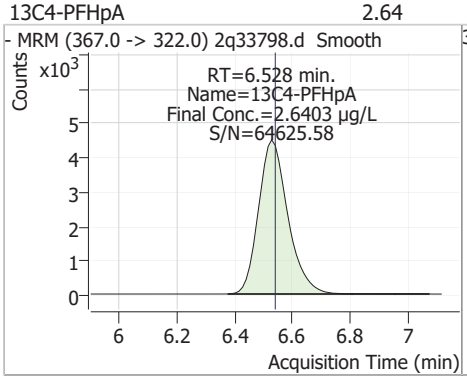
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	63.72	6.19	-0.01	194786	341.0 -> 217.0	71.9	35.6	106.9

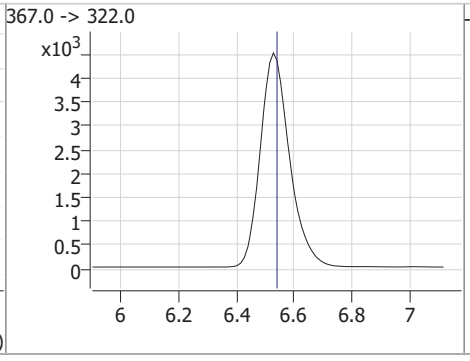


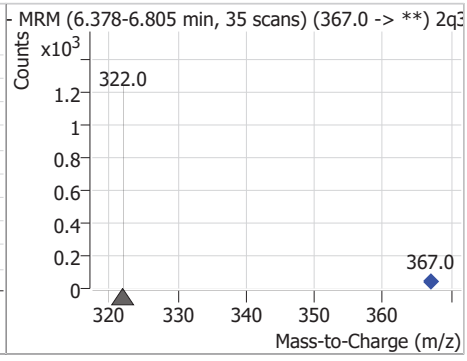




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.64	6.53	-0.01	31416				







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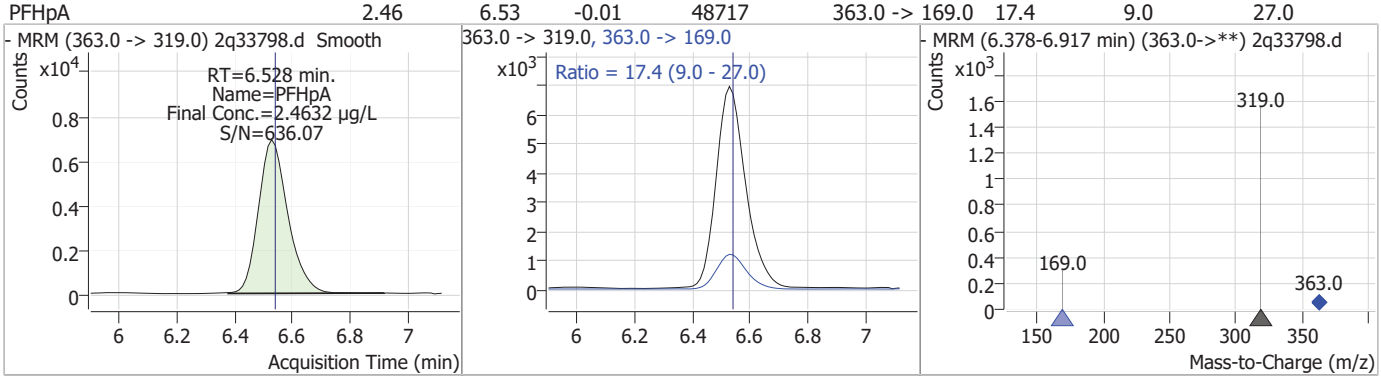
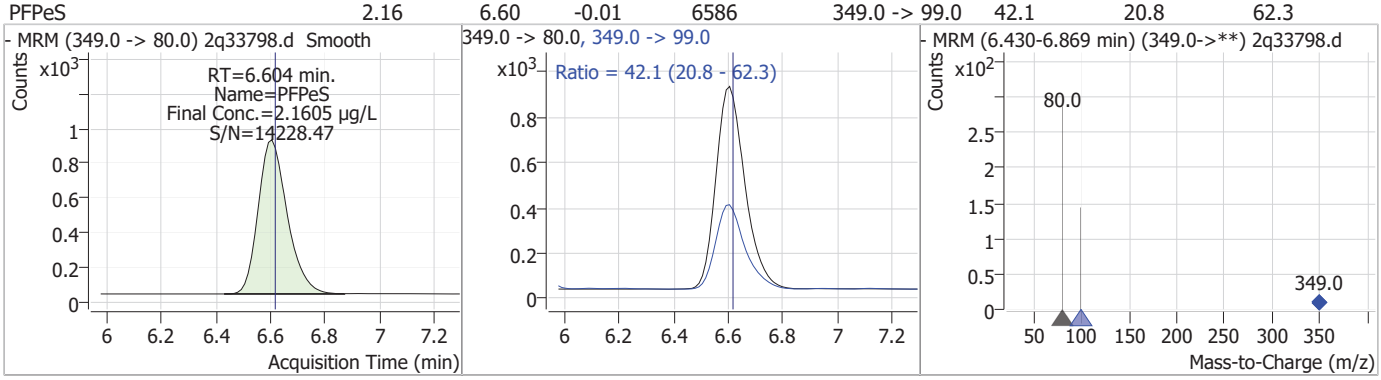
Perfluorinated Compounds by LC/MS/MS

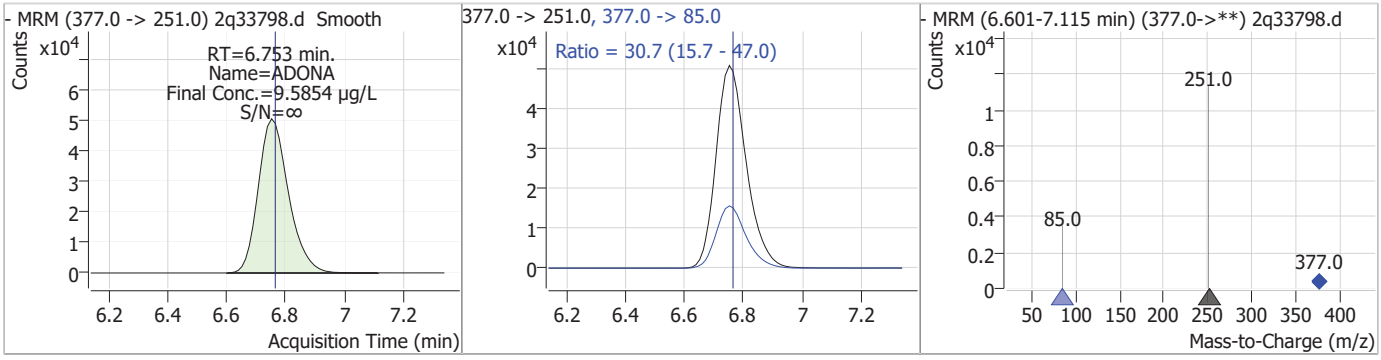
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.46	6.53	-0.01	48717	363.0 -> 169.0	17.4	9.0	27.0



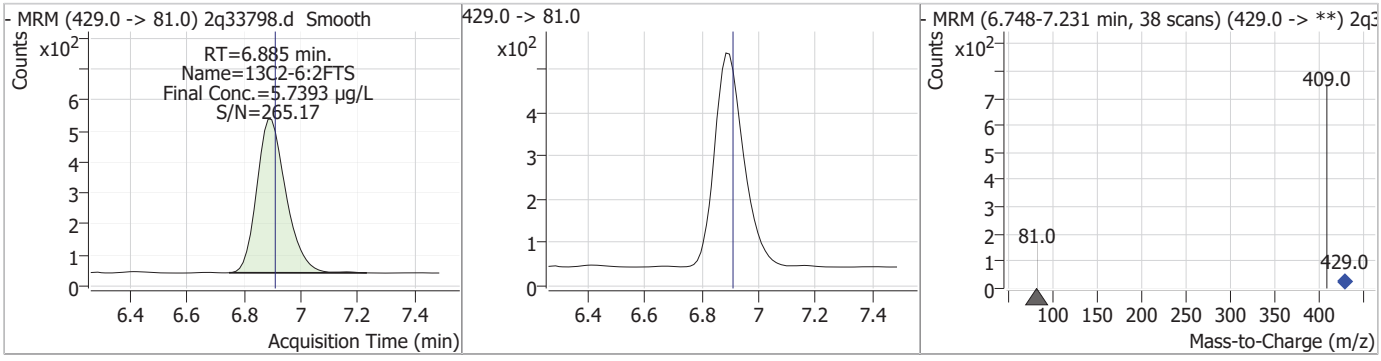
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.16	6.60	-0.01	6586	349.0 -> 99.0	42.1	20.8	62.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	9.59	6.75	-0.01	361114	377.0 -> 85.0	30.7	15.7	47.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.74	6.88	-0.02	3523				



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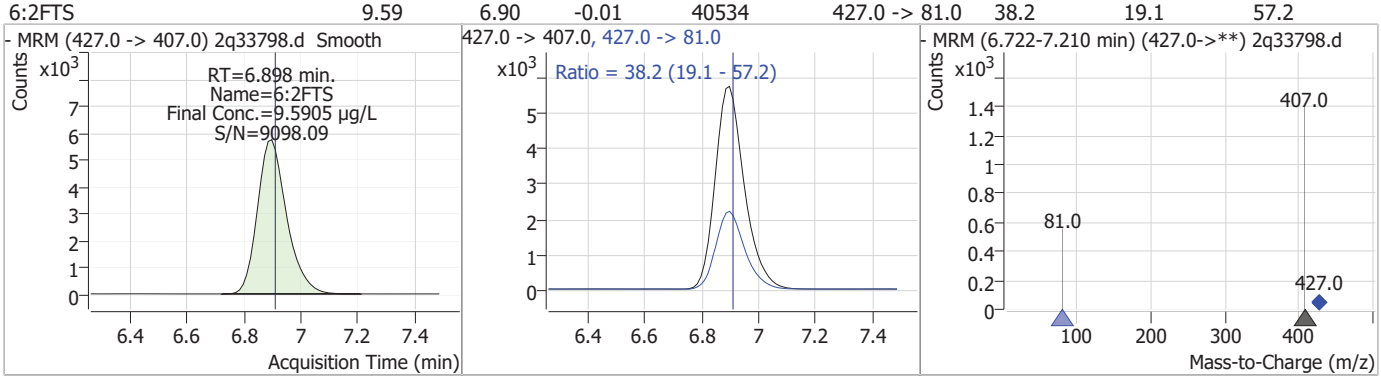
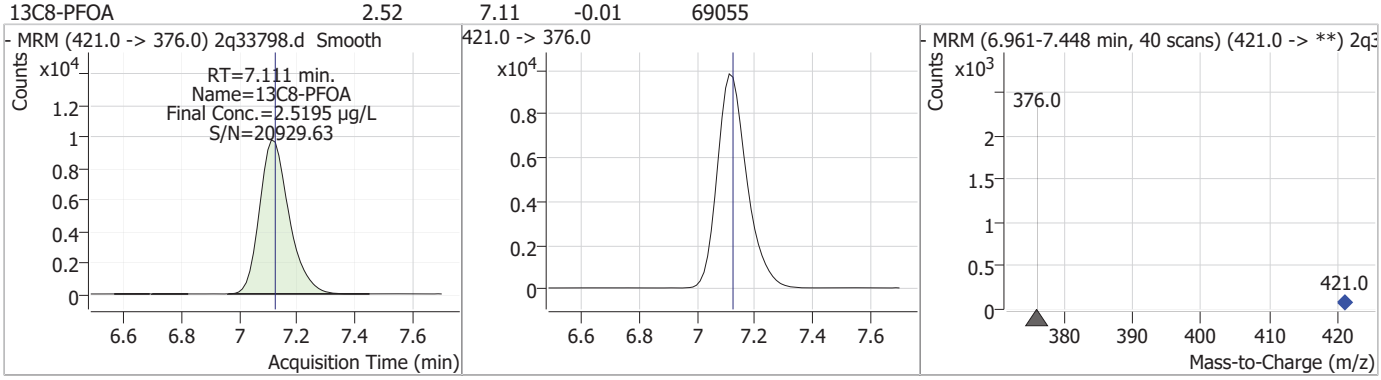
Perfluorinated Compounds by LC/MS/MS

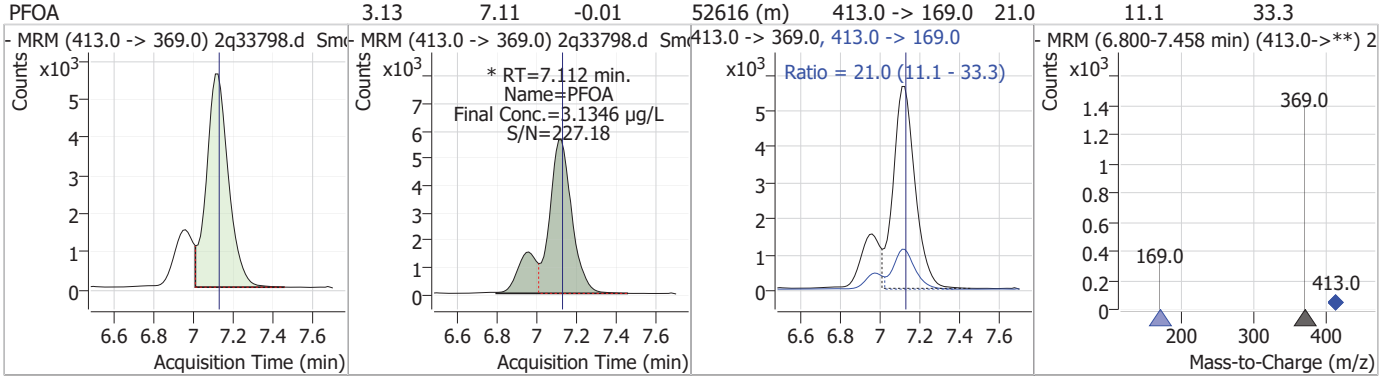
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.59	6.90	-0.01	40534	427.0 -> 81.0	38.2	19.1	57.2



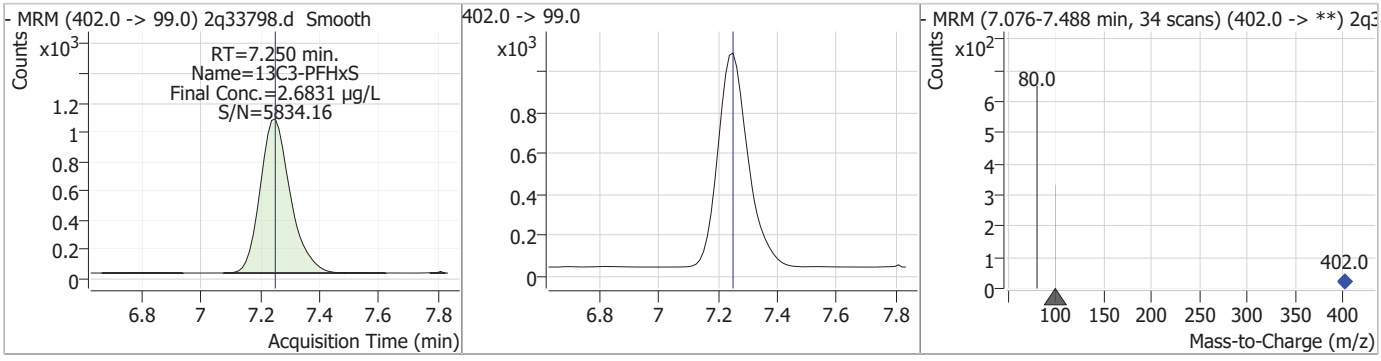
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.52	7.11	-0.01	69055				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	3.13	7.11	-0.01	52616 (m)	413.0 -> 169.0	21.0	11.1	33.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.68	7.25	0.00	7439				



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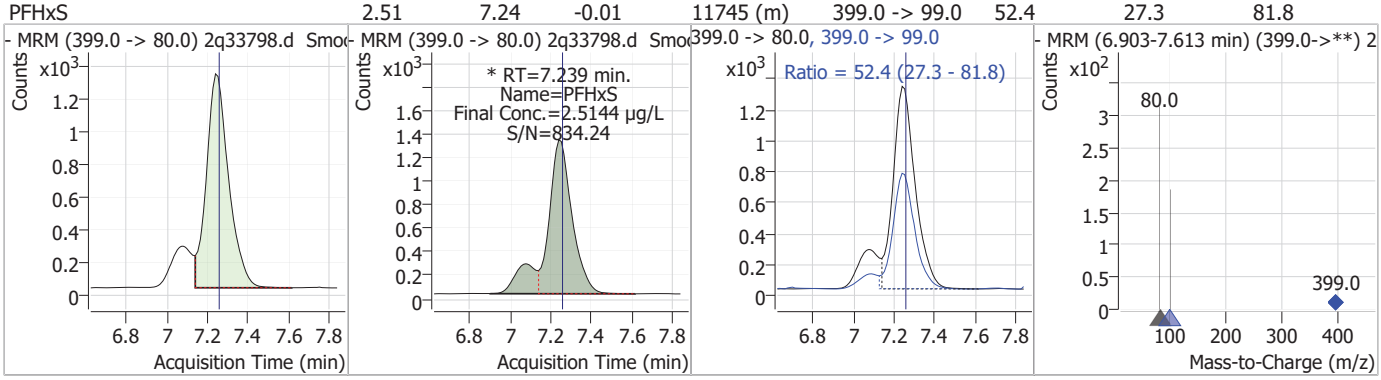
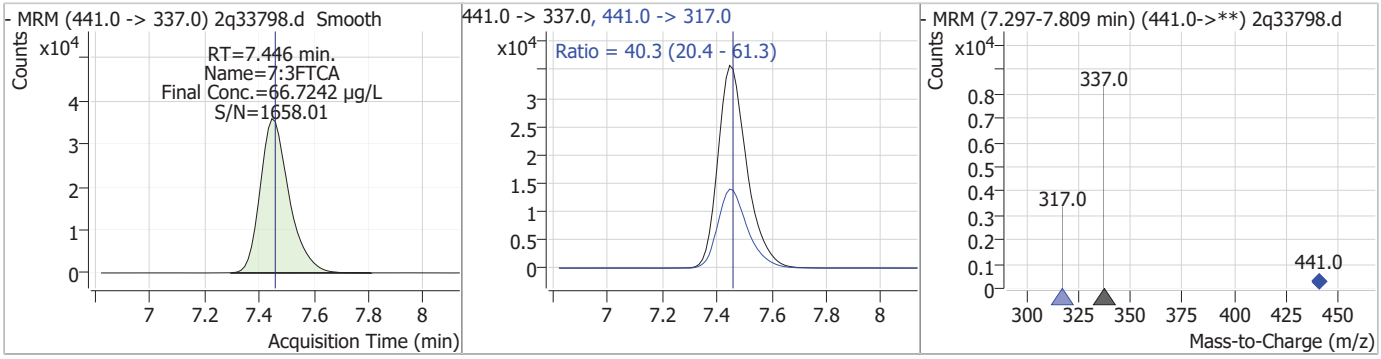
Perfluorinated Compounds by LC/MS/MS

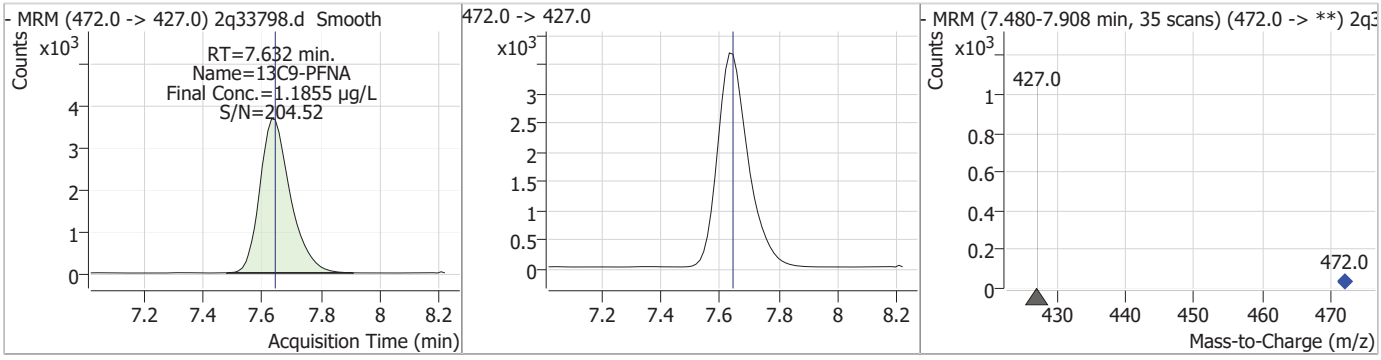
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.51	7.24	-0.01	11745 (m)	399.0 -> 99.0	52.4	27.3	81.8



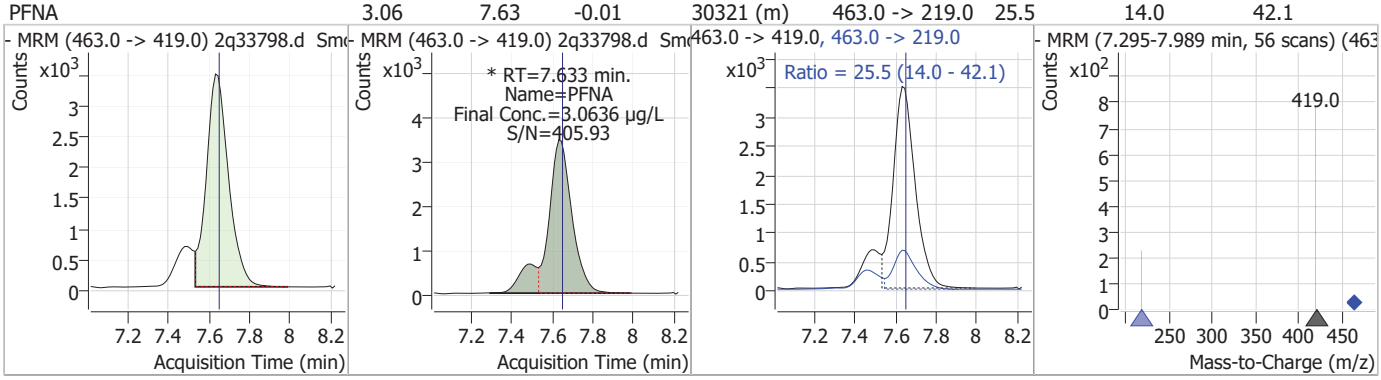
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	66.72	7.45	-0.01	261923	441.0 -> 317.0	40.3	20.4	61.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.19	7.63	-0.01	26290				

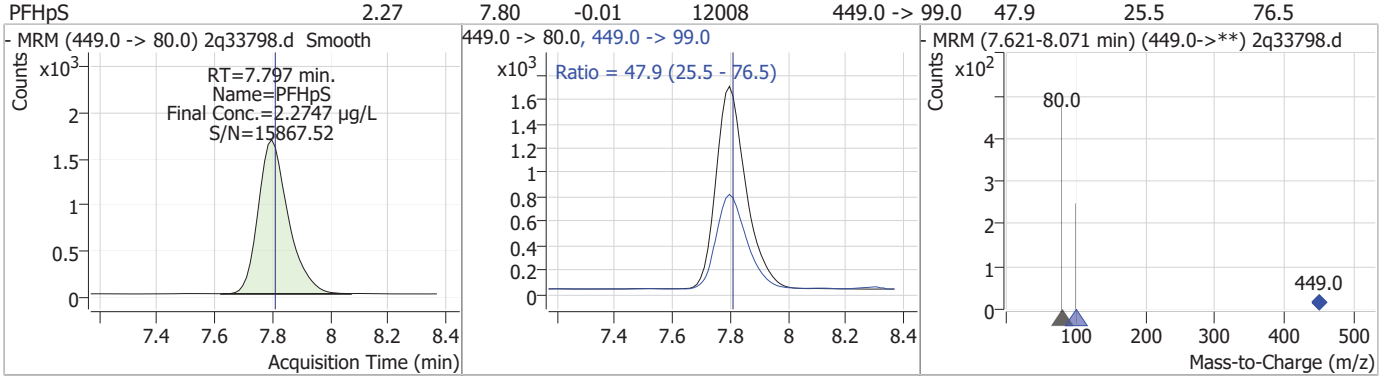


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	3.06	7.63	-0.01	30321 (m)	463.0 -> 219.0	25.5	14.0	42.1

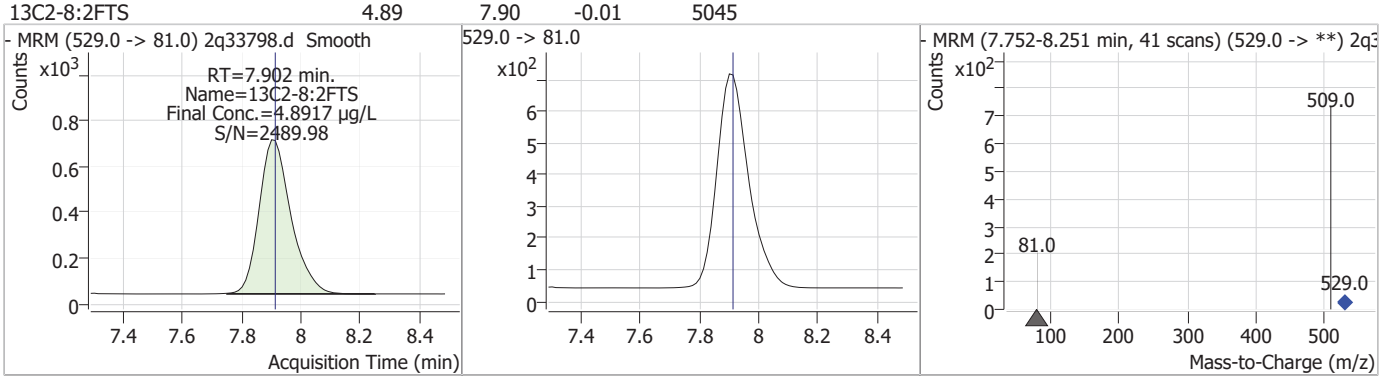


Perfluorinated Compounds by LC/MS/MS

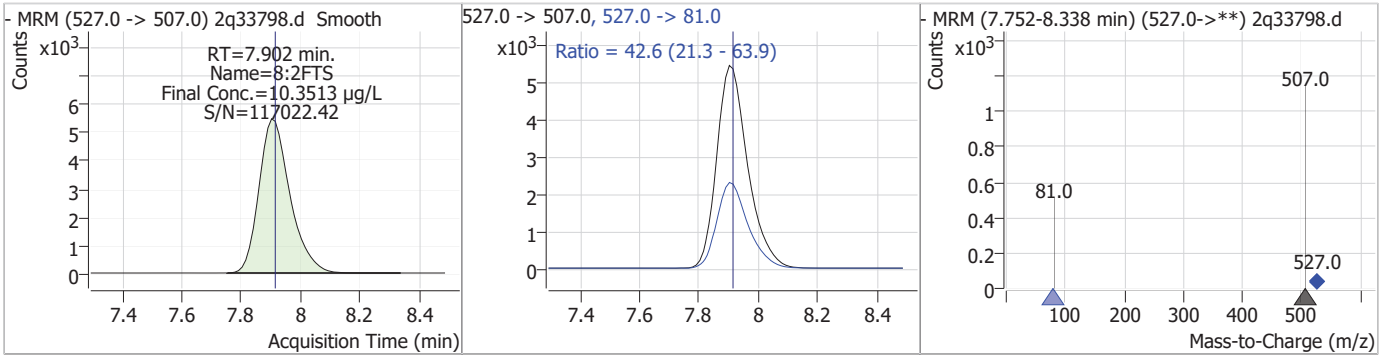
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.27	7.80	-0.01	12008	449.0 -> 99.0	47.9	25.5	76.5



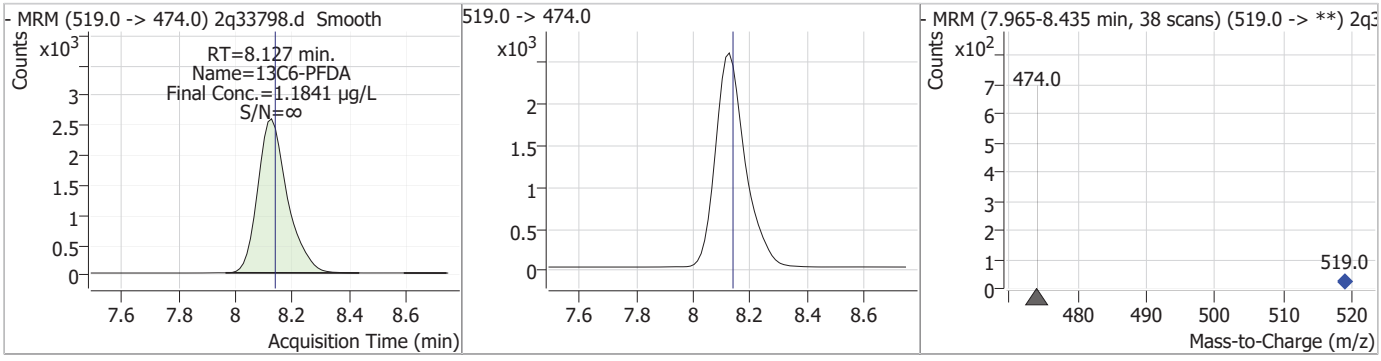
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.89	7.90	-0.01	5045				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.35	7.90	-0.01	39490	527.0 -> 81.0	42.6	21.3	63.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.18	8.13	-0.01	18526				



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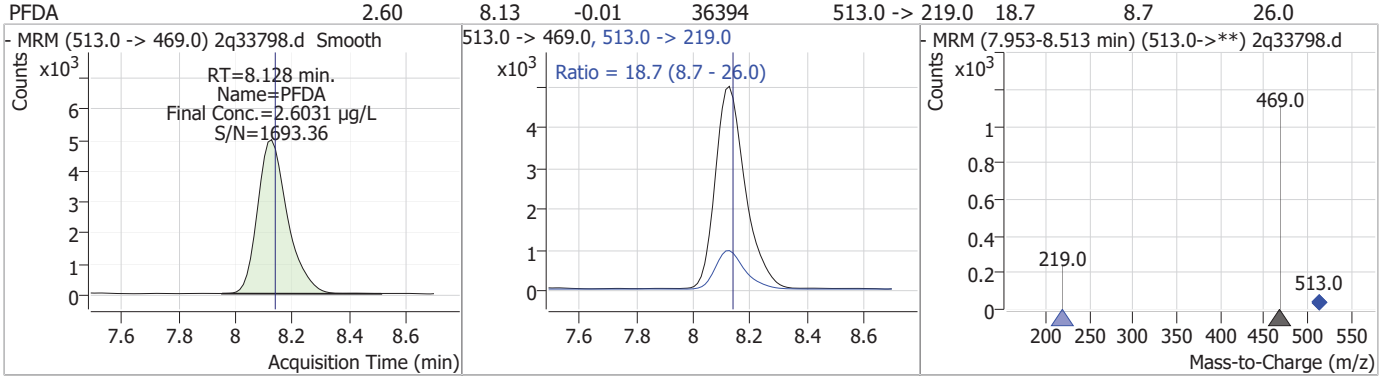
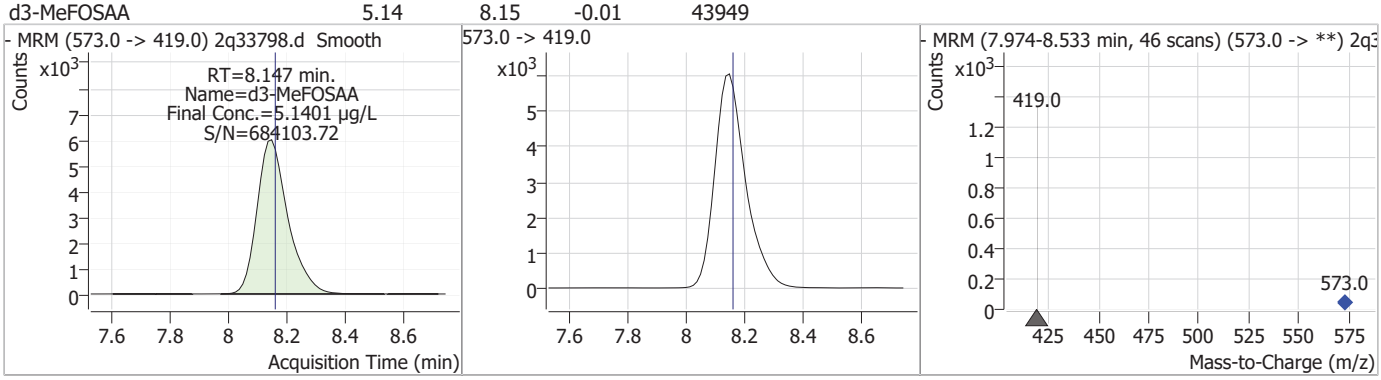
Perfluorinated Compounds by LC/MS/MS

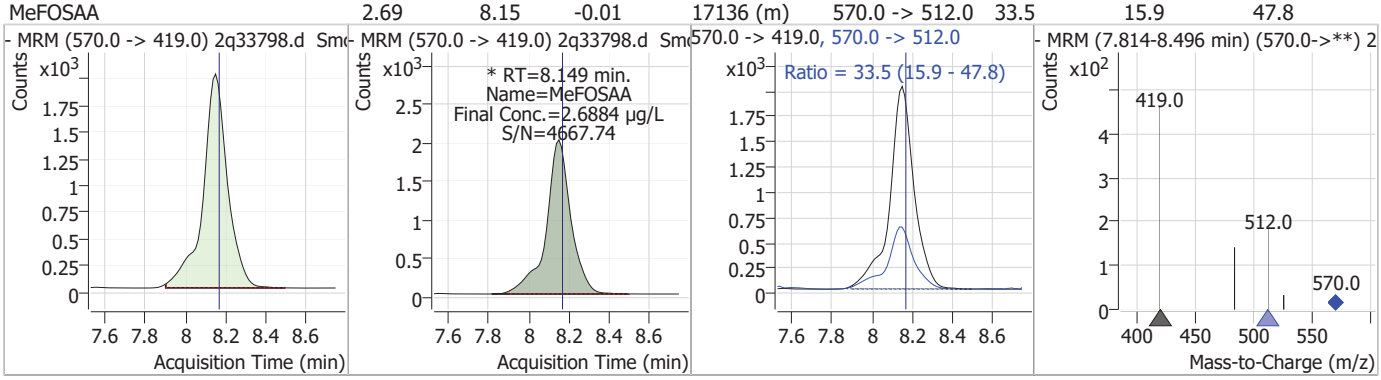
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.60	8.13	-0.01	36394	513.0 -> 219.0	18.7	8.7	26.0



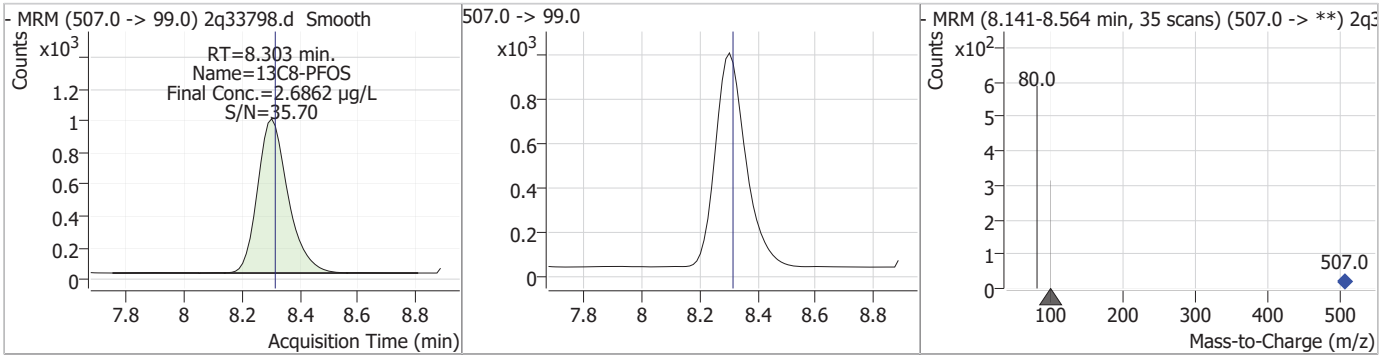
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.14	8.15	-0.01	43949				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.69	8.15	-0.01	17136 (m)	570.0 -> 512.0	33.5	15.9	47.8

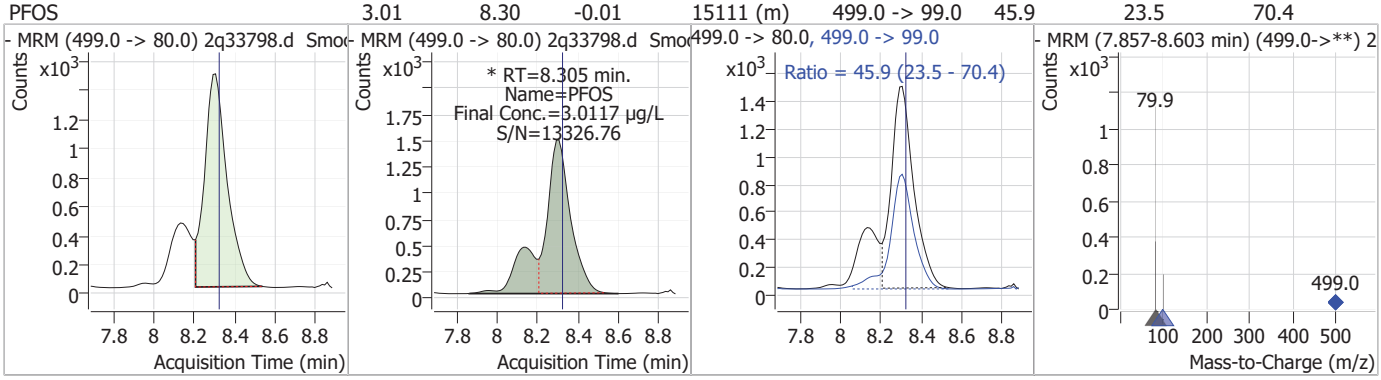


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.69	8.30	-0.01	7069				

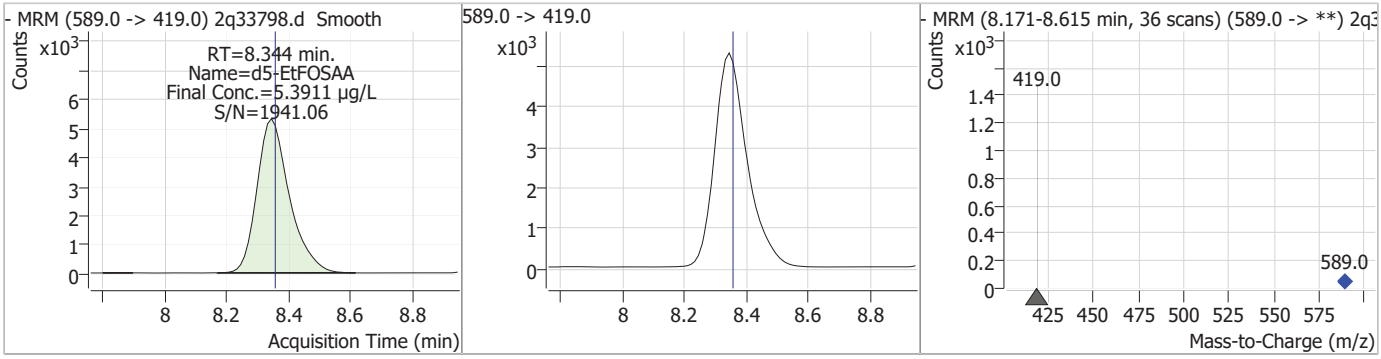


Perfluorinated Compounds by LC/MS/MS

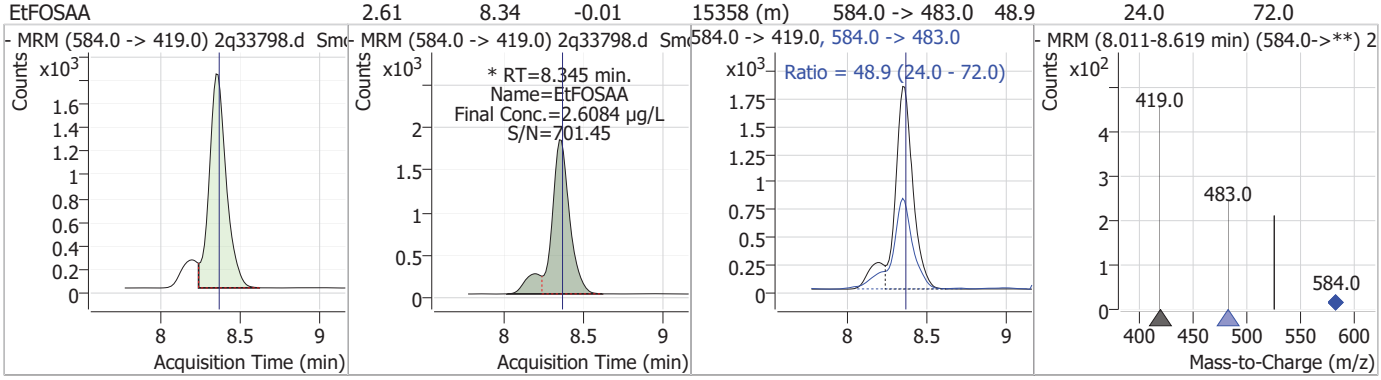
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	3.01	8.30	-0.01	15111 (m)	499.0 -> 99.0	45.9	23.5	70.4



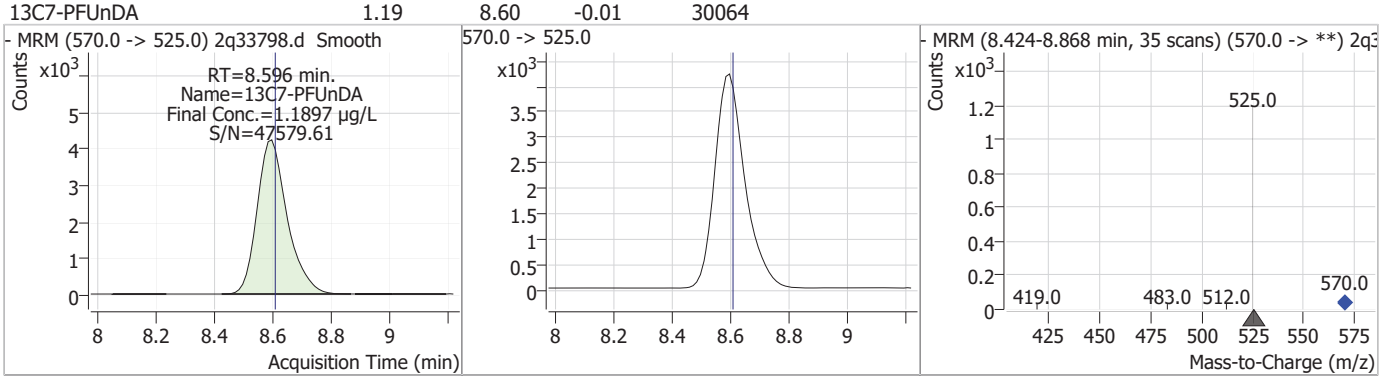
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.39	8.34	-0.01	38343				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.61	8.34	-0.01	15358 (m)	584.0 -> 483.0	48.9	24.0	72.0

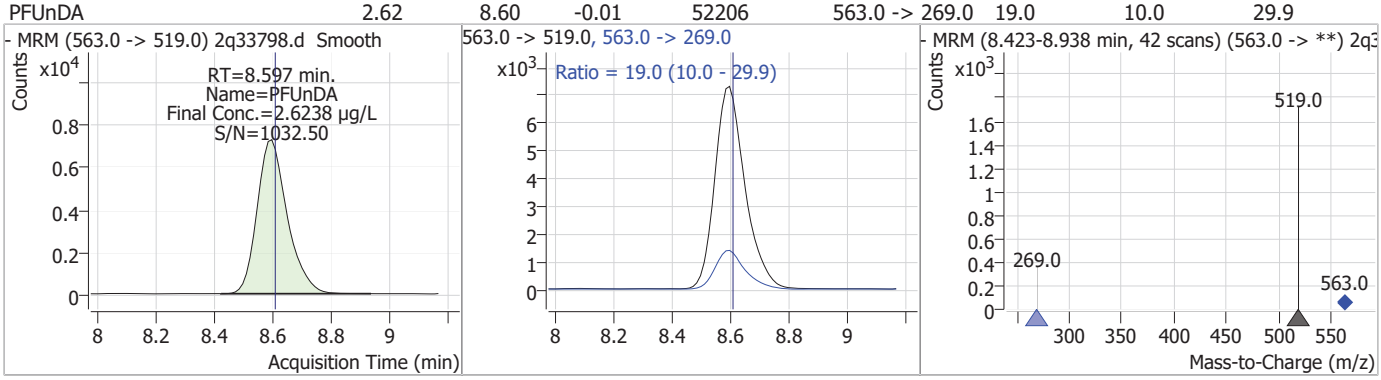


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.19	8.60	-0.01	30064				

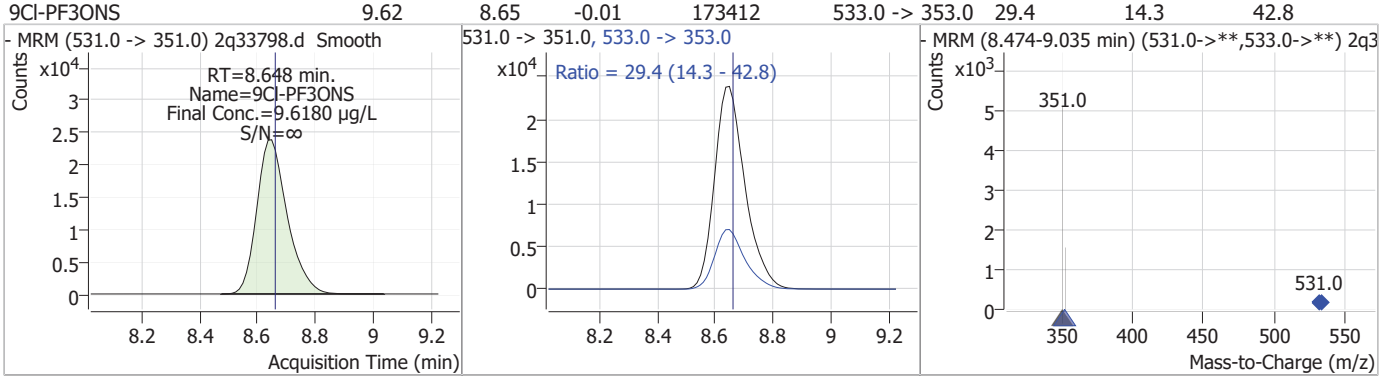


Perfluorinated Compounds by LC/MS/MS

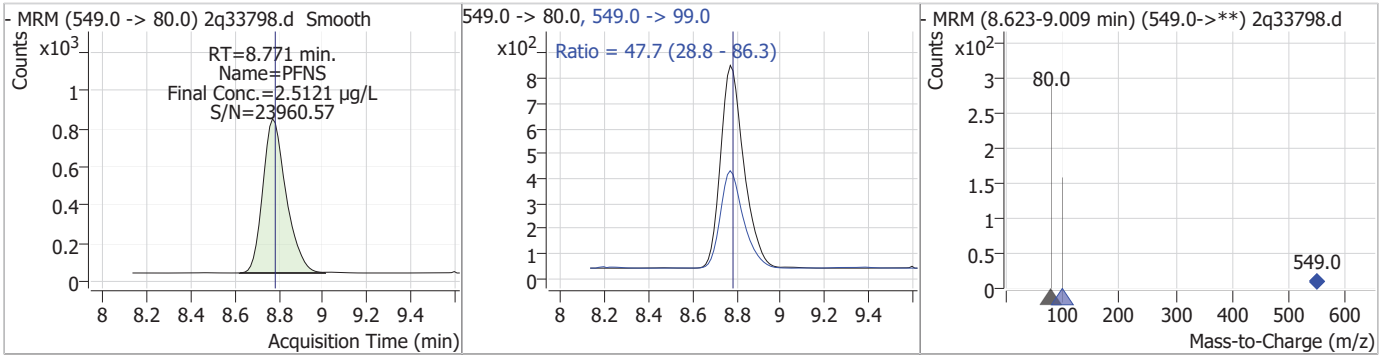
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.62	8.60	-0.01	52206	563.0 -> 269.0	19.0	10.0	29.9



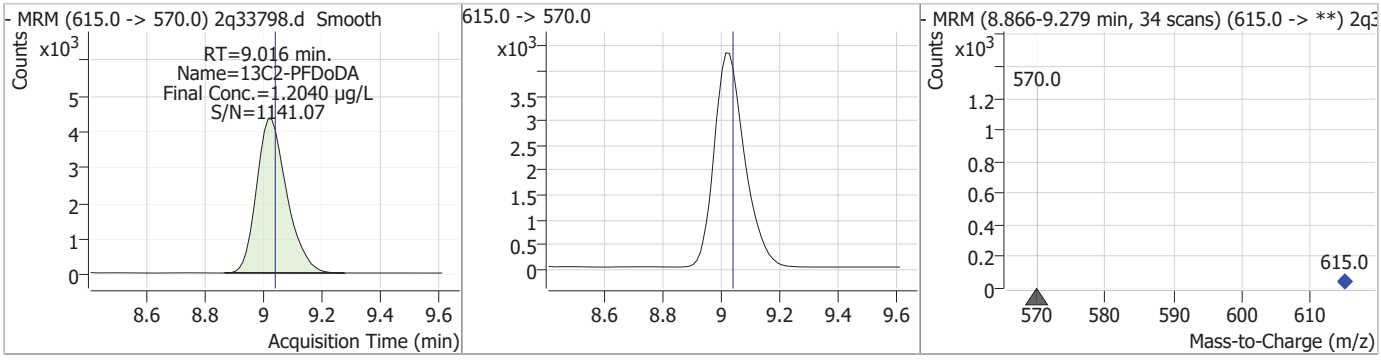
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.62	8.65	-0.01	173412	533.0 -> 353.0	29.4	14.3	42.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.51	8.77	-0.01	5923	549.0 -> 99.0	47.7	28.8	86.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.20	9.02	-0.02	31250				



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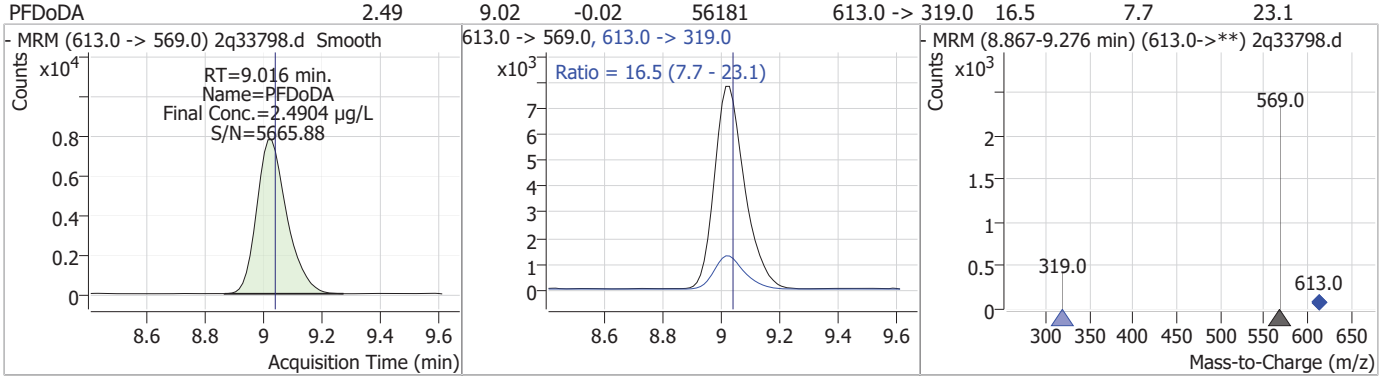
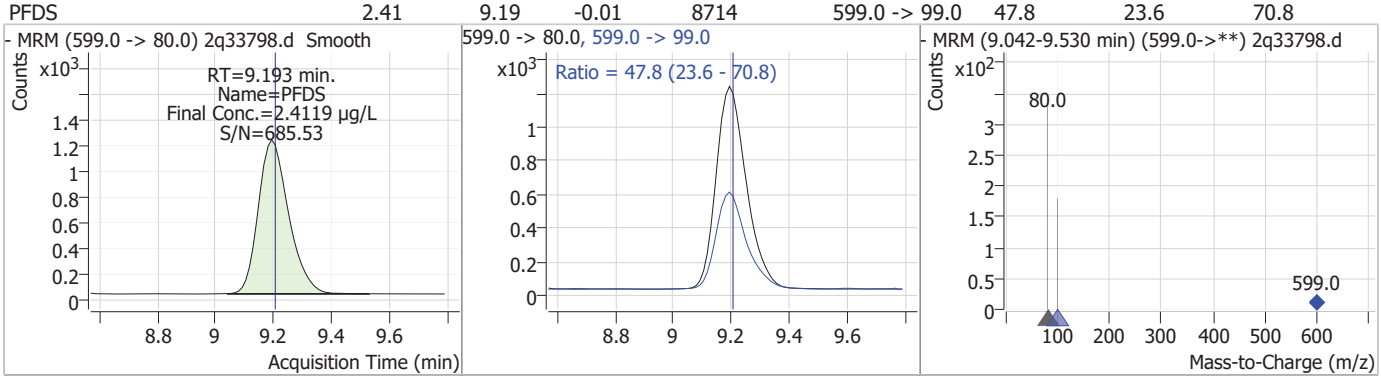
Perfluorinated Compounds by LC/MS/MS

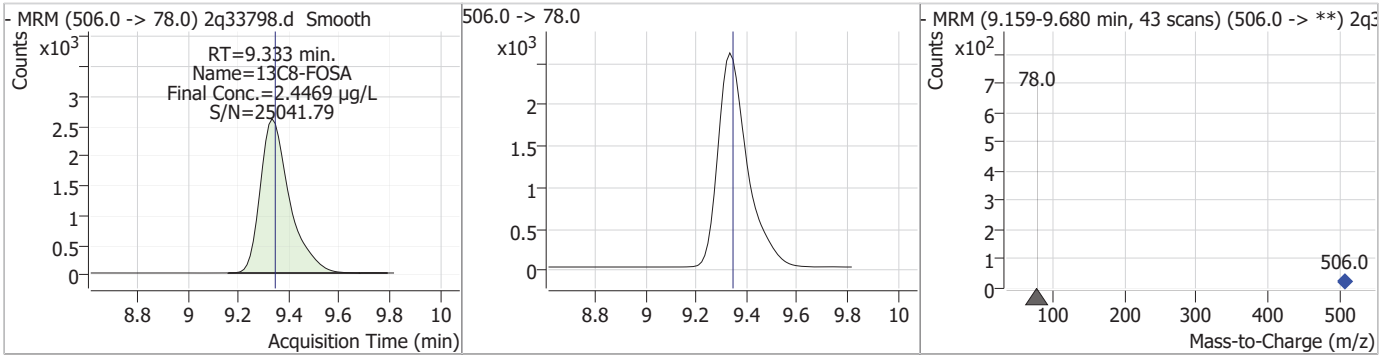
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.49	9.02	-0.02	56181	613.0 -> 319.0	16.5	7.7	23.1



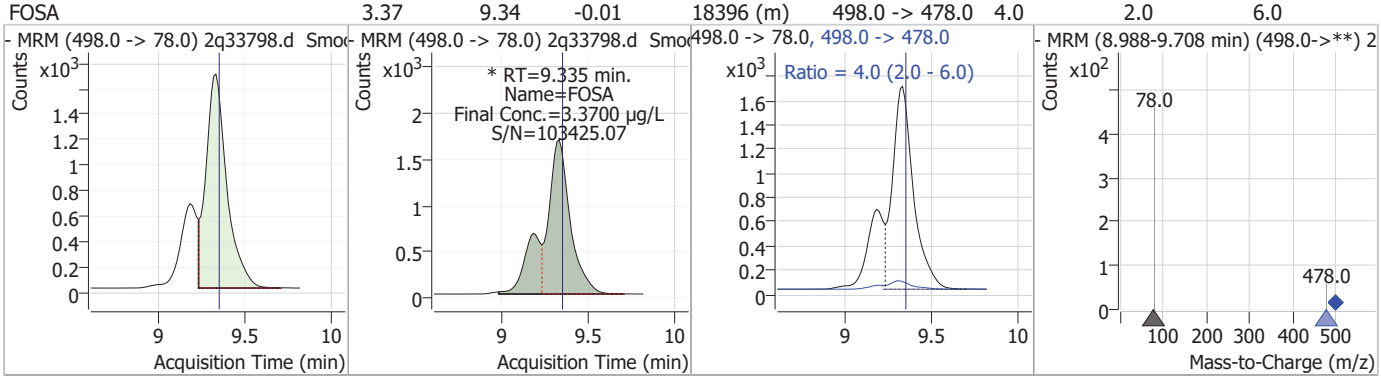
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.41	9.19	-0.01	8714	599.0 -> 99.0	47.8	23.6	70.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.45	9.33	-0.01	20826				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	3.37	9.34	-0.01	18396 (m)	498.0 -> 478.0	4.0	2.0	6.0



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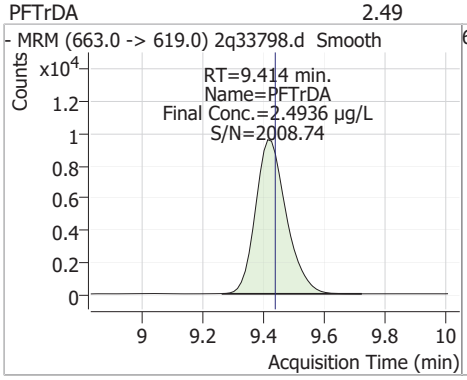
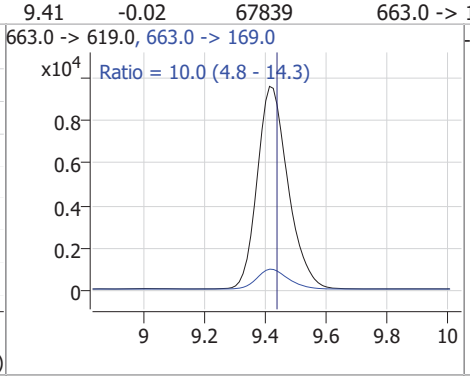
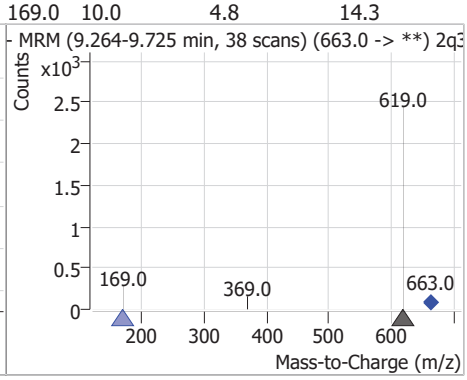
Perfluorinated Compounds by LC/MS/MS

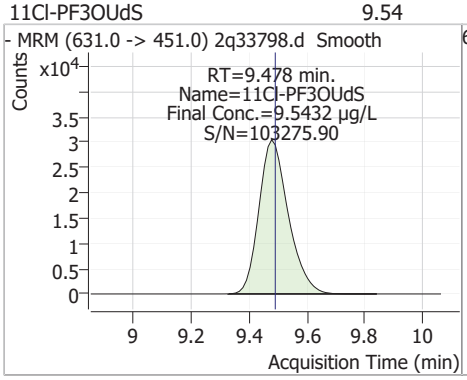
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.49	9.41	-0.02	67839	663.0 -> 169.0	10.0	4.8	14.3

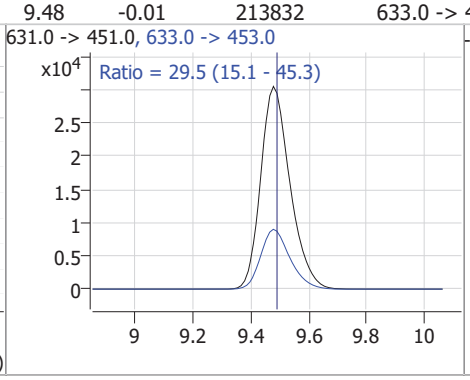


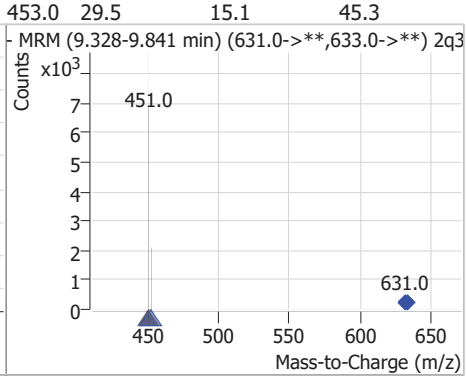




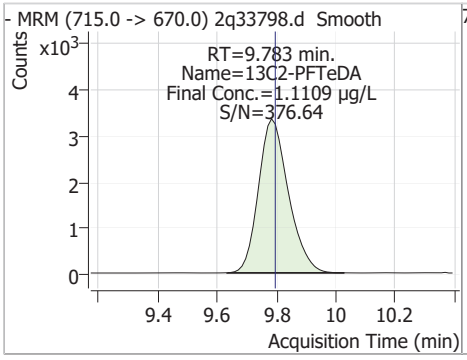
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.54	9.48	-0.01	213832	633.0 -> 453.0	29.5	15.1	45.3

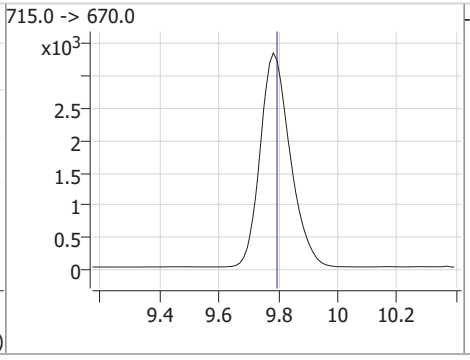


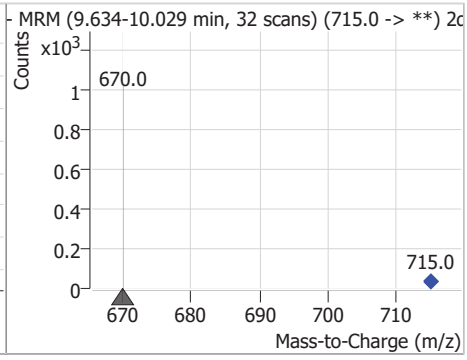




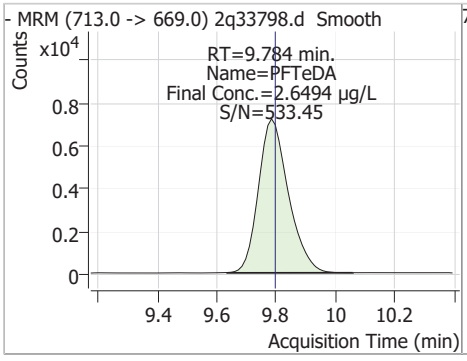
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.11	9.78	-0.01	23218				

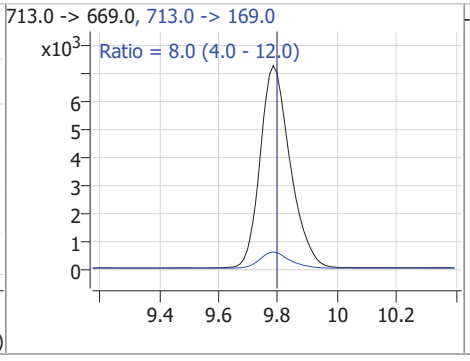


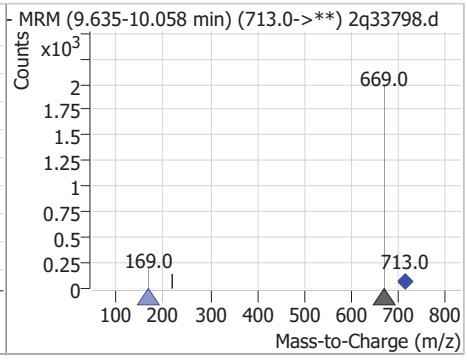




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.65	9.78	-0.01	50405	713.0 -> 169.0	8.0	4.0	12.0

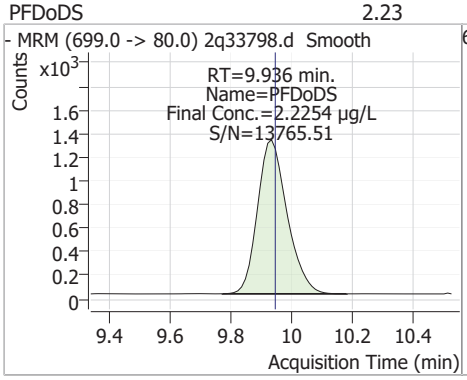


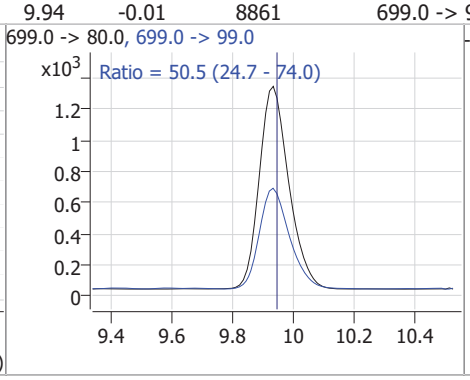


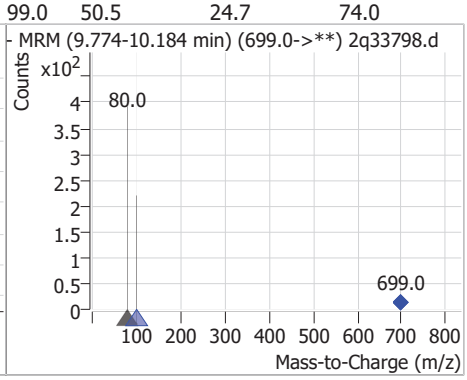


Perfluorinated Compounds by LC/MS/MS

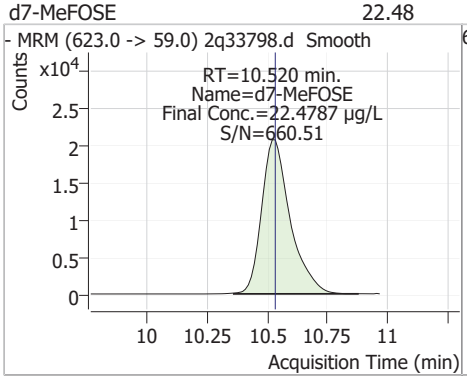
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.23	9.94	-0.01	8861	699.0 -> 99.0	50.5	24.7	74.0

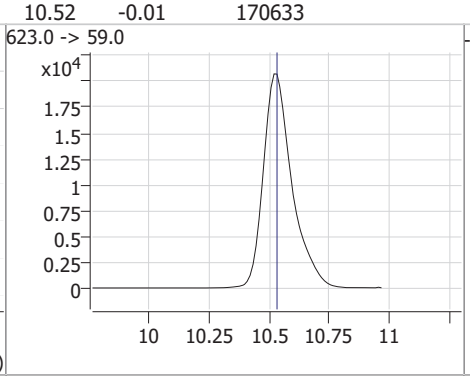


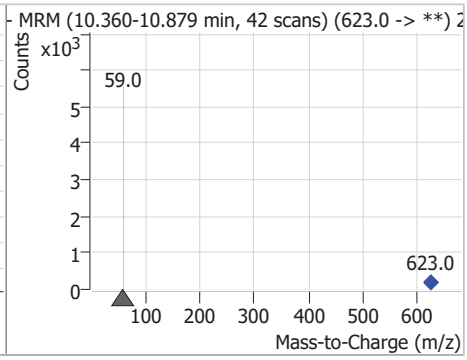




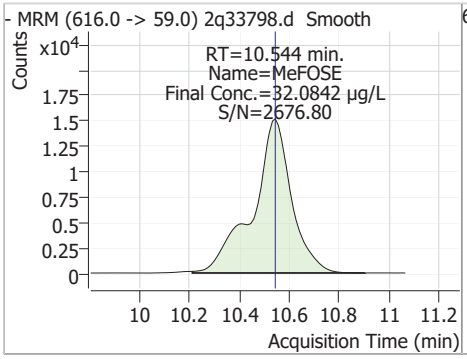
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.48	10.52	-0.01	170633				

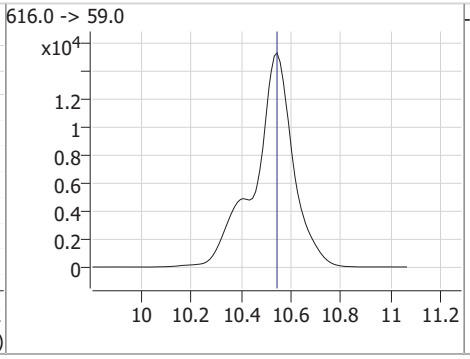


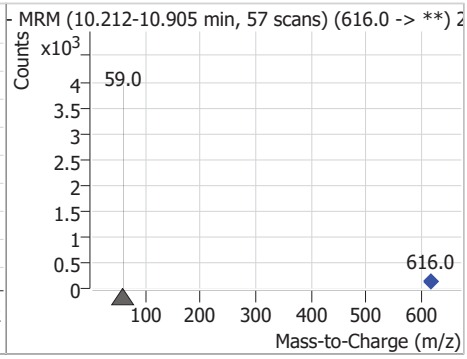




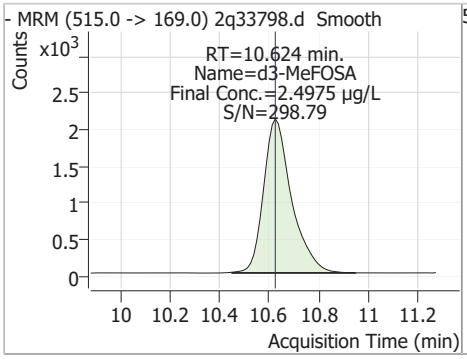
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	32.08	10.54	0.00	163461				

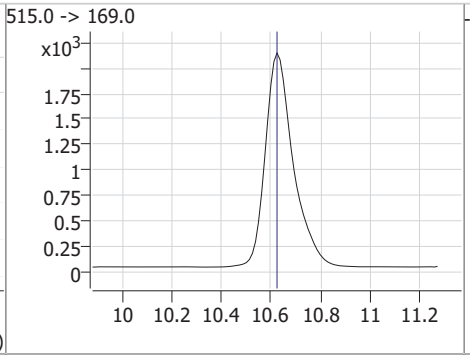


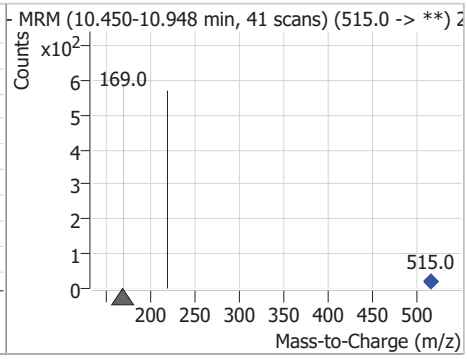




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.50	10.62	0.00	16509				

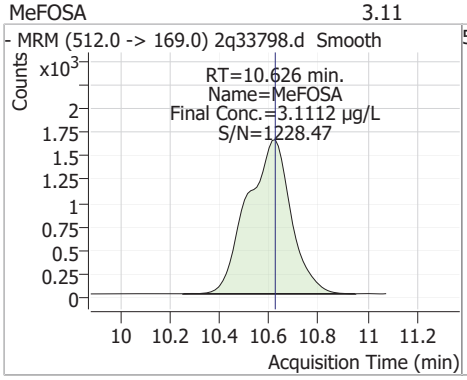


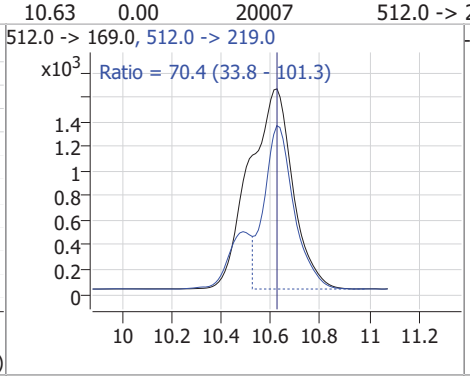


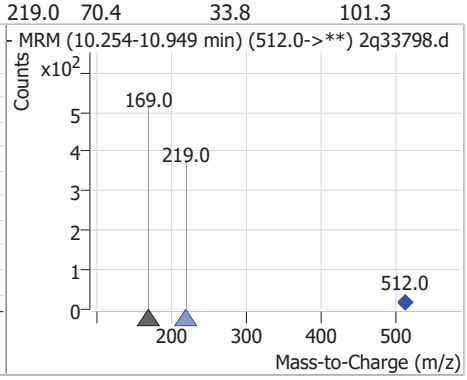


Perfluorinated Compounds by LC/MS/MS

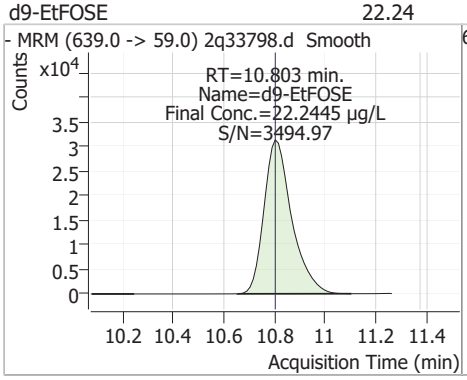
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	3.11	10.63	0.00	20007	512.0 -> 219.0	70.4	33.8	101.3

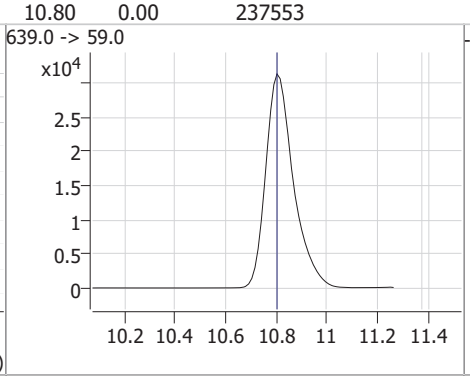


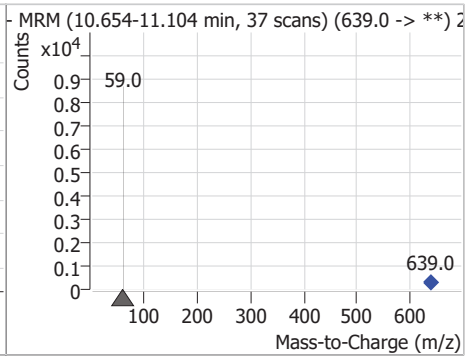




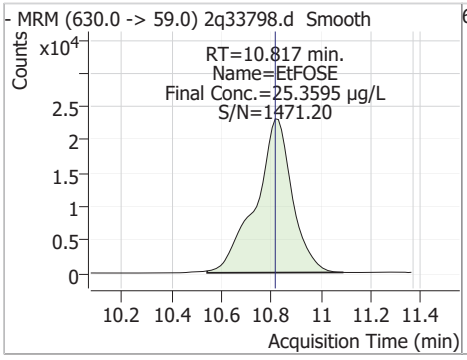
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.24	10.80	0.00	237553				

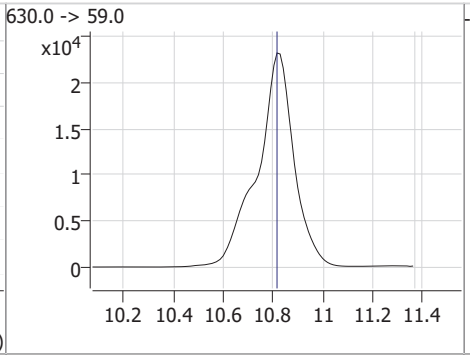


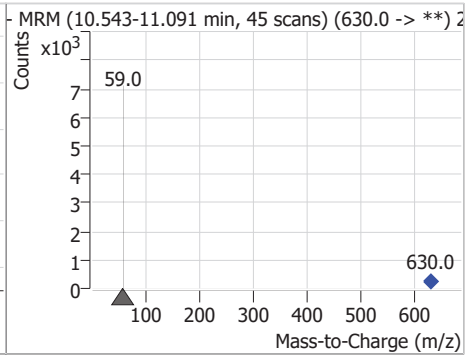




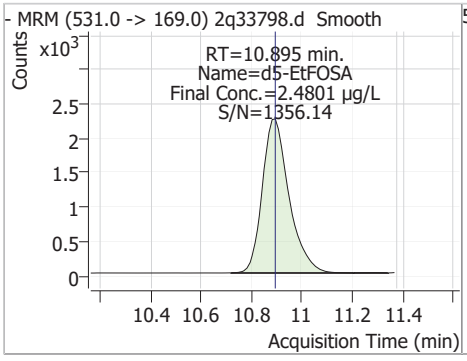
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.36	10.82	0.00	235516				

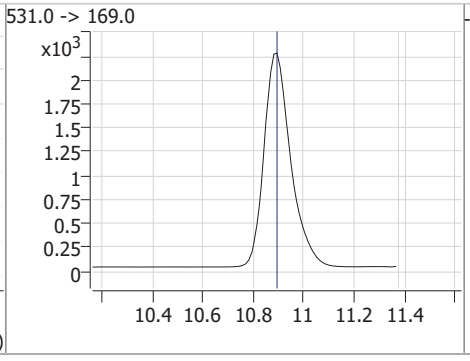


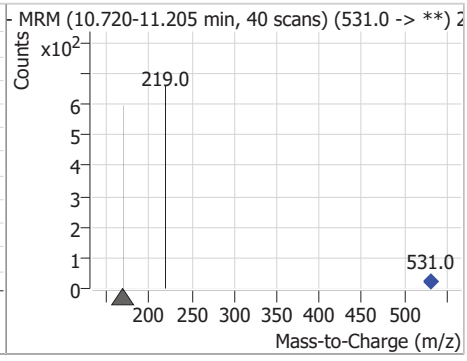




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.48	10.89	0.00	16464				





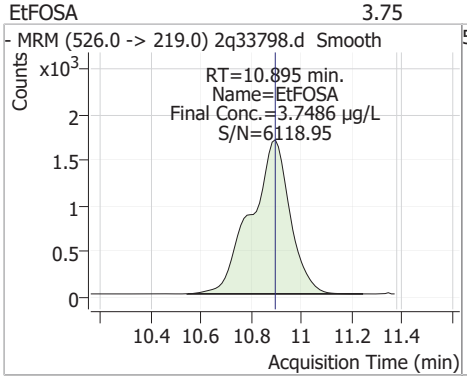


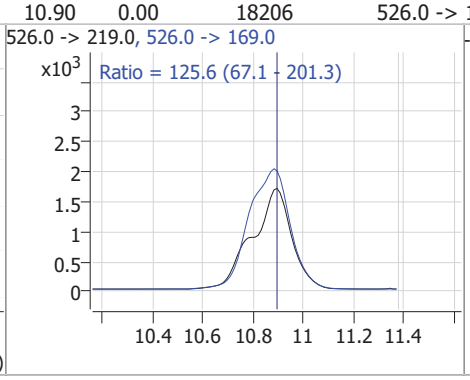
7.6.30

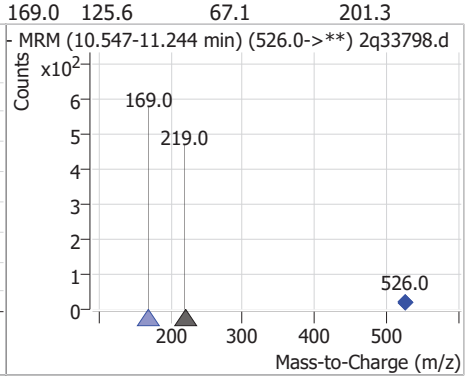
7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	3.75	10.90	0.00	18206	526.0 -> 169.0	125.6	67.1	201.3







Manual Integration Approval Summary

Sample Number: T2Q345-ECC344
Lab FileID: 2Q33798.D
Injection Time: 05/13/25 03:38
Method: EPA 1633
Analyst approved: 05/15/25 12:38 Olga Azarian
Supervisor approved: 05/15/25 12:46 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		7.11	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.24	Split peak
Perfluorononanoic acid	375-95-1		7.63	Split peak
MeFOSAA	2355-31-9		8.15	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.30	Split peak
EtFOSAA	2991-50-6		8.35	Split peak
PFOSA	754-91-6		9.34	Split peak

QQQ Check Tune Report

Agilent | Trusted Answers

Instrument Name	LCMS4
MS Model	G6495C
MS Instrument Serial	SG1953D201
Software_Firmware Version	10.1.67, FW: A.00.08.112
Tune Date & Time	21 April 2025 09:24:35
File Path	D:\MassHunter\Tune\QQQ\G6495C\atunes.tune.xml
Ion Source	AJS ESI
Ionization Mode	AJS ESI
Tuned Resolution	All
Vacuum Pressure	1.59E+0 [R] (Torr); 3.46E-5 [H] (Torr)

Source Parameters

Parameter	Negative
Gas Temp (°C)	220
Gas Flow (l/min)	14
Nebulizer (psi)	20
Capillary (V)	3000
Nozzle Voltage (V)	1500
Sheath Gas Temp (°C)	250
Sheath Gas Flow (l/min)	11

QQQ Check Tune Report

Agilent | Trusted Answers

Negative Results

Analyzer: MS1 Polarity: Negative Width: Unit HP and LP Funnel RF as shown in Tune Parameters

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	113.02	0.03	Pass	0.70	0.67	-0.03	Pass	2791971
302.00	302.02	0.02	Pass	0.70	0.68	-0.02	Pass	771608
601.98	602.03	0.05	Pass	0.70	0.63	-0.07	Pass	3092842
1033.99	1034.04	0.05	Pass	0.70	0.57	-0.13	Pass	2628750
1633.95	1634.04	0.09	Pass	0.70	0.64	-0.06	Pass	3284531
2233.91	2233.93	0.02	Pass	0.70	0.68	-0.02	Pass	1028007

Analyzer: MS2 Polarity: Negative Width: Unit HP and LP Funnel RF as shown in Tune Parameters

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.07	0.07	Pass	0.70	0.63	-0.07	Pass	576898
112.99	112.99	0.00	Pass	0.70	0.69	-0.01	Pass	3979026
302.00	302.01	0.01	Pass	0.70	0.69	-0.01	Pass	1203784
601.98	602.00	0.02	Pass	0.70	0.66	-0.04	Pass	4245092
1033.99	1034.01	0.02	Pass	0.70	0.65	-0.05	Pass	6720743
1633.95	1633.96	0.01	Pass	0.70	0.65	-0.05	Pass	9311676
2233.91	2233.90	-0.01	Pass	0.70	0.74	0.04	Pass	1782692

Analyzer: MS1 Polarity: Negative Width: Wide HP Funnel RF: 45Vp-p LP Funnel RF: 45Vp-p

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	113.06	0.07	Pass	1.20	1.12	-0.08	Pass	3957372
302.00	302.10	0.10	Pass	1.20	1.24	0.04	Pass	1400100
601.98	602.06	0.08	Pass	1.20	1.39	0.19	Pass	6084649
1033.99	1034.03	0.04	Pass	1.20	1.37	0.17	Pass	2690328
1633.95	1633.95	0.00	Pass	1.20	1.39	0.19	Pass	1800971
2233.91	2233.86	-0.05	Pass	1.20	1.31	0.11	Pass	849135

Analyzer: MS2 Polarity: Negative Width: Wide HP Funnel RF: 45Vp-p LP Funnel RF: 45Vp-p

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.09	0.09	Pass	1.20	1.09	-0.11	Pass	744792
112.99	113.00	0.01	Pass	1.20	1.16	-0.04	Pass	5966546
302.00	301.99	-0.01	Pass	1.20	1.38	0.18	Pass	1817427
601.98	601.97	-0.01	Pass	1.20	1.59	0.39	Pass	6430929
1033.99	1033.97	-0.02	Pass	1.20	1.66	0.46	Pass	3427659
1633.95	1633.93	-0.02	Pass	1.20	1.53	0.33	Pass	3374435
2233.91	2233.83	-0.08	Pass	1.20	1.27	0.07	Pass	965880

Analyzer: MS1 Polarity: Negative Width: Widest HP Funnel RF: 45Vp-p LP Funnel RF: 45Vp-p

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	113.11	0.12	Pass	2.50	2.33	-0.17	Pass	5914447
302.00	302.19	0.19	Pass	2.50	2.25	-0.25	Pass	2226878
601.98	602.12	0.14	Pass	2.50	2.65	0.15	Pass	8554529
1033.99	1034.15	0.16	Pass	2.50	2.44	-0.06	Pass	5254976
1633.95	1634.09	0.14	Pass	2.50	2.41	-0.09	Pass	5367191
2233.91	2233.93	0.02	Pass	2.50	2.31	-0.19	Pass	3505620

Analyzer: MS2 Polarity: Negative Width: Widest HP Funnel RF: 45Vp-p LP Funnel RF: 45Vp-p

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.00	0.00	Pass	2.50	2.61	0.11	Pass	786446
112.99	112.94	-0.05	Pass	2.50	2.65	0.15	Pass	8331677
302.00	301.99	-0.01	Pass	2.50	2.88	0.38	Pass	2494661
601.98	601.98	0.00	Pass	2.50	3.08	0.58	Pass	8873020
1033.99	1033.96	-0.03	Pass	2.50	3.11	0.61	Pass	5466037
1633.95	1633.96	0.01	Pass	2.50	2.93	0.43	Pass	6229055
2233.91	2233.88	-0.03	Pass	2.50	2.62	0.12	Pass	2406370

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
04/30/25 07:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8081.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 5:12:30 PM
Sample Name : IC137-1
Vial : P1-A2
DA Method File : 042925_1633_T4Q137.quantmethod.xml
Batch Name : t4q137.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.908	217.0 -> 172.0	778028	10.00 µg/L	0.000
M5-PFPeA	4.344	268.0 -> 223.0	390255	5.00 µg/L	0.000
M5-PFHxA	5.489	318.0 -> 273.0	263329	2.50 µg/L	0.000
M4-PFHpA	6.316	367.0 -> 322.0	290529	2.50 µg/L	0.000
M8-PFOA	6.934	421.0 -> 376.0	449588	2.50 µg/L	0.000
M9-PFNA	7.440	472.0 -> 427.0	186564	1.25 µg/L	0.000
M6-PFDA	7.895	519.0 -> 474.0	184130	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	241613	1.25 µg/L	0.000
M2-PFDoDA	8.716	615.0 -> 570.0	225860	1.25 µg/L	0.000
M2-PFTeDA	9.418	715.0 -> 670.0	195177	1.25 µg/L	-0.012
M8-FOSA	9.291	506.0 -> 78.0	167204	2.50 µg/L	0.000
M3-PFBS	5.393	302.0 -> 99.0	23711	2.50 µg/L	0.012
		302.0 -> 80.0	57948		
M3-PFHxS	7.024	402.0 -> 99.0	36112	2.50 µg/L	0.000
M8-PFOS	8.019	507.0 -> 99.0	41479	2.50 µg/L	0.000
M2-4:2FTS	5.190	329.0 -> 81.0	9886	5.00 µg/L	0.000
M2-6:2FTS	6.708	429.0 -> 81.0	21194	5.00 µg/L	-0.012
M2-8:2FTS	7.696	529.0 -> 81.0	25475	5.00 µg/L	0.000
M3-MeFOSAA	7.952	573.0 -> 419.0	187714	5.00 µg/L	0.000
M3-HFPO-DA	5.816	287.0 -> 169.0	397046	10.00 µg/L	0.000
M5-EtFOSAA	8.135	589.0 -> 419.0	146907	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	933109	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1239130	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	97934	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	87495	2.50 µg/L	-0.012
13C4-PFOS	8.020	503.0 -> 80.0	64697	2.50 µg/L	0.000
13C3-PFBA	2.911	216.0 -> 172.0	319996	5.00 µg/L	0.000
18O2-PFHxS	7.023	403.0 -> 84.0	38851	2.50 µg/L	0.000
13C4-PFOA	6.935	417.0 -> 372.0	426519	2.50 µg/L	0.000
13C2-PFDA	7.895	515.0 -> 470.0	148412	1.25 µg/L	0.000
13C5-PFNA	7.440	468.0 -> 423.0	168404	1.25 µg/L	0.000
13C2-PFHxA	5.477	315.0 -> 270.0	233044	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.190	329.0 -> 81.0	9886	4.97 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.3%	
13C2-6:2FTS	6.708	429.0 -> 81.0	21194	5.14 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.9%	
13C2-8:2FTS	7.696	529.0 -> 81.0	25475	5.04 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.8%	
13C2-PFDoDA	8.716	615.0 -> 570.0	225860	1.23 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.6%	
13C2-PFTeDA	9.418	715.0 -> 670.0	195177	1.24 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.6%	
13C3-PFBS	5.393	302.0 -> 99.0	23711	2.35 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.0%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.024	402.0 -> 99.0	36112	2.45	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.9%			
13C4-PFBA	2.908	217.0 -> 172.0	778028	9.84	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.4%			
13C4-PFHpA	6.316	367.0 -> 322.0	290529	2.49	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.6%			
13C5-PFHxA	5.489	318.0 -> 273.0	263329	2.47	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.8%			
13C5-PFPeA	4.344	268.0 -> 223.0	390255	4.98	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.5%			
13C6-PFDA	7.895	519.0 -> 474.0	184130	1.25	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.9%			
13C7-PFUnDA	8.310	570.0 -> 525.0	241613	1.27	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.6%			
13C8-FOSA	9.291	506.0 -> 78.0	167204	2.41	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.5%			
13C8-PFOA	6.934	421.0 -> 376.0	449588	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.1%			
13C8-PFOS	8.019	507.0 -> 99.0	41479	2.53	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.1%			
13C9-PFNA	7.440	472.0 -> 427.0	186564	1.23	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.4%			
d3-MeFOSAA	7.952	573.0 -> 419.0	187714	4.64	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.8%			
13C3-HFPO-DA	5.816	287.0 -> 169.0	397046	9.89	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.9%			
d3-MeFOSA	10.567	515.0 -> 169.0	87495	2.33	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.2%			
d5-EtFOSAA	8.135	589.0 -> 419.0	146907	4.67	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.4%			
d7-MeFOSE	10.475	623.0 -> 59.0	933109	23.93	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 95.7%			
d9-EtFOSE	10.746	639.0 -> 59.0	1239130	24.42	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.7%			
d5-EtFOSA	10.837	531.0 -> 169.0	97934	2.42	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.0%			
Target Compounds							**QValue**
4:2FTS	5.178	327.0 -> 307.0	9676	0.64	µg/L		91
		327.0 -> 81.0	4958				
6:2FTS	6.721	427.0 -> 407.0	11009	0.62	µg/L		100
		427.0 -> 81.0	5234				
8:2FTS	7.696	527.0 -> 507.0	10822	0.65	µg/L		98
		527.0 -> 81.0	4029				
EtFOSAA	8.136	584.0 -> 419.0	3794	0.16	µg/L	m	96
		584.0 -> 483.0	1927				
FOSA	9.294	498.0 -> 78.0	8561	0.16	µg/L	m	97
		498.0 -> 478.0	303				
MeFOSAA	7.953	570.0 -> 419.0	5740	0.20	µg/L	m	87
		570.0 -> 512.0	1575				
PFBA	2.914	213.0 -> 169.0	14260	0.67	µg/L		100
PFBS	5.394	299.0 -> 80.0	3427	0.15	µg/L		90
		299.0 -> 99.0	1672				
PFDA	7.896	513.0 -> 469.0	17614	0.15	µg/L		100
		513.0 -> 219.0	3945				
PFDoDA	8.716	613.0 -> 569.0	24908	0.16	µg/L		100
		613.0 -> 319.0	3397				

Perfluorinated Compounds by LC/MS/MS

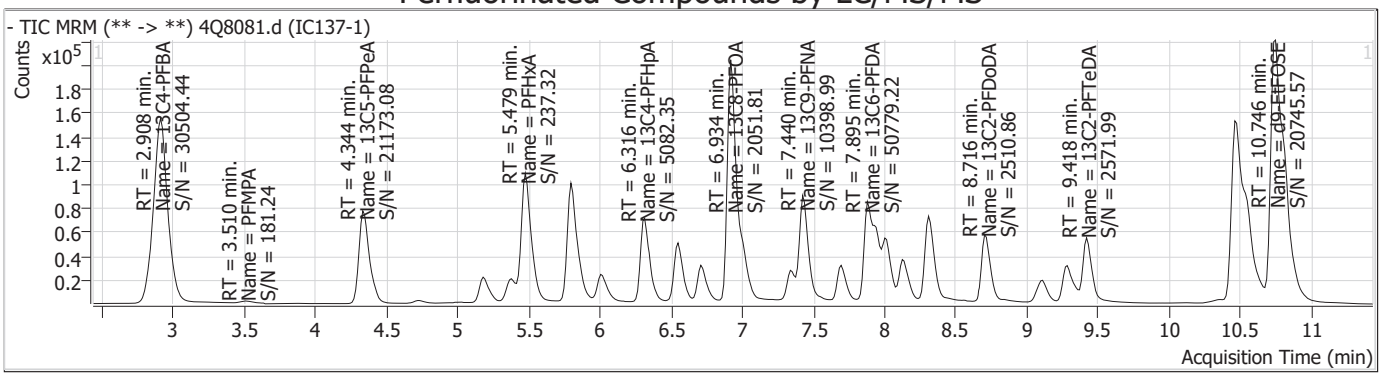
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.854	599.0 -> 80.0	3259	0.17	µg/L		85
		599.0 -> 99.0	1595				
PFHpA	6.317	363.0 -> 319.0	23747	0.16	µg/L		97
		363.0 -> 169.0	5071				
PFHpS	7.553	449.0 -> 80.0	4381	0.16	µg/L		90
		449.0 -> 99.0	2695				
PFHxA	5.479	313.0 -> 269.0	16303	0.17	µg/L	m	98
		313.0 -> 119.0	640				
PFHxS	7.013	399.0 -> 80.0	4569	0.17	µg/L	m	96
		399.0 -> 99.0	2234				
PFNA	7.441	463.0 -> 419.0	15567	0.16	µg/L	m	97
		463.0 -> 219.0	5762				
PFNS	8.461	549.0 -> 80.0	4068	0.16	µg/L		85
		549.0 -> 99.0	1982				
PFOA	6.935	413.0 -> 369.0	20297	0.16	µg/L	m	91
		413.0 -> 169.0	6756				
PFOS	8.033	499.0 -> 80.0	4663	0.16	µg/L	m	99
		499.0 -> 99.0	2498				
PFPeA	4.346	263.0 -> 219.0	17008	0.33	µg/L		100
PFPeS	6.355	349.0 -> 80.0	3956	0.16	µg/L		91
		349.0 -> 99.0	2250				
PFTeDA	9.419	713.0 -> 669.0	31208	0.16	µg/L		98
		713.0 -> 219.0	2362				
PFTrDA	9.087	663.0 -> 619.0	28752	0.17	µg/L		99
		663.0 -> 369.0	1780				
PFUnDA	8.312	563.0 -> 519.0	19463	0.16	µg/L		93
		563.0 -> 269.0	4462				
11Cl-PF3OUdS	9.114	631.0 -> 451.0	48140	0.62	µg/L		99
		633.0 -> 453.0	14350				
9Cl-PF3ONS	8.339	531.0 -> 351.0	52418	0.64	µg/L		97
		533.0 -> 353.0	16721				
ADONA	6.552	377.0 -> 251.0	165733	0.62	µg/L		99
		377.0 -> 85.0	55491				
HFPO-DA	5.817	285.0 -> 169.0	24862	0.69	µg/L		99
		285.0 -> 185.0	2727				
3:3FTCA	3.794	241.0 -> 177.0	2372	0.84	µg/L		95
		241.0 -> 117.0	249				
5:3FTCA	6.019	341.0 -> 237.0	62508	4.37	µg/L		99
		341.0 -> 217.0	45643				
7:3FTCA	7.355	441.0 -> 337.0	90215	4.33	µg/L		94
		441.0 -> 317.0	36877				
EtFOSA	10.826	526.0 -> 219.0	6167	0.17	µg/L		89
		526.0 -> 169.0	7963				
EtFOSE	10.760	630.0 -> 59.0	77942	1.66	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	7497	0.18	µg/L		100
		512.0 -> 219.0	5038				
MeFOSE	10.488	616.0 -> 59.0	55524	1.63	µg/L	m	100
PFDoDS	9.546	699.0 -> 80.0	2855	0.17	µg/L		97
		699.0 -> 99.0	1703				
NFDHA	5.370	295.0 -> 201.0	4434	0.36	µg/L		82
		201.0 -> 85.0	16656				
		295.0 -> 85.0	1142				
PFMBA	4.735	279.0 -> 85.0	11740	0.33	µg/L		100
PFMPA	3.510	229.0 -> 85.0	10369	0.34	µg/L		100
PFEESA	5.872	315.0 -> 135.0	25995	0.29	µg/L		99
		315.0 -> 69.0	1955				

Perfluorinated Compounds by LC/MS/MS

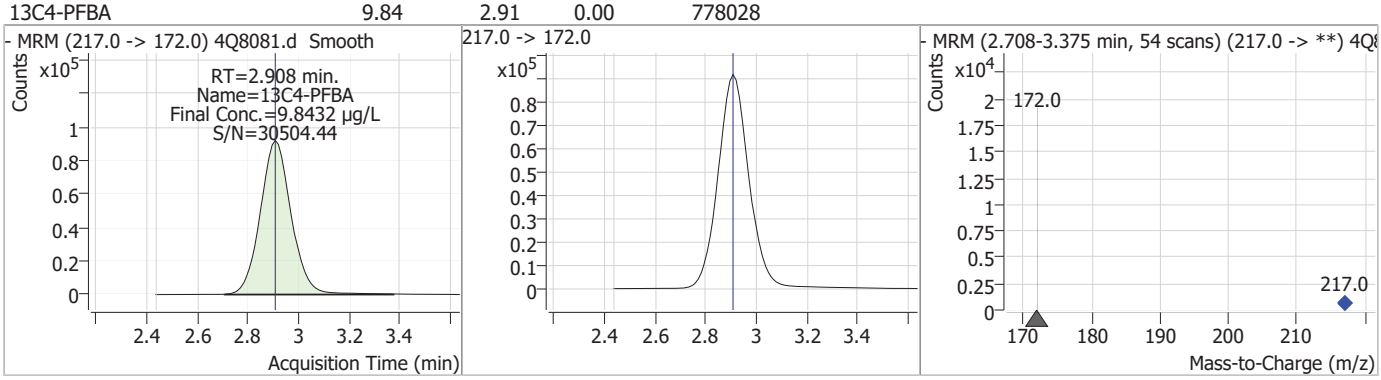
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

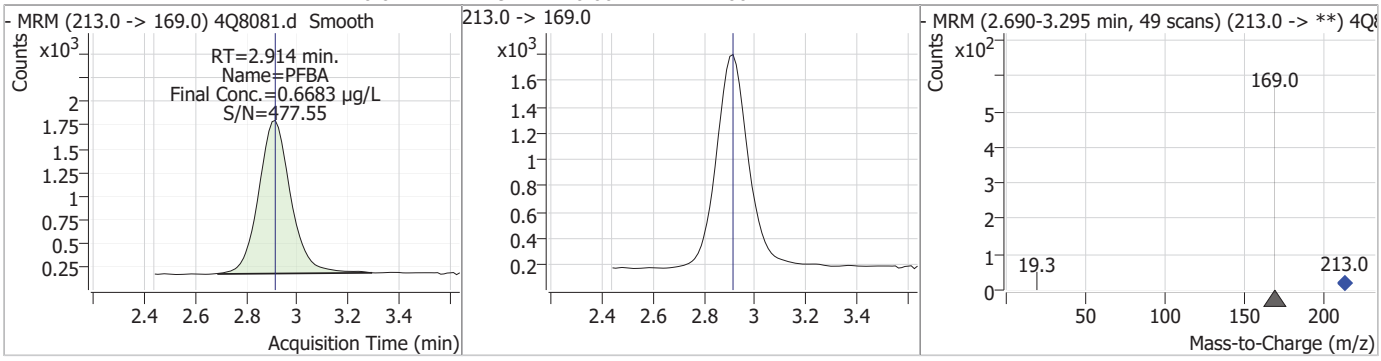
Perfluorinated Compounds by LC/MS/MS



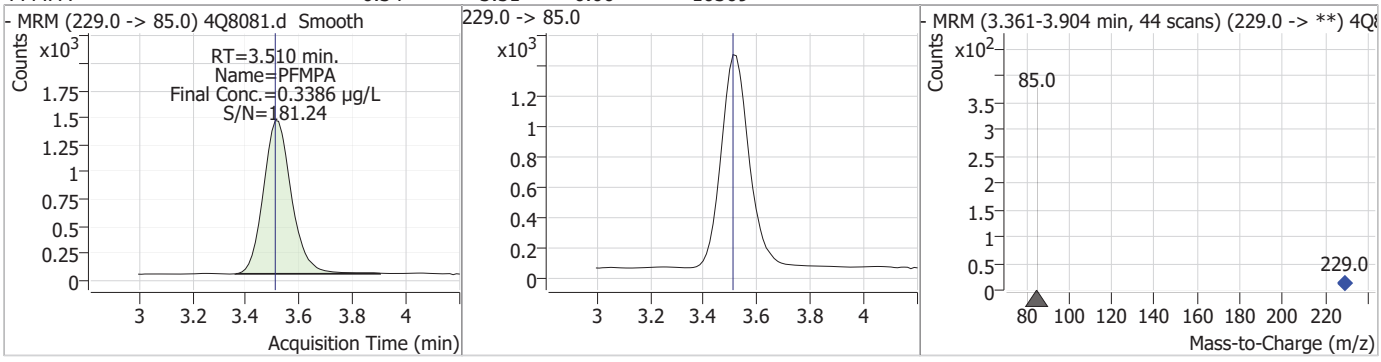
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.84	2.91	0.00	778028				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.67	2.91	0.00	14260				

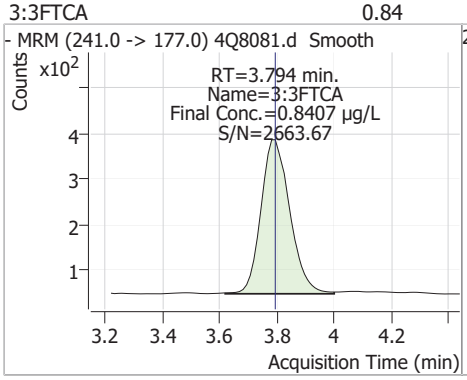


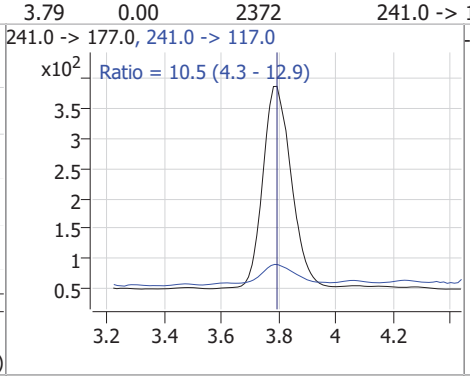
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.34	3.51	0.00	10369				

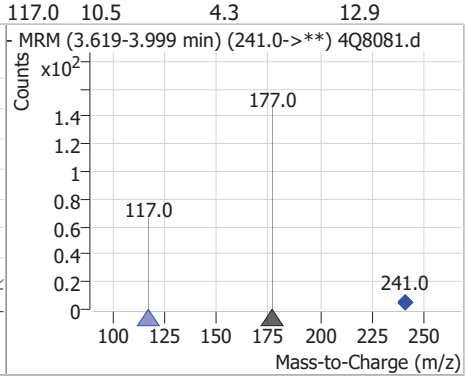


Perfluorinated Compounds by LC/MS/MS

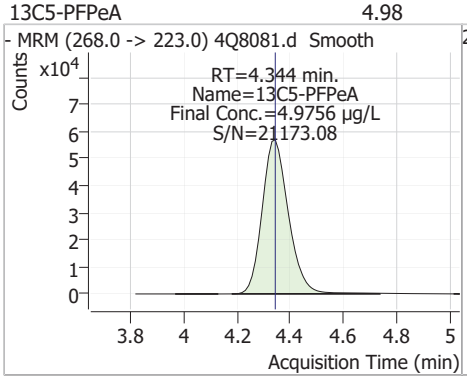
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	0.84	3.79	0.00	2372	241.0 -> 117.0	10.5	4.3	12.9

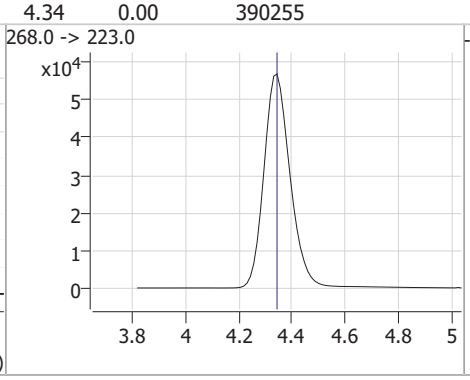


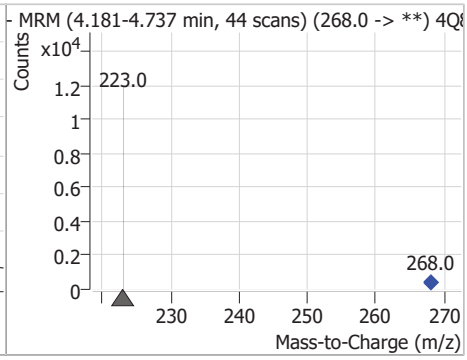




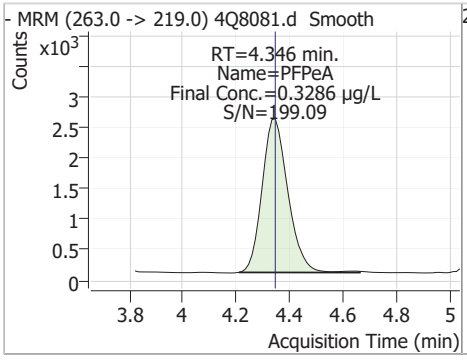
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.98	4.34	0.00	390255				

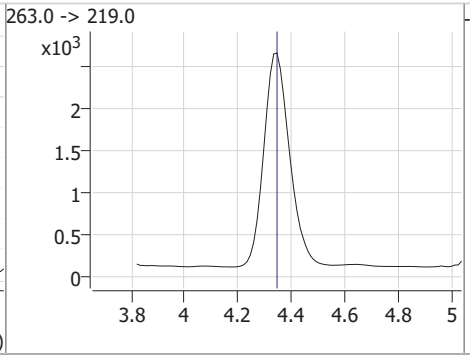


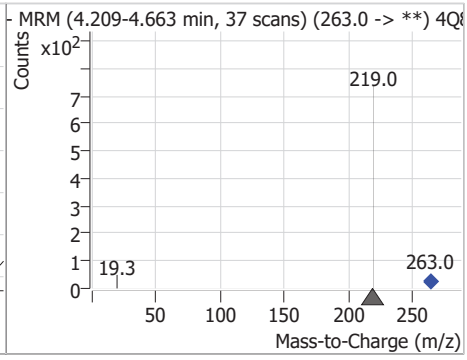




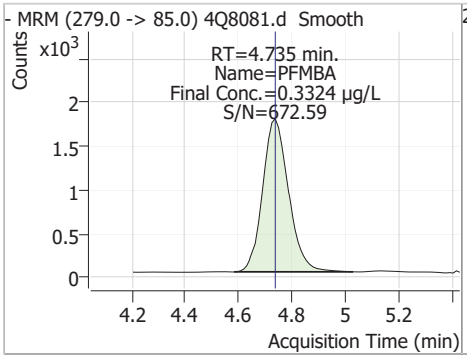
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.33	4.35	0.00	17008				

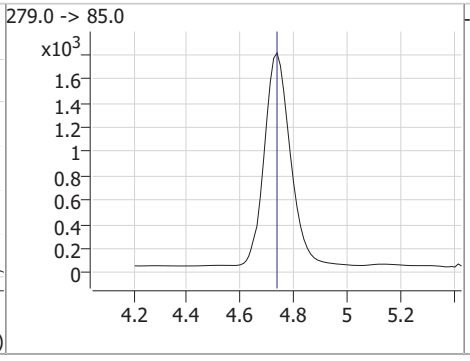


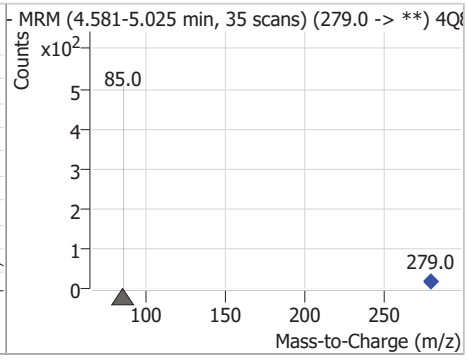




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.33	4.73	0.00	11740				

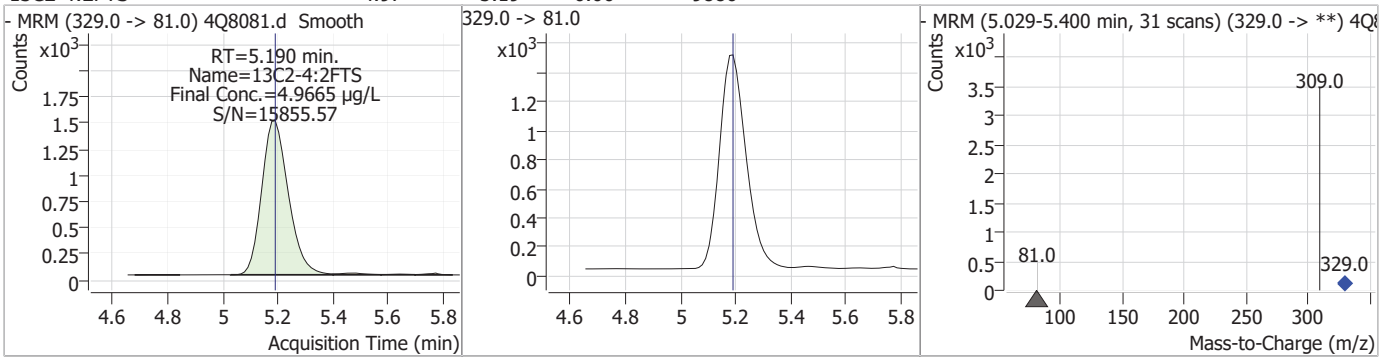




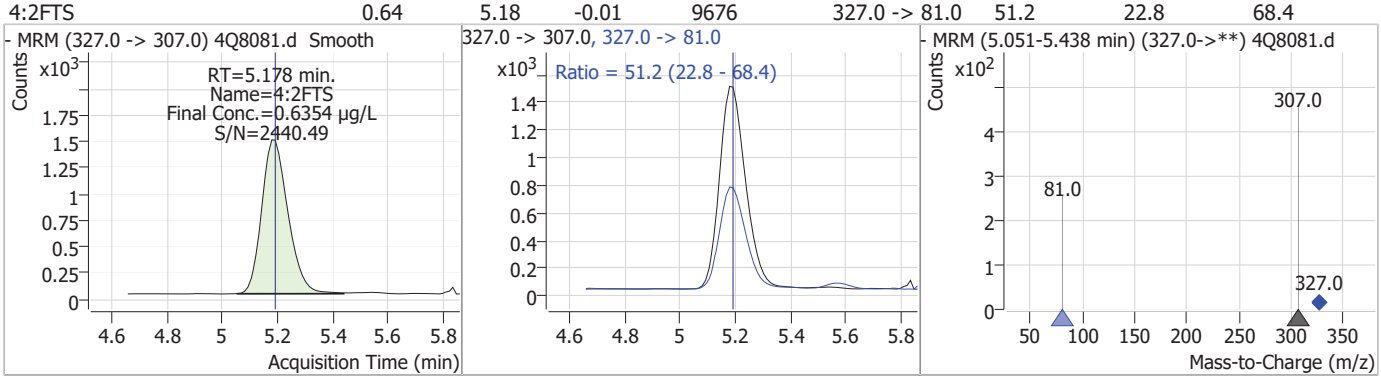


Perfluorinated Compounds by LC/MS/MS

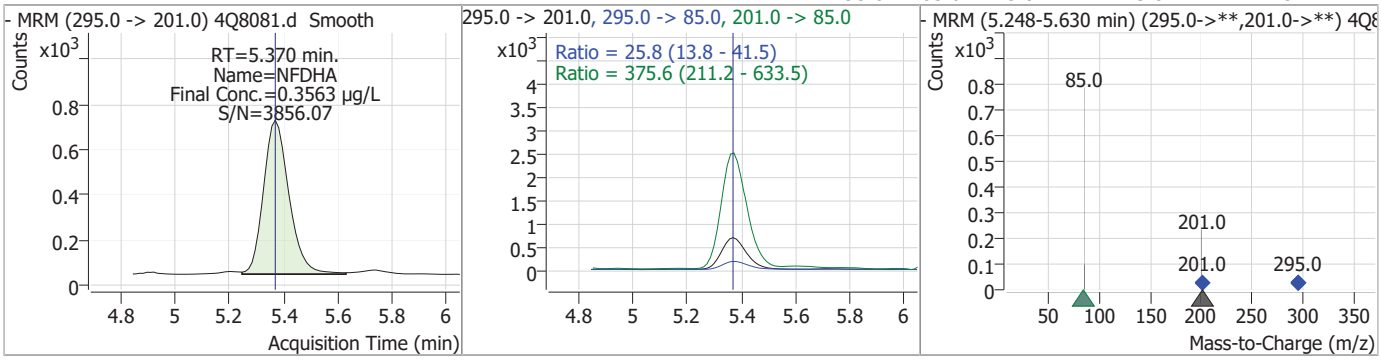
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.97	5.19	0.00	9886				



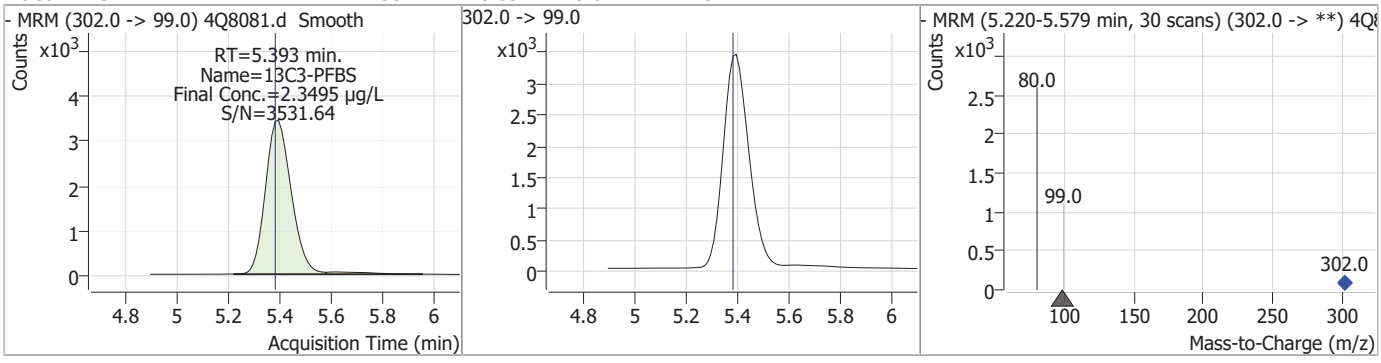
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	0.64	5.18	-0.01	9676	327.0 -> 81.0	51.2	22.8	68.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.36	5.37	0.00	4434	201.0 -> 85.0	375.6	211.2	633.5
					295.0 -> 85.0	25.8	13.8	41.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.35	5.39	0.01	23711				



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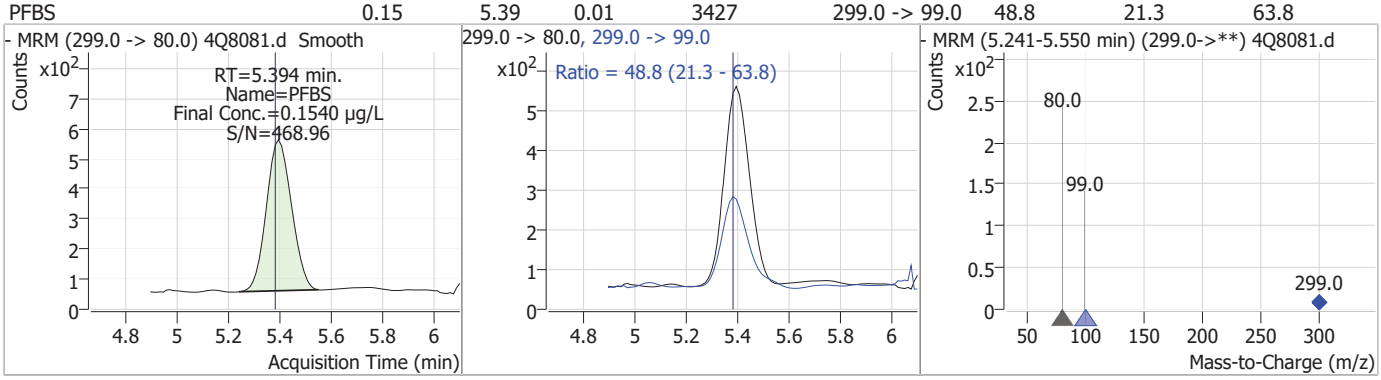
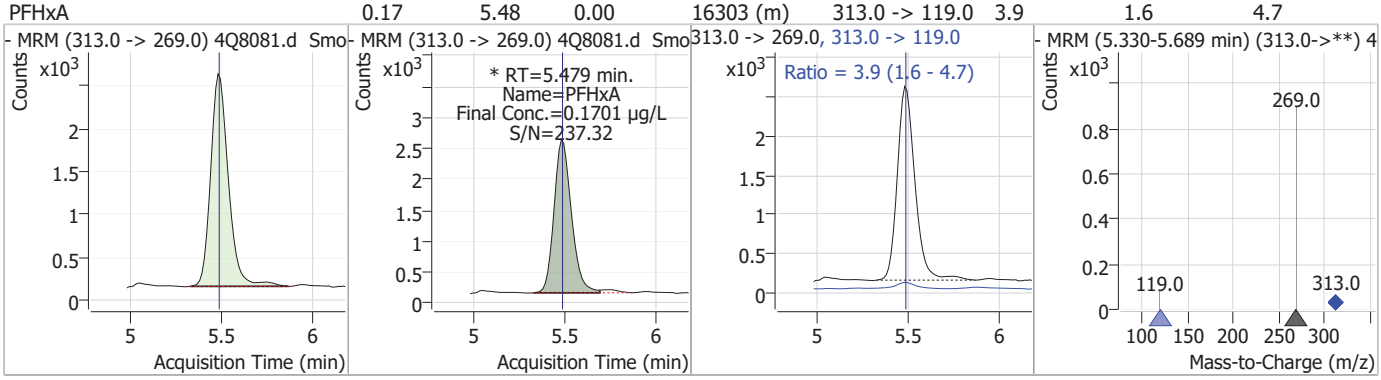
Perfluorinated Compounds by LC/MS/MS

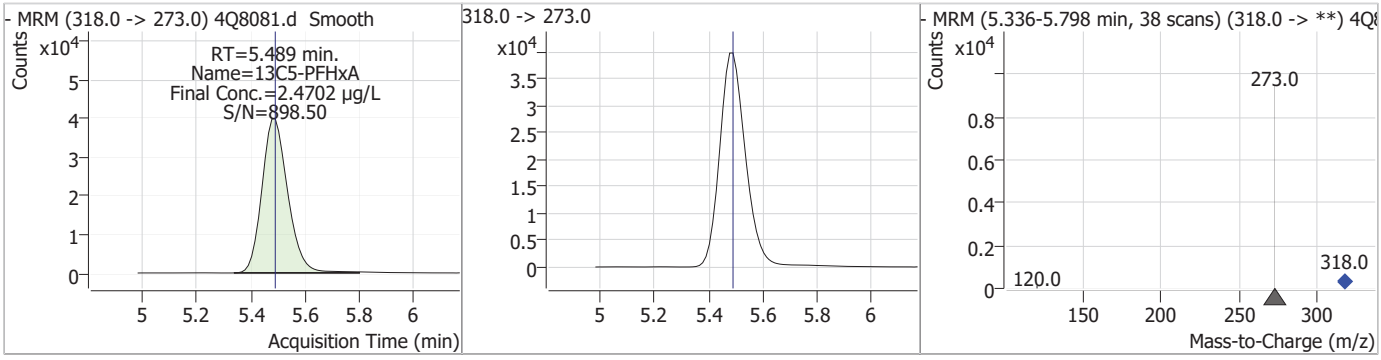
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.15	5.39	0.01	3427	299.0 -> 99.0	48.8	21.3	63.8



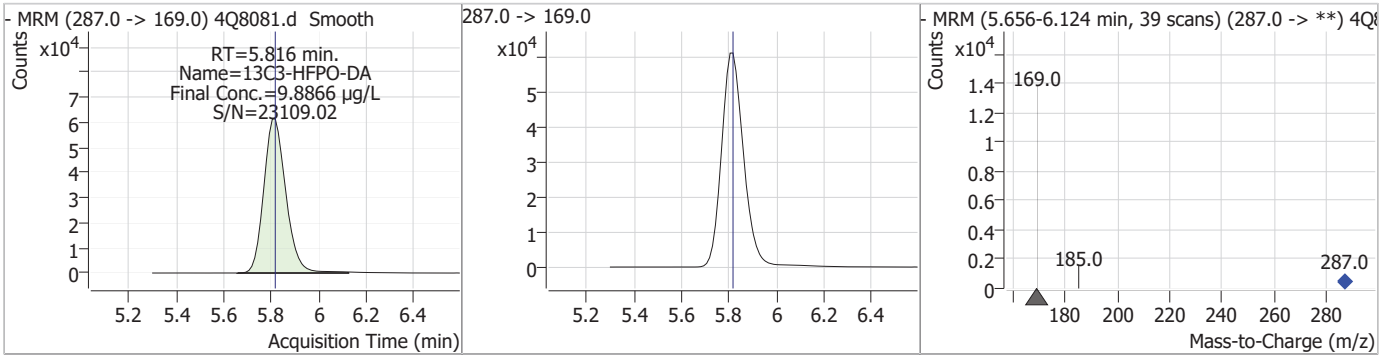
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.17	5.48	0.00	16303 (m)	313.0 -> 119.0	3.9	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.47	5.49	0.00	263329				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.89	5.82	0.00	397046				



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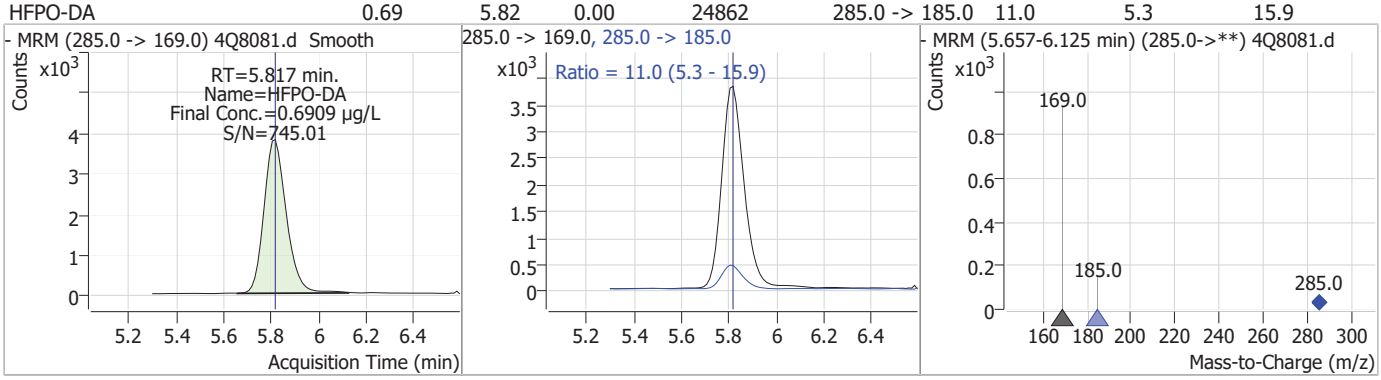
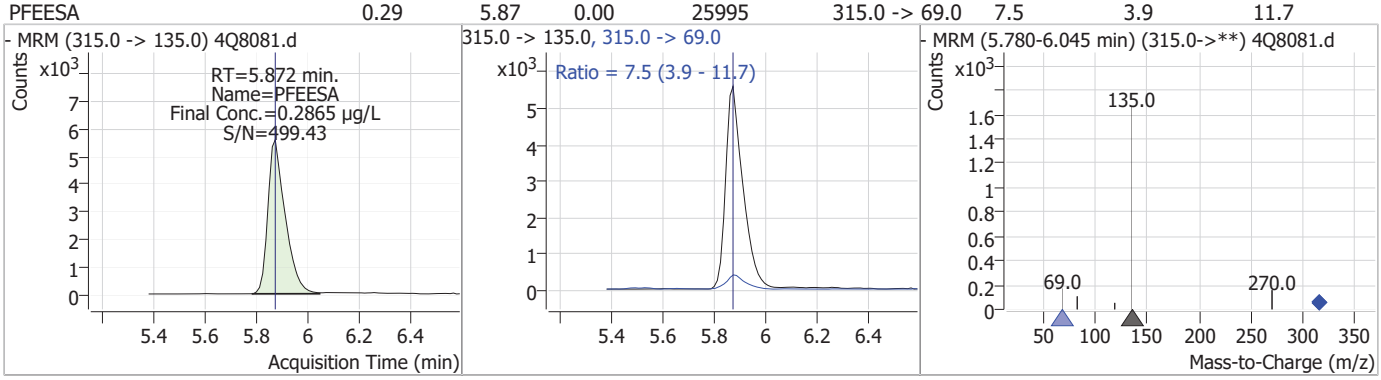
Perfluorinated Compounds by LC/MS/MS

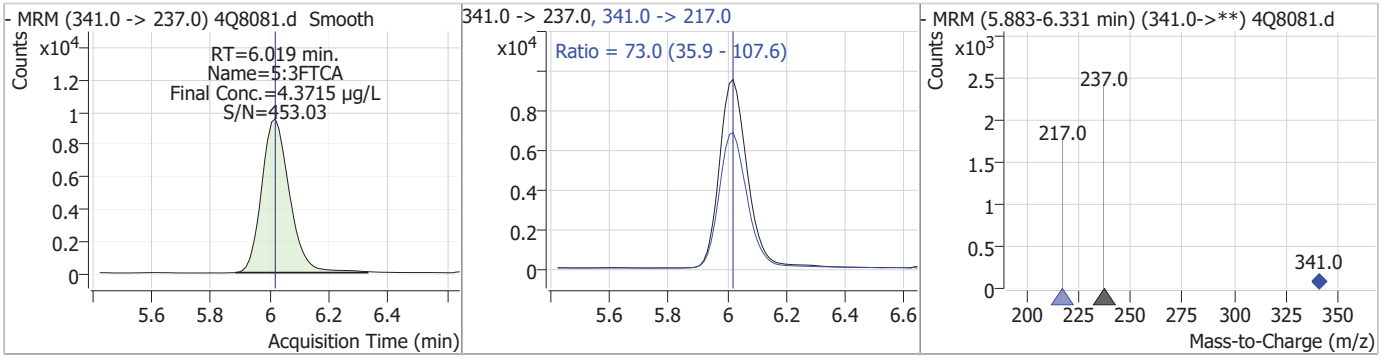
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	0.69	5.82	0.00	24862	285.0 -> 185.0	11.0	5.3	15.9



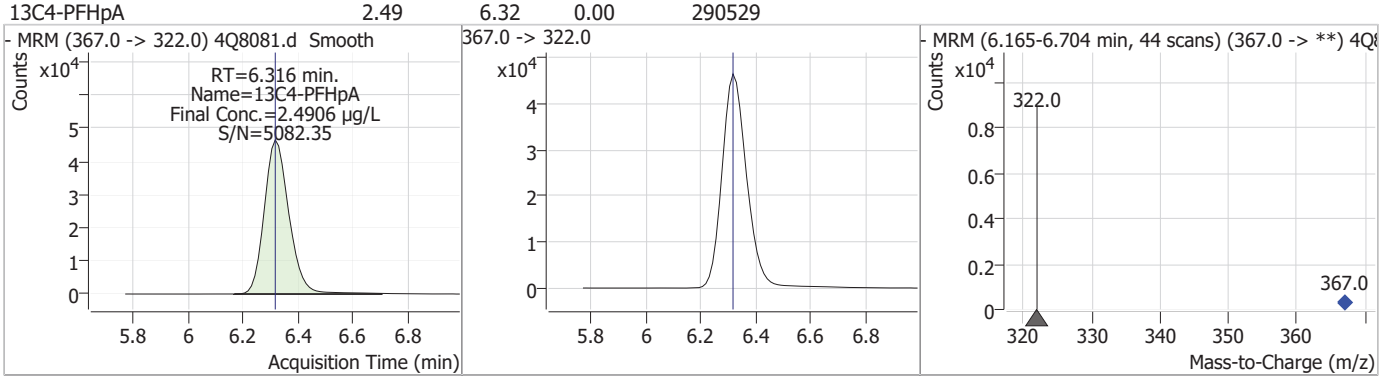
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.29	5.87	0.00	25995	315.0 -> 69.0	7.5	3.9	11.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	4.37	6.02	0.00	62508	341.0 -> 217.0	73.0	35.9	107.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.49	6.32	0.00	290529				



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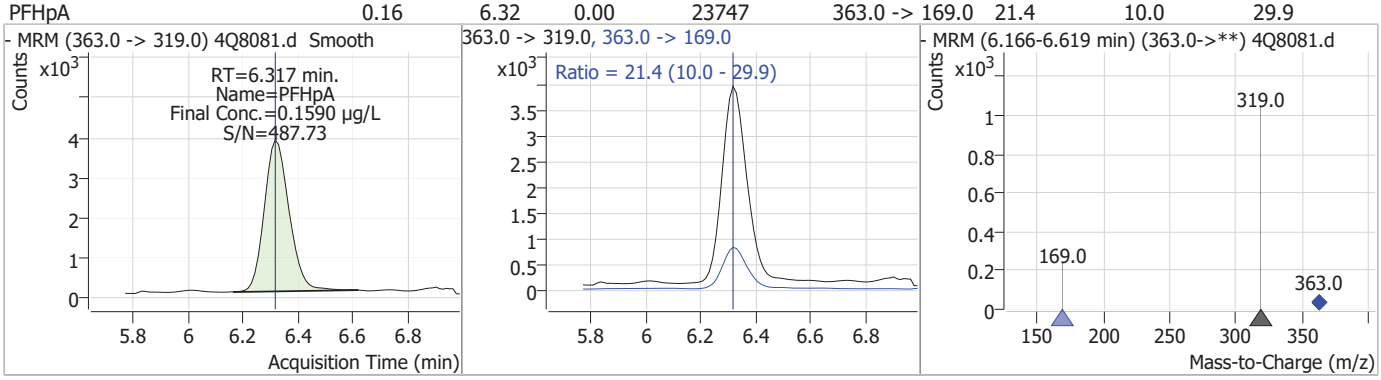
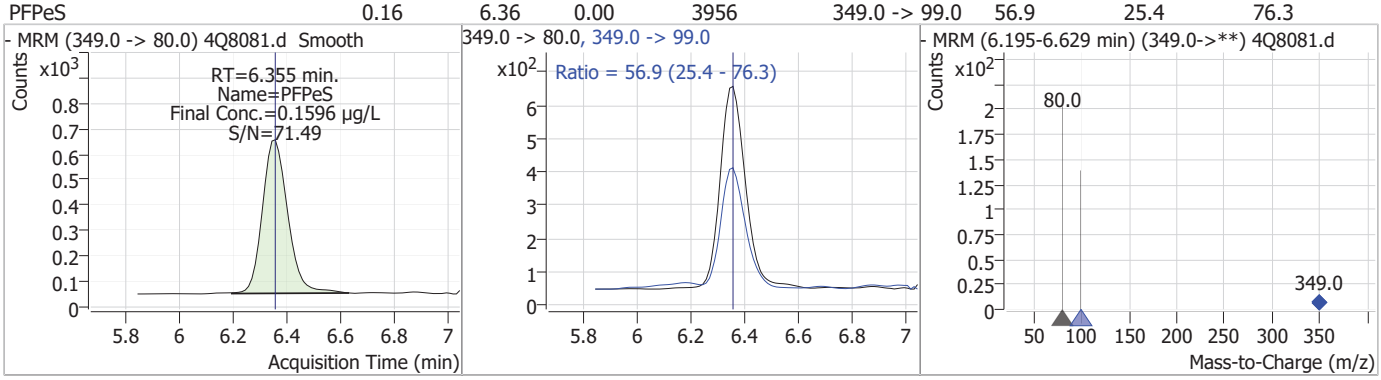
Perfluorinated Compounds by LC/MS/MS

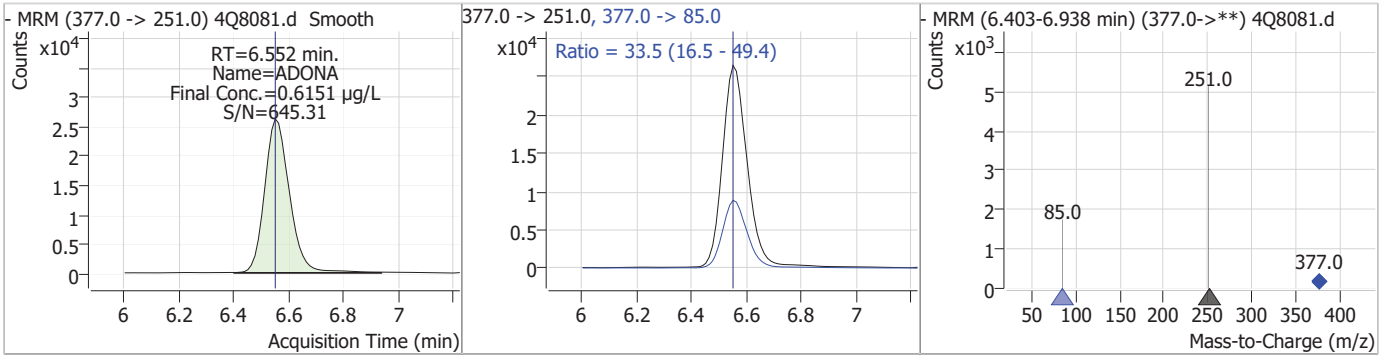
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.16	6.32	0.00	23747	363.0 -> 169.0	21.4	10.0	29.9



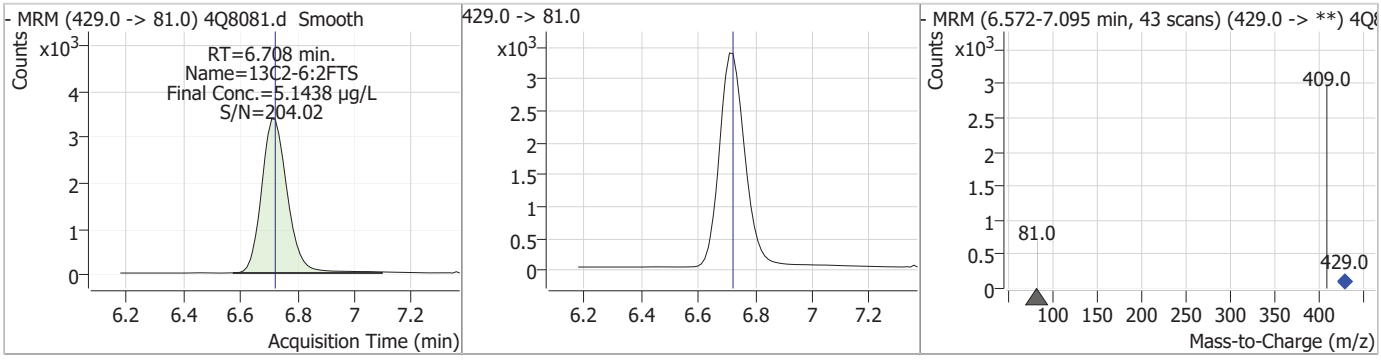
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.16	6.36	0.00	3956	349.0 -> 99.0	56.9	25.4	76.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	0.62	6.55	0.00	165733	377.0 -> 85.0	33.5	16.5	49.4

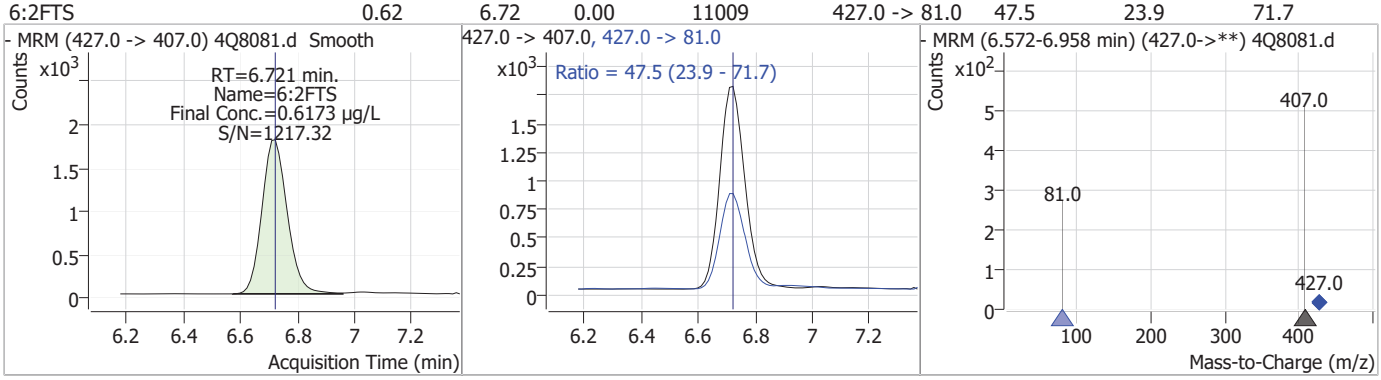


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.14	6.71	-0.01	21194				

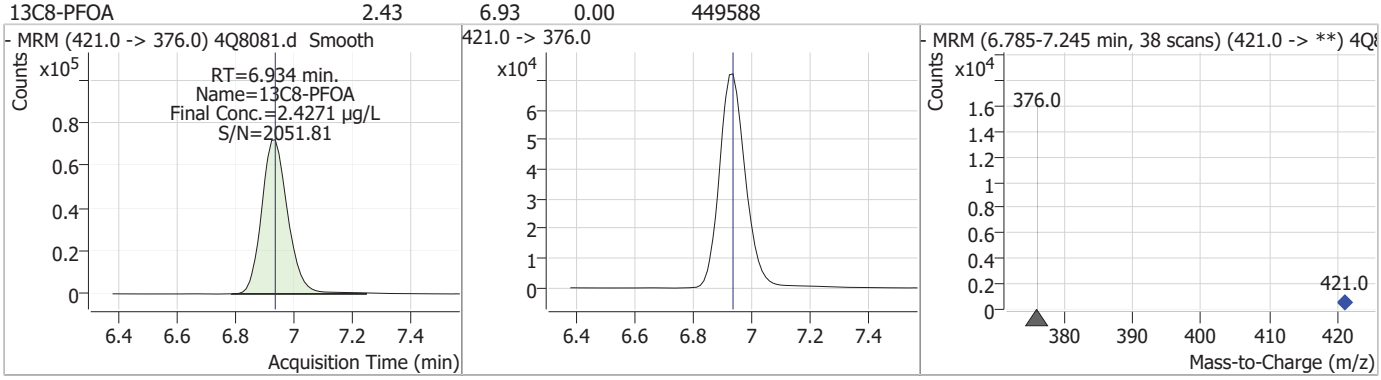


Perfluorinated Compounds by LC/MS/MS

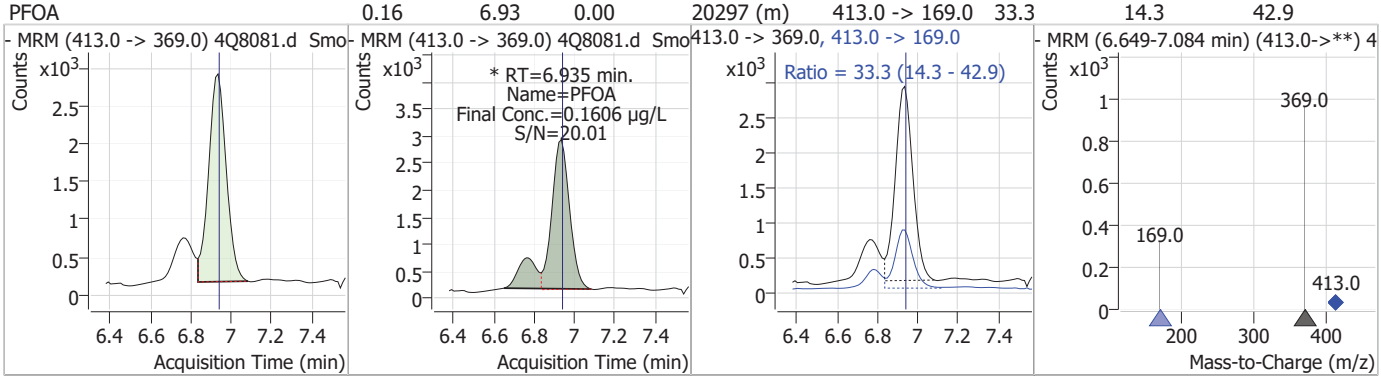
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.62	6.72	0.00	11009	427.0 -> 81.0	47.5	23.9	71.7



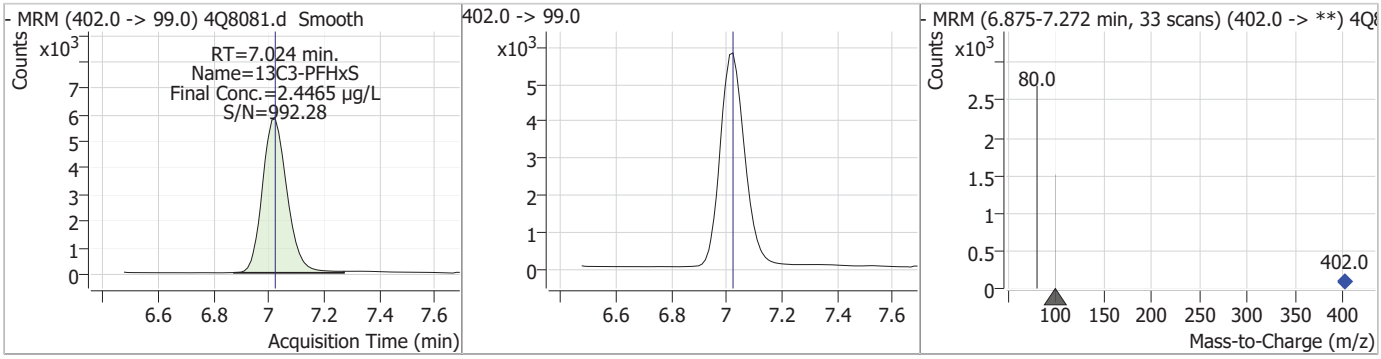
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.43	6.93	0.00	449588				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.16	6.93	0.00	20297 (m)	413.0 -> 169.0	33.3	14.3	42.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.45	7.02	0.00	36112				



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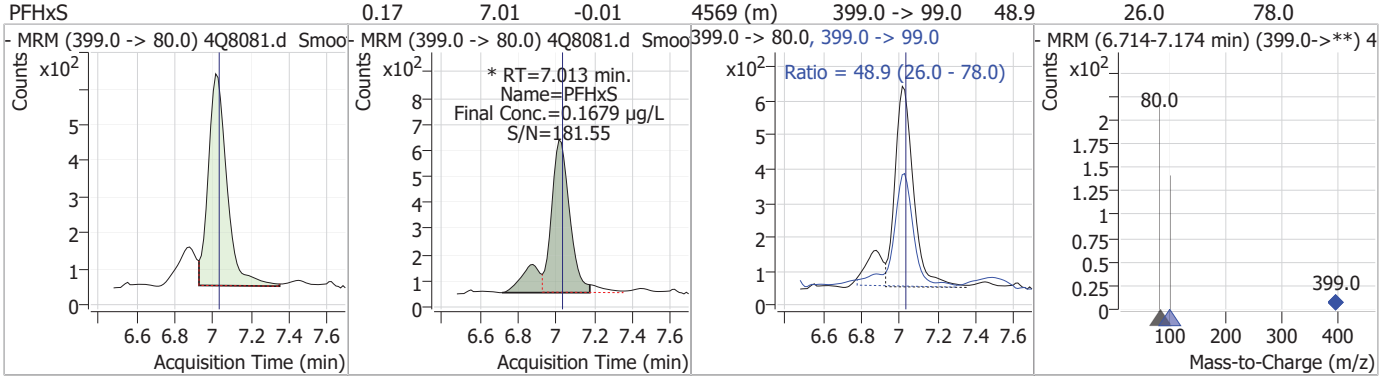
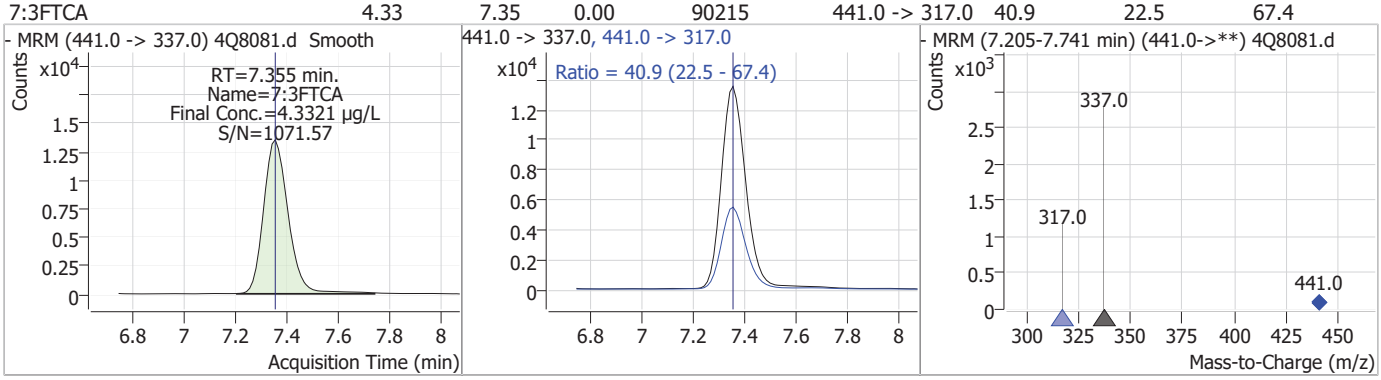
Perfluorinated Compounds by LC/MS/MS

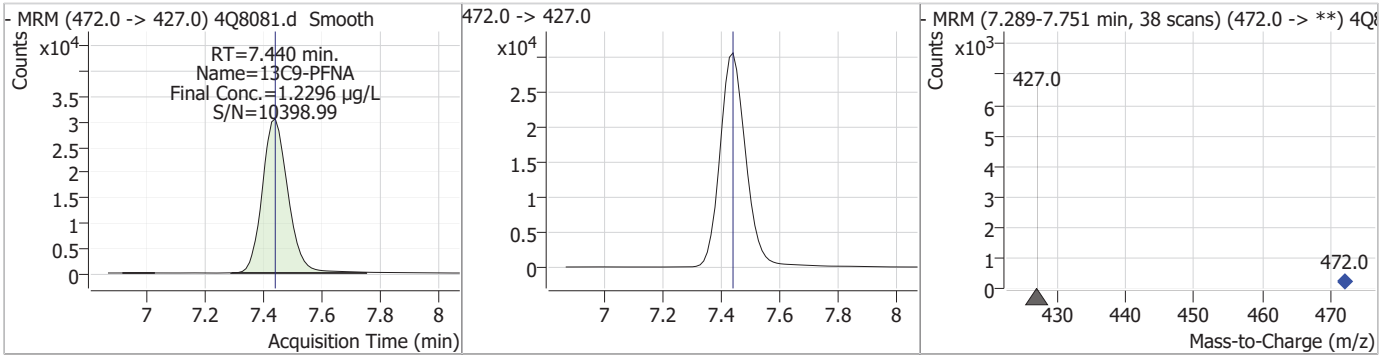
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.17	7.01	-0.01	4569 (m)	399.0 -> 99.0	48.9	26.0	78.0



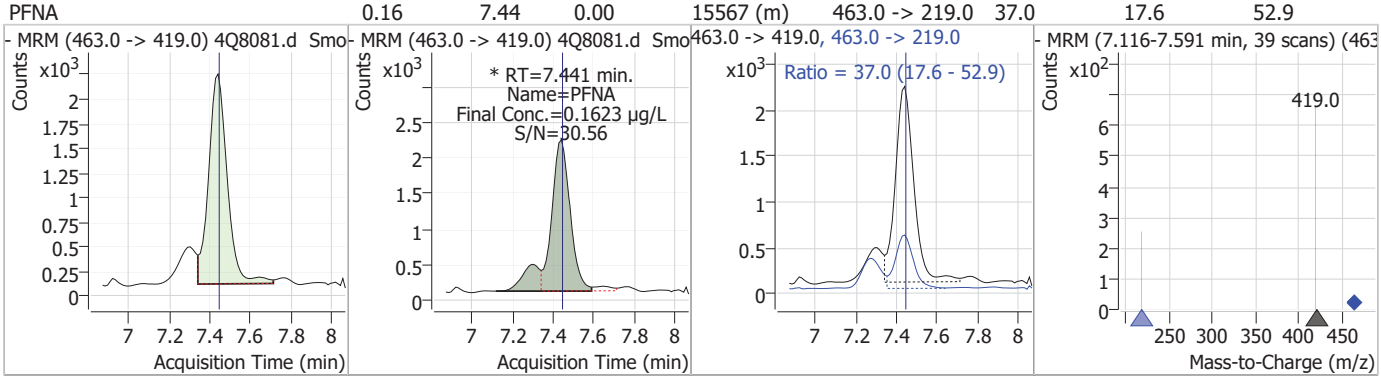
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	4.33	7.35	0.00	90215	441.0 -> 317.0	40.9	22.5	67.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.23	7.44	0.00	186564				

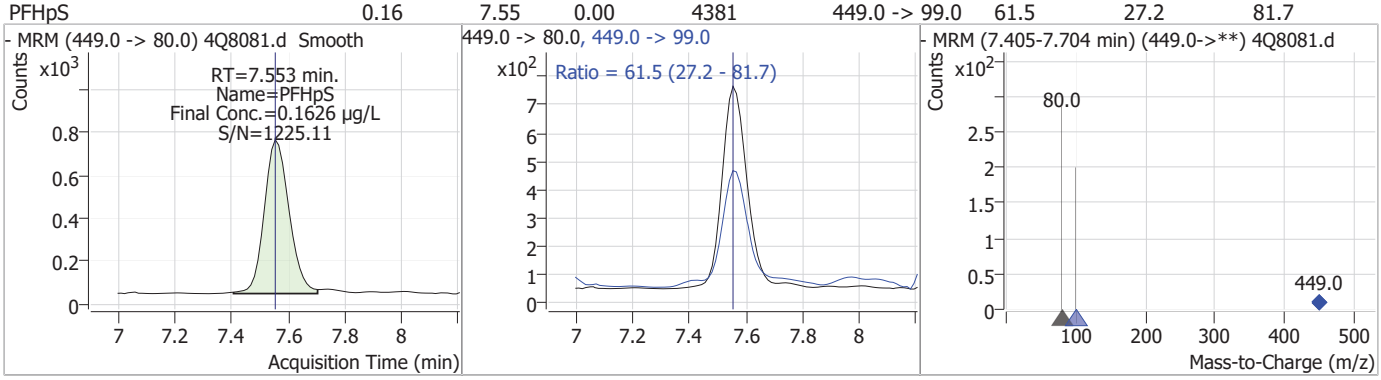


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.16	7.44	0.00	15567 (m)	463.0 -> 219.0	37.0	17.6	52.9

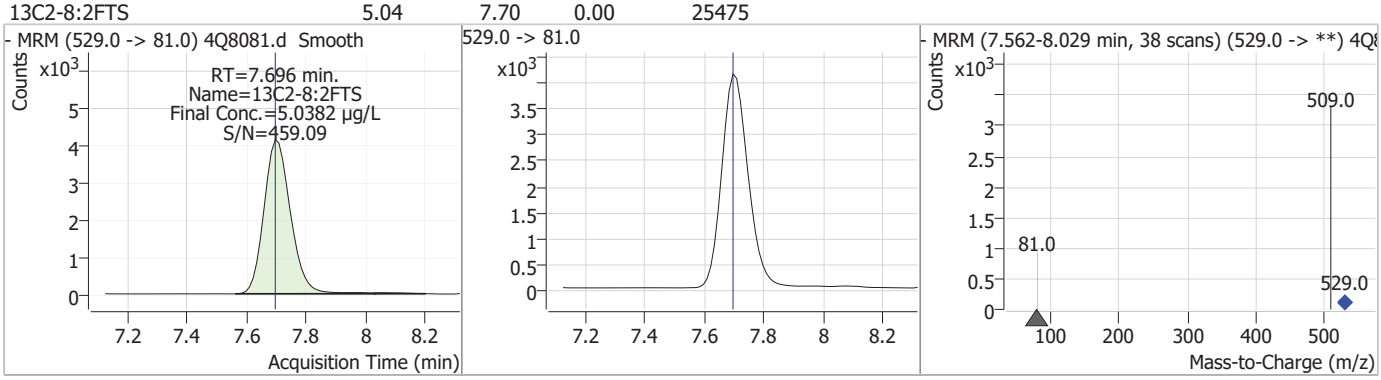


Perfluorinated Compounds by LC/MS/MS

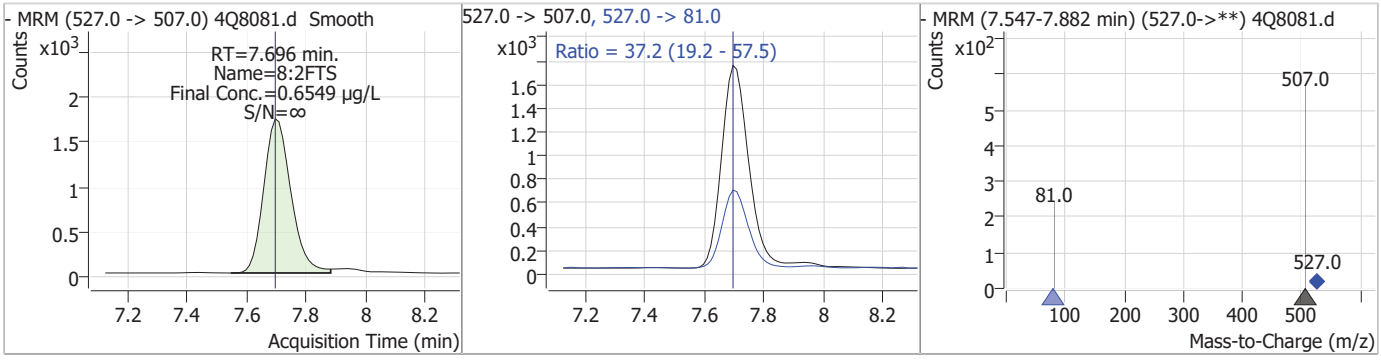
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.16	7.55	0.00	4381	449.0 -> 99.0	61.5	27.2	81.7



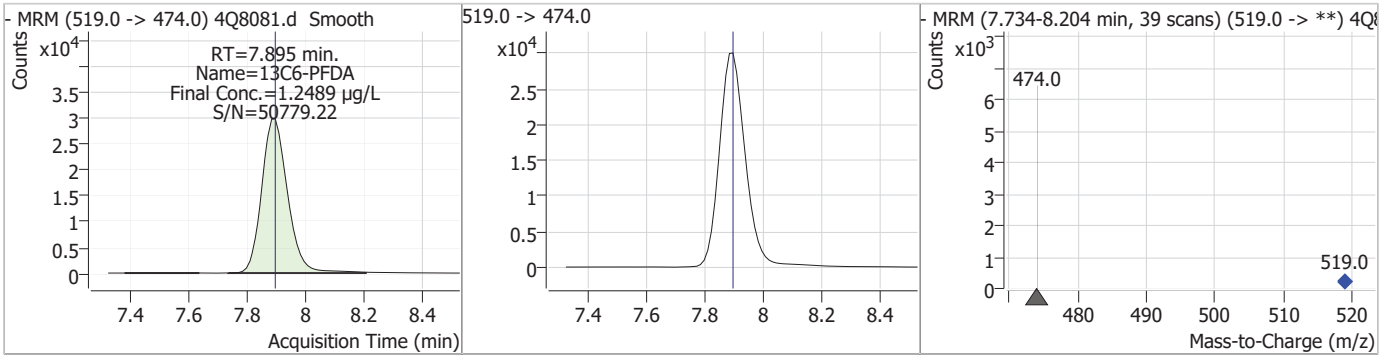
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.04	7.70	0.00	25475				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.65	7.70	0.00	10822	527.0 -> 81.0	37.2	19.2	57.5

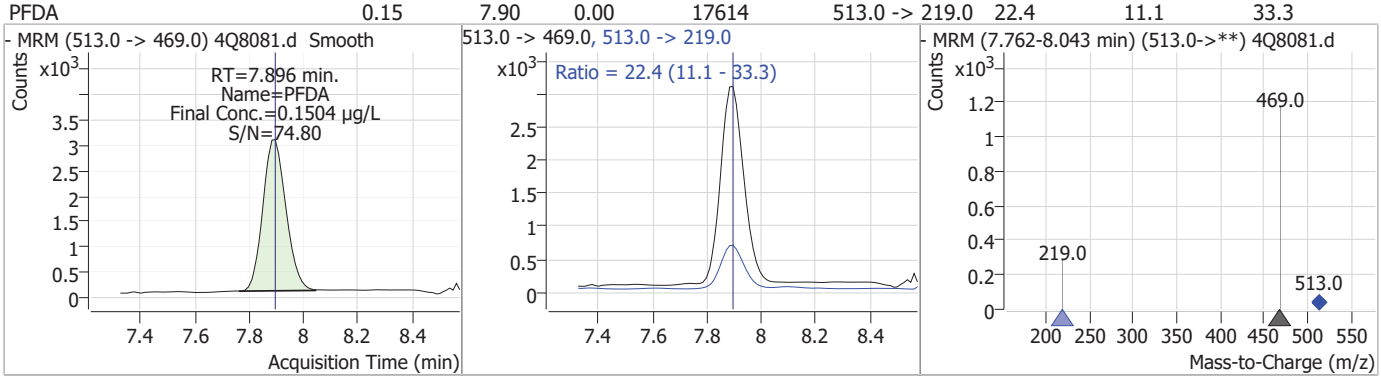


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.25	7.89	0.00	184130				

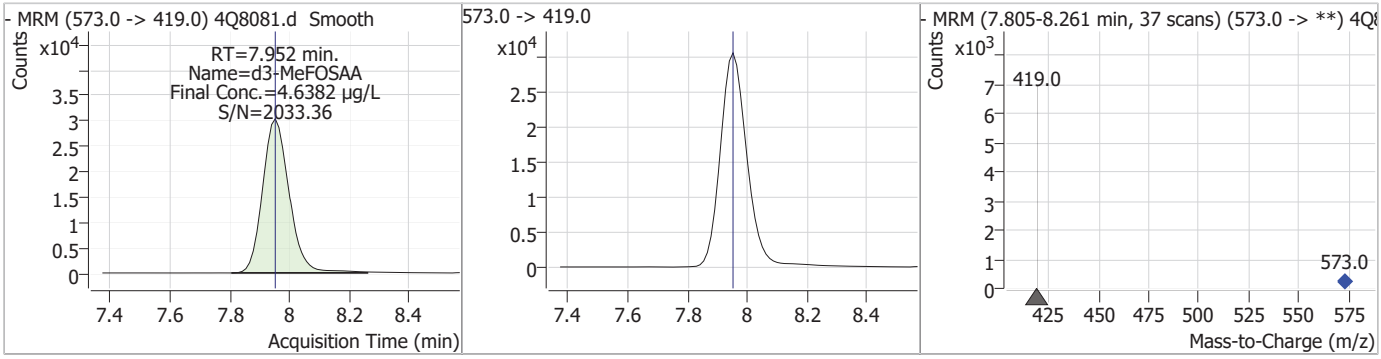


Perfluorinated Compounds by LC/MS/MS

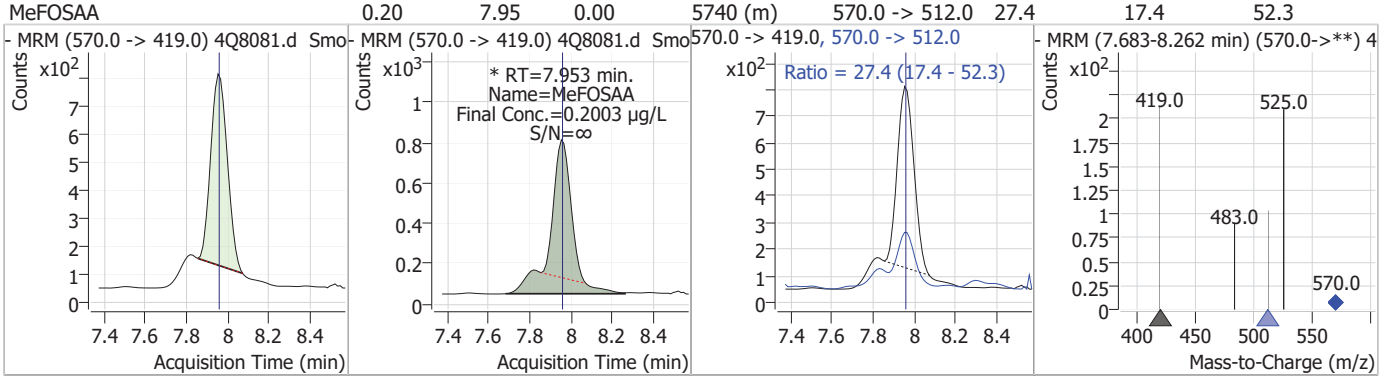
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.15	7.90	0.00	17614	513.0 -> 219.0	22.4	11.1	33.3



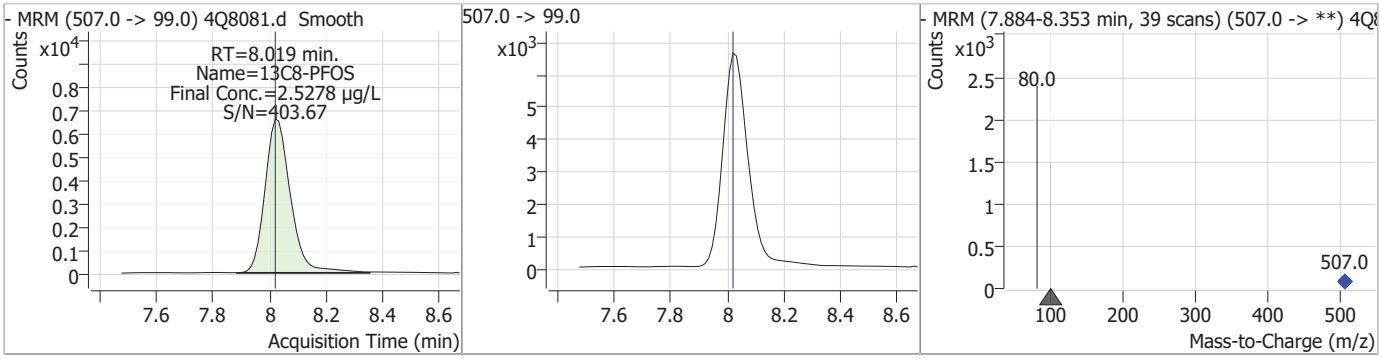
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.64	7.95	0.00	187714				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.20	7.95	0.00	5740 (m)	570.0 -> 512.0	27.4	17.4	52.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.53	8.02	0.00	41479				



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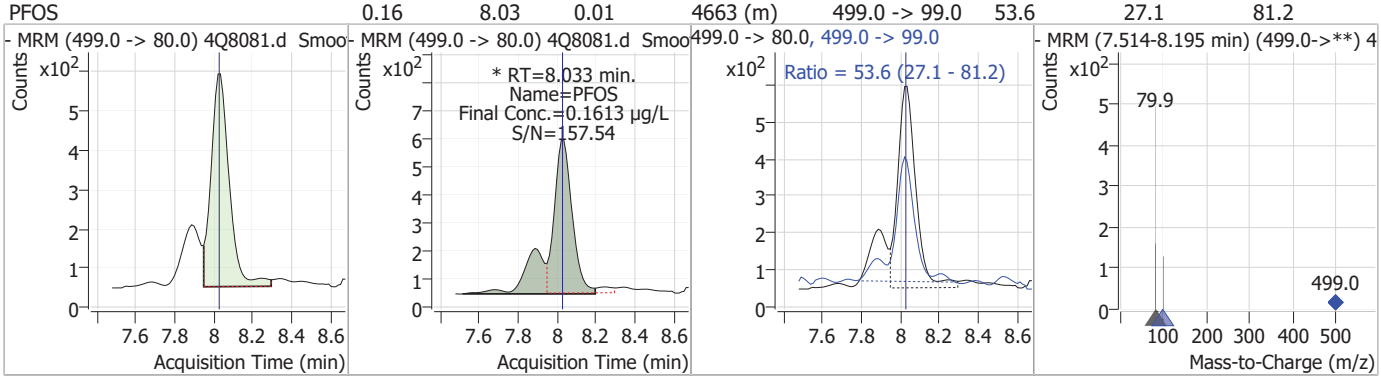
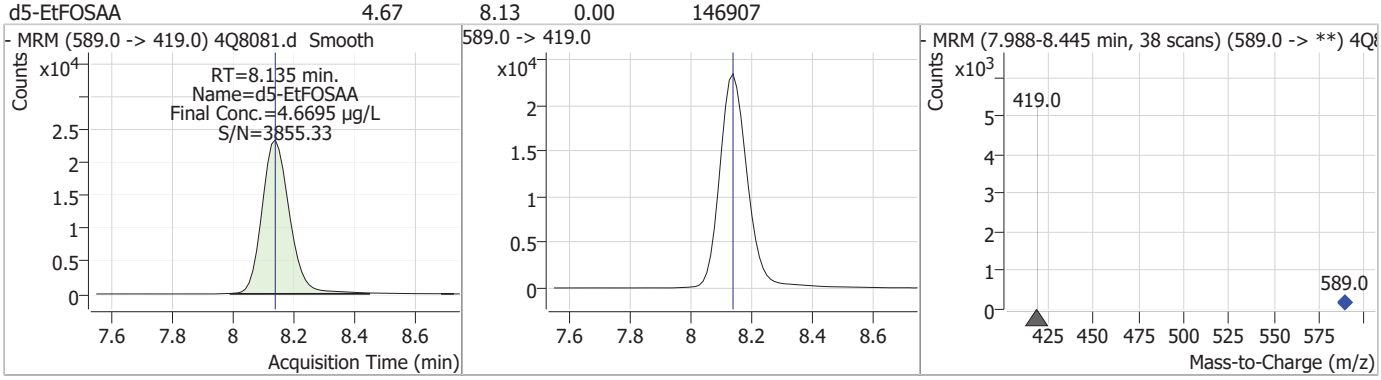
Perfluorinated Compounds by LC/MS/MS

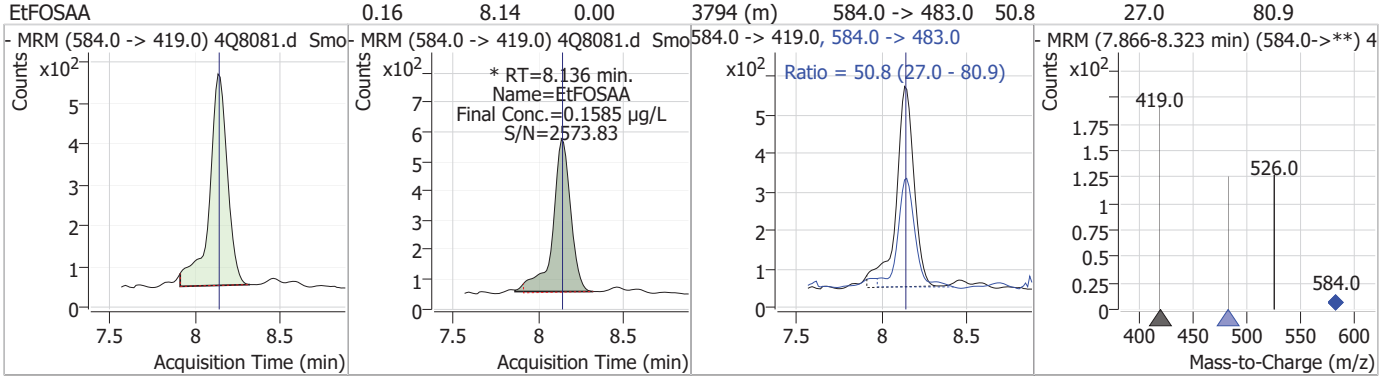
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.16	8.03	0.01	4663 (m)	499.0 -> 99.0	53.6	27.1	81.2



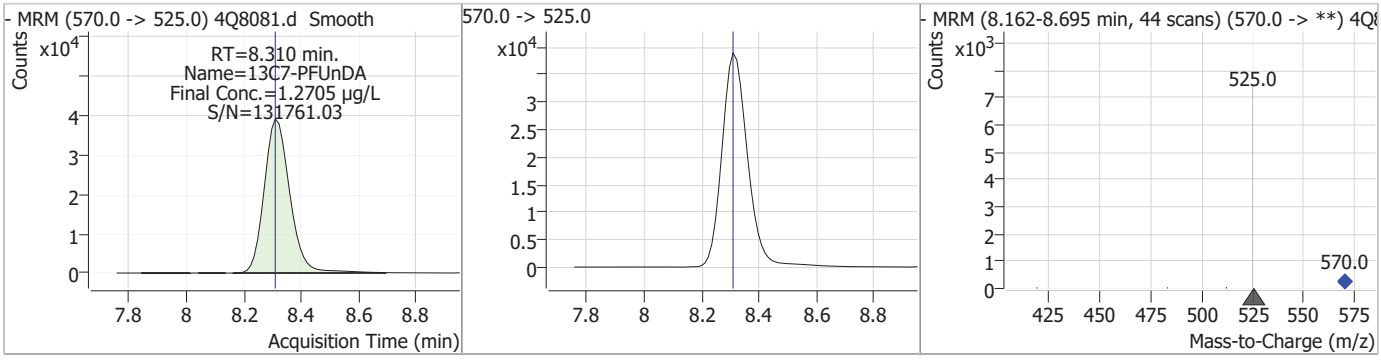
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.67	8.13	0.00	146907				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.16	8.14	0.00	3794 (m)	584.0 -> 483.0	50.8	27.0	80.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.27	8.31	0.00	241613				



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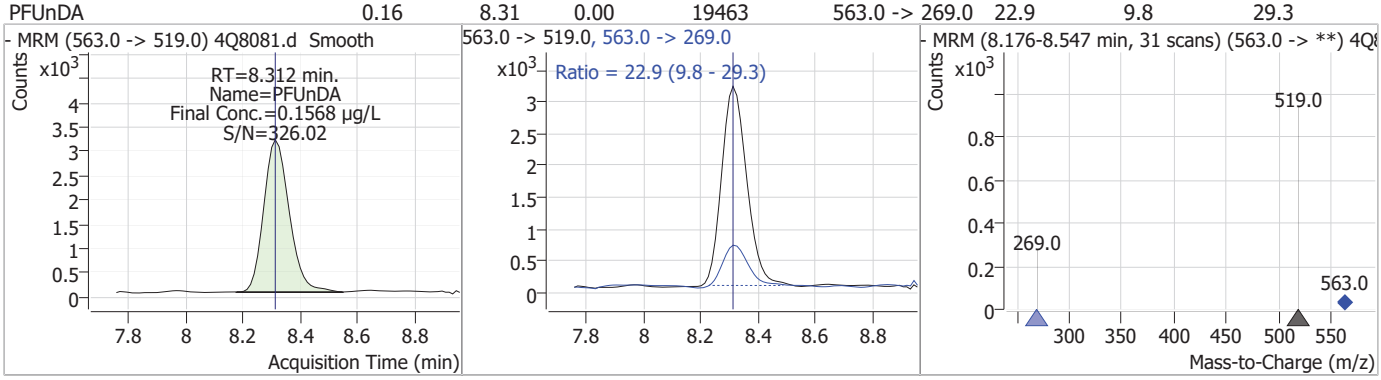
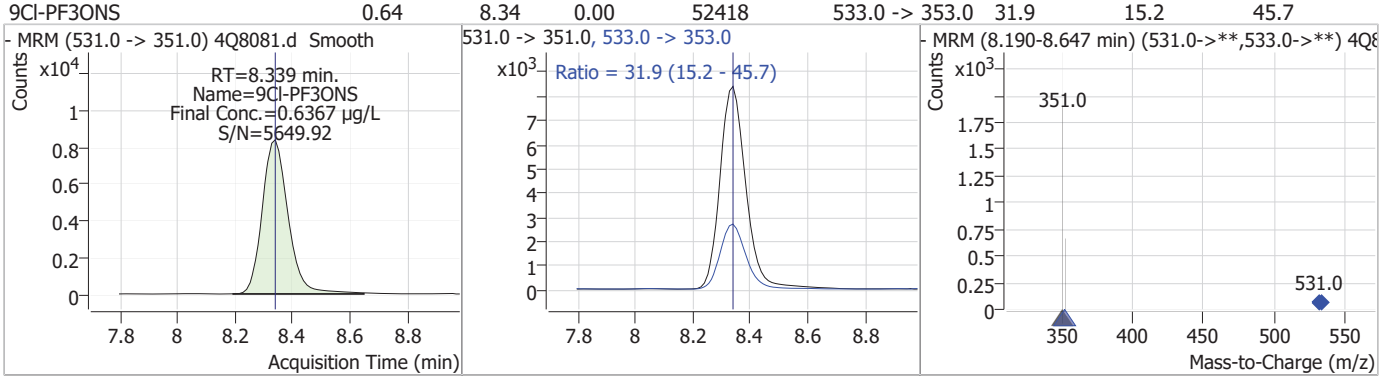
Perfluorinated Compounds by LC/MS/MS

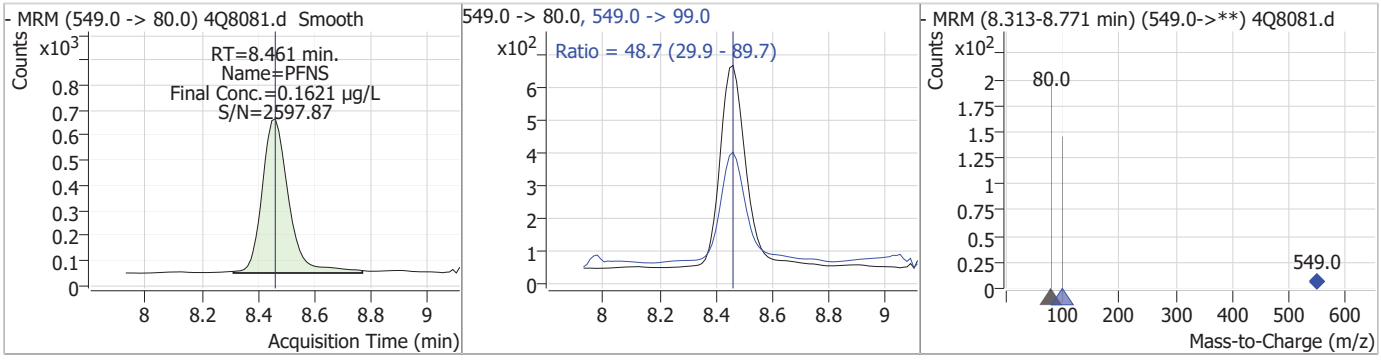
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.16	8.31	0.00	19463	563.0 -> 269.0	22.9	9.8	29.3



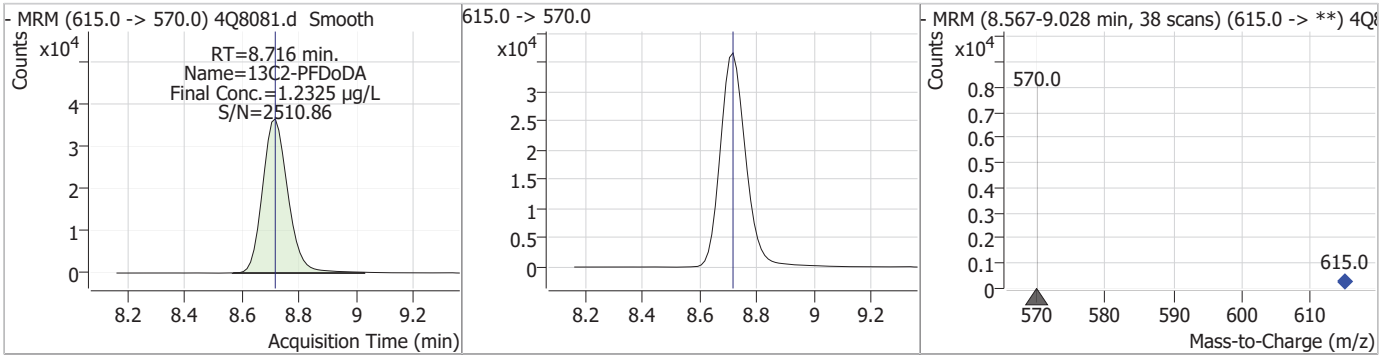
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	0.64	8.34	0.00	52418	533.0 -> 353.0	31.9	15.2	45.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.16	8.46	0.00	4068	549.0 -> 99.0	48.7	29.9	89.7

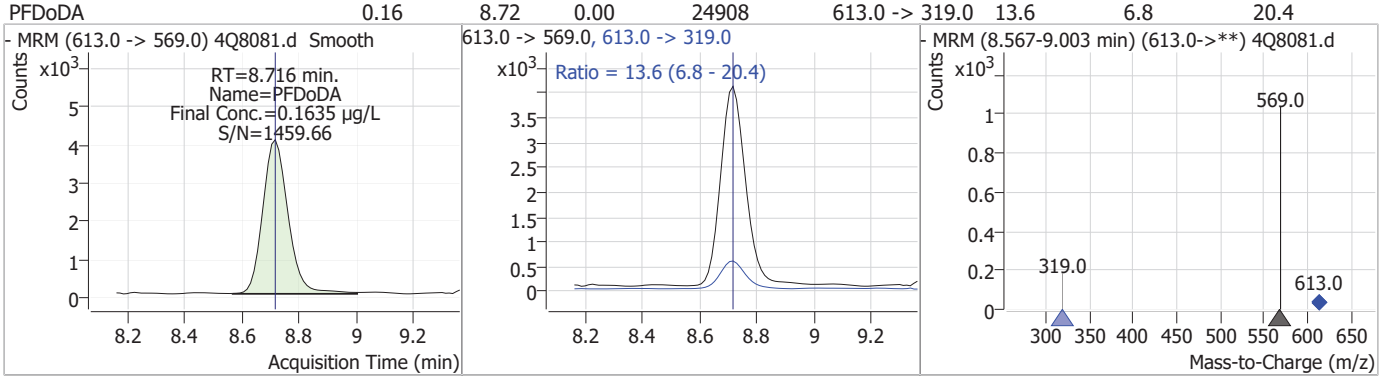


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.23	8.72	0.00	225860				

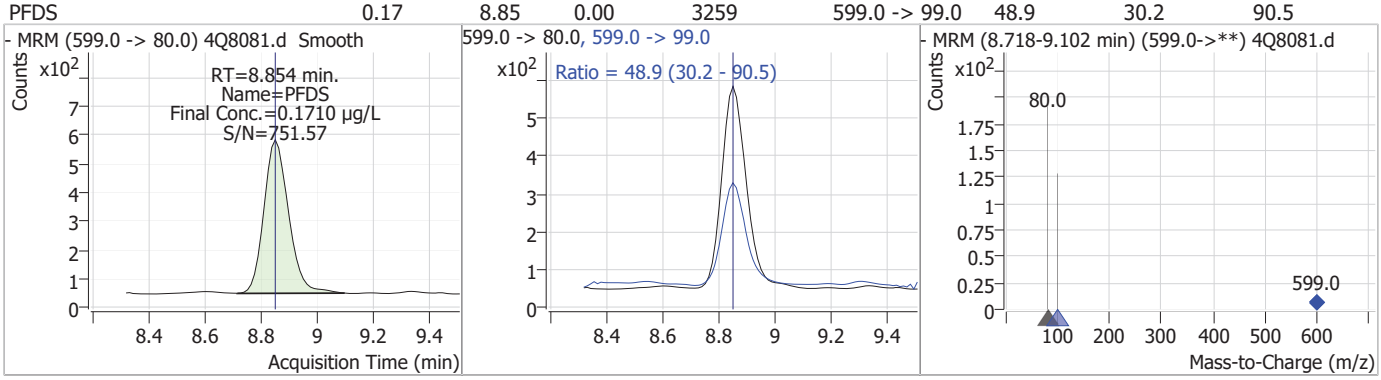


Perfluorinated Compounds by LC/MS/MS

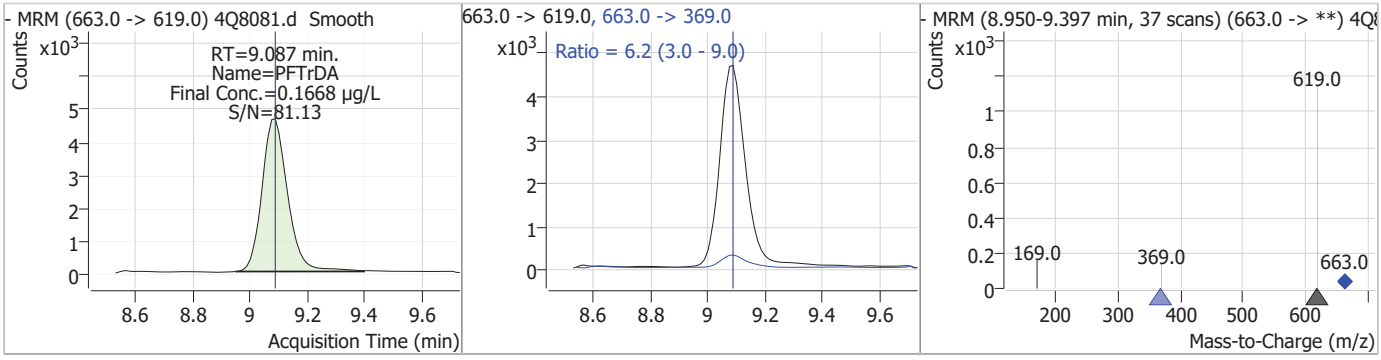
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.16	8.72	0.00	24908	613.0 -> 319.0	13.6	6.8	20.4



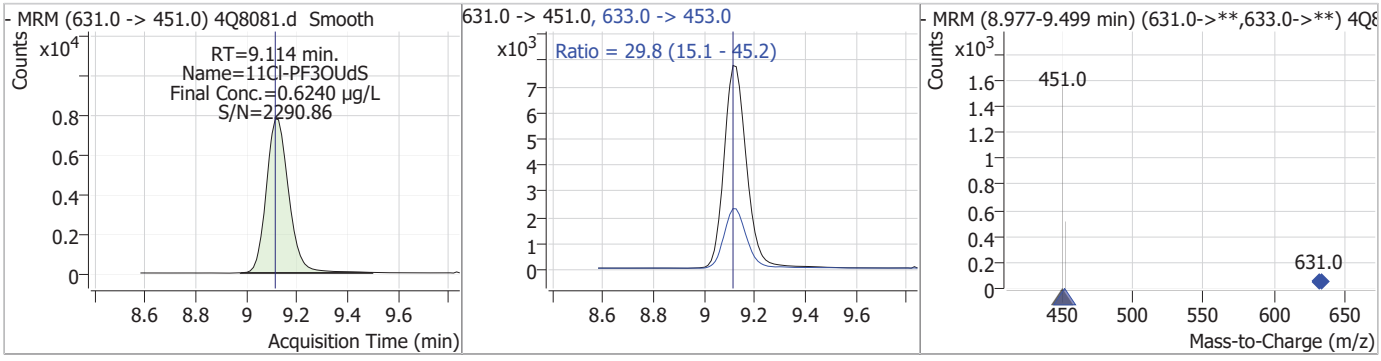
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.17	8.85	0.00	3259	599.0 -> 99.0	48.9	30.2	90.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.17	9.09	0.00	28752	663.0 -> 369.0	6.2	3.0	9.0

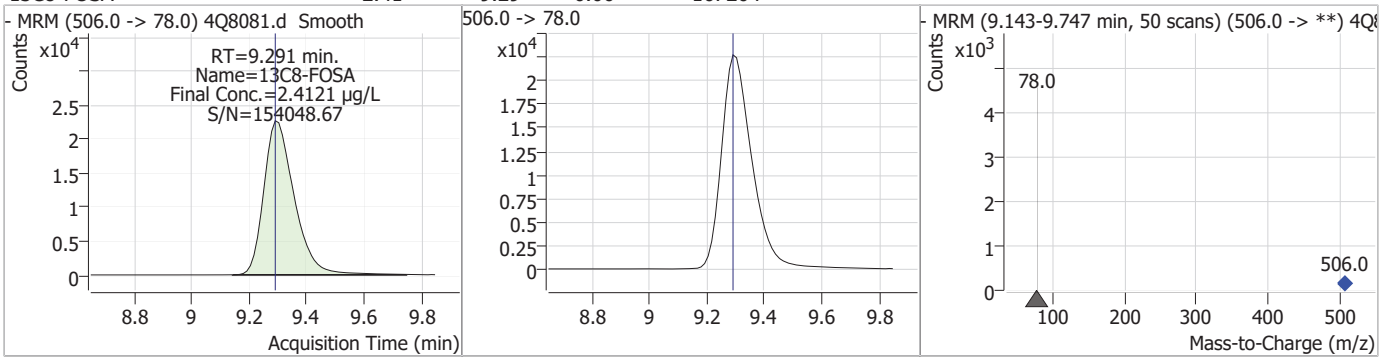


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	0.62	9.11	0.00	48140	633.0 -> 453.0	29.8	15.1	45.2

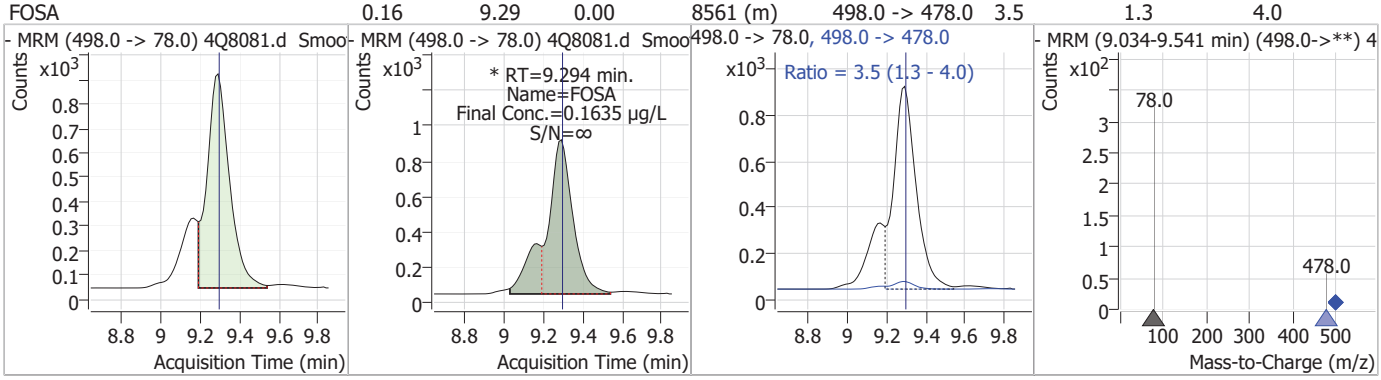


Perfluorinated Compounds by LC/MS/MS

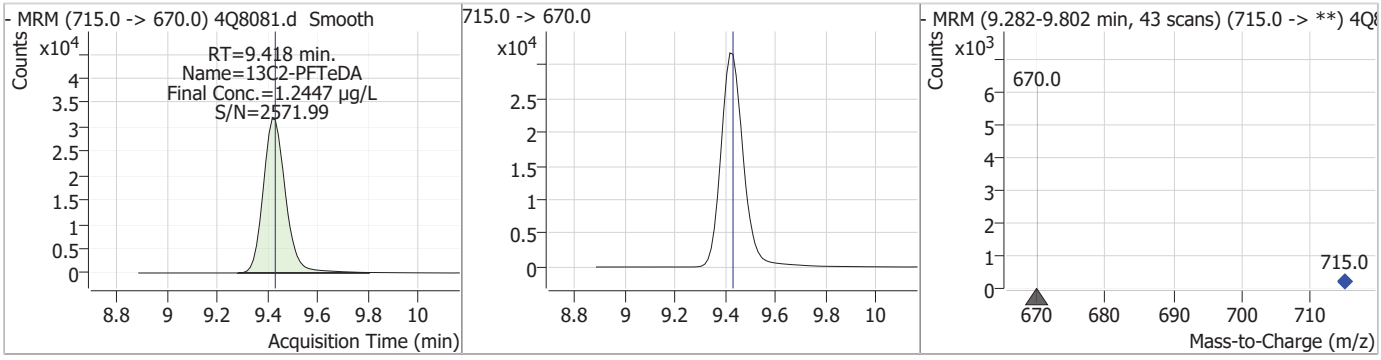
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.41	9.29	0.00	167204				



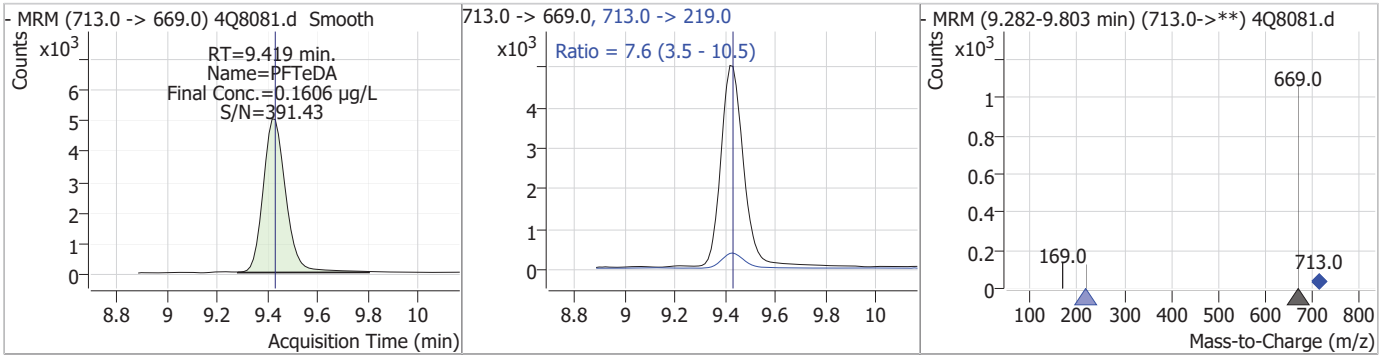
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.16	9.29	0.00	8561 (m)	498.0 -> 478.0	3.5	1.3	4.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.24	9.42	-0.01	195177				

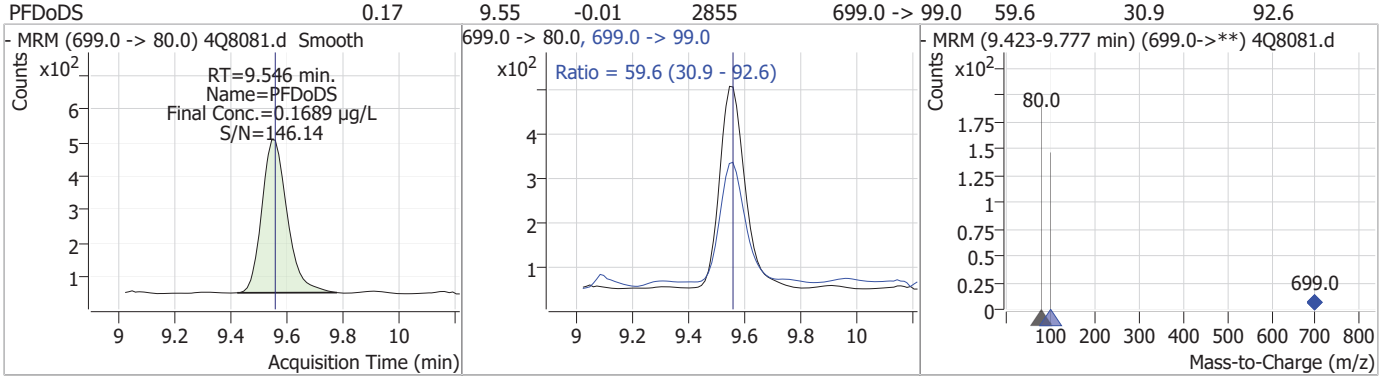


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.16	9.42	-0.01	31208	713.0 -> 219.0	7.6	3.5	10.5

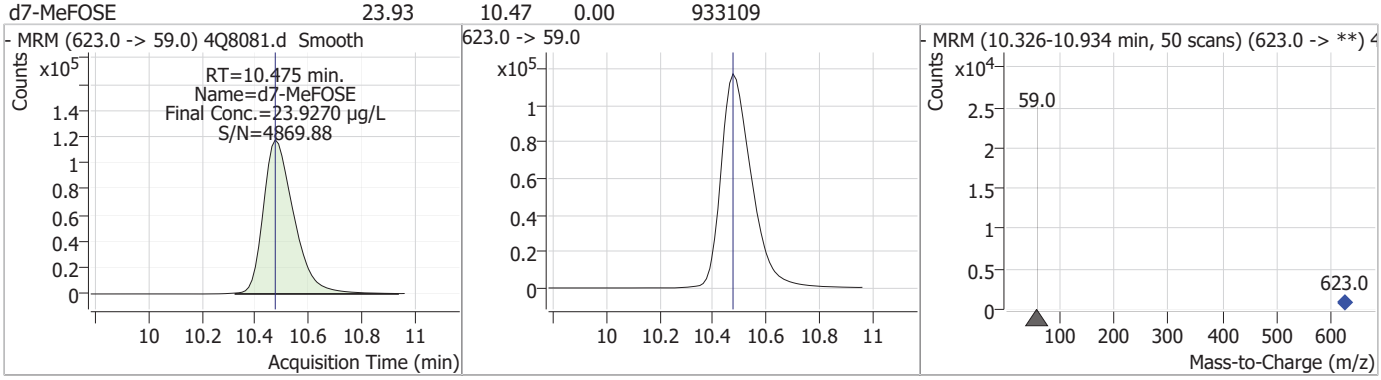


Perfluorinated Compounds by LC/MS/MS

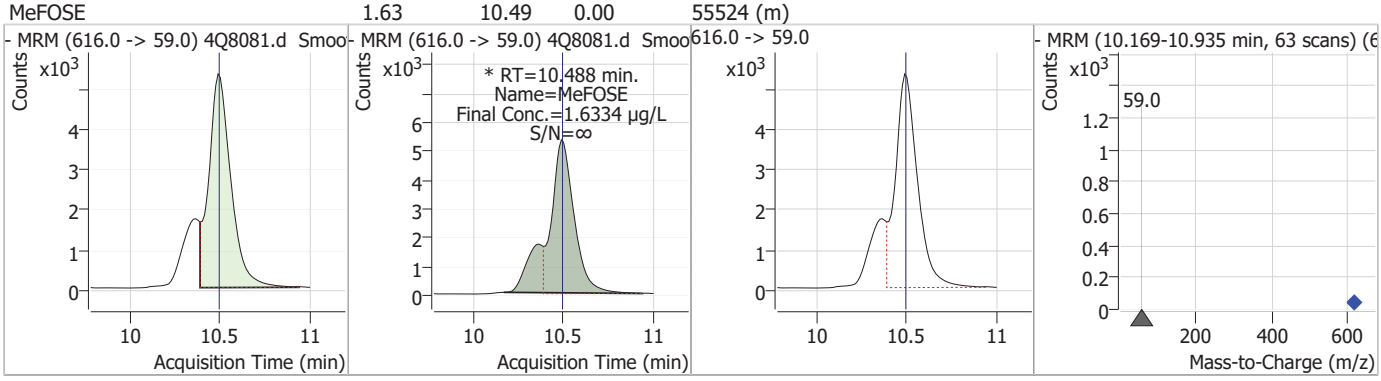
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.17	9.55	-0.01	2855	699.0 -> 99.0	59.6	30.9	92.6



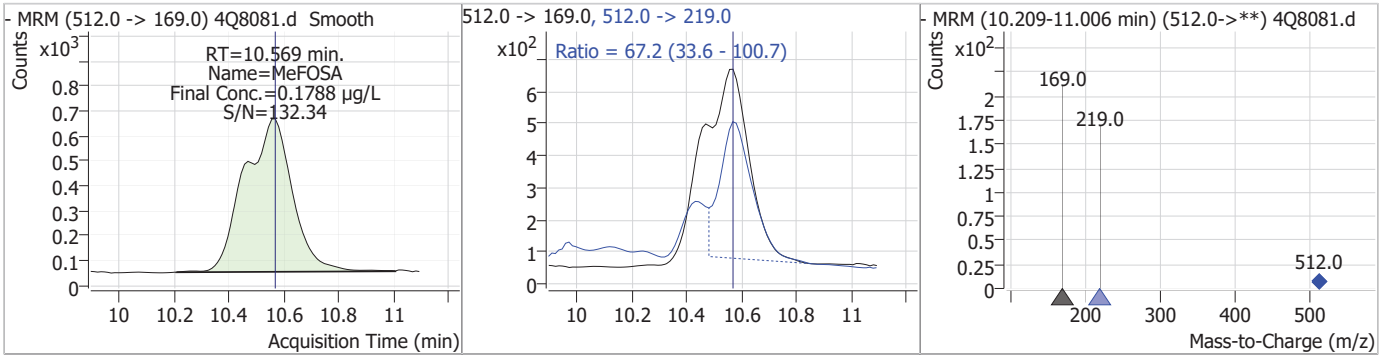
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.93	10.47	0.00	933109				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	1.63	10.49	0.00	55524 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.18	10.57	0.00	7497	512.0 -> 219.0	67.2	33.6	100.7



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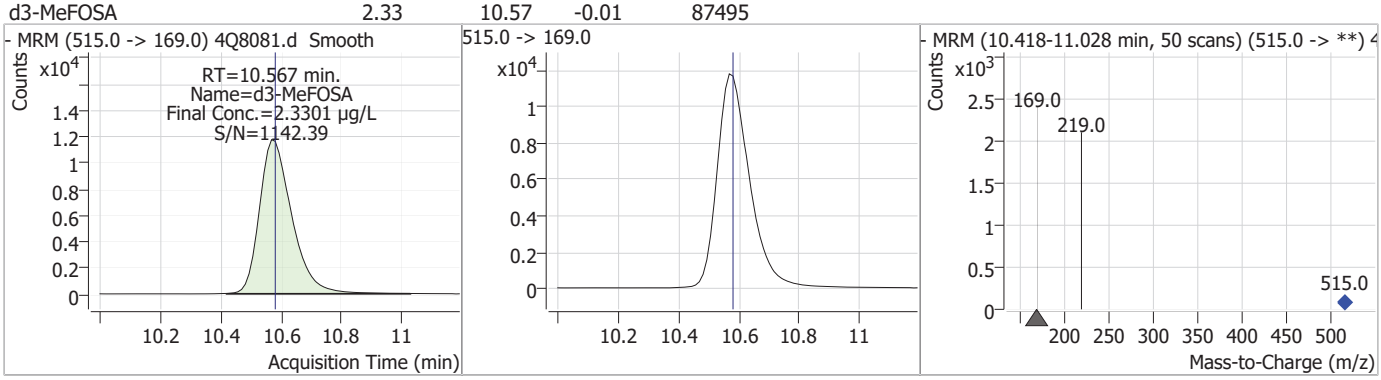
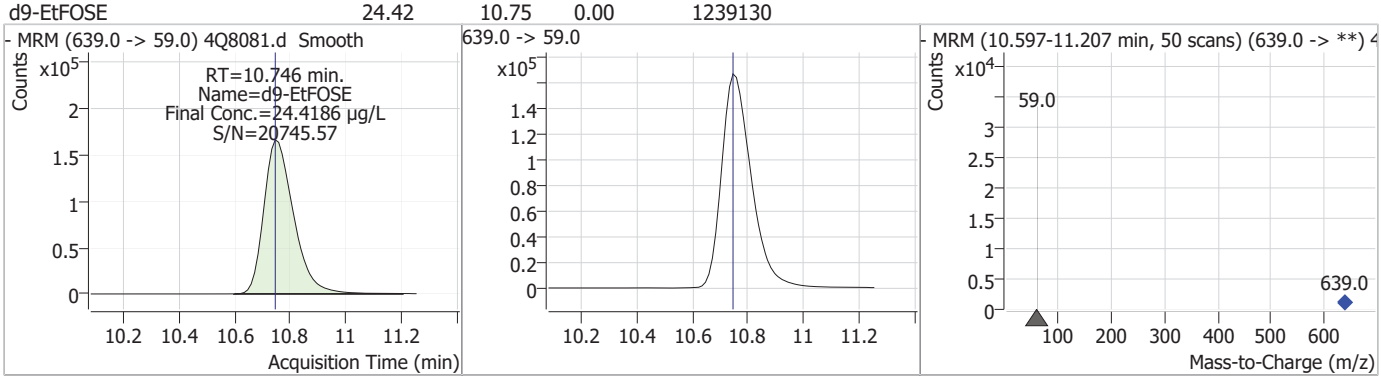
Perfluorinated Compounds by LC/MS/MS

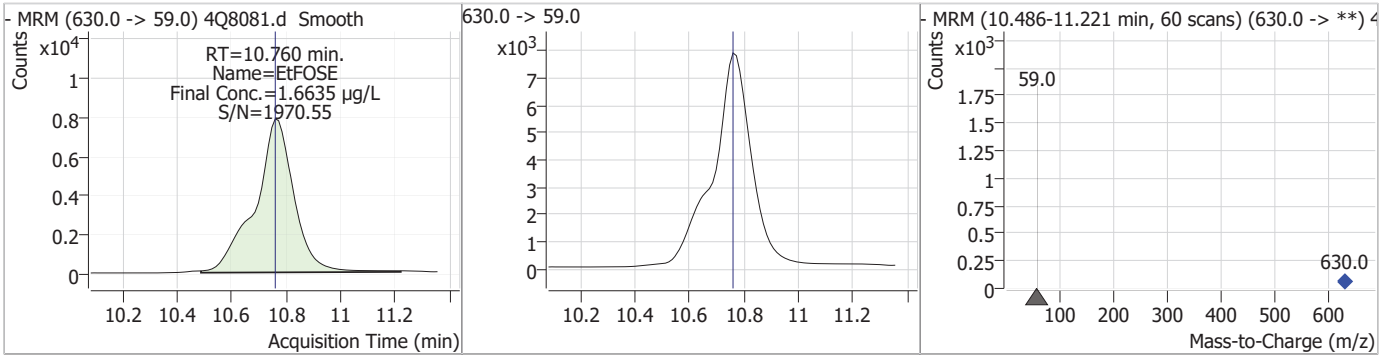
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.33	10.57	-0.01	87495				



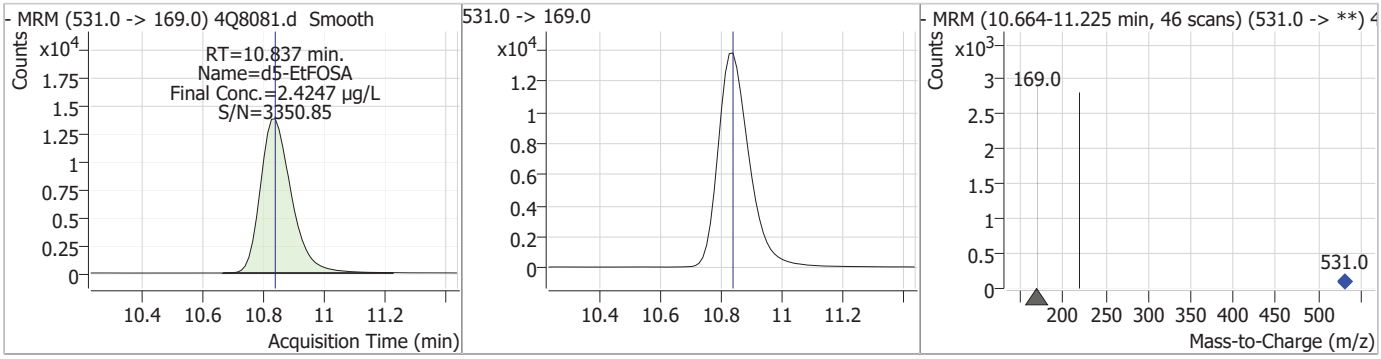
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.42	10.75	0.00	1239130				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	1.66	10.76	0.00	77942				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.42	10.84	0.00	97934				



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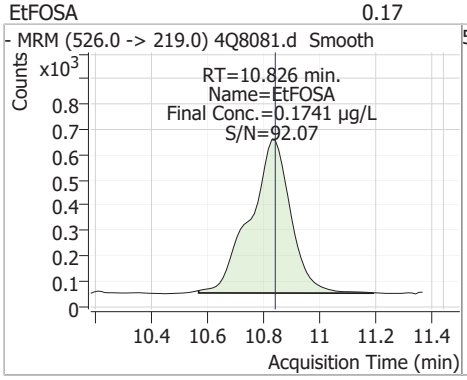
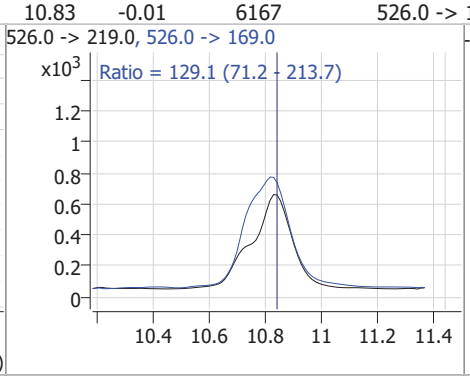
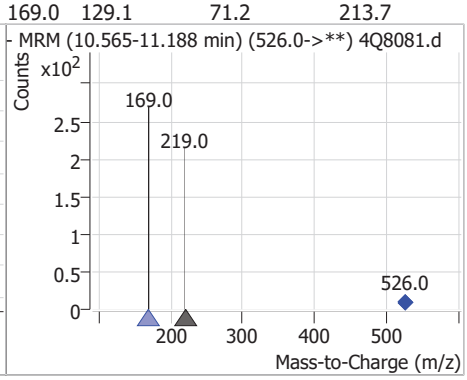
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.17	10.83	-0.01	6167	526.0 -> 169.0	129.1	71.2	213.7







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7

Manual Integration Approval Summary

Sample Number: T4Q137-IC137
Lab FileID: 4Q8081.D
Injection Time: 04/29/25 17:12
Method: EPA 1633
Analyst approved: 04/30/25 02:22 Rensel John Romano
Supervisor approved: 04/30/25 07:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanoic acid	307-24-4		5.48	Poorly defined baseline
Perfluorooctanoic acid	335-67-1		6.93	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.01	Split peak
Perfluorononanoic acid	375-95-1		7.44	Split peak
MeFOSAA	2355-31-9		7.95	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.03	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.29	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
04/30/25 07:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8082.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 5:26:04 PM
Sample Name : IC137-2
Vial : P1-A3
DA Method File : 042925_1633_T4Q137.quantmethod.xml
Batch Name : t4q137.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.908	217.0 -> 172.0	799607	10.00 µg/L	0.000
M5-PFPeA	4.344	268.0 -> 223.0	402211	5.00 µg/L	0.000
M5-PFHxA	5.489	318.0 -> 273.0	270212	2.50 µg/L	0.000
M4-PFHpA	6.316	367.0 -> 322.0	299884	2.50 µg/L	0.000
M8-PFOA	6.934	421.0 -> 376.0	457668	2.50 µg/L	0.000
M9-PFNA	7.440	472.0 -> 427.0	194310	1.25 µg/L	0.000
M6-PFDA	7.895	519.0 -> 474.0	189766	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	247971	1.25 µg/L	0.000
M2-PFDoDA	8.716	615.0 -> 570.0	233019	1.25 µg/L	0.000
M2-PFTeDA	9.418	715.0 -> 670.0	204832	1.25 µg/L	-0.012
M8-FOSA	9.291	506.0 -> 78.0	172085	2.50 µg/L	0.000
M3-PFBS	5.393	302.0 -> 99.0	25581	2.50 µg/L	0.012
		302.0 -> 80.0	60931		
M3-PFHxS	7.024	402.0 -> 99.0	37617	2.50 µg/L	0.000
M8-PFOS	8.019	507.0 -> 99.0	39487	2.50 µg/L	0.000
M2-4:2FTS	5.190	329.0 -> 81.0	10262	5.00 µg/L	0.000
M2-6:2FTS	6.721	429.0 -> 81.0	21701	5.00 µg/L	0.000
M2-8:2FTS	7.696	529.0 -> 81.0	26200	5.00 µg/L	0.000
M3-MeFOSAA	7.952	573.0 -> 419.0	197948	5.00 µg/L	0.000
M3-HFPO-DA	5.816	287.0 -> 169.0	401474	10.00 µg/L	0.000
M5-EtFOSAA	8.135	589.0 -> 419.0	154001	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	1074796	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1443571	25.00 µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	102712	2.50 µg/L	-0.012
M3-MeFOSA	10.568	515.0 -> 169.0	94803	2.50 µg/L	-0.012
13C4-PFOS	8.020	503.0 -> 80.0	63448	2.50 µg/L	0.000
13C3-PFBA	2.911	216.0 -> 172.0	314227	5.00 µg/L	0.000
18O2-PFHxS	7.023	403.0 -> 84.0	38043	2.50 µg/L	0.000
13C4-PFOA	6.935	417.0 -> 372.0	417925	2.50 µg/L	0.000
13C2-PFDA	7.895	515.0 -> 470.0	147601	1.25 µg/L	0.000
13C5-PFNA	7.441	468.0 -> 423.0	164806	1.25 µg/L	0.000
13C2-PFHxA	5.477	315.0 -> 270.0	230817	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.190	329.0 -> 81.0	10262	5.27 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.3%	
13C2-6:2FTS	6.721	429.0 -> 81.0	21701	5.38 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.6%	
13C2-8:2FTS	7.696	529.0 -> 81.0	26200	5.29 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.8%	
13C2-PFDoDA	8.716	615.0 -> 570.0	233019	1.28 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.3%	
13C2-PFTeDA	9.418	715.0 -> 670.0	204832	1.31 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.1%	
13C3-PFBS	5.393	302.0 -> 99.0	25581	2.59 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.5%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.024	402.0 -> 99.0	37617	2.60	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.1%			
13C4-PFBA	2.908	217.0 -> 172.0	799607	10.30	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 103.0%			
13C4-PFHpA	6.316	367.0 -> 322.0	299884	2.60	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.8%			
13C5-PFHxA	5.489	318.0 -> 273.0	270212	2.56	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.4%			
13C5-PFPeA	4.344	268.0 -> 223.0	402211	5.18	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.5%			
13C6-PFDA	7.895	519.0 -> 474.0	189766	1.29	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.5%			
13C7-PFUnDA	8.310	570.0 -> 525.0	247971	1.31	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.9%			
13C8-FOSA	9.291	506.0 -> 78.0	172085	2.53	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.3%			
13C8-PFOA	6.934	421.0 -> 376.0	457668	2.52	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.9%			
13C8-PFOS	8.019	507.0 -> 99.0	39487	2.45	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.2%			
13C9-PFNA	7.440	472.0 -> 427.0	194310	1.31	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.7%			
d3-MeFOSAA	7.952	573.0 -> 419.0	197948	4.99	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.7%			
13C3-HFPO-DA	5.816	287.0 -> 169.0	401474	10.09	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.9%			
d3-MeFOSA	10.568	515.0 -> 169.0	94803	2.57	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.0%			
d5-EtFOSAA	8.135	589.0 -> 419.0	154001	4.99	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.8%			
d7-MeFOSE	10.475	623.0 -> 59.0	1074796	28.10	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 112.4%			
d9-EtFOSE	10.746	639.0 -> 59.0	1443571	29.01	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 116.0%			
d5-EtFOSA	10.825	531.0 -> 169.0	102712	2.59	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.7%			
Target Compounds							QValue
4:2FTS	5.178	327.0 -> 307.0	22250	1.41	µg/L		96
		327.0 -> 81.0	10741				
6:2FTS	6.709	427.0 -> 407.0	25333	1.39	µg/L		97
		427.0 -> 81.0	11568				
8:2FTS	7.696	527.0 -> 507.0	23279	1.37	µg/L		98
		527.0 -> 81.0	9268				
EtFOSAA	8.136	584.0 -> 419.0	9281	0.37	µg/L	m	95
		584.0 -> 483.0	4697				
FOSA	9.294	498.0 -> 78.0	20237	0.38	µg/L	m	98
		498.0 -> 478.0	691				
MeFOSAA	7.953	570.0 -> 419.0	10912	0.36	µg/L	m	100
		570.0 -> 512.0	3794				
PFBA	2.914	213.0 -> 169.0	31141	1.42	µg/L		100
PFBS	5.394	299.0 -> 80.0	7873	0.33	µg/L		96
		299.0 -> 99.0	3163				
PFDA	7.896	513.0 -> 469.0	44553	0.37	µg/L		97
		513.0 -> 219.0	9242				
PFDoDA	8.716	613.0 -> 569.0	57710	0.37	µg/L		99
		613.0 -> 319.0	8032				

Perfluorinated Compounds by LC/MS/MS

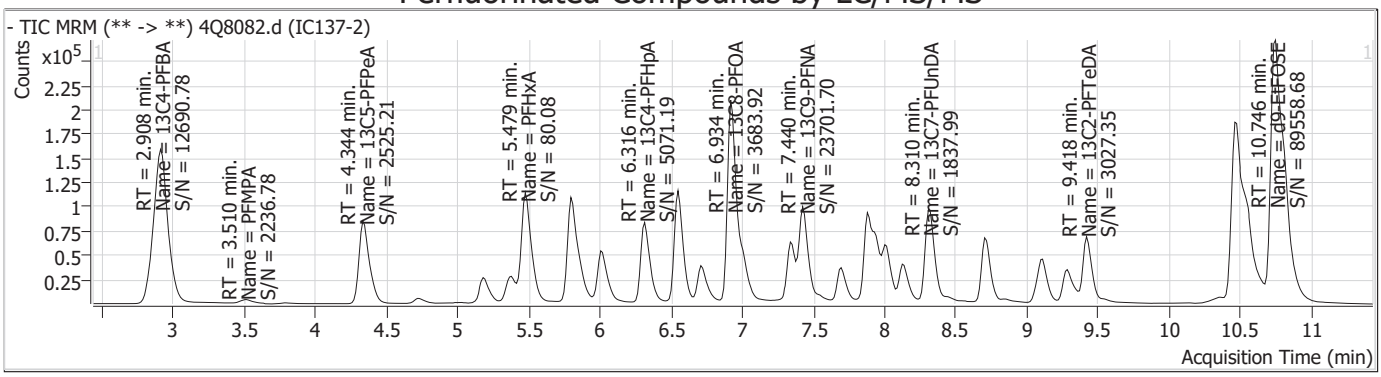
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.854	599.0 -> 80.0	6798	0.35	µg/L		99
		599.0 -> 99.0	4149				
PFHpA	6.317	363.0 -> 319.0	54923	0.36	µg/L		99
		363.0 -> 169.0	11223				
PFHpS	7.553	449.0 -> 80.0	9814	0.35	µg/L		95
		449.0 -> 99.0	5702				
PFHxA	5.479	313.0 -> 269.0	35687	0.36	µg/L		97
		313.0 -> 119.0	1426				
PFHxS	7.025	399.0 -> 80.0	9449	0.33	µg/L	m	100
		399.0 -> 99.0	4913				
PFNA	7.441	463.0 -> 419.0	35367	0.35	µg/L	m	94
		463.0 -> 219.0	13720				
PFNS	8.461	549.0 -> 80.0	8915	0.37	µg/L		95
		549.0 -> 99.0	5024				
PFOA	6.935	413.0 -> 369.0	49424	0.38	µg/L	m	100
		413.0 -> 169.0	14099				
PFOS	8.021	499.0 -> 80.0	10416	0.38	µg/L	m	99
		499.0 -> 99.0	5717				
PFPeA	4.346	263.0 -> 219.0	39027	0.73	µg/L		100
PFPeS	6.355	349.0 -> 80.0	9458	0.35	µg/L		97
		349.0 -> 99.0	4970				
PFTeDA	9.419	713.0 -> 669.0	75542	0.37	µg/L		99
		713.0 -> 219.0	5653				
PFTrDA	9.087	663.0 -> 619.0	67574	0.38	µg/L		99
		663.0 -> 369.0	4291				
PFUnDA	8.312	563.0 -> 519.0	45433	0.36	µg/L		99
		563.0 -> 269.0	9150				
11Cl-PF3OUdS	9.114	631.0 -> 451.0	114789	1.47	µg/L		99
		633.0 -> 453.0	33917				
9Cl-PF3ONS	8.339	531.0 -> 351.0	118773	1.43	µg/L		98
		533.0 -> 353.0	34943				
ADONA	6.552	377.0 -> 251.0	380901	1.40	µg/L		100
		377.0 -> 85.0	125461				
HFPO-DA	5.817	285.0 -> 169.0	54961	1.51	µg/L		96
		285.0 -> 185.0	6570				
3:3FTCA	3.781	241.0 -> 177.0	5367	1.85	µg/L		100
		241.0 -> 117.0	457				
5:3FTCA	6.019	341.0 -> 237.0	147545	10.04	µg/L		97
		341.0 -> 217.0	102426				
7:3FTCA	7.355	441.0 -> 337.0	208384	9.73	µg/L		98
		441.0 -> 317.0	91345				
EtFOSA	10.838	526.0 -> 219.0	13471	0.36	µg/L		97
		526.0 -> 169.0	18735				
EtFOSE	10.760	630.0 -> 59.0	200675	3.68	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	16087	0.35	µg/L		96
		512.0 -> 219.0	11328				
MeFOSE	10.488	616.0 -> 59.0	143202	3.66	µg/L		100
PFDoDS	9.558	699.0 -> 80.0	6080	0.38	µg/L		95
		699.0 -> 99.0	4001				
NFDHA	5.370	295.0 -> 201.0	10166	0.80	µg/L		89
		201.0 -> 85.0	40104				
		295.0 -> 85.0	2357				
PFMBA	4.735	279.0 -> 85.0	26479	0.73	µg/L		100
PFMPA	3.510	229.0 -> 85.0	22625	0.72	µg/L		100
PFEESA	5.872	315.0 -> 135.0	61067	0.66	µg/L		96
		315.0 -> 69.0	5541				

Perfluorinated Compounds by LC/MS/MS

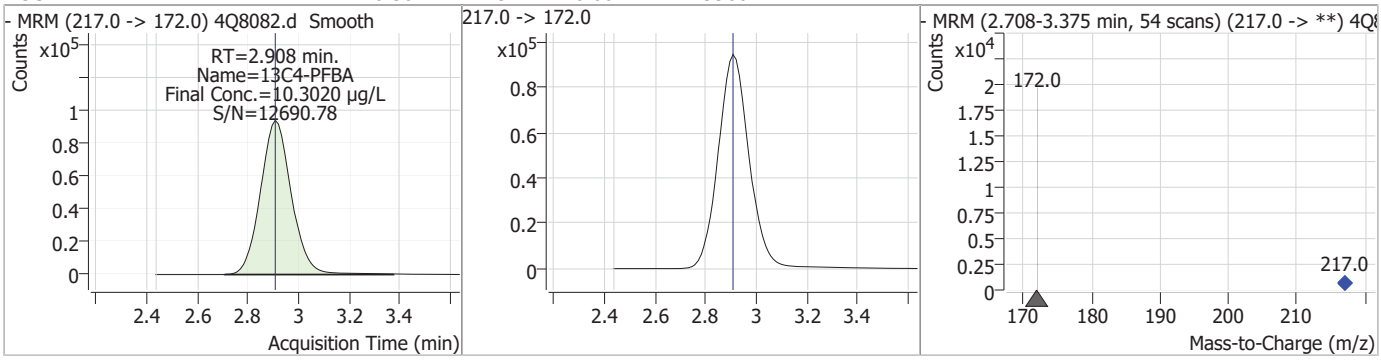
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

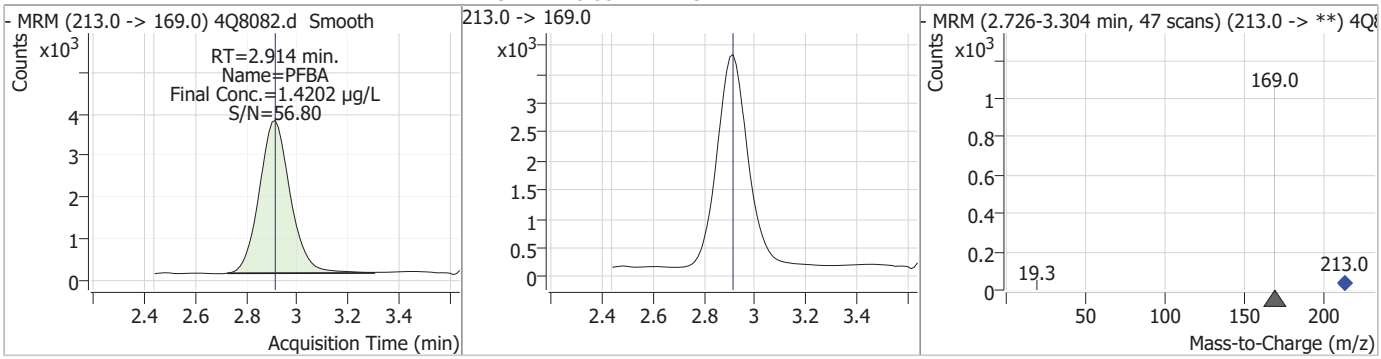
Perfluorinated Compounds by LC/MS/MS



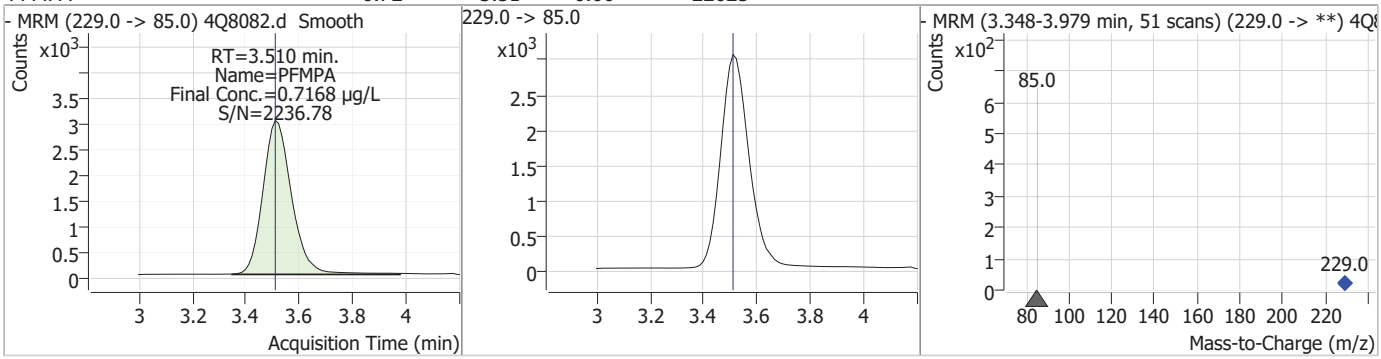
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.30	2.91	0.00	799607				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	1.42	2.91	0.00	31141				

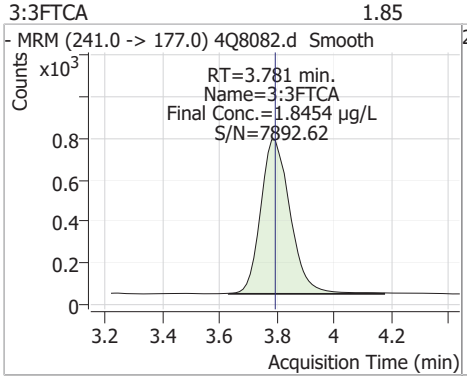


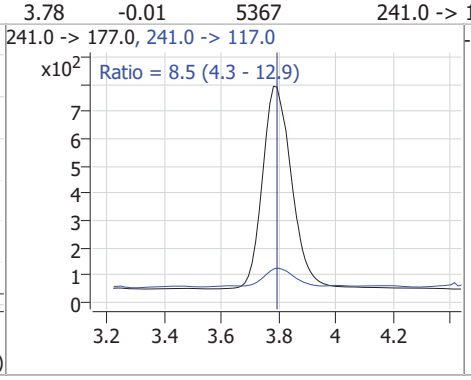
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.72	3.51	0.00	22625				

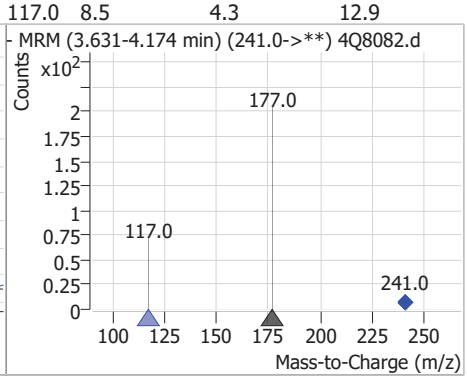


Perfluorinated Compounds by LC/MS/MS

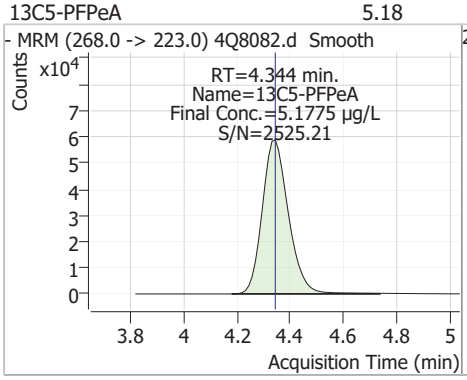
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	1.85	3.78	-0.01	5367	241.0 -> 117.0	8.5	4.3	12.9

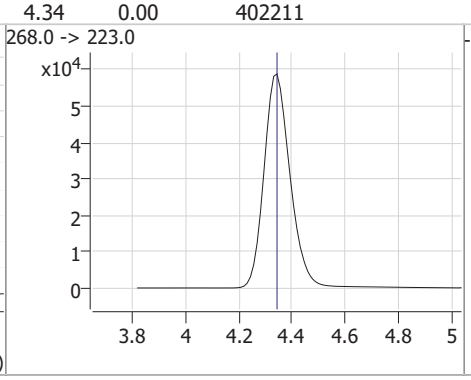


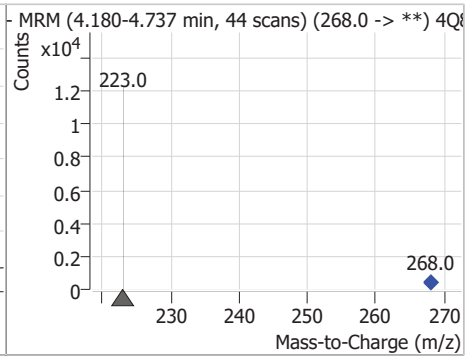




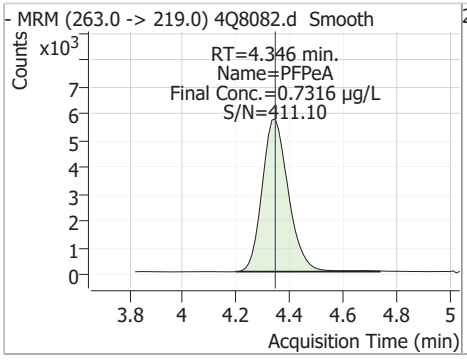
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.18	4.34	0.00	402211				

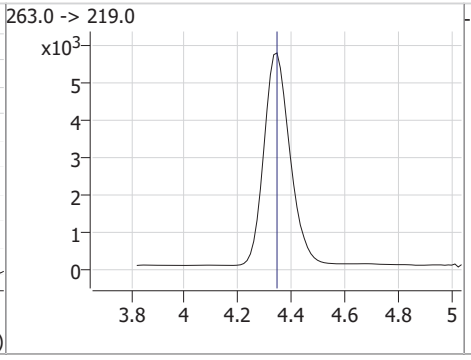


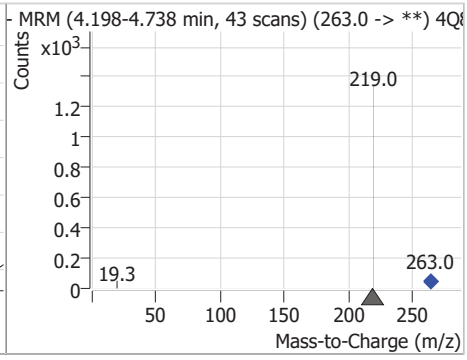




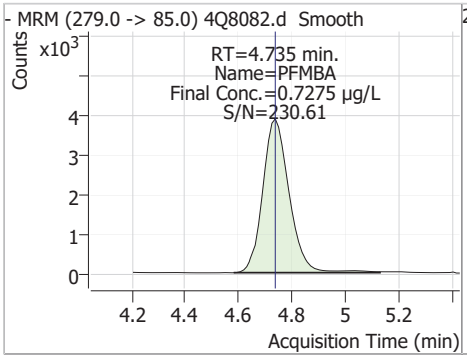
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.73	4.35	0.00	39027				

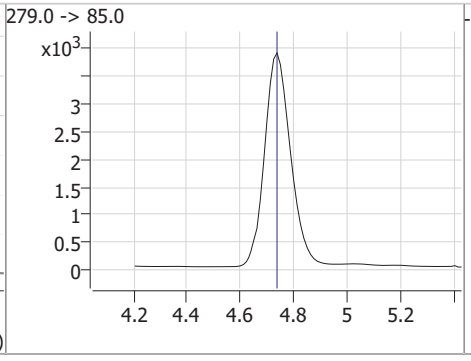


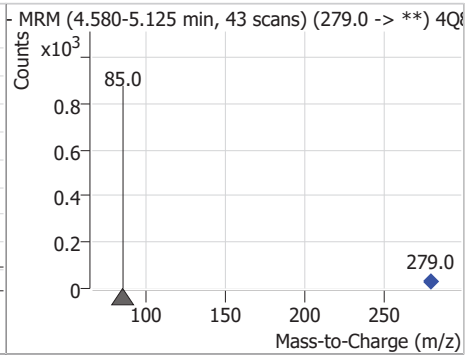




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.73	4.73	0.00	26479				







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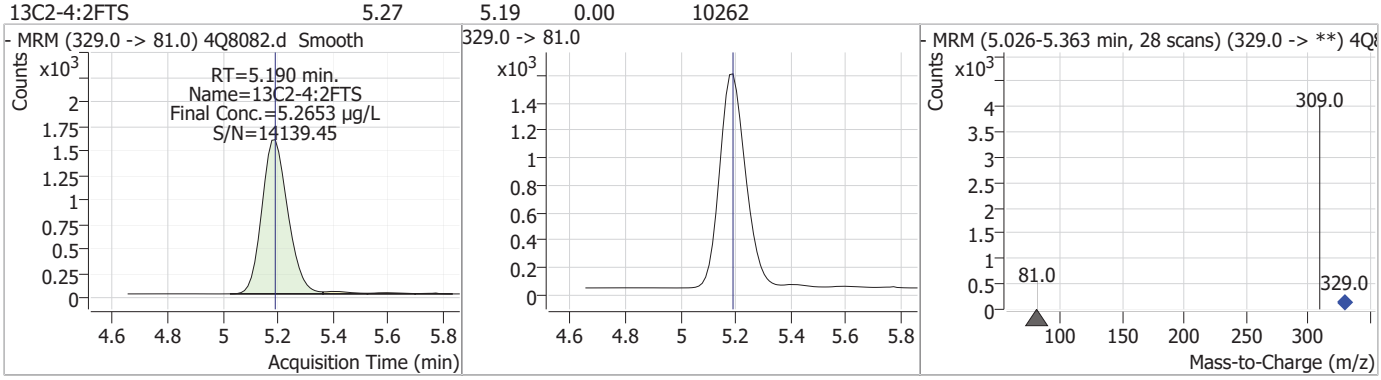
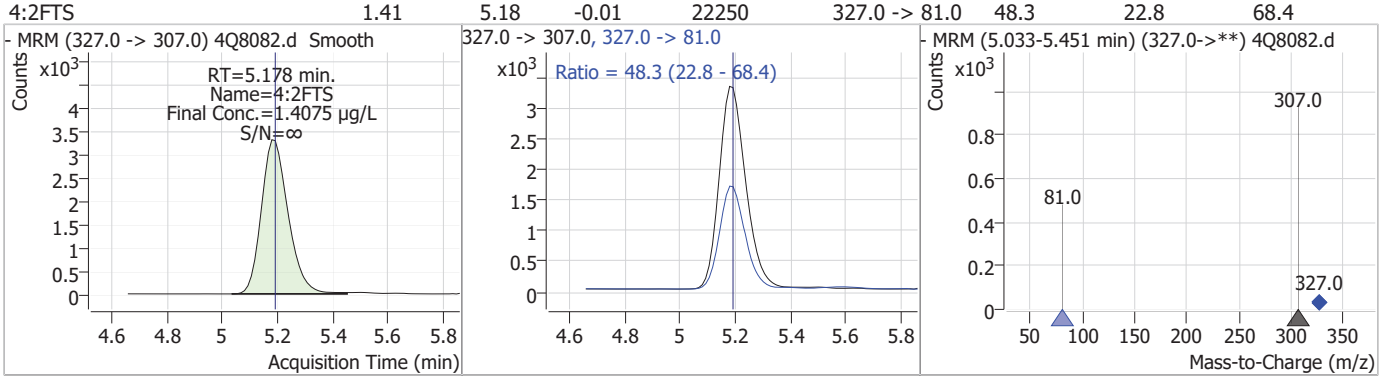
Perfluorinated Compounds by LC/MS/MS

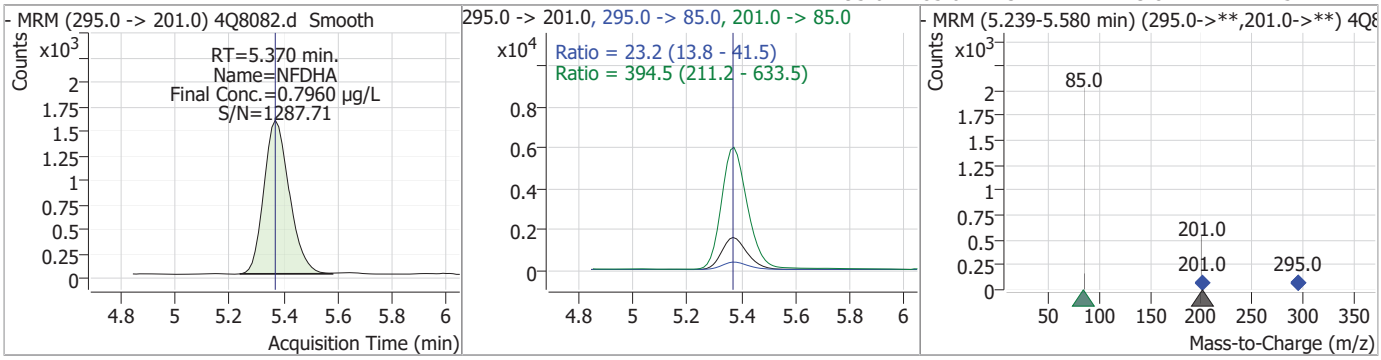
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.27	5.19	0.00	10262				



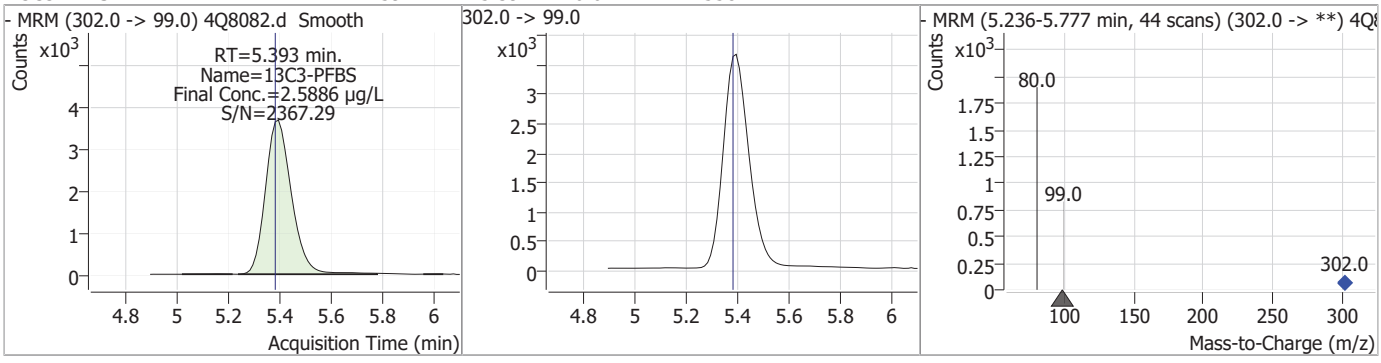
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	1.41	5.18	-0.01	22250	327.0 -> 81.0	48.3	22.8	68.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.80	5.37	0.00	10166	201.0 -> 85.0	394.5	211.2	633.5
					295.0 -> 85.0	23.2	13.8	41.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.59	5.39	0.01	25581				



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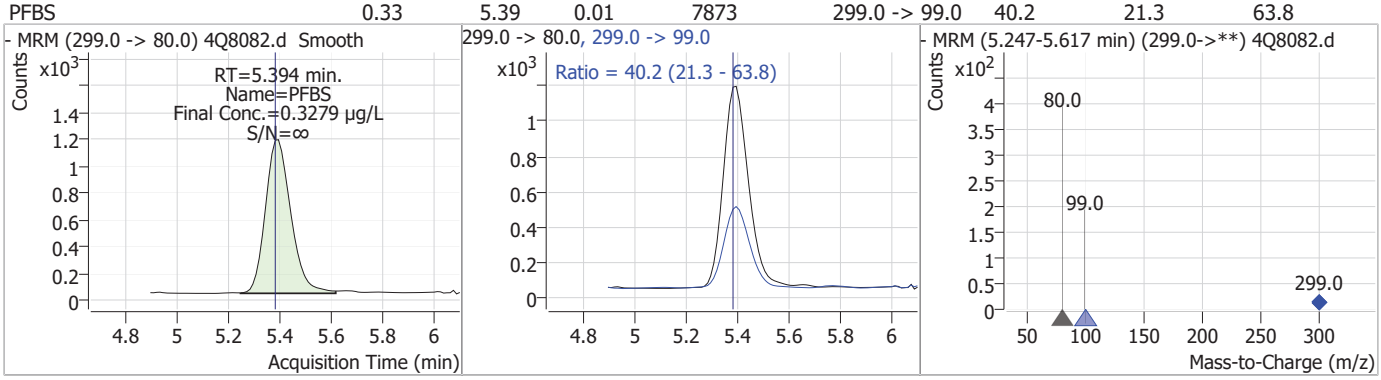
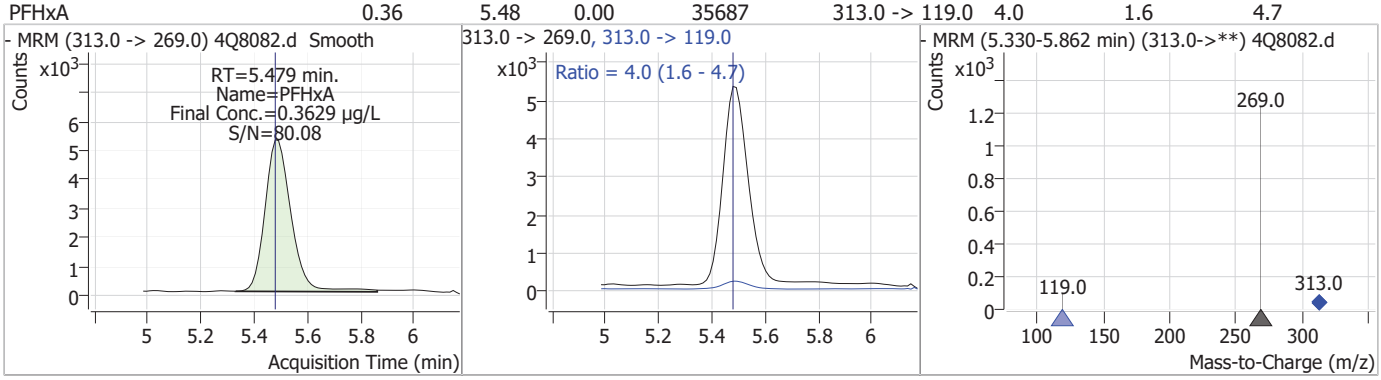
Perfluorinated Compounds by LC/MS/MS

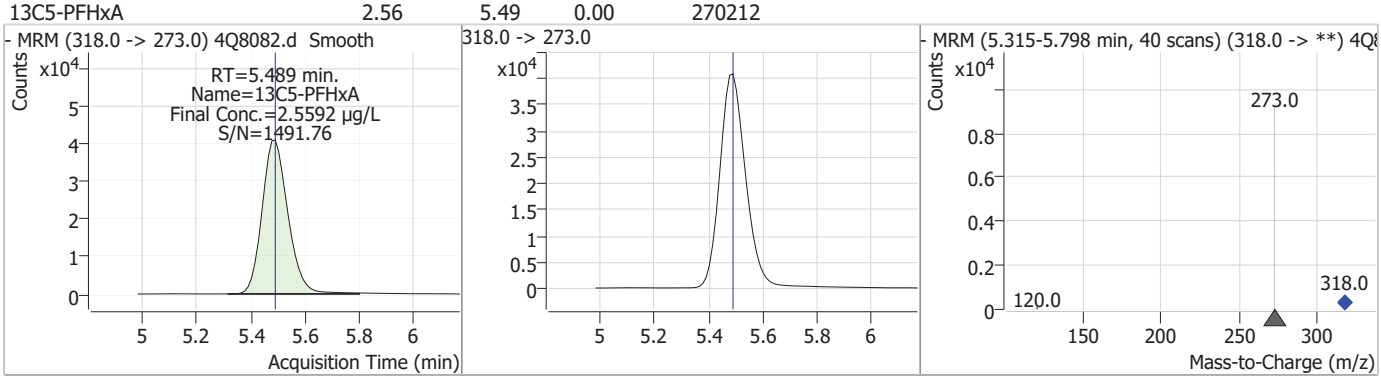
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.33	5.39	0.01	7873	299.0 -> 99.0	40.2	21.3	63.8



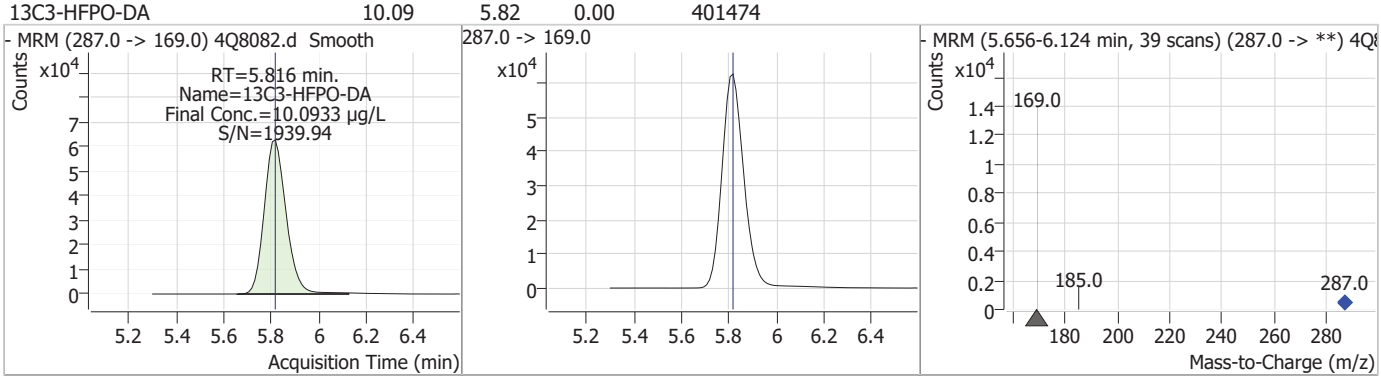
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.36	5.48	0.00	35687	313.0 -> 119.0	4.0	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.56	5.49	0.00	270212				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.09	5.82	0.00	401474				



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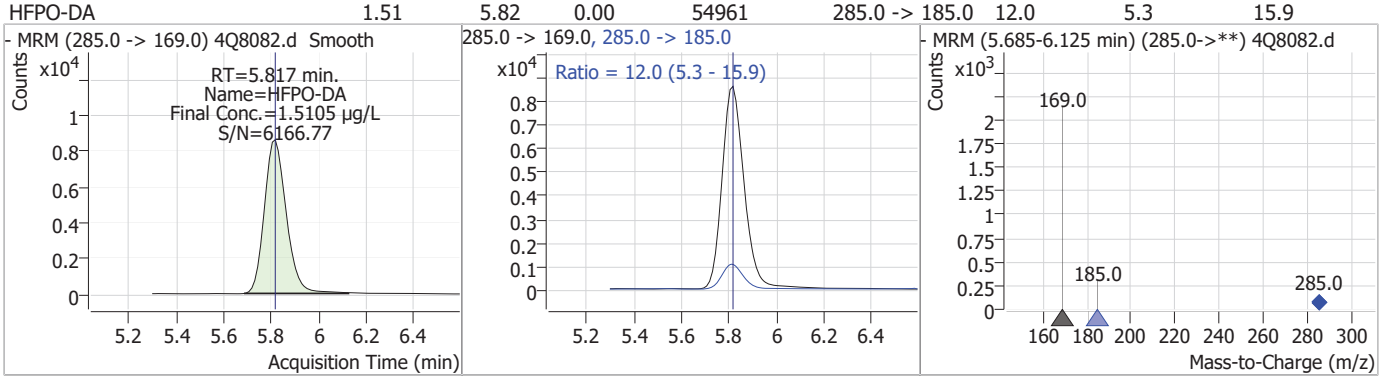
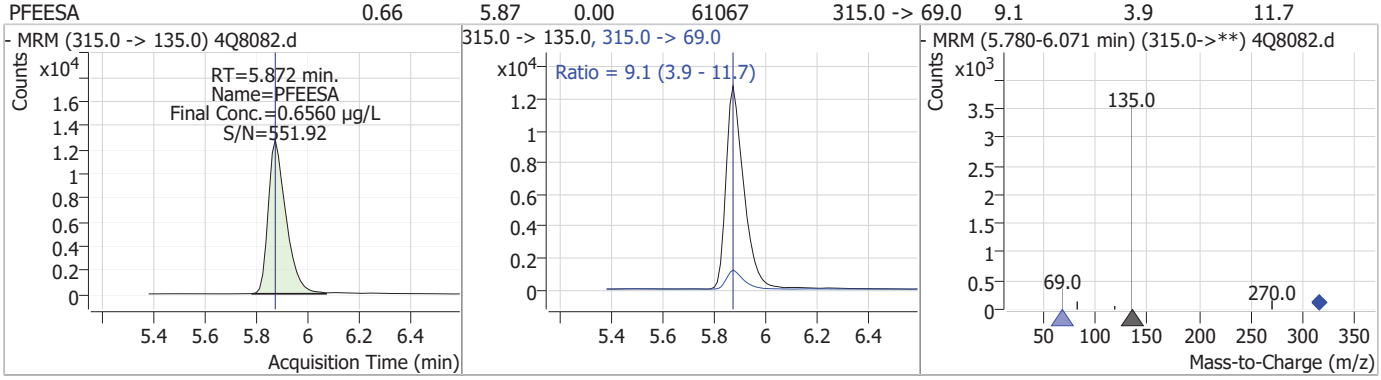
Perfluorinated Compounds by LC/MS/MS

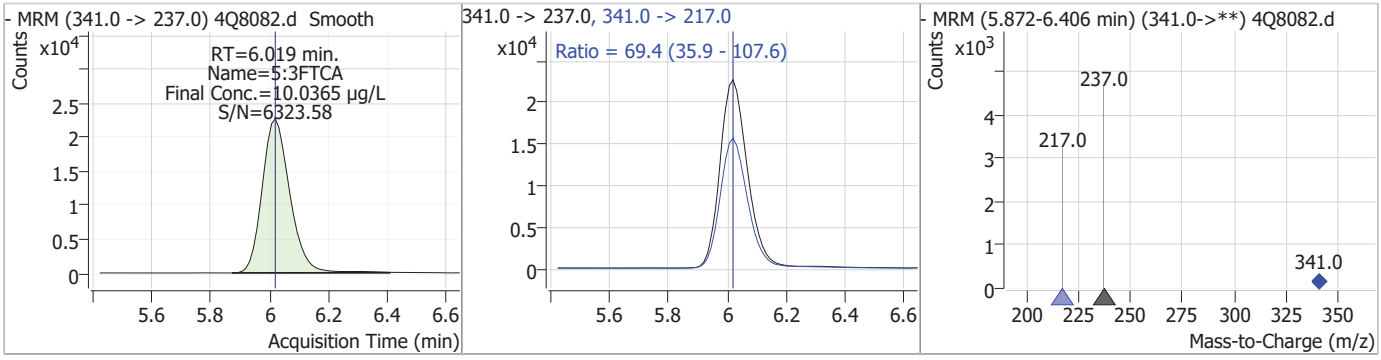
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	1.51	5.82	0.00	54961	285.0 -> 185.0	12.0	5.3	15.9



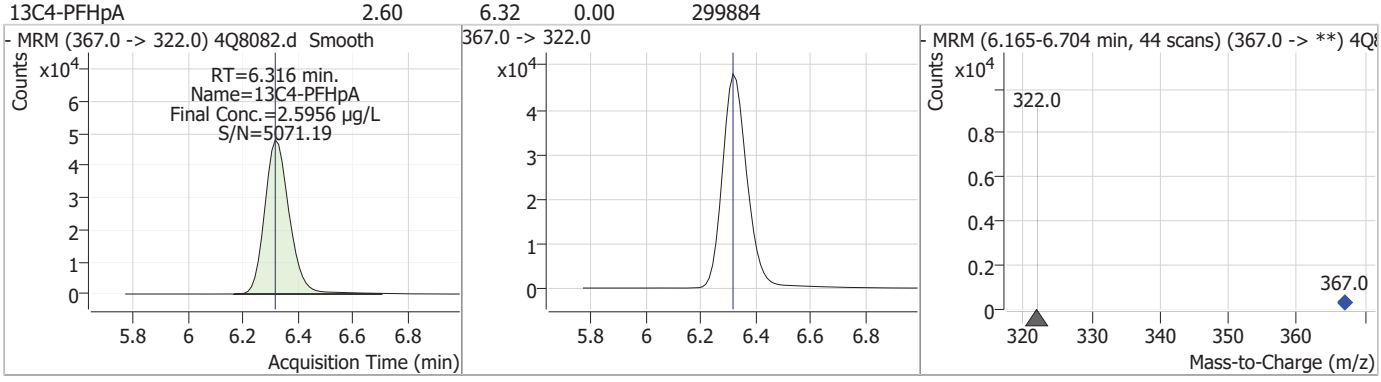
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.66	5.87	0.00	61067	315.0 -> 69.0	9.1	3.9	11.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	10.04	6.02	0.00	147545	341.0 -> 217.0	69.4	35.9	107.6

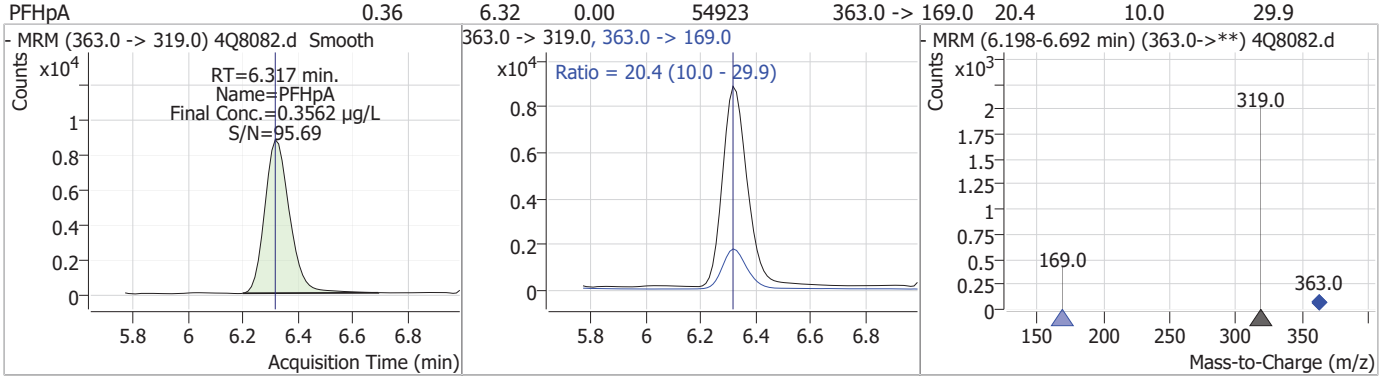


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.60	6.32	0.00	299884				

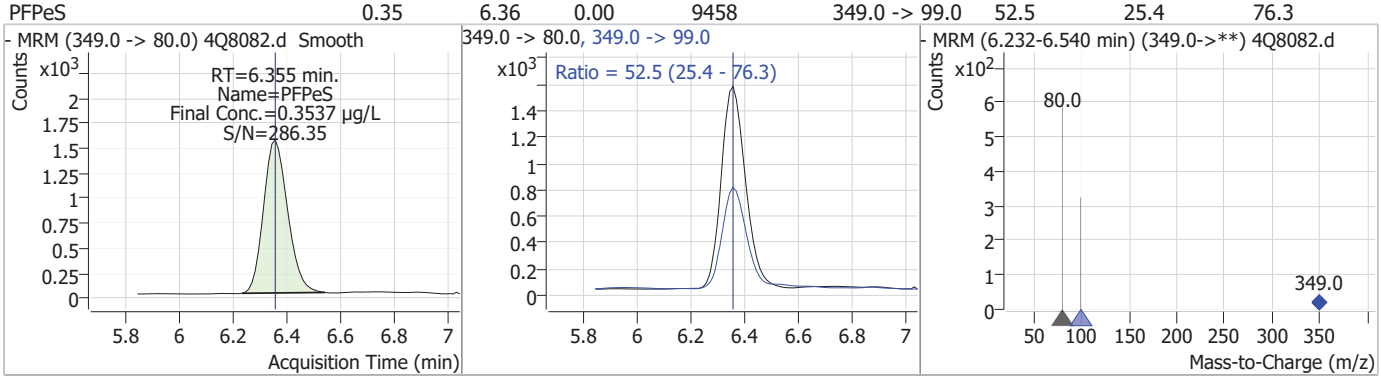


Perfluorinated Compounds by LC/MS/MS

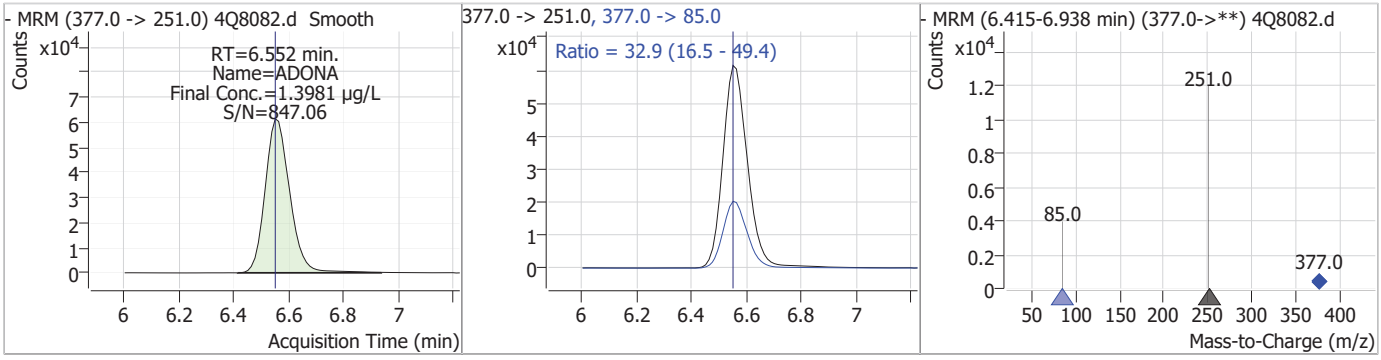
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.36	6.32	0.00	54923	363.0 -> 169.0	20.4	10.0	29.9



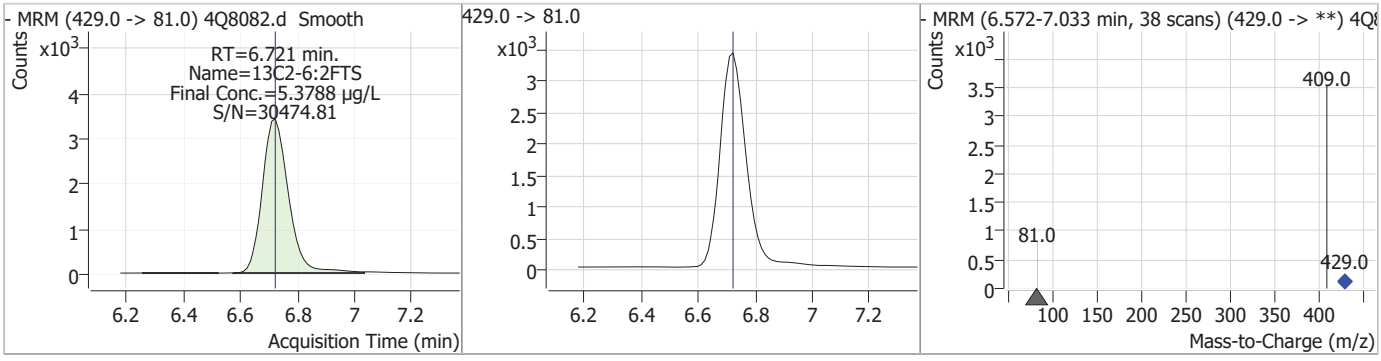
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.35	6.36	0.00	9458	349.0 -> 99.0	52.5	25.4	76.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	1.40	6.55	0.00	380901	377.0 -> 85.0	32.9	16.5	49.4

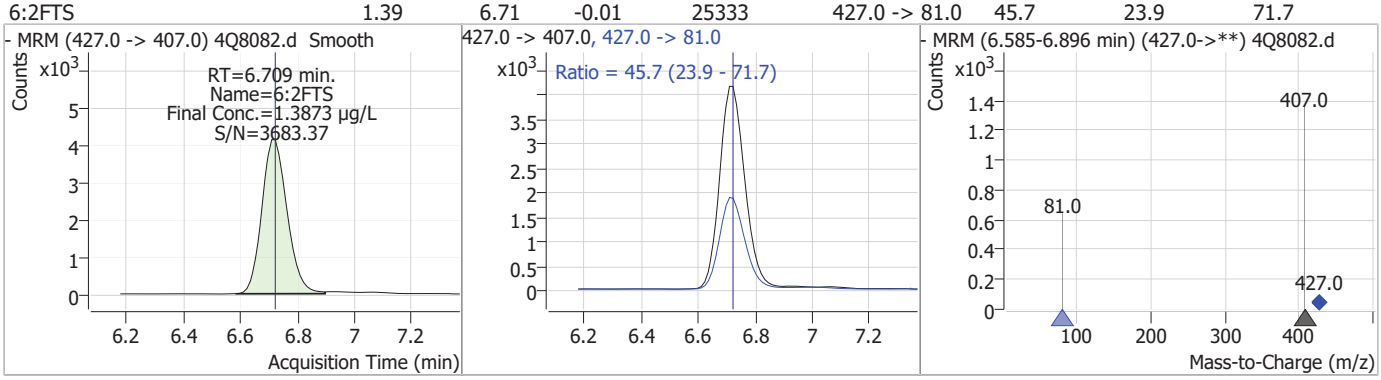


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.38	6.72	0.00	21701				

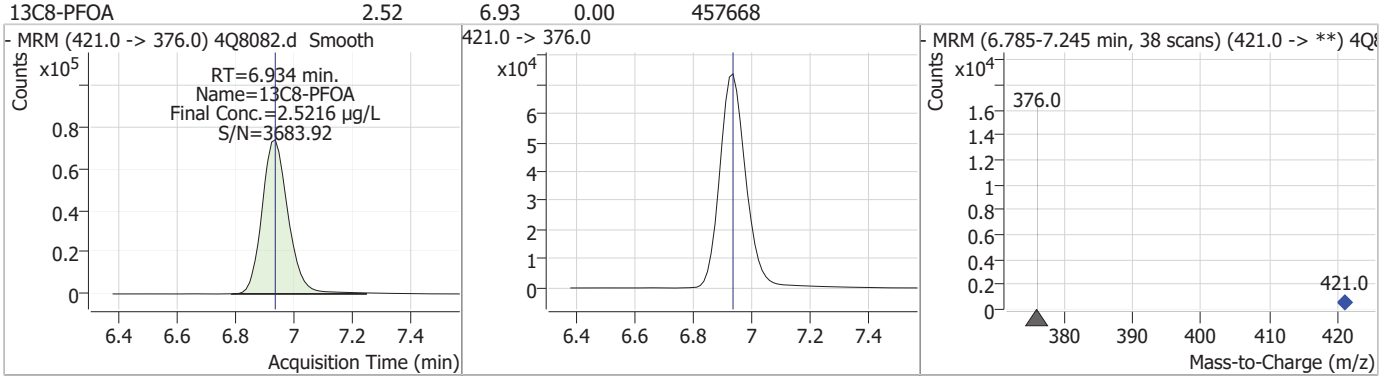


Perfluorinated Compounds by LC/MS/MS

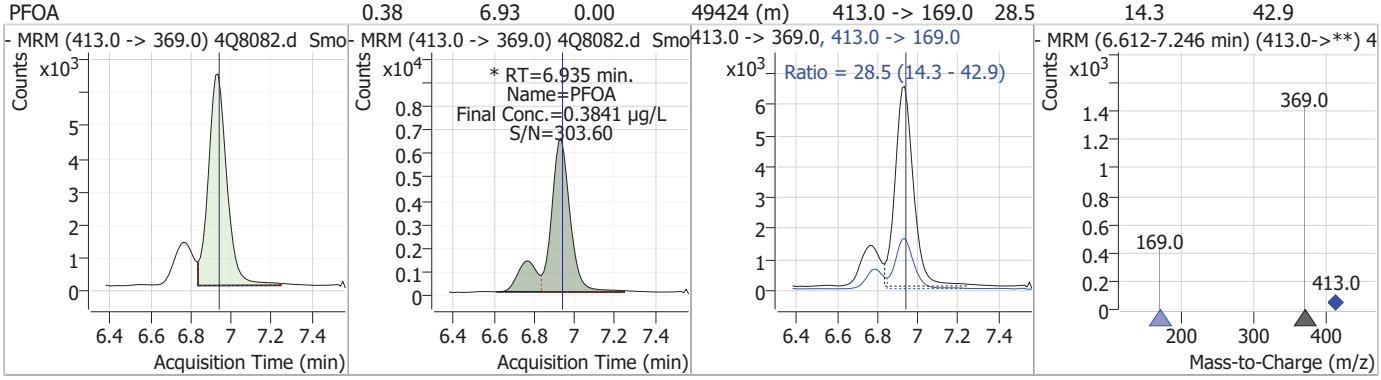
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	1.39	6.71	-0.01	25333	427.0 -> 81.0	45.7	23.9	71.7



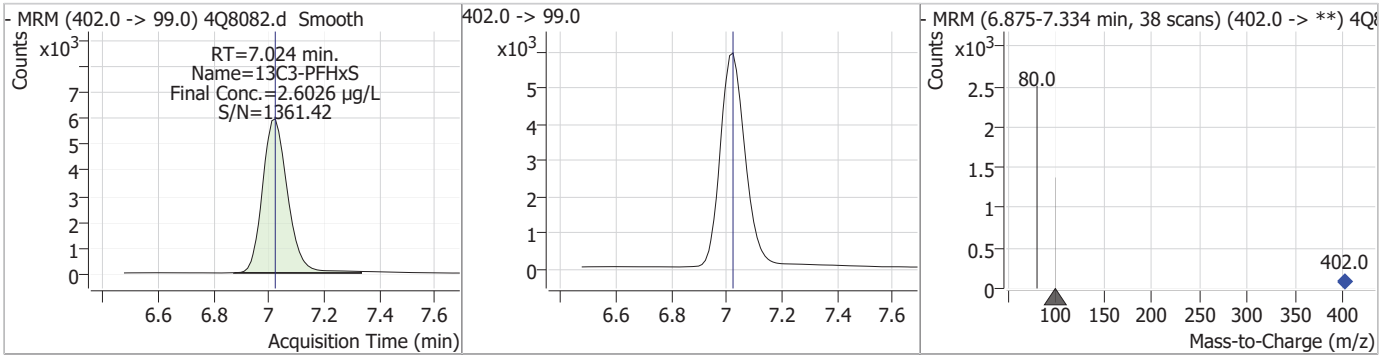
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.52	6.93	0.00	457668				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.38	6.93	0.00	49424 (m)	413.0 -> 169.0	28.5	14.3	42.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.60	7.02	0.00	37617				



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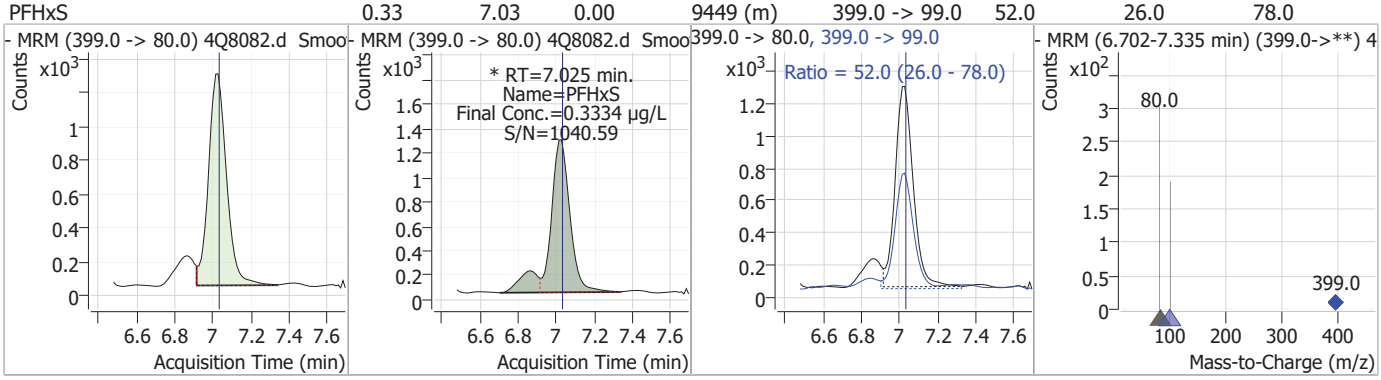
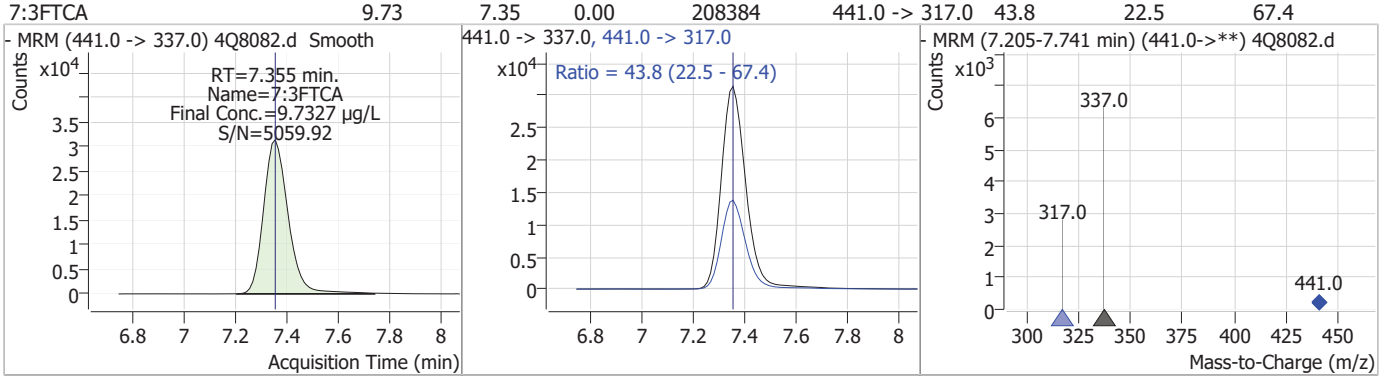
Perfluorinated Compounds by LC/MS/MS

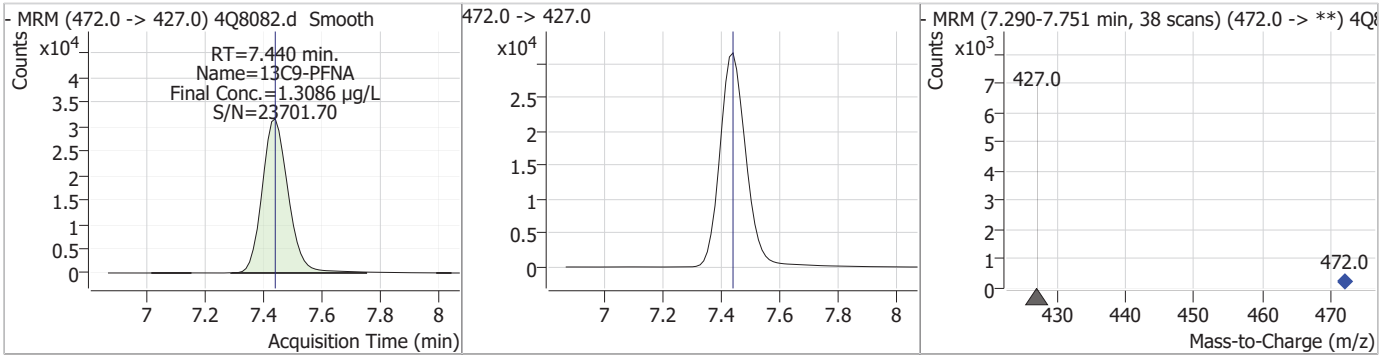
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.33	7.03	0.00	9449 (m)	399.0 -> 99.0	52.0	26.0	78.0



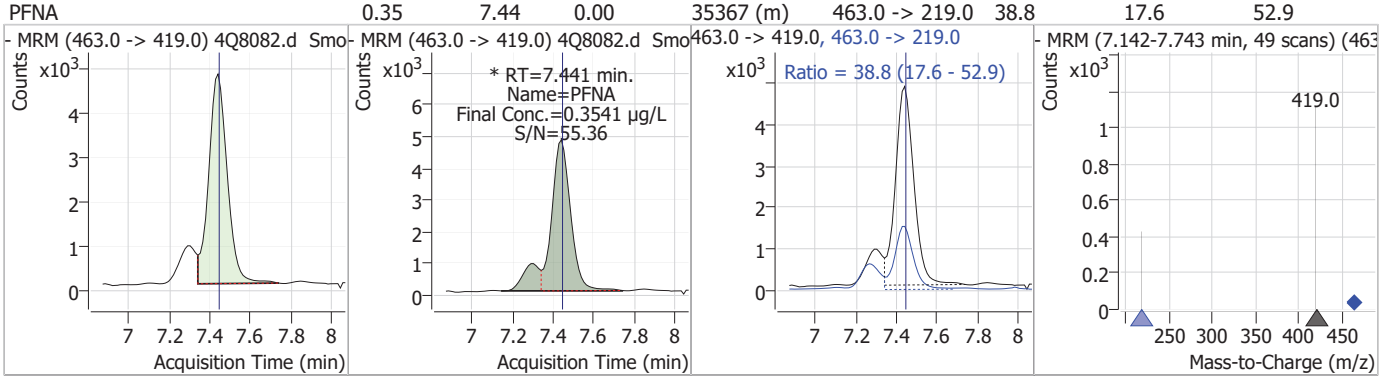
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	9.73	7.35	0.00	208384	441.0 -> 317.0	43.8	22.5	67.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.31	7.44	0.00	194310				

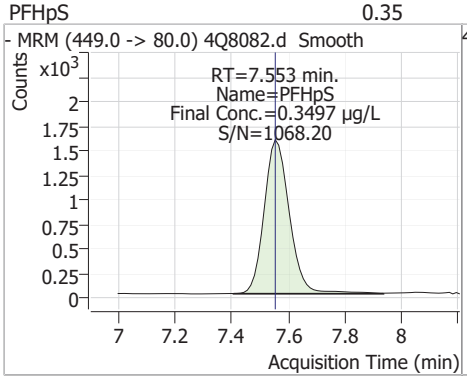


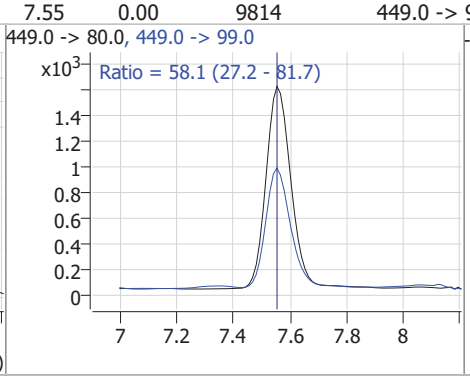
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.35	7.44	0.00	35367 (m)	463.0 -> 219.0	38.8	17.6	52.9

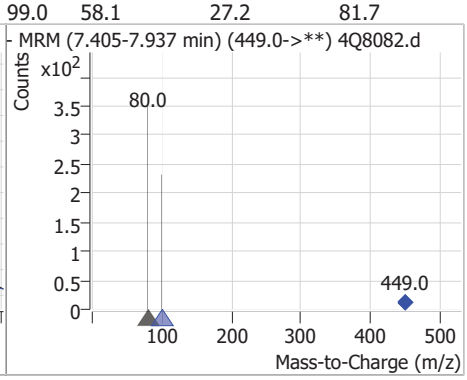


Perfluorinated Compounds by LC/MS/MS

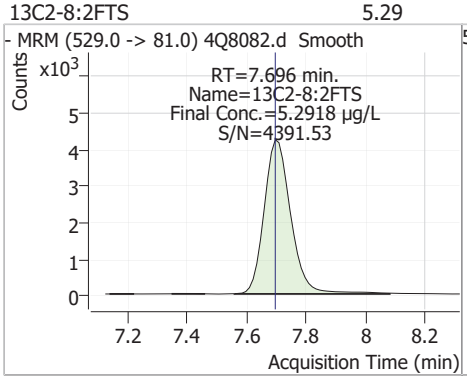
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.35	7.55	0.00	9814	449.0 -> 99.0	58.1	27.2	81.7

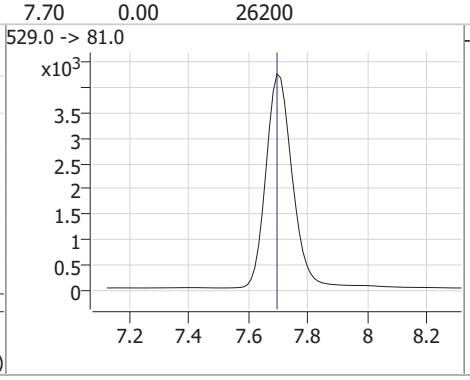


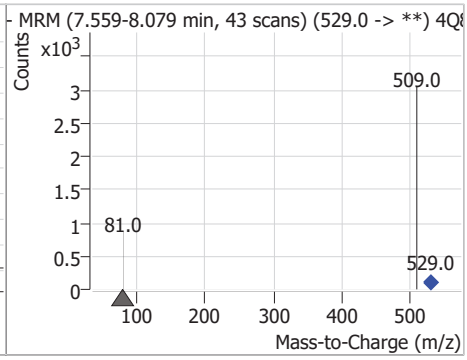




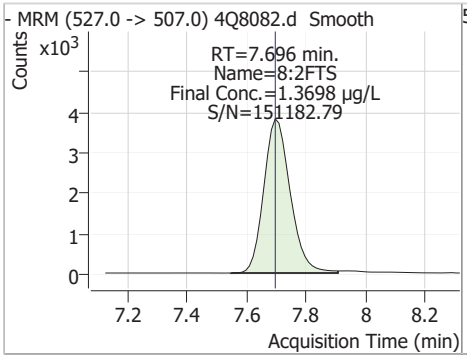
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.29	7.70	0.00	26200				

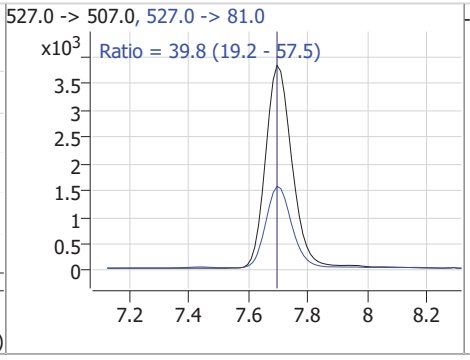


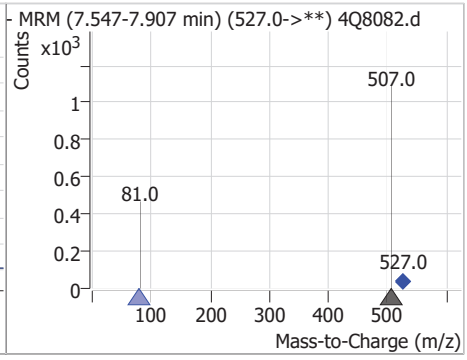




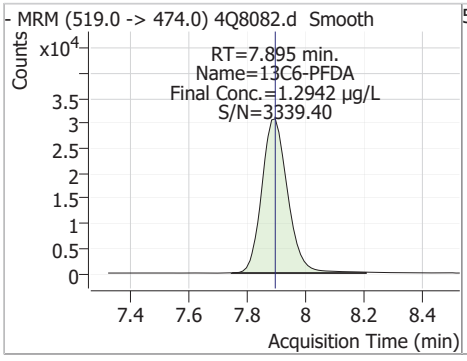
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	1.37	7.70	0.00	23279	527.0 -> 81.0	39.8	19.2	57.5

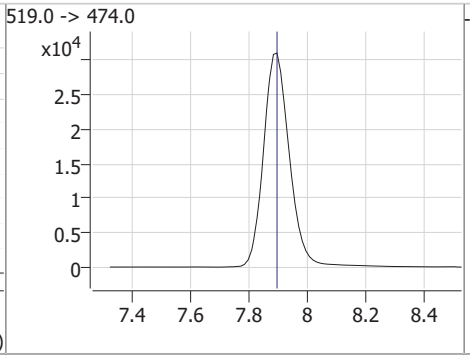


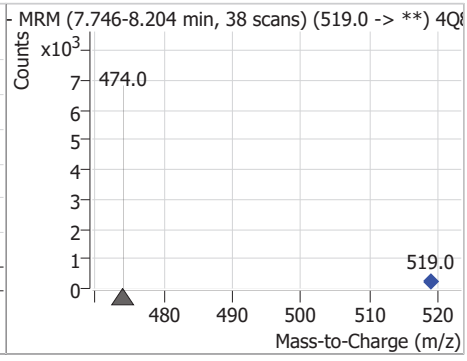




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.29	7.89	0.00	189766				

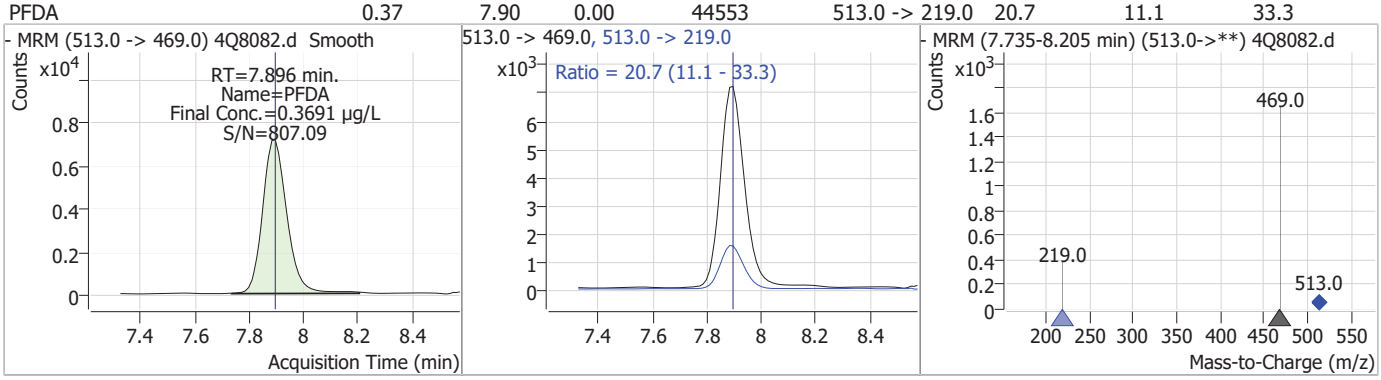




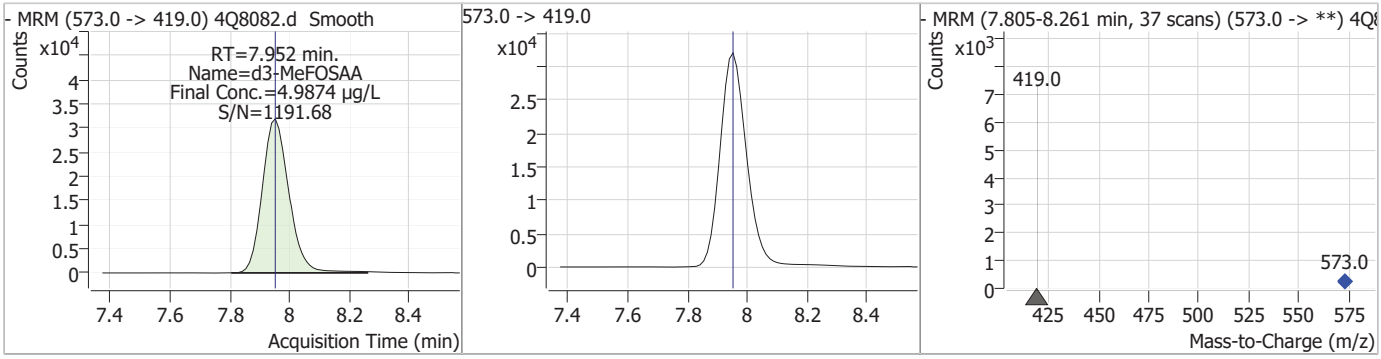


Perfluorinated Compounds by LC/MS/MS

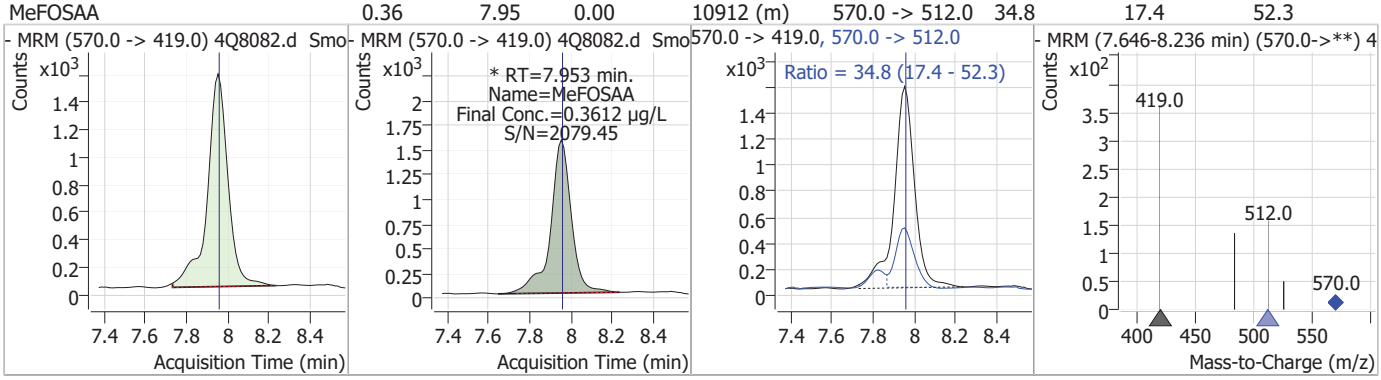
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.37	7.90	0.00	44553	513.0 -> 219.0	20.7	11.1	33.3



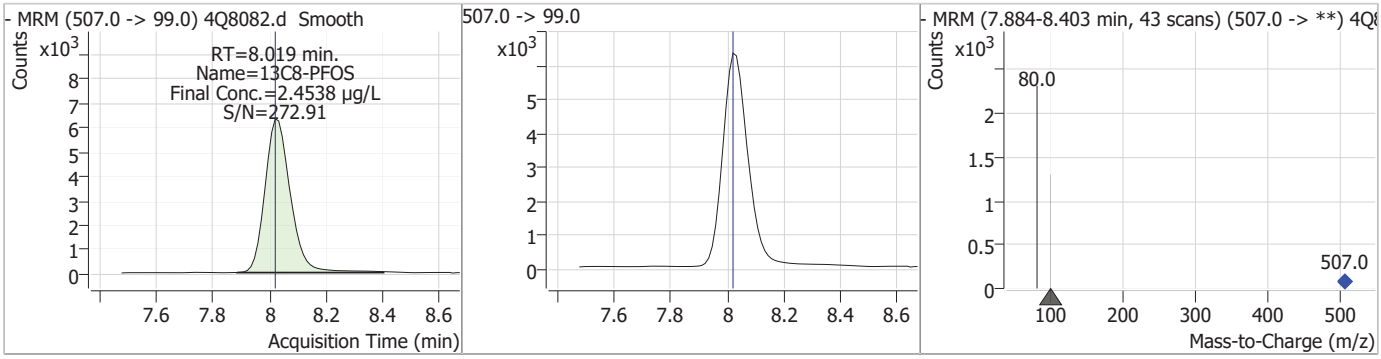
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.99	7.95	0.00	197948				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.36	7.95	0.00	10912 (m)	570.0 -> 512.0	34.8	17.4	52.3

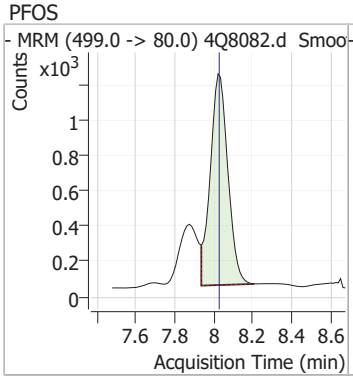


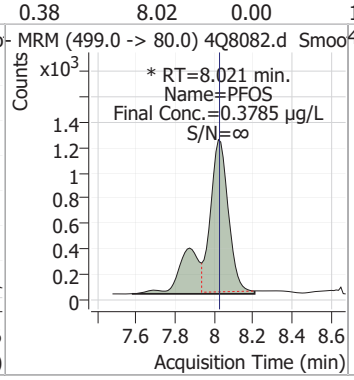
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.45	8.02	0.00	39487				

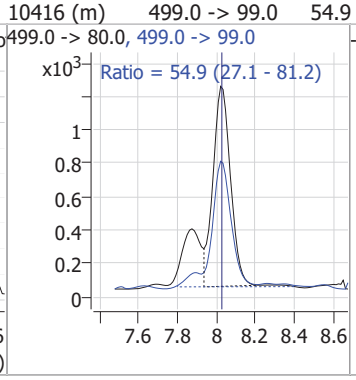


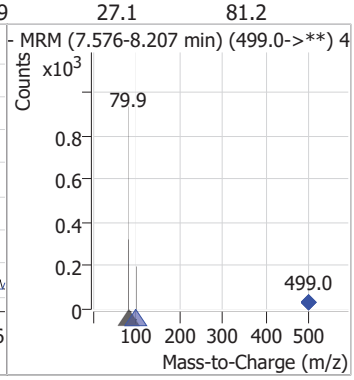
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.38	8.02	0.00	10416 (m)	499.0 -> 99.0	54.9	27.1	81.2

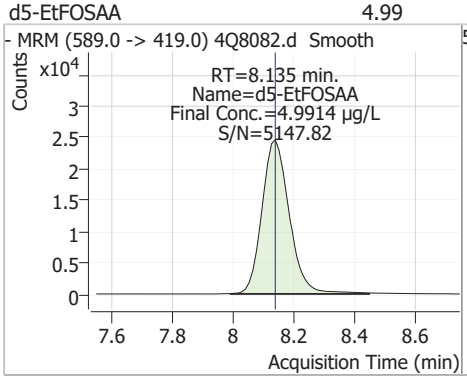


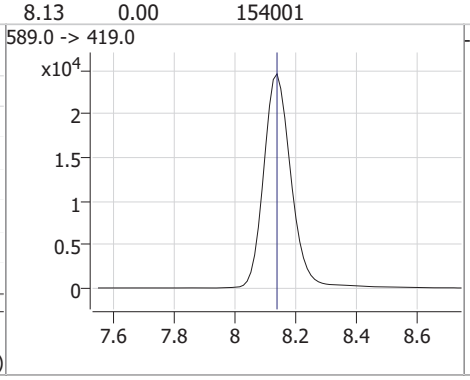


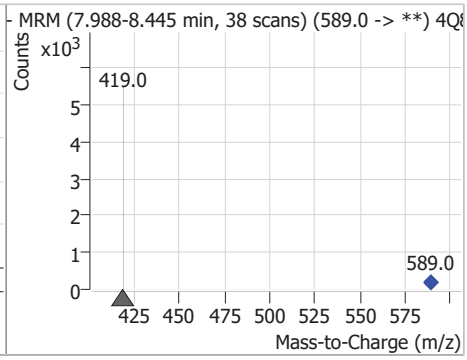




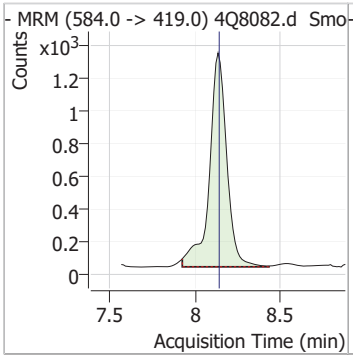
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.99	8.13	0.00	154001				

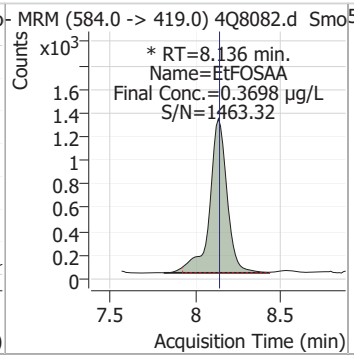


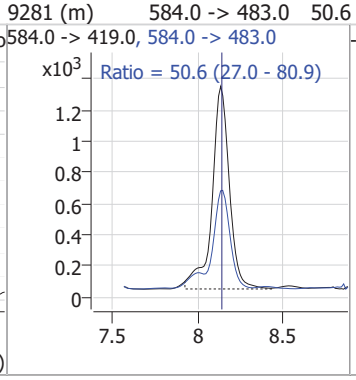


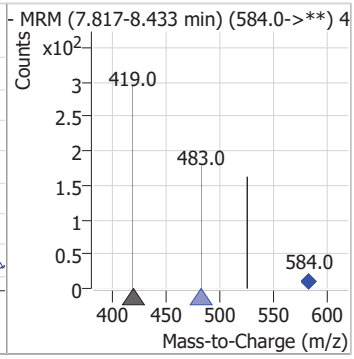


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.37	8.14	0.00	9281 (m)	584.0 -> 483.0	50.6	27.0	80.9

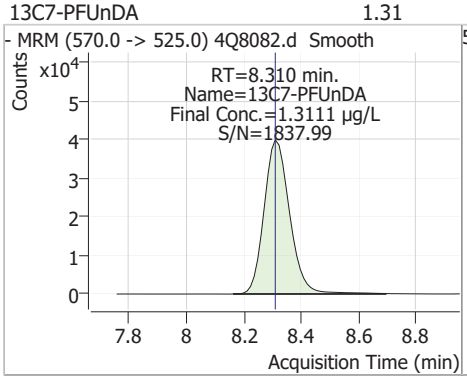


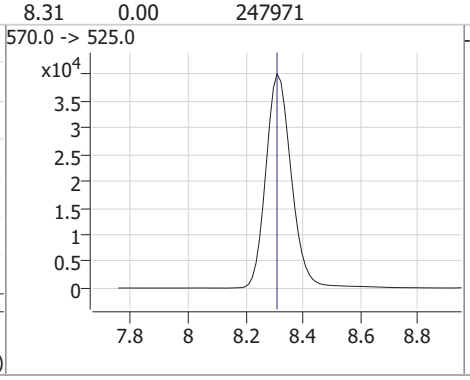


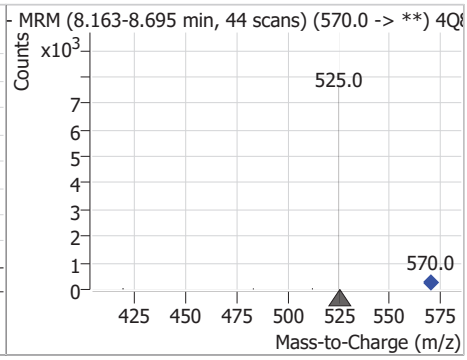




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.31	8.31	0.00	247971				

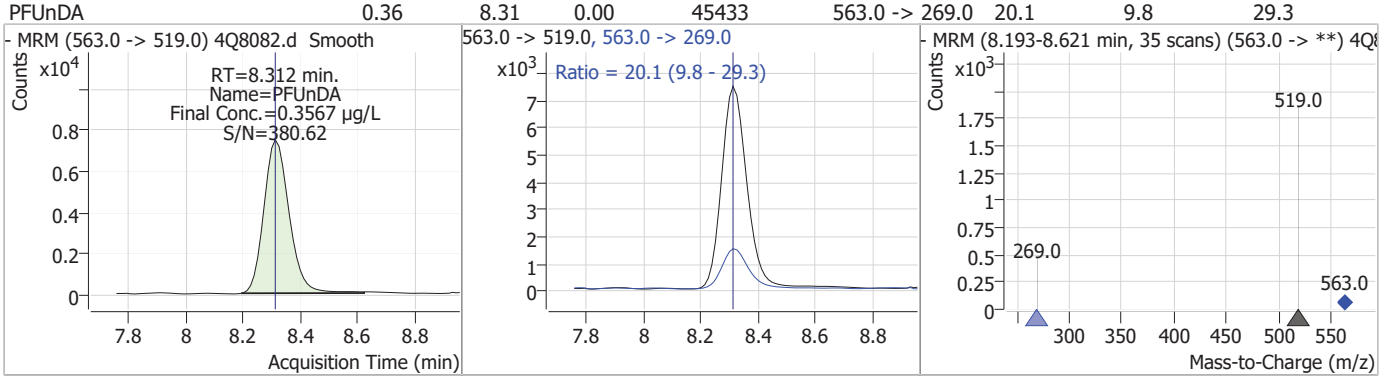




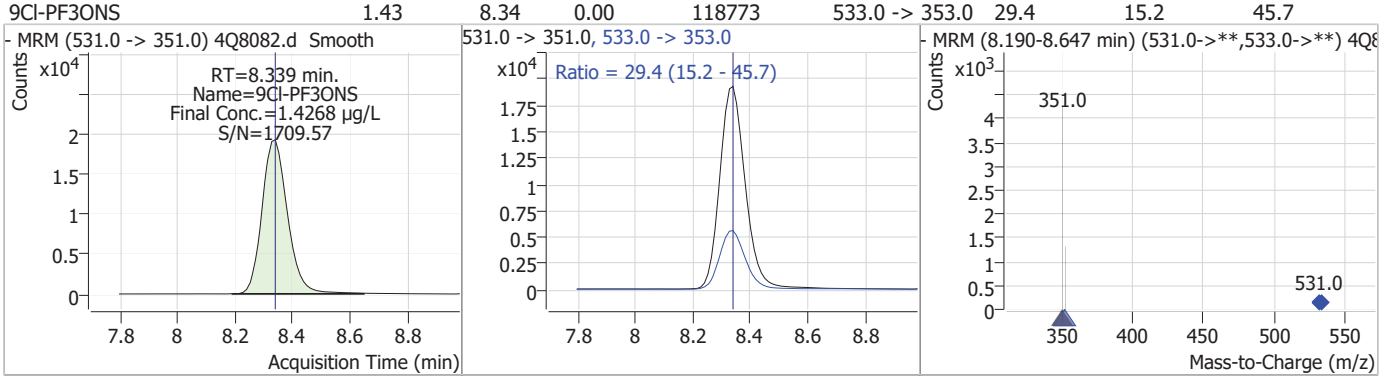


Perfluorinated Compounds by LC/MS/MS

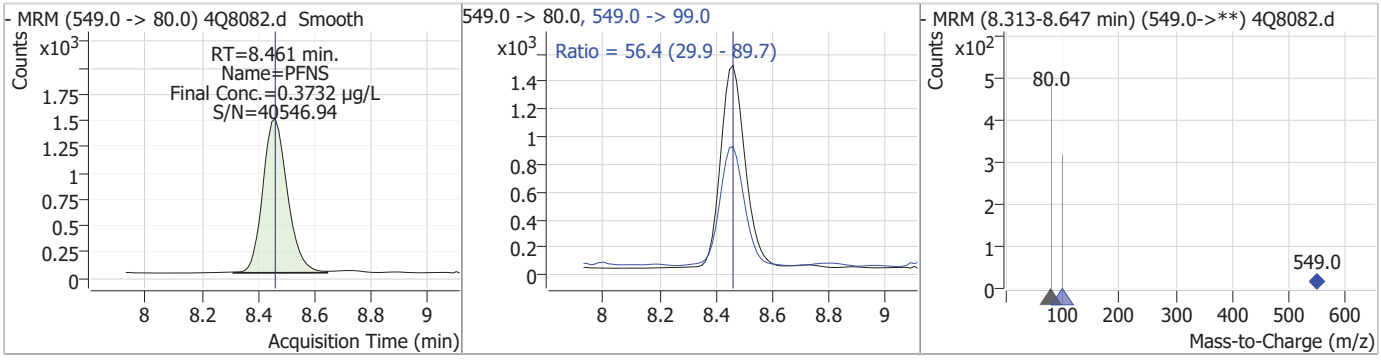
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.36	8.31	0.00	45433	563.0 -> 269.0	20.1	9.8	29.3



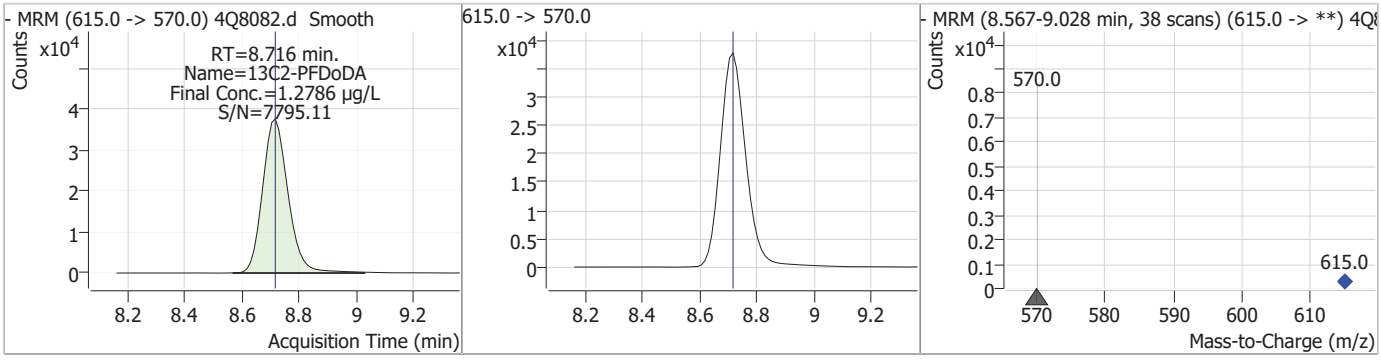
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	1.43	8.34	0.00	118773	533.0 -> 353.0	29.4	15.2	45.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.37	8.46	0.00	8915	549.0 -> 99.0	56.4	29.9	89.7

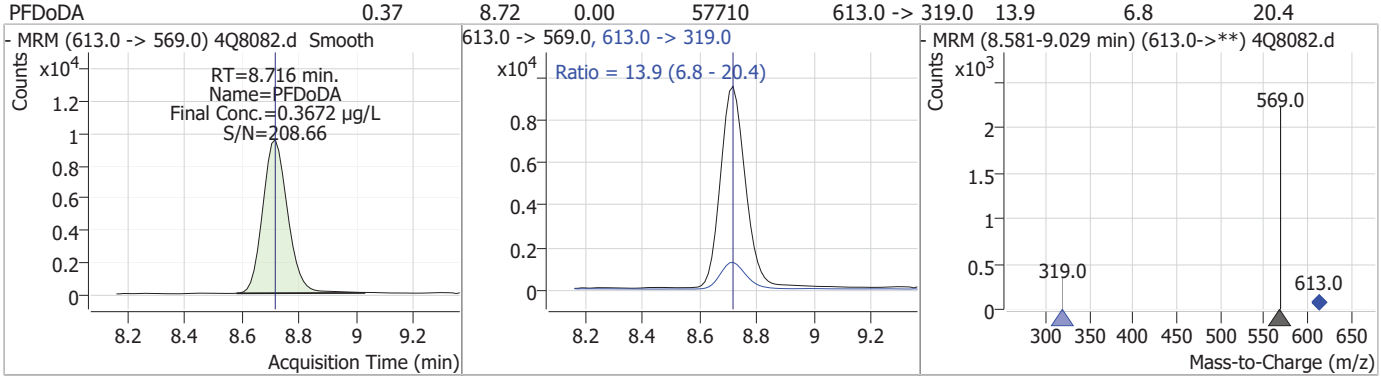


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.28	8.72	0.00	233019				

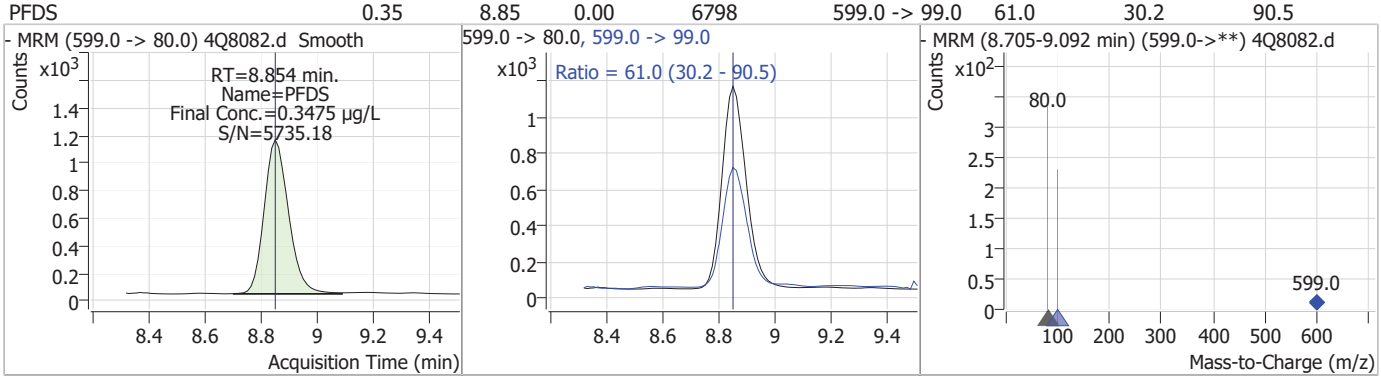


Perfluorinated Compounds by LC/MS/MS

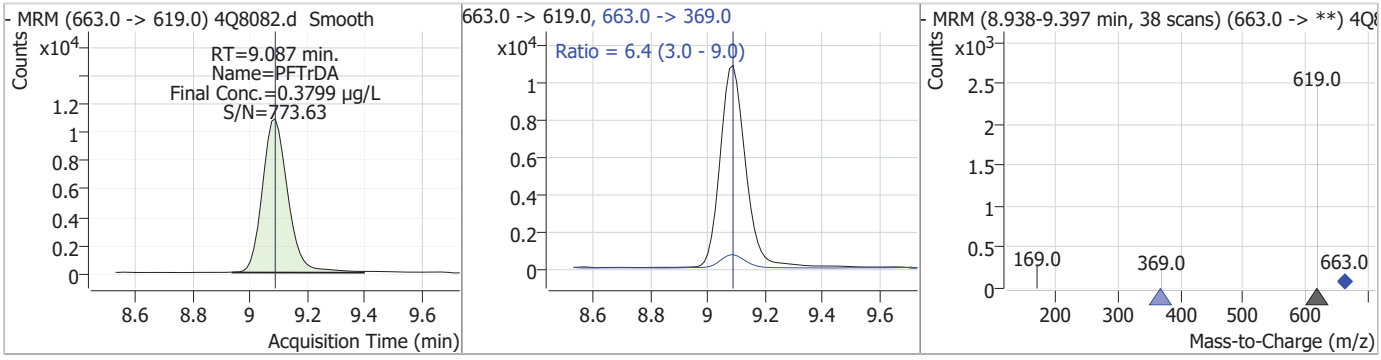
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.37	8.72	0.00	57710	613.0 -> 319.0	13.9	6.8	20.4



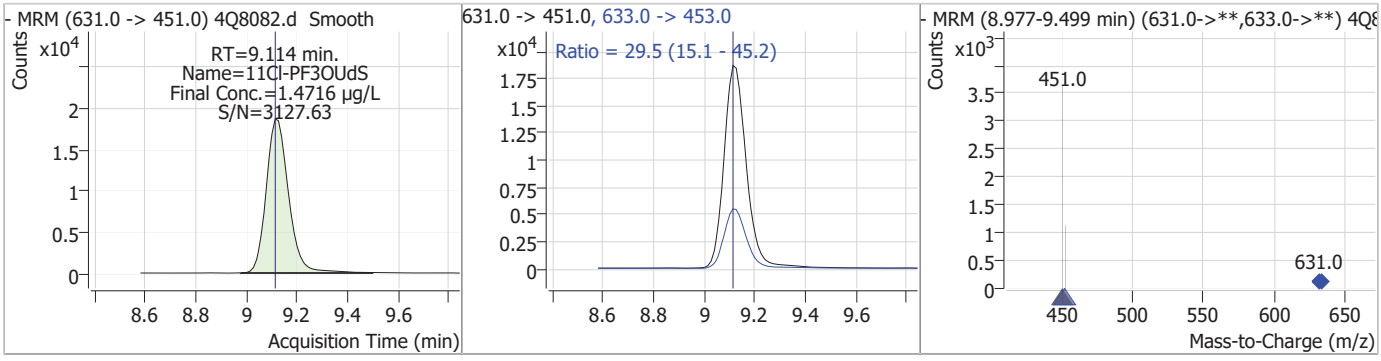
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.35	8.85	0.00	6798	599.0 -> 99.0	61.0	30.2	90.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.38	9.09	0.00	67574	663.0 -> 369.0	6.4	3.0	9.0

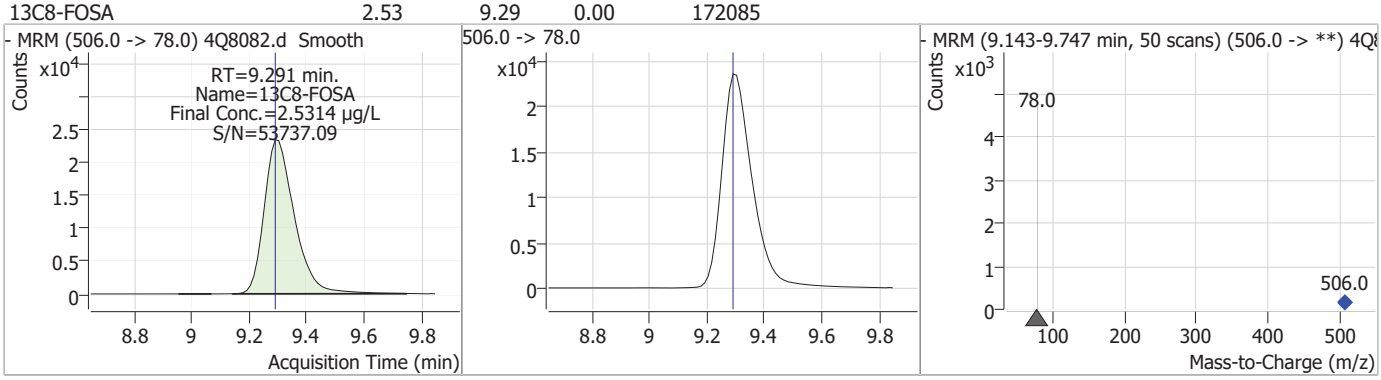


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	1.47	9.11	0.00	114789	633.0 -> 453.0	29.5	15.1	45.2

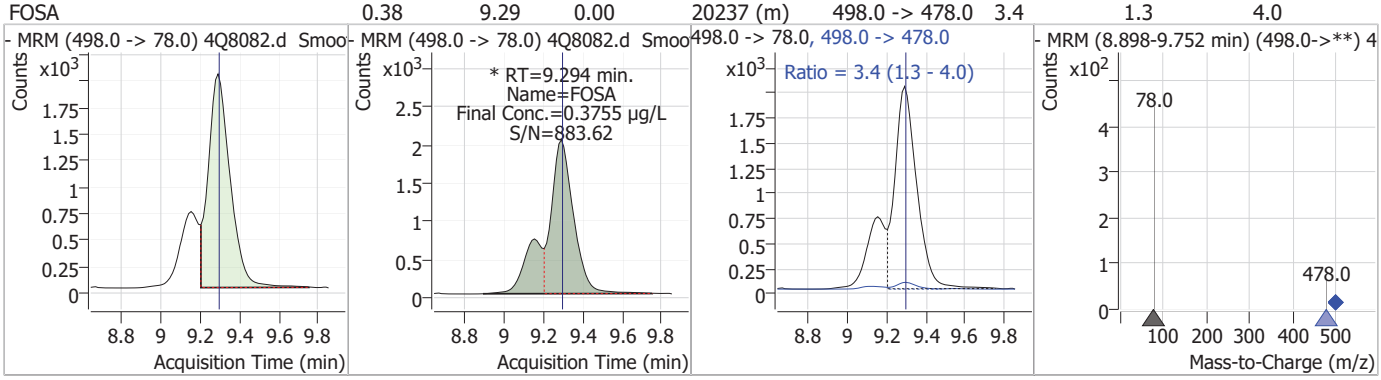


Perfluorinated Compounds by LC/MS/MS

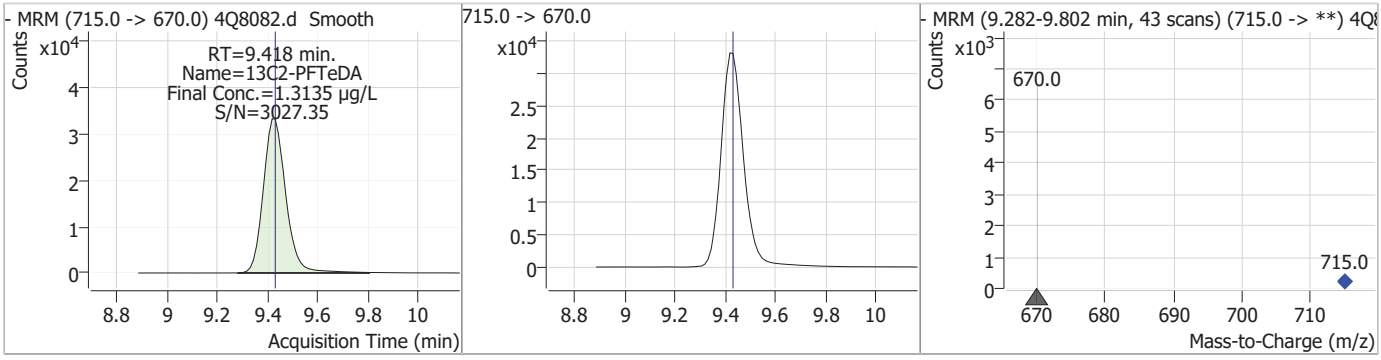
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.53	9.29	0.00	172085				



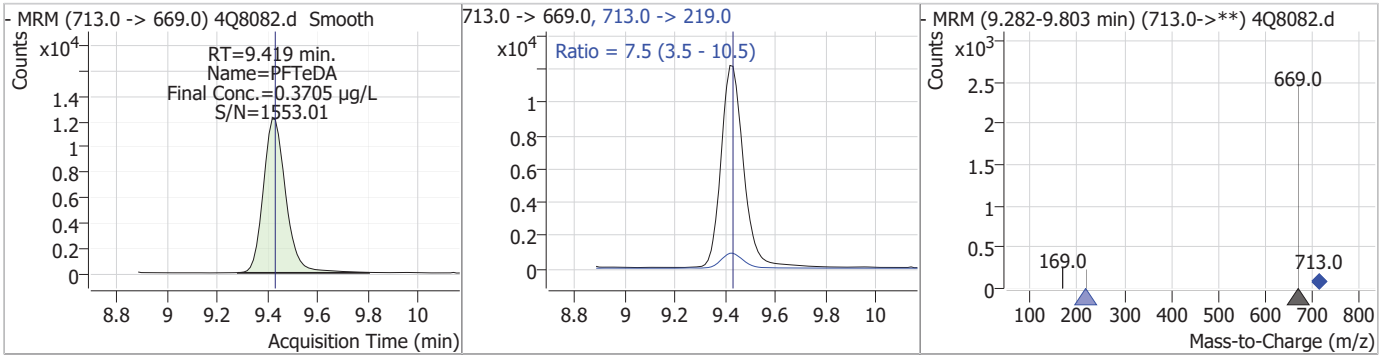
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.38	9.29	0.00	20237 (m)	498.0 -> 478.0	3.4	1.3	4.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.31	9.42	-0.01	204832				

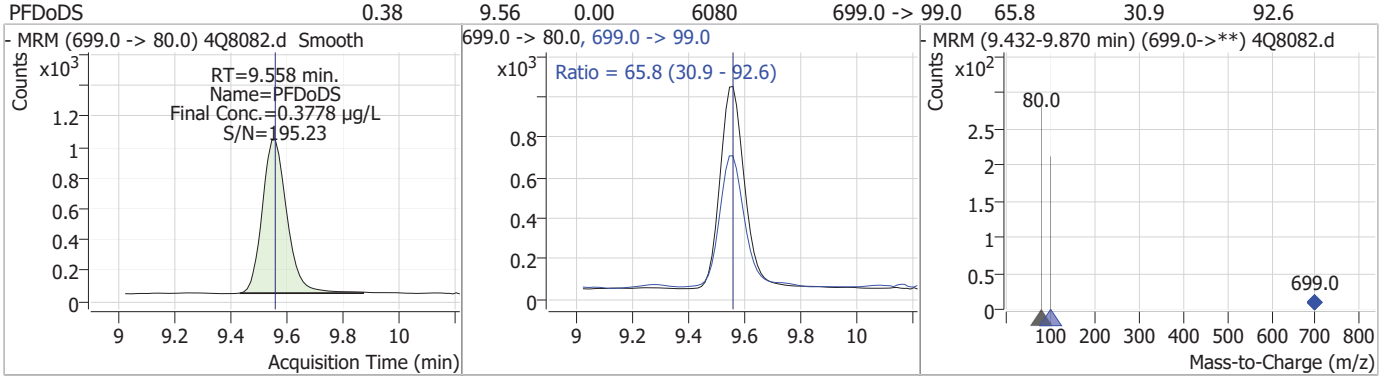


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.37	9.42	-0.01	75542	713.0 -> 219.0	7.5	3.5	10.5

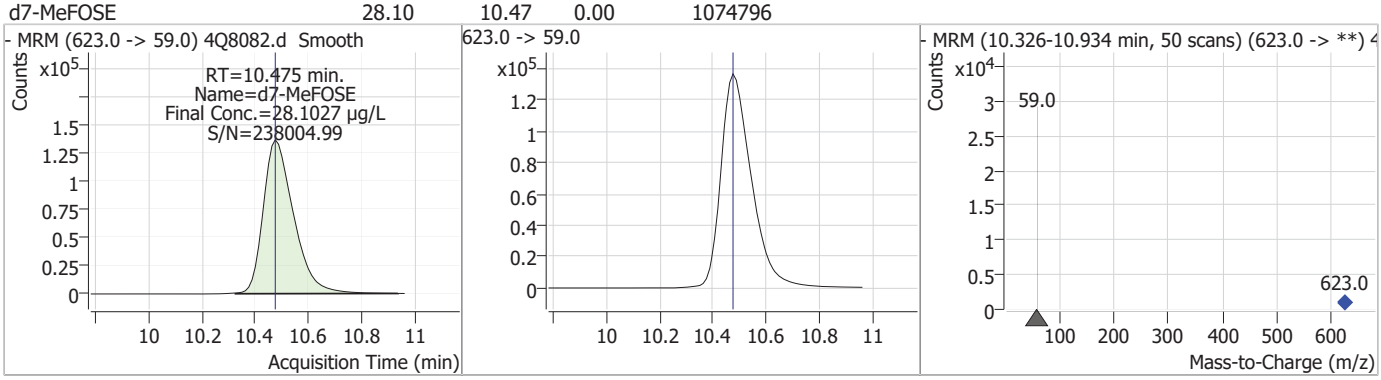


Perfluorinated Compounds by LC/MS/MS

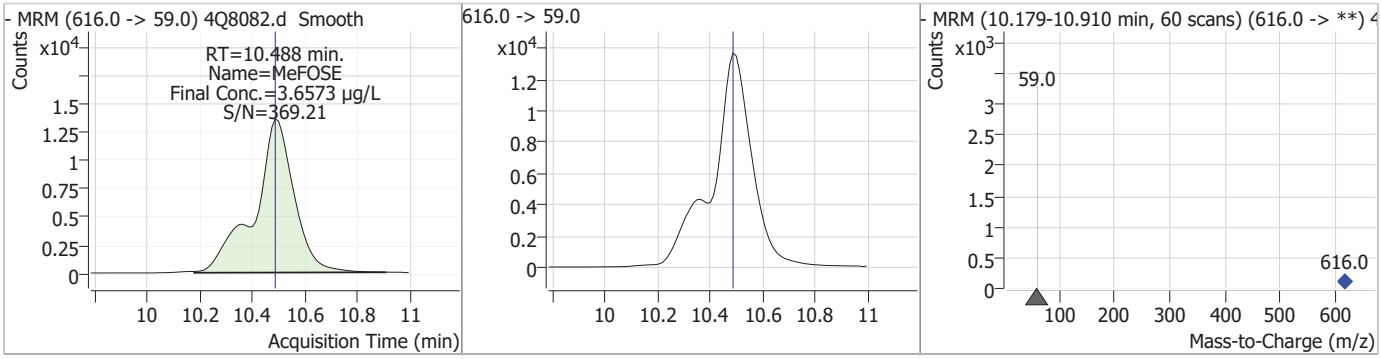
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.38	9.56	0.00	6080	699.0 -> 99.0	65.8	30.9	92.6



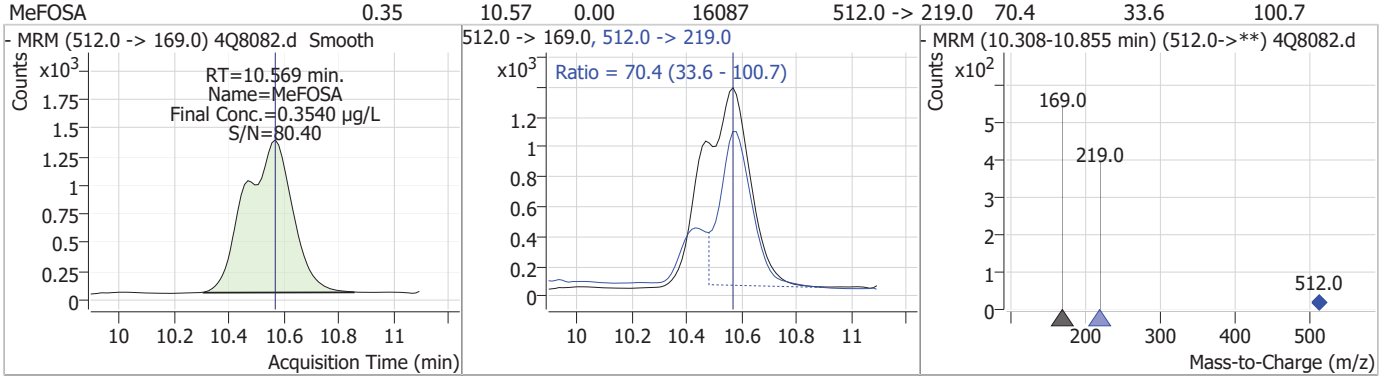
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	28.10	10.47	0.00	1074796				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	3.66	10.49	0.00	143202				

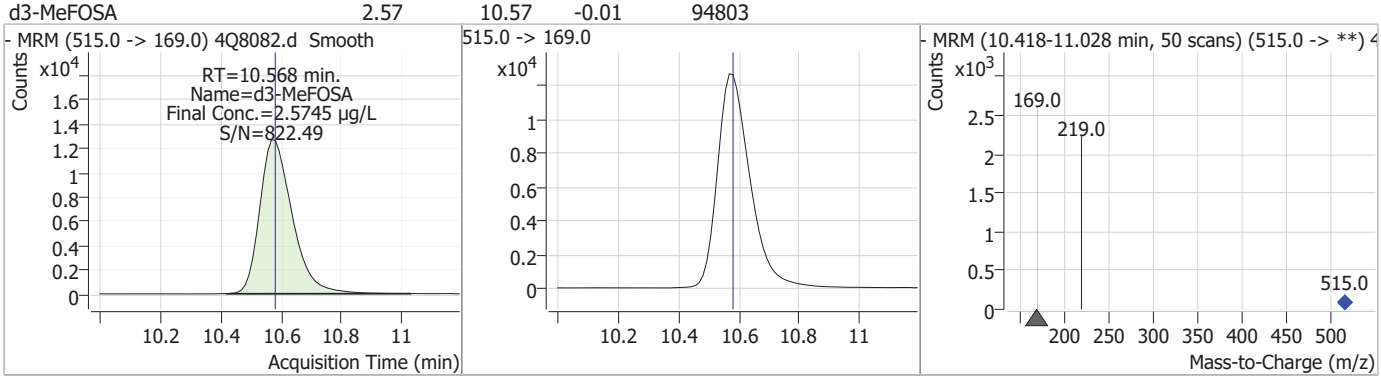


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.35	10.57	0.00	16087	512.0 -> 219.0	70.4	33.6	100.7

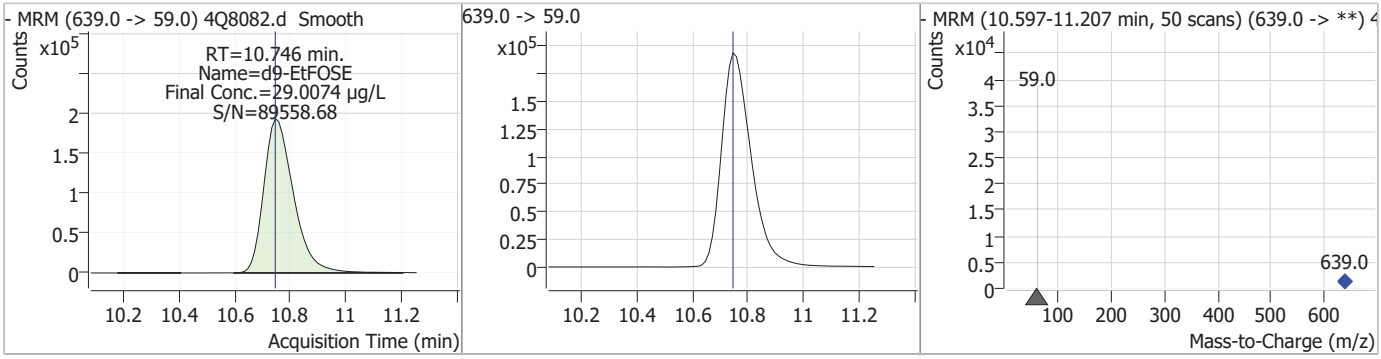


Perfluorinated Compounds by LC/MS/MS

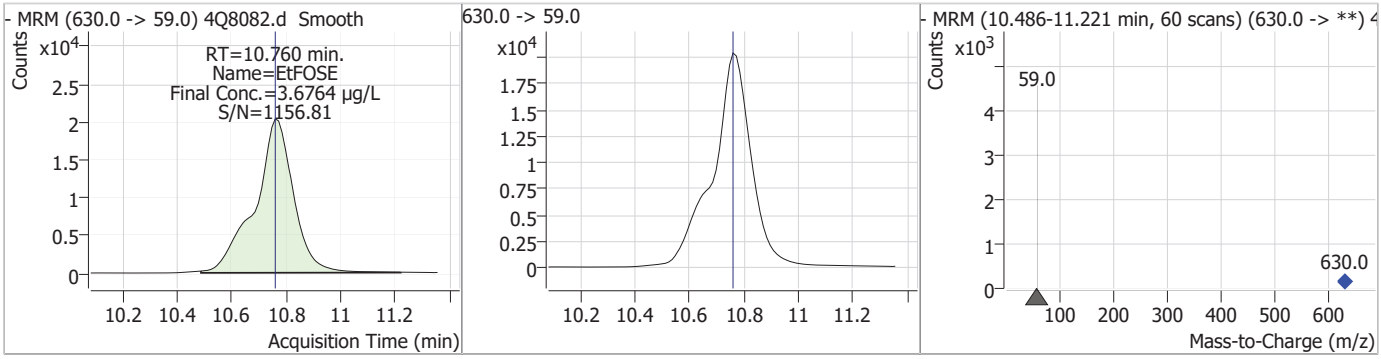
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.57	10.57	-0.01	94803				



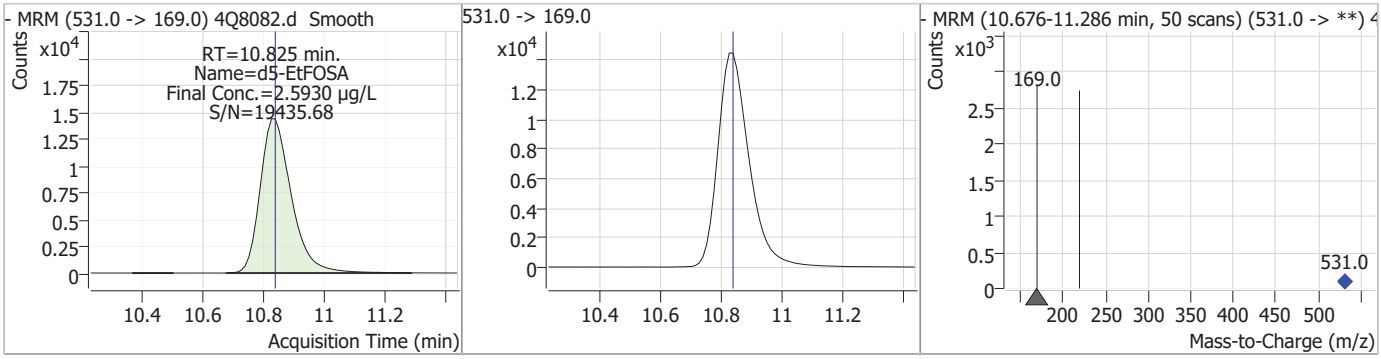
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	29.01	10.75	0.00	1443571				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	3.68	10.76	0.00	200675				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.59	10.83	-0.01	102712				

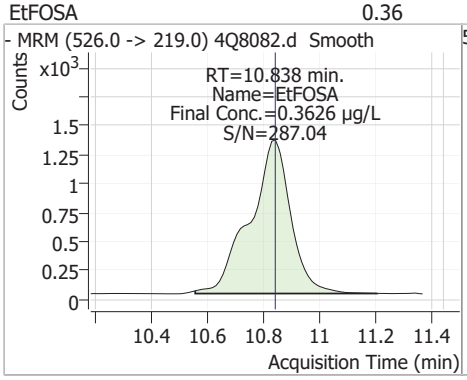


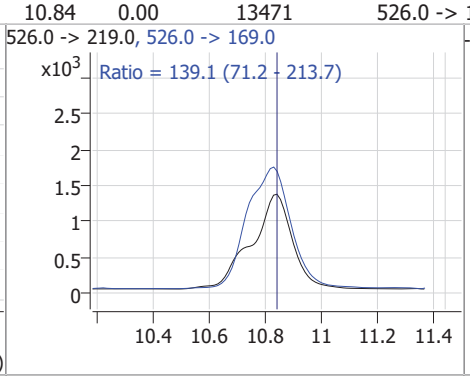
7.6.33

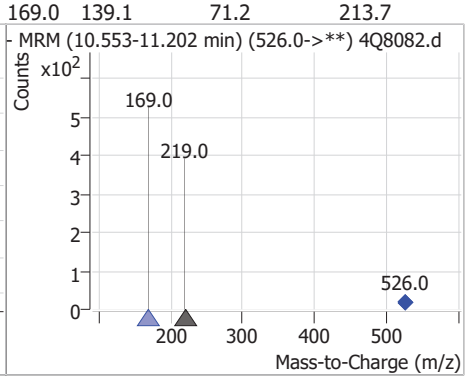
7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.36	10.84	0.00	13471	526.0 -> 169.0	139.1	71.2	213.7







7.6.33

7

Manual Integration Approval Summary

Sample Number: T4Q137-IC137
Lab FileID: 4Q8082.D
Injection Time: 04/29/25 17:26
Method: EPA 1633
Analyst approved: 04/30/25 02:22 Rensel John Romano
Supervisor approved: 04/30/25 07:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.93	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.03	Split peak
Perfluorononanoic acid	375-95-1		7.44	Split peak
MeFOSAA	2355-31-9		7.95	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.02	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.29	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 04/30/25 07:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8083.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 5:39:38 PM
Sample Name : IC137-3
Vial : P1-A4
DA Method File : 042925_1633_T4Q137.quantmethod.xml
Batch Name : t4q137.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.908	217.0 -> 172.0	766270	10.00 µg/L	0.000
M5-PFPeA	4.344	268.0 -> 223.0	394260	5.00 µg/L	0.000
M5-PFHxA	5.489	318.0 -> 273.0	267705	2.50 µg/L	0.000
M4-PFHpA	6.316	367.0 -> 322.0	284720	2.50 µg/L	0.000
M8-PFOA	6.934	421.0 -> 376.0	448227	2.50 µg/L	0.000
M9-PFNA	7.440	472.0 -> 427.0	186676	1.25 µg/L	0.000
M6-PFDA	7.895	519.0 -> 474.0	183834	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	244224	1.25 µg/L	0.000
M2-PFDoDA	8.716	615.0 -> 570.0	222943	1.25 µg/L	0.000
M2-PFTeDA	9.430	715.0 -> 670.0	195022	1.25 µg/L	0.000
M8-FOSA	9.303	506.0 -> 78.0	168257	2.50 µg/L	0.012
M3-PFBS	5.393	302.0 -> 99.0	24216	2.50 µg/L	0.012
		302.0 -> 80.0	60571		
M3-PFHxS	7.024	402.0 -> 99.0	36259	2.50 µg/L	0.000
M8-PFOS	8.032	507.0 -> 99.0	40906	2.50 µg/L	0.012
M2-4:2FTS	5.190	329.0 -> 81.0	10038	5.00 µg/L	0.000
M2-6:2FTS	6.721	429.0 -> 81.0	20856	5.00 µg/L	0.000
M2-8:2FTS	7.696	529.0 -> 81.0	24064	5.00 µg/L	0.000
M3-MeFOSAA	7.952	573.0 -> 419.0	193673	5.00 µg/L	0.000
M3-HFPO-DA	5.816	287.0 -> 169.0	390618	10.00 µg/L	0.000
M5-EtFOSAA	8.135	589.0 -> 419.0	154295	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	1023007	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1345345	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	97748	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	89307	2.50 µg/L	-0.012
13C4-PFOS	8.020	503.0 -> 80.0	61308	2.50 µg/L	0.000
13C3-PFBA	2.911	216.0 -> 172.0	305312	5.00 µg/L	0.000
18O2-PFHxS	7.023	403.0 -> 84.0	36926	2.50 µg/L	0.000
13C4-PFOA	6.935	417.0 -> 372.0	409419	2.50 µg/L	0.000
13C2-PFDA	7.895	515.0 -> 470.0	142120	1.25 µg/L	0.000
13C5-PFNA	7.440	468.0 -> 423.0	166544	1.25 µg/L	0.000
13C2-PFHxA	5.489	315.0 -> 270.0	225270	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.190	329.0 -> 81.0	10038	5.31 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.1%	
13C2-6:2FTS	6.721	429.0 -> 81.0	20856	5.33 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.5%	
13C2-8:2FTS	7.696	529.0 -> 81.0	24064	5.01 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.1%	
13C2-PFDoDA	8.716	615.0 -> 570.0	222943	1.27 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.6%	
13C2-PFTeDA	9.430	715.0 -> 670.0	195022	1.30 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.9%	
13C3-PFBS	5.393	302.0 -> 99.0	24216	2.52 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.0%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.024	402.0 -> 99.0	36259	2.58	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.4%			
13C4-PFBA	2.908	217.0 -> 172.0	766270	10.16	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.6%			
13C4-PFHpA	6.316	367.0 -> 322.0	284720	2.53	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.0%			
13C5-PFHxA	5.489	318.0 -> 273.0	267705	2.60	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.9%			
13C5-PFPeA	4.344	268.0 -> 223.0	394260	5.20	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.0%			
13C6-PFDA	7.895	519.0 -> 474.0	183834	1.30	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.2%			
13C7-PFUnDA	8.310	570.0 -> 525.0	244224	1.34	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 107.3%			
13C8-FOSA	9.303	506.0 -> 78.0	168257	2.56	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.5%			
13C8-PFOA	6.934	421.0 -> 376.0	448227	2.52	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.8%			
13C8-PFOS	8.032	507.0 -> 99.0	40906	2.63	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.2%			
13C9-PFNA	7.440	472.0 -> 427.0	186676	1.24	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.5%			
d3-MeFOSAA	7.952	573.0 -> 419.0	193673	5.05	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.0%			
13C3-HFPO-DA	5.816	287.0 -> 169.0	390618	10.06	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.6%			
d3-MeFOSA	10.567	515.0 -> 169.0	89307	2.51	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.4%			
d5-EtFOSAA	8.135	589.0 -> 419.0	154295	5.18	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.5%			
d7-MeFOSE	10.475	623.0 -> 59.0	1023007	27.68	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 110.7%			
d9-EtFOSE	10.746	639.0 -> 59.0	1345345	27.98	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 111.9%			
d5-EtFOSA	10.837	531.0 -> 169.0	97748	2.55	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.2%			
Target Compounds							QValue
4:2FTS	5.191	327.0 -> 307.0	70617	4.57	µg/L		100
		327.0 -> 81.0	32284				
6:2FTS	6.721	427.0 -> 407.0	83315	4.75	µg/L		96
		427.0 -> 81.0	37759				
8:2FTS	7.696	527.0 -> 507.0	79041	5.06	µg/L		99
		527.0 -> 81.0	30780				
EtFOSAA	8.136	584.0 -> 419.0	29008	1.15	µg/L	m	94
		584.0 -> 483.0	14441				
FOSA	9.294	498.0 -> 78.0	63405	1.20	µg/L	m	100
		498.0 -> 478.0	1688				
MeFOSAA	7.953	570.0 -> 419.0	33770	1.14	µg/L	m	99
		570.0 -> 512.0	11987				
PFBA	2.914	213.0 -> 169.0	98703	4.70	µg/L		100
PFBS	5.394	299.0 -> 80.0	23807	1.05	µg/L		98
		299.0 -> 99.0	9761				
PFDA	7.896	513.0 -> 469.0	140469	1.20	µg/L		100
		513.0 -> 219.0	31092				
PFDoDA	8.716	613.0 -> 569.0	182563	1.21	µg/L		99
		613.0 -> 319.0	24424				

Perfluorinated Compounds by LC/MS/MS

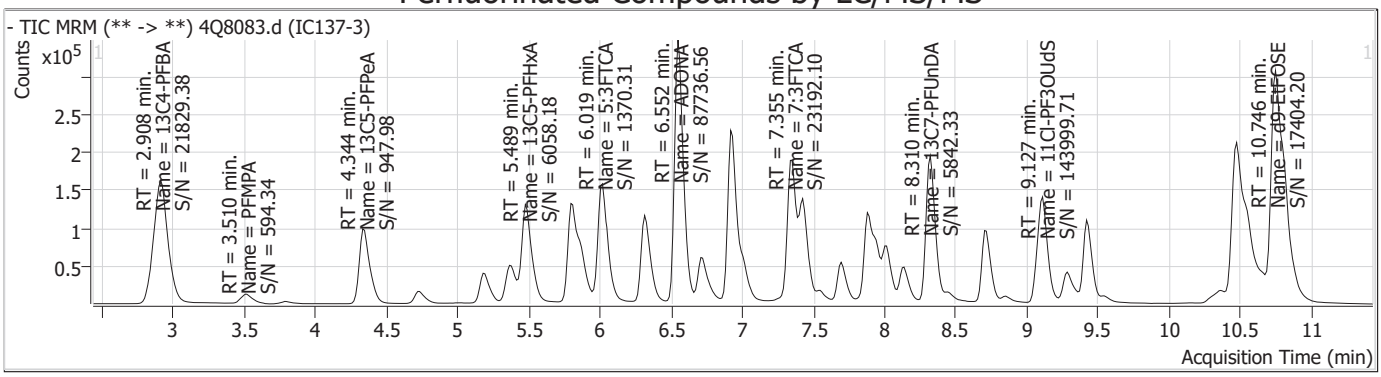
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.854	599.0 -> 80.0	20822	1.08	µg/L		93
		599.0 -> 99.0	11478				
PFHpA	6.317	363.0 -> 319.0	176289	1.20	µg/L		98
		363.0 -> 169.0	36590				
PFHpS	7.553	449.0 -> 80.0	29131	1.08	µg/L		95
		449.0 -> 99.0	16904				
PFHxA	5.492	313.0 -> 269.0	111025	1.14	µg/L		98
		313.0 -> 119.0	4249				
PFHxS	7.025	399.0 -> 80.0	28479	1.04	µg/L	m	97
		399.0 -> 99.0	15463				
PFNA	7.441	463.0 -> 419.0	113919	1.19	µg/L	m	99
		463.0 -> 219.0	41115				
PFNS	8.461	549.0 -> 80.0	26060	1.05	µg/L		99
		549.0 -> 99.0	15877				
PFOA	6.935	413.0 -> 369.0	146519	1.16	µg/L	m	99
		413.0 -> 169.0	42828				
PFOS	8.021	499.0 -> 80.0	28064	0.98	µg/L	m	93
		499.0 -> 99.0	16674				
PFPeA	4.346	263.0 -> 219.0	123739	2.37	µg/L		100
PFPeS	6.355	349.0 -> 80.0	28327	1.12	µg/L		96
		349.0 -> 99.0	13644				
PFTeDA	9.431	713.0 -> 669.0	235824	1.21	µg/L		100
		713.0 -> 219.0	16523				
PFTrDA	9.087	663.0 -> 619.0	213251	1.25	µg/L		100
		663.0 -> 369.0	13029				
PFUnDA	8.312	563.0 -> 519.0	149684	1.19	µg/L		97
		563.0 -> 269.0	27431				
11Cl-PF3OUdS	9.127	631.0 -> 451.0	355972	4.69	µg/L		99
		633.0 -> 453.0	105692				
9Cl-PF3ONS	8.339	531.0 -> 351.0	378451	4.67	µg/L		98
		533.0 -> 353.0	110639				
ADONA	6.552	377.0 -> 251.0	1171520	4.42	µg/L		100
		377.0 -> 85.0	386498				
HFPO-DA	5.817	285.0 -> 169.0	174107	4.92	µg/L		100
		285.0 -> 185.0	18759				
3:3FTCA	3.794	241.0 -> 177.0	15707	5.51	µg/L		99
		241.0 -> 117.0	1414				
5:3FTCA	6.019	341.0 -> 237.0	450103	30.69	µg/L		100
		341.0 -> 217.0	322195				
7:3FTCA	7.355	441.0 -> 337.0	646208	30.24	µg/L		97
		441.0 -> 317.0	301130				
EtFOSA	10.838	526.0 -> 219.0	40920	1.16	µg/L		97
		526.0 -> 169.0	56629				
EtFOSE	10.760	630.0 -> 59.0	602987	11.85	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	52262	1.22	µg/L		95
		512.0 -> 219.0	33162				
MeFOSE	10.488	616.0 -> 59.0	440134	11.81	µg/L	m	100
PFDoDS	9.558	699.0 -> 80.0	18271	1.10	µg/L		98
		699.0 -> 99.0	11025				
NFDHA	5.370	295.0 -> 201.0	28051	2.22	µg/L		99
		201.0 -> 85.0	119455				
		295.0 -> 85.0	7719				
PFMBA	4.735	279.0 -> 85.0	83106	2.33	µg/L		100
PFMPA	3.510	229.0 -> 85.0	71373	2.31	µg/L		100
PFEESA	5.872	315.0 -> 135.0	197281	2.14	µg/L		99
		315.0 -> 69.0	14761				

Perfluorinated Compounds by LC/MS/MS

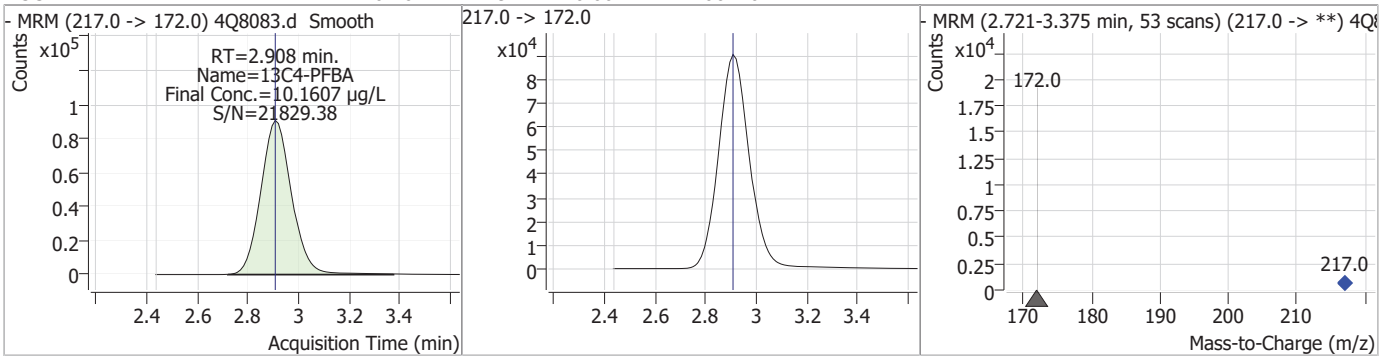
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

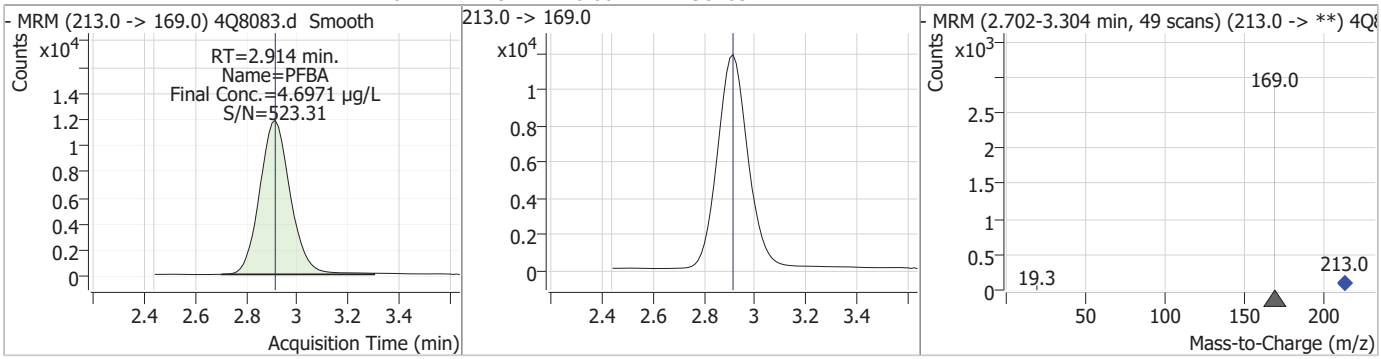
Perfluorinated Compounds by LC/MS/MS



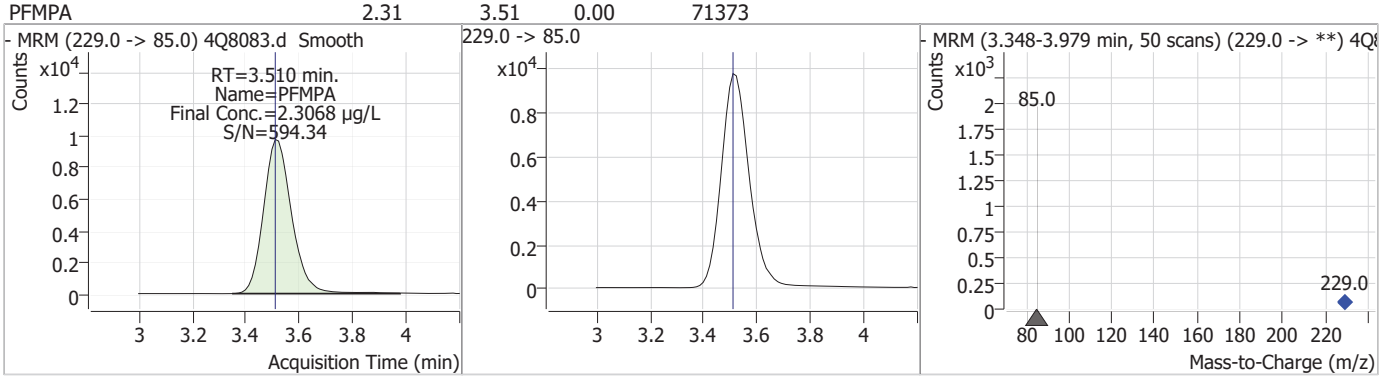
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.16	2.91	0.00	766270				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	4.70	2.91	0.00	98703				

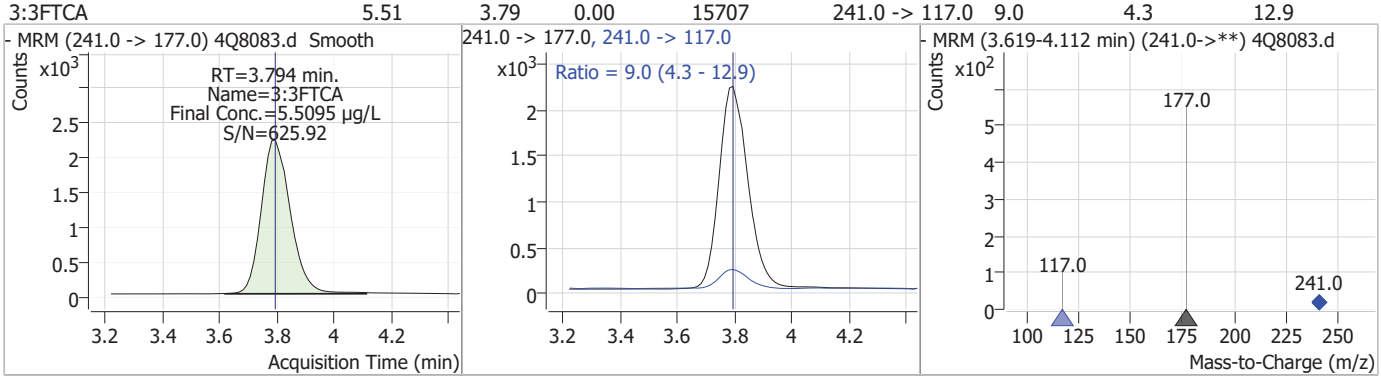


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	2.31	3.51	0.00	71373				

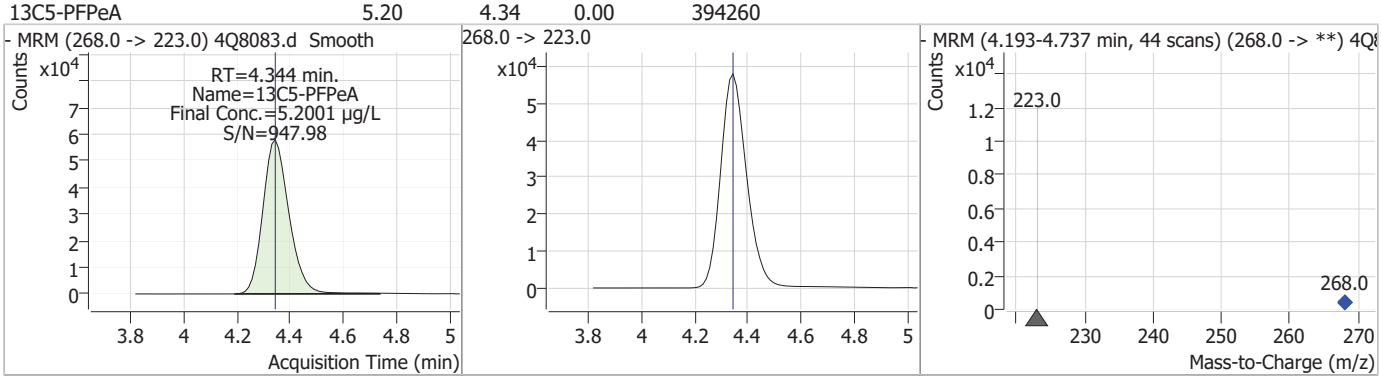


Perfluorinated Compounds by LC/MS/MS

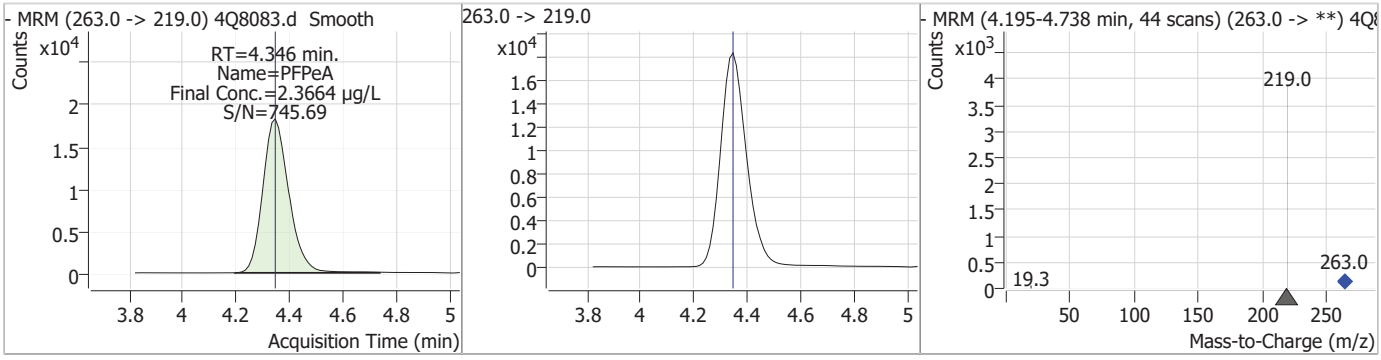
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	5.51	3.79	0.00	15707	241.0 -> 117.0	9.0	4.3	12.9



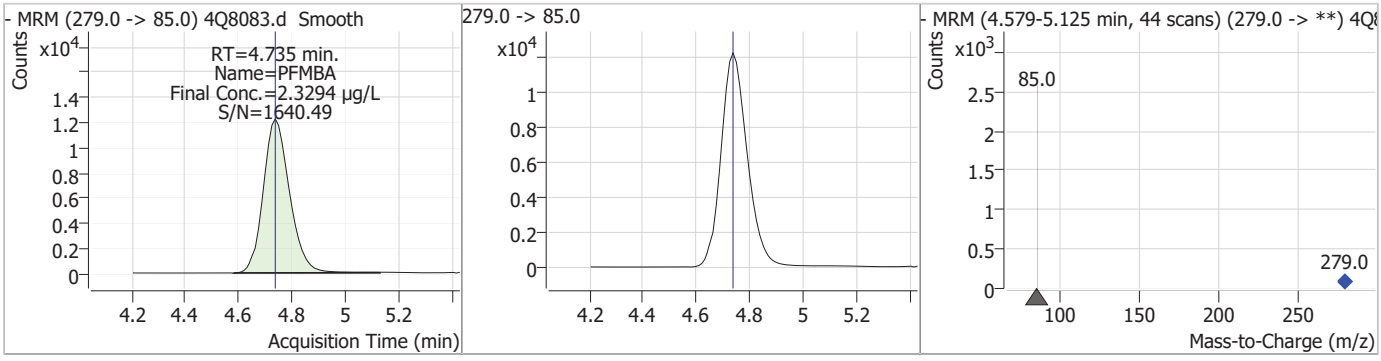
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.20	4.34	0.00	394260				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	2.37	4.35	0.00	123739				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	2.33	4.73	0.00	83106				



7.6.34

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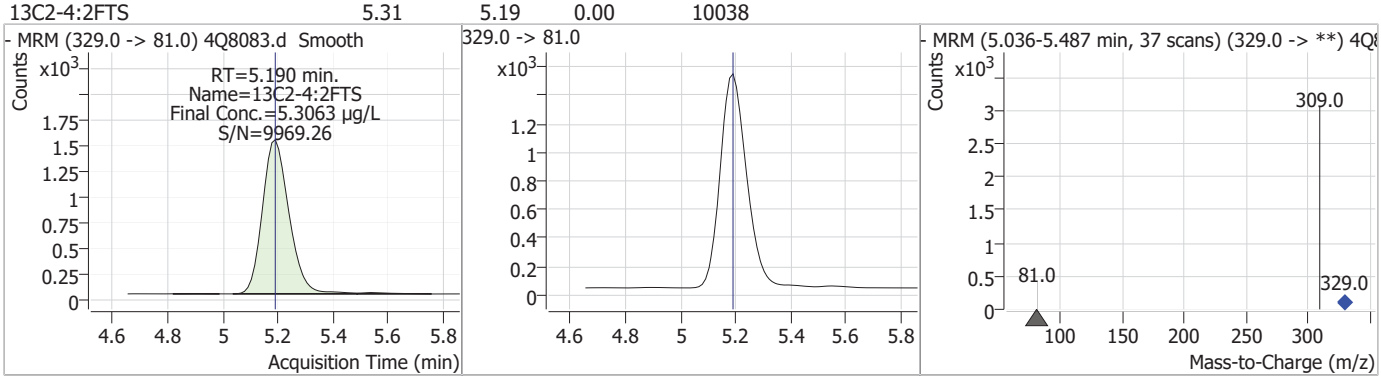
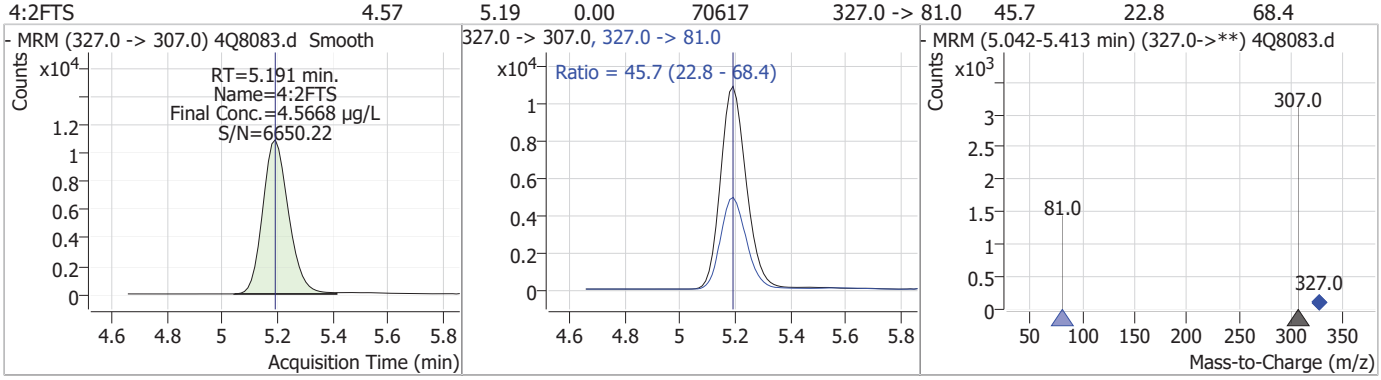
Perfluorinated Compounds by LC/MS/MS

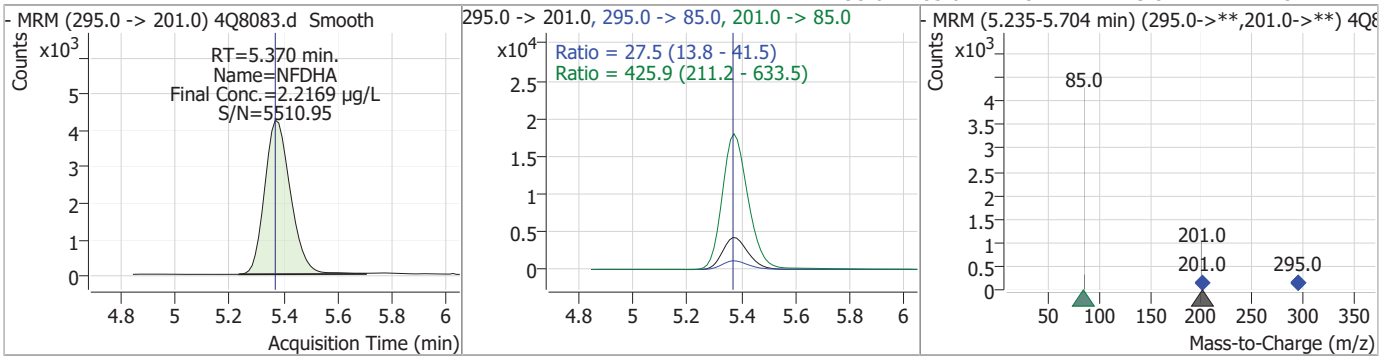
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.31	5.19	0.00	10038				



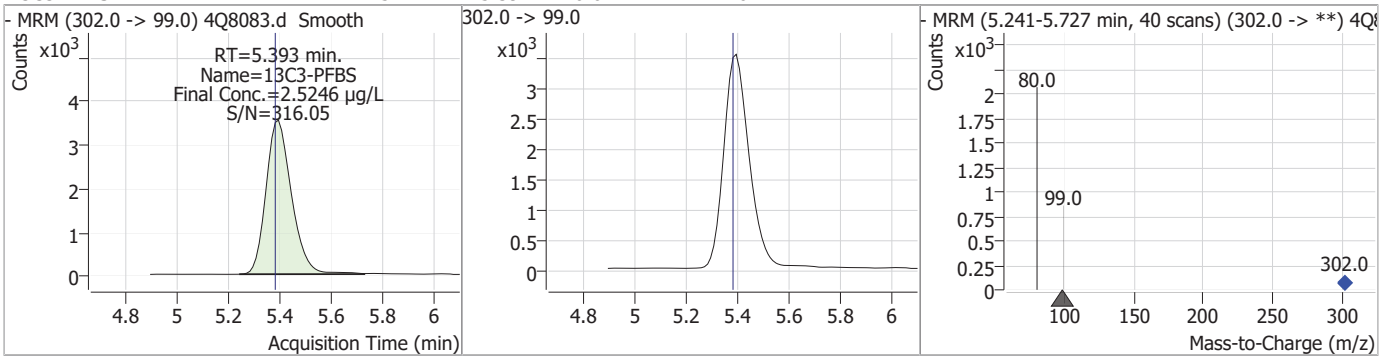
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	4.57	5.19	0.00	70617	327.0 -> 81.0	45.7	22.8	68.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	2.22	5.37	0.00	28051	201.0 -> 85.0	425.9	211.2	633.5
					295.0 -> 85.0	27.5	13.8	41.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.52	5.39	0.01	24216				



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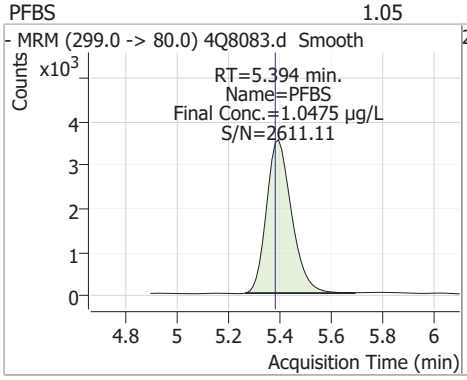
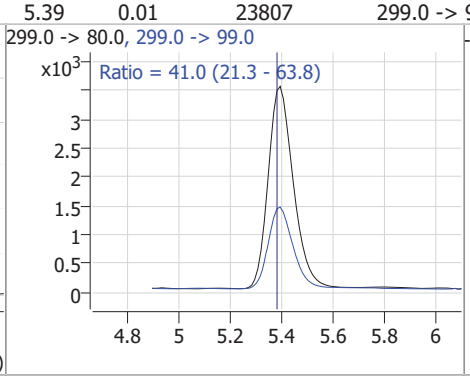
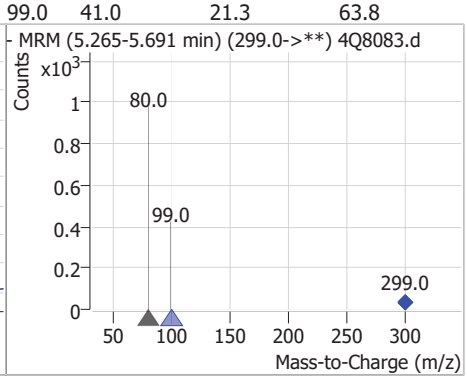
Perfluorinated Compounds by LC/MS/MS

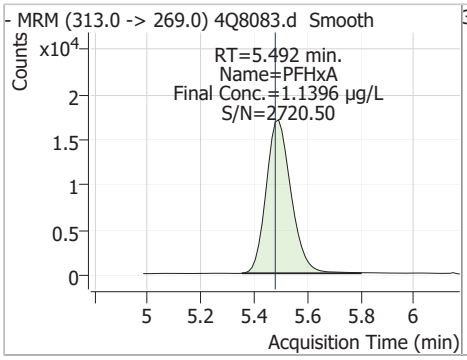
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	1.05	5.39	0.01	23807	299.0 -> 99.0	41.0	21.3	63.8

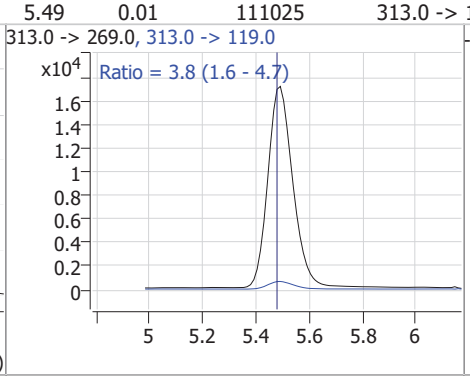


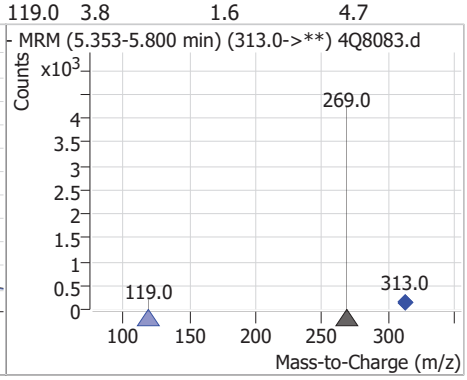




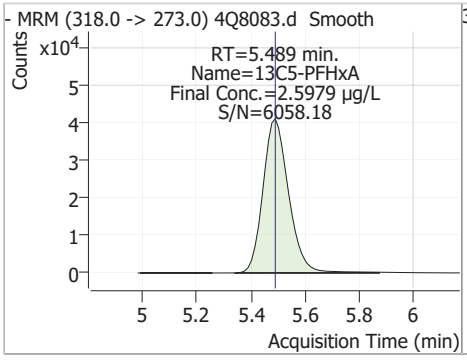
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	1.14	5.49	0.01	111025	313.0 -> 119.0	3.8	1.6	4.7

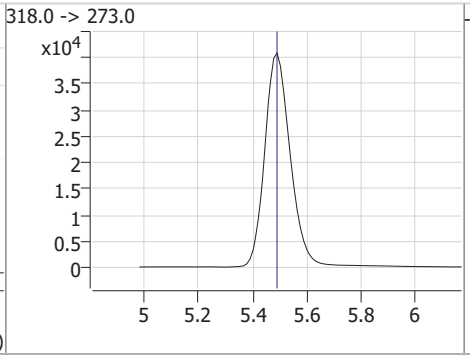


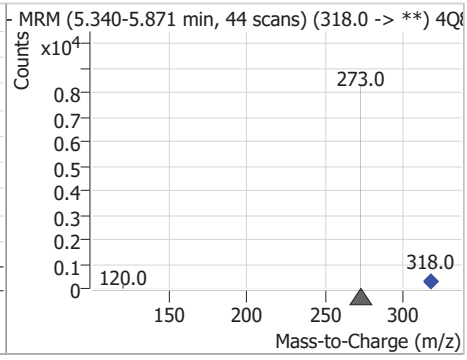




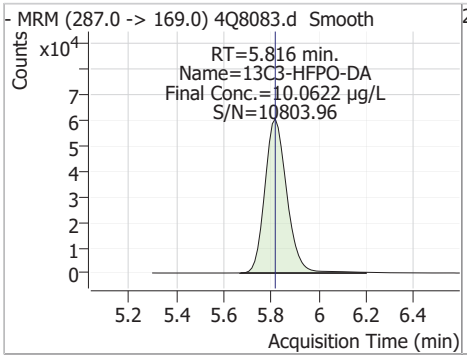
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.60	5.49	0.00	267705				

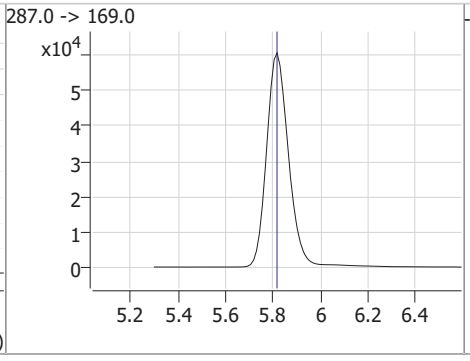


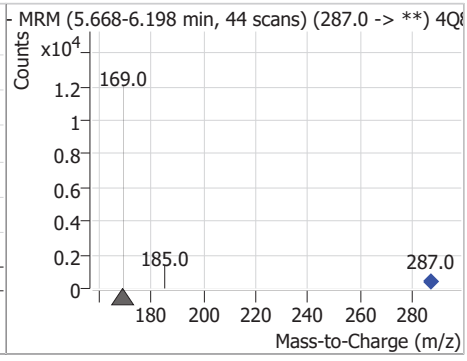




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.06	5.82	0.00	390618				







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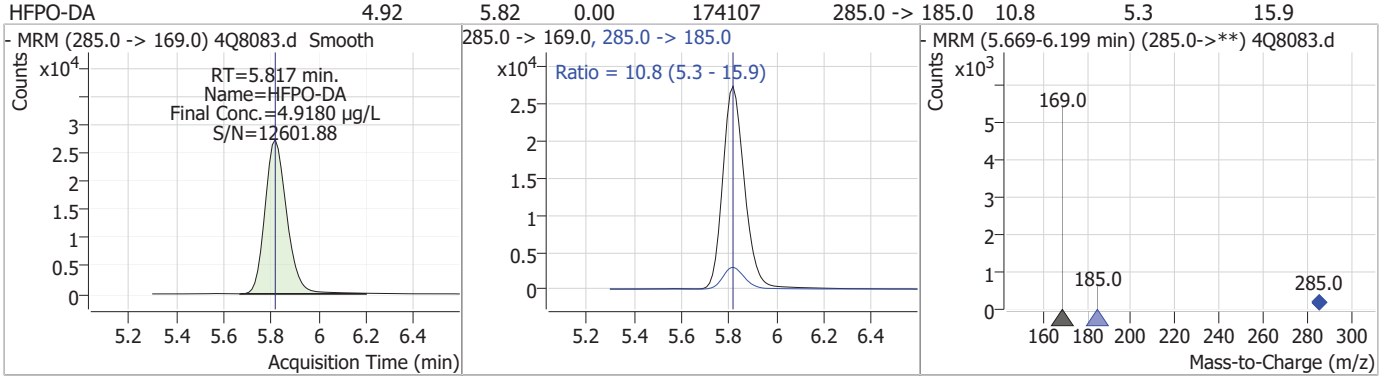
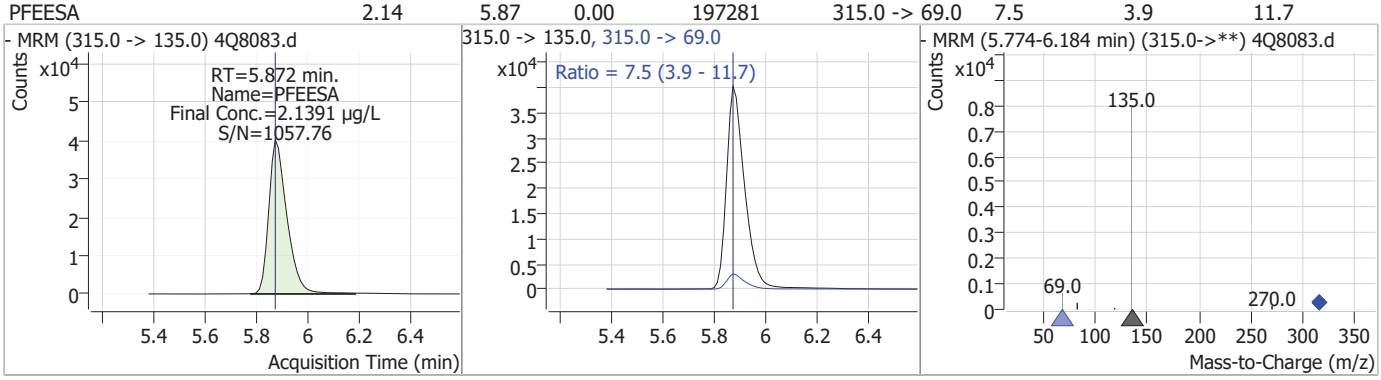
Perfluorinated Compounds by LC/MS/MS

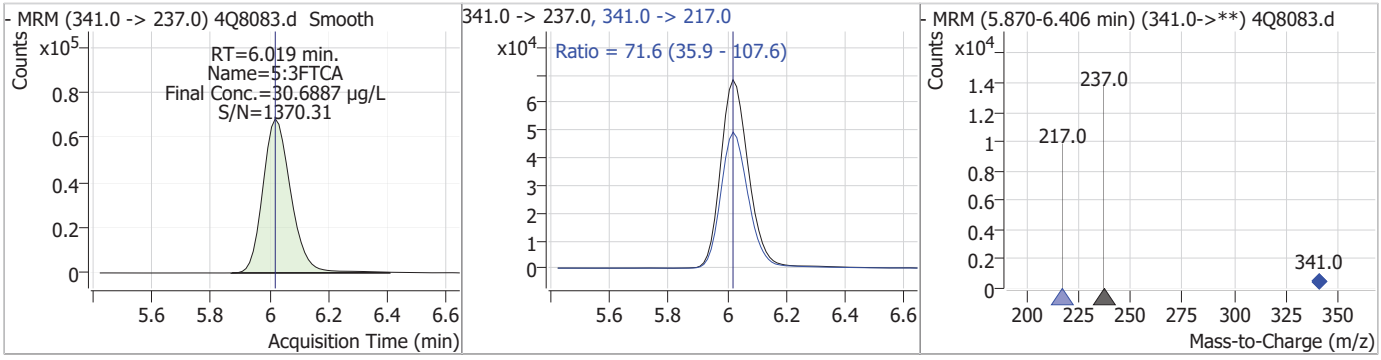
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	4.92	5.82	0.00	174107	285.0 -> 185.0	10.8	5.3	15.9



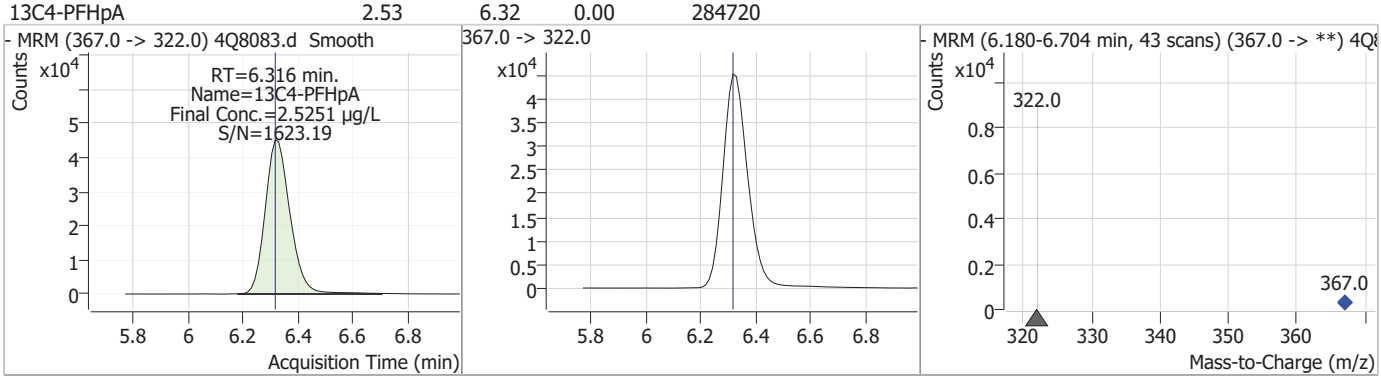
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	2.14	5.87	0.00	197281	315.0 -> 69.0	7.5	3.9	11.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	30.69	6.02	0.00	450103	341.0 -> 217.0	71.6	35.9	107.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.53	6.32	0.00	284720				



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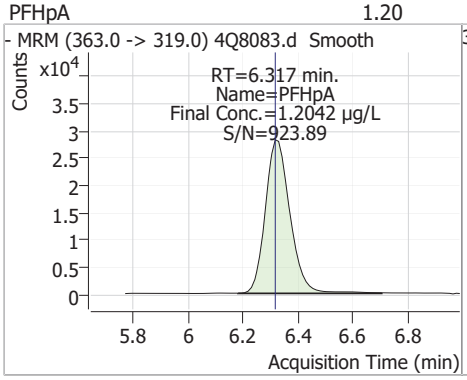
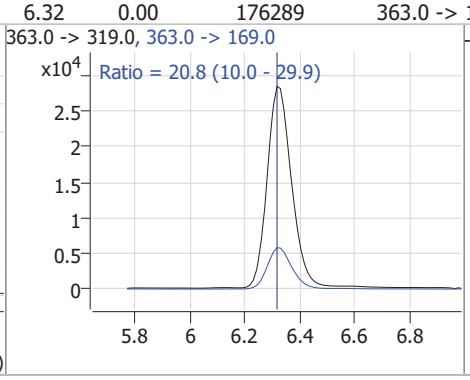
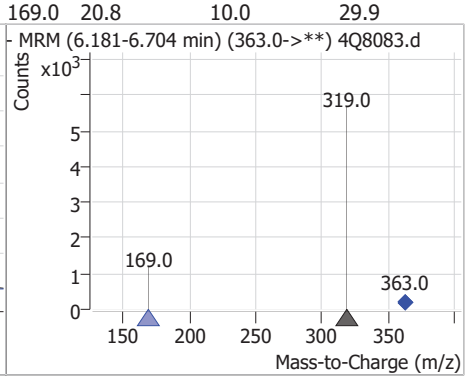
7

Perfluorinated Compounds by LC/MS/MS

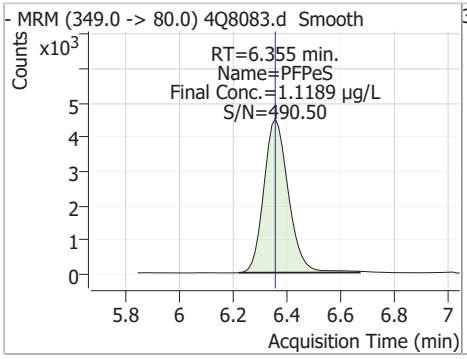
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	1.20	6.32	0.00	176289	363.0 -> 169.0	20.8	10.0	29.9

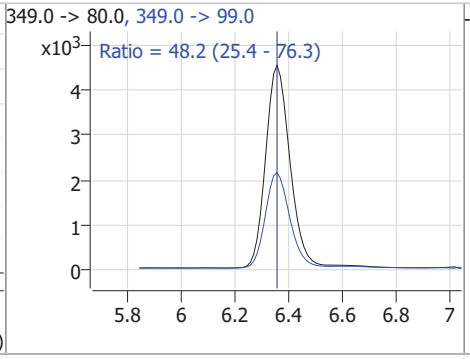


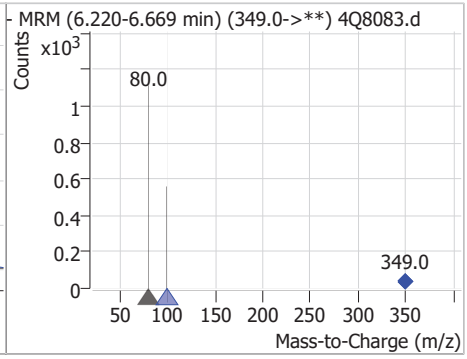




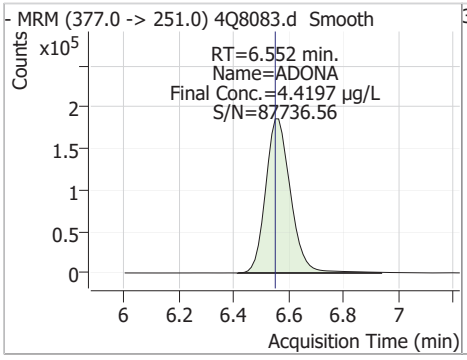
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	1.12	6.36	0.00	28327	349.0 -> 99.0	48.2	25.4	76.3

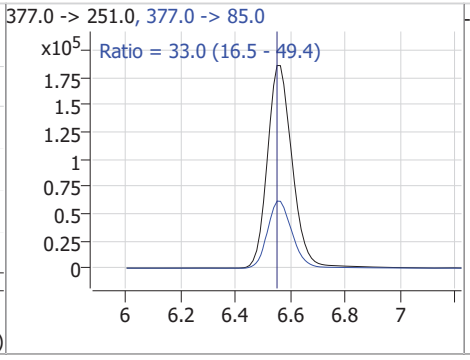


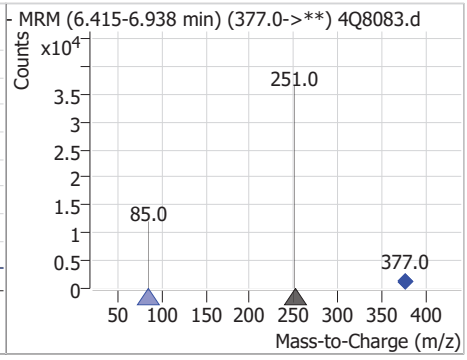




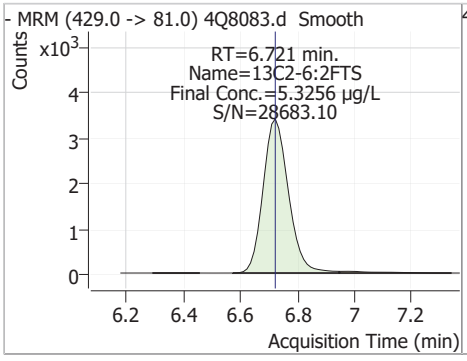
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	4.42	6.55	0.00	1171520	377.0 -> 85.0	33.0	16.5	49.4

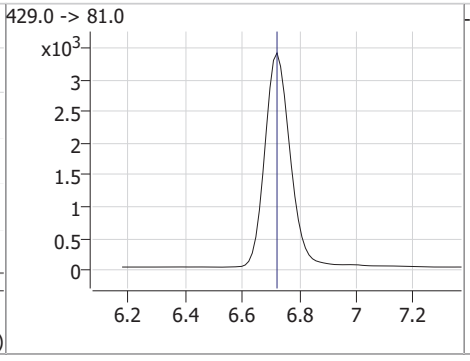


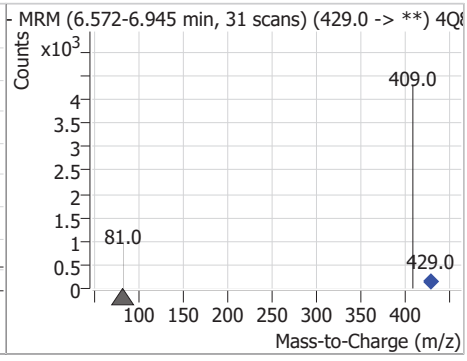




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.33	6.72	0.00	20856				







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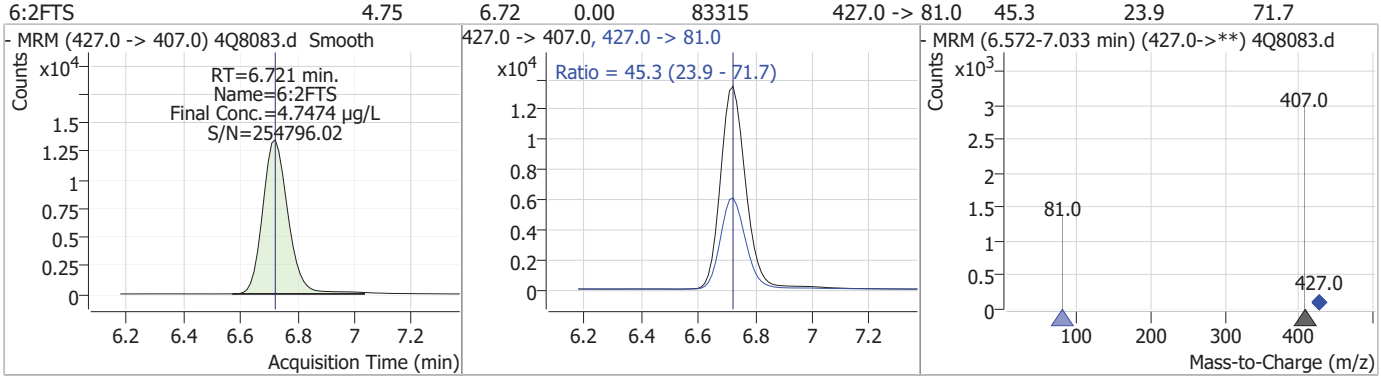
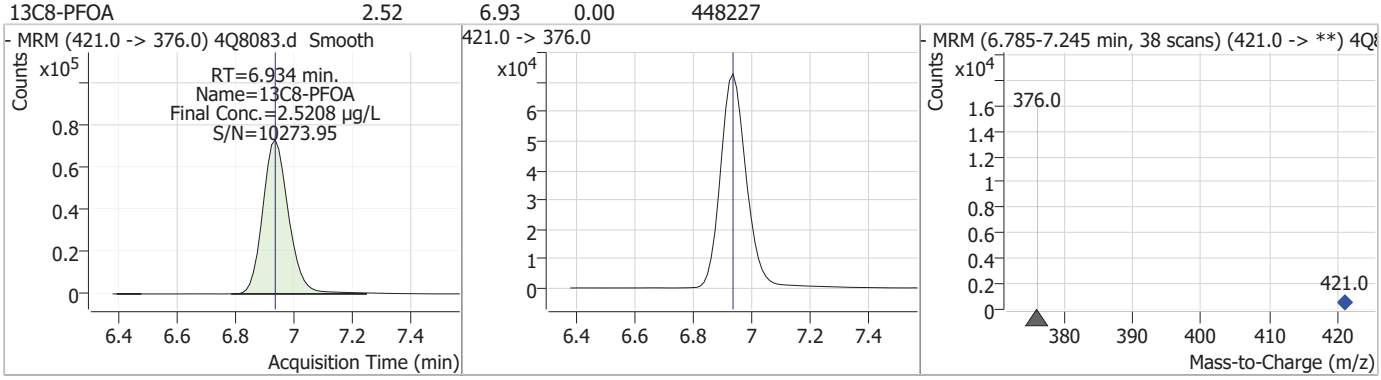
Perfluorinated Compounds by LC/MS/MS

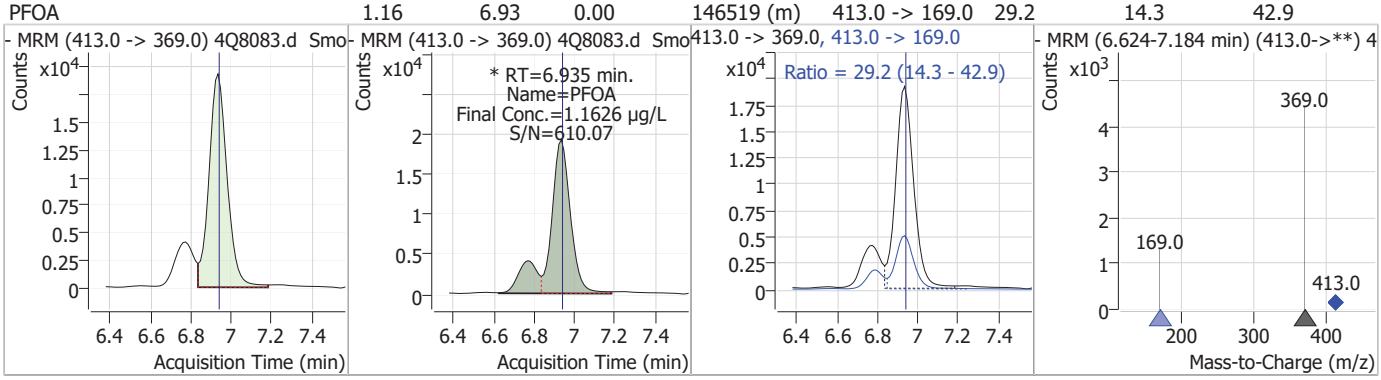
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	4.75	6.72	0.00	83315	427.0 -> 81.0	45.3	23.9	71.7



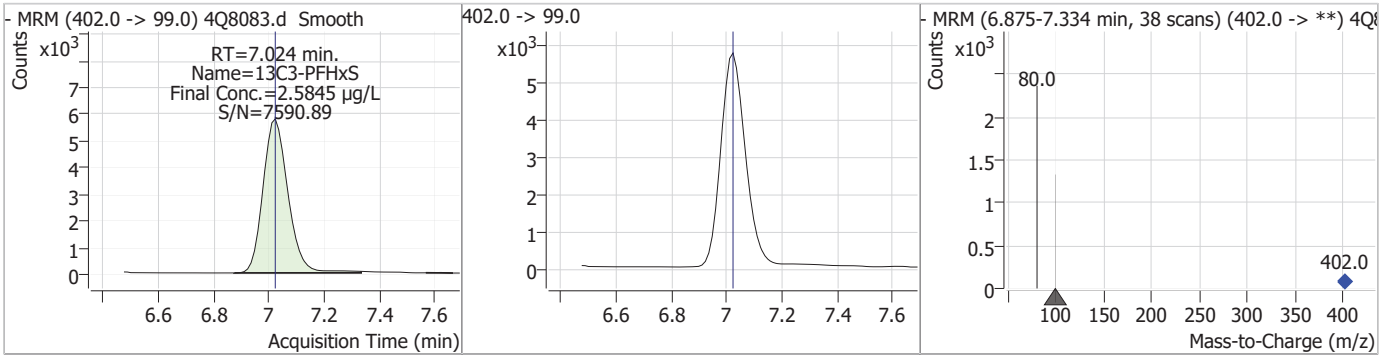
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.52	6.93	0.00	448227				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	1.16	6.93	0.00	146519 (m)	413.0 -> 169.0	29.2	14.3	42.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.58	7.02	0.00	36259				



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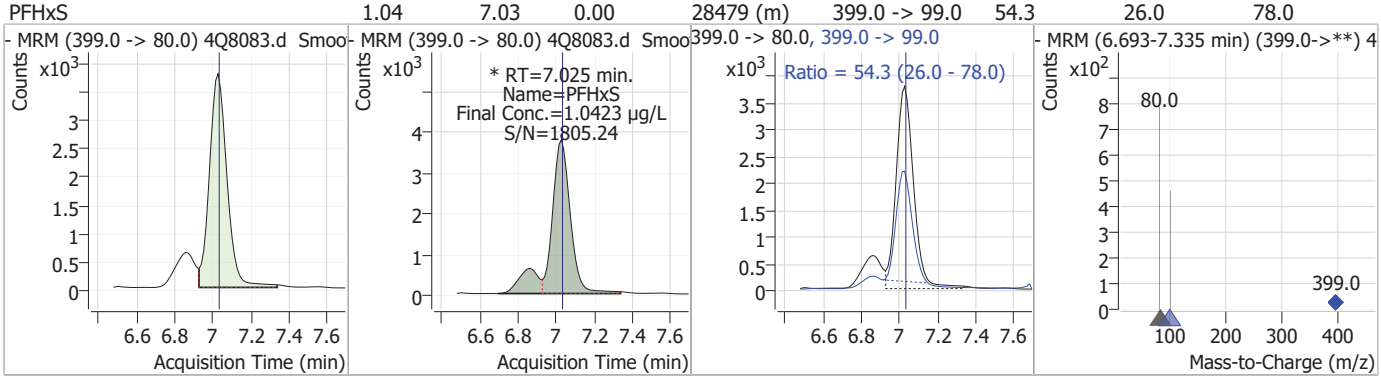
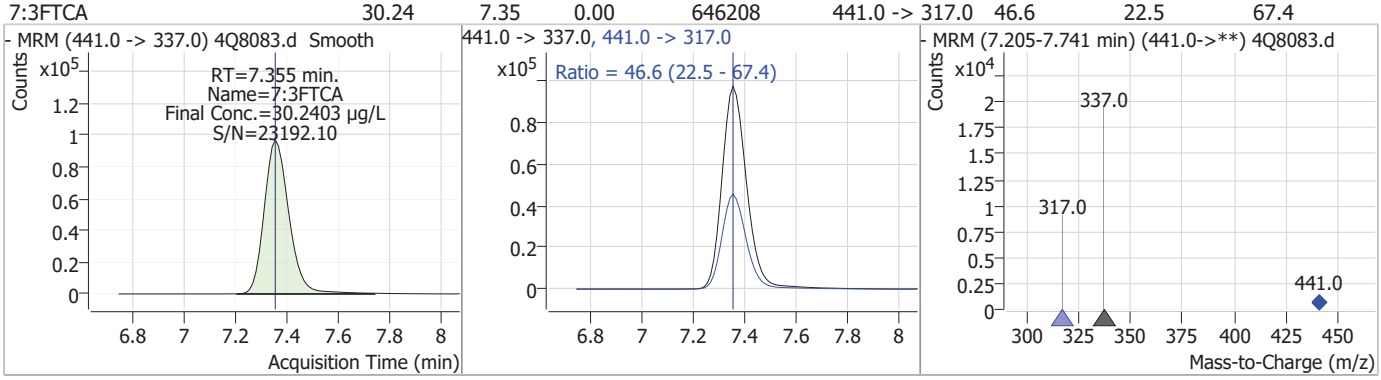
Perfluorinated Compounds by LC/MS/MS

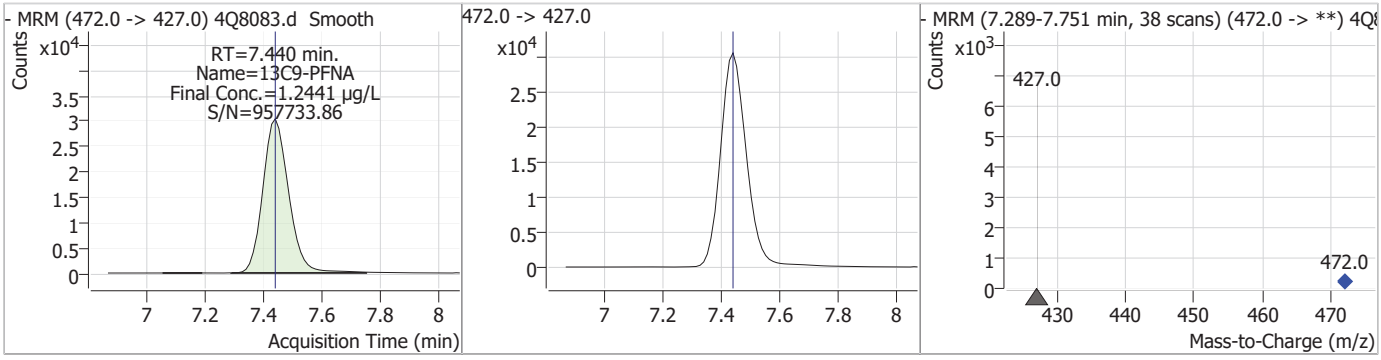
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	1.04	7.03	0.00	28479 (m)	399.0 -> 99.0	54.3	26.0	78.0



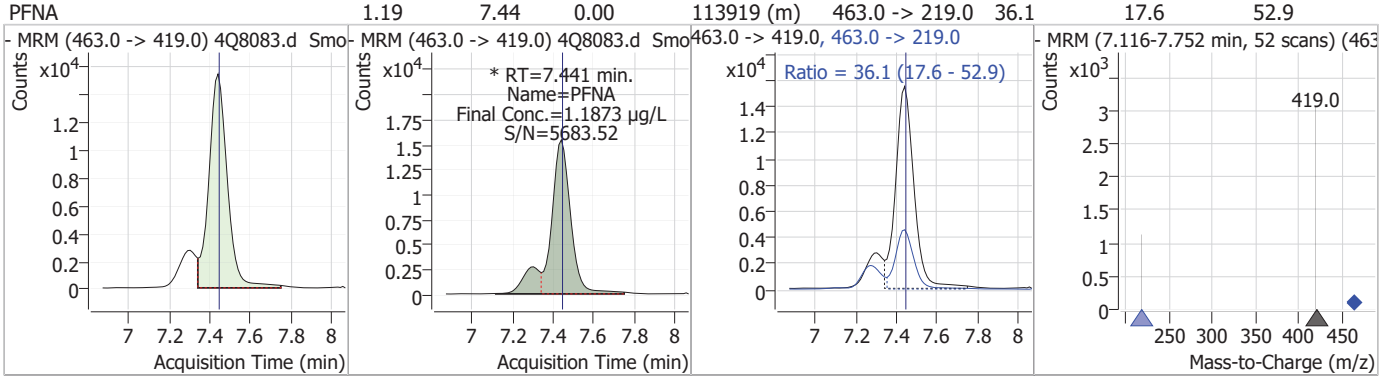
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	30.24	7.35	0.00	646208	441.0 -> 317.0	46.6	22.5	67.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.24	7.44	0.00	186676				

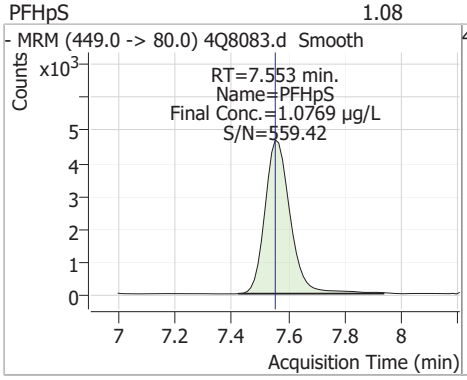


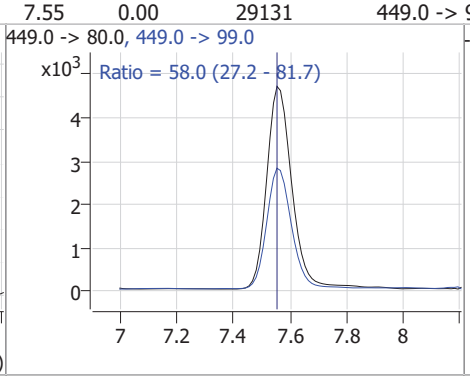
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	1.19	7.44	0.00	113919 (m)	463.0 -> 219.0	36.1	17.6	52.9

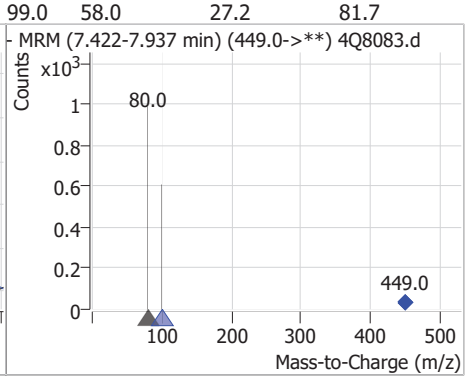


Perfluorinated Compounds by LC/MS/MS

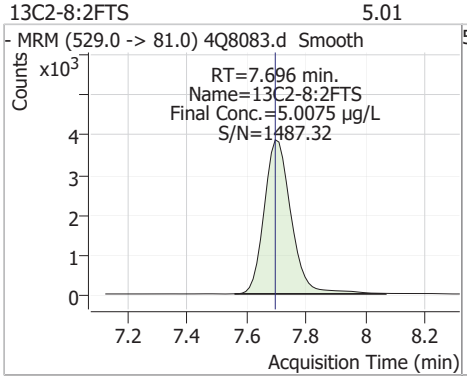
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	1.08	7.55	0.00	29131	449.0 -> 99.0	58.0	27.2	81.7

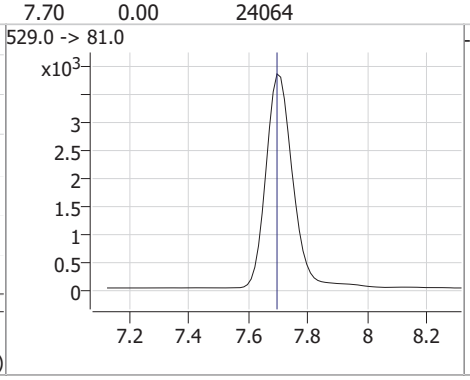


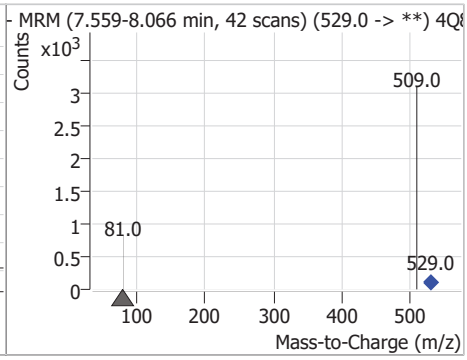




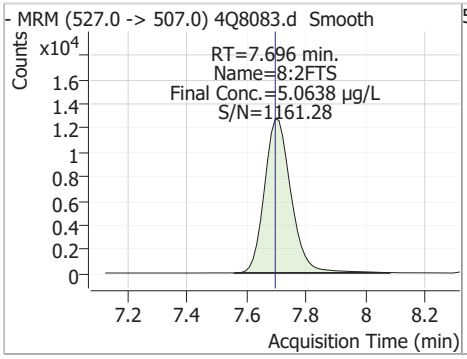
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.01	7.70	0.00	24064				

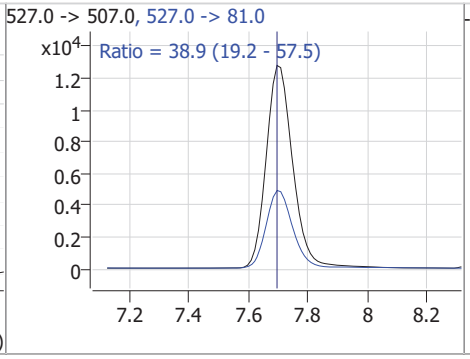


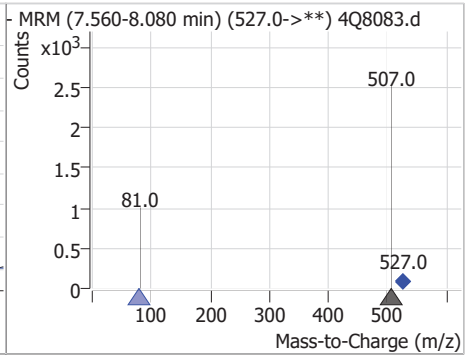




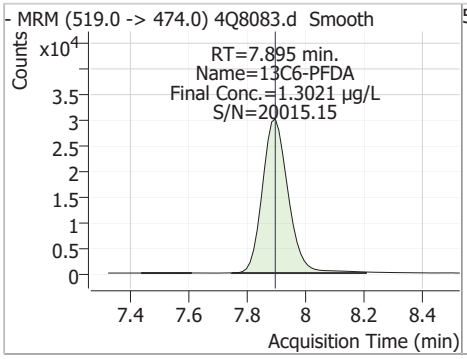
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	5.06	7.70	0.00	79041	527.0 -> 81.0	38.9	19.2	57.5

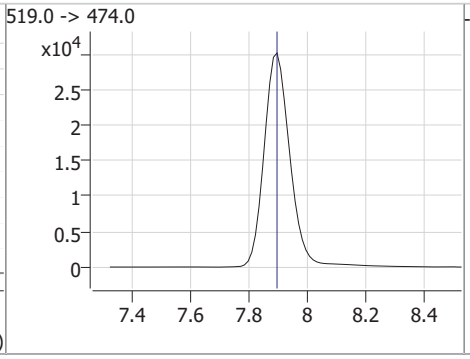


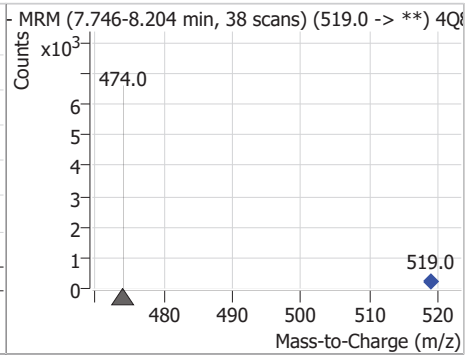




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.30	7.89	0.00	183834				







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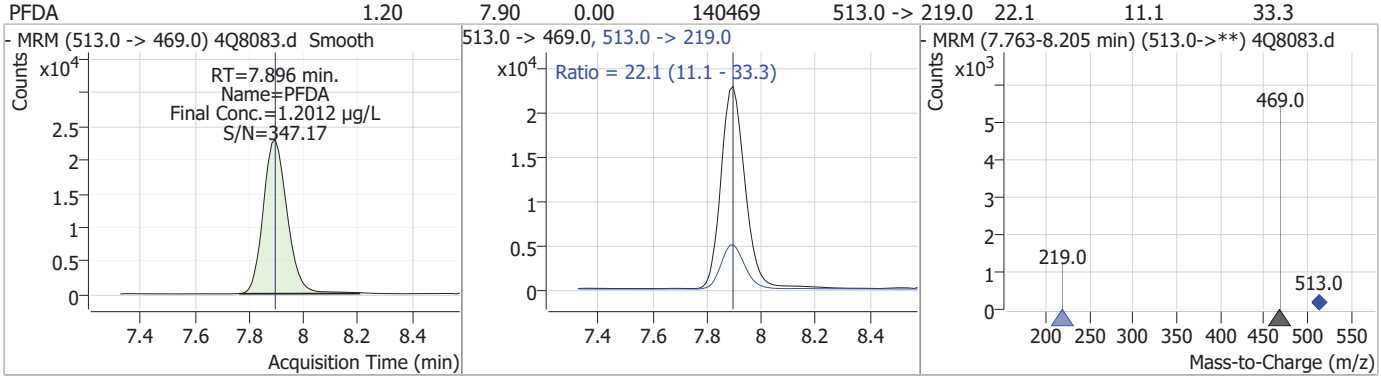
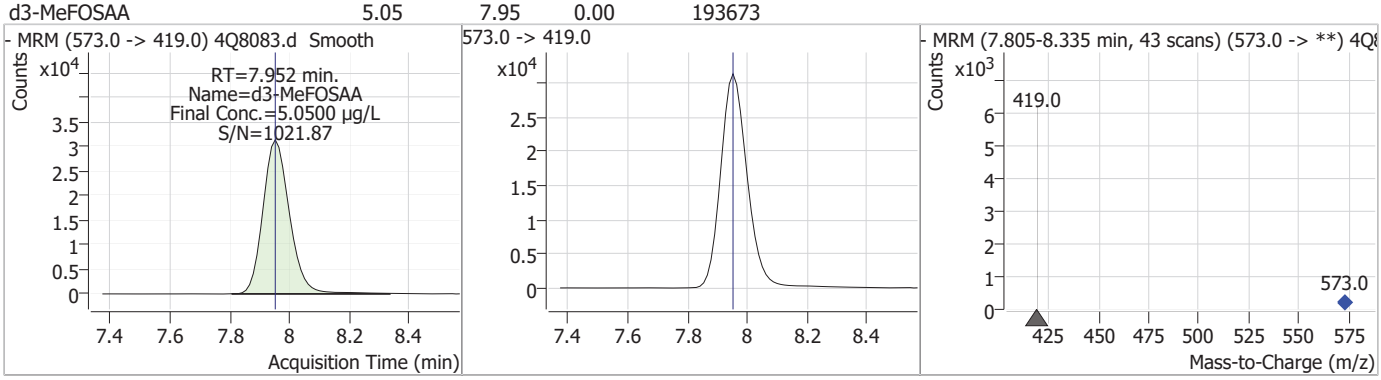
Perfluorinated Compounds by LC/MS/MS

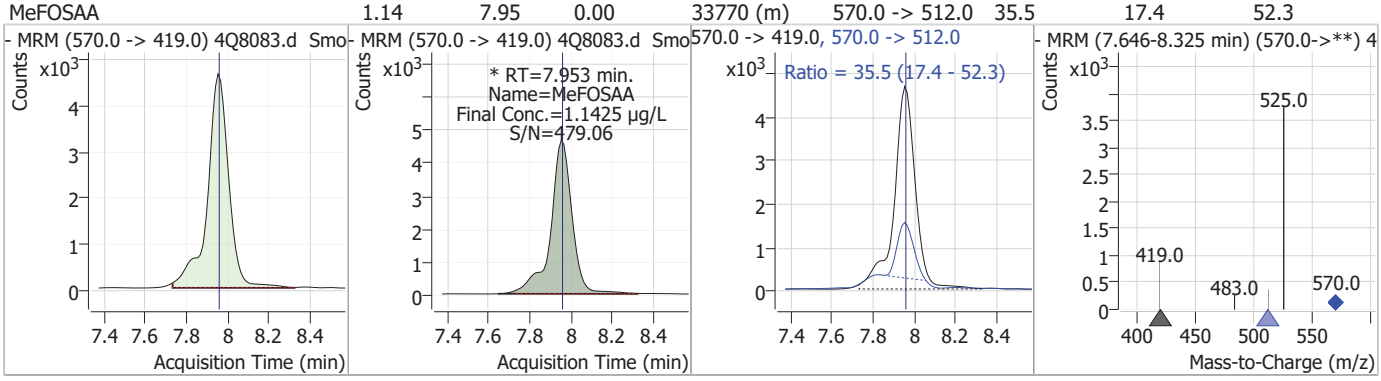
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	1.20	7.90	0.00	140469	513.0 -> 219.0	22.1	11.1	33.3



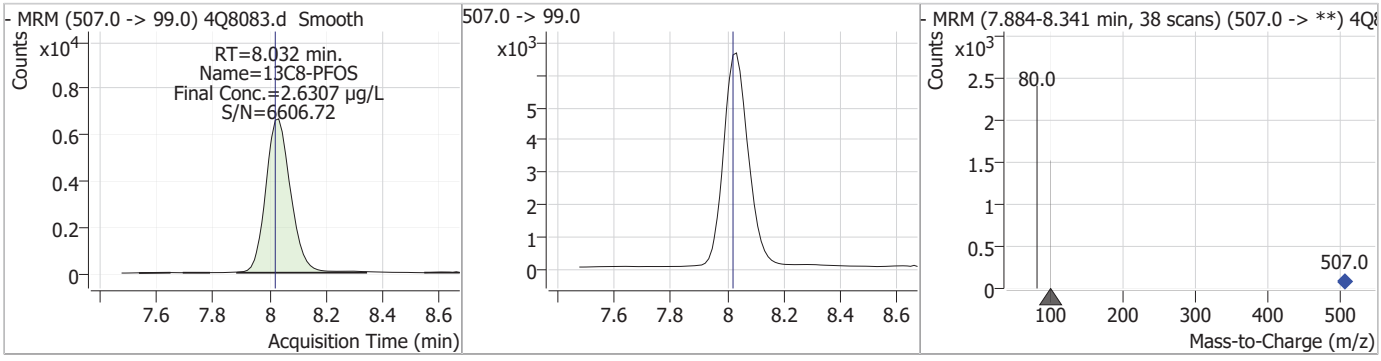
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.05	7.95	0.00	193673				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	1.14	7.95	0.00	33770 (m)	570.0 -> 512.0	35.5	17.4	52.3

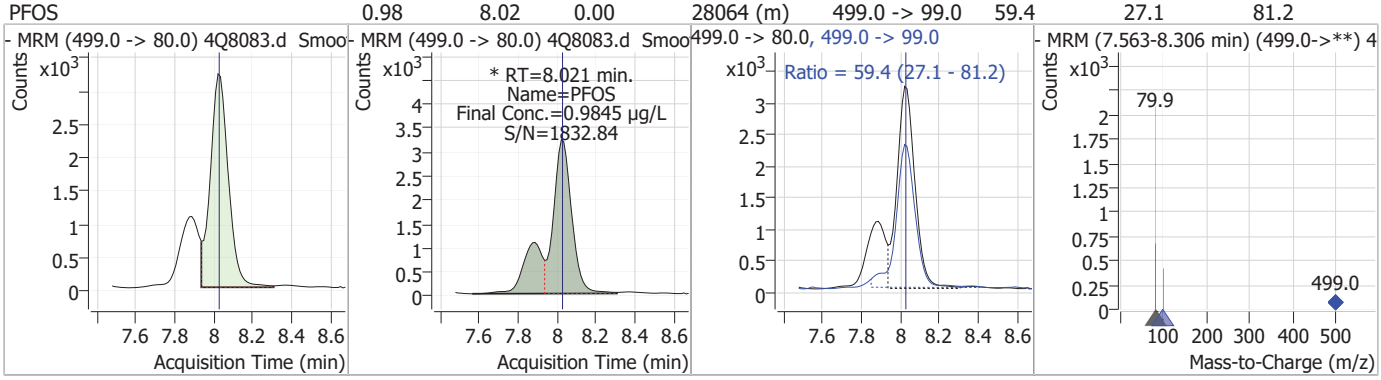


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.63	8.03	0.01	40906				

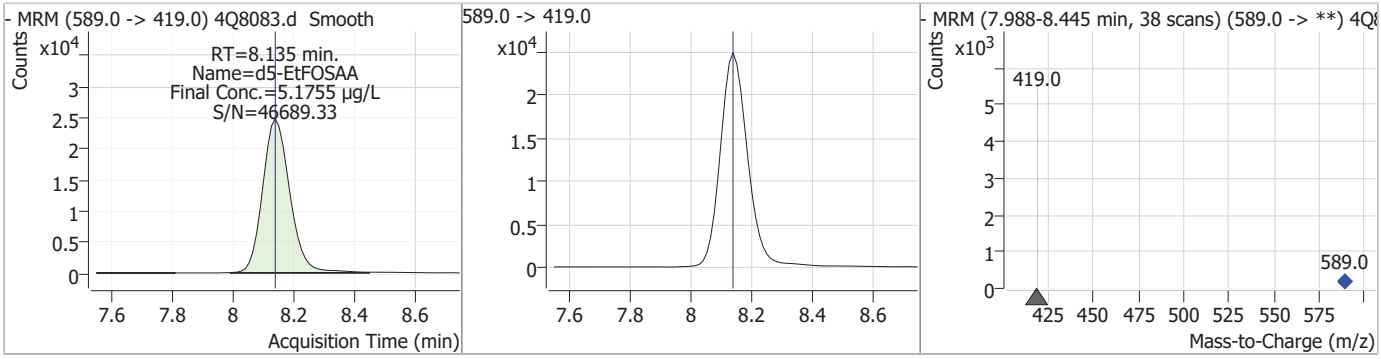


Perfluorinated Compounds by LC/MS/MS

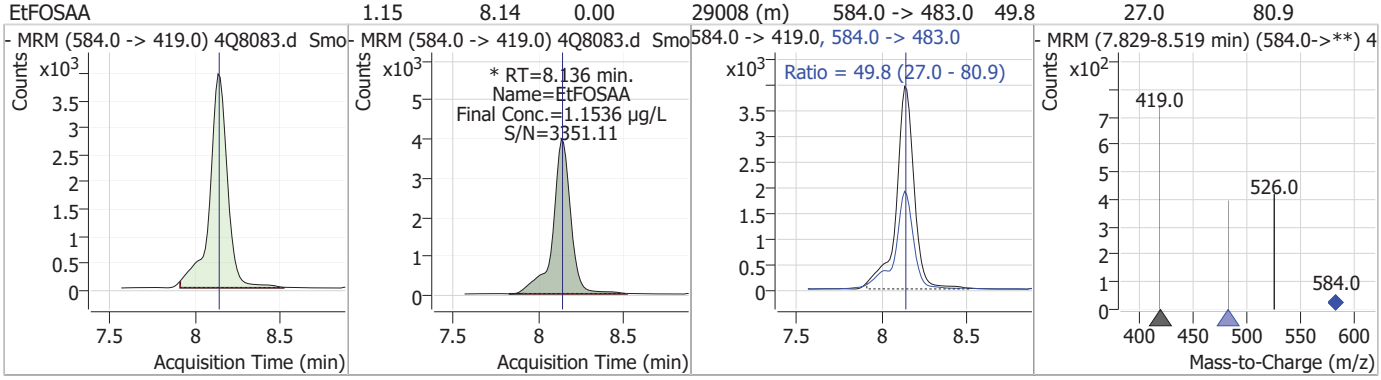
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.98	8.02	0.00	28064 (m)	499.0 -> 99.0	59.4	27.1	81.2



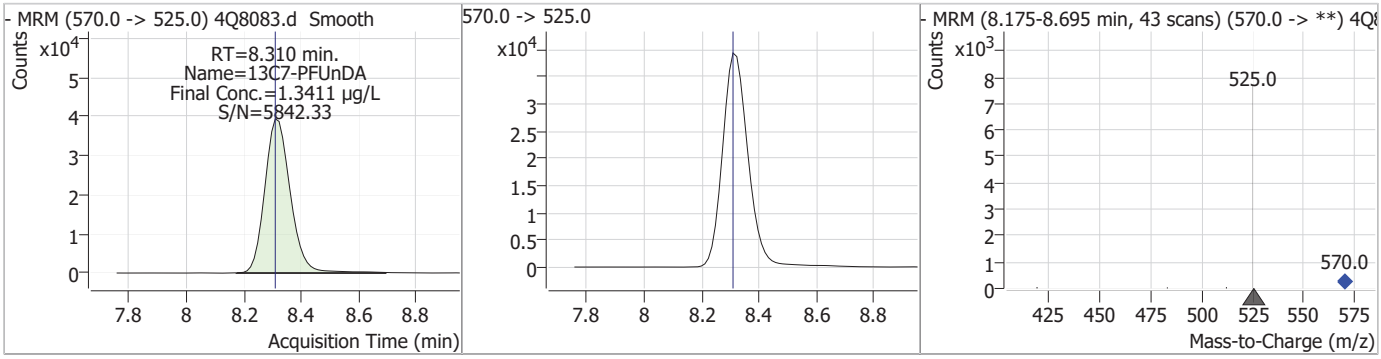
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.18	8.13	0.00	154295				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	1.15	8.14	0.00	29008 (m)	584.0 -> 483.0	49.8	27.0	80.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.34	8.31	0.00	244224				



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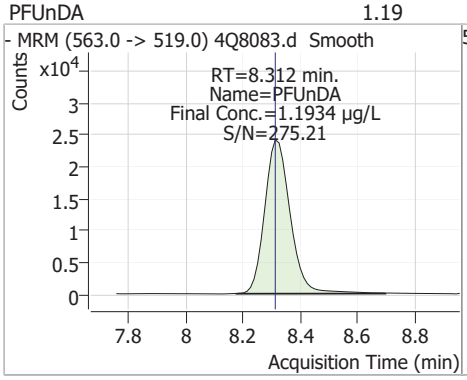
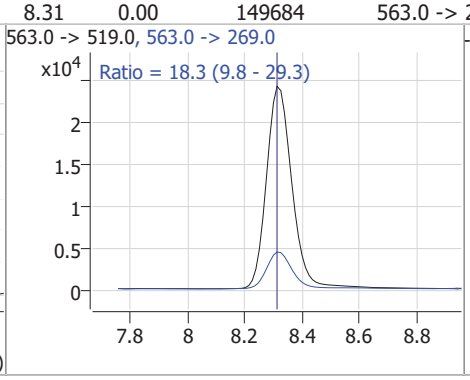
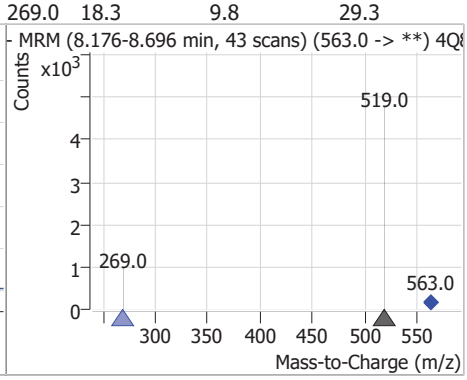
Perfluorinated Compounds by LC/MS/MS

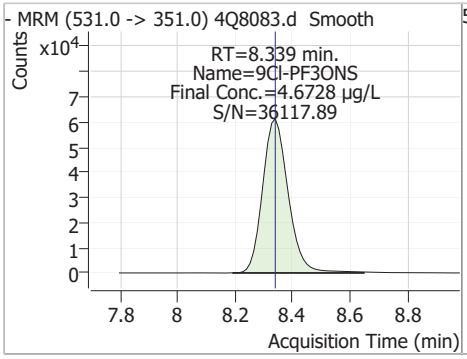
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	1.19	8.31	0.00	149684	563.0 -> 269.0	18.3	9.8	29.3

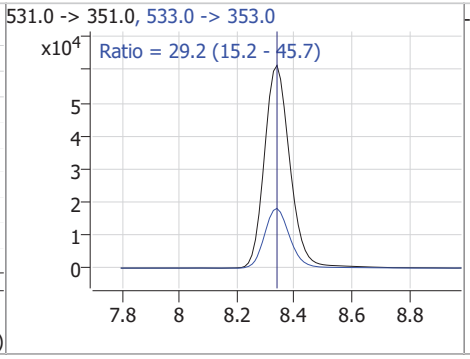


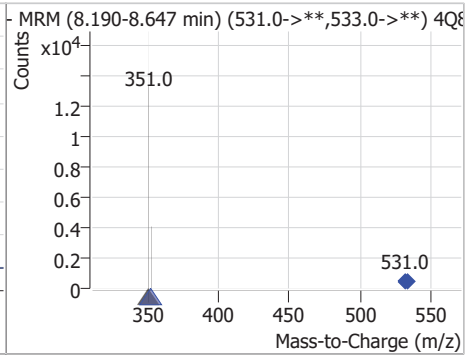




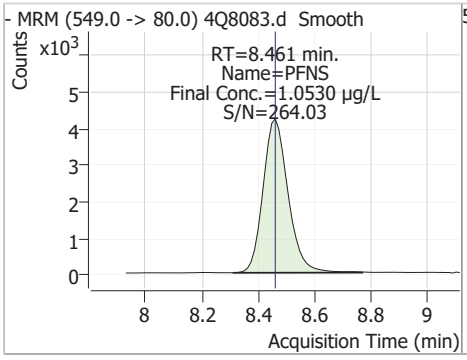
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	4.67	8.34	0.00	378451	533.0 -> 353.0	29.2	15.2	45.7

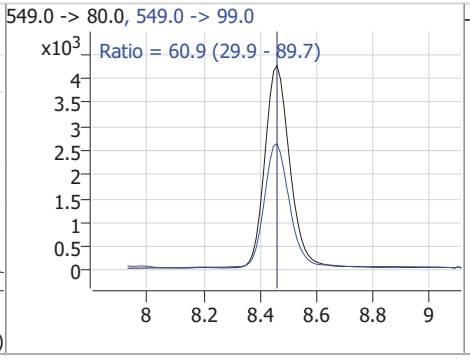


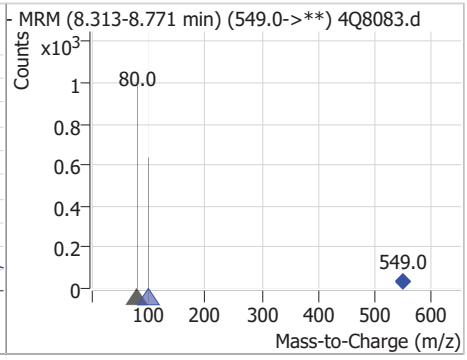




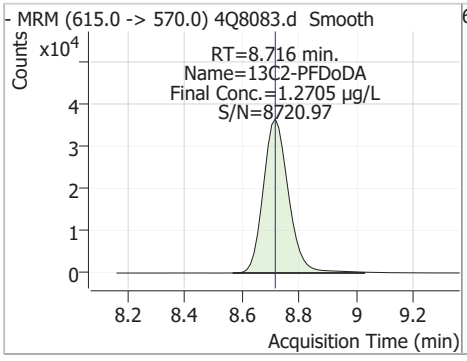
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	1.05	8.46	0.00	26060	549.0 -> 99.0	60.9	29.9	89.7

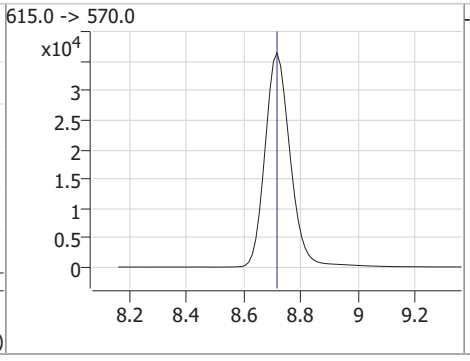


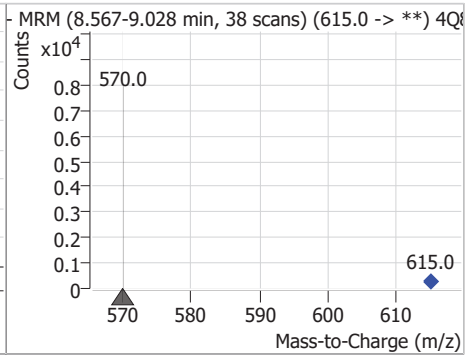




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.27	8.72	0.00	222943				







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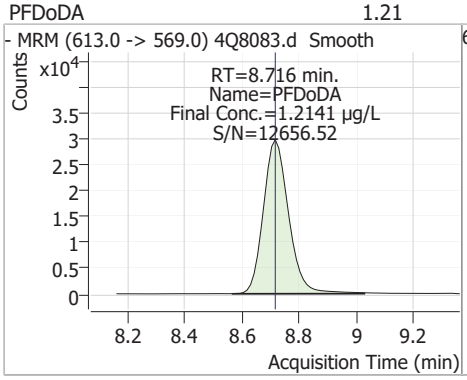
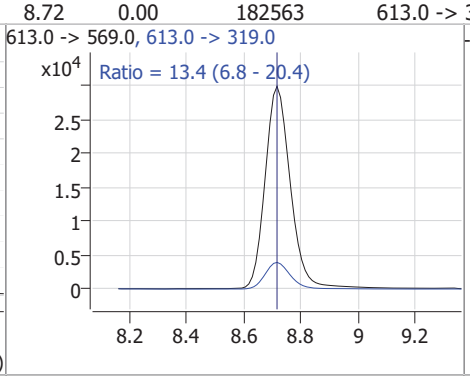
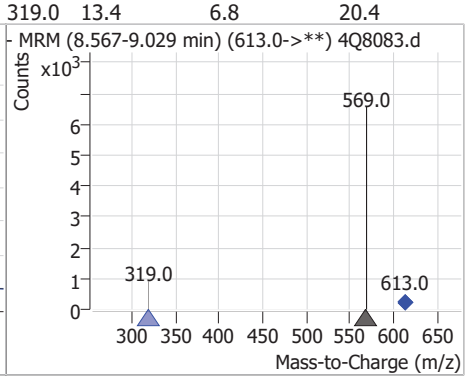
Perfluorinated Compounds by LC/MS/MS

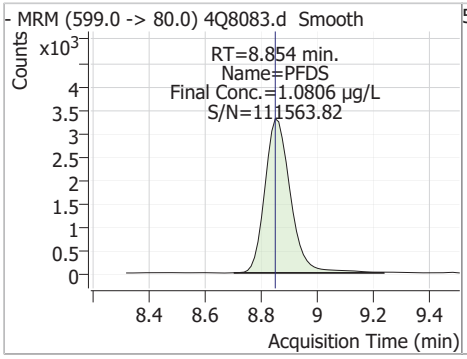
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	1.21	8.72	0.00	182563	613.0 -> 319.0	13.4	6.8	20.4

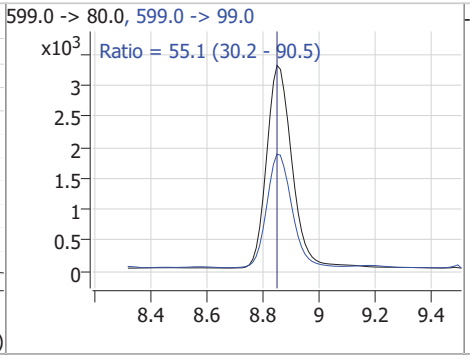


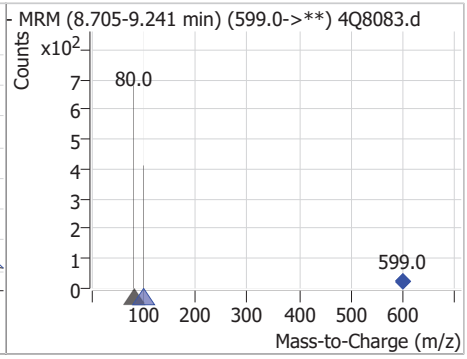




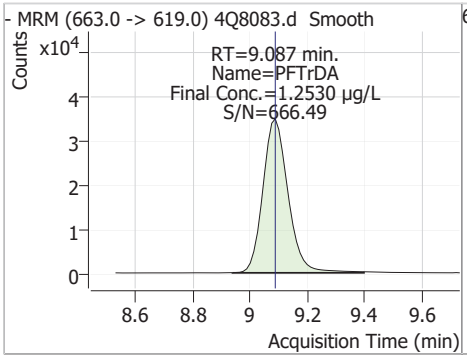
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	1.08	8.85	0.00	20822	599.0 -> 99.0	55.1	30.2	90.5

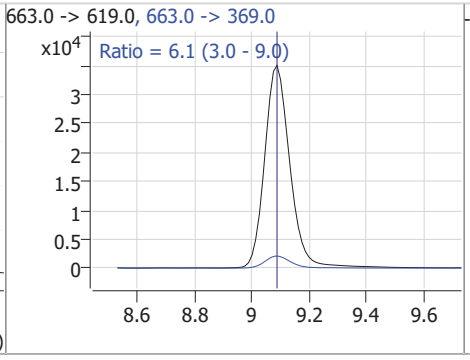


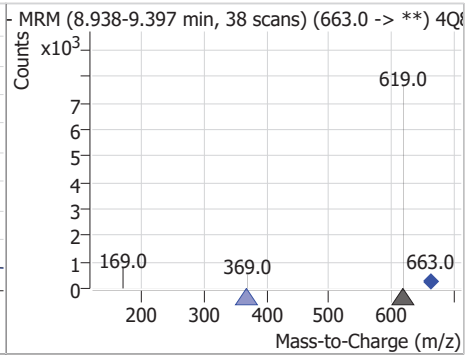




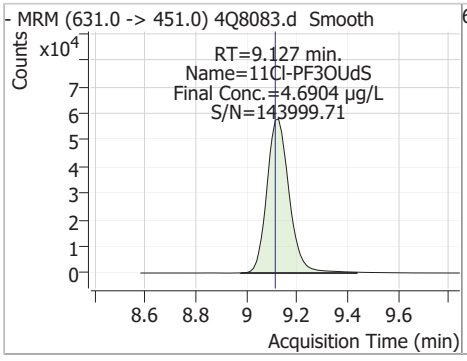
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	1.25	9.09	0.00	213251	663.0 -> 369.0	6.1	3.0	9.0

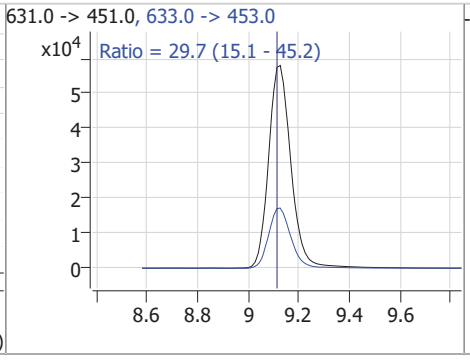


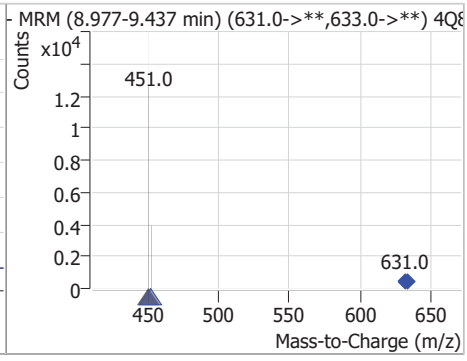




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	4.69	9.13	0.01	355972	633.0 -> 453.0	29.7	15.1	45.2







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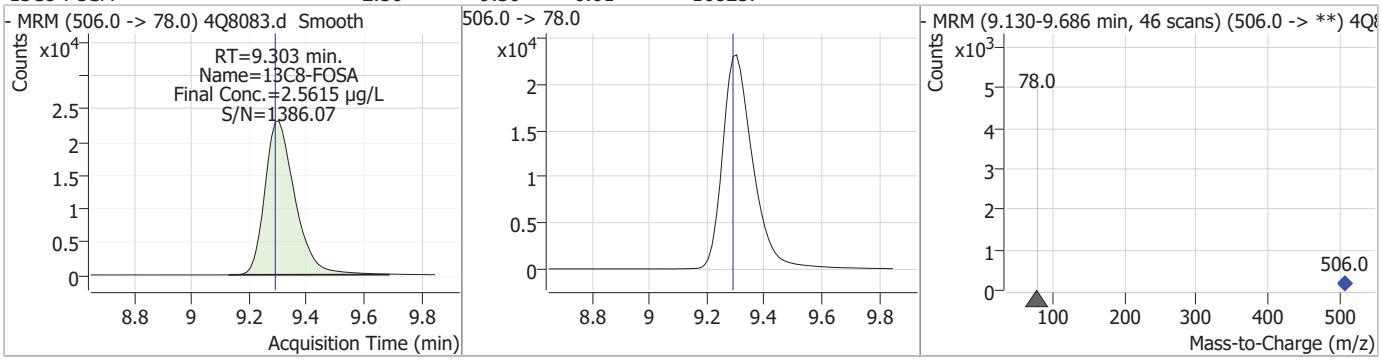
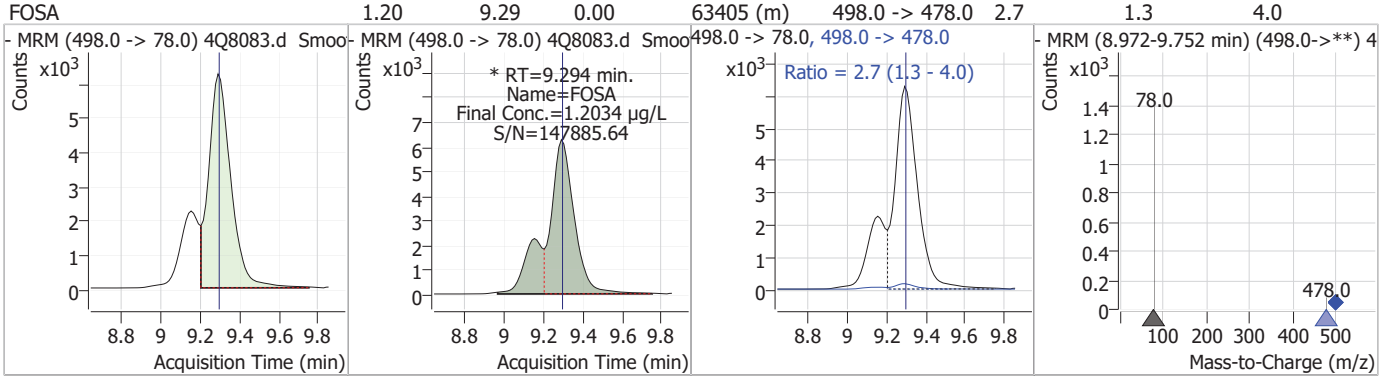
Perfluorinated Compounds by LC/MS/MS

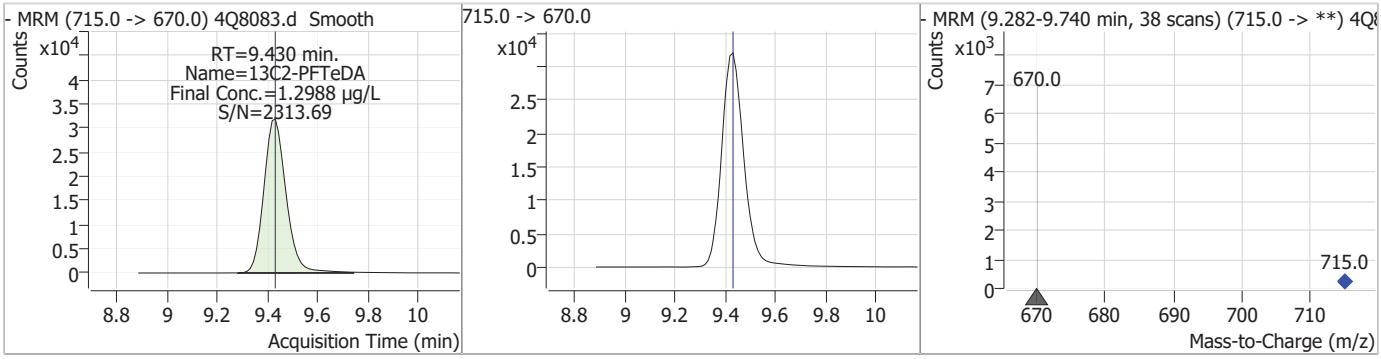
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.56	9.30	0.01	168257				



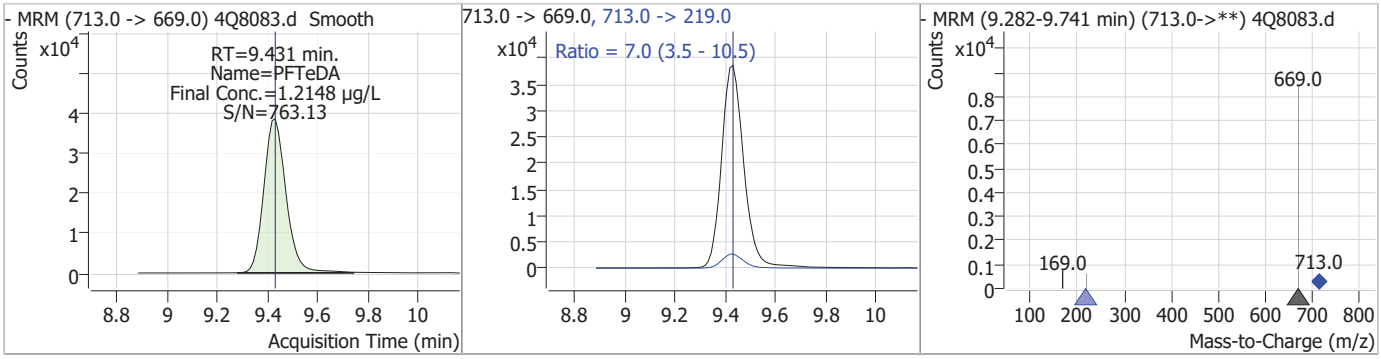
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	1.20	9.29	0.00	63405 (m)	498.0 -> 478.0	2.7	1.3	4.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.30	9.43	0.00	195022				

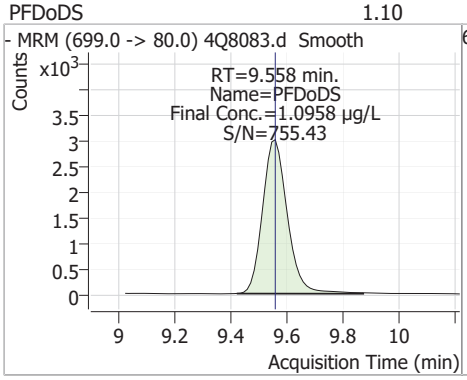


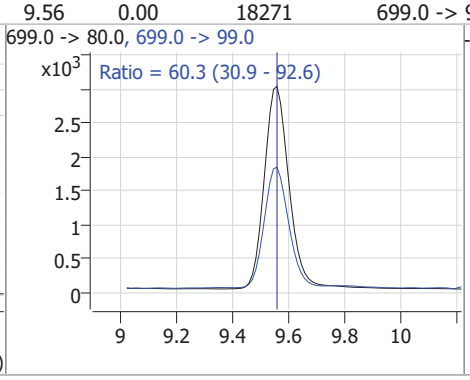
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	1.21	9.43	0.00	235824	713.0 -> 219.0	7.0	3.5	10.5

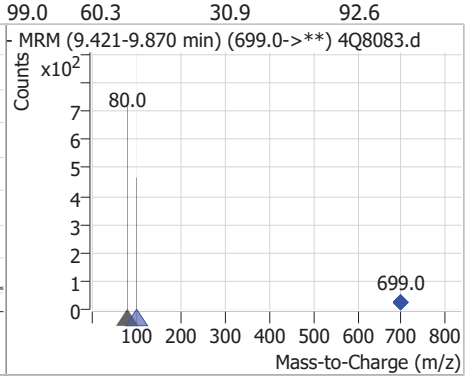


Perfluorinated Compounds by LC/MS/MS

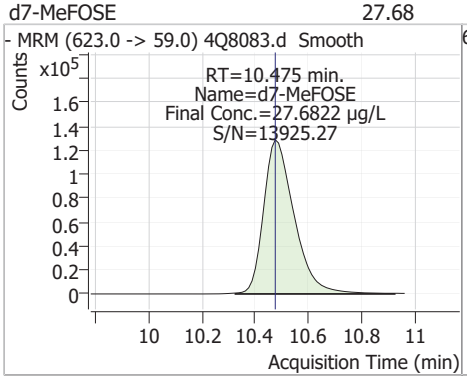
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	1.10	9.56	0.00	18271	699.0 -> 99.0	60.3	30.9	92.6

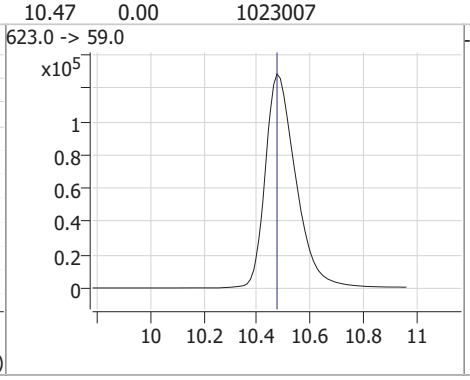


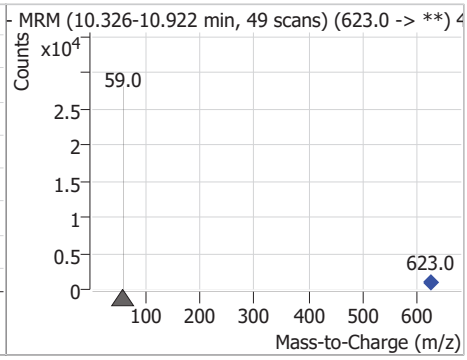




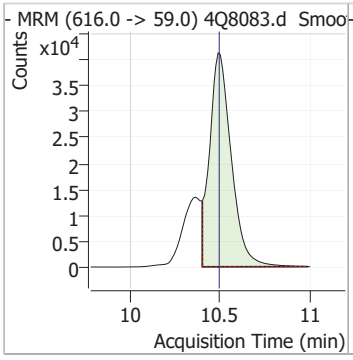
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	27.68	10.47	0.00	1023007				

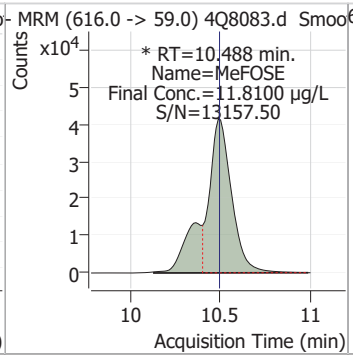


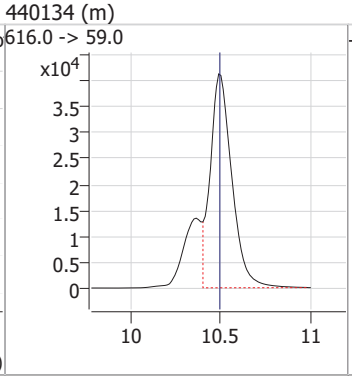


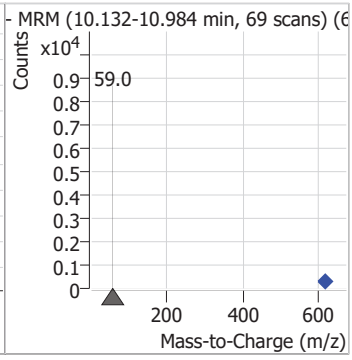


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	11.81	10.49	0.00	440134 (m)				

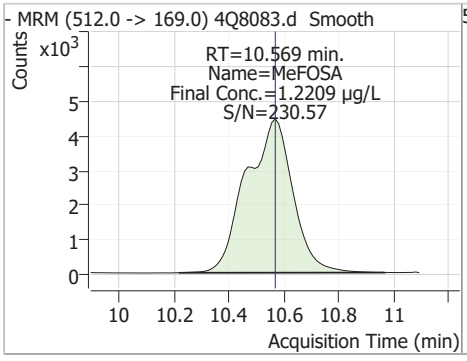


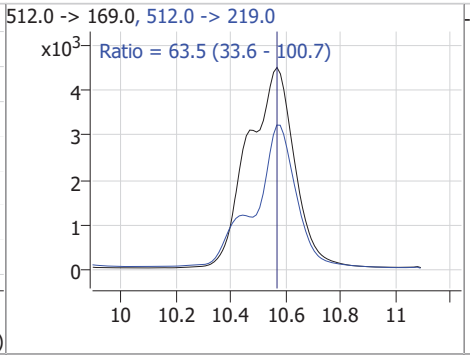


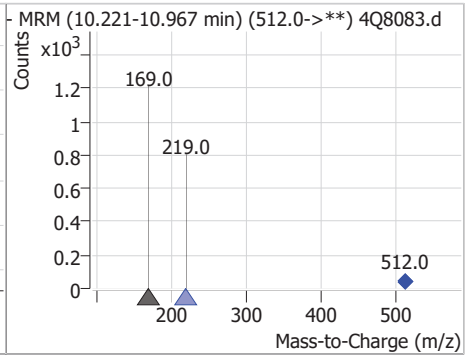




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	1.22	10.57	0.00	52262	512.0 -> 219.0	63.5	33.6	100.7







7.6.34

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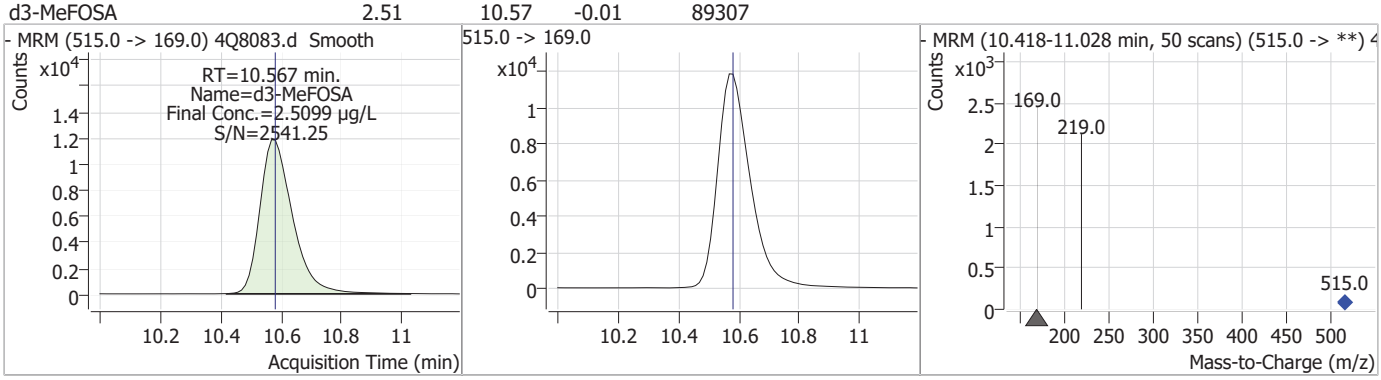
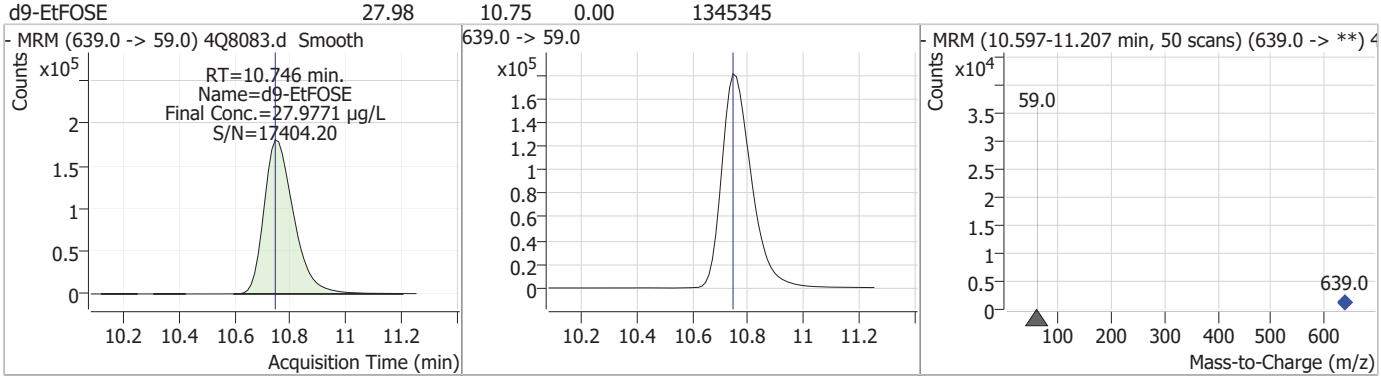
Perfluorinated Compounds by LC/MS/MS

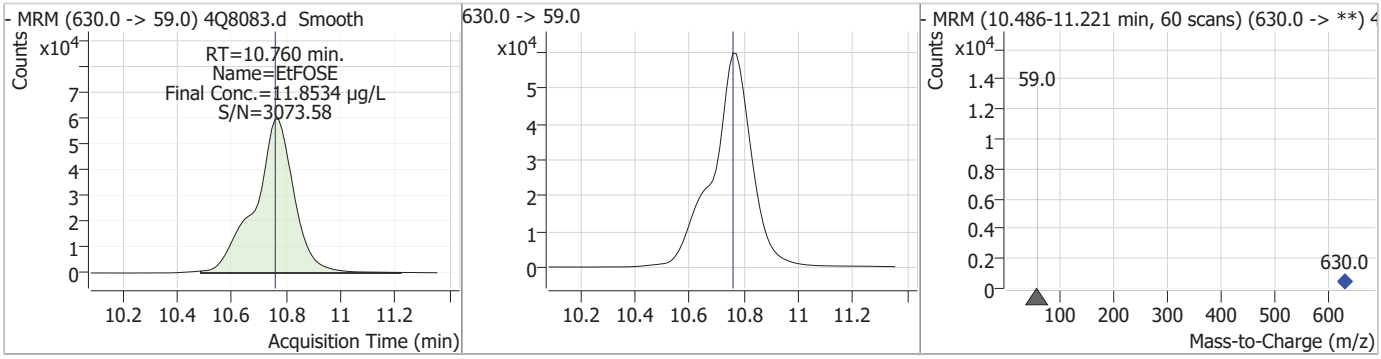
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.51	10.57	-0.01	89307				



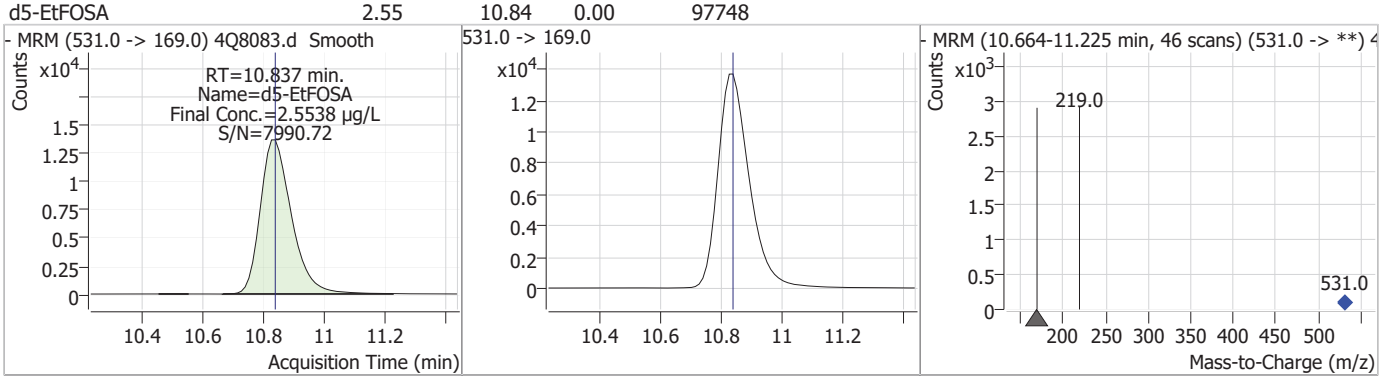
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	27.98	10.75	0.00	1345345				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	11.85	10.76	0.00	602987				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.55	10.84	0.00	97748				

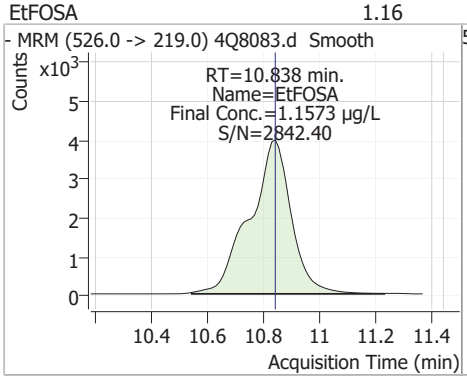


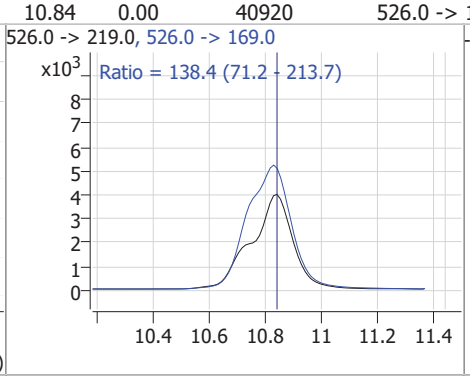
7.6.34

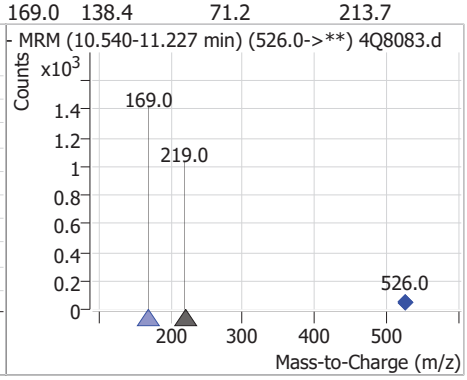
7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	1.16	10.84	0.00	40920	526.0 -> 169.0	138.4	71.2	213.7







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7

Manual Integration Approval Summary

Sample Number: T4Q137-IC137
Lab FileID: 4Q8083.D
Injection Time: 04/29/25 17:39
Method: EPA 1633
Analyst approved: 04/30/25 02:22 Rensel John Romano
Supervisor approved: 04/30/25 07:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.93	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.03	Split peak
Perfluorononanoic acid	375-95-1		7.44	Split peak
MeFOSAA	2355-31-9		7.95	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.02	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.29	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
04/30/25 07:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8084.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 5:53:12 PM
Sample Name : ICC137-4
Vial : P1-A5
DA Method File : 042925_1633_T4Q137.quantmethod.xml
Batch Name : t4q137.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.908	217.0 -> 172.0	833824	10.00 µg/L	0.000
M5-PFPeA	4.344	268.0 -> 223.0	426502	5.00 µg/L	0.000
M5-PFHxA	5.489	318.0 -> 273.0	281054	2.50 µg/L	0.000
M4-PFHpA	6.316	367.0 -> 322.0	318339	2.50 µg/L	0.000
M8-PFOA	6.934	421.0 -> 376.0	489196	2.50 µg/L	0.000
M9-PFNA	7.440	472.0 -> 427.0	200284	1.25 µg/L	0.000
M6-PFDA	7.895	519.0 -> 474.0	195122	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	254277	1.25 µg/L	0.000
M2-PFDoDA	8.716	615.0 -> 570.0	250534	1.25 µg/L	0.000
M2-PFTeDA	9.430	715.0 -> 670.0	206635	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	177003	2.50 µg/L	0.000
M3-PFBS	5.381	302.0 -> 99.0	26162	2.50 µg/L	0.000
		302.0 -> 80.0	65092		
M3-PFHxS	7.024	402.0 -> 99.0	38560	2.50 µg/L	0.000
M8-PFOS	8.019	507.0 -> 99.0	42685	2.50 µg/L	0.000
M2-4:2FTS	5.190	329.0 -> 81.0	10812	5.00 µg/L	0.000
M2-6:2FTS	6.721	429.0 -> 81.0	21697	5.00 µg/L	0.000
M2-8:2FTS	7.696	529.0 -> 81.0	27019	5.00 µg/L	0.000
M3-MeFOSAA	7.952	573.0 -> 419.0	212568	5.00 µg/L	0.000
M3-HFPO-DA	5.816	287.0 -> 169.0	435647	10.00 µg/L	0.000
M5-EtFOSAA	8.135	589.0 -> 419.0	164286	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	989466	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1281304	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	104912	2.50 µg/L	0.000
M3-MeFOSA	10.580	515.0 -> 169.0	95640	2.50 µg/L	0.000
13C4-PFOS	8.020	503.0 -> 80.0	73373	2.50 µg/L	0.000
13C3-PFBA	2.911	216.0 -> 172.0	362174	5.00 µg/L	0.000
18O2-PFHxS	7.023	403.0 -> 84.0	44615	2.50 µg/L	0.000
13C4-PFOA	6.935	417.0 -> 372.0	477532	2.50 µg/L	0.000
13C2-PFDA	7.895	515.0 -> 470.0	173099	1.25 µg/L	0.000
13C5-PFNA	7.440	468.0 -> 423.0	191976	1.25 µg/L	0.000
13C2-PFHxA	5.489	315.0 -> 270.0	269940	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.190	329.0 -> 81.0	10812	4.73 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.6%	
13C2-6:2FTS	6.721	429.0 -> 81.0	21697	4.59 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.7%	
13C2-8:2FTS	7.696	529.0 -> 81.0	27019	4.65 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.1%	
13C2-PFDoDA	8.716	615.0 -> 570.0	250534	1.17 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.8%	
13C2-PFTeDA	9.430	715.0 -> 670.0	206635	1.13 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.4%	
13C3-PFBS	5.381	302.0 -> 99.0	26162	2.26 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.3%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.024	402.0 -> 99.0	38560	2.27	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.0%			
13C4-PFBA	2.908	217.0 -> 172.0	833824	9.32	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 93.2%			
13C4-PFHpA	6.316	367.0 -> 322.0	318339	2.36	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.2%			
13C5-PFHxA	5.489	318.0 -> 273.0	281054	2.28	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.0%			
13C5-PFPeA	4.344	268.0 -> 223.0	426502	4.69	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.9%			
13C6-PFDA	7.895	519.0 -> 474.0	195122	1.13	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.8%			
13C7-PFUnDA	8.310	570.0 -> 525.0	254277	1.15	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.7%			
13C8-FOSA	9.291	506.0 -> 78.0	177003	2.25	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.1%			
13C8-PFOA	6.934	421.0 -> 376.0	489196	2.36	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.4%			
13C8-PFOS	8.019	507.0 -> 99.0	42685	2.29	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.8%			
13C9-PFNA	7.440	472.0 -> 427.0	200284	1.16	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.6%			
d3-MeFOSAA	7.952	573.0 -> 419.0	212568	4.63	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.6%			
13C3-HFPO-DA	5.816	287.0 -> 169.0	435647	9.37	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 93.7%			
d3-MeFOSA	10.580	515.0 -> 169.0	95640	2.25	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 89.8%			
d5-EtFOSAA	8.135	589.0 -> 419.0	164286	4.60	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.1%			
d7-MeFOSE	10.475	623.0 -> 59.0	989466	22.37	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 89.5%			
d9-EtFOSE	10.746	639.0 -> 59.0	1281304	22.26	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 89.1%			
d5-EtFOSA	10.837	531.0 -> 169.0	104912	2.29	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.6%			
Target Compounds							QValue
4:2FTS	5.191	327.0 -> 307.0	158299	9.50	µg/L		100
		327.0 -> 81.0	72192				
6:2FTS	6.721	427.0 -> 407.0	181576	9.95	µg/L		100
		427.0 -> 81.0	86846				
8:2FTS	7.696	527.0 -> 507.0	176452	10.07	µg/L		100
		527.0 -> 81.0	67674				
EtFOSAA	8.136	584.0 -> 419.0	64299	2.40	µg/L	m	100
		584.0 -> 483.0	34676				
FOSA	9.294	498.0 -> 78.0	136512	2.46	µg/L	m	100
		498.0 -> 478.0	3633				
MeFOSAA	7.953	570.0 -> 419.0	77441	2.39	µg/L	m	100
		570.0 -> 512.0	26978				
PFBA	2.914	213.0 -> 169.0	223113	9.76	µg/L		100
PFBS	5.382	299.0 -> 80.0	52432	2.14	µg/L		100
		299.0 -> 99.0	22286				
PFDA	7.896	513.0 -> 469.0	307280	2.48	µg/L		100
		513.0 -> 219.0	68272				
PFDoDA	8.716	613.0 -> 569.0	403156	2.39	µg/L		100
		613.0 -> 319.0	54701				

Perfluorinated Compounds by LC/MS/MS

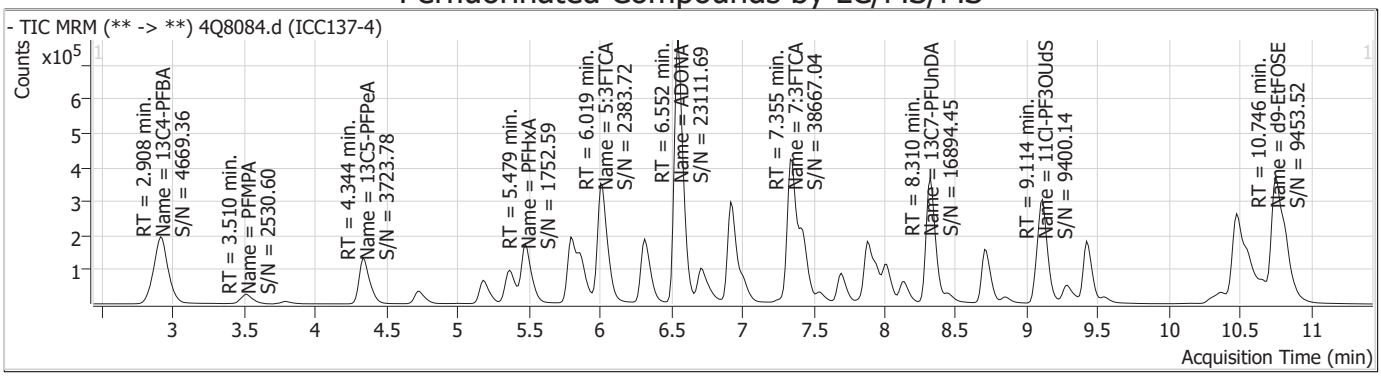
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.854	599.0 -> 80.0	45273	2.26	µg/L		100
		599.0 -> 99.0	27307				
PFHpA	6.317	363.0 -> 319.0	401125	2.45	µg/L		100
		363.0 -> 169.0	79920				
PFHpS	7.553	449.0 -> 80.0	66710	2.32	µg/L		100
		449.0 -> 99.0	36345				
PFHxA	5.479	313.0 -> 269.0	258110	2.52	µg/L		100
		313.0 -> 119.0	8028				
PFHxS	7.025	399.0 -> 80.0	63918	2.20	µg/L	m	100
		399.0 -> 99.0	33241				
PFNA	7.441	463.0 -> 419.0	254002	2.47	µg/L	m	100
		463.0 -> 219.0	89650				
PFNS	8.461	549.0 -> 80.0	60405	2.34	µg/L		100
		549.0 -> 99.0	36112				
PFOA	6.935	413.0 -> 369.0	333758	2.43	µg/L	m	100
		413.0 -> 169.0	95513				
PFOS	8.021	499.0 -> 80.0	66204	2.23	µg/L	m	100
		499.0 -> 99.0	35841				
PFPeA	4.346	263.0 -> 219.0	275883	4.88	µg/L		100
PFPeS	6.355	349.0 -> 80.0	62532	2.29	µg/L		100
		349.0 -> 99.0	31795				
PFTeDA	9.431	713.0 -> 669.0	505416	2.46	µg/L		100
		713.0 -> 219.0	35493				
PFTrDA	9.087	663.0 -> 619.0	461880	2.41	µg/L		100
		663.0 -> 369.0	27688				
PFUnDA	8.312	563.0 -> 519.0	328516	2.52	µg/L		100
		563.0 -> 269.0	64277				
11Cl-PF3OUdS	9.114	631.0 -> 451.0	775717	9.16	µg/L		100
		633.0 -> 453.0	233514				
9Cl-PF3ONS	8.339	531.0 -> 351.0	829408	9.18	µg/L		100
		533.0 -> 353.0	252492				
ADONA	6.552	377.0 -> 251.0	2622173	8.87	µg/L		100
		377.0 -> 85.0	863110				
HFPO-DA	5.817	285.0 -> 169.0	379017	9.60	µg/L		100
		285.0 -> 185.0	40275				
3:3FTCA	3.794	241.0 -> 177.0	35910	11.64	µg/L		100
		241.0 -> 117.0	3090				
5:3FTCA	6.019	341.0 -> 237.0	1013232	65.05	µg/L		100
		341.0 -> 217.0	727055				
7:3FTCA	7.355	441.0 -> 337.0	1464235	64.48	µg/L		100
		441.0 -> 317.0	657743				
EtFOSA	10.838	526.0 -> 219.0	90277	2.38	µg/L		100
		526.0 -> 169.0	128643				
EtFOSE	10.760	630.0 -> 59.0	1177679	24.31	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	111185	2.43	µg/L		100
		512.0 -> 219.0	74669				
MeFOSE	10.488	616.0 -> 59.0	877092	24.33	µg/L	m	100
PFDoDS	9.558	699.0 -> 80.0	39690	2.28	µg/L		100
		699.0 -> 99.0	24503				
NFDHA	5.370	295.0 -> 201.0	64222	4.83	µg/L		100
		201.0 -> 85.0	271209				
		295.0 -> 85.0	17770				
PFMBA	4.735	279.0 -> 85.0	189637	4.91	µg/L		100
PFMPA	3.510	229.0 -> 85.0	161412	4.82	µg/L		100
PFEESA	5.872	315.0 -> 135.0	433876	4.48	µg/L		100
		315.0 -> 69.0	33844				

Perfluorinated Compounds by LC/MS/MS

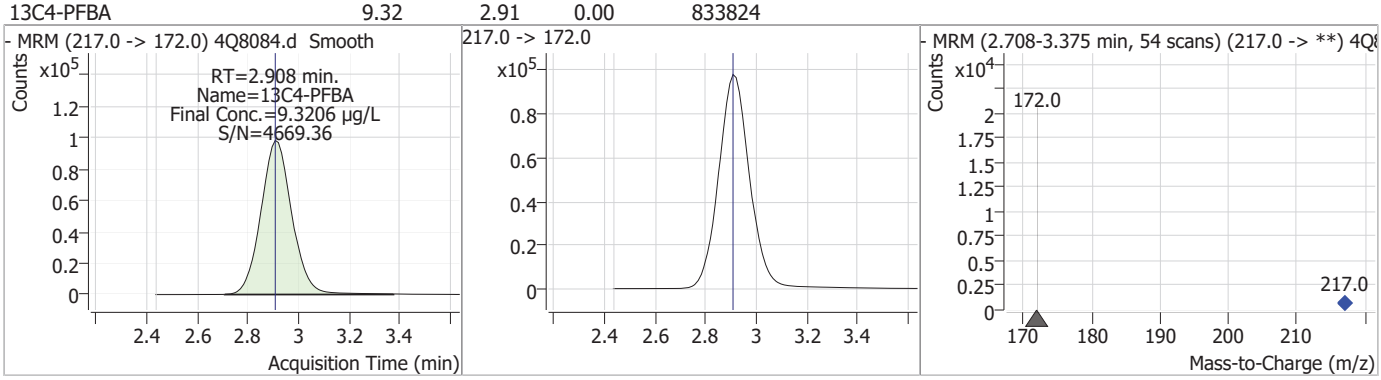
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

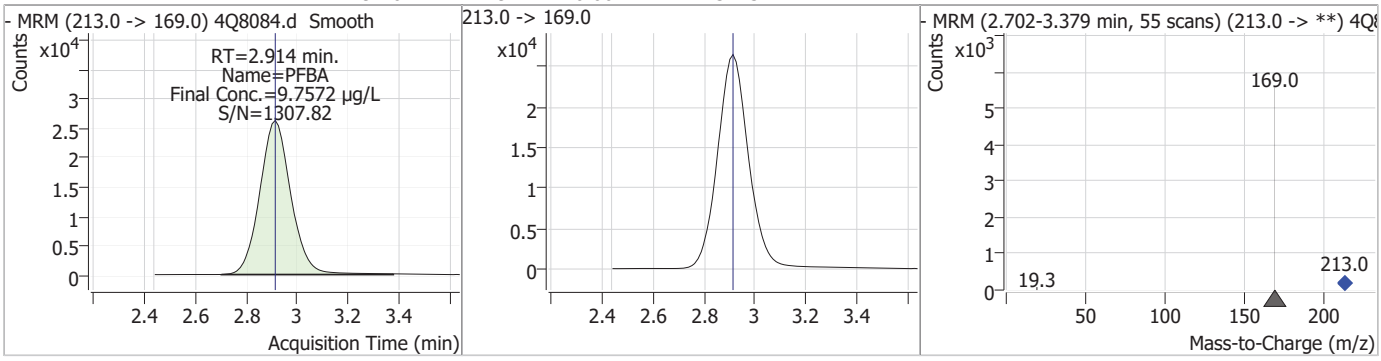
Perfluorinated Compounds by LC/MS/MS



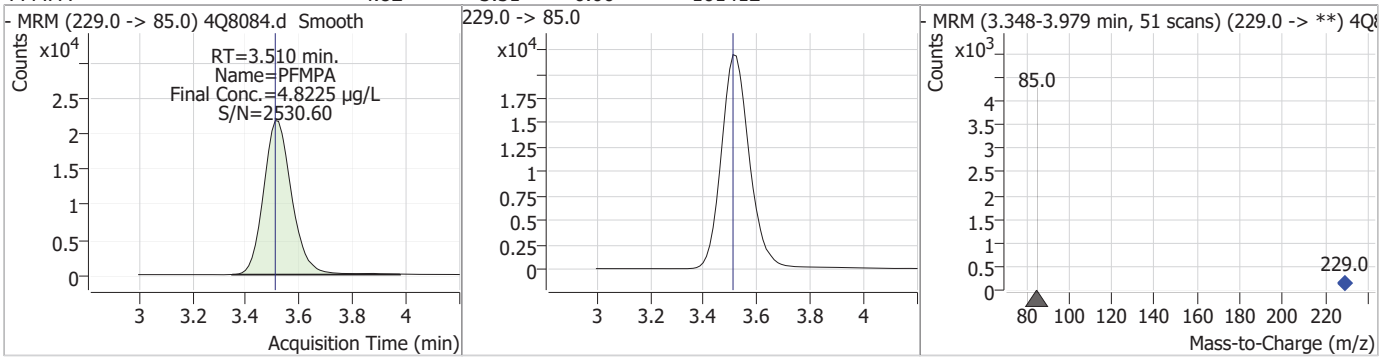
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.32	2.91	0.00	833824				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.76	2.91	0.00	223113				

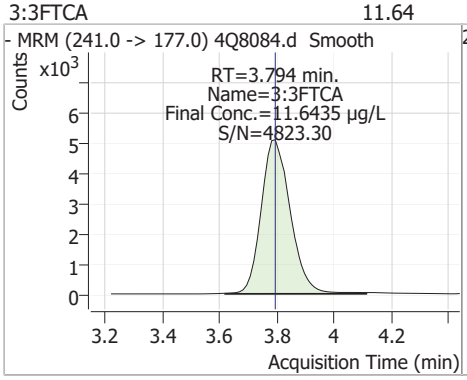


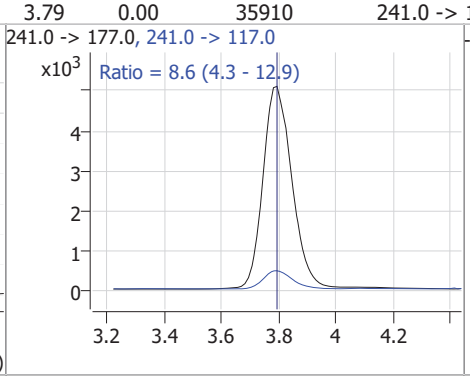
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	4.82	3.51	0.00	161412				

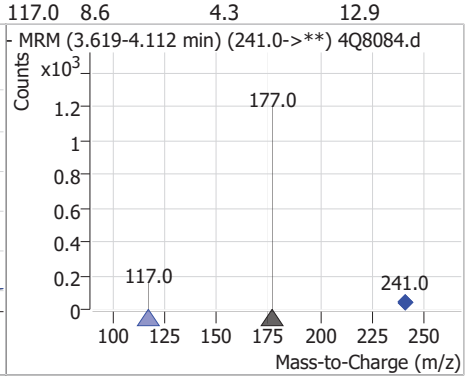


Perfluorinated Compounds by LC/MS/MS

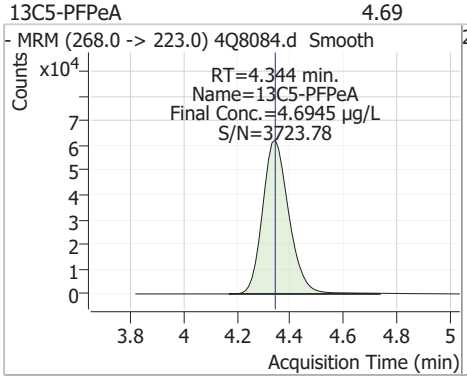
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	11.64	3.79	0.00	35910	241.0 -> 117.0	8.6	4.3	12.9

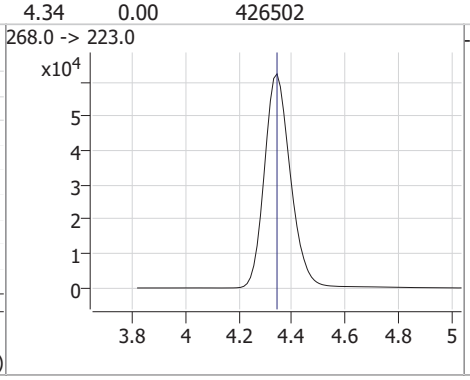


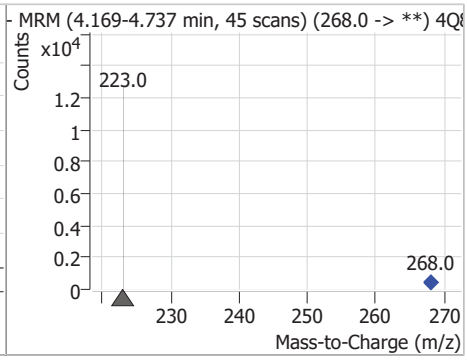




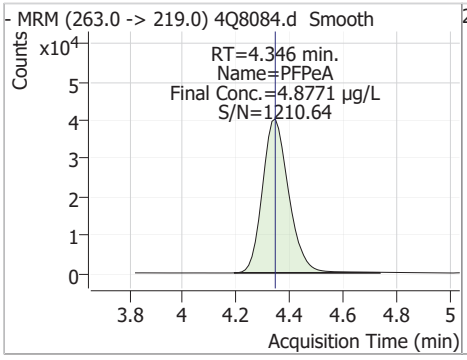
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.69	4.34	0.00	426502				

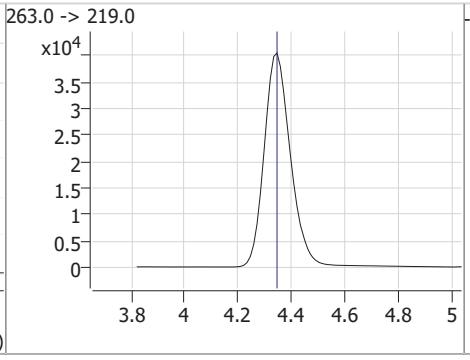


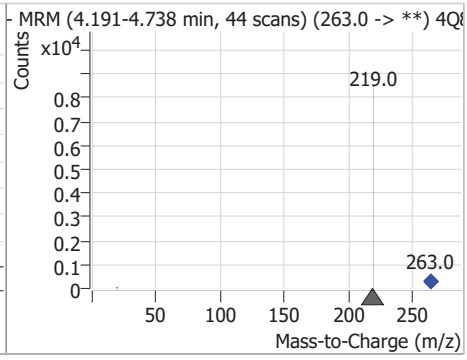




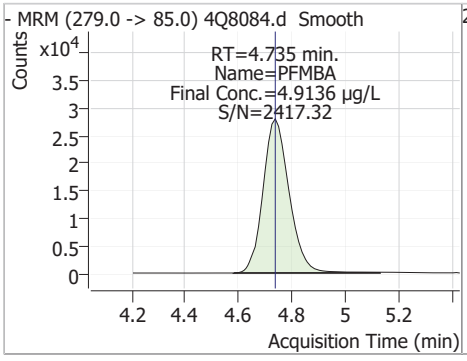
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	4.88	4.35	0.00	275883				

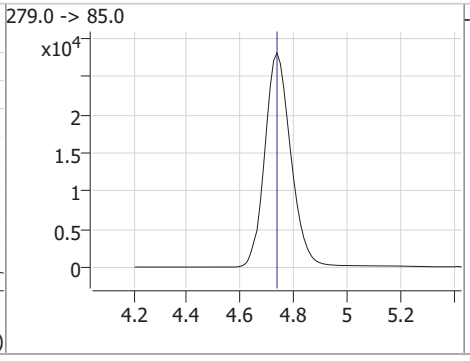


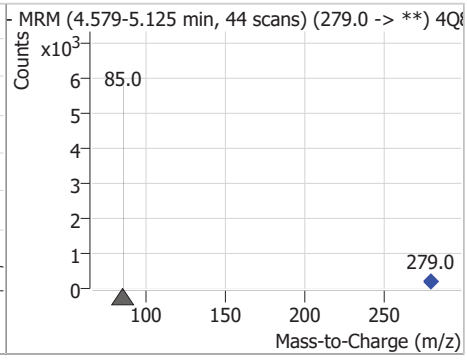




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.91	4.73	0.00	189637				







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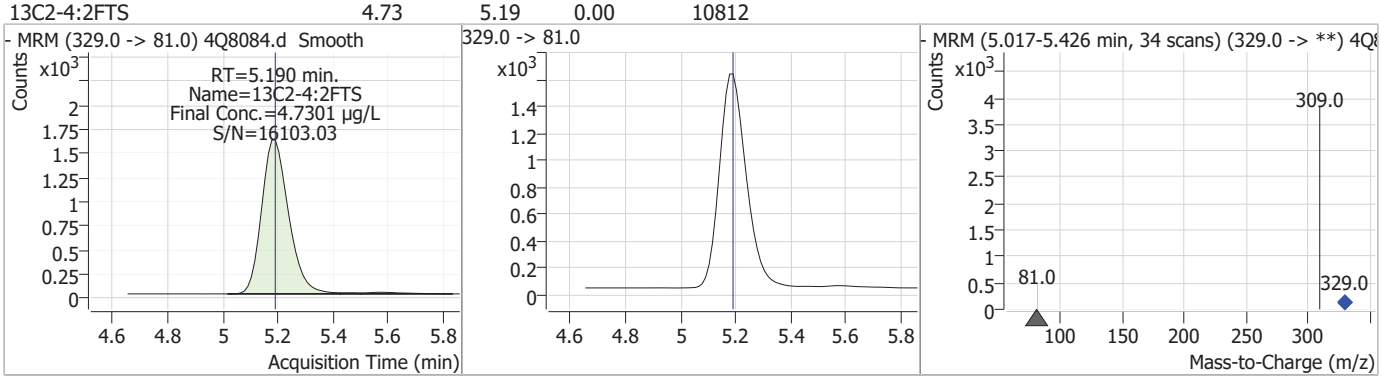
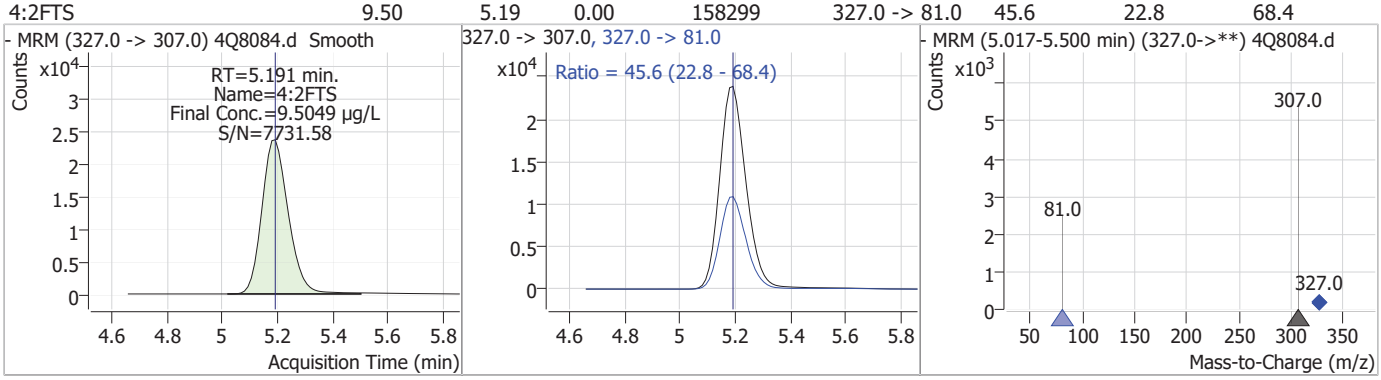
Perfluorinated Compounds by LC/MS/MS

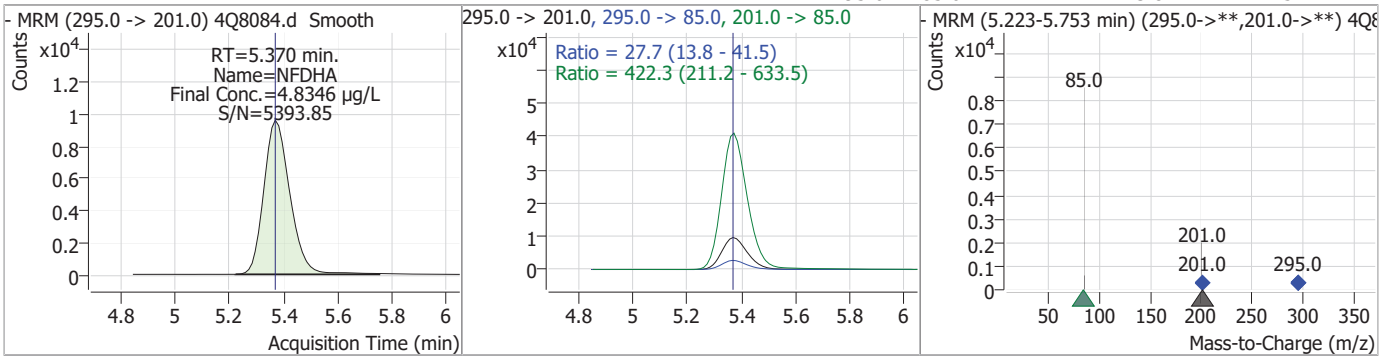
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.73	5.19	0.00	10812				



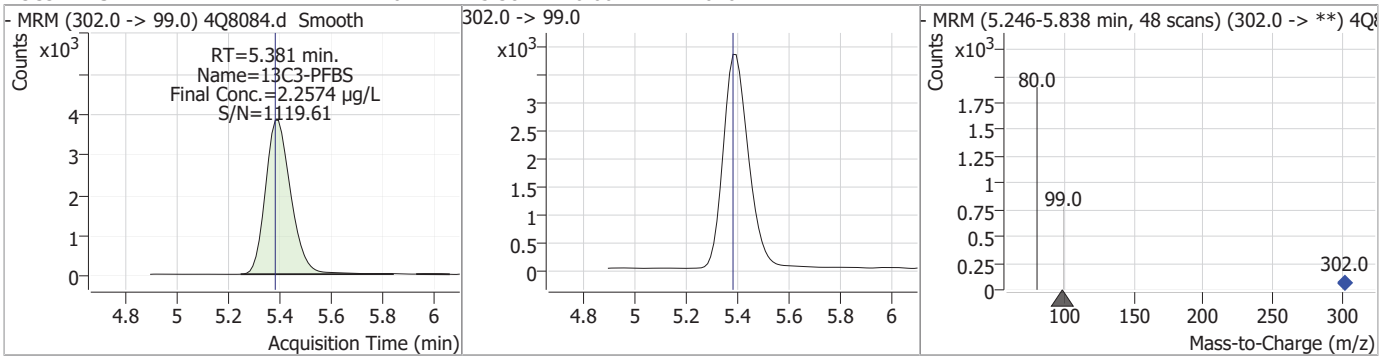
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.50	5.19	0.00	158299	327.0 -> 81.0	45.6	22.8	68.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	4.83	5.37	0.00	64222	201.0 -> 85.0	422.3	211.2	633.5
					295.0 -> 85.0	27.7	13.8	41.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.26	5.38	0.00	26162				



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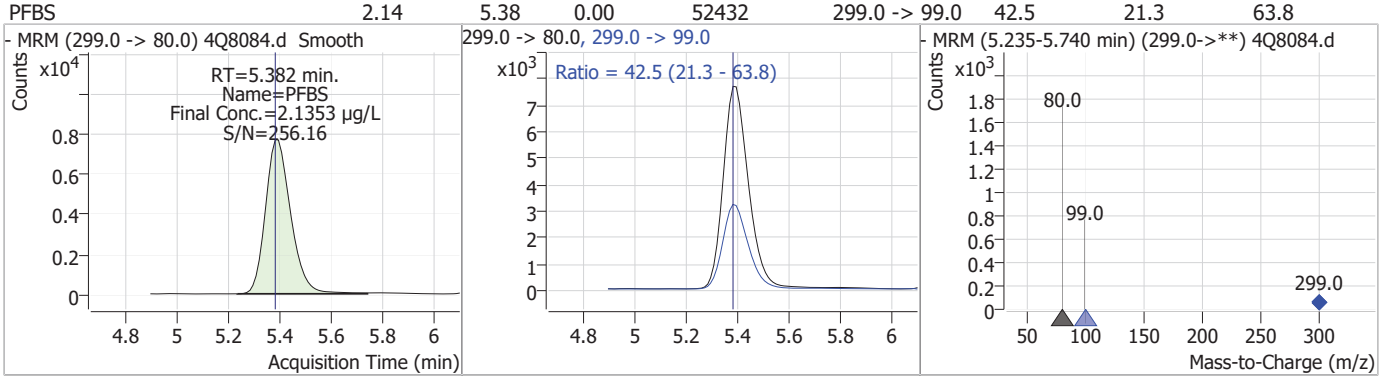
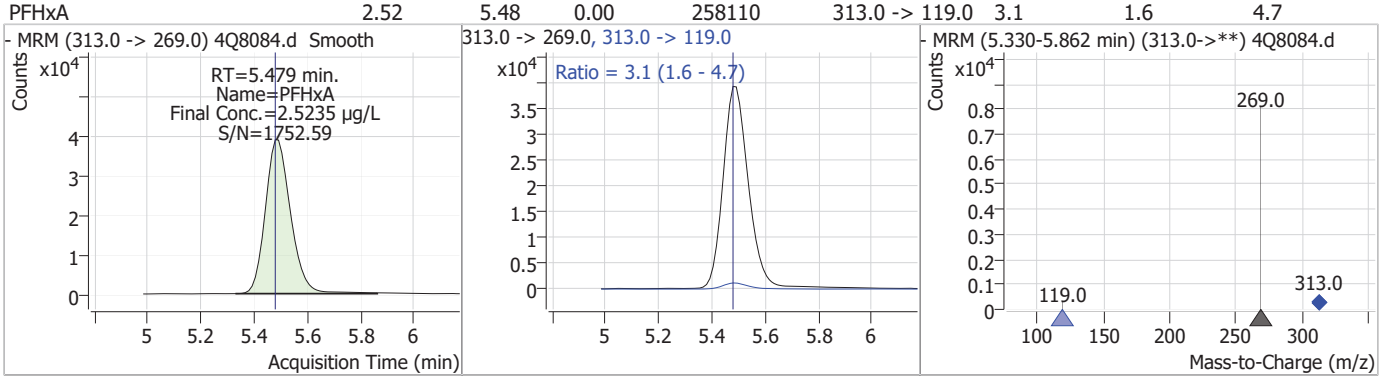
Perfluorinated Compounds by LC/MS/MS

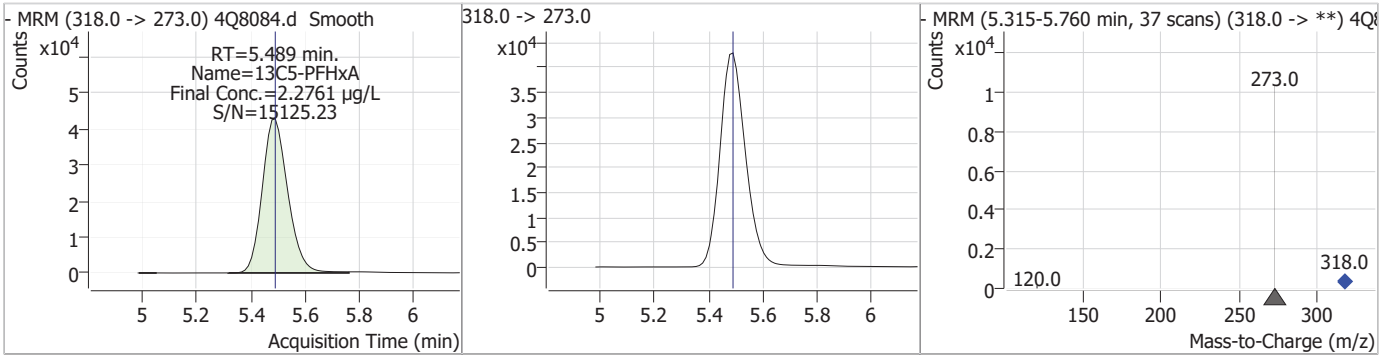
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.14	5.38	0.00	52432	299.0 -> 99.0	42.5	21.3	63.8



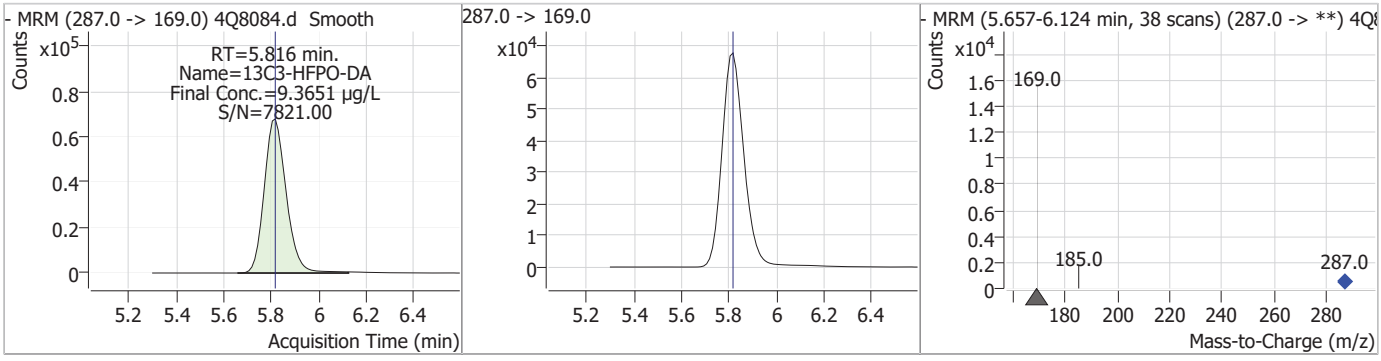
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.52	5.48	0.00	258110	313.0 -> 119.0	3.1	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.28	5.49	0.00	281054				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.37	5.82	0.00	435647				



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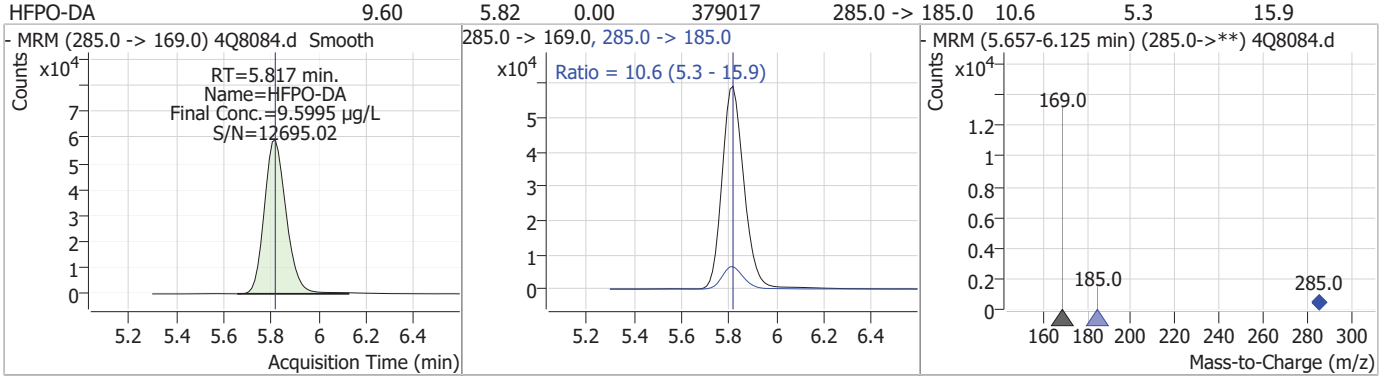
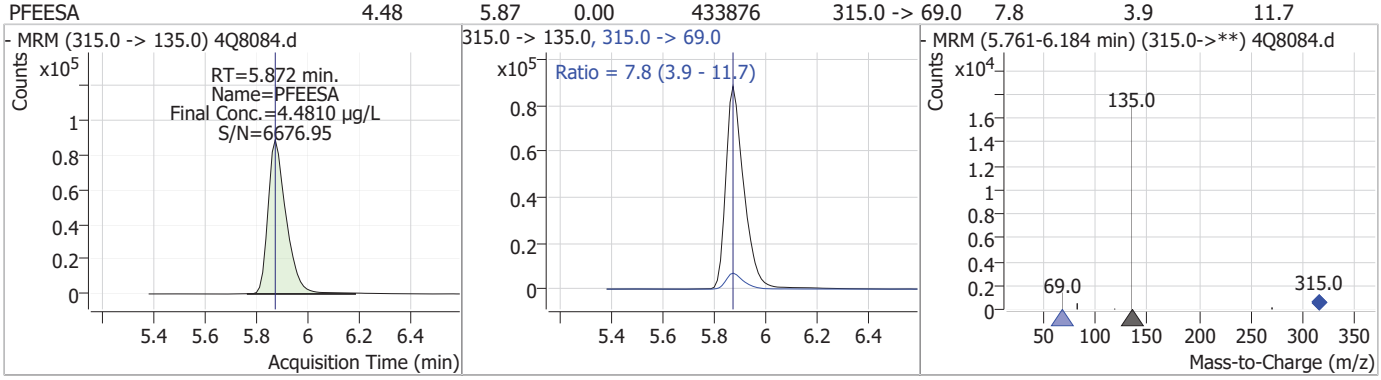
Perfluorinated Compounds by LC/MS/MS

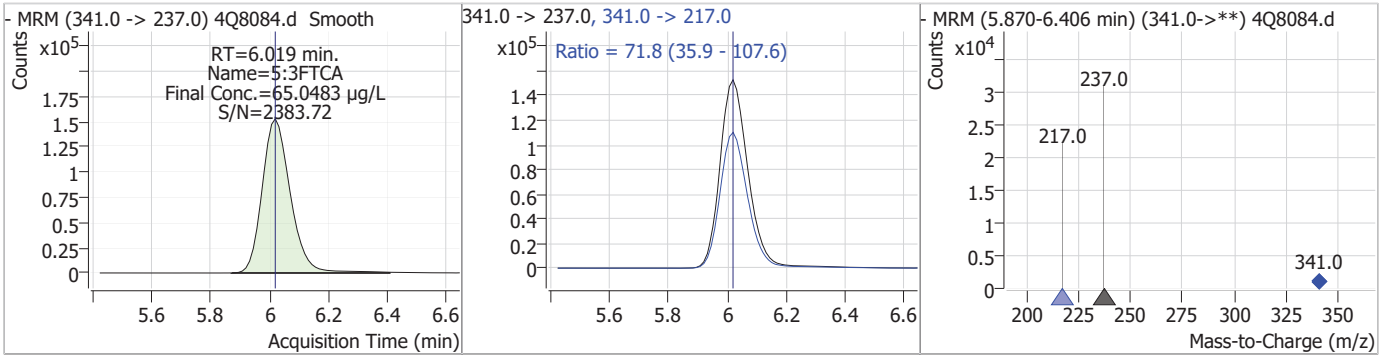
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	9.60	5.82	0.00	379017	285.0 -> 185.0	10.6	5.3	15.9



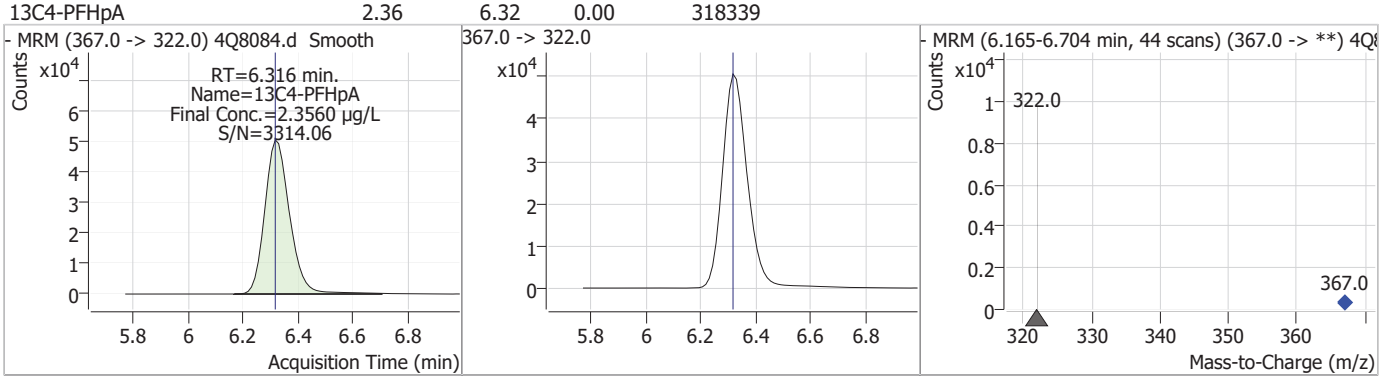
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.48	5.87	0.00	433876	315.0 -> 69.0	7.8	3.9	11.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	65.05	6.02	0.00	1013232	341.0 -> 217.0	71.8	35.9	107.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.36	6.32	0.00	318339				



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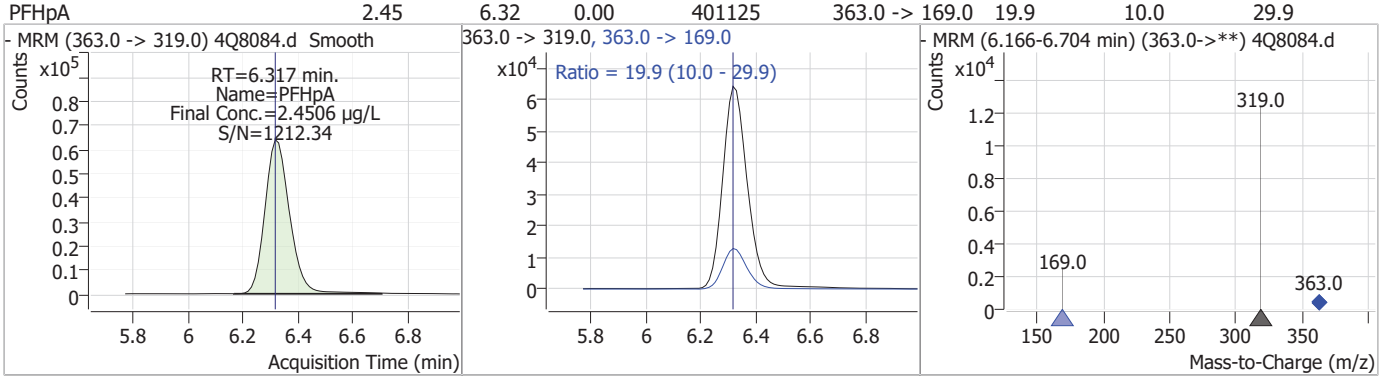
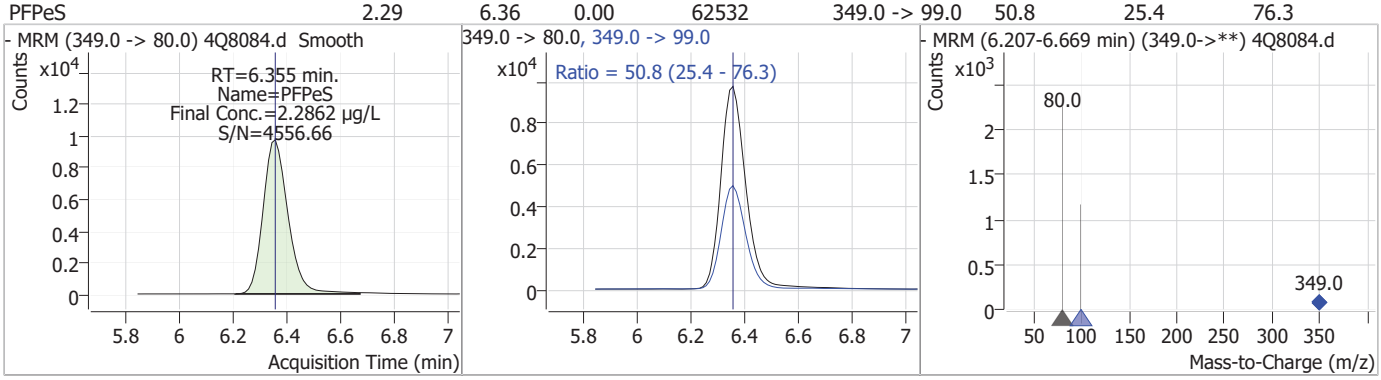
Perfluorinated Compounds by LC/MS/MS

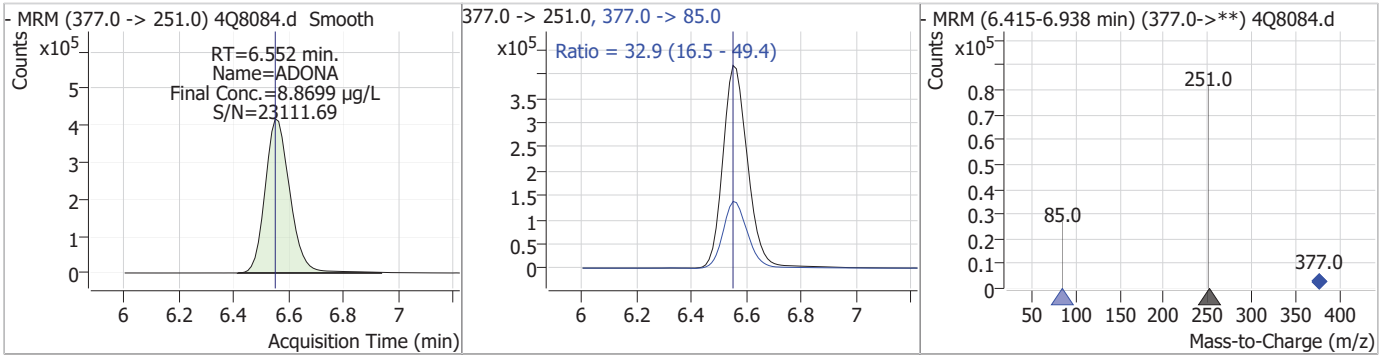
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.45	6.32	0.00	401125	363.0 -> 169.0	19.9	10.0	29.9



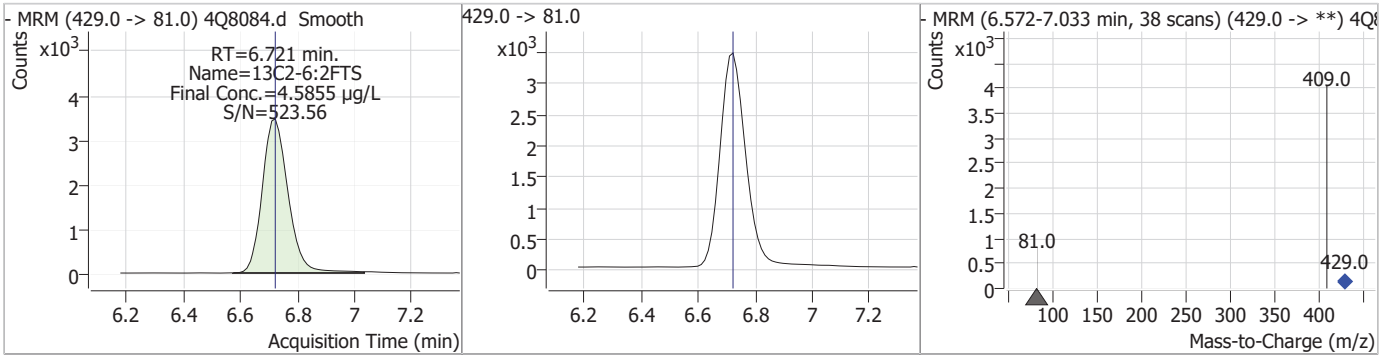
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.29	6.36	0.00	62532	349.0 -> 99.0	50.8	25.4	76.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.87	6.55	0.00	2622173	377.0 -> 85.0	32.9	16.5	49.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.59	6.72	0.00	21697				



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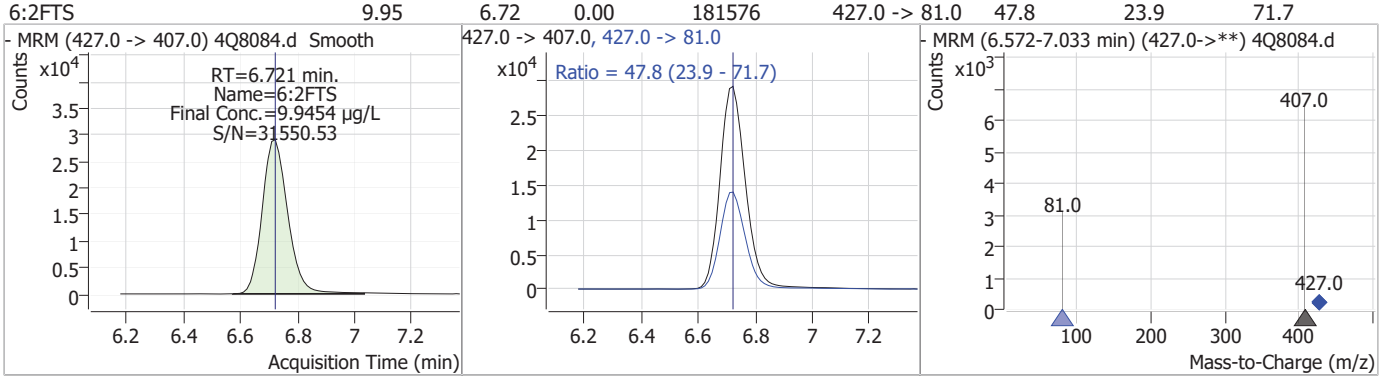
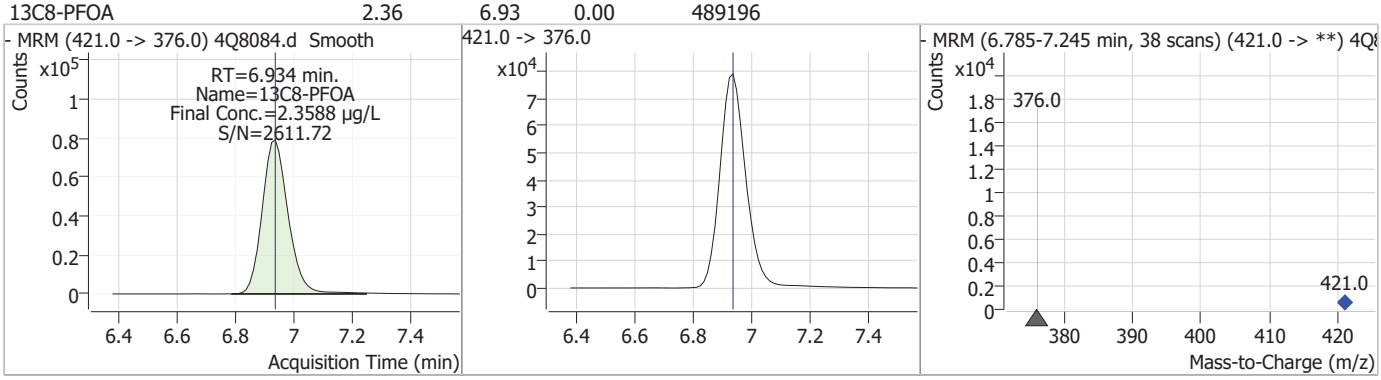
Perfluorinated Compounds by LC/MS/MS

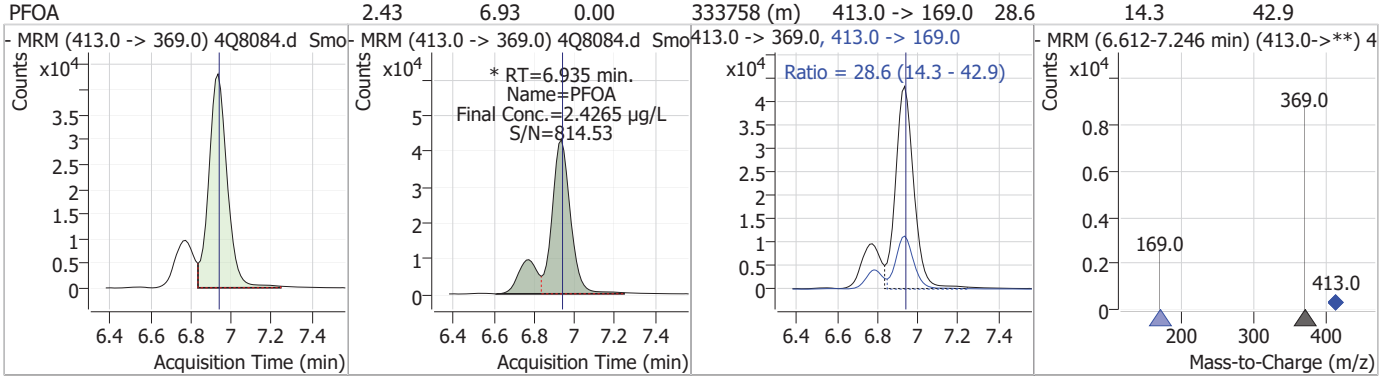
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.95	6.72	0.00	181576	427.0 -> 81.0	47.8	23.9	71.7



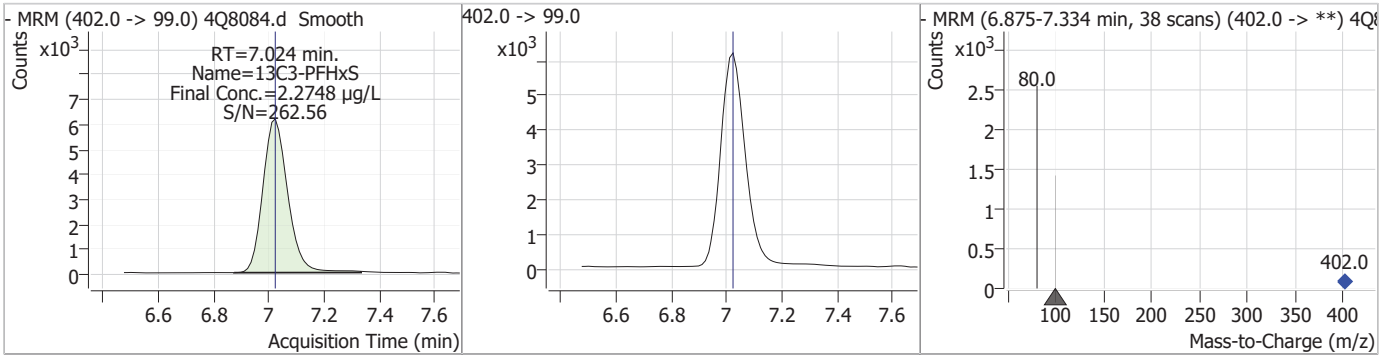
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.36	6.93	0.00	489196				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.43	6.93	0.00	333758 (m)	413.0 -> 169.0	28.6	14.3	42.9

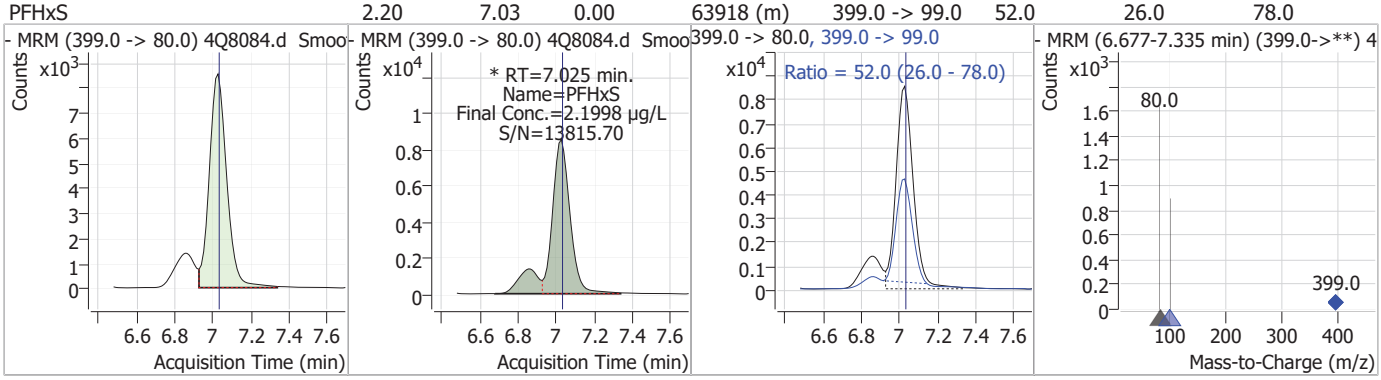


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.27	7.02	0.00	38560				

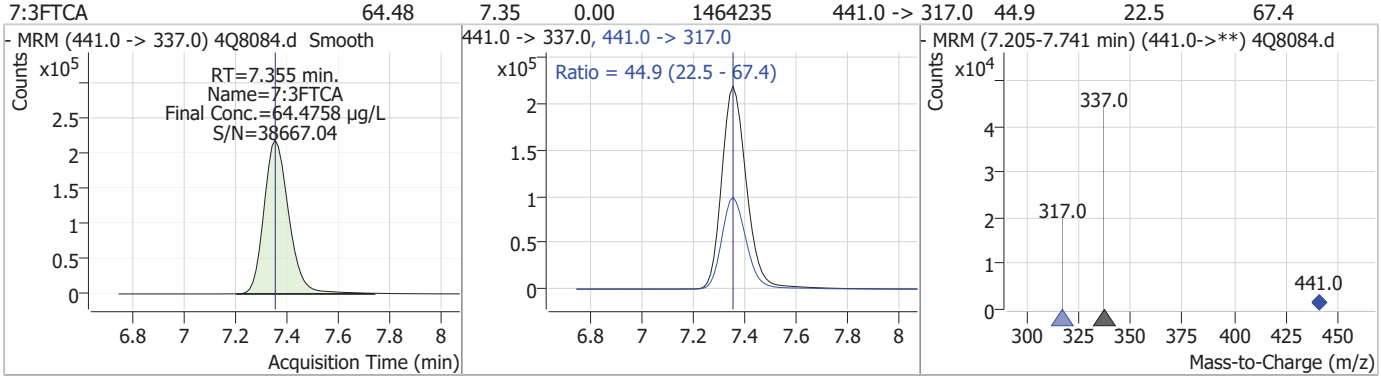


Perfluorinated Compounds by LC/MS/MS

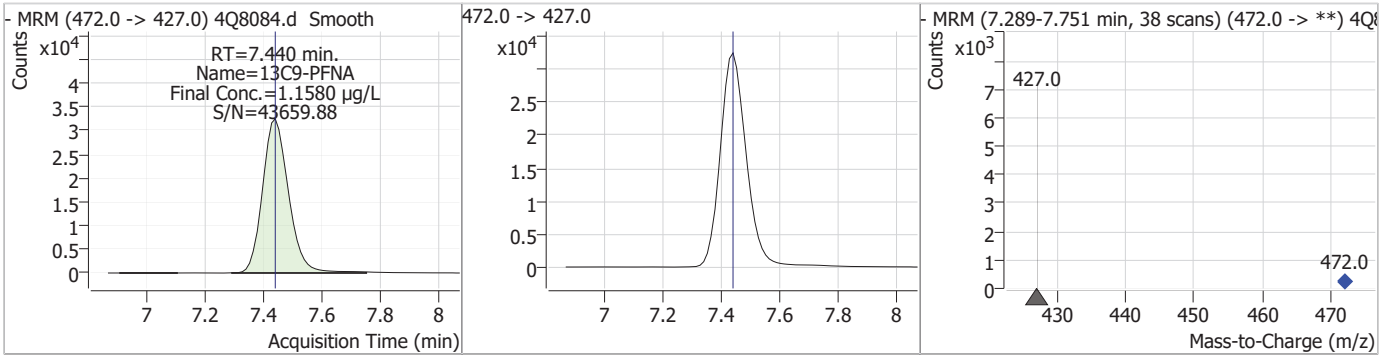
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.20	7.03	0.00	63918 (m)	399.0 -> 99.0	52.0	26.0	78.0



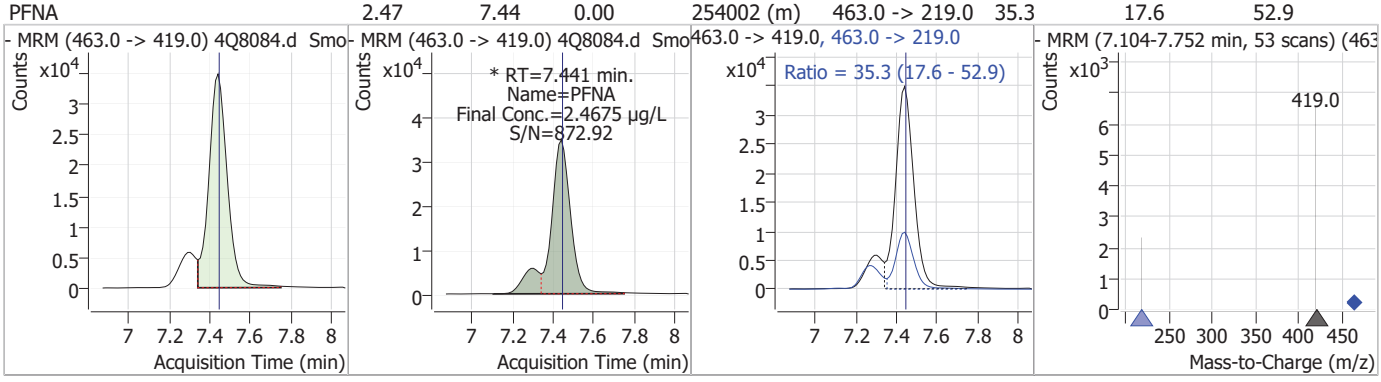
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	64.48	7.35	0.00	1464235	441.0 -> 317.0	44.9	22.5	67.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.16	7.44	0.00	200284				

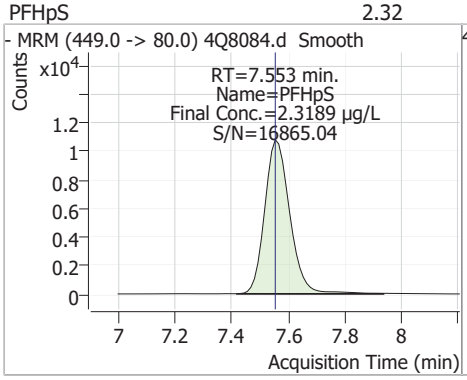


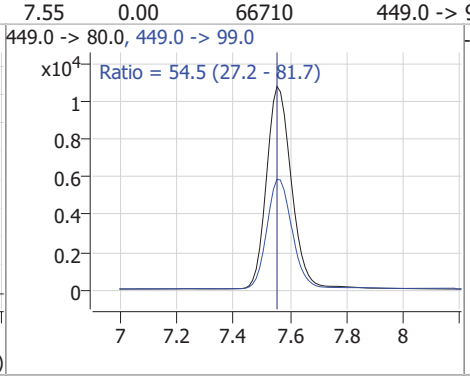
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.47	7.44	0.00	254002 (m)	463.0 -> 219.0	35.3	17.6	52.9

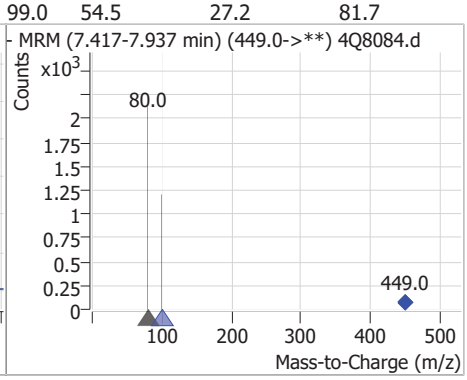


Perfluorinated Compounds by LC/MS/MS

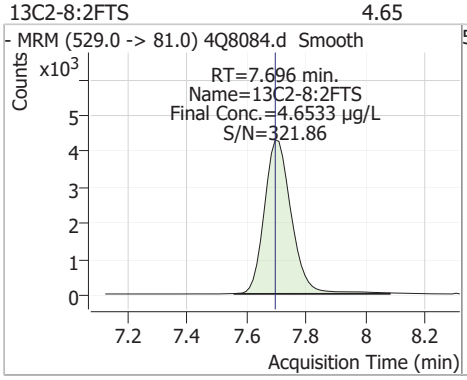
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.32	7.55	0.00	66710	449.0 -> 99.0	54.5	27.2	81.7

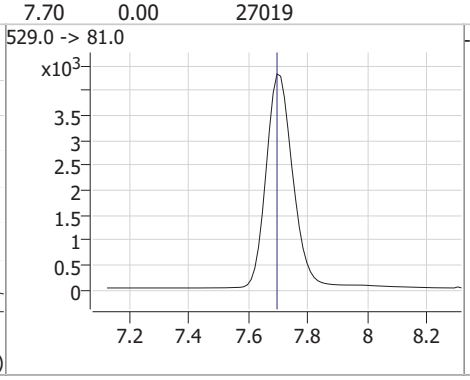


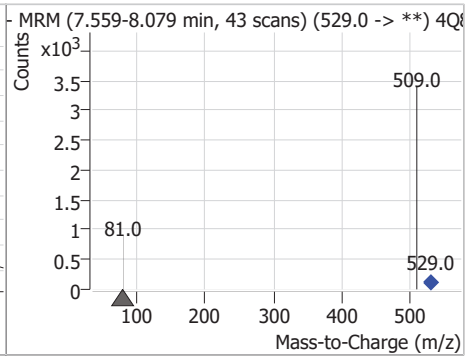




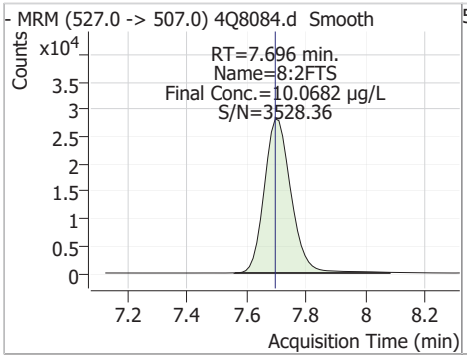
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.65	7.70	0.00	27019				

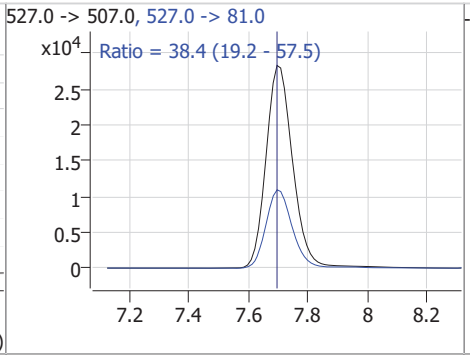


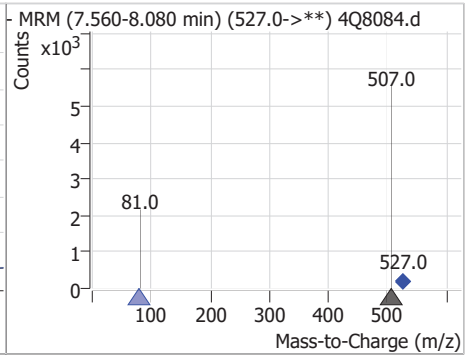




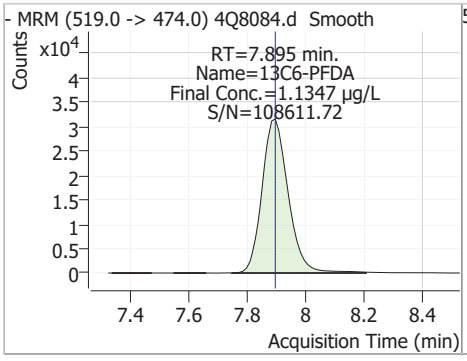
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.07	7.70	0.00	176452	527.0 -> 81.0	38.4	19.2	57.5

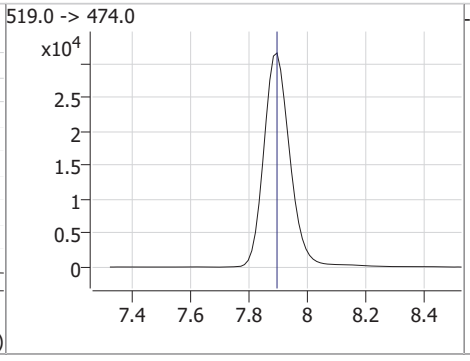


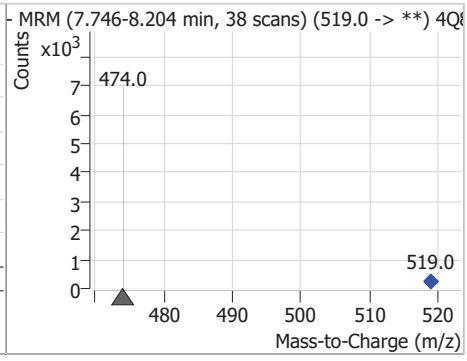




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.13	7.89	0.00	195122				

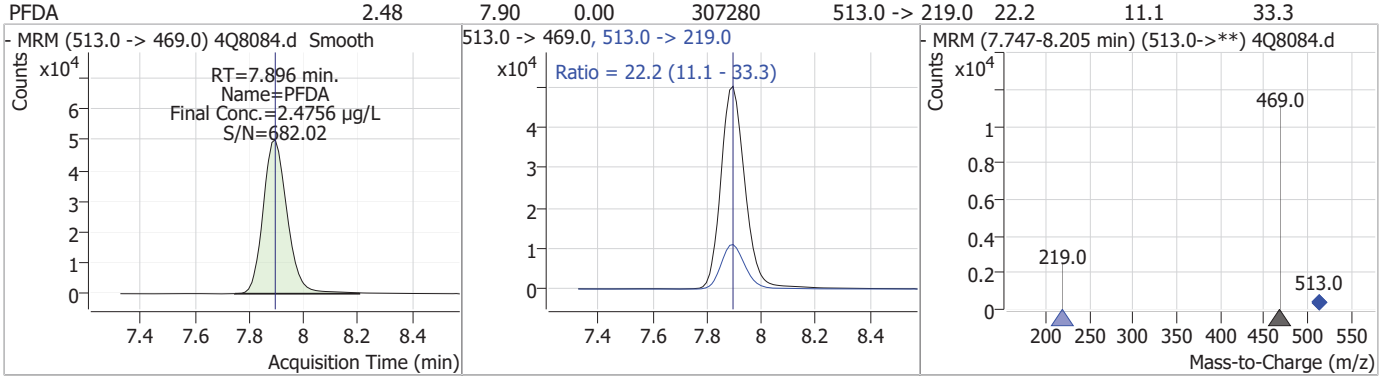




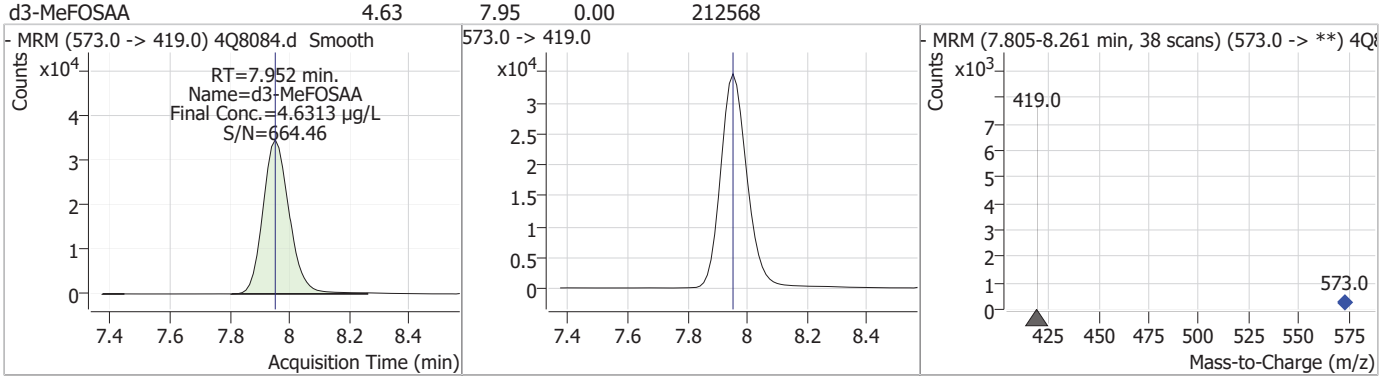


Perfluorinated Compounds by LC/MS/MS

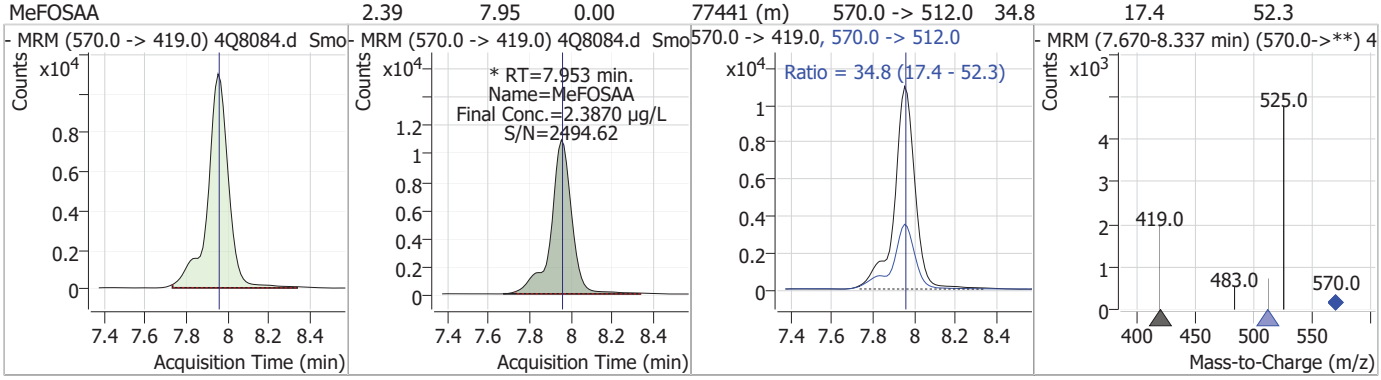
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.48	7.90	0.00	307280	513.0 -> 219.0	22.2	11.1	33.3



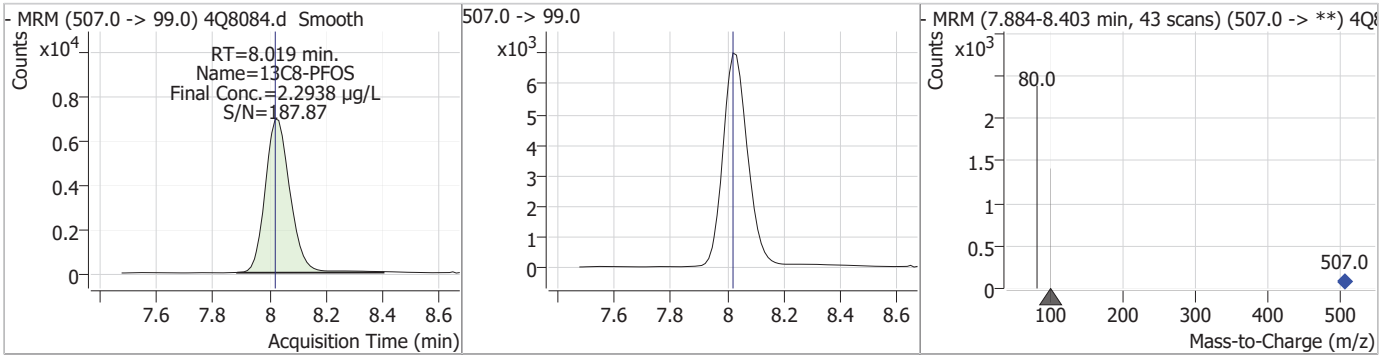
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.63	7.95	0.00	212568				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.39	7.95	0.00	77441 (m)	570.0 -> 512.0	34.8	17.4	52.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.29	8.02	0.00	42685				



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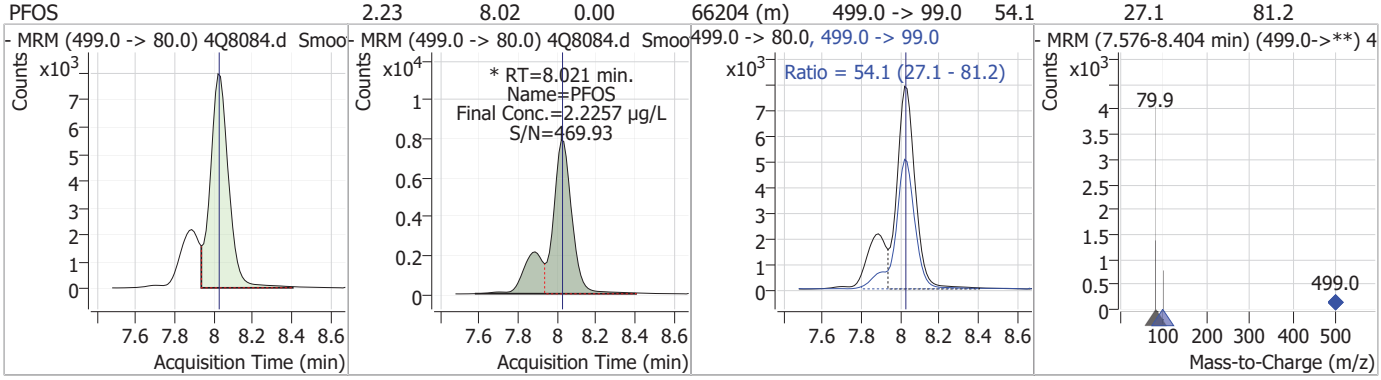
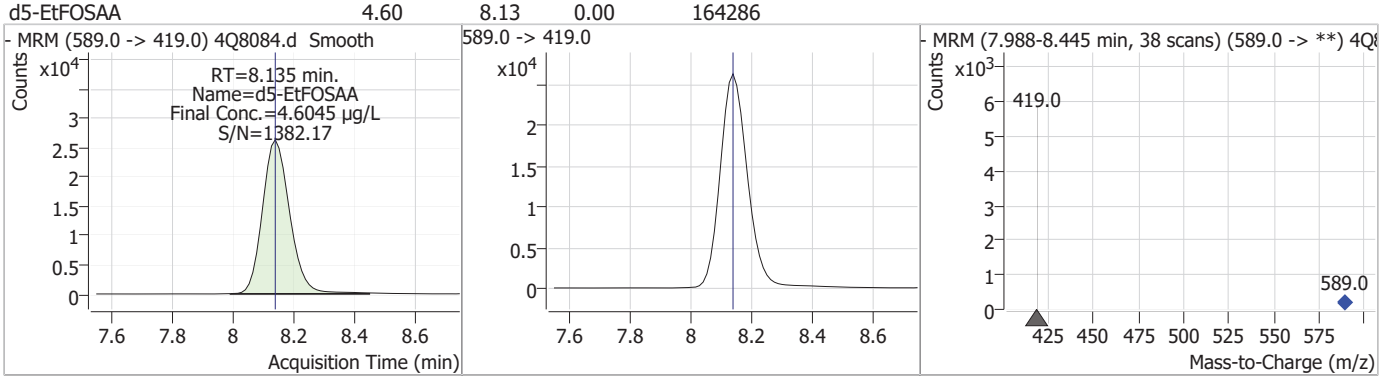
Perfluorinated Compounds by LC/MS/MS

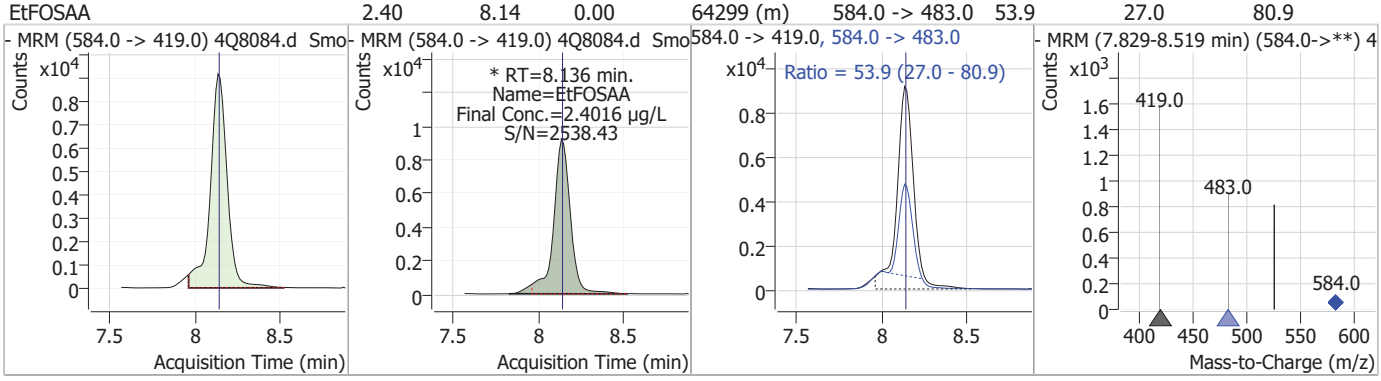
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.23	8.02	0.00	66204 (m)	499.0 -> 99.0	54.1	27.1	81.2



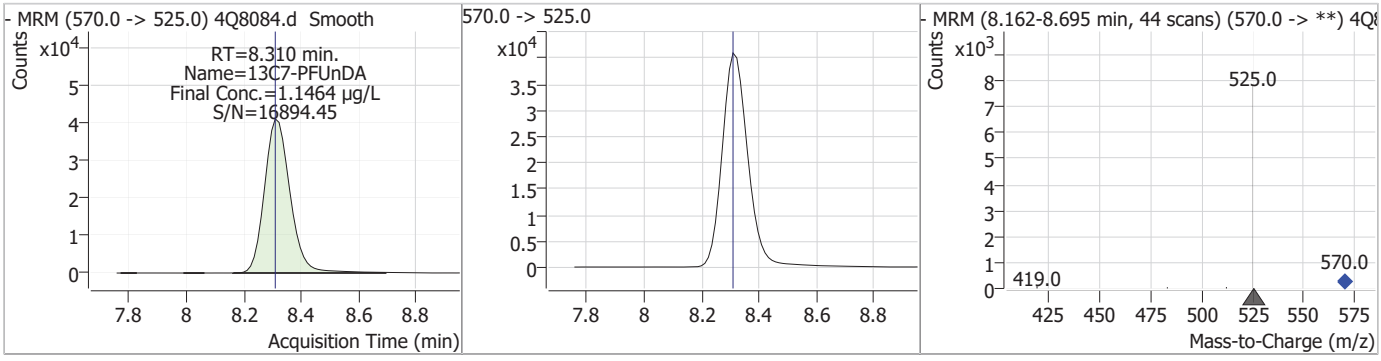
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.60	8.13	0.00	164286				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.40	8.14	0.00	64299 (m)	584.0 -> 483.0	53.9	27.0	80.9

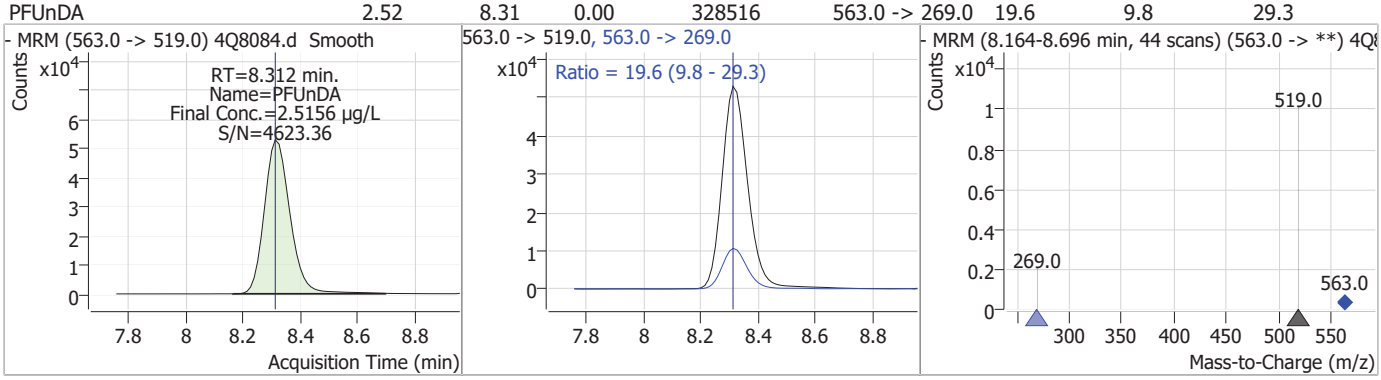


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.15	8.31	0.00	254277				

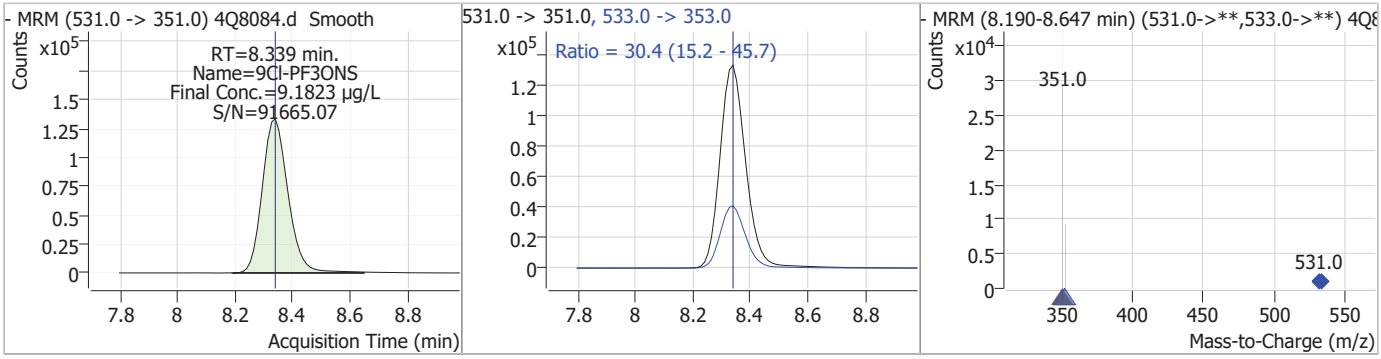


Perfluorinated Compounds by LC/MS/MS

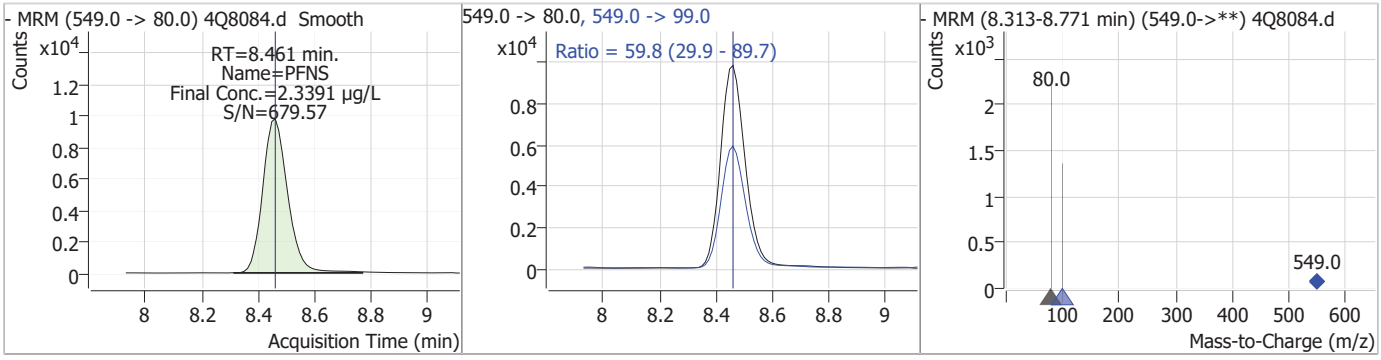
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.52	8.31	0.00	328516	563.0 -> 269.0	19.6	9.8	29.3



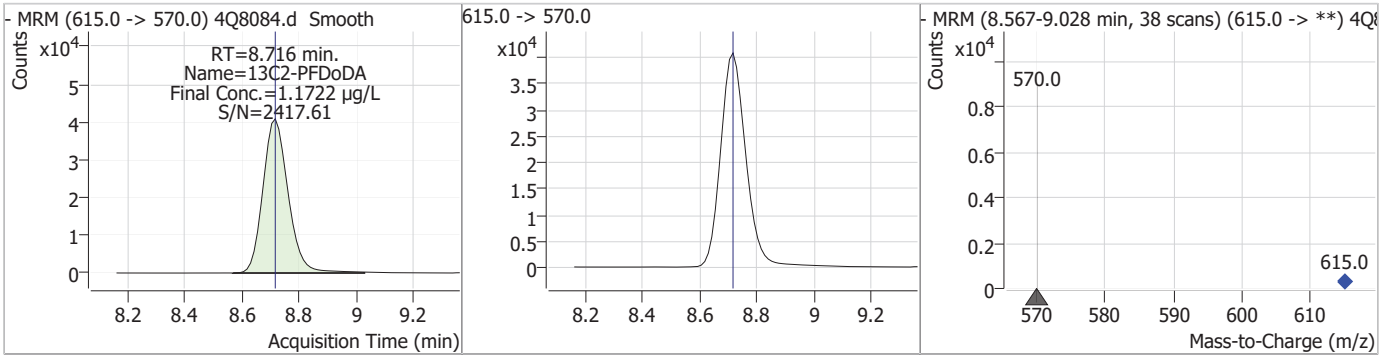
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.18	8.34	0.00	829408	533.0 -> 353.0	30.4	15.2	45.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.34	8.46	0.00	60405	549.0 -> 99.0	59.8	29.9	89.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.17	8.72	0.00	250534				



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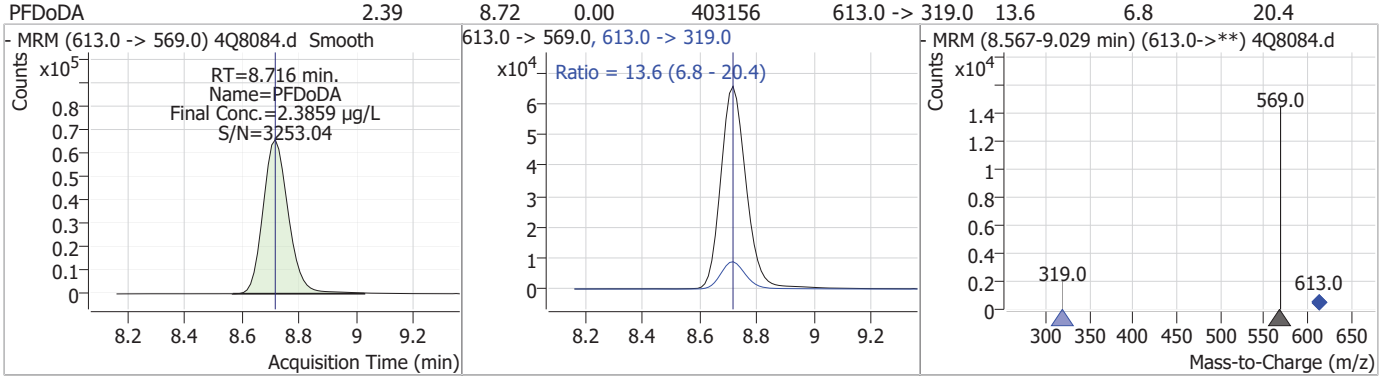
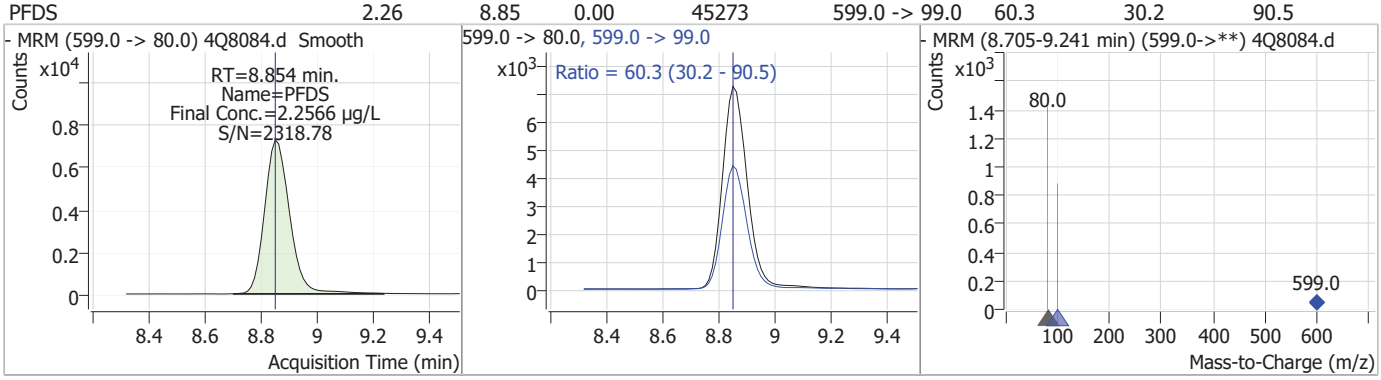
Perfluorinated Compounds by LC/MS/MS

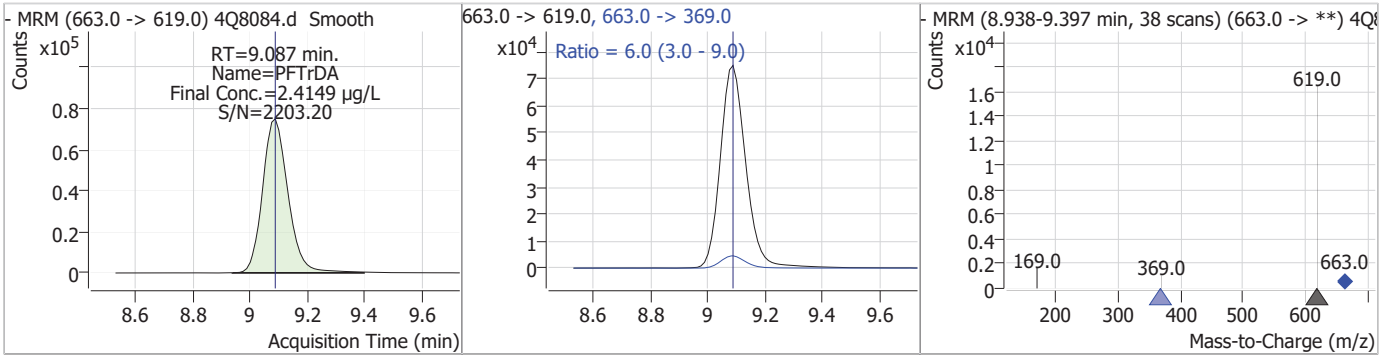
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.39	8.72	0.00	403156	613.0 -> 319.0	13.6	6.8	20.4



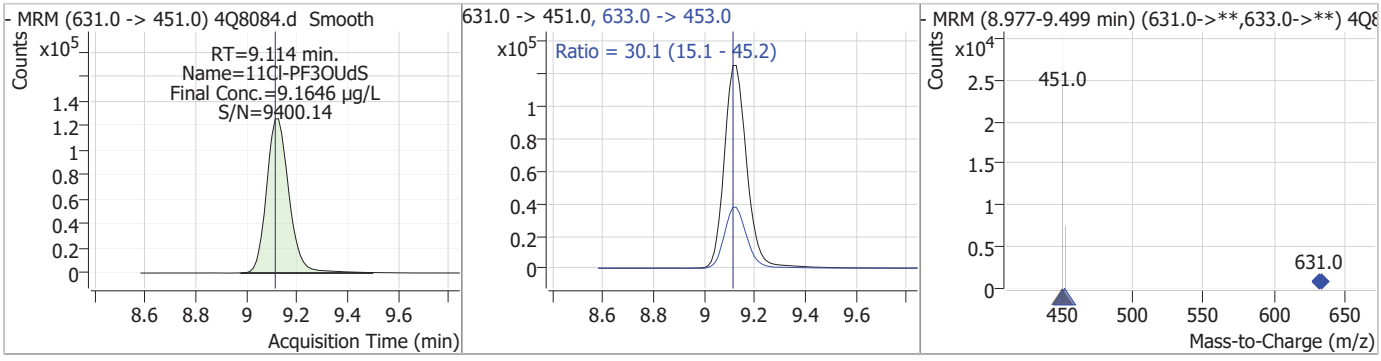
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.26	8.85	0.00	45273	599.0 -> 99.0	60.3	30.2	90.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.41	9.09	0.00	461880	663.0 -> 369.0	6.0	3.0	9.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.16	9.11	0.00	775717	633.0 -> 453.0	30.1	15.1	45.2



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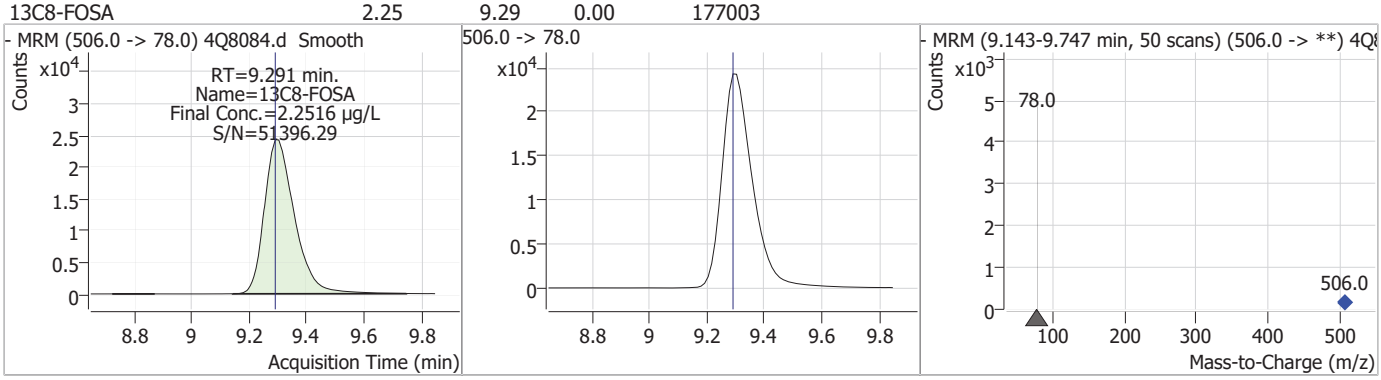
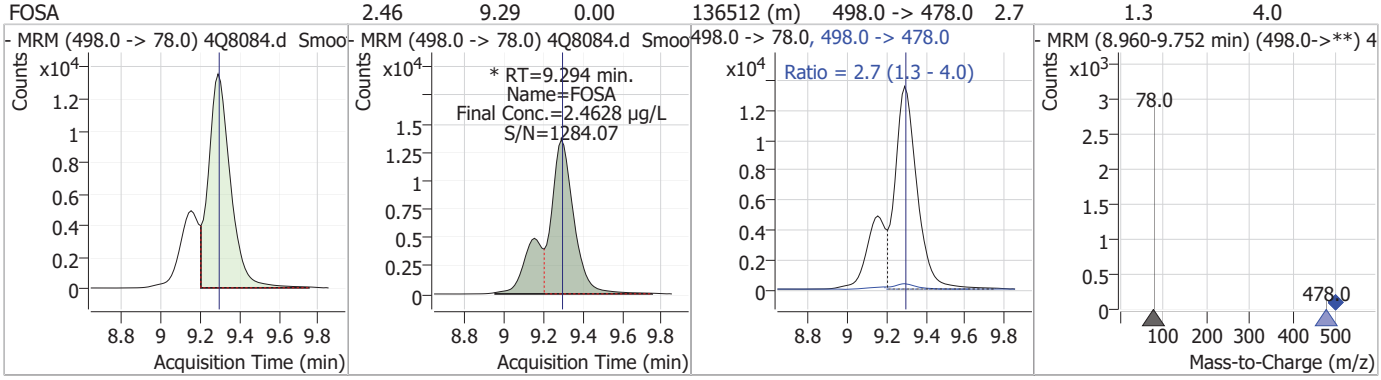
Perfluorinated Compounds by LC/MS/MS

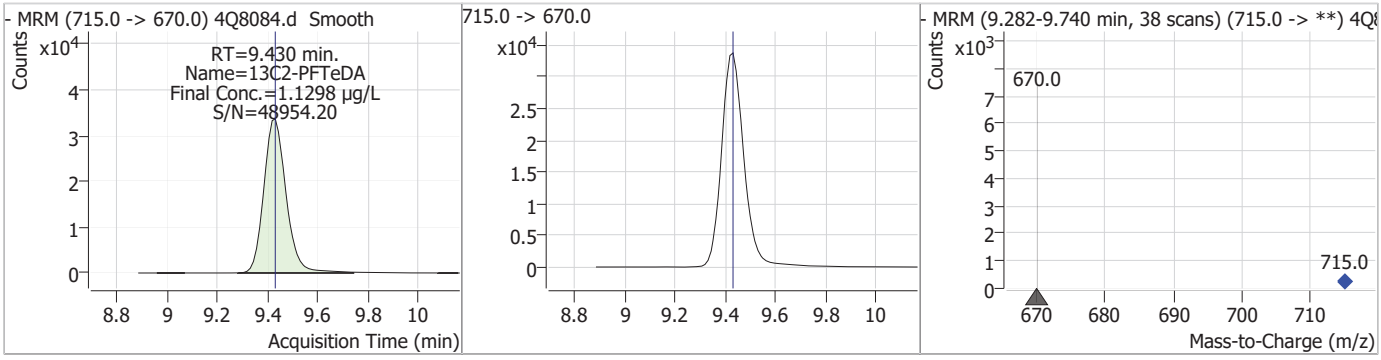
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.25	9.29	0.00	177003				



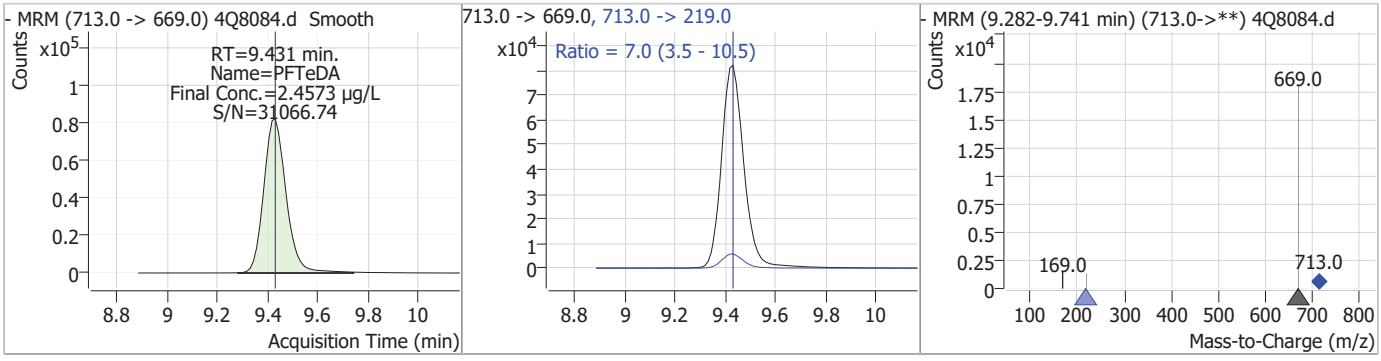
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.46	9.29	0.00	136512 (m)	498.0 -> 478.0	2.7	1.3	4.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.13	9.43	0.00	206635				

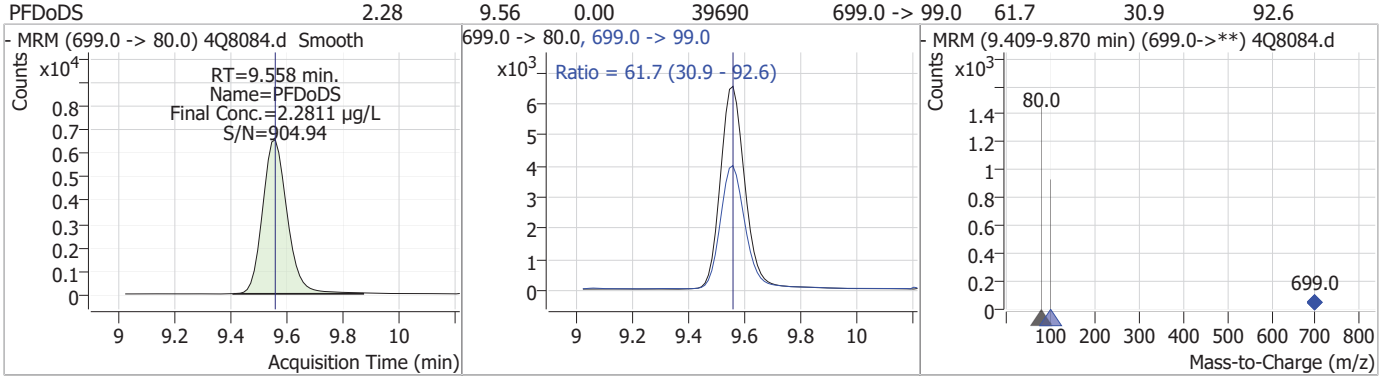


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.46	9.43	0.00	505416	713.0 -> 219.0	7.0	3.5	10.5

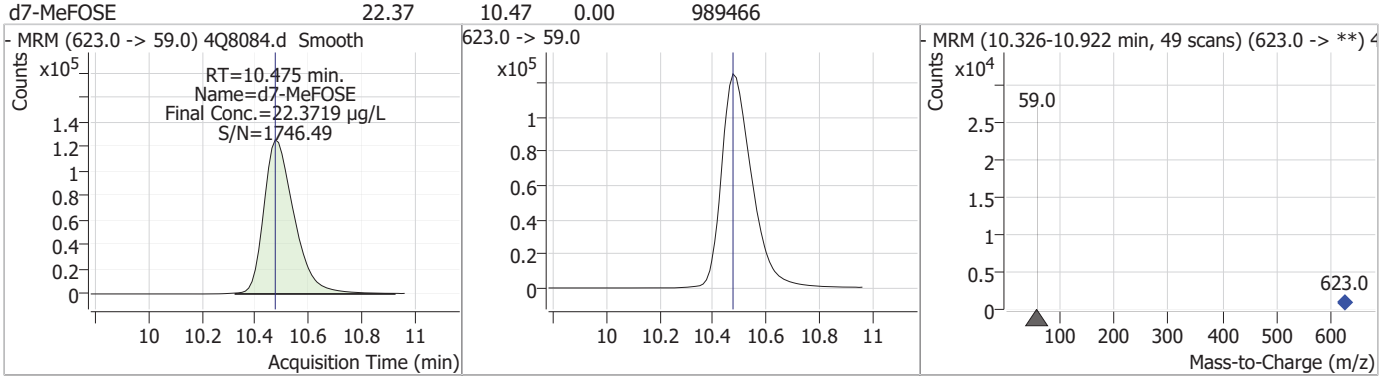


Perfluorinated Compounds by LC/MS/MS

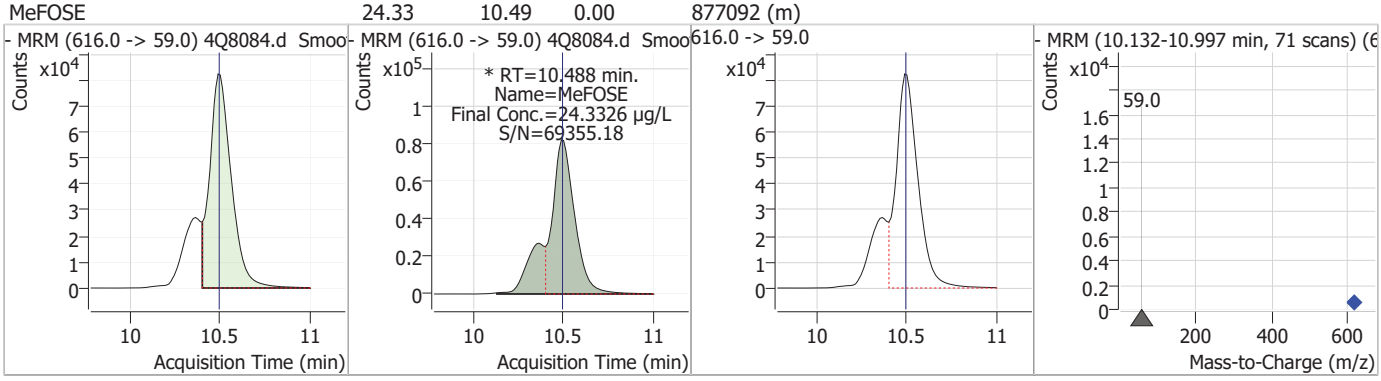
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.28	9.56	0.00	39690	699.0 -> 99.0	61.7	30.9	92.6



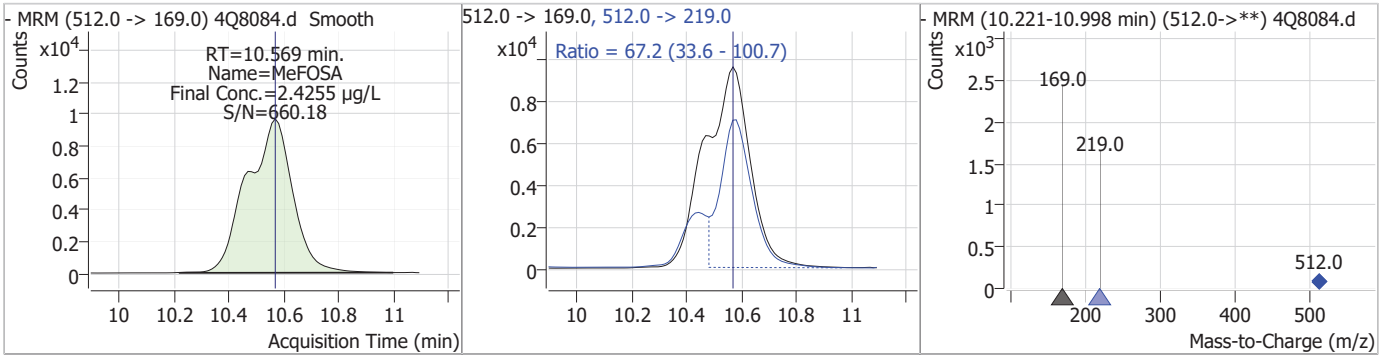
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.37	10.47	0.00	989466				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	24.33	10.49	0.00	877092 (m)				

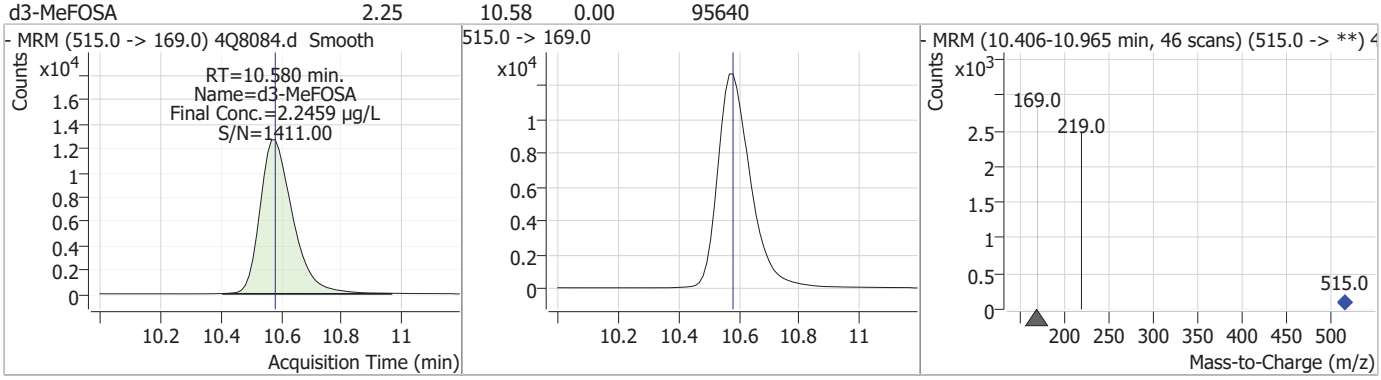


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.43	10.57	0.00	111185	512.0 -> 219.0	67.2	33.6	100.7

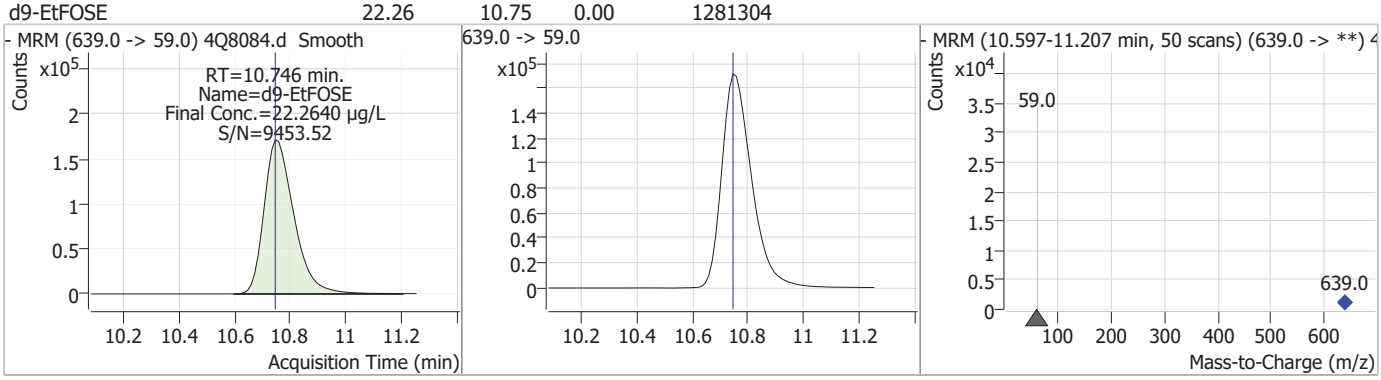


Perfluorinated Compounds by LC/MS/MS

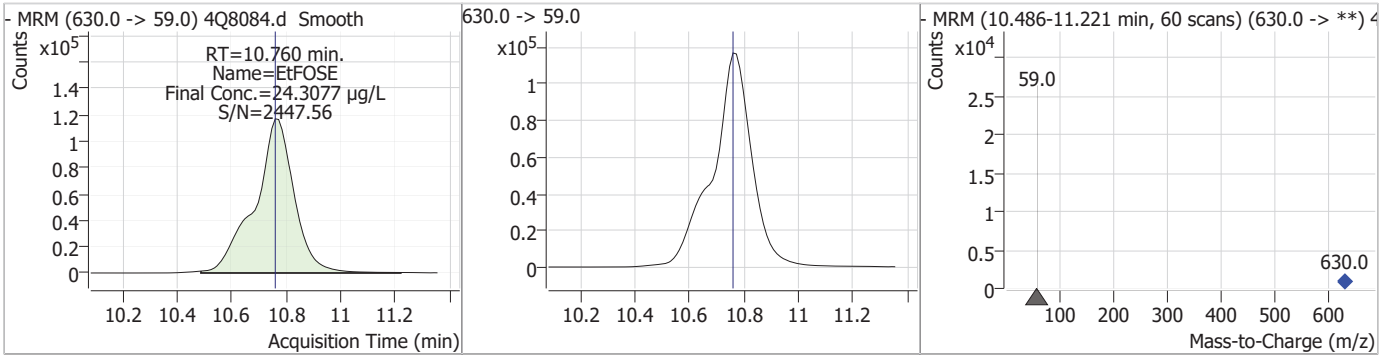
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.25	10.58	0.00	95640				



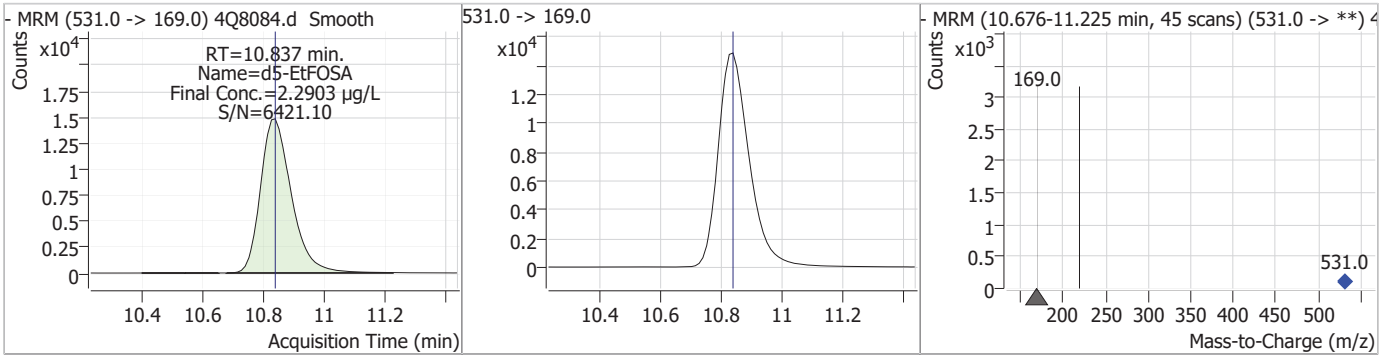
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.26	10.75	0.00	1281304				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	24.31	10.76	0.00	1177679				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.29	10.84	0.00	104912				



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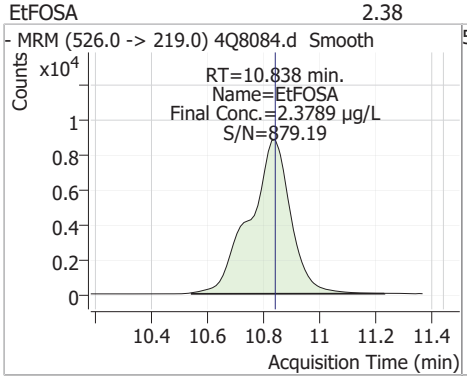
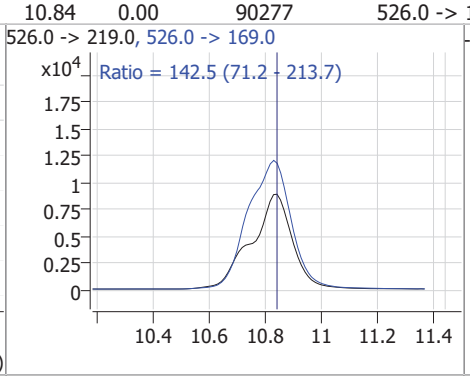
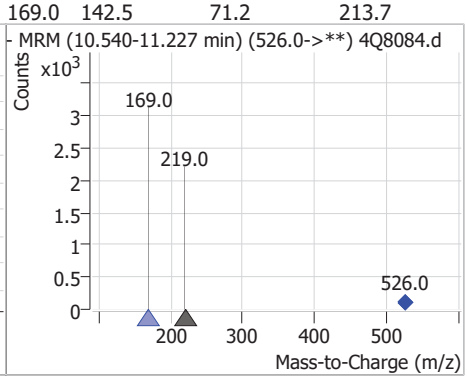
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.38	10.84	0.00	90277	526.0 -> 169.0	142.5	71.2	213.7







7.6.35

7

Manual Integration Approval Summary

Sample Number: T4Q137-ICC137
Lab FileID: 4Q8084.D
Injection Time: 04/29/25 17:53
Method: EPA 1633
Analyst approved: 04/30/25 02:22 Rensel John Romano
Supervisor approved: 04/30/25 07:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.93	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.03	Split peak
Perfluorononanoic acid	375-95-1		7.44	Split peak
MeFOSAA	2355-31-9		7.95	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.02	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.29	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 04/30/25 07:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8085.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 6:06:47 PM
Sample Name : IC137-5
Vial : P1-A6
DA Method File : 042925_1633_T4Q137.quantmethod.xml
Batch Name : t4q137.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.908	217.0 -> 172.0	802071	10.00 µg/L	0.000
M5-PFPeA	4.344	268.0 -> 223.0	415273	5.00 µg/L	0.000
M5-PFHxA	5.476	318.0 -> 273.0	286909	2.50 µg/L	-0.012
M4-PFHpA	6.316	367.0 -> 322.0	307541	2.50 µg/L	0.000
M8-PFOA	6.934	421.0 -> 376.0	474427	2.50 µg/L	0.000
M9-PFNA	7.440	472.0 -> 427.0	192889	1.25 µg/L	0.000
M6-PFDA	7.895	519.0 -> 474.0	196339	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	257476	1.25 µg/L	0.000
M2-PFDoDA	8.716	615.0 -> 570.0	239997	1.25 µg/L	0.000
M2-PFTeDA	9.430	715.0 -> 670.0	203359	1.25 µg/L	0.000
M8-FOSA	9.303	506.0 -> 78.0	174332	2.50 µg/L	0.012
M3-PFBS	5.393	302.0 -> 99.0	26569	2.50 µg/L	0.012
		302.0 -> 80.0	61666		
M3-PFHxS	7.024	402.0 -> 99.0	37741	2.50 µg/L	0.000
M8-PFOS	8.019	507.0 -> 99.0	40415	2.50 µg/L	0.000
M2-4:2FTS	5.190	329.0 -> 81.0	10944	5.00 µg/L	0.000
M2-6:2FTS	6.721	429.0 -> 81.0	21933	5.00 µg/L	0.000
M2-8:2FTS	7.696	529.0 -> 81.0	26930	5.00 µg/L	0.000
M3-MeFOSAA	7.952	573.0 -> 419.0	206434	5.00 µg/L	0.000
M3-HFPO-DA	5.816	287.0 -> 169.0	420595	10.00 µg/L	0.000
M5-EtFOSAA	8.135	589.0 -> 419.0	164113	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	960364	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1257153	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	101727	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	93114	2.50 µg/L	-0.012
13C4-PFOS	8.020	503.0 -> 80.0	60837	2.50 µg/L	0.000
13C3-PFBA	2.911	216.0 -> 172.0	310092	5.00 µg/L	0.000
18O2-PFHxS	7.023	403.0 -> 84.0	38890	2.50 µg/L	0.000
13C4-PFOA	6.935	417.0 -> 372.0	412661	2.50 µg/L	0.000
13C2-PFDA	7.895	515.0 -> 470.0	146429	1.25 µg/L	0.000
13C5-PFNA	7.440	468.0 -> 423.0	165392	1.25 µg/L	0.000
13C2-PFHxA	5.477	315.0 -> 270.0	232550	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.190	329.0 -> 81.0	10944	5.49 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 109.9%	
13C2-6:2FTS	6.721	429.0 -> 81.0	21933	5.32 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.4%	
13C2-8:2FTS	7.696	529.0 -> 81.0	26930	5.32 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.4%	
13C2-PFDoDA	8.716	615.0 -> 570.0	239997	1.33 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.2%	
13C2-PFTeDA	9.430	715.0 -> 670.0	203359	1.31 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.2%	
13C3-PFBS	5.393	302.0 -> 99.0	26569	2.63 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.2%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.024	402.0 -> 99.0	37741	2.55	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.2%			
13C4-PFBA	2.908	217.0 -> 172.0	802071	10.47	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 104.7%			
13C4-PFHpA	6.316	367.0 -> 322.0	307541	2.64	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.7%			
13C5-PFHxA	5.476	318.0 -> 273.0	286909	2.70	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.9%			
13C5-PFPeA	4.344	268.0 -> 223.0	415273	5.31	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.1%			
13C6-PFDA	7.895	519.0 -> 474.0	196339	1.35	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 108.0%			
13C7-PFUnDA	8.310	570.0 -> 525.0	257476	1.37	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 109.8%			
13C8-FOSA	9.303	506.0 -> 78.0	174332	2.67	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.0%			
13C8-PFOA	6.934	421.0 -> 376.0	474427	2.65	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.9%			
13C8-PFOS	8.019	507.0 -> 99.0	40415	2.62	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.8%			
13C9-PFNA	7.440	472.0 -> 427.0	192889	1.29	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.6%			
d3-MeFOSAA	7.952	573.0 -> 419.0	206434	5.42	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.5%			
13C3-HFPO-DA	5.816	287.0 -> 169.0	420595	10.50	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 105.0%			
d3-MeFOSA	10.567	515.0 -> 169.0	93114	2.64	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.5%			
d5-EtFOSAA	8.135	589.0 -> 419.0	164113	5.55	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 110.9%			
d7-MeFOSE	10.475	623.0 -> 59.0	960364	26.19	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 104.8%			
d9-EtFOSE	10.746	639.0 -> 59.0	1257153	26.35	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 105.4%			
d5-EtFOSA	10.837	531.0 -> 169.0	101727	2.68	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.1%			
Target Compounds							QValue
4:2FTS	5.191	327.0 -> 307.0	305458	18.12	µg/L		98
		327.0 -> 81.0	142508				
6:2FTS	6.721	427.0 -> 407.0	351264	19.03	µg/L		100
		427.0 -> 81.0	166935				
8:2FTS	7.696	527.0 -> 507.0	331382	18.97	µg/L		98
		527.0 -> 81.0	131780				
EtFOSAA	8.136	584.0 -> 419.0	127631	4.77	µg/L	m	100
		584.0 -> 483.0	68706				
FOSA	9.294	498.0 -> 78.0	269162	4.93	µg/L	m	99
		498.0 -> 478.0	6423				
MeFOSAA	7.953	570.0 -> 419.0	149469	4.74	µg/L	m	96
		570.0 -> 512.0	48956				
PFBA	2.914	213.0 -> 169.0	435774	19.81	µg/L		100
PFBS	5.382	299.0 -> 80.0	106779	4.28	µg/L		97
		299.0 -> 99.0	43044				
PFDA	7.896	513.0 -> 469.0	601725	4.82	µg/L		97
		513.0 -> 219.0	142771				
PFDoDA	8.716	613.0 -> 569.0	790956	4.89	µg/L		99
		613.0 -> 319.0	105651				

Perfluorinated Compounds by LC/MS/MS

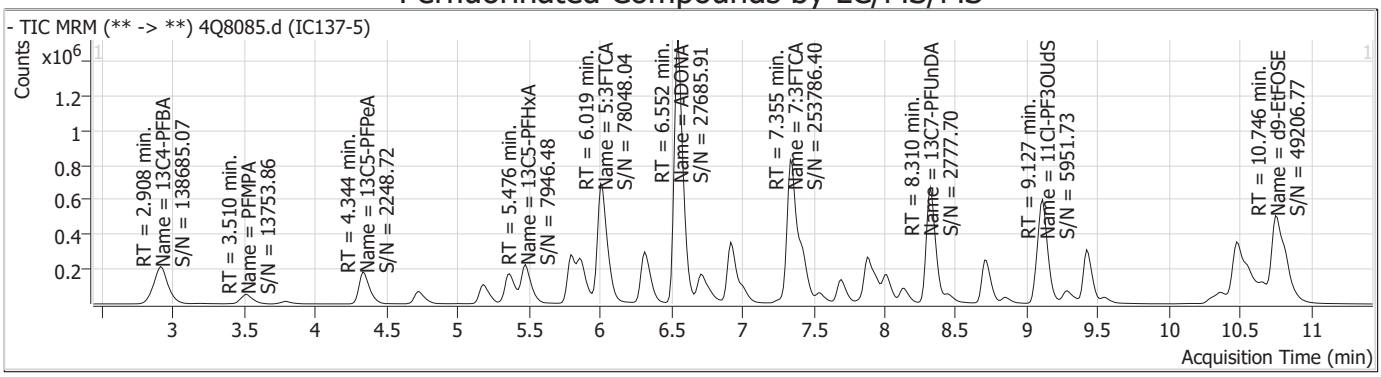
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.854	599.0 -> 80.0	92041	4.53	µg/L		94
		599.0 -> 99.0	51632				
PFHpA	6.317	363.0 -> 319.0	773916	4.89	µg/L		99
		363.0 -> 169.0	158671				
PFHpS	7.553	449.0 -> 80.0	133258	4.73	µg/L		100
		449.0 -> 99.0	72324				
PFHxA	5.479	313.0 -> 269.0	504548	4.83	µg/L		99
		313.0 -> 119.0	16648				
PFHxS	7.025	399.0 -> 80.0	125335	4.41	µg/L	m	99
		399.0 -> 99.0	66050				
PFNA	7.441	463.0 -> 419.0	496080	5.00	µg/L	m	99
		463.0 -> 219.0	178202				
PFNS	8.461	549.0 -> 80.0	115578	4.73	µg/L		96
		549.0 -> 99.0	72961				
PFOA	6.935	413.0 -> 369.0	653009	4.90	µg/L	m	100
		413.0 -> 169.0	188104				
PFOS	8.021	499.0 -> 80.0	127120	4.51	µg/L	m	98
		499.0 -> 99.0	70359				
PFPeA	4.346	263.0 -> 219.0	543255	9.86	µg/L		100
PFPeS	6.355	349.0 -> 80.0	123882	4.46	µg/L		100
		349.0 -> 99.0	62885				
PFTeDA	9.431	713.0 -> 669.0	985942	4.87	µg/L		98
		713.0 -> 219.0	74764				
PFTrDA	9.087	663.0 -> 619.0	899435	4.91	µg/L		99
		663.0 -> 369.0	57184				
PFUnDA	8.312	563.0 -> 519.0	650032	4.92	µg/L		99
		563.0 -> 269.0	125421				
11Cl-PF3OUdS	9.127	631.0 -> 451.0	1531219	18.74	µg/L		99
		633.0 -> 453.0	470362				
9Cl-PF3ONS	8.339	531.0 -> 351.0	1621885	18.60	µg/L		99
		533.0 -> 353.0	487924				
ADONA	6.552	377.0 -> 251.0	5122486	17.95	µg/L		100
		377.0 -> 85.0	1687106				
HFPO-DA	5.817	285.0 -> 169.0	760718	19.96	µg/L		98
		285.0 -> 185.0	86771				
3:3FTCA	3.794	241.0 -> 177.0	72151	24.03	µg/L		100
		241.0 -> 117.0	6146				
5:3FTCA	6.019	341.0 -> 237.0	1996163	123.15	µg/L		99
		341.0 -> 217.0	1422574				
7:3FTCA	7.355	441.0 -> 337.0	2846684	120.41	µg/L		100
		441.0 -> 317.0	1276088				
EtFOSA	10.838	526.0 -> 219.0	177311	4.82	µg/L		99
		526.0 -> 169.0	250704				
EtFOSE	10.760	630.0 -> 59.0	2277587	47.91	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	218728	4.90	µg/L		99
		512.0 -> 219.0	145284				
MeFOSE	10.488	616.0 -> 59.0	1713606	48.98	µg/L	m	100
PFDoDS	9.558	699.0 -> 80.0	77713	4.72	µg/L		97
		699.0 -> 99.0	49642				
NFDHA	5.370	295.0 -> 201.0	129270	9.53	µg/L		93
		201.0 -> 85.0	524671				
		295.0 -> 85.0	32037				
PFMBA	4.735	279.0 -> 85.0	368953	9.82	µg/L		100
PFMPA	3.510	229.0 -> 85.0	321369	9.86	µg/L		100
PFEESA	5.872	315.0 -> 135.0	850517	8.60	µg/L		99
		315.0 -> 69.0	69818				

Perfluorinated Compounds by LC/MS/MS

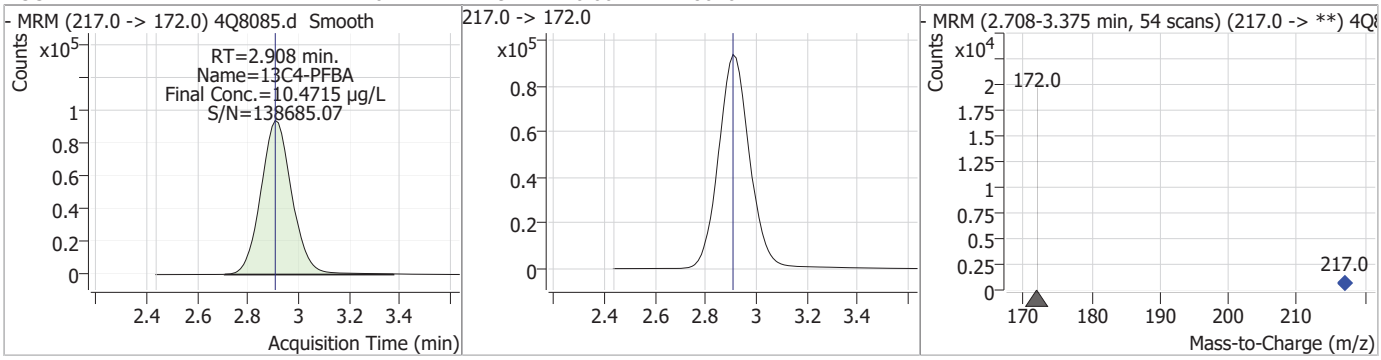
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

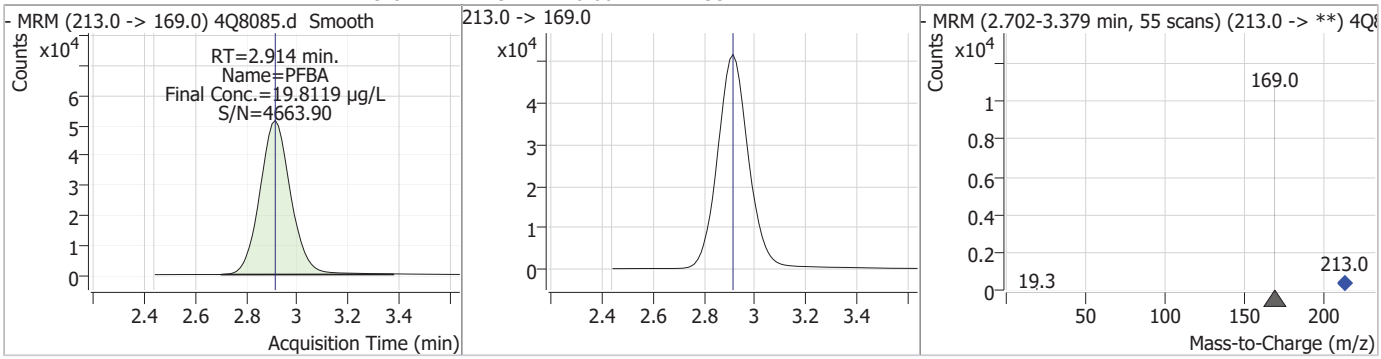
Perfluorinated Compounds by LC/MS/MS



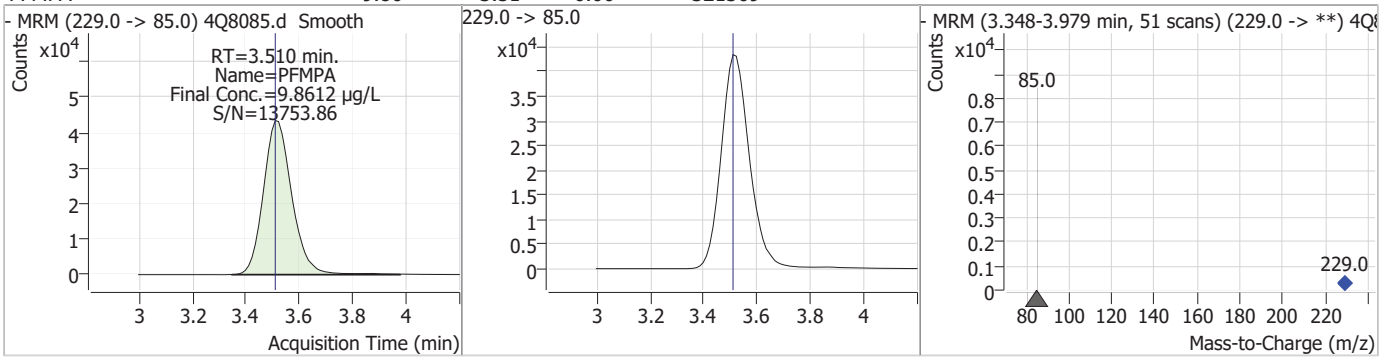
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.47	2.91	0.00	802071				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	19.81	2.91	0.00	435774				

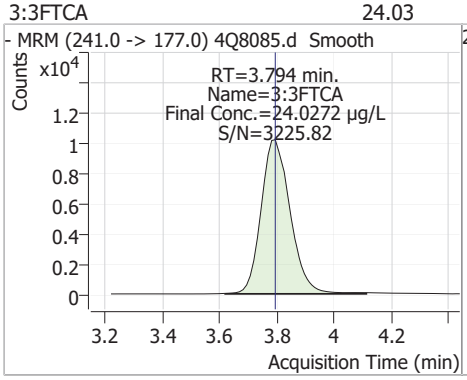


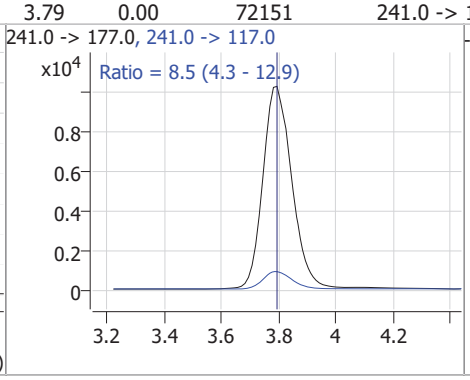
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	9.86	3.51	0.00	321369				

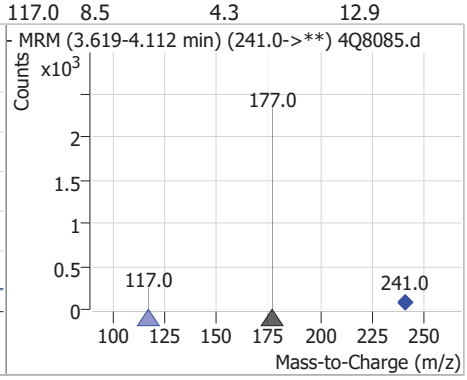


Perfluorinated Compounds by LC/MS/MS

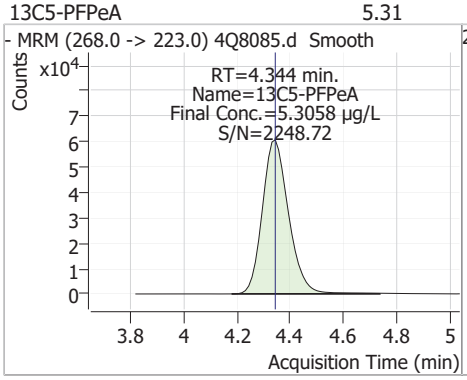
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	24.03	3.79	0.00	72151	241.0 -> 117.0	8.5	4.3	12.9

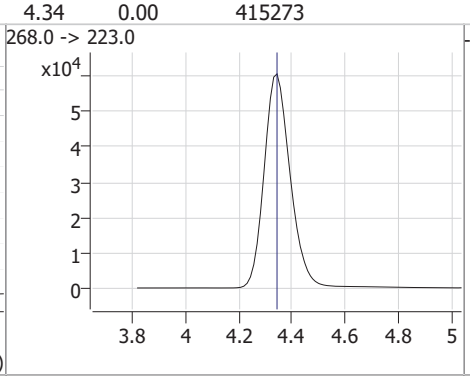


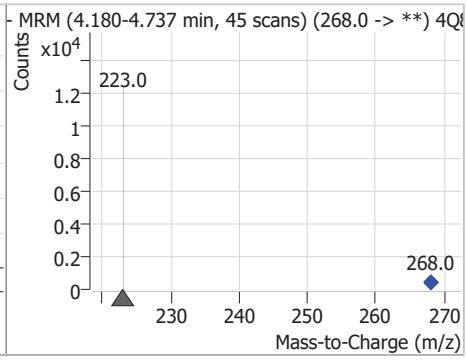




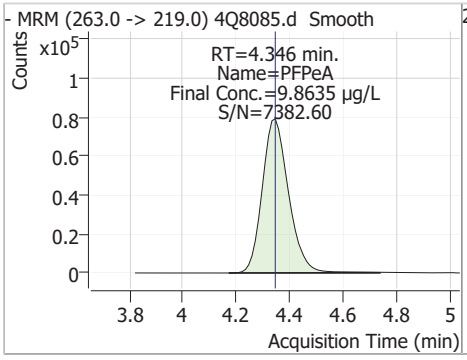
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.31	4.34	0.00	415273				

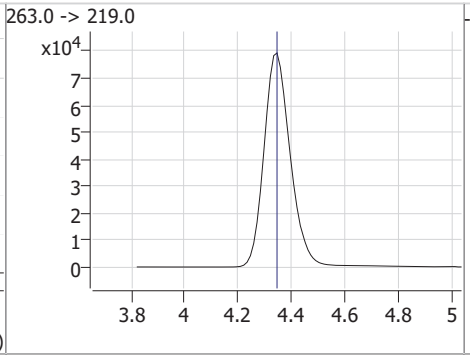


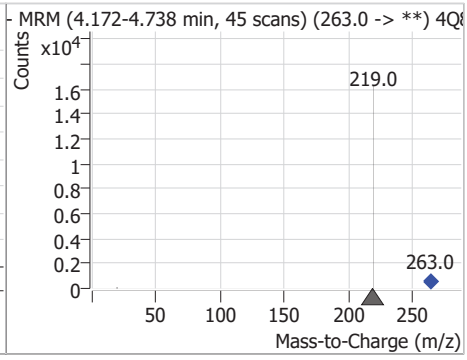




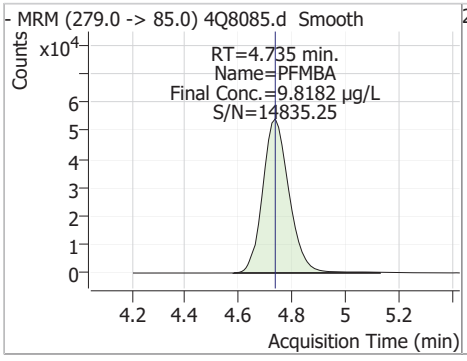
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	9.86	4.35	0.00	543255				

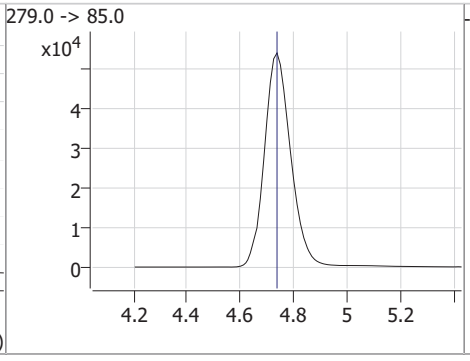


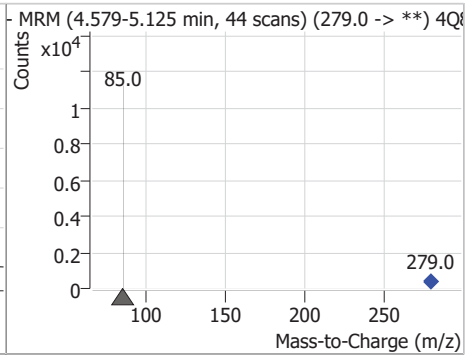




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	9.82	4.73	0.00	368953				







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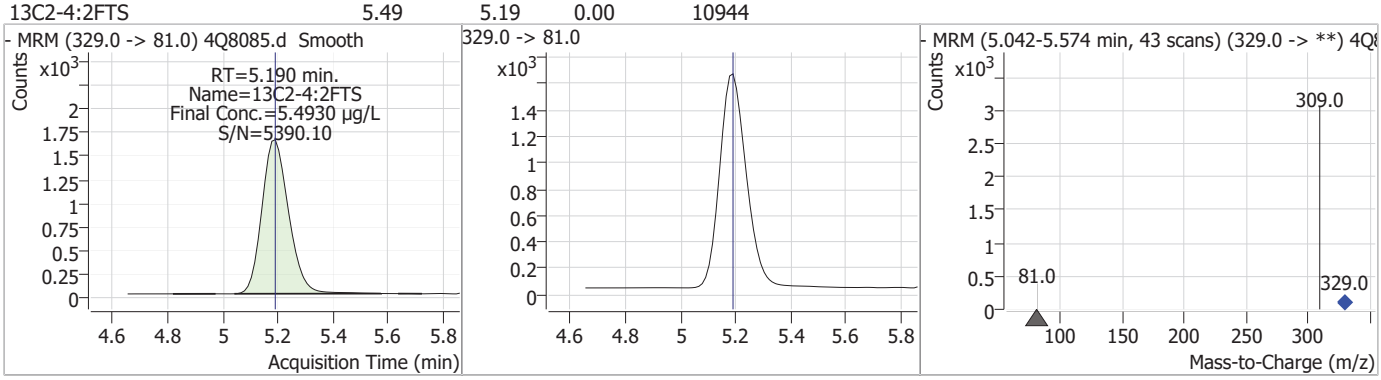
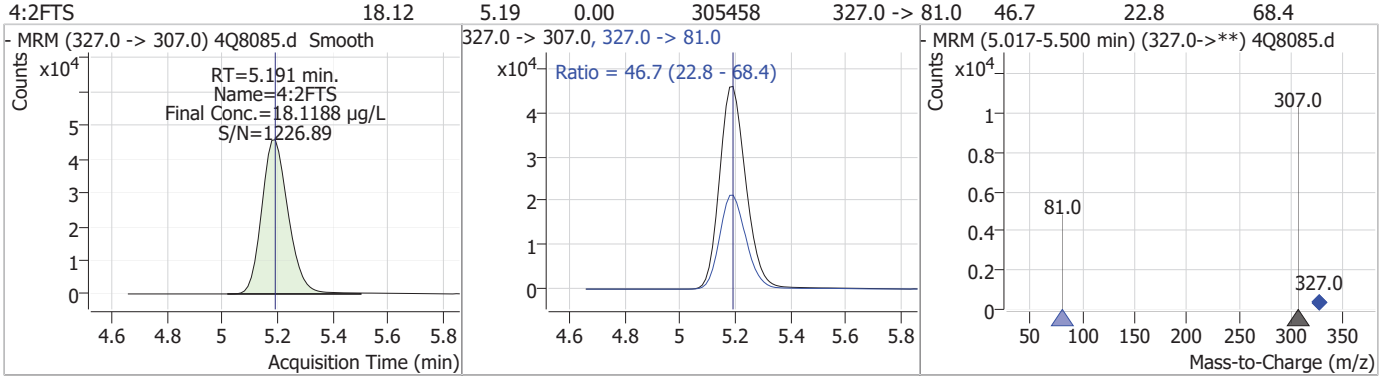
Perfluorinated Compounds by LC/MS/MS

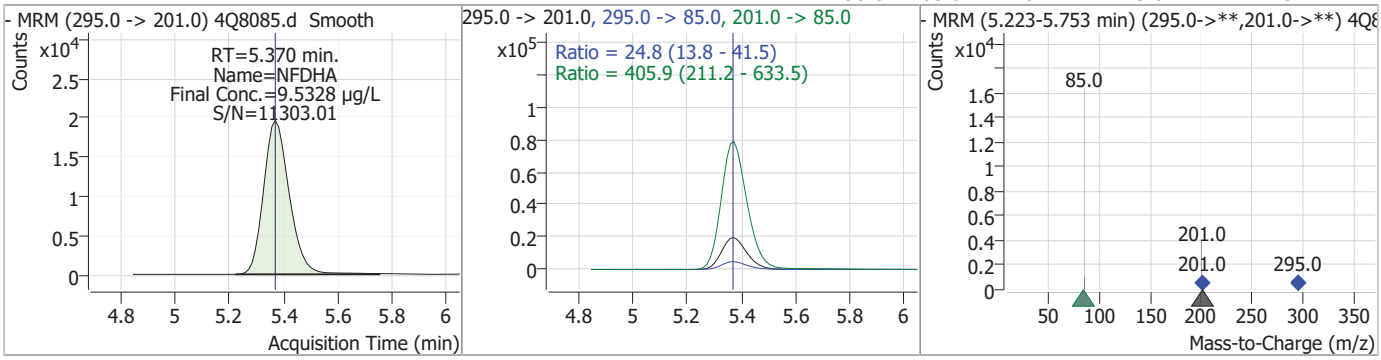
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.49	5.19	0.00	10944				



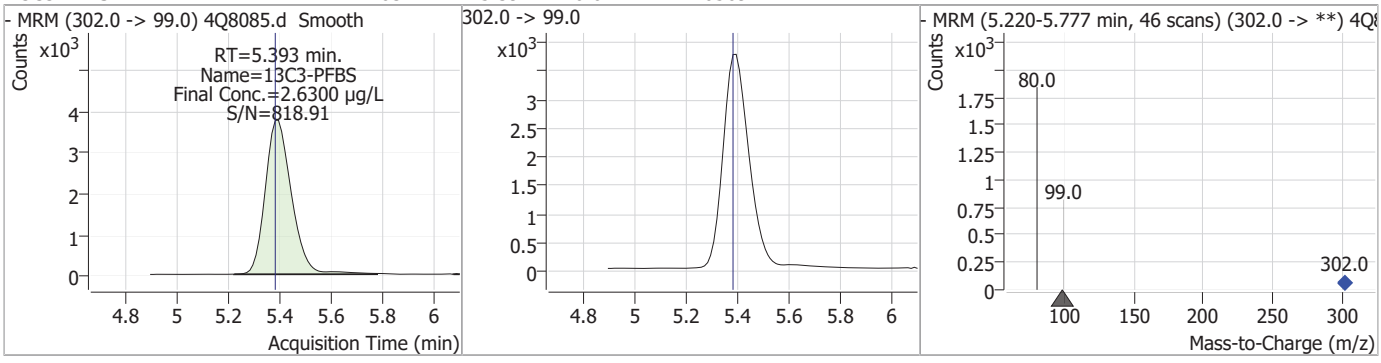
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	18.12	5.19	0.00	305458	327.0 -> 81.0	46.7	22.8	68.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	9.53	5.37	0.00	129270	201.0 -> 85.0	405.9	211.2	633.5
					295.0 -> 85.0	24.8	13.8	41.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.63	5.39	0.01	26569				



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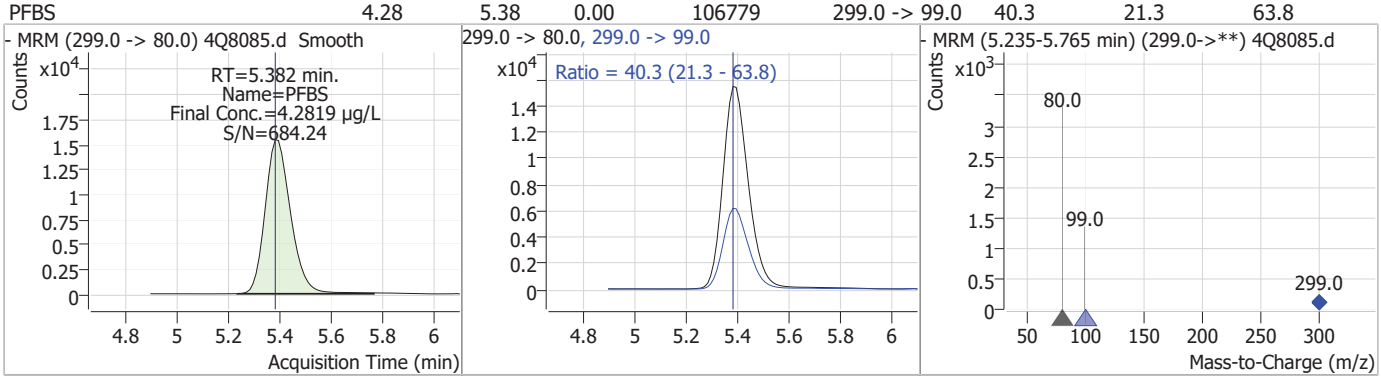
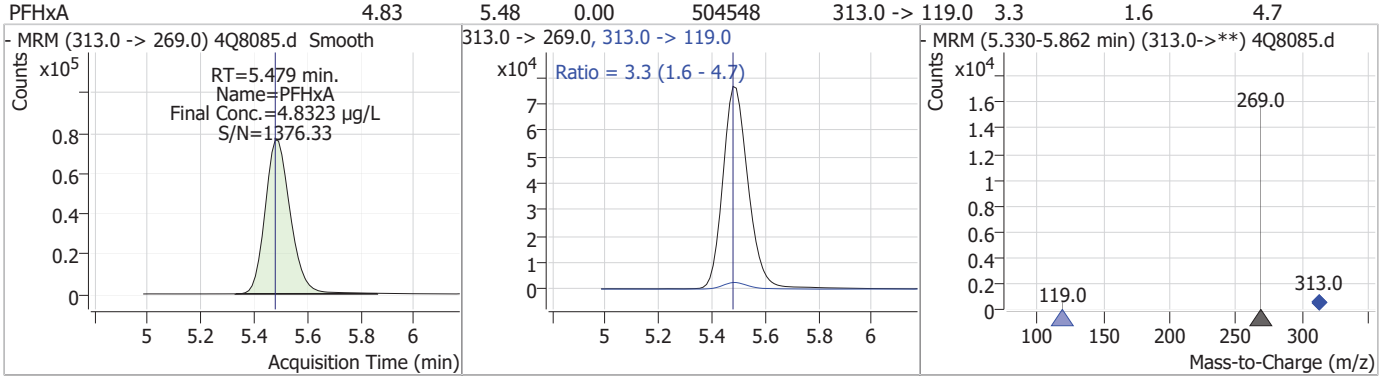
Perfluorinated Compounds by LC/MS/MS

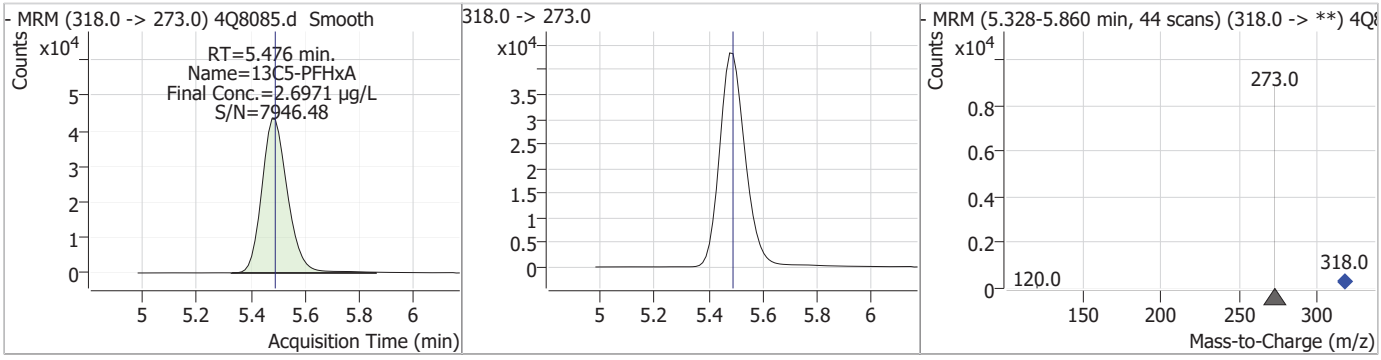
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.28	5.38	0.00	106779	299.0 -> 99.0	40.3	21.3	63.8



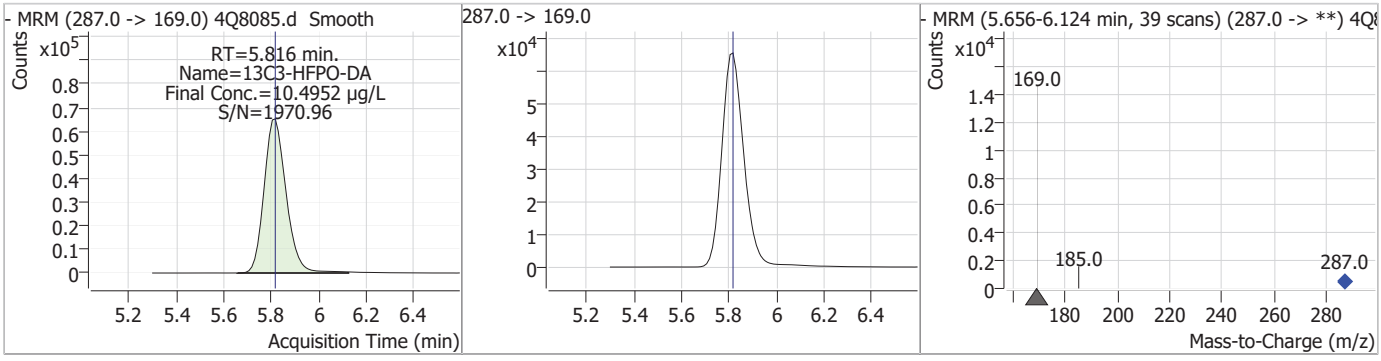
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	4.83	5.48	0.00	504548	313.0 -> 119.0	3.3	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.70	5.48	-0.01	286909				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.50	5.82	0.00	420595				



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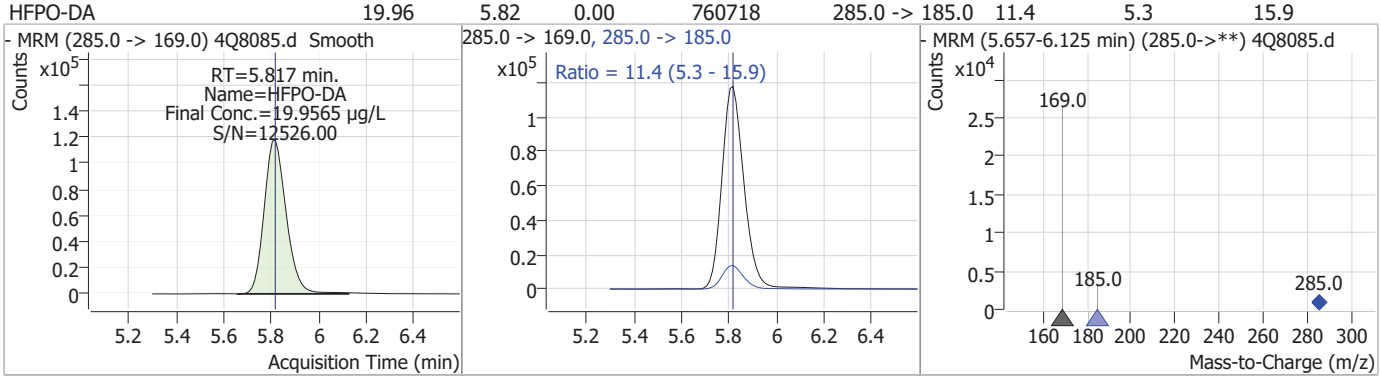
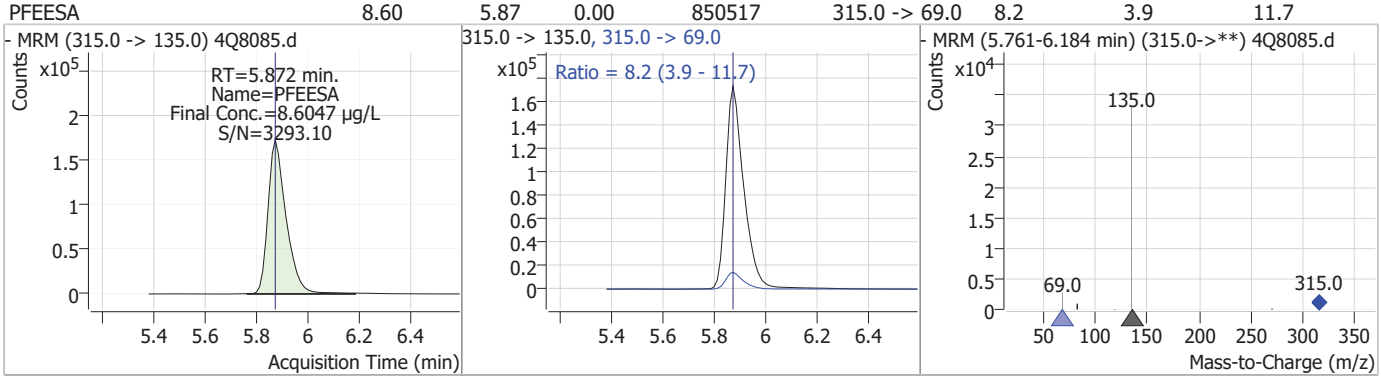
Perfluorinated Compounds by LC/MS/MS

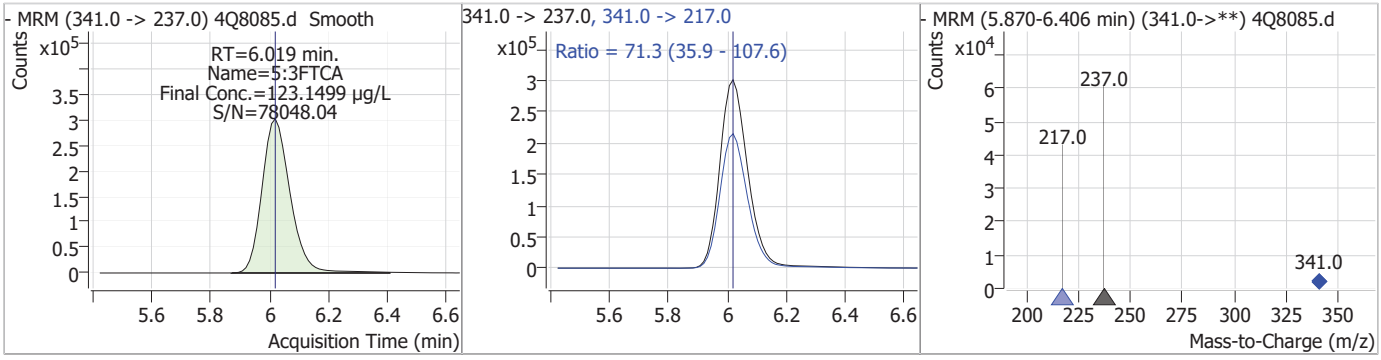
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	19.96	5.82	0.00	760718	285.0 -> 185.0	11.4	5.3	15.9



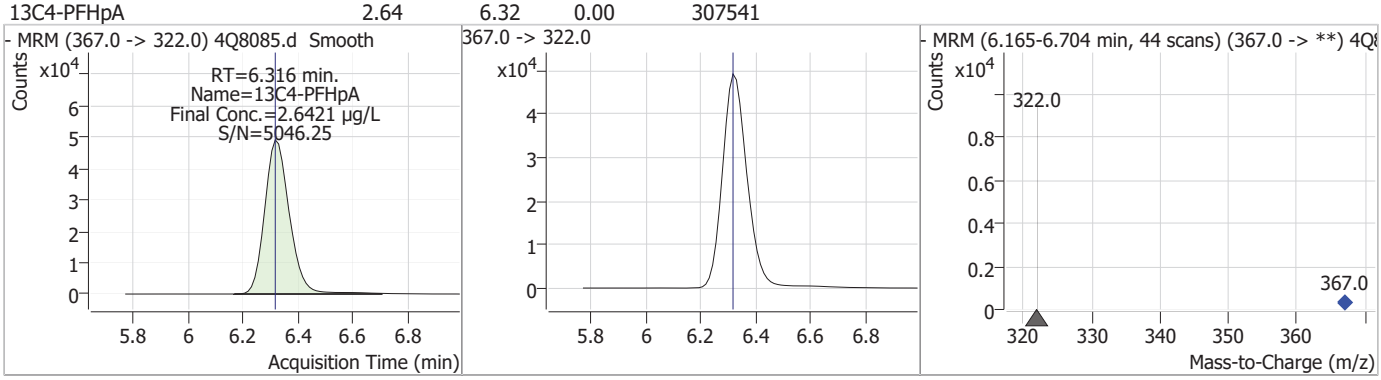
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	8.60	5.87	0.00	850517	315.0 -> 69.0	8.2	3.9	11.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	123.15	6.02	0.00	1996163	341.0 -> 217.0	71.3	35.9	107.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.64	6.32	0.00	307541				



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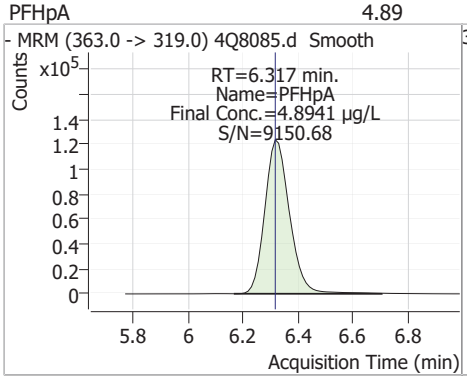
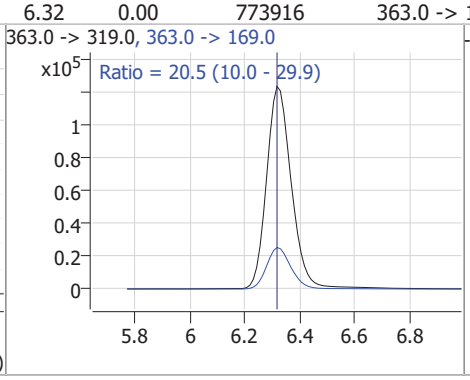
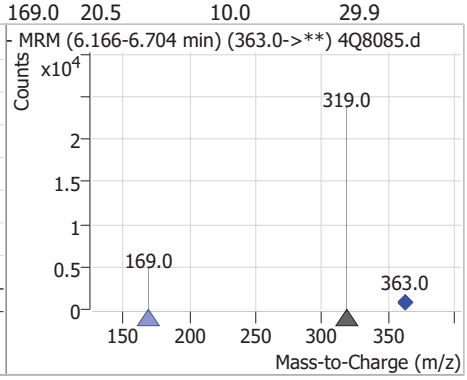
Perfluorinated Compounds by LC/MS/MS

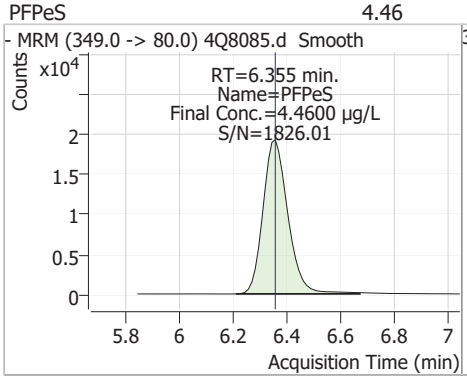
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	4.89	6.32	0.00	773916	363.0 -> 169.0	20.5	10.0	29.9

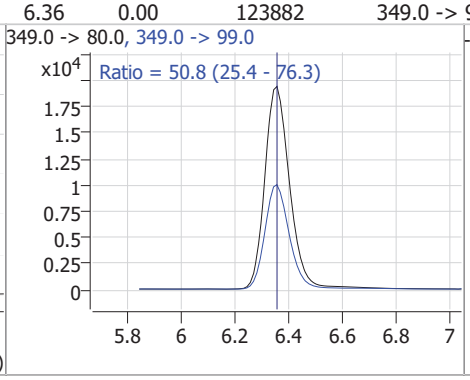


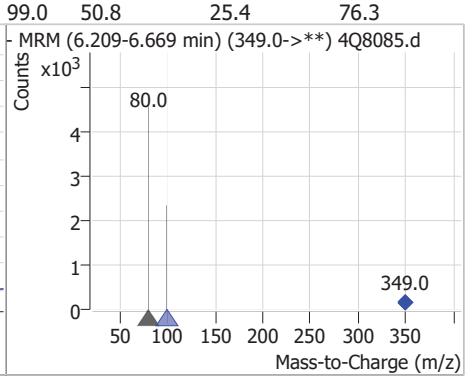




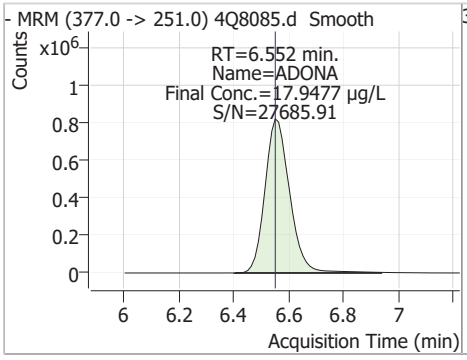
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	4.46	6.36	0.00	123882	349.0 -> 99.0	50.8	25.4	76.3

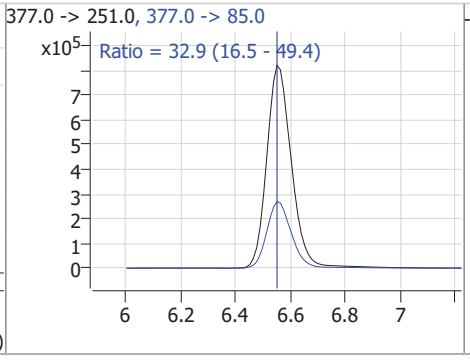


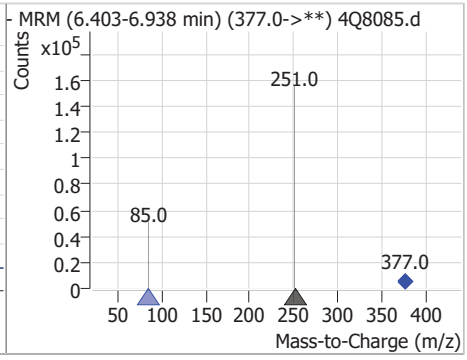




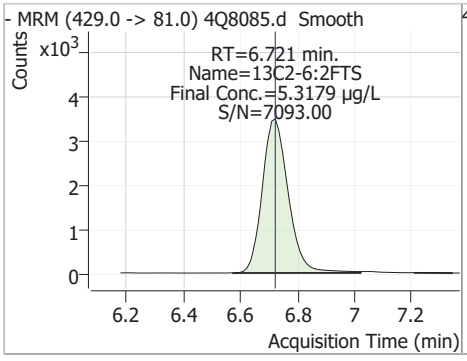
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	17.95	6.55	0.00	5122486	377.0 -> 85.0	32.9	16.5	49.4

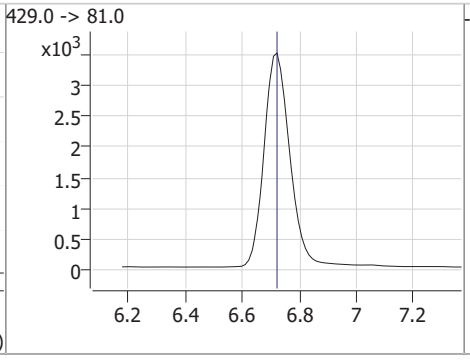


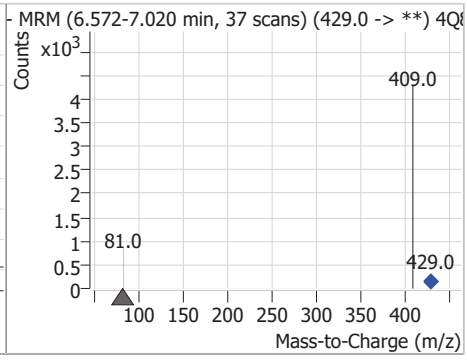




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.32	6.72	0.00	21933				

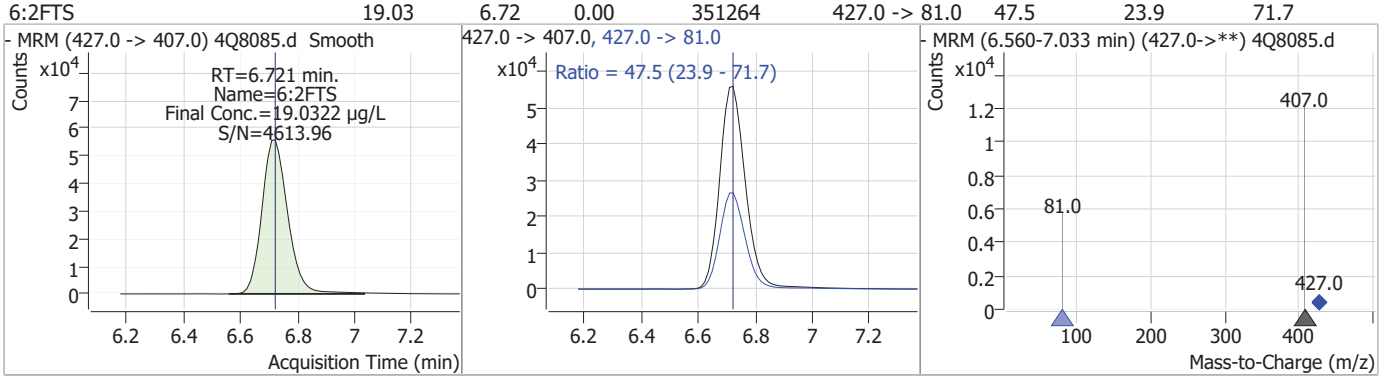




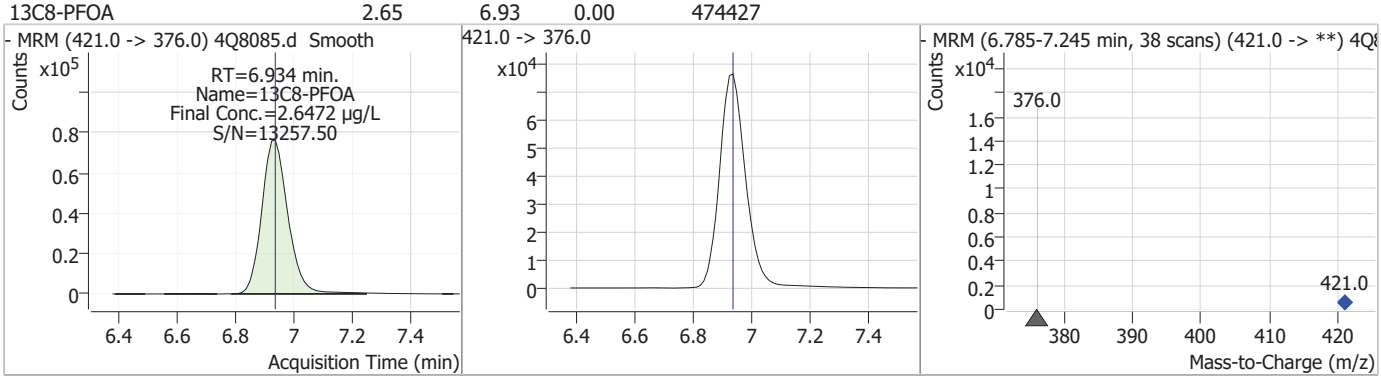


Perfluorinated Compounds by LC/MS/MS

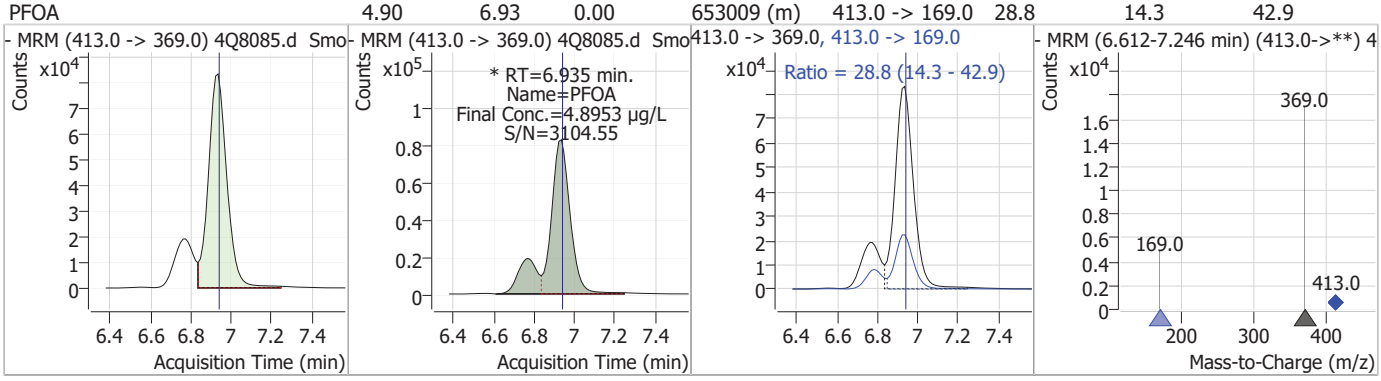
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	19.03	6.72	0.00	351264	427.0 -> 81.0	47.5	23.9	71.7



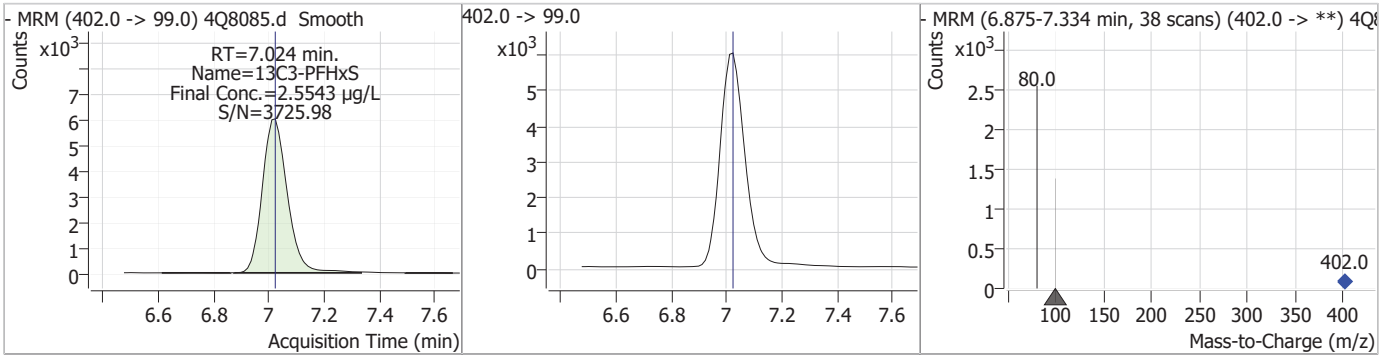
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.65	6.93	0.00	474427				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	4.90	6.93	0.00	653009 (m)	413.0 -> 169.0	28.8	14.3	42.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.55	7.02	0.00	37741				



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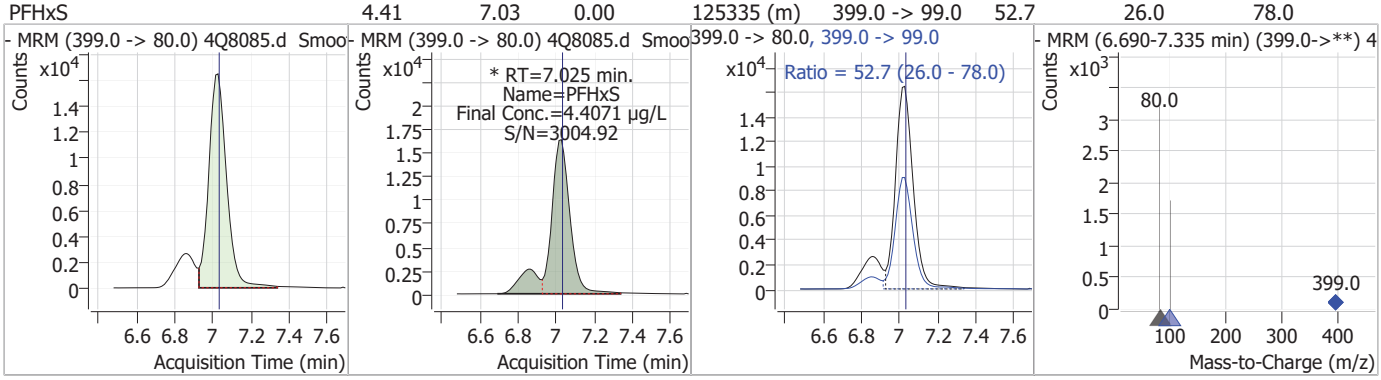
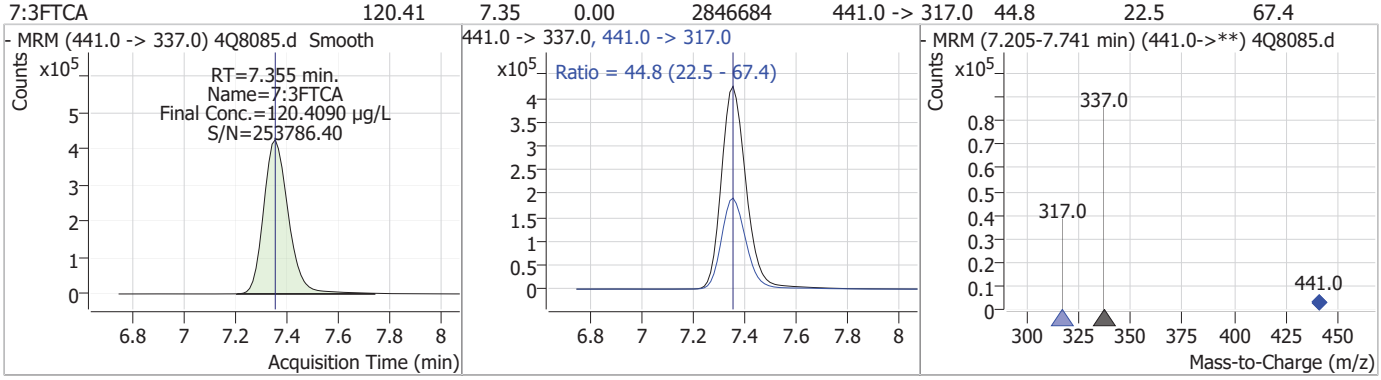
Perfluorinated Compounds by LC/MS/MS

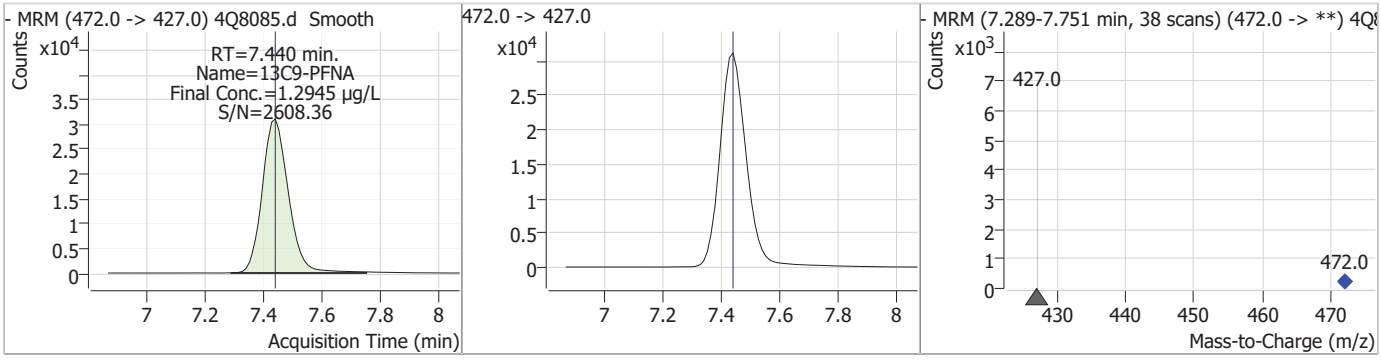
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	4.41	7.03	0.00	125335 (m)	399.0 -> 99.0	52.7	26.0	78.0



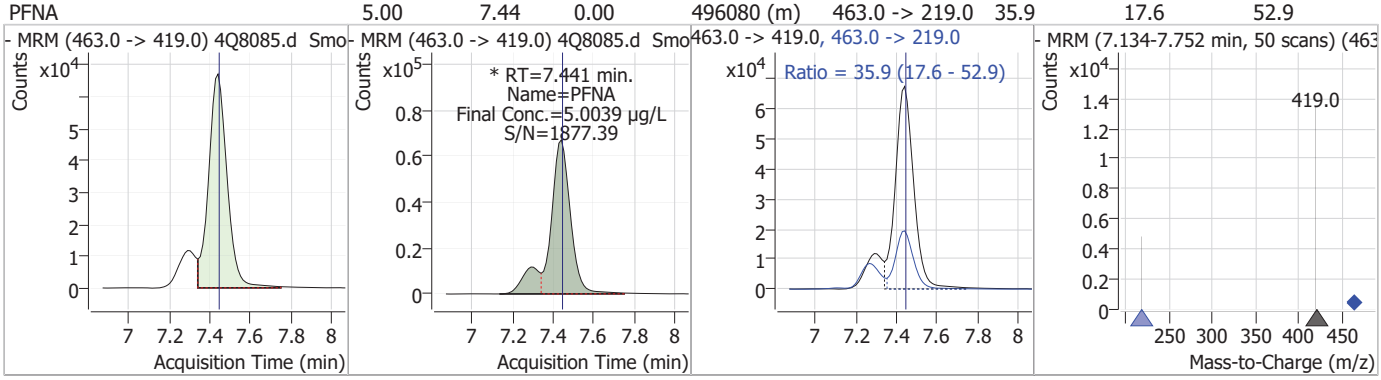
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	120.41	7.35	0.00	2846684	441.0 -> 317.0	44.8	22.5	67.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.29	7.44	0.00	192889				

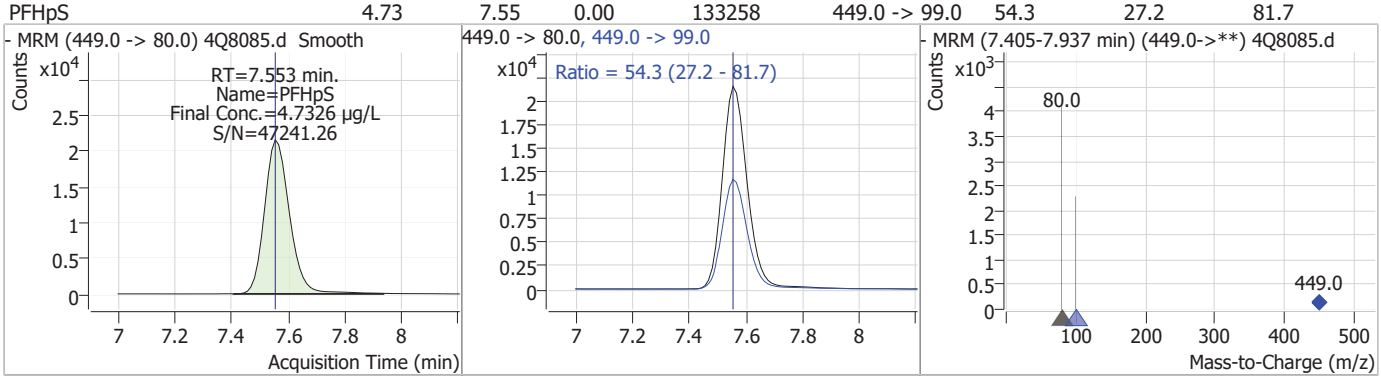


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	5.00	7.44	0.00	496080 (m)	463.0 -> 219.0	35.9	17.6	52.9

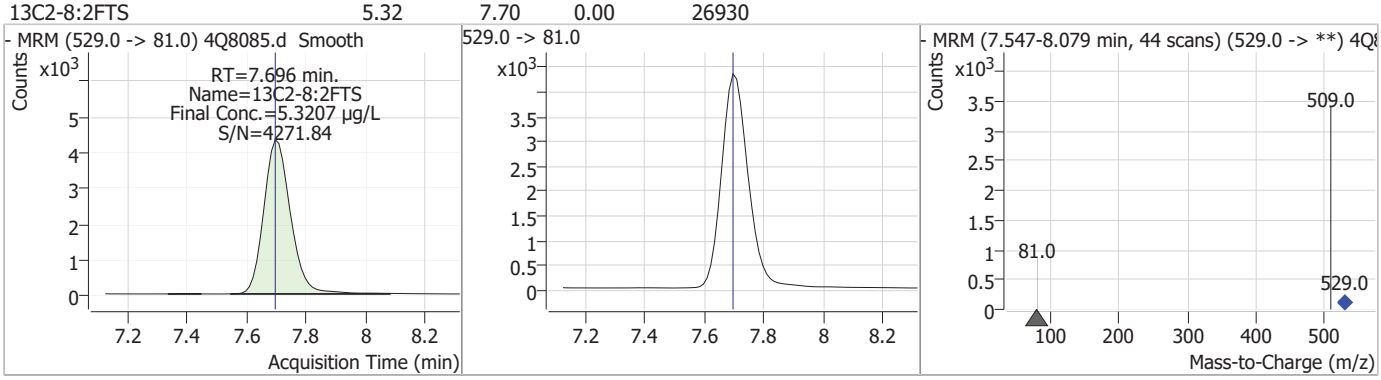


Perfluorinated Compounds by LC/MS/MS

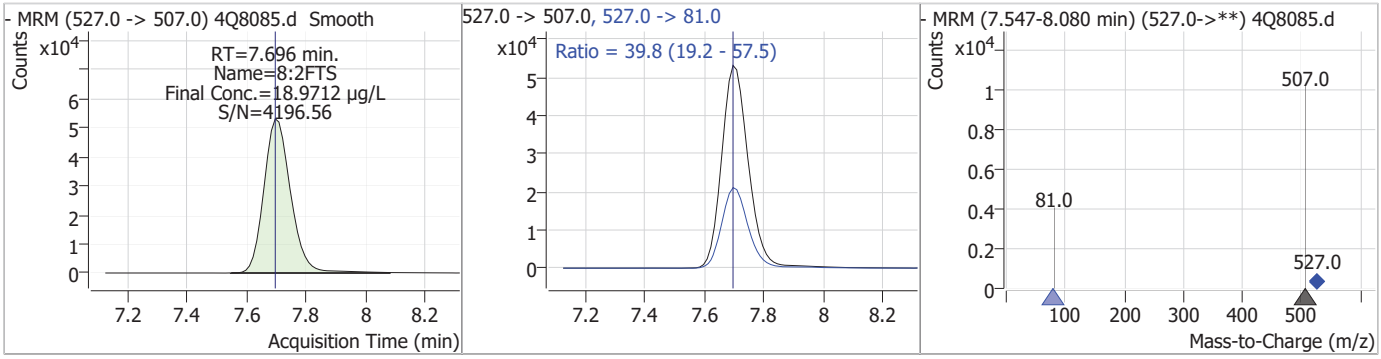
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	4.73	7.55	0.00	133258	449.0 -> 99.0	54.3	27.2	81.7



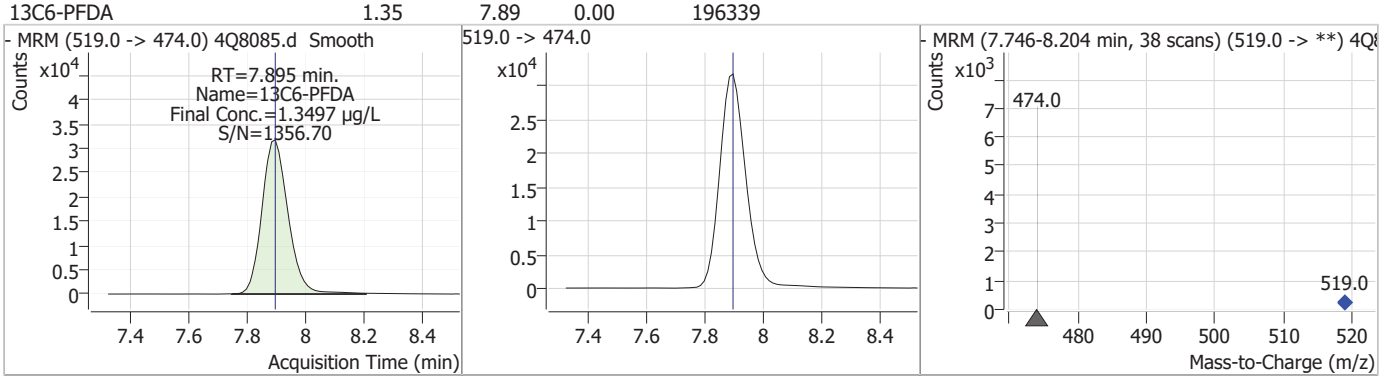
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.32	7.70	0.00	26930				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	18.97	7.70	0.00	331382	527.0 -> 81.0	39.8	19.2	57.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.35	7.89	0.00	196339				



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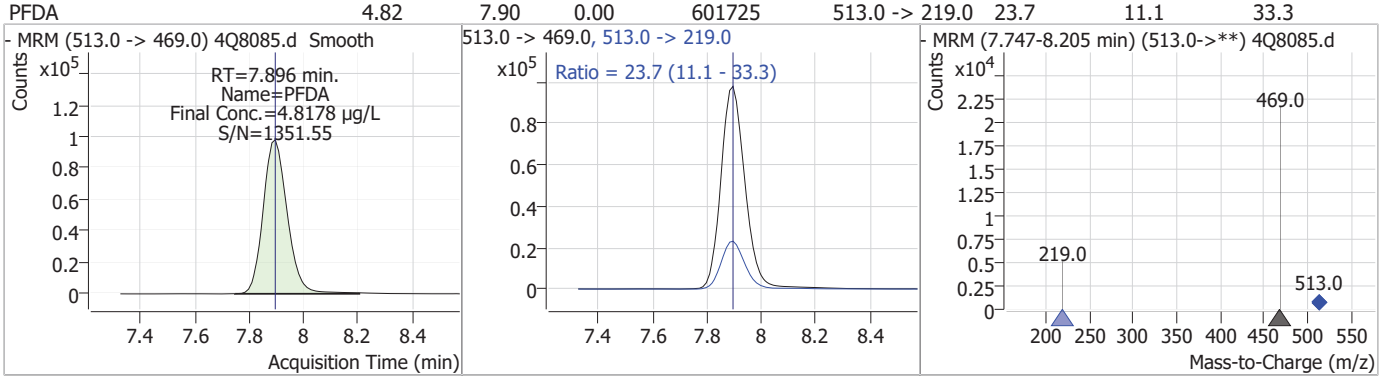
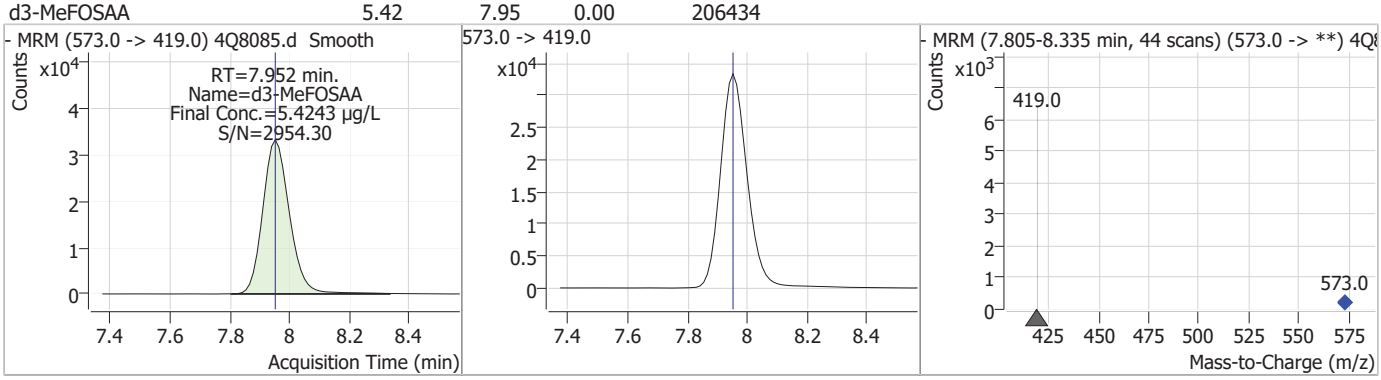
Perfluorinated Compounds by LC/MS/MS

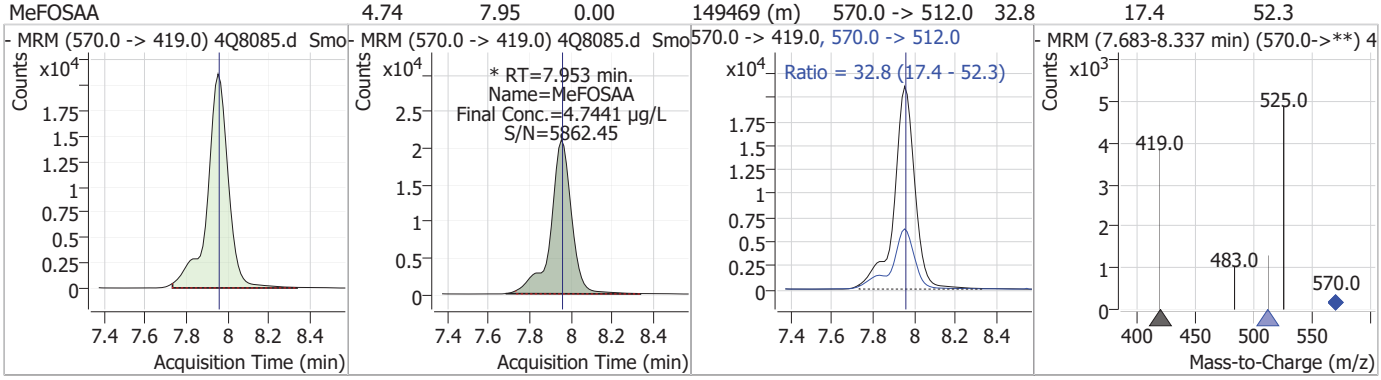
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	4.82	7.90	0.00	601725	513.0 -> 219.0	23.7	11.1	33.3



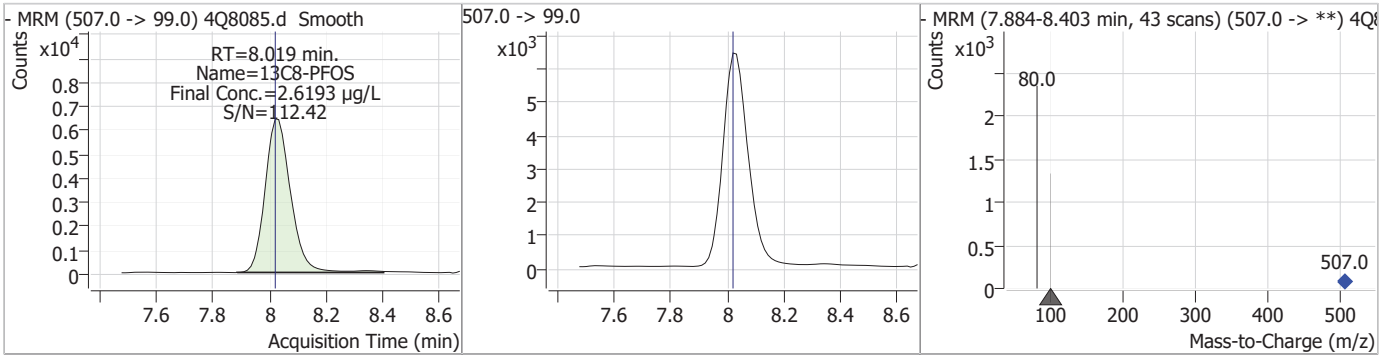
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.42	7.95	0.00	206434				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	4.74	7.95	0.00	149469 (m)	570.0 -> 512.0	32.8	17.4	52.3

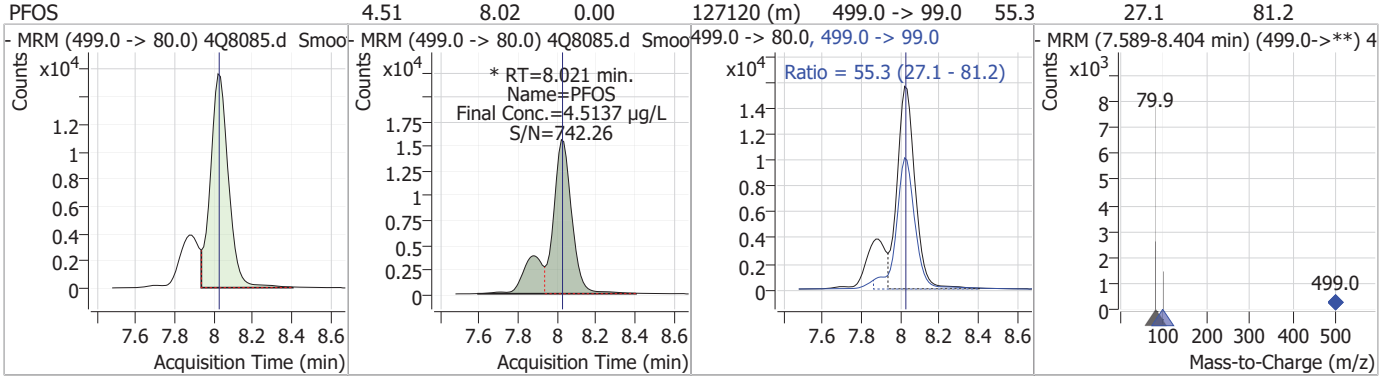


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.62	8.02	0.00	40415				

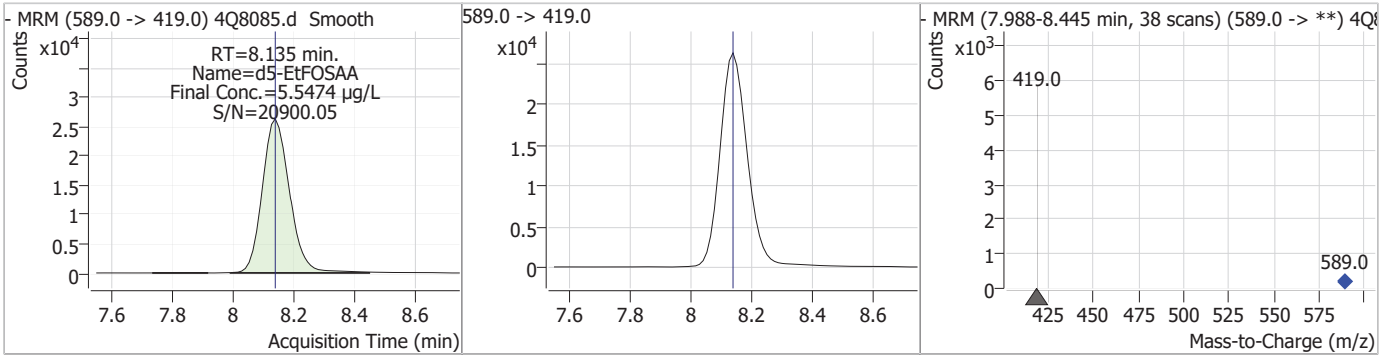


Perfluorinated Compounds by LC/MS/MS

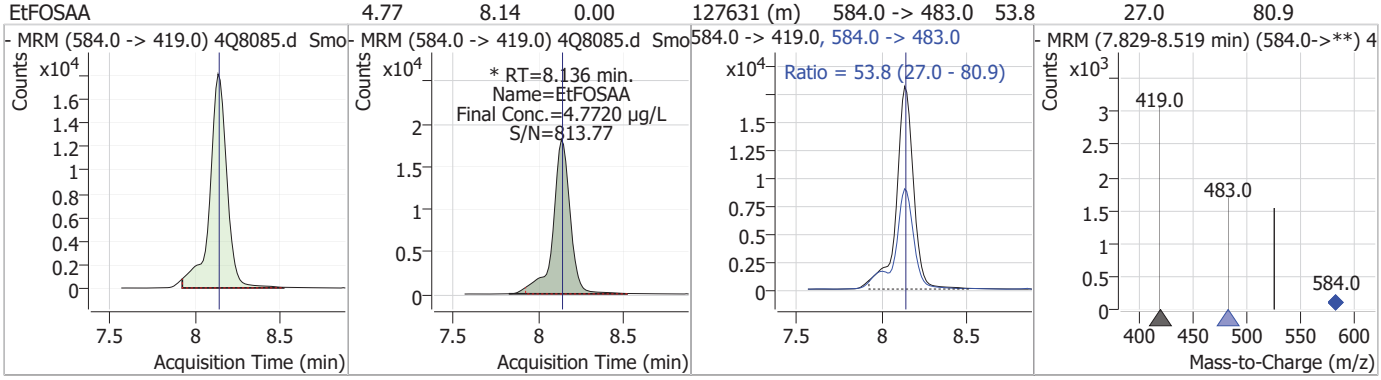
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.51	8.02	0.00	127120 (m)	499.0 -> 99.0	55.3	27.1	81.2



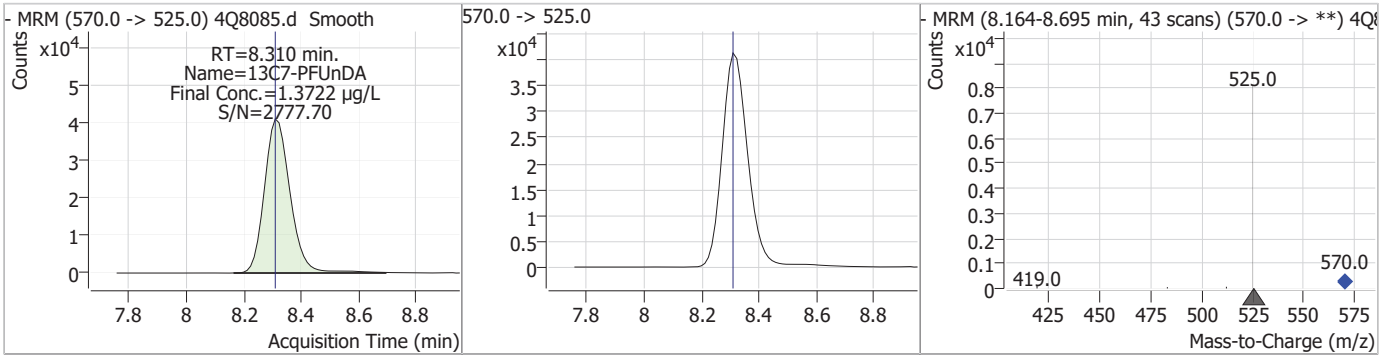
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.55	8.13	0.00	164113				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	4.77	8.14	0.00	127631 (m)	584.0 -> 483.0	53.8	27.0	80.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.37	8.31	0.00	257476				



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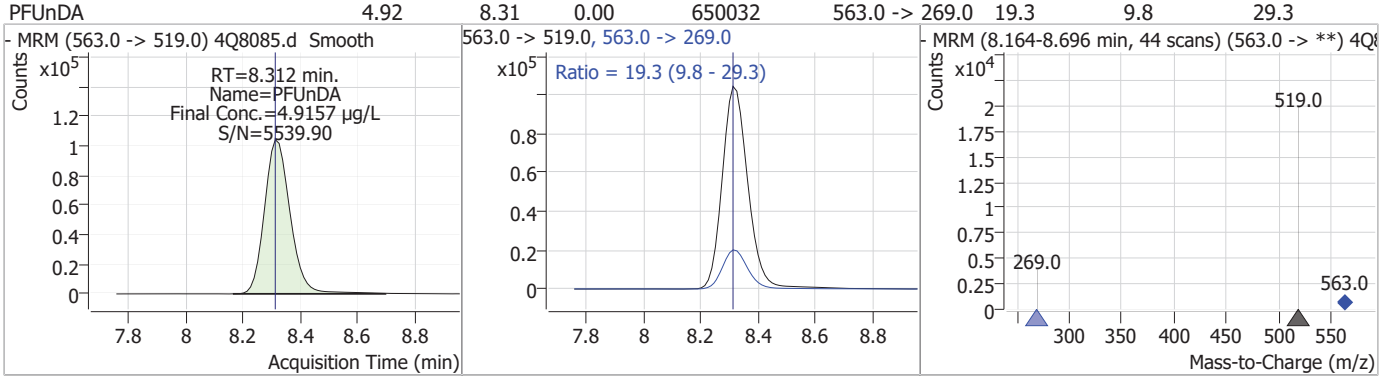
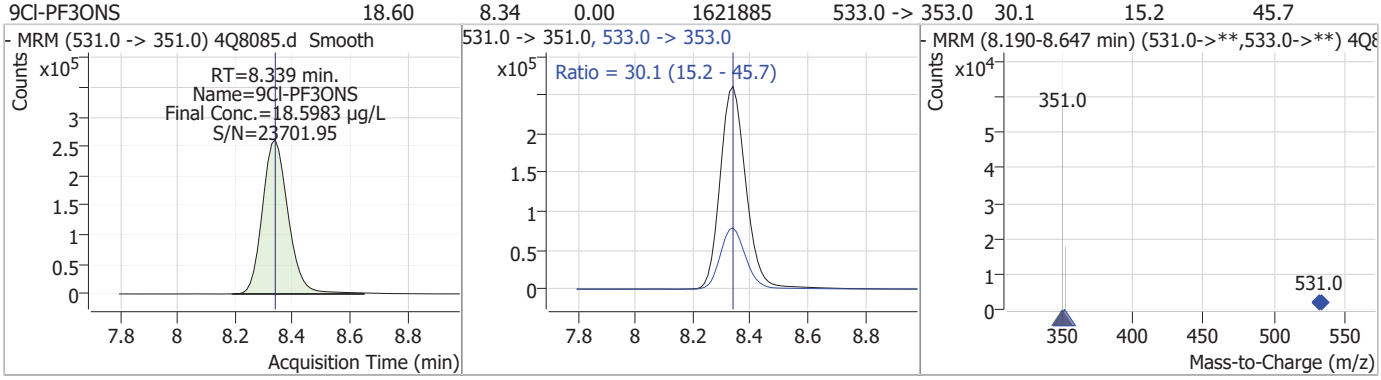
Perfluorinated Compounds by LC/MS/MS

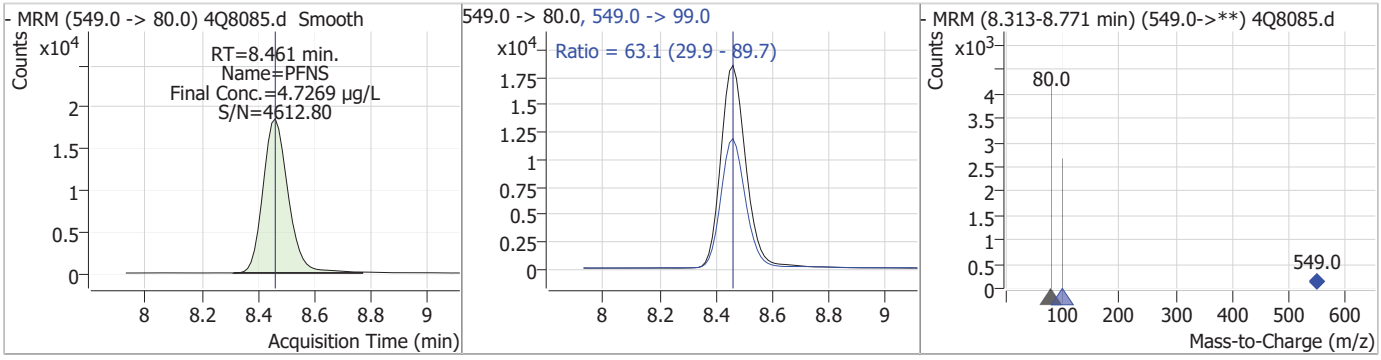
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	4.92	8.31	0.00	650032	563.0 -> 269.0	19.3	9.8	29.3



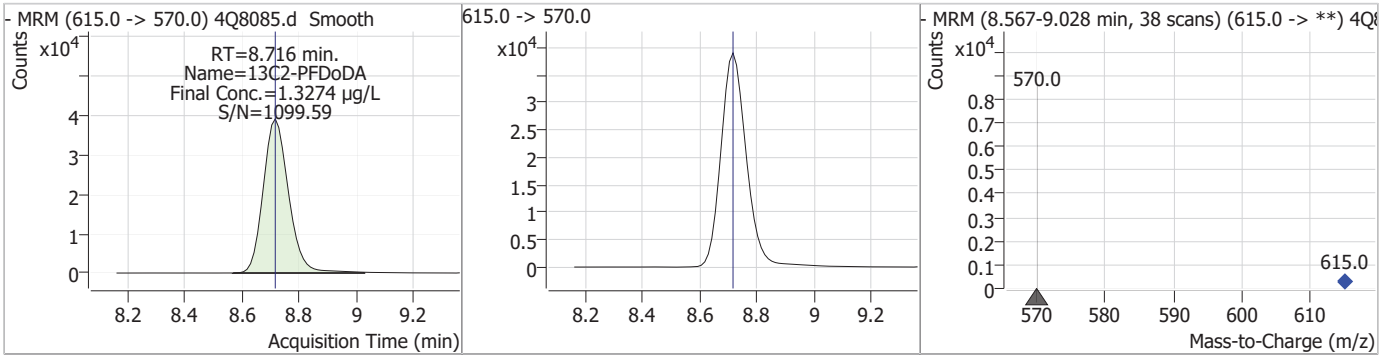
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	18.60	8.34	0.00	1621885	533.0 -> 353.0	30.1	15.2	45.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	4.73	8.46	0.00	115578	549.0 -> 99.0	63.1	29.9	89.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.33	8.72	0.00	239997				



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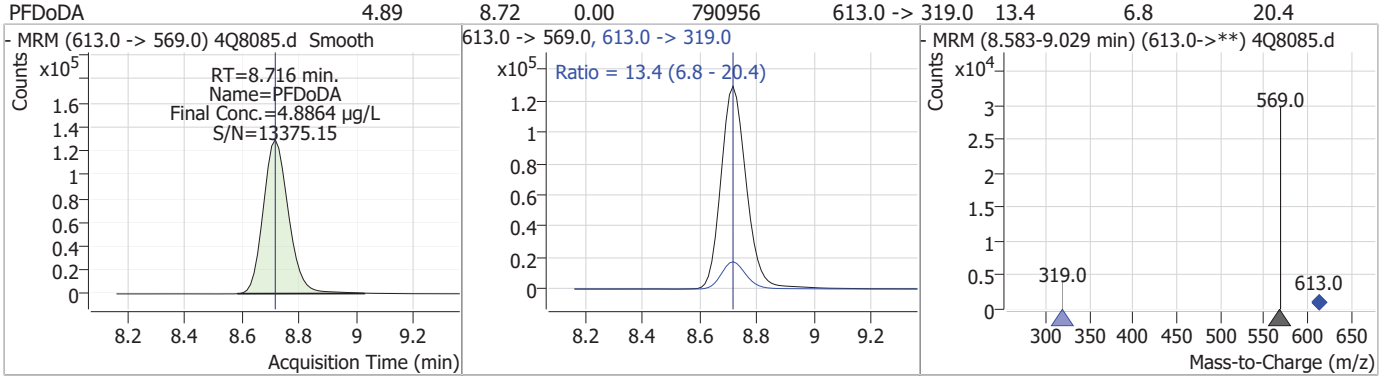
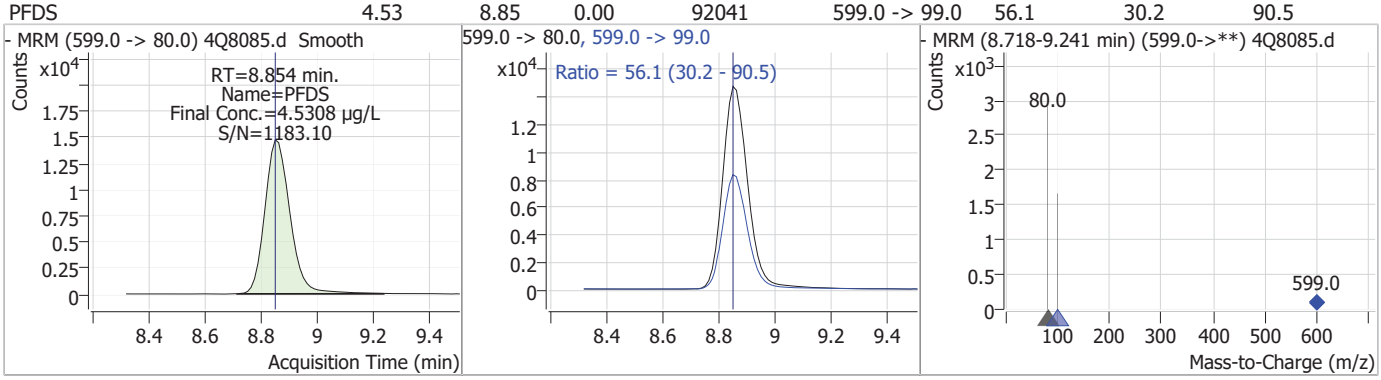
Perfluorinated Compounds by LC/MS/MS

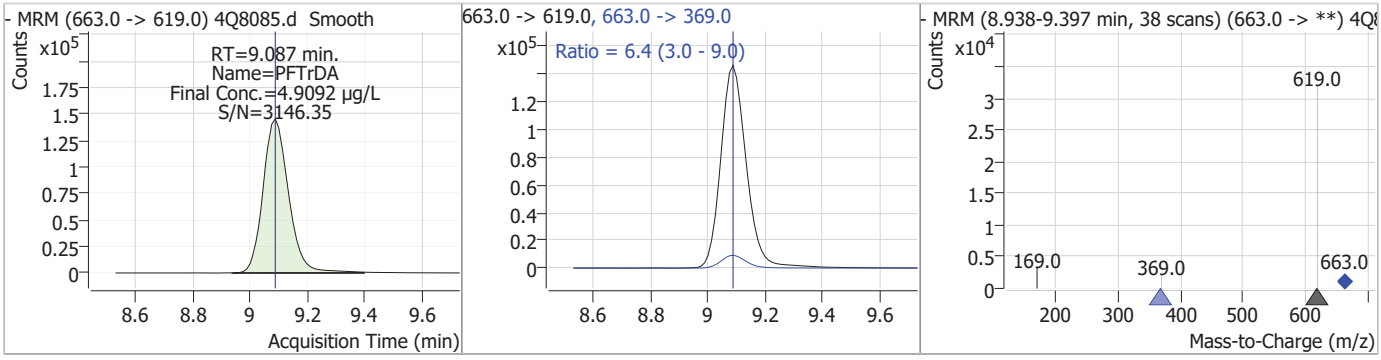
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	4.89	8.72	0.00	790956	613.0 -> 319.0	13.4	6.8	20.4



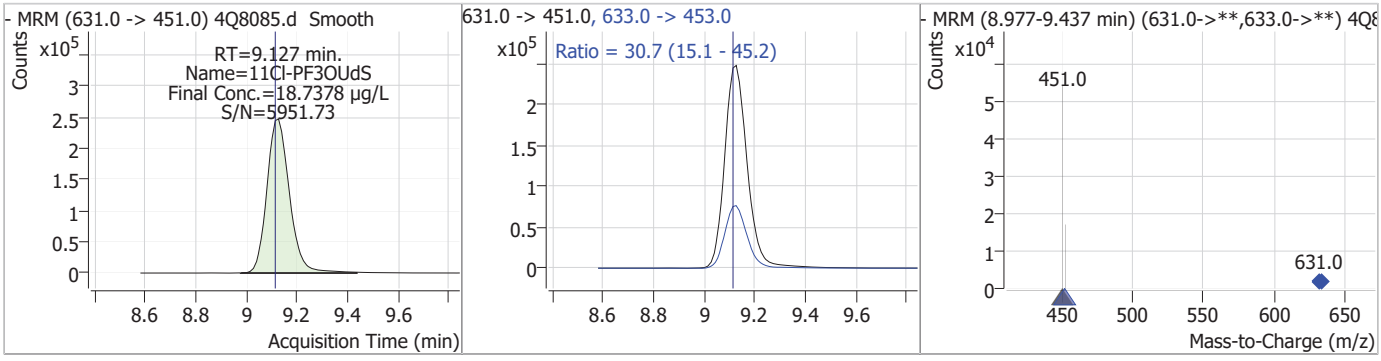
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	4.53	8.85	0.00	92041	599.0 -> 99.0	56.1	30.2	90.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	4.91	9.09	0.00	899435	663.0 -> 369.0	6.4	3.0	9.0

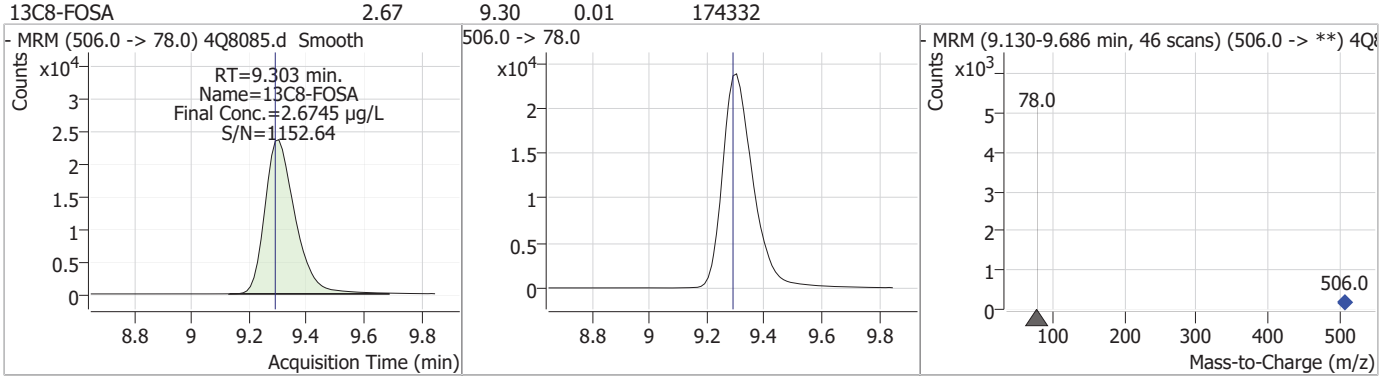


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	18.74	9.13	0.01	1531219	633.0 -> 453.0	30.7	15.1	45.2

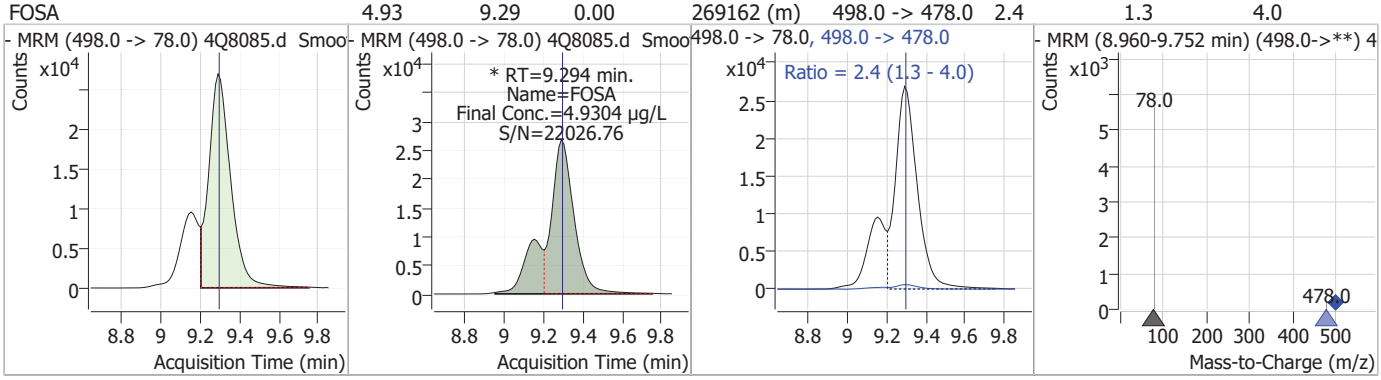


Perfluorinated Compounds by LC/MS/MS

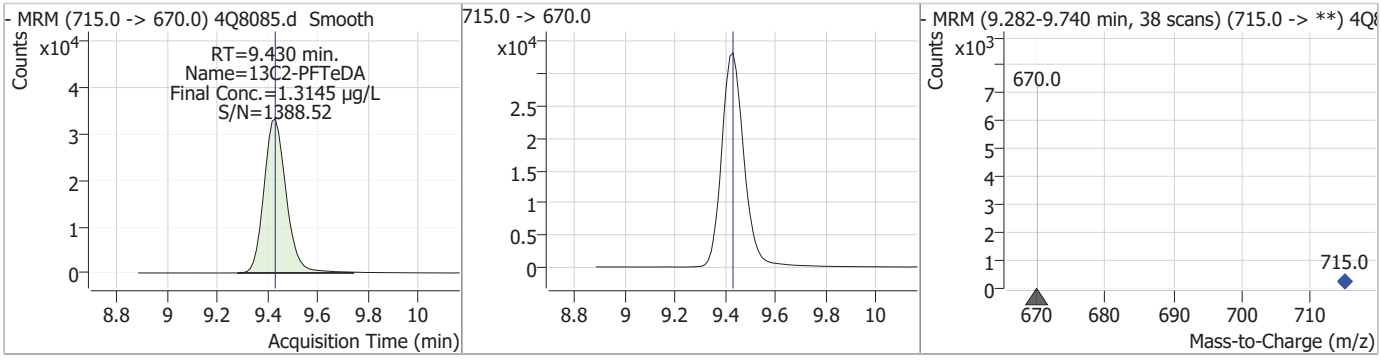
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.67	9.30	0.01	174332				



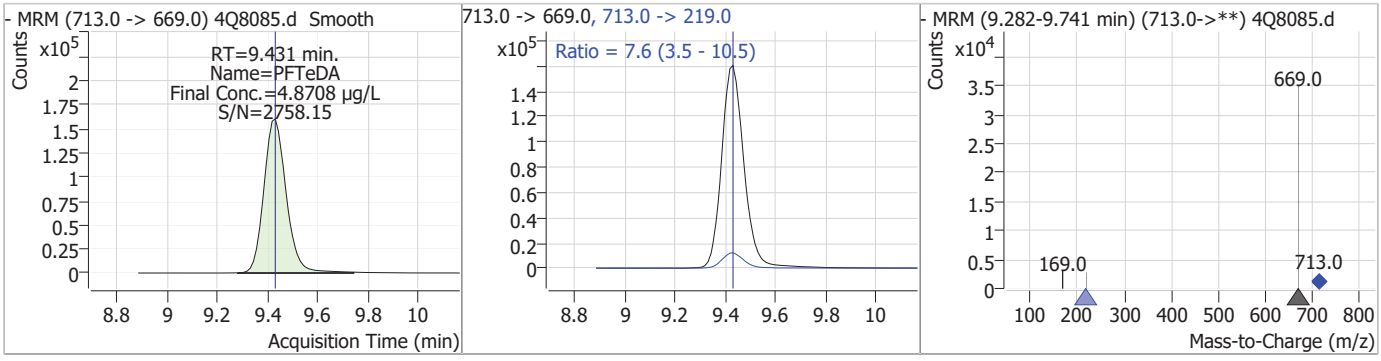
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	4.93	9.29	0.00	269162 (m)	498.0 -> 478.0	2.4	1.3	4.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.31	9.43	0.00	203359				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	4.87	9.43	0.00	985942	713.0 -> 219.0	7.6	3.5	10.5



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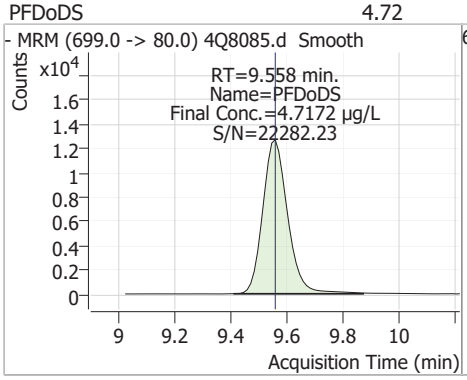
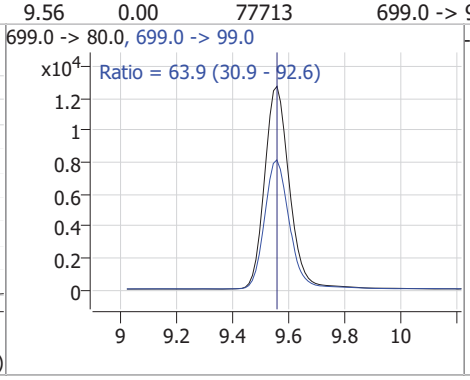
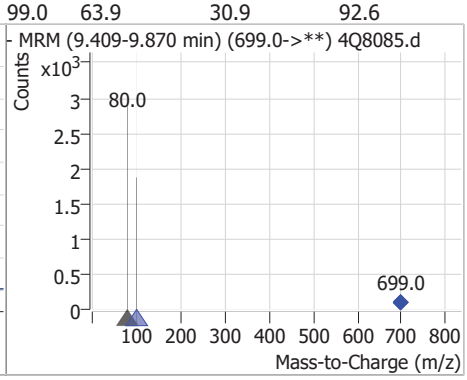
Perfluorinated Compounds by LC/MS/MS

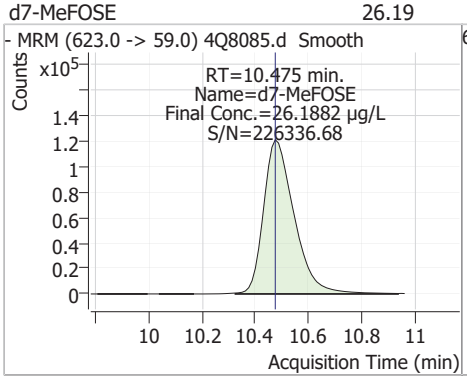
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	4.72	9.56	0.00	77713	699.0 -> 99.0	63.9	30.9	92.6

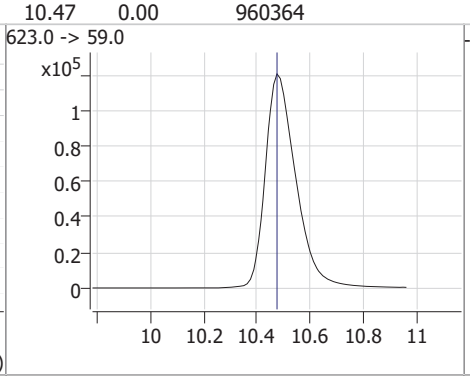


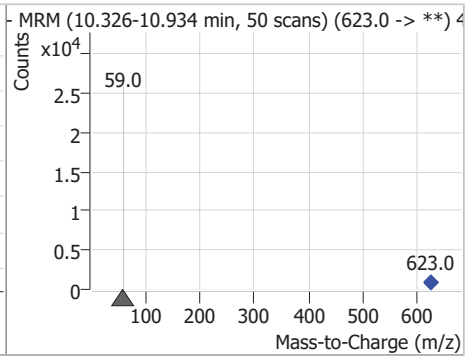




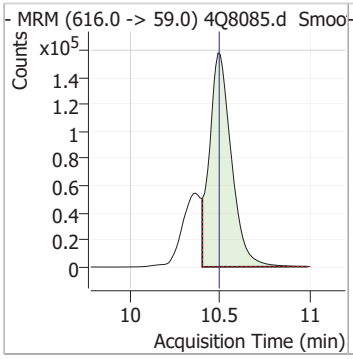
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	26.19	10.47	0.00	960364				

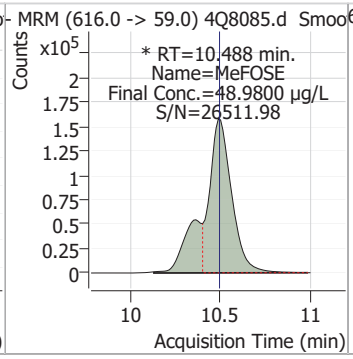


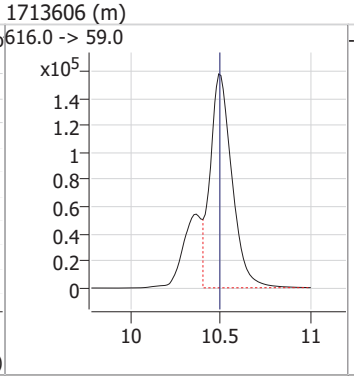


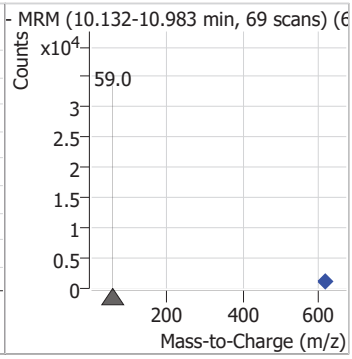


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	48.98	10.49	0.00	1713606 (m)				

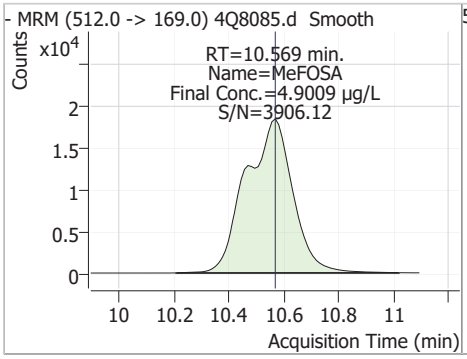


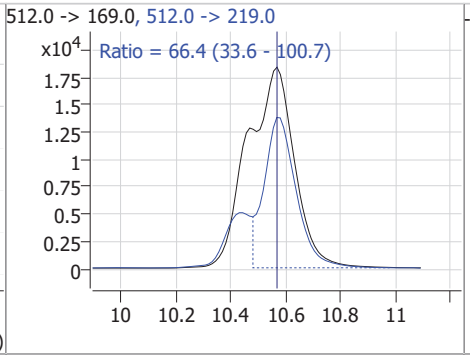


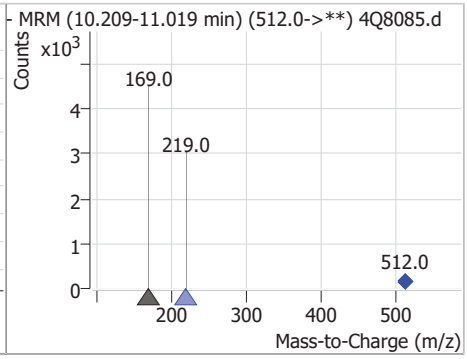




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	4.90	10.57	0.00	218728	512.0 -> 219.0	66.4	33.6	100.7







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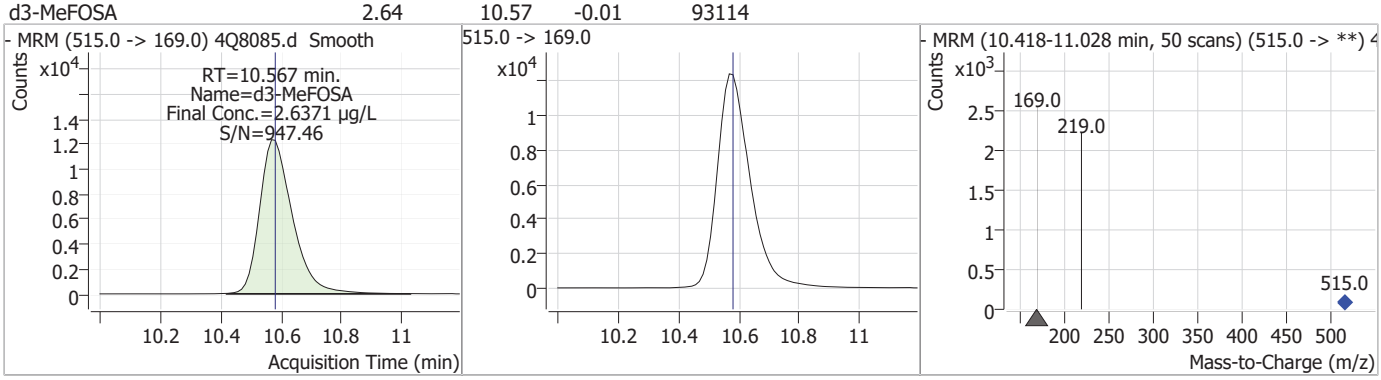
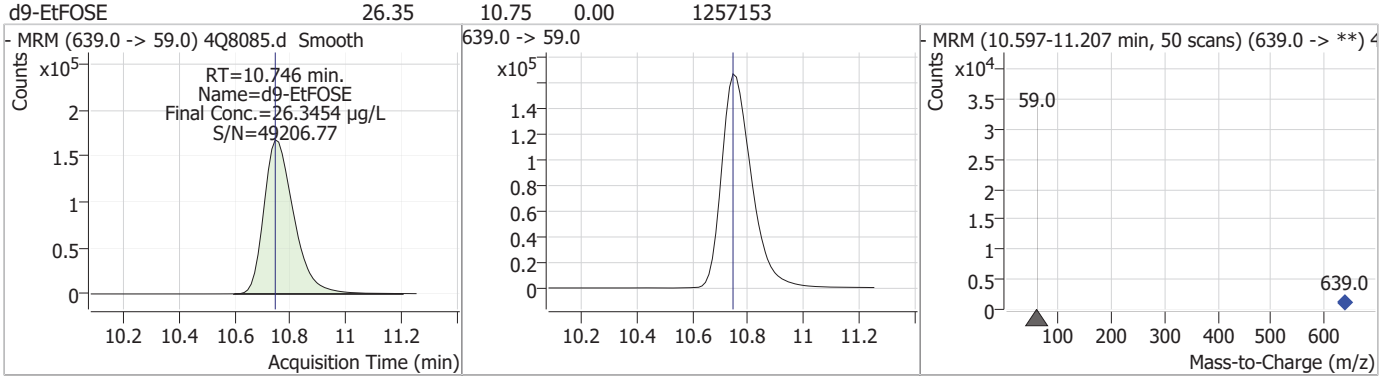
Perfluorinated Compounds by LC/MS/MS

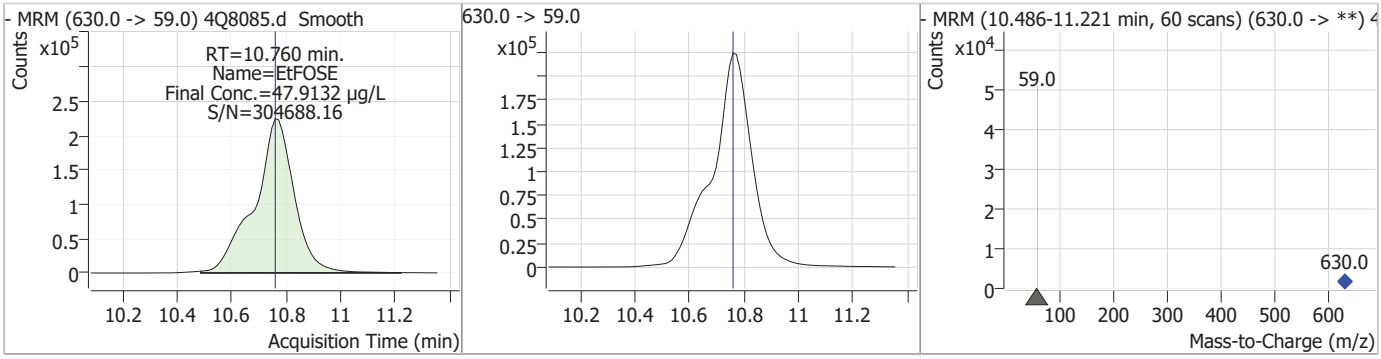
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.64	10.57	-0.01	93114				



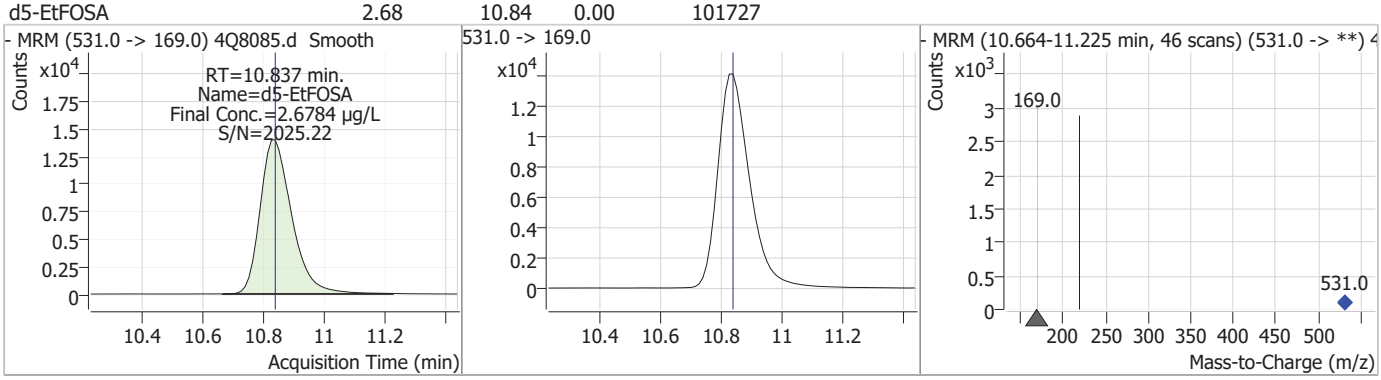
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	26.35	10.75	0.00	1257153				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	47.91	10.76	0.00	2277587				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.68	10.84	0.00	101727				



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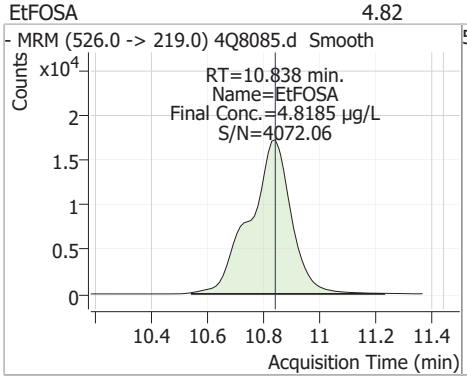
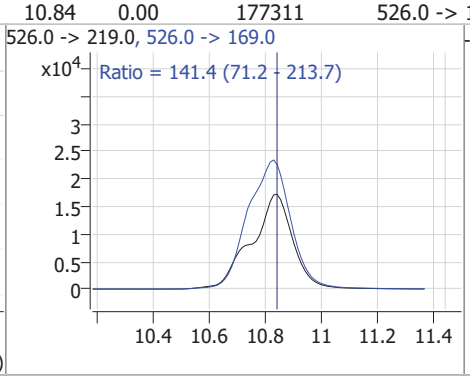
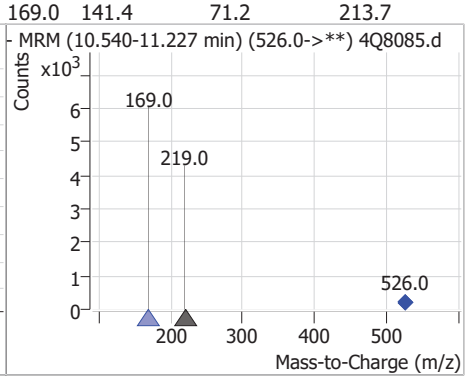
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	4.82	10.84	0.00	177311	526.0 -> 169.0	141.4	71.2	213.7







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Manual Integration Approval Summary

Sample Number: T4Q137-IC137
Lab FileID: 4Q8085.D
Injection Time: 04/29/25 18:06
Method: EPA 1633
Analyst approved: 04/30/25 02:22 Rensel John Romano
Supervisor approved: 04/30/25 07:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.93	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.03	Split peak
Perfluorononanoic acid	375-95-1		7.44	Split peak
MeFOSAA	2355-31-9		7.95	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.02	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.29	Split peak
MeFOSE	24448-09-7		10.49	Split peak

4Q8086.D

Manual Integrations APPROVED (compounds with "m" flag)

Althea Mae Medina 04/30/25 07:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8086.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 6:20:23 PM
Sample Name : IC137-6
Vial : P1-A7
DA Method File : 042925_1633_T4Q137.quantmethod.xml
Batch Name : t4q137.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.921	217.0 -> 172.0	785562	10.00 µg/L	0.012
M5-PFPeA	4.344	268.0 -> 223.0	410066	5.00 µg/L	0.000
M5-PFHxA	5.476	318.0 -> 273.0	278587	2.50 µg/L	-0.012
M4-PFHpA	6.316	367.0 -> 322.0	296845	2.50 µg/L	0.000
M8-PFOA	6.934	421.0 -> 376.0	470365	2.50 µg/L	0.000
M9-PFNA	7.440	472.0 -> 427.0	196023	1.25 µg/L	0.000
M6-PFDA	7.895	519.0 -> 474.0	187451	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	241015	1.25 µg/L	0.000
M2-PFDoDA	8.716	615.0 -> 570.0	231811	1.25 µg/L	0.000
M2-PFTeDA	9.430	715.0 -> 670.0	196302	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	170173	2.50 µg/L	0.000
M3-PFBS	5.393	302.0 -> 99.0	25816	2.50 µg/L	0.012
		302.0 -> 80.0	61866		
M3-PFHxS	7.024	402.0 -> 99.0	36635	2.50 µg/L	0.000
M8-PFOS	8.019	507.0 -> 99.0	41532	2.50 µg/L	0.000
M2-4:2FTS	5.190	329.0 -> 81.0	9782	5.00 µg/L	0.000
M2-6:2FTS	6.721	429.0 -> 81.0	19967	5.00 µg/L	0.000
M2-8:2FTS	7.696	529.0 -> 81.0	24080	5.00 µg/L	0.000
M3-MeFOSAA	7.952	573.0 -> 419.0	203577	5.00 µg/L	0.000
M3-HFPO-DA	5.816	287.0 -> 169.0	419979	10.00 µg/L	0.000
M5-EtFOSAA	8.135	589.0 -> 419.0	154327	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	922775	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1194563	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	98075	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	90689	2.50 µg/L	-0.012
13C4-PFOS	8.020	503.0 -> 80.0	61596	2.50 µg/L	0.000
13C3-PFBA	2.911	216.0 -> 172.0	308725	5.00 µg/L	0.000
18O2-PFHxS	7.023	403.0 -> 84.0	37934	2.50 µg/L	0.000
13C4-PFOA	6.935	417.0 -> 372.0	417535	2.50 µg/L	0.000
13C2-PFDA	7.895	515.0 -> 470.0	149573	1.25 µg/L	0.000
13C5-PFNA	7.440	468.0 -> 423.0	165478	1.25 µg/L	0.000
13C2-PFHxA	5.477	315.0 -> 270.0	235004	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.190	329.0 -> 81.0	9782	5.03 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.7%	
13C2-6:2FTS	6.721	429.0 -> 81.0	19967	4.96 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.3%	
13C2-8:2FTS	7.696	529.0 -> 81.0	24080	4.88 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.6%	
13C2-PFDoDA	8.716	615.0 -> 570.0	231811	1.26 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.4%	
13C2-PFTeDA	9.430	715.0 -> 670.0	196302	1.24 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.4%	
13C3-PFBS	5.393	302.0 -> 99.0	25816	2.62 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.8%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.024	402.0 -> 99.0	36635	2.54	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.7%			
13C4-PFBA	2.921	217.0 -> 172.0	785562	10.30	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 103.0%			
13C4-PFHpA	6.316	367.0 -> 322.0	296845	2.52	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.9%			
13C5-PFHxA	5.476	318.0 -> 273.0	278587	2.59	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.7%			
13C5-PFPeA	4.344	268.0 -> 223.0	410066	5.18	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.7%			
13C6-PFDA	7.895	519.0 -> 474.0	187451	1.26	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.9%			
13C7-PFUnDA	8.310	570.0 -> 525.0	241015	1.26	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.6%			
13C8-FOSA	9.291	506.0 -> 78.0	170173	2.58	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.1%			
13C8-PFOA	6.934	421.0 -> 376.0	470365	2.59	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.8%			
13C8-PFOS	8.019	507.0 -> 99.0	41532	2.66	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.3%			
13C9-PFNA	7.440	472.0 -> 427.0	196023	1.31	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.2%			
d3-MeFOSAA	7.952	573.0 -> 419.0	203577	5.28	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.7%			
13C3-HFPO-DA	5.816	287.0 -> 169.0	419979	10.37	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 103.7%			
d3-MeFOSA	10.567	515.0 -> 169.0	90689	2.54	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.5%			
d5-EtFOSAA	8.135	589.0 -> 419.0	154327	5.15	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.0%			
d7-MeFOSE	10.475	623.0 -> 59.0	922775	24.85	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 99.4%			
d9-EtFOSE	10.746	639.0 -> 59.0	1194563	24.73	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 98.9%			
d5-EtFOSA	10.837	531.0 -> 169.0	98075	2.55	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.0%			
Target Compounds							QValue
4:2FTS	5.191	327.0 -> 307.0	766488	50.87	µg/L		99
		327.0 -> 81.0	353777				
6:2FTS	6.721	427.0 -> 407.0	879706	52.36	µg/L		98
		427.0 -> 81.0	410357				
8:2FTS	7.696	527.0 -> 507.0	844488	54.07	µg/L		100
		527.0 -> 81.0	325446				
EtFOSAA	8.136	584.0 -> 419.0	342828	13.63	µg/L	m	99
		584.0 -> 483.0	186333				
FOSA	9.294	498.0 -> 78.0	709447	13.31	µg/L	m	99
		498.0 -> 478.0	17646				
MeFOSAA	7.953	570.0 -> 419.0	407341	13.11	µg/L	m	99
		570.0 -> 512.0	139837				
PFBA	2.914	213.0 -> 169.0	1161803	53.93	µg/L		100
PFBS	5.382	299.0 -> 80.0	283715	11.71	µg/L		99
		299.0 -> 99.0	118707				
PFDA	7.896	513.0 -> 469.0	1614989	13.54	µg/L		99
		513.0 -> 219.0	370047				
PFDoDA	8.716	613.0 -> 569.0	2105709	13.47	µg/L		99
		613.0 -> 319.0	295683				

Perfluorinated Compounds by LC/MS/MS

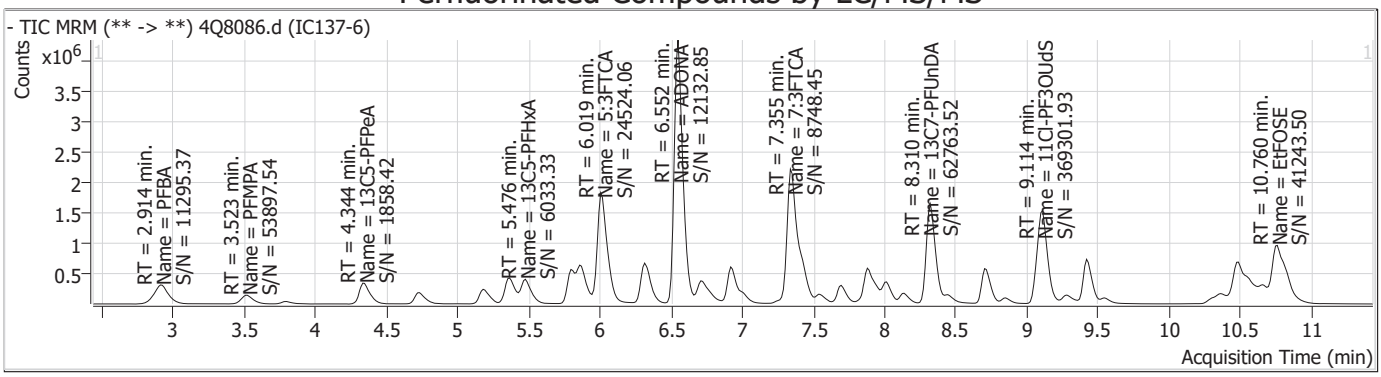
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.854	599.0 -> 80.0	254284	13.37	µg/L		91
		599.0 -> 99.0	136557				
PFHpA	6.317	363.0 -> 319.0	2035273	13.33	µg/L		98
		363.0 -> 169.0	423256				
PFHpS	7.553	449.0 -> 80.0	350849	12.84	µg/L		96
		449.0 -> 99.0	200537				
PFHxA	5.479	313.0 -> 269.0	1321340	13.03	µg/L		99
		313.0 -> 119.0	45584				
PFHxS	7.025	399.0 -> 80.0	336994	12.21	µg/L	m	100
		399.0 -> 99.0	174176				
PFNA	7.441	463.0 -> 419.0	1315087	13.05	µg/L	m	97
		463.0 -> 219.0	485294				
PFNS	8.461	549.0 -> 80.0	316900	12.61	µg/L		100
		549.0 -> 99.0	189345				
PFOA	6.935	413.0 -> 369.0	1740884	13.16	µg/L	m	99
		413.0 -> 169.0	505116				
PFOS	8.021	499.0 -> 80.0	346401	11.97	µg/L	m	99
		499.0 -> 99.0	185158				
PFPeA	4.346	263.0 -> 219.0	1417957	26.07	µg/L		100
PFPeS	6.355	349.0 -> 80.0	333471	12.36	µg/L		99
		349.0 -> 99.0	166635				
PFTeDA	9.431	713.0 -> 669.0	2581446	13.21	µg/L		99
		713.0 -> 219.0	193660				
PFTrDA	9.087	663.0 -> 619.0	2363411	13.36	µg/L		99
		663.0 -> 369.0	151852				
PFUnDA	8.312	563.0 -> 519.0	1667105	13.47	µg/L		99
		563.0 -> 269.0	335359				
11Cl-PF3OUdS	9.114	631.0 -> 451.0	3961567	48.55	µg/L		99
		633.0 -> 453.0	1223619				
9Cl-PF3ONS	8.339	531.0 -> 351.0	4212015	48.37	µg/L		100
		533.0 -> 353.0	1278537				
ADONA	6.552	377.0 -> 251.0	14539797	51.02	µg/L		96
		377.0 -> 85.0	4494357				
HFPO-DA	5.817	285.0 -> 169.0	1971829	51.80	µg/L		97
		285.0 -> 185.0	233139				
3:3FTCA	3.794	241.0 -> 177.0	195588	65.96	µg/L		99
		241.0 -> 117.0	16283				
5:3FTCA	6.019	341.0 -> 237.0	5260856	314.56	µg/L		100
		341.0 -> 217.0	3787713				
7:3FTCA	7.355	441.0 -> 337.0	7631661	311.75	µg/L		100
		441.0 -> 317.0	3428259				
EtFOSA	10.838	526.0 -> 219.0	474700	13.38	µg/L		100
		526.0 -> 169.0	673583				
EtFOSE	10.760	630.0 -> 59.0	5869283	129.94	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	595192	13.69	µg/L		99
		512.0 -> 219.0	394203				
MeFOSE	10.488	616.0 -> 59.0	4466436	132.86	µg/L	m	100
PFDoDS	9.558	699.0 -> 80.0	212014	12.52	µg/L		98
		699.0 -> 99.0	133627				
NFDHA	5.370	295.0 -> 201.0	335756	25.50	µg/L		94
		201.0 -> 85.0	1368208				
		295.0 -> 85.0	93838				
PFMBA	4.735	279.0 -> 85.0	979665	26.40	µg/L		100
PFMPA	3.523	229.0 -> 85.0	854772	26.56	µg/L		100
PFEESA	5.872	315.0 -> 135.0	2255203	23.50	µg/L		99
		315.0 -> 69.0	187721				

Perfluorinated Compounds by LC/MS/MS

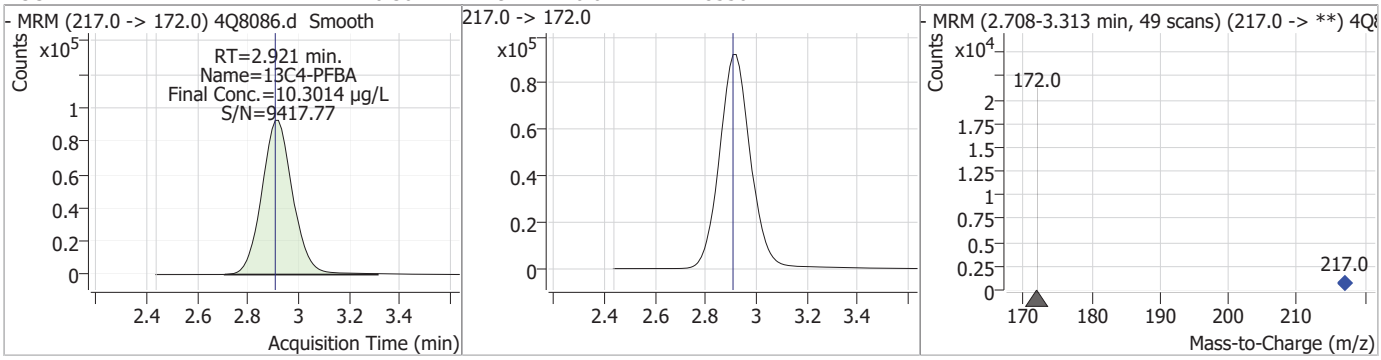
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

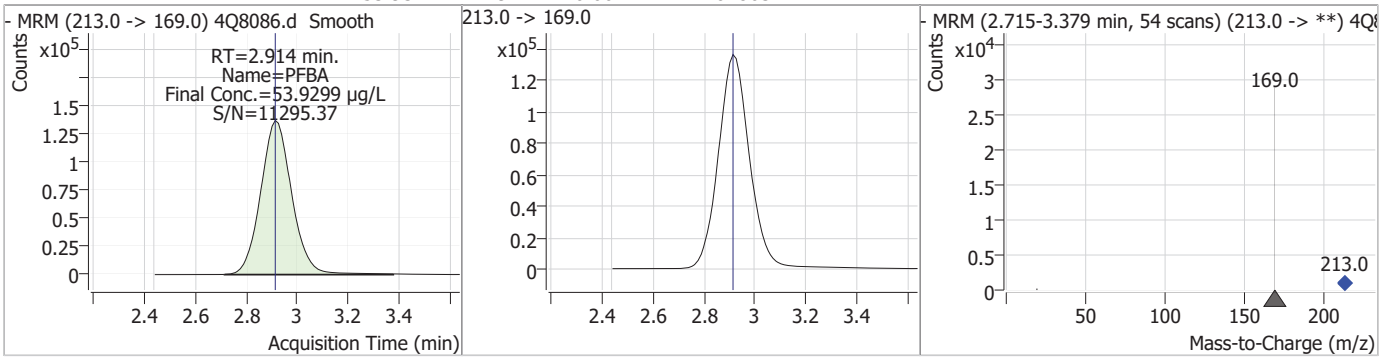
Perfluorinated Compounds by LC/MS/MS



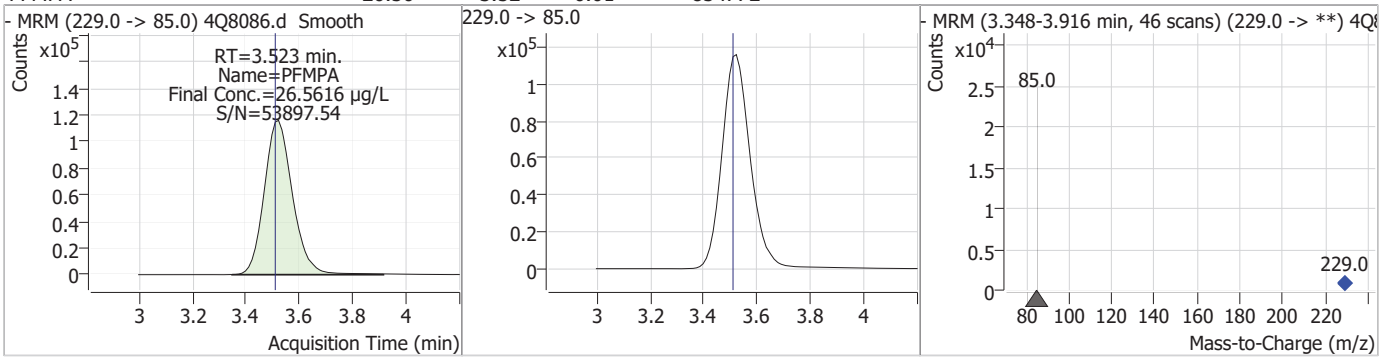
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.30	2.92	0.01	785562				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	53.93	2.91	0.00	1161803				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	26.56	3.52	0.01	854772				



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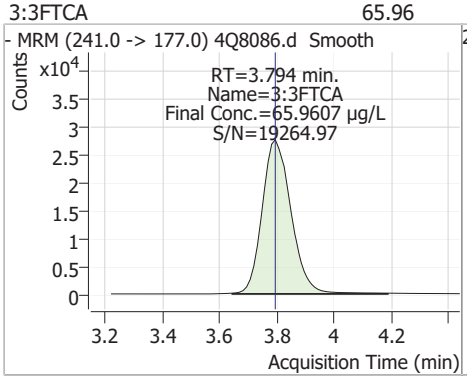
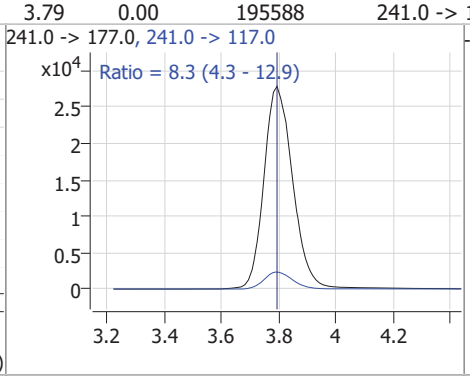
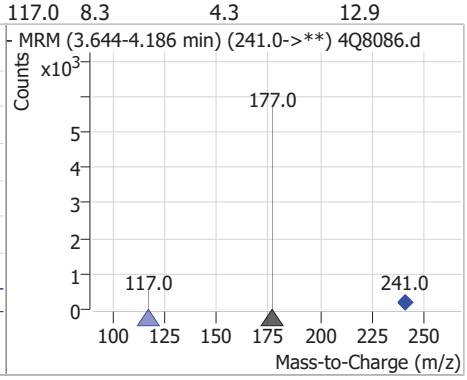
Perfluorinated Compounds by LC/MS/MS

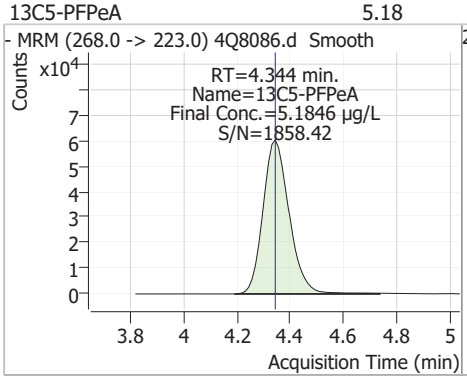
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	65.96	3.79	0.00	195588	241.0 -> 117.0	8.3	4.3	12.9

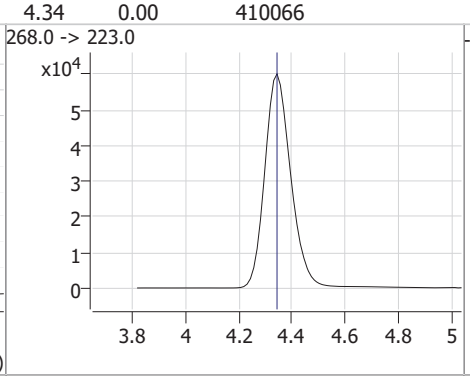


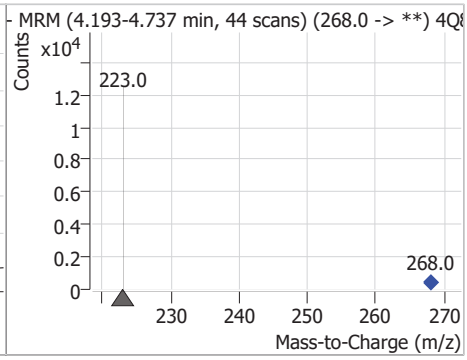




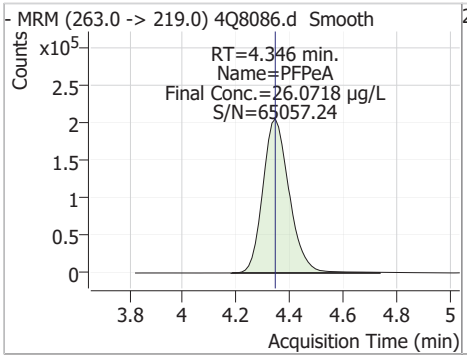
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.18	4.34	0.00	410066				

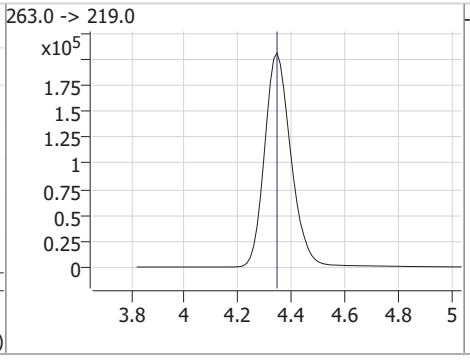


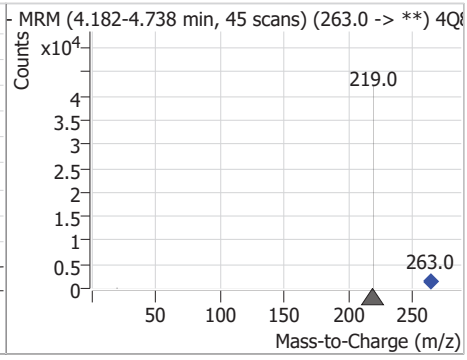




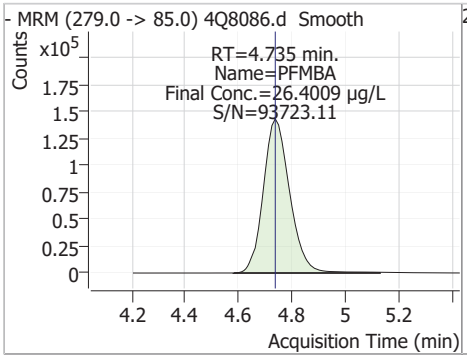
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	26.07	4.35	0.00	1417957				

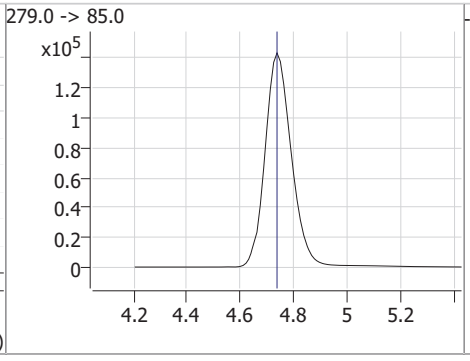


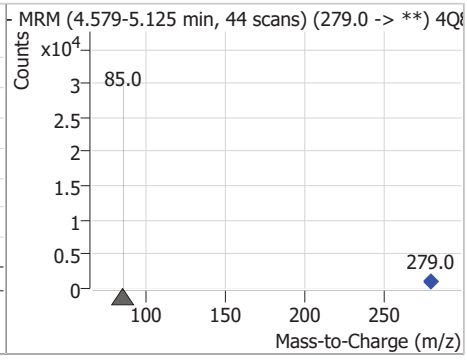




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	26.40	4.73	0.00	979665				

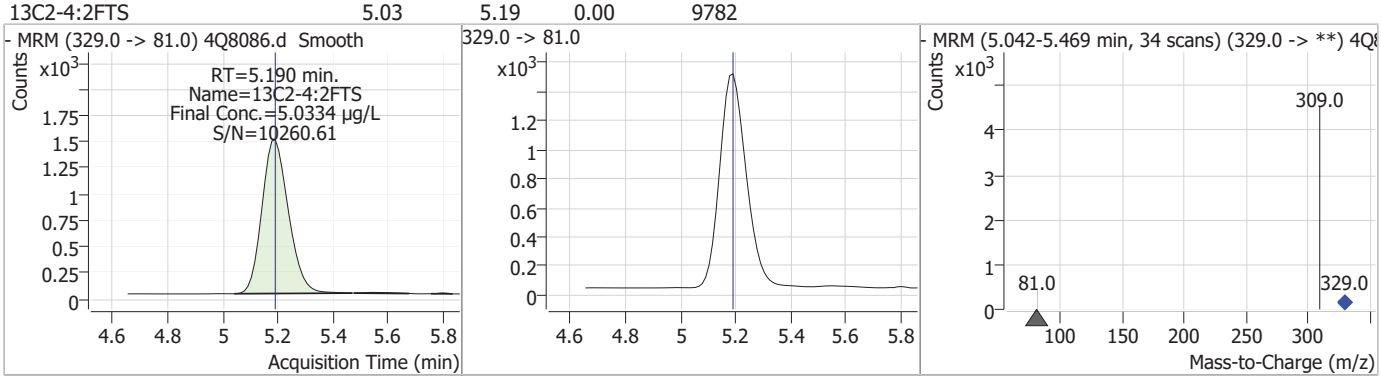




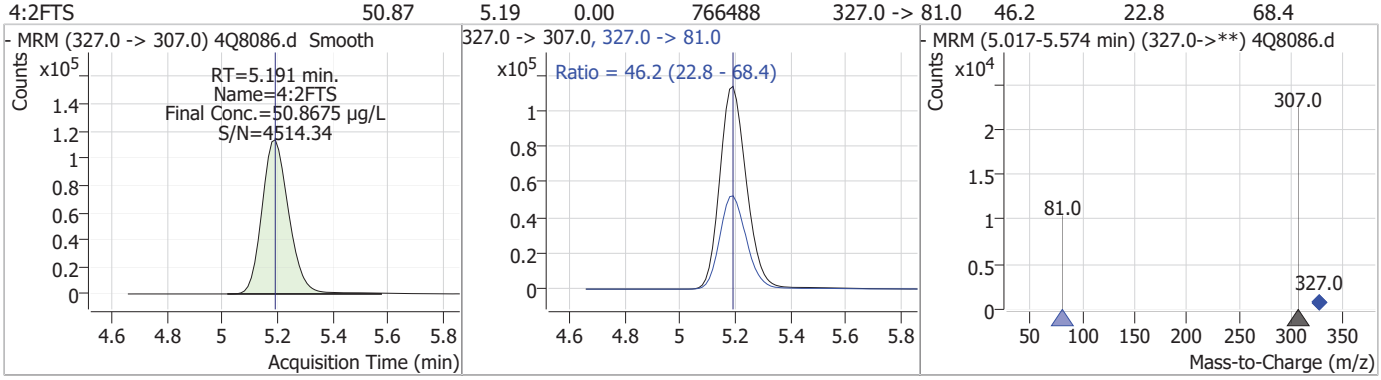


Perfluorinated Compounds by LC/MS/MS

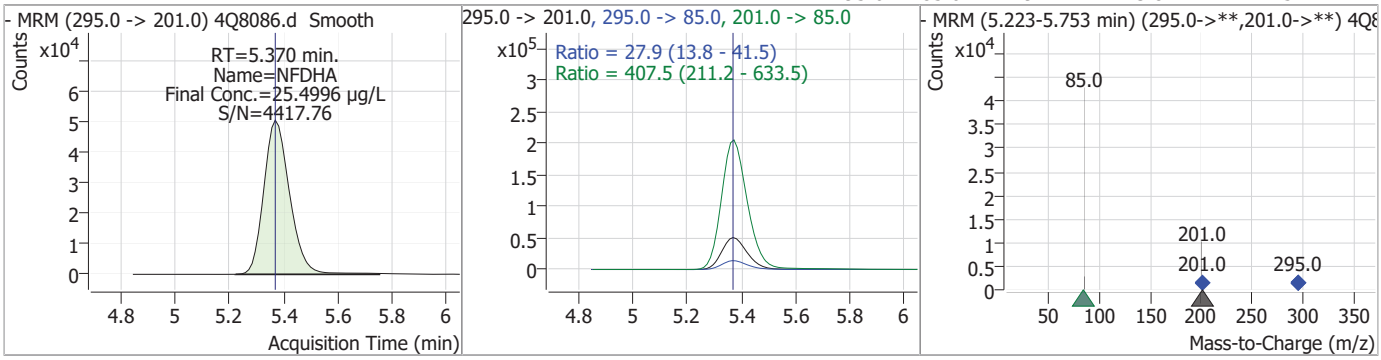
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.03	5.19	0.00	9782				



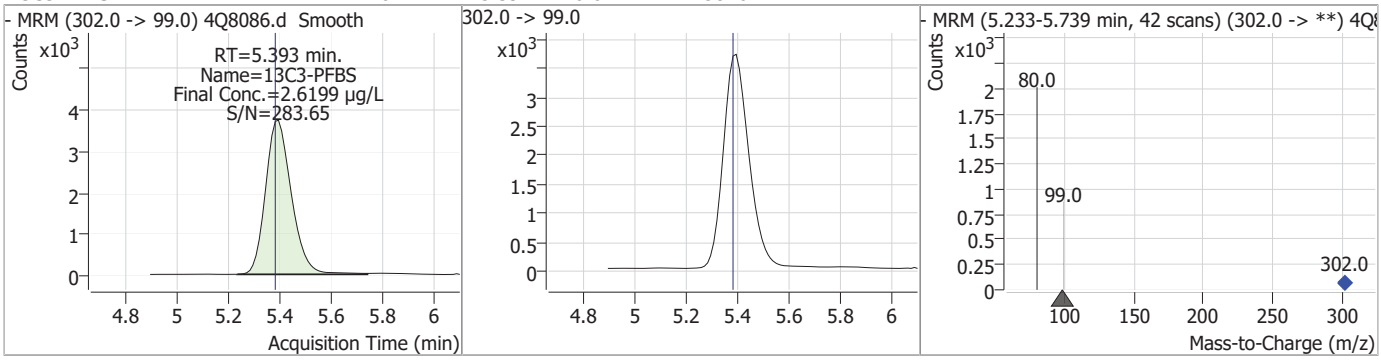
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	50.87	5.19	0.00	766488	327.0 -> 81.0	46.2	22.8	68.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	25.50	5.37	0.00	335756	201.0 -> 85.0	407.5	211.2	633.5
					295.0 -> 85.0	27.9	13.8	41.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.62	5.39	0.01	25816				



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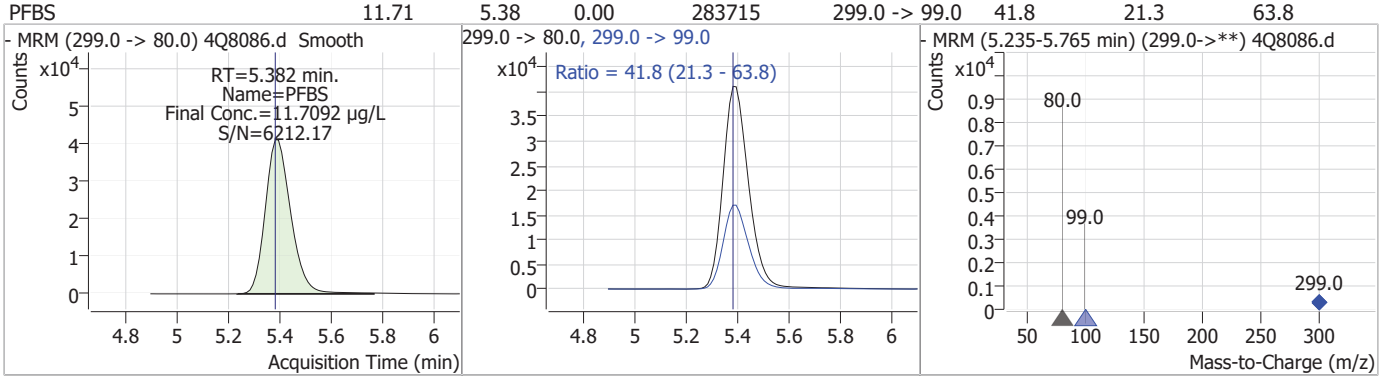
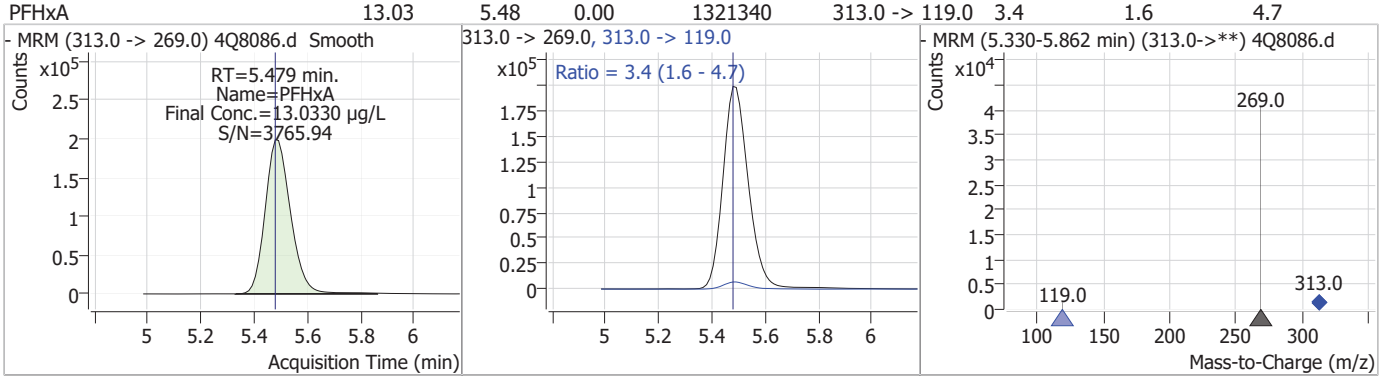
Perfluorinated Compounds by LC/MS/MS

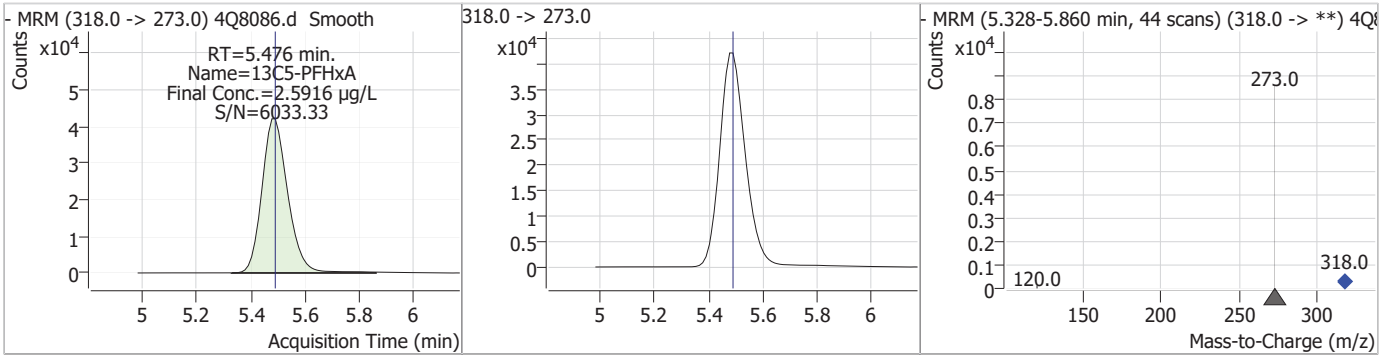
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	11.71	5.38	0.00	283715	299.0 -> 99.0	41.8	21.3	63.8



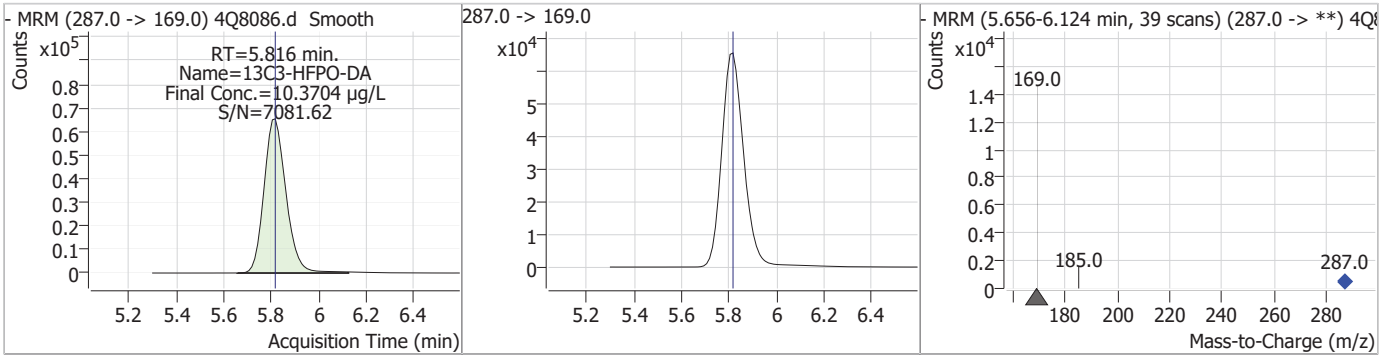
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	13.03	5.48	0.00	1321340	313.0 -> 119.0	3.4	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.59	5.48	-0.01	278587				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.37	5.82	0.00	419979				



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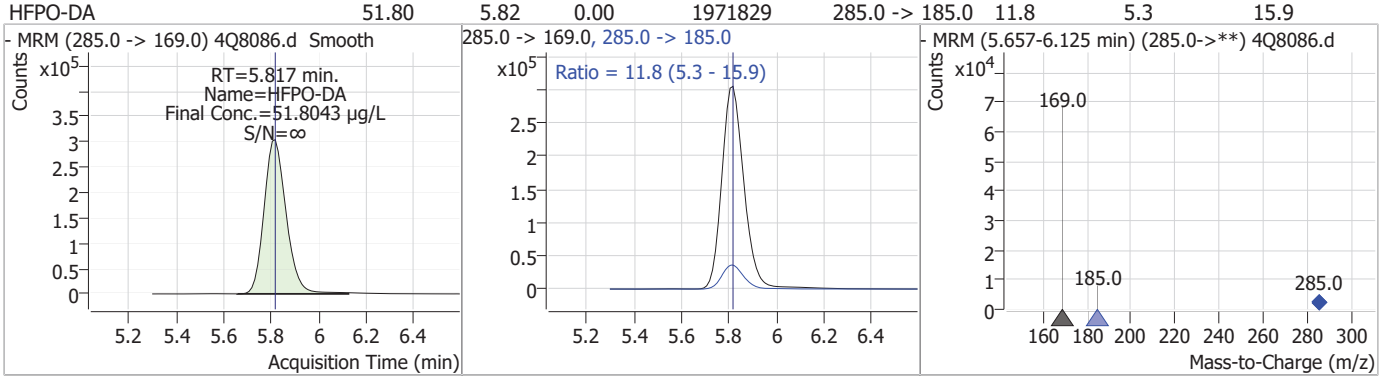
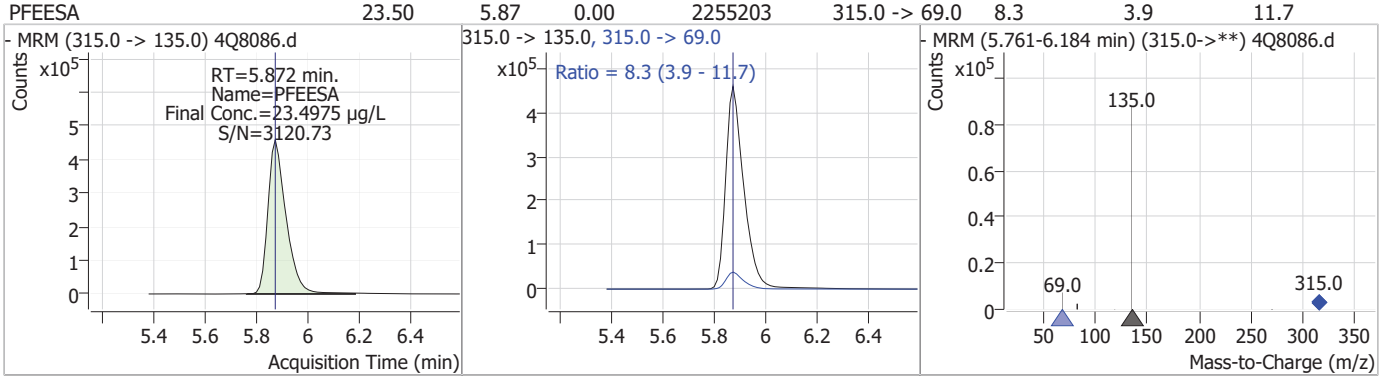
Perfluorinated Compounds by LC/MS/MS

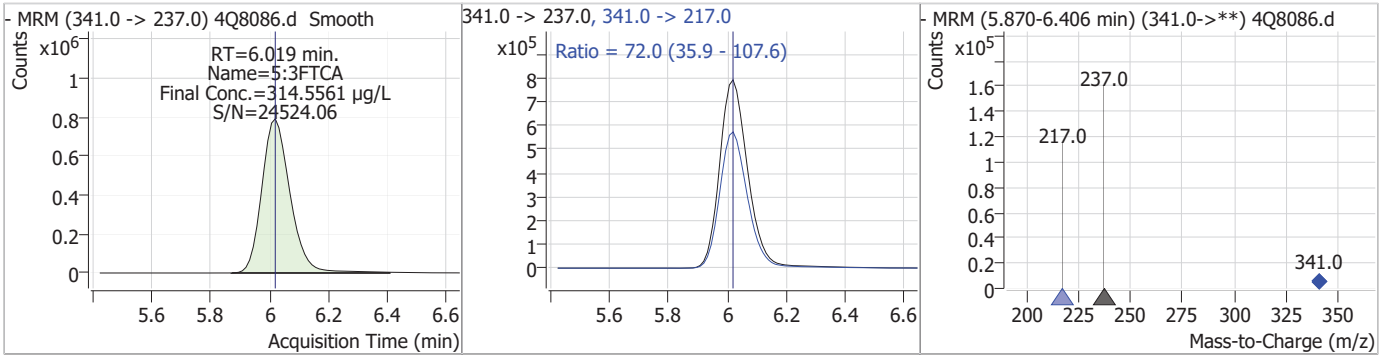
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	51.80	5.82	0.00	1971829	285.0 -> 185.0	11.8	5.3	15.9



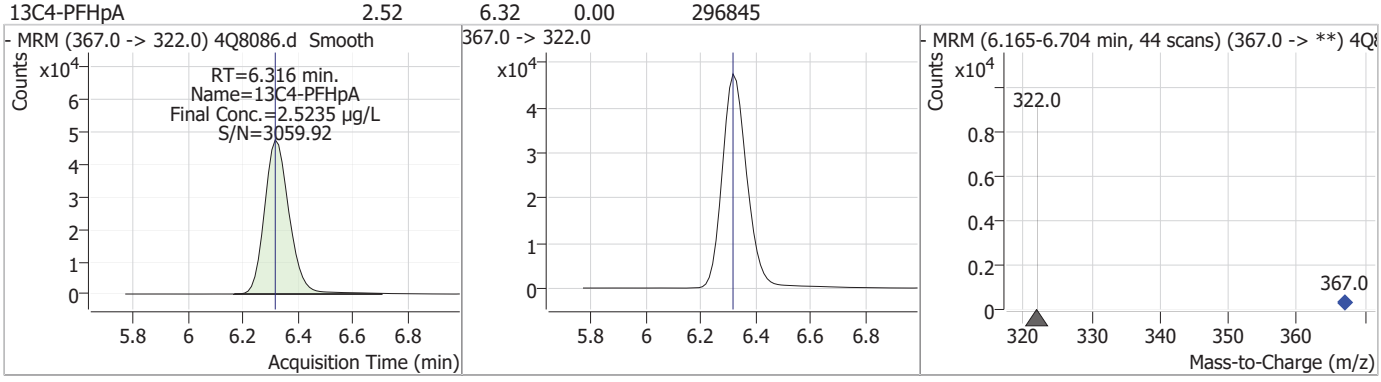
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	23.50	5.87	0.00	2255203	315.0 -> 69.0	8.3	3.9	11.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	314.56	6.02	0.00	5260856	341.0 -> 217.0	72.0	35.9	107.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.52	6.32	0.00	296845				



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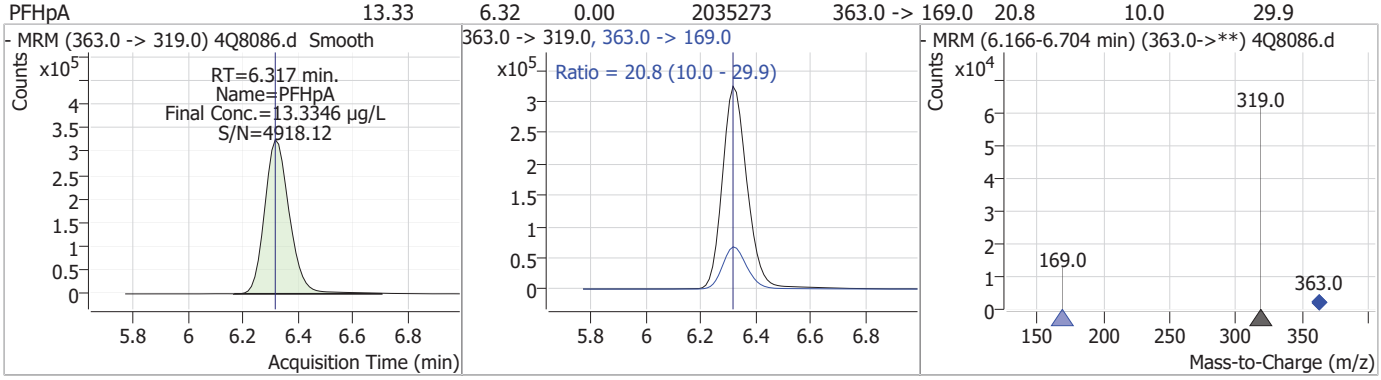
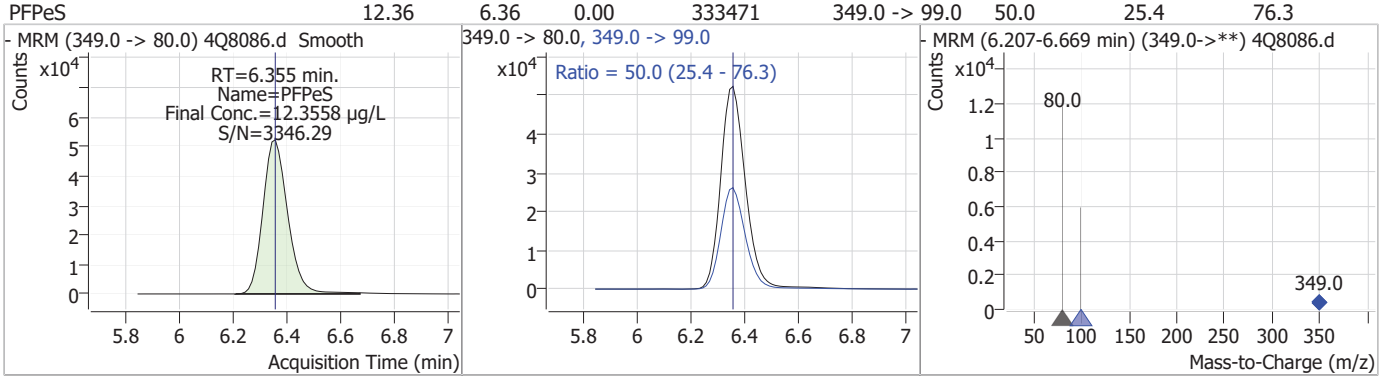
Perfluorinated Compounds by LC/MS/MS

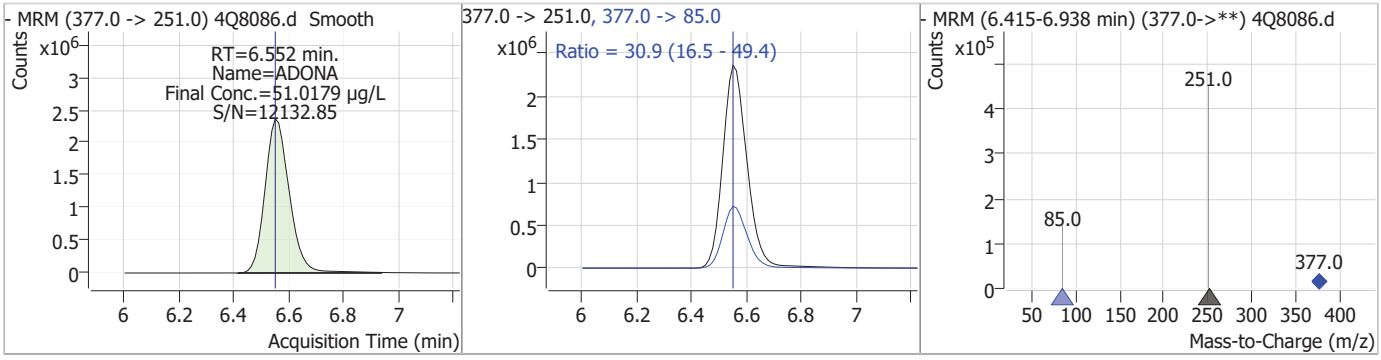
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	13.33	6.32	0.00	2035273	363.0 -> 169.0	20.8	10.0	29.9



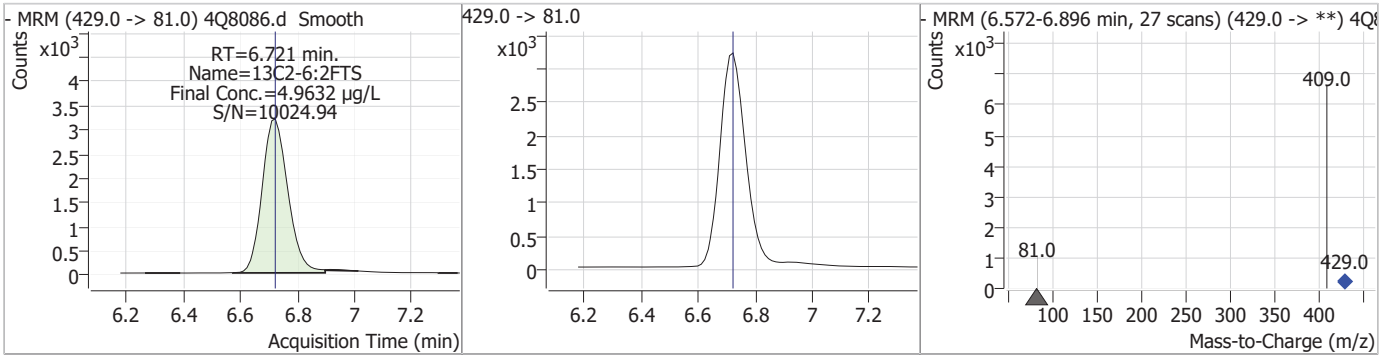
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	12.36	6.36	0.00	333471	349.0 -> 99.0	50.0	25.4	76.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	51.02	6.55	0.00	14539797	377.0 -> 85.0	30.9	16.5	49.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.96	6.72	0.00	19967				



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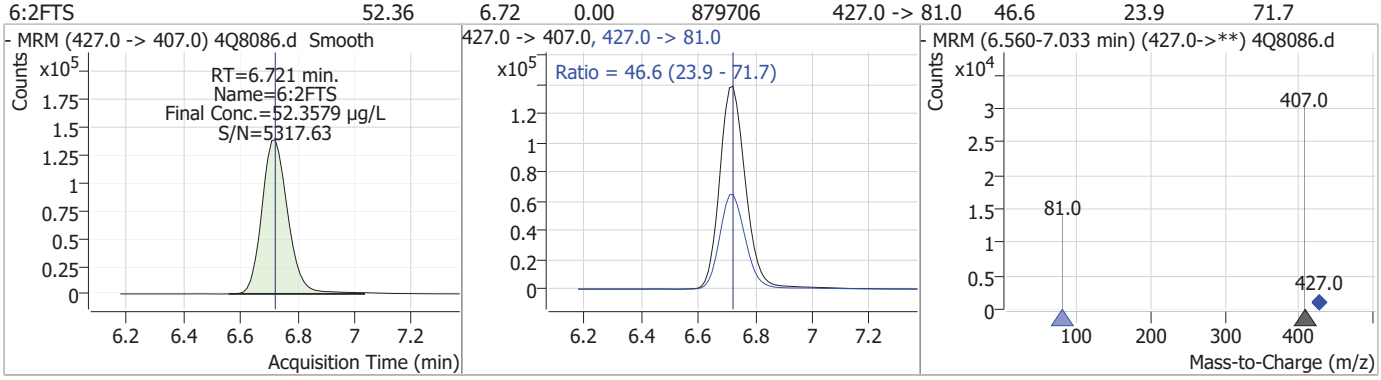
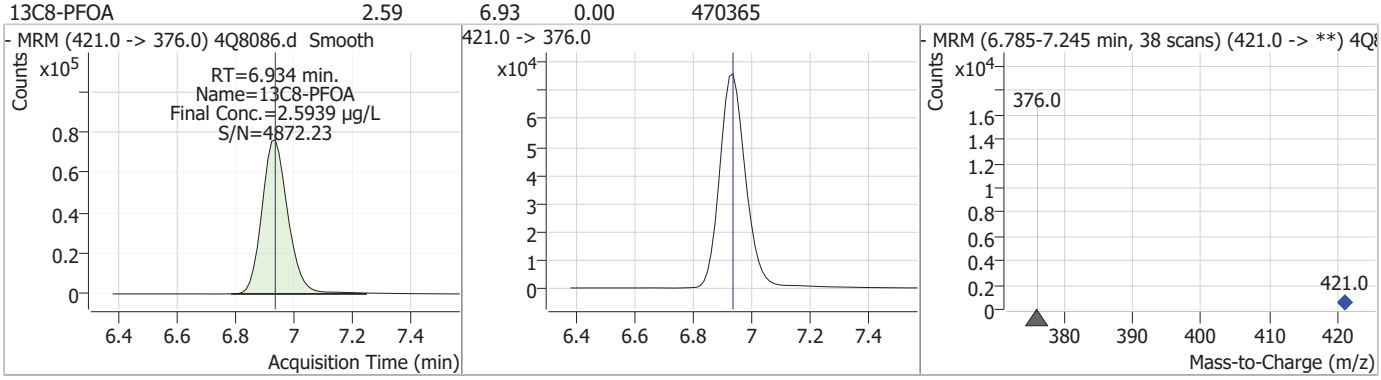
Perfluorinated Compounds by LC/MS/MS

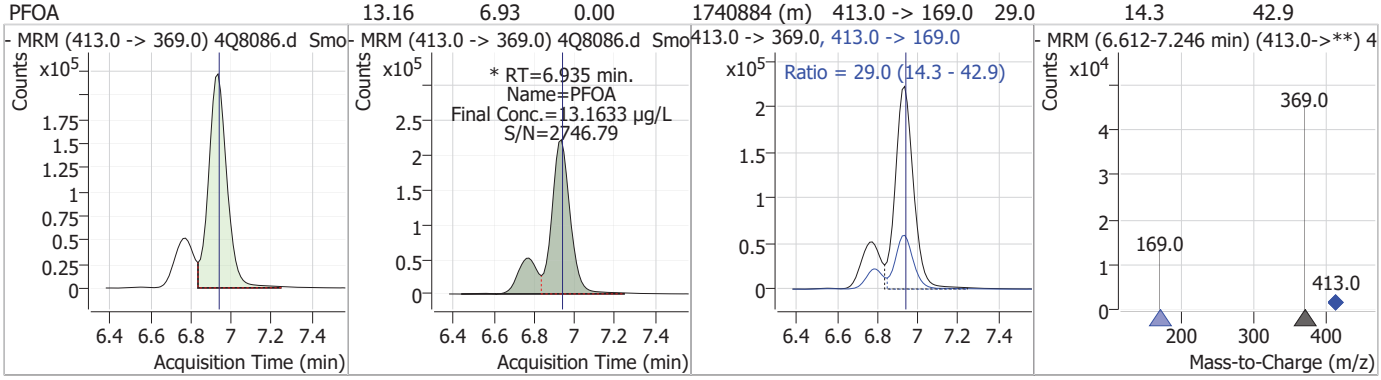
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	52.36	6.72	0.00	879706	427.0 -> 81.0	46.6	23.9	71.7



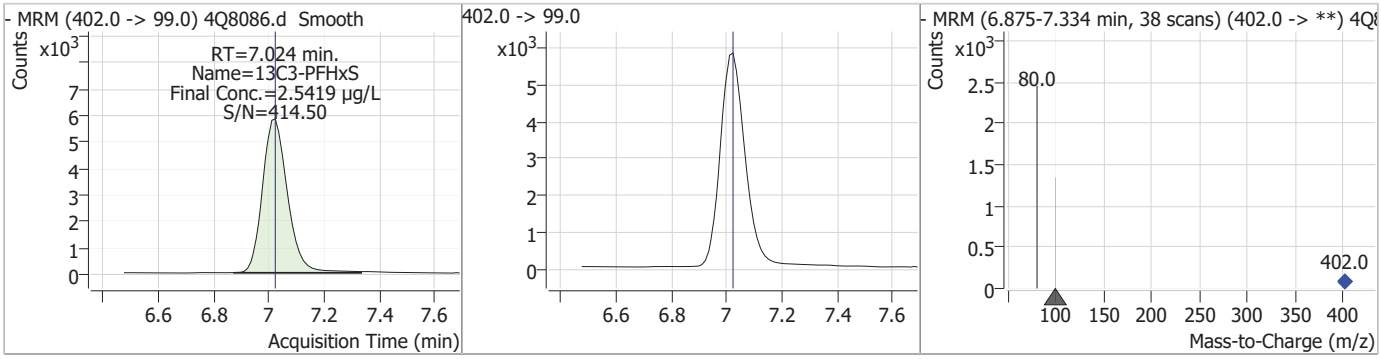
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.59	6.93	0.00	470365				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	13.16	6.93	0.00	1740884 (m)	413.0 -> 169.0	29.0	14.3	42.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.54	7.02	0.00	36635				



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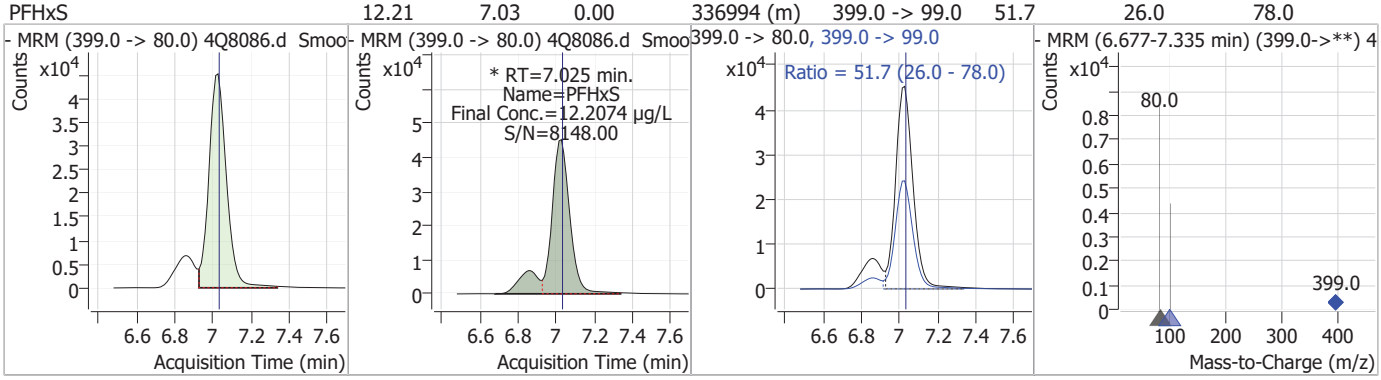
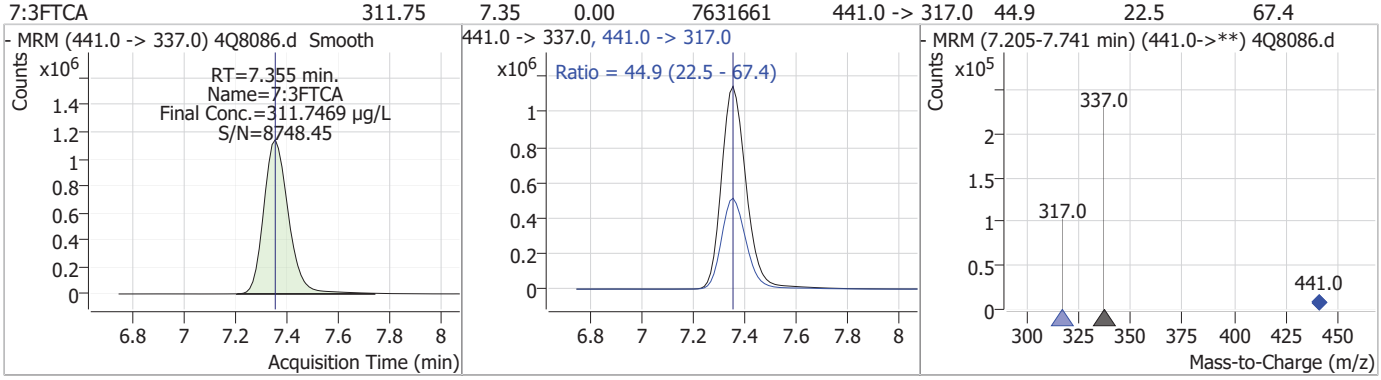
Perfluorinated Compounds by LC/MS/MS

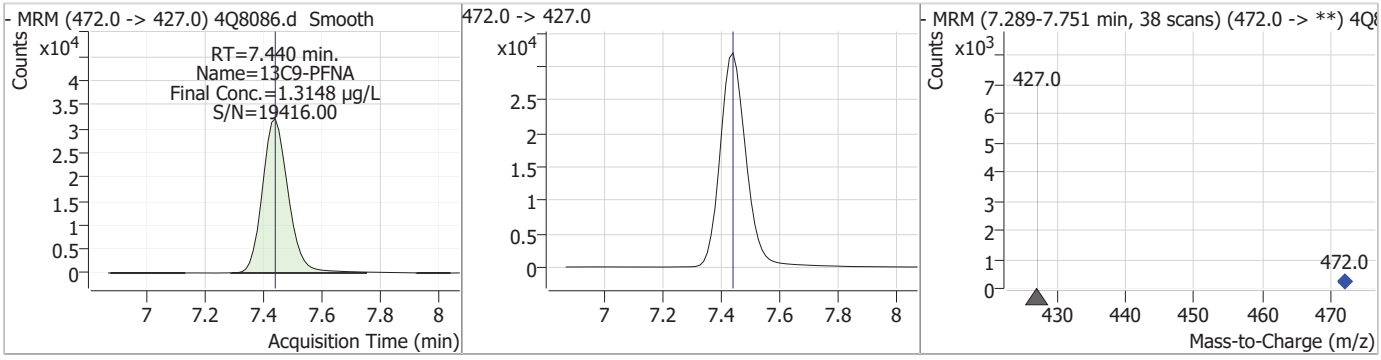
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	12.21	7.03	0.00	336994 (m)	399.0 -> 99.0	51.7	26.0	78.0



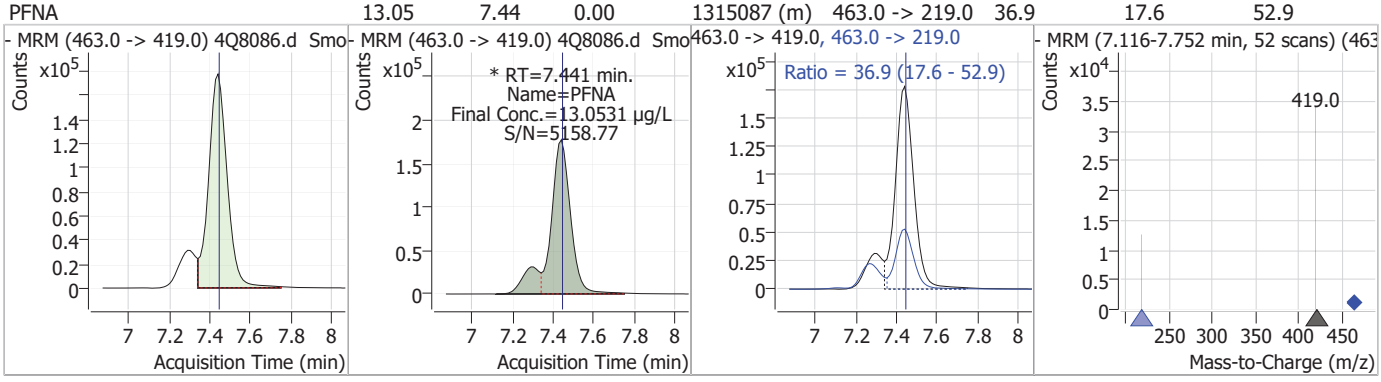
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	311.75	7.35	0.00	7631661	441.0 -> 317.0	44.9	22.5	67.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.31	7.44	0.00	196023				

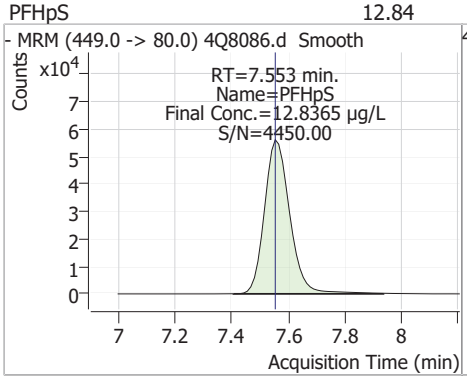


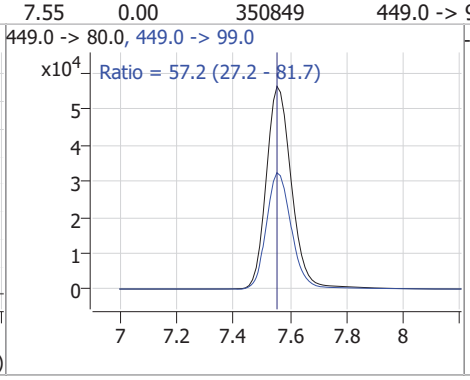
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	13.05	7.44	0.00	1315087 (m)	463.0 -> 219.0	36.9	17.6	52.9

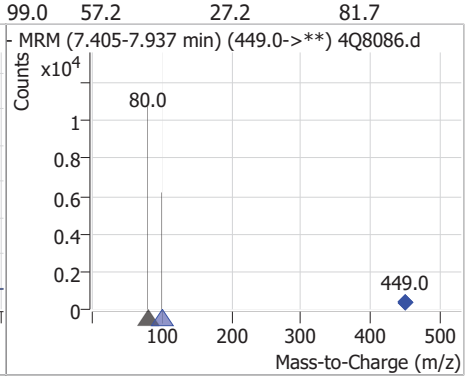


Perfluorinated Compounds by LC/MS/MS

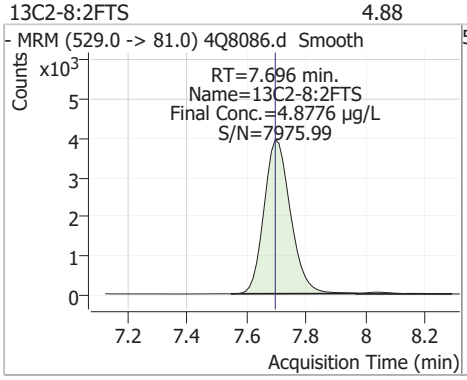
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	12.84	7.55	0.00	350849	449.0 -> 99.0	57.2	27.2	81.7

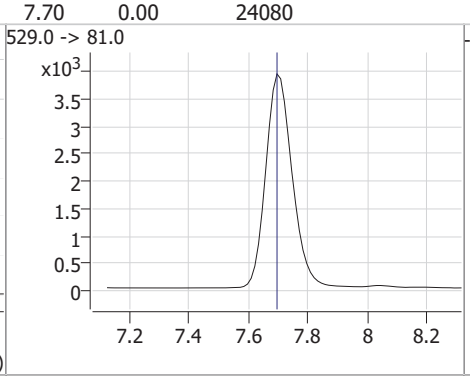


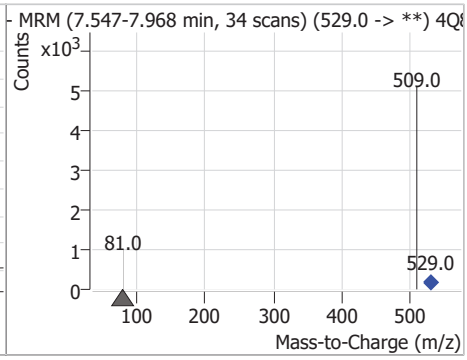




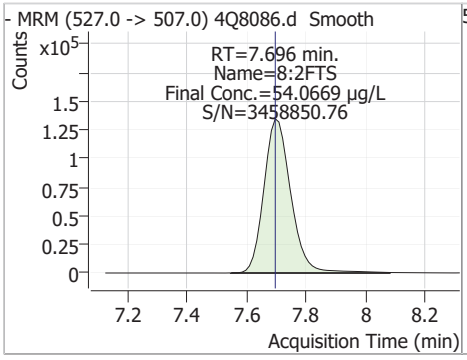
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.88	7.70	0.00	24080				

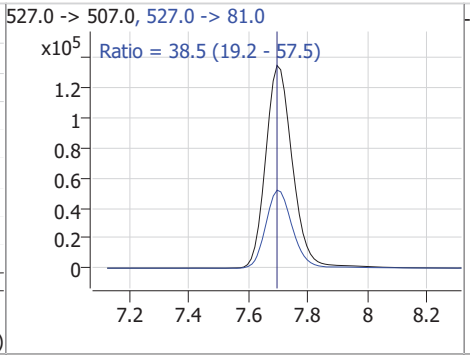


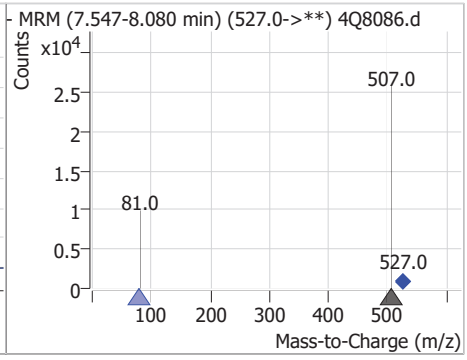




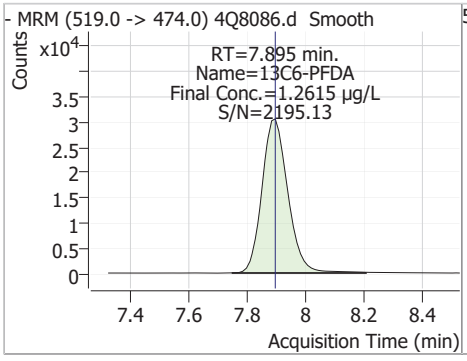
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	54.07	7.70	0.00	844488	527.0 -> 81.0	38.5	19.2	57.5

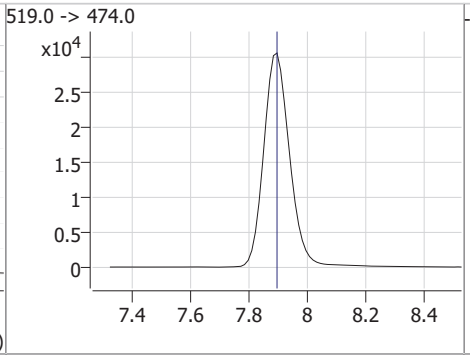


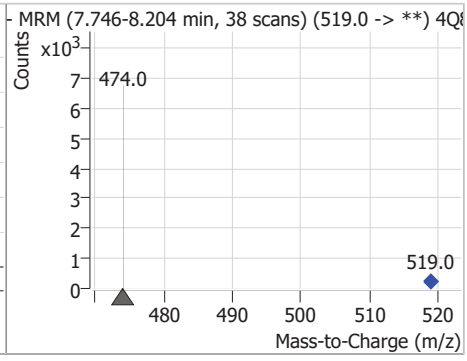




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.26	7.89	0.00	187451				







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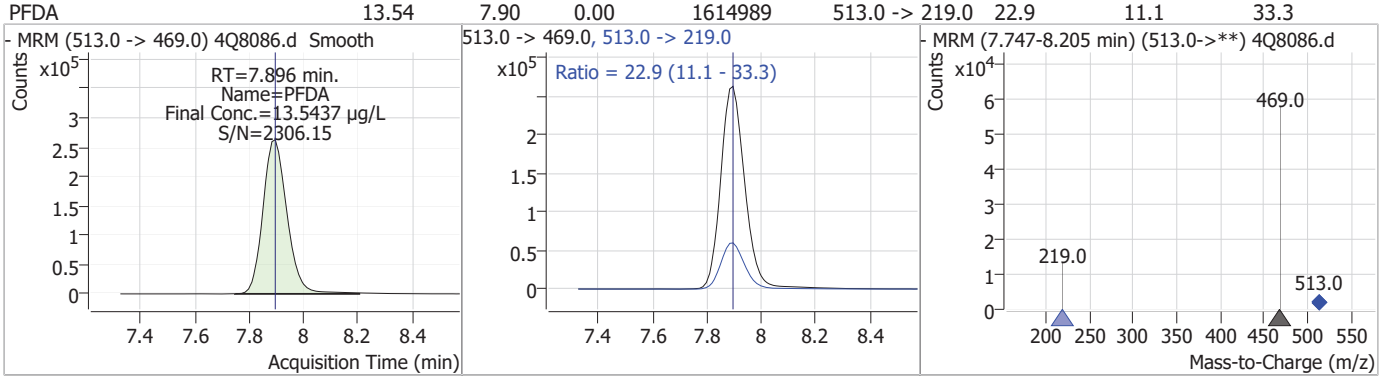
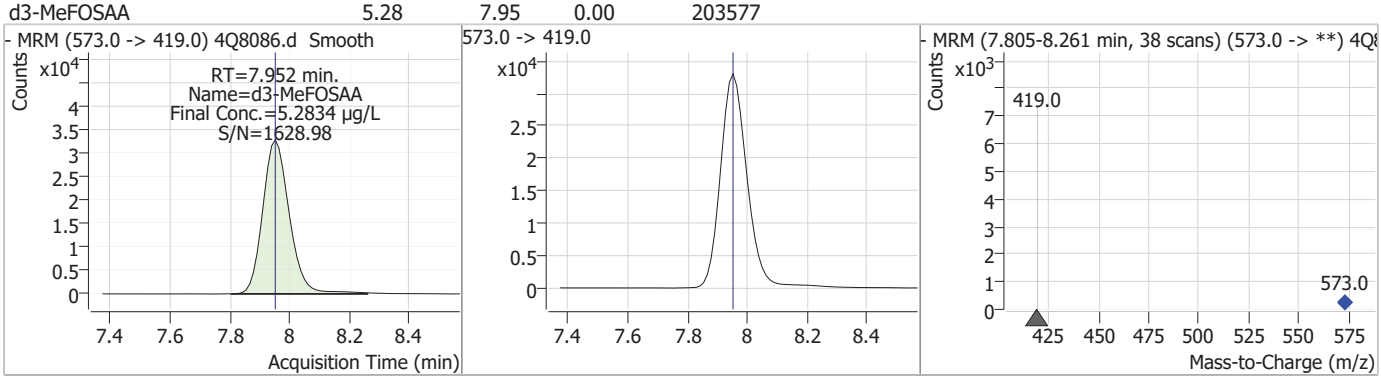
Perfluorinated Compounds by LC/MS/MS

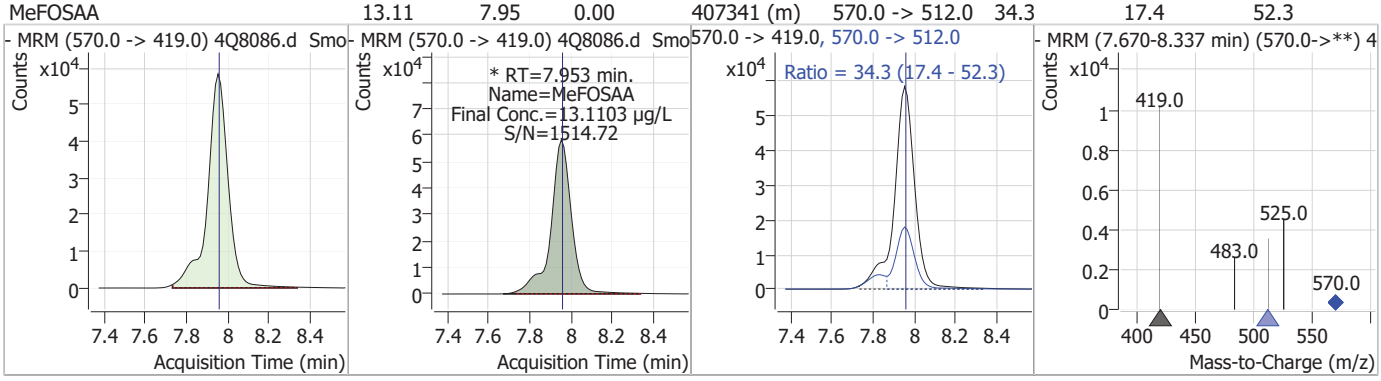
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	13.54	7.90	0.00	1614989	513.0 -> 219.0	22.9	11.1	33.3



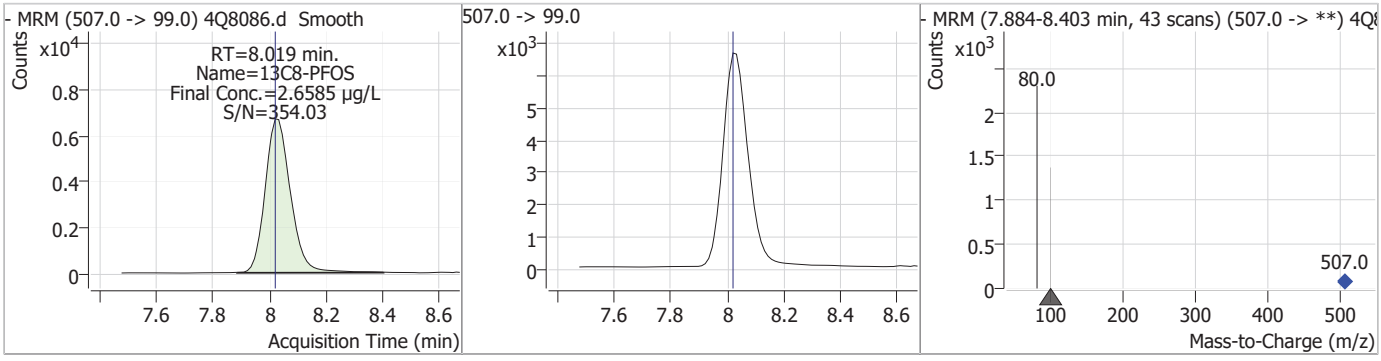
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.28	7.95	0.00	203577				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	13.11	7.95	0.00	407341 (m)	570.0 -> 512.0	34.3	17.4	52.3

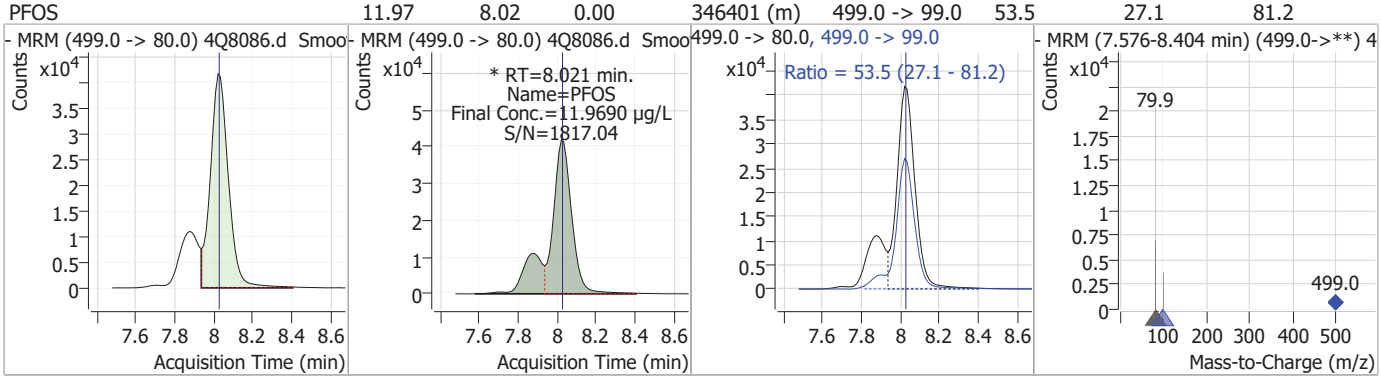


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.66	8.02	0.00	41532				

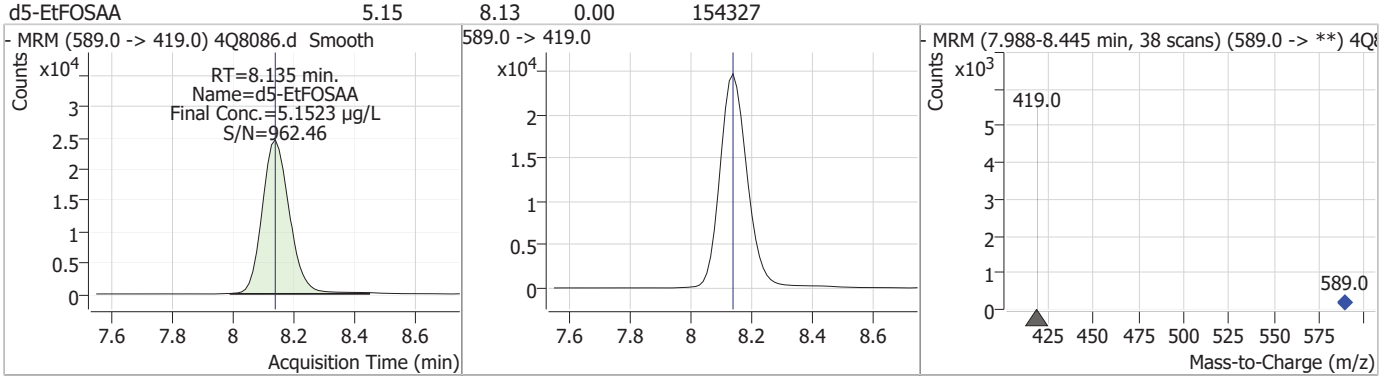


Perfluorinated Compounds by LC/MS/MS

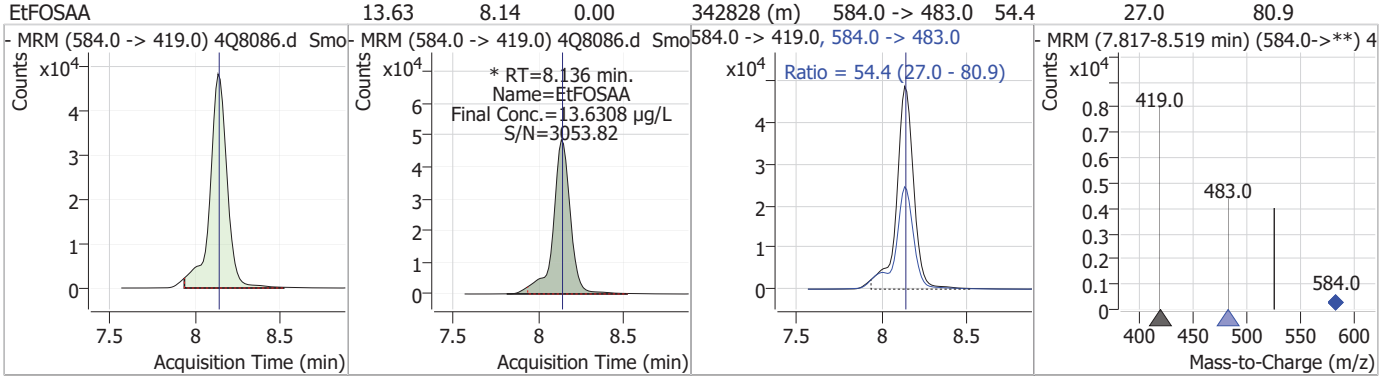
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	11.97	8.02	0.00	346401 (m)	499.0 -> 99.0	53.5	27.1	81.2



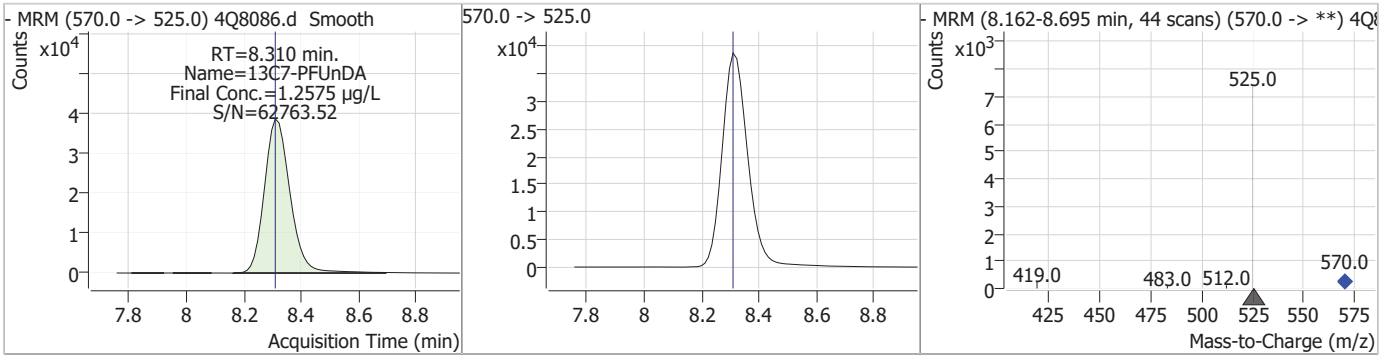
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.15	8.13	0.00	154327				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	13.63	8.14	0.00	342828 (m)	584.0 -> 483.0	54.4	27.0	80.9

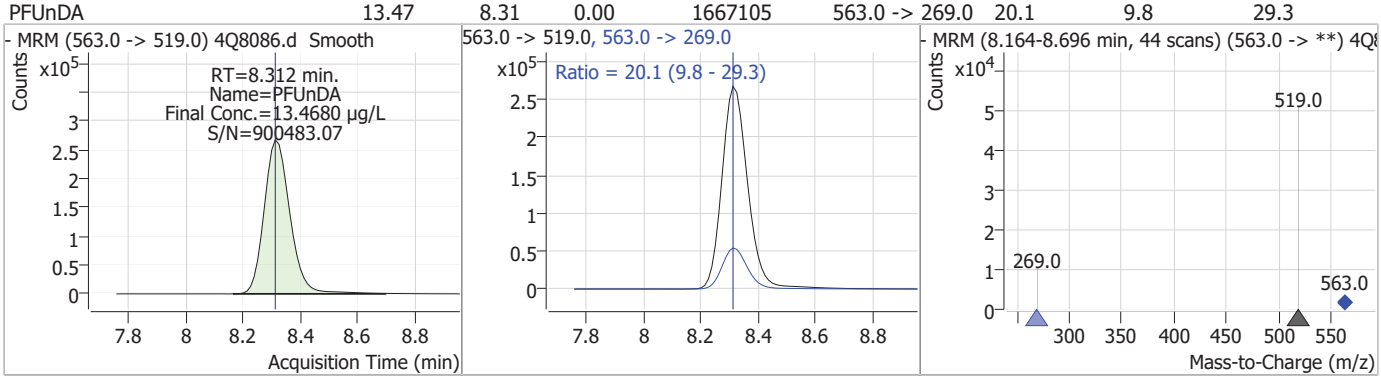


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.26	8.31	0.00	241015				

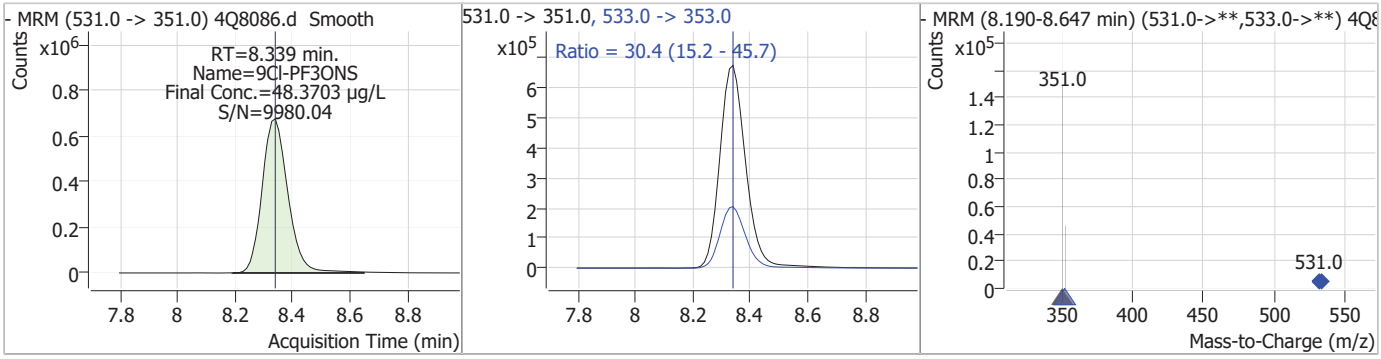


Perfluorinated Compounds by LC/MS/MS

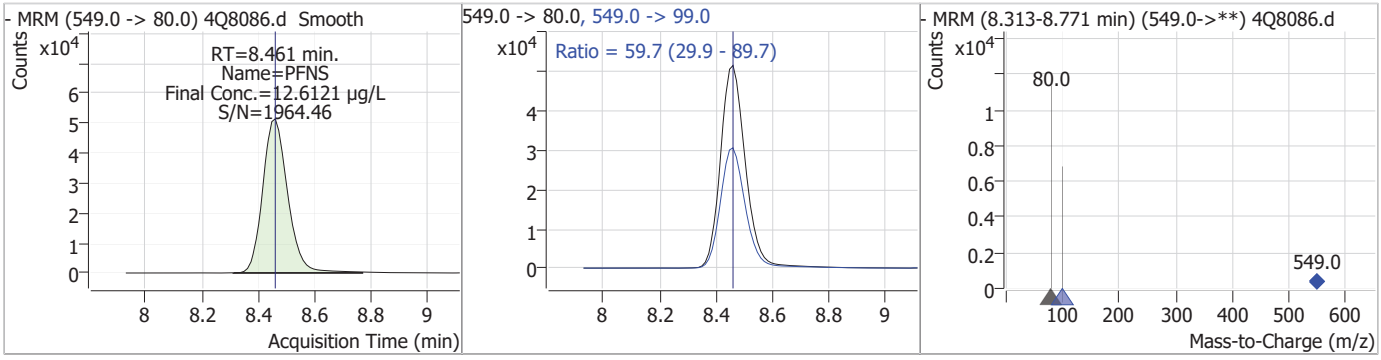
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	13.47	8.31	0.00	1667105	563.0 -> 269.0	20.1	9.8	29.3



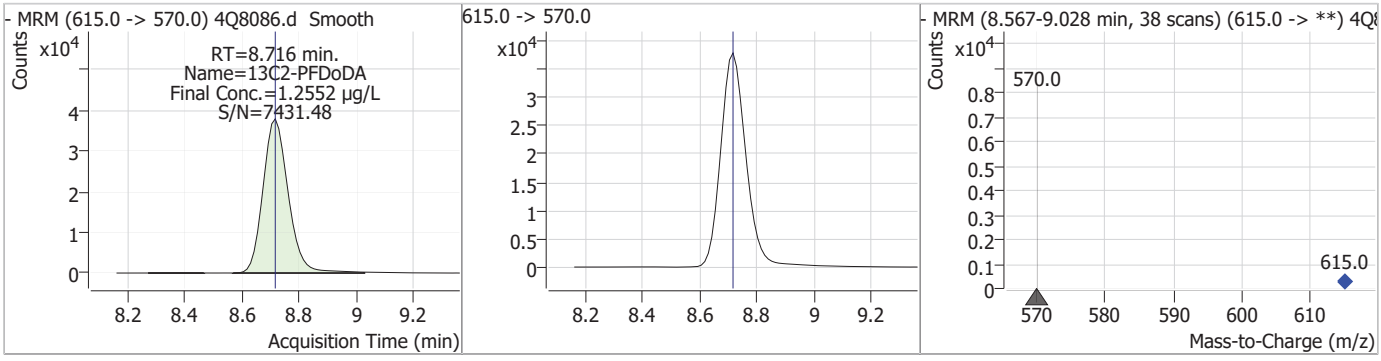
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	48.37	8.34	0.00	4212015	533.0 -> 353.0	30.4	15.2	45.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	12.61	8.46	0.00	316900	549.0 -> 99.0	59.7	29.9	89.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.26	8.72	0.00	231811				



7.6.37

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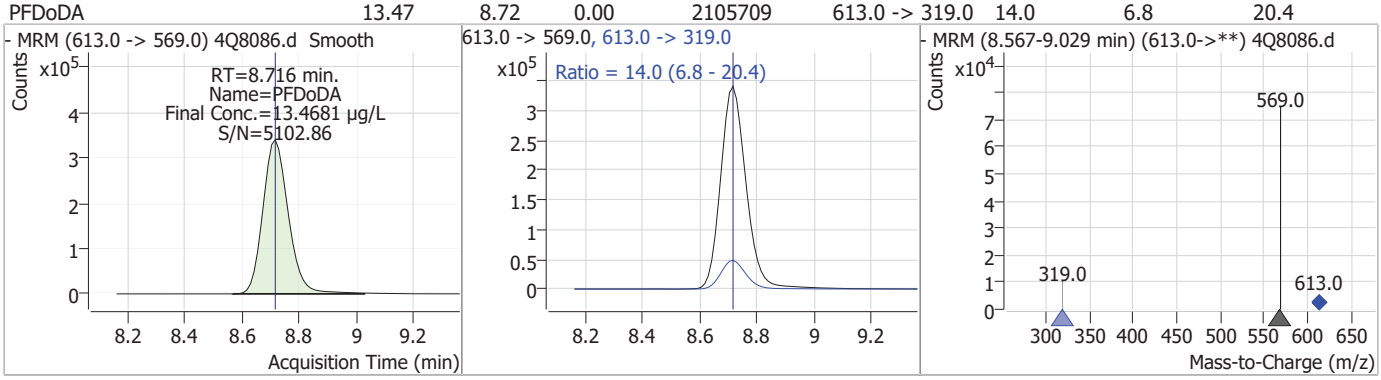
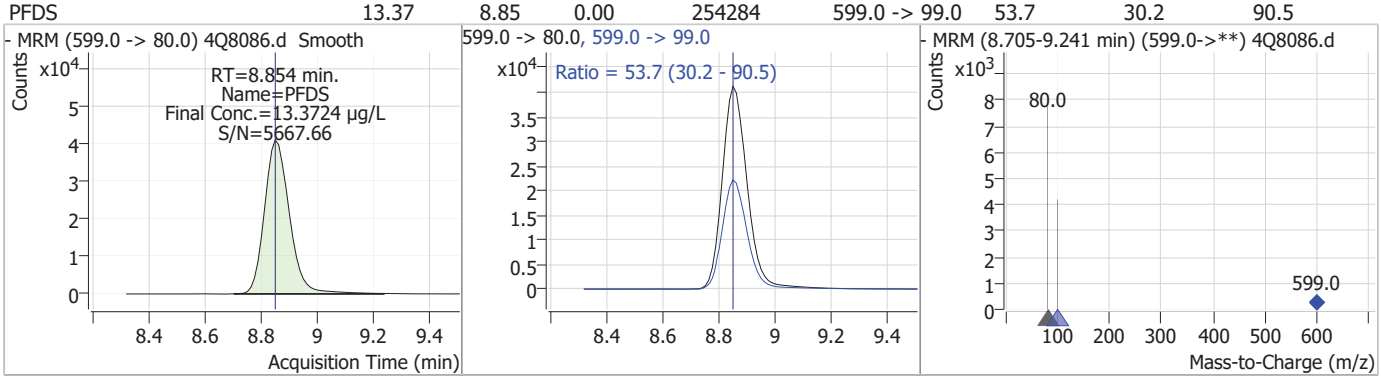
Perfluorinated Compounds by LC/MS/MS

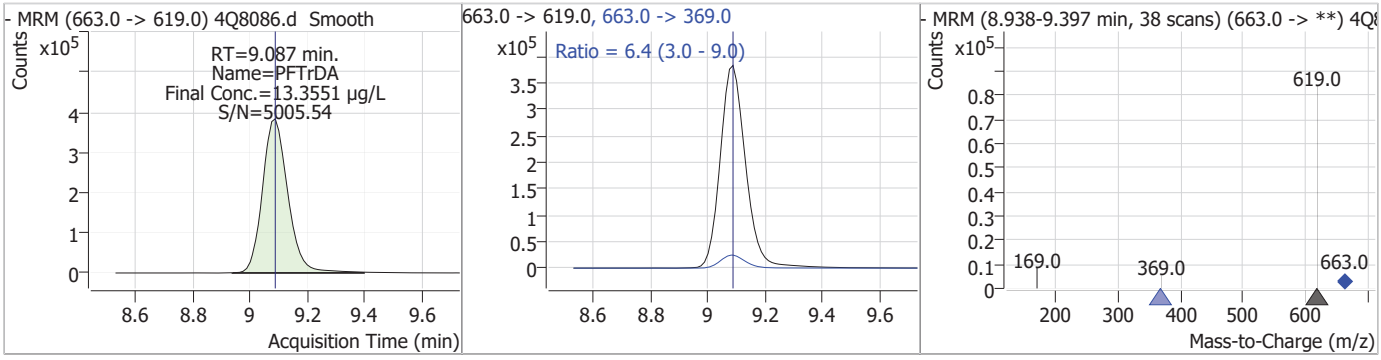
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	13.47	8.72	0.00	2105709	613.0 -> 319.0	14.0	6.8	20.4



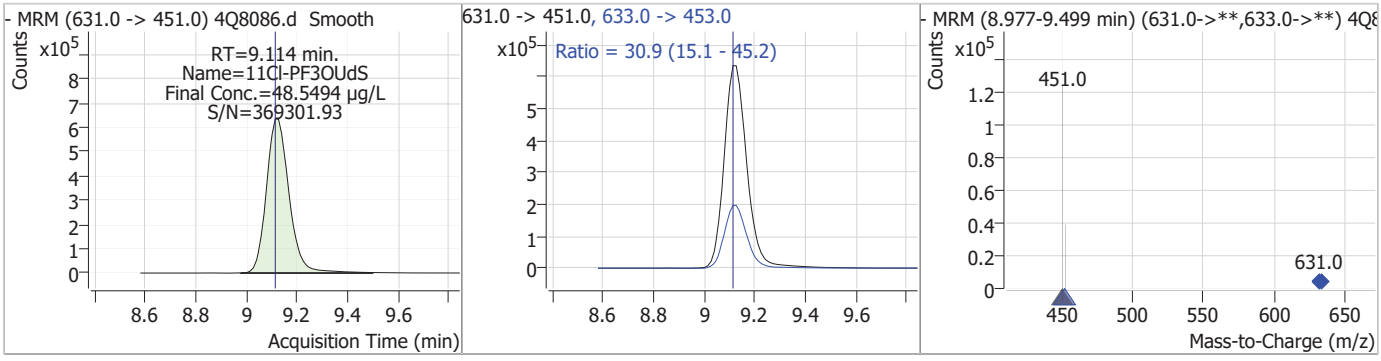
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	13.37	8.85	0.00	254284	599.0 -> 99.0	53.7	30.2	90.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	13.36	9.09	0.00	2363411	663.0 -> 369.0	6.4	3.0	9.0

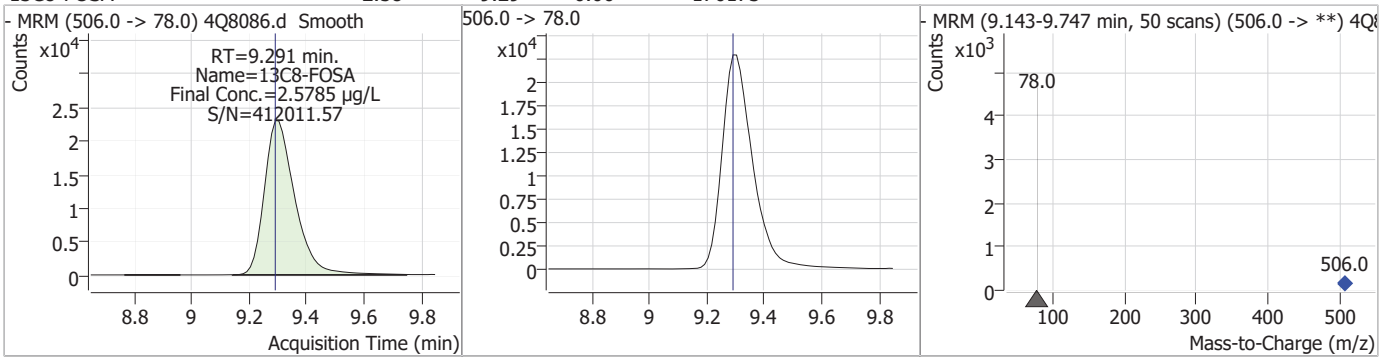


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	48.55	9.11	0.00	3961567	633.0 -> 453.0	30.9	15.1	45.2

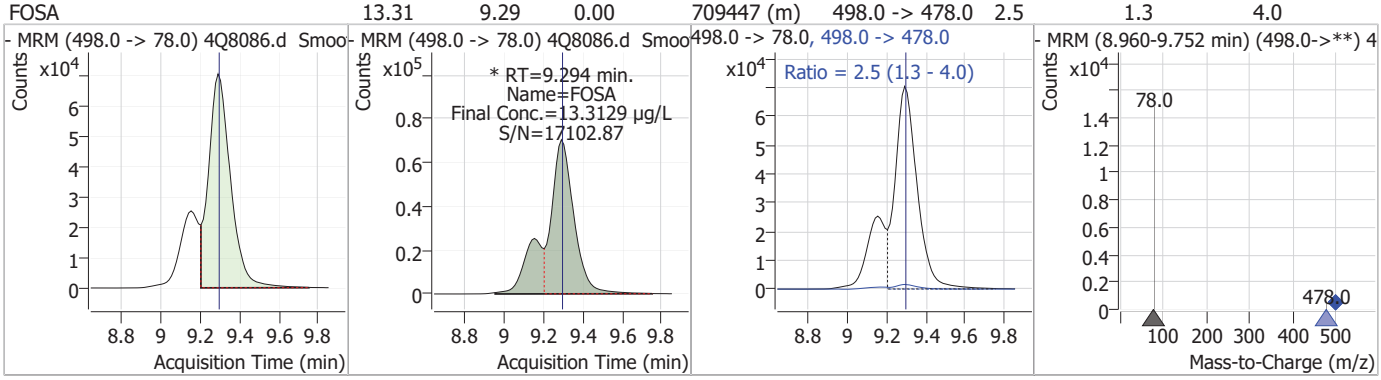


Perfluorinated Compounds by LC/MS/MS

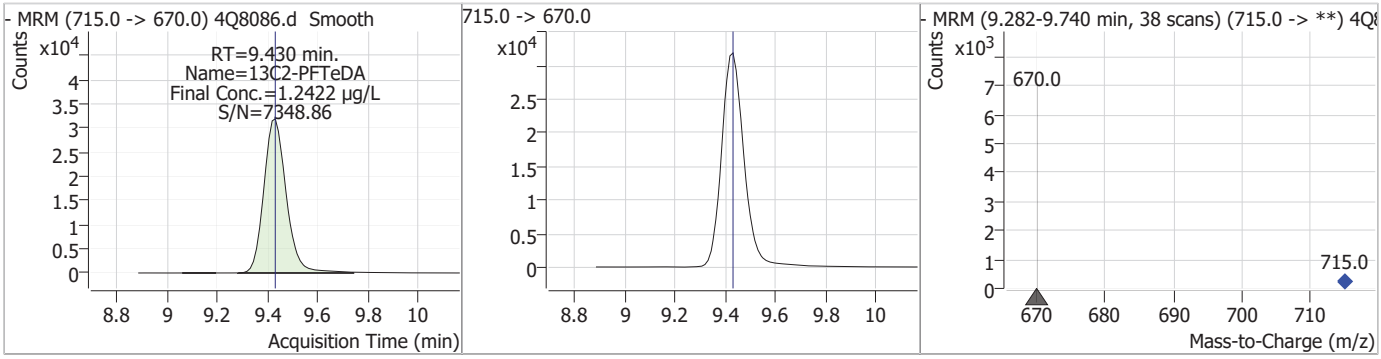
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.58	9.29	0.00	170173				



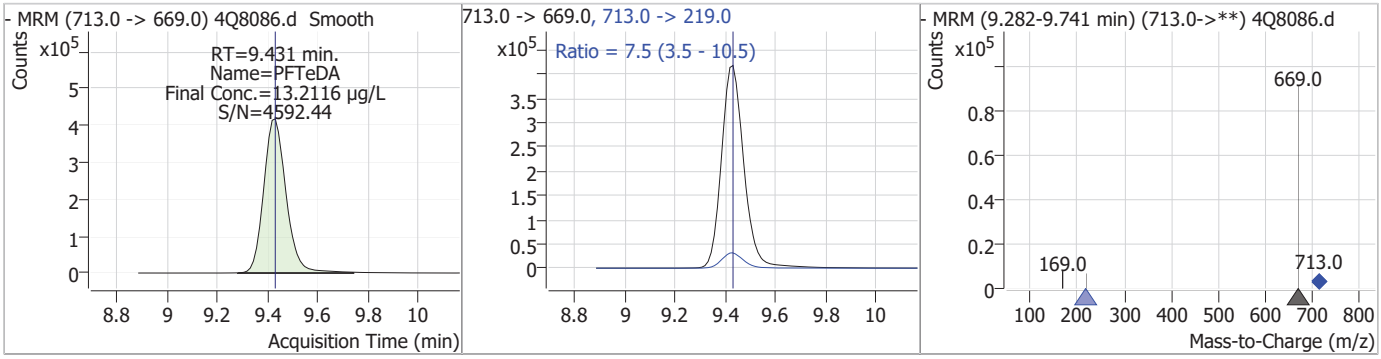
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	13.31	9.29	0.00	709447 (m)	498.0 -> 478.0	2.5	1.3	4.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.24	9.43	0.00	196302				

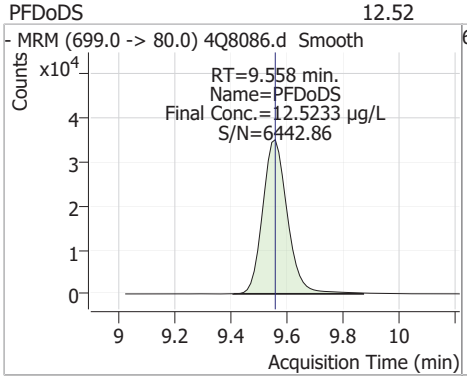


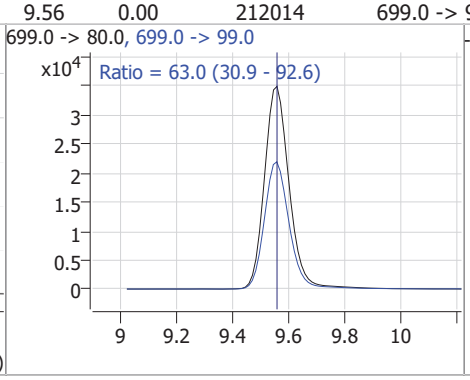
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	13.21	9.43	0.00	2581446	713.0 -> 219.0	7.5	3.5	10.5

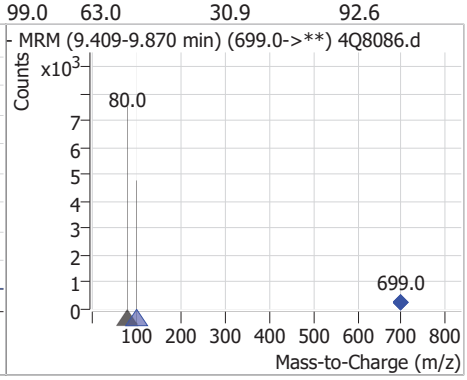


Perfluorinated Compounds by LC/MS/MS

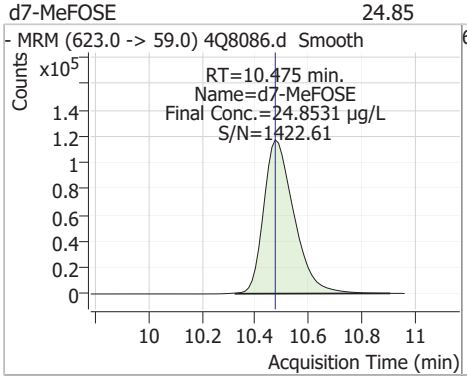
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	12.52	9.56	0.00	212014	699.0 -> 99.0	63.0	30.9	92.6

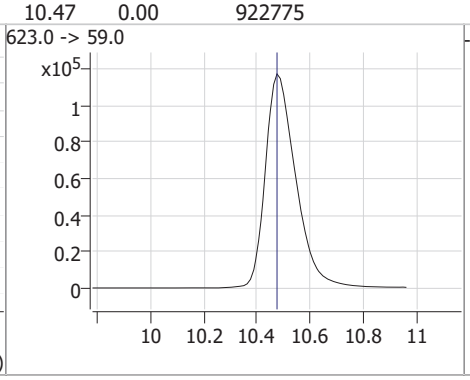


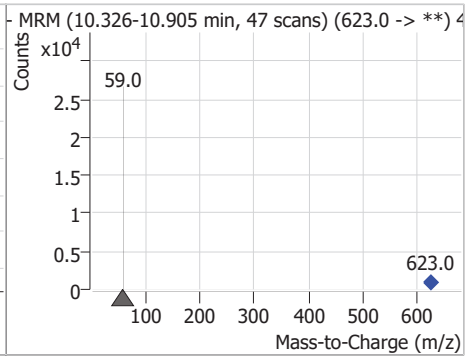




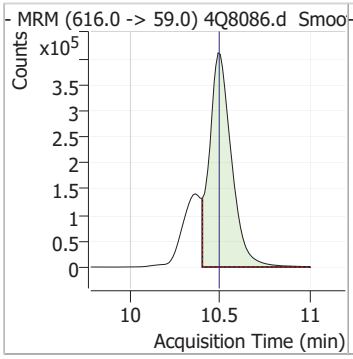
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.85	10.47	0.00	922775				

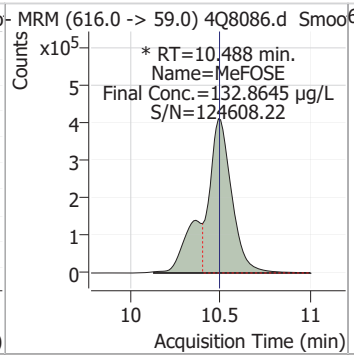


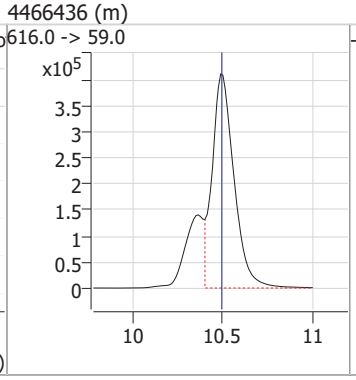


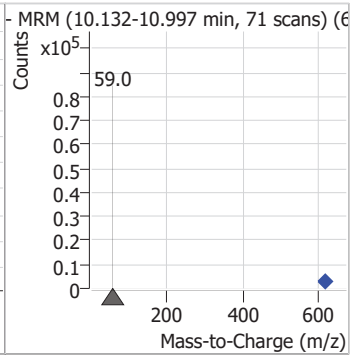


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	132.86	10.49	0.00	4466436 (m)				

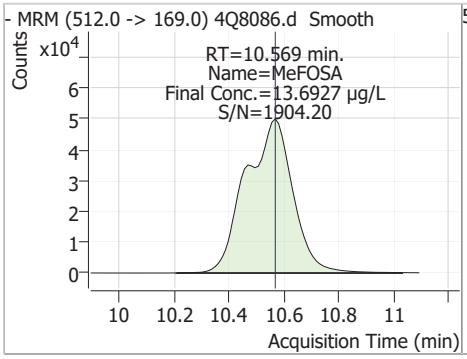


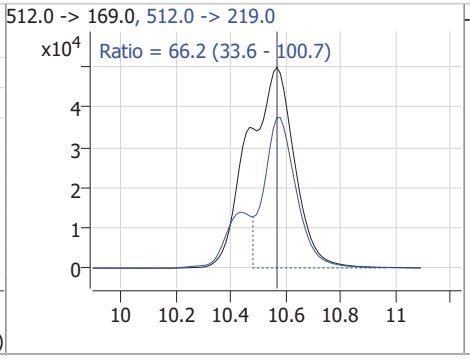


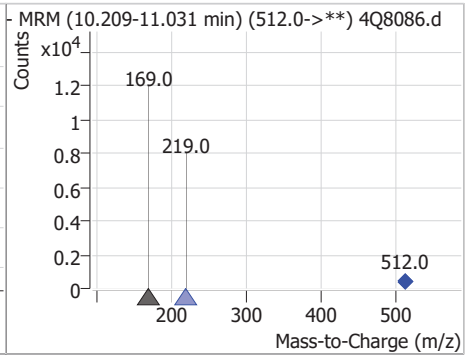




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	13.69	10.57	0.00	595192	512.0 -> 219.0	66.2	33.6	100.7

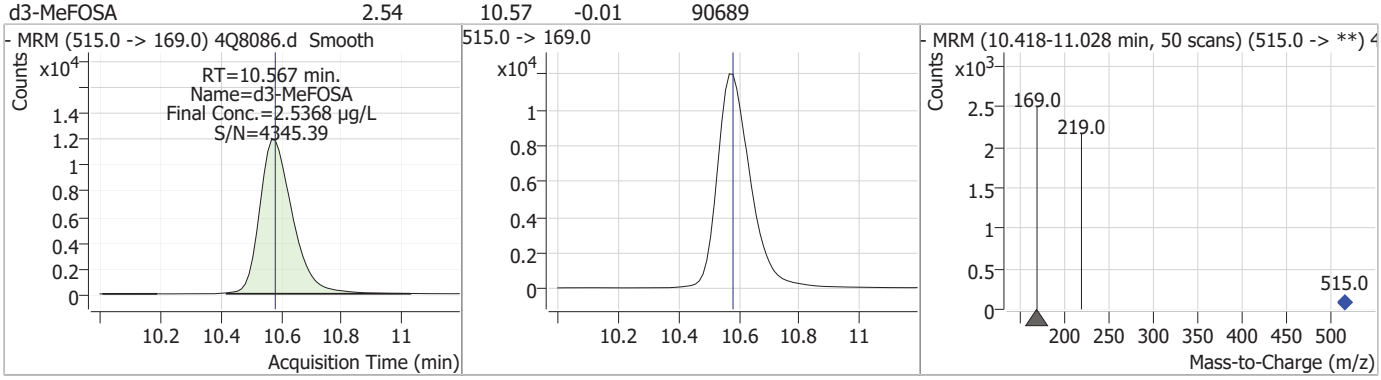




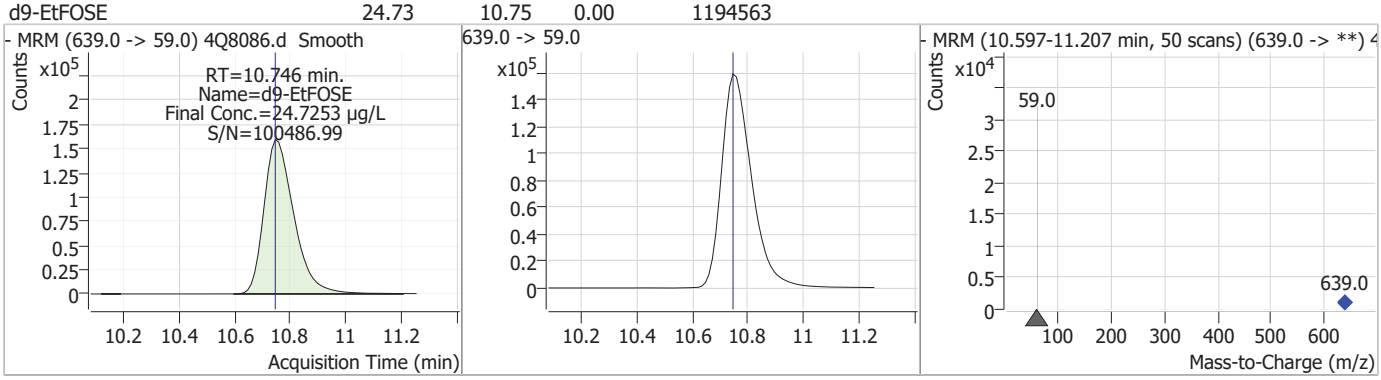


Perfluorinated Compounds by LC/MS/MS

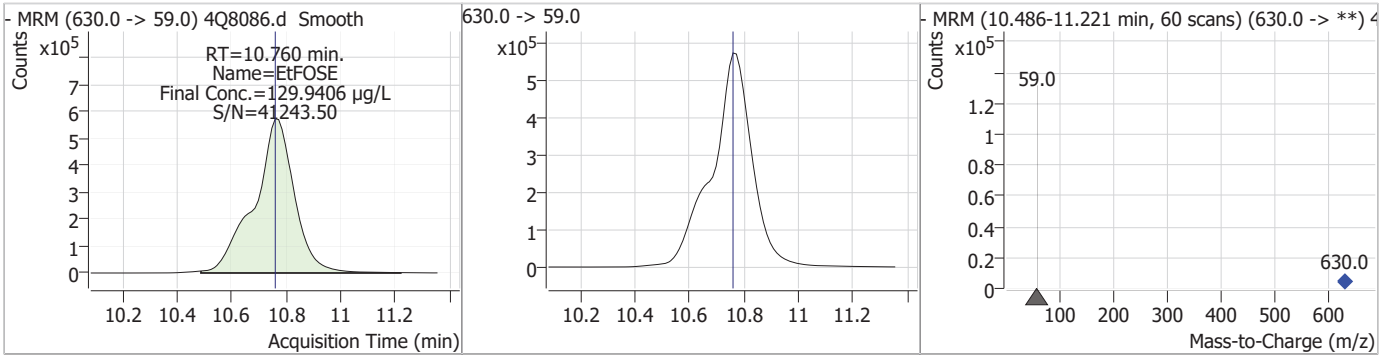
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.54	10.57	-0.01	90689				



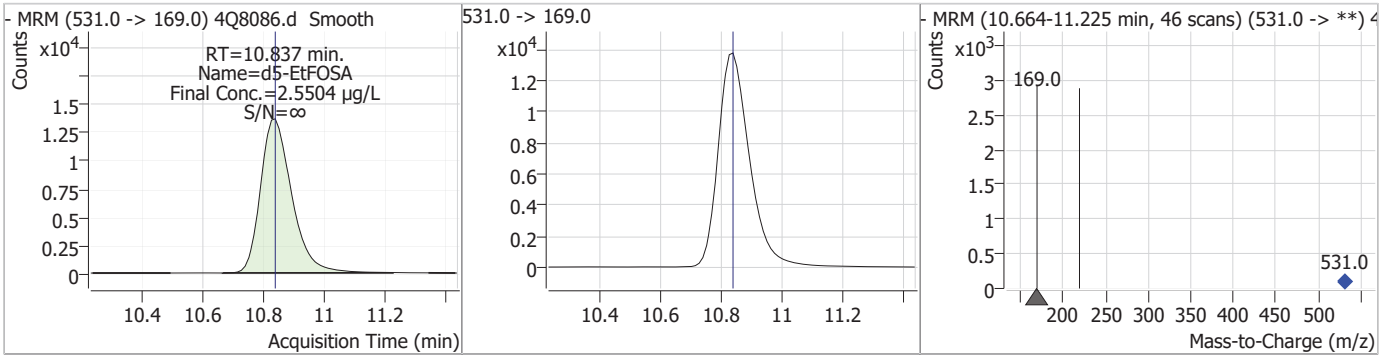
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.73	10.75	0.00	1194563				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	129.94	10.76	0.00	5869283				

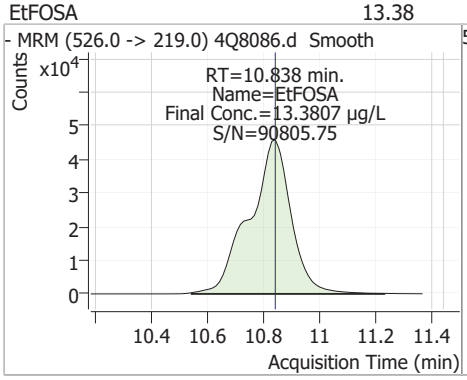


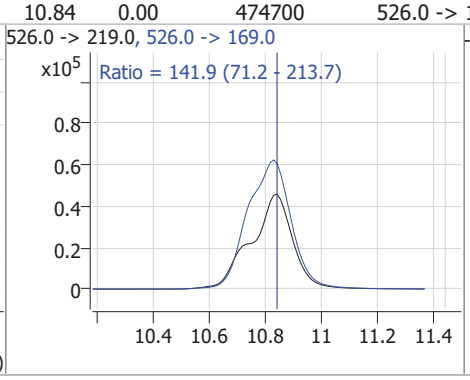
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.55	10.84	0.00	98075				

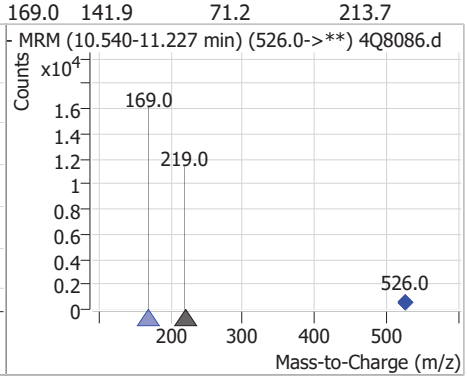


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	13.38	10.84	0.00	474700	526.0 -> 169.0	141.9	71.2	213.7







7.6.37

7

Manual Integration Approval Summary

Sample Number: T4Q137-IC137
Lab FileID: 4Q8086.D
Injection Time: 04/29/25 18:20
Method: EPA 1633
Analyst approved: 04/30/25 02:22 Rensel John Romano
Supervisor approved: 04/30/25 07:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.93	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.03	Split peak
Perfluorononanoic acid	375-95-1		7.44	Split peak
MeFOSAA	2355-31-9		7.95	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.02	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.29	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 04/30/25 07:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8087.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 6:33:56 PM
Sample Name : IC137-7
Vial : P1-A8
DA Method File : 042925_1633_T4Q137.quantmethod.xml
Batch Name : t4q137.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.908	217.0 -> 172.0	778273	10.00 µg/L	0.000
M5-PFPeA	4.344	268.0 -> 223.0	414608	5.00 µg/L	0.000
M5-PFHxA	5.476	318.0 -> 273.0	284633	2.50 µg/L	-0.012
M4-PFHpA	6.316	367.0 -> 322.0	317937	2.50 µg/L	0.000
M8-PFOA	6.922	421.0 -> 376.0	480270	2.50 µg/L	-0.012
M9-PFNA	7.440	472.0 -> 427.0	198112	1.25 µg/L	0.000
M6-PFDA	7.895	519.0 -> 474.0	194866	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	249608	1.25 µg/L	0.000
M2-PFDoDA	8.716	615.0 -> 570.0	243988	1.25 µg/L	0.000
M2-PFTeDA	9.430	715.0 -> 670.0	208363	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	178254	2.50 µg/L	0.000
M3-PFBS	5.381	302.0 -> 99.0	25732	2.50 µg/L	0.000
		302.0 -> 80.0	62074		
M3-PFHxS	7.024	402.0 -> 99.0	38933	2.50 µg/L	0.000
M8-PFOS	8.019	507.0 -> 99.0	43030	2.50 µg/L	0.000
M2-4:2FTS	5.178	329.0 -> 81.0	9352	5.00 µg/L	-0.012
M2-6:2FTS	6.721	429.0 -> 81.0	20487	5.00 µg/L	0.000
M2-8:2FTS	7.696	529.0 -> 81.0	26043	5.00 µg/L	0.000
M3-MeFOSAA	7.952	573.0 -> 419.0	207303	5.00 µg/L	0.000
M3-HFPO-DA	5.804	287.0 -> 169.0	429863	10.00 µg/L	-0.012
M5-EtFOSAA	8.135	589.0 -> 419.0	158201	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	947752	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1213217	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	102377	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	95525	2.50 µg/L	-0.012
13C4-PFOS	8.020	503.0 -> 80.0	72586	2.50 µg/L	0.000
13C3-PFBA	2.911	216.0 -> 172.0	351934	5.00 µg/L	0.000
18O2-PFHxS	7.023	403.0 -> 84.0	43053	2.50 µg/L	0.000
13C4-PFOA	6.922	417.0 -> 372.0	481140	2.50 µg/L	-0.012
13C2-PFDA	7.895	515.0 -> 470.0	170257	1.25 µg/L	0.000
13C5-PFNA	7.440	468.0 -> 423.0	196969	1.25 µg/L	0.000
13C2-PFHxA	5.477	315.0 -> 270.0	275976	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.178	329.0 -> 81.0	9352	4.24 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 84.8%	
13C2-6:2FTS	6.721	429.0 -> 81.0	20487	4.49 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 89.7%	
13C2-8:2FTS	7.696	529.0 -> 81.0	26043	4.65 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.0%	
13C2-PFDoDA	8.716	615.0 -> 570.0	243988	1.16 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.9%	
13C2-PFTeDA	9.430	715.0 -> 670.0	208363	1.16 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.7%	
13C3-PFBS	5.381	302.0 -> 99.0	25732	2.30 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.0%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.024	402.0 -> 99.0	38933	2.38	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.2%			
13C4-PFBA	2.908	217.0 -> 172.0	778273	8.95	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 89.5%			
13C4-PFHpA	6.316	367.0 -> 322.0	317937	2.30	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.1%			
13C5-PFHxA	5.476	318.0 -> 273.0	284633	2.25	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.2%			
13C5-PFPeA	4.344	268.0 -> 223.0	414608	4.46	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 89.3%			
13C6-PFDA	7.895	519.0 -> 474.0	194866	1.15	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.2%			
13C7-PFUnDA	8.310	570.0 -> 525.0	249608	1.14	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.5%			
13C8-FOSA	9.291	506.0 -> 78.0	178254	2.29	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.7%			
13C8-PFOA	6.922	421.0 -> 376.0	480270	2.30	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.9%			
13C8-PFOS	8.019	507.0 -> 99.0	43030	2.34	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.5%			
13C9-PFNA	7.440	472.0 -> 427.0	198112	1.12	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.3%			
d3-MeFOSAA	7.952	573.0 -> 419.0	207303	4.57	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.3%			
13C3-HFPO-DA	5.804	287.0 -> 169.0	429863	9.04	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 90.4%			
d3-MeFOSA	10.567	515.0 -> 169.0	95525	2.27	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.7%			
d5-EtFOSAA	8.135	589.0 -> 419.0	158201	4.48	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 89.6%			
d7-MeFOSE	10.475	623.0 -> 59.0	947752	21.66	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 86.6%			
d9-EtFOSE	10.746	639.0 -> 59.0	1213217	21.31	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 85.2%			
d5-EtFOSA	10.837	531.0 -> 169.0	102377	2.26	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.4%			
Target Compounds							QValue
4:2FTS	5.178	327.0 -> 307.0	1484061	103.02	µg/L		99
		327.0 -> 81.0	682568				
6:2FTS	6.709	427.0 -> 407.0	1727819	100.23	µg/L		97
		427.0 -> 81.0	790742				
8:2FTS	7.696	527.0 -> 507.0	1633962	96.73	µg/L		98
		527.0 -> 81.0	644872				
EtFOSAA	8.136	584.0 -> 419.0	749524	29.07	µg/L	m	100
		584.0 -> 483.0	401918				
FOSA	9.294	498.0 -> 78.0	1497783	26.83	µg/L	m	100
		498.0 -> 478.0	38189				
MeFOSAA	7.953	570.0 -> 419.0	851240	26.90	µg/L	m	99
		570.0 -> 512.0	300171				
PFBA	2.914	213.0 -> 169.0	2397462	112.33	µg/L		100
PFBS	5.382	299.0 -> 80.0	590990	24.47	µg/L		100
		299.0 -> 99.0	250414				
PFDA	7.896	513.0 -> 469.0	3357115	27.08	µg/L		97
		513.0 -> 219.0	789384				
PFDoDA	8.716	613.0 -> 569.0	4412292	26.81	µg/L		99
		613.0 -> 319.0	614882				

Perfluorinated Compounds by LC/MS/MS

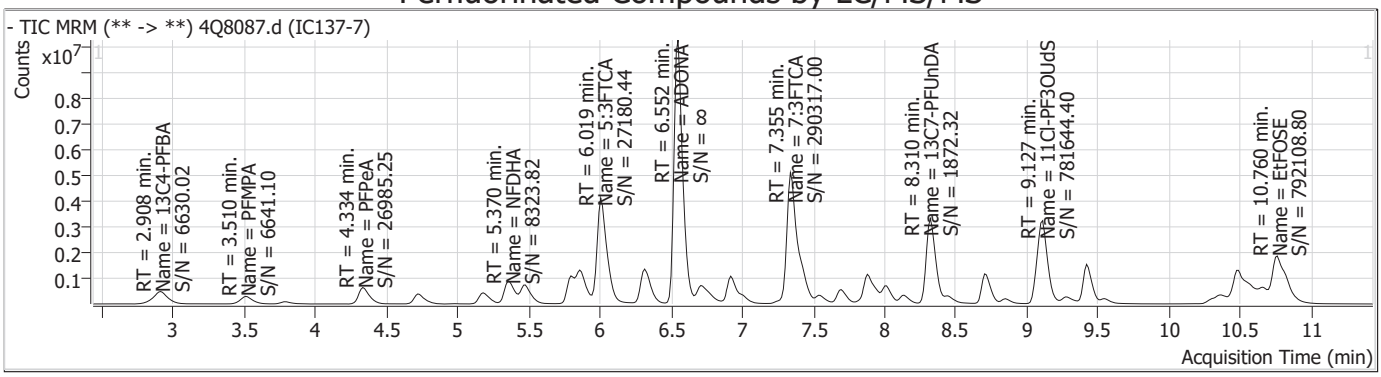
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.854	599.0 -> 80.0	516441	26.22	µg/L		94
		599.0 -> 99.0	289274				
PFHpA	6.317	363.0 -> 319.0	4352065	26.62	µg/L		98
		363.0 -> 169.0	902681				
PFHpS	7.553	449.0 -> 80.0	746203	25.69	µg/L		98
		449.0 -> 99.0	415857				
PFHxA	5.479	313.0 -> 269.0	2819461	27.22	µg/L		99
		313.0 -> 119.0	95868				
PFHxS	7.013	399.0 -> 80.0	716832	24.43	µg/L	m	98
		399.0 -> 99.0	380322				
PFNA	7.441	463.0 -> 419.0	2804445	27.54	µg/L	m	98
		463.0 -> 219.0	1028823				
PFNS	8.461	549.0 -> 80.0	660455	25.37	µg/L		100
		549.0 -> 99.0	397101				
PFOA	6.935	413.0 -> 369.0	3686260	27.30	µg/L	m	99
		413.0 -> 169.0	1071830				
PFOS	8.021	499.0 -> 80.0	717175	23.92	µg/L	m	100
		499.0 -> 99.0	386654				
PFPeA	4.334	263.0 -> 219.0	3021761	54.95	µg/L		100
PFPeS	6.355	349.0 -> 80.0	706653	26.27	µg/L		100
		349.0 -> 99.0	359525				
PFTeDA	9.431	713.0 -> 669.0	5533367	26.68	µg/L		99
		713.0 -> 219.0	415781				
PFTrDA	9.087	663.0 -> 619.0	4955602	26.61	µg/L		98
		663.0 -> 369.0	327558				
PFUnDA	8.312	563.0 -> 519.0	3425390	26.72	µg/L		98
		563.0 -> 269.0	709909				
11Cl-PF3OUdS	9.127	631.0 -> 451.0	8446208	101.13	µg/L		99
		633.0 -> 453.0	2512869				
9Cl-PF3ONS	8.339	531.0 -> 351.0	8823120	98.99	µg/L		98
		533.0 -> 353.0	2585275				
ADONA	6.552	377.0 -> 251.0	34952889	119.82	µg/L		92
		377.0 -> 85.0	9861529				
HFPO-DA	5.805	285.0 -> 169.0	4197911	107.75	µg/L		97
		285.0 -> 185.0	492141				
3:3FTCA	3.781	241.0 -> 177.0	422539	140.94	µg/L		99
		241.0 -> 117.0	35245				
5:3FTCA	6.019	341.0 -> 237.0	11678739	624.00	µg/L		99
		341.0 -> 217.0	8301212				
7:3FTCA	7.355	441.0 -> 337.0	17268950	626.32	µg/L		98
		441.0 -> 317.0	7490995				
EtFOSA	10.838	526.0 -> 219.0	1026354	27.71	µg/L		98
		526.0 -> 169.0	1435452				
EtFOSE	10.760	630.0 -> 59.0	12439986	271.18	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	1257502	27.47	µg/L		100
		512.0 -> 219.0	841911				
MeFOSE	10.488	616.0 -> 59.0	9404818	272.40	µg/L	m	100
PFDoDS	9.558	699.0 -> 80.0	445817	25.42	µg/L		98
		699.0 -> 99.0	281144				
NFDHA	5.370	295.0 -> 201.0	736330	54.73	µg/L		90
		201.0 -> 85.0	2913863				
		295.0 -> 85.0	197812				
PFMBA	4.735	279.0 -> 85.0	2052947	54.72	µg/L		100
PFMPA	3.510	229.0 -> 85.0	1792841	55.10	µg/L		100
PFEESA	5.872	315.0 -> 135.0	4720480	48.14	µg/L		98
		315.0 -> 69.0	399858				

Perfluorinated Compounds by LC/MS/MS

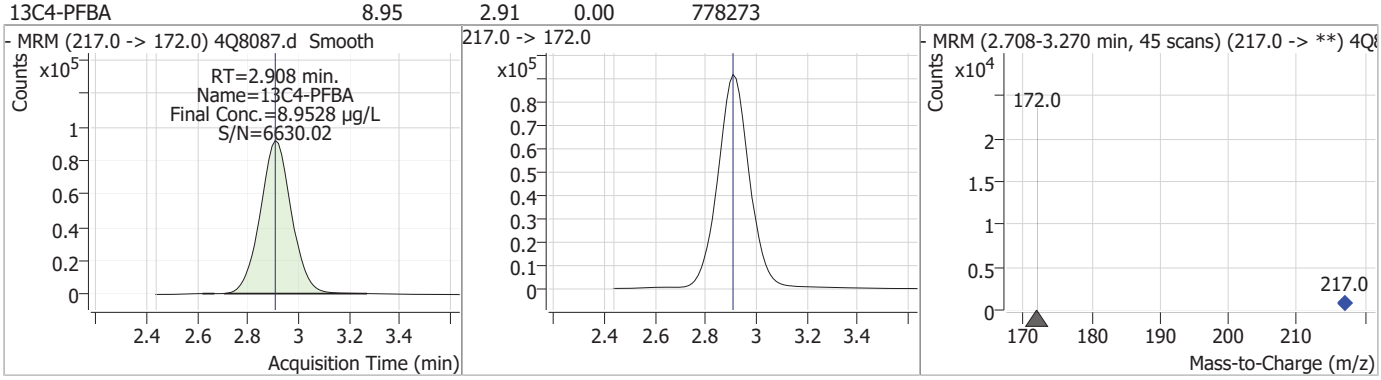
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

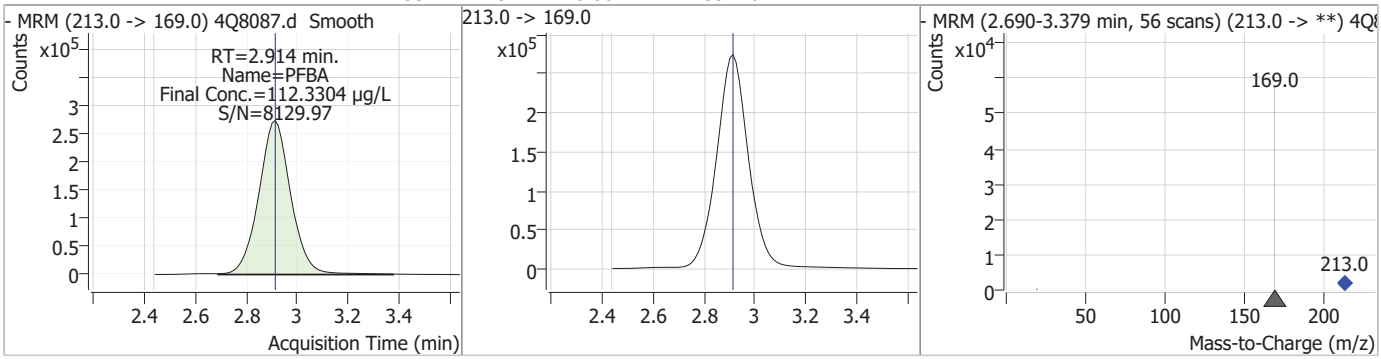
Perfluorinated Compounds by LC/MS/MS



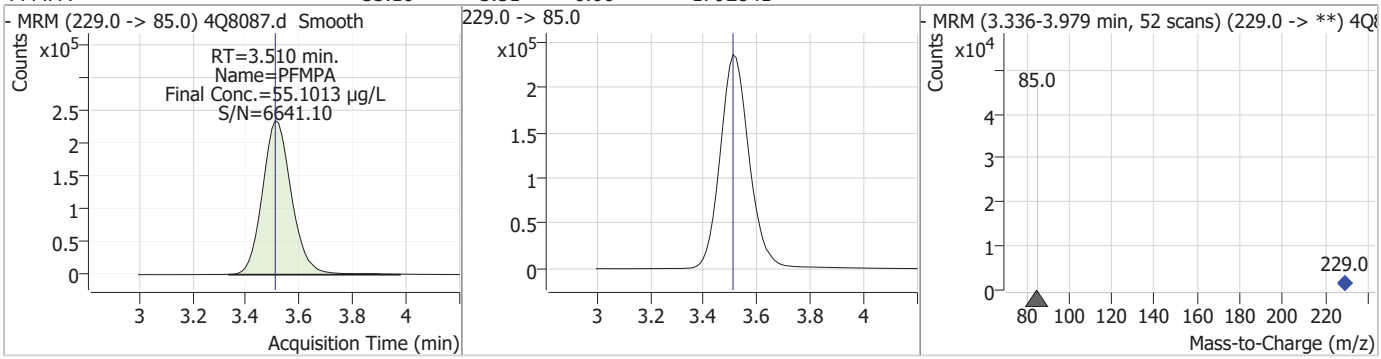
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	8.95	2.91	0.00	778273				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	112.33	2.91	0.00	2397462				

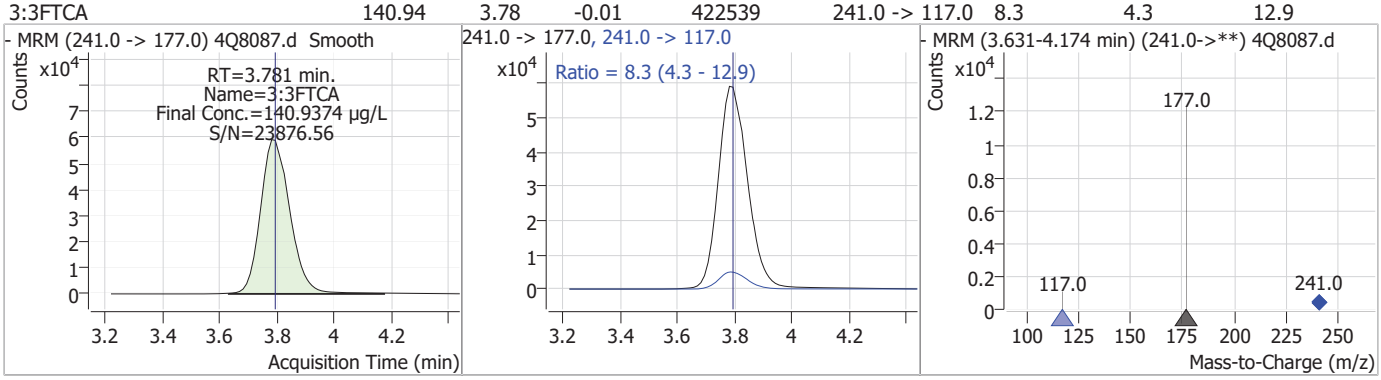


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	55.10	3.51	0.00	1792841				

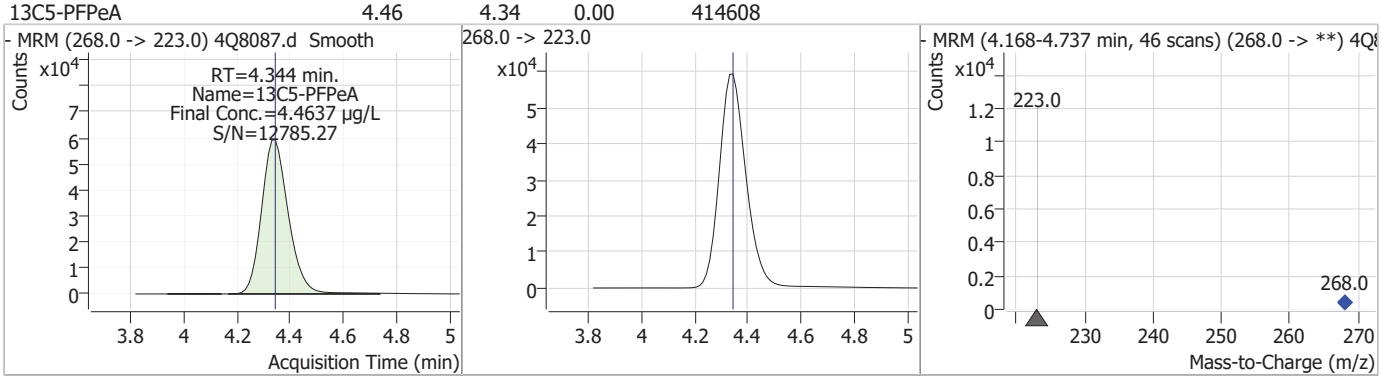


Perfluorinated Compounds by LC/MS/MS

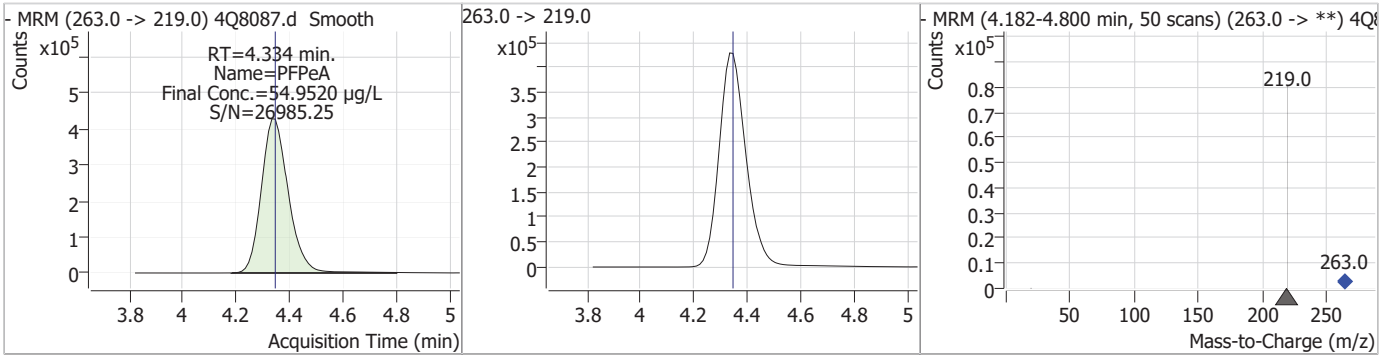
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	140.94	3.78	-0.01	422539	241.0 -> 117.0	8.3	4.3	12.9



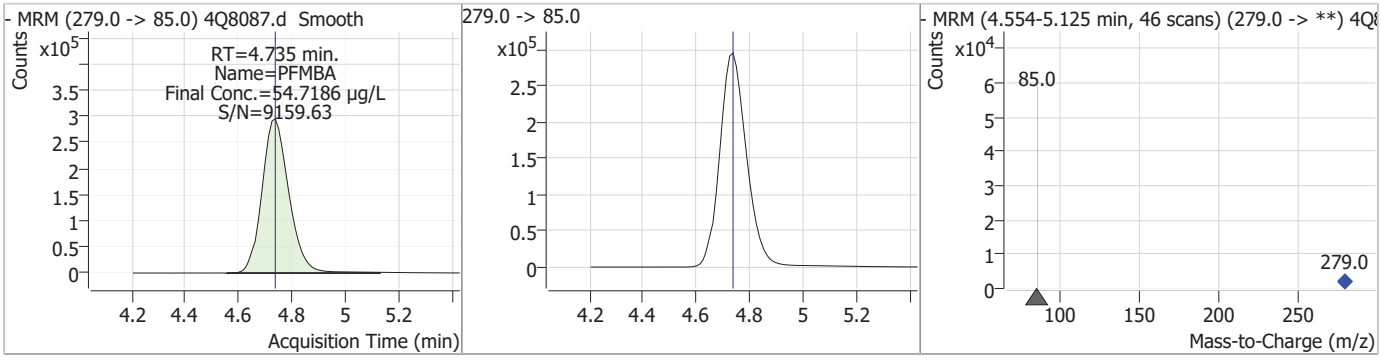
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.46	4.34	0.00	414608				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	54.95	4.33	-0.01	3021761				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	54.72	4.73	0.00	2052947				



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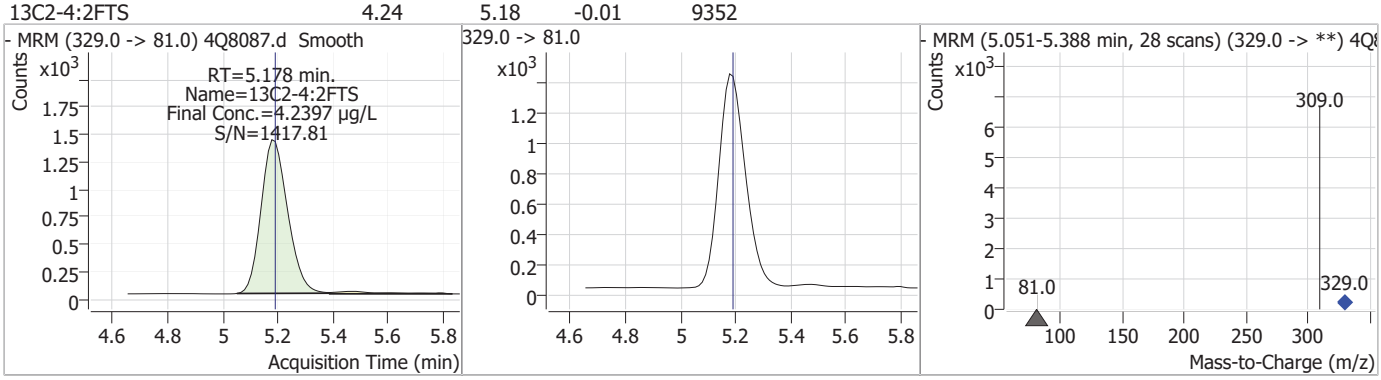
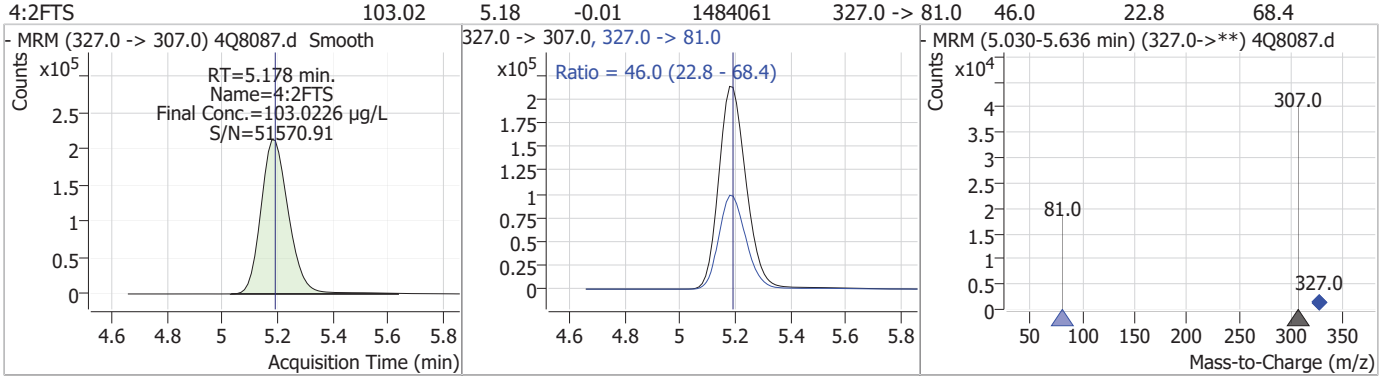
Perfluorinated Compounds by LC/MS/MS

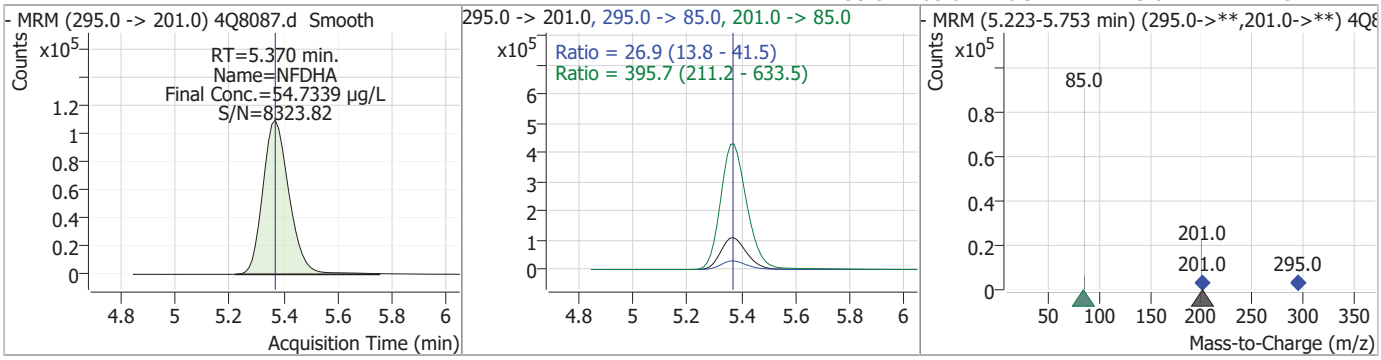
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.24	5.18	-0.01	9352				



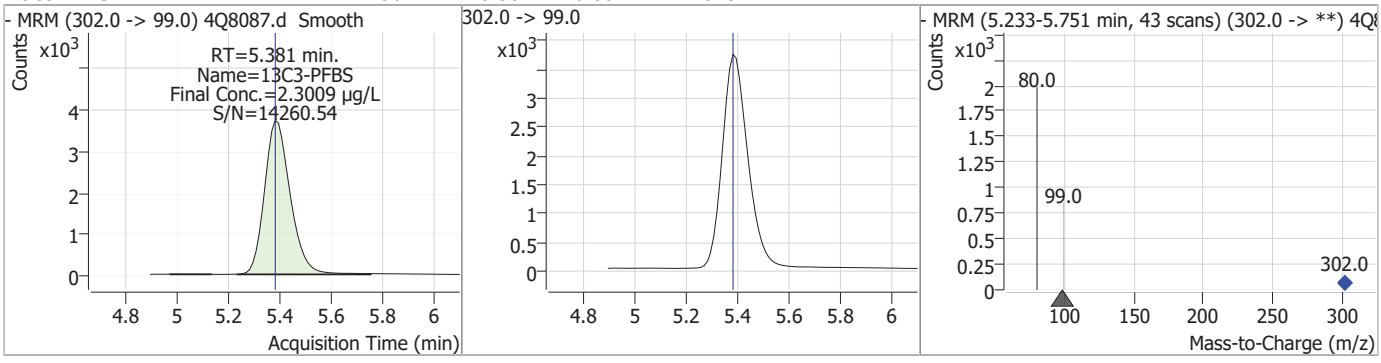
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	103.02	5.18	-0.01	1484061	327.0 -> 81.0	46.0	22.8	68.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	54.73	5.37	0.00	736330	201.0 -> 85.0	395.7	211.2	633.5
					295.0 -> 85.0	26.9	13.8	41.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.30	5.38	0.00	25732				



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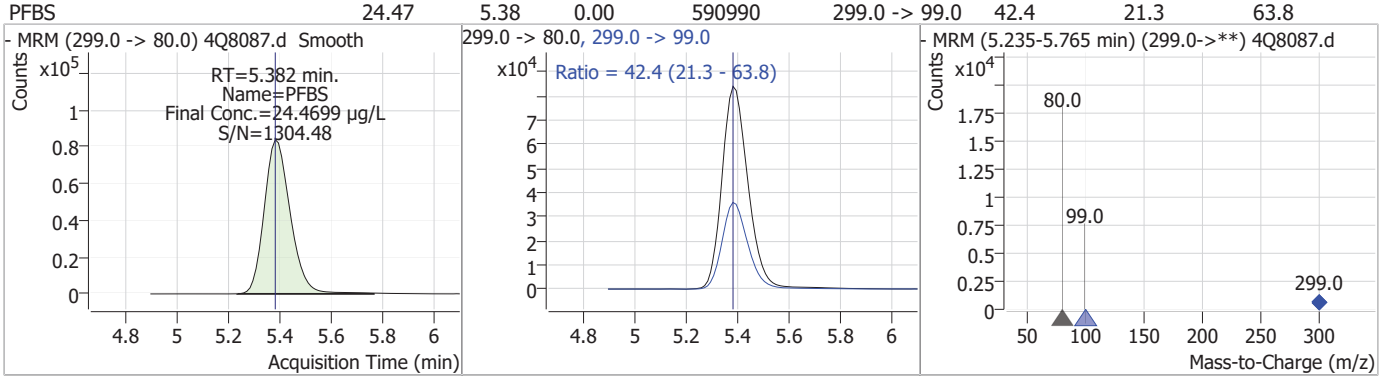
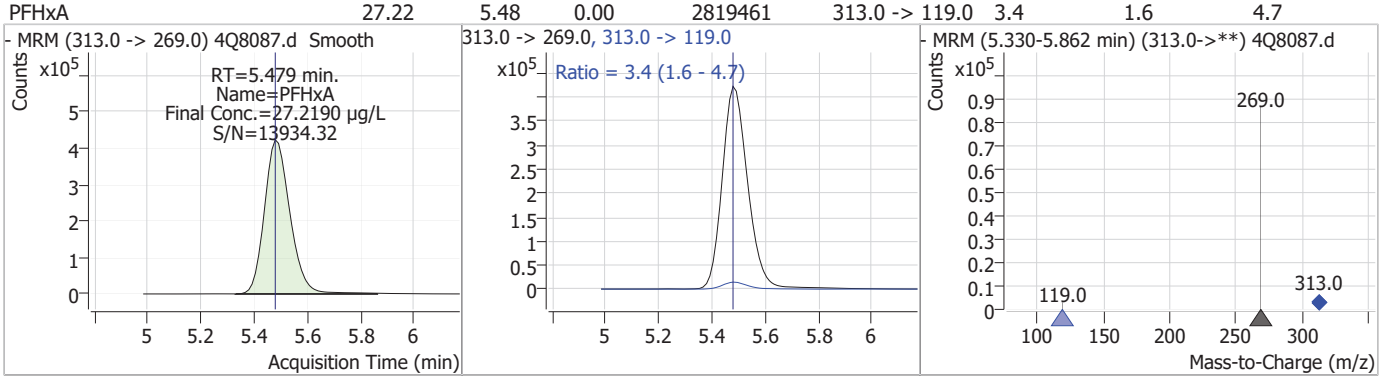
Perfluorinated Compounds by LC/MS/MS

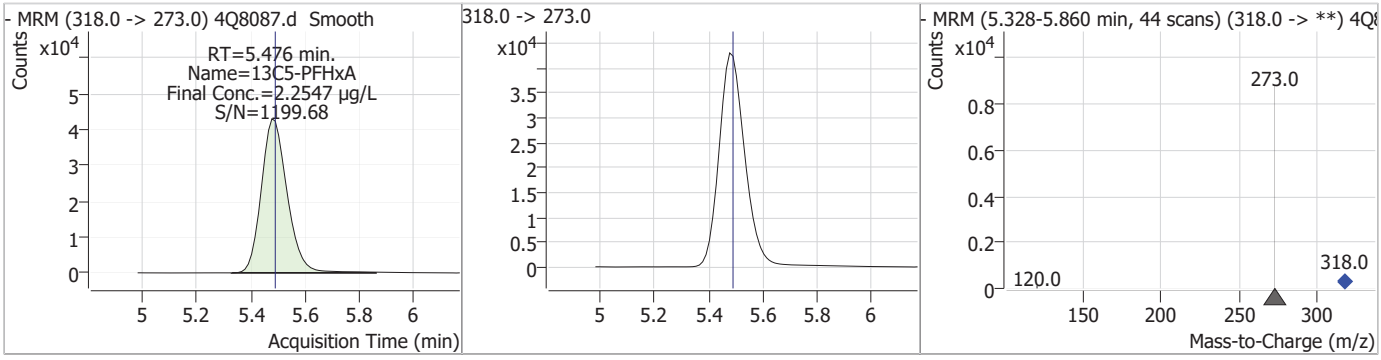
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	24.47	5.38	0.00	590990	299.0 -> 99.0	42.4	21.3	63.8



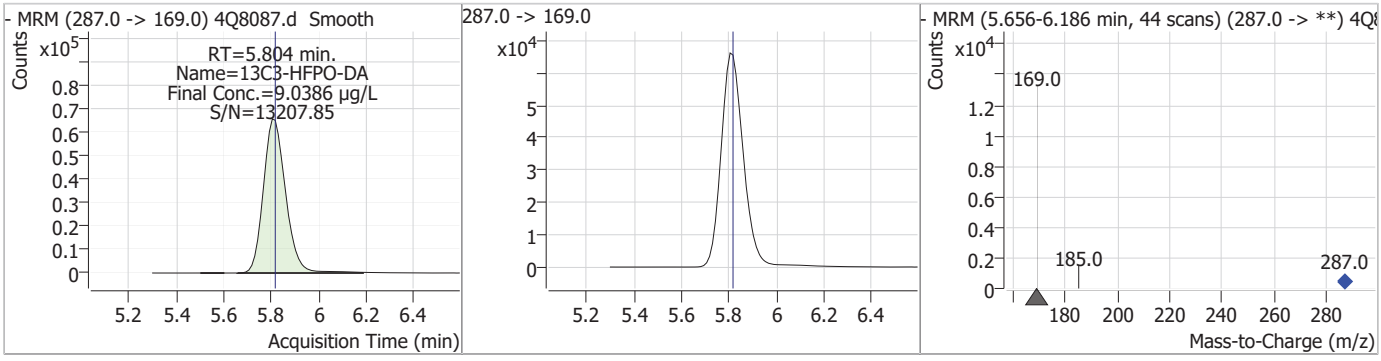
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	27.22	5.48	0.00	2819461	313.0 -> 119.0	3.4	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.25	5.48	-0.01	284633				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.04	5.80	-0.01	429863				



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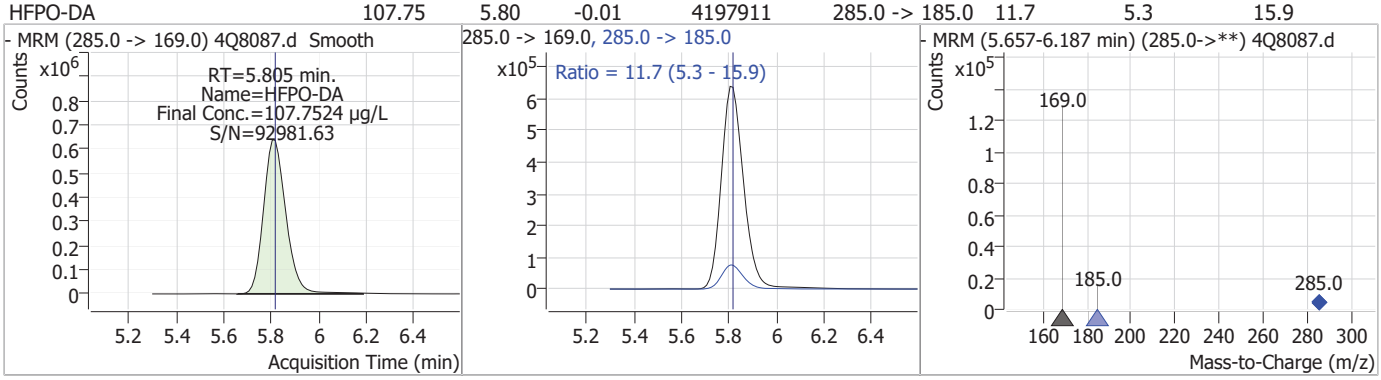
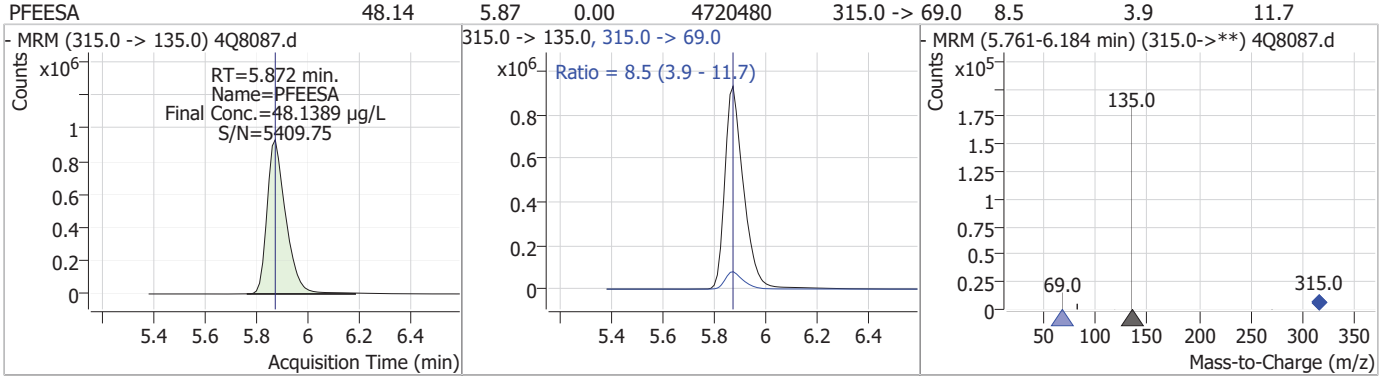
Perfluorinated Compounds by LC/MS/MS

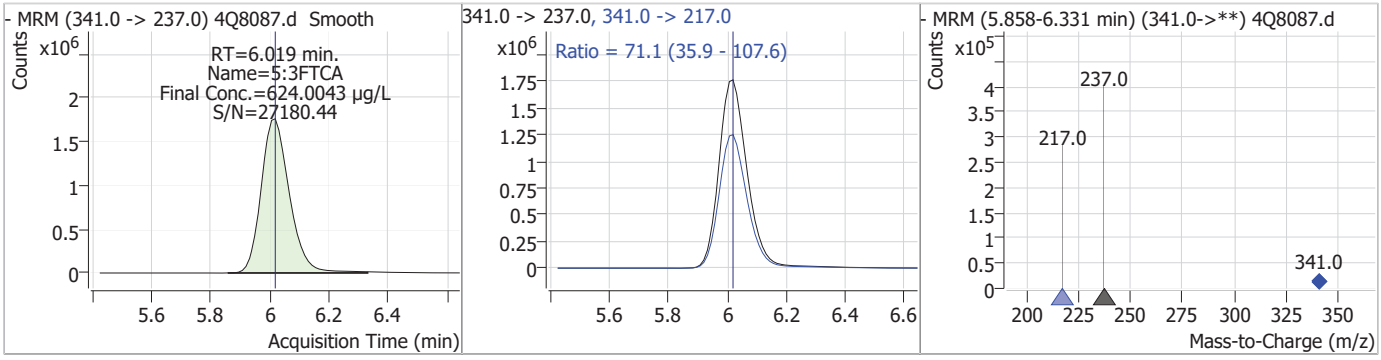
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	107.75	5.80	-0.01	4197911	285.0 -> 185.0	11.7	5.3	15.9



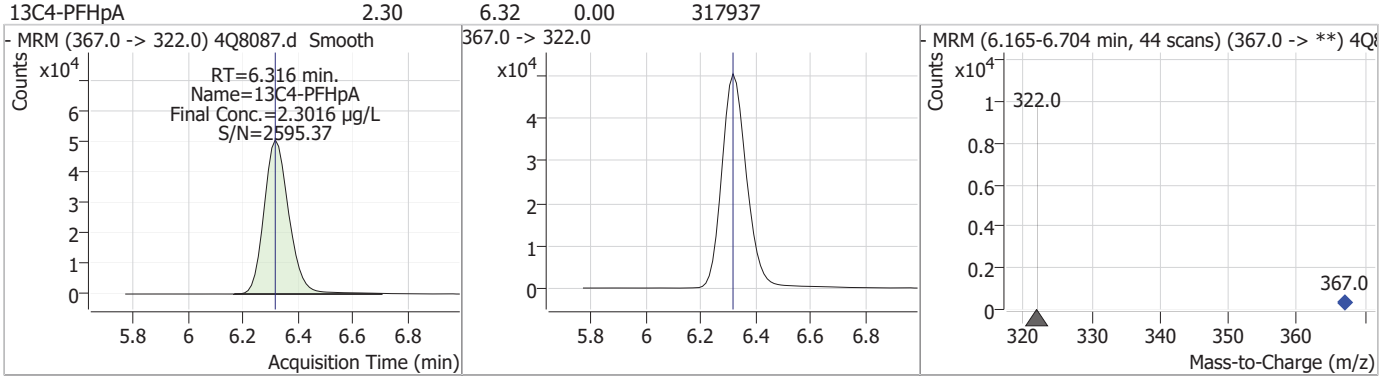
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	48.14	5.87	0.00	4720480	315.0 -> 69.0	8.5	3.9	11.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	624.00	6.02	0.00	11678739	341.0 -> 217.0	71.1	35.9	107.6

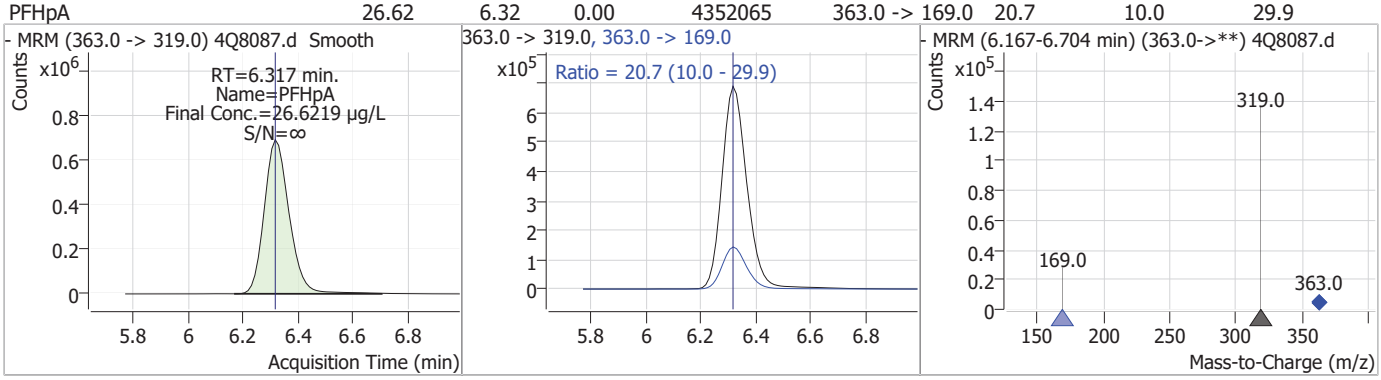


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.30	6.32	0.00	317937				

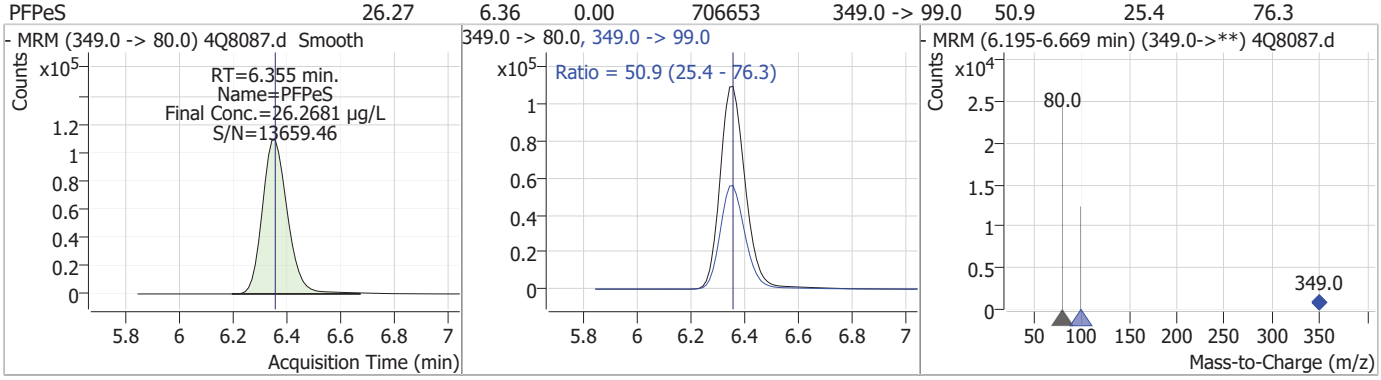


Perfluorinated Compounds by LC/MS/MS

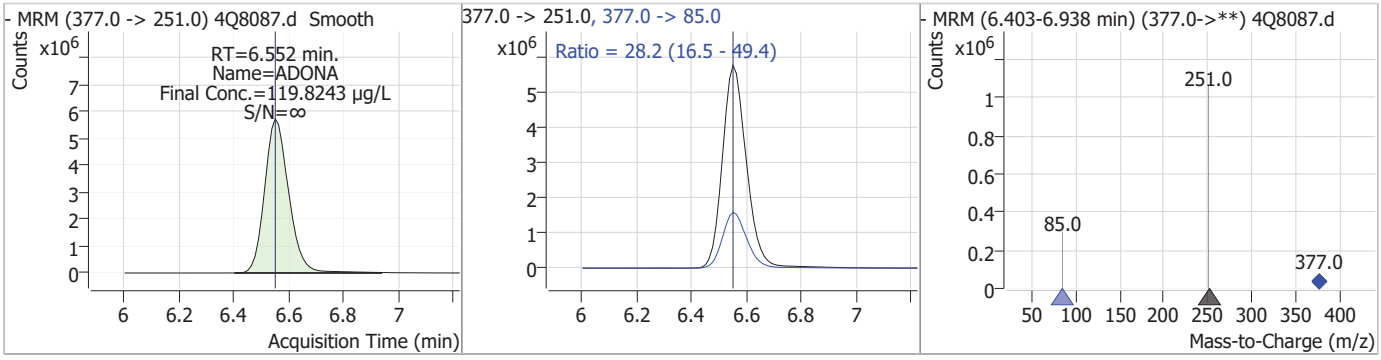
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	26.62	6.32	0.00	4352065	363.0 -> 169.0	20.7	10.0	29.9



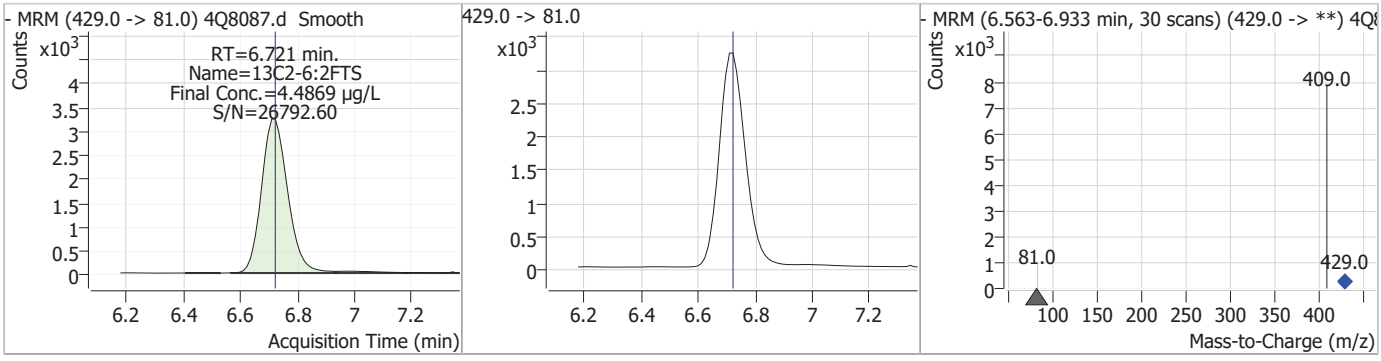
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	26.27	6.36	0.00	706653	349.0 -> 99.0	50.9	25.4	76.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	119.82	6.55	0.00	34952889	377.0 -> 85.0	28.2	16.5	49.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.49	6.72	0.00	20487				



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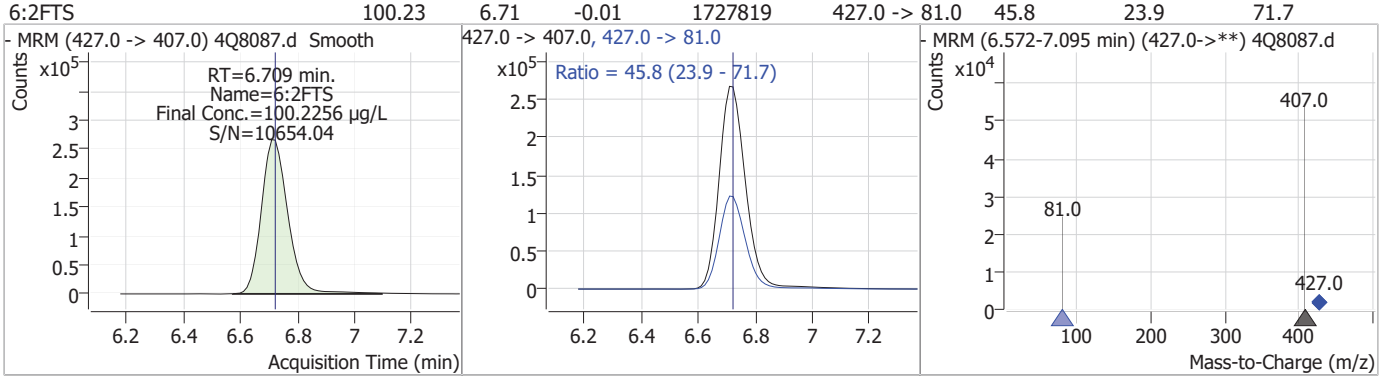
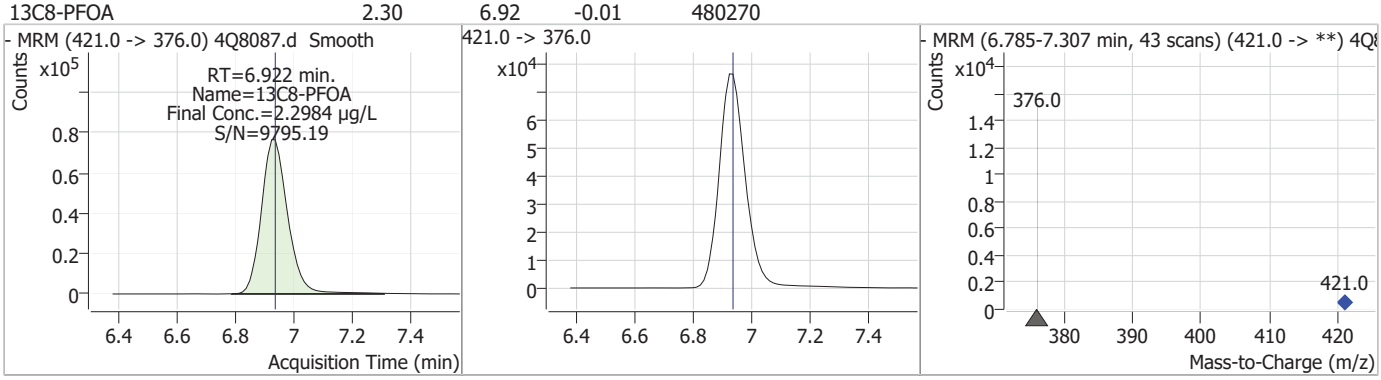
Perfluorinated Compounds by LC/MS/MS

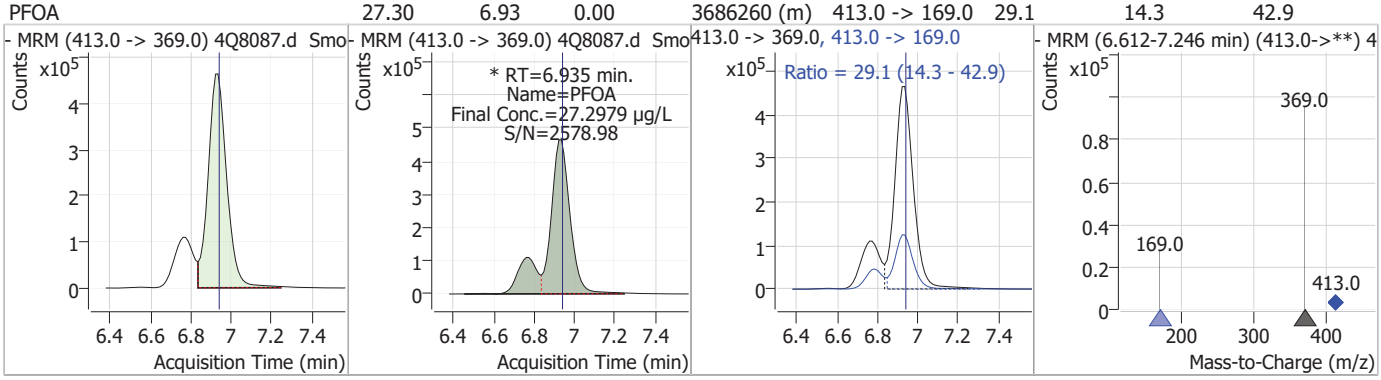
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	100.23	6.71	-0.01	1727819	427.0 -> 81.0	45.8	23.9	71.7



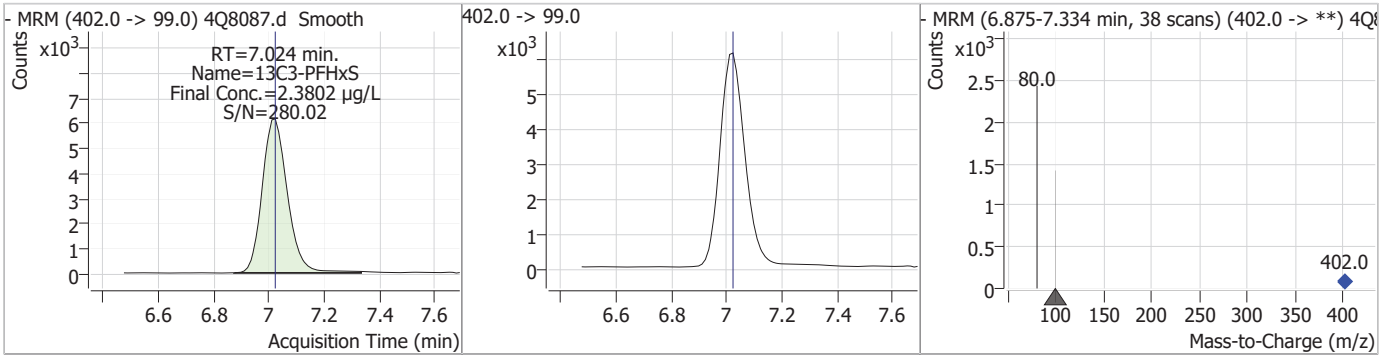
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.30	6.92	-0.01	480270				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	27.30	6.93	0.00	3686260 (m)	413.0 -> 169.0	29.1	14.3	42.9

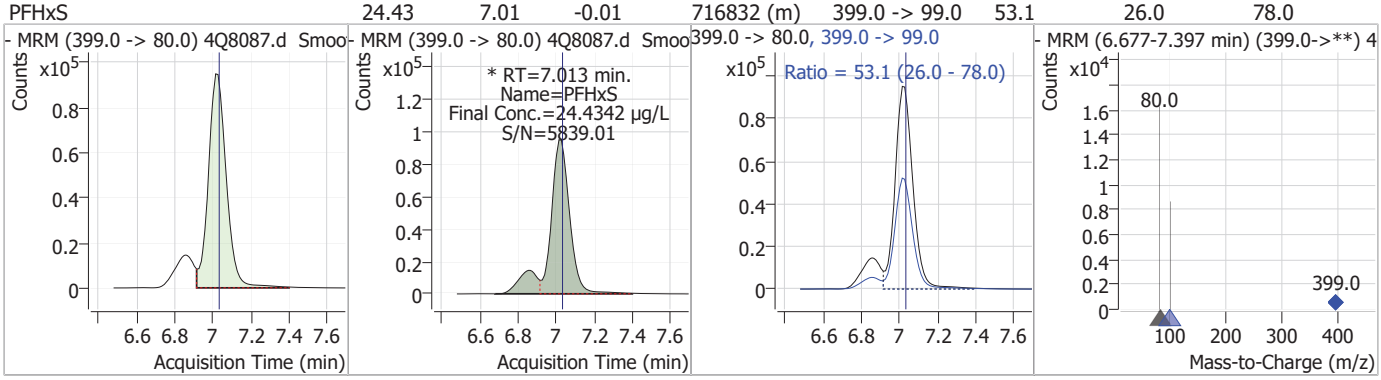


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.38	7.02	0.00	38933				

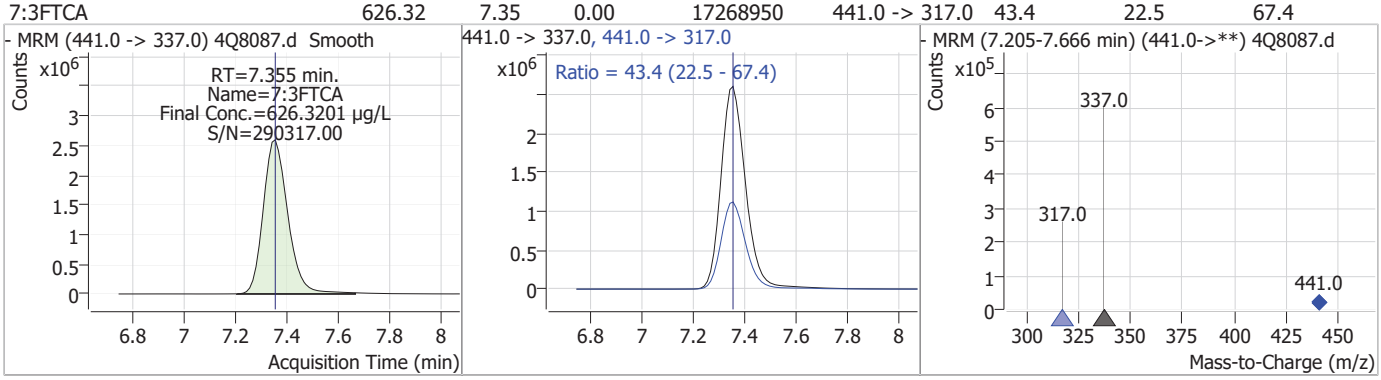


Perfluorinated Compounds by LC/MS/MS

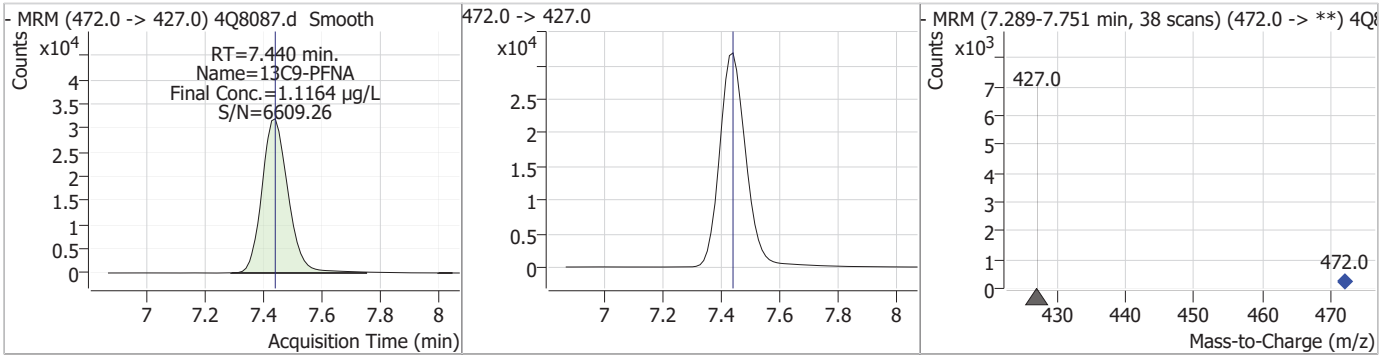
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	24.43	7.01	-0.01	716832 (m)	399.0 -> 99.0	53.1	26.0	78.0



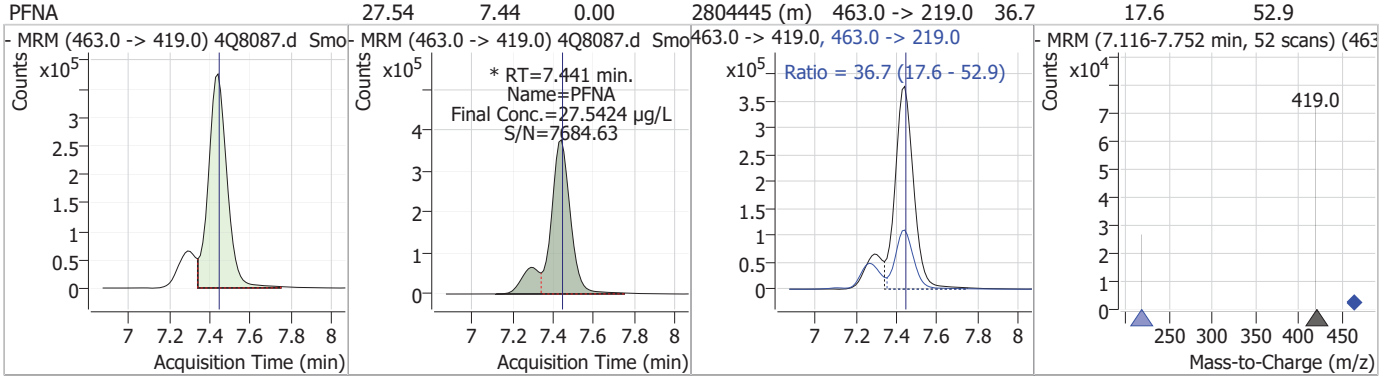
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	626.32	7.35	0.00	17268950	441.0 -> 317.0	43.4	22.5	67.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.12	7.44	0.00	198112				

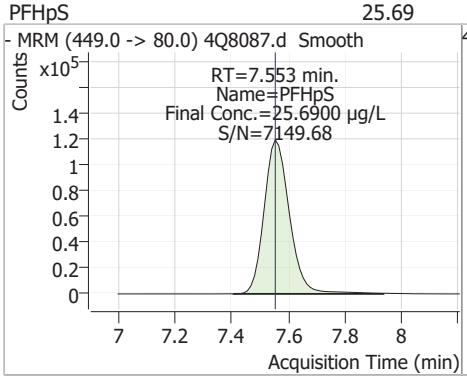


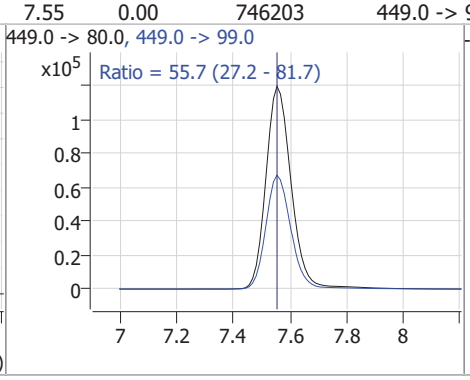
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	27.54	7.44	0.00	2804445 (m)	463.0 -> 219.0	36.7	17.6	52.9

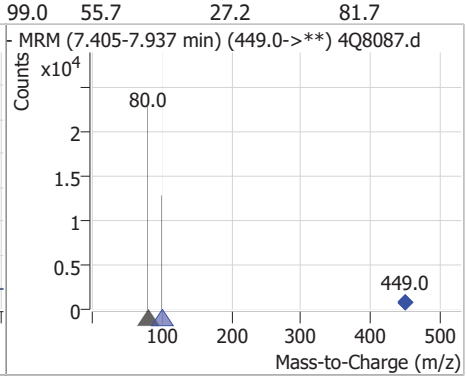


Perfluorinated Compounds by LC/MS/MS

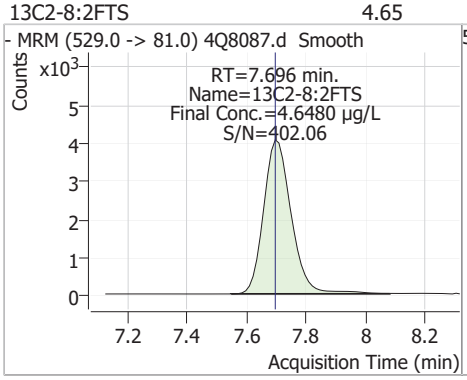
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	25.69	7.55	0.00	746203	449.0 -> 99.0	55.7	27.2	81.7

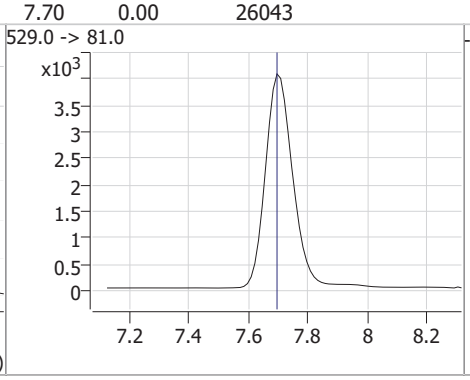


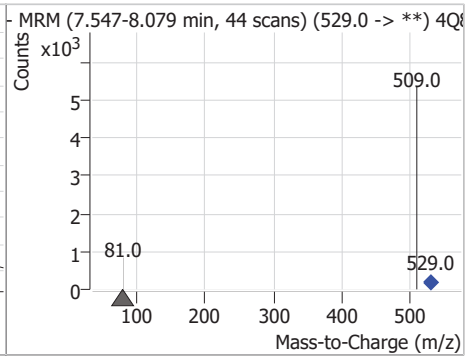




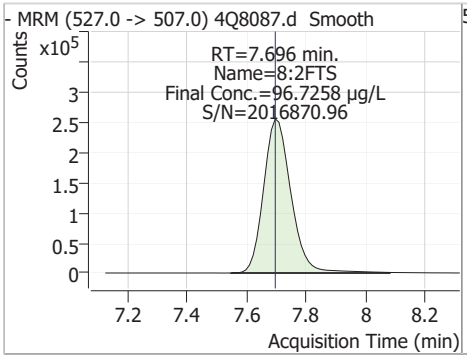
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.65	7.70	0.00	26043				

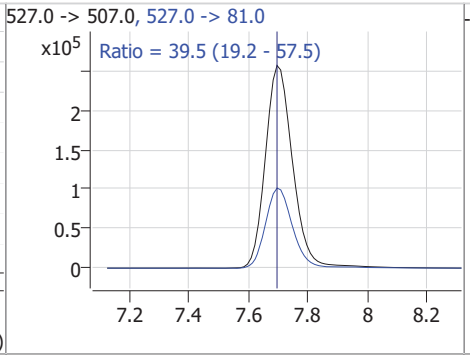


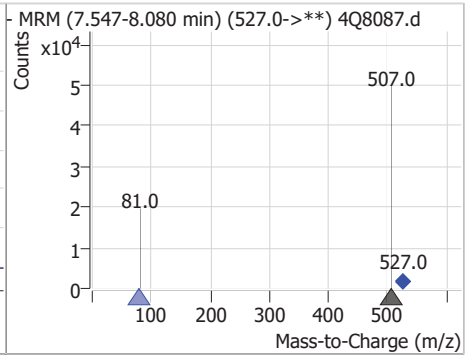




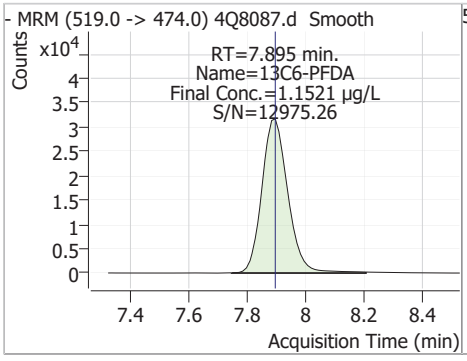
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	96.73	7.70	0.00	1633962	527.0 -> 81.0	39.5	19.2	57.5

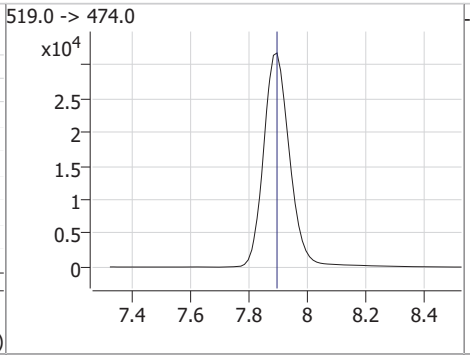


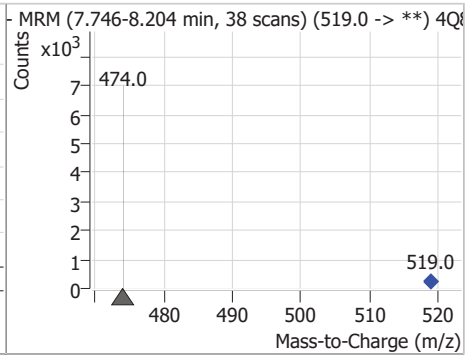




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.15	7.89	0.00	194866				

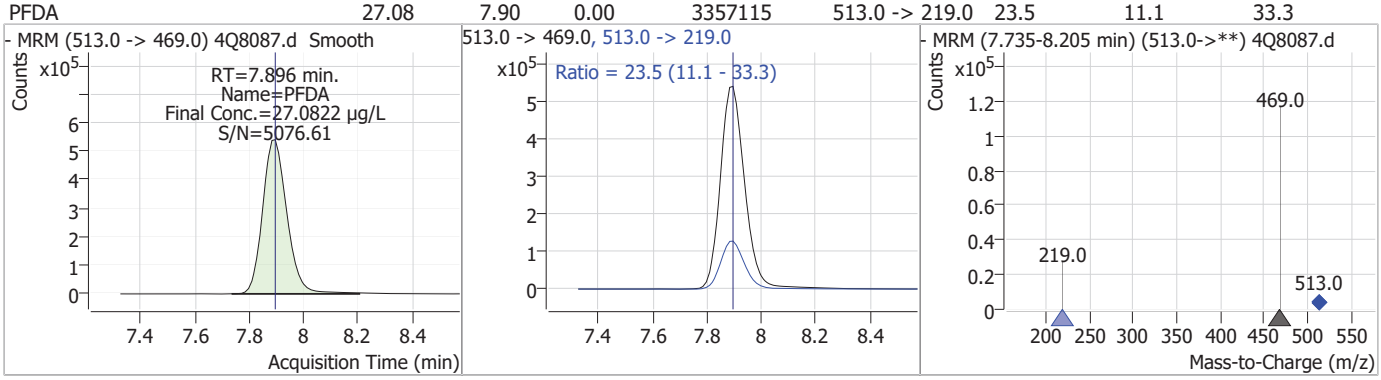




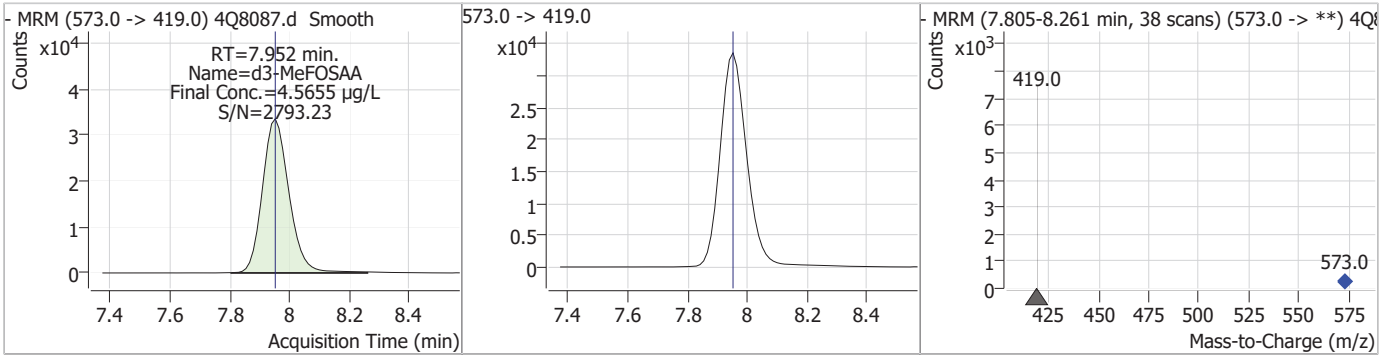


Perfluorinated Compounds by LC/MS/MS

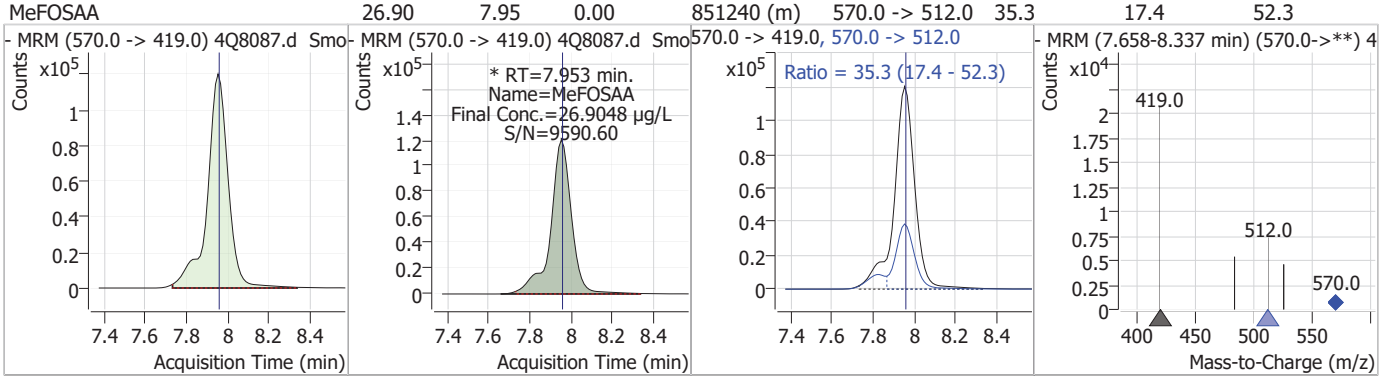
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	27.08	7.90	0.00	3357115	513.0 -> 219.0	23.5	11.1	33.3



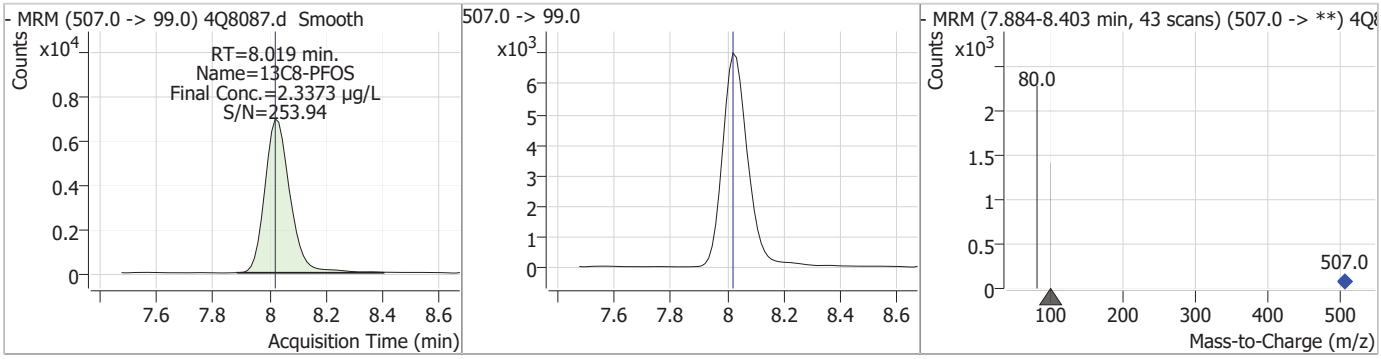
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.57	7.95	0.00	207303				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	26.90	7.95	0.00	851240 (m)	570.0 -> 512.0	35.3	17.4	52.3

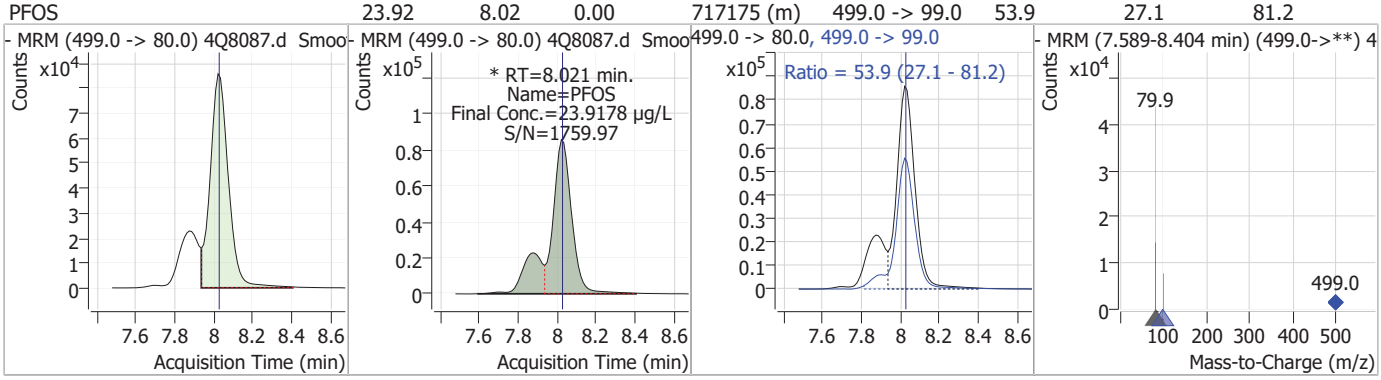


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.34	8.02	0.00	43030				

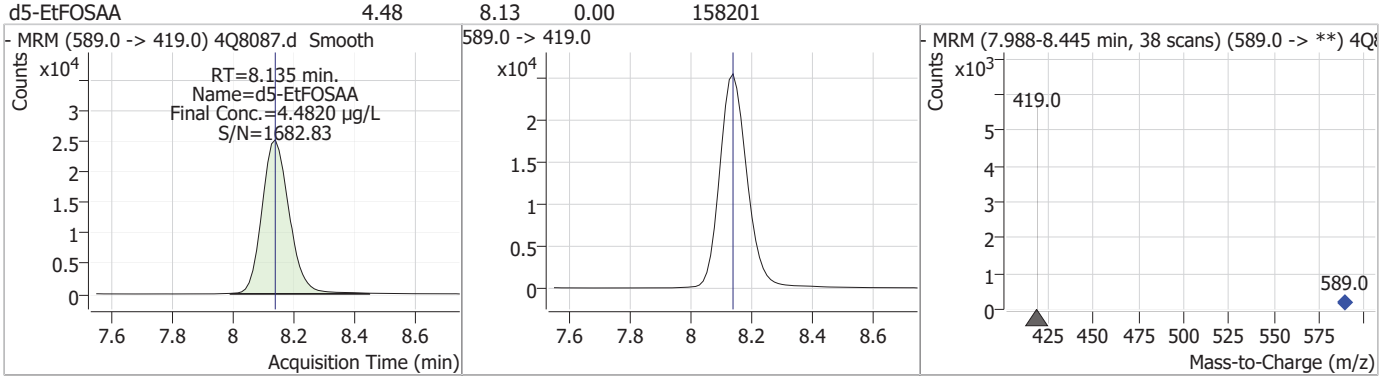


Perfluorinated Compounds by LC/MS/MS

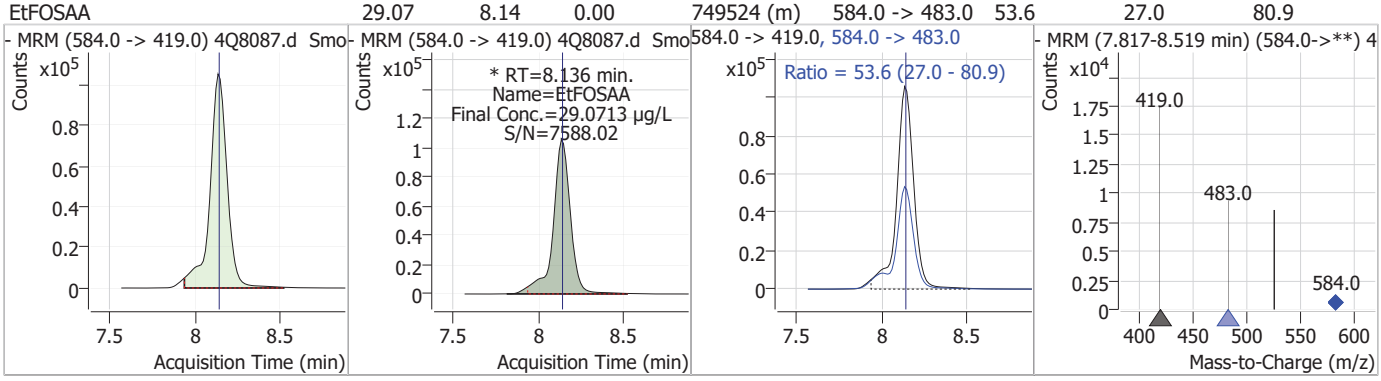
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	23.92	8.02	0.00	717175 (m)	499.0 -> 99.0	53.9	27.1	81.2



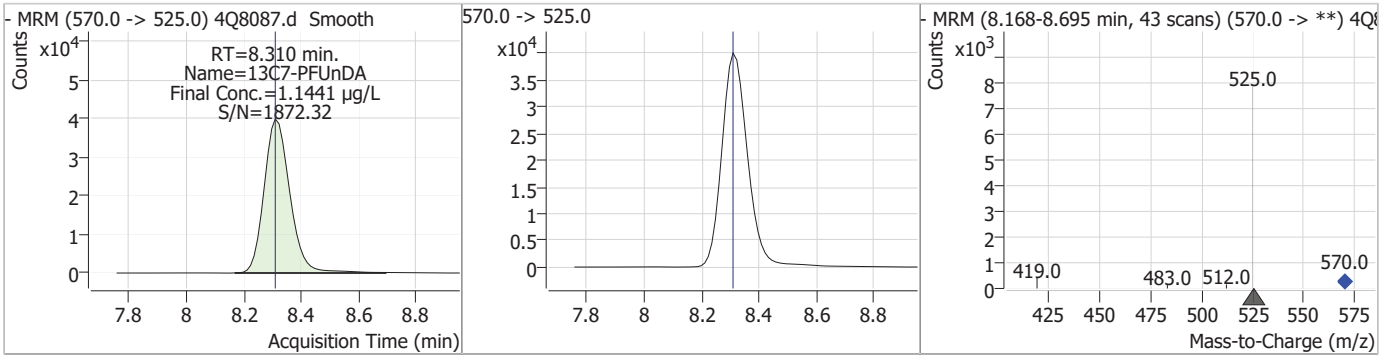
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.48	8.13	0.00	158201				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	29.07	8.14	0.00	749524 (m)	584.0 -> 483.0	53.6	27.0	80.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.14	8.31	0.00	249608				

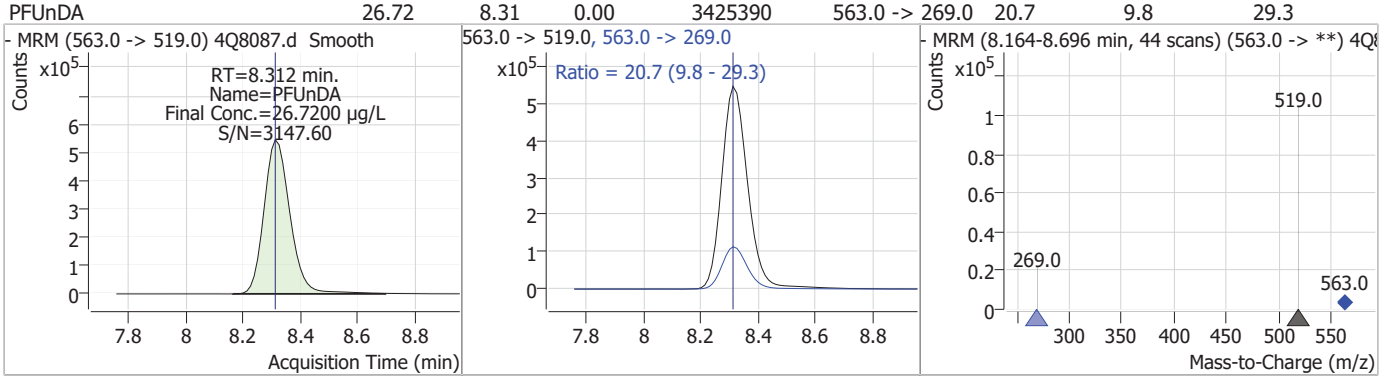


7.6.38

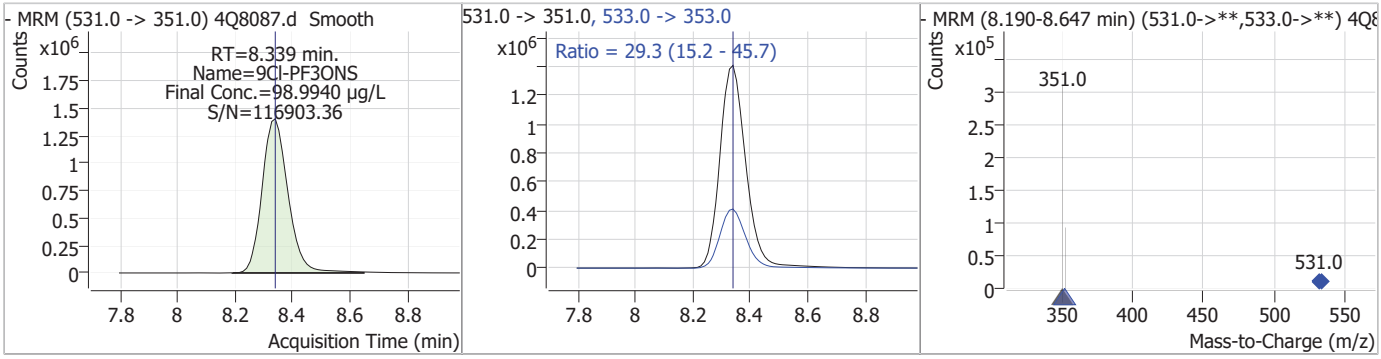
7

Perfluorinated Compounds by LC/MS/MS

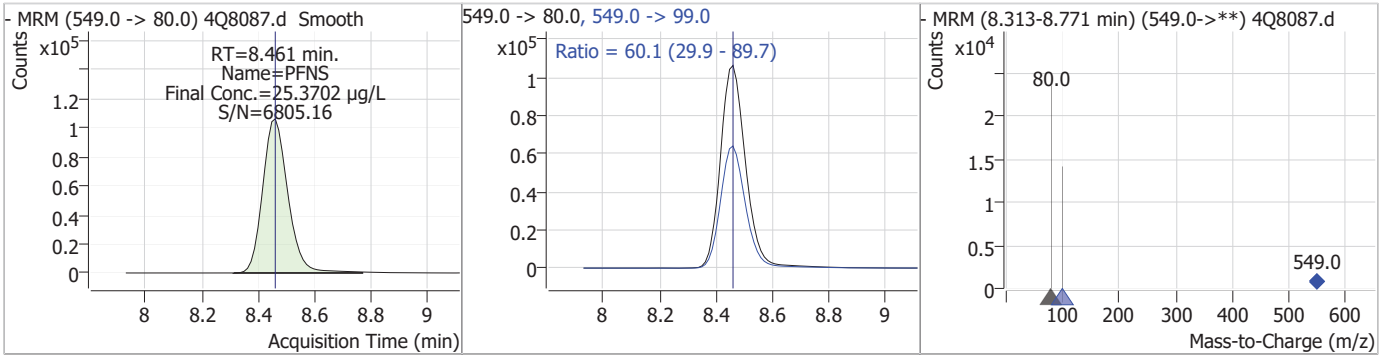
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	26.72	8.31	0.00	3425390	563.0 -> 269.0	20.7	9.8	29.3



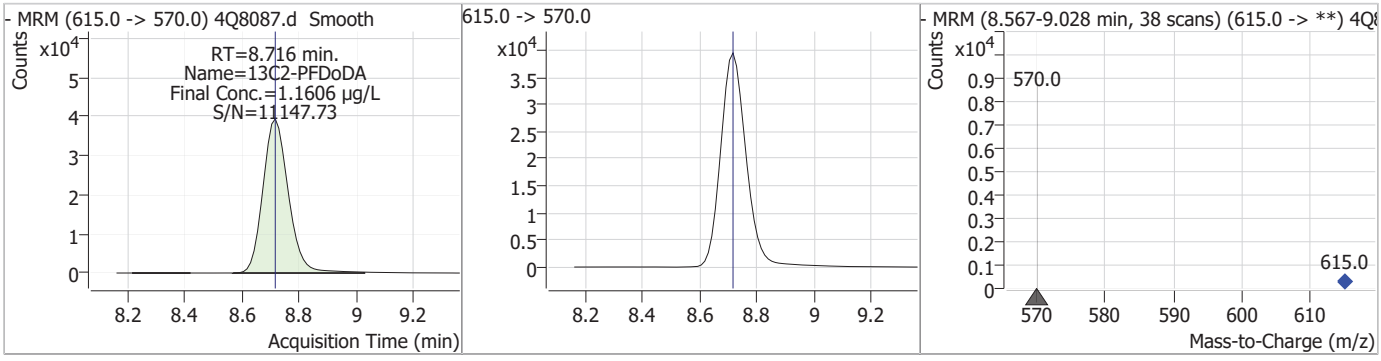
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	98.99	8.34	0.00	8823120	533.0 -> 353.0	29.3	15.2	45.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	25.37	8.46	0.00	660455	549.0 -> 99.0	60.1	29.9	89.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.16	8.72	0.00	243988				

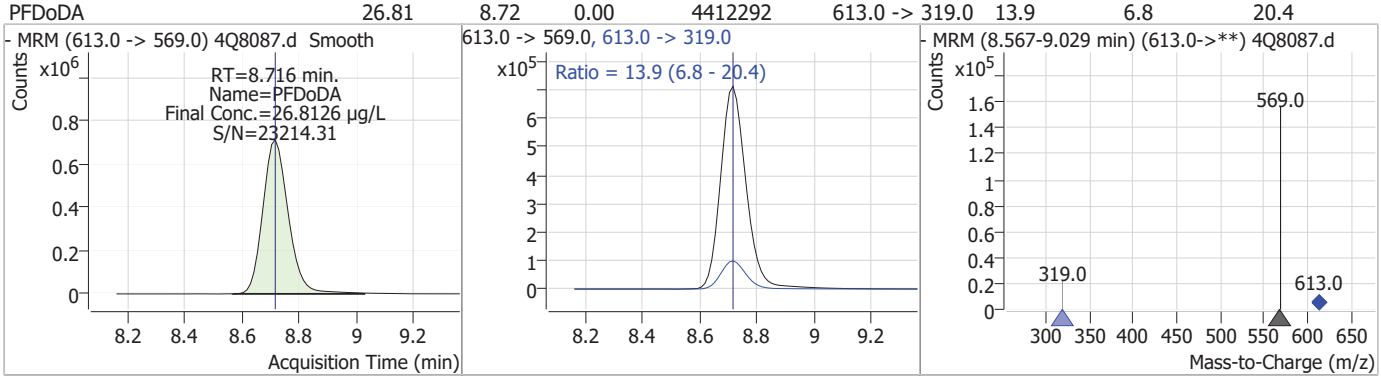


7.6.38

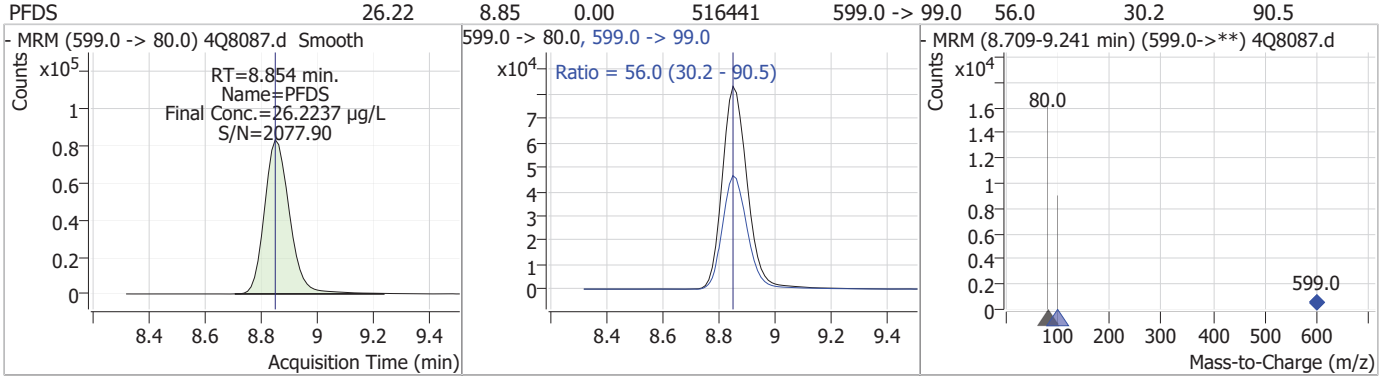
7

Perfluorinated Compounds by LC/MS/MS

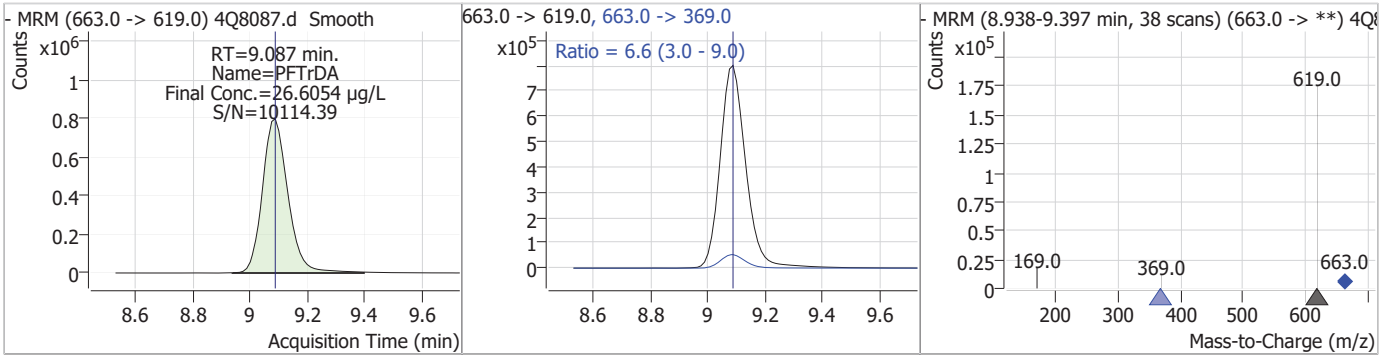
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	26.81	8.72	0.00	4412292	613.0 -> 319.0	13.9	6.8	20.4



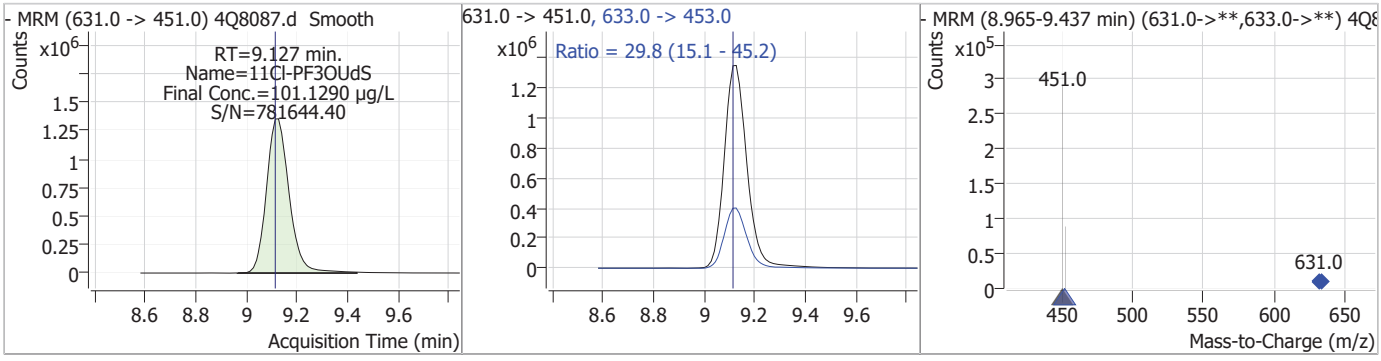
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	26.22	8.85	0.00	516441	599.0 -> 99.0	56.0	30.2	90.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	26.61	9.09	0.00	4955602	663.0 -> 369.0	6.6	3.0	9.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	101.13	9.13	0.01	8446208	633.0 -> 453.0	29.8	15.1	45.2

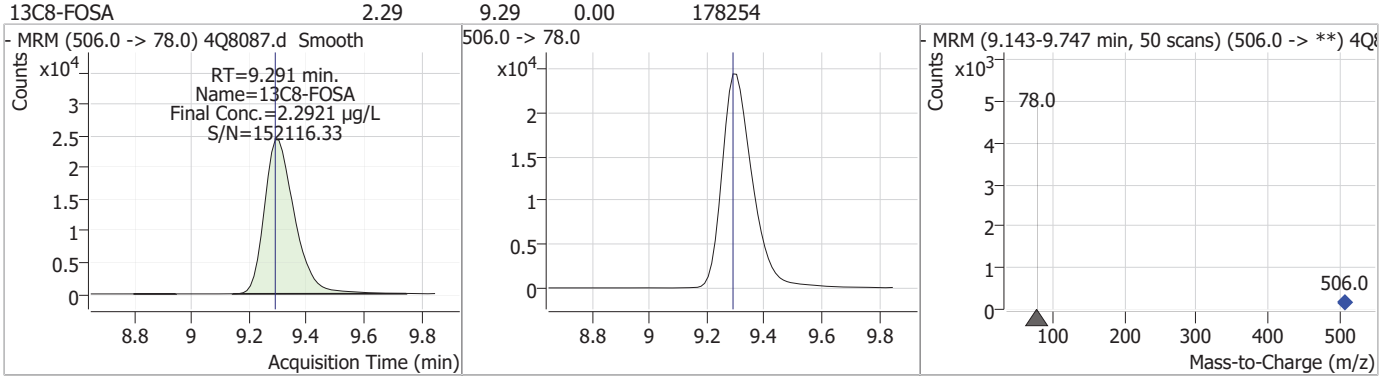


7.6.38

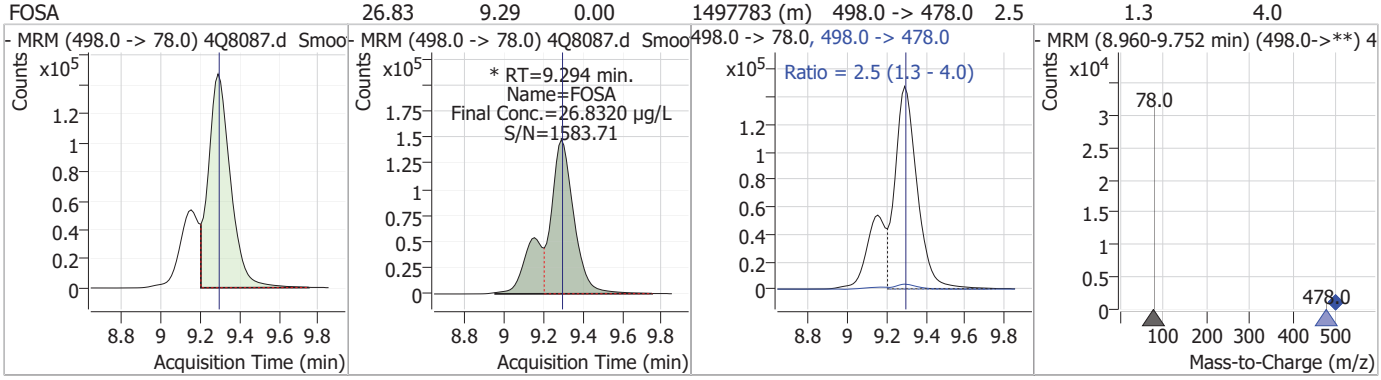
7

Perfluorinated Compounds by LC/MS/MS

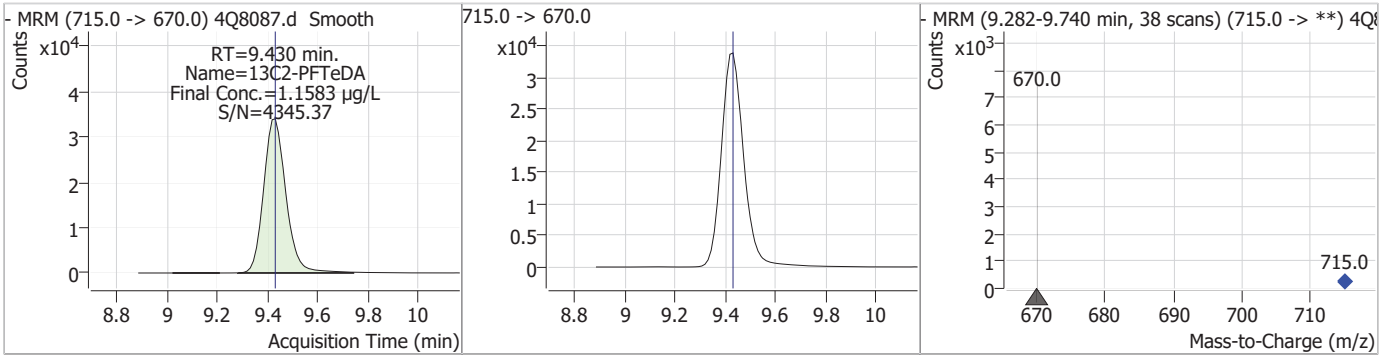
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.29	9.29	0.00	178254				



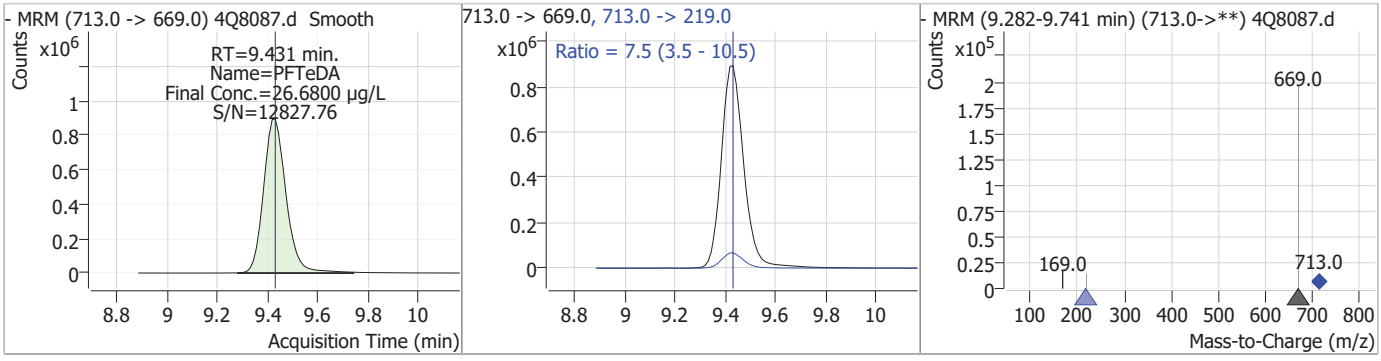
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	26.83	9.29	0.00	1497783 (m)	498.0 -> 478.0	2.5	1.3	4.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.16	9.43	0.00	208363				

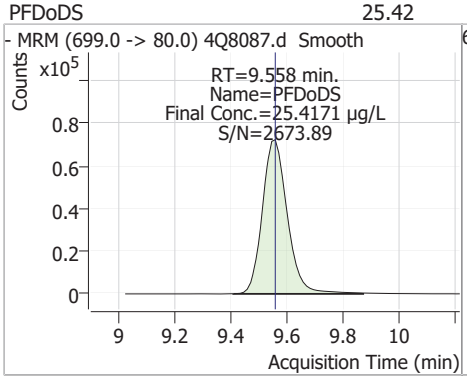


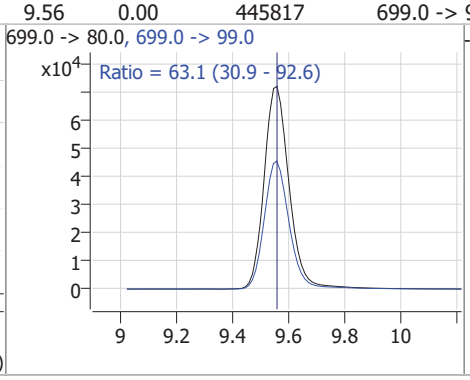
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	26.68	9.43	0.00	5533367	713.0 -> 219.0	7.5	3.5	10.5

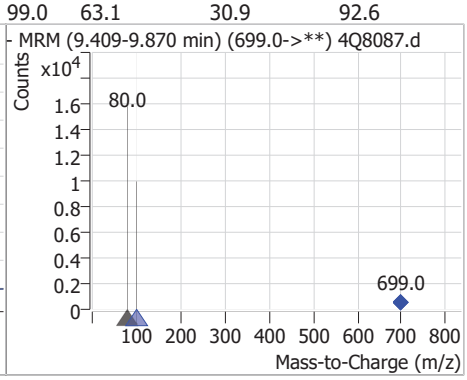


Perfluorinated Compounds by LC/MS/MS

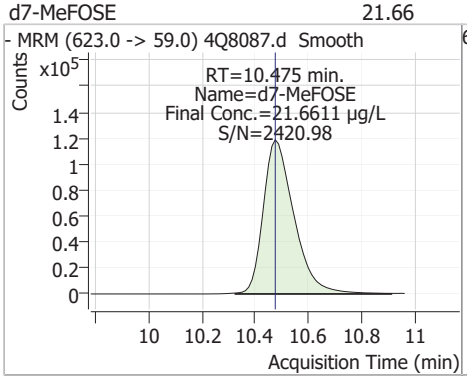
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	25.42	9.56	0.00	445817	699.0 -> 99.0	63.1	30.9	92.6

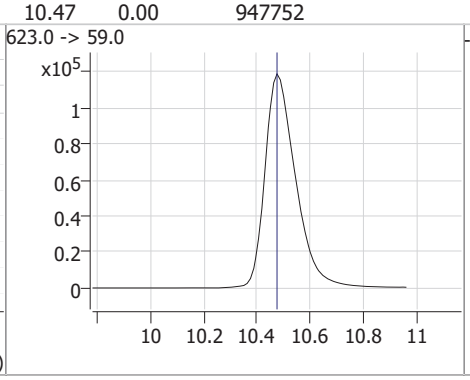


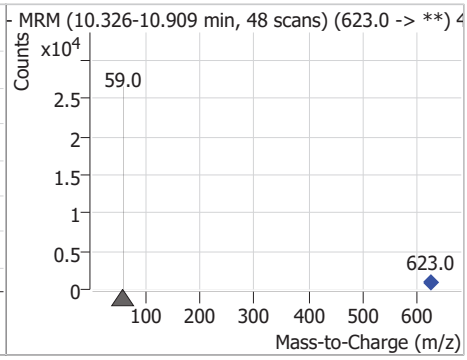




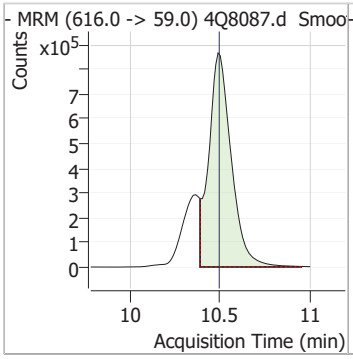
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	21.66	10.47	0.00	947752				

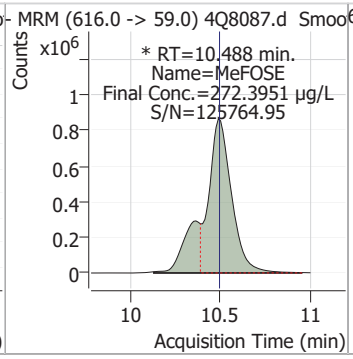


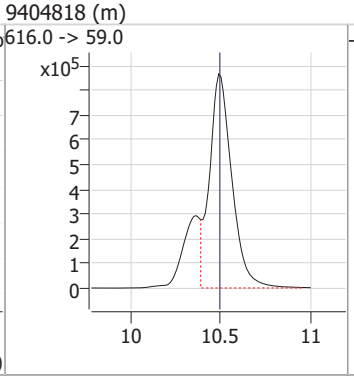


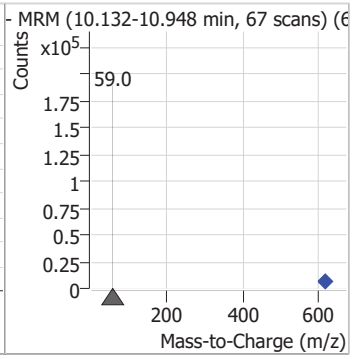


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	272.40	10.49	0.00	9404818 (m)				

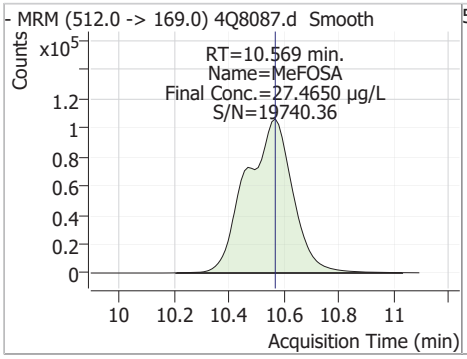


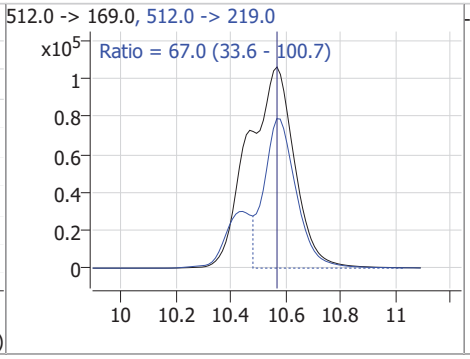


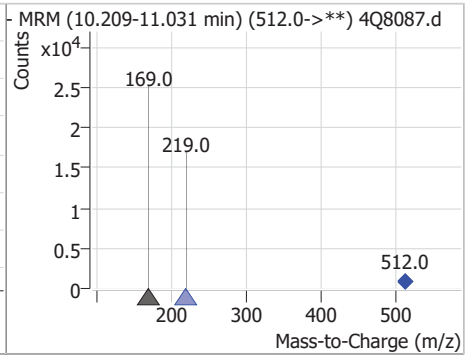




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	27.47	10.57	0.00	1257502	512.0 -> 219.0	67.0	33.6	100.7







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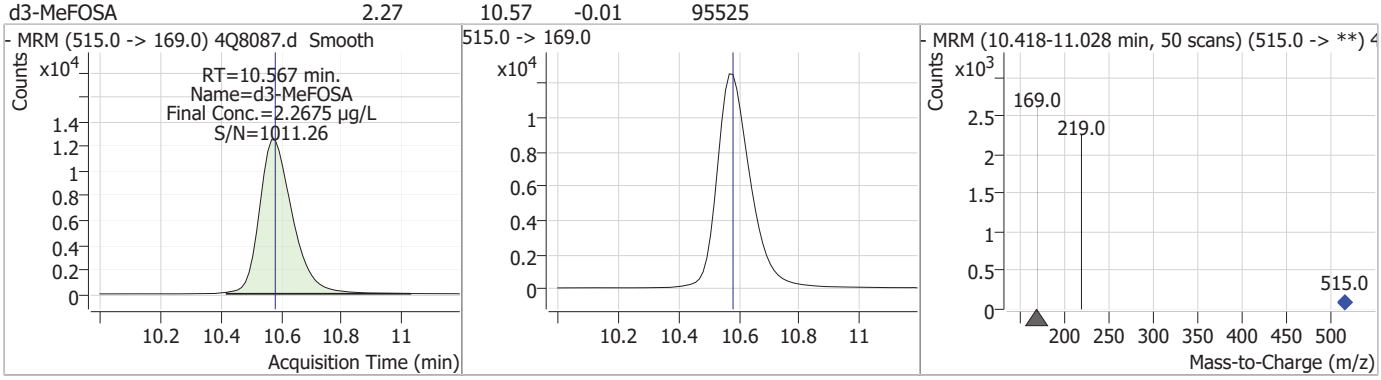
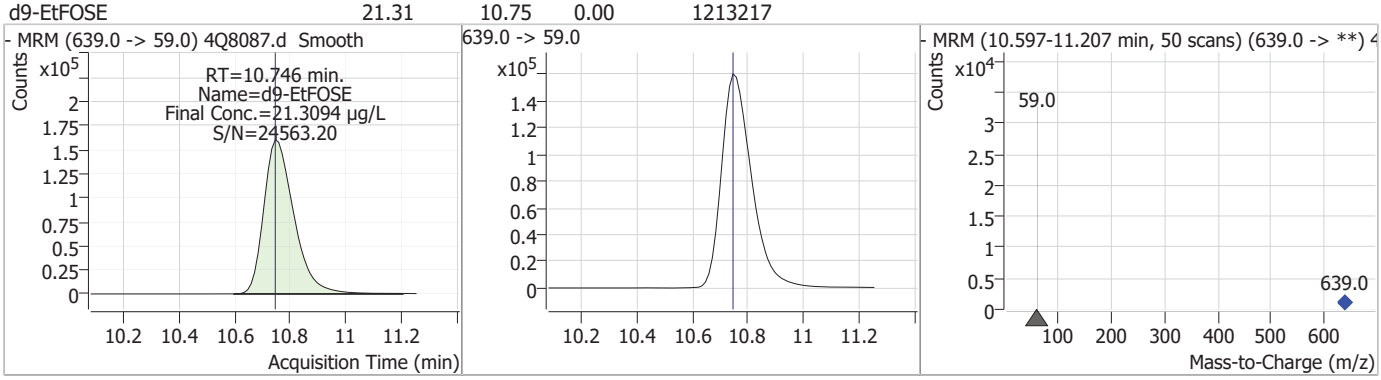
Perfluorinated Compounds by LC/MS/MS

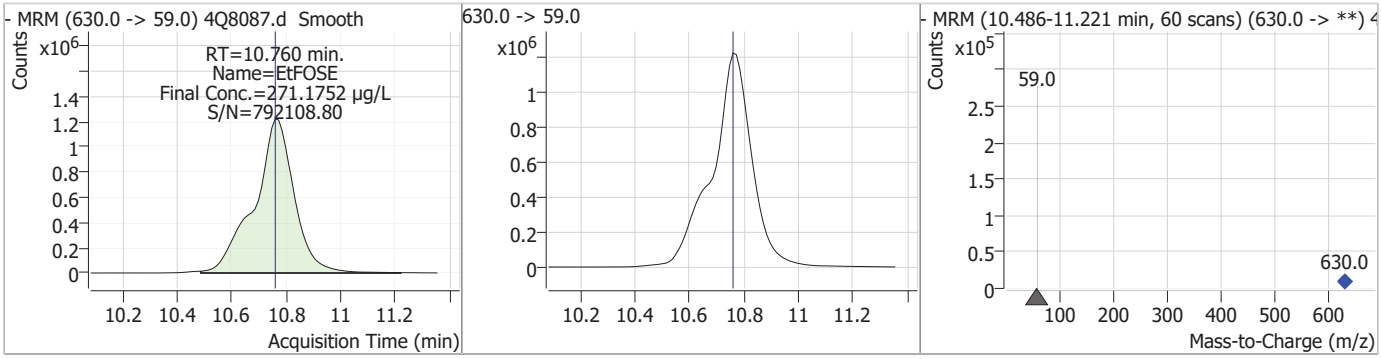
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.27	10.57	-0.01	95525				



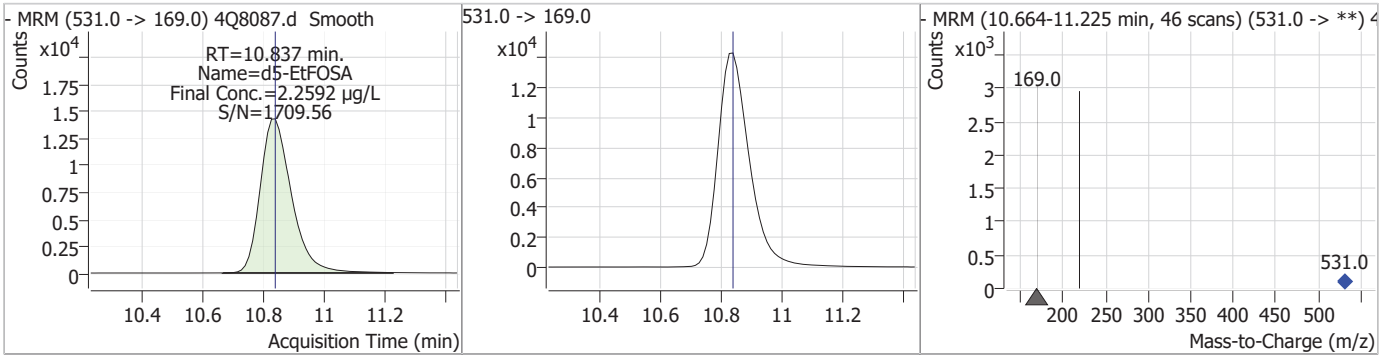
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	21.31	10.75	0.00	1213217				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	271.18	10.76	0.00	12439986				

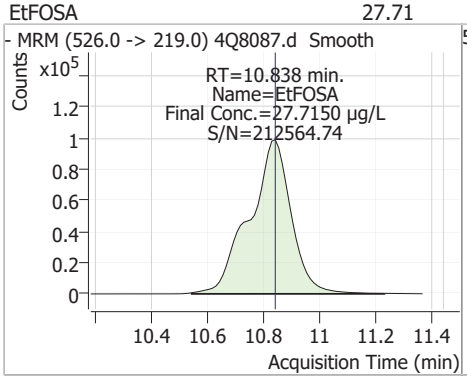


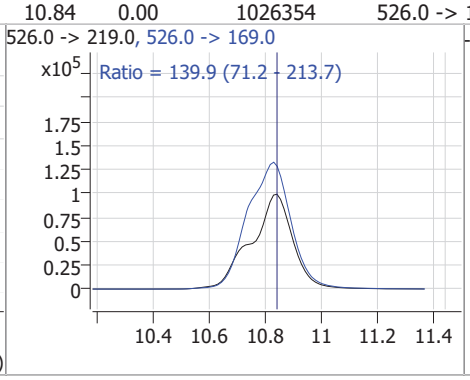
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.26	10.84	0.00	102377				

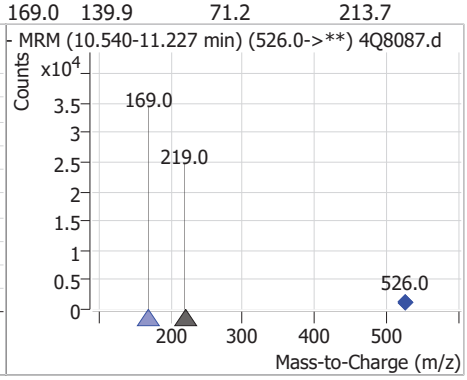


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	27.71	10.84	0.00	1026354	526.0 -> 169.0	139.9	71.2	213.7







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7

Manual Integration Approval Summary

Sample Number: T4Q137-IC137
Lab FileID: 4Q8087.D
Injection Time: 04/29/25 18:33
Method: EPA 1633
Analyst approved: 04/30/25 02:22 Rensel John Romano
Supervisor approved: 04/30/25 07:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.93	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.01	Split peak
Perfluorononanoic acid	375-95-1		7.44	Split peak
MeFOSAA	2355-31-9		7.95	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.02	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.29	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
04/30/25 07:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8088.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 6:47:31 PM
Sample Name : IC137-8
Vial : P1-A9
DA Method File : 042925_1633_T4Q137.quantmethod.xml
Batch Name : t4q137.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.908	217.0 -> 172.0	729708	10.00 µg/L	0.000
M5-PFPeA	4.344	268.0 -> 223.0	379673	5.00 µg/L	0.000
M5-PFHxA	5.476	318.0 -> 273.0	263576	2.50 µg/L	-0.012
M4-PFHpA	6.316	367.0 -> 322.0	289826	2.50 µg/L	0.000
M8-PFOA	6.934	421.0 -> 376.0	442954	2.50 µg/L	0.000
M9-PFNA	7.440	472.0 -> 427.0	187477	1.25 µg/L	0.000
M6-PFDA	7.895	519.0 -> 474.0	180591	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	214463	1.25 µg/L	0.000
M2-PFDoDA	8.716	615.0 -> 570.0	232693	1.25 µg/L	0.000
M2-PFTeDA	9.430	715.0 -> 670.0	198410	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	163191	2.50 µg/L	0.000
M3-PFBS	5.381	302.0 -> 99.0	24373	2.50 µg/L	0.000
		302.0 -> 80.0	58389		
M3-PFHxS	7.024	402.0 -> 99.0	34160	2.50 µg/L	0.000
M8-PFOS	8.019	507.0 -> 99.0	35487	2.50 µg/L	0.000
M2-4:2FTS	5.190	329.0 -> 81.0	8271	5.00 µg/L	0.000
M2-6:2FTS	6.721	429.0 -> 81.0	17495	5.00 µg/L	0.000
M2-8:2FTS	7.696	529.0 -> 81.0	23101	5.00 µg/L	0.000
M3-MeFOSAA	7.952	573.0 -> 419.0	191387	5.00 µg/L	0.000
M3-HFPO-DA	5.816	287.0 -> 169.0	415720	10.00 µg/L	0.000
M5-EtFOSAA	8.135	589.0 -> 419.0	147609	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	857926	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1060520	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	93399	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	94953	2.50 µg/L	-0.012
13C4-PFOS	8.020	503.0 -> 80.0	56448	2.50 µg/L	0.000
13C3-PFBA	2.911	216.0 -> 172.0	277444	5.00 µg/L	0.000
18O2-PFHxS	7.023	403.0 -> 84.0	34380	2.50 µg/L	0.000
13C4-PFOA	6.935	417.0 -> 372.0	387507	2.50 µg/L	0.000
13C2-PFDA	7.895	515.0 -> 470.0	144652	1.25 µg/L	0.000
13C5-PFNA	7.440	468.0 -> 423.0	155985	1.25 µg/L	0.000
13C2-PFHxA	5.477	315.0 -> 270.0	225695	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.190	329.0 -> 81.0	8271	4.70 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.9%	
13C2-6:2FTS	6.721	429.0 -> 81.0	17495	4.80 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.0%	
13C2-8:2FTS	7.696	529.0 -> 81.0	23101	5.16 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.3%	
13C2-PFDoDA	8.716	615.0 -> 570.0	232693	1.30 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.2%	
13C2-PFTeDA	9.430	715.0 -> 670.0	198410	1.30 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.9%	
13C3-PFBS	5.381	302.0 -> 99.0	24373	2.73 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 109.2%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.024	402.0 -> 99.0	34160	2.62	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.6%			
13C4-PFBA	2.908	217.0 -> 172.0	729708	10.65	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 106.5%			
13C4-PFHpA	6.316	367.0 -> 322.0	289826	2.57	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.6%			
13C5-PFHxA	5.476	318.0 -> 273.0	263576	2.55	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.1%			
13C5-PFPeA	4.344	268.0 -> 223.0	379673	5.00	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.0%			
13C6-PFDA	7.895	519.0 -> 474.0	180591	1.26	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.5%			
13C7-PFUnDA	8.310	570.0 -> 525.0	214463	1.16	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.6%			
13C8-FOSA	9.291	506.0 -> 78.0	163191	2.70	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.9%			
13C8-PFOA	6.934	421.0 -> 376.0	442954	2.63	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.3%			
13C8-PFOS	8.019	507.0 -> 99.0	35487	2.48	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.1%			
13C9-PFNA	7.440	472.0 -> 427.0	187477	1.33	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.7%			
d3-MeFOSAA	7.952	573.0 -> 419.0	191387	5.42	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.4%			
13C3-HFPO-DA	5.816	287.0 -> 169.0	415720	10.69	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 106.9%			
d3-MeFOSA	10.567	515.0 -> 169.0	94953	2.90	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 115.9%			
d5-EtFOSAA	8.135	589.0 -> 419.0	147609	5.38	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.5%			
d7-MeFOSE	10.475	623.0 -> 59.0	857926	25.21	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.9%			
d9-EtFOSE	10.746	639.0 -> 59.0	1060520	23.95	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 95.8%			
d5-EtFOSA	10.837	531.0 -> 169.0	93399	2.65	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.0%			
Target Compounds							QValue
4:2FTS	5.178	327.0 -> 307.0	3212520	252.16	µg/L		100
		327.0 -> 81.0	1471056				
6:2FTS	6.721	427.0 -> 407.0	3740423	254.07	µg/L		98
		427.0 -> 81.0	1727854				
8:2FTS	7.696	527.0 -> 507.0	3702938	247.12	µg/L		99
		527.0 -> 81.0	1434815				
EtFOSAA	8.136	584.0 -> 419.0	1792070	74.50	µg/L	m	97
		584.0 -> 483.0	999699				
FOSA	9.294	498.0 -> 78.0	3741511	73.21	µg/L	m	100
		498.0 -> 478.0	99862				
MeFOSAA	7.953	570.0 -> 419.0	2104350	72.04	µg/L	m	99
		570.0 -> 512.0	747658				
PFBA	2.914	213.0 -> 169.0	5850037	292.34	µg/L		100
PFBS	5.382	299.0 -> 80.0	1485382	64.93	µg/L		100
		299.0 -> 99.0	628673				
PFDA	7.896	513.0 -> 469.0	8930946	77.74	µg/L		99
		513.0 -> 219.0	2042844				
PFDoDA	8.716	613.0 -> 569.0	11884241	75.72	µg/L		99
		613.0 -> 319.0	1574682				

Perfluorinated Compounds by LC/MS/MS

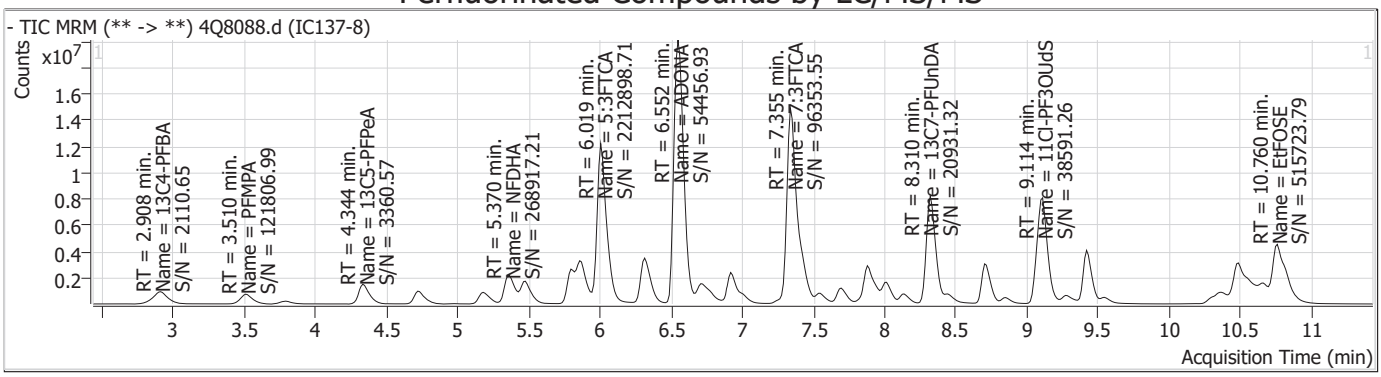
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.854	599.0 -> 80.0	1273437	75.26	µg/L		94
		599.0 -> 99.0	714292				
PFHpA	6.317	363.0 -> 319.0	11741281	78.79	µg/L		100
		363.0 -> 169.0	2313433				
PFHpS	7.553	449.0 -> 80.0	1831507	71.87	µg/L		98
		449.0 -> 99.0	1021012				
PFHxA	5.479	313.0 -> 269.0	7332990	76.45	µg/L		99
		313.0 -> 119.0	250502				
PFHxS	7.025	399.0 -> 80.0	1756940	68.26	µg/L	m	99
		399.0 -> 99.0	904704				
PFNA	7.441	463.0 -> 419.0	7343330	76.21	µg/L	m	98
		463.0 -> 219.0	2657918				
PFNS	8.461	549.0 -> 80.0	1612845	75.12	µg/L		99
		549.0 -> 99.0	980498				
PFOA	6.935	413.0 -> 369.0	9436625	75.77	µg/L	m	99
		413.0 -> 169.0	2653233				
PFOS	8.021	499.0 -> 80.0	1823661	73.75	µg/L	m	99
		499.0 -> 99.0	972408				
PFPeA	4.346	263.0 -> 219.0	7639867	151.72	µg/L		100
PFPeS	6.355	349.0 -> 80.0	1756623	68.94	µg/L		100
		349.0 -> 99.0	897102				
PFTeDA	9.431	713.0 -> 669.0	15026724	76.09	µg/L		100
		713.0 -> 219.0	1039194				
PFTrDA	9.087	663.0 -> 619.0	12587856	70.86	µg/L		100
		663.0 -> 369.0	771403				
PFUnDA	8.312	563.0 -> 519.0	8492349	77.10	µg/L		99
		563.0 -> 269.0	1688112				
11Cl-PF3OUdS	9.114	631.0 -> 451.0	21939784	271.63	µg/L		94
		633.0 -> 453.0	5930128				
9Cl-PF3ONS	8.339	531.0 -> 351.0	22675060	263.07	µg/L		94
		533.0 -> 353.0	6092556				
ADONA	6.552	377.0 -> 251.0	72666651	257.59	µg/L		91
		377.0 -> 85.0	27638652				
HFPO-DA	5.817	285.0 -> 169.0	10712826	284.33	µg/L		98
		285.0 -> 185.0	1219017				
3:3FTCA	3.781	241.0 -> 177.0	1097883	399.89	µg/L		100
		241.0 -> 117.0	93567				
5:3FTCA	6.019	341.0 -> 237.0	34226350	1562.57	µg/L		95
		341.0 -> 217.0	23027867				
7:3FTCA	7.355	441.0 -> 337.0	50914541	1562.39	µg/L		94
		441.0 -> 317.0	20743161				
EtFOSA	10.838	526.0 -> 219.0	2540198	75.19	µg/L		97
		526.0 -> 169.0	3529331				
EtFOSE	10.760	630.0 -> 59.0	31230304	778.80	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	3128880	68.75	µg/L		100
		512.0 -> 219.0	2107751				
MeFOSE	10.488	616.0 -> 59.0	23807085	761.73	µg/L	m	100
PFDoDS	9.558	699.0 -> 80.0	1103481	76.28	µg/L		97
		699.0 -> 99.0	704424				
NFDHA	5.370	295.0 -> 201.0	1857240	149.08	µg/L		91
		201.0 -> 85.0	7424561				
		295.0 -> 85.0	498432				
PFMBA	4.735	279.0 -> 85.0	5208515	151.60	µg/L		100
PFMPA	3.510	229.0 -> 85.0	4542915	152.47	µg/L		100
PFEESA	5.872	315.0 -> 135.0	12130249	133.59	µg/L		99
		315.0 -> 69.0	982568				

Perfluorinated Compounds by LC/MS/MS

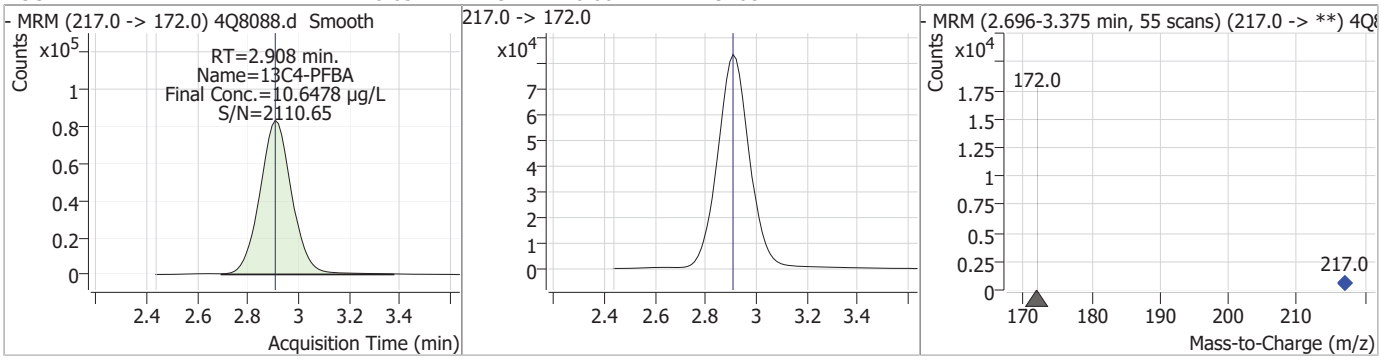
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

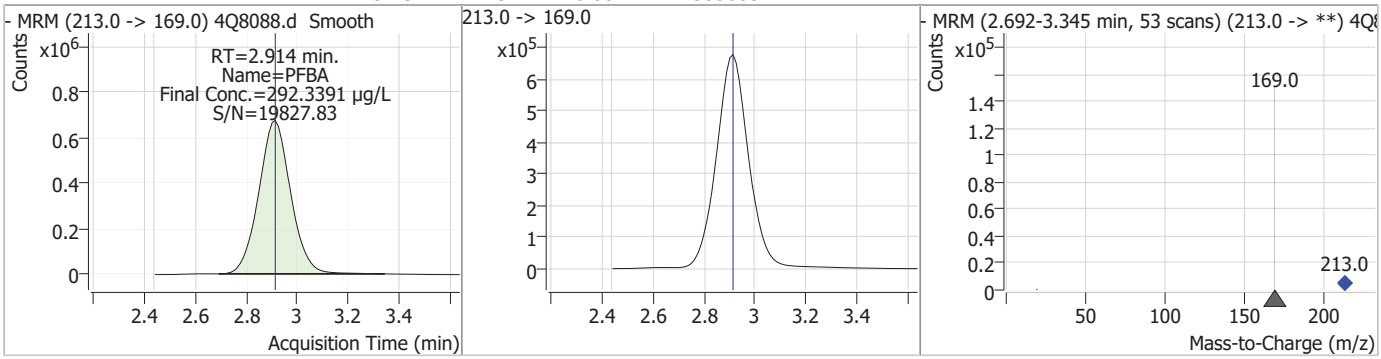
Perfluorinated Compounds by LC/MS/MS



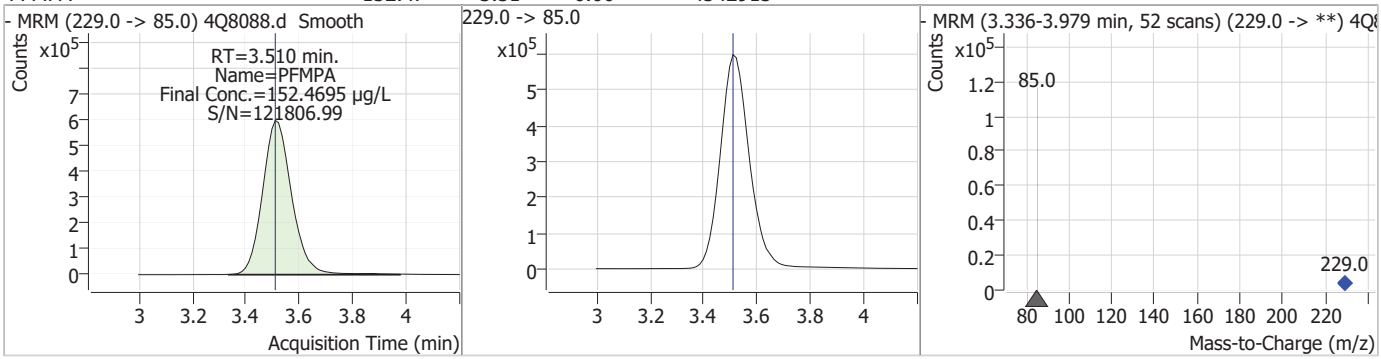
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.65	2.91	0.00	729708				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	292.34	2.91	0.00	5850037				

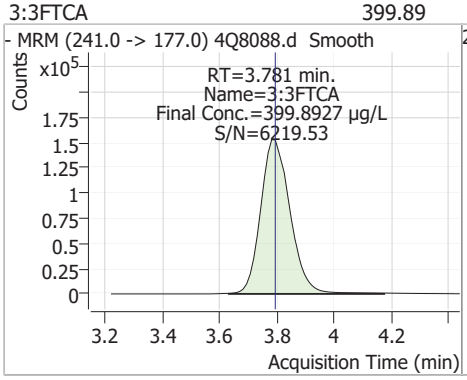


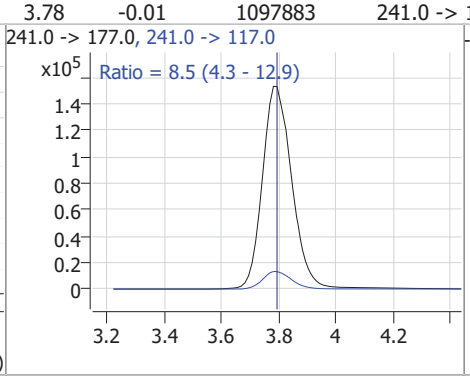
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	152.47	3.51	0.00	4542915				

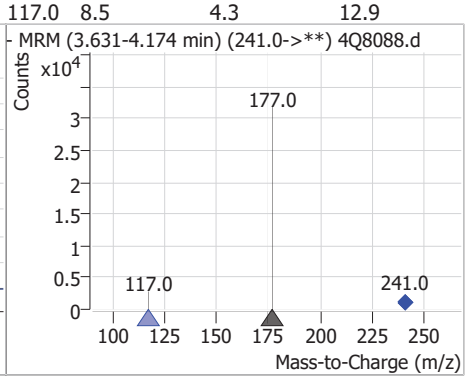


Perfluorinated Compounds by LC/MS/MS

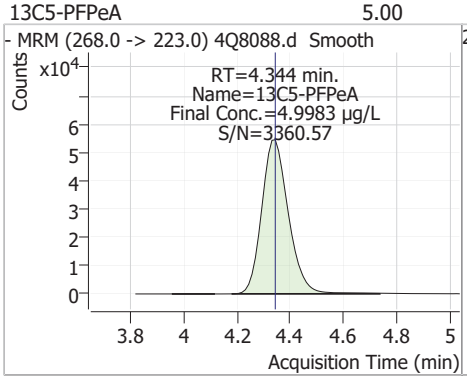
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	399.89	3.78	-0.01	1097883	241.0 -> 117.0	8.5	4.3	12.9

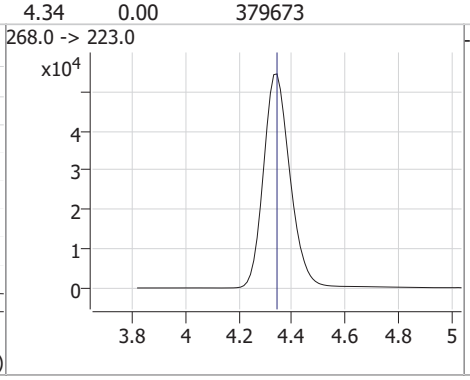


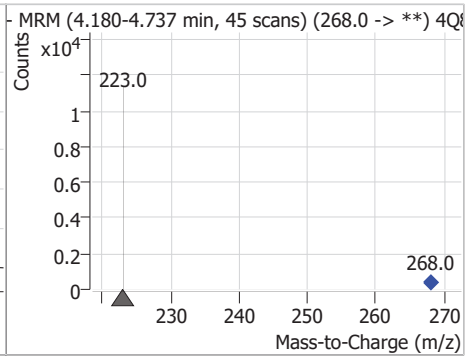




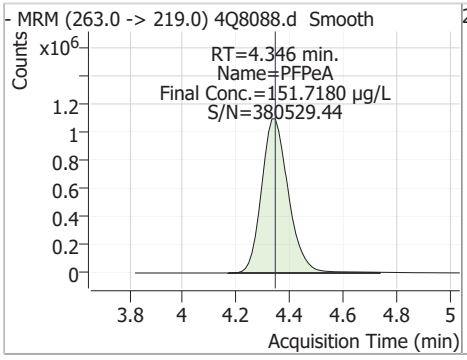
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.00	4.34	0.00	379673				

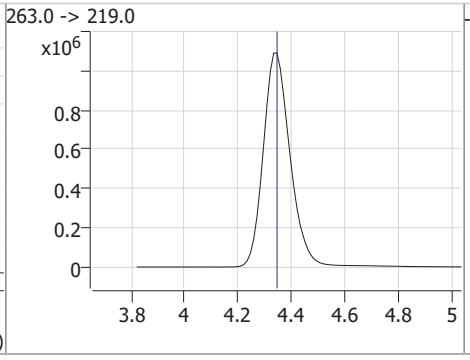


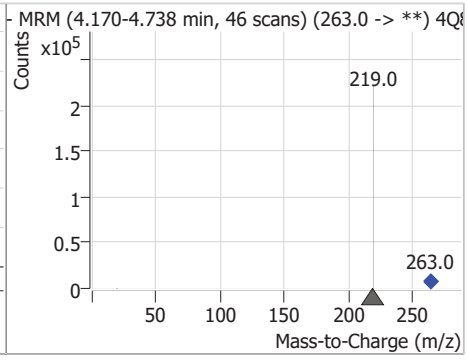




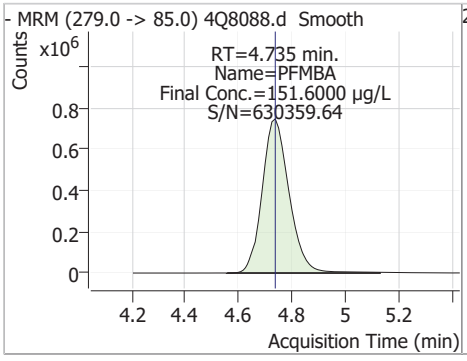
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	151.72	4.35	0.00	7639867				

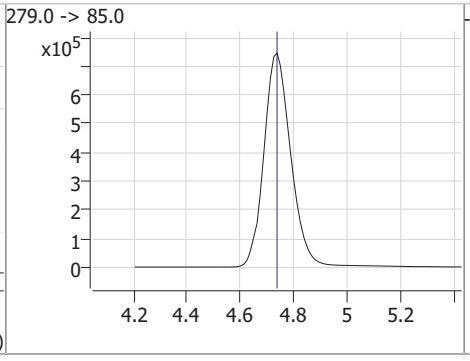


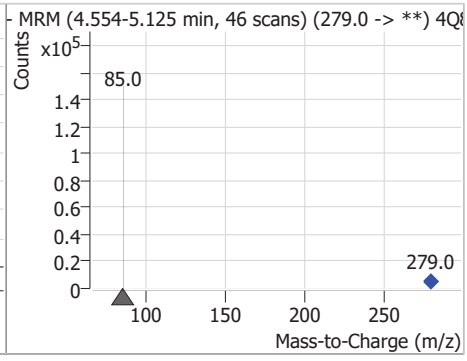




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	151.60	4.73	0.00	5208515				







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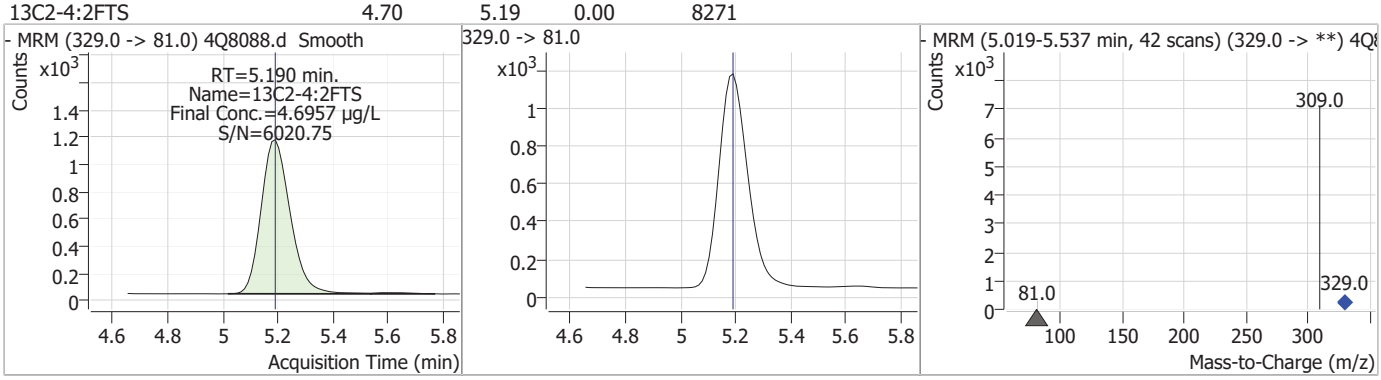
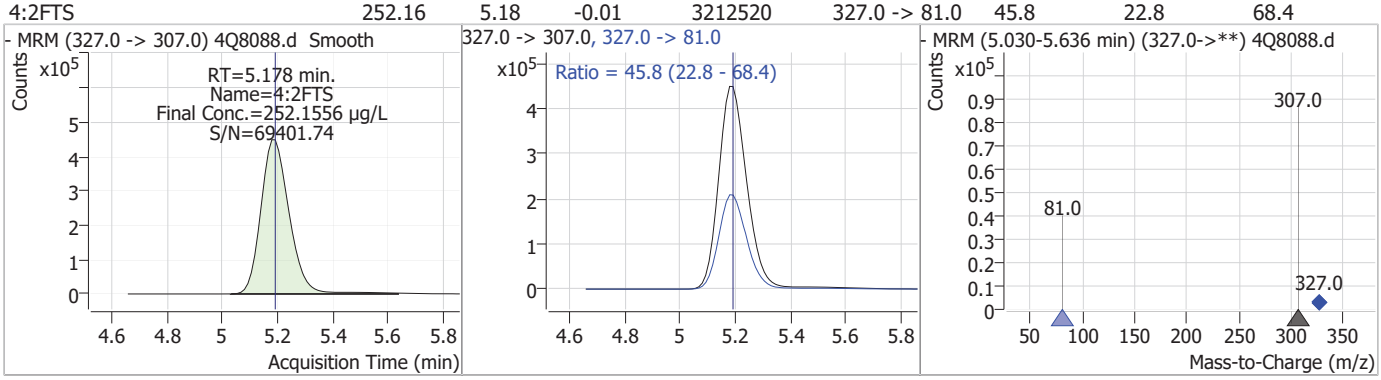
Perfluorinated Compounds by LC/MS/MS

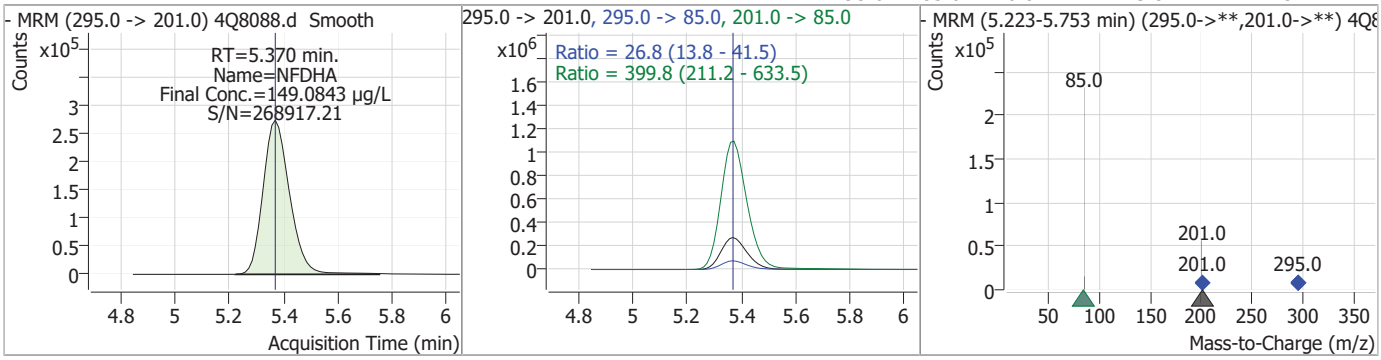
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.70	5.19	0.00	8271				



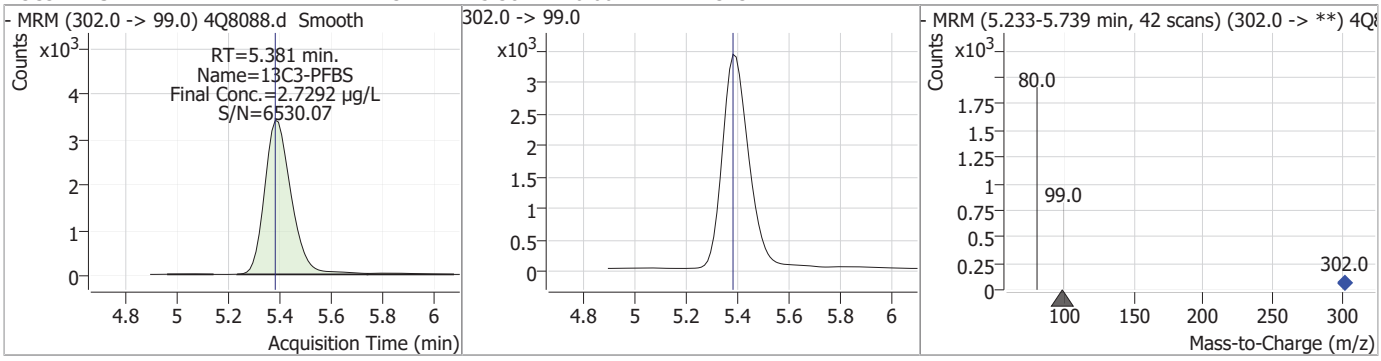
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	252.16	5.18	-0.01	3212520	327.0 -> 81.0	45.8	22.8	68.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	149.08	5.37	0.00	1857240	201.0 -> 85.0	399.8	211.2	633.5
					295.0 -> 85.0	26.8	13.8	41.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.73	5.38	0.00	24373				



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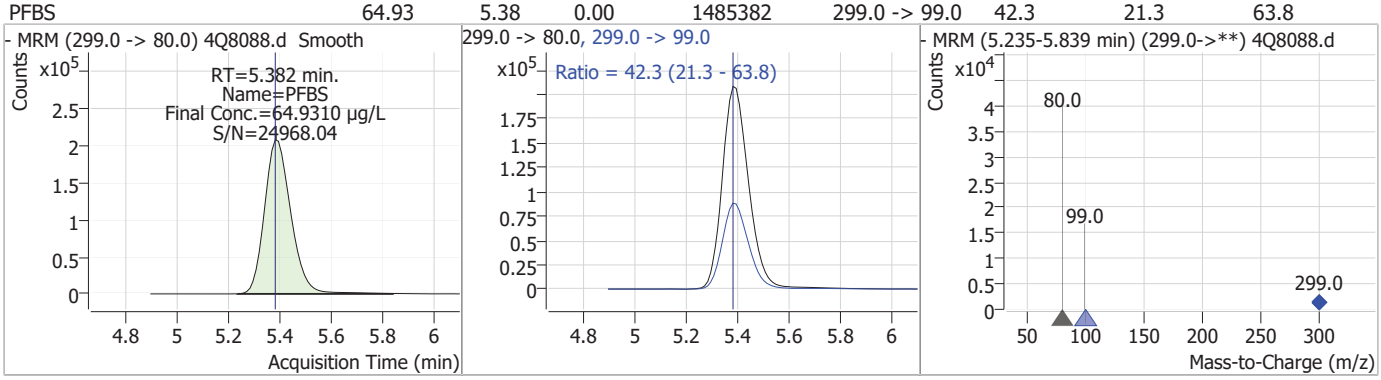
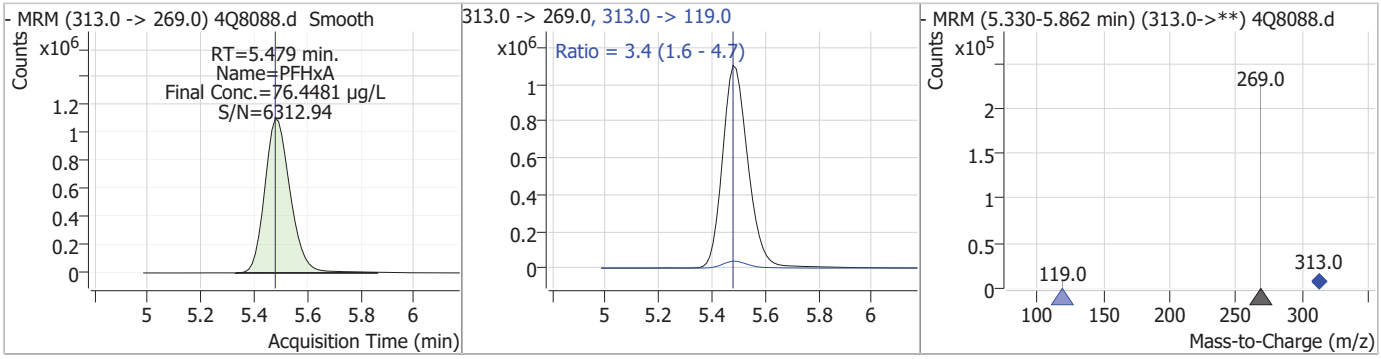
Perfluorinated Compounds by LC/MS/MS

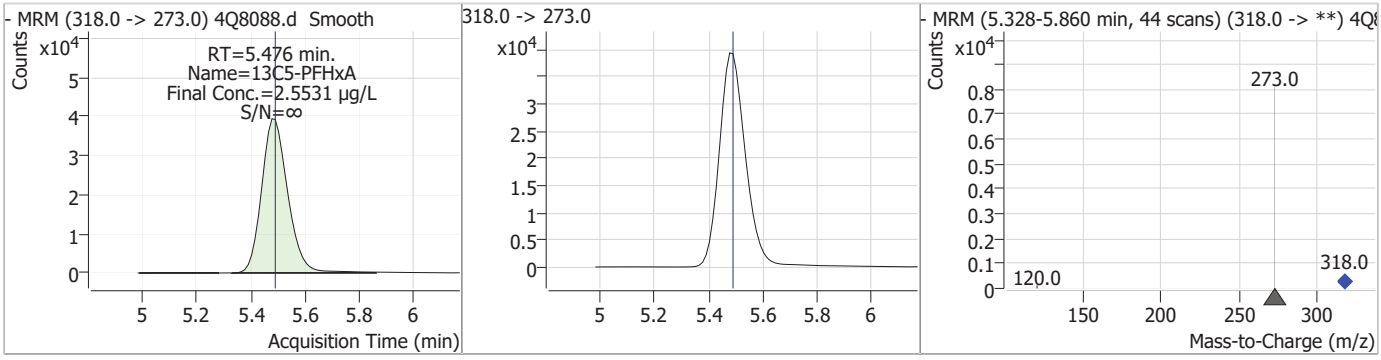
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	64.93	5.38	0.00	1485382	299.0 -> 99.0	42.3	21.3	63.8



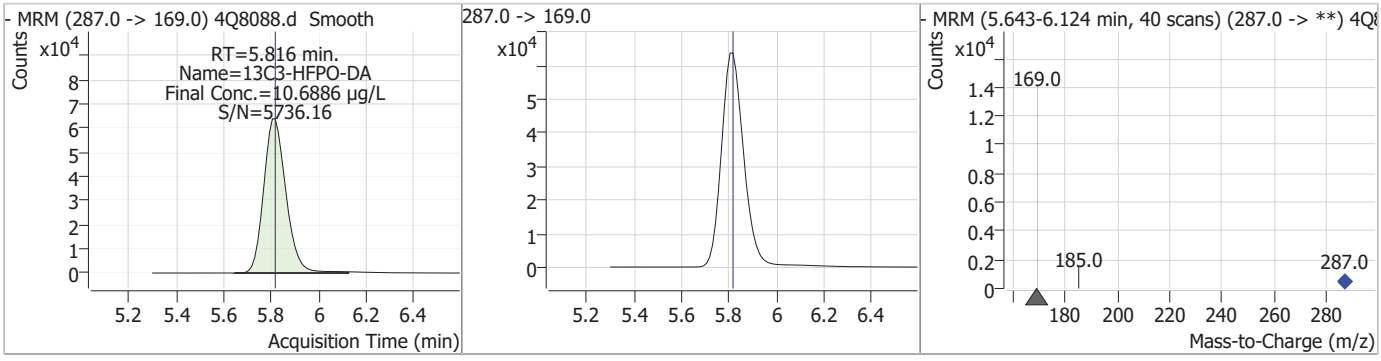
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	76.45	5.48	0.00	7332990	313.0 -> 119.0	3.4	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.55	5.48	-0.01	263576				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.69	5.82	0.00	415720				



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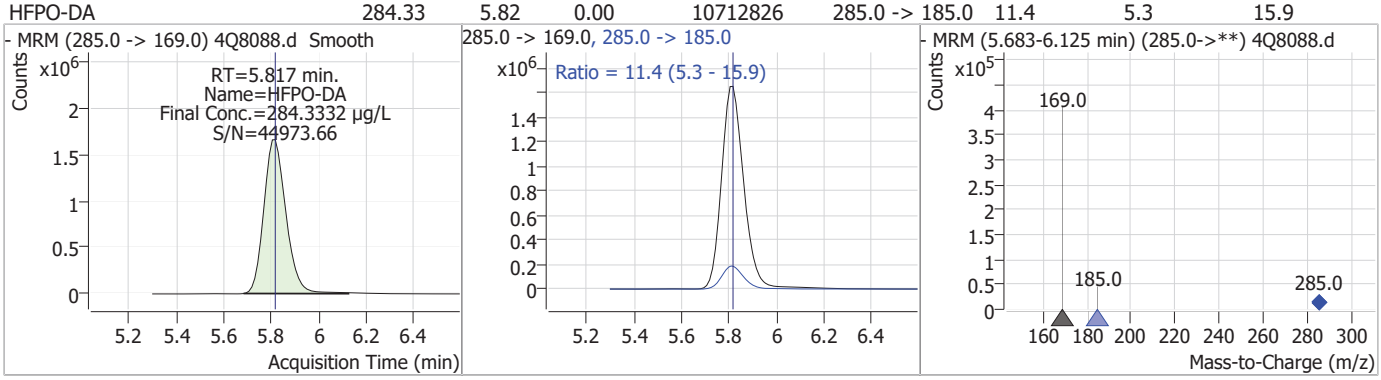
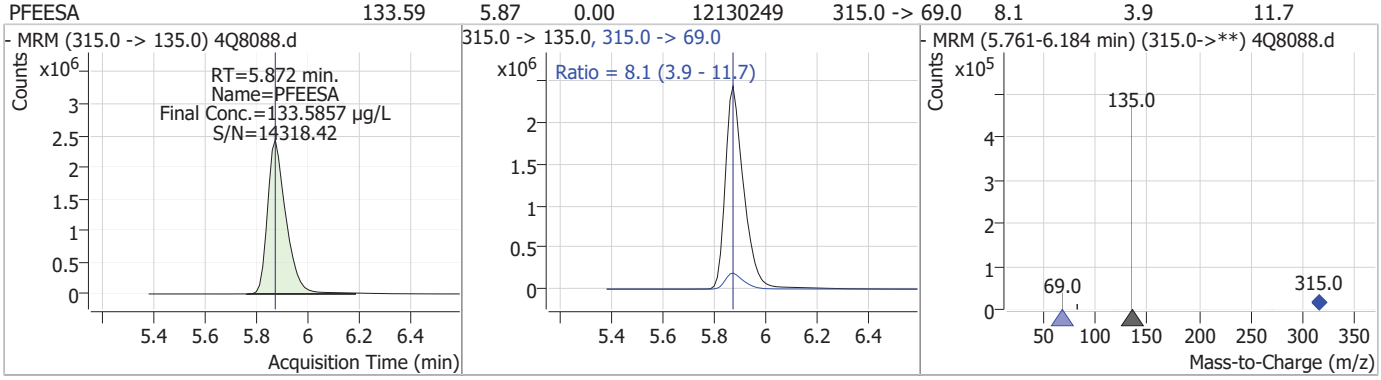
Perfluorinated Compounds by LC/MS/MS

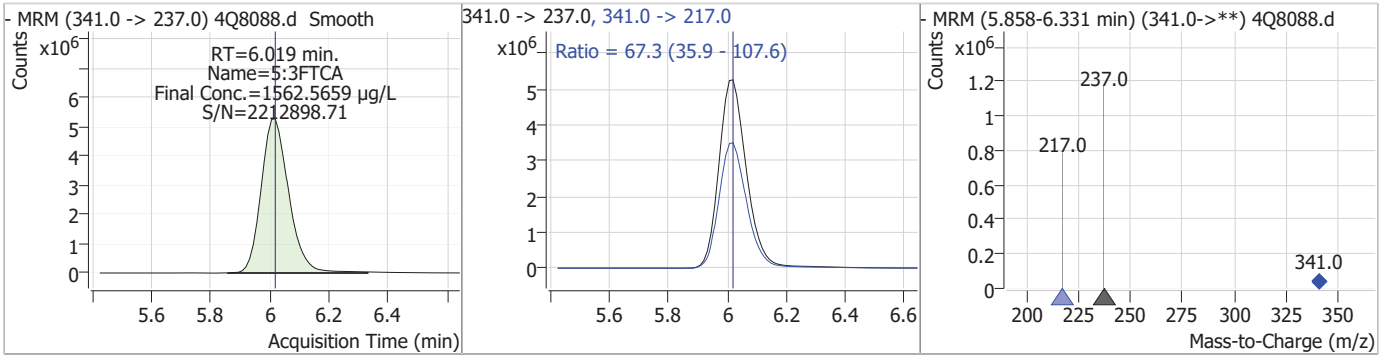
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	284.33	5.82	0.00	10712826	285.0 -> 185.0	11.4	5.3	15.9



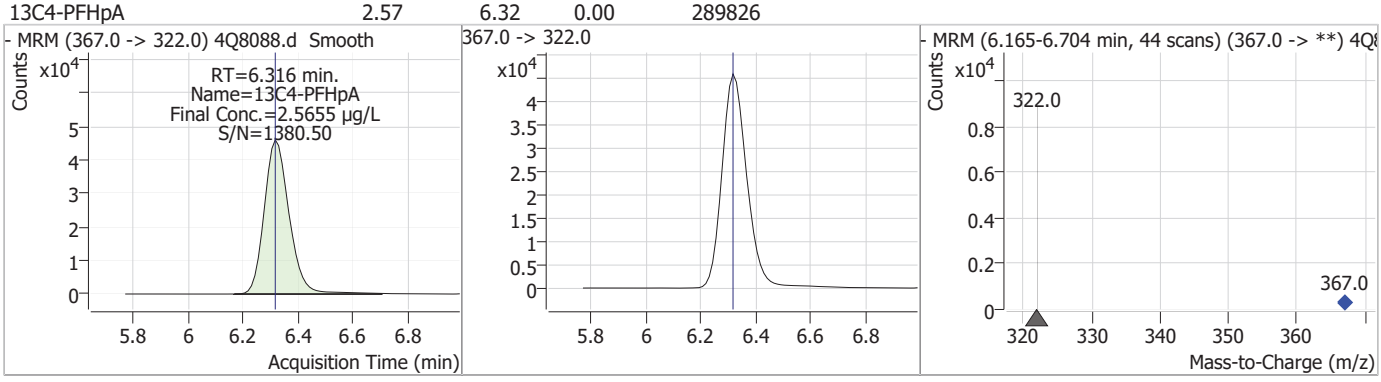
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	133.59	5.87	0.00	12130249	315.0 -> 69.0	8.1	3.9	11.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	1562.57	6.02	0.00	34226350	341.0 -> 217.0	67.3	35.9	107.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.57	6.32	0.00	289826				



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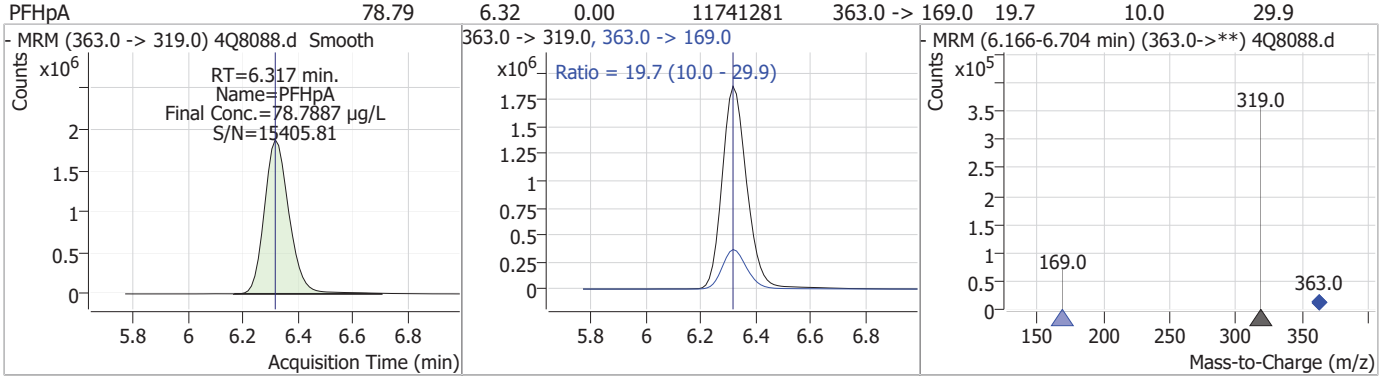
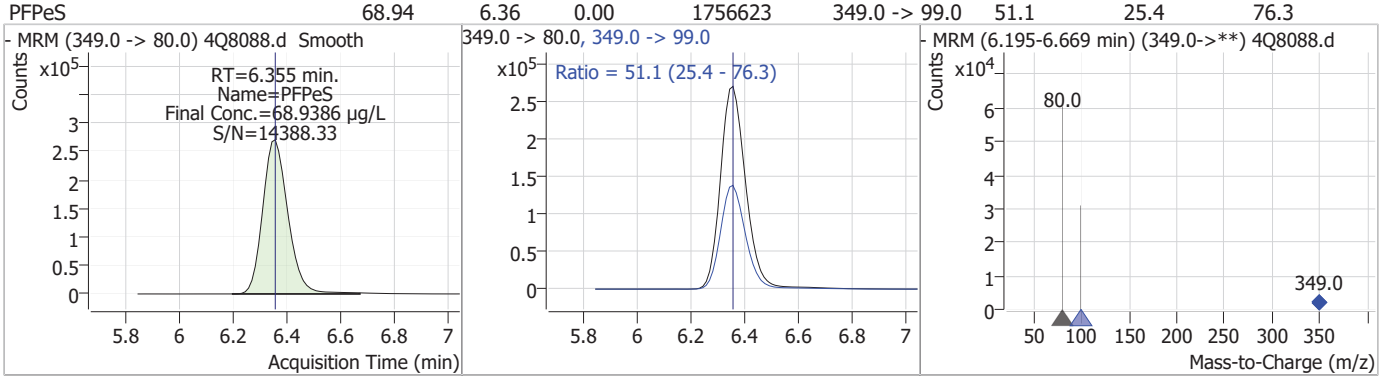
Perfluorinated Compounds by LC/MS/MS

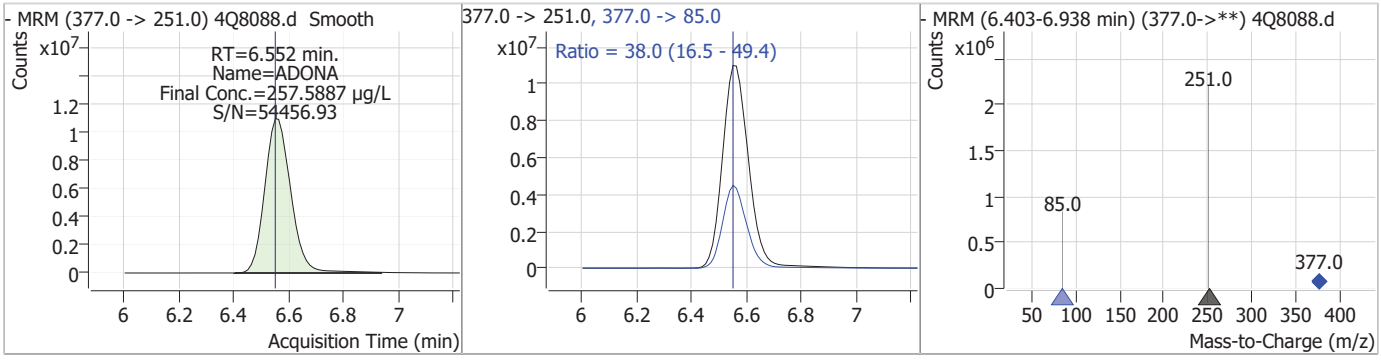
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	78.79	6.32	0.00	11741281	363.0 -> 169.0	19.7	10.0	29.9



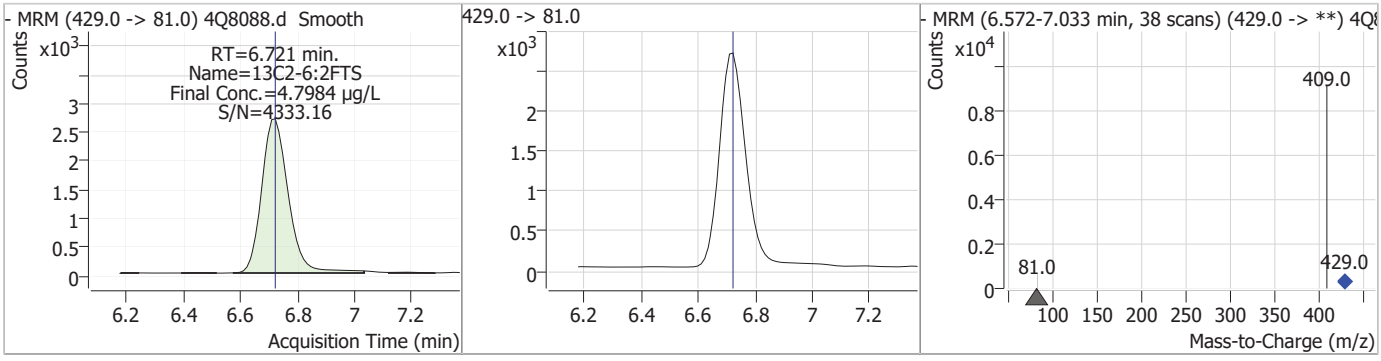
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	68.94	6.36	0.00	1756623	349.0 -> 99.0	51.1	25.4	76.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	257.59	6.55	0.00	72666651	377.0 -> 85.0	38.0	16.5	49.4

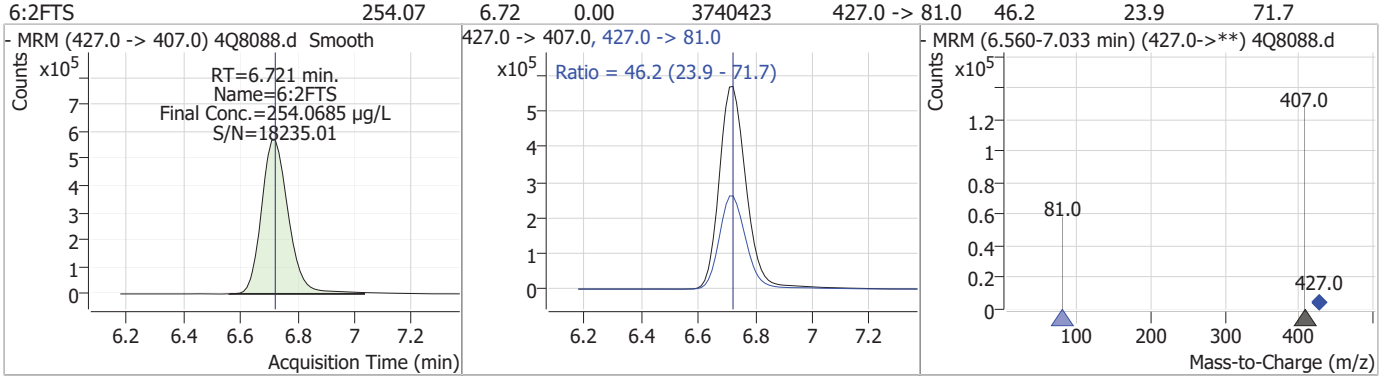


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.80	6.72	0.00	17495				

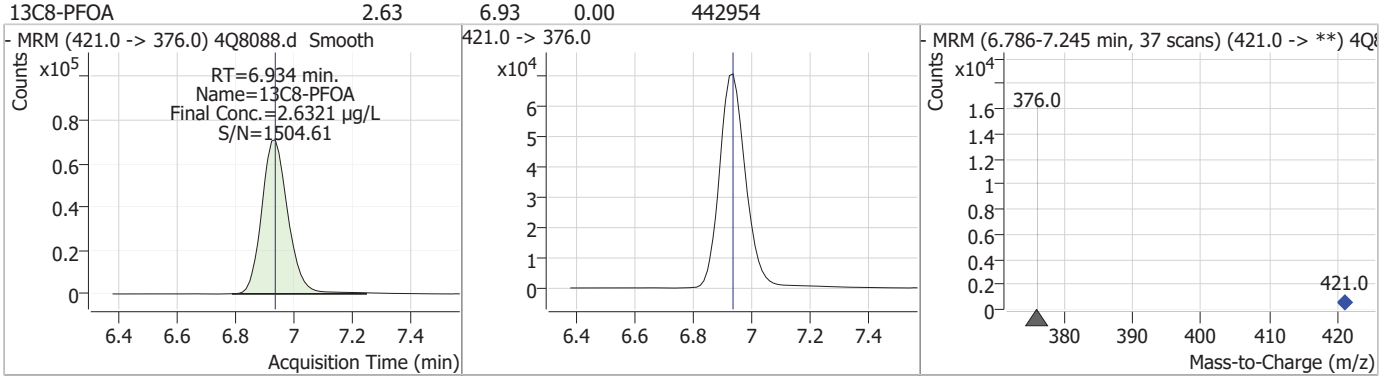


Perfluorinated Compounds by LC/MS/MS

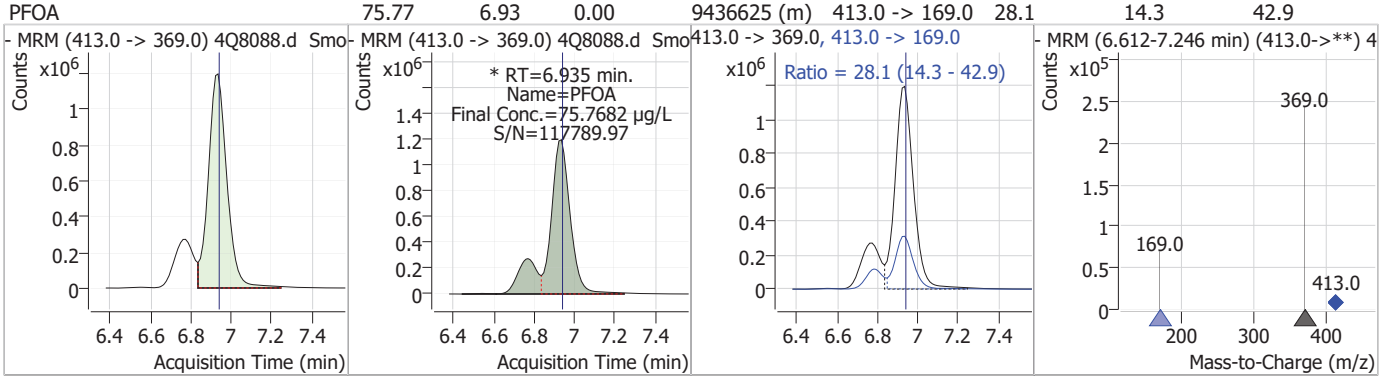
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	254.07	6.72	0.00	3740423	427.0 -> 81.0	46.2	23.9	71.7



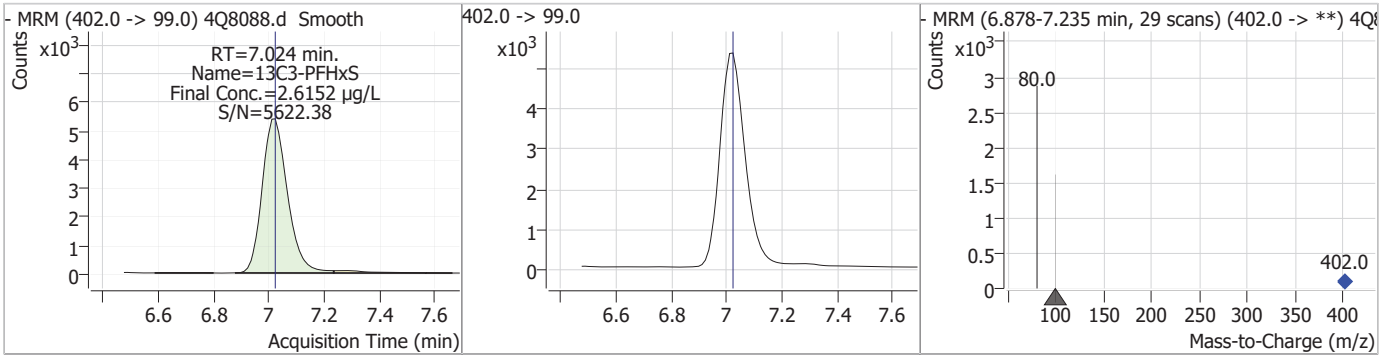
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.63	6.93	0.00	442954				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	75.77	6.93	0.00	9436625 (m)	413.0 -> 169.0	28.1	14.3	42.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.62	7.02	0.00	34160				



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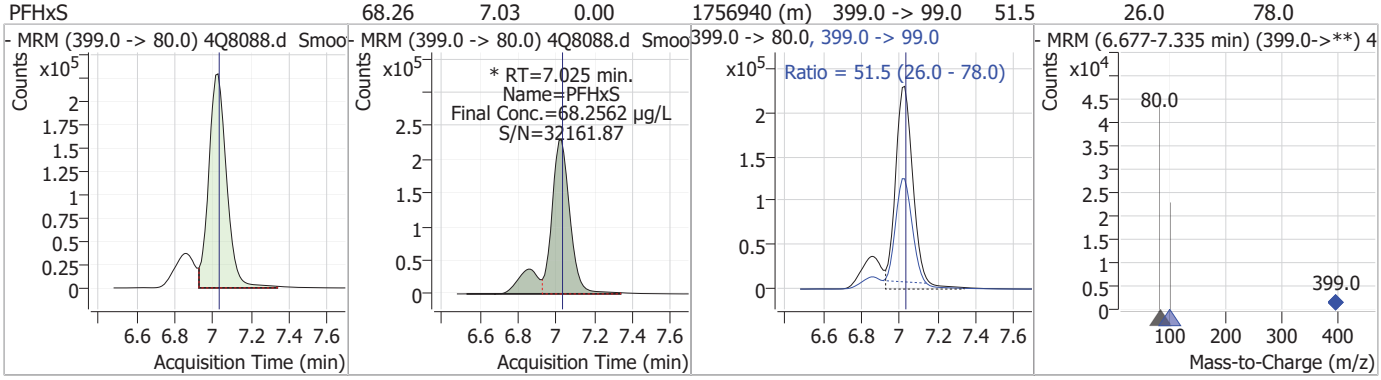
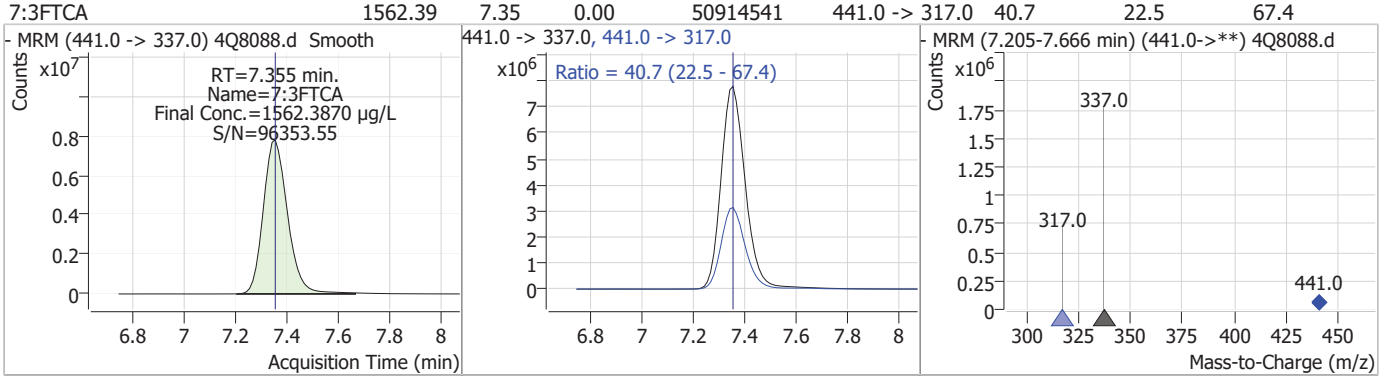
Perfluorinated Compounds by LC/MS/MS

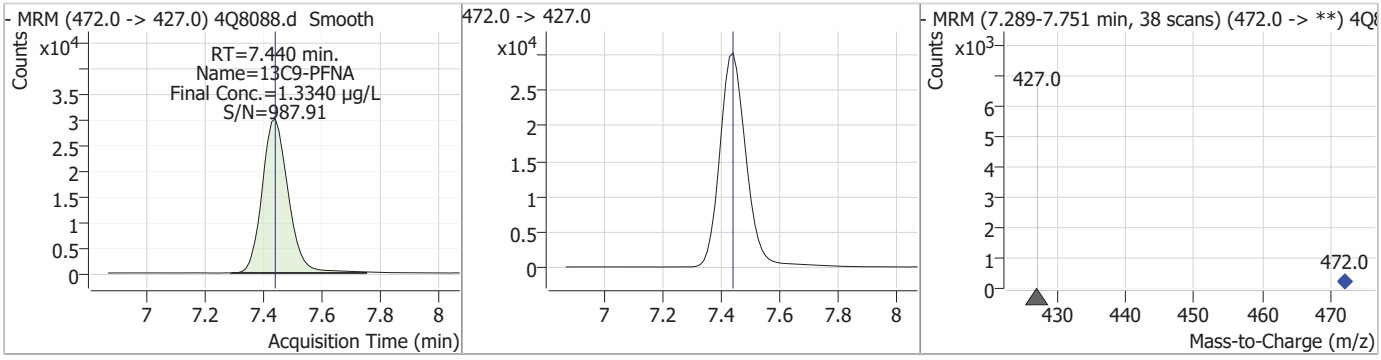
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	68.26	7.03	0.00	1756940 (m)	399.0 -> 99.0	51.5	26.0	78.0



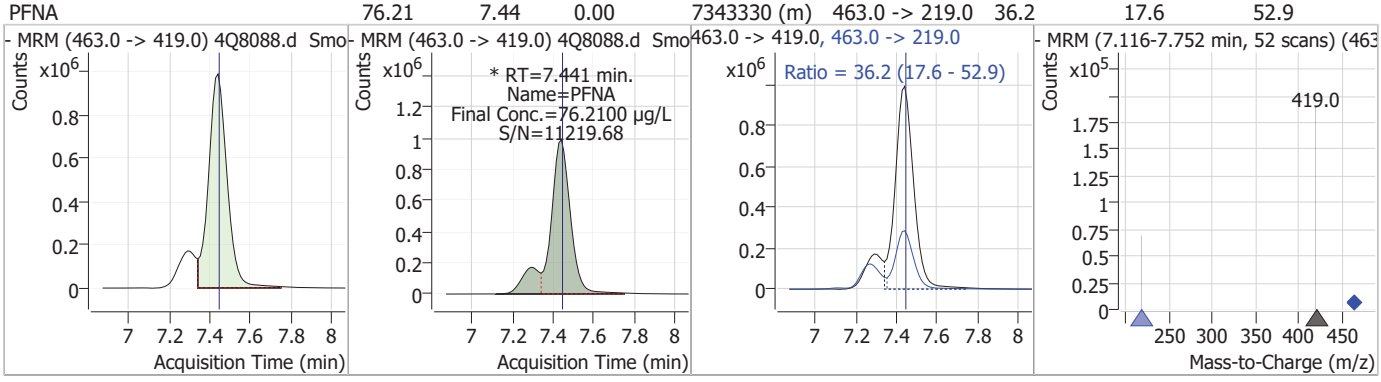
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	1562.39	7.35	0.00	50914541	441.0 -> 317.0	40.7	22.5	67.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.33	7.44	0.00	187477				

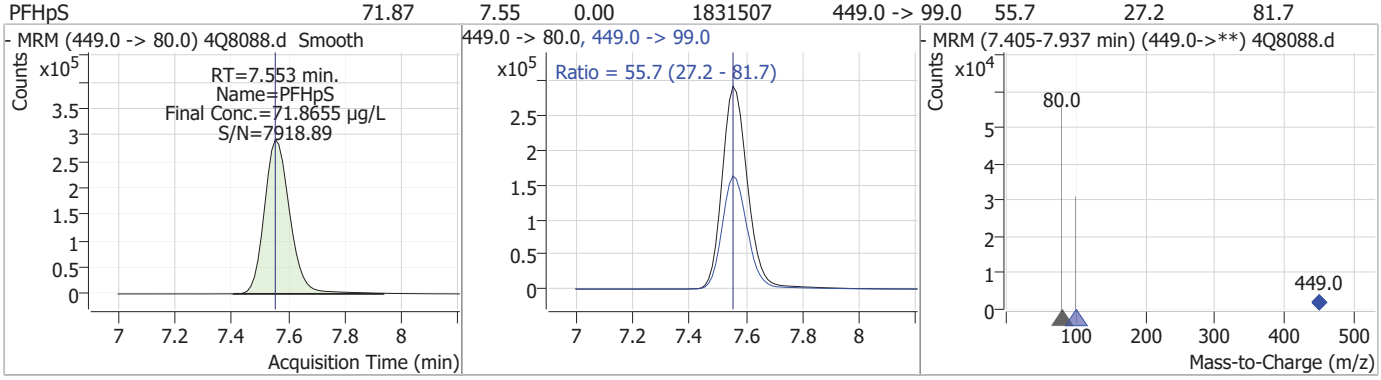


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	76.21	7.44	0.00	7343330 (m)	463.0 -> 219.0	36.2	17.6	52.9

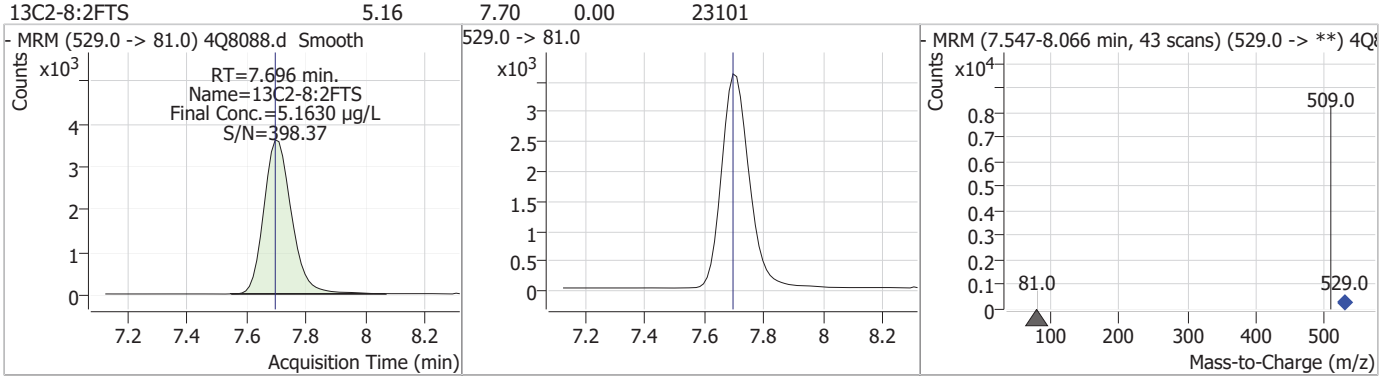


Perfluorinated Compounds by LC/MS/MS

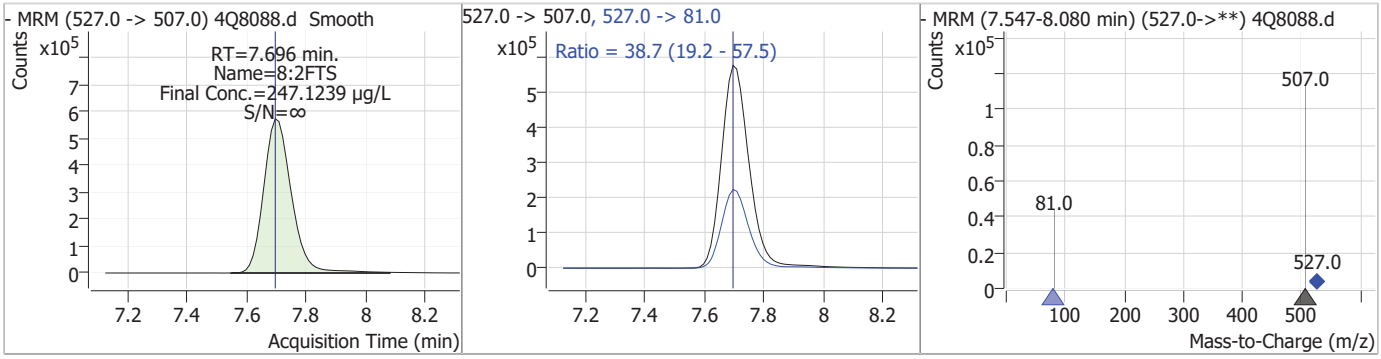
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	71.87	7.55	0.00	1831507	449.0 -> 99.0	55.7	27.2	81.7



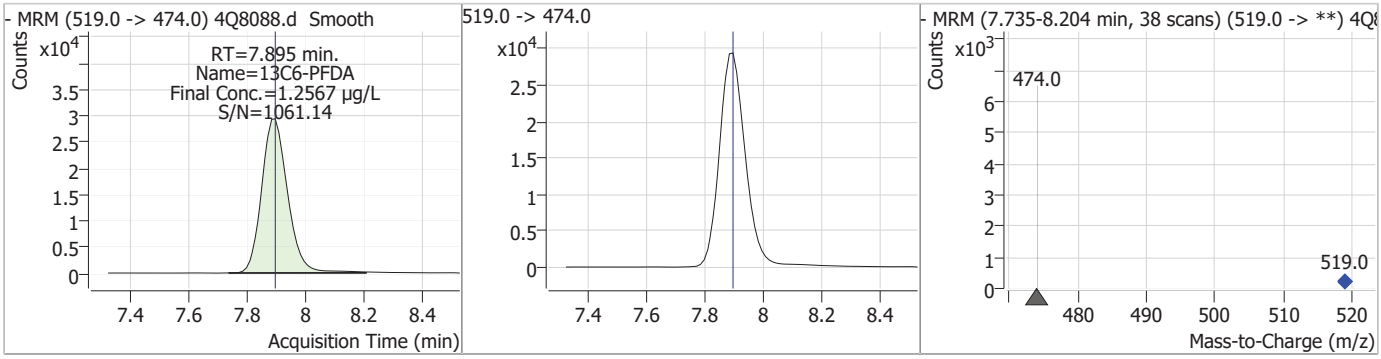
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.16	7.70	0.00	23101				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	247.12	7.70	0.00	3702938	527.0 -> 81.0	38.7	19.2	57.5

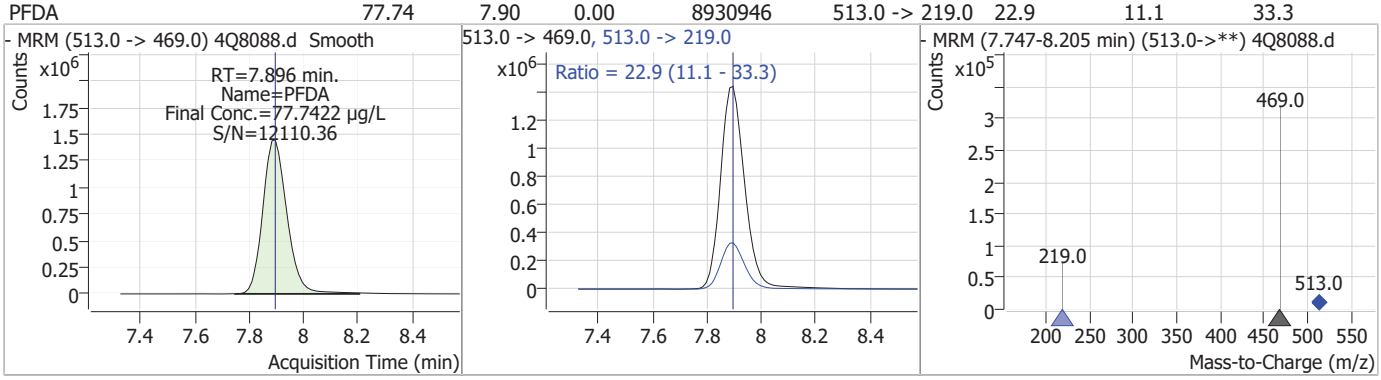


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.26	7.89	0.00	180591				

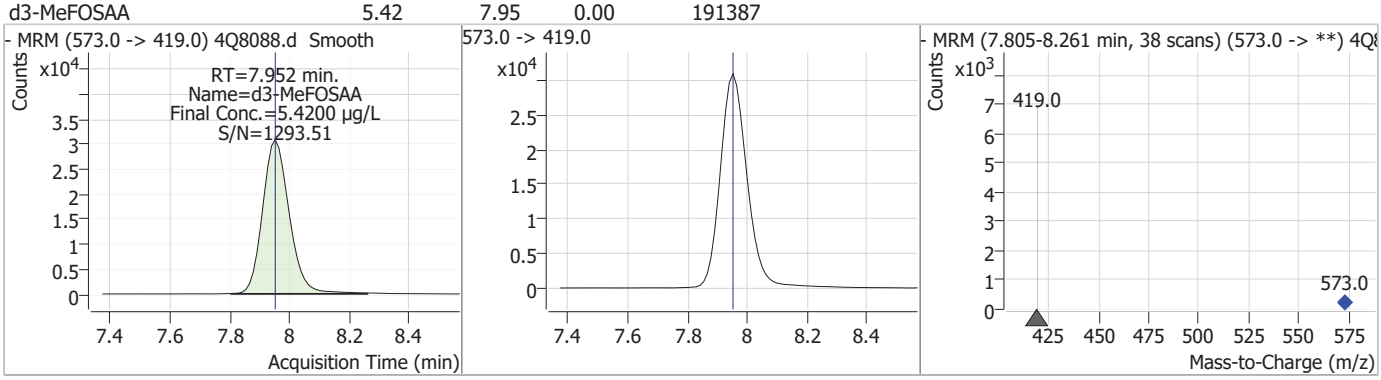


Perfluorinated Compounds by LC/MS/MS

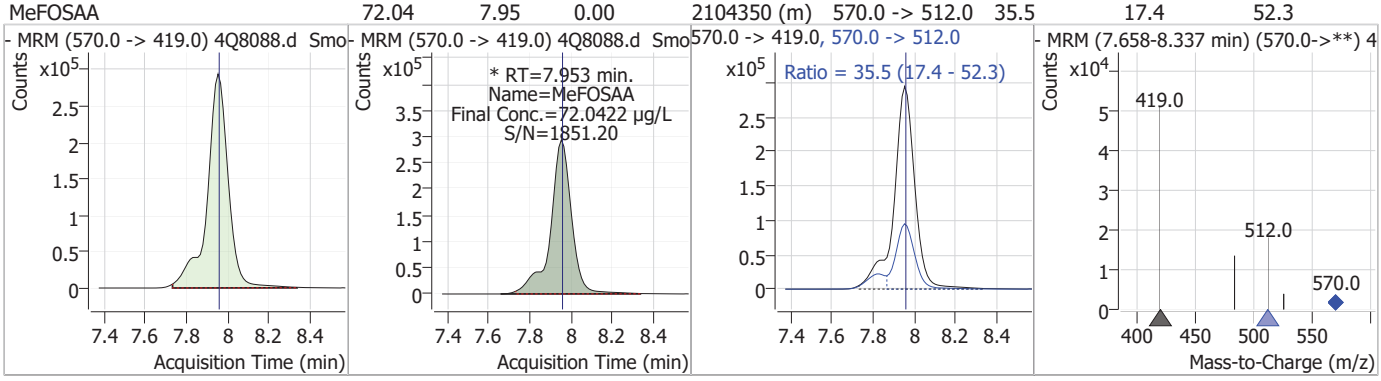
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	77.74	7.90	0.00	8930946	513.0 -> 219.0	22.9	11.1	33.3



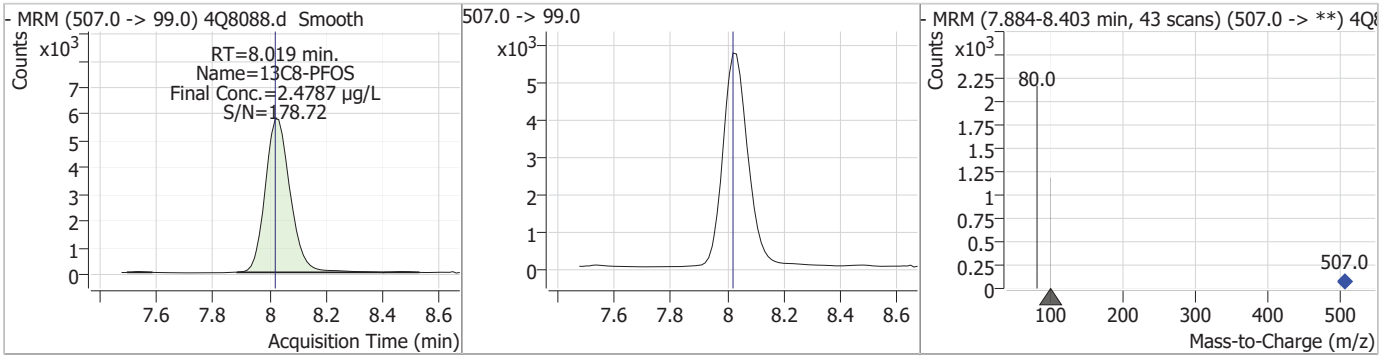
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.42	7.95	0.00	191387				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	72.04	7.95	0.00	2104350 (m)	570.0 -> 512.0	35.5	17.4	52.3

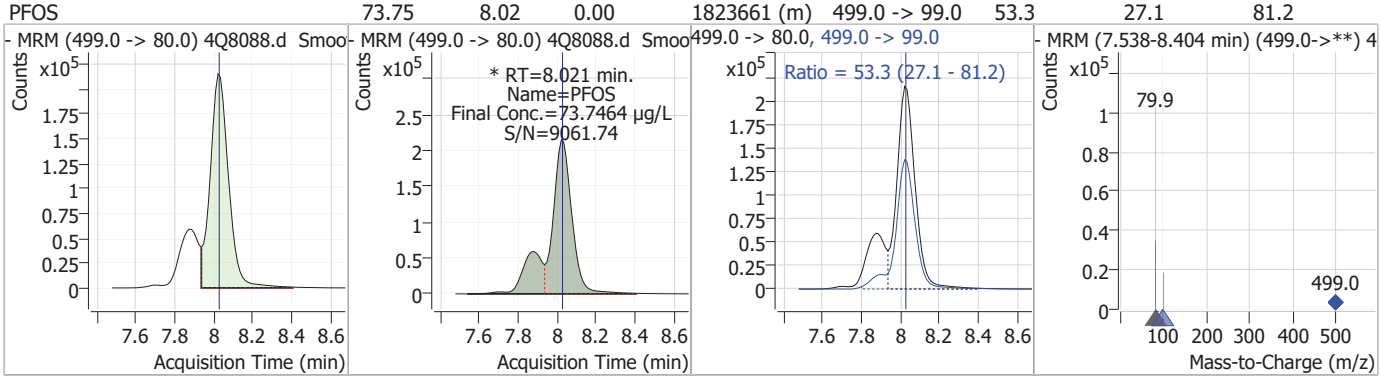


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.48	8.02	0.00	35487				

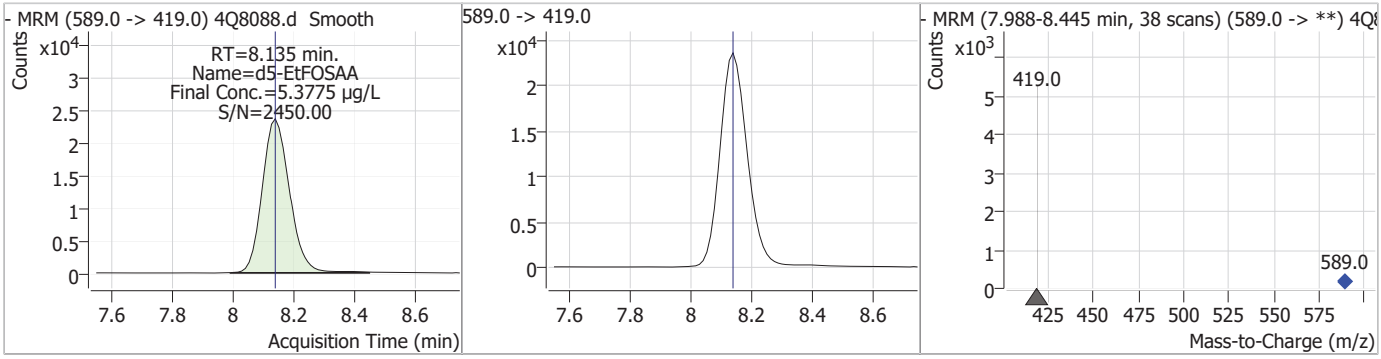


Perfluorinated Compounds by LC/MS/MS

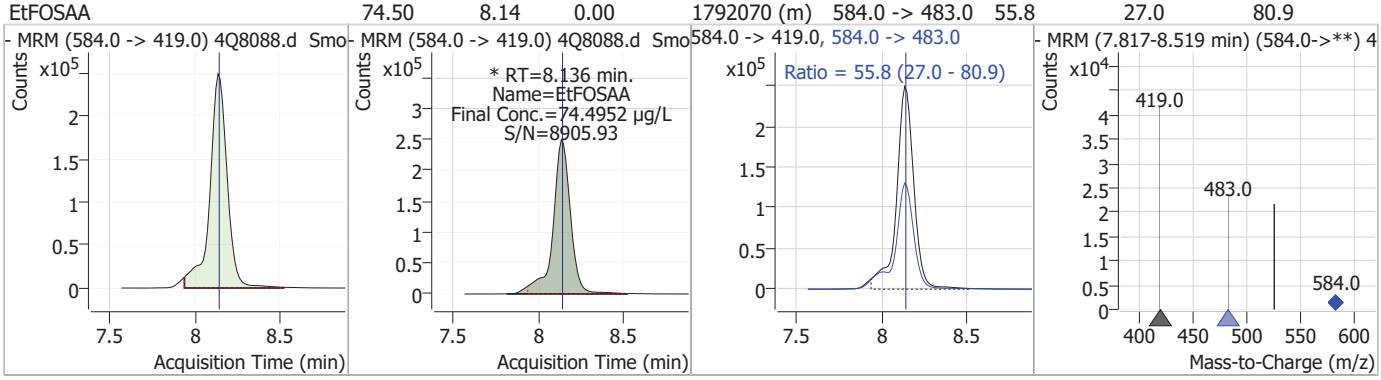
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	73.75	8.02	0.00	1823661 (m)	499.0 -> 99.0	53.3	27.1	81.2



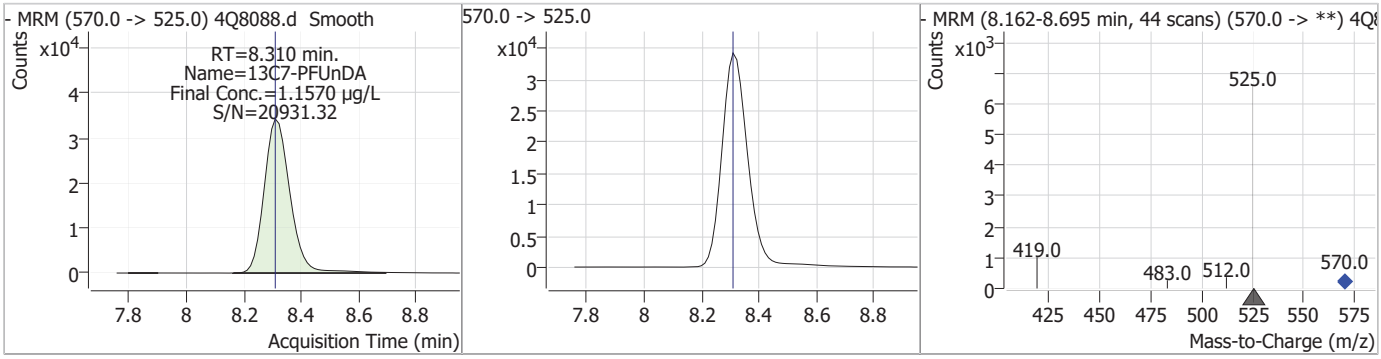
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.38	8.13	0.00	147609				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	74.50	8.14	0.00	1792070 (m)	584.0 -> 483.0	55.8	27.0	80.9

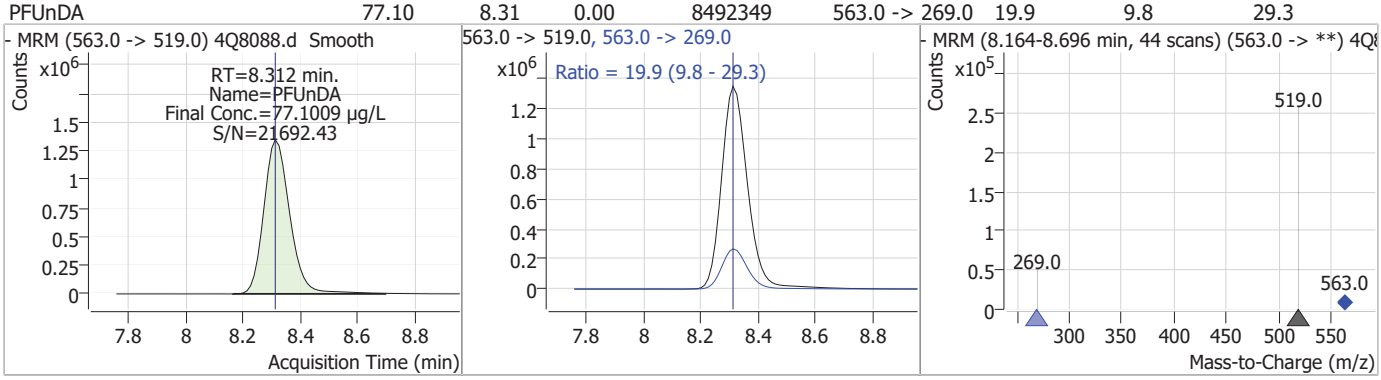


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.16	8.31	0.00	214463				

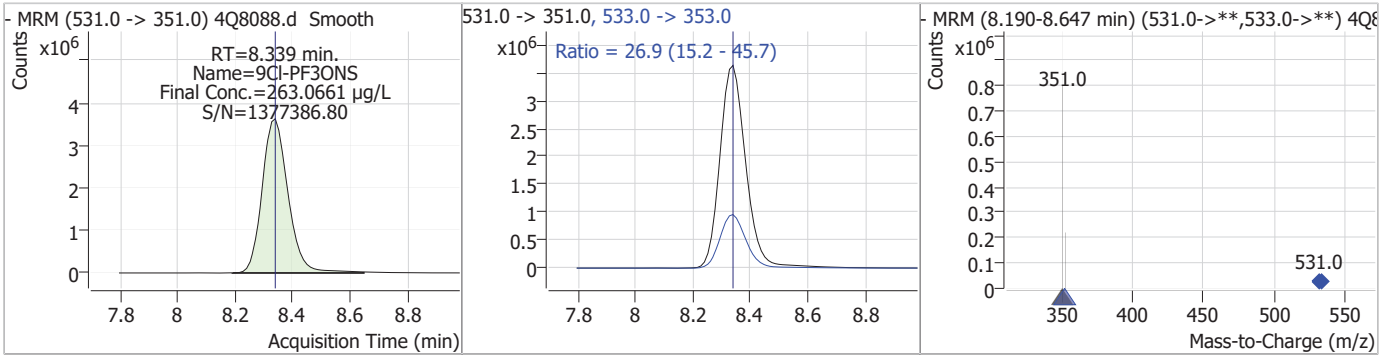


Perfluorinated Compounds by LC/MS/MS

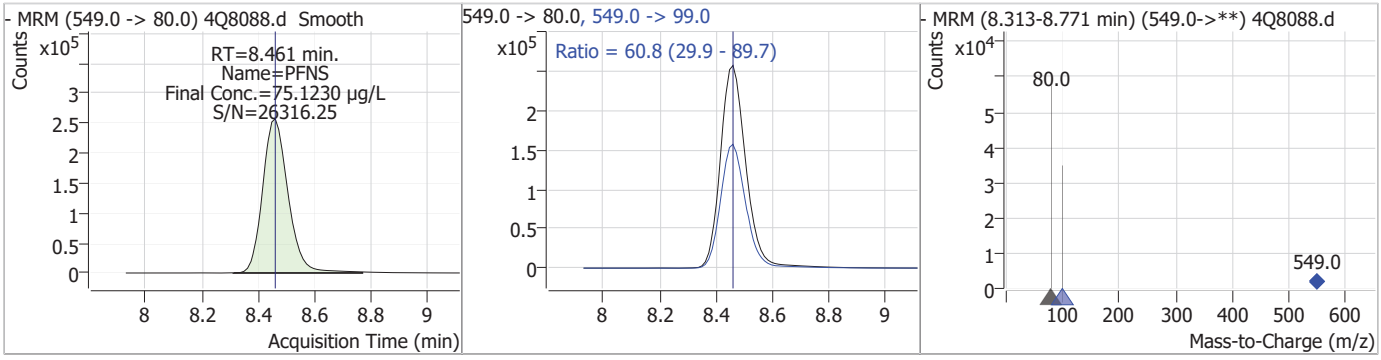
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	77.10	8.31	0.00	8492349	563.0 -> 269.0	19.9	9.8	29.3



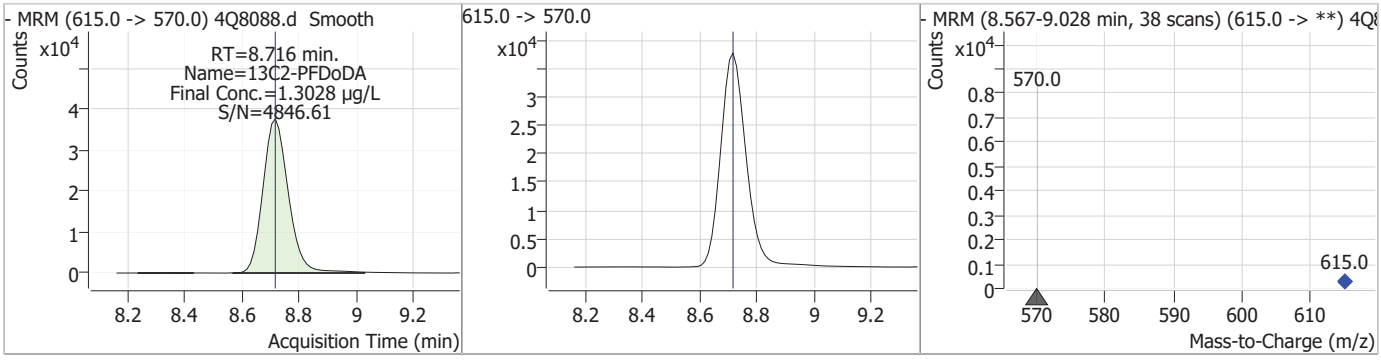
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	263.07	8.34	0.00	22675060	533.0 -> 353.0	26.9	15.2	45.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	75.12	8.46	0.00	1612845	549.0 -> 99.0	60.8	29.9	89.7

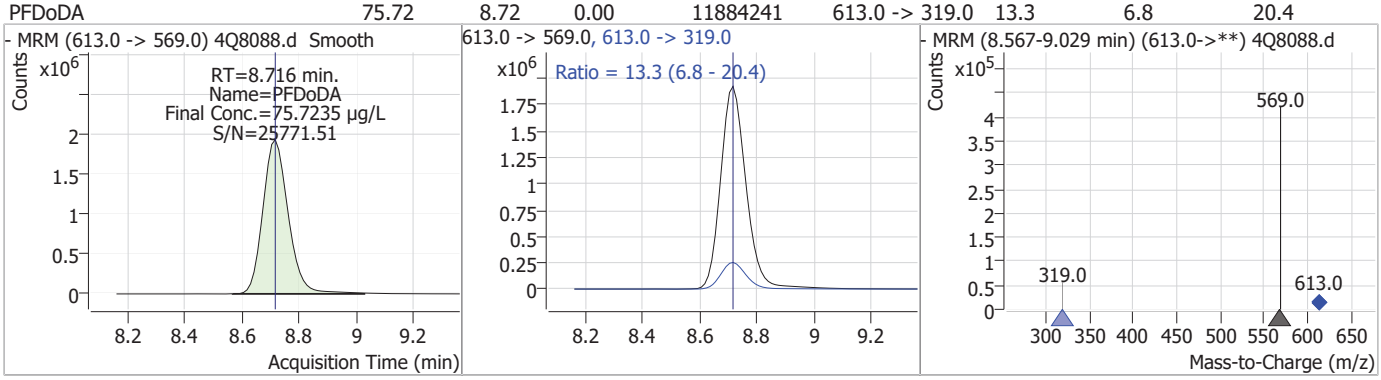


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.30	8.72	0.00	232693				

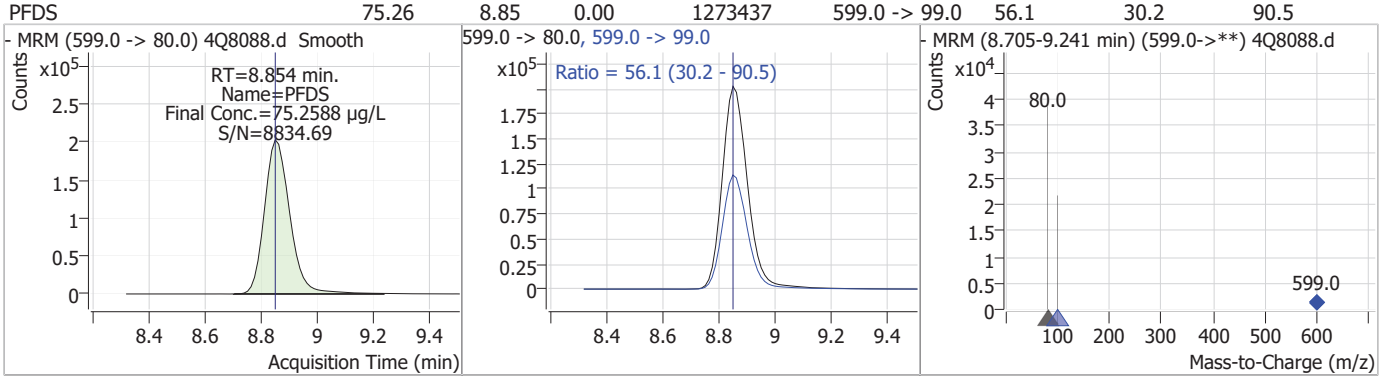


Perfluorinated Compounds by LC/MS/MS

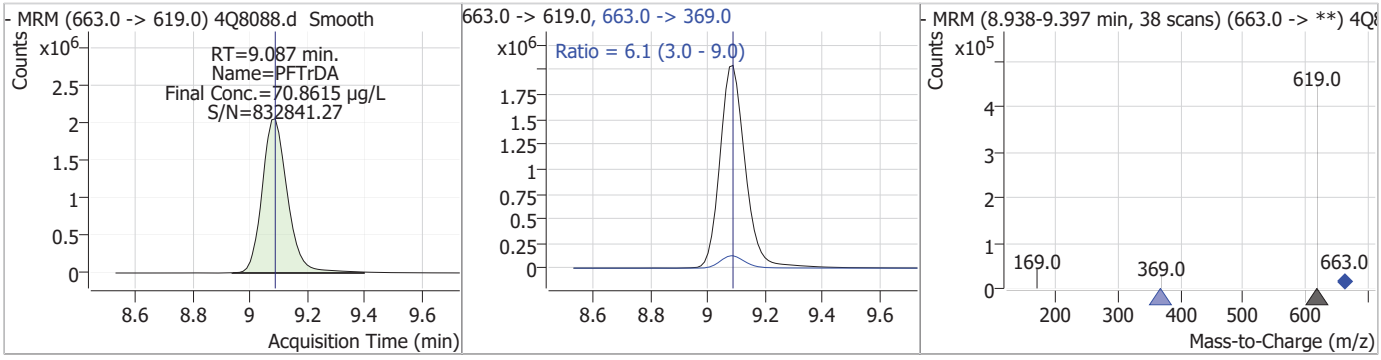
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	75.72	8.72	0.00	11884241	613.0 -> 319.0	13.3	6.8	20.4



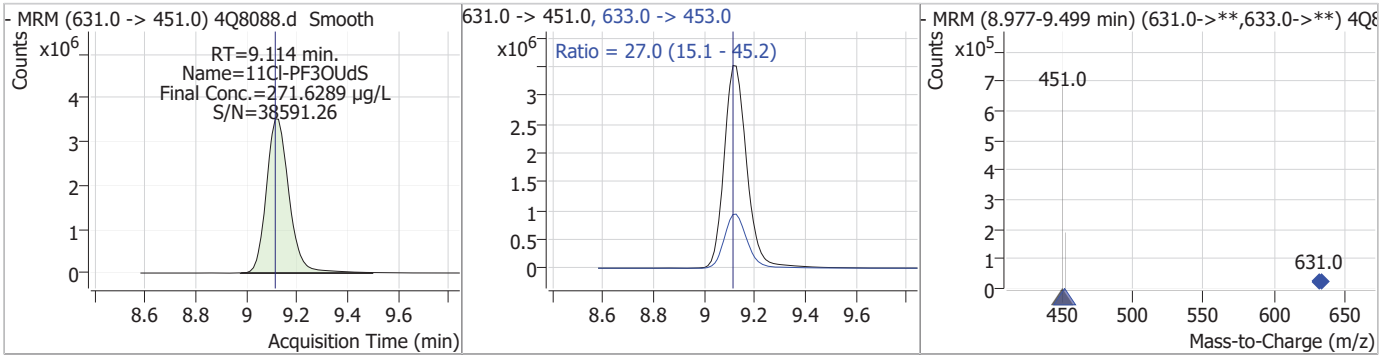
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	75.26	8.85	0.00	1273437	599.0 -> 99.0	56.1	30.2	90.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	70.86	9.09	0.00	12587856	663.0 -> 369.0	6.1	3.0	9.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	271.63	9.11	0.00	21939784	633.0 -> 453.0	27.0	15.1	45.2



7.6.39

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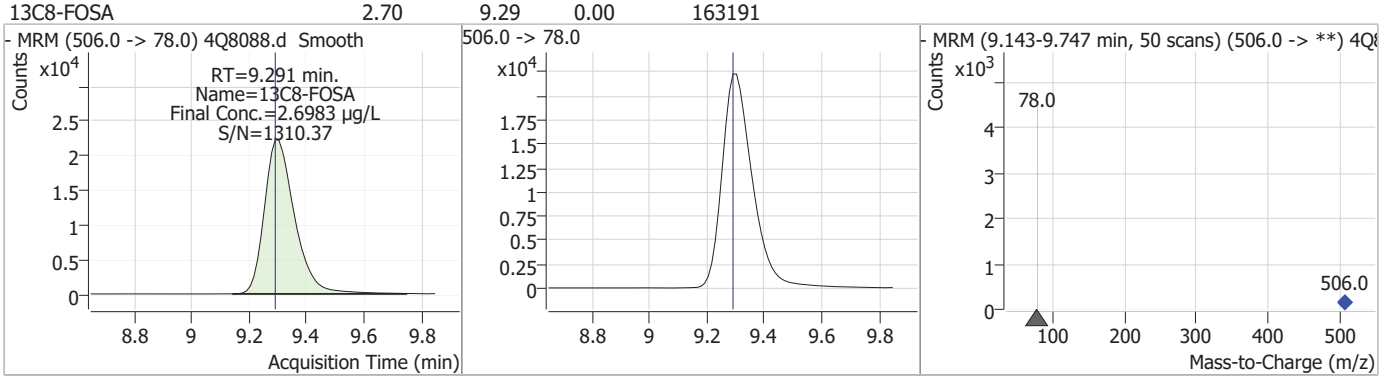
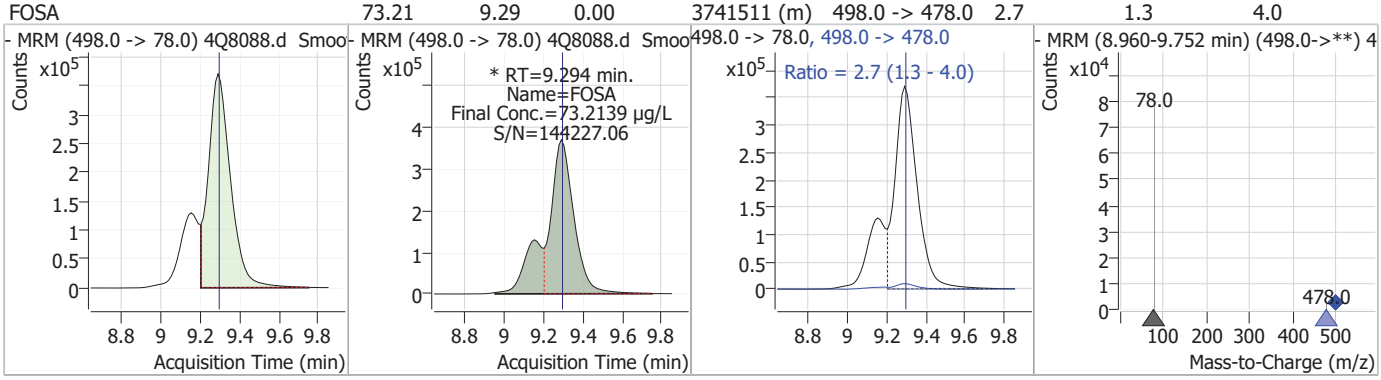
Perfluorinated Compounds by LC/MS/MS

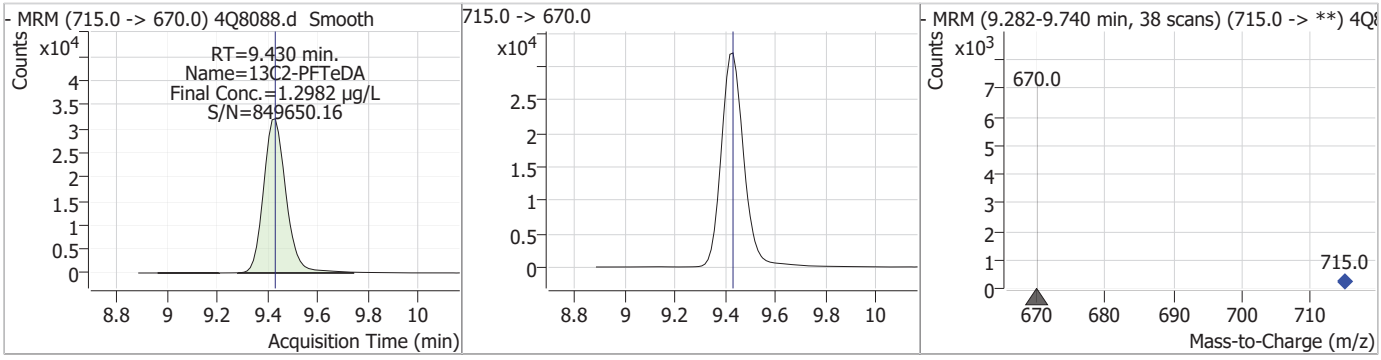
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.70	9.29	0.00	163191				



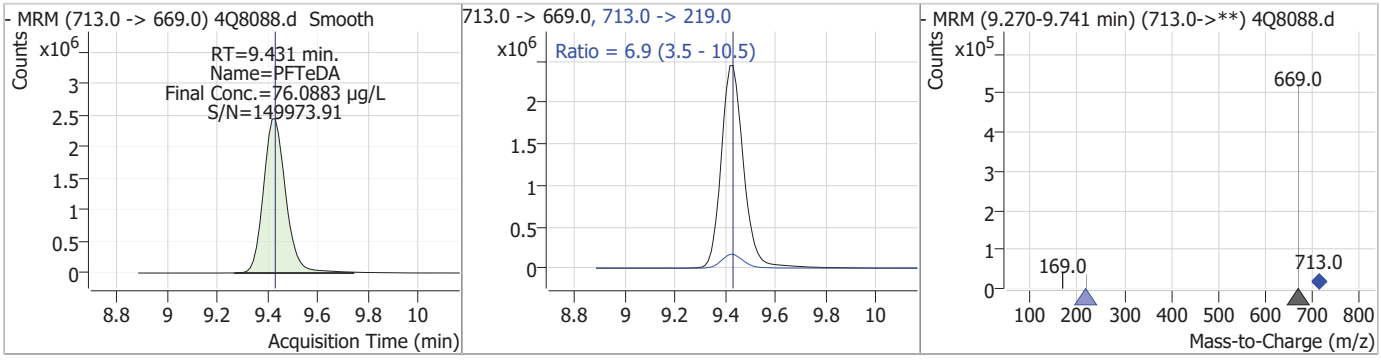
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	73.21	9.29	0.00	3741511 (m)	498.0 -> 478.0	2.7	1.3	4.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.30	9.43	0.00	198410				

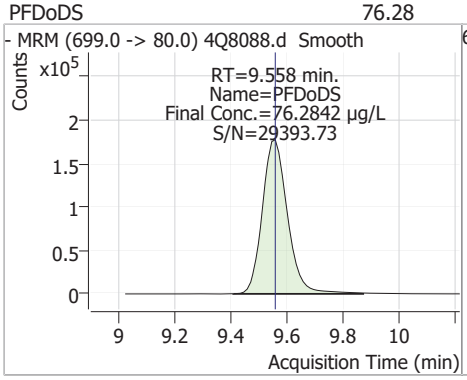


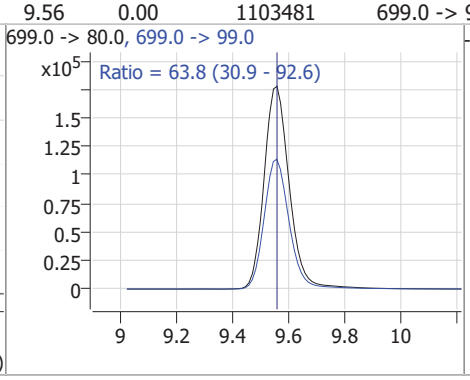
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	76.09	9.43	0.00	15026724	713.0 -> 219.0	6.9	3.5	10.5

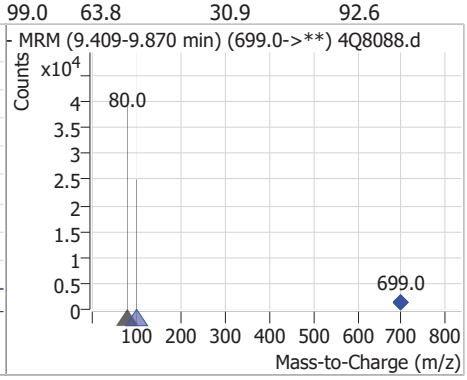


Perfluorinated Compounds by LC/MS/MS

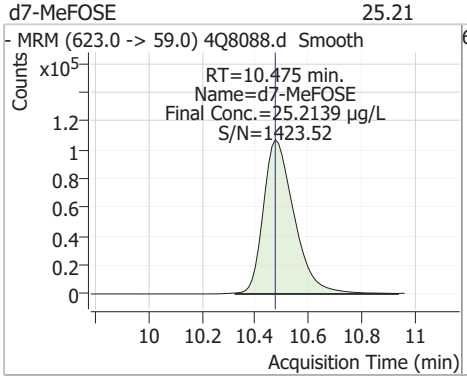
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	76.28	9.56	0.00	1103481	699.0 -> 99.0	63.8	30.9	92.6

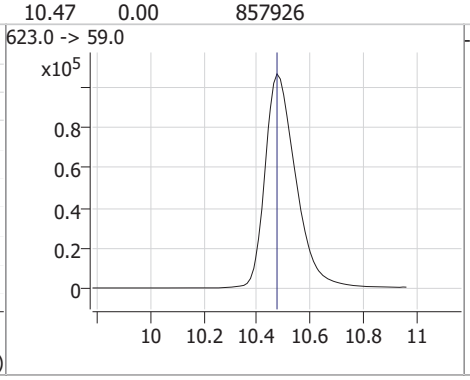


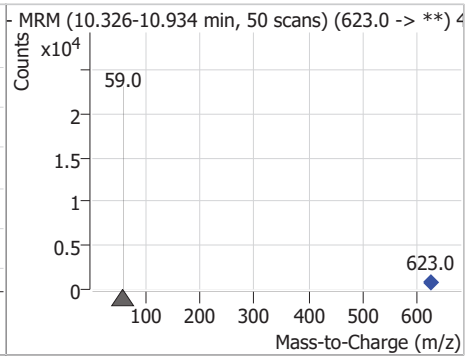




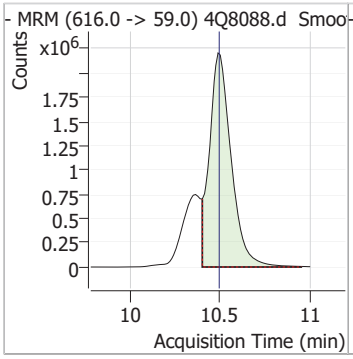
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.21	10.47	0.00	857926				

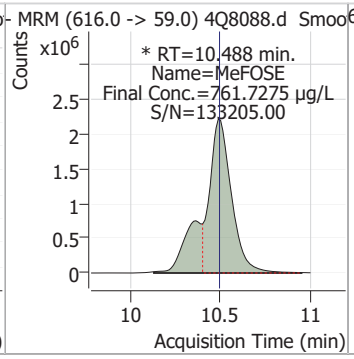


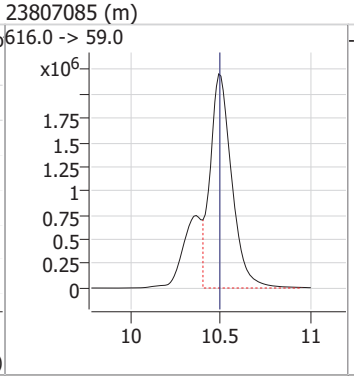


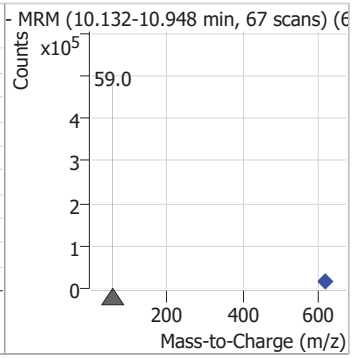


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	761.73	10.49	0.00	23807085 (m)				

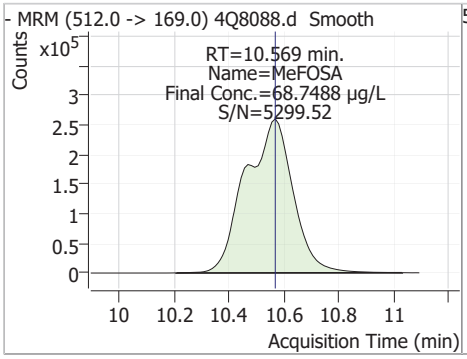


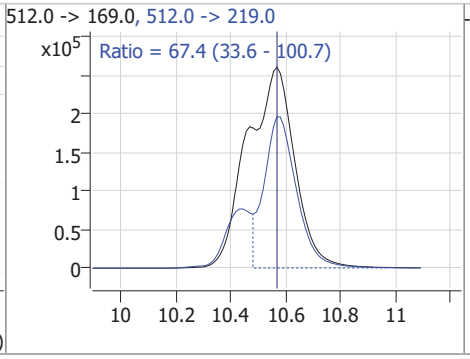


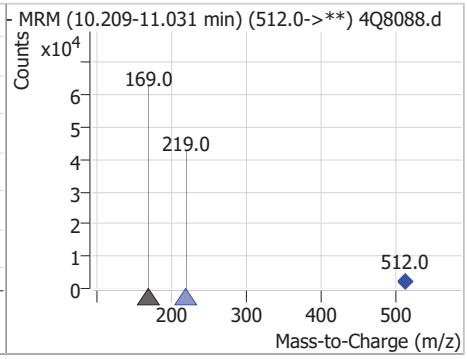




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	68.75	10.57	0.00	3128880	512.0 -> 219.0	67.4	33.6	100.7

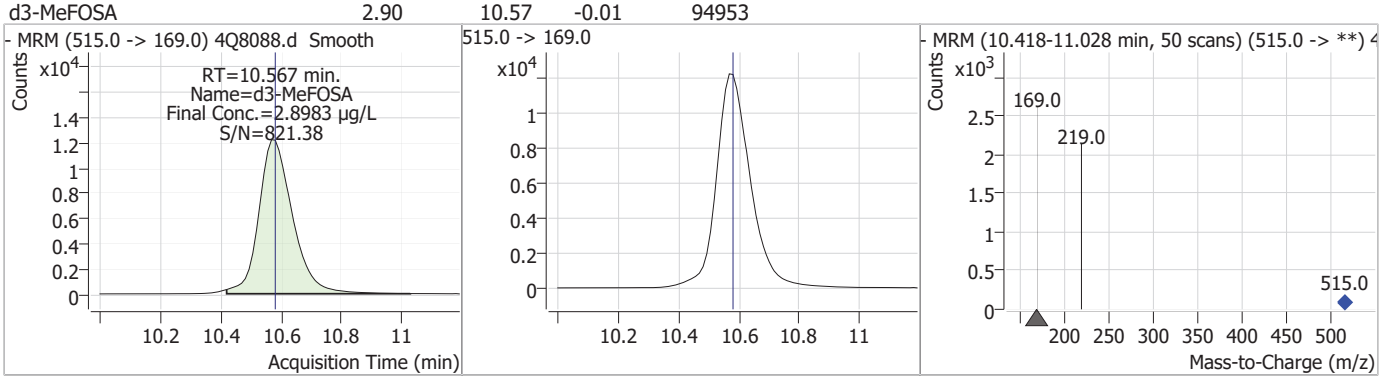




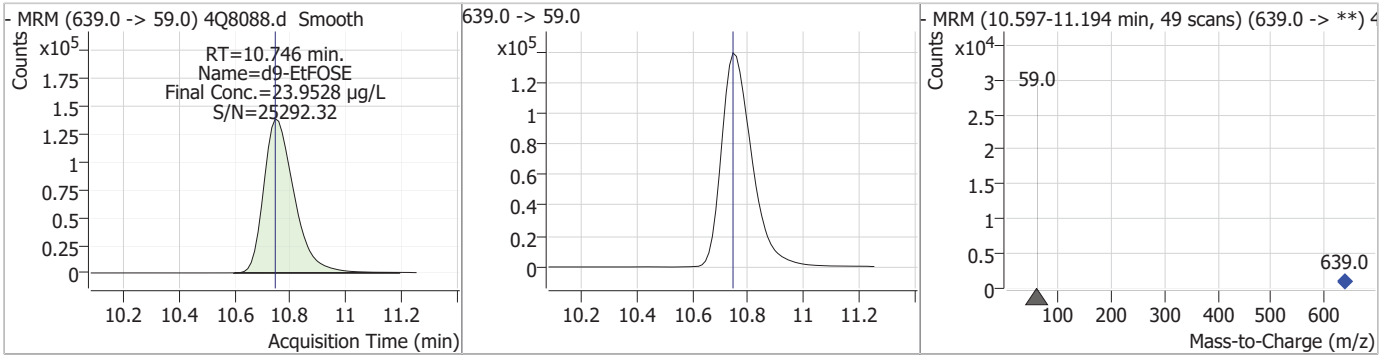


Perfluorinated Compounds by LC/MS/MS

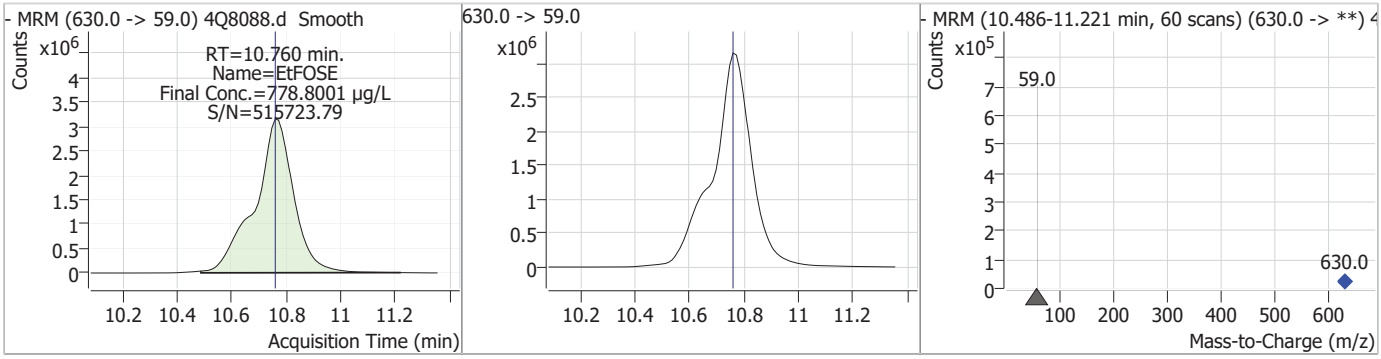
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.90	10.57	-0.01	94953				



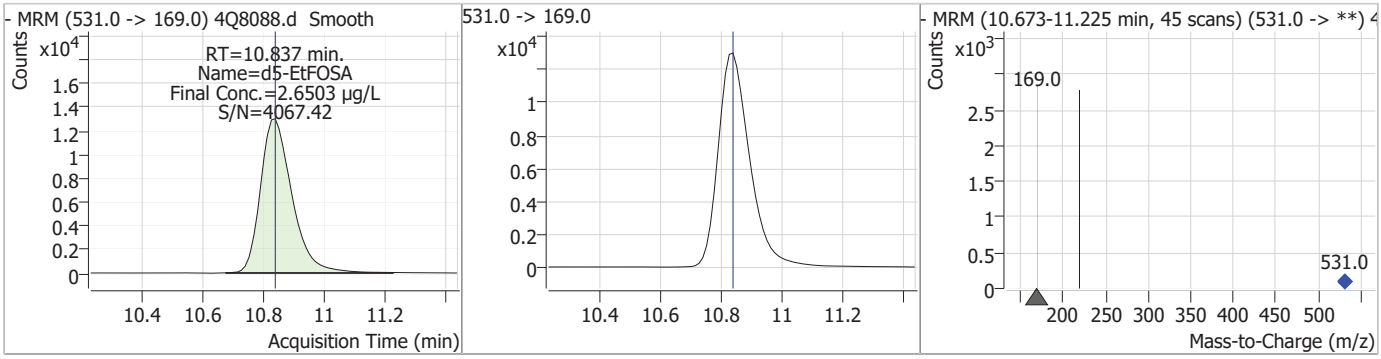
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.95	10.75	0.00	1060520				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	778.80	10.76	0.00	31230304				

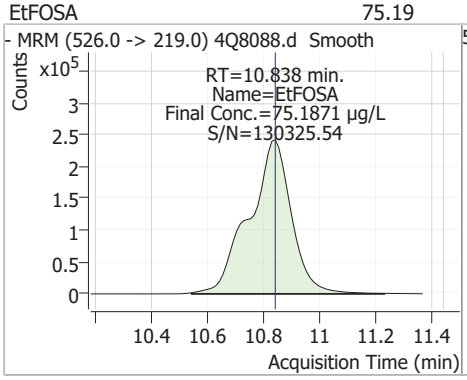


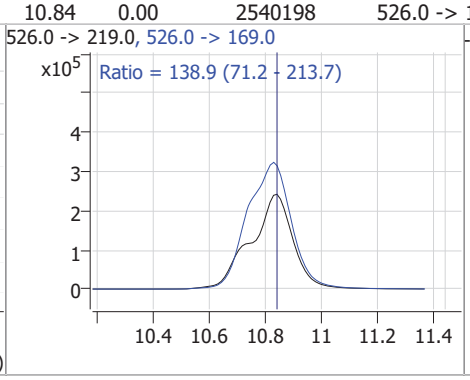
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.65	10.84	0.00	93399				

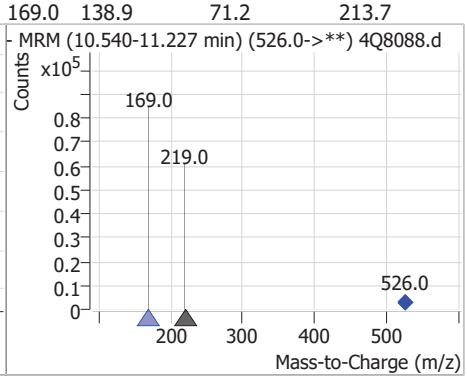


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	75.19	10.84	0.00	2540198	526.0 -> 169.0	138.9	71.2	213.7







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Manual Integration Approval Summary

Sample Number: T4Q137-IC137
Lab FileID: 4Q8088.D
Injection Time: 04/29/25 18:47
Method: EPA 1633
Analyst approved: 04/30/25 02:22 Rensel John Romano
Supervisor approved: 04/30/25 07:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.93	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.03	Split peak
Perfluorononanoic acid	375-95-1		7.44	Split peak
MeFOSAA	2355-31-9		7.95	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.02	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.29	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
04/30/25 07:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8090.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 7:14:39 PM
Sample Name : ICV137-4
Vial : P1-B2
DA Method File : 042925_1633_T4Q137.quantmethod.xml
Batch Name : t4q137.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.908	217.0 -> 172.0	767676	10.00 µg/L	0.000
M5-PFPeA	4.344	268.0 -> 223.0	398978	5.00 µg/L	0.000
M5-PFHxA	5.489	318.0 -> 273.0	276759	2.50 µg/L	0.000
M4-PFHpA	6.316	367.0 -> 322.0	302820	2.50 µg/L	0.000
M8-PFOA	6.934	421.0 -> 376.0	461033	2.50 µg/L	0.000
M9-PFNA	7.440	472.0 -> 427.0	185379	1.25 µg/L	0.000
M6-PFDA	7.895	519.0 -> 474.0	182630	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	235041	1.25 µg/L	0.000
M2-PFDoDA	8.716	615.0 -> 570.0	224732	1.25 µg/L	0.000
M2-PFTeDA	9.430	715.0 -> 670.0	187147	1.25 µg/L	0.000
M8-FOSA	9.303	506.0 -> 78.0	166550	2.50 µg/L	0.012
M3-PFBS	5.393	302.0 -> 99.0	24542	2.50 µg/L	0.012
		302.0 -> 80.0	59293		
M3-PFHxS	7.024	402.0 -> 99.0	35719	2.50 µg/L	0.000
M8-PFOS	8.032	507.0 -> 99.0	39686	2.50 µg/L	0.012
M2-4:2FTS	5.190	329.0 -> 81.0	11073	5.00 µg/L	0.000
M2-6:2FTS	6.721	429.0 -> 81.0	21750	5.00 µg/L	0.000
M2-8:2FTS	7.708	529.0 -> 81.0	24951	5.00 µg/L	0.012
M3-MeFOSAA	7.952	573.0 -> 419.0	202192	5.00 µg/L	0.000
M3-HFPO-DA	5.816	287.0 -> 169.0	412737	10.00 µg/L	0.000
M5-EtFOSAA	8.135	589.0 -> 419.0	158352	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	905455	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1214103	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	98419	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	87576	2.50 µg/L	-0.012
13C4-PFOS	8.020	503.0 -> 80.0	73292	2.50 µg/L	0.000
13C3-PFBA	2.911	216.0 -> 172.0	353141	5.00 µg/L	0.000
18O2-PFHxS	7.023	403.0 -> 84.0	43522	2.50 µg/L	0.000
13C4-PFOA	6.935	417.0 -> 372.0	490377	2.50 µg/L	0.000
13C2-PFDA	7.895	515.0 -> 470.0	168587	1.25 µg/L	0.000
13C5-PFNA	7.440	468.0 -> 423.0	194919	1.25 µg/L	0.000
13C2-PFHxA	5.489	315.0 -> 270.0	273714	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.190	329.0 -> 81.0	11073	4.97 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.3%	
13C2-6:2FTS	6.721	429.0 -> 81.0	21750	4.71 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.2%	
13C2-8:2FTS	7.708	529.0 -> 81.0	24951	4.41 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 88.1%	
13C2-PFDoDA	8.716	615.0 -> 570.0	224732	1.08 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 86.4%	
13C2-PFTeDA	9.430	715.0 -> 670.0	187147	1.05 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 84.1%	
13C3-PFBS	5.393	302.0 -> 99.0	24542	2.17 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 86.8%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.024	402.0 -> 99.0	35719	2.16	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 86.4%			
13C4-PFBA	2.908	217.0 -> 172.0	767676	8.80	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 88.0%			
13C4-PFHpA	6.316	367.0 -> 322.0	302820	2.21	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 88.4%			
13C5-PFHxA	5.489	318.0 -> 273.0	276759	2.21	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 88.4%			
13C5-PFPeA	4.344	268.0 -> 223.0	398978	4.33	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 86.6%			
13C6-PFDA	7.895	519.0 -> 474.0	182630	1.09	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.2%			
13C7-PFUnDA	8.310	570.0 -> 525.0	235041	1.09	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.0%			
13C8-FOSA	9.303	506.0 -> 78.0	166550	2.12	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 84.8%			
13C8-PFOA	6.934	421.0 -> 376.0	461033	2.16	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 86.6%			
13C8-PFOS	8.032	507.0 -> 99.0	39686	2.13	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 85.4%			
13C9-PFNA	7.440	472.0 -> 427.0	185379	1.06	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 84.4%			
d3-MeFOSAA	7.952	573.0 -> 419.0	202192	4.41	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 88.2%			
13C3-HFPO-DA	5.816	287.0 -> 169.0	412737	8.75	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 87.5%			
d3-MeFOSA	10.567	515.0 -> 169.0	87576	2.06	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 82.4%			
d5-EtFOSAA	8.135	589.0 -> 419.0	158352	4.44	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 88.9%			
d7-MeFOSE	10.475	623.0 -> 59.0	905455	20.50	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 82.0%			
d9-EtFOSE	10.746	639.0 -> 59.0	1214103	21.12	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 84.5%			
d5-EtFOSA	10.837	531.0 -> 169.0	98419	2.15	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 86.0%			
Target Compounds							QValue
4:2FTS	5.191	327.0 -> 307.0	154195	9.04	µg/L		99
		327.0 -> 81.0	71735				
6:2FTS	6.721	427.0 -> 407.0	179676	9.82	µg/L		96
		427.0 -> 81.0	81214				
8:2FTS	7.696	527.0 -> 507.0	164670	10.17	µg/L		100
		527.0 -> 81.0	62797				
EtFOSAA	8.136	584.0 -> 419.0	59200	2.29	µg/L	m	97
		584.0 -> 483.0	33200				
FOSA	9.294	498.0 -> 78.0	128889	2.47	µg/L	m	100
		498.0 -> 478.0	3434				
MeFOSAA	7.953	570.0 -> 419.0	75680	2.45	µg/L	m	100
		570.0 -> 512.0	26264				
PFBA	2.914	213.0 -> 169.0	210536	10.00	µg/L		100
PFBS	5.394	299.0 -> 80.0	50917	2.21	µg/L		99
		299.0 -> 99.0	22072				
PFDA	7.896	513.0 -> 469.0	293856	2.53	µg/L		98
		513.0 -> 219.0	68192				
PFDoDA	8.716	613.0 -> 569.0	382765	2.53	µg/L		100
		613.0 -> 319.0	51725				

Perfluorinated Compounds by LC/MS/MS

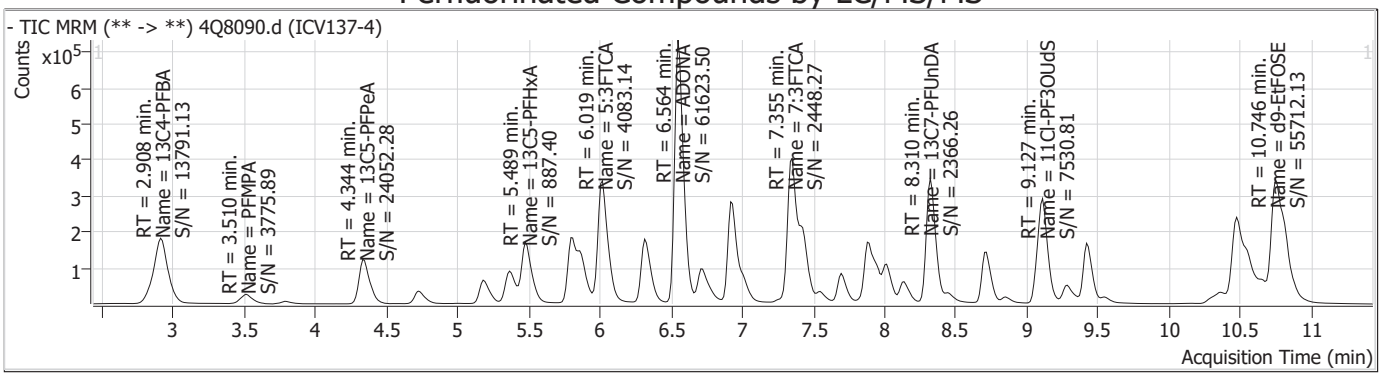
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.854	599.0 -> 80.0	44315	2.39	µg/L		91
		599.0 -> 99.0	23831				
PFHpA	6.317	363.0 -> 319.0	381752	2.45	µg/L		98
		363.0 -> 169.0	79714				
PFHpS	7.553	449.0 -> 80.0	65263	2.45	µg/L		98
		449.0 -> 99.0	36402				
PFHxA	5.492	313.0 -> 269.0	250310	2.49	µg/L		100
		313.0 -> 119.0	7527				
PFHxS	7.025	399.0 -> 80.0	60296	2.24	µg/L	m	98
		399.0 -> 99.0	32306				
PFNA	7.441	463.0 -> 419.0	242829	2.55	µg/L	m	100
		463.0 -> 219.0	85708				
PFNS	8.461	549.0 -> 80.0	59295	2.47	µg/L		99
		549.0 -> 99.0	35793				
PFOA	6.935	413.0 -> 369.0	316752	2.44	µg/L	m	99
		413.0 -> 169.0	89410				
PFOS	8.033	499.0 -> 80.0	63132	2.28	µg/L	m	100
		499.0 -> 99.0	34160				
PFPeA	4.346	263.0 -> 219.0	264033	4.99	µg/L		100
PFPeS	6.355	349.0 -> 80.0	58455	2.28	µg/L		99
		349.0 -> 99.0	30214				
PFTeDA	9.431	713.0 -> 669.0	472445	2.54	µg/L		100
		713.0 -> 219.0	33549				
PFTrDA	9.087	663.0 -> 619.0	437156	2.55	µg/L		100
		663.0 -> 369.0	26353				
PFUnDA	8.312	563.0 -> 519.0	311518	2.58	µg/L		100
		563.0 -> 269.0	60530				
11Cl-PF3OUdS	9.127	631.0 -> 451.0	748200	9.33	µg/L		99
		633.0 -> 453.0	227608				
9Cl-PF3ONS	8.339	531.0 -> 351.0	803300	9.39	µg/L		99
		533.0 -> 353.0	240847				
ADONA	6.564	377.0 -> 251.0	2473370	8.83	µg/L		99
		377.0 -> 85.0	832200				
HFPO-DA	5.817	285.0 -> 169.0	379798	10.15	µg/L		98
		285.0 -> 185.0	43218				
3:3FTCA	3.794	241.0 -> 177.0	34857	12.08	µg/L		99
		241.0 -> 117.0	3083				
5:3FTCA	6.019	341.0 -> 237.0	983082	64.11	µg/L		99
		341.0 -> 217.0	711268				
7:3FTCA	7.355	441.0 -> 337.0	1414623	63.28	µg/L		100
		441.0 -> 317.0	635186				
EtFOSA	10.838	526.0 -> 219.0	85622	2.41	µg/L		99
		526.0 -> 169.0	123084				
EtFOSE	10.760	630.0 -> 59.0	1134346	24.71	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	103763	2.47	µg/L		99
		512.0 -> 219.0	70385				
MeFOSE	10.488	616.0 -> 59.0	801172	24.29	µg/L	m	100
PFDoDS	9.558	699.0 -> 80.0	38150	2.36	µg/L		99
		699.0 -> 99.0	23353				
NFDHA	5.370	295.0 -> 201.0	61904	4.73	µg/L		96
		201.0 -> 85.0	254255				
		295.0 -> 85.0	17092				
PFMBA	4.735	279.0 -> 85.0	182395	5.05	µg/L		100
PFMPA	3.510	229.0 -> 85.0	156392	4.99	µg/L		100
PFEESA	5.872	315.0 -> 135.0	419866	4.40	µg/L		99
		315.0 -> 69.0	34341				

Perfluorinated Compounds by LC/MS/MS

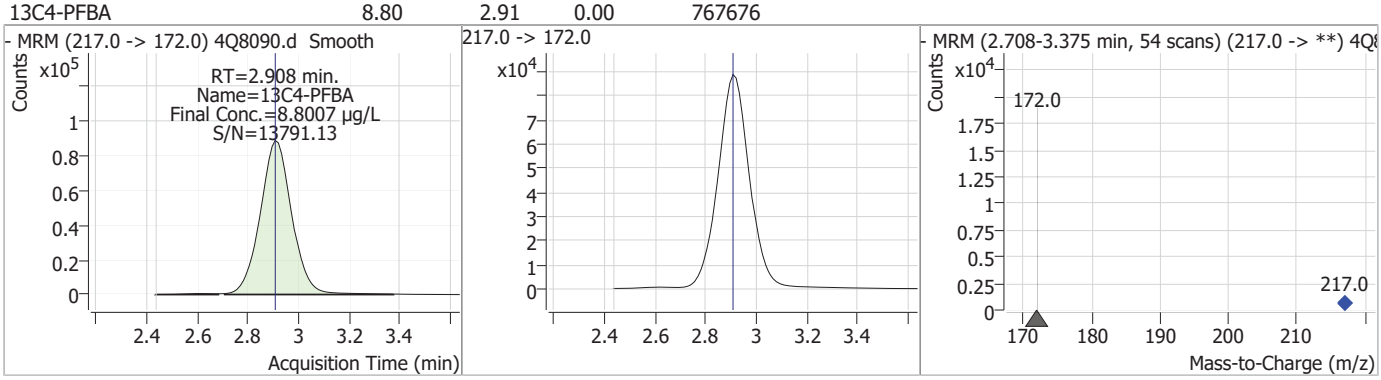
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

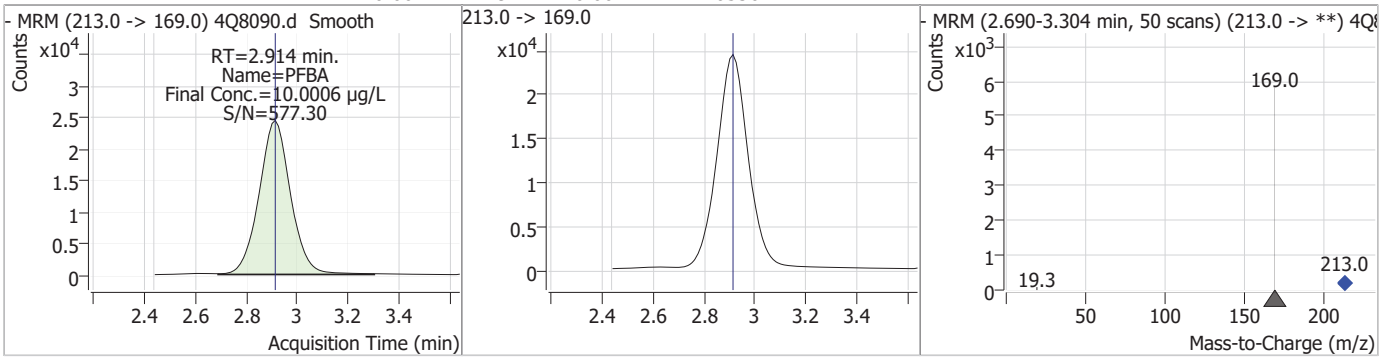
Perfluorinated Compounds by LC/MS/MS



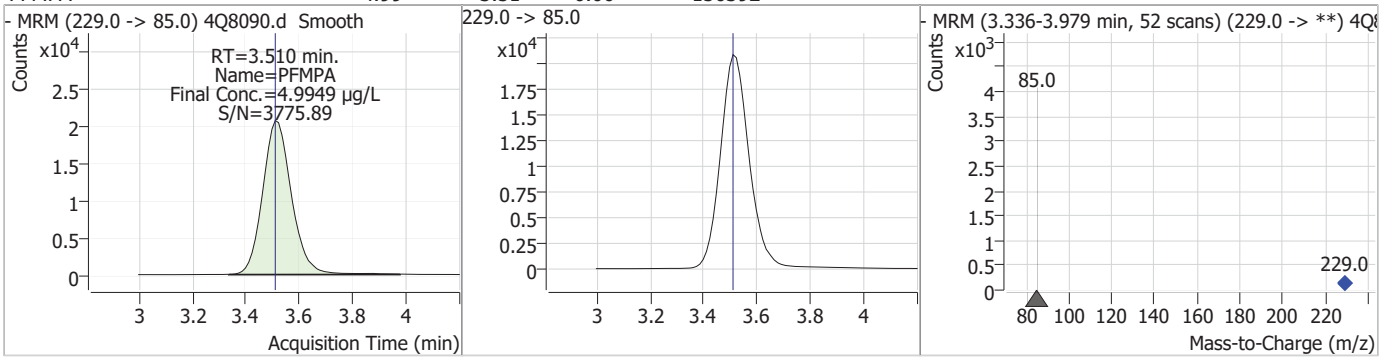
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	8.80	2.91	0.00	767676				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.00	2.91	0.00	210536				

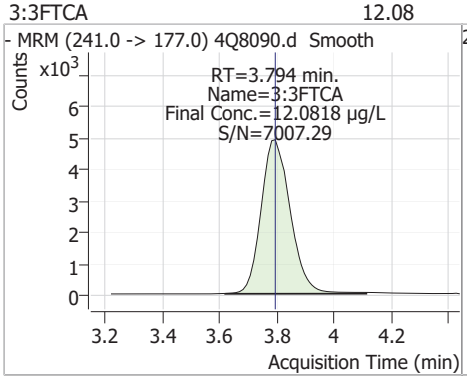


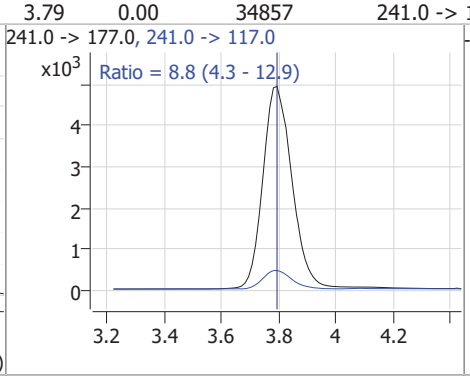
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	4.99	3.51	0.00	156392				

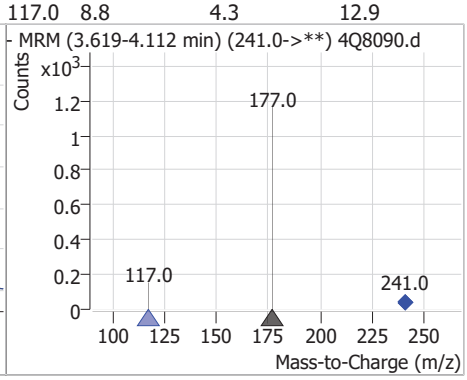


Perfluorinated Compounds by LC/MS/MS

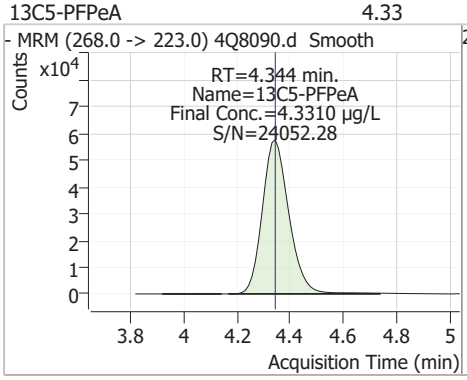
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.08	3.79	0.00	34857	241.0 -> 117.0	8.8	4.3	12.9

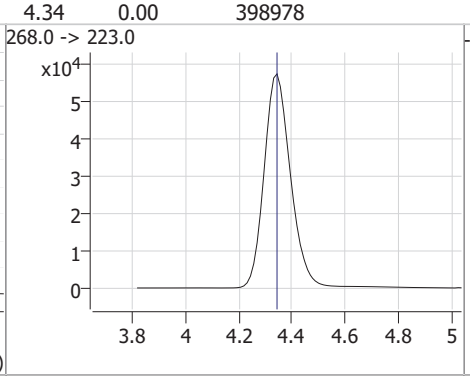


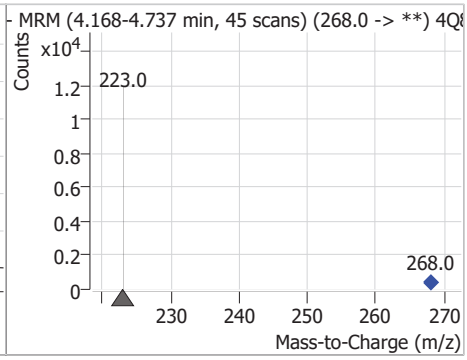




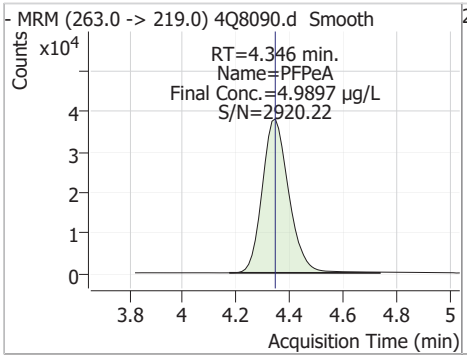
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.33	4.34	0.00	398978				

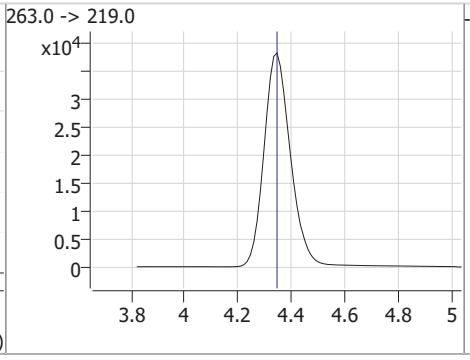


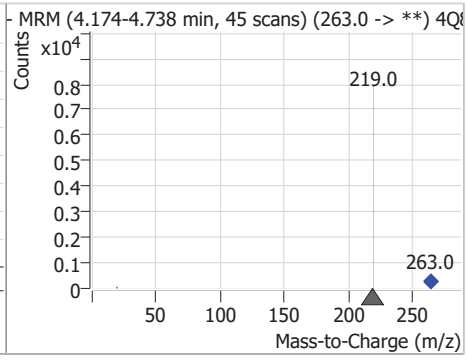




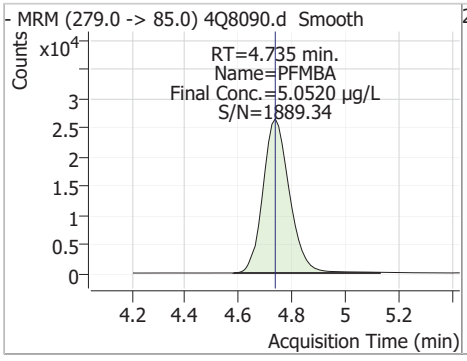
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	4.99	4.35	0.00	264033				

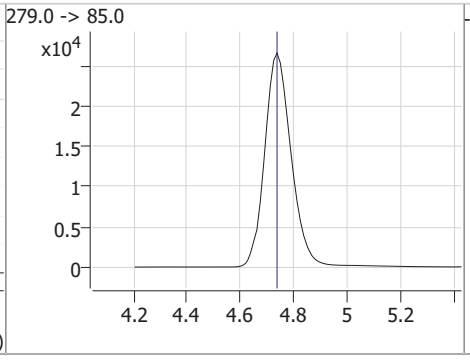


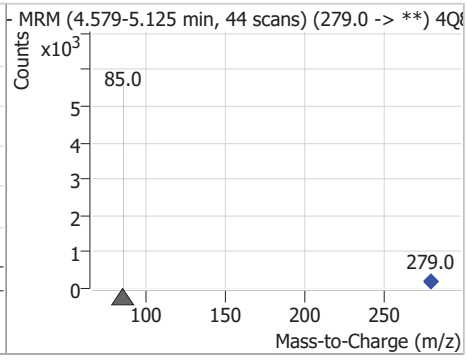




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.05	4.73	0.00	182395				





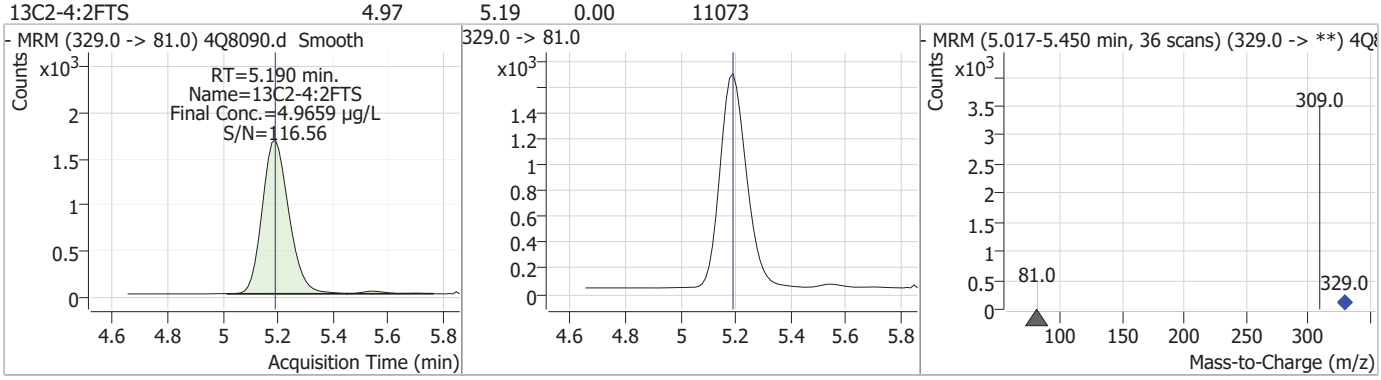


7.6.40

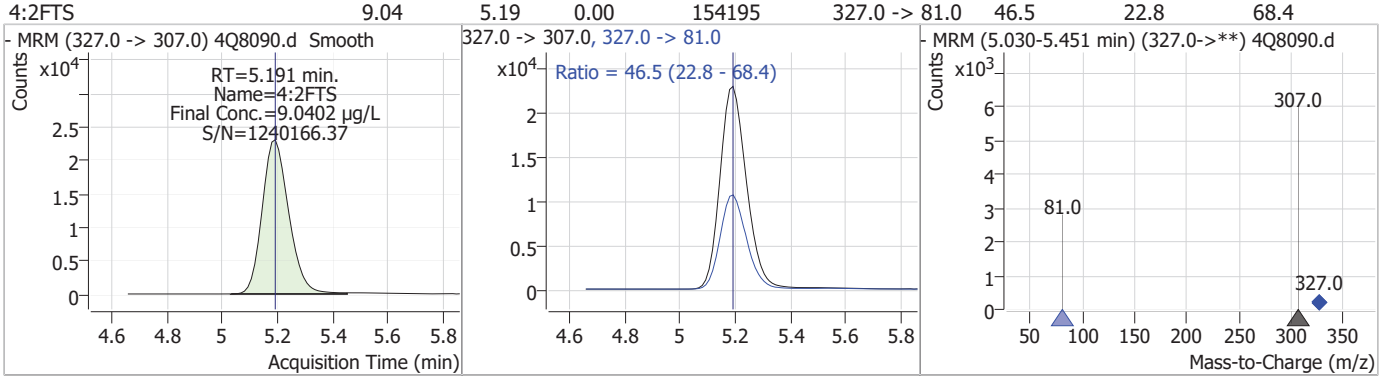
7

Perfluorinated Compounds by LC/MS/MS

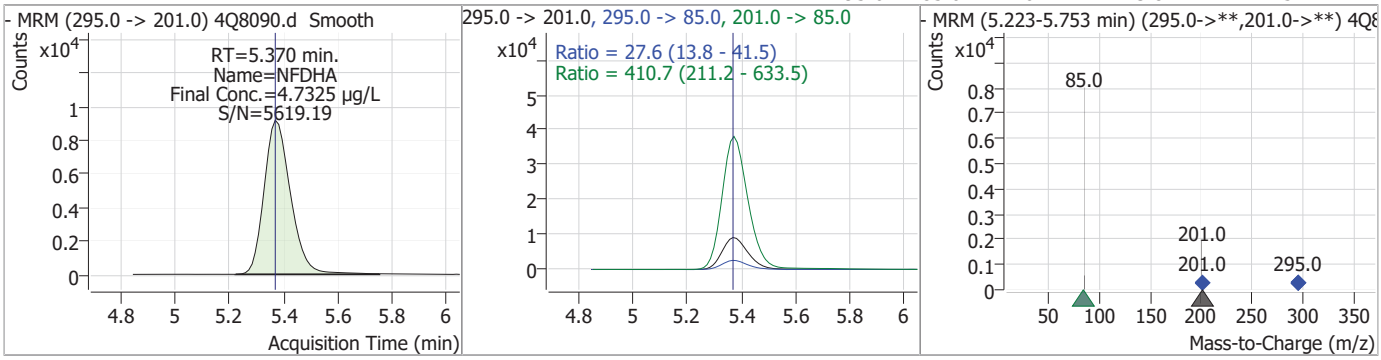
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.97	5.19	0.00	11073				



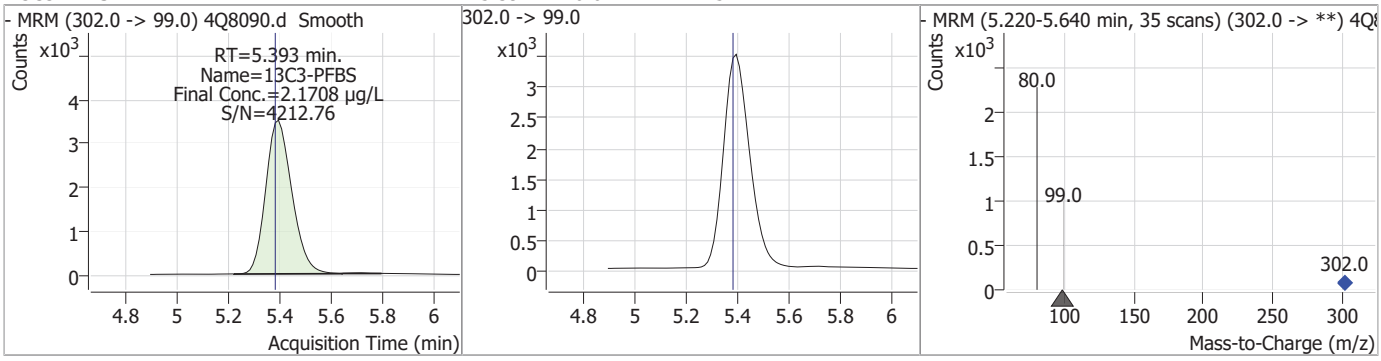
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.04	5.19	0.00	154195	327.0 -> 81.0	46.5	22.8	68.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	4.73	5.37	0.00	61904	201.0 -> 85.0	410.7	211.2	633.5
					295.0 -> 85.0	27.6	13.8	41.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.17	5.39	0.01	24542				



7.6.40

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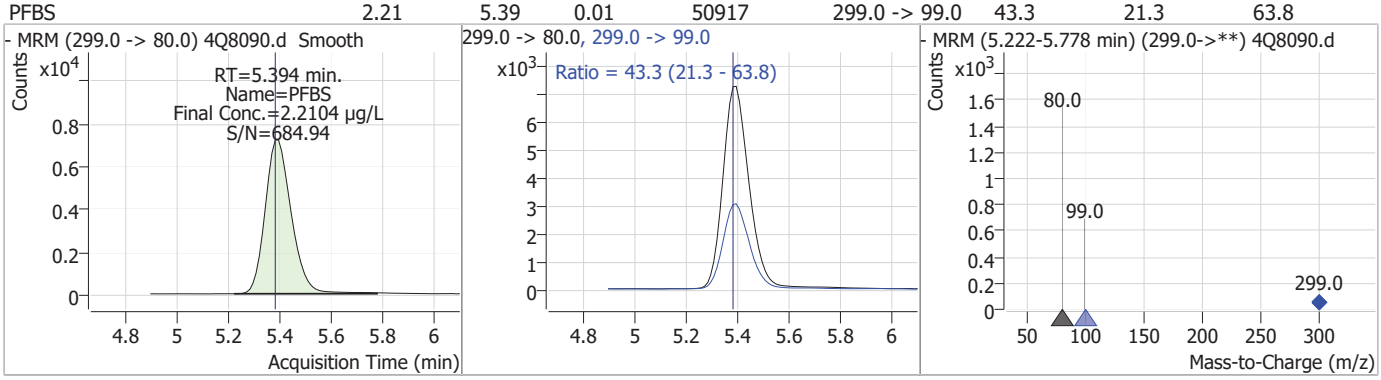
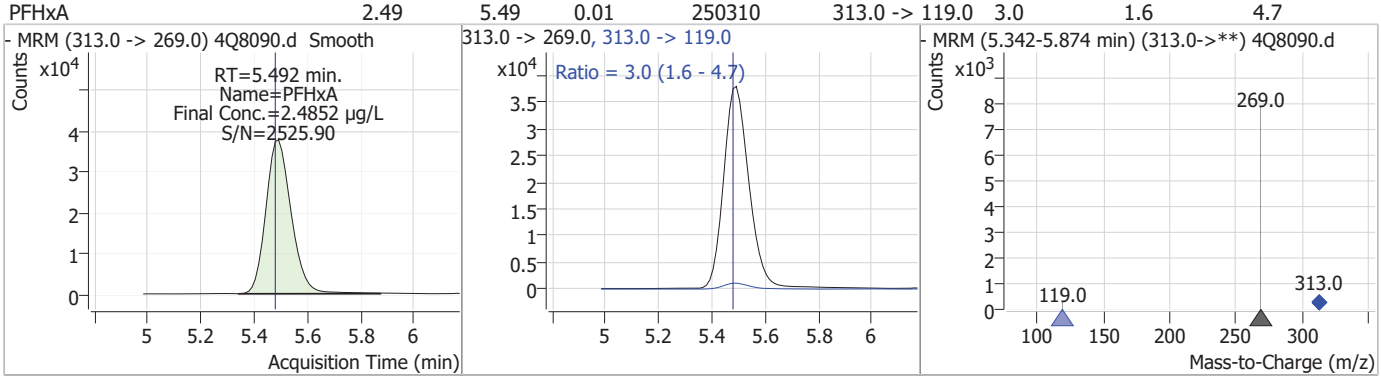
Perfluorinated Compounds by LC/MS/MS

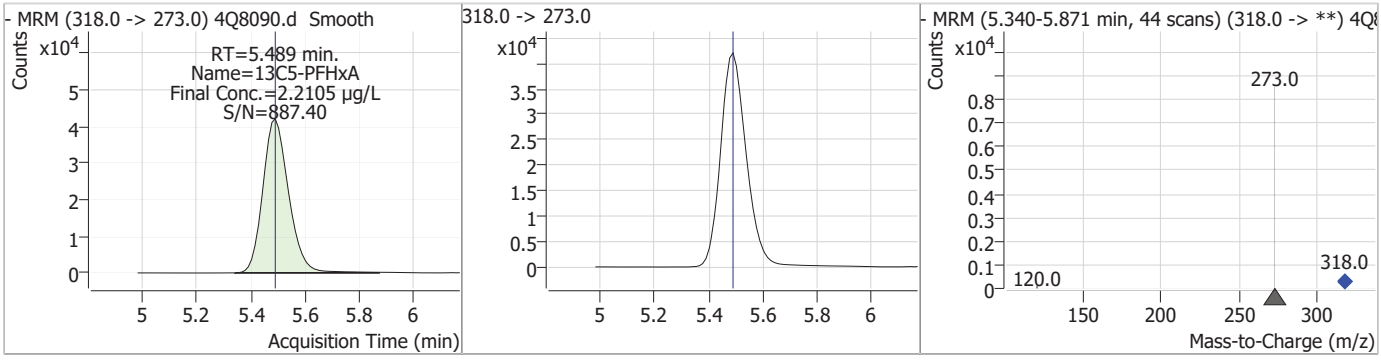
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.21	5.39	0.01	50917	299.0 -> 99.0	43.3	21.3	63.8



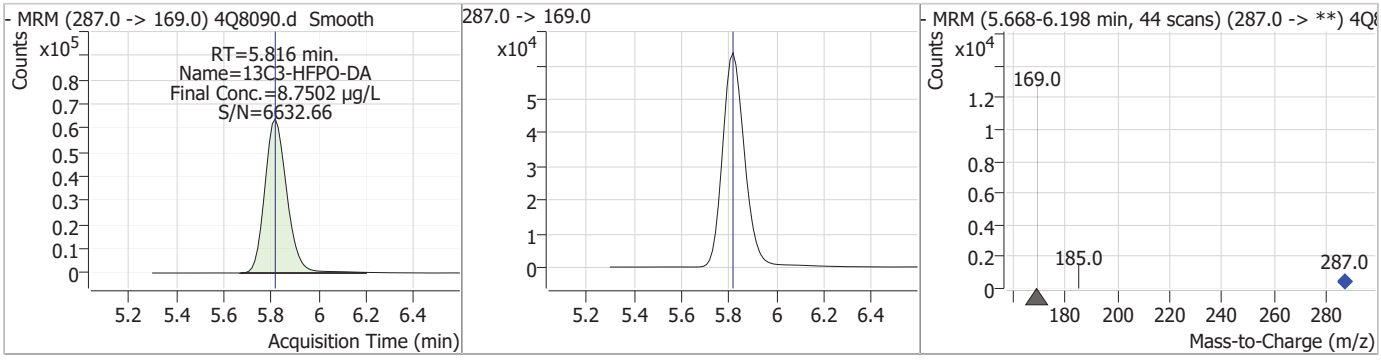
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.49	5.49	0.01	250310	313.0 -> 119.0	3.0	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.21	5.49	0.00	276759				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	8.75	5.82	0.00	412737				

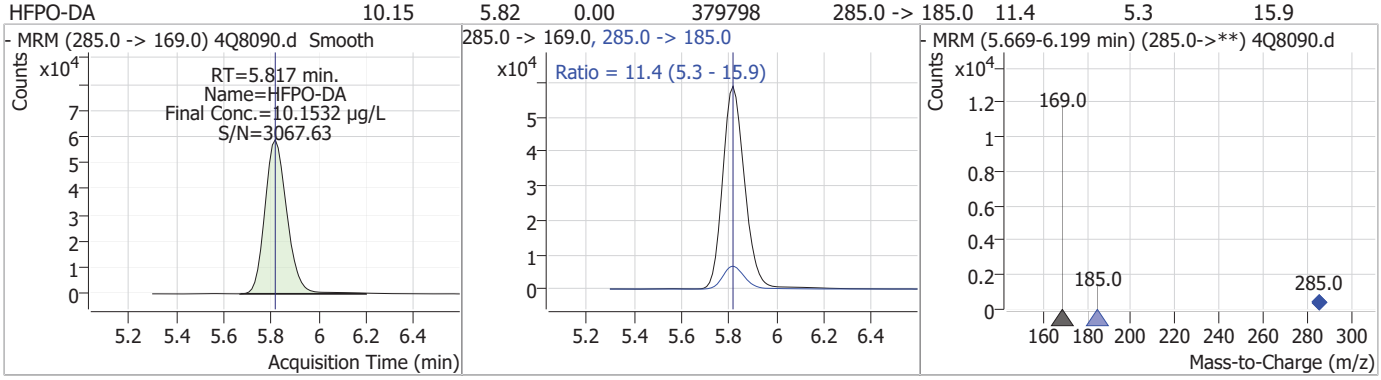


7.6.40

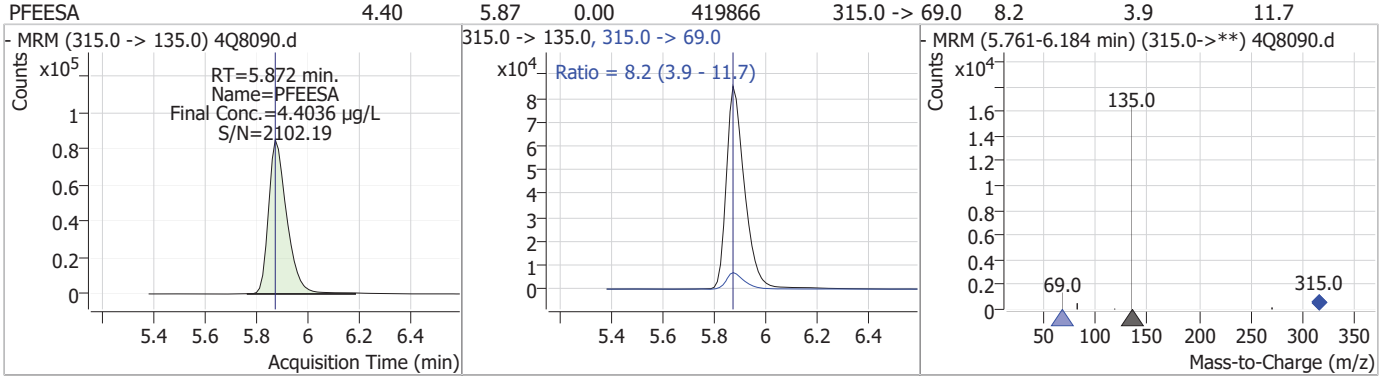
7

Perfluorinated Compounds by LC/MS/MS

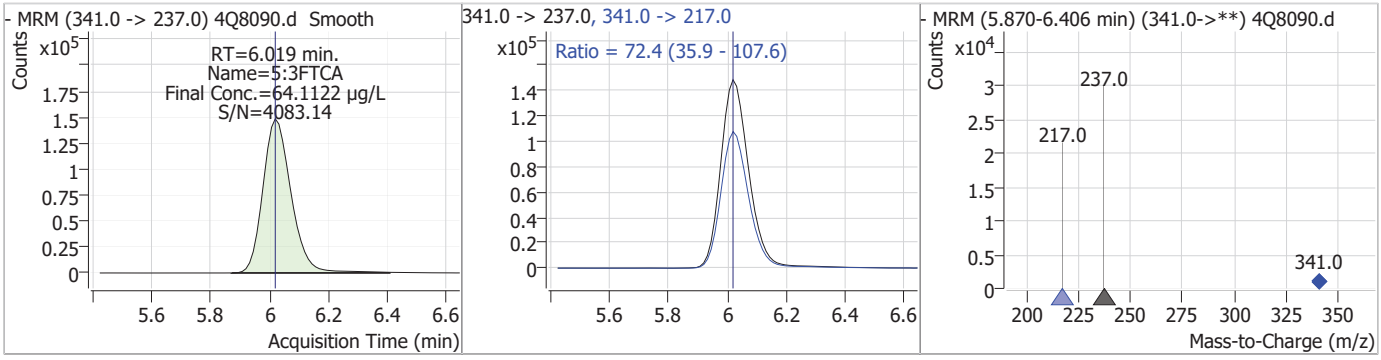
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.15	5.82	0.00	379798	285.0 -> 185.0	11.4	5.3	15.9



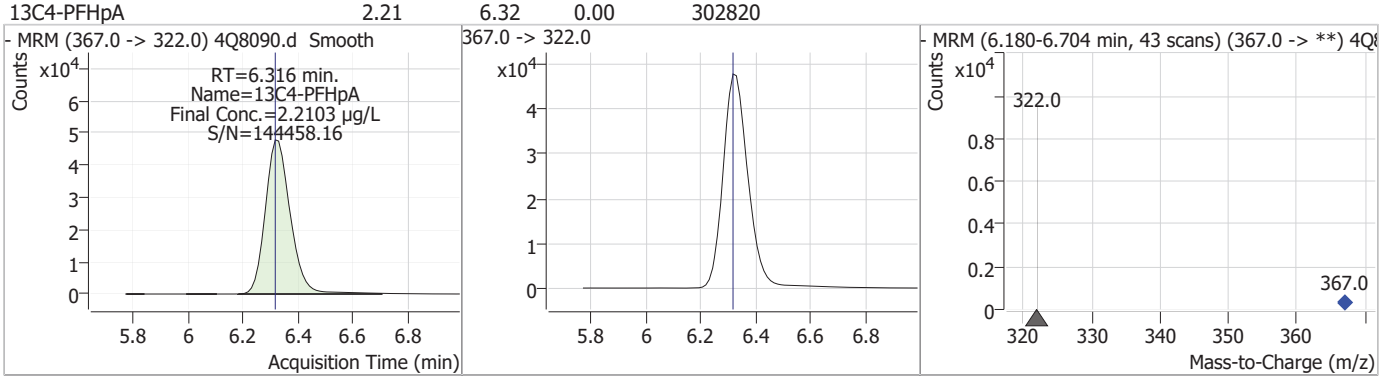
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.40	5.87	0.00	419866	315.0 -> 69.0	8.2	3.9	11.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	64.11	6.02	0.00	983082	341.0 -> 217.0	72.4	35.9	107.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.21	6.32	0.00	302820				



7.6.40

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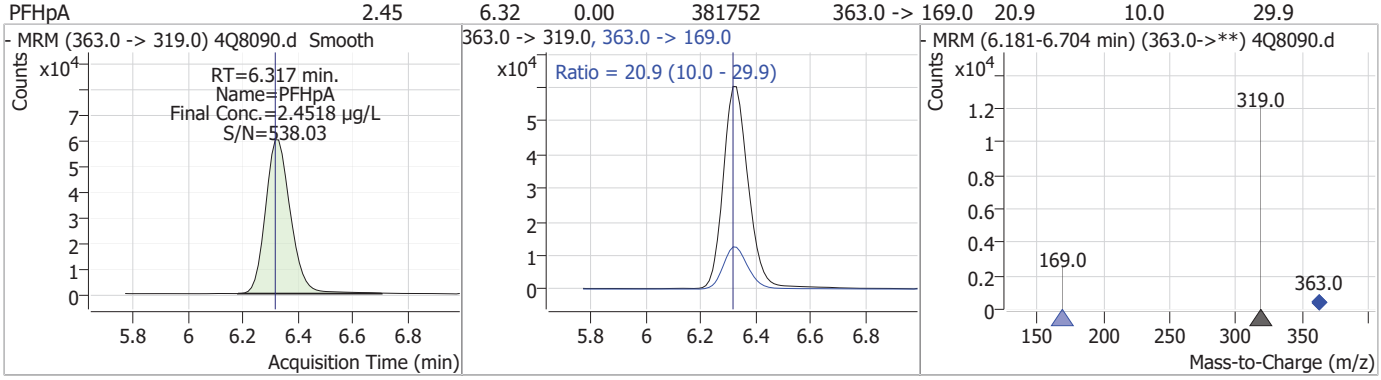
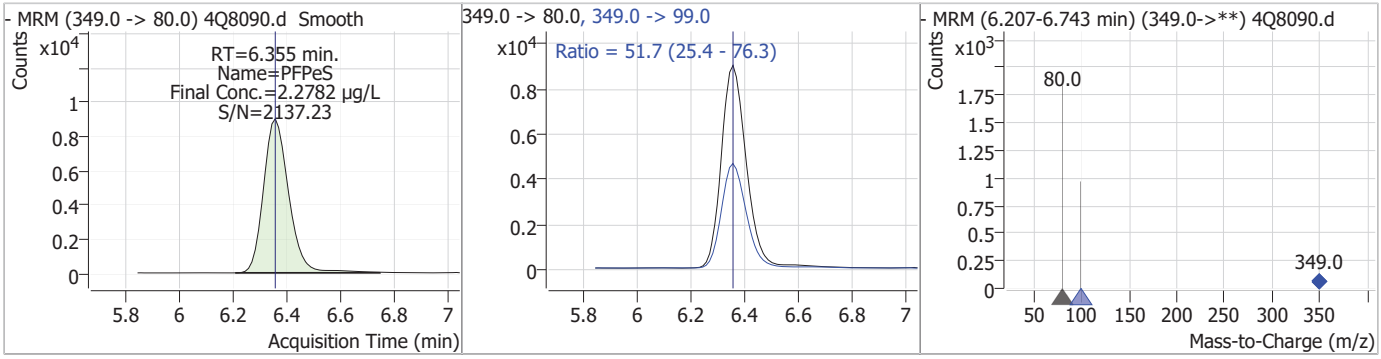
Perfluorinated Compounds by LC/MS/MS

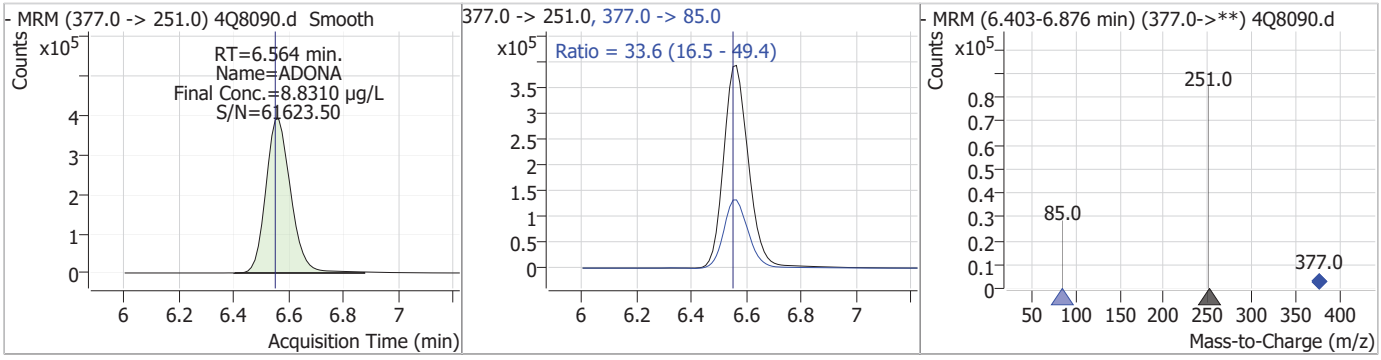
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.45	6.32	0.00	381752	363.0 -> 169.0	20.9	10.0	29.9



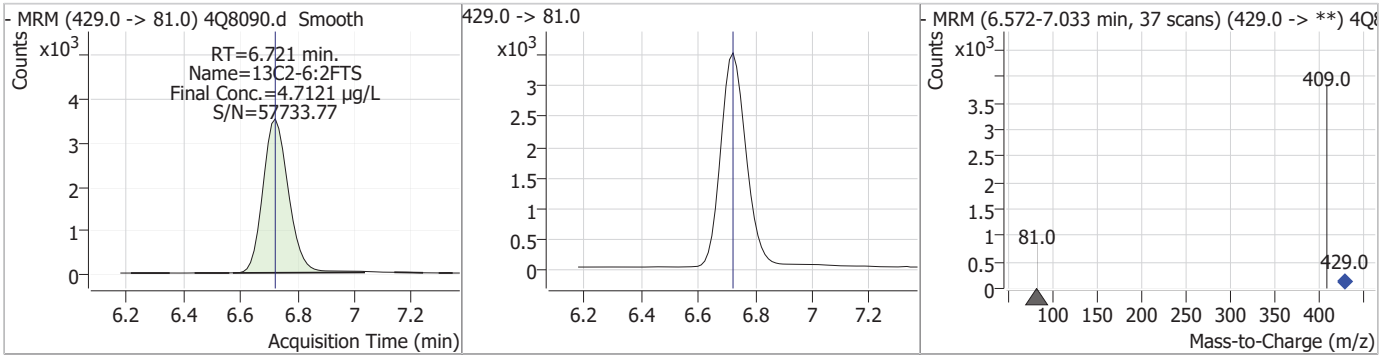
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.28	6.36	0.00	58455	349.0 -> 99.0	51.7	25.4	76.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.83	6.56	0.01	2473370	377.0 -> 85.0	33.6	16.5	49.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.71	6.72	0.00	21750				



7.6.40

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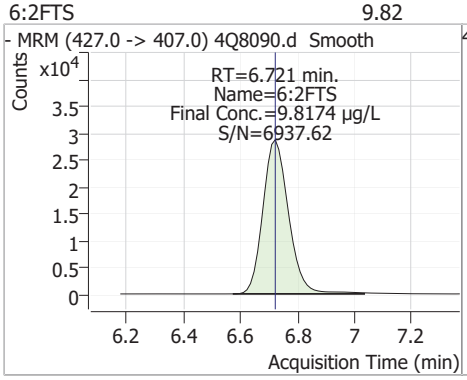
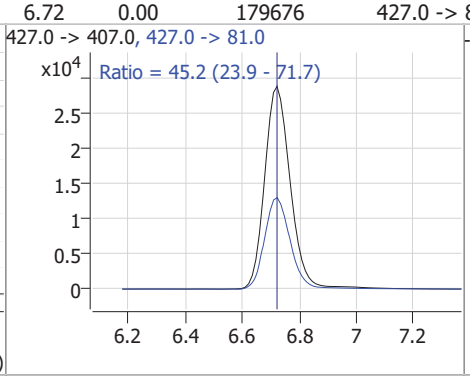
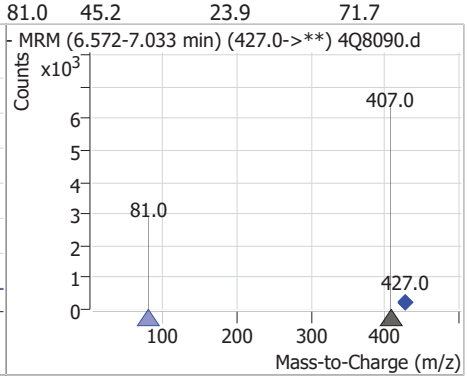
Perfluorinated Compounds by LC/MS/MS

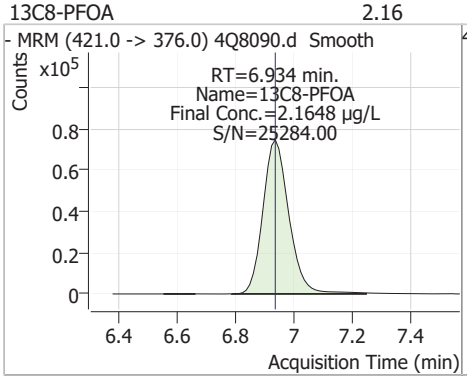
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.82	6.72	0.00	179676	427.0 -> 81.0	45.2	23.9	71.7

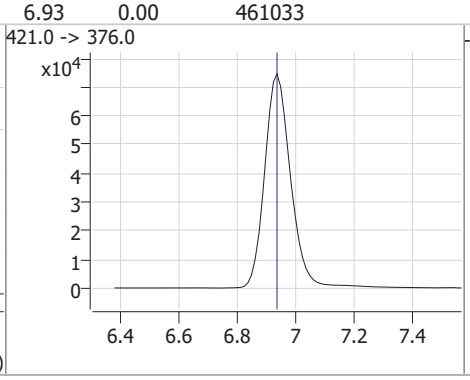


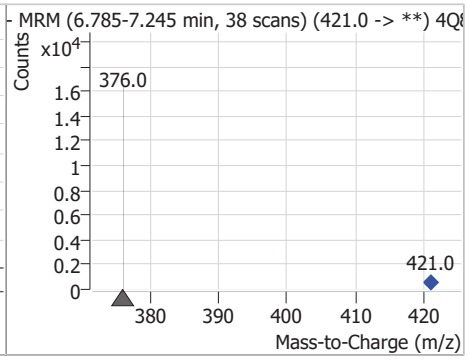




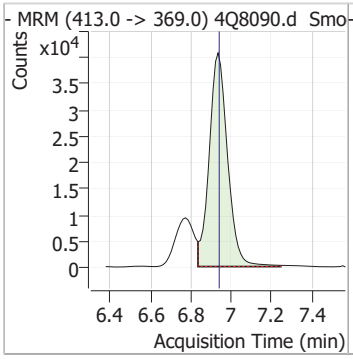
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.16	6.93	0.00	461033				

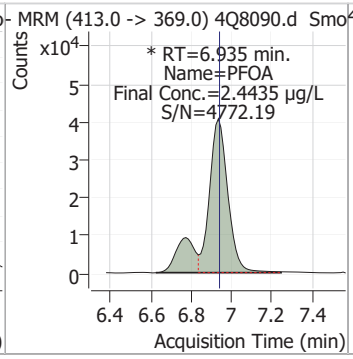


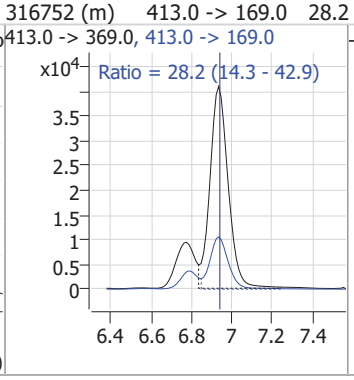


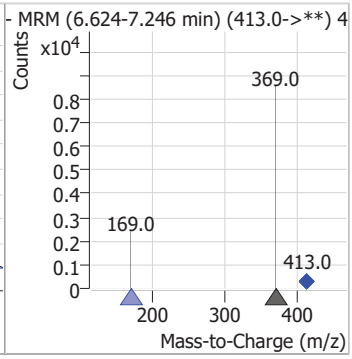


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.44	6.93	0.00	316752 (m)	413.0 -> 169.0	28.2	14.3	42.9

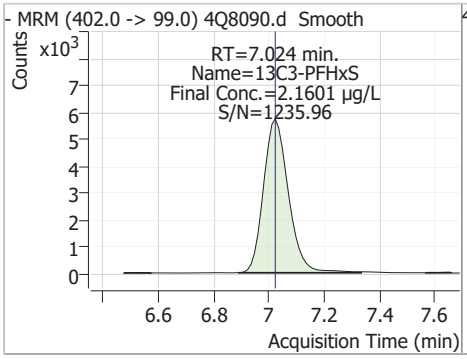


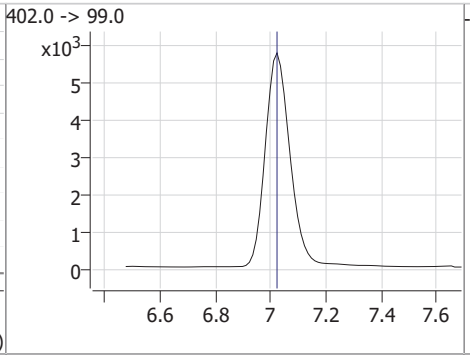


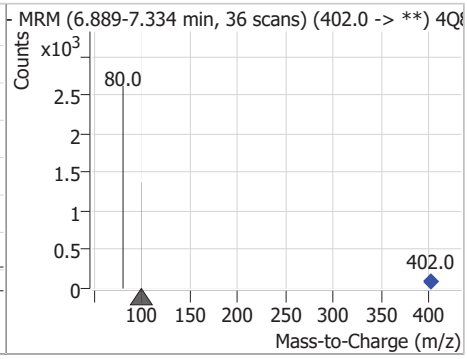




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.16	7.02	0.00	35719				

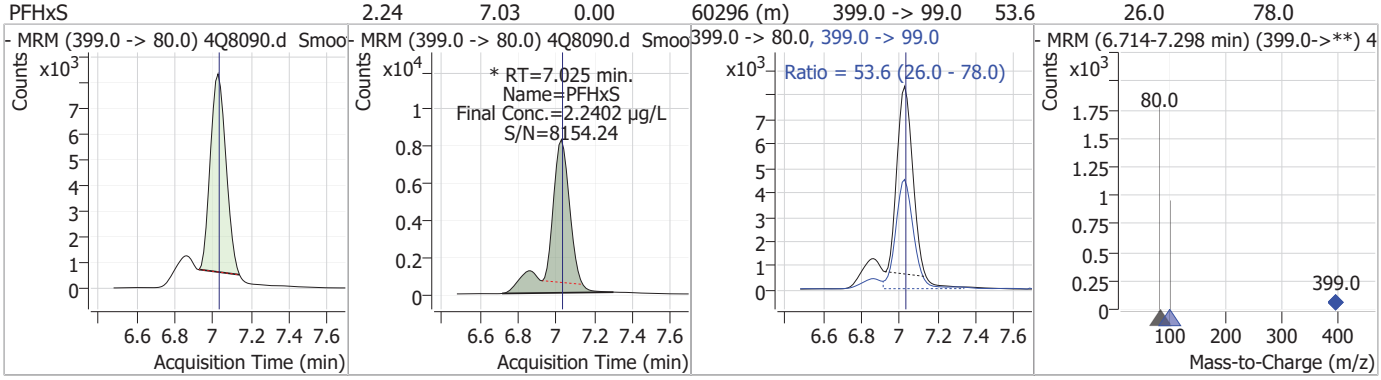




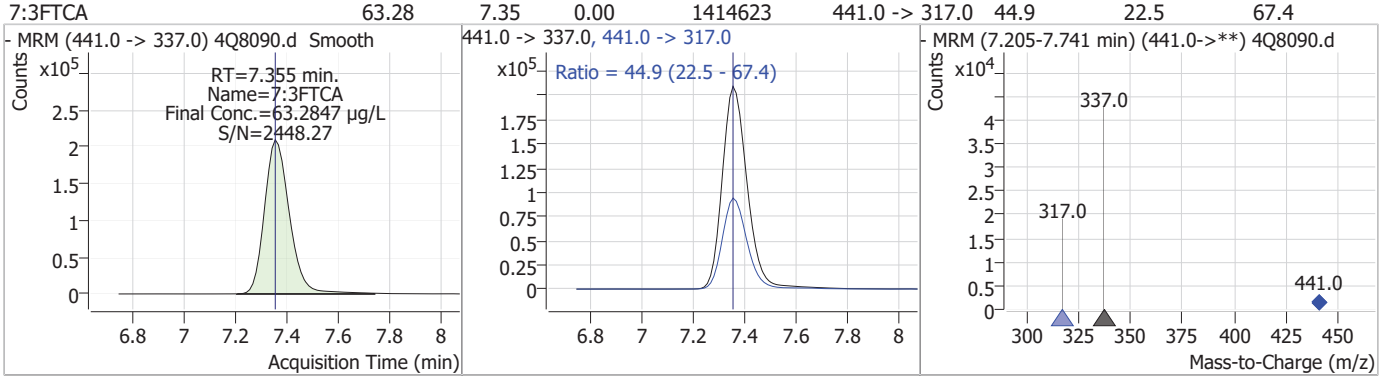


Perfluorinated Compounds by LC/MS/MS

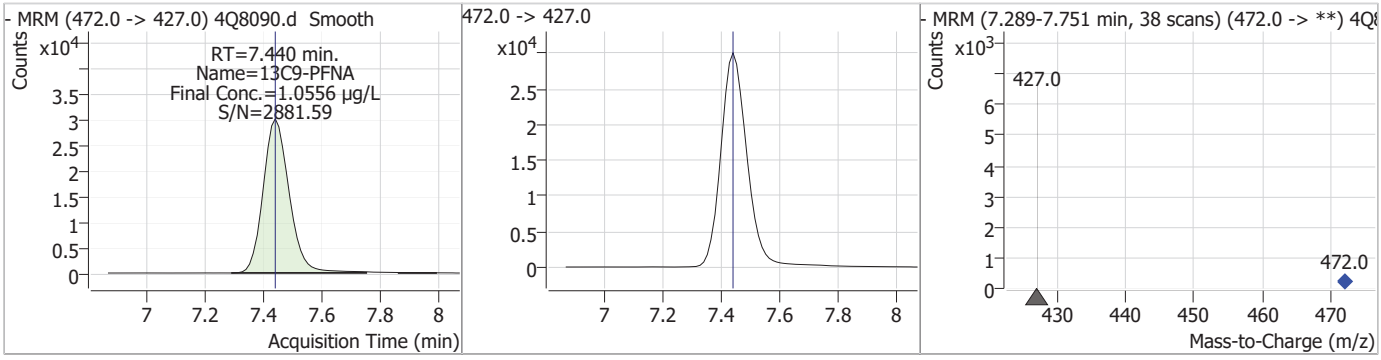
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.24	7.03	0.00	60296 (m)	399.0 -> 99.0	53.6	26.0	78.0



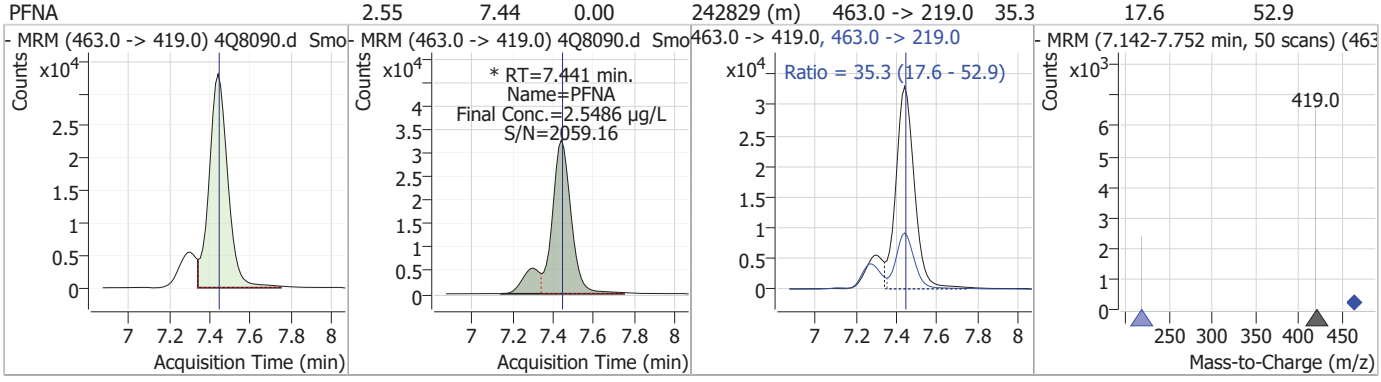
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	63.28	7.35	0.00	1414623	441.0 -> 317.0	44.9	22.5	67.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.06	7.44	0.00	185379				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.55	7.44	0.00	242829 (m)	463.0 -> 219.0	35.3	17.6	52.9

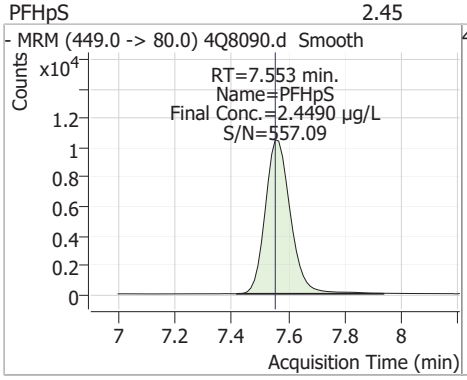


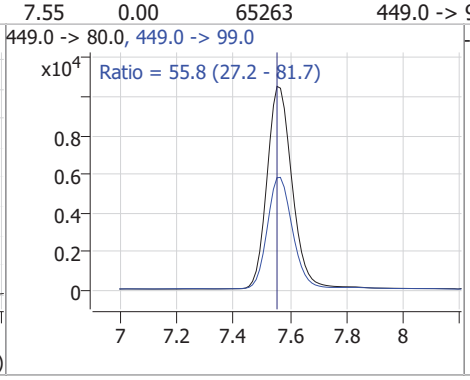
7.6.40

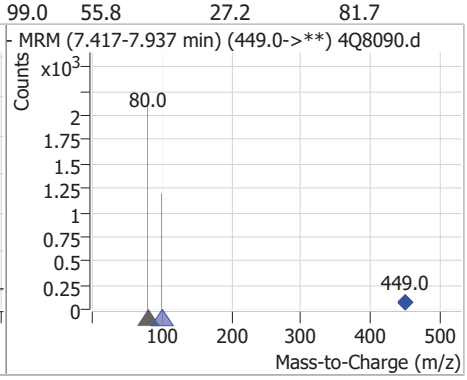
7

Perfluorinated Compounds by LC/MS/MS

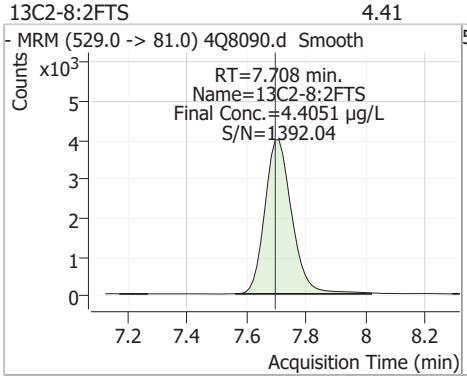
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.45	7.55	0.00	65263	449.0 -> 99.0	55.8	27.2	81.7

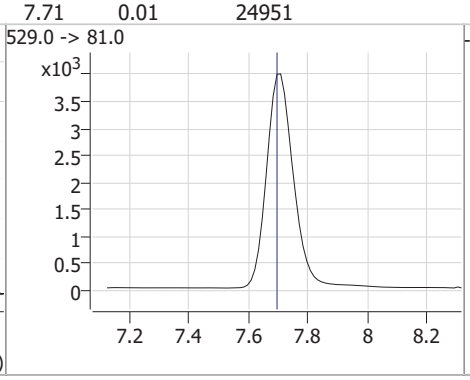


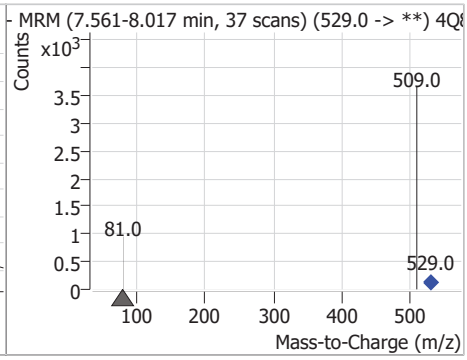




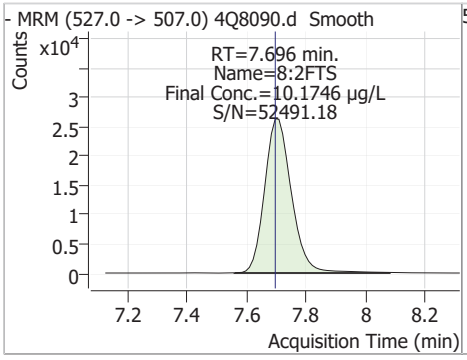
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.41	7.71	0.01	24951				

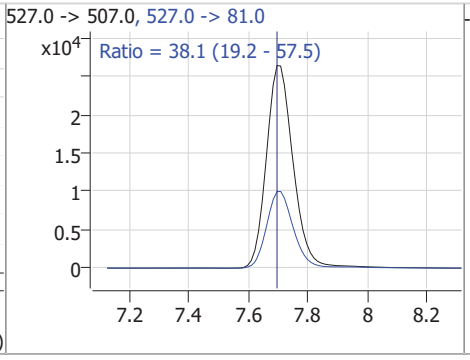


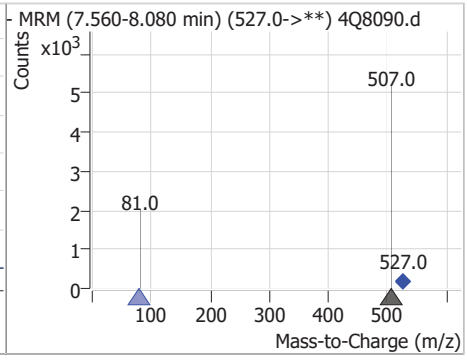




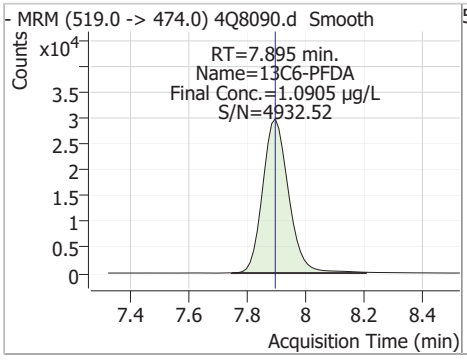
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.17	7.70	0.00	164670	527.0 -> 81.0	38.1	19.2	57.5

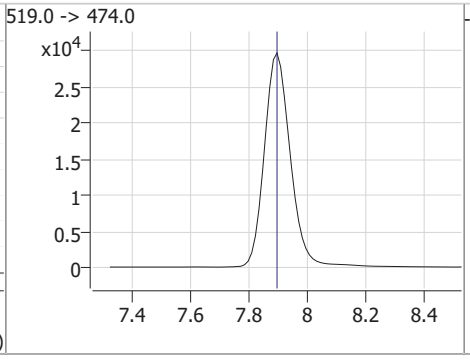


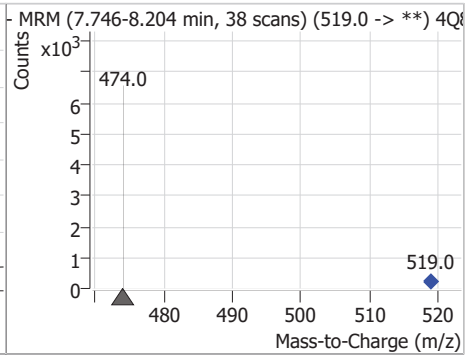




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.09	7.89	0.00	182630				

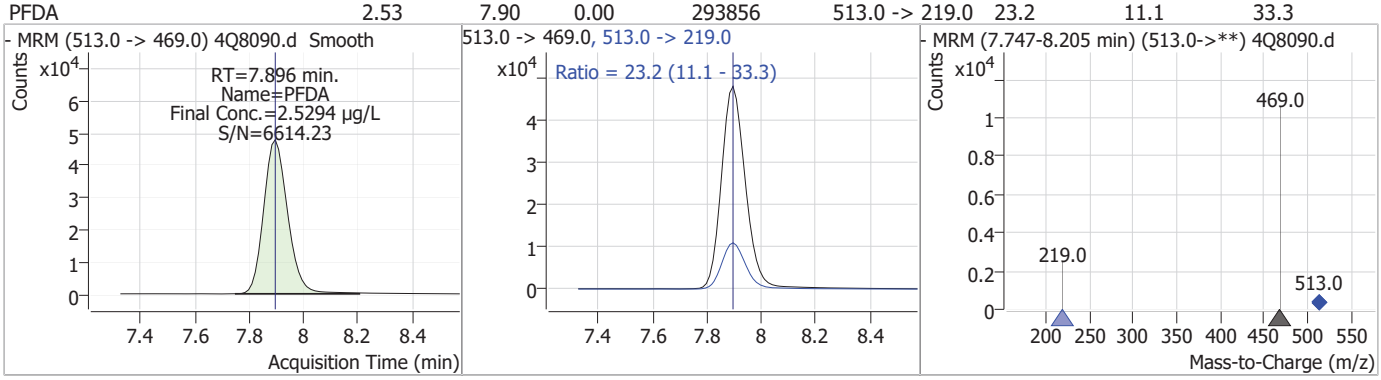




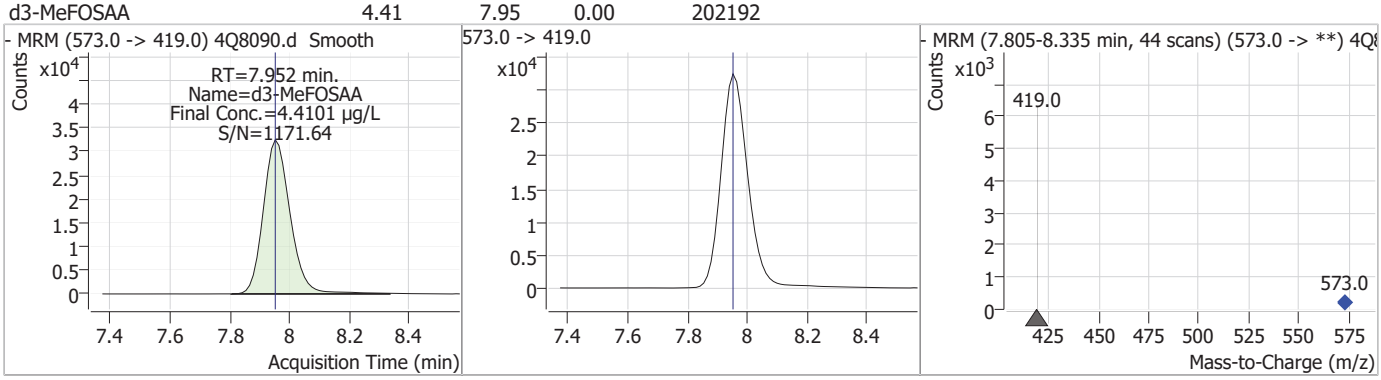


Perfluorinated Compounds by LC/MS/MS

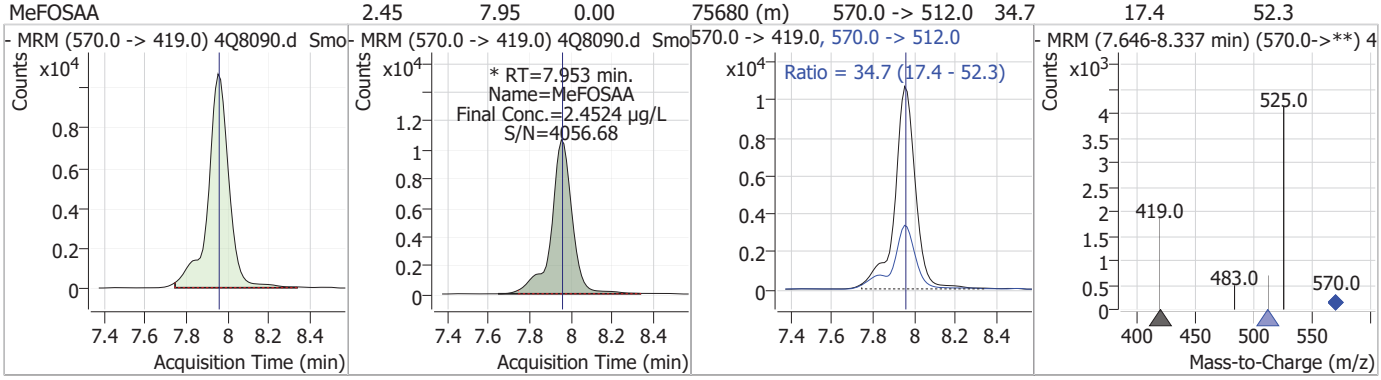
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.53	7.90	0.00	293856	513.0 -> 219.0	23.2	11.1	33.3



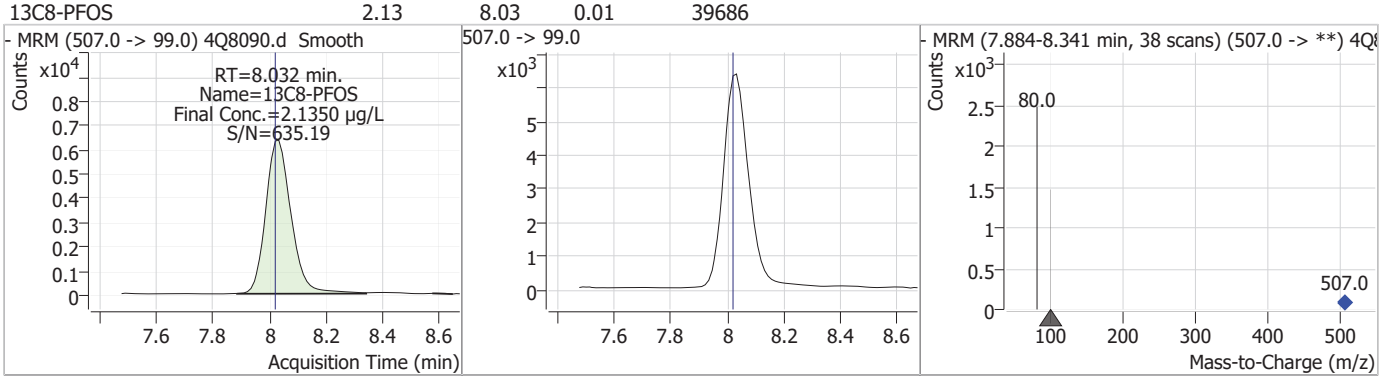
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.41	7.95	0.00	202192				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.45	7.95	0.00	75680 (m)	570.0 -> 512.0	34.7	17.4	52.3

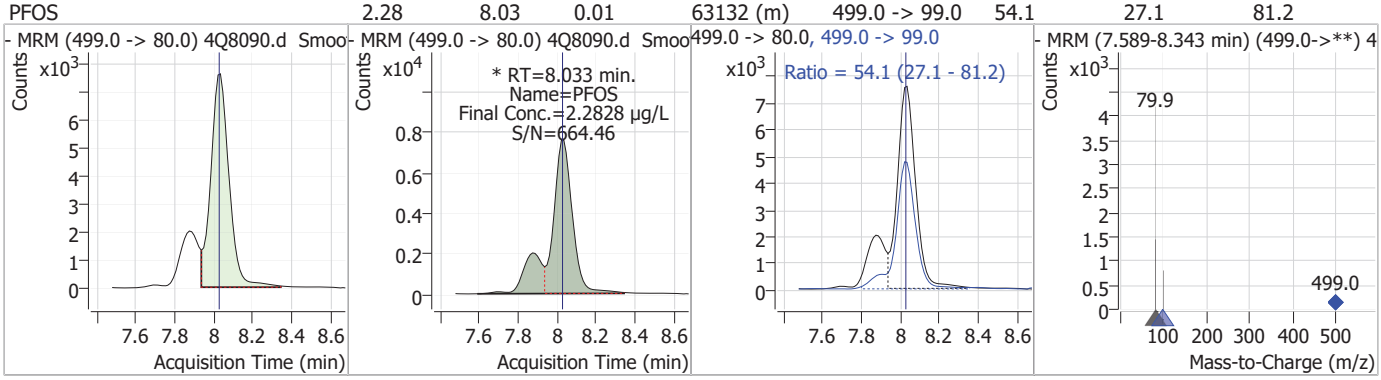


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.13	8.03	0.01	39686				

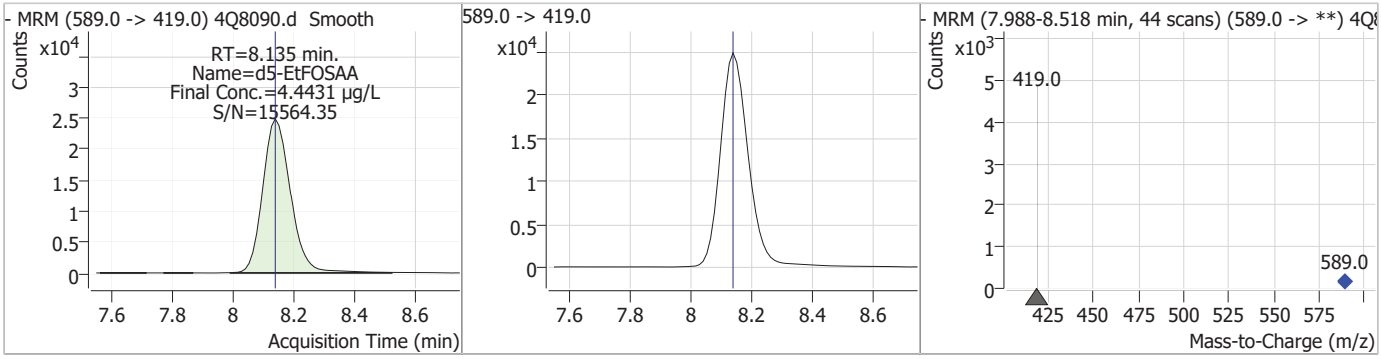


Perfluorinated Compounds by LC/MS/MS

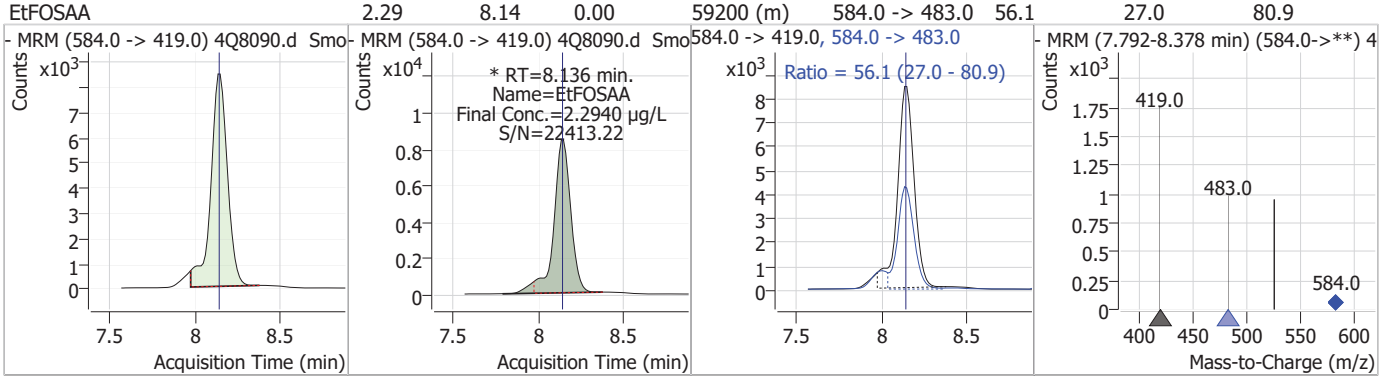
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.28	8.03	0.01	63132 (m)	499.0 -> 99.0	54.1	27.1	81.2



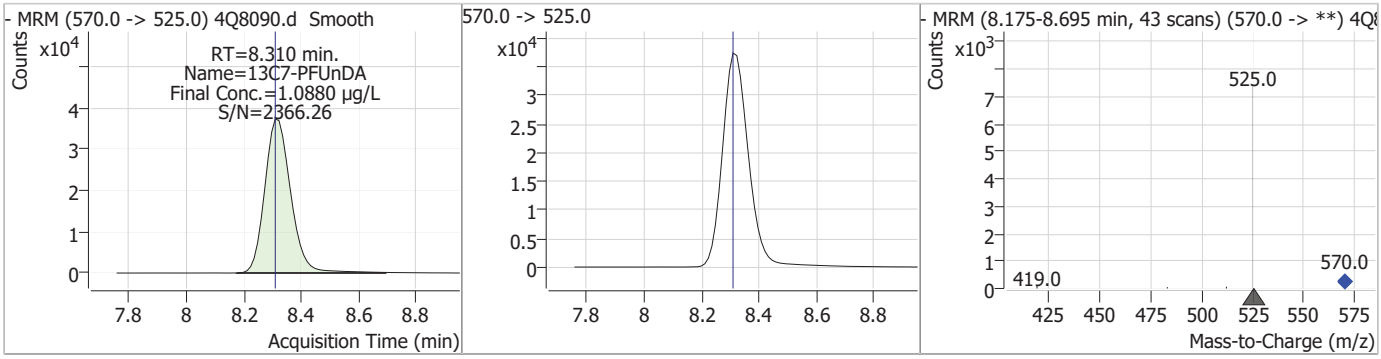
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.44	8.13	0.00	158352				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.29	8.14	0.00	59200 (m)	584.0 -> 483.0	56.1	27.0	80.9

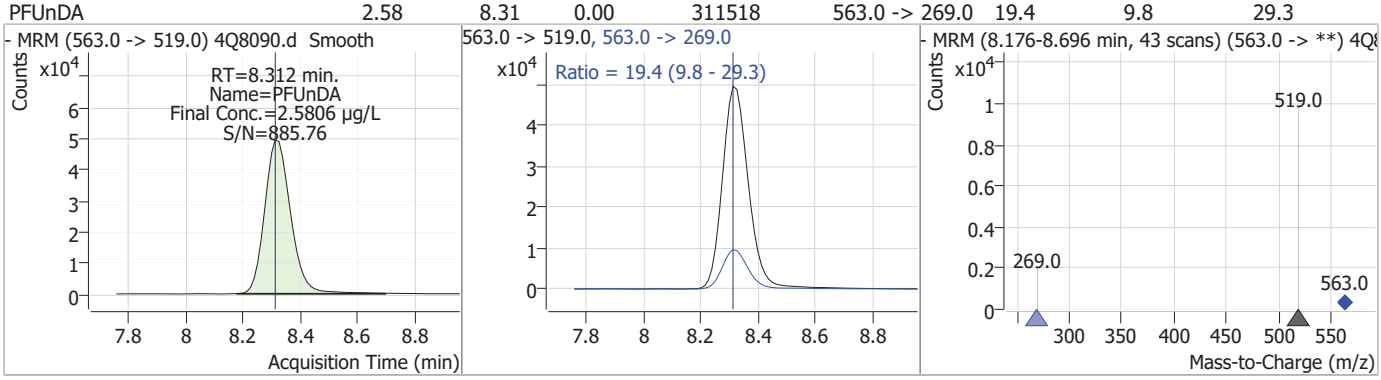


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.09	8.31	0.00	235041				

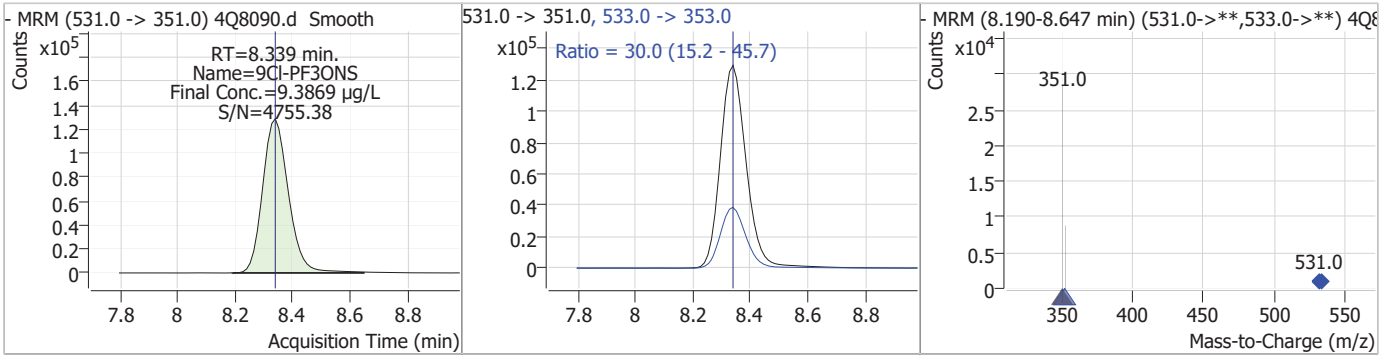


Perfluorinated Compounds by LC/MS/MS

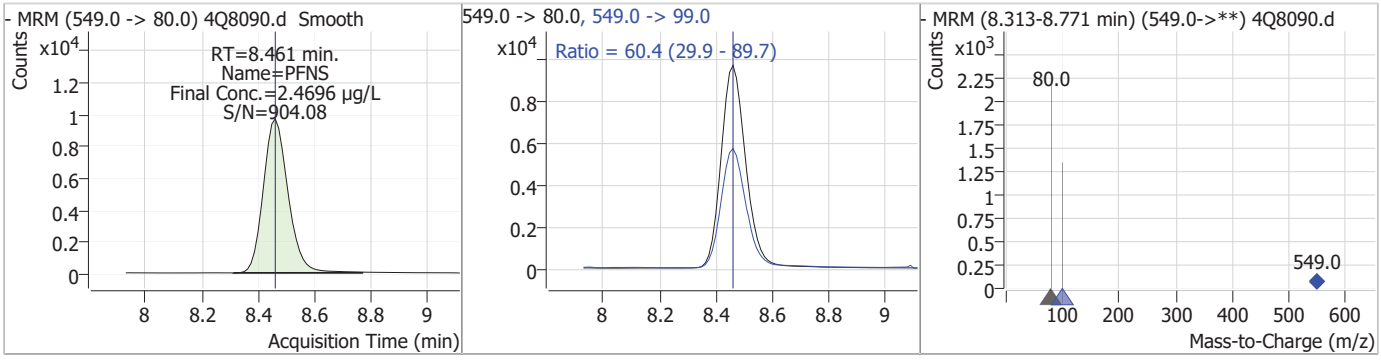
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.58	8.31	0.00	311518	563.0 -> 269.0	19.4	9.8	29.3



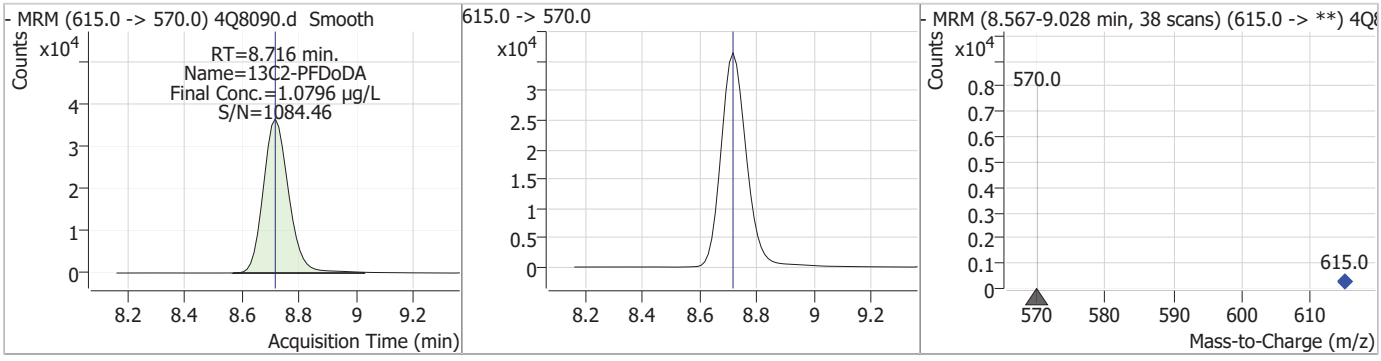
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.39	8.34	0.00	803300	533.0 -> 353.0	30.0	15.2	45.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.47	8.46	0.00	59295	549.0 -> 99.0	60.4	29.9	89.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.08	8.72	0.00	224732				



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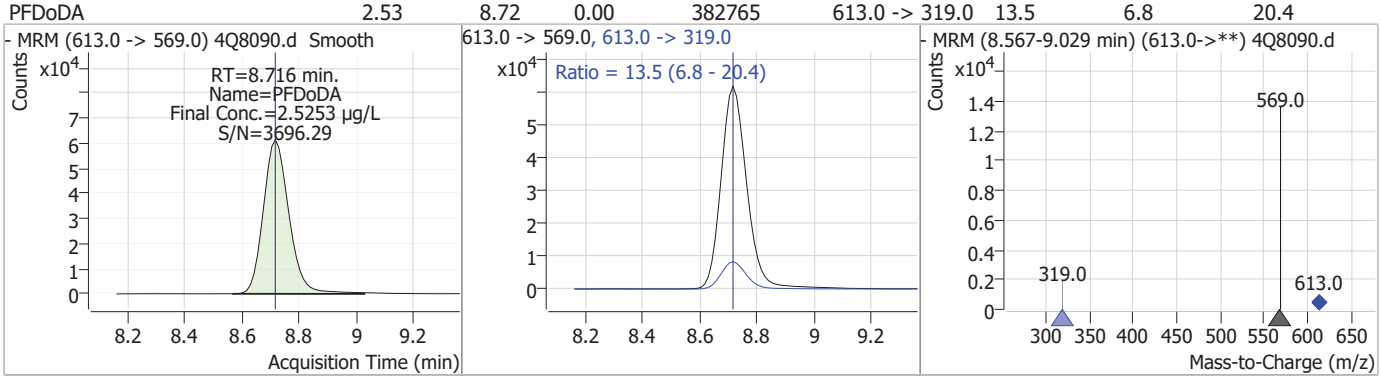
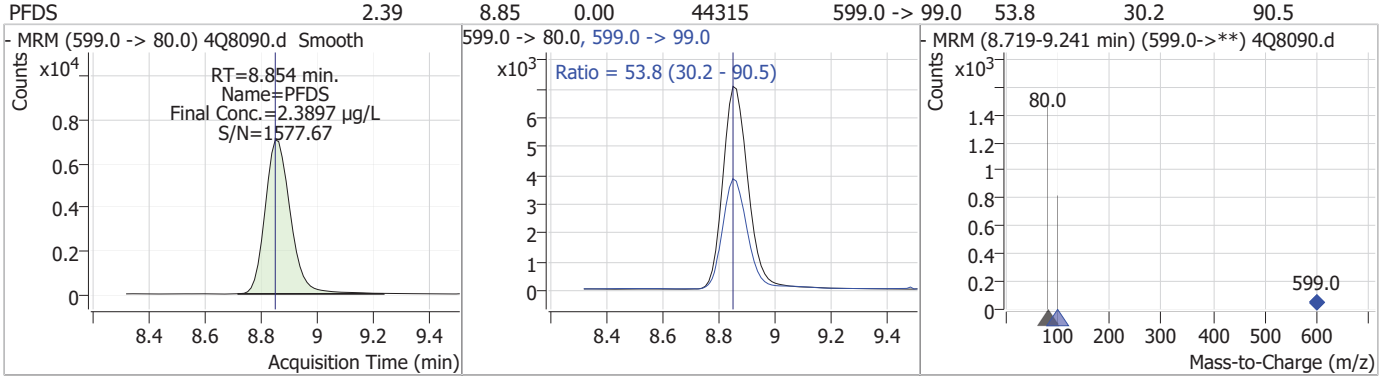
Perfluorinated Compounds by LC/MS/MS

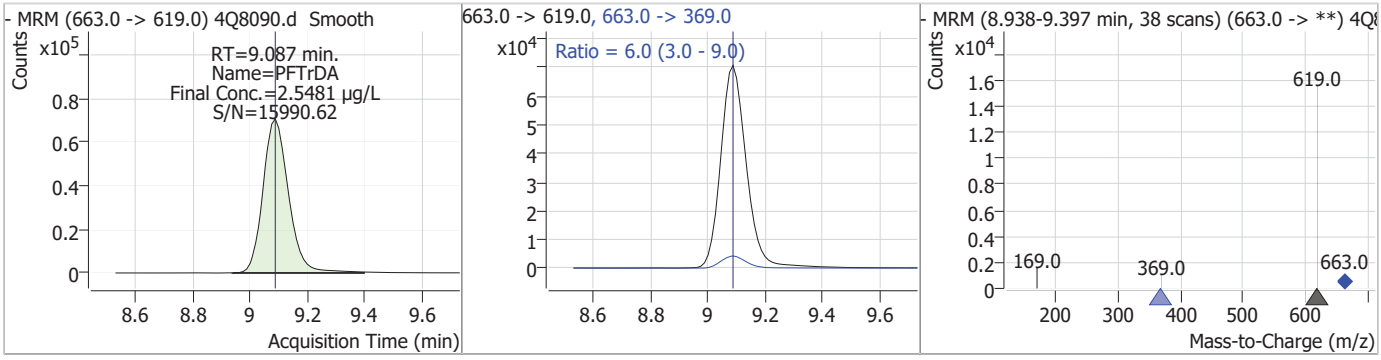
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.53	8.72	0.00	382765	613.0 -> 319.0	13.5	6.8	20.4



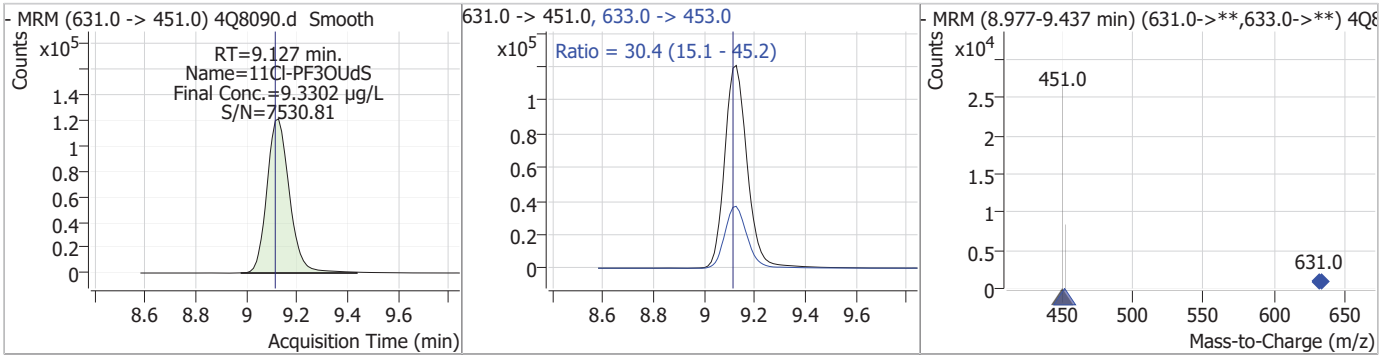
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.39	8.85	0.00	44315	599.0 -> 99.0	53.8	30.2	90.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.55	9.09	0.00	437156	663.0 -> 369.0	6.0	3.0	9.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.33	9.13	0.01	748200	633.0 -> 453.0	30.4	15.1	45.2



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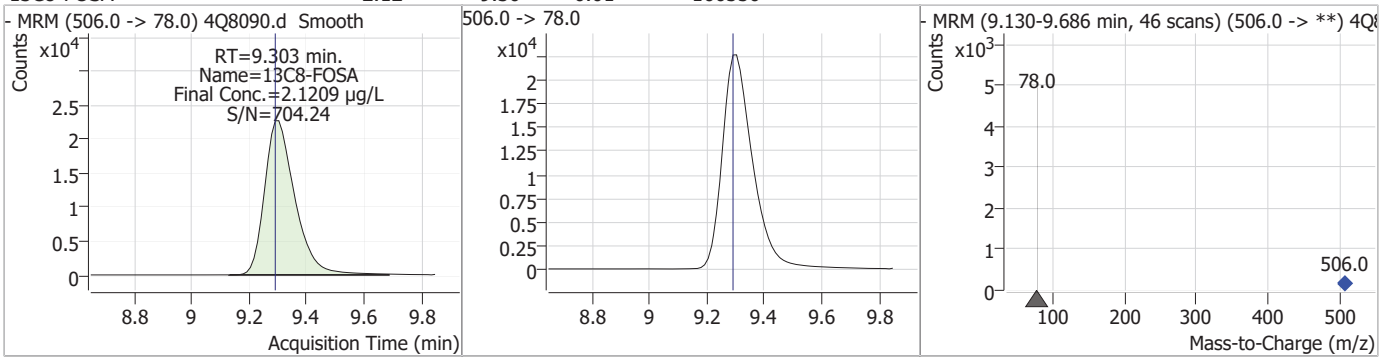
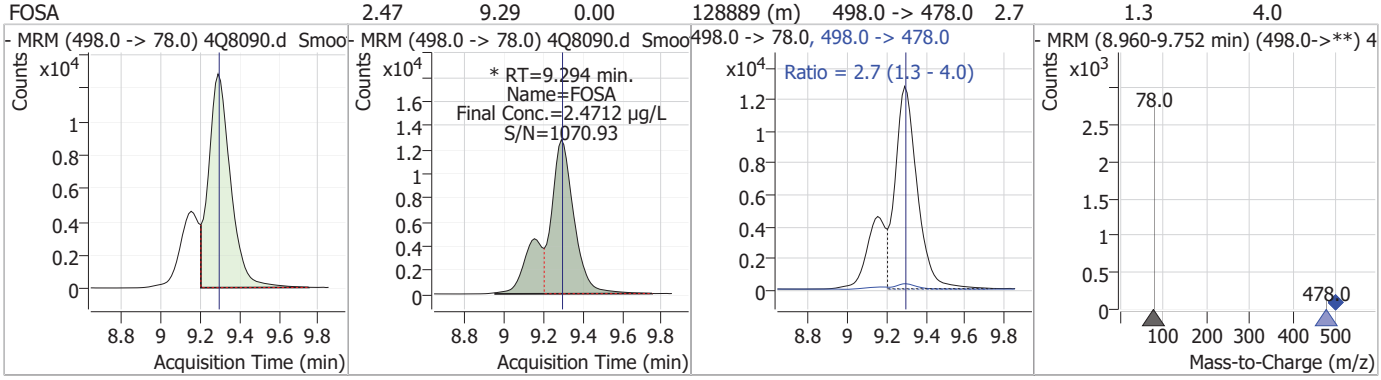
Perfluorinated Compounds by LC/MS/MS

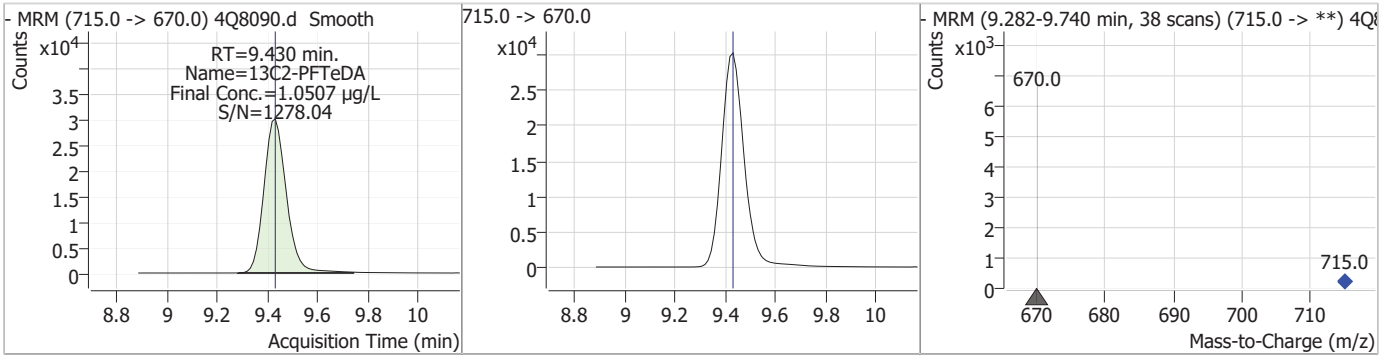
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.12	9.30	0.01	166550				



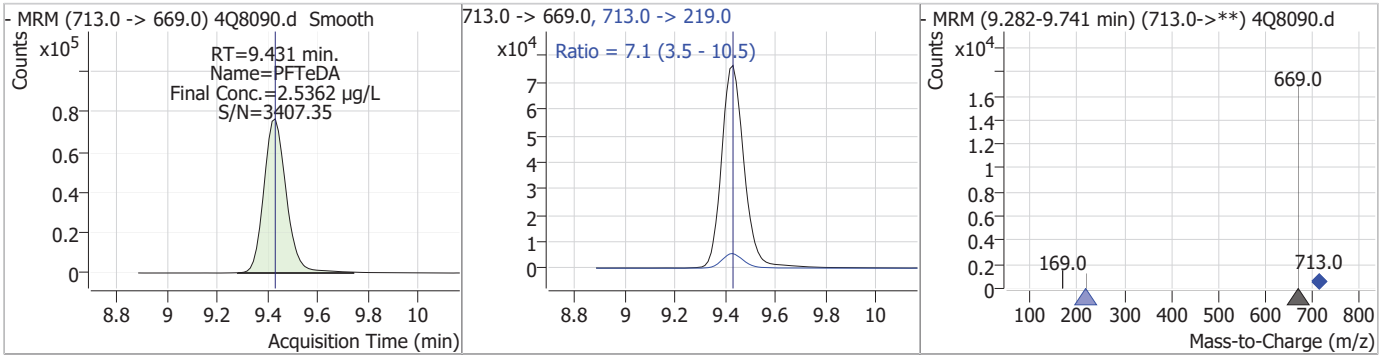
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.47	9.29	0.00	128889 (m)	498.0 -> 478.0	2.7	1.3	4.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.05	9.43	0.00	187147				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.54	9.43	0.00	472445	713.0 -> 219.0	7.1	3.5	10.5



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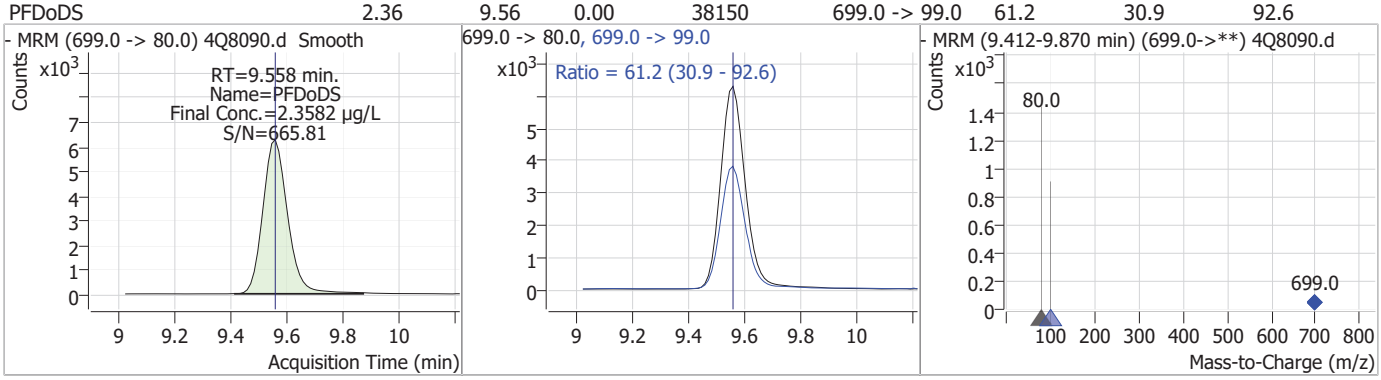
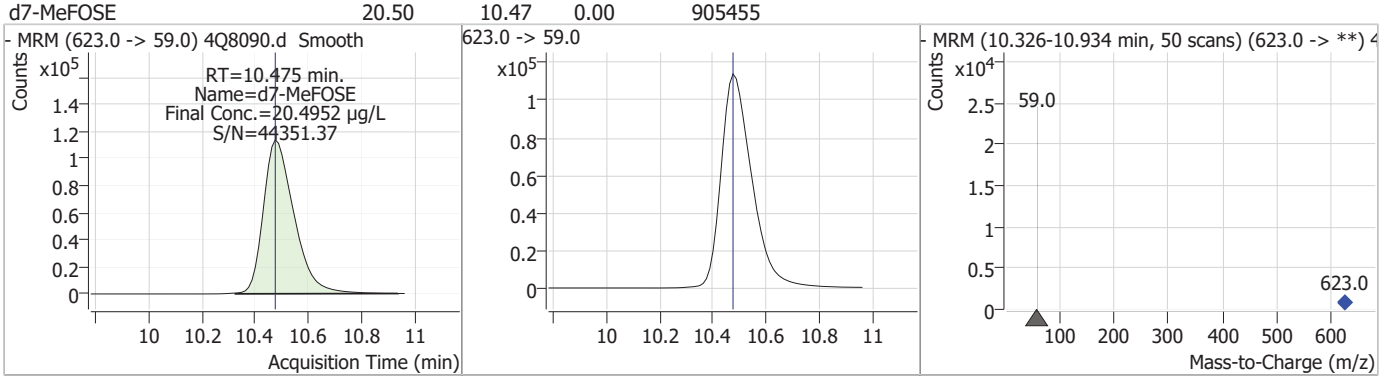
Perfluorinated Compounds by LC/MS/MS

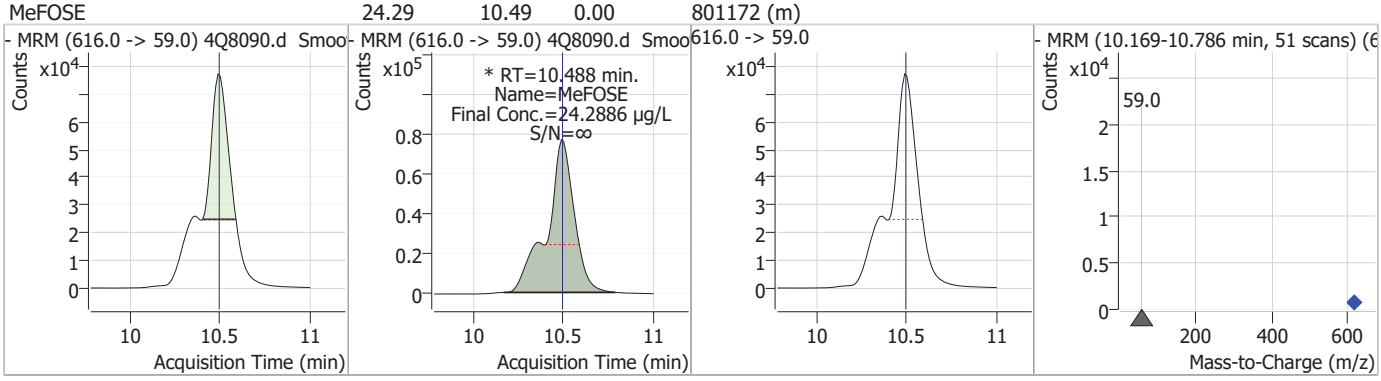
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.36	9.56	0.00	38150	699.0 -> 99.0	61.2	30.9	92.6



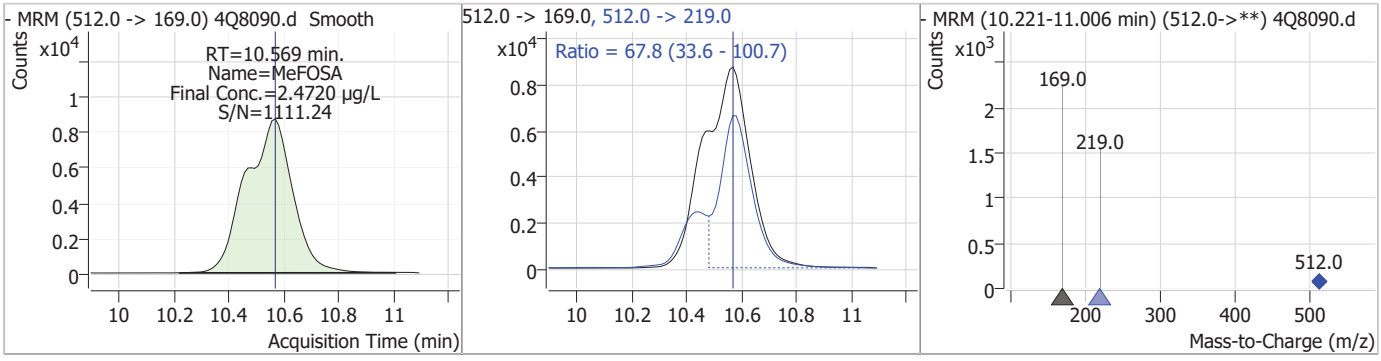
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	20.50	10.47	0.00	905455				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	24.29	10.49	0.00	801172 (m)				

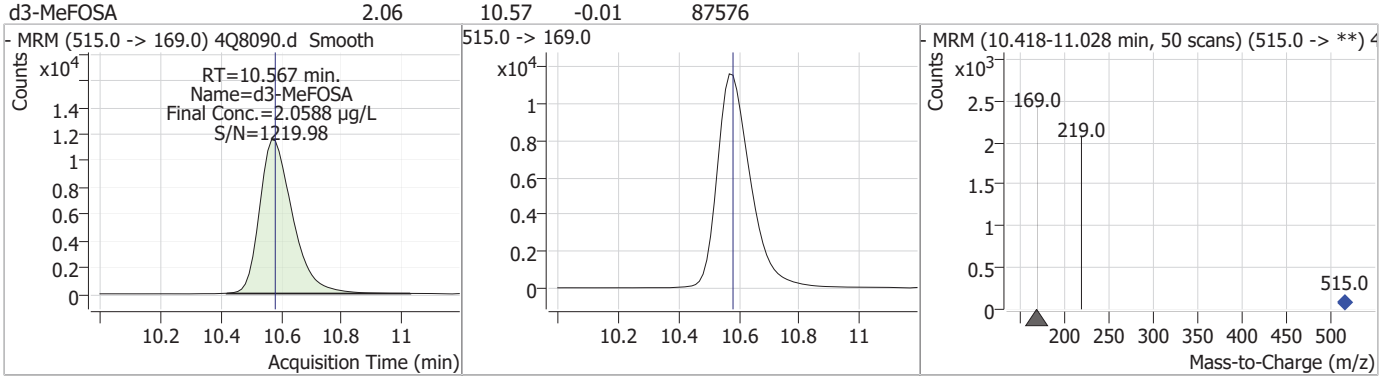


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.47	10.57	0.00	103763	512.0 -> 219.0	67.8	33.6	100.7

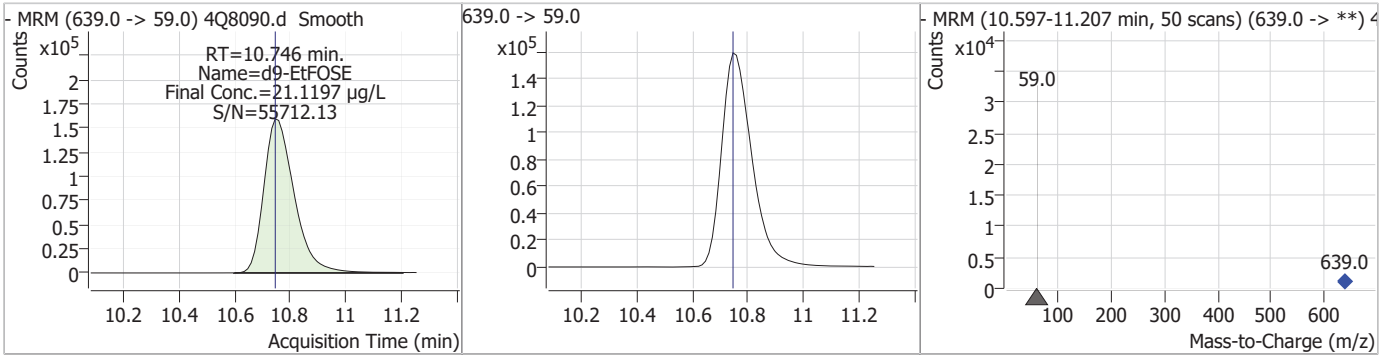


Perfluorinated Compounds by LC/MS/MS

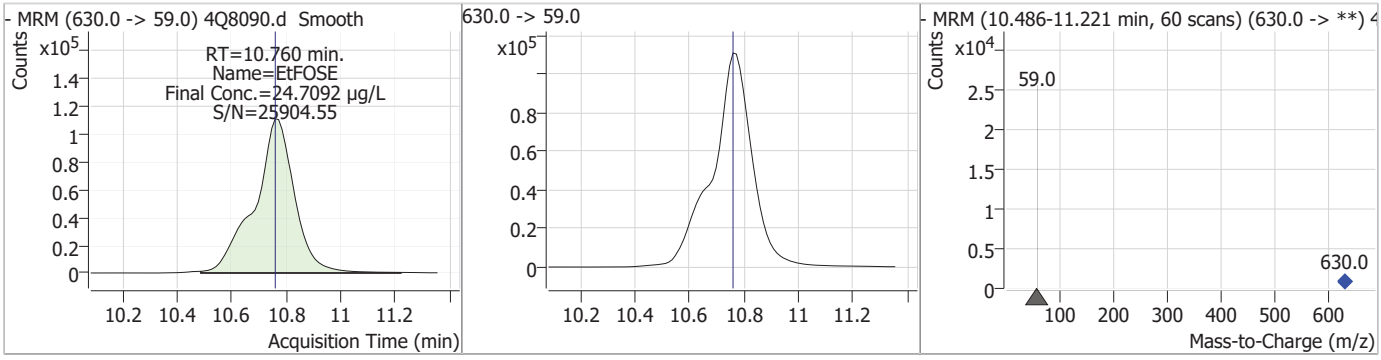
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.06	10.57	-0.01	87576				



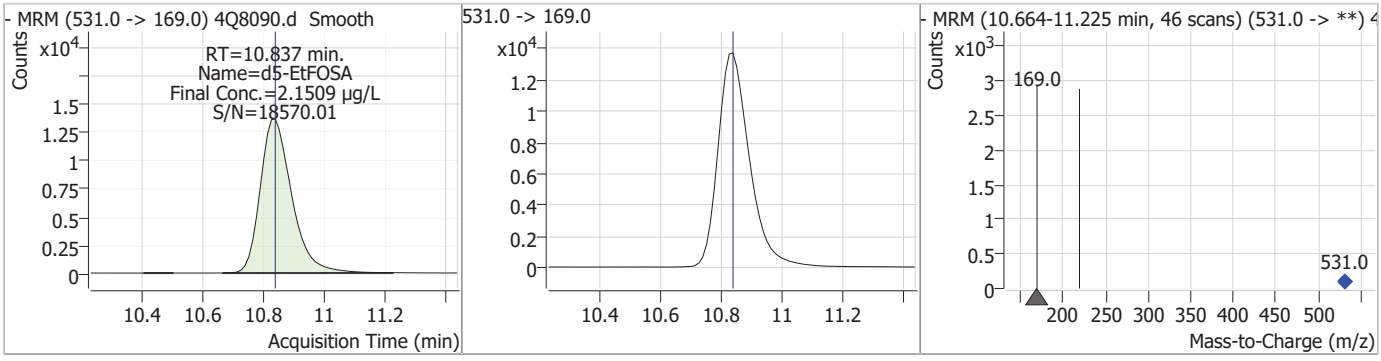
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	21.12	10.75	0.00	1214103				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	24.71	10.76	0.00	1134346				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.15	10.84	0.00	98419				



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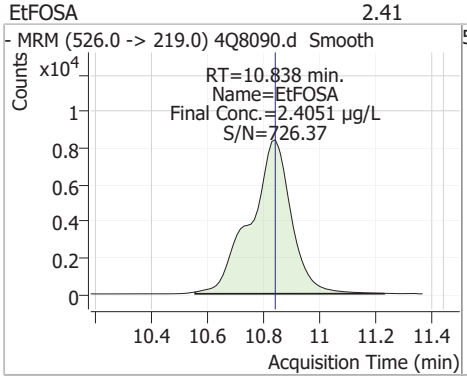
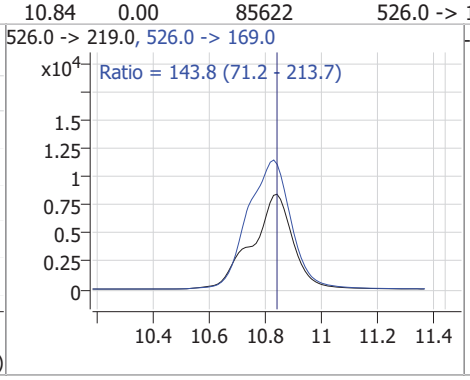
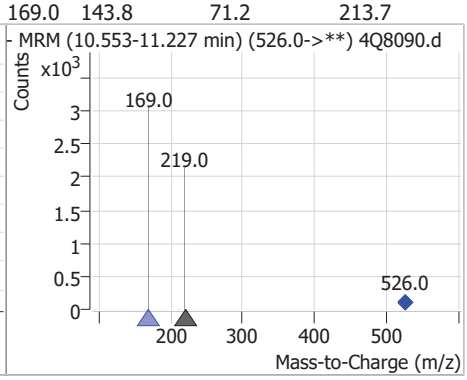
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.41	10.84	0.00	85622	526.0 -> 169.0	143.8	71.2	213.7







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Manual Integration Approval Summary

Sample Number: T4Q137-ICV137
Lab FileID: 4Q8090.D
Injection Time: 04/29/25 19:14
Method: EPA 1633
Analyst approved: 04/30/25 02:22 Rensel John Romano
Supervisor approved: 04/30/25 07:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.93	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.03	Split peak
Perfluorononanoic acid	375-95-1		7.44	Split peak
MeFOSAA	2355-31-9		7.95	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.03	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.29	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
04/30/25 07:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8091.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 7:28:12 PM
Sample Name : CC137-4
Vial : P1-A5
DA Method File : 042925_1633_T4Q137.quantmethod.xml
Batch Name : t4q137.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.908	217.0 -> 172.0	840883	10.00 µg/L	0.000
M5-PFPeA	4.344	268.0 -> 223.0	428425	5.00 µg/L	0.000
M5-PFHxA	5.489	318.0 -> 273.0	295652	2.50 µg/L	0.000
M4-PFHpA	6.328	367.0 -> 322.0	323798	2.50 µg/L	0.012
M8-PFOA	6.934	421.0 -> 376.0	486009	2.50 µg/L	0.000
M9-PFNA	7.440	472.0 -> 427.0	202205	1.25 µg/L	0.000
M6-PFDA	7.895	519.0 -> 474.0	199712	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	260576	1.25 µg/L	0.000
M2-PFDoDA	8.716	615.0 -> 570.0	242928	1.25 µg/L	0.000
M2-PFTeDA	9.430	715.0 -> 670.0	199473	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	176040	2.50 µg/L	0.000
M3-PFBS	5.393	302.0 -> 99.0	27221	2.50 µg/L	0.012
		302.0 -> 80.0	65488		
M3-PFHxS	7.024	402.0 -> 99.0	39139	2.50 µg/L	0.000
M8-PFOS	8.032	507.0 -> 99.0	42456	2.50 µg/L	0.012
M2-4:2FTS	5.190	329.0 -> 81.0	11009	5.00 µg/L	0.000
M2-6:2FTS	6.721	429.0 -> 81.0	22847	5.00 µg/L	0.000
M2-8:2FTS	7.708	529.0 -> 81.0	26065	5.00 µg/L	0.012
M3-MeFOSAA	7.952	573.0 -> 419.0	218574	5.00 µg/L	0.000
M3-HFPO-DA	5.816	287.0 -> 169.0	442123	10.00 µg/L	0.000
M5-EtFOSAA	8.135	589.0 -> 419.0	169414	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	974464	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1289588	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	106186	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	92741	2.50 µg/L	-0.012
13C4-PFOS	8.032	503.0 -> 80.0	73144	2.50 µg/L	0.012
13C3-PFBA	2.911	216.0 -> 172.0	359938	5.00 µg/L	0.000
18O2-PFHxS	7.023	403.0 -> 84.0	44202	2.50 µg/L	0.000
13C4-PFOA	6.935	417.0 -> 372.0	484128	2.50 µg/L	0.000
13C2-PFDA	7.895	515.0 -> 470.0	173224	1.25 µg/L	0.000
13C5-PFNA	7.440	468.0 -> 423.0	192918	1.25 µg/L	0.000
13C2-PFHxA	5.489	315.0 -> 270.0	271335	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.190	329.0 -> 81.0	11009	4.86 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.2%	
13C2-6:2FTS	6.721	429.0 -> 81.0	22847	4.87 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.5%	
13C2-8:2FTS	7.708	529.0 -> 81.0	26065	4.53 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.6%	
13C2-PFDoDA	8.716	615.0 -> 570.0	242928	1.14 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.9%	
13C2-PFTeDA	9.430	715.0 -> 670.0	199473	1.09 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 87.2%	
13C3-PFBS	5.393	302.0 -> 99.0	27221	2.37 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.8%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.024	402.0 -> 99.0	39139	2.33	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.2%			
13C4-PFBA	2.908	217.0 -> 172.0	840883	9.46	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.6%			
13C4-PFHpA	6.328	367.0 -> 322.0	323798	2.38	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.4%			
13C5-PFHxA	5.489	318.0 -> 273.0	295652	2.38	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.3%			
13C5-PFPeA	4.344	268.0 -> 223.0	428425	4.69	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.8%			
13C6-PFDA	7.895	519.0 -> 474.0	199712	1.16	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.8%			
13C7-PFUnDA	8.310	570.0 -> 525.0	260576	1.17	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.9%			
13C8-FOSA	9.291	506.0 -> 78.0	176040	2.25	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 89.9%			
13C8-PFOA	6.934	421.0 -> 376.0	486009	2.31	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.5%			
13C8-PFOS	8.032	507.0 -> 99.0	42456	2.29	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.5%			
13C9-PFNA	7.440	472.0 -> 427.0	202205	1.16	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.1%			
d3-MeFOSAA	7.952	573.0 -> 419.0	218574	4.78	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.5%			
13C3-HFPO-DA	5.816	287.0 -> 169.0	442123	9.46	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.6%			
d3-MeFOSA	10.567	515.0 -> 169.0	92741	2.18	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 87.4%			
d5-EtFOSAA	8.135	589.0 -> 419.0	169414	4.76	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.3%			
d7-MeFOSE	10.475	623.0 -> 59.0	974464	22.10	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 88.4%			
d9-EtFOSE	10.746	639.0 -> 59.0	1289588	22.48	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 89.9%			
d5-EtFOSA	10.837	531.0 -> 169.0	106186	2.33	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.0%			
Target Compounds							QValue
4:2FTS	5.191	327.0 -> 307.0	163376	9.63	µg/L		98
		327.0 -> 81.0	72513				
6:2FTS	6.721	427.0 -> 407.0	182569	9.50	µg/L		99
		427.0 -> 81.0	88911				
8:2FTS	7.709	527.0 -> 507.0	171850	10.16	µg/L		99
		527.0 -> 81.0	65311				
EtFOSAA	8.136	584.0 -> 419.0	62645	2.27	µg/L	m	94
		584.0 -> 483.0	36447				
FOSA	9.294	498.0 -> 78.0	134874	2.45	µg/L	m	99
		498.0 -> 478.0	3985				
MeFOSAA	7.953	570.0 -> 419.0	75745	2.27	µg/L	m	98
		570.0 -> 512.0	25468				
PFBA	2.914	213.0 -> 169.0	223186	9.68	µg/L		100
PFBS	5.394	299.0 -> 80.0	54344	2.13	µg/L		97
		299.0 -> 99.0	22192				
PFDA	7.896	513.0 -> 469.0	307688	2.42	µg/L		99
		513.0 -> 219.0	70501				
PFDoDA	8.716	613.0 -> 569.0	400954	2.45	µg/L		99
		613.0 -> 319.0	53494				

Perfluorinated Compounds by LC/MS/MS

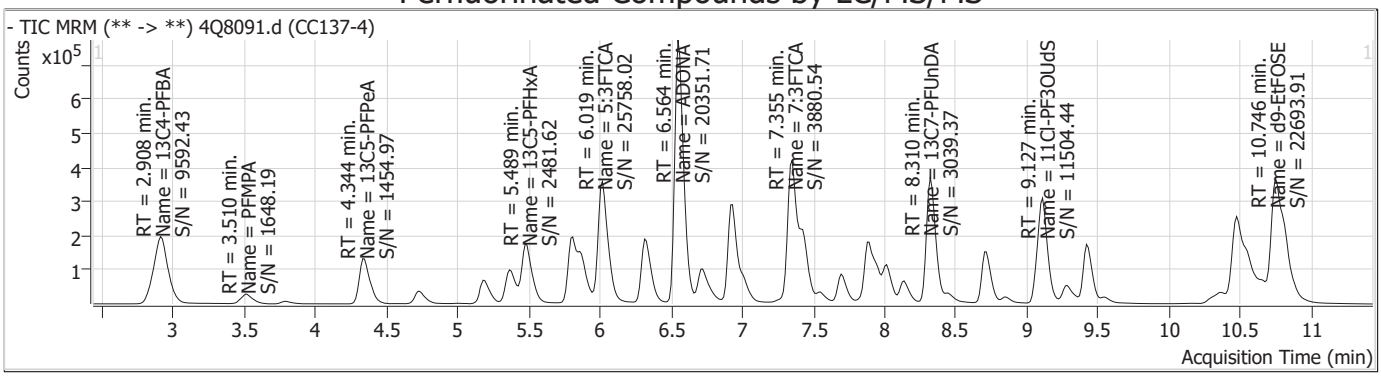
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.854	599.0 -> 80.0	48109	2.34	µg/L		90
		599.0 -> 99.0	25244				
PFHpA	6.329	363.0 -> 319.0	399588	2.40	µg/L		99
		363.0 -> 169.0	81483				
PFHpS	7.553	449.0 -> 80.0	68328	2.34	µg/L		98
		449.0 -> 99.0	36124				
PFHxA	5.492	313.0 -> 269.0	256352	2.38	µg/L		99
		313.0 -> 119.0	8752				
PFHxS	7.025	399.0 -> 80.0	67163	2.28	µg/L	m	98
		399.0 -> 99.0	34120				
PFNA	7.441	463.0 -> 419.0	250773	2.41	µg/L	m	99
		463.0 -> 219.0	86825				
PFNS	8.461	549.0 -> 80.0	59322	2.31	µg/L		98
		549.0 -> 99.0	36542				
PFOA	6.935	413.0 -> 369.0	334019	2.44	µg/L	m	99
		413.0 -> 169.0	97116				
PFOS	8.021	499.0 -> 80.0	61325	2.07	µg/L	m	98
		499.0 -> 99.0	34016				
PFPeA	4.346	263.0 -> 219.0	276299	4.86	µg/L		100
PFPeS	6.355	349.0 -> 80.0	62391	2.19	µg/L		98
		349.0 -> 99.0	32405				
PFTeDA	9.431	713.0 -> 669.0	485945	2.45	µg/L		99
		713.0 -> 219.0	35595				
PFTrDA	9.087	663.0 -> 619.0	454218	2.45	µg/L		100
		663.0 -> 369.0	27794				
PFUnDA	8.312	563.0 -> 519.0	322630	2.41	µg/L		99
		563.0 -> 269.0	64246				
11Cl-PF3OUdS	9.127	631.0 -> 451.0	781556	9.10	µg/L		99
		633.0 -> 453.0	238382				
9Cl-PF3ONS	8.339	531.0 -> 351.0	822040	8.97	µg/L		99
		533.0 -> 353.0	256206				
ADONA	6.564	377.0 -> 251.0	2607897	8.69	µg/L		99
		377.0 -> 85.0	867235				
HFPO-DA	5.817	285.0 -> 169.0	390115	9.74	µg/L		98
		285.0 -> 185.0	43562				
3:3FTCA	3.794	241.0 -> 177.0	37003	11.94	µg/L		100
		241.0 -> 117.0	3198				
5:3FTCA	6.019	341.0 -> 237.0	1033754	63.13	µg/L		99
		341.0 -> 217.0	734155				
7:3FTCA	7.355	441.0 -> 337.0	1440827	60.40	µg/L		98
		441.0 -> 317.0	663480				
EtFOSA	10.838	526.0 -> 219.0	88757	2.31	µg/L		100
		526.0 -> 169.0	126848				
EtFOSE	10.760	630.0 -> 59.0	1166217	23.92	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	108814	2.45	µg/L		99
		512.0 -> 219.0	72461				
MeFOSE	10.488	616.0 -> 59.0	860150	24.23	µg/L		100
PFDoDS	9.558	699.0 -> 80.0	39793	2.30	µg/L		100
		699.0 -> 99.0	24462				
NFDHA	5.370	295.0 -> 201.0	67651	4.84	µg/L		93
		201.0 -> 85.0	274058				
		295.0 -> 85.0	18368				
PFMBA	4.735	279.0 -> 85.0	189709	4.89	µg/L		100
PFMPA	3.510	229.0 -> 85.0	164140	4.88	µg/L		100
PFEESA	5.872	315.0 -> 135.0	443051	4.35	µg/L		100
		315.0 -> 69.0	35230				

Perfluorinated Compounds by LC/MS/MS

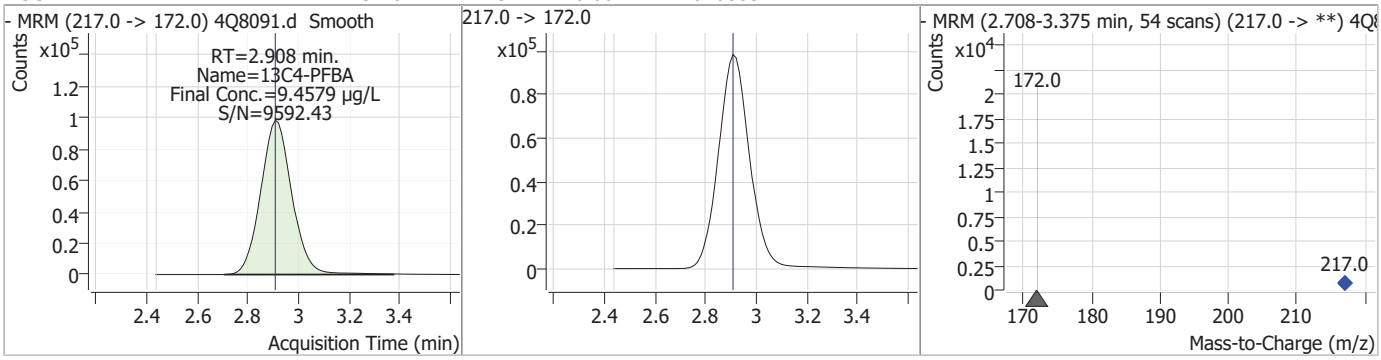
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

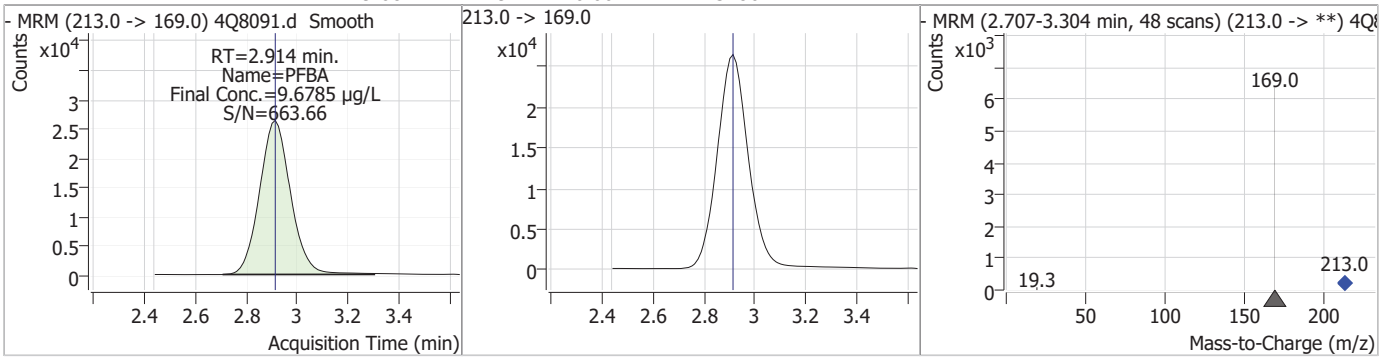
Perfluorinated Compounds by LC/MS/MS



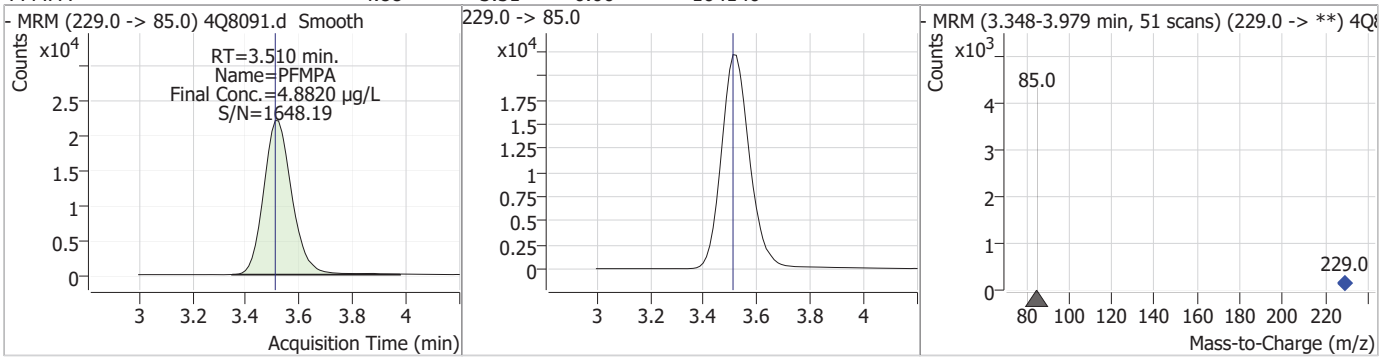
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.46	2.91	0.00	840883				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.68	2.91	0.00	223186				

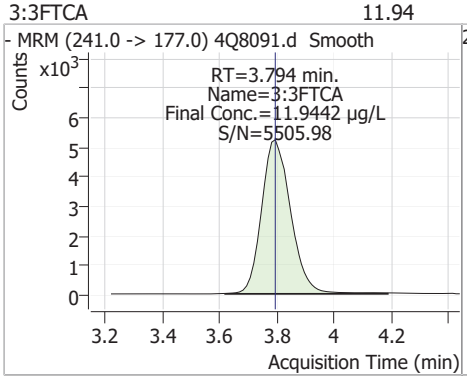


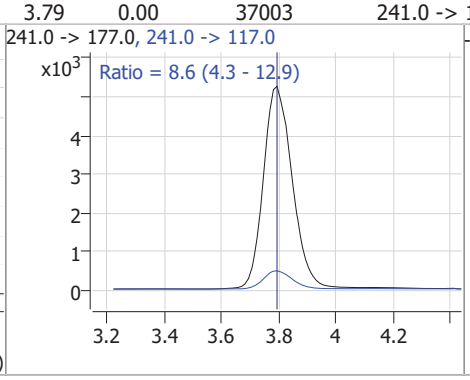
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	4.88	3.51	0.00	164140				

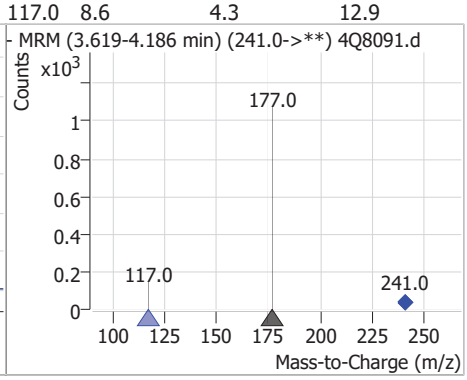


Perfluorinated Compounds by LC/MS/MS

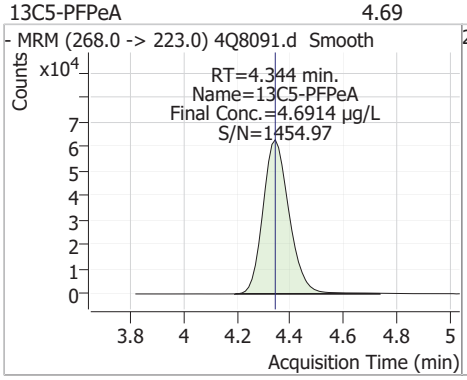
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	11.94	3.79	0.00	37003	241.0 -> 117.0	8.6	4.3	12.9

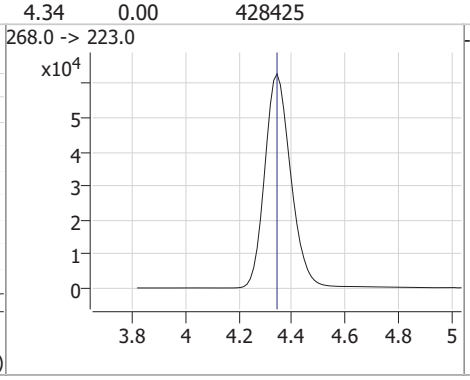


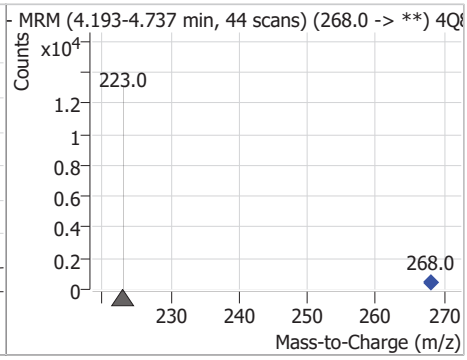




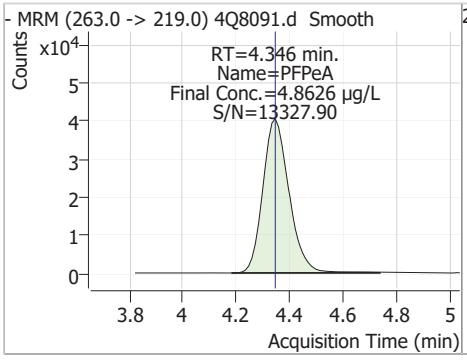
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.69	4.34	0.00	428425				

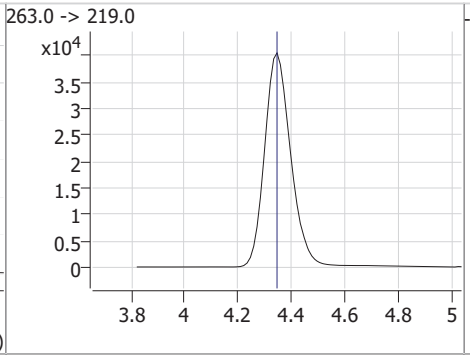


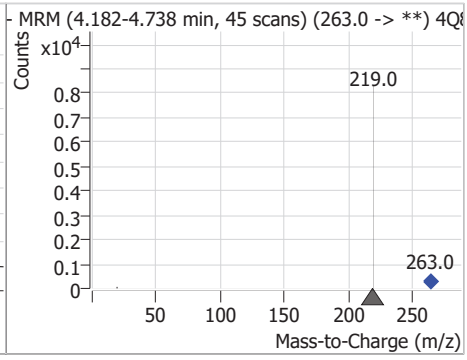




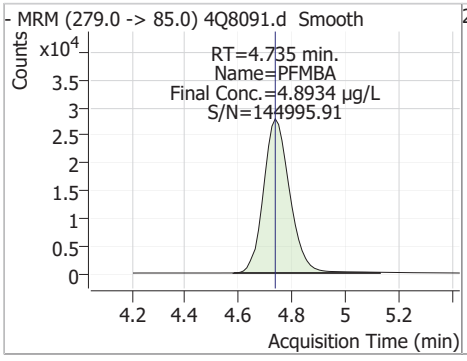
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	4.86	4.35	0.00	276299				

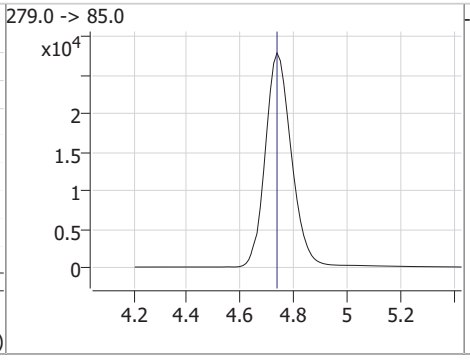


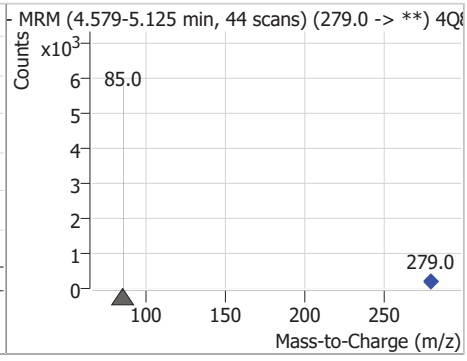




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.89	4.73	0.00	189709				







7.6.41

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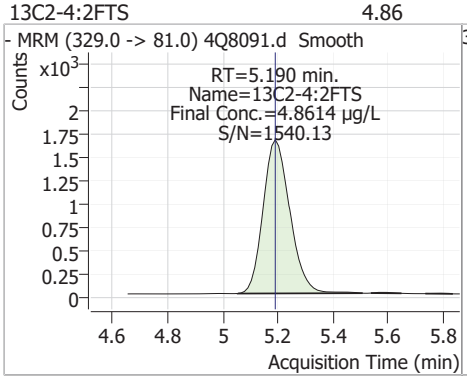
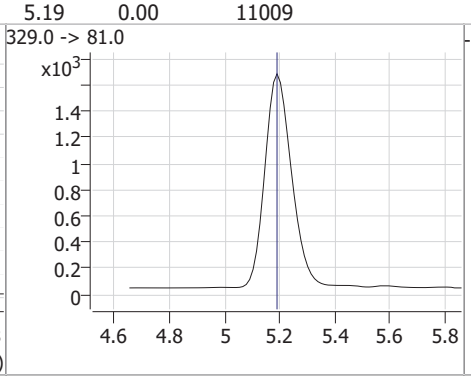
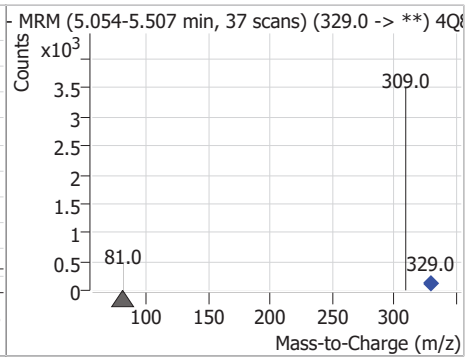
Perfluorinated Compounds by LC/MS/MS

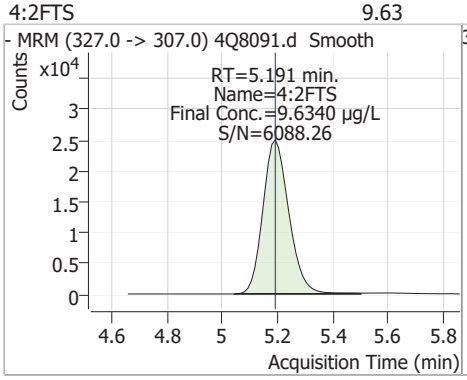
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.86	5.19	0.00	11009				

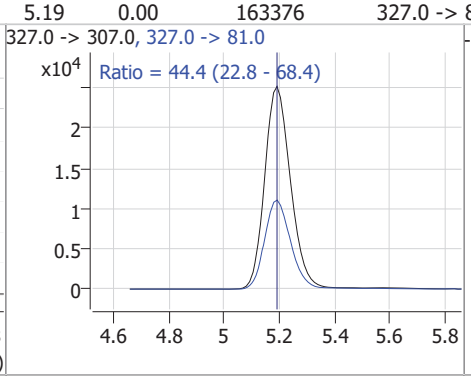


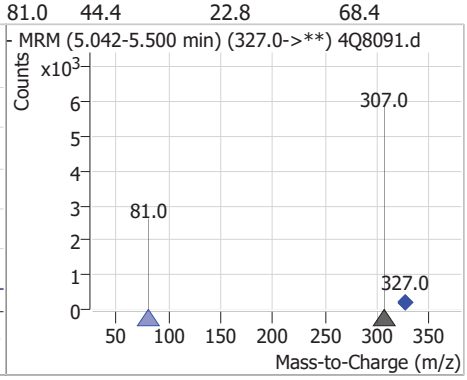




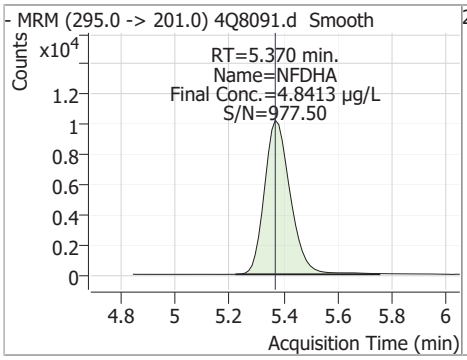
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.63	5.19	0.00	163376	327.0 -> 81.0	44.4	22.8	68.4

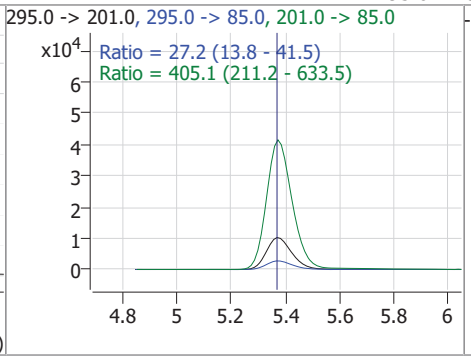


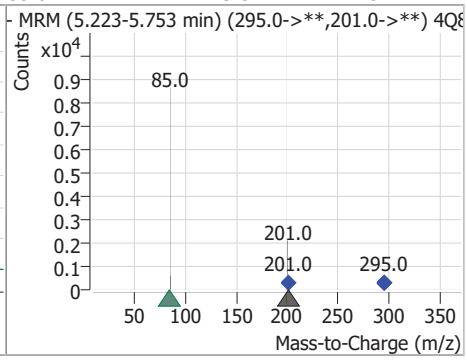




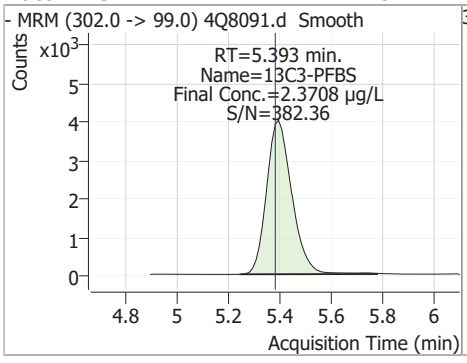
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	4.84	5.37	0.00	67651	201.0 -> 85.0	405.1	211.2	633.5
					295.0 -> 85.0	27.2	13.8	41.5

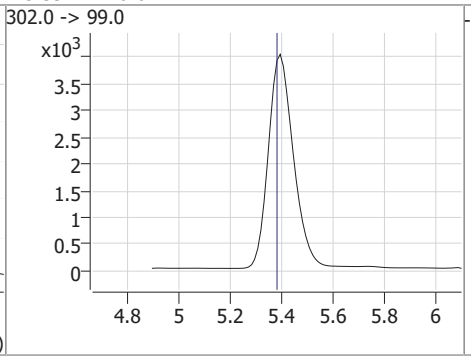


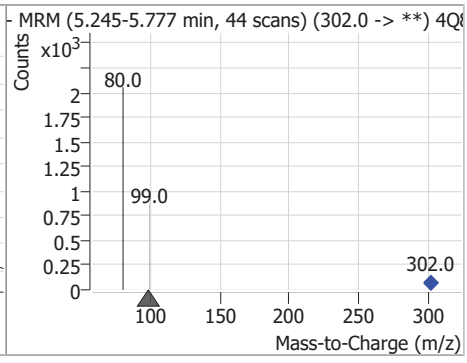




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.37	5.39	0.01	27221				







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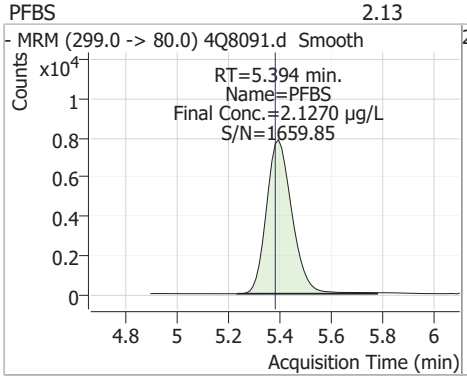
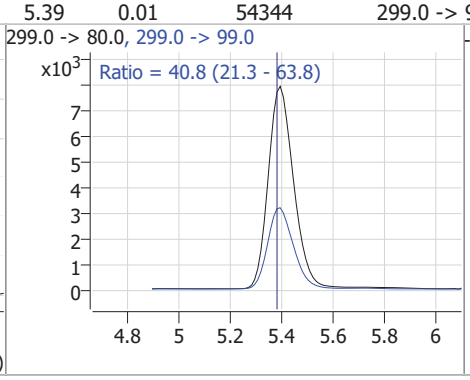
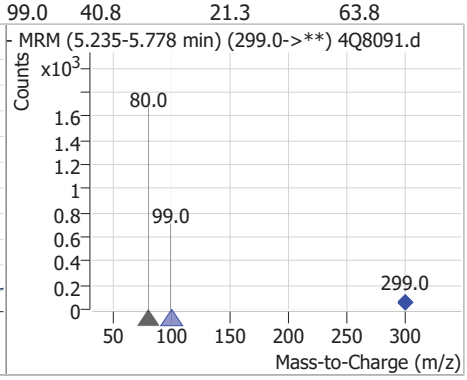
Perfluorinated Compounds by LC/MS/MS

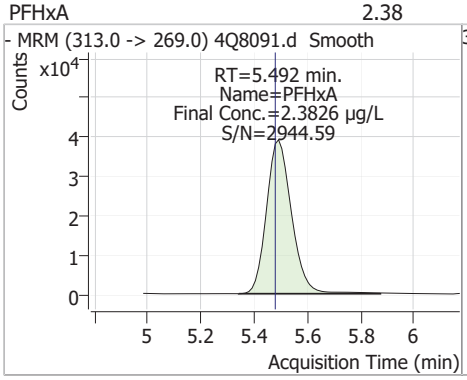
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.13	5.39	0.01	54344	299.0 -> 99.0	40.8	21.3	63.8

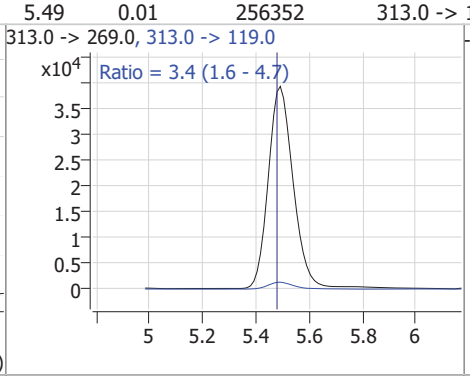


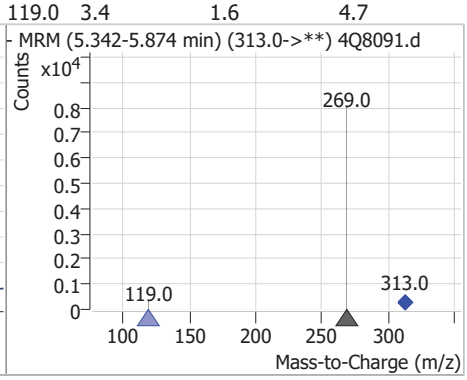




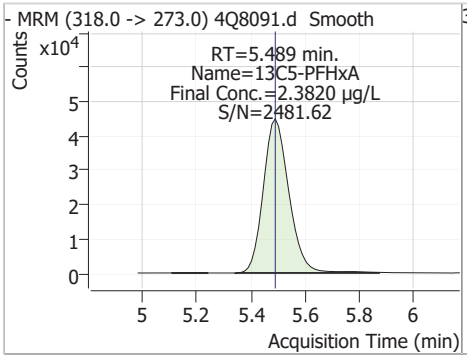
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.38	5.49	0.01	256352	313.0 -> 119.0	3.4	1.6	4.7

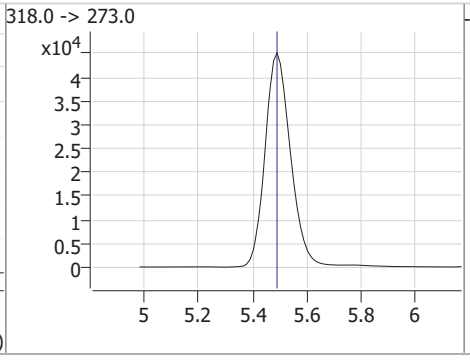


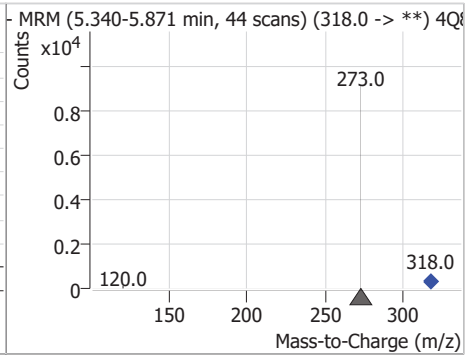




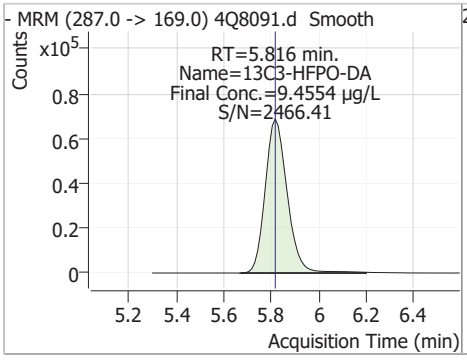
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.38	5.49	0.00	295652				

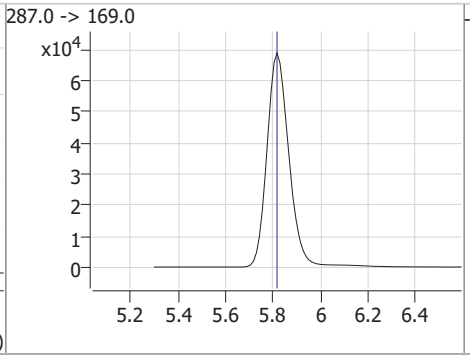


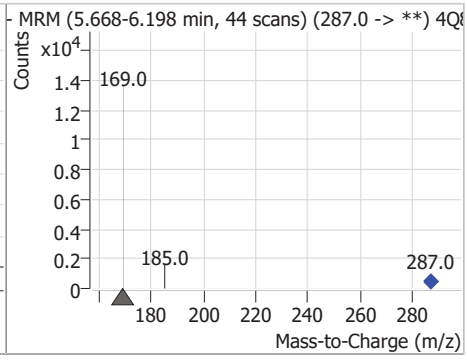




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.46	5.82	0.00	442123				







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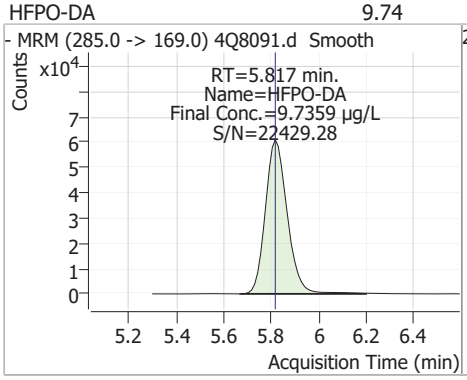
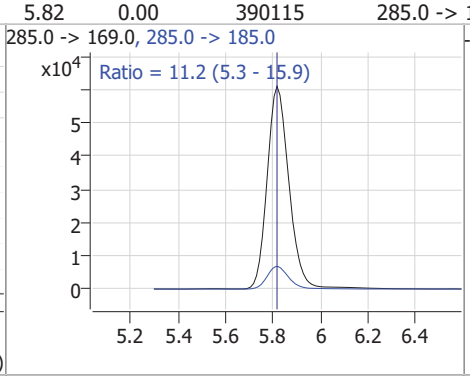
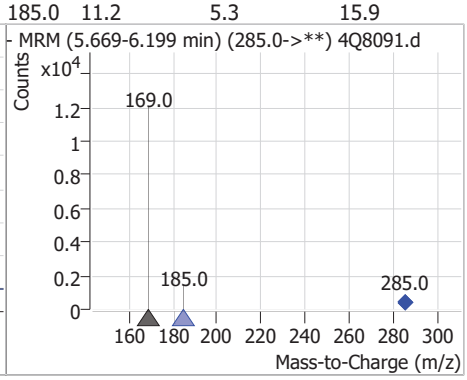
Perfluorinated Compounds by LC/MS/MS

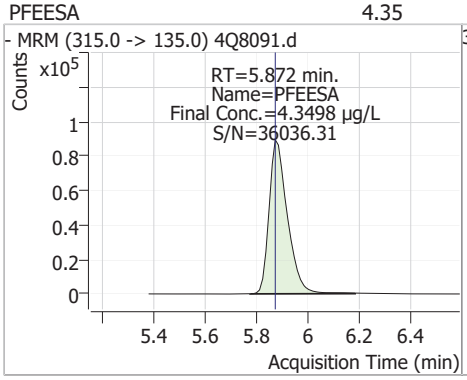
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	9.74	5.82	0.00	390115	285.0 -> 185.0	11.2	5.3	15.9

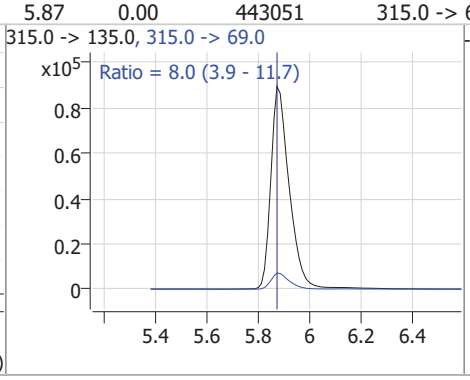


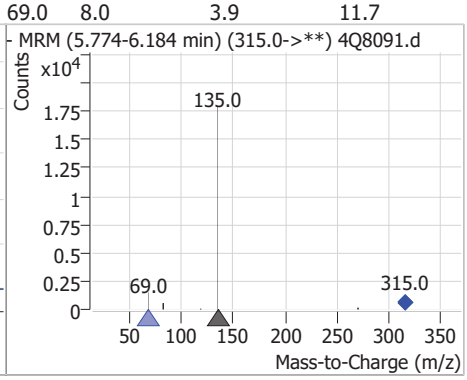




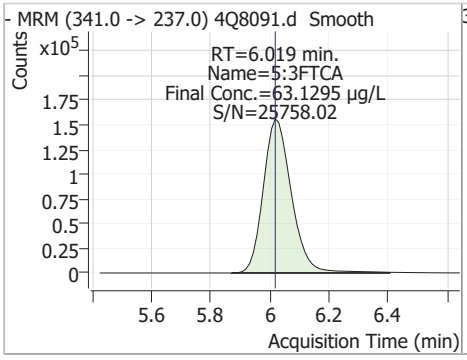
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.35	5.87	0.00	443051	315.0 -> 69.0	8.0	3.9	11.7

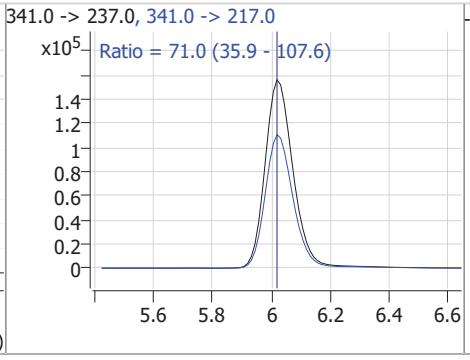


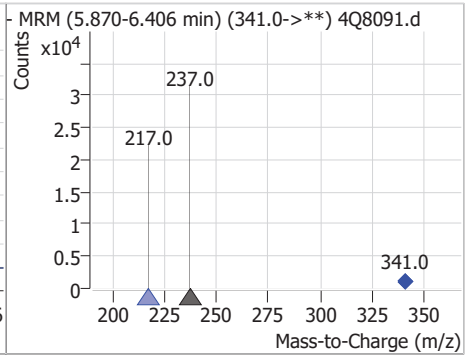




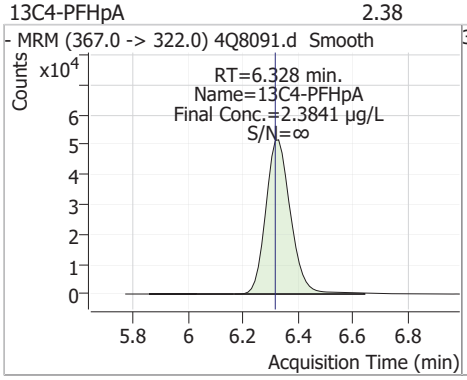
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	63.13	6.02	0.00	1033754	341.0 -> 217.0	71.0	35.9	107.6

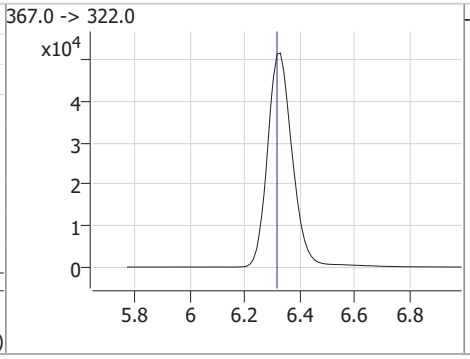


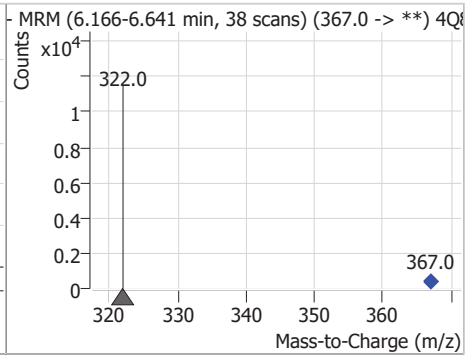




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.38	6.33	0.01	323798				







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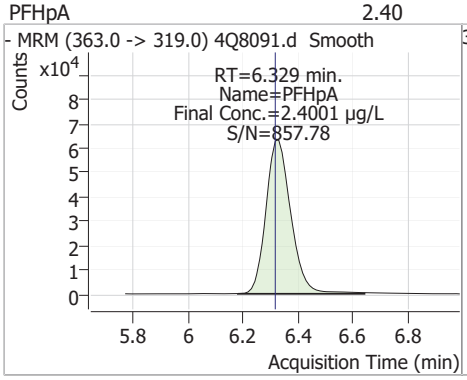
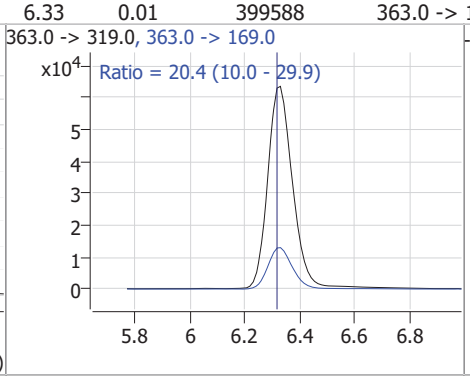
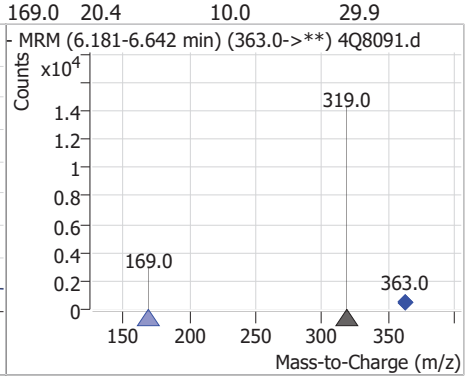
Perfluorinated Compounds by LC/MS/MS

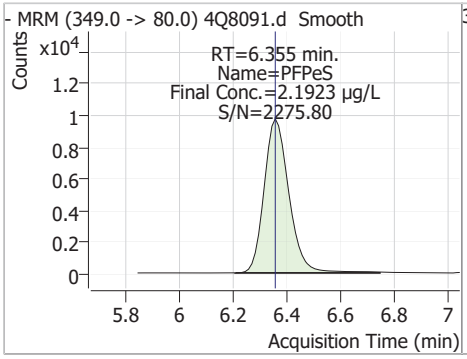
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.40	6.33	0.01	399588	363.0 -> 169.0	20.4	10.0	29.9

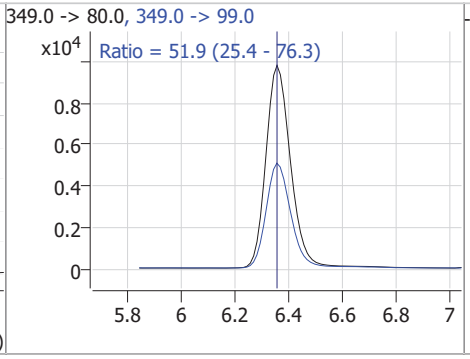


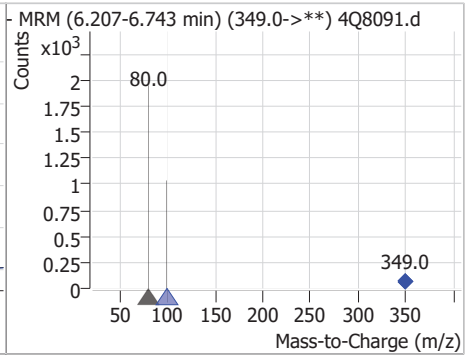




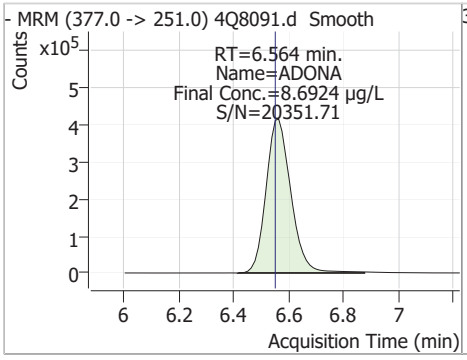
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.19	6.36	0.00	62391	349.0 -> 99.0	51.9	25.4	76.3

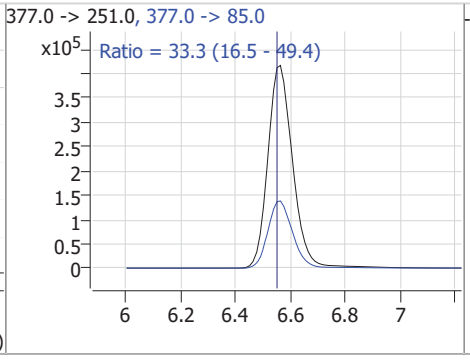


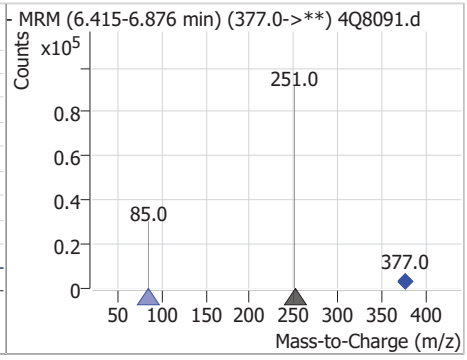




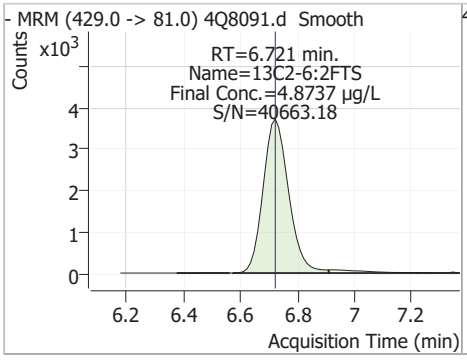
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.69	6.56	0.01	2607897	377.0 -> 85.0	33.3	16.5	49.4

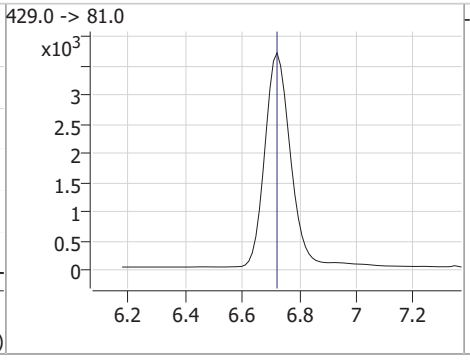


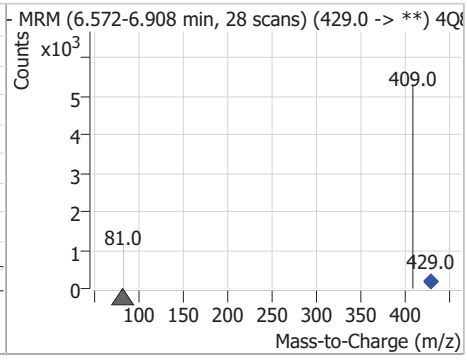




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.87	6.72	0.00	22847				







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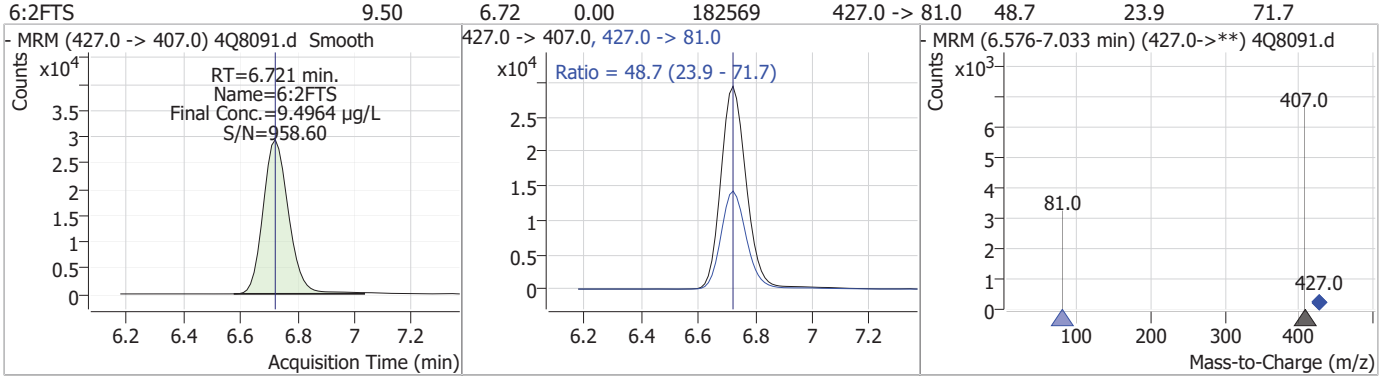
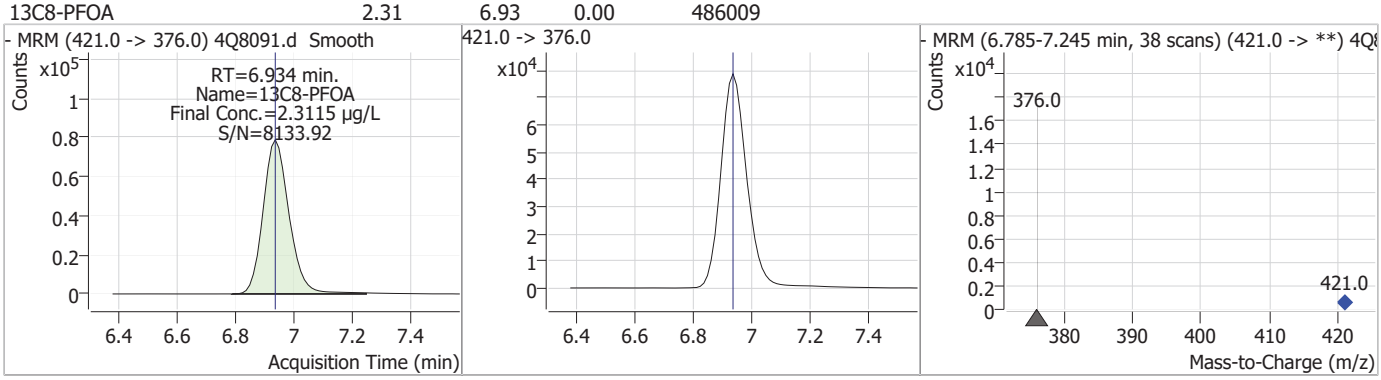
Perfluorinated Compounds by LC/MS/MS

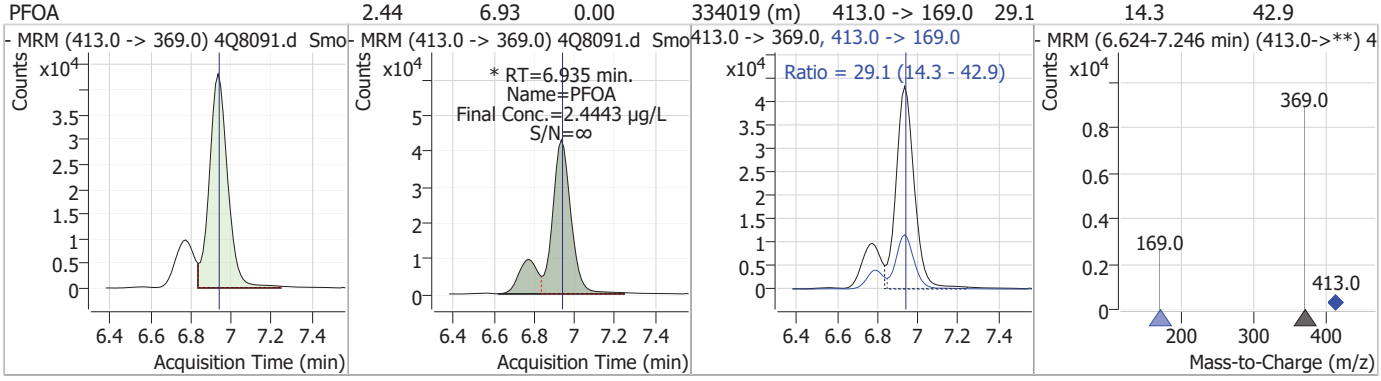
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.50	6.72	0.00	182569	427.0 -> 81.0	48.7	23.9	71.7



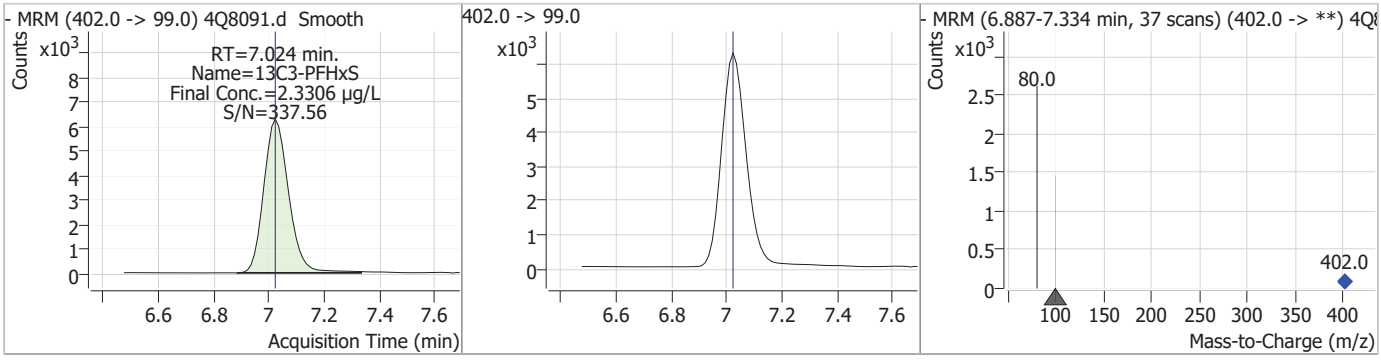
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.31	6.93	0.00	486009				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.44	6.93	0.00	334019 (m)	413.0 -> 169.0	29.1	14.3	42.9

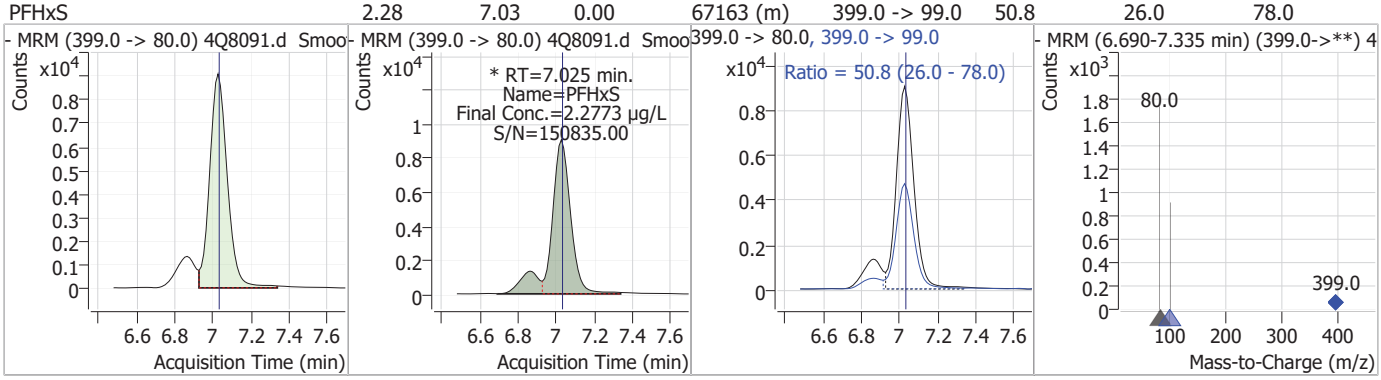


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.33	7.02	0.00	39139				

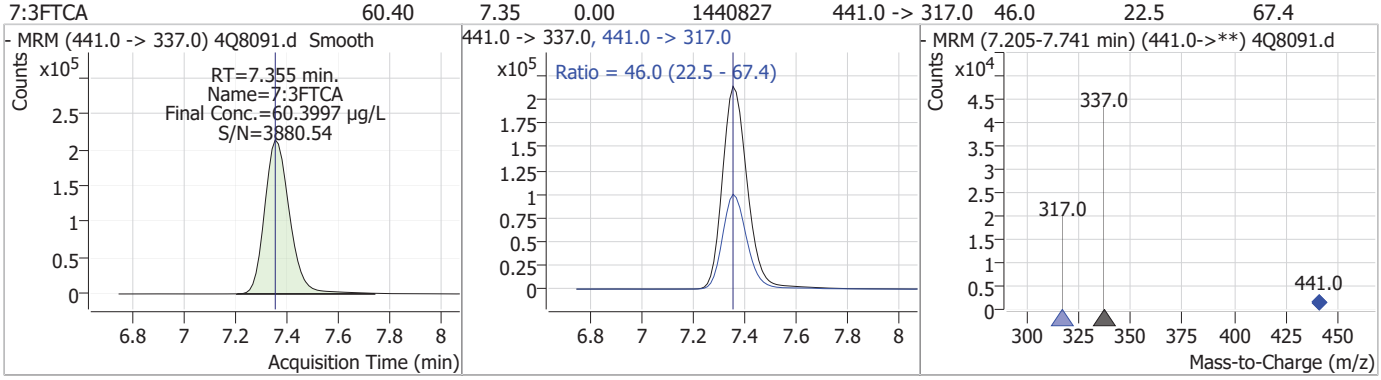


Perfluorinated Compounds by LC/MS/MS

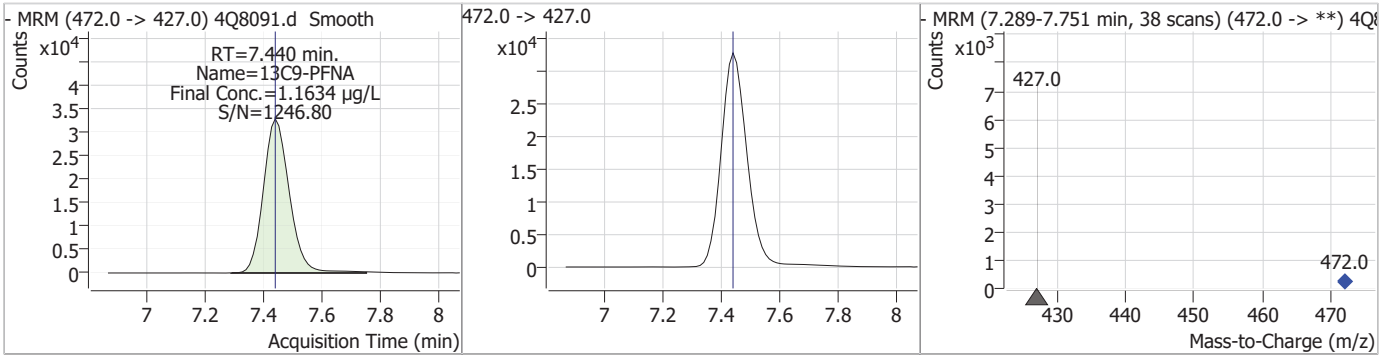
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.28	7.03	0.00	67163 (m)	399.0 -> 99.0	50.8	26.0	78.0



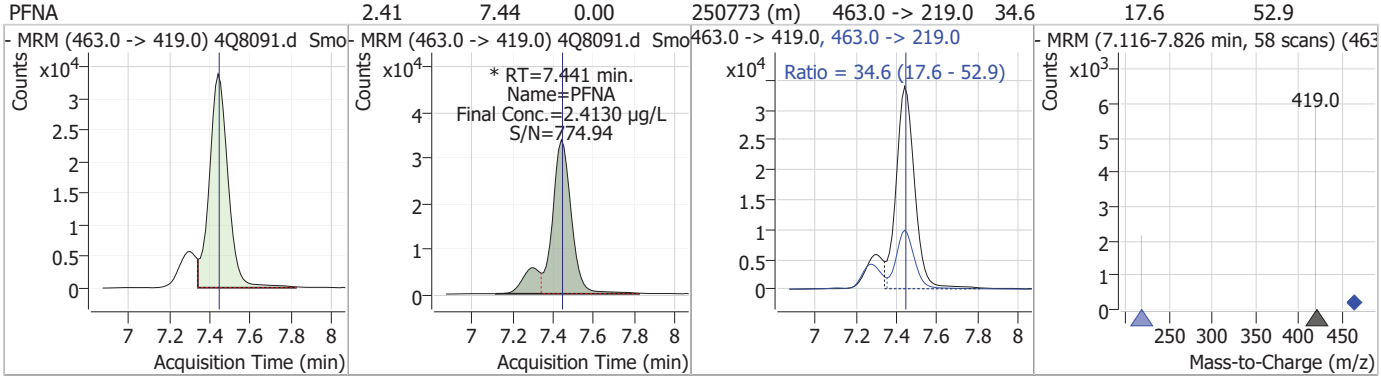
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	60.40	7.35	0.00	1440827	441.0 -> 317.0	46.0	22.5	67.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.16	7.44	0.00	202205				

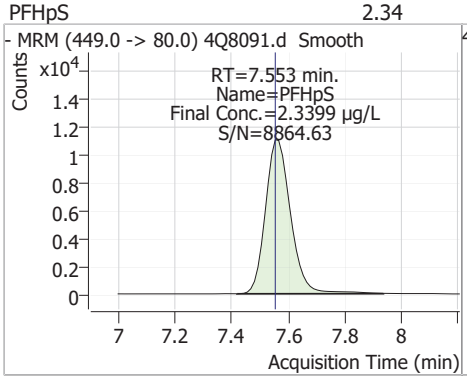


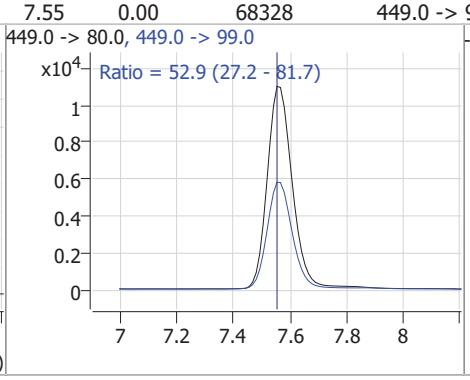
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.41	7.44	0.00	250773 (m)	463.0 -> 219.0	34.6	17.6	52.9

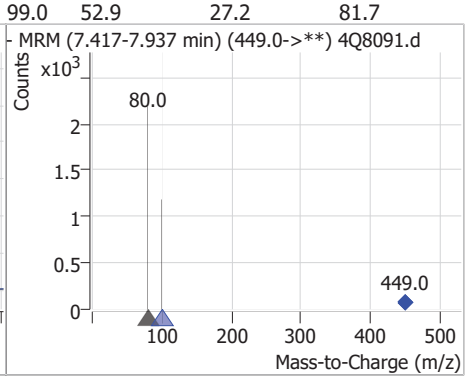


Perfluorinated Compounds by LC/MS/MS

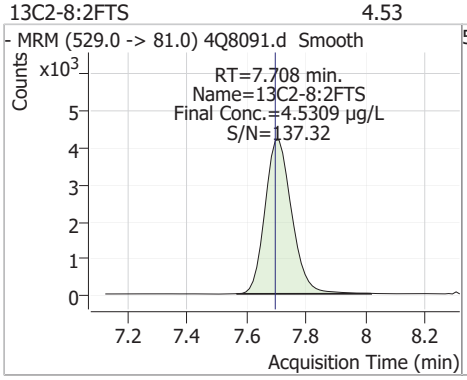
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.34	7.55	0.00	68328	449.0 -> 99.0	52.9	27.2	81.7

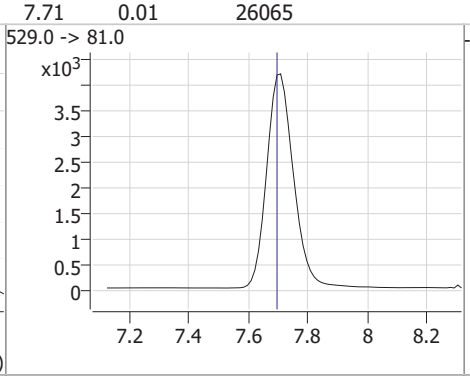


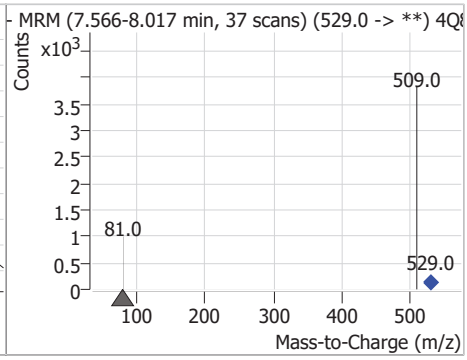




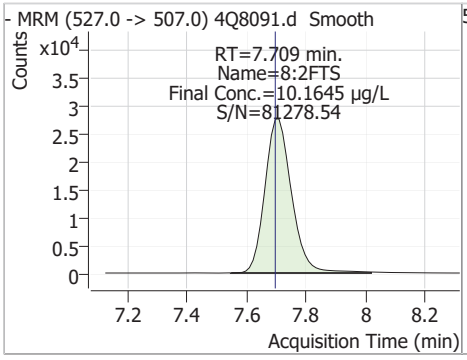
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.53	7.71	0.01	26065				

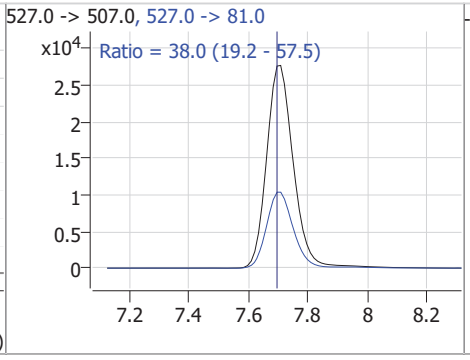


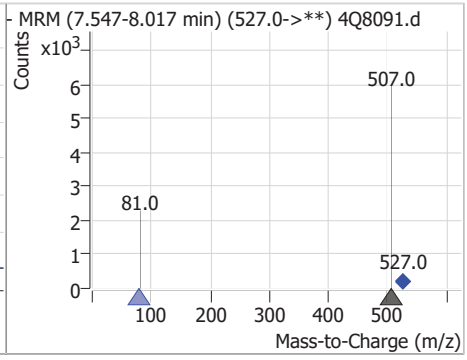




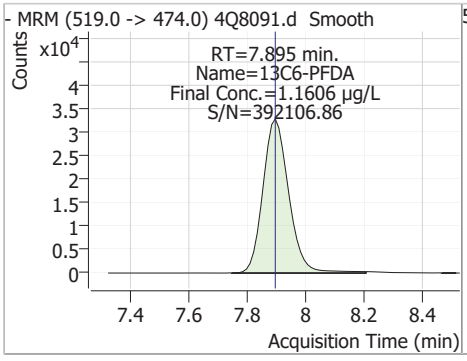
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.16	7.71	0.01	171850	527.0 -> 81.0	38.0	19.2	57.5

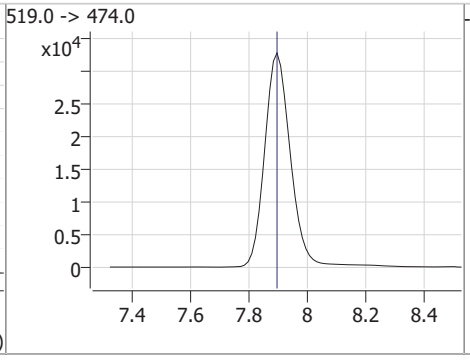


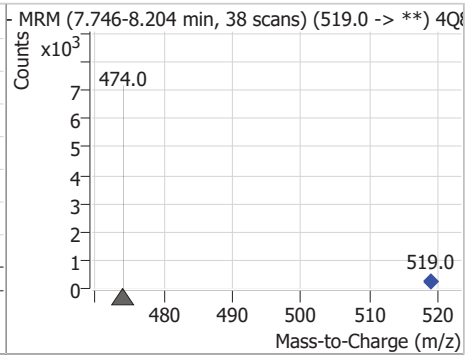




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.16	7.89	0.00	199712				

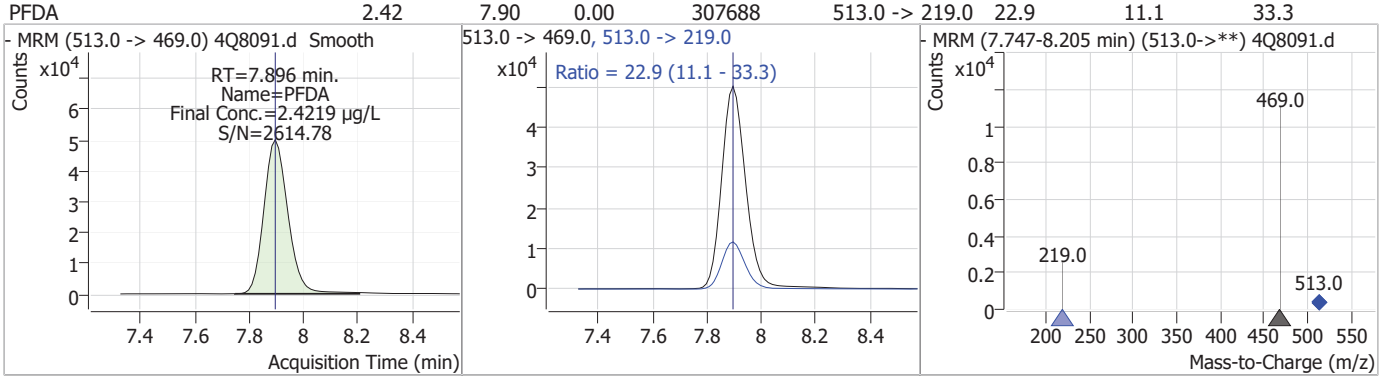




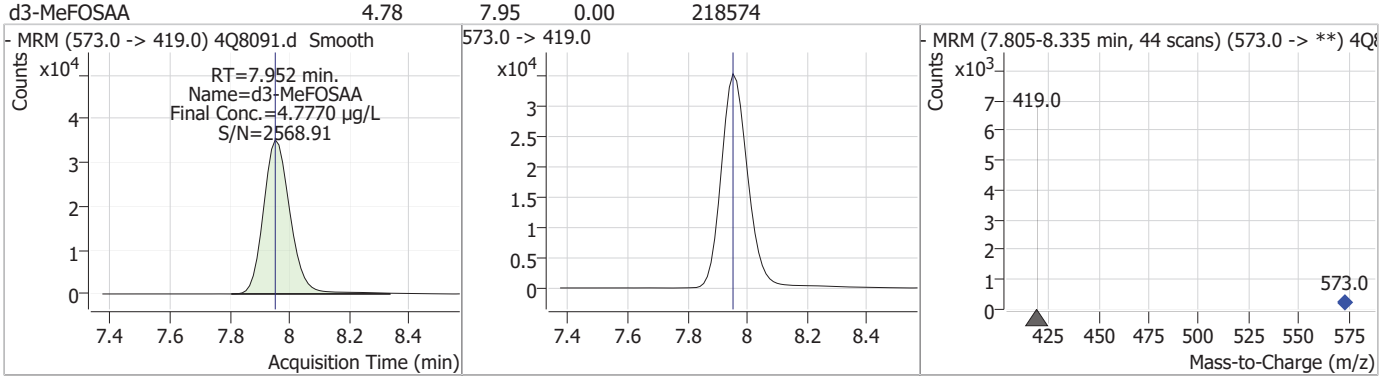


Perfluorinated Compounds by LC/MS/MS

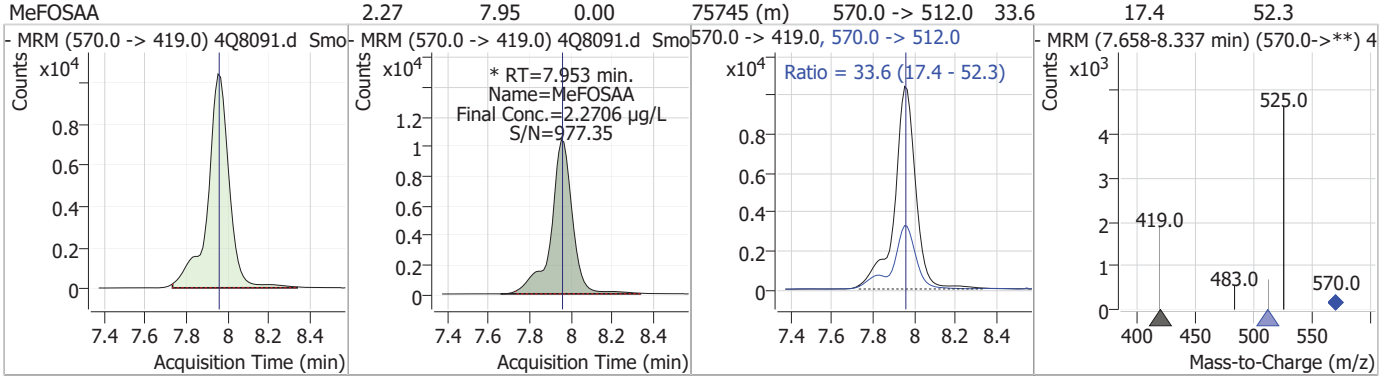
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.42	7.90	0.00	307688	513.0 -> 219.0	22.9	11.1	33.3



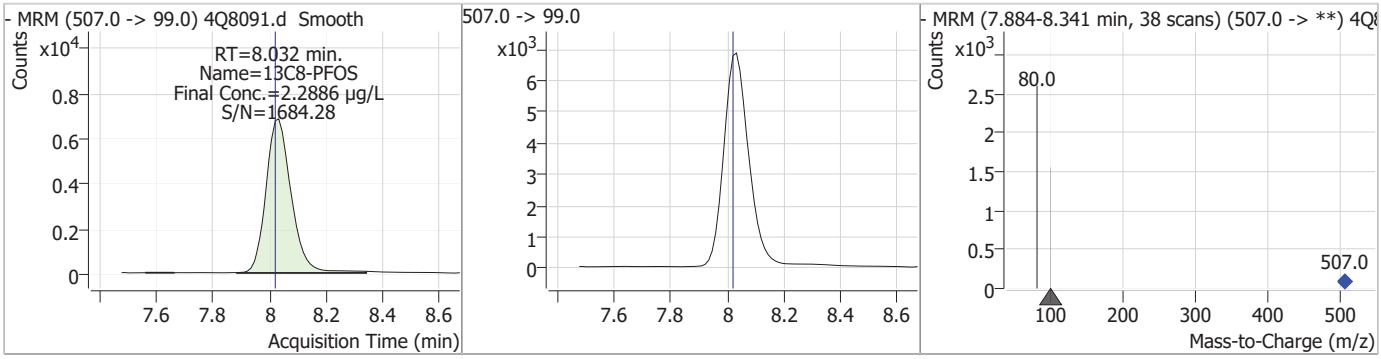
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.78	7.95	0.00	218574				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.27	7.95	0.00	75745 (m)	570.0 -> 512.0	33.6	17.4	52.3

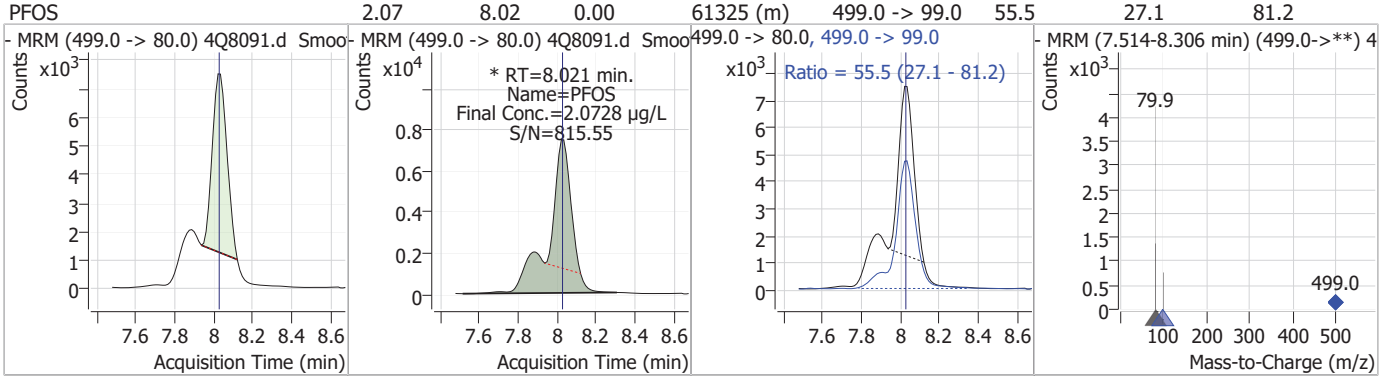


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.29	8.03	0.01	42456				

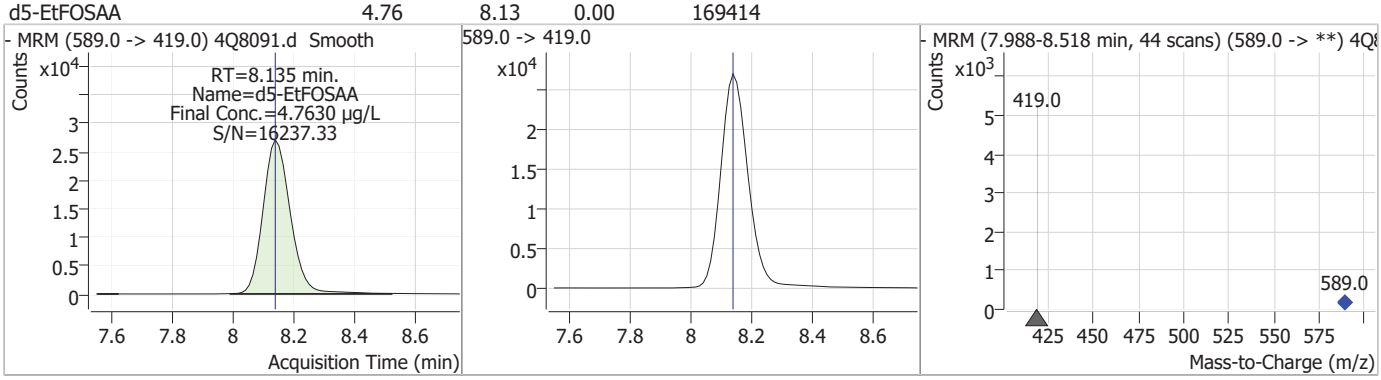


Perfluorinated Compounds by LC/MS/MS

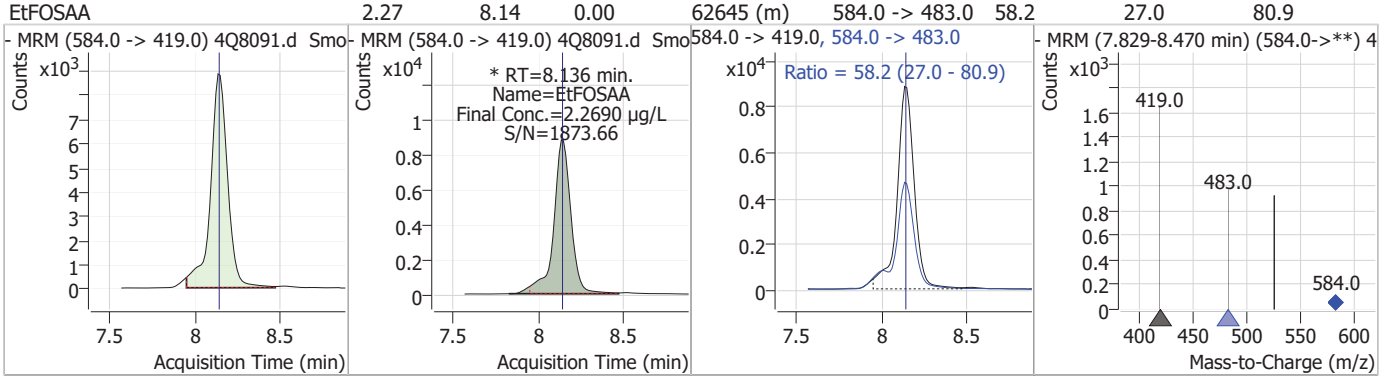
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.07	8.02	0.00	61325 (m)	499.0 -> 99.0	55.5	27.1	81.2



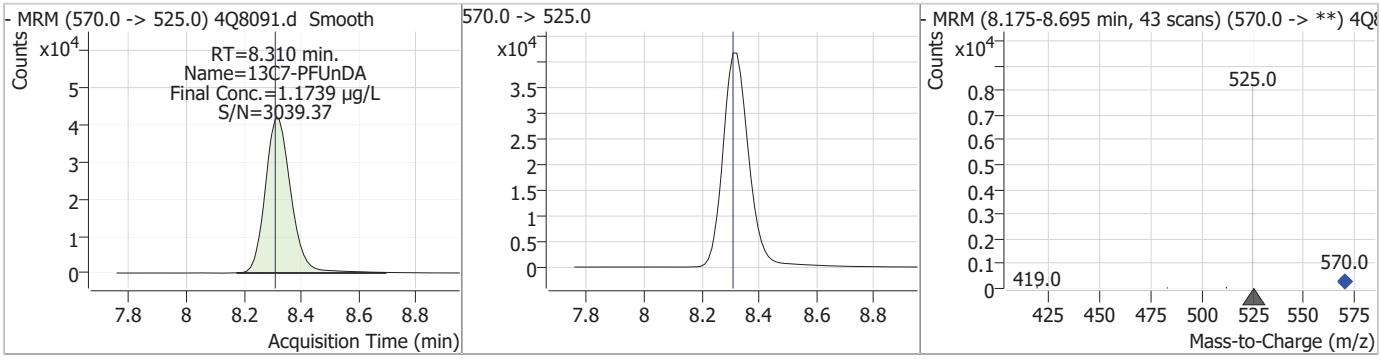
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.76	8.13	0.00	169414				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.27	8.14	0.00	62645 (m)	584.0 -> 483.0	58.2	27.0	80.9

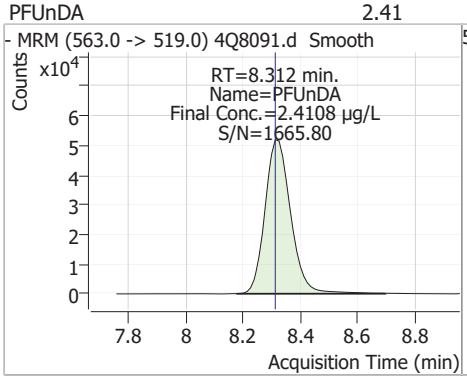


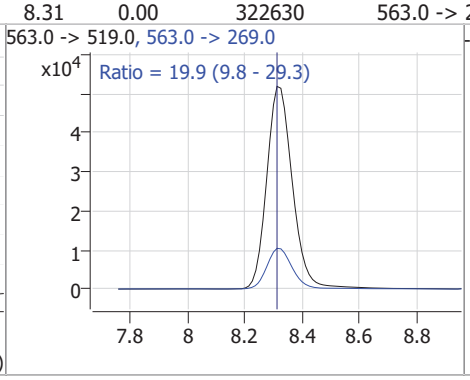
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.17	8.31	0.00	260576				

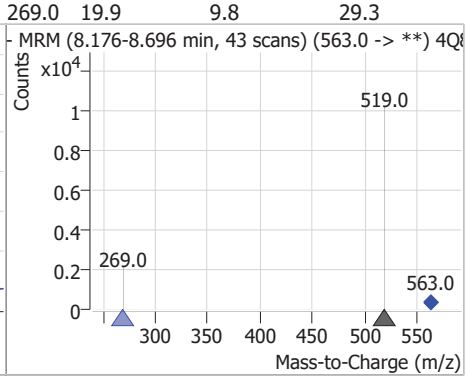


Perfluorinated Compounds by LC/MS/MS

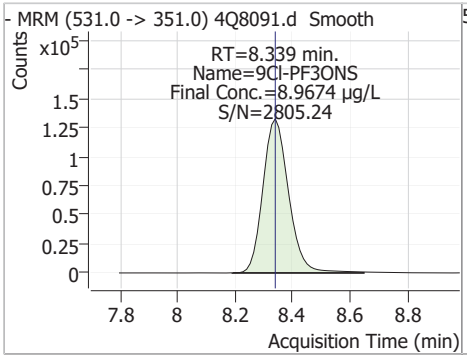
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.41	8.31	0.00	322630	563.0 -> 269.0	19.9	9.8	29.3

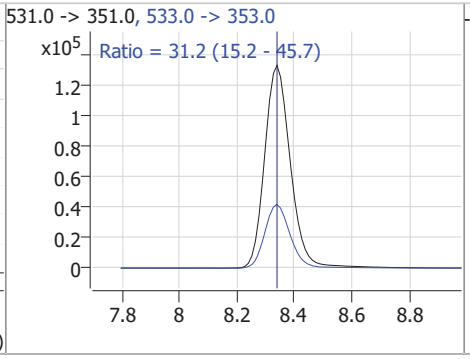


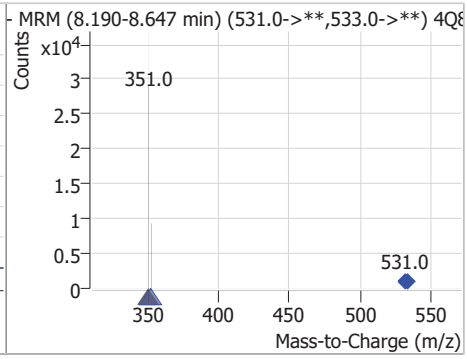




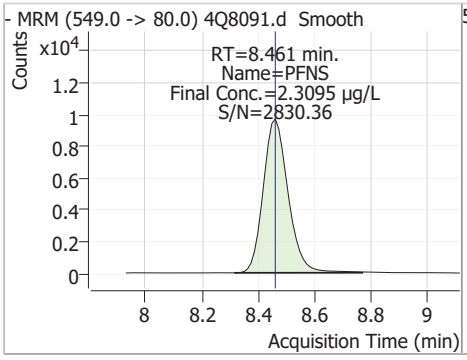
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	8.97	8.34	0.00	822040	533.0 -> 353.0	31.2	15.2	45.7

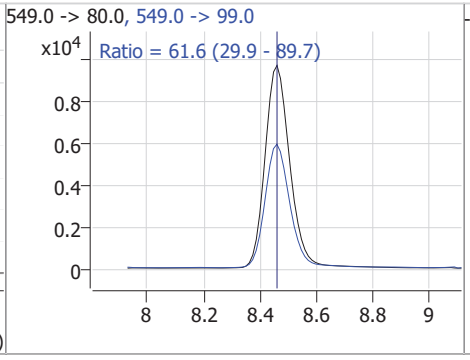


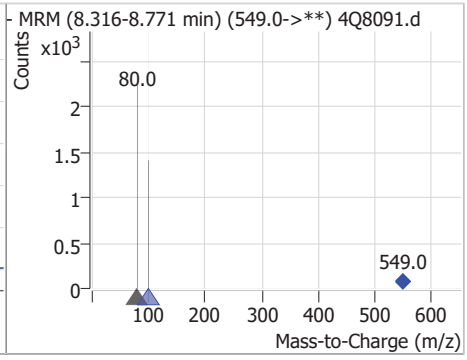




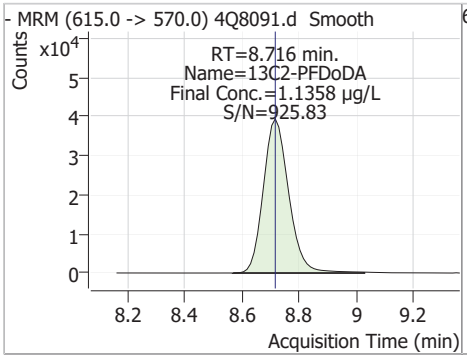
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.31	8.46	0.00	59322	549.0 -> 99.0	61.6	29.9	89.7

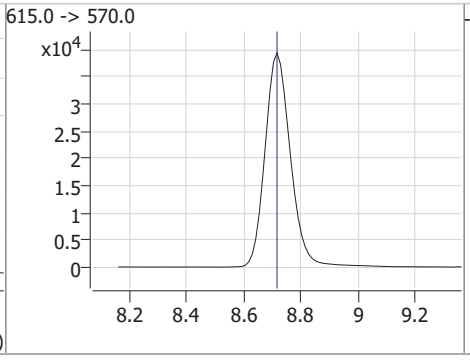


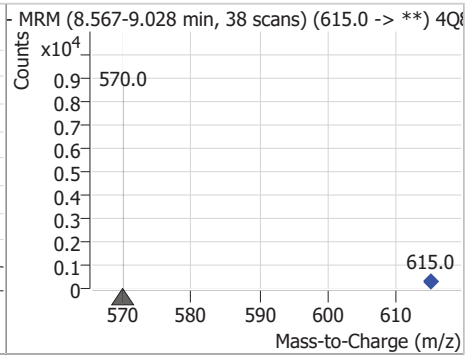




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.14	8.72	0.00	242928				





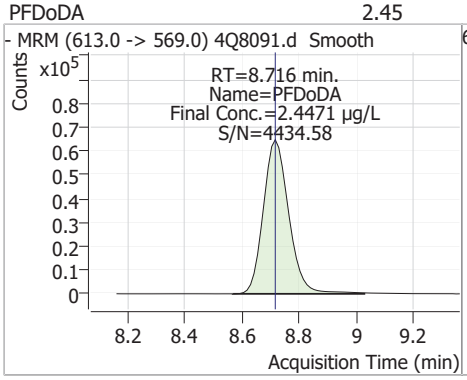


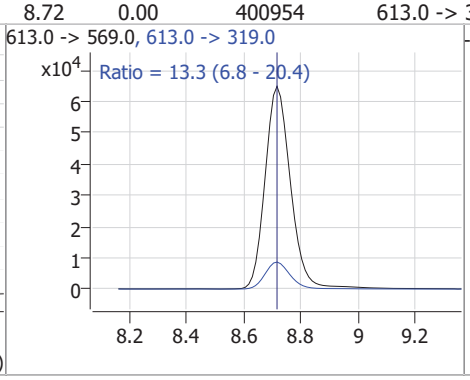
7.6.41

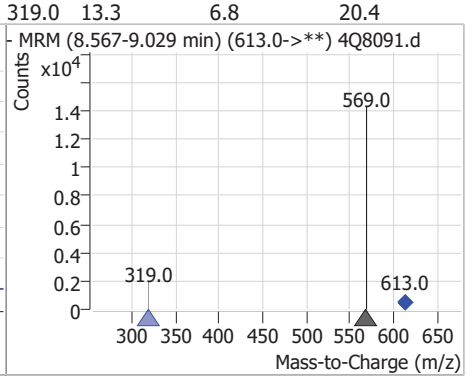
7

Perfluorinated Compounds by LC/MS/MS

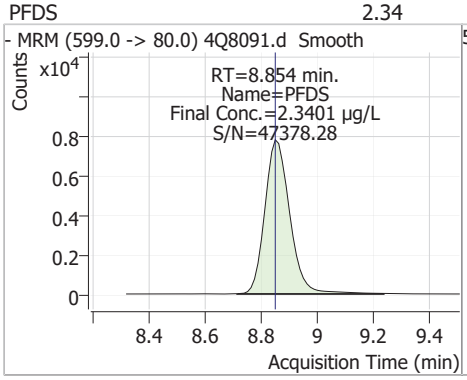
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.45	8.72	0.00	400954	613.0 -> 319.0	13.3	6.8	20.4

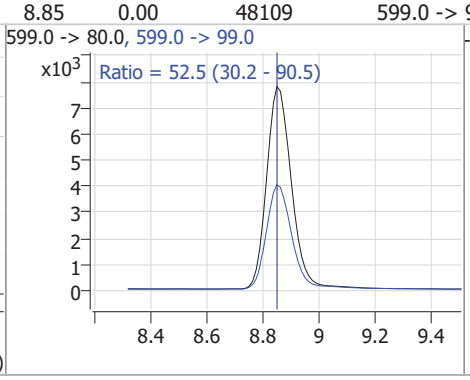


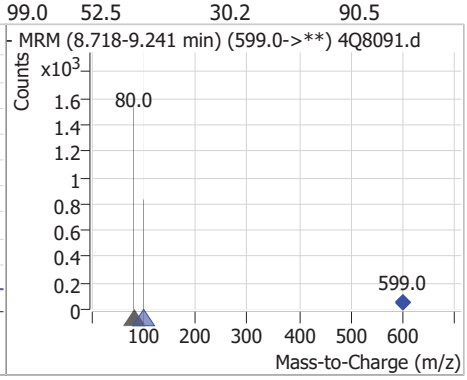




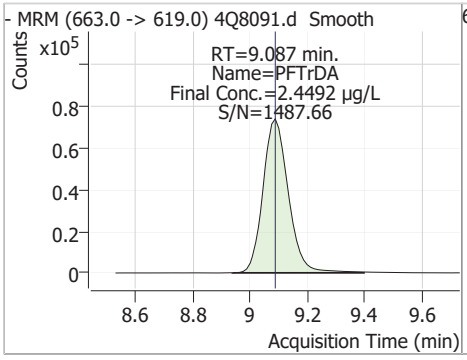
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.34	8.85	0.00	48109	599.0 -> 99.0	52.5	30.2	90.5

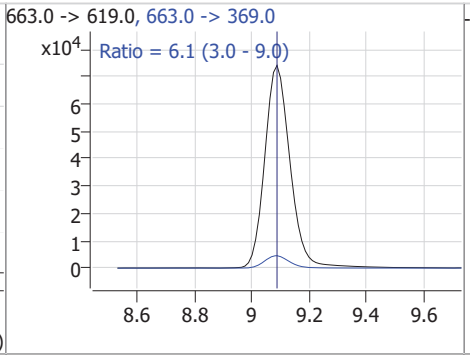


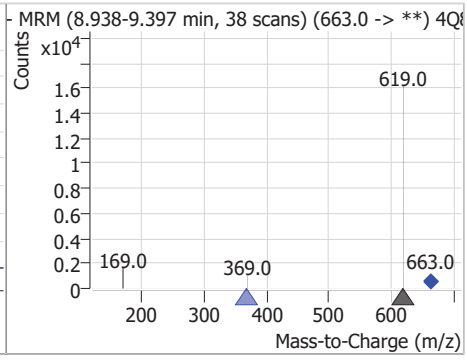




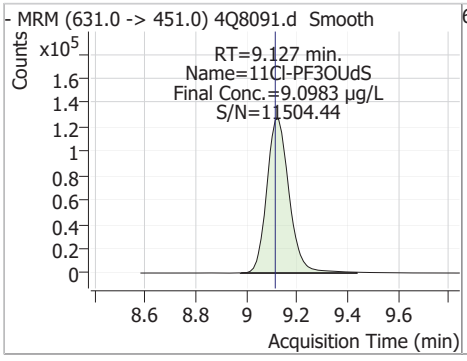
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.45	9.09	0.00	454218	663.0 -> 369.0	6.1	3.0	9.0

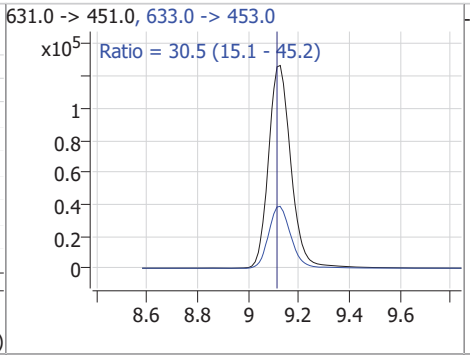


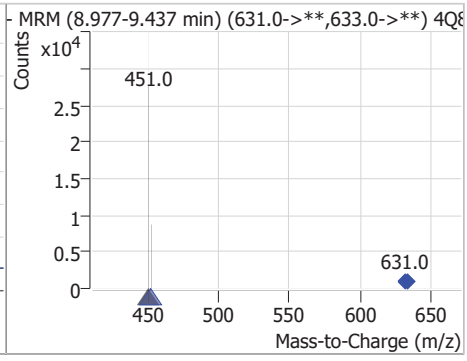




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.10	9.13	0.01	781556	633.0 -> 453.0	30.5	15.1	45.2

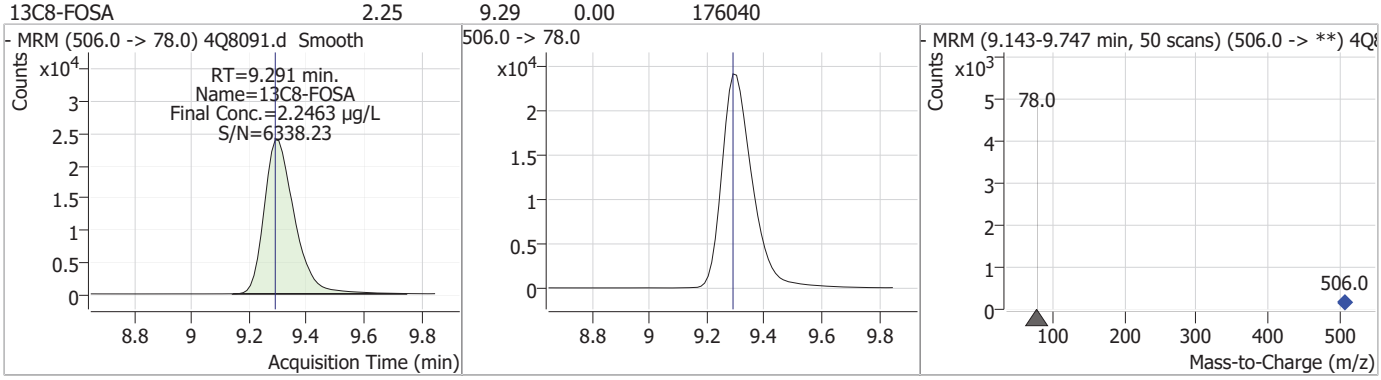




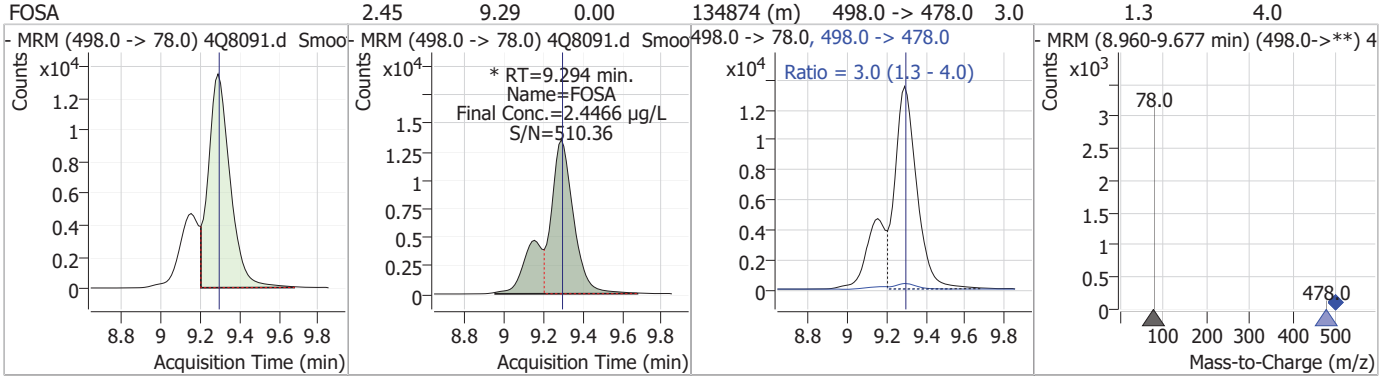


Perfluorinated Compounds by LC/MS/MS

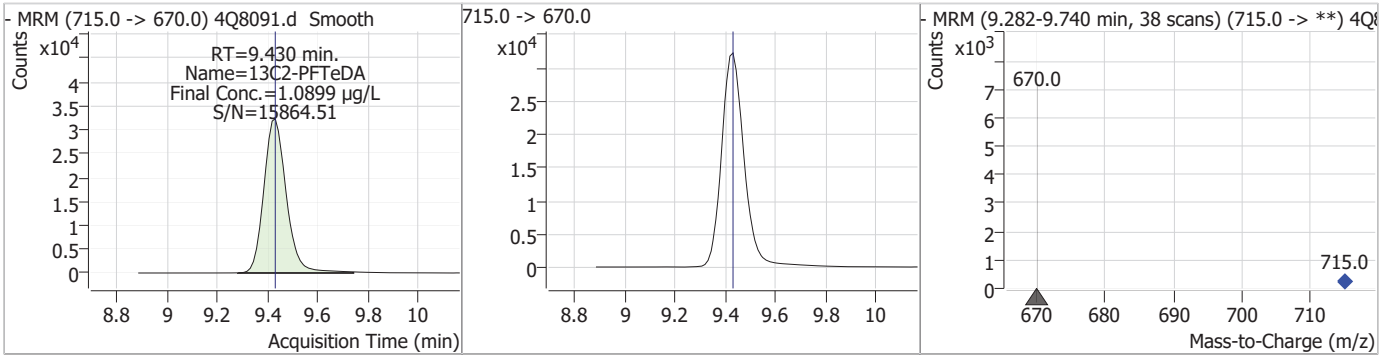
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.25	9.29	0.00	176040				



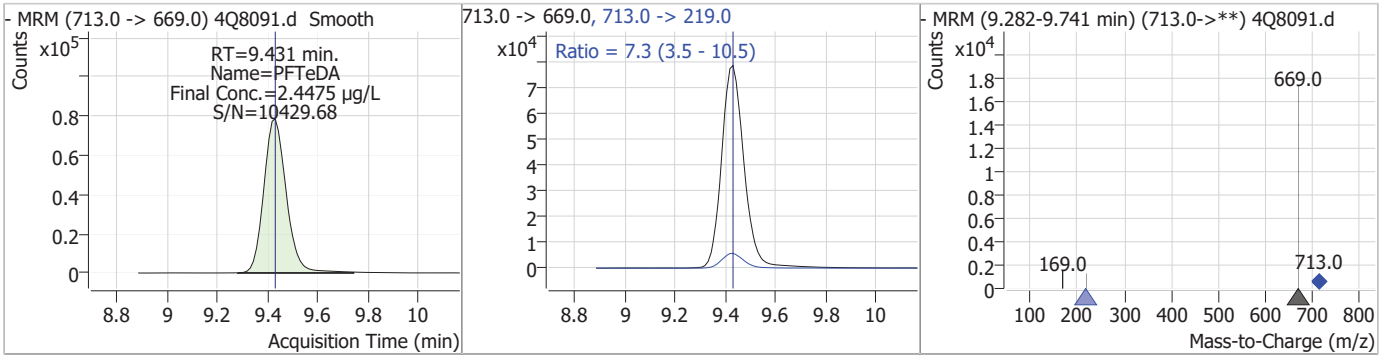
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.45	9.29	0.00	134874 (m)	498.0 -> 478.0	3.0	1.3	4.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.09	9.43	0.00	199473				

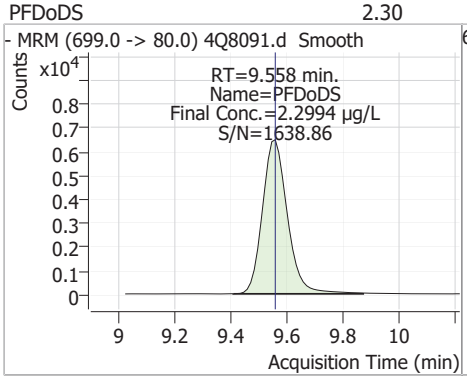


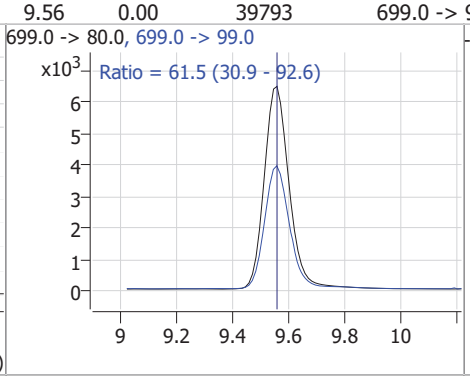
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.45	9.43	0.00	485945	713.0 -> 219.0	7.3	3.5	10.5

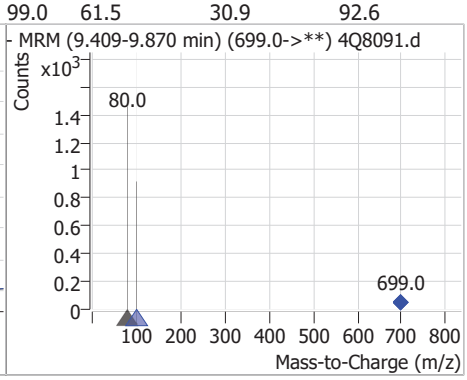


Perfluorinated Compounds by LC/MS/MS

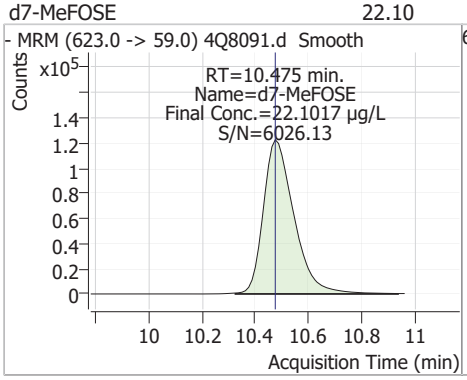
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.30	9.56	0.00	39793	699.0 -> 99.0	61.5	30.9	92.6

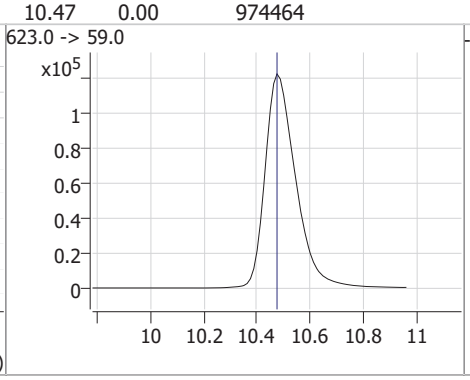


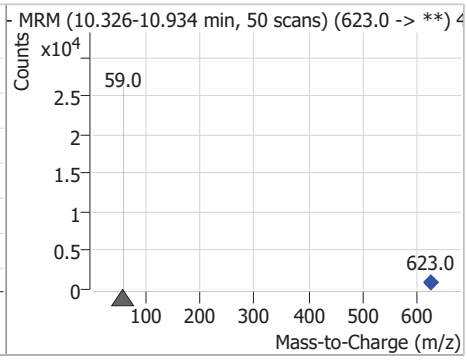




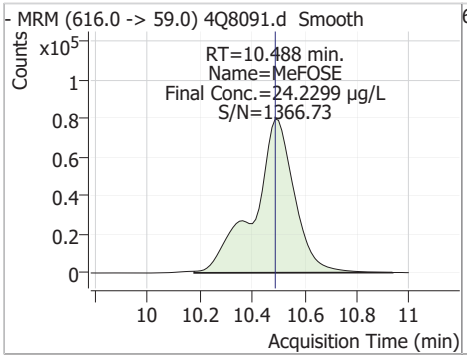
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.10	10.47	0.00	974464				

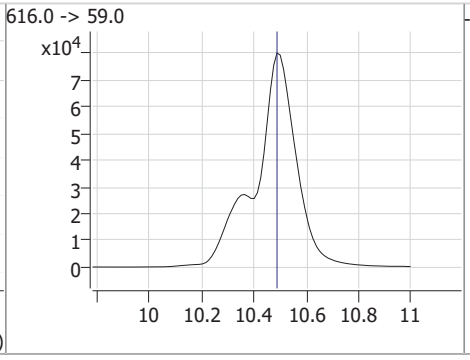


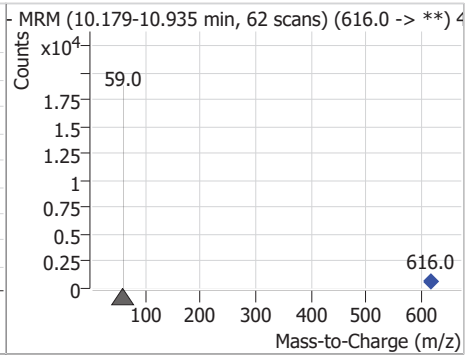




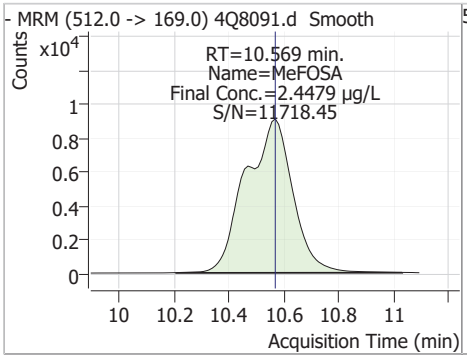
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	24.23	10.49	0.00	860150				

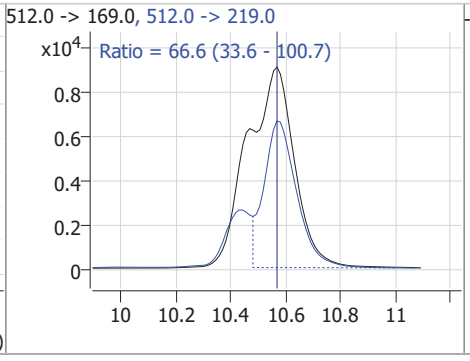


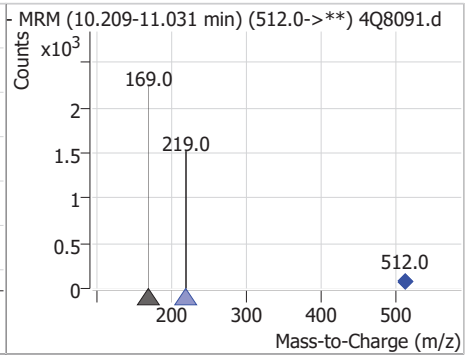




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.45	10.57	0.00	108814	512.0 -> 219.0	66.6	33.6	100.7

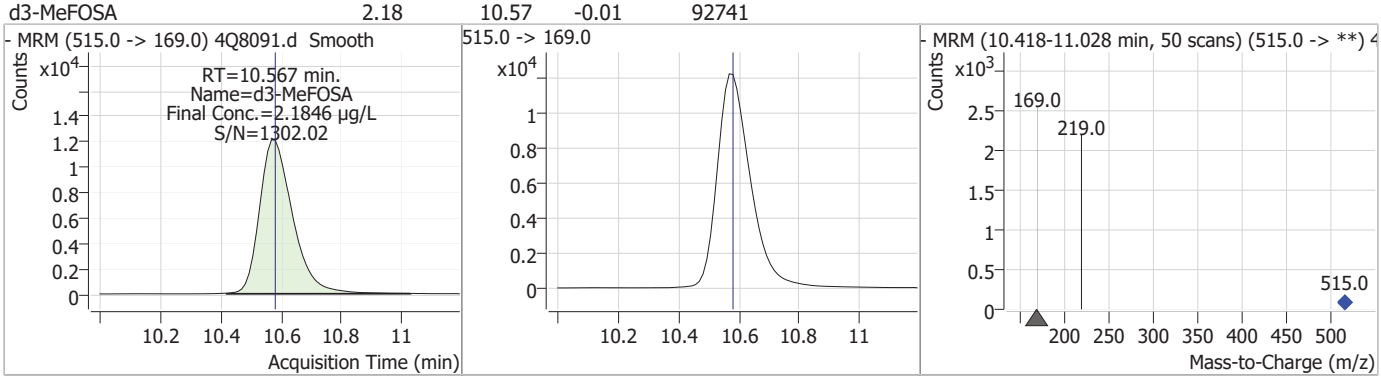




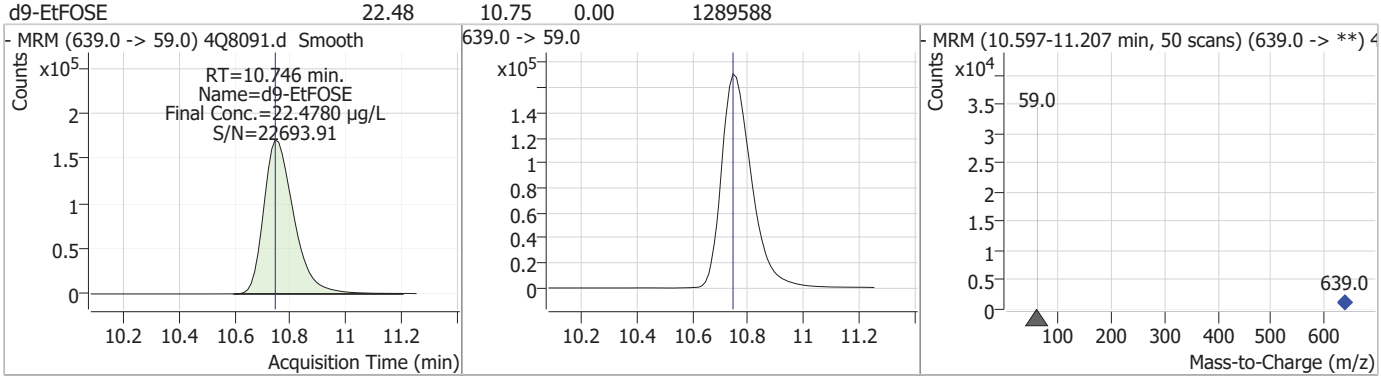


Perfluorinated Compounds by LC/MS/MS

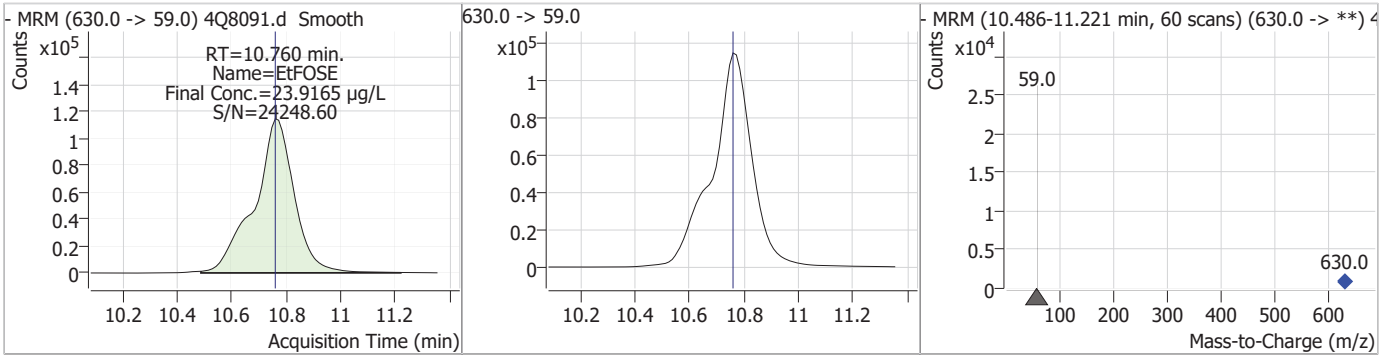
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.18	10.57	-0.01	92741				



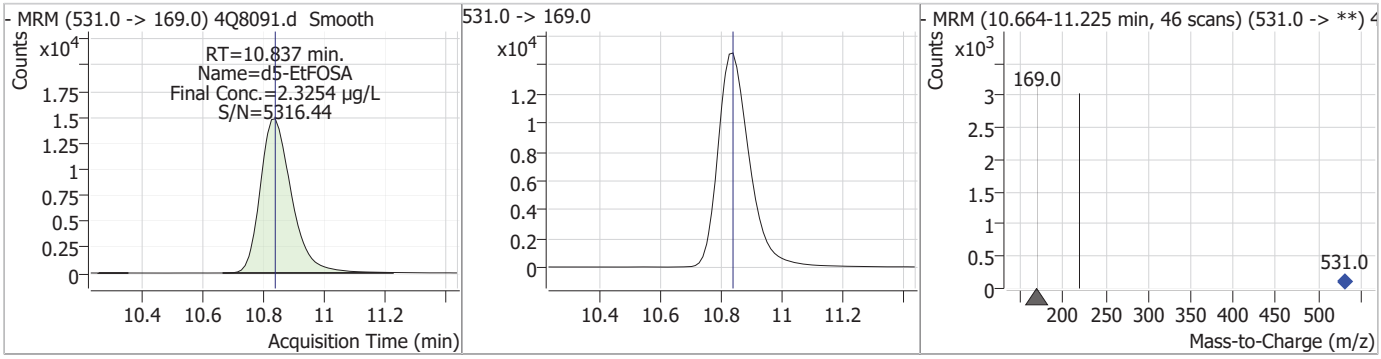
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.48	10.75	0.00	1289588				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	23.92	10.76	0.00	1166217				

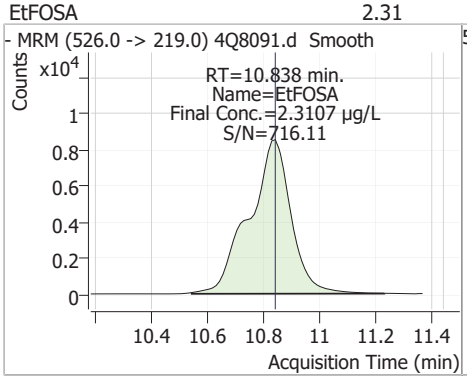


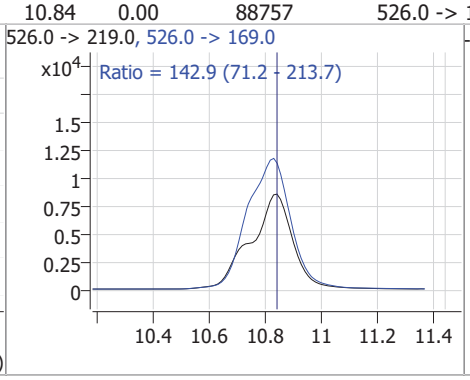
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.33	10.84	0.00	106186				

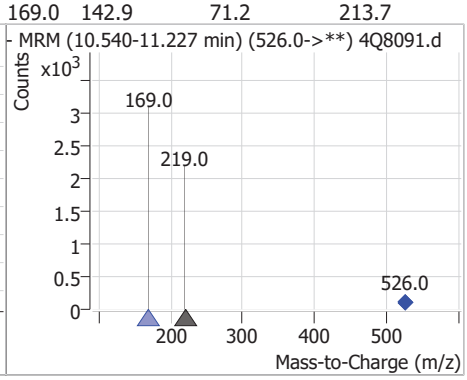


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.31	10.84	0.00	88757	526.0 -> 169.0	142.9	71.2	213.7







7.6.41

7

Manual Integration Approval Summary

Sample Number: T4Q137-CC137
Lab FileID: 4Q8091.D
Injection Time: 04/29/25 19:28
Method: EPA 1633
Analyst approved: 04/30/25 02:22 Rensel John Romano
Supervisor approved: 04/30/25 07:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.93	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.03	Split peak
Perfluorononanoic acid	375-95-1		7.44	Split peak
MeFOSAA	2355-31-9		7.95	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.02	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.29	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
04/30/25 07:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8092.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/29/2025 7:41:46 PM
Sample Name : CC137-1.0 LL
Vial : P1-A2
DA Method File : 042925_1633_T4Q137.quantmethod.xml
Batch Name : t4q137.batch.bin
Sample Information : OP63077,T4Q137,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.908	217.0 -> 172.0	788753	10.00 µg/L	0.000
M5-PFPeA	4.344	268.0 -> 223.0	405320	5.00 µg/L	0.000
M5-PFHxA	5.489	318.0 -> 273.0	278591	2.50 µg/L	0.000
M4-PFHpA	6.328	367.0 -> 322.0	299592	2.50 µg/L	0.012
M8-PFOA	6.934	421.0 -> 376.0	454939	2.50 µg/L	0.000
M9-PFNA	7.440	472.0 -> 427.0	189451	1.25 µg/L	0.000
M6-PFDA	7.895	519.0 -> 474.0	183078	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	244489	1.25 µg/L	0.000
M2-PFDoDA	8.716	615.0 -> 570.0	220213	1.25 µg/L	0.000
M2-PFTeDA	9.430	715.0 -> 670.0	185589	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	161968	2.50 µg/L	0.000
M3-PFBS	5.393	302.0 -> 99.0	23955	2.50 µg/L	0.012
		302.0 -> 80.0	61667		
M3-PFHxS	7.024	402.0 -> 99.0	36690	2.50 µg/L	0.000
M8-PFOS	8.032	507.0 -> 99.0	38839	2.50 µg/L	0.012
M2-4:2FTS	5.190	329.0 -> 81.0	11641	5.00 µg/L	0.000
M2-6:2FTS	6.721	429.0 -> 81.0	21552	5.00 µg/L	0.000
M2-8:2FTS	7.708	529.0 -> 81.0	26129	5.00 µg/L	0.012
M3-MeFOSAA	7.952	573.0 -> 419.0	201031	5.00 µg/L	0.000
M3-HFPO-DA	5.816	287.0 -> 169.0	413184	10.00 µg/L	0.000
M5-EtFOSAA	8.135	589.0 -> 419.0	156130	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	902763	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1182070	25.00 µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	97130	2.50 µg/L	-0.012
M3-MeFOSA	10.567	515.0 -> 169.0	87074	2.50 µg/L	-0.012
13C4-PFOS	8.032	503.0 -> 80.0	65708	2.50 µg/L	0.012
13C3-PFBA	2.911	216.0 -> 172.0	325068	5.00 µg/L	0.000
18O2-PFHxS	7.023	403.0 -> 84.0	40160	2.50 µg/L	0.000
13C4-PFOA	6.935	417.0 -> 372.0	432970	2.50 µg/L	0.000
13C2-PFDA	7.895	515.0 -> 470.0	153617	1.25 µg/L	0.000
13C5-PFNA	7.440	468.0 -> 423.0	169709	1.25 µg/L	0.000
13C2-PFHxA	5.489	315.0 -> 270.0	245322	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.190	329.0 -> 81.0	11641	5.66 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 113.2%	
13C2-6:2FTS	6.721	429.0 -> 81.0	21552	5.06 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.2%	
13C2-8:2FTS	7.708	529.0 -> 81.0	26129	5.00 µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.0%	
13C2-PFDoDA	8.716	615.0 -> 570.0	220213	1.16 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.9%	
13C2-PFTeDA	9.430	715.0 -> 670.0	185589	1.14 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.5%	
13C3-PFBS	5.393	302.0 -> 99.0	23955	2.30 µg/L	0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.8%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.024	402.0 -> 99.0	36690	2.40	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.2%			
13C4-PFBA	2.908	217.0 -> 172.0	788753	9.82	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.2%			
13C4-PFHpA	6.328	367.0 -> 322.0	299592	2.44	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.6%			
13C5-PFHxA	5.489	318.0 -> 273.0	278591	2.48	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.3%			
13C5-PFPeA	4.344	268.0 -> 223.0	405320	4.91	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.2%			
13C6-PFDA	7.895	519.0 -> 474.0	183078	1.20	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.0%			
13C7-PFUnDA	8.310	570.0 -> 525.0	244489	1.24	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.4%			
13C8-FOSA	9.291	506.0 -> 78.0	161968	2.30	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.0%			
13C8-PFOA	6.934	421.0 -> 376.0	454939	2.42	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.8%			
13C8-PFOS	8.032	507.0 -> 99.0	38839	2.33	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.2%			
13C9-PFNA	7.440	472.0 -> 427.0	189451	1.24	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.1%			
d3-MeFOSAA	7.952	573.0 -> 419.0	201031	4.89	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.8%			
13C3-HFPO-DA	5.816	287.0 -> 169.0	413184	9.77	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 97.7%			
d3-MeFOSA	10.567	515.0 -> 169.0	87074	2.28	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.3%			
d5-EtFOSAA	8.135	589.0 -> 419.0	156130	4.89	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.7%			
d7-MeFOSE	10.475	623.0 -> 59.0	902763	22.79	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 91.2%			
d9-EtFOSE	10.746	639.0 -> 59.0	1182070	22.94	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 91.7%			
d5-EtFOSA	10.825	531.0 -> 169.0	97130	2.37	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.7%			
Target Compounds							**QValue**
4:2FTS	5.191	327.0 -> 307.0	10218	0.57	µg/L		100
		327.0 -> 81.0	4673				
6:2FTS	6.721	427.0 -> 407.0	11428	0.63	µg/L		96
		427.0 -> 81.0	5127				
8:2FTS	7.709	527.0 -> 507.0	10177	0.60	µg/L		96
		527.0 -> 81.0	4129				
EtFOSAA	8.136	584.0 -> 419.0	4078	0.16	µg/L	m	94
		584.0 -> 483.0	2383				
FOSA	9.294	498.0 -> 78.0	8838	0.17	µg/L	m	98
		498.0 -> 478.0	295				
MeFOSAA	7.953	570.0 -> 419.0	5258	0.17	µg/L	m	96
		570.0 -> 512.0	1709				
PFBA	2.914	213.0 -> 169.0	15145	0.70	µg/L		100
PFBS	5.394	299.0 -> 80.0	3424	0.15	µg/L		92
		299.0 -> 99.0	1285				
PFDA	7.896	513.0 -> 469.0	18296	0.16	µg/L		93
		513.0 -> 219.0	4694				
PFDoDA	8.716	613.0 -> 569.0	25681	0.17	µg/L		96
		613.0 -> 319.0	3912				

Perfluorinated Compounds by LC/MS/MS

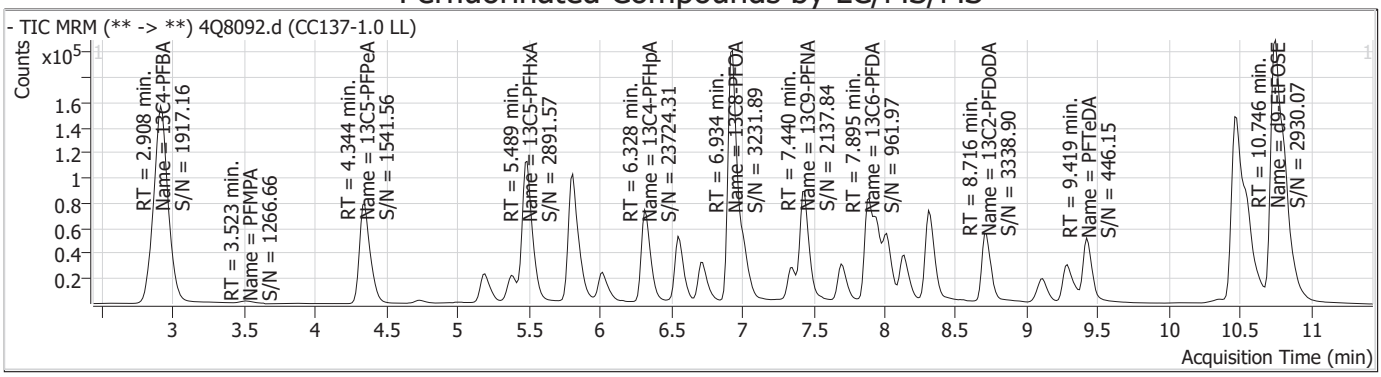
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.854	599.0 -> 80.0	2990	0.16	µg/L	m	82
		599.0 -> 99.0	1401				
PFHpA	6.329	363.0 -> 319.0	26265	0.17	µg/L		97
		363.0 -> 169.0	5538				
PFHpS	7.553	449.0 -> 80.0	4365	0.16	µg/L	m	86
		449.0 -> 99.0	1944				
PFHxA	5.492	313.0 -> 269.0	16488	0.16	µg/L	m	99
		313.0 -> 119.0	546				
PFHxS	7.025	399.0 -> 80.0	4407	0.16	µg/L	m	90
		399.0 -> 99.0	2587				
PFNA	7.441	463.0 -> 419.0	15970	0.16	µg/L	m	96
		463.0 -> 219.0	6039				
PFNS	8.461	549.0 -> 80.0	4057	0.17	µg/L		95
		549.0 -> 99.0	2258				
PFOA	6.935	413.0 -> 369.0	22848	0.18	µg/L	m	97
		413.0 -> 169.0	6938				
PFOS	8.033	499.0 -> 80.0	4963	0.18	µg/L	m	93
		499.0 -> 99.0	2429				
PFPeA	4.346	263.0 -> 219.0	17620	0.33	µg/L		100
PFPeS	6.355	349.0 -> 80.0	3533	0.14	µg/L		88
		349.0 -> 99.0	2081				
PFTeDA	9.419	713.0 -> 669.0	29733	0.16	µg/L		98
		713.0 -> 219.0	2332				
PFTrDA	9.087	663.0 -> 619.0	28359	0.17	µg/L		98
		663.0 -> 369.0	1888				
PFUnDA	8.312	563.0 -> 519.0	19894	0.16	µg/L		95
		563.0 -> 269.0	4374				
11Cl-PF3OUdS	9.114	631.0 -> 451.0	48942	0.61	µg/L		98
		633.0 -> 453.0	14272				
9Cl-PF3ONS	8.339	531.0 -> 351.0	50351	0.59	µg/L		99
		533.0 -> 353.0	15082				
ADONA	6.564	377.0 -> 251.0	171058	0.61	µg/L		99
		377.0 -> 85.0	55373				
HFPO-DA	5.817	285.0 -> 169.0	23380	0.62	µg/L		96
		285.0 -> 185.0	2826				
3:3FTCA	3.794	241.0 -> 177.0	2447	0.83	µg/L		97
		241.0 -> 117.0	237				
5:3FTCA	6.019	341.0 -> 237.0	65009	4.30	µg/L		94
		341.0 -> 217.0	43403				
7:3FTCA	7.355	441.0 -> 337.0	90319	4.10	µg/L		98
		441.0 -> 317.0	42005				
EtFOSA	10.838	526.0 -> 219.0	5526	0.16	µg/L		89
		526.0 -> 169.0	8607				
EtFOSE	10.760	630.0 -> 59.0	73797	1.65	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	7916	0.19	µg/L		92
		512.0 -> 219.0	4838				
MeFOSE	10.488	616.0 -> 59.0	53255	1.62	µg/L	m	100
PFDoDS	9.558	699.0 -> 80.0	2425	0.15	µg/L		82
		699.0 -> 99.0	1831				
NFDHA	5.370	295.0 -> 201.0	3987	0.30	µg/L		94
		201.0 -> 85.0	17379				
		295.0 -> 85.0	1316				
PFMBA	4.735	279.0 -> 85.0	11862	0.32	µg/L		100
PFMPA	3.523	229.0 -> 85.0	10404	0.33	µg/L		100
PFEESA	5.872	315.0 -> 135.0	27349	0.28	µg/L		99
		315.0 -> 69.0	2236				

Perfluorinated Compounds by LC/MS/MS

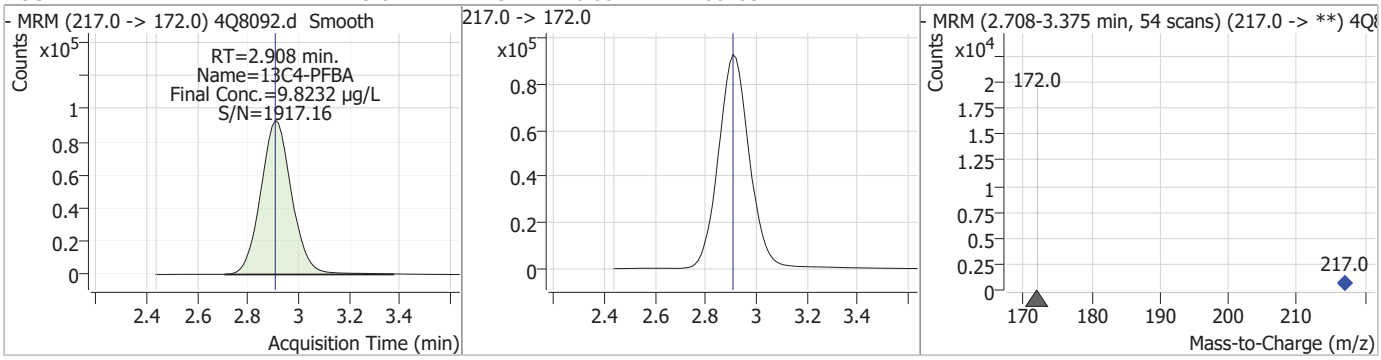
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

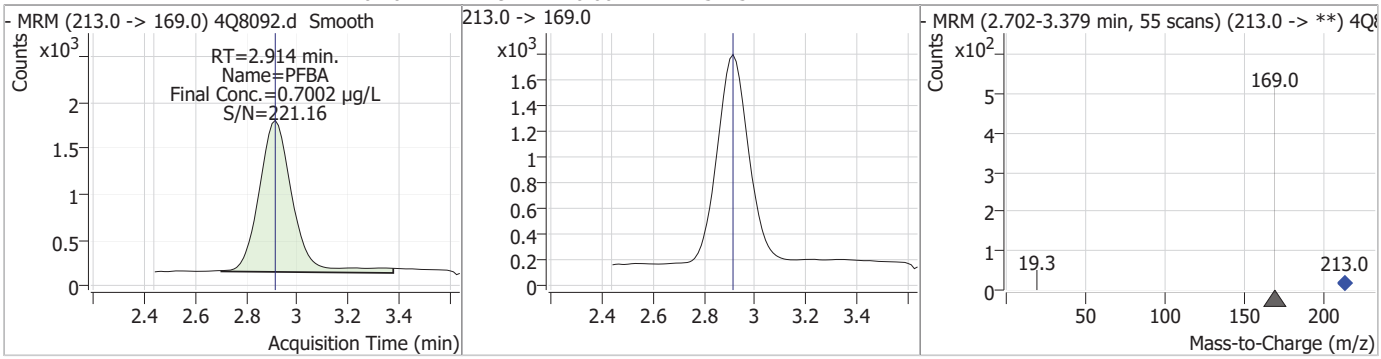
Perfluorinated Compounds by LC/MS/MS



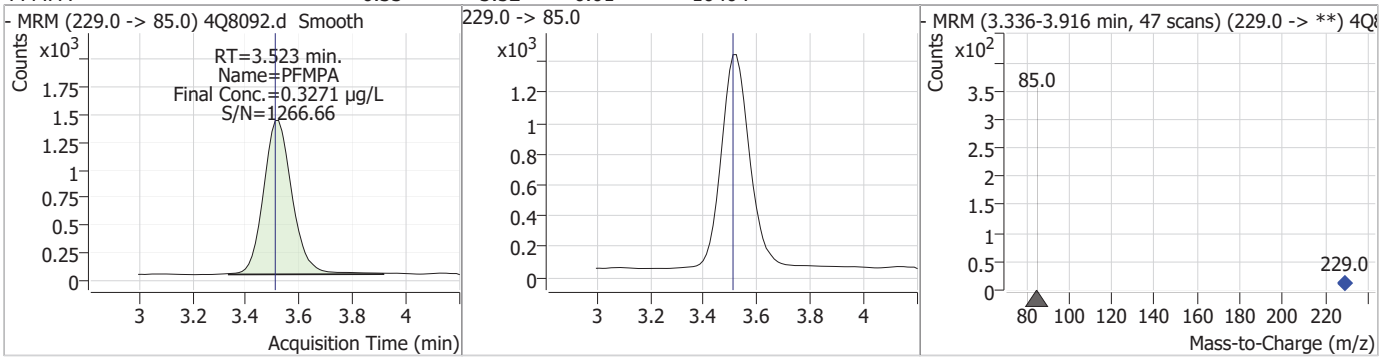
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.82	2.91	0.00	788753				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.70	2.91	0.00	15145				

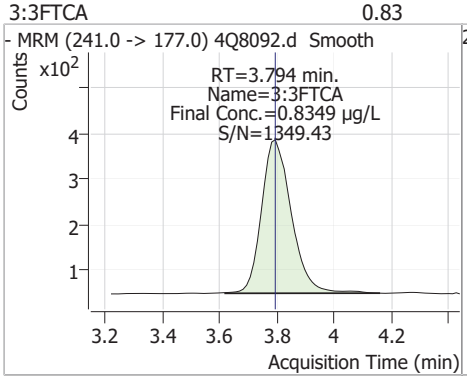


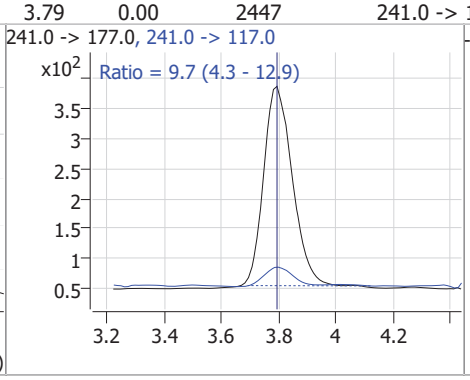
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.33	3.52	0.01	10404				

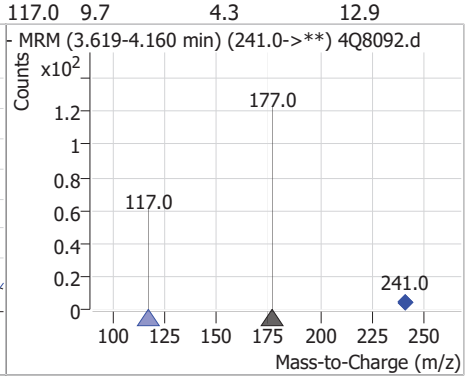


Perfluorinated Compounds by LC/MS/MS

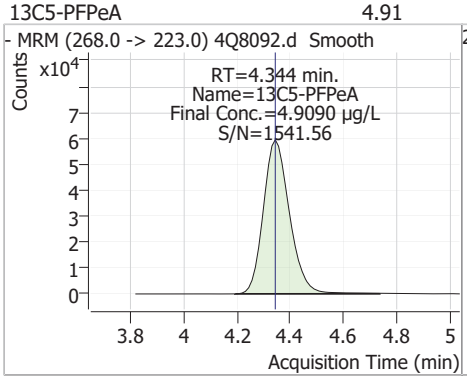
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	0.83	3.79	0.00	2447	241.0 -> 117.0	9.7	4.3	12.9

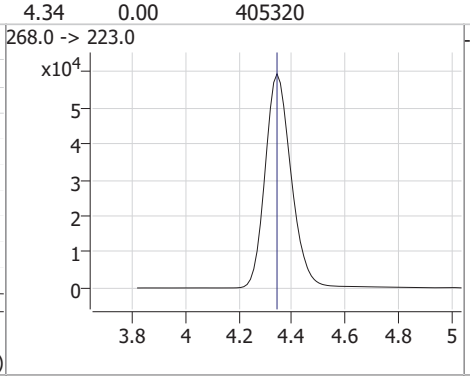


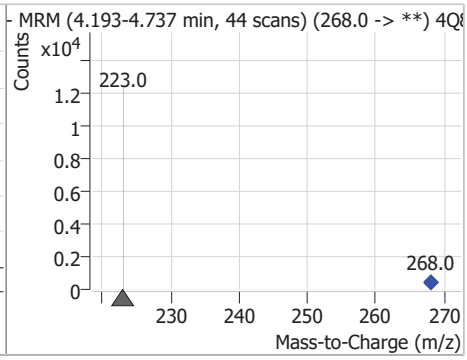




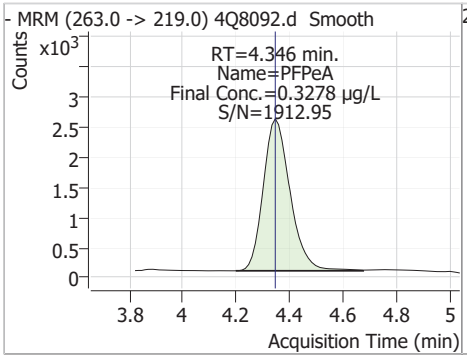
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.91	4.34	0.00	405320				

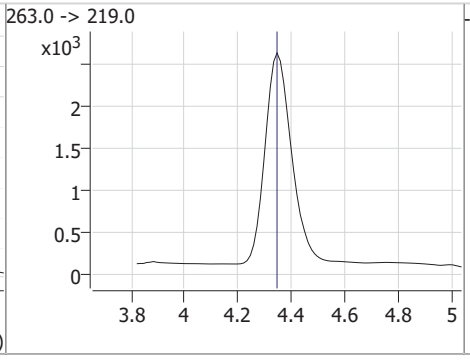


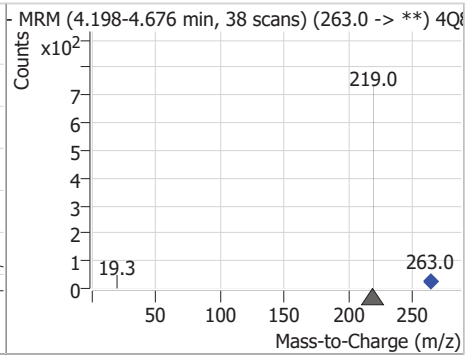




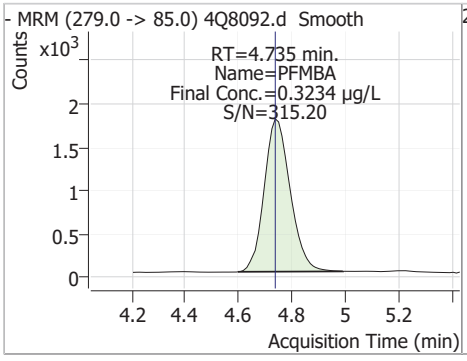
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.33	4.35	0.00	17620				

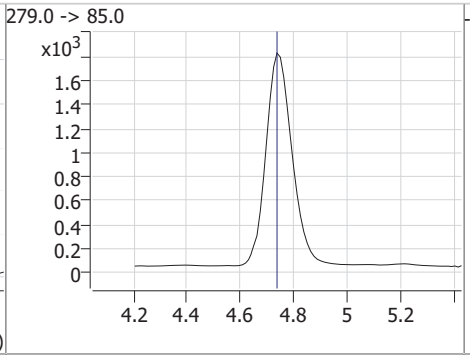


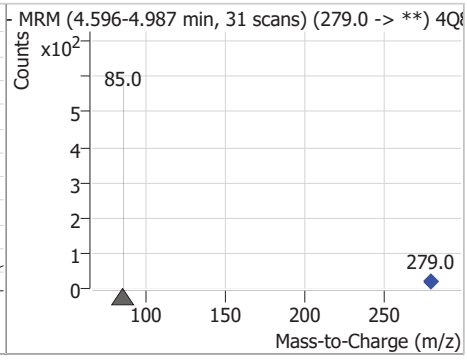




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.32	4.73	0.00	11862				







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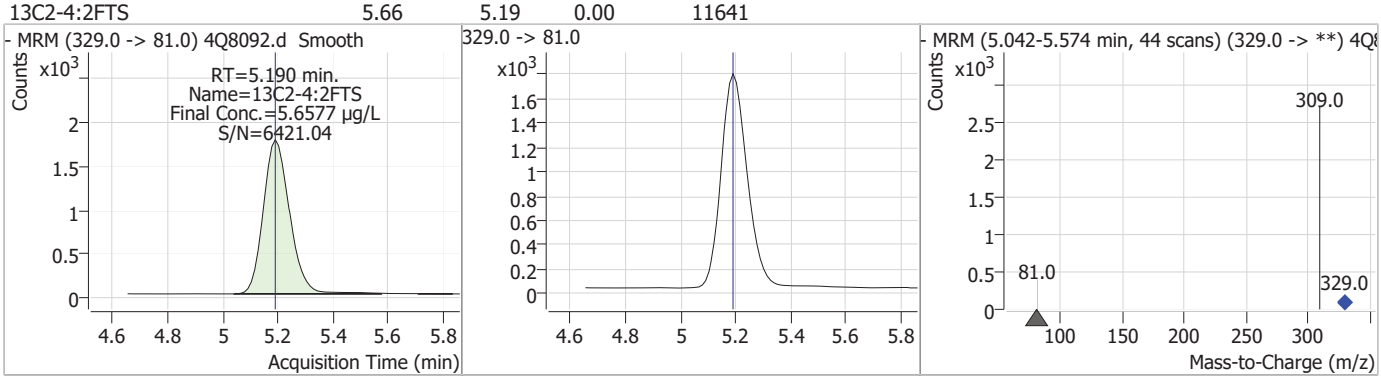
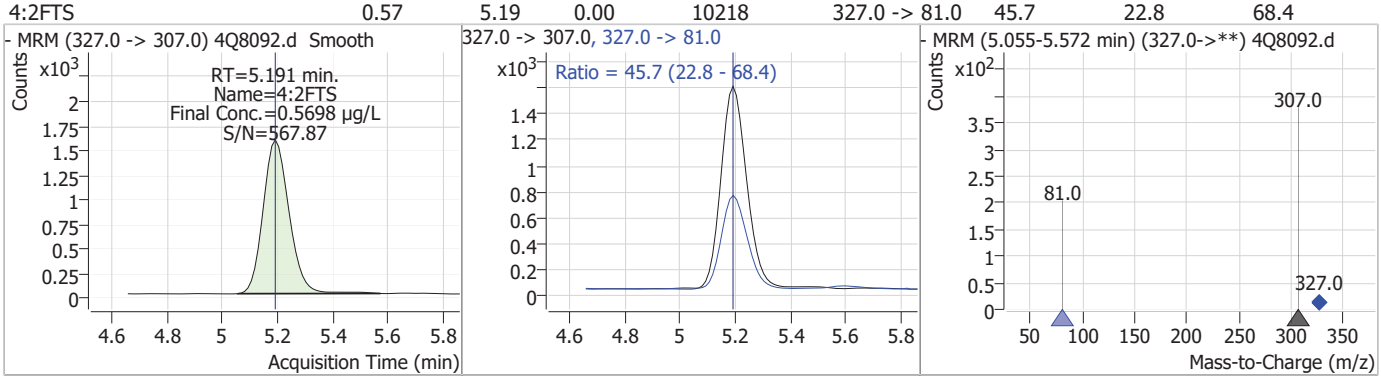
Perfluorinated Compounds by LC/MS/MS

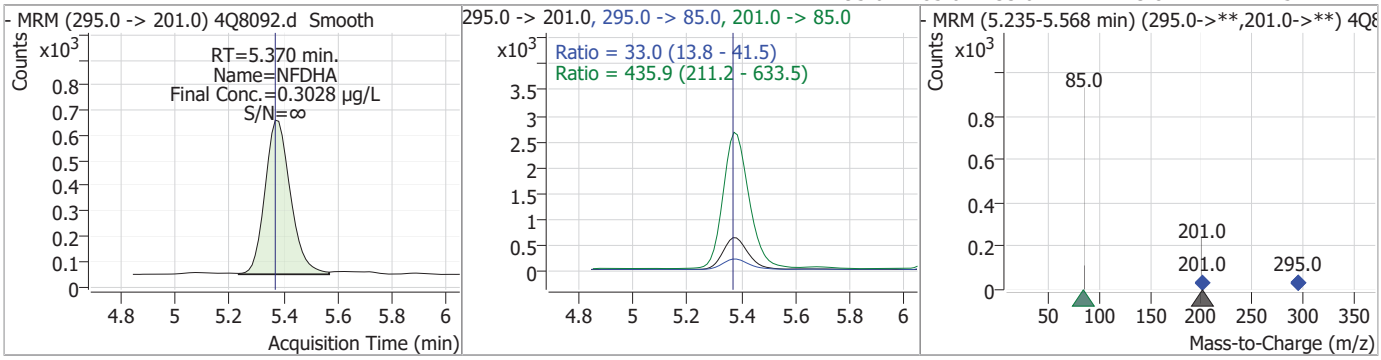
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.66	5.19	0.00	11641				



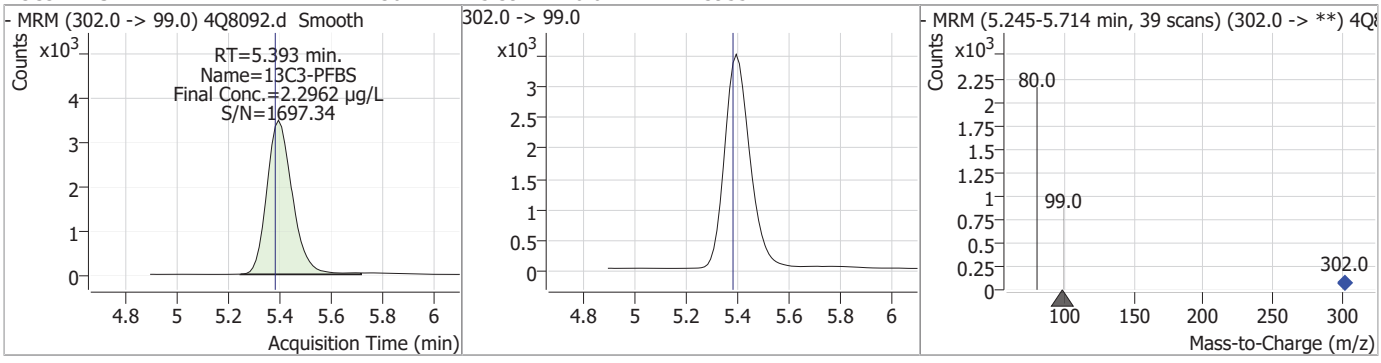
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	0.57	5.19	0.00	10218	327.0 -> 81.0	45.7	22.8	68.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.30	5.37	0.00	3987	201.0 -> 85.0	435.9	211.2	633.5
					295.0 -> 85.0	33.0	13.8	41.5

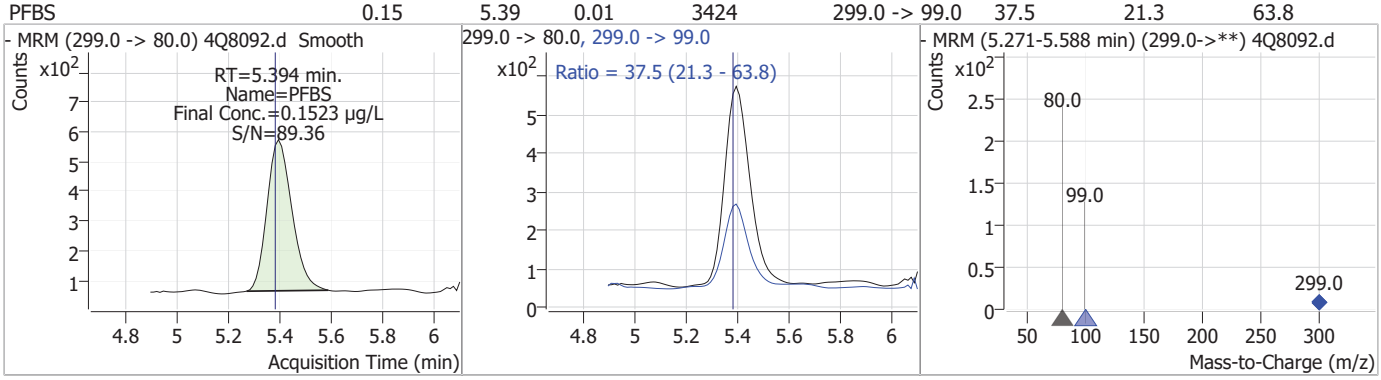


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.30	5.39	0.01	23955				

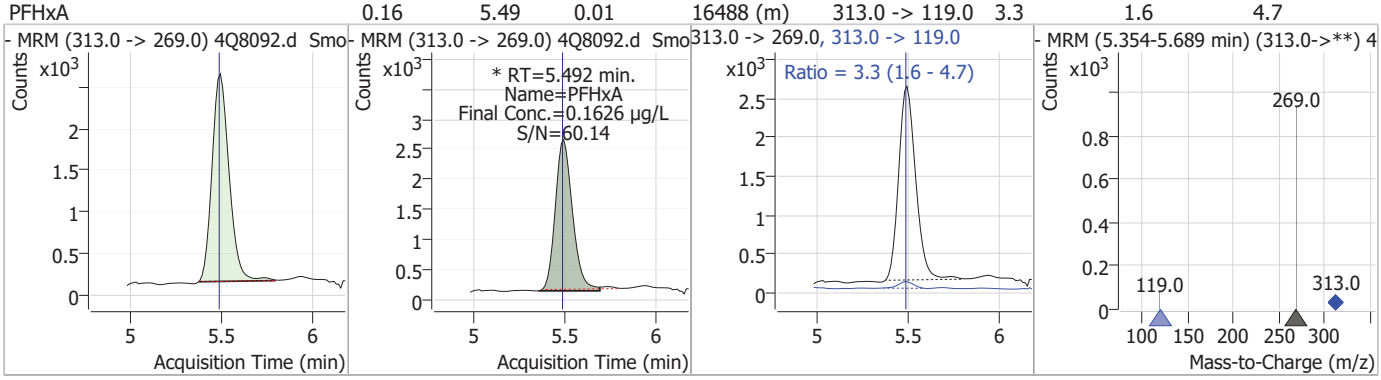


Perfluorinated Compounds by LC/MS/MS

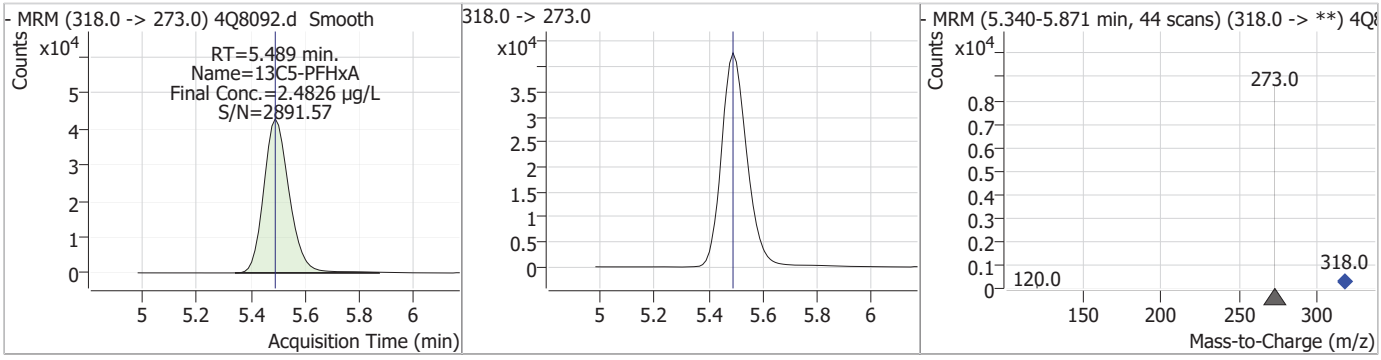
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.15	5.39	0.01	3424	299.0 -> 99.0	37.5	21.3	63.8



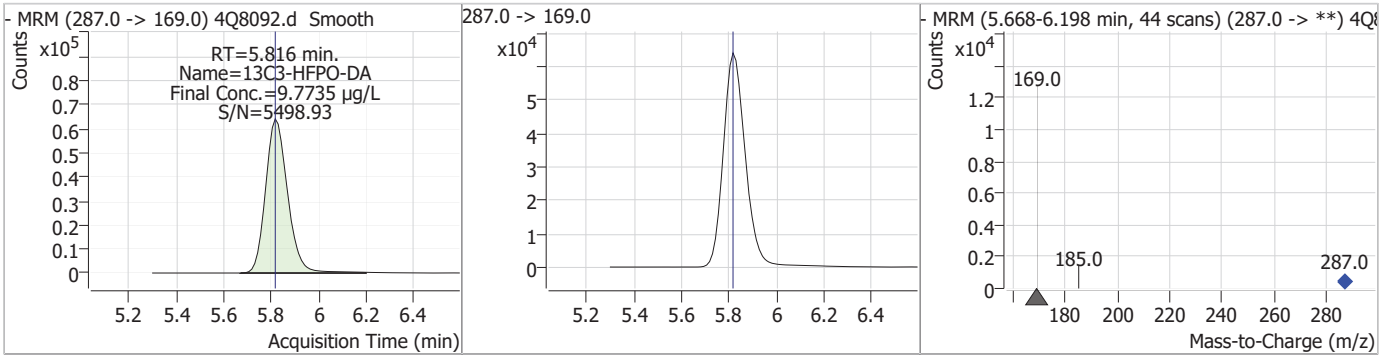
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.16	5.49	0.01	16488 (m)	313.0 -> 119.0	3.3	1.6	4.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.48	5.49	0.00	278591				

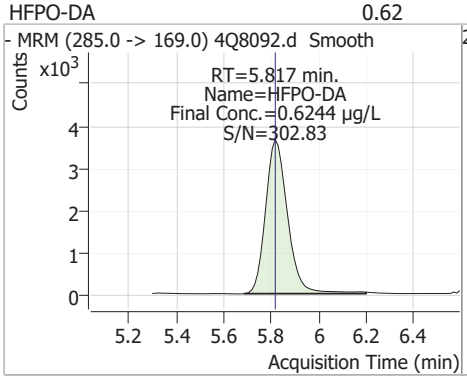


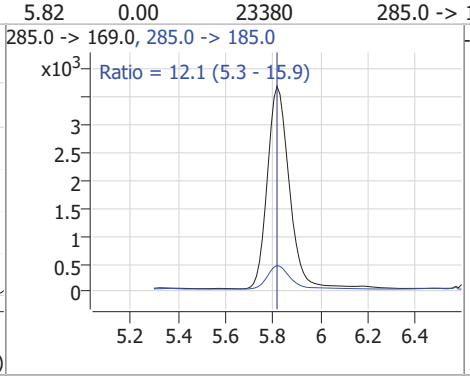
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.77	5.82	0.00	413184				

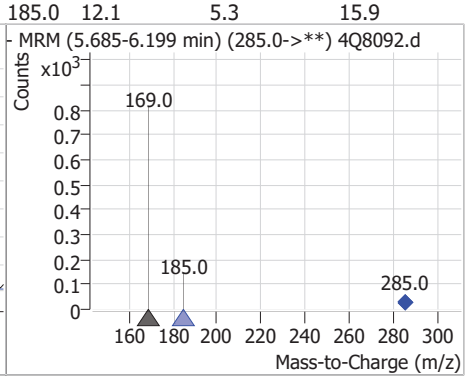


Perfluorinated Compounds by LC/MS/MS

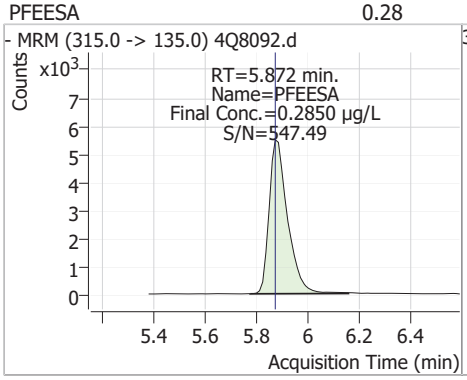
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	0.62	5.82	0.00	23380	285.0 -> 185.0	12.1	5.3	15.9

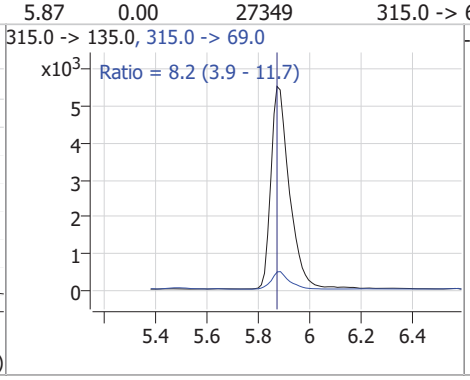


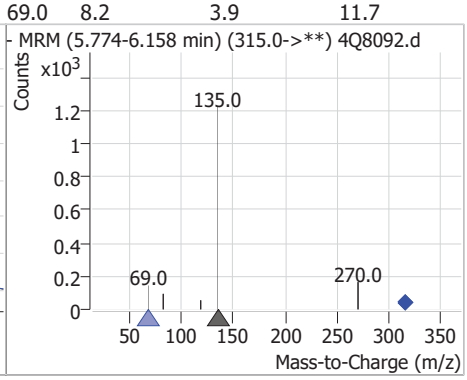




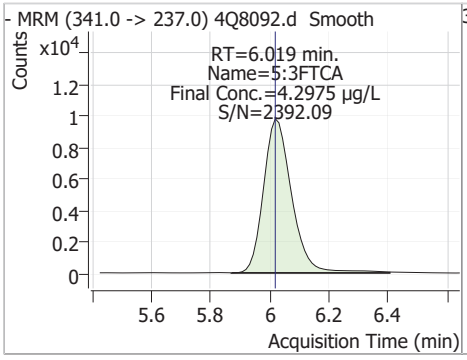
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.28	5.87	0.00	27349	315.0 -> 69.0	8.2	3.9	11.7

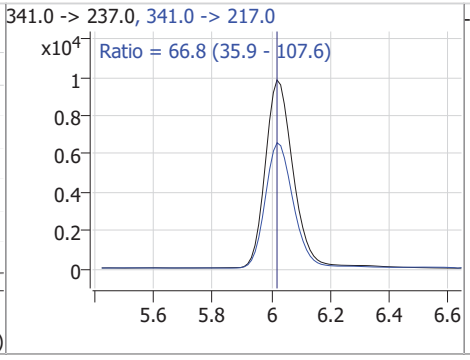


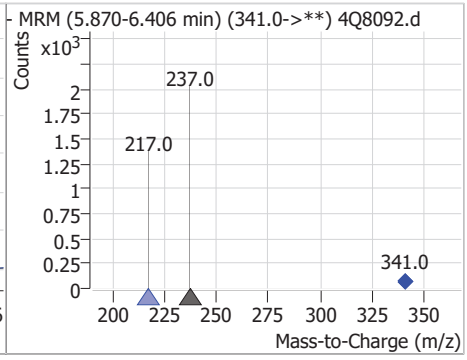




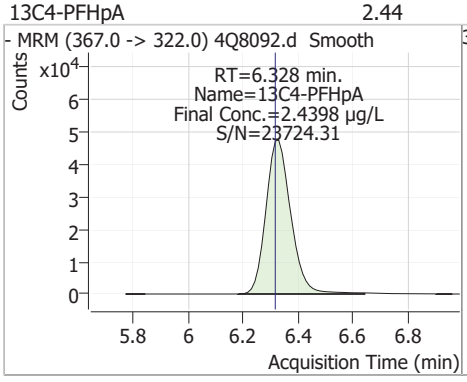
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	4.30	6.02	0.00	65009	341.0 -> 217.0	66.8	35.9	107.6

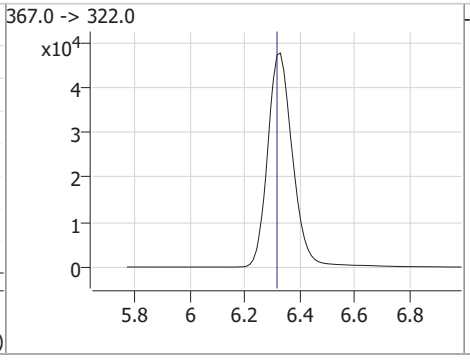


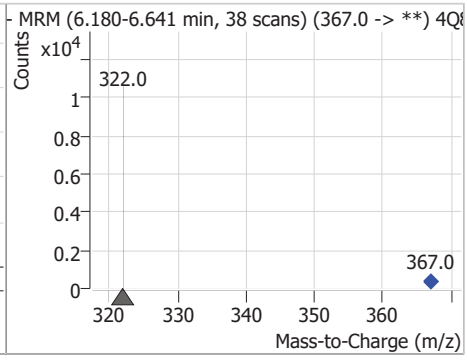




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.44	6.33	0.01	299592				







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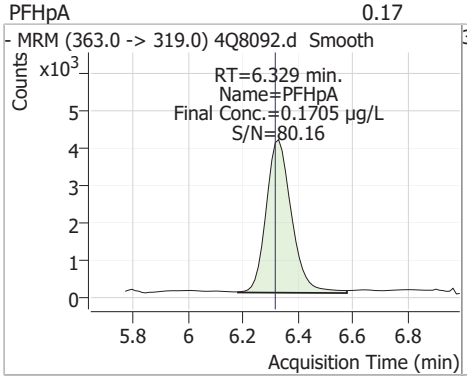
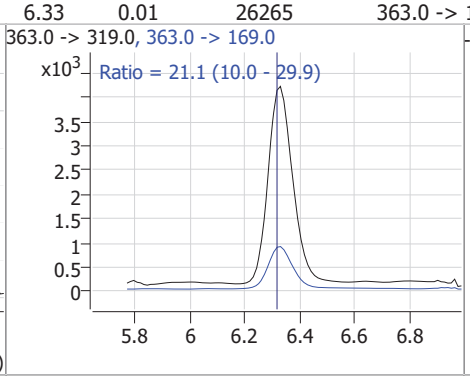
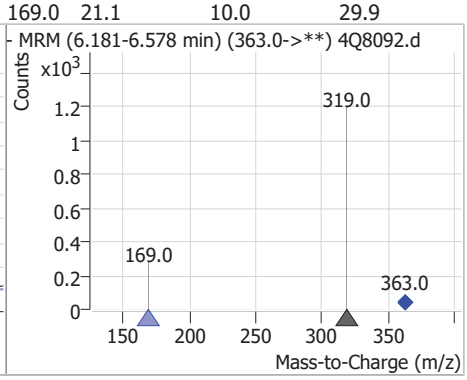
Perfluorinated Compounds by LC/MS/MS

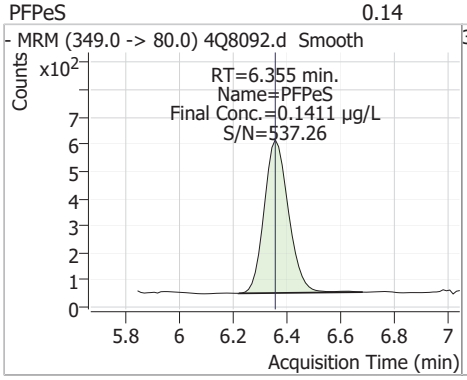
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.17	6.33	0.01	26265	363.0 -> 169.0	21.1	10.0	29.9

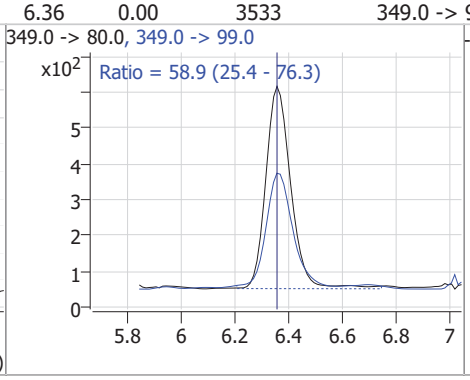


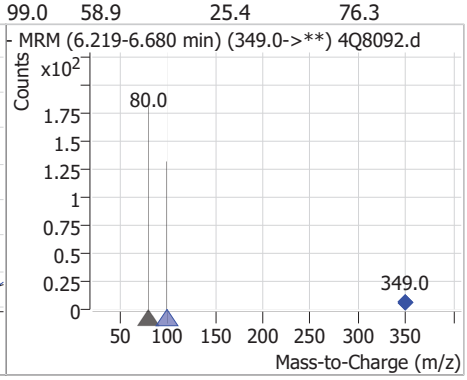




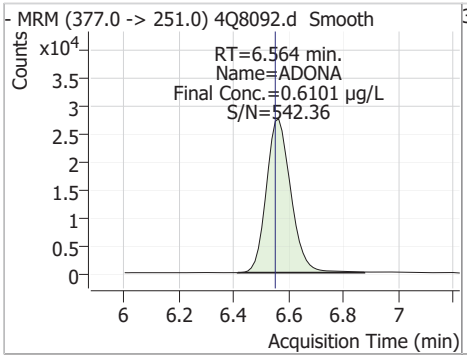
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.14	6.36	0.00	3533	349.0 -> 99.0	58.9	25.4	76.3

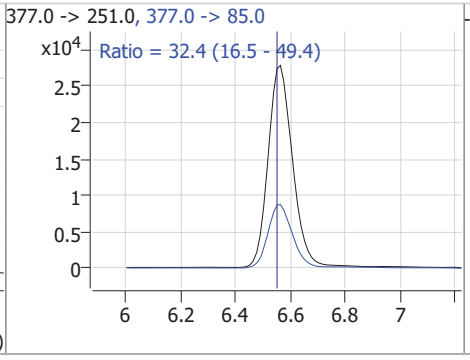


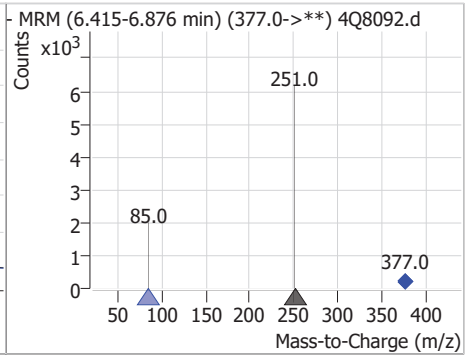




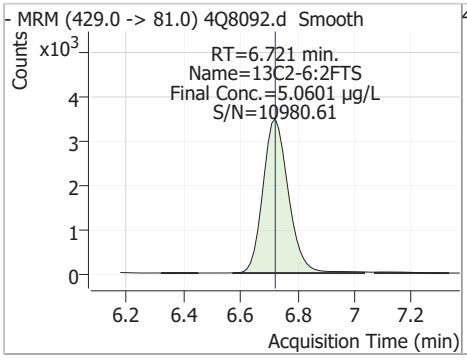
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	0.61	6.56	0.01	171058	377.0 -> 85.0	32.4	16.5	49.4

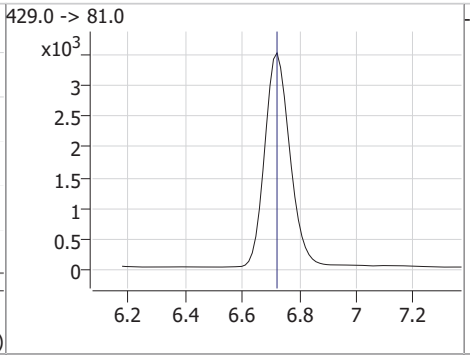


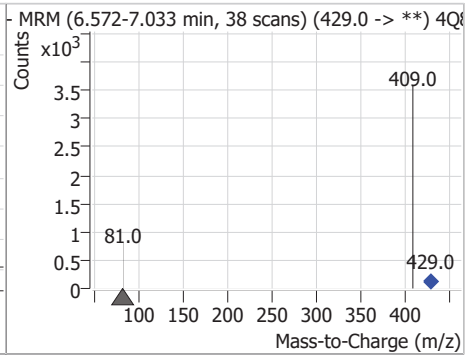




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.06	6.72	0.00	21552				







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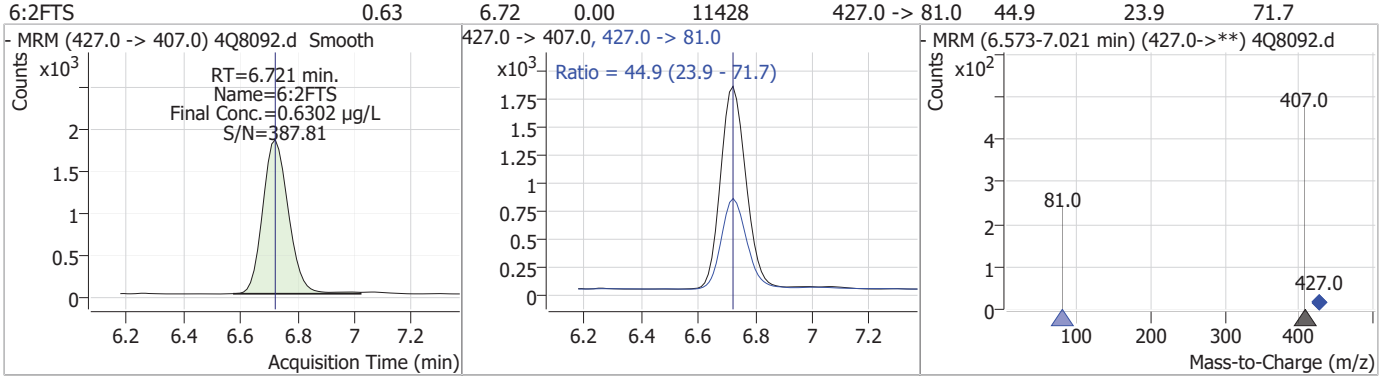
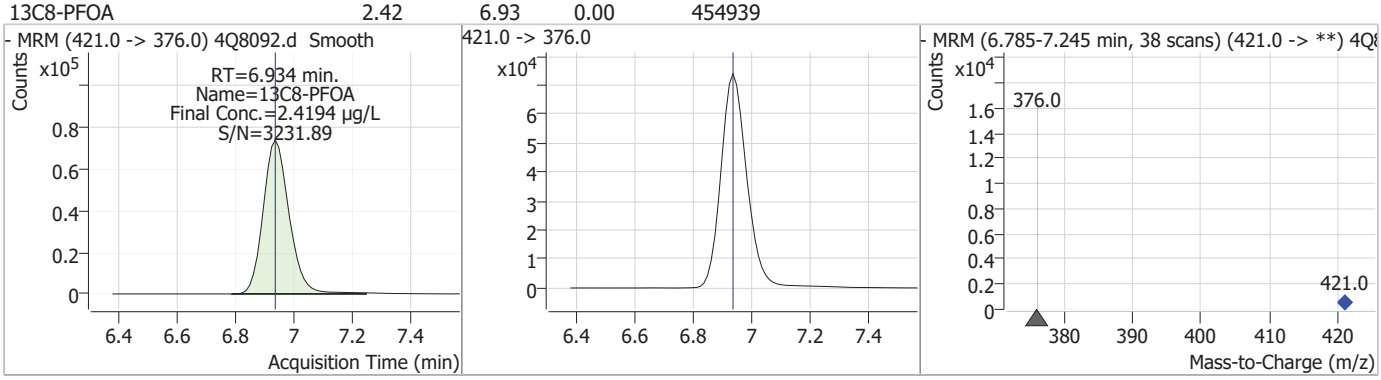
Perfluorinated Compounds by LC/MS/MS

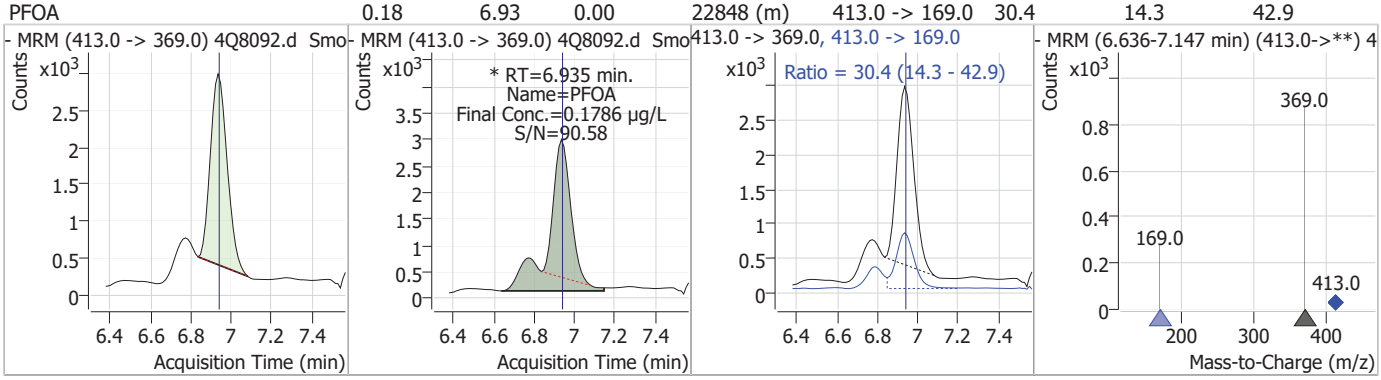
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.63	6.72	0.00	11428	427.0 -> 81.0	44.9	23.9	71.7



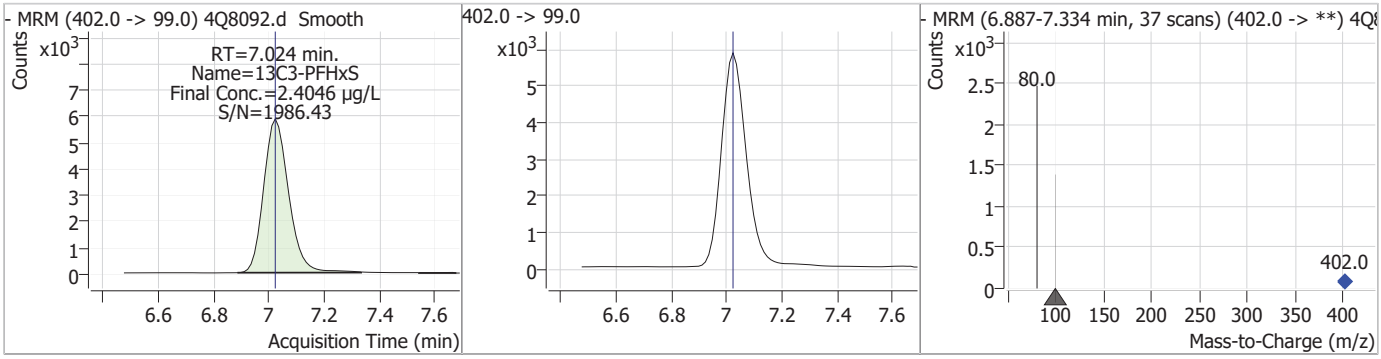
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.42	6.93	0.00	454939				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.18	6.93	0.00	22848 (m)	413.0 -> 169.0	30.4	14.3	42.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.40	7.02	0.00	36690				



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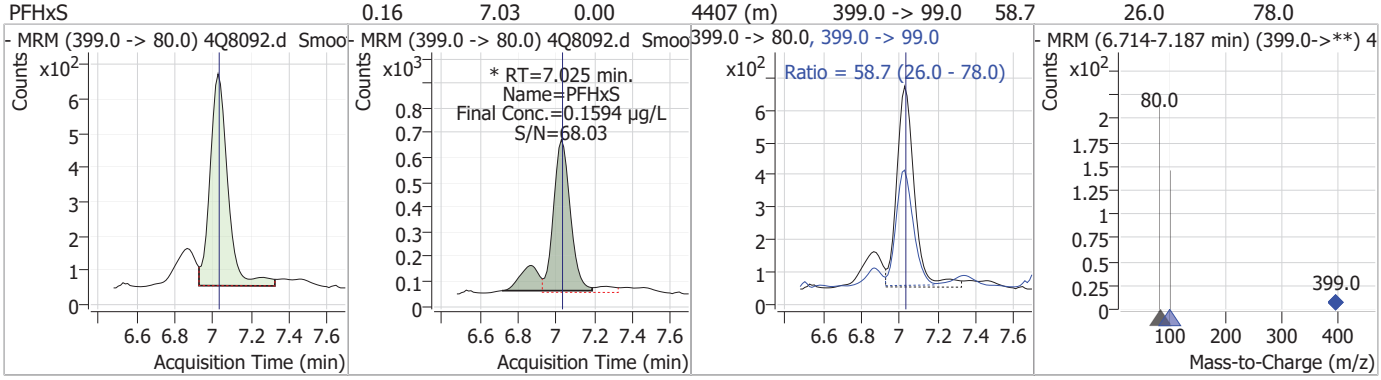
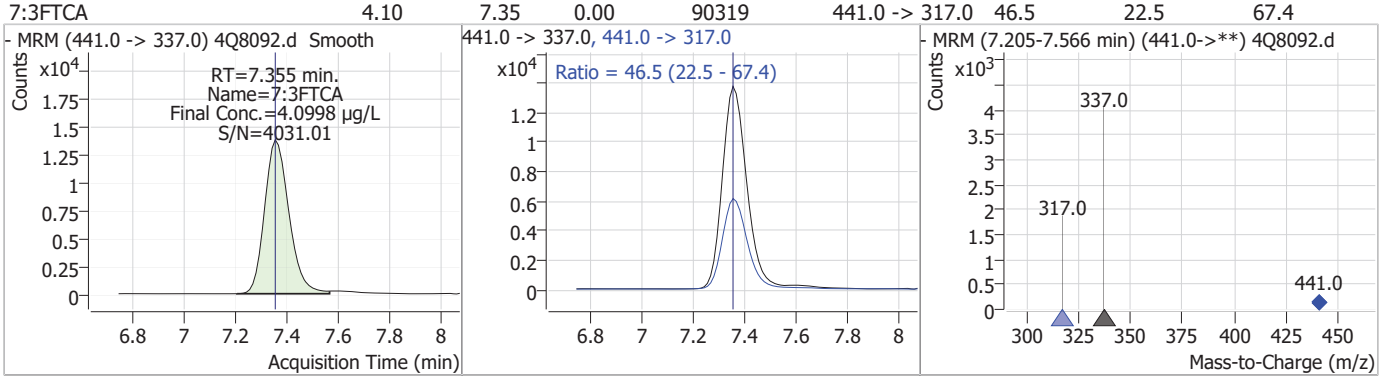
Perfluorinated Compounds by LC/MS/MS

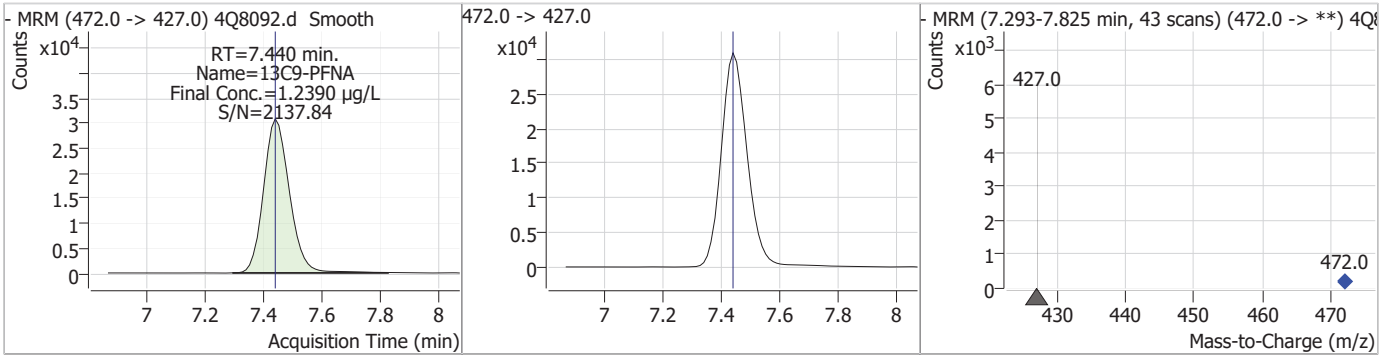
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.16	7.03	0.00	4407 (m)	399.0 -> 99.0	58.7	26.0	78.0



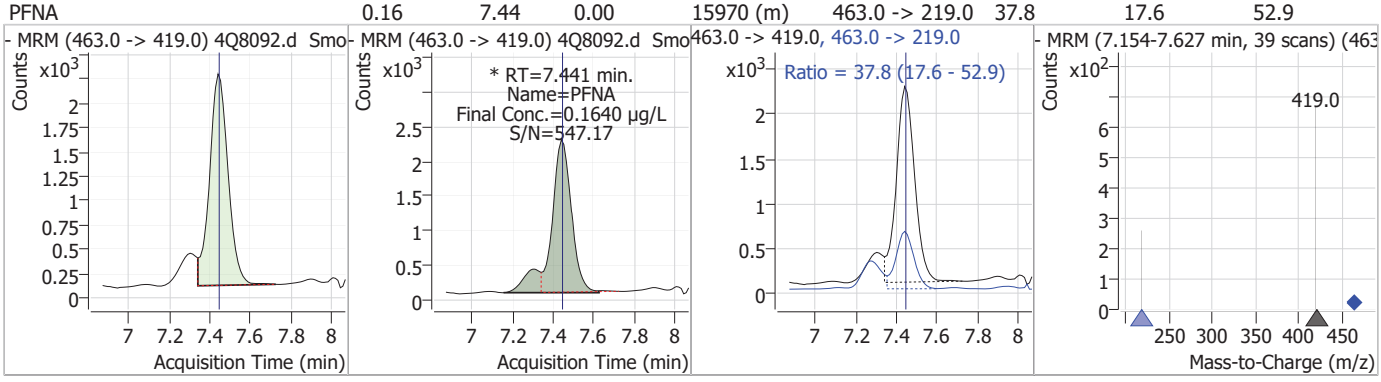
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	4.10	7.35	0.00	90319	441.0 -> 317.0	46.5	22.5	67.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.24	7.44	0.00	189451				

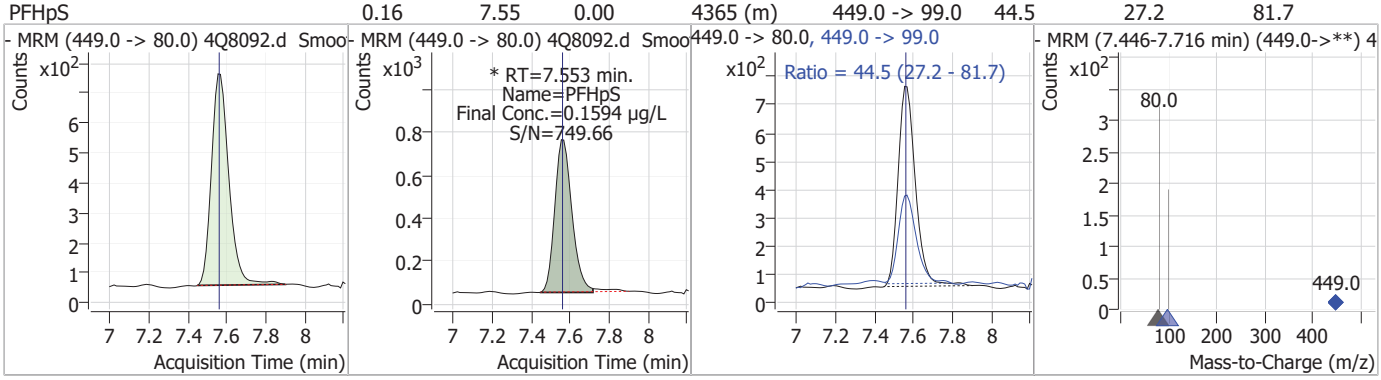


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.16	7.44	0.00	15970 (m)	463.0 -> 219.0	37.8	17.6	52.9

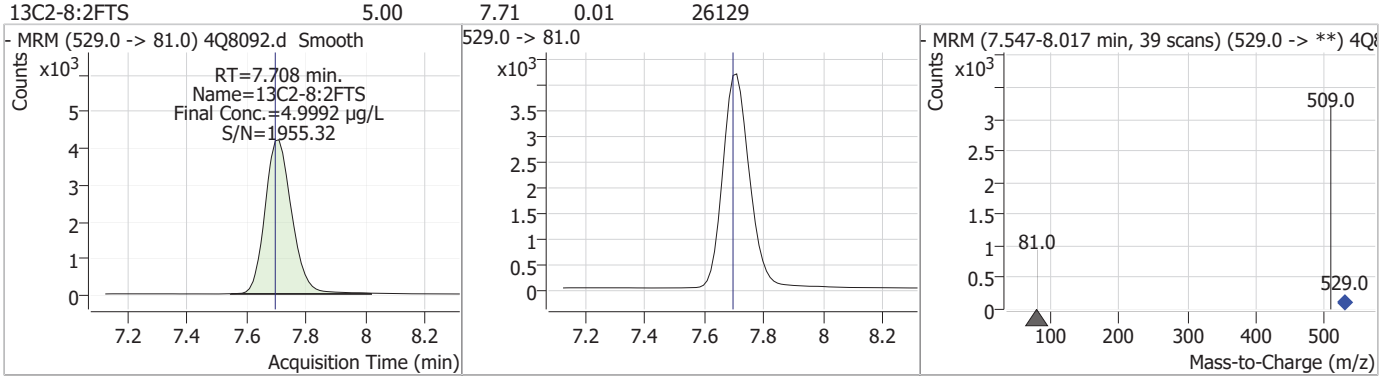


Perfluorinated Compounds by LC/MS/MS

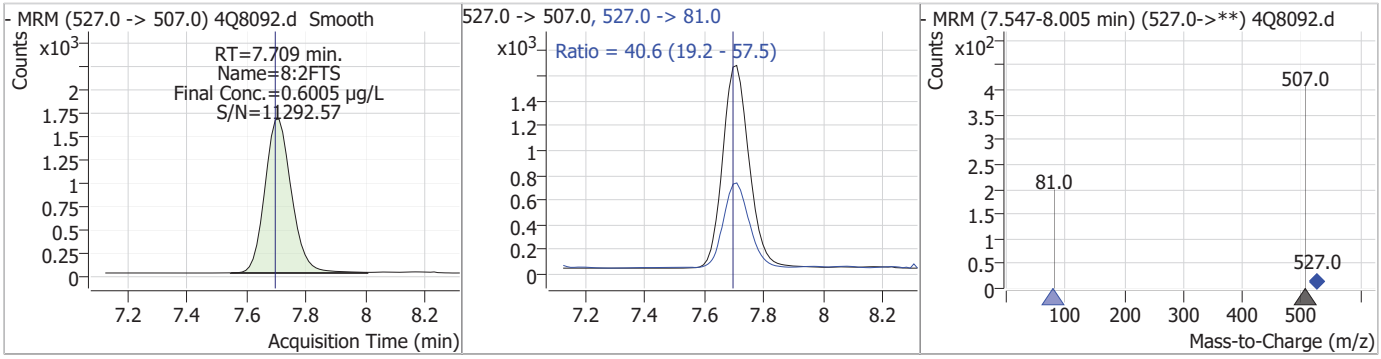
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.16	7.55	0.00	4365 (m)	449.0 -> 99.0	44.5	27.2	81.7



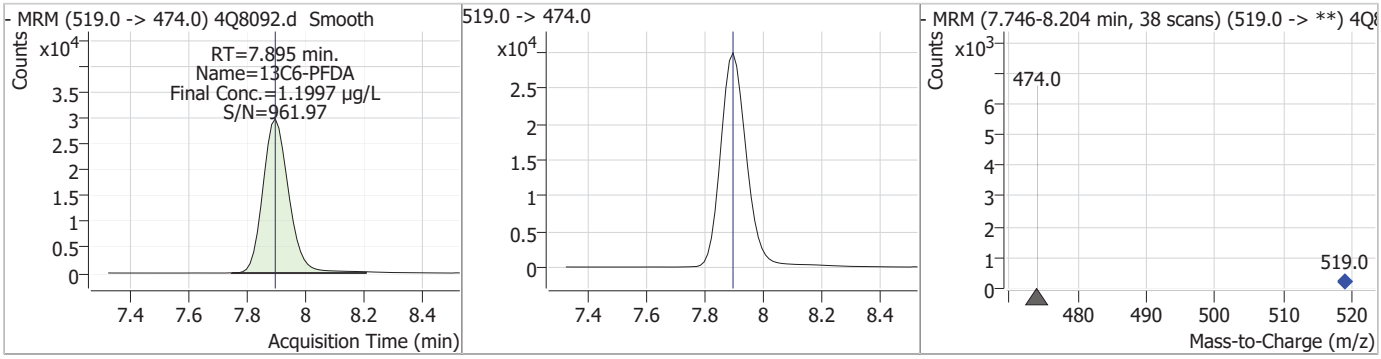
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.00	7.71	0.01	26129				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.60	7.71	0.01	10177	527.0 -> 81.0	40.6	19.2	57.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.20	7.89	0.00	183078				



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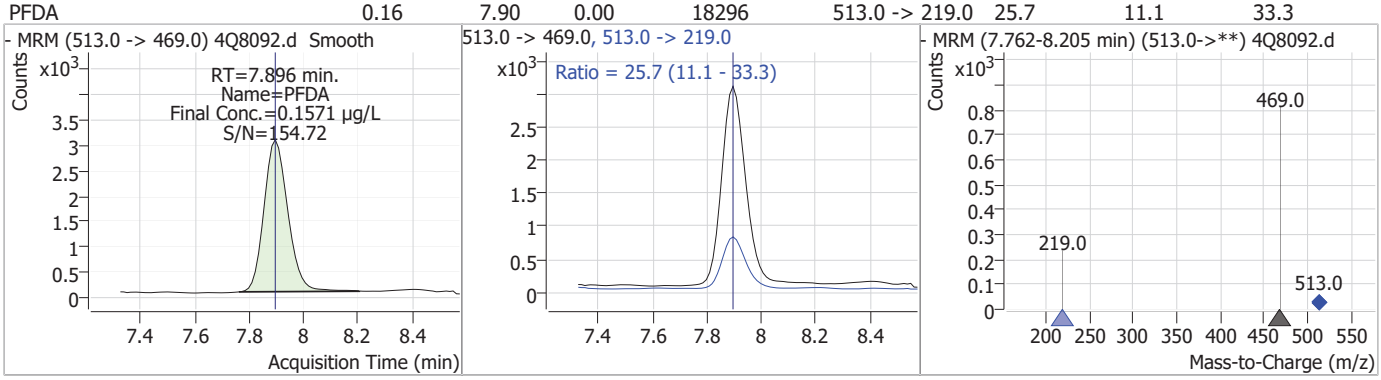
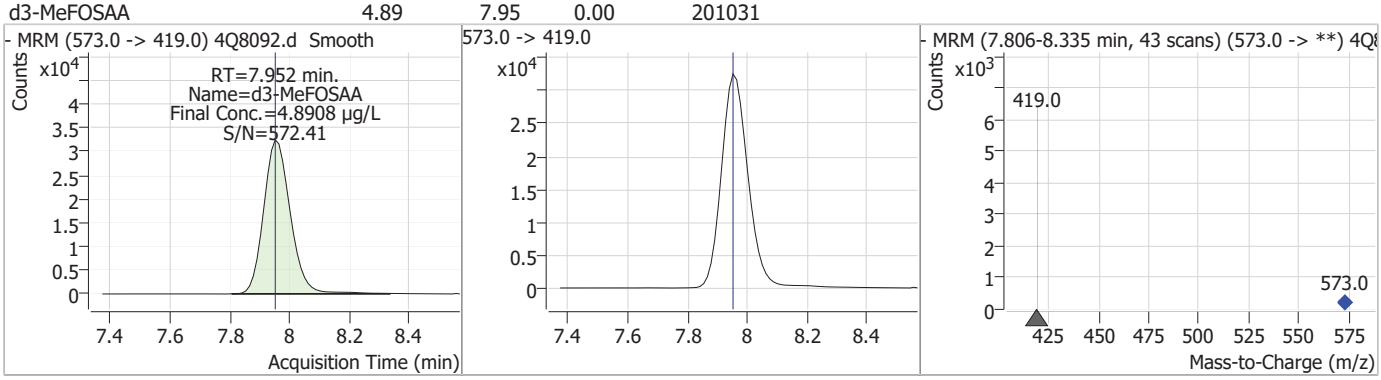
Perfluorinated Compounds by LC/MS/MS

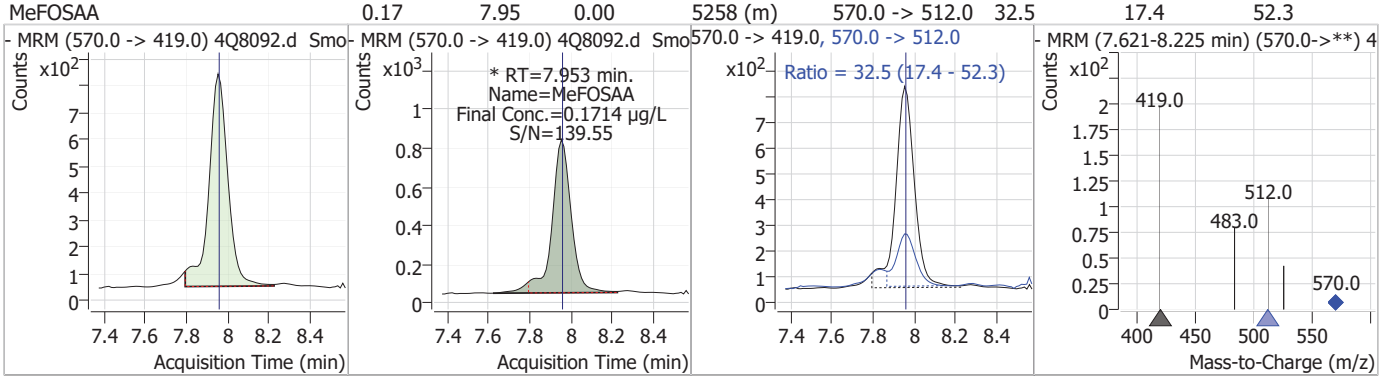
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.16	7.90	0.00	18296	513.0 -> 219.0	25.7	11.1	33.3



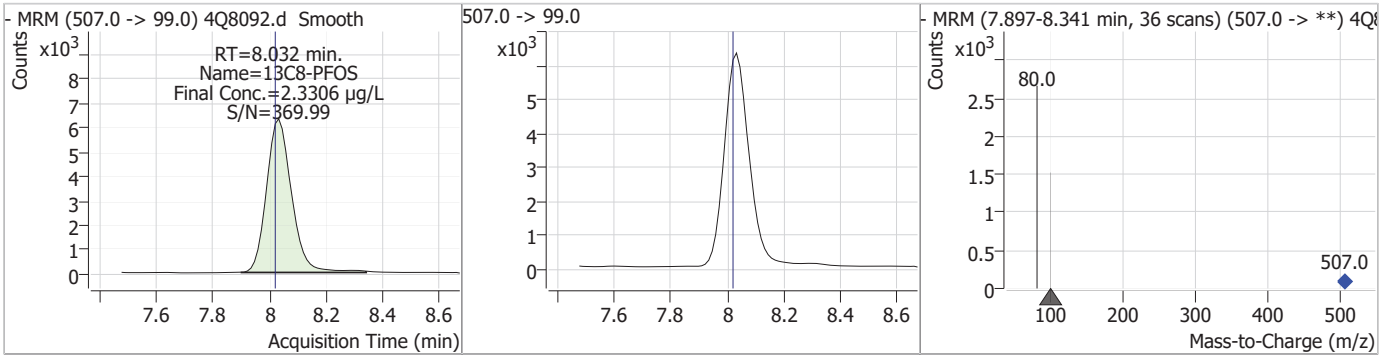
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.89	7.95	0.00	201031				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.17	7.95	0.00	5258 (m)	570.0 -> 512.0	32.5	17.4	52.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.33	8.03	0.01	38839				



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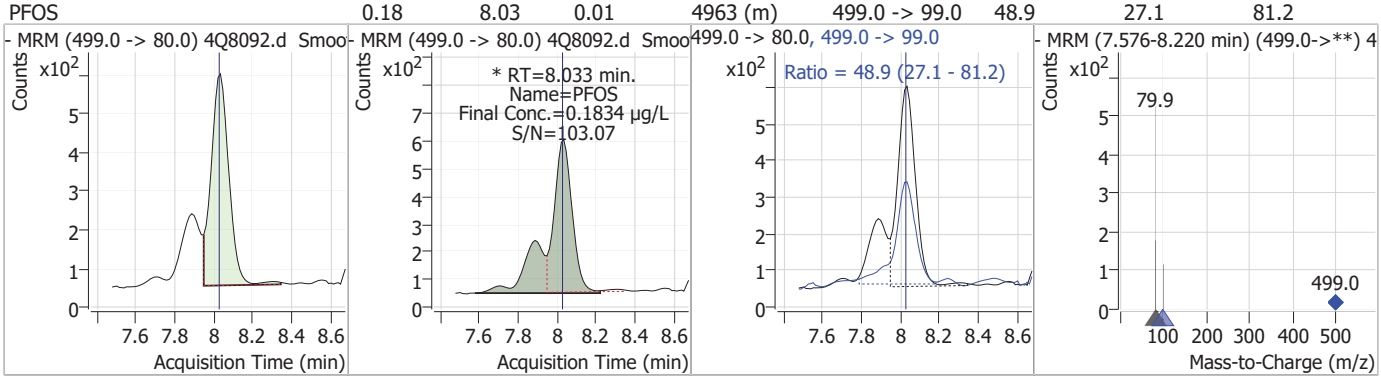
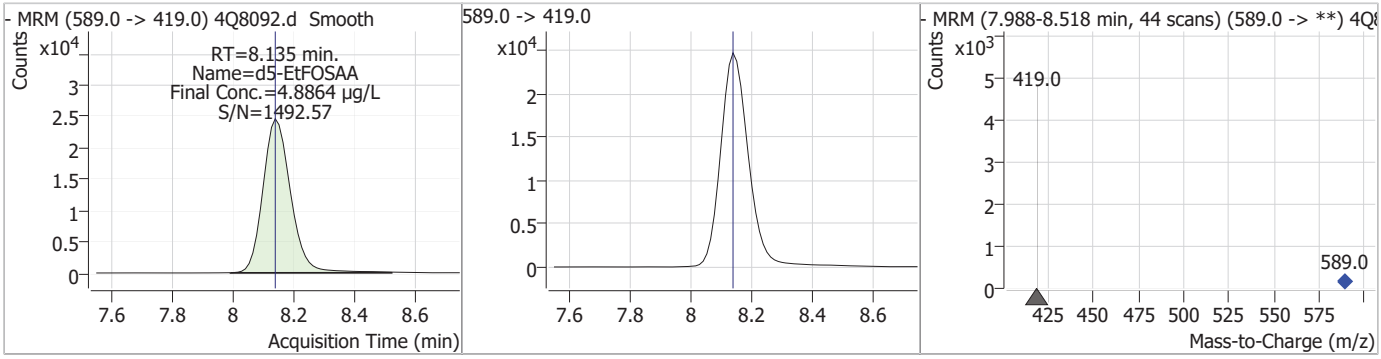
Perfluorinated Compounds by LC/MS/MS

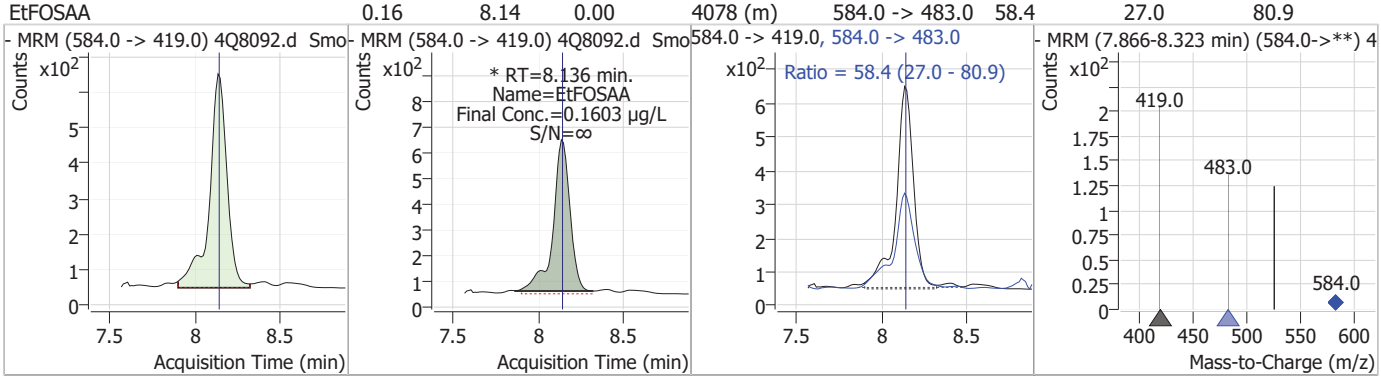
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.18	8.03	0.01	4963 (m)	499.0 -> 99.0	48.9	27.1	81.2



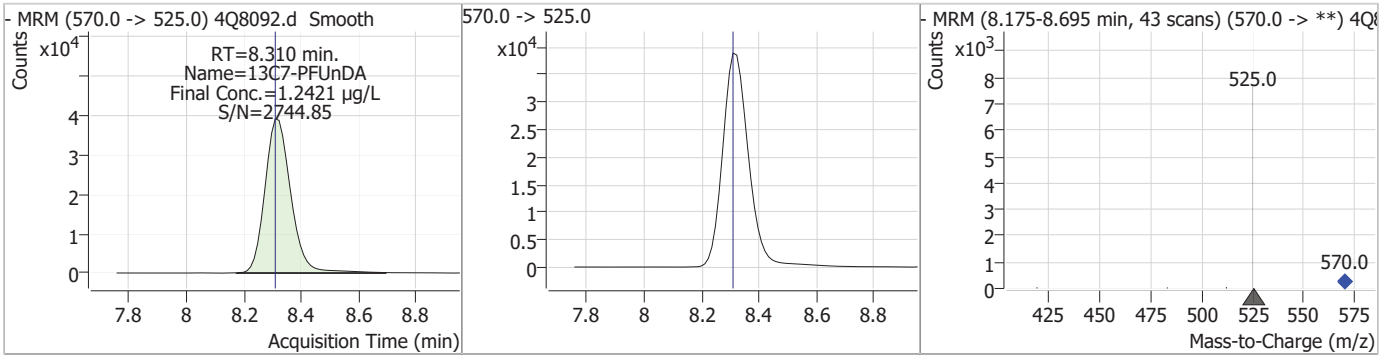
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.89	8.13	0.00	156130				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.16	8.14	0.00	4078 (m)	584.0 -> 483.0	58.4	27.0	80.9

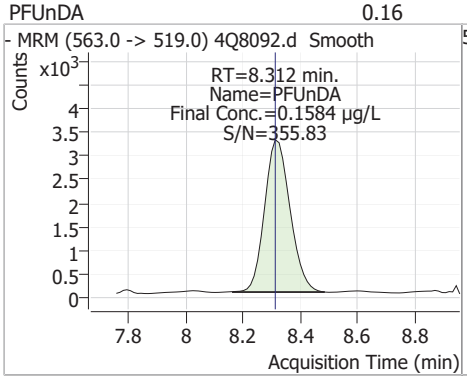


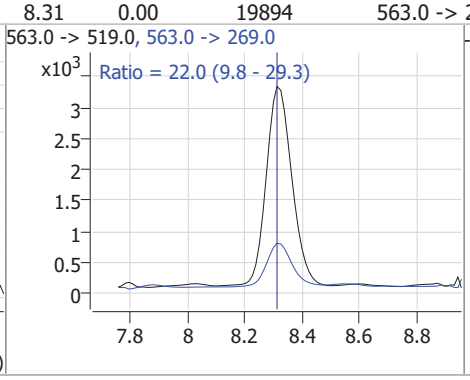
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.24	8.31	0.00	244489				

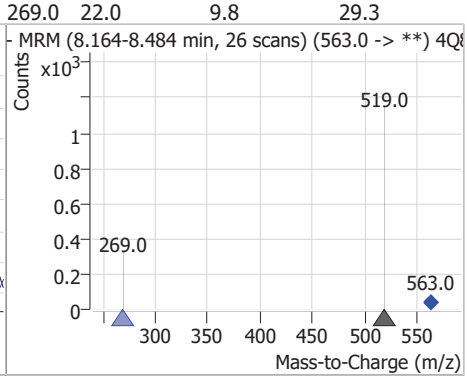


Perfluorinated Compounds by LC/MS/MS

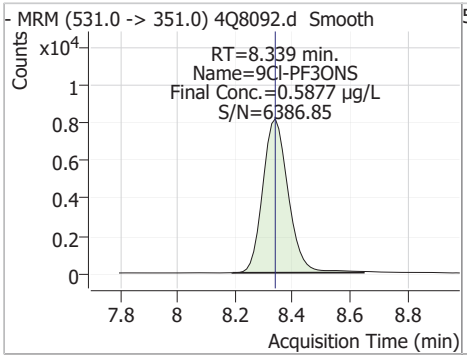
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.16	8.31	0.00	19894	563.0 -> 269.0	22.0	9.8	29.3

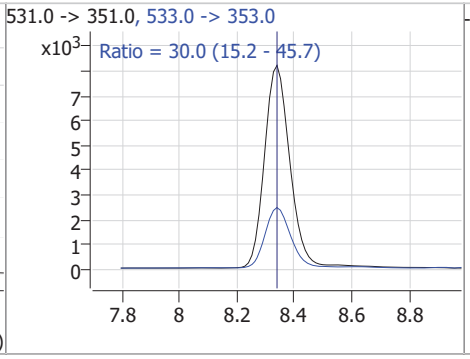


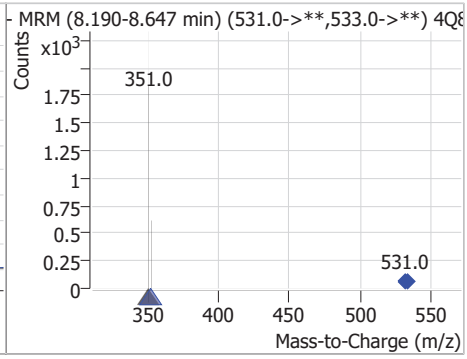




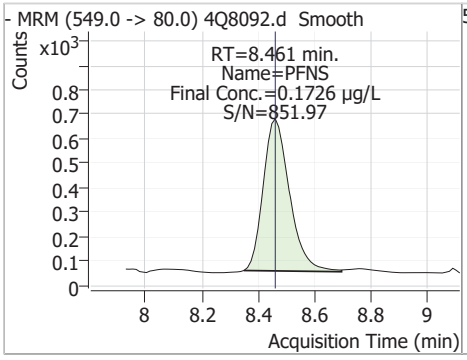
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	0.59	8.34	0.00	50351	533.0 -> 353.0	30.0	15.2	45.7

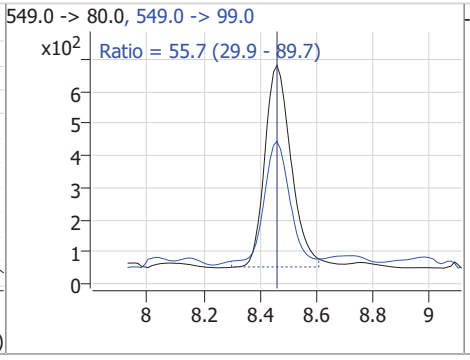


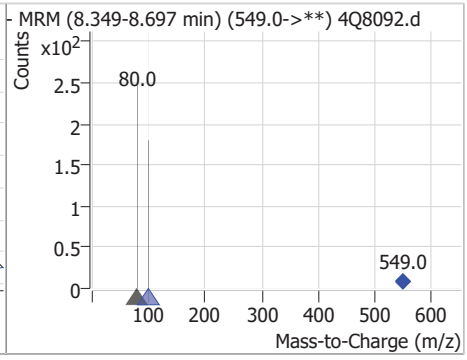




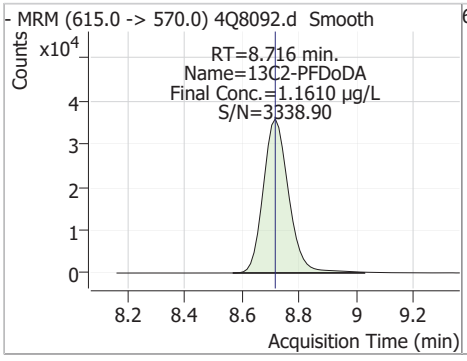
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.17	8.46	0.00	4057	549.0 -> 99.0	55.7	29.9	89.7

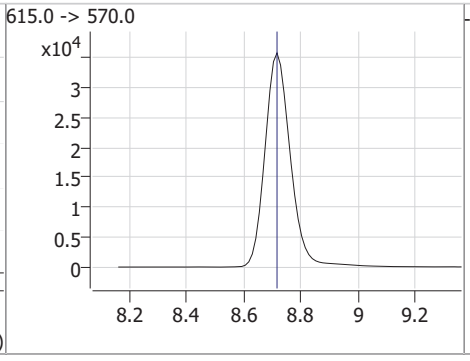


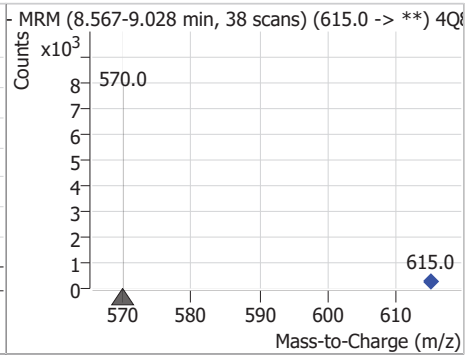




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.16	8.72	0.00	220213				







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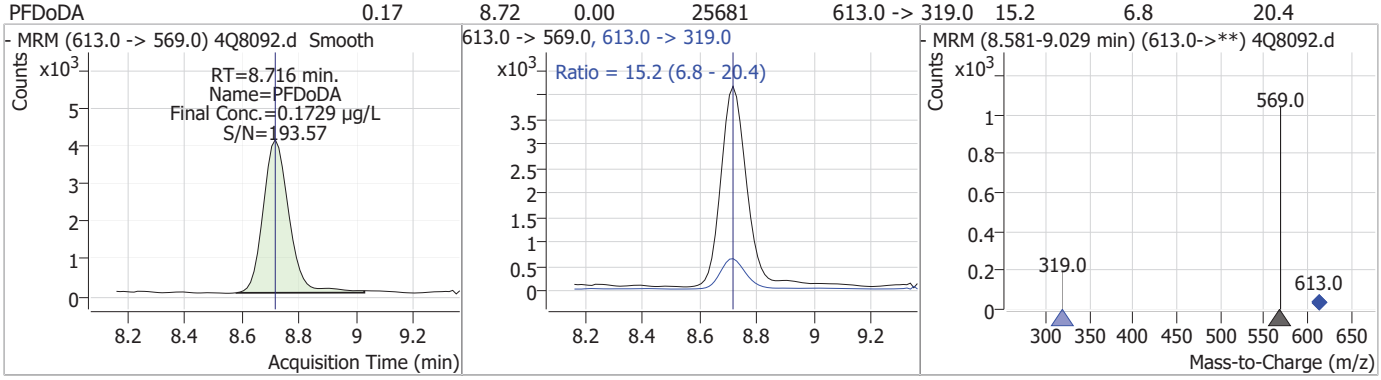
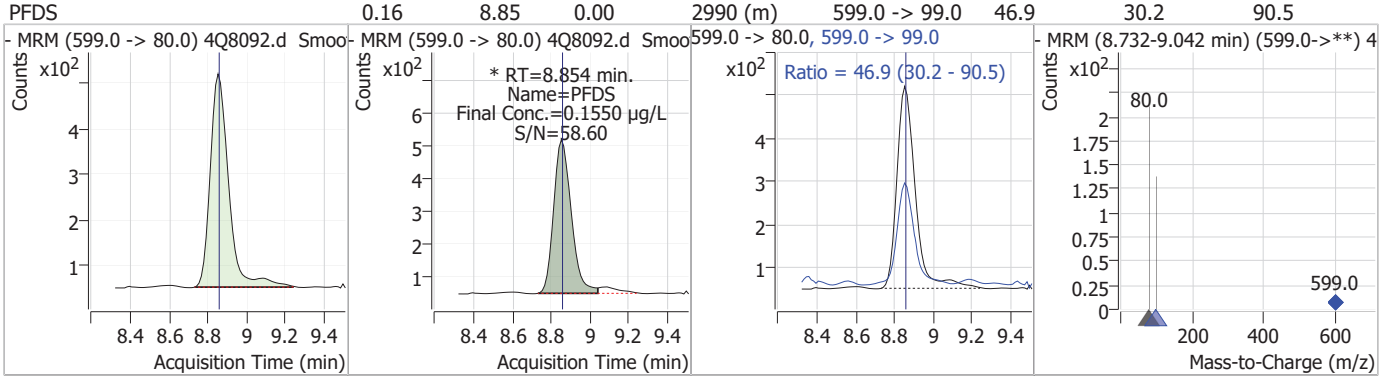
Perfluorinated Compounds by LC/MS/MS

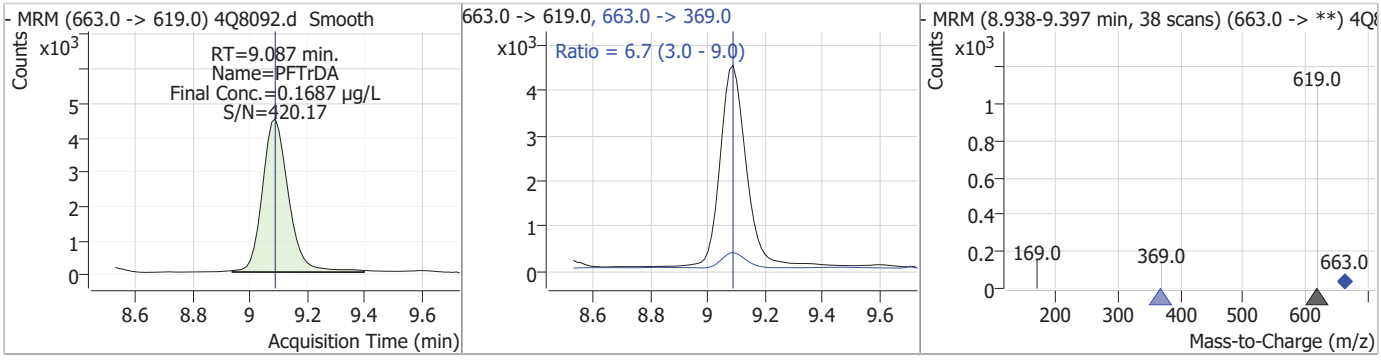
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.17	8.72	0.00	25681	613.0 -> 319.0	15.2	6.8	20.4



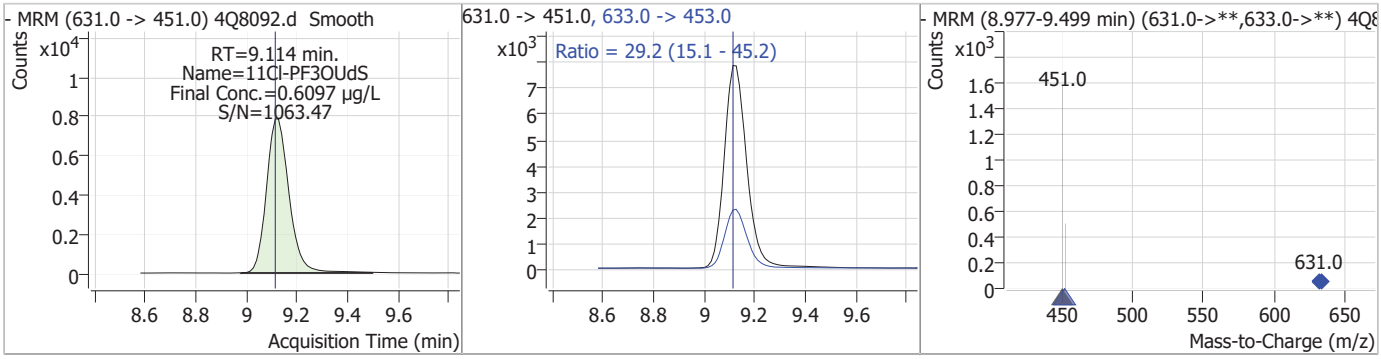
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.16	8.85	0.00	2990 (m)	599.0 -> 99.0	46.9	30.2	90.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.17	9.09	0.00	28359	663.0 -> 369.0	6.7	3.0	9.0

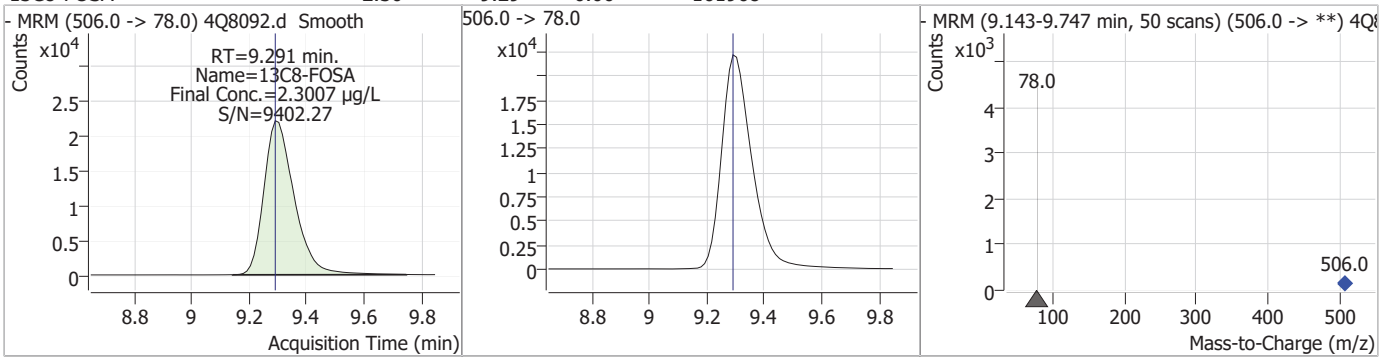


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	0.61	9.11	0.00	48942	633.0 -> 453.0	29.2	15.1	45.2

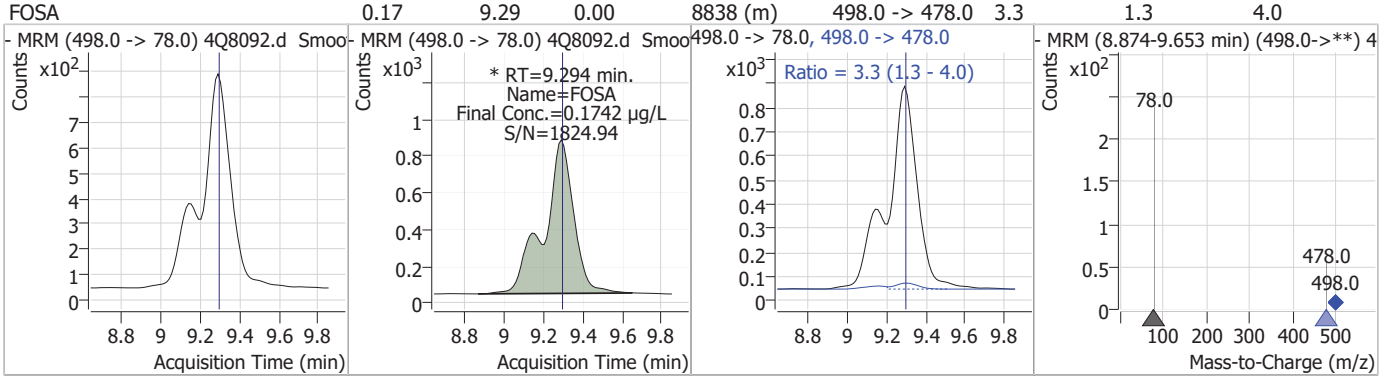


Perfluorinated Compounds by LC/MS/MS

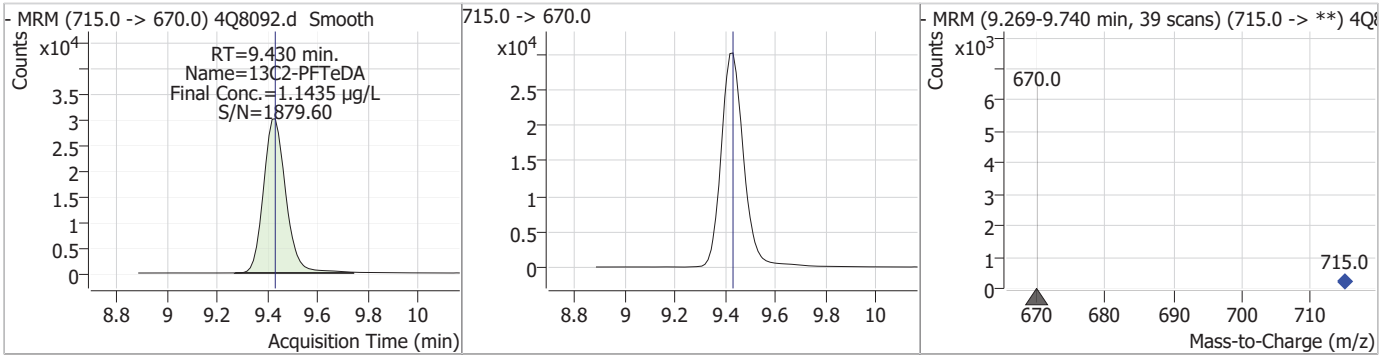
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.30	9.29	0.00	161968				



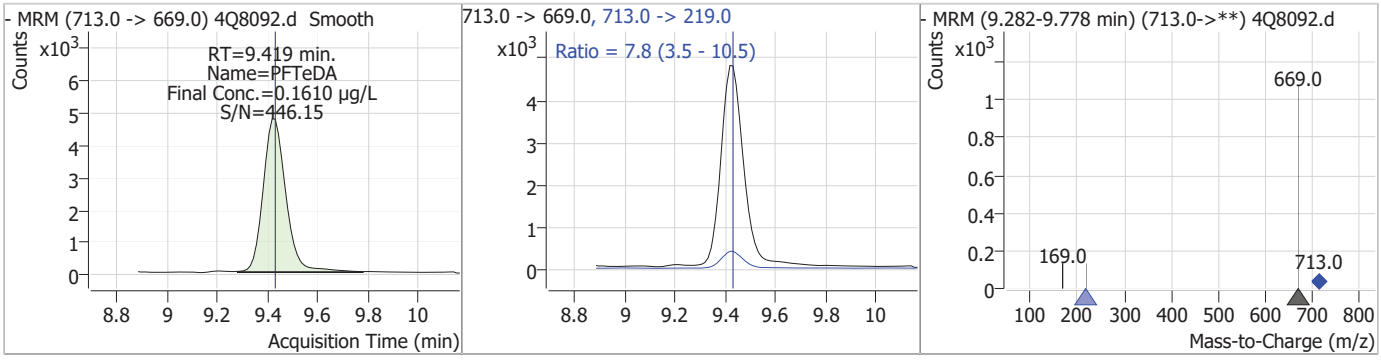
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.17	9.29	0.00	8838 (m)	498.0 -> 478.0	3.3	1.3	4.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.14	9.43	0.00	185589				

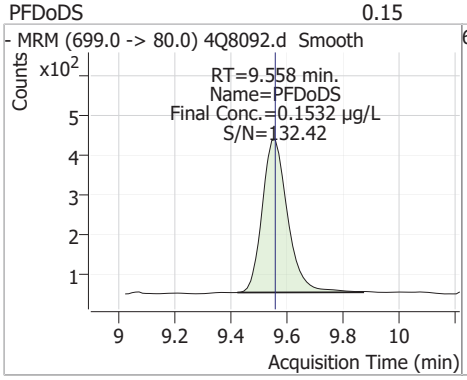


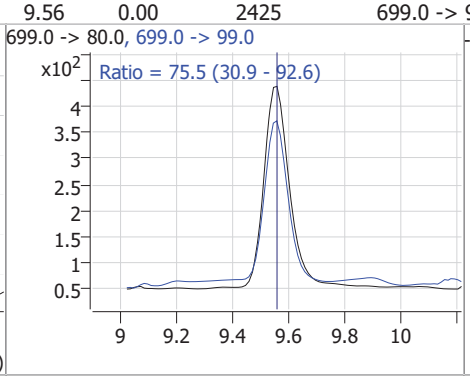
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.16	9.42	-0.01	29733	713.0 -> 219.0	7.8	3.5	10.5

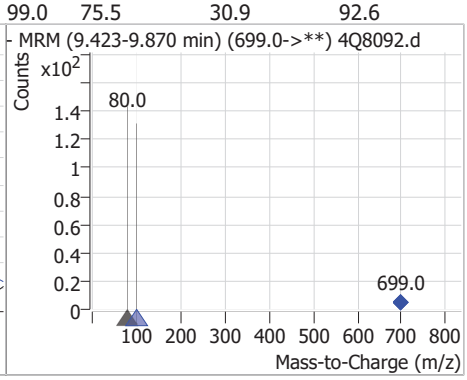


Perfluorinated Compounds by LC/MS/MS

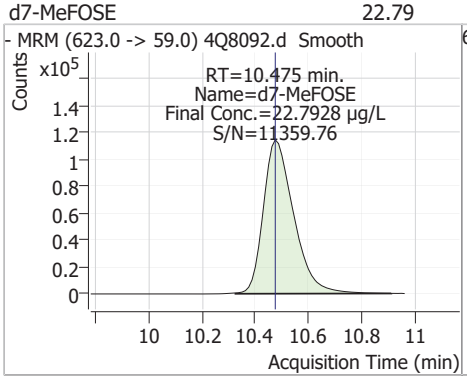
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.15	9.56	0.00	2425	699.0 -> 99.0	75.5	30.9	92.6

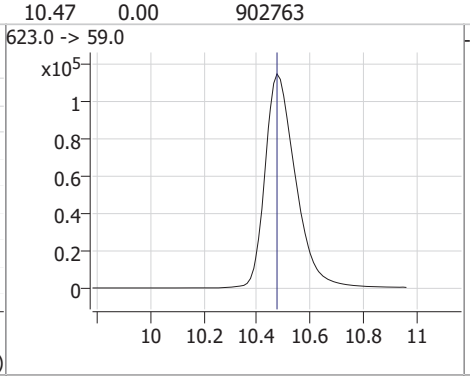


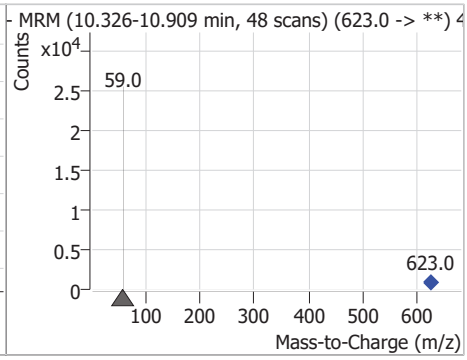




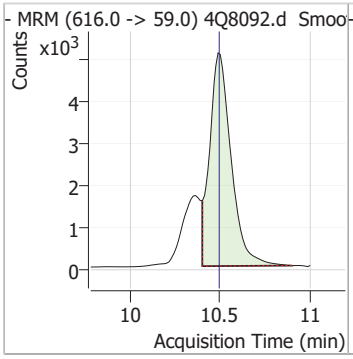
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.79	10.47	0.00	902763				

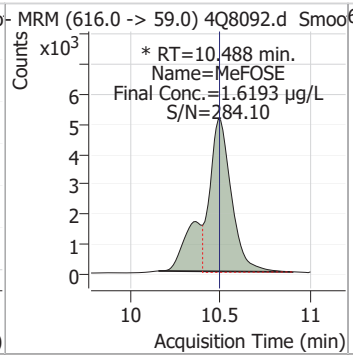


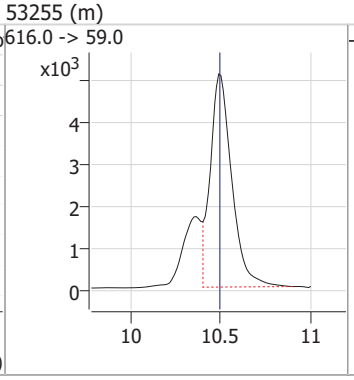


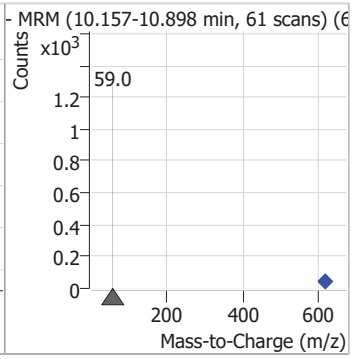


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	1.62	10.49	0.00	53255 (m)				

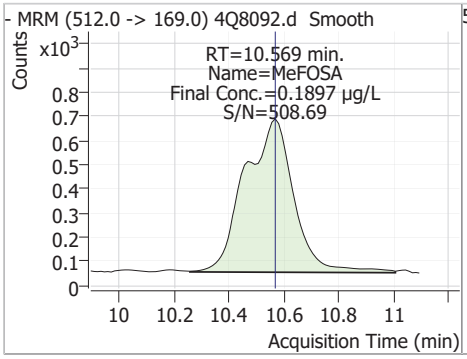


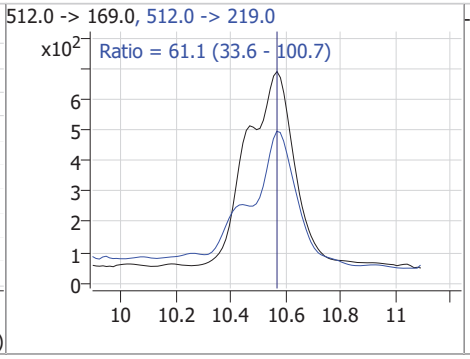


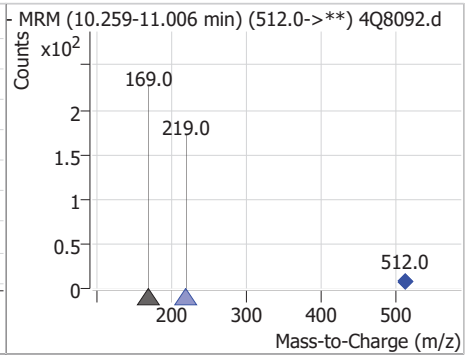




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.19	10.57	0.00	7916	512.0 -> 219.0	61.1	33.6	100.7

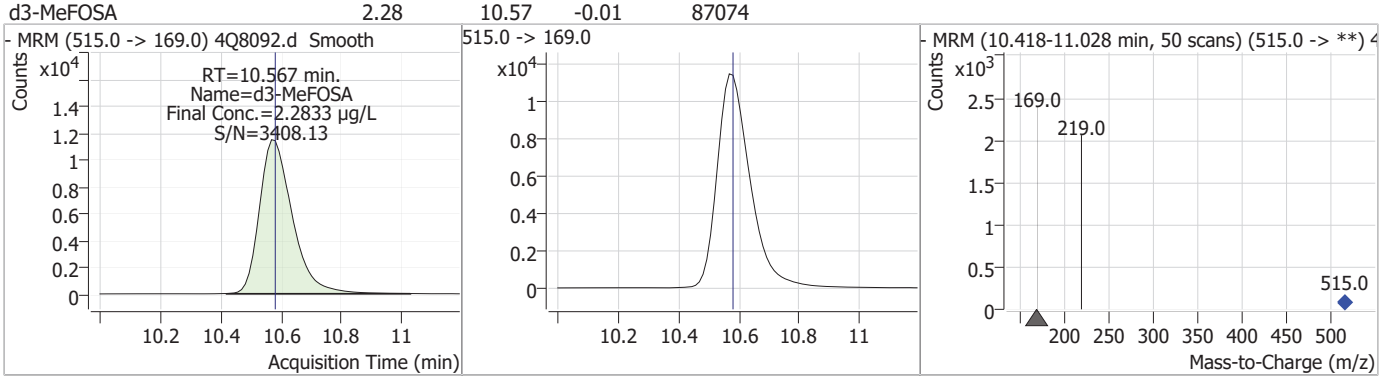




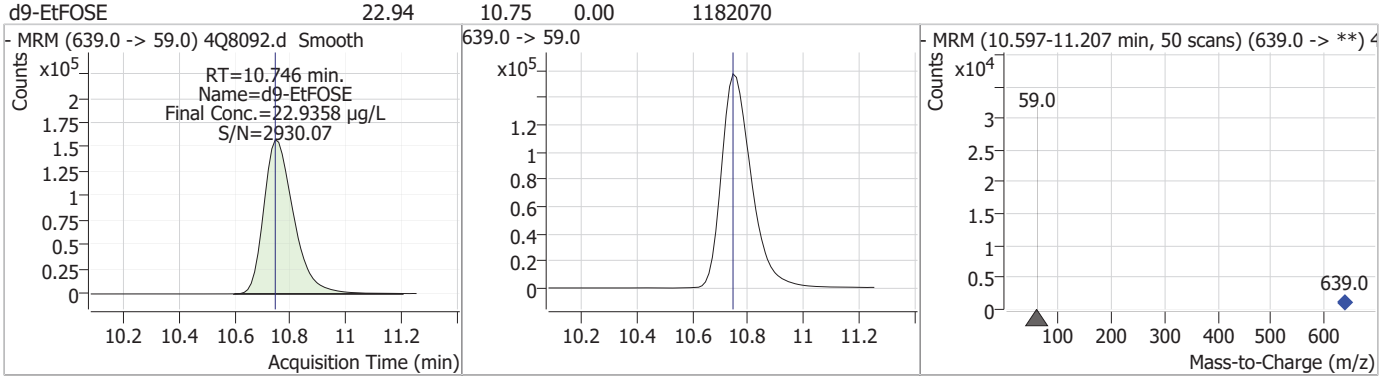


Perfluorinated Compounds by LC/MS/MS

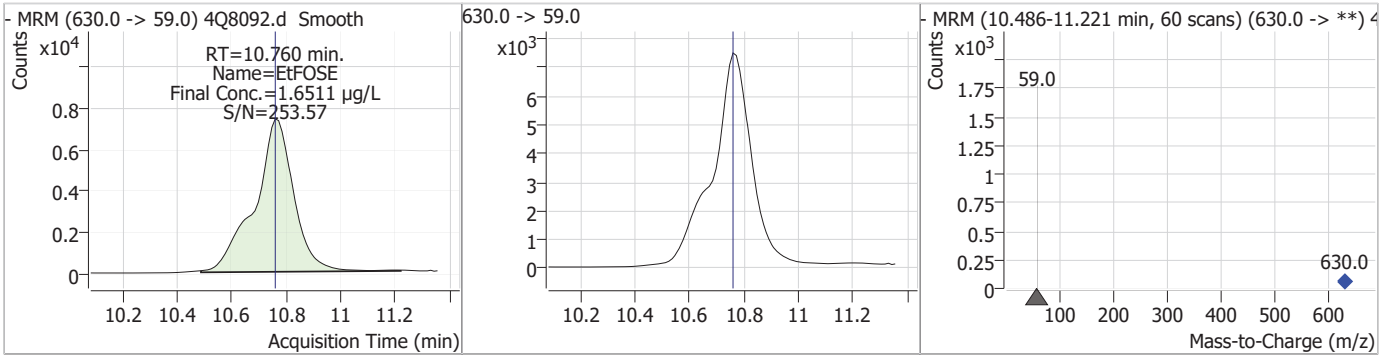
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.28	10.57	-0.01	87074				



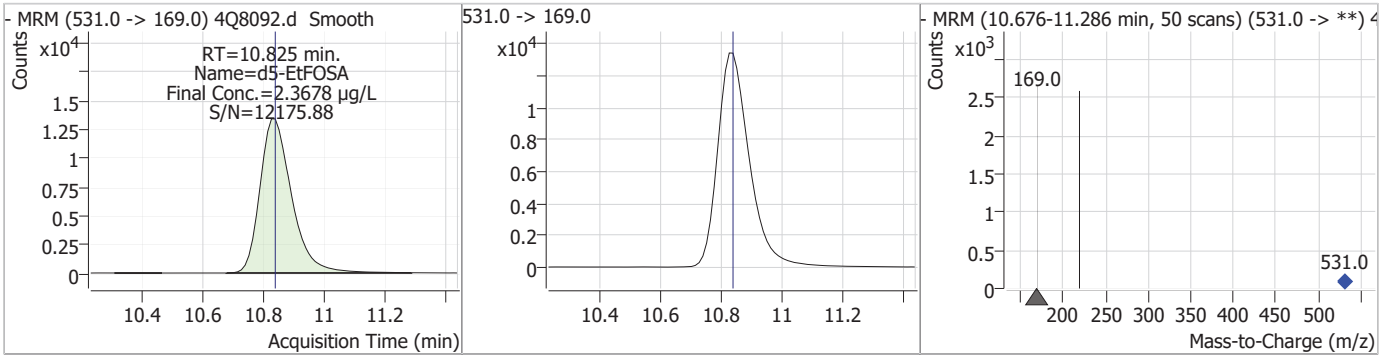
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.94	10.75	0.00	1182070				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	1.65	10.76	0.00	73797				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.37	10.82	-0.01	97130				



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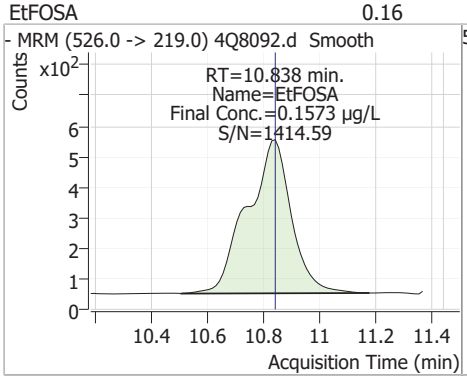
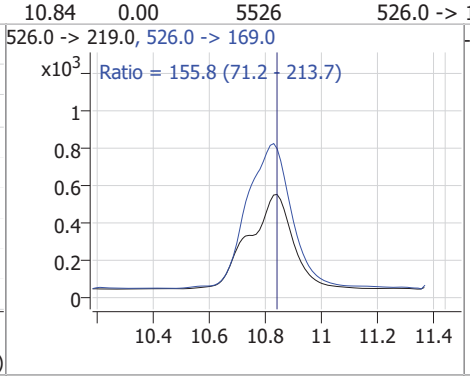
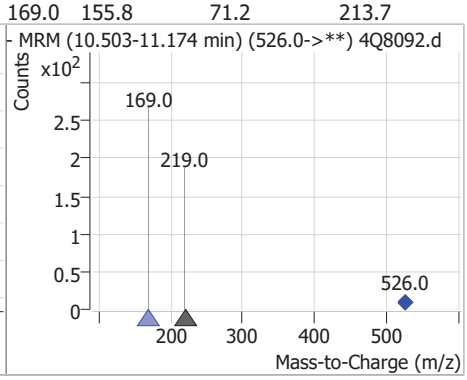
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.16	10.84	0.00	5526	526.0 -> 169.0	155.8	71.2	213.7







7.6.42

7

Manual Integration Approval Summary

Sample Number: T4Q137-CC137
Lab FileID: 4Q8092.D
Injection Time: 04/29/25 19:41
Method: EPA 1633
Analyst approved: 04/30/25 02:22 Rensel John Romano
Supervisor approved: 04/30/25 07:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanoic acid	307-24-4		5.49	Poorly defined baseline
Perfluorooctanoic acid	335-67-1		6.93	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.03	Split peak
Perfluorononanoic acid	375-95-1		7.44	Split peak
Perfluoroheptanesulfonic acid	375-92-8		7.55	Poorly defined baseline
MeFOSAA	2355-31-9		7.95	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.03	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
Perfluorodecanesulfonic acid	335-77-3		8.85	Poorly defined baseline
PFOSA	754-91-6		9.29	Split peak
MeFOSE	24448-09-7		10.49	Split peak

QQQ Check Tune Report

Agilent | Trusted Answers

Instrument Name	LCMS4
MS Model	G6495C
MS Instrument Serial	SG1953D201
Software_Firmware Version	10.1.67, FW: A.00.08.112
Tune Date & Time	21 April 2025 09:24:35
File Path	D:\MassHunter\Tune\QQQ\G6495C\atunes.tune.xml
Ion Source	AJS ESI
Ionization Mode	AJS ESI
Tuned Resolution	All
Vacuum Pressure	1.59E+0 [R] (Torr); 3.46E-5 [H] (Torr)

Source Parameters

Parameter	Negative
Gas Temp (°C)	220
Gas Flow (l/min)	14
Nebulizer (psi)	20
Capillary (V)	3000
Nozzle Voltage (V)	1500
Sheath Gas Temp (°C)	250
Sheath Gas Flow (l/min)	11

QQQ Check Tune Report

Agilent | Trusted Answers

Negative Results

Analyzer: MS1 Polarity: Negative Width: Unit HP and LP Funnel RF as shown in Tune Parameters

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	113.02	0.03	Pass	0.70	0.67	-0.03	Pass	2791971
302.00	302.02	0.02	Pass	0.70	0.68	-0.02	Pass	771608
601.98	602.03	0.05	Pass	0.70	0.63	-0.07	Pass	3092842
1033.99	1034.04	0.05	Pass	0.70	0.57	-0.13	Pass	2628750
1633.95	1634.04	0.09	Pass	0.70	0.64	-0.06	Pass	3284531
2233.91	2233.93	0.02	Pass	0.70	0.68	-0.02	Pass	1028007

Analyzer: MS2 Polarity: Negative Width: Unit HP and LP Funnel RF as shown in Tune Parameters

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.07	0.07	Pass	0.70	0.63	-0.07	Pass	576898
112.99	112.99	0.00	Pass	0.70	0.69	-0.01	Pass	3979026
302.00	302.01	0.01	Pass	0.70	0.69	-0.01	Pass	1203784
601.98	602.00	0.02	Pass	0.70	0.66	-0.04	Pass	4245092
1033.99	1034.01	0.02	Pass	0.70	0.65	-0.05	Pass	6720743
1633.95	1633.96	0.01	Pass	0.70	0.65	-0.05	Pass	9311676
2233.91	2233.90	-0.01	Pass	0.70	0.74	0.04	Pass	1782692

Analyzer: MS1 Polarity: Negative Width: Wide HP Funnel RF: 45Vp-p LP Funnel RF: 45Vp-p

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	113.06	0.07	Pass	1.20	1.12	-0.08	Pass	3957372
302.00	302.10	0.10	Pass	1.20	1.24	0.04	Pass	1400100
601.98	602.06	0.08	Pass	1.20	1.39	0.19	Pass	6084649
1033.99	1034.03	0.04	Pass	1.20	1.37	0.17	Pass	2690328
1633.95	1633.95	0.00	Pass	1.20	1.39	0.19	Pass	1800971
2233.91	2233.86	-0.05	Pass	1.20	1.31	0.11	Pass	849135

Analyzer: MS2 Polarity: Negative Width: Wide HP Funnel RF: 45Vp-p LP Funnel RF: 45Vp-p

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.09	0.09	Pass	1.20	1.09	-0.11	Pass	744792
112.99	113.00	0.01	Pass	1.20	1.16	-0.04	Pass	5966546
302.00	301.99	-0.01	Pass	1.20	1.38	0.18	Pass	1817427
601.98	601.97	-0.01	Pass	1.20	1.59	0.39	Pass	6430929
1033.99	1033.97	-0.02	Pass	1.20	1.66	0.46	Pass	3427659
1633.95	1633.93	-0.02	Pass	1.20	1.53	0.33	Pass	3374435
2233.91	2233.83	-0.08	Pass	1.20	1.27	0.07	Pass	965880

Analyzer: MS1 Polarity: Negative Width: Widest HP Funnel RF: 45Vp-p LP Funnel RF: 45Vp-p

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	113.11	0.12	Pass	2.50	2.33	-0.17	Pass	5914447
302.00	302.19	0.19	Pass	2.50	2.25	-0.25	Pass	2226878
601.98	602.12	0.14	Pass	2.50	2.65	0.15	Pass	8554529
1033.99	1034.15	0.16	Pass	2.50	2.44	-0.06	Pass	5254976
1633.95	1634.09	0.14	Pass	2.50	2.41	-0.09	Pass	5367191
2233.91	2233.93	0.02	Pass	2.50	2.31	-0.19	Pass	3505620

Analyzer: MS2 Polarity: Negative Width: Widest HP Funnel RF: 45Vp-p LP Funnel RF: 45Vp-p

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.00	0.00	Pass	2.50	2.61	0.11	Pass	786446
112.99	112.94	-0.05	Pass	2.50	2.65	0.15	Pass	8331677
302.00	301.99	-0.01	Pass	2.50	2.88	0.38	Pass	2494661
601.98	601.98	0.00	Pass	2.50	3.08	0.58	Pass	8873020
1033.99	1033.96	-0.03	Pass	2.50	3.11	0.61	Pass	5466037
1633.95	1633.96	0.01	Pass	2.50	2.93	0.43	Pass	6229055
2233.91	2233.88	-0.03	Pass	2.50	2.62	0.12	Pass	2406370

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8128.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 2:29:23 PM
Sample Name : IC138-1
Vial : P1-A2
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63077,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.871	217.0 -> 172.0	880722	10.00 µg/L	-0.012
M5-PFPeA	4.307	268.0 -> 223.0	465912	5.00 µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	295070	2.50 µg/L	0.000
M4-PFHpA	6.279	367.0 -> 322.0	320805	2.50 µg/L	-0.012
M8-PFOA	6.897	421.0 -> 376.0	486937	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	194682	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	180747	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	249852	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	215349	1.25 µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	167908	1.25 µg/L	0.000
M8-FOSA	9.279	506.0 -> 78.0	176148	2.50 µg/L	-0.012
M3-PFBS	5.355	302.0 -> 99.0	28258	2.50 µg/L	-0.012
		302.0 -> 80.0	67120		
M3-PFHxS	6.986	402.0 -> 99.0	38911	2.50 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	41444	2.50 µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	12850	5.00 µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	25355	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	29898	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	226082	5.00 µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	469492	10.00 µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	173683	5.00 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	873111	25.00 µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	1074751	25.00 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	94395	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	88601	2.50 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	67263	2.50 µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	385009	5.00 µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	45236	2.50 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	486882	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	159638	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	190064	1.25 µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	278175	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.153	329.0 -> 81.0	12850	5.66 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 113.3%	
13C2-6:2FTS	6.684	429.0 -> 81.0	25355	5.15 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.0%	
13C2-8:2FTS	7.671	529.0 -> 81.0	29898	5.16 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.3%	
13C2-PFDoDA	8.666	615.0 -> 570.0	215349	1.25 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.8%	
13C2-PFTeDA	9.381	715.0 -> 670.0	167908	1.27 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.2%	
13C3-PFBS	5.355	302.0 -> 99.0	28258	2.53 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.2%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	38911	2.46	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.5%			
13C4-PFBA	2.871	217.0 -> 172.0	880722	9.98	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.8%			
13C4-PFHpA	6.279	367.0 -> 322.0	320805	2.56	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.5%			
13C5-PFHxA	5.452	318.0 -> 273.0	295070	2.51	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.2%			
13C5-PFPeA	4.307	268.0 -> 223.0	465912	5.21	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.3%			
13C6-PFDA	7.858	519.0 -> 474.0	180747	1.28	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.5%			
13C7-PFUnDA	8.273	570.0 -> 525.0	249852	1.33	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.1%			
13C8-FOSA	9.279	506.0 -> 78.0	176148	2.55	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.0%			
13C8-PFOA	6.897	421.0 -> 376.0	486937	2.50	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.1%			
13C8-PFOS	7.995	507.0 -> 99.0	41444	2.56	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.4%			
13C9-PFNA	7.403	472.0 -> 427.0	194682	1.23	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.8%			
d3-MeFOSAA	7.915	573.0 -> 419.0	226082	5.10	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.1%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	469492	10.15	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.5%			
d3-MeFOSA	10.567	515.0 -> 169.0	88601	2.50	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.9%			
d5-EtFOSAA	8.098	589.0 -> 419.0	173683	5.11	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.1%			
d7-MeFOSE	10.462	623.0 -> 59.0	873111	25.77	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 103.1%			
d9-EtFOSE	10.734	639.0 -> 59.0	1074751	26.16	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 104.7%			
d5-EtFOSA	10.825	531.0 -> 169.0	94395	2.58	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.3%			
Target Compounds							QValue
4:2FTS	5.154	327.0 -> 307.0	15519	0.66	µg/L		98
		327.0 -> 81.0	7075				
6:2FTS	6.684	427.0 -> 407.0	18325	0.72	µg/L		96
		427.0 -> 81.0	8046				
8:2FTS	7.671	527.0 -> 507.0	14043	0.60	µg/L		92
		527.0 -> 81.0	5994				
EtFOSAA	8.099	584.0 -> 419.0	5826	0.18	µg/L	m	93
		584.0 -> 483.0	3563				
FOSA	9.269	498.0 -> 78.0	11837	0.19	µg/L	m	97
		498.0 -> 478.0	249				
MeFOSAA	7.917	570.0 -> 419.0	6819	0.18	µg/L	m	89
		570.0 -> 512.0	2040				
PFBA	2.864	213.0 -> 169.0	18557	0.69	µg/L		100
PFBS	5.357	299.0 -> 80.0	5047	0.16	µg/L		98
		299.0 -> 99.0	2015				
PFDA	7.859	513.0 -> 469.0	22044	0.16	µg/L		94
		513.0 -> 219.0	5781				
PFDoDA	8.667	613.0 -> 569.0	29291	0.18	µg/L		97
		613.0 -> 319.0	4187				

Perfluorinated Compounds by LC/MS/MS

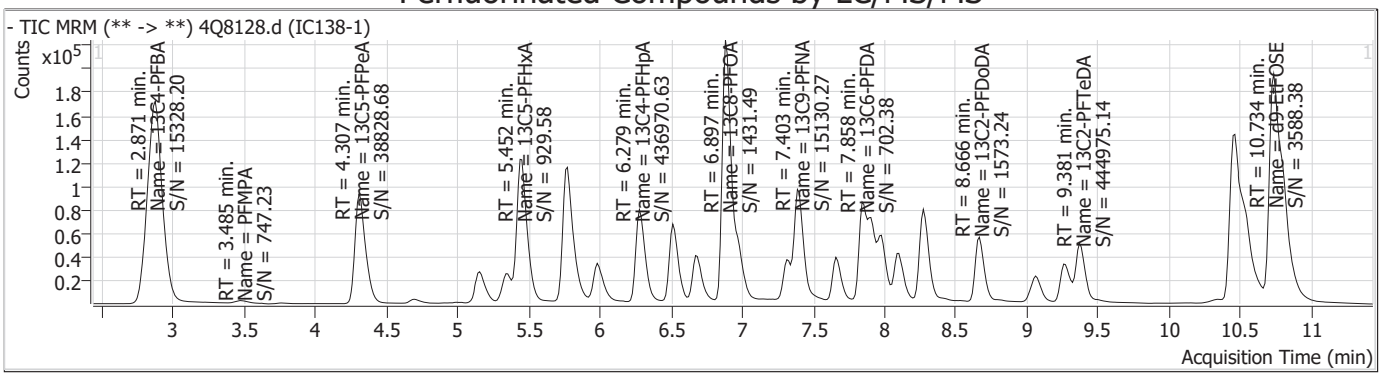
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	3854	0.17	µg/L		99
		599.0 -> 99.0	2151				
PFHpA	6.280	363.0 -> 319.0	33297	0.17	µg/L		95
		363.0 -> 169.0	6117				
PFHpS	7.516	449.0 -> 80.0	5737	0.17	µg/L		97
		449.0 -> 99.0	3046				
PFHxA	5.455	313.0 -> 269.0	21611	0.17	µg/L		100
		313.0 -> 119.0	708				
PFHxS	6.987	399.0 -> 80.0	5426	0.16	µg/L	m	93
		399.0 -> 99.0	3167				
PFNA	7.404	463.0 -> 419.0	19274	0.16	µg/L		96
		463.0 -> 219.0	6795				
PFNS	8.425	549.0 -> 80.0	4324	0.16	µg/L		97
		549.0 -> 99.0	2632				
PFOA	6.898	413.0 -> 369.0	28374	0.18	µg/L	m	97
		413.0 -> 169.0	8708				
PFOS	7.996	499.0 -> 80.0	5501	0.16	µg/L	m	90
		499.0 -> 99.0	3236				
PFPeA	4.309	263.0 -> 219.0	24172	0.33	µg/L		100
PFPeS	6.318	349.0 -> 80.0	5784	0.16	µg/L		93
		349.0 -> 99.0	2637				
PFTeDA	9.381	713.0 -> 669.0	33864	0.17	µg/L		99
		713.0 -> 219.0	2362				
PFTrDA	9.038	663.0 -> 619.0	32433	0.18	µg/L		97
		663.0 -> 369.0	2381				
PFUnDA	8.275	563.0 -> 519.0	24669	0.17	µg/L		100
		563.0 -> 269.0	4942				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	58958	0.66	µg/L		99
		633.0 -> 453.0	18674				
9Cl-PF3ONS	8.301	531.0 -> 351.0	64223	0.65	µg/L		96
		533.0 -> 353.0	18167				
ADONA	6.527	377.0 -> 251.0	221578	0.60	µg/L		99
		377.0 -> 85.0	73293				
HFPO-DA	5.780	285.0 -> 169.0	33961	0.69	µg/L		98
		285.0 -> 185.0	3965				
3:3FTCA	3.756	241.0 -> 177.0	3673	0.83	µg/L		97
		241.0 -> 117.0	337				
5:3FTCA	5.993	341.0 -> 237.0	89848	4.00	µg/L		99
		341.0 -> 217.0	63593				
7:3FTCA	7.330	441.0 -> 337.0	123504	4.22	µg/L		96
		441.0 -> 317.0	52737				
EtFOSA	10.826	526.0 -> 219.0	6866	0.18	µg/L		97
		526.0 -> 169.0	10023				
EtFOSE	10.760	630.0 -> 59.0	82643	1.65	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	7984	0.17	µg/L		91
		512.0 -> 219.0	5835				
MeFOSE	10.476	616.0 -> 59.0	66555	1.74	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	3256	0.18	µg/L		99
		699.0 -> 99.0	1998				
NFDHA	5.345	295.0 -> 201.0	6204	0.37	µg/L		89
		201.0 -> 85.0	23564				
		295.0 -> 85.0	1727				
PFMBA	4.698	279.0 -> 85.0	17425	0.35	µg/L		100
PFMPA	3.485	229.0 -> 85.0	14049	0.33	µg/L		100
PFEESA	5.849	315.0 -> 135.0	36341	0.31	µg/L		99
		315.0 -> 69.0	2655				

Perfluorinated Compounds by LC/MS/MS

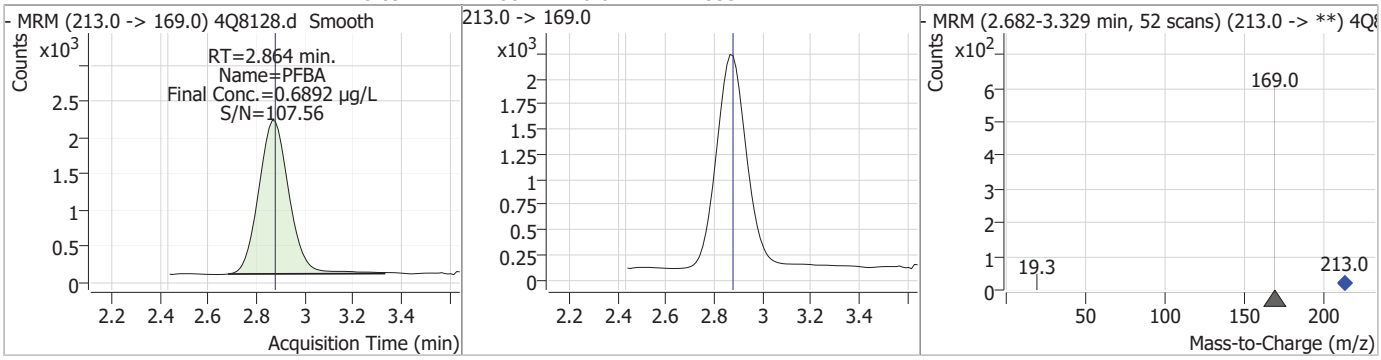
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

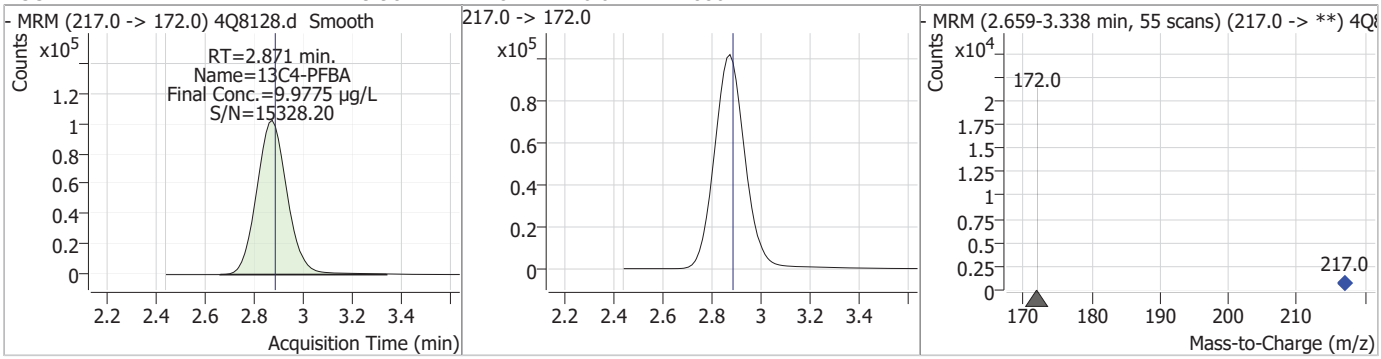
Perfluorinated Compounds by LC/MS/MS



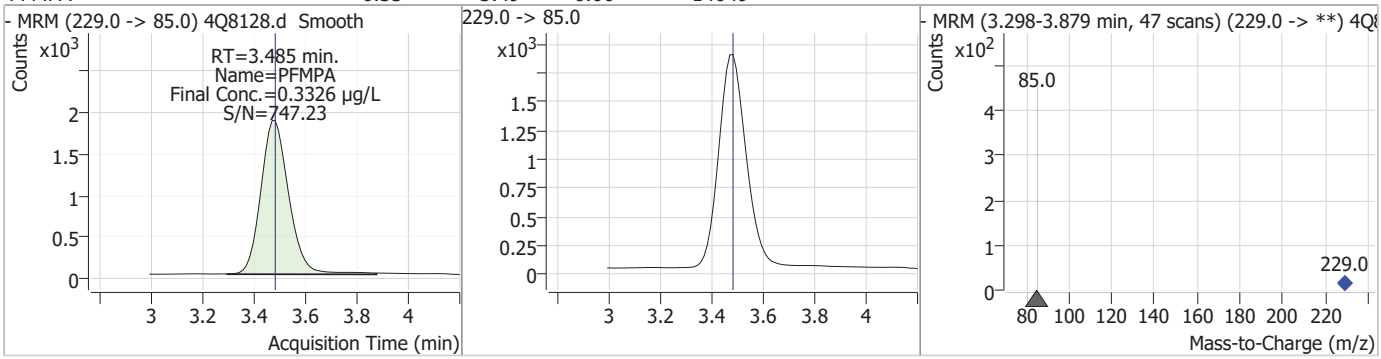
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.69	2.86	-0.01	18557				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.98	2.87	-0.01	880722				

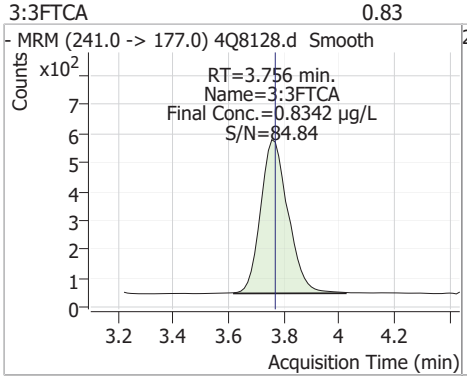


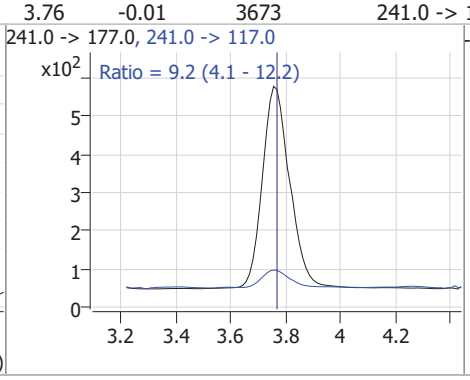
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.33	3.49	0.00	14049				

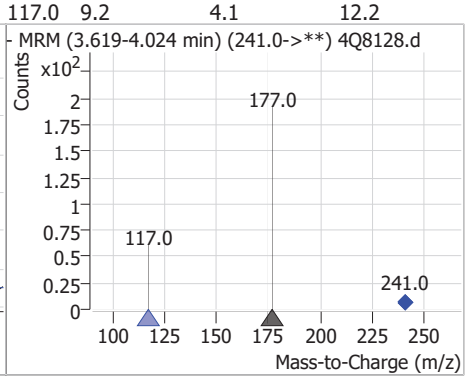


Perfluorinated Compounds by LC/MS/MS

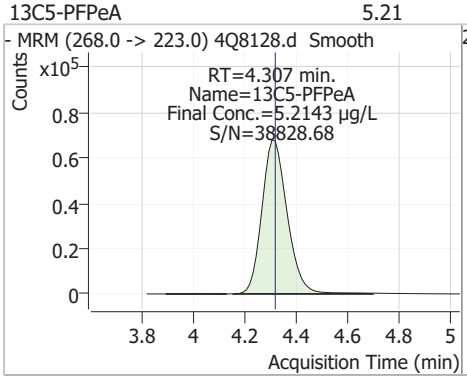
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	0.83	3.76	-0.01	3673	241.0 -> 117.0	9.2	4.1	12.2

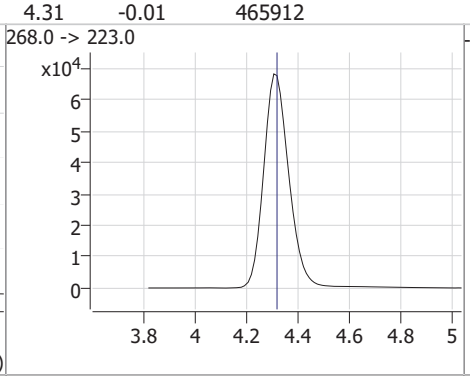


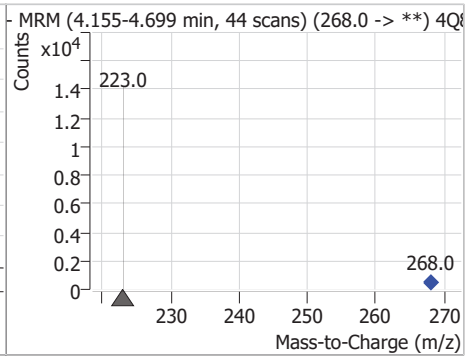




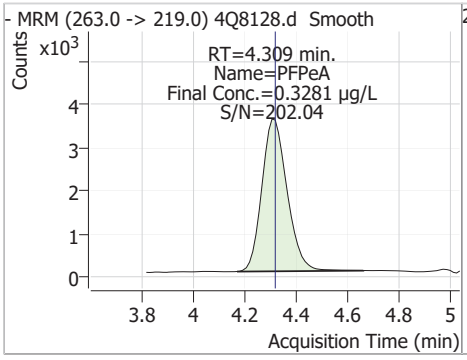
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.21	4.31	-0.01	465912				

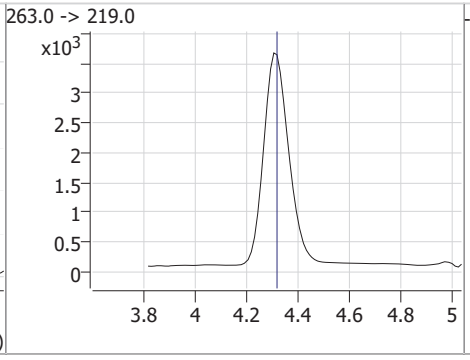


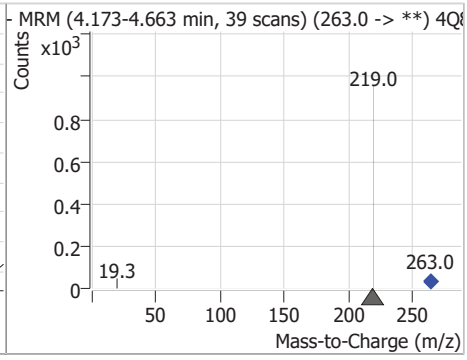




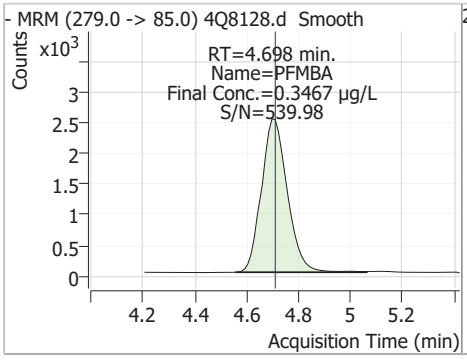
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.33	4.31	-0.01	24172				

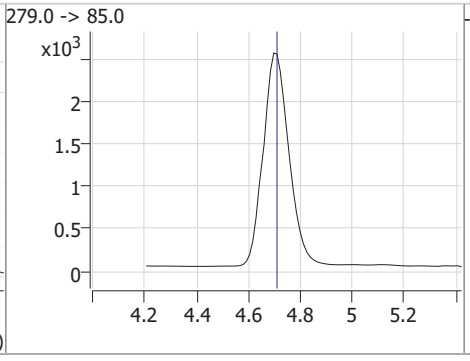


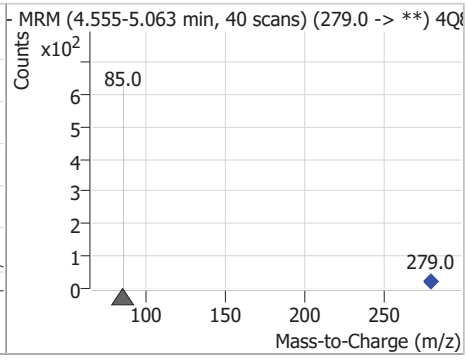




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.35	4.70	-0.01	17425				

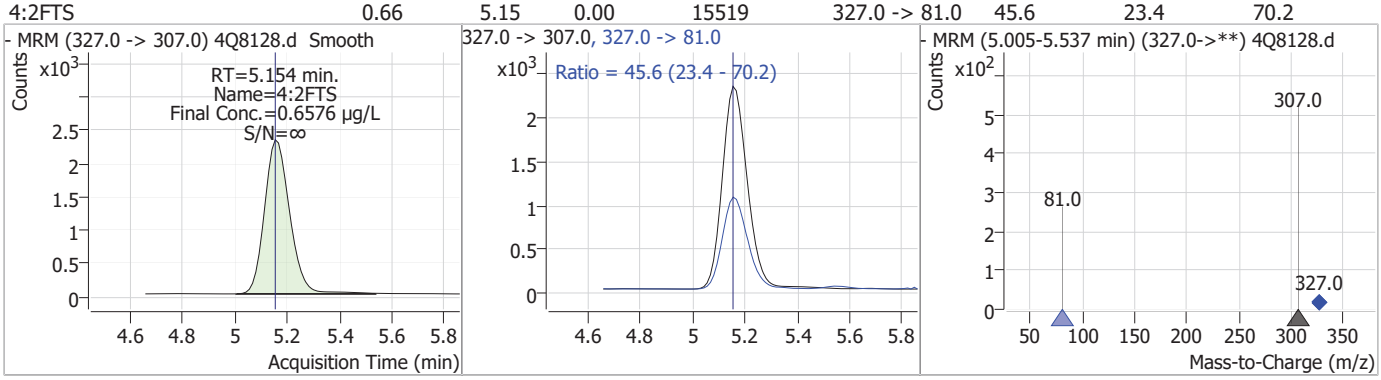




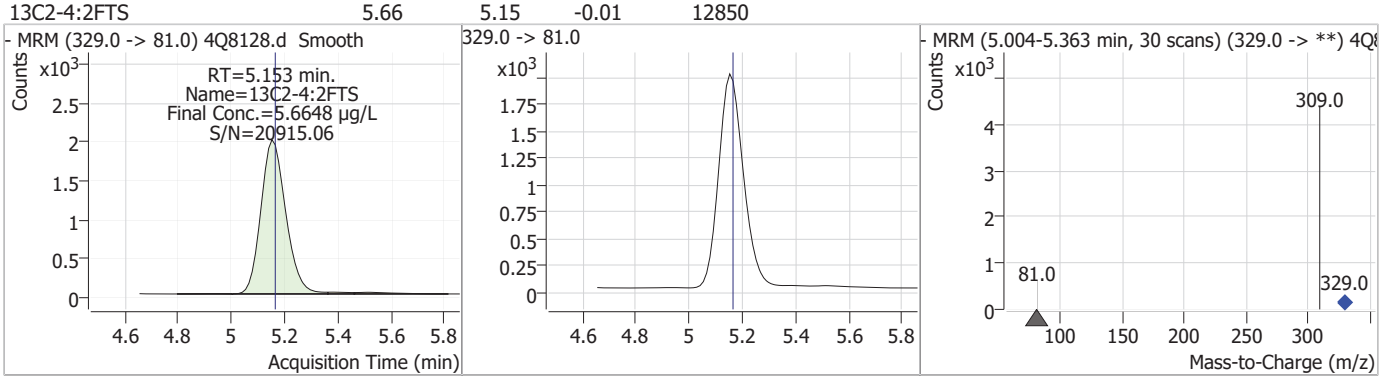


Perfluorinated Compounds by LC/MS/MS

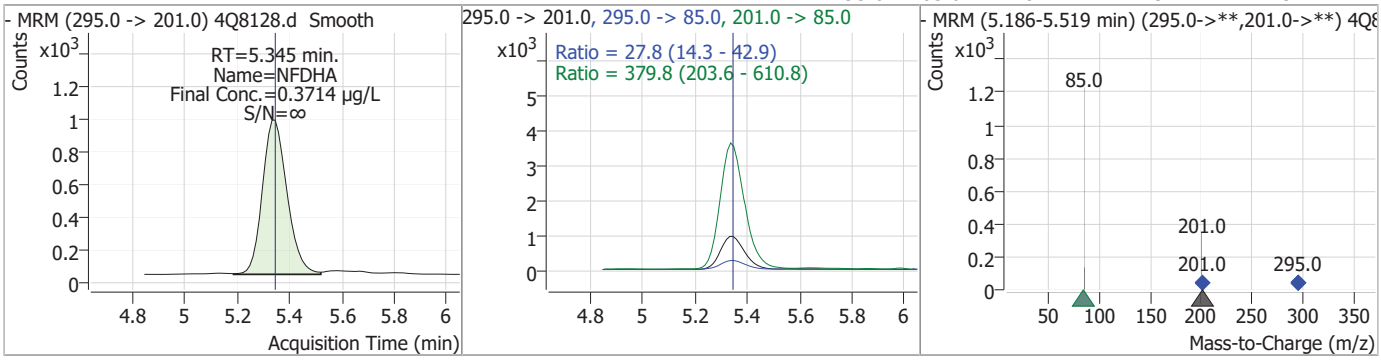
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	0.66	5.15	0.00	15519	327.0 -> 81.0	45.6	23.4	70.2



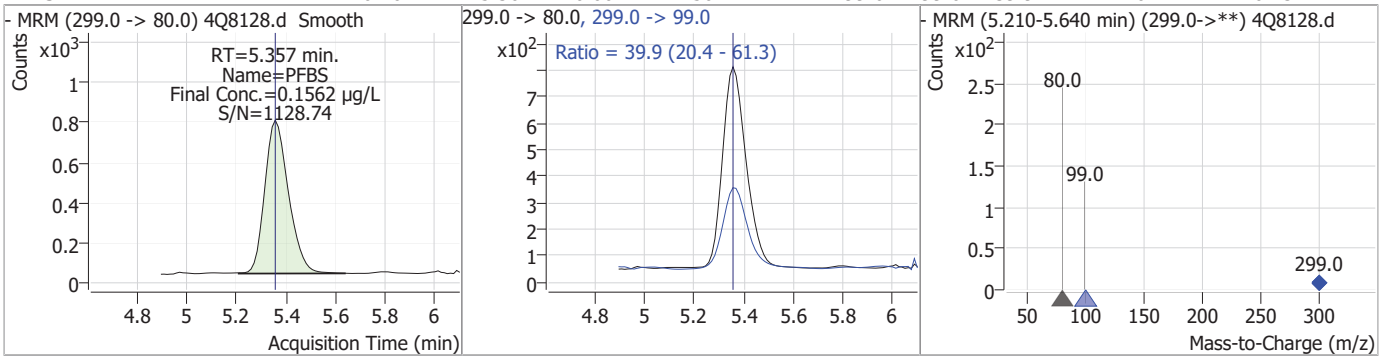
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.66	5.15	-0.01	12850				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.37	5.35	0.00	6204	201.0 -> 85.0	379.8	203.6	610.8
					295.0 -> 85.0	27.8	14.3	42.9

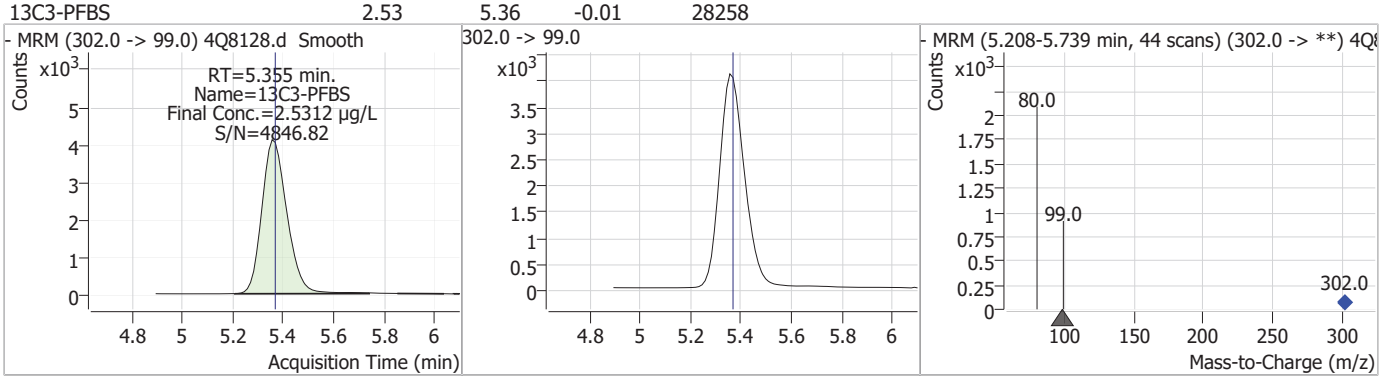


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.16	5.36	0.00	5047	299.0 -> 99.0	39.9	20.4	61.3

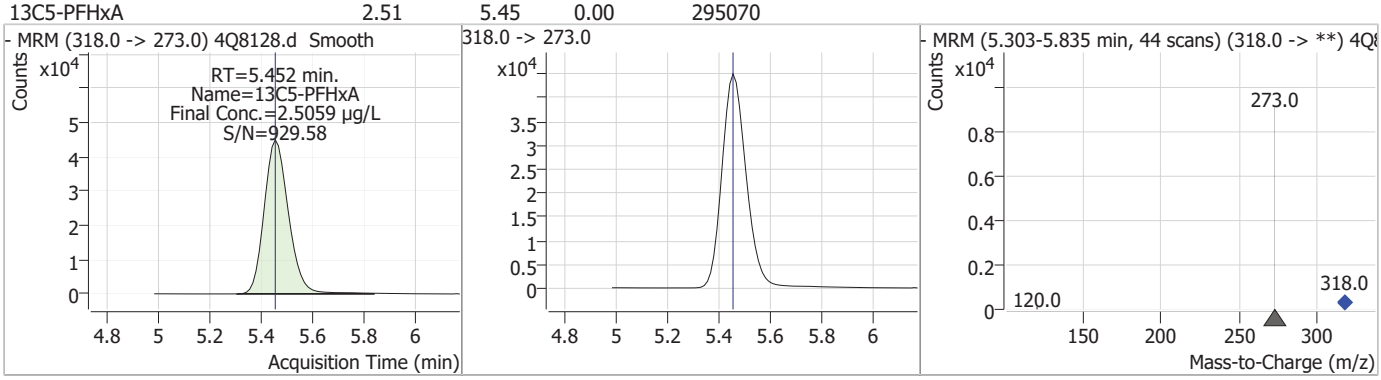


Perfluorinated Compounds by LC/MS/MS

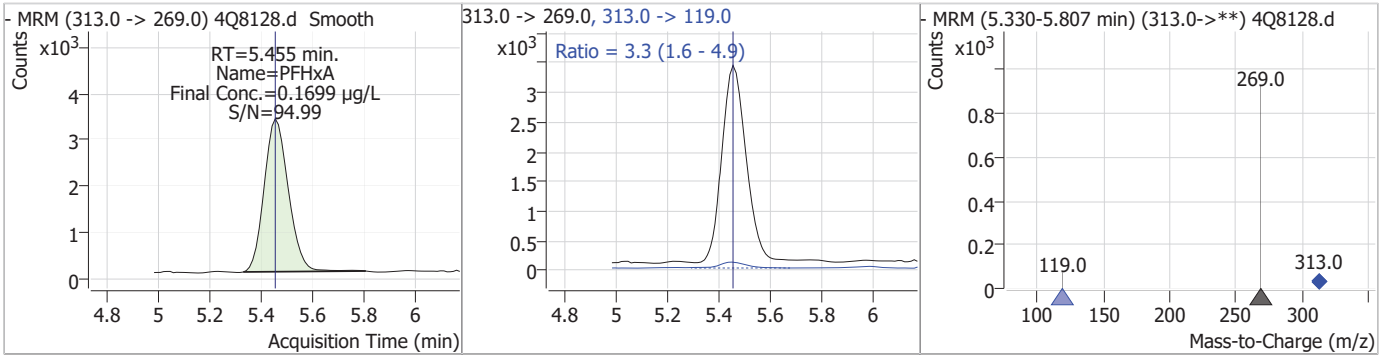
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.53	5.36	-0.01	28258				



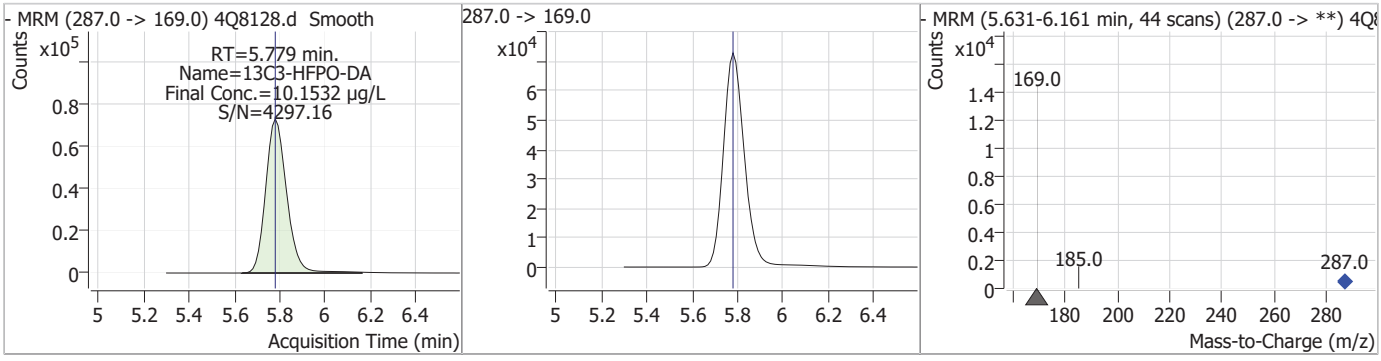
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.51	5.45	0.00	295070				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.17	5.45	0.00	21611	313.0 -> 119.0	3.3	1.6	4.9

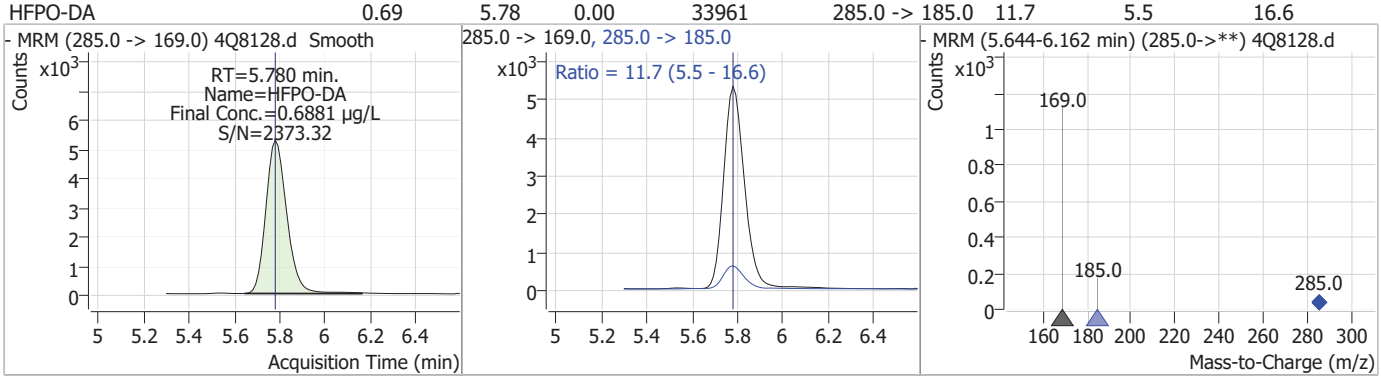


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.15	5.78	0.00	469492				

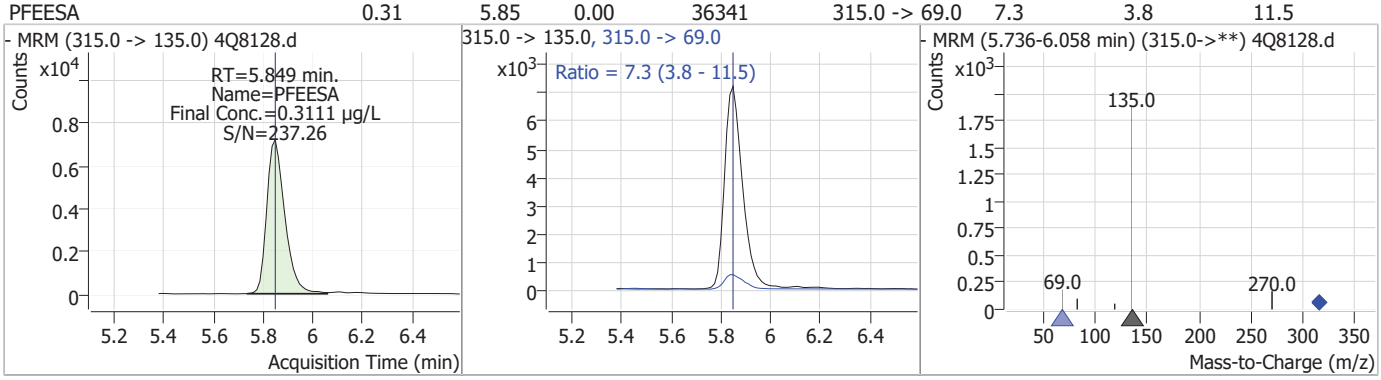


Perfluorinated Compounds by LC/MS/MS

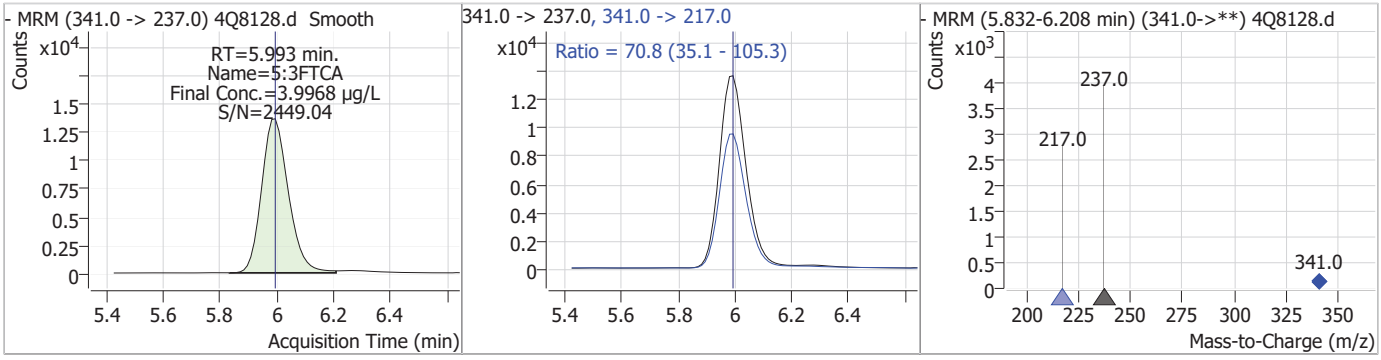
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	0.69	5.78	0.00	33961	285.0 -> 185.0	11.7	5.5	16.6



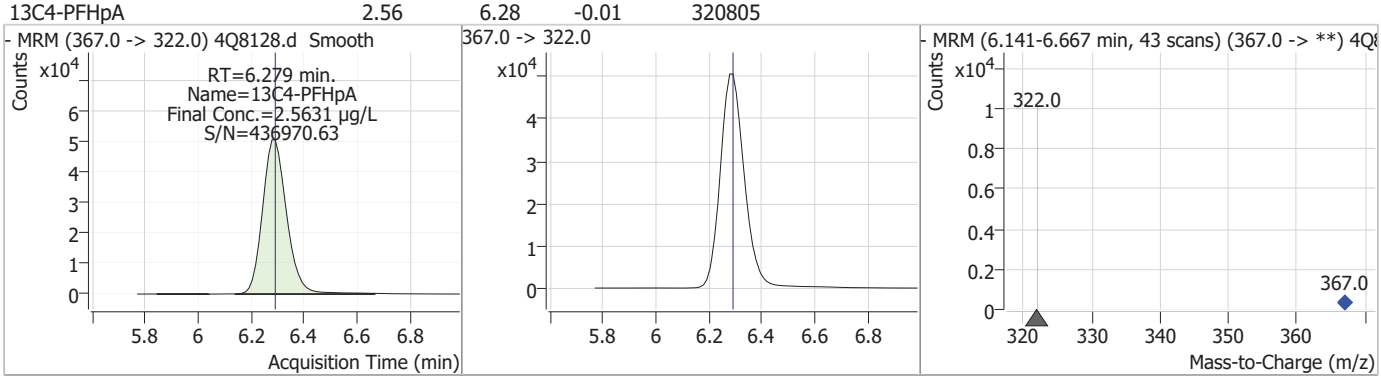
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.31	5.85	0.00	36341	315.0 -> 69.0	7.3	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	4.00	5.99	0.00	89848	341.0 -> 217.0	70.8	35.1	105.3

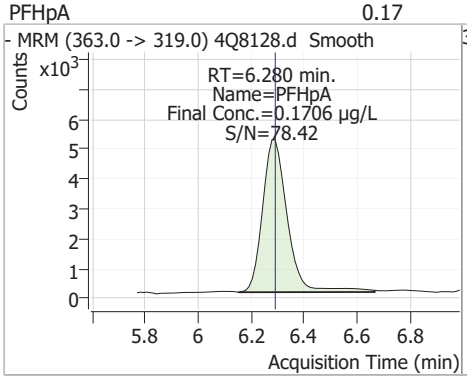


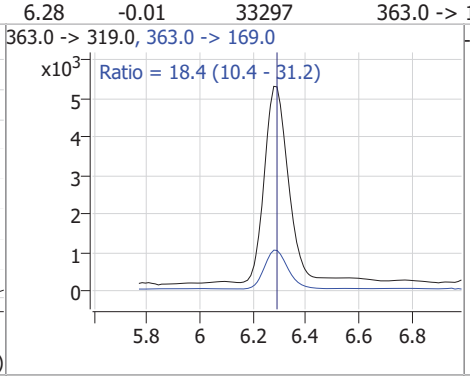
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.56	6.28	-0.01	320805				

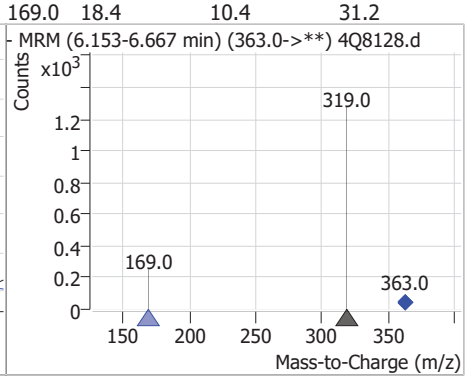


Perfluorinated Compounds by LC/MS/MS

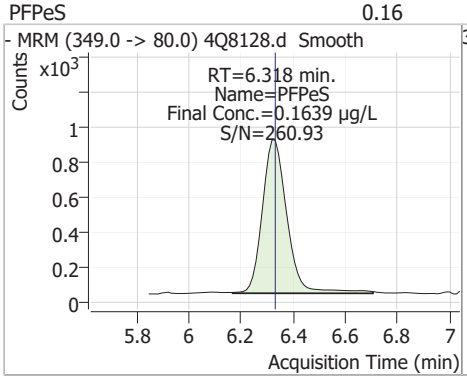
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.17	6.28	-0.01	33297	363.0 -> 169.0	18.4	10.4	31.2

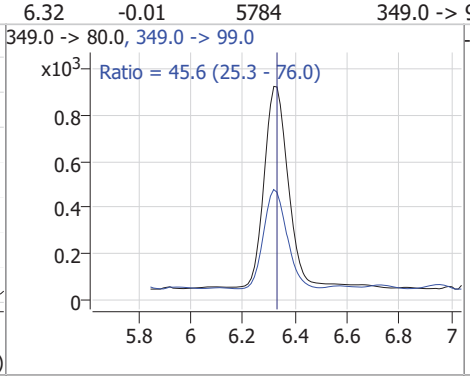


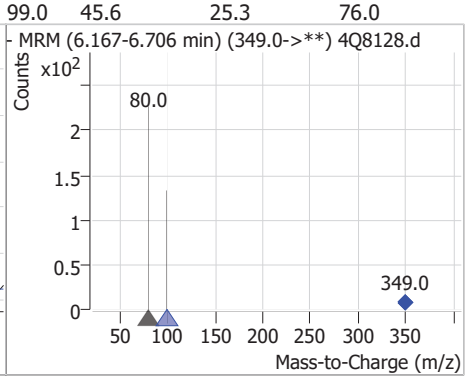




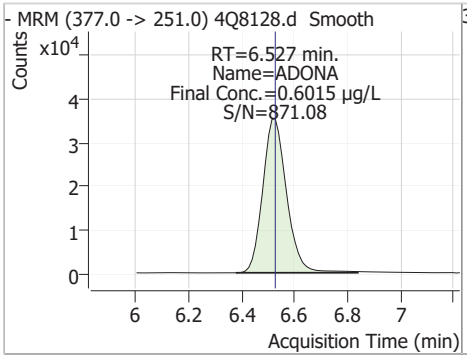
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.16	6.32	-0.01	5784	349.0 -> 99.0	45.6	25.3	76.0

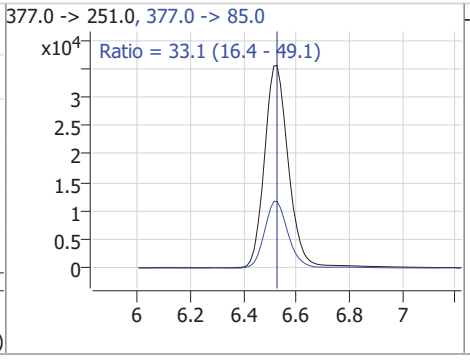


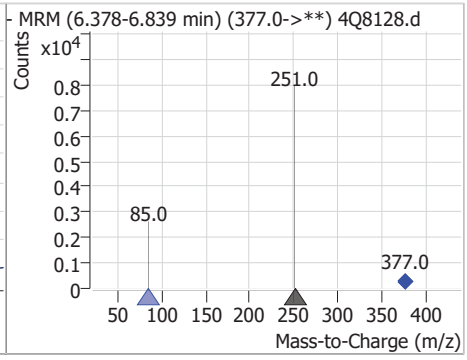




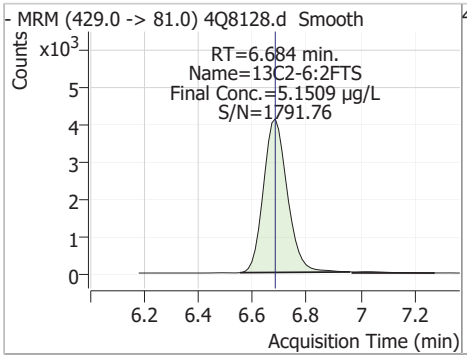
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	0.60	6.53	0.00	221578	377.0 -> 85.0	33.1	16.4	49.1

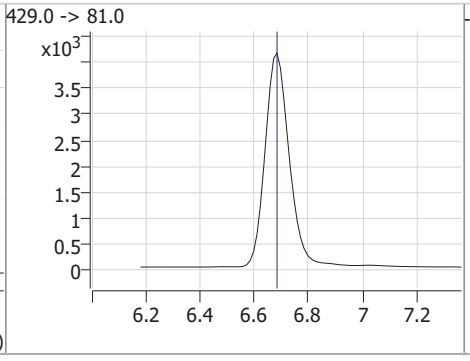


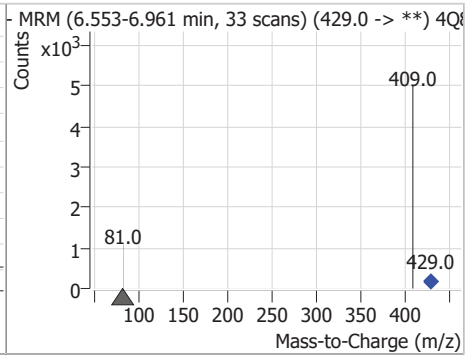




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.15	6.68	0.00	25355				







7.6.44

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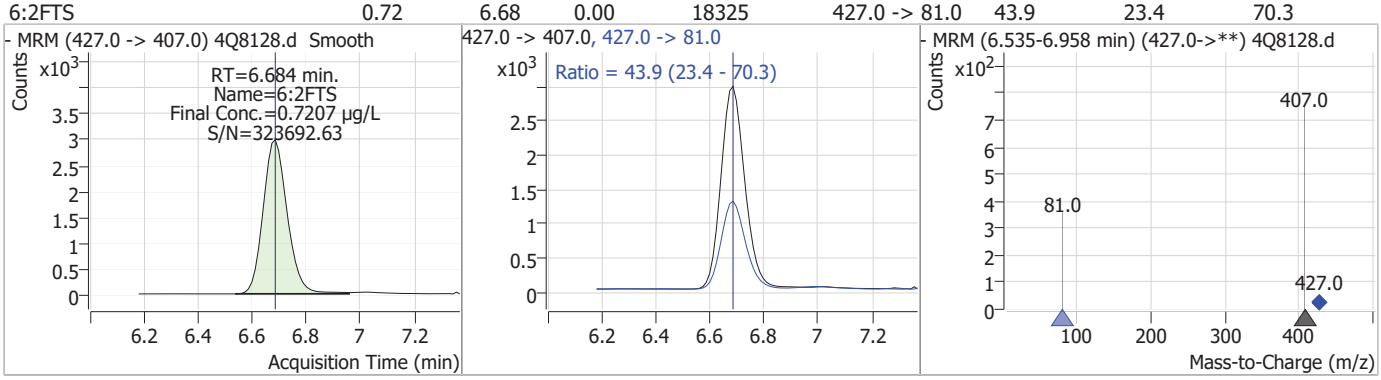
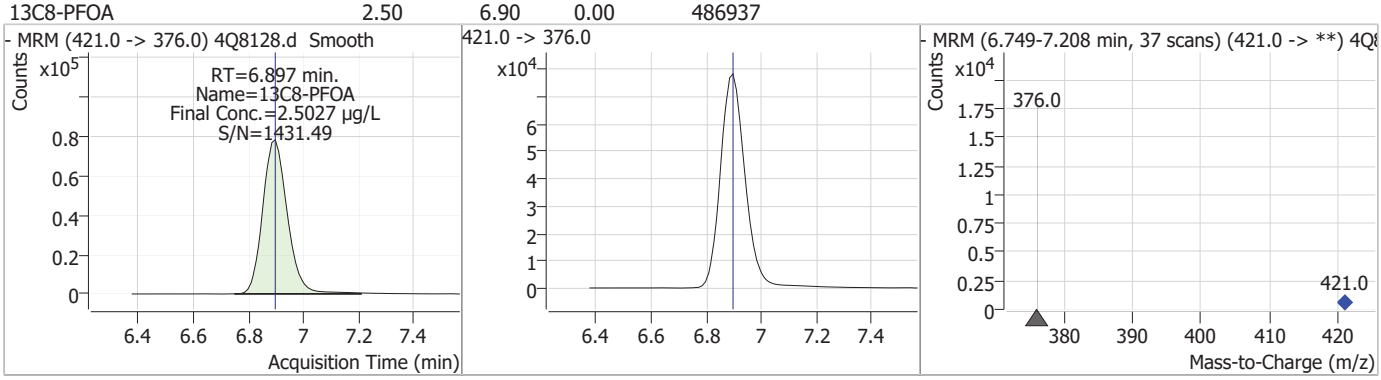
Perfluorinated Compounds by LC/MS/MS

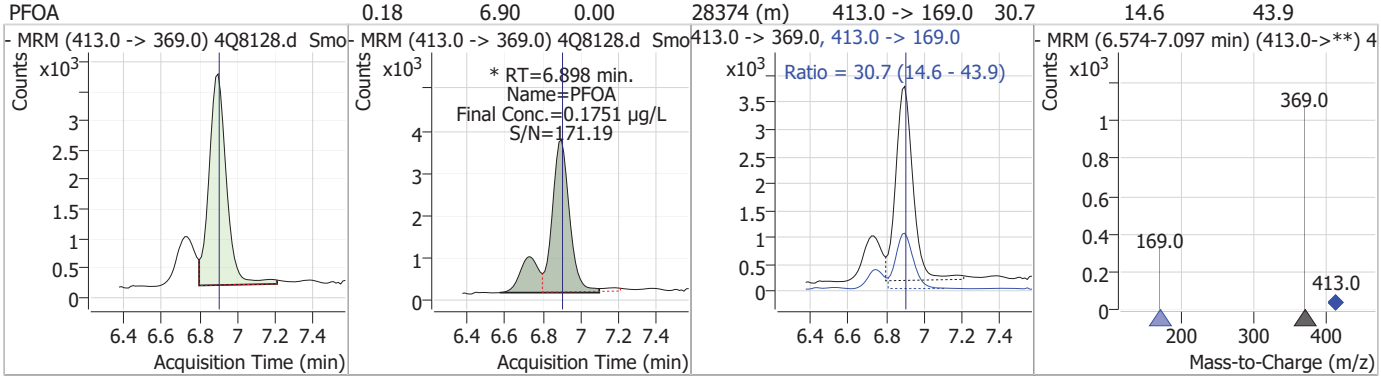
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.72	6.68	0.00	18325	427.0 -> 81.0	43.9	23.4	70.3



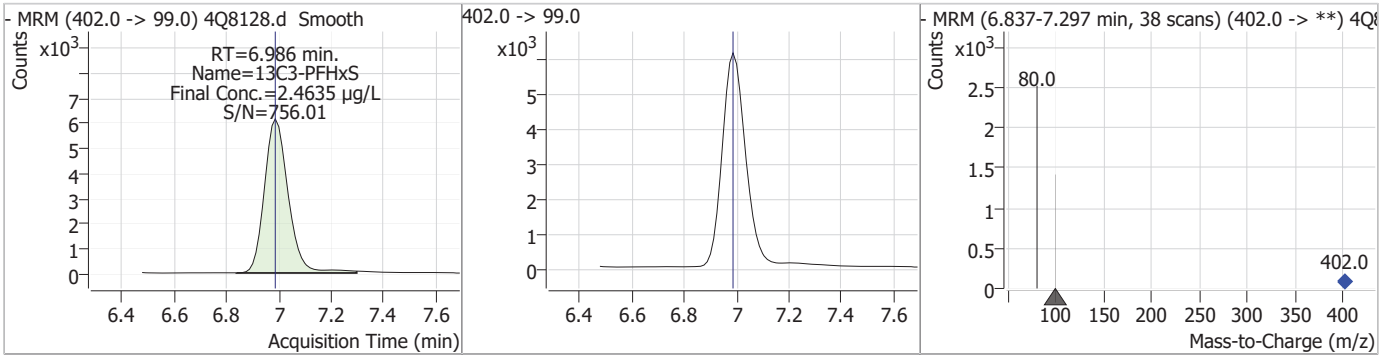
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.50	6.90	0.00	486937				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.18	6.90	0.00	28374 (m)	413.0 -> 169.0	30.7	14.6	43.9

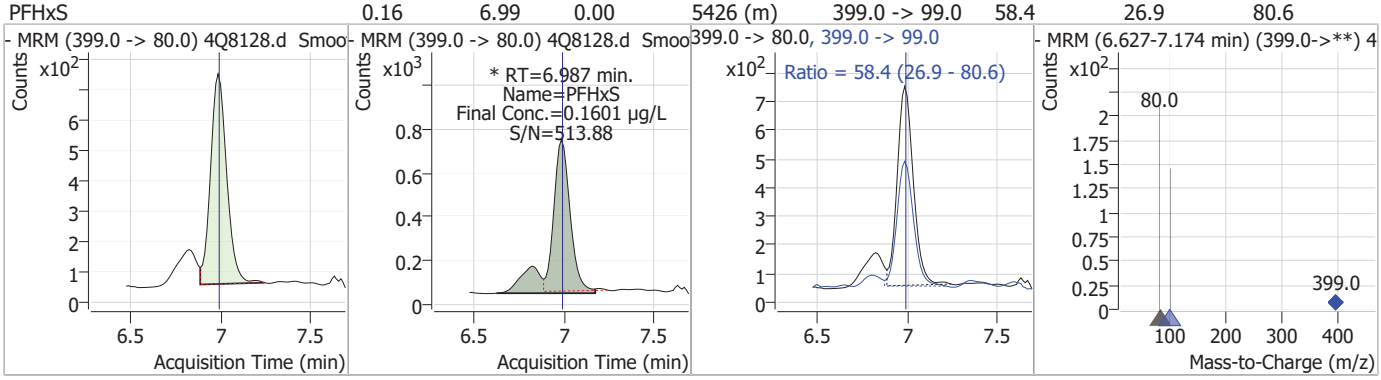


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.46	6.99	0.00	38911				

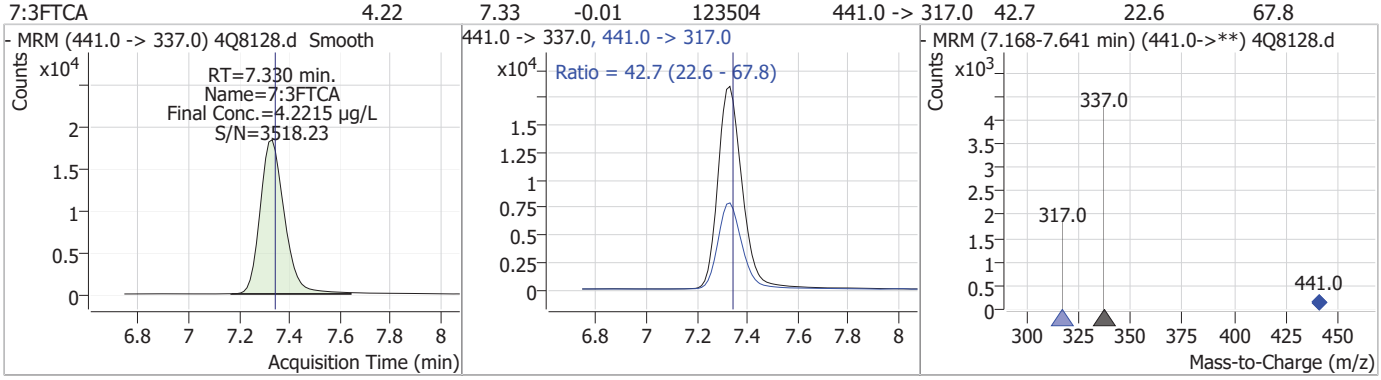


Perfluorinated Compounds by LC/MS/MS

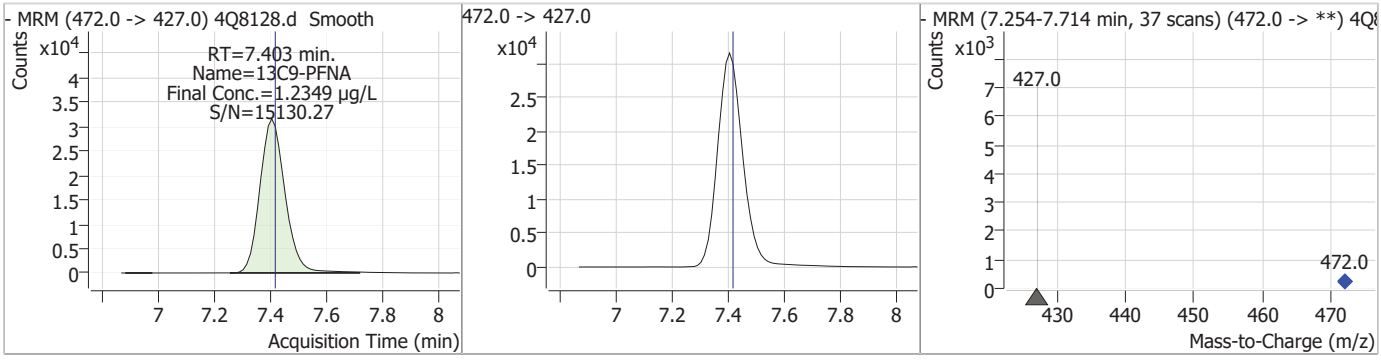
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.16	6.99	0.00	5426 (m)	399.0 -> 99.0	58.4	26.9	80.6



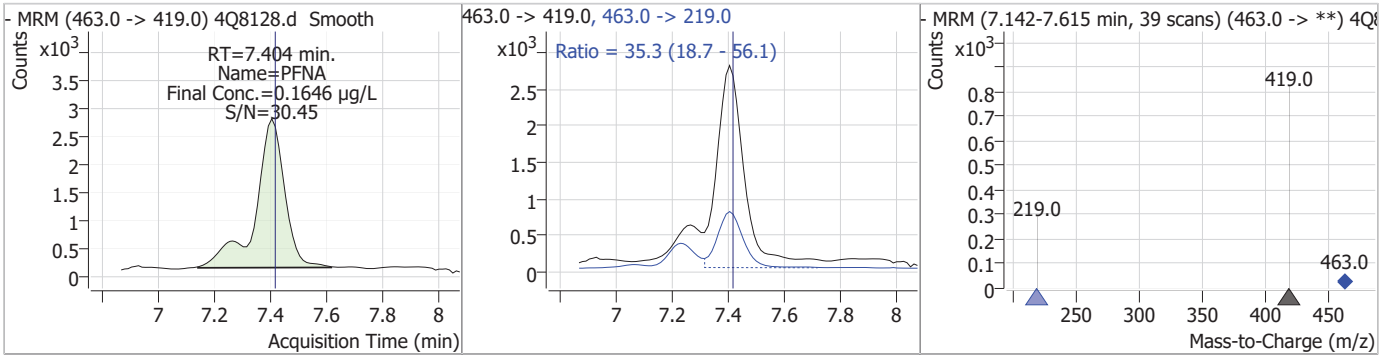
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	4.22	7.33	-0.01	123504	441.0 -> 317.0	42.7	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.23	7.40	-0.01	194682				

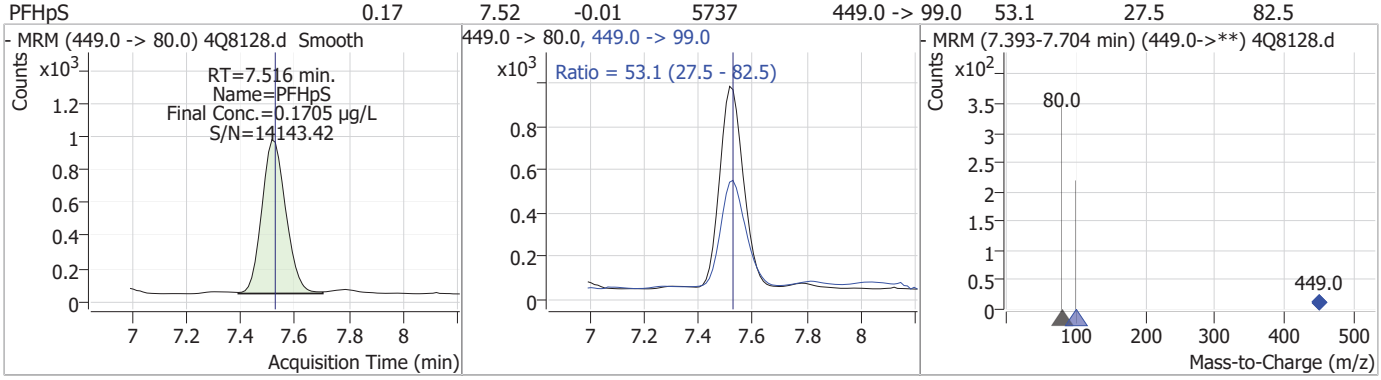


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.16	7.40	-0.01	19274	463.0 -> 219.0	35.3	18.7	56.1

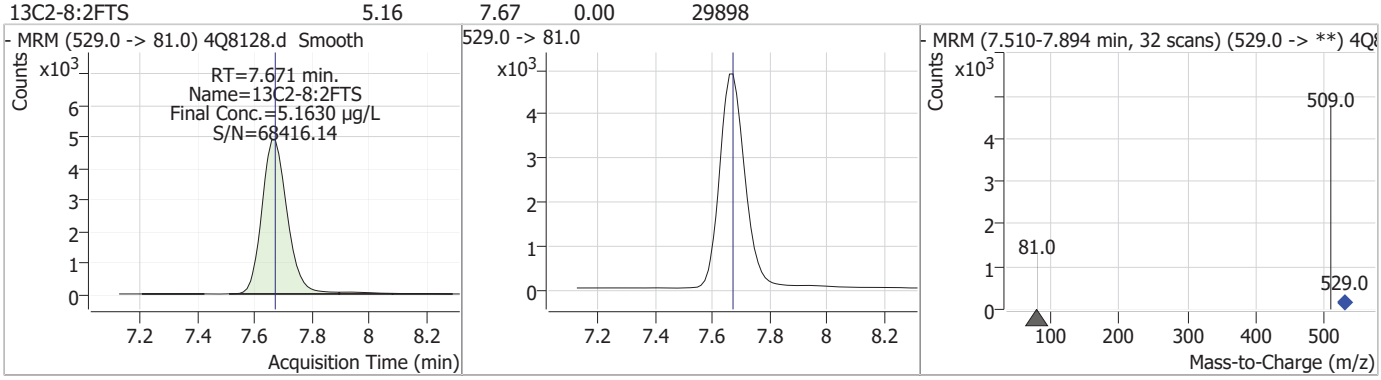


Perfluorinated Compounds by LC/MS/MS

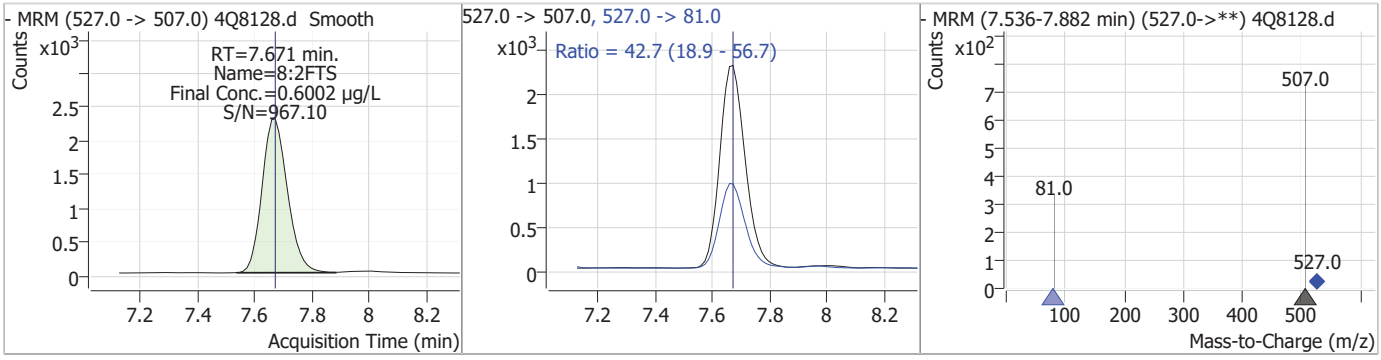
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.17	7.52	-0.01	5737	449.0 -> 99.0	53.1	27.5	82.5



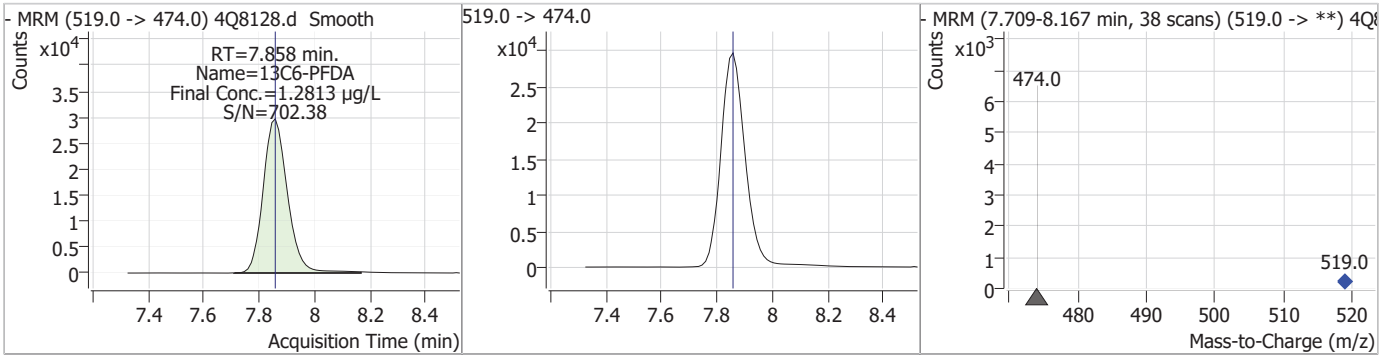
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.16	7.67	0.00	29898				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.60	7.67	0.00	14043	527.0 -> 81.0	42.7	18.9	56.7

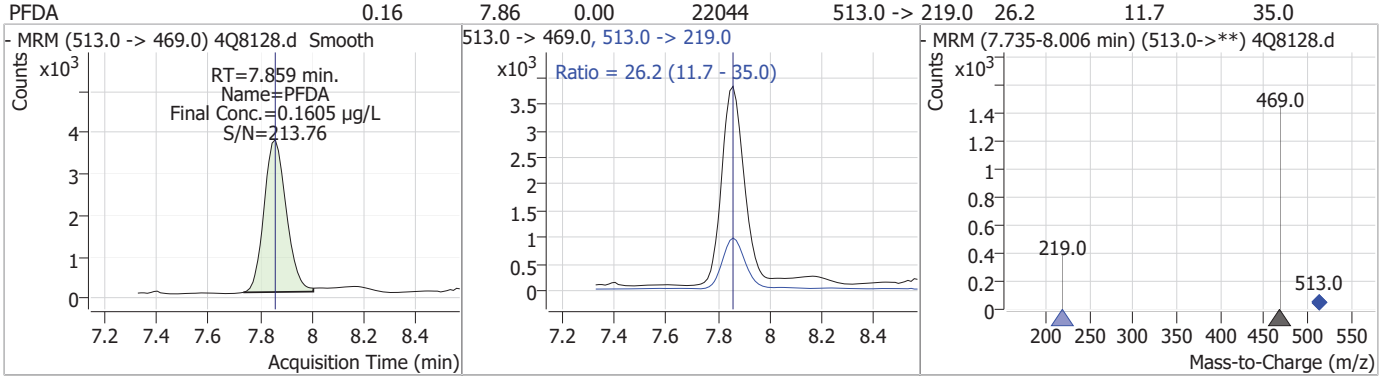


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.28	7.86	0.00	180747				

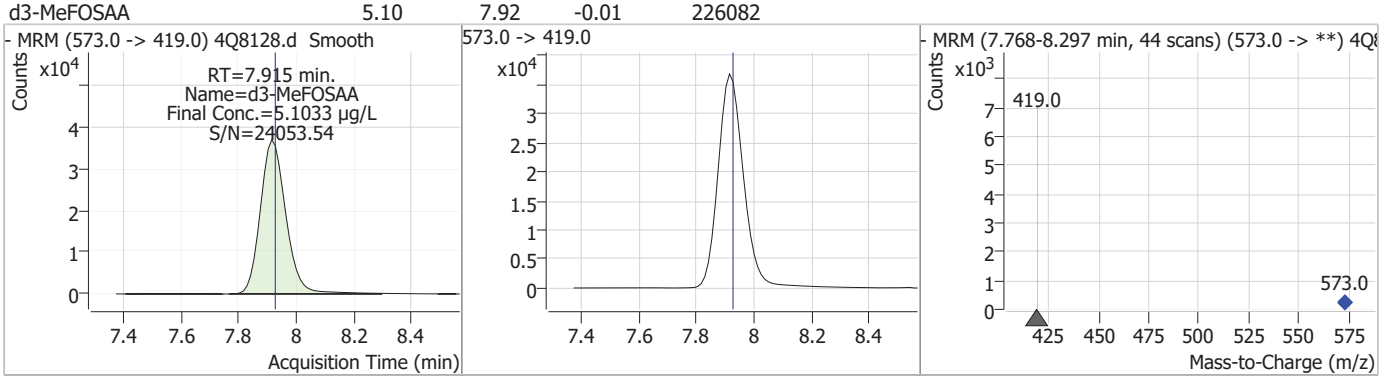


Perfluorinated Compounds by LC/MS/MS

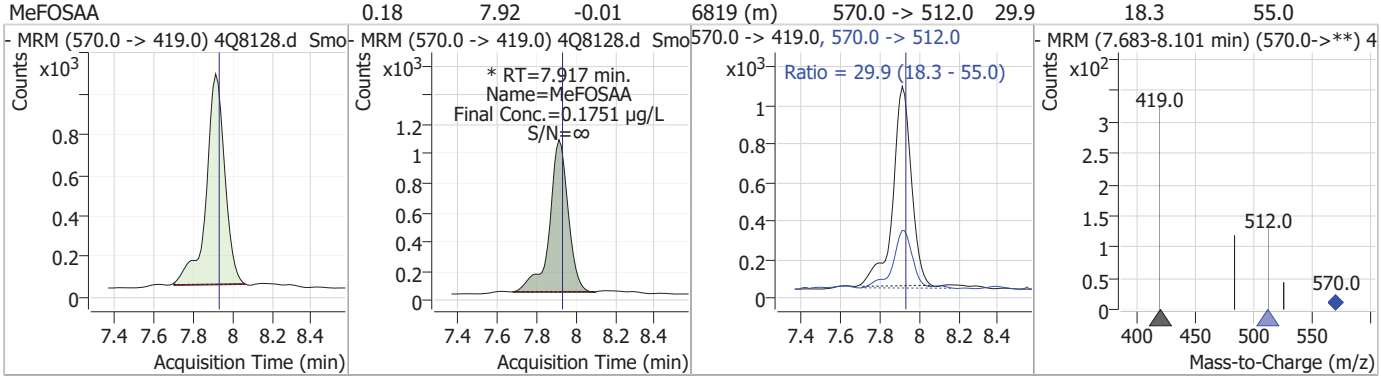
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.16	7.86	0.00	22044	513.0 -> 219.0	26.2	11.7	35.0



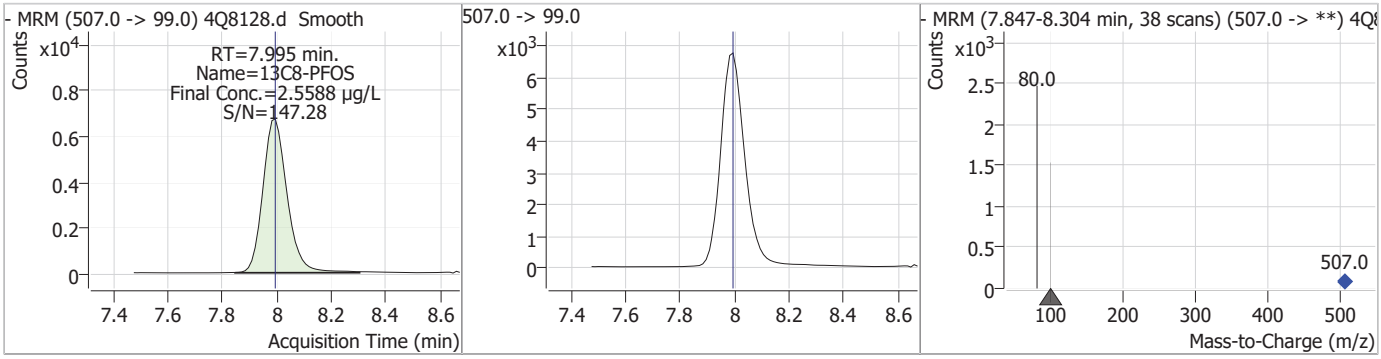
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.10	7.92	-0.01	226082				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.18	7.92	-0.01	6819 (m)	570.0 -> 512.0	29.9	18.3	55.0

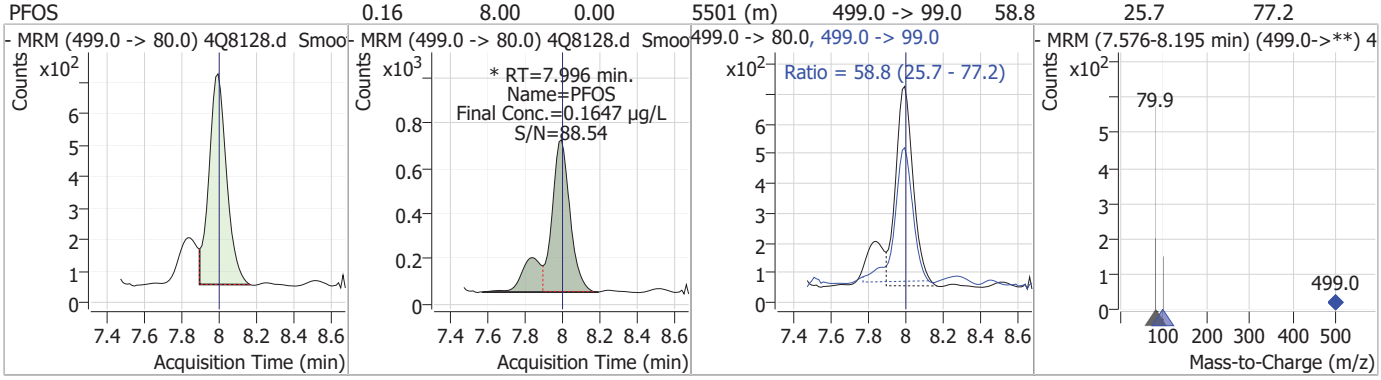


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.56	7.99	0.00	41444				

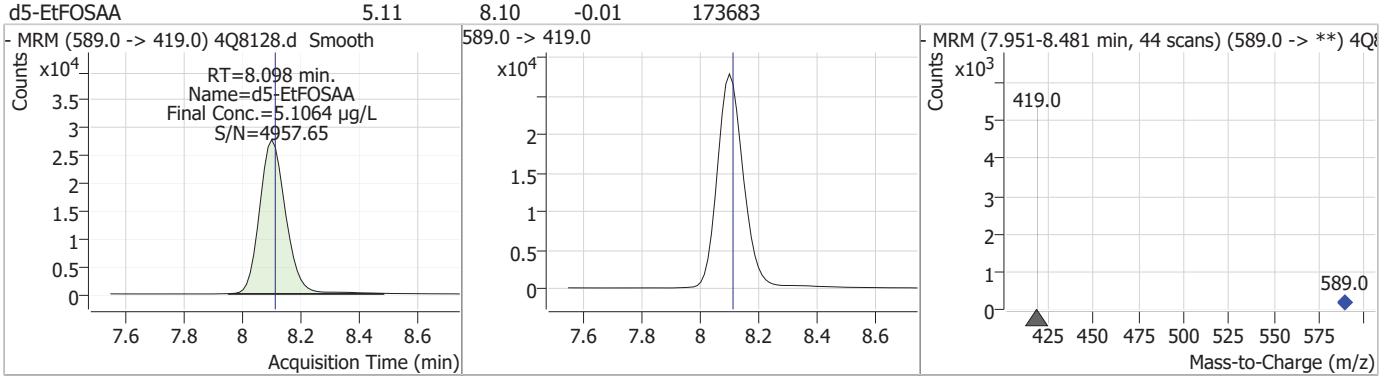


Perfluorinated Compounds by LC/MS/MS

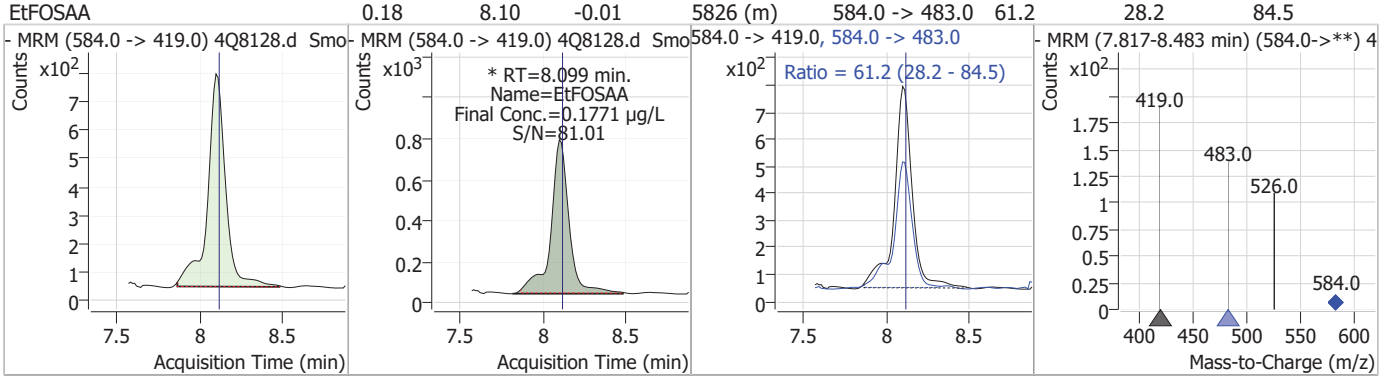
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.16	8.00	0.00	5501 (m)	499.0 -> 99.0	58.8	25.7	77.2



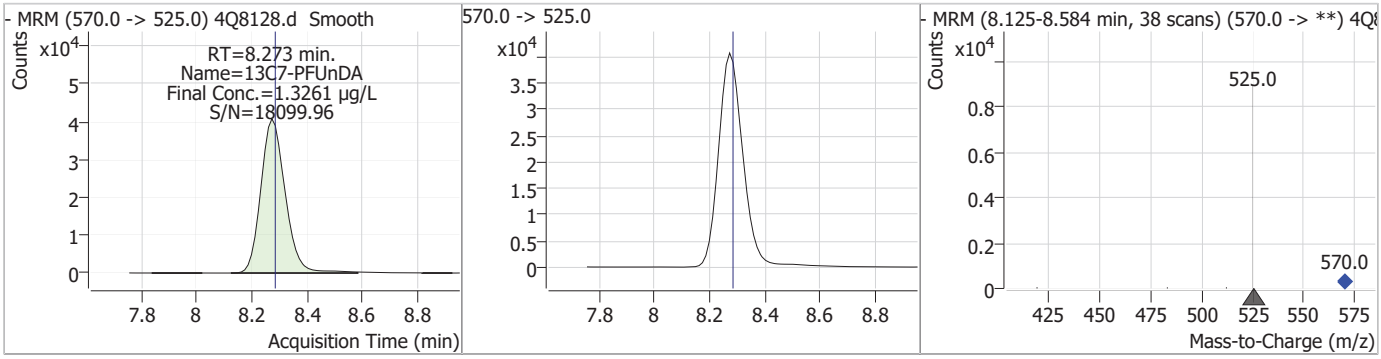
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.11	8.10	-0.01	173683				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.18	8.10	-0.01	5826 (m)	584.0 -> 483.0	61.2	28.2	84.5

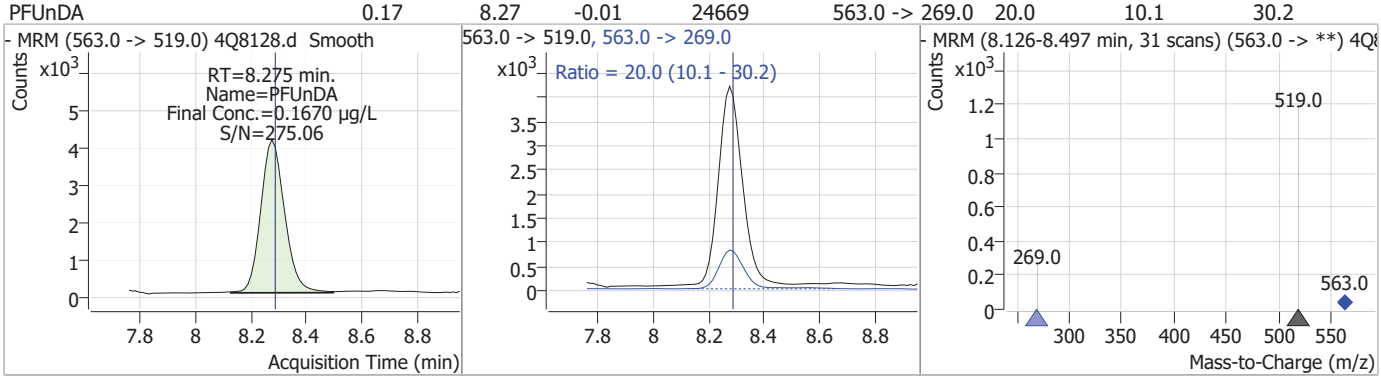


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.33	8.27	-0.01	249852				

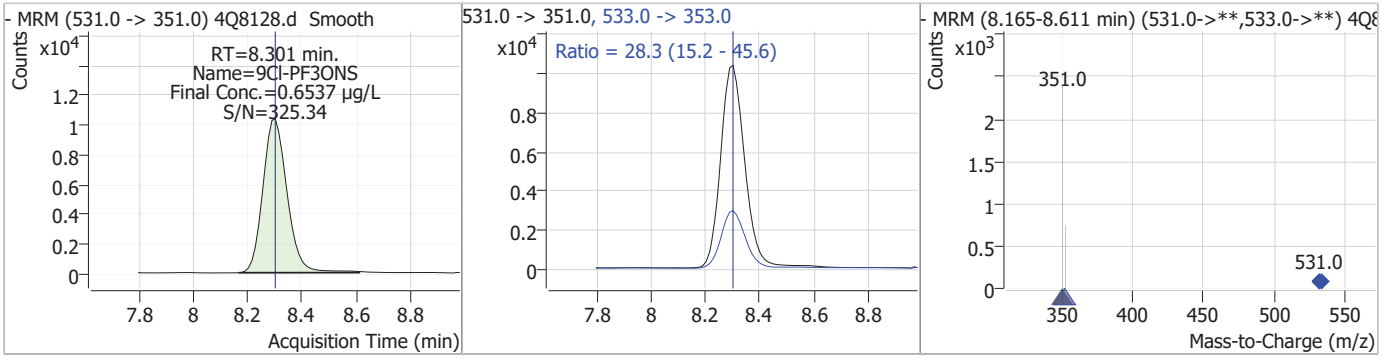


Perfluorinated Compounds by LC/MS/MS

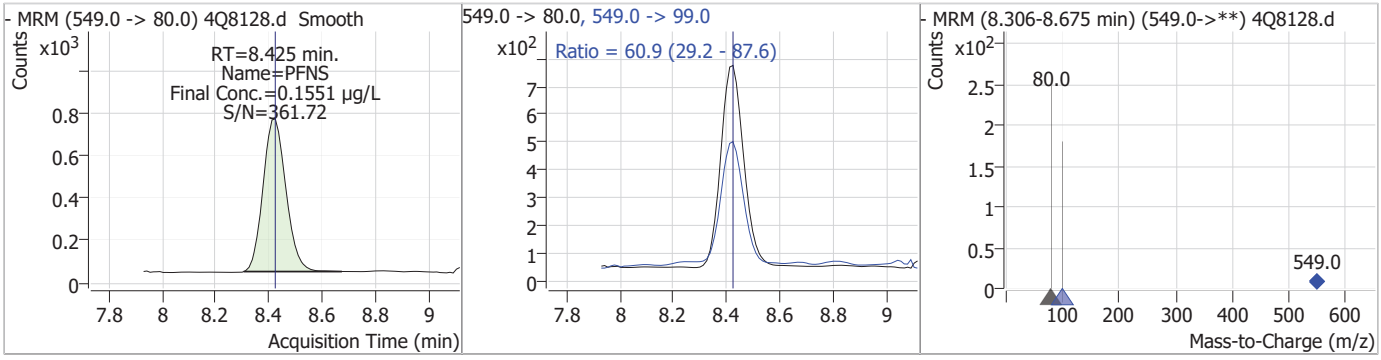
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.17	8.27	-0.01	24669	563.0 -> 269.0	20.0	10.1	30.2



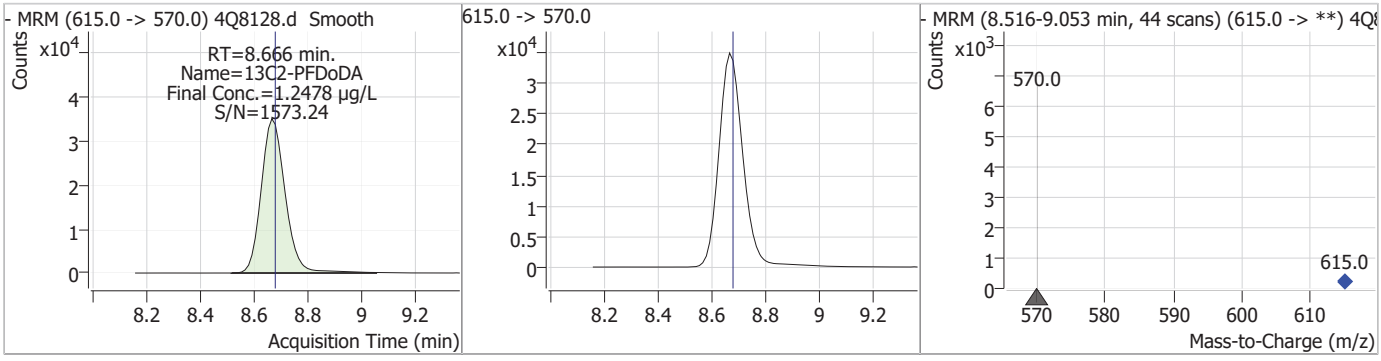
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	0.65	8.30	0.00	64223	533.0 -> 353.0	28.3	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.16	8.42	0.00	4324	549.0 -> 99.0	60.9	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.25	8.67	-0.01	215349				



7.6.44

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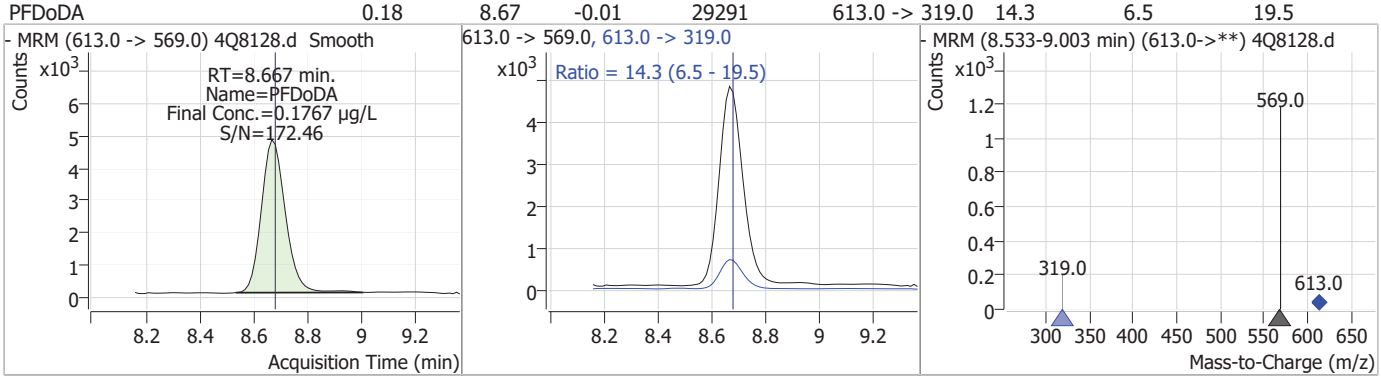
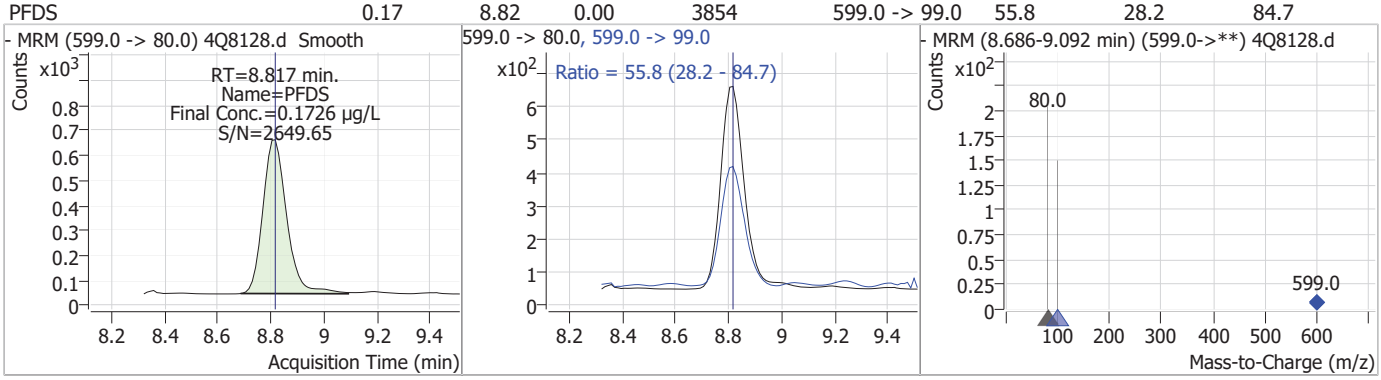
Perfluorinated Compounds by LC/MS/MS

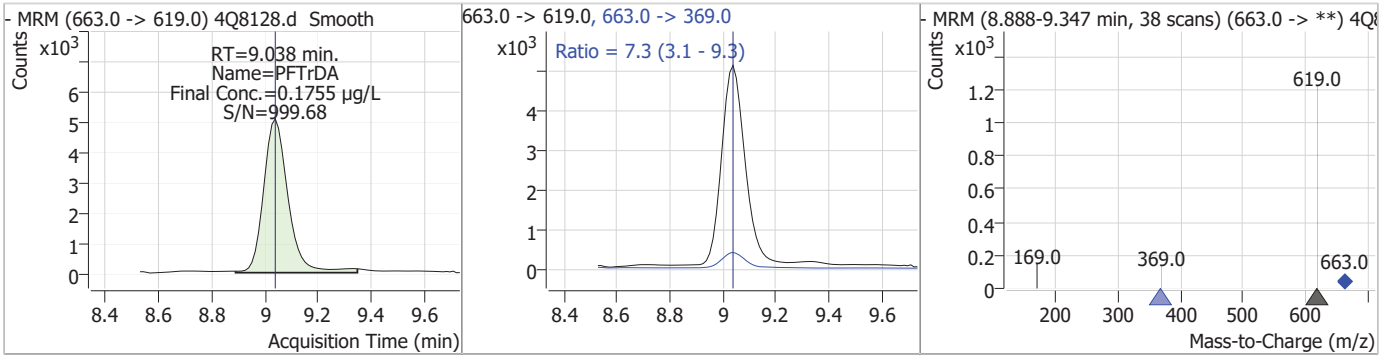
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.18	8.67	-0.01	29291	613.0 -> 319.0	14.3	6.5	19.5



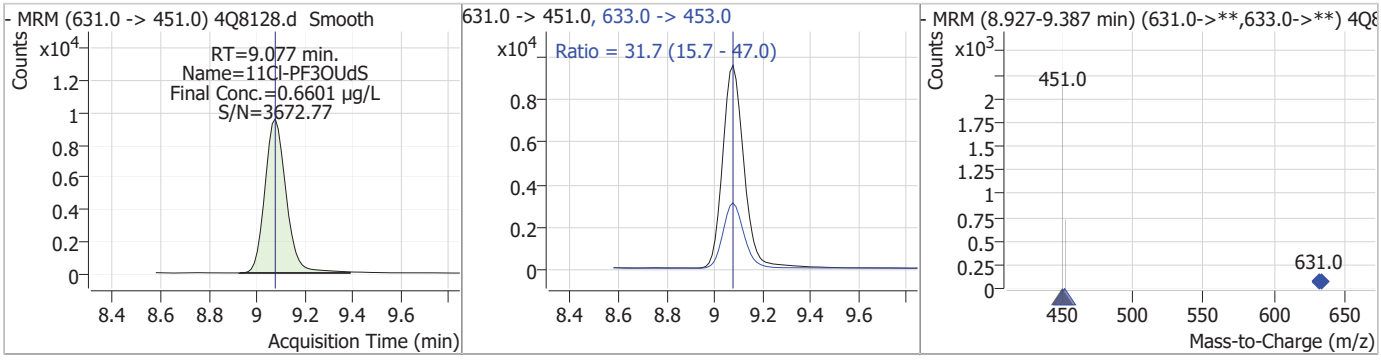
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.17	8.82	0.00	3854	599.0 -> 99.0	55.8	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.18	9.04	0.00	32433	663.0 -> 369.0	7.3	3.1	9.3

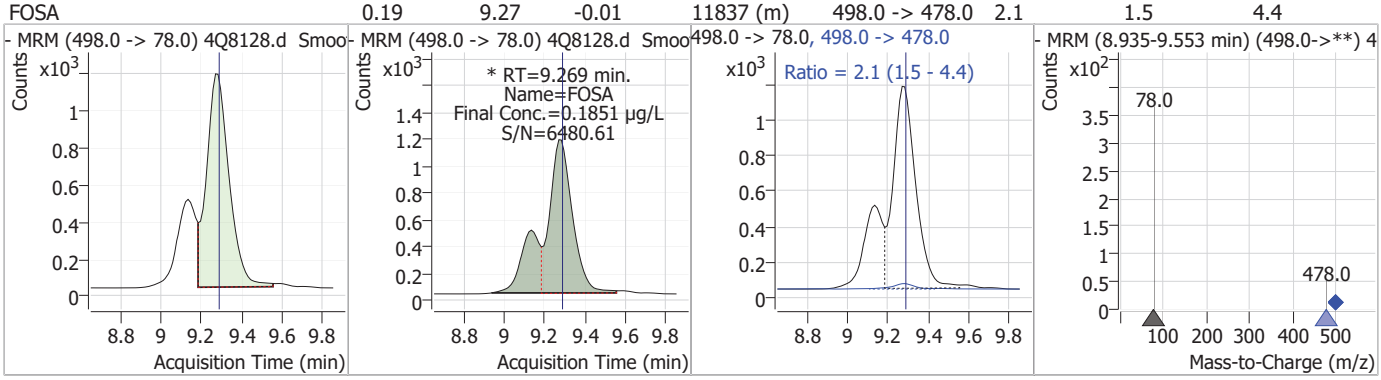


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	0.66	9.08	0.00	58958	633.0 -> 453.0	31.7	15.7	47.0

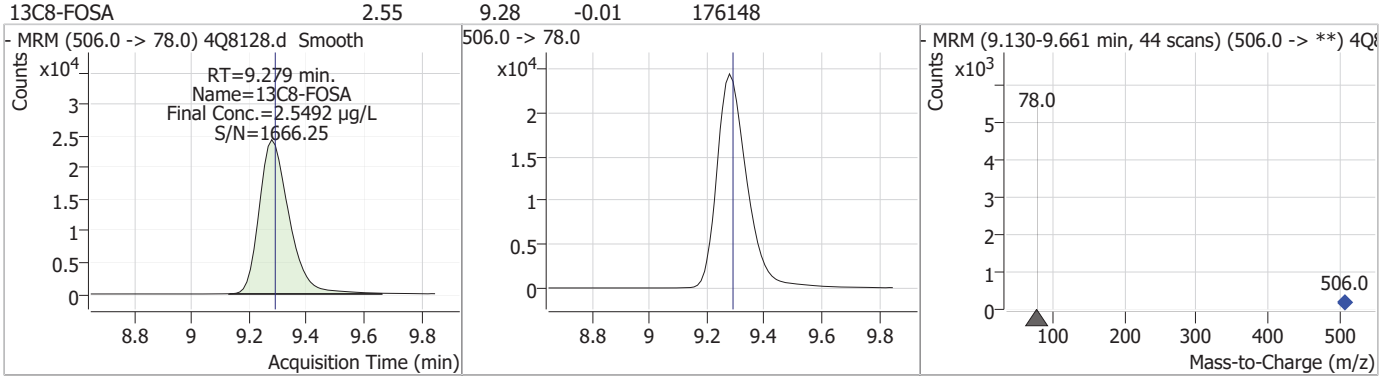


Perfluorinated Compounds by LC/MS/MS

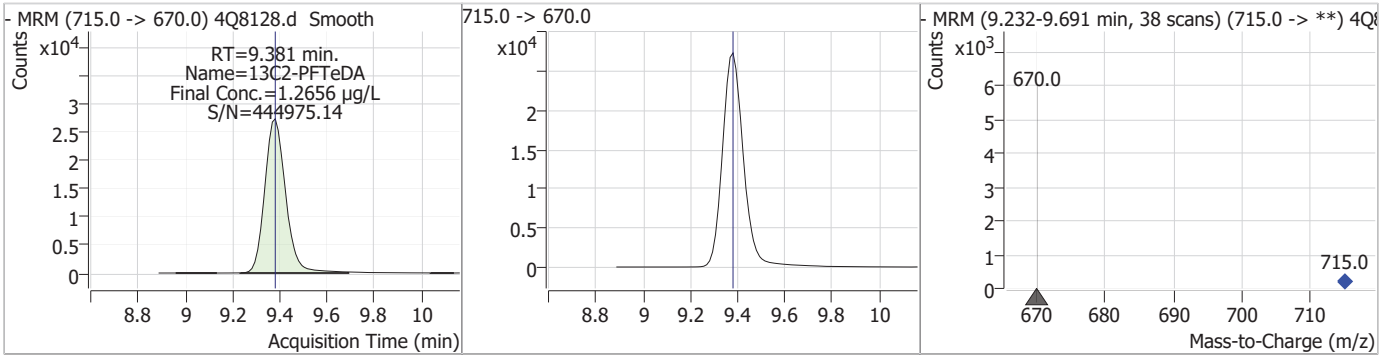
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.19	9.27	-0.01	11837 (m)	498.0 -> 478.0	2.1	1.5	4.4



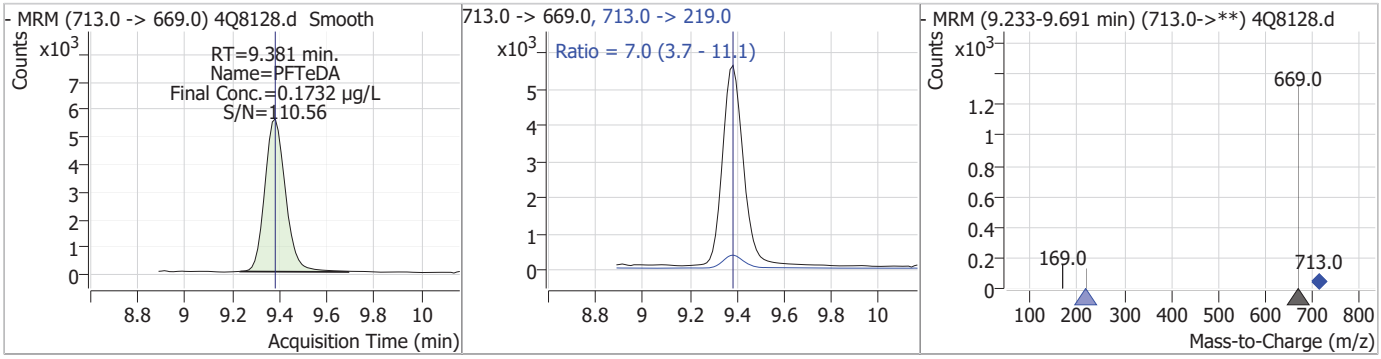
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.55	9.28	-0.01	176148				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.27	9.38	0.00	167908				

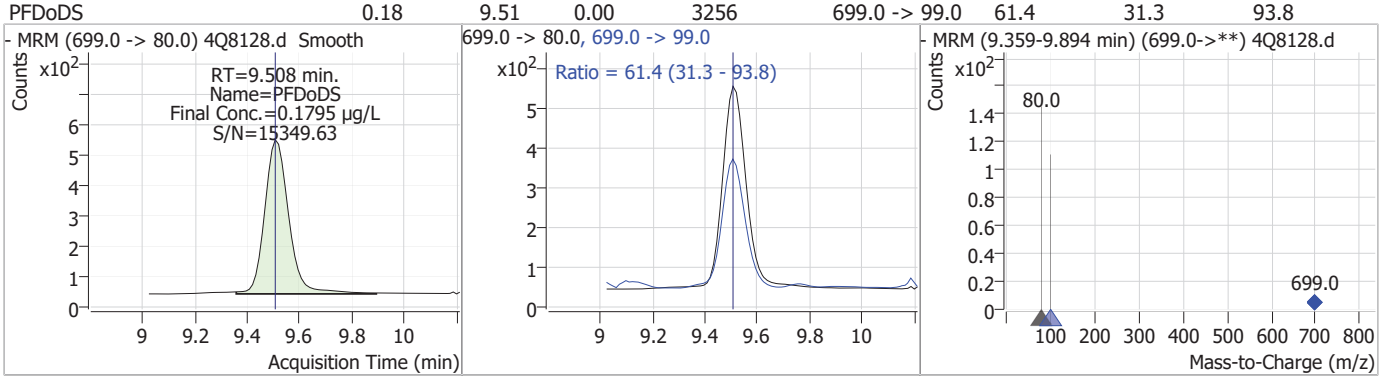


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.17	9.38	0.00	33864	713.0 -> 219.0	7.0	3.7	11.1

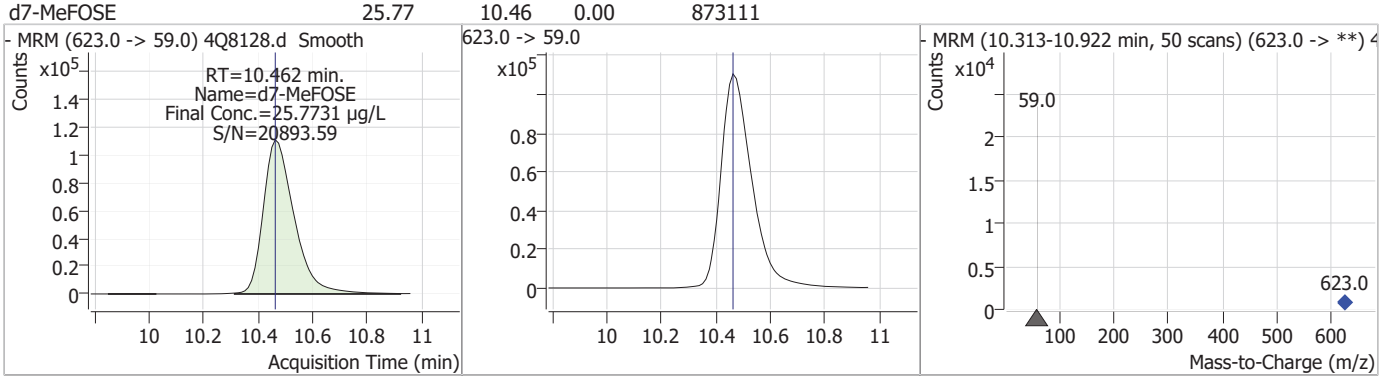


Perfluorinated Compounds by LC/MS/MS

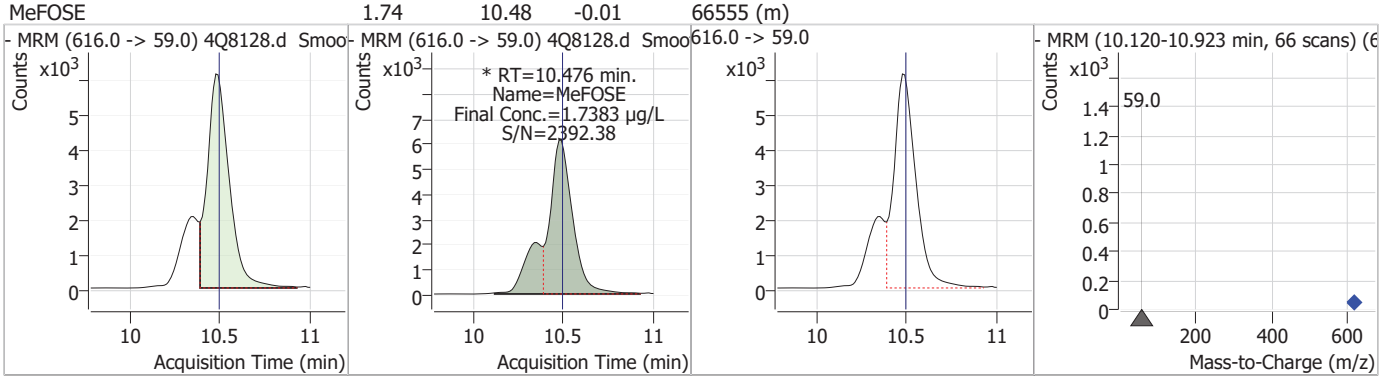
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.18	9.51	0.00	3256	699.0 -> 99.0	61.4	31.3	93.8



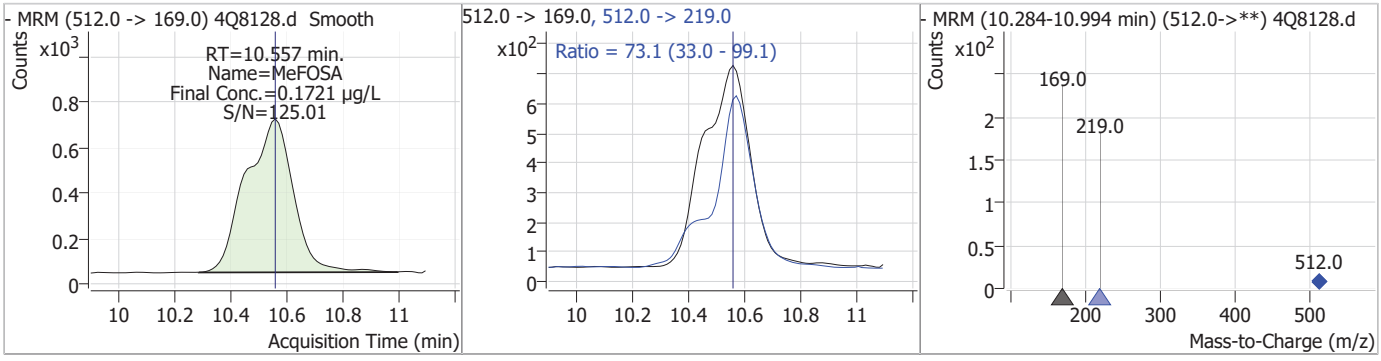
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.77	10.46	0.00	873111				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	1.74	10.48	-0.01	66555 (m)				

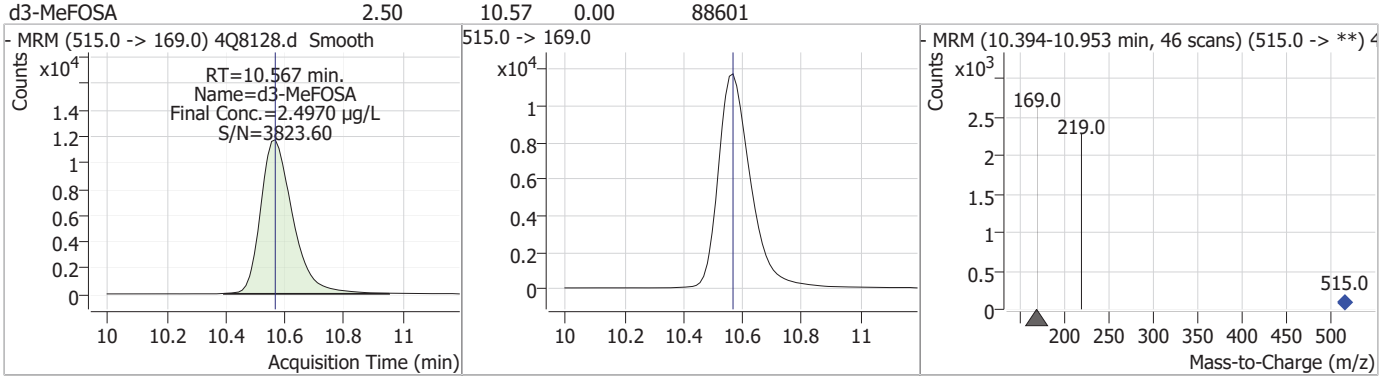


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.17	10.56	0.00	7984	512.0 -> 219.0	73.1	33.0	99.1

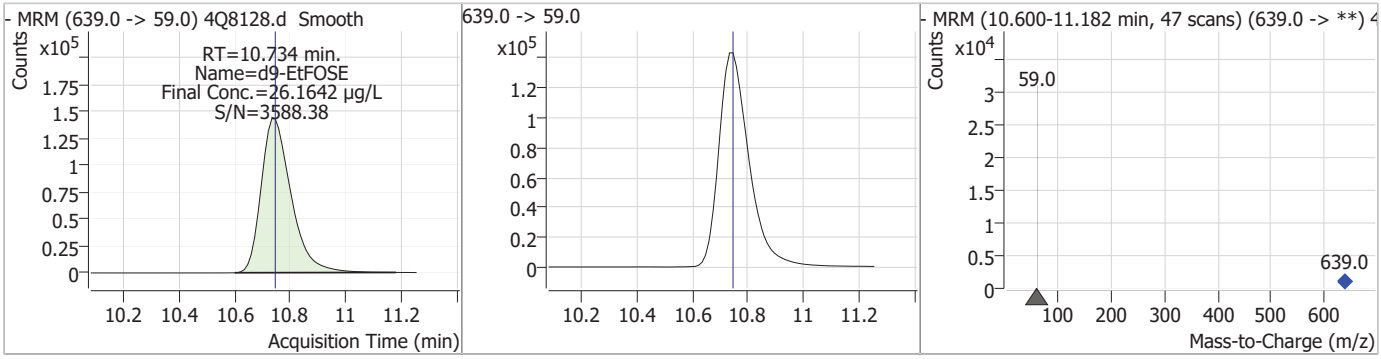


Perfluorinated Compounds by LC/MS/MS

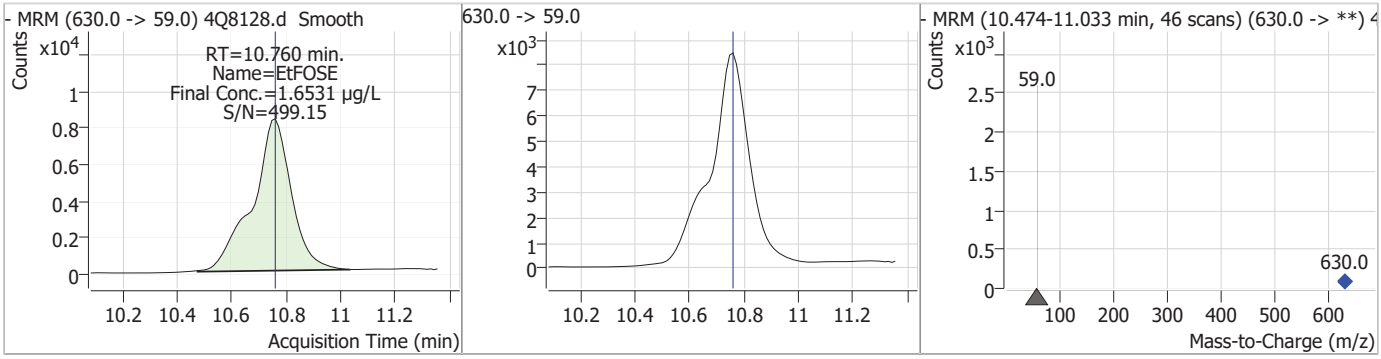
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.50	10.57	0.00	88601				



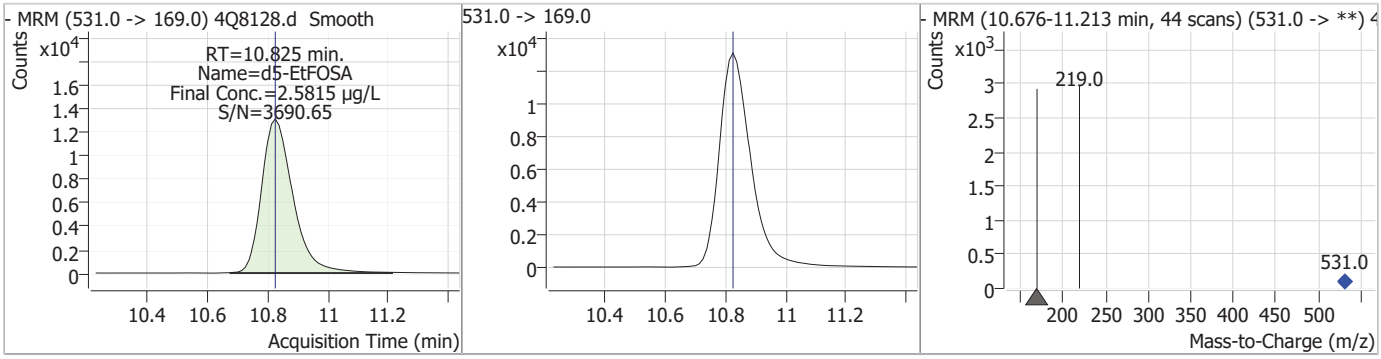
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	26.16	10.73	-0.01	1074751				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	1.65	10.76	0.00	82643				

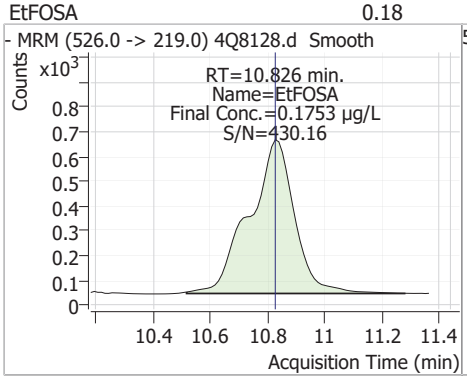


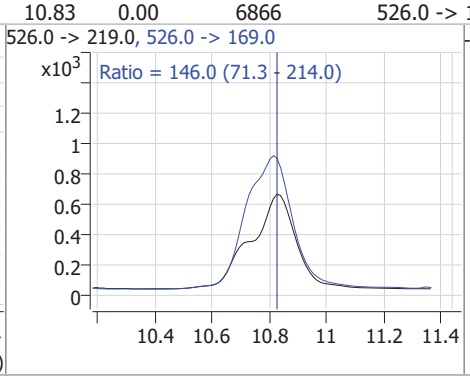
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.58	10.82	0.00	94395				

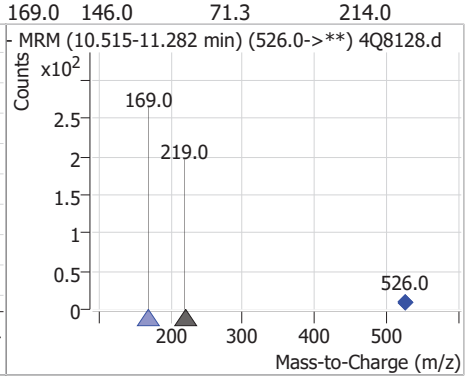


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.18	10.83	0.00	6866	526.0 -> 169.0	146.0	71.3	214.0







7.6.44

7

Manual Integration Approval Summary

Sample Number: T4Q138-IC138
Lab FileID: 4Q8128.D
Injection Time: 04/30/25 14:29
Method: EPA 1633
Analyst approved: 04/30/25 23:06 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
MeFOSAA	2355-31-9		7.92	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.10	Poor instrument integration
PFOSA	754-91-6		9.27	Split peak
MeFOSE	24448-09-7		10.48	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8129.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 2:42:57 PM
Sample Name : IC138-2
Vial : P1-A3
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63077,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	907490	10.00	µg/L	-0.012
M5-PFPeA	4.307	268.0 -> 223.0	477066	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	312587	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	330352	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	499143	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	206441	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	189201	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	252131	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	229037	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	181420	1.25	µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	184541	2.50	µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	27934	2.50	µg/L	-0.012
		302.0 -> 80.0	69057			
M3-PFHxS	6.986	402.0 -> 99.0	38315	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	43482	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	12822	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	26424	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	31317	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	241970	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	479467	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	178665	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	915018	25.00	µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1115890	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	97552	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	91885	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	70879	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	388410	5.00	µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	43368	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	502860	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	161174	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	189609	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	289216	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	12822	5.90	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 117.9%		
13C2-6:2FTS	6.684	429.0 -> 81.0	26424	5.60	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 112.0%		
13C2-8:2FTS	7.671	529.0 -> 81.0	31317	5.64	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 112.8%		
13C2-PFDoDA	8.666	615.0 -> 570.0	229037	1.31	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.2%		
13C2-PFTeDA	9.381	715.0 -> 670.0	181420	1.35	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 108.4%		
13C3-PFBS	5.355	302.0 -> 99.0	27934	2.61	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.4%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	38315	2.53	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.2%			
13C4-PFBA	2.871	217.0 -> 172.0	907490	10.19	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.9%			
13C4-PFHpA	6.291	367.0 -> 322.0	330352	2.54	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.5%			
13C5-PFHxA	5.452	318.0 -> 273.0	312587	2.55	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.1%			
13C5-PFPeA	4.307	268.0 -> 223.0	477066	5.14	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.7%			
13C6-PFDA	7.858	519.0 -> 474.0	189201	1.33	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.3%			
13C7-PFUnDA	8.273	570.0 -> 525.0	252131	1.33	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.0%			
13C8-FOSA	9.291	506.0 -> 78.0	184541	2.53	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.4%			
13C8-PFOA	6.897	421.0 -> 376.0	499143	2.48	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.4%			
13C8-PFOS	7.995	507.0 -> 99.0	43482	2.55	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.9%			
13C9-PFNA	7.403	472.0 -> 427.0	206441	1.31	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.0%			
d3-MeFOSAA	7.915	573.0 -> 419.0	241970	5.18	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.7%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	479467	9.97	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.7%			
d3-MeFOSA	10.567	515.0 -> 169.0	91885	2.46	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.3%			
d5-EtFOSAA	8.098	589.0 -> 419.0	178665	4.98	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.7%			
d7-MeFOSE	10.462	623.0 -> 59.0	915018	25.63	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 102.5%			
d9-EtFOSE	10.746	639.0 -> 59.0	1115890	25.78	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 103.1%			
d5-EtFOSA	10.825	531.0 -> 169.0	97552	2.53	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.3%			
Target Compounds							QValue
4:2FTS	5.154	327.0 -> 307.0	30602	1.30	µg/L		97
		327.0 -> 81.0	14904				
6:2FTS	6.684	427.0 -> 407.0	37051	1.40	µg/L		100
		427.0 -> 81.0	17433				
8:2FTS	7.671	527.0 -> 507.0	32411	1.32	µg/L		93
		527.0 -> 81.0	13632				
EtFOSAA	8.111	584.0 -> 419.0	12565	0.37	µg/L	m	88
		584.0 -> 483.0	5997				
FOSA	9.281	498.0 -> 78.0	23109	0.34	µg/L	m	99
		498.0 -> 478.0	770				
MeFOSAA	7.917	570.0 -> 419.0	13755	0.33	µg/L	m	97
		570.0 -> 512.0	5254				
PFBA	2.877	213.0 -> 169.0	38414	1.38	µg/L		100
PFBS	5.357	299.0 -> 80.0	10003	0.31	µg/L		99
		299.0 -> 99.0	4174				
PFDA	7.859	513.0 -> 469.0	47619	0.33	µg/L		99
		513.0 -> 219.0	11264				
PFDoDA	8.667	613.0 -> 569.0	58711	0.33	µg/L		94
		613.0 -> 319.0	9005				

Perfluorinated Compounds by LC/MS/MS

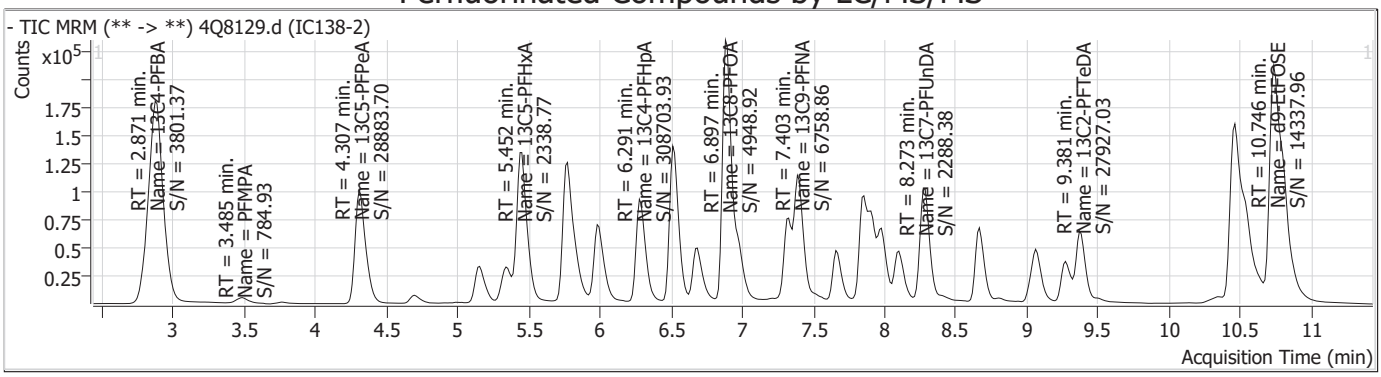
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	7650	0.34	µg/L		93
		599.0 -> 99.0	3957				
PFHpA	6.292	363.0 -> 319.0	68267	0.34	µg/L		96
		363.0 -> 169.0	13019				
PFHpS	7.529	449.0 -> 80.0	10483	0.32	µg/L		97
		449.0 -> 99.0	5961				
PFHxA	5.455	313.0 -> 269.0	47075	0.35	µg/L		98
		313.0 -> 119.0	1907				
PFHxS	6.987	399.0 -> 80.0	11097	0.33	µg/L	m	98
		399.0 -> 99.0	6092				
PFNA	7.404	463.0 -> 419.0	41964	0.34	µg/L	m	98
		463.0 -> 219.0	15100				
PFNS	8.412	549.0 -> 80.0	9470	0.32	µg/L		96
		549.0 -> 99.0	5780				
PFOA	6.898	413.0 -> 369.0	57970	0.35	µg/L	m	96
		413.0 -> 169.0	15579				
PFOS	7.996	499.0 -> 80.0	11685	0.33	µg/L	m	92
		499.0 -> 99.0	6638				
PFPeA	4.321	263.0 -> 219.0	51620	0.68	µg/L		100
PFPeS	6.318	349.0 -> 80.0	11344	0.33	µg/L		98
		349.0 -> 99.0	5891				
PFTeDA	9.381	713.0 -> 669.0	70875	0.34	µg/L		99
		713.0 -> 219.0	5512				
PFTrDA	9.038	663.0 -> 619.0	68988	0.35	µg/L		97
		663.0 -> 369.0	4881				
PFUnDA	8.275	563.0 -> 519.0	49801	0.33	µg/L		97
		563.0 -> 269.0	9380				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	125162	1.37	µg/L		98
		633.0 -> 453.0	37956				
9Cl-PF3ONS	8.301	531.0 -> 351.0	135112	1.35	µg/L		99
		533.0 -> 353.0	40574				
ADONA	6.527	377.0 -> 251.0	472508	1.26	µg/L		100
		377.0 -> 85.0	155708				
HFPO-DA	5.780	285.0 -> 169.0	69728	1.38	µg/L		99
		285.0 -> 185.0	7375				
3:3FTCA	3.769	241.0 -> 177.0	7747	1.72	µg/L		98
		241.0 -> 117.0	681				
5:3FTCA	5.993	341.0 -> 237.0	197537	8.29	µg/L		100
		341.0 -> 217.0	138061				
7:3FTCA	7.330	441.0 -> 337.0	261433	8.44	µg/L		96
		441.0 -> 317.0	111546				
EtFOSA	10.826	526.0 -> 219.0	14010	0.35	µg/L		94
		526.0 -> 169.0	18904				
EtFOSE	10.760	630.0 -> 59.0	179275	3.45	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	17332	0.36	µg/L		94
		512.0 -> 219.0	12219				
MeFOSE	10.488	616.0 -> 59.0	135545	3.38	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	6540	0.34	µg/L		94
		699.0 -> 99.0	3775				
NFDHA	5.333	295.0 -> 201.0	11342	0.64	µg/L		83
		201.0 -> 85.0	51150				
		295.0 -> 85.0	3063				
PFMBA	4.698	279.0 -> 85.0	35850	0.70	µg/L		100
PFMPA	3.485	229.0 -> 85.0	29966	0.69	µg/L		100
PFEESA	5.849	315.0 -> 135.0	75125	0.61	µg/L		100
		315.0 -> 69.0	5804				

Perfluorinated Compounds by LC/MS/MS

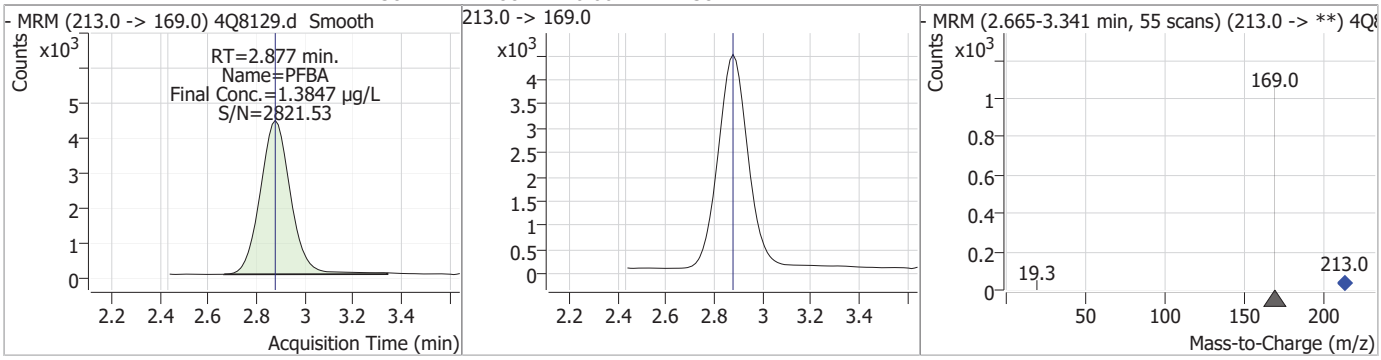
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

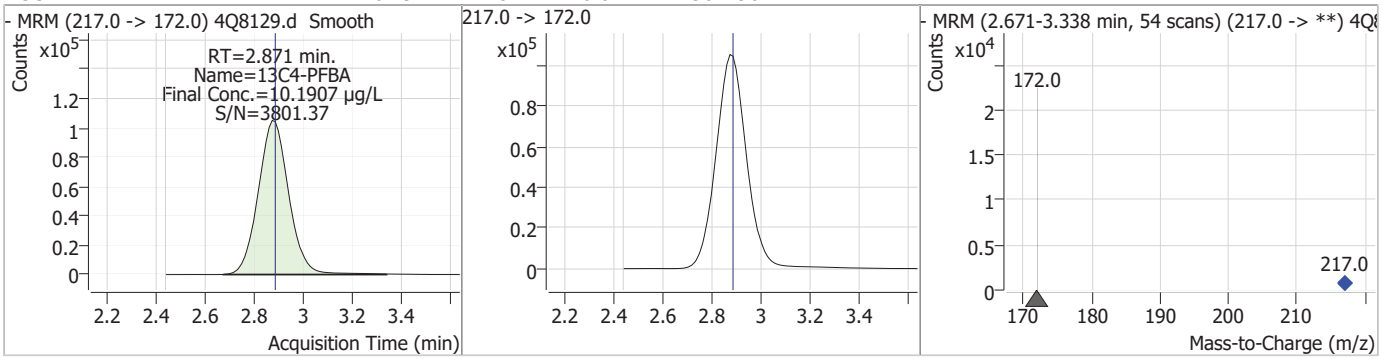
Perfluorinated Compounds by LC/MS/MS



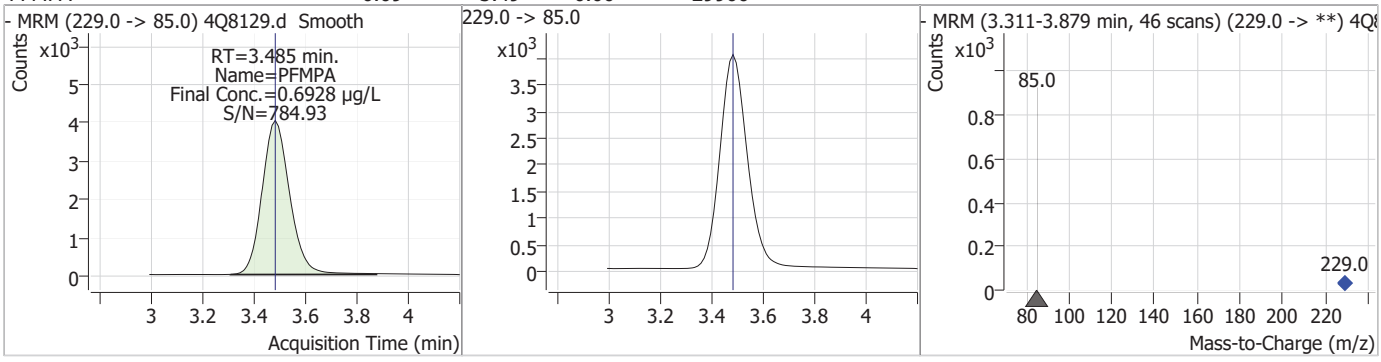
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	1.38	2.88	0.00	38414				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.19	2.87	-0.01	907490				

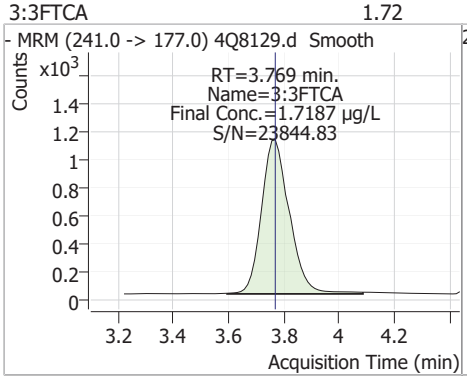


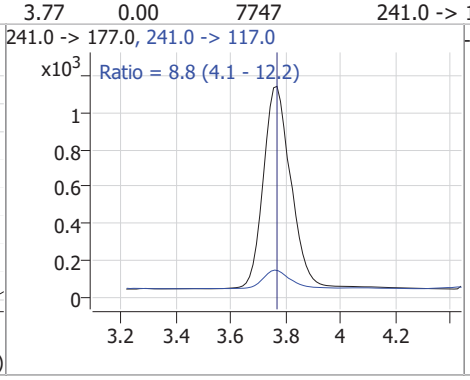
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.69	3.49	0.00	29966				

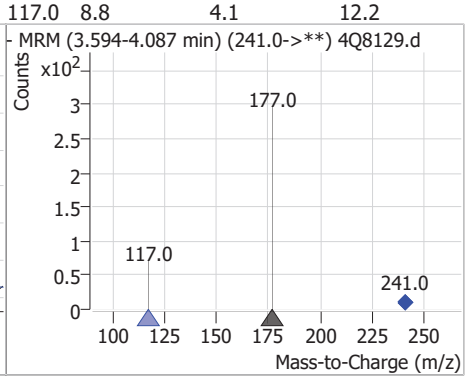


Perfluorinated Compounds by LC/MS/MS

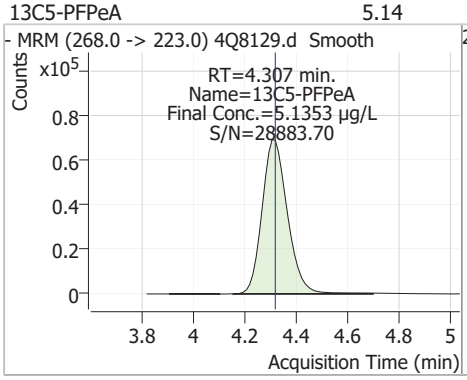
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	1.72	3.77	0.00	7747	241.0 -> 117.0	8.8	4.1	12.2

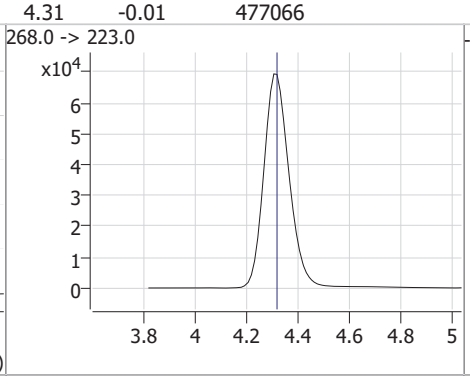


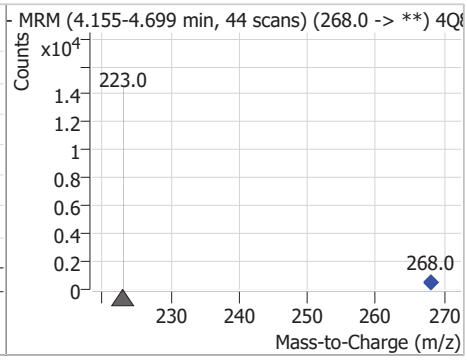




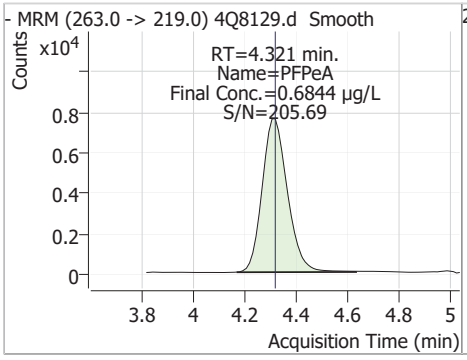
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.14	4.31	-0.01	477066				

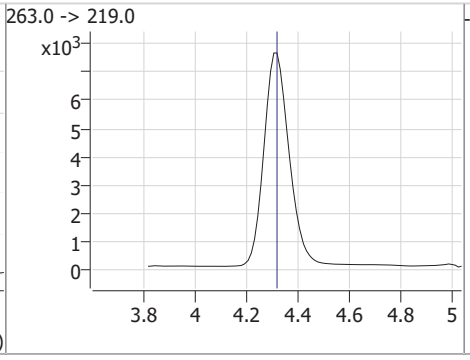


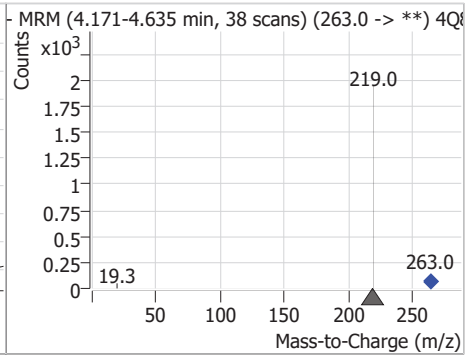




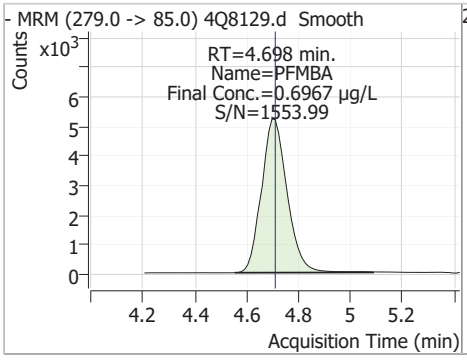
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.68	4.32	0.00	51620				

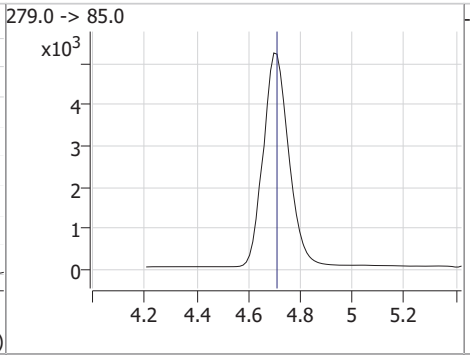


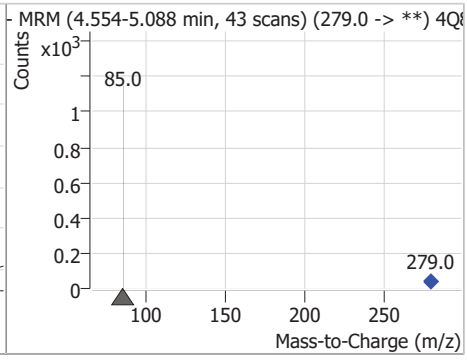




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.70	4.70	-0.01	35850				







7.6.45

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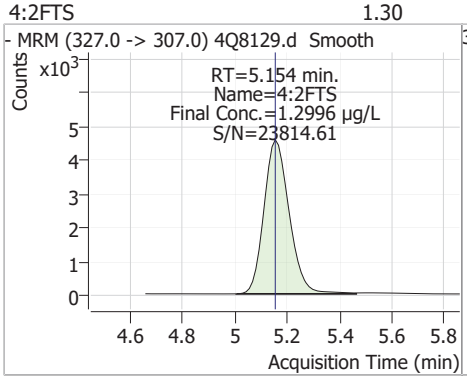
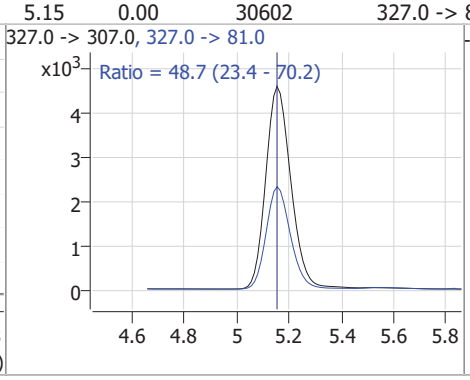
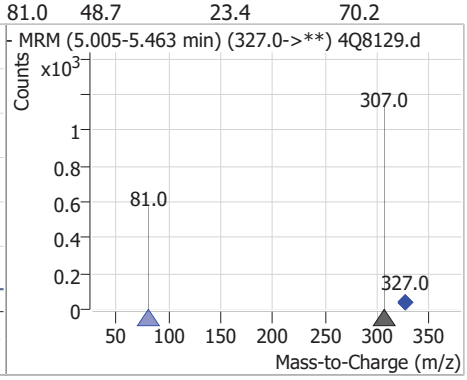
Perfluorinated Compounds by LC/MS/MS

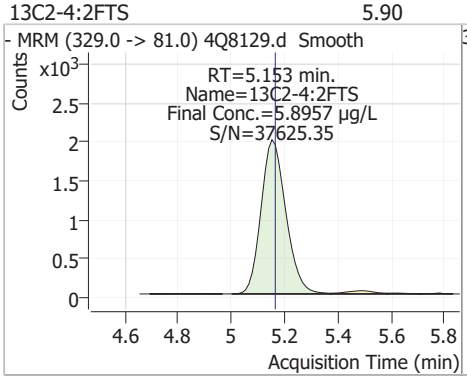
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	1.30	5.15	0.00	30602	327.0 -> 81.0	48.7	23.4	70.2

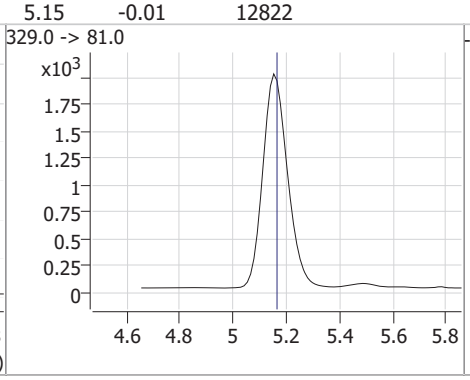


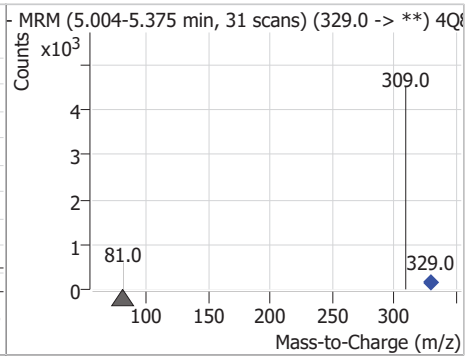




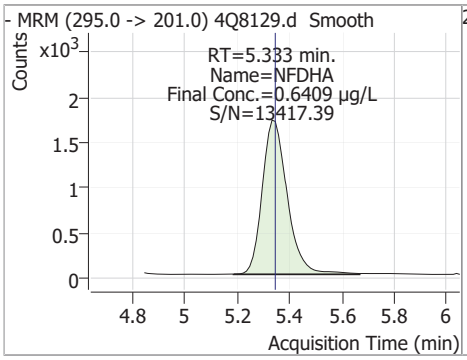
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.90	5.15	-0.01	12822				

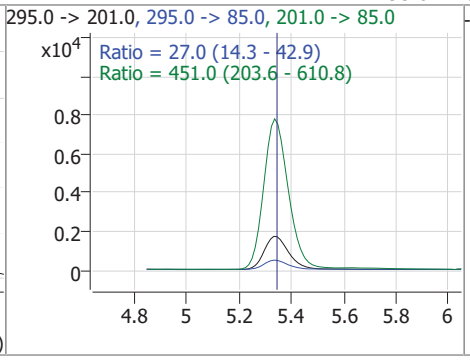


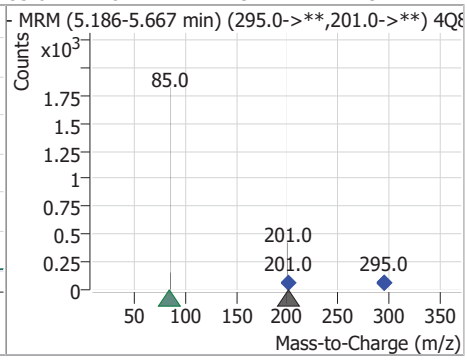




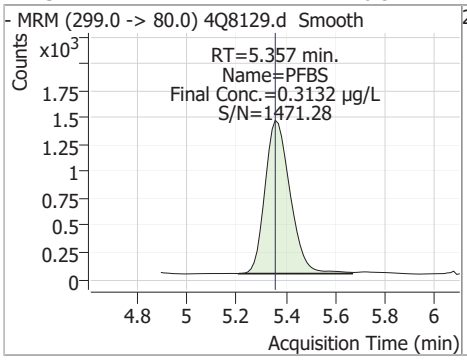
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.64	5.33	-0.01	11342	201.0 -> 85.0	451.0	203.6	610.8
					295.0 -> 85.0	27.0	14.3	42.9

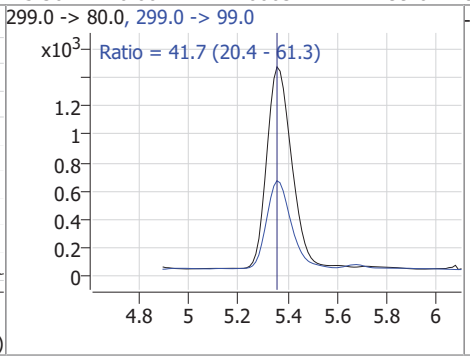


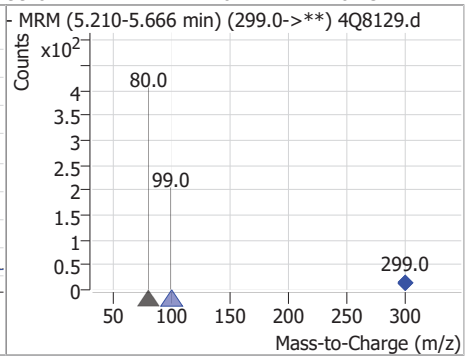




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.31	5.36	0.00	10003	299.0 -> 99.0	41.7	20.4	61.3

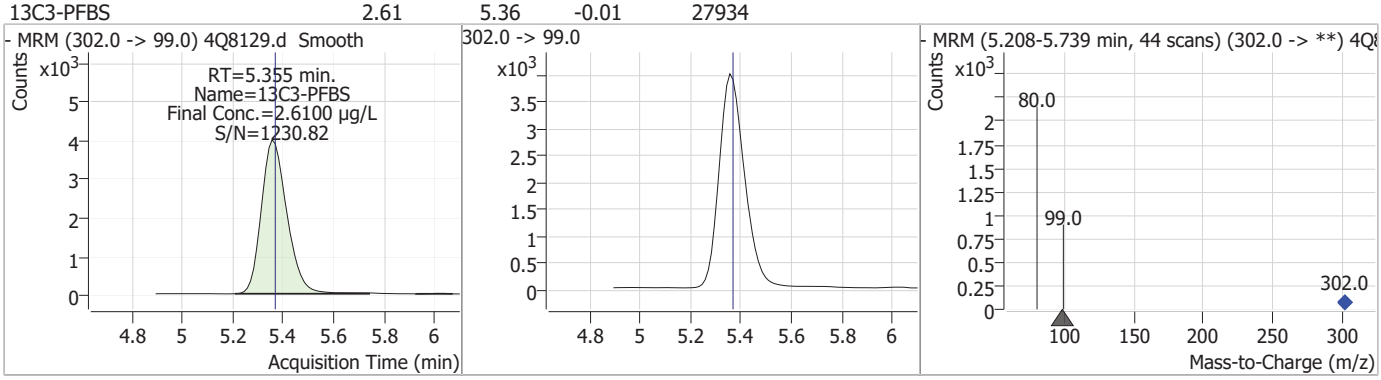




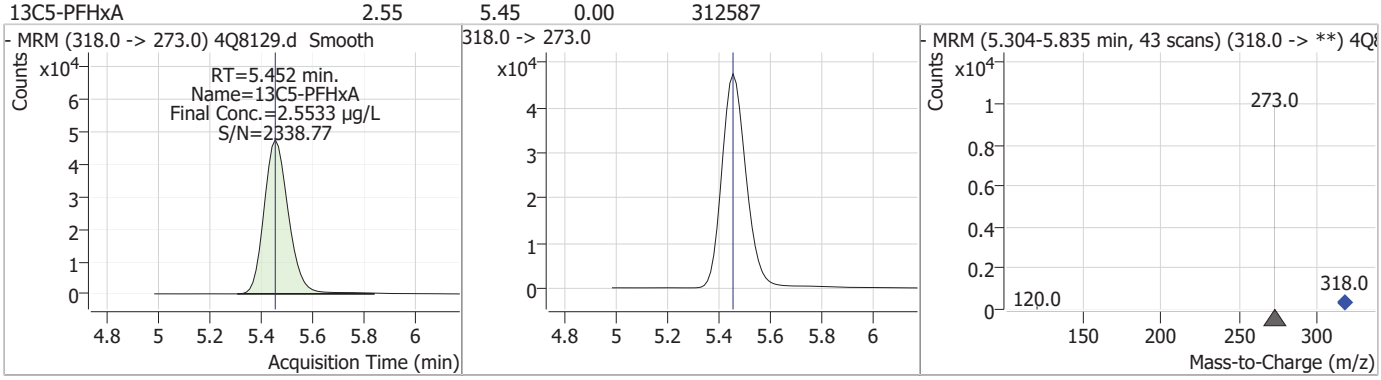


Perfluorinated Compounds by LC/MS/MS

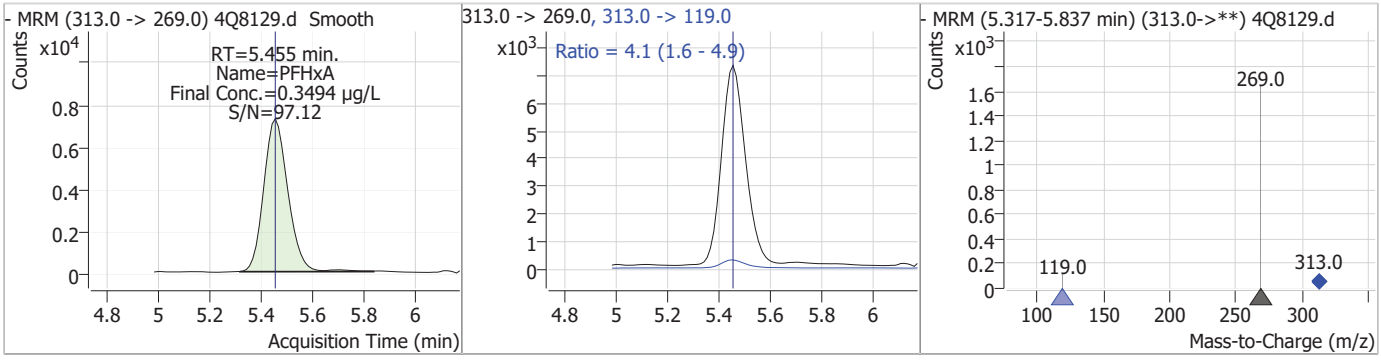
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.61	5.36	-0.01	27934				



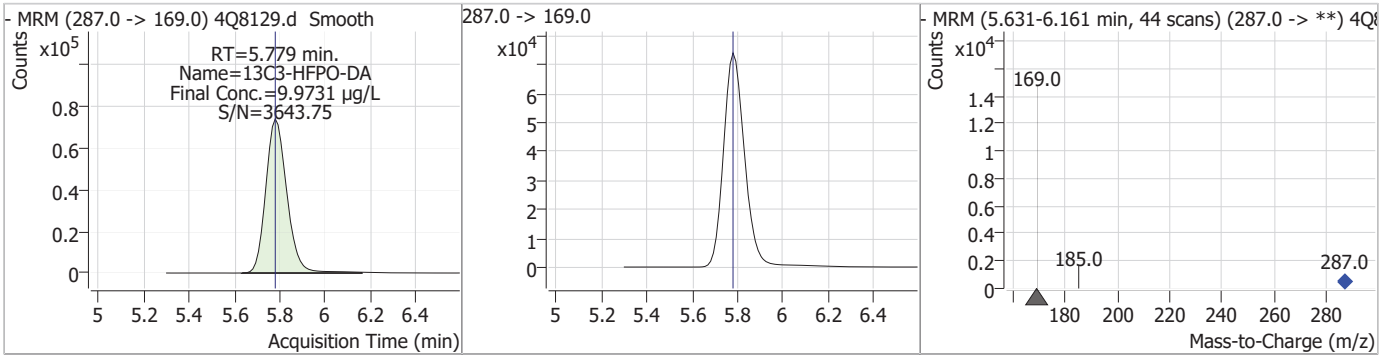
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.55	5.45	0.00	312587				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.35	5.45	0.00	47075	313.0 -> 119.0	4.1	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.97	5.78	0.00	479467				



7.6.45

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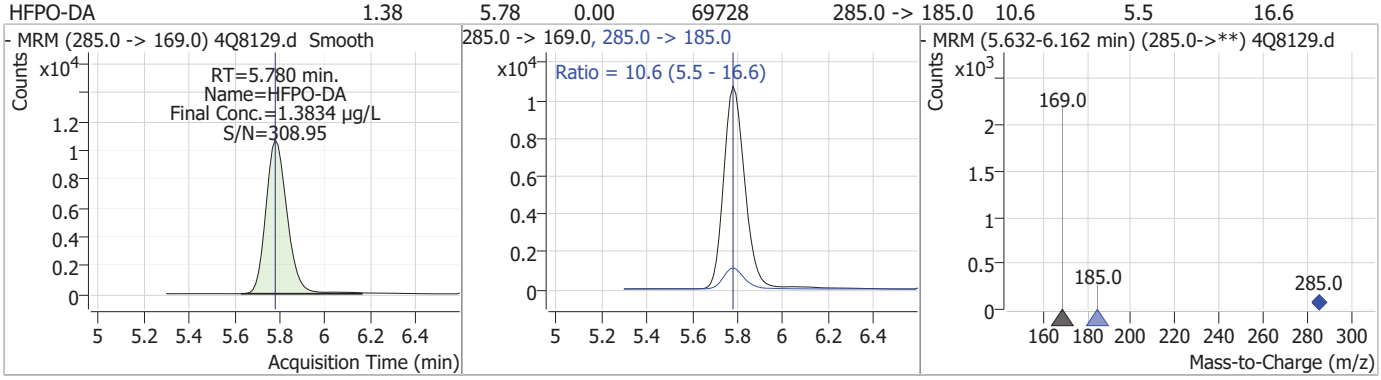
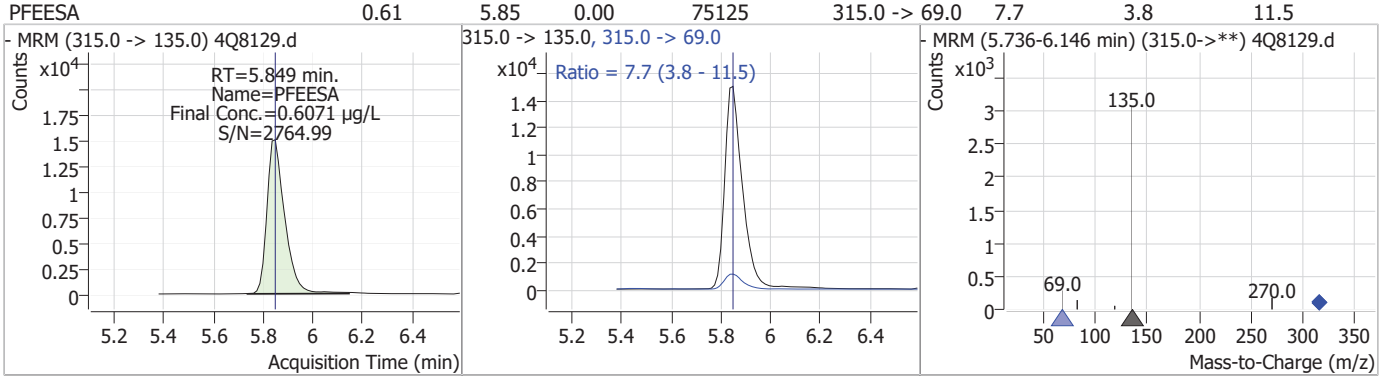
Perfluorinated Compounds by LC/MS/MS

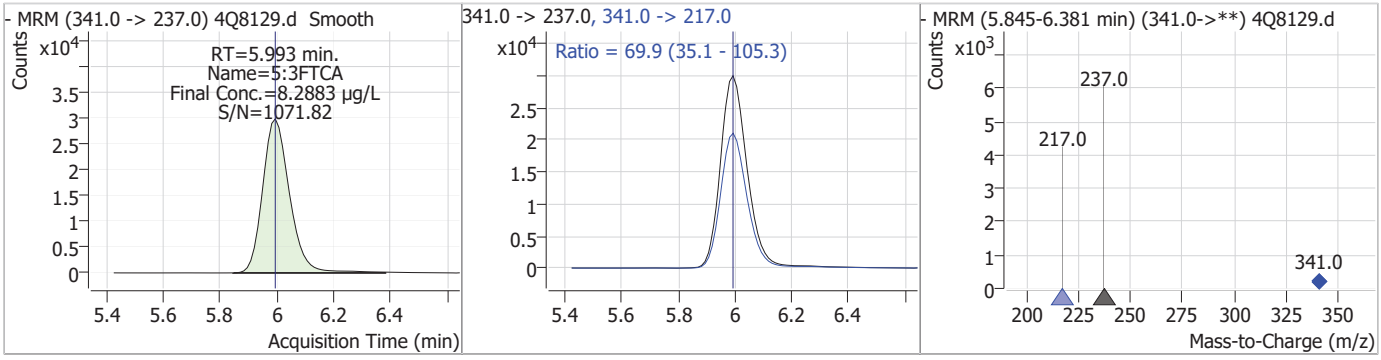
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	1.38	5.78	0.00	69728	285.0 -> 185.0	10.6	5.5	16.6



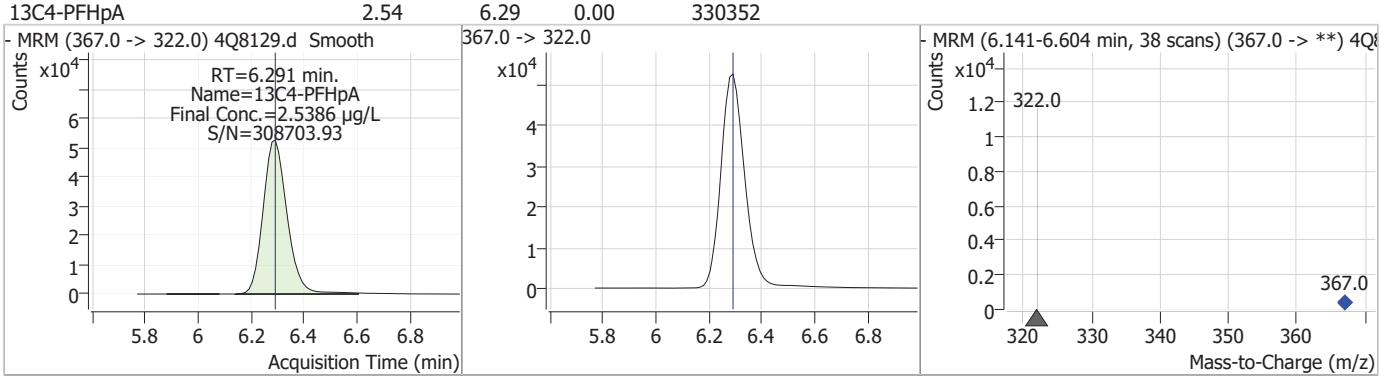
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.61	5.85	0.00	75125	315.0 -> 69.0	7.7	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	8.29	5.99	0.00	197537	341.0 -> 217.0	69.9	35.1	105.3

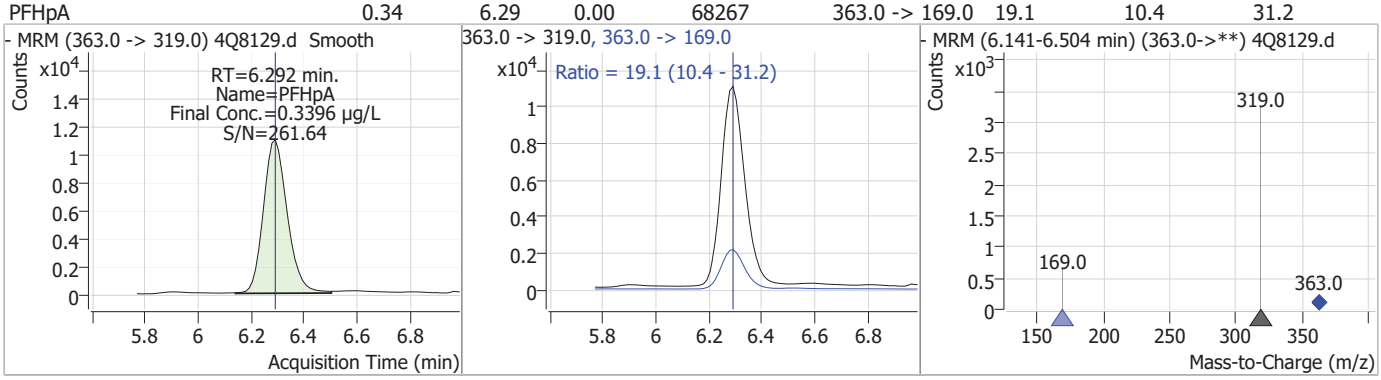


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.54	6.29	0.00	330352				

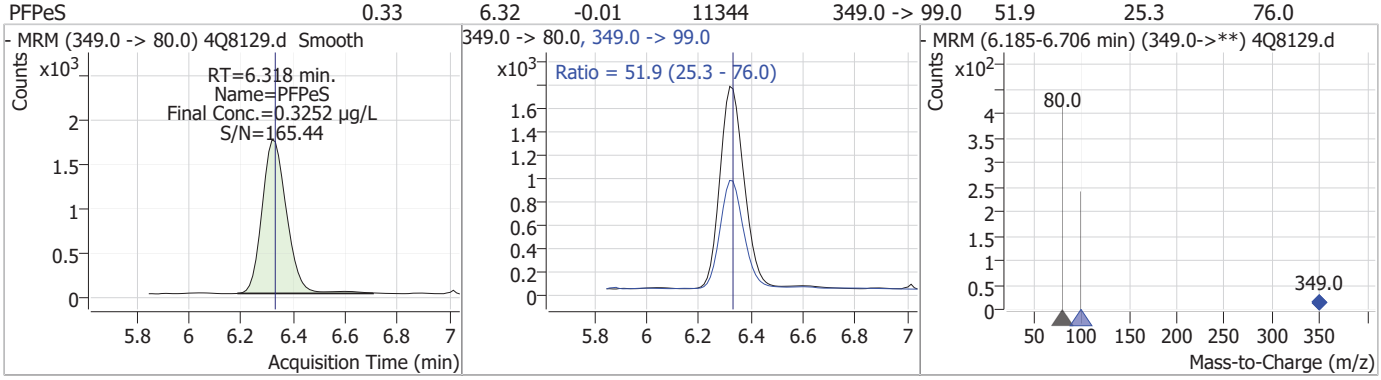


Perfluorinated Compounds by LC/MS/MS

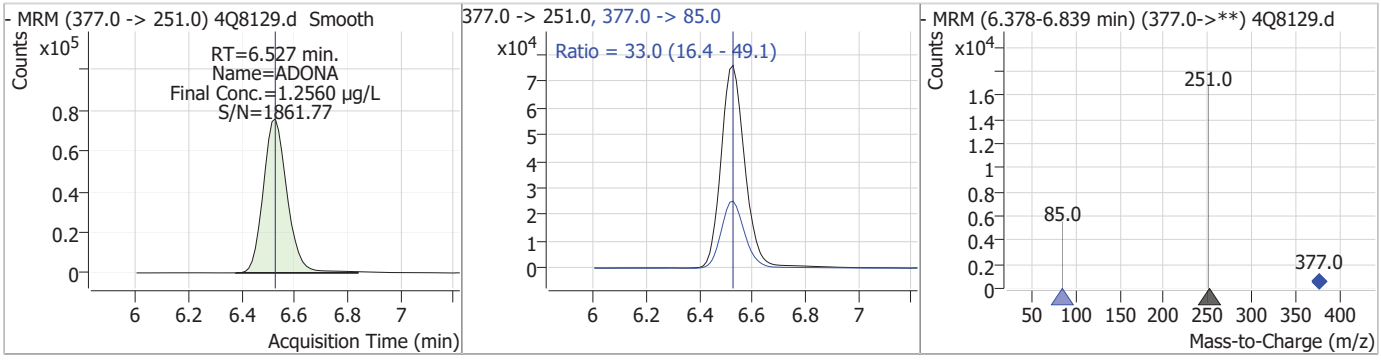
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.34	6.29	0.00	68267	363.0 -> 169.0	19.1	10.4	31.2



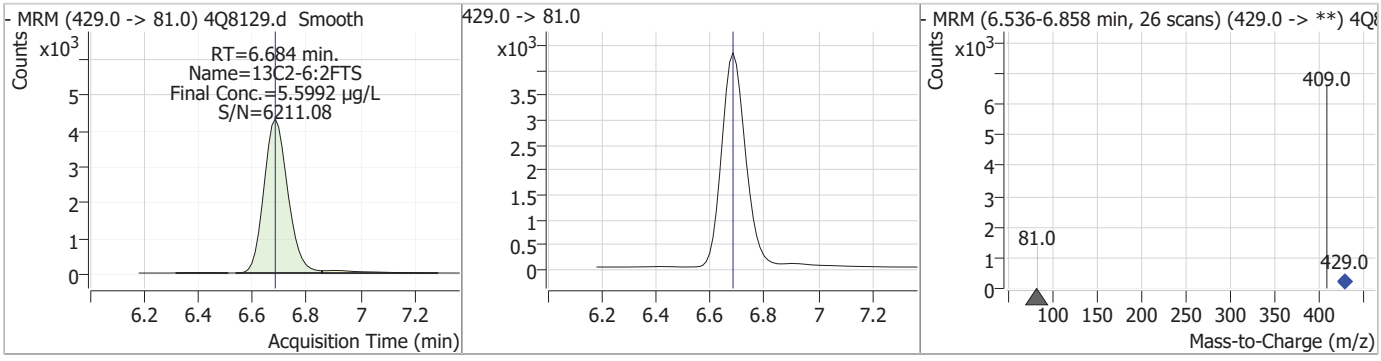
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.33	6.32	-0.01	11344	349.0 -> 99.0	51.9	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	1.26	6.53	0.00	472508	377.0 -> 85.0	33.0	16.4	49.1

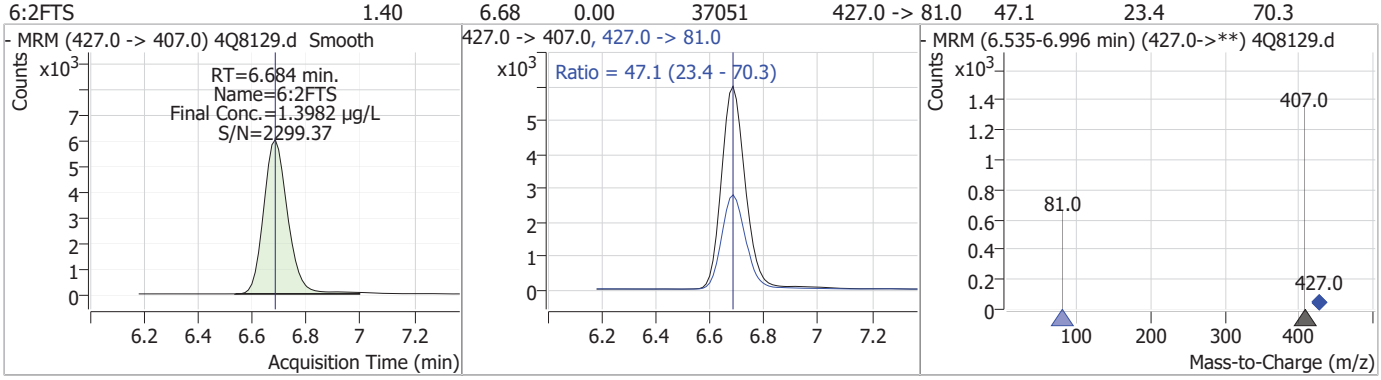


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.60	6.68	0.00	26424				

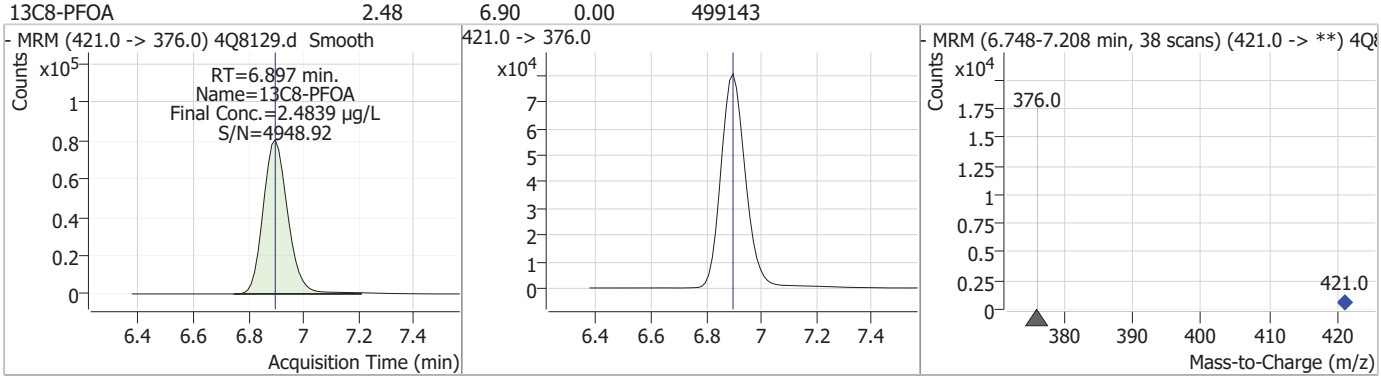


Perfluorinated Compounds by LC/MS/MS

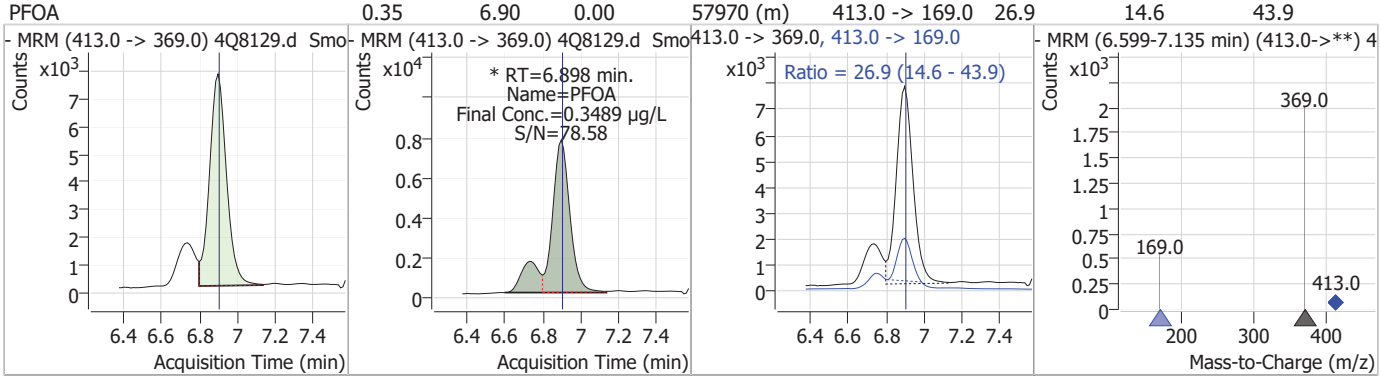
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	1.40	6.68	0.00	37051	427.0 -> 81.0	47.1	23.4	70.3



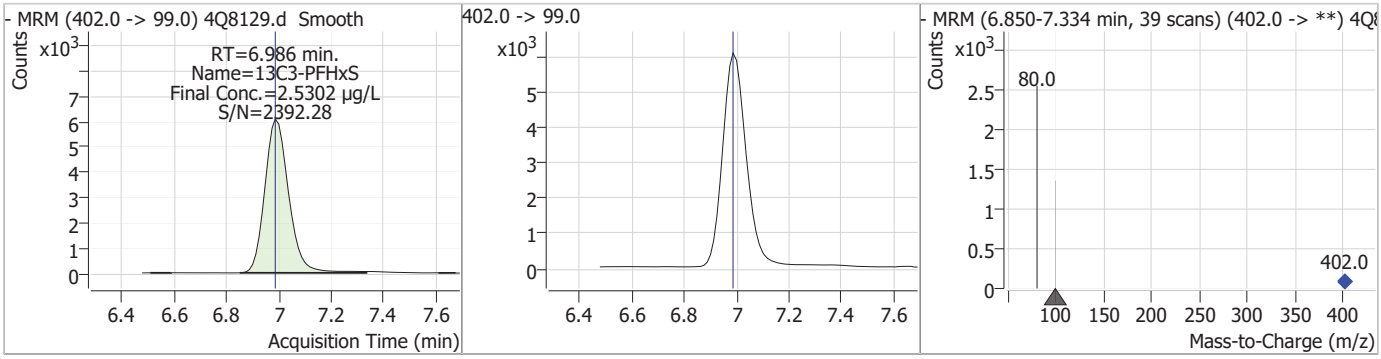
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.48	6.90	0.00	499143				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.35	6.90	0.00	57970 (m)	413.0 -> 169.0	26.9	14.6	43.9

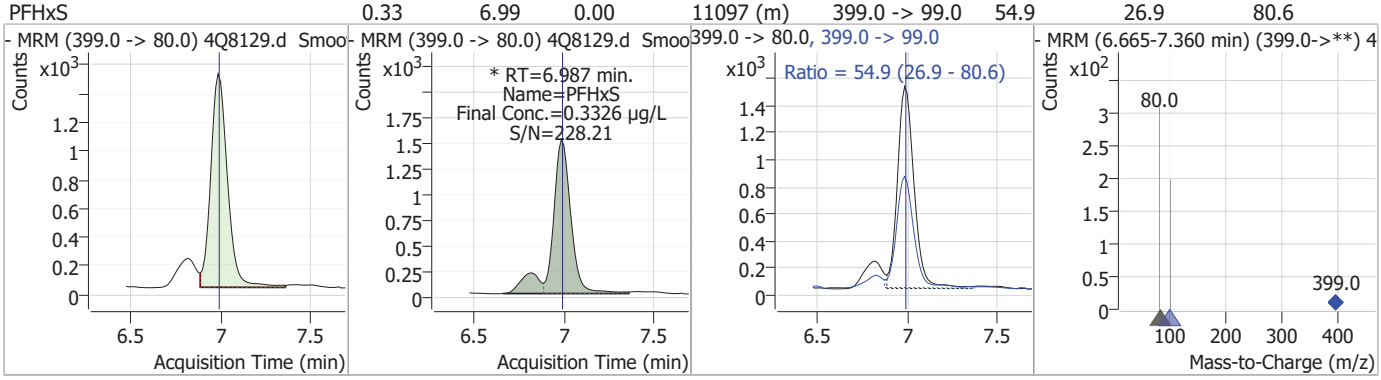


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.53	6.99	0.00	38315				

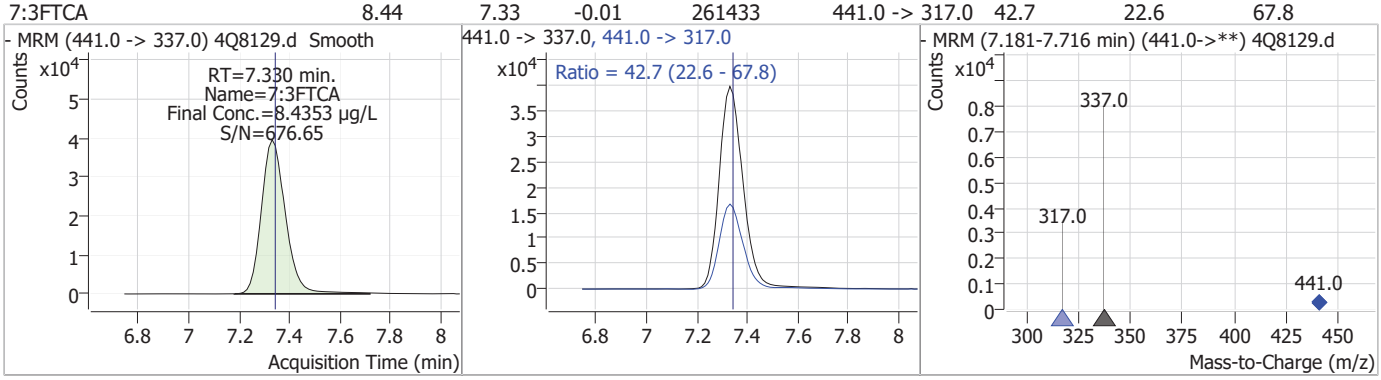


Perfluorinated Compounds by LC/MS/MS

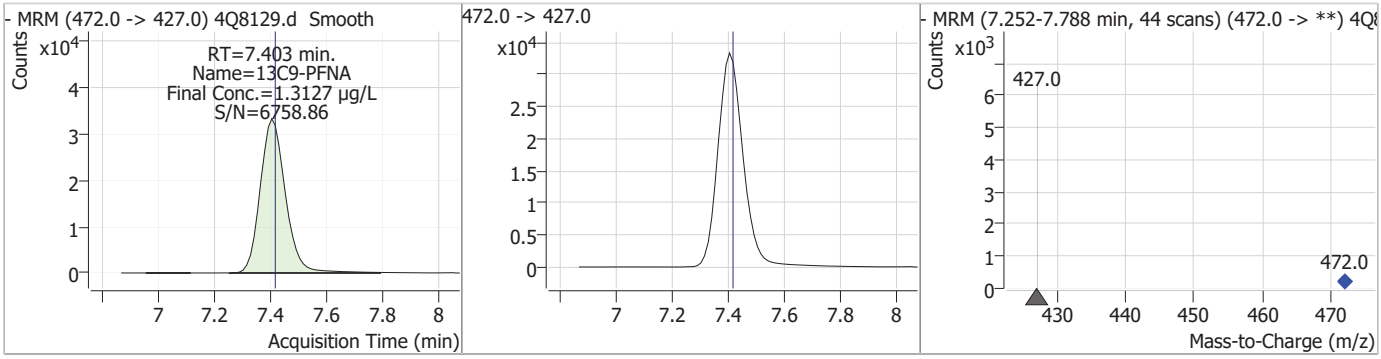
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.33	6.99	0.00	11097 (m)	399.0 -> 99.0	54.9	26.9	80.6



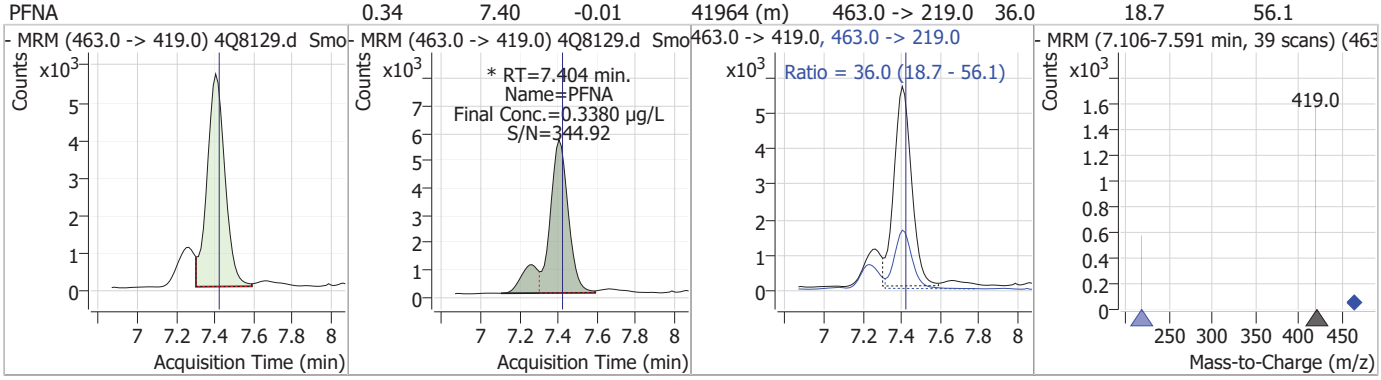
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	8.44	7.33	-0.01	261433	441.0 -> 317.0	42.7	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.31	7.40	-0.01	206441				

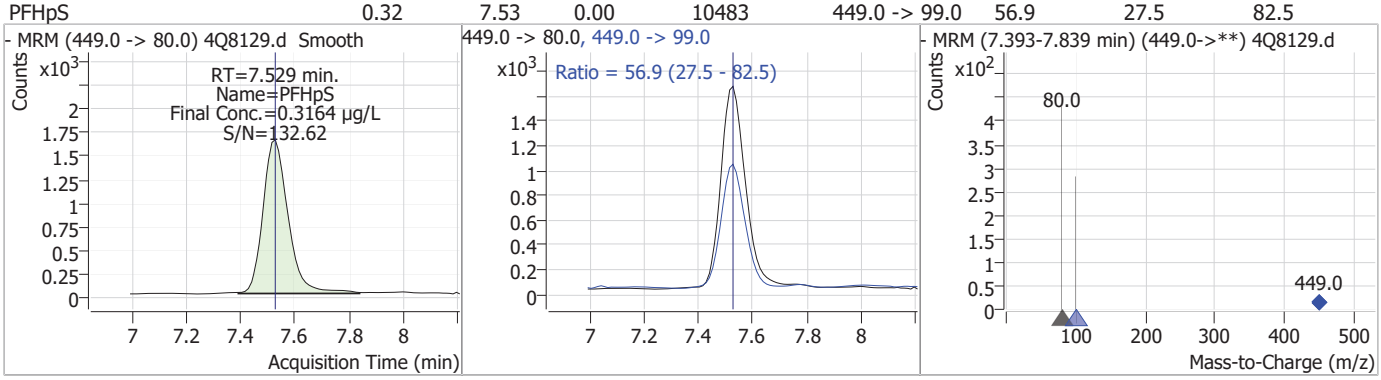


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.34	7.40	-0.01	41964 (m)	463.0 -> 219.0	36.0	18.7	56.1

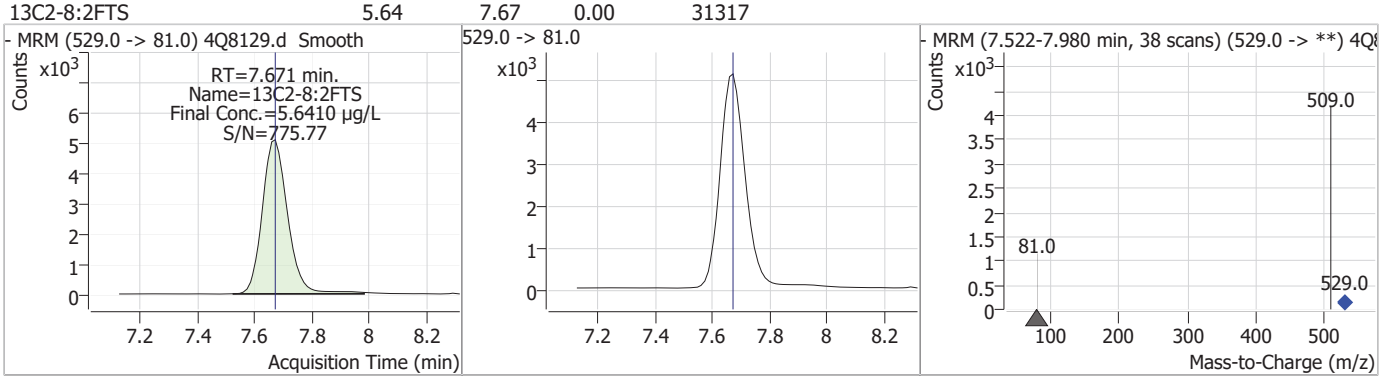


Perfluorinated Compounds by LC/MS/MS

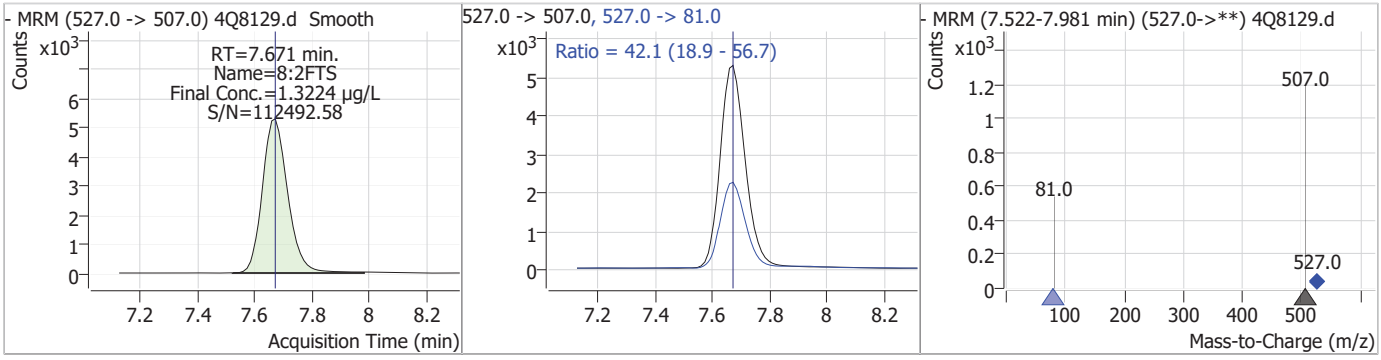
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.32	7.53	0.00	10483	449.0 -> 99.0	56.9	27.5	82.5



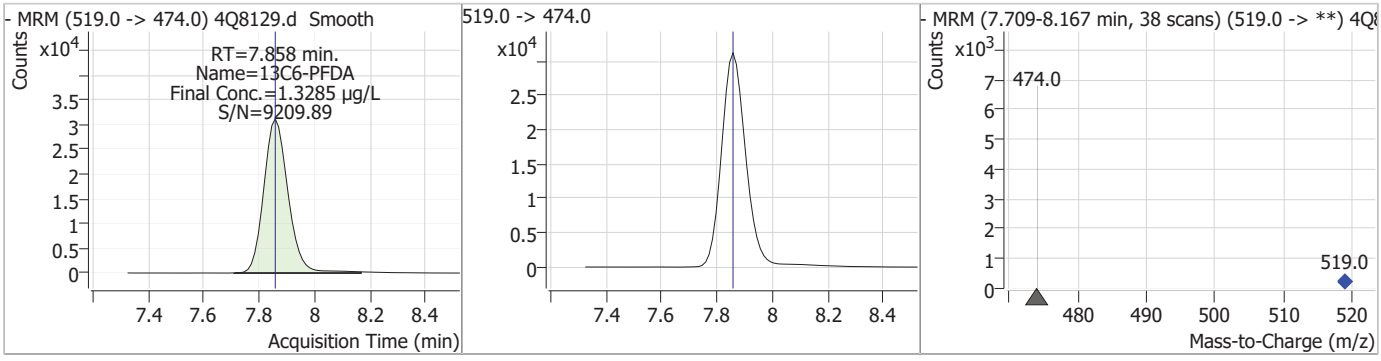
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.64	7.67	0.00	31317				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	1.32	7.67	0.00	32411	527.0 -> 81.0	42.1	18.9	56.7

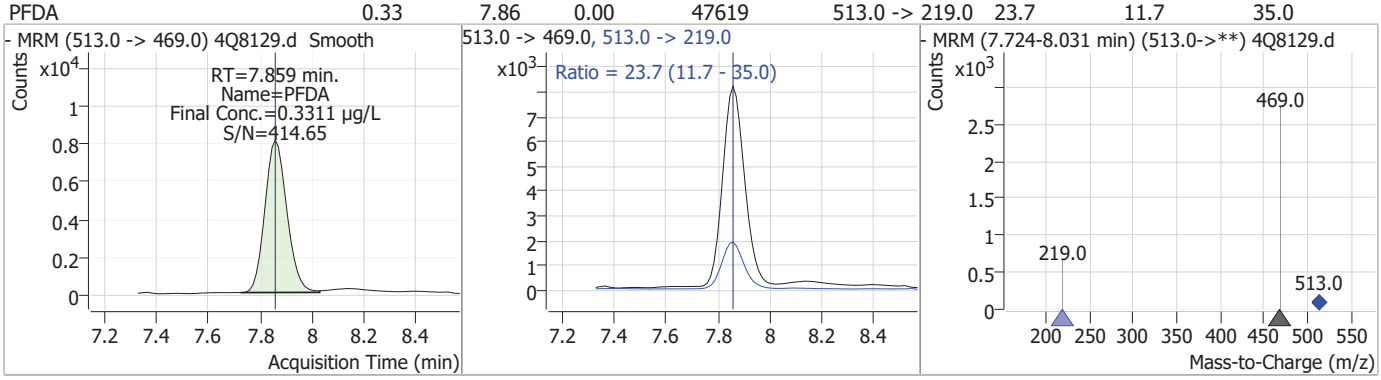


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.33	7.86	0.00	189201				

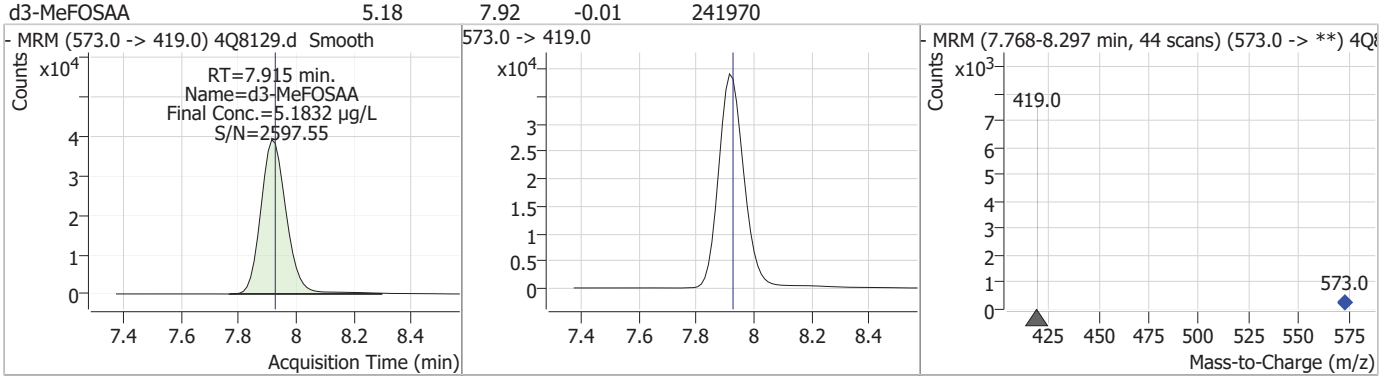


Perfluorinated Compounds by LC/MS/MS

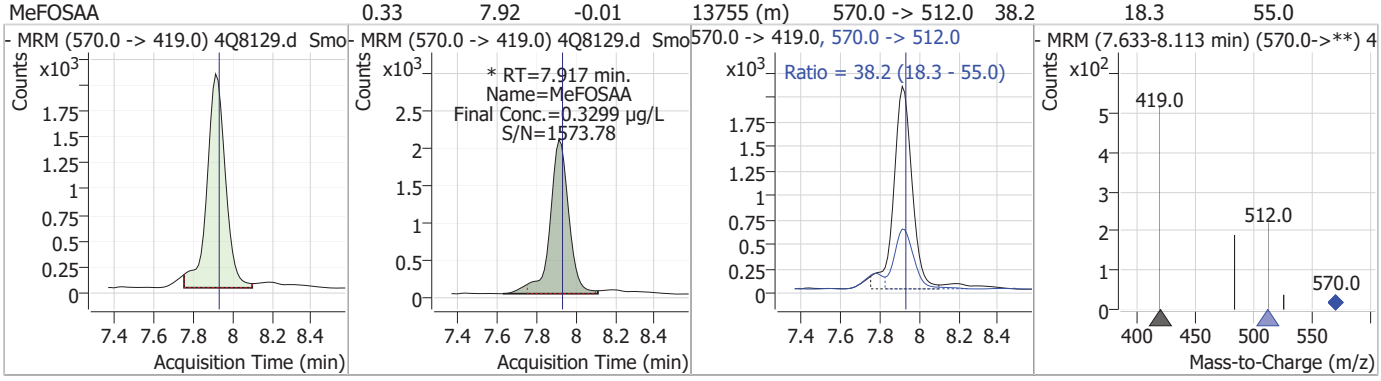
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.33	7.86	0.00	47619	513.0 -> 219.0	23.7	11.7	35.0



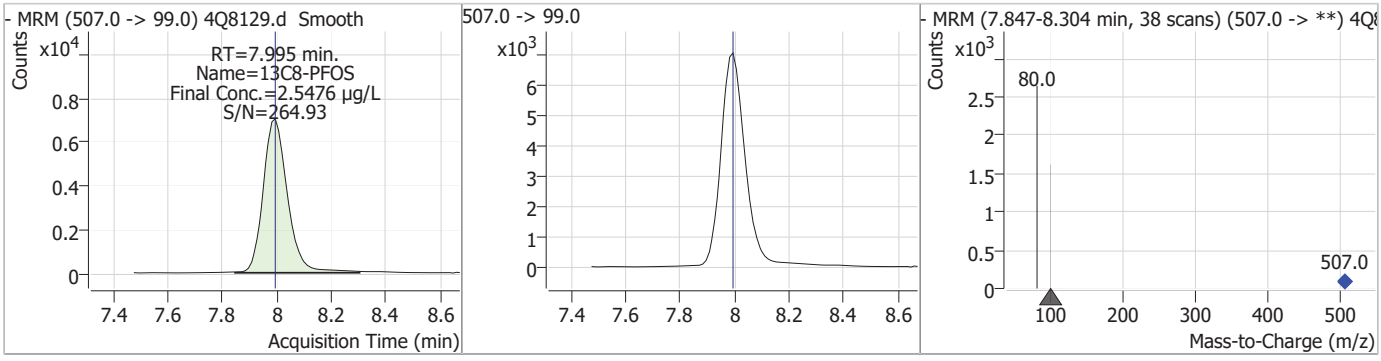
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.18	7.92	-0.01	241970				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.33	7.92	-0.01	13755 (m)	570.0 -> 512.0	38.2	18.3	55.0

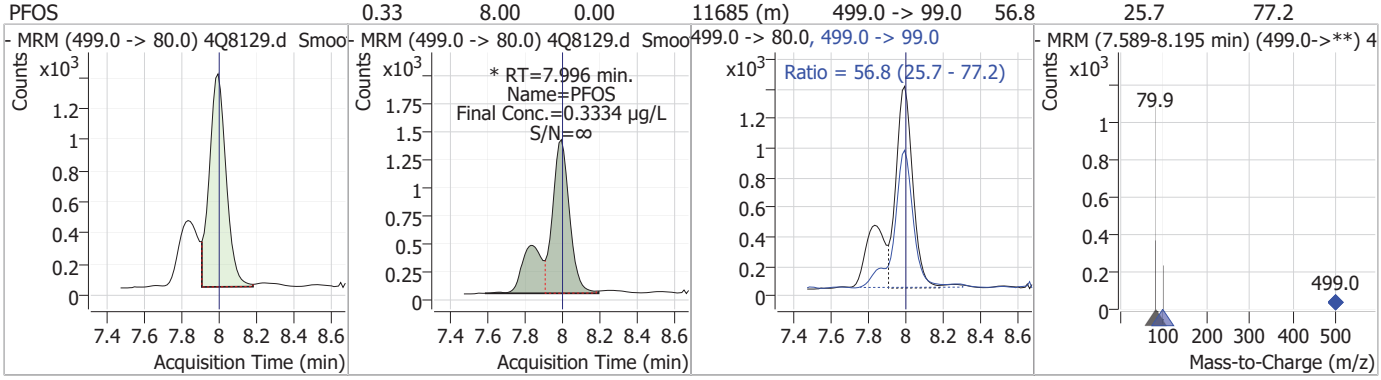


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.55	7.99	0.00	43482				

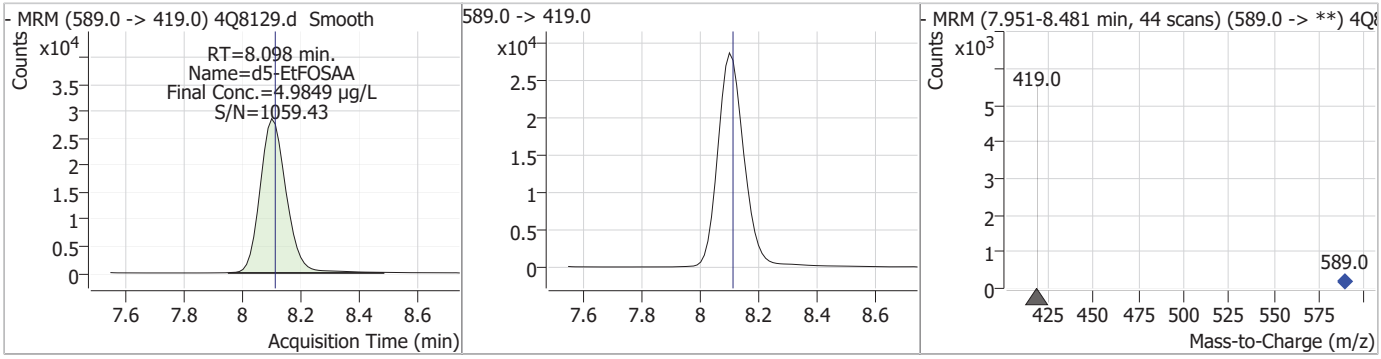


Perfluorinated Compounds by LC/MS/MS

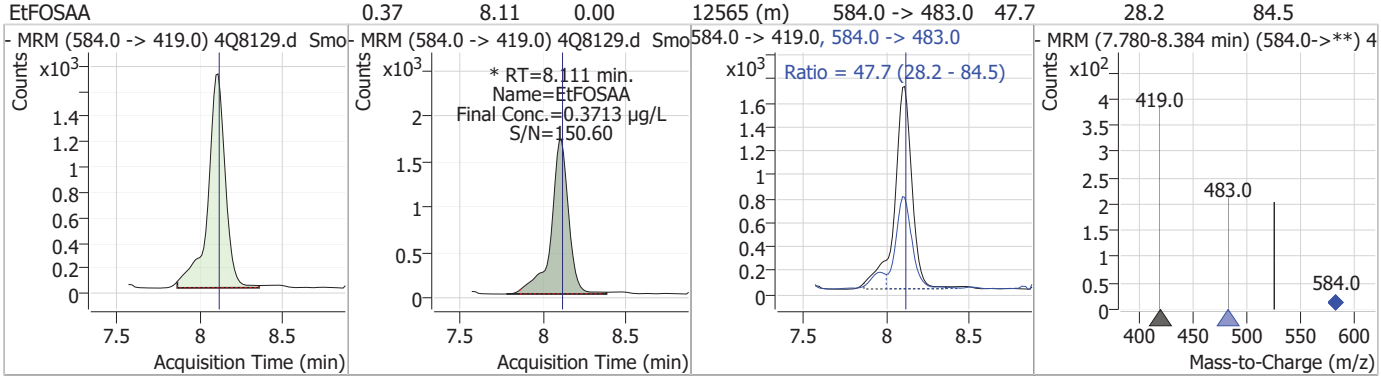
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.33	8.00	0.00	11685 (m)	499.0 -> 99.0	56.8	25.7	77.2



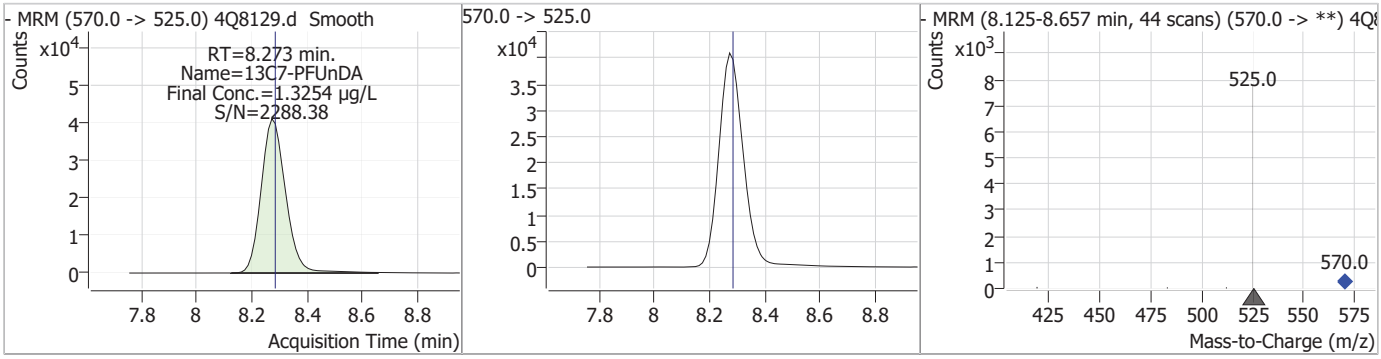
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.98	8.10	-0.01	178665				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.37	8.11	0.00	12565 (m)	584.0 -> 483.0	47.7	28.2	84.5

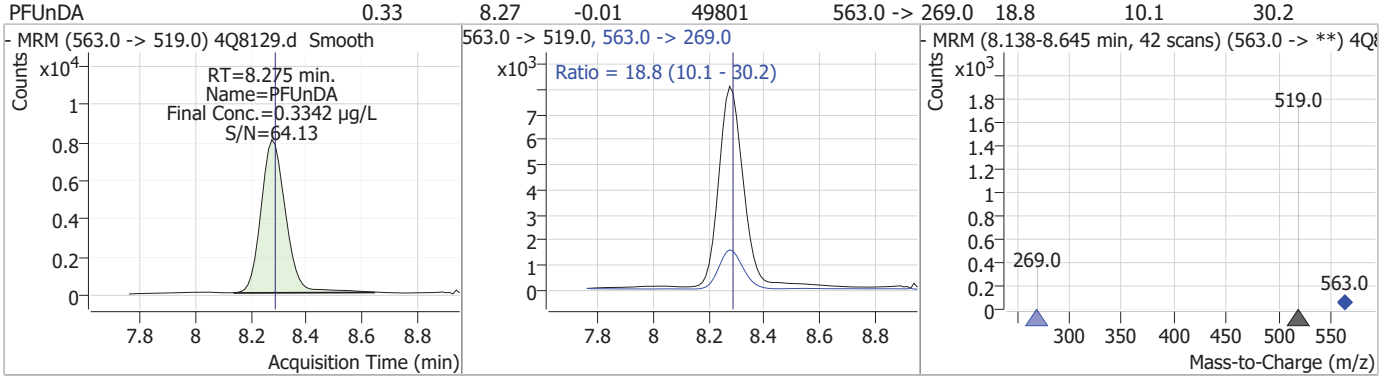


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.33	8.27	-0.01	252131				

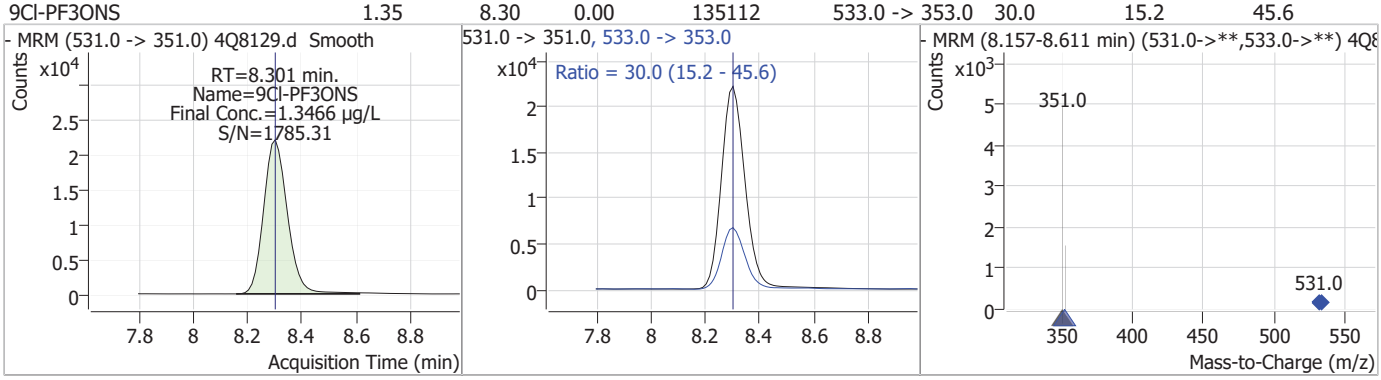


Perfluorinated Compounds by LC/MS/MS

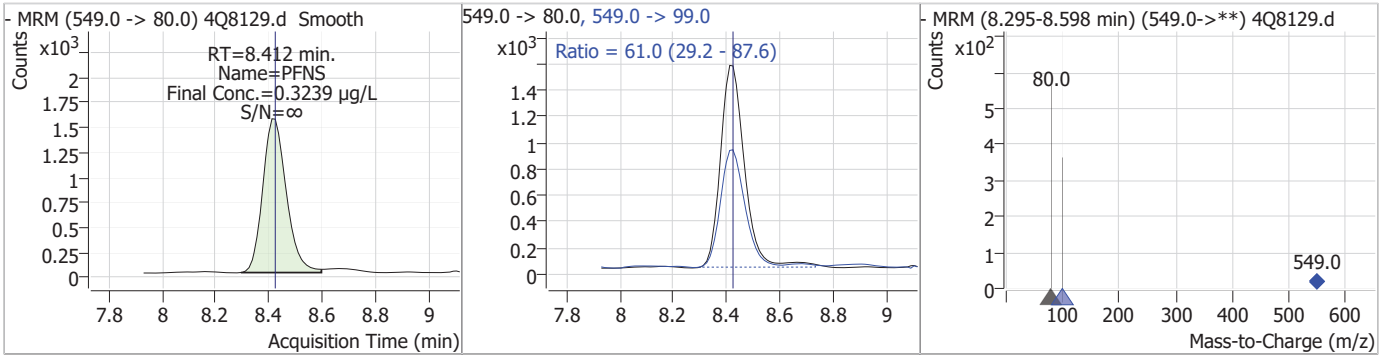
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.33	8.27	-0.01	49801	563.0 -> 269.0	18.8	10.1	30.2



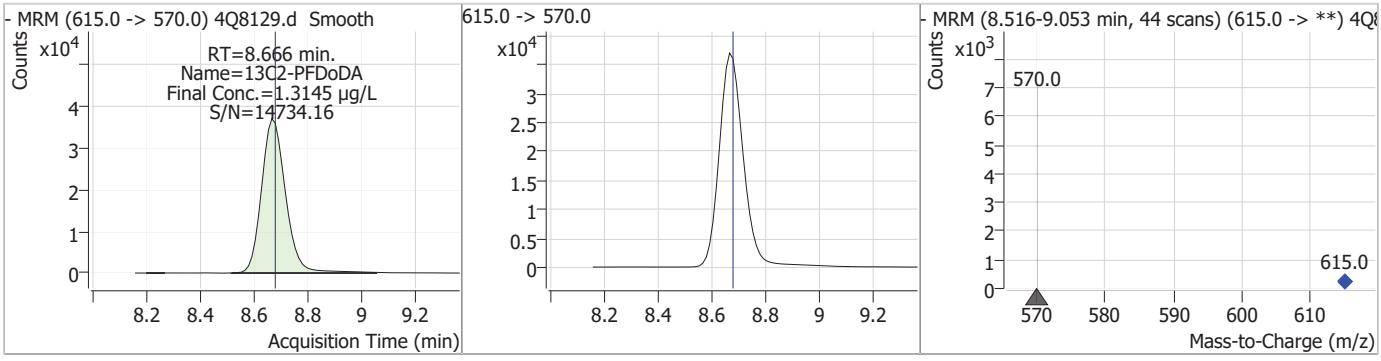
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	1.35	8.30	0.00	135112	533.0 -> 353.0	30.0	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.32	8.41	-0.01	9470	549.0 -> 99.0	61.0	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.31	8.67	-0.01	229037				



7.6.45

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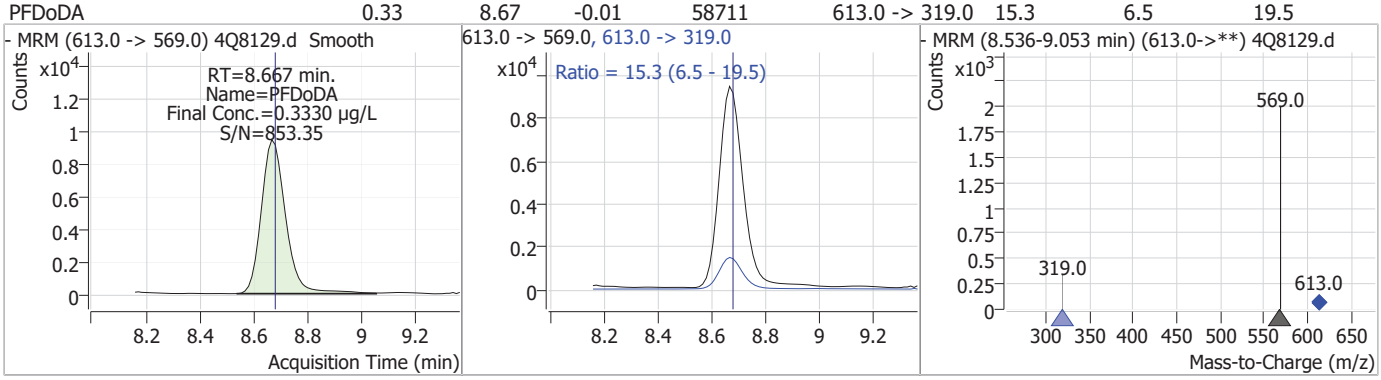
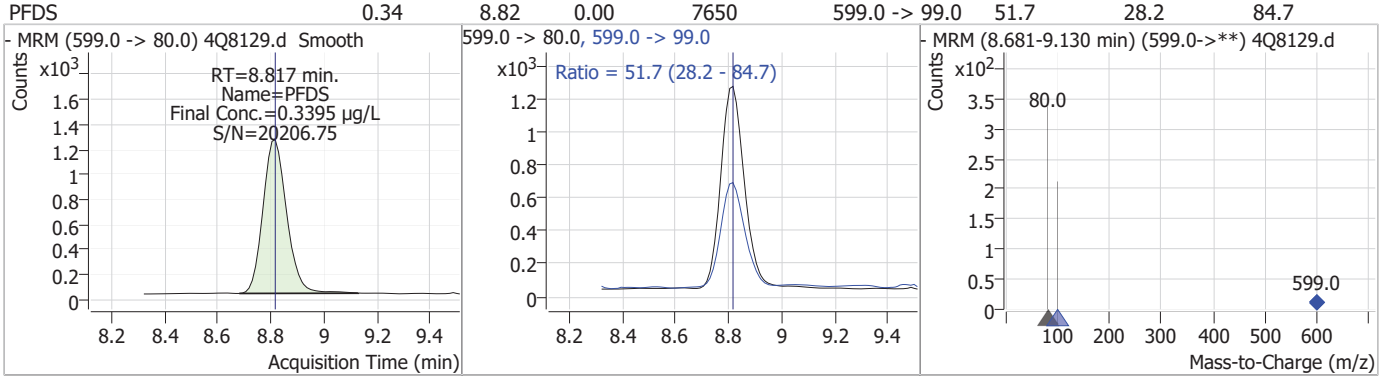
Perfluorinated Compounds by LC/MS/MS

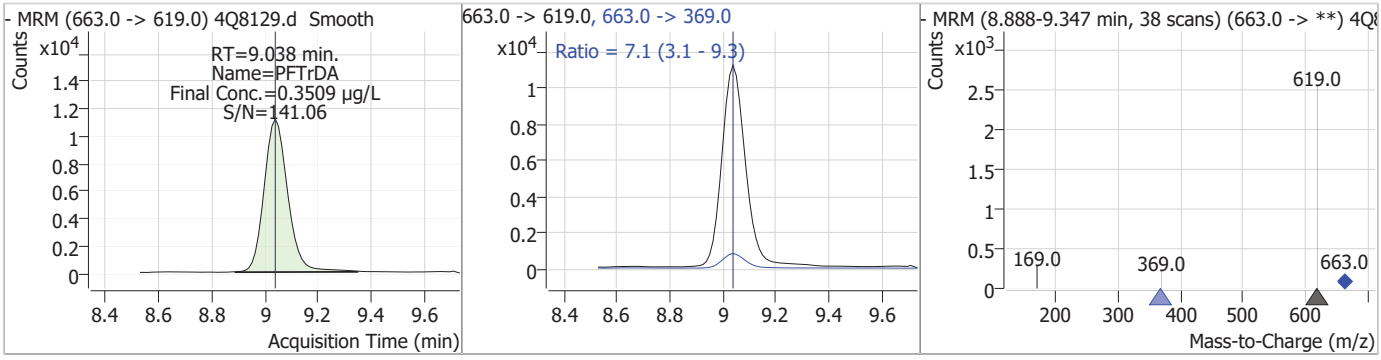
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.33	8.67	-0.01	58711	613.0 -> 319.0	15.3	6.5	19.5



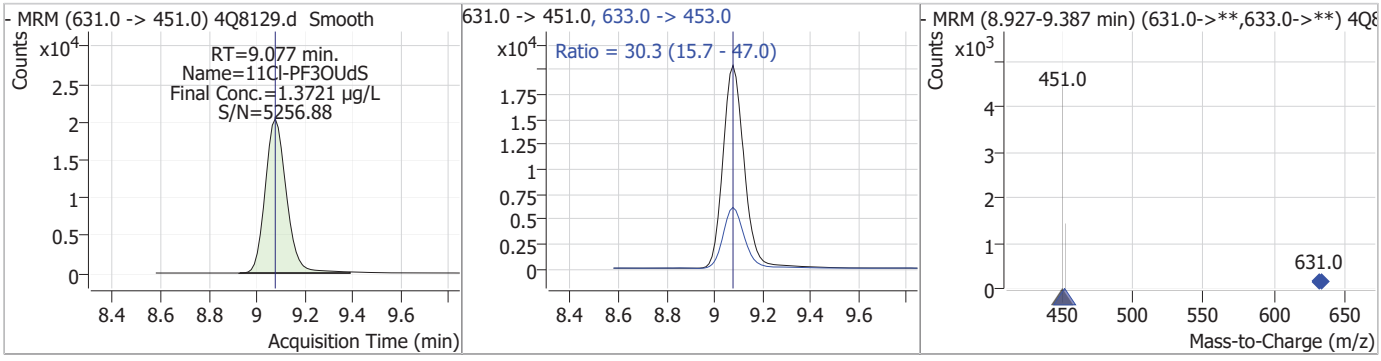
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.34	8.82	0.00	7650	599.0 -> 99.0	51.7	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.35	9.04	0.00	68988	663.0 -> 369.0	7.1	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	1.37	9.08	0.00	125162	633.0 -> 453.0	30.3	15.7	47.0



7.6.45

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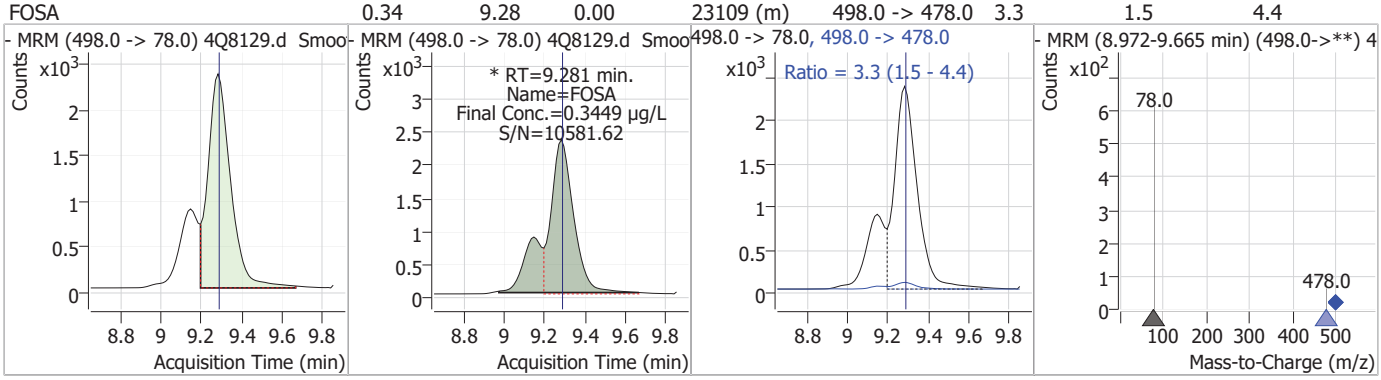
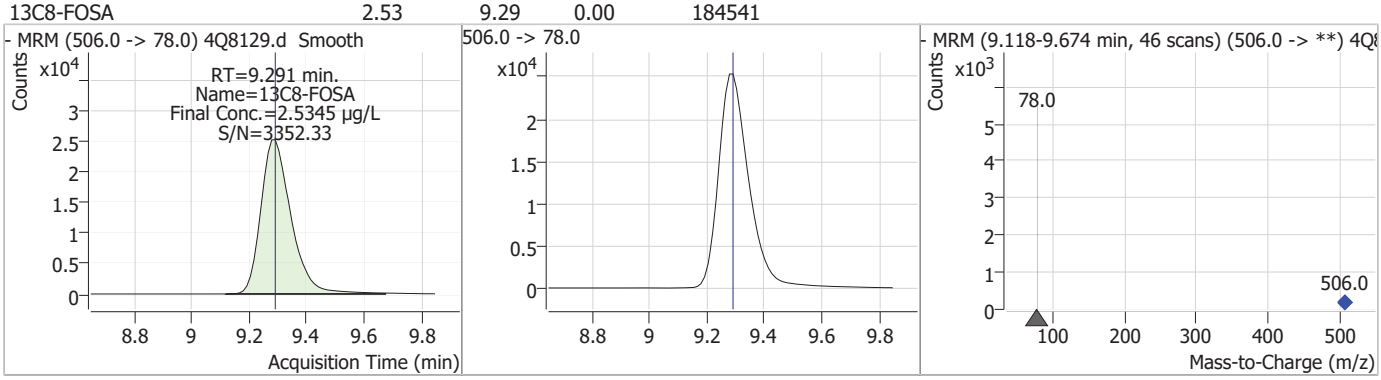
Perfluorinated Compounds by LC/MS/MS

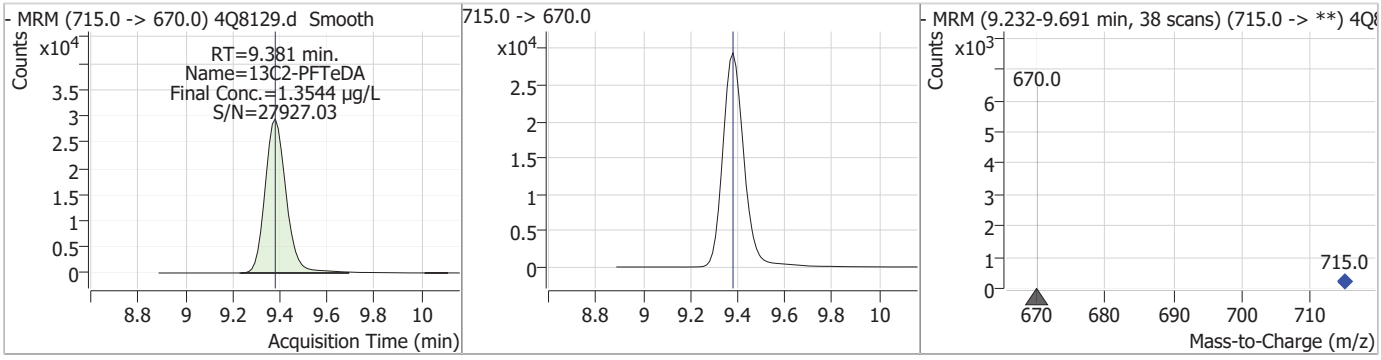
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.34	9.28	0.00	23109 (m)	498.0 -> 478.0	3.3	1.5	4.4



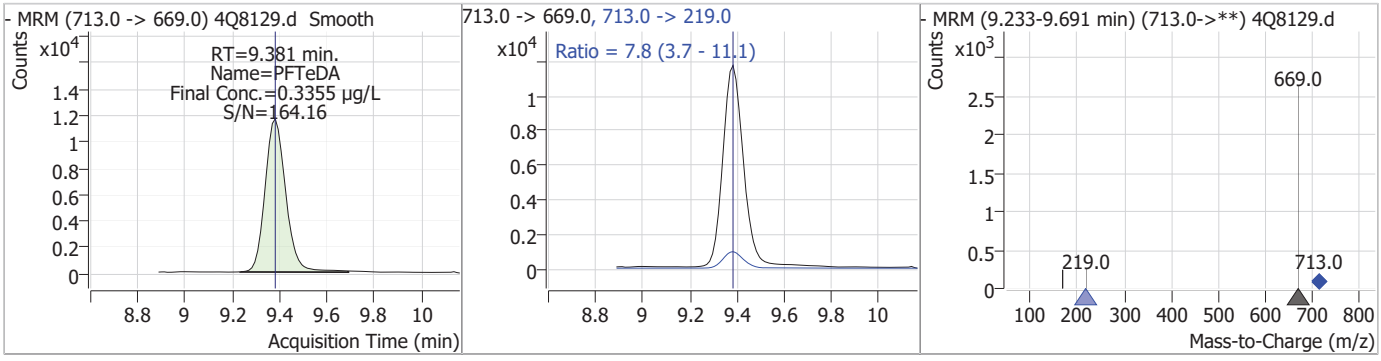
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.53	9.29	0.00	184541				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.35	9.38	0.00	181420				

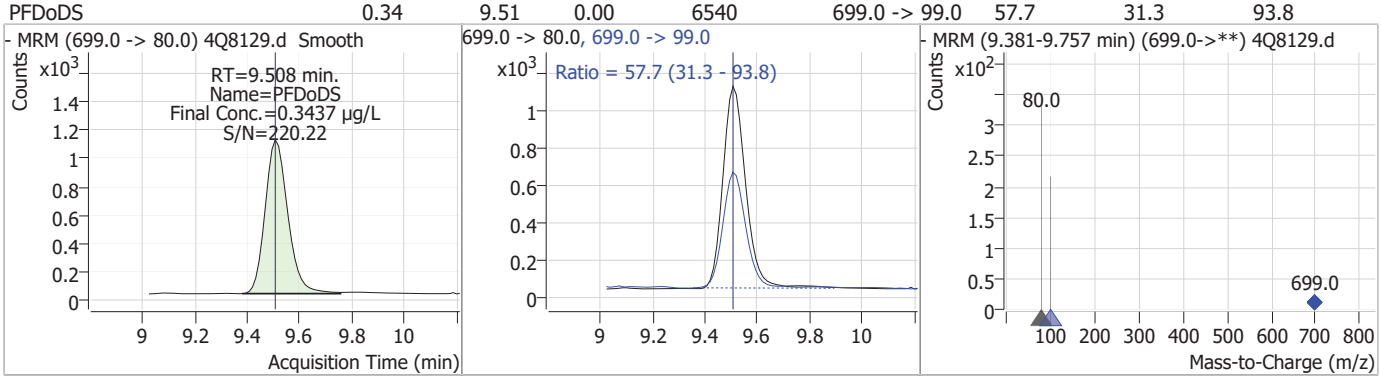


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.34	9.38	0.00	70875	713.0 -> 219.0	7.8	3.7	11.1

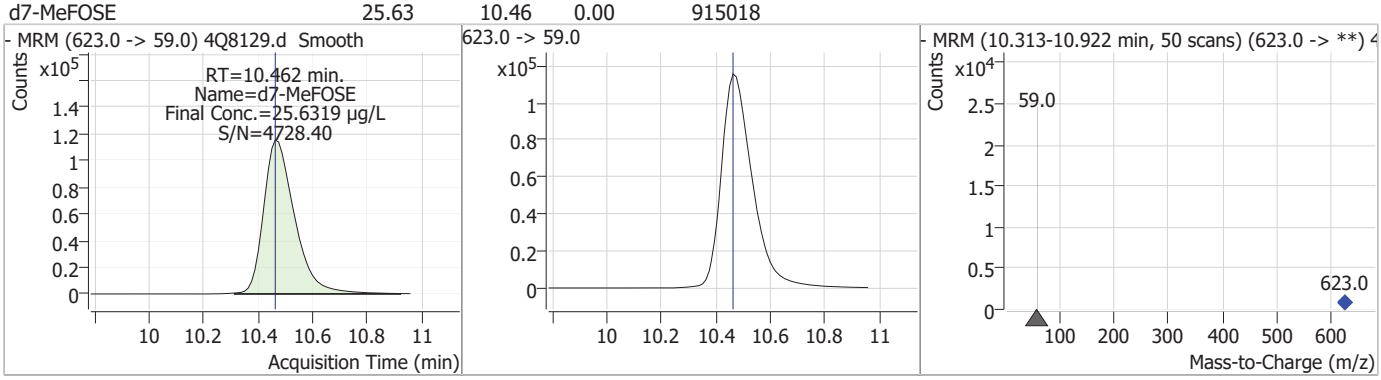


Perfluorinated Compounds by LC/MS/MS

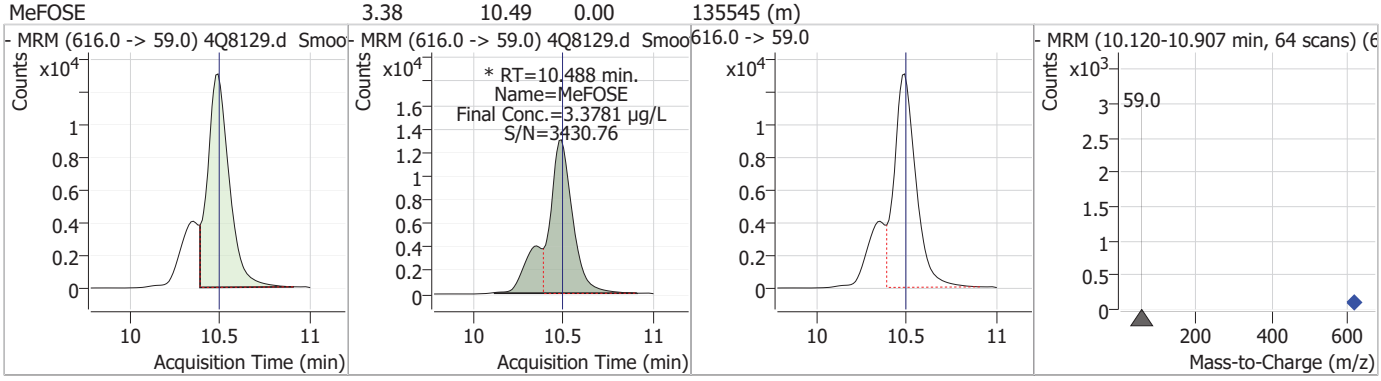
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.34	9.51	0.00	6540	699.0 -> 99.0	57.7	31.3	93.8



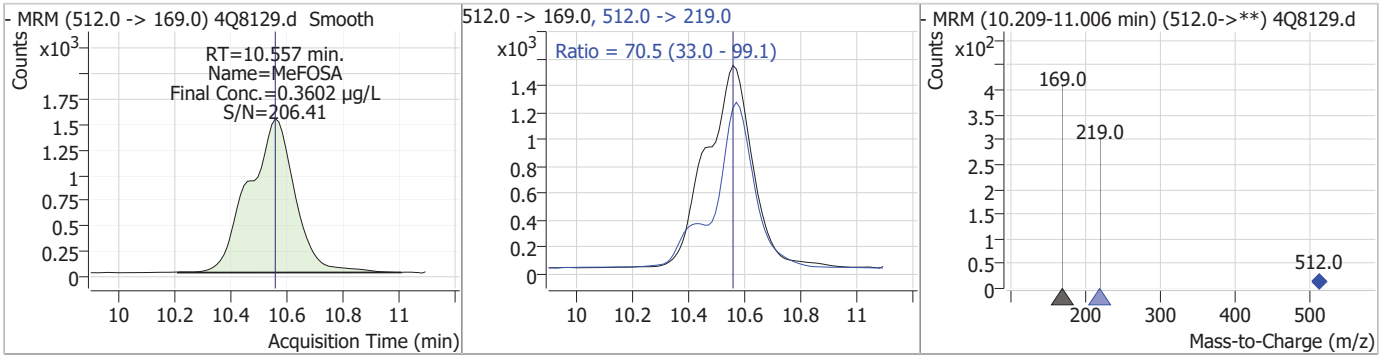
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.63	10.46	0.00	915018				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	3.38	10.49	0.00	135545 (m)				

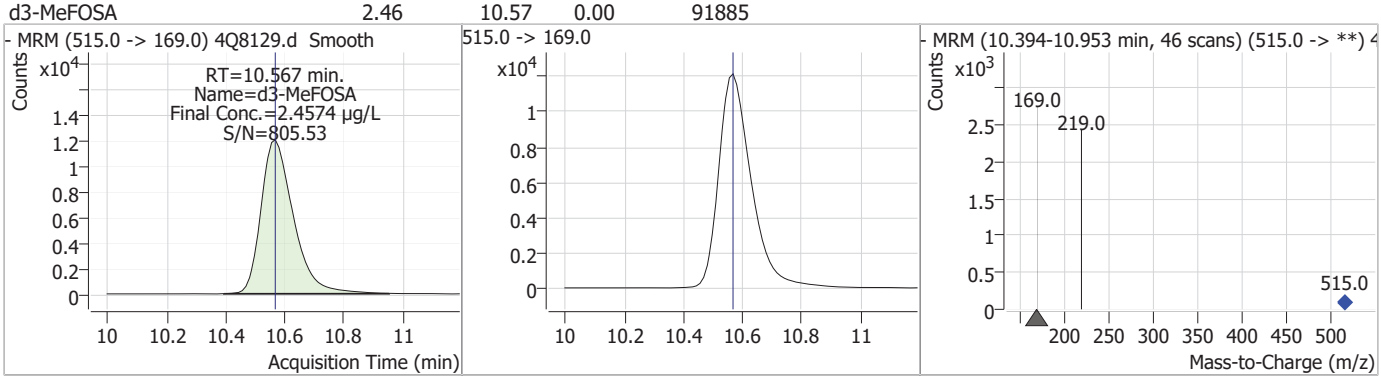


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.36	10.56	0.00	17332	512.0 -> 219.0	70.5	33.0	99.1

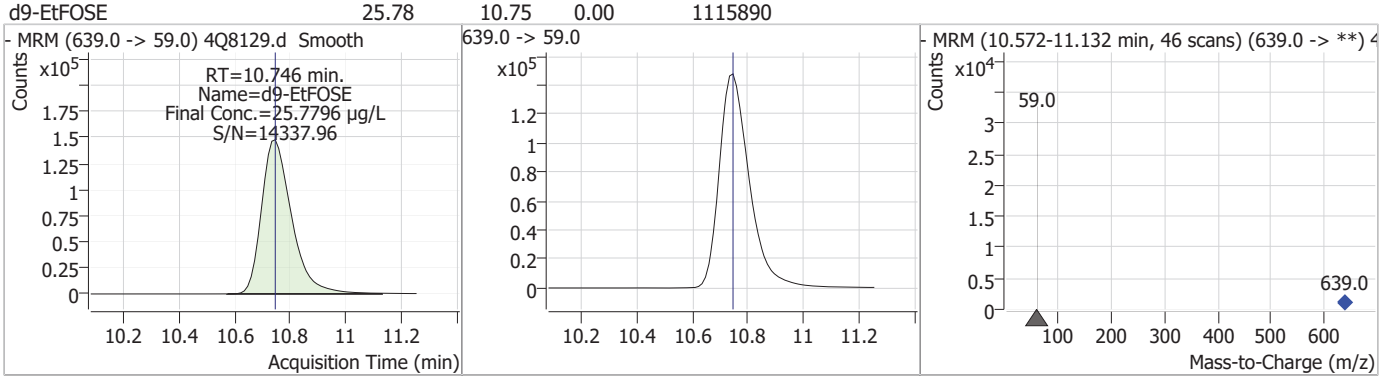


Perfluorinated Compounds by LC/MS/MS

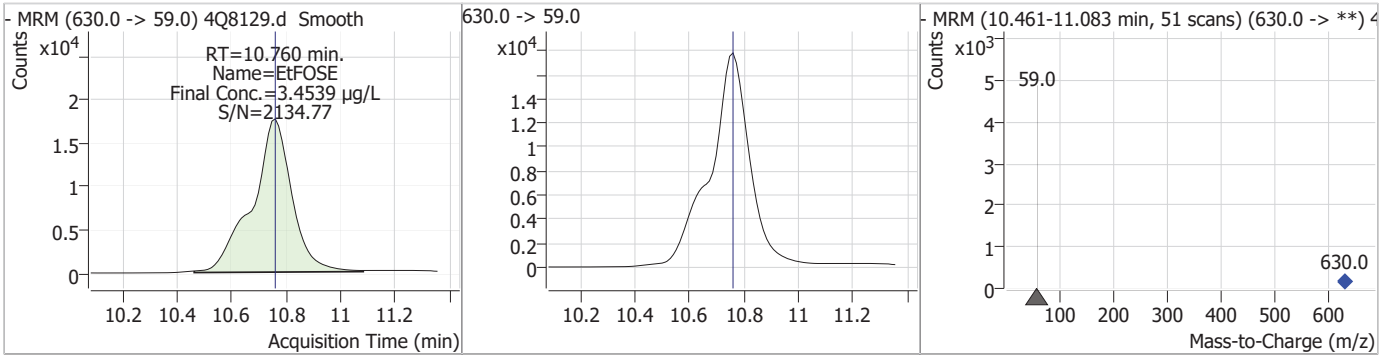
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.46	10.57	0.00	91885				



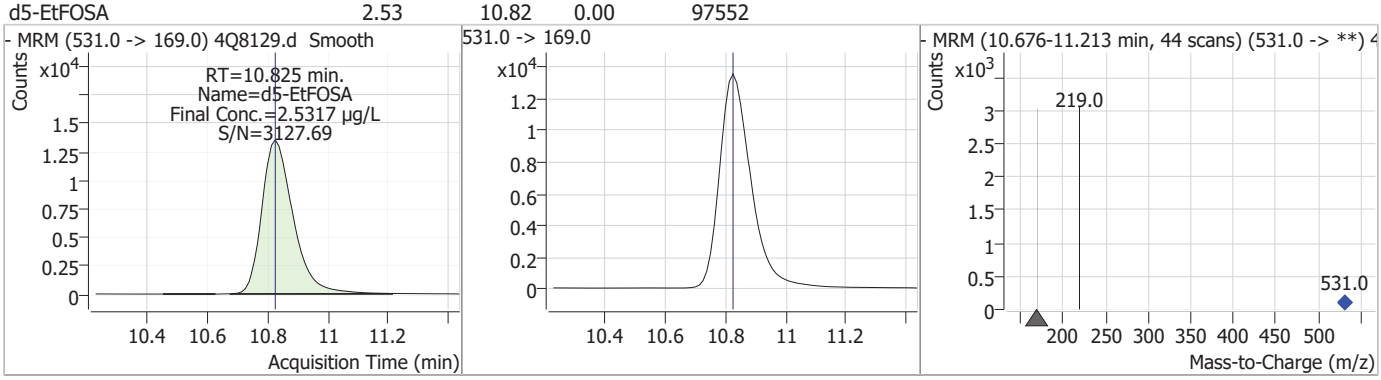
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.78	10.75	0.00	1115890				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	3.45	10.76	0.00	179275				

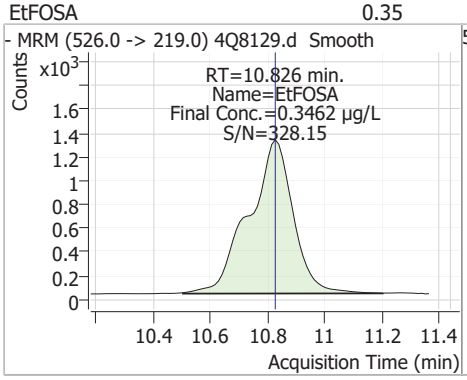


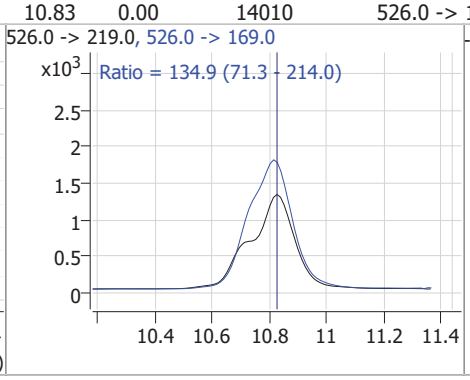
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.53	10.82	0.00	97552				

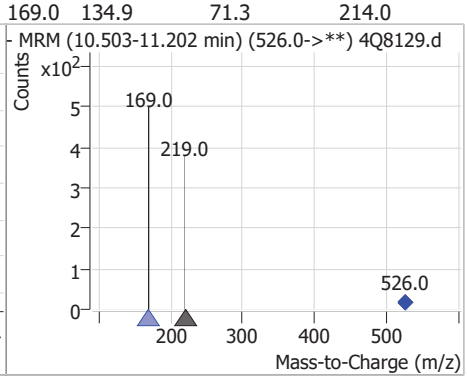


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.35	10.83	0.00	14010	526.0 -> 169.0	134.9	71.3	214.0







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7

Manual Integration Approval Summary

Sample Number: T4Q138-IC138
Lab FileID: 4Q8129.D
Injection Time: 04/30/25 14:42
Method: EPA 1633
Analyst approved: 04/30/25 23:06 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.92	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8130.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 2:56:32 PM
Sample Name : IC138-3
Vial : P1-A4
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63077,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.871	217.0 -> 172.0	957624	10.00 µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	510638	5.00 µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	331866	2.50 µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	351513	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	535059	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	210580	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	193648	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	274105	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	248448	1.25 µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	183397	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	195772	2.50 µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	29939	2.50 µg/L	-0.012
		302.0 -> 80.0	71089		
M3-PFHxS	6.986	402.0 -> 99.0	42590	2.50 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	46095	2.50 µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	13242	5.00 µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	28292	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	31892	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	250037	5.00 µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	514941	10.00 µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	196849	5.00 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	965751	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1204564	25.00 µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	105825	2.50 µg/L	0.000
M3-MeFOSA	10.568	515.0 -> 169.0	99681	2.50 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	72666	2.50 µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	403597	5.00 µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	44658	2.50 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	507070	2.50 µg/L	0.000
13C2-PFDA	7.859	515.0 -> 470.0	165098	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	194168	1.25 µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	294917	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.153	329.0 -> 81.0	13242	5.91 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 118.3%	
13C2-6:2FTS	6.684	429.0 -> 81.0	28292	5.82 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 116.4%	
13C2-8:2FTS	7.671	529.0 -> 81.0	31892	5.58 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 111.6%	
13C2-PFDoDA	8.666	615.0 -> 570.0	248448	1.39 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 111.4%	
13C2-PFTeDA	9.381	715.0 -> 670.0	183397	1.34 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.9%	
13C3-PFBS	5.355	302.0 -> 99.0	29939	2.72 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 108.7%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	42590	2.73	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 109.3%			
13C4-PFBA	2.871	217.0 -> 172.0	957624	10.35	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 103.5%			
13C4-PFHpA	6.291	367.0 -> 322.0	351513	2.65	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.0%			
13C5-PFHxA	5.452	318.0 -> 273.0	331866	2.66	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.3%			
13C5-PFPeA	4.319	268.0 -> 223.0	510638	5.39	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.8%			
13C6-PFDA	7.858	519.0 -> 474.0	193648	1.33	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.2%			
13C7-PFUnDA	8.273	570.0 -> 525.0	274105	1.41	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 112.5%			
13C8-FOSA	9.291	506.0 -> 78.0	195772	2.62	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.9%			
13C8-PFOA	6.897	421.0 -> 376.0	535059	2.64	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.6%			
13C8-PFOS	7.995	507.0 -> 99.0	46095	2.63	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.4%			
13C9-PFNA	7.403	472.0 -> 427.0	210580	1.31	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.6%			
d3-MeFOSAA	7.915	573.0 -> 419.0	250037	5.22	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.5%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	514941	10.50	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 105.0%			
d3-MeFOSA	10.568	515.0 -> 169.0	99681	2.60	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.0%			
d5-EtFOSAA	8.098	589.0 -> 419.0	196849	5.36	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.1%			
d7-MeFOSE	10.462	623.0 -> 59.0	965751	26.39	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 105.6%			
d9-EtFOSE	10.746	639.0 -> 59.0	1204564	27.14	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 108.6%			
d5-EtFOSA	10.825	531.0 -> 169.0	105825	2.68	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.2%			
Target Compounds							QValue
4:2FTS	5.154	327.0 -> 307.0	104879	4.31	µg/L		99
		327.0 -> 81.0	49718				
6:2FTS	6.684	427.0 -> 407.0	127883	4.51	µg/L		98
		427.0 -> 81.0	61591				
8:2FTS	7.671	527.0 -> 507.0	119183	4.78	µg/L		98
		527.0 -> 81.0	46618				
EtFOSAA	8.099	584.0 -> 419.0	41157	1.10	µg/L	m	97
		584.0 -> 483.0	22359				
FOSA	9.281	498.0 -> 78.0	80923	1.14	µg/L	m	99
		498.0 -> 478.0	2255				
MeFOSAA	7.917	570.0 -> 419.0	51146	1.19	µg/L	m	93
		570.0 -> 512.0	16694				
PFBA	2.877	213.0 -> 169.0	136131	4.65	µg/L		100
PFBS	5.357	299.0 -> 80.0	33354	0.97	µg/L		100
		299.0 -> 99.0	13649				
PFDA	7.859	513.0 -> 469.0	174060	1.18	µg/L		99
		513.0 -> 219.0	39975				
PFDoDA	8.667	613.0 -> 569.0	221889	1.16	µg/L		99
		613.0 -> 319.0	29863				

Perfluorinated Compounds by LC/MS/MS

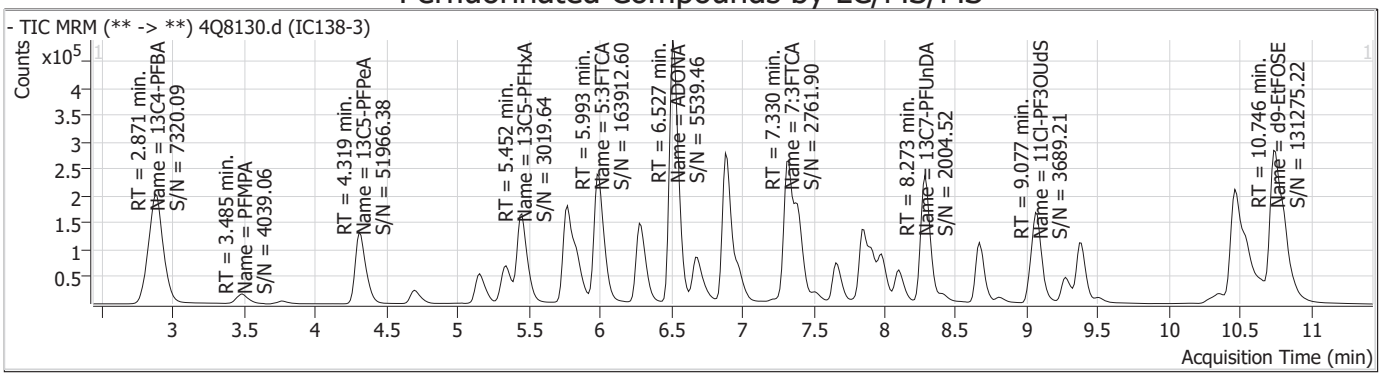
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	25761	1.05	µg/L		100
		599.0 -> 99.0	14466				
PFHpA	6.292	363.0 -> 319.0	248678	1.16	µg/L		99
		363.0 -> 169.0	50123				
PFHpS	7.529	449.0 -> 80.0	39211	1.06	µg/L		98
		449.0 -> 99.0	22169				
PFHxA	5.455	313.0 -> 269.0	167593	1.17	µg/L		100
		313.0 -> 119.0	5539				
PFHxS	6.987	399.0 -> 80.0	38168	1.03	µg/L	m	99
		399.0 -> 99.0	20847				
PFNA	7.404	463.0 -> 419.0	147483	1.16	µg/L	m	96
		463.0 -> 219.0	51775				
PFNS	8.425	549.0 -> 80.0	34041	1.10	µg/L		98
		549.0 -> 99.0	19438				
PFOA	6.898	413.0 -> 369.0	206195	1.16	µg/L	m	99
		413.0 -> 169.0	58588				
PFOS	7.996	499.0 -> 80.0	38547	1.04	µg/L	m	96
		499.0 -> 99.0	20837				
PFPeA	4.321	263.0 -> 219.0	189405	2.35	µg/L		100
PFPeS	6.318	349.0 -> 80.0	39756	1.06	µg/L		98
		349.0 -> 99.0	19476				
PFTeDA	9.382	713.0 -> 669.0	254029	1.19	µg/L		99
		713.0 -> 219.0	19290				
PFTrDA	9.038	663.0 -> 619.0	251795	1.18	µg/L		100
		663.0 -> 369.0	15298				
PFUnDA	8.275	563.0 -> 519.0	188873	1.17	µg/L		99
		563.0 -> 269.0	36969				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	456061	4.66	µg/L		96
		633.0 -> 453.0	133876				
9Cl-PF3ONS	8.301	531.0 -> 351.0	480121	4.46	µg/L		99
		533.0 -> 353.0	149707				
ADONA	6.527	377.0 -> 251.0	1679709	4.16	µg/L		100
		377.0 -> 85.0	553790				
HFPO-DA	5.780	285.0 -> 169.0	262180	4.84	µg/L		99
		285.0 -> 185.0	27872				
3:3FTCA	3.769	241.0 -> 177.0	26999	5.60	µg/L		100
		241.0 -> 117.0	2235				
5:3FTCA	5.993	341.0 -> 237.0	698493	27.51	µg/L		99
		341.0 -> 217.0	494326				
7:3FTCA	7.330	441.0 -> 337.0	926671	28.16	µg/L		99
		441.0 -> 317.0	412807				
EtFOSA	10.826	526.0 -> 219.0	49426	1.13	µg/L		99
		526.0 -> 169.0	70934				
EtFOSE	10.760	630.0 -> 59.0	658039	11.74	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	58851	1.13	µg/L		98
		512.0 -> 219.0	40066				
MeFOSE	10.488	616.0 -> 59.0	490250	11.58	µg/L		100
PFDoDS	9.508	699.0 -> 80.0	22300	1.11	µg/L		99
		699.0 -> 99.0	14110				
NFDHA	5.345	295.0 -> 201.0	43882	2.34	µg/L		99
		201.0 -> 85.0	178094				
		295.0 -> 85.0	11260				
PFMBA	4.710	279.0 -> 85.0	129019	2.34	µg/L		100
PFMPA	3.485	229.0 -> 85.0	106131	2.29	µg/L		100
PFEESA	5.849	315.0 -> 135.0	274100	2.09	µg/L		99
		315.0 -> 69.0	22074				

Perfluorinated Compounds by LC/MS/MS

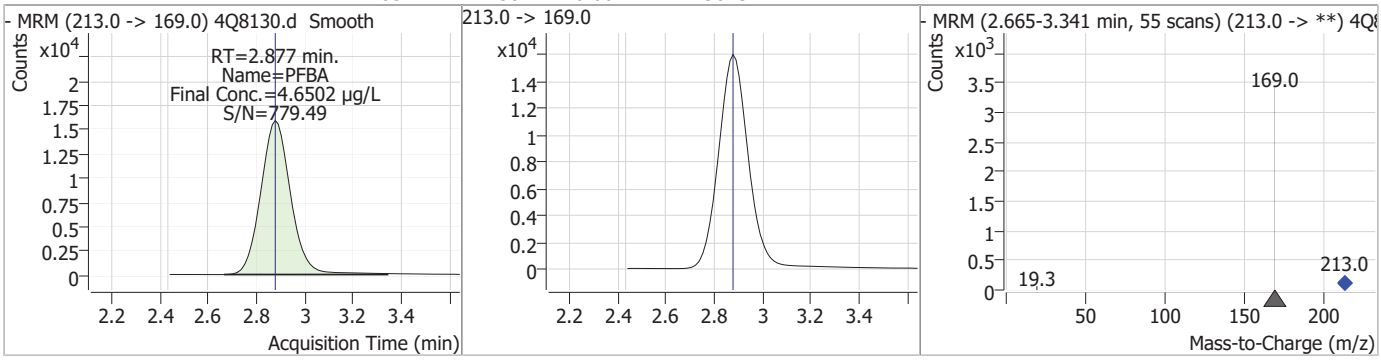
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

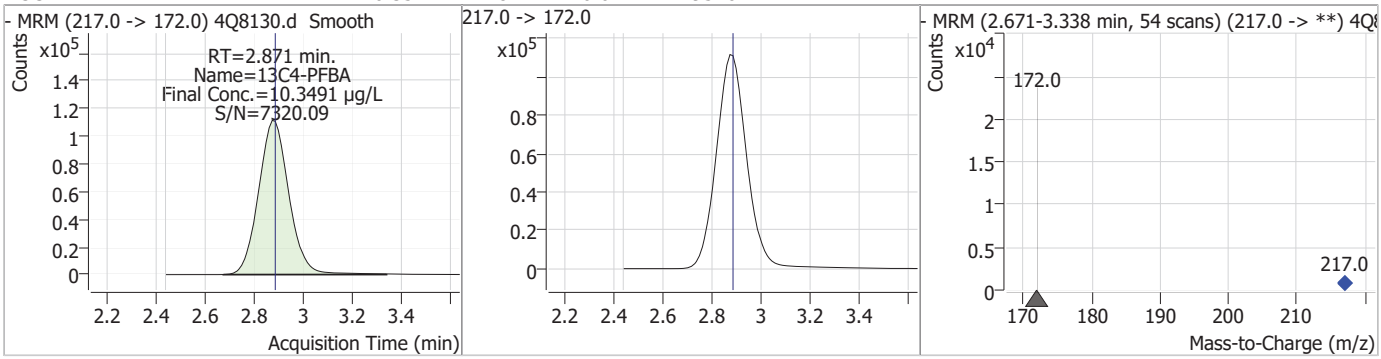
Perfluorinated Compounds by LC/MS/MS



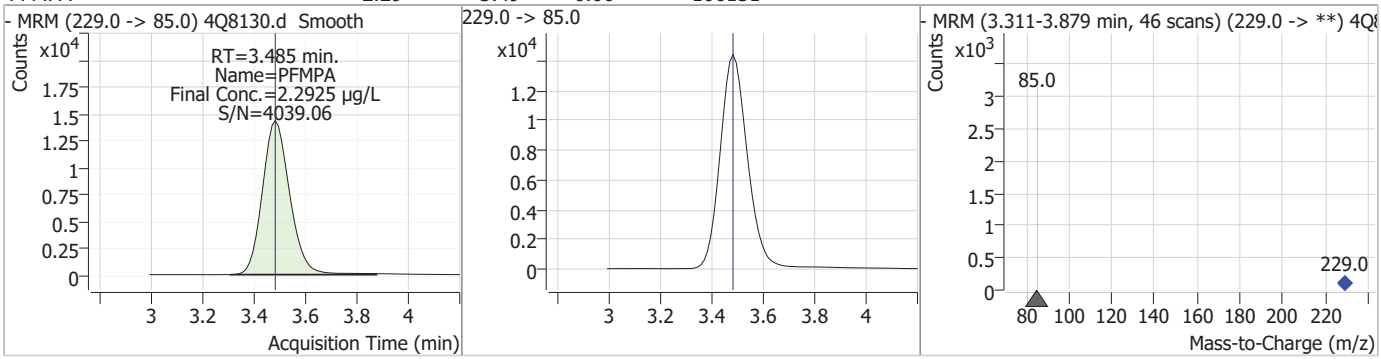
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	4.65	2.88	0.00	136131				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.35	2.87	-0.01	957624				

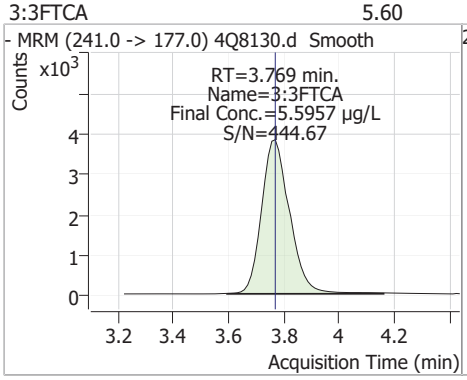


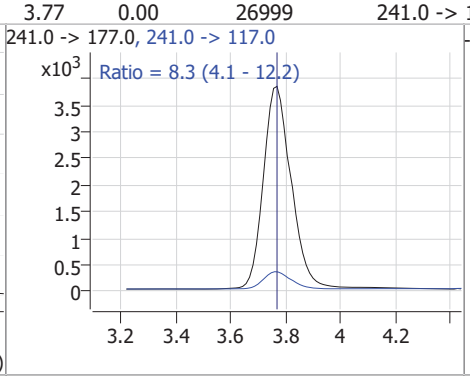
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	2.29	3.49	0.00	106131				

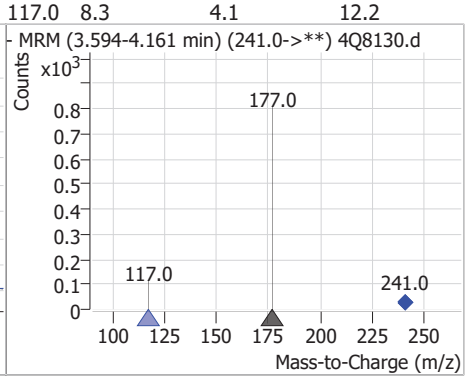


Perfluorinated Compounds by LC/MS/MS

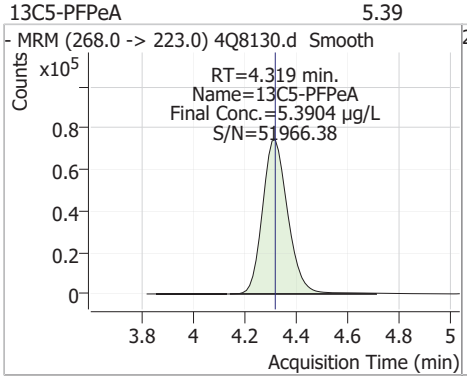
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	5.60	3.77	0.00	26999	241.0 -> 117.0	8.3	4.1	12.2

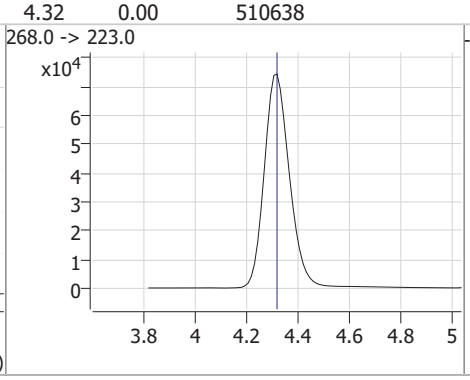


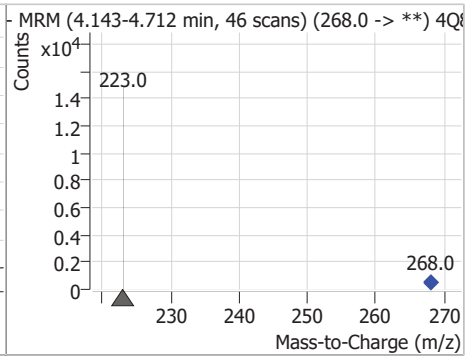




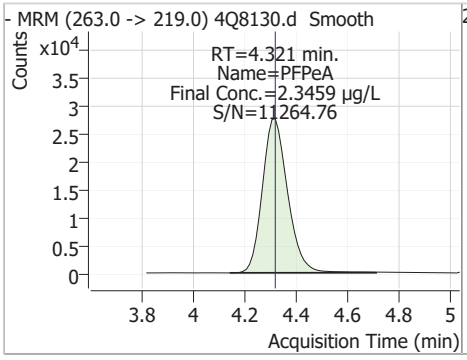
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.39	4.32	0.00	510638				

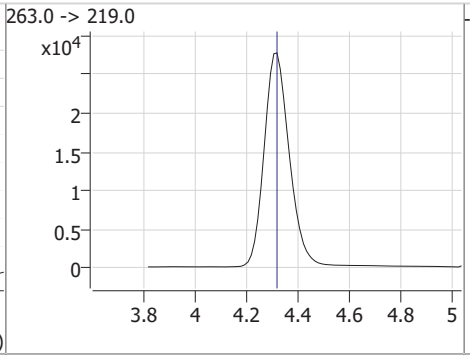


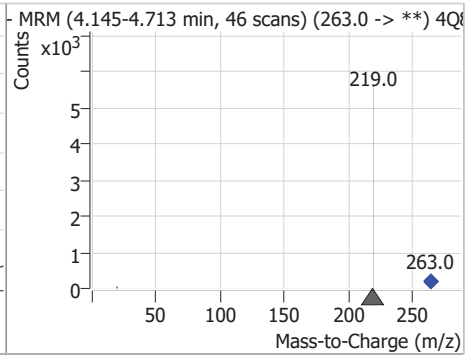




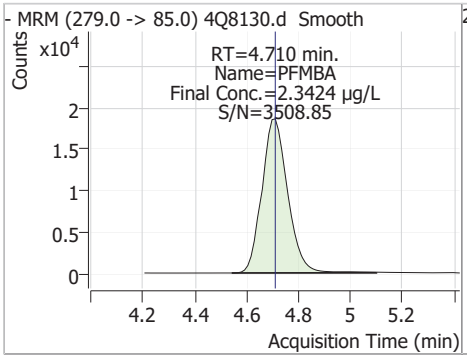
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	2.35	4.32	0.00	189405				

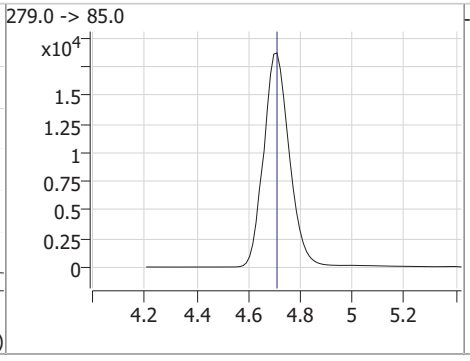


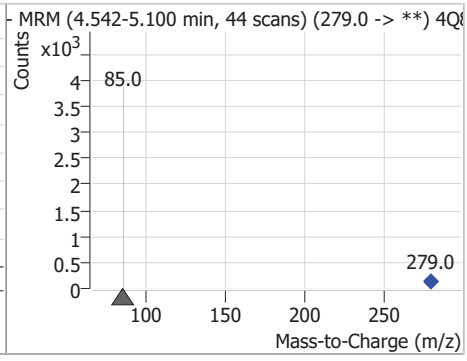




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	2.34	4.71	0.00	129019				







7.6.46

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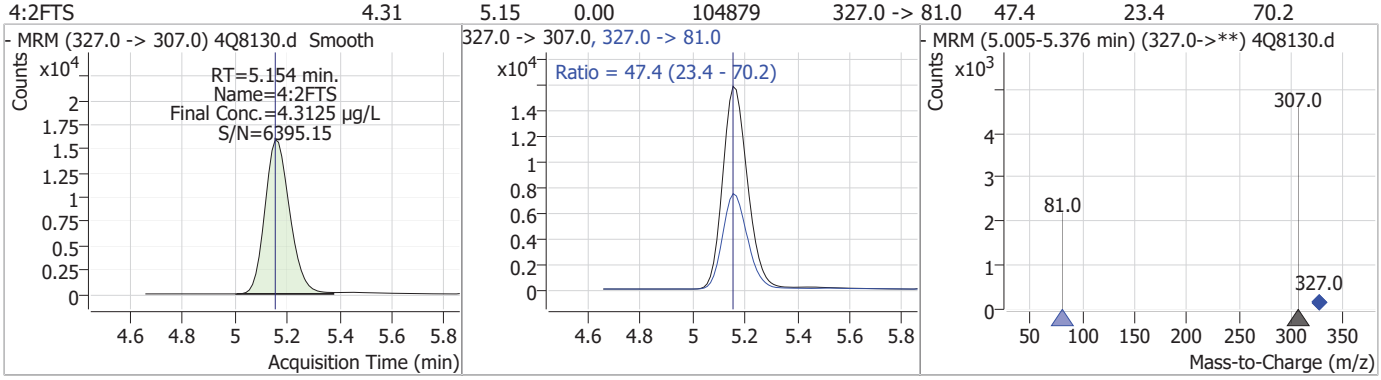
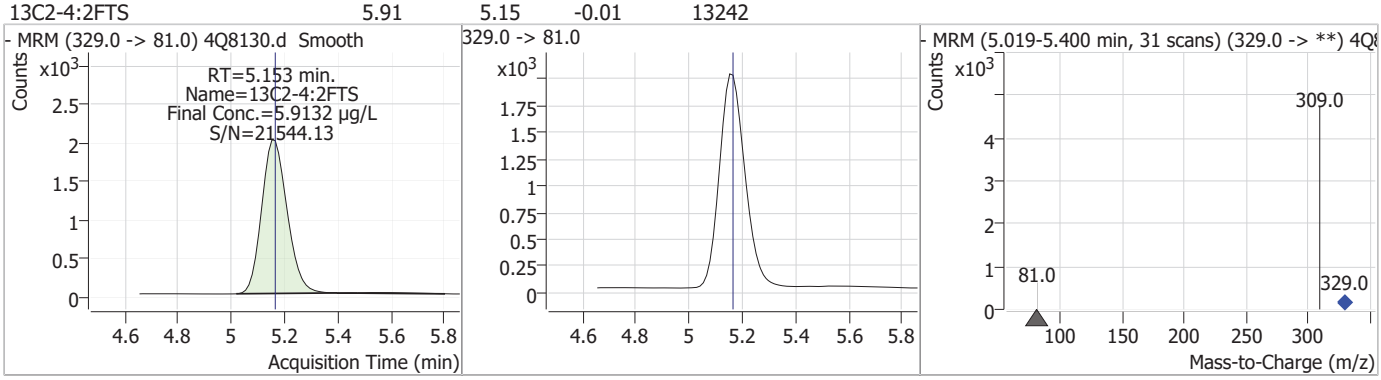
Perfluorinated Compounds by LC/MS/MS

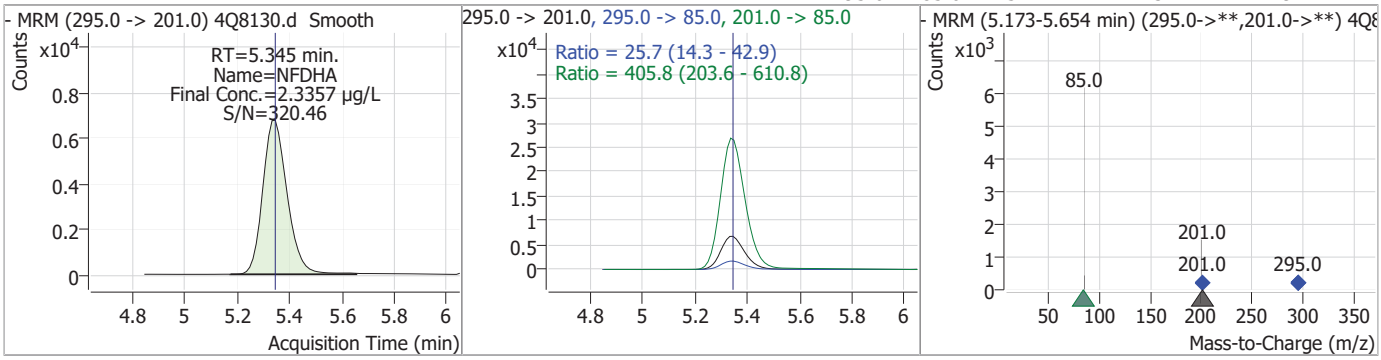
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	4.31	5.15	0.00	104879	327.0 -> 81.0	47.4	23.4	70.2



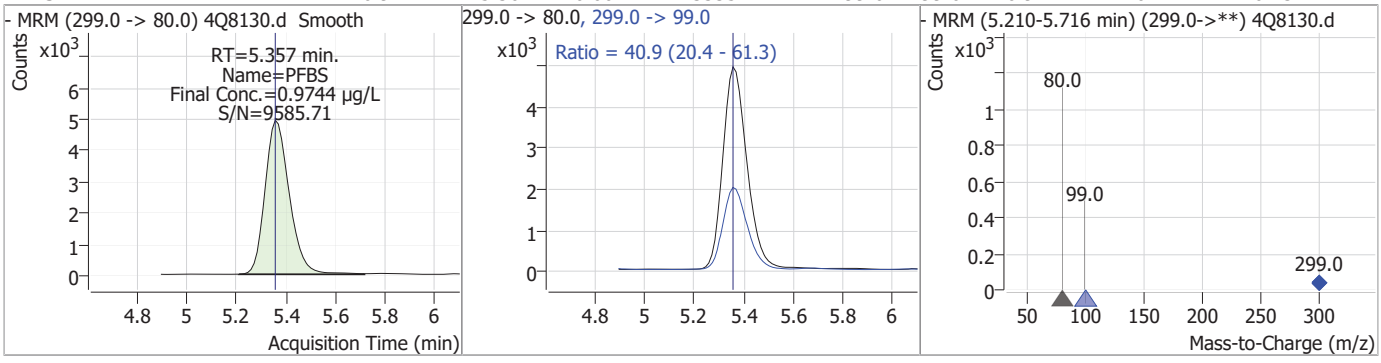
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.91	5.15	-0.01	13242				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	2.34	5.35	0.00	43882	201.0 -> 85.0	405.8	203.6	610.8
					295.0 -> 85.0	25.7	14.3	42.9

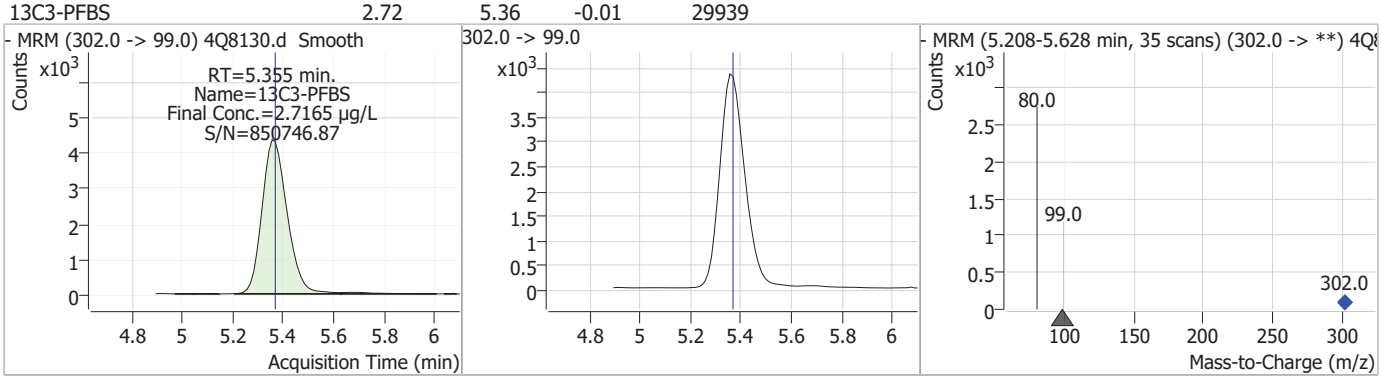


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.97	5.36	0.00	33354	299.0 -> 99.0	40.9	20.4	61.3

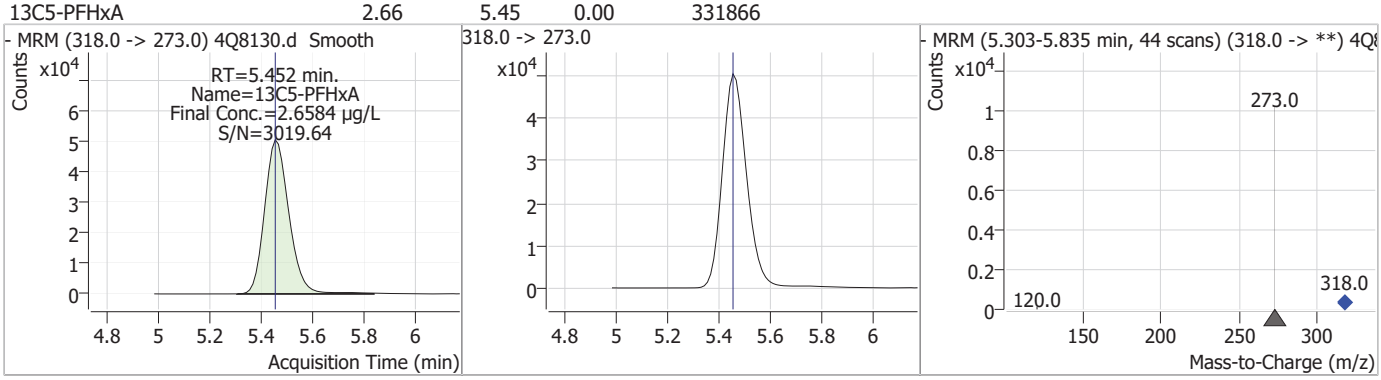


Perfluorinated Compounds by LC/MS/MS

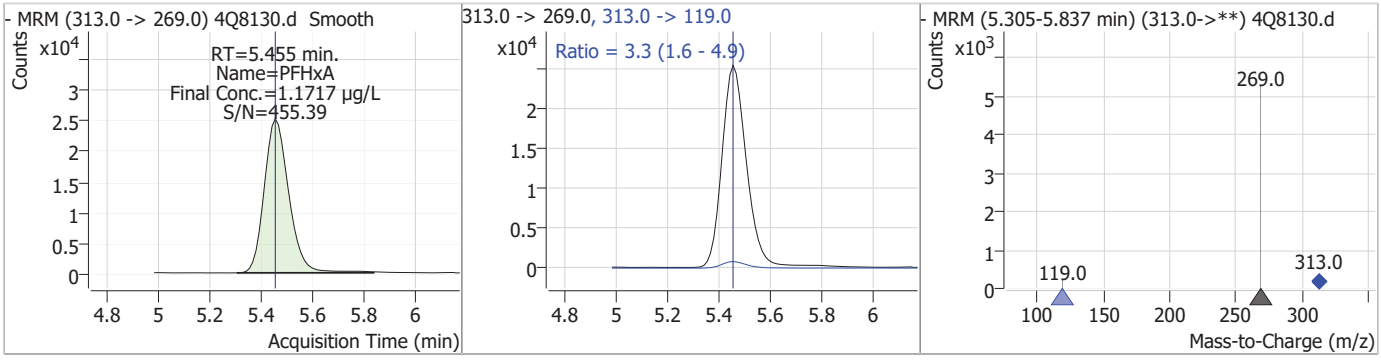
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.72	5.36	-0.01	29939				



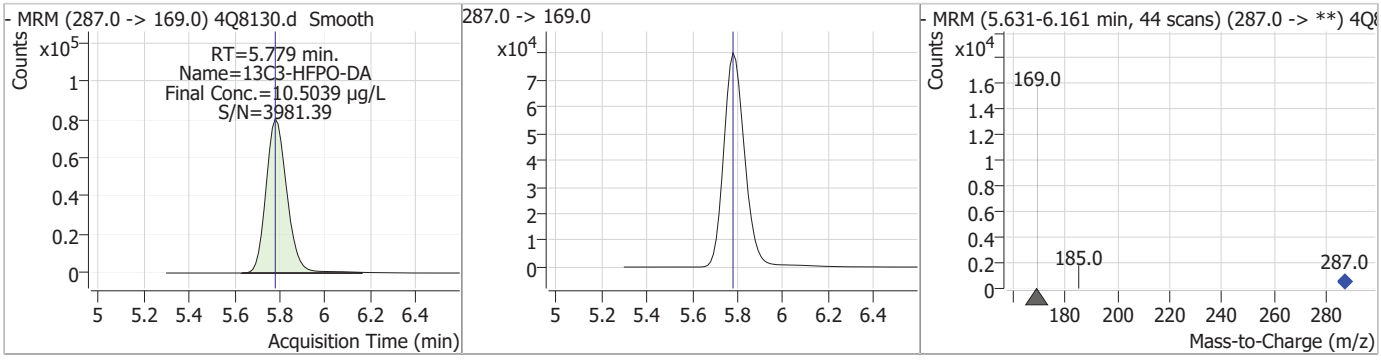
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.66	5.45	0.00	331866				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	1.17	5.45	0.00	167593	313.0 -> 119.0	3.3	1.6	4.9

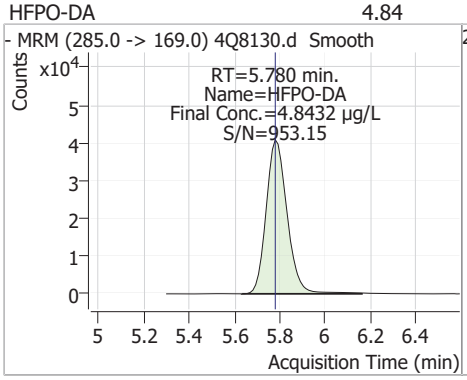


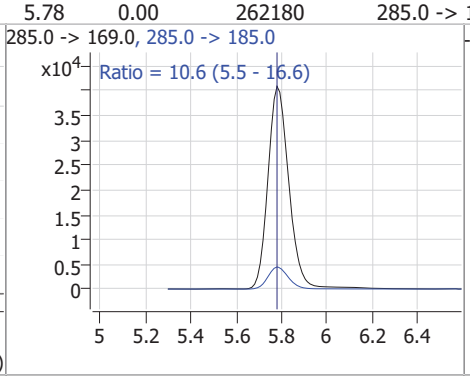
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.50	5.78	0.00	514941				

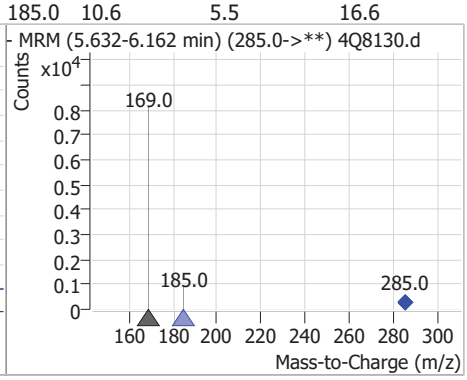


Perfluorinated Compounds by LC/MS/MS

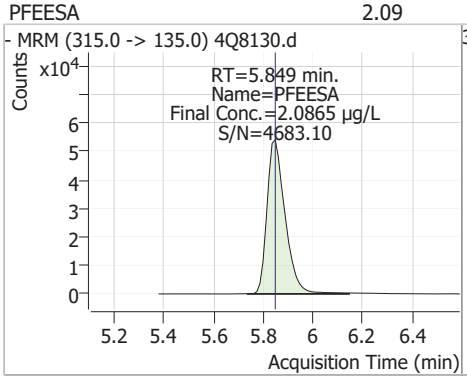
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	4.84	5.78	0.00	262180	285.0 -> 185.0	10.6	5.5	16.6

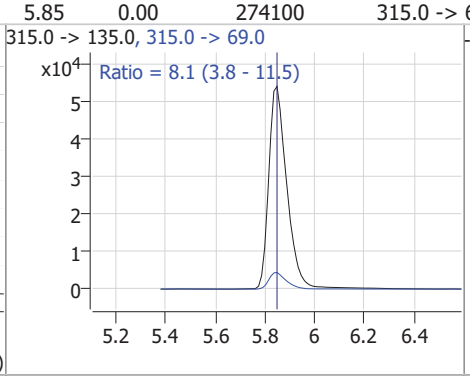


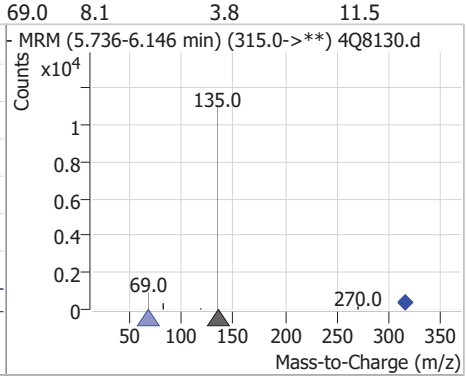




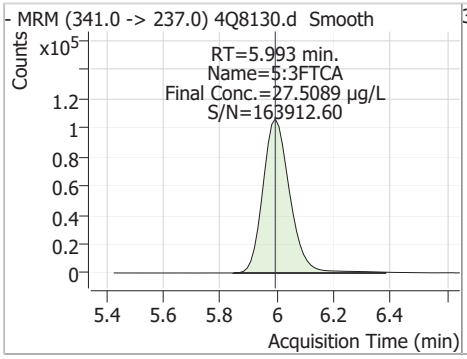
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	2.09	5.85	0.00	274100	315.0 -> 69.0	8.1	3.8	11.5

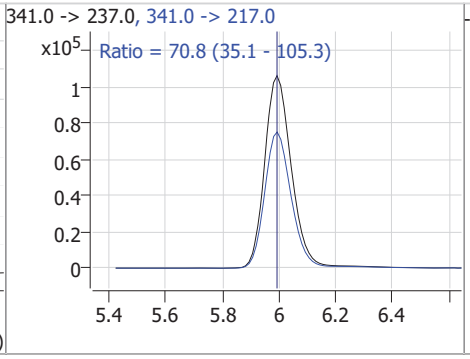


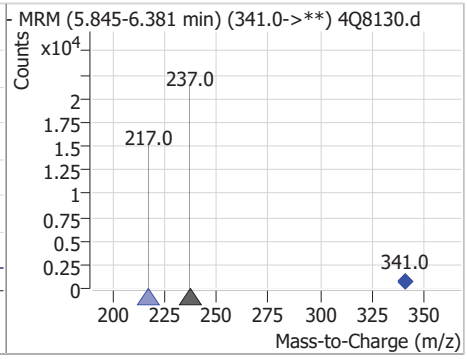




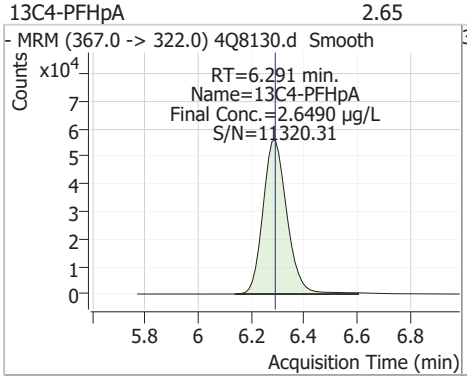
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	27.51	5.99	0.00	698493	341.0 -> 217.0	70.8	35.1	105.3

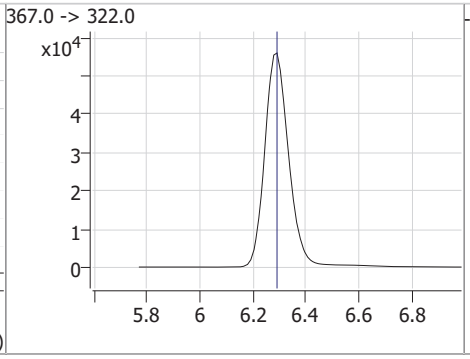


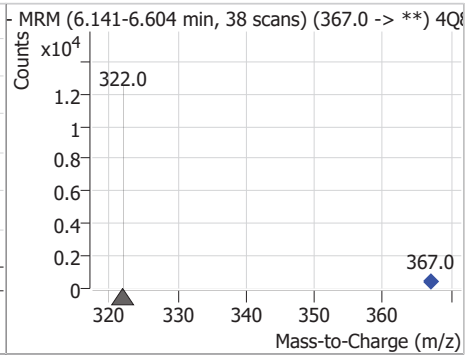




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.65	6.29	0.00	351513				

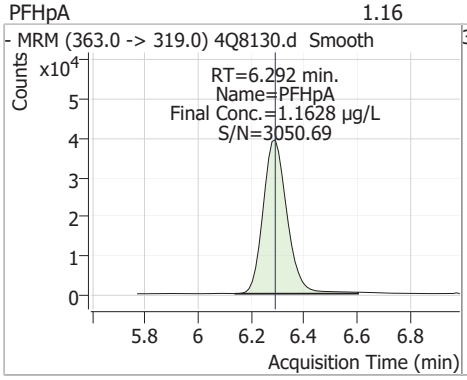


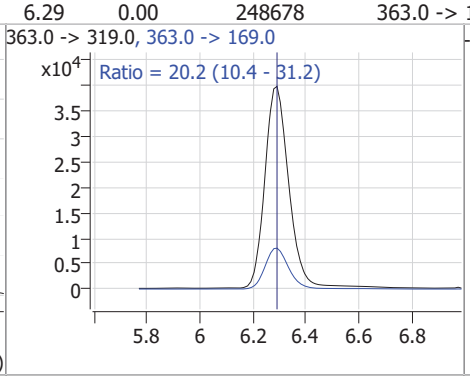


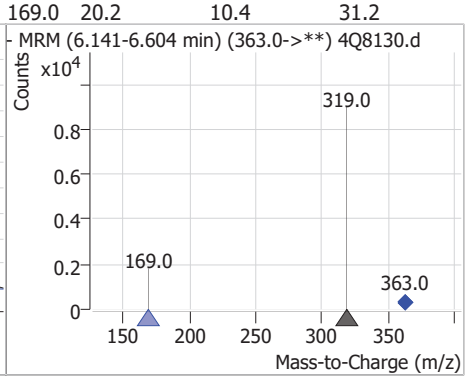


Perfluorinated Compounds by LC/MS/MS

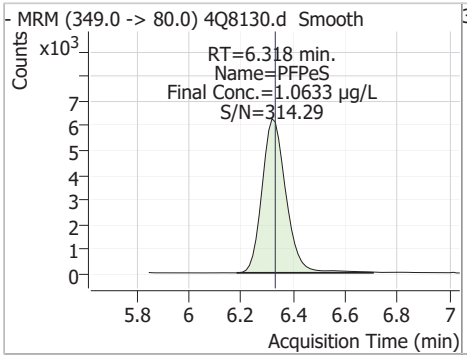
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	1.16	6.29	0.00	248678	363.0 -> 169.0	20.2	10.4	31.2

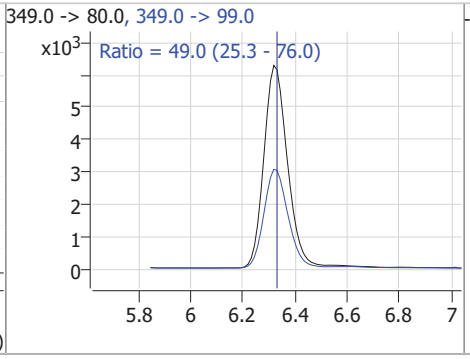


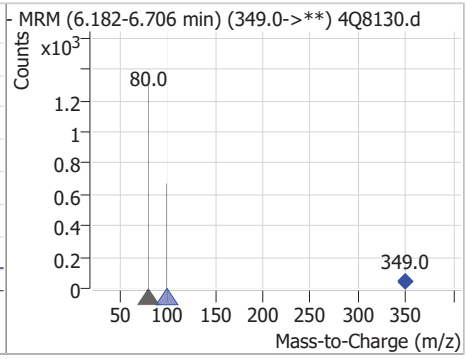




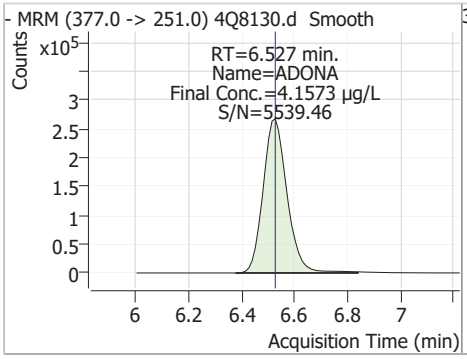
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	1.06	6.32	-0.01	39756	349.0 -> 99.0	49.0	25.3	76.0

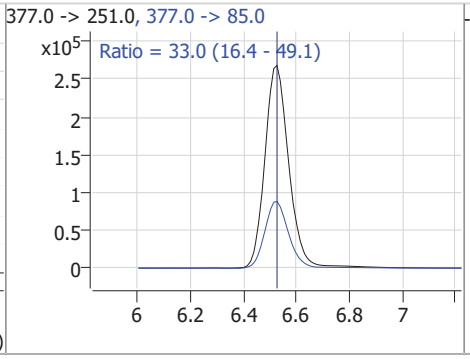


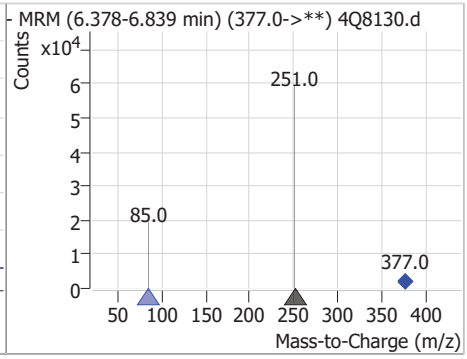




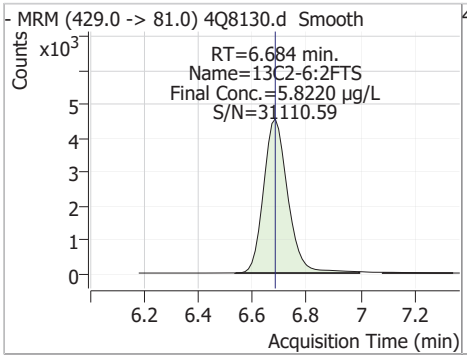
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	4.16	6.53	0.00	1679709	377.0 -> 85.0	33.0	16.4	49.1

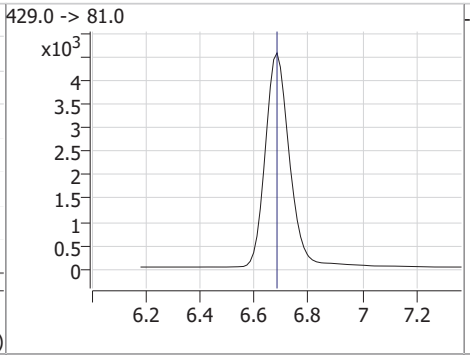


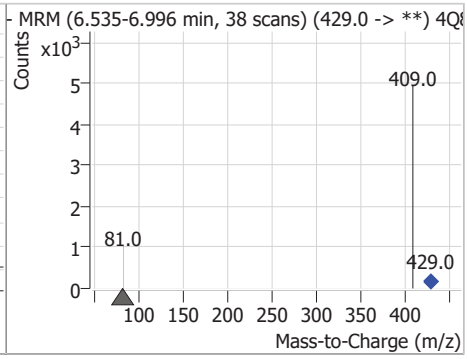




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.82	6.68	0.00	28292				





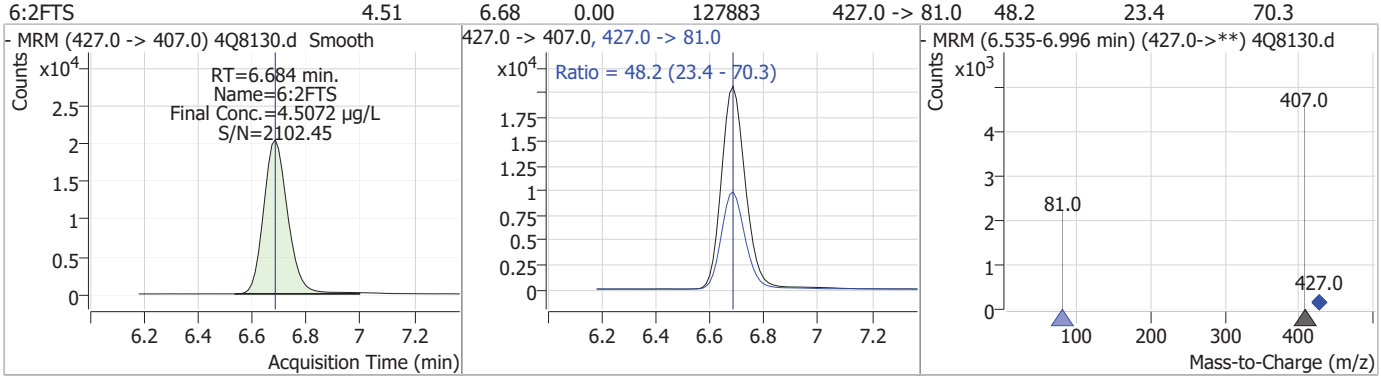


7.6.46

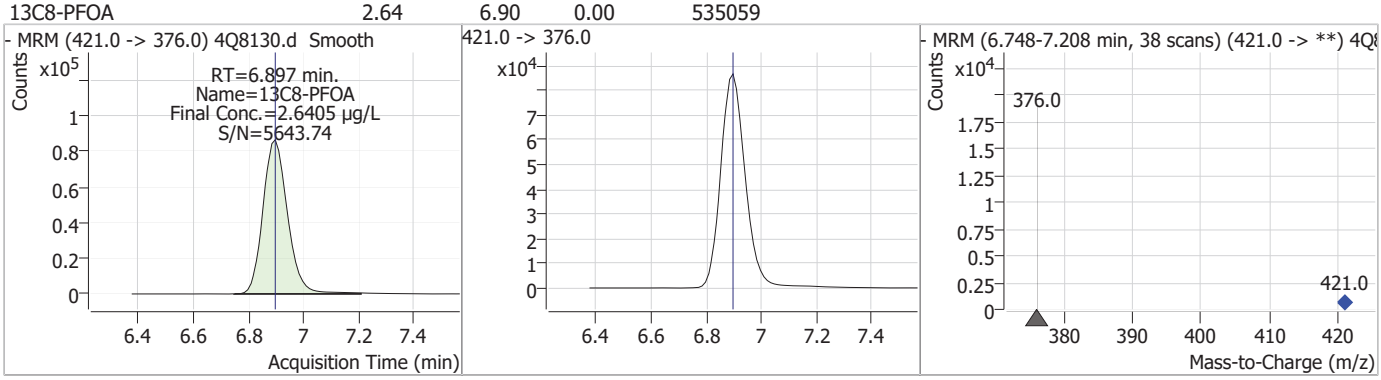
7

Perfluorinated Compounds by LC/MS/MS

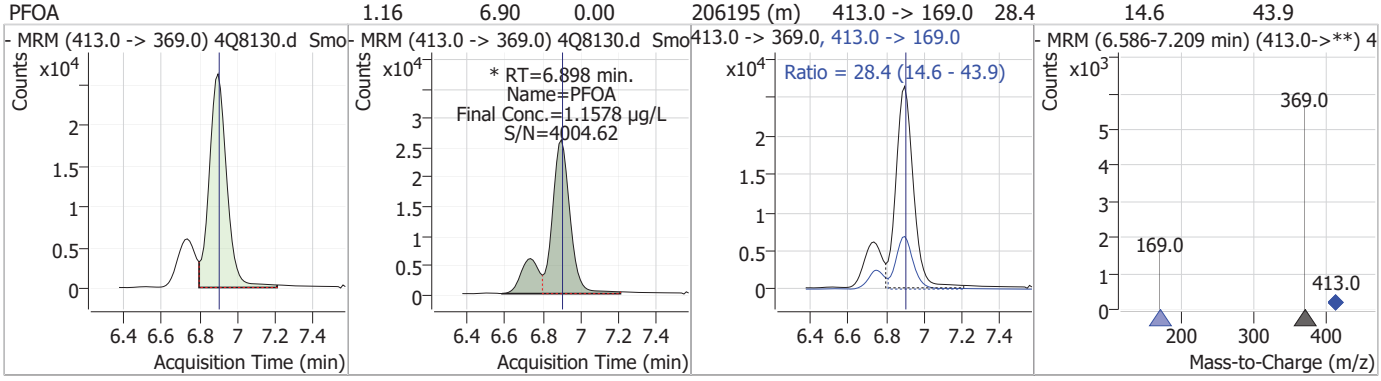
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	4.51	6.68	0.00	127883	427.0 -> 81.0	48.2	23.4	70.3



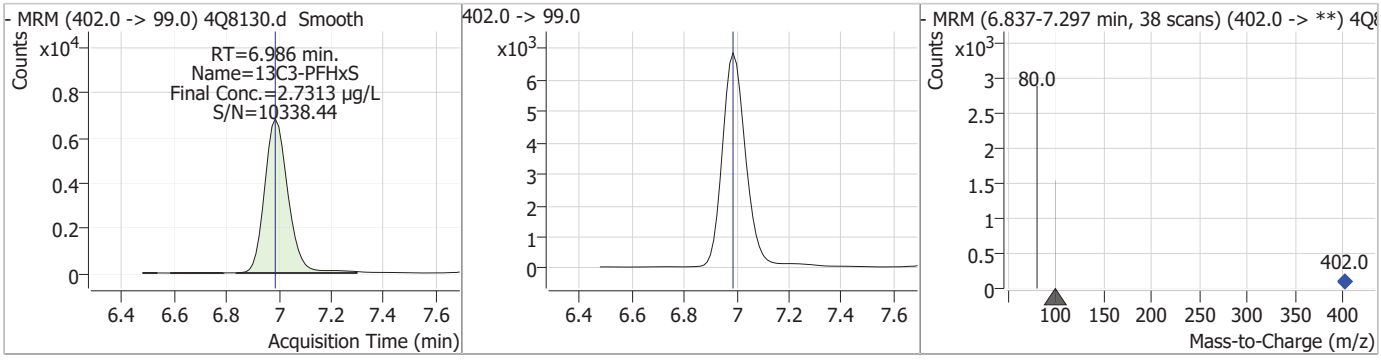
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.64	6.90	0.00	535059				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	1.16	6.90	0.00	206195 (m)	413.0 -> 169.0	28.4	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.73	6.99	0.00	42590				

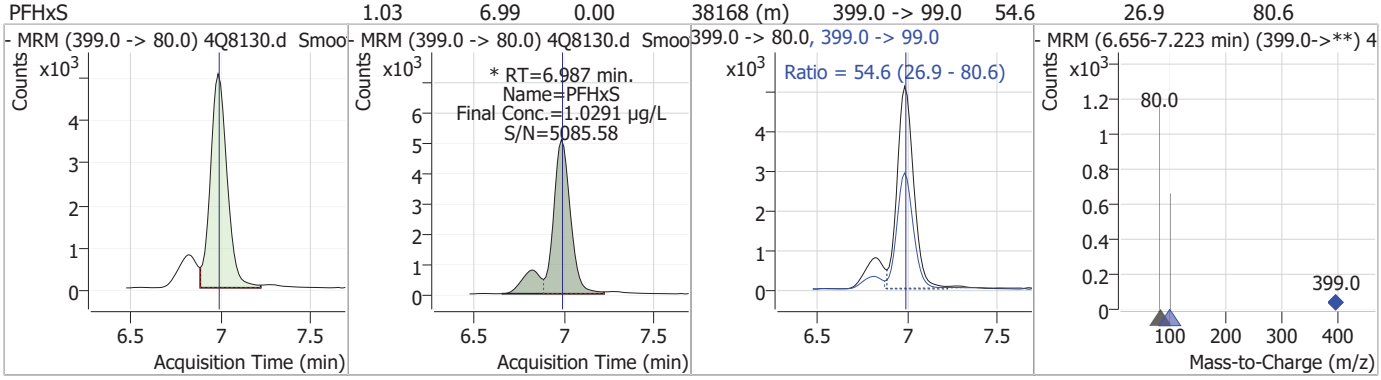


7.6.46

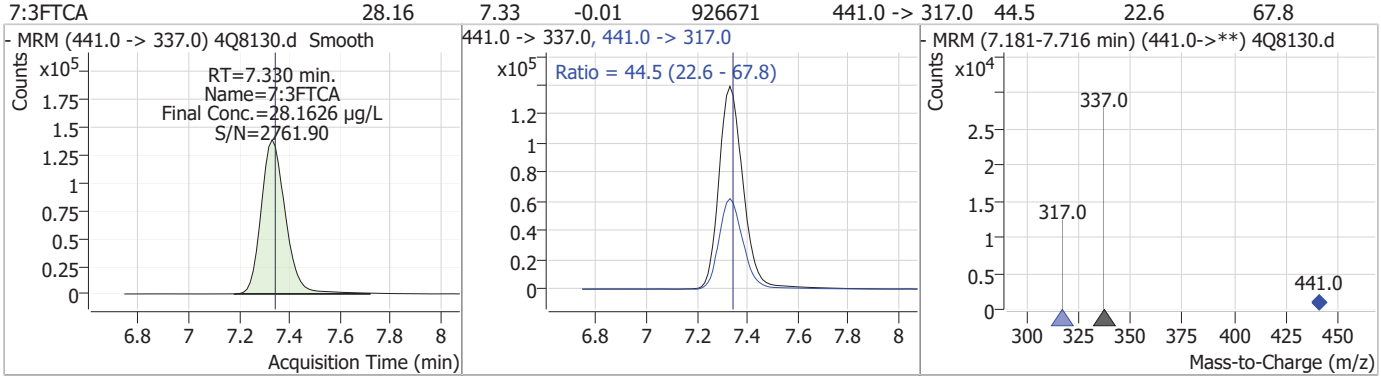
7

Perfluorinated Compounds by LC/MS/MS

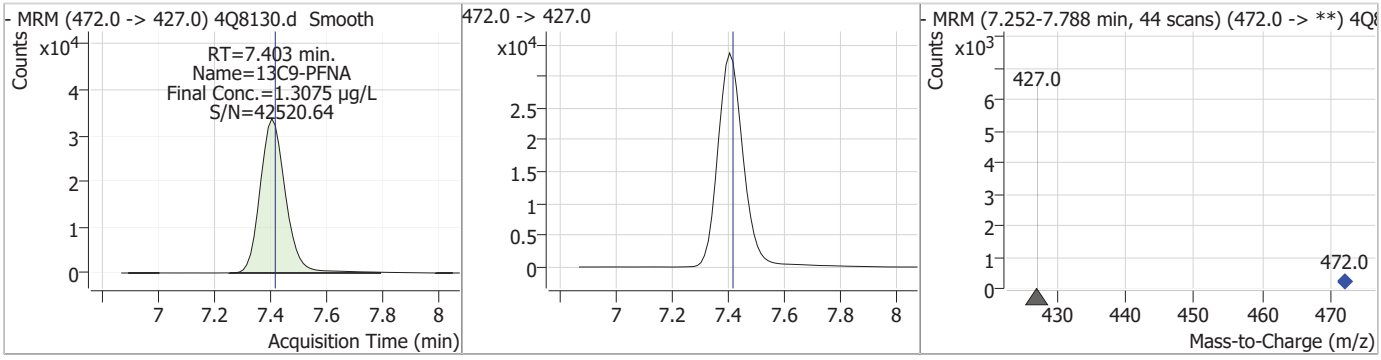
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	1.03	6.99	0.00	38168 (m)	399.0 -> 99.0	54.6	26.9	80.6



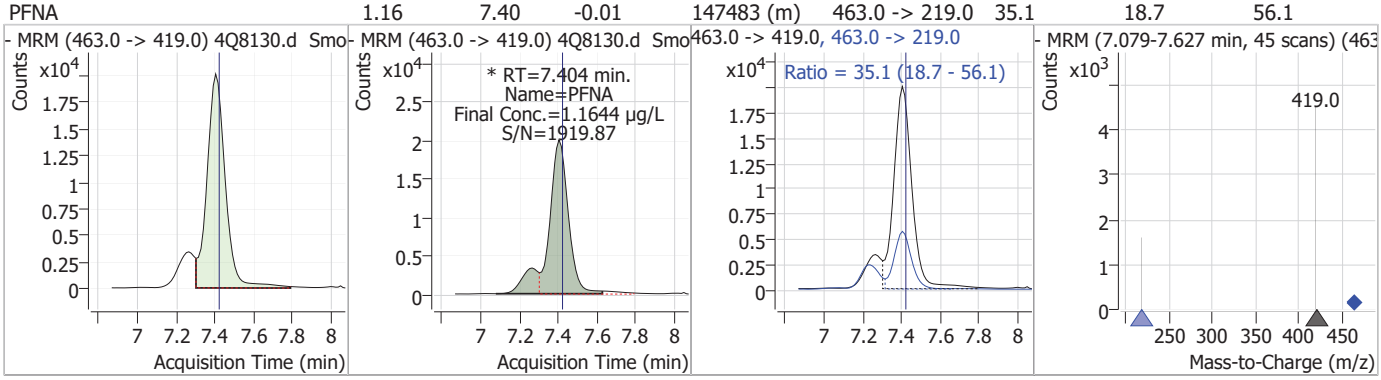
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	28.16	7.33	-0.01	926671	441.0 -> 317.0	44.5	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.31	7.40	-0.01	210580				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	1.16	7.40	-0.01	147483 (m)	463.0 -> 219.0	35.1	18.7	56.1

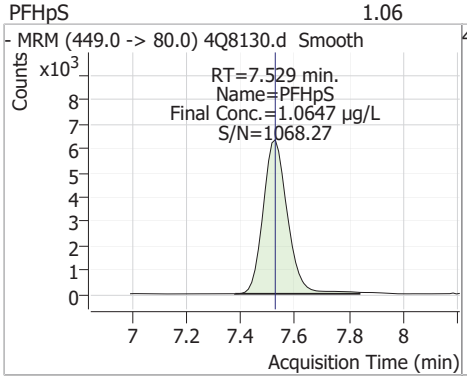


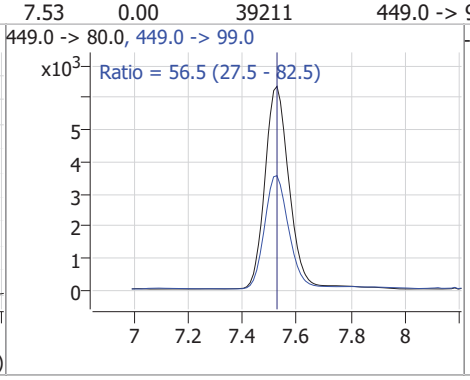
7.6.46

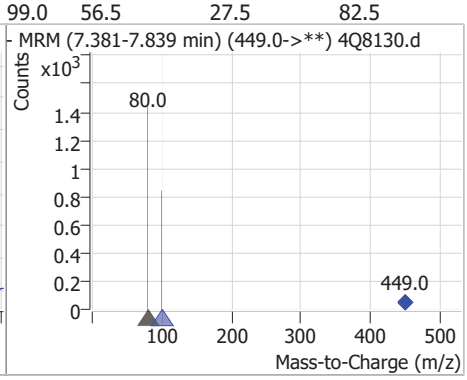
7

Perfluorinated Compounds by LC/MS/MS

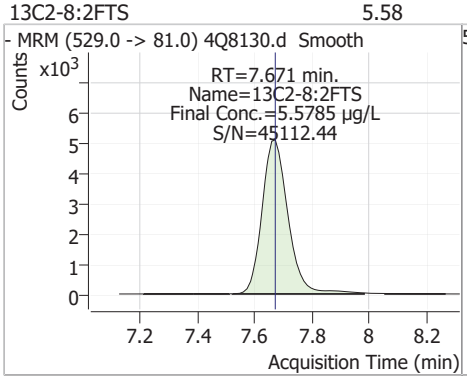
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	1.06	7.53	0.00	39211	449.0 -> 99.0	56.5	27.5	82.5

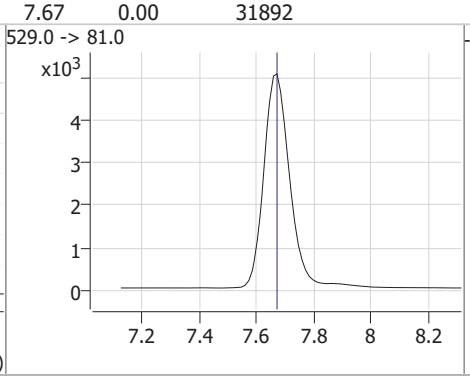


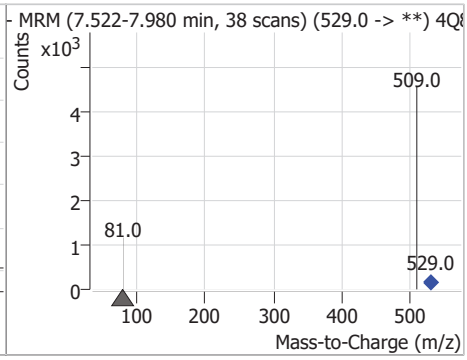




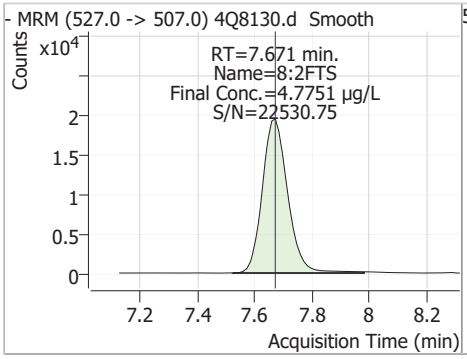
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.58	7.67	0.00	31892				

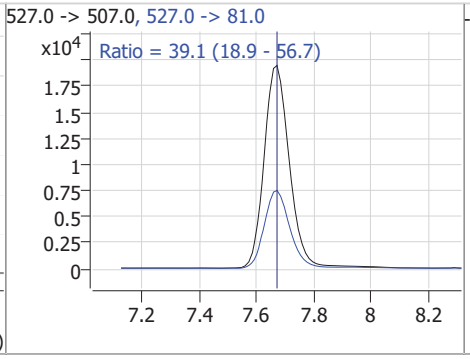


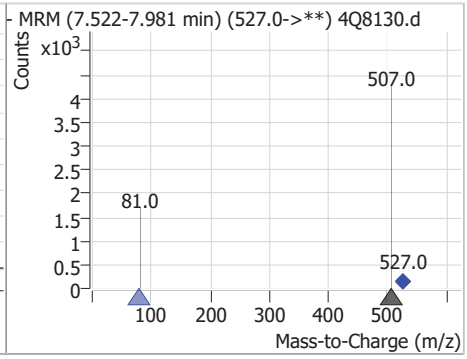




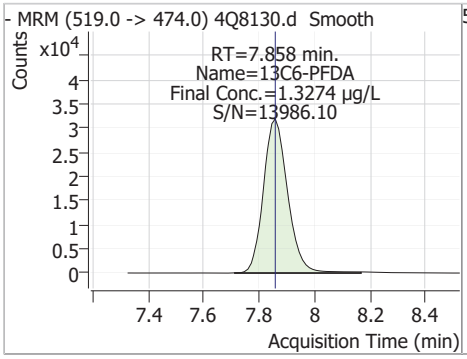
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	4.78	7.67	0.00	119183	527.0 -> 81.0	39.1	18.9	56.7

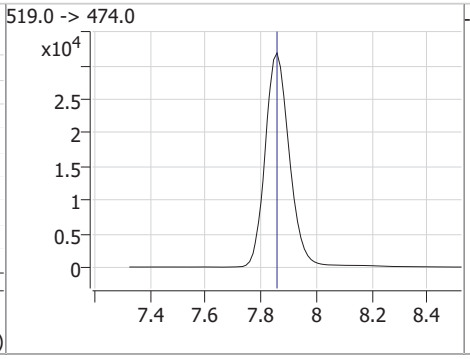


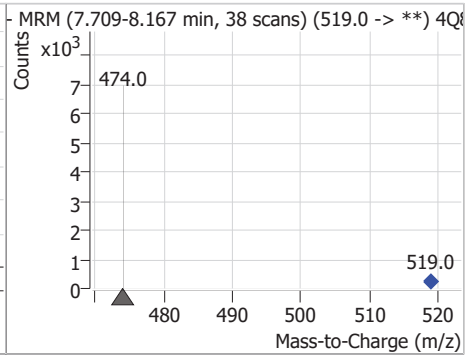




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.33	7.86	0.00	193648				

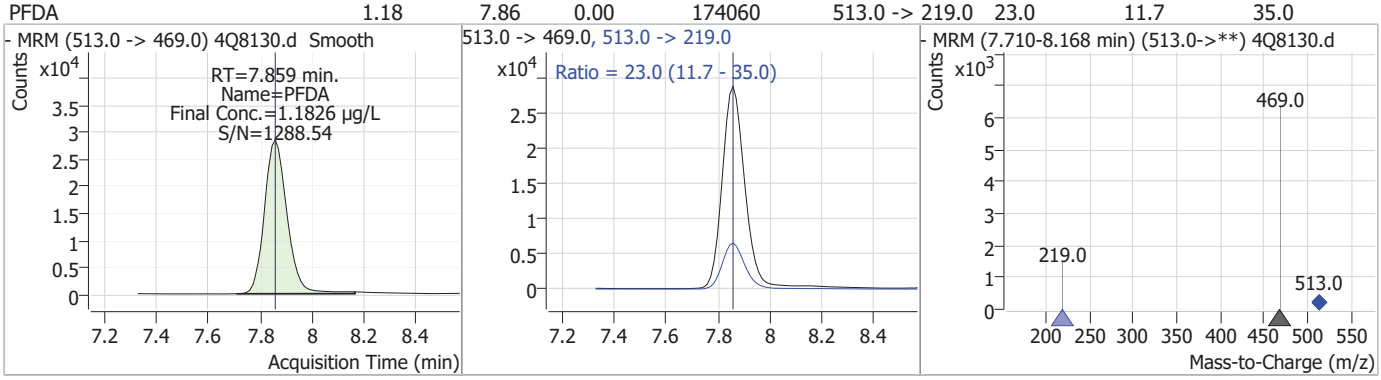




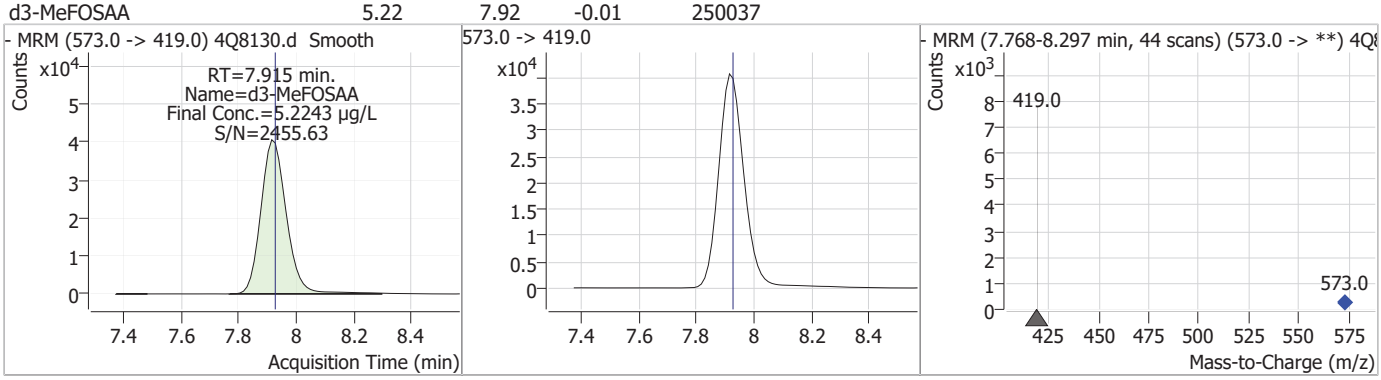


Perfluorinated Compounds by LC/MS/MS

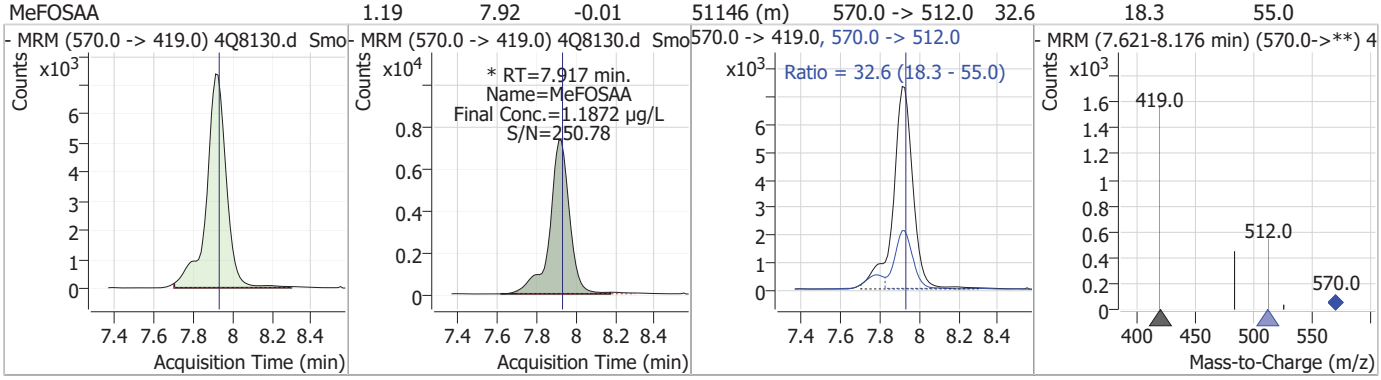
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	1.18	7.86	0.00	174060	513.0 -> 219.0	23.0	11.7	35.0



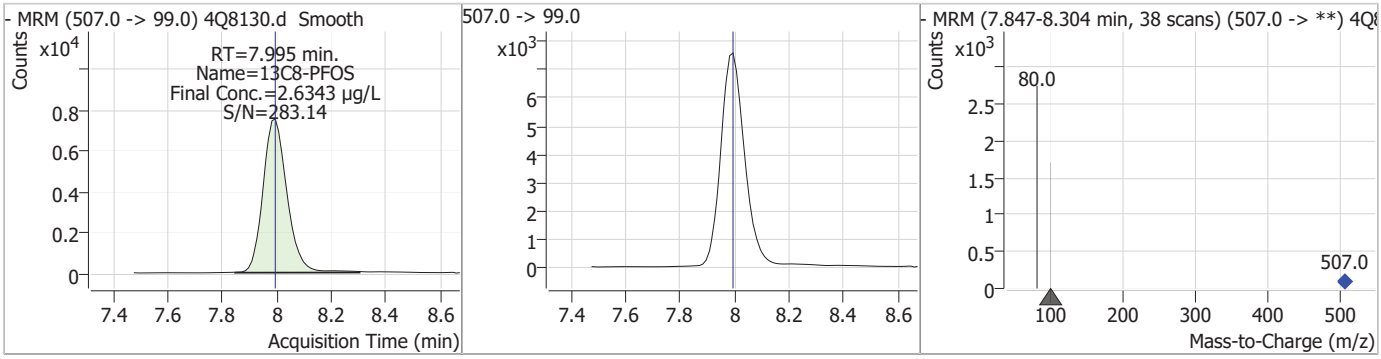
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.22	7.92	-0.01	250037				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	1.19	7.92	-0.01	51146 (m)	570.0 -> 512.0	32.6	18.3	55.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.63	7.99	0.00	46095				



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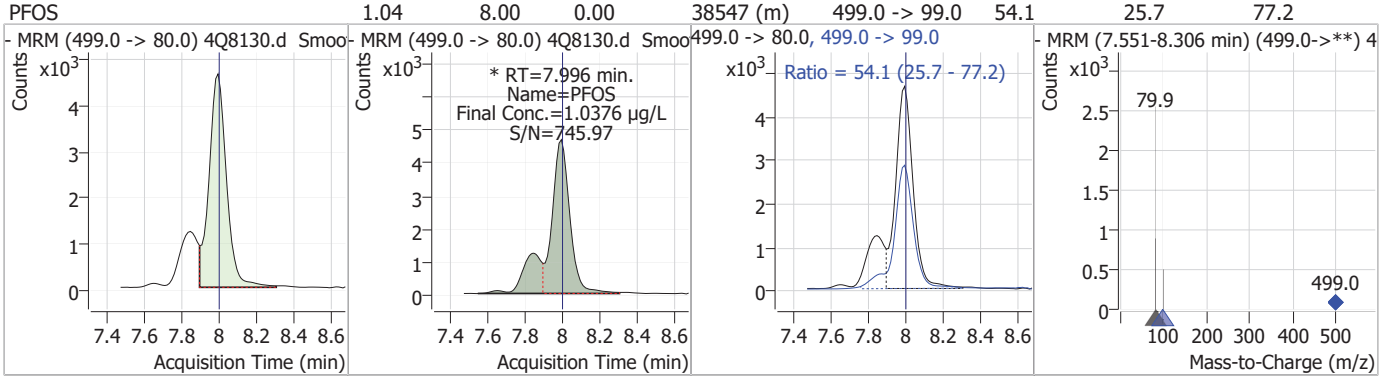
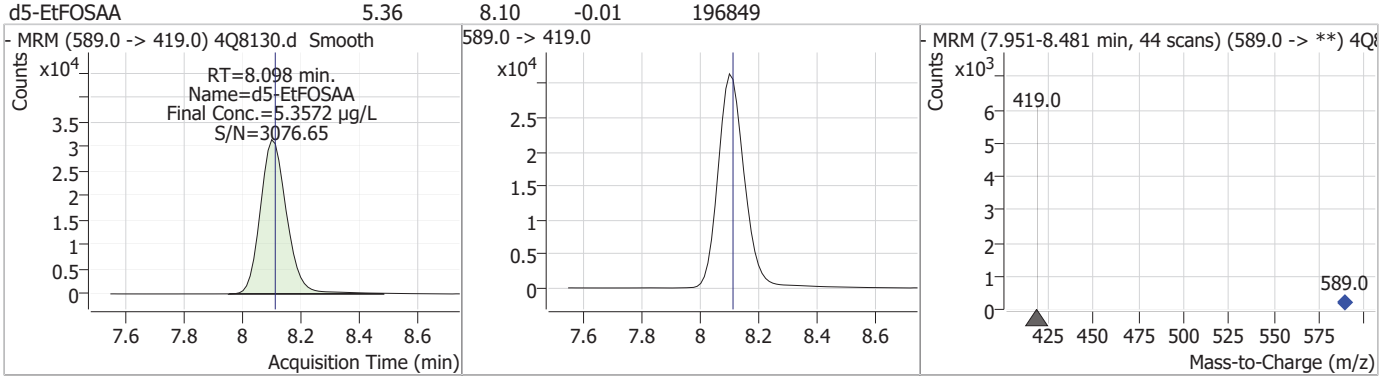
Perfluorinated Compounds by LC/MS/MS

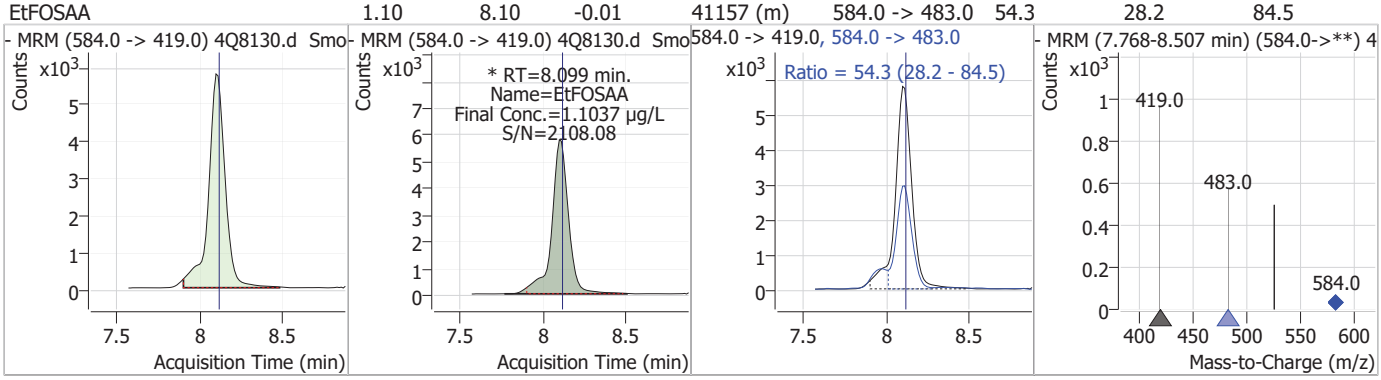
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	1.04	8.00	0.00	38547 (m)	499.0 -> 99.0	54.1	25.7	77.2



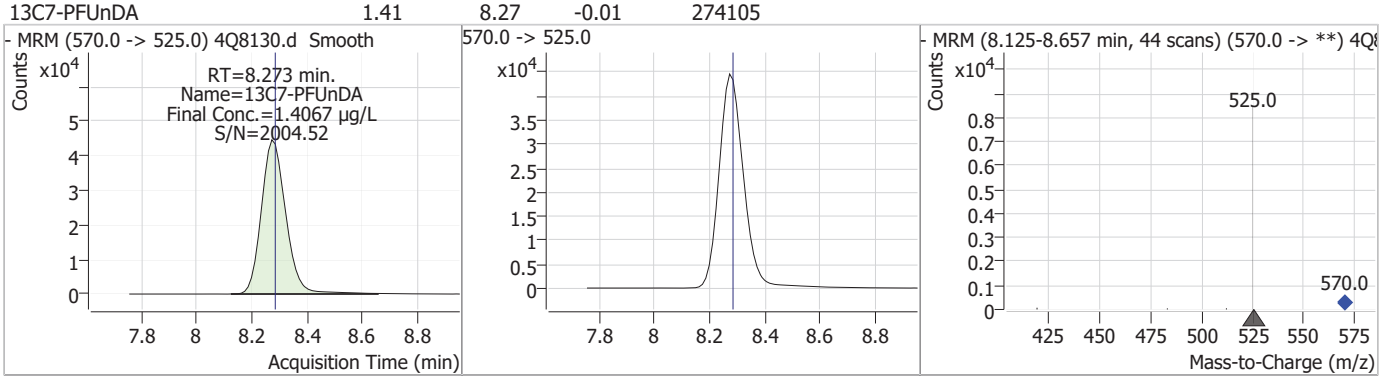
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.36	8.10	-0.01	196849				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	1.10	8.10	-0.01	41157 (m)	584.0 -> 483.0	54.3	28.2	84.5

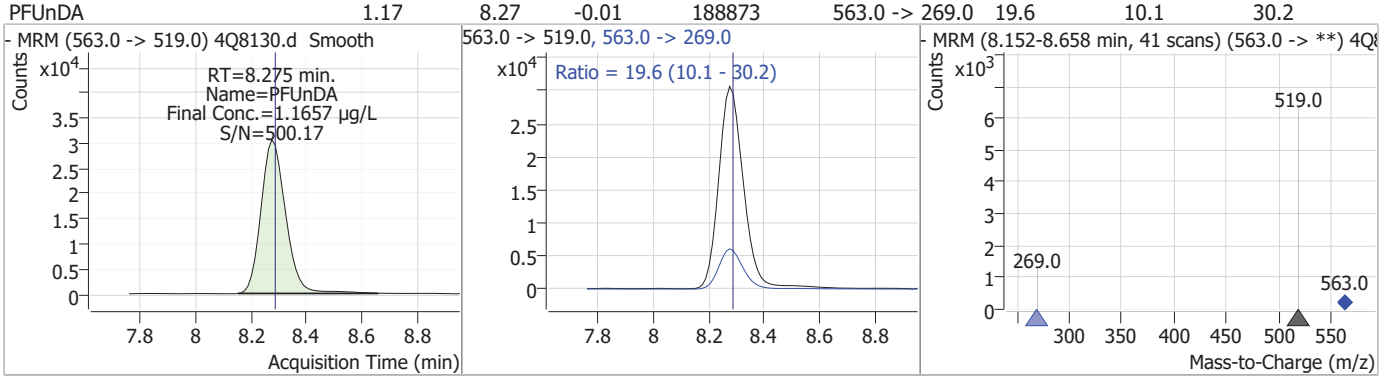


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.41	8.27	-0.01	274105				

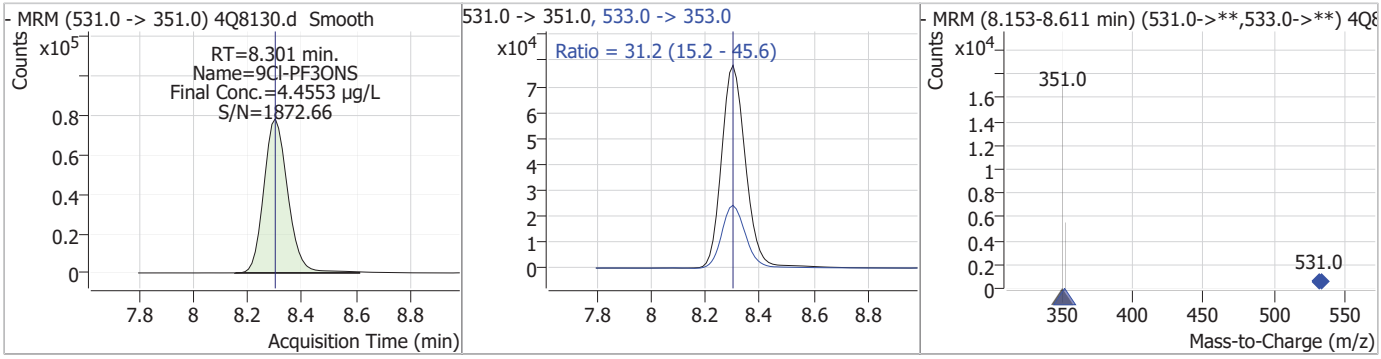


Perfluorinated Compounds by LC/MS/MS

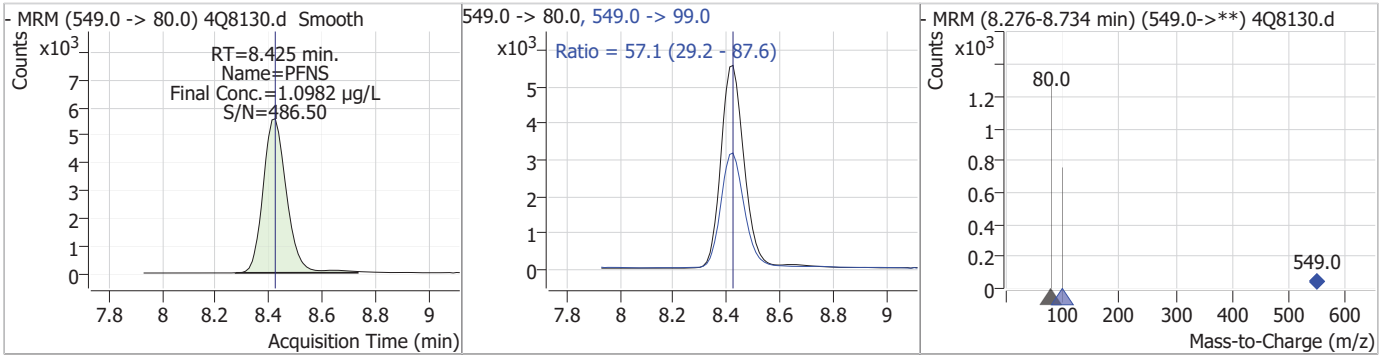
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	1.17	8.27	-0.01	188873	563.0 -> 269.0	19.6	10.1	30.2



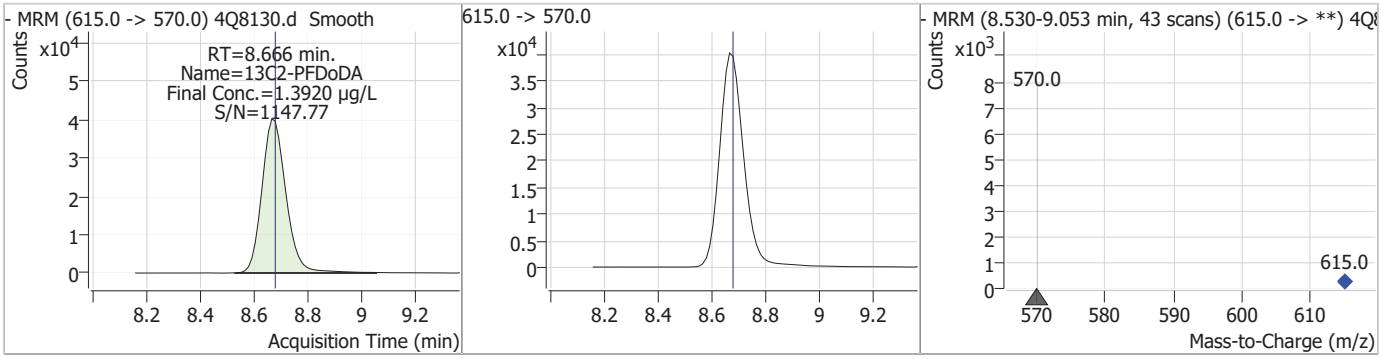
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	4.46	8.30	0.00	480121	533.0 -> 353.0	31.2	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	1.10	8.42	0.00	34041	549.0 -> 99.0	57.1	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.39	8.67	-0.01	248448				



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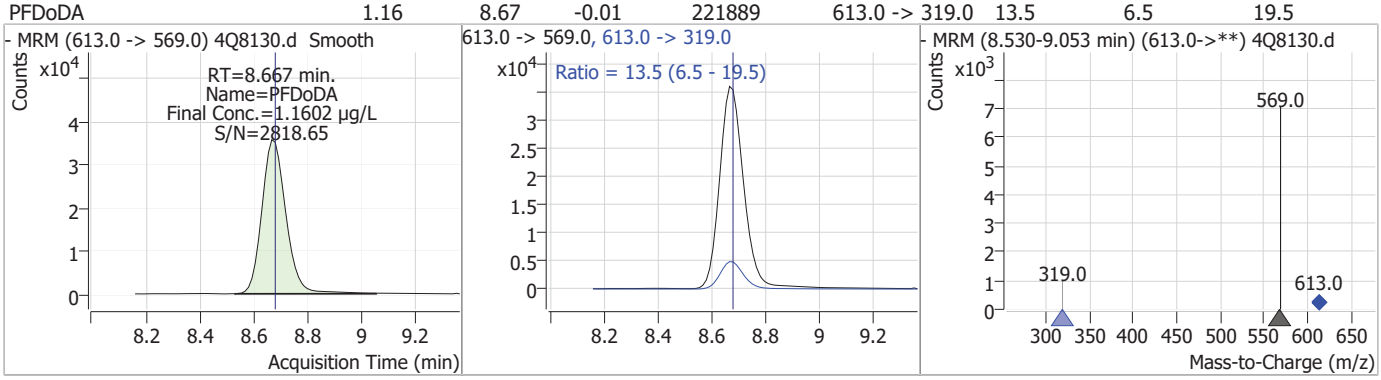
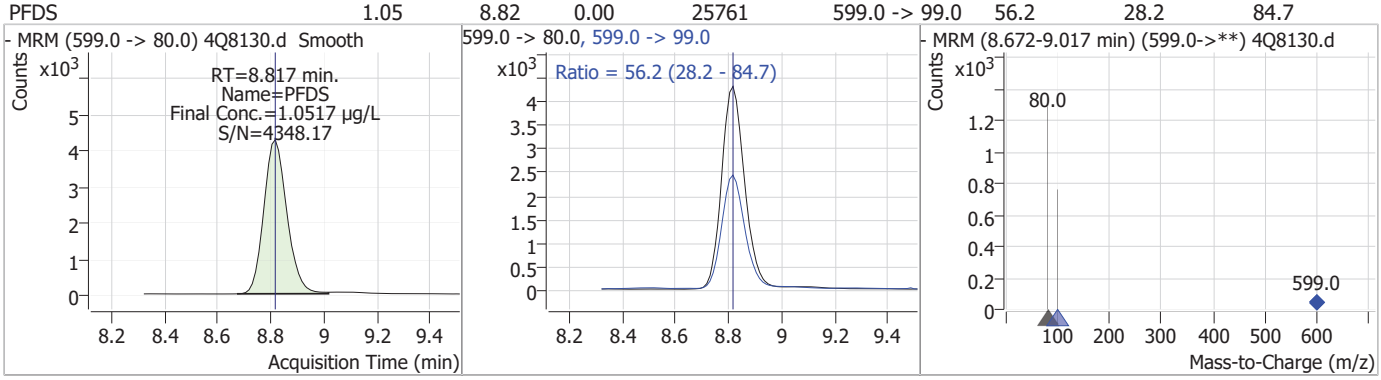
Perfluorinated Compounds by LC/MS/MS

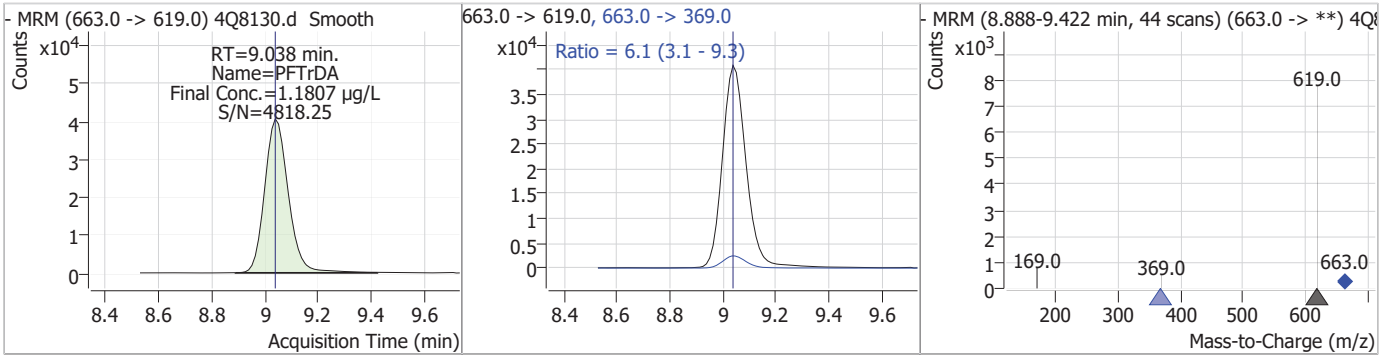
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	1.16	8.67	-0.01	221889	613.0 -> 319.0	13.5	6.5	19.5



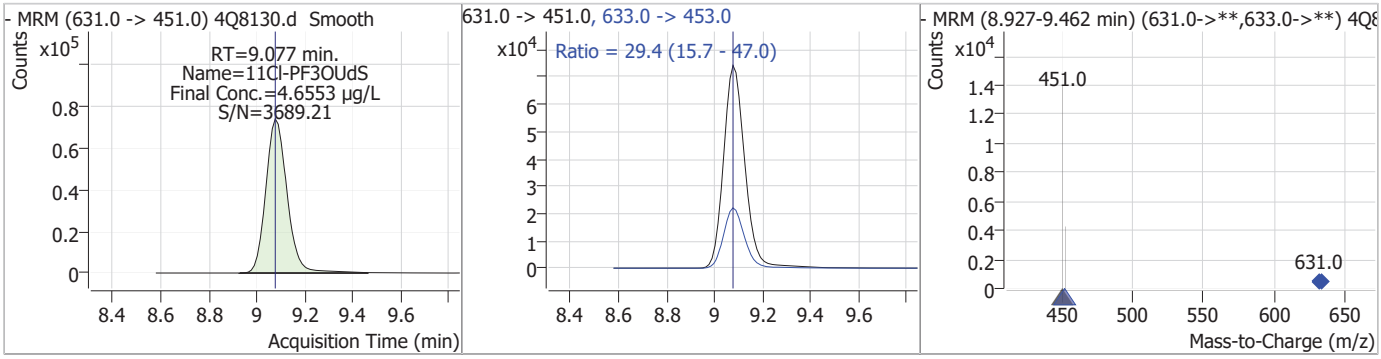
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	1.05	8.82	0.00	25761	599.0 -> 99.0	56.2	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	1.18	9.04	0.00	251795	663.0 -> 369.0	6.1	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	4.66	9.08	0.00	456061	633.0 -> 453.0	29.4	15.7	47.0



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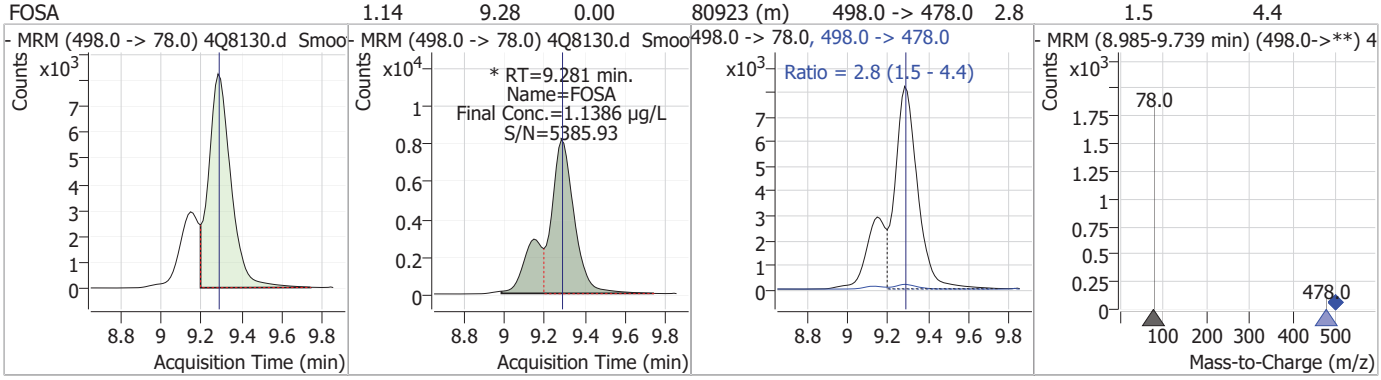
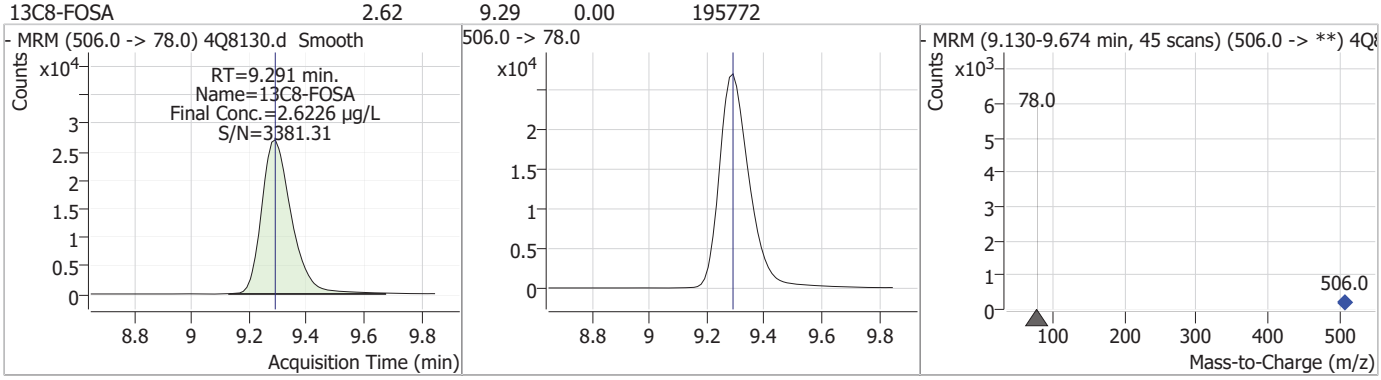
Perfluorinated Compounds by LC/MS/MS

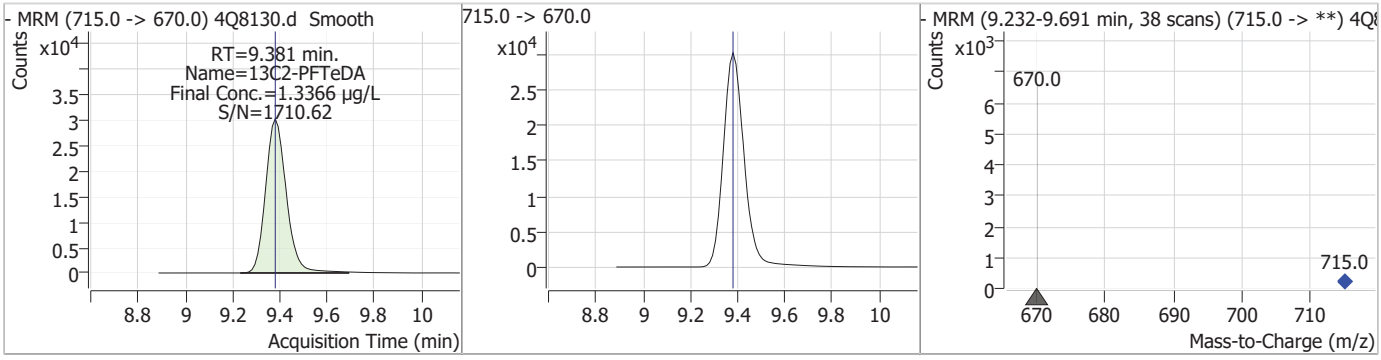
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	1.14	9.28	0.00	80923 (m)	498.0 -> 478.0	2.8	1.5	4.4



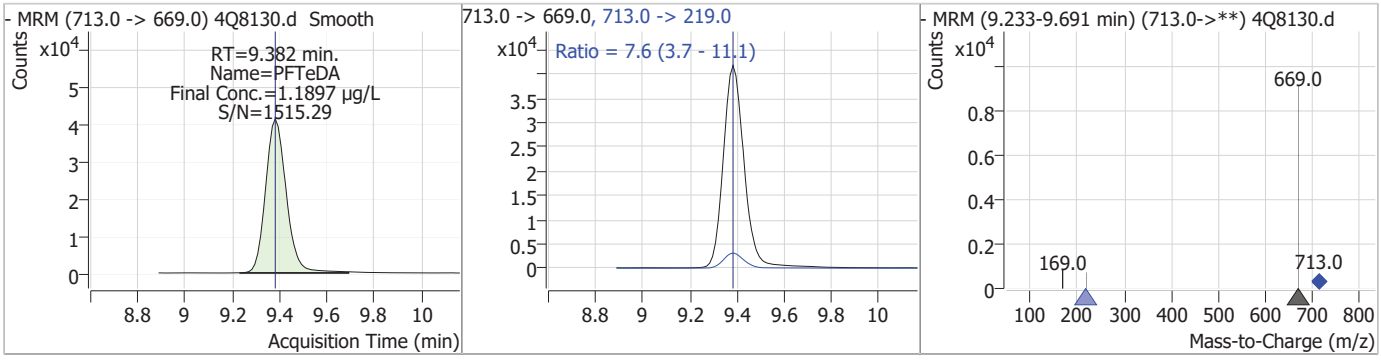
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.62	9.29	0.00	195772				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.34	9.38	0.00	183397				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	1.19	9.38	0.00	254029	713.0 -> 219.0	7.6	3.7	11.1



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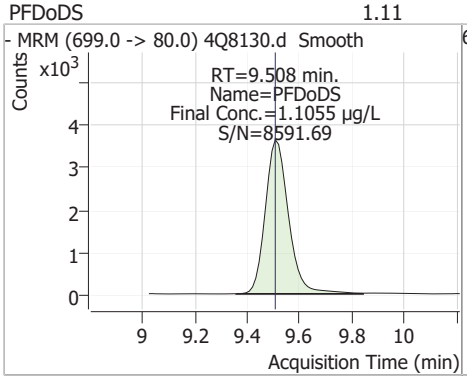
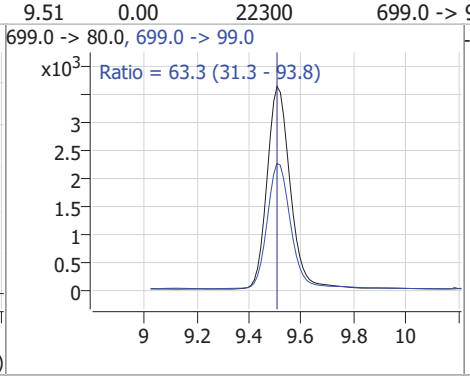
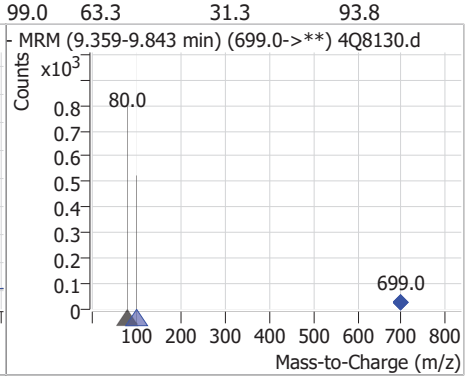
Perfluorinated Compounds by LC/MS/MS

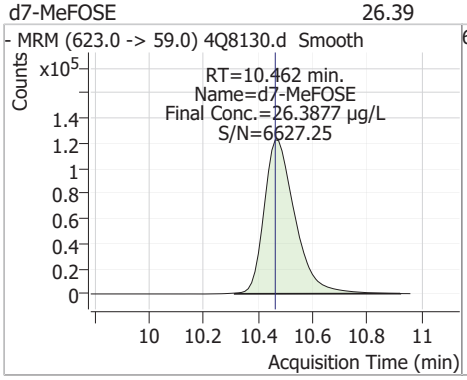
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	1.11	9.51	0.00	22300	699.0 -> 99.0	63.3	31.3	93.8

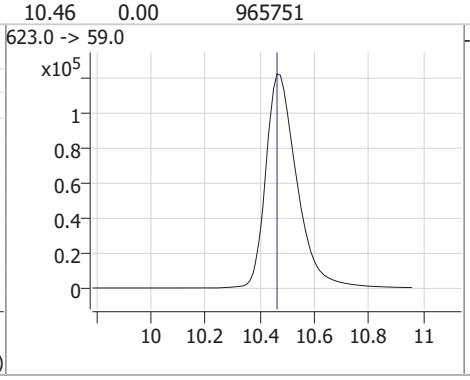


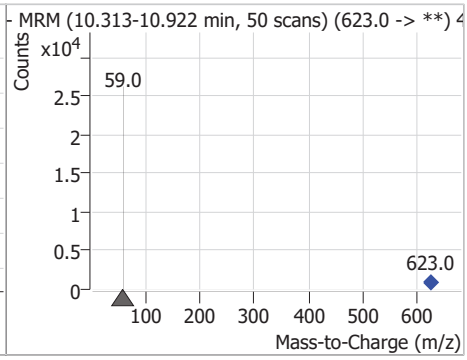




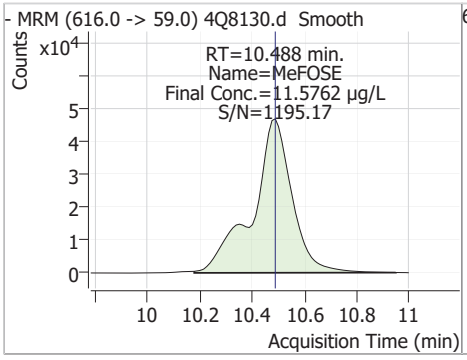
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	26.39	10.46	0.00	965751				

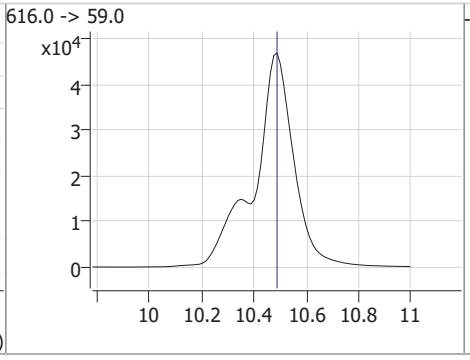


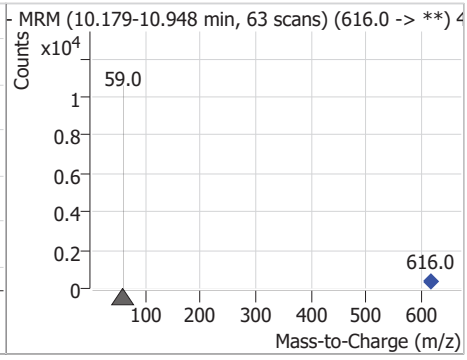




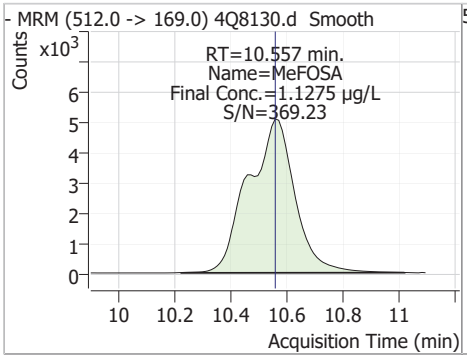
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	11.58	10.49	0.00	490250				

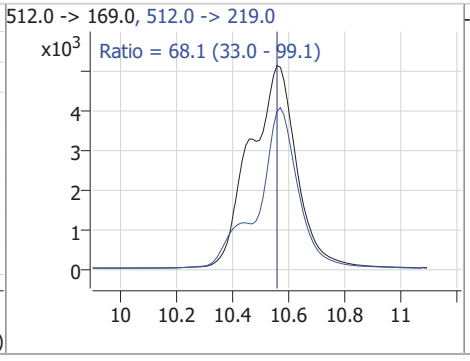


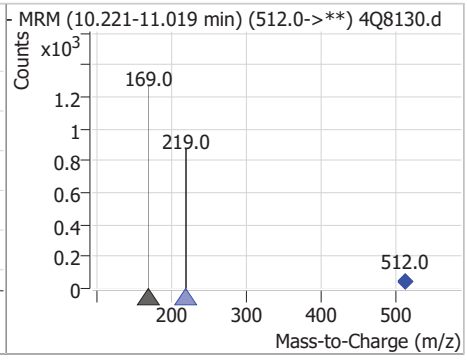




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	1.13	10.56	0.00	58851	512.0 -> 219.0	68.1	33.0	99.1

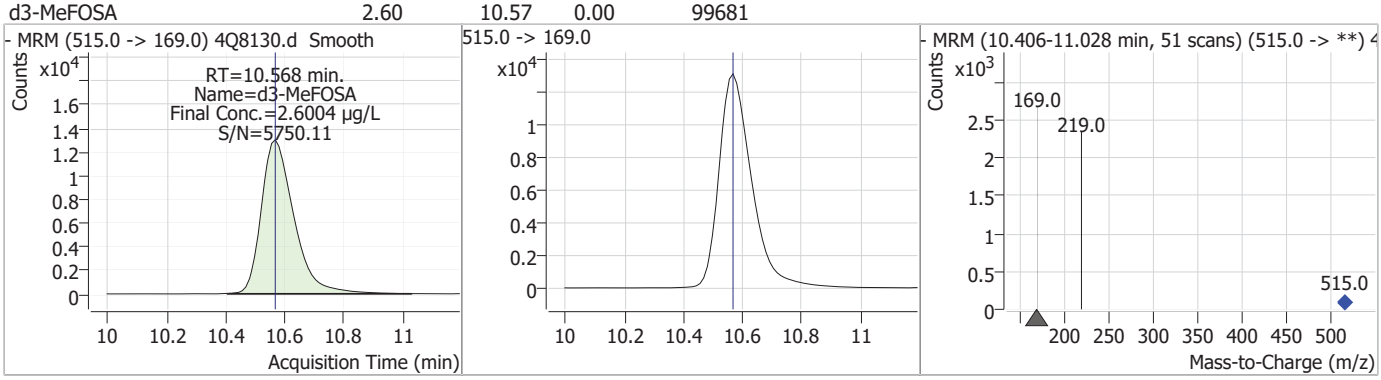




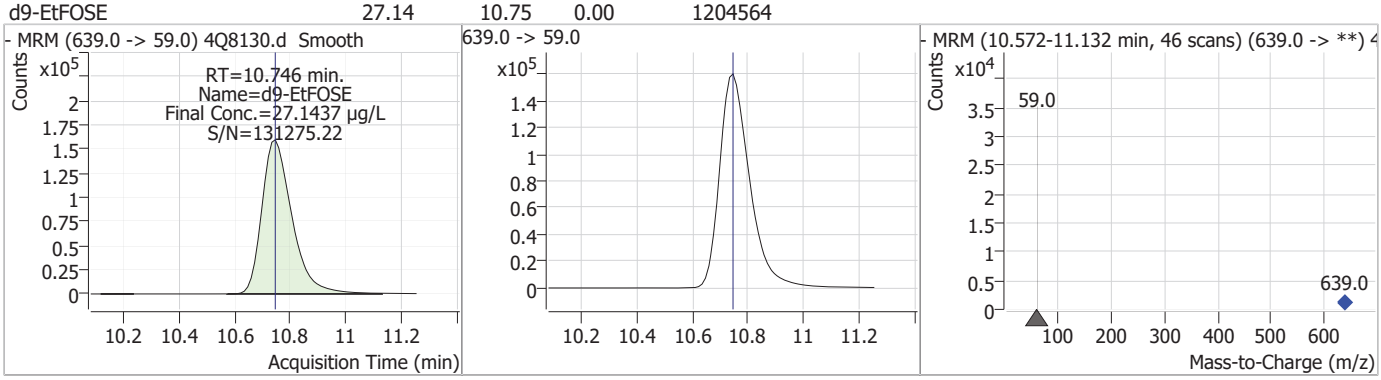


Perfluorinated Compounds by LC/MS/MS

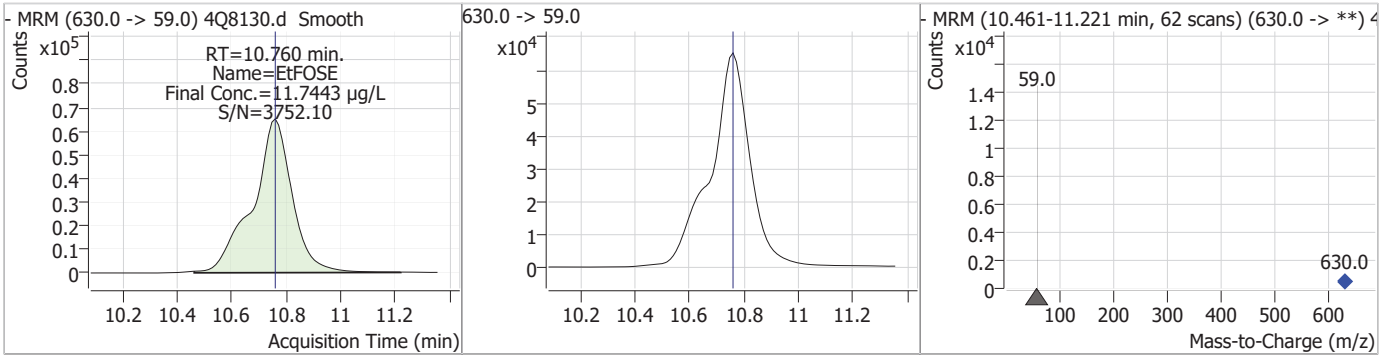
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.60	10.57	0.00	99681				



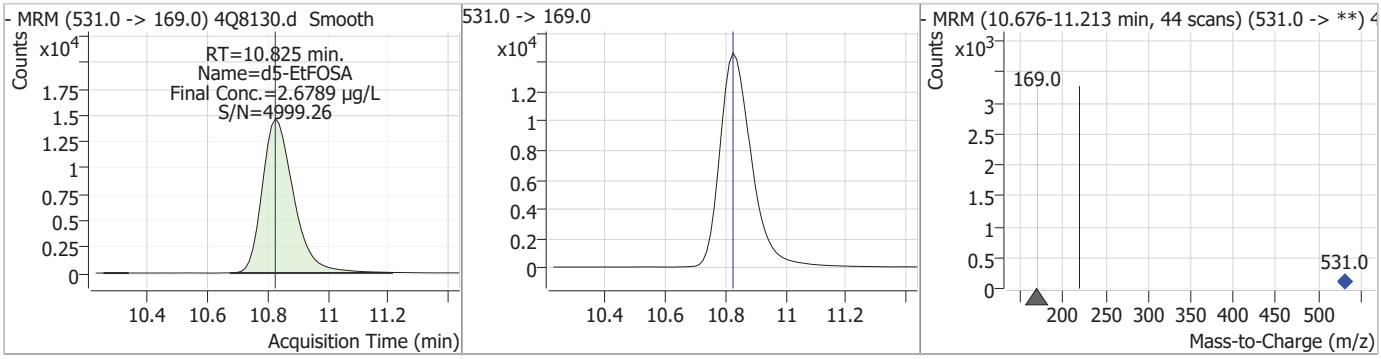
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	27.14	10.75	0.00	1204564				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	11.74	10.76	0.00	658039				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.68	10.82	0.00	105825				



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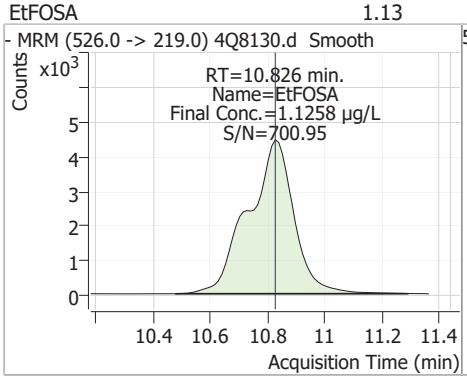
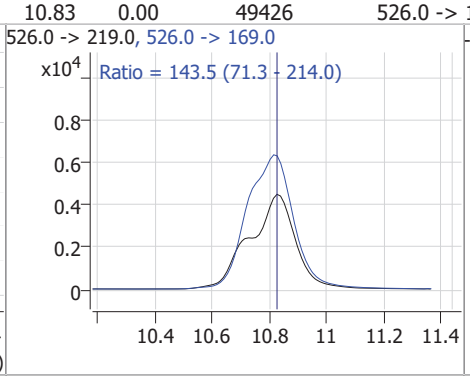
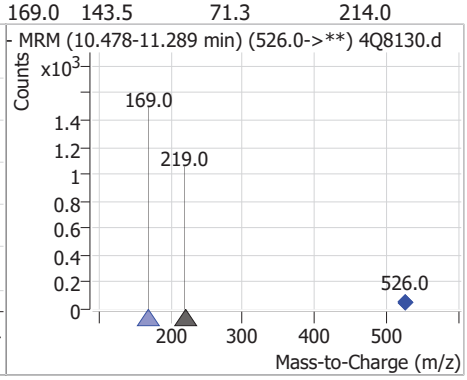
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	1.13	10.83	0.00	49426	526.0 -> 169.0	143.5	71.3	214.0







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Manual Integration Approval Summary

Sample Number: T4Q138-IC138
Lab FileID: 4Q8130.D
Injection Time: 04/30/25 14:56
Method: EPA 1633
Analyst approved: 04/30/25 23:06 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.92	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.10	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8131.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 3:10:07 PM
Sample Name : ICC138-4
Vial : P1-A5
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63077,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.883	217.0 -> 172.0	875051	10.00 µg/L	0.000
M5-PFPeA	4.319	268.0 -> 223.0	475938	5.00 µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	301982	2.50 µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	331732	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	482537	2.50 µg/L	0.000
M9-PFNA	7.416	472.0 -> 427.0	192913	1.25 µg/L	0.000
M6-PFDA	7.858	519.0 -> 474.0	185482	1.25 µg/L	0.000
M7-PFUnDA	8.285	570.0 -> 525.0	254740	1.25 µg/L	0.000
M2-PFDoDA	8.679	615.0 -> 570.0	229380	1.25 µg/L	0.000
M2-PFTeDA	9.381	715.0 -> 670.0	162720	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	174818	2.50 µg/L	0.000
M3-PFBS	5.368	302.0 -> 99.0	26706	2.50 µg/L	0.000
		302.0 -> 80.0	65423		
M3-PFHxS	6.986	402.0 -> 99.0	38978	2.50 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	41260	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	11475	5.00 µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	25926	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	28916	5.00 µg/L	0.000
M3-MeFOSAA	7.927	573.0 -> 419.0	231240	5.00 µg/L	0.000
M3-HFPO-DA	5.779	287.0 -> 169.0	487491	10.00 µg/L	0.000
M5-EtFOSAA	8.110	589.0 -> 419.0	176374	5.00 µg/L	0.000
M7-MeFOSE	10.462	623.0 -> 59.0	898784	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1095146	25.00 µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	96777	2.50 µg/L	0.000
M3-MeFOSA	10.568	515.0 -> 169.0	91770	2.50 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	73480	2.50 µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	400479	5.00 µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	45708	2.50 µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	511567	2.50 µg/L	0.000
13C2-PFDA	7.859	515.0 -> 470.0	176645	1.25 µg/L	0.000
13C5-PFNA	7.416	468.0 -> 423.0	200288	1.25 µg/L	0.000
13C2-PFHxA	5.452	315.0 -> 270.0	302927	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	11475	5.01 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.1%	
13C2-6:2FTS	6.684	429.0 -> 81.0	25926	5.21 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.2%	
13C2-8:2FTS	7.671	529.0 -> 81.0	28916	4.94 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.8%	
13C2-PFDoDA	8.679	615.0 -> 570.0	229380	1.20 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.1%	
13C2-PFTeDA	9.381	715.0 -> 670.0	162720	1.11 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.7%	
13C3-PFBS	5.368	302.0 -> 99.0	26706	2.37 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.7%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	38978	2.44	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.7%			
13C4-PFBA	2.883	217.0 -> 172.0	875051	9.53	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.3%			
13C4-PFHpA	6.291	367.0 -> 322.0	331732	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.4%			
13C5-PFHxA	5.452	318.0 -> 273.0	301982	2.36	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.2%			
13C5-PFPeA	4.319	268.0 -> 223.0	475938	4.89	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.8%			
13C6-PFDA	7.858	519.0 -> 474.0	185482	1.19	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.1%			
13C7-PFUnDA	8.285	570.0 -> 525.0	254740	1.22	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.7%			
13C8-FOSA	9.291	506.0 -> 78.0	174818	2.32	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.6%			
13C8-PFOA	6.897	421.0 -> 376.0	482537	2.36	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.4%			
13C8-PFOS	7.995	507.0 -> 99.0	41260	2.33	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.3%			
13C9-PFNA	7.416	472.0 -> 427.0	192913	1.16	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.9%			
d3-MeFOSAA	7.927	573.0 -> 419.0	231240	4.78	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.6%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	487491	9.68	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 96.8%			
d3-MeFOSA	10.568	515.0 -> 169.0	91770	2.37	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.7%			
d5-EtFOSAA	8.110	589.0 -> 419.0	176374	4.75	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.9%			
d7-MeFOSE	10.462	623.0 -> 59.0	898784	24.29	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.1%			
d9-EtFOSE	10.746	639.0 -> 59.0	1095146	24.40	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.6%			
d5-EtFOSA	10.825	531.0 -> 169.0	96777	2.42	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.9%			
Target Compounds							QValue
4:2FTS	5.154	327.0 -> 307.0	215031	10.20	µg/L		100
		327.0 -> 81.0	100593				
6:2FTS	6.684	427.0 -> 407.0	258244	9.93	µg/L		100
		427.0 -> 81.0	121054				
8:2FTS	7.671	527.0 -> 507.0	241161	10.66	µg/L		100
		527.0 -> 81.0	91086				
EtFOSAA	8.111	584.0 -> 419.0	82924	2.48	µg/L	m	100
		584.0 -> 483.0	46733				
FOSA	9.281	498.0 -> 78.0	162335	2.56	µg/L	m	100
		498.0 -> 478.0	4813				
MeFOSAA	7.929	570.0 -> 419.0	98681	2.48	µg/L	m	100
		570.0 -> 512.0	36174				
PFBA	2.877	213.0 -> 169.0	272797	10.20	µg/L		100
PFBS	5.357	299.0 -> 80.0	68531	2.24	µg/L		100
		299.0 -> 99.0	28023				
PFDA	7.859	513.0 -> 469.0	357090	2.53	µg/L		100
		513.0 -> 219.0	83398				
PFDoDA	8.679	613.0 -> 569.0	453342	2.57	µg/L		100
		613.0 -> 319.0	58891				

Perfluorinated Compounds by LC/MS/MS

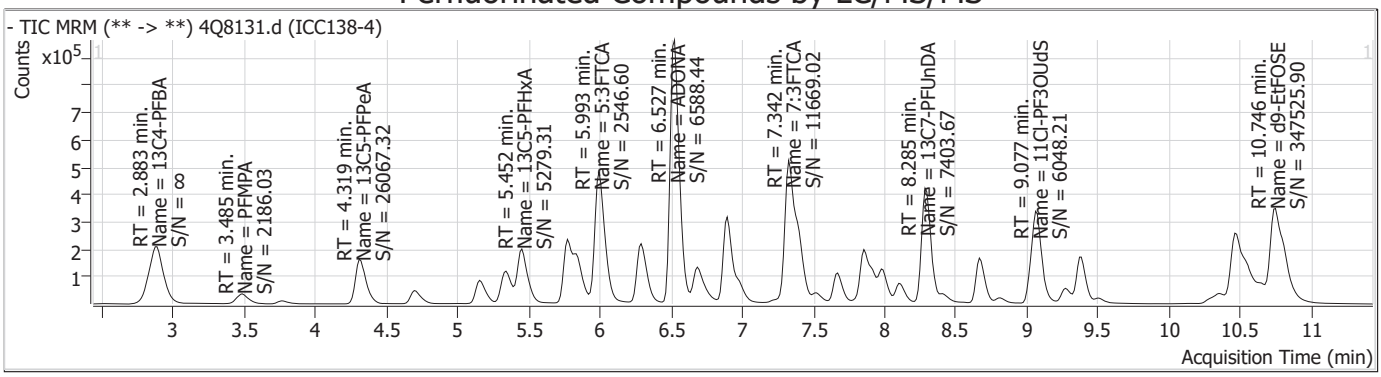
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	54132	2.38	µg/L		100
		599.0 -> 99.0	30575				
PFHpA	6.292	363.0 -> 319.0	510690	2.53	µg/L		100
		363.0 -> 169.0	106381				
PFHpS	7.529	449.0 -> 80.0	81684	2.42	µg/L		100
		449.0 -> 99.0	44904				
PFHxA	5.455	313.0 -> 269.0	338555	2.60	µg/L		100
		313.0 -> 119.0	11037				
PFHxS	6.987	399.0 -> 80.0	76832	2.26	µg/L	m	100
		399.0 -> 99.0	41290				
PFNA	7.416	463.0 -> 419.0	296429	2.55	µg/L	m	100
		463.0 -> 219.0	110875				
PFNS	8.425	549.0 -> 80.0	72689	2.62	µg/L		100
		549.0 -> 99.0	42432				
PFOA	6.898	413.0 -> 369.0	408126	2.54	µg/L	m	100
		413.0 -> 169.0	119332				
PFOS	7.996	499.0 -> 80.0	79779	2.40	µg/L	m	100
		499.0 -> 99.0	41083				
PFPeA	4.321	263.0 -> 219.0	387722	5.15	µg/L		100
PFPeS	6.331	349.0 -> 80.0	81785	2.45	µg/L		100
		349.0 -> 99.0	41440				
PFTeDA	9.382	713.0 -> 669.0	499329	2.64	µg/L		100
		713.0 -> 219.0	36962				
PFTrDA	9.038	663.0 -> 619.0	505864	2.57	µg/L		100
		663.0 -> 369.0	31434				
PFUnDA	8.287	563.0 -> 519.0	388048	2.58	µg/L		100
		563.0 -> 269.0	78187				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	895771	9.66	µg/L		100
		633.0 -> 453.0	280415				
9Cl-PF3ONS	8.301	531.0 -> 351.0	994602	9.75	µg/L		100
		533.0 -> 353.0	302431				
ADONA	6.527	377.0 -> 251.0	3391236	8.87	µg/L		100
		377.0 -> 85.0	1109220				
HFPO-DA	5.780	285.0 -> 169.0	521629	10.18	µg/L		100
		285.0 -> 185.0	57716				
3:3FTCA	3.769	241.0 -> 177.0	55013	12.23	µg/L		100
		241.0 -> 117.0	4471				
5:3FTCA	5.993	341.0 -> 237.0	1420897	61.12	µg/L		100
		341.0 -> 217.0	997718				
7:3FTCA	7.342	441.0 -> 337.0	1813050	60.55	µg/L		100
		441.0 -> 317.0	819076				
EtFOSA	10.826	526.0 -> 219.0	98153	2.44	µg/L		100
		526.0 -> 169.0	140006				
EtFOSE	10.760	630.0 -> 59.0	1291166	25.35	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	121796	2.53	µg/L		100
		512.0 -> 219.0	80459				
MeFOSE	10.488	616.0 -> 59.0	1011131	25.65	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	43962	2.43	µg/L		100
		699.0 -> 99.0	27497				
NFDHA	5.345	295.0 -> 201.0	85579	5.01	µg/L		100
		201.0 -> 85.0	348503				
		295.0 -> 85.0	24492				
PFMBA	4.710	279.0 -> 85.0	256243	4.99	µg/L		100
PFMPA	3.485	229.0 -> 85.0	216520	5.02	µg/L		100
PFEESA	5.849	315.0 -> 135.0	559324	4.68	µg/L		100
		315.0 -> 69.0	42965				

Perfluorinated Compounds by LC/MS/MS

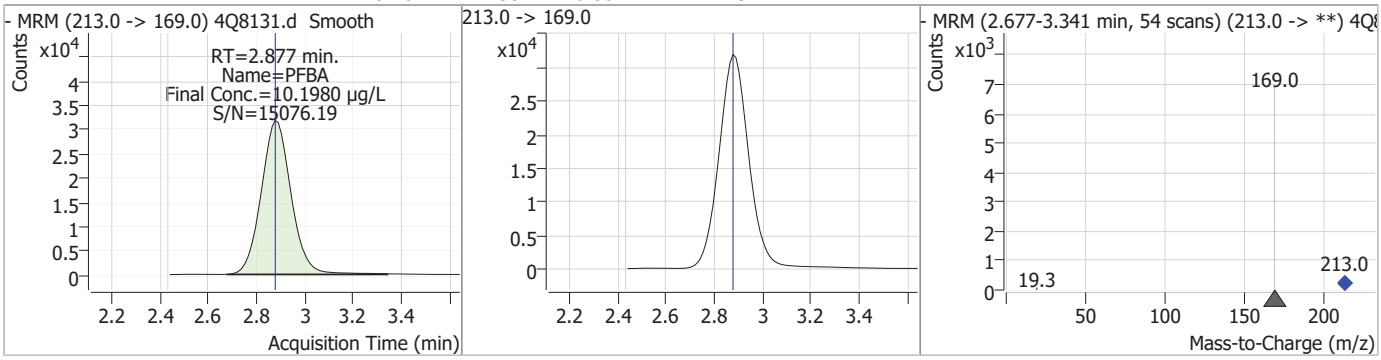
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

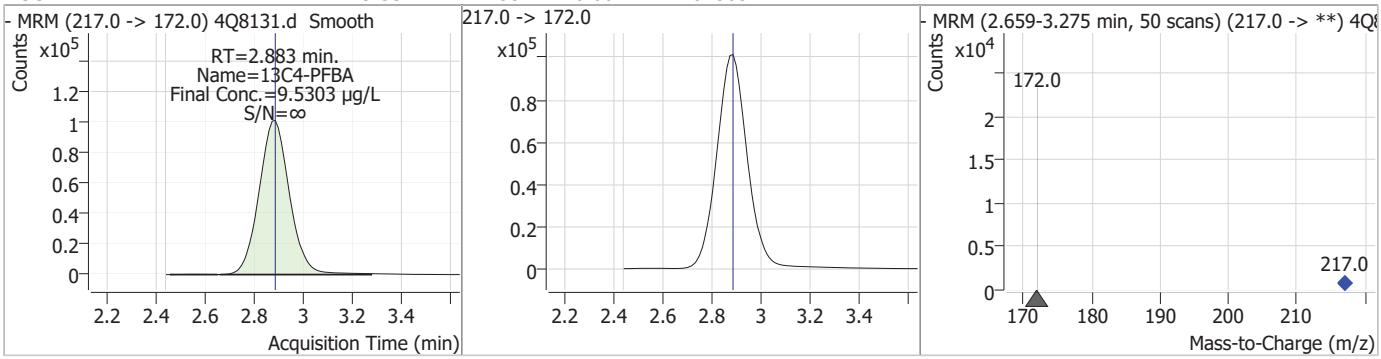
Perfluorinated Compounds by LC/MS/MS



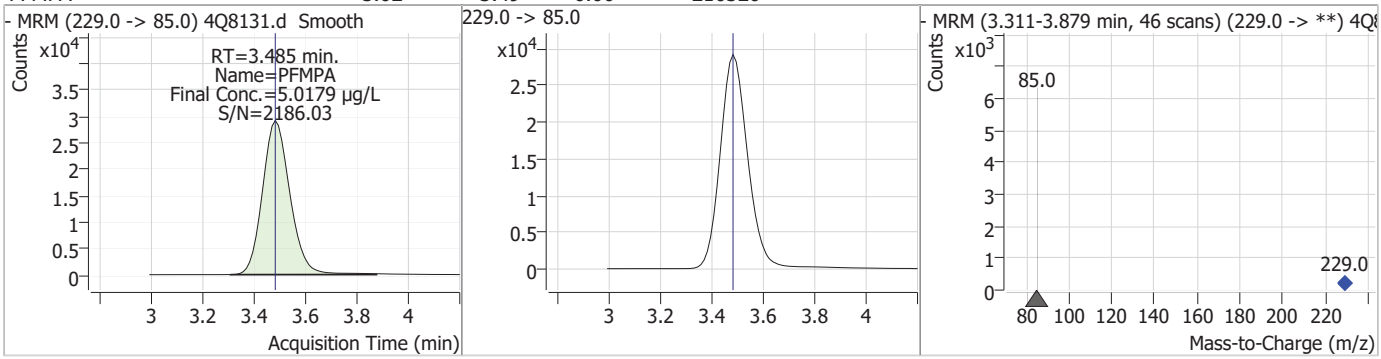
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.20	2.88	0.00	272797				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.53	2.88	0.00	875051				

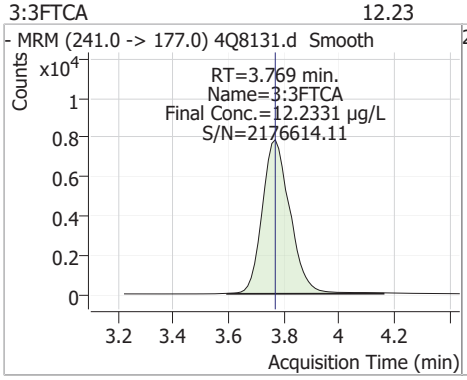


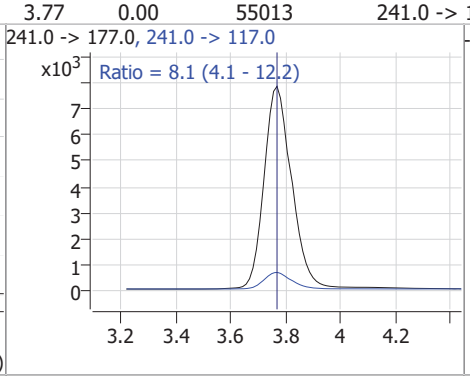
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.02	3.49	0.00	216520				

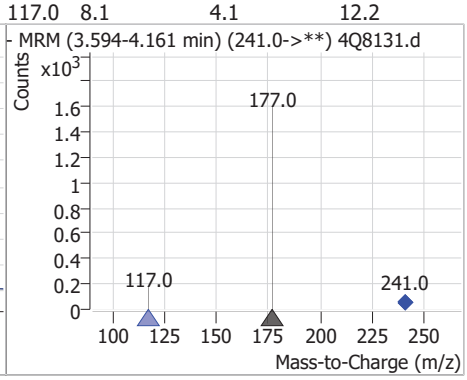


Perfluorinated Compounds by LC/MS/MS

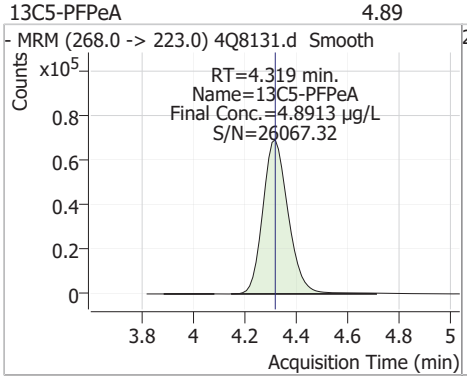
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.23	3.77	0.00	55013	241.0 -> 117.0	8.1	4.1	12.2

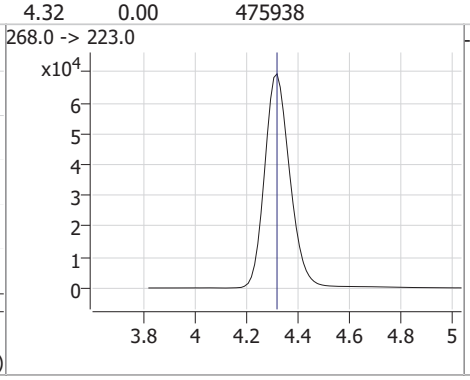


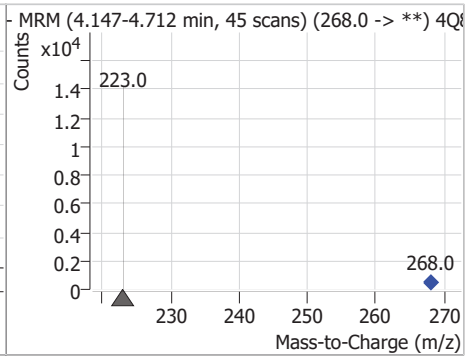




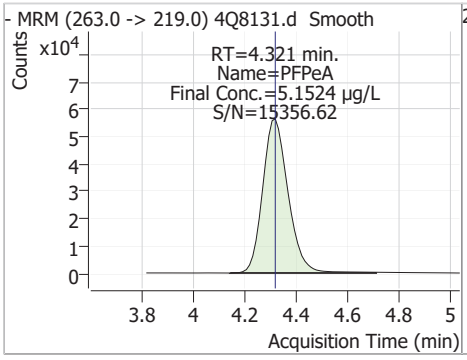
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.89	4.32	0.00	475938				

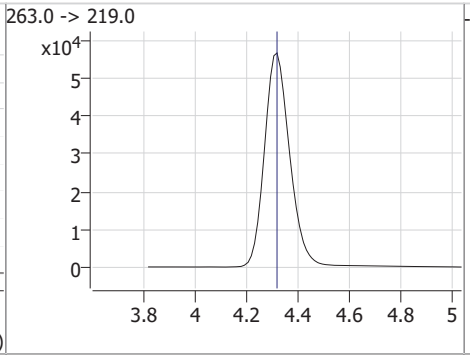


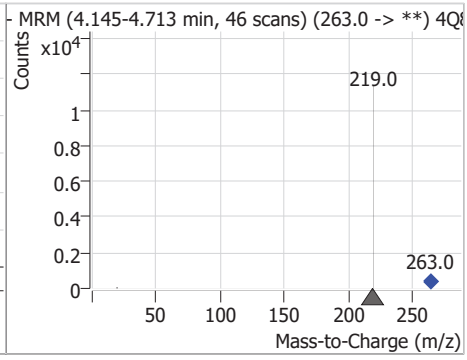




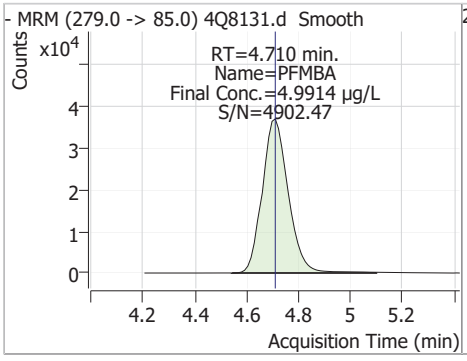
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.15	4.32	0.00	387722				

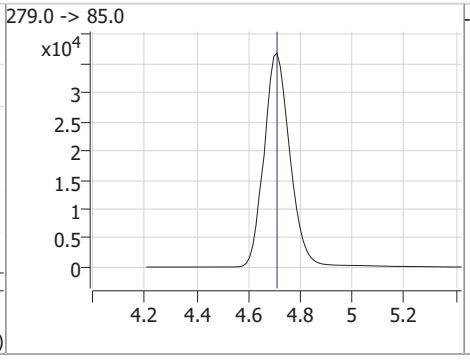


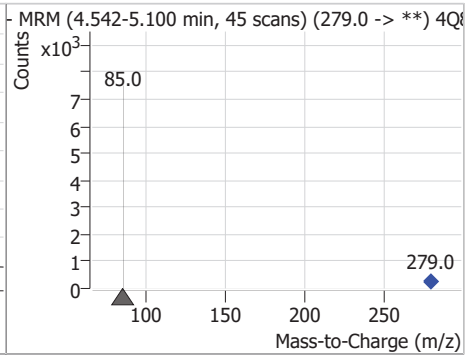




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.99	4.71	0.00	256243				







7.6.47

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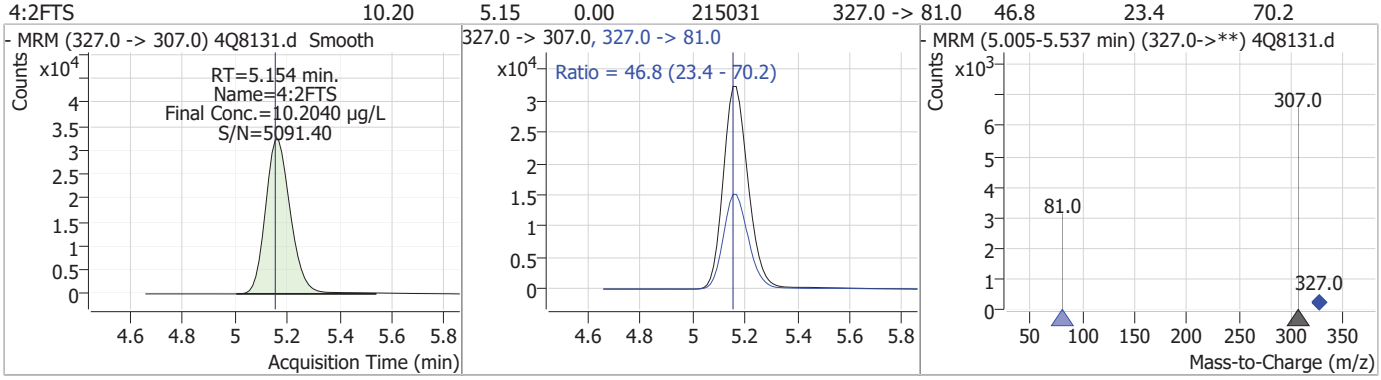
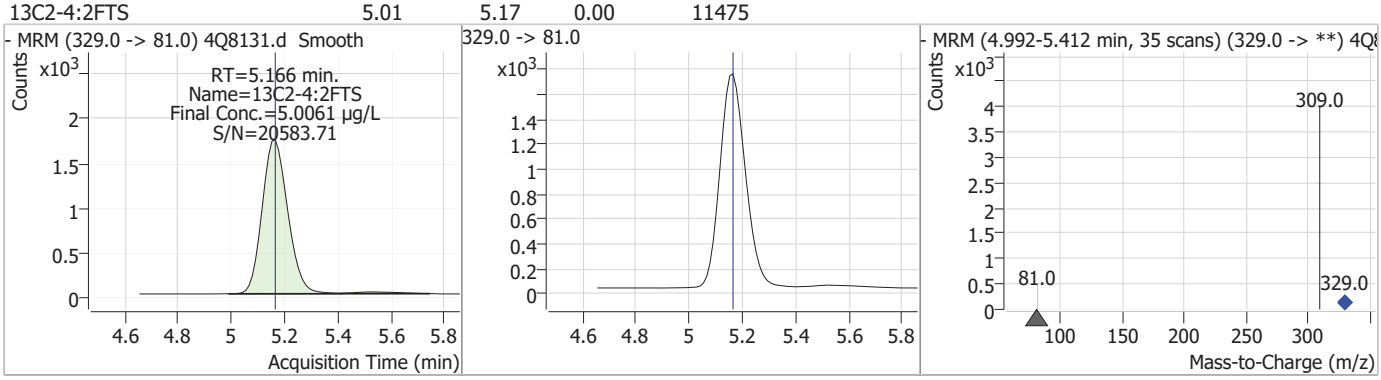
Perfluorinated Compounds by LC/MS/MS

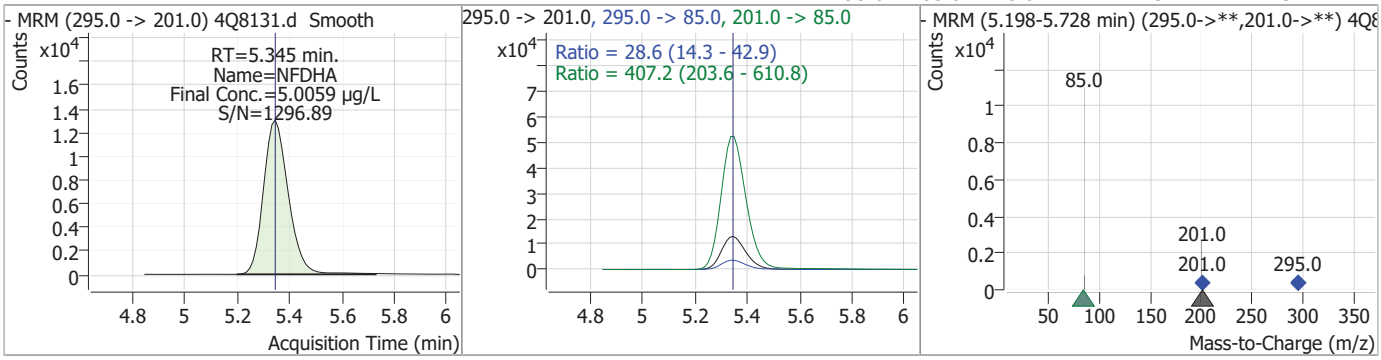
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	10.20	5.15	0.00	215031	327.0 -> 81.0	46.8	23.4	70.2



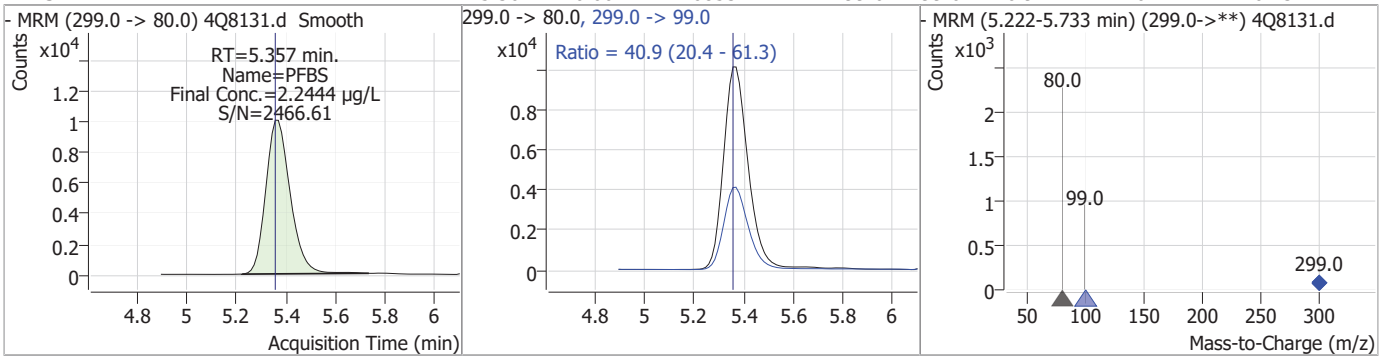
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.01	5.17	0.00	11475				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.01	5.35	0.00	85579	201.0 -> 85.0	407.2	203.6	610.8
					295.0 -> 85.0	28.6	14.3	42.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.24	5.36	0.00	68531	299.0 -> 99.0	40.9	20.4	61.3



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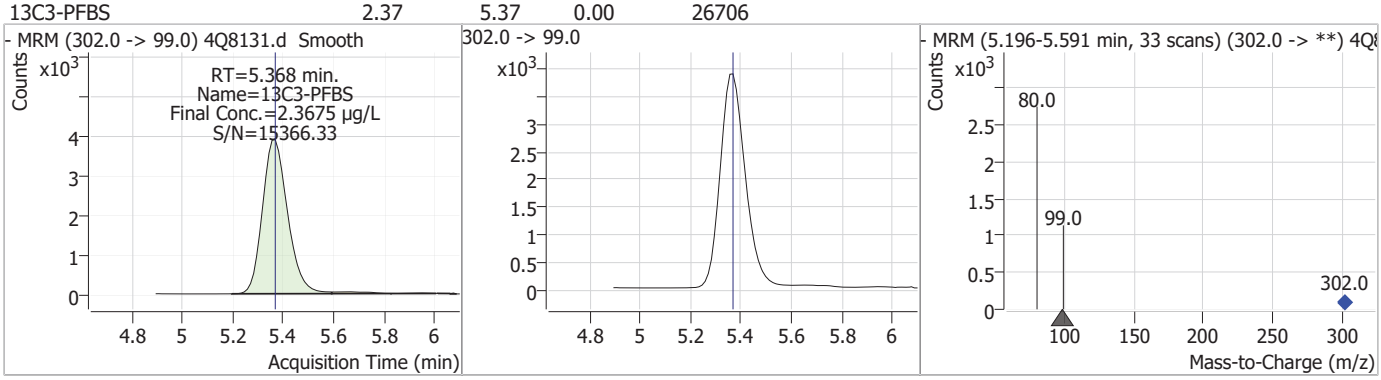
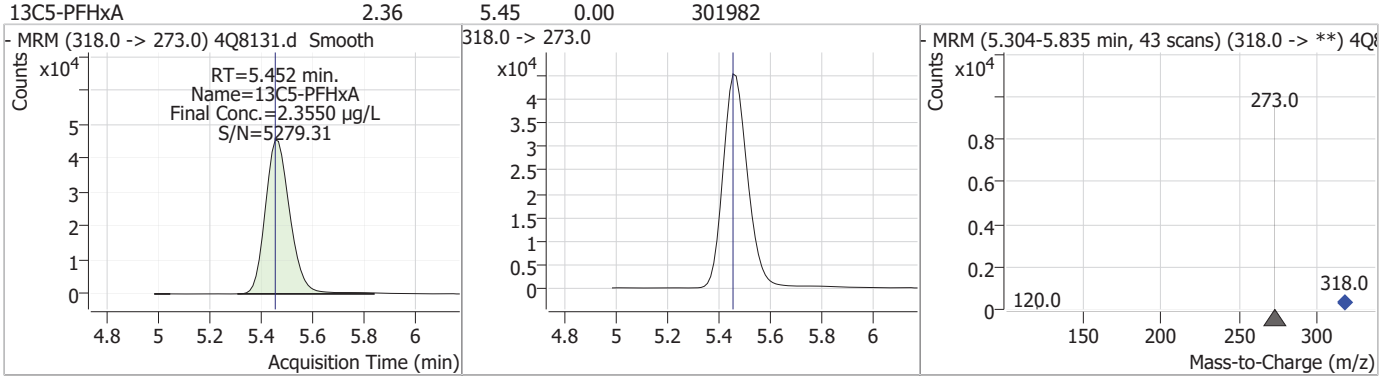
Perfluorinated Compounds by LC/MS/MS

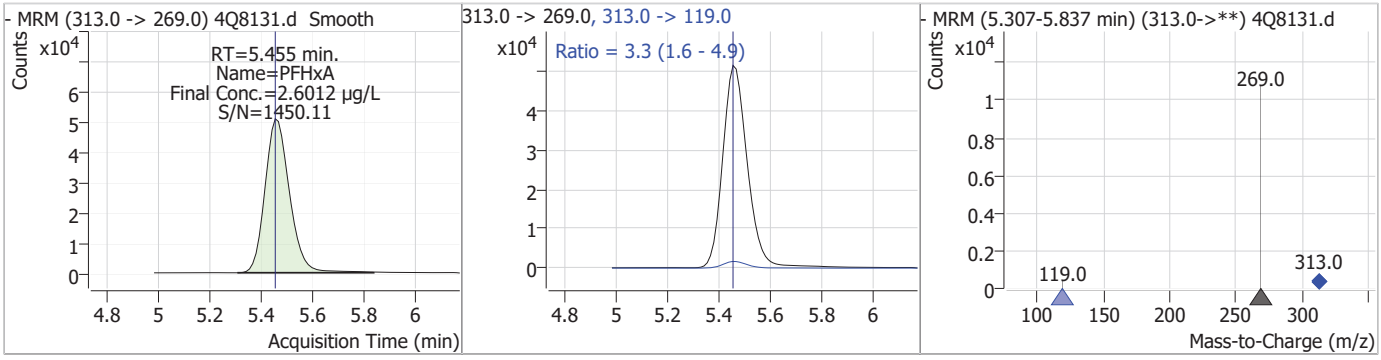
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.37	5.37	0.00	26706				



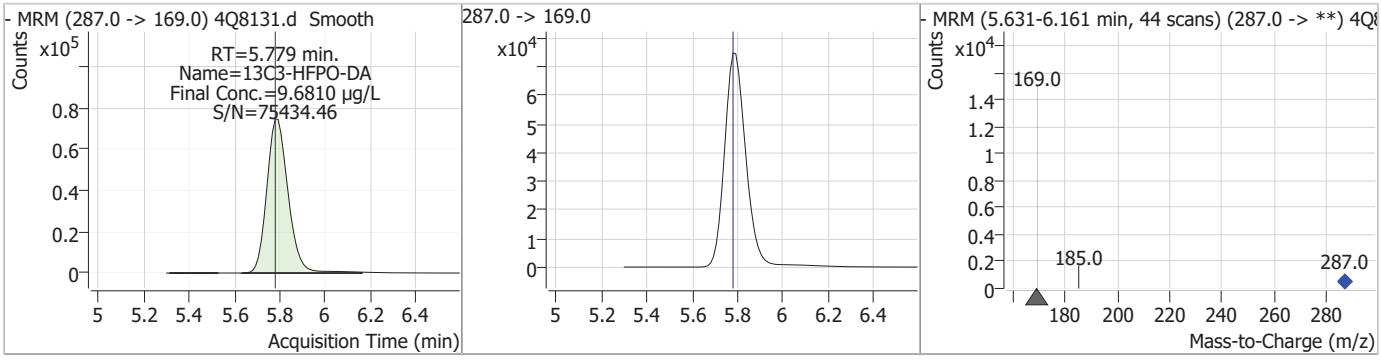
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.36	5.45	0.00	301982				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.60	5.45	0.00	338555	313.0 -> 119.0	3.3	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.68	5.78	0.00	487491				



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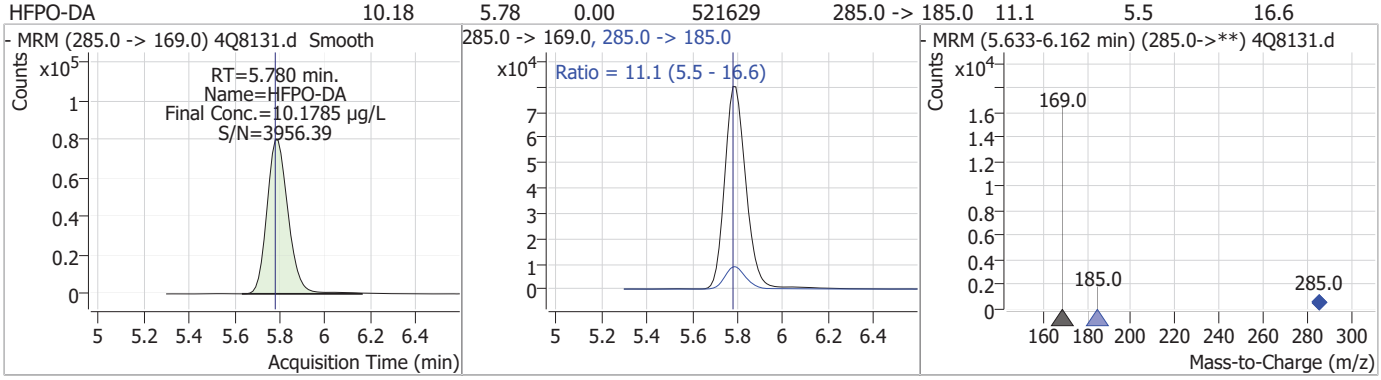
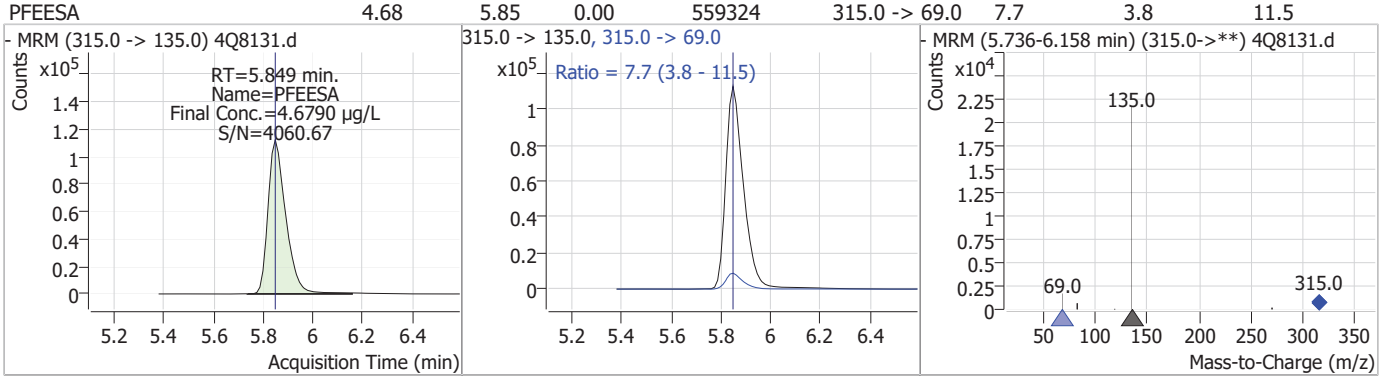
Perfluorinated Compounds by LC/MS/MS

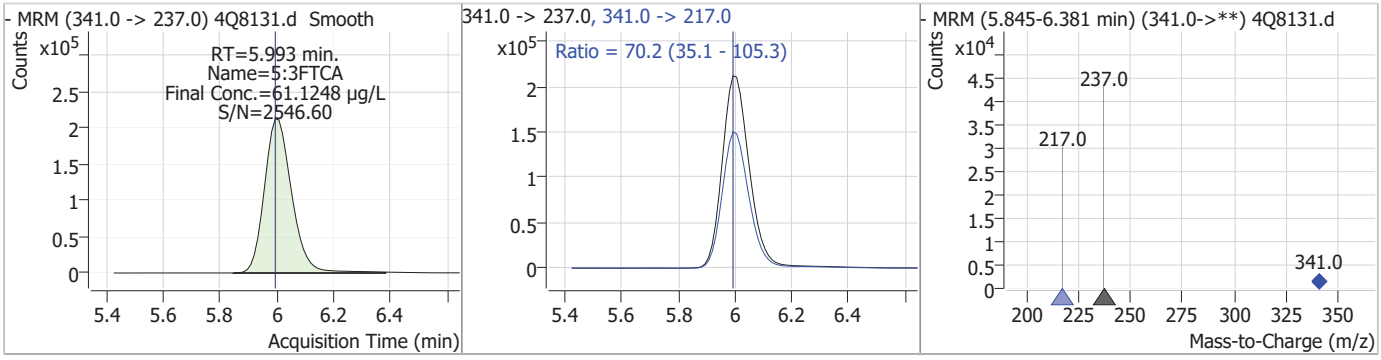
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.18	5.78	0.00	521629	285.0 -> 185.0	11.1	5.5	16.6



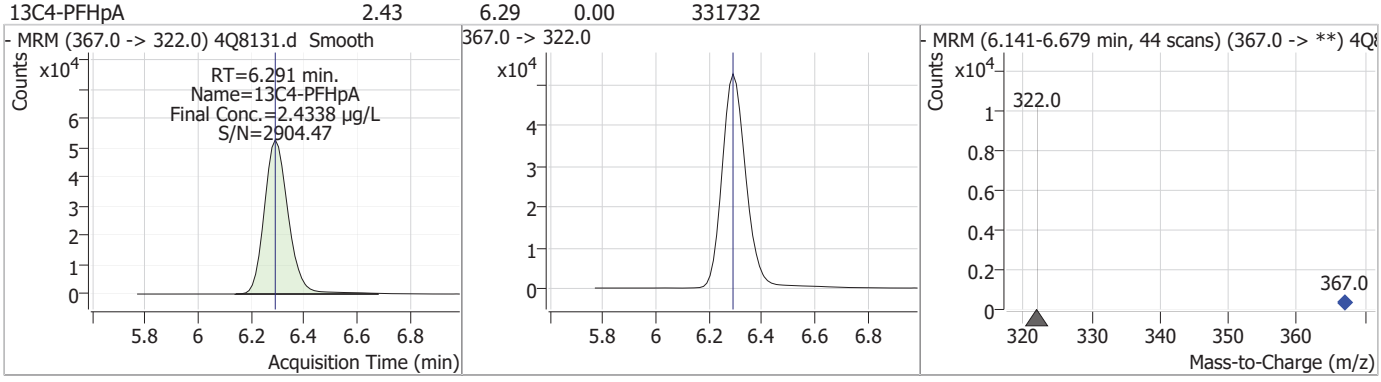
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.68	5.85	0.00	559324	315.0 -> 69.0	7.7	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	61.12	5.99	0.00	1420897	341.0 -> 217.0	70.2	35.1	105.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.43	6.29	0.00	331732				



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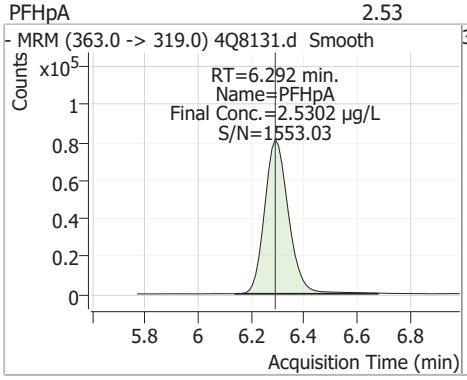
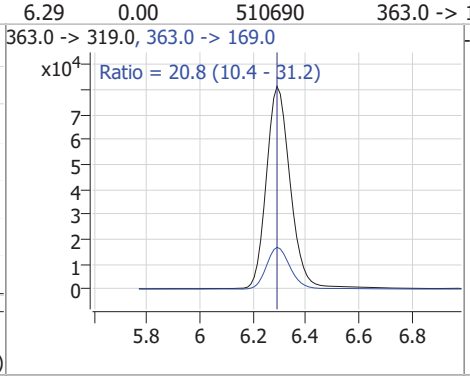
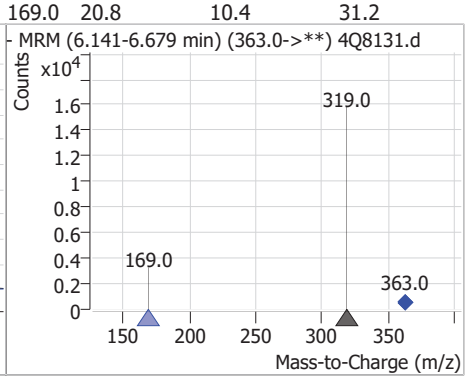
Perfluorinated Compounds by LC/MS/MS

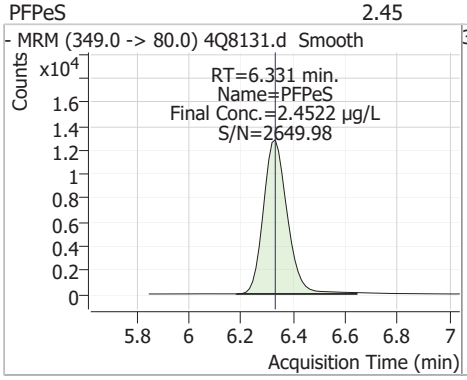
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.53	6.29	0.00	510690	363.0 -> 169.0	20.8	10.4	31.2

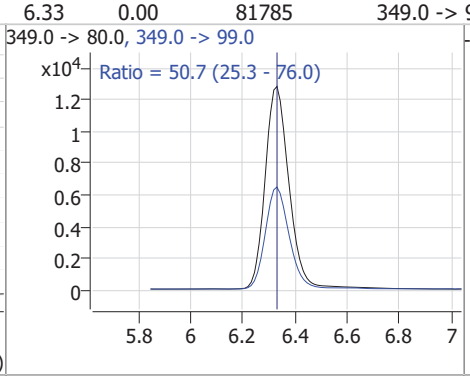


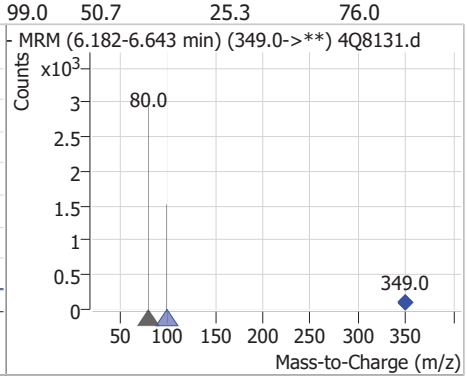




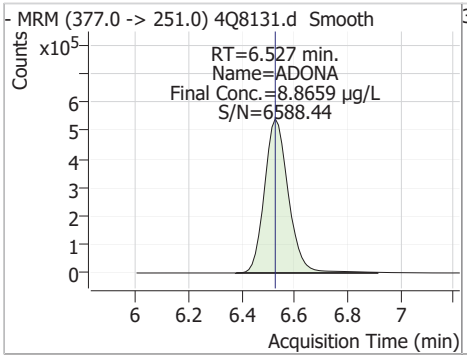
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.45	6.33	0.00	81785	349.0 -> 99.0	50.7	25.3	76.0

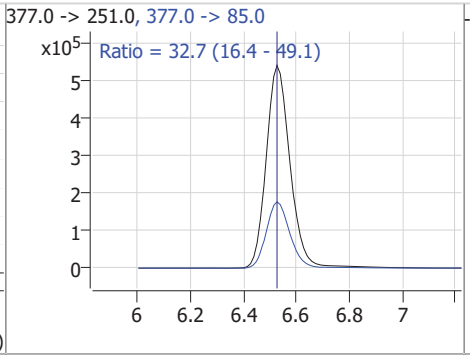


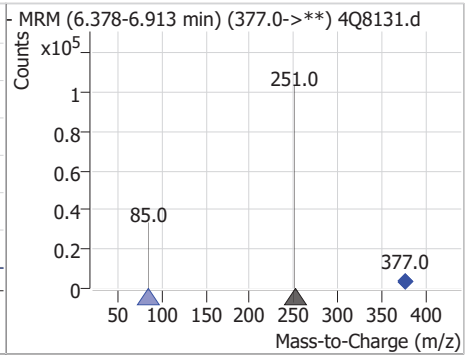




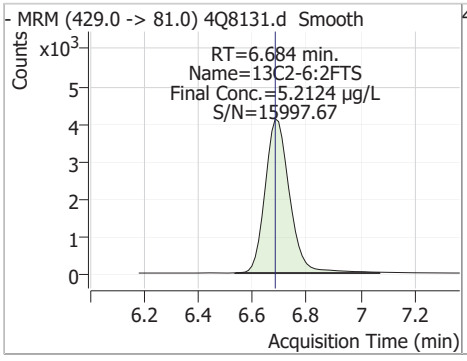
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.87	6.53	0.00	3391236	377.0 -> 85.0	32.7	16.4	49.1

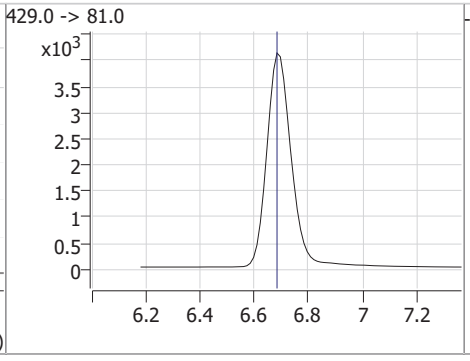


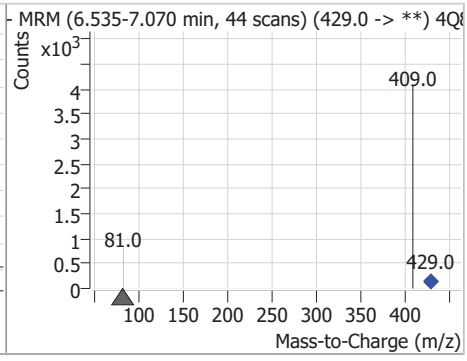




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.21	6.68	0.00	25926				







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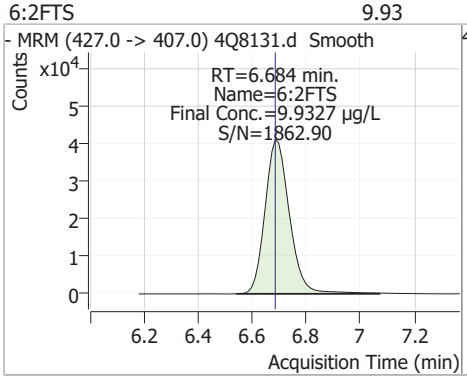
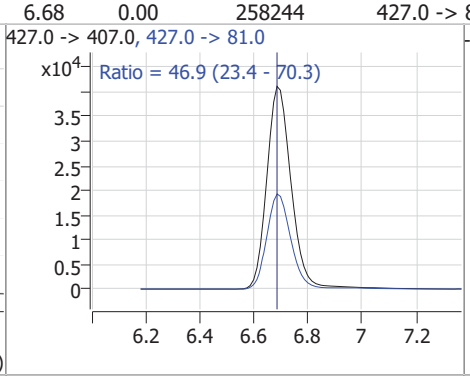
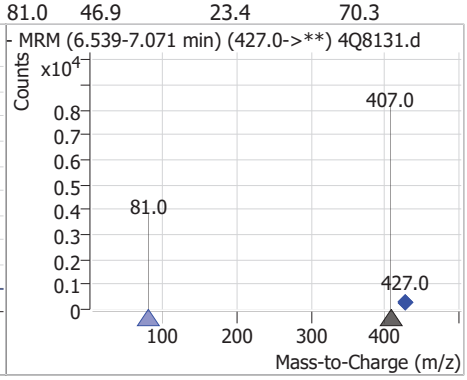
Perfluorinated Compounds by LC/MS/MS

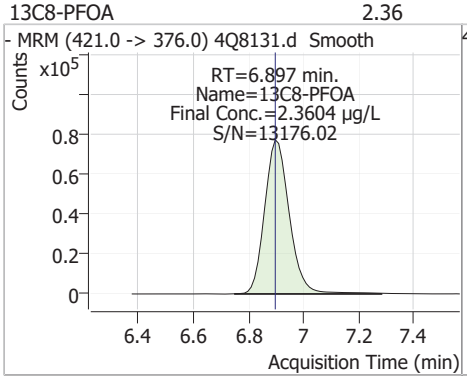
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.93	6.68	0.00	258244	427.0 -> 81.0	46.9	23.4	70.3

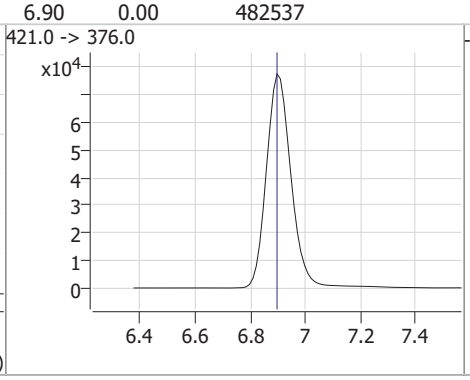


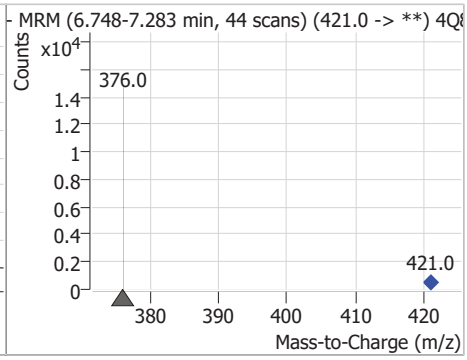




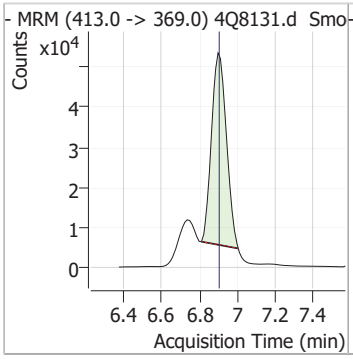
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.36	6.90	0.00	482537				

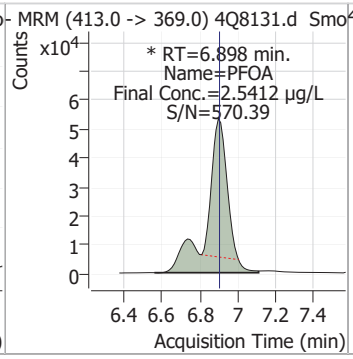


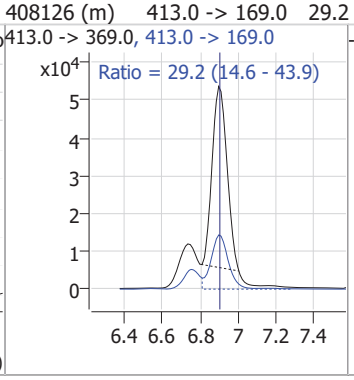


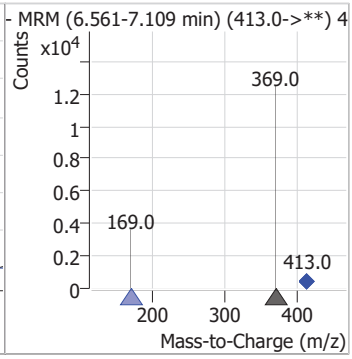


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.54	6.90	0.00	408126 (m)	413.0 -> 169.0	29.2	14.6	43.9

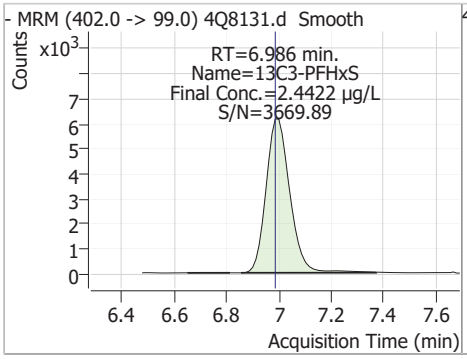


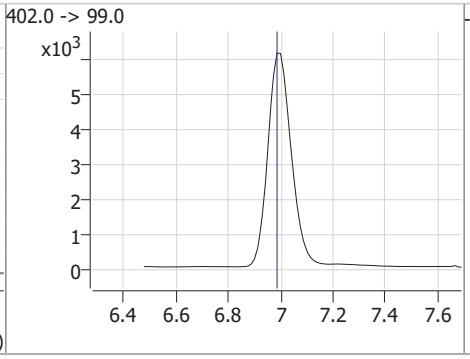


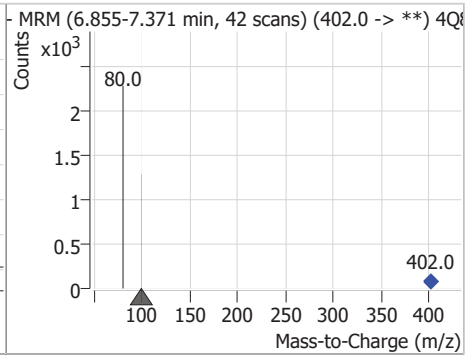




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.44	6.99	0.00	38978				

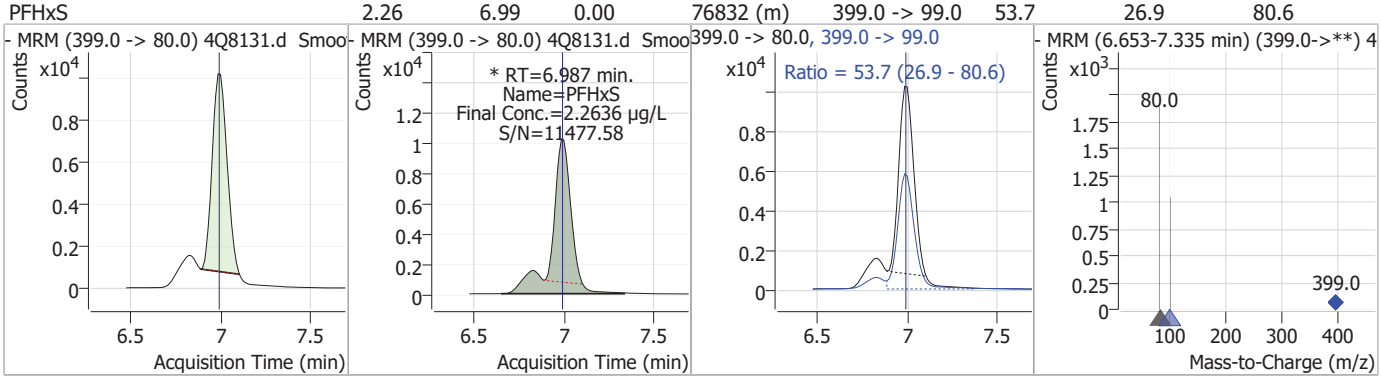




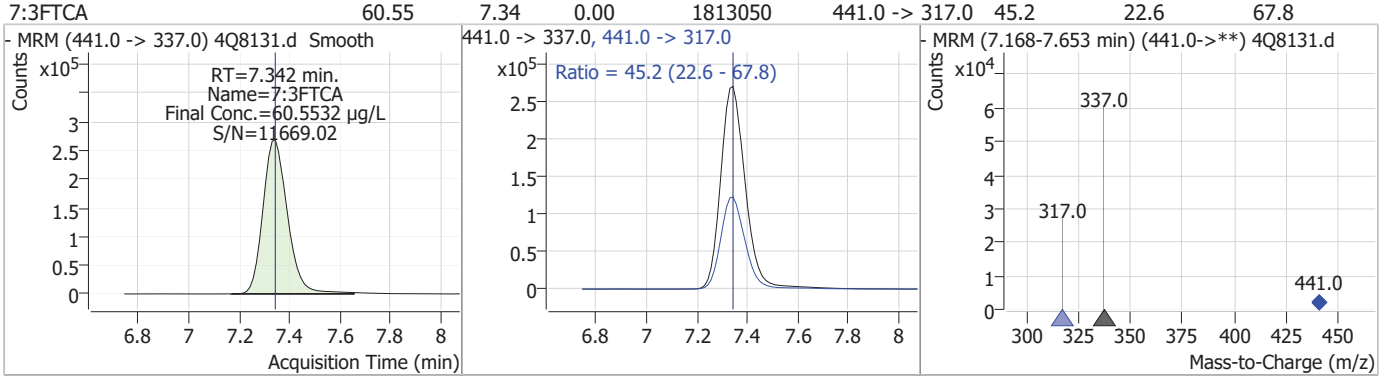


Perfluorinated Compounds by LC/MS/MS

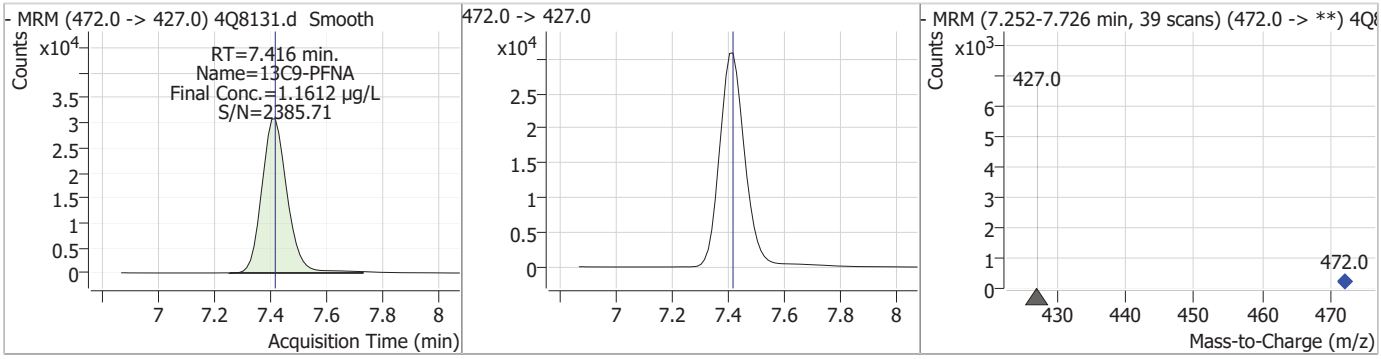
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.26	6.99	0.00	76832 (m)	399.0 -> 99.0	53.7	26.9	80.6



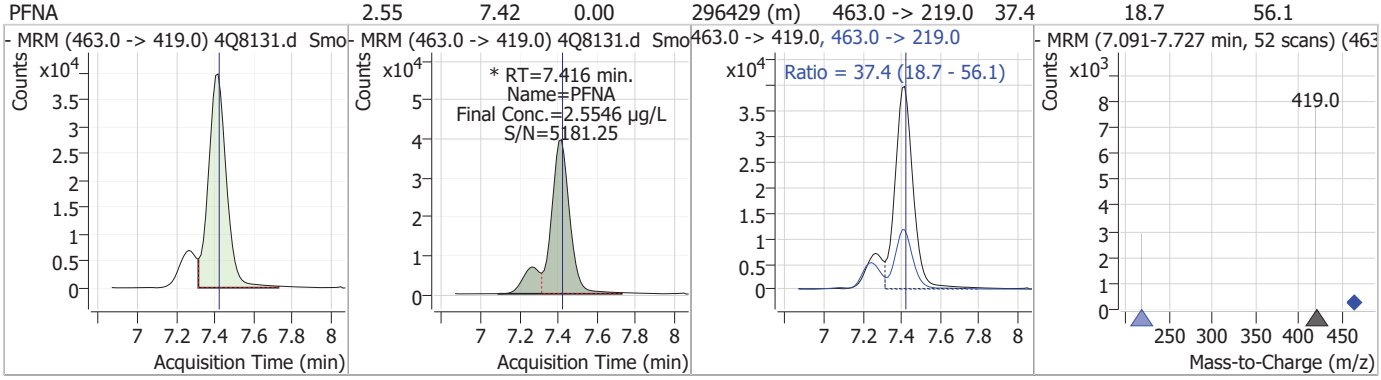
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	60.55	7.34	0.00	1813050	441.0 -> 317.0	45.2	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.16	7.42	0.00	192913				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.55	7.42	0.00	296429 (m)	463.0 -> 219.0	37.4	18.7	56.1



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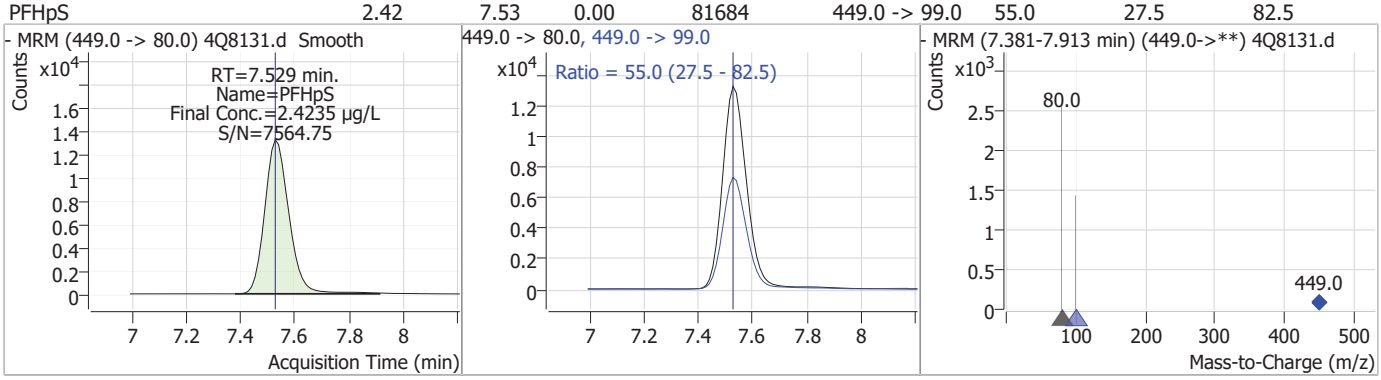
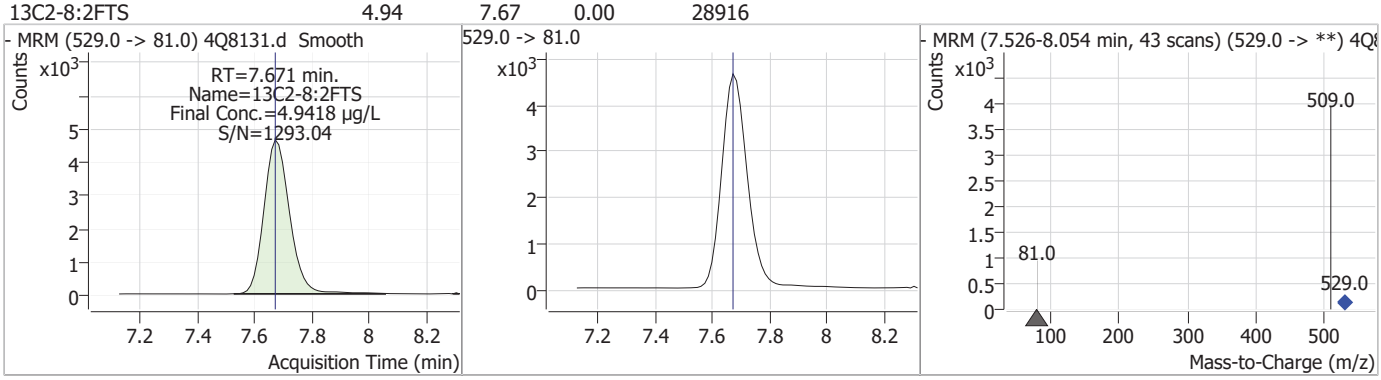
Perfluorinated Compounds by LC/MS/MS

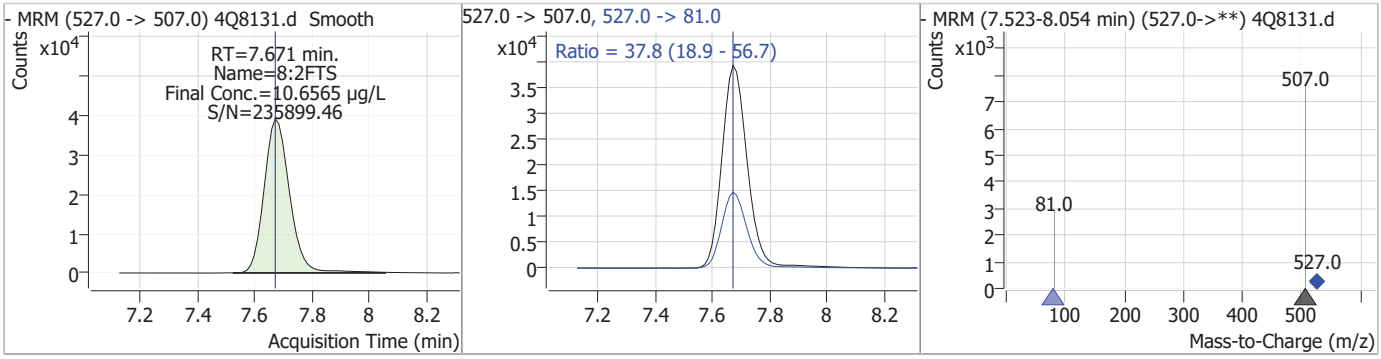
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.42	7.53	0.00	81684	449.0 -> 99.0	55.0	27.5	82.5



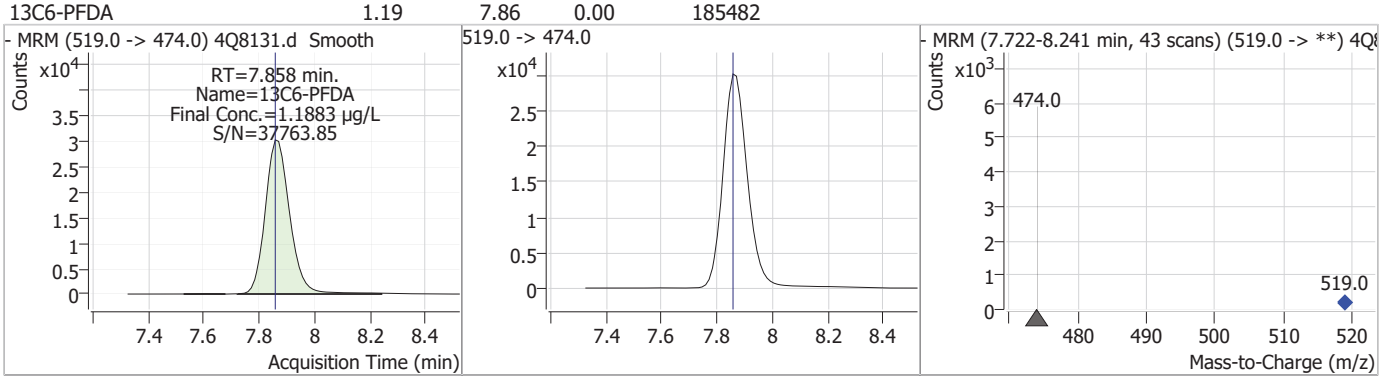
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.94	7.67	0.00	28916				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.66	7.67	0.00	241161	527.0 -> 81.0	37.8	18.9	56.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.19	7.86	0.00	185482				



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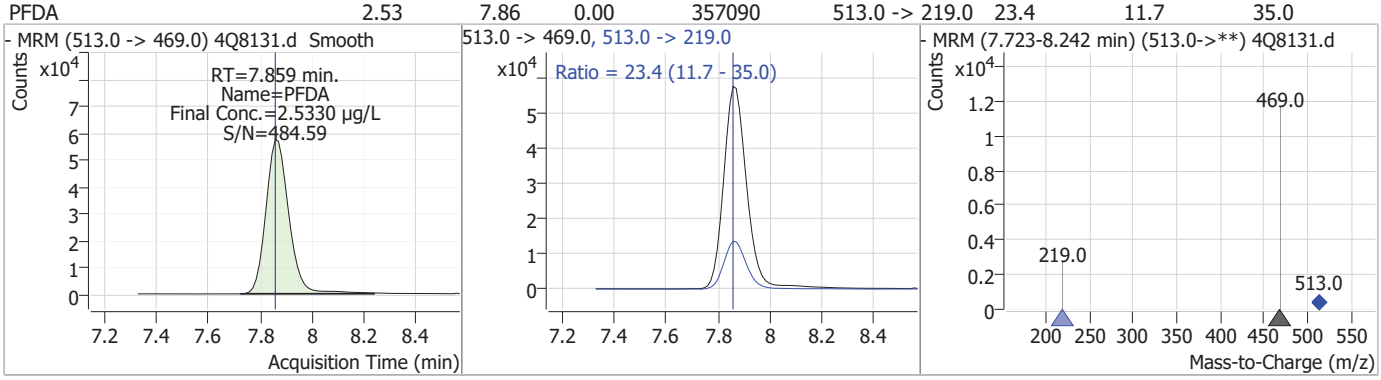
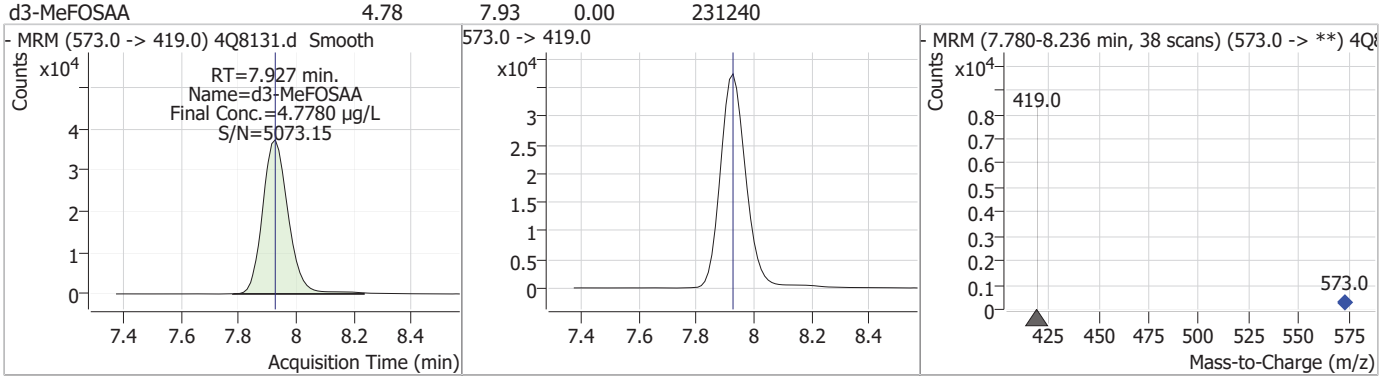
Perfluorinated Compounds by LC/MS/MS

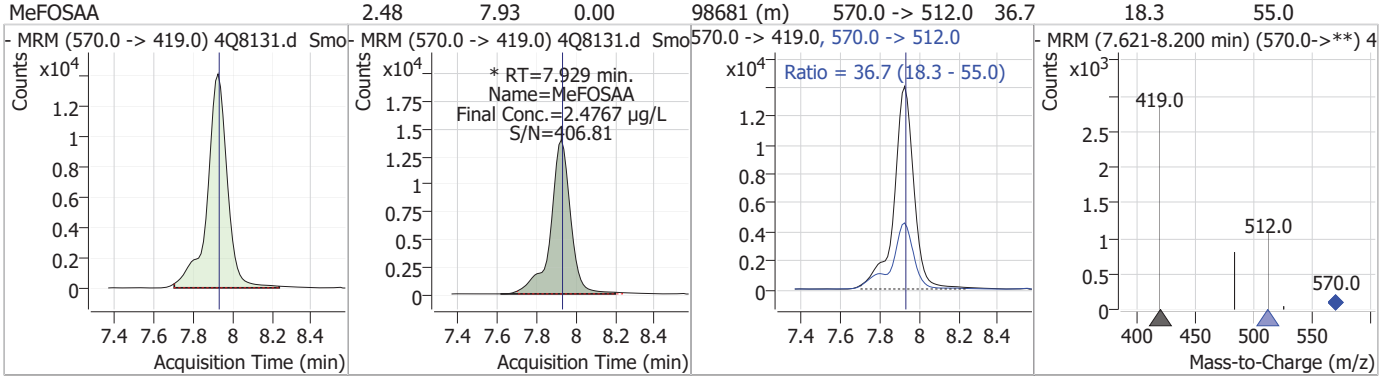
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.53	7.86	0.00	357090	513.0 -> 219.0	23.4	11.7	35.0



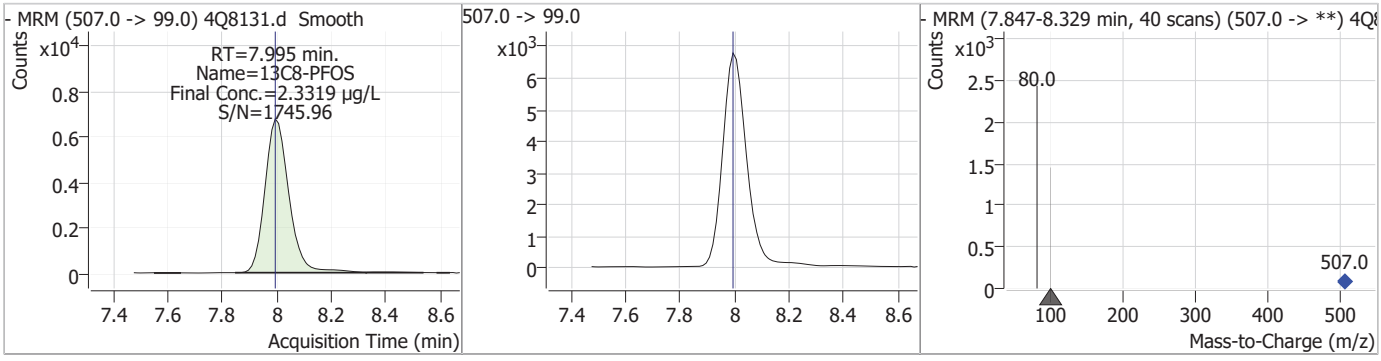
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.78	7.93	0.00	231240				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.48	7.93	0.00	98681 (m)	570.0 -> 512.0	36.7	18.3	55.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.33	7.99	0.00	41260				



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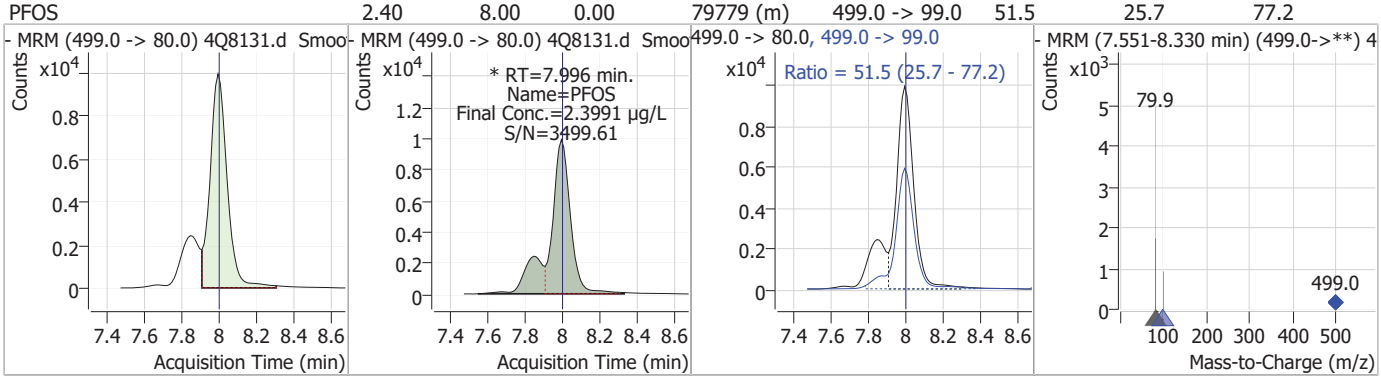
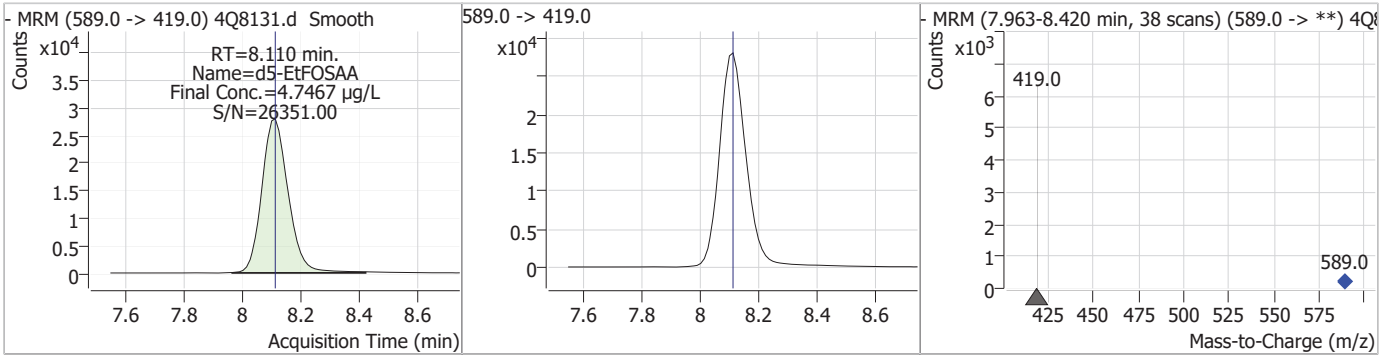
Perfluorinated Compounds by LC/MS/MS

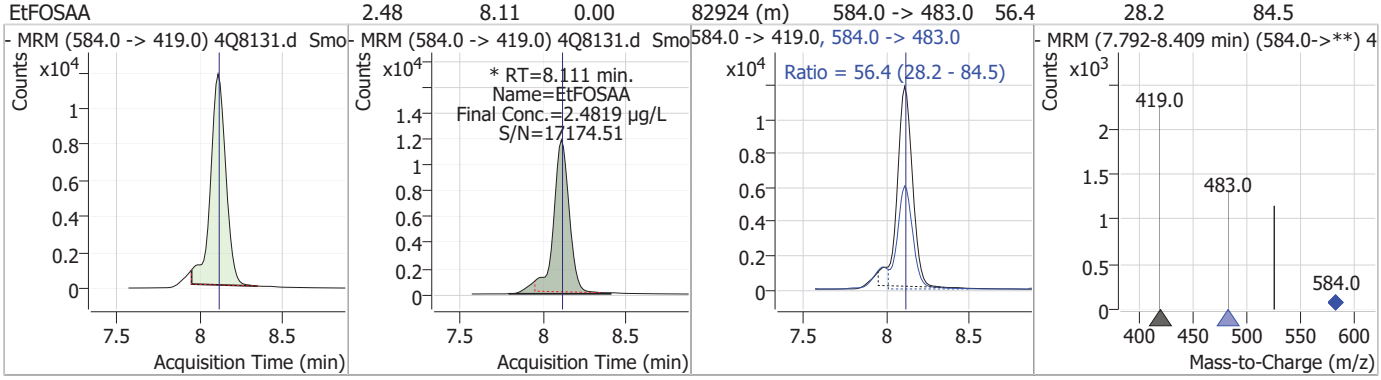
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.40	8.00	0.00	79779 (m)	499.0 -> 99.0	51.5	25.7	77.2



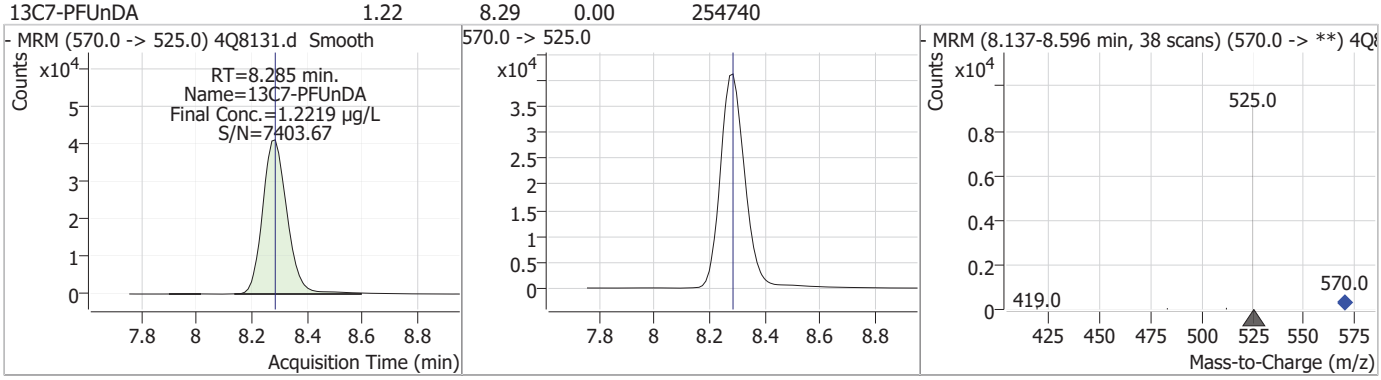
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.75	8.11	0.00	176374				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.48	8.11	0.00	82924 (m)	584.0 -> 483.0	56.4	28.2	84.5

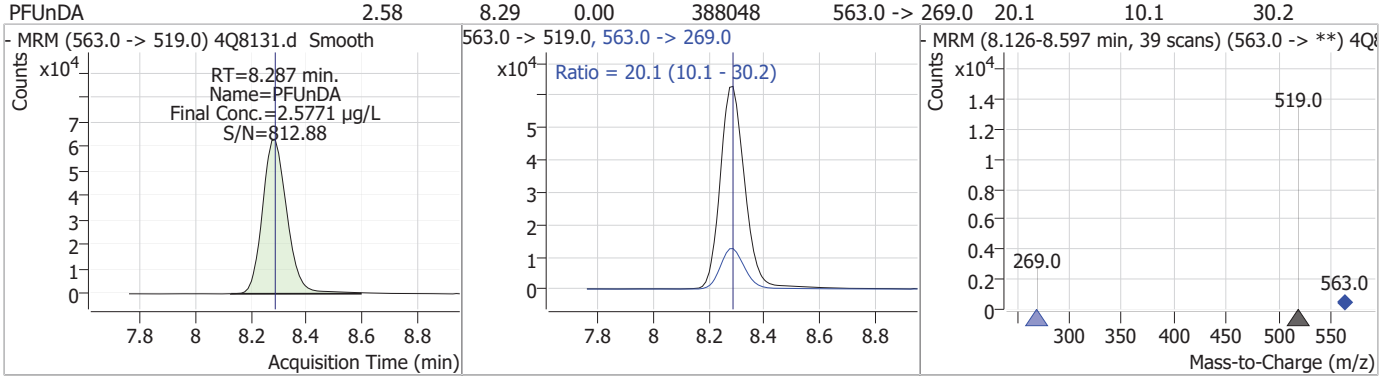


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.22	8.29	0.00	254740				

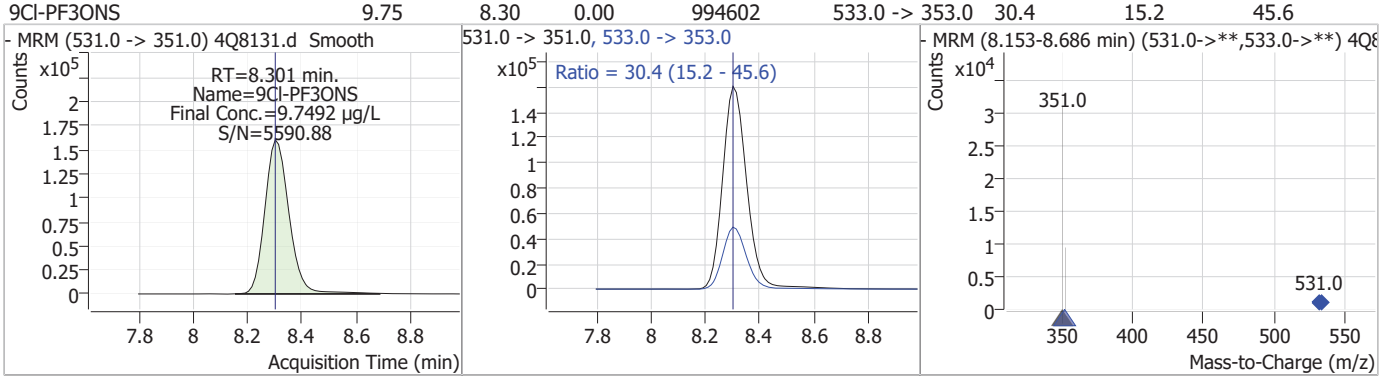


Perfluorinated Compounds by LC/MS/MS

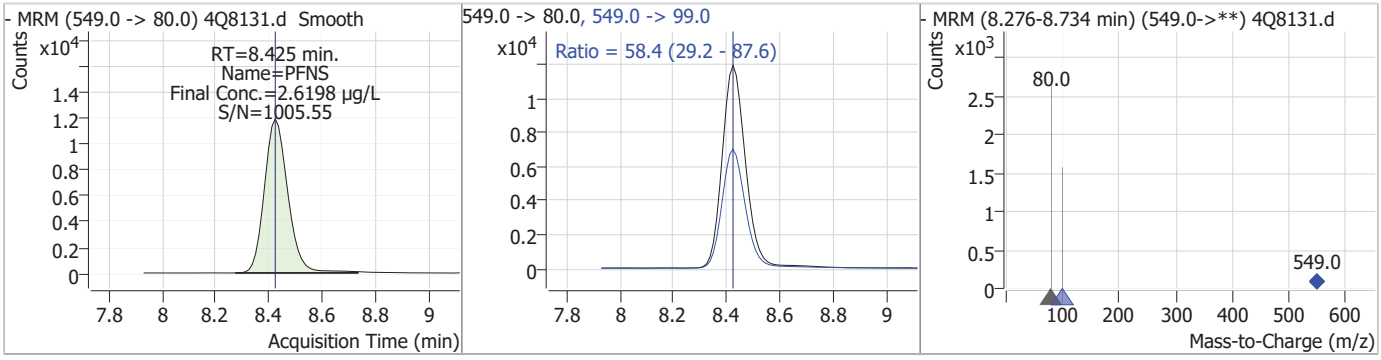
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.58	8.29	0.00	388048	563.0 -> 269.0	20.1	10.1	30.2



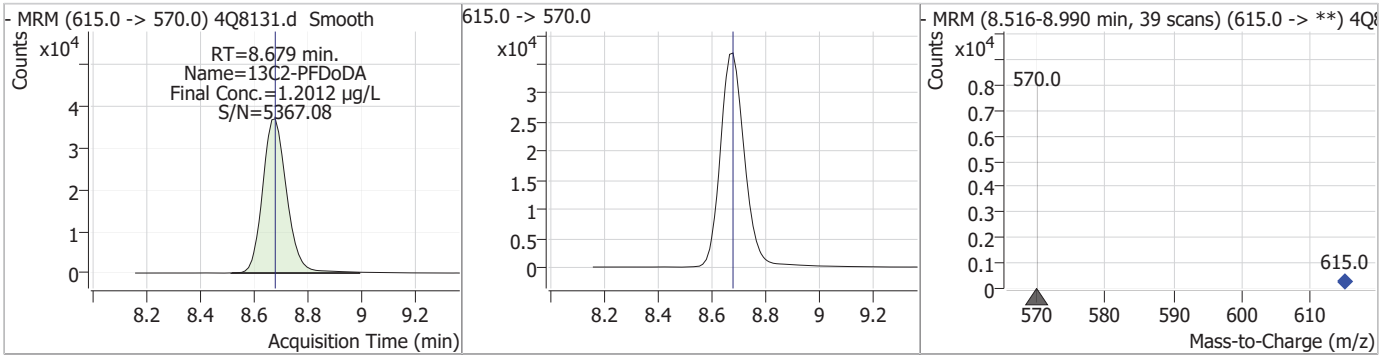
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.75	8.30	0.00	994602	533.0 -> 353.0	30.4	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.62	8.42	0.00	72689	549.0 -> 99.0	58.4	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.20	8.68	0.00	229380				



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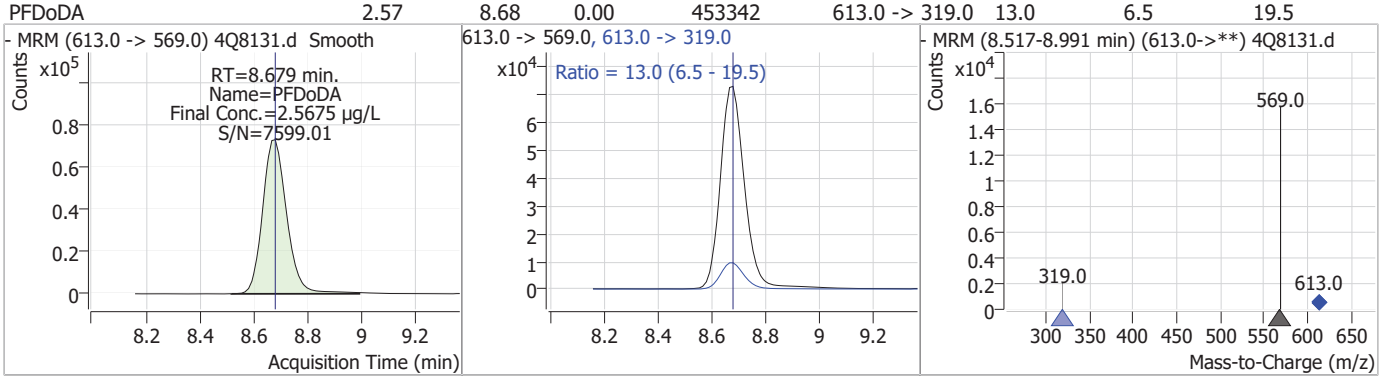
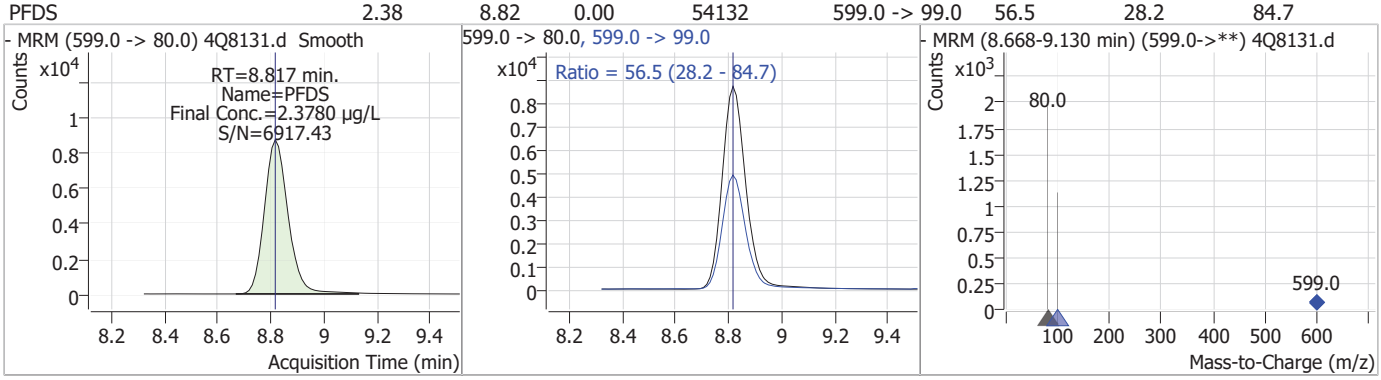
Perfluorinated Compounds by LC/MS/MS

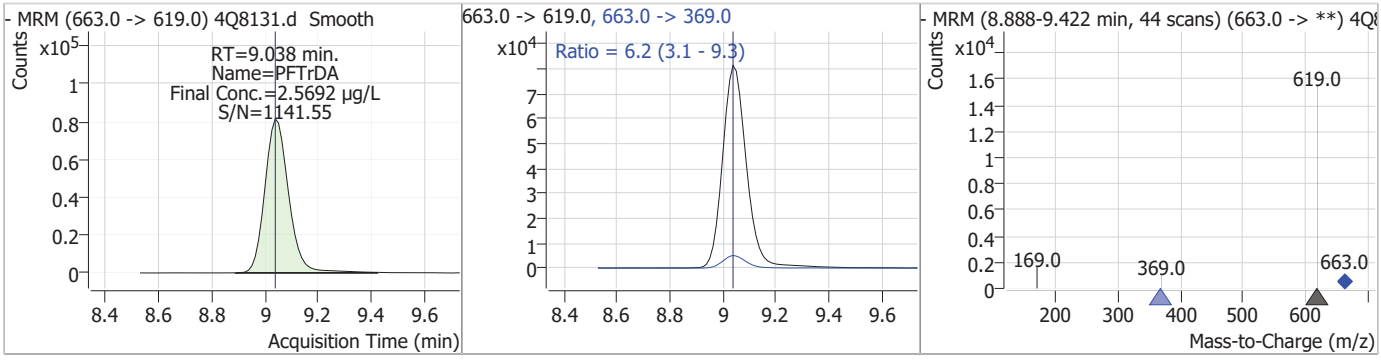
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.57	8.68	0.00	453342	613.0 -> 319.0	13.0	6.5	19.5



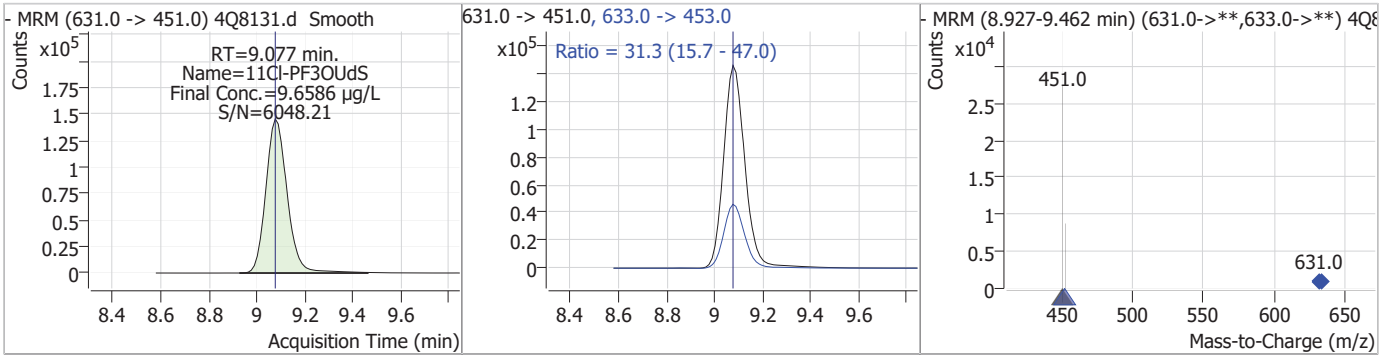
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.38	8.82	0.00	54132	599.0 -> 99.0	56.5	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.57	9.04	0.00	505864	663.0 -> 369.0	6.2	3.1	9.3

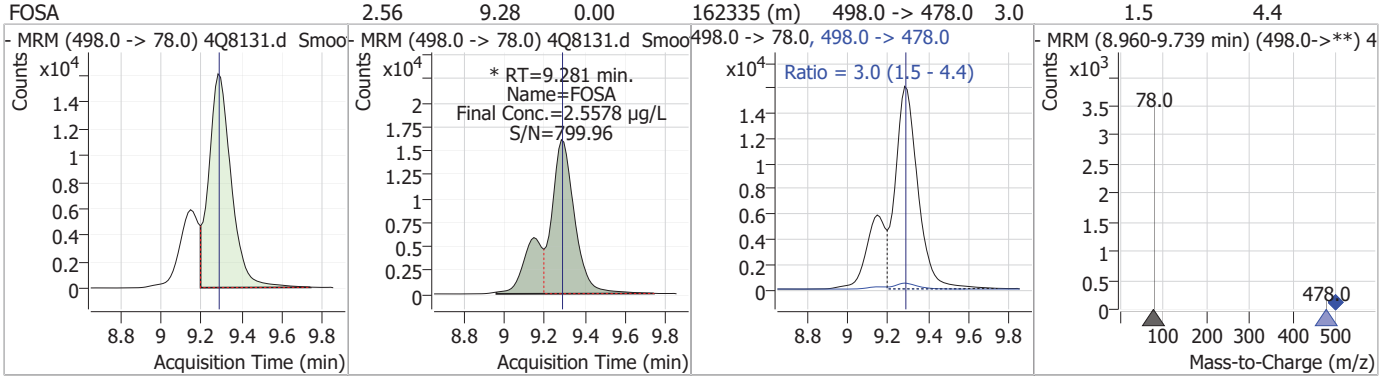


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.66	9.08	0.00	895771	633.0 -> 453.0	31.3	15.7	47.0

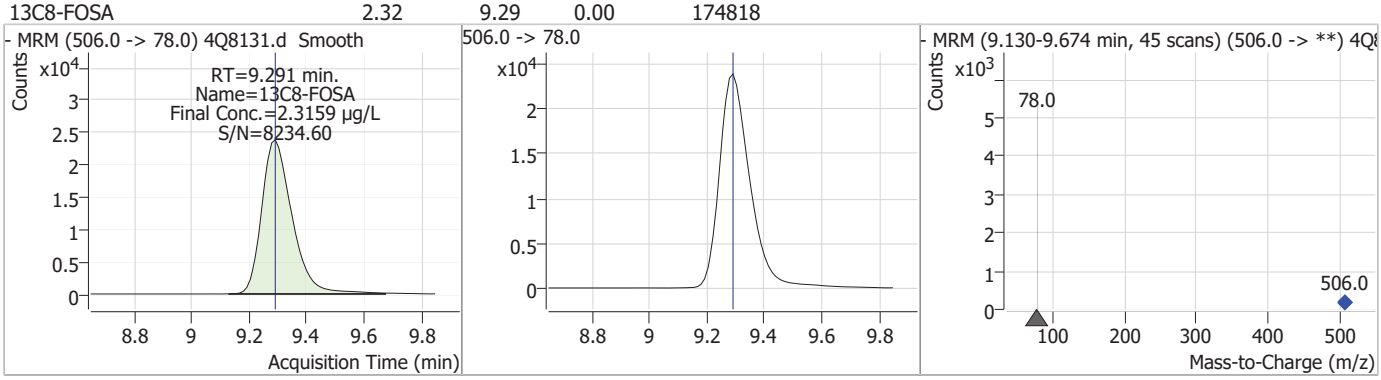


Perfluorinated Compounds by LC/MS/MS

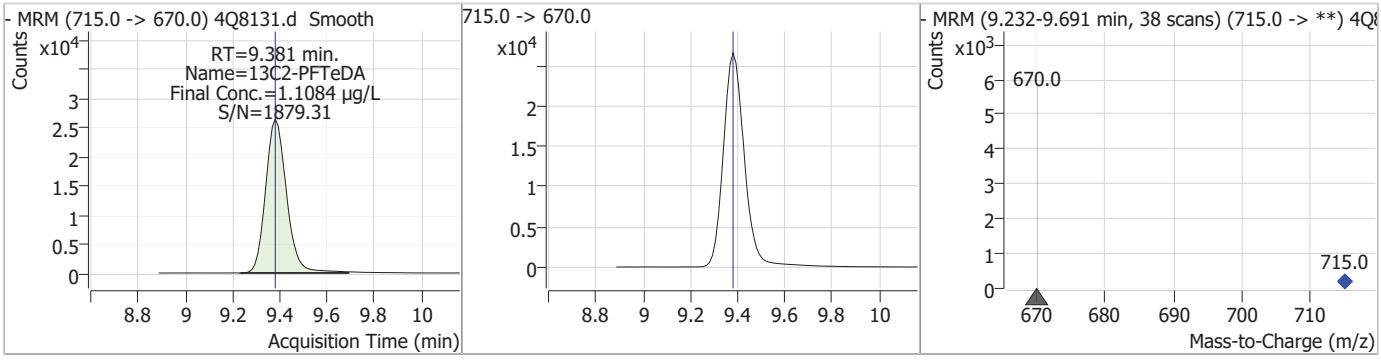
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.56	9.28	0.00	162335 (m)	498.0 -> 478.0	3.0	1.5	4.4



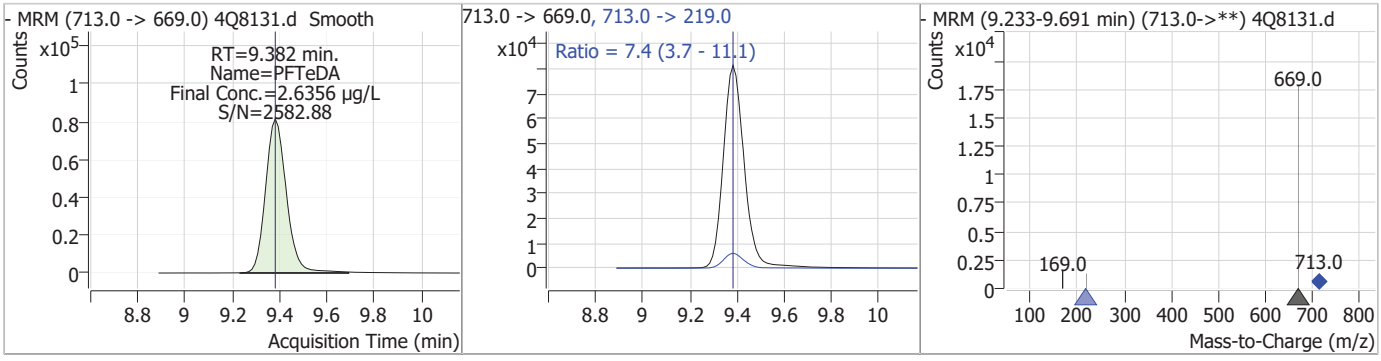
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.32	9.29	0.00	174818				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.11	9.38	0.00	162720				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.64	9.38	0.00	499329	713.0 -> 219.0	7.4	3.7	11.1



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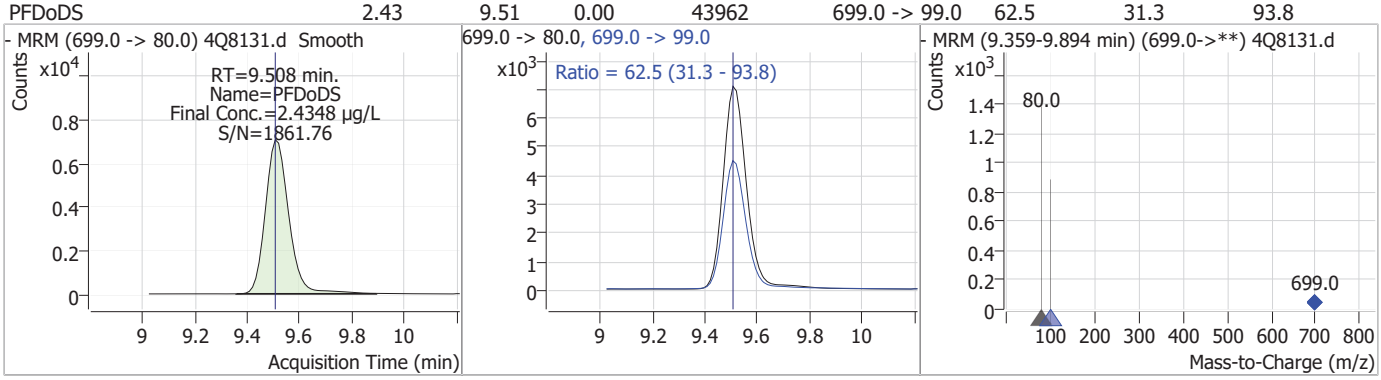
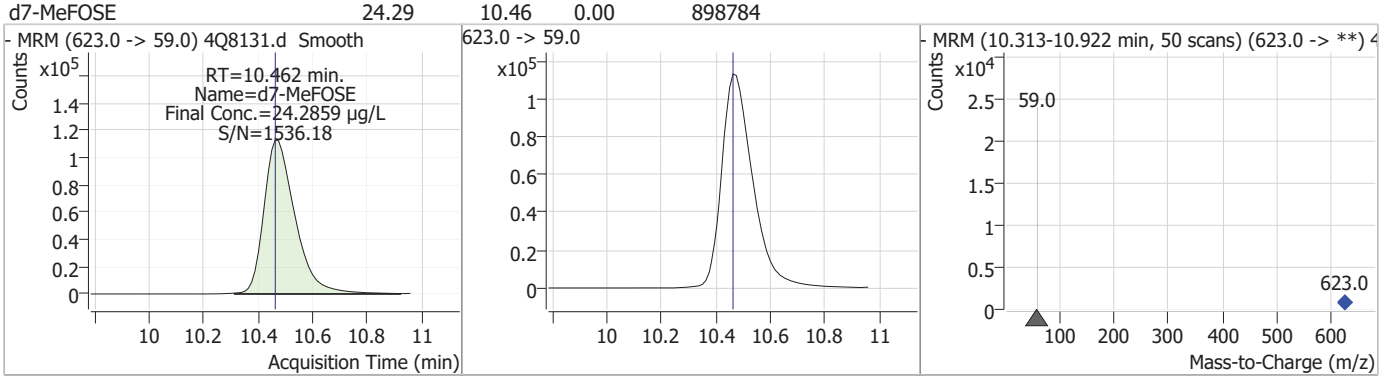
Perfluorinated Compounds by LC/MS/MS

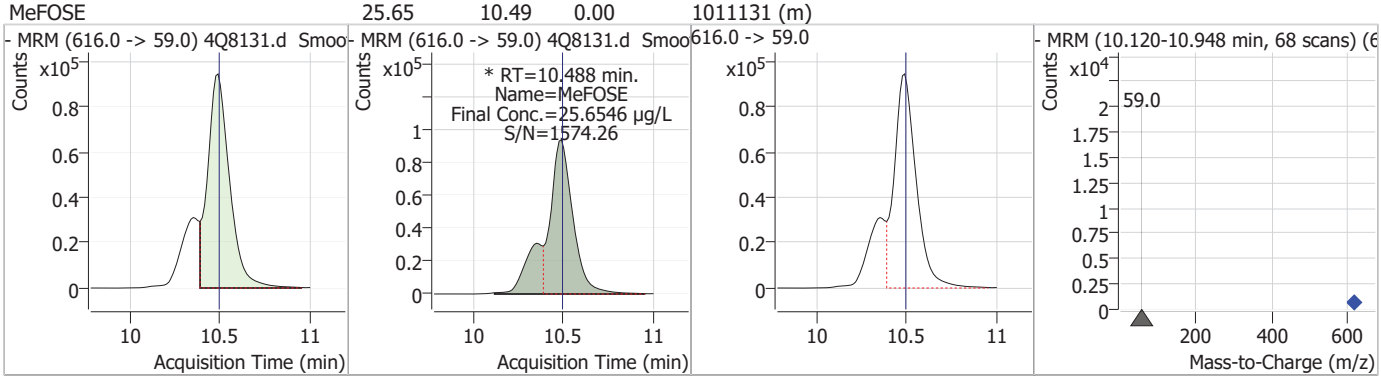
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.43	9.51	0.00	43962	699.0 -> 99.0	62.5	31.3	93.8



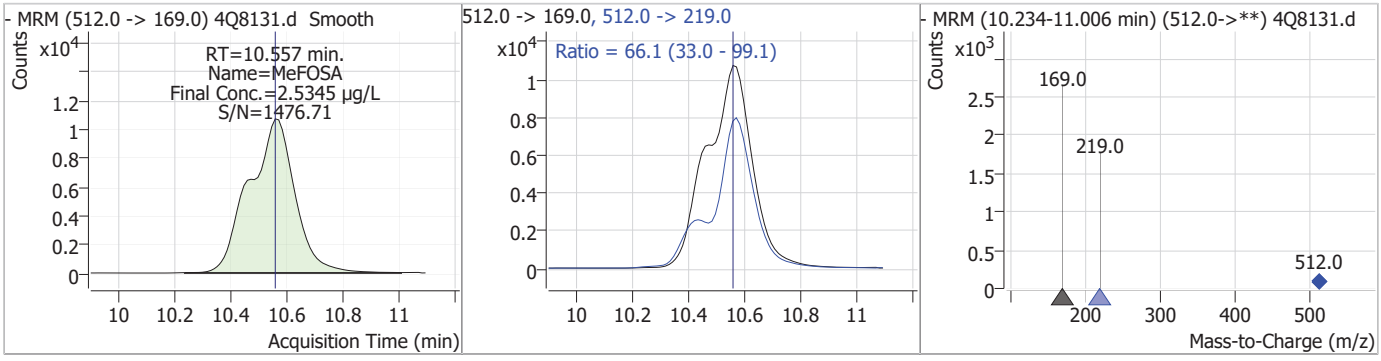
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.29	10.46	0.00	898784				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.65	10.49	0.00	1011131 (m)				

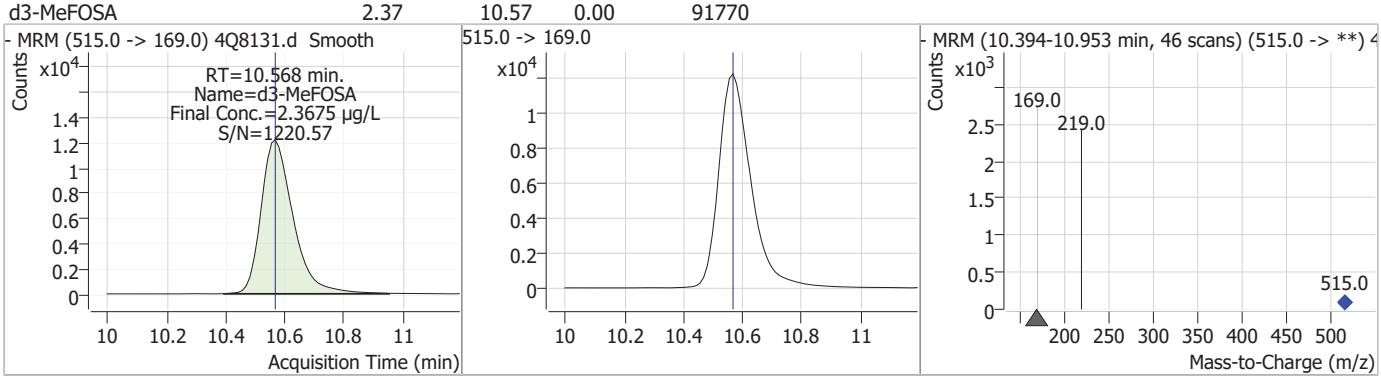


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.53	10.56	0.00	121796	512.0 -> 219.0	66.1	33.0	99.1

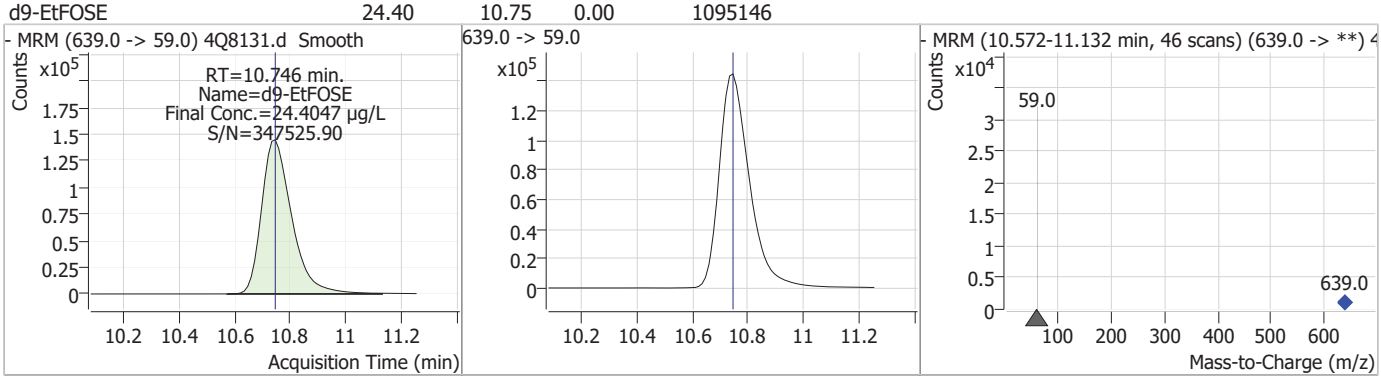


Perfluorinated Compounds by LC/MS/MS

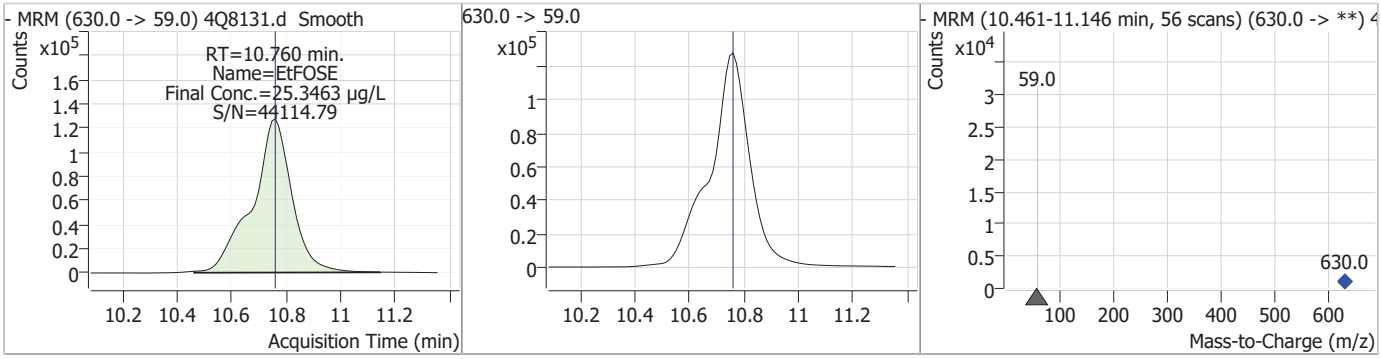
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.37	10.57	0.00	91770				



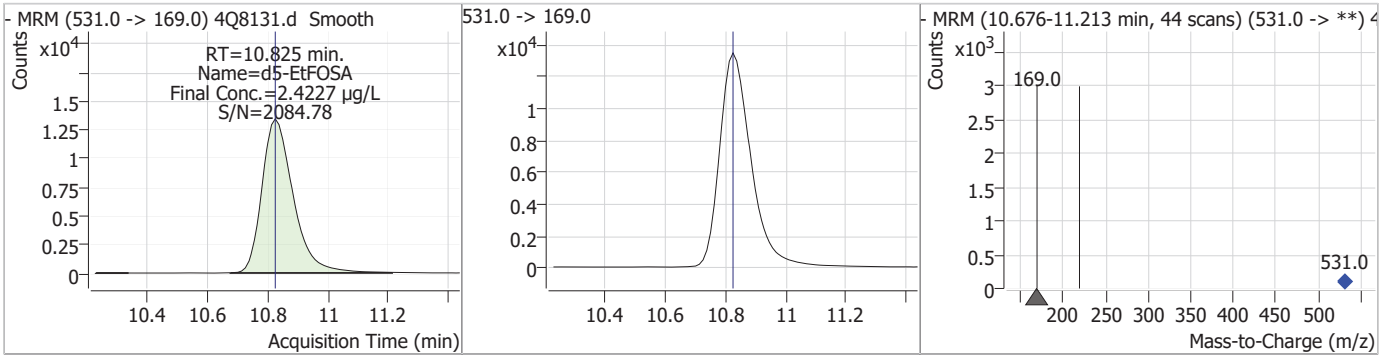
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.40	10.75	0.00	1095146				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.35	10.76	0.00	1291166				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.42	10.83	0.00	96777				



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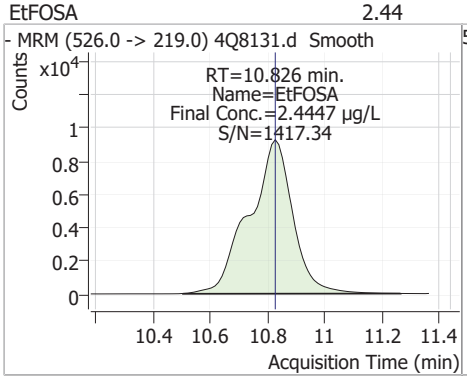
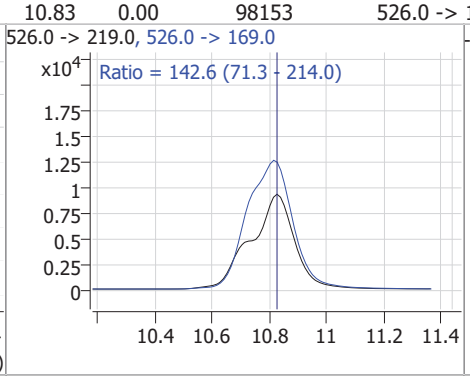
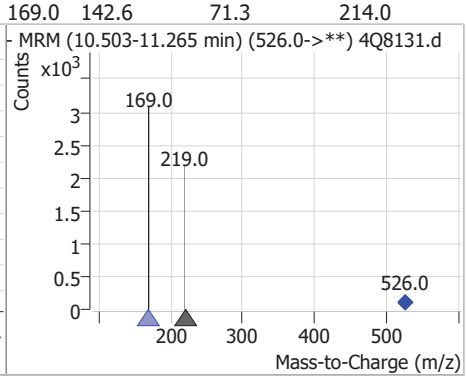
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.44	10.83	0.00	98153	526.0 -> 169.0	142.6	71.3	214.0







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Manual Integration Approval Summary

Sample Number: T4Q138-ICC138
Lab FileID: 4Q8131.D
Injection Time: 04/30/25 15:10
Method: EPA 1633
Analyst approved: 04/30/25 23:06 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.42	Split peak
MeFOSAA	2355-31-9		7.93	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8132.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 3:23:43 PM
Sample Name : IC138-5
Vial : P1-A6
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63077,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.871	217.0 -> 172.0	910128	10.00 µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	486903	5.00 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	315675	2.50 µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	341318	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	503666	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	207816	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	194153	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	253112	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	231279	1.25 µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	174127	1.25 µg/L	0.000
M8-FOSA	9.279	506.0 -> 78.0	185567	2.50 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	28345	2.50 µg/L	0.000
		302.0 -> 80.0	68828		
M3-PFHxS	6.986	402.0 -> 99.0	39026	2.50 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	43654	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	11051	5.00 µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	25485	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	28125	5.00 µg/L	0.000
M3-MeFOSAA	7.927	573.0 -> 419.0	247093	5.00 µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	494028	10.00 µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	187656	5.00 µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	924867	25.00 µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1137781	25.00 µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	100963	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	94751	2.50 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	68594	2.50 µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	385621	5.00 µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	44871	2.50 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	484734	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	171051	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	194698	1.25 µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	283715	2.50 µg/L	0.012
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	11051	4.91 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.2%	
13C2-6:2FTS	6.684	429.0 -> 81.0	25485	5.22 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.4%	
13C2-8:2FTS	7.671	529.0 -> 81.0	28125	4.90 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.9%	
13C2-PFDoDA	8.666	615.0 -> 570.0	231279	1.25 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.1%	
13C2-PFTeDA	9.381	715.0 -> 670.0	174127	1.22 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.0%	
13C3-PFBS	5.368	302.0 -> 99.0	28345	2.56 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.4%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	39026	2.49	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.6%			
13C4-PFBA	2.871	217.0 -> 172.0	910128	10.29	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 102.9%			
13C4-PFHpA	6.291	367.0 -> 322.0	341318	2.67	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.9%			
13C5-PFHxA	5.464	318.0 -> 273.0	315675	2.63	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.1%			
13C5-PFPeA	4.319	268.0 -> 223.0	486903	5.34	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.9%			
13C6-PFDA	7.858	519.0 -> 474.0	194153	1.28	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.8%			
13C7-PFUnDA	8.273	570.0 -> 525.0	253112	1.25	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.3%			
13C8-FOSA	9.279	506.0 -> 78.0	185567	2.63	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.3%			
13C8-PFOA	6.897	421.0 -> 376.0	503666	2.60	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.0%			
13C8-PFOS	7.995	507.0 -> 99.0	43654	2.64	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.7%			
13C9-PFNA	7.403	472.0 -> 427.0	207816	1.29	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.9%			
d3-MeFOSAA	7.927	573.0 -> 419.0	247093	5.47	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 109.4%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	494028	10.48	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 104.8%			
d3-MeFOSA	10.567	515.0 -> 169.0	94751	2.62	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.7%			
d5-EtFOSAA	8.098	589.0 -> 419.0	187656	5.41	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.2%			
d7-MeFOSE	10.462	623.0 -> 59.0	924867	26.77	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 107.1%			
d9-EtFOSE	10.746	639.0 -> 59.0	1137781	27.16	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 108.6%			
d5-EtFOSA	10.825	531.0 -> 169.0	100963	2.71	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 108.3%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	406324	20.02	µg/L		98
		327.0 -> 81.0	195423				
6:2FTS	6.684	427.0 -> 407.0	498354	19.50	µg/L		98
		427.0 -> 81.0	227710				
8:2FTS	7.671	527.0 -> 507.0	467429	21.24	µg/L		97
		527.0 -> 81.0	185607				
EtFOSAA	8.111	584.0 -> 419.0	173133	4.87	µg/L	m	100
		584.0 -> 483.0	97507				
FOSA	9.281	498.0 -> 78.0	333096	4.94	µg/L	m	99
		498.0 -> 478.0	9387				
MeFOSAA	7.929	570.0 -> 419.0	205518	4.83	µg/L	m	97
		570.0 -> 512.0	71374				
PFBA	2.877	213.0 -> 169.0	560427	20.14	µg/L		100
PFBS	5.369	299.0 -> 80.0	141049	4.35	µg/L		100
		299.0 -> 99.0	57673				
PFDA	7.859	513.0 -> 469.0	725643	4.92	µg/L		98
		513.0 -> 219.0	175554				
PFDoDA	8.667	613.0 -> 569.0	897803	5.04	µg/L		98
		613.0 -> 319.0	124071				

Perfluorinated Compounds by LC/MS/MS

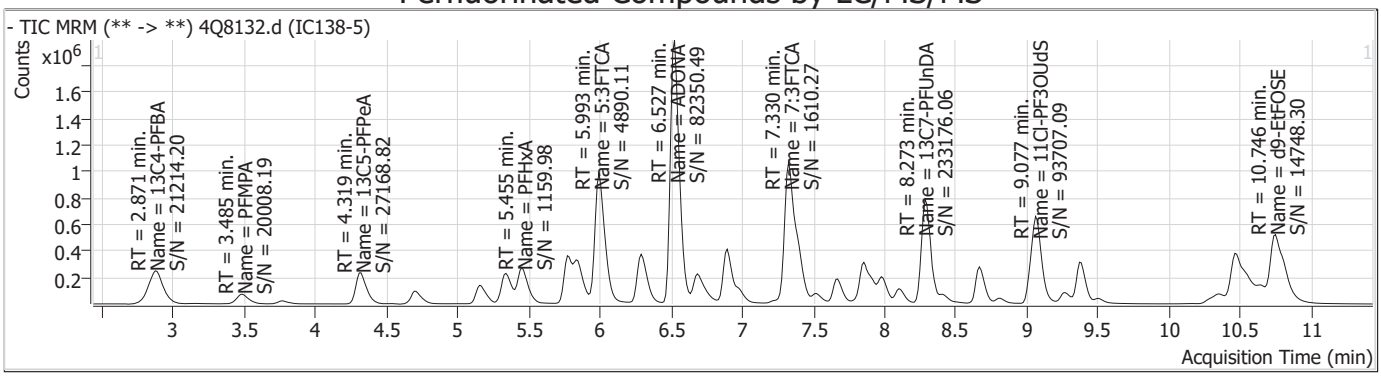
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	109204	4.83	µg/L		97
		599.0 -> 99.0	59672				
PFHpA	6.292	363.0 -> 319.0	1021772	4.92	µg/L		100
		363.0 -> 169.0	211195				
PFHpS	7.529	449.0 -> 80.0	171578	5.08	µg/L		96
		449.0 -> 99.0	89650				
PFHxA	5.455	313.0 -> 269.0	679898	5.00	µg/L		100
		313.0 -> 119.0	21412				
PFHxS	6.987	399.0 -> 80.0	160260	4.72	µg/L	m	97
		399.0 -> 99.0	82249				
PFNA	7.404	463.0 -> 419.0	620292	4.96	µg/L	m	96
		463.0 -> 219.0	218775				
PFNS	8.425	549.0 -> 80.0	147343	5.02	µg/L		99
		549.0 -> 99.0	87212				
PFOA	6.898	413.0 -> 369.0	819448	4.89	µg/L	m	99
		413.0 -> 169.0	243616				
PFOS	7.996	499.0 -> 80.0	161047	4.58	µg/L	m	97
		499.0 -> 99.0	86644				
PFPeA	4.321	263.0 -> 219.0	773175	10.04	µg/L		100
PFPeS	6.331	349.0 -> 80.0	166546	4.70	µg/L		98
		349.0 -> 99.0	82135				
PFTeDA	9.381	713.0 -> 669.0	1027061	5.07	µg/L		99
		713.0 -> 219.0	79000				
PFTrDA	9.038	663.0 -> 619.0	1003353	5.05	µg/L		99
		663.0 -> 369.0	63941				
PFUnDA	8.275	563.0 -> 519.0	766861	5.13	µg/L		99
		563.0 -> 269.0	156363				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	1778194	18.92	µg/L		99
		633.0 -> 453.0	544175				
9Cl-PF3ONS	8.301	531.0 -> 351.0	1978285	19.13	µg/L		100
		533.0 -> 353.0	601743				
ADONA	6.527	377.0 -> 251.0	6885615	17.76	µg/L		99
		377.0 -> 85.0	2228028				
HFPO-DA	5.792	285.0 -> 169.0	1053073	20.28	µg/L		100
		285.0 -> 185.0	117748				
3:3FTCA	3.769	241.0 -> 177.0	113935	24.77	µg/L		99
		241.0 -> 117.0	8954				
5:3FTCA	5.993	341.0 -> 237.0	2868411	116.87	µg/L		99
		341.0 -> 217.0	2027769				
7:3FTCA	7.330	441.0 -> 337.0	3722430	118.93	µg/L		99
		441.0 -> 317.0	1648889				
EtFOSA	10.826	526.0 -> 219.0	200360	4.78	µg/L		99
		526.0 -> 169.0	287841				
EtFOSE	10.760	630.0 -> 59.0	2595761	49.05	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	250761	5.05	µg/L		99
		512.0 -> 219.0	163311				
MeFOSE	10.476	616.0 -> 59.0	2013513	49.65	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	90135	4.72	µg/L		100
		699.0 -> 99.0	56374				
NFDHA	5.345	295.0 -> 201.0	178922	10.01	µg/L		98
		201.0 -> 85.0	721744				
		295.0 -> 85.0	47842				
PFMBA	4.710	279.0 -> 85.0	512572	9.76	µg/L		100
PFMPA	3.485	229.0 -> 85.0	442360	10.02	µg/L		100
PFEESA	5.849	315.0 -> 135.0	1131982	9.06	µg/L		99
		315.0 -> 69.0	91475				

Perfluorinated Compounds by LC/MS/MS

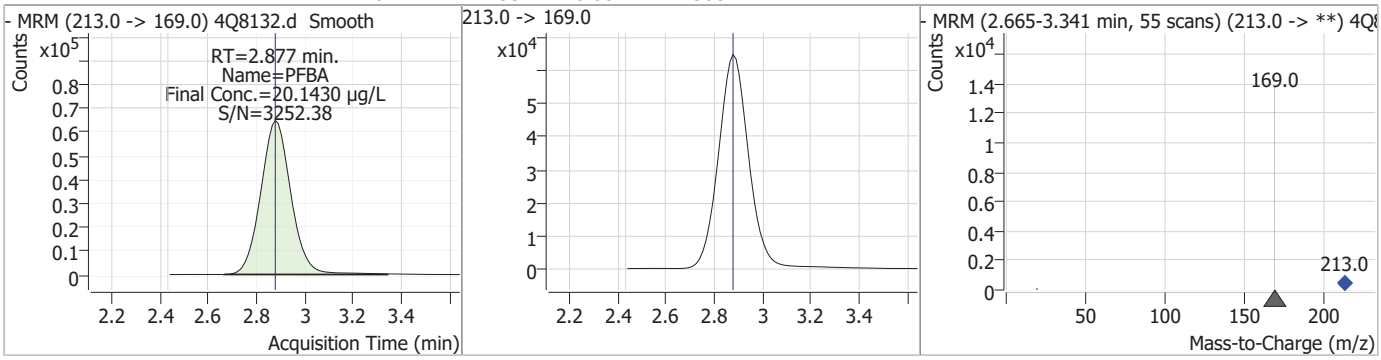
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

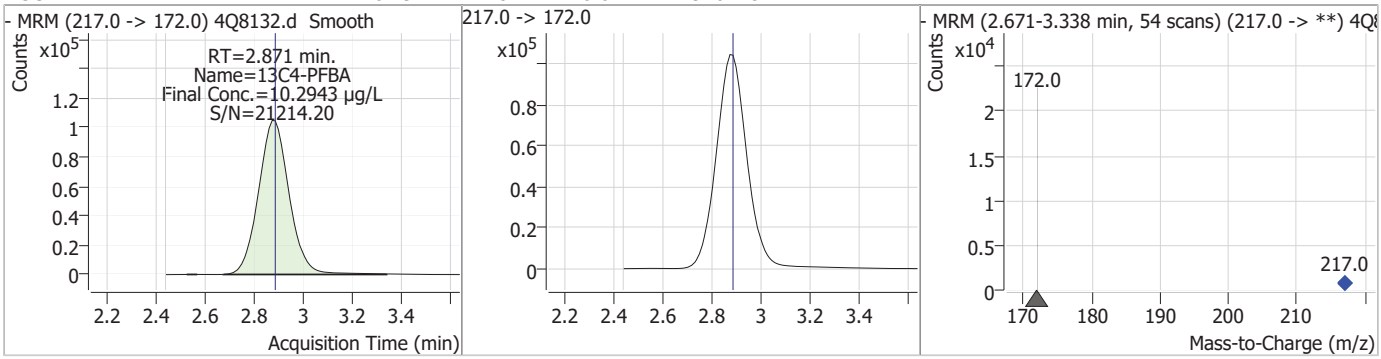
Perfluorinated Compounds by LC/MS/MS



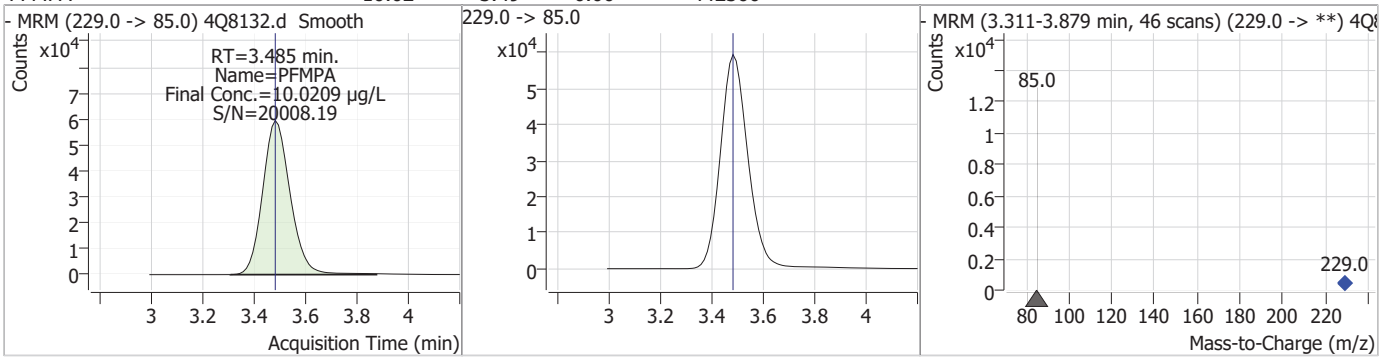
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	20.14	2.88	0.00	560427				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.29	2.87	-0.01	910128				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	10.02	3.49	0.00	442360				



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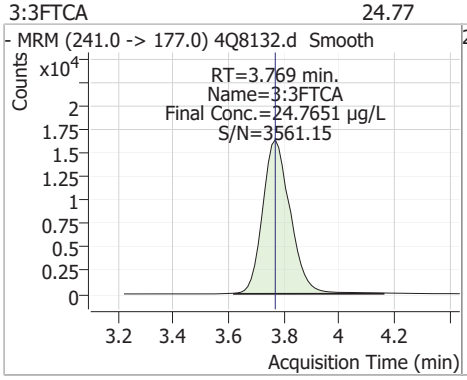
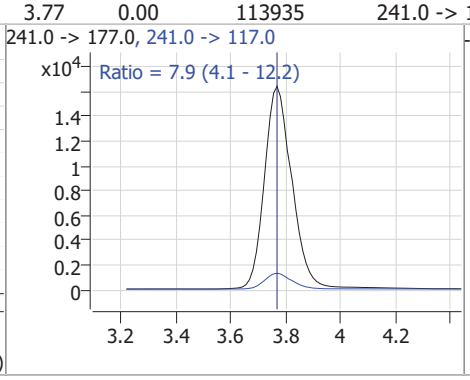
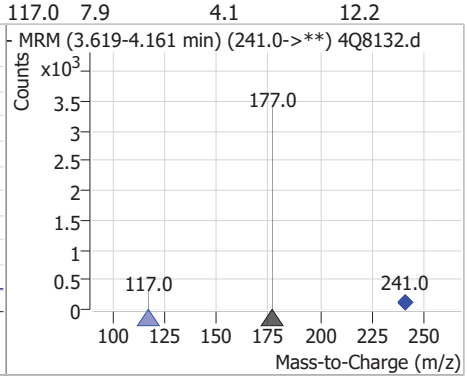
Perfluorinated Compounds by LC/MS/MS

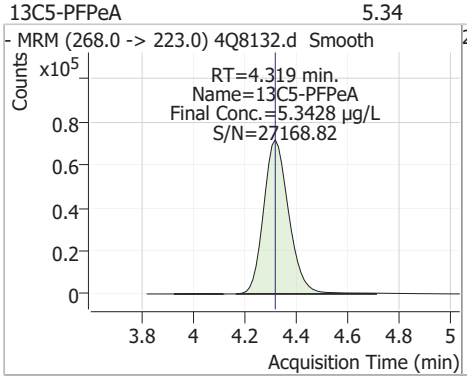
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	24.77	3.77	0.00	113935	241.0 -> 117.0	7.9	4.1	12.2

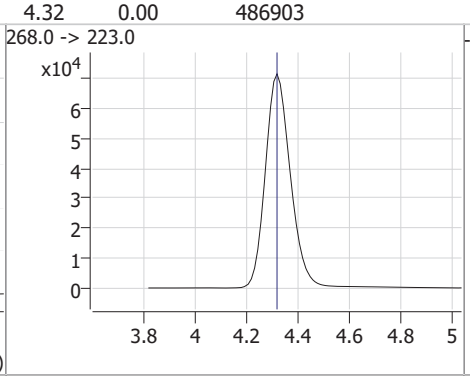


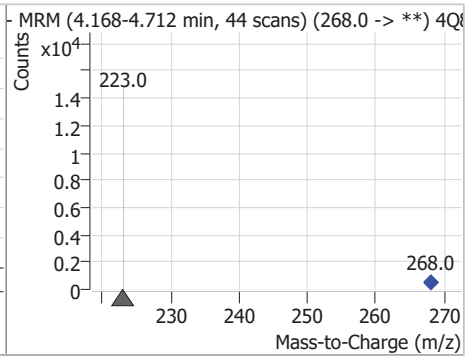




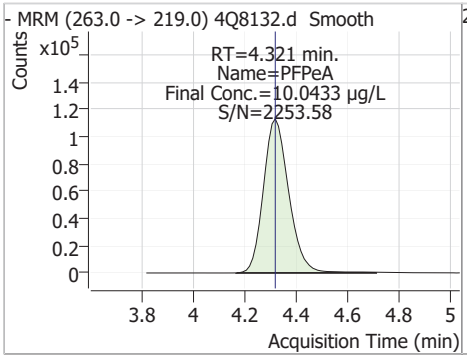
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.34	4.32	0.00	486903				

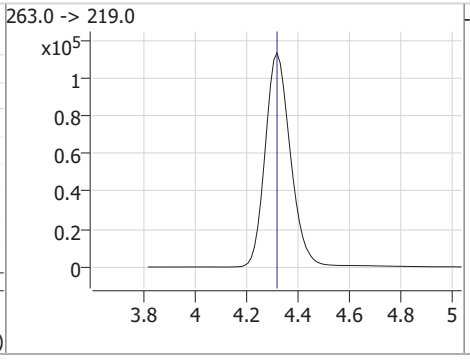


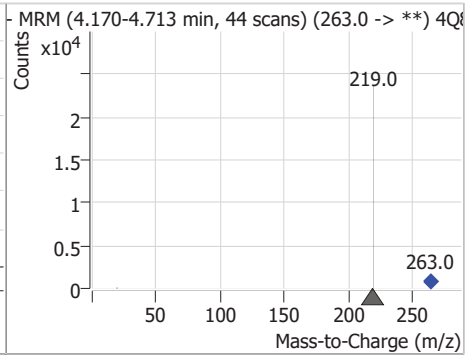




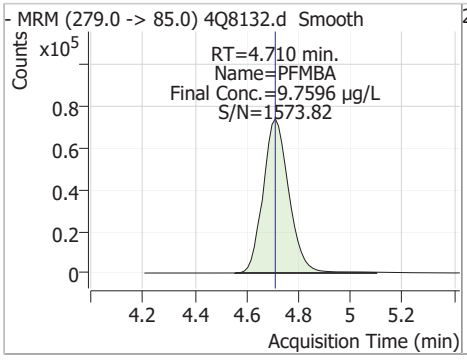
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	10.04	4.32	0.00	773175				

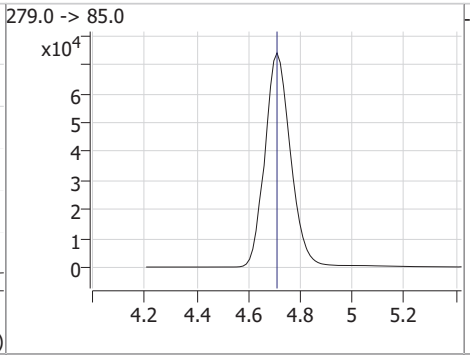


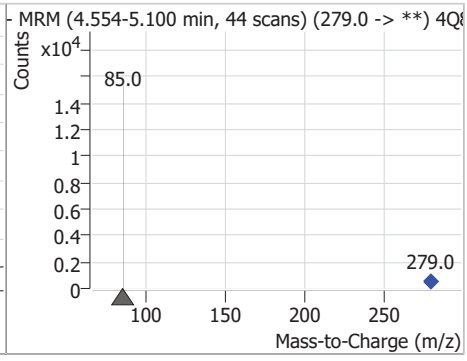




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	9.76	4.71	0.00	512572				







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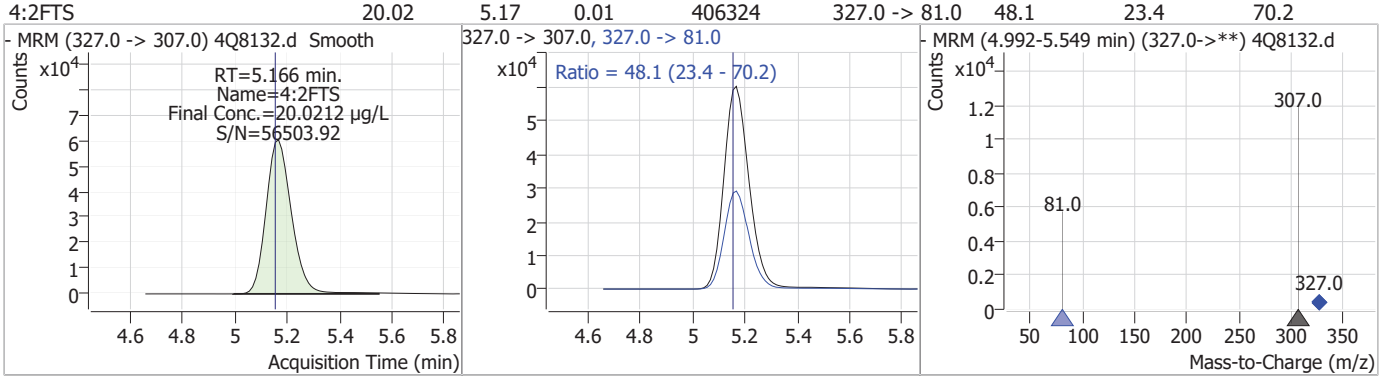
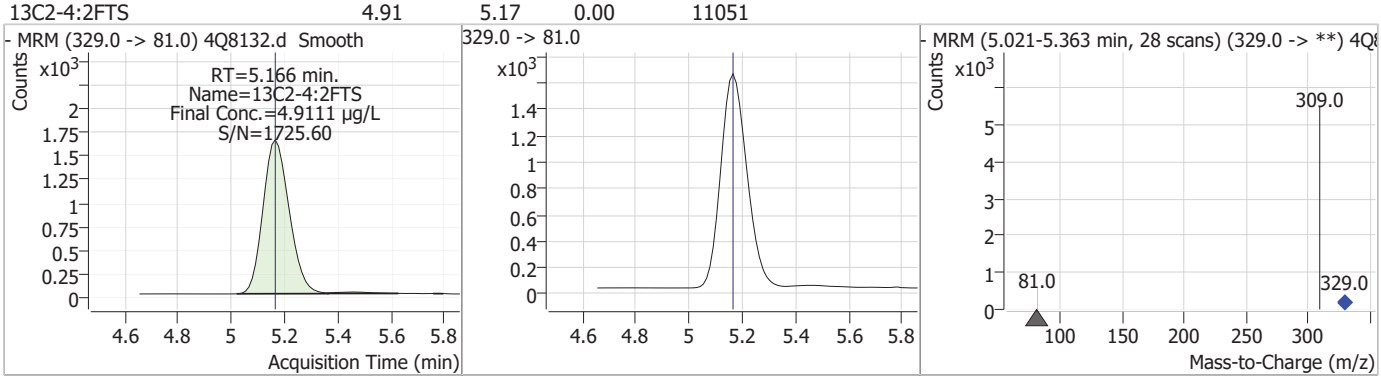
Perfluorinated Compounds by LC/MS/MS

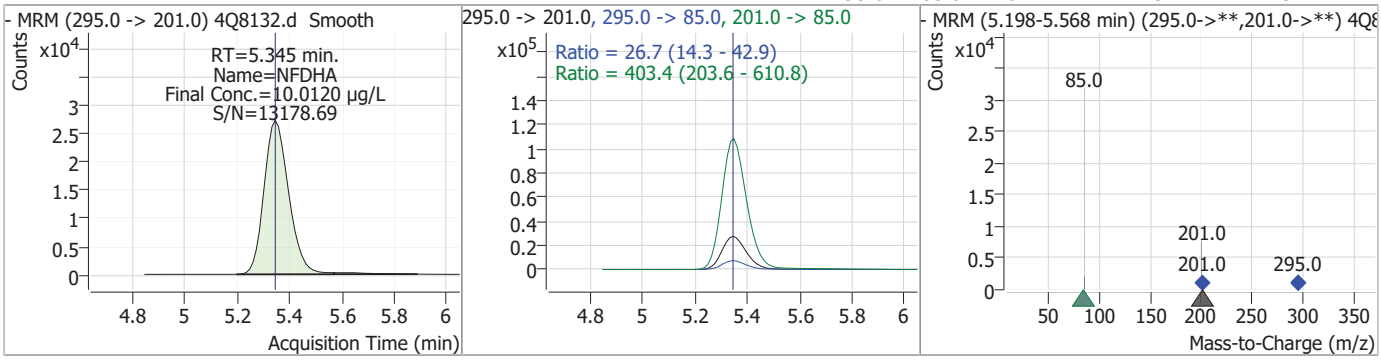
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	20.02	5.17	0.01	406324	327.0 -> 81.0	48.1	23.4	70.2



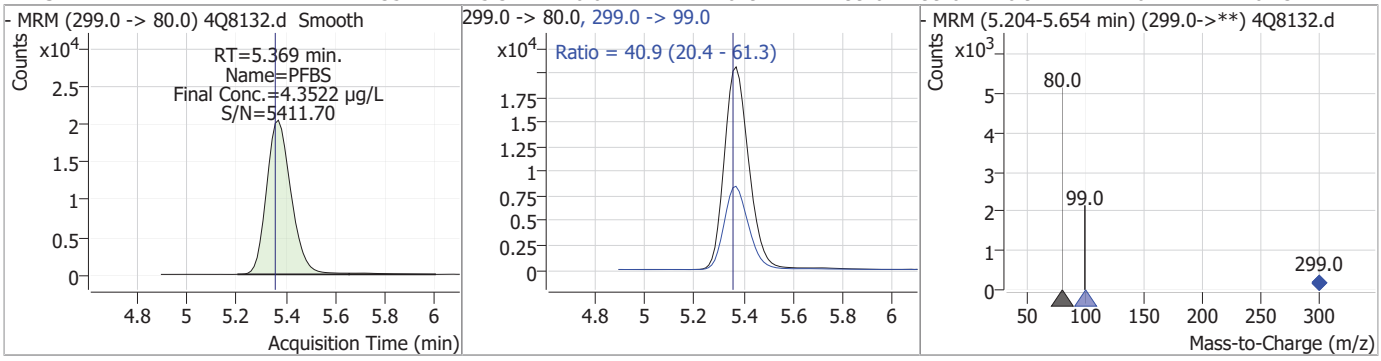
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.91	5.17	0.00	11051				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	10.01	5.35	0.00	178922	201.0 -> 85.0	403.4	203.6	610.8
					295.0 -> 85.0	26.7	14.3	42.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.35	5.37	0.01	141049	299.0 -> 99.0	40.9	20.4	61.3



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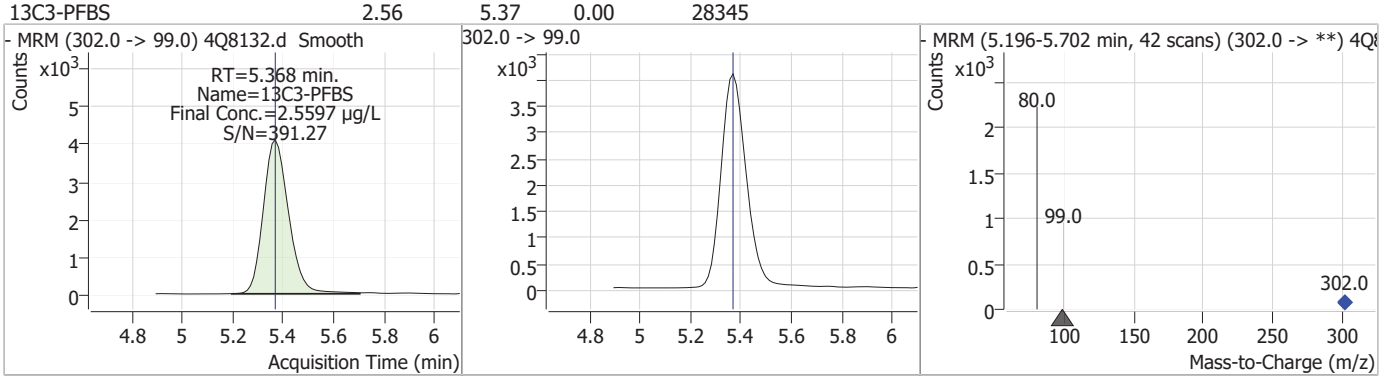
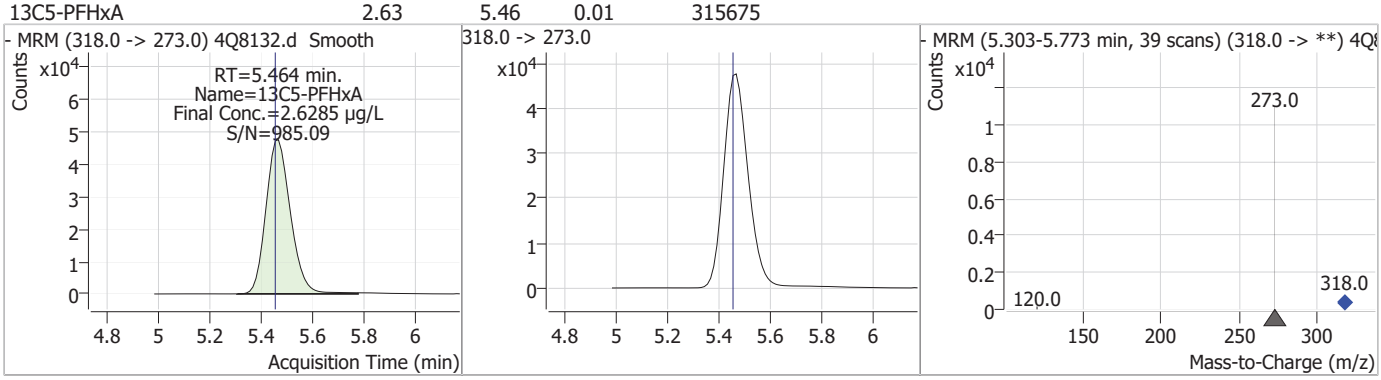
Perfluorinated Compounds by LC/MS/MS

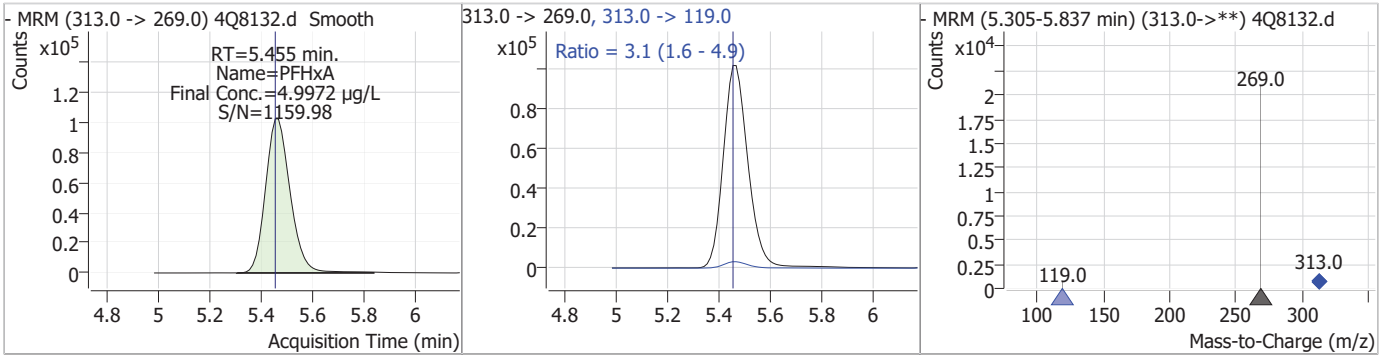
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.56	5.37	0.00	28345				



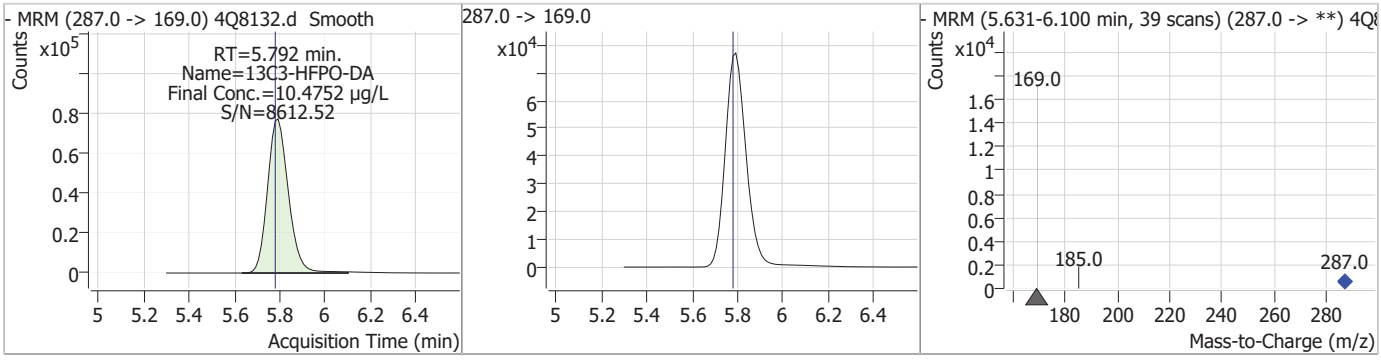
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.63	5.46	0.01	315675				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	5.00	5.45	0.00	679898	313.0 -> 119.0	3.1	1.6	4.9

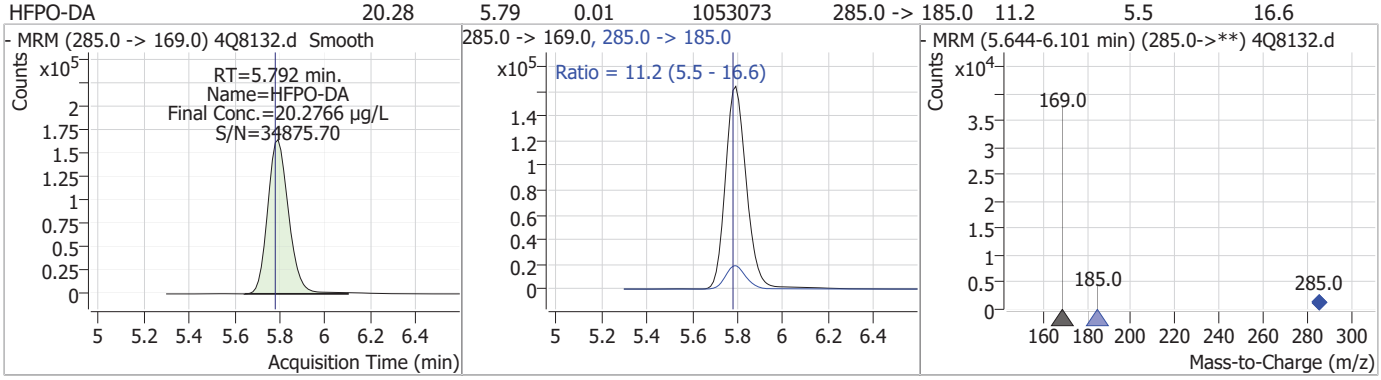


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.48	5.79	0.01	494028				

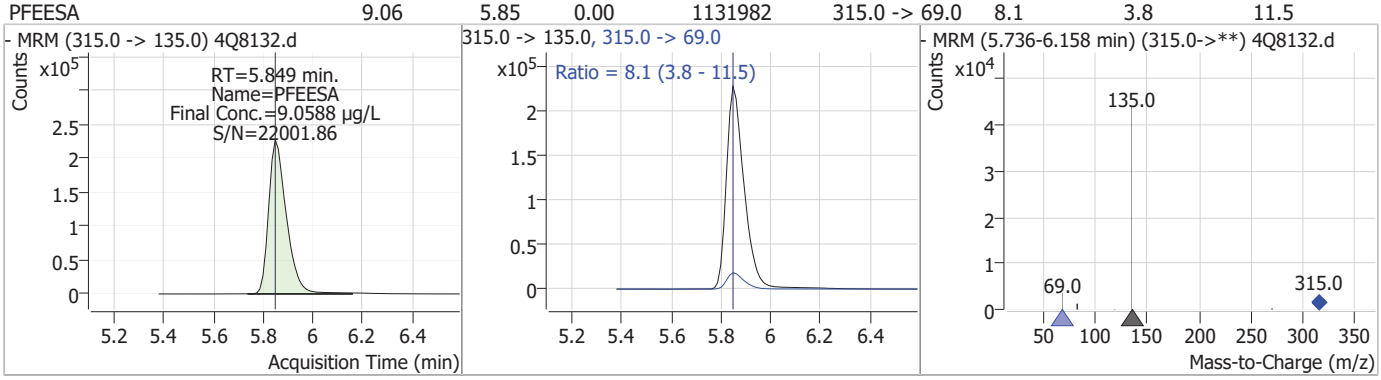


Perfluorinated Compounds by LC/MS/MS

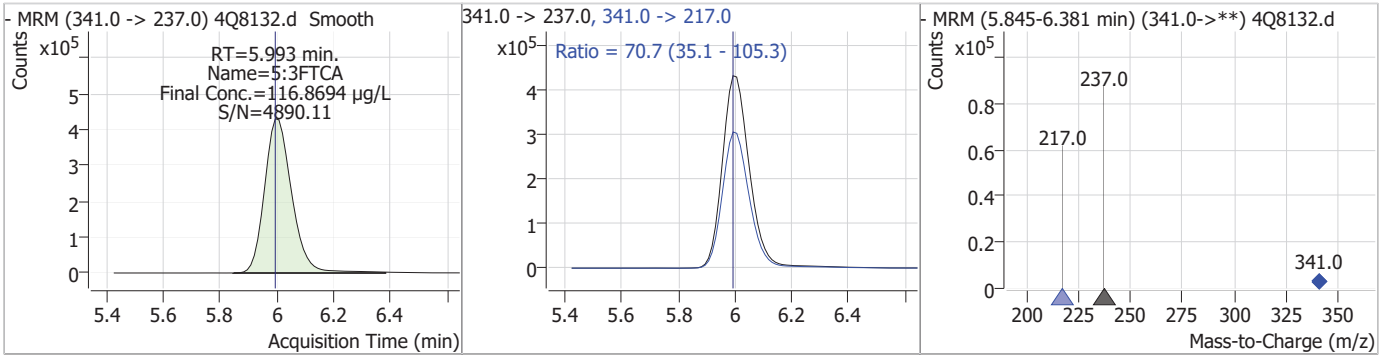
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	20.28	5.79	0.01	1053073	285.0 -> 185.0	11.2	5.5	16.6



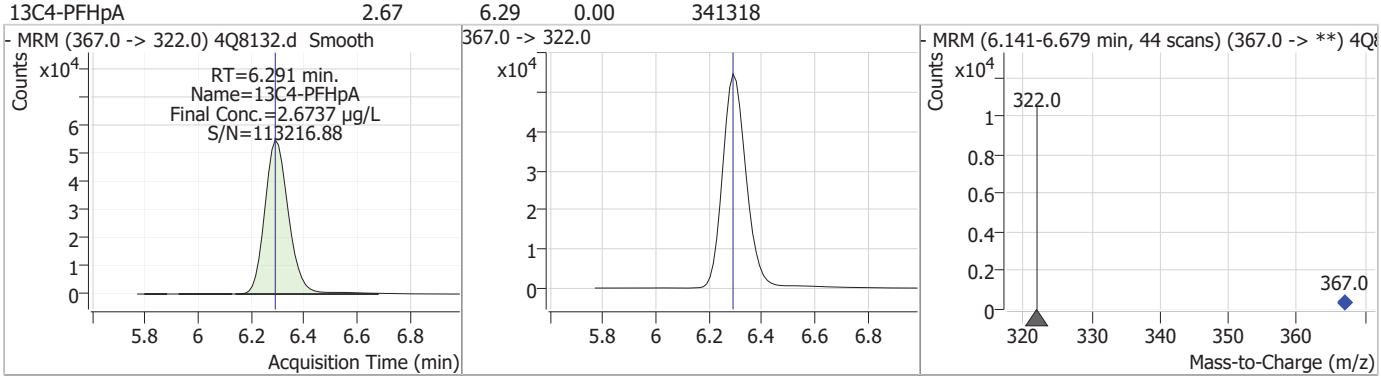
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	9.06	5.85	0.00	1131982	315.0 -> 69.0	8.1	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	116.87	5.99	0.00	2868411	341.0 -> 217.0	70.7	35.1	105.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.67	6.29	0.00	341318				



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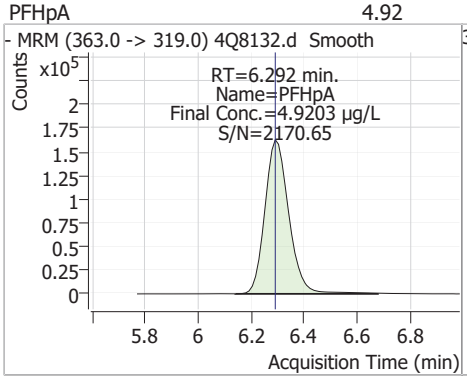
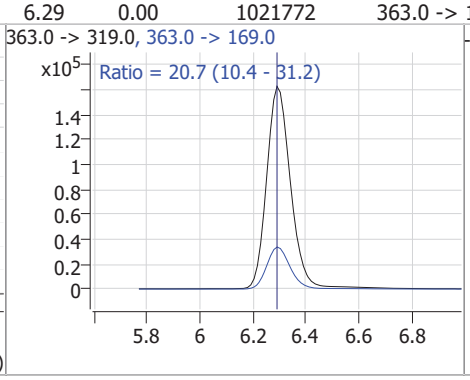
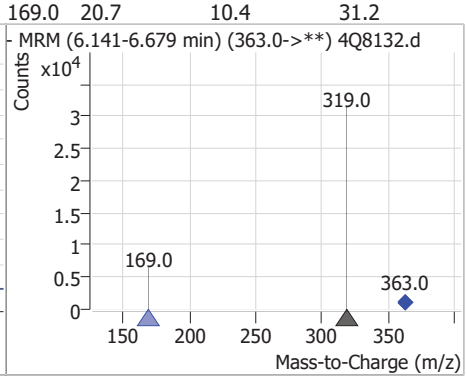
Perfluorinated Compounds by LC/MS/MS

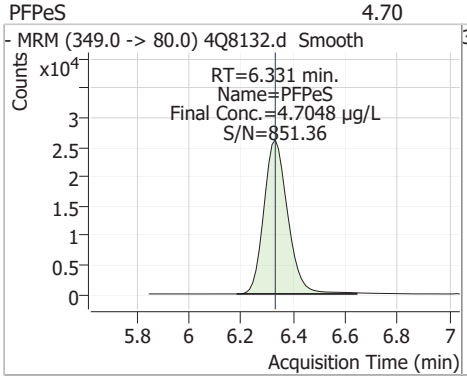
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	4.92	6.29	0.00	1021772	363.0 -> 169.0	20.7	10.4	31.2

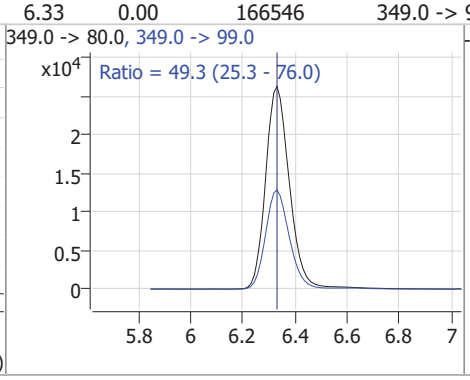


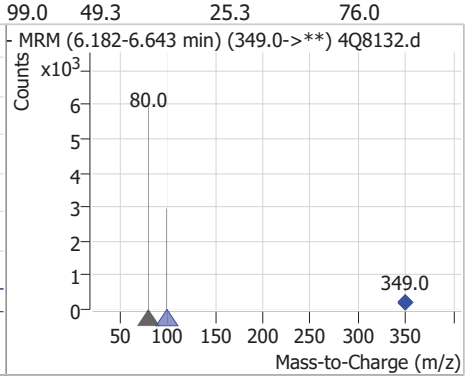




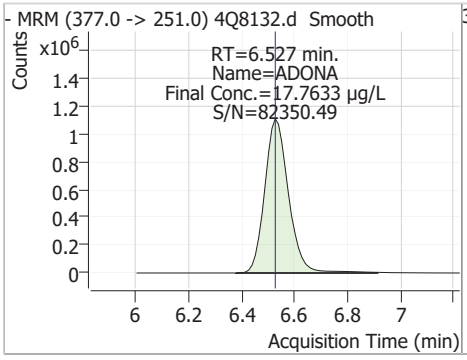
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	4.70	6.33	0.00	166546	349.0 -> 99.0	49.3	25.3	76.0

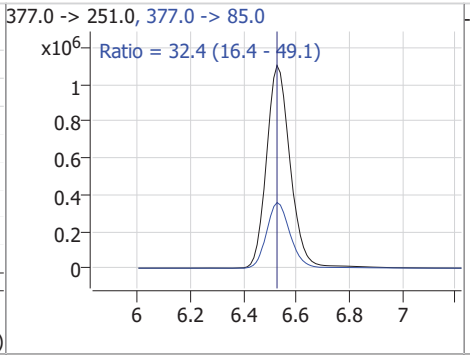


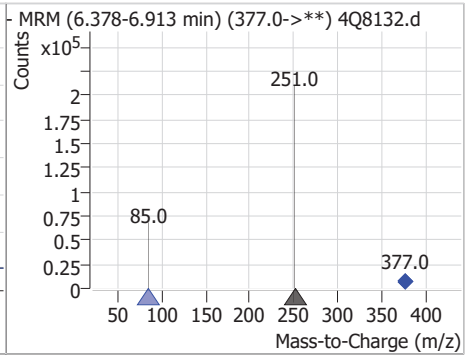




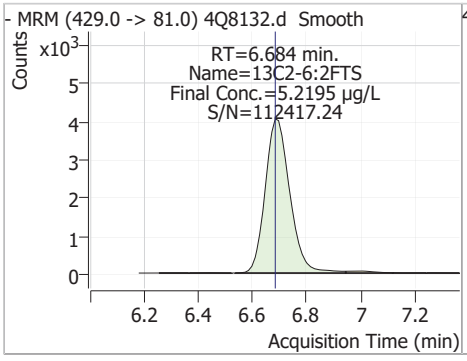
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	17.76	6.53	0.00	6885615	377.0 -> 85.0	32.4	16.4	49.1

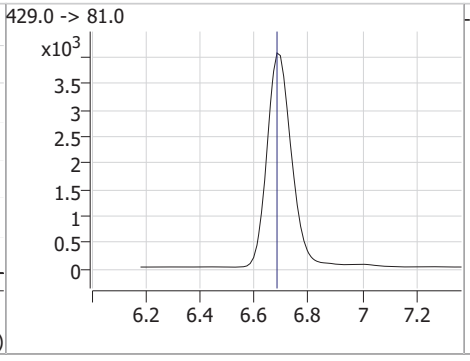


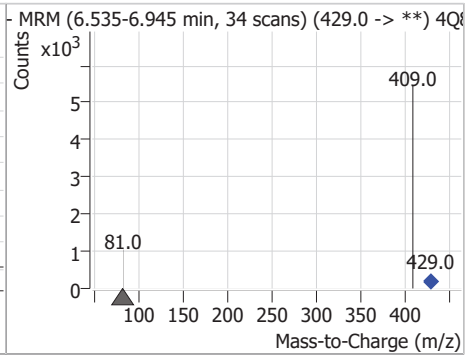




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.22	6.68	0.00	25485				







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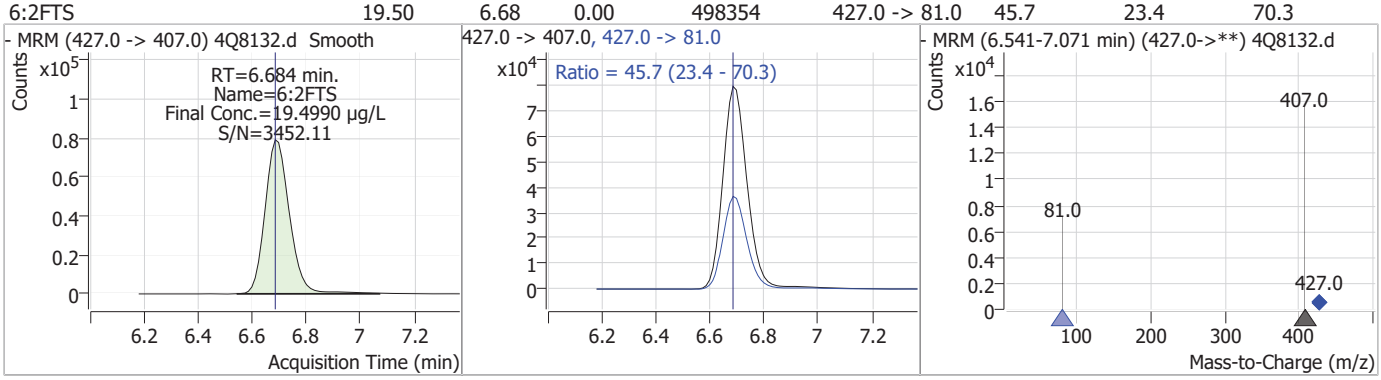
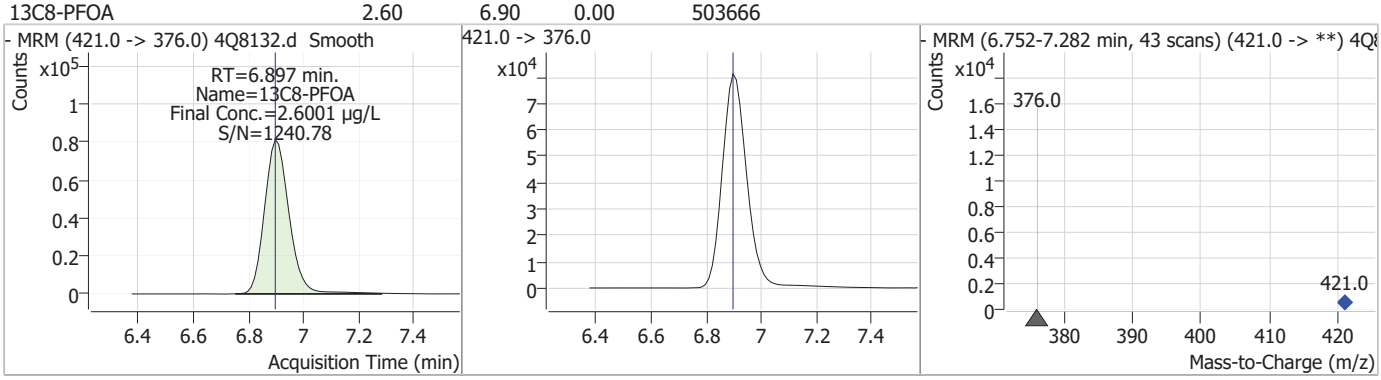
Perfluorinated Compounds by LC/MS/MS

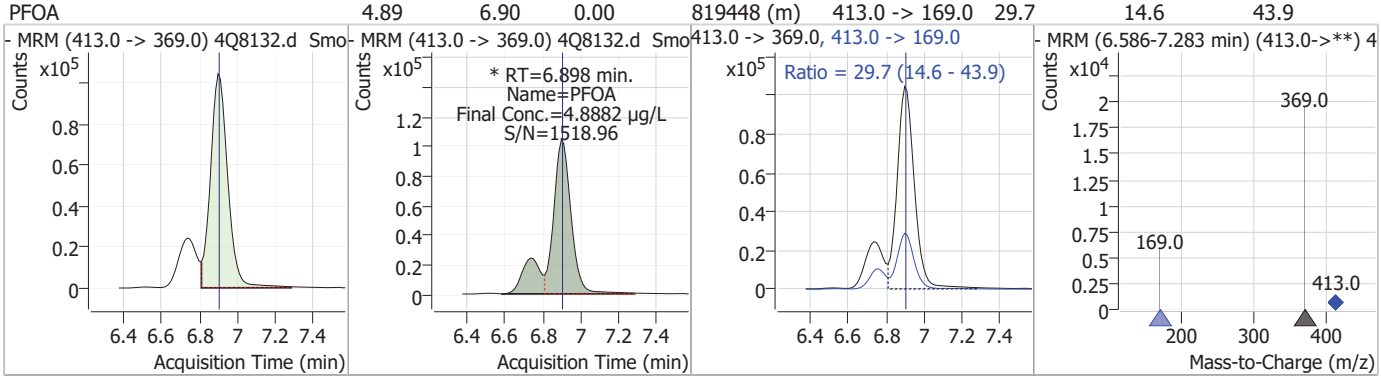
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	19.50	6.68	0.00	498354	427.0 -> 81.0	45.7	23.4	70.3



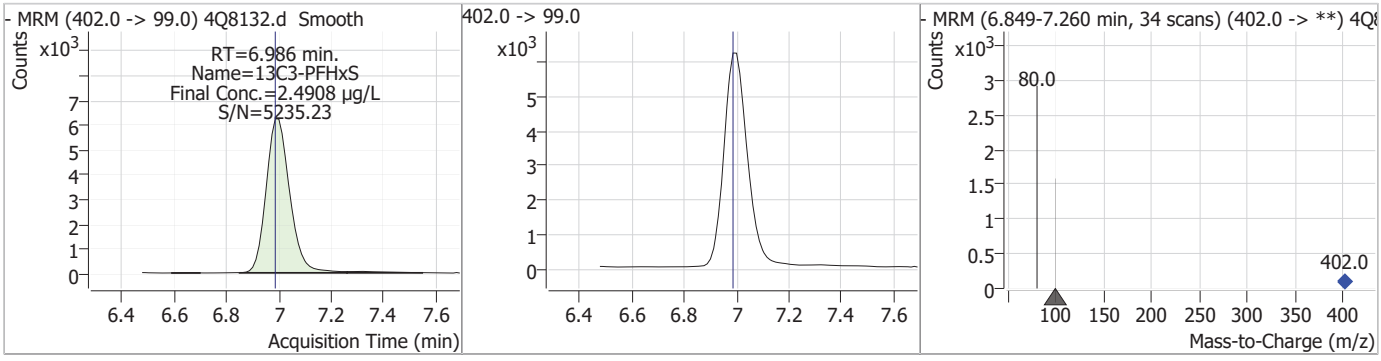
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.60	6.90	0.00	503666				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	4.89	6.90	0.00	819448 (m)	413.0 -> 169.0	29.7	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.49	6.99	0.00	39026				



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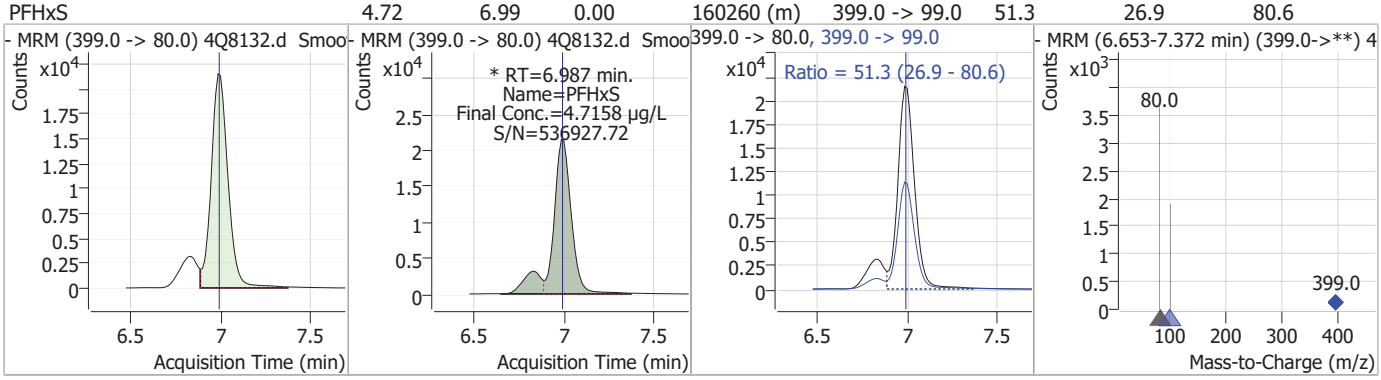
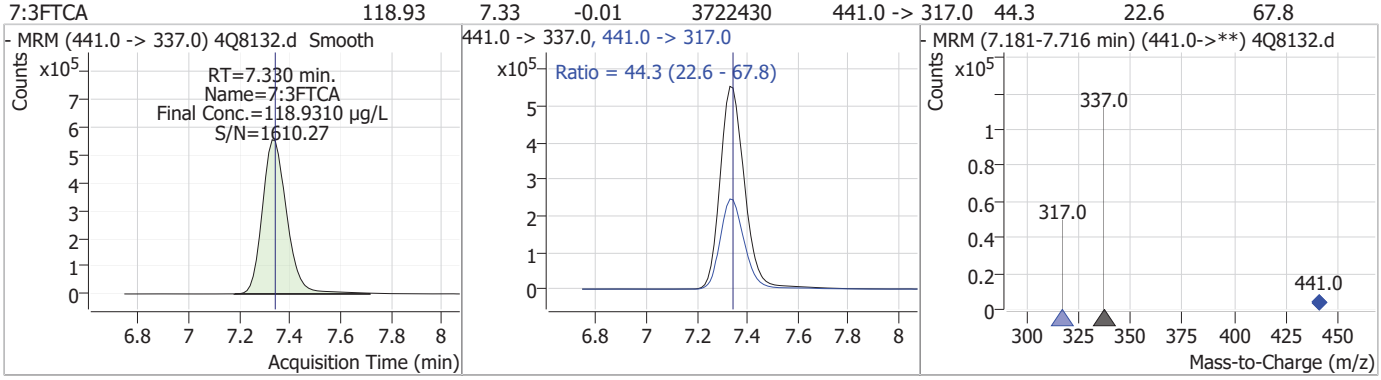
Perfluorinated Compounds by LC/MS/MS

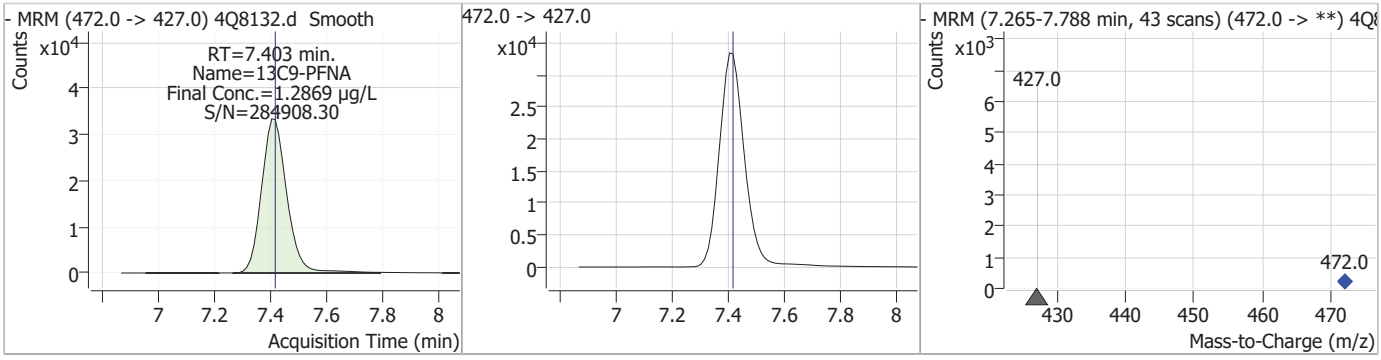
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	4.72	6.99	0.00	160260 (m)	399.0 -> 99.0	51.3	26.9	80.6



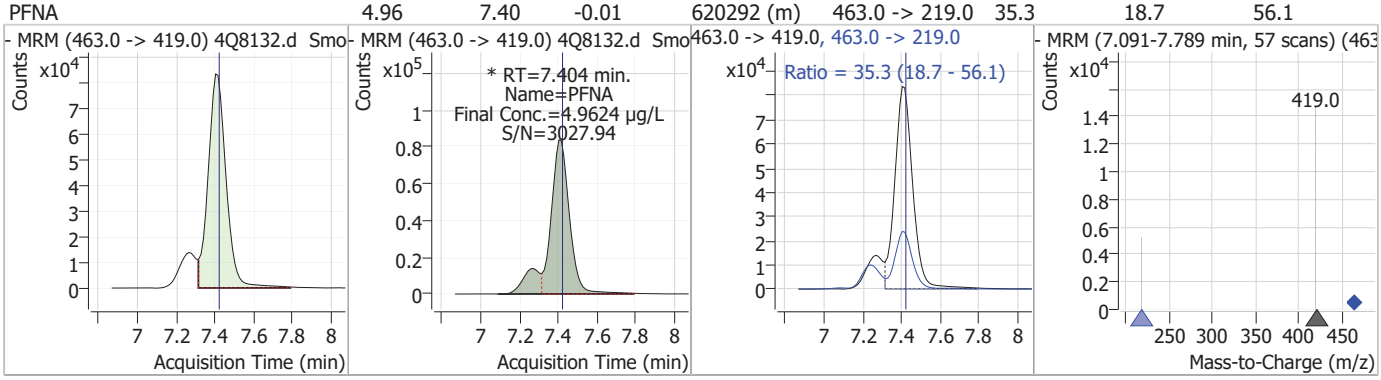
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	118.93	7.33	-0.01	3722430	441.0 -> 317.0	44.3	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.29	7.40	-0.01	207816				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	4.96	7.40	-0.01	620292 (m)	463.0 -> 219.0	35.3	18.7	56.1



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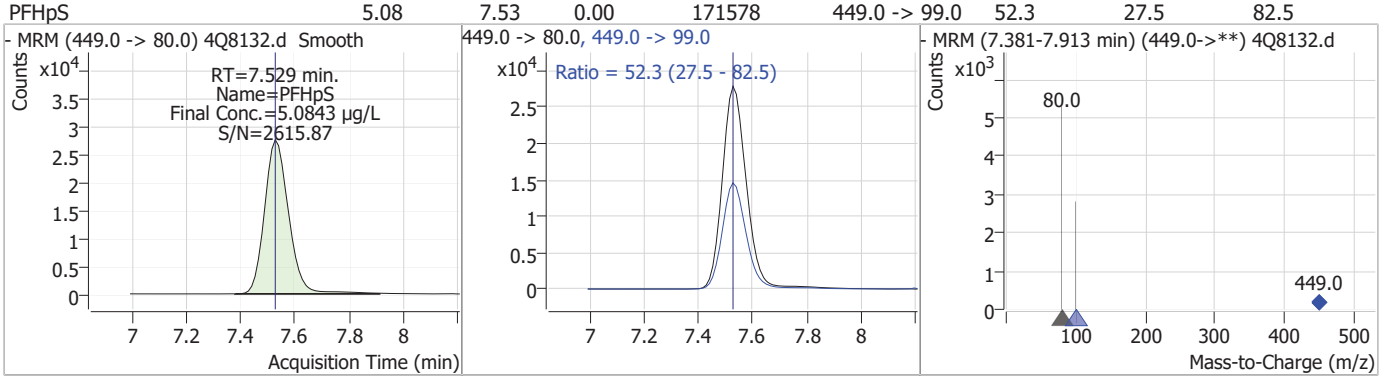
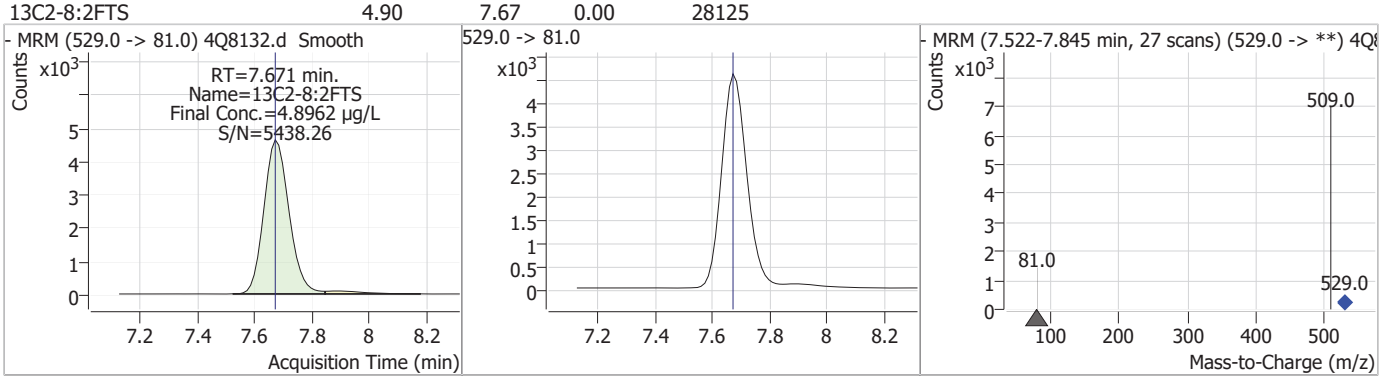
Perfluorinated Compounds by LC/MS/MS

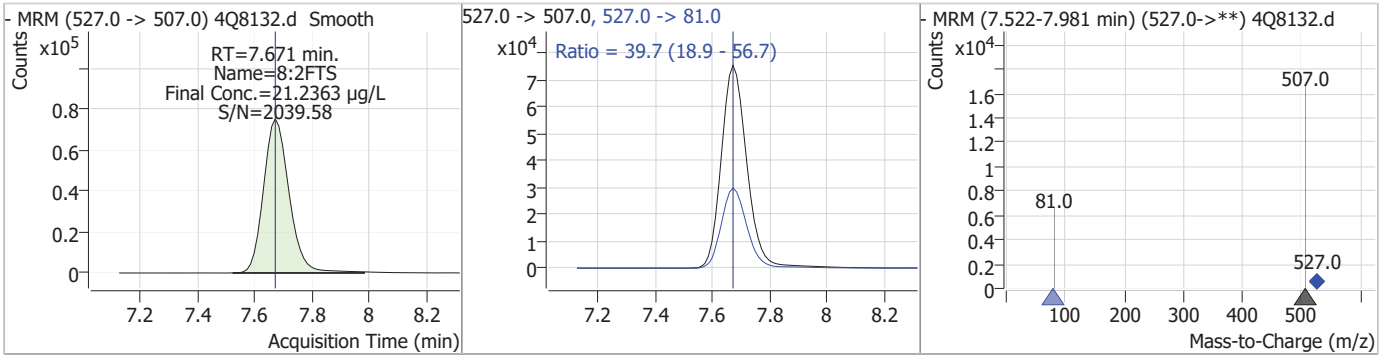
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	5.08	7.53	0.00	171578	449.0 -> 99.0	52.3	27.5	82.5



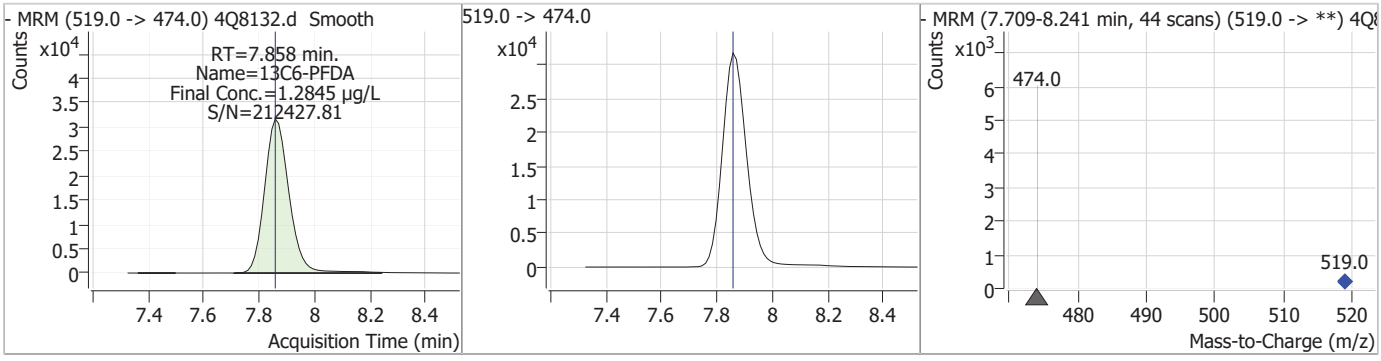
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.90	7.67	0.00	28125				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	21.24	7.67	0.00	467429	527.0 -> 81.0	39.7	18.9	56.7

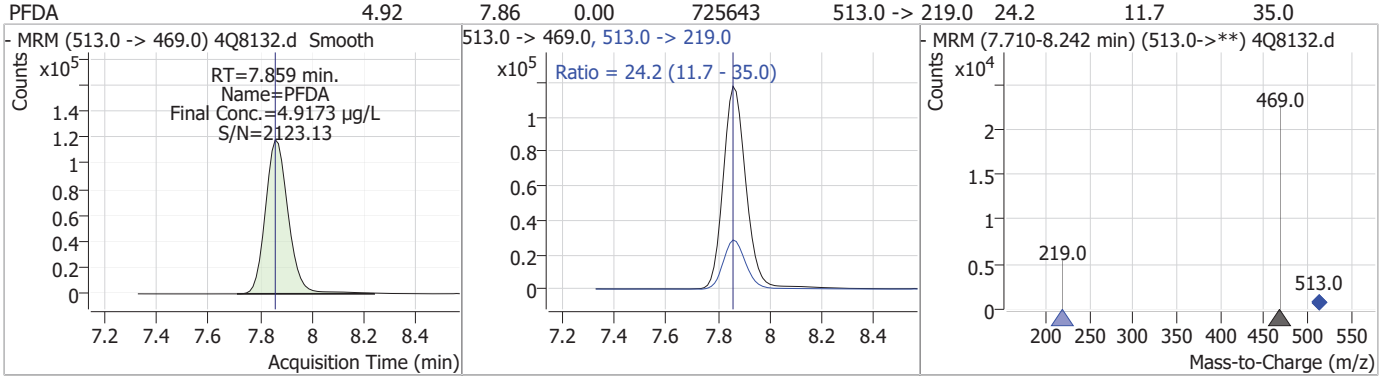


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.28	7.86	0.00	194153				

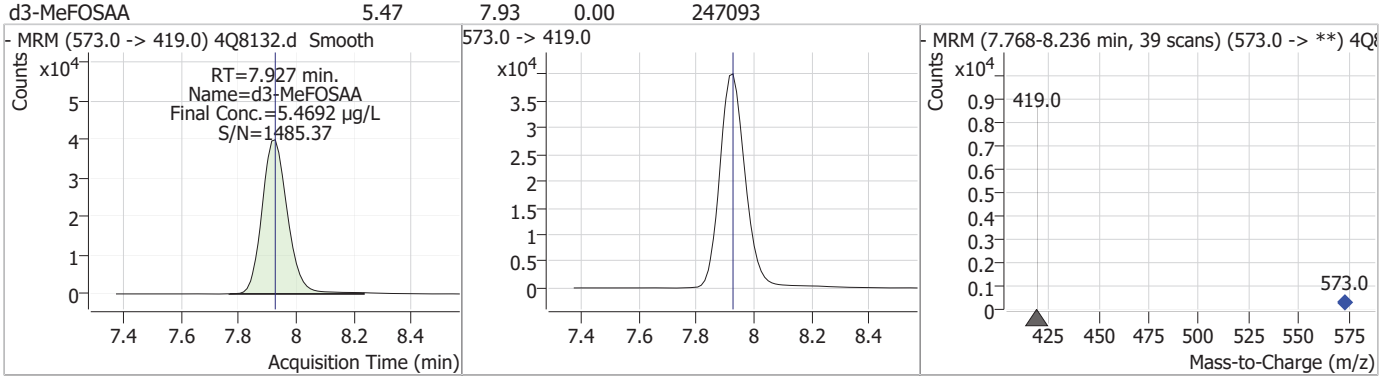


Perfluorinated Compounds by LC/MS/MS

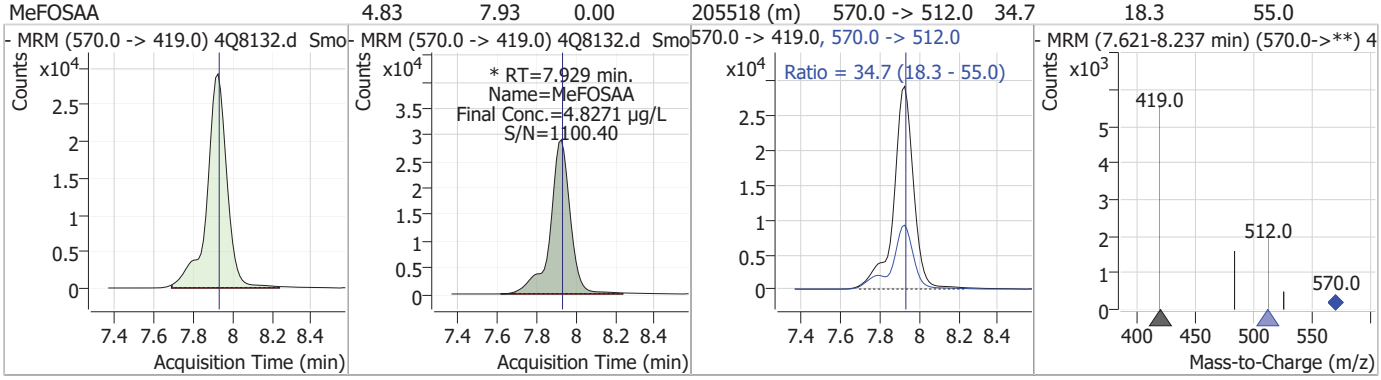
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	4.92	7.86	0.00	725643	513.0 -> 219.0	24.2	11.7	35.0



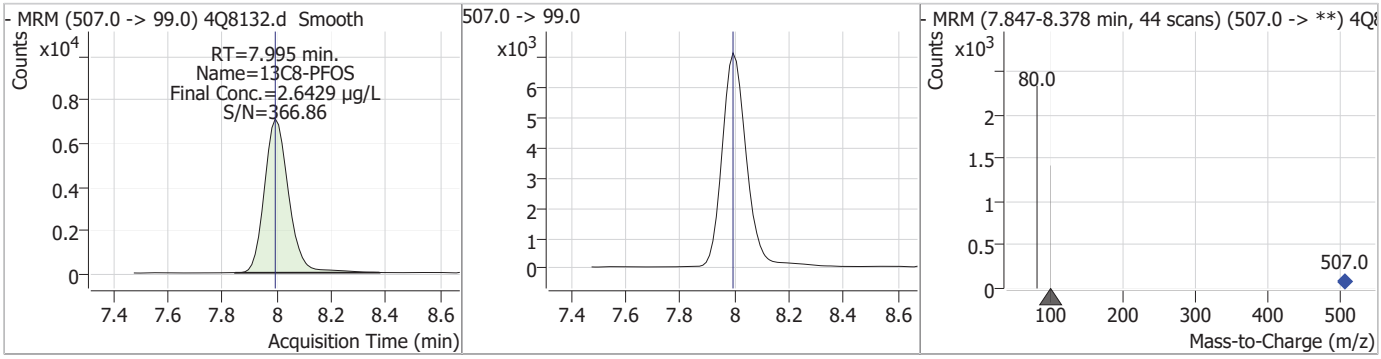
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.47	7.93	0.00	247093				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	4.83	7.93	0.00	205518 (m)	570.0 -> 512.0	34.7	18.3	55.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.64	7.99	0.00	43654				



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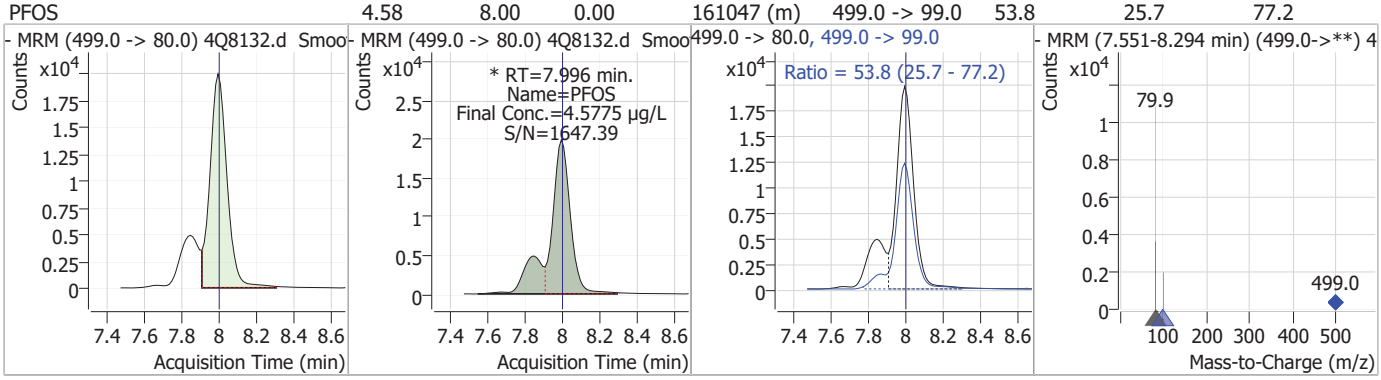
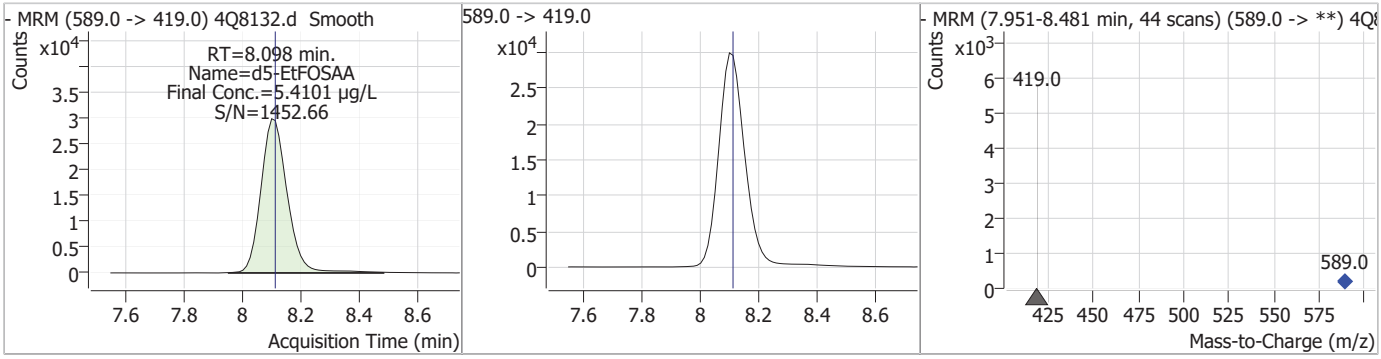
Perfluorinated Compounds by LC/MS/MS

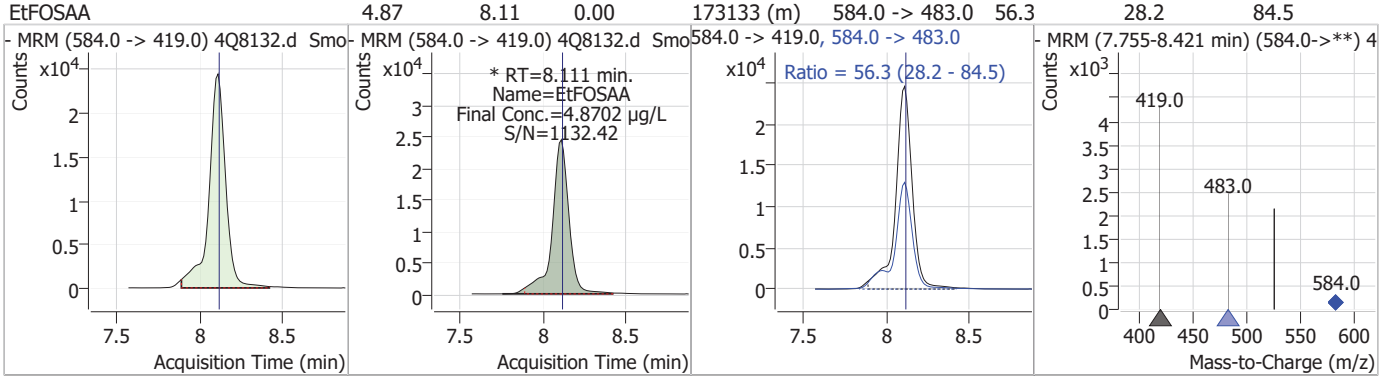
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.58	8.00	0.00	161047 (m)	499.0 -> 99.0	53.8	25.7	77.2



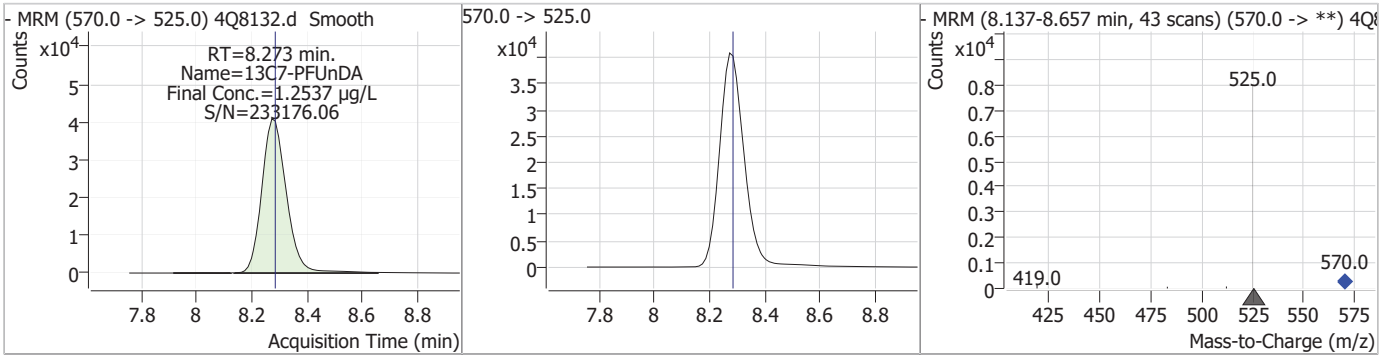
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.41	8.10	-0.01	187656				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	4.87	8.11	0.00	173133 (m)	584.0 -> 483.0	56.3	28.2	84.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.25	8.27	-0.01	253112				



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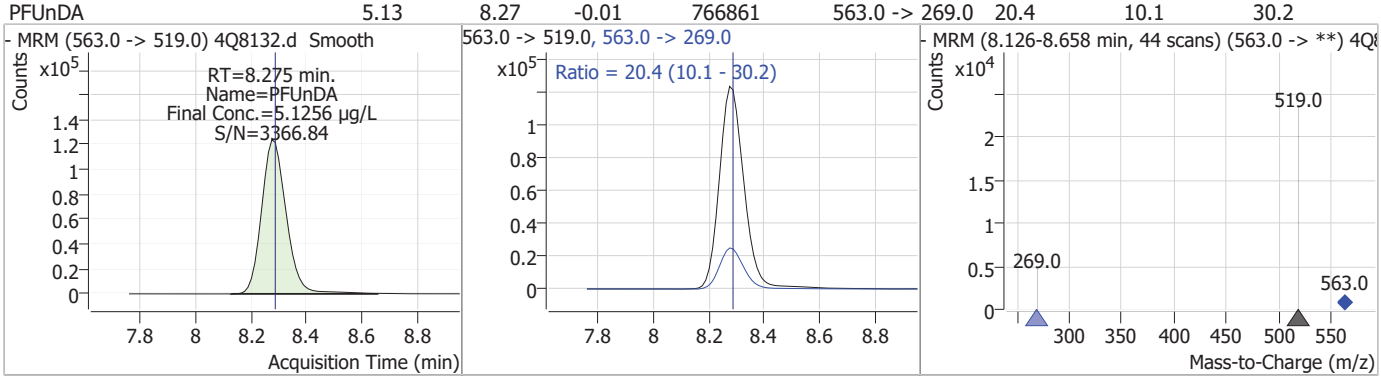
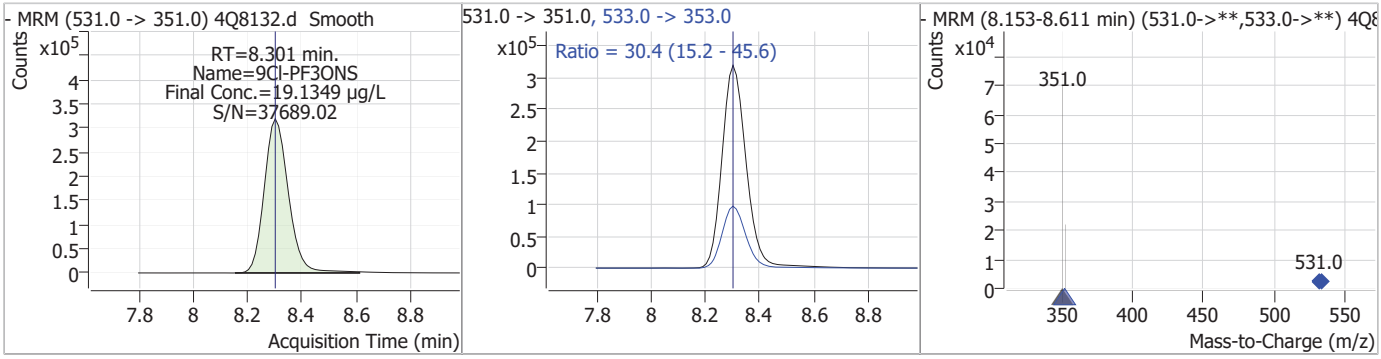
Perfluorinated Compounds by LC/MS/MS

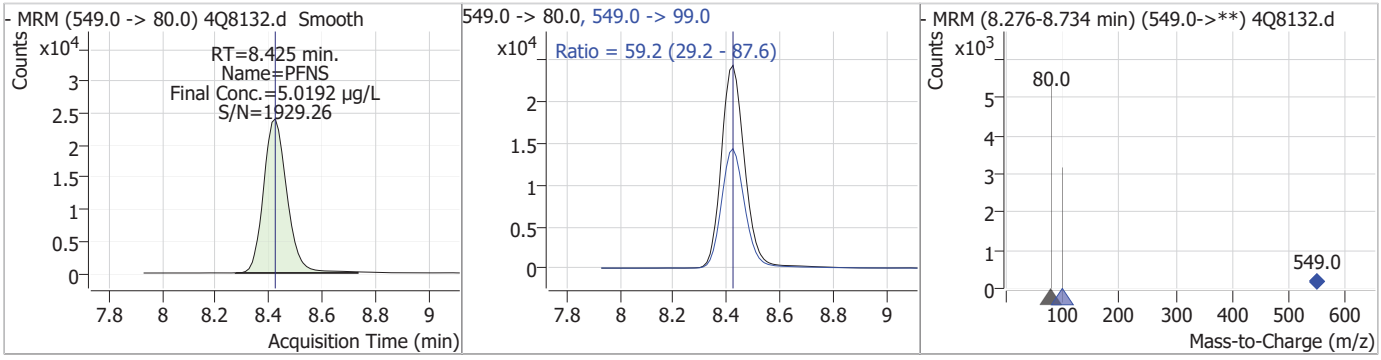
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	5.13	8.27	-0.01	766861	563.0 -> 269.0	20.4	10.1	30.2



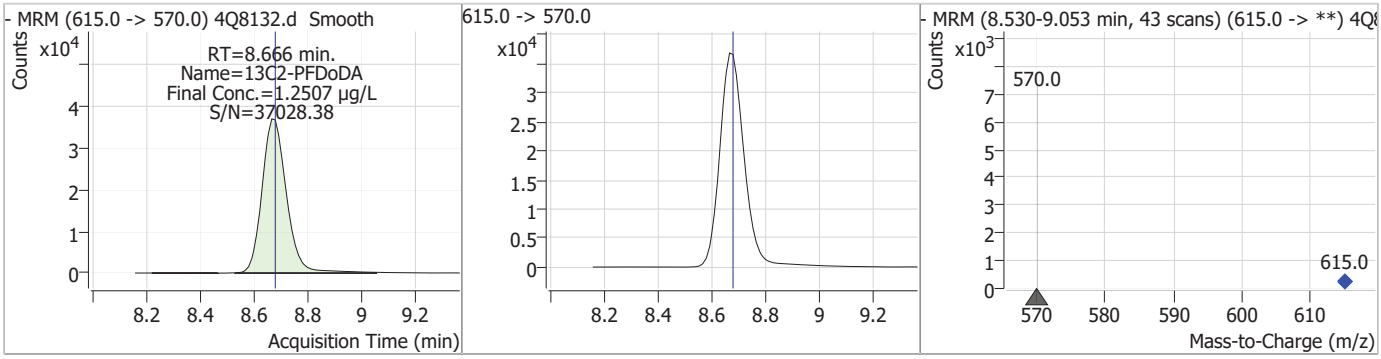
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	19.13	8.30	0.00	1978285	533.0 -> 353.0	30.4	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	5.02	8.42	0.00	147343	549.0 -> 99.0	59.2	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.25	8.67	-0.01	231279				



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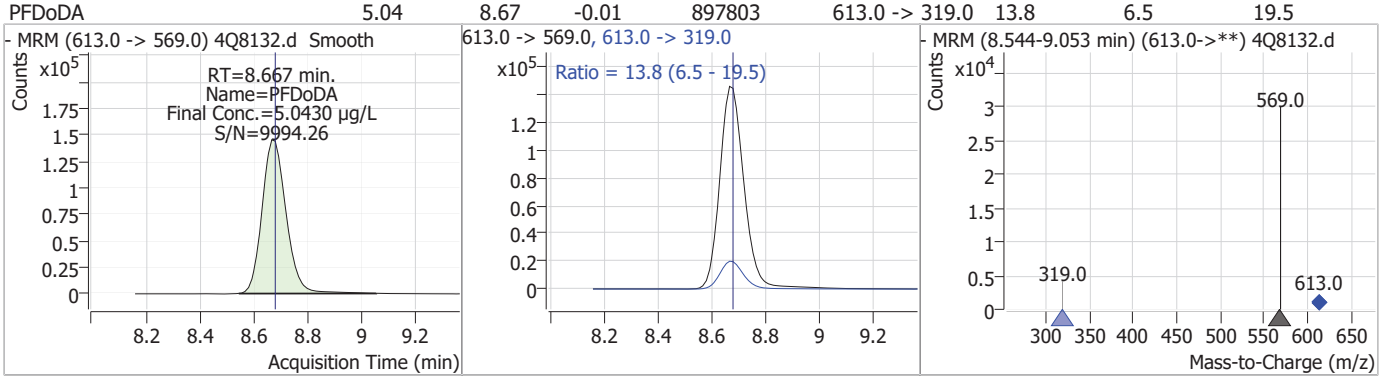
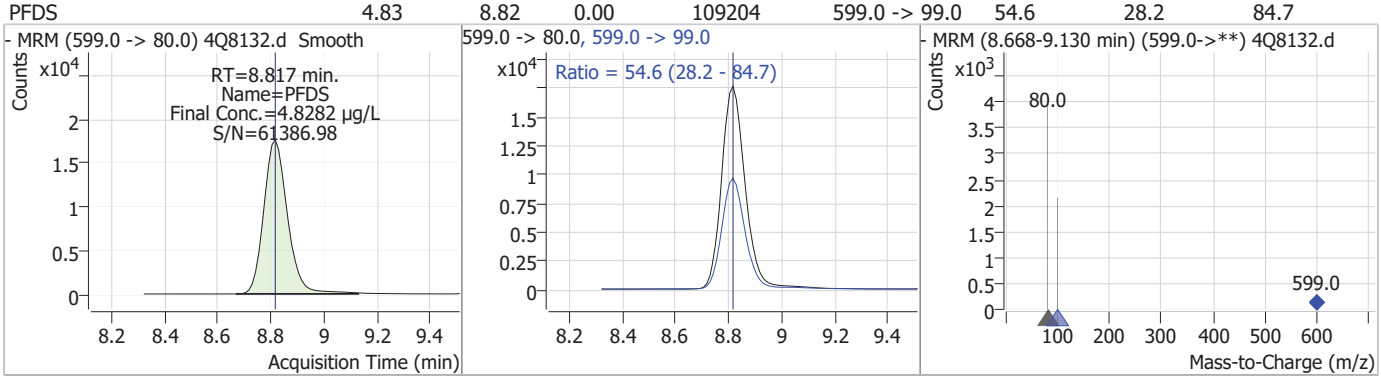
Perfluorinated Compounds by LC/MS/MS

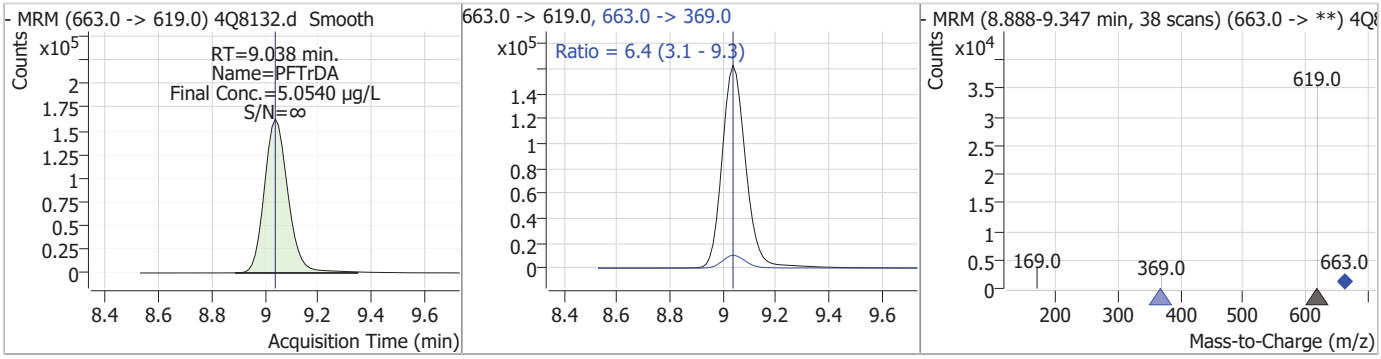
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	5.04	8.67	-0.01	897803	613.0 -> 319.0	13.8	6.5	19.5



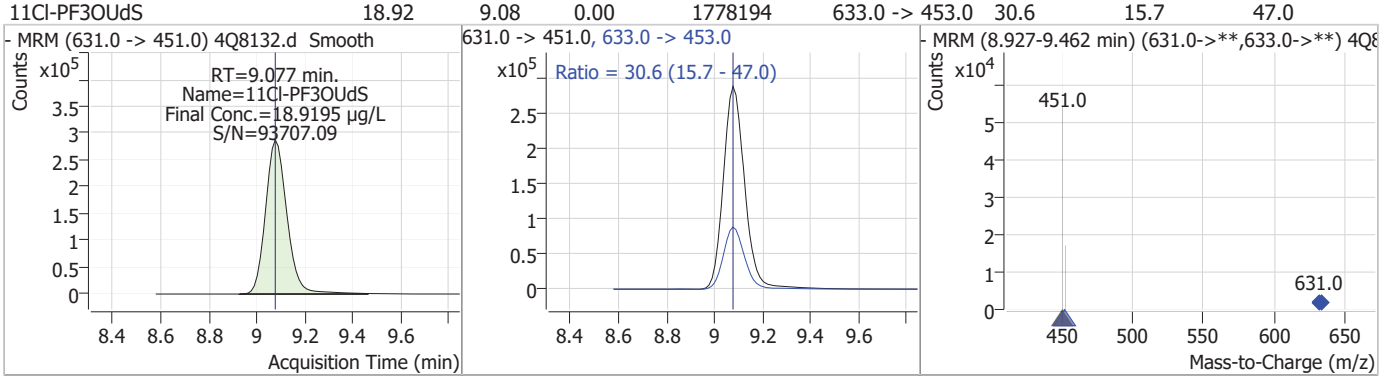
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	4.83	8.82	0.00	109204	599.0 -> 99.0	54.6	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	5.05	9.04	0.00	1003353	663.0 -> 369.0	6.4	3.1	9.3

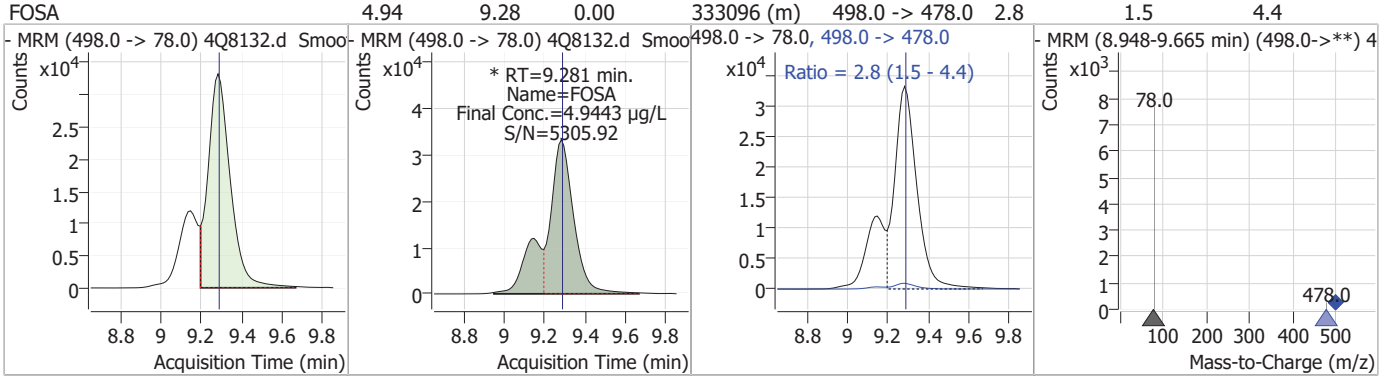


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	18.92	9.08	0.00	1778194	633.0 -> 453.0	30.6	15.7	47.0

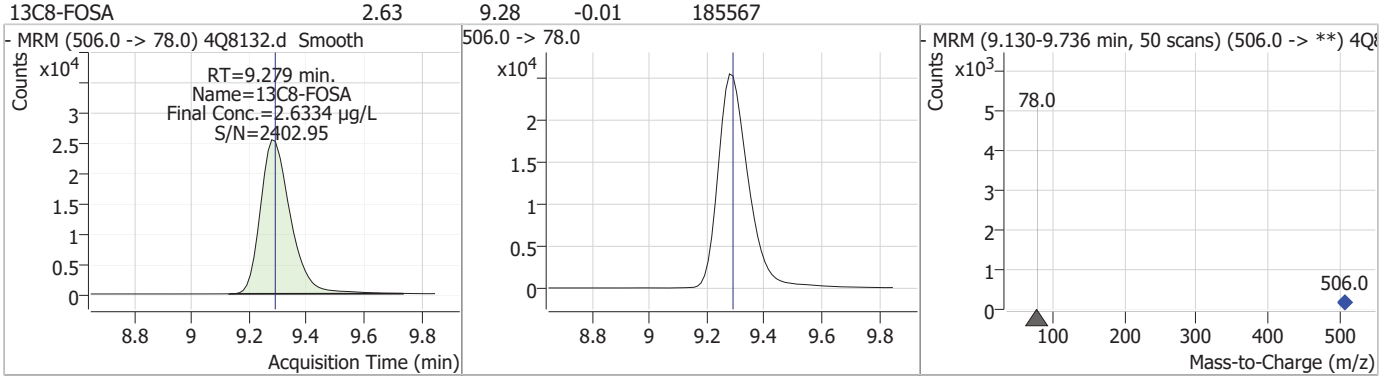


Perfluorinated Compounds by LC/MS/MS

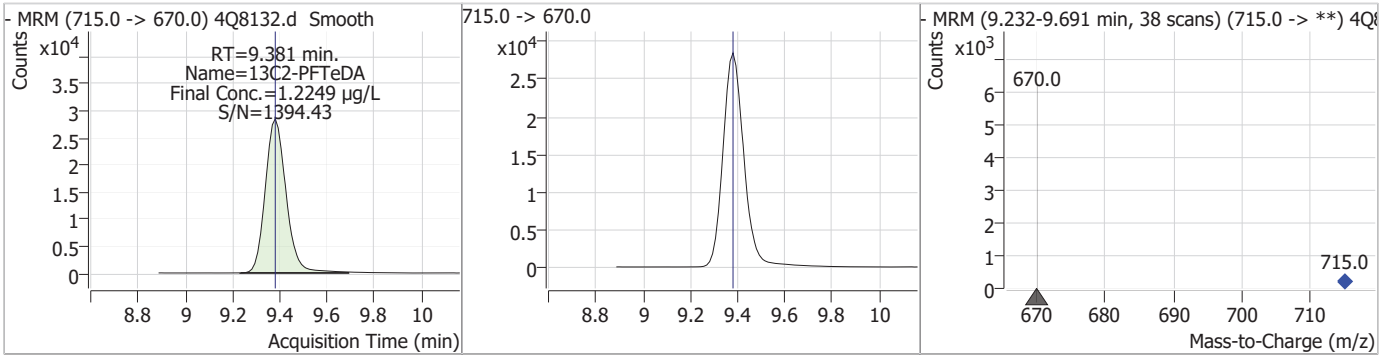
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	4.94	9.28	0.00	333096 (m)	498.0 -> 478.0	2.8	1.5	4.4



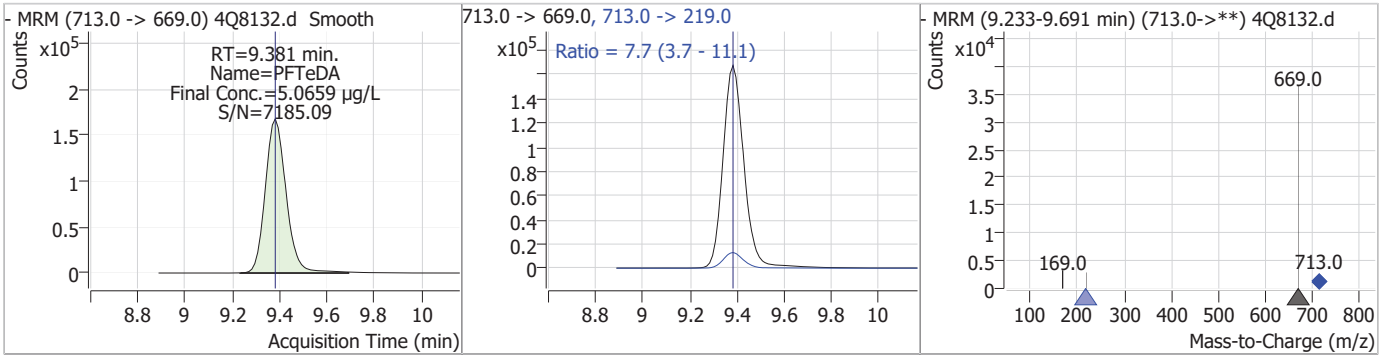
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.63	9.28	-0.01	185567				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.22	9.38	0.00	174127				

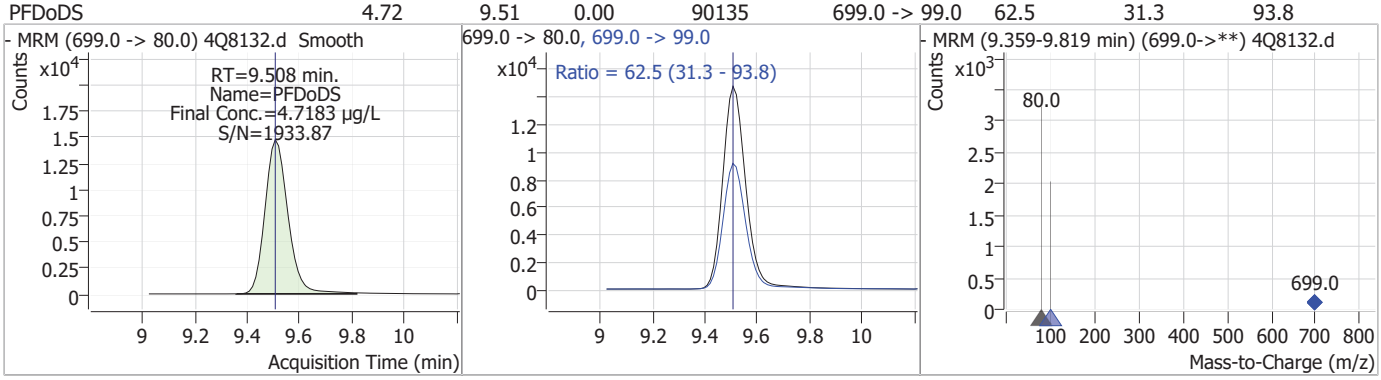


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	5.07	9.38	0.00	1027061	713.0 -> 219.0	7.7	3.7	11.1

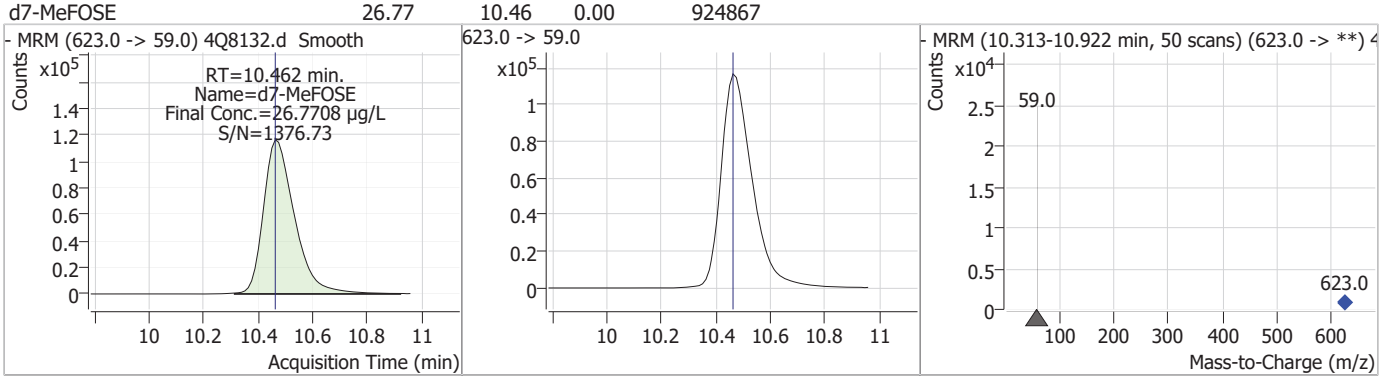


Perfluorinated Compounds by LC/MS/MS

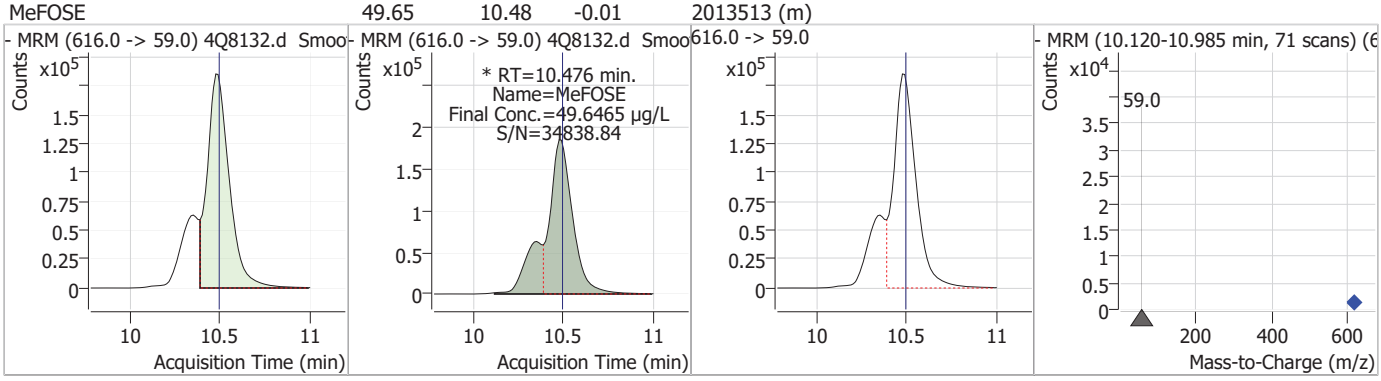
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	4.72	9.51	0.00	90135	699.0 -> 99.0	62.5	31.3	93.8



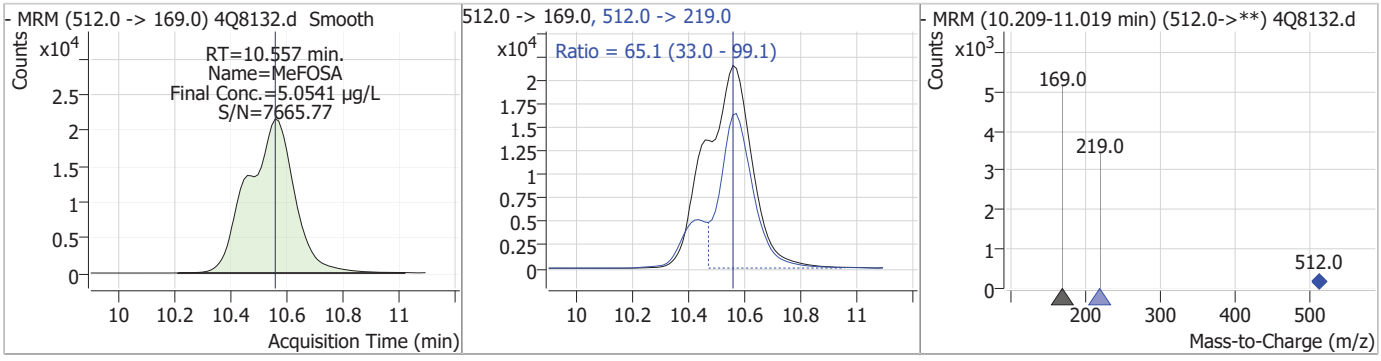
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	26.77	10.46	0.00	924867				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	49.65	10.48	-0.01	2013513 (m)				

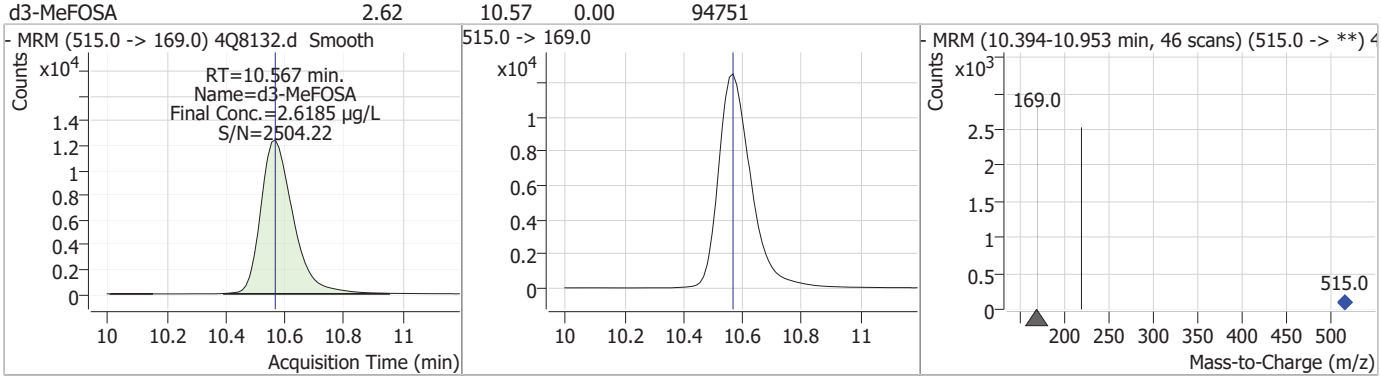


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	5.05	10.56	0.00	250761	512.0 -> 219.0	65.1	33.0	99.1

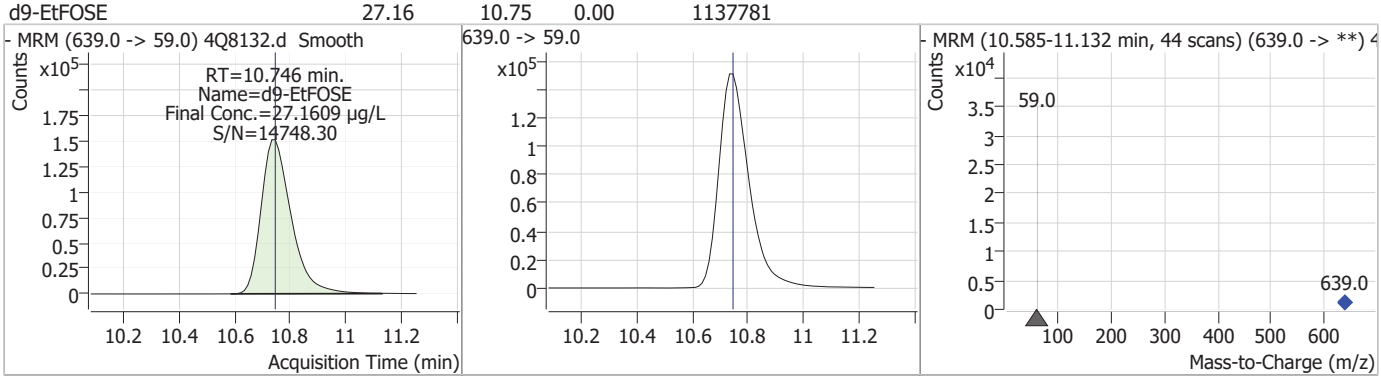


Perfluorinated Compounds by LC/MS/MS

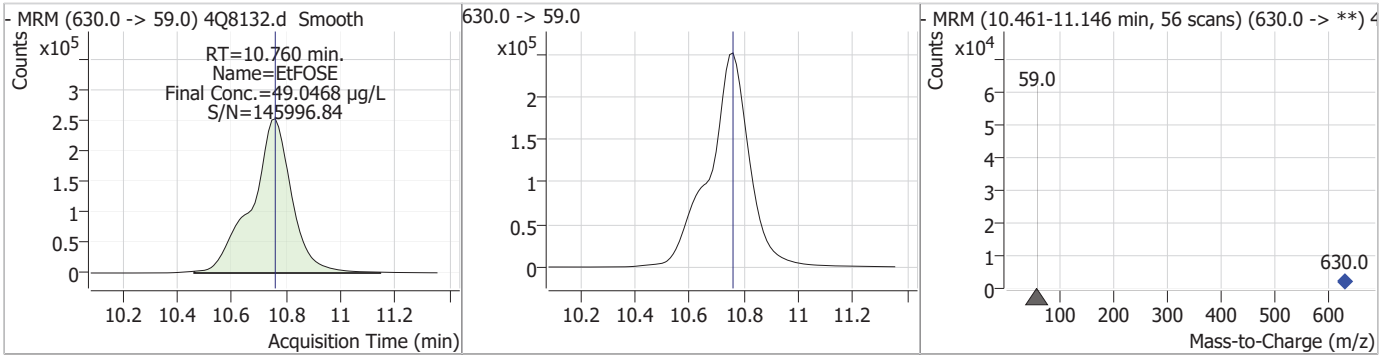
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.62	10.57	0.00	94751				



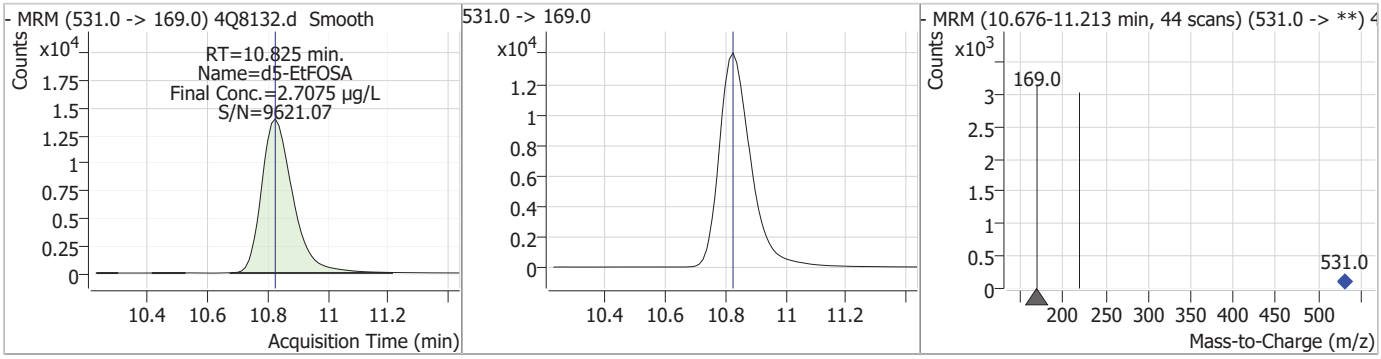
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	27.16	10.75	0.00	1137781				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	49.05	10.76	0.00	2595761				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.71	10.82	0.00	100963				

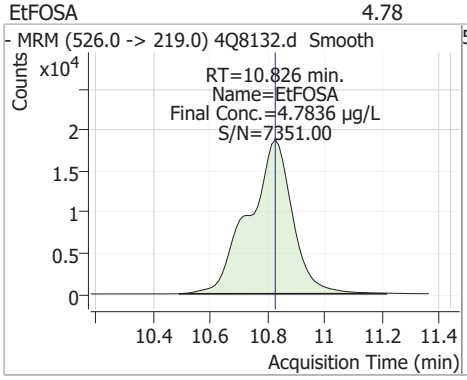


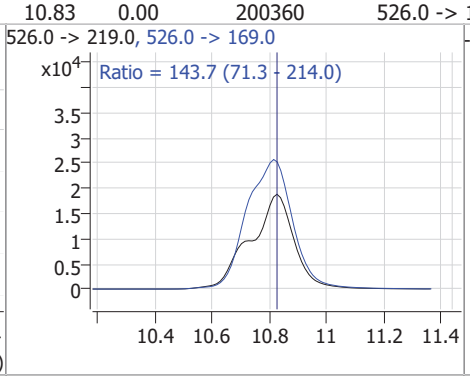
7.6.48

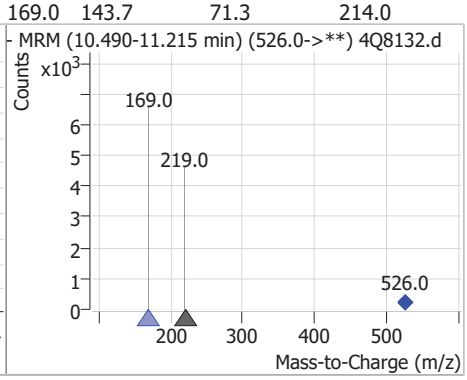
7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	4.78	10.83	0.00	200360	526.0 -> 169.0	143.7	71.3	214.0







7.6.48

7

Manual Integration Approval Summary

Sample Number: T4Q138-IC138
Lab FileID: 4Q8132.D
Injection Time: 04/30/25 15:23
Method: EPA 1633
Analyst approved: 04/30/25 23:06 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.93	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak
MeFOSE	24448-09-7		10.48	Split peak

4Q8133.D

Manual Integrations APPROVED (compounds with "m" flag)

Althea Mae Medina 05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8133.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 3:37:17 PM
Sample Name : IC138-6
Vial : P1-A7
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63077,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	904529	10.00	µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	475584	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	320329	2.50	µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	336344	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	497668	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	202724	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	189095	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	256894	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	221624	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	177339	1.25	µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	181363	2.50	µg/L	0.000
M3-PFBS	5.368	302.0 -> 99.0	27969	2.50	µg/L	0.000
		302.0 -> 80.0	69745			
M3-PFHxS	6.999	402.0 -> 99.0	38911	2.50	µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	42575	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	10932	5.00	µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	22928	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	28505	5.00	µg/L	0.000
M3-MeFOSAA	7.927	573.0 -> 419.0	240299	5.00	µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	509842	10.00	µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	186075	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	905332	25.00	µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1077545	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	97205	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	93754	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	76428	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	406352	5.00	µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	48206	2.50	µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	505336	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	177732	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	210145	1.25	µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	320650	2.50	µg/L	0.012
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	10932	4.52	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.4%		
13C2-6:2FTS	6.684	429.0 -> 81.0	22928	4.37	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 87.4%		
13C2-8:2FTS	7.671	529.0 -> 81.0	28505	4.62	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.4%		
13C2-PFDoDA	8.666	615.0 -> 570.0	221624	1.15	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.3%		
13C2-PFTeDA	9.381	715.0 -> 670.0	177339	1.20	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.0%		
13C3-PFBS	5.368	302.0 -> 99.0	27969	2.35	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.0%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	38911	2.31	µg/L		0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.5%			
13C4-PFBA	2.871	217.0 -> 172.0	904529	9.71	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 97.1%			
13C4-PFHpA	6.291	367.0 -> 322.0	336344	2.33	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.3%			
13C5-PFHxA	5.464	318.0 -> 273.0	320329	2.36	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.4%			
13C5-PFPeA	4.319	268.0 -> 223.0	475584	4.62	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.3%			
13C6-PFDA	7.858	519.0 -> 474.0	189095	1.20	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.3%			
13C7-PFUnDA	8.273	570.0 -> 525.0	256894	1.22	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.0%			
13C8-FOSA	9.291	506.0 -> 78.0	181363	2.31	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.4%			
13C8-PFOA	6.897	421.0 -> 376.0	497668	2.46	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.6%			
13C8-PFOS	7.995	507.0 -> 99.0	42575	2.31	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.5%			
13C9-PFNA	7.403	472.0 -> 427.0	202724	1.16	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.0%			
d3-MeFOSAA	7.927	573.0 -> 419.0	240299	4.77	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.5%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	509842	9.57	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.7%			
d3-MeFOSA	10.567	515.0 -> 169.0	93754	2.33	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.0%			
d5-EtFOSAA	8.098	589.0 -> 419.0	186075	4.81	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.3%			
d7-MeFOSE	10.462	623.0 -> 59.0	905332	23.52	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 94.1%			
d9-EtFOSE	10.746	639.0 -> 59.0	1077545	23.09	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 92.3%			
d5-EtFOSA	10.825	531.0 -> 169.0	97205	2.34	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.6%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	949382	47.29	µg/L		99
		327.0 -> 81.0	450708				
6:2FTS	6.684	427.0 -> 407.0	1155785	50.27	µg/L		100
		427.0 -> 81.0	545135				
8:2FTS	7.671	527.0 -> 507.0	1139189	51.06	µg/L		99
		527.0 -> 81.0	440873				
EtFOSAA	8.111	584.0 -> 419.0	452935	12.85	µg/L	m	99
		584.0 -> 483.0	252162				
FOSA	9.281	498.0 -> 78.0	866351	13.16	µg/L	m	99
		498.0 -> 478.0	22455				
MeFOSAA	7.929	570.0 -> 419.0	545304	13.17	µg/L	m	99
		570.0 -> 512.0	195507				
PFBA	2.877	213.0 -> 169.0	1436314	51.94	µg/L		100
PFBS	5.369	299.0 -> 80.0	372270	11.64	µg/L		99
		299.0 -> 99.0	154155				
PFDA	7.859	513.0 -> 469.0	1903014	13.24	µg/L		100
		513.0 -> 219.0	445300				
PFDoDA	8.667	613.0 -> 569.0	2304099	13.51	µg/L		98
		613.0 -> 319.0	321448				

Perfluorinated Compounds by LC/MS/MS

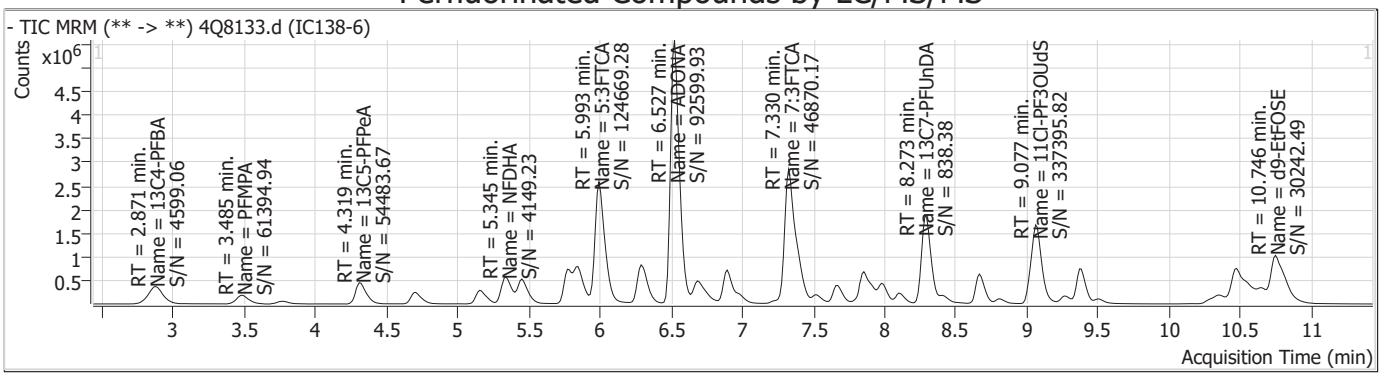
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	276665	12.05	µg/L		98
		599.0 -> 99.0	160030				
PFHpA	6.292	363.0 -> 319.0	2595259	12.68	µg/L		100
		363.0 -> 169.0	541355				
PFHpS	7.529	449.0 -> 80.0	426487	12.68	µg/L		99
		449.0 -> 99.0	238657				
PFHxA	5.467	313.0 -> 269.0	1761828	12.76	µg/L		100
		313.0 -> 119.0	59137				
PFHxS	7.000	399.0 -> 80.0	405057	11.95	µg/L	m	98
		399.0 -> 99.0	210887				
PFNA	7.404	463.0 -> 419.0	1594077	13.07	µg/L	m	96
		463.0 -> 219.0	561204				
PFNS	8.425	549.0 -> 80.0	370543	12.94	µg/L		95
		549.0 -> 99.0	230189				
PFOA	6.898	413.0 -> 369.0	2128303	12.85	µg/L	m	100
		413.0 -> 169.0	623892				
PFOS	7.996	499.0 -> 80.0	422383	12.31	µg/L	m	99
		499.0 -> 99.0	221718				
PFPeA	4.321	263.0 -> 219.0	1940770	25.81	µg/L		100
PFPeS	6.331	349.0 -> 80.0	425603	12.18	µg/L		99
		349.0 -> 99.0	217840				
PFTeDA	9.381	713.0 -> 669.0	2657916	12.87	µg/L		100
		713.0 -> 219.0	199986				
PFTrDA	9.038	663.0 -> 619.0	2530409	13.30	µg/L		99
		663.0 -> 369.0	162542				
PFUnDA	8.275	563.0 -> 519.0	1951409	12.85	µg/L		98
		563.0 -> 269.0	408709				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	4540207	46.81	µg/L		98
		633.0 -> 453.0	1369510				
9Cl-PF3ONS	8.301	531.0 -> 351.0	4995574	46.82	µg/L		100
		533.0 -> 353.0	1509851				
ADONA	6.527	377.0 -> 251.0	19340522	48.35	µg/L		95
		377.0 -> 85.0	5759967				
HFPO-DA	5.792	285.0 -> 169.0	2692126	50.23	µg/L		99
		285.0 -> 185.0	310628				
3:3FTCA	3.769	241.0 -> 177.0	297685	66.25	µg/L		99
		241.0 -> 117.0	23039				
5:3FTCA	5.993	341.0 -> 237.0	7491181	291.69	µg/L		100
		341.0 -> 217.0	5231998				
7:3FTCA	7.330	441.0 -> 337.0	9888841	311.36	µg/L		98
		441.0 -> 317.0	4365694				
EtFOSA	10.826	526.0 -> 219.0	526378	13.05	µg/L		100
		526.0 -> 169.0	748051				
EtFOSE	10.760	630.0 -> 59.0	6402019	127.73	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	655930	13.36	µg/L		100
		512.0 -> 219.0	431751				
MeFOSE	10.488	616.0 -> 59.0	5067696	127.65	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	237350	12.74	µg/L		99
		699.0 -> 99.0	149886				
NFDHA	5.345	295.0 -> 201.0	480322	26.49	µg/L		93
		201.0 -> 85.0	1872748				
		295.0 -> 85.0	125674				
PFMBA	4.710	279.0 -> 85.0	1315093	25.64	µg/L		100
PFMPA	3.485	229.0 -> 85.0	1134528	26.31	µg/L		100
PFEESA	5.849	315.0 -> 135.0	2888144	22.78	µg/L		98
		315.0 -> 69.0	239067				

Perfluorinated Compounds by LC/MS/MS

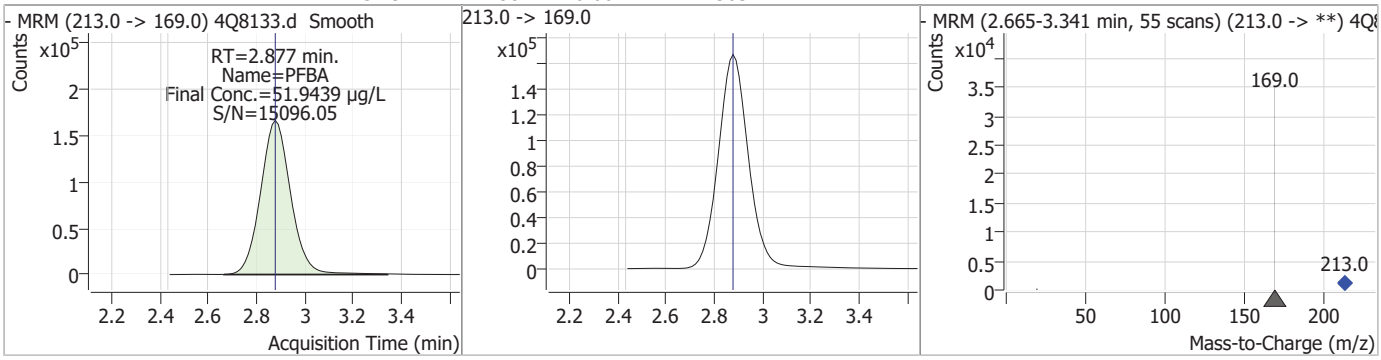
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

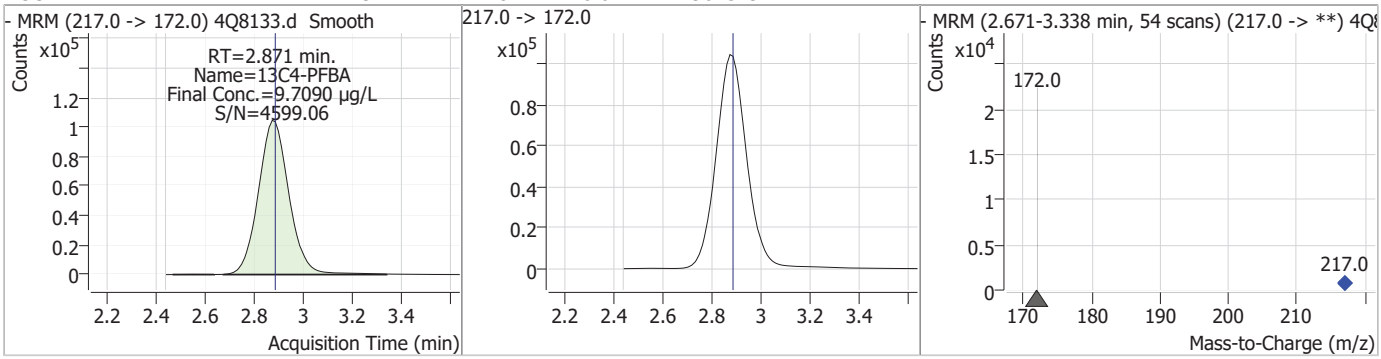
Perfluorinated Compounds by LC/MS/MS



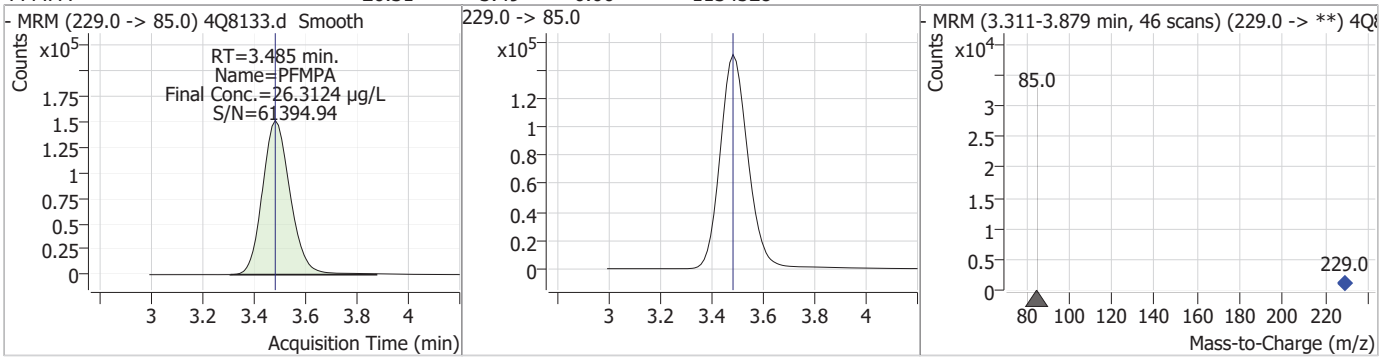
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	51.94	2.88	0.00	1436314				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.71	2.87	-0.01	904529				

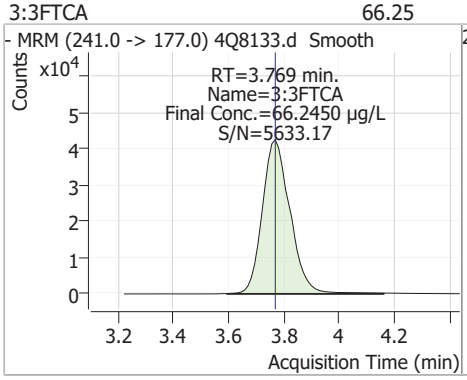


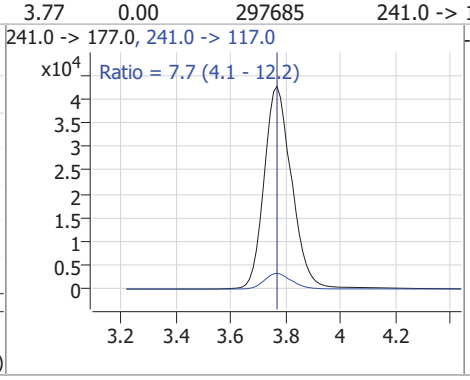
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	26.31	3.49	0.00	1134528				

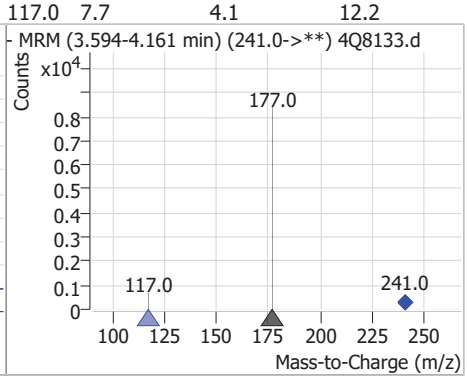


Perfluorinated Compounds by LC/MS/MS

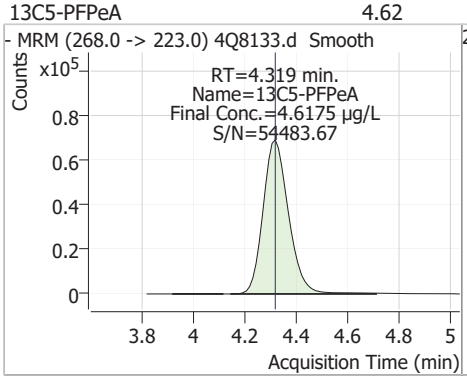
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	66.25	3.77	0.00	297685	241.0 -> 117.0	7.7	4.1	12.2

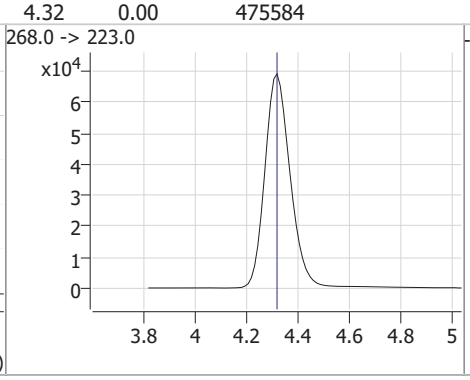


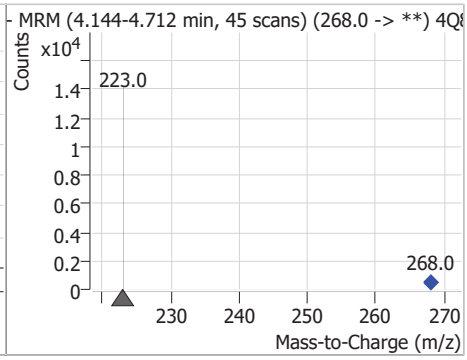




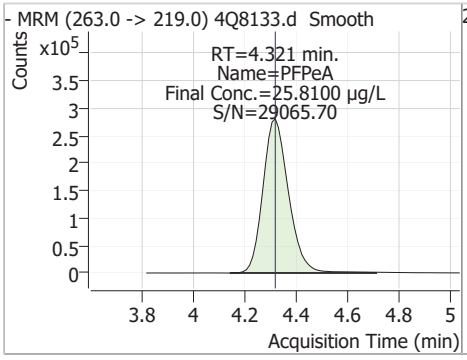
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.62	4.32	0.00	475584				

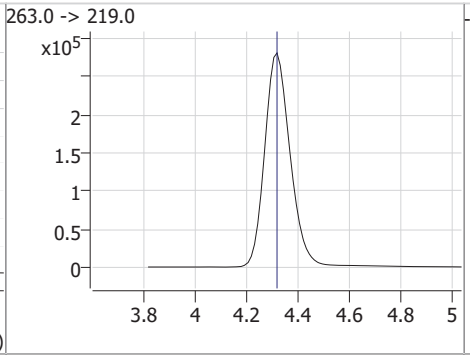


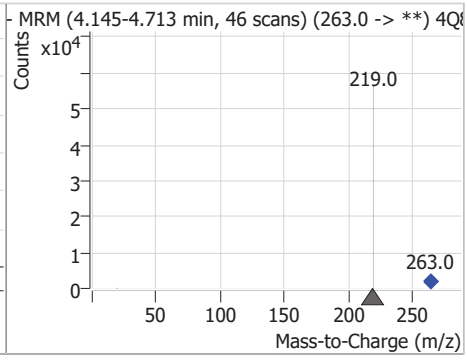




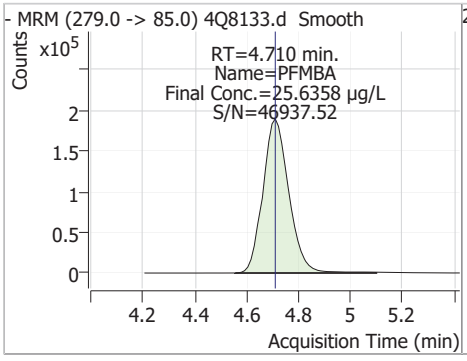
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	25.81	4.32	0.00	1940770				

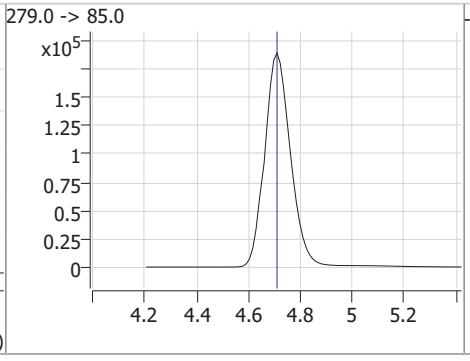


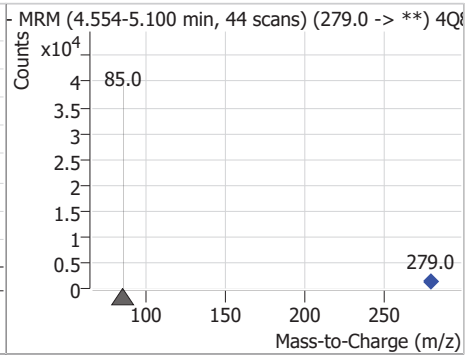




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	25.64	4.71	0.00	1315093				

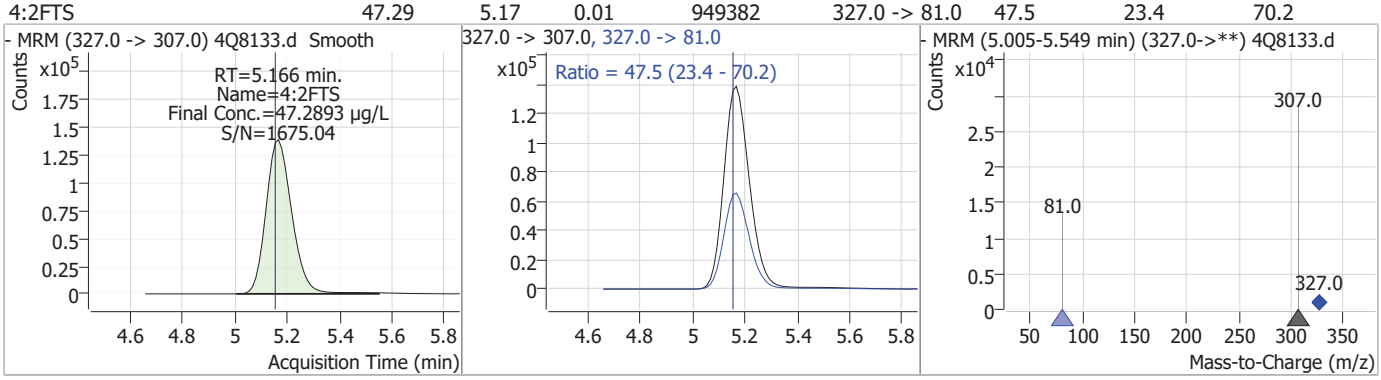




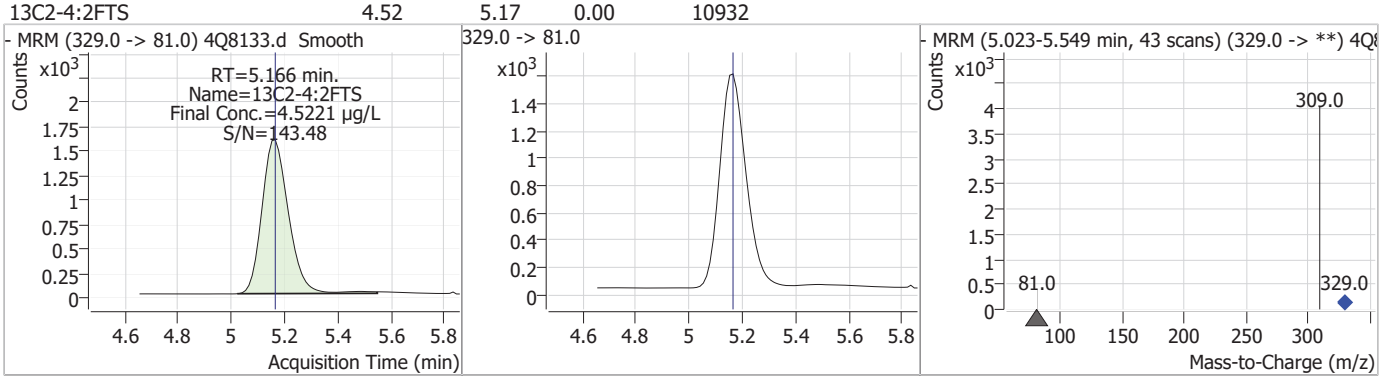


Perfluorinated Compounds by LC/MS/MS

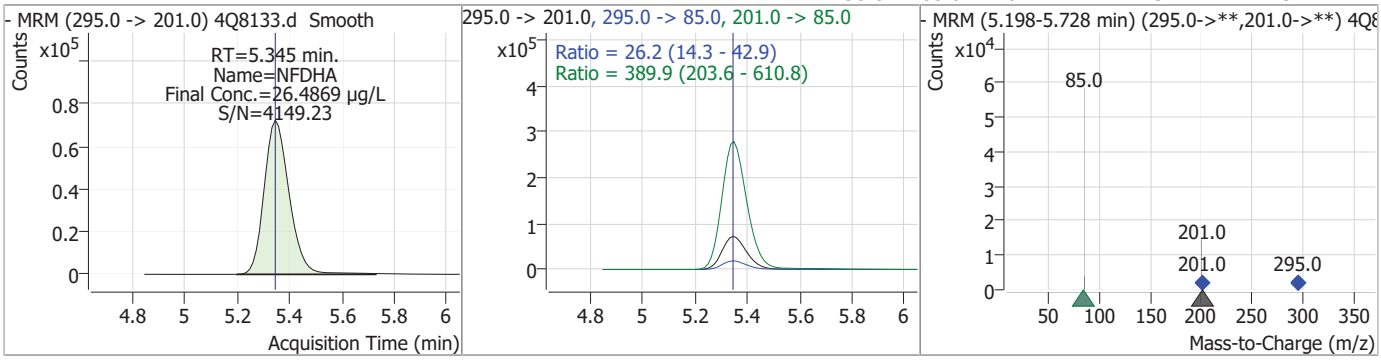
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	47.29	5.17	0.01	949382	327.0 -> 81.0	47.5	23.4	70.2



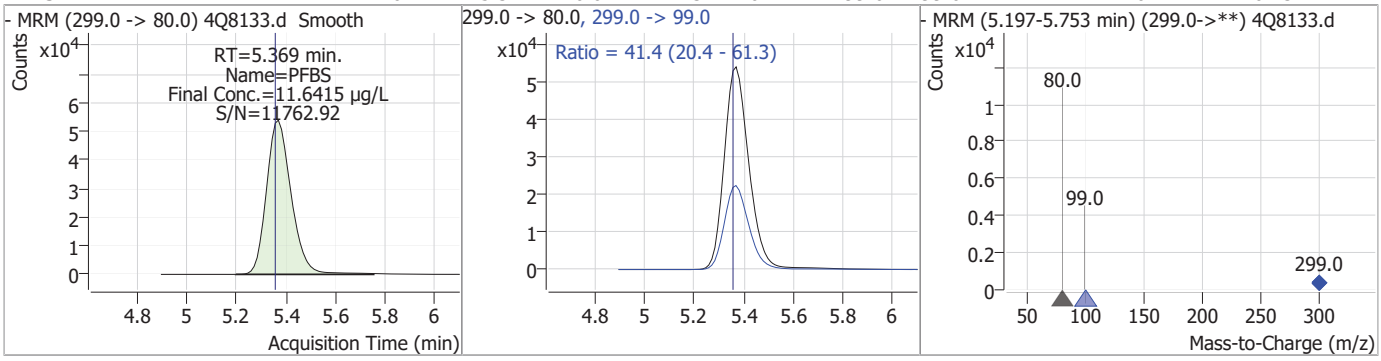
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.52	5.17	0.00	10932				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	26.49	5.35	0.00	480322	201.0 -> 85.0	389.9	203.6	610.8
					295.0 -> 85.0	26.2	14.3	42.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	11.64	5.37	0.01	372270	299.0 -> 99.0	41.4	20.4	61.3



7.6.49

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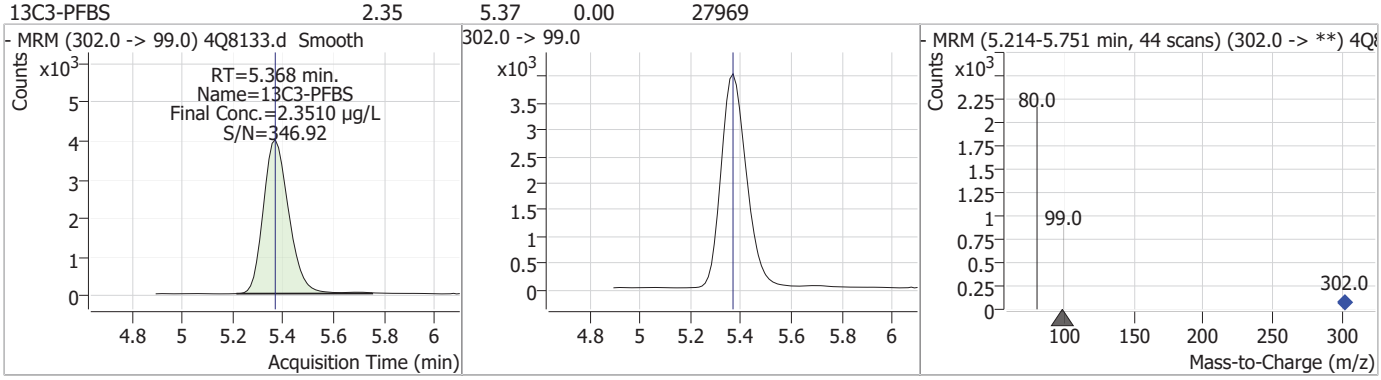
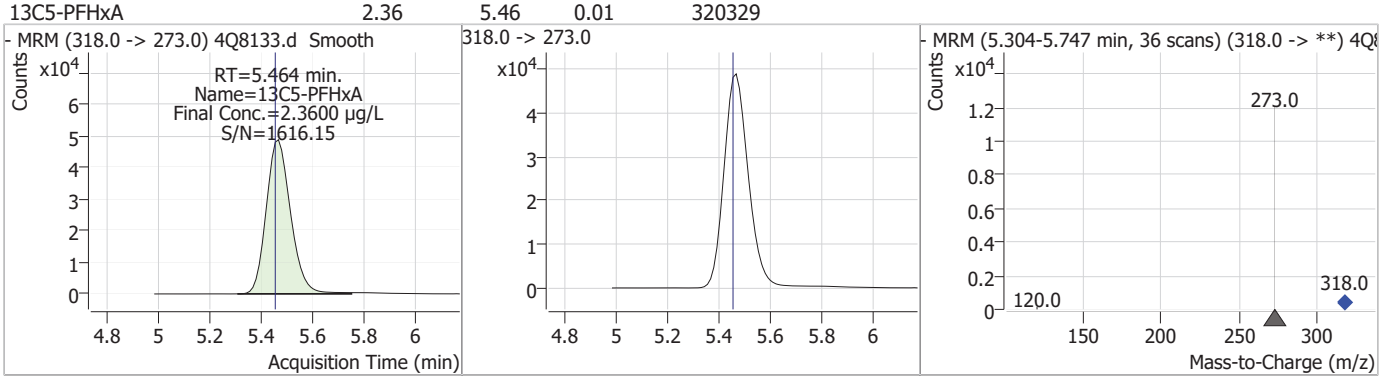
Perfluorinated Compounds by LC/MS/MS

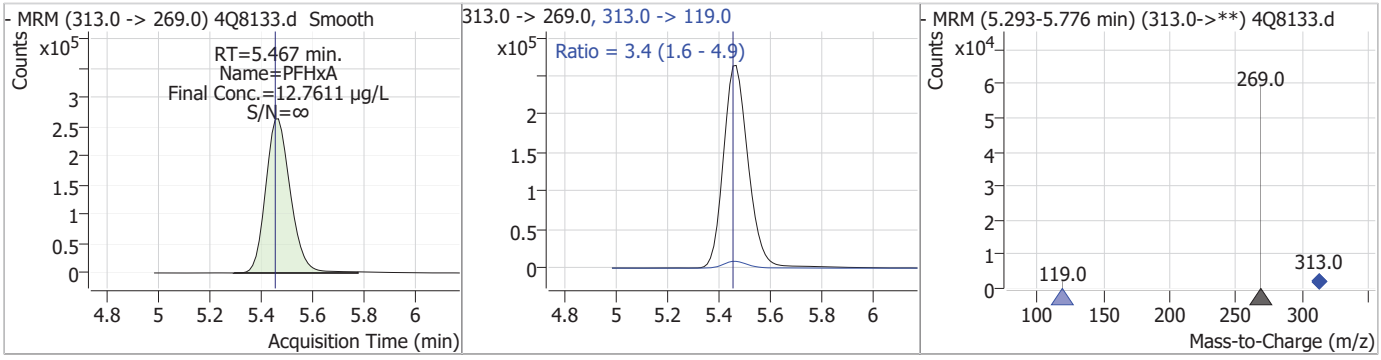
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.35	5.37	0.00	27969				



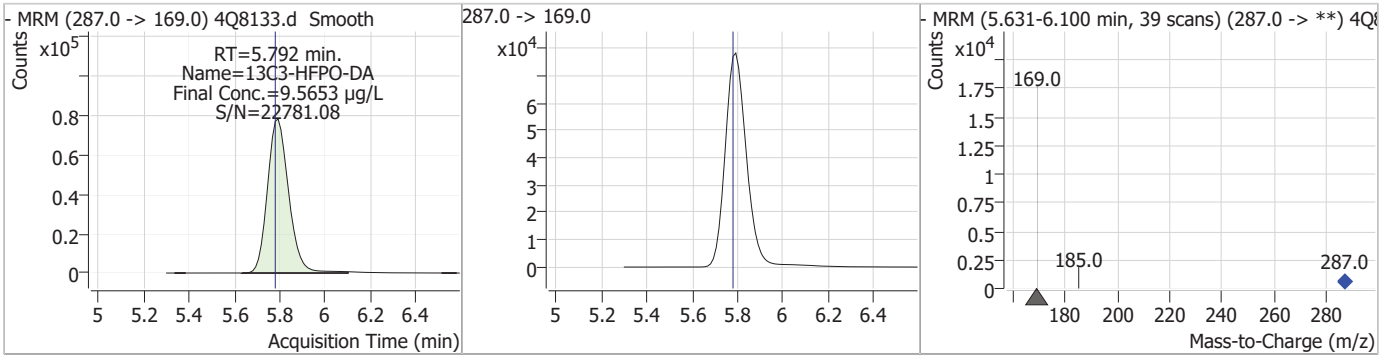
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.36	5.46	0.01	320329				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	12.76	5.47	0.01	1761828	313.0 -> 119.0	3.4	1.6	4.9

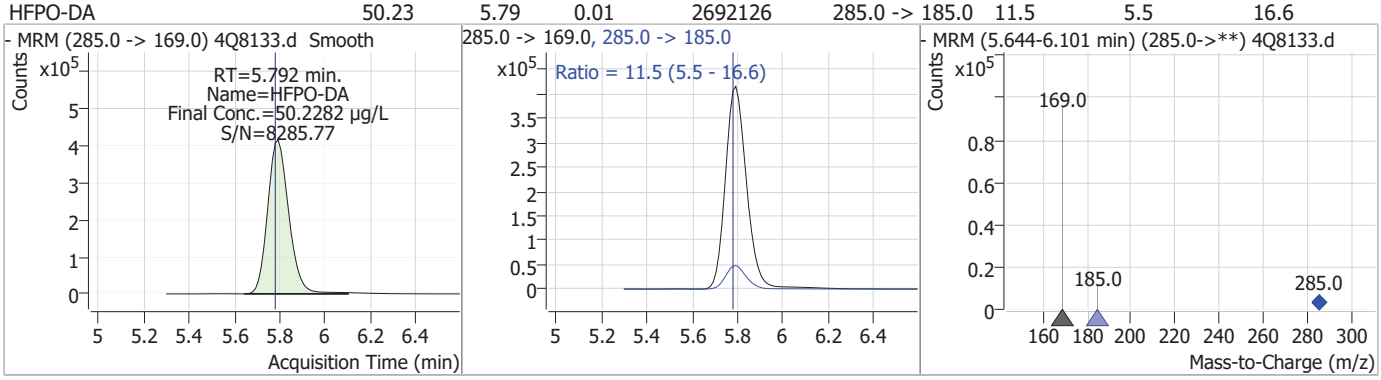


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.57	5.79	0.01	509842				

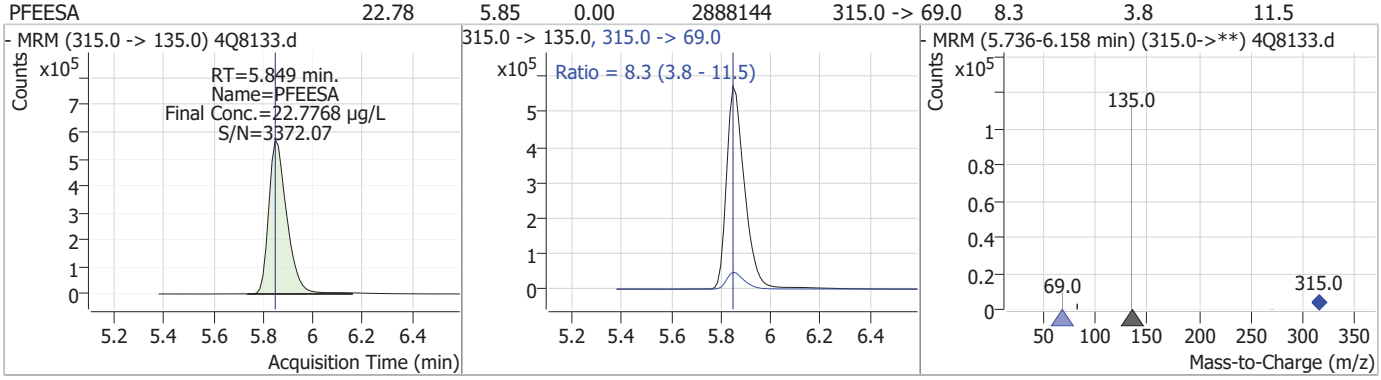


Perfluorinated Compounds by LC/MS/MS

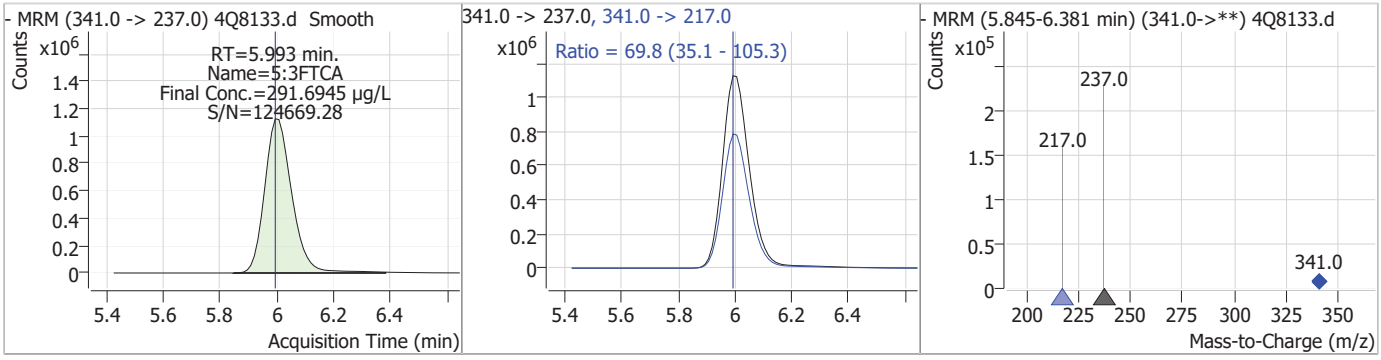
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	50.23	5.79	0.01	2692126	285.0 -> 185.0	11.5	5.5	16.6



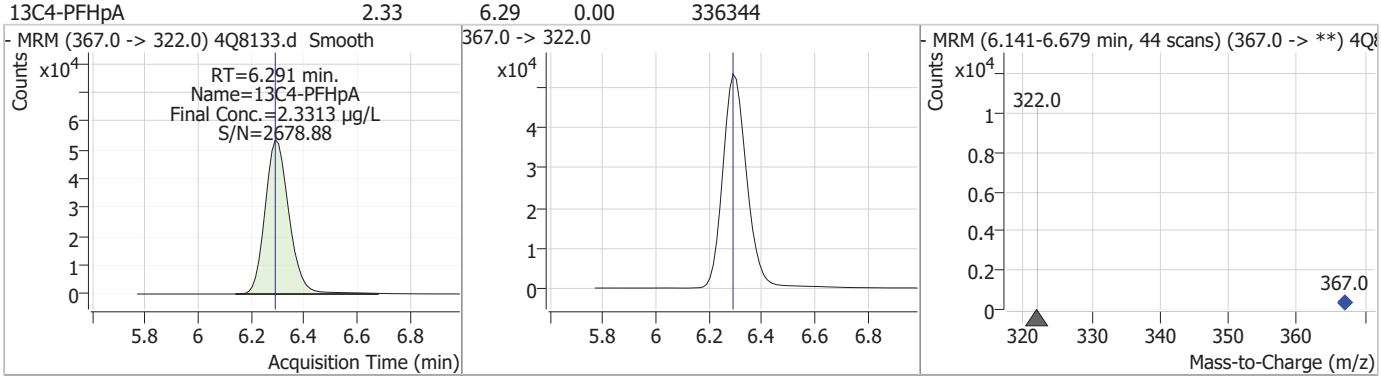
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	22.78	5.85	0.00	2888144	315.0 -> 69.0	8.3	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	291.69	5.99	0.00	7491181	341.0 -> 217.0	69.8	35.1	105.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.33	6.29	0.00	336344				



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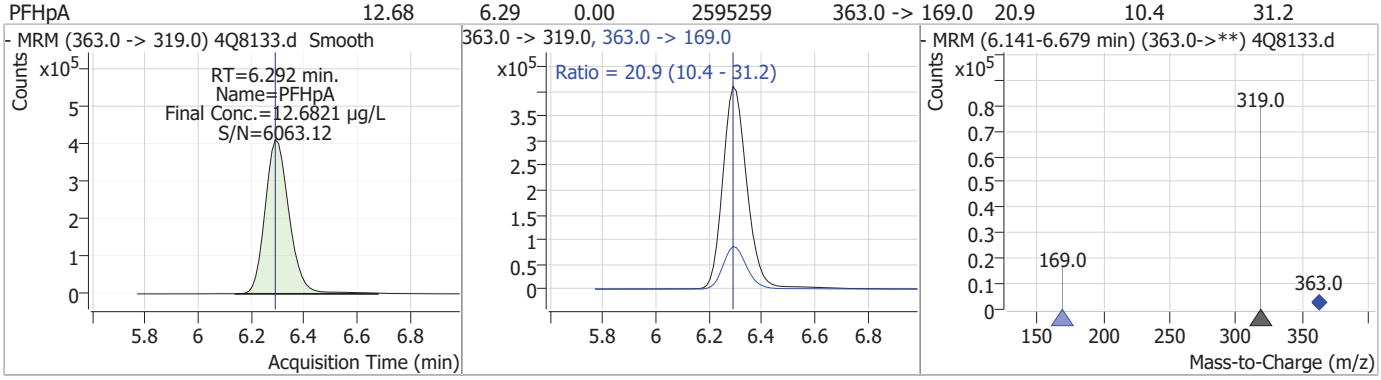
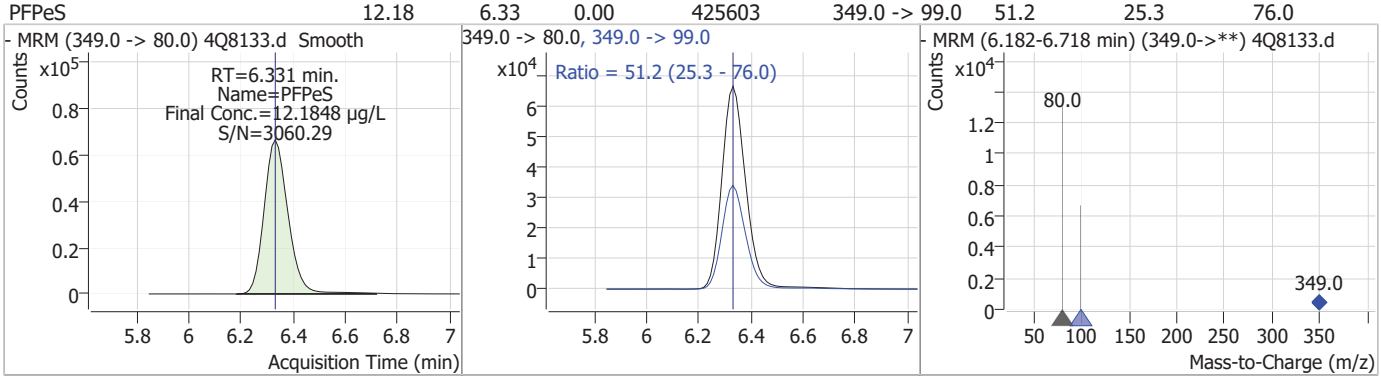
Perfluorinated Compounds by LC/MS/MS

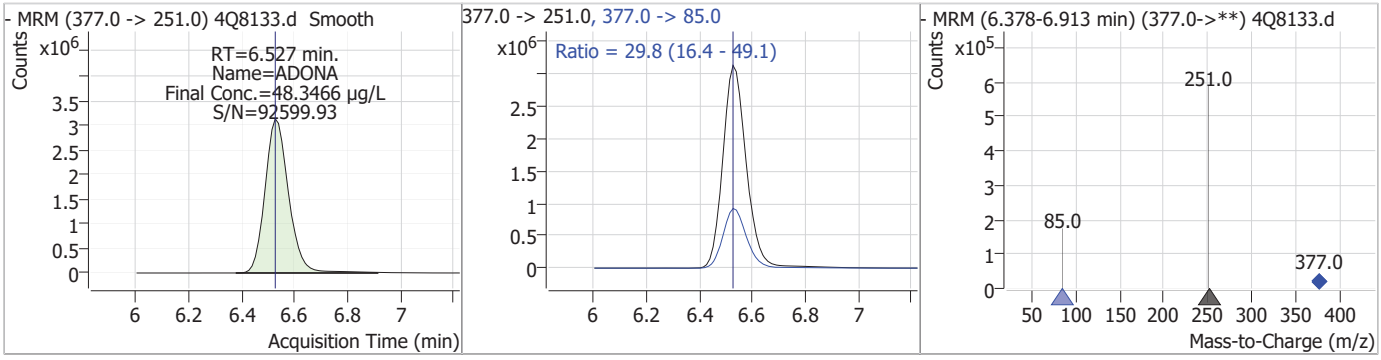
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	12.68	6.29	0.00	2595259	363.0 -> 169.0	20.9	10.4	31.2



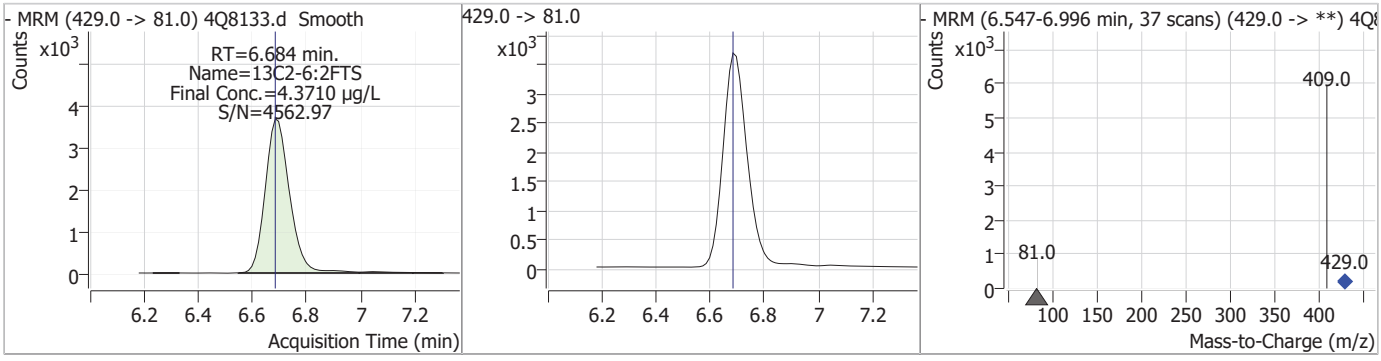
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	12.18	6.33	0.00	425603	349.0 -> 99.0	51.2	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	48.35	6.53	0.00	19340522	377.0 -> 85.0	29.8	16.4	49.1

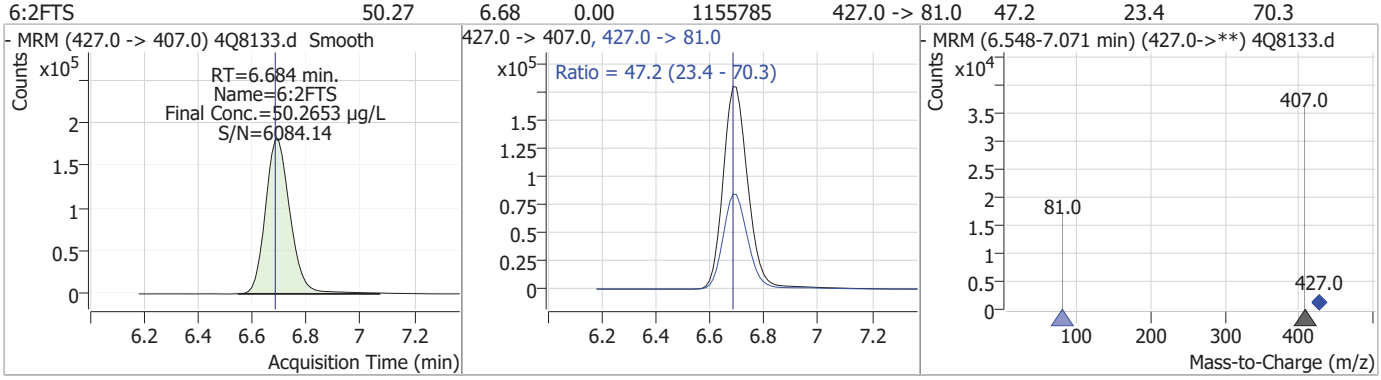


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.37	6.68	0.00	22928				

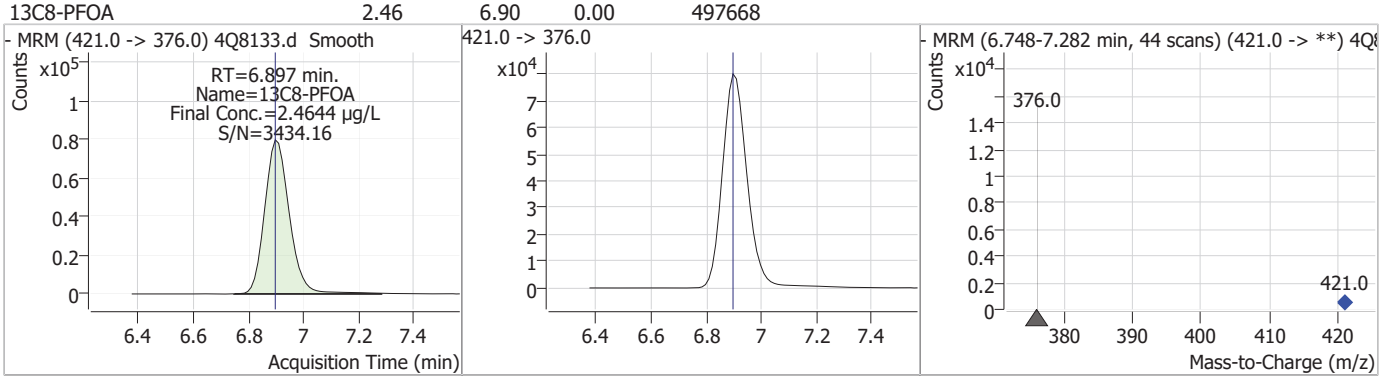


Perfluorinated Compounds by LC/MS/MS

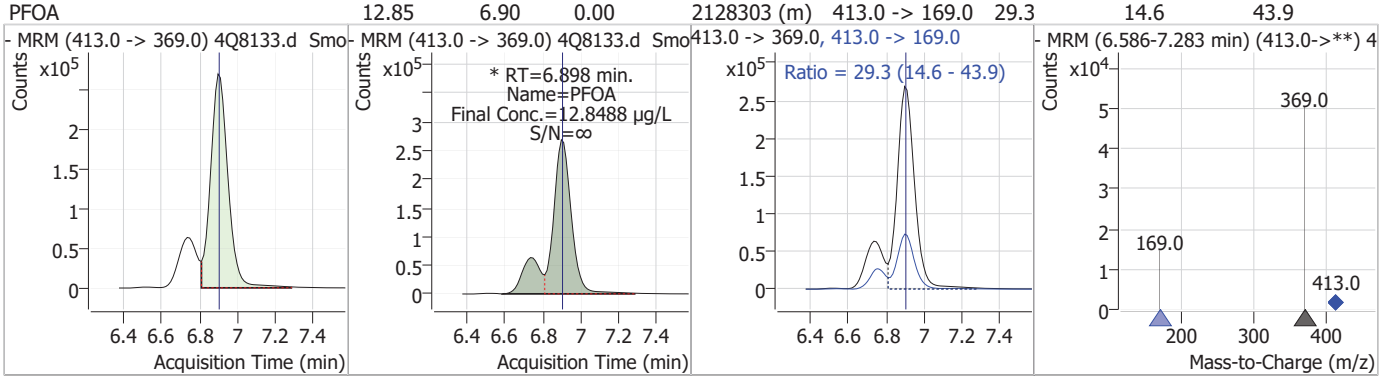
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	50.27	6.68	0.00	1155785	427.0 -> 81.0	47.2	23.4	70.3



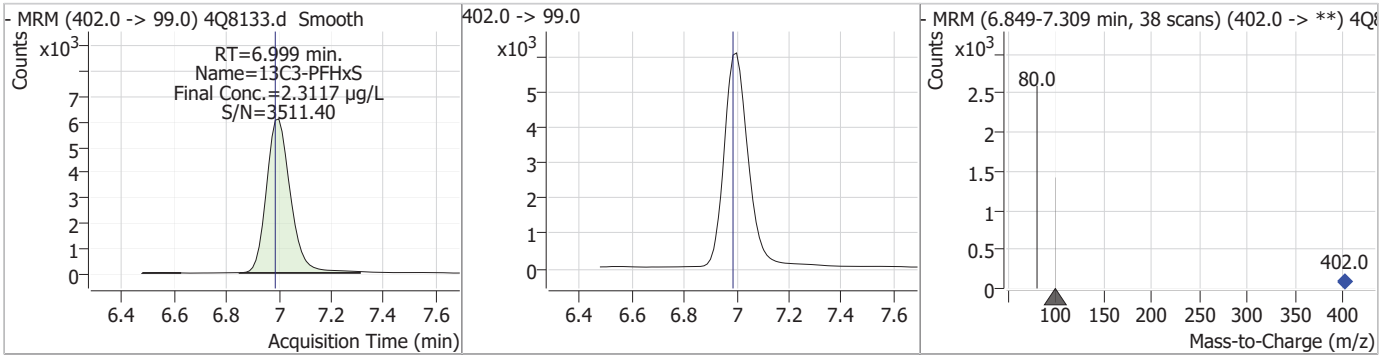
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.46	6.90	0.00	497668				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	12.85	6.90	0.00	2128303 (m)	413.0 -> 169.0	29.3	14.6	43.9

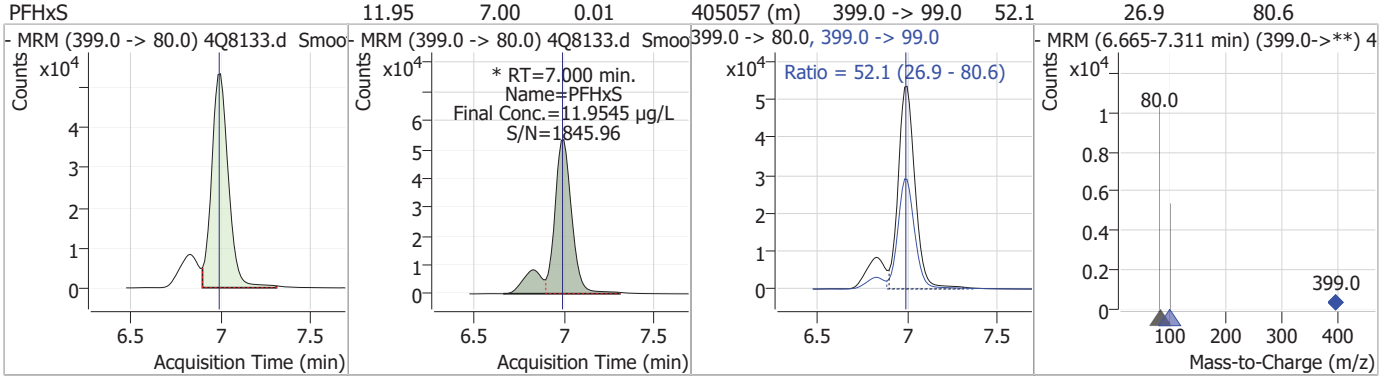


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.31	7.00	0.01	38911				

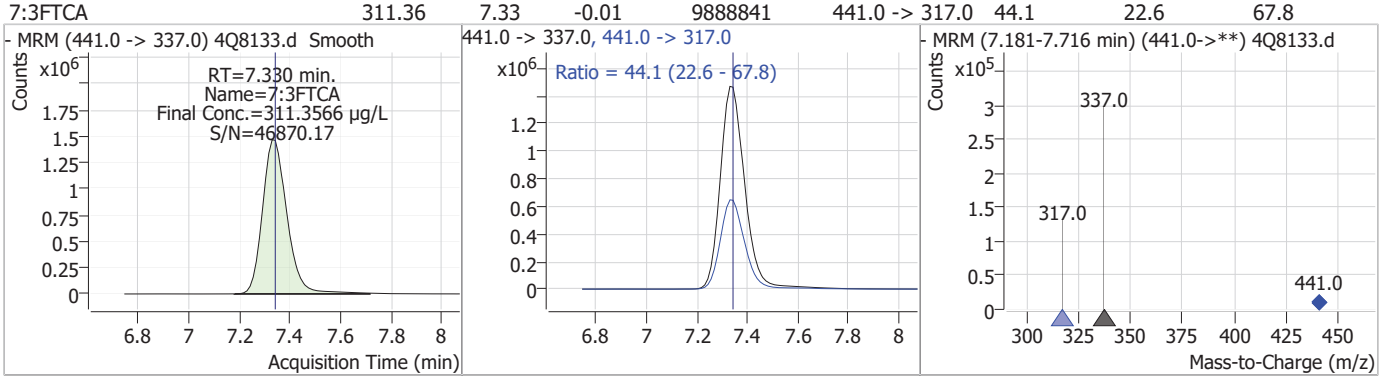


Perfluorinated Compounds by LC/MS/MS

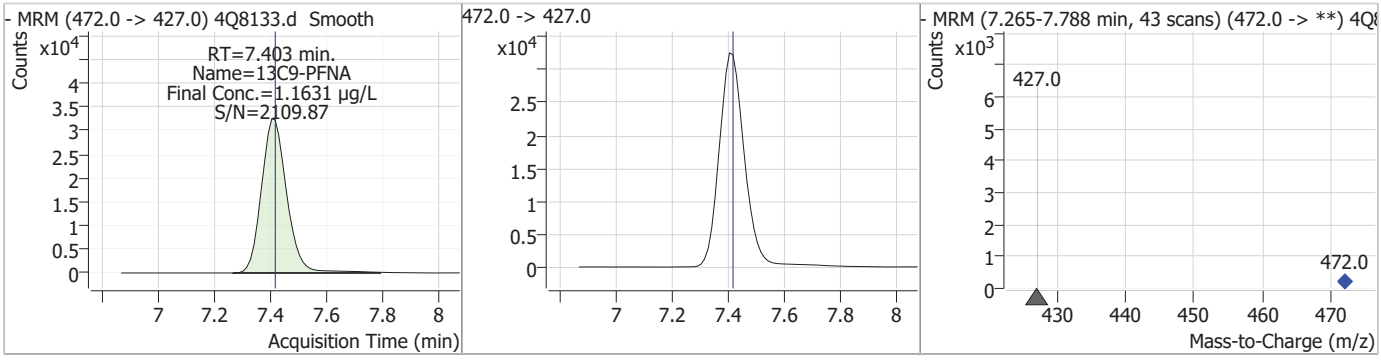
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	11.95	7.00	0.01	405057 (m)	399.0 -> 99.0	52.1	26.9	80.6



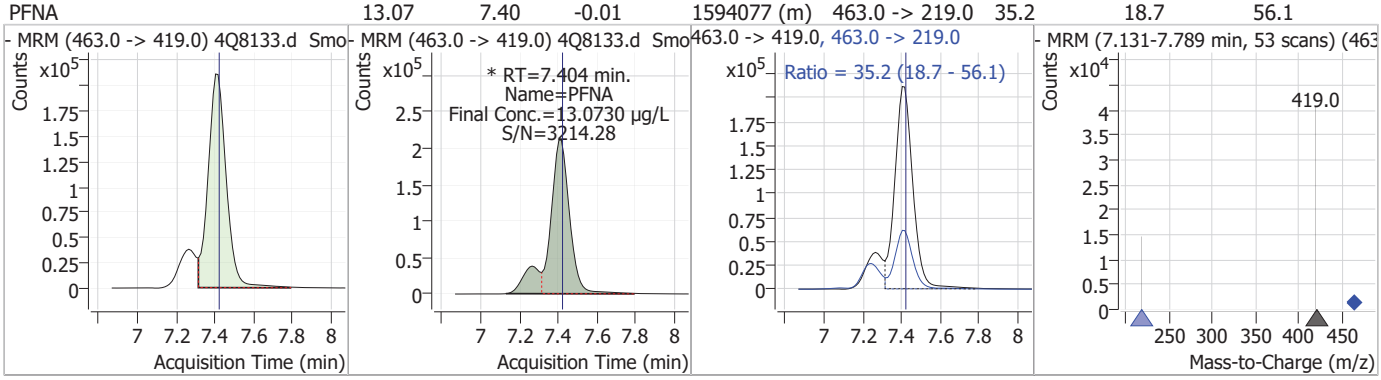
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	311.36	7.33	-0.01	9888841	441.0 -> 317.0	44.1	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.16	7.40	-0.01	202724				

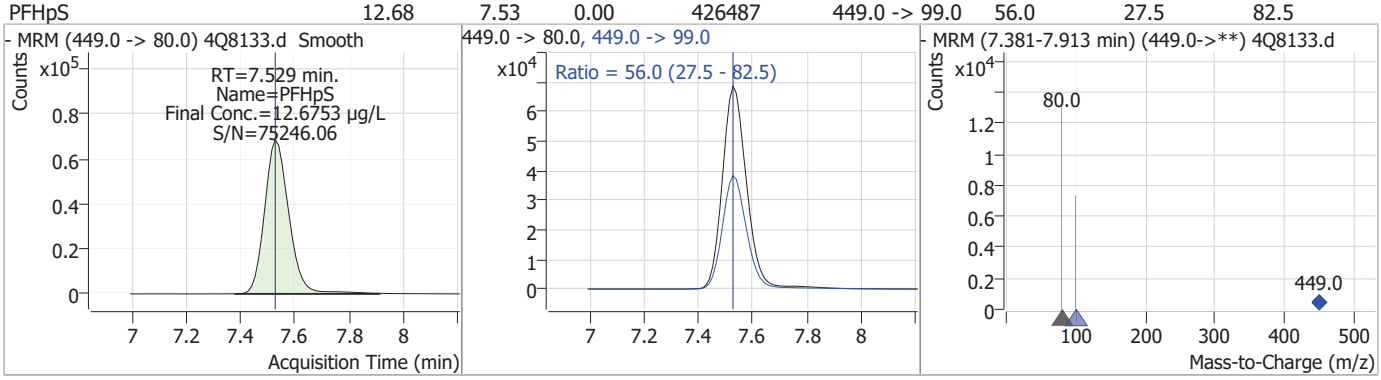


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	13.07	7.40	-0.01	1594077 (m)	463.0 -> 219.0	35.2	18.7	56.1

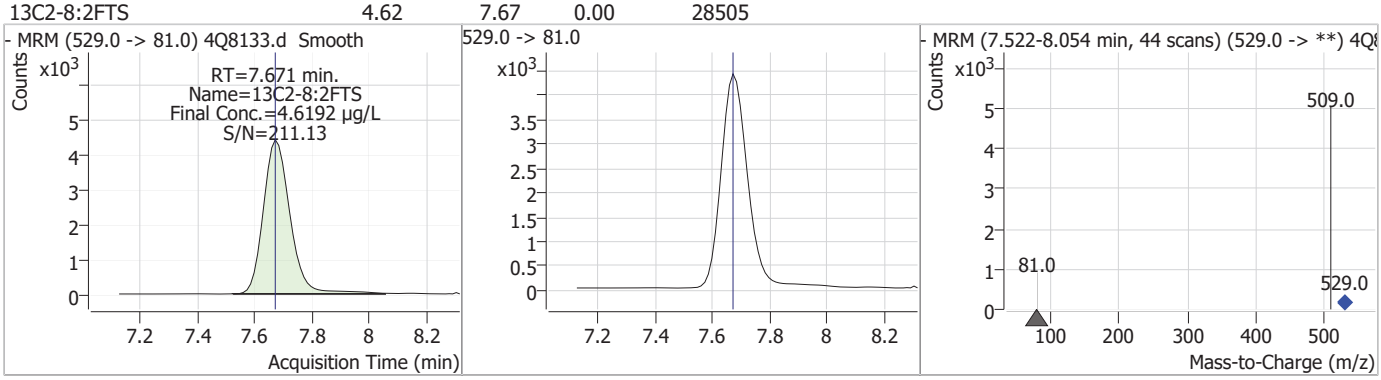


Perfluorinated Compounds by LC/MS/MS

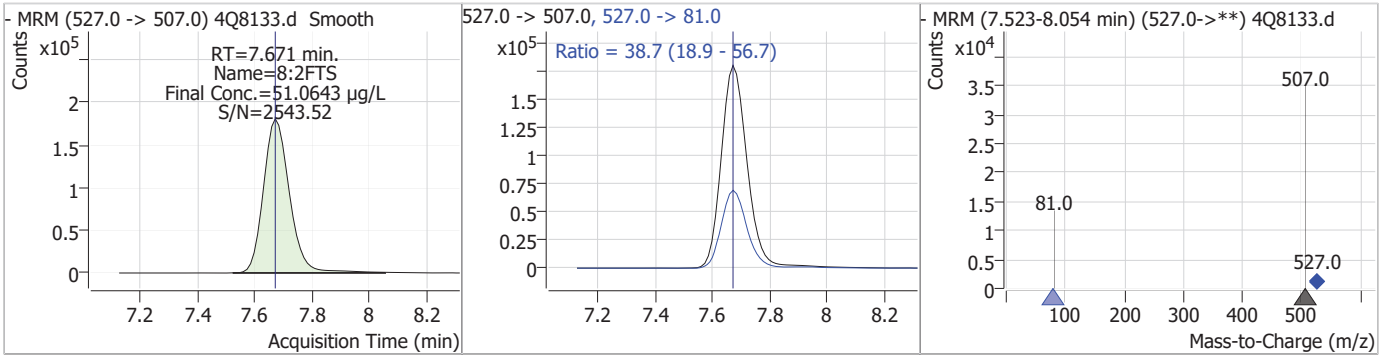
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	12.68	7.53	0.00	426487	449.0 -> 99.0	56.0	27.5	82.5



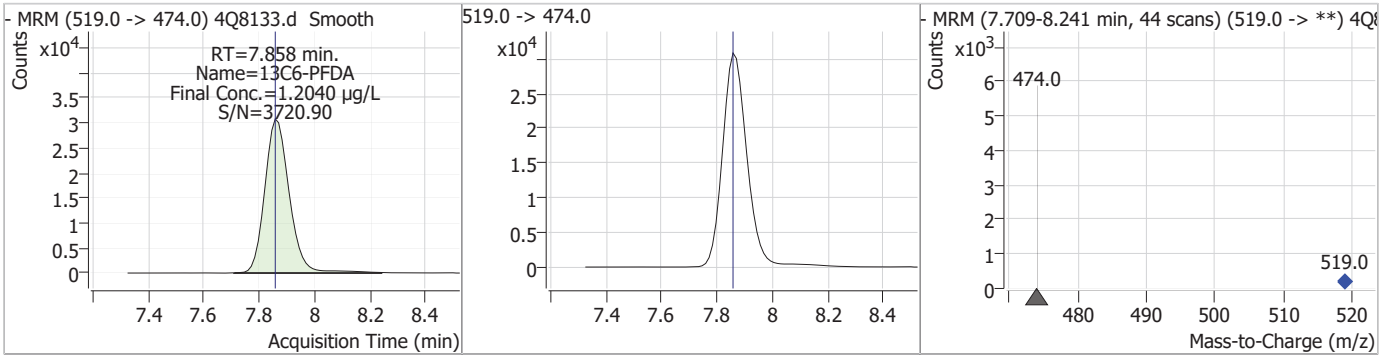
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.62	7.67	0.00	28505				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	51.06	7.67	0.00	1139189	527.0 -> 81.0	38.7	18.9	56.7

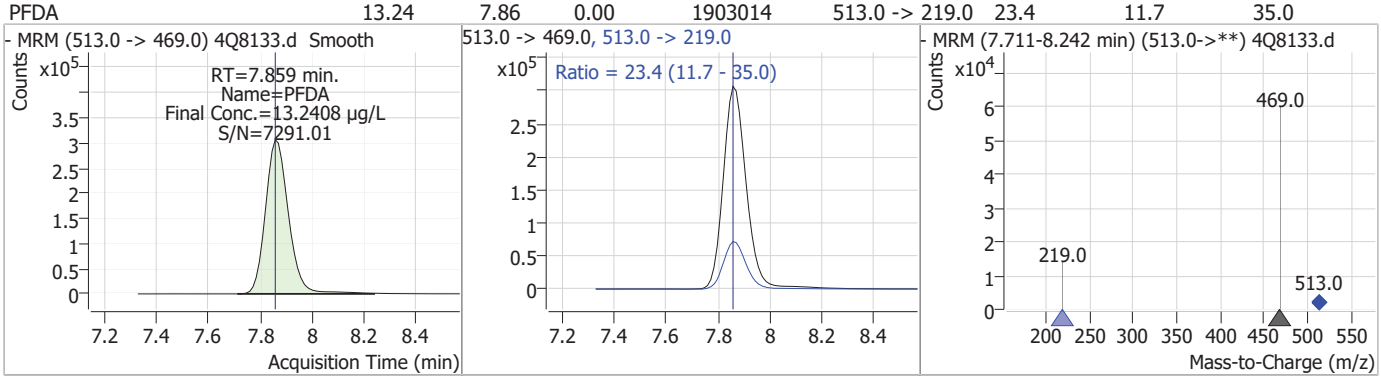


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.20	7.86	0.00	189095				

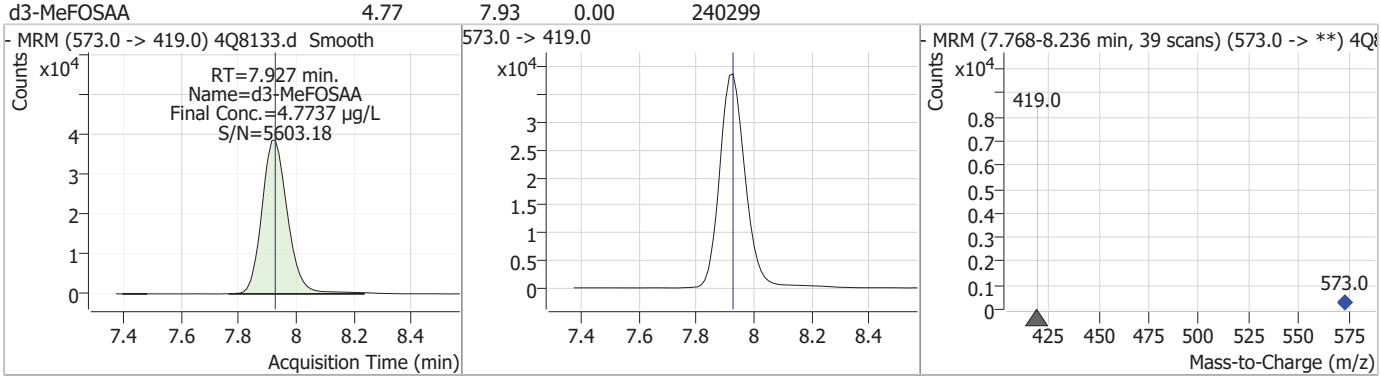


Perfluorinated Compounds by LC/MS/MS

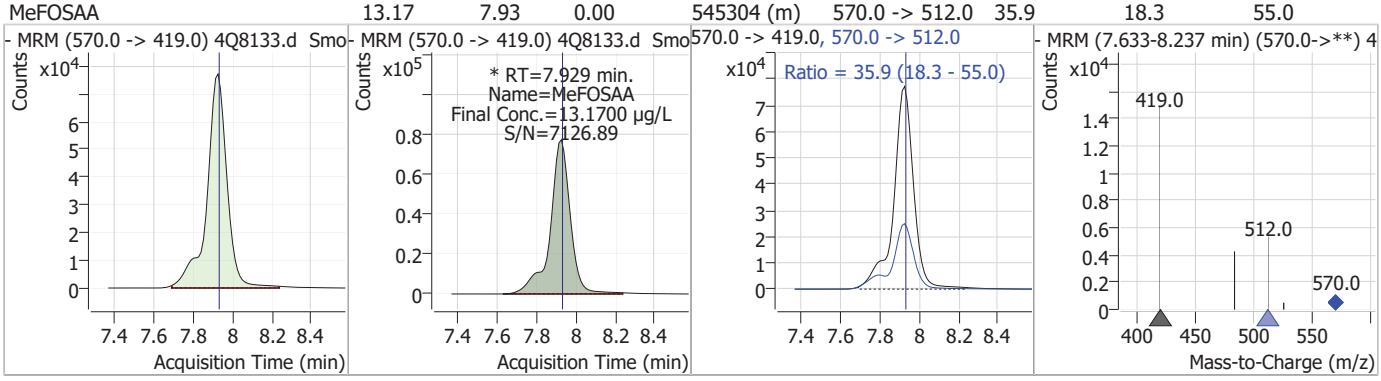
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	13.24	7.86	0.00	1903014	513.0 -> 219.0	23.4	11.7	35.0



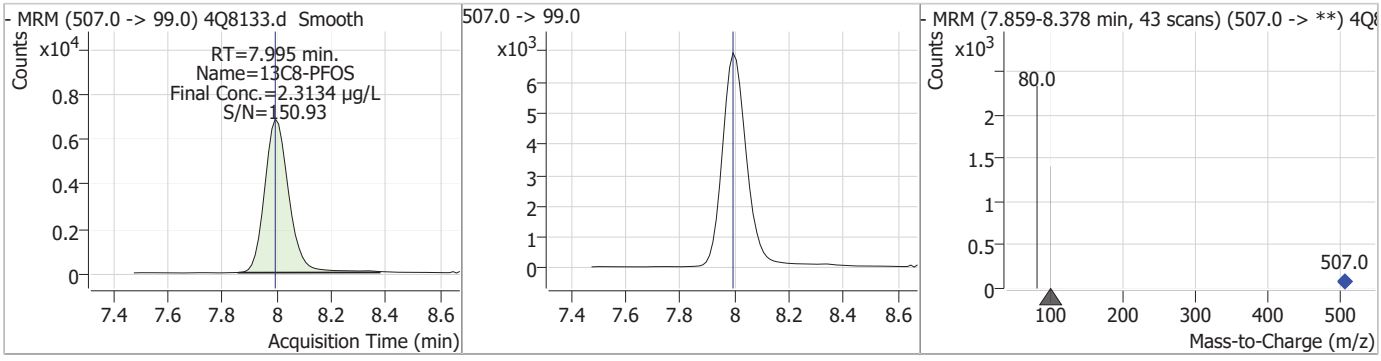
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.77	7.93	0.00	240299				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	13.17	7.93	0.00	545304 (m)	570.0 -> 512.0	35.9	18.3	55.0

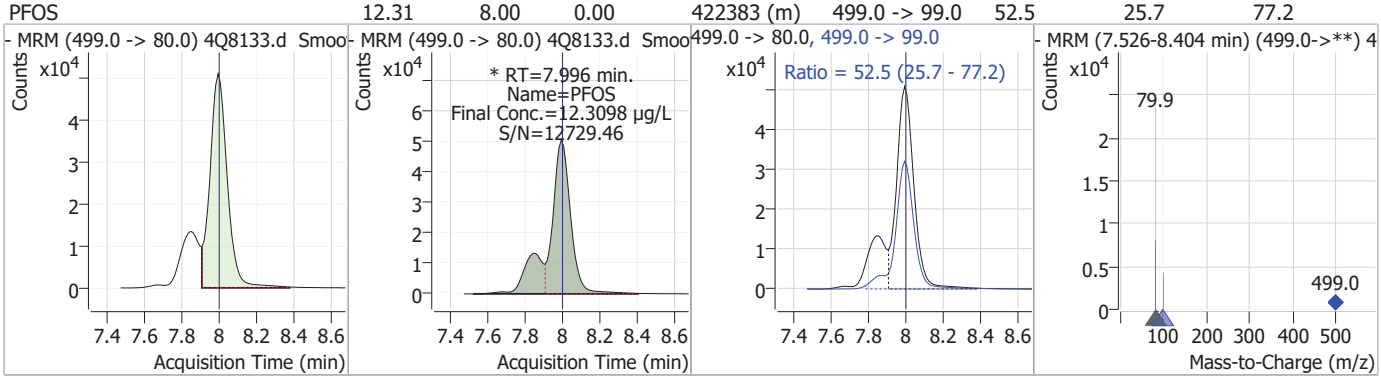


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.31	7.99	0.00	42575				

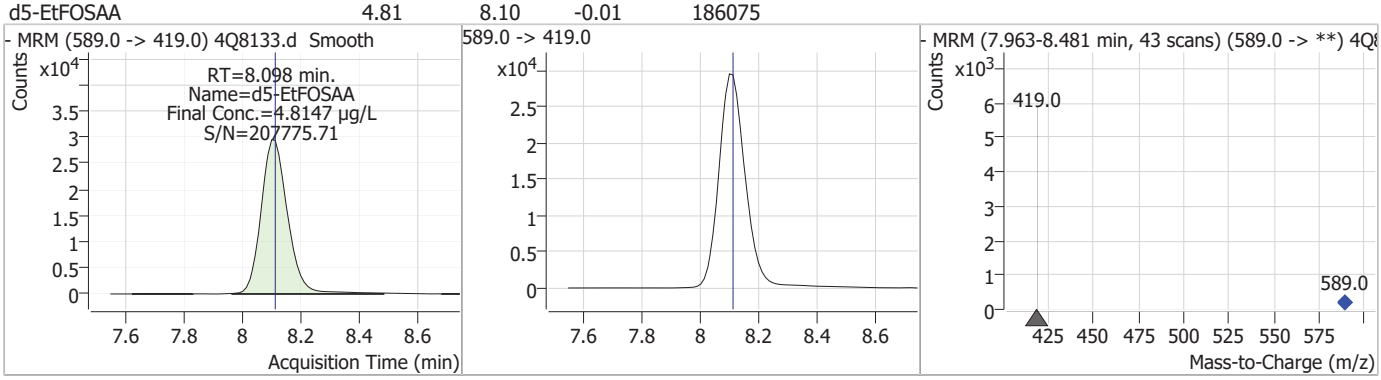


Perfluorinated Compounds by LC/MS/MS

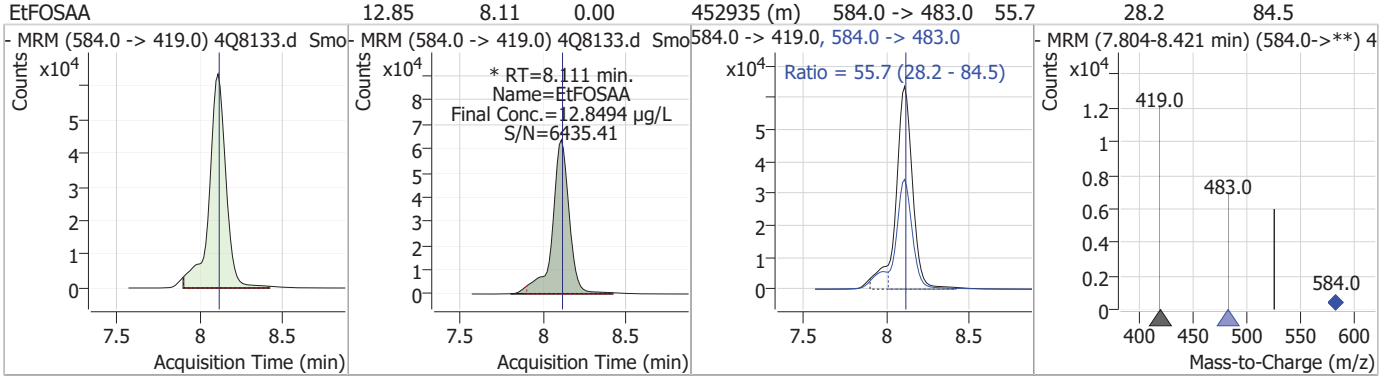
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	12.31	8.00	0.00	422383 (m)	499.0 -> 99.0	52.5	25.7	77.2



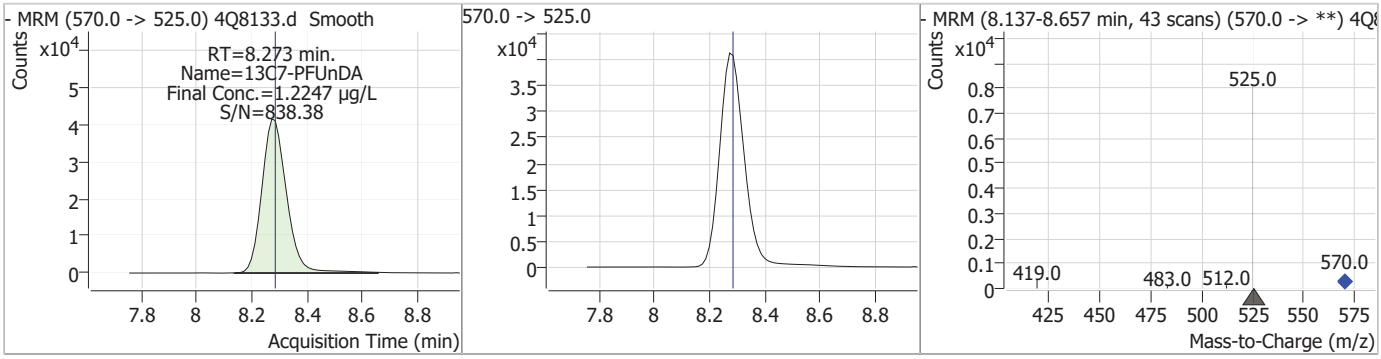
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.81	8.10	-0.01	186075				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	12.85	8.11	0.00	452935 (m)	584.0 -> 483.0	55.7	28.2	84.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.22	8.27	-0.01	256894				



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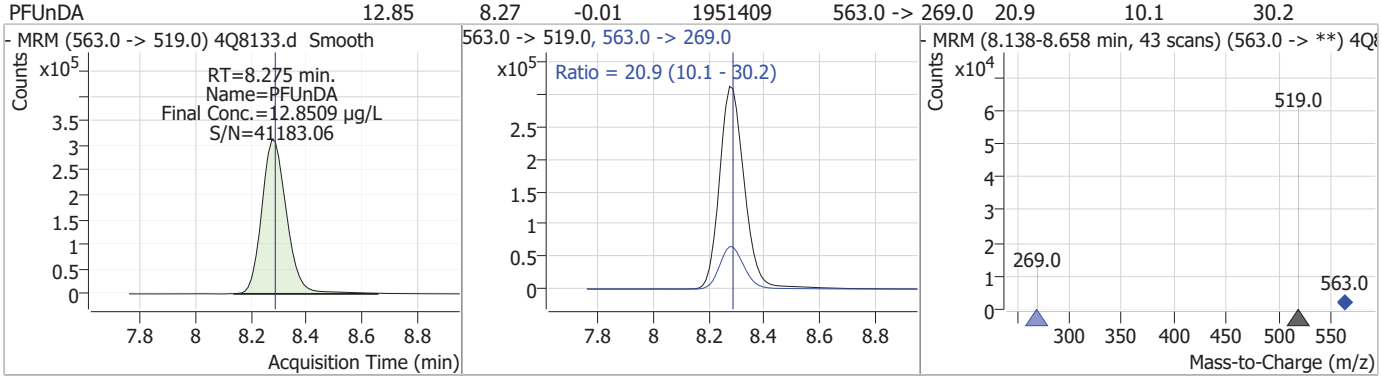
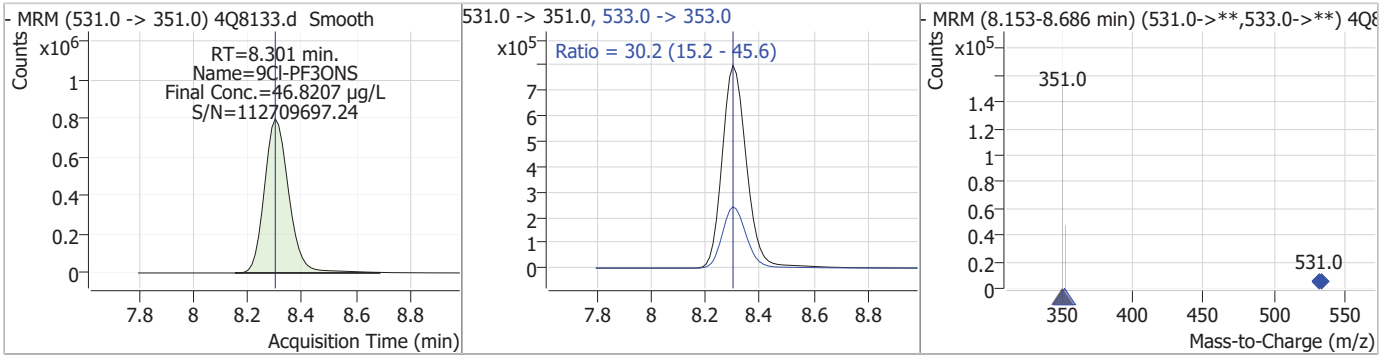
Perfluorinated Compounds by LC/MS/MS

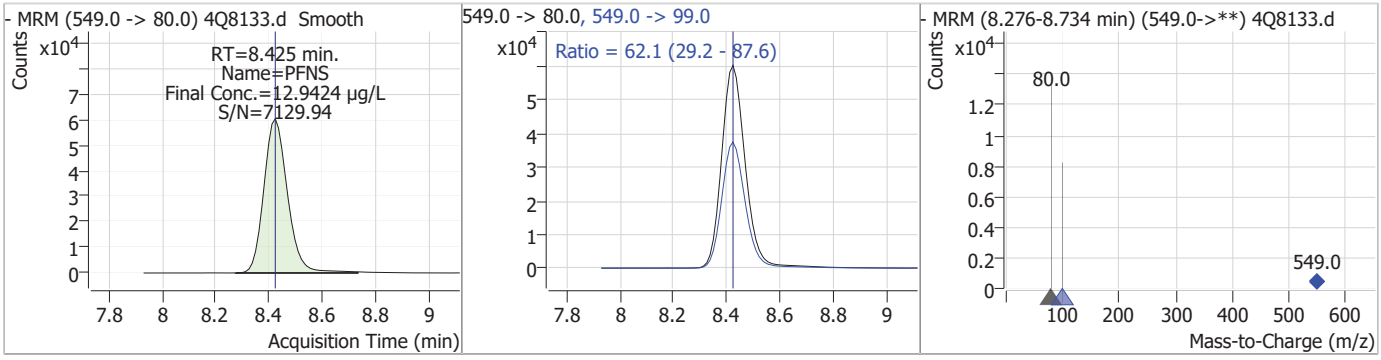
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	12.85	8.27	-0.01	1951409	563.0 -> 269.0	20.9	10.1	30.2



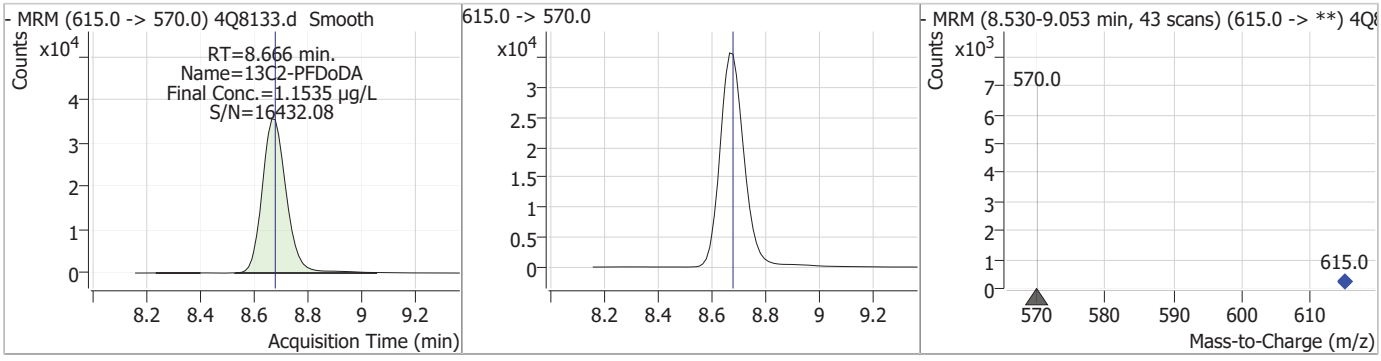
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	46.82	8.30	0.00	4995574	533.0 -> 353.0	30.2	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	12.94	8.42	0.00	370543	549.0 -> 99.0	62.1	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.15	8.67	-0.01	221624				



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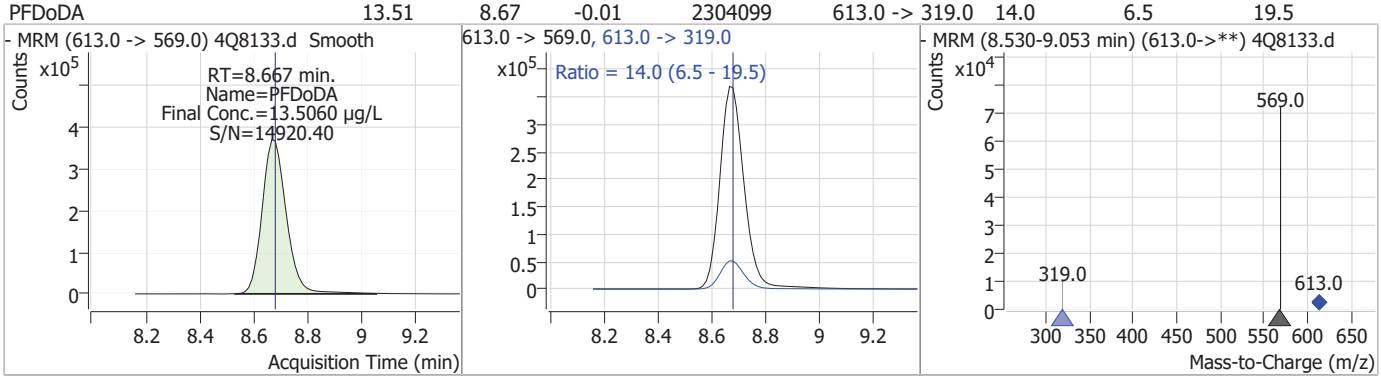
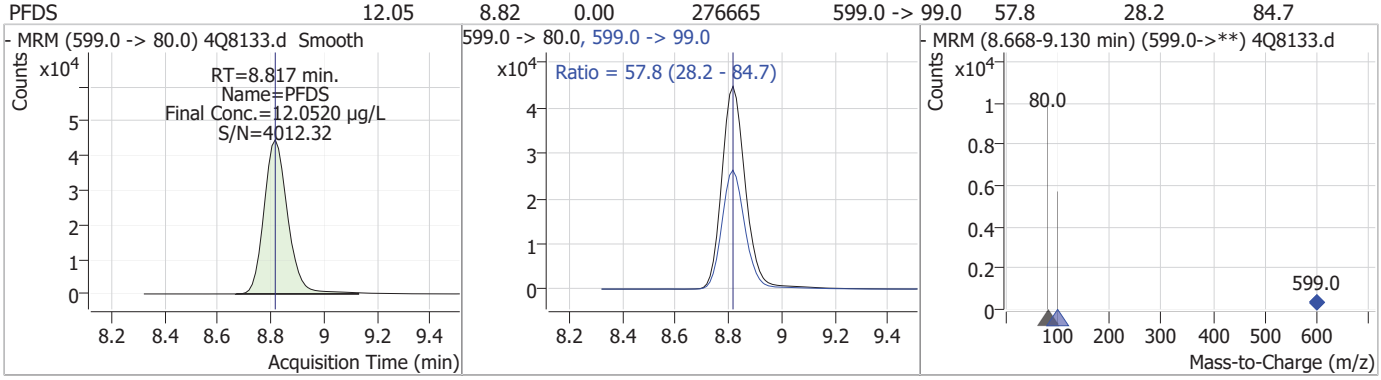
Perfluorinated Compounds by LC/MS/MS

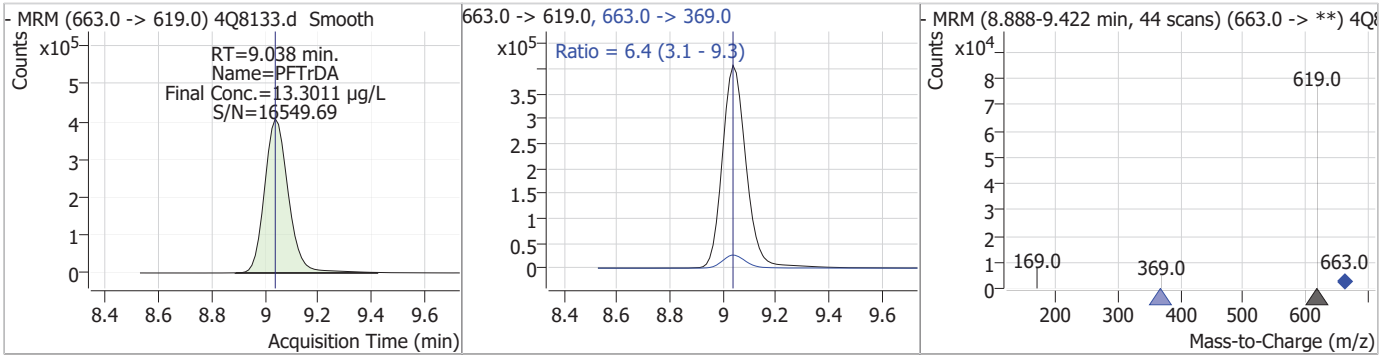
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	13.51	8.67	-0.01	2304099	613.0 -> 319.0	14.0	6.5	19.5



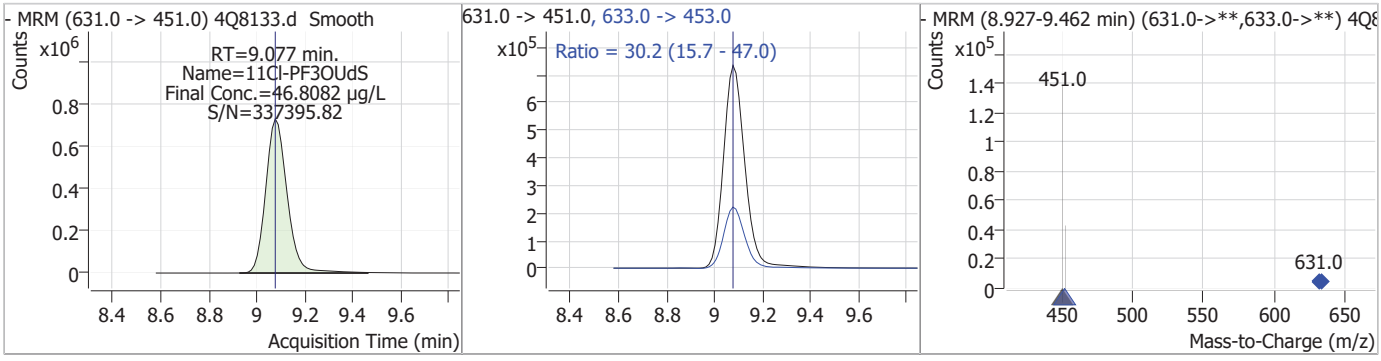
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	12.05	8.82	0.00	276665	599.0 -> 99.0	57.8	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	13.30	9.04	0.00	2530409	663.0 -> 369.0	6.4	3.1	9.3

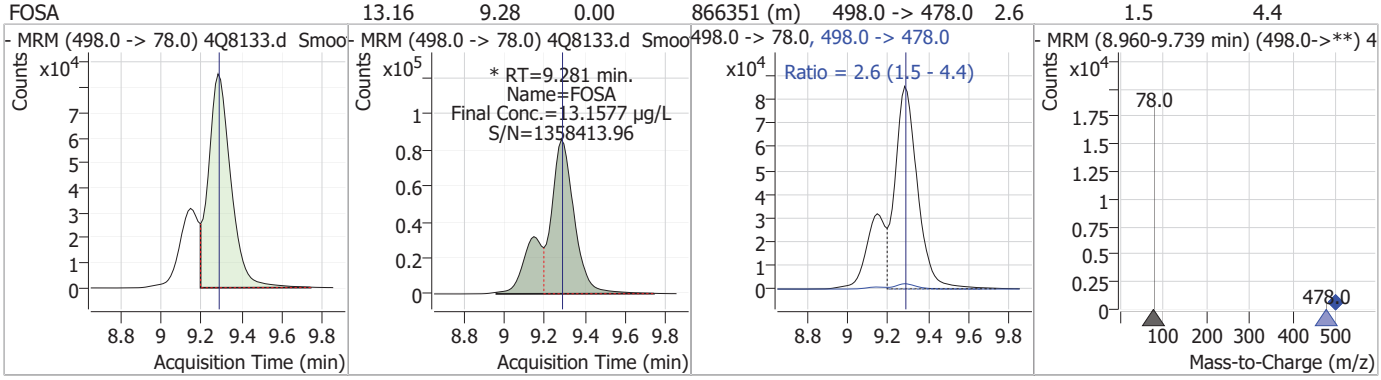


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	46.81	9.08	0.00	4540207	633.0 -> 453.0	30.2	15.7	47.0

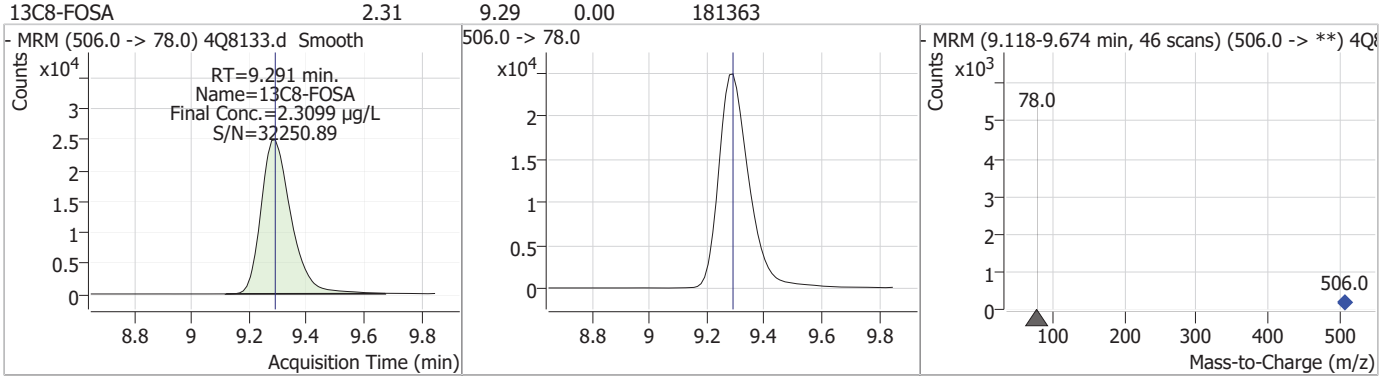


Perfluorinated Compounds by LC/MS/MS

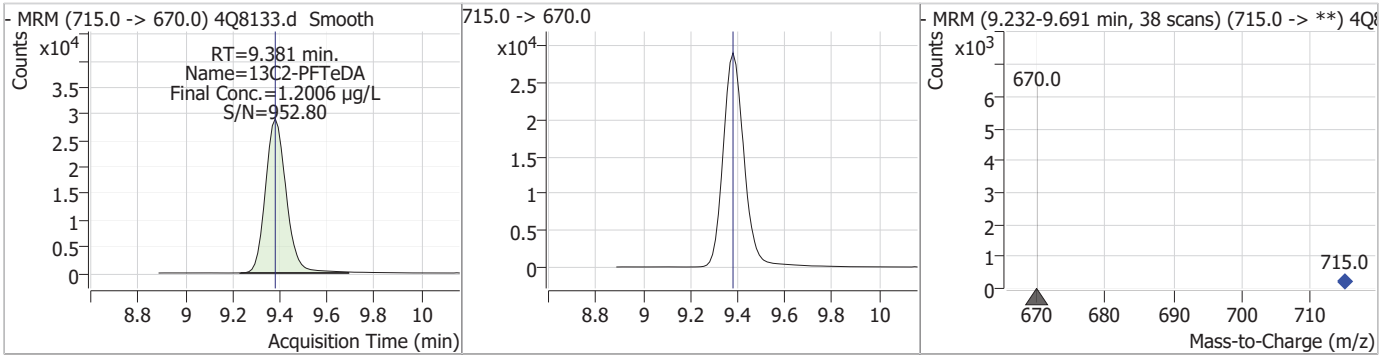
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	13.16	9.28	0.00	866351 (m)	498.0 -> 478.0	2.6	1.5	4.4



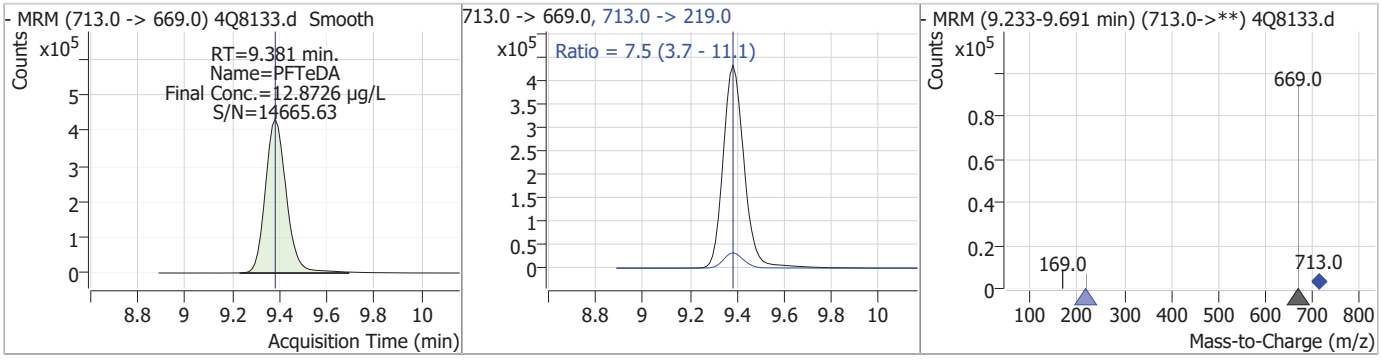
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.31	9.29	0.00	181363				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.20	9.38	0.00	177339				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	12.87	9.38	0.00	2657916	713.0 -> 219.0	7.5	3.7	11.1



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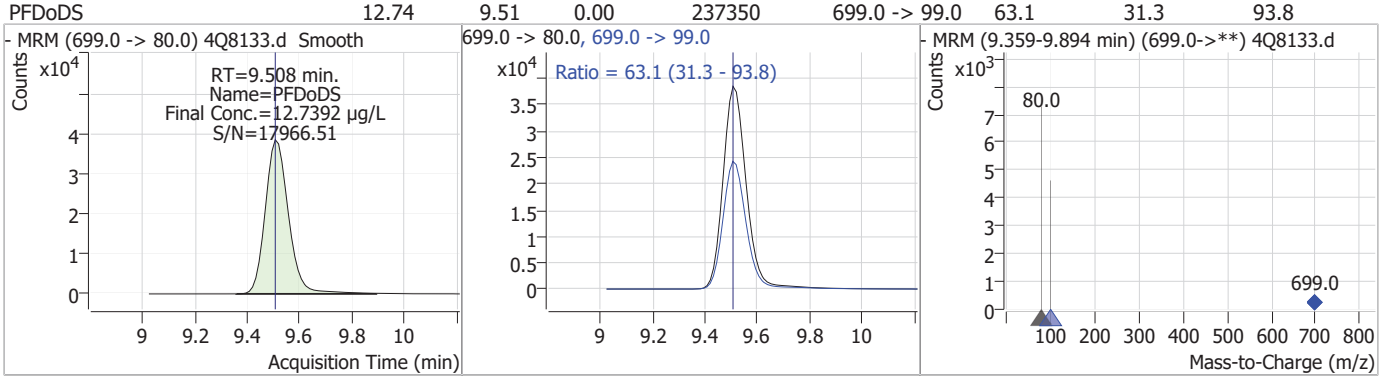
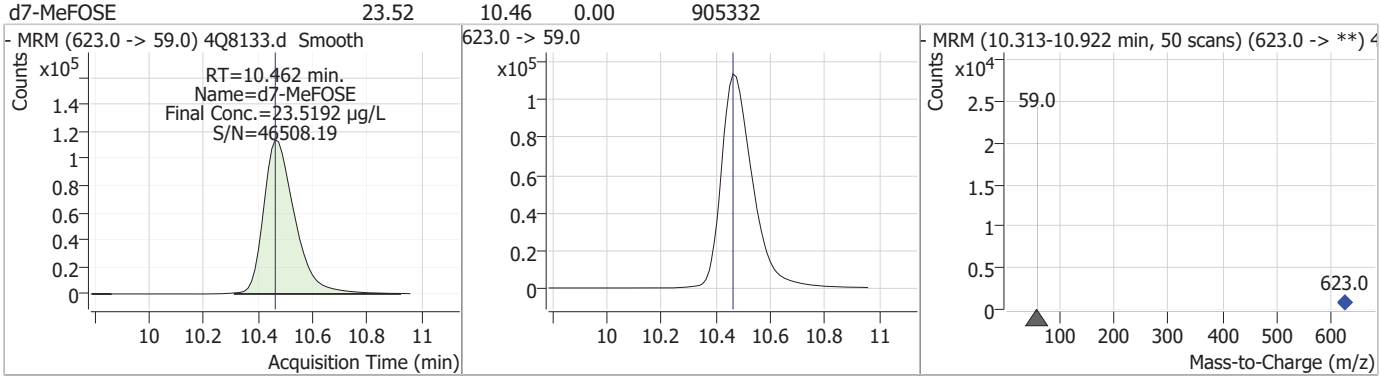
Perfluorinated Compounds by LC/MS/MS

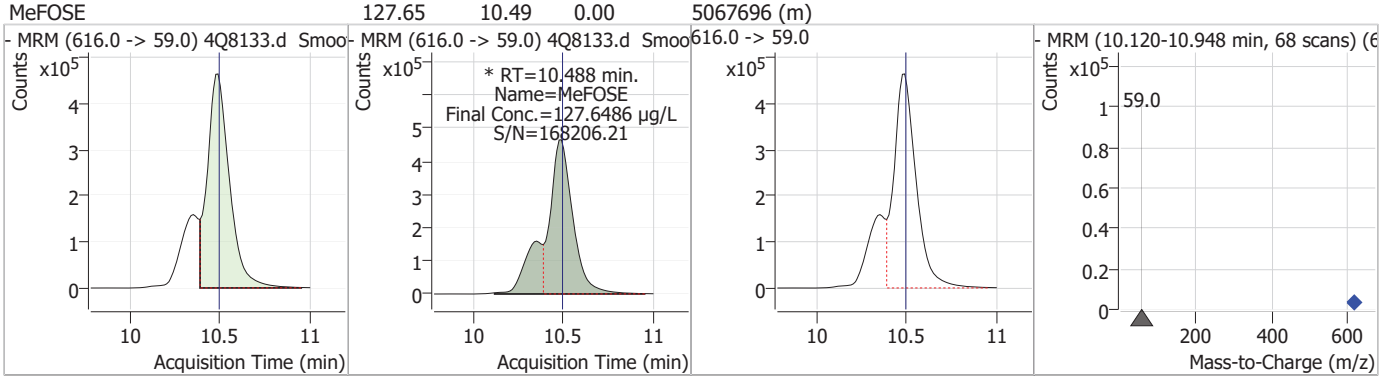
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	12.74	9.51	0.00	237350	699.0 -> 99.0	63.1	31.3	93.8



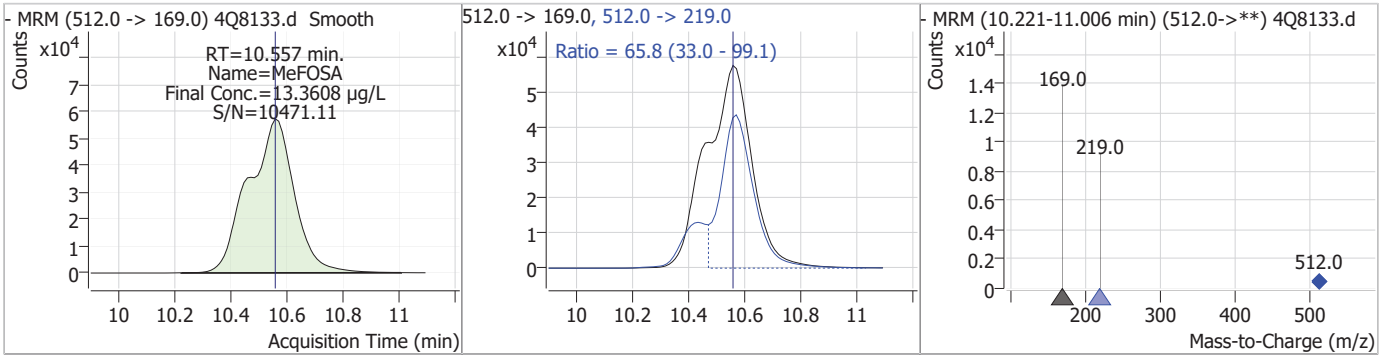
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.52	10.46	0.00	905332				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	127.65	10.49	0.00	5067696 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	13.36	10.56	0.00	655930	512.0 -> 219.0	65.8	33.0	99.1



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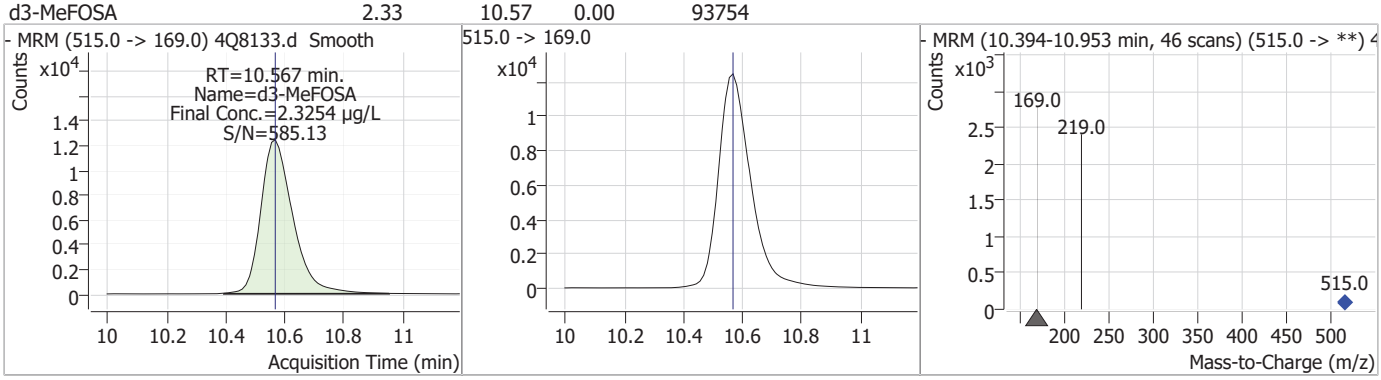
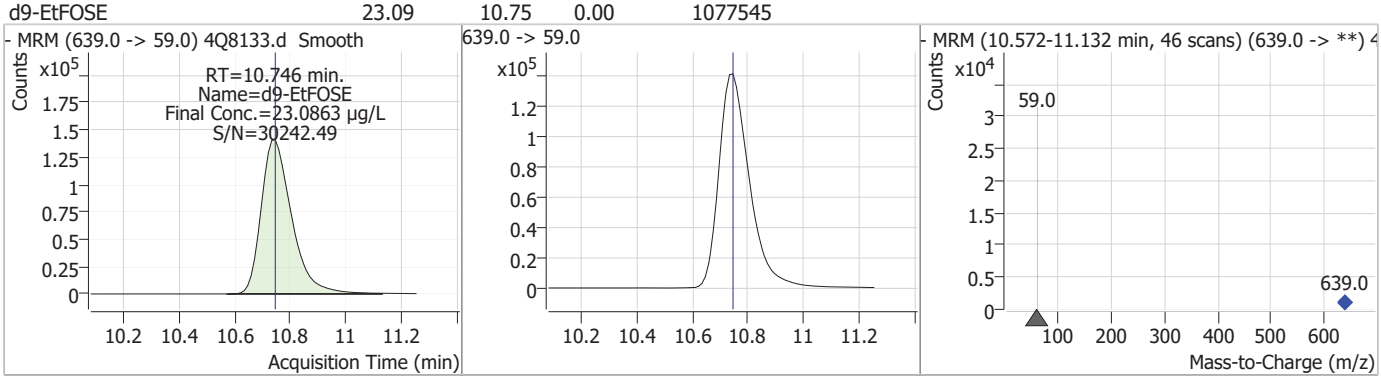
Perfluorinated Compounds by LC/MS/MS

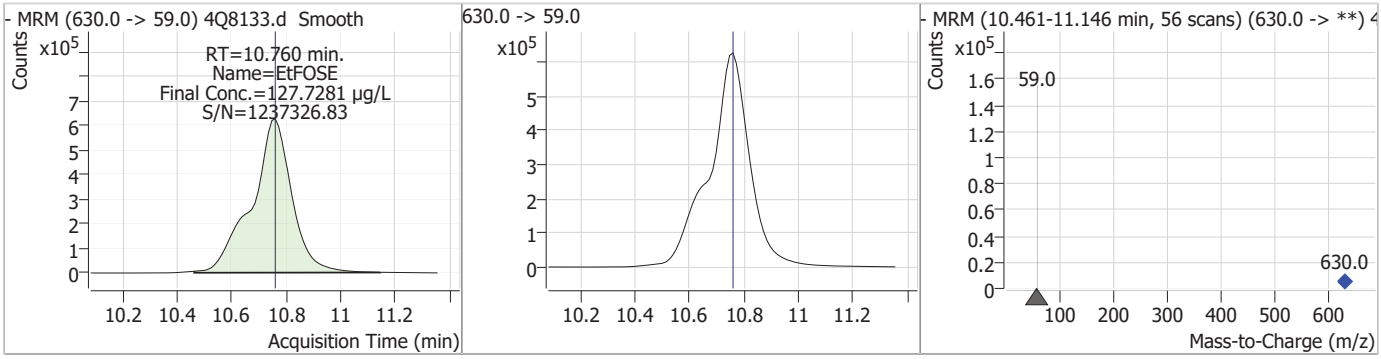
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.33	10.57	0.00	93754				



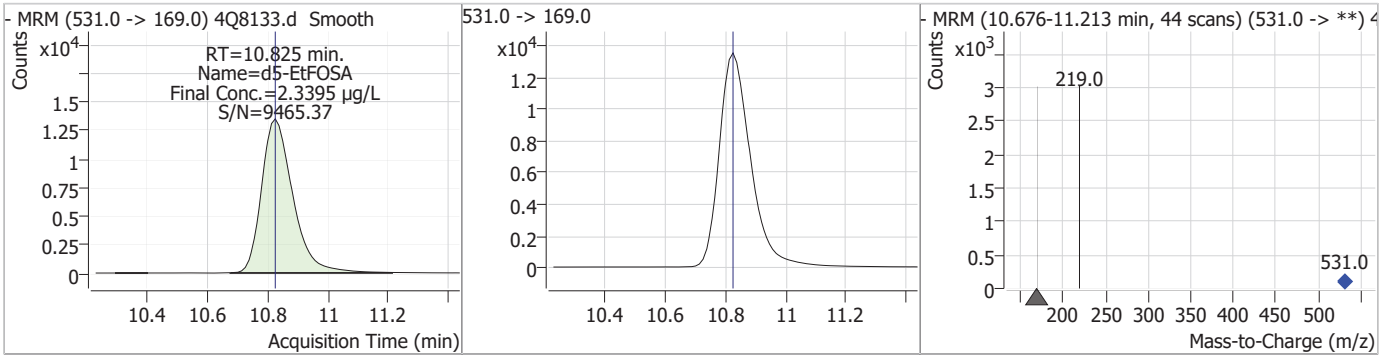
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.09	10.75	0.00	1077545				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	127.73	10.76	0.00	6402019				

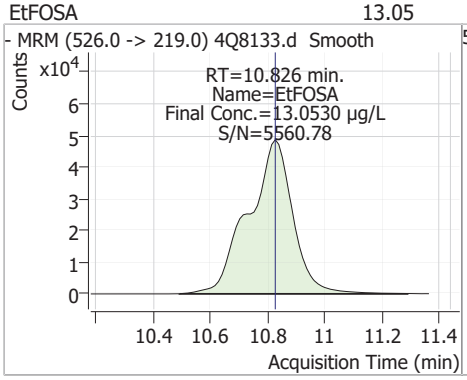


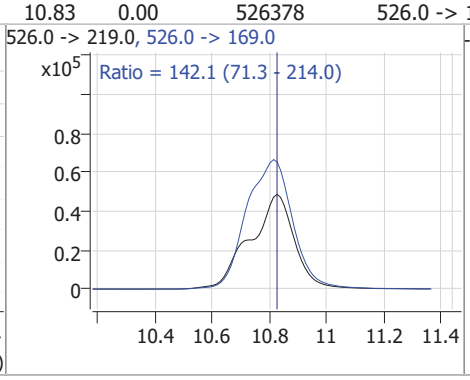
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.34	10.82	0.00	97205				

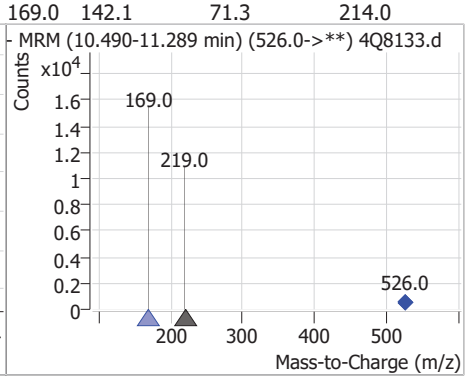


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	13.05	10.83	0.00	526378	526.0 -> 169.0	142.1	71.3	214.0







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Manual Integration Approval Summary

Sample Number: T4Q138-IC138
Lab FileID: 4Q8133.D
Injection Time: 04/30/25 15:37
Method: EPA 1633
Analyst approved: 04/30/25 23:06 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.93	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8134.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 3:50:52 PM
Sample Name : IC138-7
Vial : P1-A8
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63077,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	827975	10.00	µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	440543	5.00	µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	299318	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	309743	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	460109	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	194045	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	179156	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	230631	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	216889	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	169491	1.25	µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	174624	2.50	µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	25807	2.50	µg/L	-0.012
		302.0 -> 80.0	63461			
M3-PFHxS	6.986	402.0 -> 99.0	37138	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	41174	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	9194	5.00	µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	20629	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	25766	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	216365	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	463230	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	167221	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	826110	25.00	µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	981101	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	86763	2.50	µg/L	0.000
M3-MeFOSA	10.568	515.0 -> 169.0	88033	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	72712	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	365722	5.00	µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	42203	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	480273	2.50	µg/L	0.000
13C2-PFDA	7.859	515.0 -> 470.0	172852	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	191461	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	290856	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	9194	4.34	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 86.9%		
13C2-6:2FTS	6.684	429.0 -> 81.0	20629	4.49	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 89.8%		
13C2-8:2FTS	7.671	529.0 -> 81.0	25766	4.77	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.4%		
13C2-PFDoDA	8.666	615.0 -> 570.0	216889	1.16	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.9%		
13C2-PFTeDA	9.381	715.0 -> 670.0	169491	1.18	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.4%		
13C3-PFBS	5.355	302.0 -> 99.0	25807	2.48	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.1%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	37138	2.52	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.8%			
13C4-PFBA	2.871	217.0 -> 172.0	827975	9.87	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.7%			
13C4-PFHpA	6.291	367.0 -> 322.0	309743	2.37	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.7%			
13C5-PFHxA	5.452	318.0 -> 273.0	299318	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.2%			
13C5-PFPeA	4.319	268.0 -> 223.0	440543	4.72	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.3%			
13C6-PFDA	7.858	519.0 -> 474.0	179156	1.17	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.8%			
13C7-PFUnDA	8.273	570.0 -> 525.0	230631	1.13	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.4%			
13C8-FOSA	9.291	506.0 -> 78.0	174624	2.34	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.5%			
13C8-PFOA	6.897	421.0 -> 376.0	460109	2.40	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.9%			
13C8-PFOS	7.995	507.0 -> 99.0	41174	2.35	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.1%			
13C9-PFNA	7.403	472.0 -> 427.0	194045	1.22	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.8%			
d3-MeFOSAA	7.915	573.0 -> 419.0	216365	4.52	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.4%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	463230	9.58	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.8%			
d3-MeFOSA	10.568	515.0 -> 169.0	88033	2.30	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.8%			
d5-EtFOSAA	8.098	589.0 -> 419.0	167221	4.55	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.0%			
d7-MeFOSE	10.462	623.0 -> 59.0	826110	22.56	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 90.2%			
d9-EtFOSE	10.746	639.0 -> 59.0	981101	22.09	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 88.4%			
d5-EtFOSA	10.825	531.0 -> 169.0	86763	2.19	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 87.8%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	1734640	102.73	µg/L		97
		327.0 -> 81.0	844973				
6:2FTS	6.684	427.0 -> 407.0	2112771	102.13	µg/L		100
		427.0 -> 81.0	995169				
8:2FTS	7.671	527.0 -> 507.0	2122046	105.23	µg/L		99
		527.0 -> 81.0	820586				
EtFOSAA	8.111	584.0 -> 419.0	924635	29.19	µg/L	m	99
		584.0 -> 483.0	513750				
FOSA	9.281	498.0 -> 78.0	1740257	27.45	µg/L	m	99
		498.0 -> 478.0	46764				
MeFOSAA	7.929	570.0 -> 419.0	1090349	29.25	µg/L	m	98
		570.0 -> 512.0	384055				
PFBA	2.877	213.0 -> 169.0	2896183	114.42	µg/L		100
PFBS	5.357	299.0 -> 80.0	759764	25.75	µg/L		99
		299.0 -> 99.0	315919				
PFDA	7.859	513.0 -> 469.0	3995399	29.34	µg/L		100
		513.0 -> 219.0	925605				
PFDoDA	8.667	613.0 -> 569.0	4616057	27.65	µg/L		96
		613.0 -> 319.0	668561				

Perfluorinated Compounds by LC/MS/MS

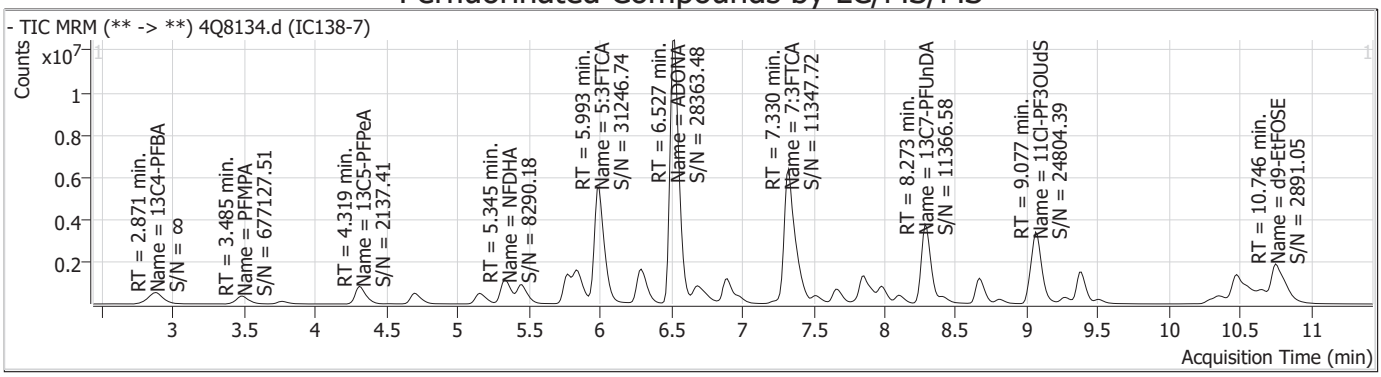
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	579638	28.13	µg/L		99
		599.0 -> 99.0	322677				
PFHpA	6.292	363.0 -> 319.0	5436297	28.85	µg/L		100
		363.0 -> 169.0	1119815				
PFHpS	7.529	449.0 -> 80.0	877235	27.32	µg/L		99
		449.0 -> 99.0	479263				
PFHxA	5.455	313.0 -> 269.0	3627064	28.12	µg/L		100
		313.0 -> 119.0	125308				
PFHxS	6.987	399.0 -> 80.0	839938	25.97	µg/L	m	98
		399.0 -> 99.0	436288				
PFNA	7.404	463.0 -> 419.0	3418486	29.29	µg/L	m	98
		463.0 -> 219.0	1233058				
PFNS	8.425	549.0 -> 80.0	744434	26.89	µg/L		96
		549.0 -> 99.0	455034				
PFOA	6.898	413.0 -> 369.0	4374579	28.57	µg/L	m	100
		413.0 -> 169.0	1285163				
PFOS	7.996	499.0 -> 80.0	866244	26.10	µg/L	m	98
		499.0 -> 99.0	460901				
PFPeA	4.321	263.0 -> 219.0	3998029	57.40	µg/L		100
PFPeS	6.331	349.0 -> 80.0	857595	26.61	µg/L		98
		349.0 -> 99.0	445079				
PFTeDA	9.382	713.0 -> 669.0	5562838	28.19	µg/L		99
		713.0 -> 219.0	427831				
PFTrDA	9.038	663.0 -> 619.0	5185651	27.85	µg/L		99
		663.0 -> 369.0	336312				
PFUnDA	8.275	563.0 -> 519.0	3893238	28.56	µg/L		98
		563.0 -> 269.0	815487				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	9344059	106.03	µg/L		97
		633.0 -> 453.0	2779851				
9Cl-PF3ONS	8.301	531.0 -> 351.0	10245343	105.69	µg/L		98
		533.0 -> 353.0	2981659				
ADONA	6.527	377.0 -> 251.0	44474344	122.36	µg/L		92
		377.0 -> 85.0	12490948				
HFPO-DA	5.780	285.0 -> 169.0	5621514	115.44	µg/L		100
		285.0 -> 185.0	629499				
3:3FTCA	3.769	241.0 -> 177.0	609903	146.52	µg/L		99
		241.0 -> 117.0	47155				
5:3FTCA	5.993	341.0 -> 237.0	16285922	640.11	µg/L		98
		341.0 -> 217.0	11127501				
7:3FTCA	7.330	441.0 -> 337.0	22295393	751.26	µg/L		94
		441.0 -> 317.0	9260641				
EtFOSA	10.826	526.0 -> 219.0	1085079	30.15	µg/L		99
		526.0 -> 169.0	1532154				
EtFOSE	10.760	630.0 -> 59.0	13049407	285.94	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	1343531	29.15	µg/L		100
		512.0 -> 219.0	884544				
MeFOSE	10.488	616.0 -> 59.0	10311925	284.65	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	493388	27.38	µg/L		100
		699.0 -> 99.0	307647				
NFDHA	5.345	295.0 -> 201.0	992809	58.59	µg/L		93
		201.0 -> 85.0	3865031				
		295.0 -> 85.0	262729				
PFMBA	4.710	279.0 -> 85.0	2719136	57.22	µg/L		100
PFMPA	3.485	229.0 -> 85.0	2307199	57.77	µg/L		100
PFEESA	5.849	315.0 -> 135.0	5954498	50.26	µg/L		99
		315.0 -> 69.0	484524				

Perfluorinated Compounds by LC/MS/MS

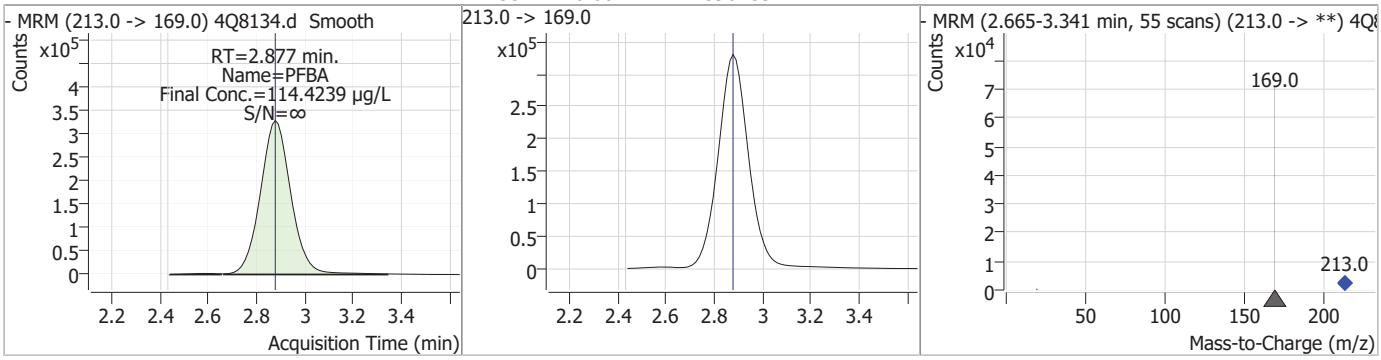
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

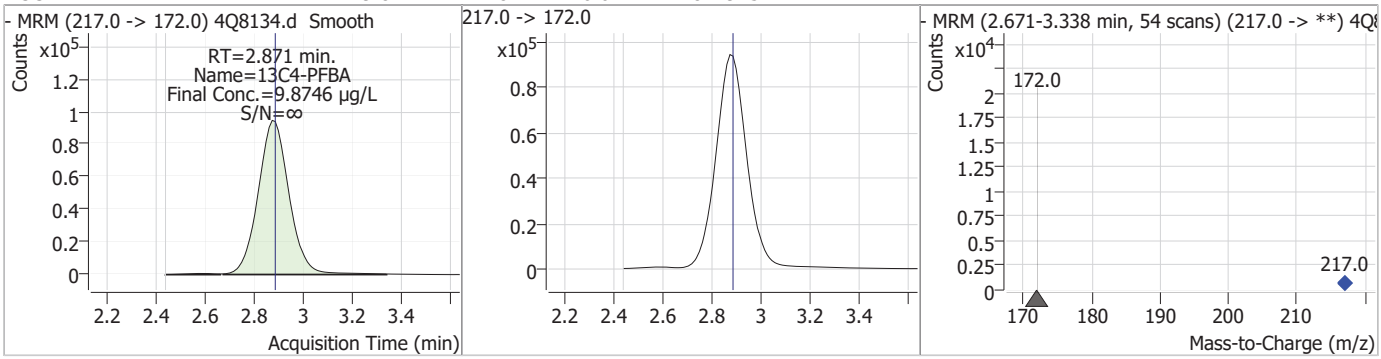
Perfluorinated Compounds by LC/MS/MS



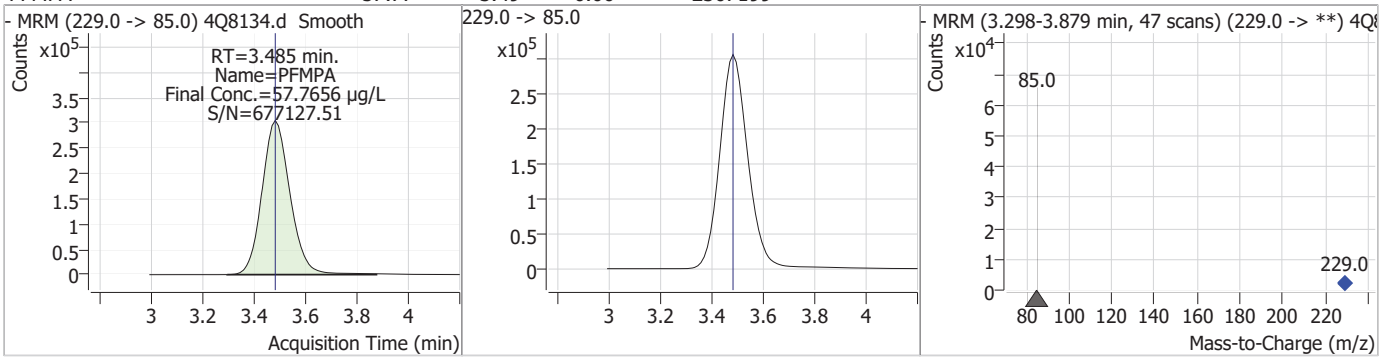
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	114.42	2.88	0.00	2896183				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.87	2.87	-0.01	827975				

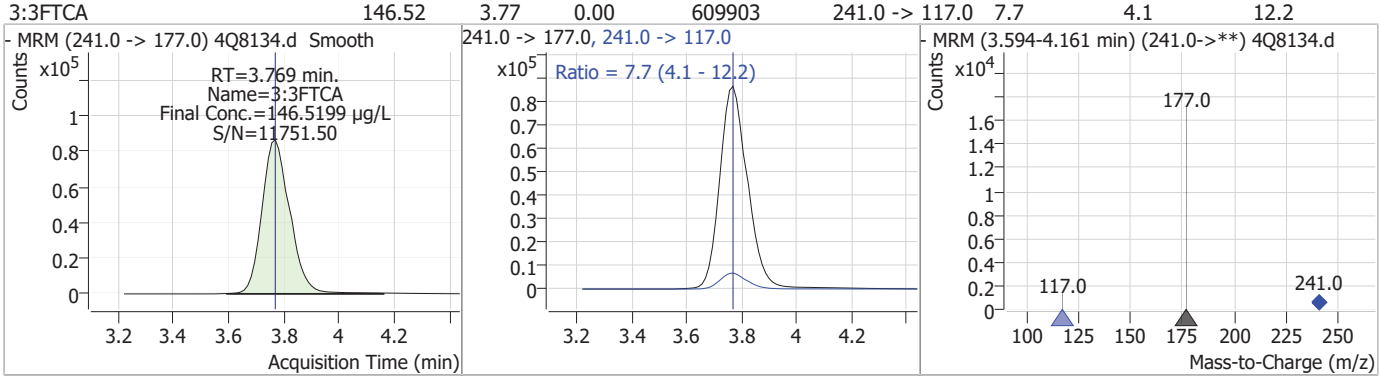


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	57.77	3.49	0.00	2307199				

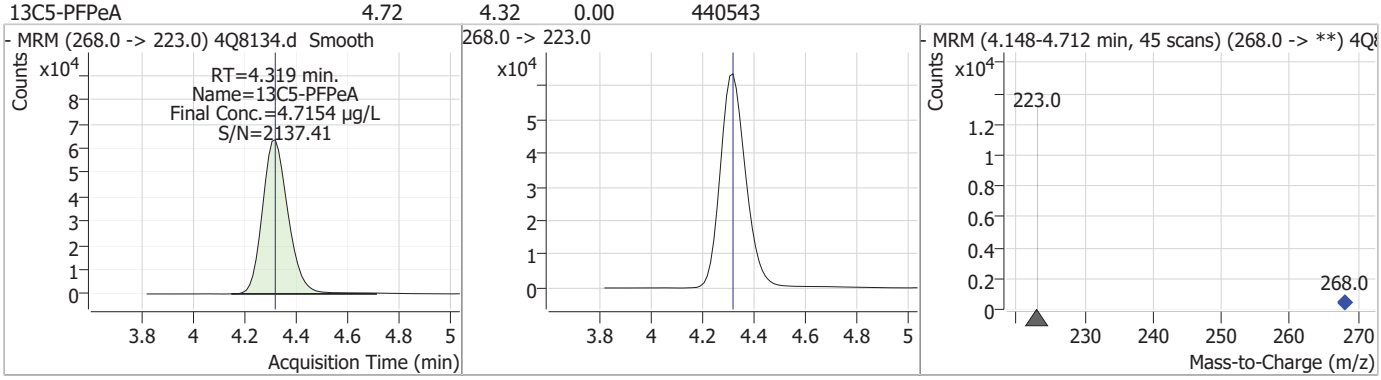


Perfluorinated Compounds by LC/MS/MS

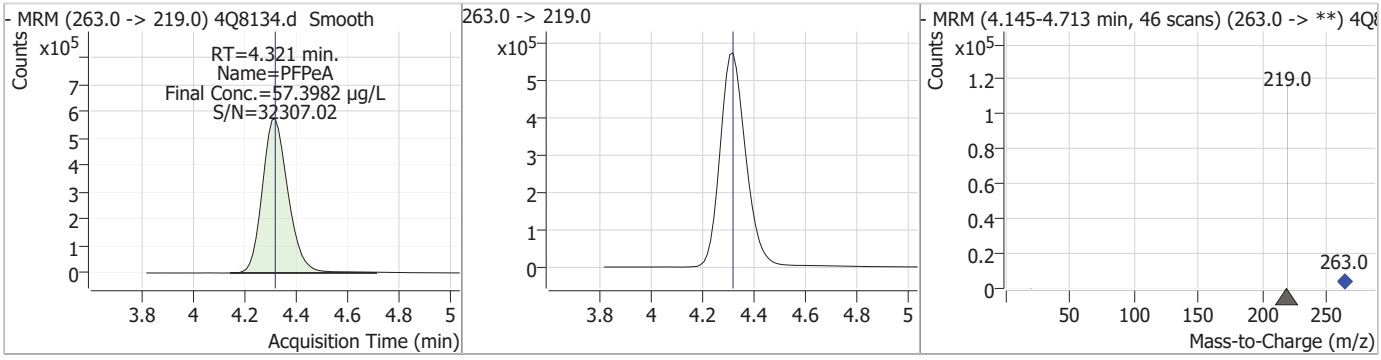
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	146.52	3.77	0.00	609903	241.0 -> 117.0	7.7	4.1	12.2



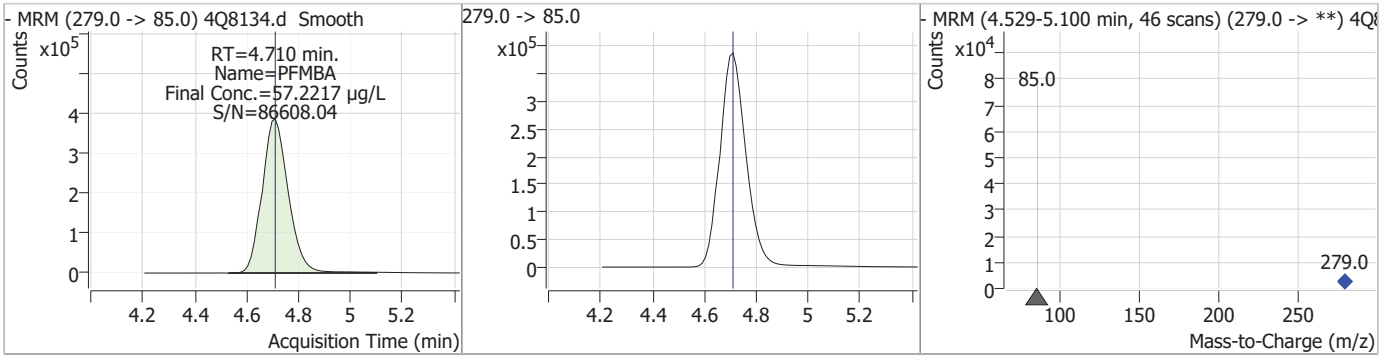
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.72	4.32	0.00	440543				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	57.40	4.32	0.00	3998029				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	57.22	4.71	0.00	2719136				



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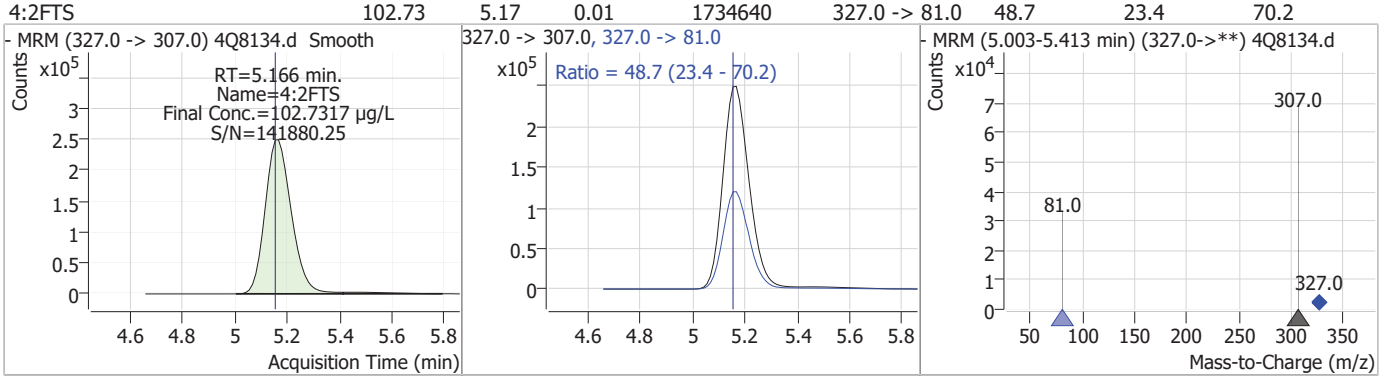
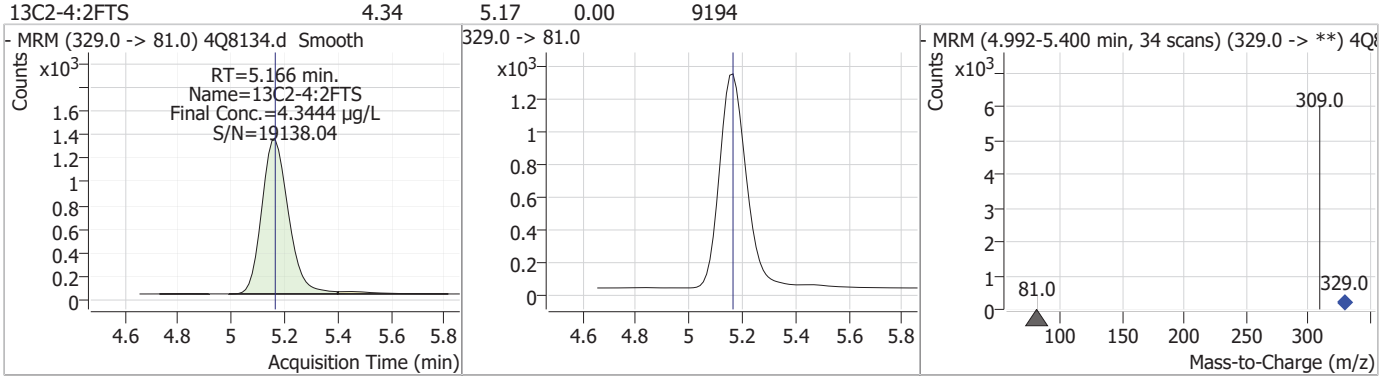
Perfluorinated Compounds by LC/MS/MS

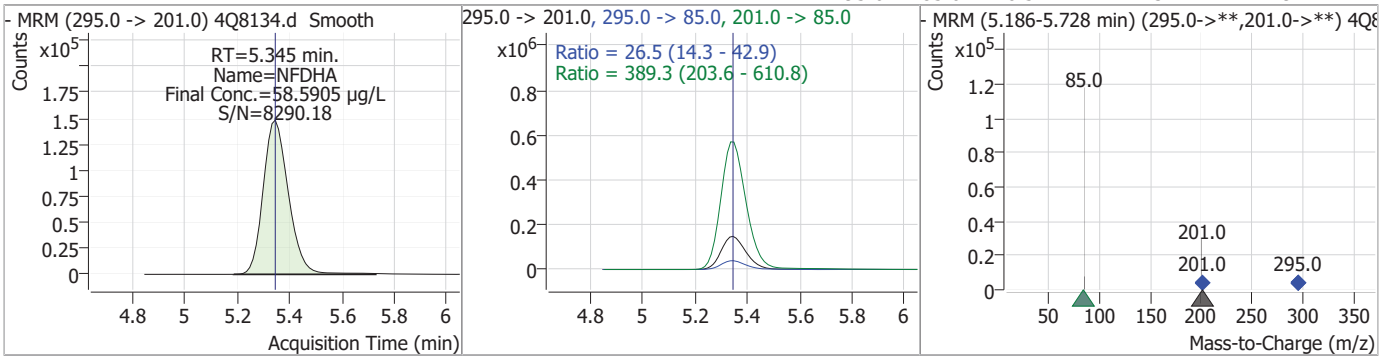
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	102.73	5.17	0.01	1734640	327.0 -> 81.0	48.7	23.4	70.2



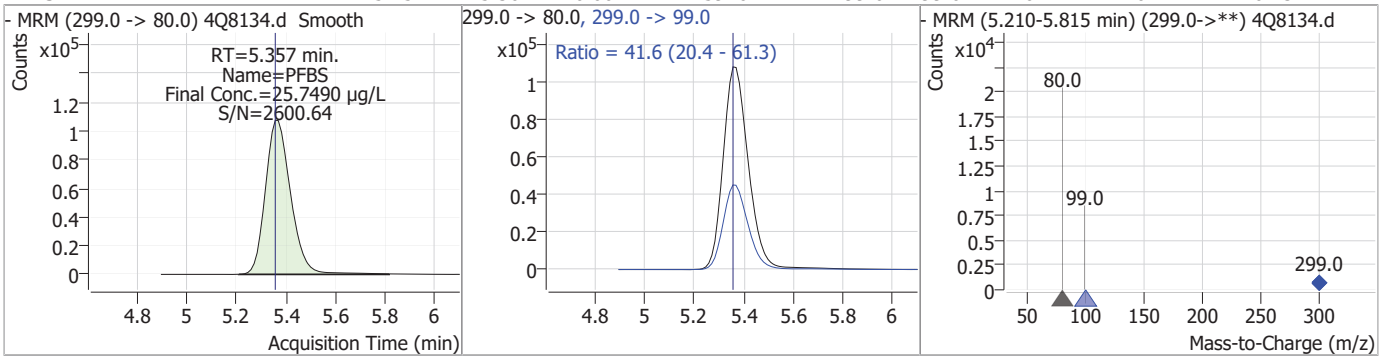
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.34	5.17	0.00	9194				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	58.59	5.35	0.00	992809	201.0 -> 85.0	389.3	203.6	610.8
					295.0 -> 85.0	26.5	14.3	42.9

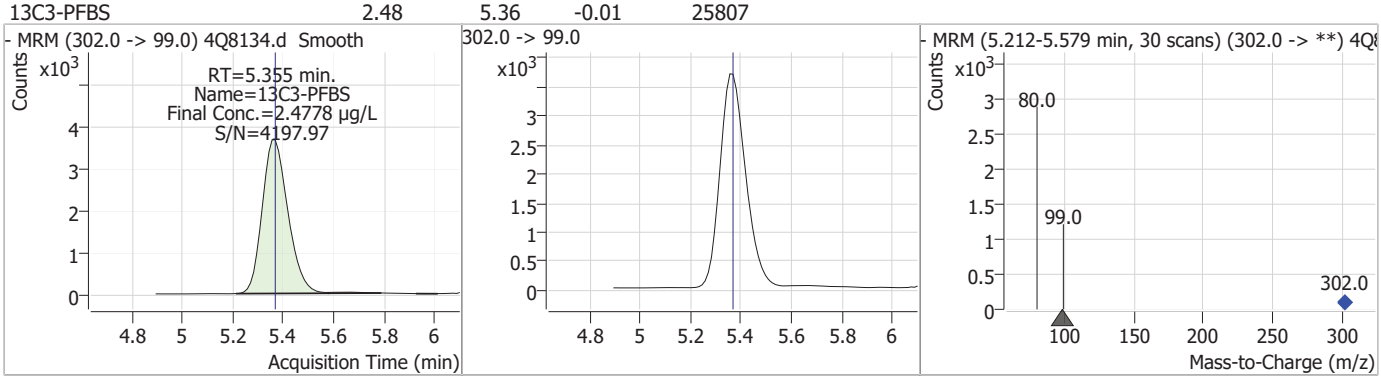


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	25.75	5.36	0.00	759764	299.0 -> 99.0	41.6	20.4	61.3

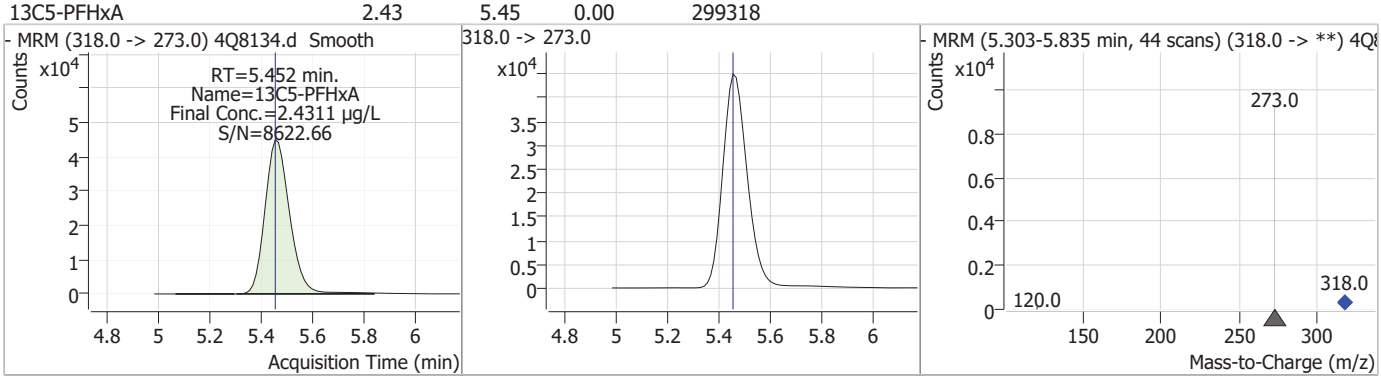


Perfluorinated Compounds by LC/MS/MS

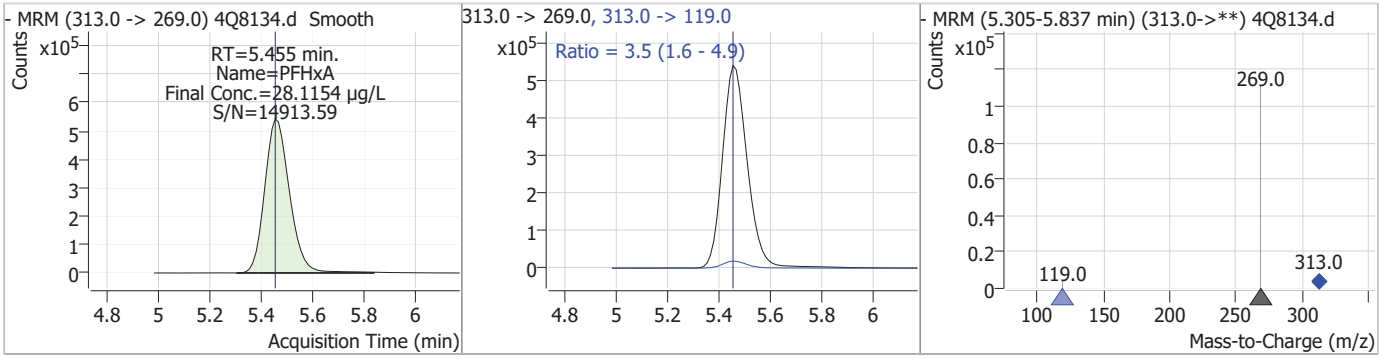
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.48	5.36	-0.01	25807				



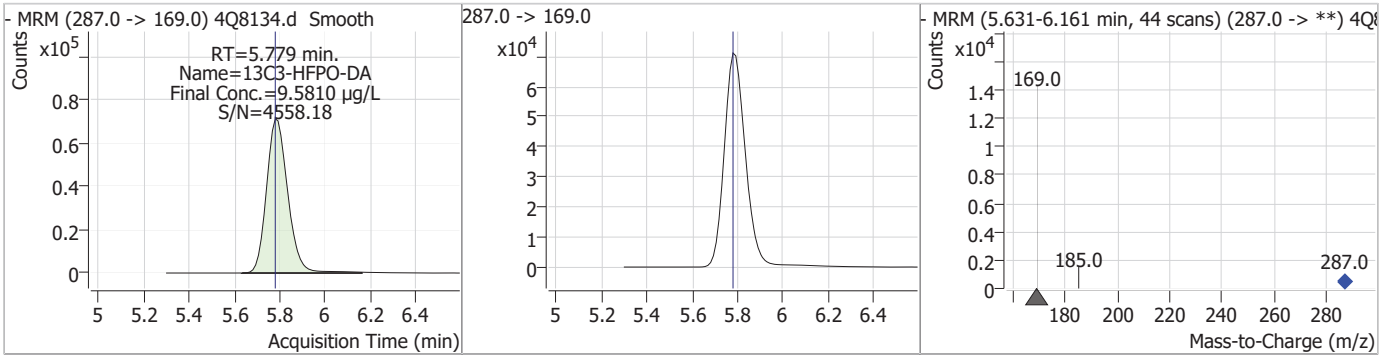
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.43	5.45	0.00	299318				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	28.12	5.45	0.00	3627064	313.0 -> 119.0	3.5	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.58	5.78	0.00	463230				



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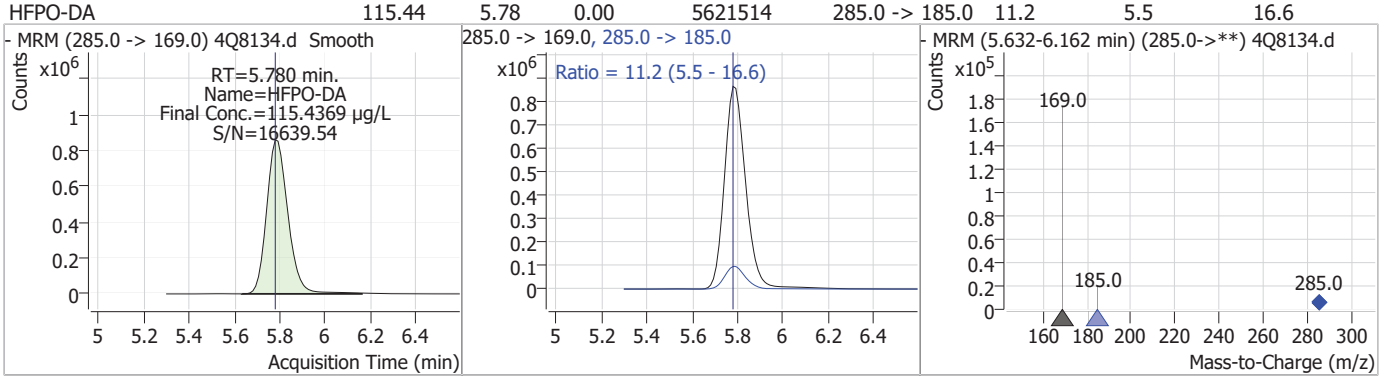
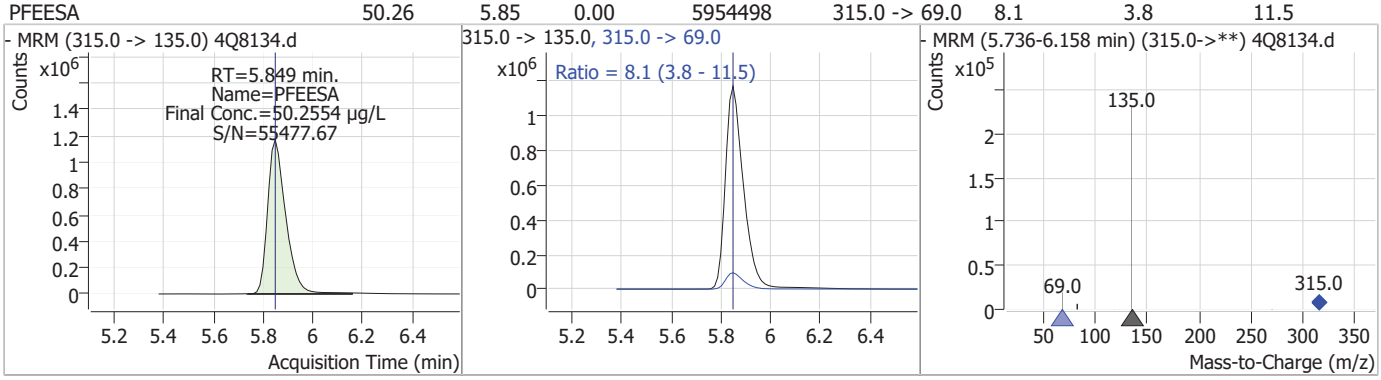
Perfluorinated Compounds by LC/MS/MS

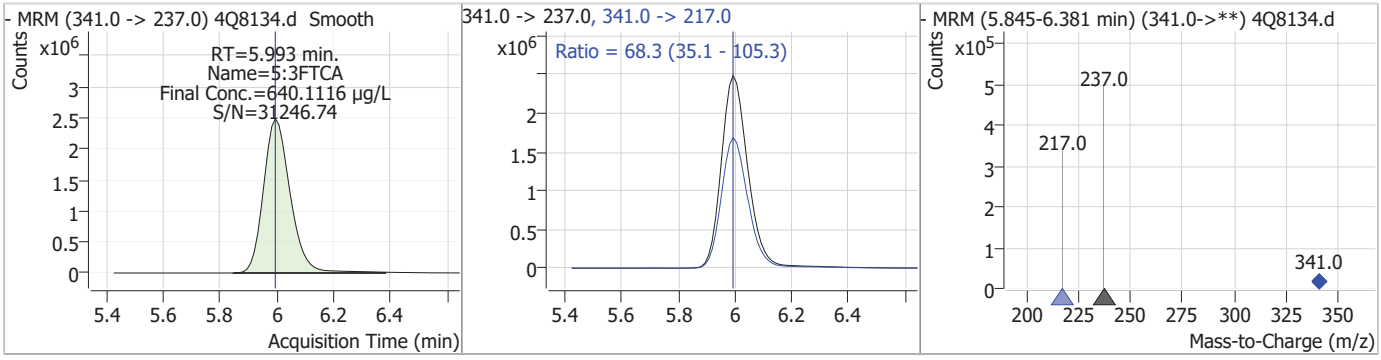
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	115.44	5.78	0.00	5621514	285.0 -> 185.0	11.2	5.5	16.6



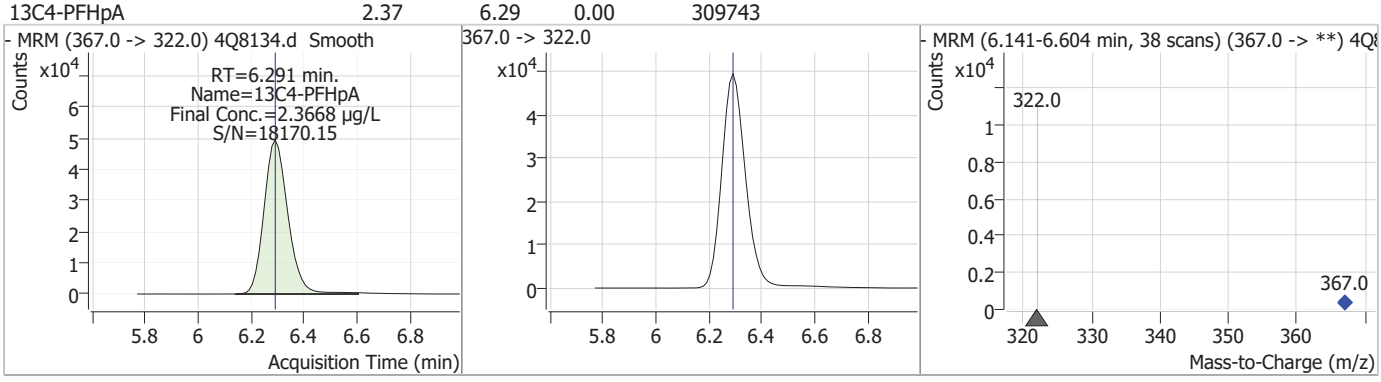
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	50.26	5.85	0.00	5954498	315.0 -> 69.0	8.1	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	640.11	5.99	0.00	16285922	341.0 -> 217.0	68.3	35.1	105.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.37	6.29	0.00	309743				



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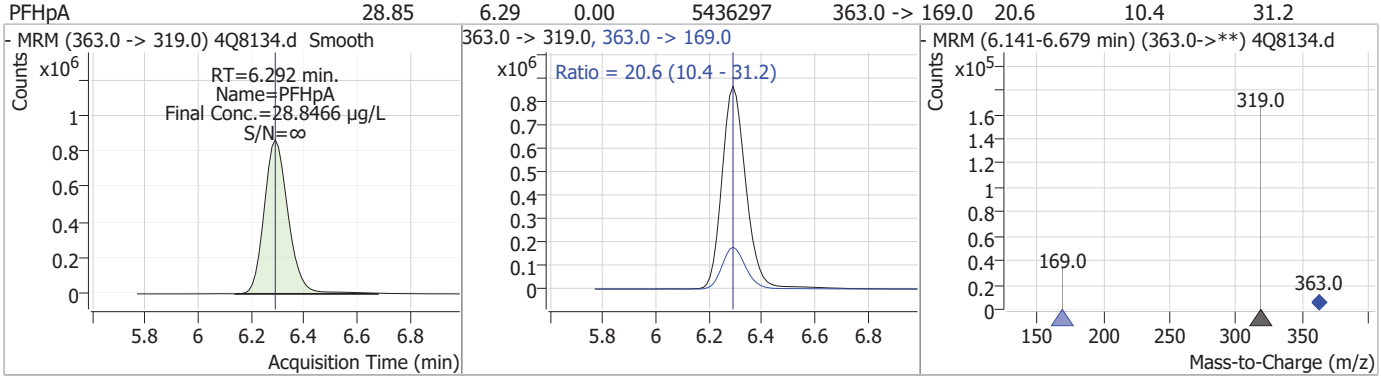
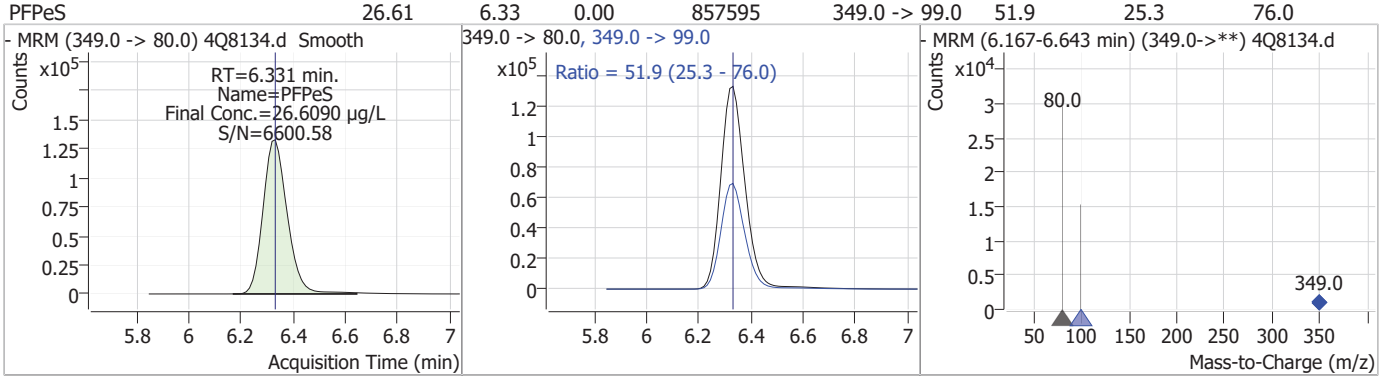
Perfluorinated Compounds by LC/MS/MS

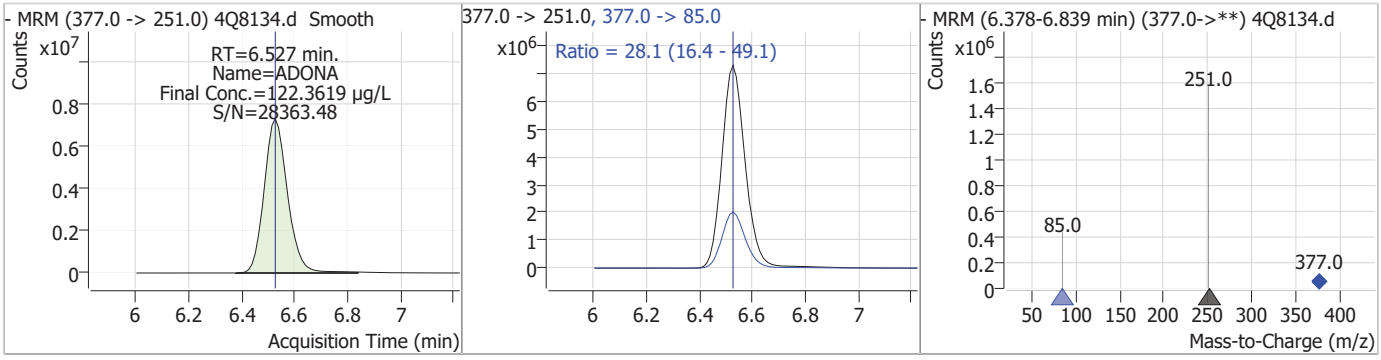
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	28.85	6.29	0.00	5436297	363.0 -> 169.0	20.6	10.4	31.2



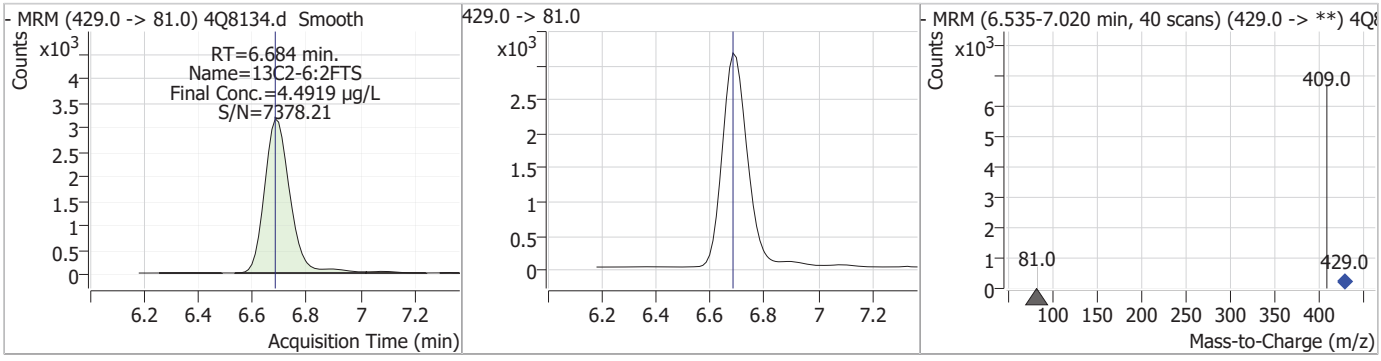
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	26.61	6.33	0.00	857595	349.0 -> 99.0	51.9	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	122.36	6.53	0.00	44474344	377.0 -> 85.0	28.1	16.4	49.1

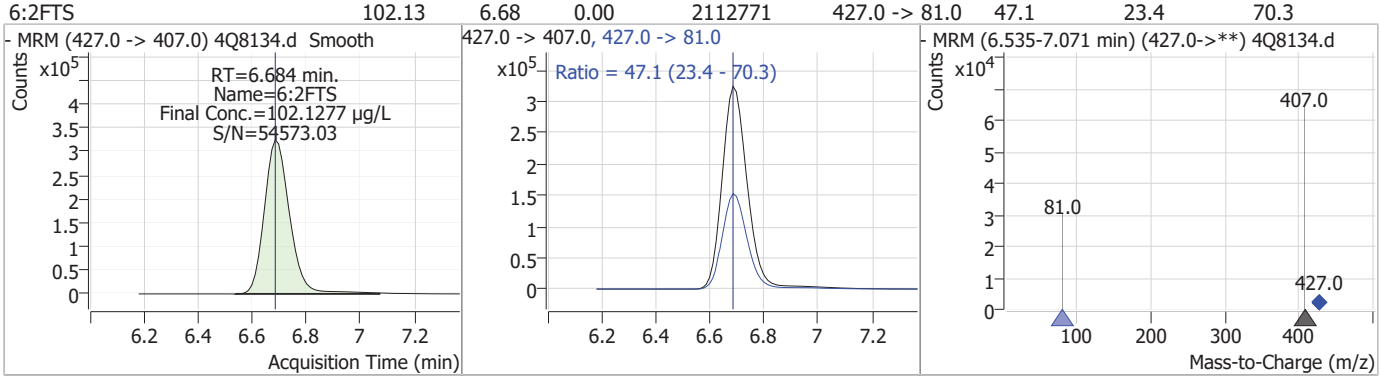


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.49	6.68	0.00	20629				

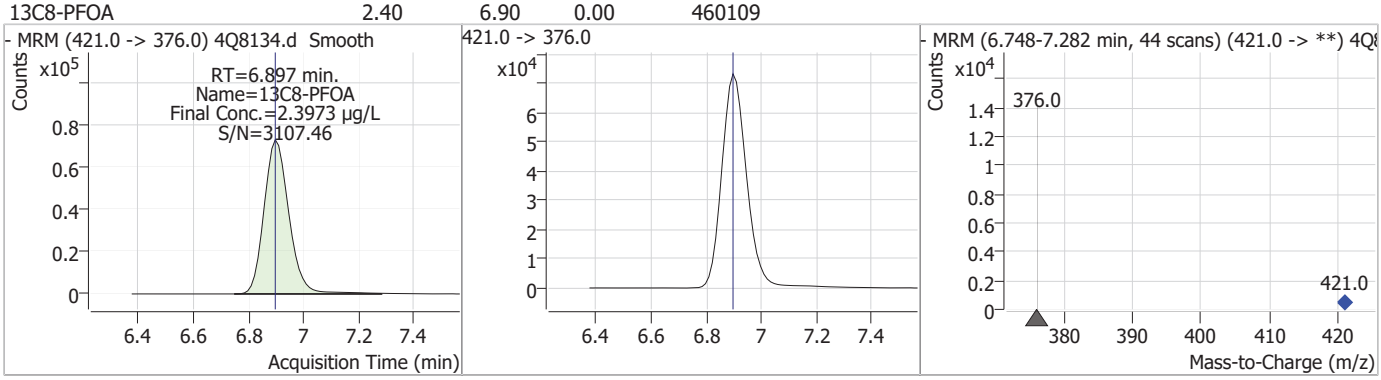


Perfluorinated Compounds by LC/MS/MS

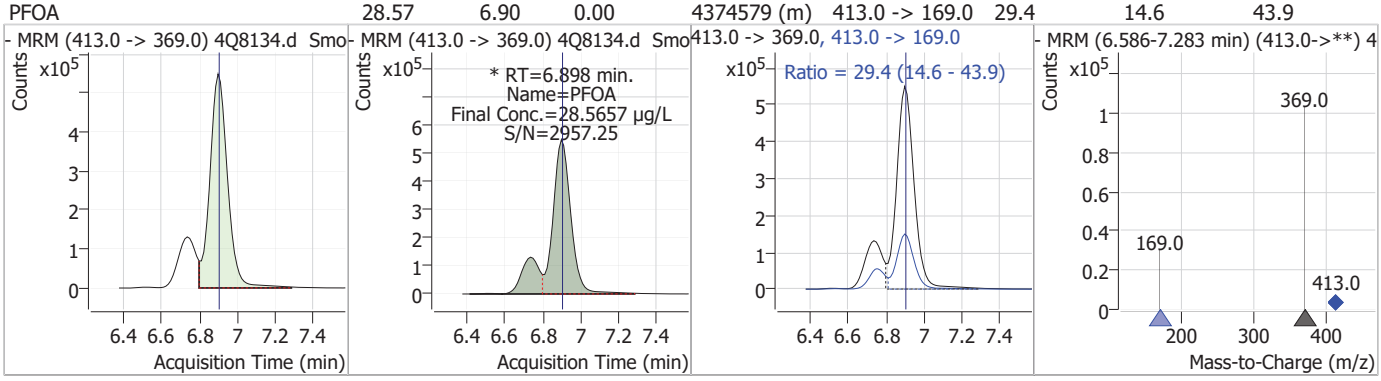
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	102.13	6.68	0.00	2112771	427.0 -> 81.0	47.1	23.4	70.3



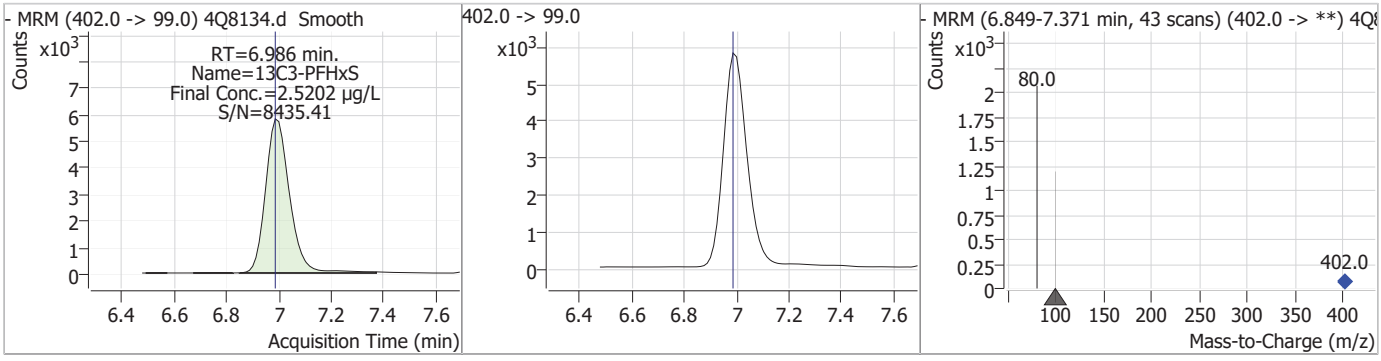
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.40	6.90	0.00	460109				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	28.57	6.90	0.00	4374579 (m)	413.0 -> 169.0	29.4	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.52	6.99	0.00	37138				



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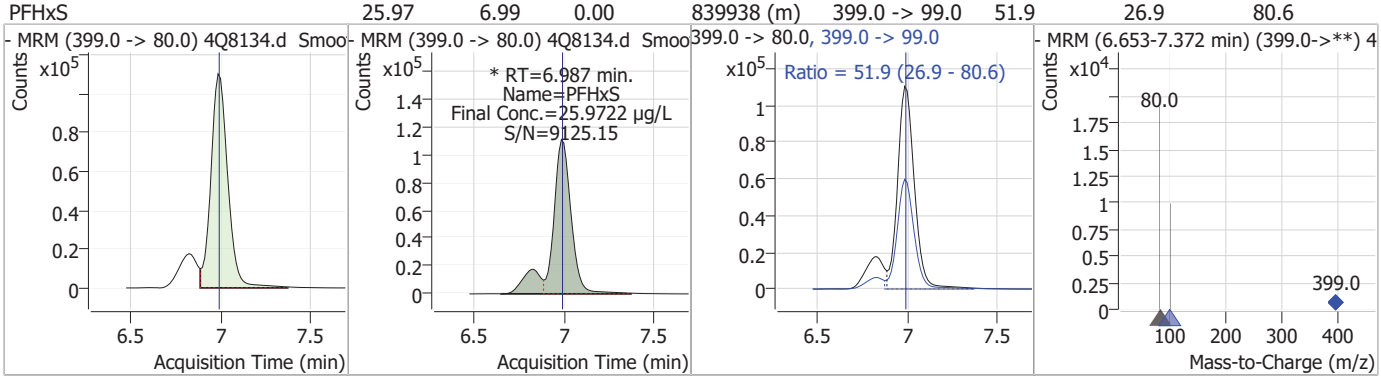
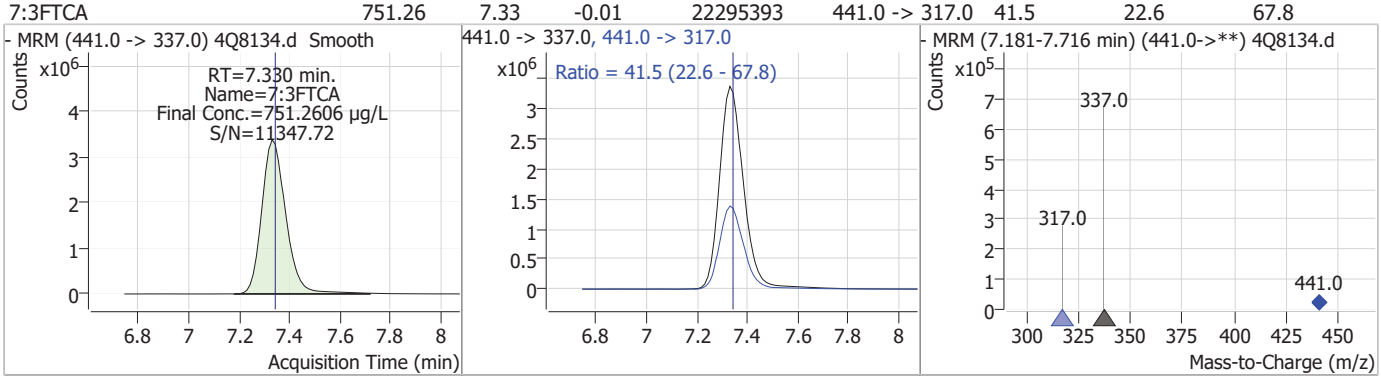
Perfluorinated Compounds by LC/MS/MS

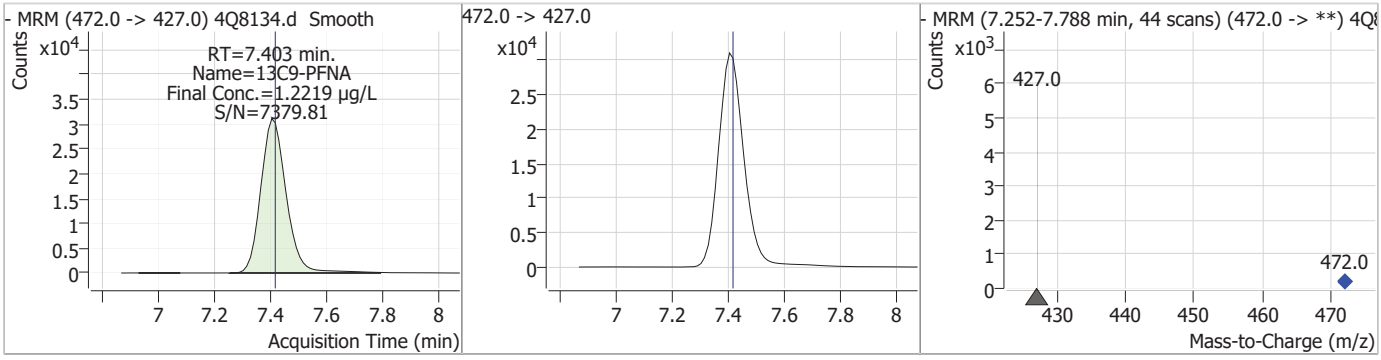
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	25.97	6.99	0.00	839938 (m)	399.0 -> 99.0	51.9	26.9	80.6



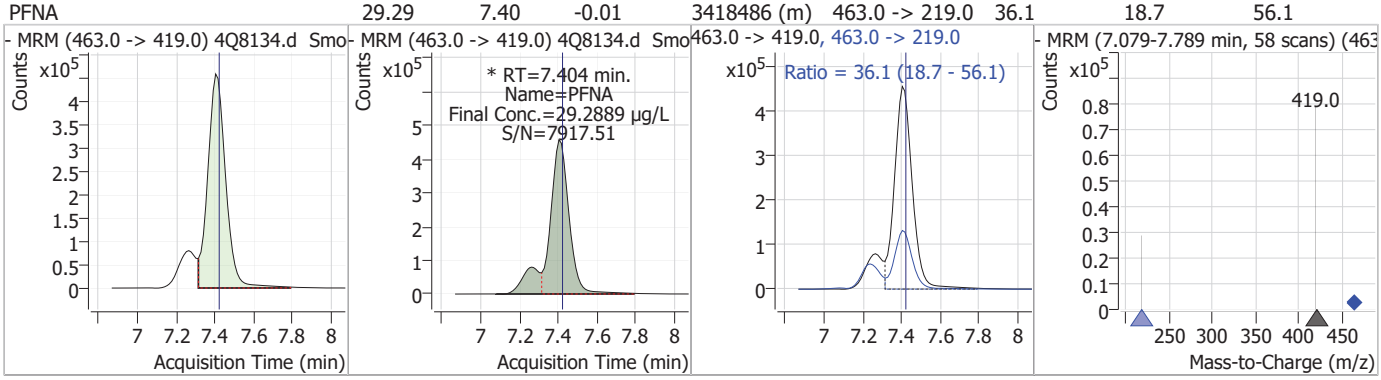
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	751.26	7.33	-0.01	22295393	441.0 -> 317.0	41.5	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.22	7.40	-0.01	194045				

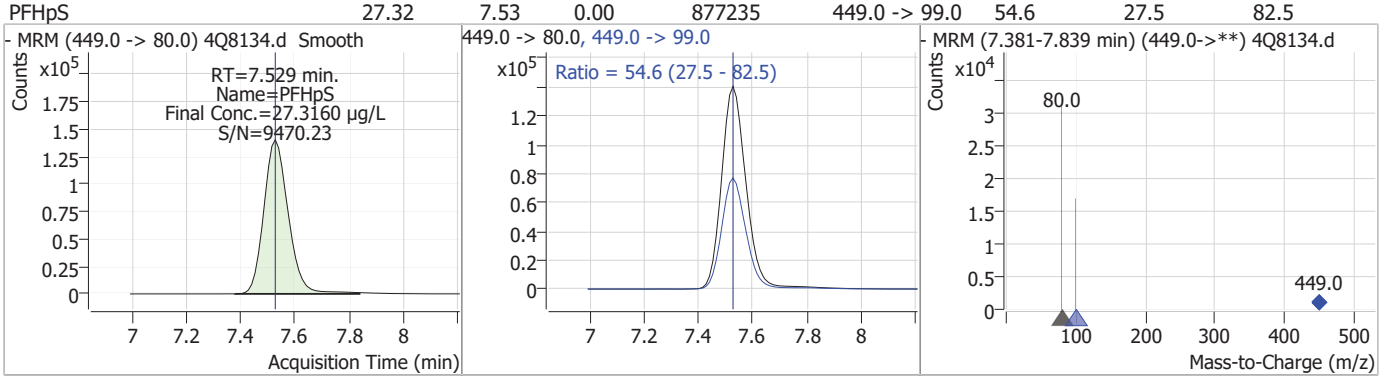


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	29.29	7.40	-0.01	3418486 (m)	463.0 -> 219.0	36.1	18.7	56.1

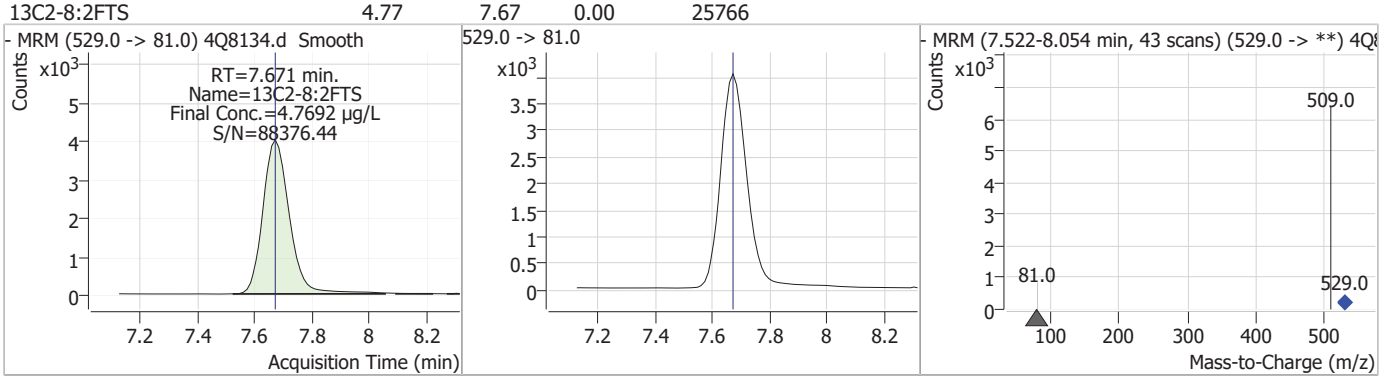


Perfluorinated Compounds by LC/MS/MS

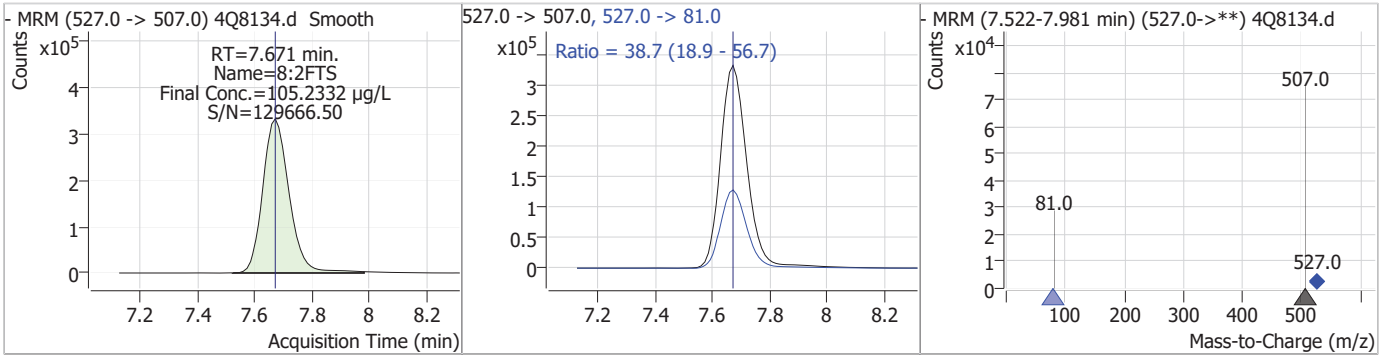
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	27.32	7.53	0.00	877235	449.0 -> 99.0	54.6	27.5	82.5



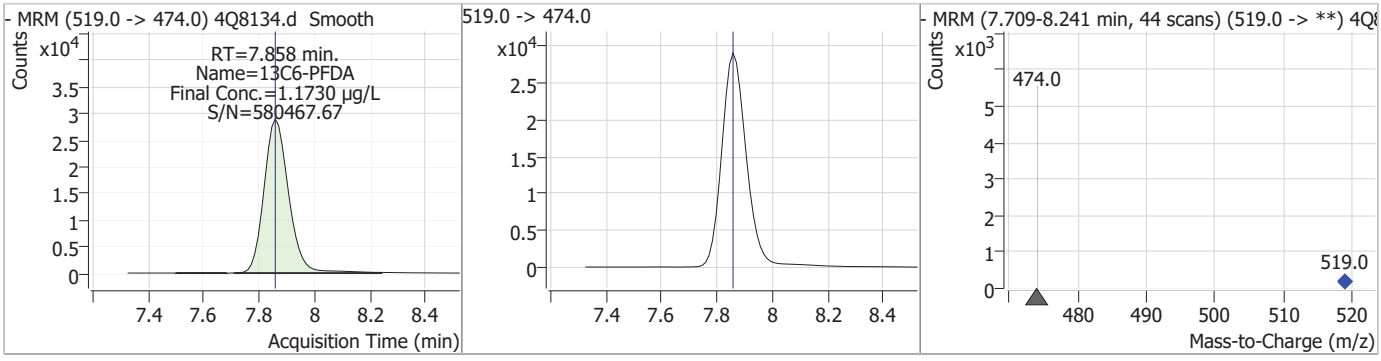
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.77	7.67	0.00	25766				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	105.23	7.67	0.00	2122046	527.0 -> 81.0	38.7	18.9	56.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.17	7.86	0.00	179156				



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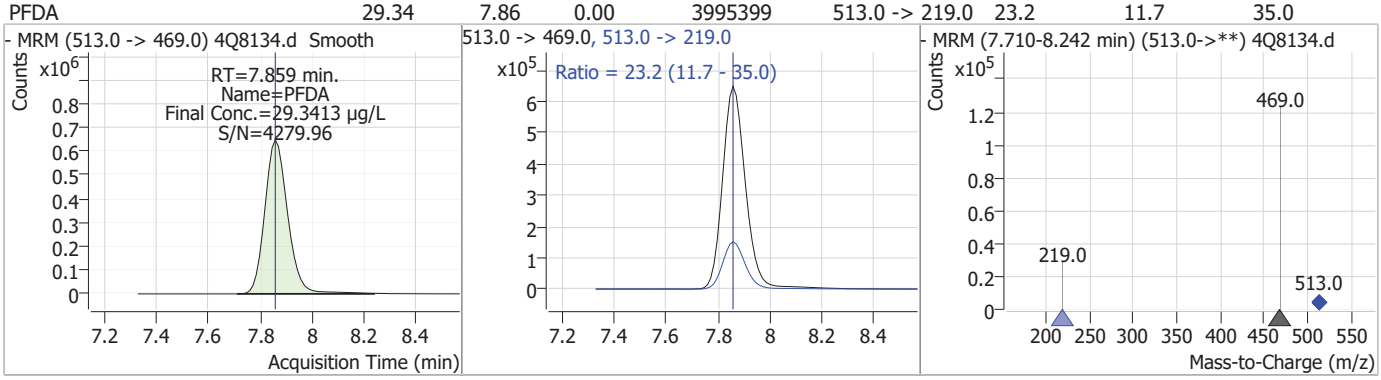
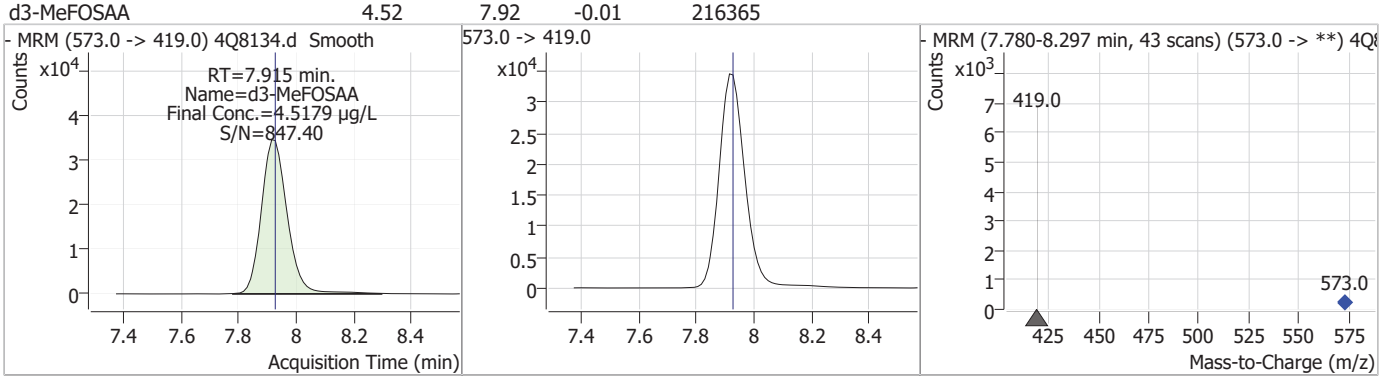
Perfluorinated Compounds by LC/MS/MS

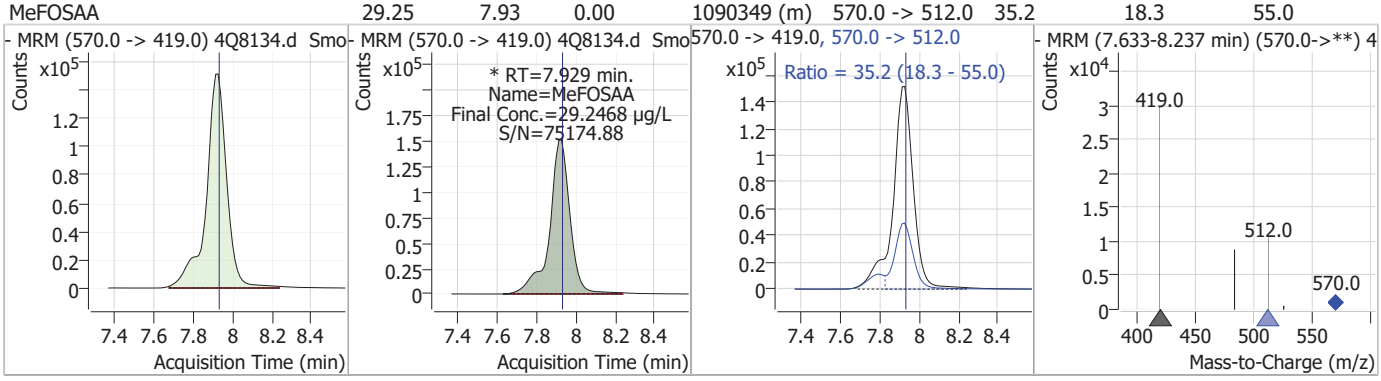
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	29.34	7.86	0.00	3995399	513.0 -> 219.0	23.2	11.7	35.0



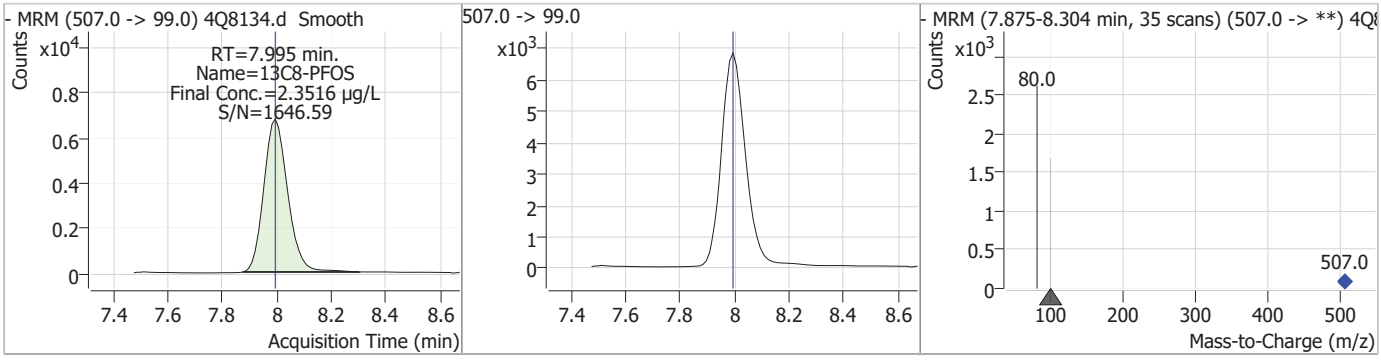
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.52	7.92	-0.01	216365				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	29.25	7.93	0.00	1090349 (m)	570.0 -> 512.0	35.2	18.3	55.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.35	7.99	0.00	41174				



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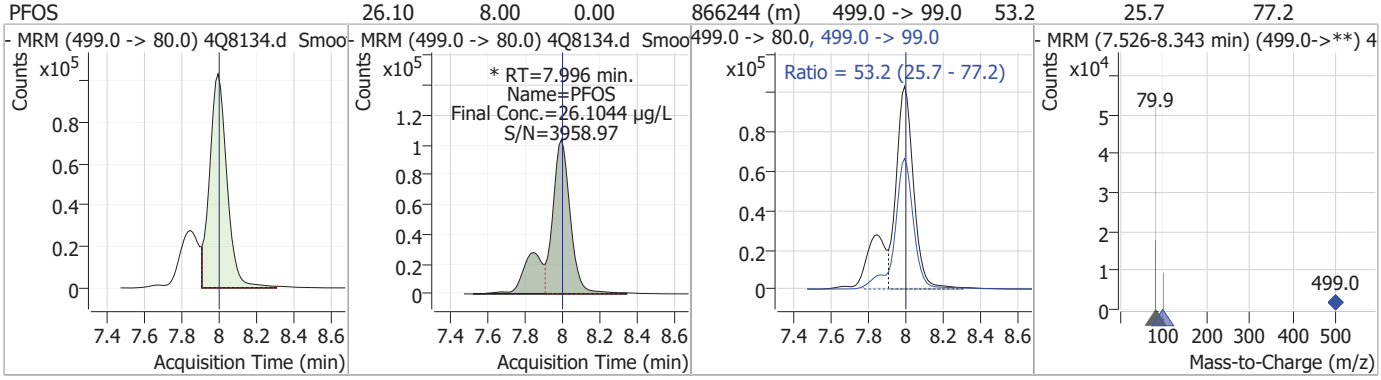
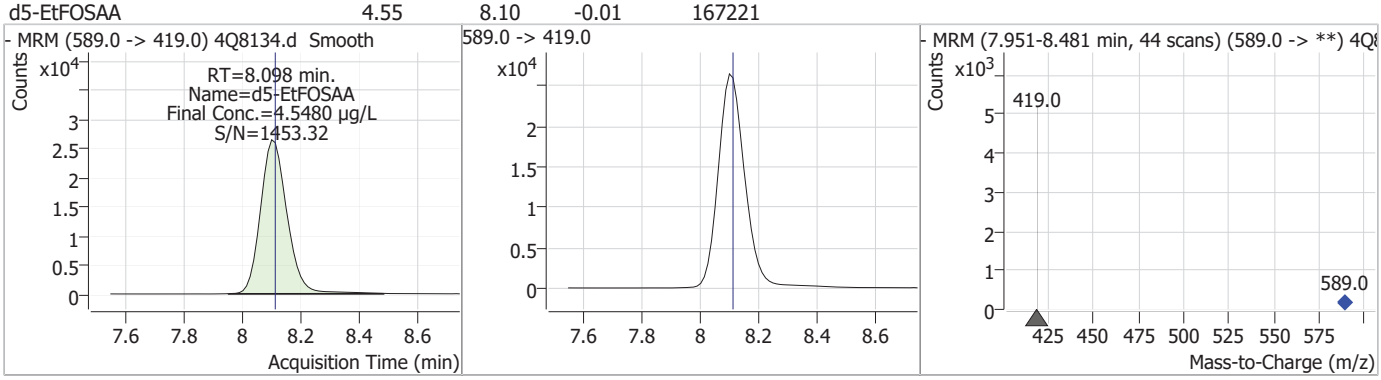
Perfluorinated Compounds by LC/MS/MS

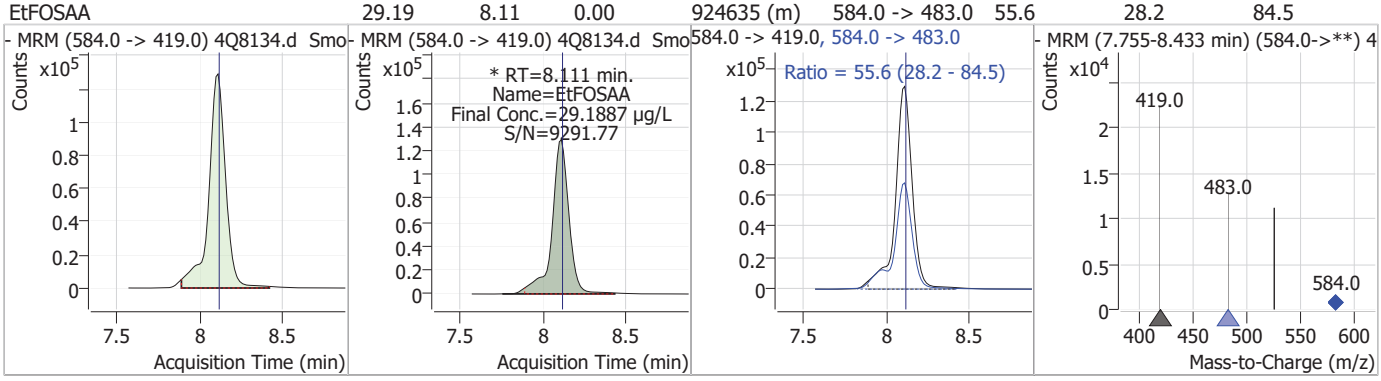
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	26.10	8.00	0.00	866244 (m)	499.0 -> 99.0	53.2	25.7	77.2



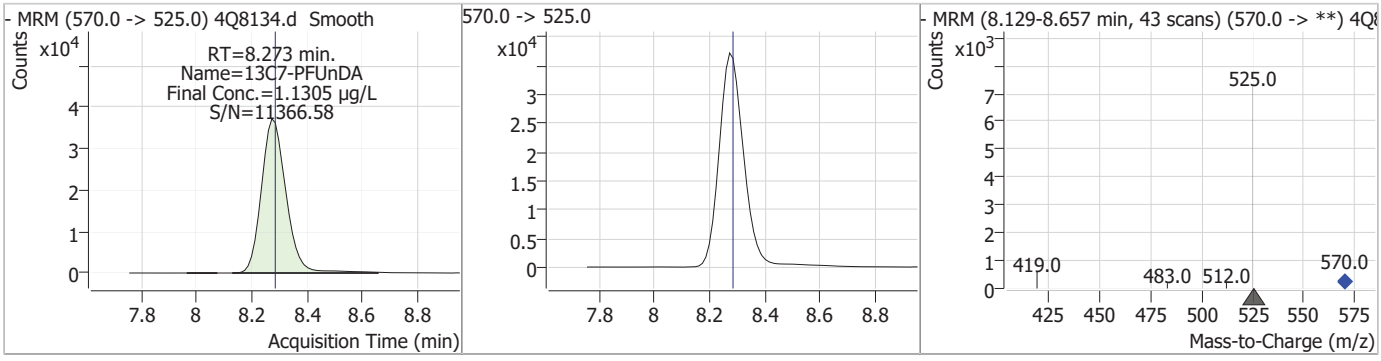
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.55	8.10	-0.01	167221				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	29.19	8.11	0.00	924635 (m)	584.0 -> 483.0	55.6	28.2	84.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.13	8.27	-0.01	230631				



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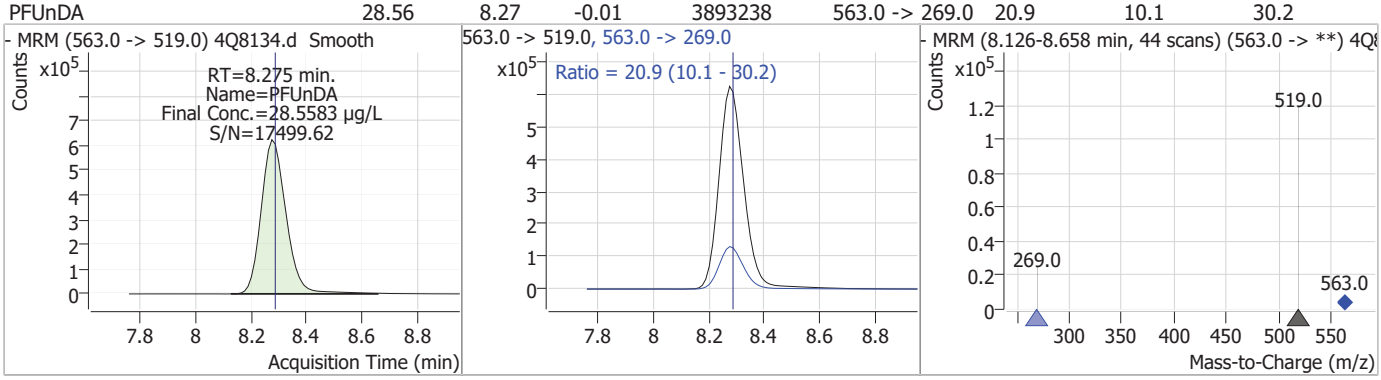
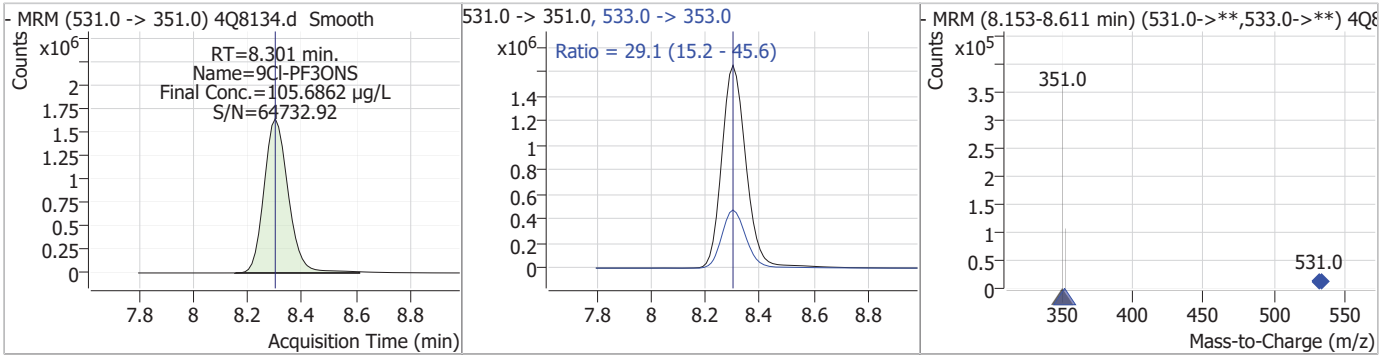
Perfluorinated Compounds by LC/MS/MS

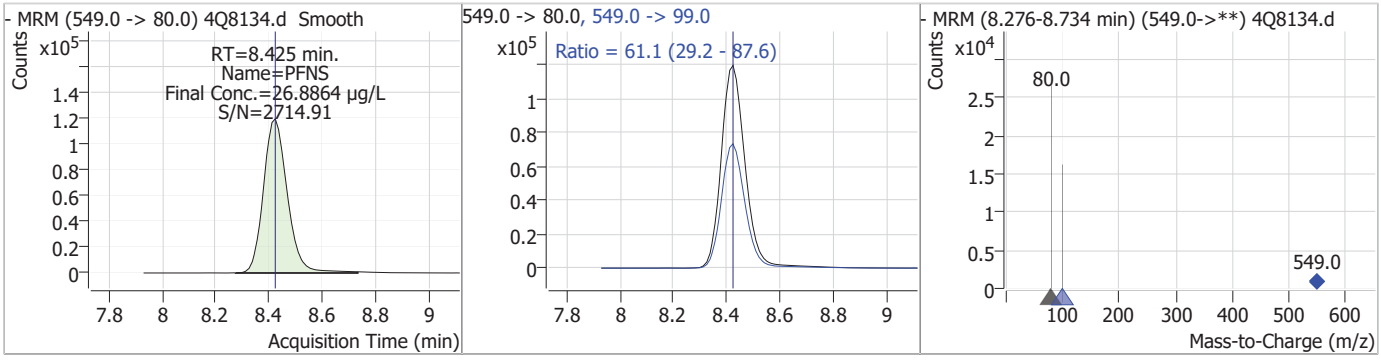
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	28.56	8.27	-0.01	3893238	563.0 -> 269.0	20.9	10.1	30.2



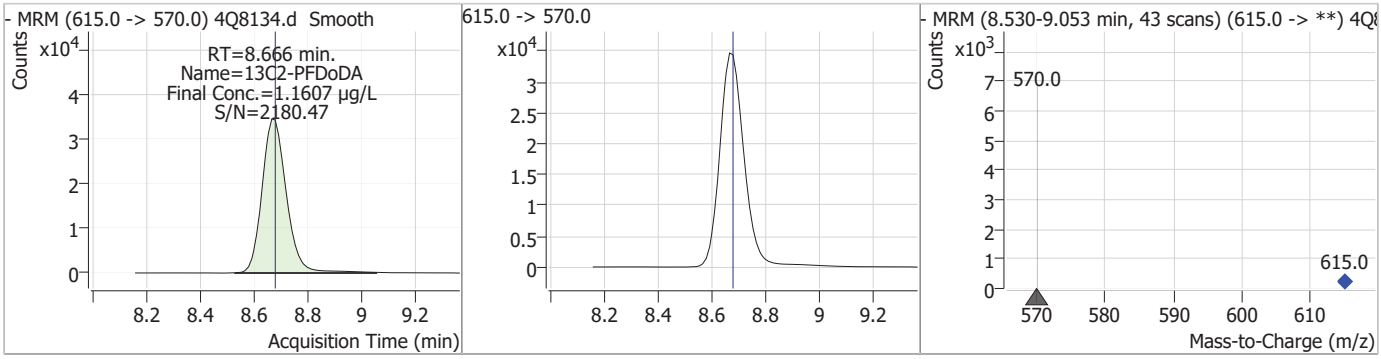
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	105.69	8.30	0.00	10245343	533.0 -> 353.0	29.1	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	26.89	8.42	0.00	744434	549.0 -> 99.0	61.1	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.16	8.67	-0.01	216889				



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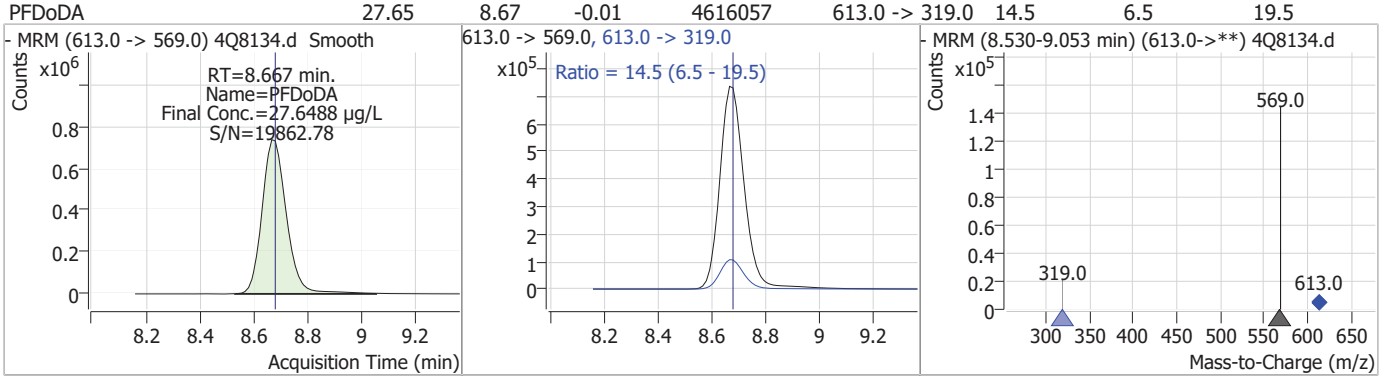
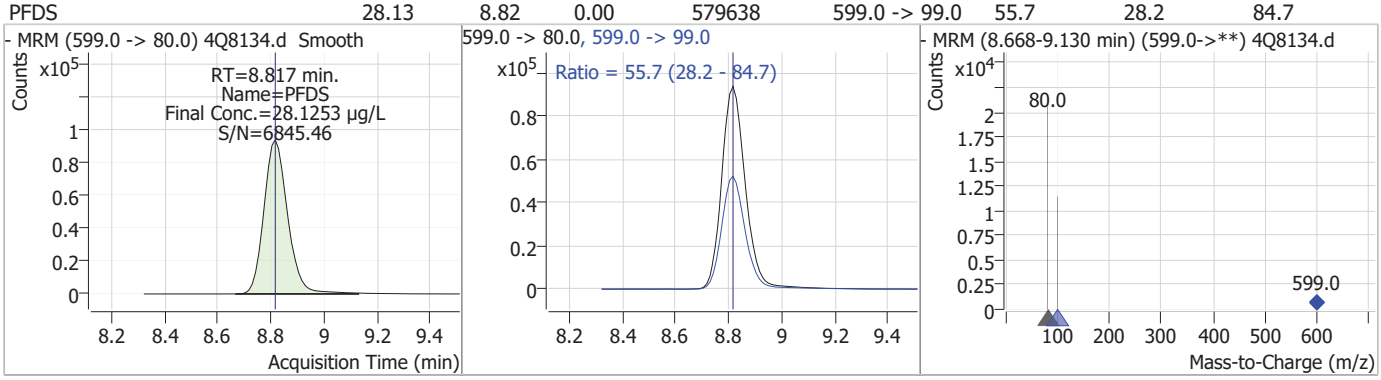
Perfluorinated Compounds by LC/MS/MS

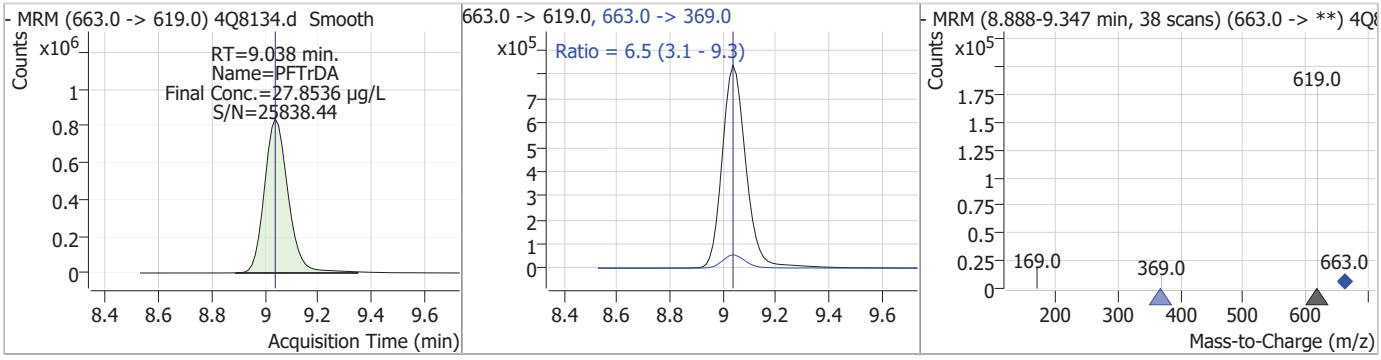
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	27.65	8.67	-0.01	4616057	613.0 -> 319.0	14.5	6.5	19.5



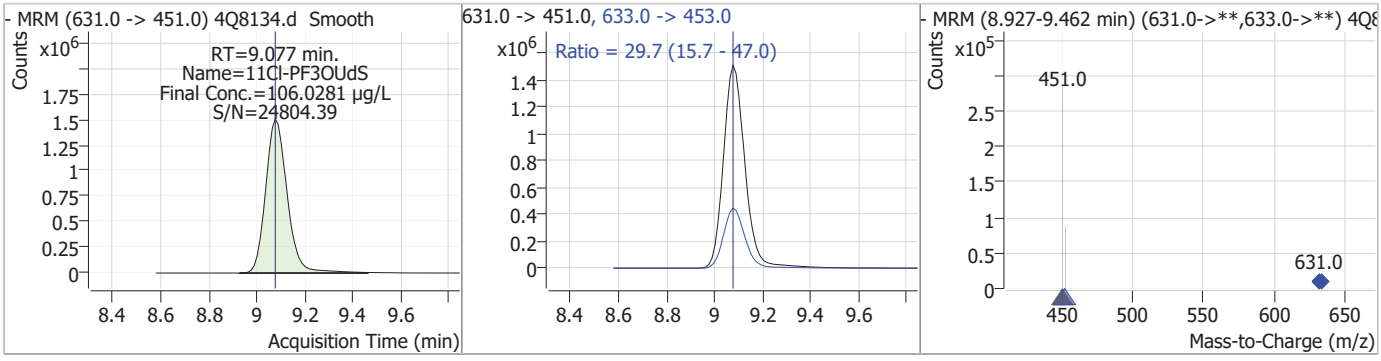
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	28.13	8.82	0.00	579638	599.0 -> 99.0	55.7	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	27.85	9.04	0.00	5185651	663.0 -> 369.0	6.5	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	106.03	9.08	0.00	9344059	633.0 -> 453.0	29.7	15.7	47.0



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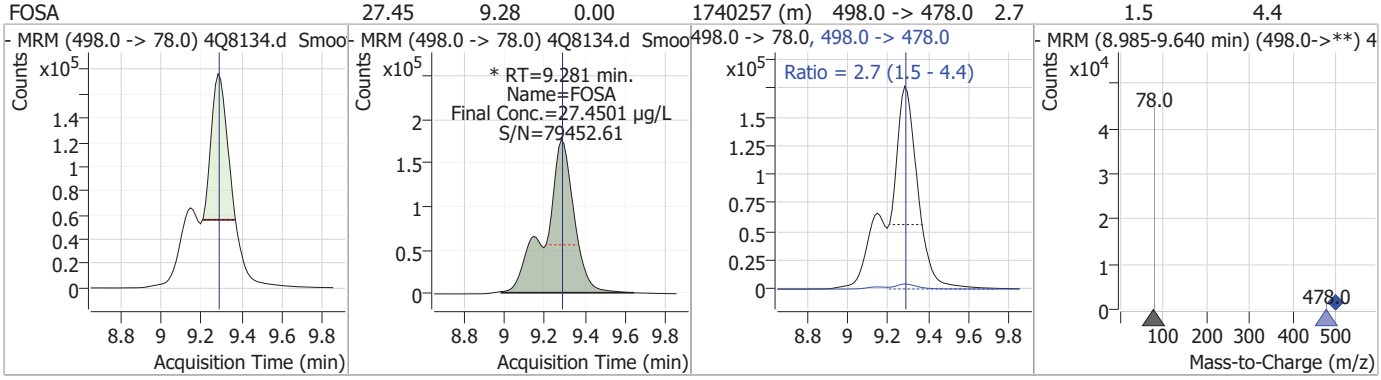
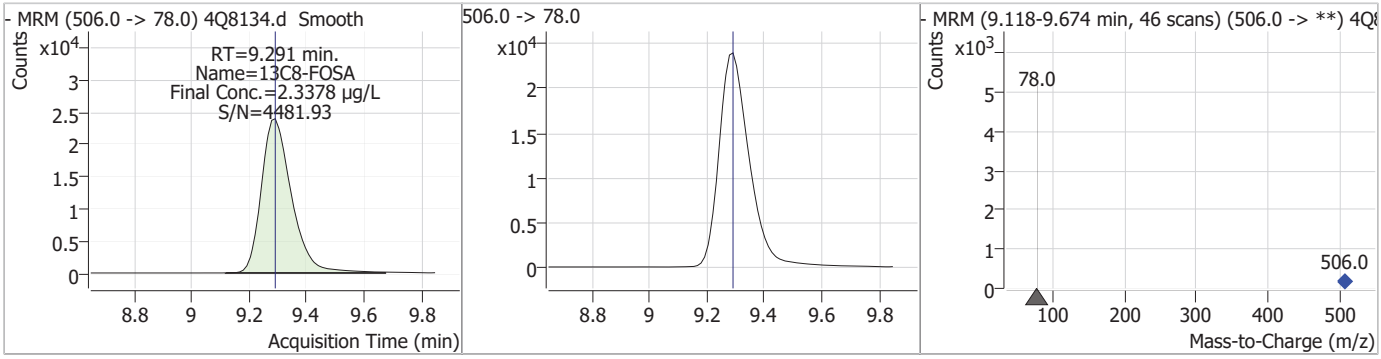
Perfluorinated Compounds by LC/MS/MS

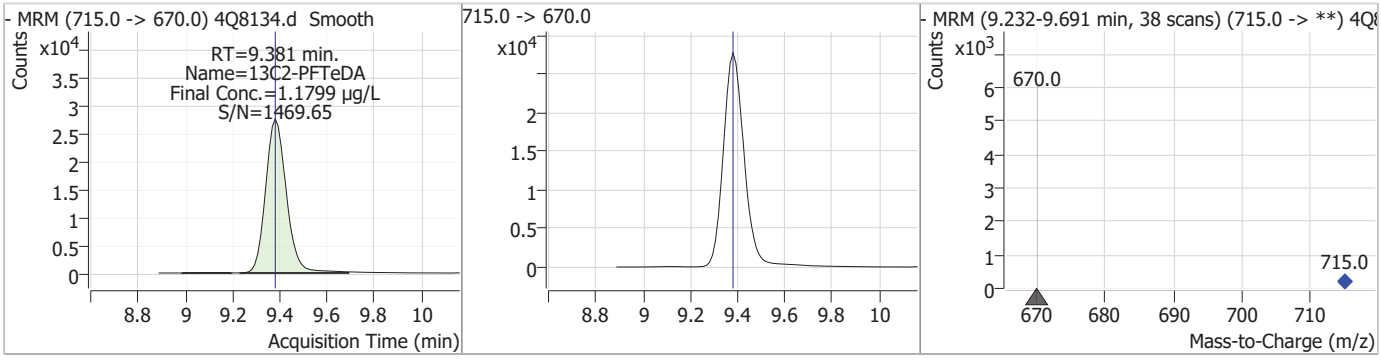
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	27.45	9.28	0.00	1740257 (m)	498.0 -> 478.0	2.7	1.5	4.4



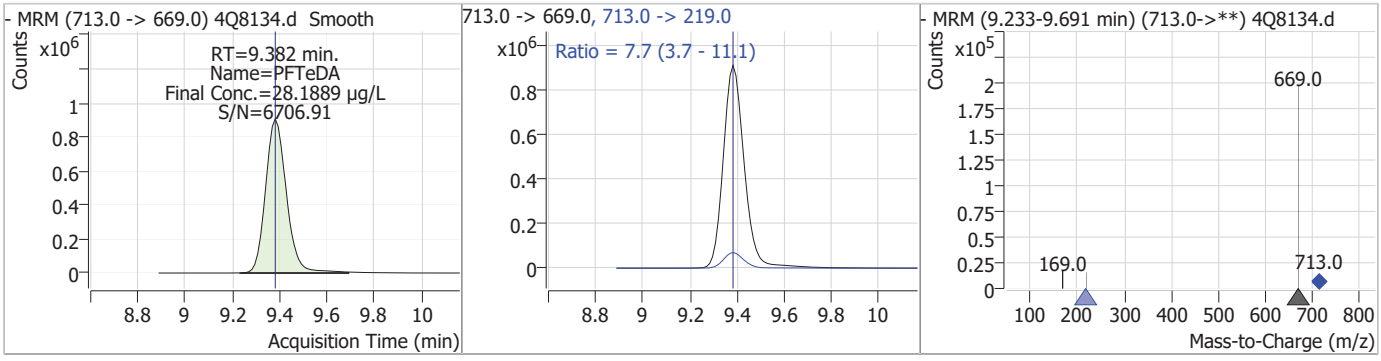
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.34	9.29	0.00	174624				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.18	9.38	0.00	169491				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	28.19	9.38	0.00	5562838	713.0 -> 219.0	7.7	3.7	11.1



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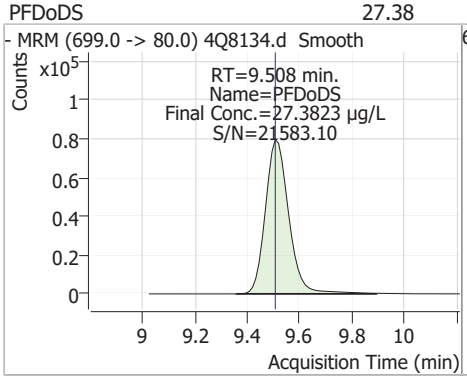
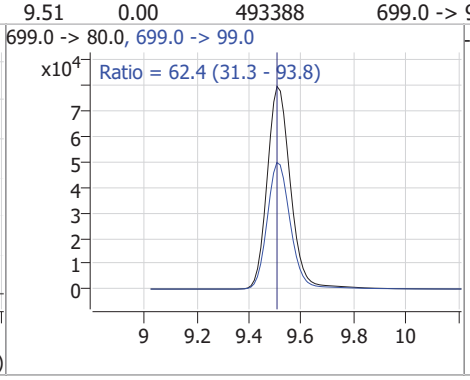
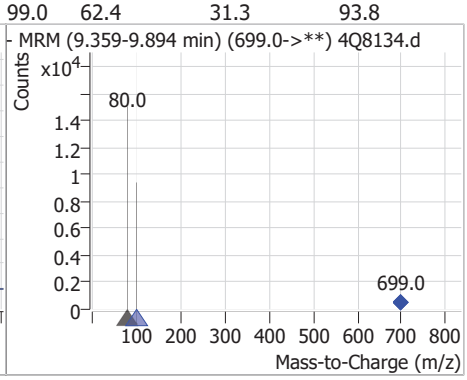
Perfluorinated Compounds by LC/MS/MS

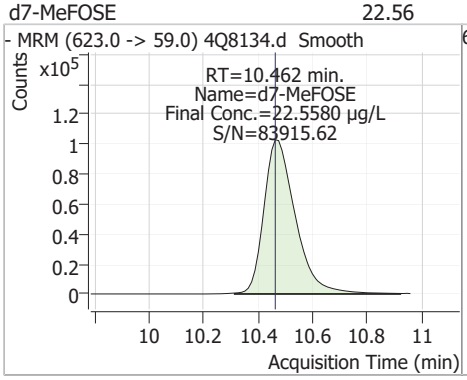
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	27.38	9.51	0.00	493388	699.0 -> 99.0	62.4	31.3	93.8

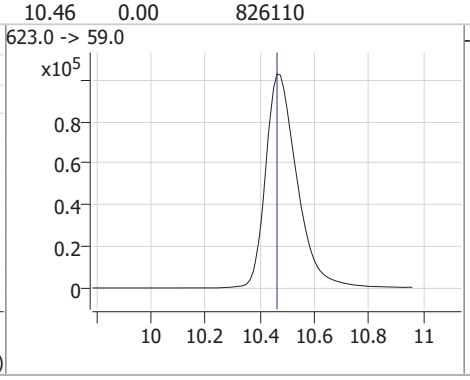


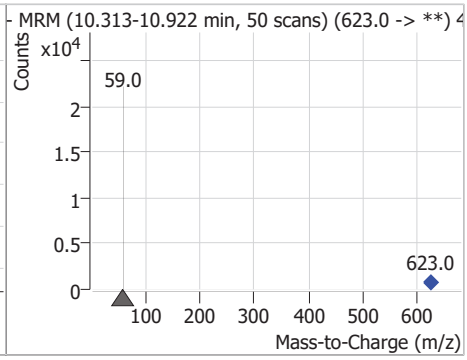




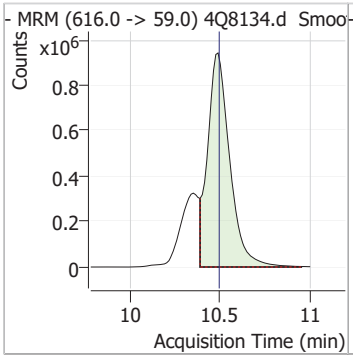
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.56	10.46	0.00	826110				

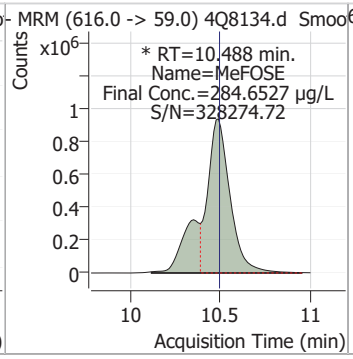


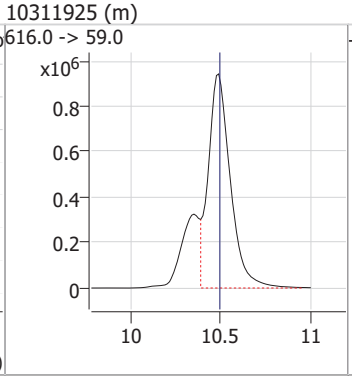


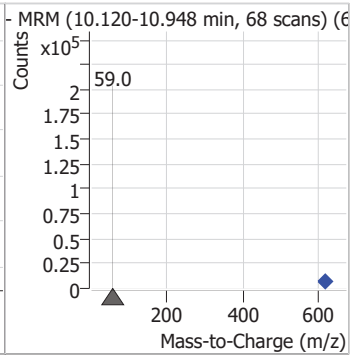


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	284.65	10.49	0.00	10311925 (m)				

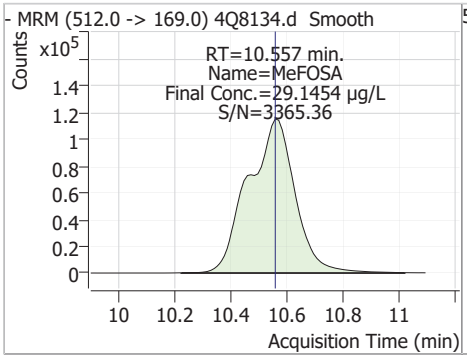


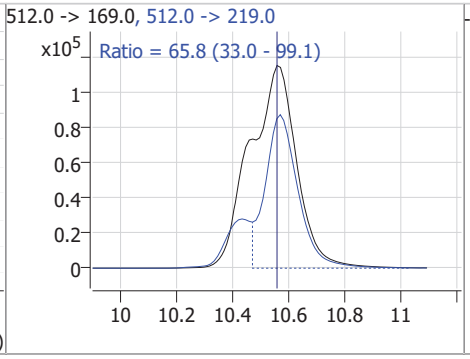


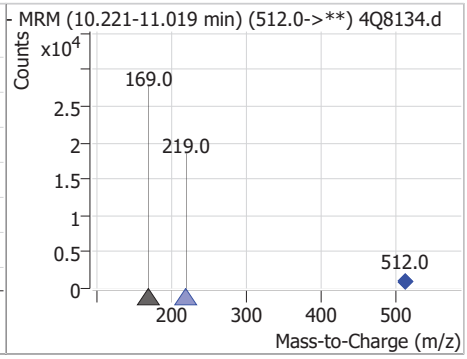




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	29.15	10.56	0.00	1343531	512.0 -> 219.0	65.8	33.0	99.1







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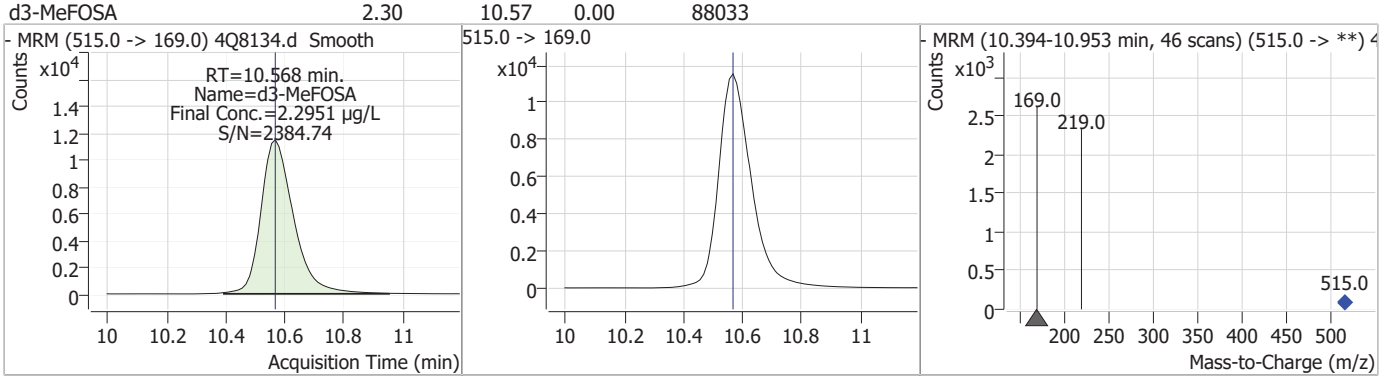
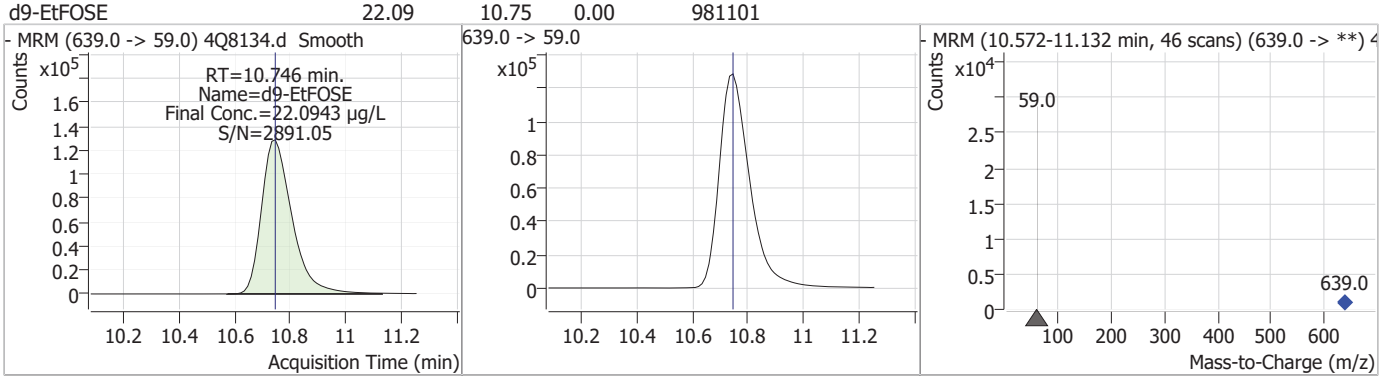
Perfluorinated Compounds by LC/MS/MS

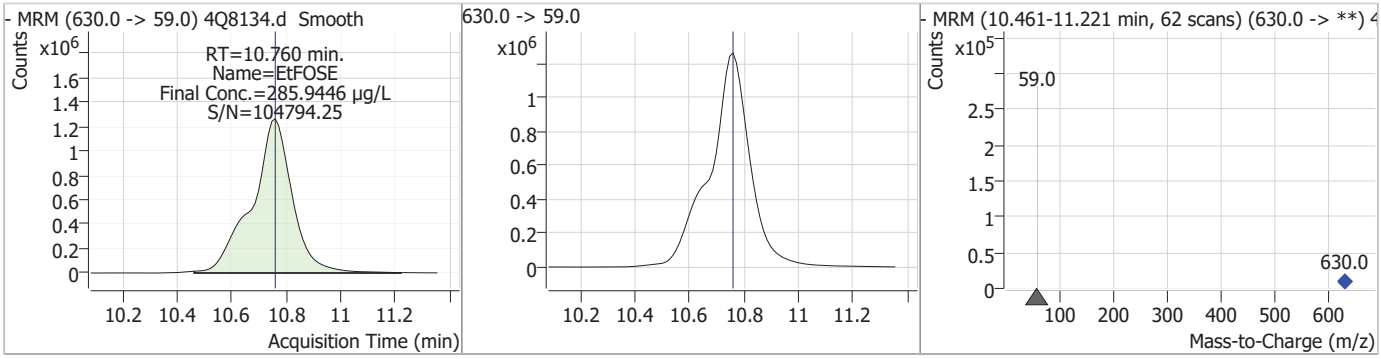
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.30	10.57	0.00	88033				



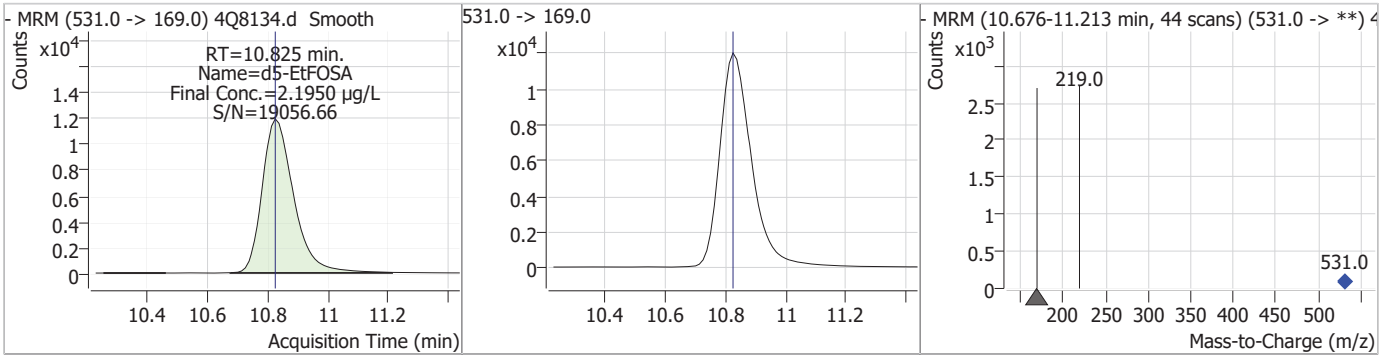
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.09	10.75	0.00	981101				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	285.94	10.76	0.00	13049407				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.19	10.83	0.00	86763				



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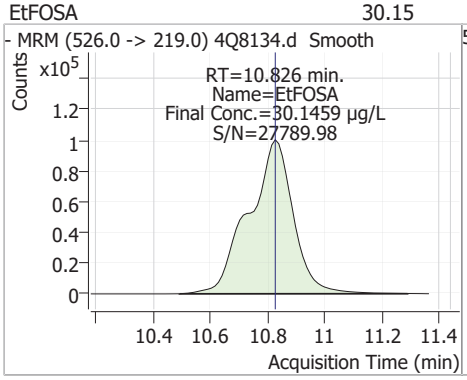
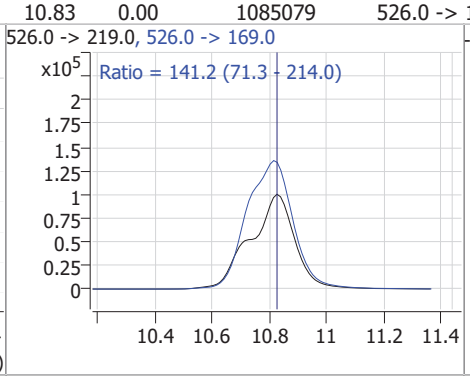
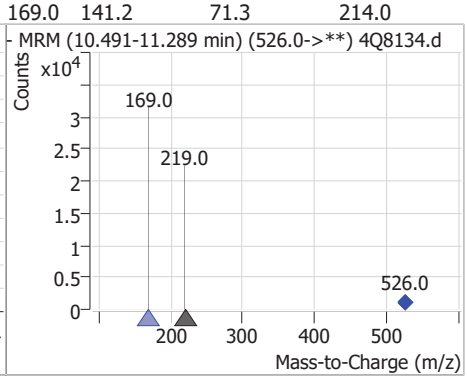
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	30.15	10.83	0.00	1085079	526.0 -> 169.0	141.2	71.3	214.0







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7

Manual Integration Approval Summary

Sample Number: T4Q138-IC138
Lab FileID: 4Q8134.D
Injection Time: 04/30/25 15:50
Method: EPA 1633
Analyst approved: 04/30/25 23:06 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.93	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8135.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 4:04:27 PM
Sample Name : IC138-8
Vial : P1-A9
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63077,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	805737	10.00	µg/L	-0.012
M5-PFPeA	4.307	268.0 -> 223.0	438867	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	309049	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	320090	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	480385	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	201652	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	177665	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	217373	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	229308	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	183185	1.25	µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	177433	2.50	µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	25402	2.50	µg/L	-0.012
		302.0 -> 80.0	64376			
M3-PFHxS	6.986	402.0 -> 99.0	37803	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	40402	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	8108	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	19398	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	24245	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	208834	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	487185	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	162976	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	808840	25.00	µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	945266	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	88553	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	95919	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	64050	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	348839	5.00	µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	43130	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	471323	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	165768	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	185327	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	291126	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	8108	3.75	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 75.0%		
13C2-6:2FTS	6.684	429.0 -> 81.0	19398	4.13	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 82.7%		
13C2-8:2FTS	7.671	529.0 -> 81.0	24245	4.39	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 87.8%		
13C2-PFDoDA	8.666	615.0 -> 570.0	229308	1.28	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.4%		
13C2-PFTeDA	9.381	715.0 -> 670.0	183185	1.33	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.4%		
13C3-PFBS	5.355	302.0 -> 99.0	25402	2.39	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.5%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	37803	2.51	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.4%			
13C4-PFBA	2.871	217.0 -> 172.0	805737	10.07	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.7%			
13C4-PFHpA	6.291	367.0 -> 322.0	320090	2.44	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.7%			
13C5-PFHxA	5.452	318.0 -> 273.0	309049	2.51	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.3%			
13C5-PFPeA	4.307	268.0 -> 223.0	438867	4.69	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.9%			
13C6-PFDA	7.858	519.0 -> 474.0	177665	1.21	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.0%			
13C7-PFUnDA	8.273	570.0 -> 525.0	217373	1.11	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.9%			
13C8-FOSA	9.291	506.0 -> 78.0	177433	2.70	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.9%			
13C8-PFOA	6.897	421.0 -> 376.0	480385	2.55	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.0%			
13C8-PFOS	7.995	507.0 -> 99.0	40402	2.62	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.8%			
13C9-PFNA	7.403	472.0 -> 427.0	201652	1.31	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.9%			
d3-MeFOSAA	7.915	573.0 -> 419.0	208834	4.95	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.0%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	487185	10.07	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.7%			
d3-MeFOSA	10.567	515.0 -> 169.0	95919	2.84	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 113.6%			
d5-EtFOSAA	8.098	589.0 -> 419.0	162976	5.03	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.6%			
d7-MeFOSE	10.462	623.0 -> 59.0	808840	25.07	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.3%			
d9-EtFOSE	10.746	639.0 -> 59.0	945266	24.17	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 96.7%			
d5-EtFOSA	10.825	531.0 -> 169.0	88553	2.54	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.7%			
Target Compounds							QValue
4:2FTS	5.154	327.0 -> 307.0	3754786	252.17	µg/L		99
		327.0 -> 81.0	1775299				
6:2FTS	6.684	427.0 -> 407.0	4518117	232.25	µg/L		100
		427.0 -> 81.0	2104848				
8:2FTS	7.671	527.0 -> 507.0	4493128	236.79	µg/L		99
		527.0 -> 81.0	1736980				
EtFOSAA	8.111	584.0 -> 419.0	2202292	71.33	µg/L	m	97
		584.0 -> 483.0	1200448				
FOSA	9.281	498.0 -> 78.0	4584634	71.17	µg/L	m	99
		498.0 -> 478.0	127416				
MeFOSAA	7.929	570.0 -> 419.0	2632701	73.16	µg/L	m	99
		570.0 -> 512.0	945872				
PFBA	2.877	213.0 -> 169.0	6976261	283.23	µg/L		100
PFBS	5.357	299.0 -> 80.0	1850420	63.71	µg/L		98
		299.0 -> 99.0	785581				
PFDA	7.859	513.0 -> 469.0	10078531	74.64	µg/L		99
		513.0 -> 219.0	2300178				
PFDoDA	8.667	613.0 -> 569.0	12508056	70.86	µg/L		99
		613.0 -> 319.0	1655872				

Perfluorinated Compounds by LC/MS/MS

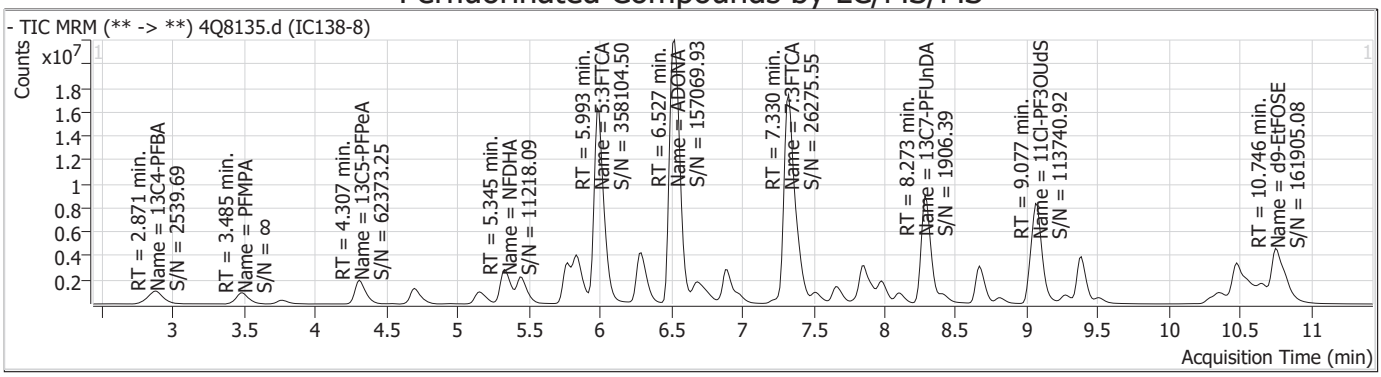
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	1408875	72.53	µg/L		99
		599.0 -> 99.0	781568				
PFHpA	6.292	363.0 -> 319.0	14644527	75.20	µg/L		97
		363.0 -> 169.0	2822098				
PFHpS	7.529	449.0 -> 80.0	2122869	64.94	µg/L		98
		449.0 -> 99.0	1199315				
PFHxA	5.455	313.0 -> 269.0	9607323	72.13	µg/L		100
		313.0 -> 119.0	325323				
PFHxS	6.987	399.0 -> 80.0	2087848	63.42	µg/L	m	98
		399.0 -> 99.0	1098538				
PFNA	7.404	463.0 -> 419.0	8861003	73.06	µg/L	m	96
		463.0 -> 219.0	3123988				
PFNS	8.425	549.0 -> 80.0	1810890	66.65	µg/L		97
		549.0 -> 99.0	1103446				
PFOA	6.898	413.0 -> 369.0	11605815	72.59	µg/L	m	99
		413.0 -> 169.0	3316596				
PFOS	7.996	499.0 -> 80.0	2108831	64.77	µg/L	m	99
		499.0 -> 99.0	1105689				
PFPeA	4.309	263.0 -> 219.0	10154091	146.34	µg/L		100
PFPeS	6.318	349.0 -> 80.0	2145222	67.62	µg/L		100
		349.0 -> 99.0	1088750				
PFTeDA	9.381	713.0 -> 669.0	14911006	69.91	µg/L		99
		713.0 -> 219.0	1059412				
PFTrDA	9.038	663.0 -> 619.0	13338974	67.77	µg/L		100
		663.0 -> 369.0	827791				
PFUnDA	8.275	563.0 -> 519.0	9399855	73.16	µg/L		99
		563.0 -> 269.0	1914005				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	24051374	259.49	µg/L		92
		633.0 -> 453.0	6470391				
9Cl-PF3ONS	8.301	531.0 -> 351.0	25624001	251.33	µg/L		93
		533.0 -> 353.0	6822480				
ADONA	6.527	377.0 -> 251.0	80271253	209.99	µg/L		79
		377.0 -> 85.0	35903962				
HFPO-DA	5.780	285.0 -> 169.0	14289819	279.01	µg/L		100
		285.0 -> 185.0	1559778				
3:3FTCA	3.769	241.0 -> 177.0	1567732	378.06	µg/L		100
		241.0 -> 117.0	125507				
5:3FTCA	5.993	341.0 -> 237.0	47171431	1561.23	µg/L		98
		341.0 -> 217.0	32220832				
7:3FTCA	7.330	441.0 -> 337.0	61873908	2019.25	µg/L		97
		441.0 -> 317.0	26862548				
EtFOSA	10.826	526.0 -> 219.0	2692221	73.28	µg/L		98
		526.0 -> 169.0	3771849				
EtFOSE	10.760	630.0 -> 59.0	33252900	756.28	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	3383249	67.36	µg/L		99
		512.0 -> 219.0	2256232				
MeFOSE	10.488	616.0 -> 59.0	26187727	738.33	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	1201453	67.95	µg/L		99
		699.0 -> 99.0	760209				
NFDHA	5.345	295.0 -> 201.0	2410996	137.80	µg/L		100
		201.0 -> 85.0	9831060				
		295.0 -> 85.0	644561				
PFMBA	4.710	279.0 -> 85.0	6990064	147.66	µg/L		100
PFMPA	3.485	229.0 -> 85.0	5829328	146.51	µg/L		100
PFEESA	5.849	315.0 -> 135.0	15151305	123.85	µg/L		100
		315.0 -> 69.0	1176245				

Perfluorinated Compounds by LC/MS/MS

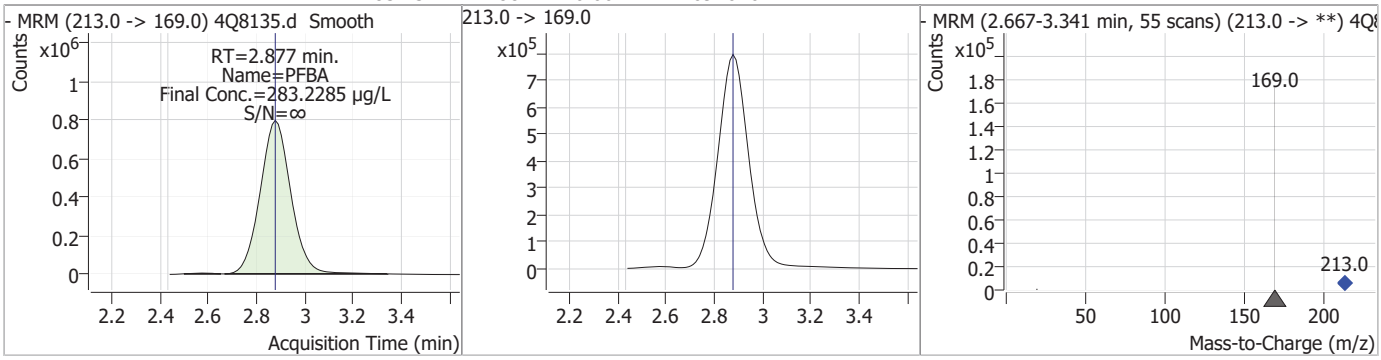
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

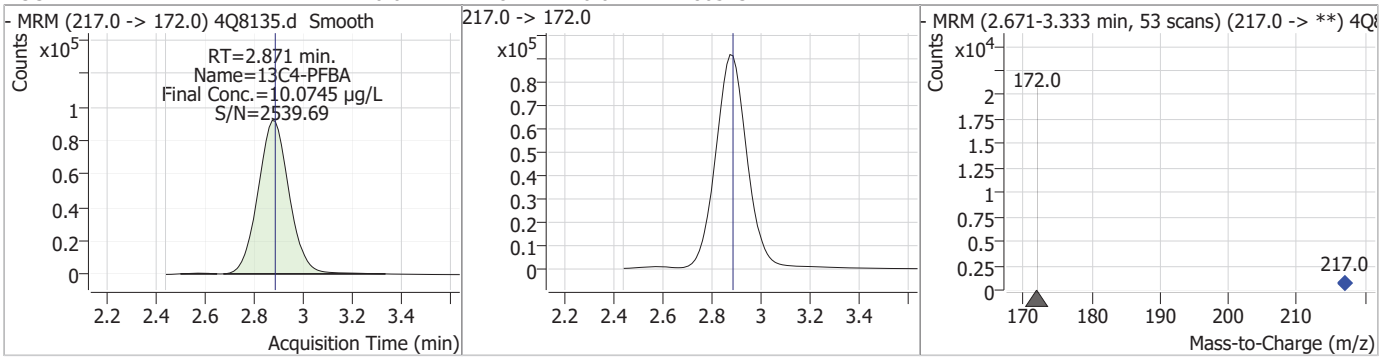
Perfluorinated Compounds by LC/MS/MS



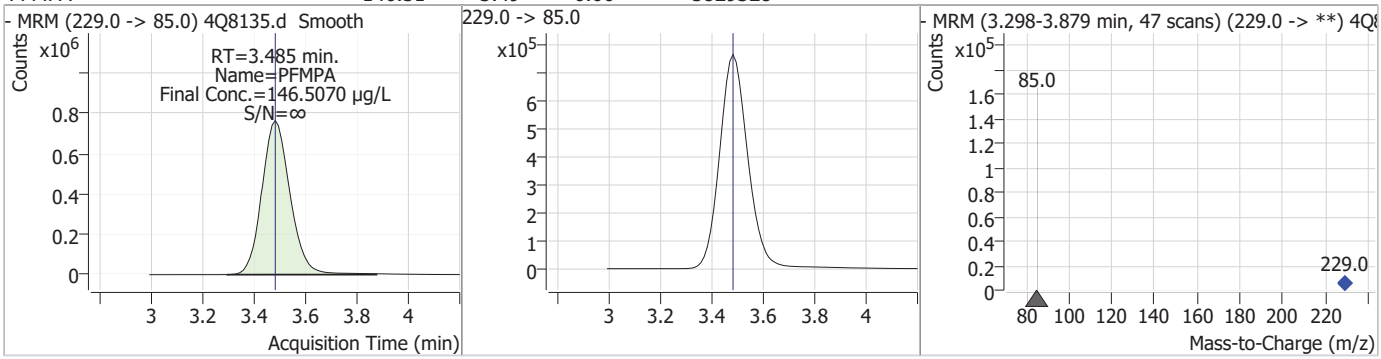
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	283.23	2.88	0.00	6976261				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.07	2.87	-0.01	805737				

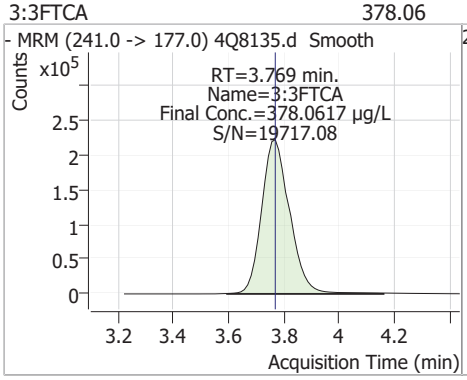


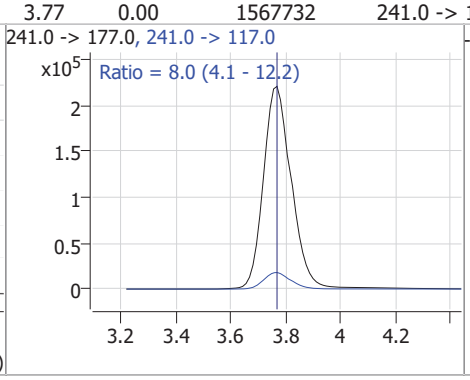
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	146.51	3.49	0.00	5829328				

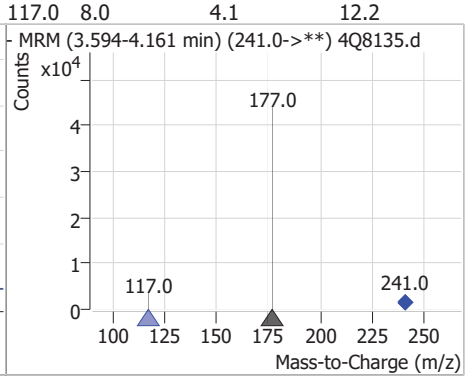


Perfluorinated Compounds by LC/MS/MS

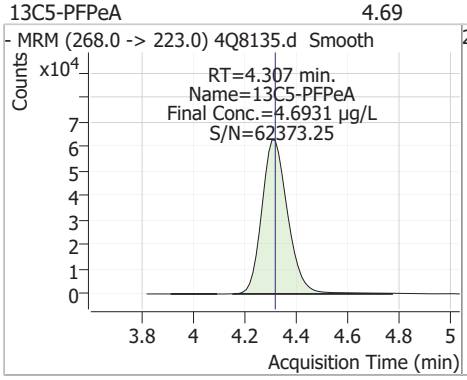
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	378.06	3.77	0.00	1567732	241.0 -> 117.0	8.0	4.1	12.2

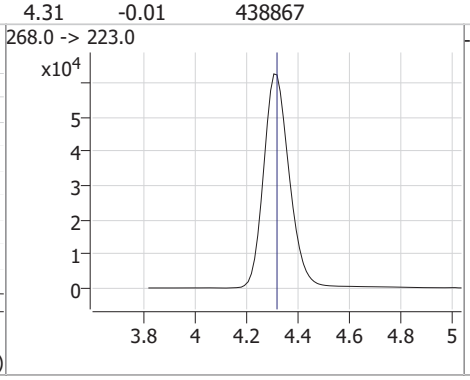


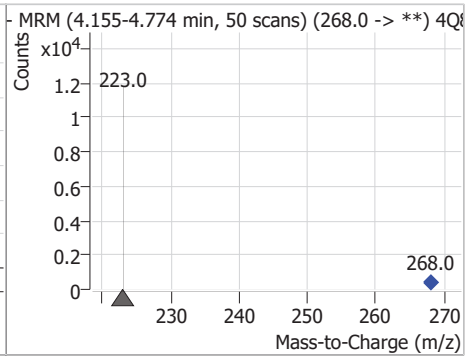




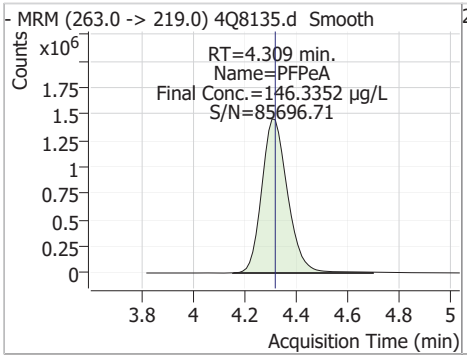
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.69	4.31	-0.01	438867				

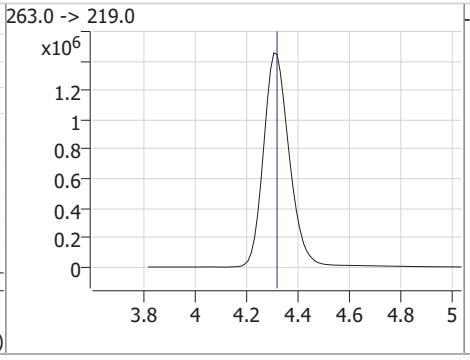


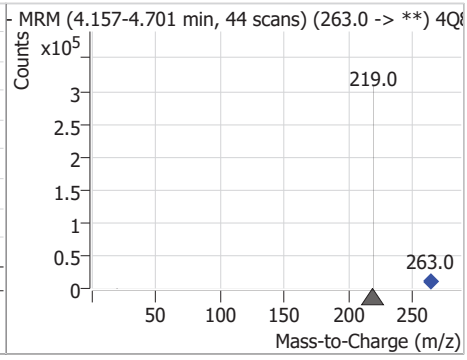




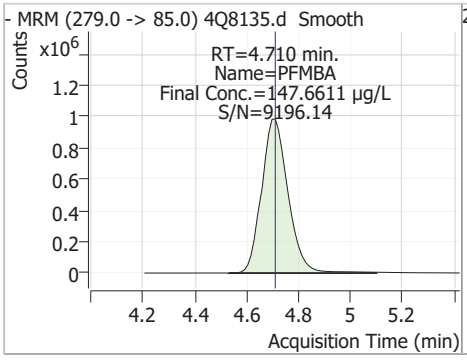
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	146.34	4.31	-0.01	10154091				

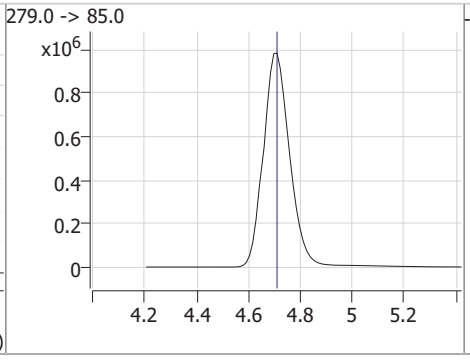


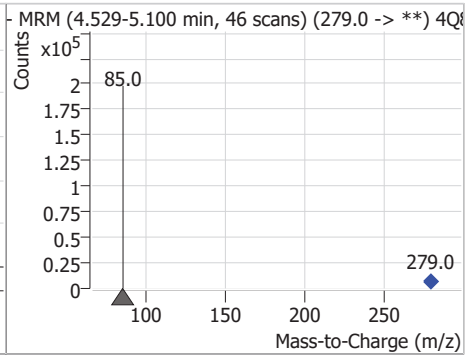




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	147.66	4.71	0.00	6990064				

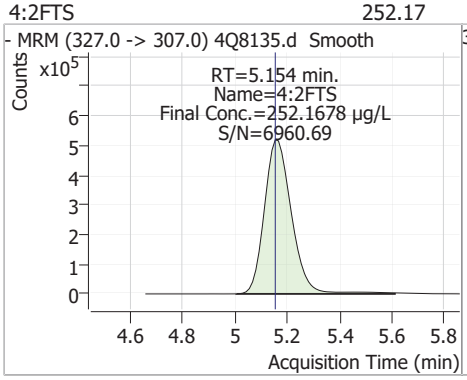


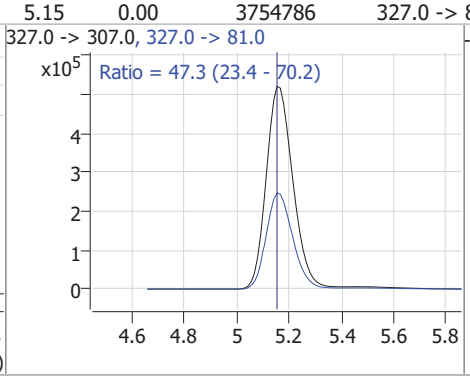


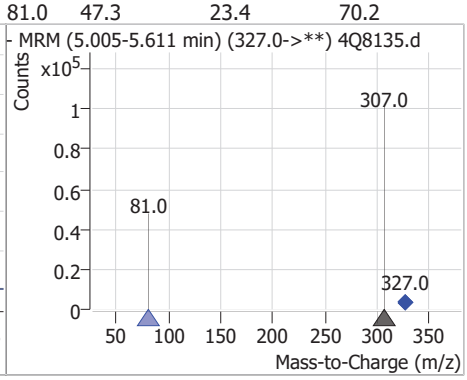


Perfluorinated Compounds by LC/MS/MS

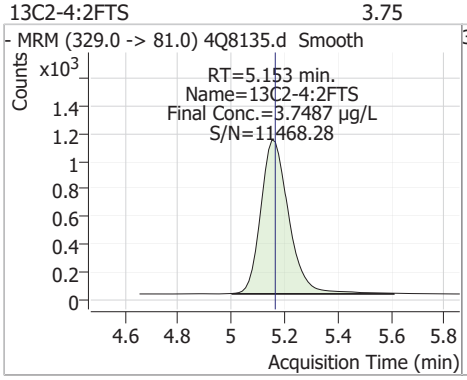
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	252.17	5.15	0.00	3754786	327.0 -> 81.0	47.3	23.4	70.2

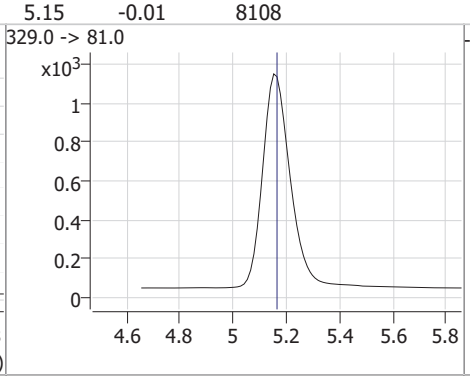


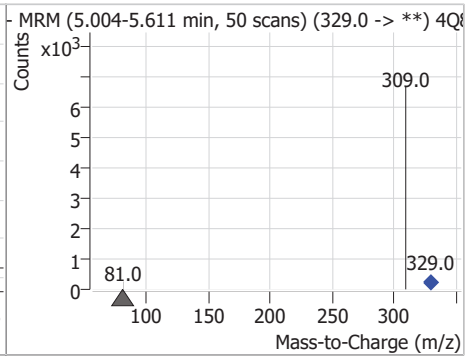




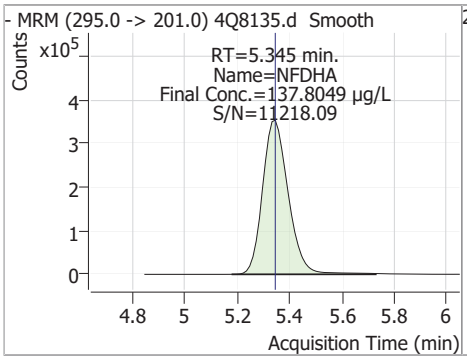
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	3.75	5.15	-0.01	8108				

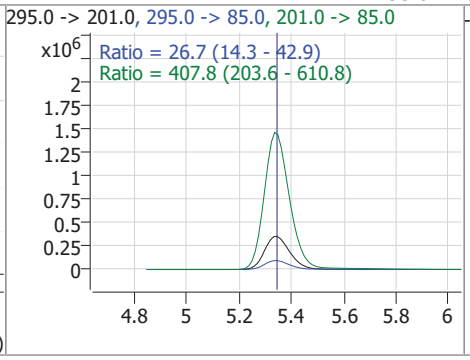


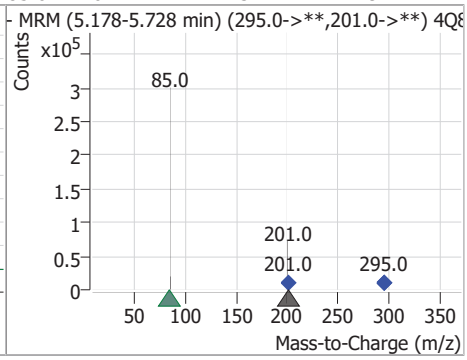




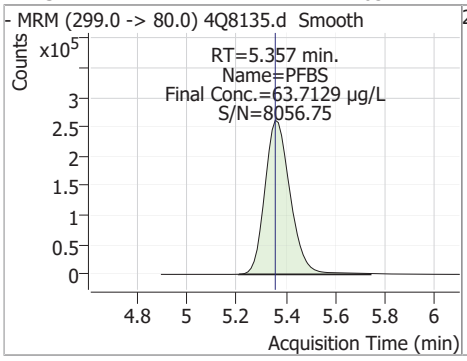
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	137.80	5.35	0.00	2410996	201.0 -> 85.0	407.8	203.6	610.8
					295.0 -> 85.0	26.7	14.3	42.9

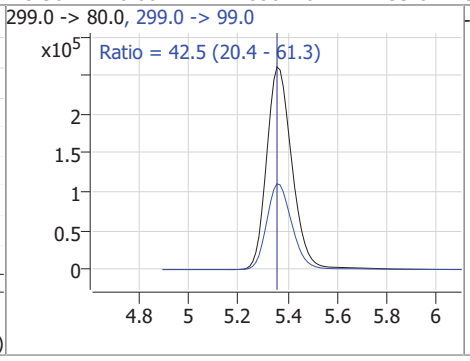


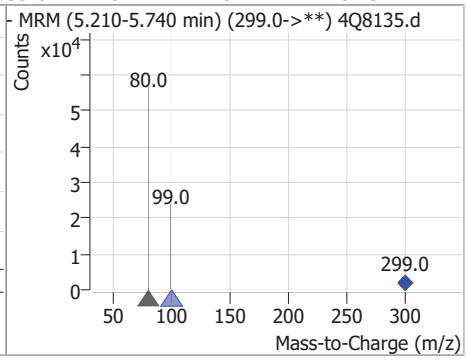




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	63.71	5.36	0.00	1850420	299.0 -> 99.0	42.5	20.4	61.3

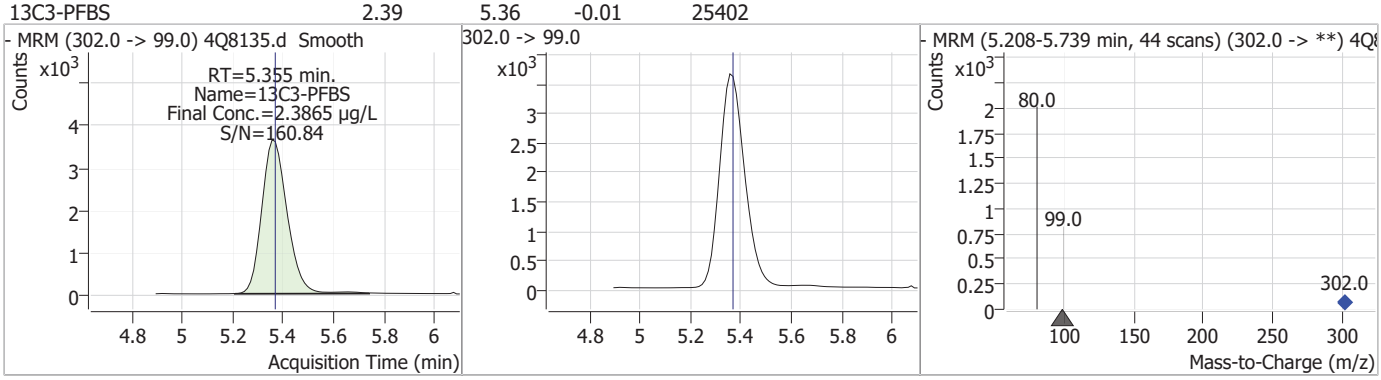




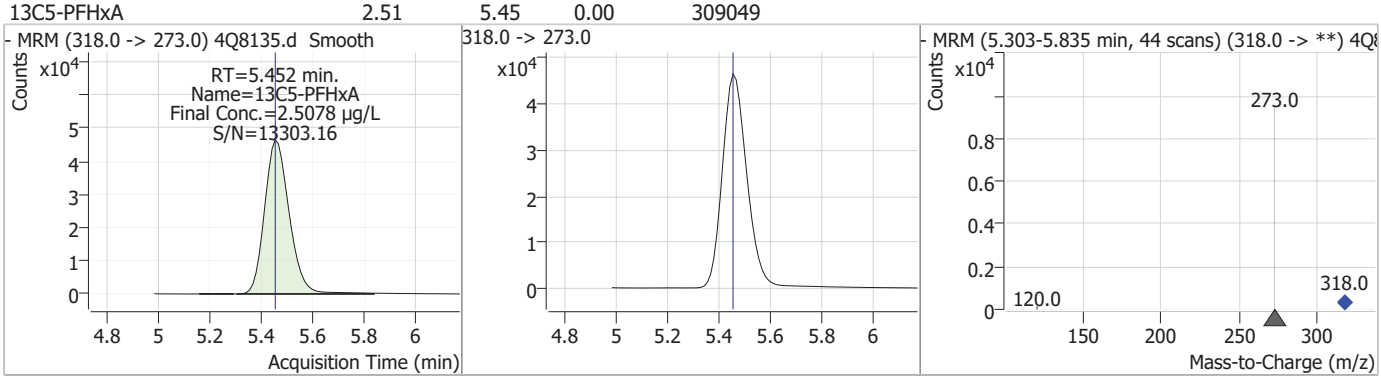


Perfluorinated Compounds by LC/MS/MS

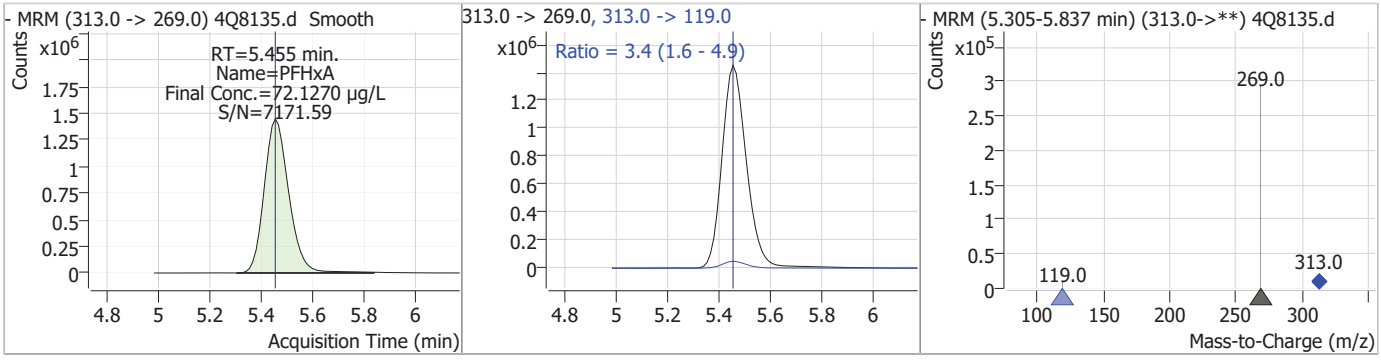
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.39	5.36	-0.01	25402				



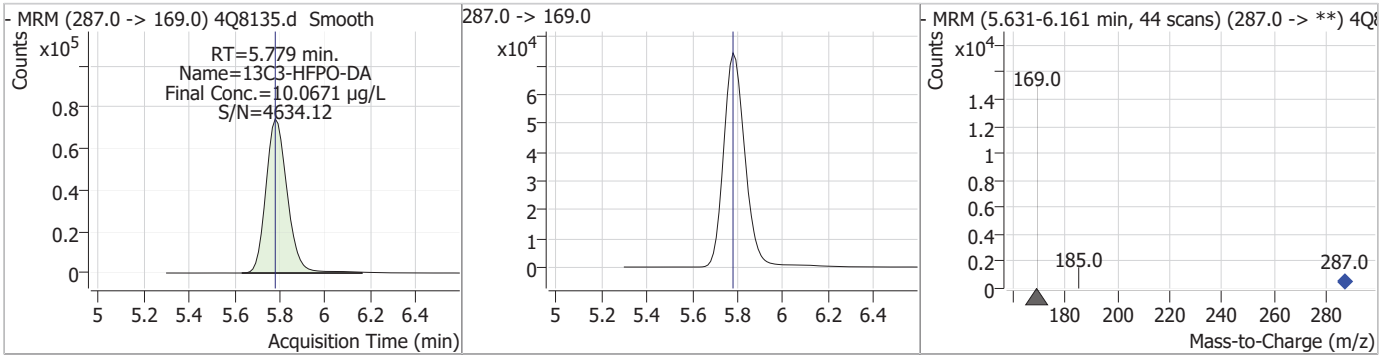
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.51	5.45	0.00	309049				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	72.13	5.45	0.00	9607323	313.0 -> 119.0	3.4	1.6	4.9

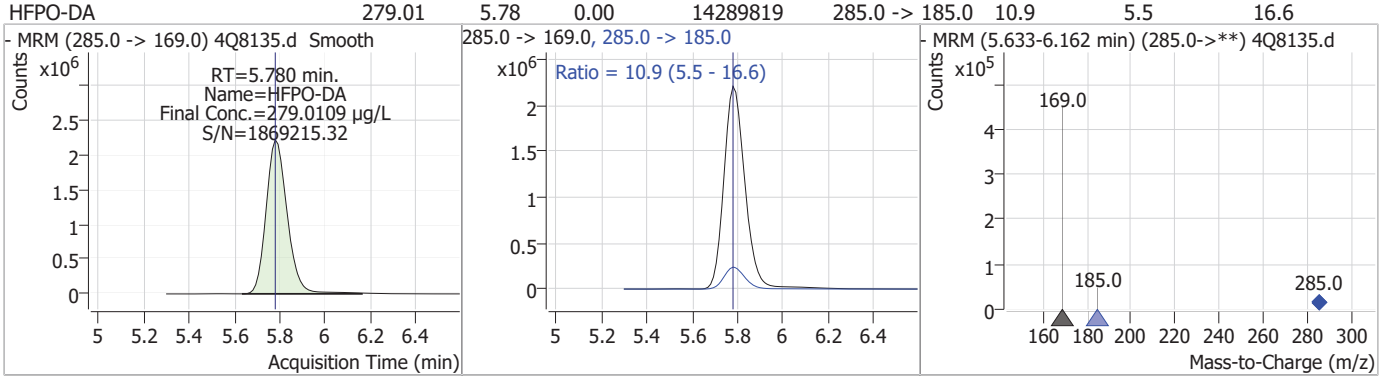


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.07	5.78	0.00	487185				

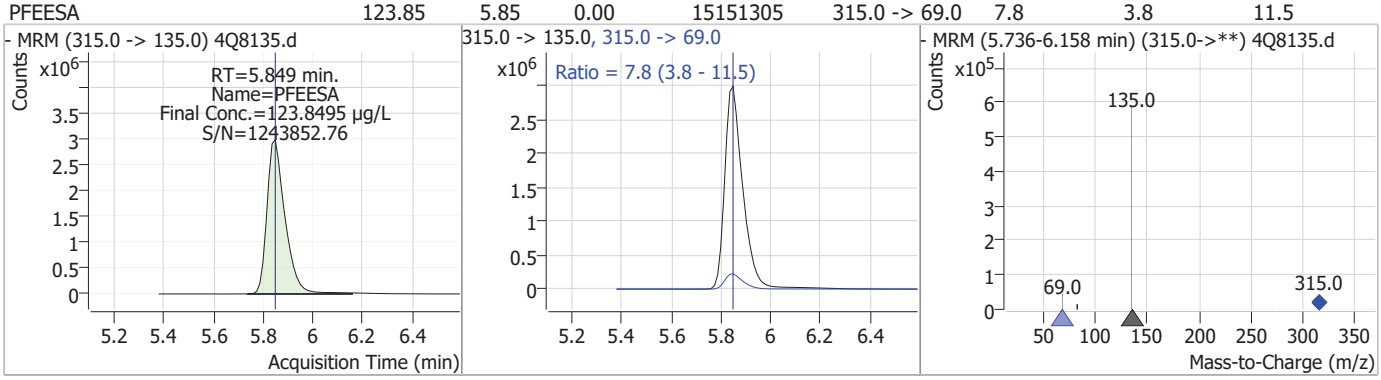


Perfluorinated Compounds by LC/MS/MS

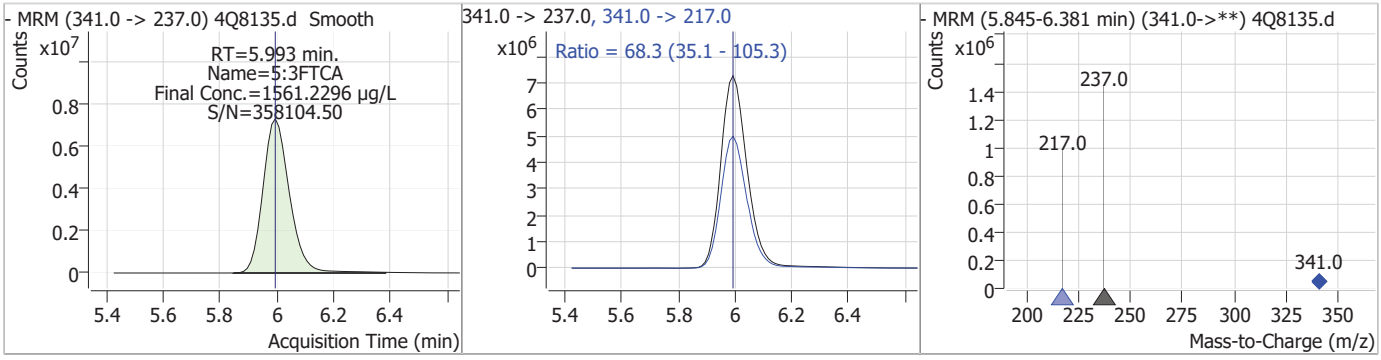
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	279.01	5.78	0.00	14289819	285.0 -> 185.0	10.9	5.5	16.6



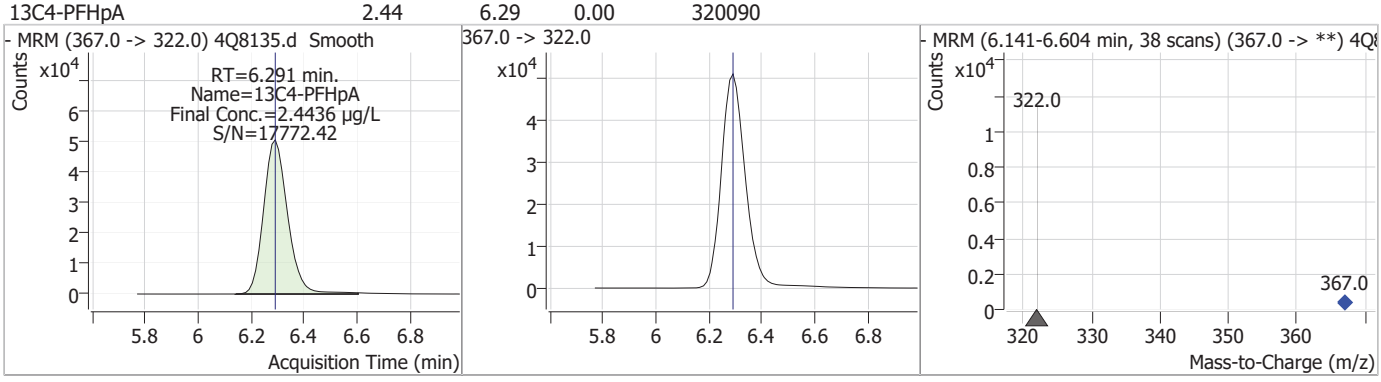
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	123.85	5.85	0.00	15151305	315.0 -> 69.0	7.8	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	1561.23	5.99	0.00	47171431	341.0 -> 217.0	68.3	35.1	105.3

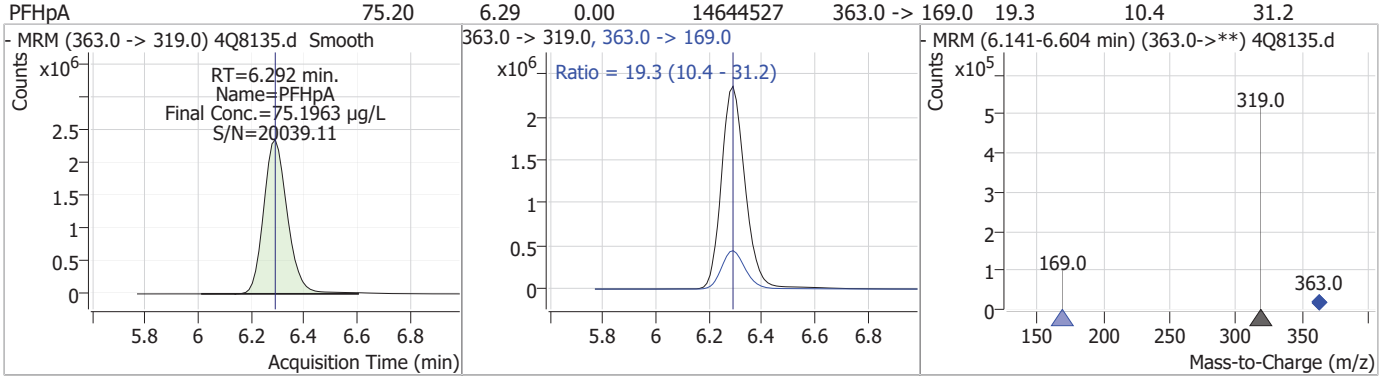


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.44	6.29	0.00	320090				

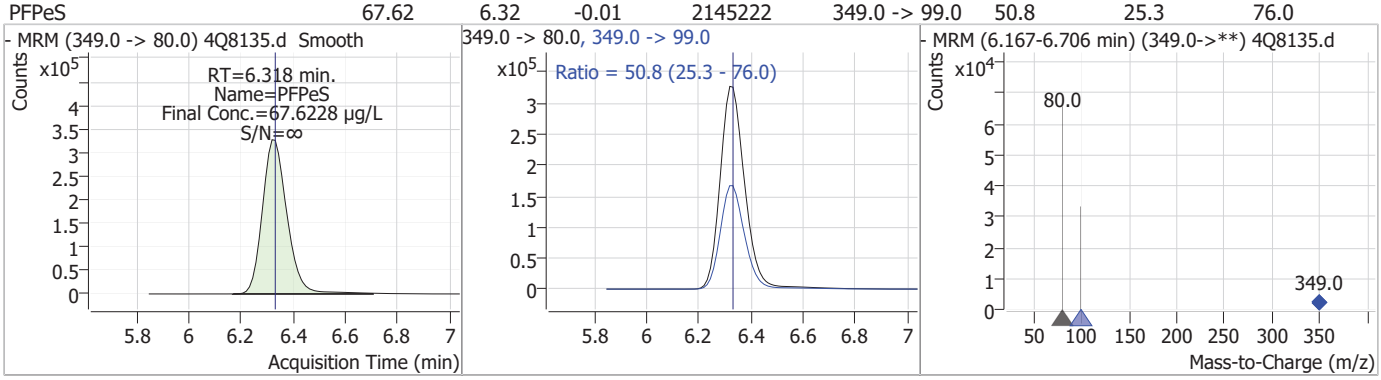


Perfluorinated Compounds by LC/MS/MS

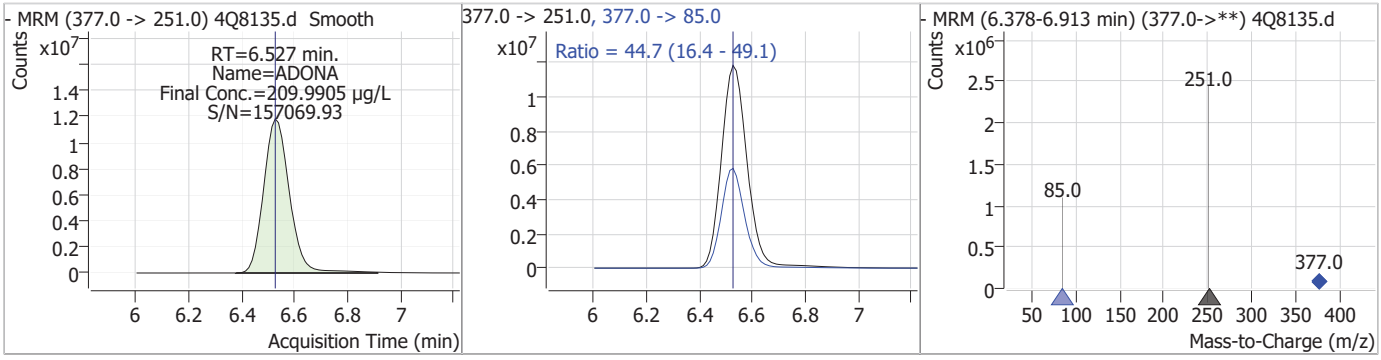
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	75.20	6.29	0.00	14644527	363.0 -> 169.0	19.3	10.4	31.2



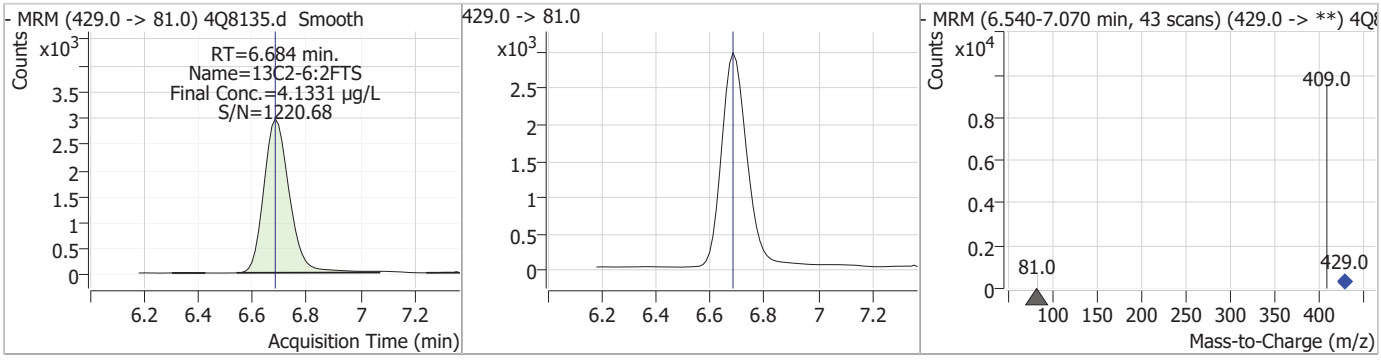
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	67.62	6.32	-0.01	2145222	349.0 -> 99.0	50.8	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	209.99	6.53	0.00	80271253	377.0 -> 85.0	44.7	16.4	49.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.13	6.68	0.00	19398				



7.6.51

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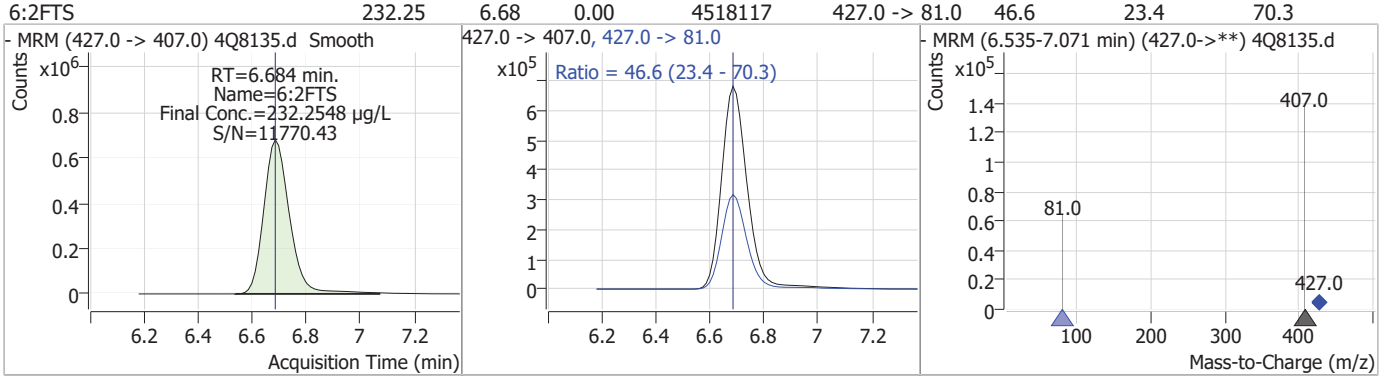
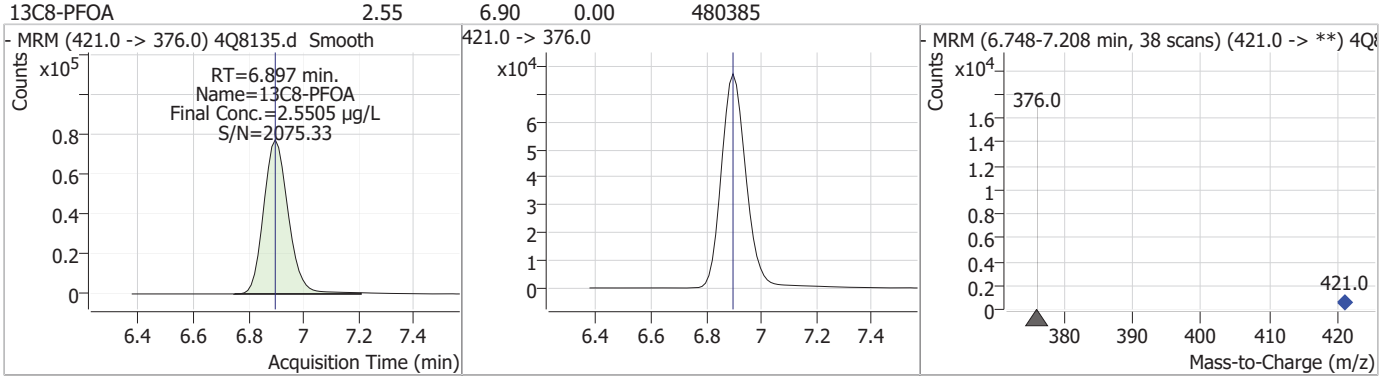
Perfluorinated Compounds by LC/MS/MS

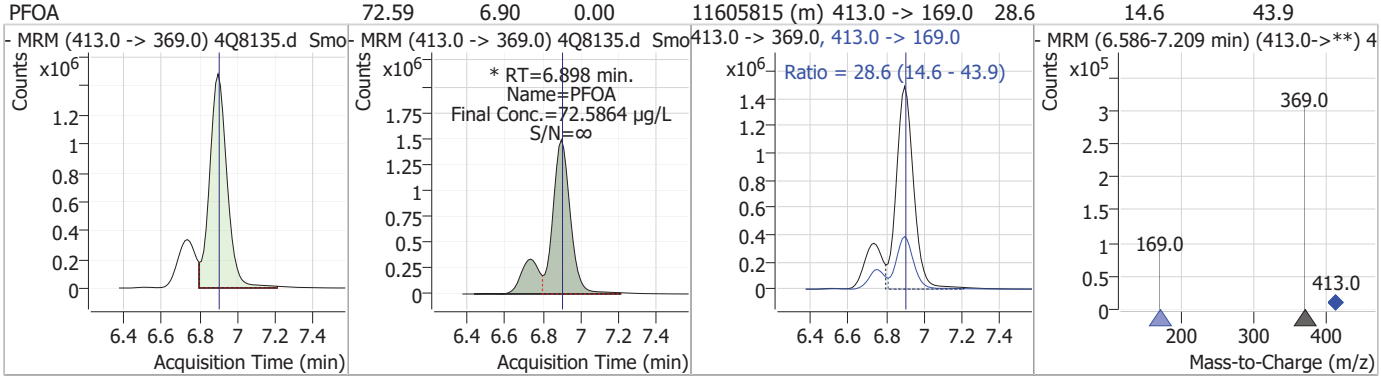
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	232.25	6.68	0.00	4518117	427.0 -> 81.0	46.6	23.4	70.3



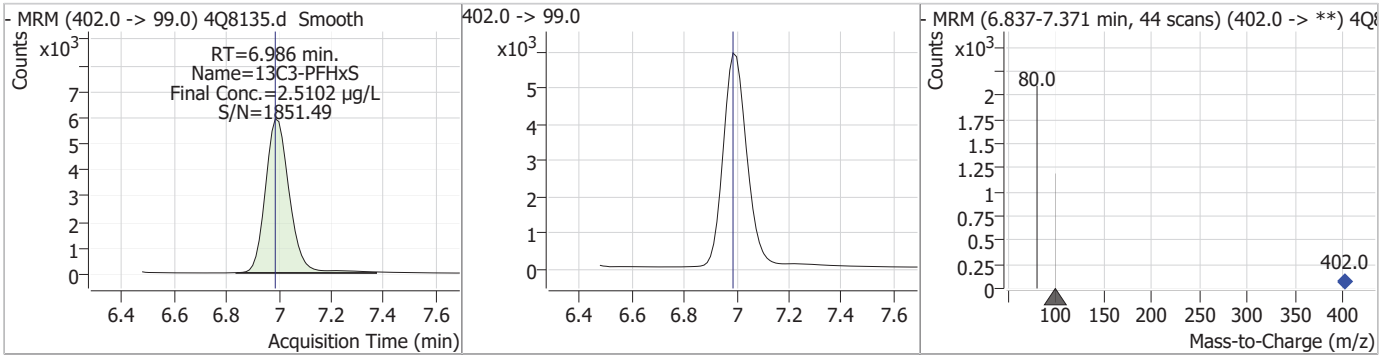
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.55	6.90	0.00	480385				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	72.59	6.90	0.00	11605815 (m)	413.0 -> 169.0	28.6	14.6	43.9

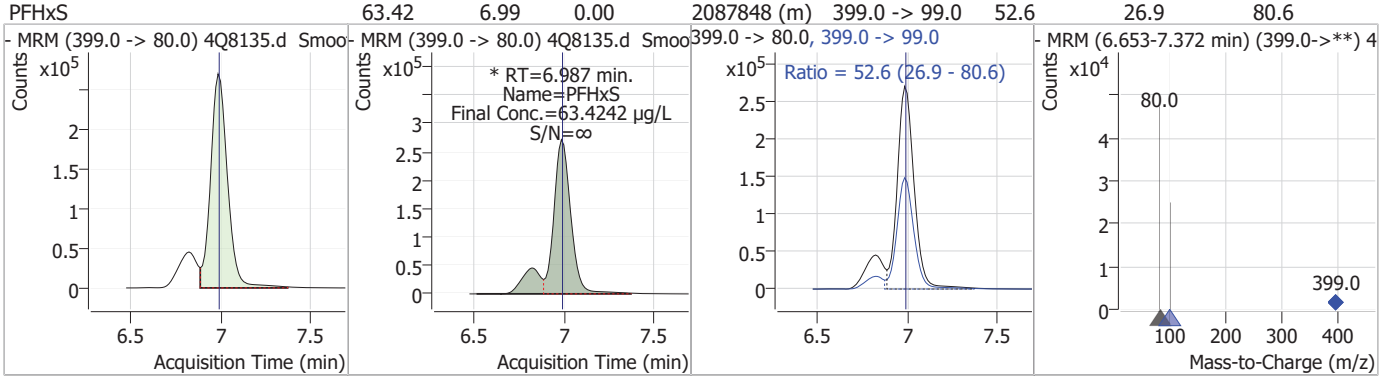


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.51	6.99	0.00	37803				

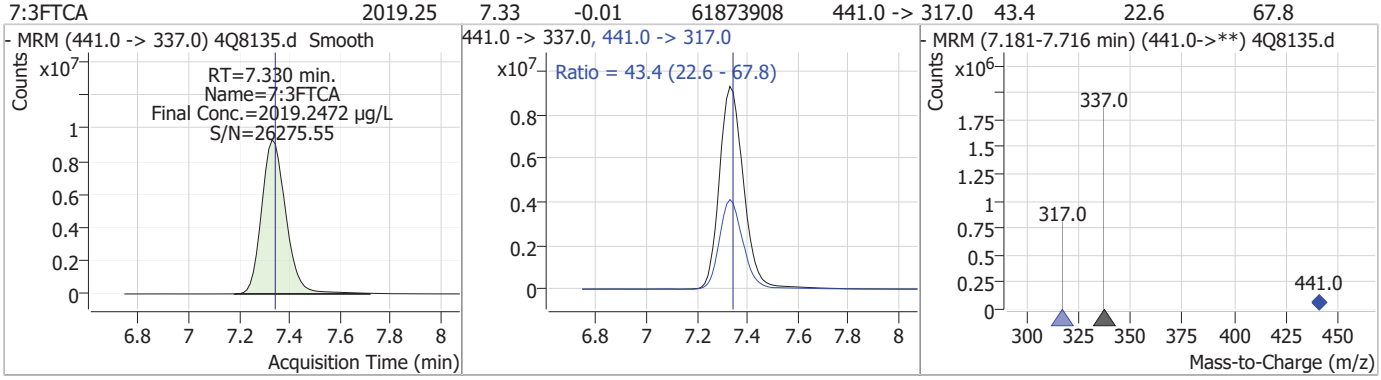


Perfluorinated Compounds by LC/MS/MS

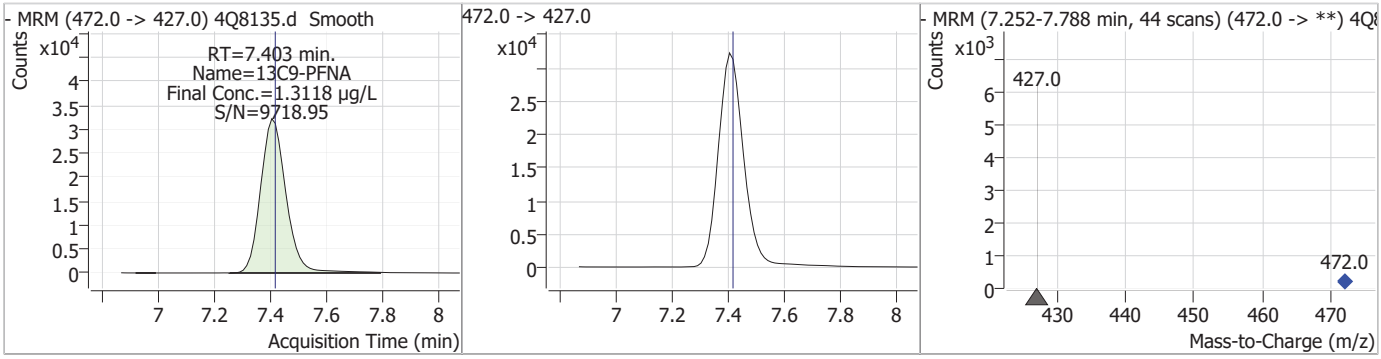
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	63.42	6.99	0.00	2087848 (m)	399.0 -> 99.0	52.6	26.9	80.6



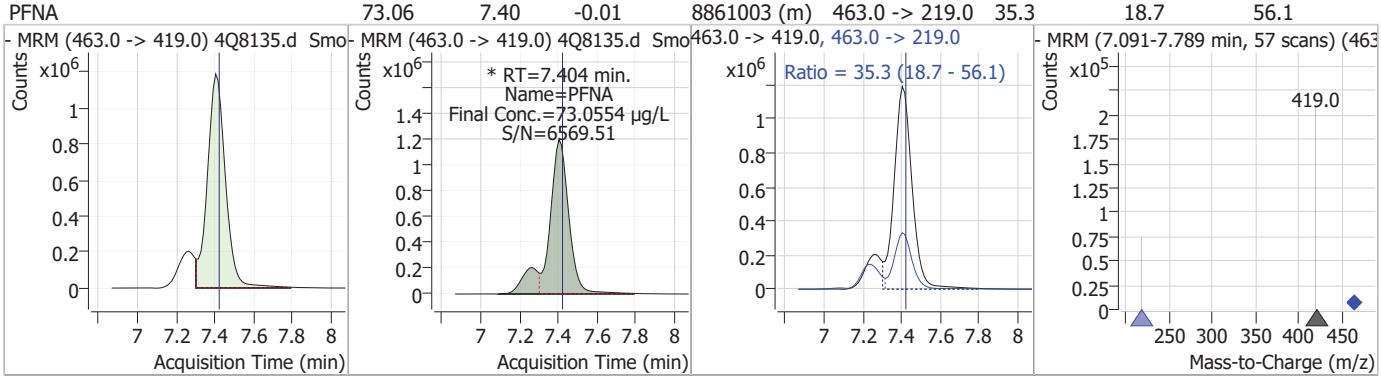
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	2019.25	7.33	-0.01	61873908	441.0 -> 317.0	43.4	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.31	7.40	-0.01	201652				

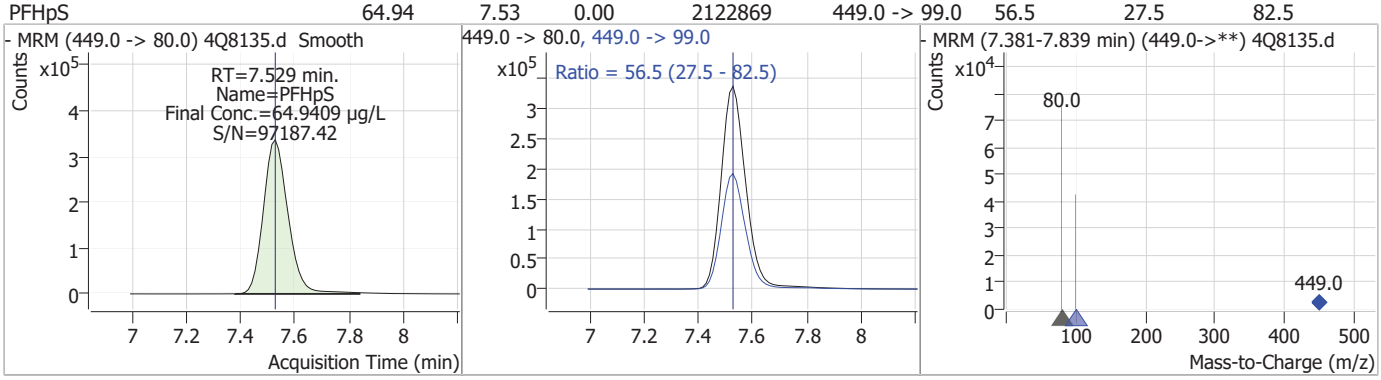


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	73.06	7.40	-0.01	8861003 (m)	463.0 -> 219.0	35.3	18.7	56.1

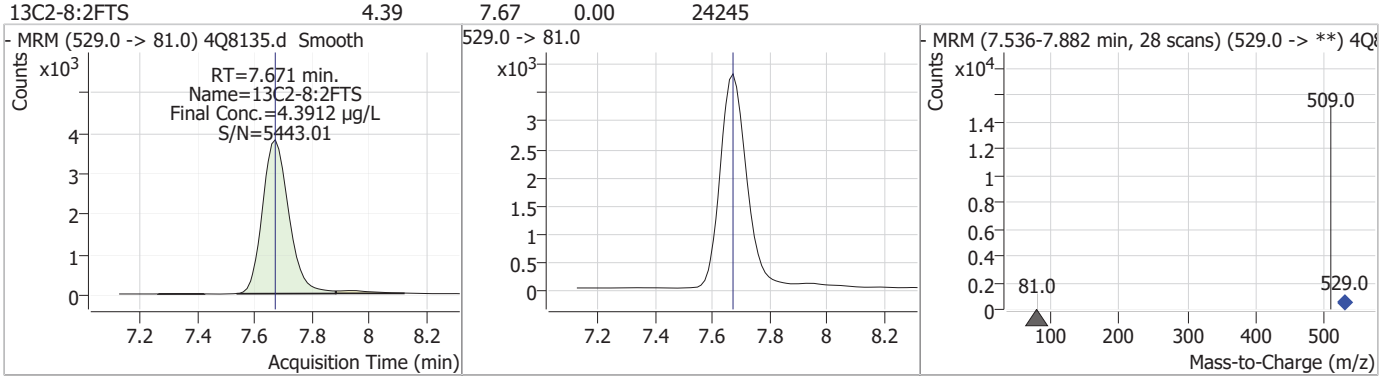


Perfluorinated Compounds by LC/MS/MS

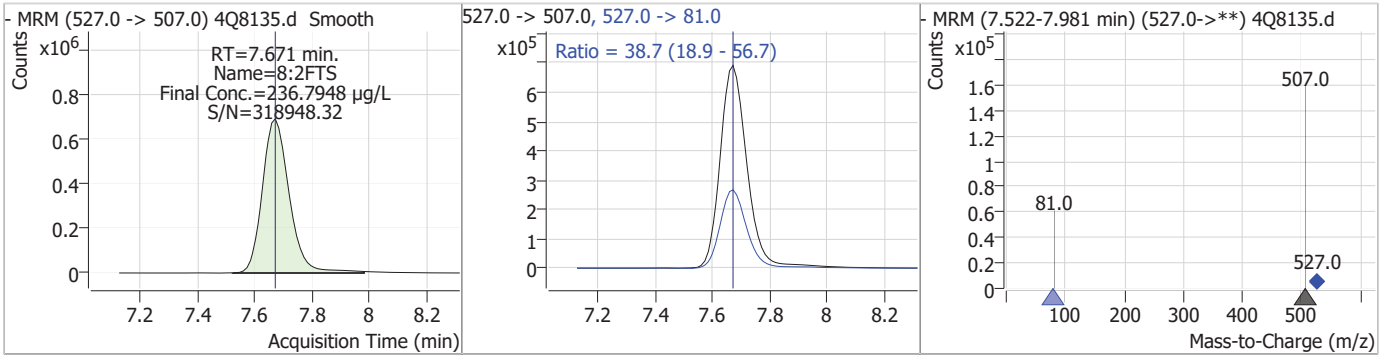
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	64.94	7.53	0.00	2122869	449.0 -> 99.0	56.5	27.5	82.5



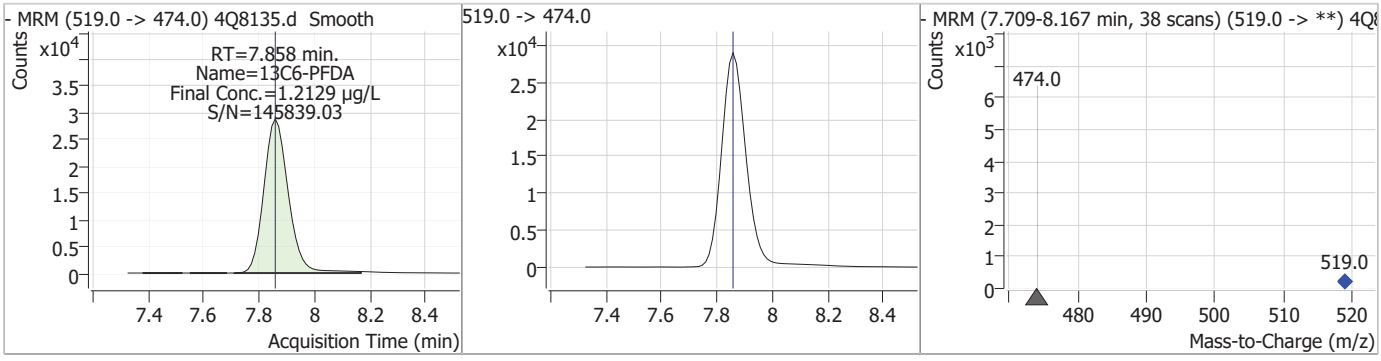
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.39	7.67	0.00	24245				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	236.79	7.67	0.00	4493128	527.0 -> 81.0	38.7	18.9	56.7

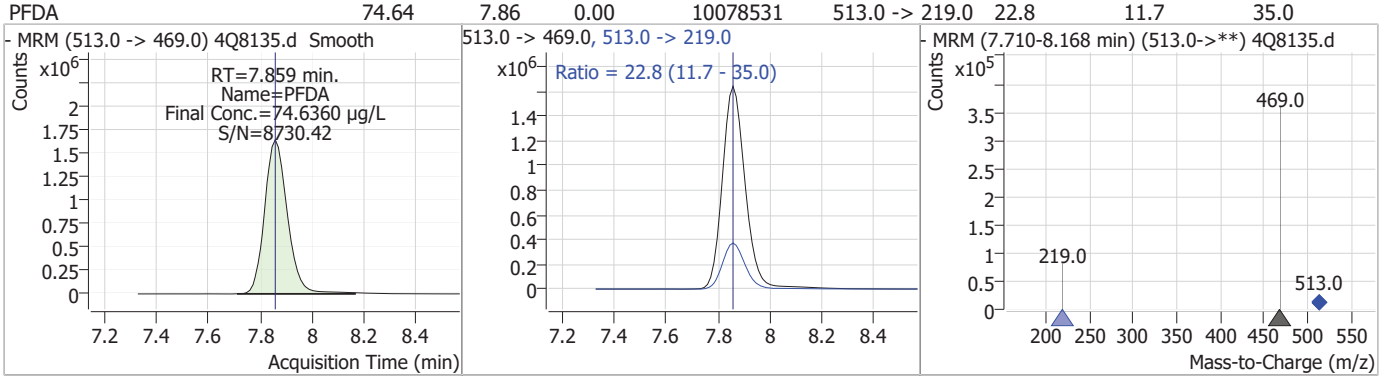


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.21	7.86	0.00	177665				

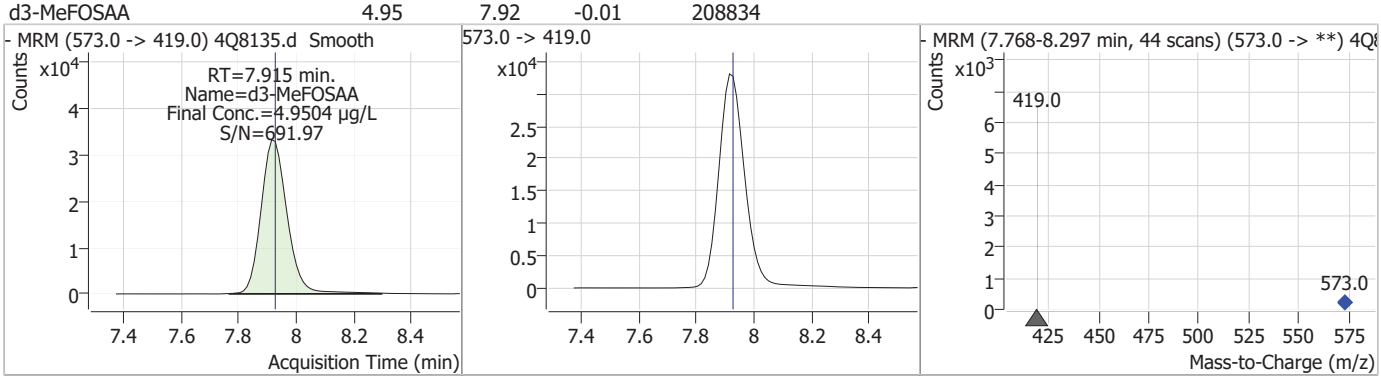


Perfluorinated Compounds by LC/MS/MS

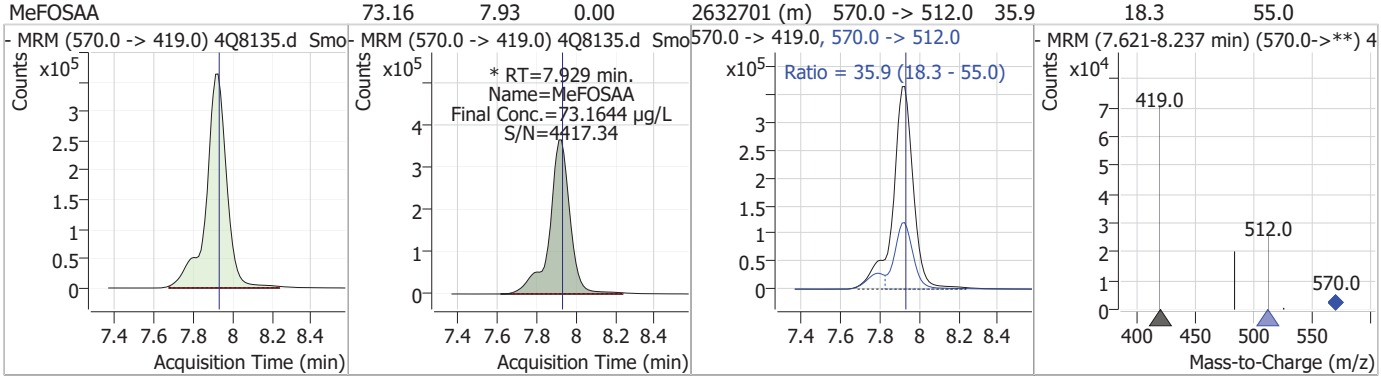
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	74.64	7.86	0.00	10078531	513.0 -> 219.0	22.8	11.7	35.0



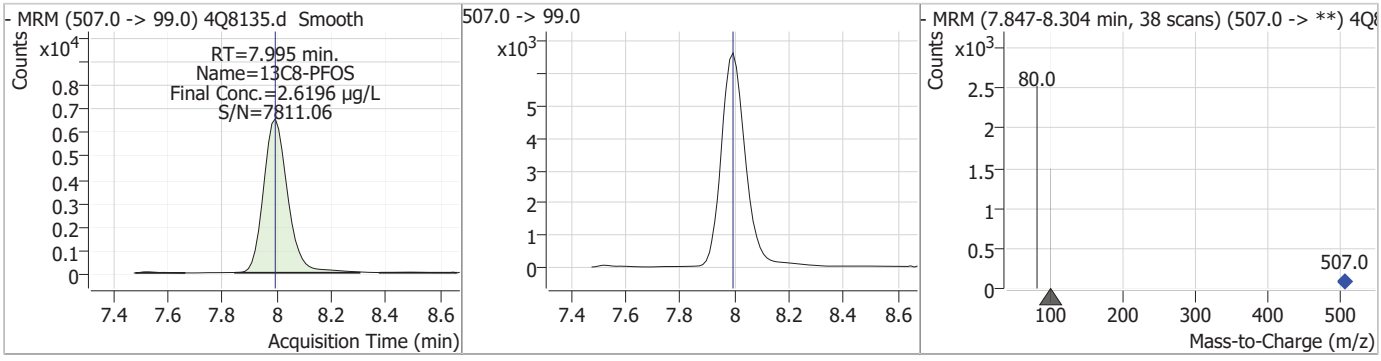
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.95	7.92	-0.01	208834				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	73.16	7.93	0.00	2632701 (m)	570.0 -> 512.0	35.9	18.3	55.0

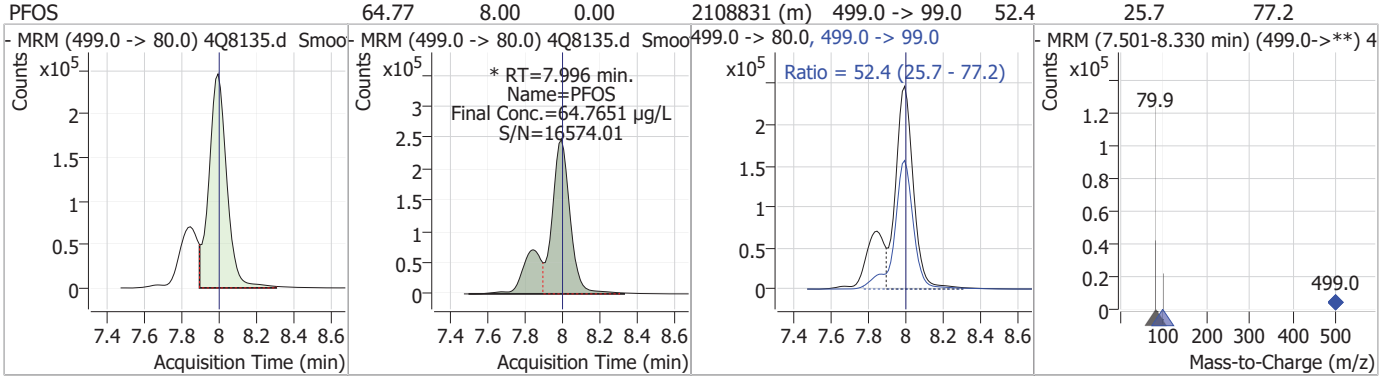


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.62	7.99	0.00	40402				

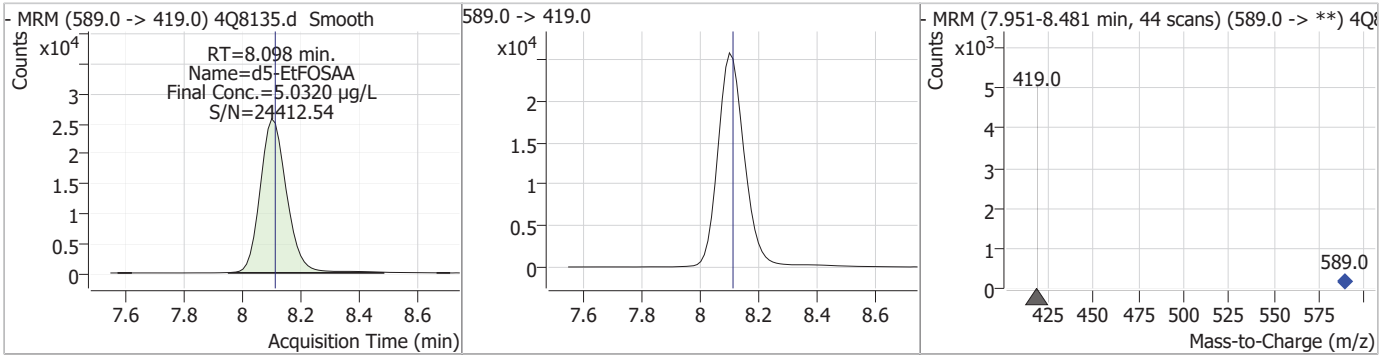


Perfluorinated Compounds by LC/MS/MS

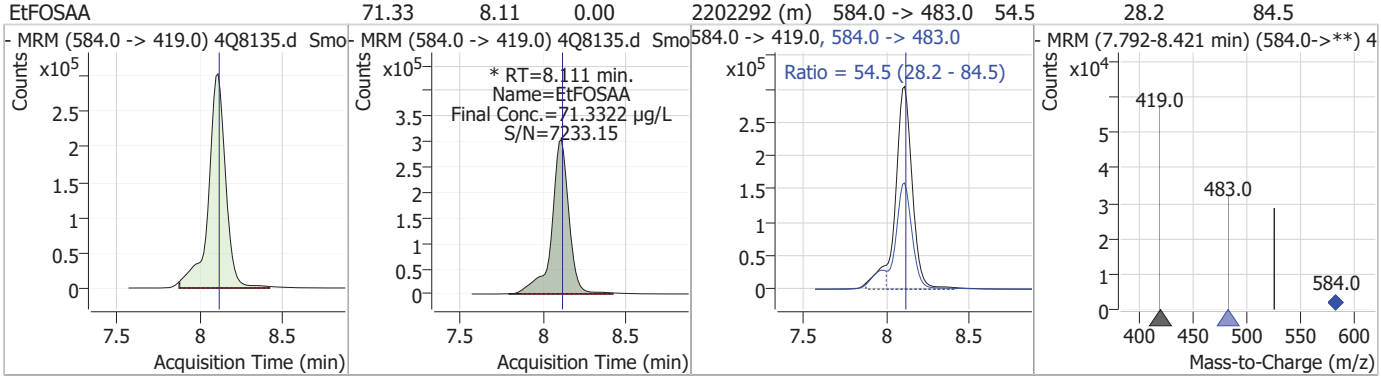
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	64.77	8.00	0.00	2108831 (m)	499.0 -> 99.0	52.4	25.7	77.2



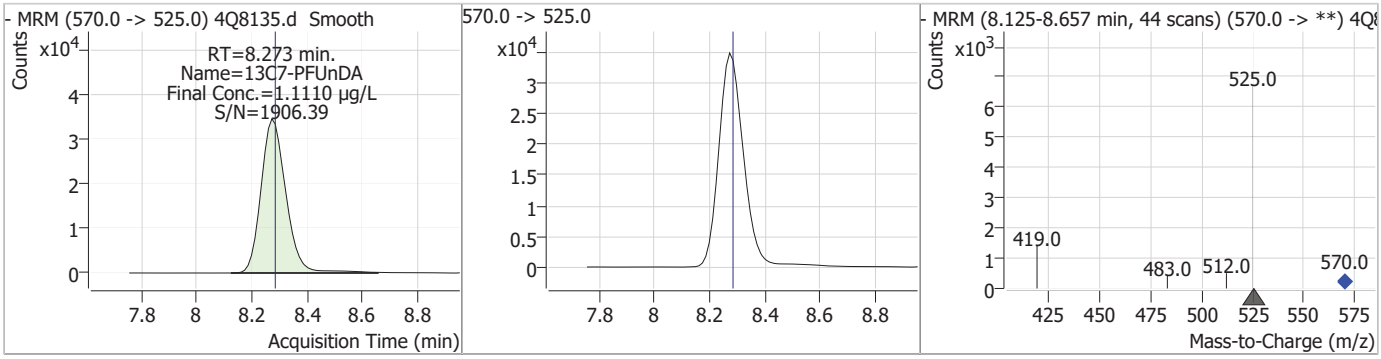
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.03	8.10	-0.01	162976				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	71.33	8.11	0.00	2202292 (m)	584.0 -> 483.0	54.5	28.2	84.5

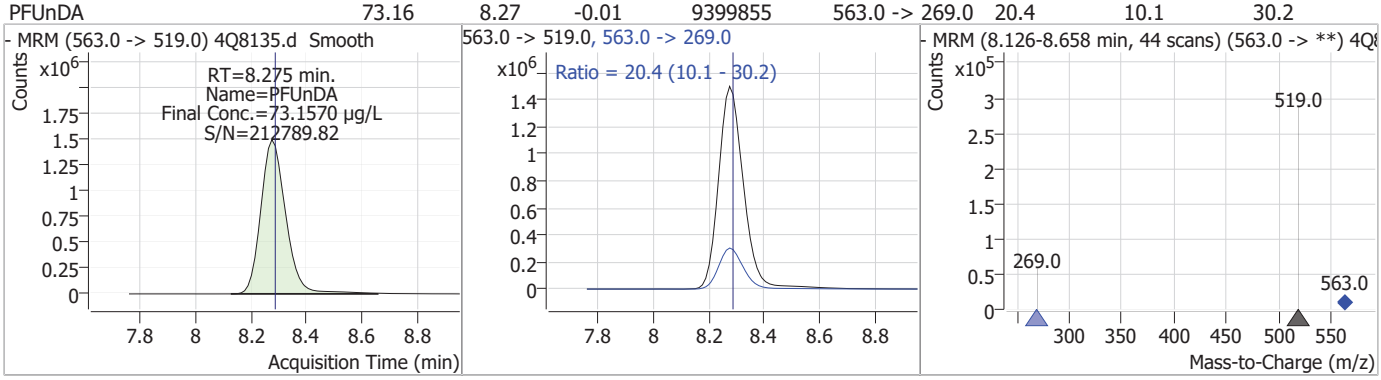


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.11	8.27	-0.01	217373				

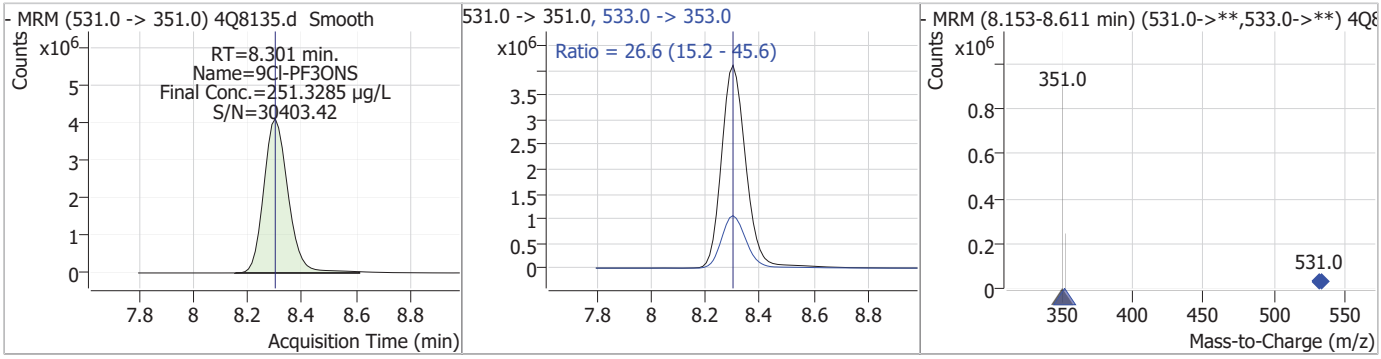


Perfluorinated Compounds by LC/MS/MS

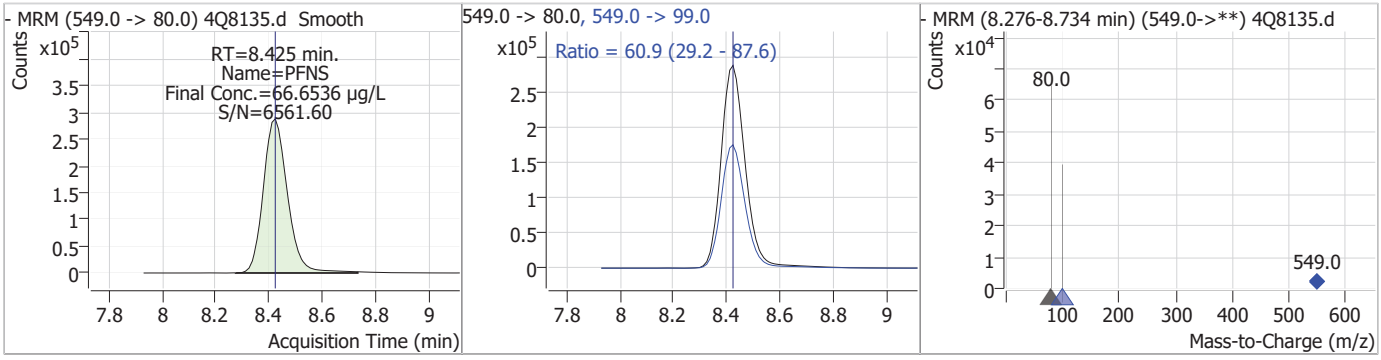
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	73.16	8.27	-0.01	9399855	563.0 -> 269.0	20.4	10.1	30.2



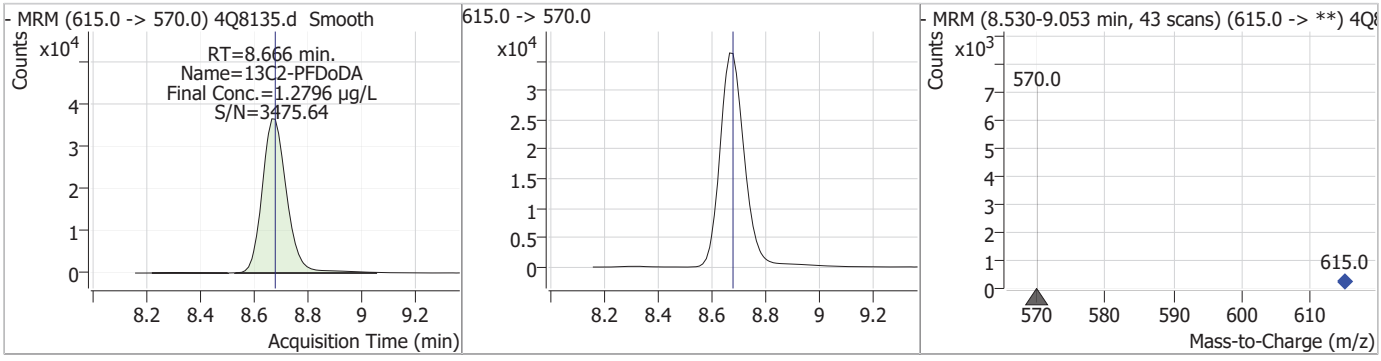
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	251.33	8.30	0.00	25624001	533.0 -> 353.0	26.6	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	66.65	8.42	0.00	1810890	549.0 -> 99.0	60.9	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.28	8.67	-0.01	229308				



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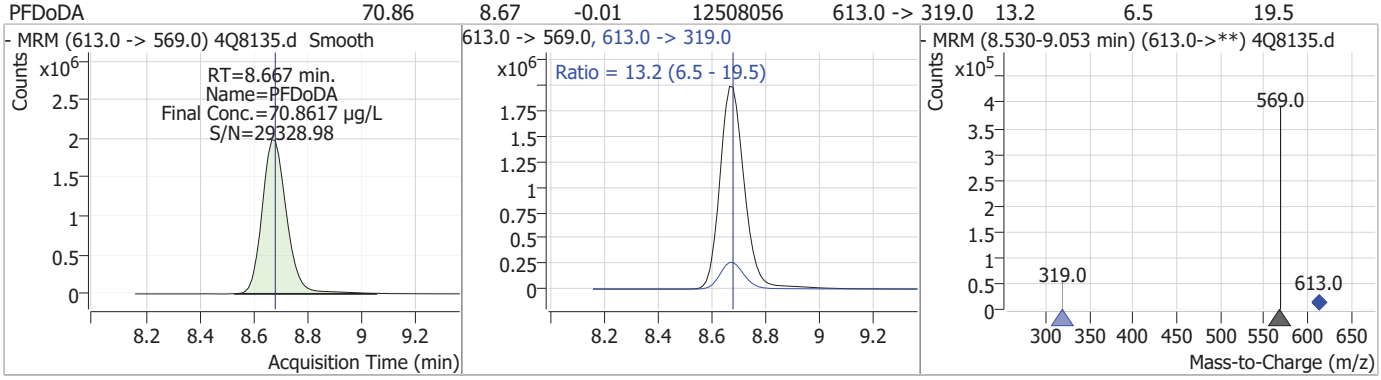
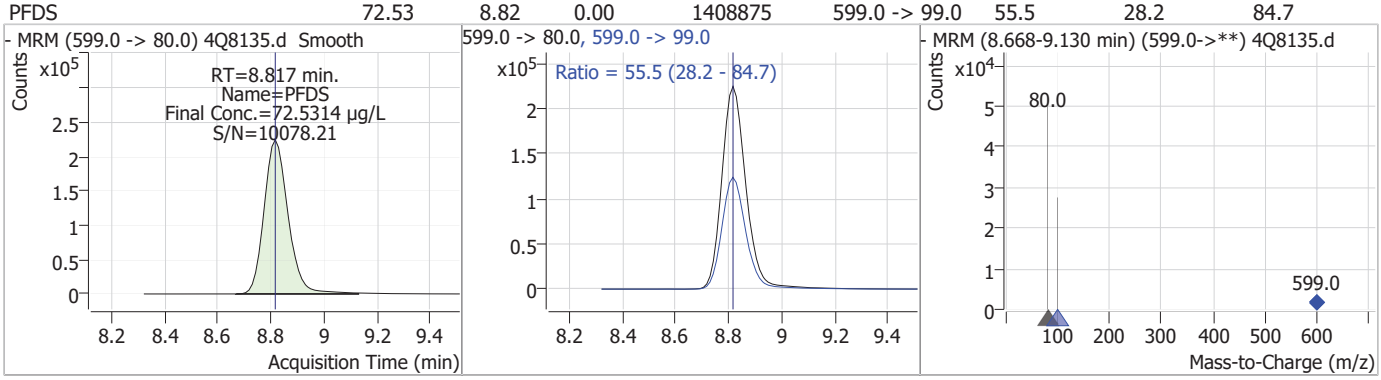
Perfluorinated Compounds by LC/MS/MS

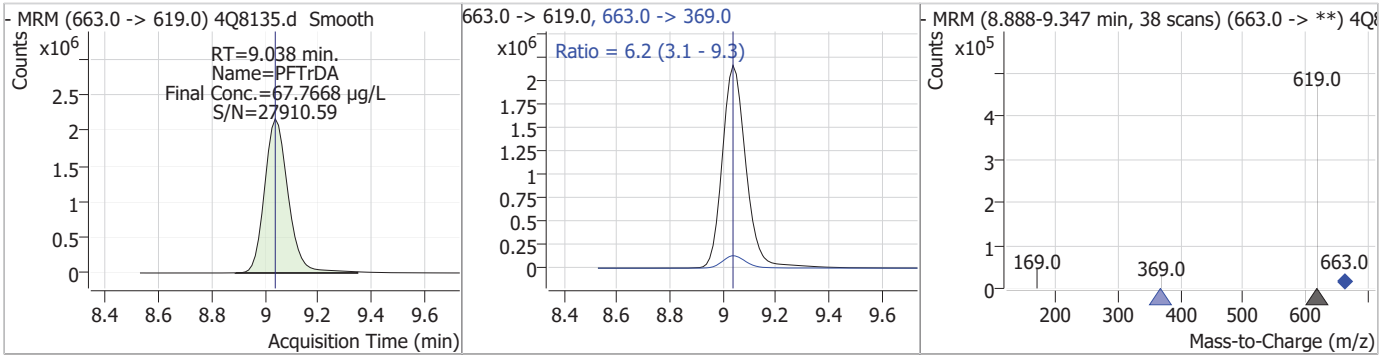
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	70.86	8.67	-0.01	12508056	613.0 -> 319.0	13.2	6.5	19.5



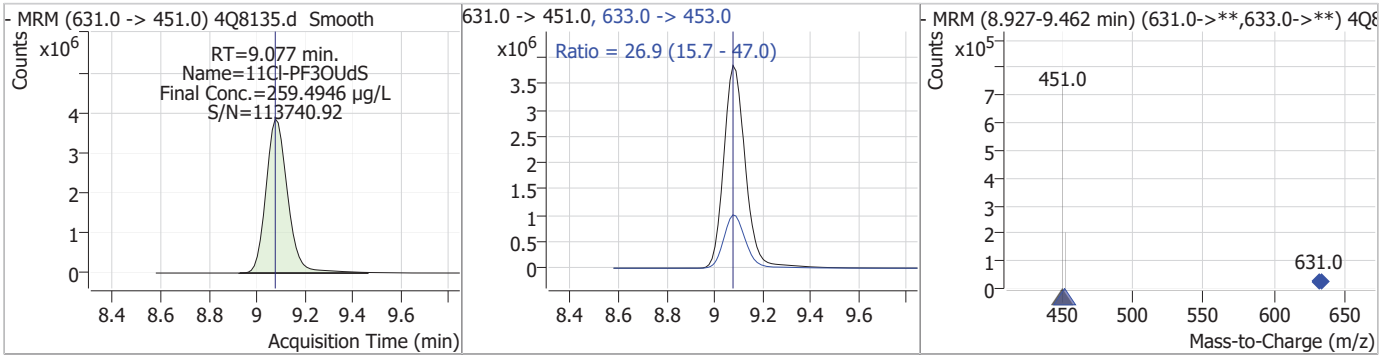
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	72.53	8.82	0.00	1408875	599.0 -> 99.0	55.5	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	67.77	9.04	0.00	13338974	663.0 -> 369.0	6.2	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	259.49	9.08	0.00	24051374	633.0 -> 453.0	26.9	15.7	47.0



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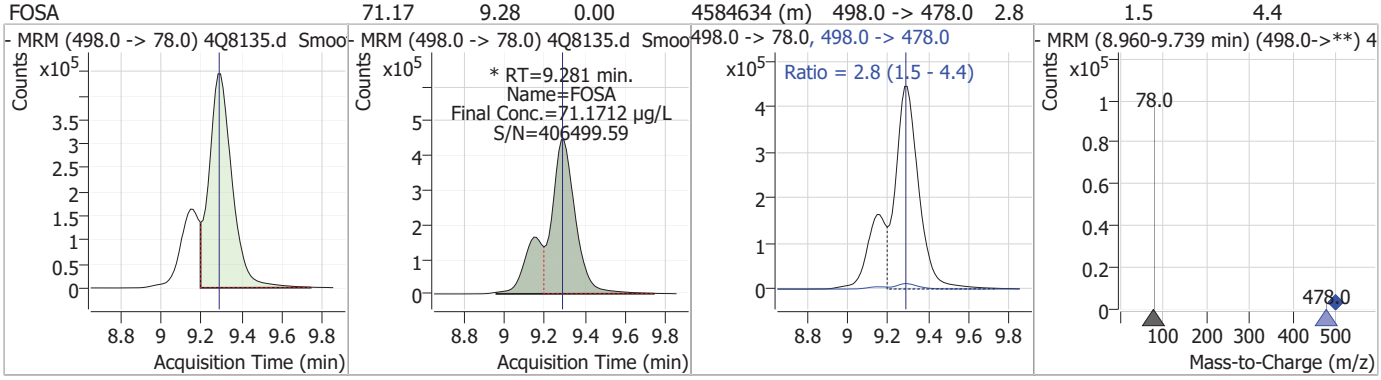
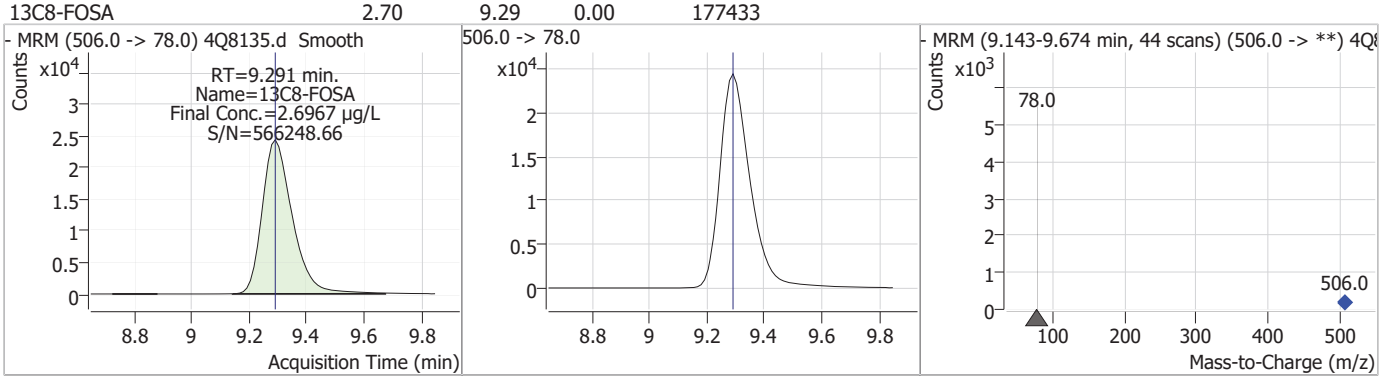
Perfluorinated Compounds by LC/MS/MS

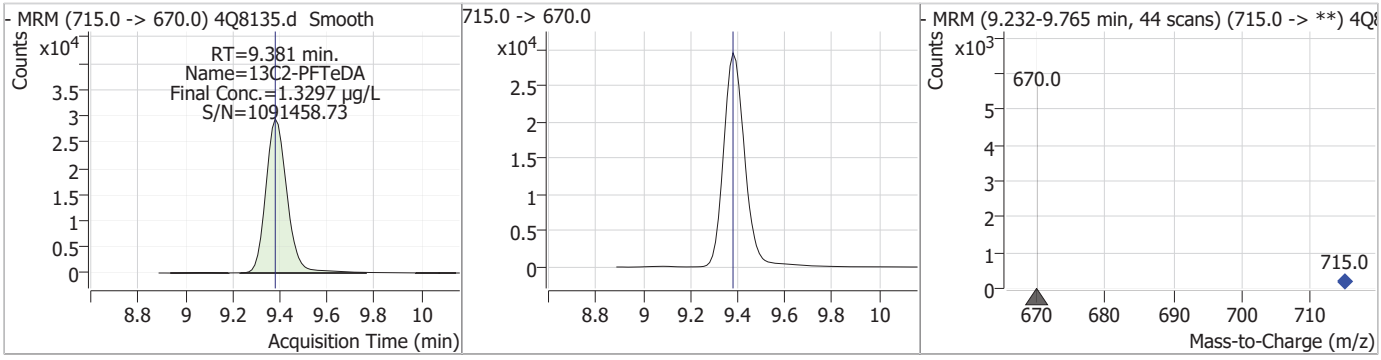
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	71.17	9.28	0.00	4584634 (m)	498.0 -> 478.0	2.8	1.5	4.4



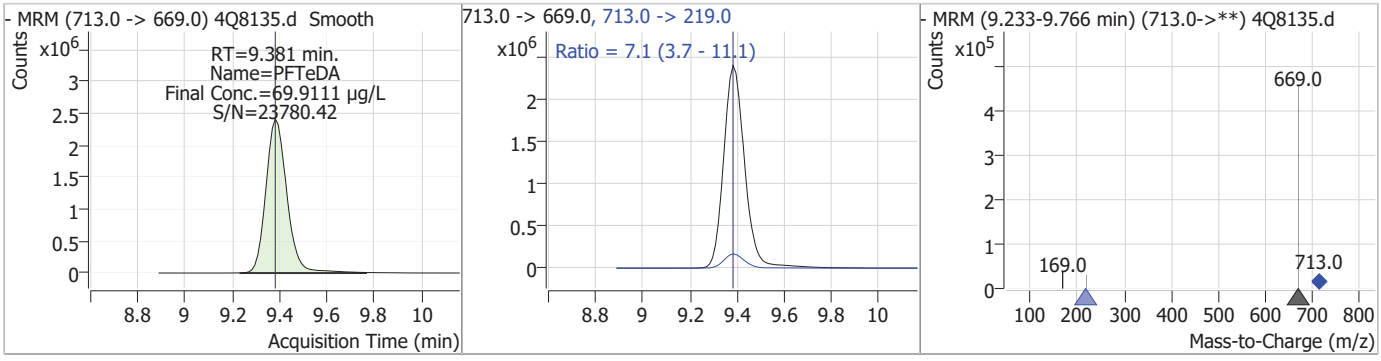
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.70	9.29	0.00	177433				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.33	9.38	0.00	183185				

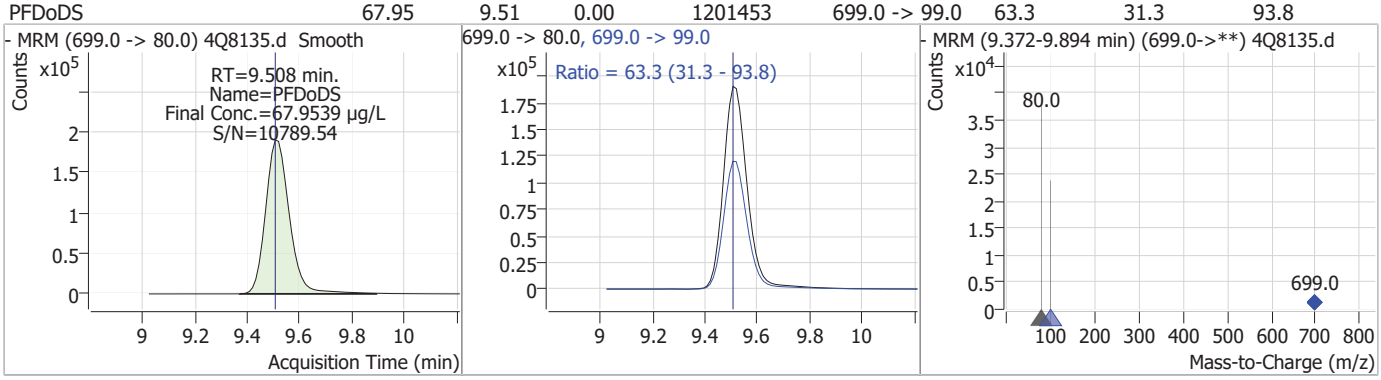


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	69.91	9.38	0.00	14911006	713.0 -> 219.0	7.1	3.7	11.1

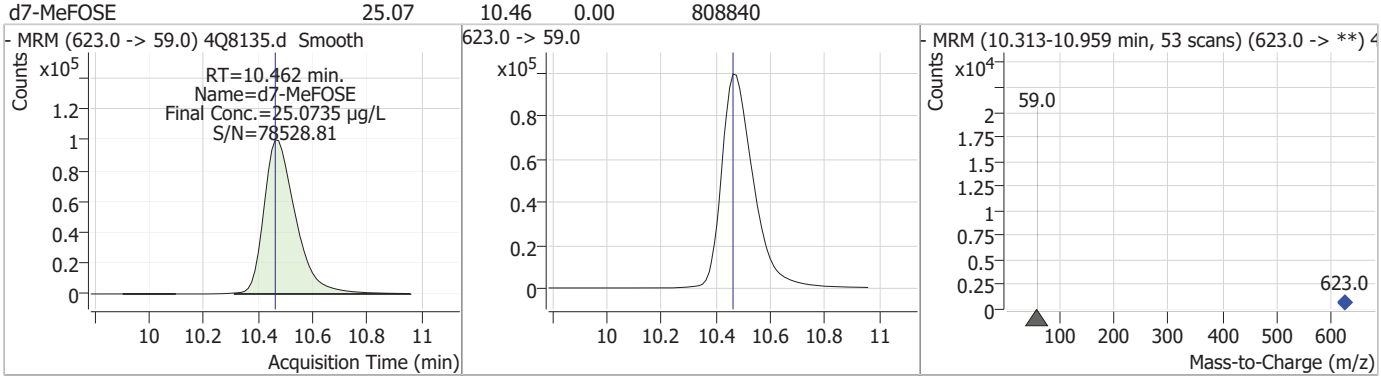


Perfluorinated Compounds by LC/MS/MS

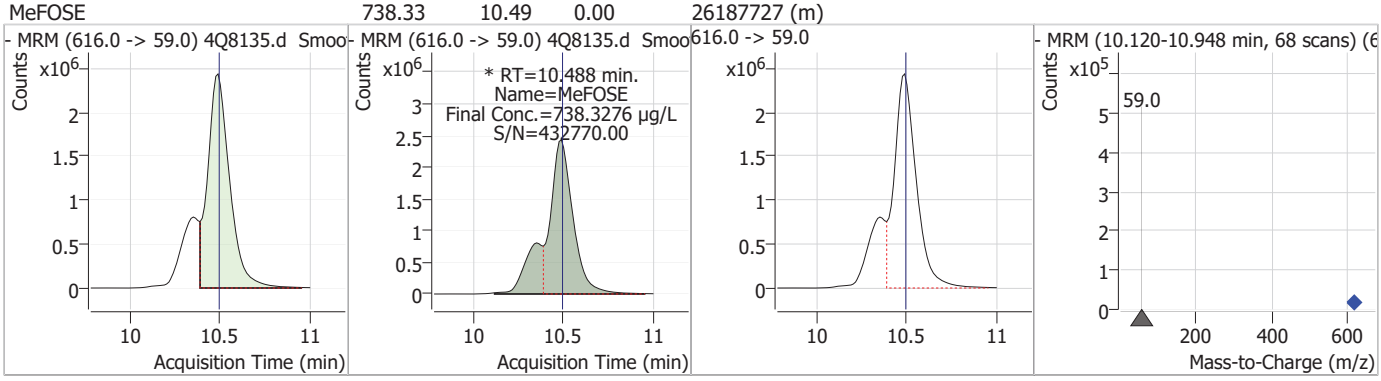
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	67.95	9.51	0.00	1201453	699.0 -> 99.0	63.3	31.3	93.8



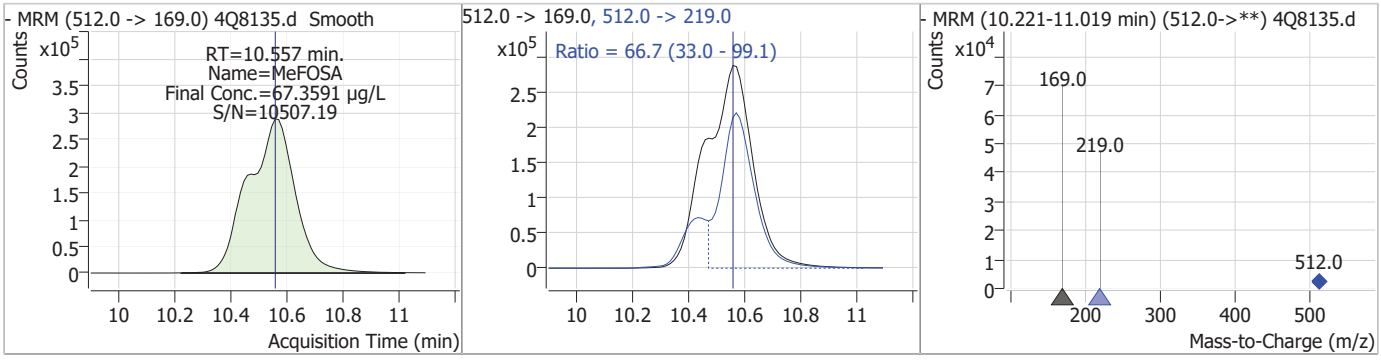
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.07	10.46	0.00	808840				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	738.33	10.49	0.00	26187727 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	67.36	10.56	0.00	3383249	512.0 -> 219.0	66.7	33.0	99.1



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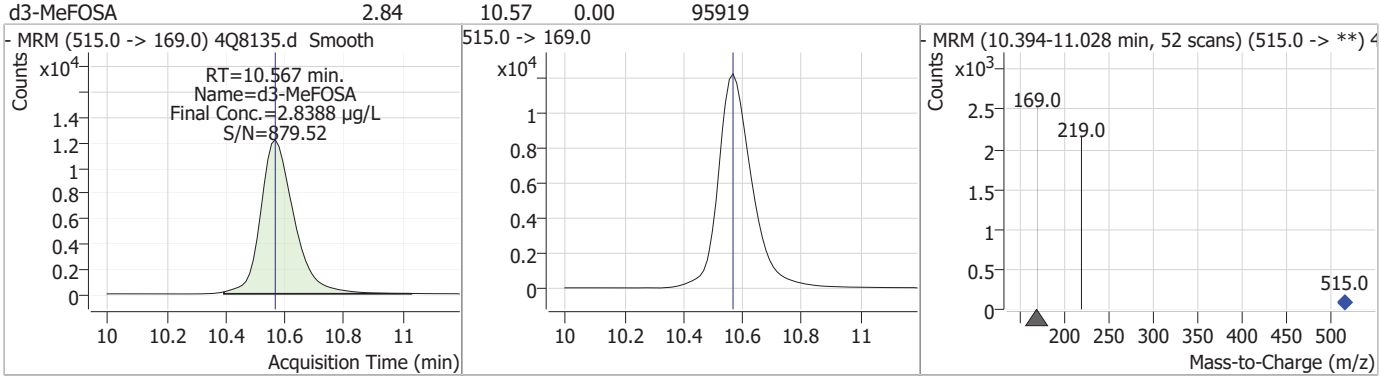
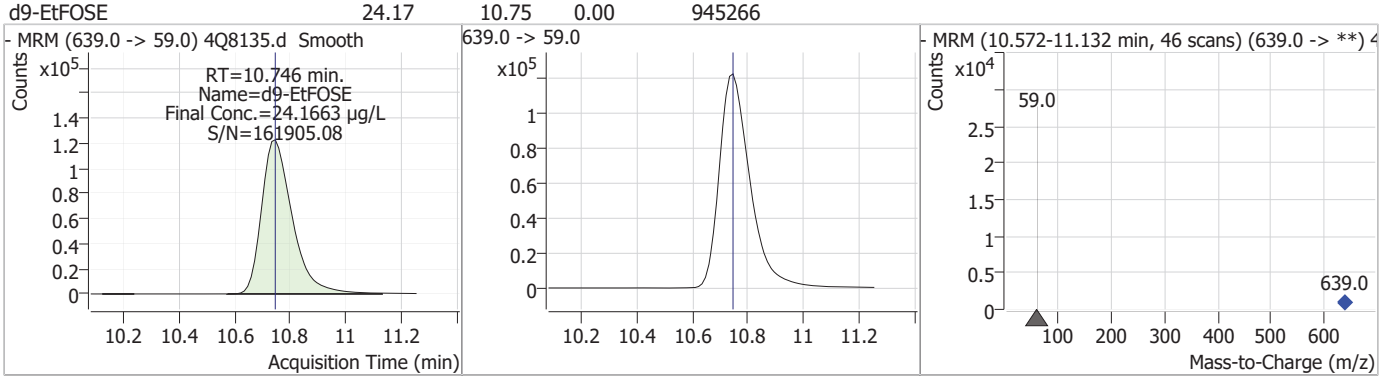
Perfluorinated Compounds by LC/MS/MS

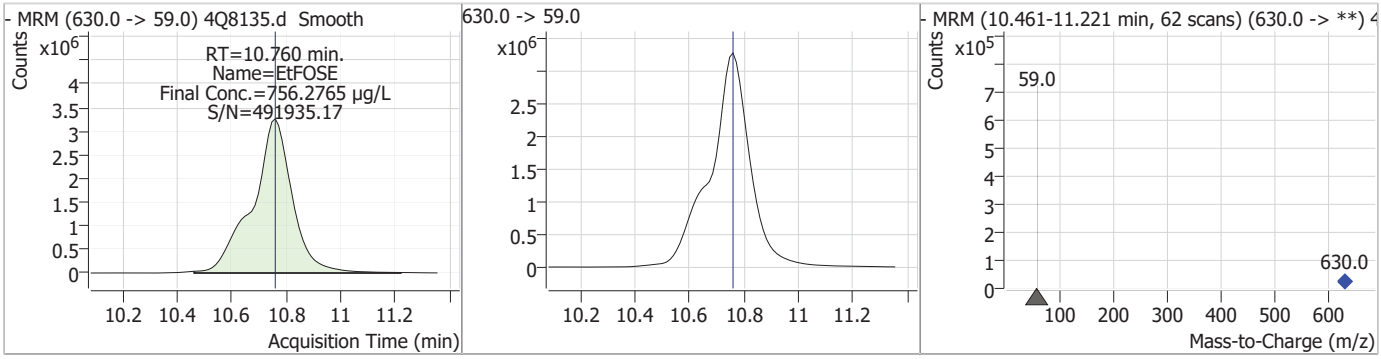
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.84	10.57	0.00	95919				



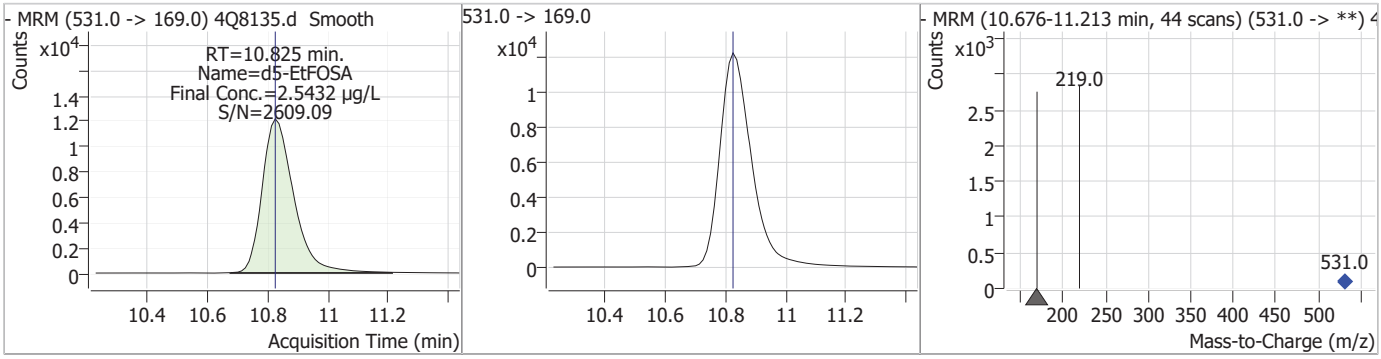
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.17	10.75	0.00	945266				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	756.28	10.76	0.00	33252900				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.54	10.82	0.00	88553				



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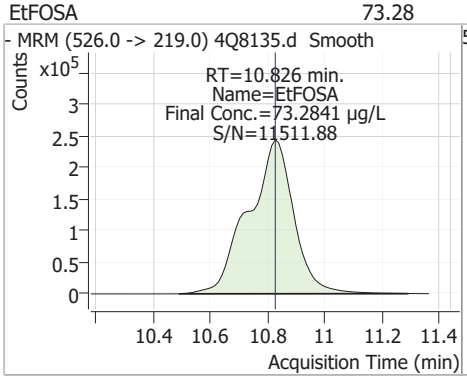
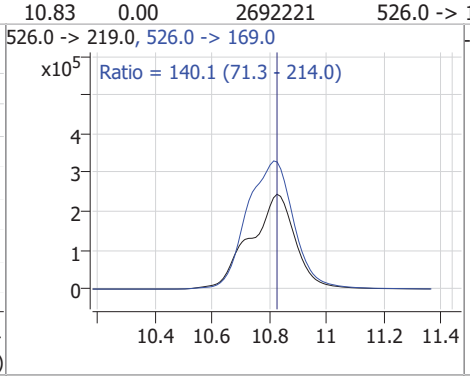
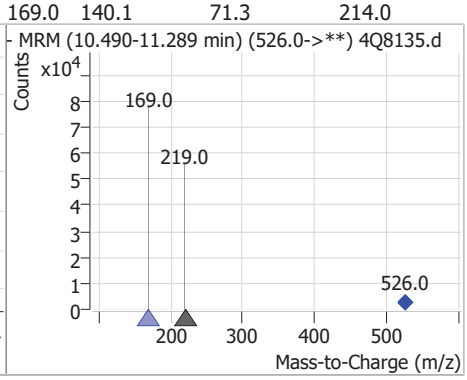
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	73.28	10.83	0.00	2692221	526.0 -> 169.0	140.1	71.3	214.0







7.6.51

7

Manual Integration Approval Summary

Sample Number: T4Q138-IC138
Lab FileID: 4Q8135.D
Injection Time: 04/30/25 16:04
Method: EPA 1633
Analyst approved: 04/30/25 23:06 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.93	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8137.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 4:31:38 PM
Sample Name : ICV138-4
Vial : P1-B2
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63077,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.883	217.0 -> 172.0	851692	10.00 µg/L	0.000
M5-PFPeA	4.307	268.0 -> 223.0	473829	5.00 µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	306462	2.50 µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	331914	2.50 µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	507469	2.50 µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	205398	1.25 µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	186932	1.25 µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	259797	1.25 µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	220290	1.25 µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	175318	1.25 µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	184410	2.50 µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	28421	2.50 µg/L	-0.012
		302.0 -> 80.0	69066		
M3-PFHxS	6.986	402.0 -> 99.0	40193	2.50 µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	41460	2.50 µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	11957	5.00 µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	26261	5.00 µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	28403	5.00 µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	231790	5.00 µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	482472	10.00 µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	173225	5.00 µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	890335	25.00 µg/L	0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1103799	25.00 µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	98812	2.50 µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	93381	2.50 µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	69817	2.50 µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	365903	5.00 µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	42725	2.50 µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	482202	2.50 µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	161878	1.25 µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	187226	1.25 µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	277353	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.153	329.0 -> 81.0	11957	5.58 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 111.6%	
13C2-6:2FTS	6.684	429.0 -> 81.0	26261	5.65 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 113.0%	
13C2-8:2FTS	7.671	529.0 -> 81.0	28403	5.19 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.9%	
13C2-PFDoDA	8.666	615.0 -> 570.0	220290	1.26 µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.7%	
13C2-PFTeDA	9.381	715.0 -> 670.0	175318	1.30 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.3%	
13C3-PFBS	5.355	302.0 -> 99.0	28421	2.70 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.8%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	40193	2.69	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.8%			
13C4-PFBA	2.883	217.0 -> 172.0	851692	10.15	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.5%			
13C4-PFHpA	6.291	367.0 -> 322.0	331914	2.66	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.4%			
13C5-PFHxA	5.452	318.0 -> 273.0	306462	2.61	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.4%			
13C5-PFPeA	4.307	268.0 -> 223.0	473829	5.32	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.4%			
13C6-PFDA	7.858	519.0 -> 474.0	186932	1.31	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.5%			
13C7-PFUnDA	8.273	570.0 -> 525.0	259797	1.36	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 108.8%			
13C8-FOSA	9.291	506.0 -> 78.0	184410	2.57	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.8%			
13C8-PFOA	6.897	421.0 -> 376.0	507469	2.63	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.3%			
13C8-PFOS	7.995	507.0 -> 99.0	41460	2.47	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.6%			
13C9-PFNA	7.403	472.0 -> 427.0	205398	1.32	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.8%			
d3-MeFOSAA	7.915	573.0 -> 419.0	231790	5.04	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.8%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	482472	10.46	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 104.6%			
d3-MeFOSA	10.567	515.0 -> 169.0	93381	2.54	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.4%			
d5-EtFOSAA	8.098	589.0 -> 419.0	173225	4.91	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.1%			
d7-MeFOSE	10.475	623.0 -> 59.0	890335	25.32	µg/L		0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 101.3%			
d9-EtFOSE	10.746	639.0 -> 59.0	1103799	25.89	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 103.6%			
d5-EtFOSA	10.825	531.0 -> 169.0	98812	2.60	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.1%			
Target Compounds							QValue
4:2FTS	5.154	327.0 -> 307.0	202461	9.22	µg/L		100
		327.0 -> 81.0	94870				
6:2FTS	6.684	427.0 -> 407.0	246109	9.35	µg/L		97
		427.0 -> 81.0	111276				
8:2FTS	7.671	527.0 -> 507.0	220582	9.92	µg/L		98
		527.0 -> 81.0	85754				
EtFOSAA	8.111	584.0 -> 419.0	80029	2.44	µg/L	m	96
		584.0 -> 483.0	42982				
FOSA	9.294	498.0 -> 78.0	154218	2.30	µg/L	m	100
		498.0 -> 478.0	4474				
MeFOSAA	7.917	570.0 -> 419.0	91430	2.29	µg/L	m	99
		570.0 -> 512.0	33879				
PFBA	2.877	213.0 -> 169.0	246764	9.48	µg/L		100
PFBS	5.357	299.0 -> 80.0	62581	1.93	µg/L		95
		299.0 -> 99.0	27714				
PFDA	7.859	513.0 -> 469.0	325389	2.29	µg/L		99
		513.0 -> 219.0	74094				
PFDoDA	8.667	613.0 -> 569.0	408857	2.41	µg/L		98
		613.0 -> 319.0	55892				

Perfluorinated Compounds by LC/MS/MS

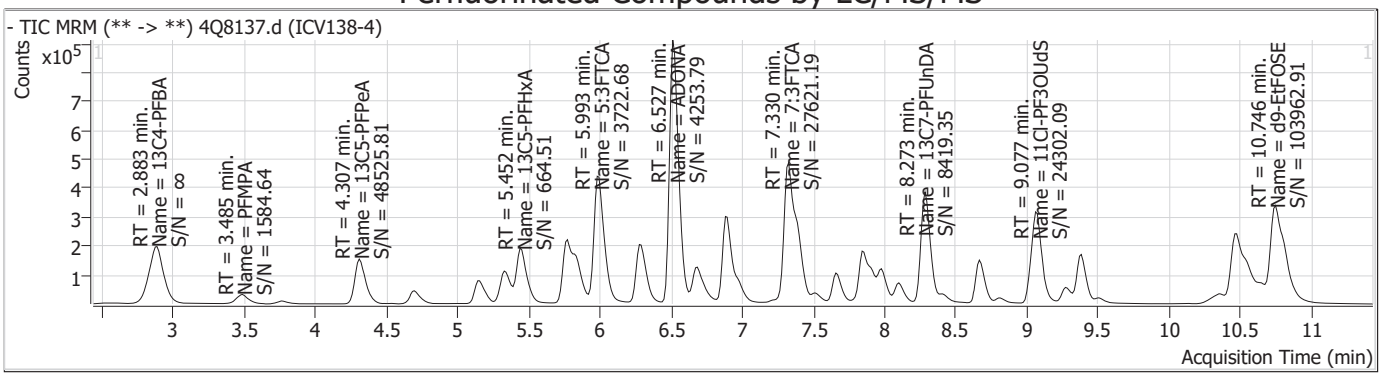
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	50059	2.16	µg/L		98
		599.0 -> 99.0	27730				
PFHpA	6.292	363.0 -> 319.0	473510	2.34	µg/L		98
		363.0 -> 169.0	95069				
PFHpS	7.529	449.0 -> 80.0	74690	2.15	µg/L		98
		449.0 -> 99.0	39771				
PFHxA	5.455	313.0 -> 269.0	313711	2.38	µg/L		99
		313.0 -> 119.0	11255				
PFHxS	6.987	399.0 -> 80.0	73529	2.10	µg/L	m	100
		399.0 -> 99.0	39249				
PFNA	7.404	463.0 -> 419.0	286284	2.32	µg/L	m	97
		463.0 -> 219.0	101716				
PFNS	8.425	549.0 -> 80.0	66657	2.39	µg/L		98
		549.0 -> 99.0	40095				
PFOA	6.898	413.0 -> 369.0	384505	2.28	µg/L	m	99
		413.0 -> 169.0	110979				
PFOS	7.996	499.0 -> 80.0	72964	2.18	µg/L	m	96
		499.0 -> 99.0	39667				
PFPeA	4.309	263.0 -> 219.0	357303	4.77	µg/L		100
PFPeS	6.318	349.0 -> 80.0	75791	2.14	µg/L		99
		349.0 -> 99.0	39173				
PFTeDA	9.381	713.0 -> 669.0	486082	2.38	µg/L		100
		713.0 -> 219.0	35353				
PFTrDA	9.038	663.0 -> 619.0	482724	2.55	µg/L		100
		663.0 -> 369.0	29631				
PFUnDA	8.275	563.0 -> 519.0	359806	2.34	µg/L		99
		563.0 -> 269.0	73248				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	858062	9.35	µg/L		98
		633.0 -> 453.0	257994				
9Cl-PF3ONS	8.301	531.0 -> 351.0	898685	8.90	µg/L		99
		533.0 -> 353.0	270292				
ADONA	6.527	377.0 -> 251.0	3163637	8.36	µg/L		100
		377.0 -> 85.0	1041155				
HFPO-DA	5.780	285.0 -> 169.0	479944	9.46	µg/L		100
		285.0 -> 185.0	53450				
3:3FTCA	3.769	241.0 -> 177.0	50339	11.24	µg/L		99
		241.0 -> 117.0	4319				
5:3FTCA	5.993	341.0 -> 237.0	1313548	55.73	µg/L		99
		341.0 -> 217.0	933754				
7:3FTCA	7.330	441.0 -> 337.0	1726751	56.83	µg/L		99
		441.0 -> 317.0	763866				
EtFOSA	10.826	526.0 -> 219.0	92341	2.25	µg/L		99
		526.0 -> 169.0	133198				
EtFOSE	10.760	630.0 -> 59.0	1219486	23.75	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	113837	2.33	µg/L		100
		512.0 -> 219.0	75247				
MeFOSE	10.488	616.0 -> 59.0	917951	23.51	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	43157	2.38	µg/L		97
		699.0 -> 99.0	25838				
NFDHA	5.333	295.0 -> 201.0	82339	4.75	µg/L		98
		201.0 -> 85.0	331129				
		295.0 -> 85.0	21140				
PFMBA	4.698	279.0 -> 85.0	240256	4.70	µg/L		100
PFMPA	3.485	229.0 -> 85.0	196352	4.57	µg/L		100
PFEESA	5.836	315.0 -> 135.0	516658	4.26	µg/L		99
		315.0 -> 69.0	41578				

Perfluorinated Compounds by LC/MS/MS

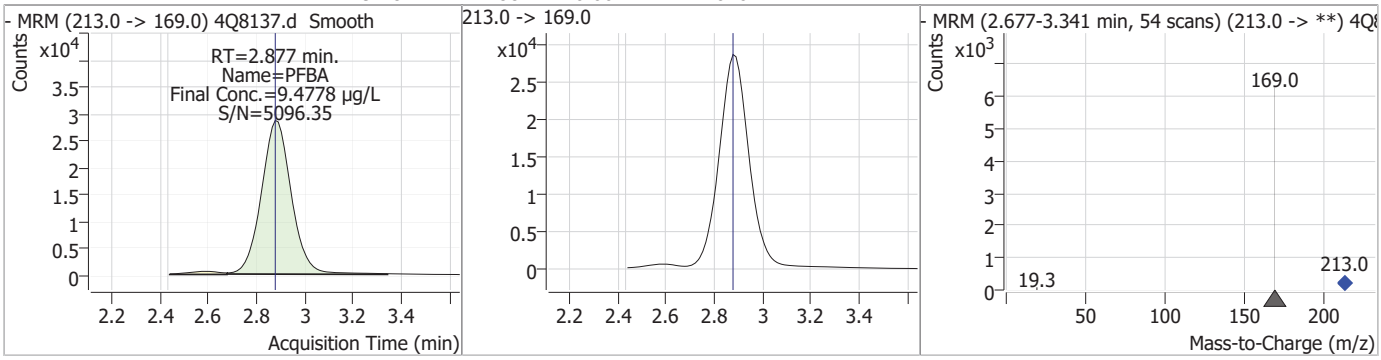
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

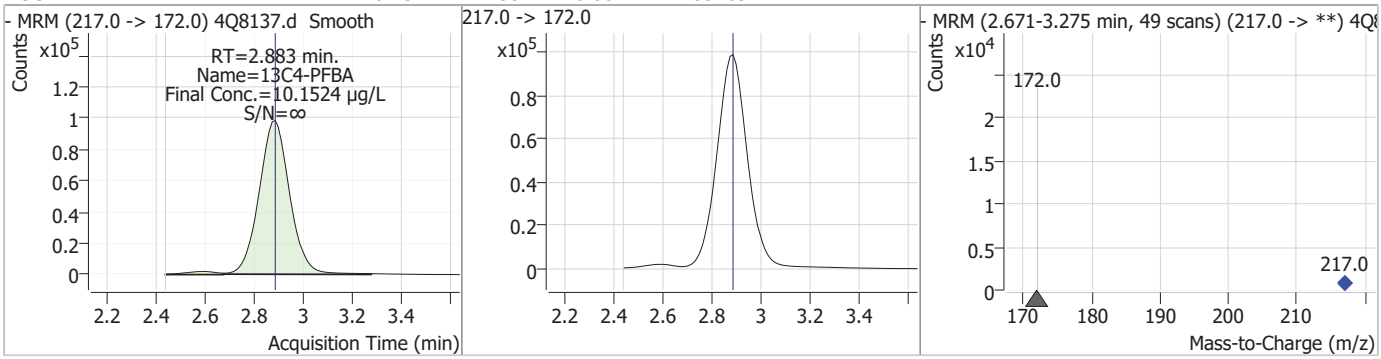
Perfluorinated Compounds by LC/MS/MS



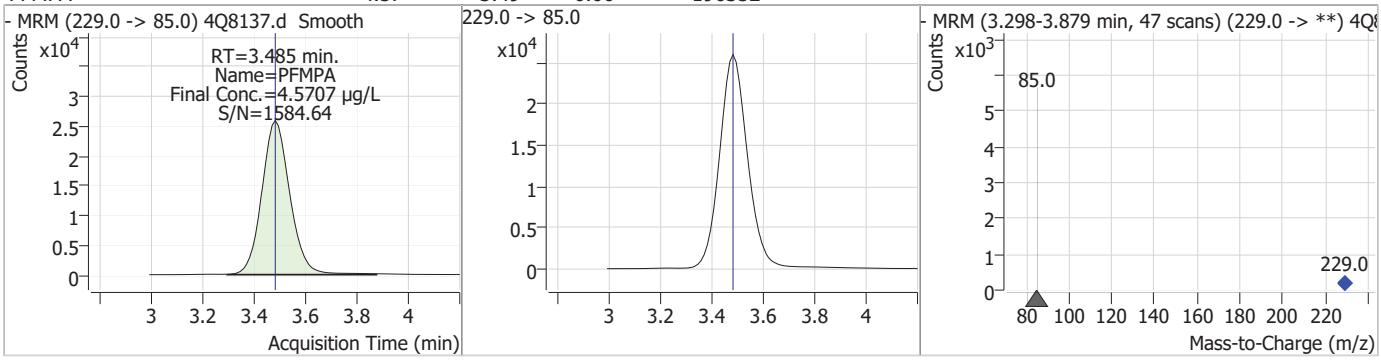
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.48	2.88	0.00	246764				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.15	2.88	0.00	851692				

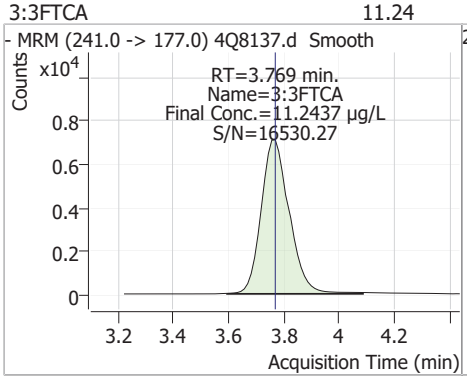


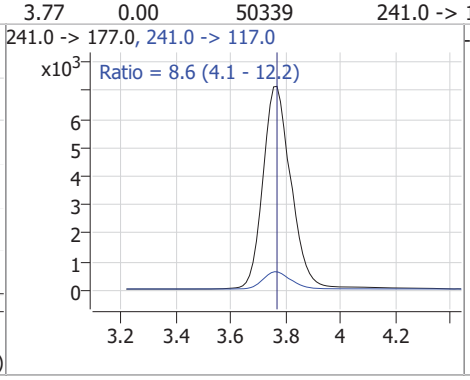
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	4.57	3.49	0.00	196352				

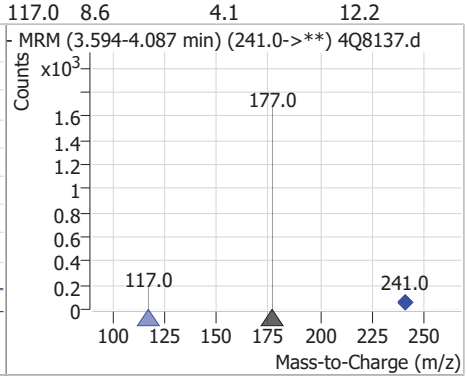


Perfluorinated Compounds by LC/MS/MS

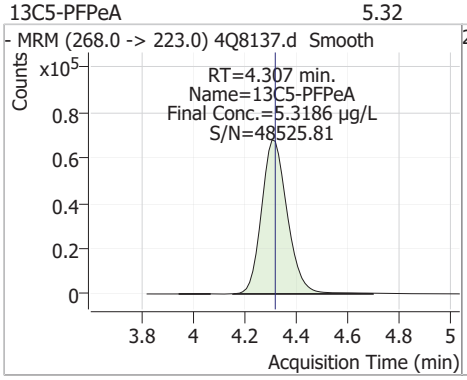
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	11.24	3.77	0.00	50339	241.0 -> 117.0	8.6	4.1	12.2

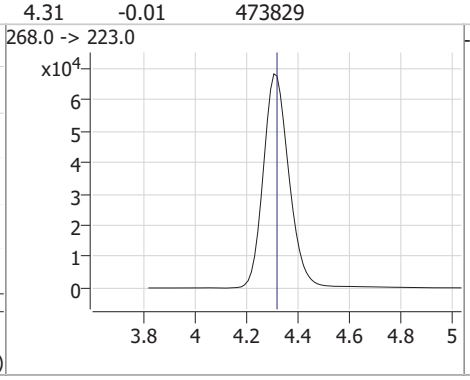


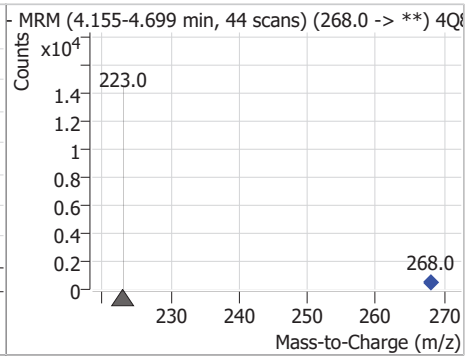




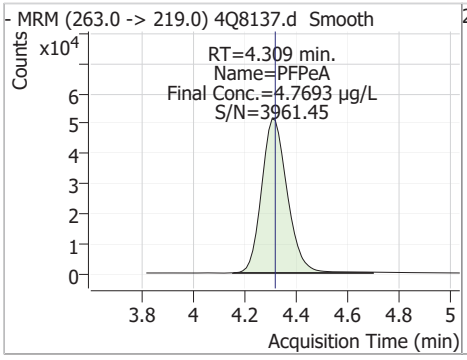
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.32	4.31	-0.01	473829				

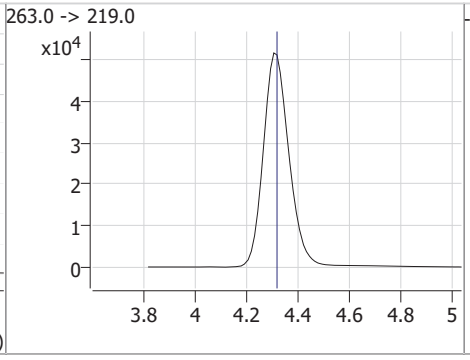


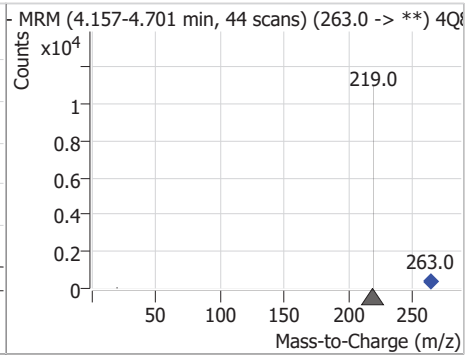




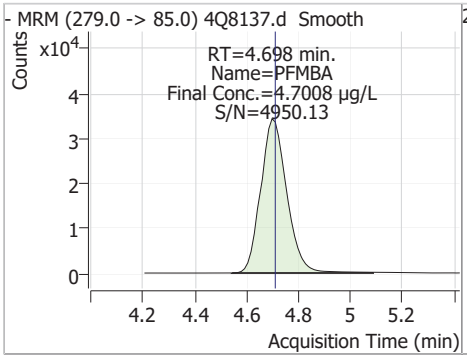
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	4.77	4.31	-0.01	357303				

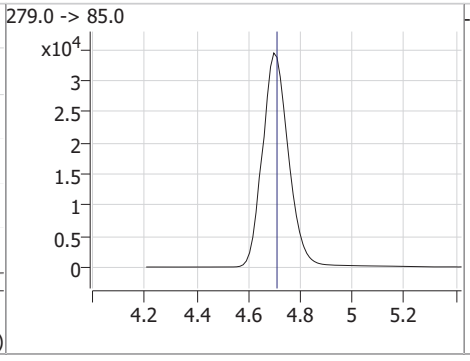


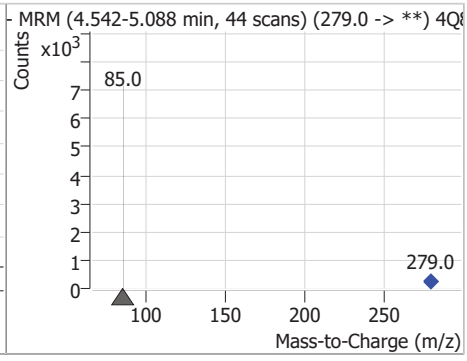




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.70	4.70	-0.01	240256				







7.6.52

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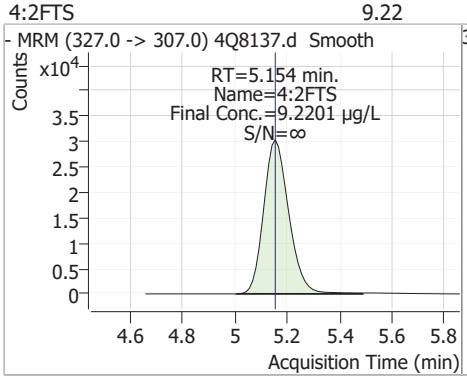
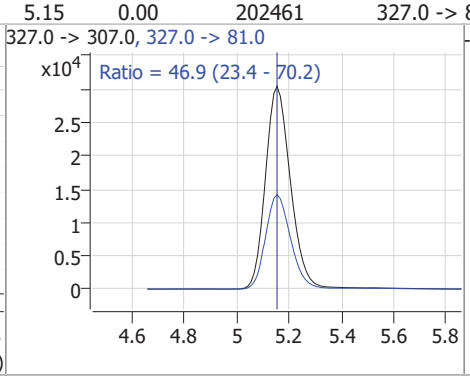
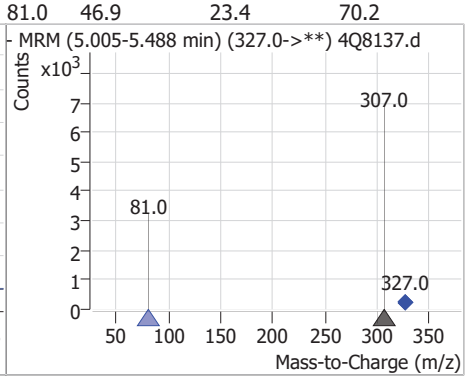
Perfluorinated Compounds by LC/MS/MS

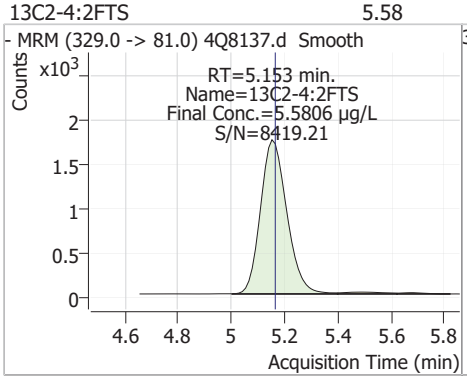
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.22	5.15	0.00	202461	327.0 -> 81.0	46.9	23.4	70.2

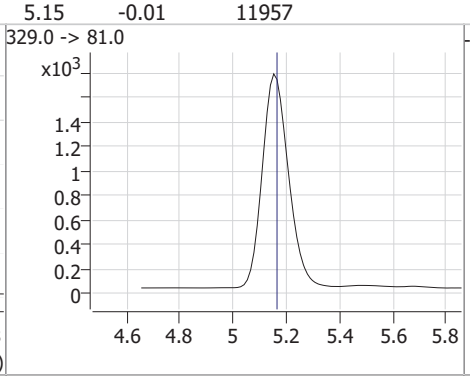


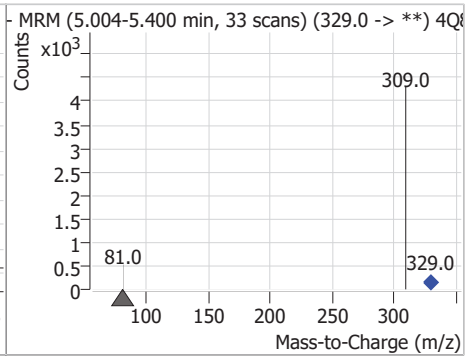




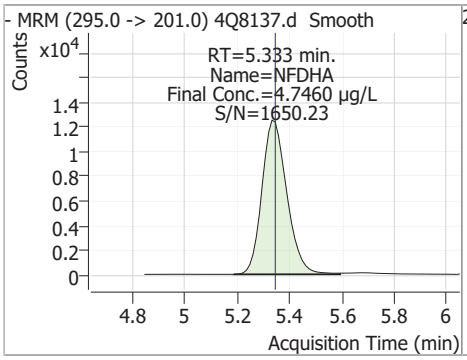
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.58	5.15	-0.01	11957				

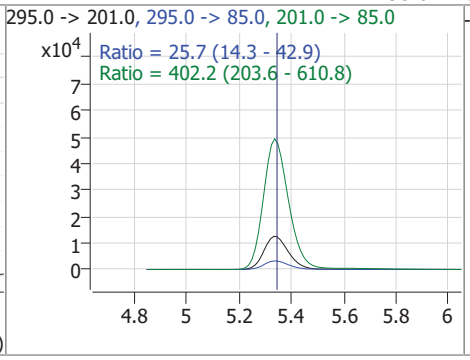


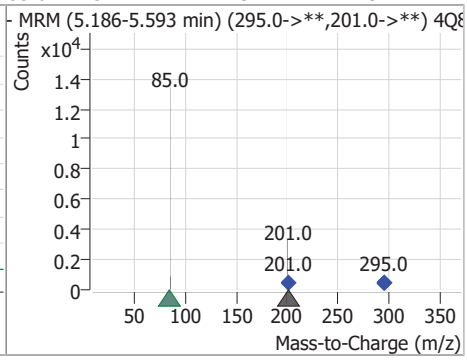




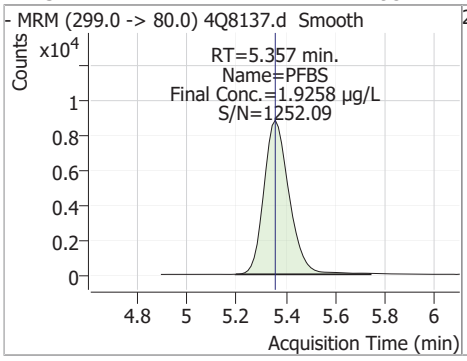
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	4.75	5.33	-0.01	82339	201.0 -> 85.0	402.2	203.6	610.8
					295.0 -> 85.0	25.7	14.3	42.9

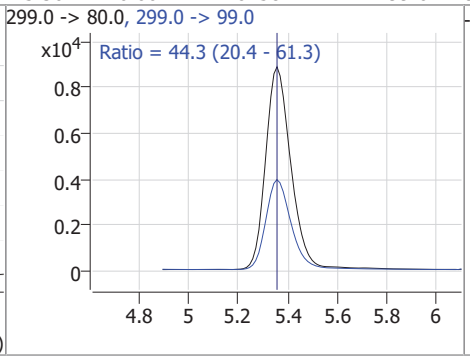


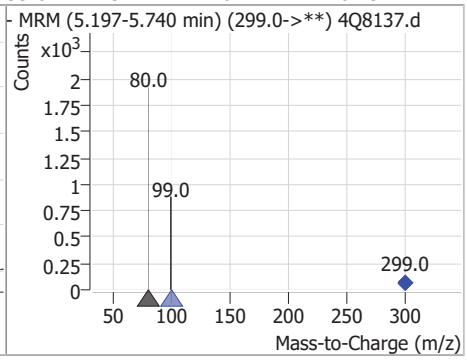




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	1.93	5.36	0.00	62581	299.0 -> 99.0	44.3	20.4	61.3







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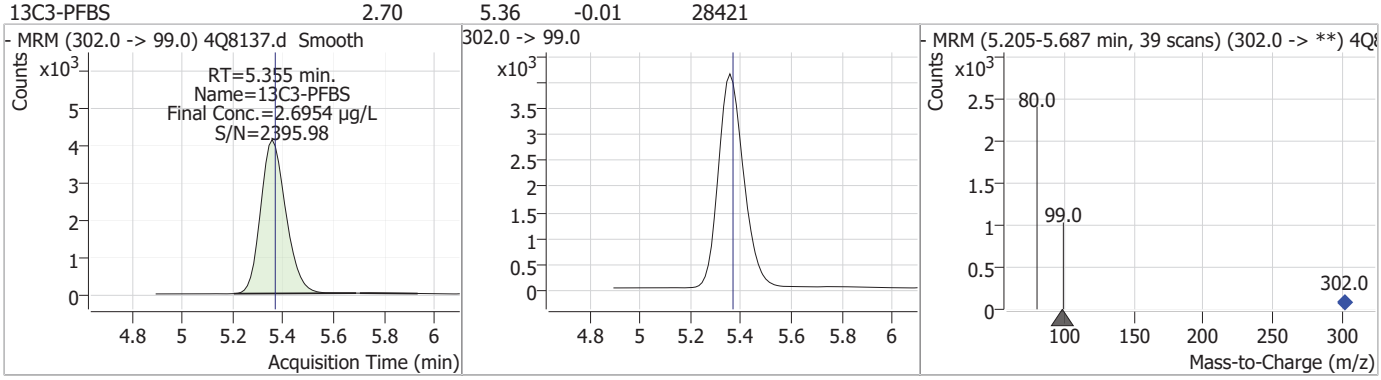
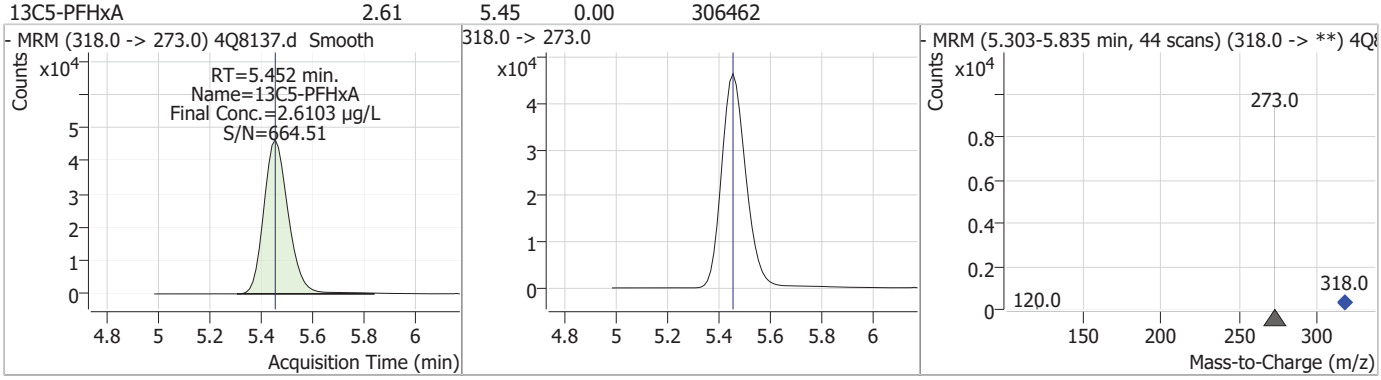
Perfluorinated Compounds by LC/MS/MS

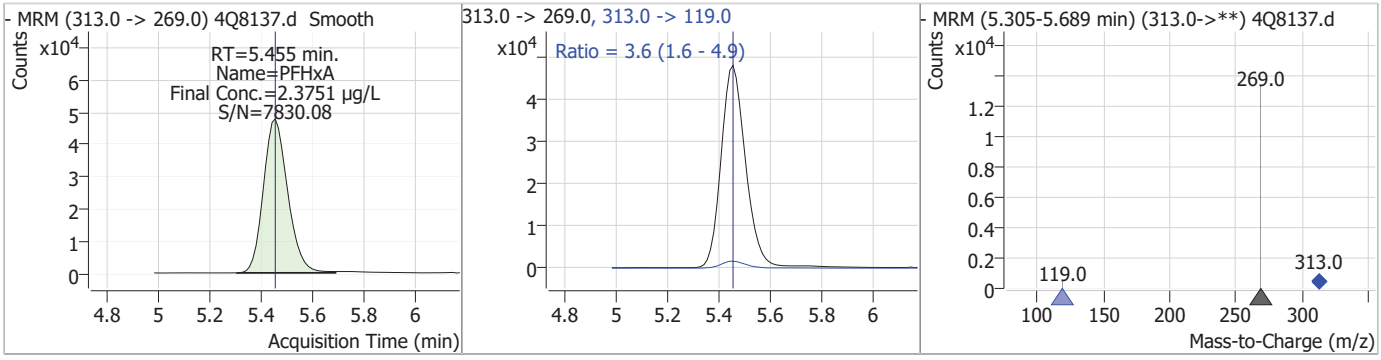
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.70	5.36	-0.01	28421				



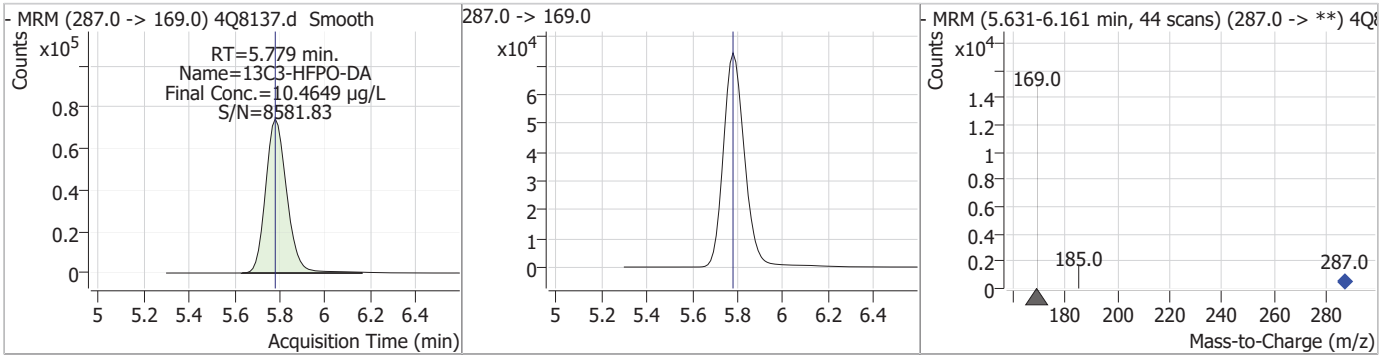
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.61	5.45	0.00	306462				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.38	5.45	0.00	313711	313.0 -> 119.0	3.6	1.6	4.9

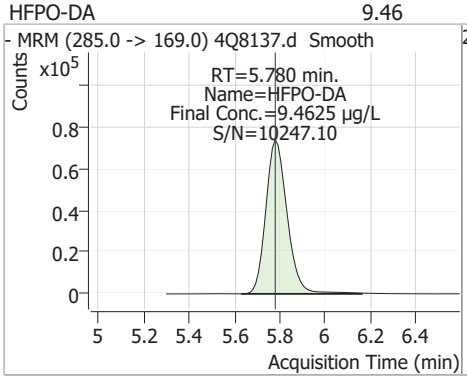


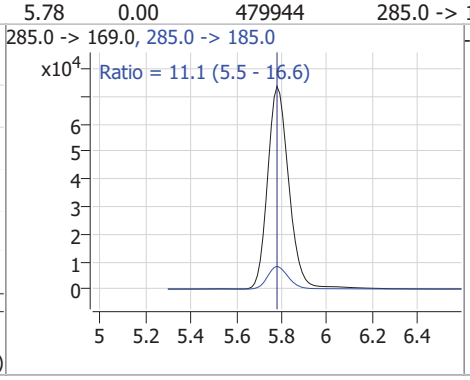
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.46	5.78	0.00	482472				

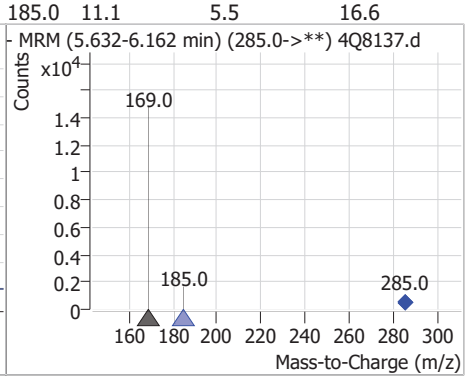


Perfluorinated Compounds by LC/MS/MS

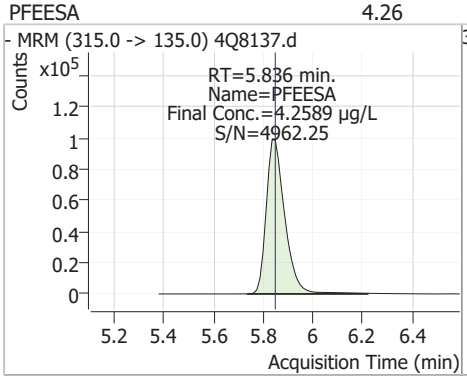
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	9.46	5.78	0.00	479944	285.0 -> 185.0	11.1	5.5	16.6

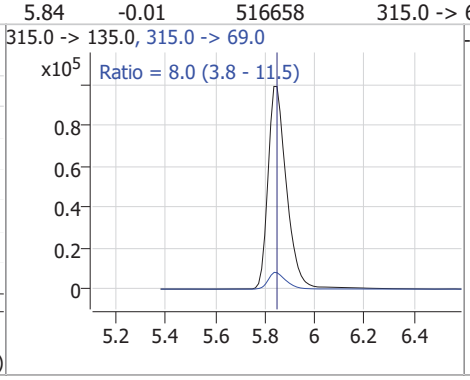


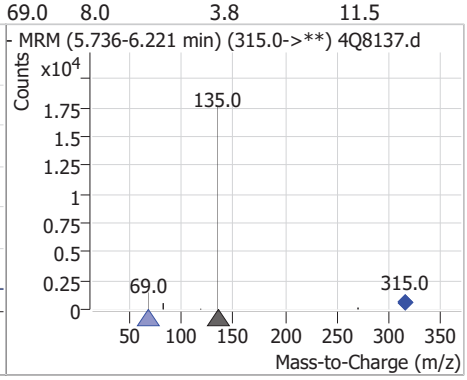




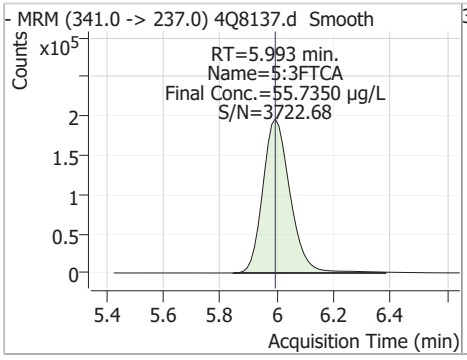
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.26	5.84	-0.01	516658	315.0 -> 69.0	8.0	3.8	11.5

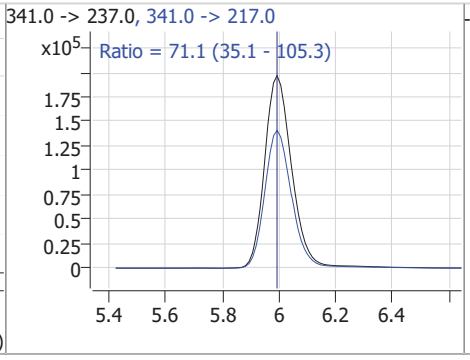


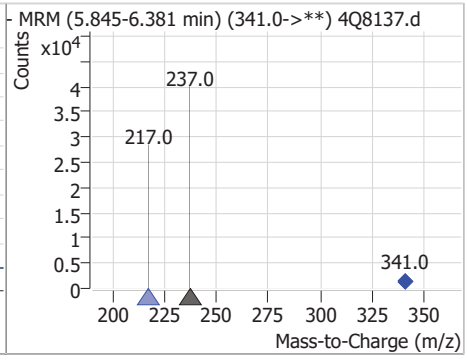




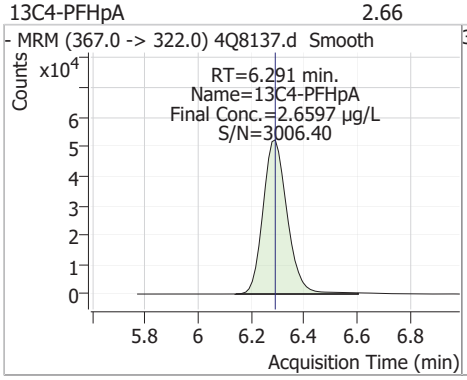
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	55.73	5.99	0.00	1313548	341.0 -> 217.0	71.1	35.1	105.3

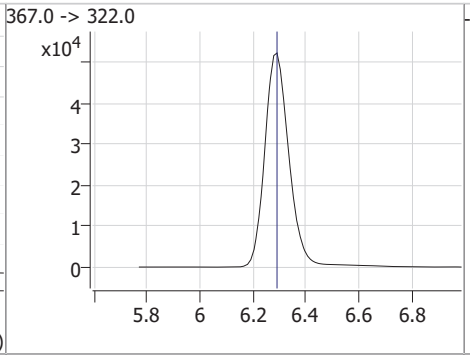


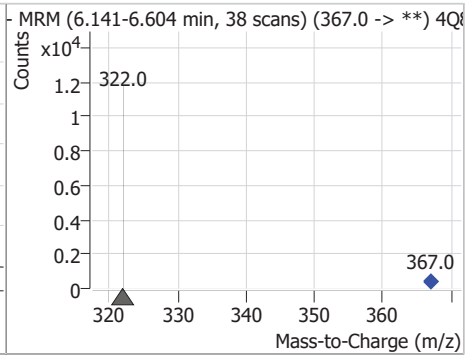




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.66	6.29	0.00	331914				







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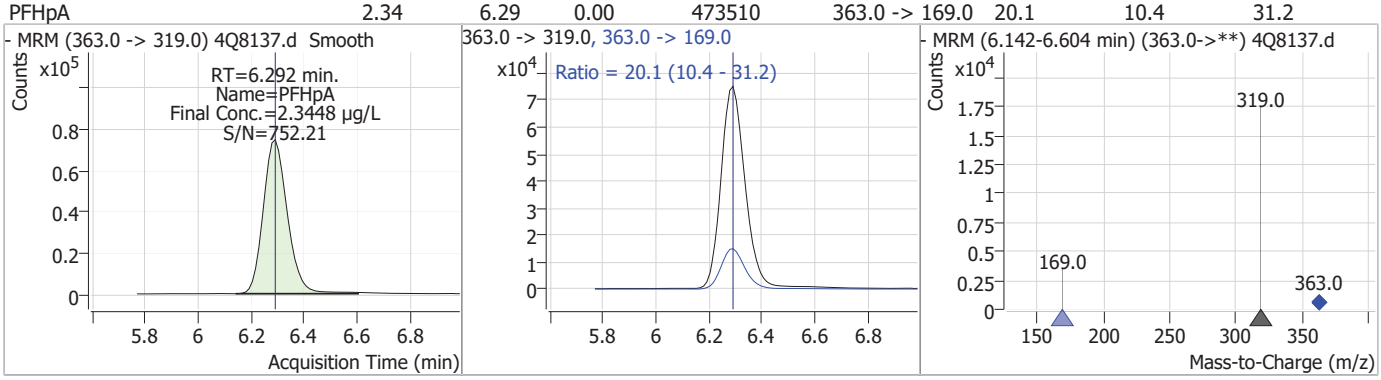
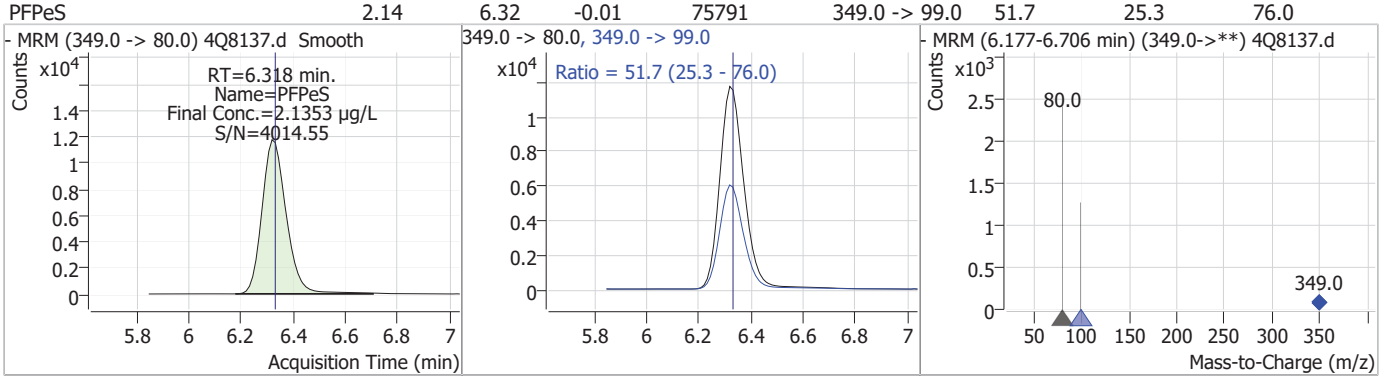
Perfluorinated Compounds by LC/MS/MS

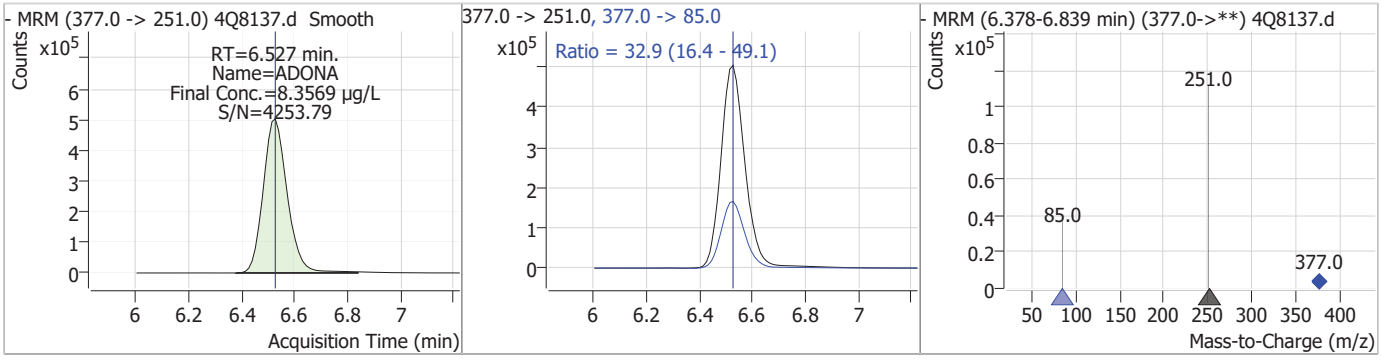
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.34	6.29	0.00	473510	363.0 -> 169.0	20.1	10.4	31.2



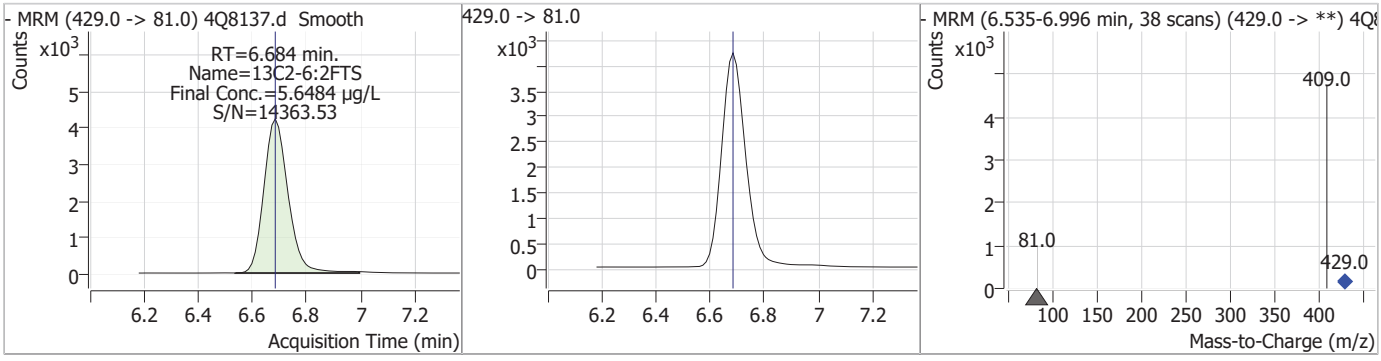
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.14	6.32	-0.01	75791	349.0 -> 99.0	51.7	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.36	6.53	0.00	3163637	377.0 -> 85.0	32.9	16.4	49.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.65	6.68	0.00	26261				



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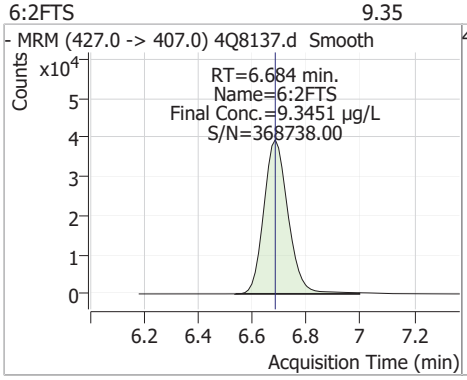
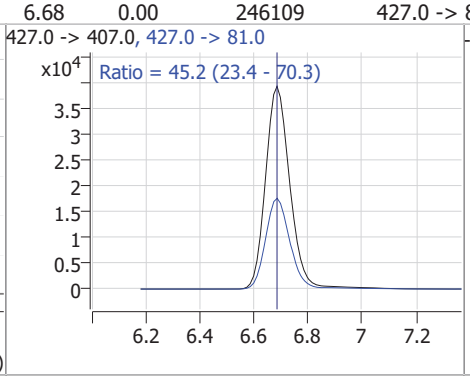
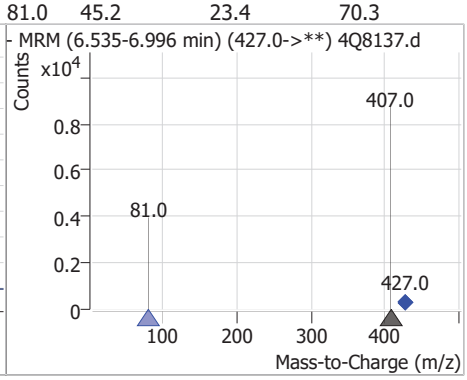
Perfluorinated Compounds by LC/MS/MS

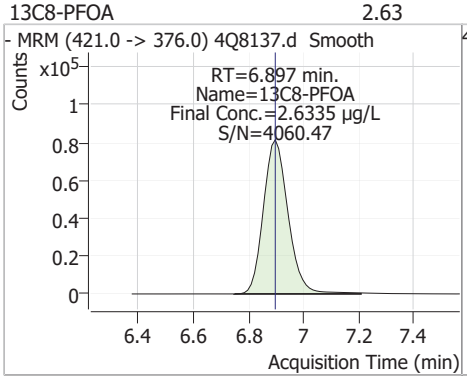
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.35	6.68	0.00	246109	427.0 -> 81.0	45.2	23.4	70.3

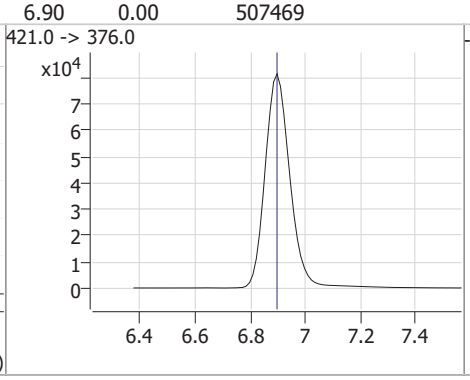


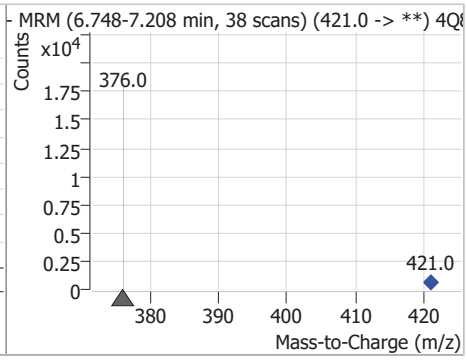




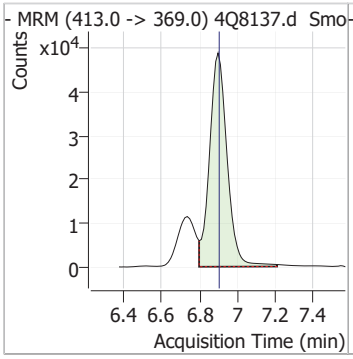
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.63	6.90	0.00	507469				

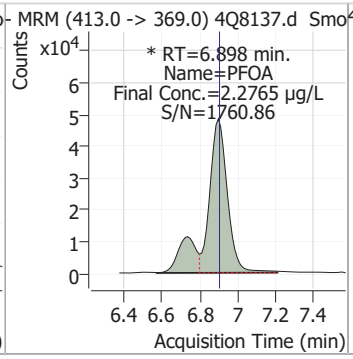


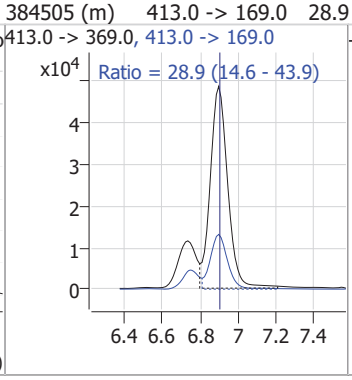


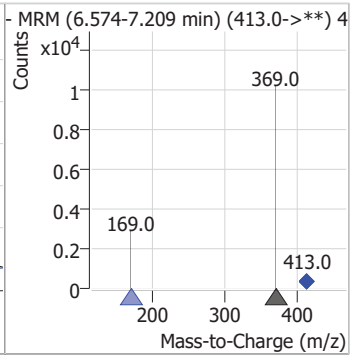


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.28	6.90	0.00	384505 (m)	413.0 -> 169.0	28.9	14.6	43.9

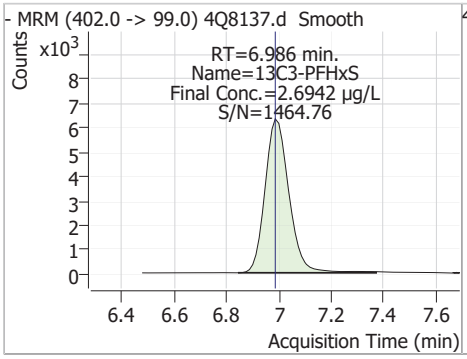


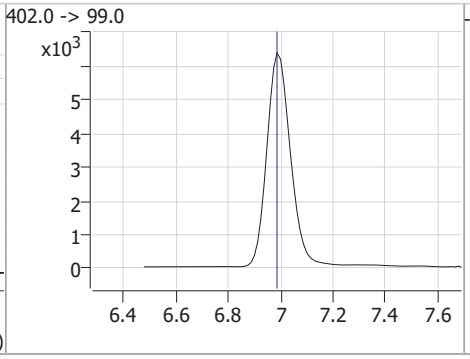


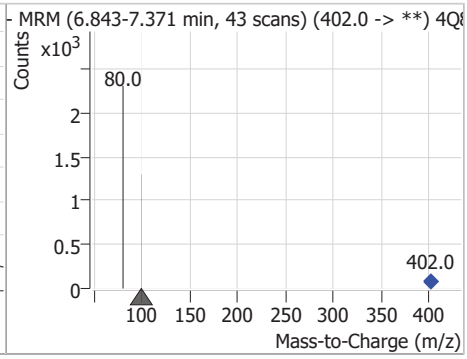




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.69	6.99	0.00	40193				

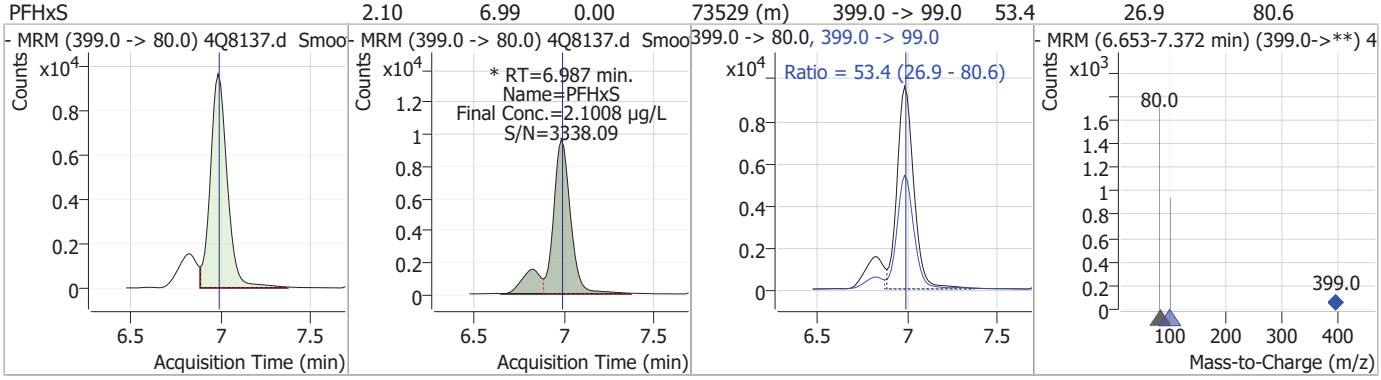




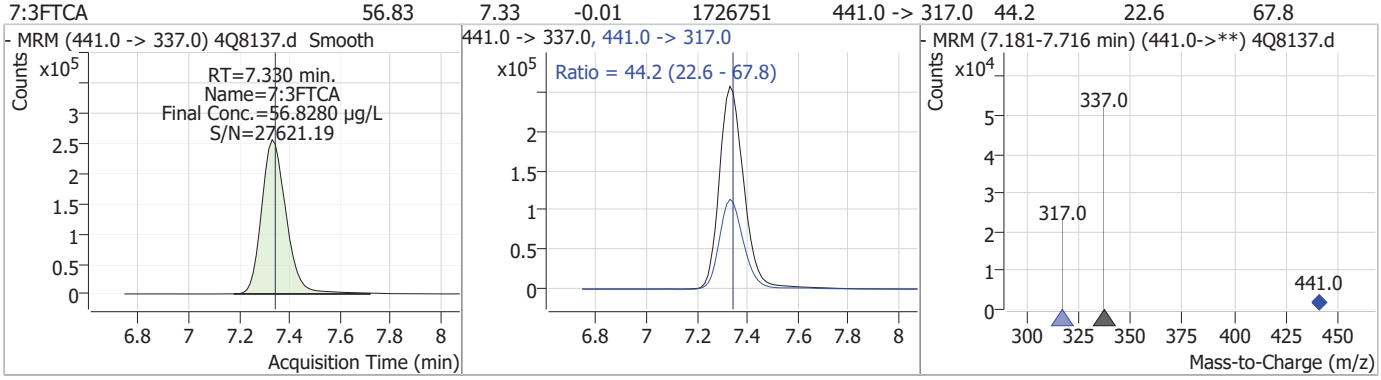


Perfluorinated Compounds by LC/MS/MS

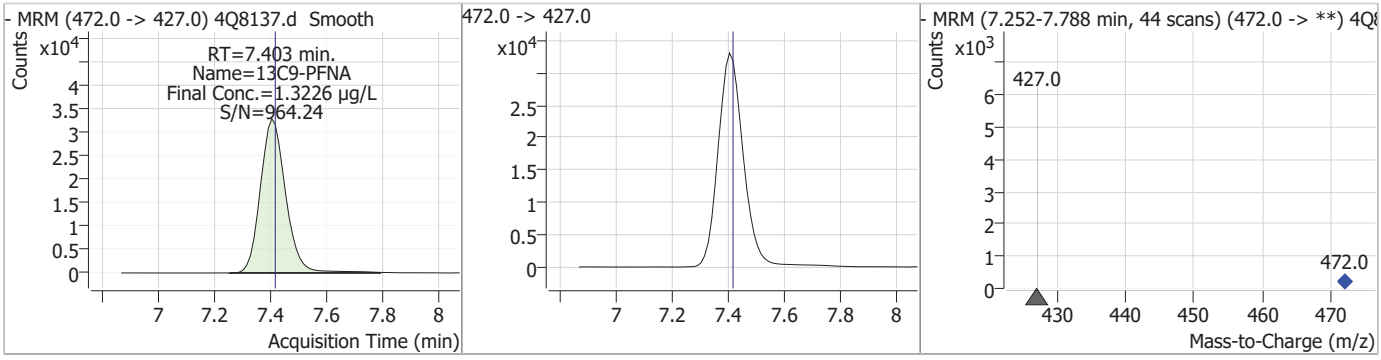
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.10	6.99	0.00	73529 (m)	399.0 -> 99.0	53.4	26.9	80.6



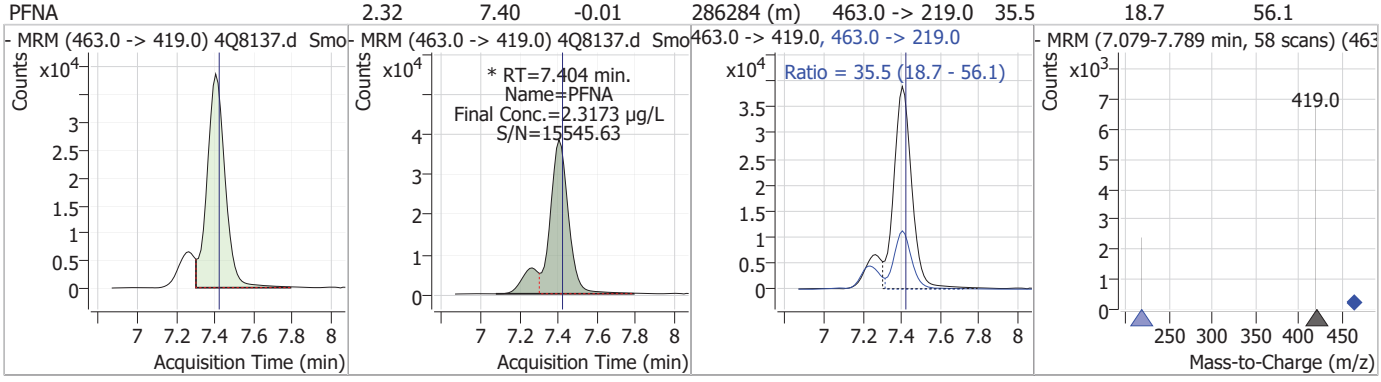
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	56.83	7.33	-0.01	1726751	441.0 -> 317.0	44.2	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.32	7.40	-0.01	205398				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.32	7.40	-0.01	286284 (m)	463.0 -> 219.0	35.5	18.7	56.1



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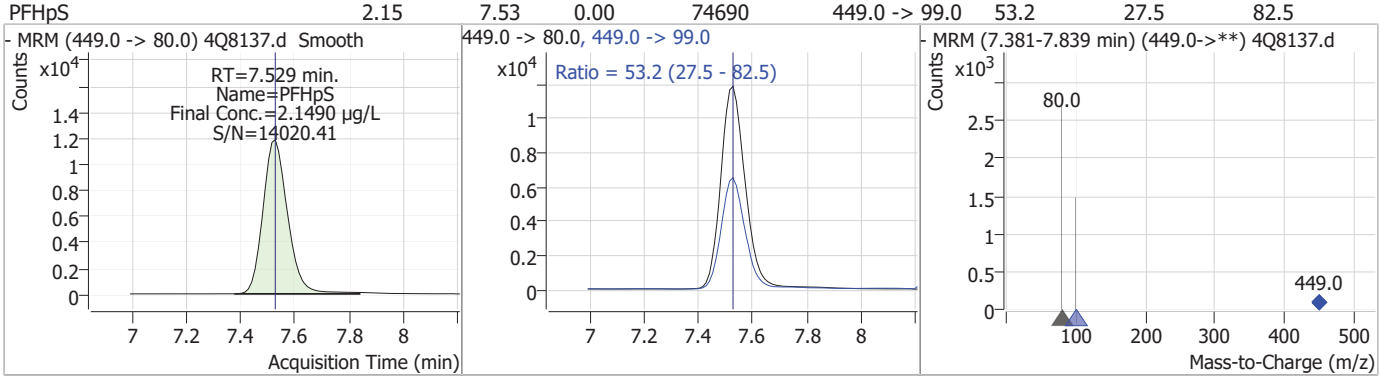
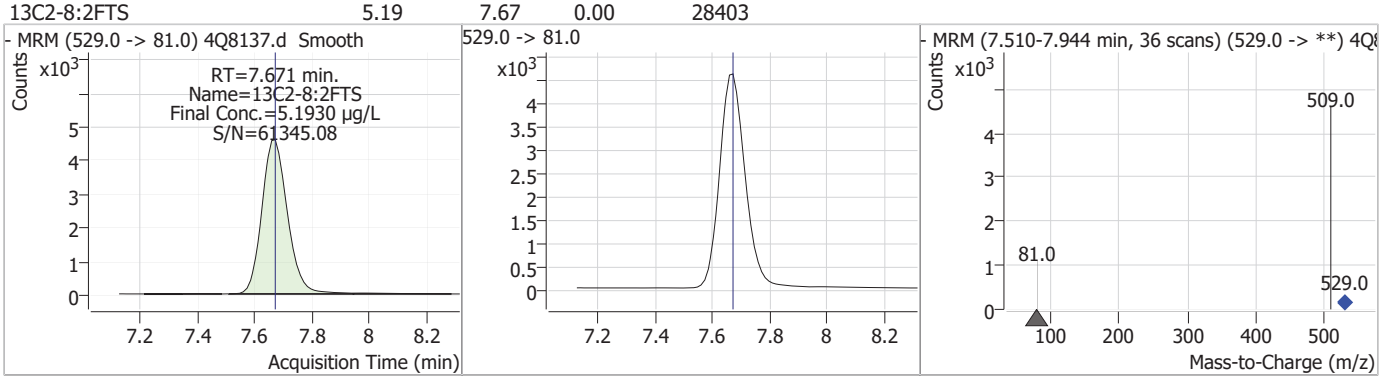
Perfluorinated Compounds by LC/MS/MS

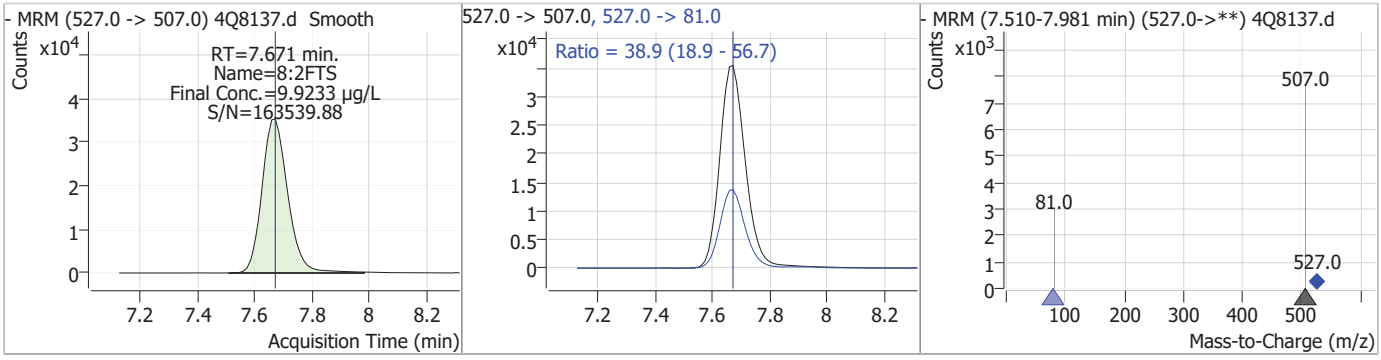
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.15	7.53	0.00	74690	449.0 -> 99.0	53.2	27.5	82.5



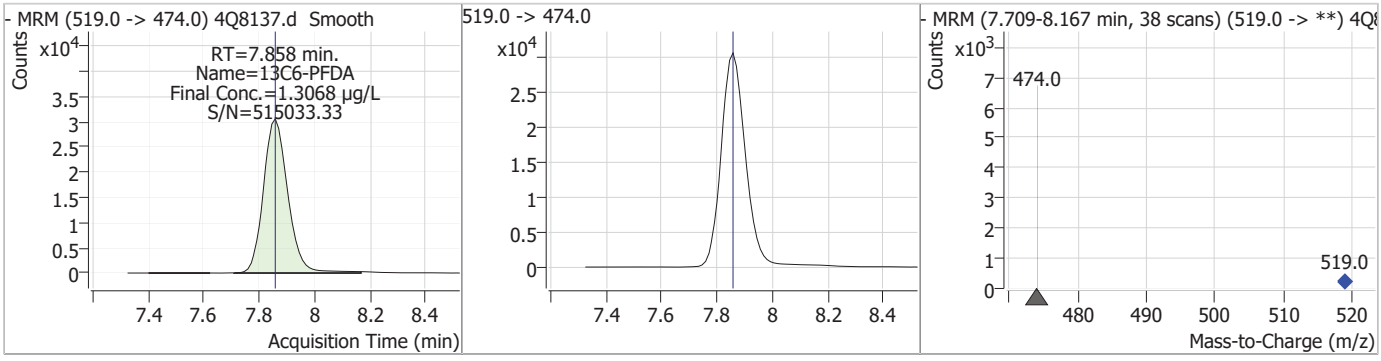
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.19	7.67	0.00	28403				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	9.92	7.67	0.00	220582	527.0 -> 81.0	38.9	18.9	56.7

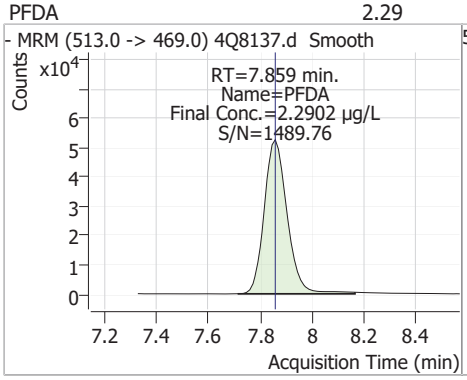


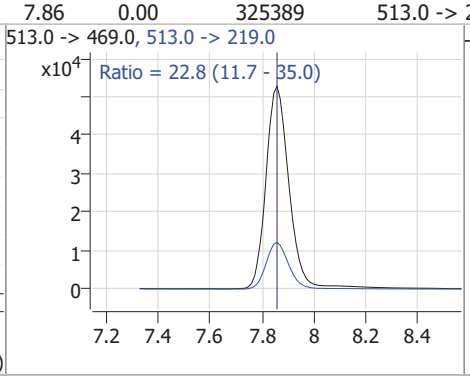
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.31	7.86	0.00	186932				

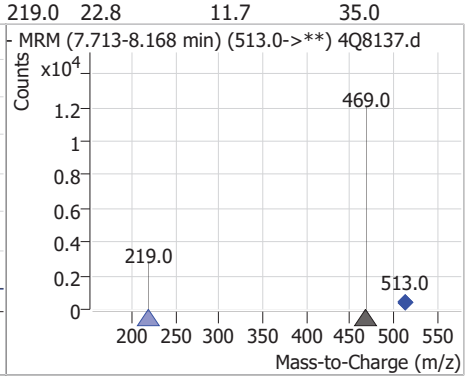


Perfluorinated Compounds by LC/MS/MS

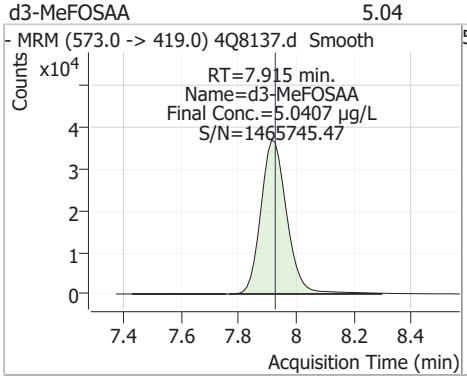
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.29	7.86	0.00	325389	513.0 -> 219.0	22.8	11.7	35.0

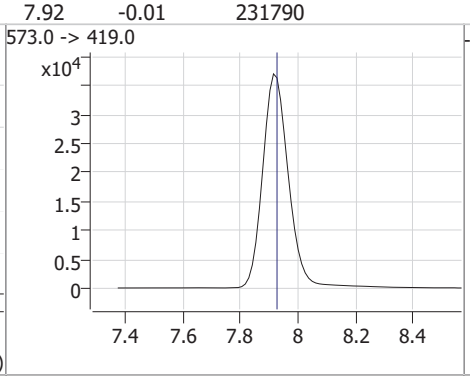


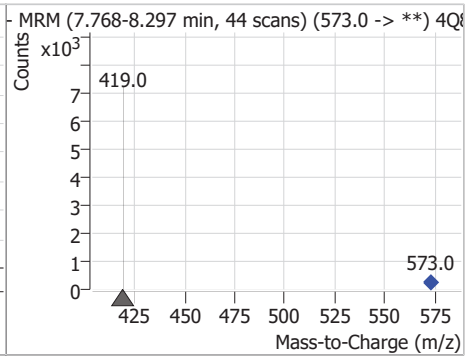




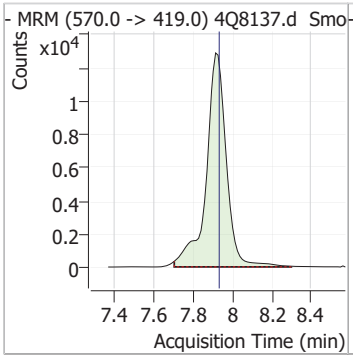
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.04	7.92	-0.01	231790				

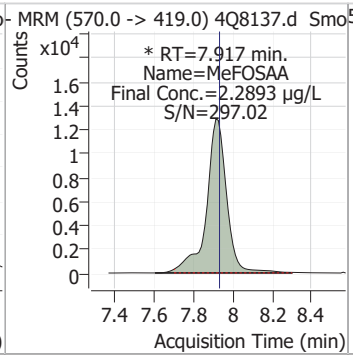


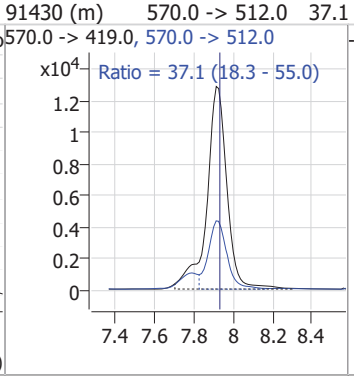


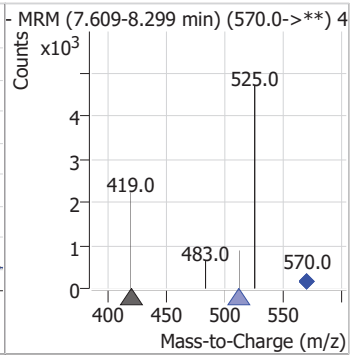


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.29	7.92	-0.01	91430 (m)	570.0 -> 512.0	37.1	18.3	55.0

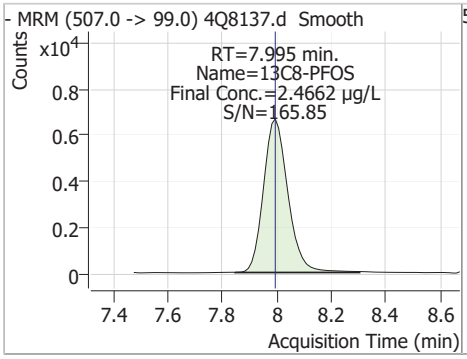


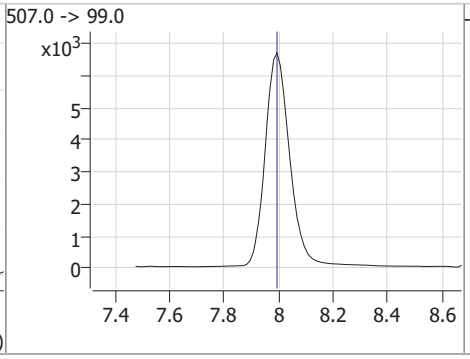


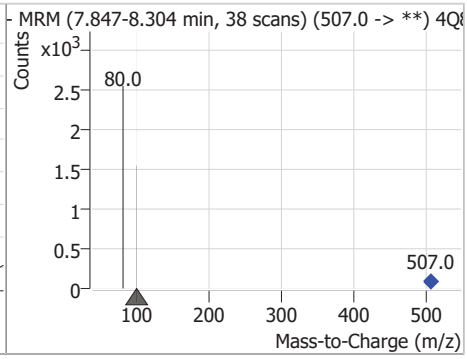




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.47	7.99	0.00	41460				

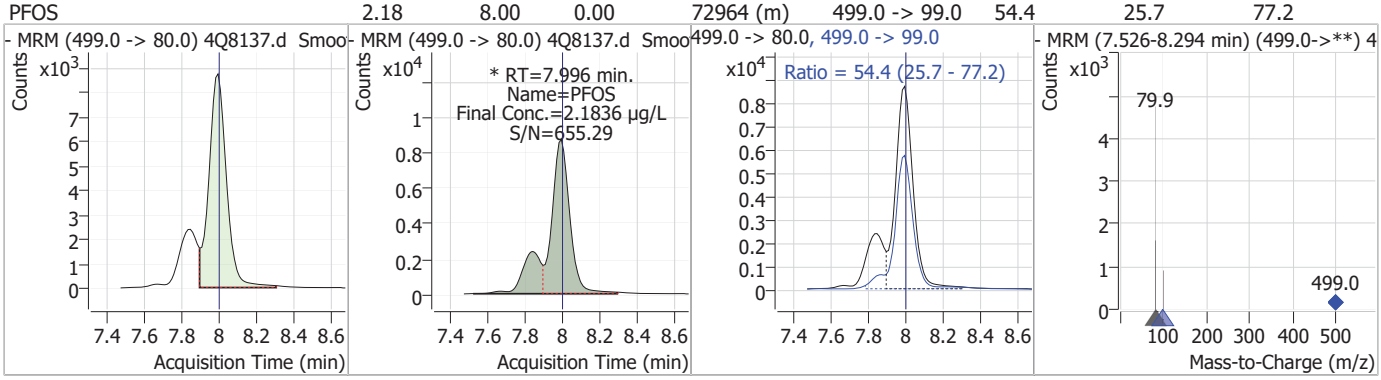




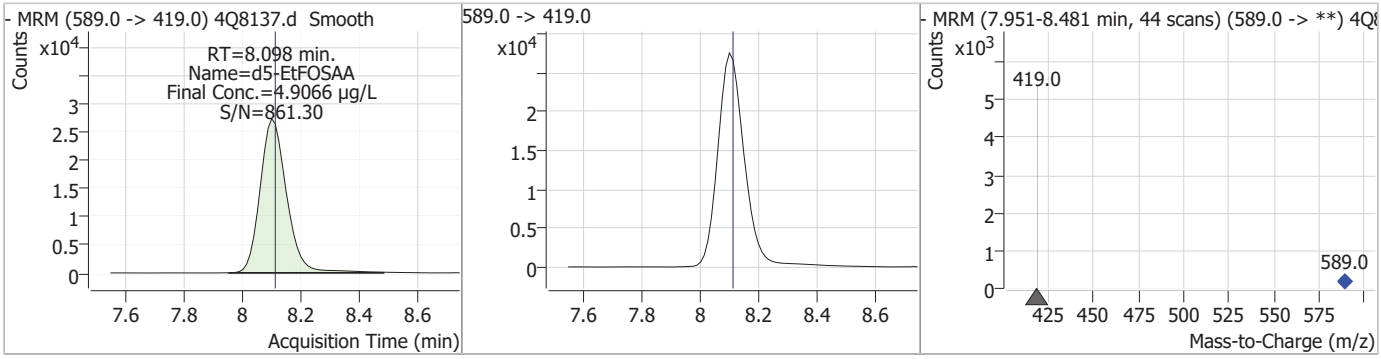


Perfluorinated Compounds by LC/MS/MS

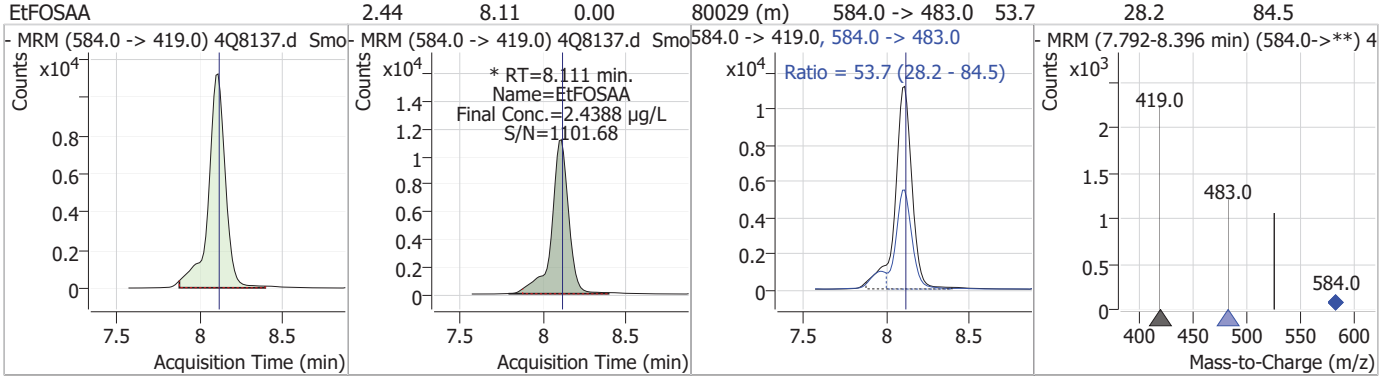
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.18	8.00	0.00	72964 (m)	499.0 -> 99.0	54.4	25.7	77.2



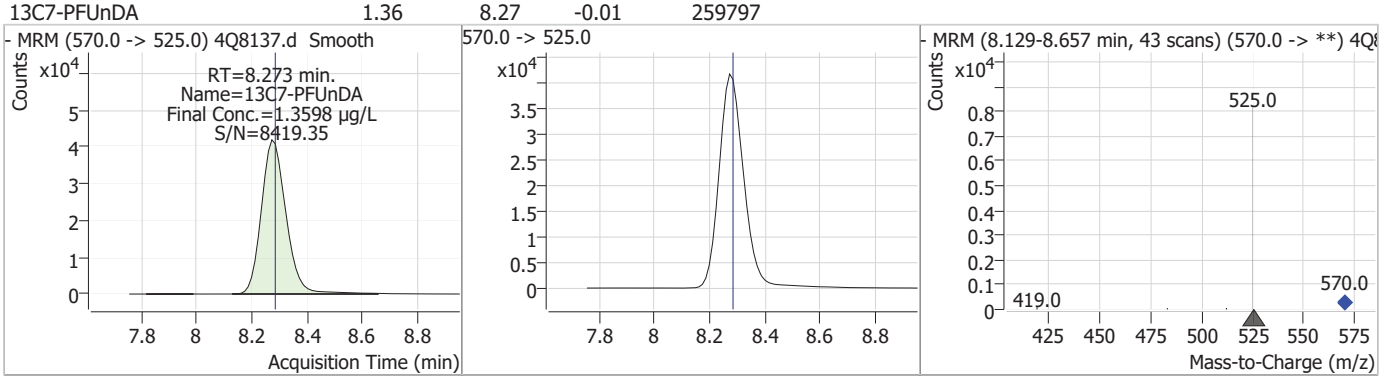
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.91	8.10	-0.01	173225				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.44	8.11	0.00	80029 (m)	584.0 -> 483.0	53.7	28.2	84.5

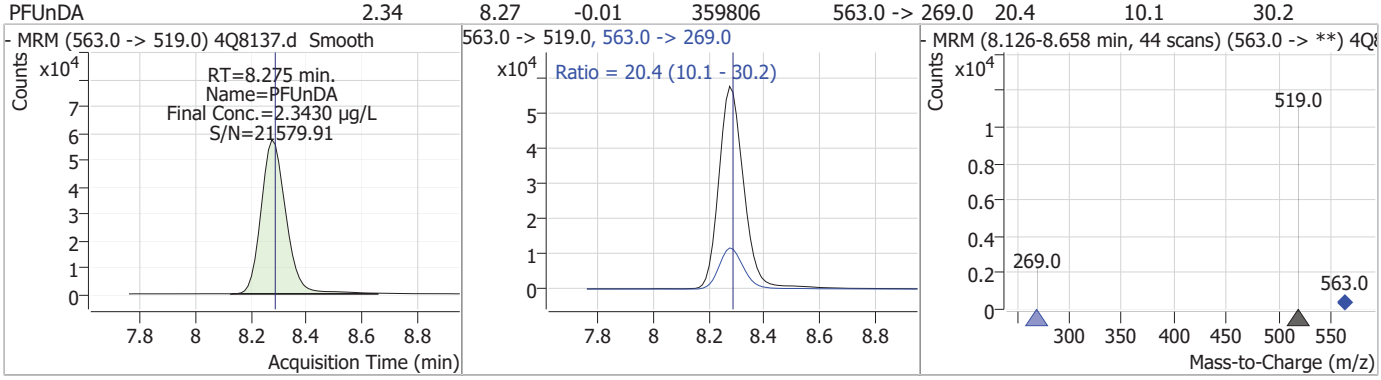


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.36	8.27	-0.01	259797				

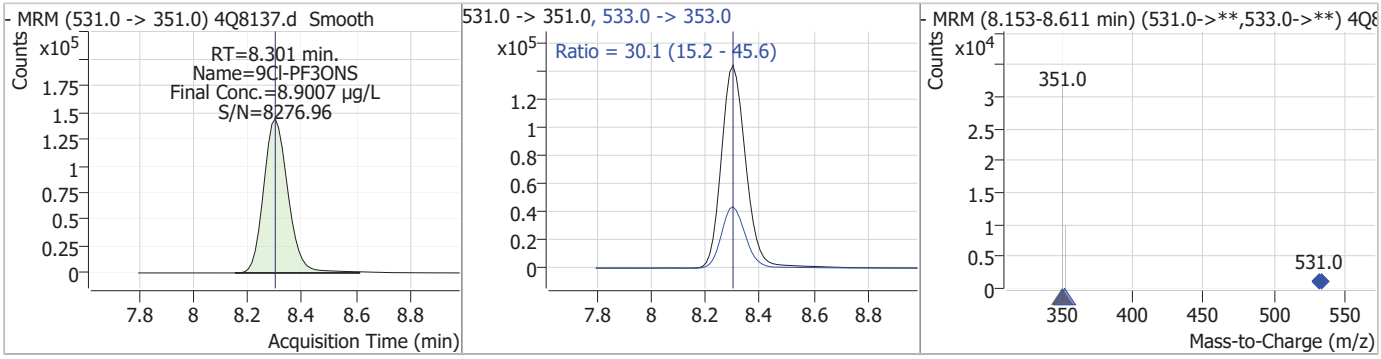


Perfluorinated Compounds by LC/MS/MS

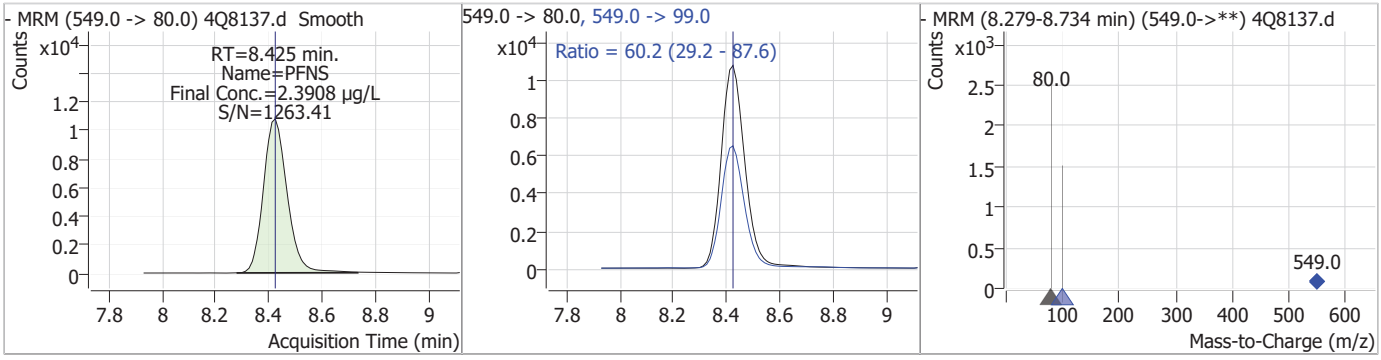
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.34	8.27	-0.01	359806	563.0 -> 269.0	20.4	10.1	30.2



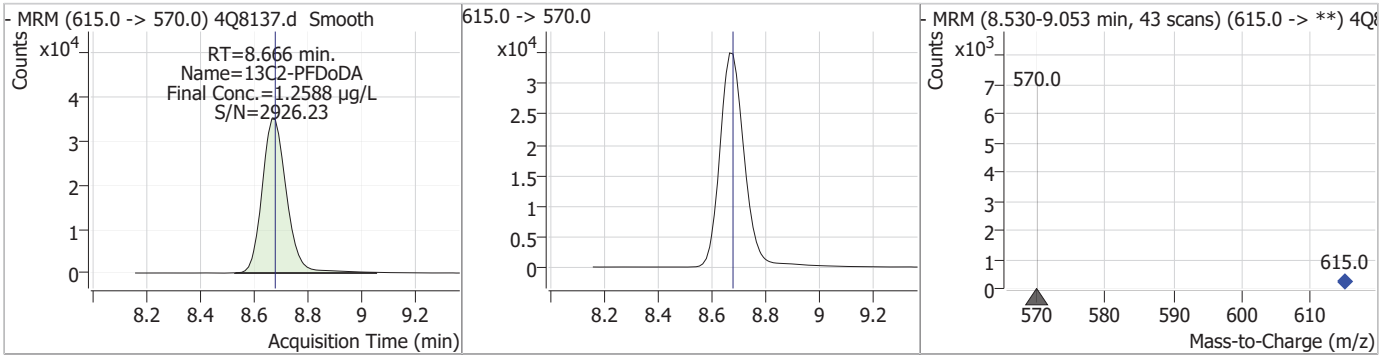
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	8.90	8.30	0.00	898685	533.0 -> 353.0	30.1	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.39	8.42	0.00	66657	549.0 -> 99.0	60.2	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.26	8.67	-0.01	220290				



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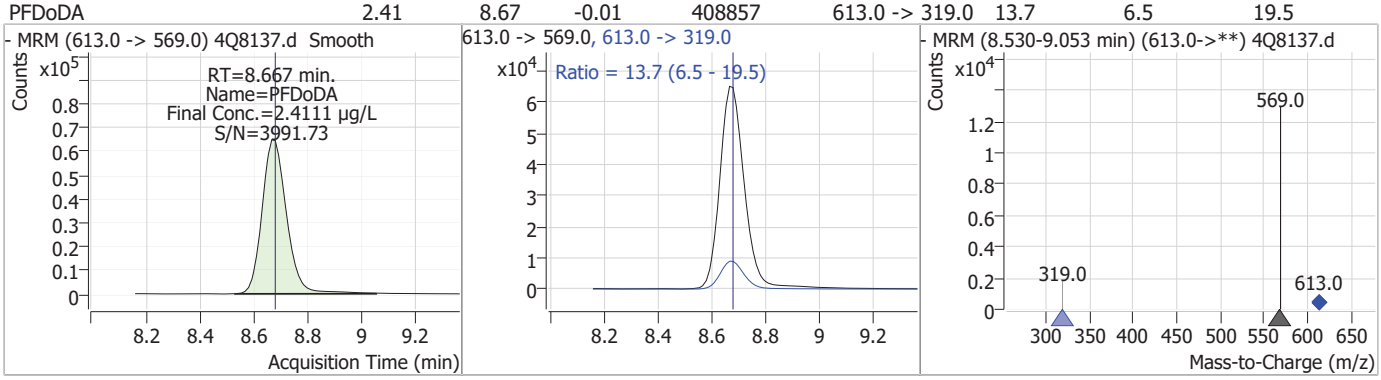
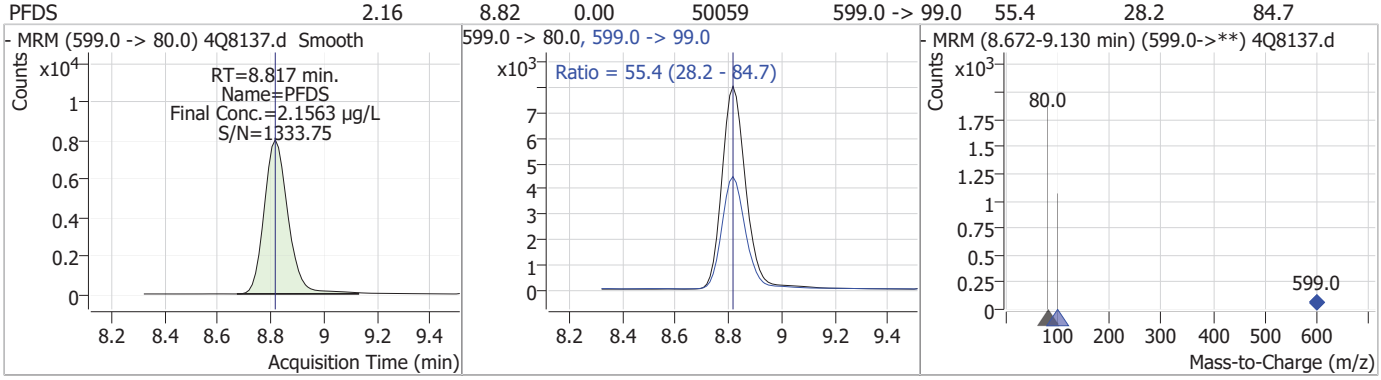
Perfluorinated Compounds by LC/MS/MS

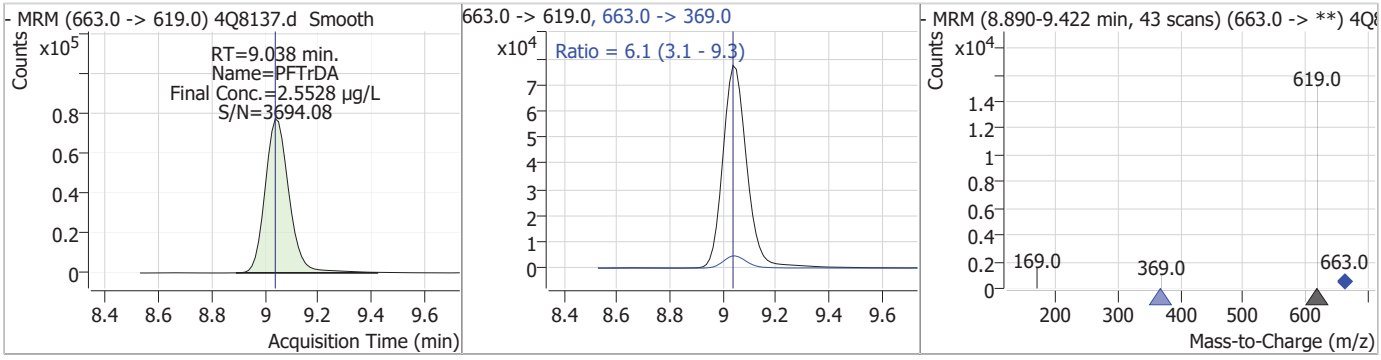
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.41	8.67	-0.01	408857	613.0 -> 319.0	13.7	6.5	19.5



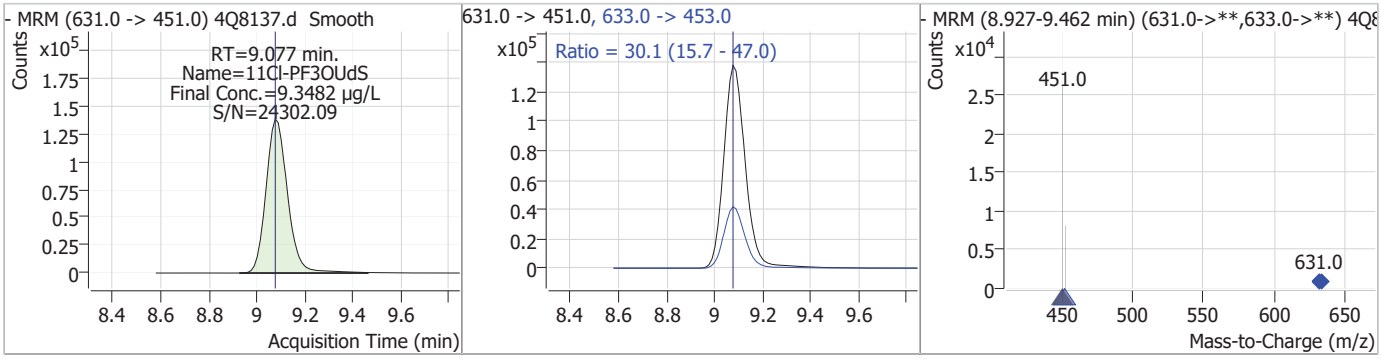
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.16	8.82	0.00	50059	599.0 -> 99.0	55.4	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.55	9.04	0.00	482724	663.0 -> 369.0	6.1	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.35	9.08	0.00	858062	633.0 -> 453.0	30.1	15.7	47.0



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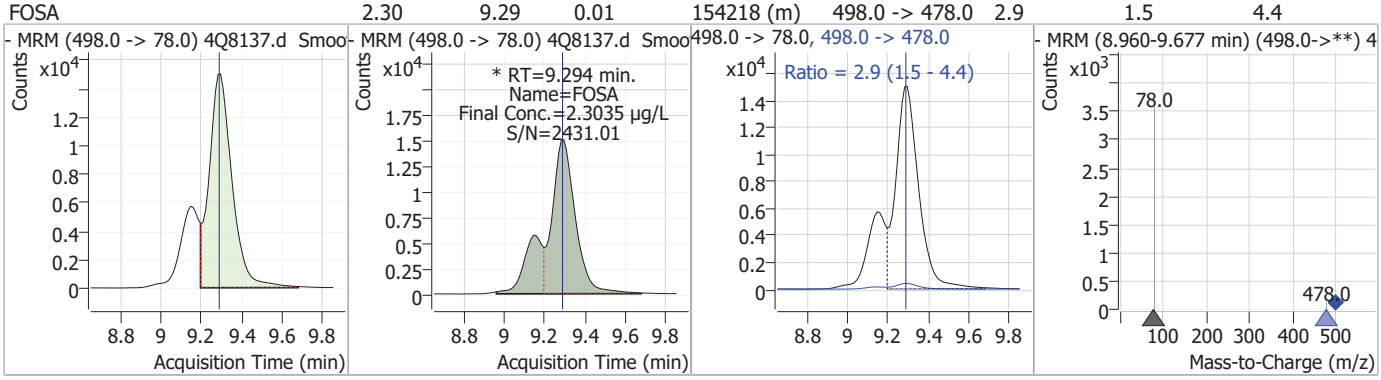
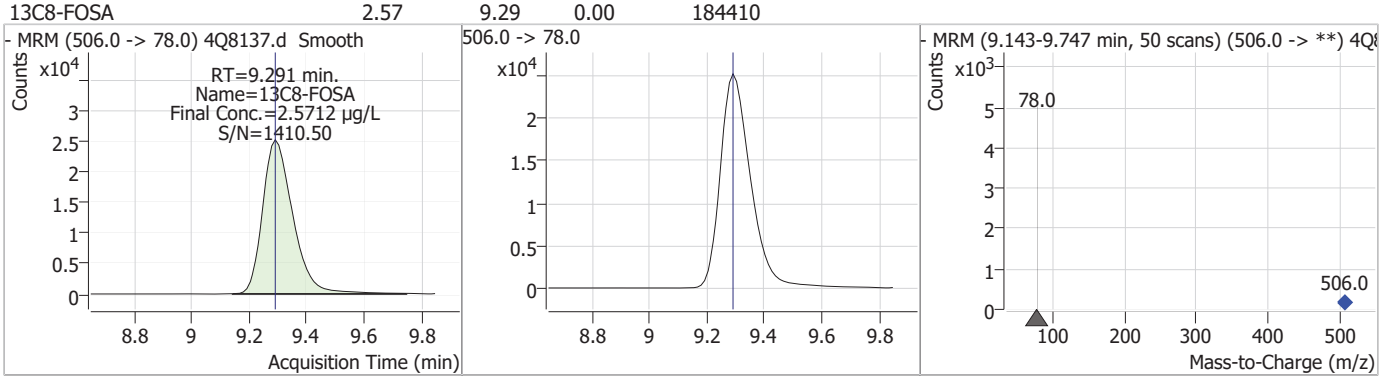
Perfluorinated Compounds by LC/MS/MS

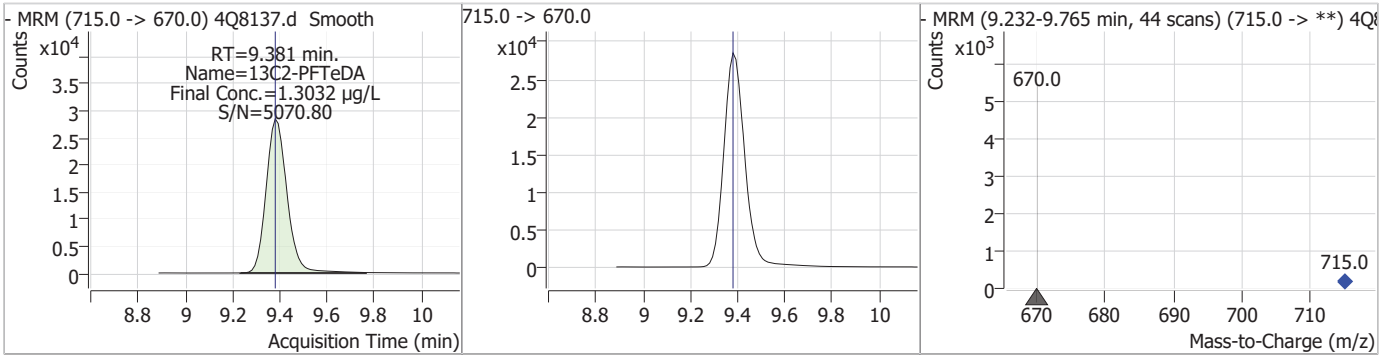
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.30	9.29	0.01	154218 (m)	498.0 -> 478.0	2.9	1.5	4.4



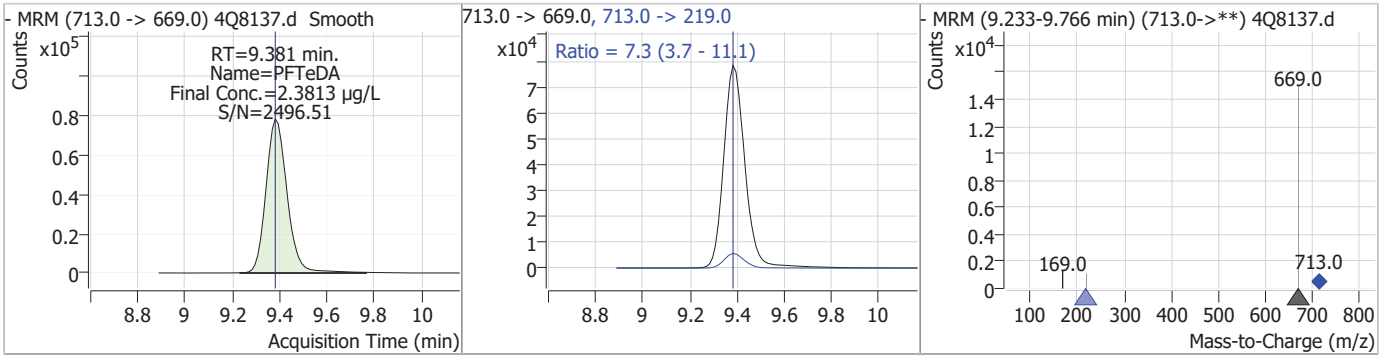
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.57	9.29	0.00	184410				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.30	9.38	0.00	175318				

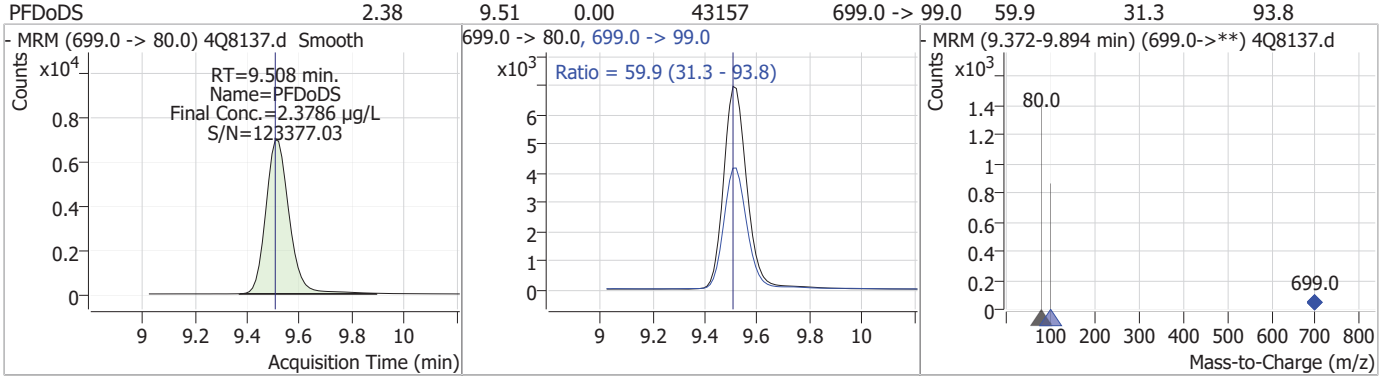


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.38	9.38	0.00	486082	713.0 -> 219.0	7.3	3.7	11.1

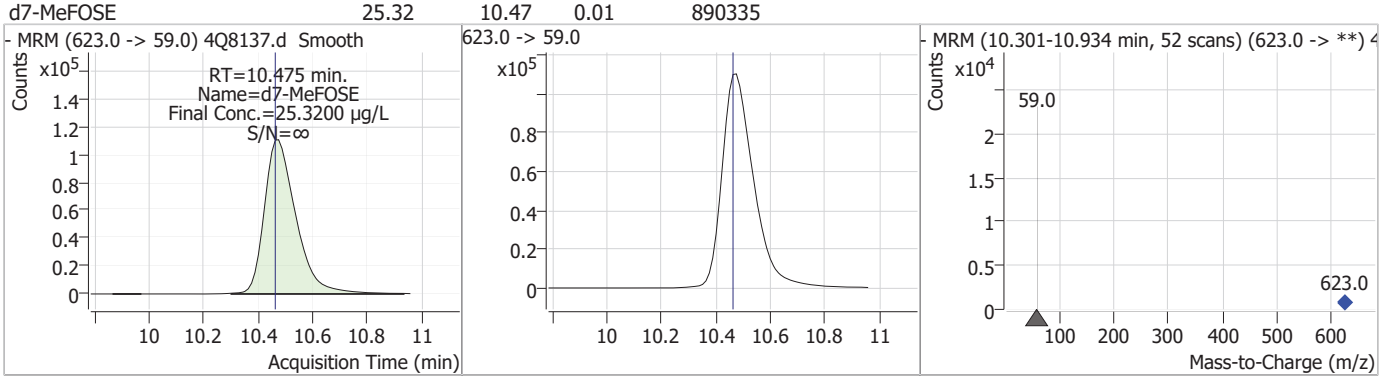


Perfluorinated Compounds by LC/MS/MS

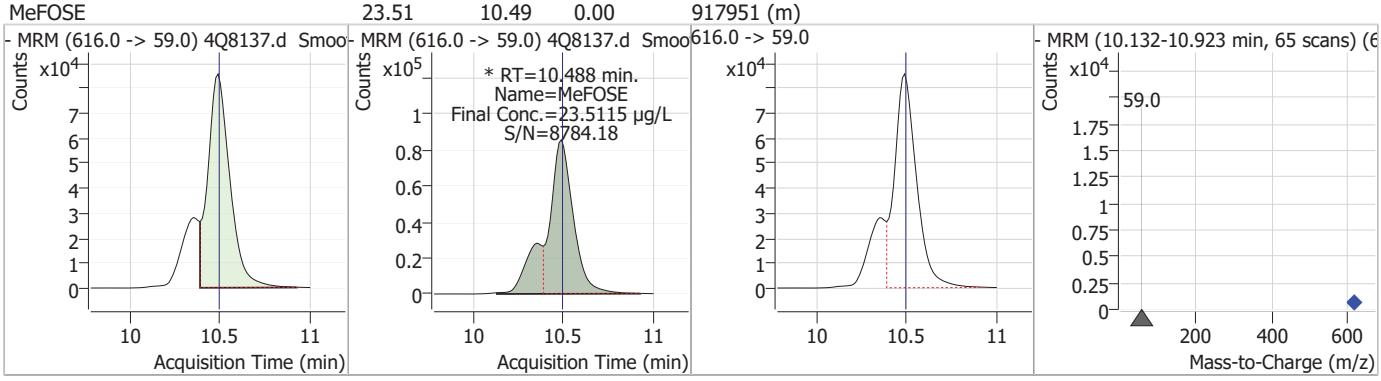
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.38	9.51	0.00	43157	699.0 -> 99.0	59.9	31.3	93.8



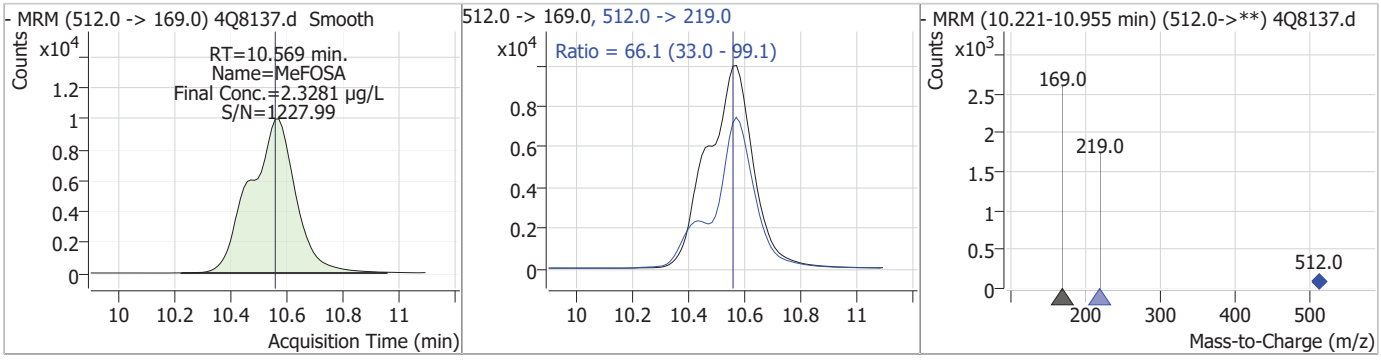
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.32	10.47	0.01	890335				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	23.51	10.49	0.00	917951 (m)				

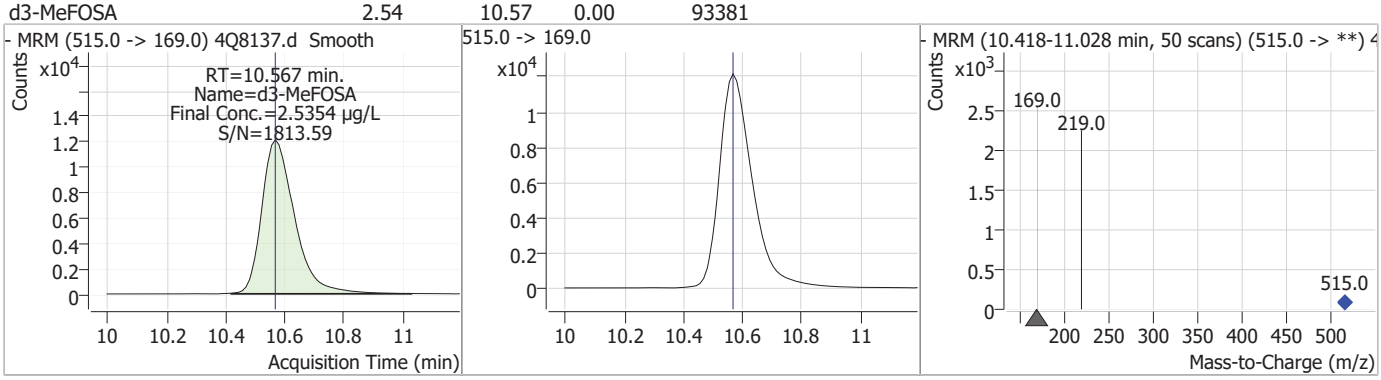


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.33	10.57	0.01	113837	512.0 -> 219.0	66.1	33.0	99.1

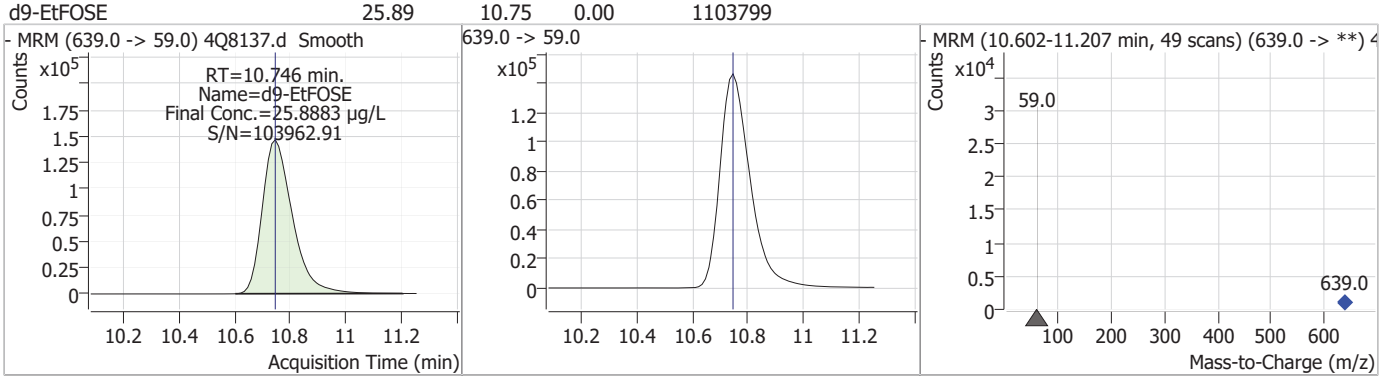


Perfluorinated Compounds by LC/MS/MS

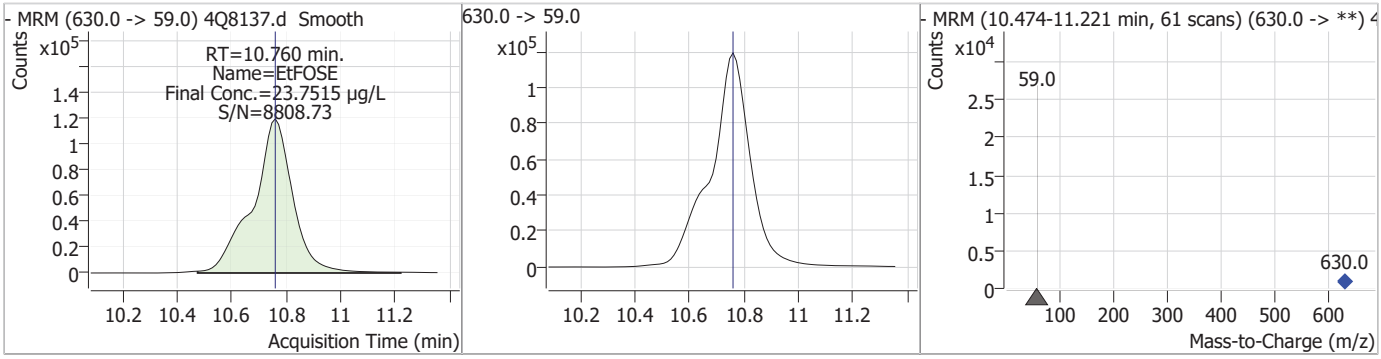
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.54	10.57	0.00	93381				



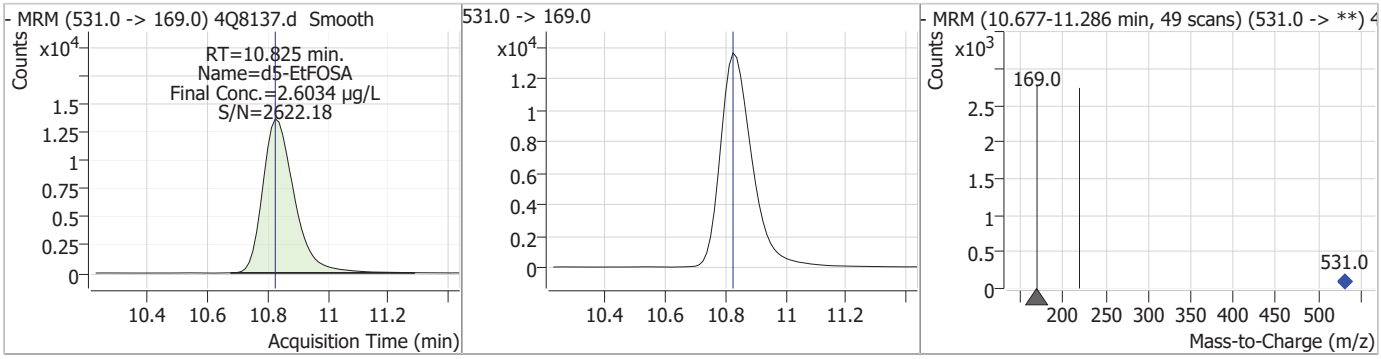
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.89	10.75	0.00	1103799				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	23.75	10.76	0.00	1219486				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.60	10.82	0.00	98812				



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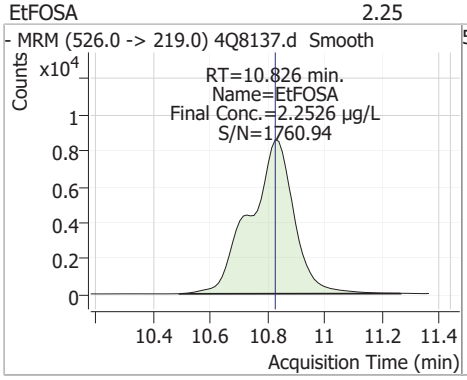
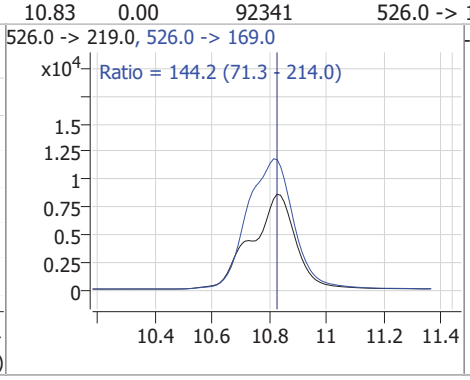
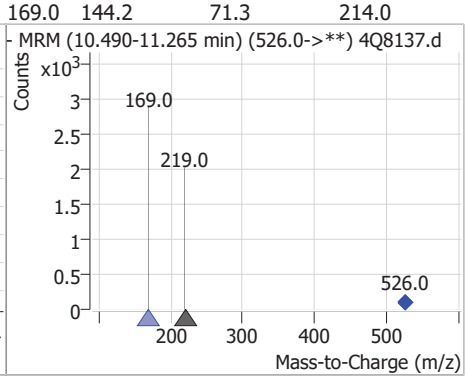
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.25	10.83	0.00	92341	526.0 -> 169.0	144.2	71.3	214.0







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7

Manual Integration Approval Summary

Sample Number: T4Q138-ICV138
Lab FileID: 4Q8137.D
Injection Time: 04/30/25 16:31
Method: EPA 1633
Analyst approved: 04/30/25 23:06 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.92	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Poor instrument integration
PFOSA	754-91-6		9.29	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8138.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 4:45:14 PM
Sample Name : CC138-4
Vial : P1-A5
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63077,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.883	217.0 -> 172.0	874405	10.00	µg/L	0.000
M5-PFPeA	4.307	268.0 -> 223.0	474066	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	308030	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	333889	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	489934	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	199137	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	188788	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	258392	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	223621	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	169067	1.25	µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	175526	2.50	µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	28869	2.50	µg/L	-0.012
		302.0 -> 80.0	68909			
M3-PFHxS	6.986	402.0 -> 99.0	38413	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	42473	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	10962	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	25781	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	28426	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	226246	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	482931	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	177423	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	891310	25.00	µg/L	0.000
M9-EtFOSE	10.746	639.0 -> 59.0	1107277	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	97524	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	88946	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	72860	2.50	µg/L	0.000
13C3-PFBA	2.886	216.0 -> 172.0	400894	5.00	µg/L	0.012
18O2-PFHxS	6.985	403.0 -> 84.0	48276	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	512548	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	171406	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	203849	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	300558	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	10962	4.53	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.6%		
13C2-6:2FTS	6.684	429.0 -> 81.0	25781	4.91	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.2%		
13C2-8:2FTS	7.671	529.0 -> 81.0	28426	4.60	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.0%		
13C2-PFDoDA	8.666	615.0 -> 570.0	223621	1.21	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.5%		
13C2-PFTeDA	9.381	715.0 -> 670.0	169067	1.19	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.9%		
13C3-PFBS	5.355	302.0 -> 99.0	28869	2.42	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.9%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	38413	2.28	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.2%			
13C4-PFBA	2.883	217.0 -> 172.0	874405	9.51	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.1%			
13C4-PFHpA	6.291	367.0 -> 322.0	333889	2.47	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.8%			
13C5-PFHxA	5.452	318.0 -> 273.0	308030	2.42	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.8%			
13C5-PFPeA	4.307	268.0 -> 223.0	474066	4.91	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.2%			
13C6-PFDA	7.858	519.0 -> 474.0	188788	1.25	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.7%			
13C7-PFUnDA	8.273	570.0 -> 525.0	258392	1.28	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.2%			
13C8-FOSA	9.291	506.0 -> 78.0	175526	2.35	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.8%			
13C8-PFOA	6.897	421.0 -> 376.0	489934	2.39	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.7%			
13C8-PFOS	7.995	507.0 -> 99.0	42473	2.42	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.8%			
13C9-PFNA	7.403	472.0 -> 427.0	199137	1.18	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.2%			
d3-MeFOSAA	7.915	573.0 -> 419.0	226246	4.71	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.3%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	482931	9.67	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 96.7%			
d3-MeFOSA	10.567	515.0 -> 169.0	88946	2.31	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.6%			
d5-EtFOSAA	8.098	589.0 -> 419.0	177423	4.82	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.3%			
d7-MeFOSE	10.462	623.0 -> 59.0	891310	24.29	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.2%			
d9-EtFOSE	10.746	639.0 -> 59.0	1107277	24.89	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 99.5%			
d5-EtFOSA	10.825	531.0 -> 169.0	97524	2.46	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.5%			
Target Compounds							QValue
4:2FTS	5.154	327.0 -> 307.0	206933	10.28	µg/L		96
		327.0 -> 81.0	102229				
6:2FTS	6.684	427.0 -> 407.0	254725	9.85	µg/L		100
		427.0 -> 81.0	119475				
8:2FTS	7.671	527.0 -> 507.0	239850	10.78	µg/L		98
		527.0 -> 81.0	93413				
EtFOSAA	8.111	584.0 -> 419.0	83912	2.50	µg/L	m	97
		584.0 -> 483.0	45662				
FOSA	9.281	498.0 -> 78.0	160175	2.51	µg/L	m	100
		498.0 -> 478.0	4625				
MeFOSAA	7.929	570.0 -> 419.0	101161	2.59	µg/L	m	93
		570.0 -> 512.0	32709				
PFBA	2.877	213.0 -> 169.0	274624	10.27	µg/L		100
PFBS	5.357	299.0 -> 80.0	69591	2.11	µg/L		98
		299.0 -> 99.0	27443				
PFDA	7.859	513.0 -> 469.0	360488	2.51	µg/L		98
		513.0 -> 219.0	81285				
PFDoDA	8.679	613.0 -> 569.0	460147	2.67	µg/L		99
		613.0 -> 319.0	61060				

Perfluorinated Compounds by LC/MS/MS

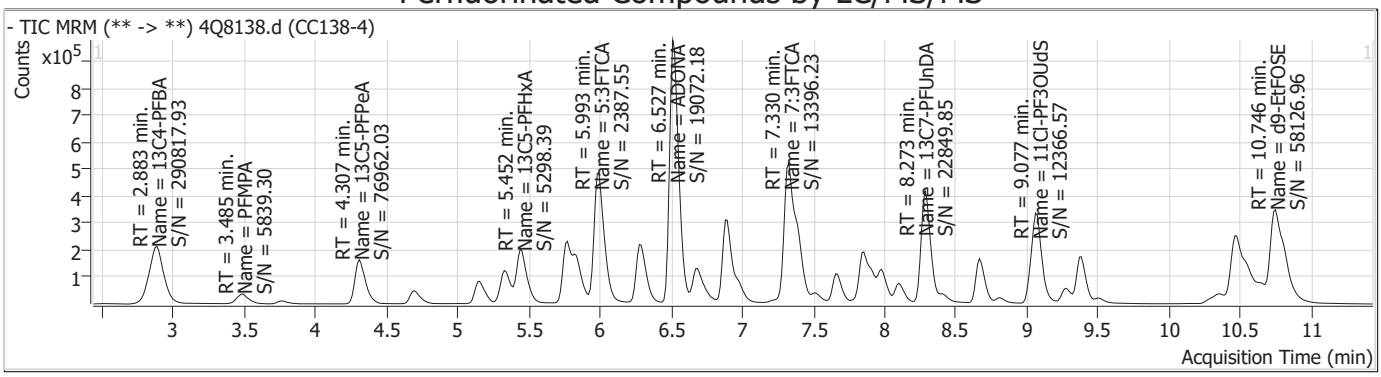
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	53608	2.32	µg/L		99
		599.0 -> 99.0	30649				
PFHpA	6.292	363.0 -> 319.0	507657	2.50	µg/L		99
		363.0 -> 169.0	104137				
PFHpS	7.529	449.0 -> 80.0	80611	2.43	µg/L		99
		449.0 -> 99.0	44749				
PFHxA	5.455	313.0 -> 269.0	340769	2.57	µg/L		99
		313.0 -> 119.0	10581				
PFHxS	6.987	399.0 -> 80.0	78831	2.36	µg/L	m	99
		399.0 -> 99.0	42006				
PFNA	7.404	463.0 -> 419.0	302671	2.53	µg/L	m	97
		463.0 -> 219.0	108360				
PFNS	8.425	549.0 -> 80.0	71246	2.49	µg/L		99
		549.0 -> 99.0	42077				
PFOA	6.898	413.0 -> 369.0	404840	2.48	µg/L	m	100
		413.0 -> 169.0	118754				
PFOS	7.996	499.0 -> 80.0	75573	2.21	µg/L	m	97
		499.0 -> 99.0	40396				
PFPeA	4.309	263.0 -> 219.0	384835	5.13	µg/L		100
PFPeS	6.318	349.0 -> 80.0	81528	2.26	µg/L		100
		349.0 -> 99.0	41358				
PFTeDA	9.381	713.0 -> 669.0	508744	2.58	µg/L		100
		713.0 -> 219.0	37025				
PFTrDA	9.038	663.0 -> 619.0	504462	2.63	µg/L		100
		663.0 -> 369.0	31697				
PFUnDA	8.275	563.0 -> 519.0	391262	2.56	µg/L		99
		563.0 -> 269.0	76645				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	892909	9.72	µg/L		99
		633.0 -> 453.0	276124				
9Cl-PF3ONS	8.301	531.0 -> 351.0	981812	9.71	µg/L		100
		533.0 -> 353.0	297682				
ADONA	6.527	377.0 -> 251.0	3388561	8.94	µg/L		100
		377.0 -> 85.0	1110703				
HFPO-DA	5.780	285.0 -> 169.0	519837	10.24	µg/L		99
		285.0 -> 185.0	55083				
3:3FTCA	3.769	241.0 -> 177.0	53995	12.05	µg/L		100
		241.0 -> 117.0	4434				
5:3FTCA	5.993	341.0 -> 237.0	1432628	60.43	µg/L		98
		341.0 -> 217.0	1024247				
7:3FTCA	7.330	441.0 -> 337.0	1837064	60.15	µg/L		100
		441.0 -> 317.0	828278				
EtFOSA	10.826	526.0 -> 219.0	98354	2.43	µg/L		99
		526.0 -> 169.0	139068				
EtFOSE	10.760	630.0 -> 59.0	1305274	25.34	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	122985	2.64	µg/L		99
		512.0 -> 219.0	80698				
MeFOSE	10.488	616.0 -> 59.0	993759	25.43	µg/L		100
PFDoDS	9.508	699.0 -> 80.0	44449	2.39	µg/L		100
		699.0 -> 99.0	27667				
NFDHA	5.333	295.0 -> 201.0	87029	4.99	µg/L		98
		201.0 -> 85.0	358755				
		295.0 -> 85.0	23285				
PFMBA	4.698	279.0 -> 85.0	254846	4.98	µg/L		100
PFMPA	3.485	229.0 -> 85.0	215050	5.00	µg/L		100
PFEESA	5.836	315.0 -> 135.0	563328	4.62	µg/L		99
		315.0 -> 69.0	46311				

Perfluorinated Compounds by LC/MS/MS

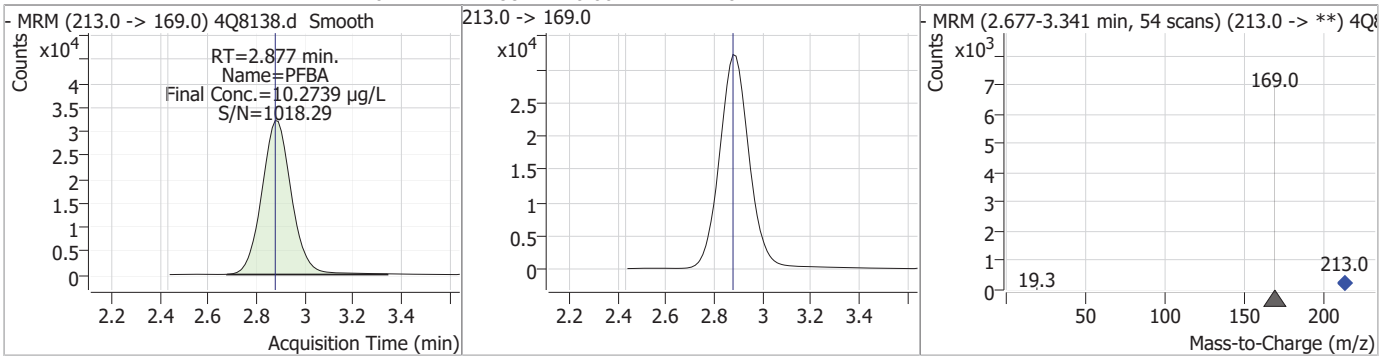
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

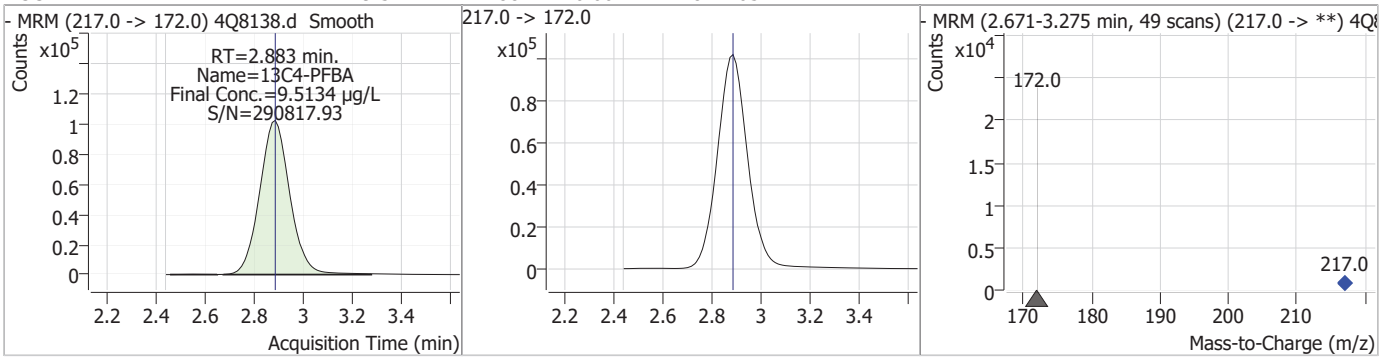
Perfluorinated Compounds by LC/MS/MS



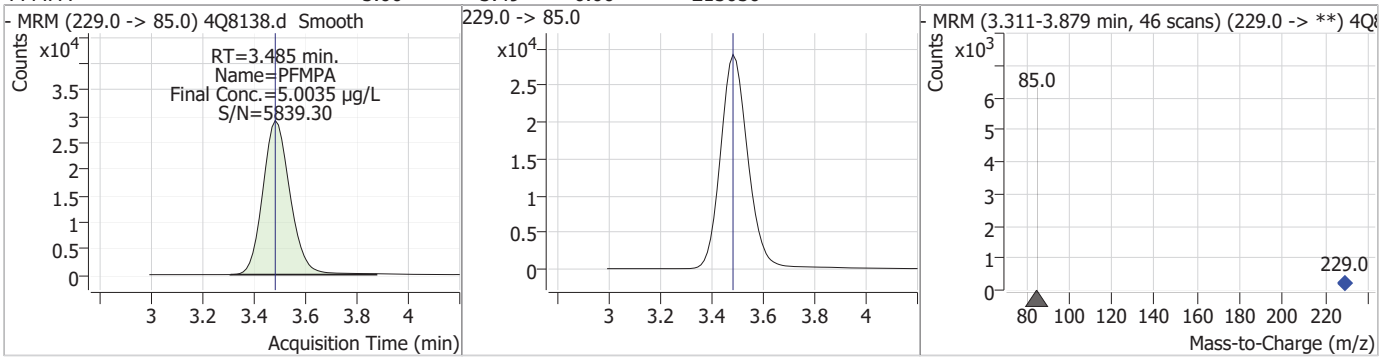
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.27	2.88	0.00	274624				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.51	2.88	0.00	874405				

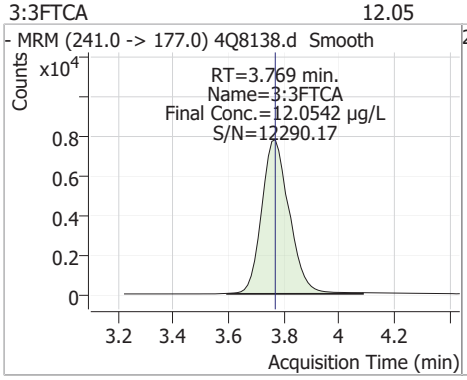


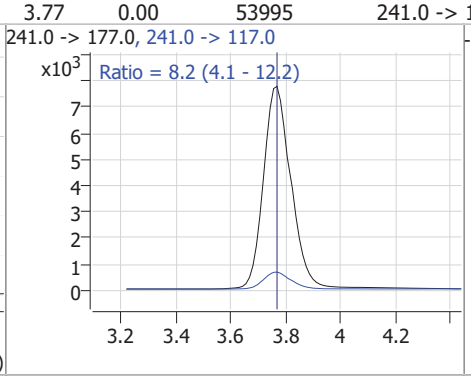
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.00	3.49	0.00	215050				

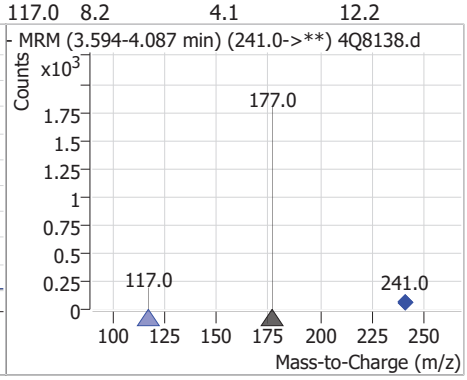


Perfluorinated Compounds by LC/MS/MS

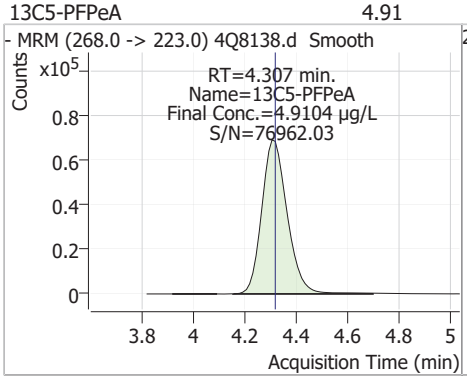
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.05	3.77	0.00	53995	241.0 -> 117.0	8.2	4.1	12.2

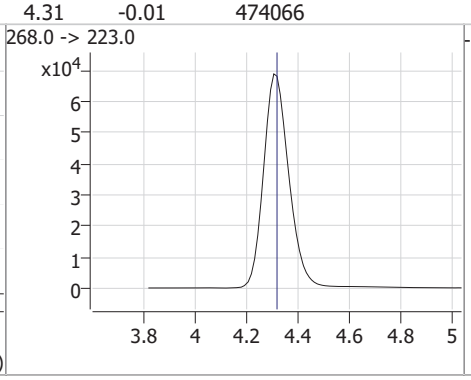


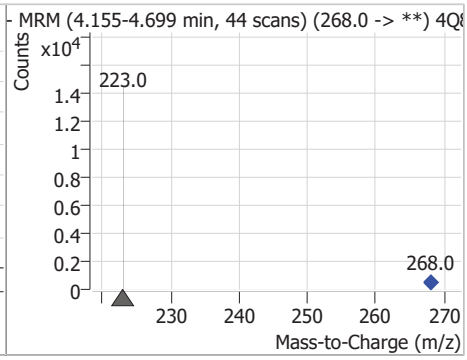




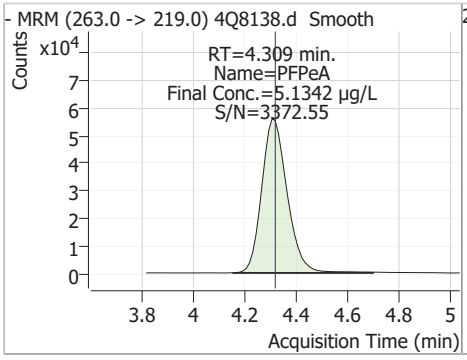
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.91	4.31	-0.01	474066				

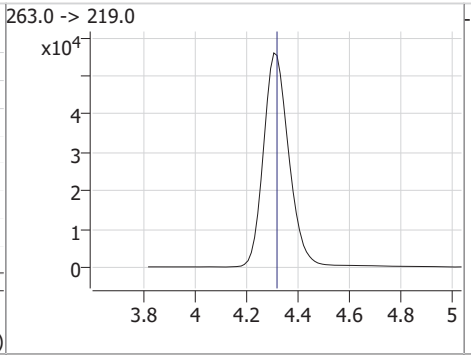


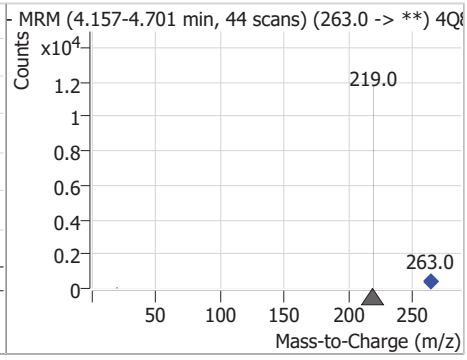




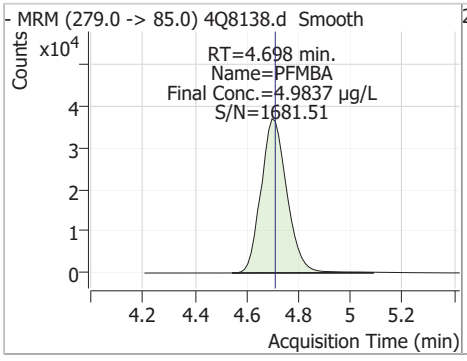
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.13	4.31	-0.01	384835				

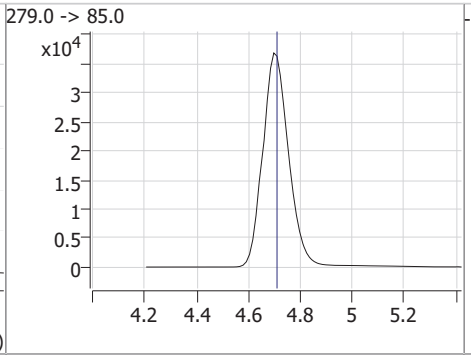


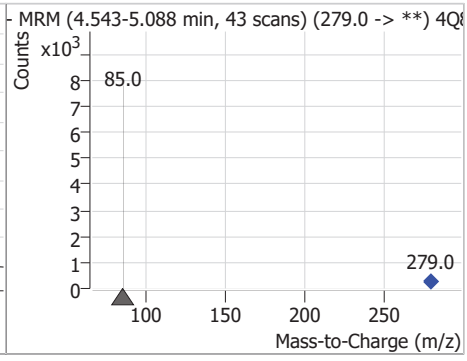




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.98	4.70	-0.01	254846				







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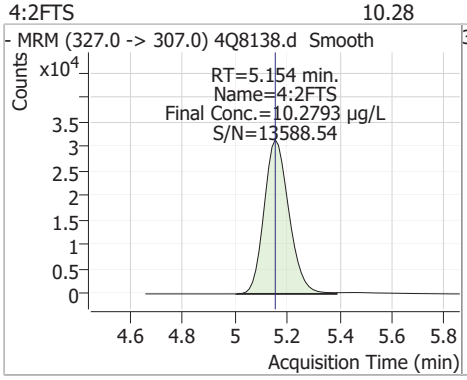
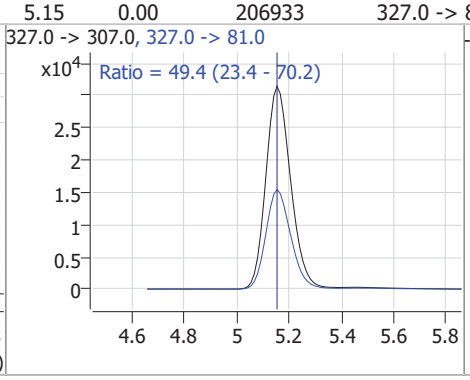
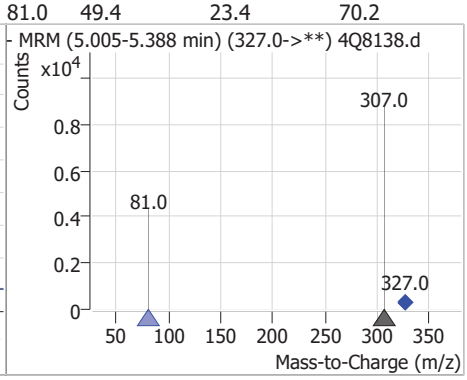
Perfluorinated Compounds by LC/MS/MS

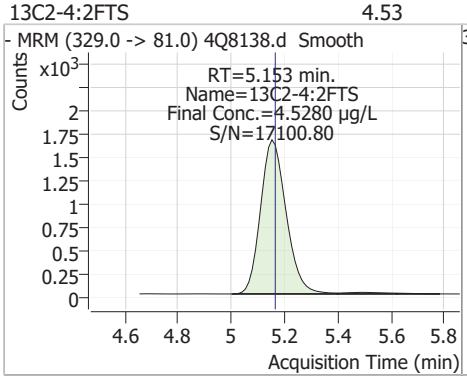
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	10.28	5.15	0.00	206933	327.0 -> 81.0	49.4	23.4	70.2

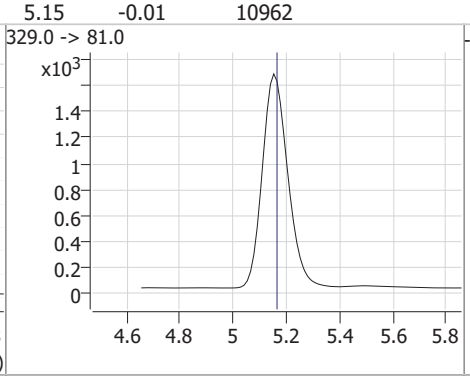


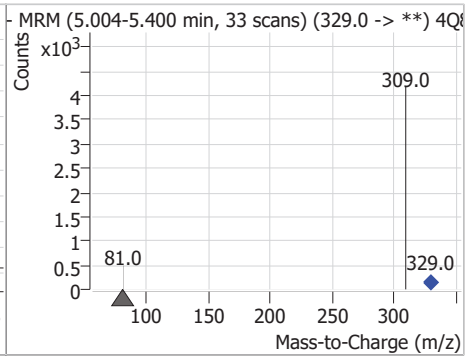




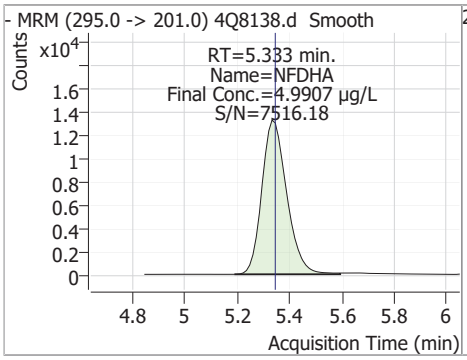
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.53	5.15	-0.01	10962				

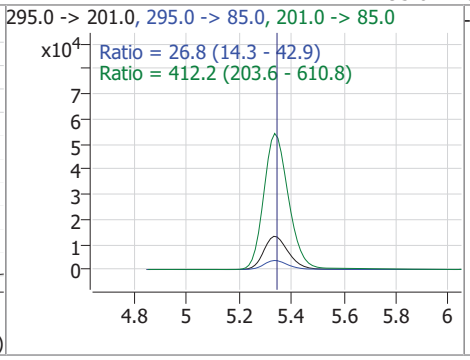


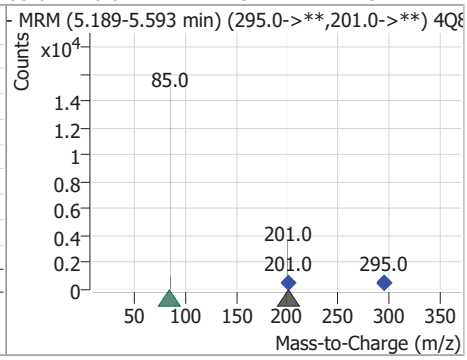




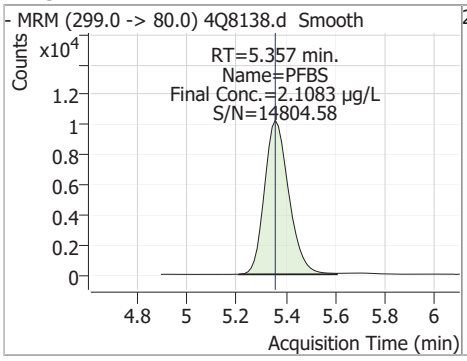
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	4.99	5.33	-0.01	87029	201.0 -> 85.0	412.2	203.6	610.8
					295.0 -> 85.0	26.8	14.3	42.9

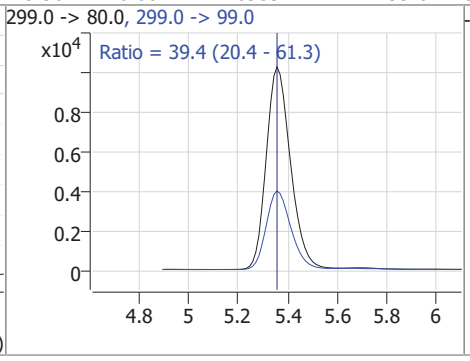


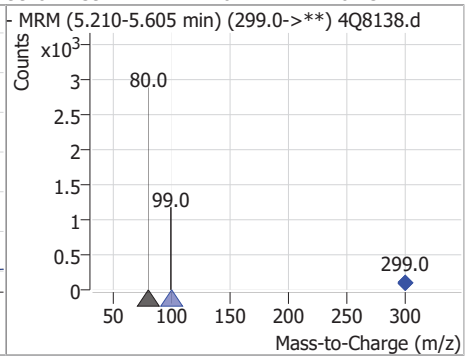




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.11	5.36	0.00	69591	299.0 -> 99.0	39.4	20.4	61.3

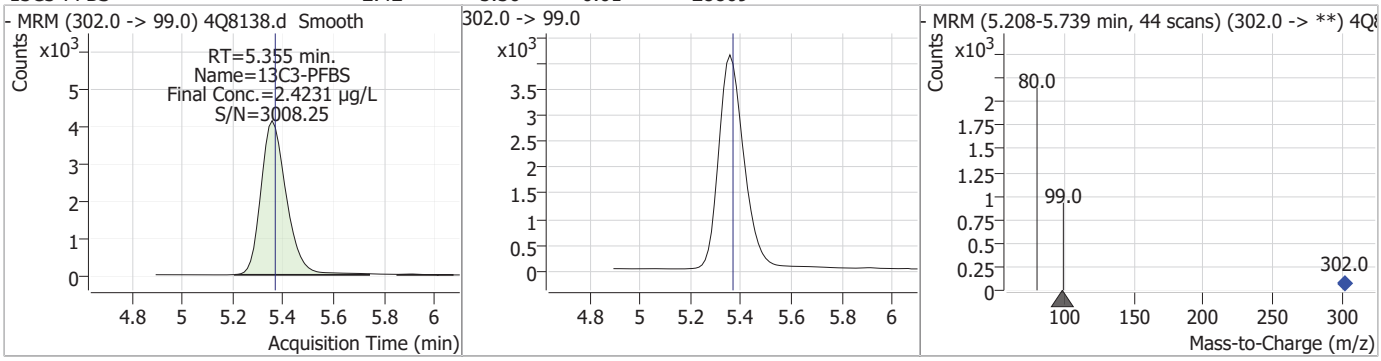




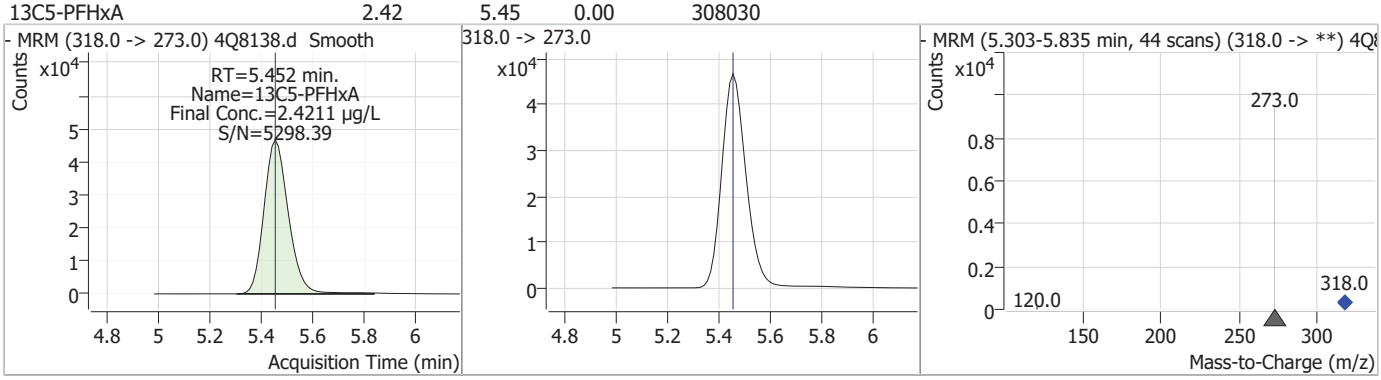


Perfluorinated Compounds by LC/MS/MS

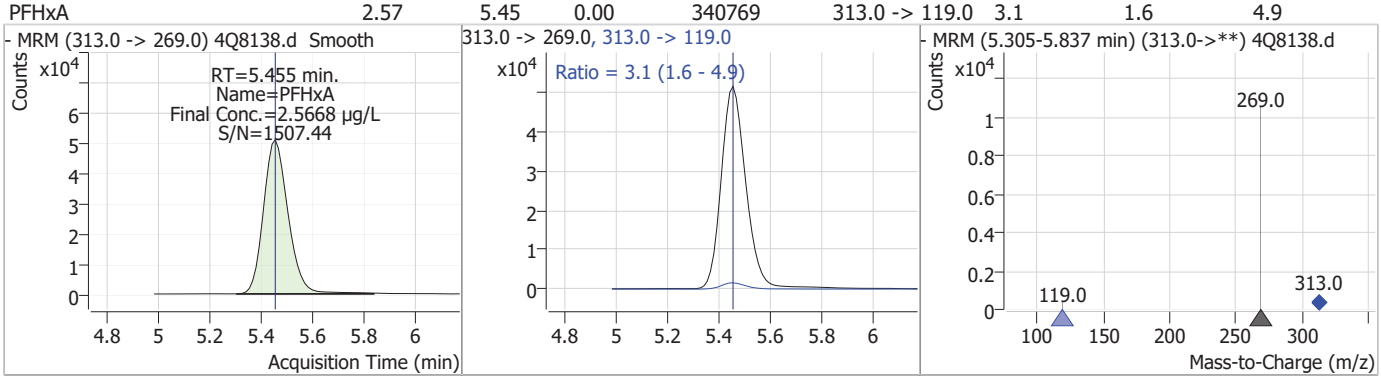
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.42	5.36	-0.01	28869				



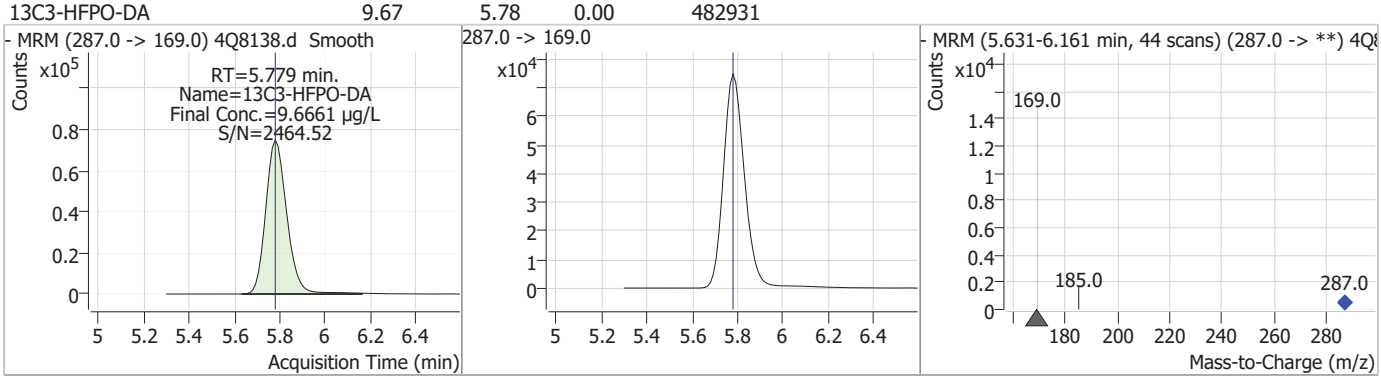
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.42	5.45	0.00	308030				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.57	5.45	0.00	340769	313.0 -> 119.0	3.1	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.67	5.78	0.00	482931				



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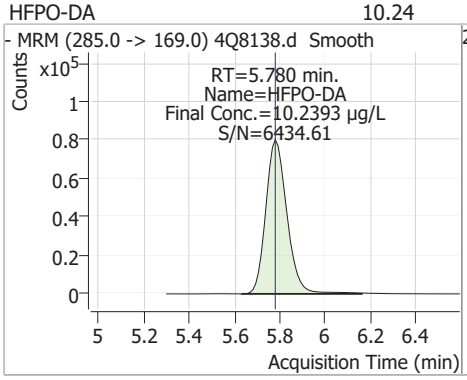
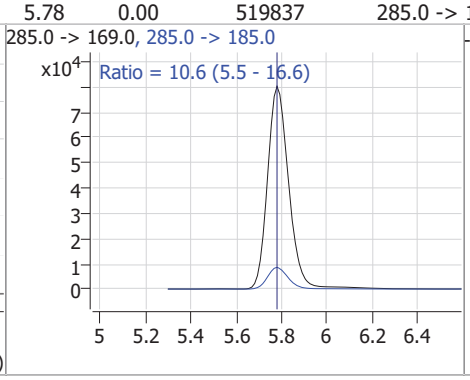
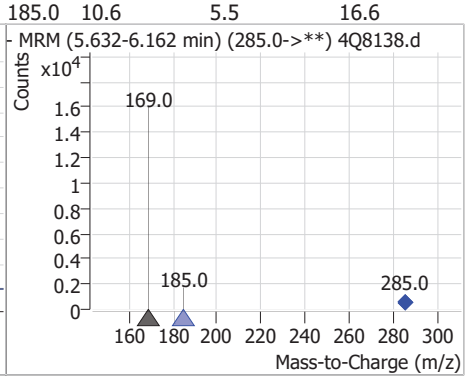
Perfluorinated Compounds by LC/MS/MS

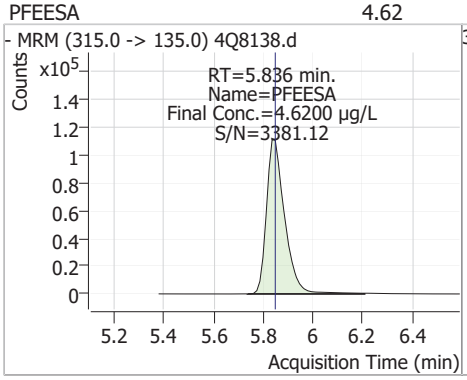
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.24	5.78	0.00	519837	285.0 -> 185.0	10.6	5.5	16.6

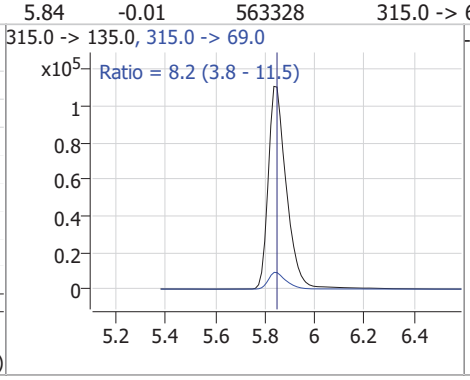


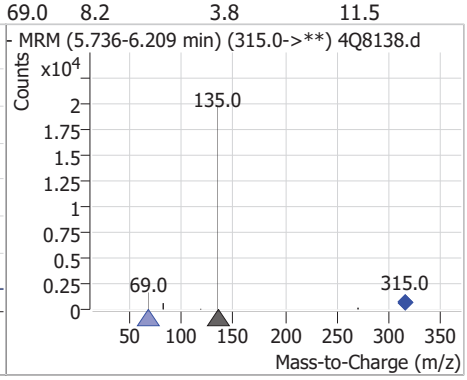




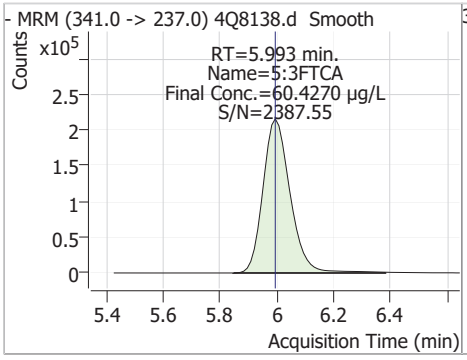
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.62	5.84	-0.01	563328	315.0 -> 69.0	8.2	3.8	11.5

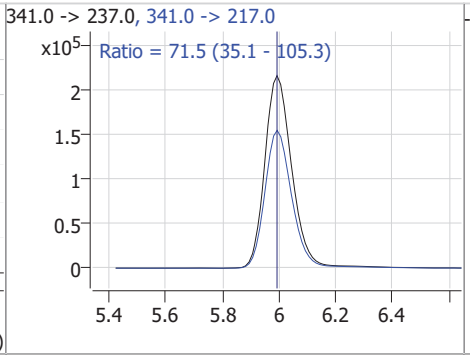


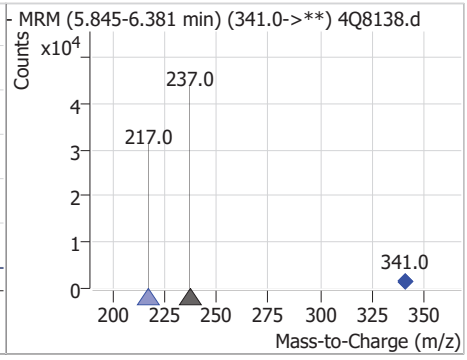




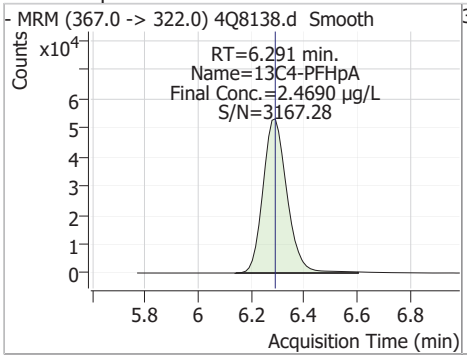
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	60.43	5.99	0.00	1432628	341.0 -> 217.0	71.5	35.1	105.3

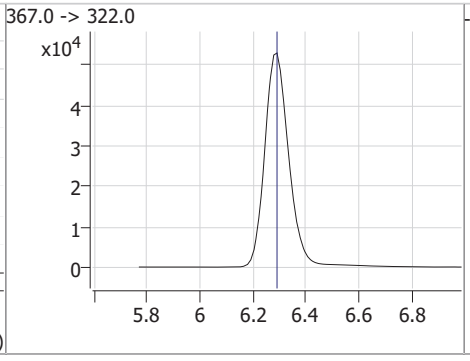


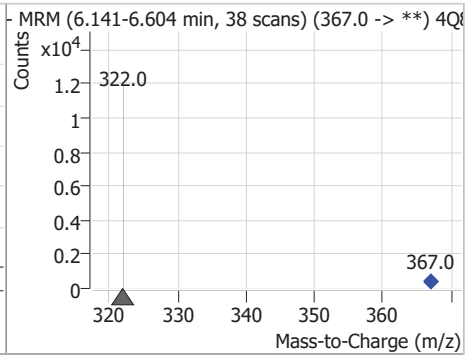




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.47	6.29	0.00	333889				







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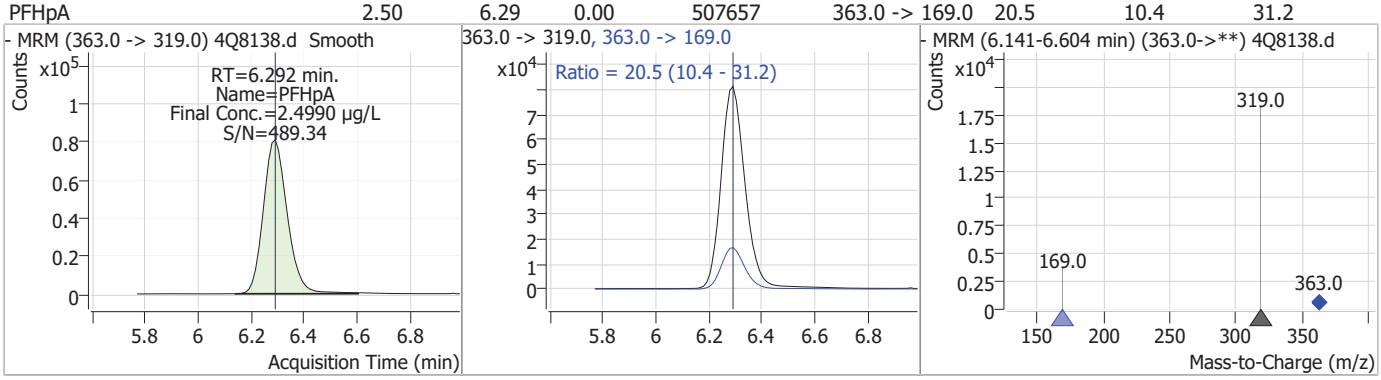
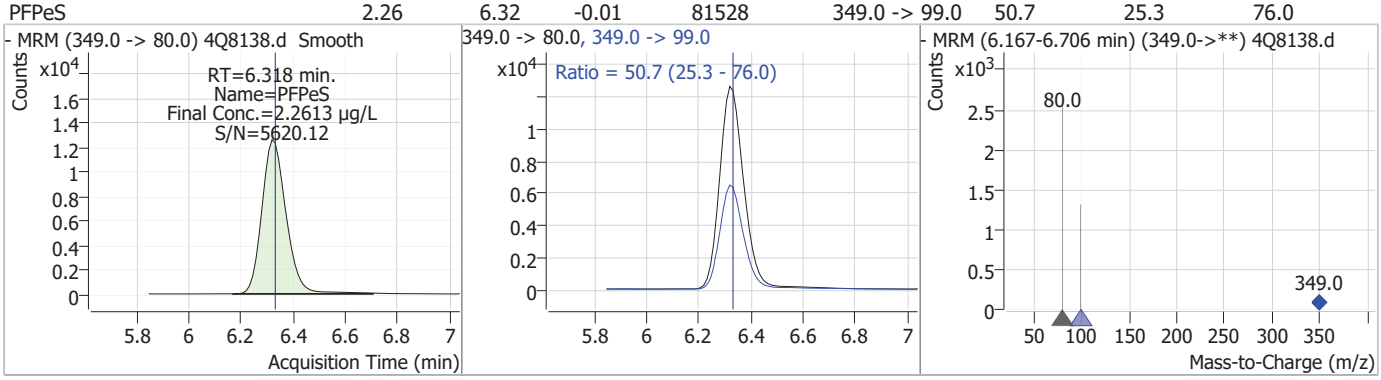
Perfluorinated Compounds by LC/MS/MS

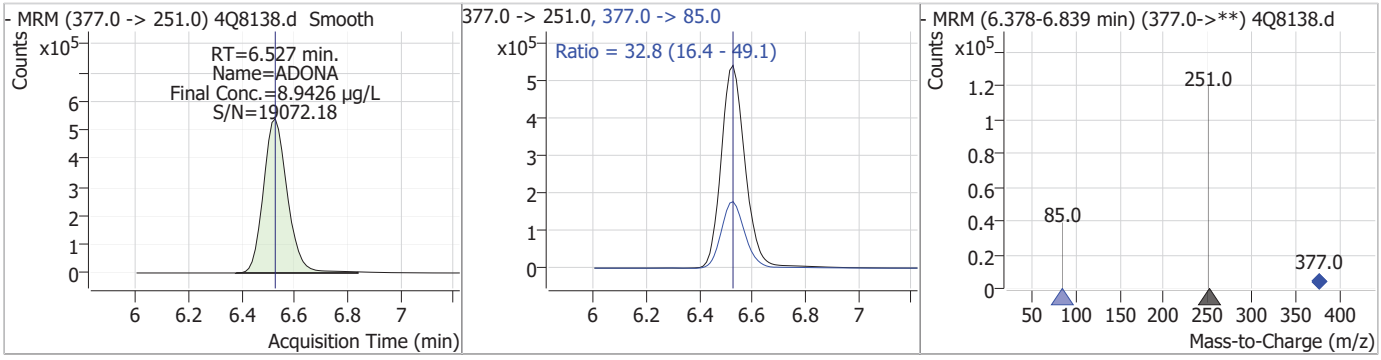
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.50	6.29	0.00	507657	363.0 -> 169.0	20.5	10.4	31.2



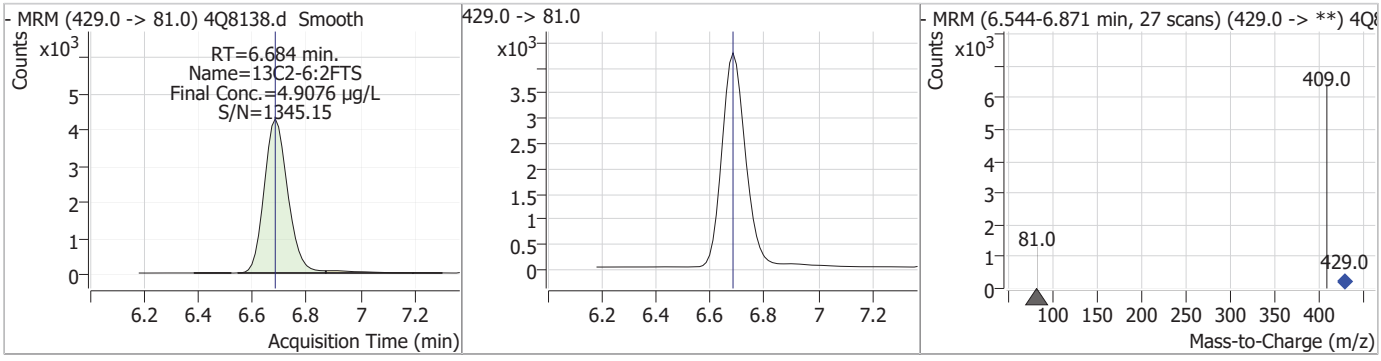
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.26	6.32	-0.01	81528	349.0 -> 99.0	50.7	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.94	6.53	0.00	3388561	377.0 -> 85.0	32.8	16.4	49.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.91	6.68	0.00	25781				



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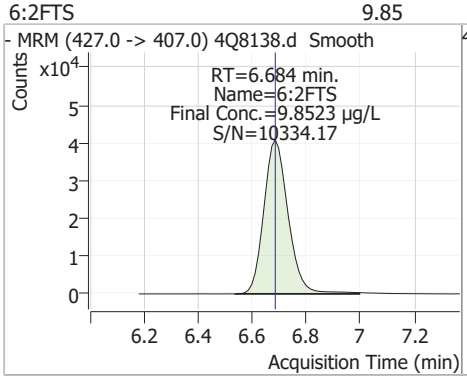
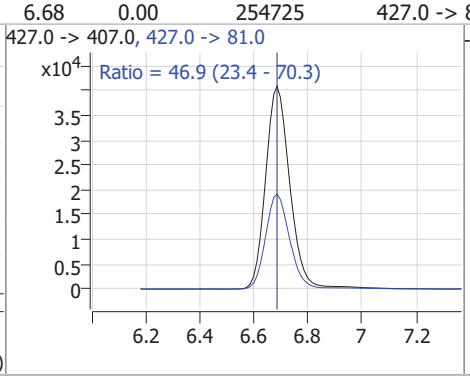
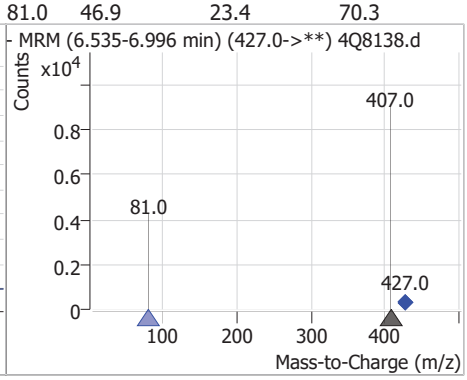
Perfluorinated Compounds by LC/MS/MS

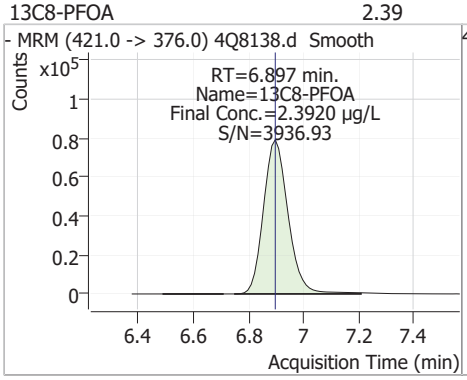
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.85	6.68	0.00	254725	427.0 -> 81.0	46.9	23.4	70.3

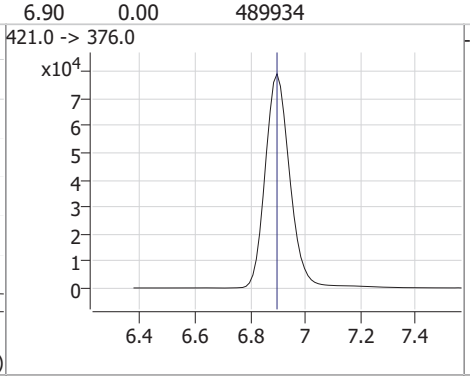


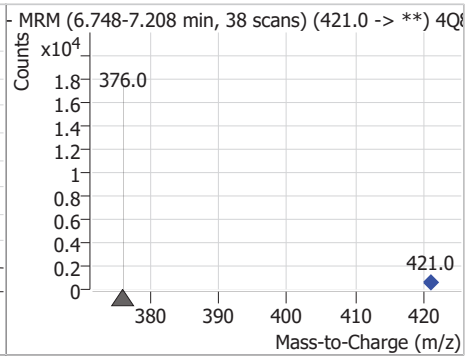




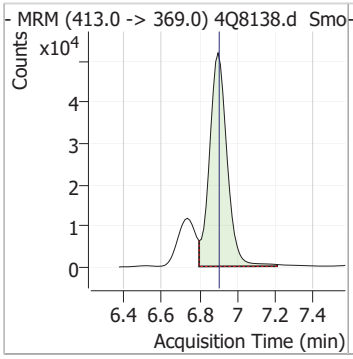
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.39	6.90	0.00	489934				

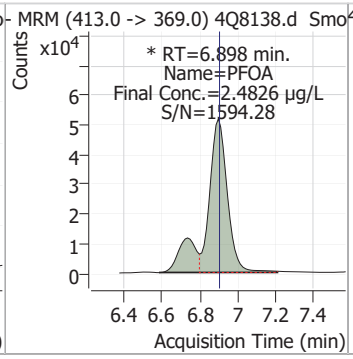


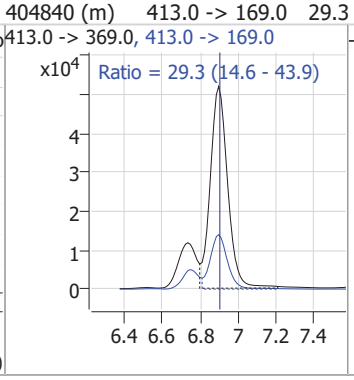


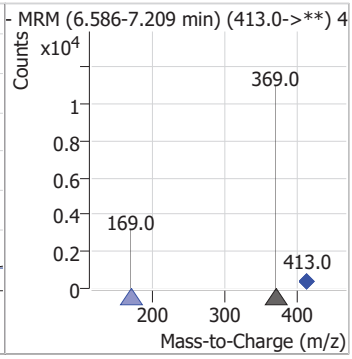


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.48	6.90	0.00	404840 (m)	413.0 -> 169.0	29.3	14.6	43.9

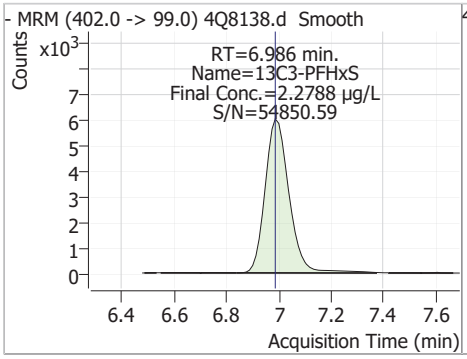


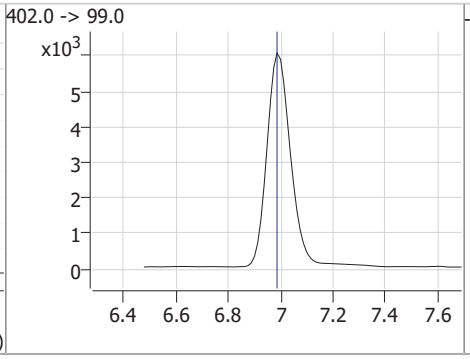


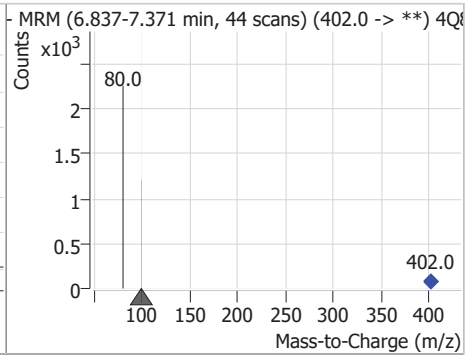




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.28	6.99	0.00	38413				

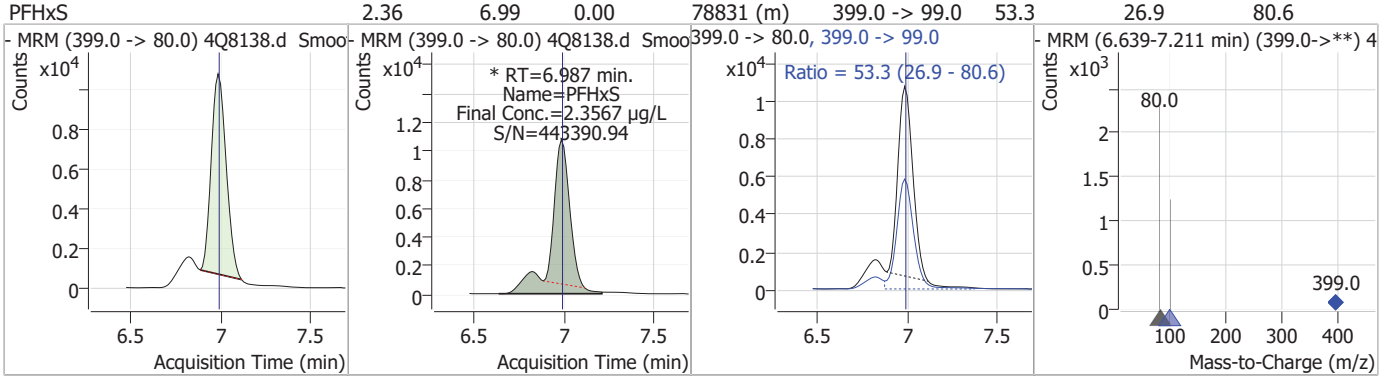




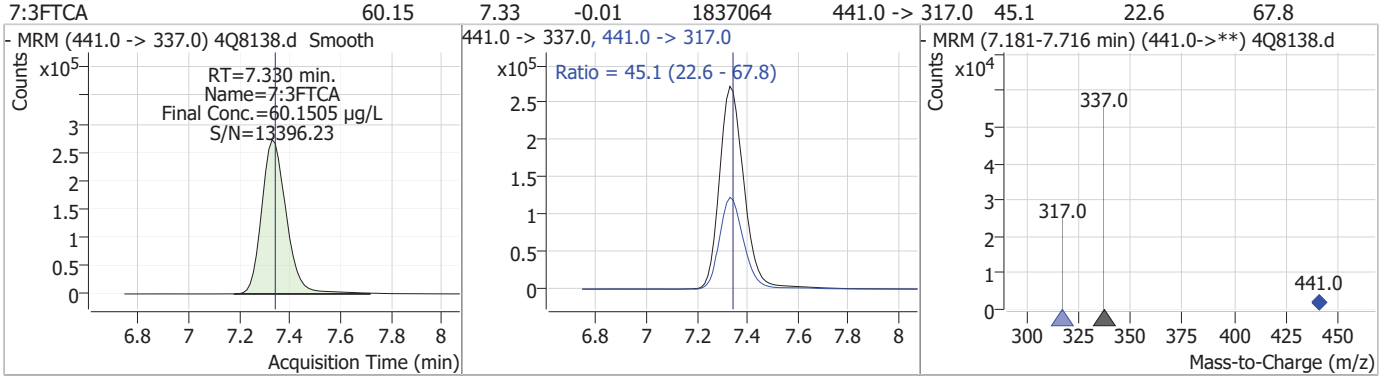


Perfluorinated Compounds by LC/MS/MS

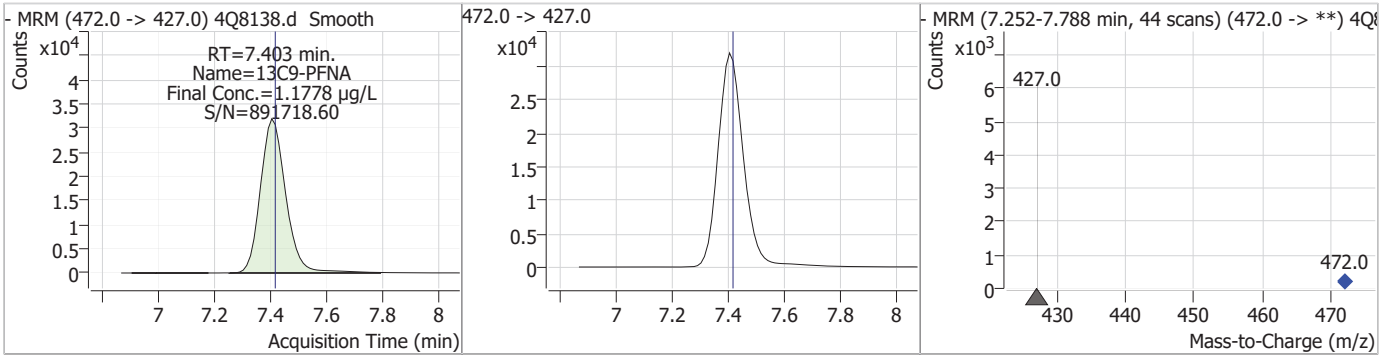
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.36	6.99	0.00	78831 (m)	399.0 -> 99.0	53.3	26.9	80.6



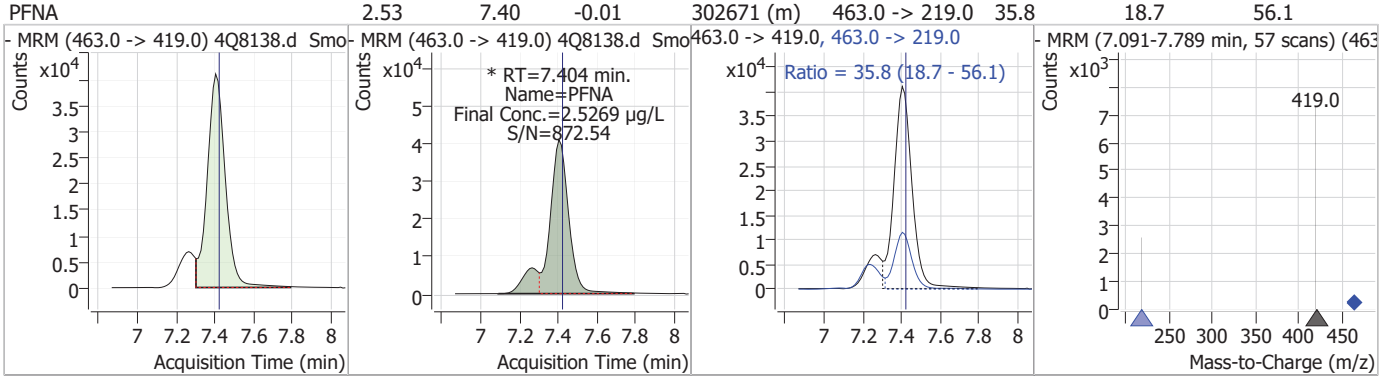
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	60.15	7.33	-0.01	1837064	441.0 -> 317.0	45.1	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.18	7.40	-0.01	199137				

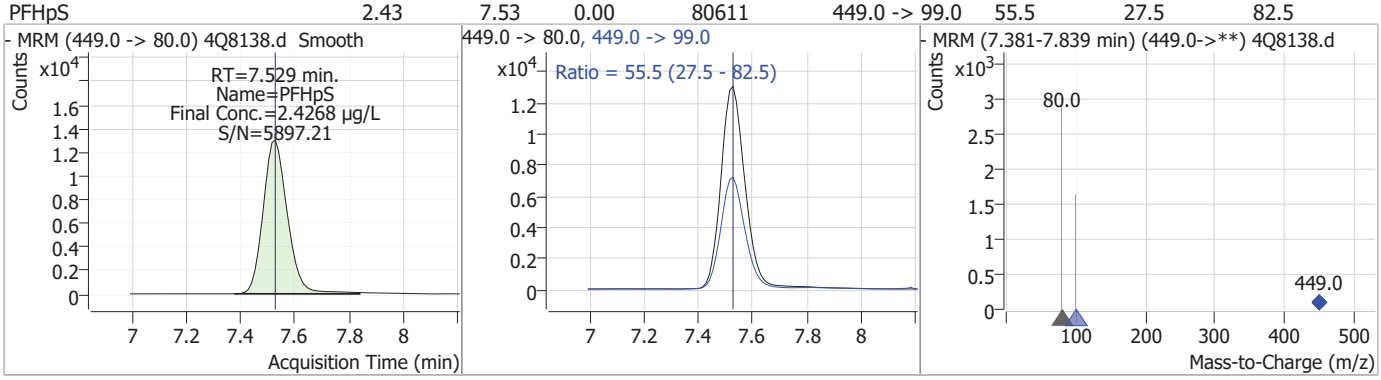


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.53	7.40	-0.01	302671 (m)	463.0 -> 219.0	35.8	18.7	56.1

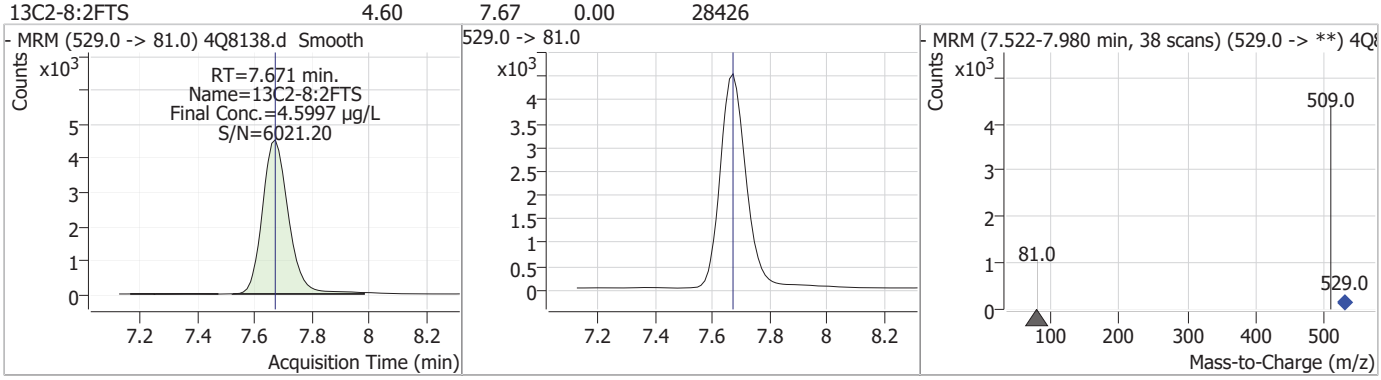


Perfluorinated Compounds by LC/MS/MS

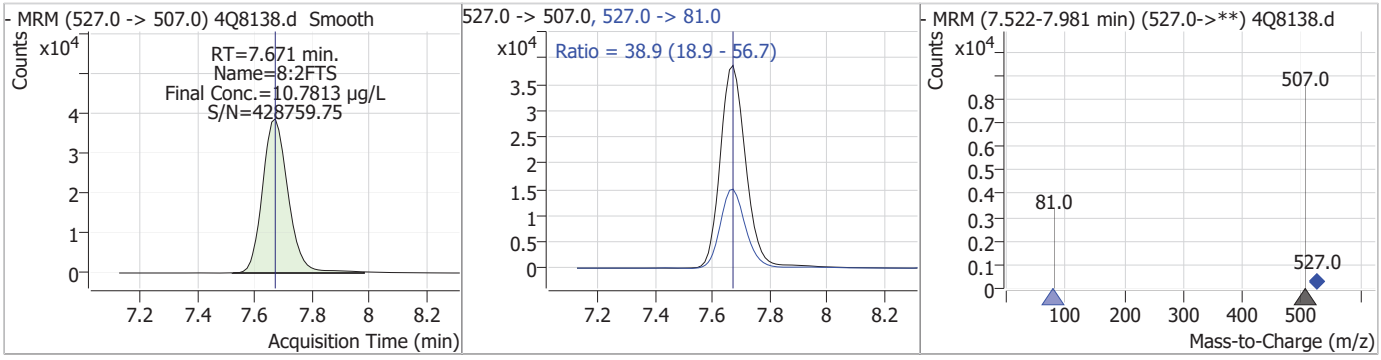
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.43	7.53	0.00	80611	449.0 -> 99.0	55.5	27.5	82.5



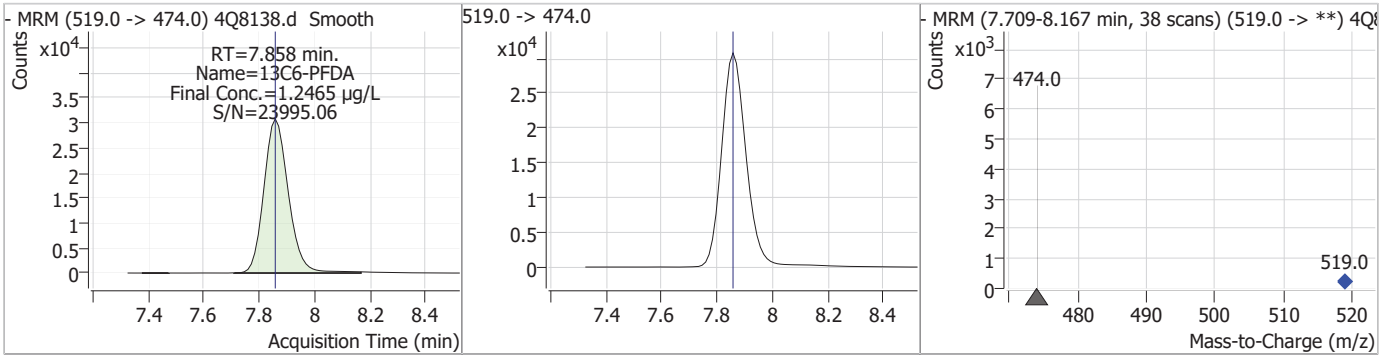
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.60	7.67	0.00	28426				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.78	7.67	0.00	239850	527.0 -> 81.0	38.9	18.9	56.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.25	7.86	0.00	188788				



7.6.53

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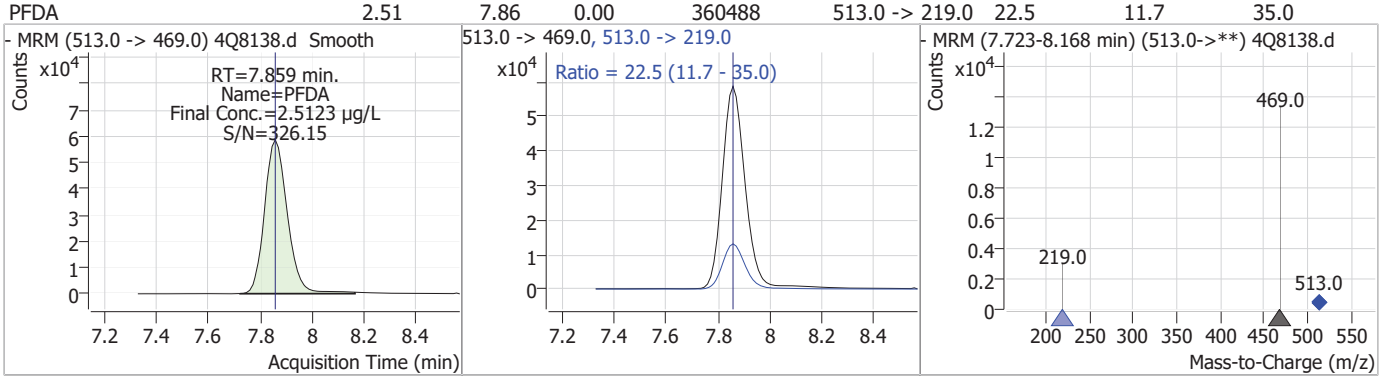
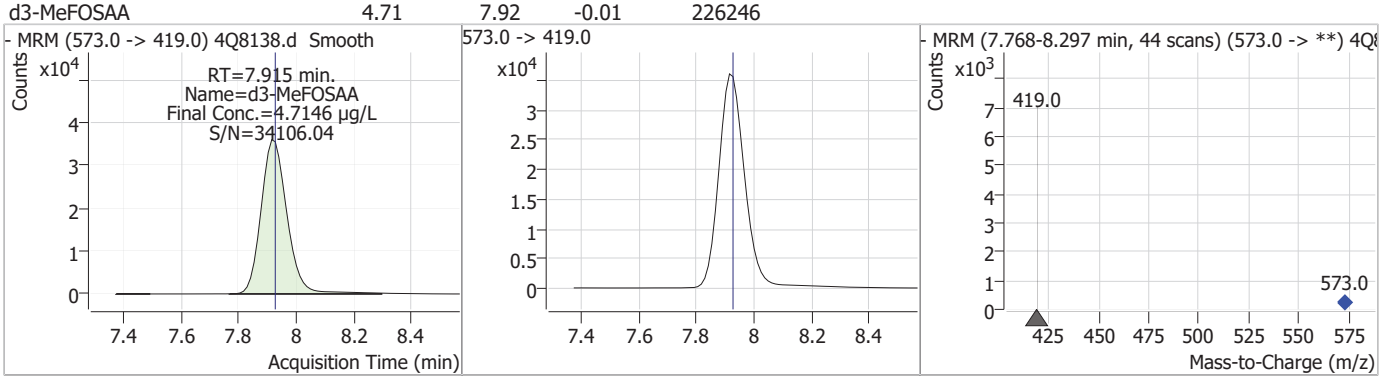
Perfluorinated Compounds by LC/MS/MS

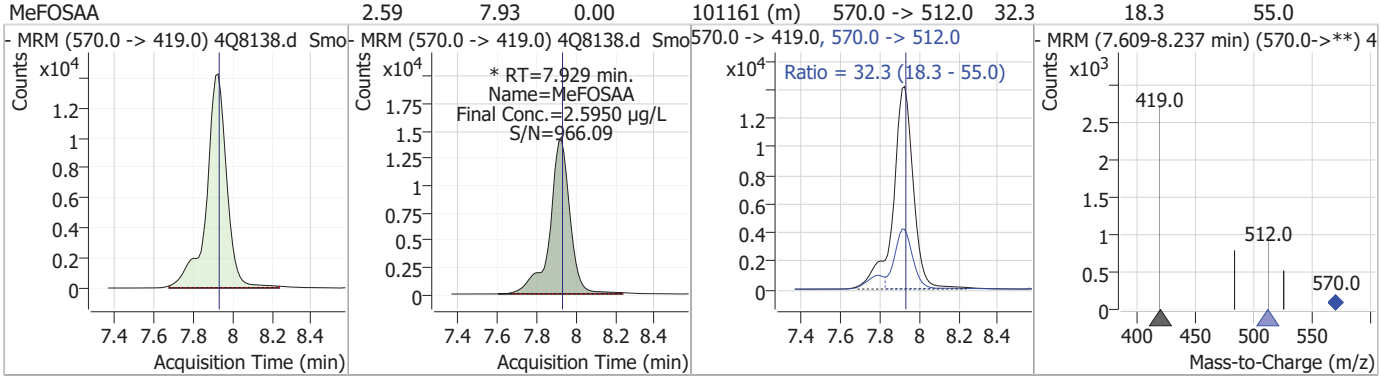
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.51	7.86	0.00	360488	513.0 -> 219.0	22.5	11.7	35.0



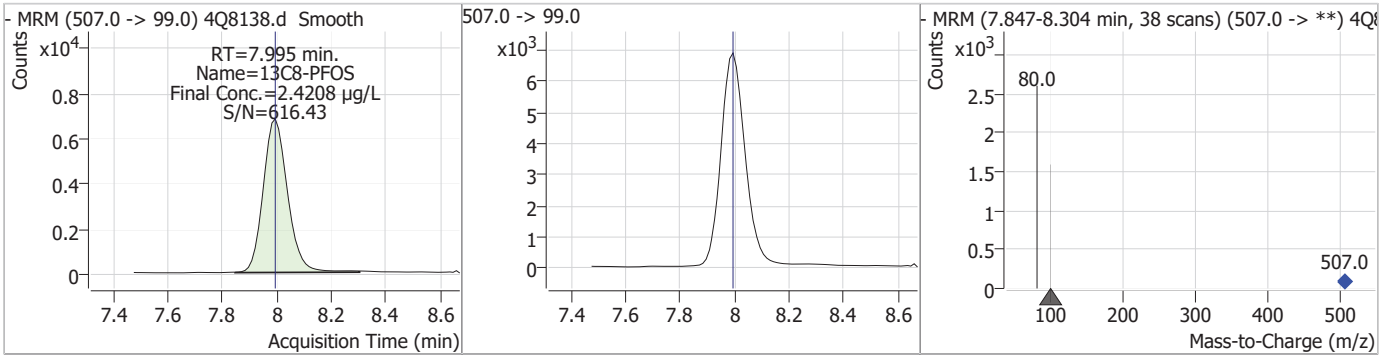
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.71	7.92	-0.01	226246				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.59	7.93	0.00	101161 (m)	570.0 -> 512.0	32.3	18.3	55.0

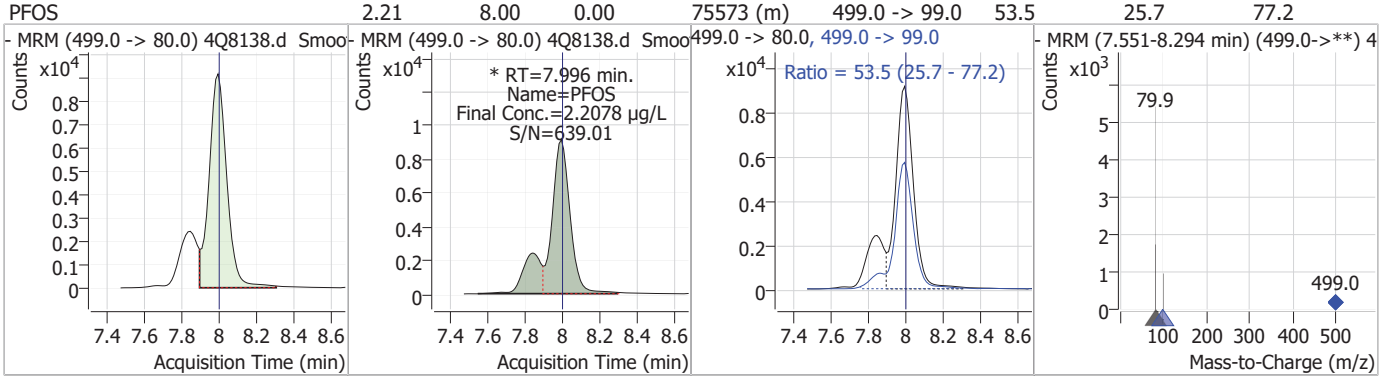


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.42	7.99	0.00	42473				

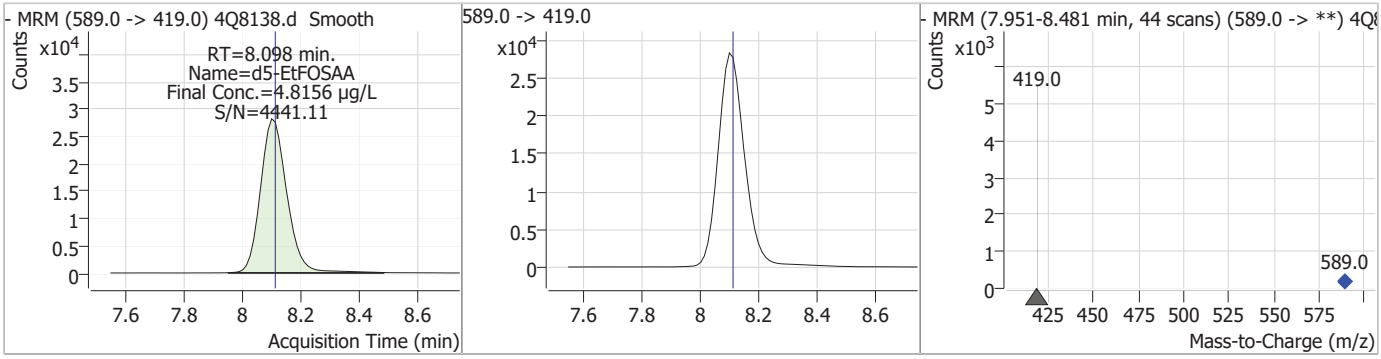


Perfluorinated Compounds by LC/MS/MS

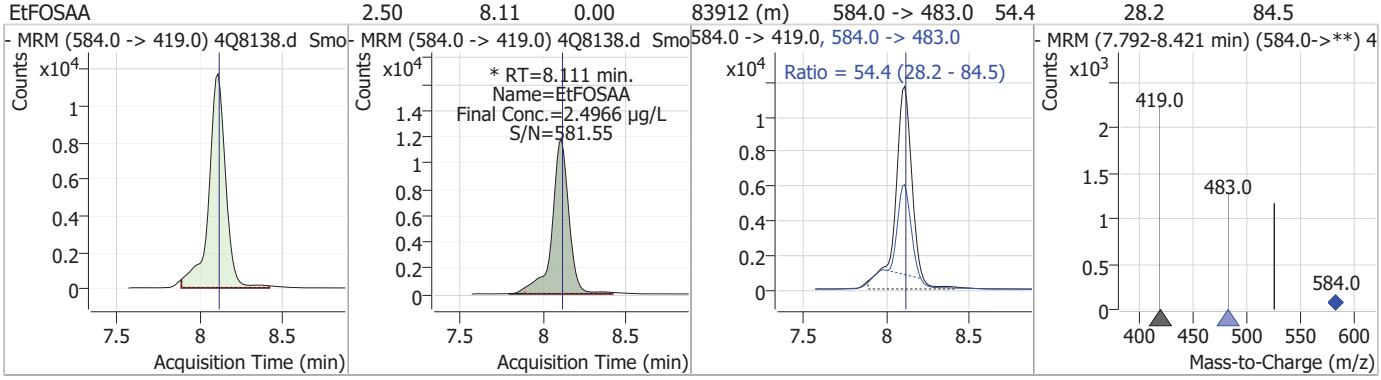
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.21	8.00	0.00	75573 (m)	499.0 -> 99.0	53.5	25.7	77.2



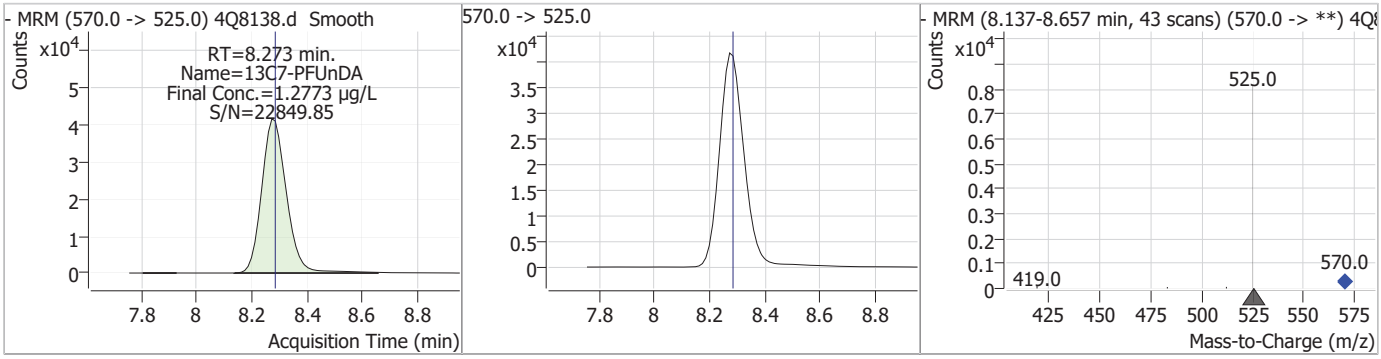
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.82	8.10	-0.01	177423				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.50	8.11	0.00	83912 (m)	584.0 -> 483.0	54.4	28.2	84.5

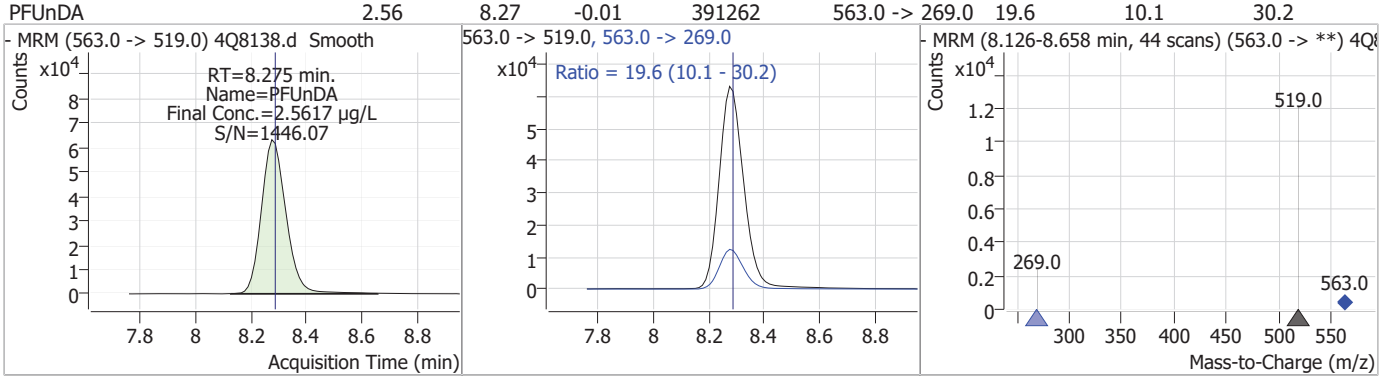


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.28	8.27	-0.01	258392				

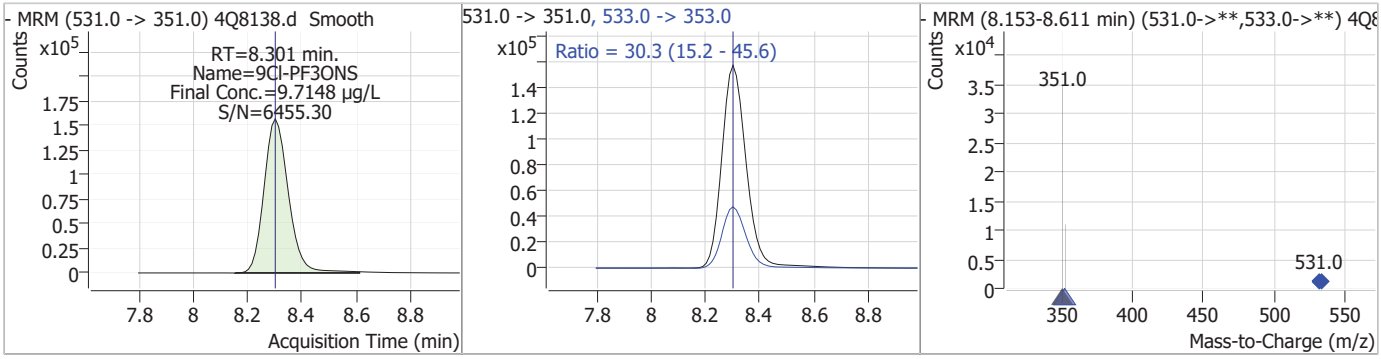


Perfluorinated Compounds by LC/MS/MS

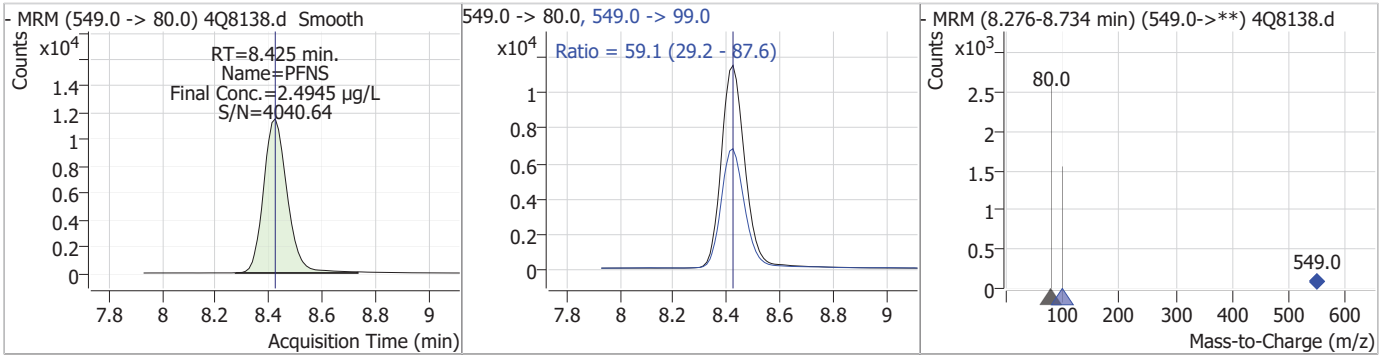
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.56	8.27	-0.01	391262	563.0 -> 269.0	19.6	10.1	30.2



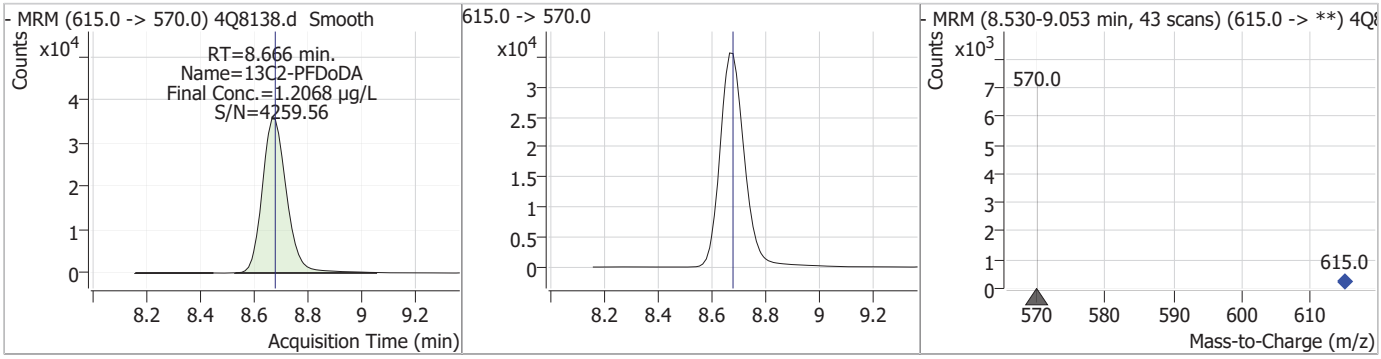
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.71	8.30	0.00	981812	533.0 -> 353.0	30.3	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.49	8.42	0.00	71246	549.0 -> 99.0	59.1	29.2	87.6

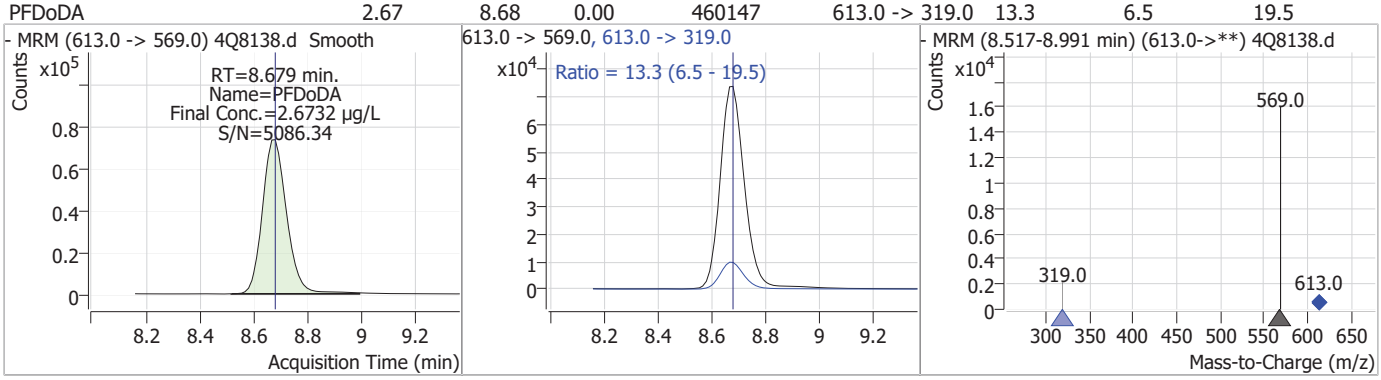


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.21	8.67	-0.01	223621				

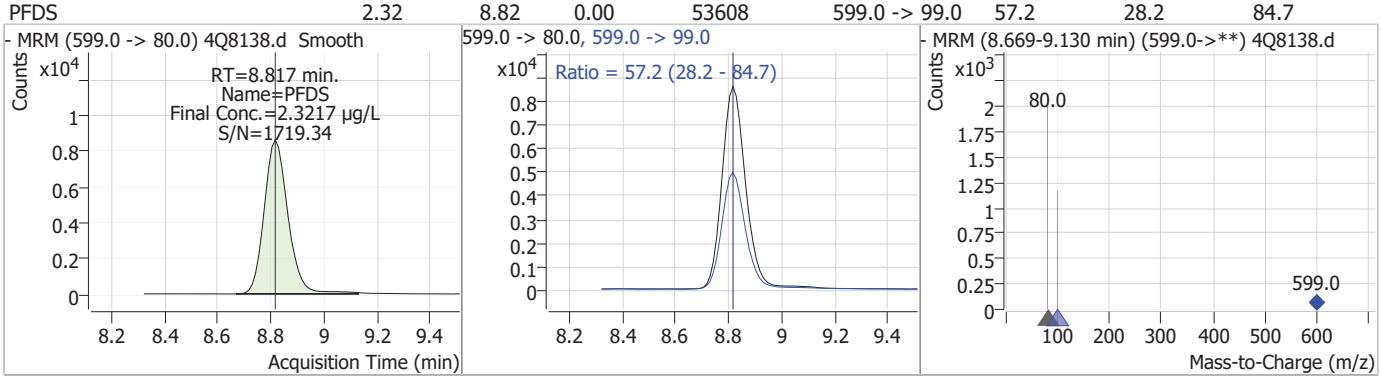


Perfluorinated Compounds by LC/MS/MS

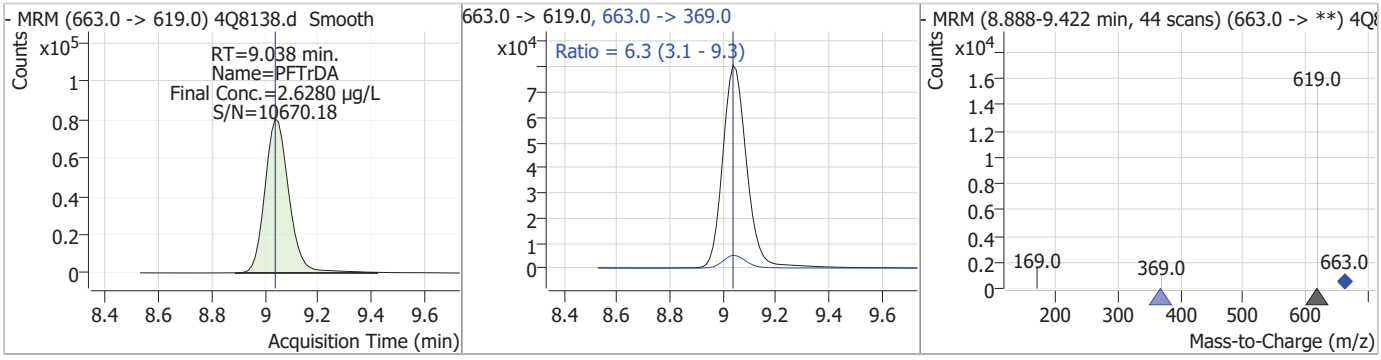
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.67	8.68	0.00	460147	613.0 -> 319.0	13.3	6.5	19.5



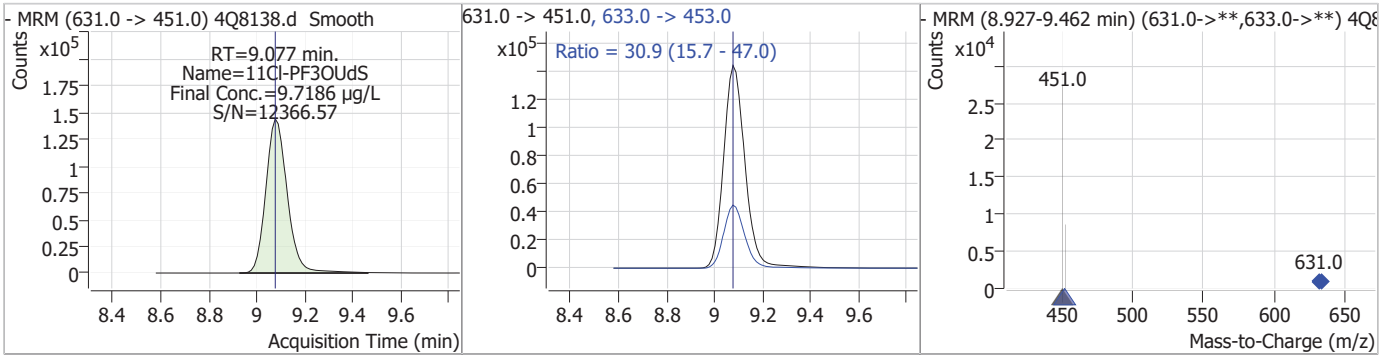
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.32	8.82	0.00	53608	599.0 -> 99.0	57.2	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.63	9.04	0.00	504462	663.0 -> 369.0	6.3	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.72	9.08	0.00	892909	633.0 -> 453.0	30.9	15.7	47.0



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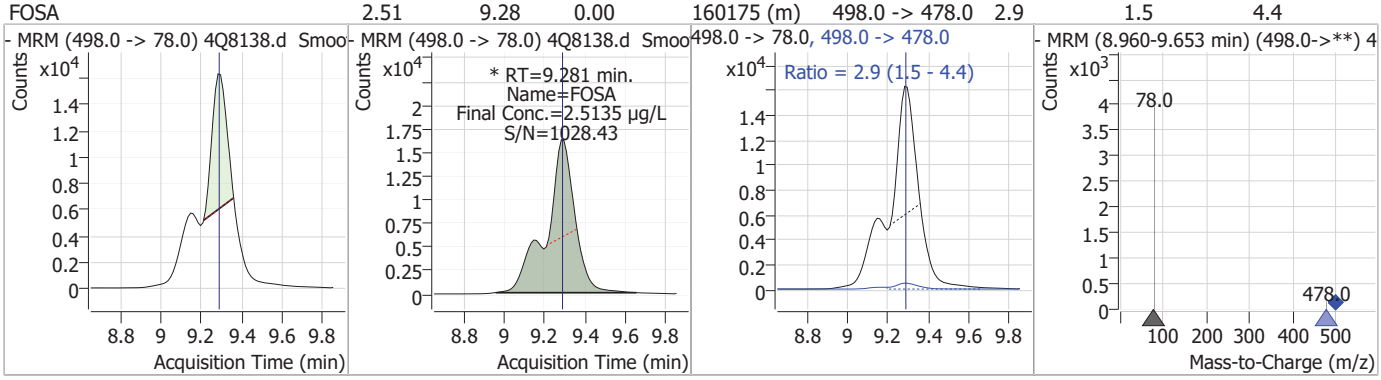
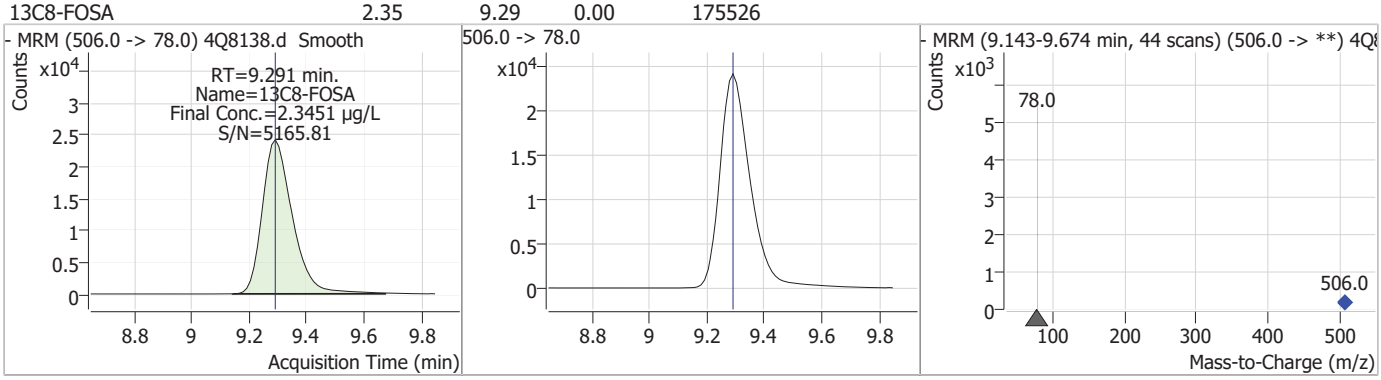
Perfluorinated Compounds by LC/MS/MS

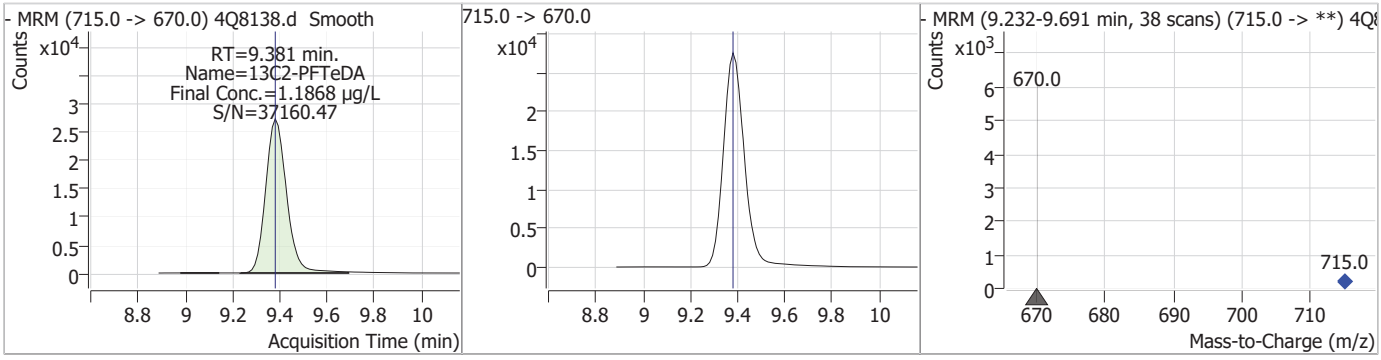
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.51	9.28	0.00	160175 (m)	498.0 -> 478.0	2.9	1.5	4.4



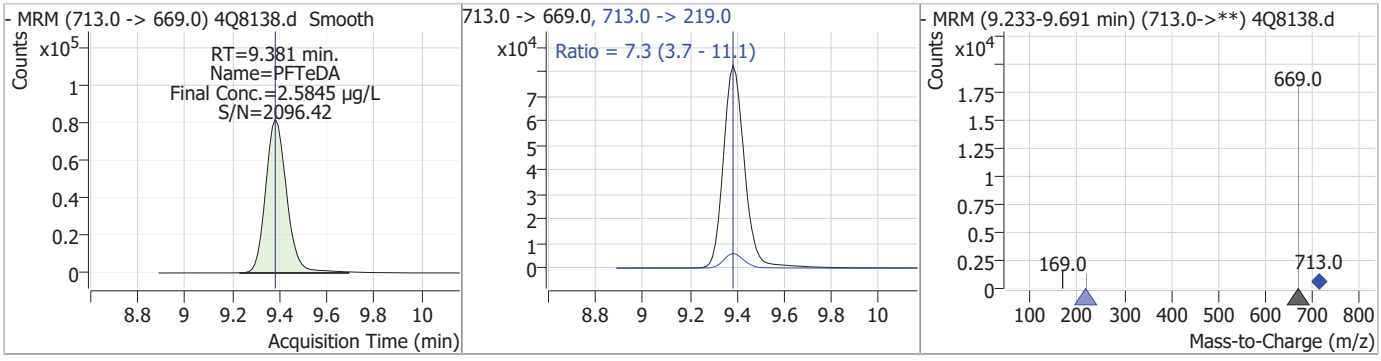
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.35	9.29	0.00	175526				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.19	9.38	0.00	169067				

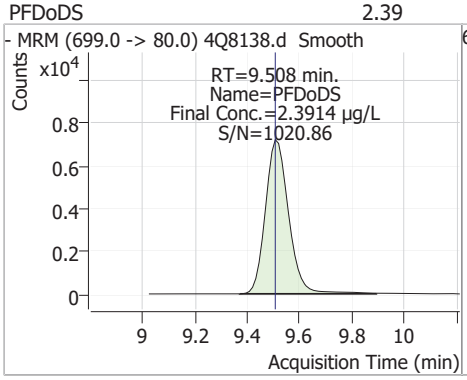


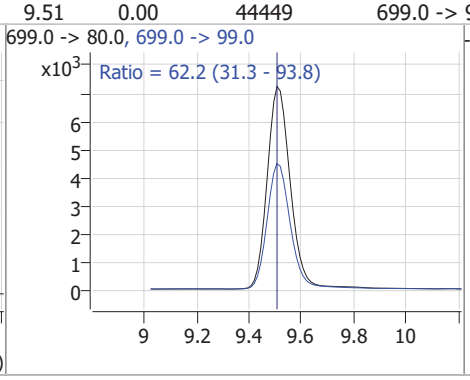
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.58	9.38	0.00	508744	713.0 -> 219.0	7.3	3.7	11.1

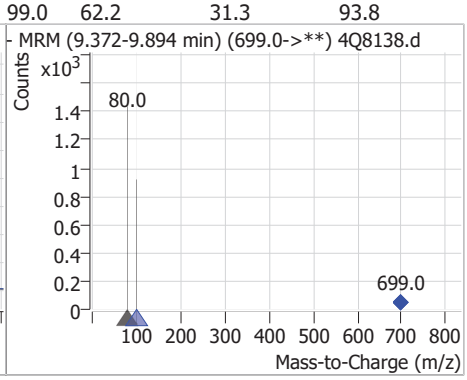


Perfluorinated Compounds by LC/MS/MS

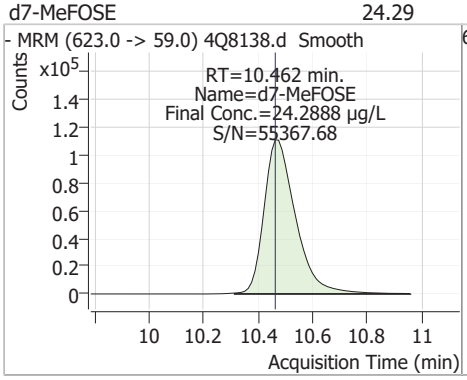
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.39	9.51	0.00	44449	699.0 -> 99.0	62.2	31.3	93.8

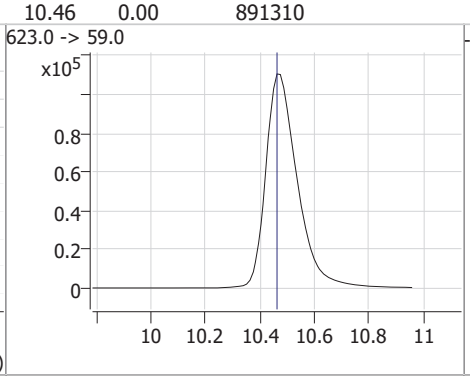


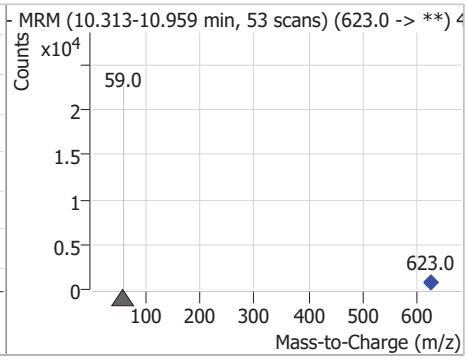




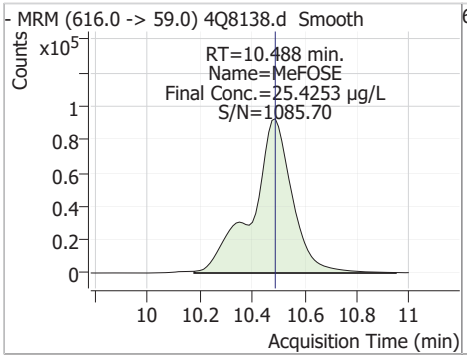
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.29	10.46	0.00	891310				

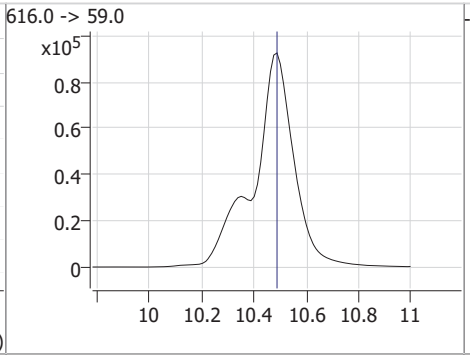


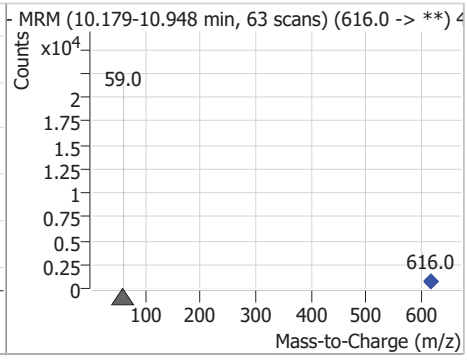




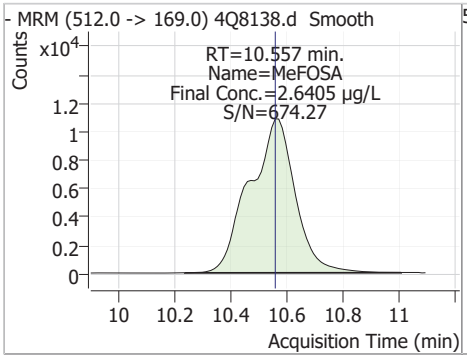
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.43	10.49	0.00	993759				

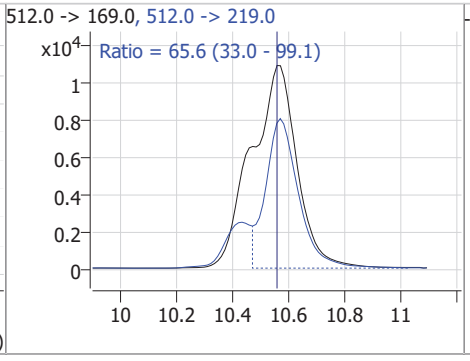


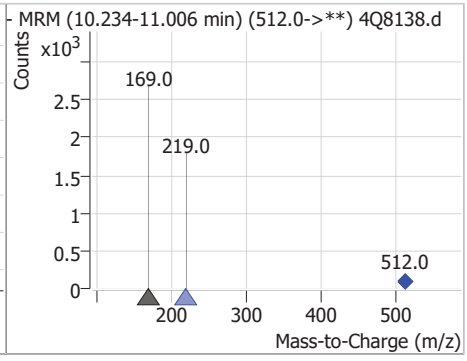




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.64	10.56	0.00	122985	512.0 -> 219.0	65.6	33.0	99.1

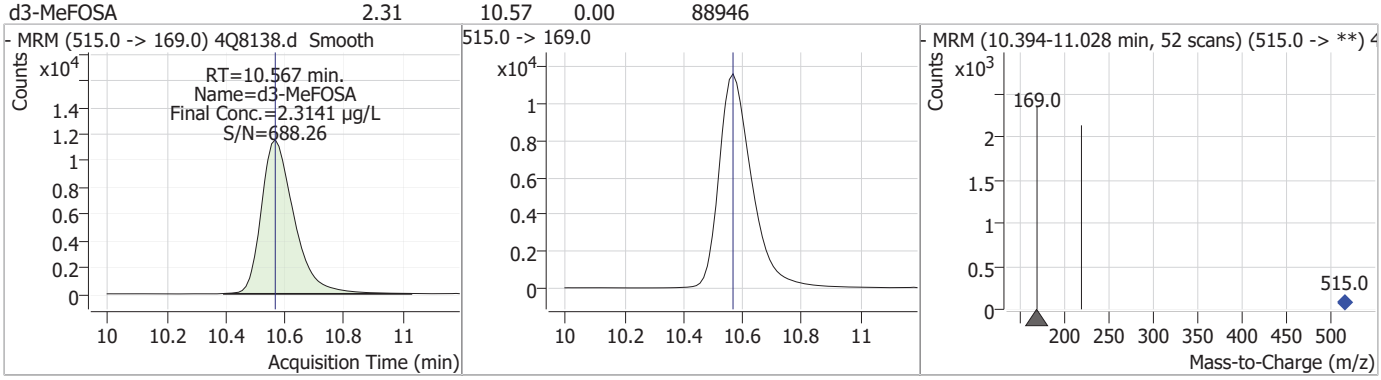




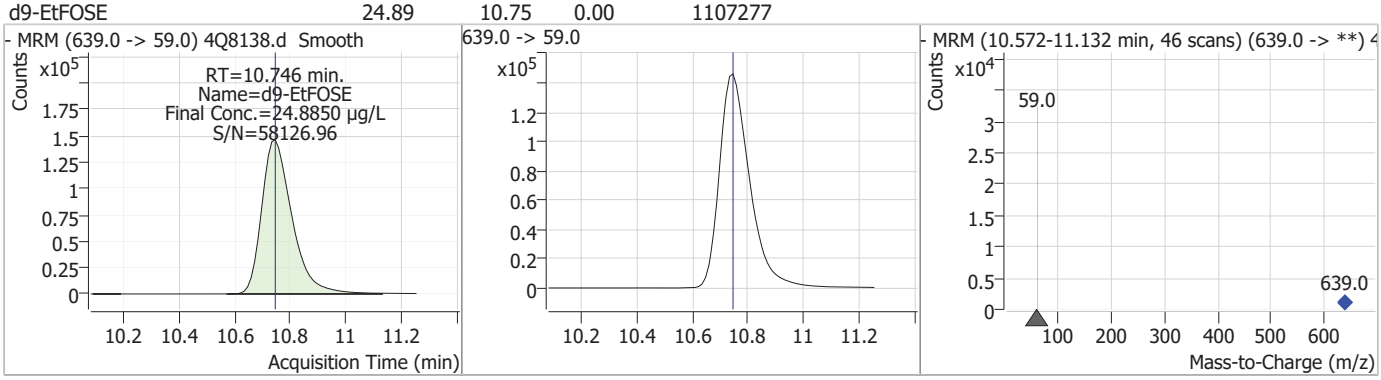


Perfluorinated Compounds by LC/MS/MS

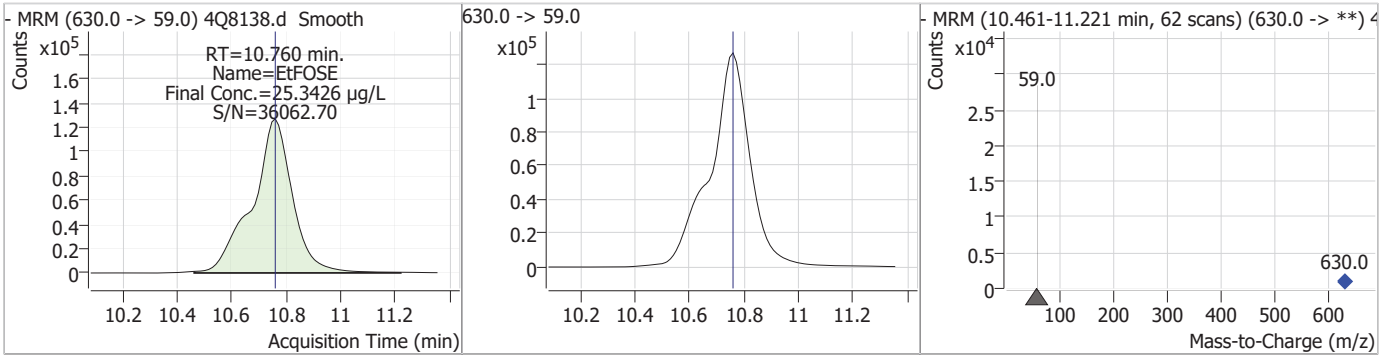
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.31	10.57	0.00	88946				



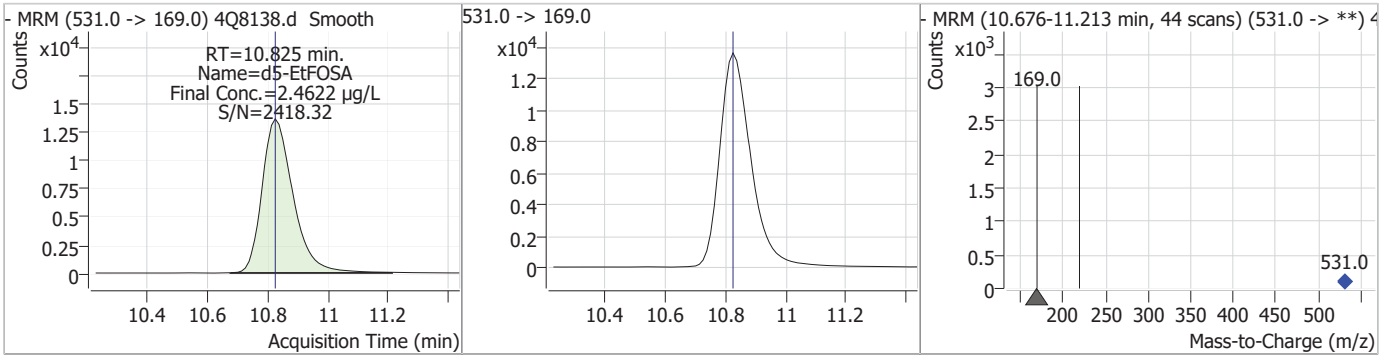
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.89	10.75	0.00	1107277				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.34	10.76	0.00	1305274				

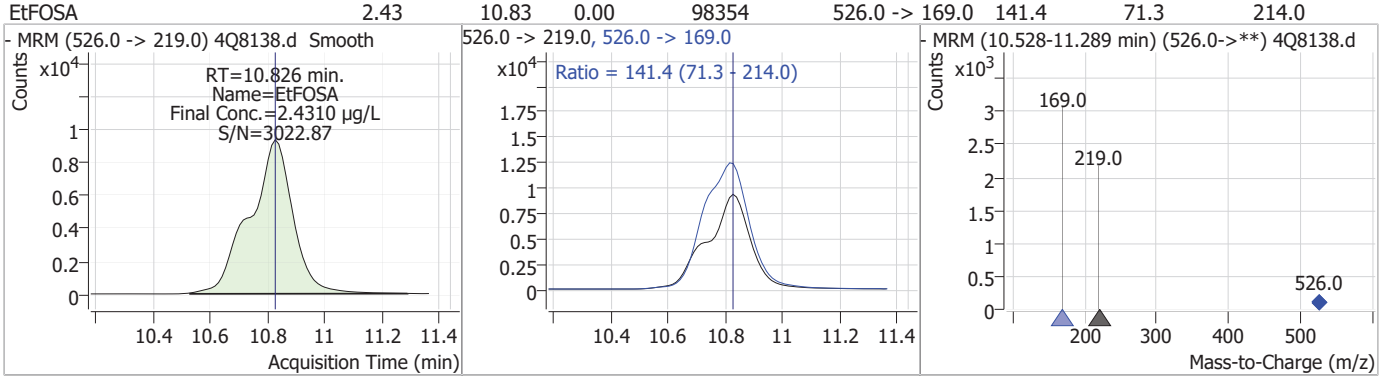


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.46	10.82	0.00	97524				



Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.43	10.83	0.00	98354	526.0 -> 169.0	141.4	71.3	214.0



7.6.53

7

Manual Integration Approval Summary

Sample Number: T4Q138-CC138
Lab FileID: 4Q8138.D
Injection Time: 04/30/25 16:45
Method: EPA 1633
Analyst approved: 04/30/25 23:06 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.93	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8139.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 4:58:49 PM
Sample Name : CC138-1.0 LL
Vial : P1-A2
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63077,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.883	217.0 -> 172.0	822336	10.00	µg/L	0.000
M5-PFPeA	4.307	268.0 -> 223.0	445932	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	302785	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	309906	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	462861	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	191558	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	177756	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	238142	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	206560	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	163834	1.25	µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	169980	2.50	µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	26770	2.50	µg/L	-0.012
		302.0 -> 80.0	65511			
M3-PFHxS	6.986	402.0 -> 99.0	36335	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	41400	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	11988	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	24568	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	27913	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	222757	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	459531	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	175882	5.00	µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	861565	25.00	µg/L	0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1045387	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	92114	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	87218	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	66906	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	360232	5.00	µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	41605	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	467382	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	164878	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	184110	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	281391	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	11988	5.75	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 114.9%		
13C2-6:2FTS	6.684	429.0 -> 81.0	24568	5.43	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.5%		
13C2-8:2FTS	7.671	529.0 -> 81.0	27913	5.24	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.8%		
13C2-PFDoDA	8.666	615.0 -> 570.0	206560	1.16	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.7%		
13C2-PFTeDA	9.381	715.0 -> 670.0	163834	1.20	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.7%		
13C3-PFBS	5.355	302.0 -> 99.0	26770	2.61	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.3%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	36335	2.50	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.0%			
13C4-PFBA	2.883	217.0 -> 172.0	822336	9.96	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.6%			
13C4-PFHpA	6.291	367.0 -> 322.0	309906	2.45	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.9%			
13C5-PFHxA	5.452	318.0 -> 273.0	302785	2.54	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.7%			
13C5-PFPeA	4.307	268.0 -> 223.0	445932	4.93	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.7%			
13C6-PFDA	7.858	519.0 -> 474.0	177756	1.22	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.6%			
13C7-PFUnDA	8.273	570.0 -> 525.0	238142	1.22	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.9%			
13C8-FOSA	9.291	506.0 -> 78.0	169980	2.47	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.9%			
13C8-PFOA	6.897	421.0 -> 376.0	462861	2.48	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.1%			
13C8-PFOS	7.995	507.0 -> 99.0	41400	2.57	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.8%			
13C9-PFNA	7.403	472.0 -> 427.0	191558	1.25	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.4%			
d3-MeFOSAA	7.915	573.0 -> 419.0	222757	5.06	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.1%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	459531	9.82	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.2%			
d3-MeFOSA	10.567	515.0 -> 169.0	87218	2.47	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.8%			
d5-EtFOSAA	8.098	589.0 -> 419.0	175882	5.20	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.0%			
d7-MeFOSE	10.475	623.0 -> 59.0	861565	25.57	µg/L		0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 102.3%			
d9-EtFOSE	10.746	639.0 -> 59.0	1045387	25.58	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 102.3%			
d5-EtFOSA	10.825	531.0 -> 169.0	92114	2.53	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.3%			
Target Compounds							**QValue**
4:2FTS	5.154	327.0 -> 307.0	13477	0.61	µg/L		92
		327.0 -> 81.0	7063				
6:2FTS	6.684	427.0 -> 407.0	15732	0.64	µg/L		99
		427.0 -> 81.0	7299				
8:2FTS	7.671	527.0 -> 507.0	15160	0.69	µg/L		87
		527.0 -> 81.0	6935				
EtFOSAA	8.111	584.0 -> 419.0	5551	0.17	µg/L	m	88
		584.0 -> 483.0	2649				
FOSA	9.281	498.0 -> 78.0	11615	0.19	µg/L	m	97
		498.0 -> 478.0	238				
MeFOSAA	7.929	570.0 -> 419.0	6984	0.18	µg/L	m	96
		570.0 -> 512.0	2387				
PFBA	2.877	213.0 -> 169.0	17641	0.70	µg/L		100
PFBS	5.357	299.0 -> 80.0	4541	0.15	µg/L		98
		299.0 -> 99.0	1918				
PFDA	7.859	513.0 -> 469.0	24163	0.18	µg/L		95
		513.0 -> 219.0	5054				
PFDoDA	8.667	613.0 -> 569.0	27077	0.17	µg/L		98
		613.0 -> 319.0	3705				

Perfluorinated Compounds by LC/MS/MS

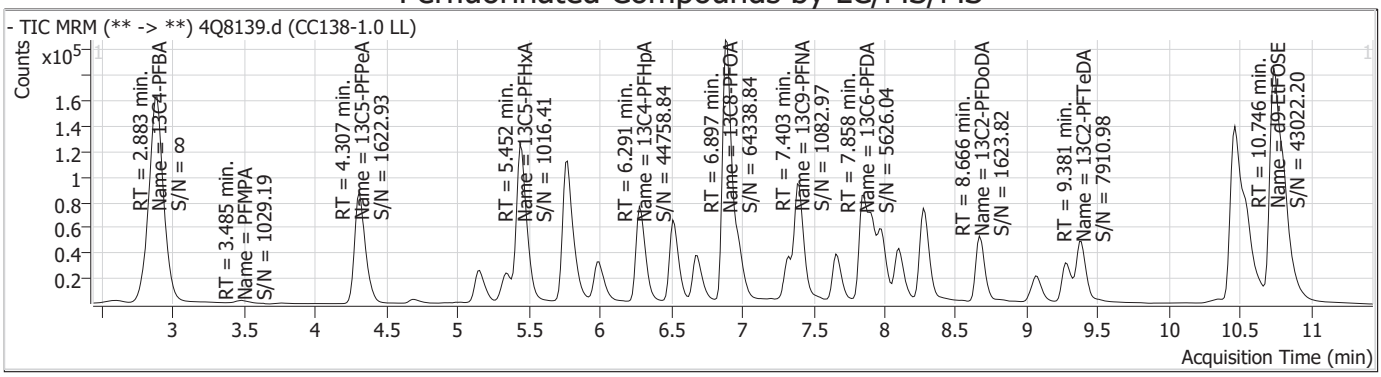
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	3580	0.17	µg/L		100
		599.0 -> 99.0	2034				
PFHpA	6.292	363.0 -> 319.0	31099	0.16	µg/L		99
		363.0 -> 169.0	6330				
PFHpS	7.529	449.0 -> 80.0	4855	0.15	µg/L		94
		449.0 -> 99.0	2865				
PFHxA	5.455	313.0 -> 269.0	22326	0.17	µg/L	m	99
		313.0 -> 119.0	834				
PFHxS	6.987	399.0 -> 80.0	5416	0.17	µg/L	m	98
		399.0 -> 99.0	2819				
PFNA	7.404	463.0 -> 419.0	19308	0.17	µg/L	m	94
		463.0 -> 219.0	6529				
PFNS	8.425	549.0 -> 80.0	4173	0.15	µg/L		96
		549.0 -> 99.0	2575				
PFOA	6.898	413.0 -> 369.0	28582	0.19	µg/L	m	98
		413.0 -> 169.0	8014				
PFOS	7.996	499.0 -> 80.0	5323	0.16	µg/L	m	84
		499.0 -> 99.0	3353				
PFPeA	4.309	263.0 -> 219.0	23357	0.33	µg/L		100
PFPeS	6.318	349.0 -> 80.0	5068	0.15	µg/L		98
		349.0 -> 99.0	2499				
PFTeDA	9.381	713.0 -> 669.0	33280	0.17	µg/L		99
		713.0 -> 219.0	2324				
PFTrDA	9.038	663.0 -> 619.0	31364	0.18	µg/L		98
		663.0 -> 369.0	2141				
PFUnDA	8.275	563.0 -> 519.0	24819	0.18	µg/L	m	98
		563.0 -> 269.0	5251				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	55206	0.63	µg/L		98
		633.0 -> 453.0	16552				
9Cl-PF3ONS	8.301	531.0 -> 351.0	60137	0.63	µg/L		100
		533.0 -> 353.0	18366				
ADONA	6.527	377.0 -> 251.0	219353	0.61	µg/L		98
		377.0 -> 85.0	69060				
HFPO-DA	5.780	285.0 -> 169.0	34107	0.71	µg/L		99
		285.0 -> 185.0	3892				
3:3FTCA	3.756	241.0 -> 177.0	3370	0.80	µg/L		99
		241.0 -> 117.0	282				
5:3FTCA	5.993	341.0 -> 237.0	92558	4.01	µg/L		98
		341.0 -> 217.0	63240				
7:3FTCA	7.330	441.0 -> 337.0	120628	4.02	µg/L		98
		441.0 -> 317.0	52974				
EtFOSA	10.826	526.0 -> 219.0	6474	0.17	µg/L		99
		526.0 -> 169.0	9338				
EtFOSE	10.760	630.0 -> 59.0	84739	1.74	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	8267	0.18	µg/L		98
		512.0 -> 219.0	5565				
MeFOSE	10.488	616.0 -> 59.0	63560	1.68	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	2891	0.16	µg/L		96
		699.0 -> 99.0	1894				
NFDHA	5.333	295.0 -> 201.0	5392	0.31	µg/L		83
		201.0 -> 85.0	24359				
		295.0 -> 85.0	1559				
PFMBA	4.698	279.0 -> 85.0	15847	0.33	µg/L		100
PFMPA	3.485	229.0 -> 85.0	13955	0.35	µg/L		100
PFEESA	5.836	315.0 -> 135.0	34449	0.29	µg/L		98
		315.0 -> 69.0	2913				

Perfluorinated Compounds by LC/MS/MS

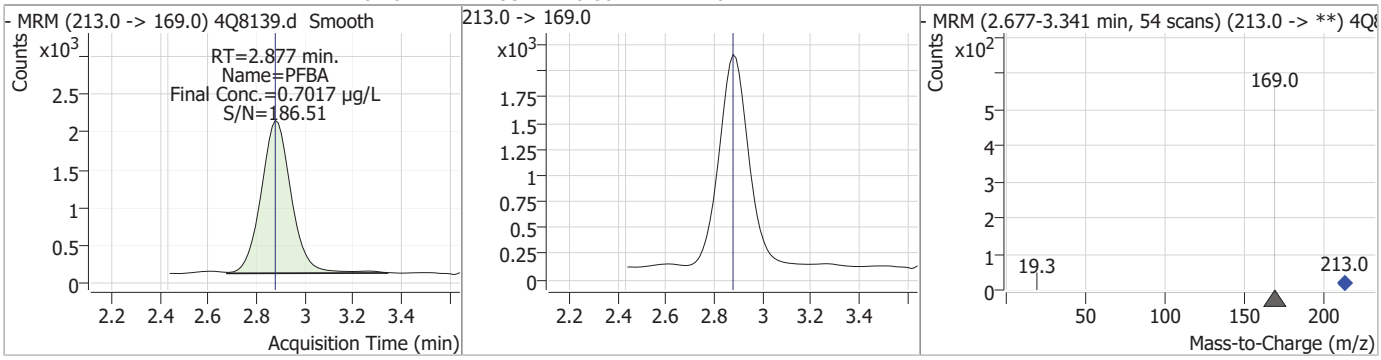
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

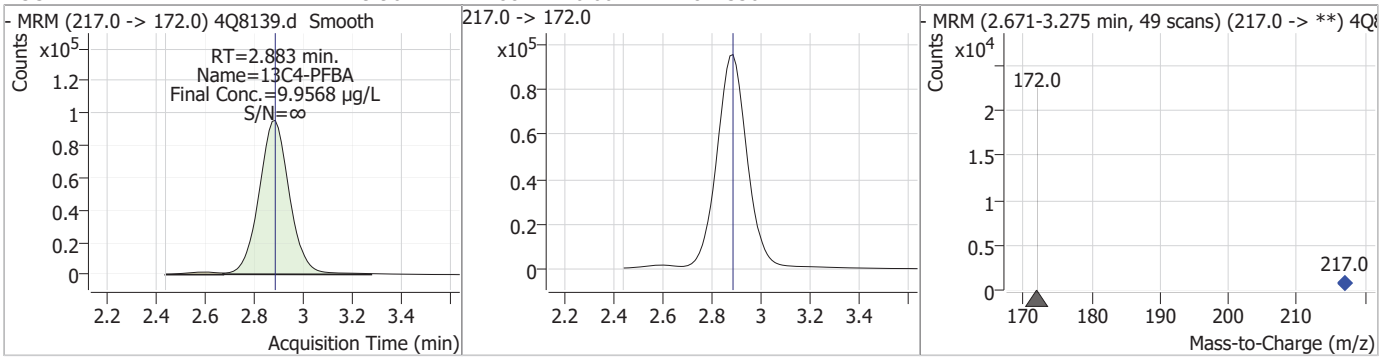
Perfluorinated Compounds by LC/MS/MS



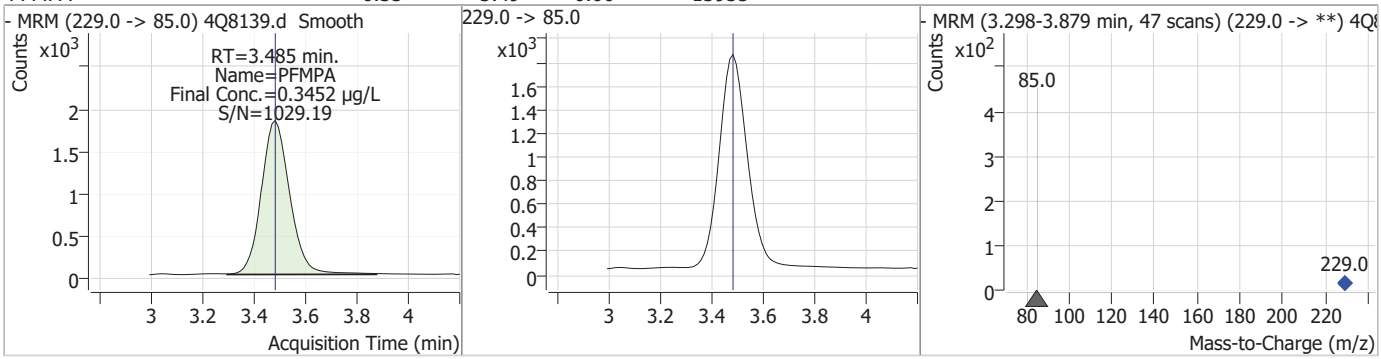
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.70	2.88	0.00	17641				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.96	2.88	0.00	822336				

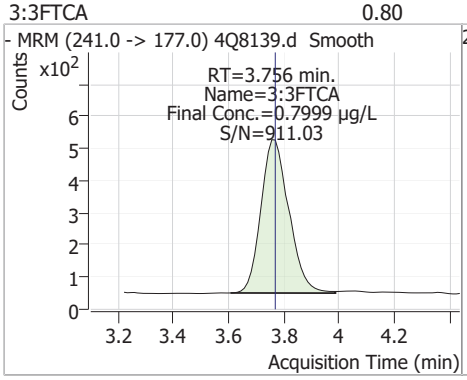


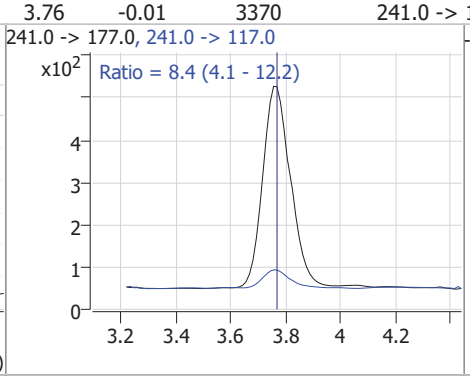
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.35	3.49	0.00	13955				

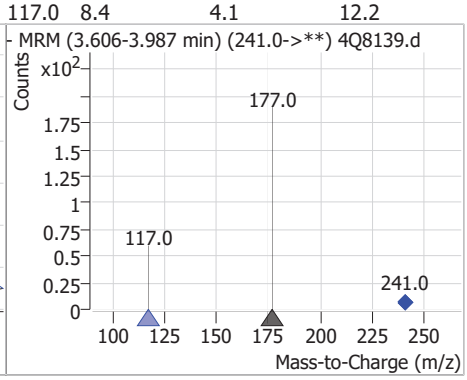


Perfluorinated Compounds by LC/MS/MS

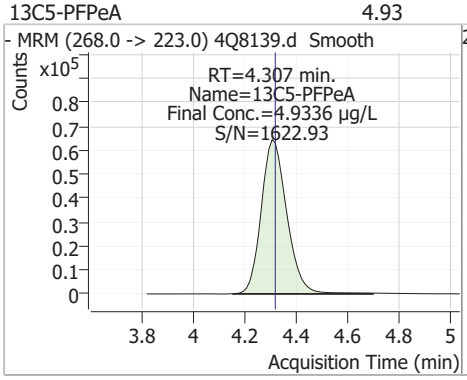
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	0.80	3.76	-0.01	3370	241.0 -> 117.0	8.4	4.1	12.2

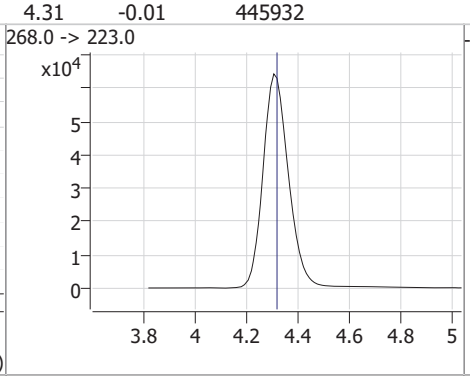


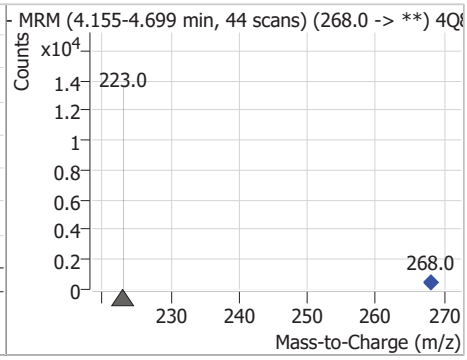




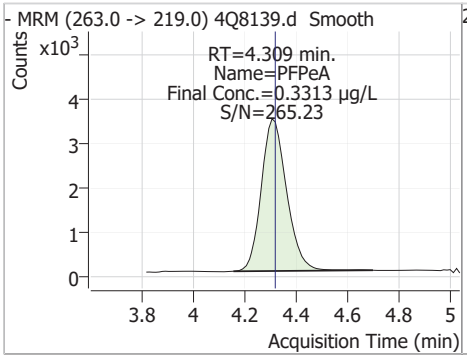
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.93	4.31	-0.01	445932				

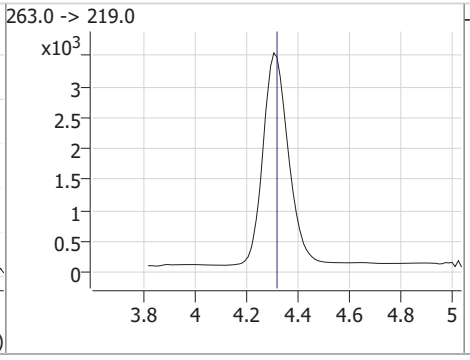


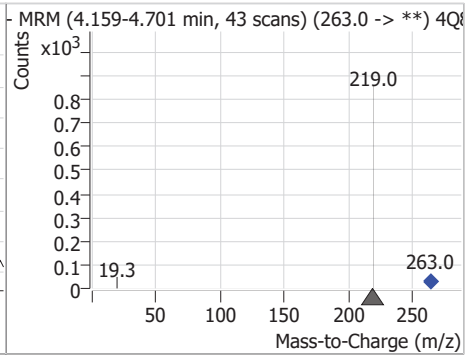




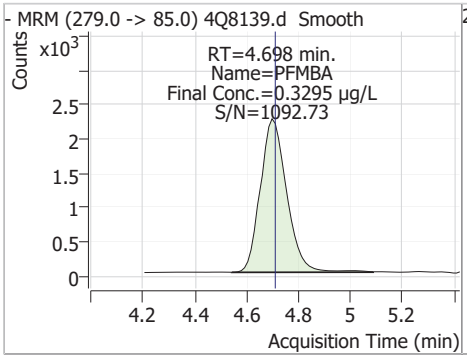
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.33	4.31	-0.01	23357				

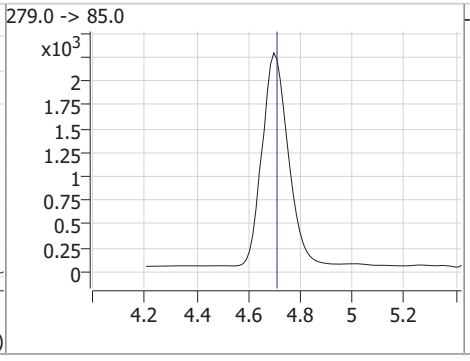


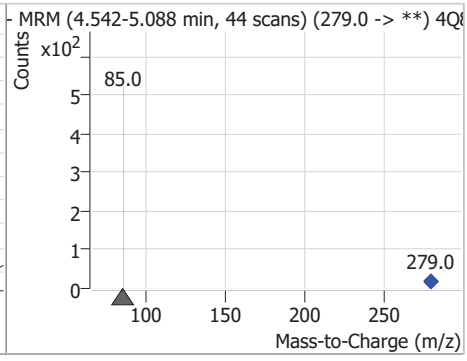




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.33	4.70	-0.01	15847				







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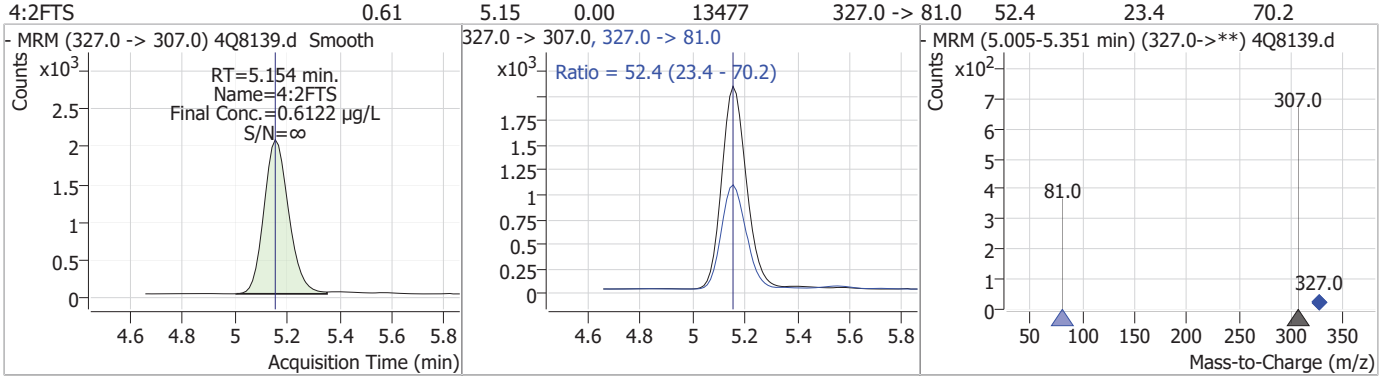
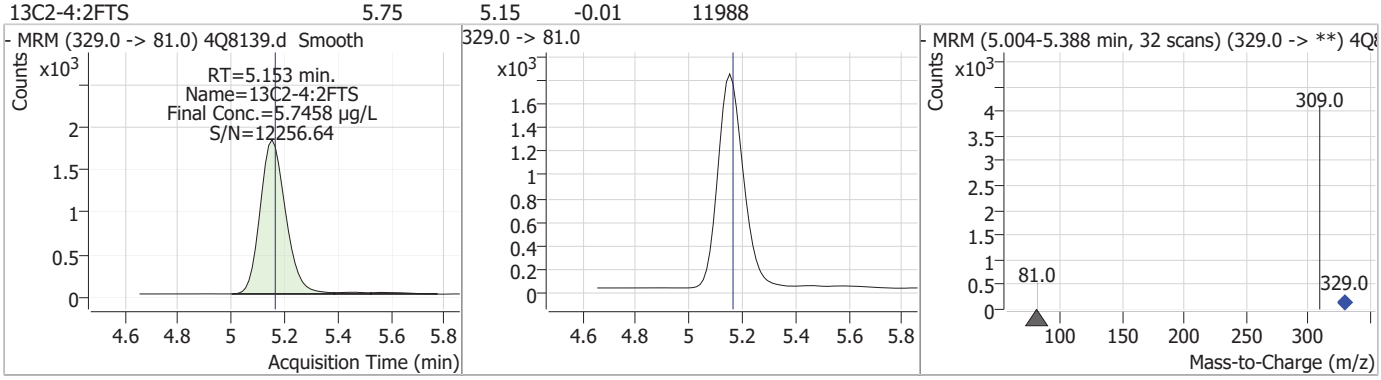
Perfluorinated Compounds by LC/MS/MS

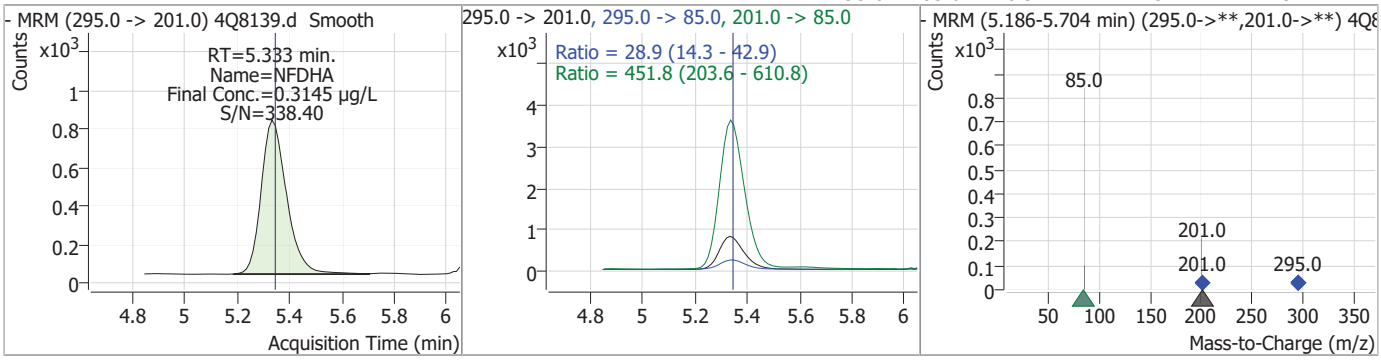
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	0.61	5.15	0.00	13477	327.0 -> 81.0	52.4	23.4	70.2



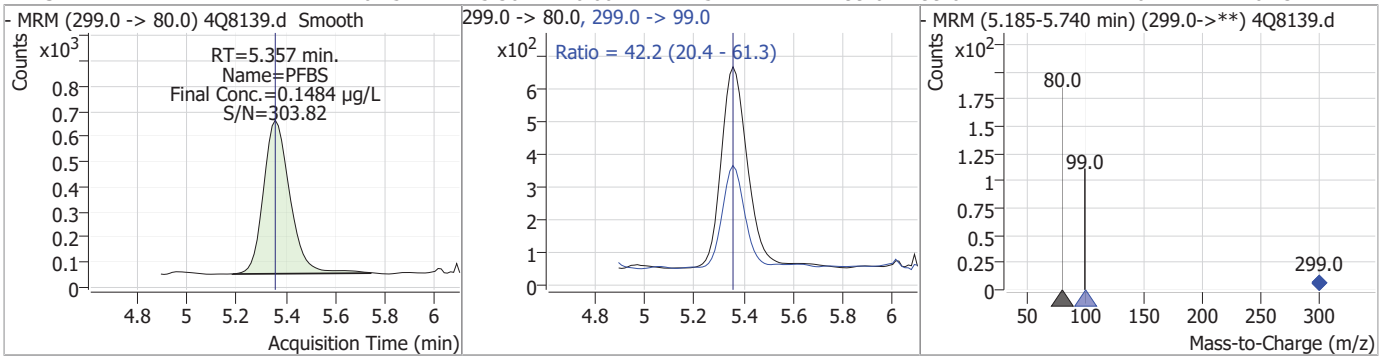
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.75	5.15	-0.01	11988				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.31	5.33	-0.01	5392	201.0 -> 85.0	451.8	203.6	610.8
					295.0 -> 85.0	28.9	14.3	42.9

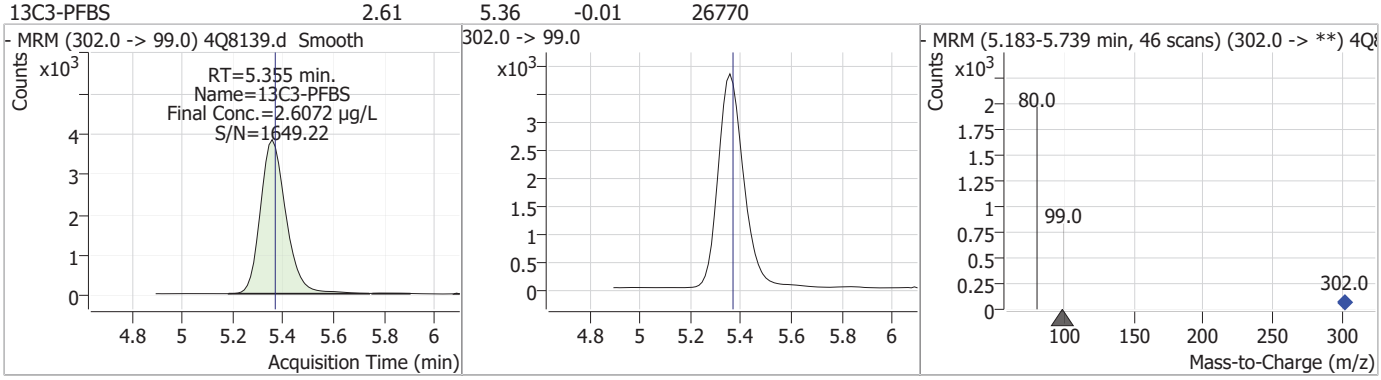


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.15	5.36	0.00	4541	299.0 -> 99.0	42.2	20.4	61.3

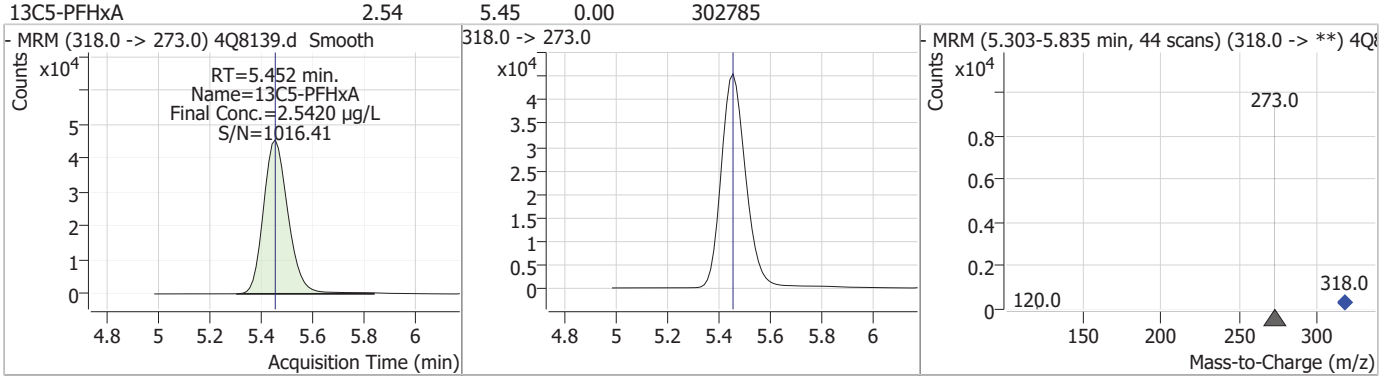


Perfluorinated Compounds by LC/MS/MS

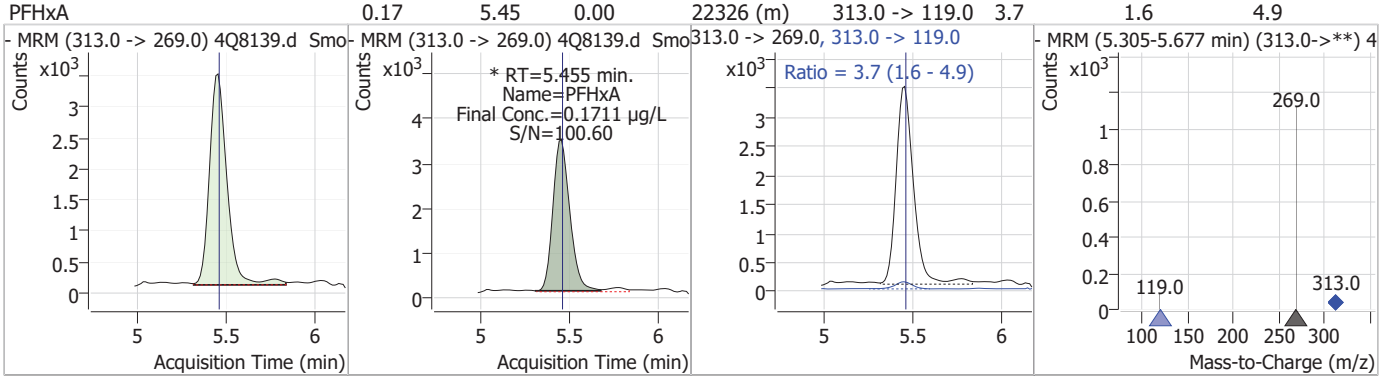
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.61	5.36	-0.01	26770				



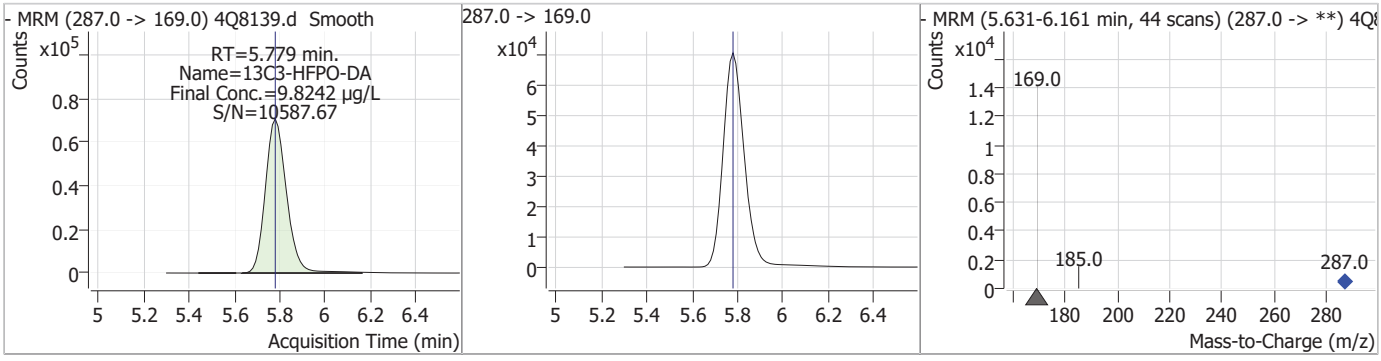
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.54	5.45	0.00	302785				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.17	5.45	0.00	22326 (m)	313.0 -> 119.0	3.7	1.6	4.9

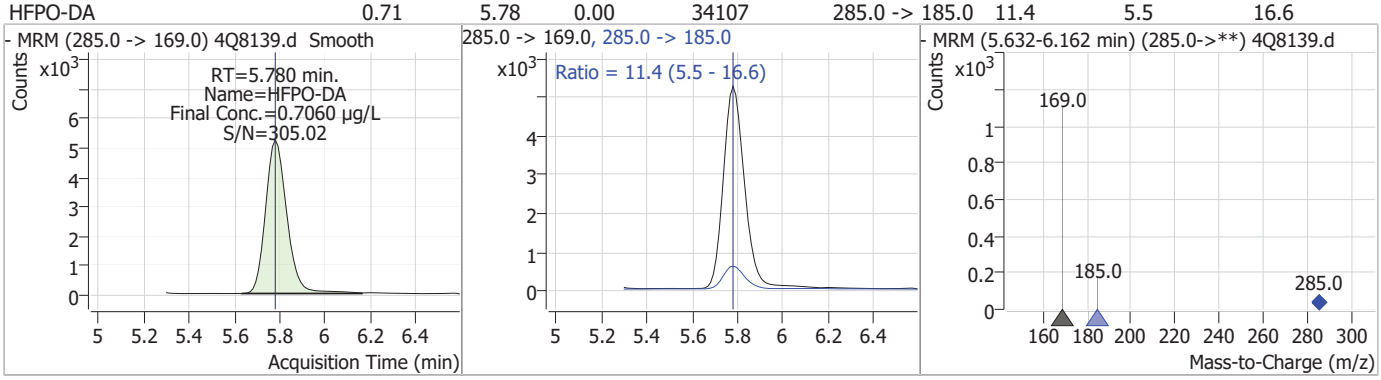


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.82	5.78	0.00	459531				

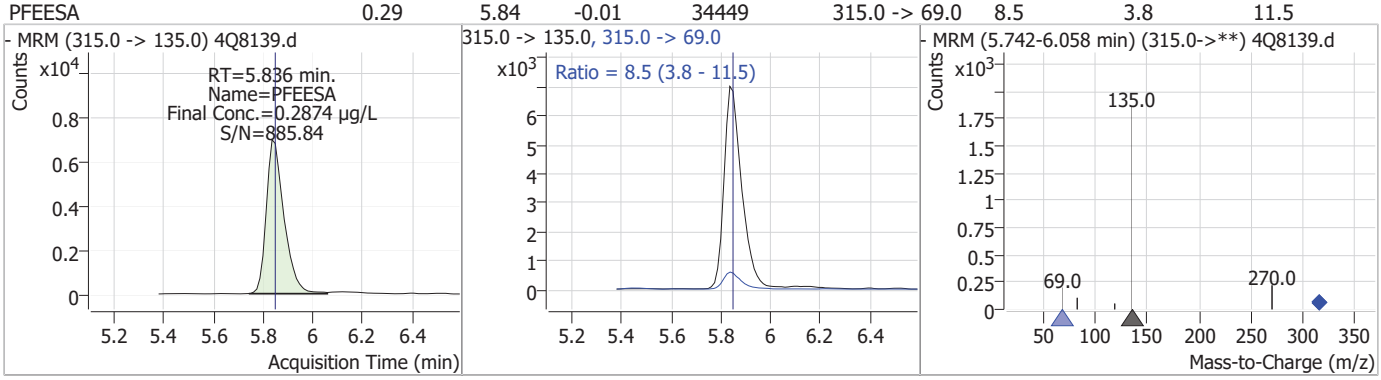


Perfluorinated Compounds by LC/MS/MS

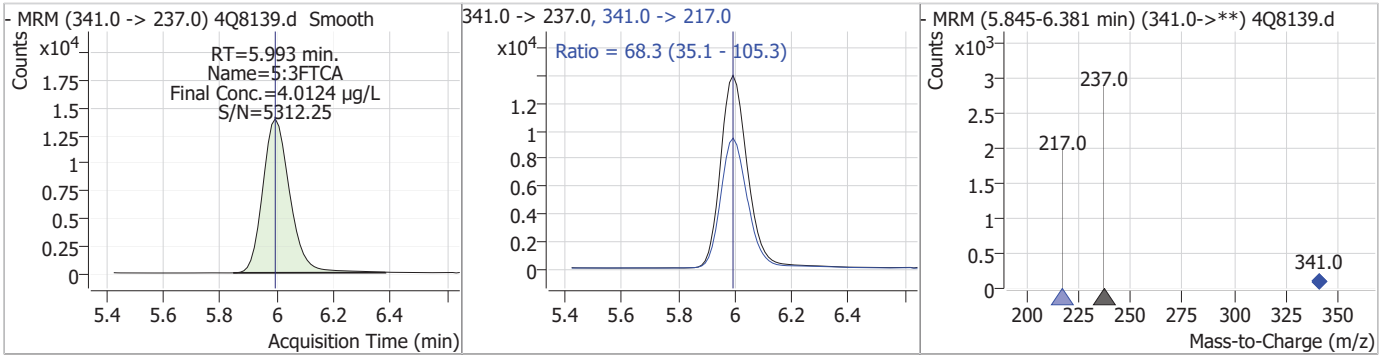
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	0.71	5.78	0.00	34107	285.0 -> 185.0	11.4	5.5	16.6



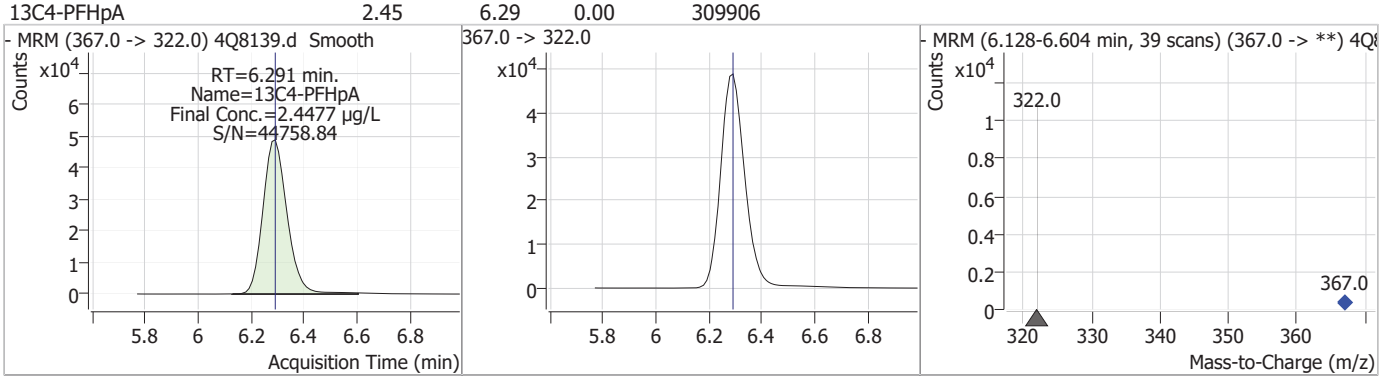
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.29	5.84	-0.01	34449	315.0 -> 69.0	8.5	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	4.01	5.99	0.00	92558	341.0 -> 217.0	68.3	35.1	105.3

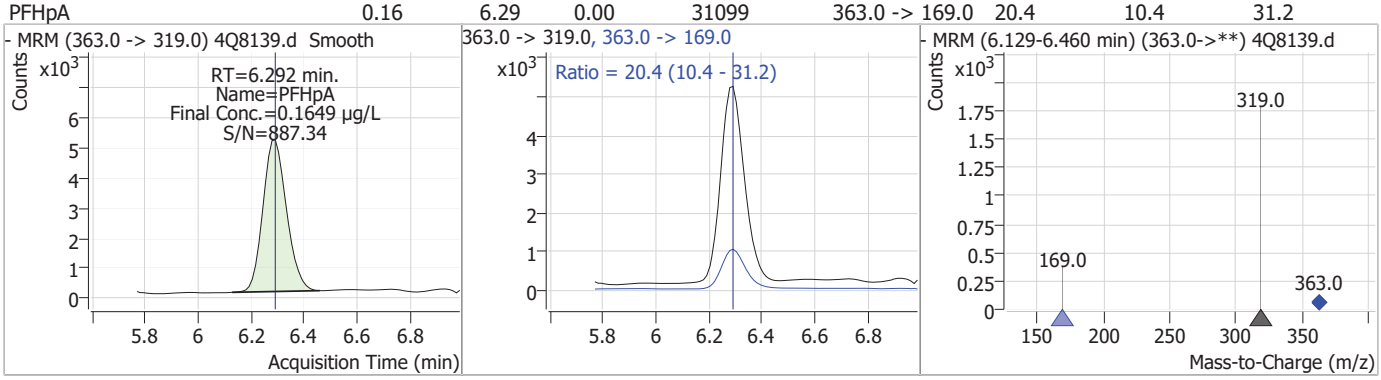


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.45	6.29	0.00	309906				

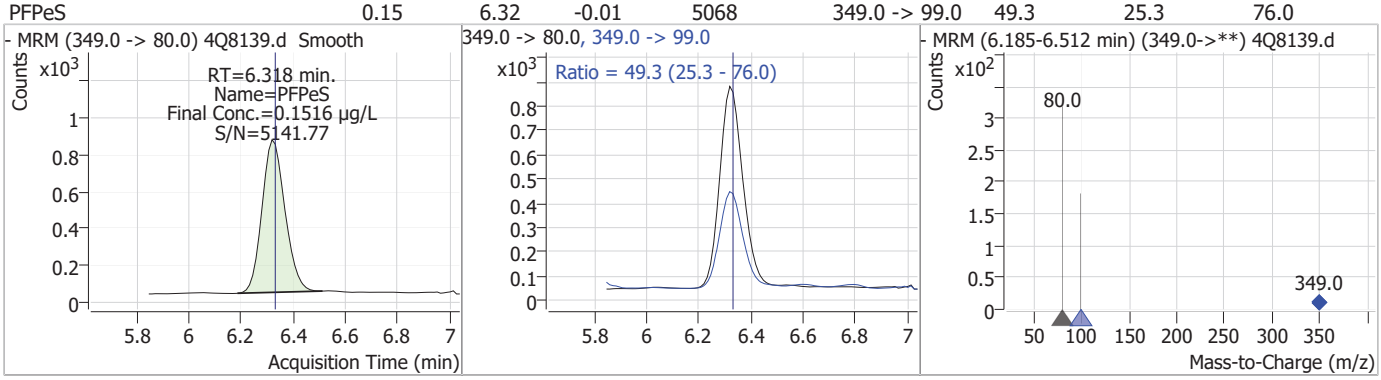


Perfluorinated Compounds by LC/MS/MS

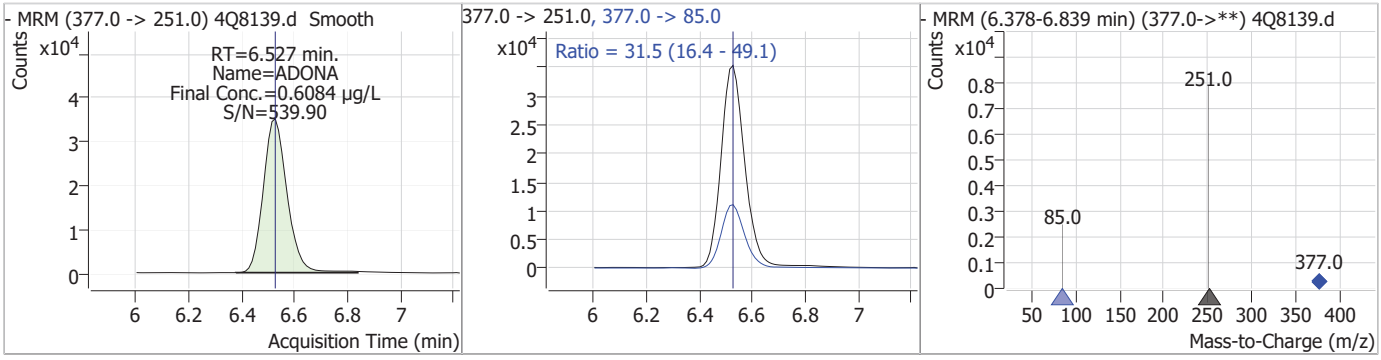
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.16	6.29	0.00	31099	363.0 -> 169.0	20.4	10.4	31.2



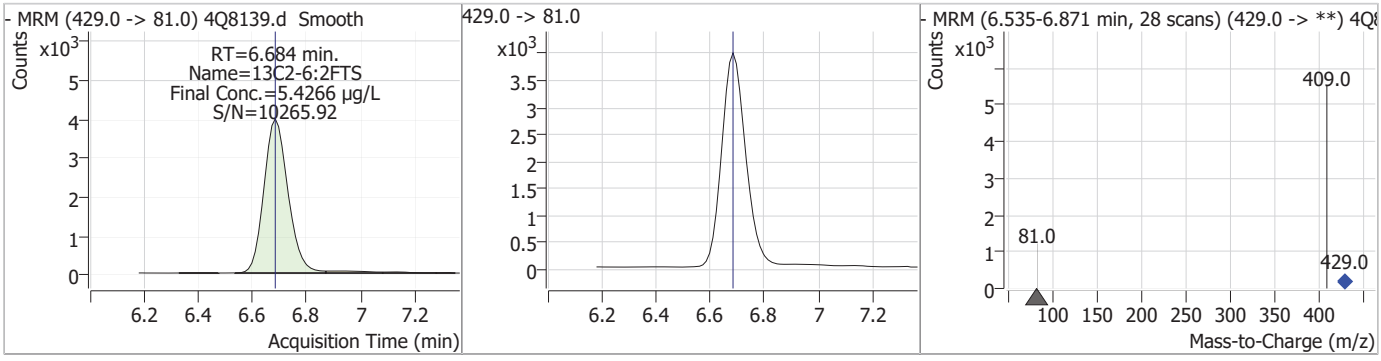
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.15	6.32	-0.01	5068	349.0 -> 99.0	49.3	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	0.61	6.53	0.00	219353	377.0 -> 85.0	31.5	16.4	49.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.43	6.68	0.00	24568				



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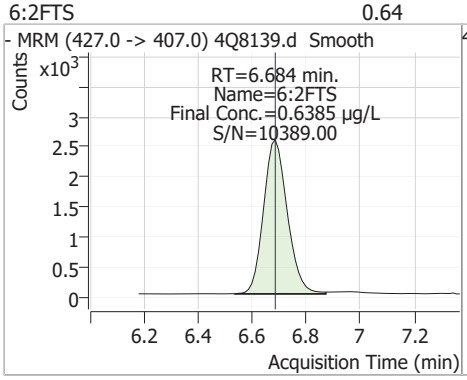
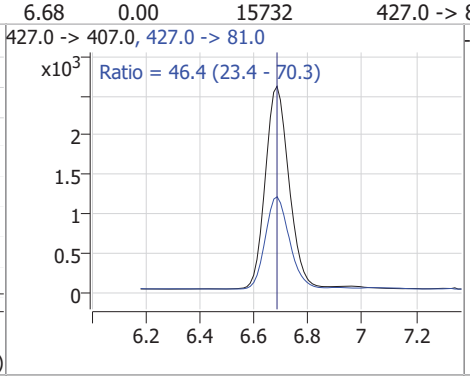
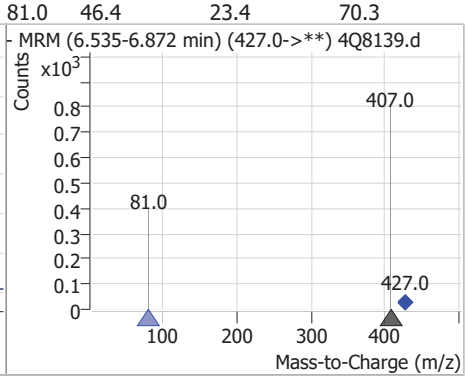
Perfluorinated Compounds by LC/MS/MS

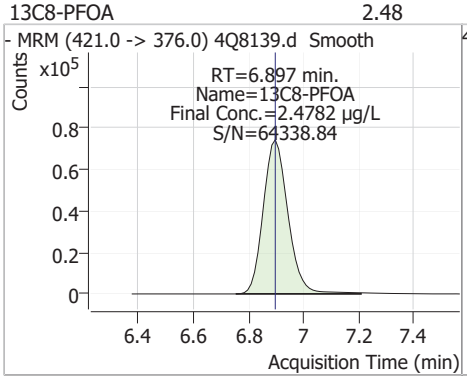
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.64	6.68	0.00	15732	427.0 -> 81.0	46.4	23.4	70.3

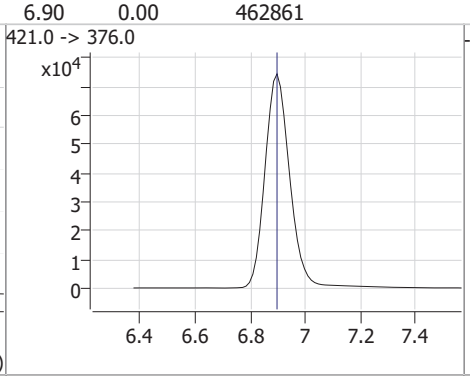


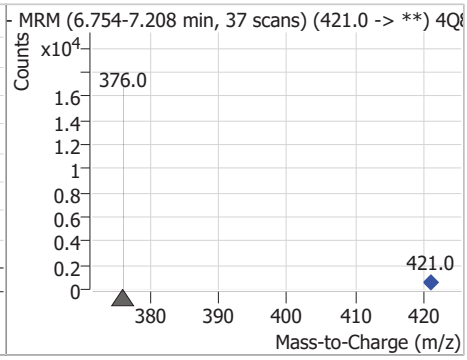




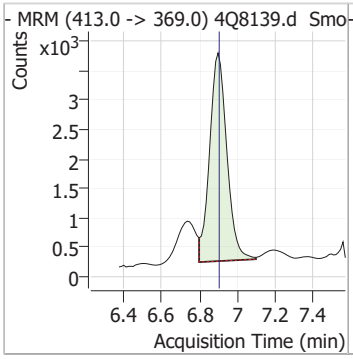
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.48	6.90	0.00	462861				

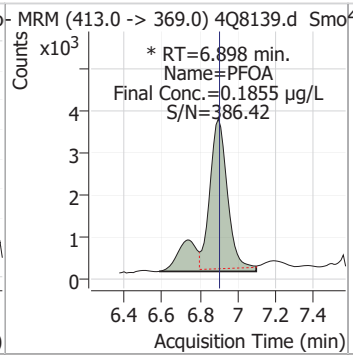


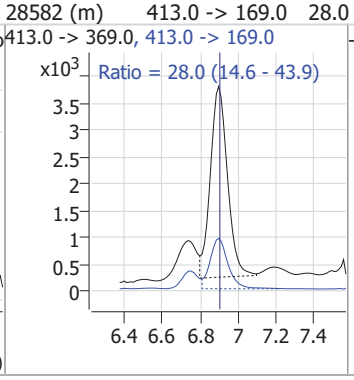


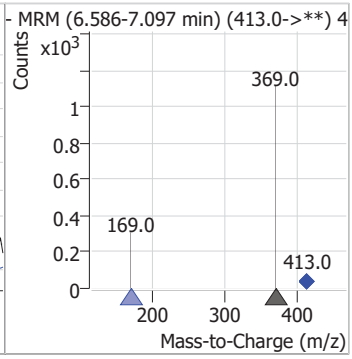


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.19	6.90	0.00	28582 (m)	413.0 -> 169.0	28.0	14.6	43.9

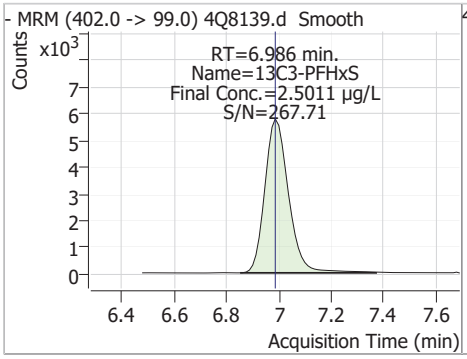


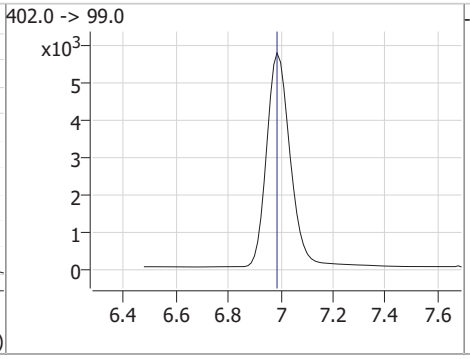


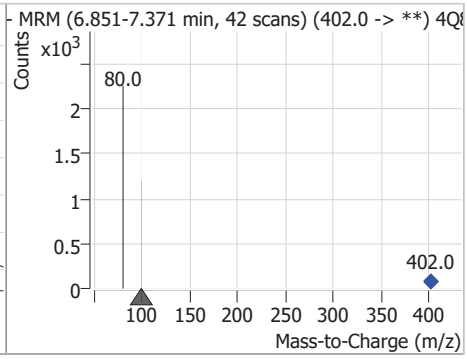




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.50	6.99	0.00	36335				

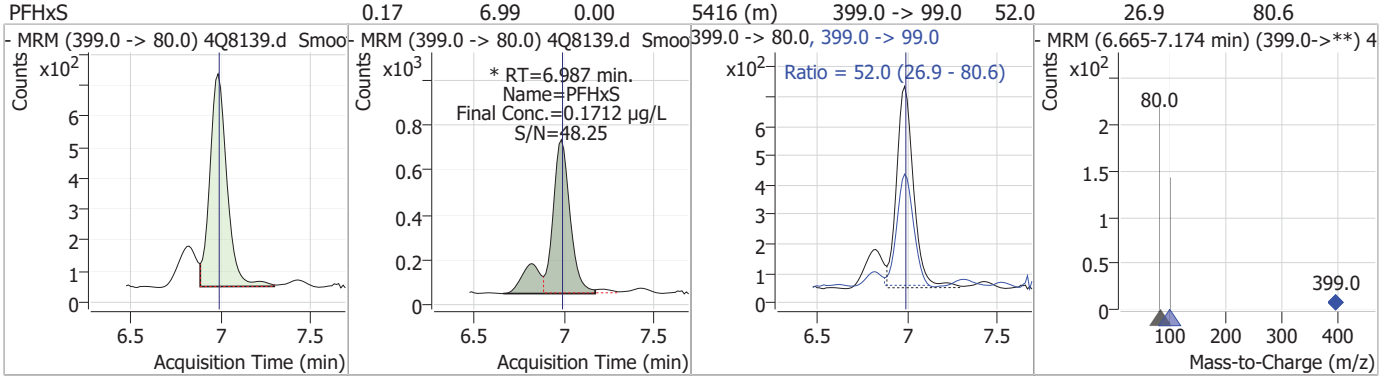




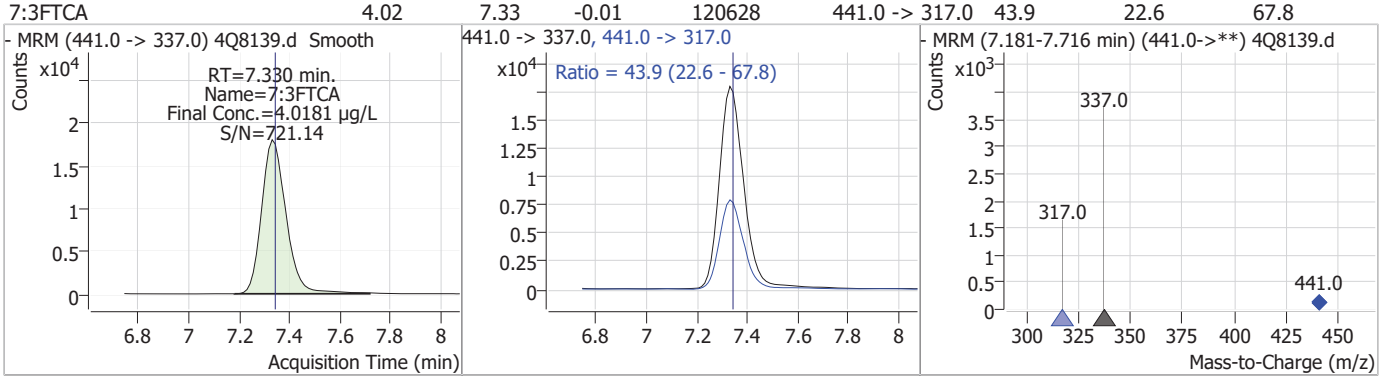


Perfluorinated Compounds by LC/MS/MS

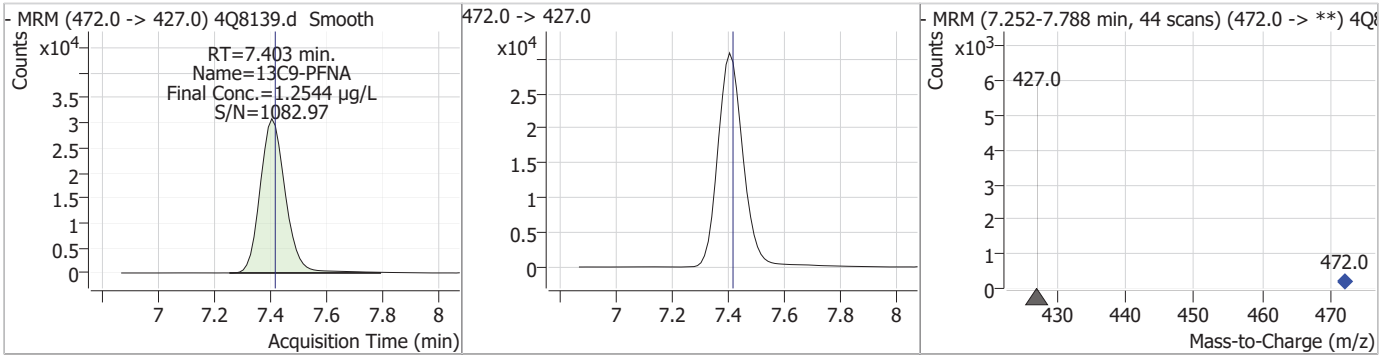
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.17	6.99	0.00	5416 (m)	399.0 -> 99.0	52.0	26.9	80.6



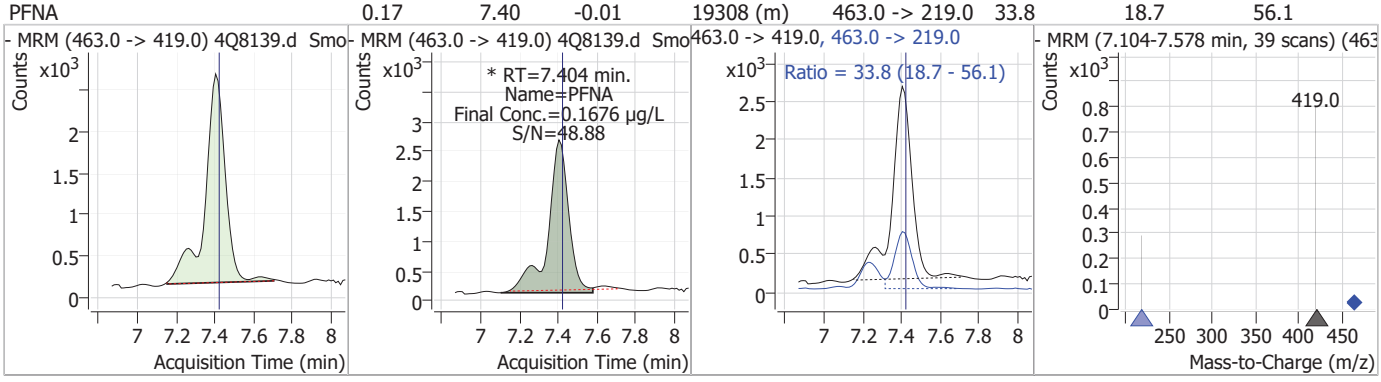
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	4.02	7.33	-0.01	120628	441.0 -> 317.0	43.9	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.25	7.40	-0.01	191558				

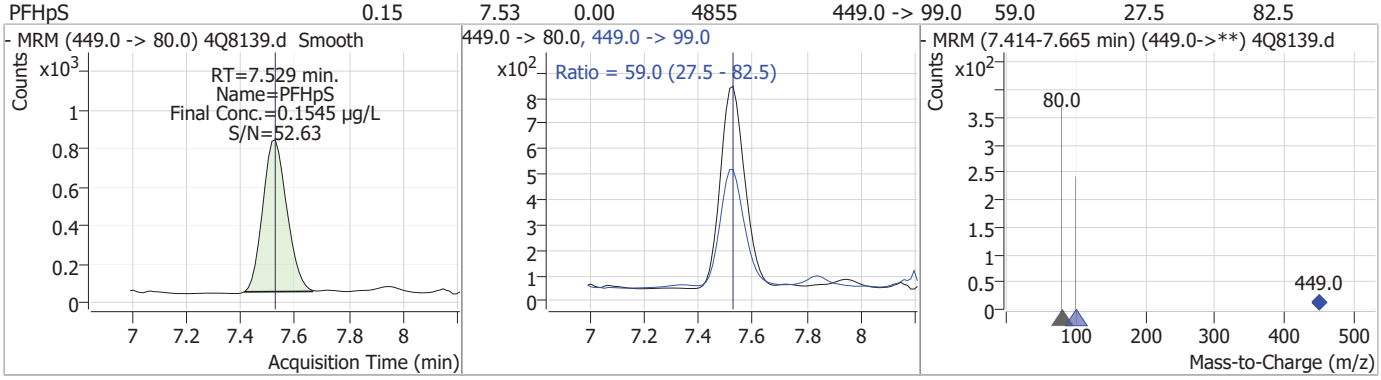


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.17	7.40	-0.01	19308 (m)	463.0 -> 219.0	33.8	18.7	56.1

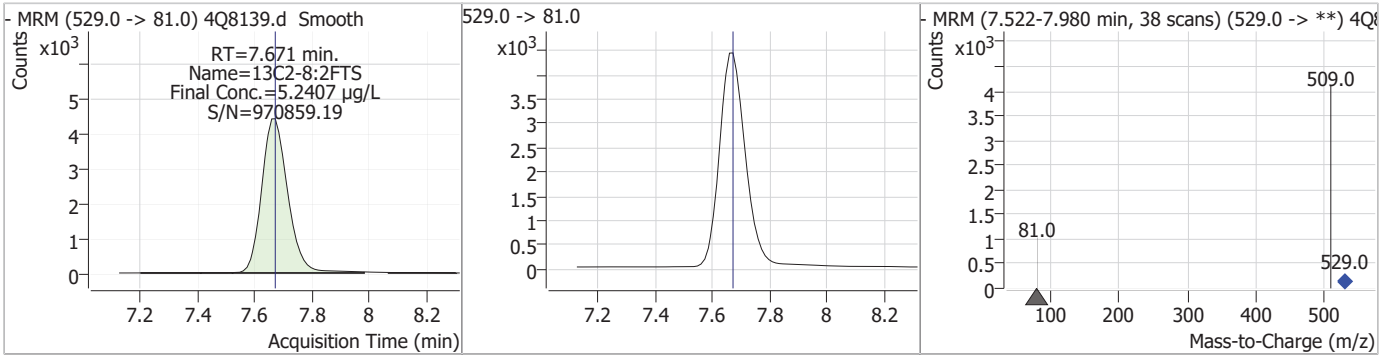


Perfluorinated Compounds by LC/MS/MS

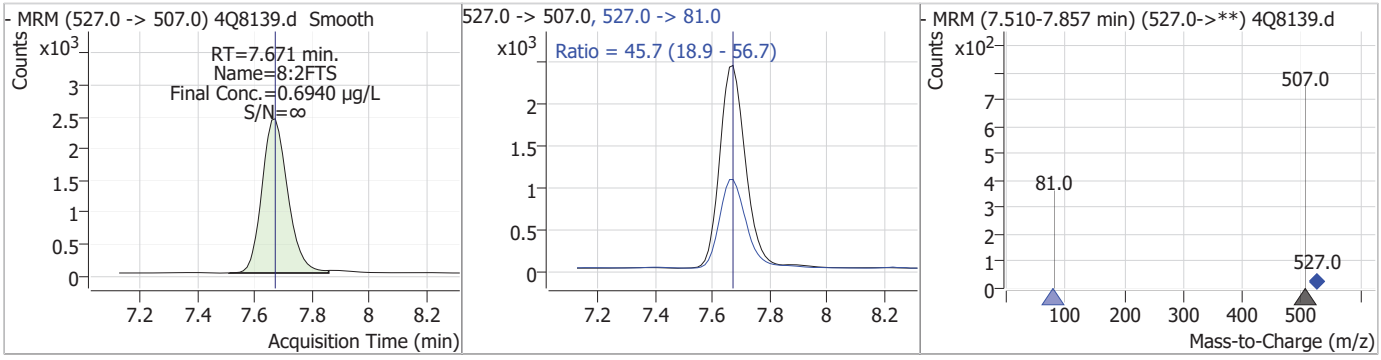
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.15	7.53	0.00	4855	449.0 -> 99.0	59.0	27.5	82.5



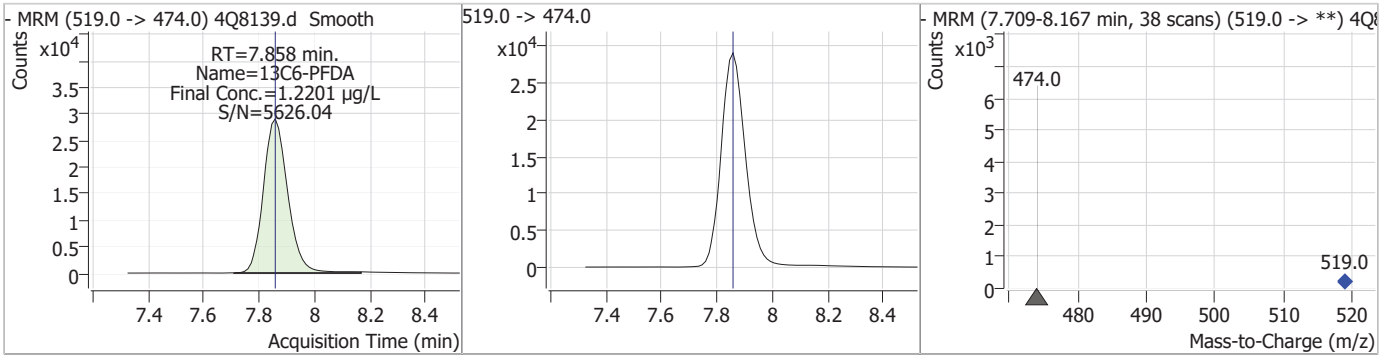
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.24	7.67	0.00	27913				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.69	7.67	0.00	15160	527.0 -> 81.0	45.7	18.9	56.7

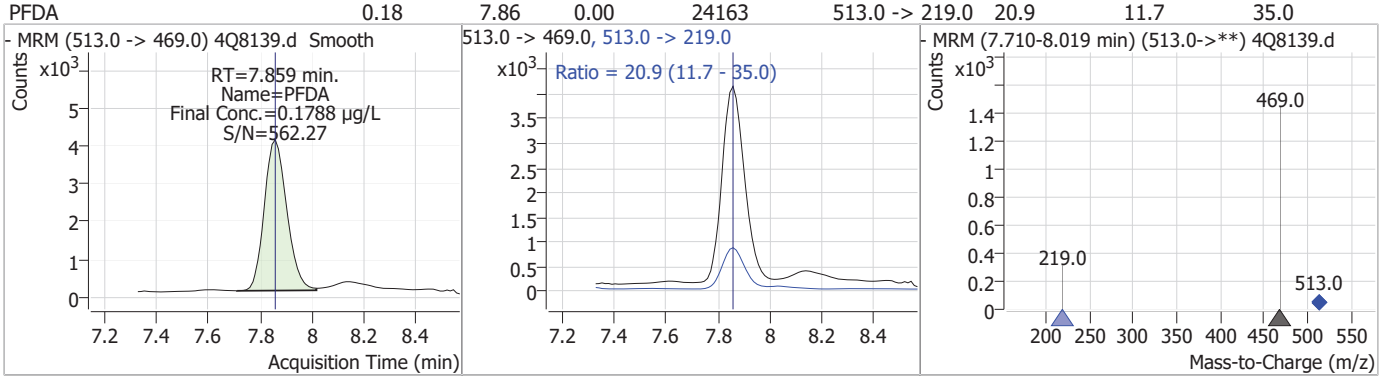


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.22	7.86	0.00	177756				

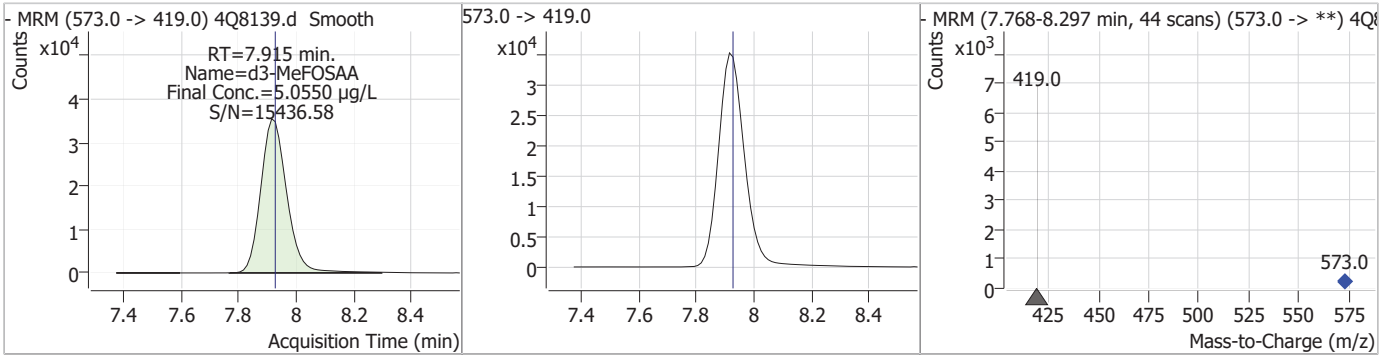


Perfluorinated Compounds by LC/MS/MS

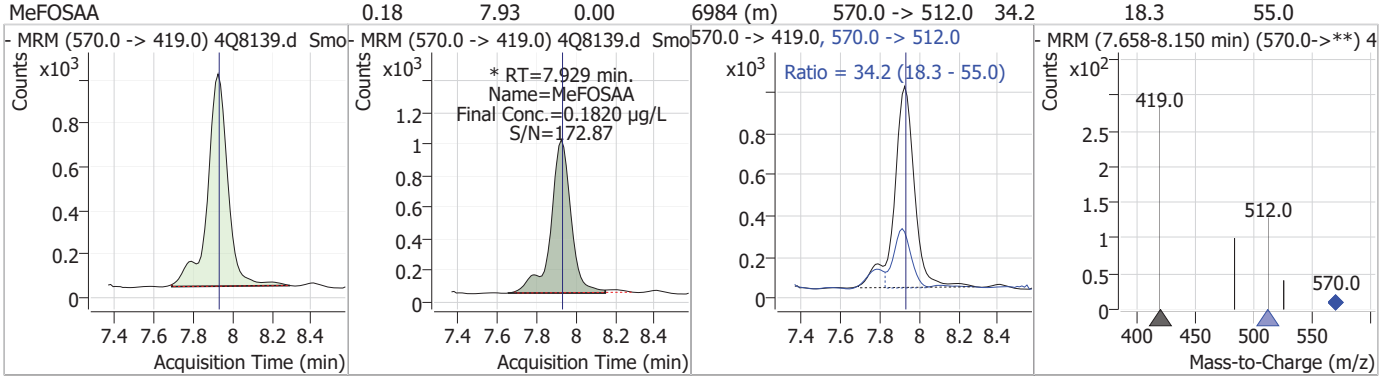
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.18	7.86	0.00	24163	513.0 -> 219.0	20.9	11.7	35.0



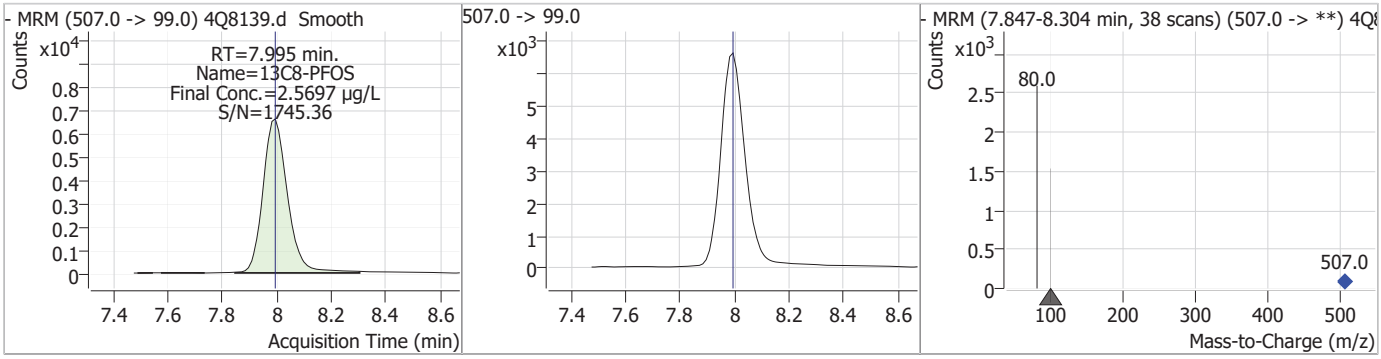
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.06	7.92	-0.01	222757				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.18	7.93	0.00	6984 (m)	570.0 -> 512.0	34.2	18.3	55.0

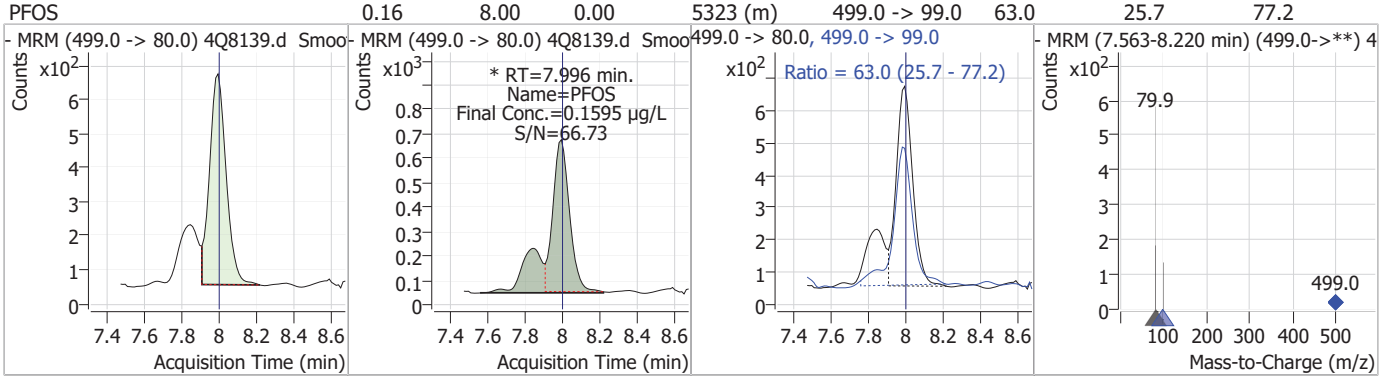


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.57	7.99	0.00	41400				

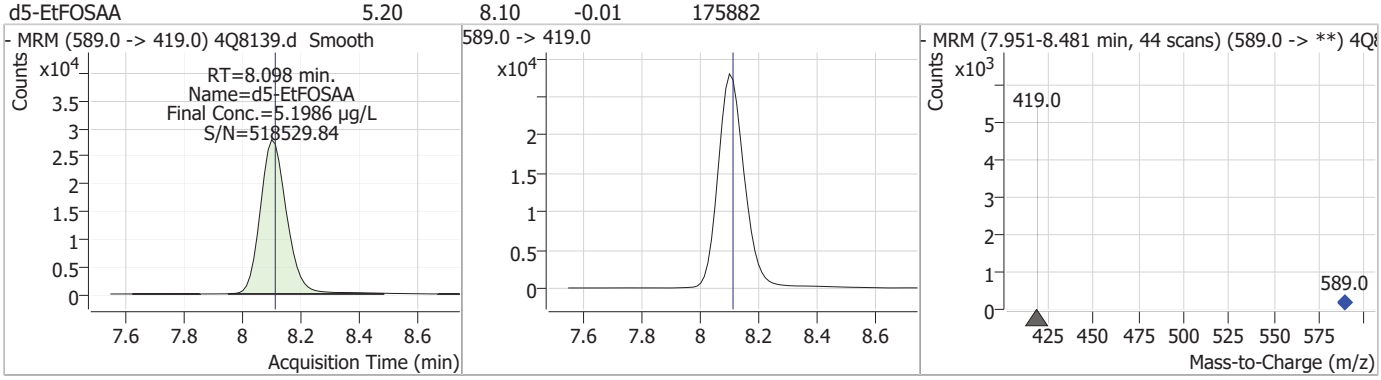


Perfluorinated Compounds by LC/MS/MS

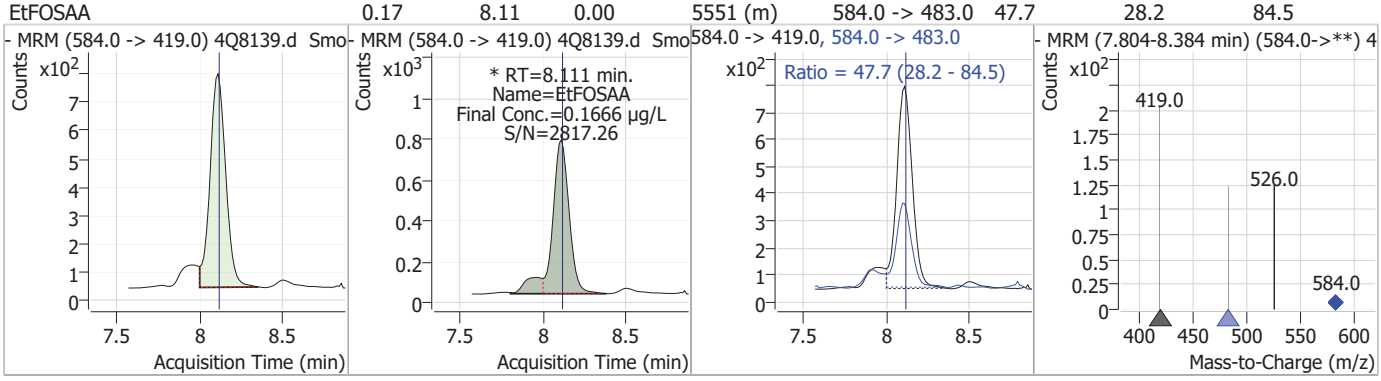
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.16	8.00	0.00	5323 (m)	499.0 -> 99.0	63.0	25.7	77.2



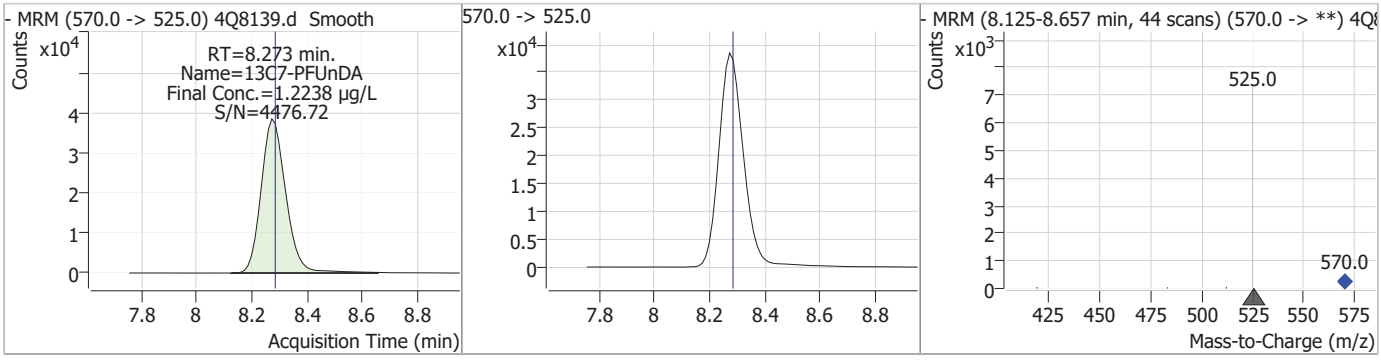
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.20	8.10	-0.01	175882				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.17	8.11	0.00	5551 (m)	584.0 -> 483.0	47.7	28.2	84.5

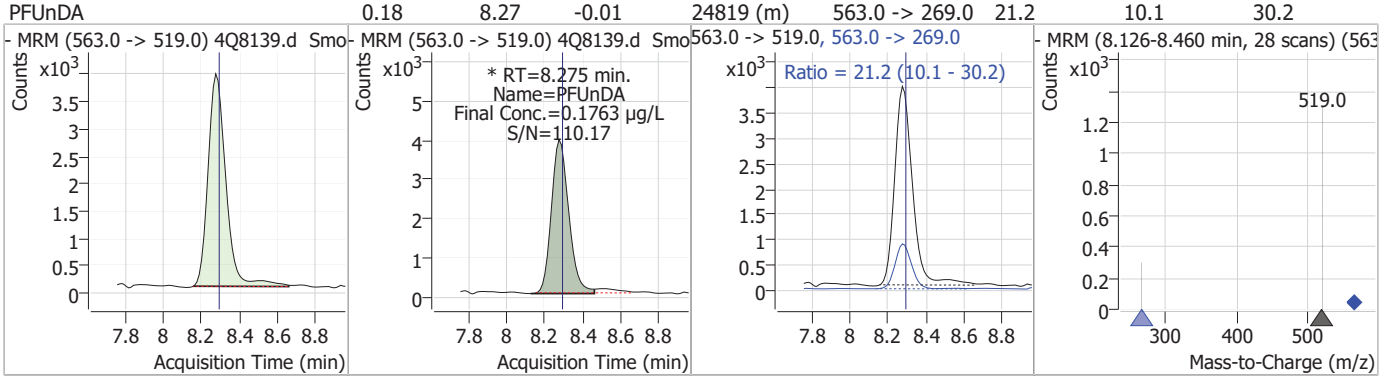


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.22	8.27	-0.01	238142				

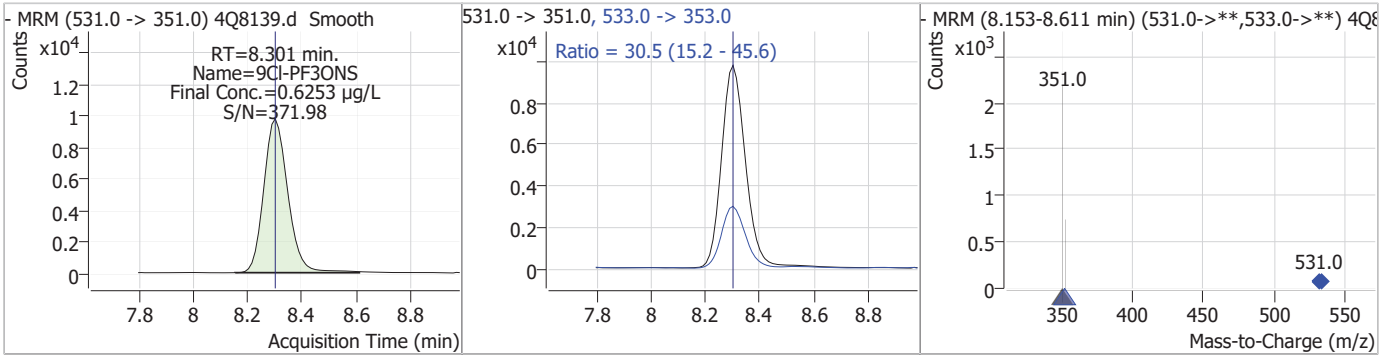


Perfluorinated Compounds by LC/MS/MS

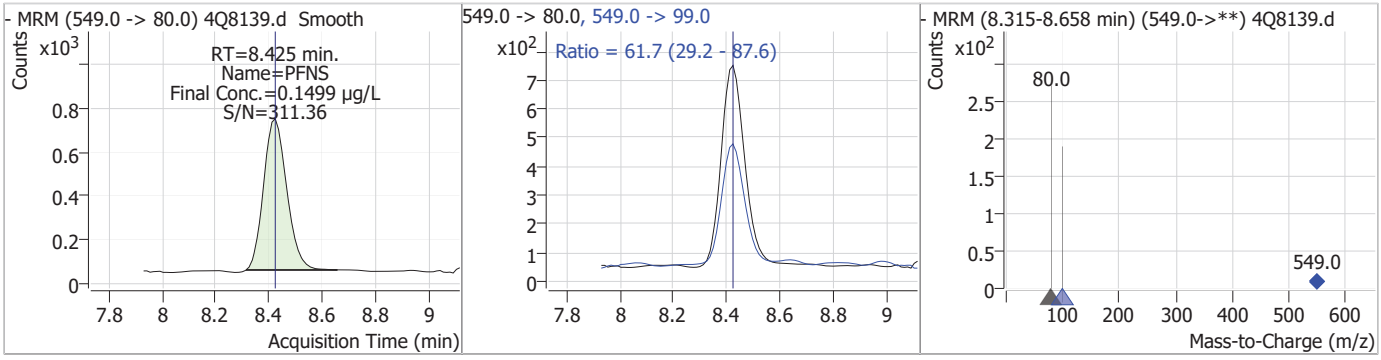
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.18	8.27	-0.01	24819 (m)	563.0 -> 269.0	21.2	10.1	30.2



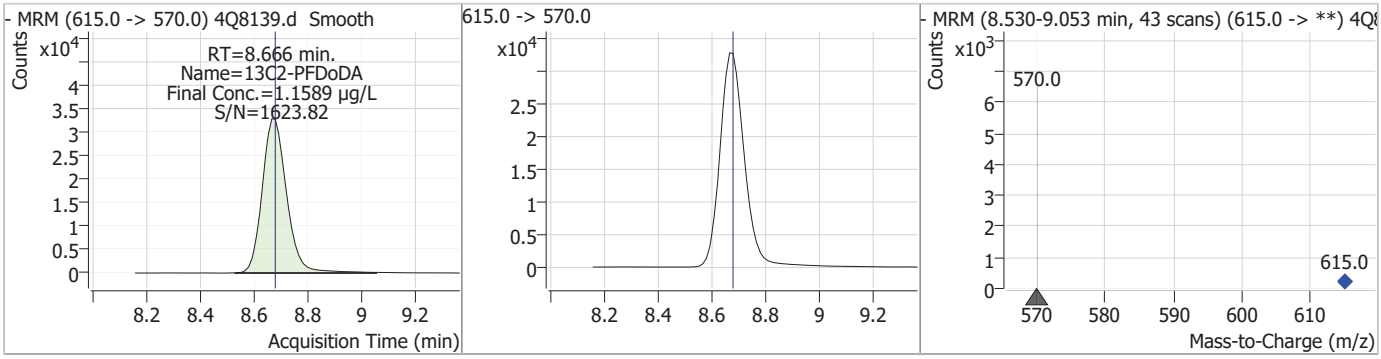
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	0.63	8.30	0.00	60137	533.0 -> 353.0	30.5	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.15	8.42	0.00	4173	549.0 -> 99.0	61.7	29.2	87.6

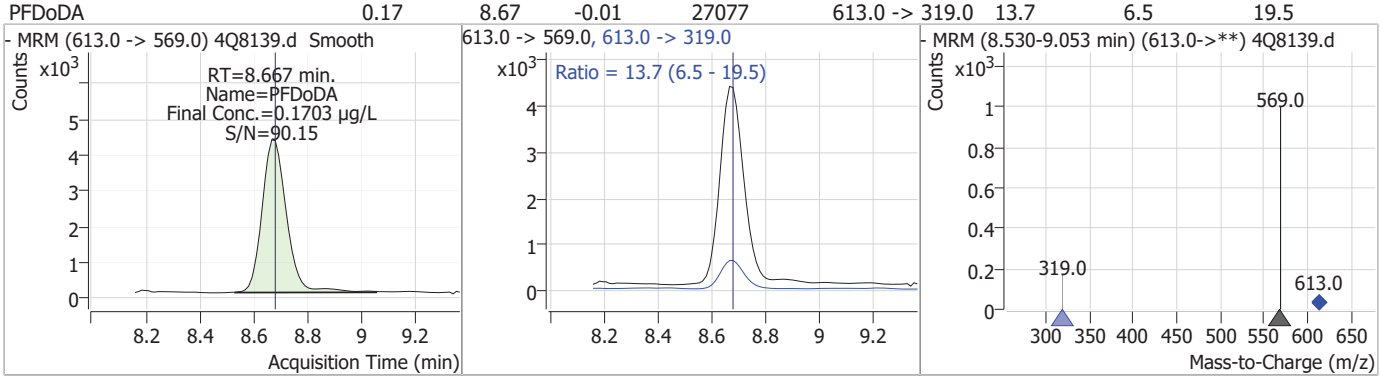


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.16	8.67	-0.01	206560				

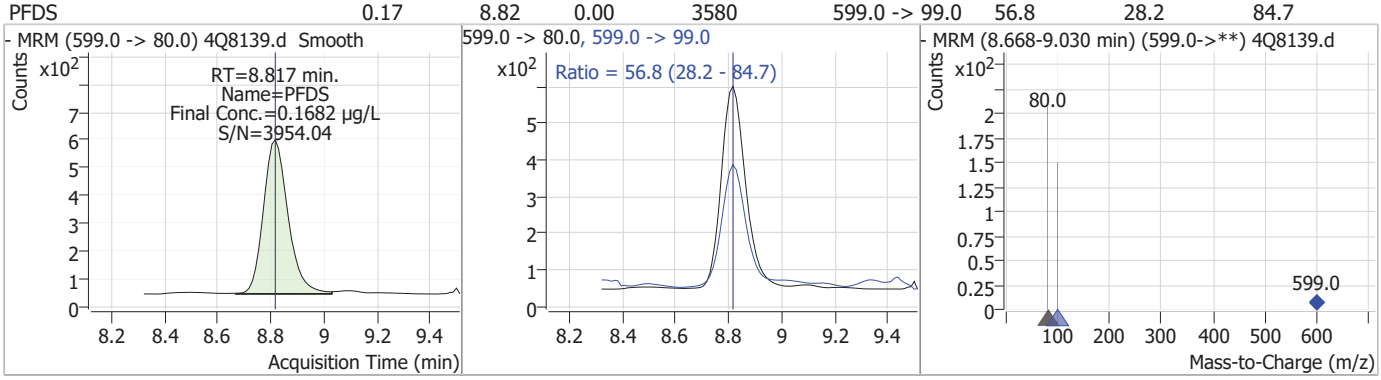


Perfluorinated Compounds by LC/MS/MS

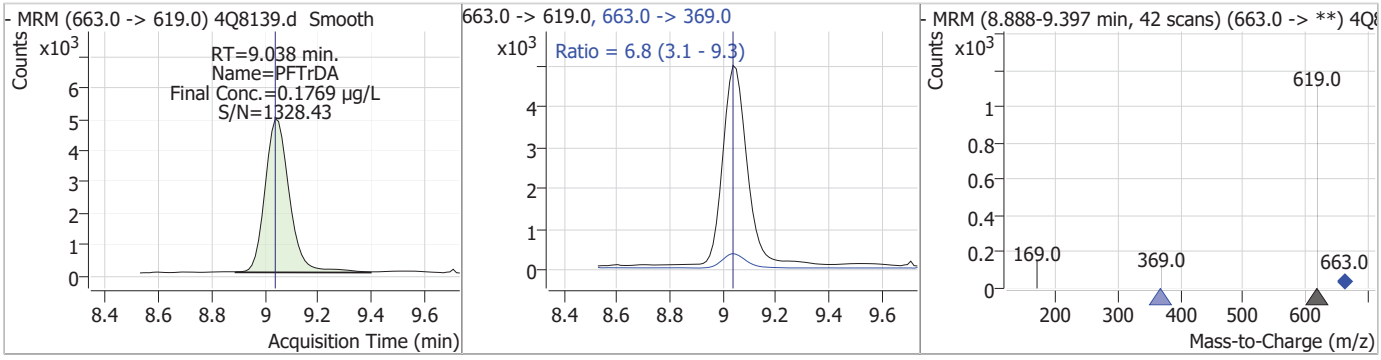
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.17	8.67	-0.01	27077	613.0 -> 319.0	13.7	6.5	19.5



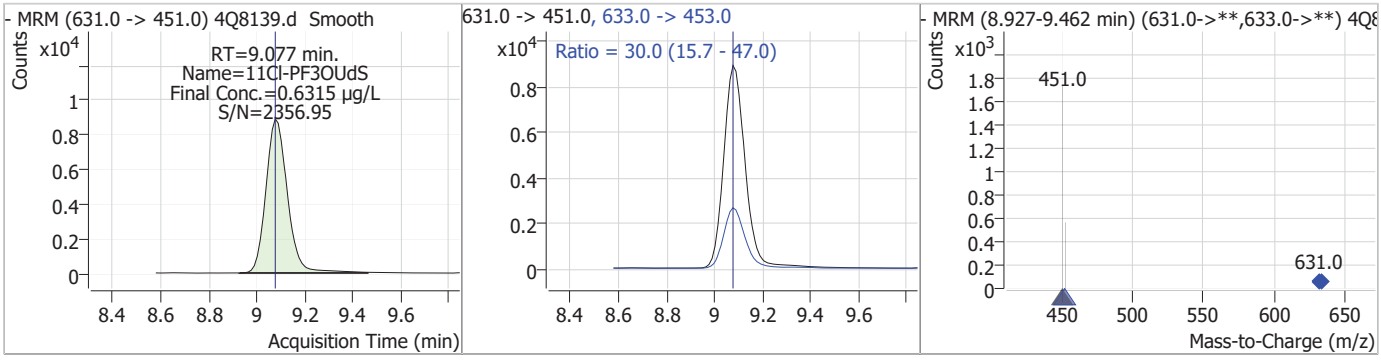
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.17	8.82	0.00	3580	599.0 -> 99.0	56.8	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.18	9.04	0.00	31364	663.0 -> 369.0	6.8	3.1	9.3

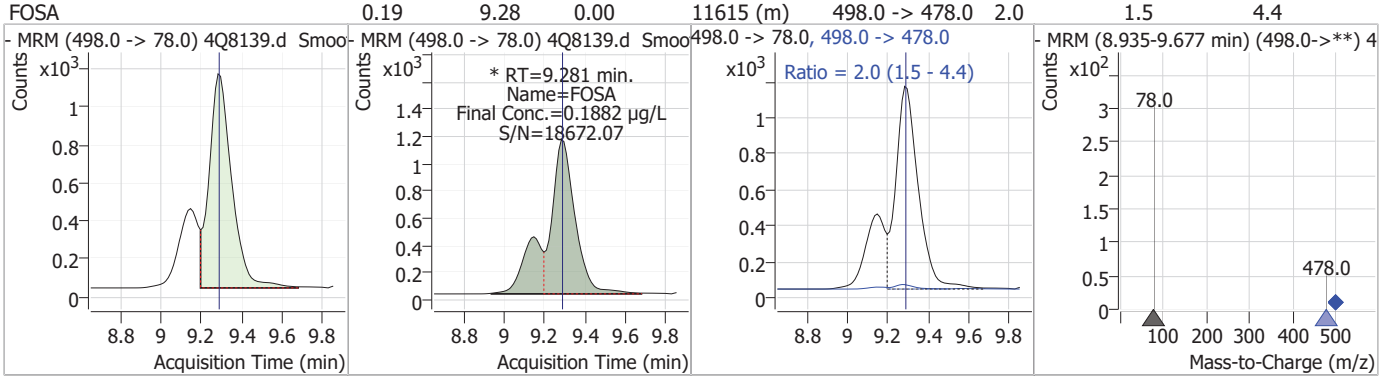


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	0.63	9.08	0.00	55206	633.0 -> 453.0	30.0	15.7	47.0

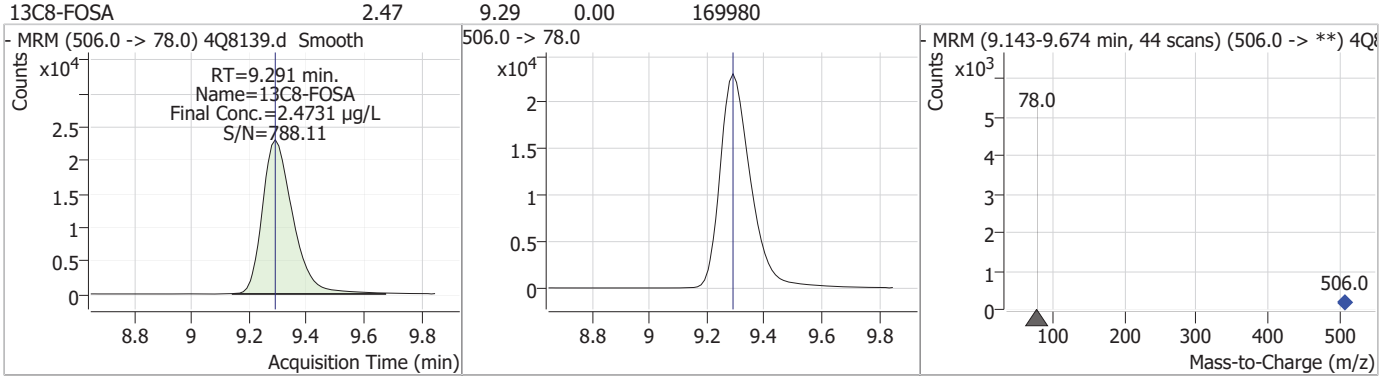


Perfluorinated Compounds by LC/MS/MS

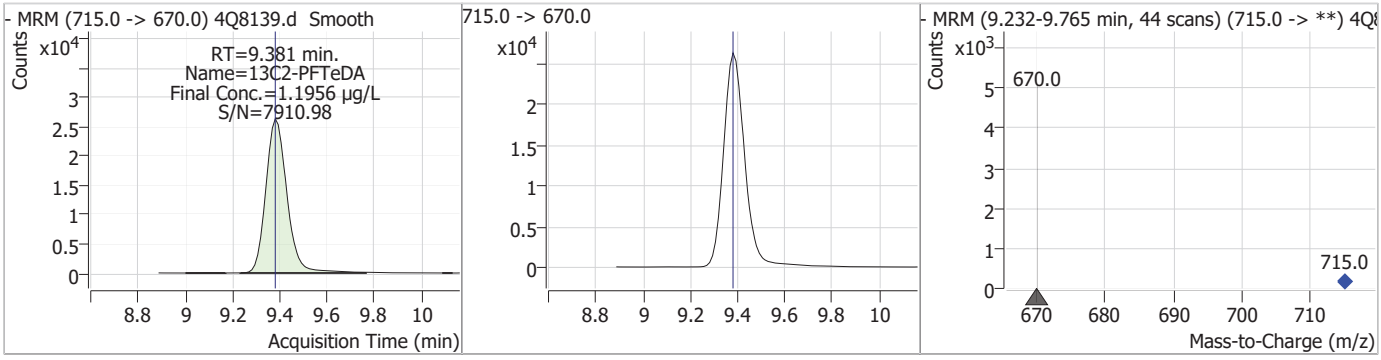
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.19	9.28	0.00	11615 (m)	498.0 -> 478.0	2.0	1.5	4.4



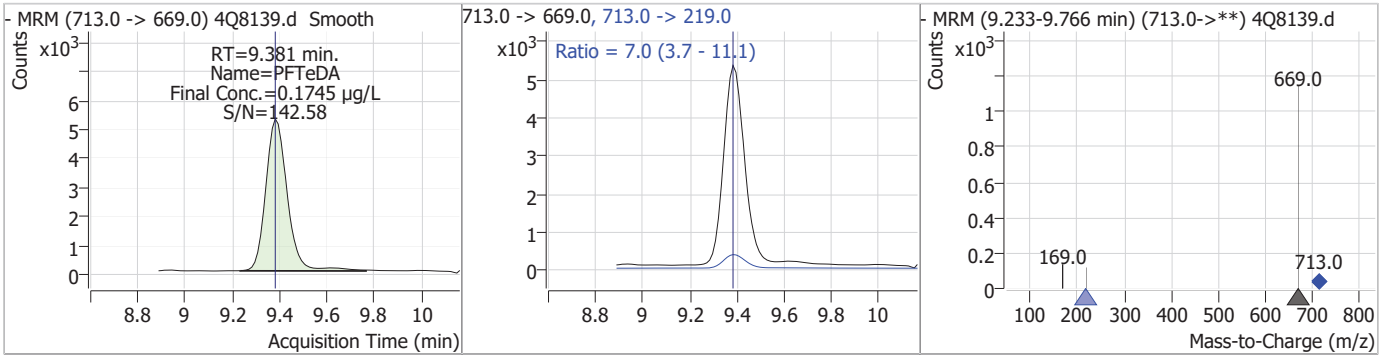
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.47	9.29	0.00	169980				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.20	9.38	0.00	163834				

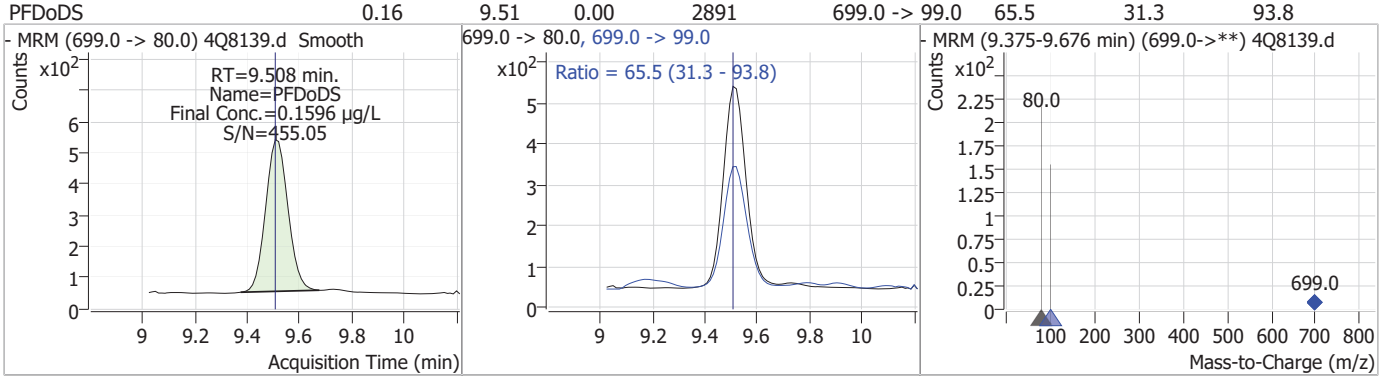


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.17	9.38	0.00	33280	713.0 -> 219.0	7.0	3.7	11.1

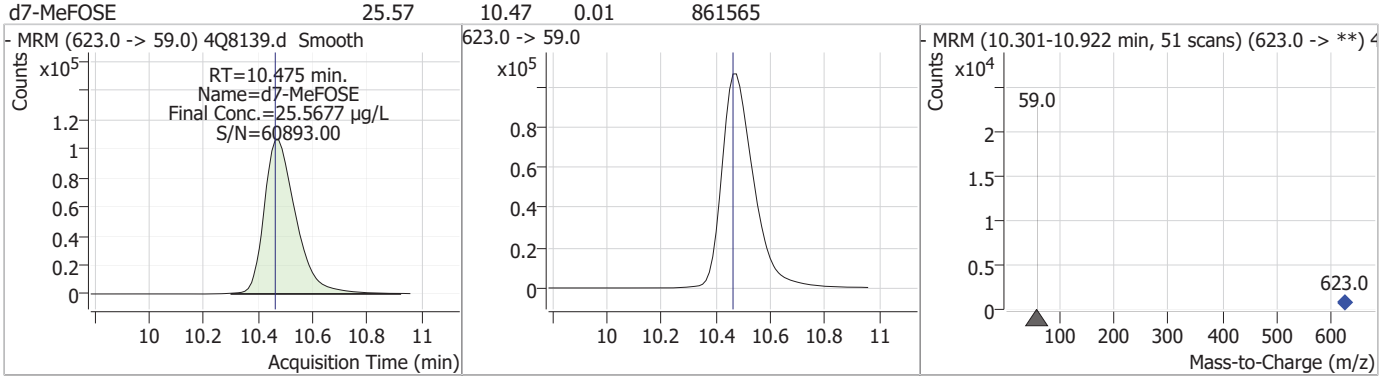


Perfluorinated Compounds by LC/MS/MS

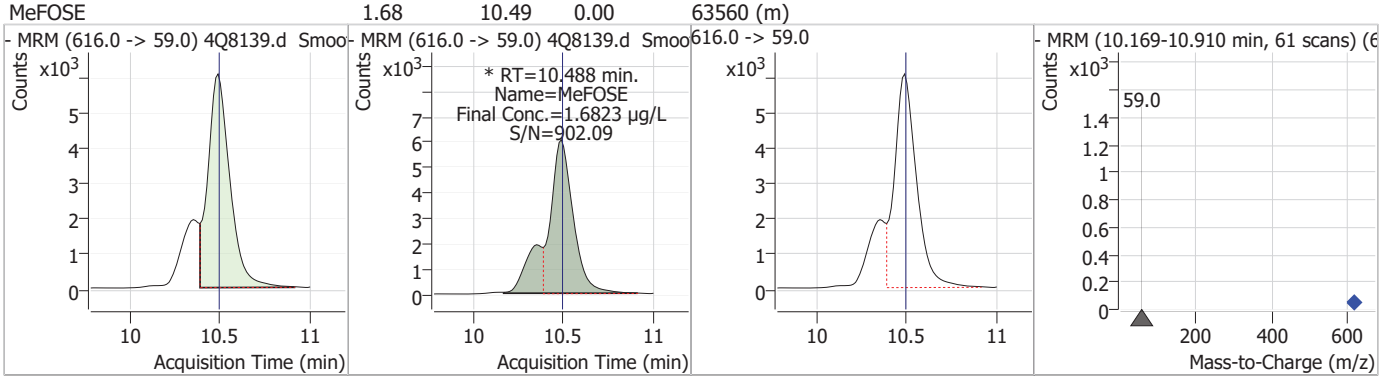
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.16	9.51	0.00	2891	699.0 -> 99.0	65.5	31.3	93.8



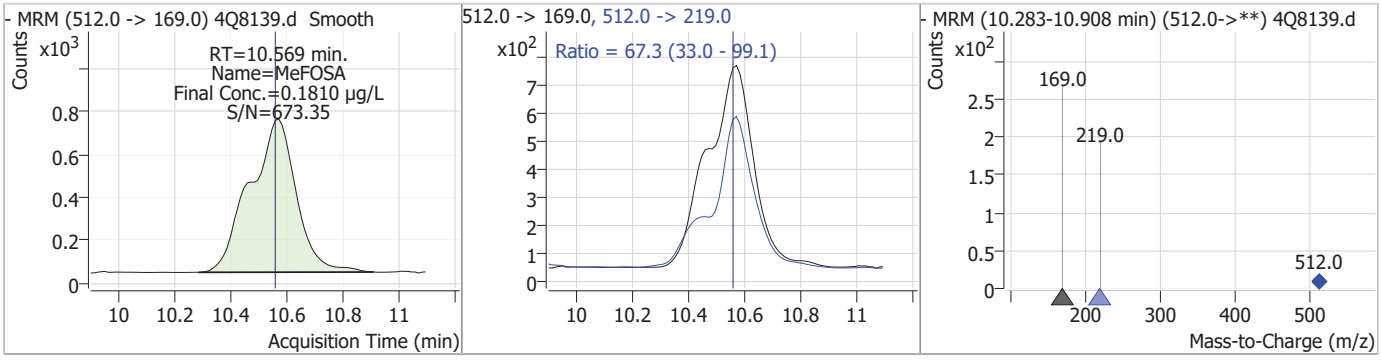
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.57	10.47	0.01	861565				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	1.68	10.49	0.00	63560 (m)				

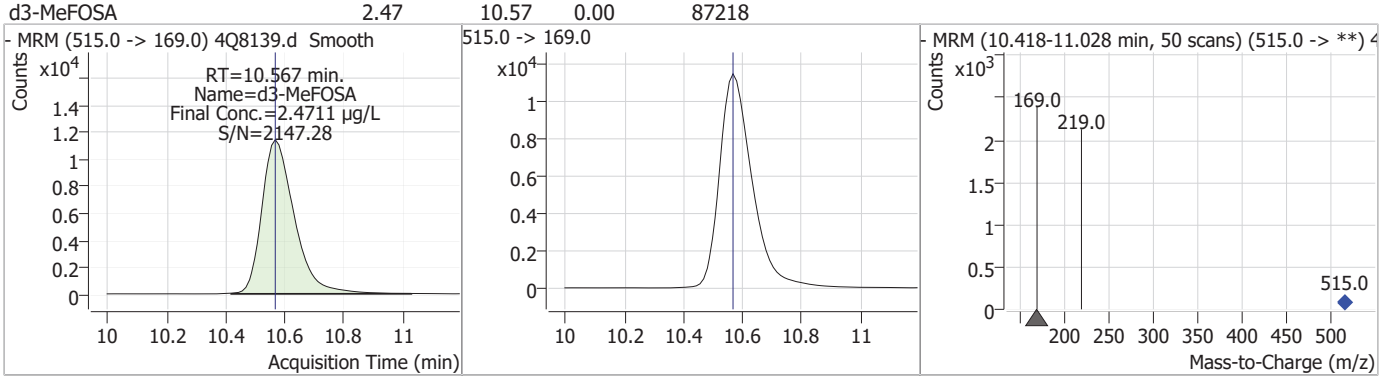


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.18	10.57	0.01	8267	512.0 -> 219.0	67.3	33.0	99.1

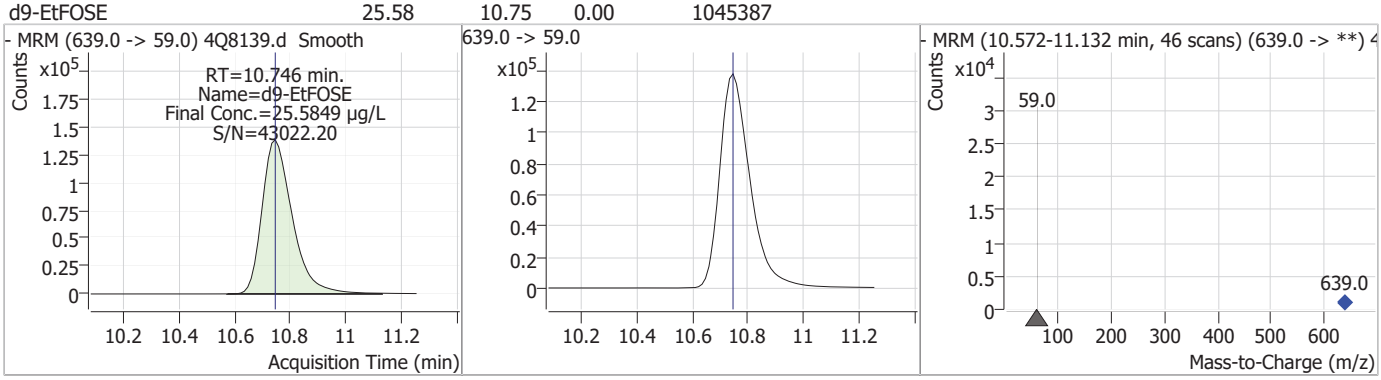


Perfluorinated Compounds by LC/MS/MS

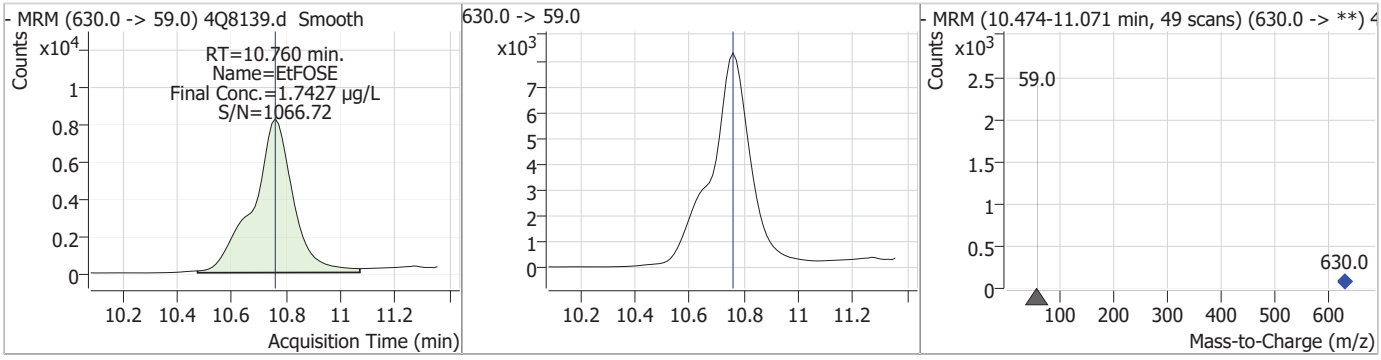
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.47	10.57	0.00	87218				



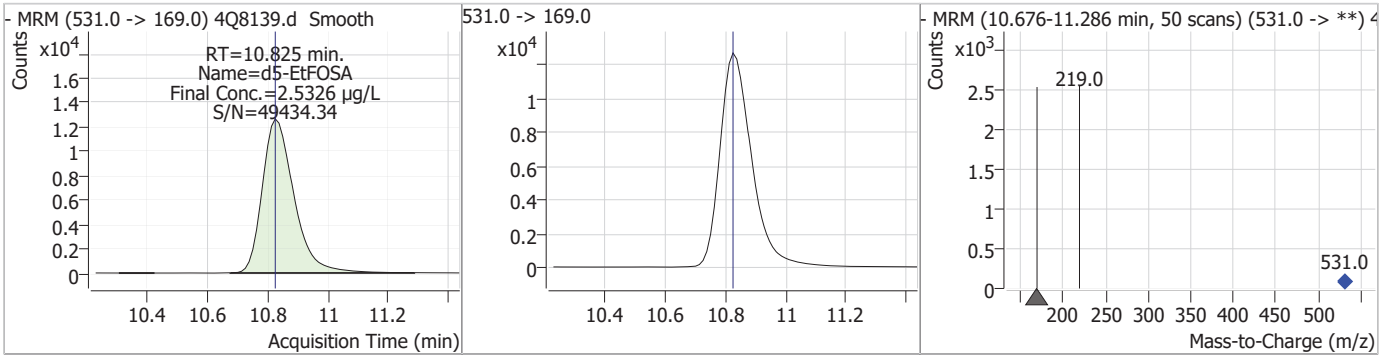
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.58	10.75	0.00	1045387				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	1.74	10.76	0.00	84739				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.53	10.82	0.00	92114				



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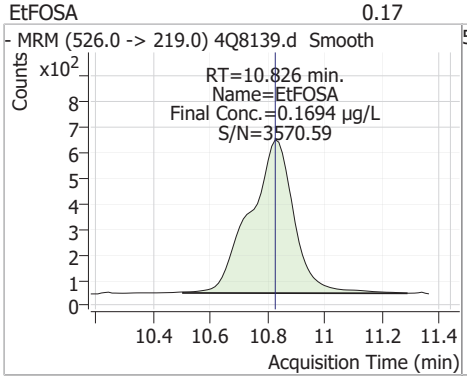
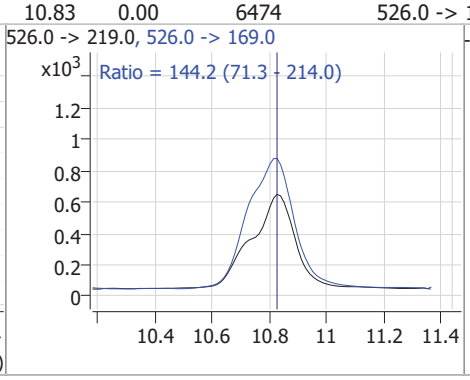
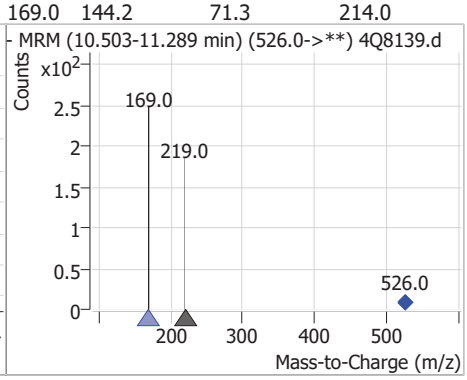
7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.17	10.83	0.00	6474	526.0 -> 169.0	144.2	71.3	214.0







7.6.54

7

Manual Integration Approval Summary

Sample Number: T4Q138-CC138
Lab FileID: 4Q8139.D
Injection Time: 04/30/25 16:58
Method: EPA 1633
Analyst approved: 04/30/25 23:06 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanoic acid	307-24-4		5.46	Poor instrument integration
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Poor instrument integration
MeFOSAA	2355-31-9		7.93	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Split peak
Perfluoroundecanoic acid	2058-94-8		8.28	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8153.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 8:08:50 PM
Sample Name : CC138-4
Vial : P1-A5
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63163,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.883	217.0 -> 172.0	854634	10.00	µg/L	0.000
M5-PFPeA	4.319	268.0 -> 223.0	449738	5.00	µg/L	0.000
M5-PFHxA	5.452	318.0 -> 273.0	313837	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	318237	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	469402	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	193398	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	181684	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	248125	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	211500	1.25	µg/L	-0.013
M2-PFTeDA	9.381	715.0 -> 670.0	170218	1.25	µg/L	0.000
M8-FOSA	9.291	506.0 -> 78.0	175771	2.50	µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	26921	2.50	µg/L	-0.012
		302.0 -> 80.0	66899			
M3-PFHxS	6.986	402.0 -> 99.0	38233	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	43510	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	11603	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	23510	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	29538	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	226335	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	482638	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	171507	5.00	µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	871618	25.00	µg/L	0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1069014	25.00	µg/L	0.000
M5-EtFOSA	10.825	531.0 -> 169.0	95017	2.50	µg/L	0.000
M3-MeFOSA	10.568	515.0 -> 169.0	89168	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	74964	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	390667	5.00	µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	44292	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	508777	2.50	µg/L	0.000
13C2-PFDA	7.859	515.0 -> 470.0	175479	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	192668	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	307871	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	11603	5.22	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.5%		
13C2-6:2FTS	6.684	429.0 -> 81.0	23510	4.88	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.6%		
13C2-8:2FTS	7.671	529.0 -> 81.0	29538	5.21	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.2%		
13C2-PFDoDA	8.666	615.0 -> 570.0	211500	1.11	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 89.2%		
13C2-PFTeDA	9.381	715.0 -> 670.0	170218	1.17	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.4%		
13C3-PFBS	5.355	302.0 -> 99.0	26921	2.46	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.5%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	38233	2.47	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.9%			
13C4-PFBA	2.883	217.0 -> 172.0	854634	9.54	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.4%			
13C4-PFHpA	6.291	367.0 -> 322.0	318237	2.30	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.9%			
13C5-PFHxA	5.452	318.0 -> 273.0	313837	2.41	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.3%			
13C5-PFPeA	4.319	268.0 -> 223.0	449738	4.55	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.0%			
13C6-PFDA	7.858	519.0 -> 474.0	181684	1.17	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.7%			
13C7-PFUnDA	8.273	570.0 -> 525.0	248125	1.20	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.8%			
13C8-FOSA	9.291	506.0 -> 78.0	175771	2.28	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.3%			
13C8-PFOA	6.897	421.0 -> 376.0	469402	2.31	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.3%			
13C8-PFOS	7.995	507.0 -> 99.0	43510	2.41	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.4%			
13C9-PFNA	7.403	472.0 -> 427.0	193398	1.21	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.8%			
d3-MeFOSAA	7.915	573.0 -> 419.0	226335	4.58	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.7%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	482638	9.43	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.3%			
d3-MeFOSA	10.568	515.0 -> 169.0	89168	2.25	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.2%			
d5-EtFOSAA	8.098	589.0 -> 419.0	171507	4.52	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 90.5%			
d7-MeFOSE	10.475	623.0 -> 59.0	871618	23.09	µg/L		0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 92.3%			
d9-EtFOSE	10.746	639.0 -> 59.0	1069014	23.35	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 93.4%			
d5-EtFOSA	10.825	531.0 -> 169.0	95017	2.33	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.3%			
Target Compounds							**QValue**
4:2FTS	5.154	327.0 -> 307.0	205323	9.64	µg/L		100
		327.0 -> 81.0	96097				
6:2FTS	6.684	427.0 -> 407.0	243740	10.34	µg/L		99
		427.0 -> 81.0	113462				
8:2FTS	7.671	527.0 -> 507.0	233374	10.10	µg/L		97
		527.0 -> 81.0	92324				
EtFOSAA	8.111	584.0 -> 419.0	84467	2.60	µg/L	m	98
		584.0 -> 483.0	46112				
FOSA	9.281	498.0 -> 78.0	162793	2.55	µg/L	m	99
		498.0 -> 478.0	4553				
MeFOSAA	7.917	570.0 -> 419.0	99674	2.56	µg/L	m	96
		570.0 -> 512.0	34195				
PFBA	2.877	213.0 -> 169.0	261553	10.01	µg/L		100
PFBS	5.357	299.0 -> 80.0	71294	2.32	µg/L		99
		299.0 -> 99.0	28844				
PFDA	7.859	513.0 -> 469.0	356173	2.58	µg/L		100
		513.0 -> 219.0	82714				
PFDoDA	8.667	613.0 -> 569.0	428882	2.63	µg/L		98
		613.0 -> 319.0	59458				

Perfluorinated Compounds by LC/MS/MS

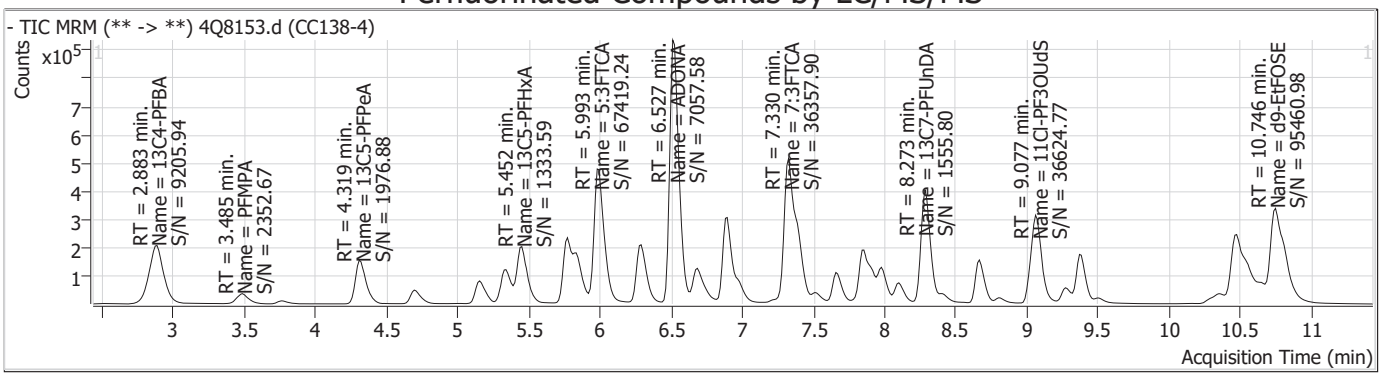
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	51483	2.32	µg/L		98
		599.0 -> 99.0	28294				
PFHpA	6.292	363.0 -> 319.0	486561	2.51	µg/L		100
		363.0 -> 169.0	101629				
PFHpS	7.529	449.0 -> 80.0	80979	2.45	µg/L		100
		449.0 -> 99.0	44349				
PFHxA	5.455	313.0 -> 269.0	337251	2.49	µg/L		100
		313.0 -> 119.0	10826				
PFHxS	6.987	399.0 -> 80.0	76345	2.29	µg/L	m	97
		399.0 -> 99.0	39183				
PFNA	7.404	463.0 -> 419.0	306150	2.63	µg/L	m	94
		463.0 -> 219.0	103726				
PFNS	8.425	549.0 -> 80.0	70407	2.41	µg/L		100
		549.0 -> 99.0	41354				
PFOA	6.898	413.0 -> 369.0	399931	2.56	µg/L	m	99
		413.0 -> 169.0	114557				
PFOS	7.996	499.0 -> 80.0	78862	2.25	µg/L	m	98
		499.0 -> 99.0	39641				
PFPeA	4.321	263.0 -> 219.0	368421	5.18	µg/L		100
PFPeS	6.318	349.0 -> 80.0	78089	2.32	µg/L		99
		349.0 -> 99.0	40248				
PFTeDA	9.382	713.0 -> 669.0	500558	2.53	µg/L		99
		713.0 -> 219.0	36057				
PFTrDA	9.038	663.0 -> 619.0	475267	2.62	µg/L		100
		663.0 -> 369.0	29339				
PFUnDA	8.275	563.0 -> 519.0	376038	2.56	µg/L		99
		563.0 -> 269.0	73032				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	860620	9.37	µg/L		98
		633.0 -> 453.0	259401				
9Cl-PF3ONS	8.301	531.0 -> 351.0	938460	9.29	µg/L		99
		533.0 -> 353.0	289696				
ADONA	6.527	377.0 -> 251.0	3276210	8.65	µg/L		100
		377.0 -> 85.0	1065424				
HFPO-DA	5.780	285.0 -> 169.0	528055	10.41	µg/L		98
		285.0 -> 185.0	55108				
3:3FTCA	3.769	241.0 -> 177.0	53477	12.58	µg/L		100
		241.0 -> 117.0	4339				
5:3FTCA	5.993	341.0 -> 237.0	1406262	58.24	µg/L		100
		341.0 -> 217.0	987827				
7:3FTCA	7.330	441.0 -> 337.0	1798708	57.80	µg/L		99
		441.0 -> 317.0	802169				
EtFOSA	10.826	526.0 -> 219.0	95978	2.43	µg/L		99
		526.0 -> 169.0	138048				
EtFOSE	10.760	630.0 -> 59.0	1258898	25.32	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	122099	2.61	µg/L		98
		512.0 -> 219.0	78999				
MeFOSE	10.488	616.0 -> 59.0	968257	25.33	µg/L		100
PFDoDS	9.508	699.0 -> 80.0	43534	2.29	µg/L		98
		699.0 -> 99.0	26635				
NFDHA	5.345	295.0 -> 201.0	90688	5.10	µg/L		95
		201.0 -> 85.0	359137				
		295.0 -> 85.0	23870				
PFMBA	4.710	279.0 -> 85.0	253612	5.23	µg/L		100
PFMPA	3.485	229.0 -> 85.0	212793	5.22	µg/L		100
PFEESA	5.849	315.0 -> 135.0	562097	4.52	µg/L		100
		315.0 -> 69.0	43807				

Perfluorinated Compounds by LC/MS/MS

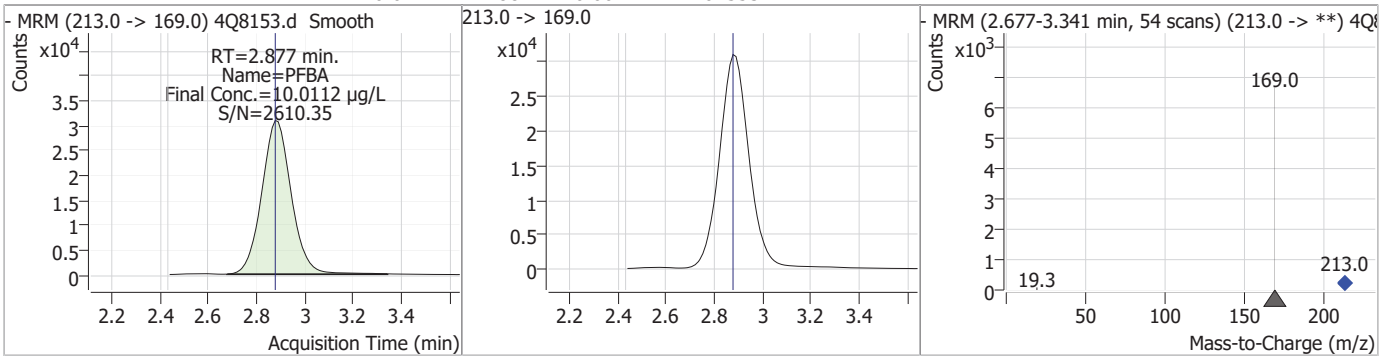
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

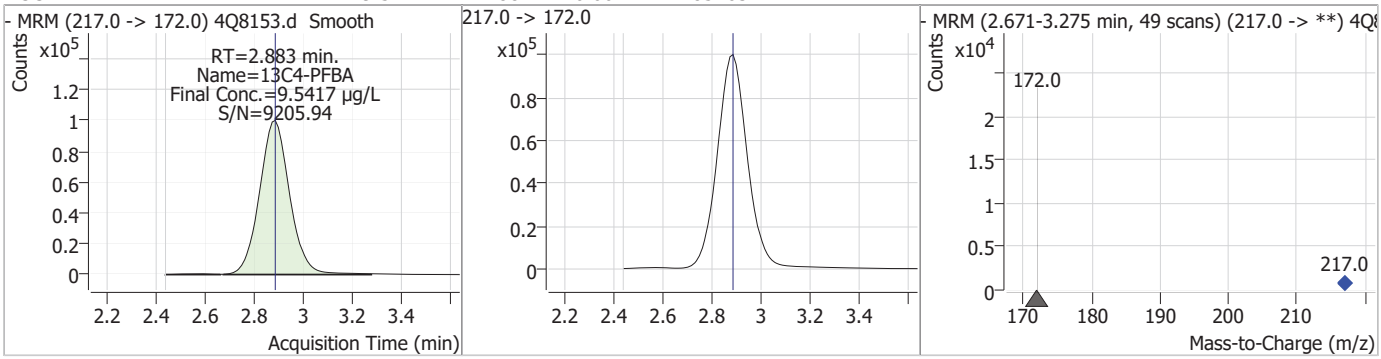
Perfluorinated Compounds by LC/MS/MS



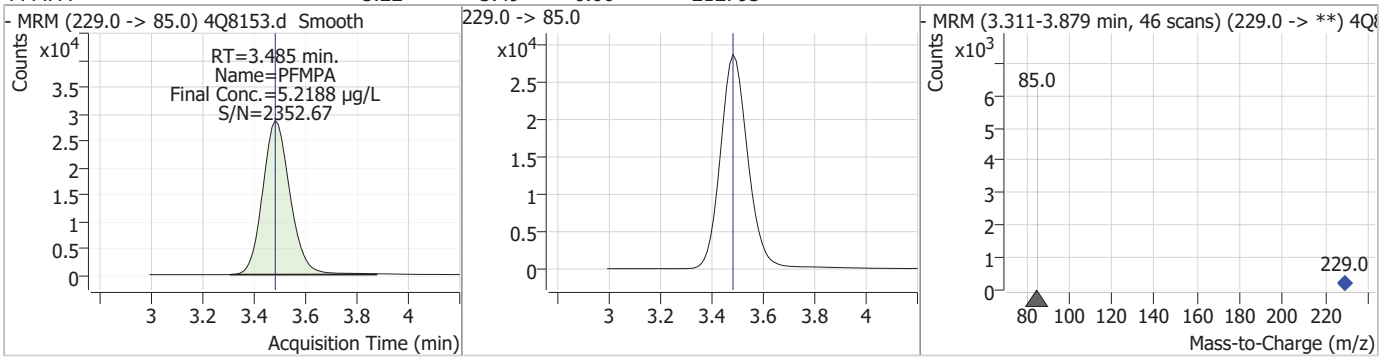
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.01	2.88	0.00	261553				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.54	2.88	0.00	854634				

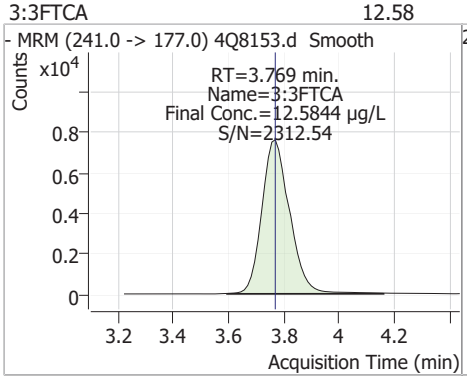


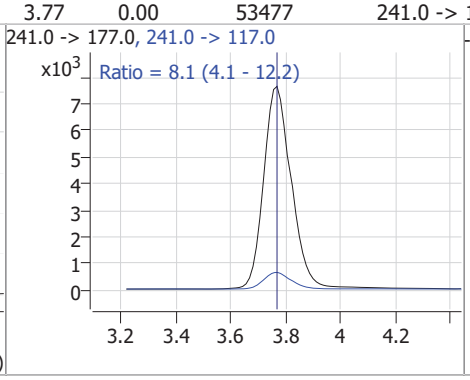
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.22	3.49	0.00	212793				

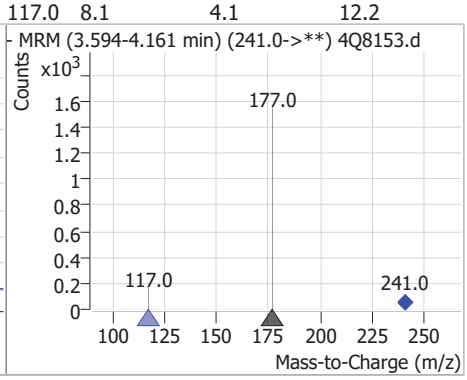


Perfluorinated Compounds by LC/MS/MS

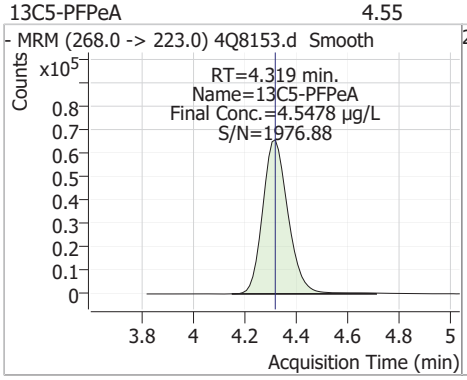
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.58	3.77	0.00	53477	241.0 -> 117.0	8.1	4.1	12.2

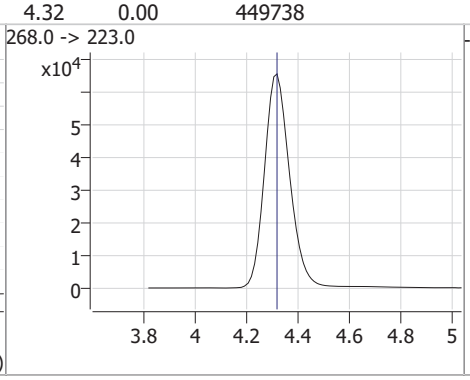


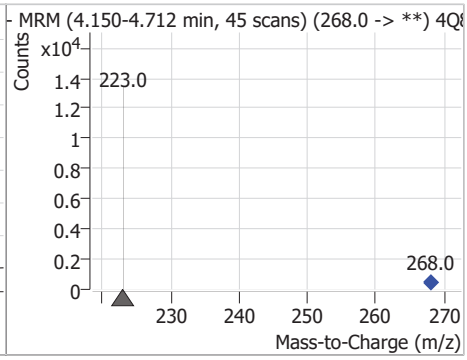




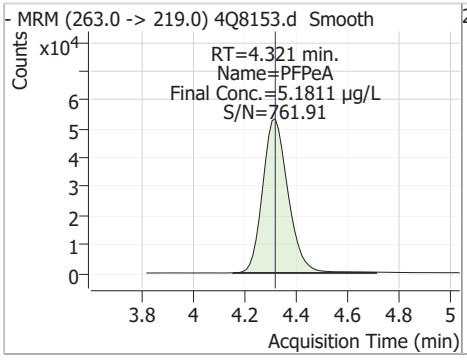
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.55	4.32	0.00	449738				

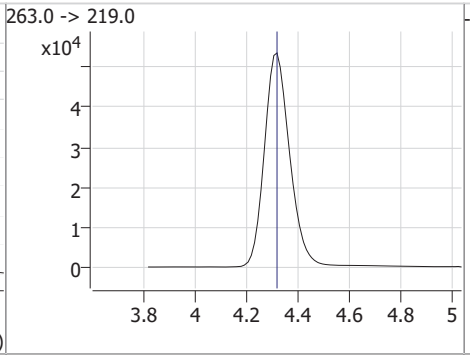


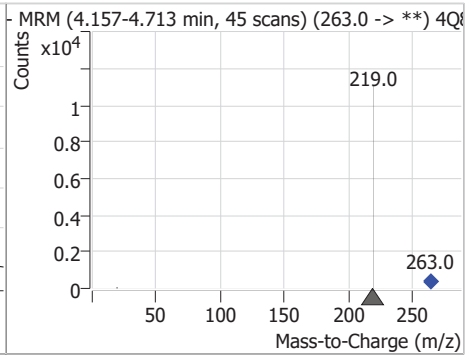




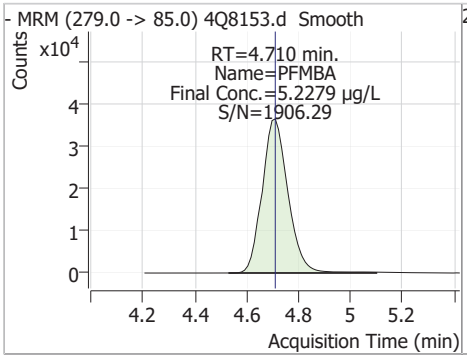
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.18	4.32	0.00	368421				

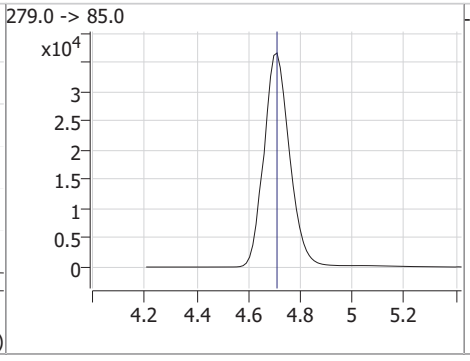


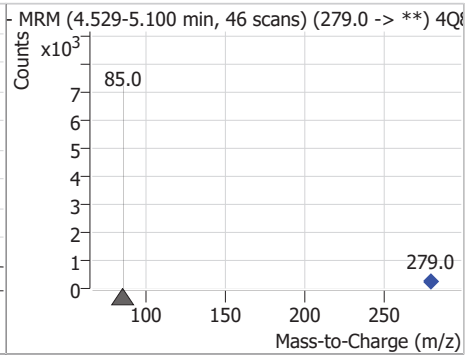




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.23	4.71	0.00	253612				

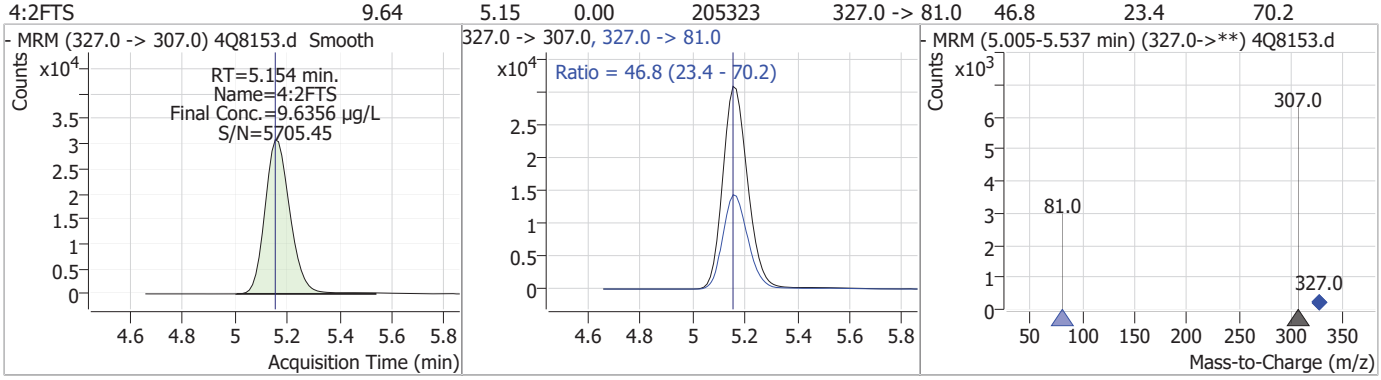




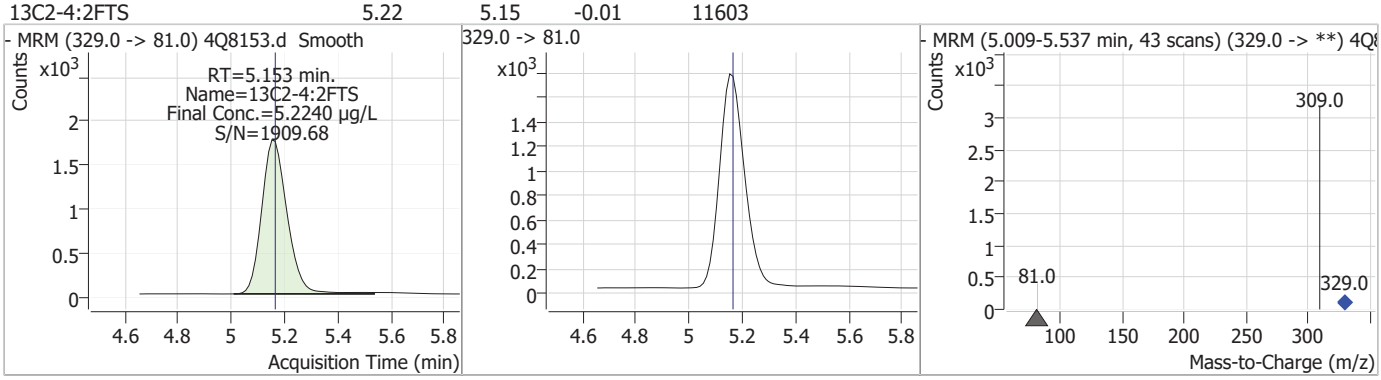


Perfluorinated Compounds by LC/MS/MS

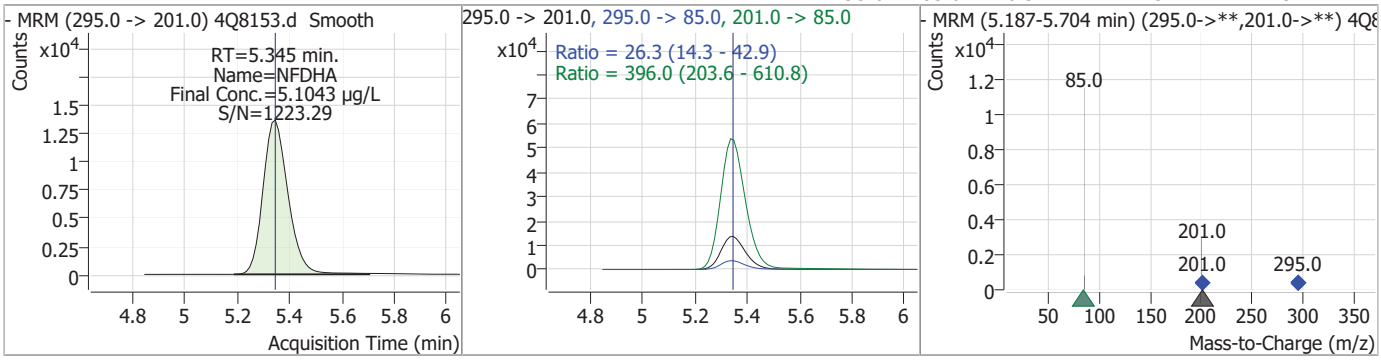
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.64	5.15	0.00	205323	327.0 -> 81.0	46.8	23.4	70.2



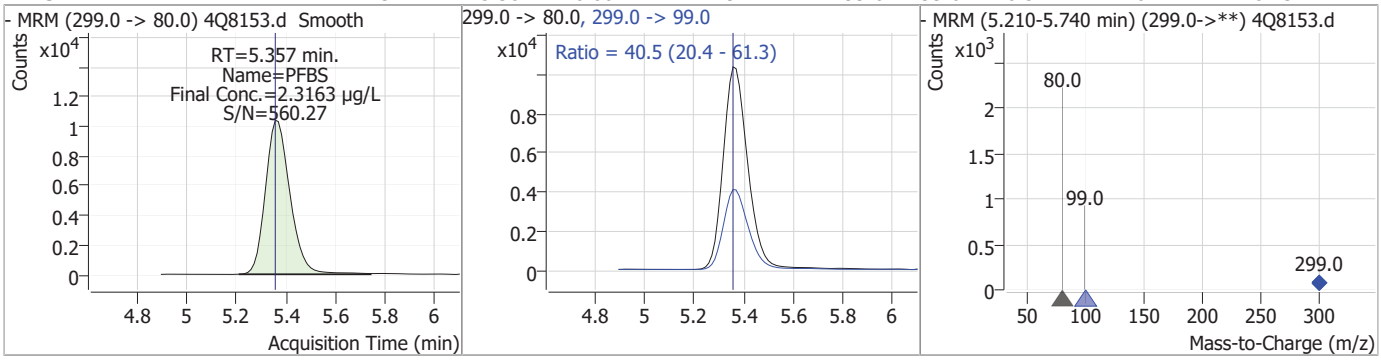
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.22	5.15	-0.01	11603				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.10	5.35	0.00	90688	201.0 -> 85.0	396.0	203.6	610.8
					295.0 -> 85.0	26.3	14.3	42.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.32	5.36	0.00	71294	299.0 -> 99.0	40.5	20.4	61.3



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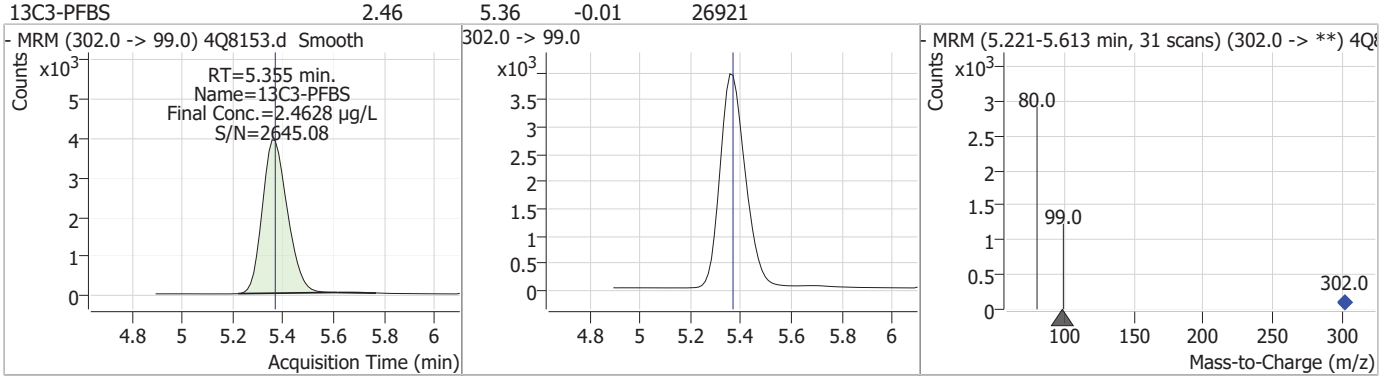
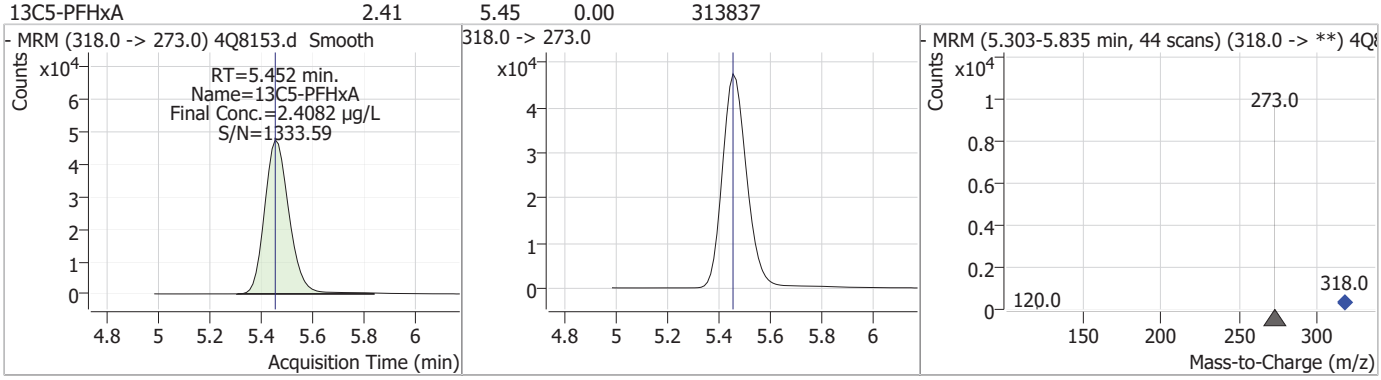
Perfluorinated Compounds by LC/MS/MS

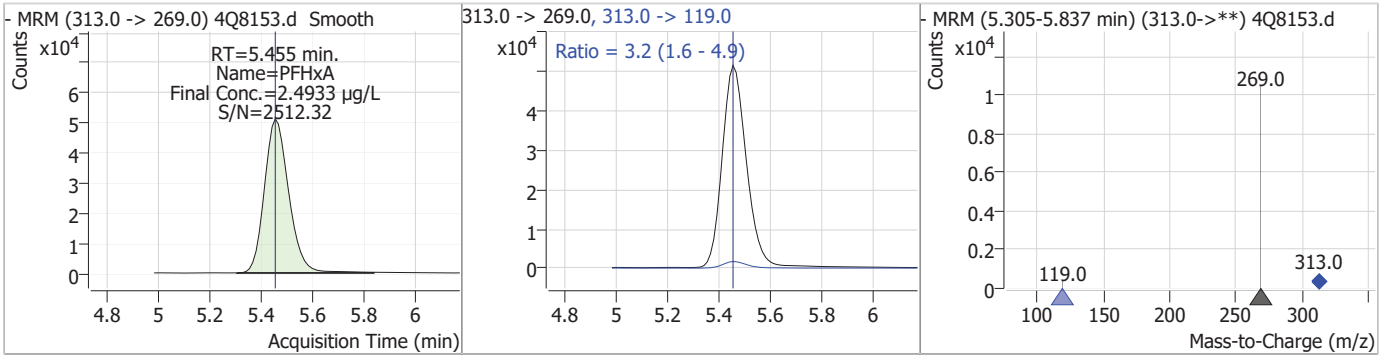
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.46	5.36	-0.01	26921				



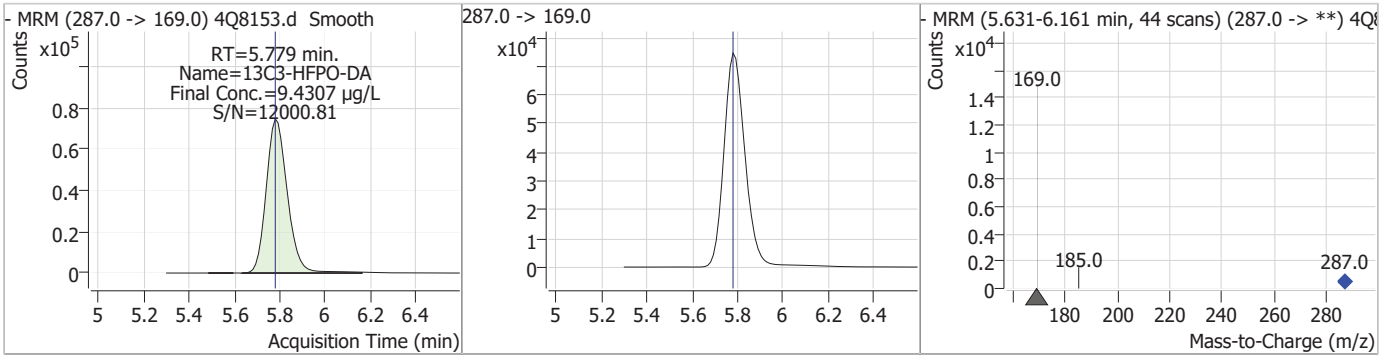
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.41	5.45	0.00	313837				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.49	5.45	0.00	337251	313.0 -> 119.0	3.2	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.43	5.78	0.00	482638				



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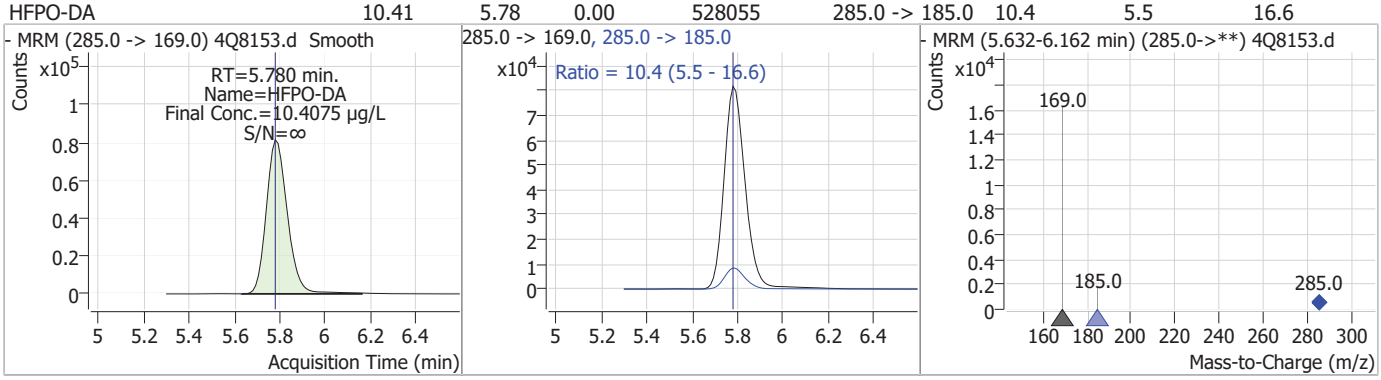
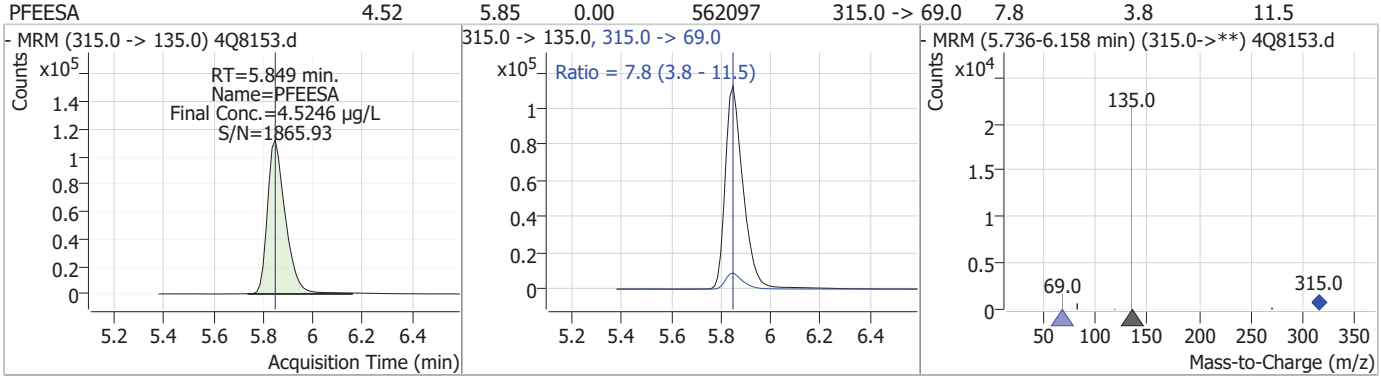
Perfluorinated Compounds by LC/MS/MS

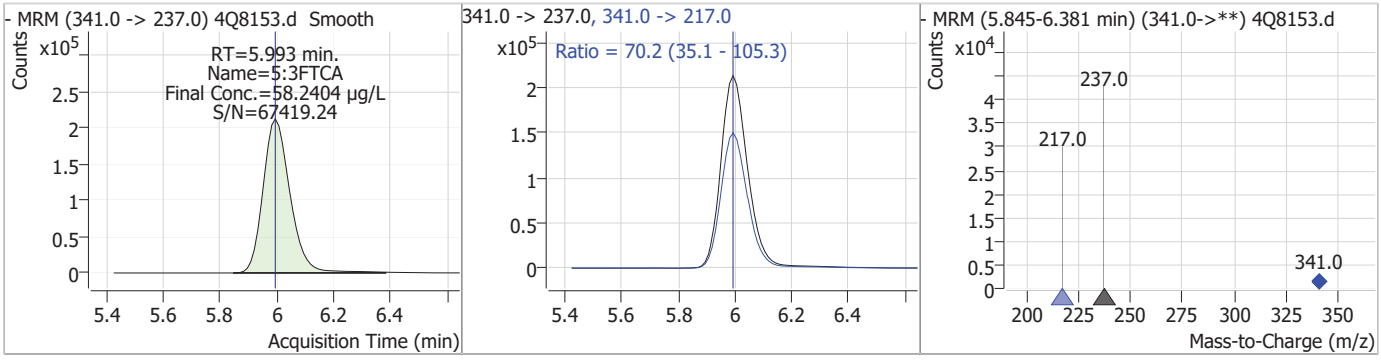
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.41	5.78	0.00	528055	285.0 -> 185.0	10.4	5.5	16.6



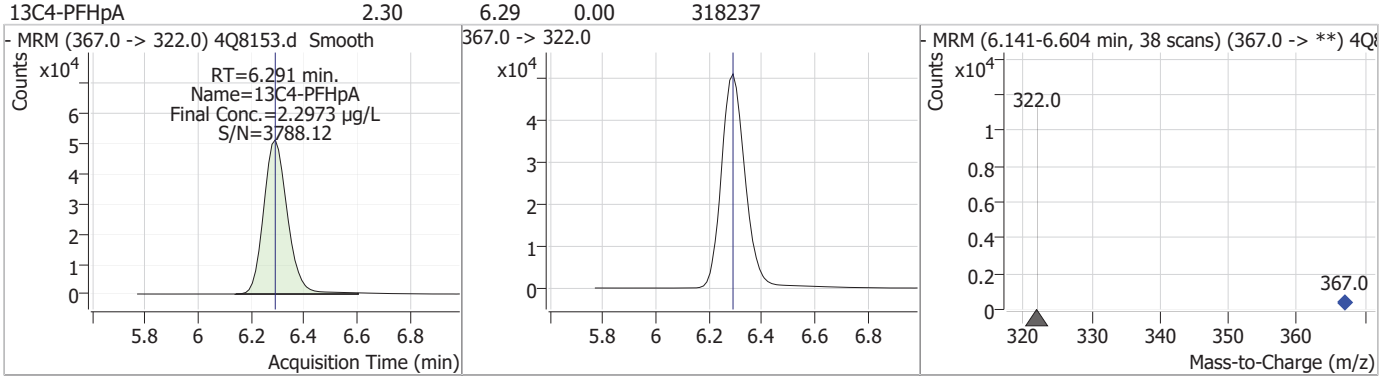
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.52	5.85	0.00	562097	315.0 -> 69.0	7.8	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	58.24	5.99	0.00	1406262	341.0 -> 217.0	70.2	35.1	105.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.30	6.29	0.00	318237				



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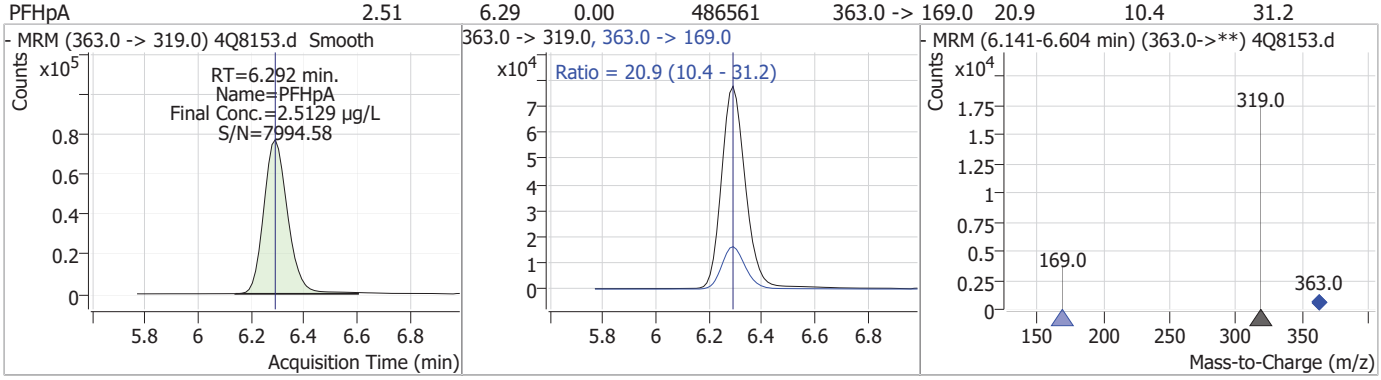
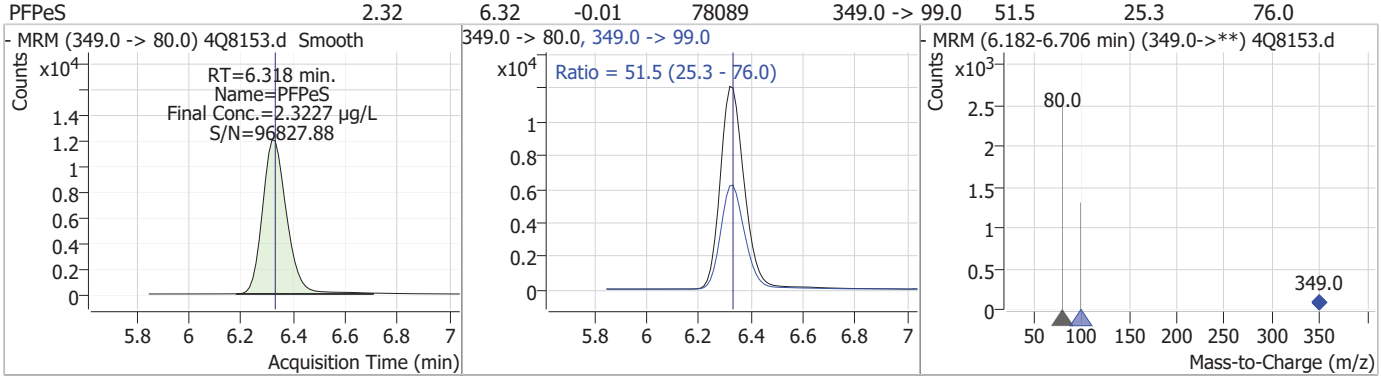
Perfluorinated Compounds by LC/MS/MS

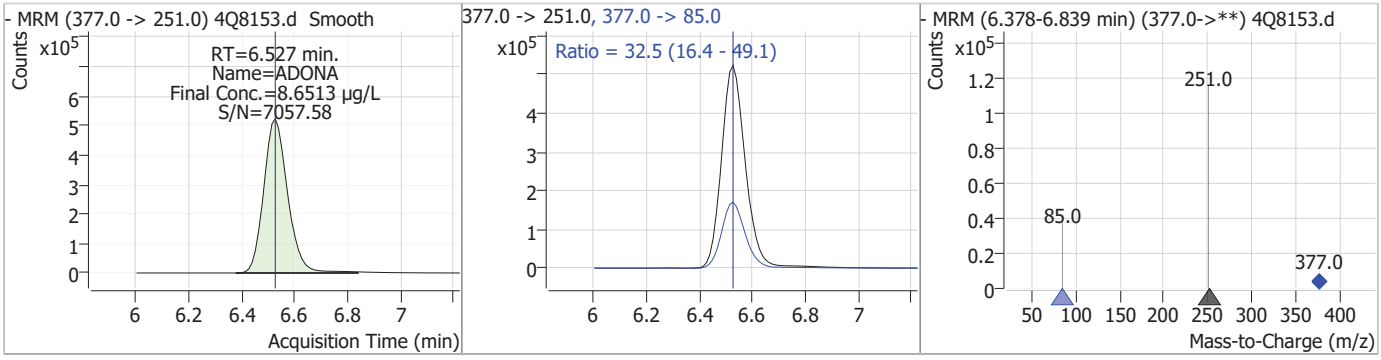
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.51	6.29	0.00	486561	363.0 -> 169.0	20.9	10.4	31.2



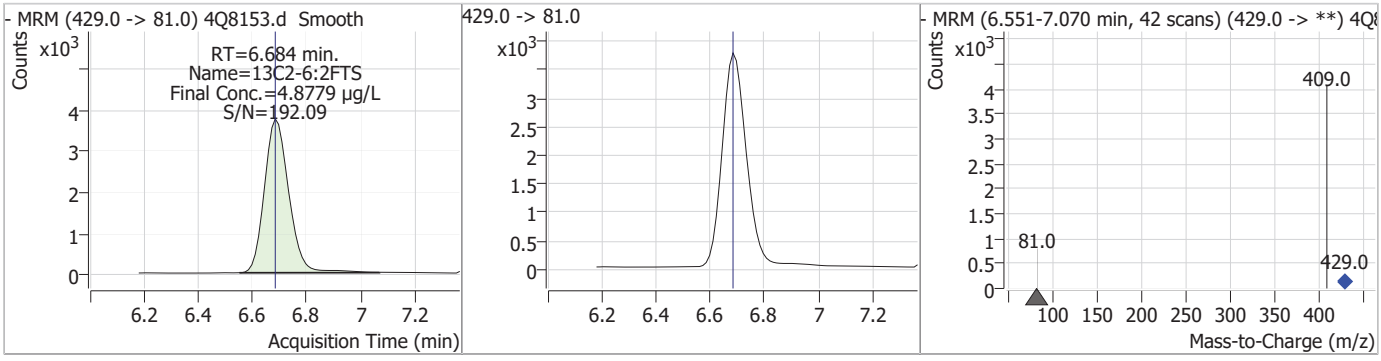
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.32	6.32	-0.01	78089	349.0 -> 99.0	51.5	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.65	6.53	0.00	3276210	377.0 -> 85.0	32.5	16.4	49.1

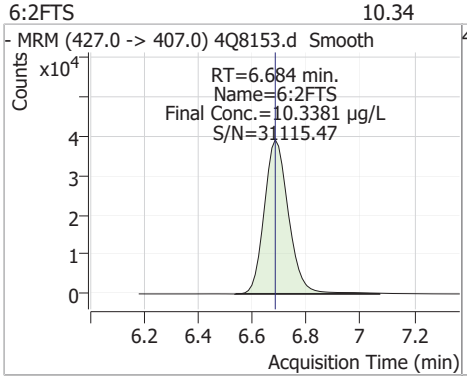


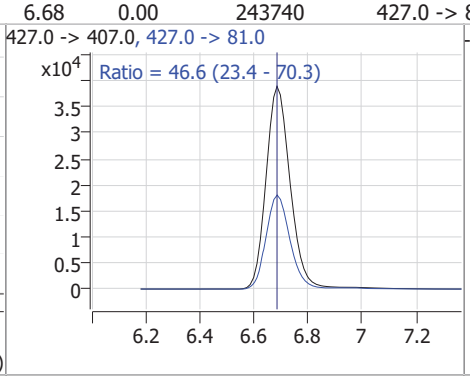
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.88	6.68	0.00	23510				

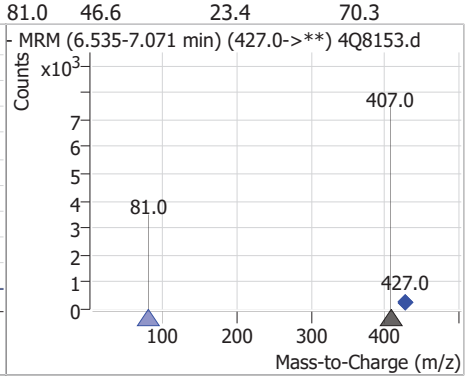


Perfluorinated Compounds by LC/MS/MS

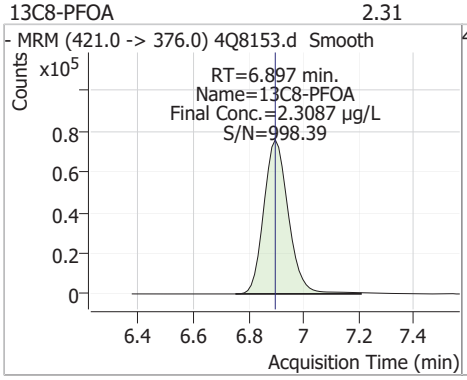
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	10.34	6.68	0.00	243740	427.0 -> 81.0	46.6	23.4	70.3

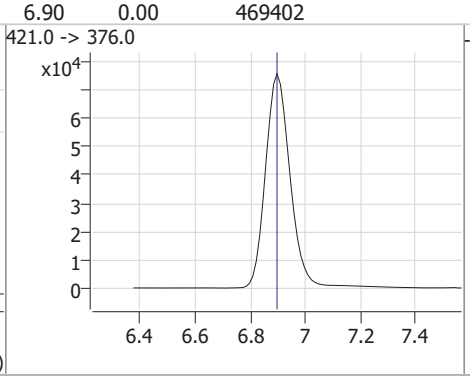


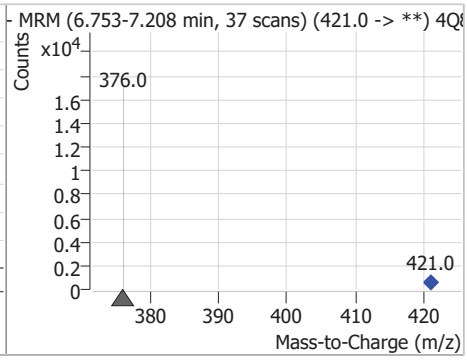




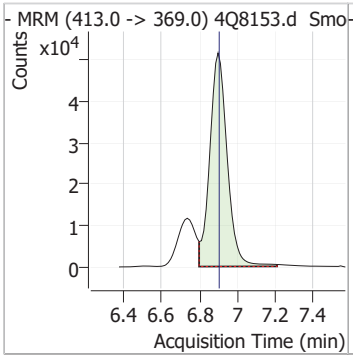
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.31	6.90	0.00	469402				

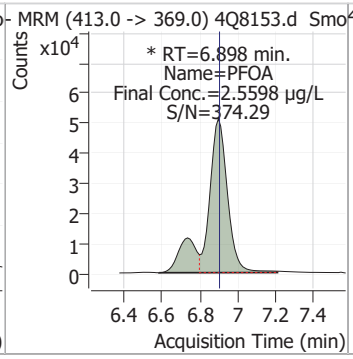


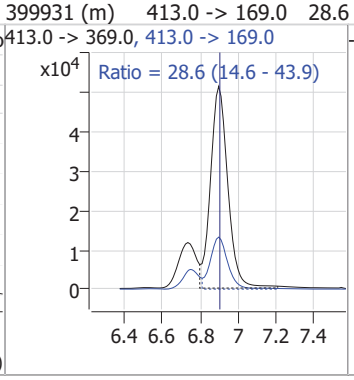


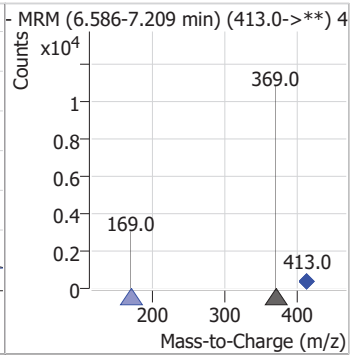


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.56	6.90	0.00	399931 (m)	413.0 -> 169.0	28.6	14.6	43.9

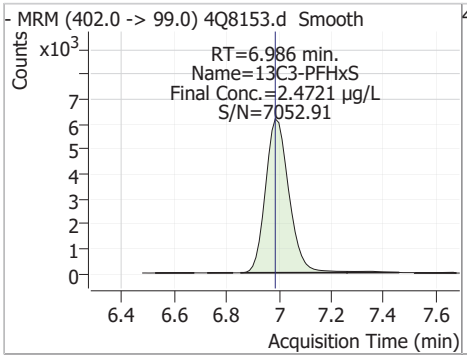


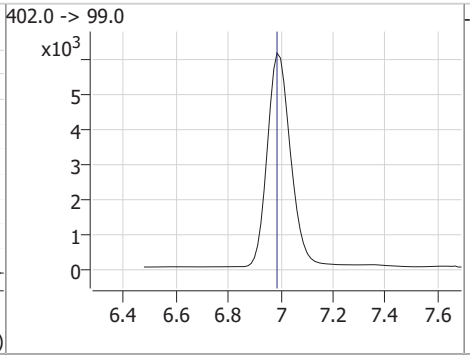


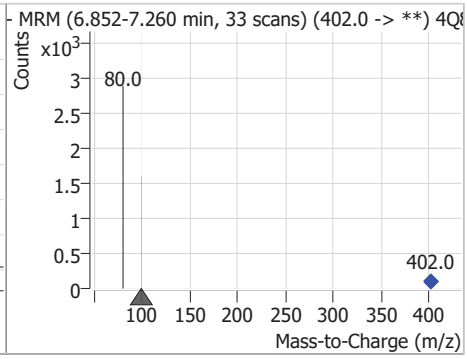




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.47	6.99	0.00	38233				







7.6.55

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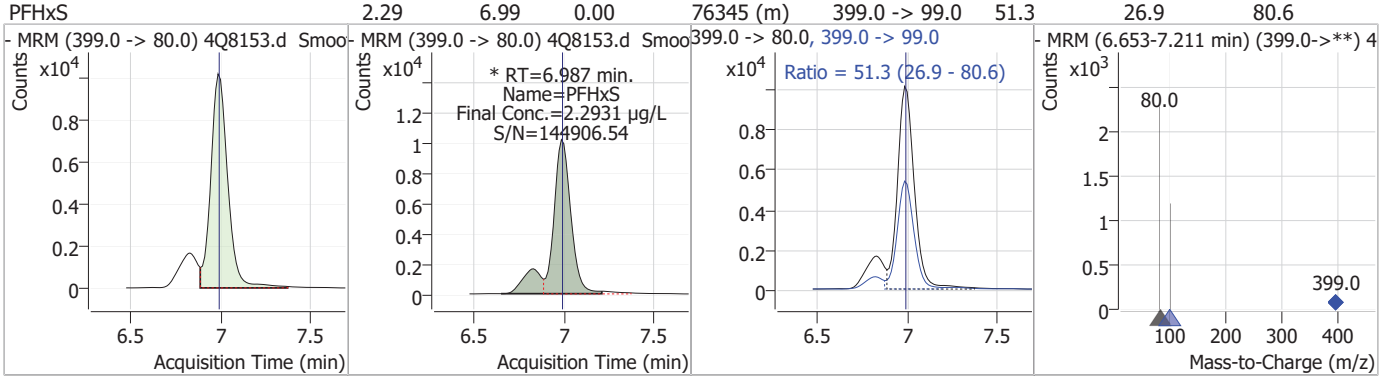
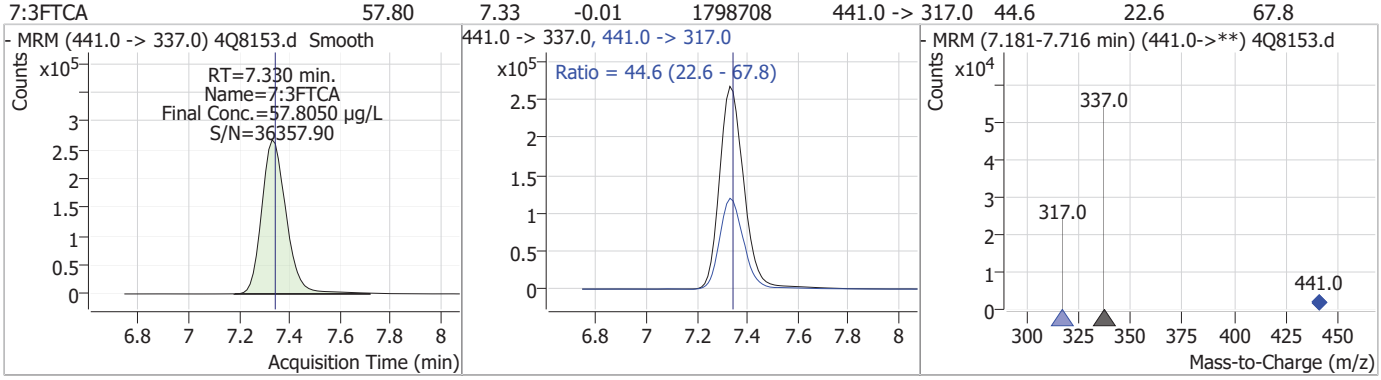
Perfluorinated Compounds by LC/MS/MS

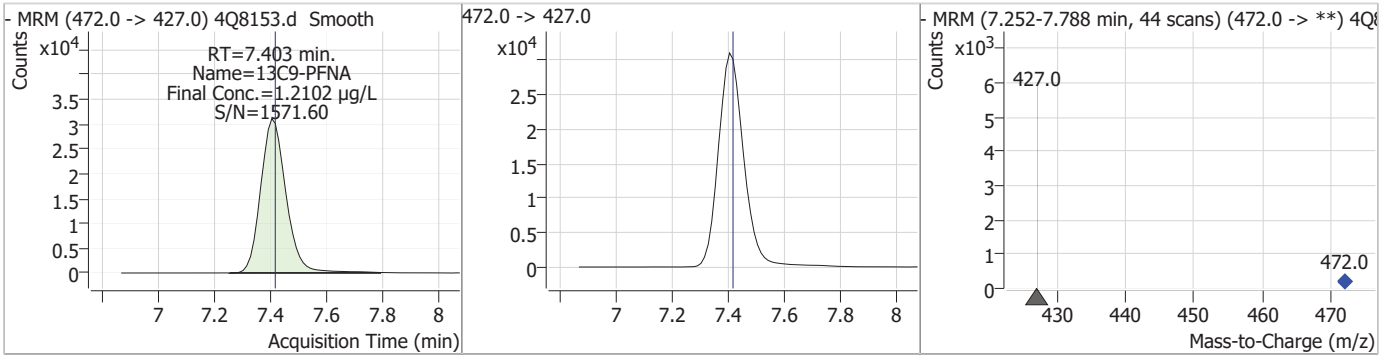
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.29	6.99	0.00	76345 (m)	399.0 -> 99.0	51.3	26.9	80.6



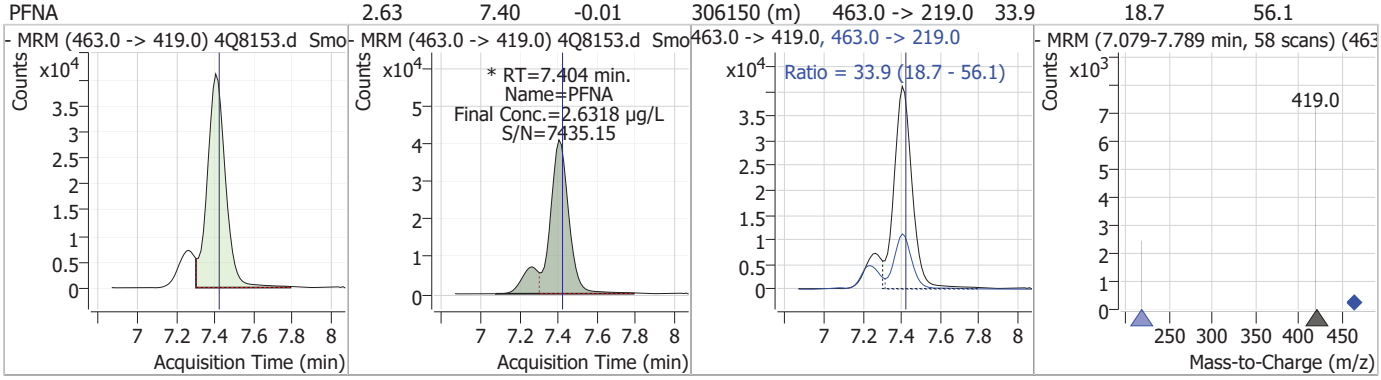
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	57.80	7.33	-0.01	1798708	441.0 -> 317.0	44.6	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.21	7.40	-0.01	193398				

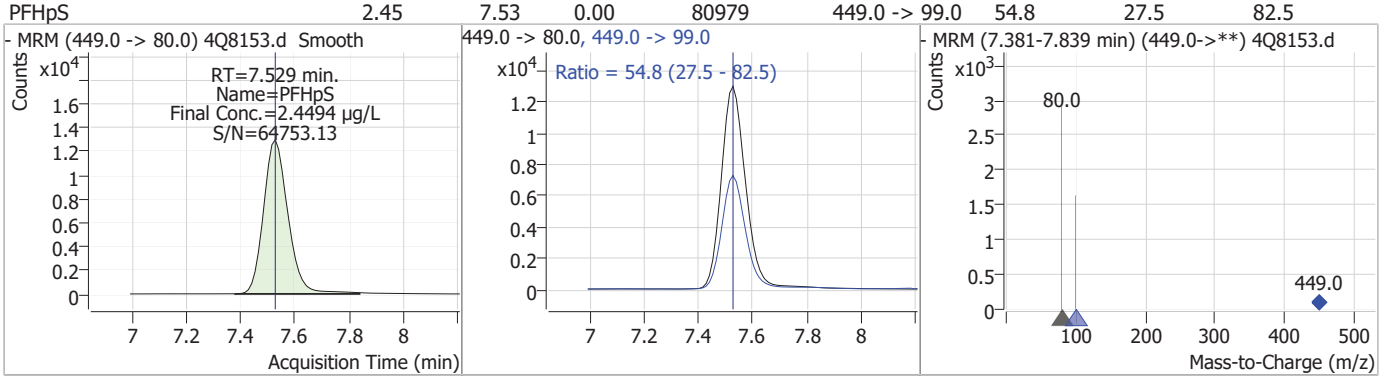


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.63	7.40	-0.01	306150 (m)	463.0 -> 219.0	33.9	18.7	56.1

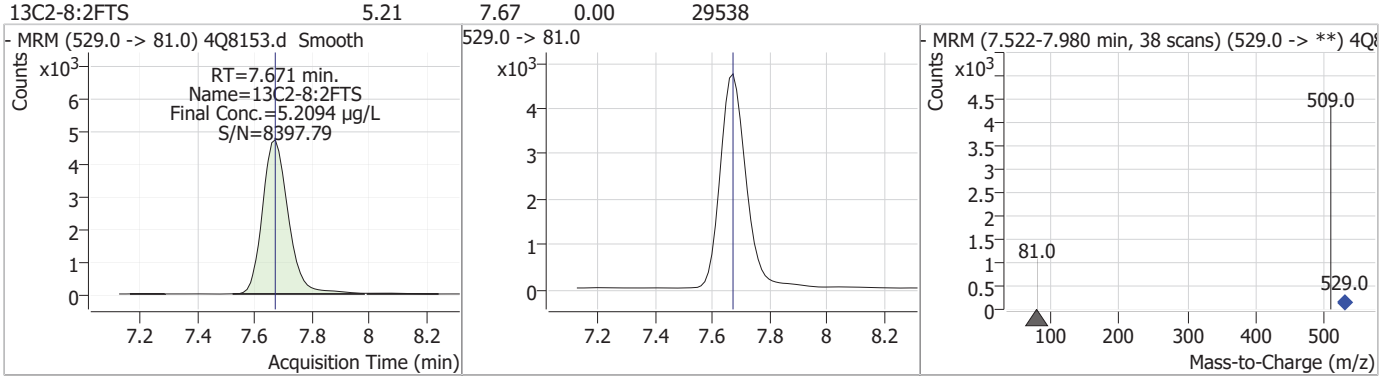


Perfluorinated Compounds by LC/MS/MS

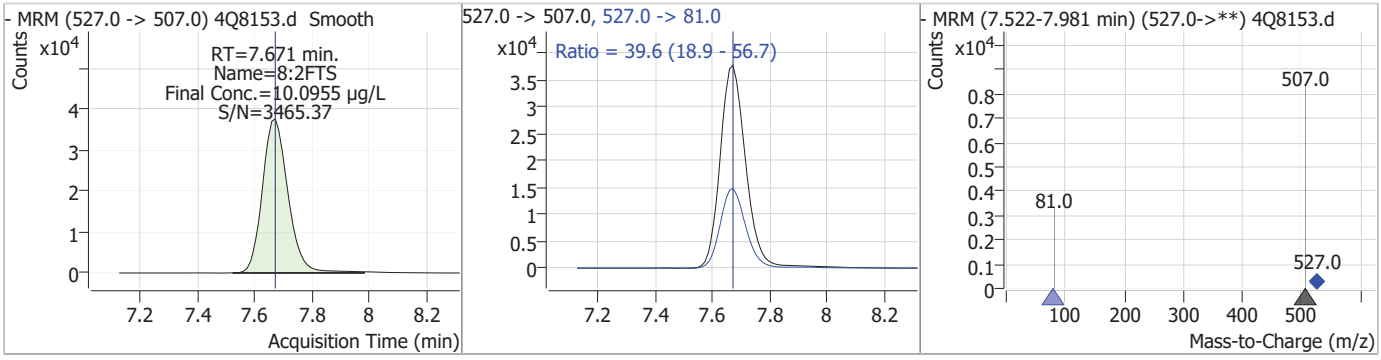
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.45	7.53	0.00	80979	449.0 -> 99.0	54.8	27.5	82.5



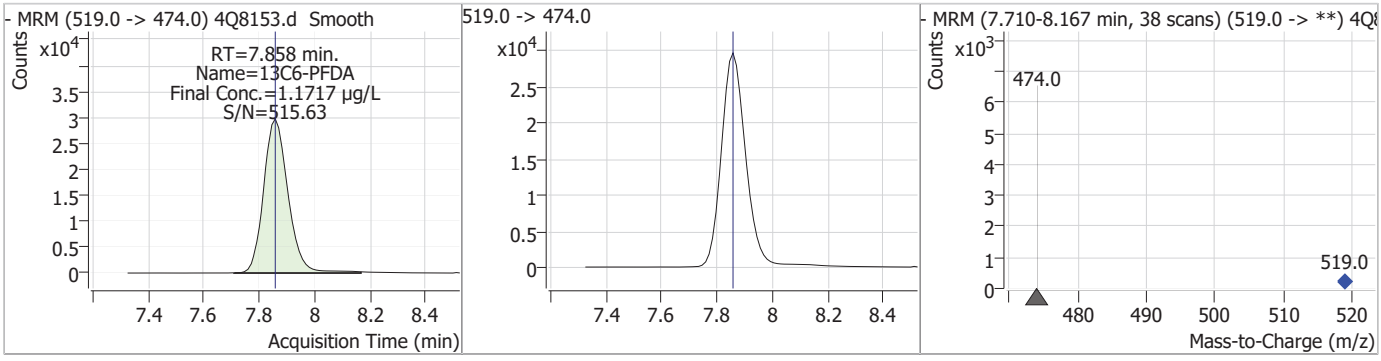
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.21	7.67	0.00	29538				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.10	7.67	0.00	233374	527.0 -> 81.0	39.6	18.9	56.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.17	7.86	0.00	181684				



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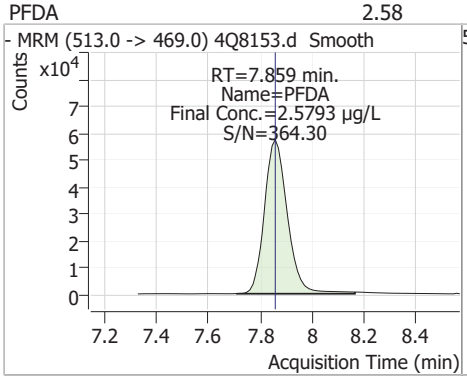
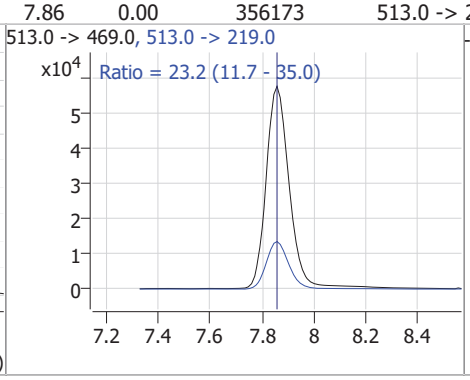
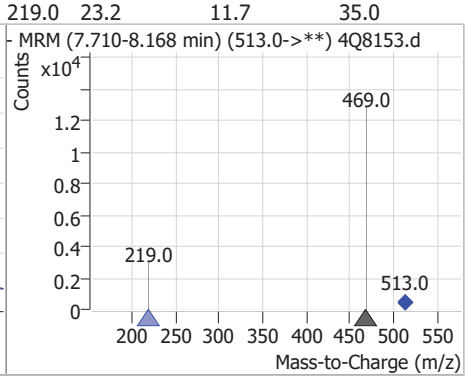
Perfluorinated Compounds by LC/MS/MS

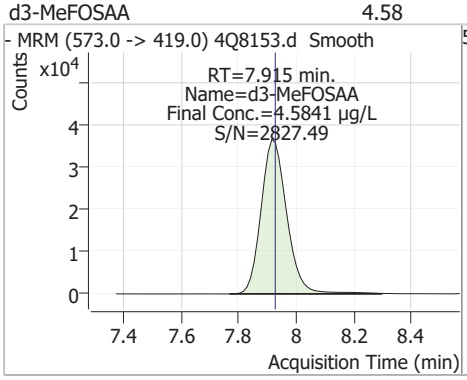
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.58	7.86	0.00	356173	513.0 -> 219.0	23.2	11.7	35.0

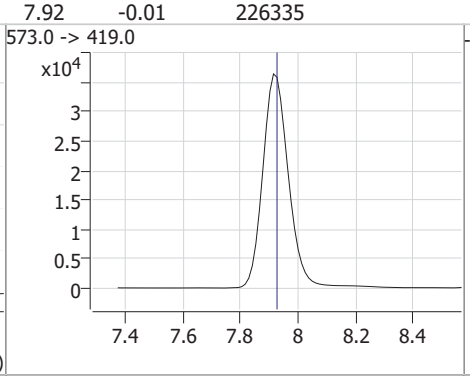


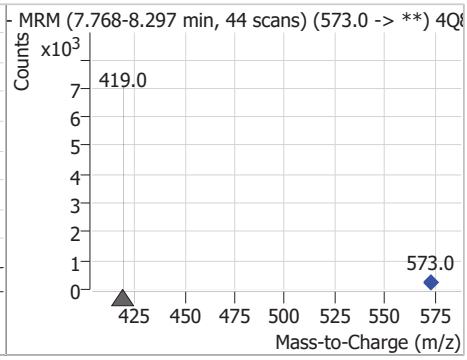




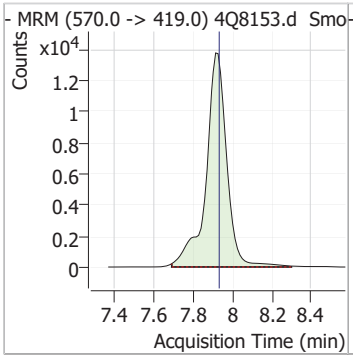
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.58	7.92	-0.01	226335				

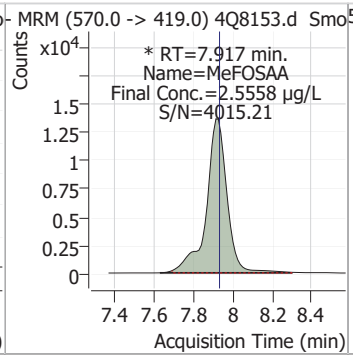


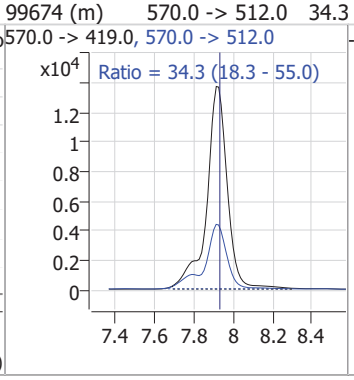


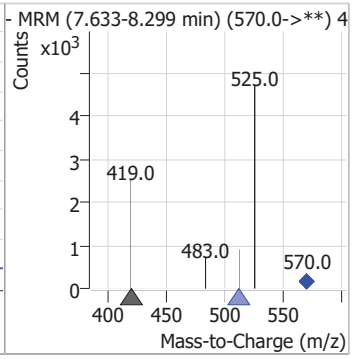


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.56	7.92	-0.01	99674 (m)	570.0 -> 512.0	34.3	18.3	55.0

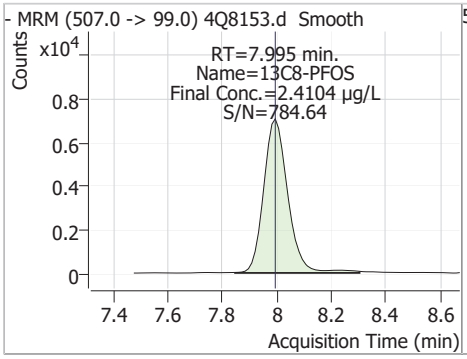


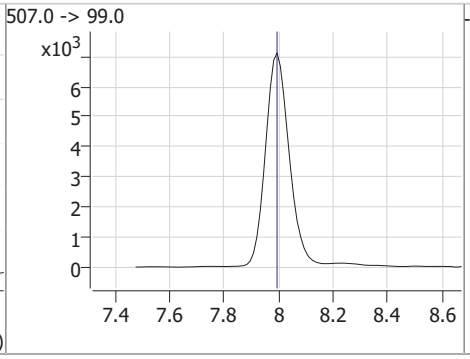


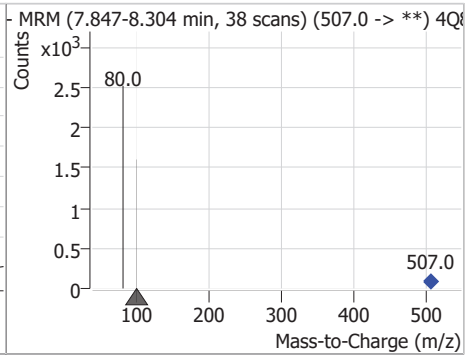




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.41	7.99	0.00	43510				

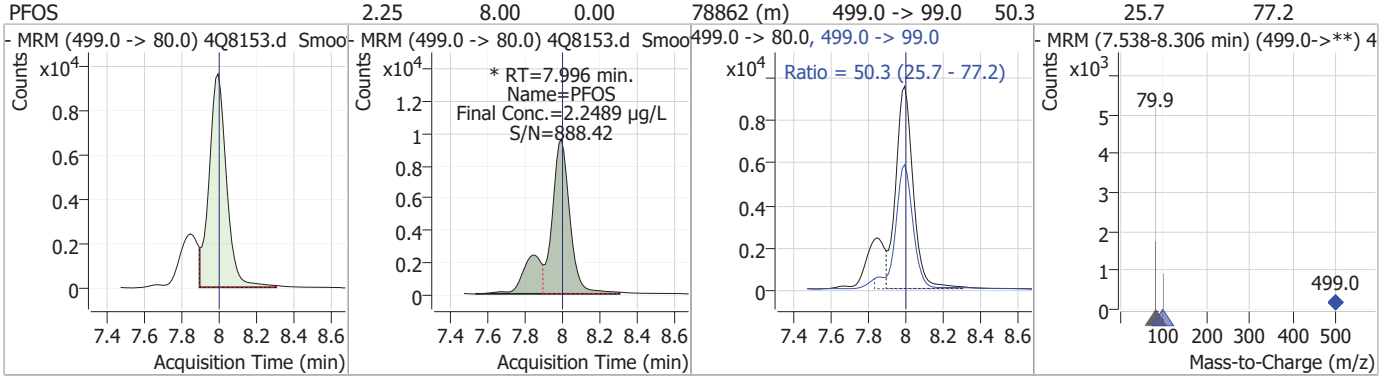




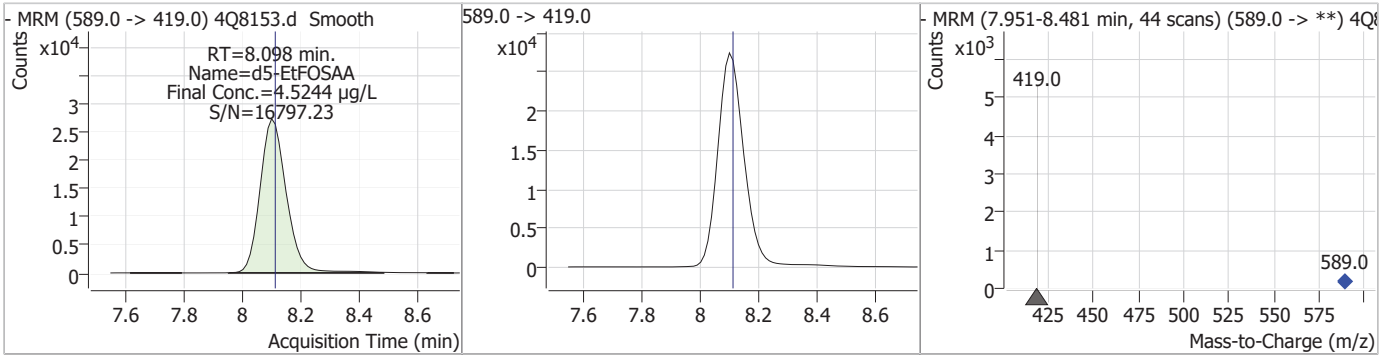


Perfluorinated Compounds by LC/MS/MS

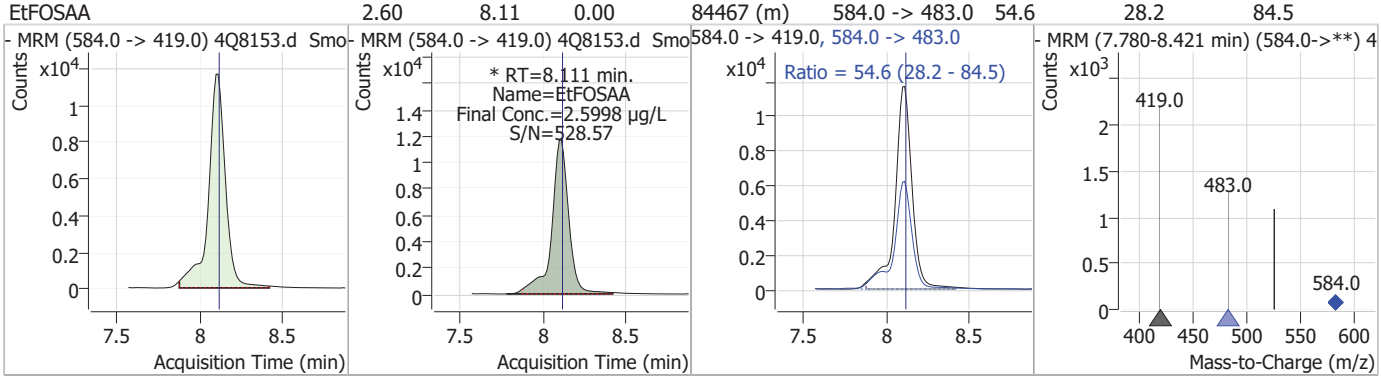
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.25	8.00	0.00	78862 (m)	499.0 -> 99.0	50.3	25.7	77.2



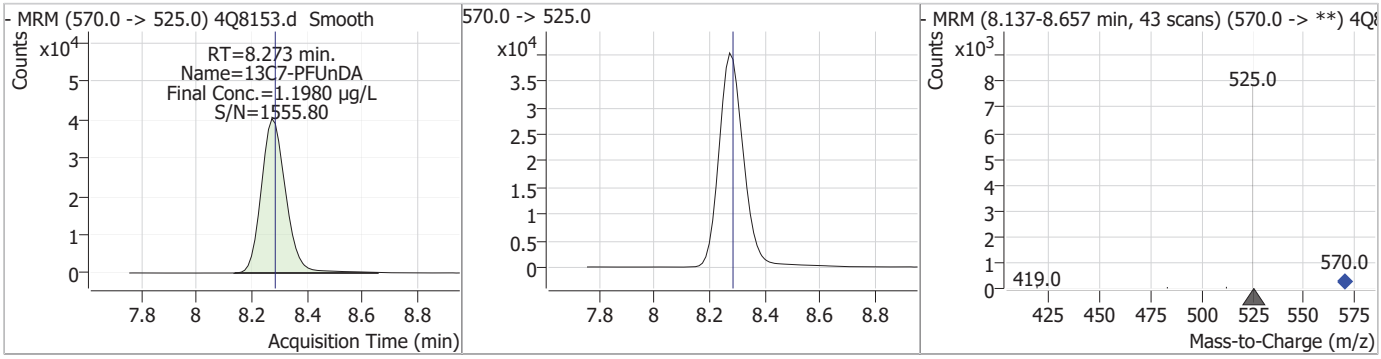
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.52	8.10	-0.01	171507				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.60	8.11	0.00	84467 (m)	584.0 -> 483.0	54.6	28.2	84.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.20	8.27	-0.01	248125				



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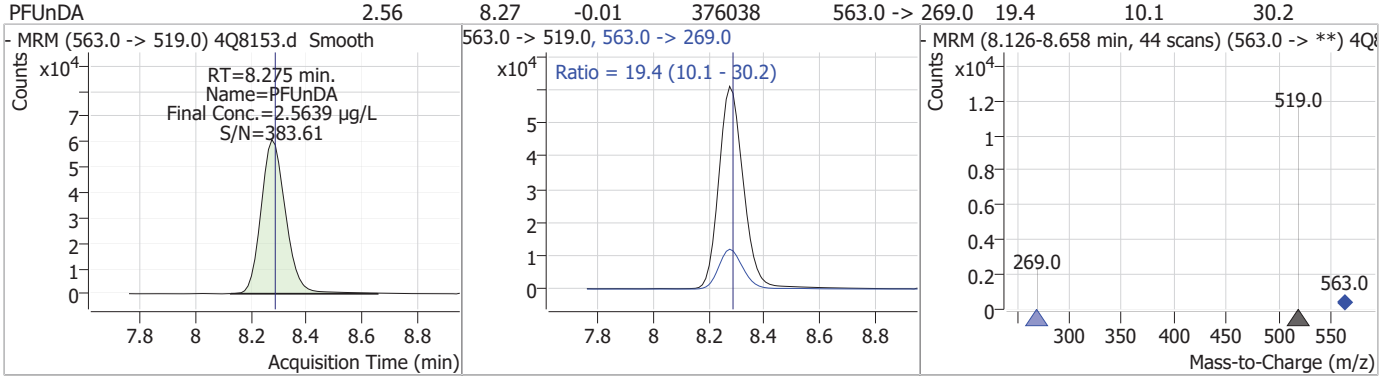
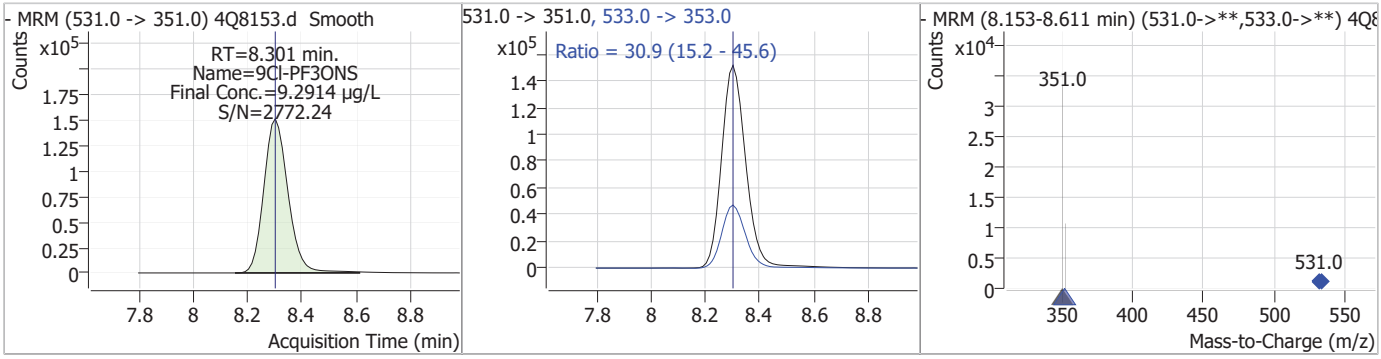
Perfluorinated Compounds by LC/MS/MS

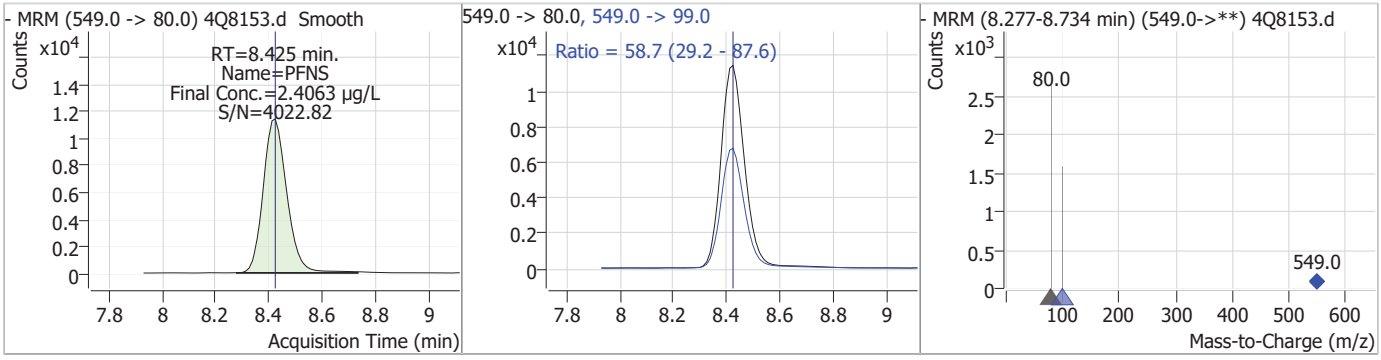
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.56	8.27	-0.01	376038	563.0 -> 269.0	19.4	10.1	30.2



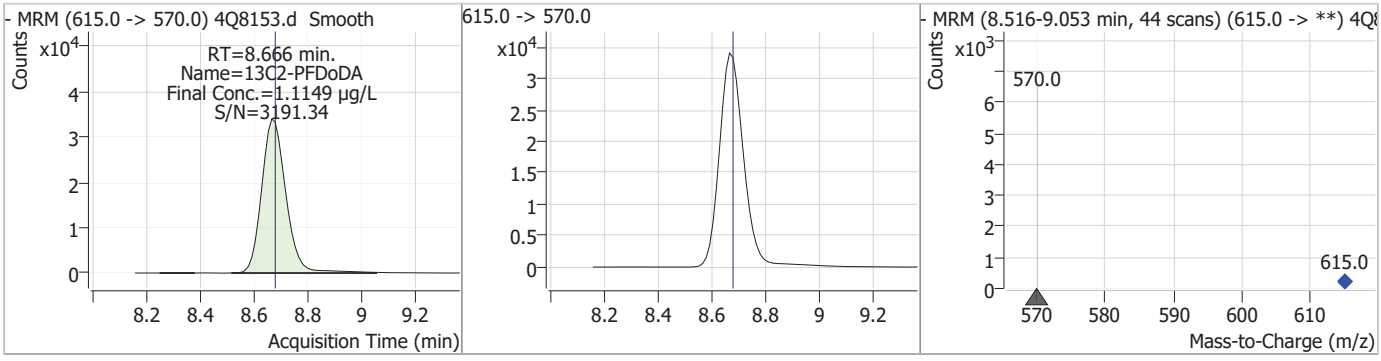
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.29	8.30	0.00	938460	533.0 -> 353.0	30.9	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.41	8.42	0.00	70407	549.0 -> 99.0	58.7	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.11	8.67	-0.01	211500				



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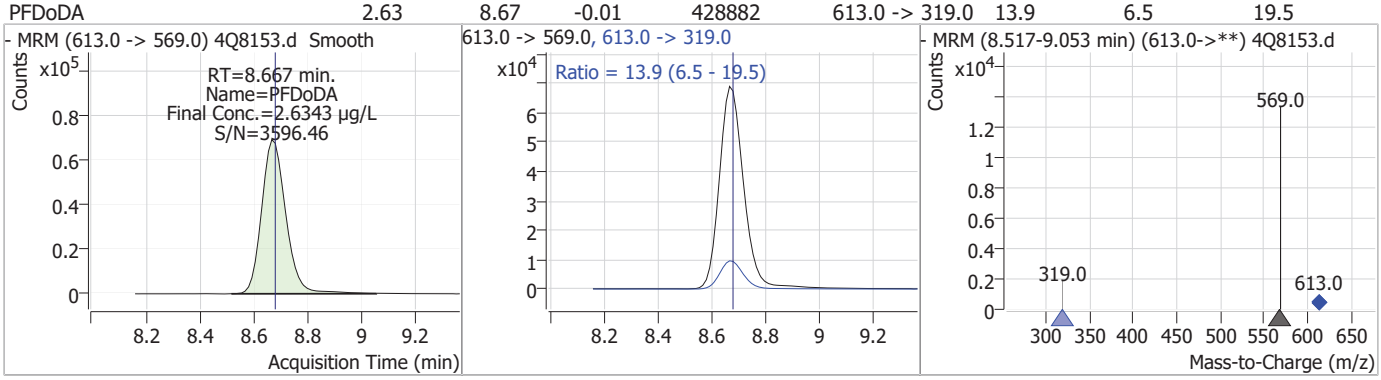
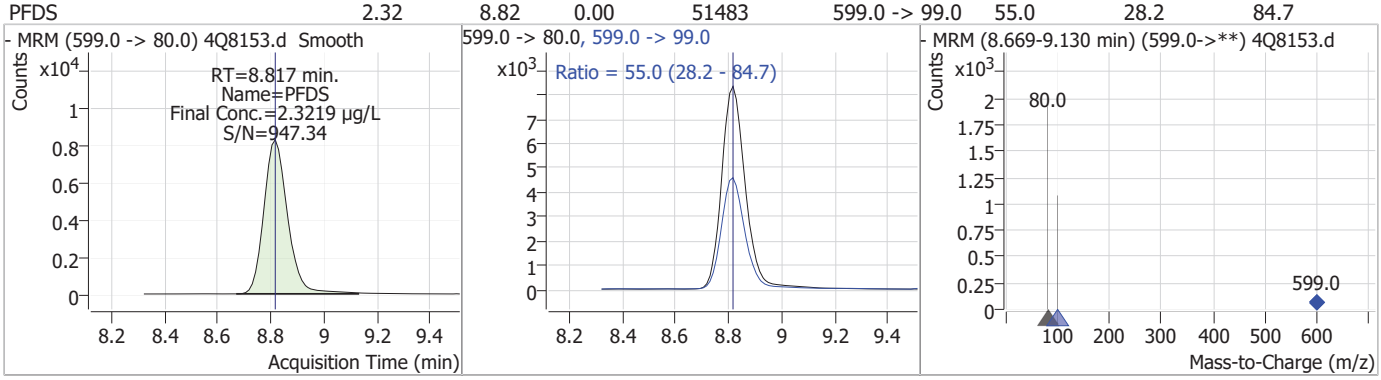
Perfluorinated Compounds by LC/MS/MS

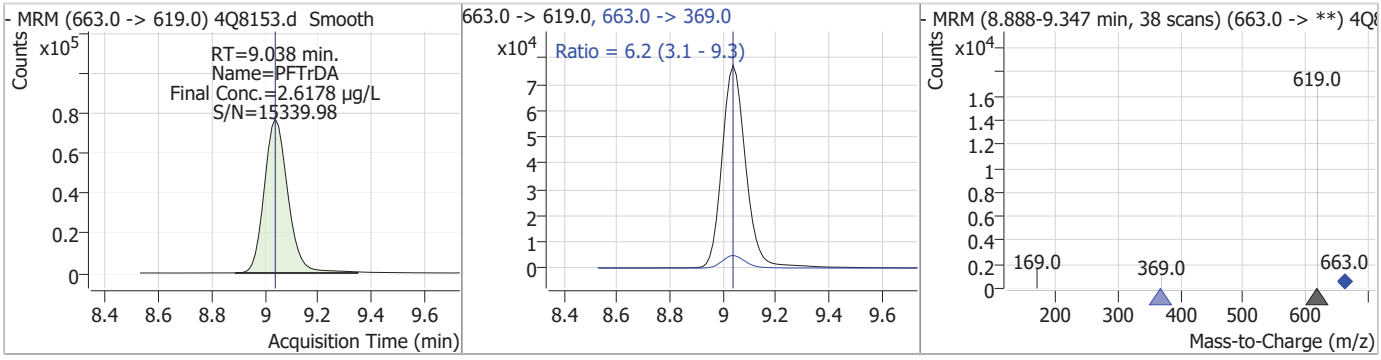
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.63	8.67	-0.01	428882	613.0 -> 319.0	13.9	6.5	19.5



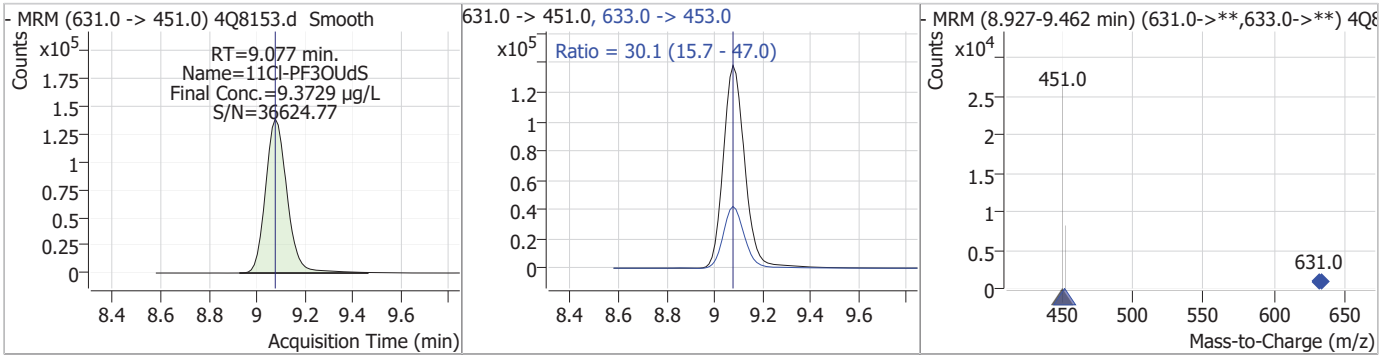
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.32	8.82	0.00	51483	599.0 -> 99.0	55.0	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.62	9.04	0.00	475267	663.0 -> 369.0	6.2	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.37	9.08	0.00	860620	633.0 -> 453.0	30.1	15.7	47.0



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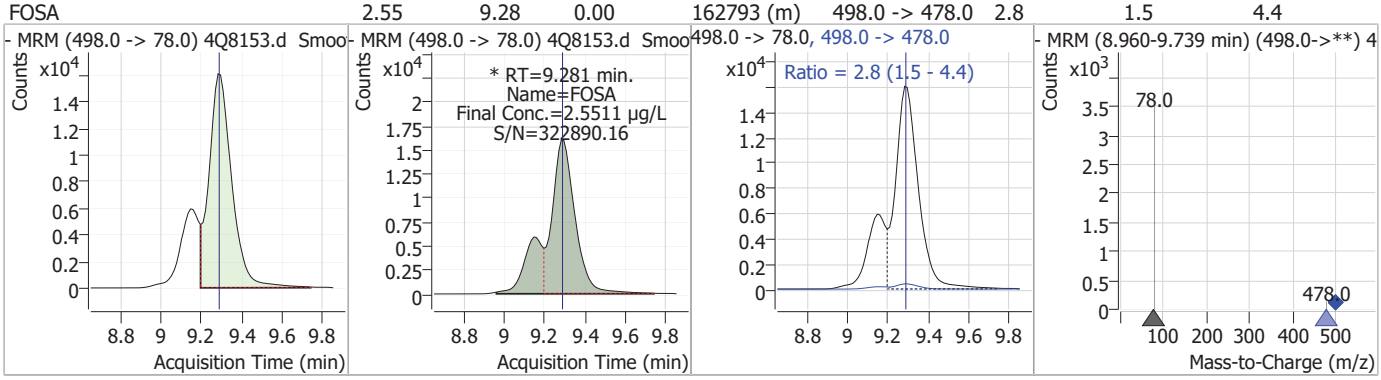
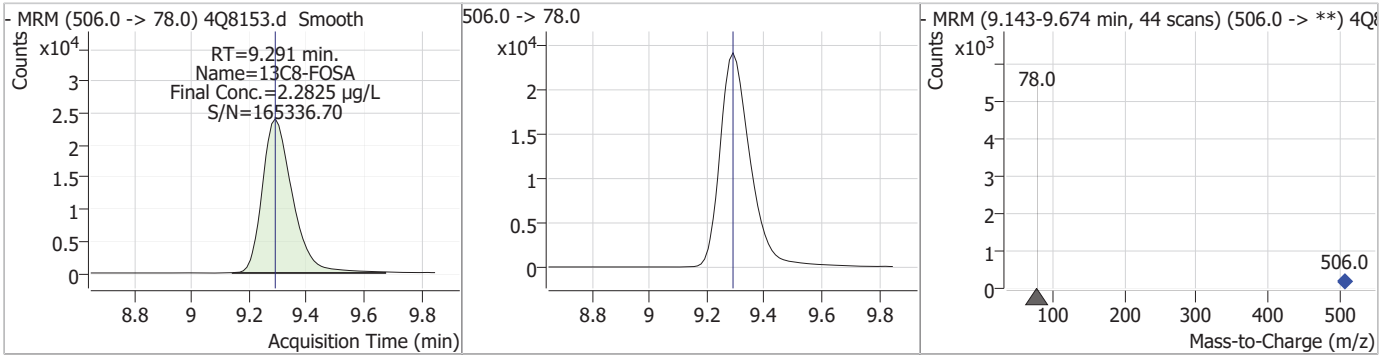
Perfluorinated Compounds by LC/MS/MS

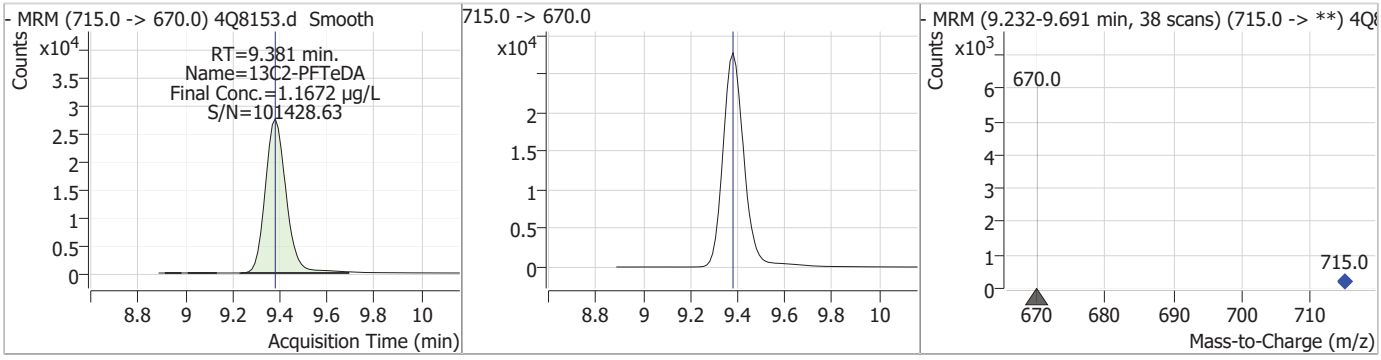
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.55	9.28	0.00	162793 (m)	498.0 -> 478.0	2.8	1.5	4.4



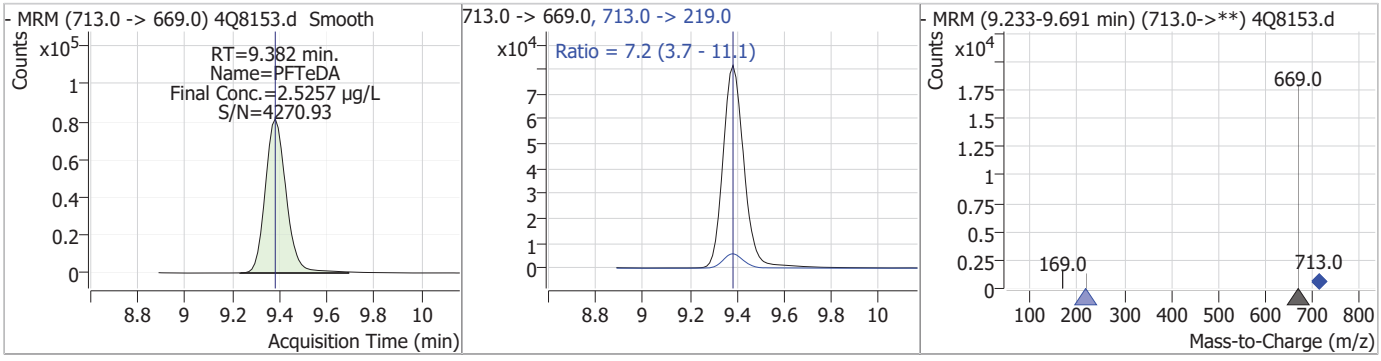
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.28	9.29	0.00	175771				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.17	9.38	0.00	170218				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.53	9.38	0.00	500558	713.0 -> 219.0	7.2	3.7	11.1



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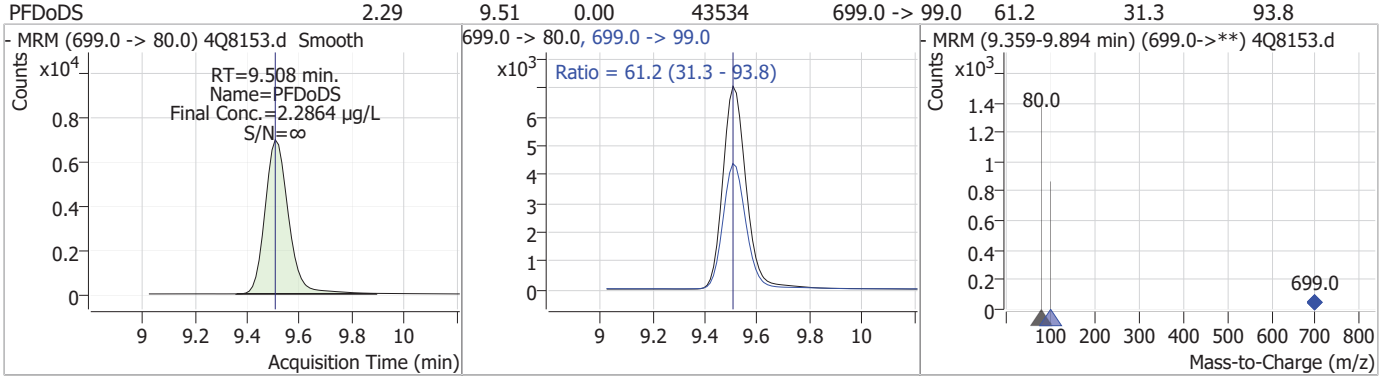
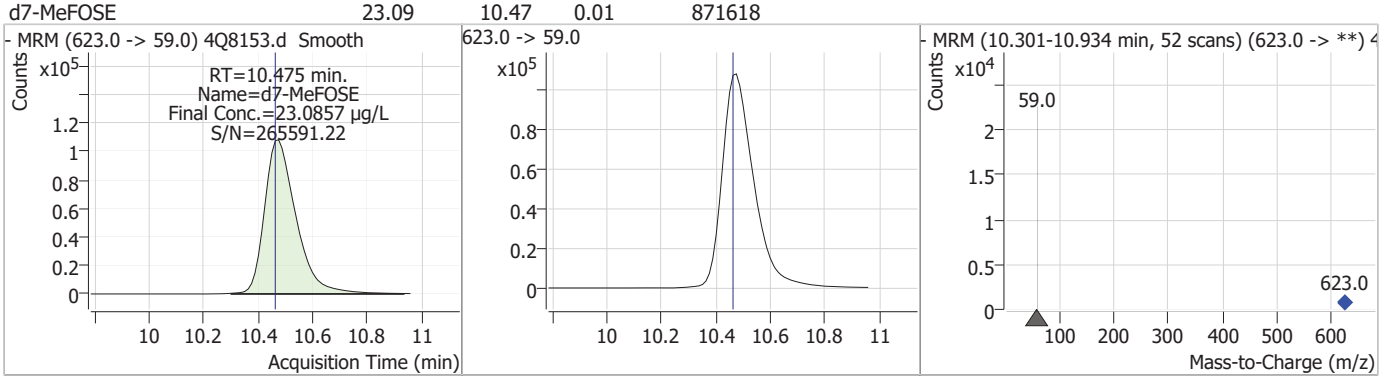
Perfluorinated Compounds by LC/MS/MS

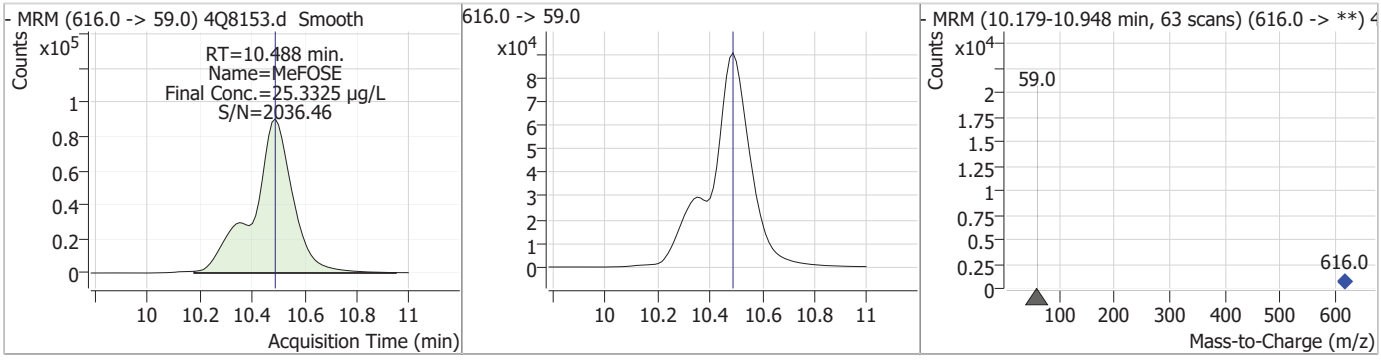
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.29	9.51	0.00	43534	699.0 -> 99.0	61.2	31.3	93.8



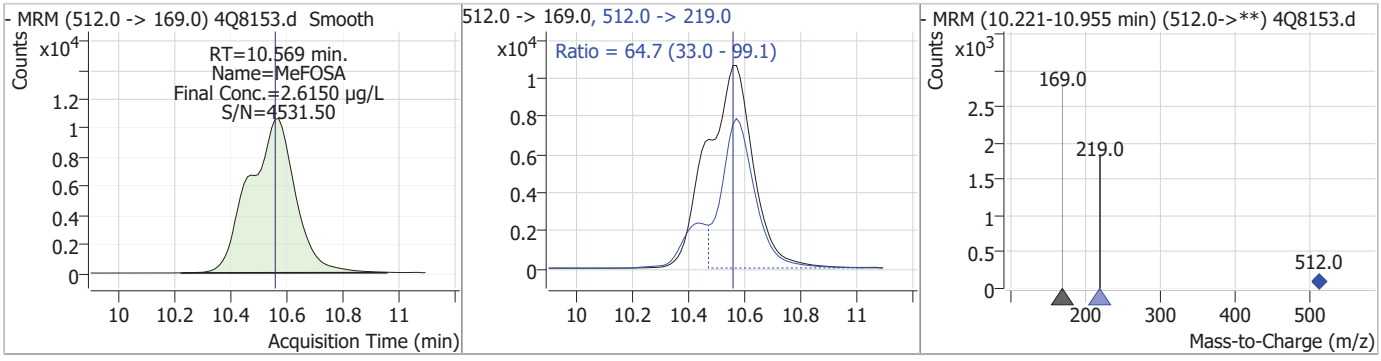
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.09	10.47	0.01	871618				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.33	10.49	0.00	968257				

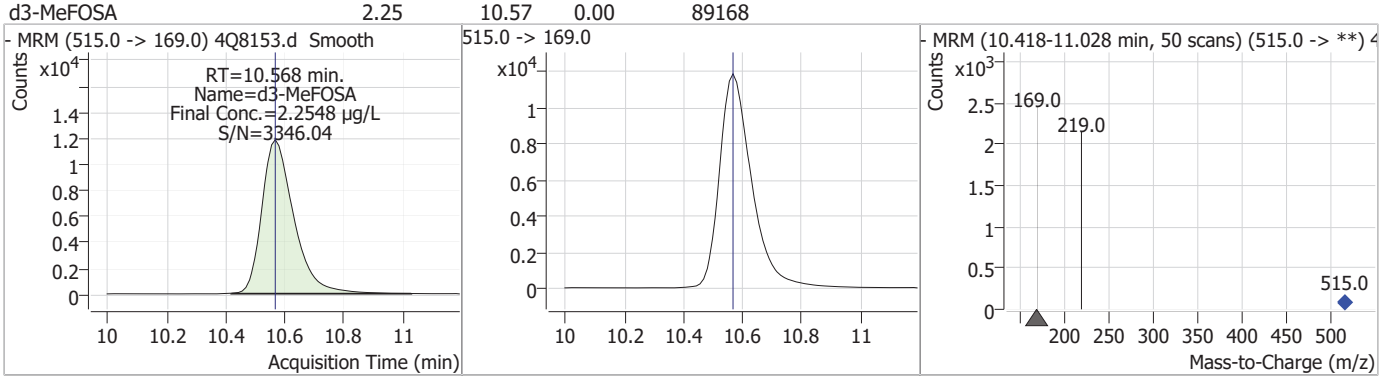


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.61	10.57	0.01	122099	512.0 -> 219.0	64.7	33.0	99.1

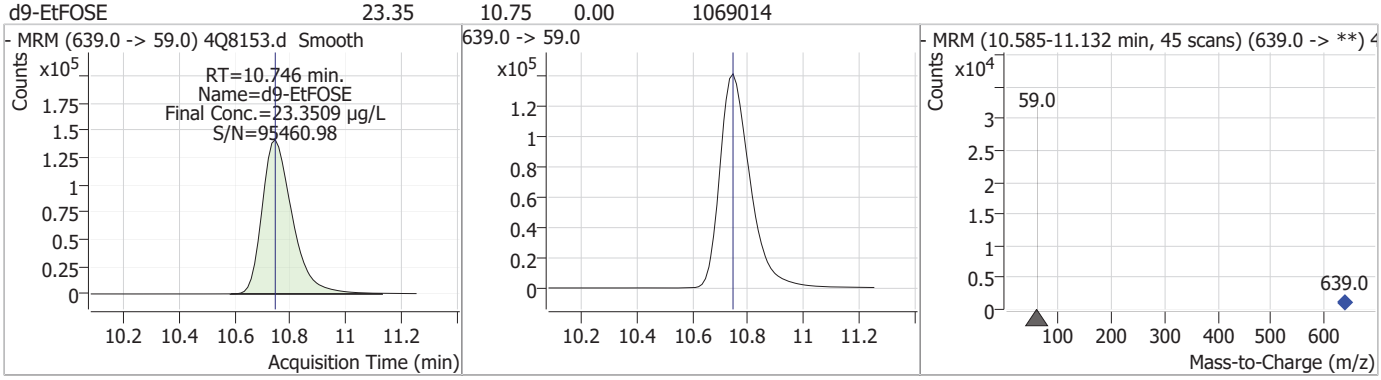


Perfluorinated Compounds by LC/MS/MS

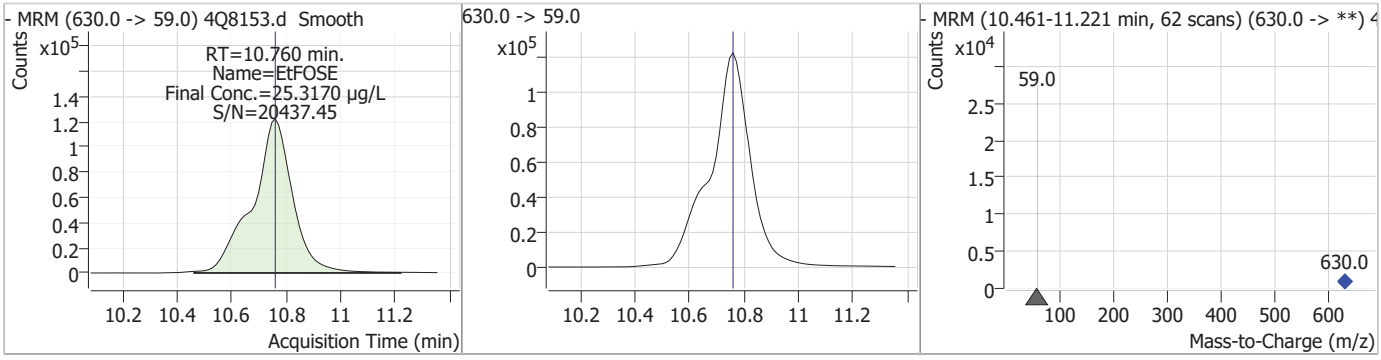
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.25	10.57	0.00	89168				



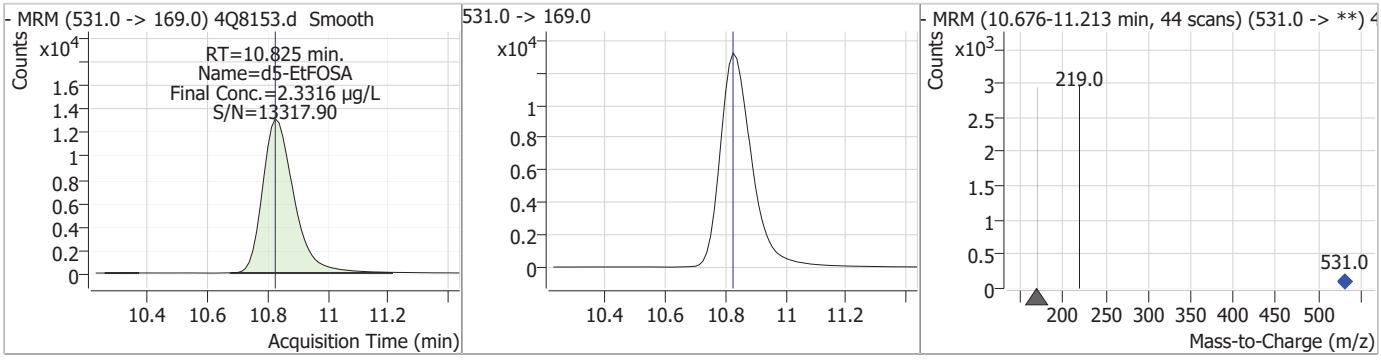
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.35	10.75	0.00	1069014				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.32	10.76	0.00	1258898				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.33	10.83	0.00	95017				



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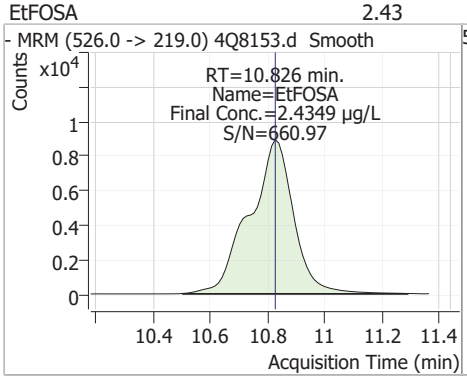
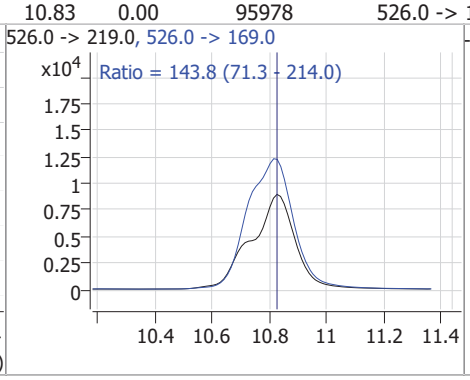
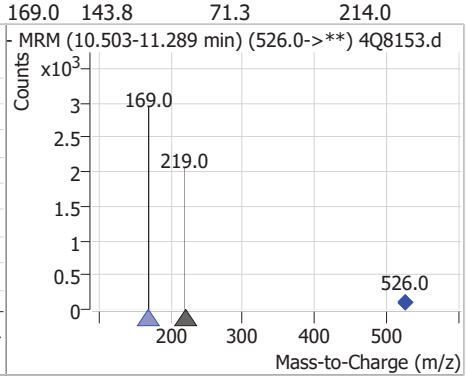
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.43	10.83	0.00	95978	526.0 -> 169.0	143.8	71.3	214.0







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Manual Integration Approval Summary

Sample Number: T4Q138-CC138
Lab FileID: 4Q8153.D
Injection Time: 04/30/25 20:08
Method: EPA 1633
Analyst approved: 05/01/25 04:03 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.92	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8170.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 4/30/2025 11:59:32 PM
Sample Name : CC138-4
Vial : P1-A5
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	868103	10.00	µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	448897	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	299853	2.50	µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	313392	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	455169	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	179062	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	171000	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	240735	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	207129	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	152772	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	165259	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	26044	2.50	µg/L	0.000
		302.0 -> 80.0	63231			
M3-PFHxS	6.999	402.0 -> 99.0	38018	2.50	µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	40686	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	10716	5.00	µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	23212	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	28057	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	214804	5.00	µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	468378	10.00	µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	165995	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	783476	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	948022	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	89163	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	84554	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	68890	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	391891	5.00	µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	43250	2.50	µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	477004	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	160274	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	182212	1.25	µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	304267	2.50	µg/L	0.012
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	10716	4.94	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.8%		
13C2-6:2FTS	6.684	429.0 -> 81.0	23212	4.93	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.6%		
13C2-8:2FTS	7.671	529.0 -> 81.0	28057	5.07	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.4%		
13C2-PFDoDA	8.666	615.0 -> 570.0	207129	1.20	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.6%		
13C2-PFTeDA	9.368	715.0 -> 670.0	152772	1.15	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.8%		
13C3-PFBS	5.368	302.0 -> 99.0	26044	2.44	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.6%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	38018	2.52	µg/L		0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.7%			
13C4-PFBA	2.871	217.0 -> 172.0	868103	9.66	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 96.6%			
13C4-PFHpA	6.291	367.0 -> 322.0	313392	2.29	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.6%			
13C5-PFHxA	5.464	318.0 -> 273.0	299853	2.33	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.1%			
13C5-PFPeA	4.319	268.0 -> 223.0	448897	4.59	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.9%			
13C6-PFDA	7.858	519.0 -> 474.0	171000	1.21	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.6%			
13C7-PFUnDA	8.273	570.0 -> 525.0	240735	1.27	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.8%			
13C8-FOSA	9.279	506.0 -> 78.0	165259	2.34	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.4%			
13C8-PFOA	6.897	421.0 -> 376.0	455169	2.39	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.5%			
13C8-PFOS	7.995	507.0 -> 99.0	40686	2.45	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.1%			
13C9-PFNA	7.403	472.0 -> 427.0	179062	1.18	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.8%			
d3-MeFOSAA	7.915	573.0 -> 419.0	214804	4.73	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.7%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	468378	9.26	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 92.6%			
d3-MeFOSA	10.555	515.0 -> 169.0	84554	2.33	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.1%			
d5-EtFOSAA	8.098	589.0 -> 419.0	165995	4.77	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.3%			
d7-MeFOSE	10.462	623.0 -> 59.0	783476	22.58	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 90.3%			
d9-EtFOSE	10.734	639.0 -> 59.0	948022	22.53	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 90.1%			
d5-EtFOSA	10.825	531.0 -> 169.0	89163	2.38	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.2%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	198154	10.07	µg/L		99
		327.0 -> 81.0	94424				
6:2FTS	6.684	427.0 -> 407.0	232633	9.99	µg/L		99
		427.0 -> 81.0	107872				
8:2FTS	7.671	527.0 -> 507.0	225092	10.25	µg/L		99
		527.0 -> 81.0	85926				
EtFOSAA	8.099	584.0 -> 419.0	79567	2.53	µg/L	m	100
		584.0 -> 483.0	45148				
FOSA	9.281	498.0 -> 78.0	152322	2.54	µg/L	m	99
		498.0 -> 478.0	4013				
MeFOSAA	7.917	570.0 -> 419.0	95321	2.58	µg/L	m	96
		570.0 -> 512.0	32618				
PFBA	2.877	213.0 -> 169.0	260532	9.82	µg/L		100
PFBS	5.369	299.0 -> 80.0	68370	2.30	µg/L		99
		299.0 -> 99.0	27475				
PFDA	7.859	513.0 -> 469.0	318933	2.45	µg/L		96
		513.0 -> 219.0	80119				
PFDoDA	8.667	613.0 -> 569.0	411539	2.58	µg/L		99
		613.0 -> 319.0	55139				

Perfluorinated Compounds by LC/MS/MS

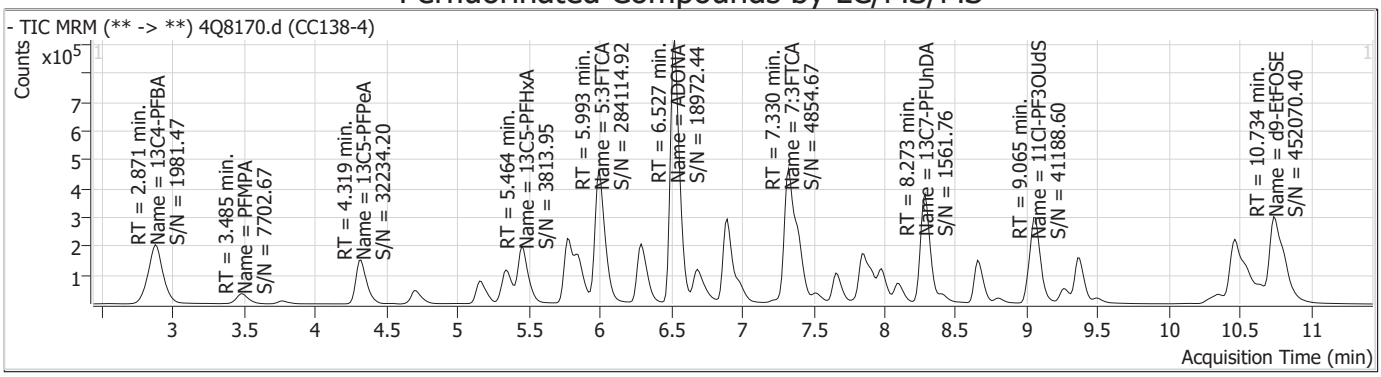
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.804	599.0 -> 80.0	48418	2.25	µg/L		98
		599.0 -> 99.0	28193				
PFHpA	6.292	363.0 -> 319.0	486818	2.55	µg/L		99
		363.0 -> 169.0	98478				
PFHpS	7.529	449.0 -> 80.0	74981	2.28	µg/L		97
		449.0 -> 99.0	42627				
PFHxA	5.467	313.0 -> 269.0	331668	2.57	µg/L		100
		313.0 -> 119.0	10652				
PFHxS	6.987	399.0 -> 80.0	74942	2.26	µg/L	m	100
		399.0 -> 99.0	40316				
PFNA	7.404	463.0 -> 419.0	279296	2.59	µg/L	m	98
		463.0 -> 219.0	101535				
PFNS	8.412	549.0 -> 80.0	67909	2.48	µg/L		95
		549.0 -> 99.0	37117				
PFOA	6.898	413.0 -> 369.0	382203	2.52	µg/L	m	99
		413.0 -> 169.0	113324				
PFOS	7.996	499.0 -> 80.0	73839	2.25	µg/L	m	99
		499.0 -> 99.0	38715				
PFPeA	4.321	263.0 -> 219.0	369524	5.21	µg/L		100
PFPeS	6.331	349.0 -> 80.0	78466	2.41	µg/L		100
		349.0 -> 99.0	39629				
PFTeDA	9.369	713.0 -> 669.0	464922	2.61	µg/L		99
		713.0 -> 219.0	32914				
PFTrDA	9.025	663.0 -> 619.0	455916	2.56	µg/L		99
		663.0 -> 369.0	27291				
PFUnDA	8.275	563.0 -> 519.0	346504	2.44	µg/L		99
		563.0 -> 269.0	71368				
11Cl-PF3OUdS	9.065	631.0 -> 451.0	838849	9.41	µg/L		98
		633.0 -> 453.0	252064				
9Cl-PF3ONS	8.301	531.0 -> 351.0	909942	9.28	µg/L		100
		533.0 -> 353.0	277514				
ADONA	6.527	377.0 -> 251.0	3200470	8.71	µg/L		100
		377.0 -> 85.0	1050468				
HFPO-DA	5.792	285.0 -> 169.0	523581	10.63	µg/L		98
		285.0 -> 185.0	54356				
3:3FTCA	3.769	241.0 -> 177.0	51575	12.16	µg/L		99
		241.0 -> 117.0	4015				
5:3FTCA	5.993	341.0 -> 237.0	1354136	58.69	µg/L		100
		341.0 -> 217.0	946982				
7:3FTCA	7.330	441.0 -> 337.0	1657322	55.75	µg/L		98
		441.0 -> 317.0	730537				
EtFOSA	10.826	526.0 -> 219.0	89585	2.42	µg/L		96
		526.0 -> 169.0	131647				
EtFOSE	10.747	630.0 -> 59.0	1126721	25.55	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	113954	2.57	µg/L		97
		512.0 -> 219.0	72662				
MeFOSE	10.476	616.0 -> 59.0	879744	25.61	µg/L	m	100
PFDoDS	9.496	699.0 -> 80.0	43259	2.43	µg/L		97
		699.0 -> 99.0	25924				
NFDHA	5.345	295.0 -> 201.0	92489	5.45	µg/L		88
		201.0 -> 85.0	349085				
		295.0 -> 85.0	23678				
PFMBA	4.710	279.0 -> 85.0	245443	5.07	µg/L		100
PFMPA	3.485	229.0 -> 85.0	212612	5.22	µg/L		100
PFEESA	5.849	315.0 -> 135.0	552702	4.66	µg/L		99
		315.0 -> 69.0	44083				

Perfluorinated Compounds by LC/MS/MS

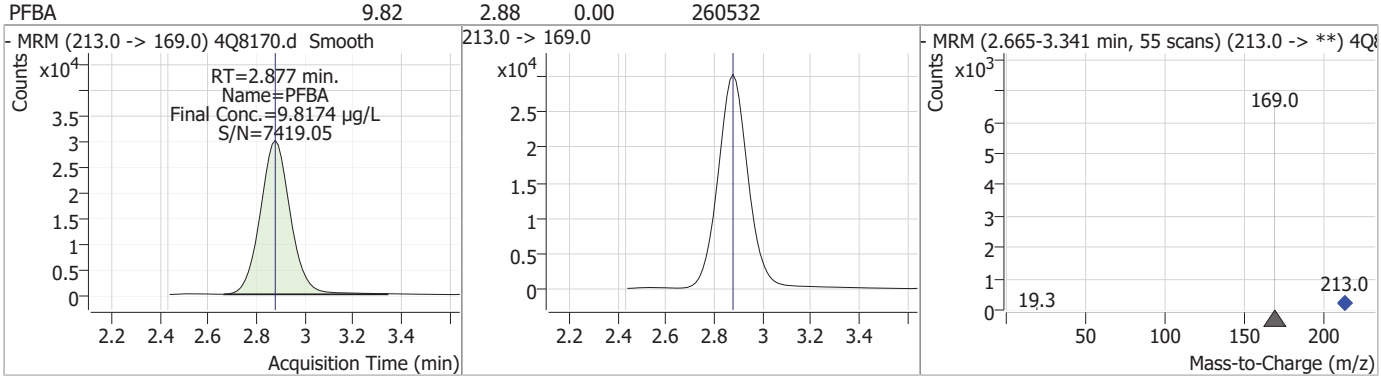
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

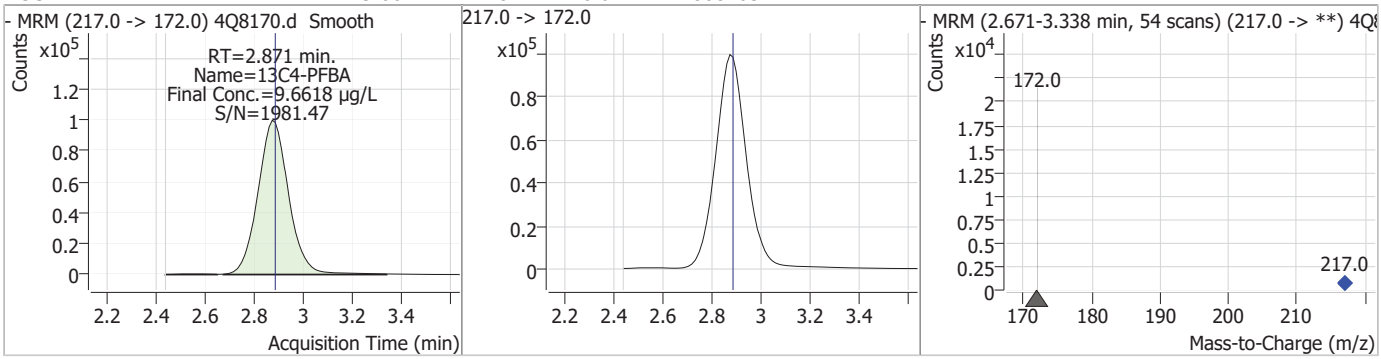
Perfluorinated Compounds by LC/MS/MS



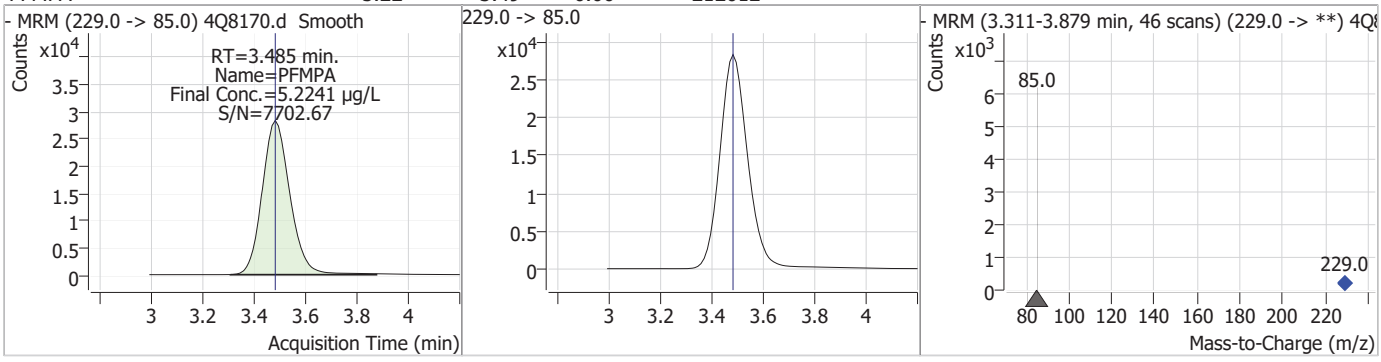
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.82	2.88	0.00	260532				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.66	2.87	-0.01	868103				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.22	3.49	0.00	212612				



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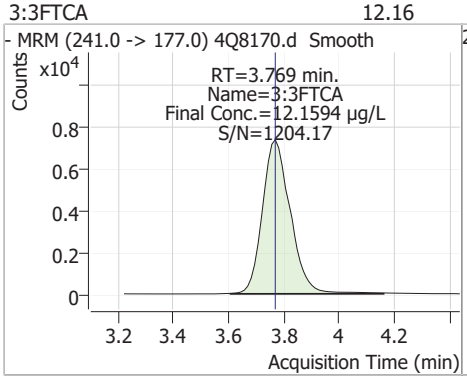
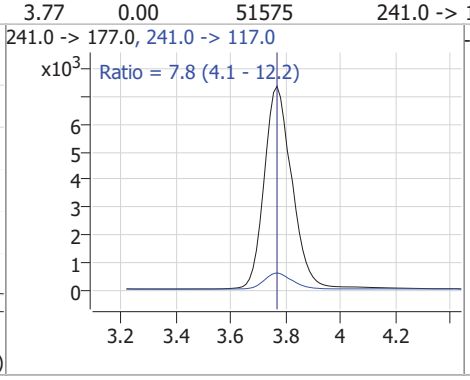
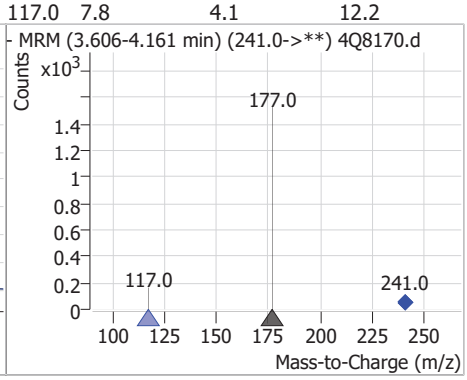
Perfluorinated Compounds by LC/MS/MS

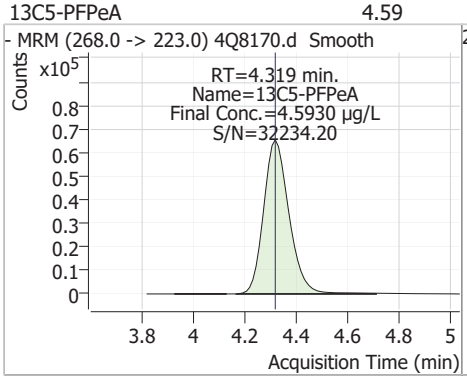
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.16	3.77	0.00	51575	241.0 -> 117.0	7.8	4.1	12.2

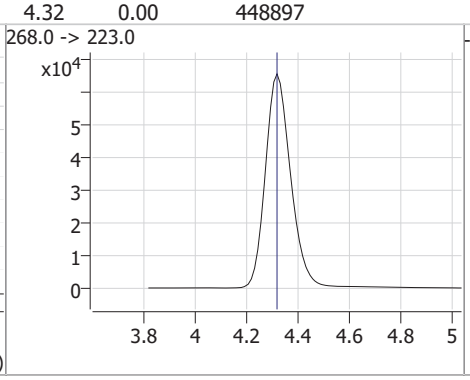


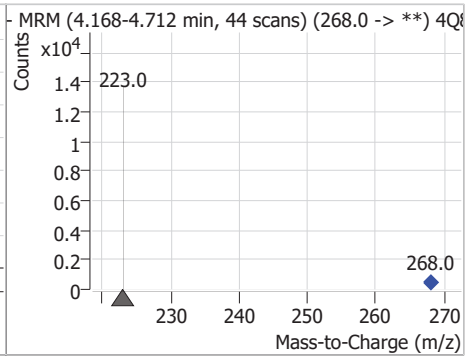




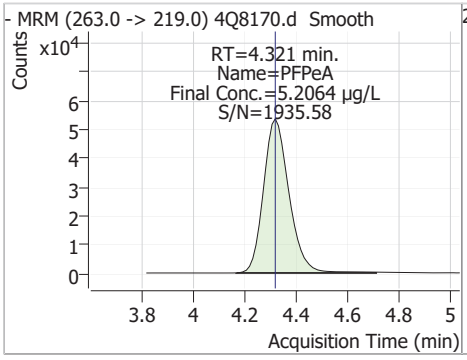
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.59	4.32	0.00	448897				

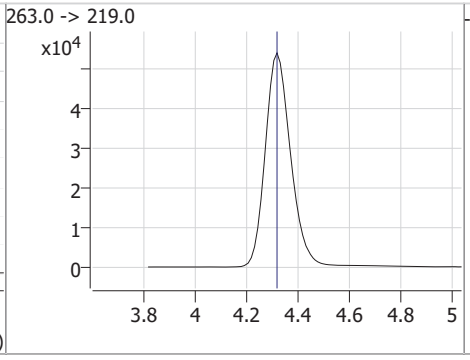


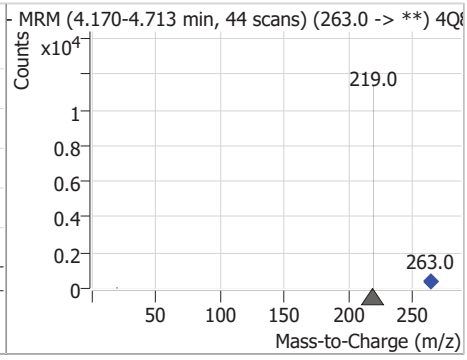




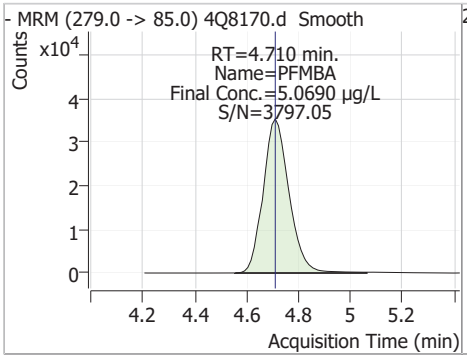
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.21	4.32	0.00	369524				

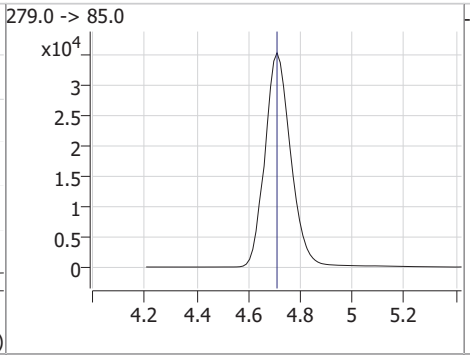


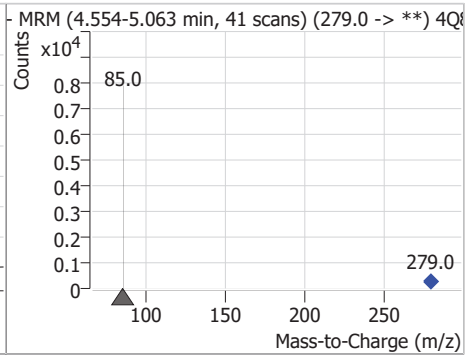




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.07	4.71	0.00	245443				







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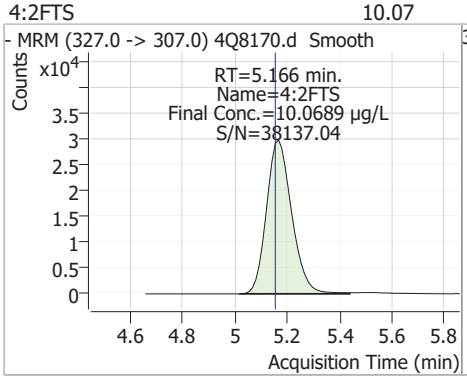
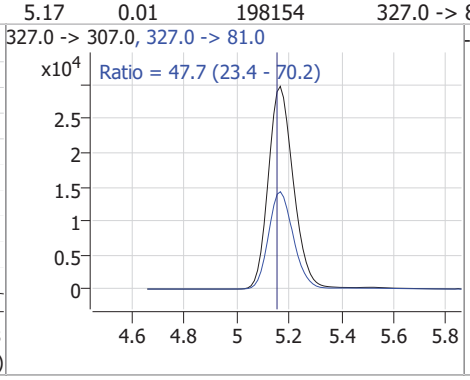
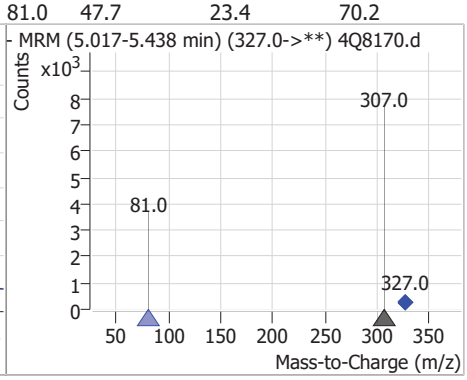
Perfluorinated Compounds by LC/MS/MS

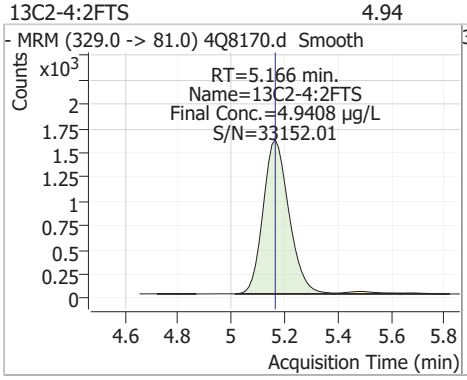
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	10.07	5.17	0.01	198154	327.0 -> 81.0	47.7	23.4	70.2

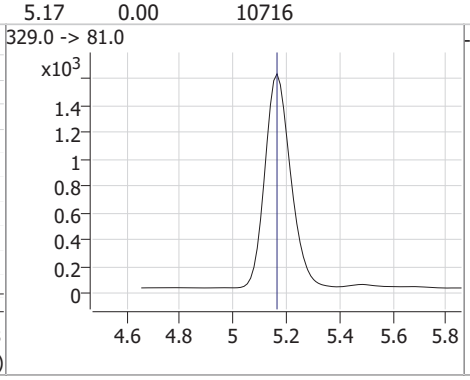


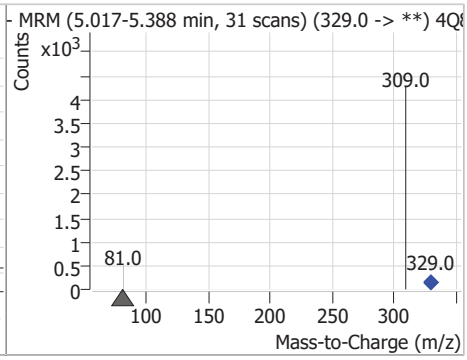




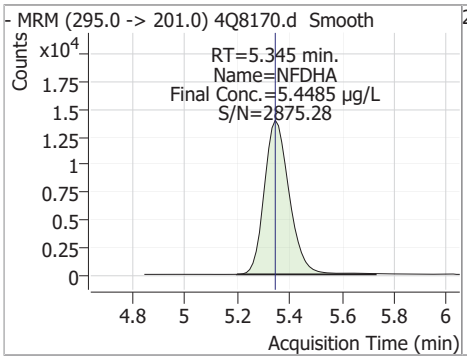
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.94	5.17	0.00	10716				

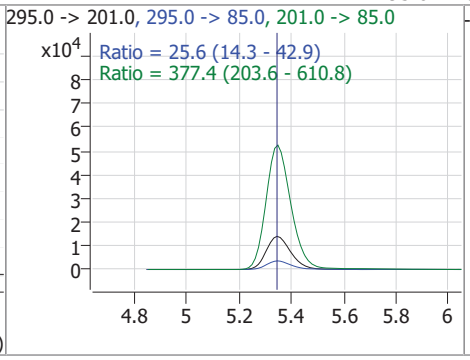


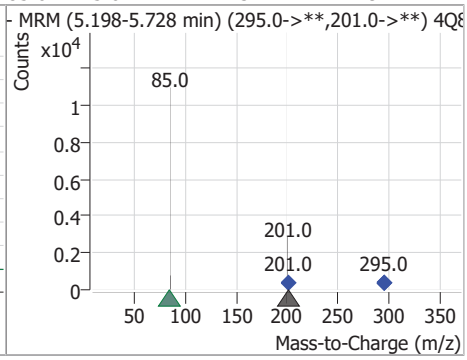




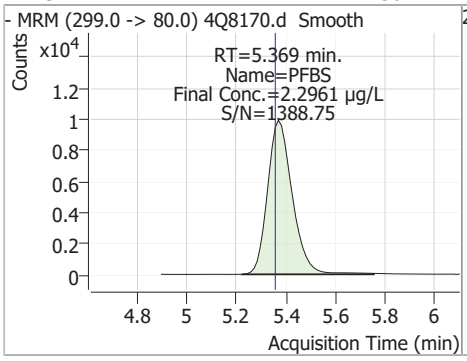
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.45	5.35	0.00	92489	201.0 -> 85.0	377.4	203.6	610.8
					295.0 -> 85.0	25.6	14.3	42.9

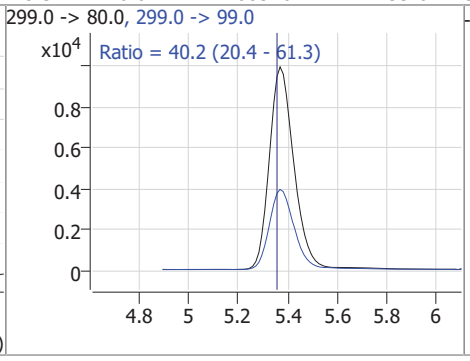


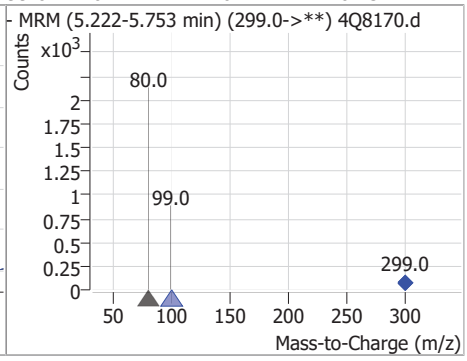




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.30	5.37	0.01	68370	299.0 -> 99.0	40.2	20.4	61.3

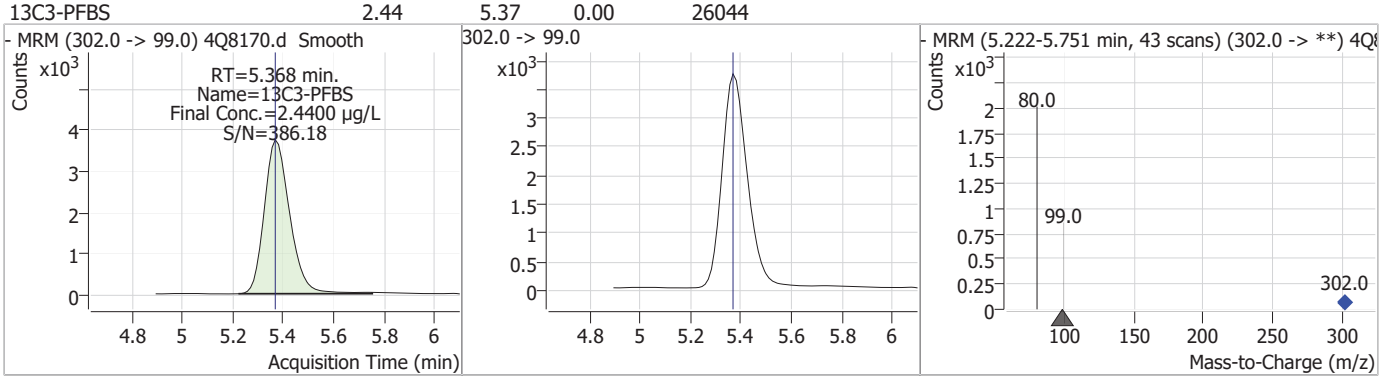




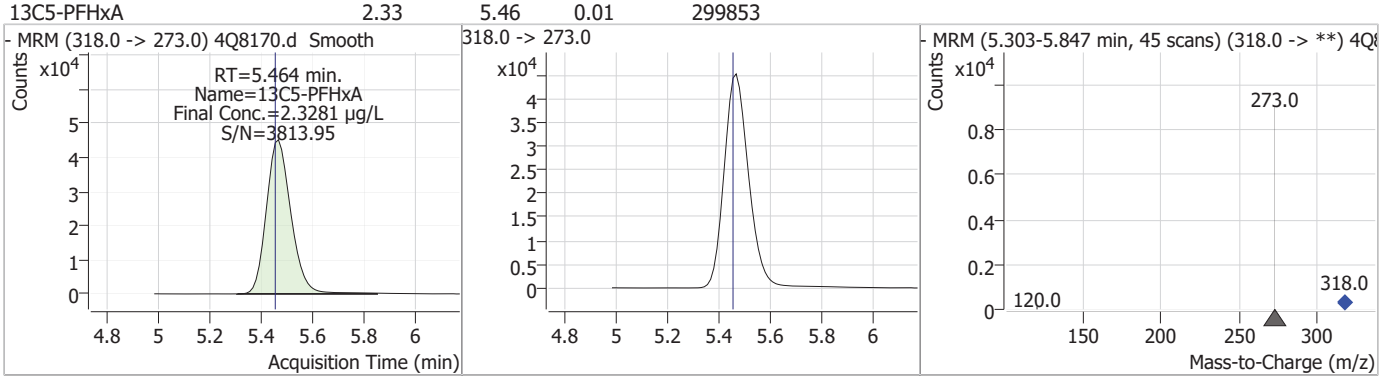


Perfluorinated Compounds by LC/MS/MS

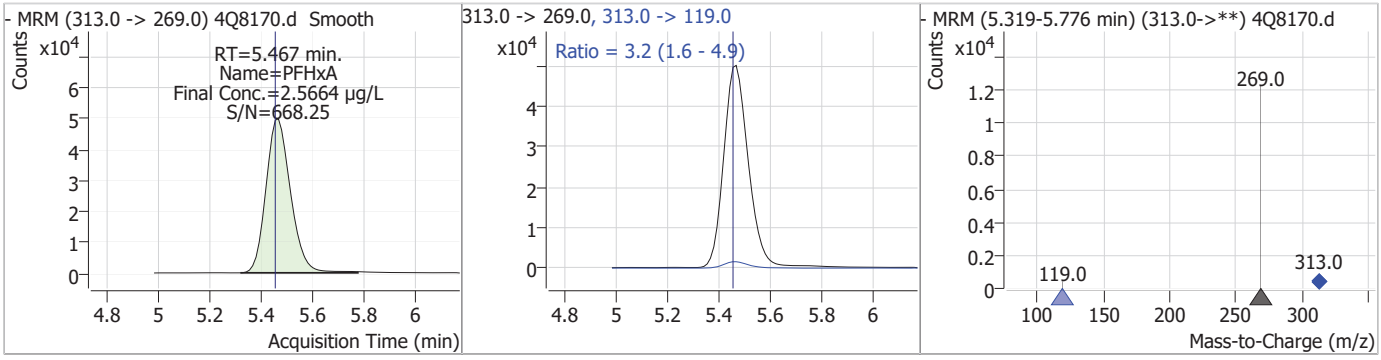
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.44	5.37	0.00	26044				



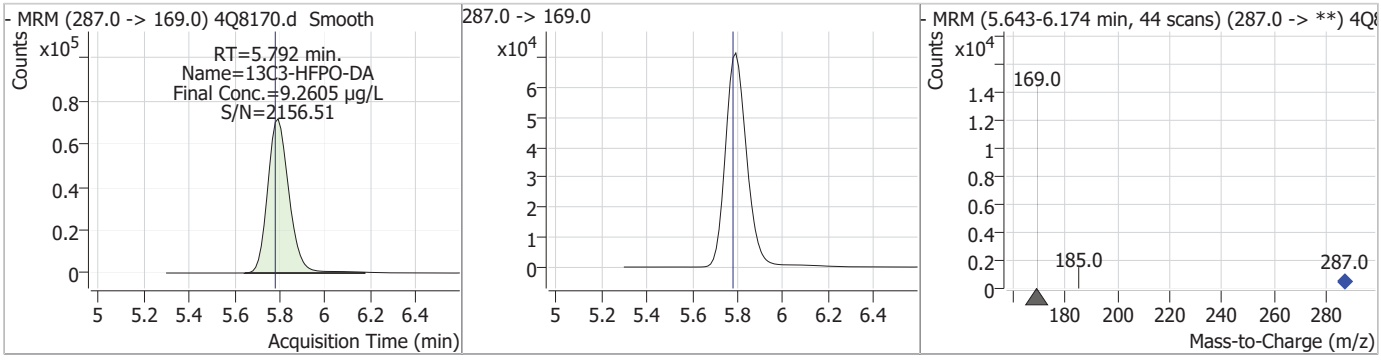
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.33	5.46	0.01	299853				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.57	5.47	0.01	331668	313.0 -> 119.0	3.2	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.26	5.79	0.01	468378				



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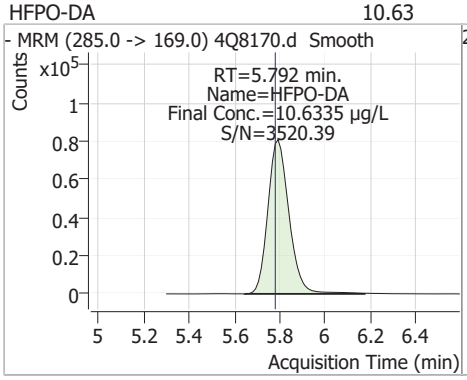
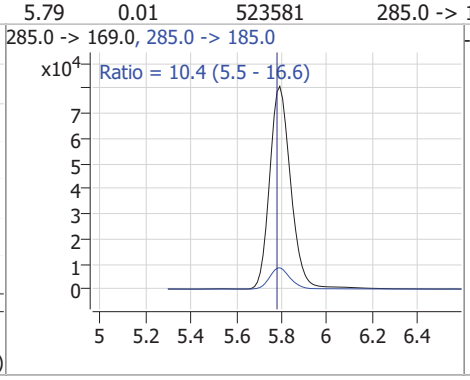
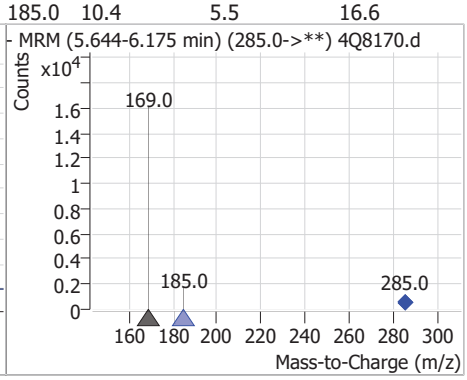
Perfluorinated Compounds by LC/MS/MS

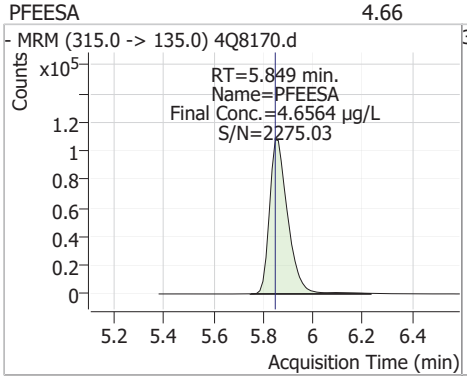
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.63	5.79	0.01	523581	285.0 -> 185.0	10.4	5.5	16.6

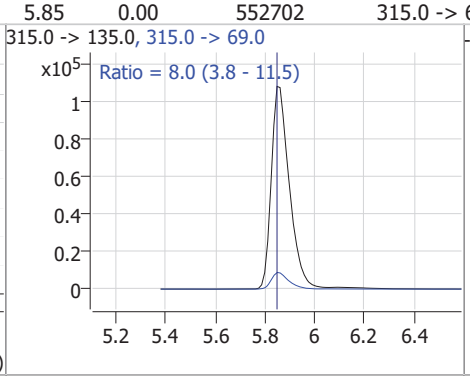


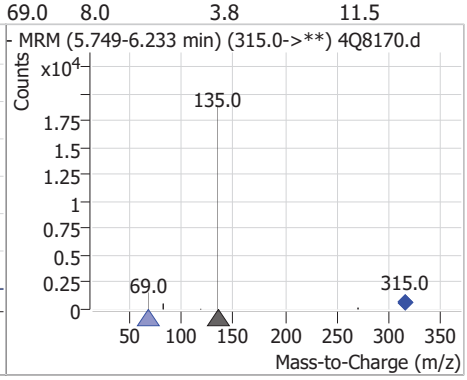




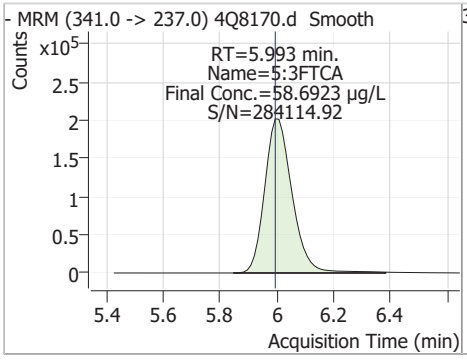
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.66	5.85	0.00	552702	315.0 -> 69.0	8.0	3.8	11.5

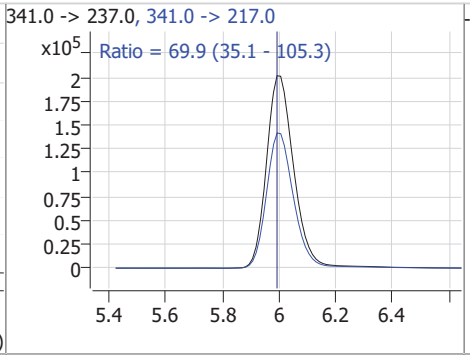


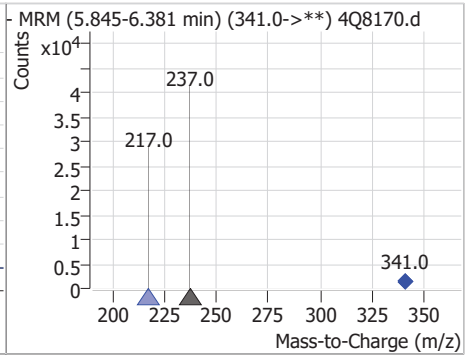




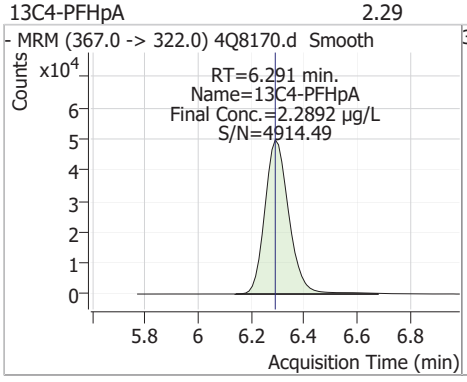
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	58.69	5.99	0.00	1354136	341.0 -> 217.0	69.9	35.1	105.3

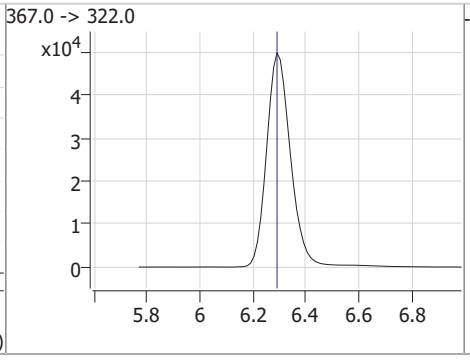


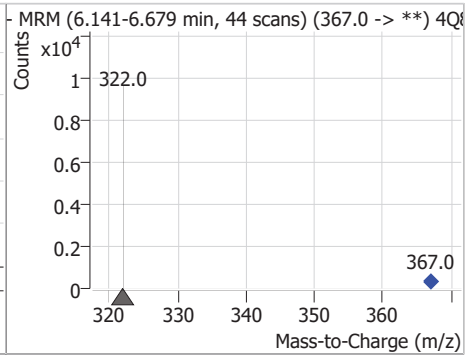




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.29	6.29	0.00	313392				







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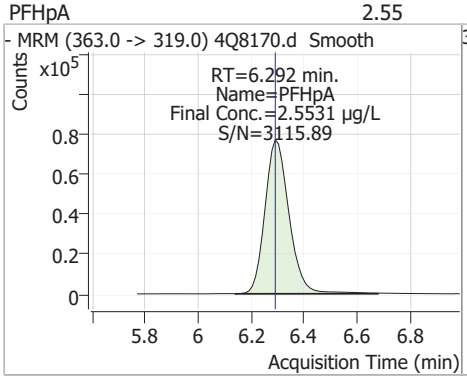
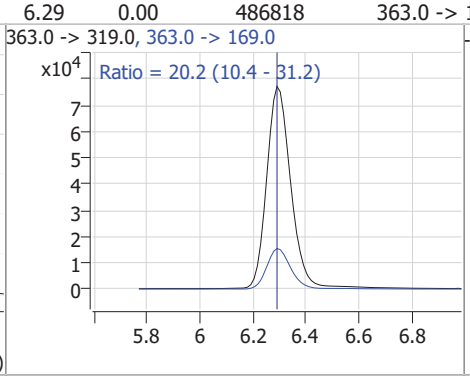
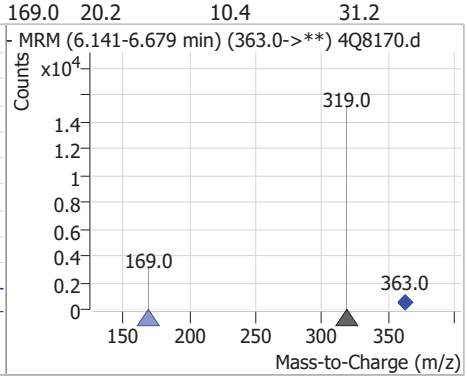
Perfluorinated Compounds by LC/MS/MS

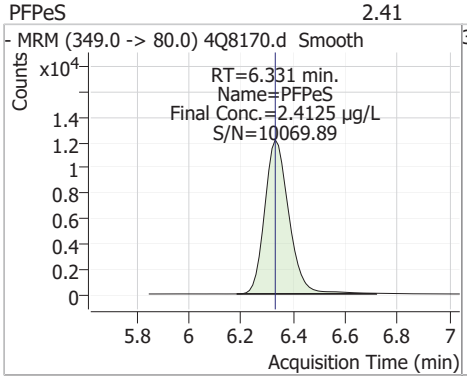
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.55	6.29	0.00	486818	363.0 -> 169.0	20.2	10.4	31.2

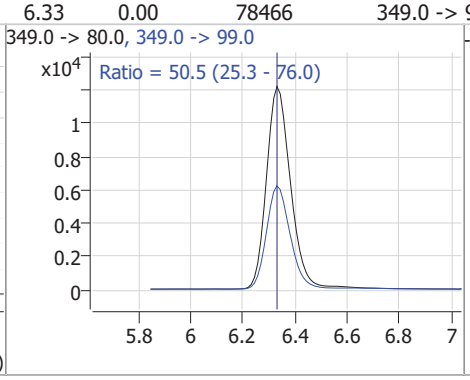


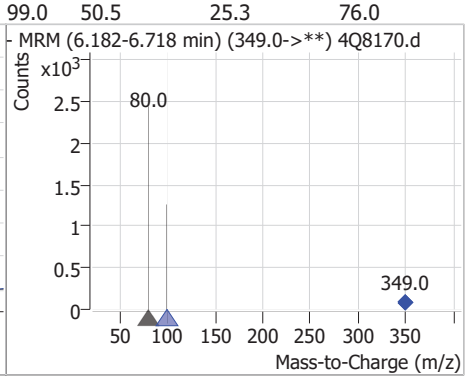




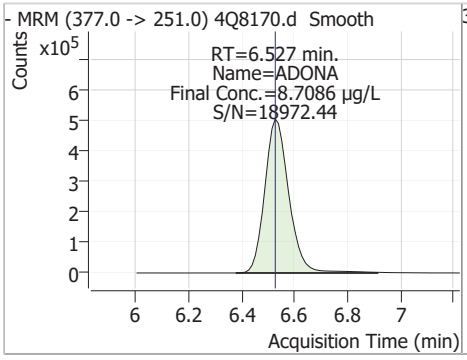
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.41	6.33	0.00	78466	349.0 -> 99.0	50.5	25.3	76.0

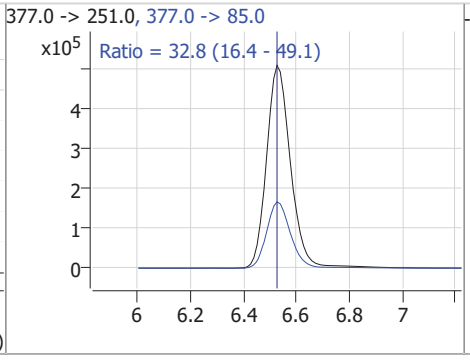


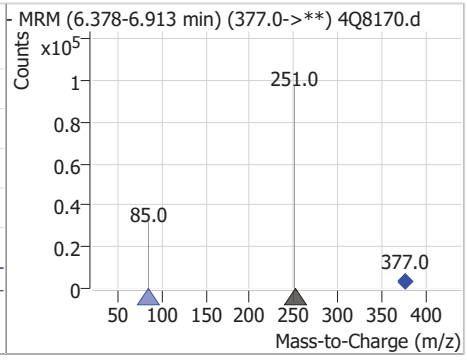




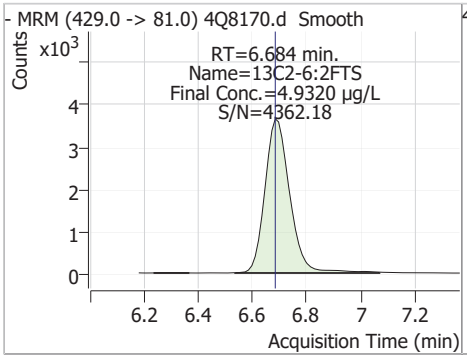
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.71	6.53	0.00	3200470	377.0 -> 85.0	32.8	16.4	49.1

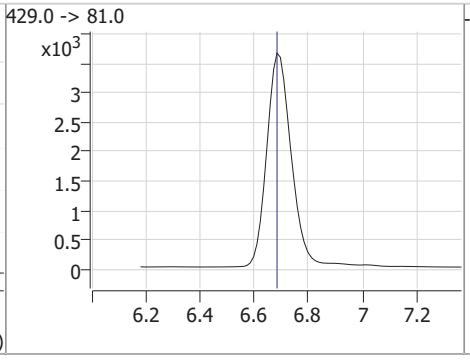


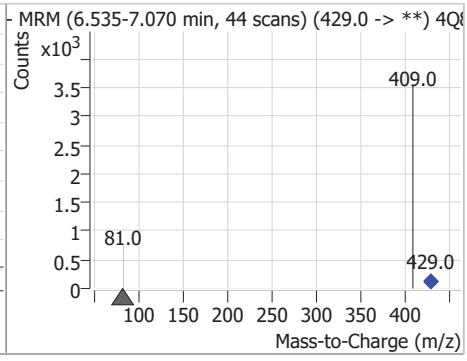




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.93	6.68	0.00	23212				







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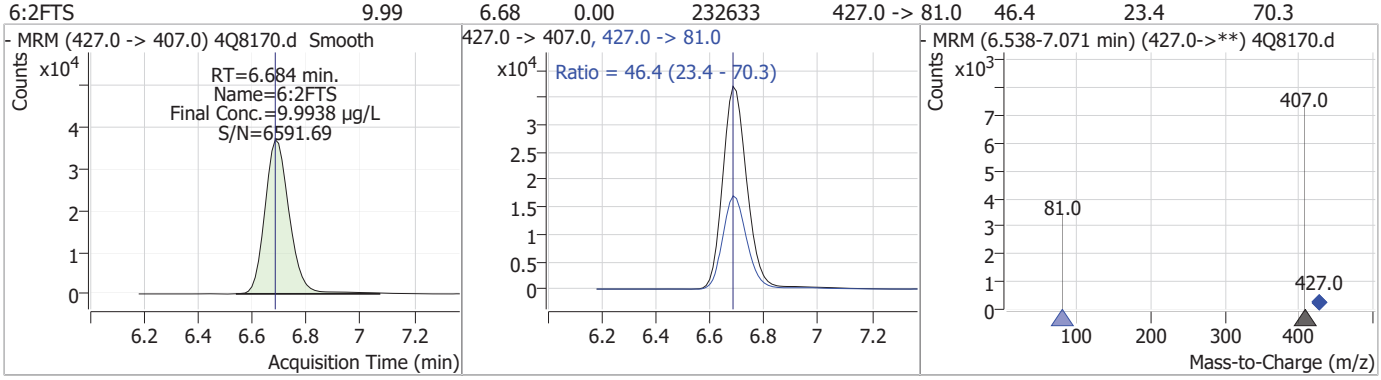
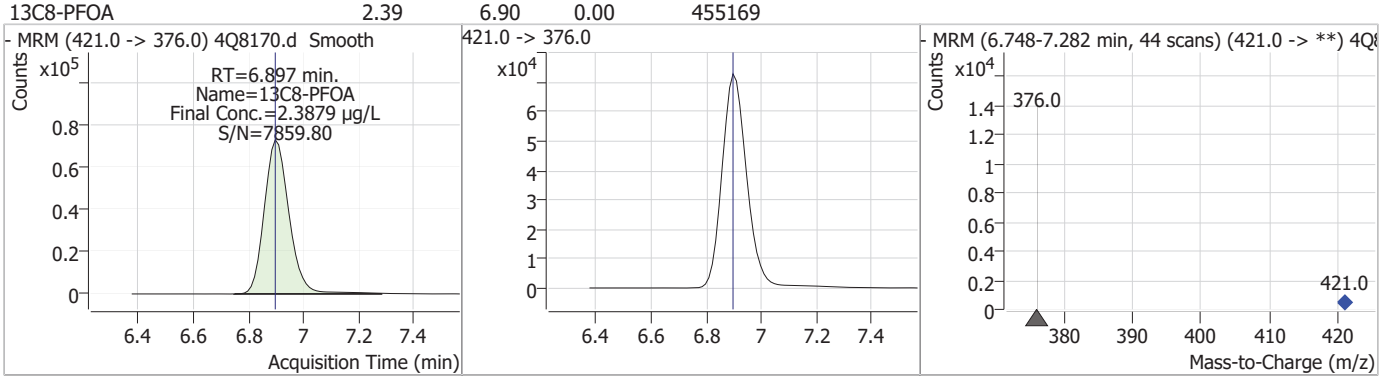
Perfluorinated Compounds by LC/MS/MS

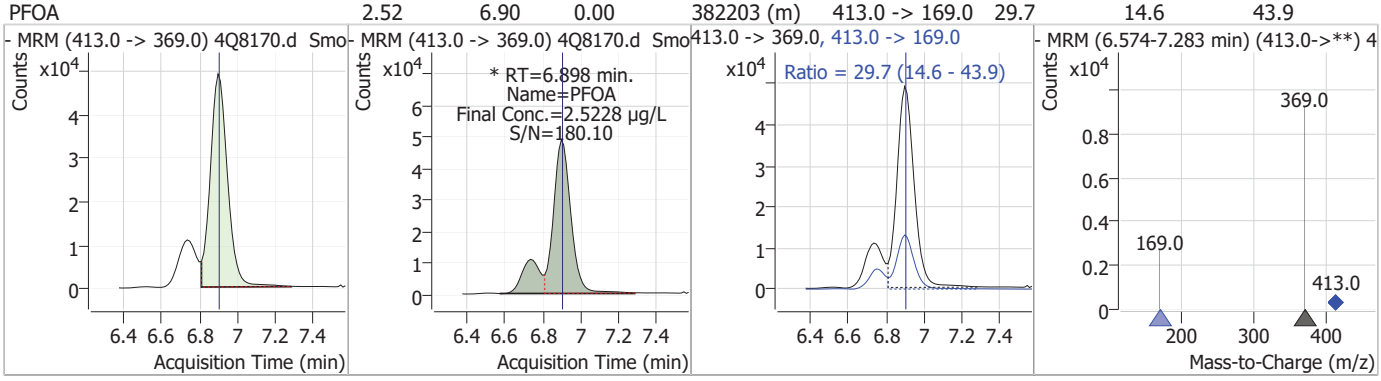
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.99	6.68	0.00	232633	427.0 -> 81.0	46.4	23.4	70.3



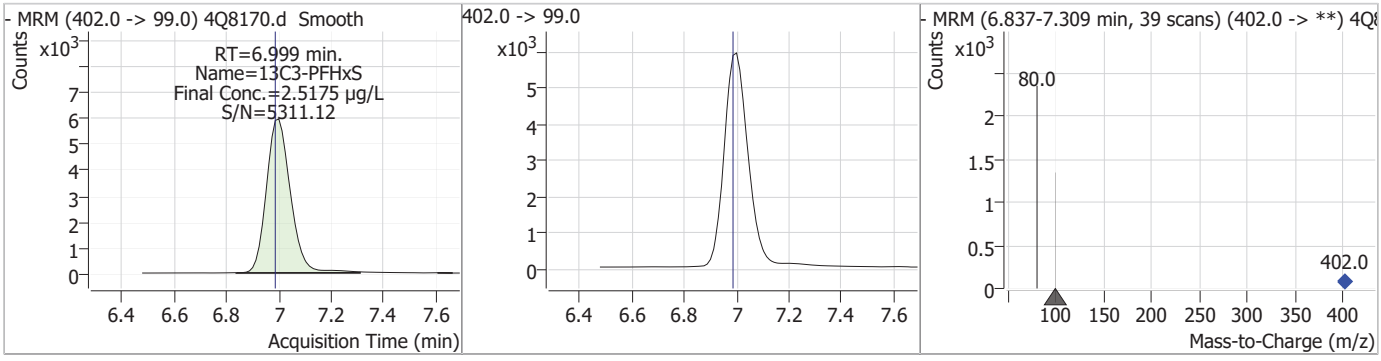
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.39	6.90	0.00	455169				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.52	6.90	0.00	382203 (m)	413.0 -> 169.0	29.7	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.52	7.00	0.01	38018				



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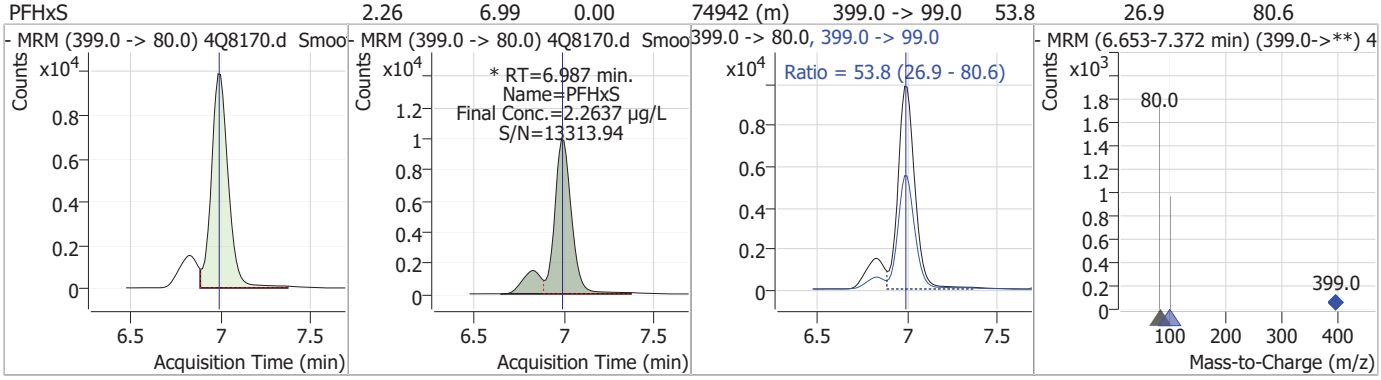
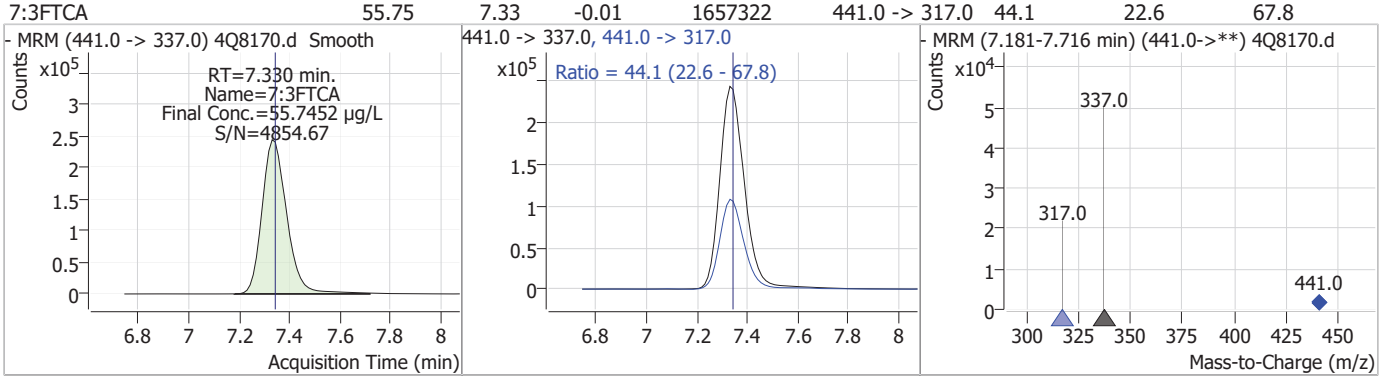
Perfluorinated Compounds by LC/MS/MS

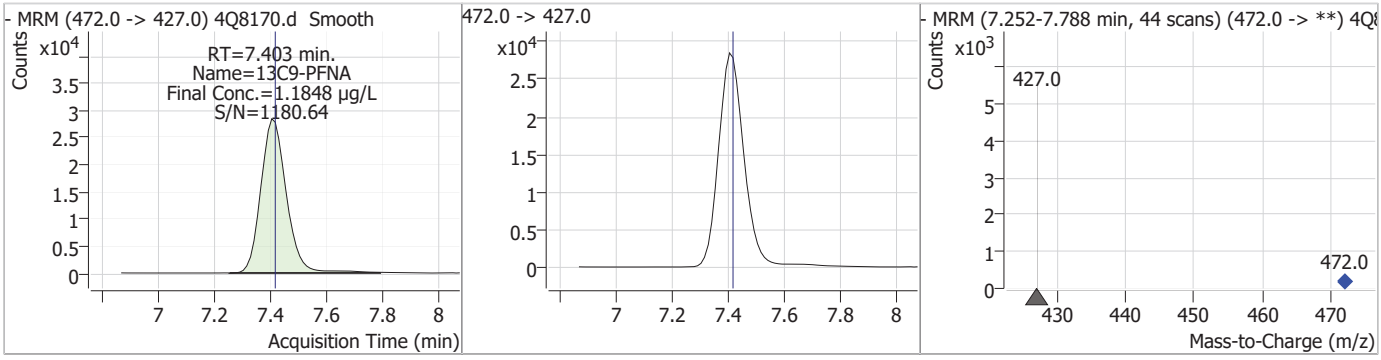
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.26	6.99	0.00	74942 (m)	399.0 -> 99.0	53.8	26.9	80.6



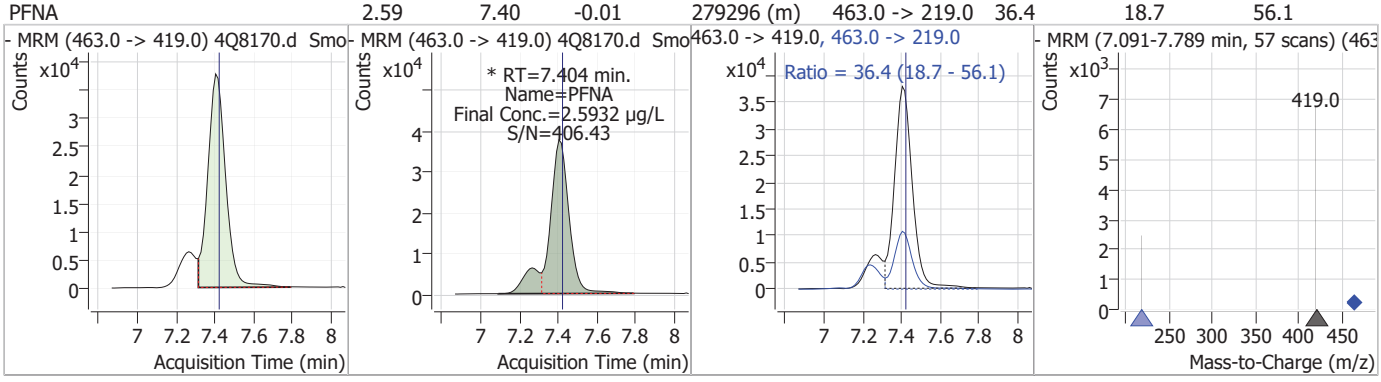
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	55.75	7.33	-0.01	1657322	441.0 -> 317.0	44.1	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.18	7.40	-0.01	179062				

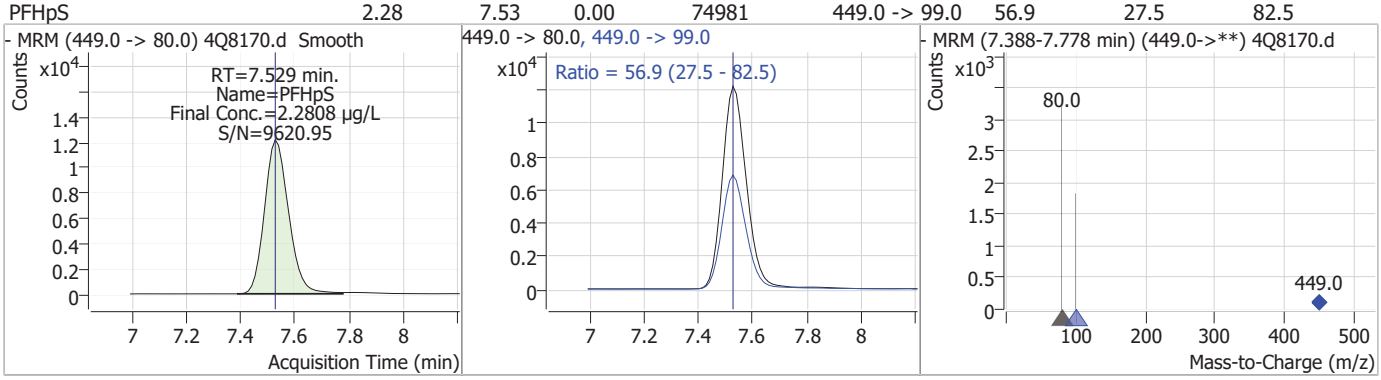


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.59	7.40	-0.01	279296 (m)	463.0 -> 219.0	36.4	18.7	56.1

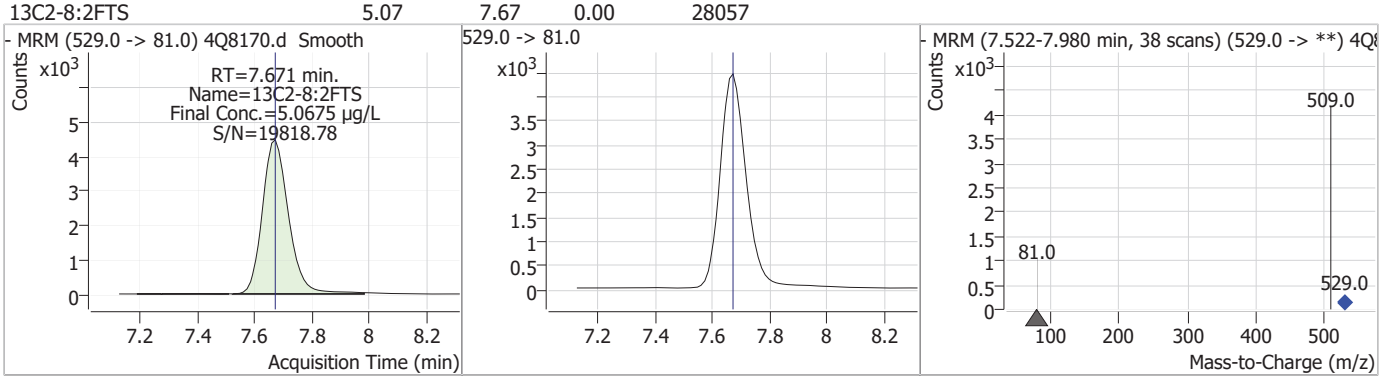


Perfluorinated Compounds by LC/MS/MS

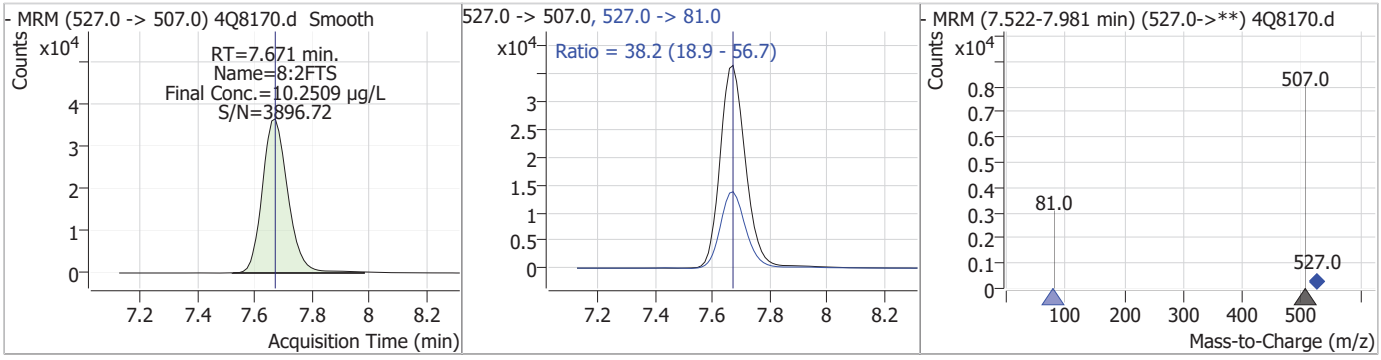
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.28	7.53	0.00	74981	449.0 -> 99.0	56.9	27.5	82.5



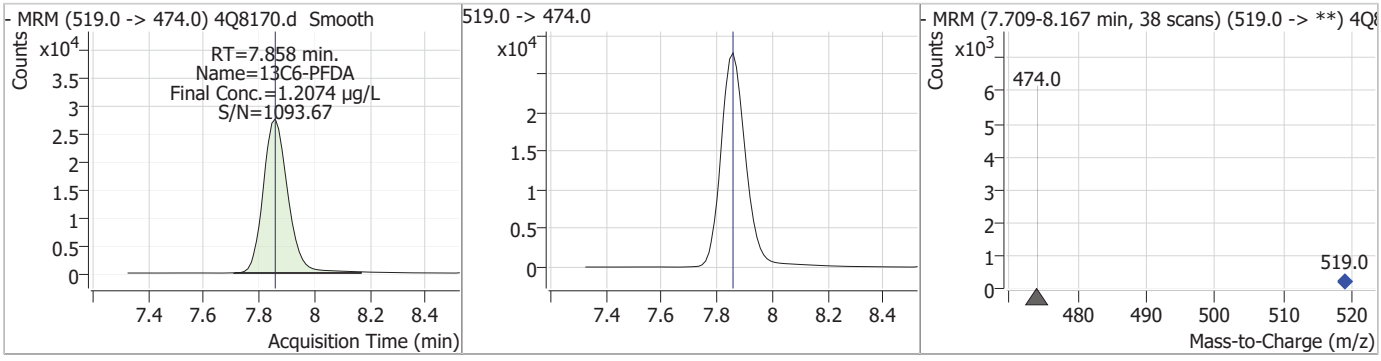
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.07	7.67	0.00	28057				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.25	7.67	0.00	225092	527.0 -> 81.0	38.2	18.9	56.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.21	7.86	0.00	171000				



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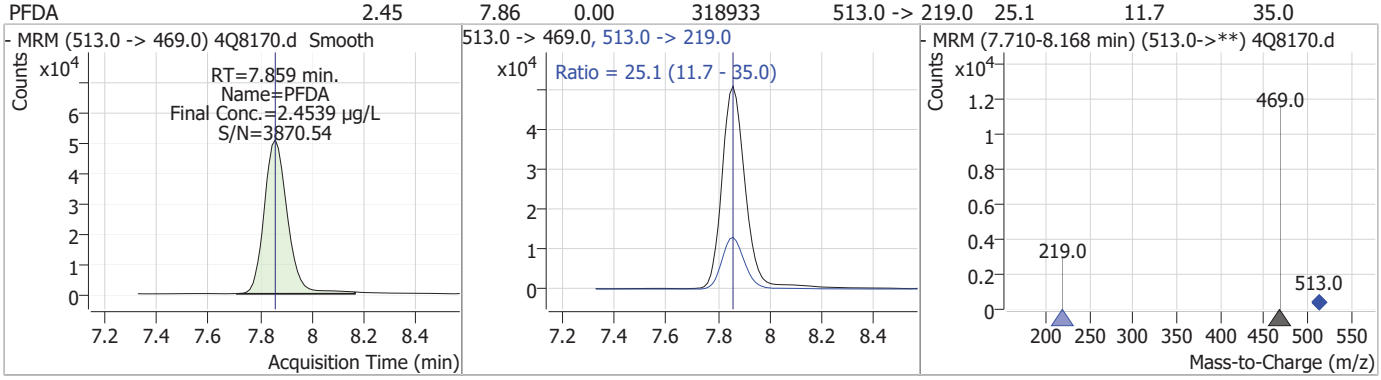
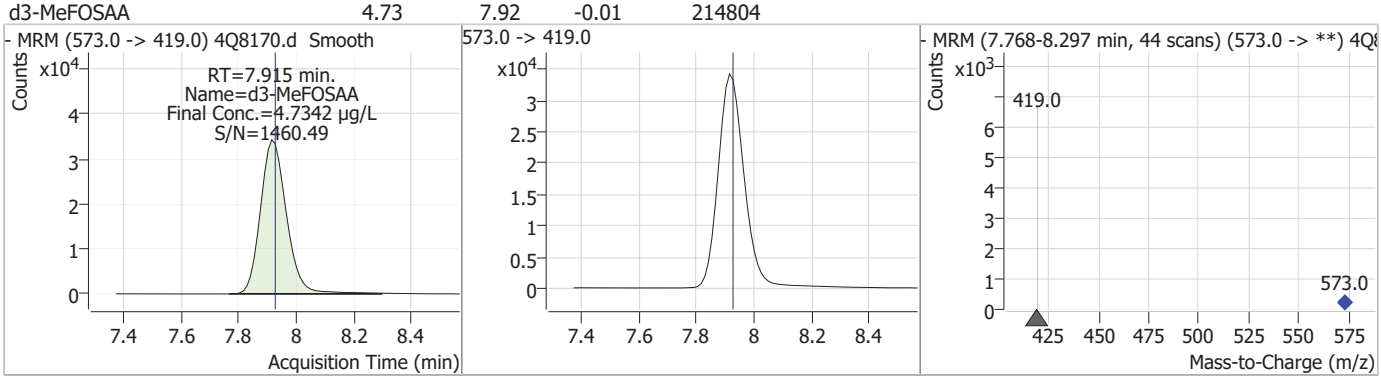
Perfluorinated Compounds by LC/MS/MS

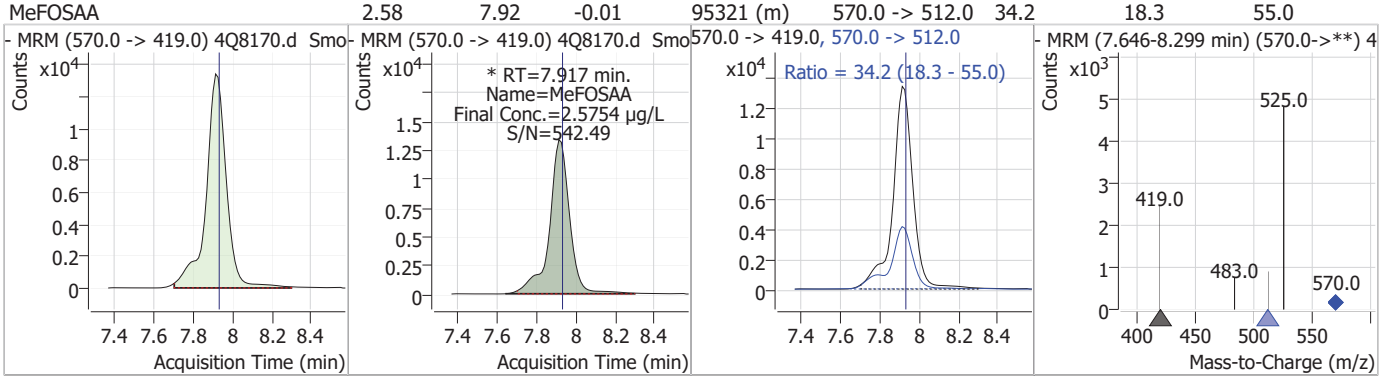
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.45	7.86	0.00	318933	513.0 -> 219.0	25.1	11.7	35.0



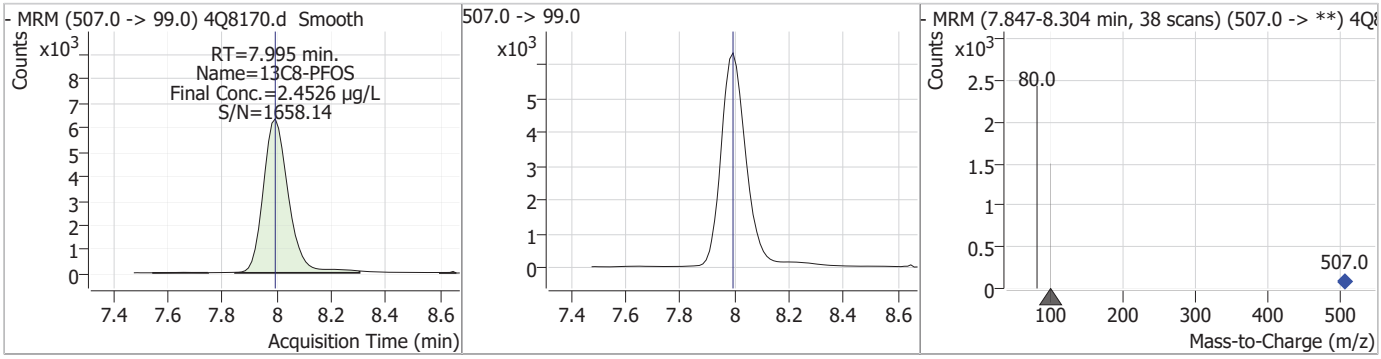
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.73	7.92	-0.01	214804				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.58	7.92	-0.01	95321 (m)	570.0 -> 512.0	34.2	18.3	55.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.45	7.99	0.00	40686				



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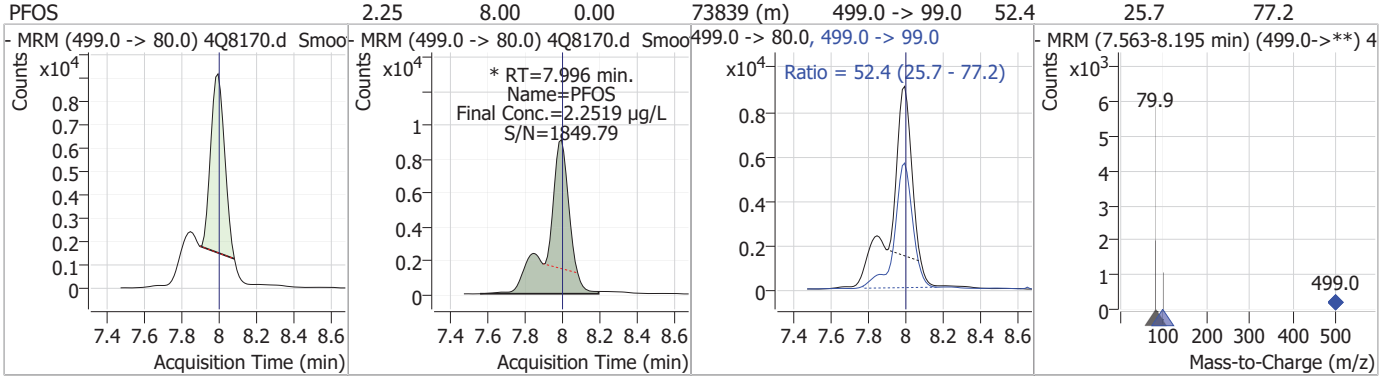
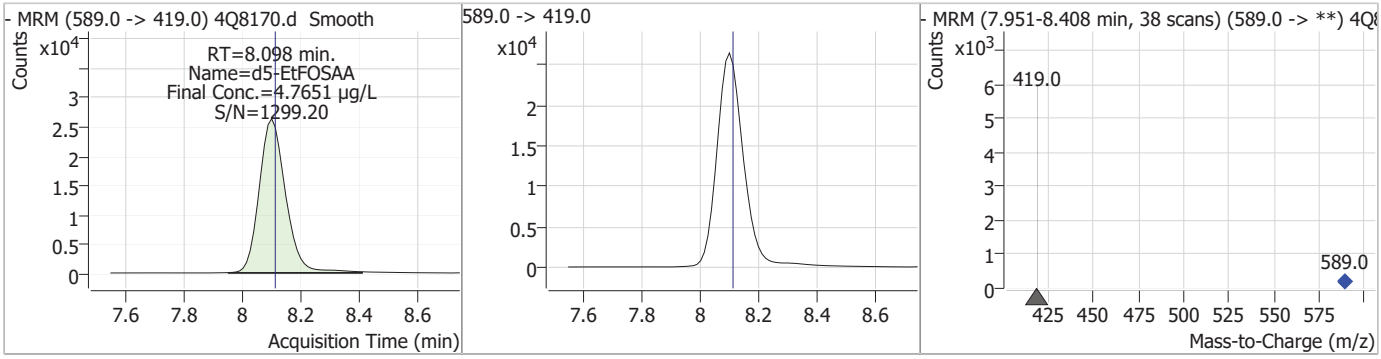
Perfluorinated Compounds by LC/MS/MS

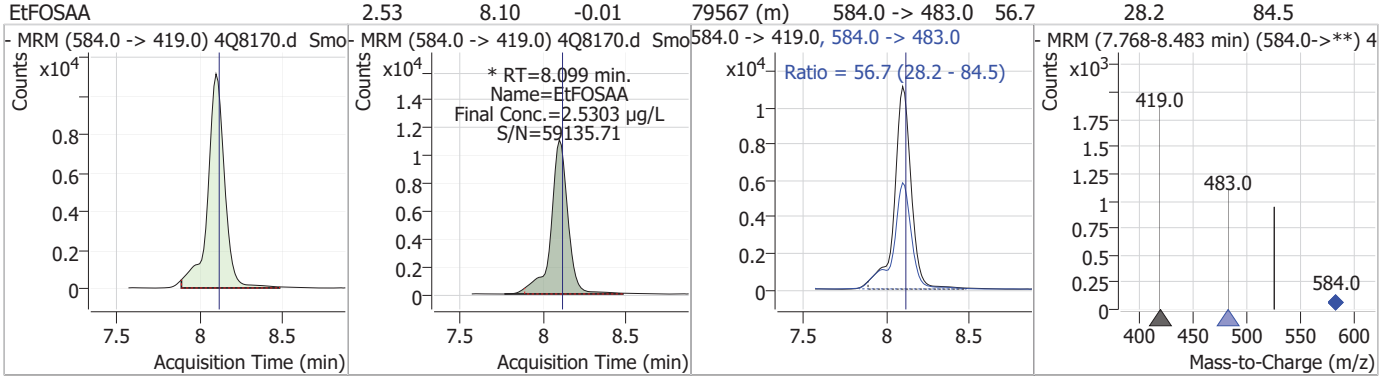
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.25	8.00	0.00	73839 (m)	499.0 -> 99.0	52.4	25.7	77.2



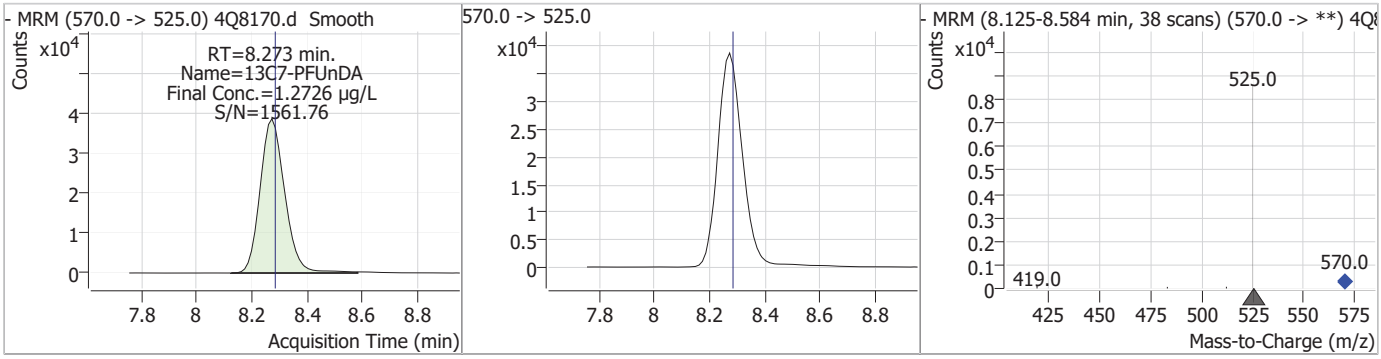
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.77	8.10	-0.01	165995				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.53	8.10	-0.01	79567 (m)	584.0 -> 483.0	56.7	28.2	84.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.27	8.27	-0.01	240735				



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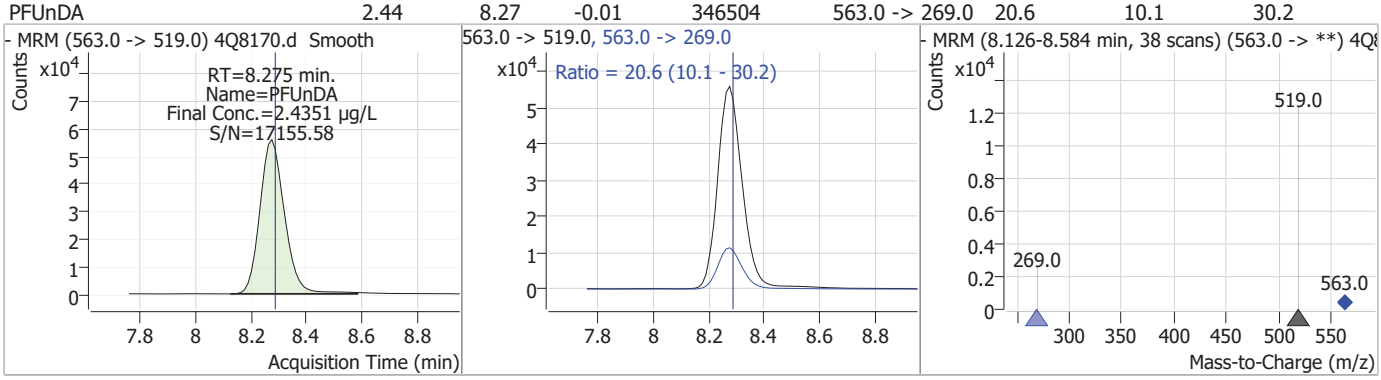
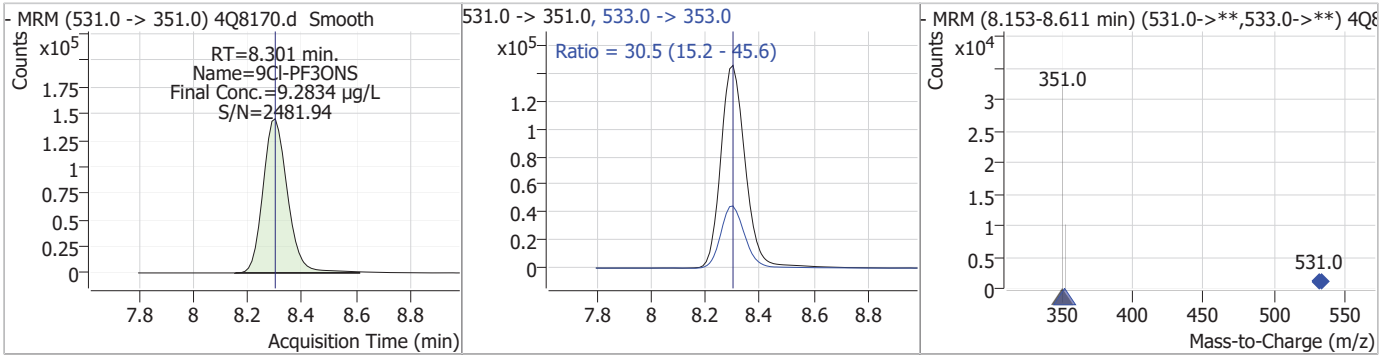
Perfluorinated Compounds by LC/MS/MS

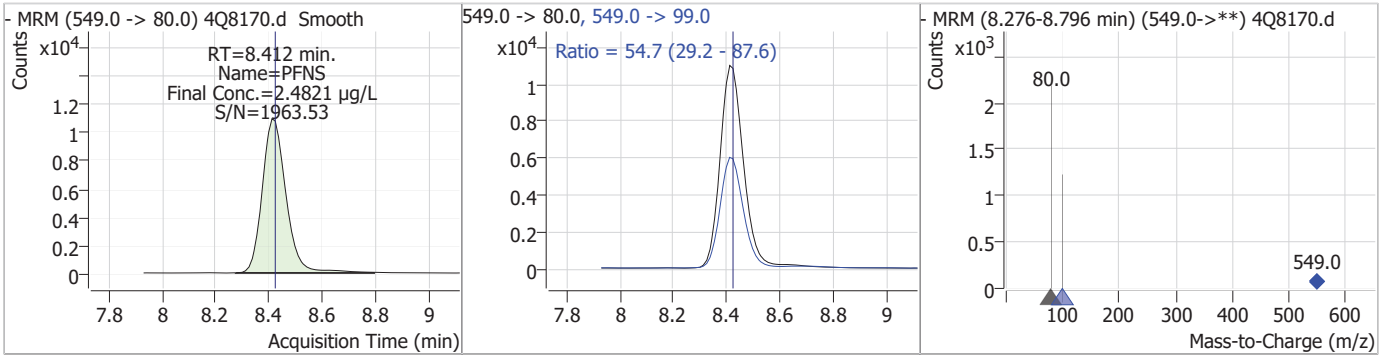
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.44	8.27	-0.01	346504	563.0 -> 269.0	20.6	10.1	30.2



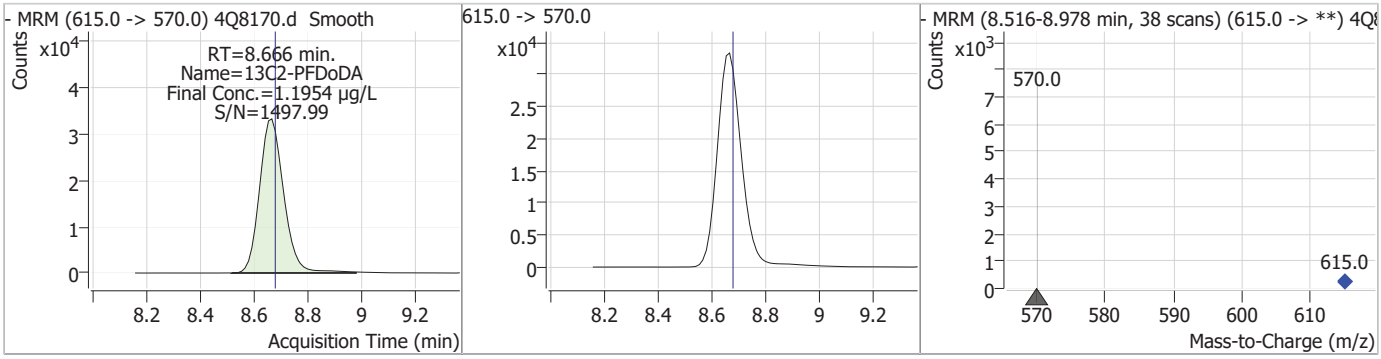
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.28	8.30	0.00	909942	533.0 -> 353.0	30.5	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.48	8.41	-0.01	67909	549.0 -> 99.0	54.7	29.2	87.6

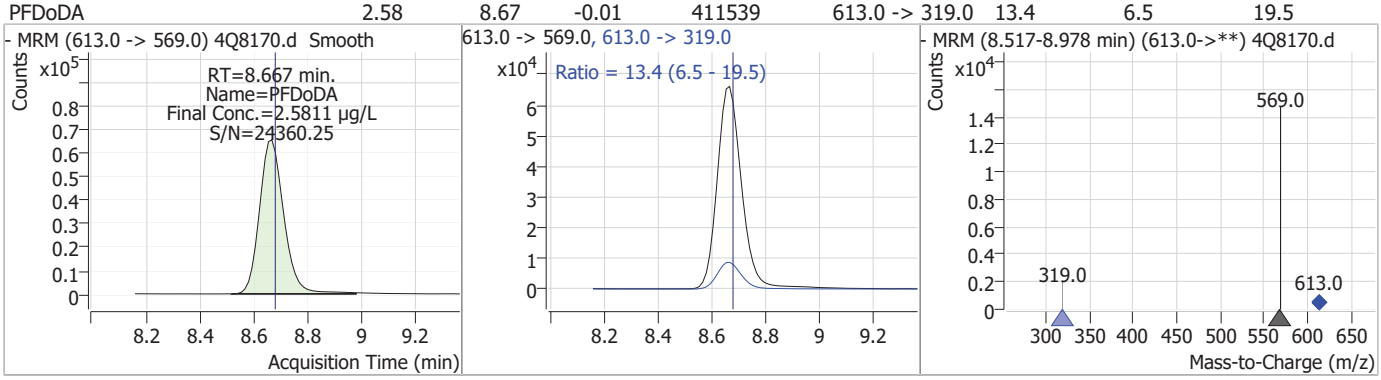


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.20	8.67	-0.01	207129				

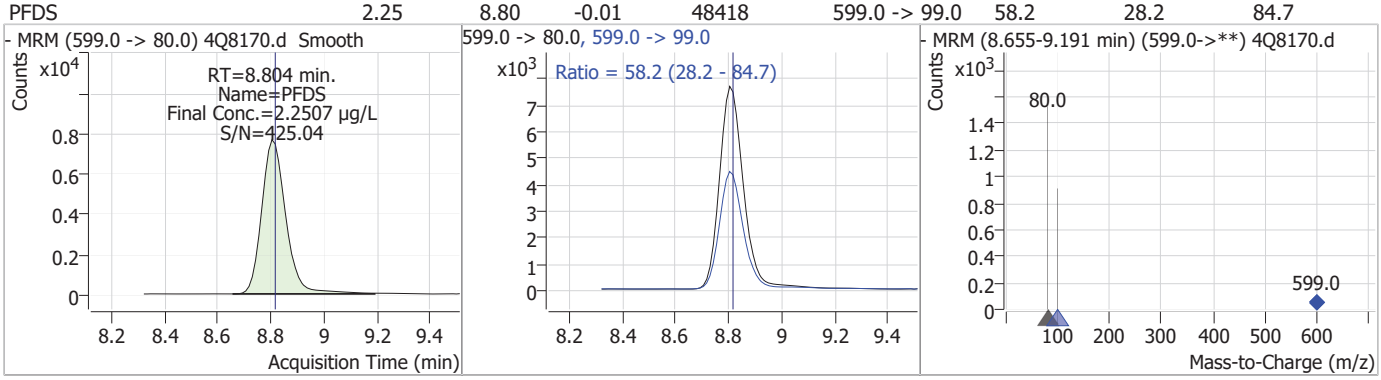


Perfluorinated Compounds by LC/MS/MS

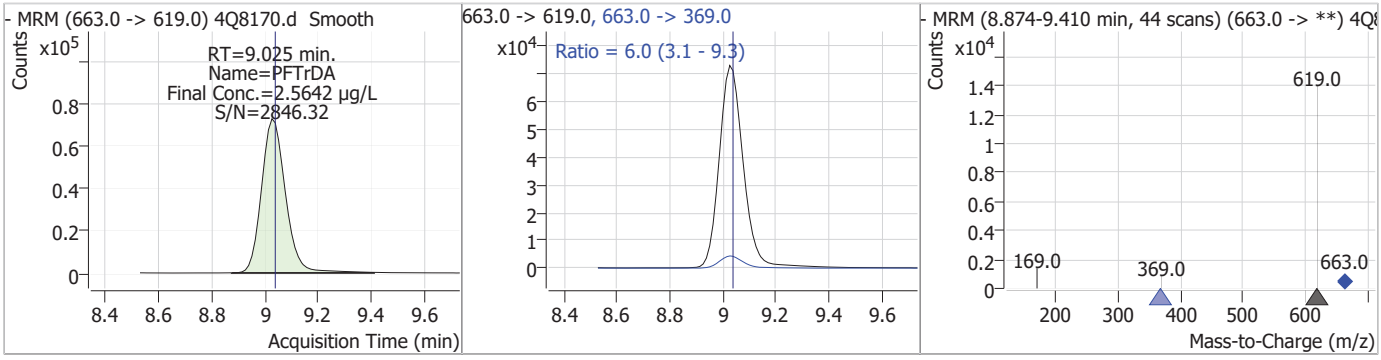
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.58	8.67	-0.01	411539	613.0 -> 319.0	13.4	6.5	19.5



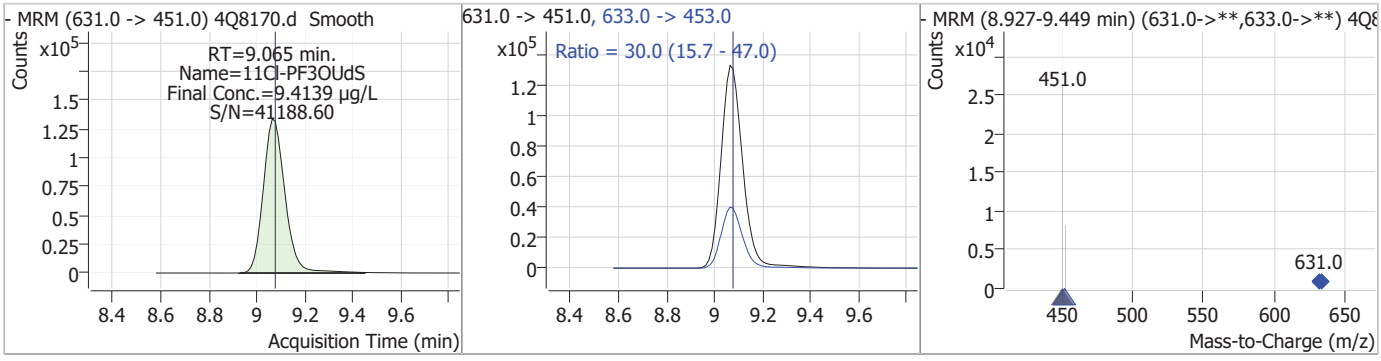
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.25	8.80	-0.01	48418	599.0 -> 99.0	58.2	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.56	9.03	-0.01	455916	663.0 -> 369.0	6.0	3.1	9.3

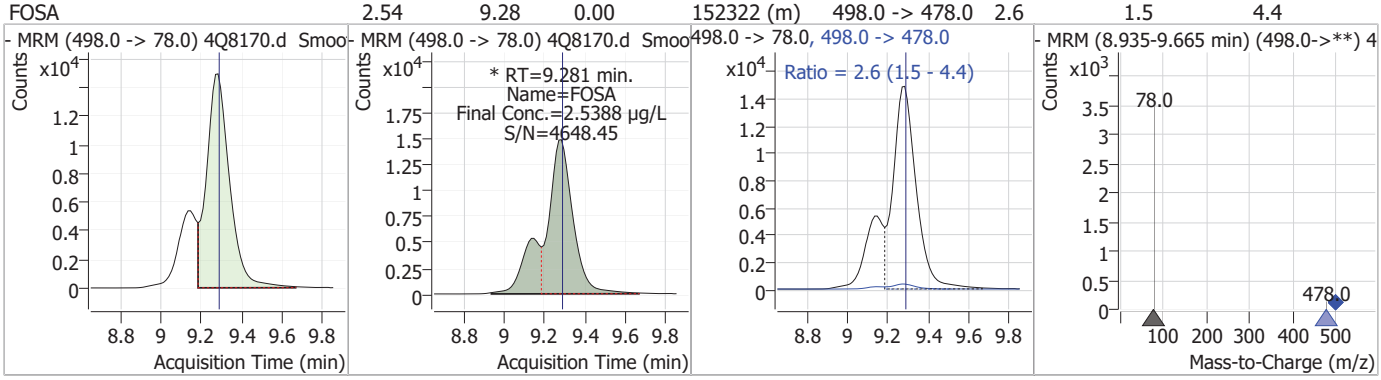


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.41	9.06	-0.01	838849	633.0 -> 453.0	30.0	15.7	47.0

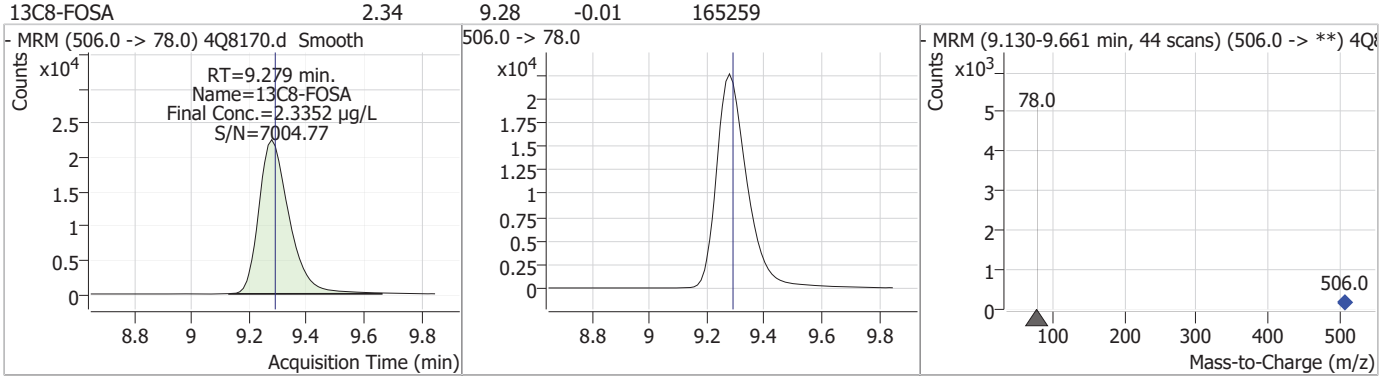


Perfluorinated Compounds by LC/MS/MS

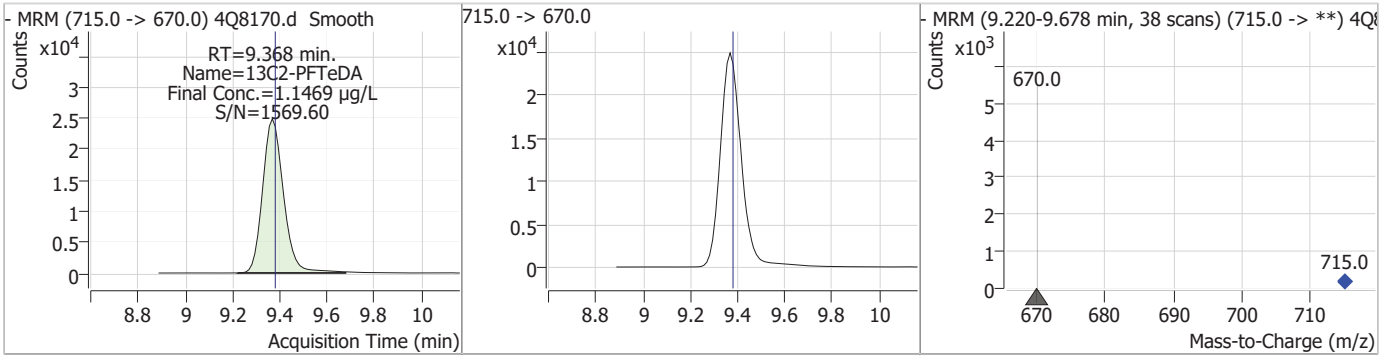
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.54	9.28	0.00	152322 (m)	498.0 -> 478.0	2.6	1.5	4.4



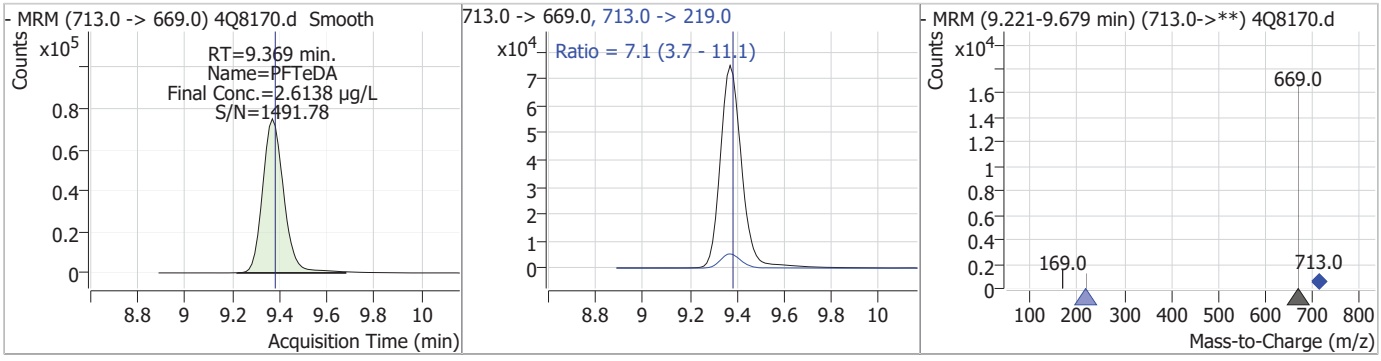
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.34	9.28	-0.01	165259				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.15	9.37	-0.01	152772				

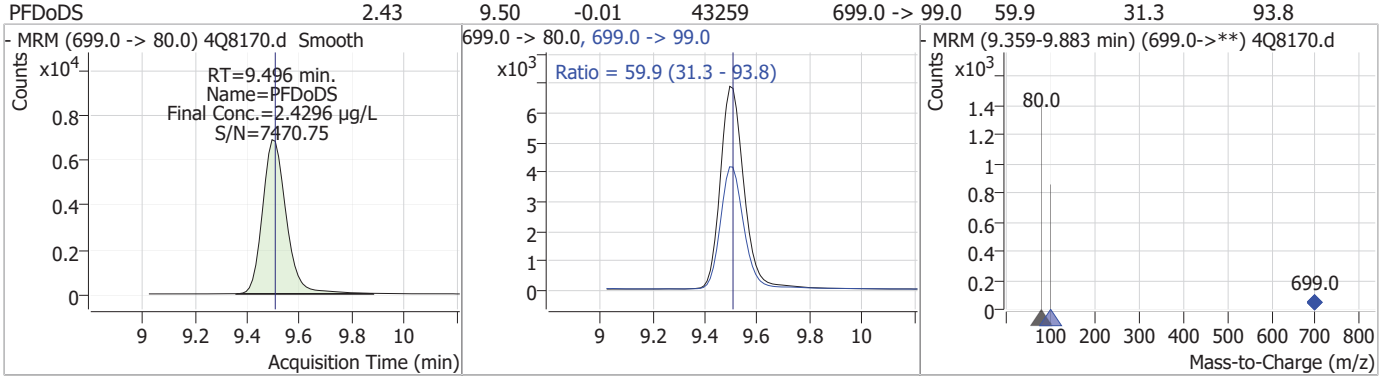


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.61	9.37	-0.01	464922	713.0 -> 219.0	7.1	3.7	11.1

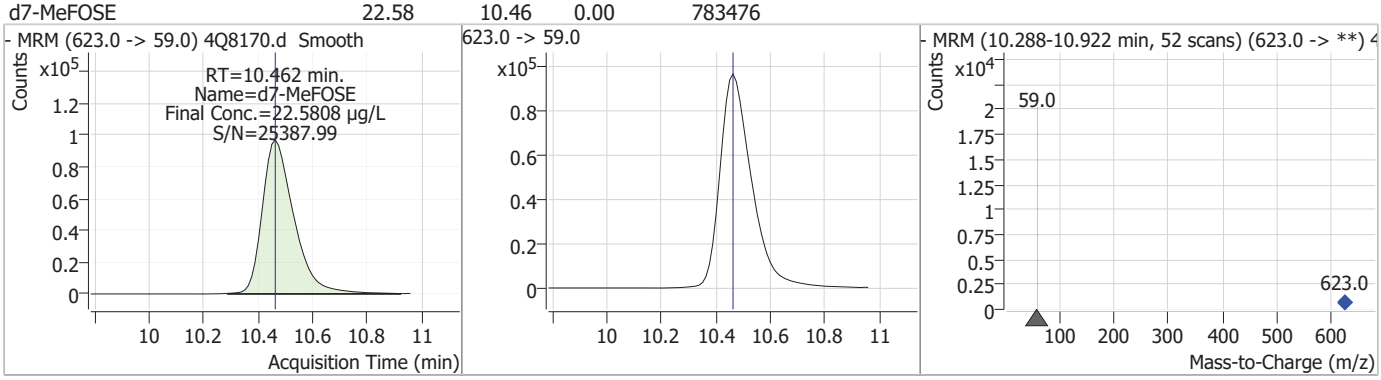


Perfluorinated Compounds by LC/MS/MS

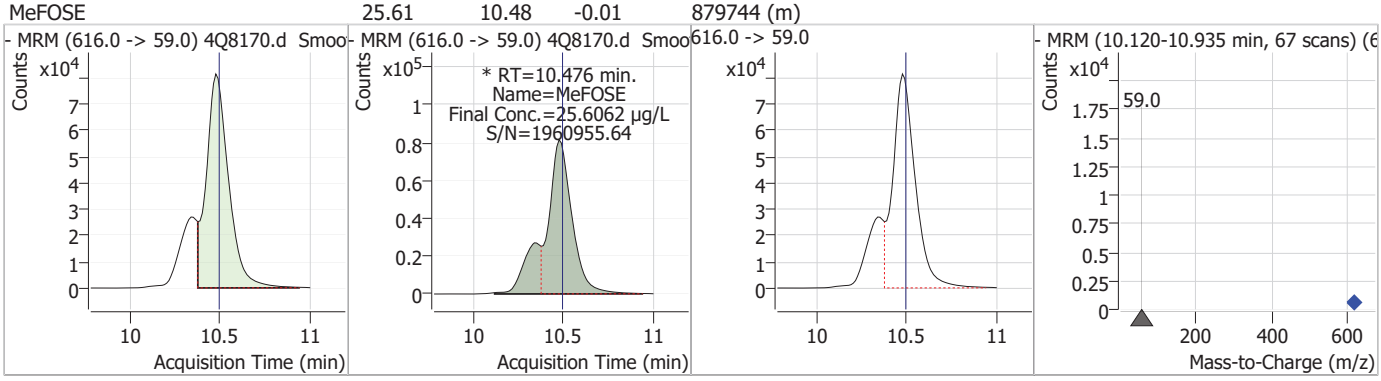
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.43	9.50	-0.01	43259	699.0 -> 99.0	59.9	31.3	93.8



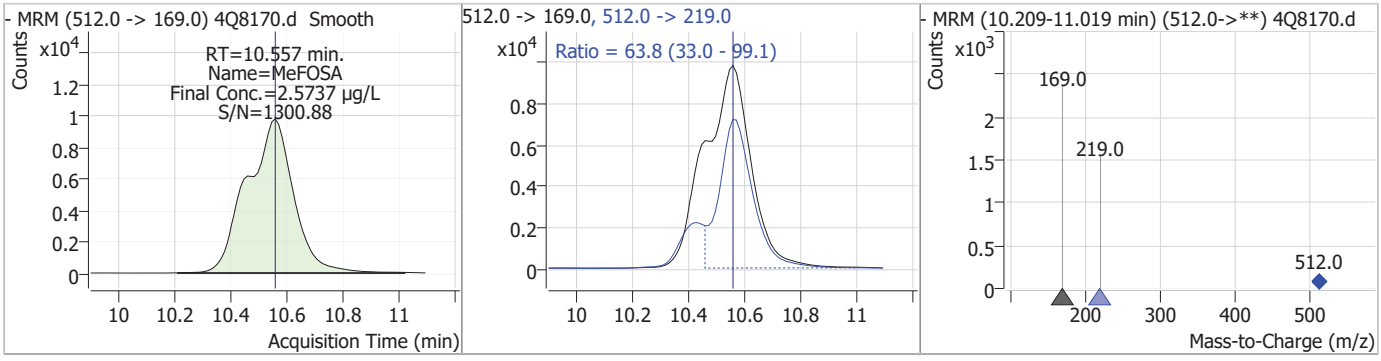
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.58	10.46	0.00	783476				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.61	10.48	-0.01	879744 (m)				

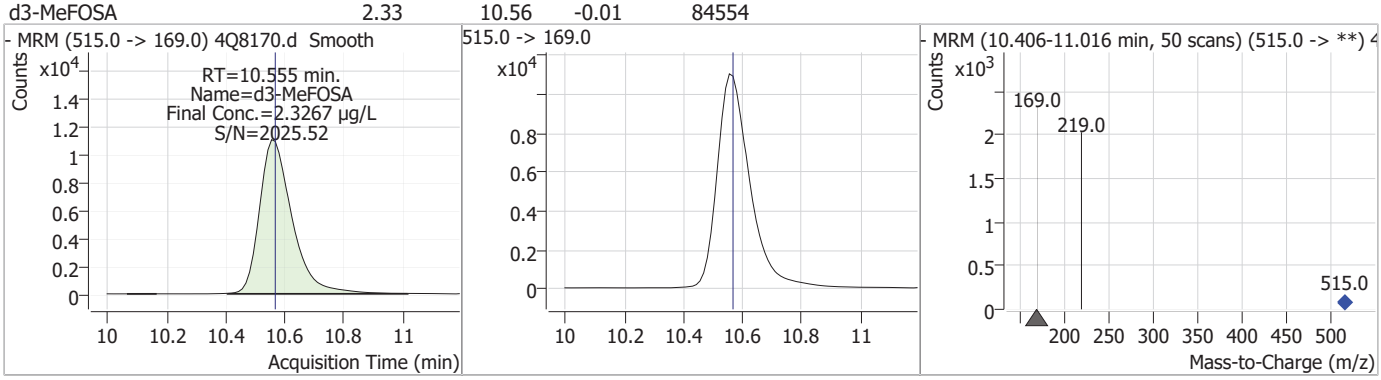


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.57	10.56	0.00	113954	512.0 -> 219.0	63.8	33.0	99.1

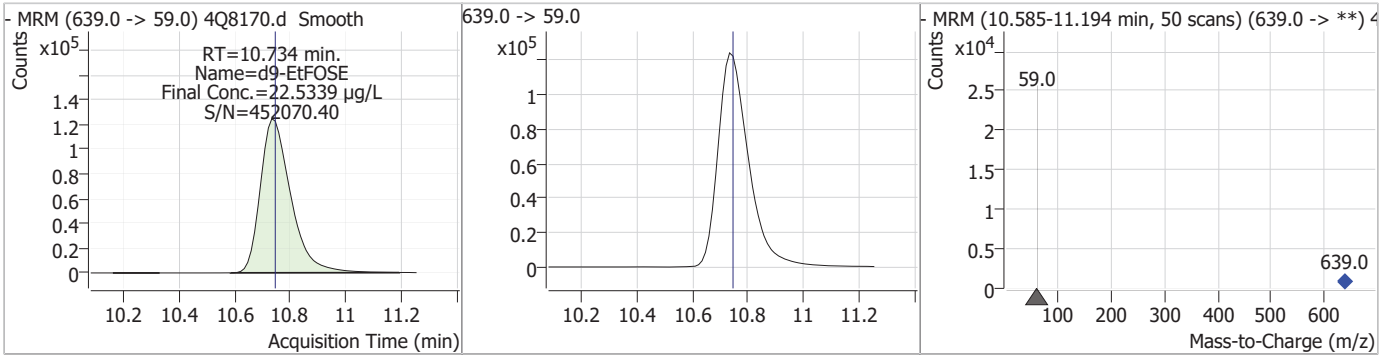


Perfluorinated Compounds by LC/MS/MS

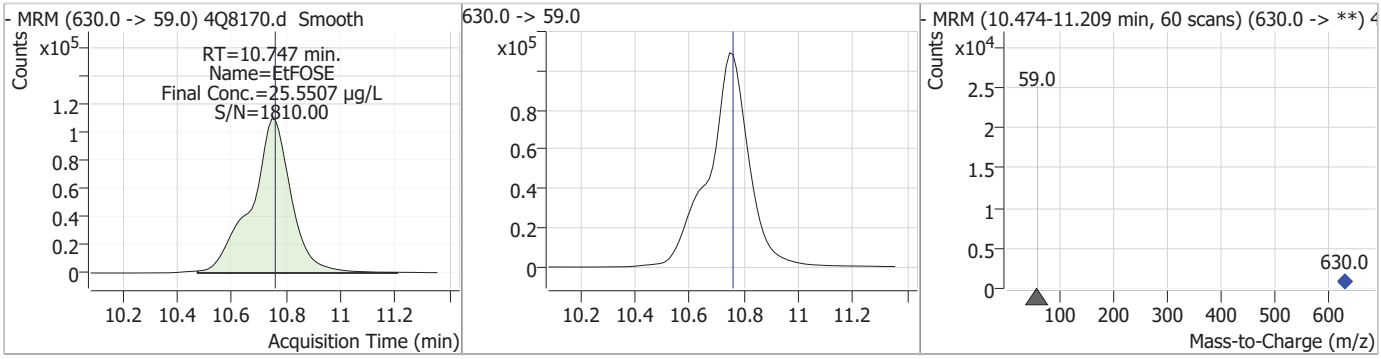
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.33	10.56	-0.01	84554				



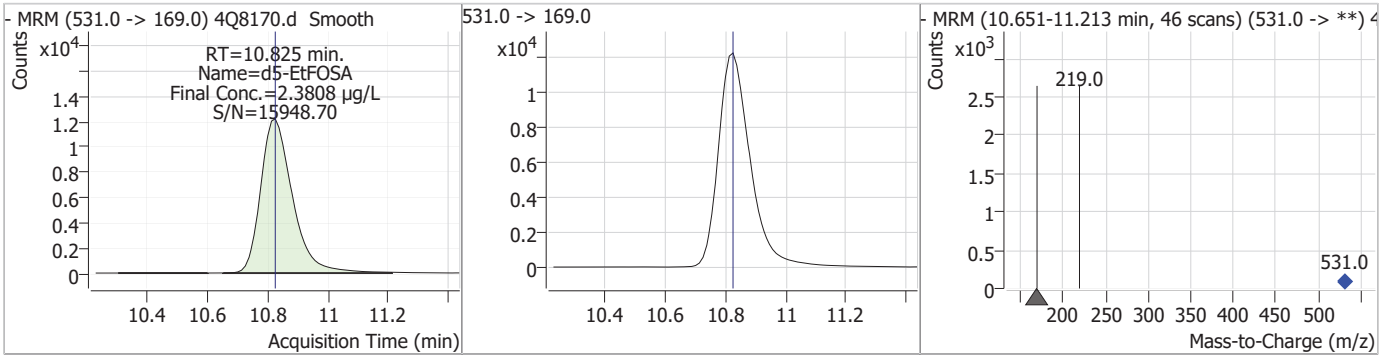
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.53	10.73	-0.01	948022				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.55	10.75	-0.01	1126721				

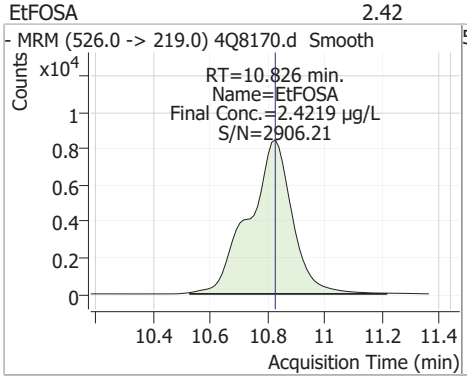


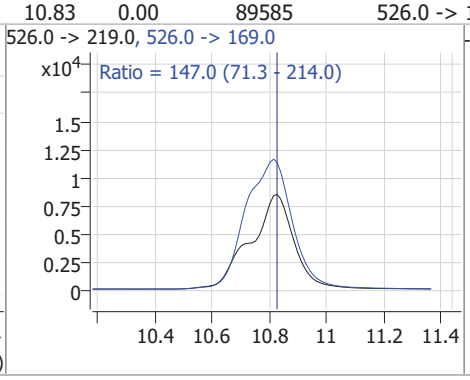
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.38	10.82	0.00	89163				

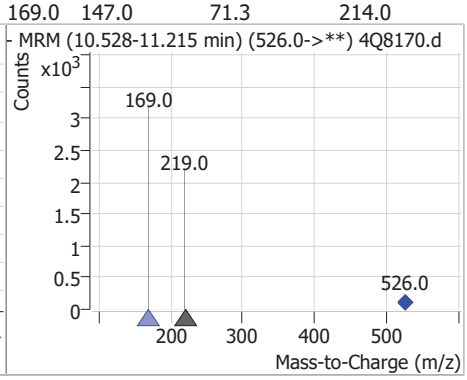


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.42	10.83	0.00	89585	526.0 -> 169.0	147.0	71.3	214.0







7.6.56

7

Manual Integration Approval Summary

Sample Number: T4Q138-CC138
Lab FileID: 4Q8170.D
Injection Time: 04/30/25 23:59
Method: EPA 1633
Analyst approved: 05/01/25 04:03 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.92	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.10	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak
MeFOSE	24448-09-7		10.48	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/01/25 08:24

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8173.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 12:40:15 AM
Sample Name : ECC138-4
Vial : P1-A5
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q138.batch.bin
Sample Information : OP63161,T4Q138,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.883	217.0 -> 172.0	857272	10.00	µg/L	0.000
M5-PFPeA	4.319	268.0 -> 223.0	451259	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	299846	2.50	µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	313195	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	464655	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	176741	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	166799	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	234249	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	200188	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	148554	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	164255	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	27465	2.50	µg/L	0.000
		302.0 -> 80.0	65944			
M3-PFHxS	6.999	402.0 -> 99.0	37192	2.50	µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	38611	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	10822	5.00	µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	22560	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	25420	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	216992	5.00	µg/L	-0.012
M3-HFPO-DA	5.792	287.0 -> 169.0	467956	10.00	µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	159603	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	789219	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	940268	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	86567	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	83971	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	71297	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	390206	5.00	µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	45272	2.50	µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	487788	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	158459	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	186635	1.25	µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	297117	2.50	µg/L	0.012
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	10822	4.77	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.3%		
13C2-6:2FTS	6.684	429.0 -> 81.0	22560	4.58	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.6%		
13C2-8:2FTS	7.671	529.0 -> 81.0	25420	4.39	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 87.7%		
13C2-PFDoDA	8.666	615.0 -> 570.0	200188	1.17	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.5%		
13C2-PFTeDA	9.368	715.0 -> 670.0	148554	1.13	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.2%		
13C3-PFBS	5.368	302.0 -> 99.0	27465	2.46	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.3%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	37192	2.35	µg/L		0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.1%			
13C4-PFBA	2.883	217.0 -> 172.0	857272	9.58	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.8%			
13C4-PFHpA	6.291	367.0 -> 322.0	313195	2.34	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.7%			
13C5-PFHxA	5.464	318.0 -> 273.0	299846	2.38	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.4%			
13C5-PFPeA	4.319	268.0 -> 223.0	451259	4.73	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.6%			
13C6-PFDA	7.858	519.0 -> 474.0	166799	1.19	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.3%			
13C7-PFUnDA	8.273	570.0 -> 525.0	234249	1.25	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.2%			
13C8-FOSA	9.279	506.0 -> 78.0	164255	2.24	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 89.7%			
13C8-PFOA	6.897	421.0 -> 376.0	464655	2.38	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.3%			
13C8-PFOS	7.995	507.0 -> 99.0	38611	2.25	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.0%			
13C9-PFNA	7.403	472.0 -> 427.0	176741	1.14	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 91.3%			
d3-MeFOSAA	7.915	573.0 -> 419.0	216992	4.62	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.4%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	467956	9.47	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.7%			
d3-MeFOSA	10.555	515.0 -> 169.0	83971	2.23	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 89.3%			
d5-EtFOSAA	8.098	589.0 -> 419.0	159603	4.43	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 88.5%			
d7-MeFOSE	10.462	623.0 -> 59.0	789219	21.98	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 87.9%			
d9-EtFOSE	10.734	639.0 -> 59.0	940268	21.59	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 86.4%			
d5-EtFOSA	10.825	531.0 -> 169.0	86567	2.23	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 89.3%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	194891	9.81	µg/L		98
		327.0 -> 81.0	94351				
6:2FTS	6.684	427.0 -> 407.0	235520	10.41	µg/L		100
		427.0 -> 81.0	109713				
8:2FTS	7.671	527.0 -> 507.0	219874	11.05	µg/L		99
		527.0 -> 81.0	84392				
EtFOSAA	8.099	584.0 -> 419.0	78438	2.59	µg/L	m	96
		584.0 -> 483.0	41962				
FOSA	9.281	498.0 -> 78.0	151974	2.55	µg/L	m	99
		498.0 -> 478.0	4176				
MeFOSAA	7.917	570.0 -> 419.0	93025	2.49	µg/L	m	96
		570.0 -> 512.0	31927				
PFBA	2.877	213.0 -> 169.0	259288	9.89	µg/L		100
PFBS	5.369	299.0 -> 80.0	68814	2.19	µg/L		99
		299.0 -> 99.0	28411				
PFDA	7.859	513.0 -> 469.0	333083	2.63	µg/L		100
		513.0 -> 219.0	78361				
PFDoDA	8.667	613.0 -> 569.0	394148	2.56	µg/L		99
		613.0 -> 319.0	53310				

Perfluorinated Compounds by LC/MS/MS

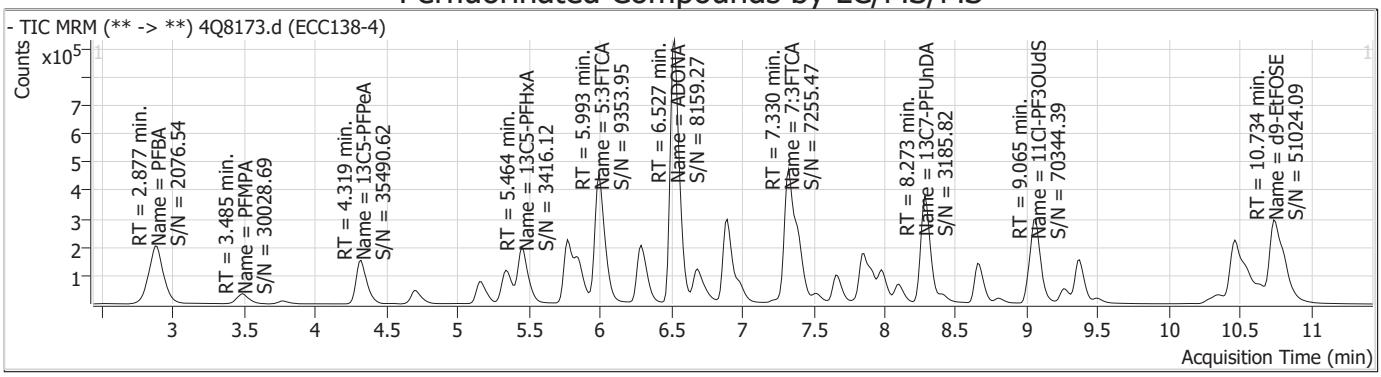
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.804	599.0 -> 80.0	49776	2.38	µg/L		93
		599.0 -> 99.0	25544				
PFHpA	6.292	363.0 -> 319.0	481174	2.53	µg/L		99
		363.0 -> 169.0	97040				
PFHpS	7.529	449.0 -> 80.0	74204	2.31	µg/L		97
		449.0 -> 99.0	42358				
PFHxA	5.467	313.0 -> 269.0	336762	2.61	µg/L		100
		313.0 -> 119.0	11065				
PFHxS	7.000	399.0 -> 80.0	75987	2.35	µg/L	m	96
		399.0 -> 99.0	38777				
PFNA	7.404	463.0 -> 419.0	281995	2.65	µg/L	m	95
		463.0 -> 219.0	97838				
PFNS	8.425	549.0 -> 80.0	67051	2.58	µg/L		98
		549.0 -> 99.0	40024				
PFOA	6.898	413.0 -> 369.0	394398	2.55	µg/L	m	100
		413.0 -> 169.0	114474				
PFOS	7.996	499.0 -> 80.0	74414	2.39	µg/L	m	98
		499.0 -> 99.0	39181				
PFPeA	4.321	263.0 -> 219.0	368428	5.16	µg/L		100
PFPeS	6.331	349.0 -> 80.0	80074	2.33	µg/L		99
		349.0 -> 99.0	39954				
PFTeDA	9.369	713.0 -> 669.0	453834	2.62	µg/L		100
		713.0 -> 219.0	33520				
PFTrDA	9.025	663.0 -> 619.0	455927	2.65	µg/L		99
		663.0 -> 369.0	27190				
PFUnDA	8.275	563.0 -> 519.0	350027	2.53	µg/L		99
		563.0 -> 269.0	72696				
11Cl-PF3OUdS	9.065	631.0 -> 451.0	827851	9.30	µg/L		99
		633.0 -> 453.0	252594				
9Cl-PF3ONS	8.301	531.0 -> 351.0	911156	9.30	µg/L		99
		533.0 -> 353.0	271368				
ADONA	6.527	377.0 -> 251.0	3246578	8.84	µg/L		100
		377.0 -> 85.0	1055374				
HFPO-DA	5.792	285.0 -> 169.0	501656	10.20	µg/L		100
		285.0 -> 185.0	56160				
3:3FTCA	3.769	241.0 -> 177.0	52365	12.28	µg/L		100
		241.0 -> 117.0	4193				
5:3FTCA	5.993	341.0 -> 237.0	1342443	58.19	µg/L		98
		341.0 -> 217.0	923423				
7:3FTCA	7.330	441.0 -> 337.0	1658822	55.80	µg/L		100
		441.0 -> 317.0	747401				
EtFOSA	10.826	526.0 -> 219.0	89707	2.50	µg/L		100
		526.0 -> 169.0	127840				
EtFOSE	10.747	630.0 -> 59.0	1118603	25.58	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	111727	2.54	µg/L		99
		512.0 -> 219.0	73392				
MeFOSE	10.476	616.0 -> 59.0	869853	25.13	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	42496	2.52	µg/L		99
		699.0 -> 99.0	26324				
NFDHA	5.345	295.0 -> 201.0	90951	5.36	µg/L		90
		201.0 -> 85.0	348081				
		295.0 -> 85.0	24183				
PFMBA	4.710	279.0 -> 85.0	248799	5.11	µg/L		100
PFMPA	3.485	229.0 -> 85.0	213727	5.22	µg/L		100
PFEESA	5.861	315.0 -> 135.0	536891	4.52	µg/L		100
		315.0 -> 69.0	41083				

Perfluorinated Compounds by LC/MS/MS

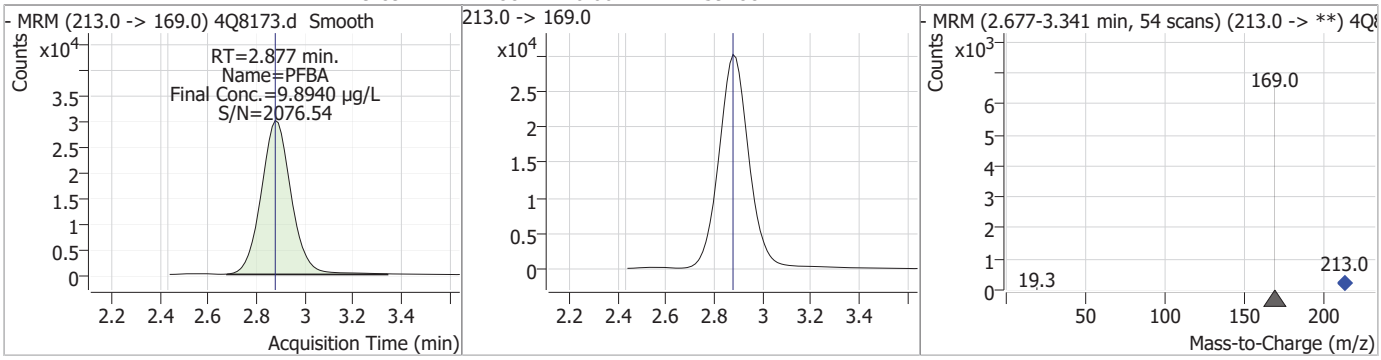
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

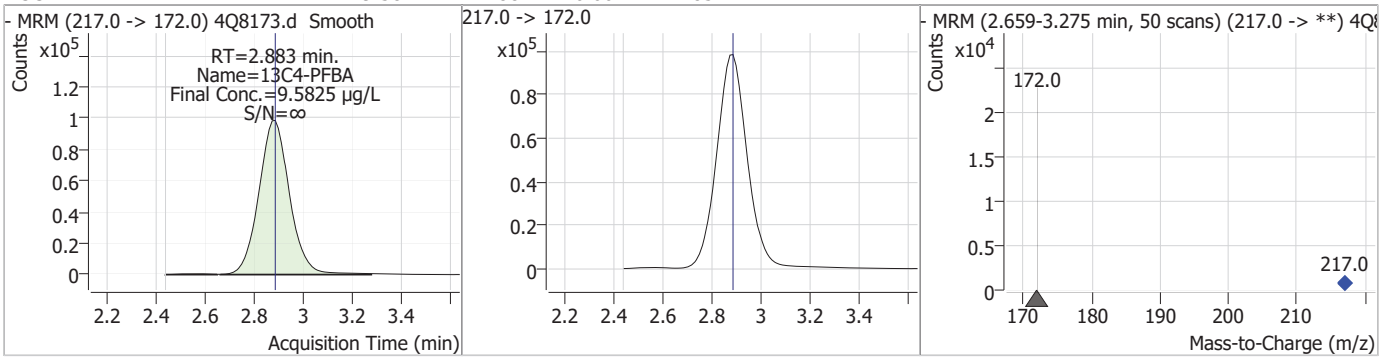
Perfluorinated Compounds by LC/MS/MS



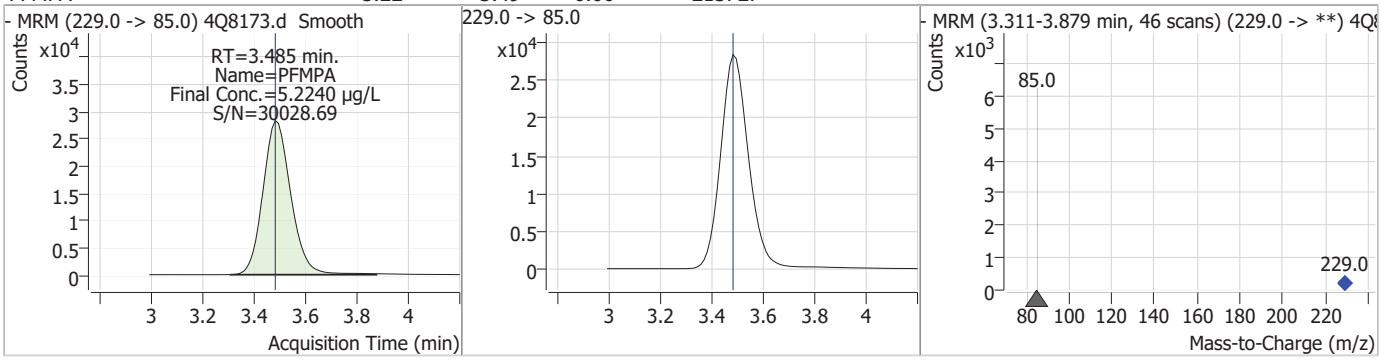
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.89	2.88	0.00	259288				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.58	2.88	0.00	857272				

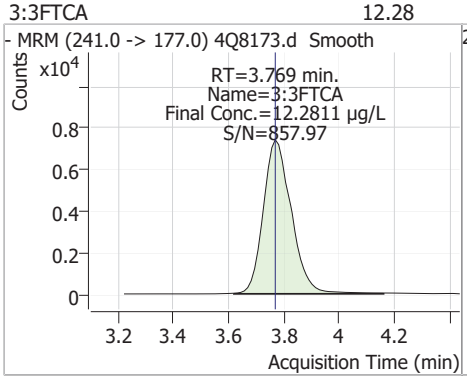


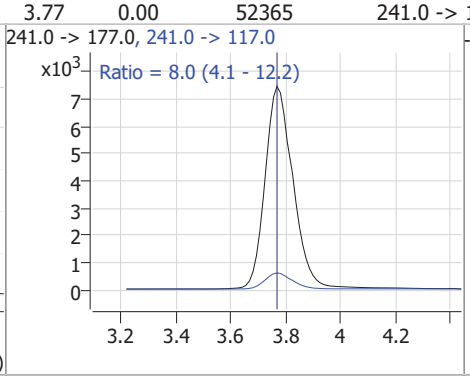
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.22	3.49	0.00	213727				

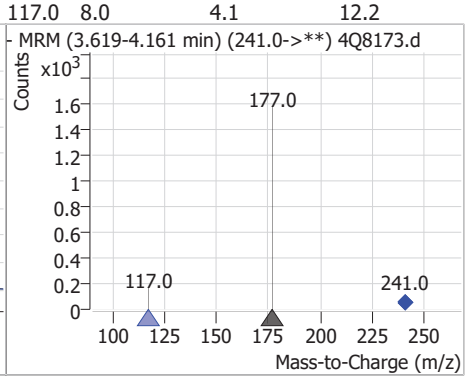


Perfluorinated Compounds by LC/MS/MS

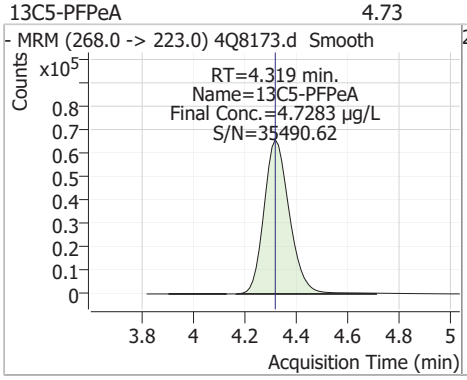
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.28	3.77	0.00	52365	241.0 -> 117.0	8.0	4.1	12.2

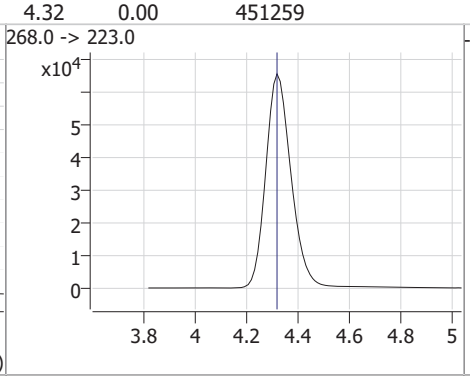


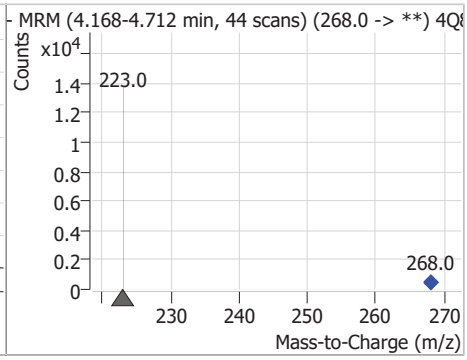




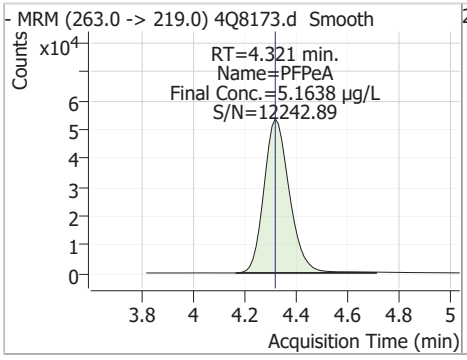
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.73	4.32	0.00	451259				

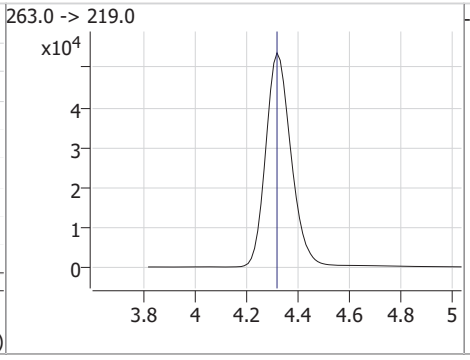


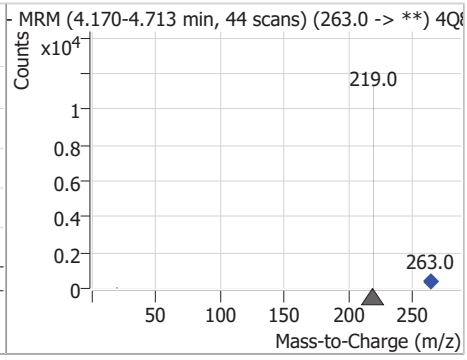




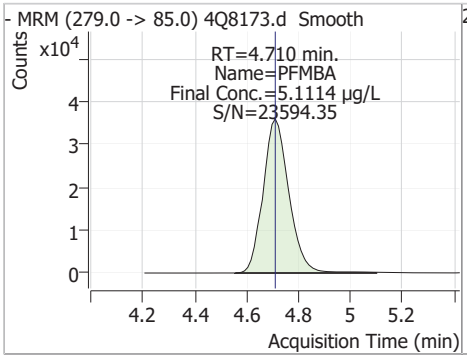
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.16	4.32	0.00	368428				

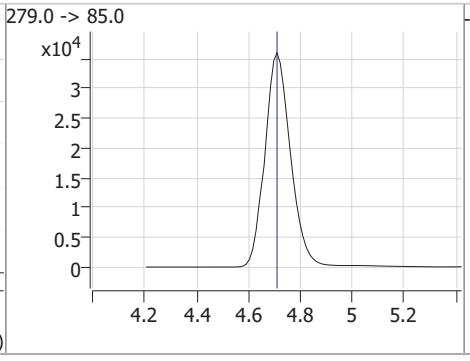


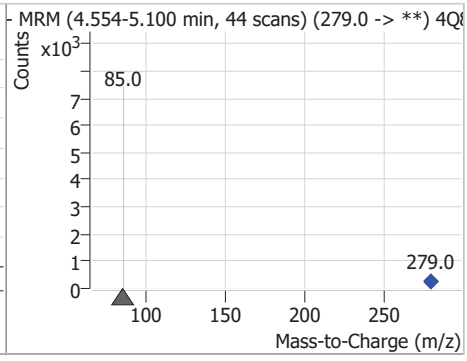




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.11	4.71	0.00	248799				







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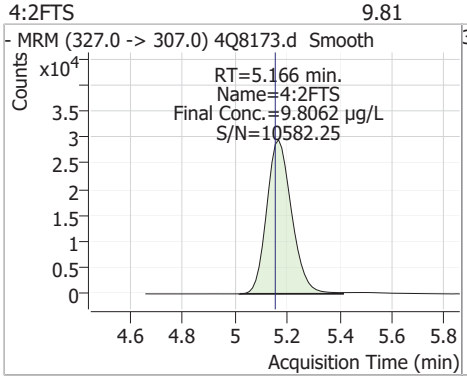
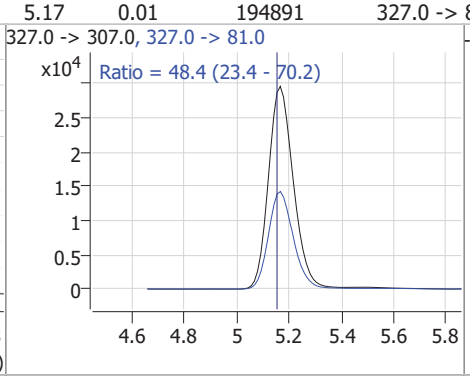
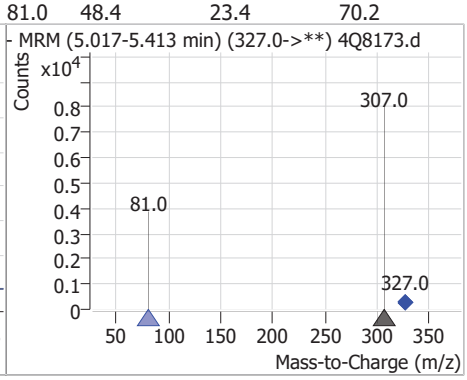
Perfluorinated Compounds by LC/MS/MS

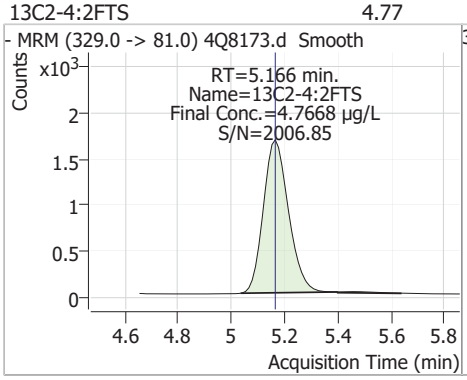
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.81	5.17	0.01	194891	327.0 -> 81.0	48.4	23.4	70.2

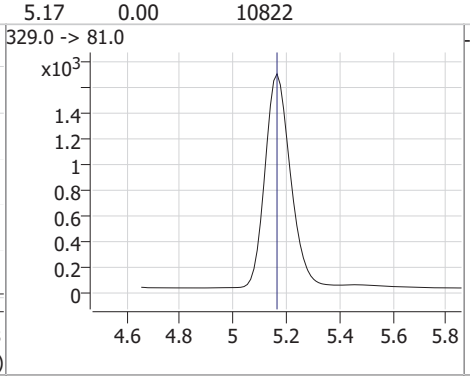


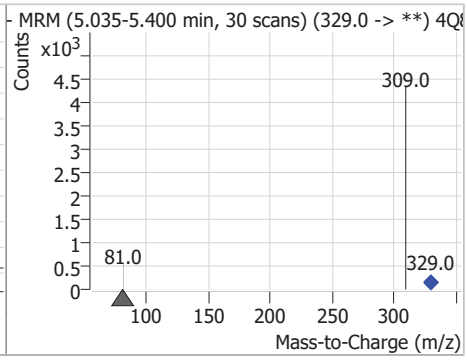




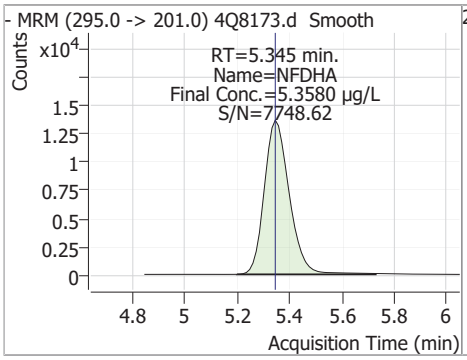
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.77	5.17	0.00	10822				

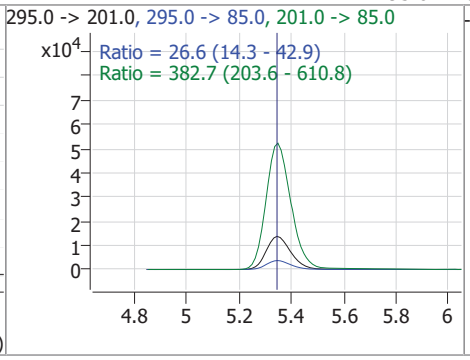


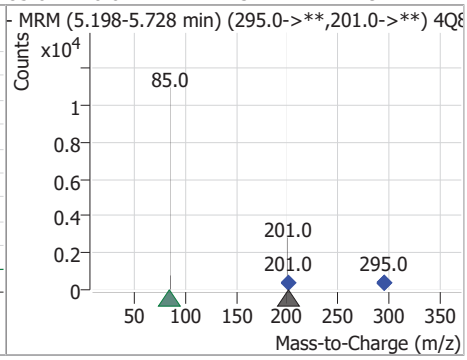




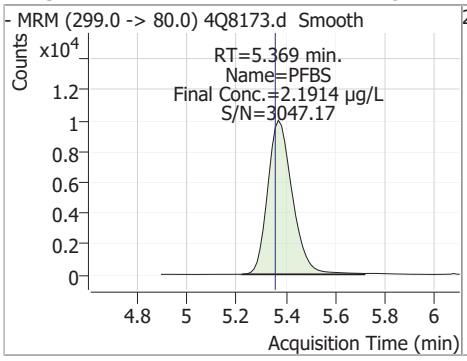
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.36	5.35	0.00	90951	201.0 -> 85.0	382.7	203.6	610.8
					295.0 -> 85.0	26.6	14.3	42.9

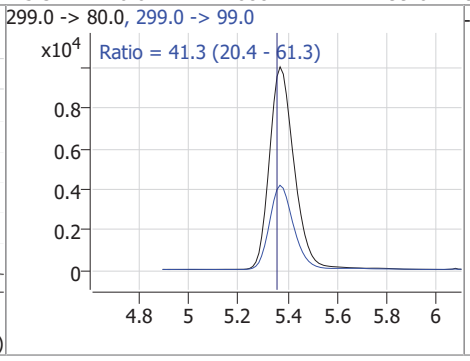


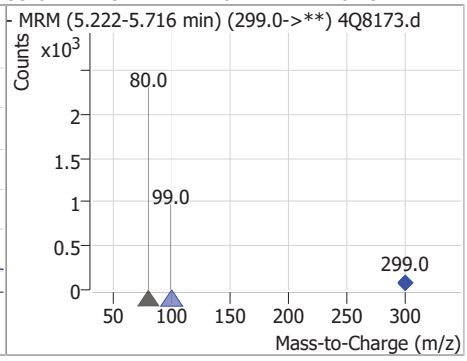




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.19	5.37	0.01	68814	299.0 -> 99.0	41.3	20.4	61.3







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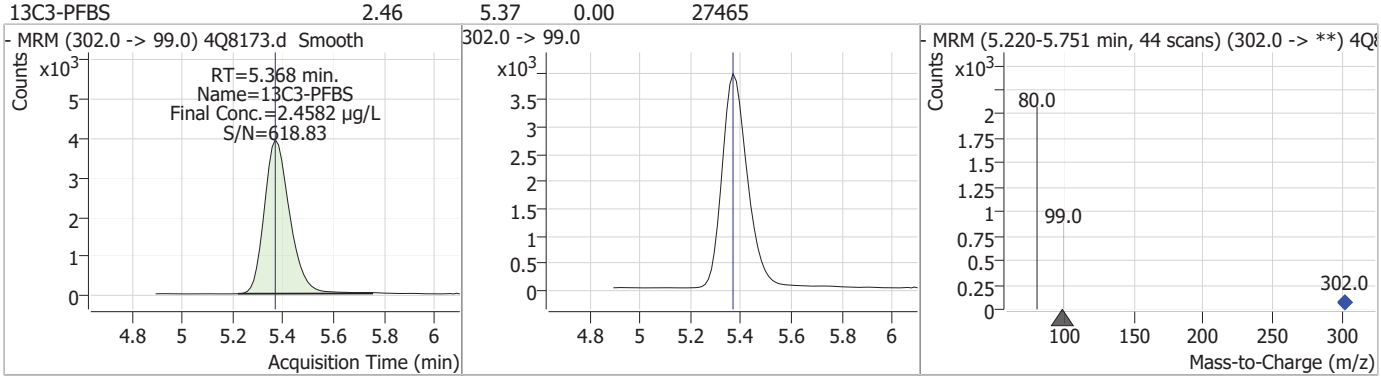
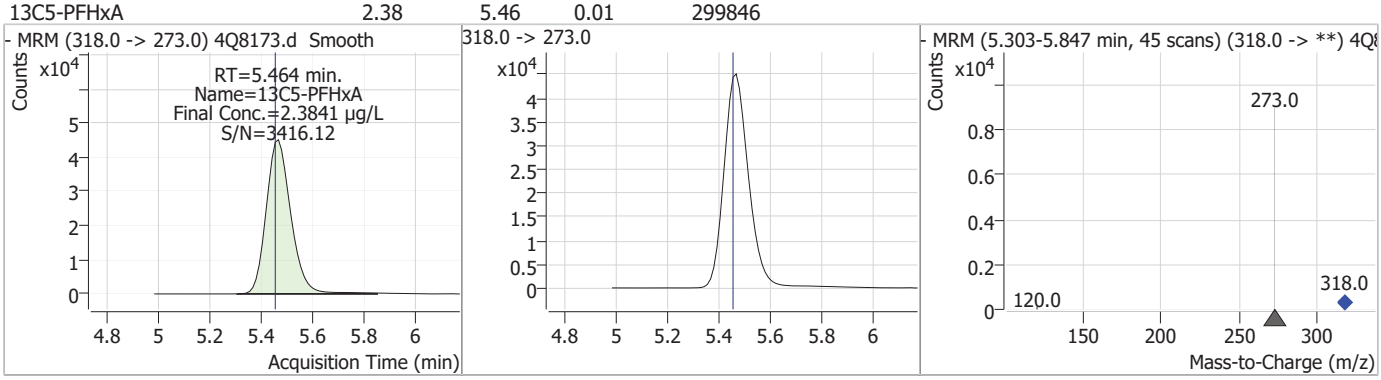
Perfluorinated Compounds by LC/MS/MS

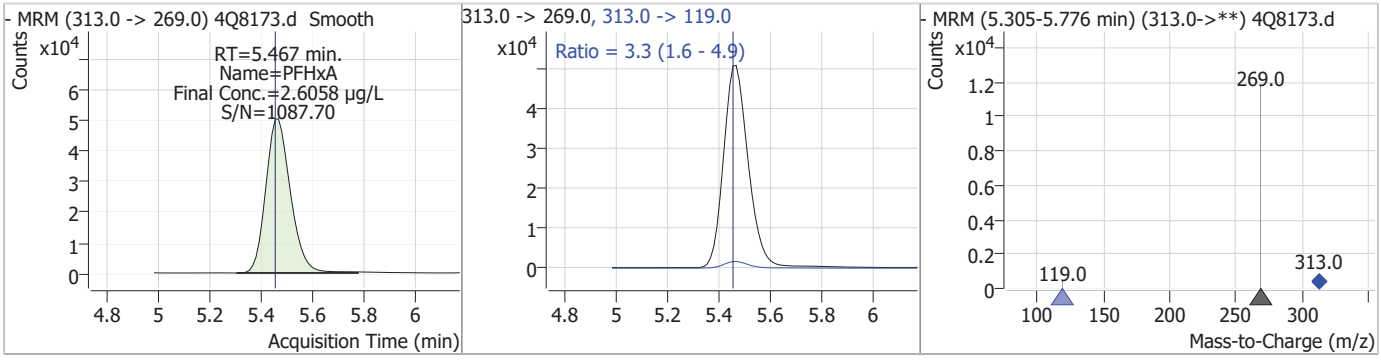
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.46	5.37	0.00	27465				



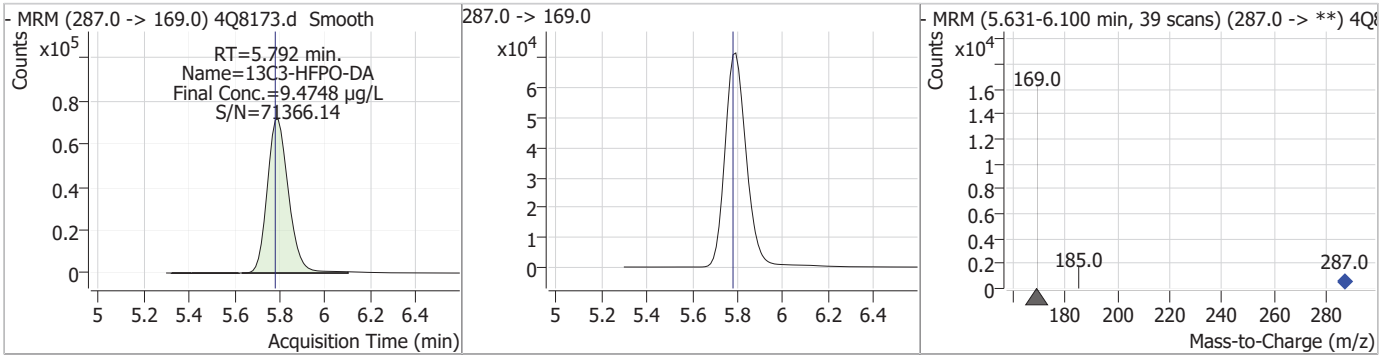
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.38	5.46	0.01	299846				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.61	5.47	0.01	336762	313.0 -> 119.0	3.3	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.47	5.79	0.01	467956				



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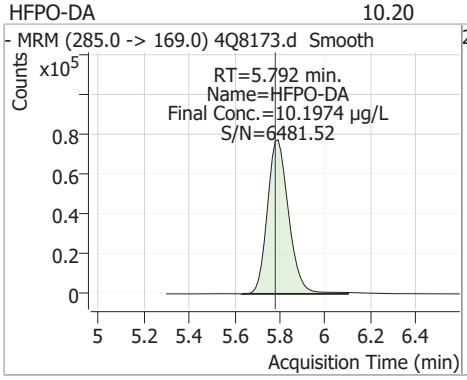
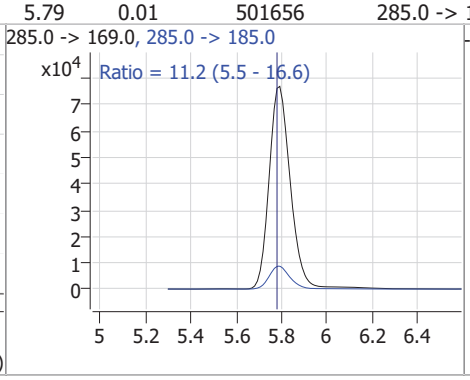
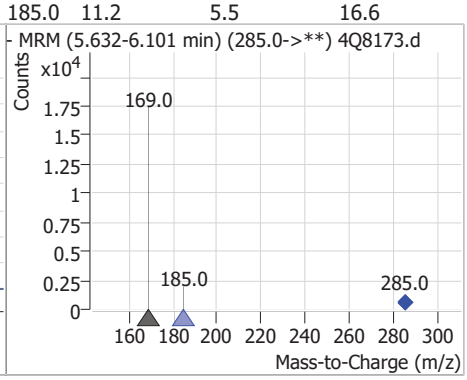
Perfluorinated Compounds by LC/MS/MS

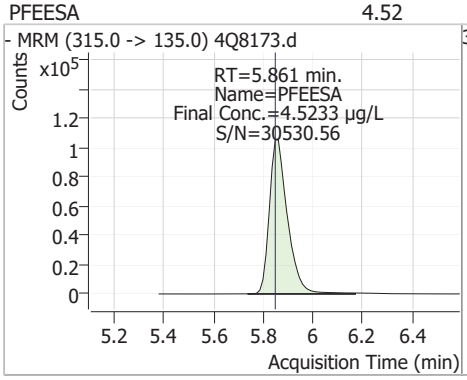
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.20	5.79	0.01	501656	285.0 -> 185.0	11.2	5.5	16.6

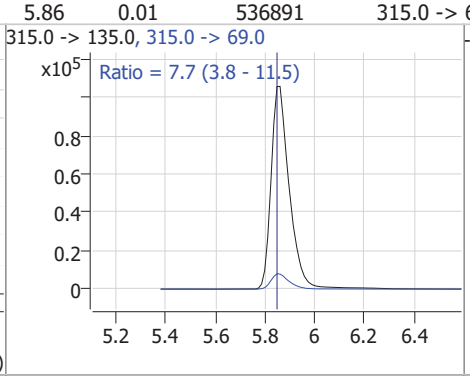


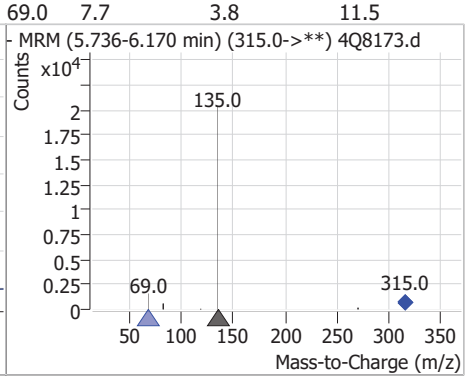




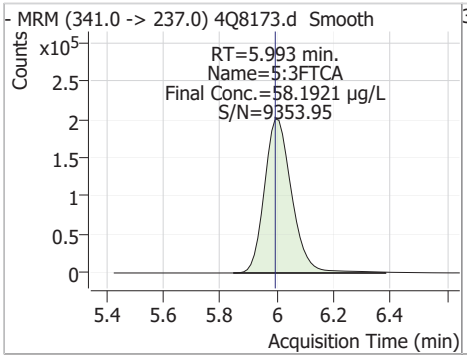
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.52	5.86	0.01	536891	315.0 -> 69.0	7.7	3.8	11.5

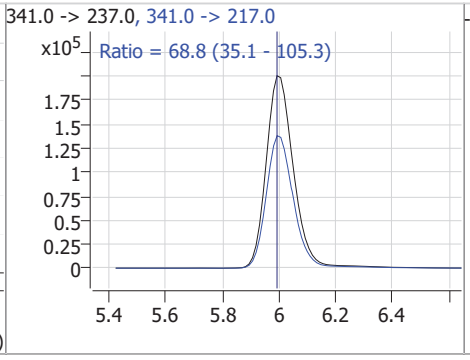


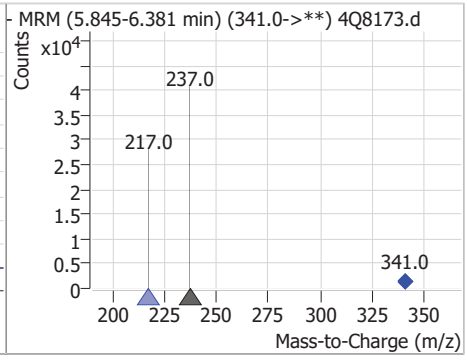




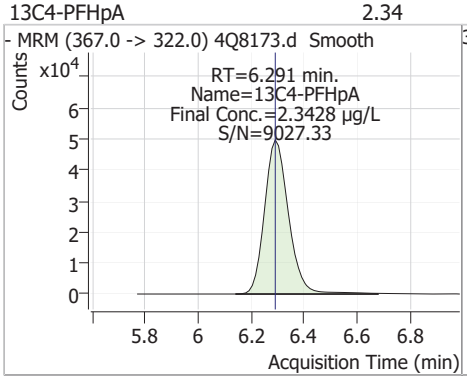
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	58.19	5.99	0.00	1342443	341.0 -> 217.0	68.8	35.1	105.3

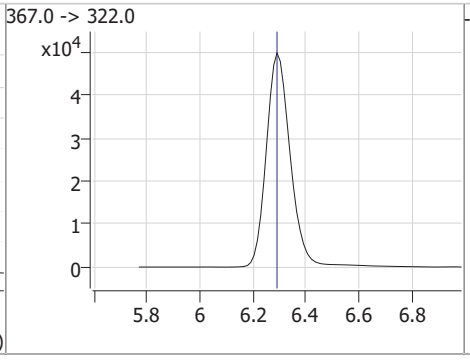


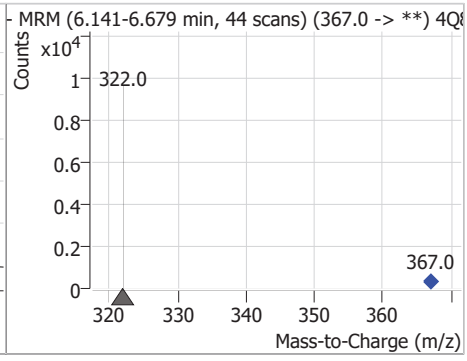




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.34	6.29	0.00	313195				

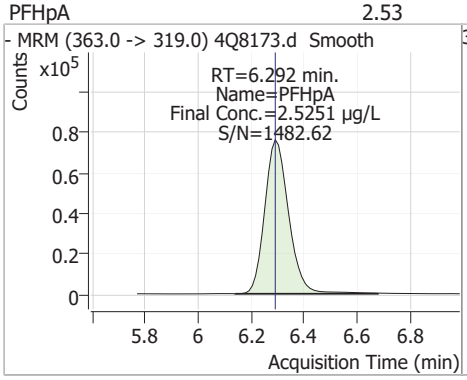


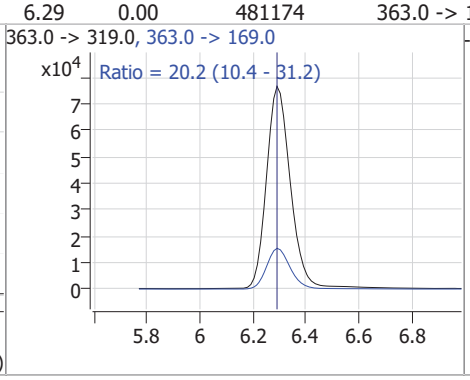


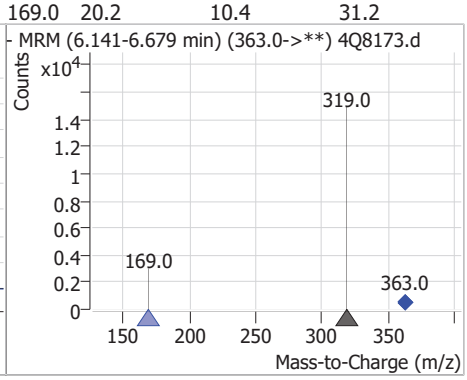


Perfluorinated Compounds by LC/MS/MS

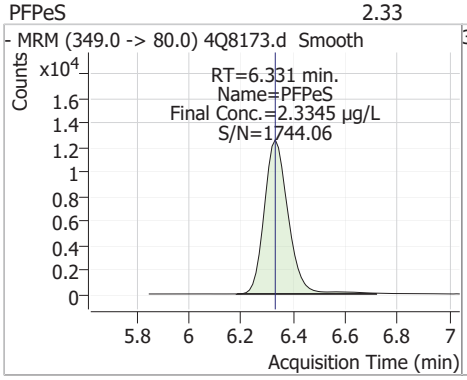
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.53	6.29	0.00	481174	363.0 -> 169.0	20.2	10.4	31.2

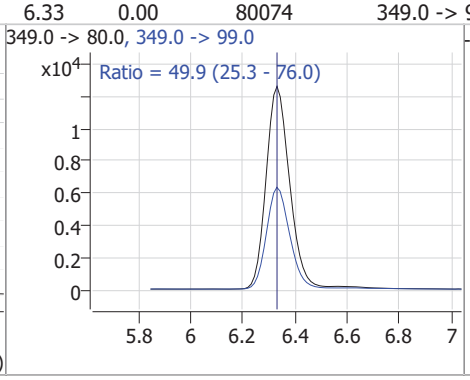


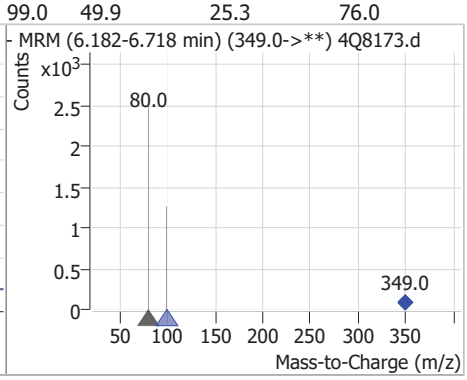




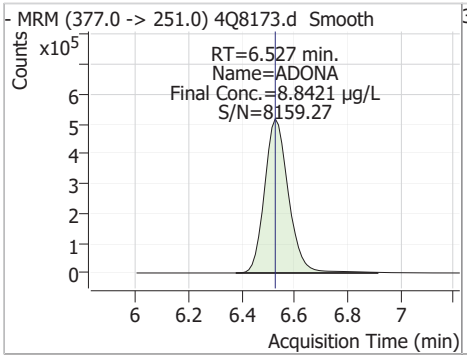
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.33	6.33	0.00	80074	349.0 -> 99.0	49.9	25.3	76.0

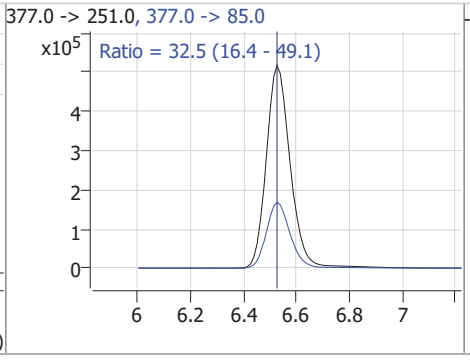


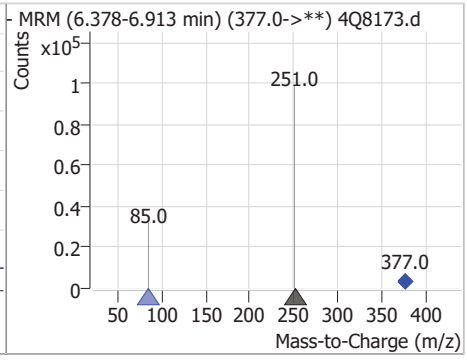




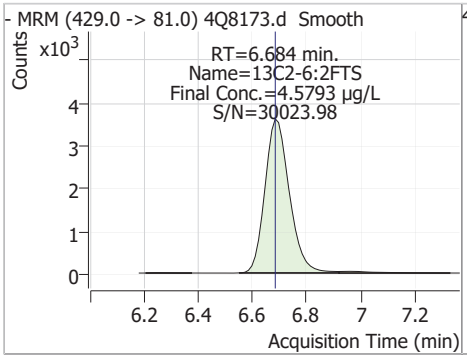
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.84	6.53	0.00	3246578	377.0 -> 85.0	32.5	16.4	49.1

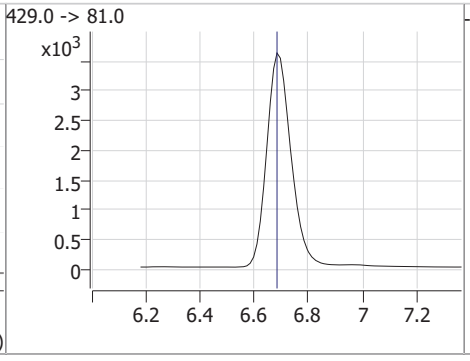


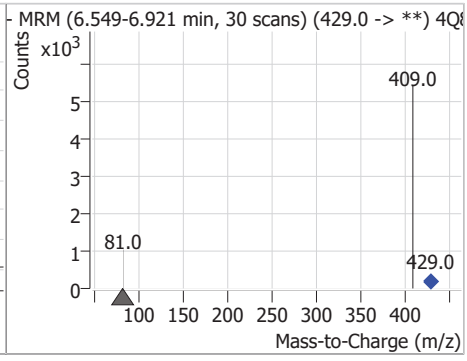




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.58	6.68	0.00	22560				







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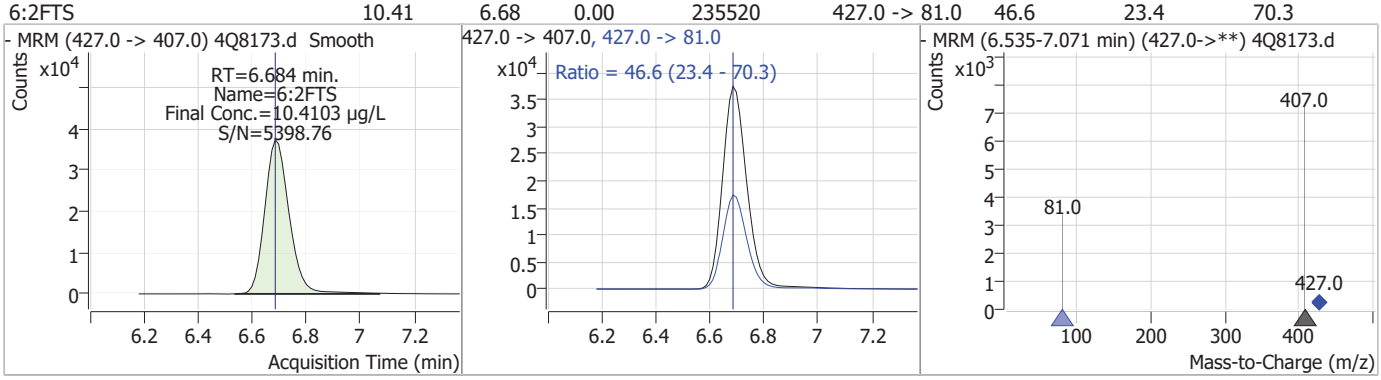
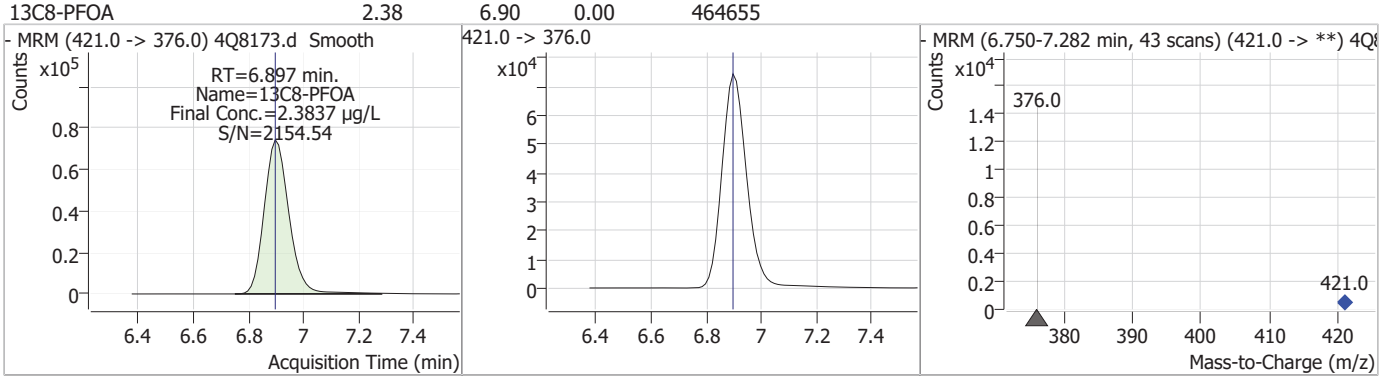
Perfluorinated Compounds by LC/MS/MS

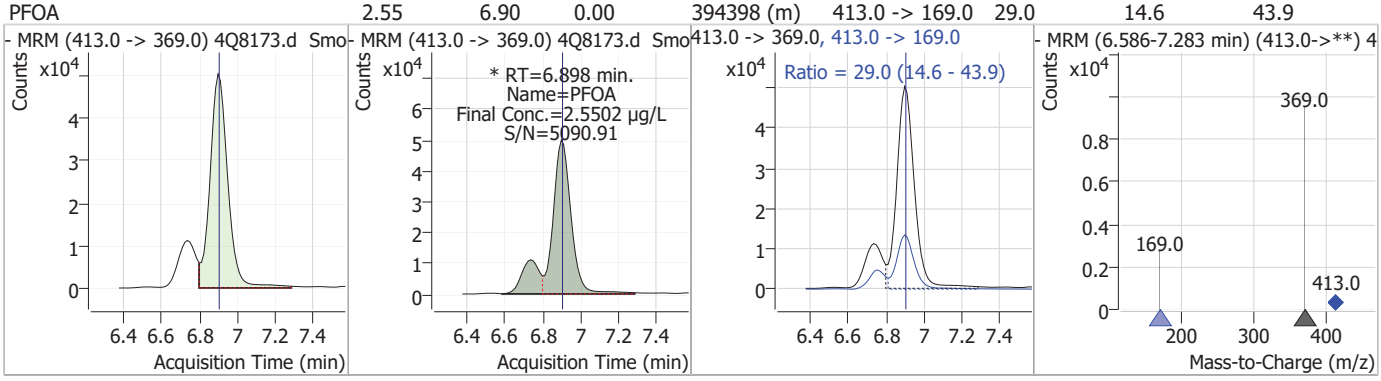
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	10.41	6.68	0.00	235520	427.0 -> 81.0	46.6	23.4	70.3



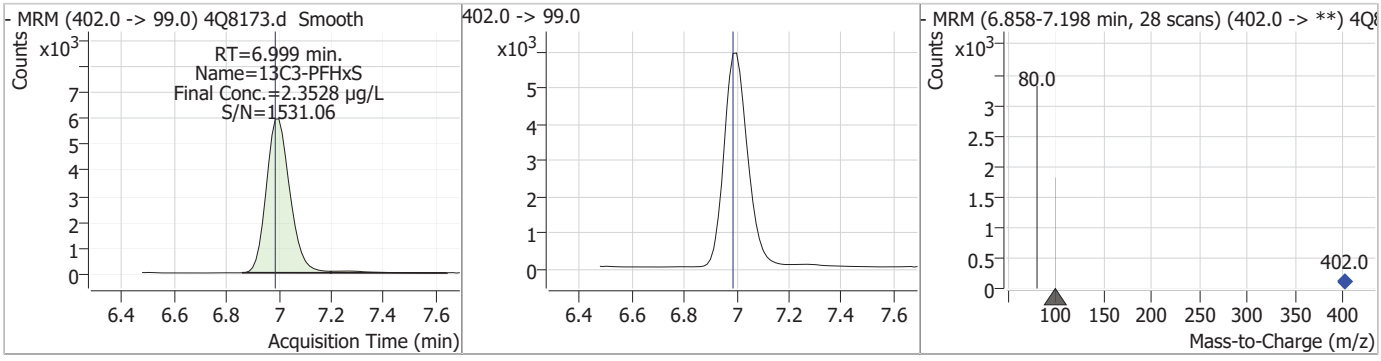
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.38	6.90	0.00	464655				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.55	6.90	0.00	394398 (m)	413.0 -> 169.0	29.0	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.35	7.00	0.01	37192				



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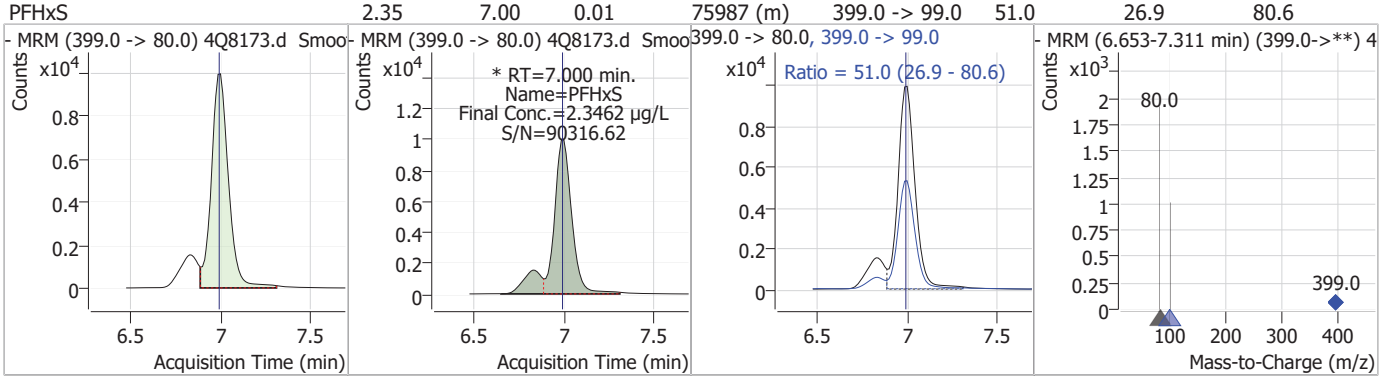
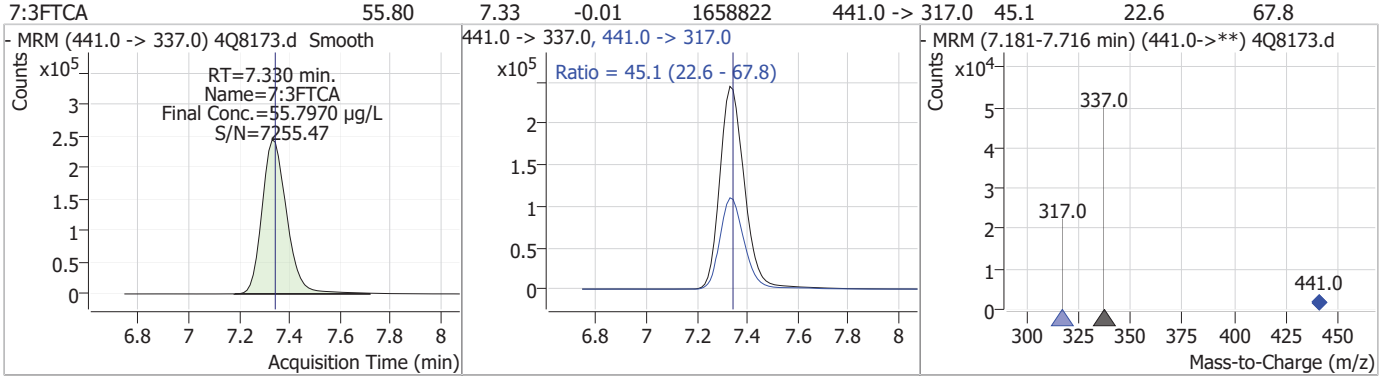
Perfluorinated Compounds by LC/MS/MS

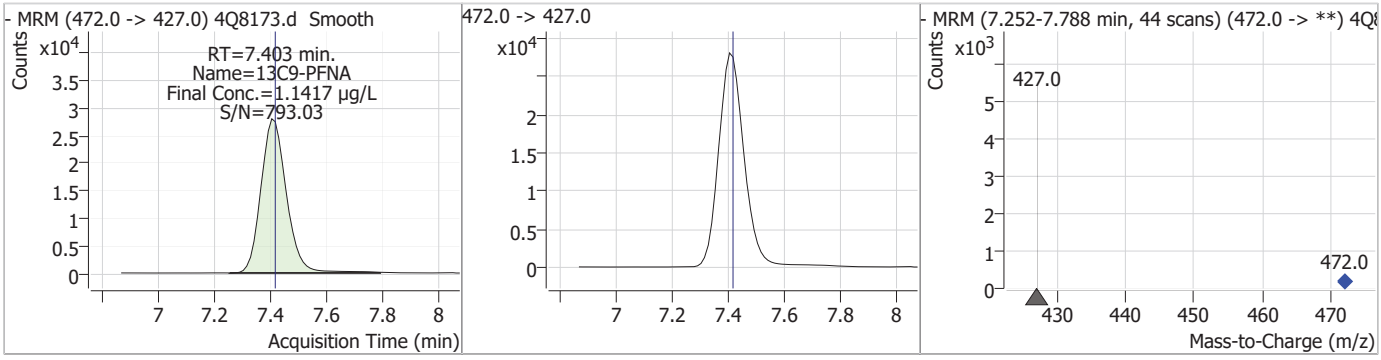
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.35	7.00	0.01	75987 (m)	399.0 -> 99.0	51.0	26.9	80.6



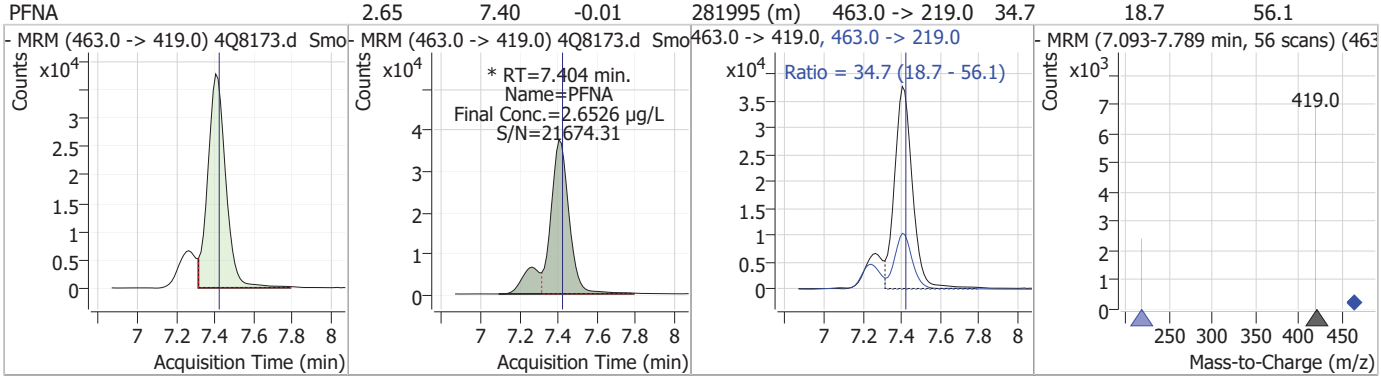
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	55.80	7.33	-0.01	1658822	441.0 -> 317.0	45.1	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.14	7.40	-0.01	176741				

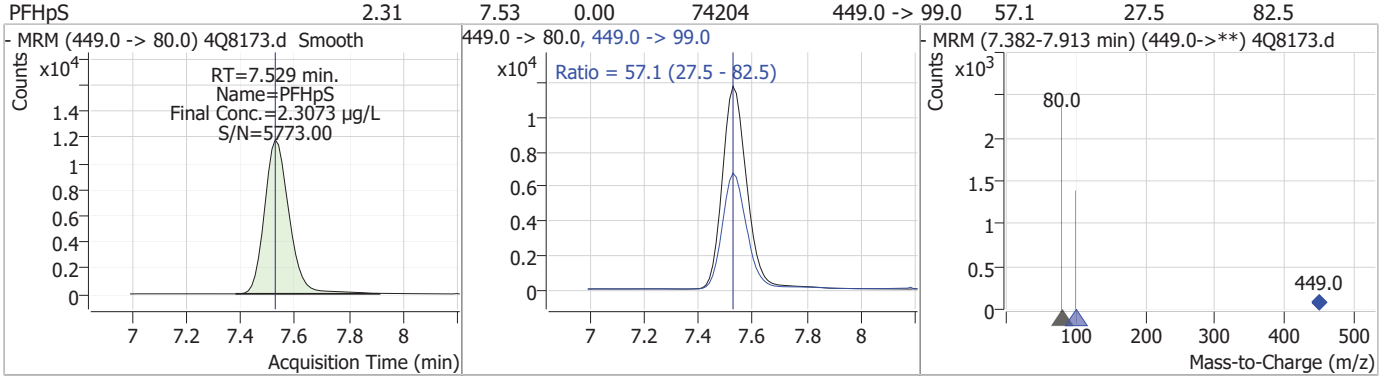


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.65	7.40	-0.01	281995 (m)	463.0 -> 219.0	34.7	18.7	56.1

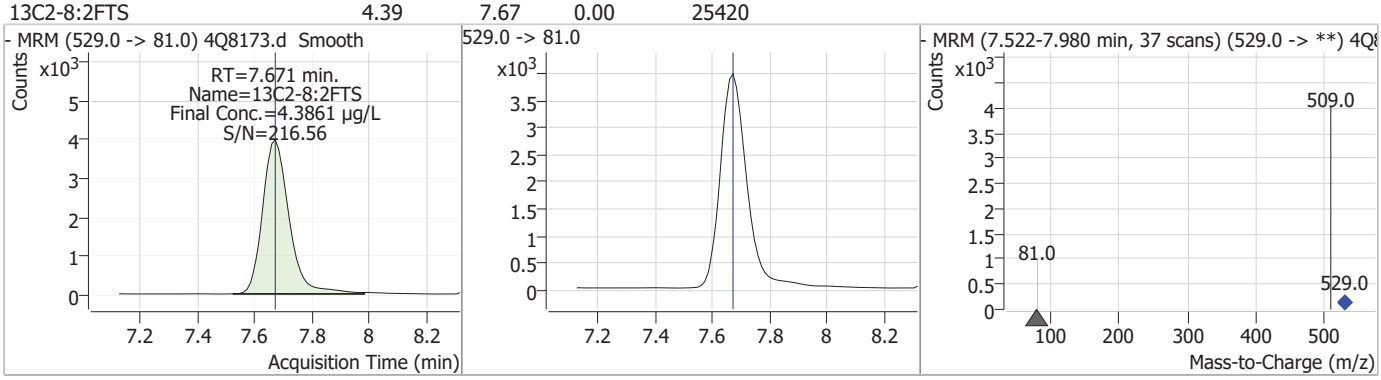


Perfluorinated Compounds by LC/MS/MS

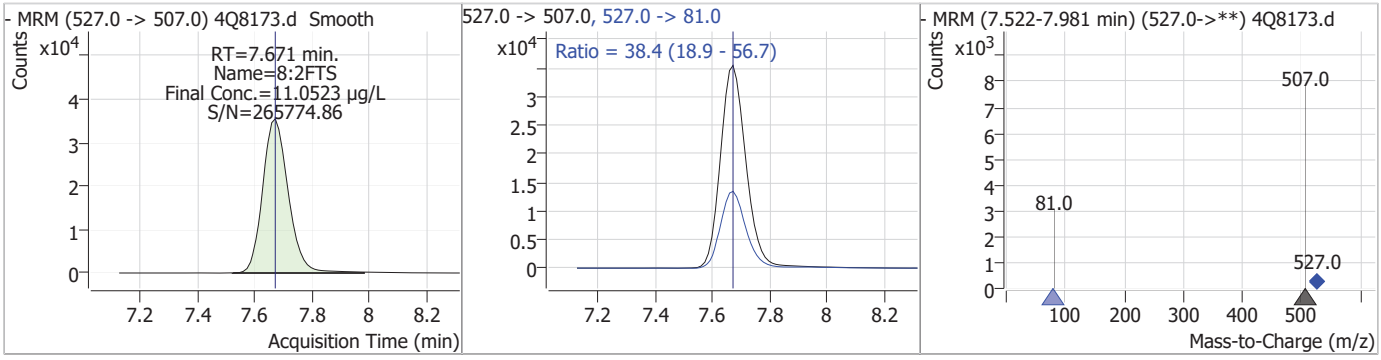
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.31	7.53	0.00	74204	449.0 -> 99.0	57.1	27.5	82.5



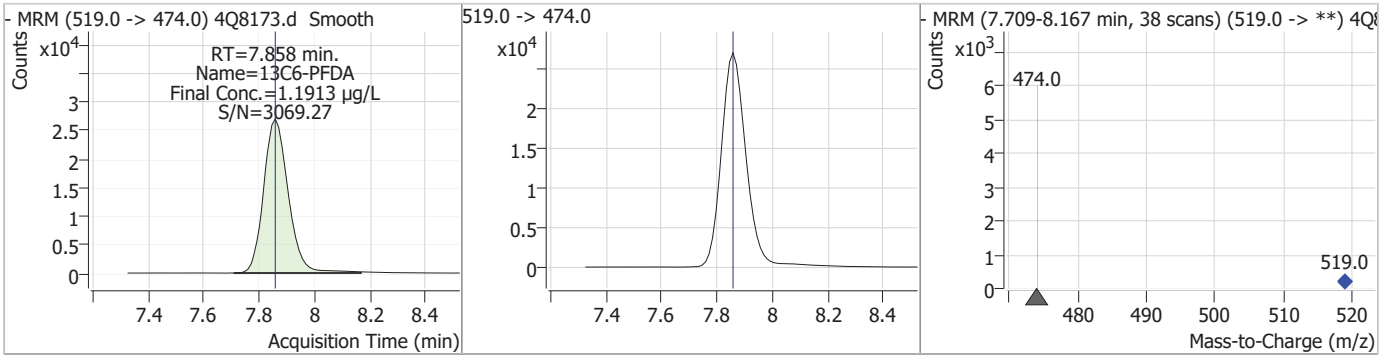
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.39	7.67	0.00	25420				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	11.05	7.67	0.00	219874	527.0 -> 81.0	38.4	18.9	56.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.19	7.86	0.00	166799				



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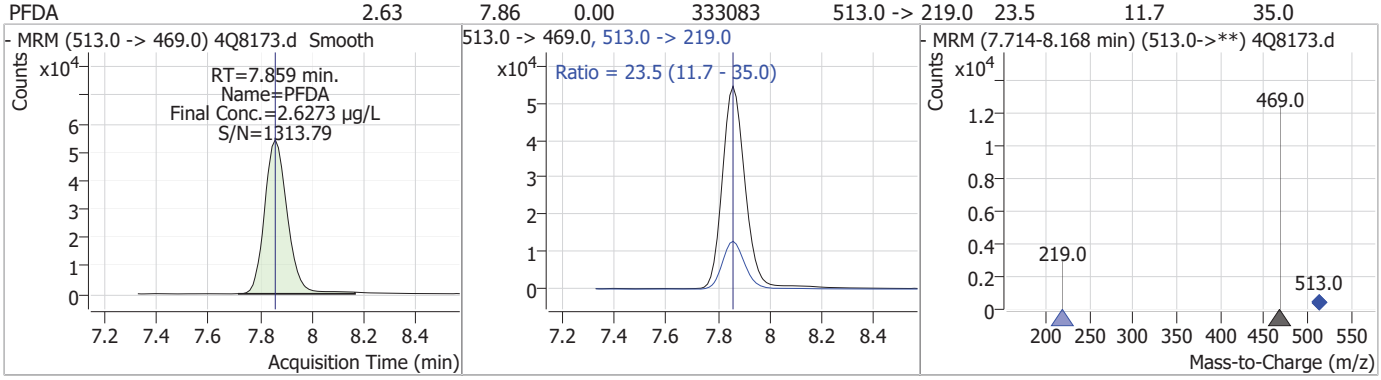
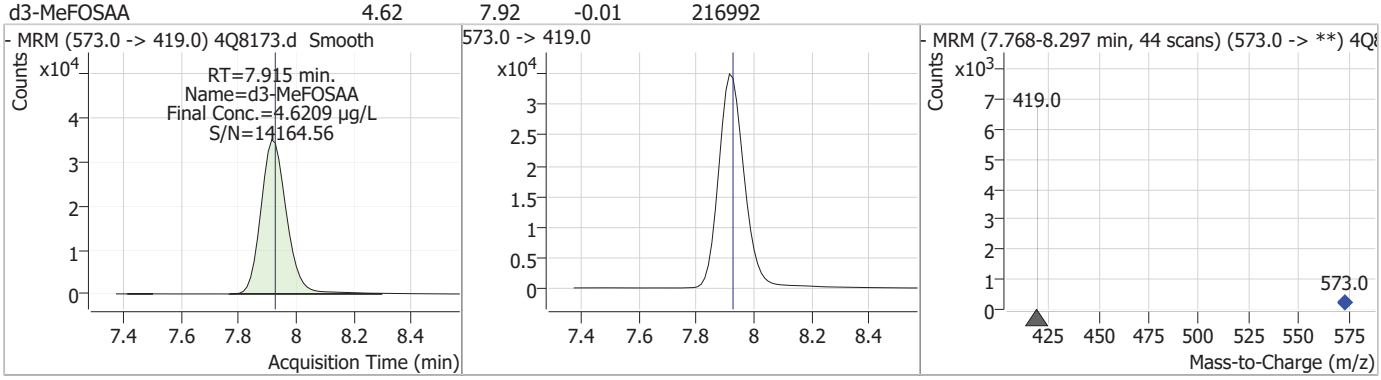
Perfluorinated Compounds by LC/MS/MS

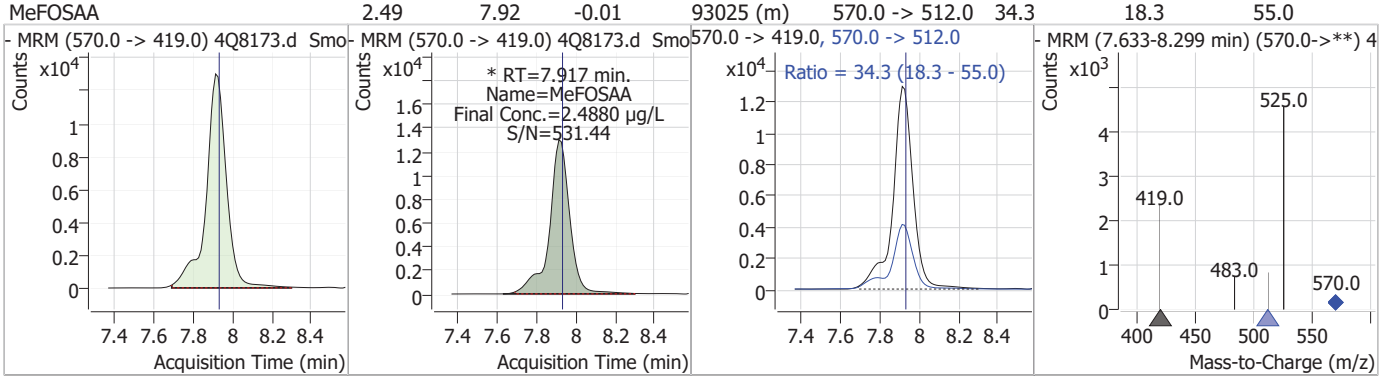
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.63	7.86	0.00	333083	513.0 -> 219.0	23.5	11.7	35.0



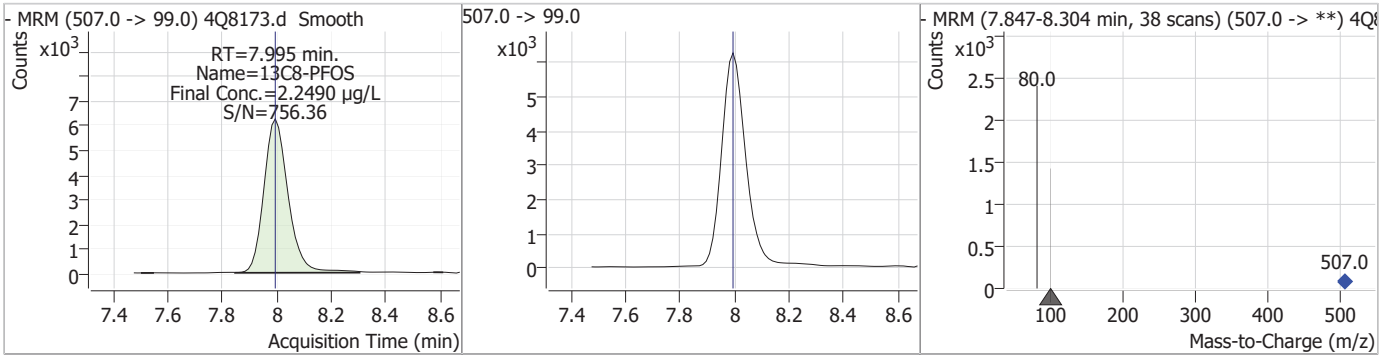
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.62	7.92	-0.01	216992				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.49	7.92	-0.01	93025 (m)	570.0 -> 512.0	34.3	18.3	55.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.25	7.99	0.00	38611				



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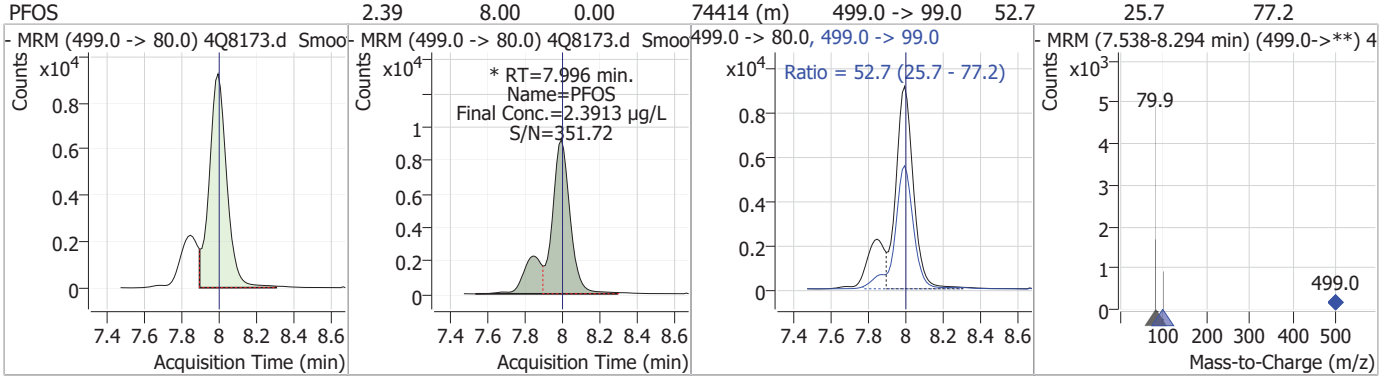
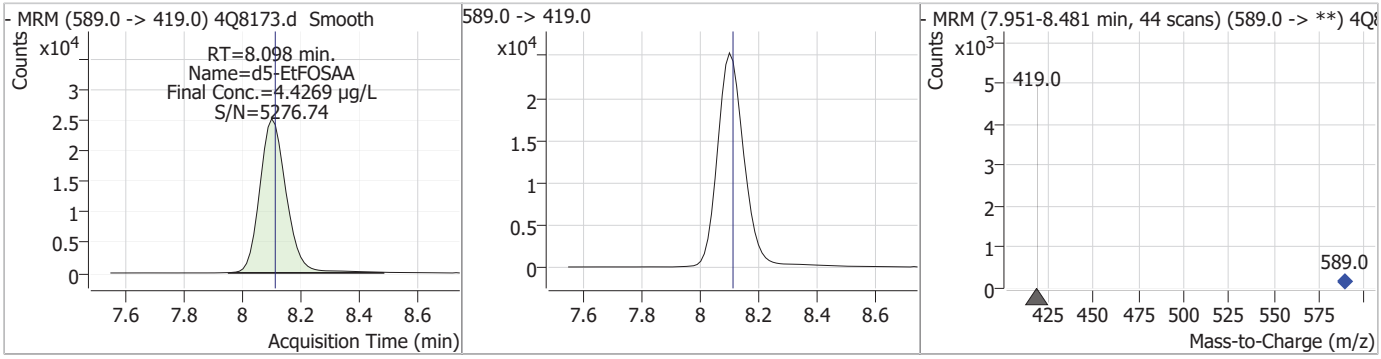
Perfluorinated Compounds by LC/MS/MS

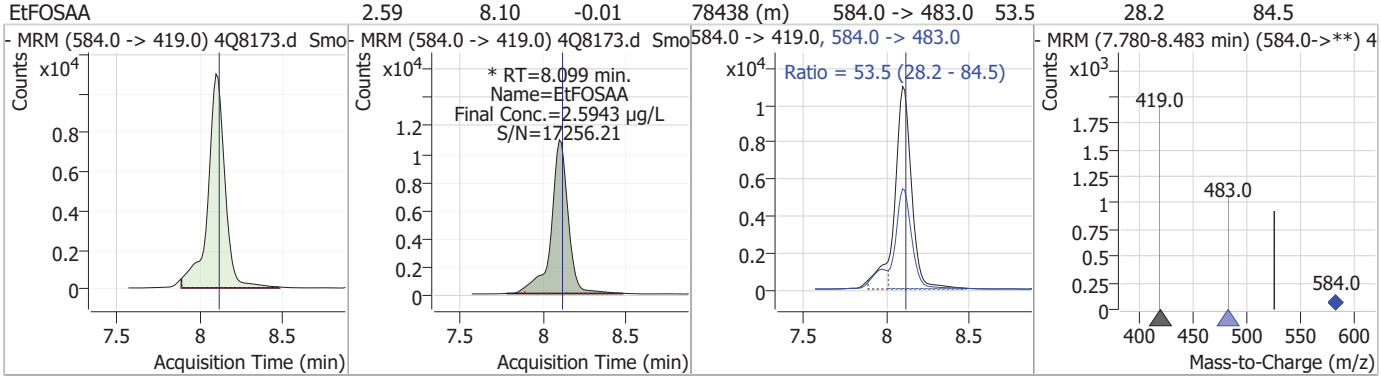
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.39	8.00	0.00	74414 (m)	499.0 -> 99.0	52.7	25.7	77.2



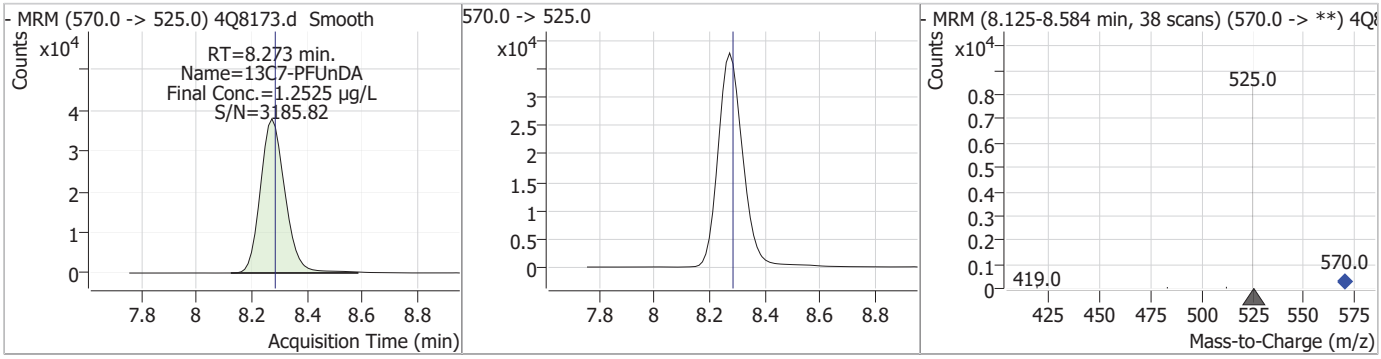
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.43	8.10	-0.01	159603				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.59	8.10	-0.01	78438 (m)	584.0 -> 483.0	53.5	28.2	84.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.25	8.27	-0.01	234249				



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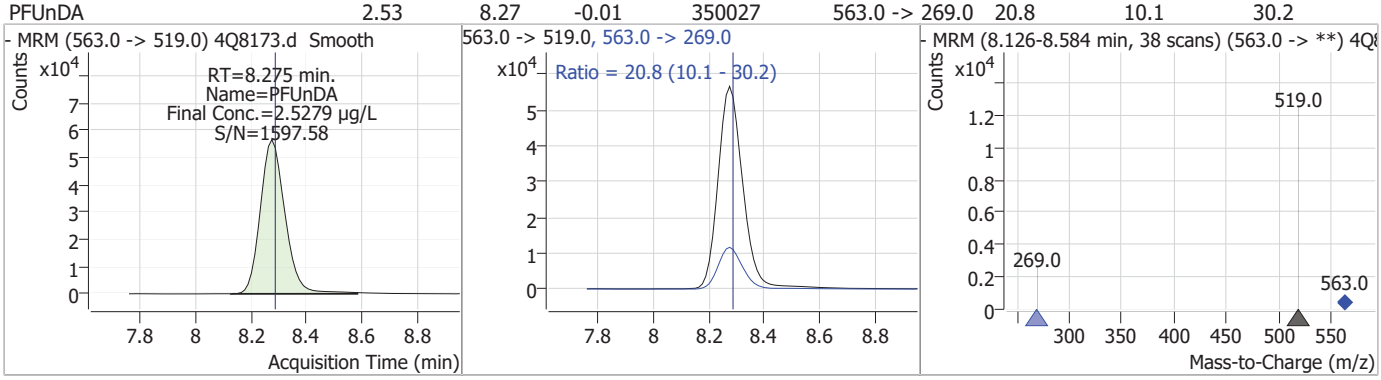
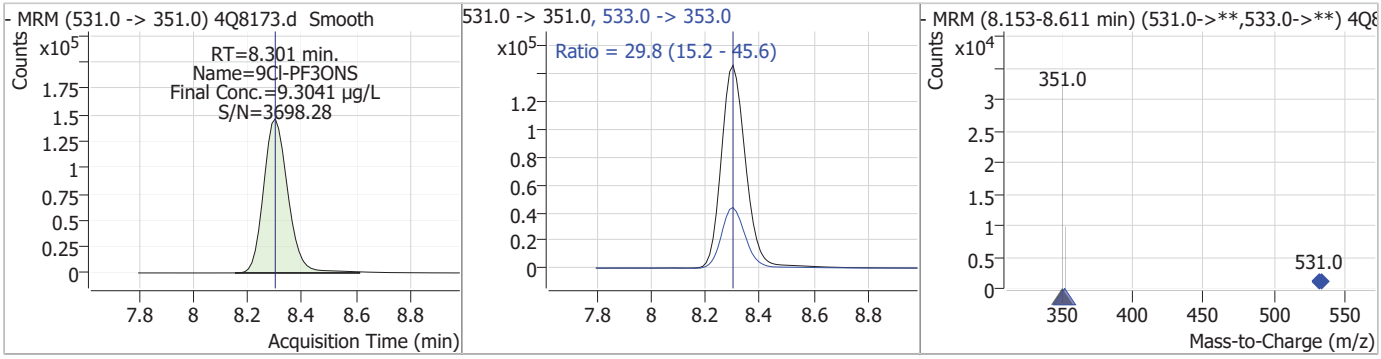
Perfluorinated Compounds by LC/MS/MS

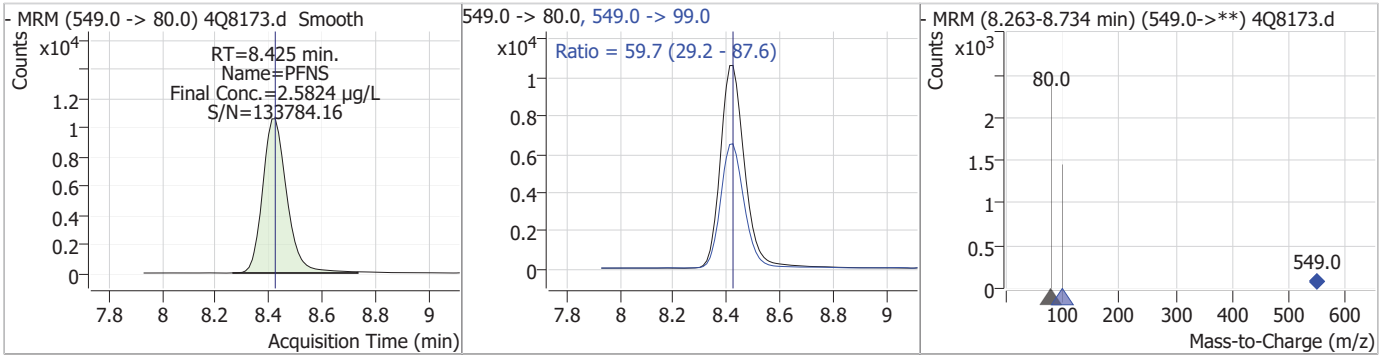
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.53	8.27	-0.01	350027	563.0 -> 269.0	20.8	10.1	30.2



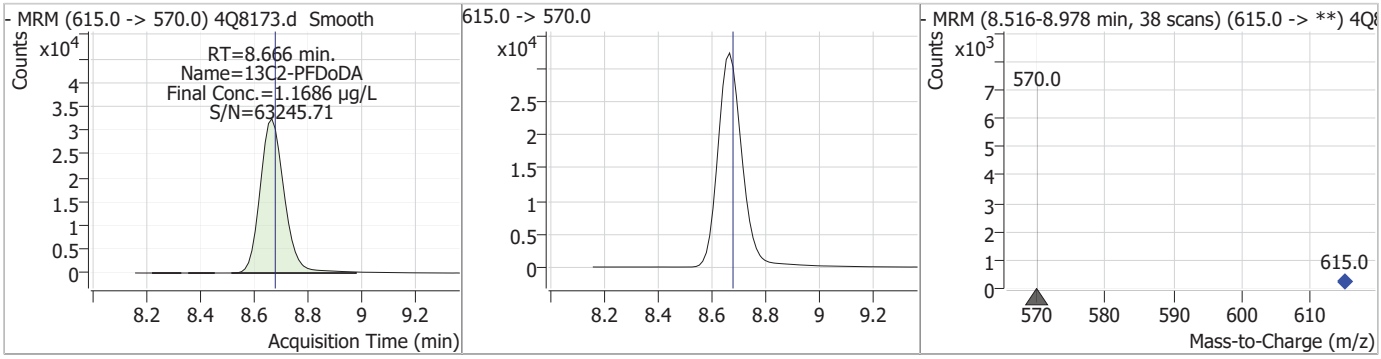
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.30	8.30	0.00	911156	533.0 -> 353.0	29.8	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.58	8.42	0.00	67051	549.0 -> 99.0	59.7	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.17	8.67	-0.01	200188				



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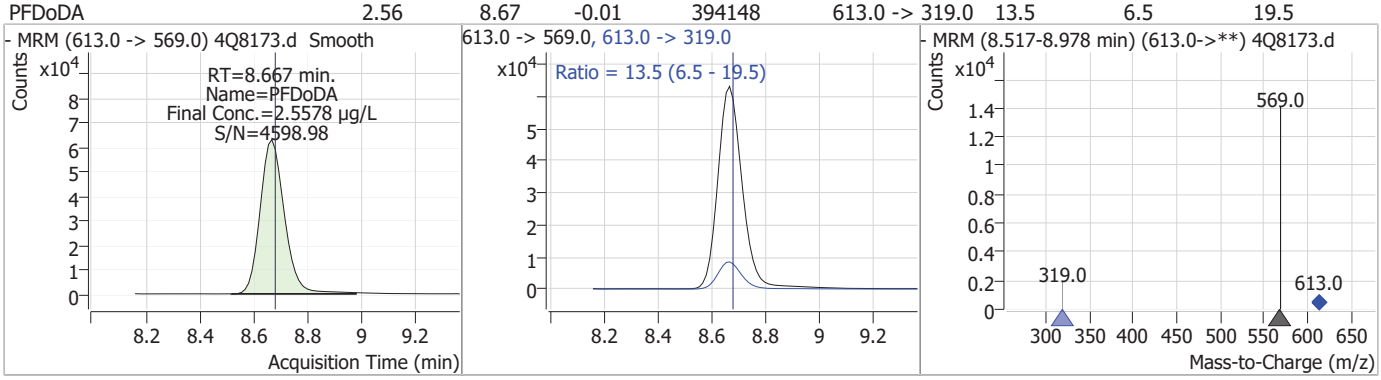
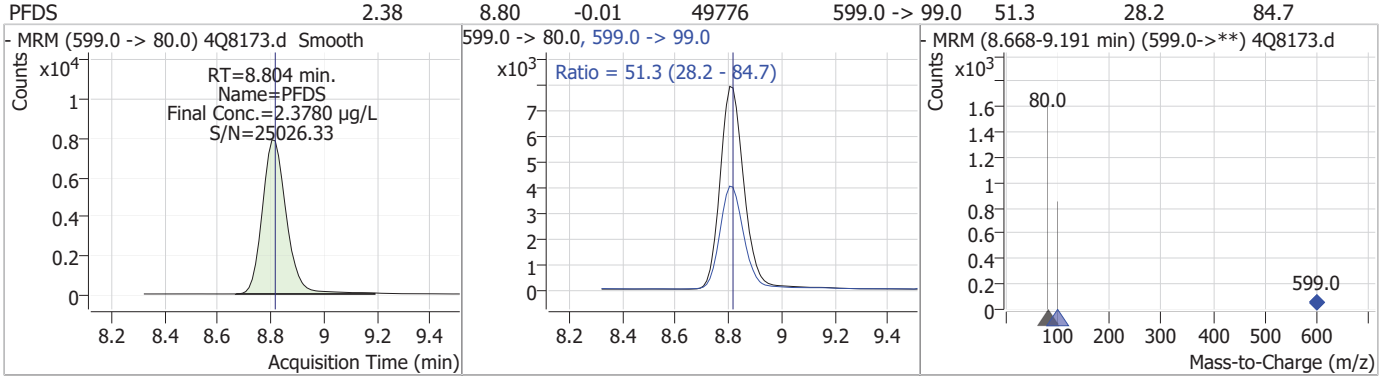
Perfluorinated Compounds by LC/MS/MS

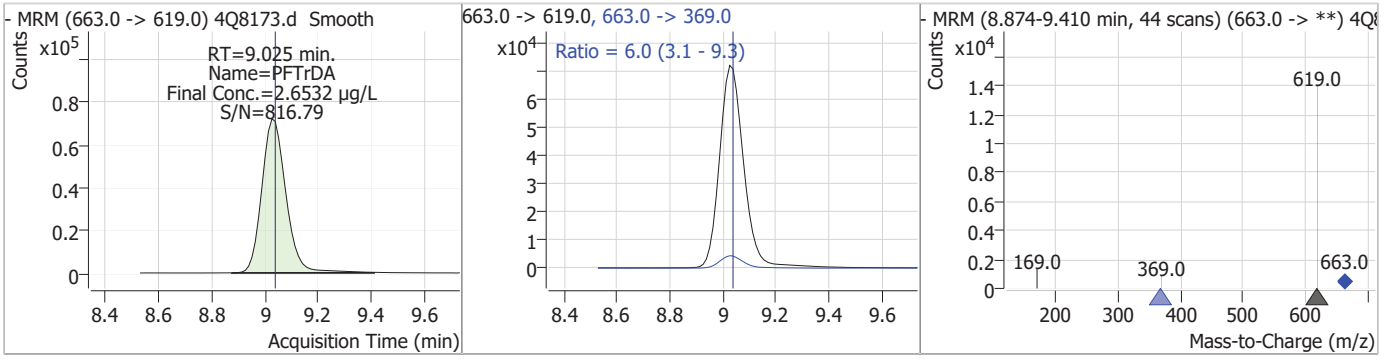
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.56	8.67	-0.01	394148	613.0 -> 319.0	13.5	6.5	19.5



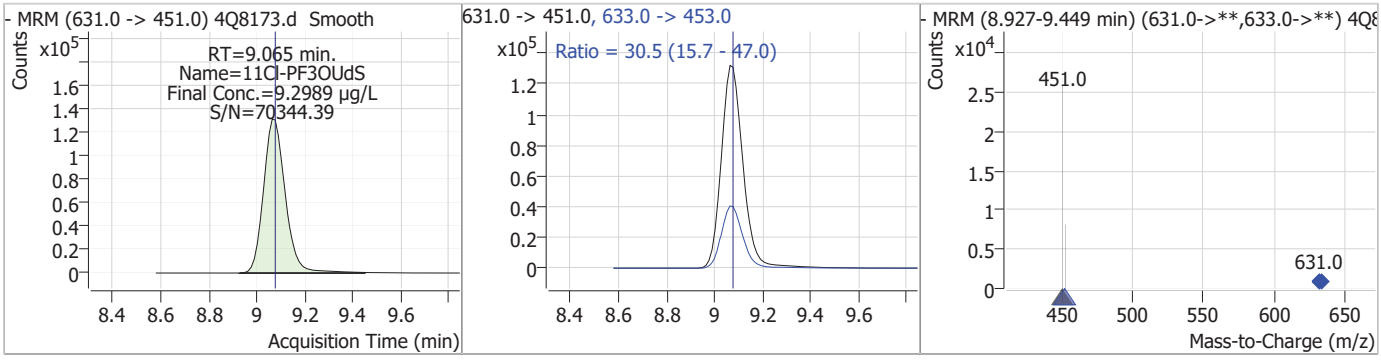
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.38	8.80	-0.01	49776	599.0 -> 99.0	51.3	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.65	9.03	-0.01	455927	663.0 -> 369.0	6.0	3.1	9.3

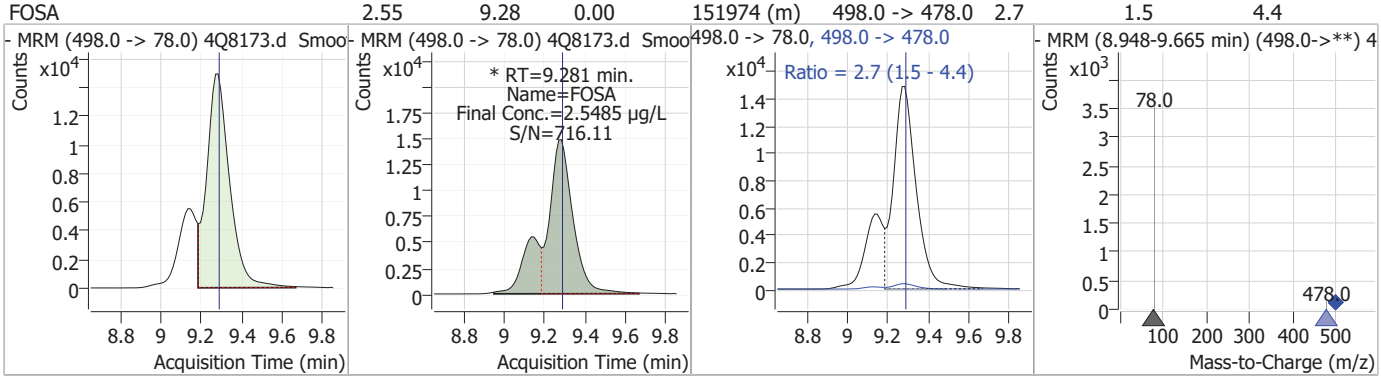


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.30	9.06	-0.01	827851	633.0 -> 453.0	30.5	15.7	47.0

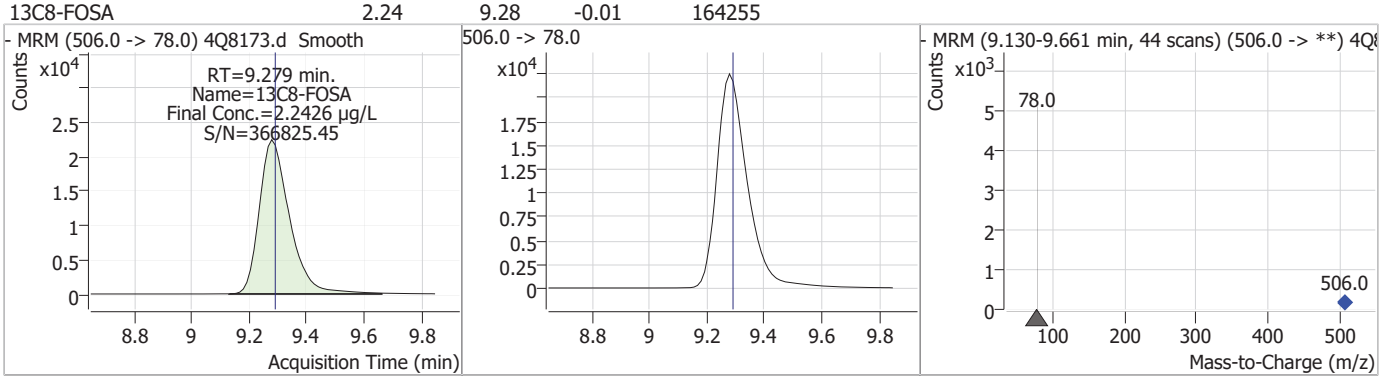


Perfluorinated Compounds by LC/MS/MS

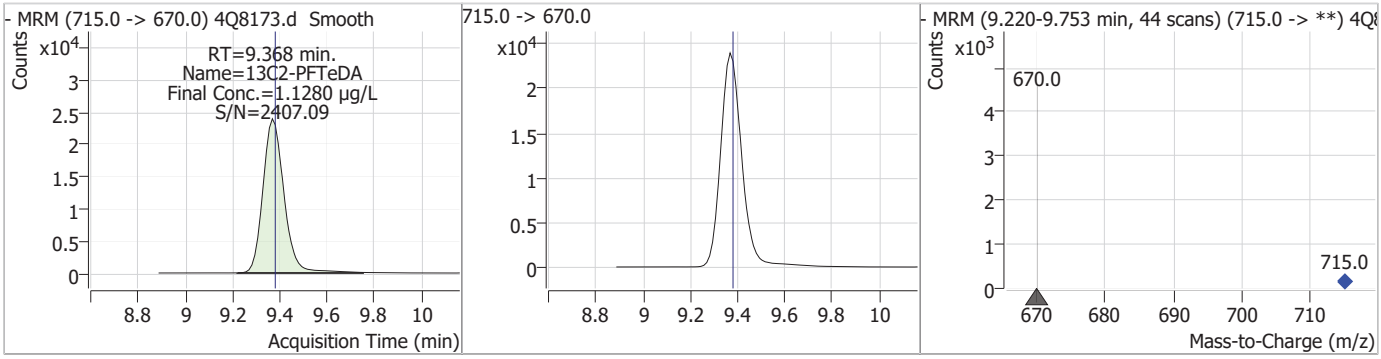
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.55	9.28	0.00	151974 (m)	498.0 -> 478.0	2.7	1.5	4.4



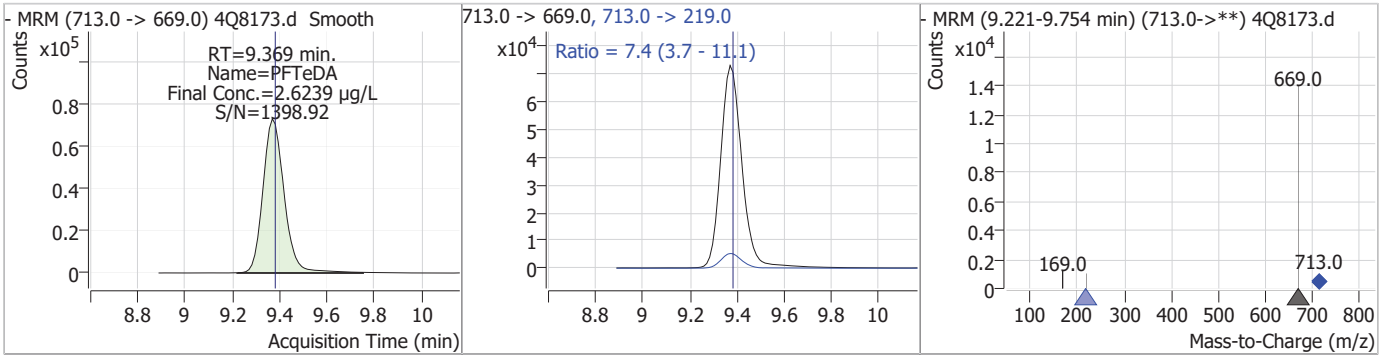
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.24	9.28	-0.01	164255				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.13	9.37	-0.01	148554				

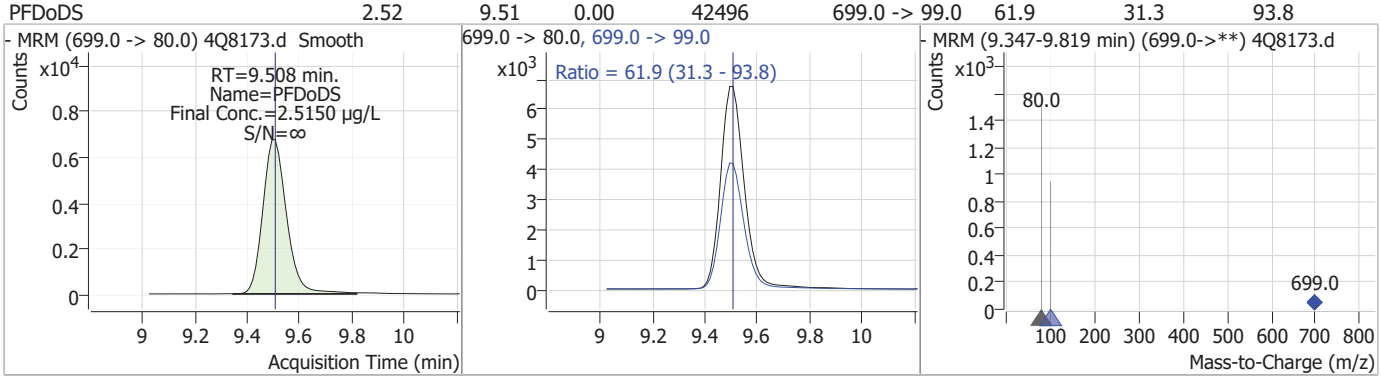


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.62	9.37	-0.01	453834	713.0 -> 219.0	7.4	3.7	11.1

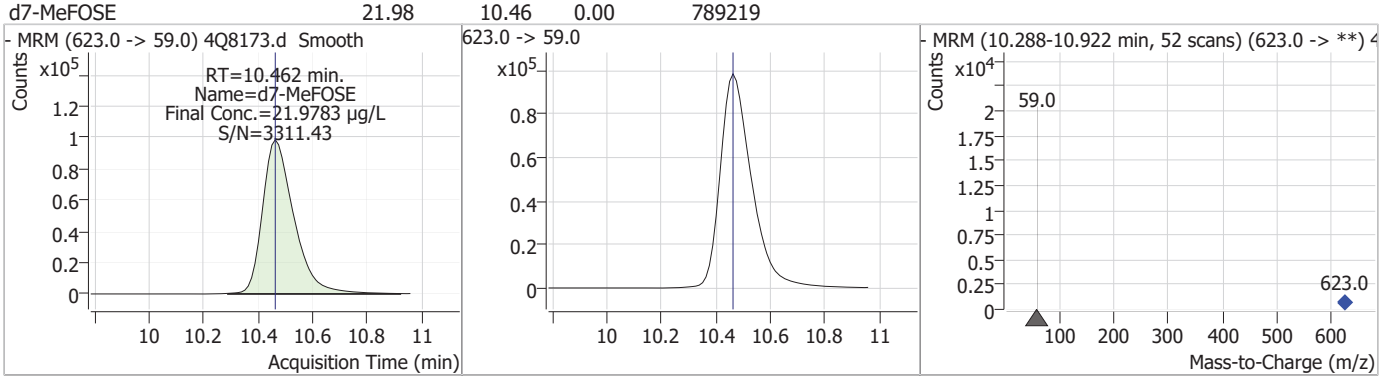


Perfluorinated Compounds by LC/MS/MS

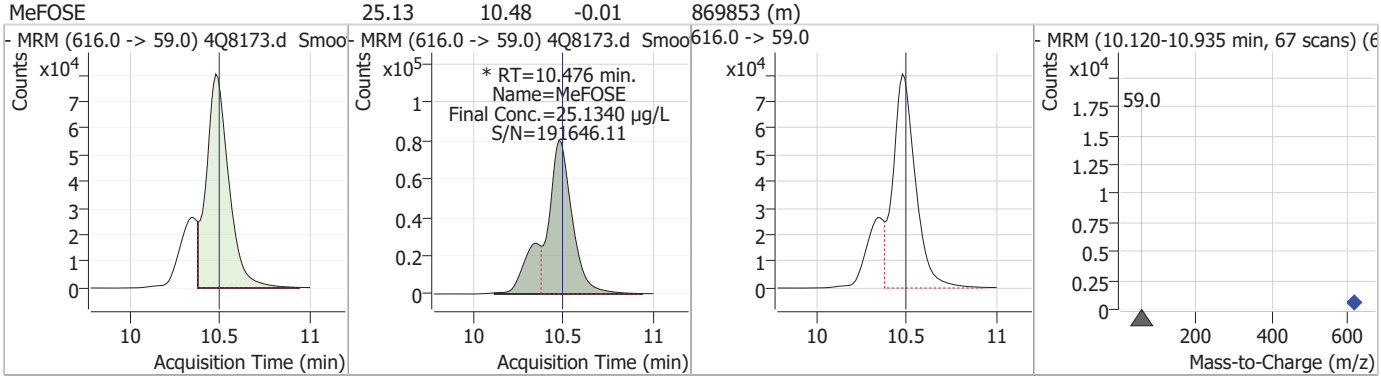
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.52	9.51	0.00	42496	699.0 -> 99.0	61.9	31.3	93.8



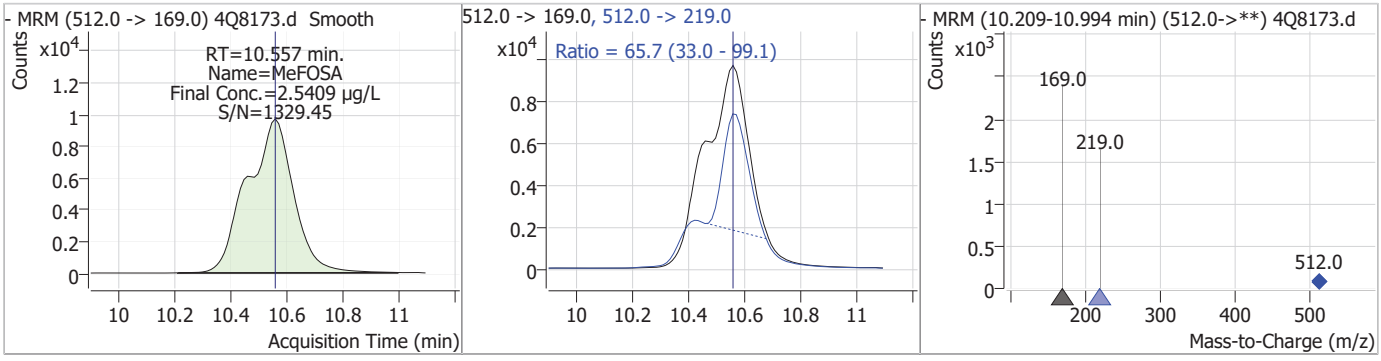
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	21.98	10.46	0.00	789219				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	25.13	10.48	-0.01	869853 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.54	10.56	0.00	111727	512.0 -> 219.0	65.7	33.0	99.1



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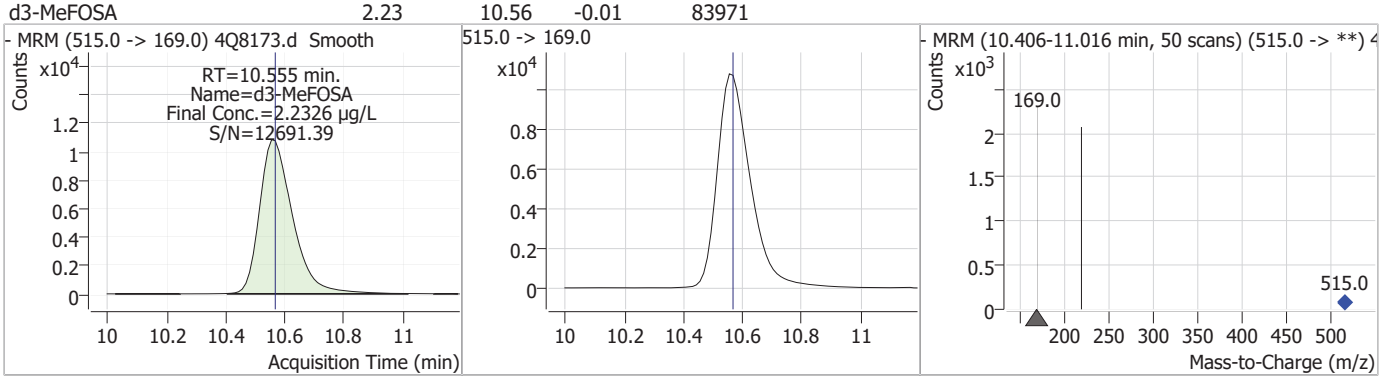
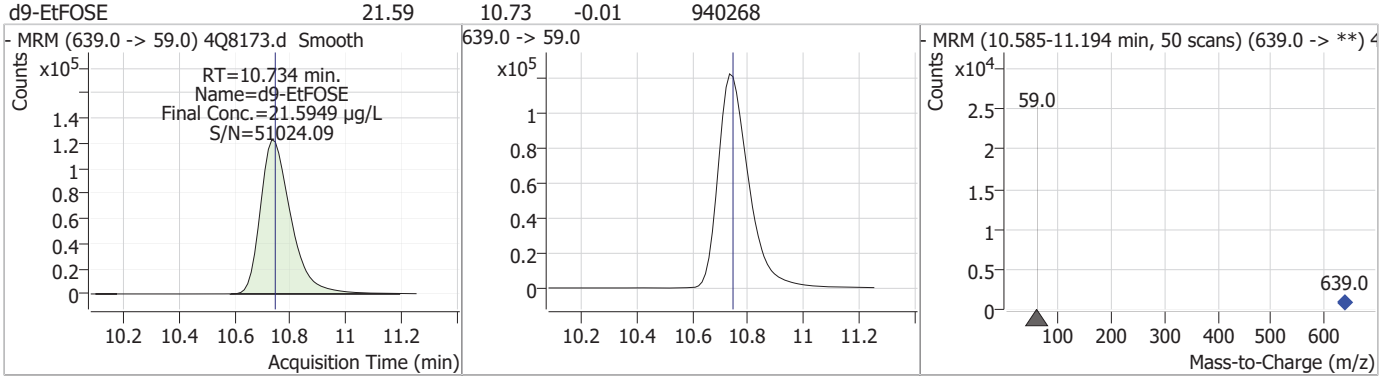
Perfluorinated Compounds by LC/MS/MS

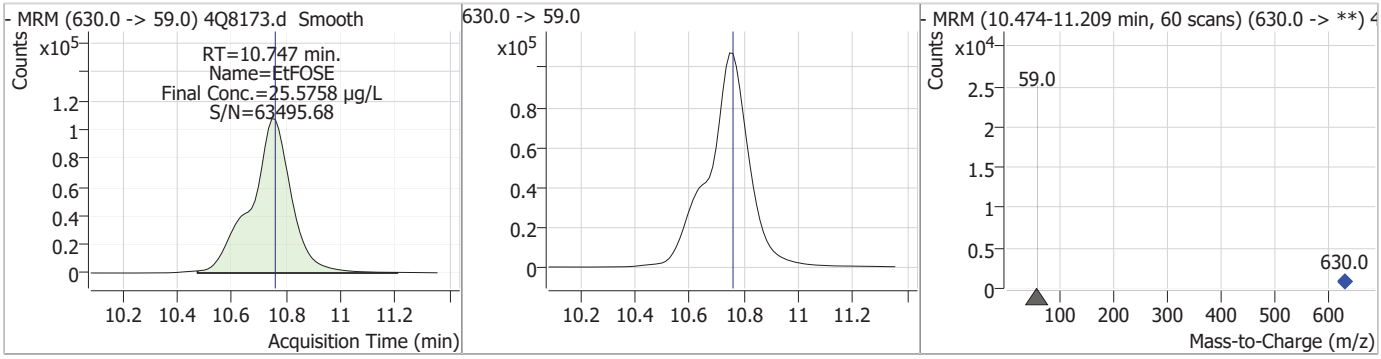
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.23	10.56	-0.01	83971				



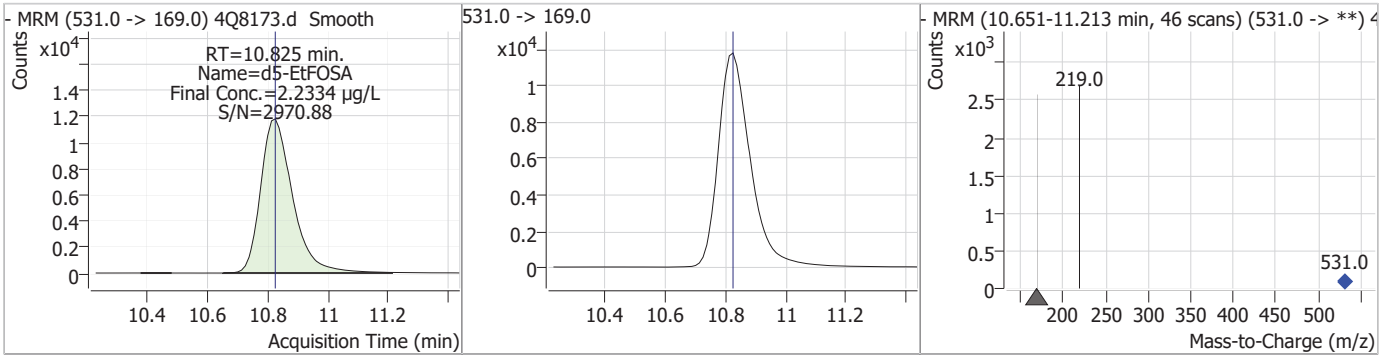
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	21.59	10.73	-0.01	940268				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.58	10.75	-0.01	1118603				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.23	10.82	0.00	86567				



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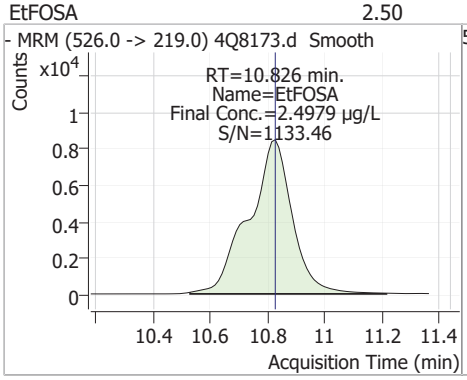
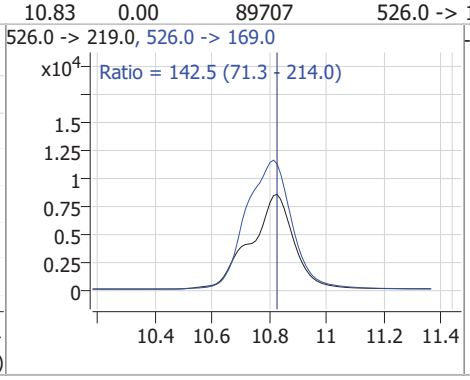
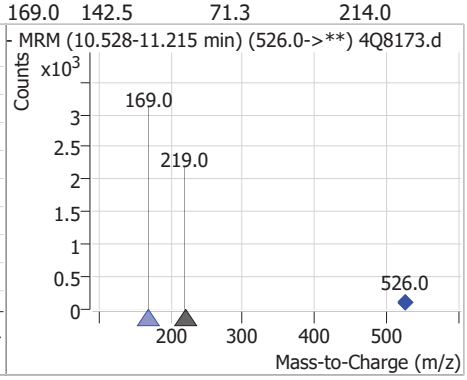
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.50	10.83	0.00	89707	526.0 -> 169.0	142.5	71.3	214.0







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Manual Integration Approval Summary

Sample Number: T4Q138-ECC138
Lab FileID: 4Q8173.D
Injection Time: 05/01/25 00:40
Method: EPA 1633
Analyst approved: 05/01/25 04:40 Alodia Hana Barrogo
Supervisor approved: 05/01/25 08:24 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.92	Poor instrument integration
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.10	Poor instrument integration
PFOSA	754-91-6		9.28	Split peak
MeFOSE	24448-09-7		10.48	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/02/25 11:54

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8183.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 12:49:35 PM
Sample Name : CC137-1.0 LL
Vial : P1-A2
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q139.batch.bin
Sample Information : OP63077,T4Q139,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	874388	10.00	µg/L	-0.012
M5-PFPeA	4.319	268.0 -> 223.0	457302	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	301592	2.50	µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	322521	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	476685	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	191827	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	179974	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	247110	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	218661	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	162015	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	168265	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	26896	2.50	µg/L	0.000
		302.0 -> 80.0	64302			
M3-PFHxS	6.986	402.0 -> 99.0	39018	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	44220	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	11440	5.00	µg/L	0.000
M2-6:2FTS	6.684	429.0 -> 81.0	24522	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	27792	5.00	µg/L	0.000
M3-MeFOSAA	7.927	573.0 -> 419.0	220650	5.00	µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	467933	10.00	µg/L	0.012
M5-EtFOSAA	8.098	589.0 -> 419.0	171567	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	843133	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	1064198	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	95711	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	88736	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	69301	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	386245	5.00	µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	43038	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	472535	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	157058	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	184773	1.25	µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	285519	2.50	µg/L	0.012
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	11440	5.30	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 106.0%		
13C2-6:2FTS	6.684	429.0 -> 81.0	24522	5.24	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.7%		
13C2-8:2FTS	7.671	529.0 -> 81.0	27792	5.04	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.9%		
13C2-PFDoDA	8.666	615.0 -> 570.0	218661	1.29	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.0%		
13C2-PFTeDA	9.368	715.0 -> 670.0	162015	1.24	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.3%		
13C3-PFBS	5.368	302.0 -> 99.0	26896	2.53	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.3%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	39018	2.60	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.9%			
13C4-PFBA	2.871	217.0 -> 172.0	874388	9.87	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.7%			
13C4-PFHpA	6.291	367.0 -> 322.0	322521	2.51	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.4%			
13C5-PFHxA	5.464	318.0 -> 273.0	301592	2.50	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.8%			
13C5-PFPeA	4.319	268.0 -> 223.0	457302	4.99	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.7%			
13C6-PFDA	7.858	519.0 -> 474.0	179974	1.30	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.7%			
13C7-PFUnDA	8.273	570.0 -> 525.0	247110	1.33	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.6%			
13C8-FOSA	9.279	506.0 -> 78.0	168265	2.36	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.5%			
13C8-PFOA	6.897	421.0 -> 376.0	476685	2.52	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.0%			
13C8-PFOS	7.995	507.0 -> 99.0	44220	2.65	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.0%			
13C9-PFNA	7.403	472.0 -> 427.0	191827	1.25	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.1%			
d3-MeFOSAA	7.927	573.0 -> 419.0	220650	4.83	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.7%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	467933	9.86	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 98.6%			
d3-MeFOSA	10.555	515.0 -> 169.0	88736	2.43	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.1%			
d5-EtFOSAA	8.098	589.0 -> 419.0	171567	4.90	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.9%			
d7-MeFOSE	10.462	623.0 -> 59.0	843133	24.16	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 96.6%			
d9-EtFOSE	10.734	639.0 -> 59.0	1064198	25.15	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.6%			
d5-EtFOSA	10.825	531.0 -> 169.0	95711	2.54	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.6%			
Target Compounds							**QValue**
4:2FTS	5.166	327.0 -> 307.0	13241	0.63	µg/L		98
		327.0 -> 81.0	6375				
6:2FTS	6.684	427.0 -> 407.0	15853	0.64	µg/L		90
		427.0 -> 81.0	8509				
8:2FTS	7.671	527.0 -> 507.0	14761	0.68	µg/L		96
		527.0 -> 81.0	5232				
EtFOSAA	8.111	584.0 -> 419.0	5099	0.16	µg/L	m	95
		584.0 -> 483.0	3081				
FOSA	9.281	498.0 -> 78.0	11169	0.26	µg/L	m	100
		498.0 -> 478.0	340				
MeFOSAA	7.929	570.0 -> 419.0	5992	0.16	µg/L		75
		570.0 -> 512.0	3104				
PFBA	2.877	213.0 -> 169.0	18396	0.69	µg/L		100
PFBS	5.369	299.0 -> 80.0	4548	0.15	µg/L		96
		299.0 -> 99.0	1733				
PFDA	7.859	513.0 -> 469.0	23648	0.17	µg/L		97
		513.0 -> 219.0	5135				
PFDoDA	8.667	613.0 -> 569.0	28007	0.17	µg/L		98
		613.0 -> 319.0	3917				

Perfluorinated Compounds by LC/MS/MS

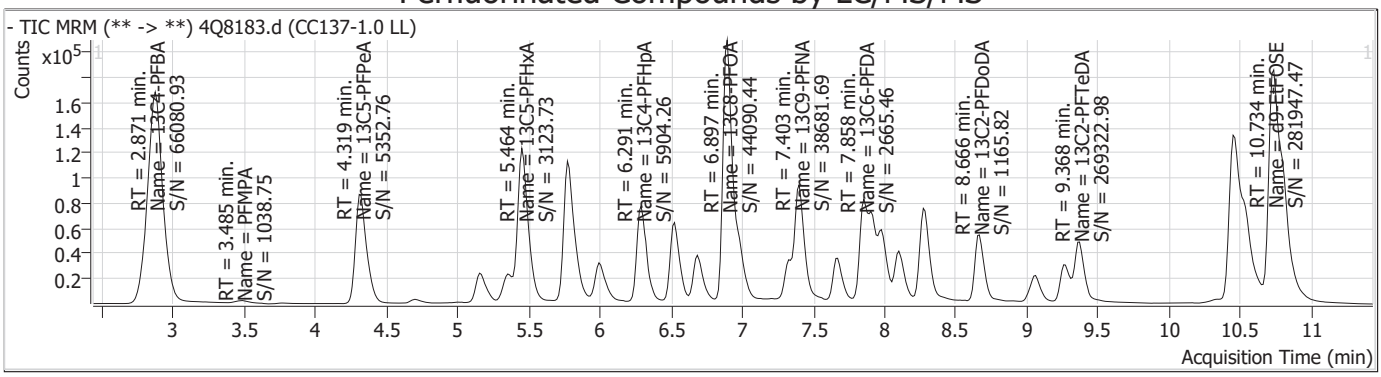
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.804	599.0 -> 80.0	3470	0.16	µg/L		88
		599.0 -> 99.0	2274				
PFHpA	6.292	363.0 -> 319.0	36598	0.19	µg/L		91
		363.0 -> 169.0	6124				
PFHpS	7.529	449.0 -> 80.0	5153	0.15	µg/L		99
		449.0 -> 99.0	2865				
PFHxA	5.467	313.0 -> 269.0	21376	0.16	µg/L		100
		313.0 -> 119.0	727				
PFHxS	6.987	399.0 -> 80.0	5456	0.19	µg/L	m	97
		399.0 -> 99.0	3049				
PFNA	7.404	463.0 -> 419.0	17914	0.18	µg/L		98
		463.0 -> 219.0	6878				
PFNS	8.412	549.0 -> 80.0	4408	0.15	µg/L		88
		549.0 -> 99.0	2964				
PFOA	6.898	413.0 -> 369.0	29118	0.23	µg/L	m	95
		413.0 -> 169.0	7704				
PFOS	7.996	499.0 -> 80.0	6560	0.24	µg/L	m	92
		499.0 -> 99.0	3741				
PFPeA	4.321	263.0 -> 219.0	24798	0.34	µg/L		100
PFPeS	6.331	349.0 -> 80.0	5154	0.15	µg/L		100
		349.0 -> 99.0	2620				
PFTeDA	9.369	713.0 -> 669.0	32747	0.17	µg/L		99
		713.0 -> 219.0	2275				
PFTrDA	9.025	663.0 -> 619.0	31956	0.17	µg/L		100
		663.0 -> 369.0	2025				
PFUnDA	8.275	563.0 -> 519.0	24380	0.17	µg/L		98
		563.0 -> 269.0	4729				
11Cl-PF3OUdS	9.065	631.0 -> 451.0	57936	0.65	µg/L		96
		633.0 -> 453.0	16833				
9Cl-PF3ONS	8.301	531.0 -> 351.0	66014	0.67	µg/L		96
		533.0 -> 353.0	18605				
ADONA	6.527	377.0 -> 251.0	224113	0.64	µg/L		99
		377.0 -> 85.0	72368				
HFPO-DA	5.792	285.0 -> 169.0	33742	0.69	µg/L		97
		285.0 -> 185.0	3403				
3:3FTCA	3.769	241.0 -> 177.0	3510	0.81	µg/L		99
		241.0 -> 117.0	267				
5:3FTCA	6.006	341.0 -> 237.0	89157	3.95	µg/L		97
		341.0 -> 217.0	64649				
7:3FTCA	7.330	441.0 -> 337.0	115436	3.86	µg/L		97
		441.0 -> 317.0	49710				
EtFOSA	10.826	526.0 -> 219.0	6749	0.17	µg/L		99
		526.0 -> 169.0	9578				
EtFOSE	10.747	630.0 -> 59.0	84247	1.70	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	8508	0.18	µg/L		98
		512.0 -> 219.0	5461				
MeFOSE	10.476	616.0 -> 59.0	61658	2.07	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	2996	0.15	µg/L		94
		699.0 -> 99.0	1733				
NFDHA	5.345	295.0 -> 201.0	5998	0.35	µg/L		89
		201.0 -> 85.0	22779				
		295.0 -> 85.0	1737				
PFMBA	4.710	279.0 -> 85.0	15943	0.32	µg/L		100
PFMPA	3.485	229.0 -> 85.0	13493	0.33	µg/L		100
PFEESA	5.849	315.0 -> 135.0	35934	0.30	µg/L		99
		315.0 -> 69.0	2922				

Perfluorinated Compounds by LC/MS/MS

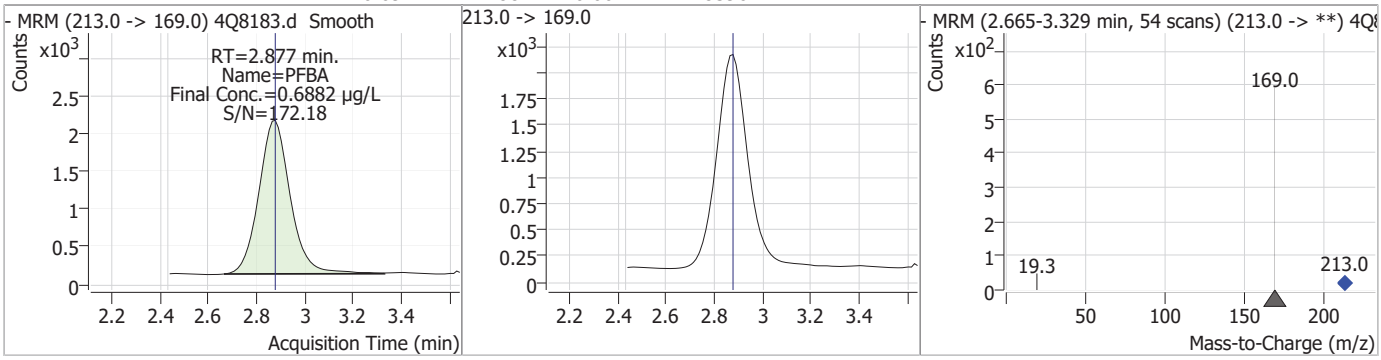
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

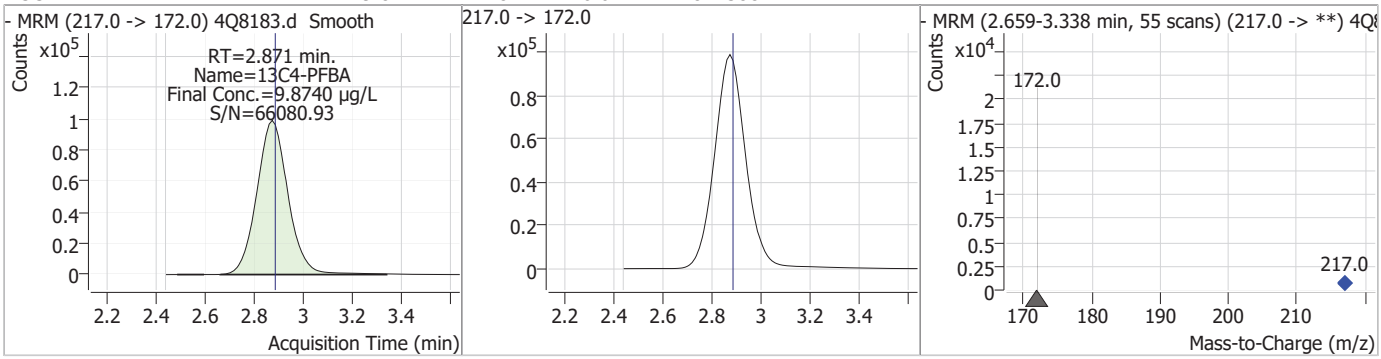
Perfluorinated Compounds by LC/MS/MS



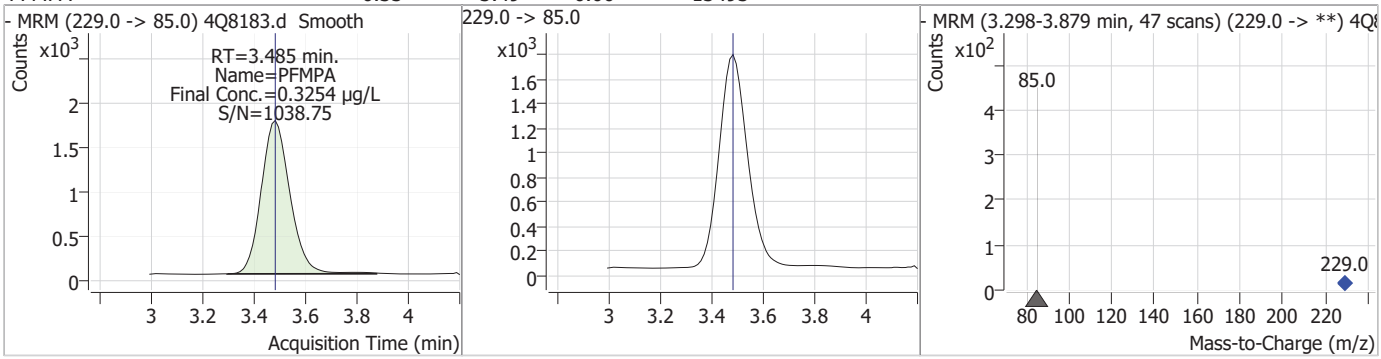
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.69	2.88	0.00	18396				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.87	2.87	-0.01	874388				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.33	3.49	0.00	13493				



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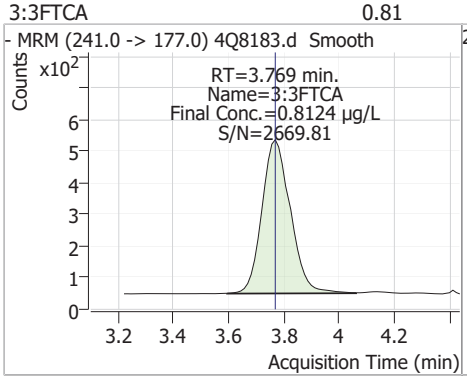
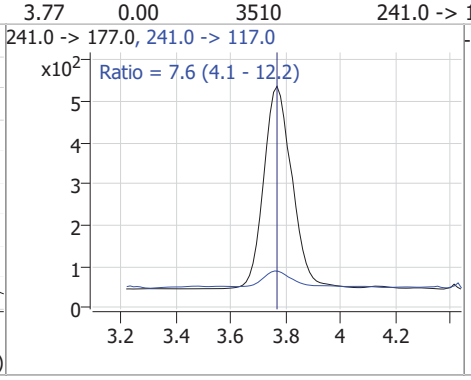
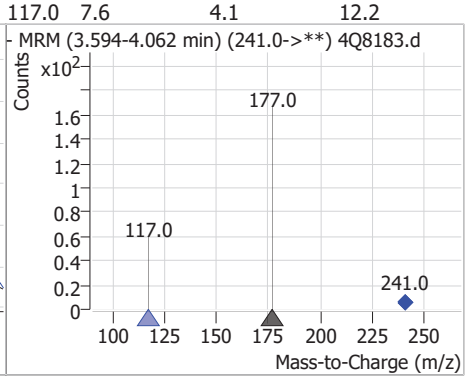
Perfluorinated Compounds by LC/MS/MS

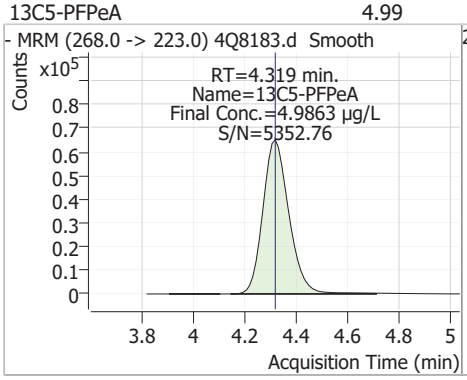
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	0.81	3.77	0.00	3510	241.0 -> 117.0	7.6	4.1	12.2

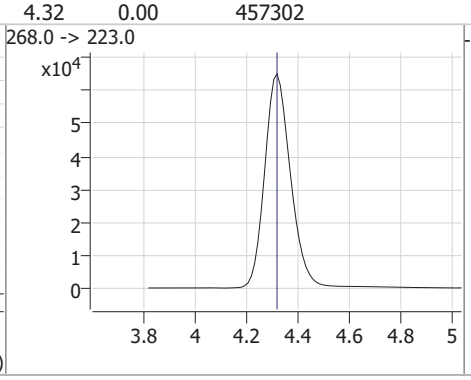


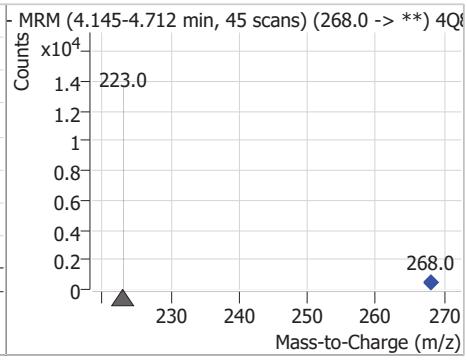




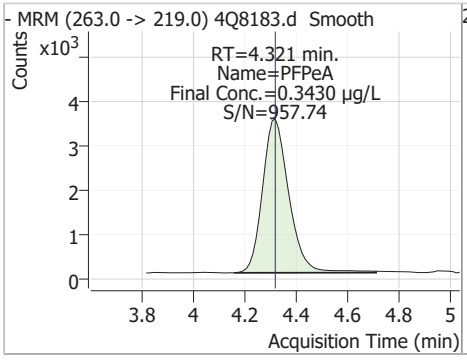
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.99	4.32	0.00	457302				

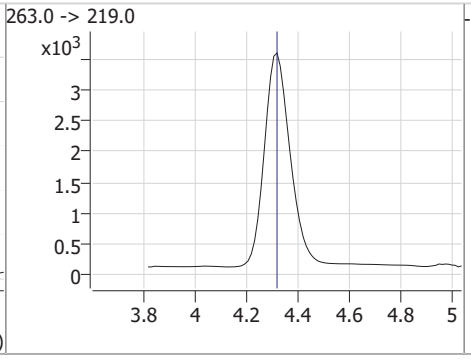


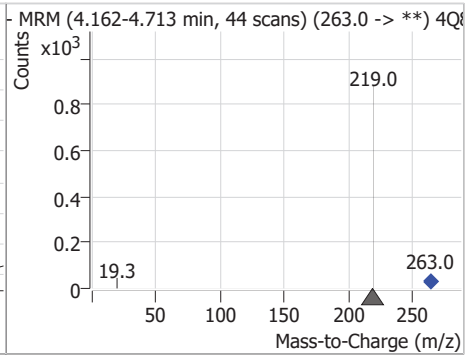




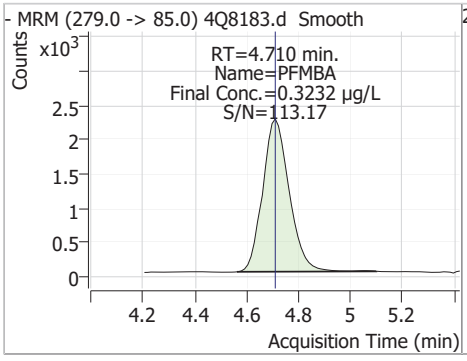
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.34	4.32	0.00	24798				

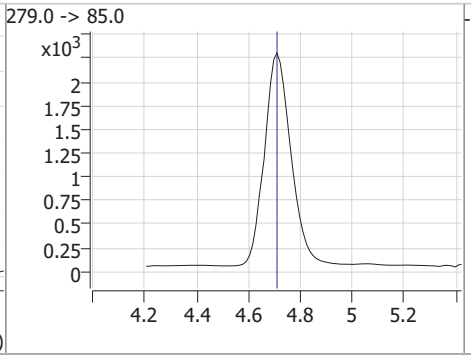


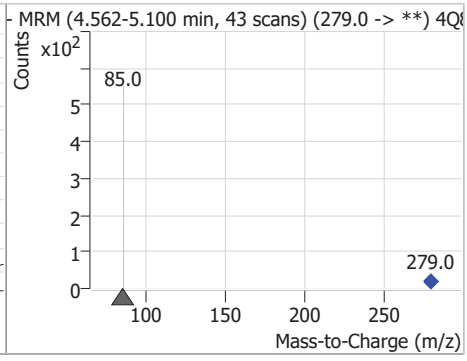




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.32	4.71	0.00	15943				







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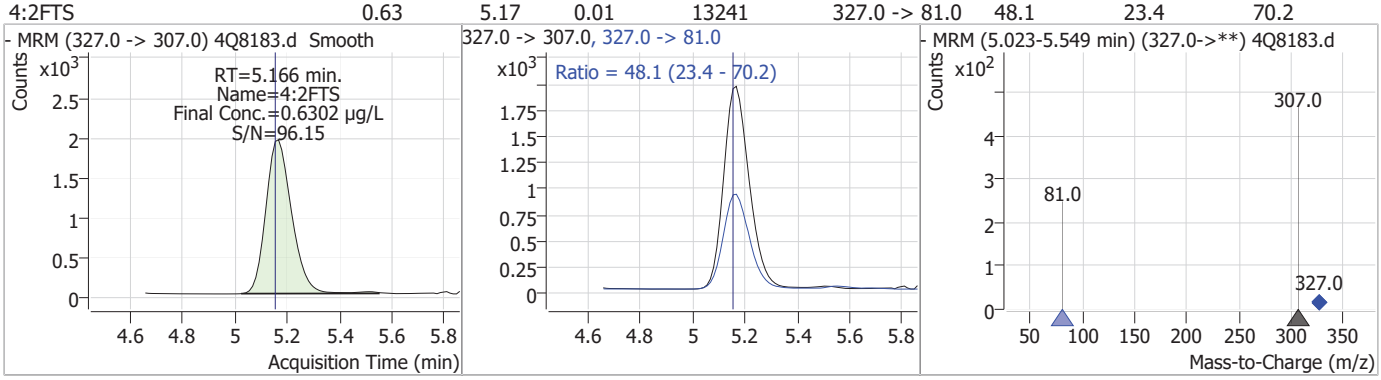
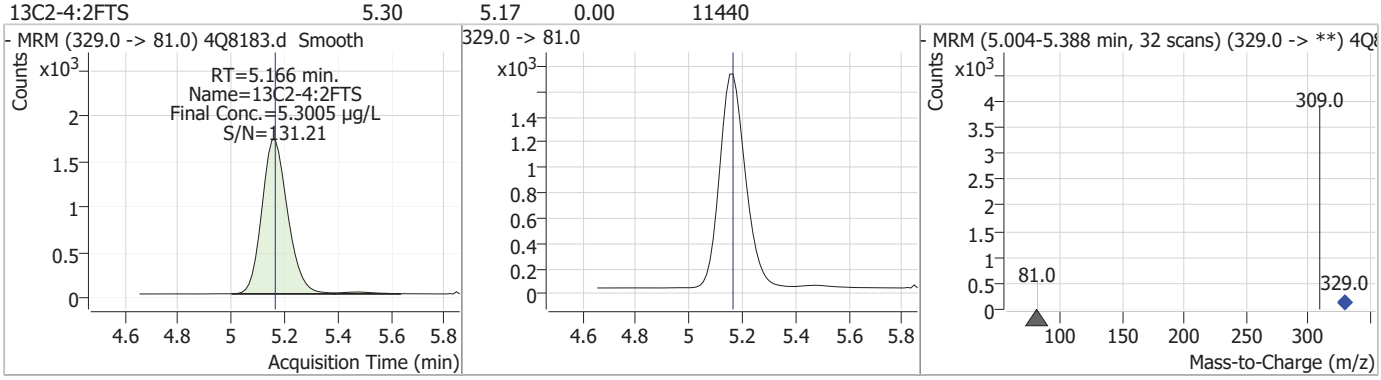
Perfluorinated Compounds by LC/MS/MS

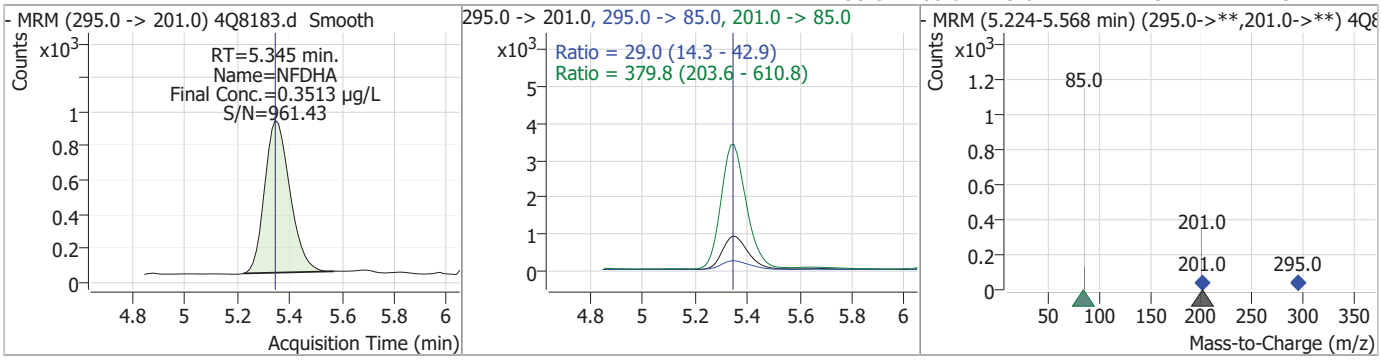
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	0.63	5.17	0.01	13241	327.0 -> 81.0	48.1	23.4	70.2



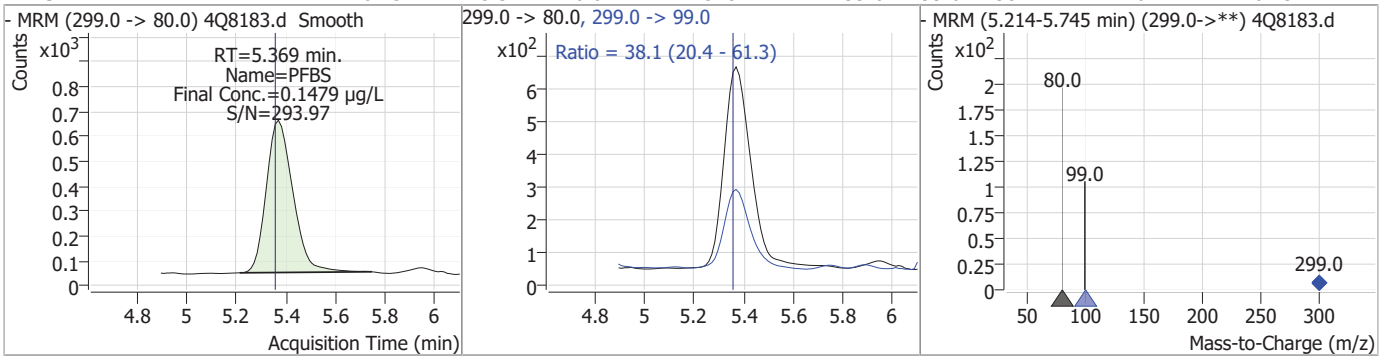
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.30	5.17	0.00	11440				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.35	5.35	0.00	5998	201.0 -> 85.0	379.8	203.6	610.8
					295.0 -> 85.0	29.0	14.3	42.9

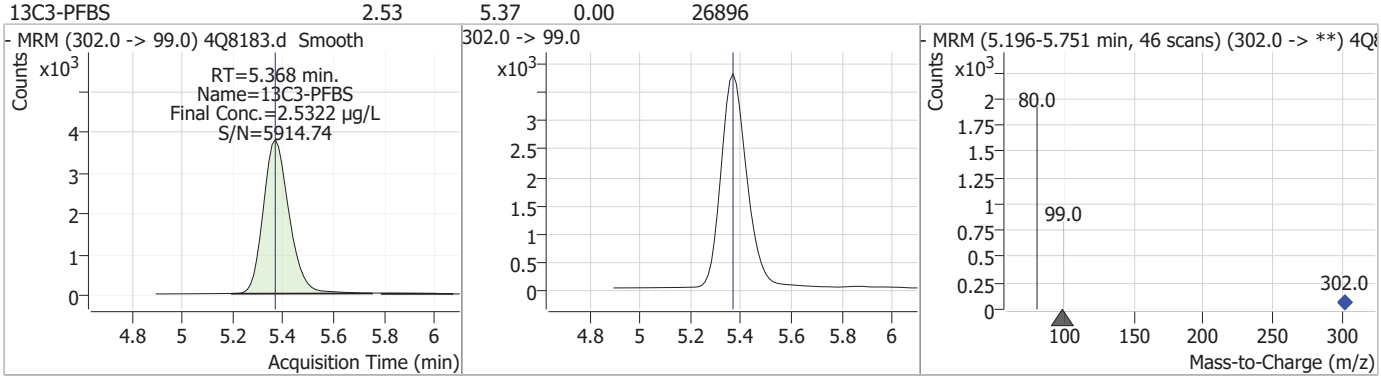


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.15	5.37	0.01	4548	299.0 -> 99.0	38.1	20.4	61.3

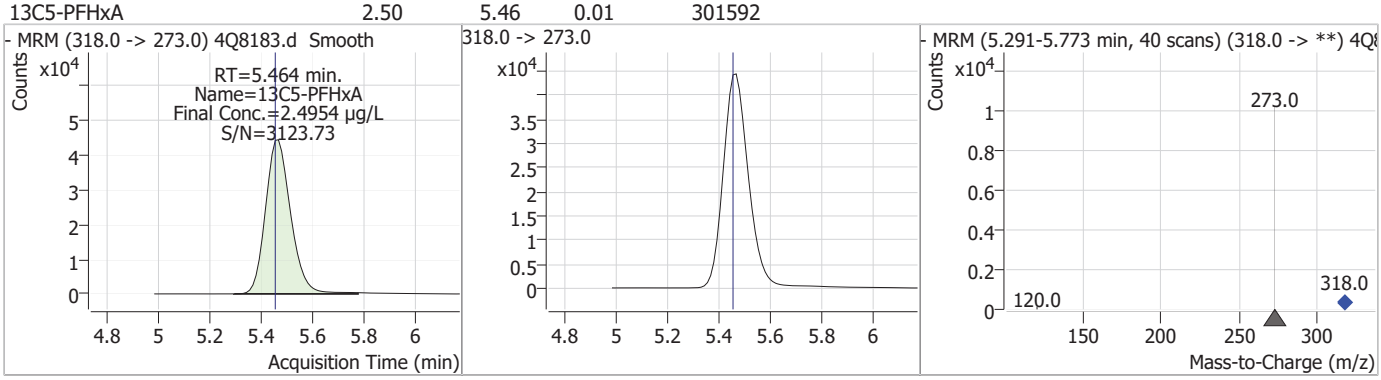


Perfluorinated Compounds by LC/MS/MS

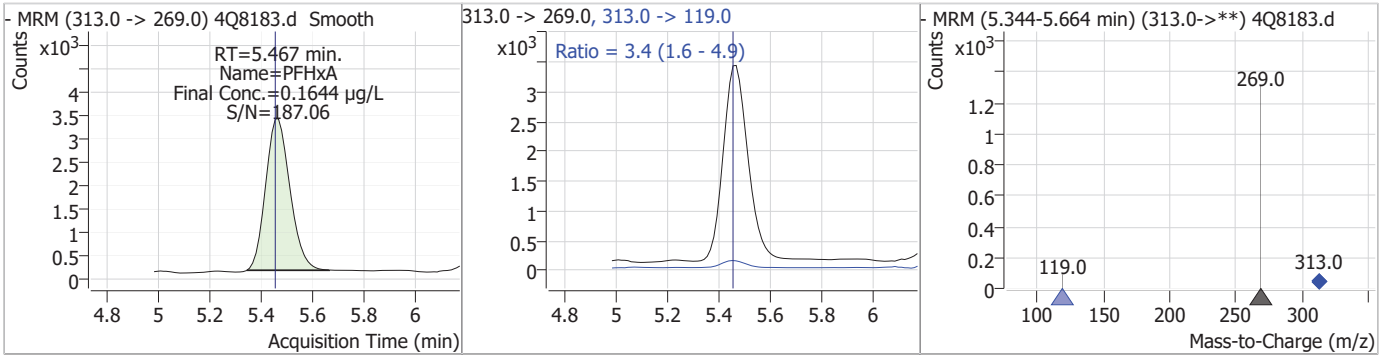
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.53	5.37	0.00	26896				



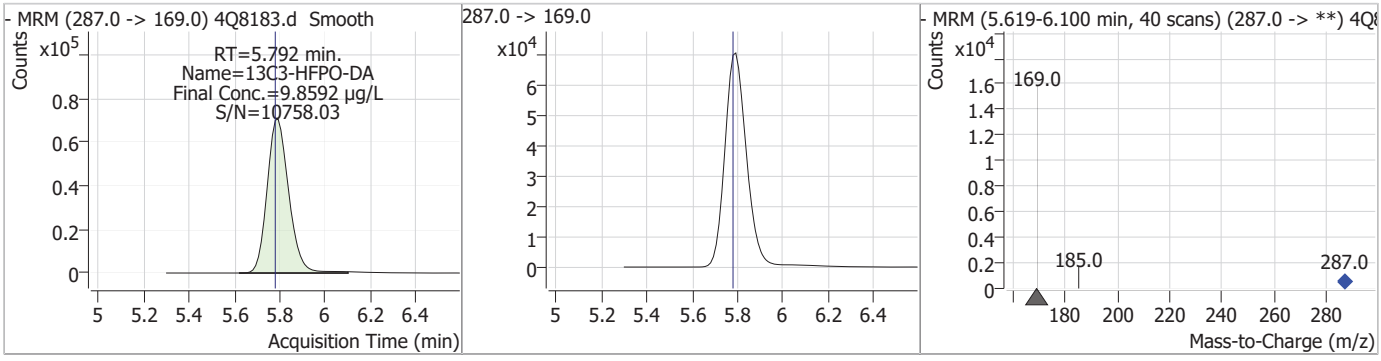
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.50	5.46	0.01	301592				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.16	5.47	0.01	21376	313.0 -> 119.0	3.4	1.6	4.9

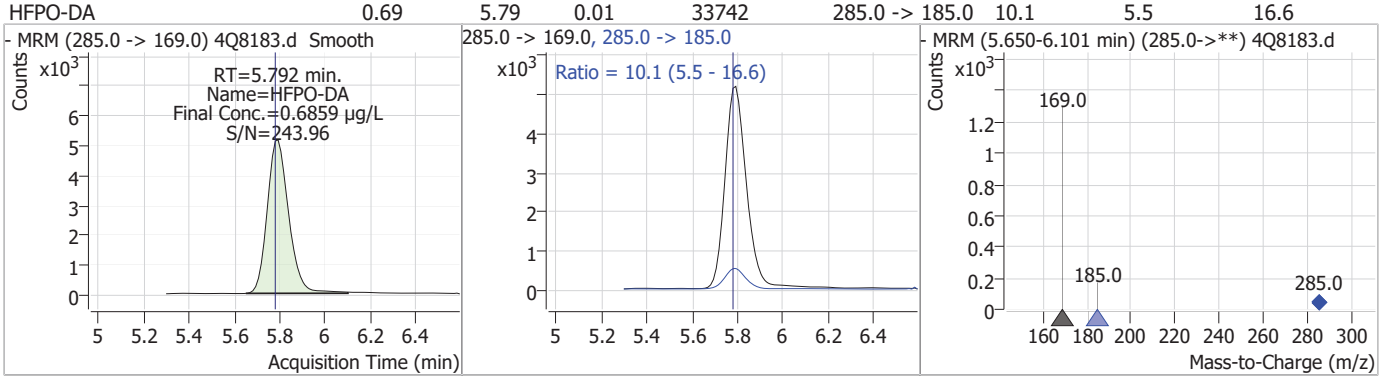


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.86	5.79	0.01	467933				

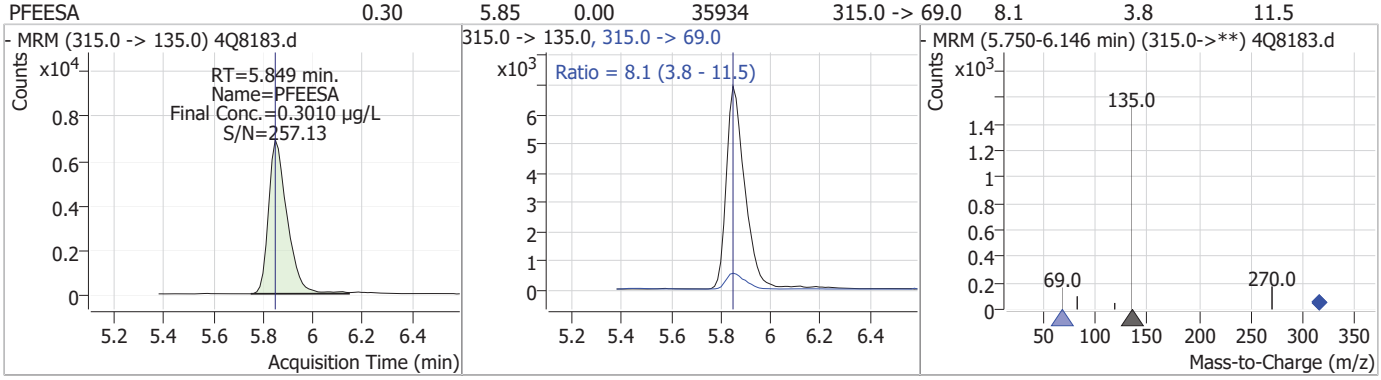


Perfluorinated Compounds by LC/MS/MS

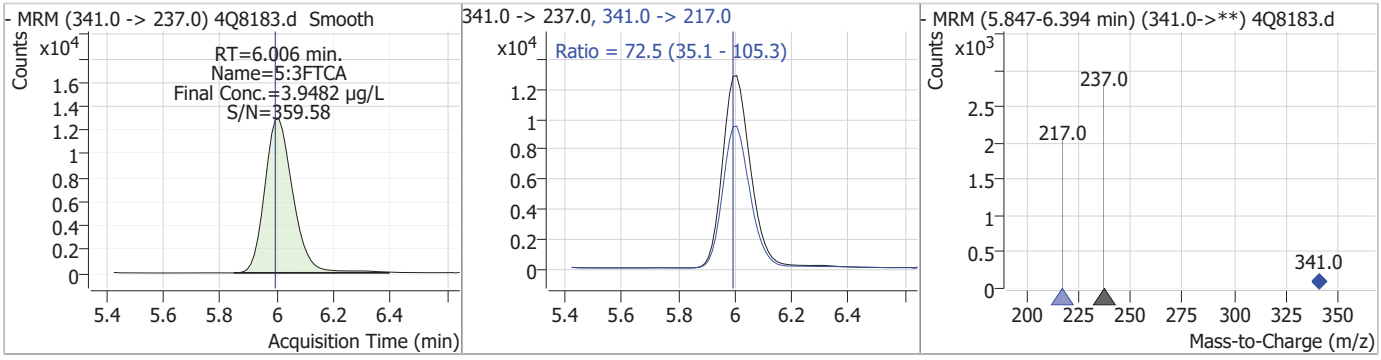
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	0.69	5.79	0.01	33742	285.0 -> 185.0	10.1	5.5	16.6



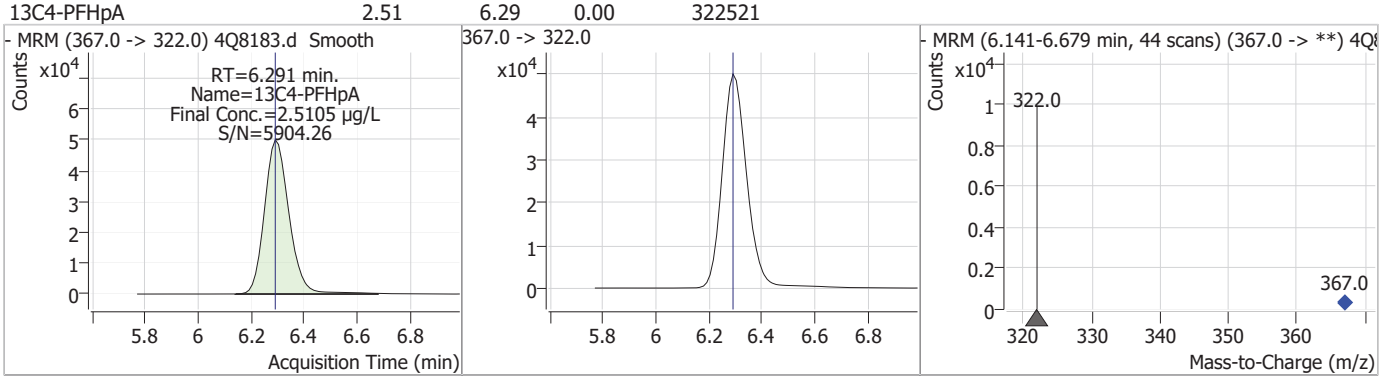
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.30	5.85	0.00	35934	315.0 -> 69.0	8.1	3.8	11.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	3.95	6.01	0.01	89157	341.0 -> 217.0	72.5	35.1	105.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.51	6.29	0.00	322521				



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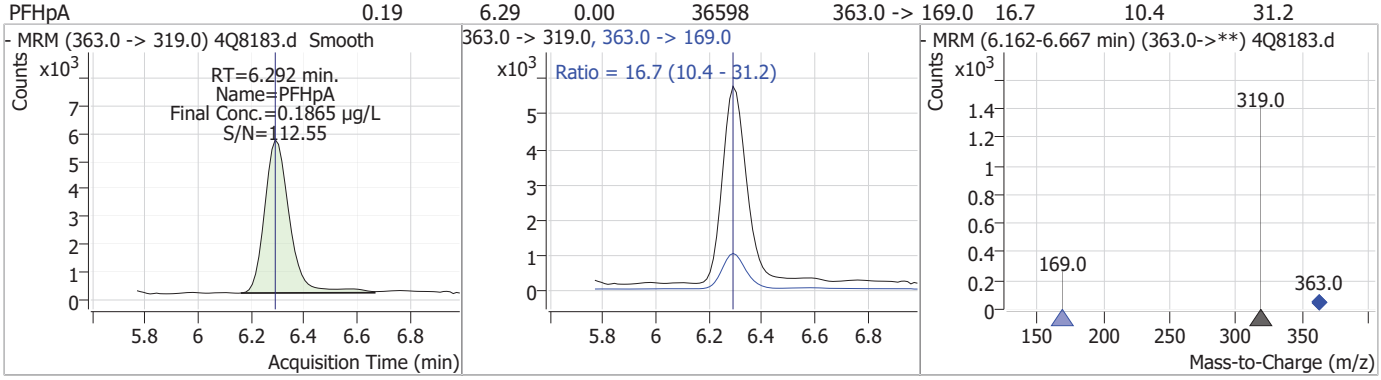
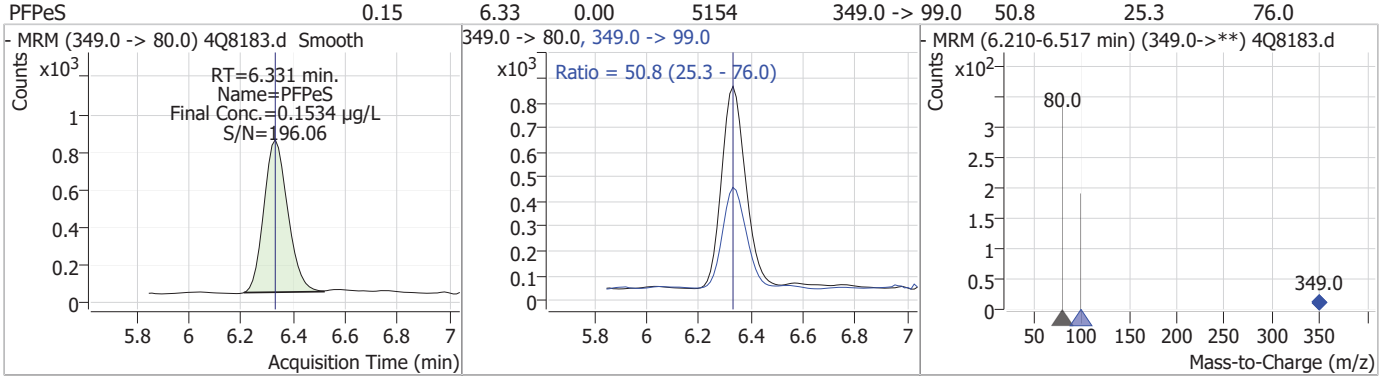
Perfluorinated Compounds by LC/MS/MS

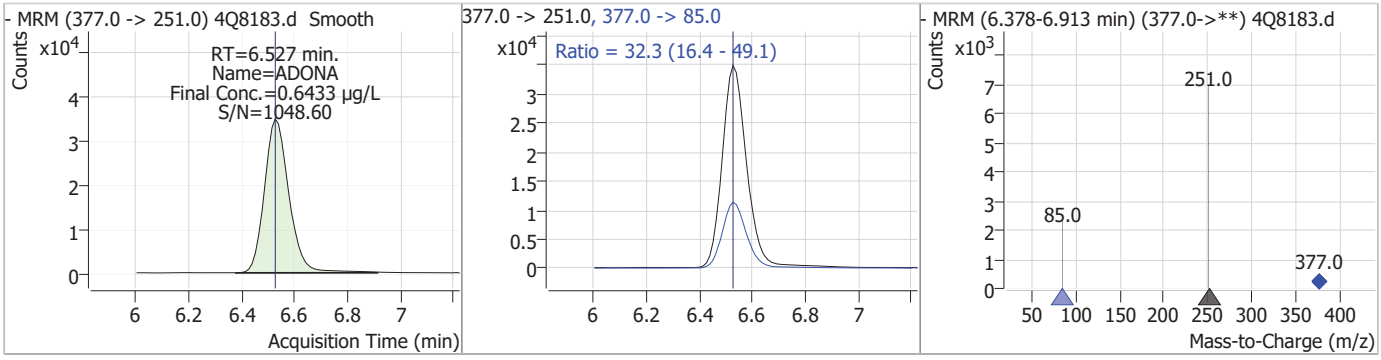
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.19	6.29	0.00	36598	363.0 -> 169.0	16.7	10.4	31.2



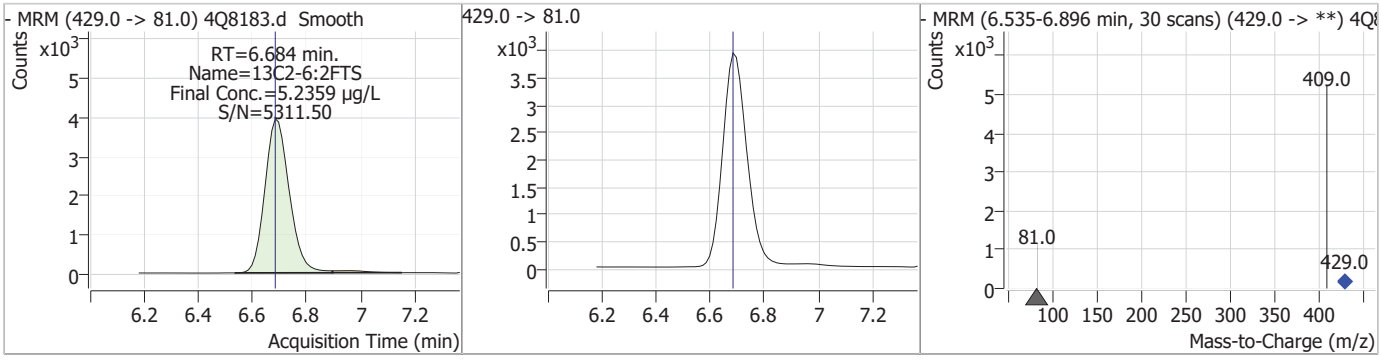
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.15	6.33	0.00	5154	349.0 -> 99.0	50.8	25.3	76.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	0.64	6.53	0.00	224113	377.0 -> 85.0	32.3	16.4	49.1



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.24	6.68	0.00	24522				



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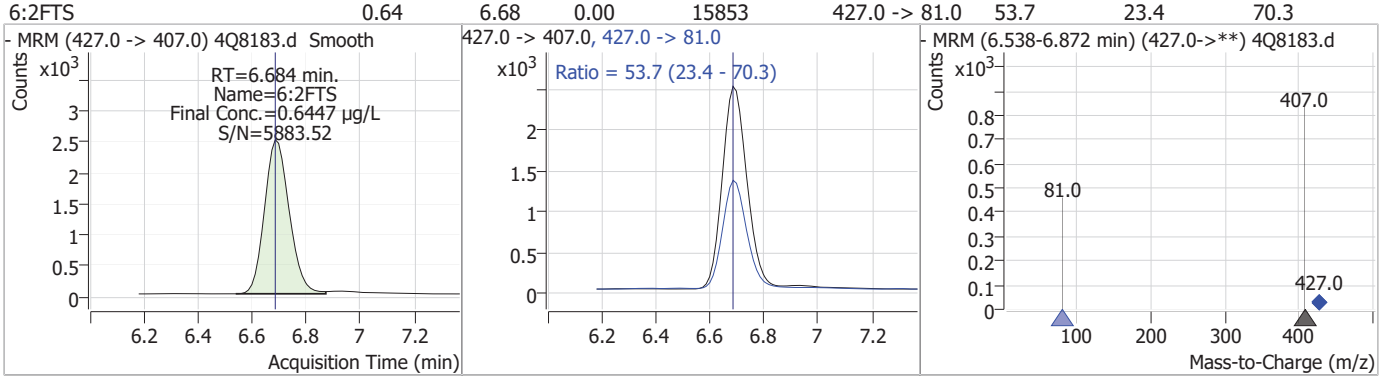
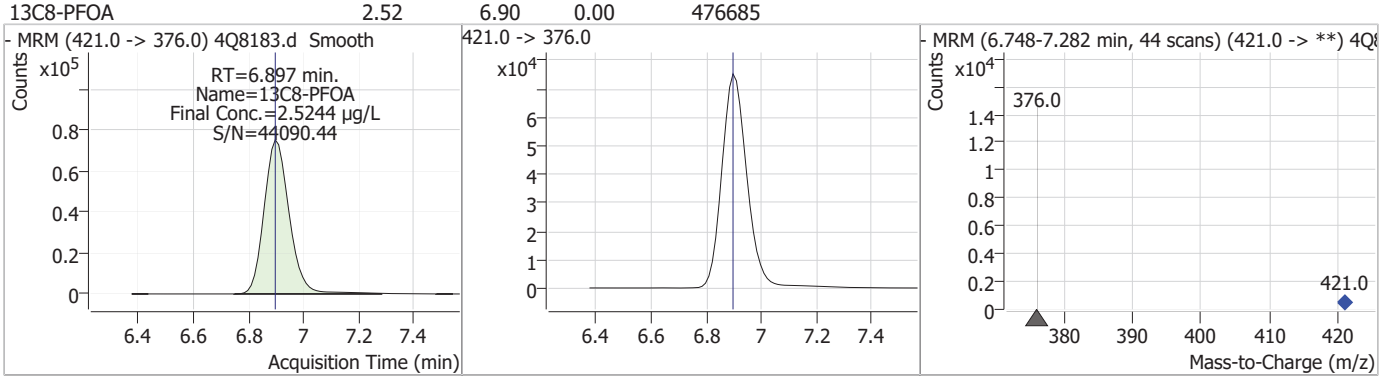
Perfluorinated Compounds by LC/MS/MS

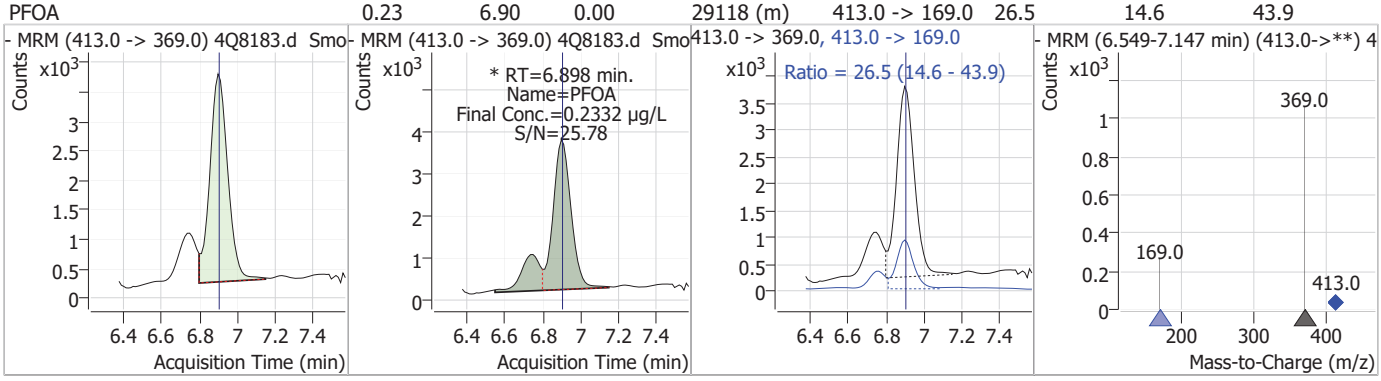
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.64	6.68	0.00	15853	427.0 -> 81.0	53.7	23.4	70.3



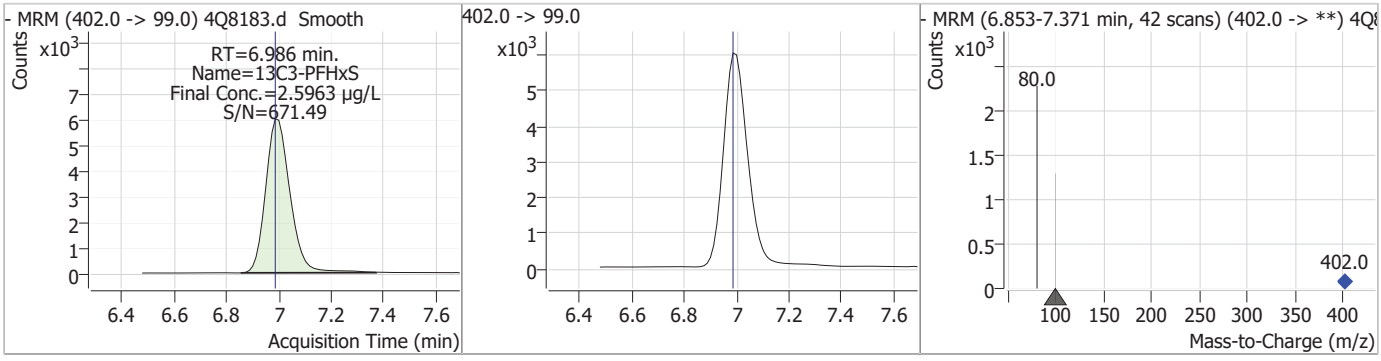
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.52	6.90	0.00	476685				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.23	6.90	0.00	29118 (m)	413.0 -> 169.0	26.5	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.60	6.99	0.00	39018				



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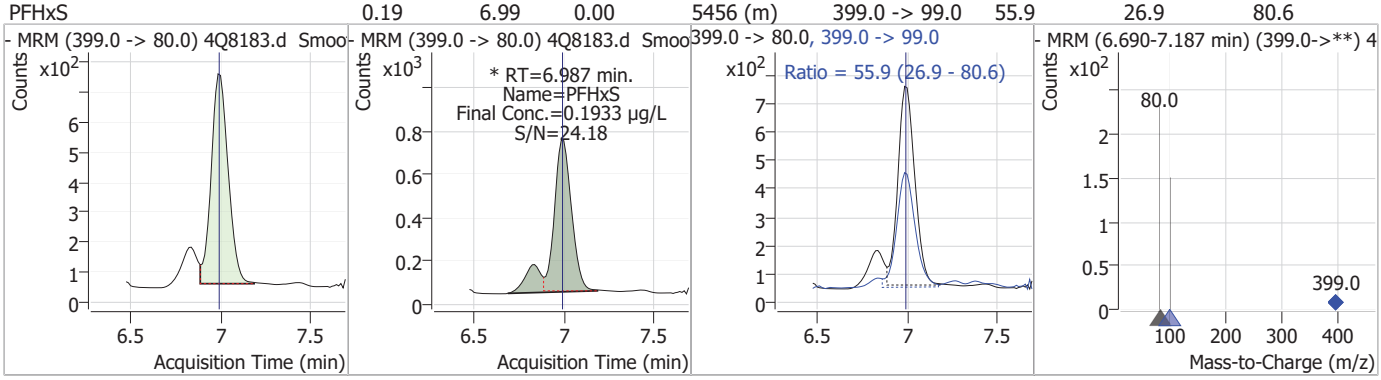
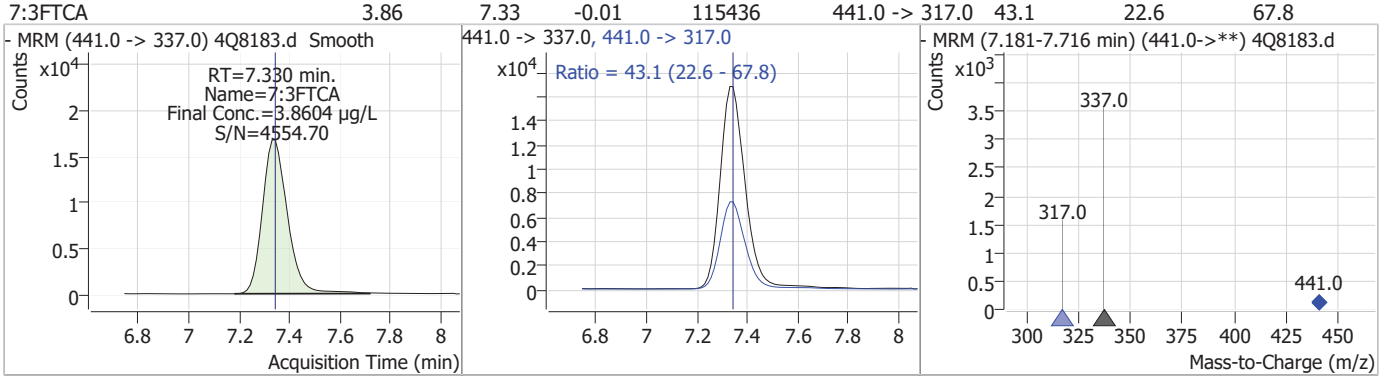
Perfluorinated Compounds by LC/MS/MS

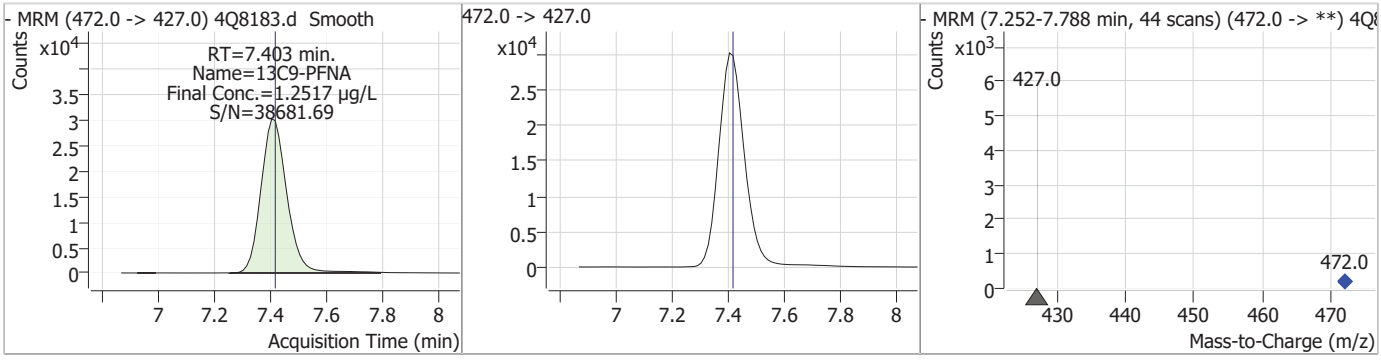
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.19	6.99	0.00	5456 (m)	399.0 -> 99.0	55.9	26.9	80.6



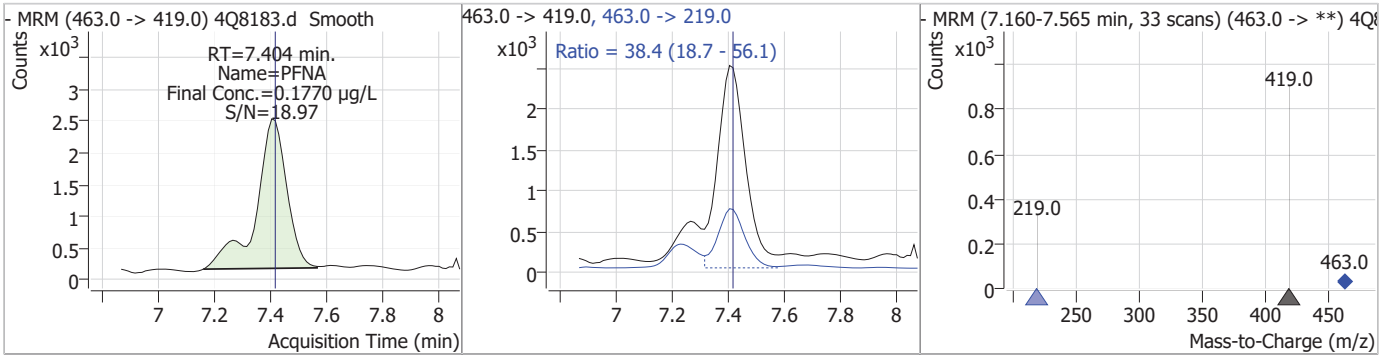
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	3.86	7.33	-0.01	115436	441.0 -> 317.0	43.1	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.25	7.40	-0.01	191827				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.18	7.40	-0.01	17914	463.0 -> 219.0	38.4	18.7	56.1



7.6.58

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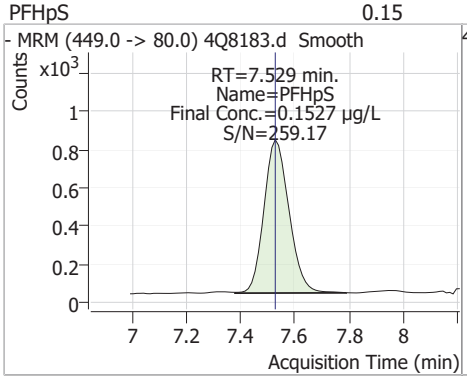
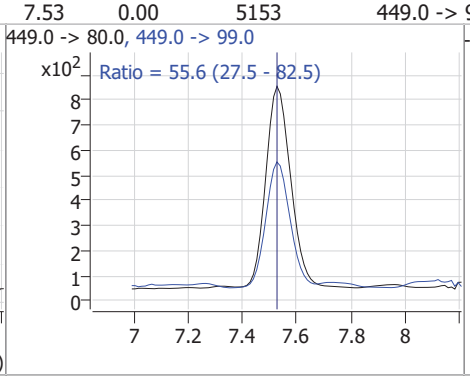
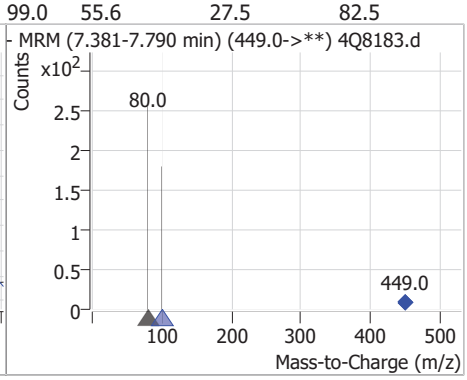
Perfluorinated Compounds by LC/MS/MS

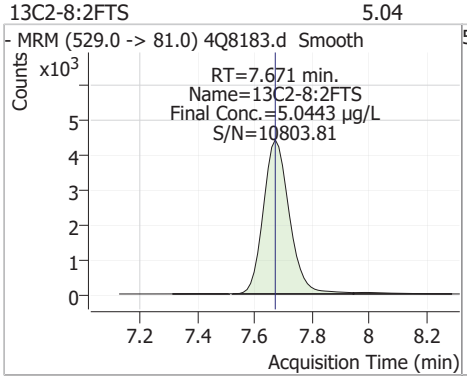
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.15	7.53	0.00	5153	449.0 -> 99.0	55.6	27.5	82.5

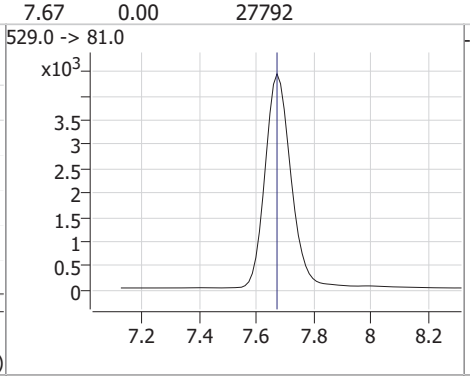


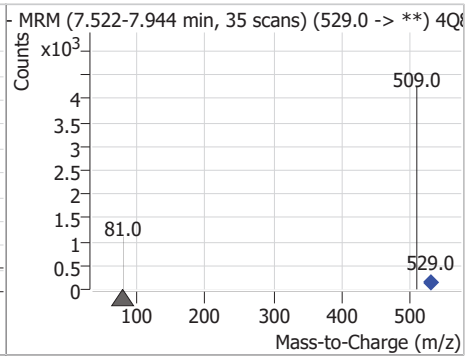




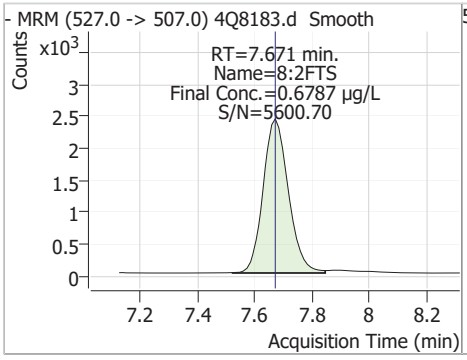
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.04	7.67	0.00	27792				

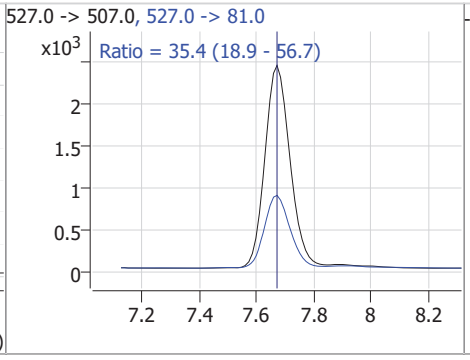


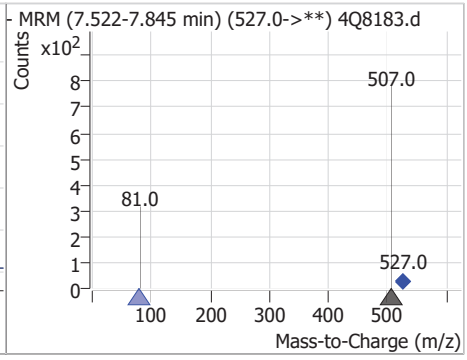




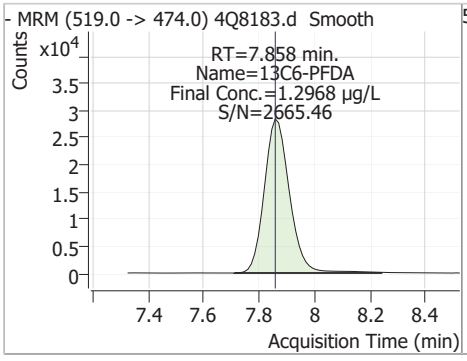
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.68	7.67	0.00	14761	527.0 -> 81.0	35.4	18.9	56.7

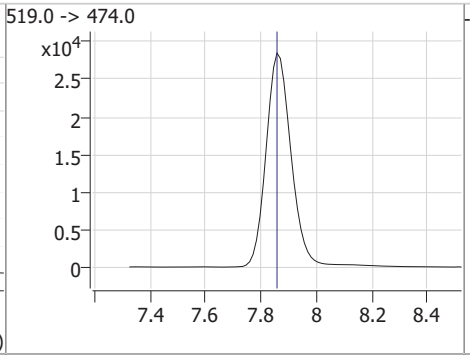


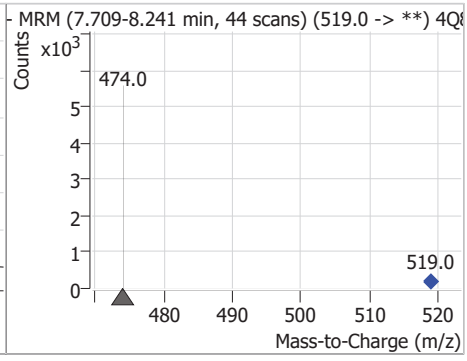




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.30	7.86	0.00	179974				

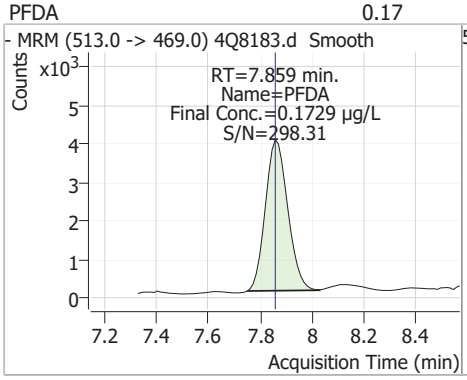


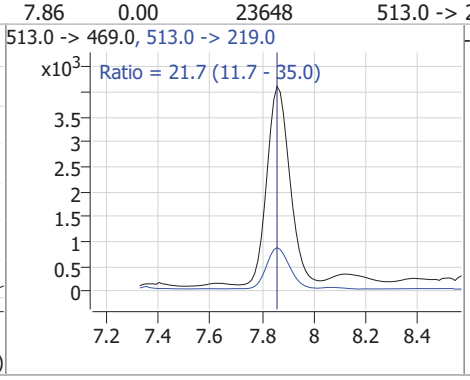


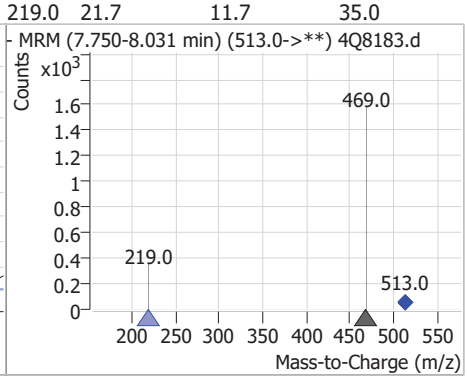


Perfluorinated Compounds by LC/MS/MS

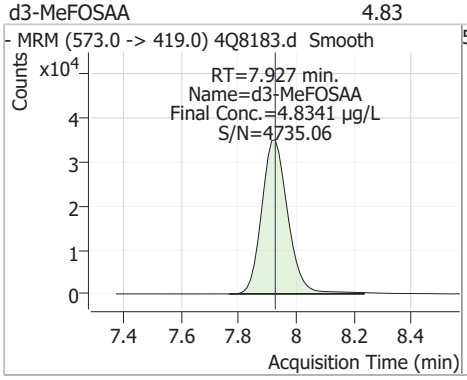
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.17	7.86	0.00	23648	513.0 -> 219.0	21.7	11.7	35.0

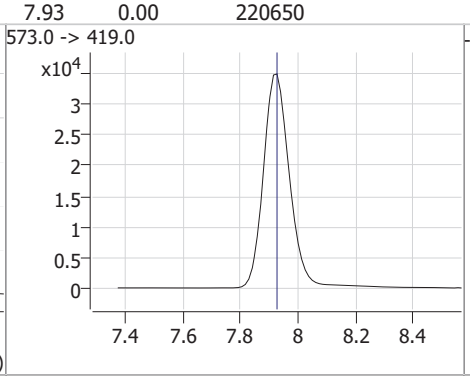


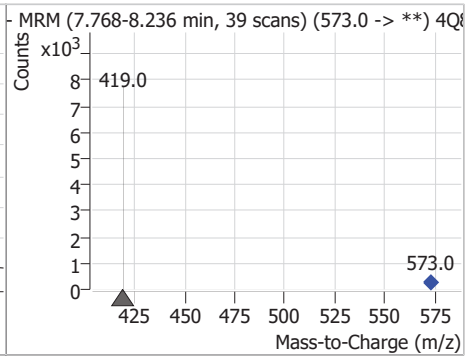




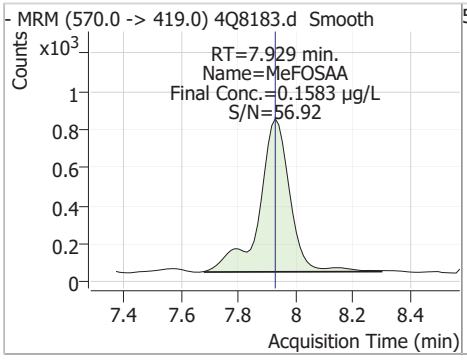
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.83	7.93	0.00	220650				

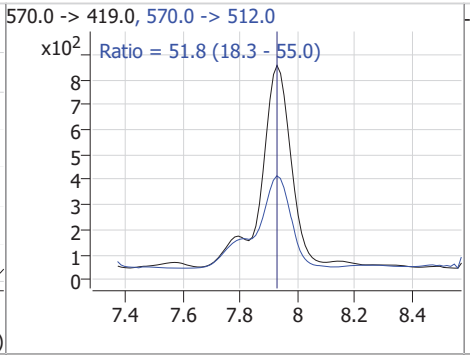


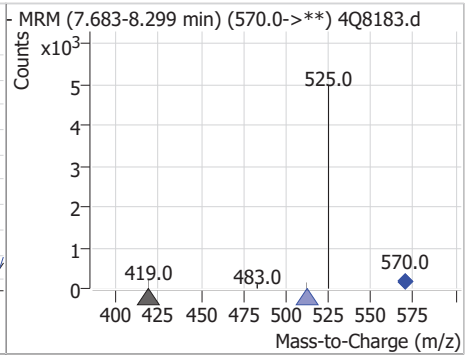




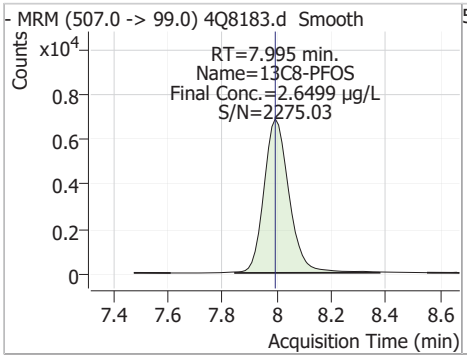
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.16	7.93	0.00	5992	570.0 -> 512.0	51.8	18.3	55.0

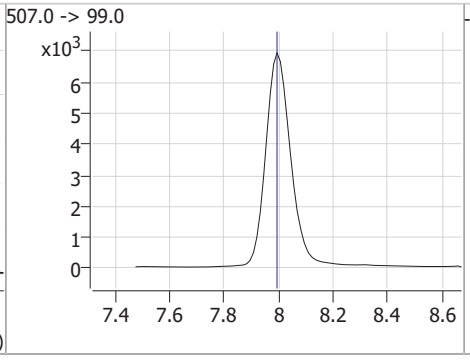


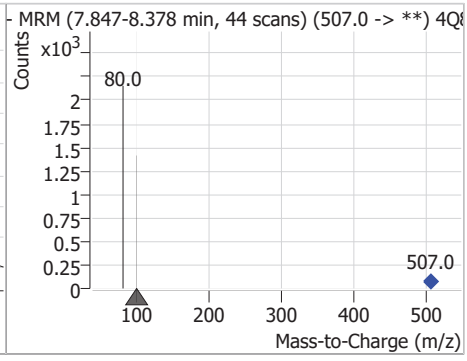




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.65	7.99	0.00	44220				







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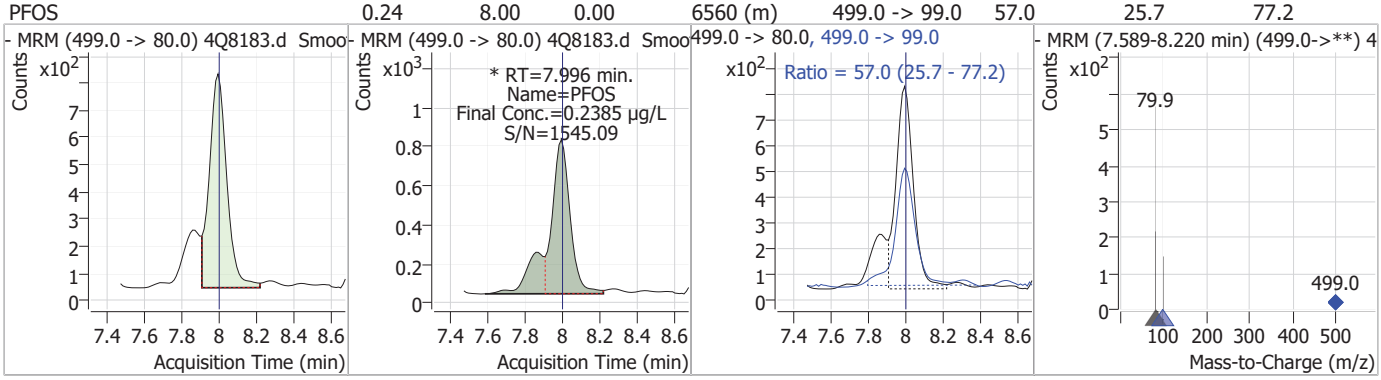
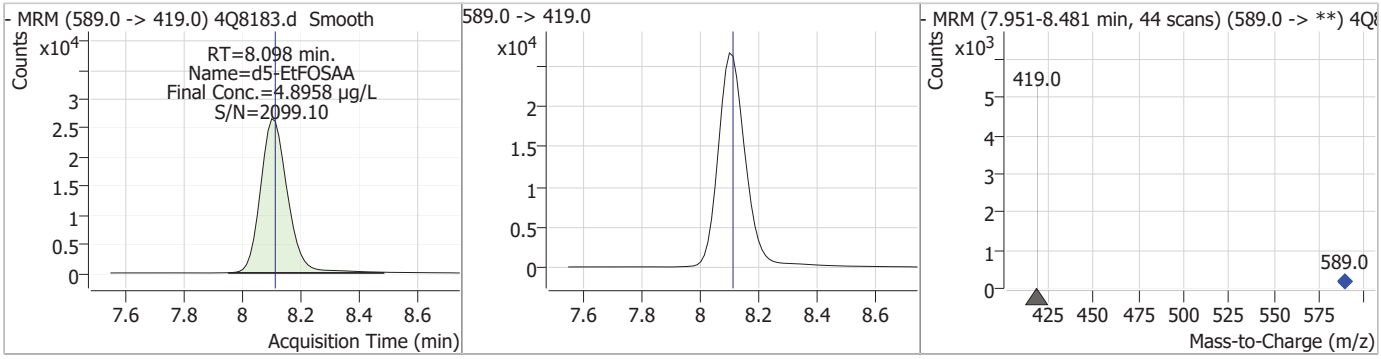
Perfluorinated Compounds by LC/MS/MS

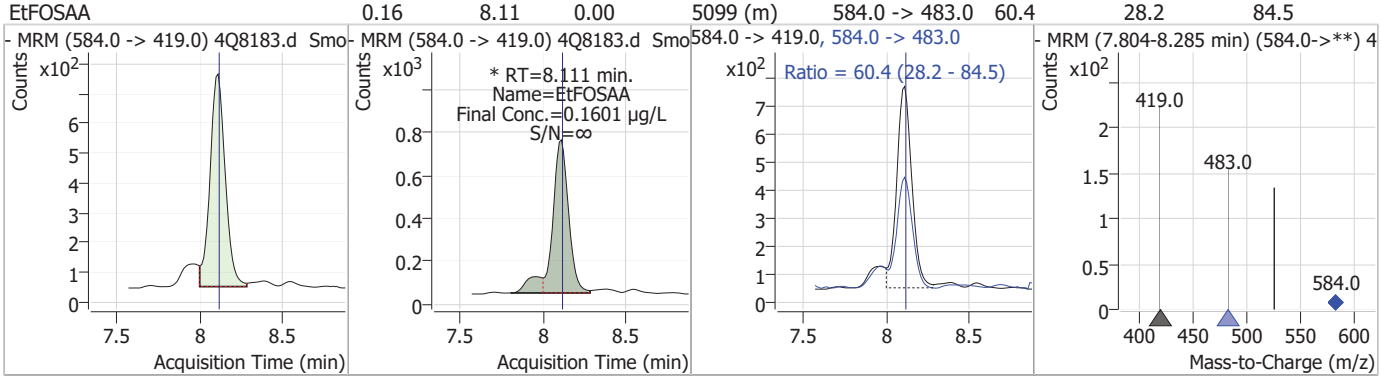
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.24	8.00	0.00	6560 (m)	499.0 -> 99.0	57.0	25.7	77.2



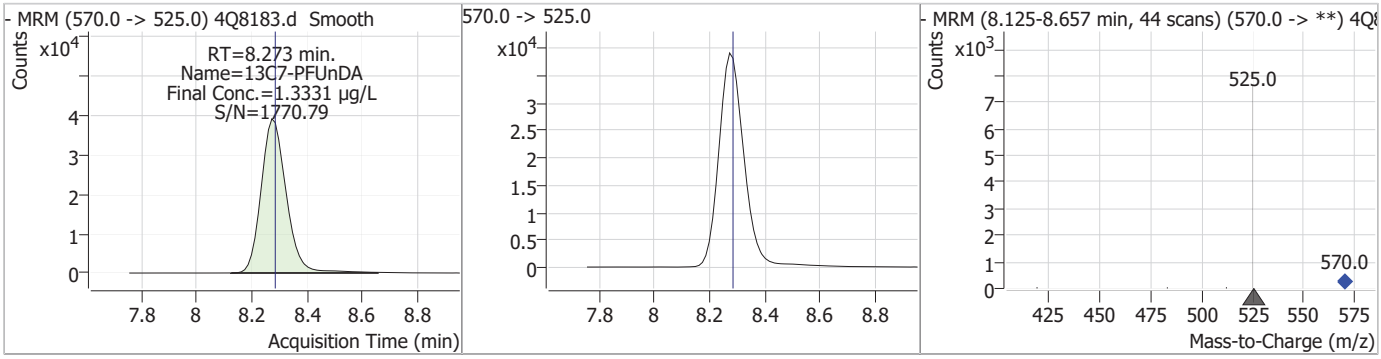
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.90	8.10	-0.01	171567				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.16	8.11	0.00	5099 (m)	584.0 -> 483.0	60.4	28.2	84.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.33	8.27	-0.01	247110				



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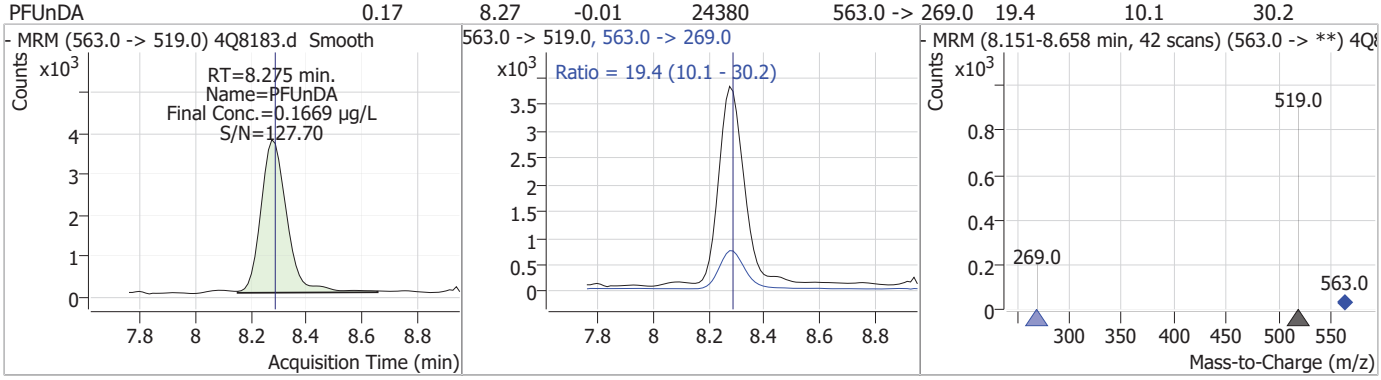
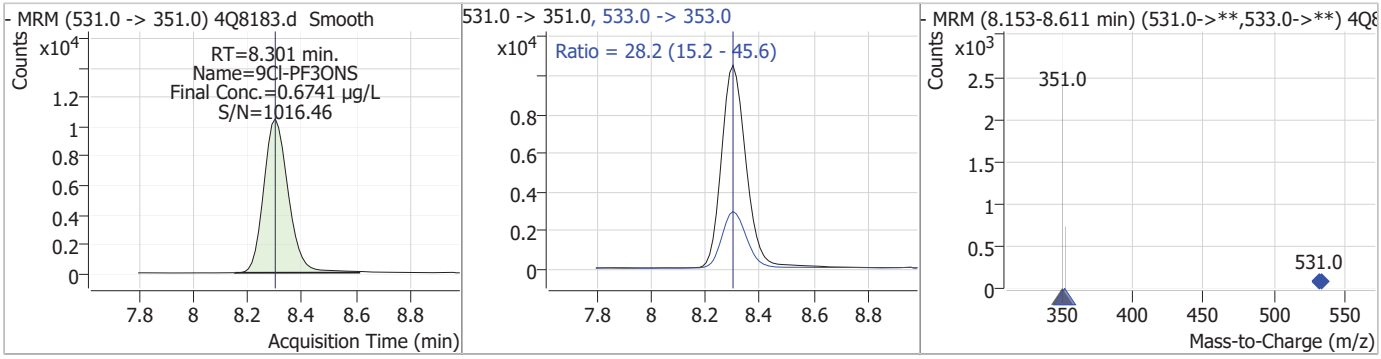
Perfluorinated Compounds by LC/MS/MS

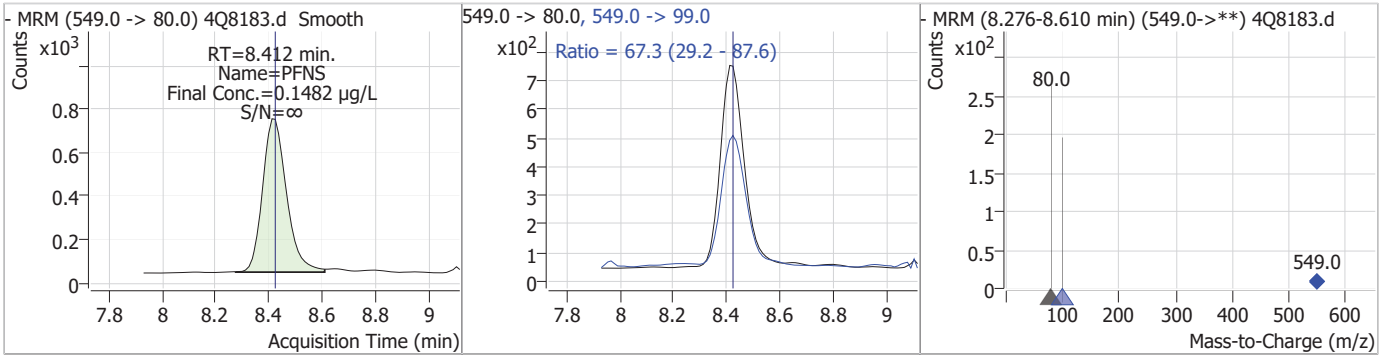
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.17	8.27	-0.01	24380	563.0 -> 269.0	19.4	10.1	30.2



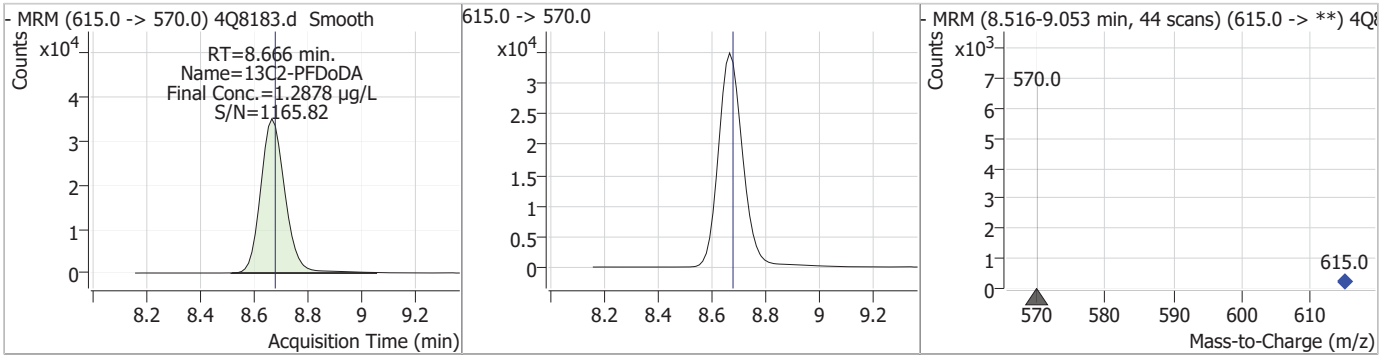
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	0.67	8.30	0.00	66014	533.0 -> 353.0	28.2	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.15	8.41	-0.01	4408	549.0 -> 99.0	67.3	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.29	8.67	-0.01	218661				



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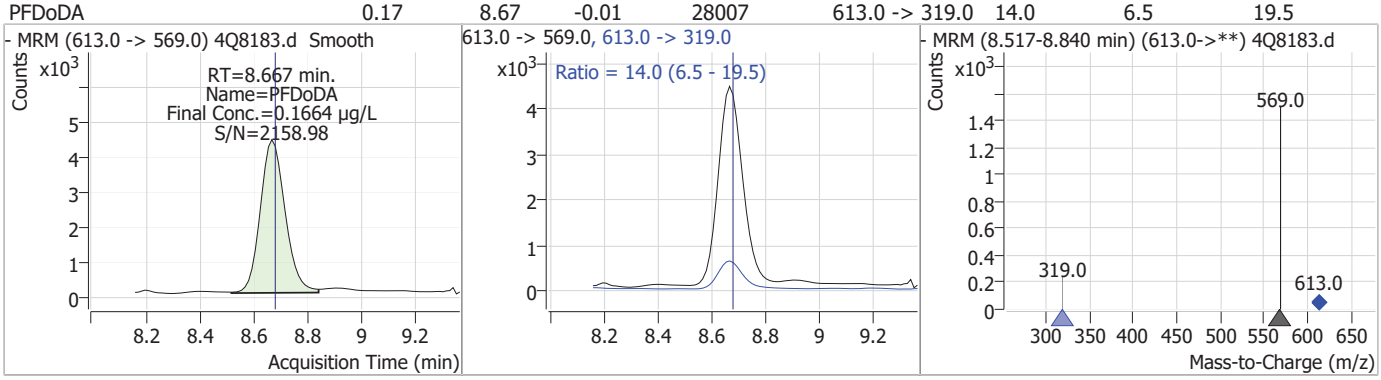
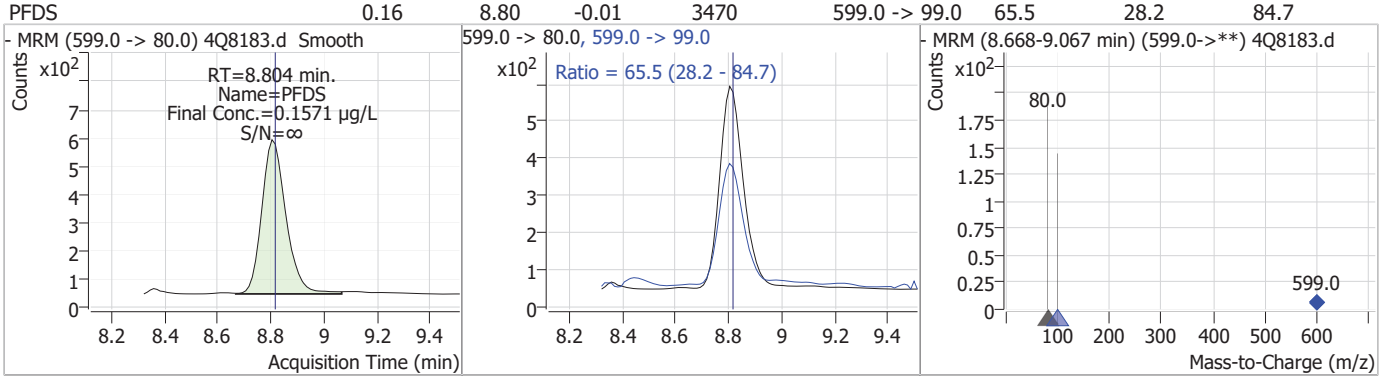
Perfluorinated Compounds by LC/MS/MS

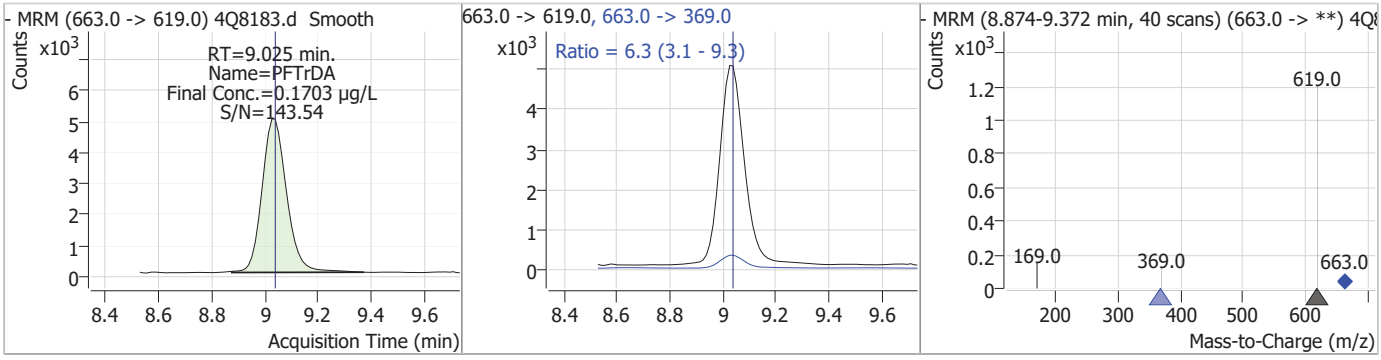
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.17	8.67	-0.01	28007	613.0 -> 319.0	14.0	6.5	19.5



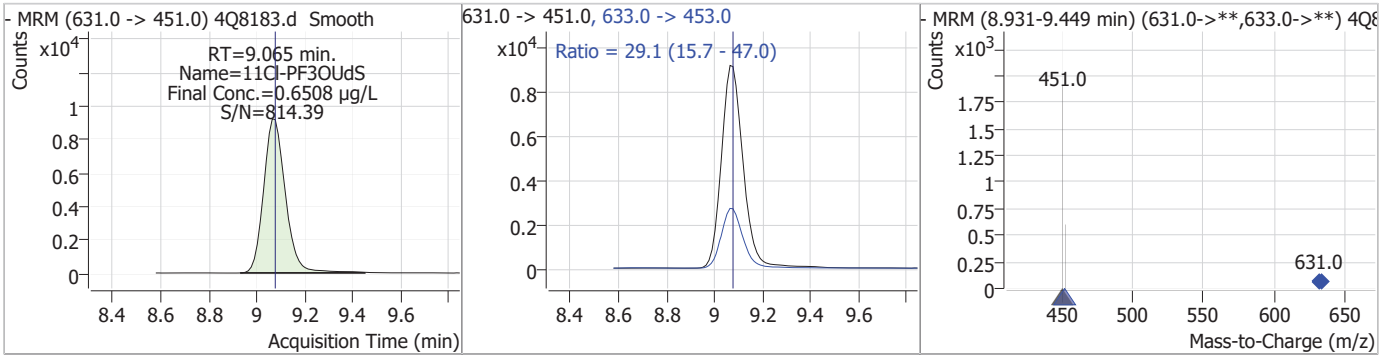
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.16	8.80	-0.01	3470	599.0 -> 99.0	65.5	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.17	9.03	-0.01	31956	663.0 -> 369.0	6.3	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	0.65	9.06	-0.01	57936	633.0 -> 453.0	29.1	15.7	47.0



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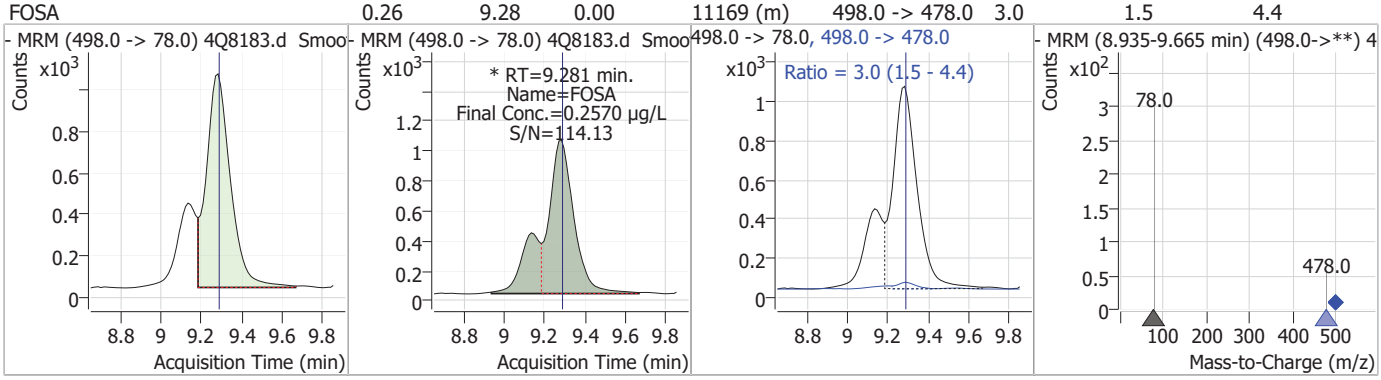
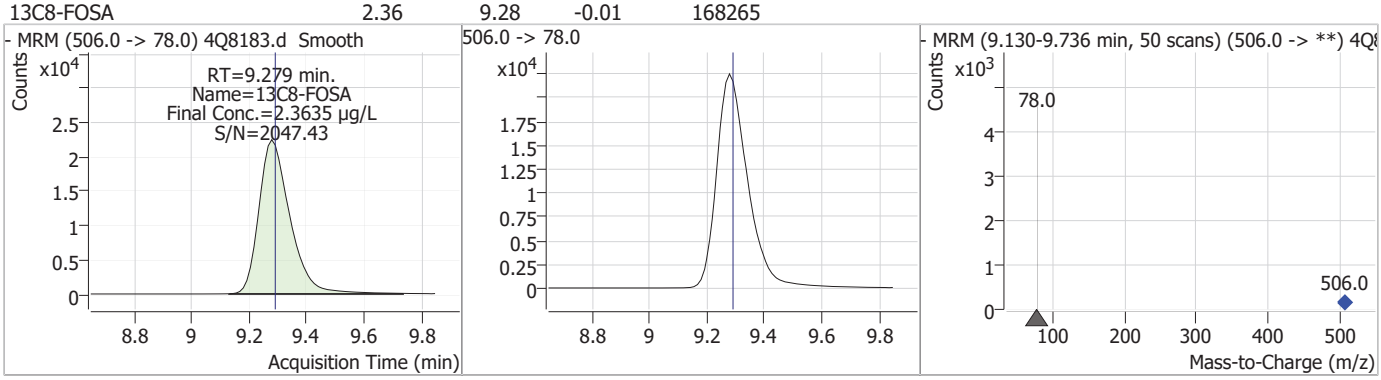
Perfluorinated Compounds by LC/MS/MS

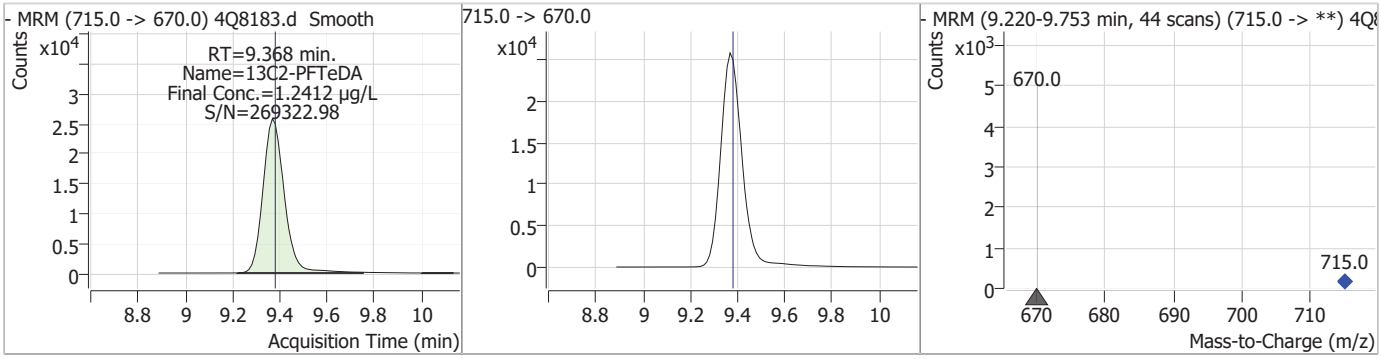
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.26	9.28	0.00	11169 (m)	498.0 -> 478.0	3.0	1.5	4.4



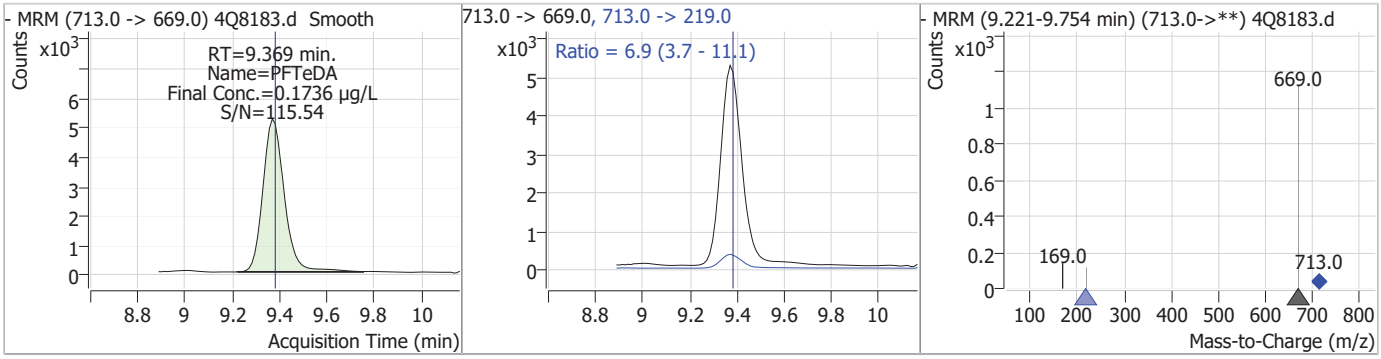
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.36	9.28	-0.01	168265				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.24	9.37	-0.01	162015				

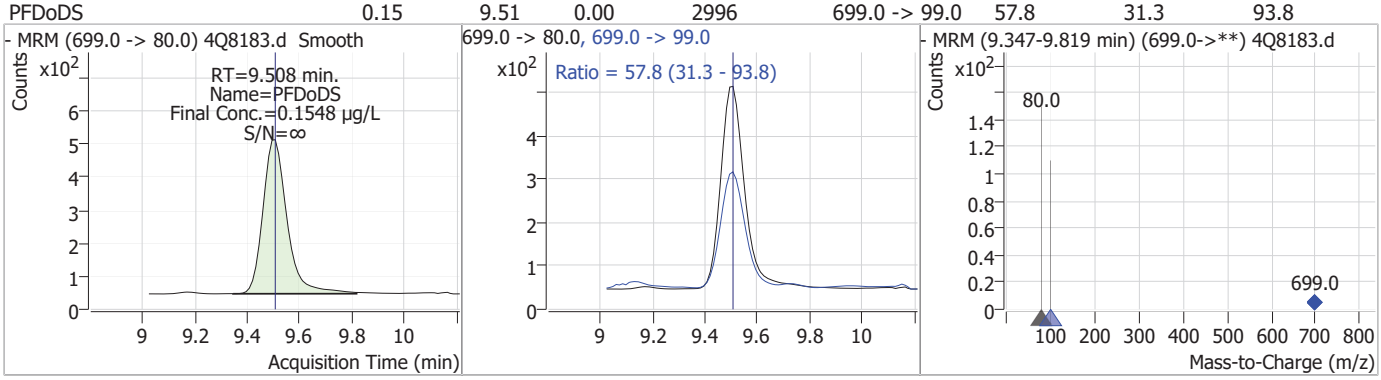


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.17	9.37	-0.01	32747	713.0 -> 219.0	6.9	3.7	11.1

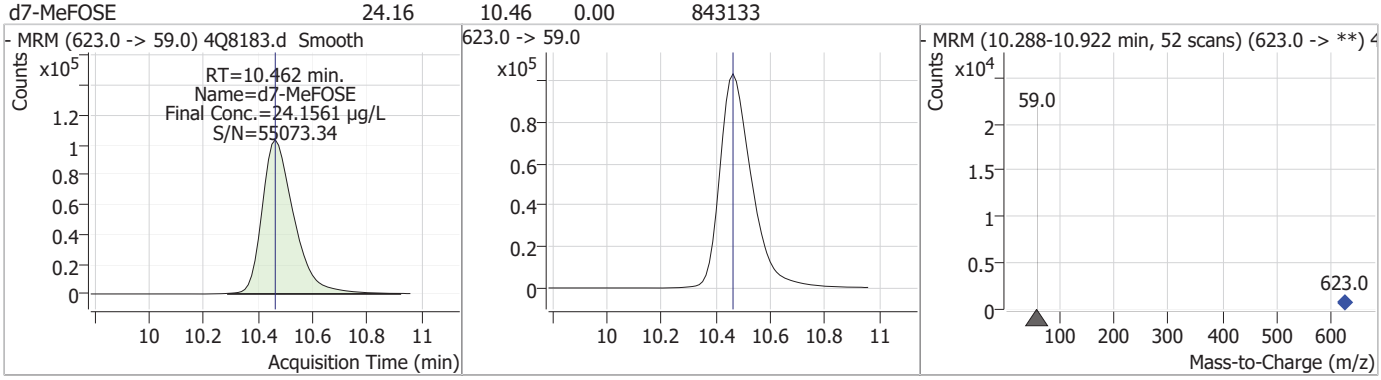


Perfluorinated Compounds by LC/MS/MS

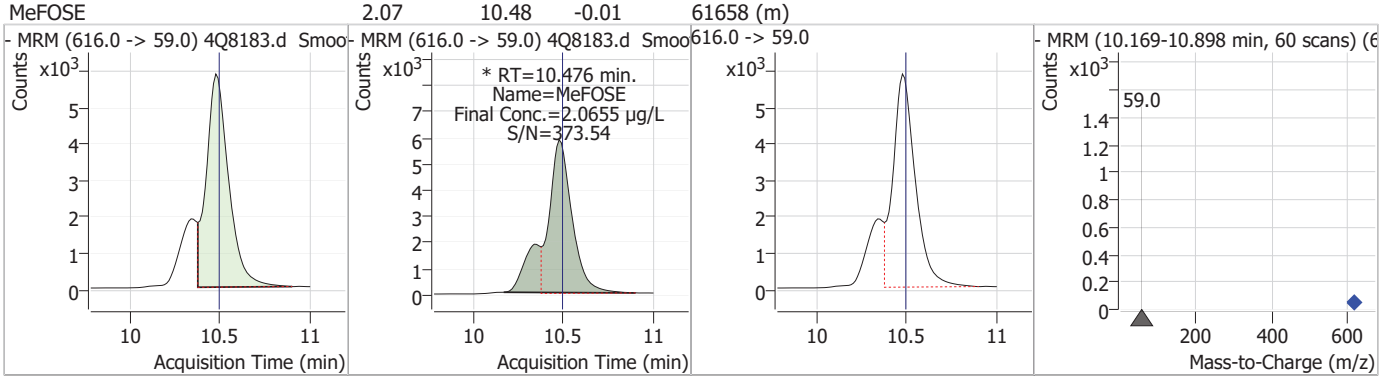
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.15	9.51	0.00	2996	699.0 -> 99.0	57.8	31.3	93.8



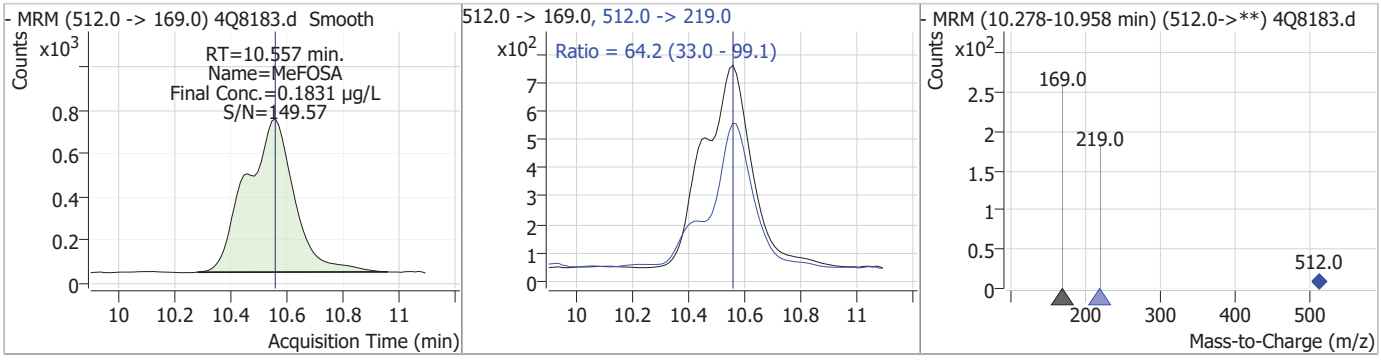
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.16	10.46	0.00	843133				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	2.07	10.48	-0.01	61658 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.18	10.56	0.00	8508	512.0 -> 219.0	64.2	33.0	99.1



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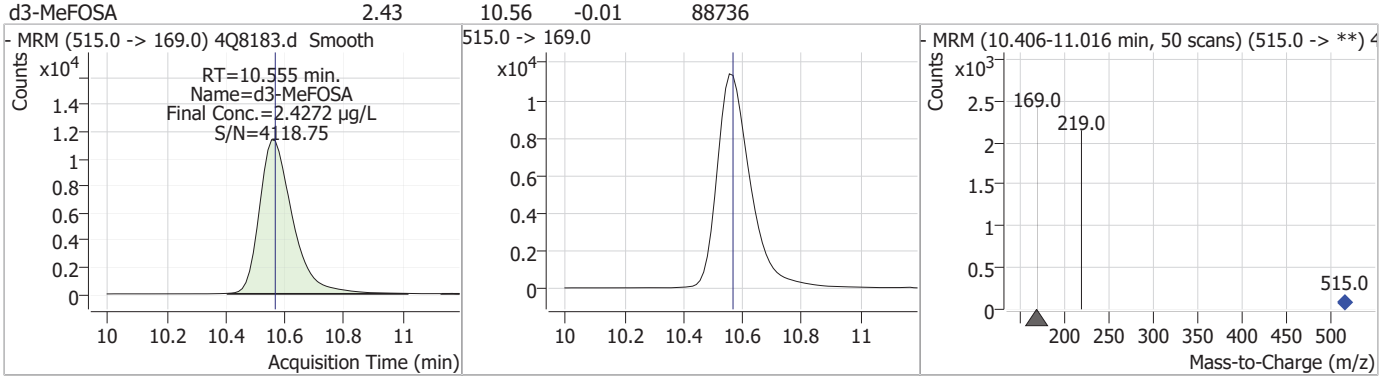
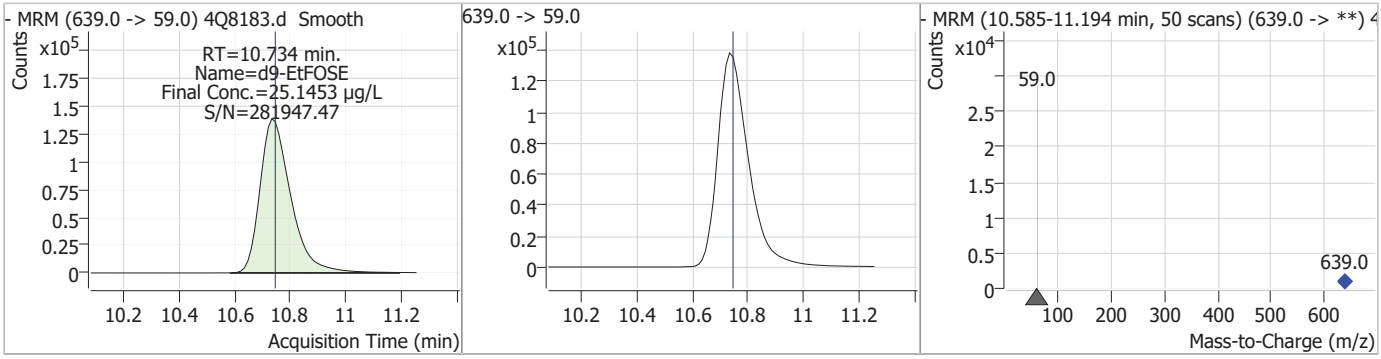
Perfluorinated Compounds by LC/MS/MS

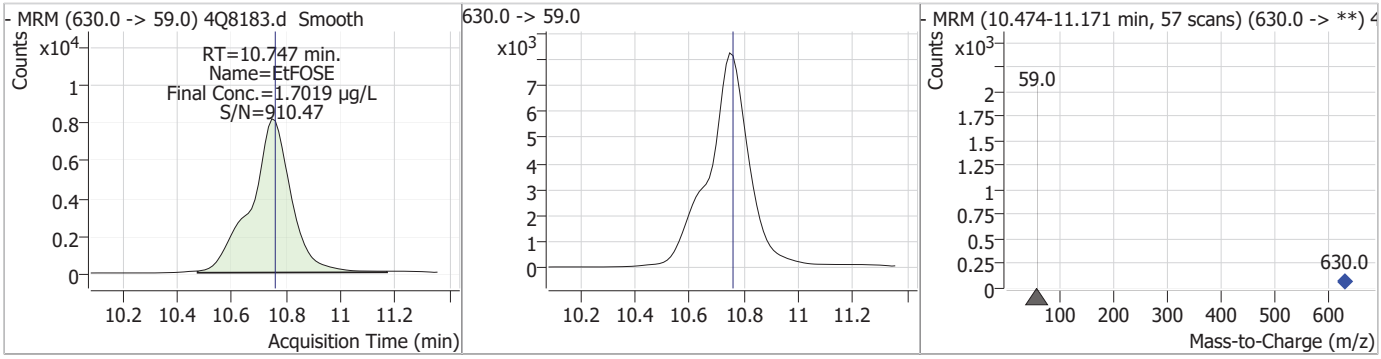
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.43	10.56	-0.01	88736				



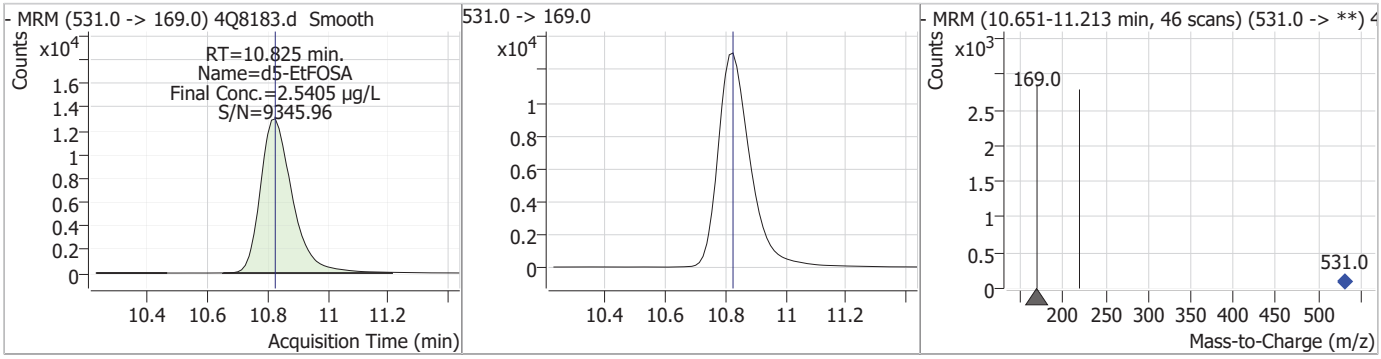
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.15	10.73	-0.01	1064198				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	1.70	10.75	-0.01	84247				

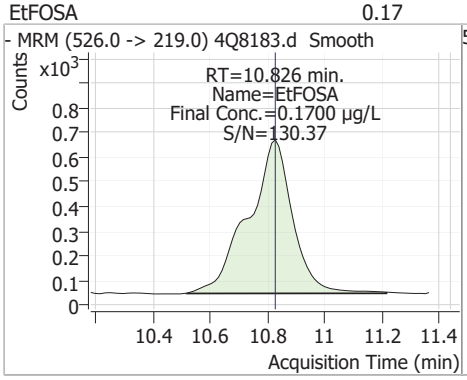


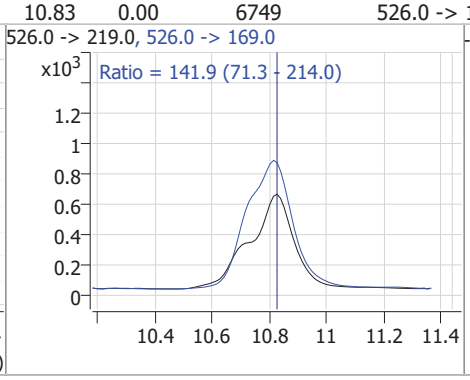
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.54	10.82	0.00	95711				

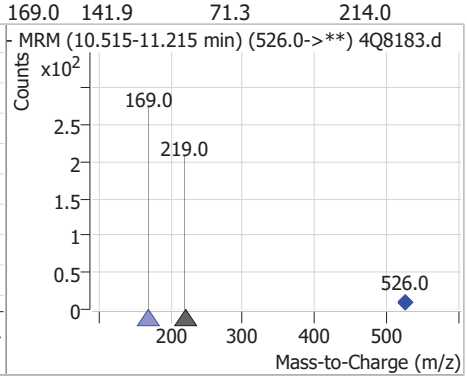


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.17	10.83	0.00	6749	526.0 -> 169.0	141.9	71.3	214.0







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7

Manual Integration Approval Summary

Sample Number: T4Q139-CC137
Lab FileID: 4Q8183.D
Injection Time: 05/01/25 12:49
Method: EPA 1633
Analyst approved: 05/02/25 04:45 Josephus Gimenez
Supervisor approved: 05/02/25 11:54 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Split peak
PFOSA	754-91-6		9.28	Split peak
MeFOSE	24448-09-7		10.48	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/02/25 11:54

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8184.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 1:04:28 PM
Sample Name : CC137-4
Vial : P1-A5
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q139.batch.bin
Sample Information : OP63077,T4Q139,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.921	217.0 -> 172.0	935935	10.00	µg/L	0.037
M5-PFPeA	4.332	268.0 -> 223.0	478691	5.00	µg/L	0.012
M5-PFHxA	5.464	318.0 -> 273.0	301951	2.50	µg/L	0.012
M4-PFHpA	6.291	367.0 -> 322.0	327177	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	490896	2.50	µg/L	0.000
M9-PFNA	7.416	472.0 -> 427.0	199450	1.25	µg/L	0.000
M6-PFDA	7.858	519.0 -> 474.0	183528	1.25	µg/L	0.000
M7-PFUnDA	8.285	570.0 -> 525.0	250393	1.25	µg/L	0.000
M2-PFDoDA	8.666	615.0 -> 570.0	225361	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	169310	1.25	µg/L	-0.012
M8-FOSA	9.291	506.0 -> 78.0	175673	2.50	µg/L	0.000
M3-PFBS	5.381	302.0 -> 99.0	27472	2.50	µg/L	0.013
		302.0 -> 80.0	67053			
M3-PFHxS	6.999	402.0 -> 99.0	36818	2.50	µg/L	0.014
M8-PFOS	7.995	507.0 -> 99.0	41076	2.50	µg/L	0.000
M2-4:2FTS	5.178	329.0 -> 81.0	11150	5.00	µg/L	0.012
M2-6:2FTS	6.696	429.0 -> 81.0	25353	5.00	µg/L	0.012
M2-8:2FTS	7.671	529.0 -> 81.0	27789	5.00	µg/L	0.000
M3-MeFOSAA	7.927	573.0 -> 419.0	222576	5.00	µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	465608	10.00	µg/L	0.012
M5-EtFOSAA	8.110	589.0 -> 419.0	167478	5.00	µg/L	0.000
M7-MeFOSE	10.462	623.0 -> 59.0	841309	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	1052487	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	94226	2.50	µg/L	0.000
M3-MeFOSA	10.567	515.0 -> 169.0	88193	2.50	µg/L	0.000
13C4-PFOS	7.995	503.0 -> 80.0	72785	2.50	µg/L	0.000
13C3-PFBA	2.924	216.0 -> 172.0	428716	5.00	µg/L	0.050
18O2-PFHxS	6.999	403.0 -> 84.0	46571	2.50	µg/L	0.000
13C4-PFOA	6.898	417.0 -> 372.0	519374	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	174467	1.25	µg/L	0.000
13C5-PFNA	7.416	468.0 -> 423.0	201801	1.25	µg/L	0.000
13C2-PFHxA	5.465	315.0 -> 270.0	299080	2.50	µg/L	0.012
System Monitoring Compounds						
13C2-4:2FTS	5.178	329.0 -> 81.0	11150	4.77	µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.5%		
13C2-6:2FTS	6.696	429.0 -> 81.0	25353	5.00	µg/L	0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.1%		
13C2-8:2FTS	7.671	529.0 -> 81.0	27789	4.66	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.2%		
13C2-PFDoDA	8.666	615.0 -> 570.0	225361	1.19	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.6%		
13C2-PFTeDA	9.368	715.0 -> 670.0	169310	1.17	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.4%		
13C3-PFBS	5.381	302.0 -> 99.0	27472	2.39	µg/L	0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.6%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	36818	2.26	µg/L		0.014
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.6%			
13C4-PFBA	2.921	217.0 -> 172.0	935935	9.52	µg/L		0.037
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.2%			
13C4-PFHpA	6.291	367.0 -> 322.0	327177	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.3%			
13C5-PFHxA	5.464	318.0 -> 273.0	301951	2.39	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.4%			
13C5-PFPeA	4.332	268.0 -> 223.0	478691	4.98	µg/L		0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.7%			
13C6-PFDA	7.858	519.0 -> 474.0	183528	1.19	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.2%			
13C7-PFUnDA	8.285	570.0 -> 525.0	250393	1.22	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.3%			
13C8-FOSA	9.291	506.0 -> 78.0	175673	2.35	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.0%			
13C8-PFOA	6.897	421.0 -> 376.0	490896	2.37	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.6%			
13C8-PFOS	7.995	507.0 -> 99.0	41076	2.34	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.7%			
13C9-PFNA	7.416	472.0 -> 427.0	199450	1.19	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.3%			
d3-MeFOSAA	7.927	573.0 -> 419.0	222576	4.64	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.9%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	465608	9.37	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 93.7%			
d3-MeFOSA	10.567	515.0 -> 169.0	88193	2.30	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.9%			
d5-EtFOSAA	8.110	589.0 -> 419.0	167478	4.55	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.0%			
d7-MeFOSE	10.462	623.0 -> 59.0	841309	22.95	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 91.8%			
d9-EtFOSE	10.734	639.0 -> 59.0	1052487	23.68	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 94.7%			
d5-EtFOSA	10.825	531.0 -> 169.0	94226	2.38	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.3%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	200332	9.78	µg/L		99
		327.0 -> 81.0	95254				
6:2FTS	6.697	427.0 -> 407.0	253612	9.97	µg/L		97
		427.0 -> 81.0	114711				
8:2FTS	7.671	527.0 -> 507.0	223015	10.25	µg/L		99
		527.0 -> 81.0	85510				
EtFOSAA	8.111	584.0 -> 419.0	83037	2.67	µg/L	m	100
		584.0 -> 483.0	46809				
FOSA	9.294	498.0 -> 78.0	164301	3.62	µg/L	m	100
		498.0 -> 478.0	4851				
MeFOSAA	7.929	570.0 -> 419.0	98599	2.58	µg/L	m	98
		570.0 -> 512.0	35006				
PFBA	2.927	213.0 -> 169.0	289483	10.12	µg/L		100
PFBS	5.382	299.0 -> 80.0	67178	2.14	µg/L		98
		299.0 -> 99.0	28123				
PFDA	7.859	513.0 -> 469.0	355674	2.55	µg/L		100
		513.0 -> 219.0	83351				
PFDoDA	8.667	613.0 -> 569.0	441822	2.55	µg/L		98
		613.0 -> 319.0	61583				

Perfluorinated Compounds by LC/MS/MS

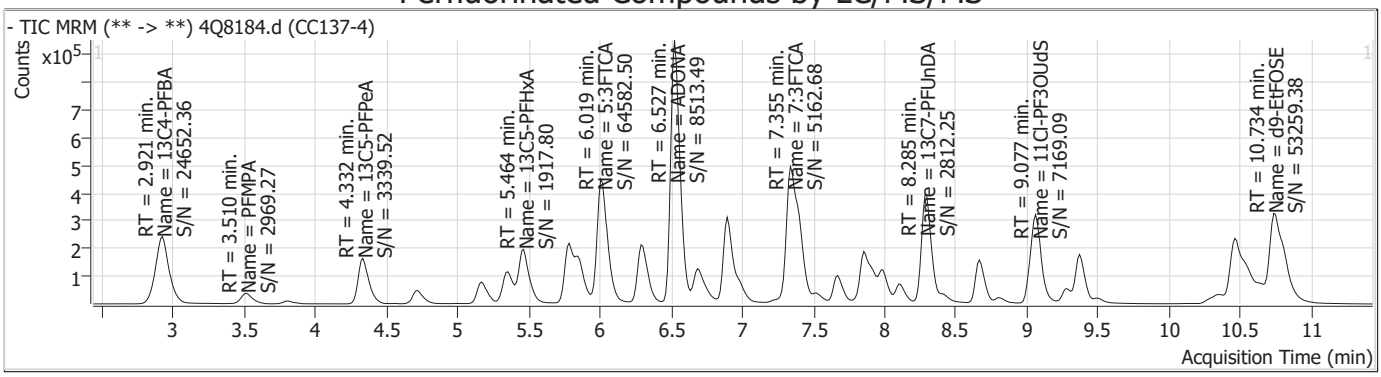
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.817	599.0 -> 80.0	54397	2.43	µg/L		99
		599.0 -> 99.0	30150				
PFHpA	6.304	363.0 -> 319.0	511616	2.57	µg/L		99
		363.0 -> 169.0	103662				
PFHpS	7.529	449.0 -> 80.0	79761	2.51	µg/L		100
		449.0 -> 99.0	44147				
PFHxA	5.467	313.0 -> 269.0	336022	2.58	µg/L		100
		313.0 -> 119.0	11088				
PFHxS	7.000	399.0 -> 80.0	75618	2.84	µg/L	m	99
		399.0 -> 99.0	41243				
PFNA	7.416	463.0 -> 419.0	308069	2.93	µg/L	m	93
		463.0 -> 219.0	101688				
PFNS	8.425	549.0 -> 80.0	69170	2.50	µg/L		95
		549.0 -> 99.0	43127				
PFOA	6.898	413.0 -> 369.0	412243	3.21	µg/L	m	99
		413.0 -> 169.0	117647				
PFOS	7.996	499.0 -> 80.0	74924	2.93	µg/L	m	97
		499.0 -> 99.0	40122				
PFPeA	4.334	263.0 -> 219.0	391876	5.18	µg/L		100
PFPeS	6.331	349.0 -> 80.0	81283	2.37	µg/L		98
		349.0 -> 99.0	40061				
PFTeDA	9.369	713.0 -> 669.0	507270	2.57	µg/L		99
		713.0 -> 219.0	35969				
PFTrDA	9.038	663.0 -> 619.0	491255	2.54	µg/L		100
		663.0 -> 369.0	30177				
PFUnDA	8.287	563.0 -> 519.0	374579	2.53	µg/L		100
		563.0 -> 269.0	75135				
11Cl-PF3OUdS	9.077	631.0 -> 451.0	889781	10.04	µg/L		98
		633.0 -> 453.0	266423				
9Cl-PF3ONS	8.301	531.0 -> 351.0	975133	10.01	µg/L		99
		533.0 -> 353.0	292150				
ADONA	6.527	377.0 -> 251.0	3389366	9.78	µg/L		100
		377.0 -> 85.0	1114124				
HFPO-DA	5.792	285.0 -> 169.0	505710	10.33	µg/L		99
		285.0 -> 185.0	54974				
3:3FTCA	3.806	241.0 -> 177.0	53057	11.73	µg/L		99
		241.0 -> 117.0	4437				
5:3FTCA	6.019	341.0 -> 237.0	1373108	60.73	µg/L		99
		341.0 -> 217.0	977037				
7:3FTCA	7.355	441.0 -> 337.0	1779709	59.45	µg/L		100
		441.0 -> 317.0	803007				
EtFOSA	10.826	526.0 -> 219.0	97550	2.50	µg/L		100
		526.0 -> 169.0	139396				
EtFOSE	10.747	630.0 -> 59.0	1235253	25.23	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	120311	2.61	µg/L		100
		512.0 -> 219.0	79970				
MeFOSE	10.476	616.0 -> 59.0	947985	31.83	µg/L	m	100
PFDoDS	9.508	699.0 -> 80.0	44397	2.47	µg/L		98
		699.0 -> 99.0	27112				
NFDHA	5.357	295.0 -> 201.0	88633	5.19	µg/L		96
		201.0 -> 85.0	351638				
		295.0 -> 85.0	24581				
PFMBA	4.723	279.0 -> 85.0	255974	4.96	µg/L		100
PFMPA	3.510	229.0 -> 85.0	220636	5.08	µg/L		100
PFEESA	5.861	315.0 -> 135.0	543968	4.55	µg/L		99
		315.0 -> 69.0	42866				

Perfluorinated Compounds by LC/MS/MS

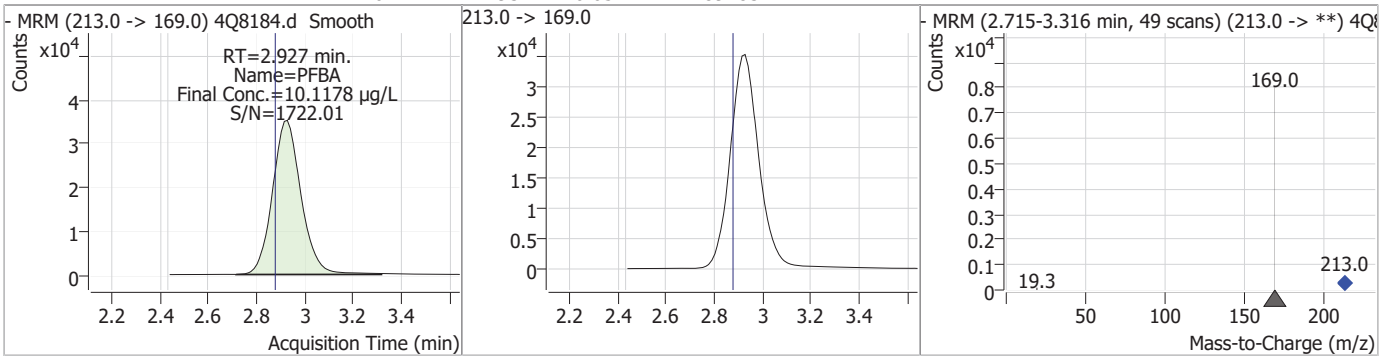
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

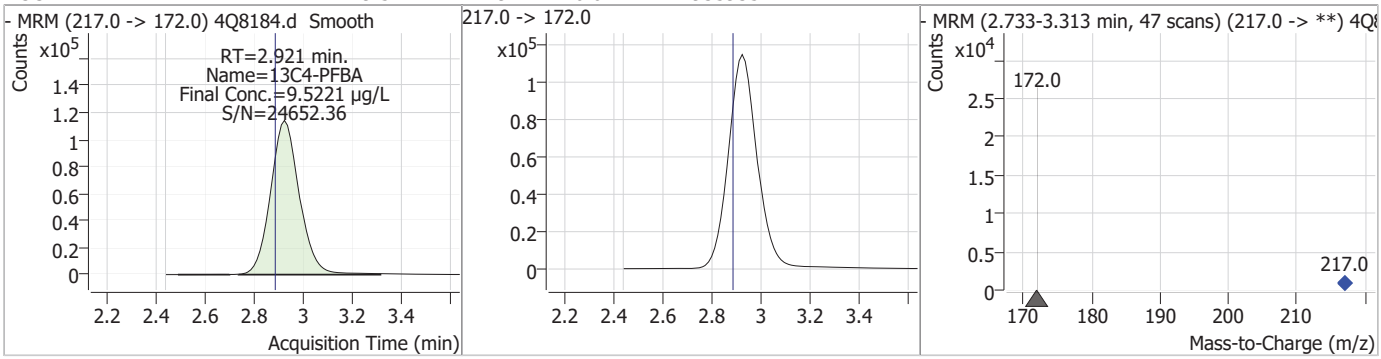
Perfluorinated Compounds by LC/MS/MS



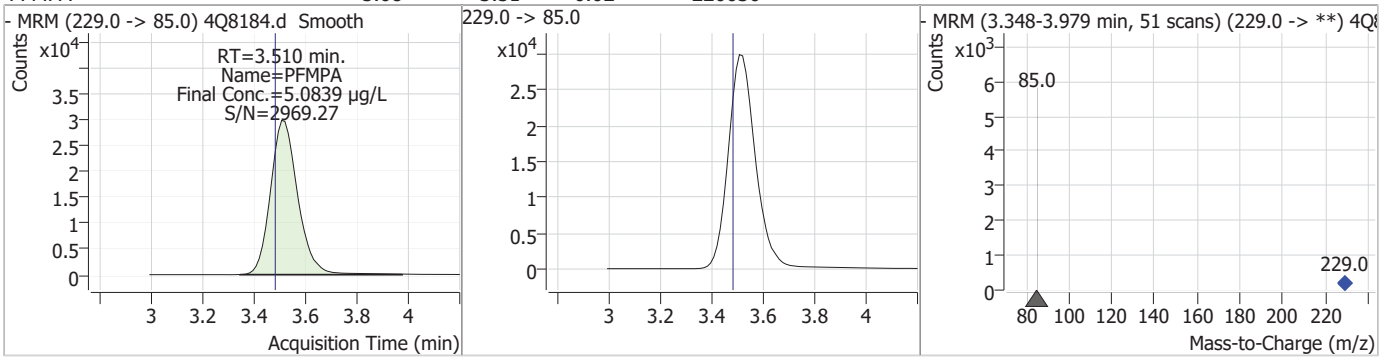
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.12	2.93	0.05	289483				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.52	2.92	0.04	935935				

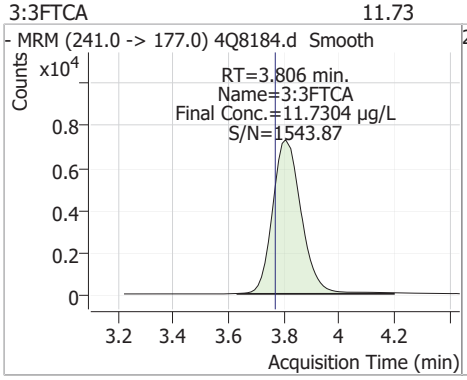


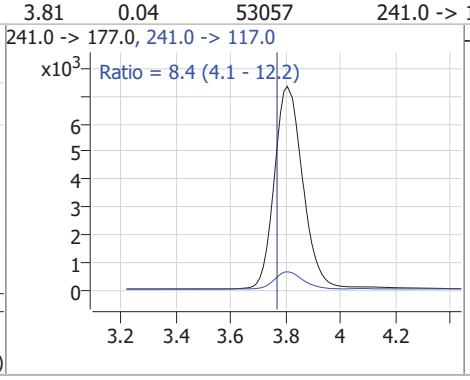
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.08	3.51	0.02	220636				

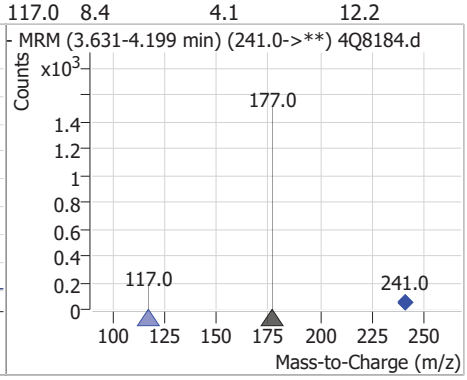


Perfluorinated Compounds by LC/MS/MS

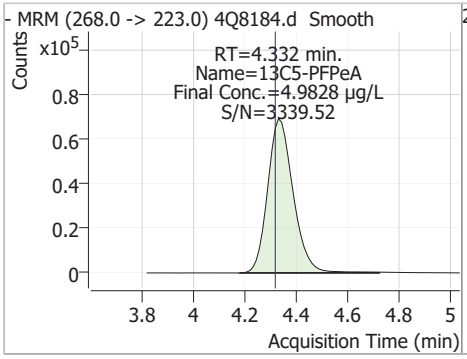
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	11.73	3.81	0.04	53057	241.0 -> 117.0	8.4	4.1	12.2

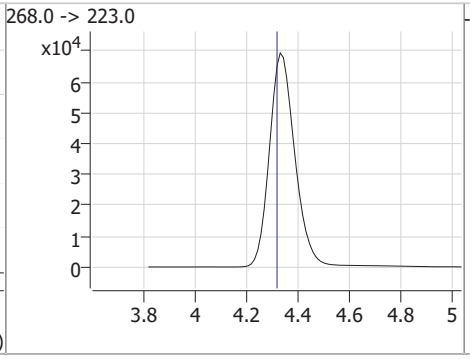


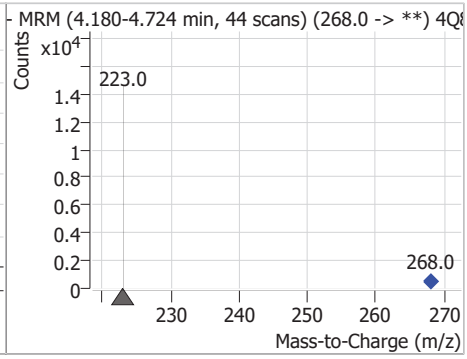




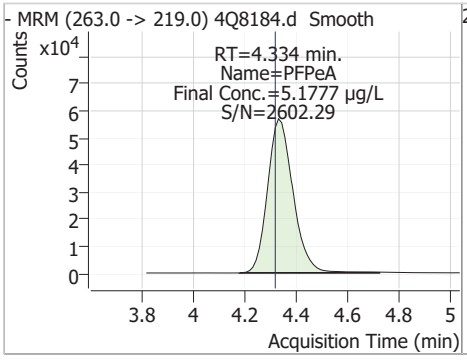
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.98	4.33	0.01	478691				

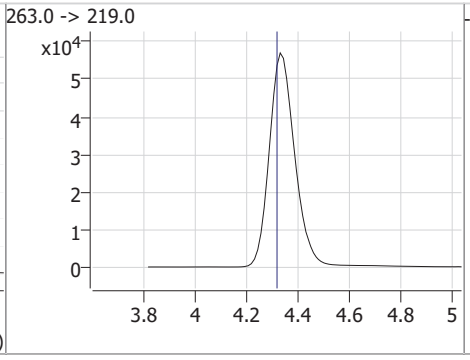


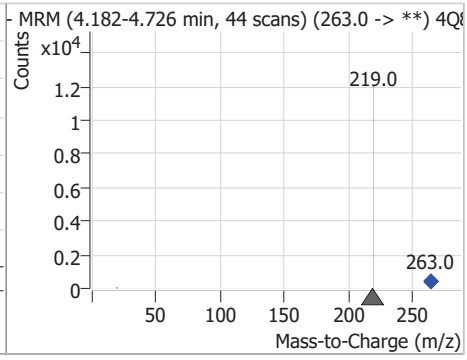




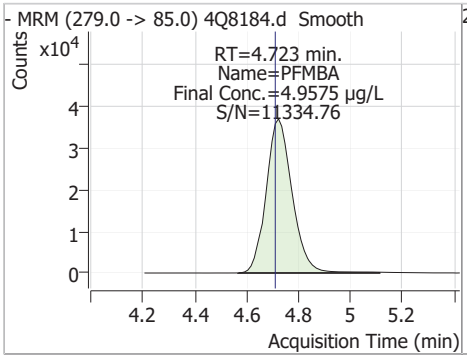
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.18	4.33	0.01	391876				

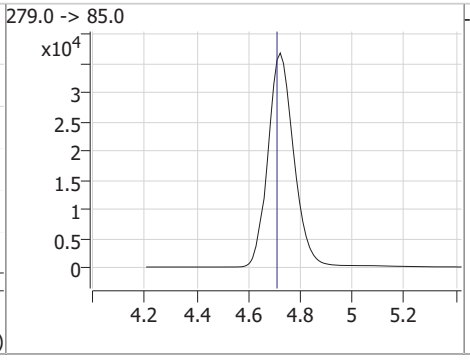


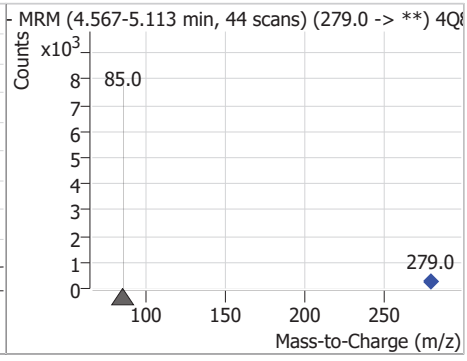




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.96	4.72	0.01	255974				

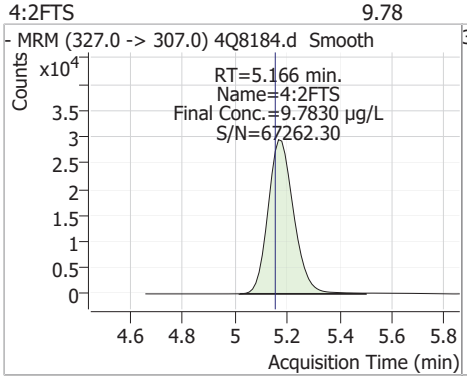


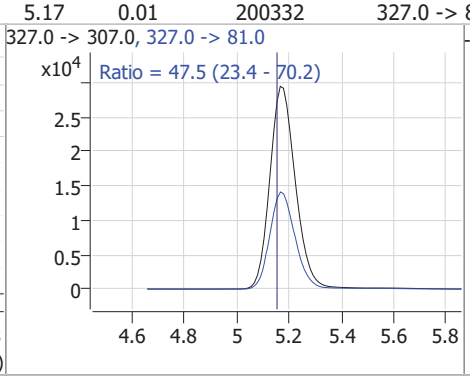


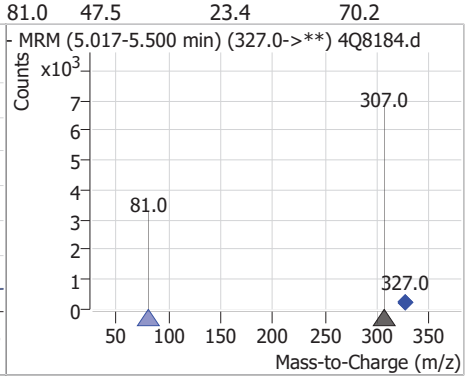


Perfluorinated Compounds by LC/MS/MS

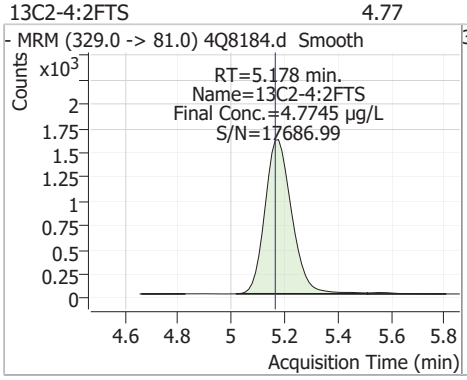
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.78	5.17	0.01	200332	327.0 -> 81.0	47.5	23.4	70.2

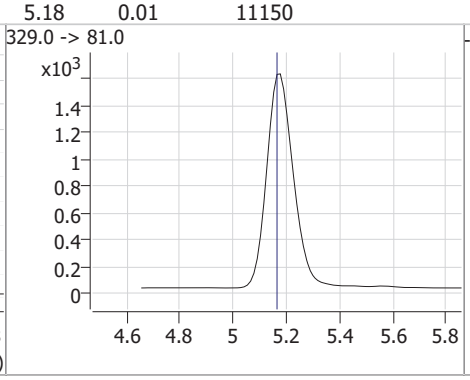


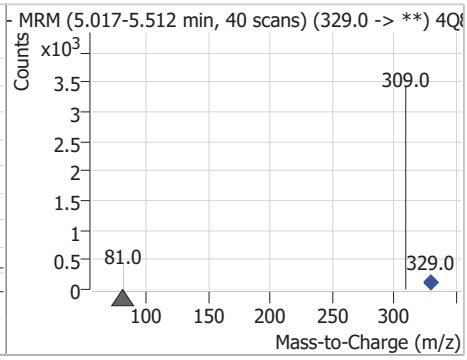




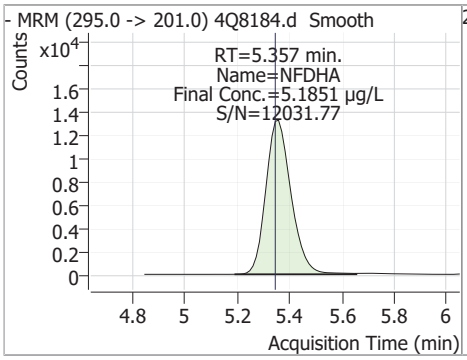
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.77	5.18	0.01	11150				

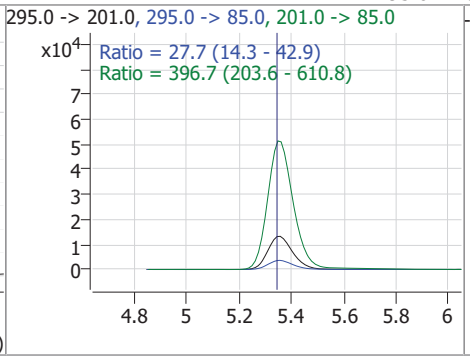


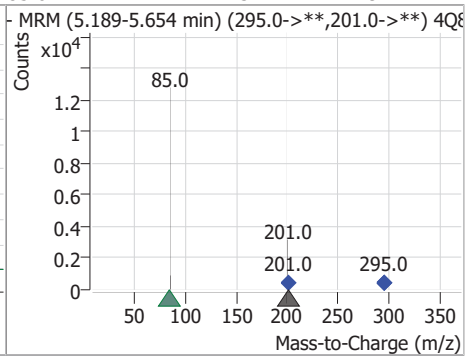




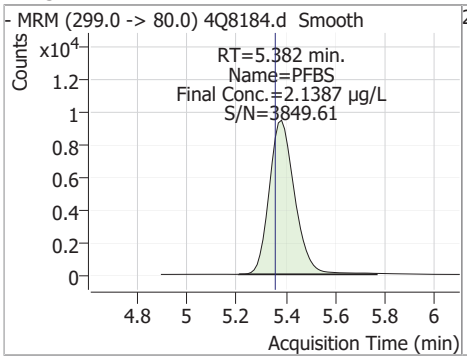
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.19	5.36	0.01	88633	201.0 -> 85.0	396.7	203.6	610.8
					295.0 -> 85.0	27.7	14.3	42.9

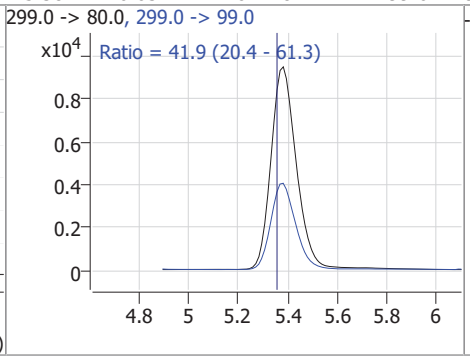


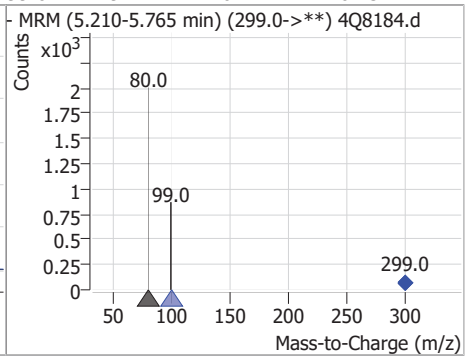




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.14	5.38	0.03	67178	299.0 -> 99.0	41.9	20.4	61.3

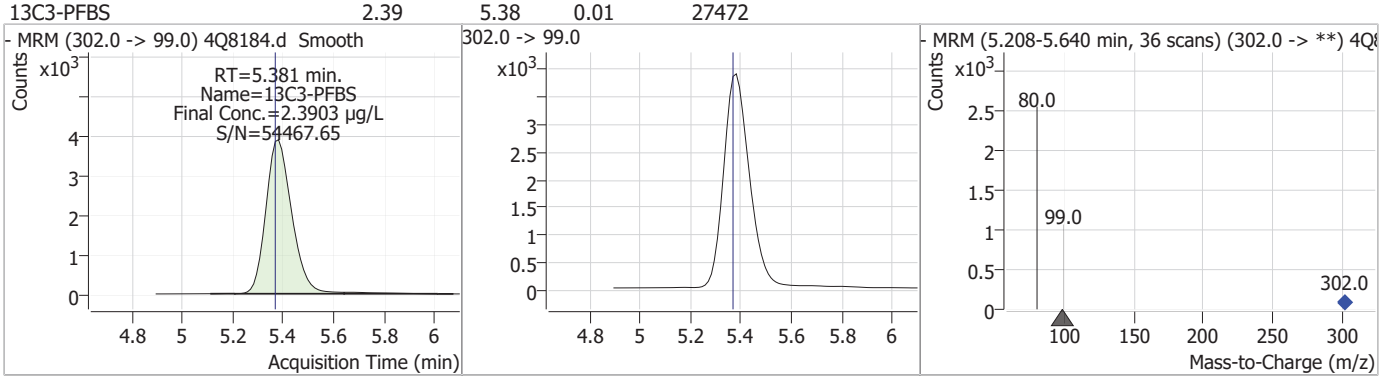




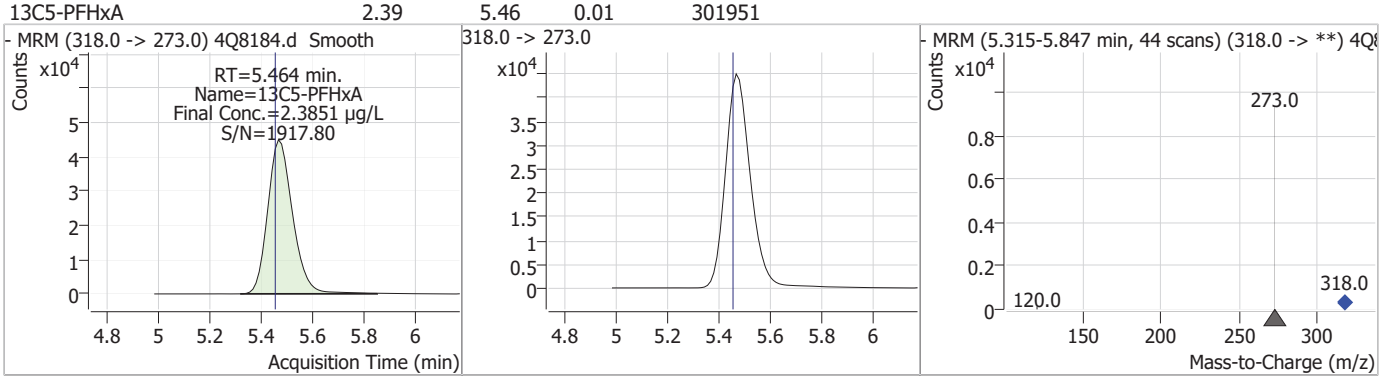


Perfluorinated Compounds by LC/MS/MS

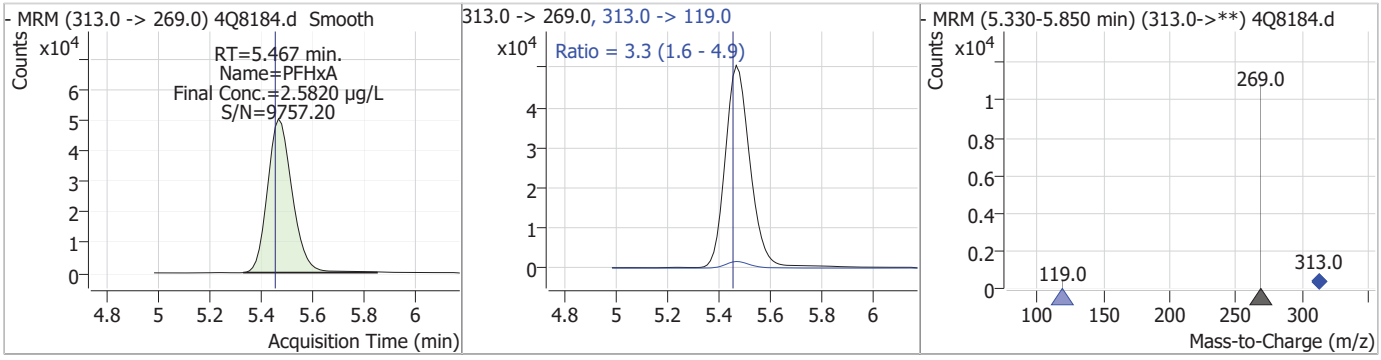
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.39	5.38	0.01	27472				



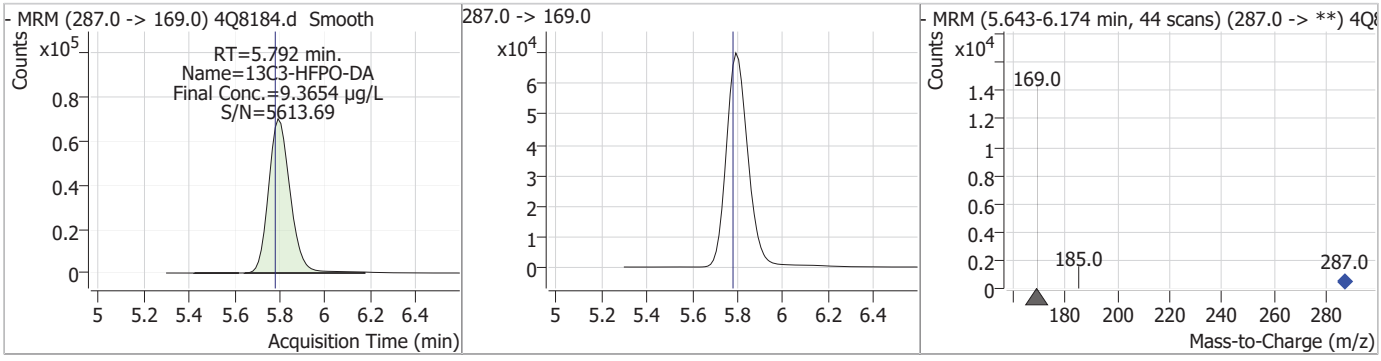
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.39	5.46	0.01	301951				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.58	5.47	0.01	336022	313.0 -> 119.0	3.3	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.37	5.79	0.01	465608				



7.6.59

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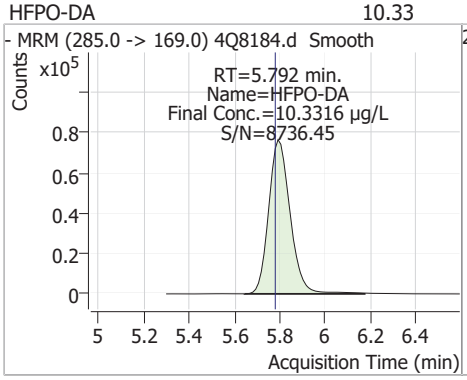
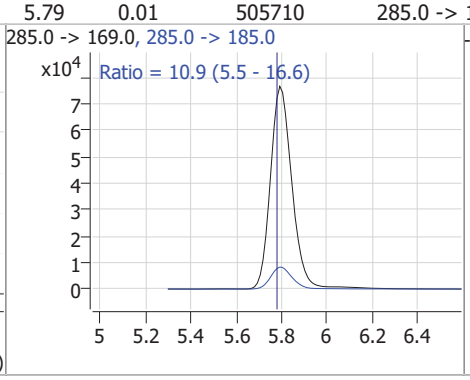
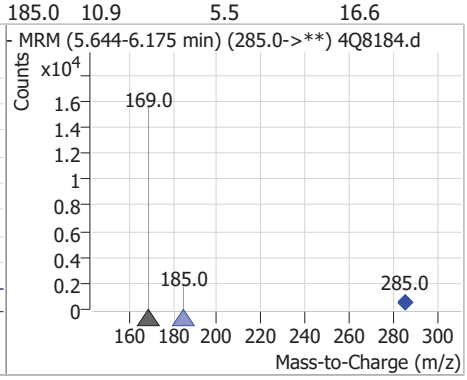
Perfluorinated Compounds by LC/MS/MS

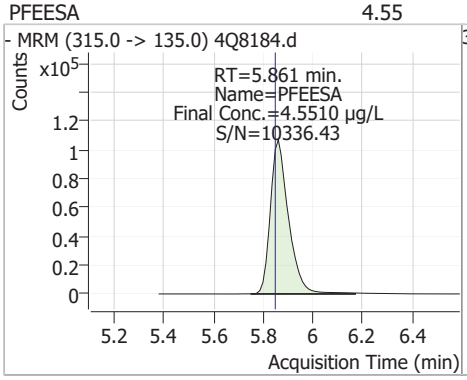
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.33	5.79	0.01	505710	285.0 -> 185.0	10.9	5.5	16.6

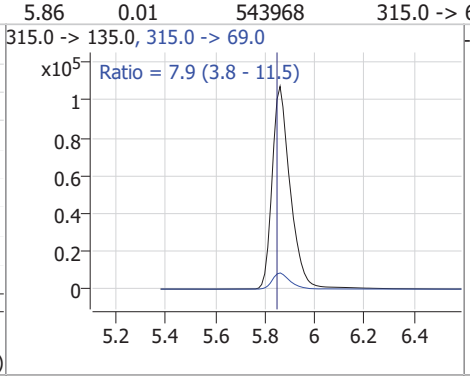


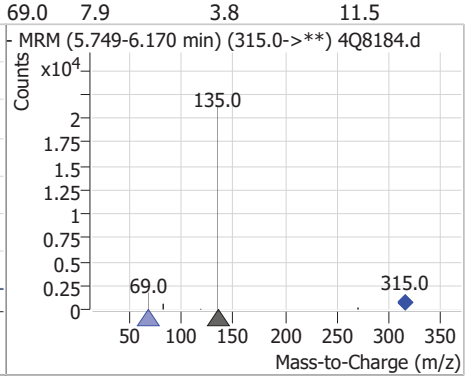




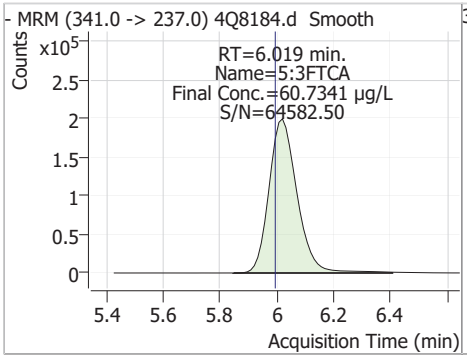
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.55	5.86	0.01	543968	315.0 -> 69.0	7.9	3.8	11.5

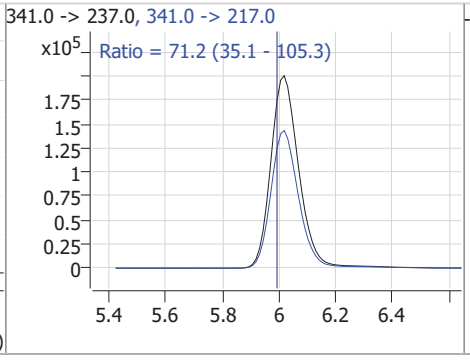


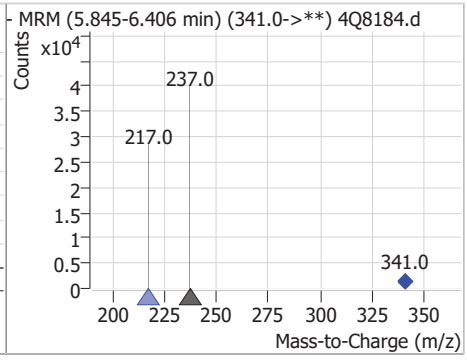




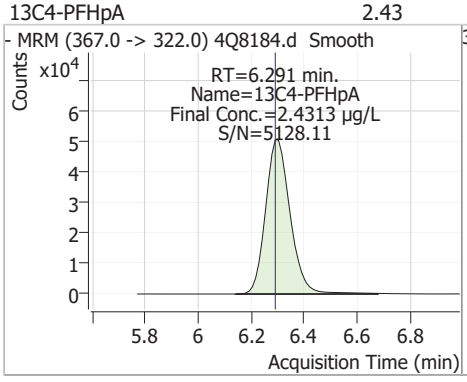
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	60.73	6.02	0.03	1373108	341.0 -> 217.0	71.2	35.1	105.3

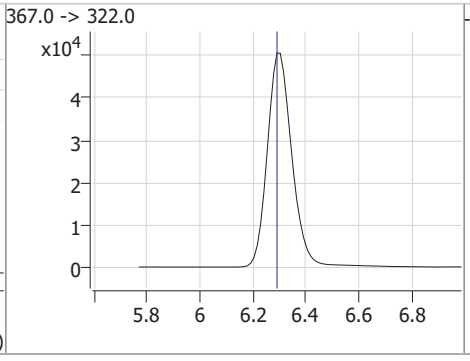


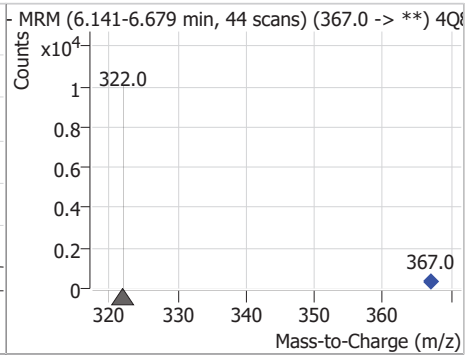




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.43	6.29	0.00	327177				







7.6.59

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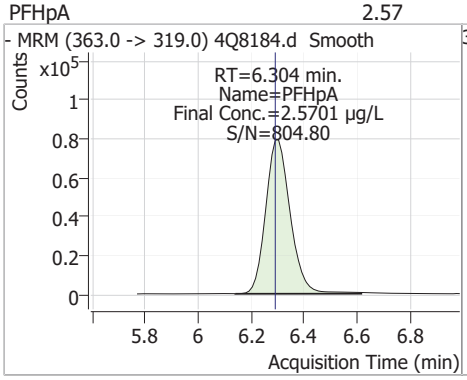
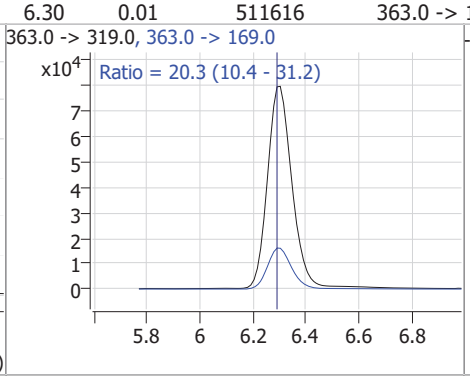
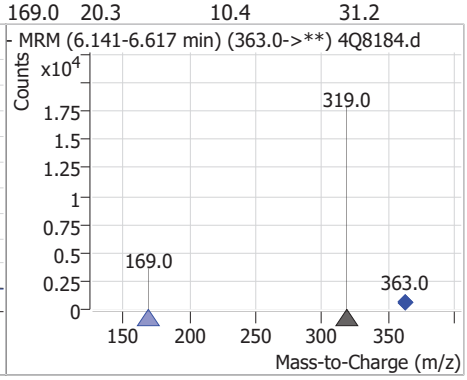
Perfluorinated Compounds by LC/MS/MS

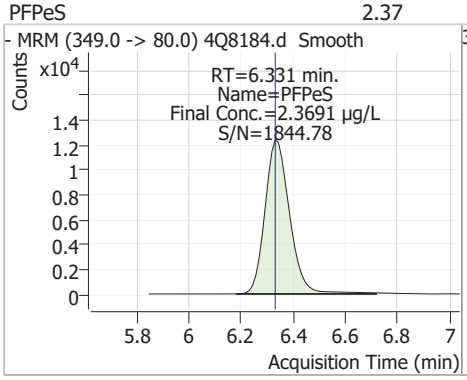
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.57	6.30	0.01	511616	363.0 -> 169.0	20.3	10.4	31.2

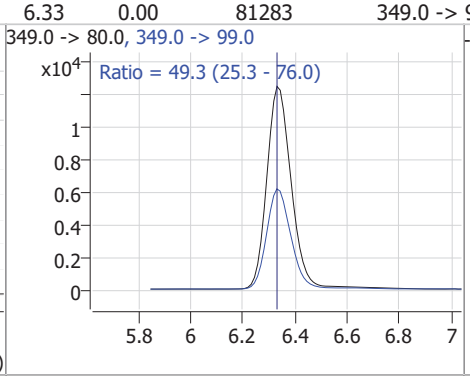


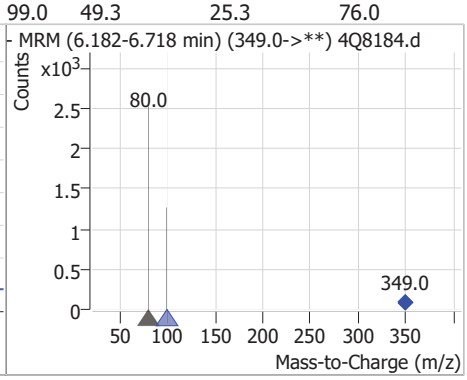




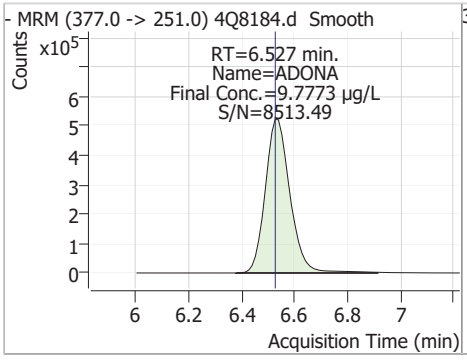
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.37	6.33	0.00	81283	349.0 -> 99.0	49.3	25.3	76.0

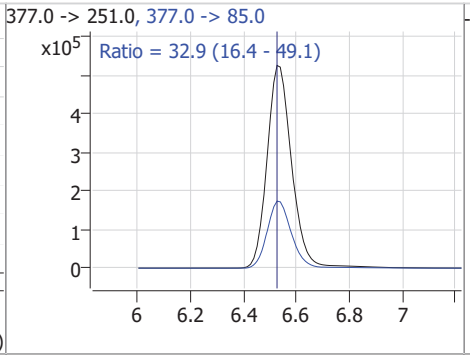


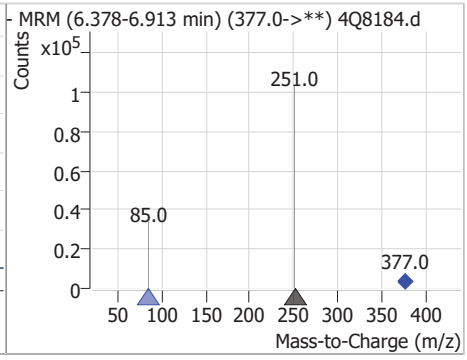




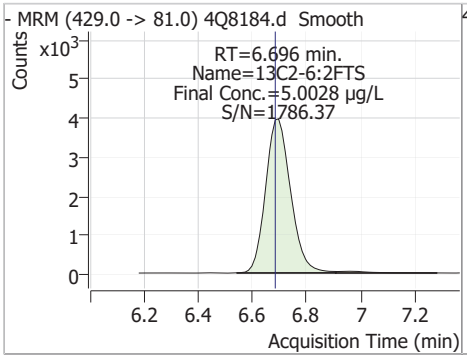
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	9.78	6.53	0.00	3389366	377.0 -> 85.0	32.9	16.4	49.1

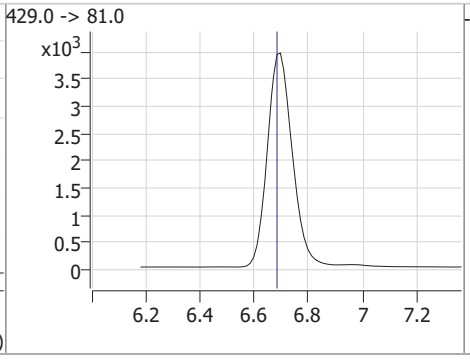


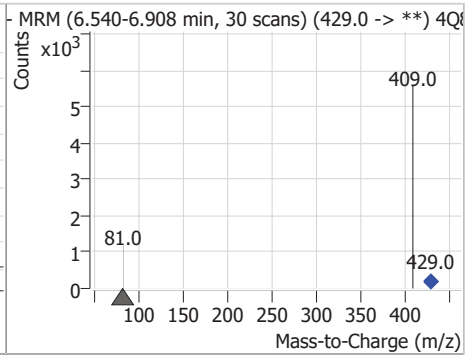




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.00	6.70	0.01	25353				







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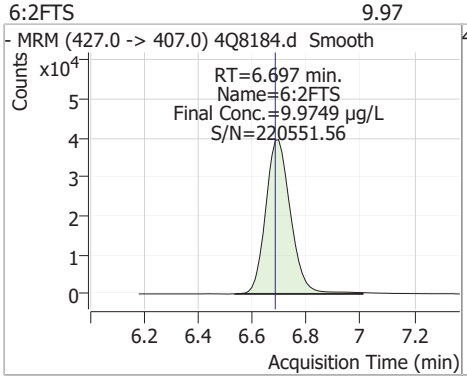
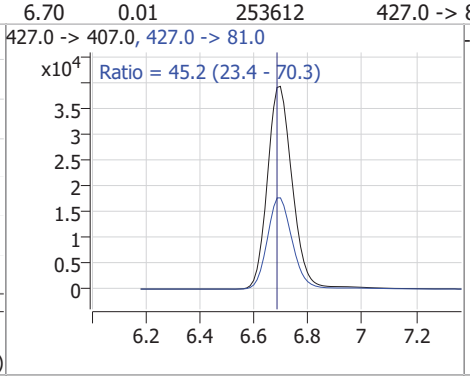
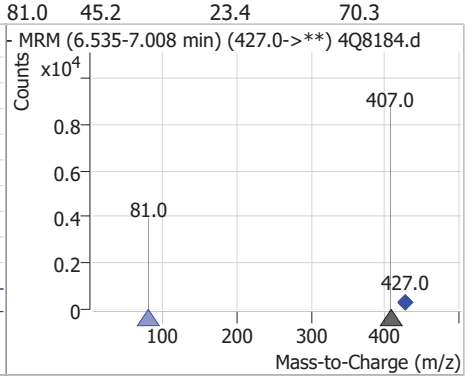
Perfluorinated Compounds by LC/MS/MS

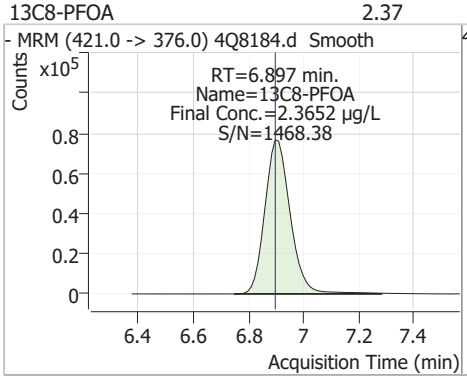
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.97	6.70	0.01	253612	427.0 -> 81.0	45.2	23.4	70.3

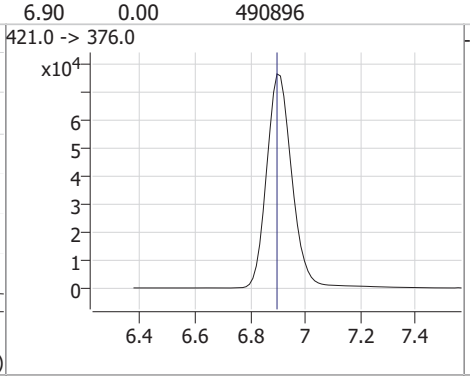


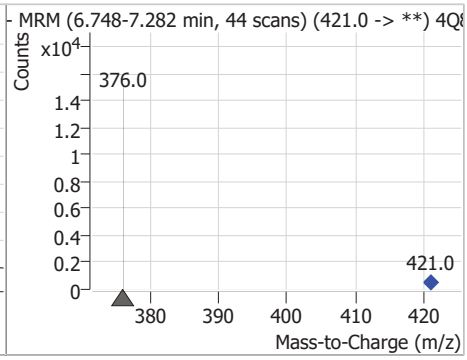




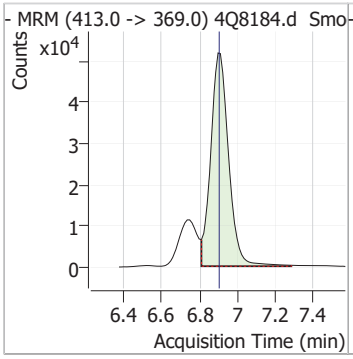
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.37	6.90	0.00	490896				

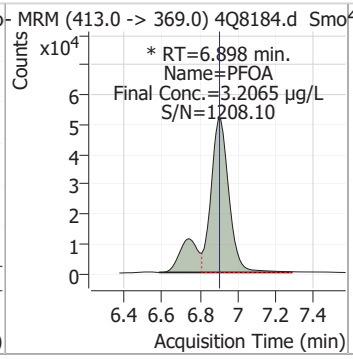


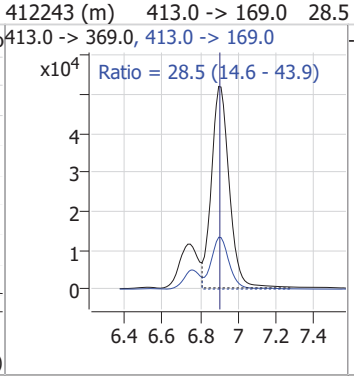


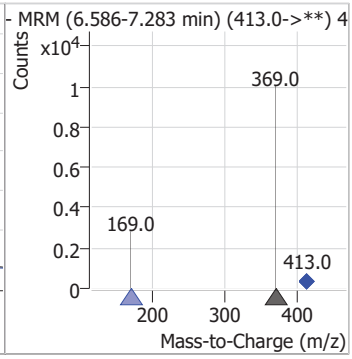


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	3.21	6.90	0.00	412243 (m)	413.0 -> 169.0	28.5	14.6	43.9

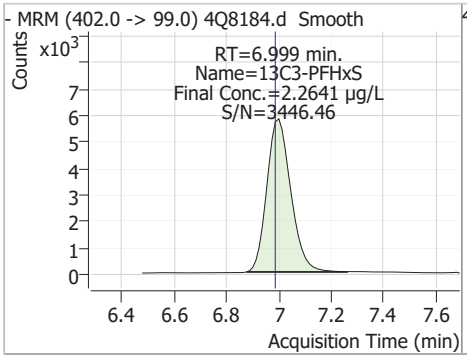


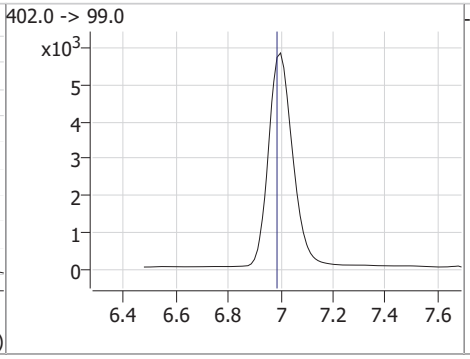


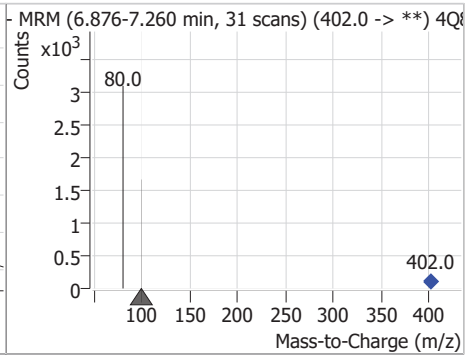




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.26	7.00	0.01	36818				

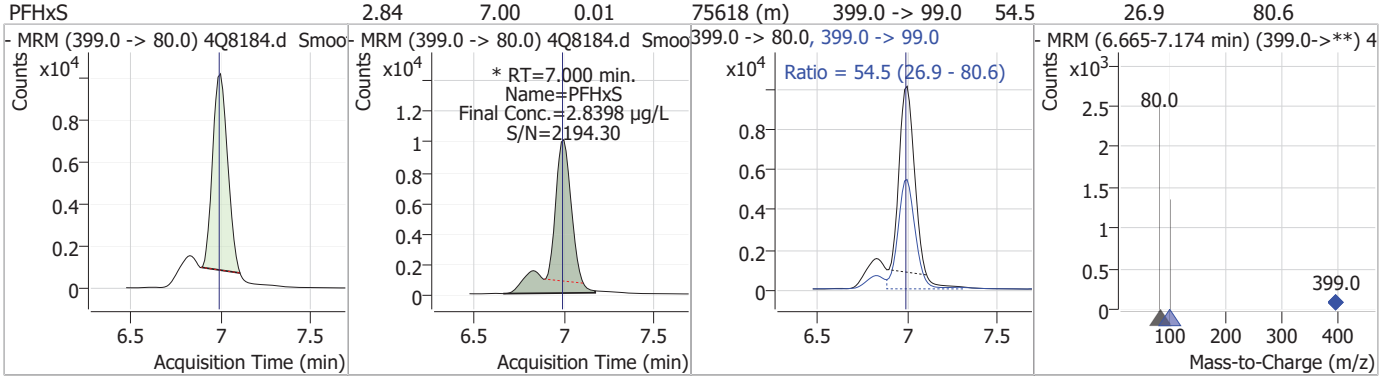




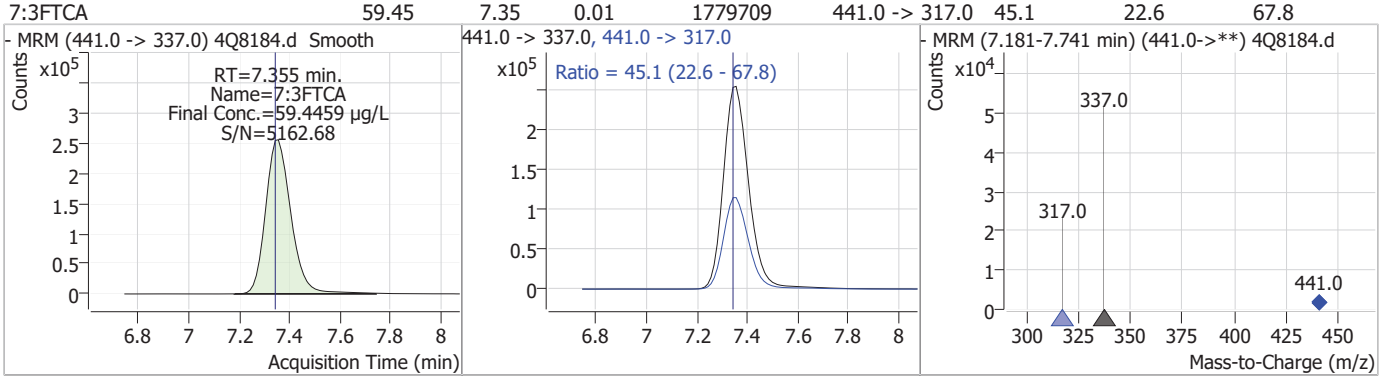


Perfluorinated Compounds by LC/MS/MS

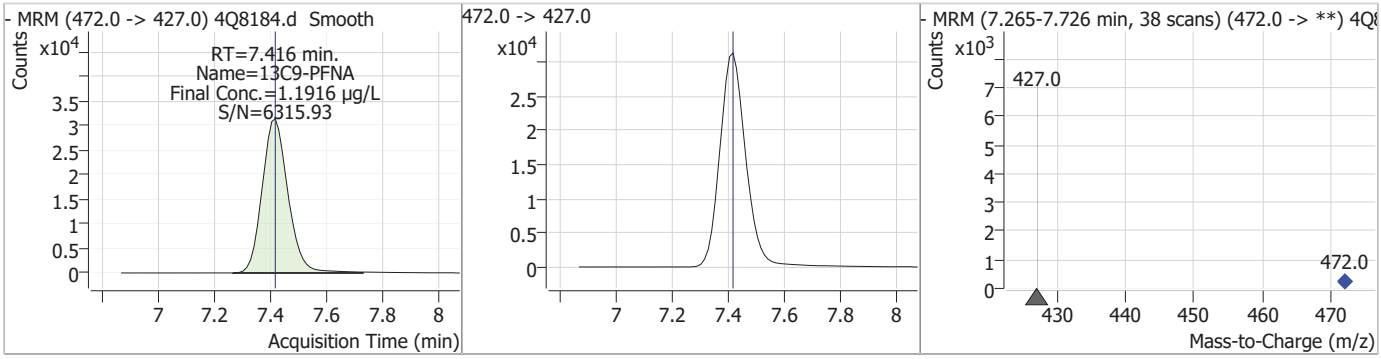
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.84	7.00	0.01	75618 (m)	399.0 -> 99.0	54.5	26.9	80.6



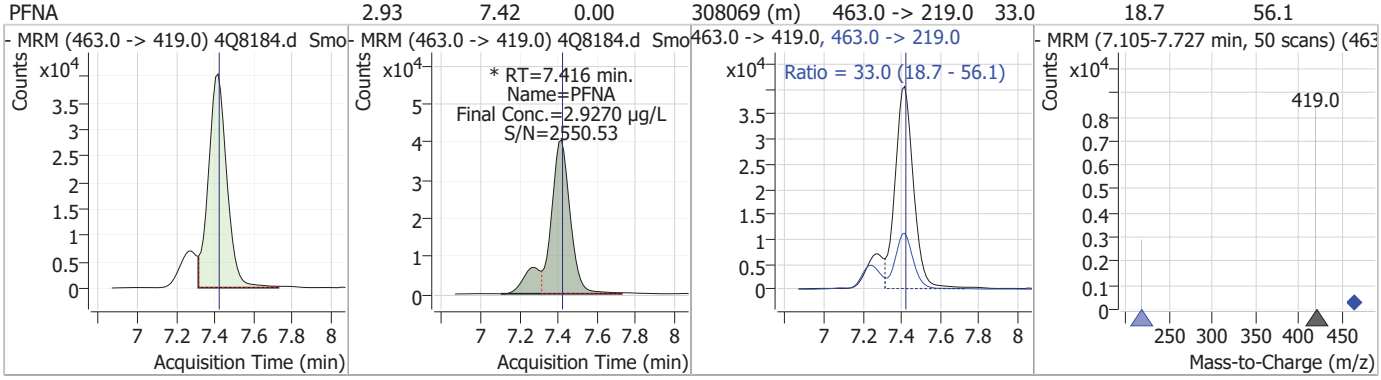
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	59.45	7.35	0.01	1779709	441.0 -> 317.0	45.1	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.19	7.42	0.00	199450				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.93	7.42	0.00	308069 (m)	463.0 -> 219.0	33.0	18.7	56.1



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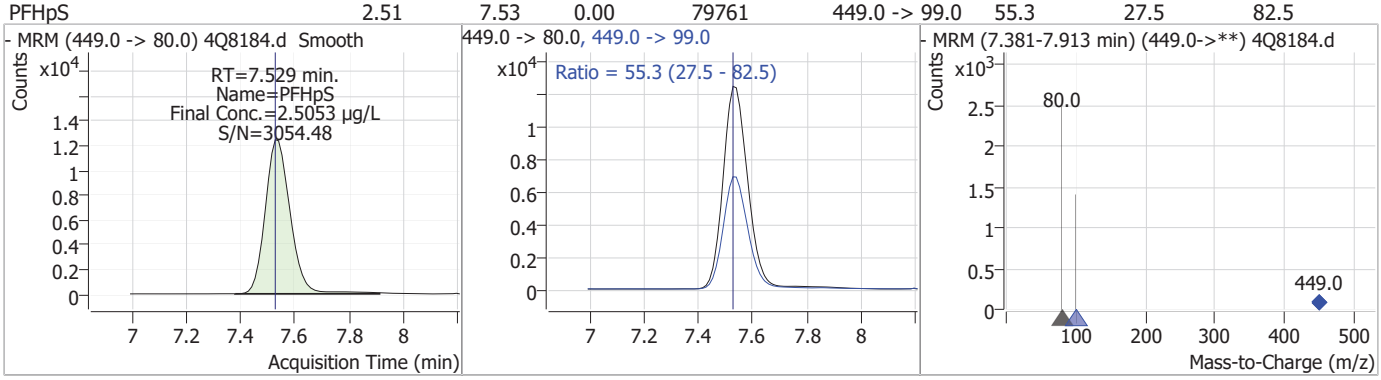
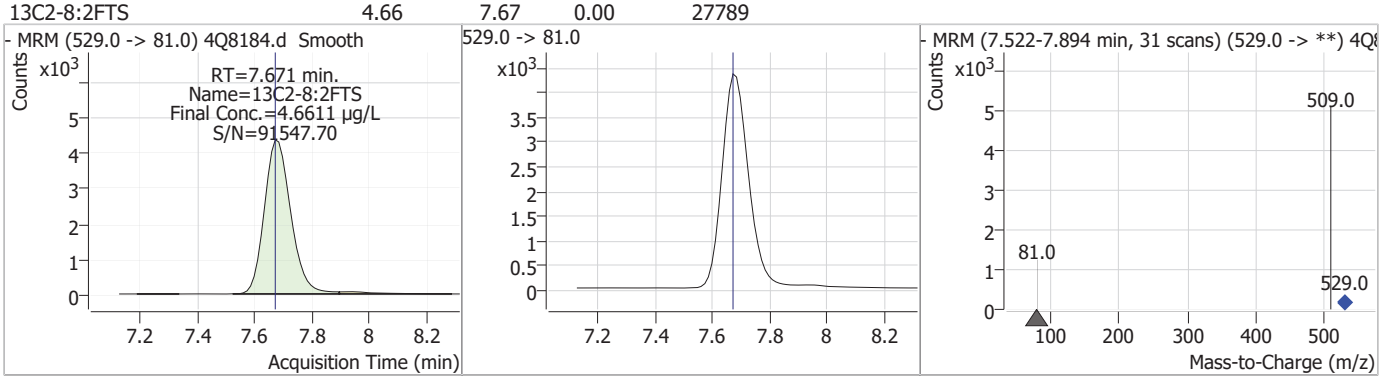
Perfluorinated Compounds by LC/MS/MS

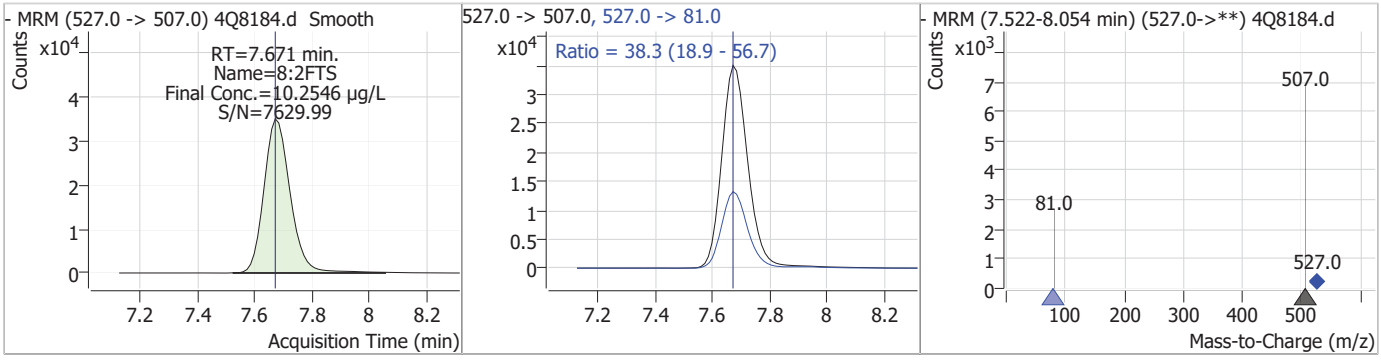
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.51	7.53	0.00	79761	449.0 -> 99.0	55.3	27.5	82.5



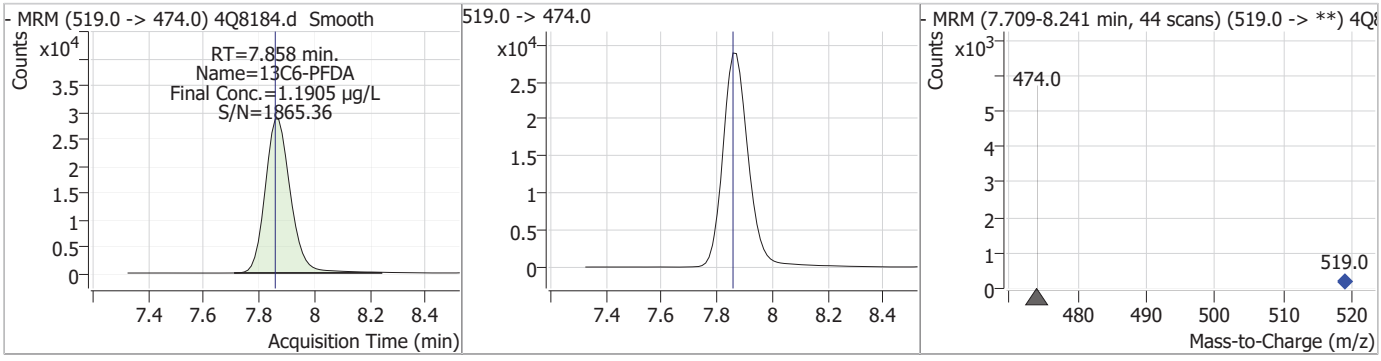
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.66	7.67	0.00	27789				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.25	7.67	0.00	223015	527.0 -> 81.0	38.3	18.9	56.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.19	7.86	0.00	183528				



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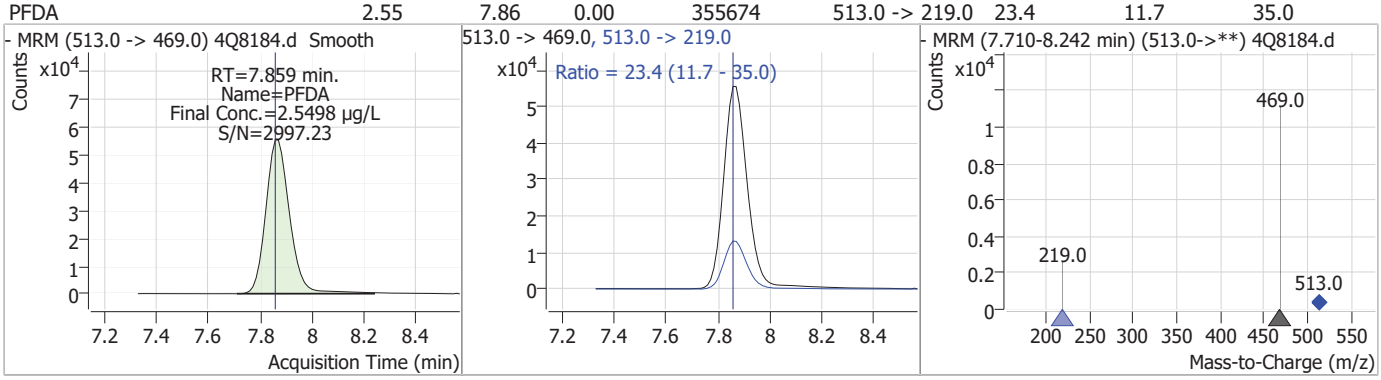
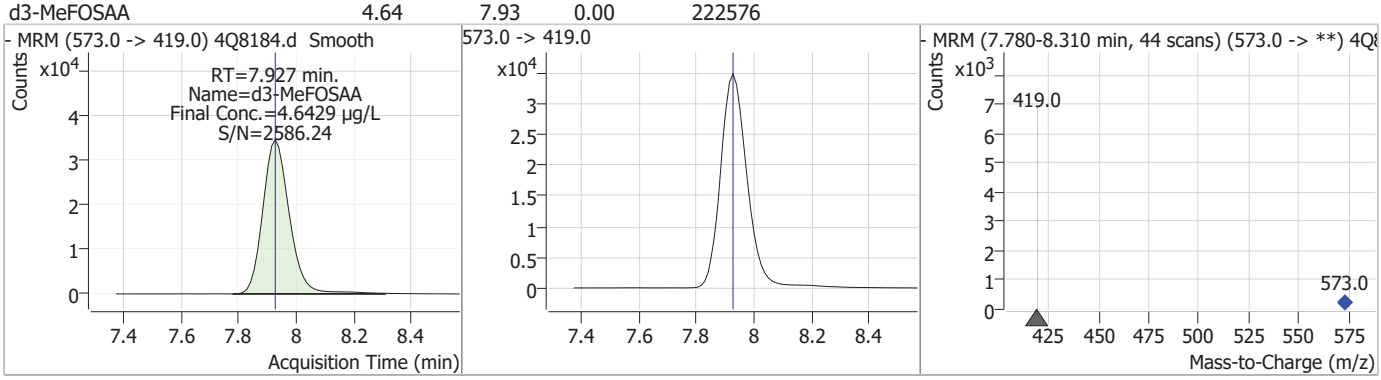
Perfluorinated Compounds by LC/MS/MS

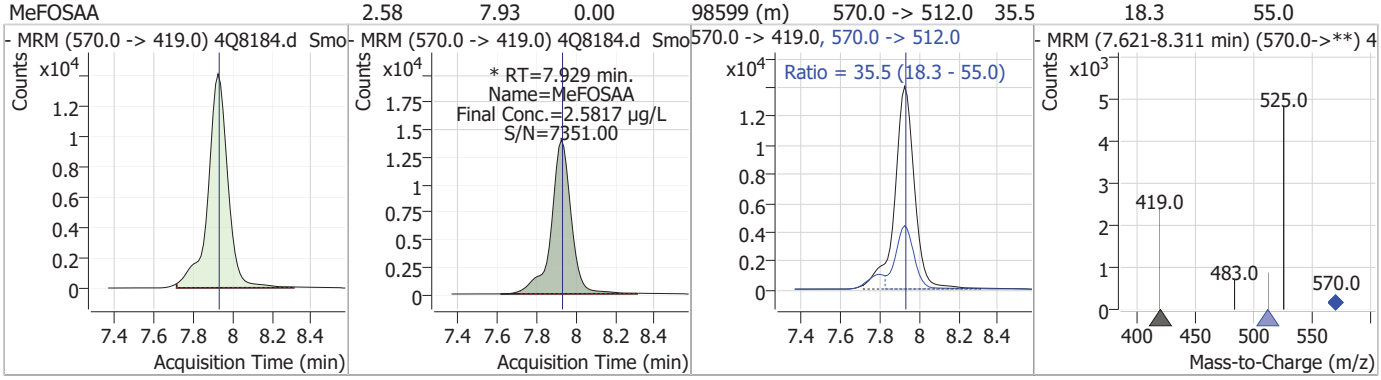
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.55	7.86	0.00	355674	513.0 -> 219.0	23.4	11.7	35.0



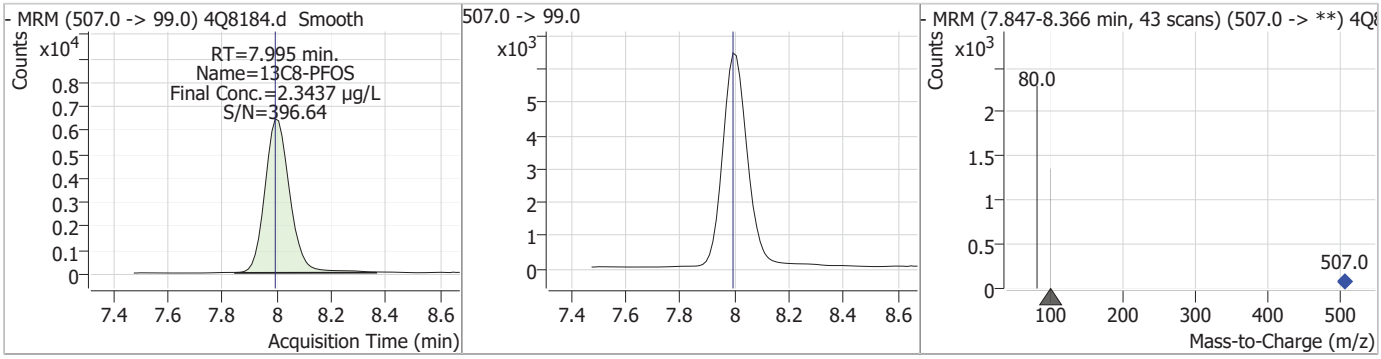
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.64	7.93	0.00	222576				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.58	7.93	0.00	98599 (m)	570.0 -> 512.0	35.5	18.3	55.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.34	7.99	0.00	41076				



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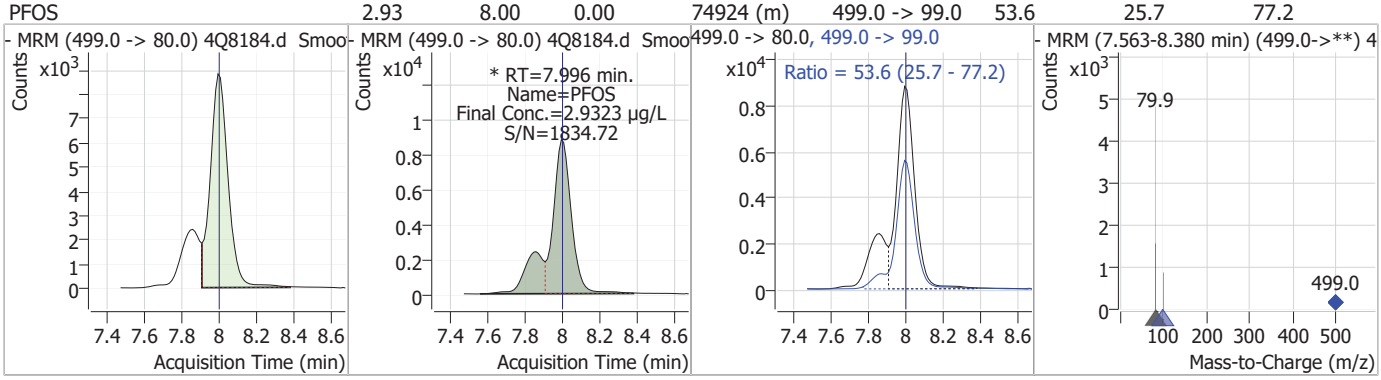
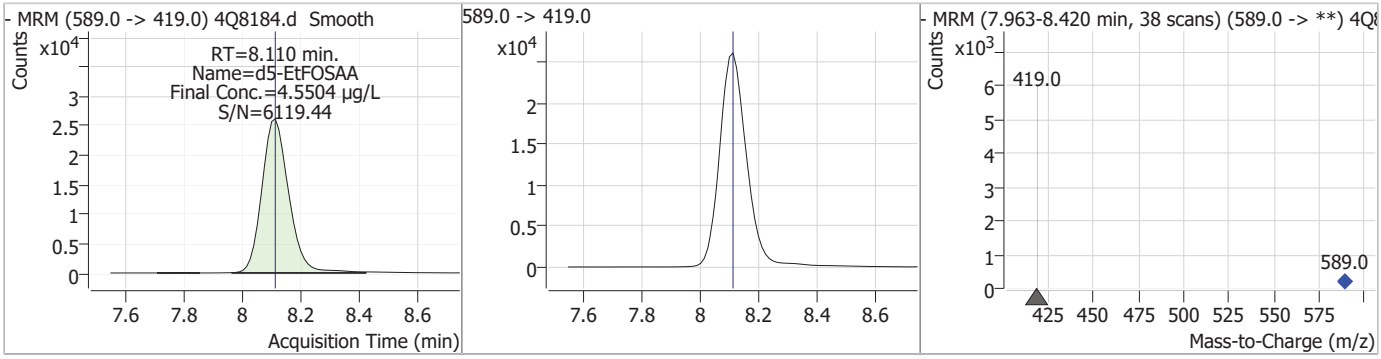
Perfluorinated Compounds by LC/MS/MS

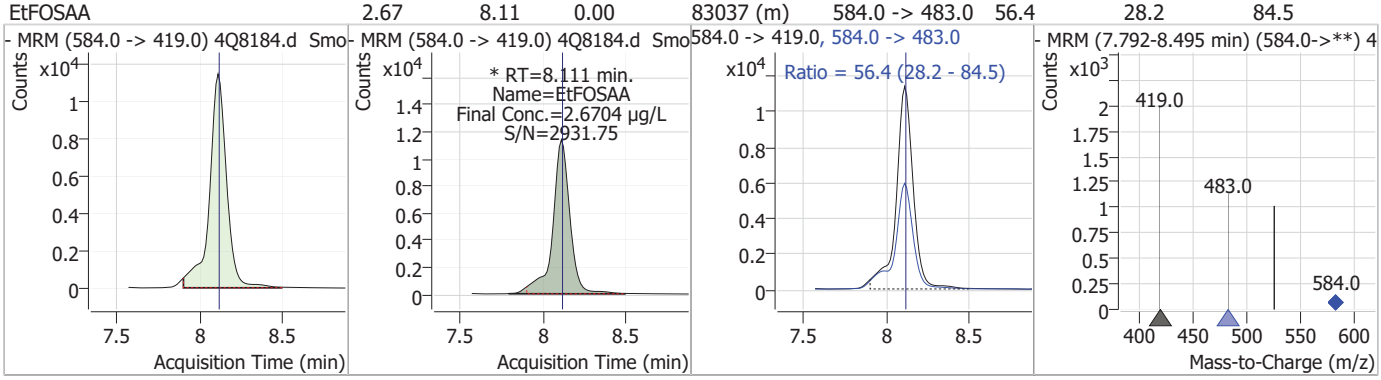
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.93	8.00	0.00	74924 (m)	499.0 -> 99.0	53.6	25.7	77.2



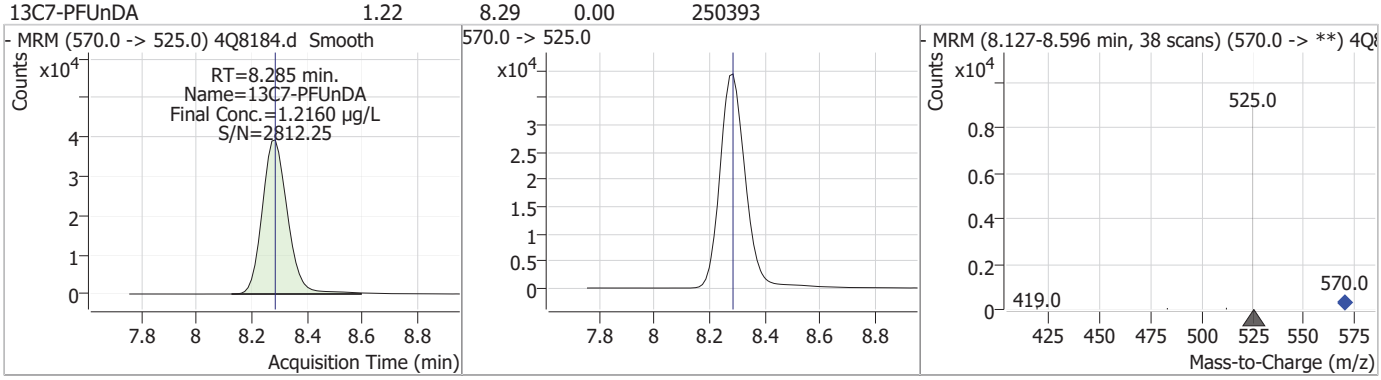
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.55	8.11	0.00	167478				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.67	8.11	0.00	83037 (m)	584.0 -> 483.0	56.4	28.2	84.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.22	8.29	0.00	250393				



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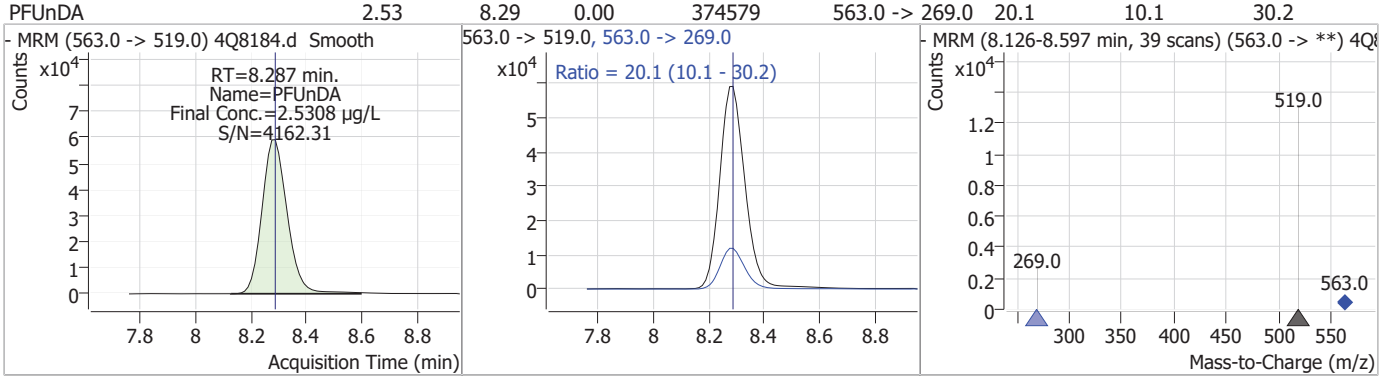
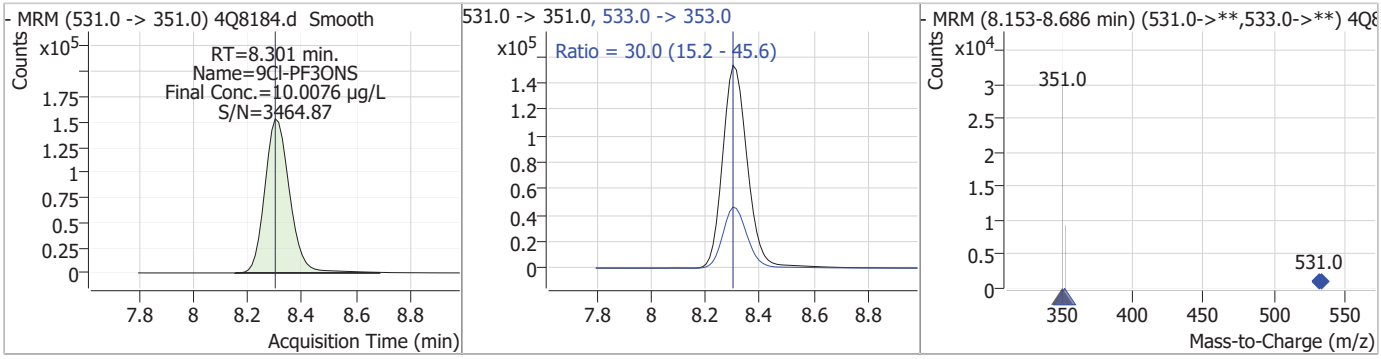
Perfluorinated Compounds by LC/MS/MS

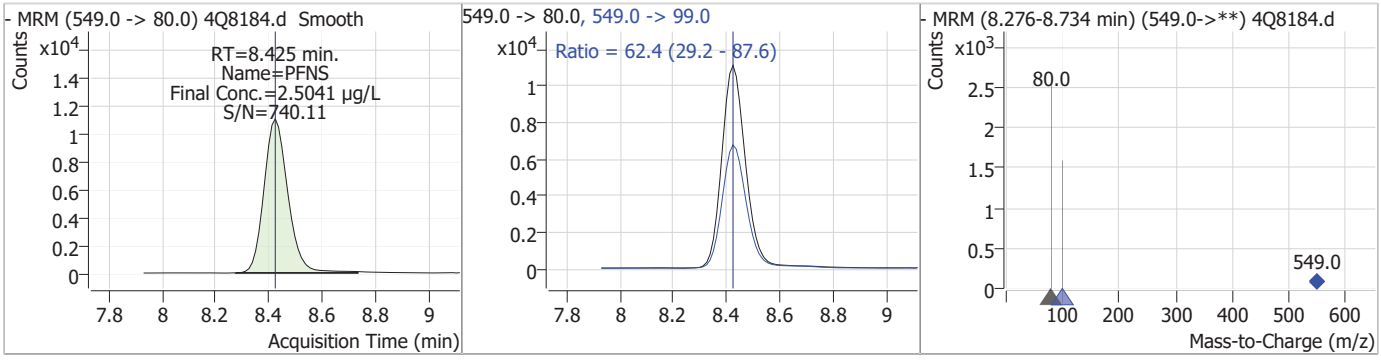
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.53	8.29	0.00	374579	563.0 -> 269.0	20.1	10.1	30.2



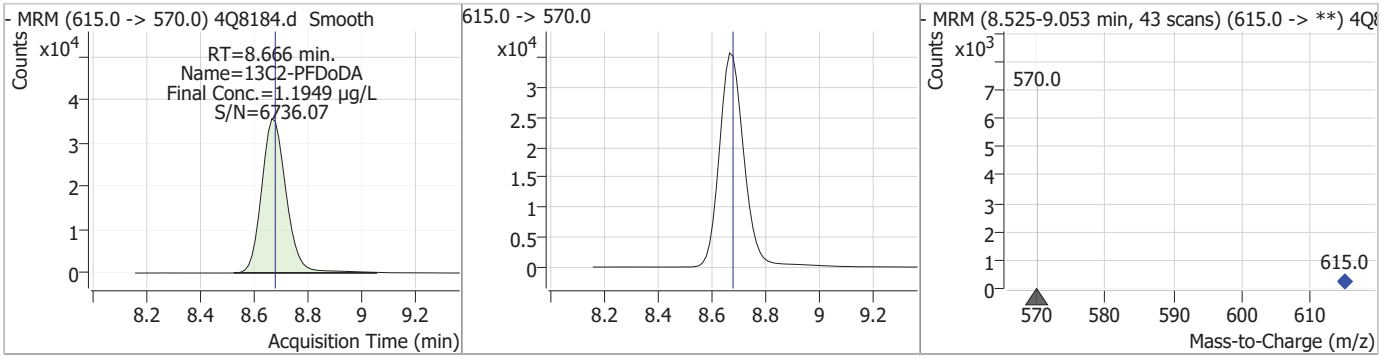
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	10.01	8.30	0.00	975133	533.0 -> 353.0	30.0	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.50	8.42	0.00	69170	549.0 -> 99.0	62.4	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.19	8.67	-0.01	225361				



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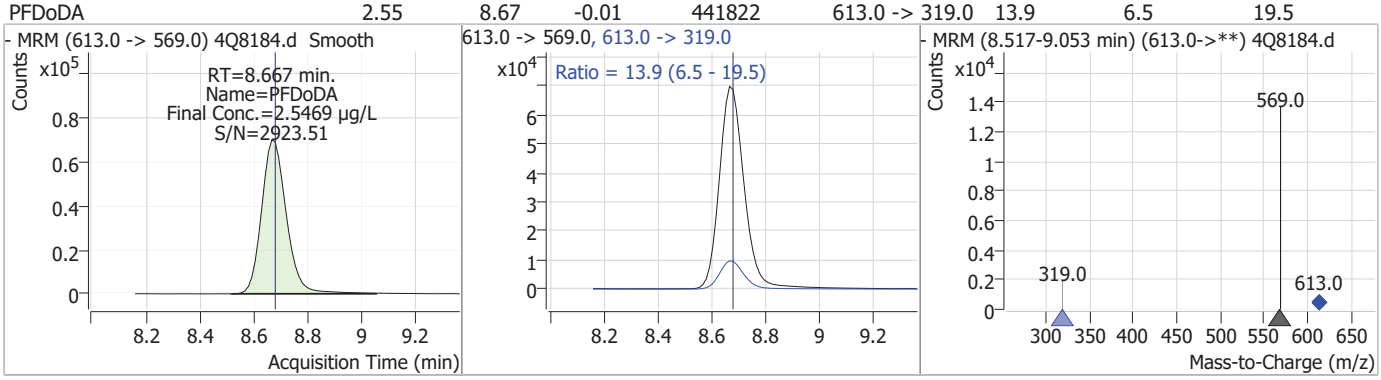
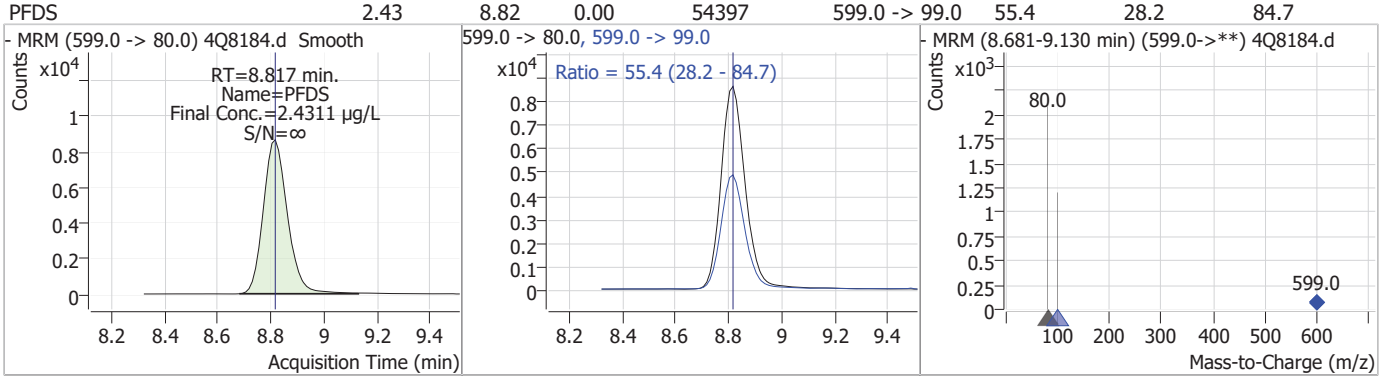
Perfluorinated Compounds by LC/MS/MS

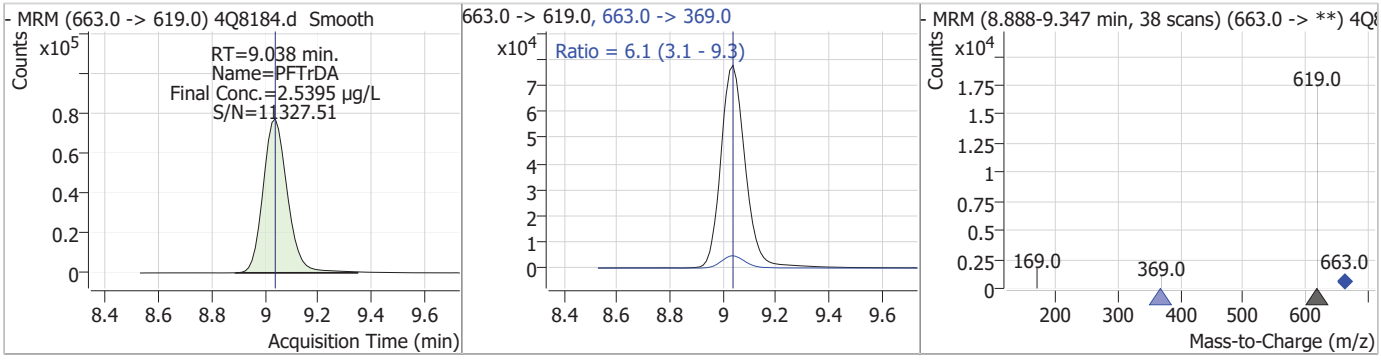
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.55	8.67	-0.01	441822	613.0 -> 319.0	13.9	6.5	19.5



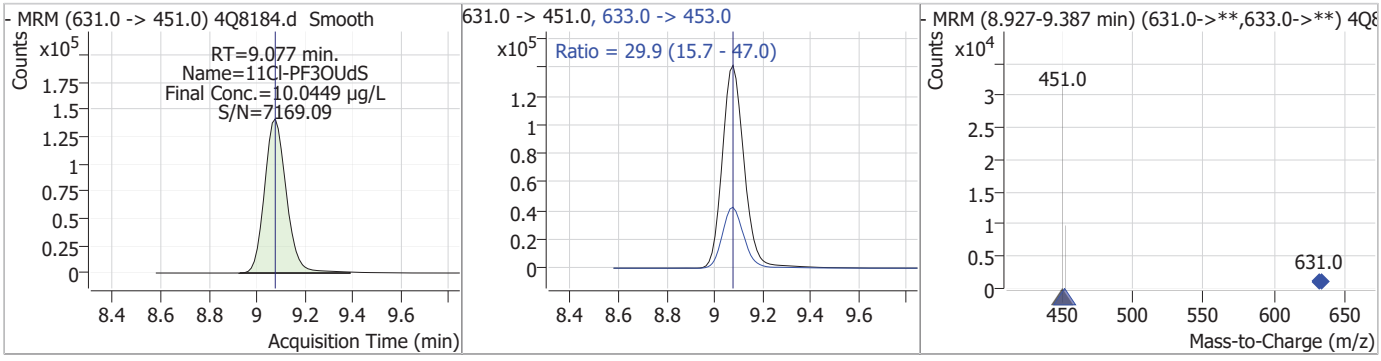
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.43	8.82	0.00	54397	599.0 -> 99.0	55.4	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.54	9.04	0.00	491255	663.0 -> 369.0	6.1	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	10.04	9.08	0.00	889781	633.0 -> 453.0	29.9	15.7	47.0



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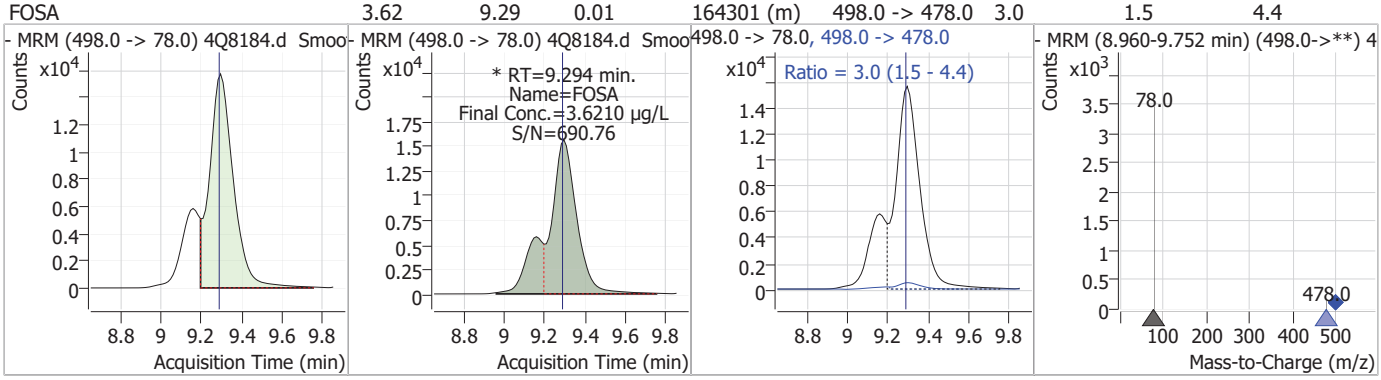
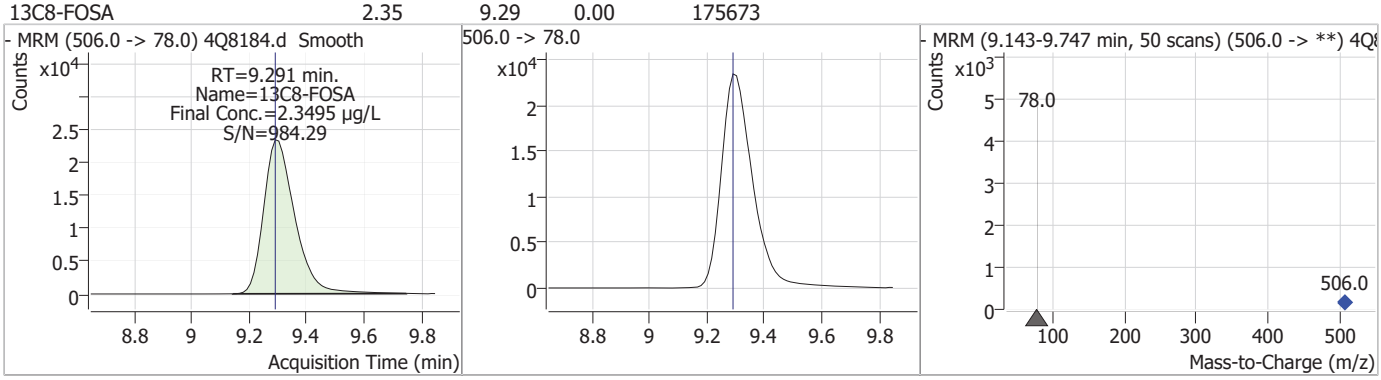
Perfluorinated Compounds by LC/MS/MS

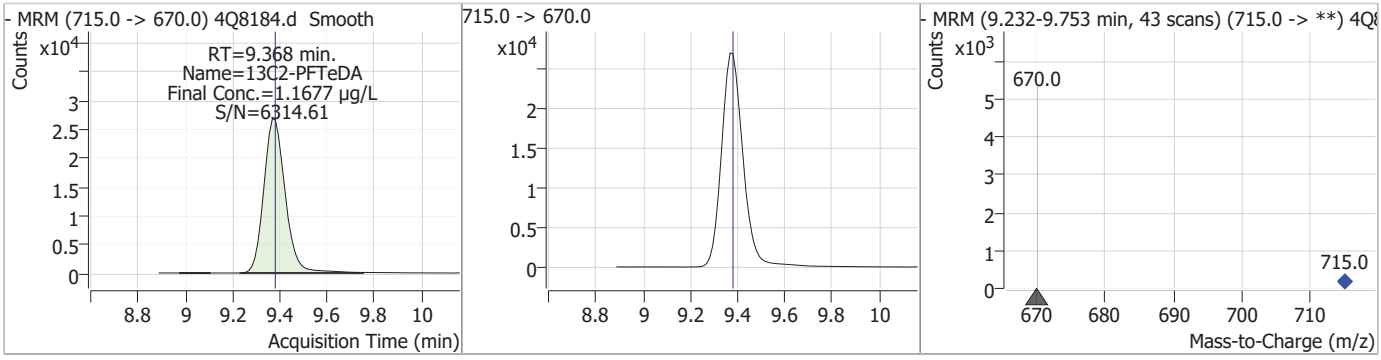
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	3.62	9.29	0.01	164301 (m)	498.0 -> 478.0	3.0	1.5	4.4



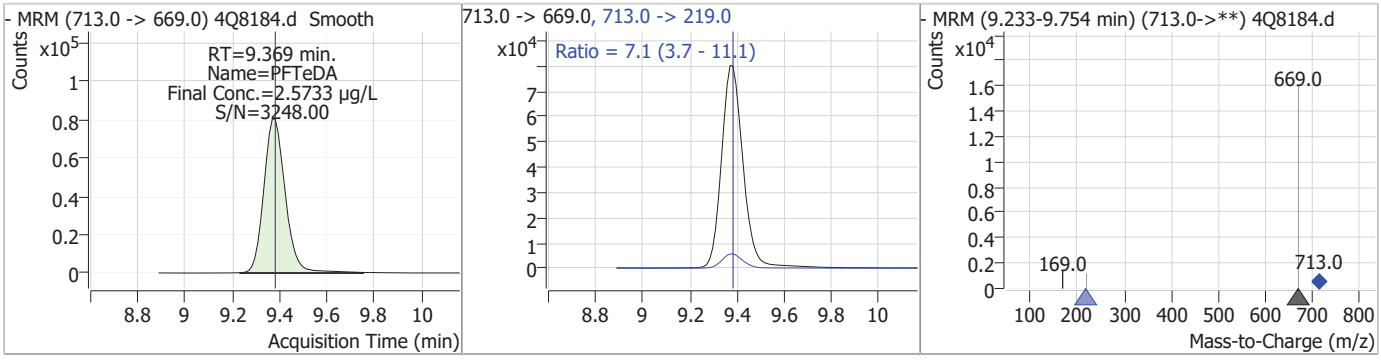
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.35	9.29	0.00	175673				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.17	9.37	-0.01	169310				

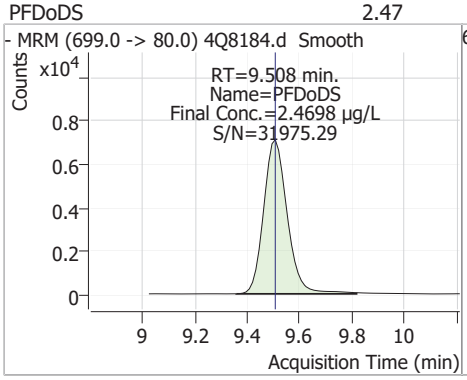


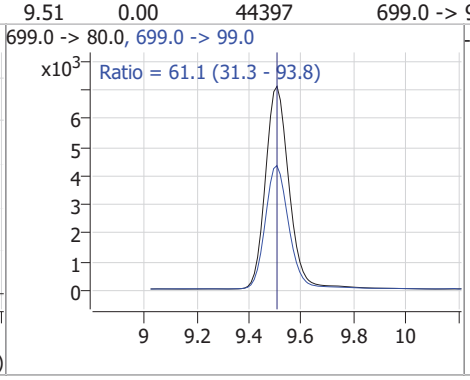
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.57	9.37	-0.01	507270	713.0 -> 219.0	7.1	3.7	11.1

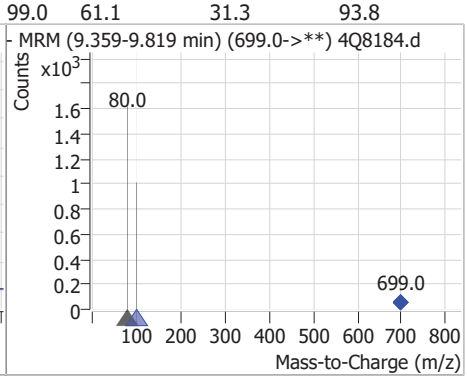


Perfluorinated Compounds by LC/MS/MS

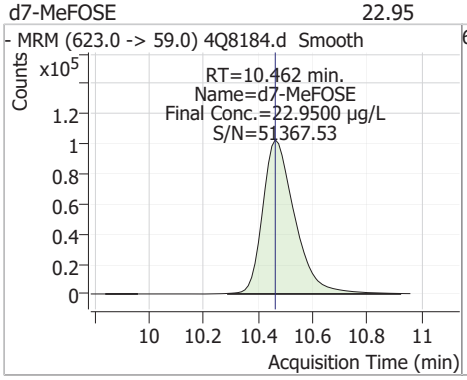
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.47	9.51	0.00	44397	699.0 -> 99.0	61.1	31.3	93.8

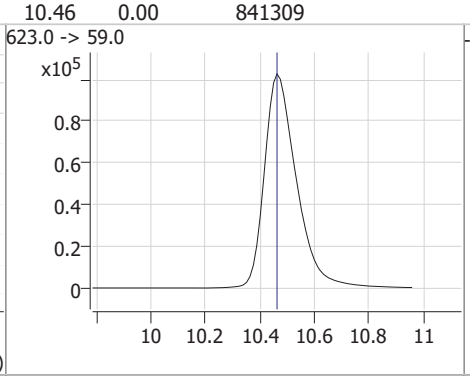


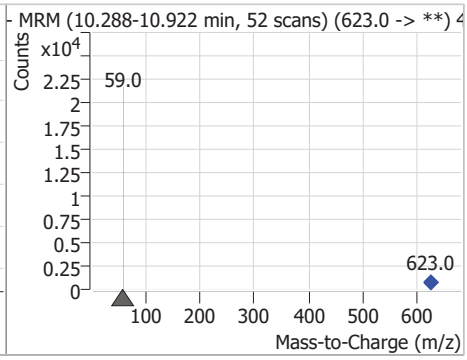




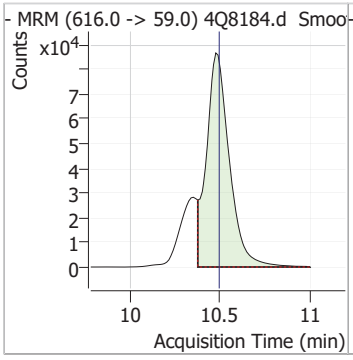
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.95	10.46	0.00	841309				

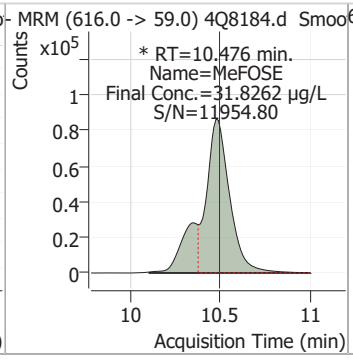


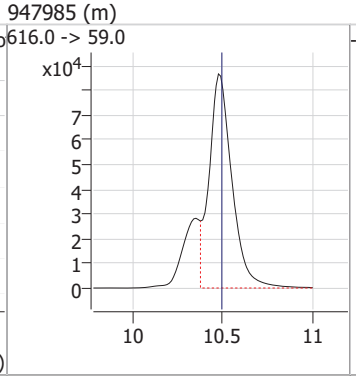


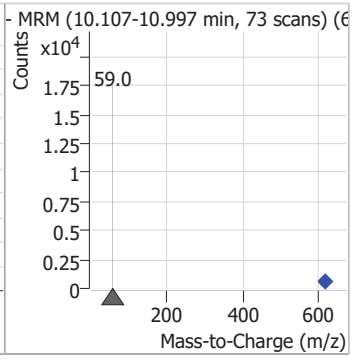


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	31.83	10.48	-0.01	947985 (m)				

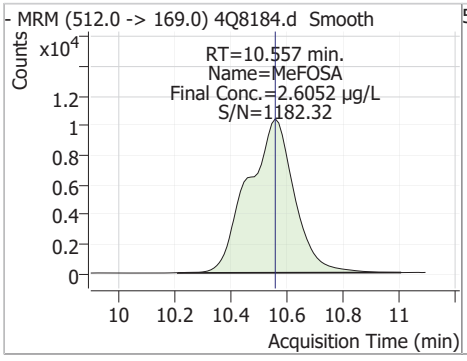


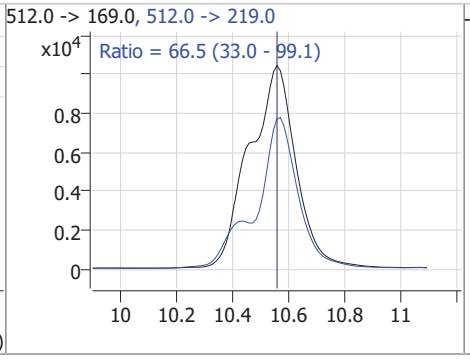


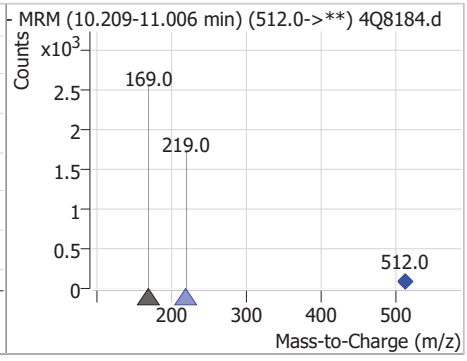




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.61	10.56	0.00	120311	512.0 -> 219.0	66.5	33.0	99.1







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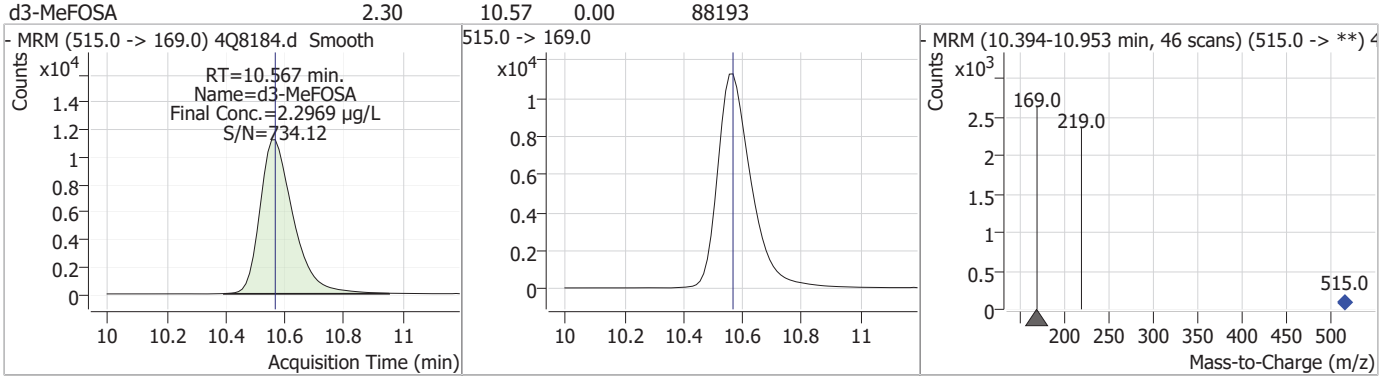
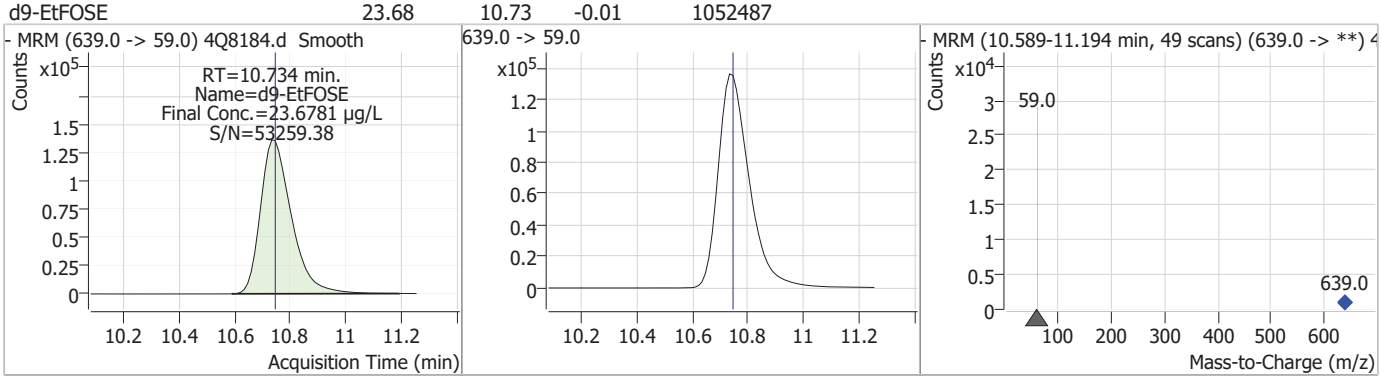
Perfluorinated Compounds by LC/MS/MS

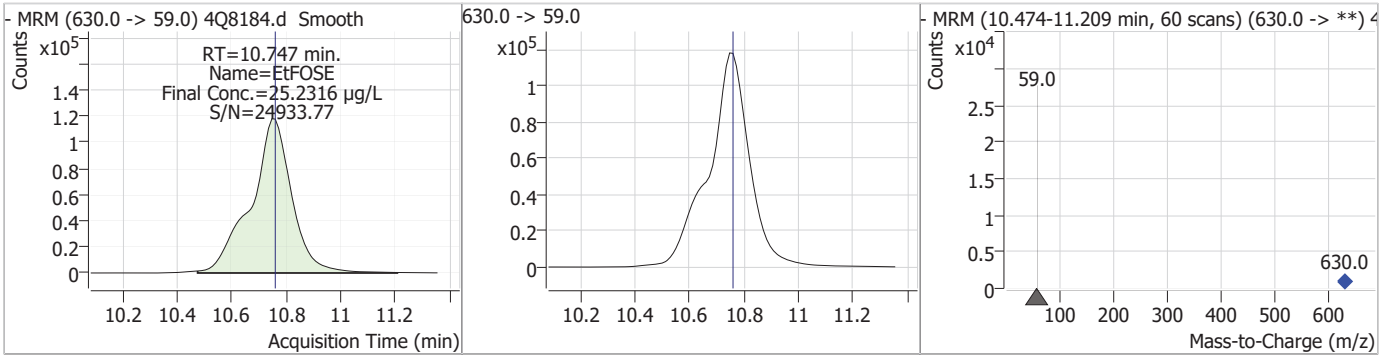
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.30	10.57	0.00	88193				



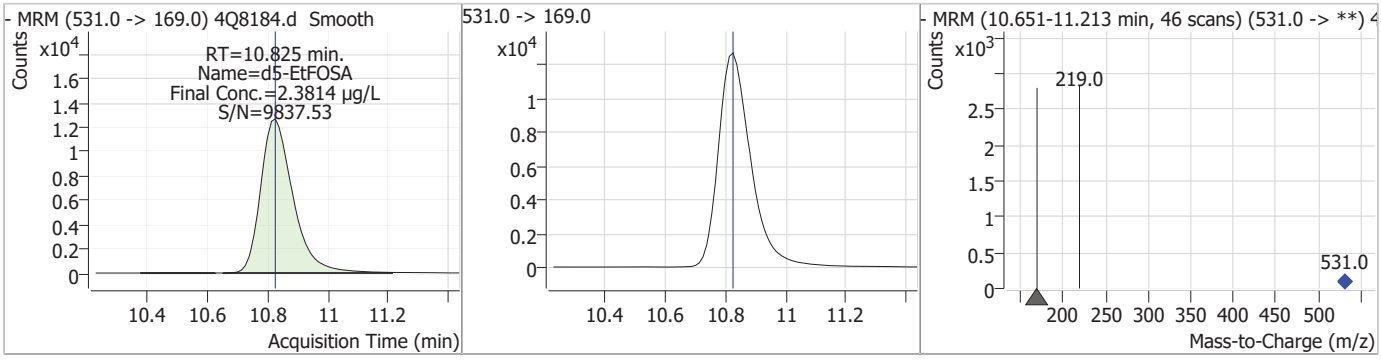
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.68	10.73	-0.01	1052487				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.23	10.75	-0.01	1235253				

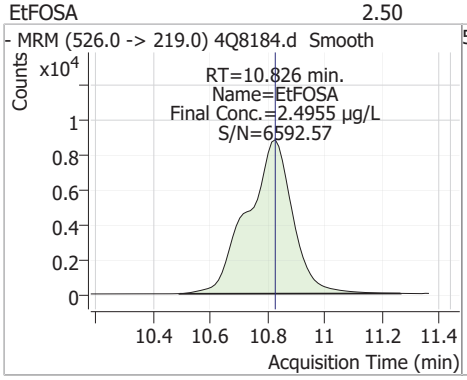


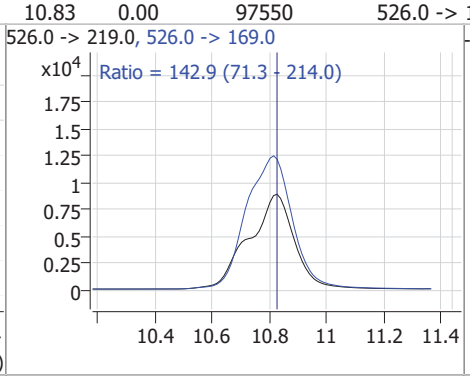
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.38	10.82	0.00	94226				

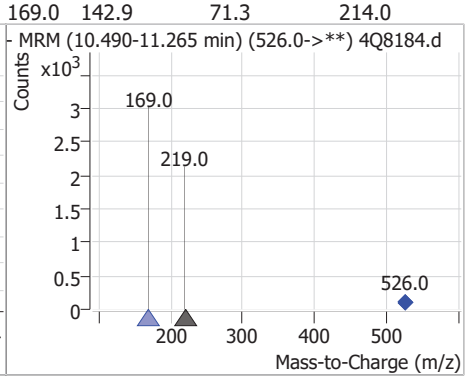


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.50	10.83	0.00	97550	526.0 -> 169.0	142.9	71.3	214.0







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7

Manual Integration Approval Summary

Sample Number: T4Q139-CC137
Lab FileID: 4Q8184.D
Injection Time: 05/01/25 13:04
Method: EPA 1633
Analyst approved: 05/02/25 04:45 Josephus Gimenez
Supervisor approved: 05/02/25 11:54 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.42	Split peak
MeFOSAA	2355-31-9		7.93	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.11	Split peak
PFOSA	754-91-6		9.29	Split peak
MeFOSE	24448-09-7		10.48	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Olga Azarian
05/02/25 12:58

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8200.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/1/2025 4:49:14 PM
Sample Name : CC137-4
Vial : P1-A5
DA Method File : 043025_1633_T4Q138.quantmethod.xml
Batch Name : T4Q139.batch.bin
Sample Information : OP63229,T4Q139,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.871	217.0 -> 172.0	843545	10.00	µg/L	-0.012
M5-PFPeA	4.307	268.0 -> 223.0	447670	5.00	µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	301130	2.50	µg/L	0.000
M4-PFHpA	6.291	367.0 -> 322.0	324363	2.50	µg/L	0.000
M8-PFOA	6.897	421.0 -> 376.0	464117	2.50	µg/L	0.000
M9-PFNA	7.403	472.0 -> 427.0	189970	1.25	µg/L	-0.012
M6-PFDA	7.858	519.0 -> 474.0	178988	1.25	µg/L	0.000
M7-PFUnDA	8.273	570.0 -> 525.0	246724	1.25	µg/L	-0.012
M2-PFDoDA	8.666	615.0 -> 570.0	209985	1.25	µg/L	-0.013
M2-PFTeDA	9.368	715.0 -> 670.0	167561	1.25	µg/L	-0.012
M8-FOSA	9.279	506.0 -> 78.0	167528	2.50	µg/L	-0.012
M3-PFBS	5.355	302.0 -> 99.0	26339	2.50	µg/L	-0.012
		302.0 -> 80.0	66853			
M3-PFHxS	6.986	402.0 -> 99.0	37016	2.50	µg/L	0.000
M8-PFOS	7.995	507.0 -> 99.0	41065	2.50	µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	11333	5.00	µg/L	-0.012
M2-6:2FTS	6.684	429.0 -> 81.0	24748	5.00	µg/L	0.000
M2-8:2FTS	7.671	529.0 -> 81.0	27881	5.00	µg/L	0.000
M3-MeFOSAA	7.915	573.0 -> 419.0	220855	5.00	µg/L	-0.012
M3-HFPO-DA	5.779	287.0 -> 169.0	475481	10.00	µg/L	0.000
M5-EtFOSAA	8.098	589.0 -> 419.0	170483	5.00	µg/L	-0.012
M7-MeFOSE	10.462	623.0 -> 59.0	871146	25.00	µg/L	0.000
M9-EtFOSE	10.734	639.0 -> 59.0	1078502	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	94062	2.50	µg/L	0.000
M3-MeFOSA	10.555	515.0 -> 169.0	87578	2.50	µg/L	-0.012
13C4-PFOS	7.995	503.0 -> 80.0	71851	2.50	µg/L	0.000
13C3-PFBA	2.874	216.0 -> 172.0	384359	5.00	µg/L	0.000
18O2-PFHxS	6.985	403.0 -> 84.0	44853	2.50	µg/L	-0.014
13C4-PFOA	6.898	417.0 -> 372.0	485710	2.50	µg/L	0.000
13C2-PFDA	7.858	515.0 -> 470.0	168876	1.25	µg/L	0.000
13C5-PFNA	7.404	468.0 -> 423.0	196498	1.25	µg/L	-0.012
13C2-PFHxA	5.452	315.0 -> 270.0	293477	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.153	329.0 -> 81.0	11333	5.04	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.8%		
13C2-6:2FTS	6.684	429.0 -> 81.0	24748	5.07	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.4%		
13C2-8:2FTS	7.671	529.0 -> 81.0	27881	4.86	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.1%		
13C2-PFDoDA	8.666	615.0 -> 570.0	209985	1.15	µg/L	-0.013
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.0%		
13C2-PFTeDA	9.368	715.0 -> 670.0	167561	1.19	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.5%		
13C3-PFBS	5.355	302.0 -> 99.0	26339	2.38	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.2%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.986	402.0 -> 99.0	37016	2.36	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.5%			
13C4-PFBA	2.871	217.0 -> 172.0	843545	9.57	µg/L		-0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.7%			
13C4-PFHpA	6.291	367.0 -> 322.0	324363	2.46	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.3%			
13C5-PFHxA	5.452	318.0 -> 273.0	301130	2.42	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.0%			
13C5-PFPeA	4.307	268.0 -> 223.0	447670	4.75	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.0%			
13C6-PFDA	7.858	519.0 -> 474.0	178988	1.20	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.0%			
13C7-PFUnDA	8.273	570.0 -> 525.0	246724	1.24	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.0%			
13C8-FOSA	9.279	506.0 -> 78.0	167528	2.27	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.8%			
13C8-PFOA	6.897	421.0 -> 376.0	464117	2.39	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.6%			
13C8-PFOS	7.995	507.0 -> 99.0	41065	2.37	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.9%			
13C9-PFNA	7.403	472.0 -> 427.0	189970	1.17	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.2%			
d3-MeFOSAA	7.915	573.0 -> 419.0	220855	4.67	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.3%			
13C3-HFPO-DA	5.779	287.0 -> 169.0	475481	9.75	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 97.5%			
d3-MeFOSA	10.555	515.0 -> 169.0	87578	2.31	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.4%			
d5-EtFOSAA	8.098	589.0 -> 419.0	170483	4.69	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.8%			
d7-MeFOSE	10.462	623.0 -> 59.0	871146	24.07	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 96.3%			
d9-EtFOSE	10.734	639.0 -> 59.0	1078502	24.58	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 98.3%			
d5-EtFOSA	10.825	531.0 -> 169.0	94062	2.41	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.3%			
Target Compounds							QValue
4:2FTS	5.154	327.0 -> 307.0	207435	9.97	µg/L		97
		327.0 -> 81.0	92971				
6:2FTS	6.684	427.0 -> 407.0	237357	9.56	µg/L		99
		427.0 -> 81.0	112458				
8:2FTS	7.671	527.0 -> 507.0	236980	10.86	µg/L		99
		527.0 -> 81.0	91173				
EtFOSAA	8.099	584.0 -> 419.0	79364	2.51	µg/L	m	99
		584.0 -> 483.0	43979				
FOSA	9.269	498.0 -> 78.0	154677	3.57	µg/L	m	98
		498.0 -> 478.0	3828				
MeFOSAA	7.917	570.0 -> 419.0	97378	2.57	µg/L	m	100
		570.0 -> 512.0	36022				
PFBA	2.877	213.0 -> 169.0	259251	10.05	µg/L		100
PFBS	5.357	299.0 -> 80.0	67339	2.24	µg/L		98
		299.0 -> 99.0	28368				
PFDA	7.859	513.0 -> 469.0	346974	2.55	µg/L		99
		513.0 -> 219.0	79629				
PFDoDA	8.667	613.0 -> 569.0	427819	2.65	µg/L		100
		613.0 -> 319.0	56222				

Perfluorinated Compounds by LC/MS/MS

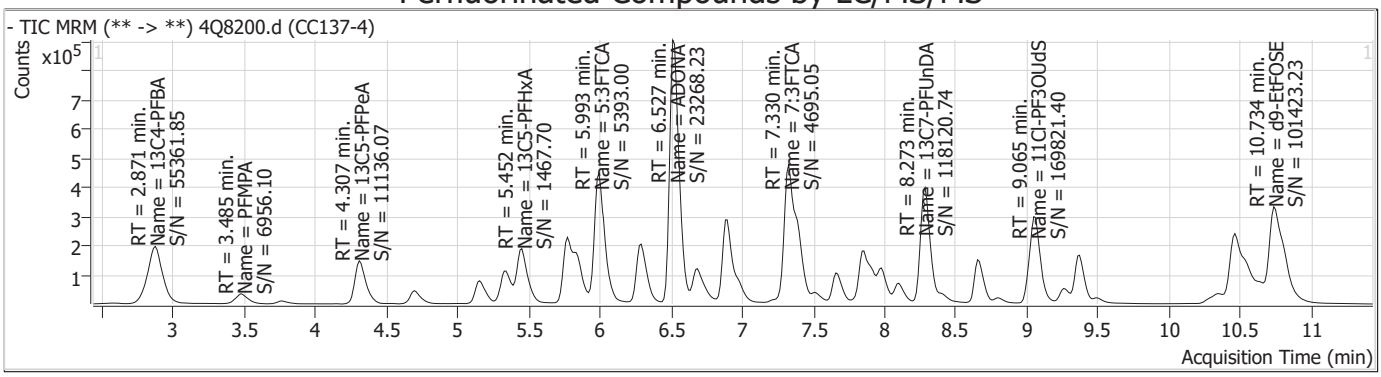
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.804	599.0 -> 80.0	49997	2.27	µg/L		97
		599.0 -> 99.0	29264				
PFHpA	6.292	363.0 -> 319.0	489362	2.48	µg/L		99
		363.0 -> 169.0	98599				
PFHpS	7.529	449.0 -> 80.0	78432	2.45	µg/L		98
		449.0 -> 99.0	41878				
PFHxA	5.455	313.0 -> 269.0	330390	2.55	µg/L		100
		313.0 -> 119.0	11140				
PFHxS	6.987	399.0 -> 80.0	74995	2.80	µg/L	m	97
		399.0 -> 99.0	38509				
PFNA	7.404	463.0 -> 419.0	296045	2.95	µg/L	m	96
		463.0 -> 219.0	103538				
PFNS	8.412	549.0 -> 80.0	68513	2.48	µg/L		99
		549.0 -> 99.0	39542				
PFOA	6.898	413.0 -> 369.0	386961	3.18	µg/L	m	100
		413.0 -> 169.0	113253				
PFOS	7.996	499.0 -> 80.0	74470	2.92	µg/L	m	98
		499.0 -> 99.0	39399				
PFPeA	4.309	263.0 -> 219.0	365289	5.16	µg/L		100
PFPeS	6.331	349.0 -> 80.0	78158	2.38	µg/L		98
		349.0 -> 99.0	40467				
PFTeDA	9.369	713.0 -> 669.0	492373	2.52	µg/L		99
		713.0 -> 219.0	35283				
PFTrDA	9.025	663.0 -> 619.0	467109	2.59	µg/L		99
		663.0 -> 369.0	30040				
PFUnDA	8.275	563.0 -> 519.0	379318	2.60	µg/L		99
		563.0 -> 269.0	77131				
11Cl-PF3OUdS	9.065	631.0 -> 451.0	829558	9.17	µg/L		98
		633.0 -> 453.0	251927				
9Cl-PF3ONS	8.301	531.0 -> 351.0	970792	9.76	µg/L		99
		533.0 -> 353.0	291599				
ADONA	6.527	377.0 -> 251.0	3258203	9.20	µg/L		100
		377.0 -> 85.0	1067494				
HFPO-DA	5.780	285.0 -> 169.0	524426	10.49	µg/L		99
		285.0 -> 185.0	56391				
3:3FTCA	3.769	241.0 -> 177.0	51292	12.13	µg/L		100
		241.0 -> 117.0	4075				
5:3FTCA	5.993	341.0 -> 237.0	1348221	59.80	µg/L		100
		341.0 -> 217.0	950155				
7:3FTCA	7.330	441.0 -> 337.0	1702039	57.01	µg/L		100
		441.0 -> 317.0	773807				
EtFOSA	10.826	526.0 -> 219.0	96113	2.46	µg/L		98
		526.0 -> 169.0	134567				
EtFOSE	10.747	630.0 -> 59.0	1278016	25.48	µg/L		100
MeFOSA	10.557	512.0 -> 169.0	118312	2.58	µg/L		98
		512.0 -> 219.0	76695				
MeFOSE	10.476	616.0 -> 59.0	962254	31.20	µg/L	m	100
PFDoDS	9.496	699.0 -> 80.0	42747	2.38	µg/L		98
		699.0 -> 99.0	27276				
NFDHA	5.345	295.0 -> 201.0	83626	4.91	µg/L		97
		201.0 -> 85.0	345700				
		295.0 -> 85.0	22982				
PFMBA	4.698	279.0 -> 85.0	239326	4.96	µg/L		100
PFMPA	3.485	229.0 -> 85.0	211075	5.20	µg/L		100
PFEESA	5.849	315.0 -> 135.0	548250	4.60	µg/L		99
		315.0 -> 69.0	43944				

Perfluorinated Compounds by LC/MS/MS

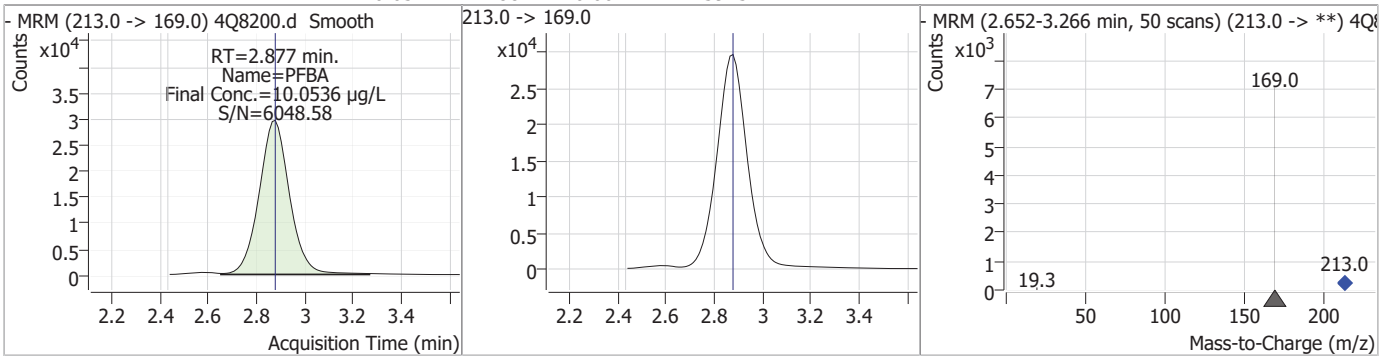
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

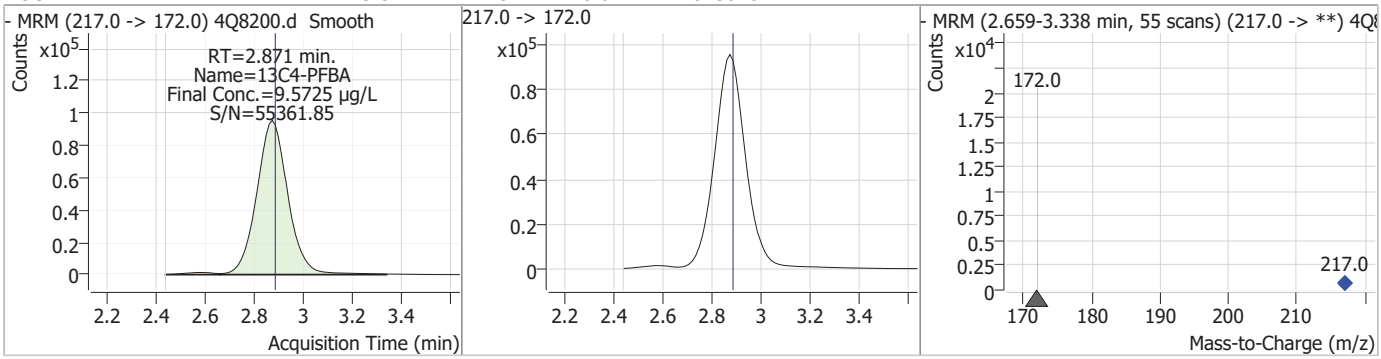
Perfluorinated Compounds by LC/MS/MS



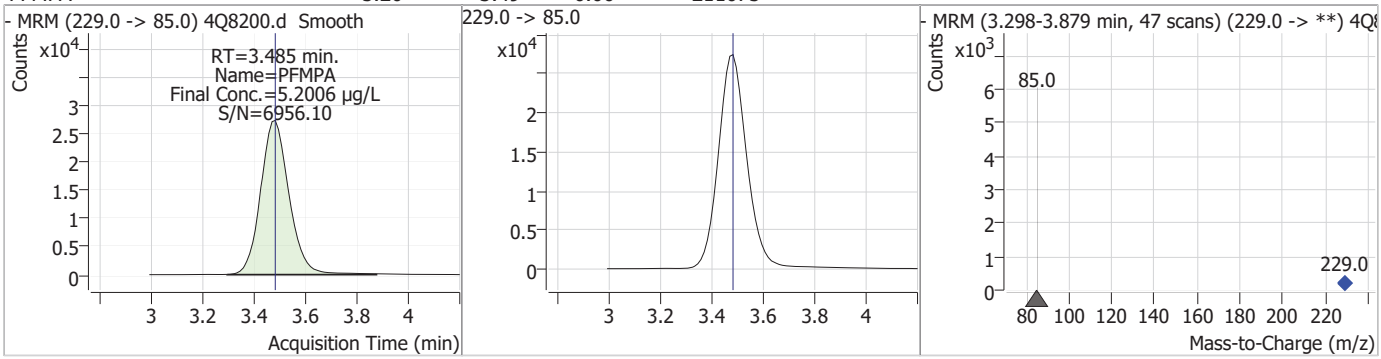
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	10.05	2.88	0.00	259251				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.57	2.87	-0.01	843545				

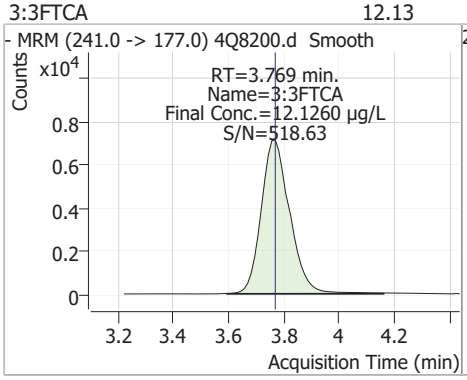


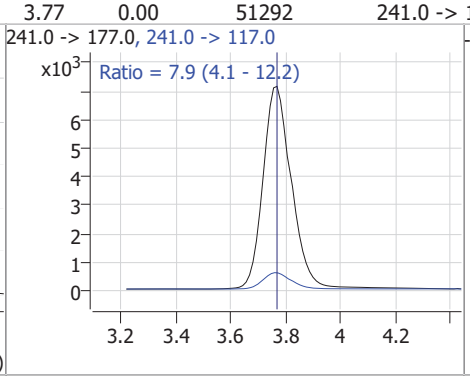
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	5.20	3.49	0.00	211075				

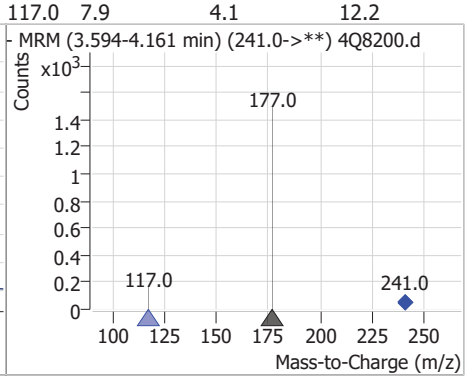


Perfluorinated Compounds by LC/MS/MS

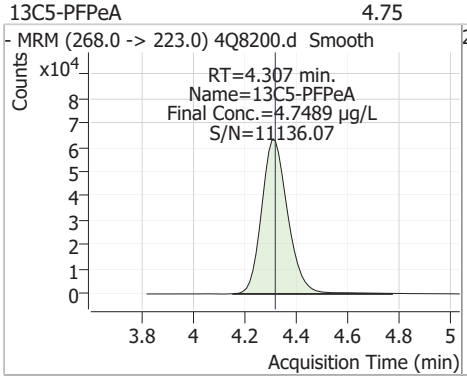
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.13	3.77	0.00	51292	241.0 -> 117.0	7.9	4.1	12.2

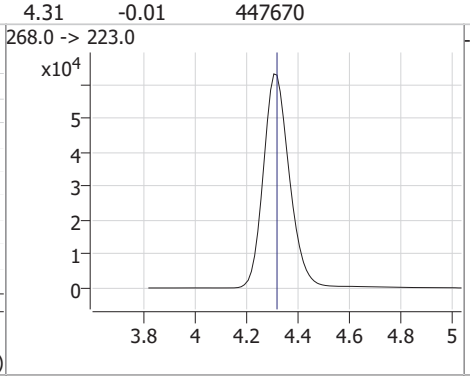


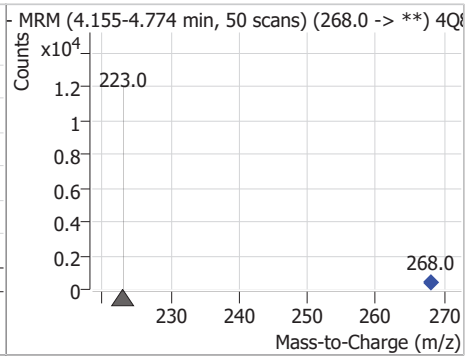




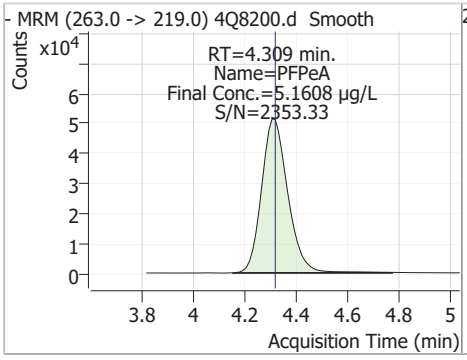
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.75	4.31	-0.01	447670				

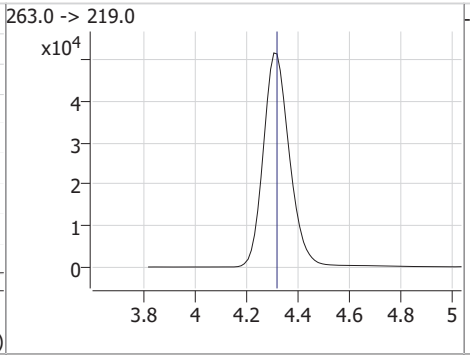


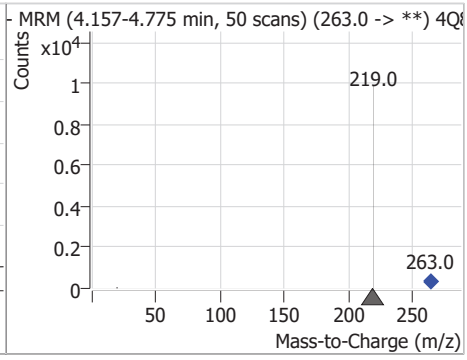




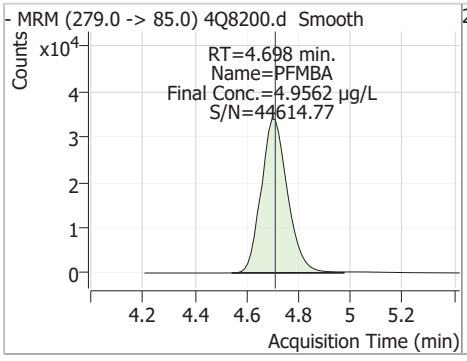
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.16	4.31	-0.01	365289				

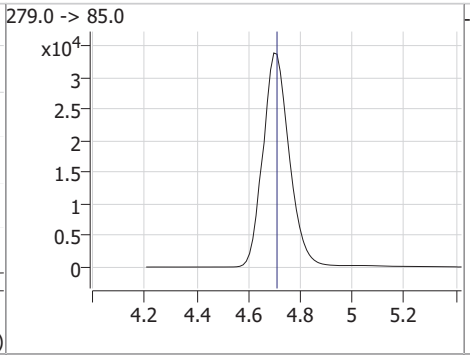


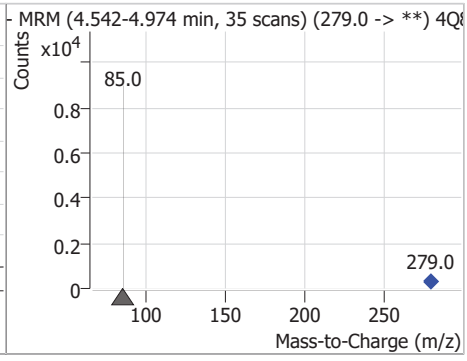




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.96	4.70	-0.01	239326				







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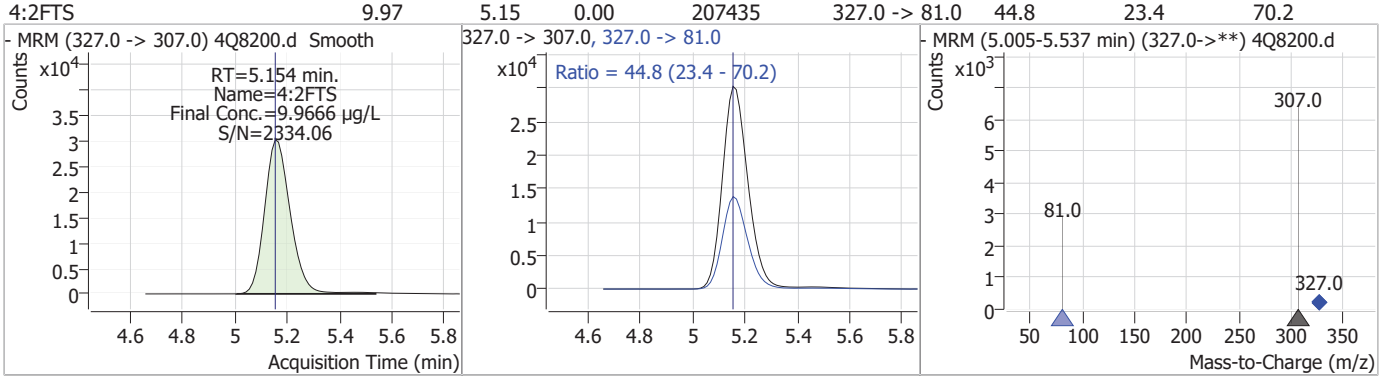
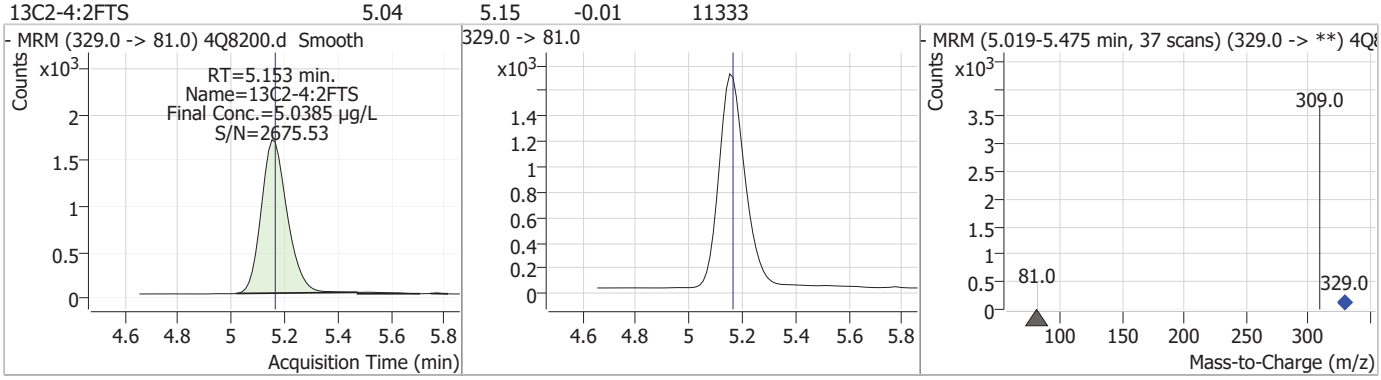
Perfluorinated Compounds by LC/MS/MS

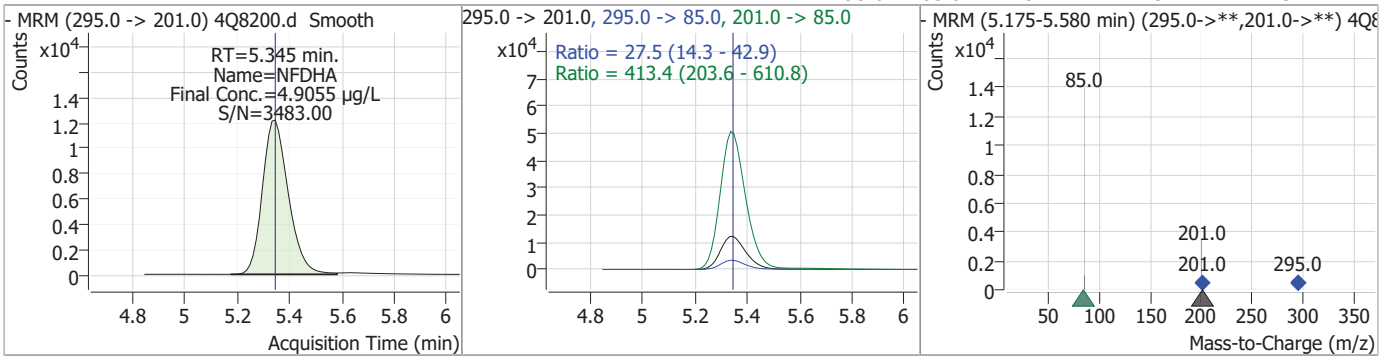
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.97	5.15	0.00	207435	327.0 -> 81.0	44.8	23.4	70.2



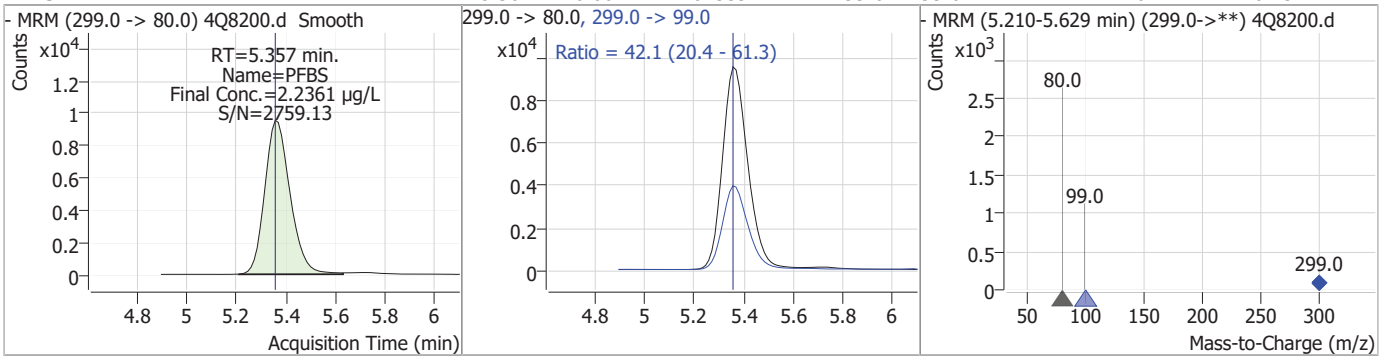
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.04	5.15	-0.01	11333				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	4.91	5.35	0.00	83626	201.0 -> 85.0	413.4	203.6	610.8
					295.0 -> 85.0	27.5	14.3	42.9

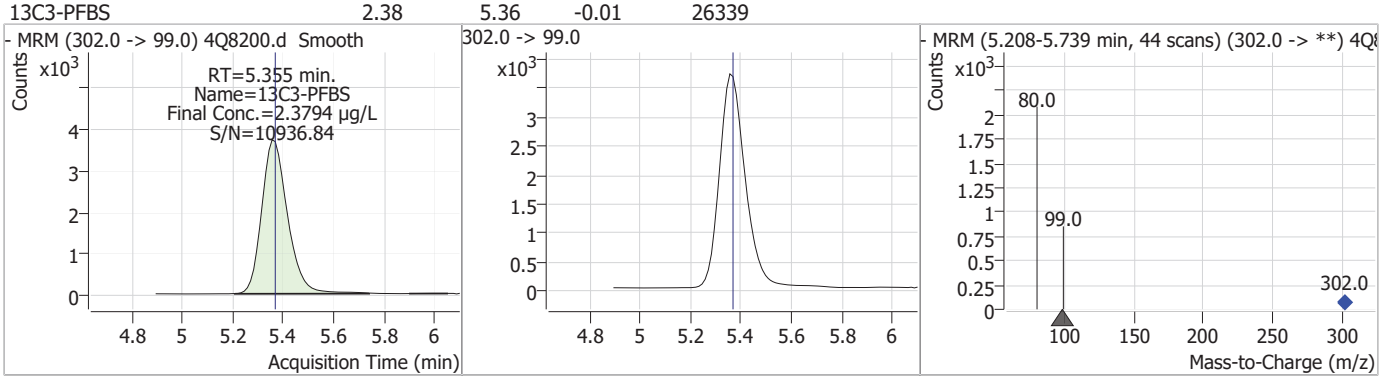


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.24	5.36	0.00	67339	299.0 -> 99.0	42.1	20.4	61.3

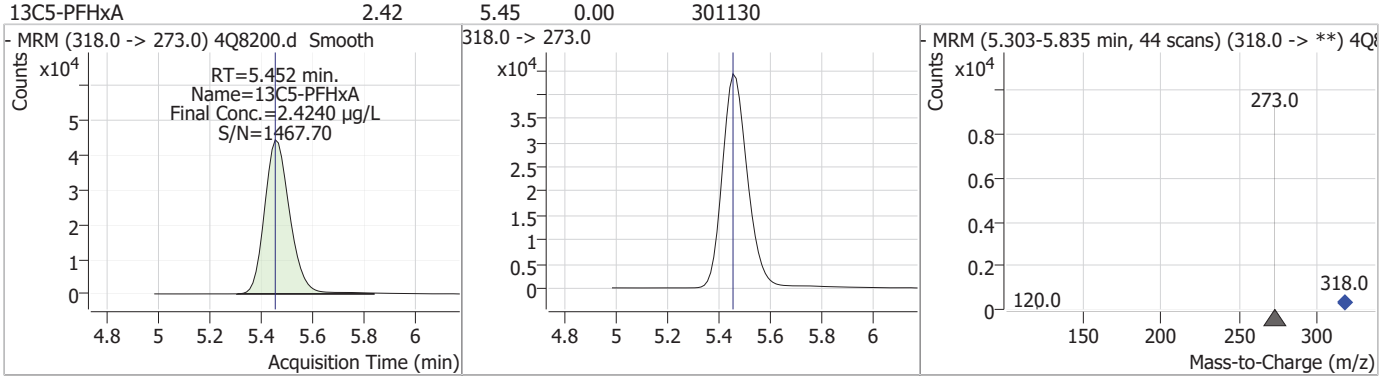


Perfluorinated Compounds by LC/MS/MS

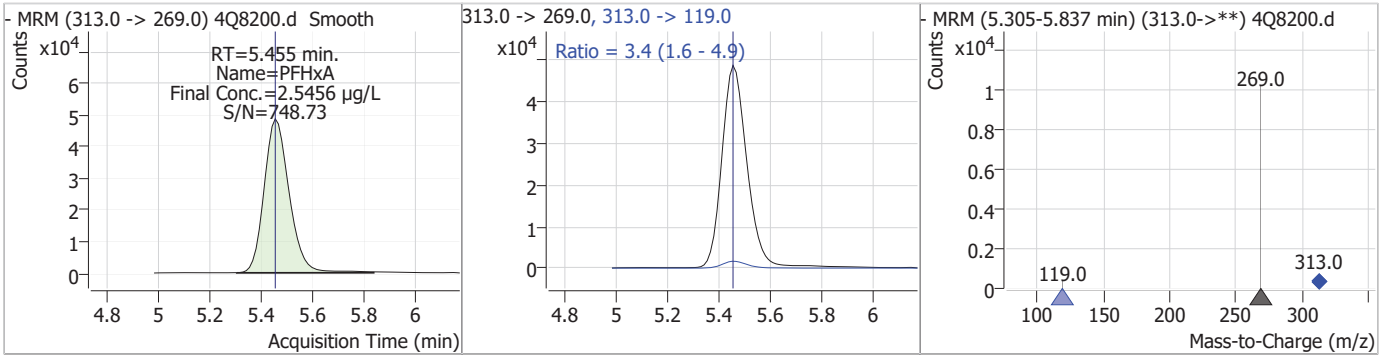
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.38	5.36	-0.01	26339				



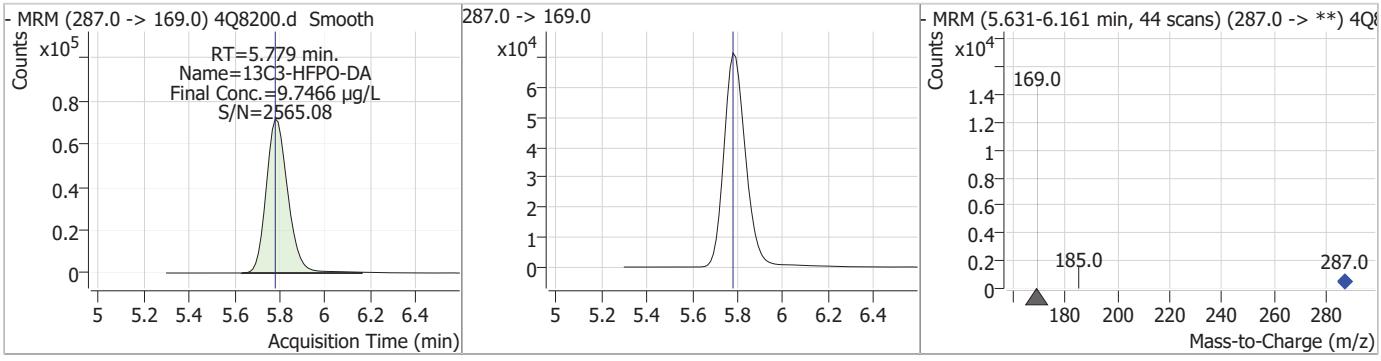
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.42	5.45	0.00	301130				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.55	5.45	0.00	330390	313.0 -> 119.0	3.4	1.6	4.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.75	5.78	0.00	475481				



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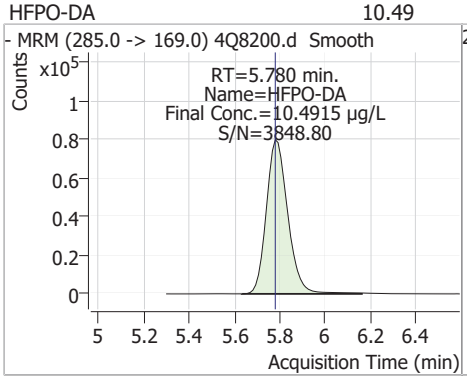
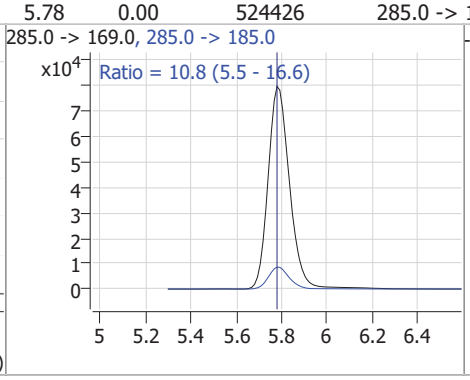
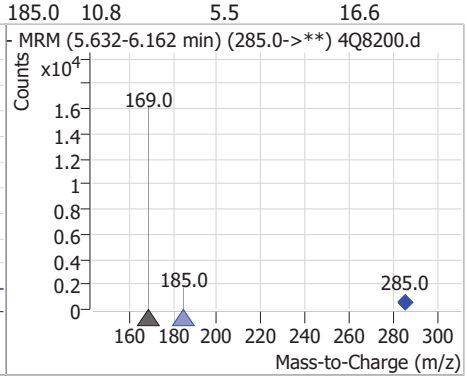
Perfluorinated Compounds by LC/MS/MS

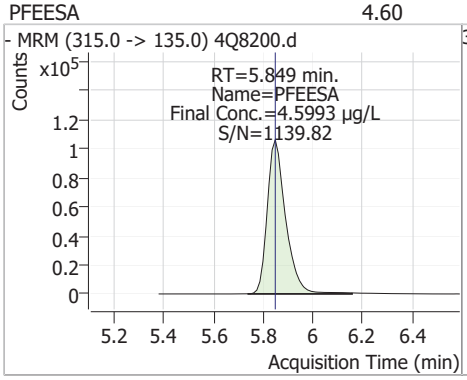
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.49	5.78	0.00	524426	285.0 -> 185.0	10.8	5.5	16.6

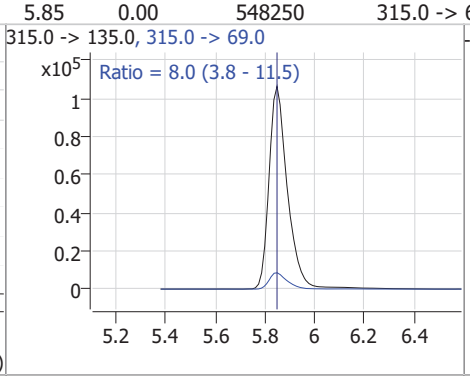


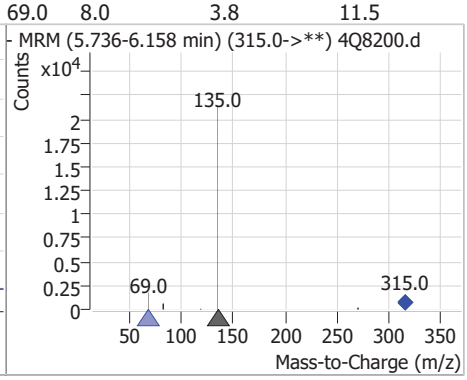




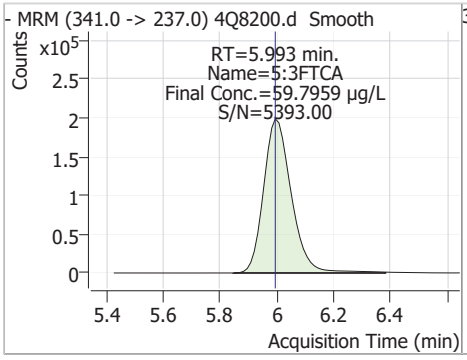
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.60	5.85	0.00	548250	315.0 -> 69.0	8.0	3.8	11.5

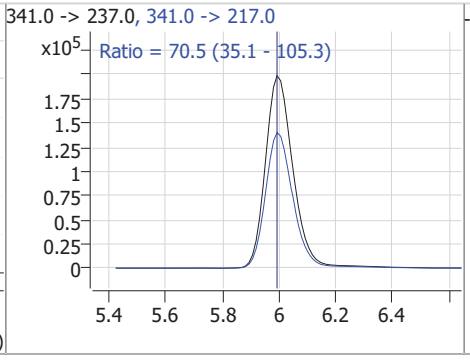


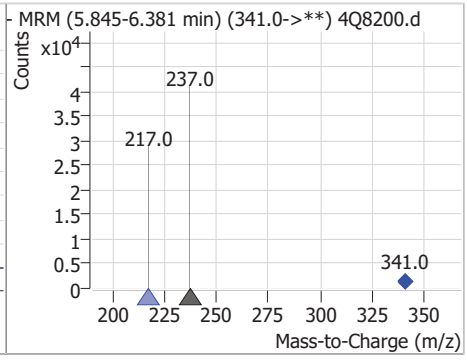




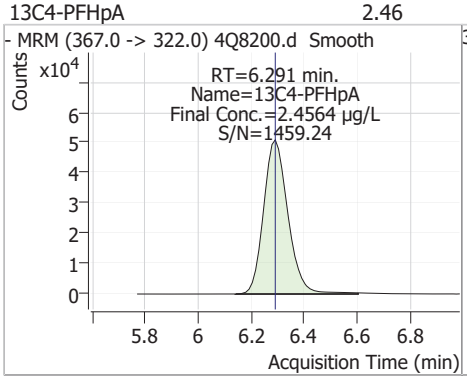
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	59.80	5.99	0.00	1348221	341.0 -> 217.0	70.5	35.1	105.3

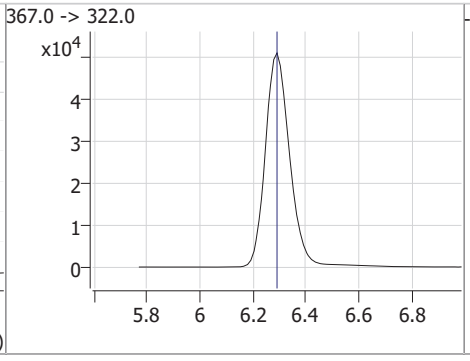


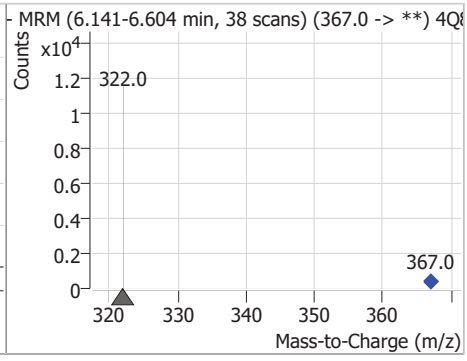




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.46	6.29	0.00	324363				







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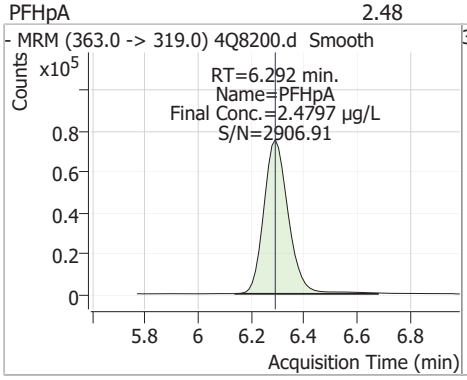
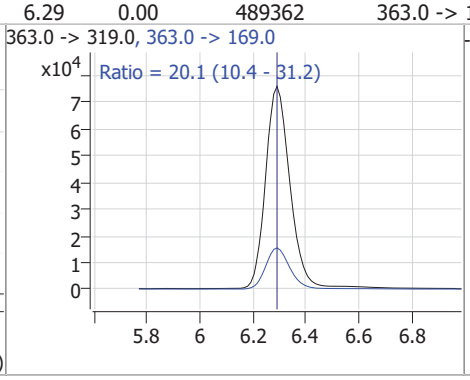
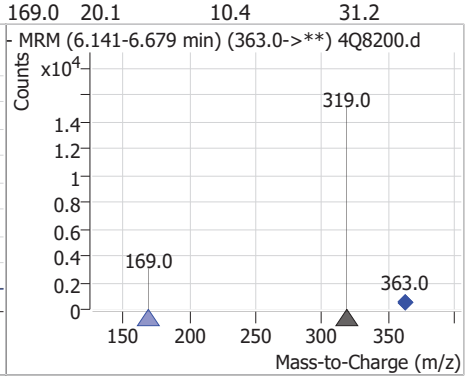
Perfluorinated Compounds by LC/MS/MS

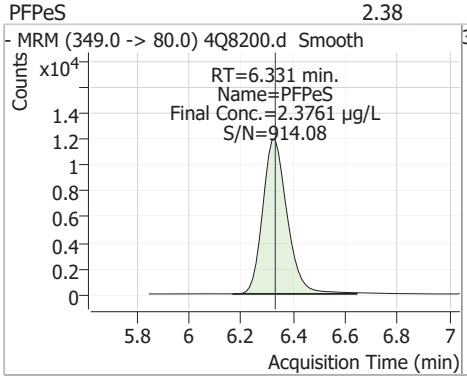
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.48	6.29	0.00	489362	363.0 -> 169.0	20.1	10.4	31.2

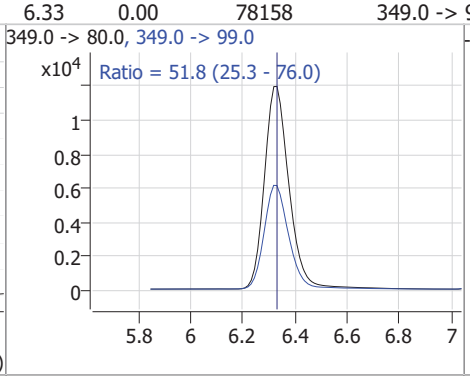


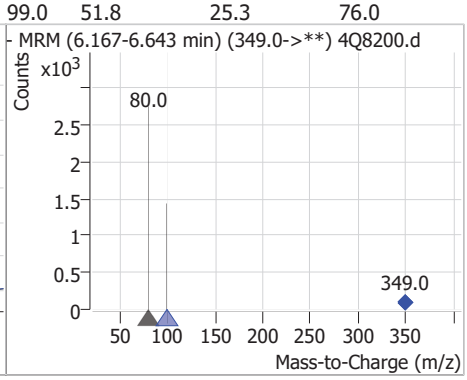




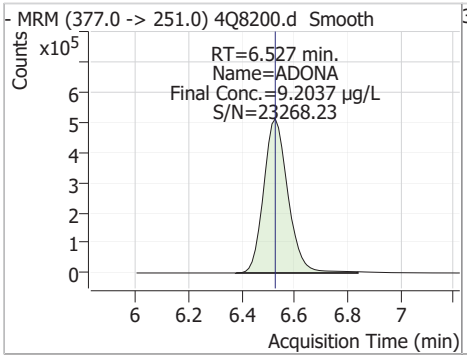
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.38	6.33	0.00	78158	349.0 -> 99.0	51.8	25.3	76.0

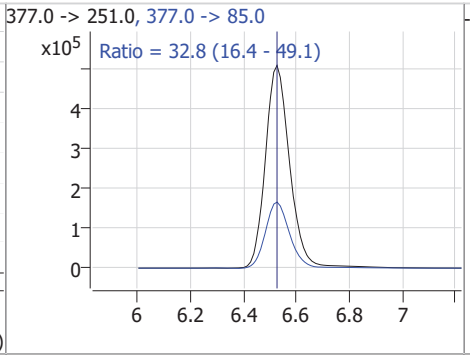


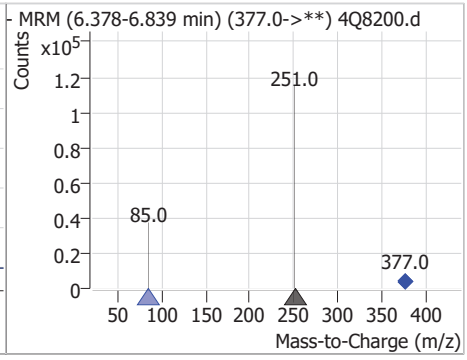




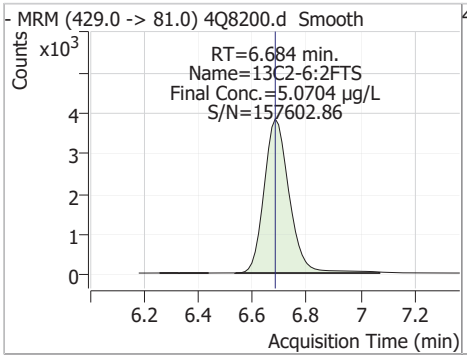
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	9.20	6.53	0.00	3258203	377.0 -> 85.0	32.8	16.4	49.1

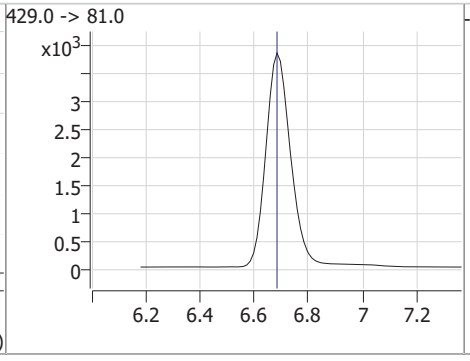


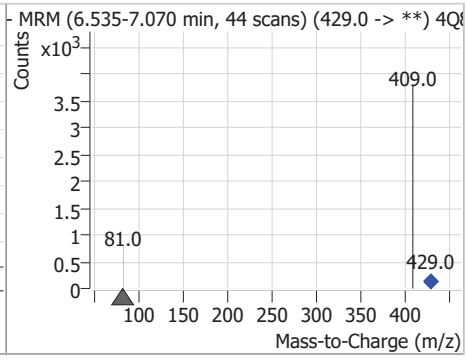




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.07	6.68	0.00	24748				







7.6.90

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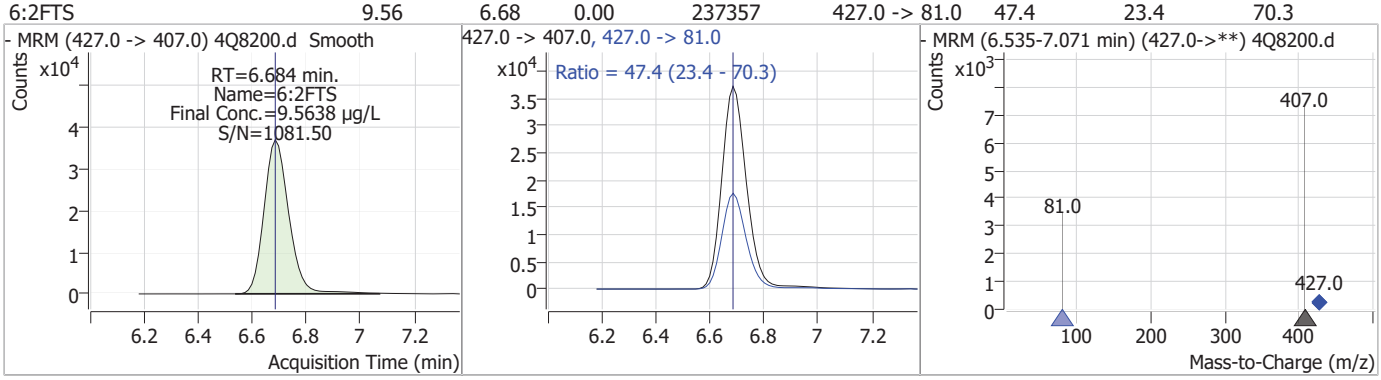
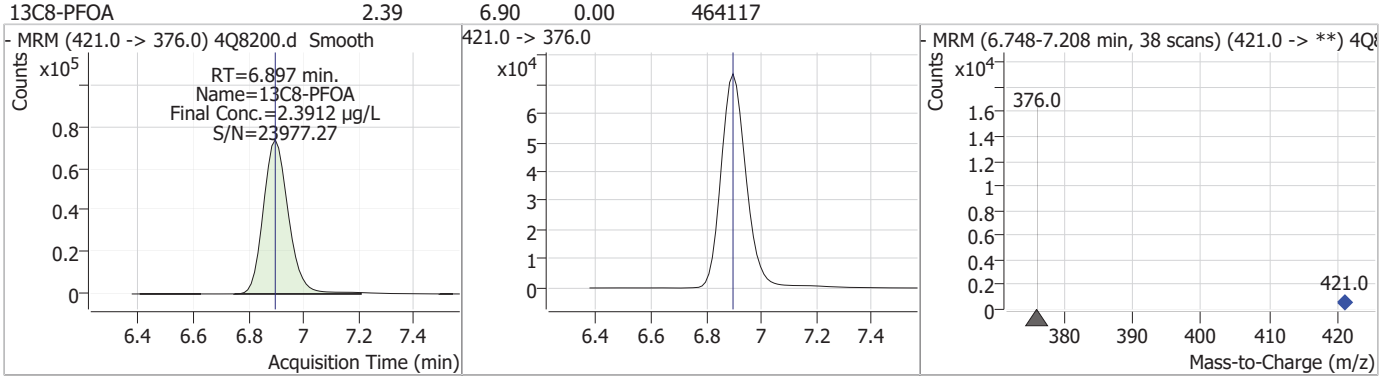
Perfluorinated Compounds by LC/MS/MS

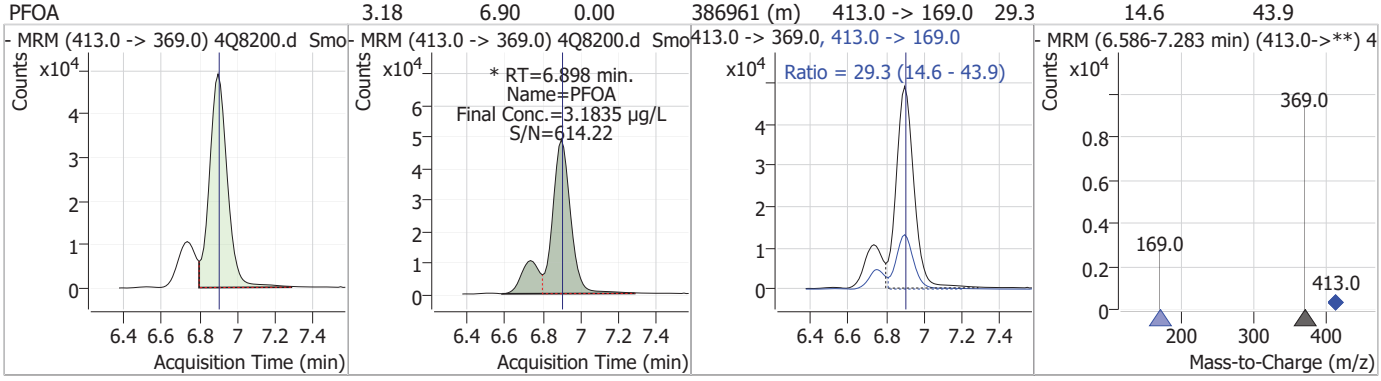
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.56	6.68	0.00	237357	427.0 -> 81.0	47.4	23.4	70.3



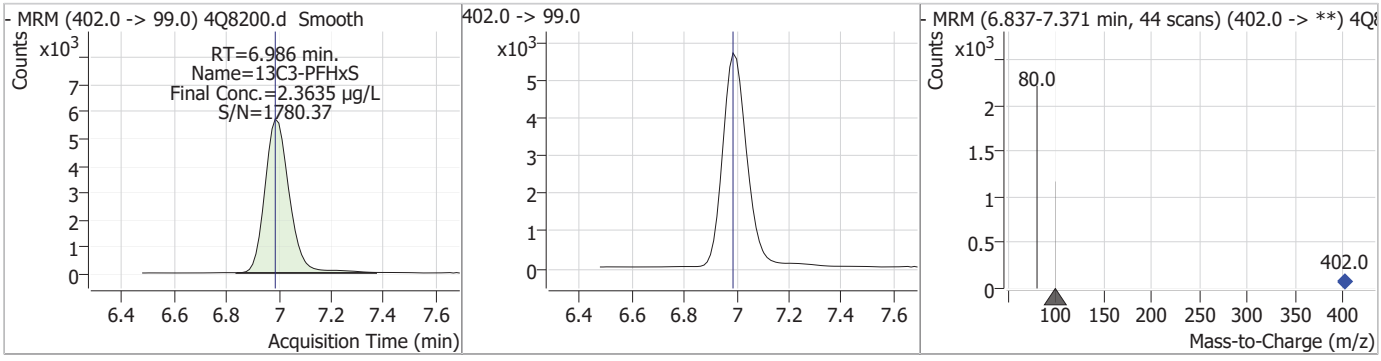
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.39	6.90	0.00	464117				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	3.18	6.90	0.00	386961 (m)	413.0 -> 169.0	29.3	14.6	43.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.36	6.99	0.00	37016				



7.6.90

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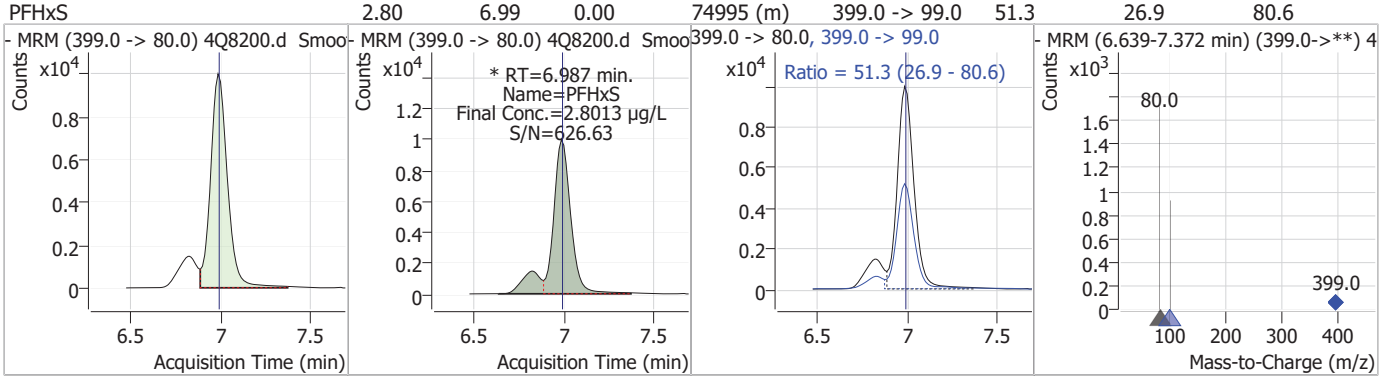
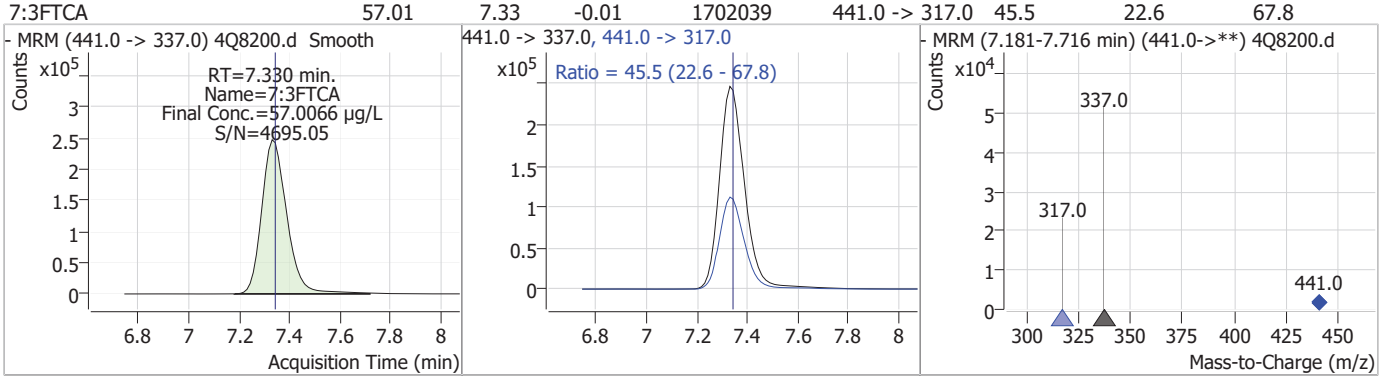
Perfluorinated Compounds by LC/MS/MS

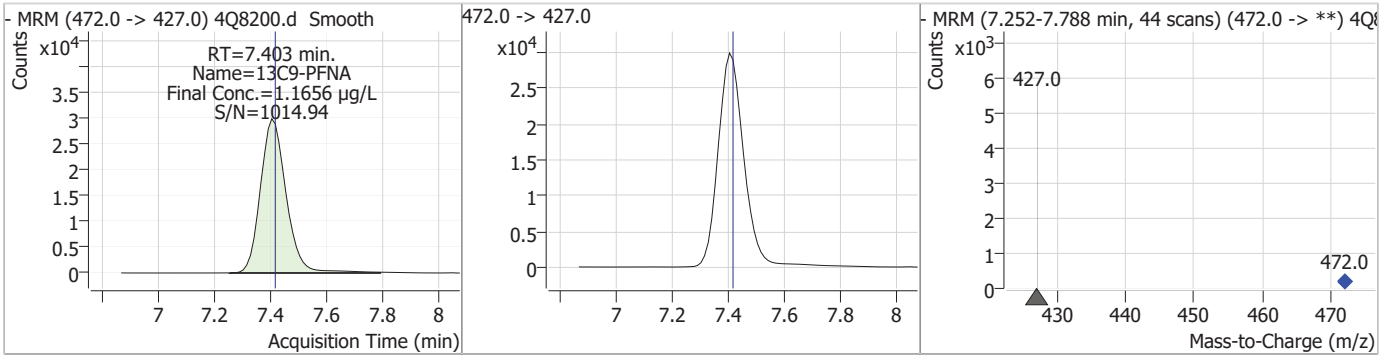
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.80	6.99	0.00	74995 (m)	399.0 -> 99.0	51.3	26.9	80.6



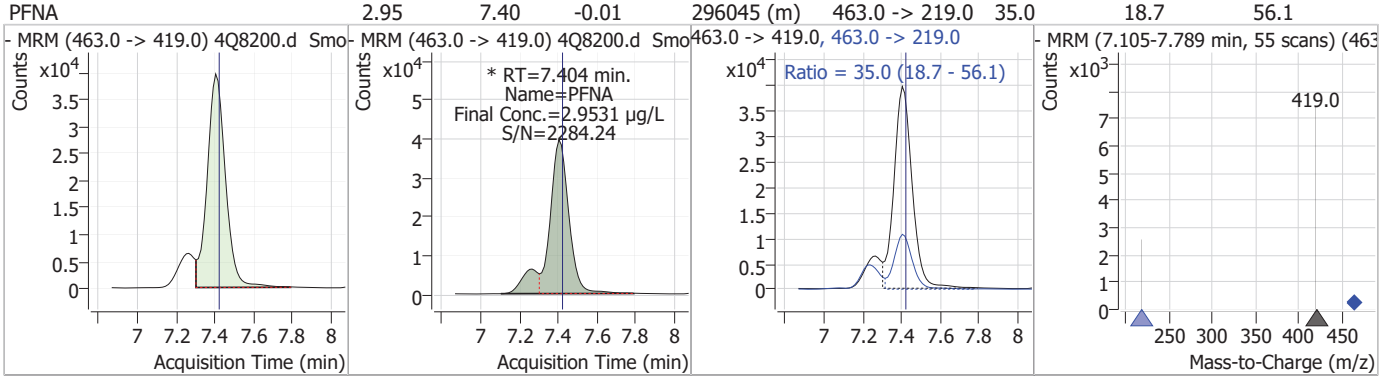
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	57.01	7.33	-0.01	1702039	441.0 -> 317.0	45.5	22.6	67.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.17	7.40	-0.01	189970				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.95	7.40	-0.01	296045 (m)	463.0 -> 219.0	35.0	18.7	56.1



7.6.90

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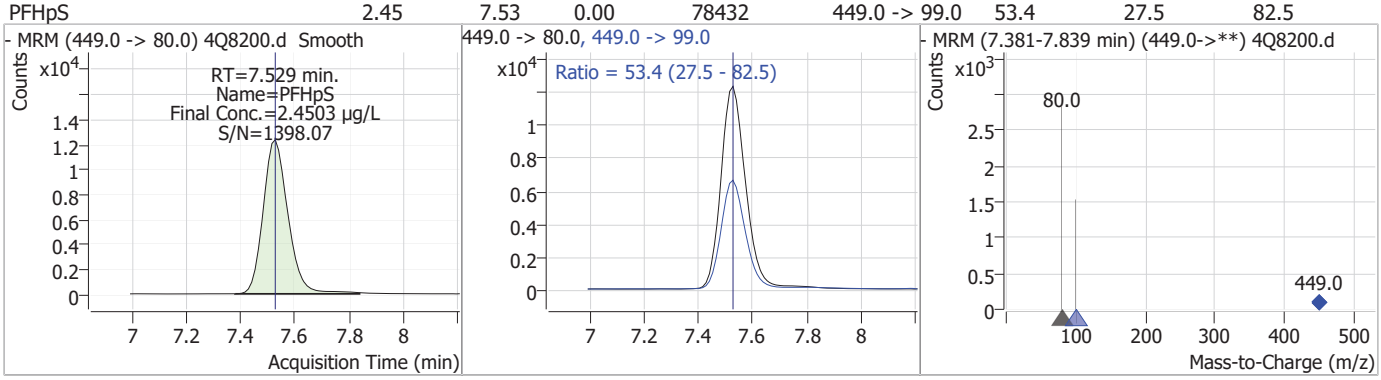
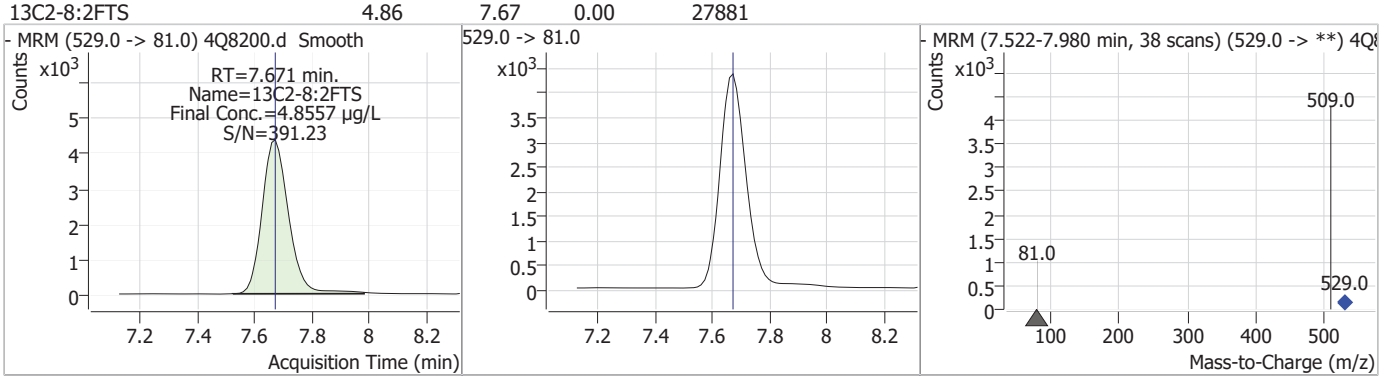
Perfluorinated Compounds by LC/MS/MS

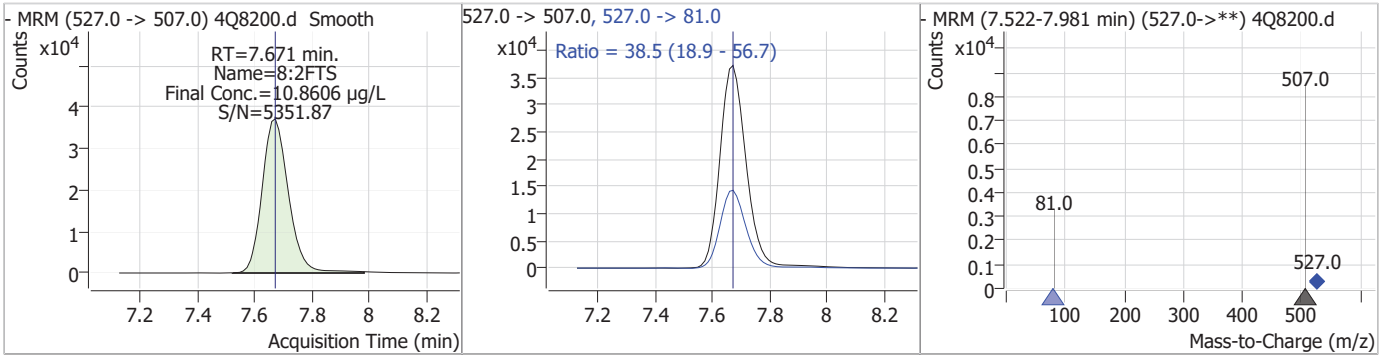
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.45	7.53	0.00	78432	449.0 -> 99.0	53.4	27.5	82.5



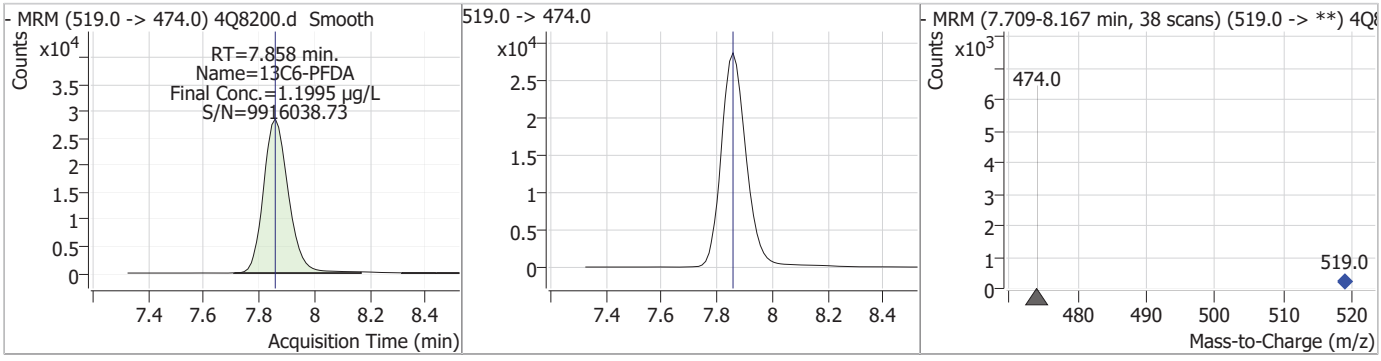
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.86	7.67	0.00	27881				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.86	7.67	0.00	236980	527.0 -> 81.0	38.5	18.9	56.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.20	7.86	0.00	178988				



7.6.90

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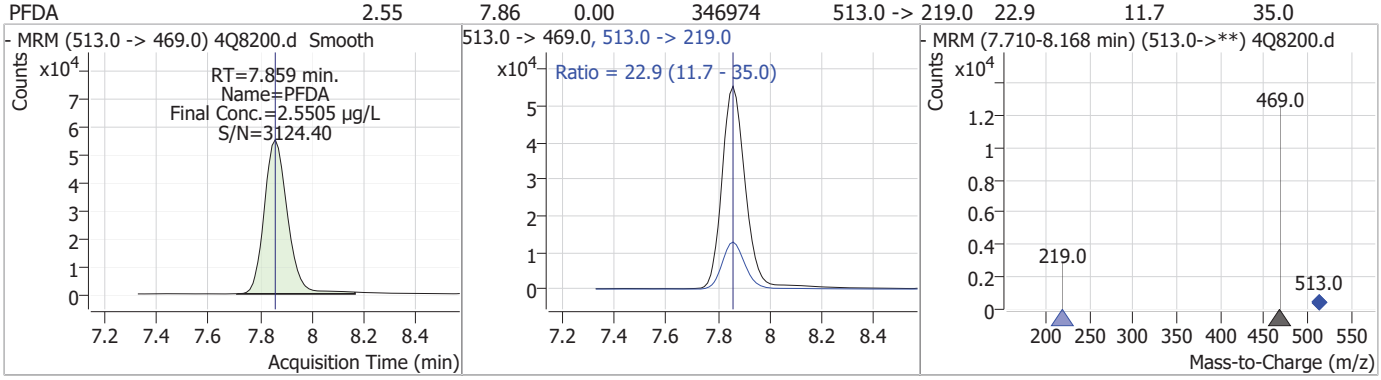
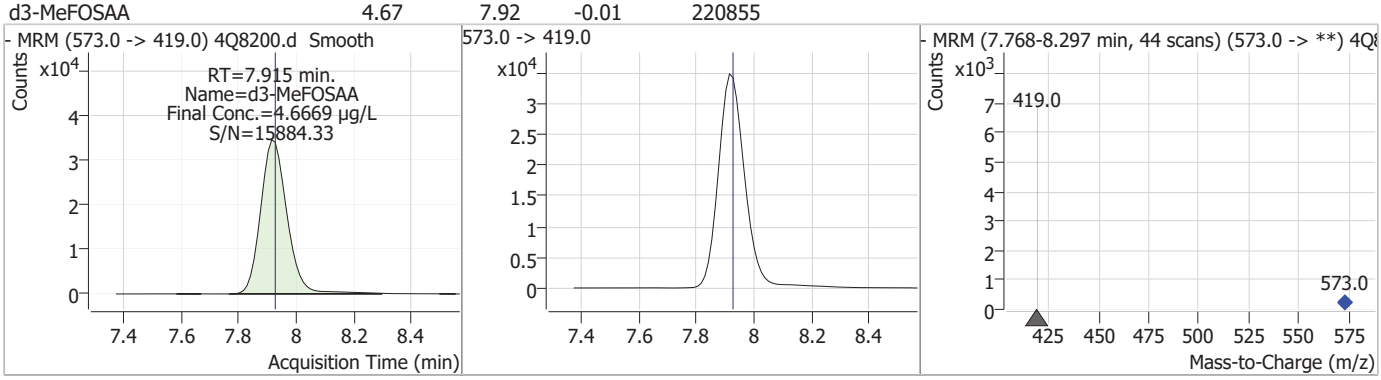
Perfluorinated Compounds by LC/MS/MS

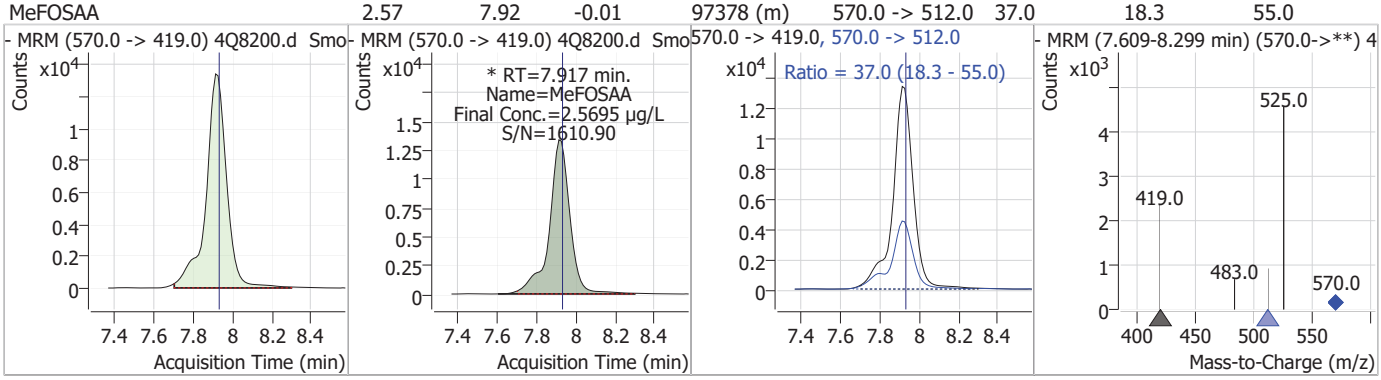
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.55	7.86	0.00	346974	513.0 -> 219.0	22.9	11.7	35.0



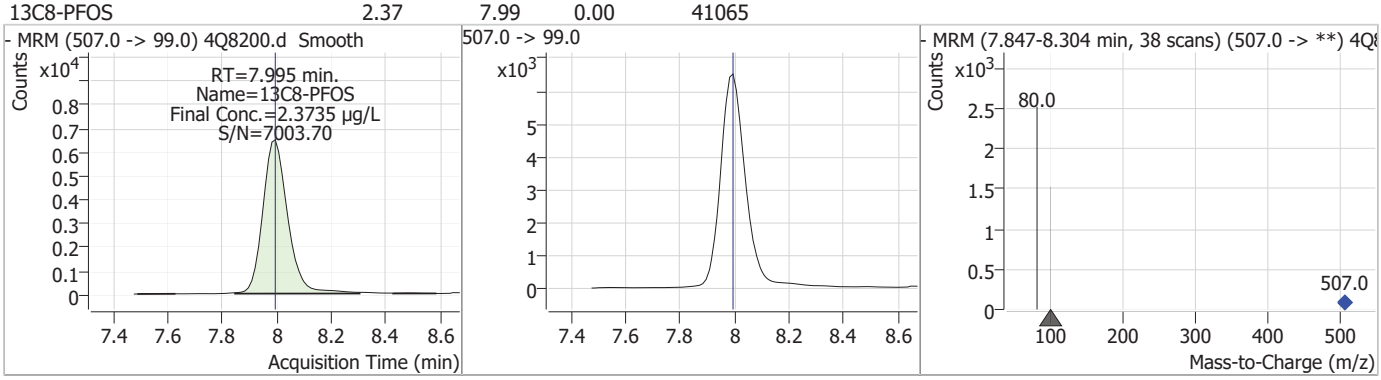
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.67	7.92	-0.01	220855				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.57	7.92	-0.01	97378 (m)	570.0 -> 512.0	37.0	18.3	55.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.37	7.99	0.00	41065				



7.6.9.0

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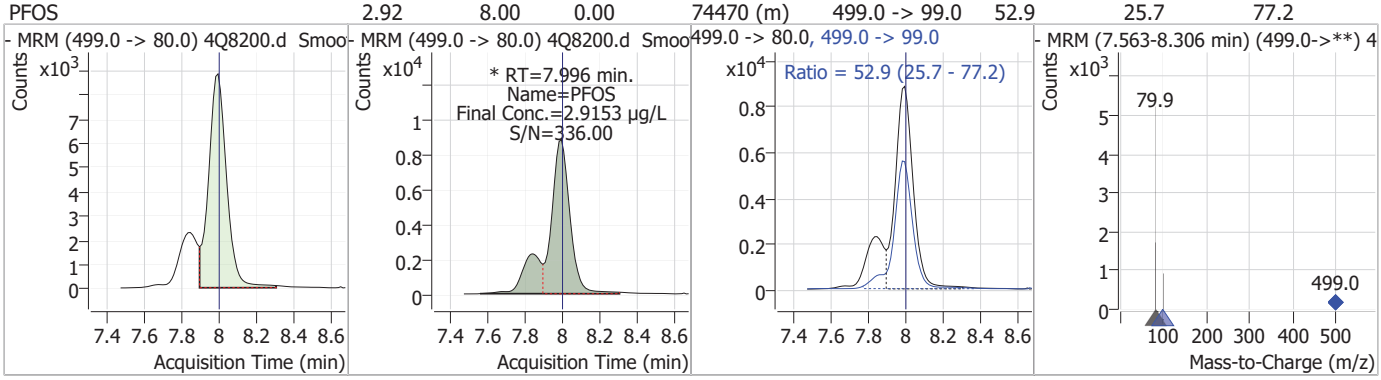
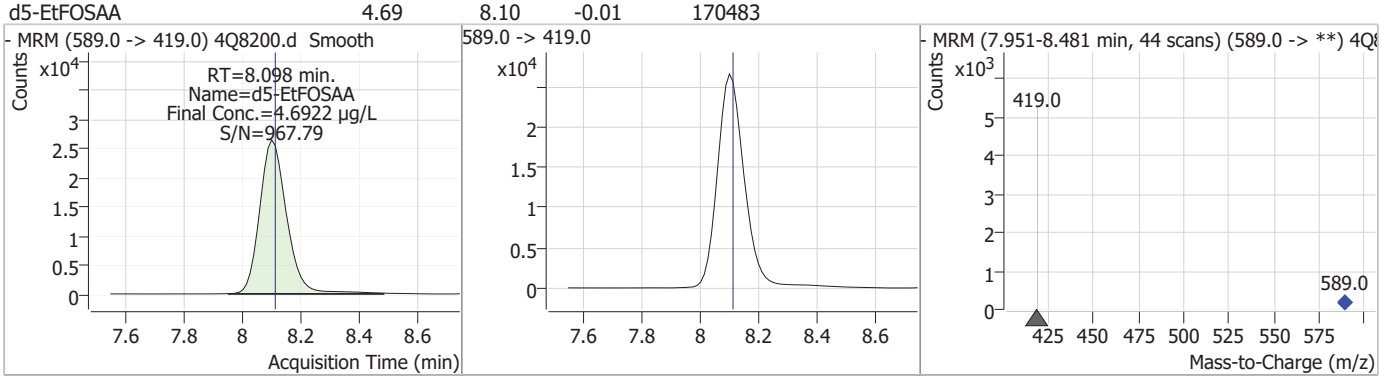
Perfluorinated Compounds by LC/MS/MS

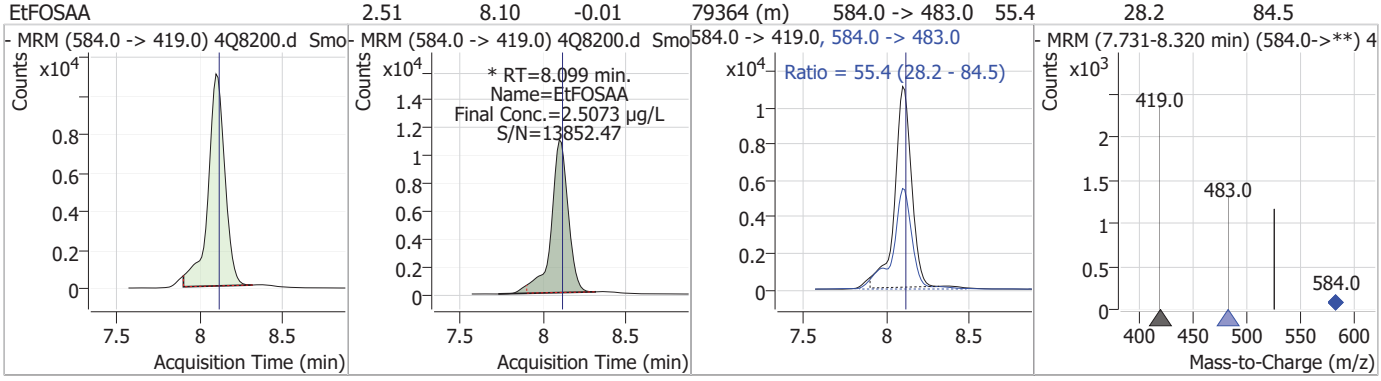
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.92	8.00	0.00	74470 (m)	499.0 -> 99.0	52.9	25.7	77.2



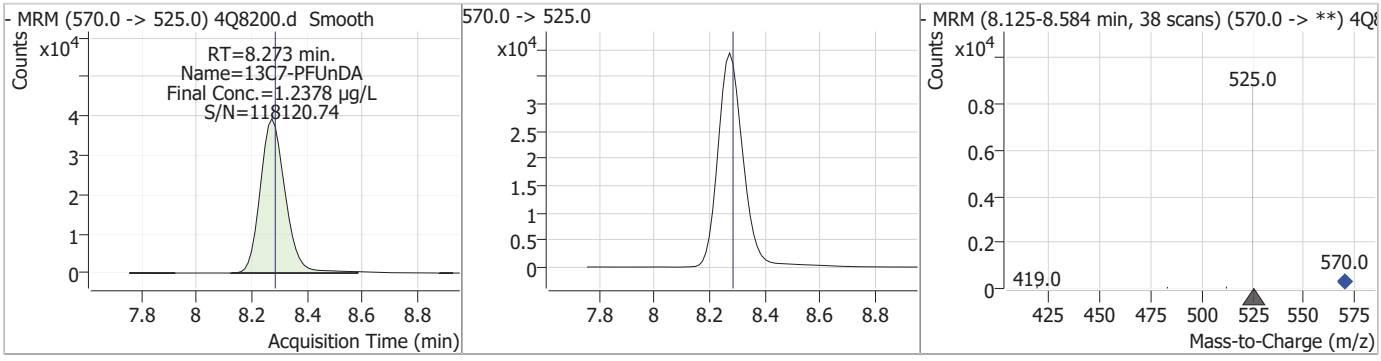
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.69	8.10	-0.01	170483				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.51	8.10	-0.01	79364 (m)	584.0 -> 483.0	55.4	28.2	84.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.24	8.27	-0.01	246724				



7.6.90

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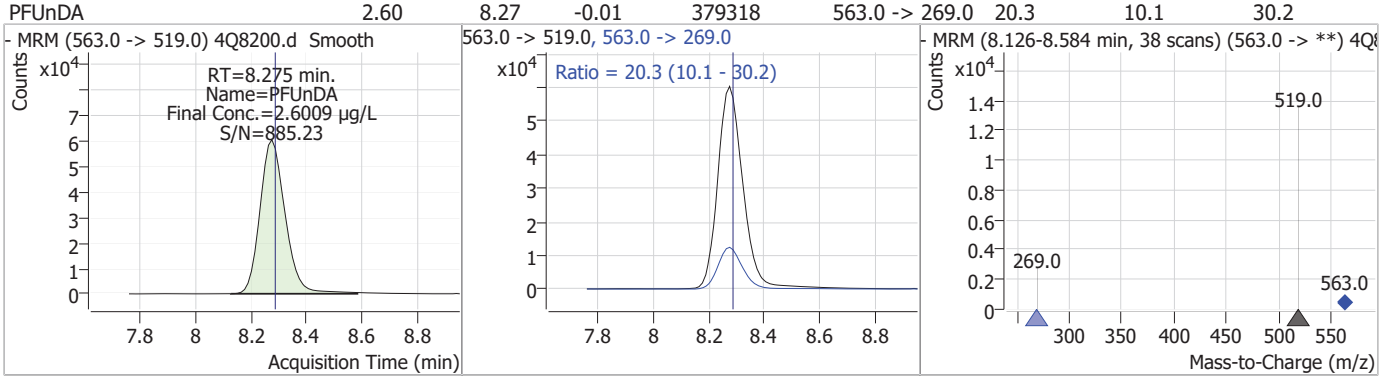
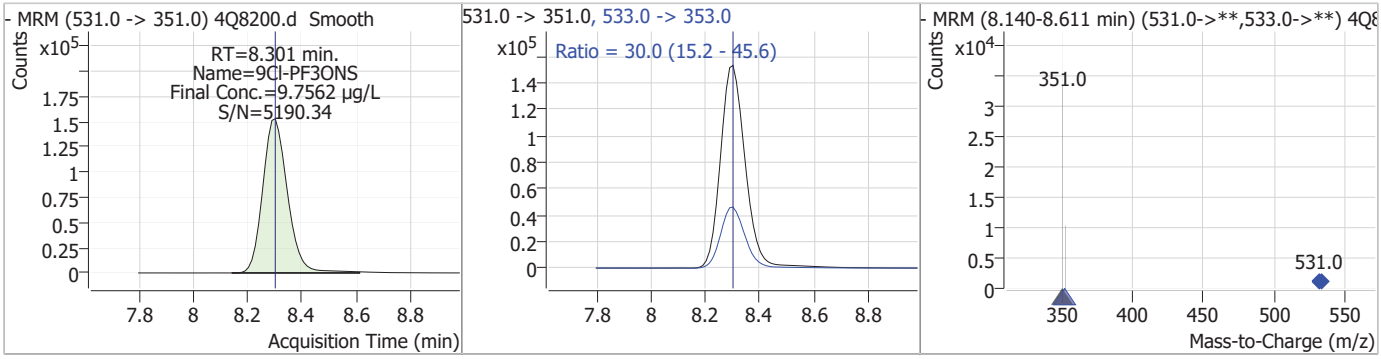
Perfluorinated Compounds by LC/MS/MS

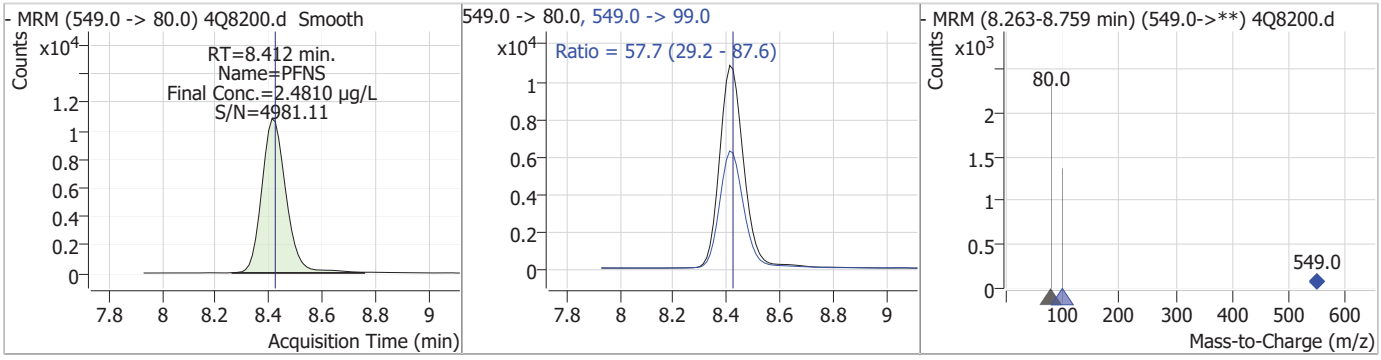
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.60	8.27	-0.01	379318	563.0 -> 269.0	20.3	10.1	30.2



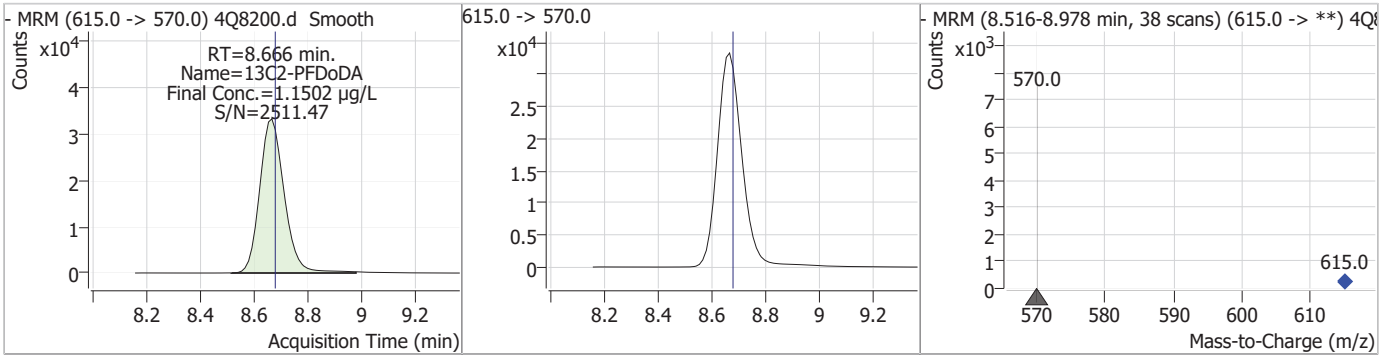
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.76	8.30	0.00	970792	533.0 -> 353.0	30.0	15.2	45.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.48	8.41	-0.01	68513	549.0 -> 99.0	57.7	29.2	87.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.15	8.67	-0.01	209985				



7.6.90

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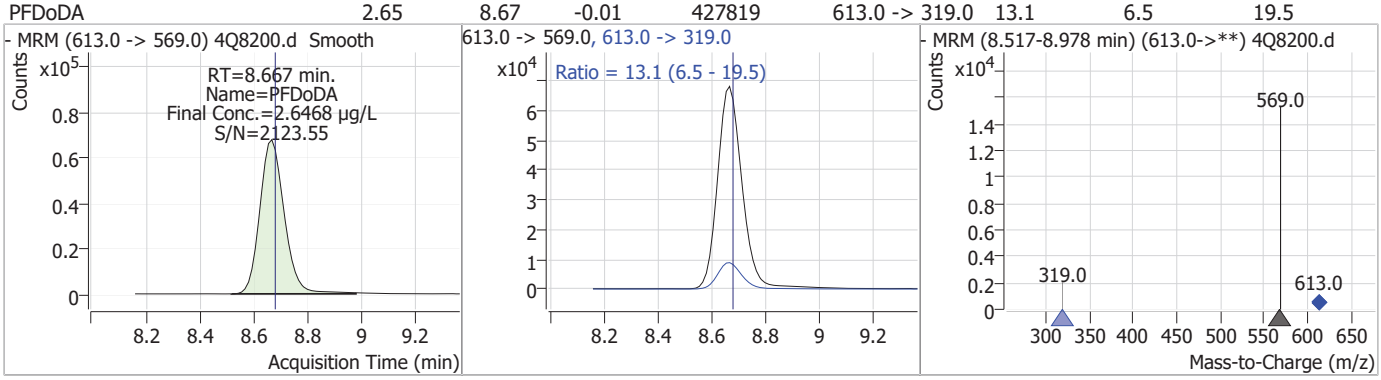
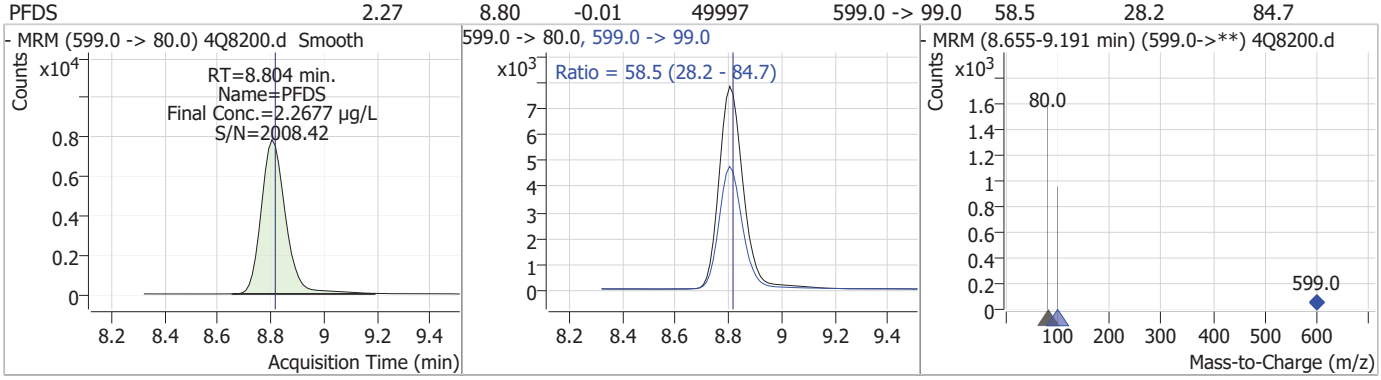
Perfluorinated Compounds by LC/MS/MS

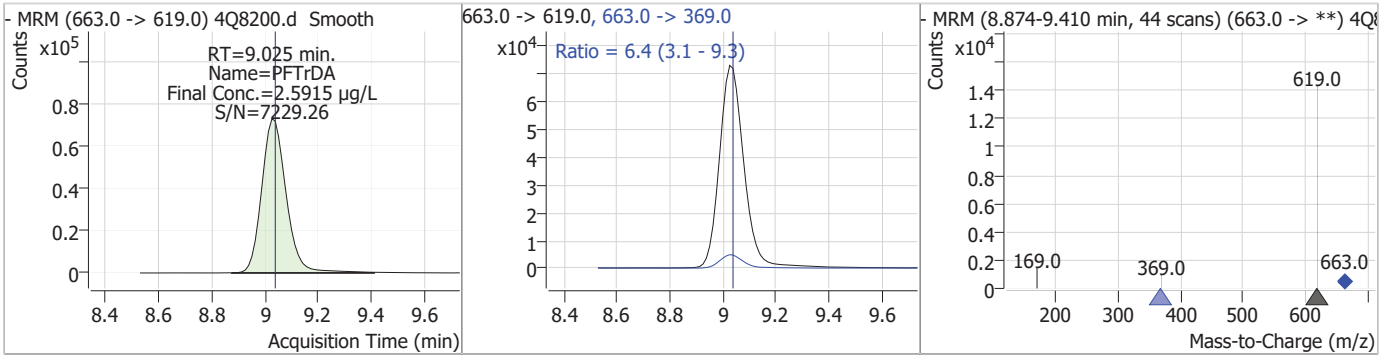
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.65	8.67	-0.01	427819	613.0 -> 319.0	13.1	6.5	19.5



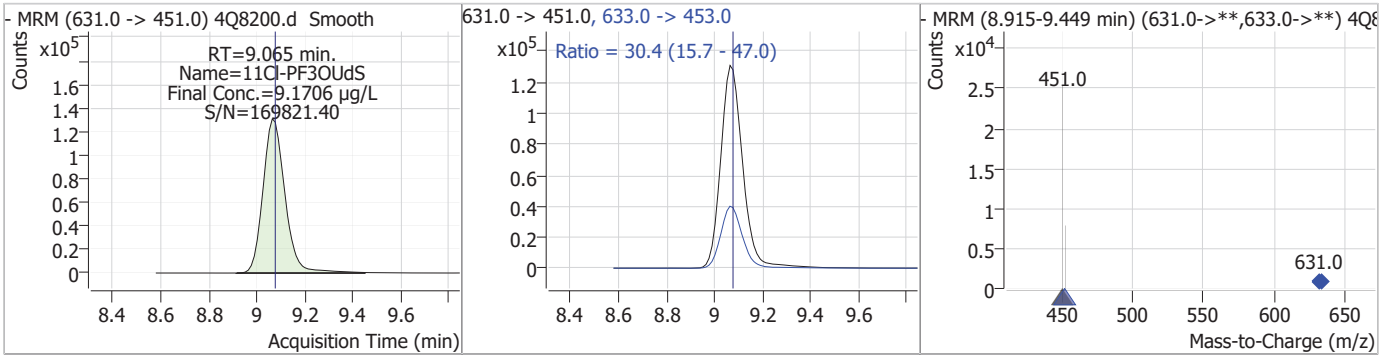
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.27	8.80	-0.01	49997	599.0 -> 99.0	58.5	28.2	84.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.59	9.03	-0.01	467109	663.0 -> 369.0	6.4	3.1	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.17	9.06	-0.01	829558	633.0 -> 453.0	30.4	15.7	47.0



7.6.90

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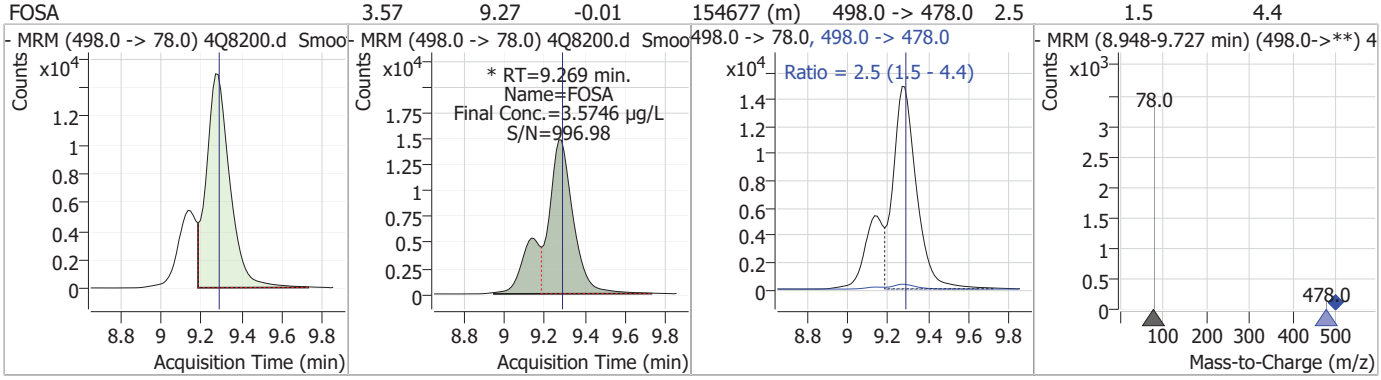
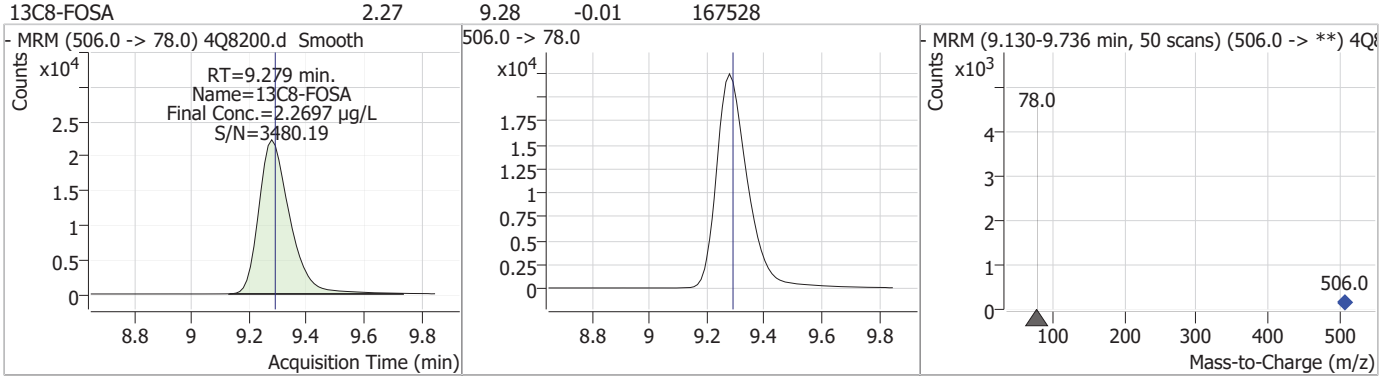
Perfluorinated Compounds by LC/MS/MS

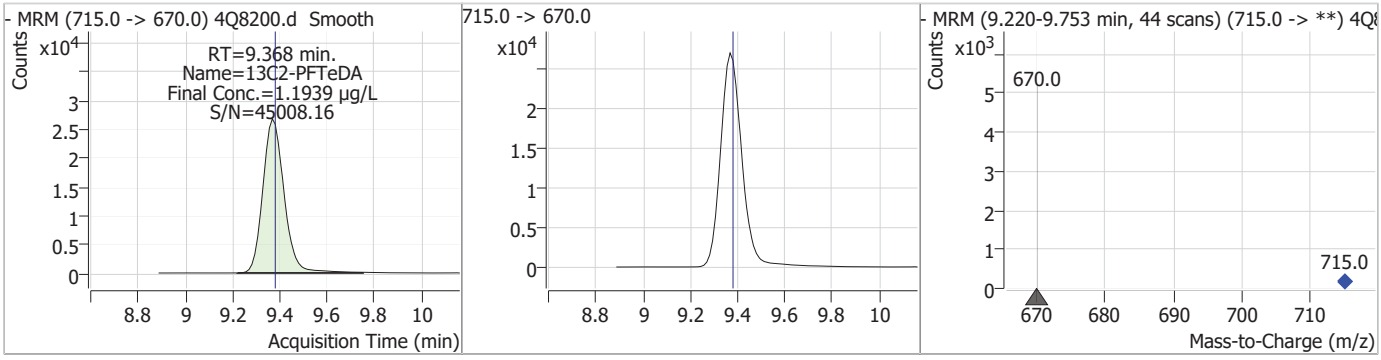
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	3.57	9.27	-0.01	154677 (m)	498.0 -> 478.0	2.5	1.5	4.4



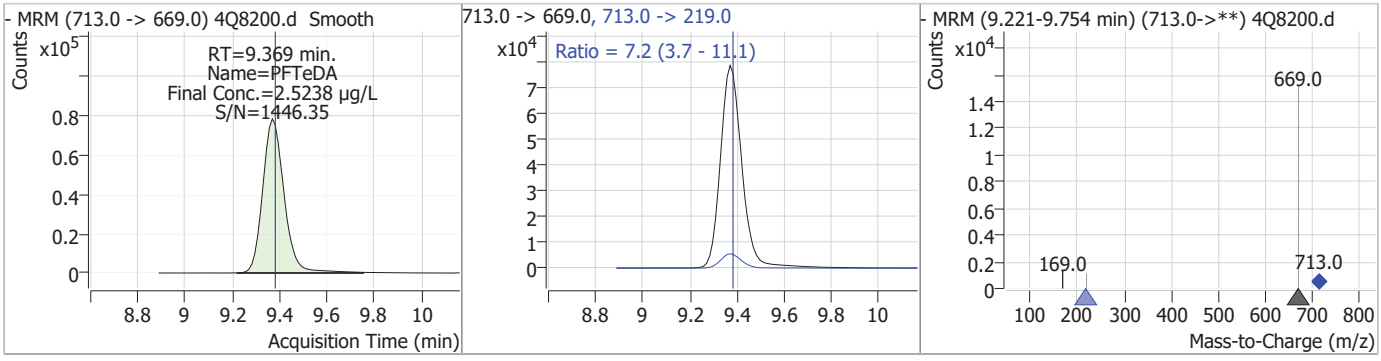
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.27	9.28	-0.01	167528				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.19	9.37	-0.01	167561				

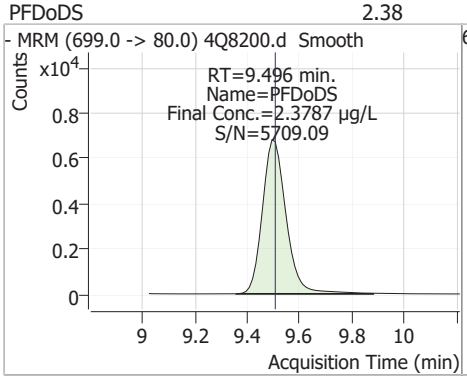


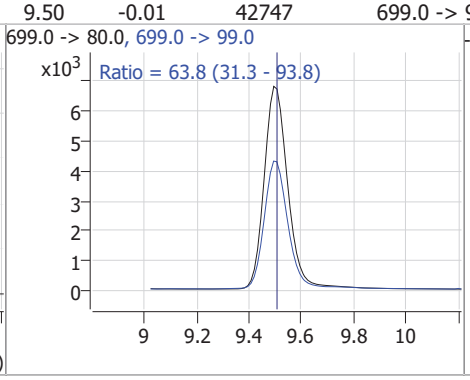
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.52	9.37	-0.01	492373	713.0 -> 219.0	7.2	3.7	11.1

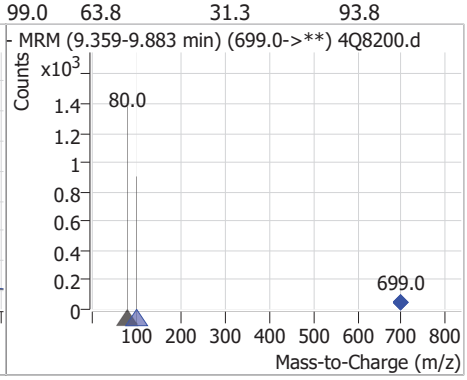


Perfluorinated Compounds by LC/MS/MS

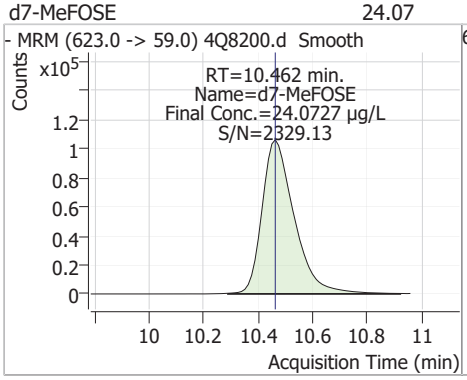
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.38	9.50	-0.01	42747	699.0 -> 99.0	63.8	31.3	93.8

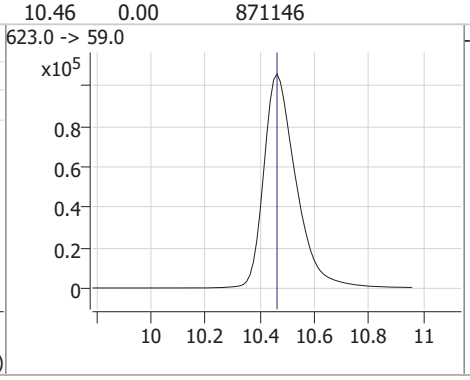


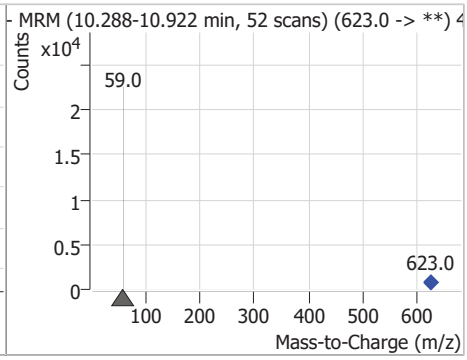




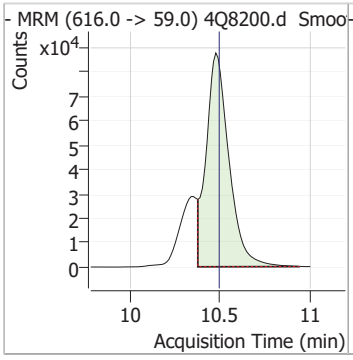
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.07	10.46	0.00	871146				

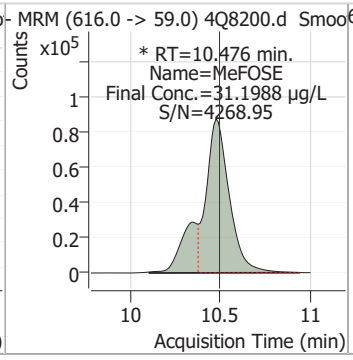


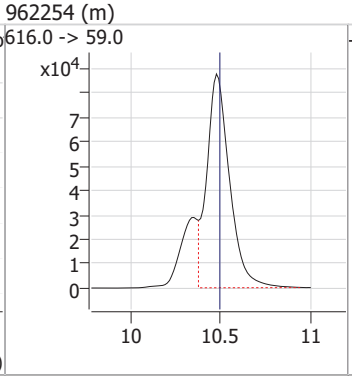


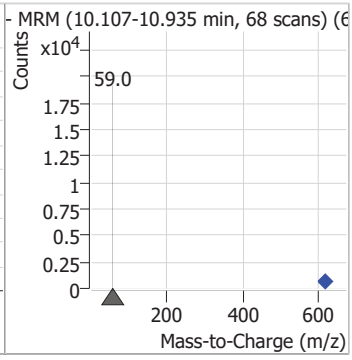


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	31.20	10.48	-0.01	962254 (m)				

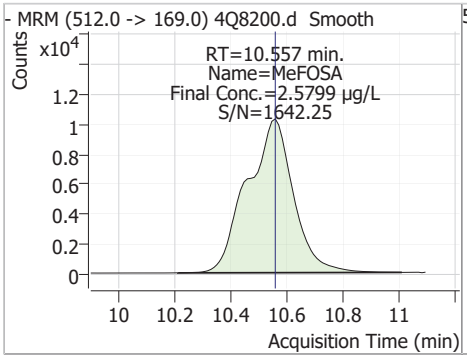


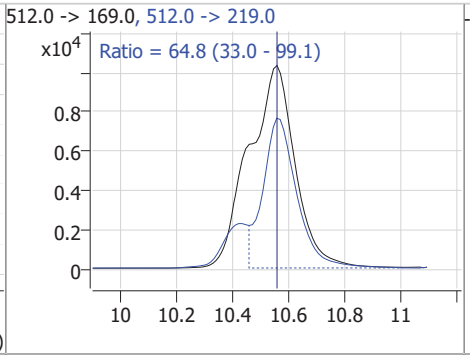


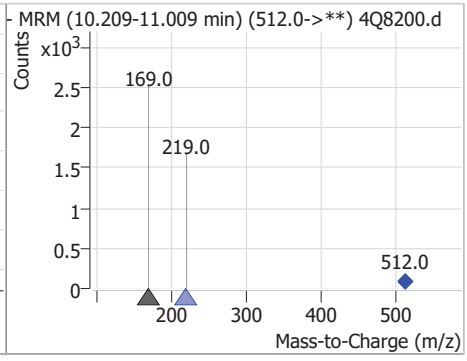




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.58	10.56	0.00	118312	512.0 -> 219.0	64.8	33.0	99.1





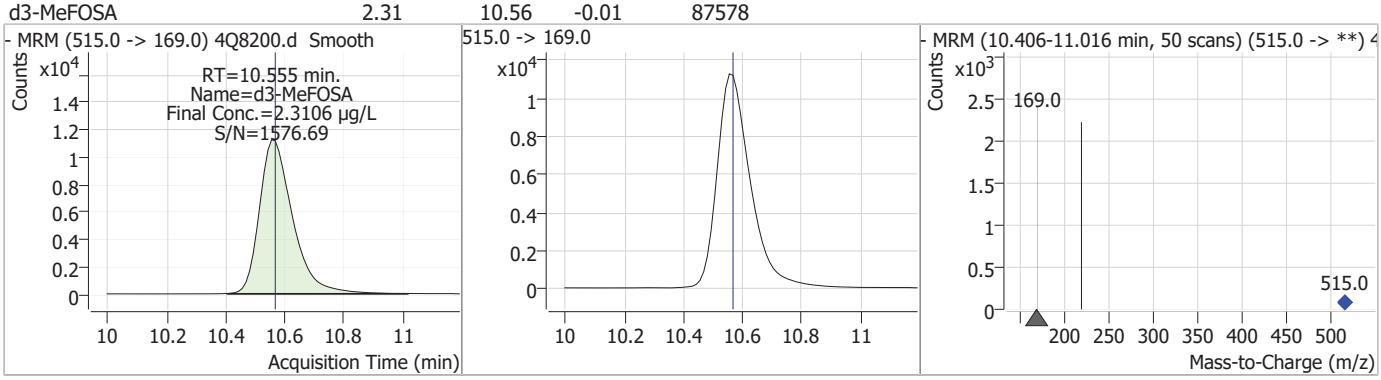


7.6.60

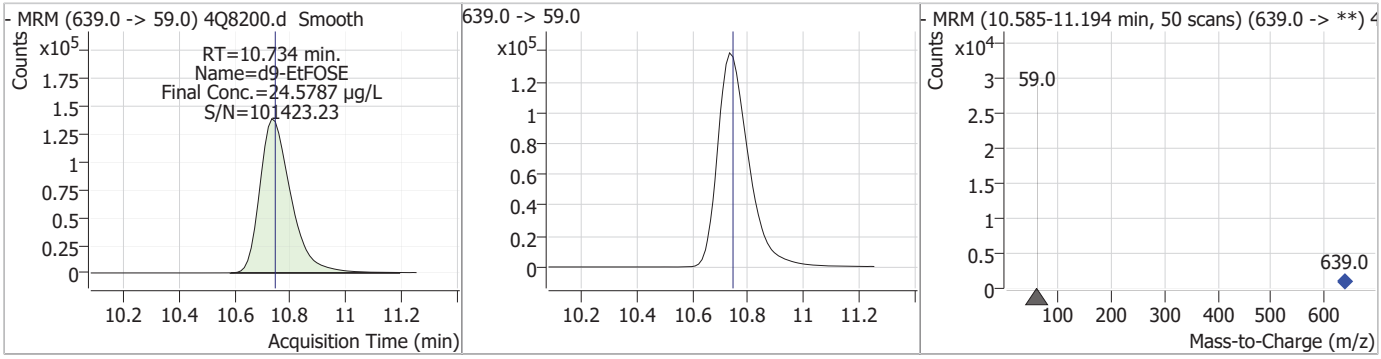
7

Perfluorinated Compounds by LC/MS/MS

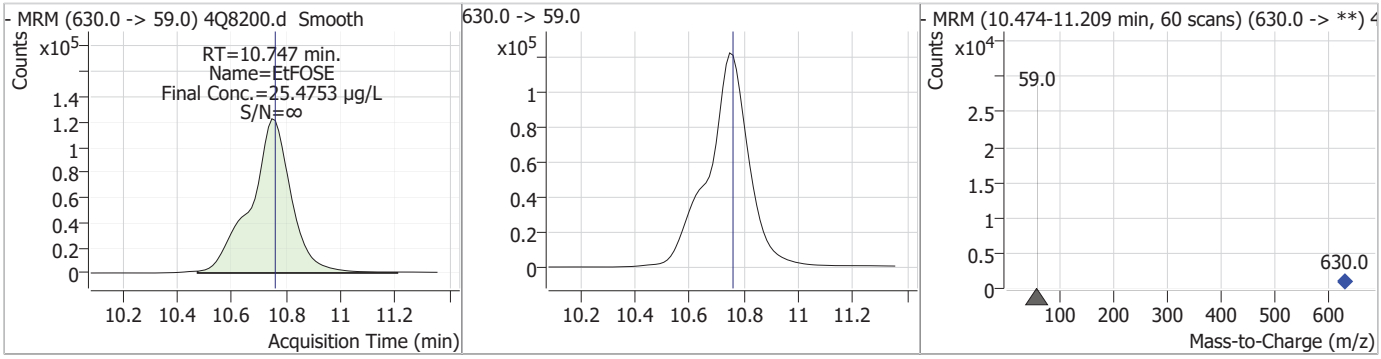
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.31	10.56	-0.01	87578				



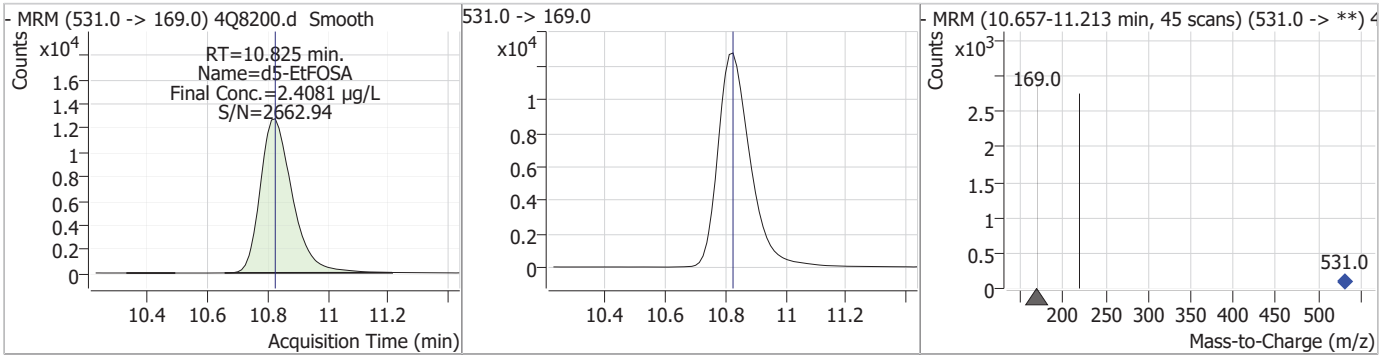
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.58	10.73	-0.01	1078502				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	25.48	10.75	-0.01	1278016				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.41	10.82	0.00	94062				



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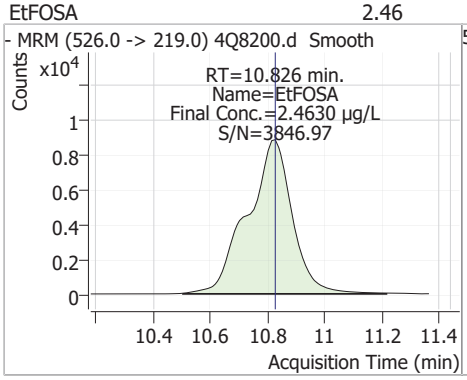
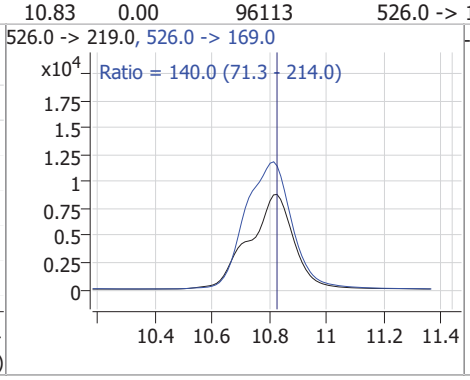
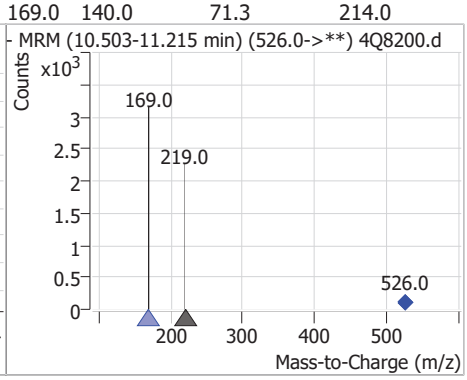
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.46	10.83	0.00	96113	526.0 -> 169.0	140.0	71.3	214.0







7.6.60

7

Manual Integration Approval Summary

Sample Number: T4Q139-CC137
Lab FileID: 4Q8200.D
Injection Time: 05/01/25 16:49
Method: EPA 1633
Analyst approved: 05/02/25 04:45 Josephus Gimenez
Supervisor approved: 05/02/25 12:58 Olga Azarian

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.90	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.99	Split peak
Perfluorononanoic acid	375-95-1		7.40	Split peak
MeFOSAA	2355-31-9		7.92	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.10	Split peak
PFOSA	754-91-6		9.27	Split peak
MeFOSE	24448-09-7		10.48	Split peak

QQQ Check Tune Report

Agilent | Trusted Answers

Instrument Name	LCMS4
MS Model	G6495C
MS Instrument Serial	SG1953D201
Software_Firmware Version	10.1.67, FW: A.00.08.112
Tune Date & Time	02 May 2025 08:50:28
File Path	D:\MassHunter\Tune\QQQ\G6495C\atunes.tune.xml
Ion Source	AJS ESI
Ionization Mode	AJS ESI
Tuned Resolution	All
Vacuum Pressure	1.57E+0 [R] (Torr); 3.44E-5 [H] (Torr)

Source Parameters

Parameter	Negative
Gas Temp (°C)	220
Gas Flow (l/min)	14
Nebulizer (psi)	20
Capillary (V)	3000
Nozzle Voltage (V)	1500
Sheath Gas Temp (°C)	250
Sheath Gas Flow (l/min)	11

QQQ Check Tune Report

Agilent | Trusted Answers

Negative Results

Analyzer: MS1 Polarity: Negative Width: Unit HP and LP Funnel RF as shown in Tune Parameters

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	113.01	0.02	Pass	0.70	0.69	-0.01	Pass	2902759
302.00	302.01	0.01	Pass	0.70	0.70	0.00	Pass	697728
601.98	602.01	0.03	Pass	0.70	0.66	-0.04	Pass	2666609
1033.99	1034.04	0.05	Pass	0.70	0.59	-0.11	Pass	2567355
1633.95	1634.04	0.09	Pass	0.70	0.62	-0.08	Pass	3827809
2233.91	2233.93	0.02	Pass	0.70	0.71	0.01	Pass	1263201

Analyzer: MS2 Polarity: Negative Width: Unit HP and LP Funnel RF as shown in Tune Parameters

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.07	0.07	Pass	0.70	0.63	-0.07	Pass	599495
112.99	113.00	0.01	Pass	0.70	0.70	0.00	Pass	4229972
302.00	302.02	0.02	Pass	0.70	0.70	0.00	Pass	1047425
601.98	602.02	0.04	Pass	0.70	0.68	-0.02	Pass	3468012
1033.99	1034.07	0.08	Pass	0.70	0.63	-0.07	Pass	6808770
1633.95	1634.01	0.06	Pass	0.70	0.67	-0.03	Pass	10105338
2233.91	2233.91	0.00	Pass	0.70	0.75	0.05	Pass	2287626

Analyzer: MS1 Polarity: Negative Width: Wide HP Funnel RF: 45Vp-p LP Funnel RF: 45Vp-p

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	113.05	0.06	Pass	1.20	1.16	-0.04	Pass	3988537
302.00	302.09	0.09	Pass	1.20	1.27	0.07	Pass	1242398
601.98	602.07	0.09	Pass	1.20	1.38	0.18	Pass	5723794
1033.99	1034.02	0.03	Pass	1.20	1.41	0.21	Pass	2454179
1633.95	1633.95	0.00	Pass	1.20	1.37	0.17	Pass	1852686
2233.91	2233.86	-0.05	Pass	1.20	1.31	0.11	Pass	892910

Analyzer: MS2 Polarity: Negative Width: Wide HP Funnel RF: 45Vp-p LP Funnel RF: 45Vp-p

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.09	0.09	Pass	1.20	1.09	-0.11	Pass	774549
112.99	113.00	0.01	Pass	1.20	1.15	-0.05	Pass	6412460
302.00	302.02	0.02	Pass	1.20	1.38	0.18	Pass	1568439
601.98	602.01	0.03	Pass	1.20	1.57	0.37	Pass	5688726
1033.99	1034.02	0.03	Pass	1.20	1.62	0.42	Pass	3882664
1633.95	1634.00	0.05	Pass	1.20	1.48	0.28	Pass	3882427
2233.91	2233.84	-0.07	Pass	1.20	1.28	0.08	Pass	1076065

Analyzer: MS1 Polarity: Negative Width: Widest HP Funnel RF: 45Vp-p LP Funnel RF: 45Vp-p

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	113.09	0.10	Pass	2.50	2.34	-0.16	Pass	5965613
302.00	302.18	0.18	Pass	2.50	2.29	-0.21	Pass	1973577
601.98	602.12	0.14	Pass	2.50	2.65	0.15	Pass	8316491
1033.99	1034.17	0.18	Pass	2.50	2.41	-0.09	Pass	5082373
1633.95	1634.12	0.17	Pass	2.50	2.38	-0.12	Pass	5102263
2233.91	2233.94	0.03	Pass	2.50	2.36	-0.14	Pass	3531958

Analyzer: MS2 Polarity: Negative Width: Widest HP Funnel RF: 45Vp-p LP Funnel RF: 45Vp-p

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	68.98	-0.02	Pass	2.50	2.61	0.11	Pass	832121
112.99	112.94	-0.05	Pass	2.50	2.64	0.14	Pass	8884657
302.00	302.02	0.02	Pass	2.50	2.85	0.35	Pass	2115989
601.98	602.00	0.02	Pass	2.50	3.06	0.56	Pass	8356627
1033.99	1034.02	0.03	Pass	2.50	3.11	0.61	Pass	5974391
1633.95	1634.00	0.05	Pass	2.50	2.93	0.43	Pass	6844024
2233.91	2233.86	-0.05	Pass	2.50	2.64	0.14	Pass	2603029

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8231.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 2:00:12 PM
Sample Name : IC140-1
Vial : P1-A2
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.883	217.0 -> 172.0	812568	10.00 µg/L	0.000
M5-PFPeA	4.307	268.0 -> 223.0	429833	5.00 µg/L	-0.012
M5-PFHxA	5.452	318.0 -> 273.0	290650	2.50 µg/L	-0.012
M4-PFHpA	6.304	367.0 -> 322.0	314539	2.50 µg/L	0.000
M8-PFOA	6.909	421.0 -> 376.0	491307	2.50 µg/L	-0.012
M9-PFNA	7.428	472.0 -> 427.0	210996	1.25 µg/L	0.000
M6-PFDA	7.883	519.0 -> 474.0	200229	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	248211	1.25 µg/L	0.000
M2-PFDoDA	8.704	615.0 -> 570.0	239163	1.25 µg/L	0.000
M2-PFTeDA	9.418	715.0 -> 670.0	203500	1.25 µg/L	0.000
M8-FOSA	9.316	506.0 -> 78.0	185324	2.50 µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	26018	2.50 µg/L	-0.012
		302.0 -> 80.0	65680		
M3-PFHxS	6.999	402.0 -> 99.0	35284	2.50 µg/L	0.000
M8-PFOS	8.007	507.0 -> 99.0	40147	2.50 µg/L	0.000
M2-4:2FTS	5.153	329.0 -> 81.0	13023	5.00 µg/L	-0.012
M2-6:2FTS	6.696	429.0 -> 81.0	29663	5.00 µg/L	-0.012
M2-8:2FTS	7.683	529.0 -> 81.0	32533	5.00 µg/L	0.000
M3-MeFOSAA	7.940	573.0 -> 419.0	232076	5.00 µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	399663	10.00 µg/L	0.000
M5-EtFOSAA	8.123	589.0 -> 419.0	182272	5.00 µg/L	0.000
M7-MeFOSE	10.487	623.0 -> 59.0	1036117	25.00 µg/L	0.000
M9-EtFOSE	10.759	639.0 -> 59.0	1270935	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	95178	2.50 µg/L	0.000
M3-MeFOSA	10.580	515.0 -> 169.0	86672	2.50 µg/L	0.000
13C4-PFOS	8.008	503.0 -> 80.0	67997	2.50 µg/L	0.000
13C3-PFBA	2.886	216.0 -> 172.0	338922	5.00 µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	41031	2.50 µg/L	0.000
13C4-PFOA	6.910	417.0 -> 372.0	465375	2.50 µg/L	-0.012
13C2-PFDA	7.883	515.0 -> 470.0	163901	1.25 µg/L	0.000
13C5-PFNA	7.428	468.0 -> 423.0	187131	1.25 µg/L	0.000
13C2-PFHxA	5.452	315.0 -> 270.0	260853	2.50 µg/L	-0.012
System Monitoring Compounds					
13C2-4:2FTS	5.153	329.0 -> 81.0	13023	5.71 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 114.2%	
13C2-6:2FTS	6.696	429.0 -> 81.0	29663	6.01 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 120.2%	
13C2-8:2FTS	7.683	529.0 -> 81.0	32533	5.51 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 110.1%	
13C2-PFDoDA	8.704	615.0 -> 570.0	239163	1.31 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.5%	
13C2-PFTeDA	9.418	715.0 -> 670.0	203500	1.32 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.2%	
13C3-PFBS	5.355	302.0 -> 99.0	26018	2.58 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.2%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	35284	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.4%			
13C4-PFBA	2.883	217.0 -> 172.0	812568	10.16	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.6%			
13C4-PFHpA	6.304	367.0 -> 322.0	314539	2.53	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.3%			
13C5-PFHxA	5.452	318.0 -> 273.0	290650	2.54	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.4%			
13C5-PFPeA	4.307	268.0 -> 223.0	429833	5.14	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.7%			
13C6-PFDA	7.883	519.0 -> 474.0	200229	1.26	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.1%			
13C7-PFUnDA	8.310	570.0 -> 525.0	248211	1.28	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.3%			
13C8-FOSA	9.316	506.0 -> 78.0	185324	2.54	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.4%			
13C8-PFOA	6.909	421.0 -> 376.0	491307	2.56	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.6%			
13C8-PFOS	8.007	507.0 -> 99.0	40147	2.49	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.4%			
13C9-PFNA	7.428	472.0 -> 427.0	210996	1.30	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.0%			
d3-MeFOSAA	7.940	573.0 -> 419.0	232076	5.08	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.5%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	399663	9.79	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 97.9%			
d3-MeFOSA	10.580	515.0 -> 169.0	86672	2.48	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.1%			
d5-EtFOSAA	8.123	589.0 -> 419.0	182272	4.99	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.9%			
d7-MeFOSE	10.487	623.0 -> 59.0	1036117	26.76	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 107.0%			
d9-EtFOSE	10.759	639.0 -> 59.0	1270935	26.88	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 107.5%			
d5-EtFOSA	10.837	531.0 -> 169.0	95178	2.53	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.0%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	13908	0.62	µg/L		94
		327.0 -> 81.0	6707				
6:2FTS	6.697	427.0 -> 407.0	16977	0.59	µg/L		94
		427.0 -> 81.0	8458				
8:2FTS	7.683	527.0 -> 507.0	14663	0.62	µg/L		98
		527.0 -> 81.0	5930				
EtFOSAA	8.136	584.0 -> 419.0	5443	0.17	µg/L		87
		584.0 -> 483.0	3186				
FOSA	9.306	498.0 -> 78.0	11441	0.17	µg/L	m	99
		498.0 -> 478.0	260				
MeFOSAA	7.941	570.0 -> 419.0	5746	0.15	µg/L	m	94
		570.0 -> 512.0	1842				
PFBA	2.889	213.0 -> 169.0	17837	0.67	µg/L		100
PFBS	5.344	299.0 -> 80.0	4166	0.14	µg/L	m	96
		299.0 -> 99.0	1810				
PFDA	7.883	513.0 -> 469.0	23446	0.16	µg/L	m	97
		513.0 -> 219.0	5660				
PFDoDA	8.704	613.0 -> 569.0	30345	0.16	µg/L		94
		613.0 -> 319.0	3302				

Perfluorinated Compounds by LC/MS/MS

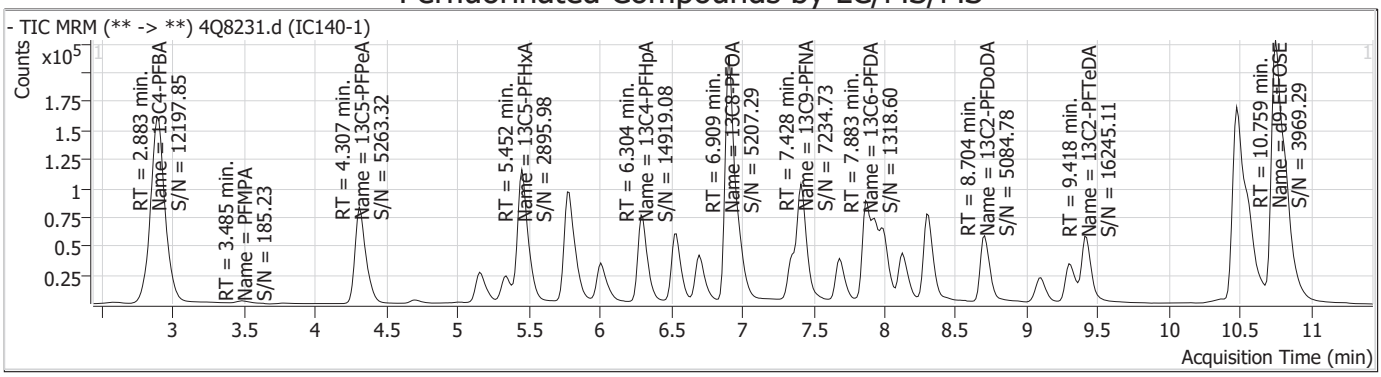
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.841	599.0 -> 80.0	3962	0.18	µg/L		93
		599.0 -> 99.0	2042				
PFHpA	6.304	363.0 -> 319.0	27915	0.15	µg/L	m	99
		363.0 -> 169.0	5766				
PFHpS	7.529	449.0 -> 80.0	5030	0.17	µg/L		90
		449.0 -> 99.0	2436				
PFHxA	5.455	313.0 -> 269.0	19035	0.16	µg/L	m	96
		313.0 -> 119.0	870				
PFHxS	7.000	399.0 -> 80.0	4970	0.16	µg/L	m	98
		399.0 -> 99.0	2673				
PFNA	7.429	463.0 -> 419.0	19022	0.16	µg/L	m	90
		463.0 -> 219.0	7871				
PFNS	8.449	549.0 -> 80.0	4226	0.15	µg/L	m	80
		549.0 -> 99.0	3011				
PFOA	6.910	413.0 -> 369.0	29427	0.18	µg/L	m	91
		413.0 -> 169.0	7131				
PFOS	8.008	499.0 -> 80.0	5359	0.17	µg/L	m	94
		499.0 -> 99.0	3226				
PFPeA	4.309	263.0 -> 219.0	21536	0.32	µg/L		100
PFPeS	6.318	349.0 -> 80.0	4723	0.15	µg/L	m	91
		349.0 -> 99.0	2660				
PFTeDA	9.419	713.0 -> 669.0	35501	0.16	µg/L		98
		713.0 -> 219.0	2838				
PFTrDA	9.075	663.0 -> 619.0	33458	0.16	µg/L		98
		663.0 -> 369.0	2311				
PFUnDA	8.299	563.0 -> 519.0	23600	0.16	µg/L		97
		563.0 -> 269.0	4760				
11Cl-PF3OUdS	9.102	631.0 -> 451.0	54432	0.65	µg/L		95
		633.0 -> 453.0	15260				
9Cl-PF3ONS	8.313	531.0 -> 351.0	62540	0.66	µg/L		99
		533.0 -> 353.0	19413				
ADONA	6.540	377.0 -> 251.0	208025	0.64	µg/L		98
		377.0 -> 85.0	66514				
HFPO-DA	5.792	285.0 -> 169.0	27410	0.66	µg/L		96
		285.0 -> 185.0	3606				
3:3FTCA	3.769	241.0 -> 177.0	3337	0.82	µg/L	m	95
		241.0 -> 117.0	376				
5:3FTCA	6.006	341.0 -> 237.0	93502	4.11	µg/L		99
		341.0 -> 217.0	68274				
7:3FTCA	7.355	441.0 -> 337.0	136175	4.17	µg/L		97
		441.0 -> 317.0	60659				
EtFOSA	10.838	526.0 -> 219.0	6242	0.16	µg/L		93
		526.0 -> 169.0	9360				
EtFOSE	10.772	630.0 -> 59.0	90836	1.60	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	8166	0.18	µg/L		97
		512.0 -> 219.0	5188				
MeFOSE	10.500	616.0 -> 59.0	70567	1.60	µg/L		100
PFDoDS	9.546	699.0 -> 80.0	2919	0.16	µg/L		96
		699.0 -> 99.0	1854				
NFDHA	5.345	295.0 -> 201.0	3973	0.30	µg/L		86
		201.0 -> 85.0	21344				
		295.0 -> 85.0	1079				
PFMBA	4.710	279.0 -> 85.0	14524	0.32	µg/L		100
PFMPA	3.485	229.0 -> 85.0	12716	0.33	µg/L		100
PFEESA	5.836	315.0 -> 135.0	30890	0.28	µg/L		96
		315.0 -> 69.0	3024				

Perfluorinated Compounds by LC/MS/MS

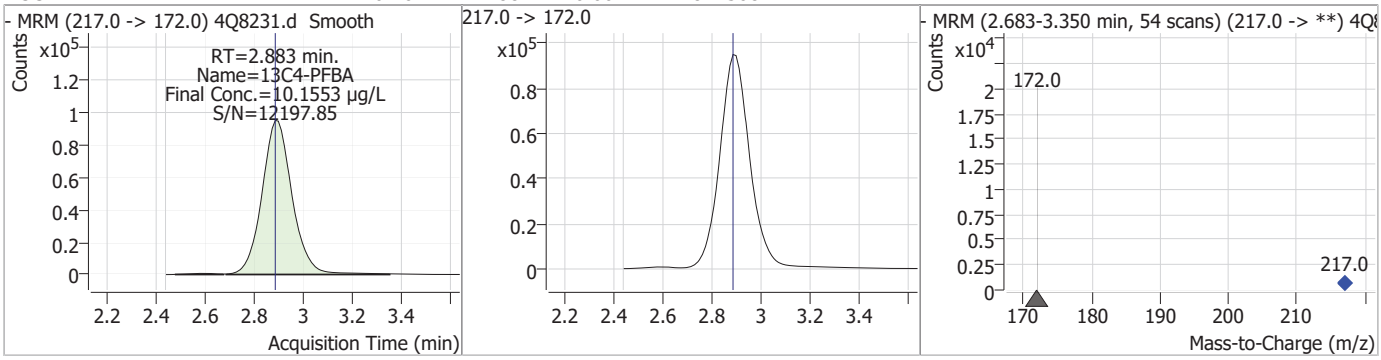
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

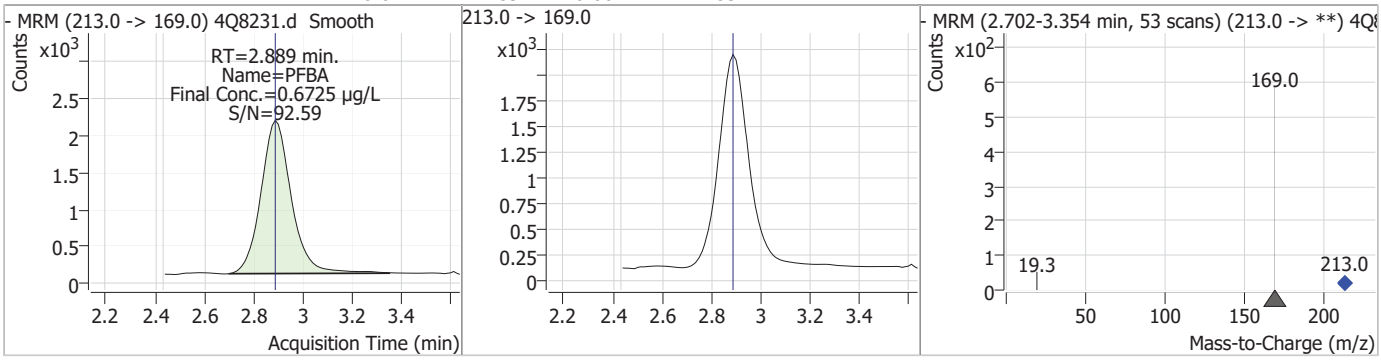
Perfluorinated Compounds by LC/MS/MS



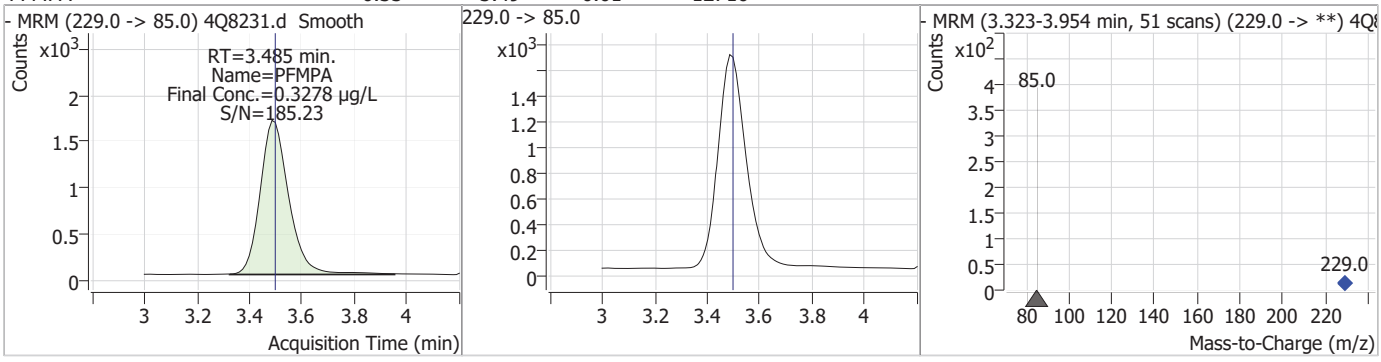
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.16	2.88	0.00	812568				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.67	2.89	0.00	17837				

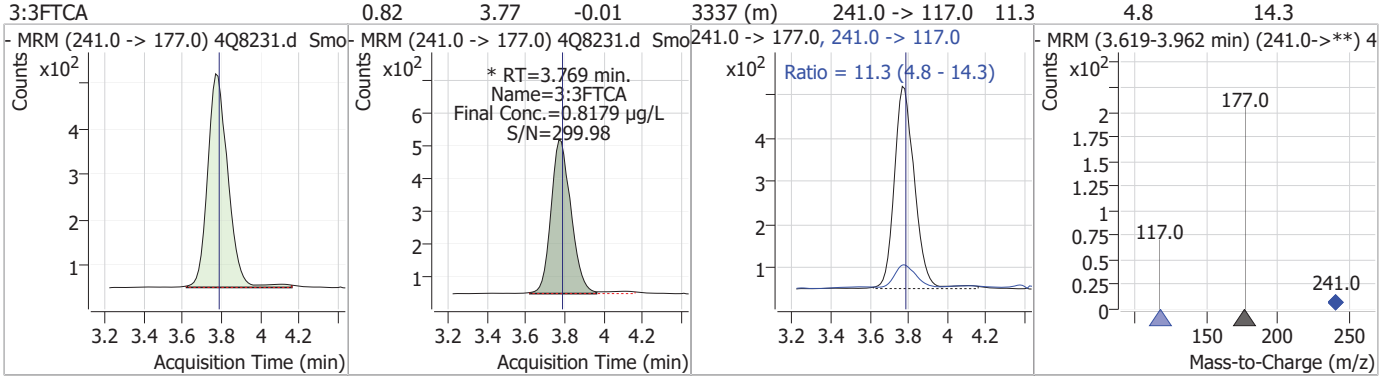


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.33	3.49	-0.01	12716				

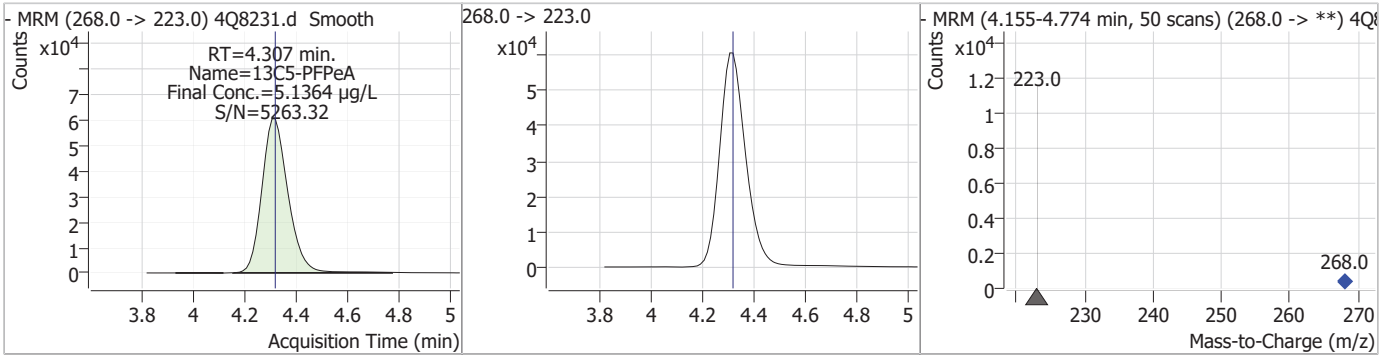


Perfluorinated Compounds by LC/MS/MS

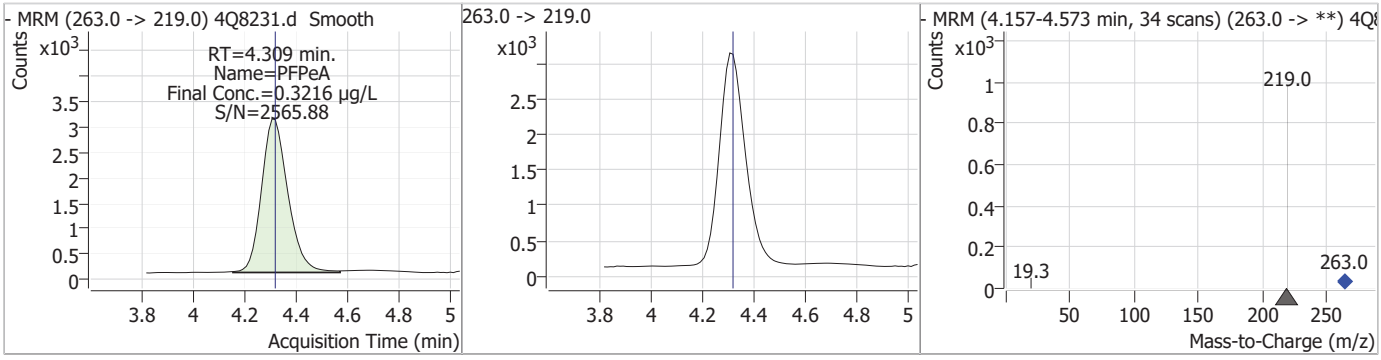
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	0.82	3.77	-0.01	3337 (m)	241.0 -> 117.0	11.3	4.8	14.3



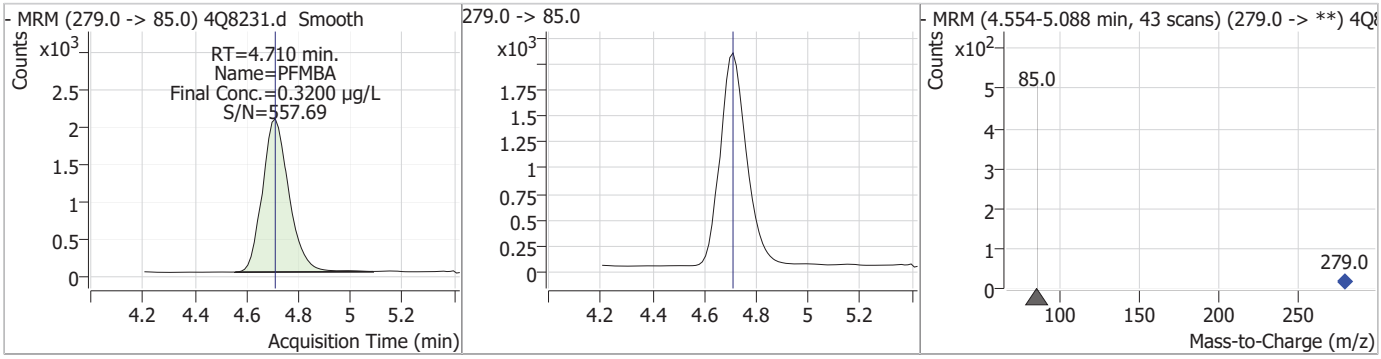
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.14	4.31	-0.01	429833				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.32	4.31	-0.01	21536				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.32	4.71	0.00	14524				



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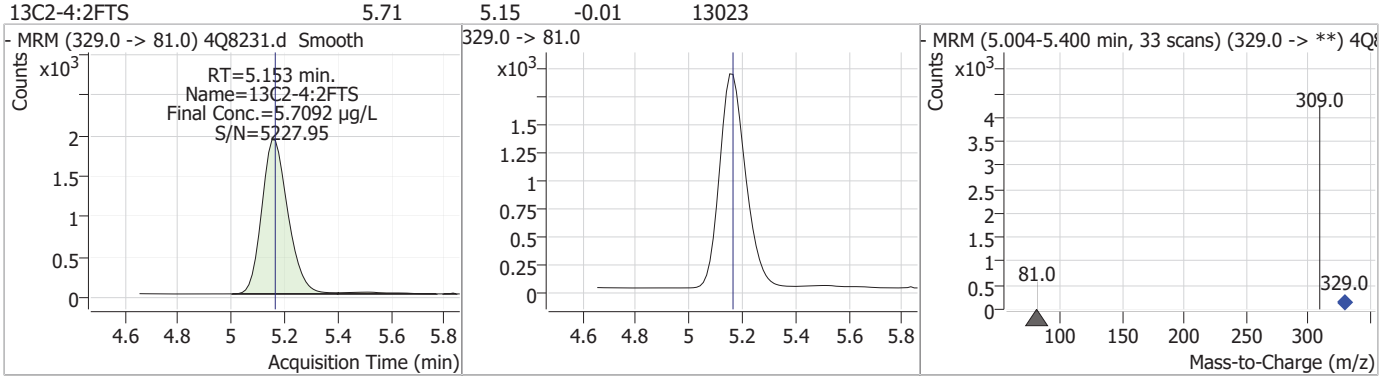
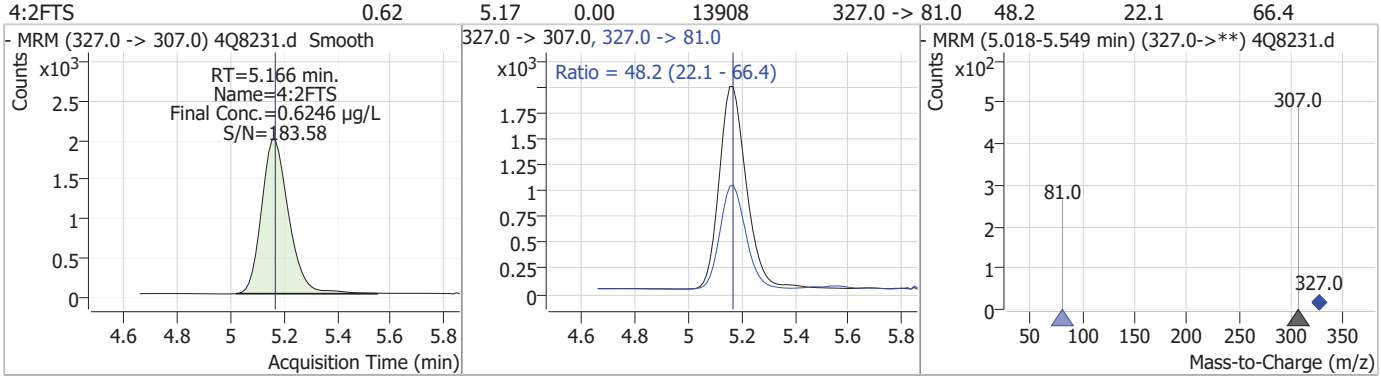
Perfluorinated Compounds by LC/MS/MS

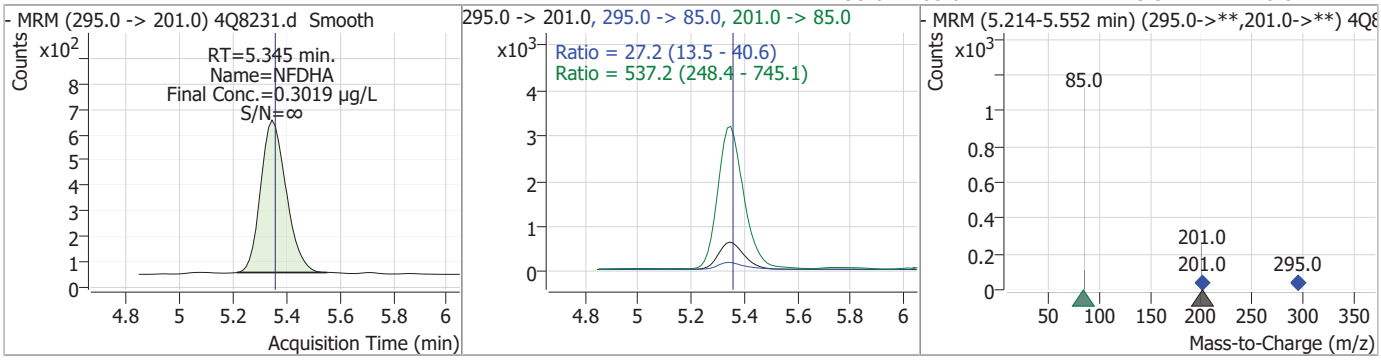
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.71	5.15	-0.01	13023				



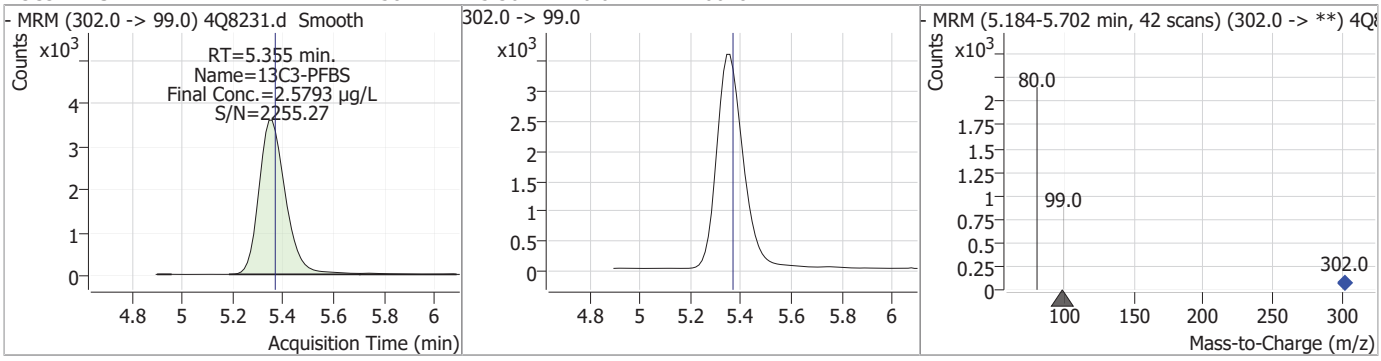
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	0.62	5.17	0.00	13908	327.0 -> 81.0	48.2	22.1	66.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.30	5.35	-0.01	3973	201.0 -> 85.0	537.2	248.4	745.1
					295.0 -> 85.0	27.2	13.5	40.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.58	5.36	-0.01	26018				



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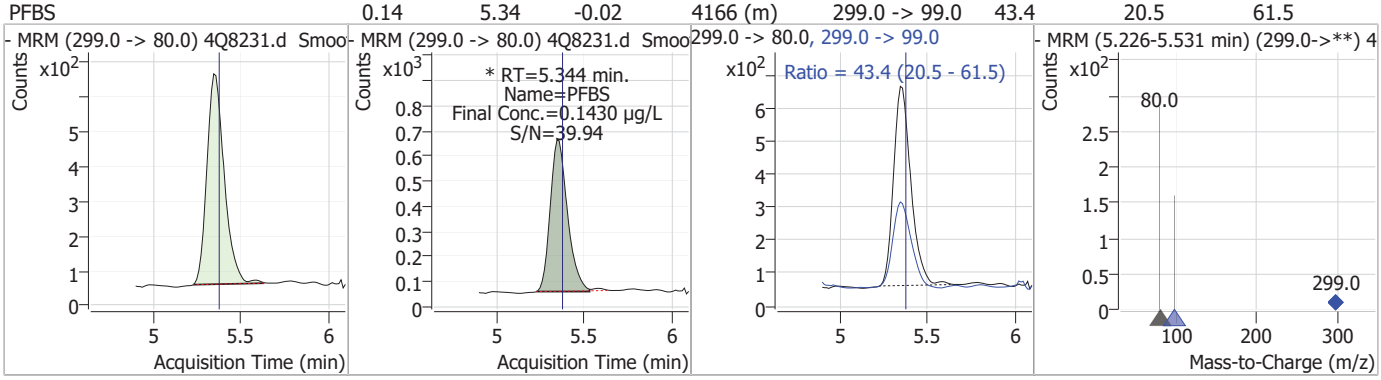
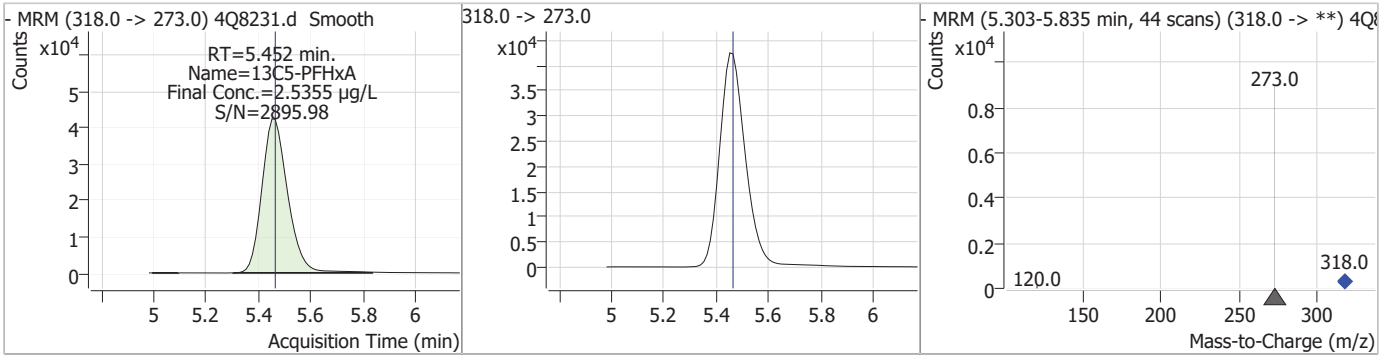
Perfluorinated Compounds by LC/MS/MS

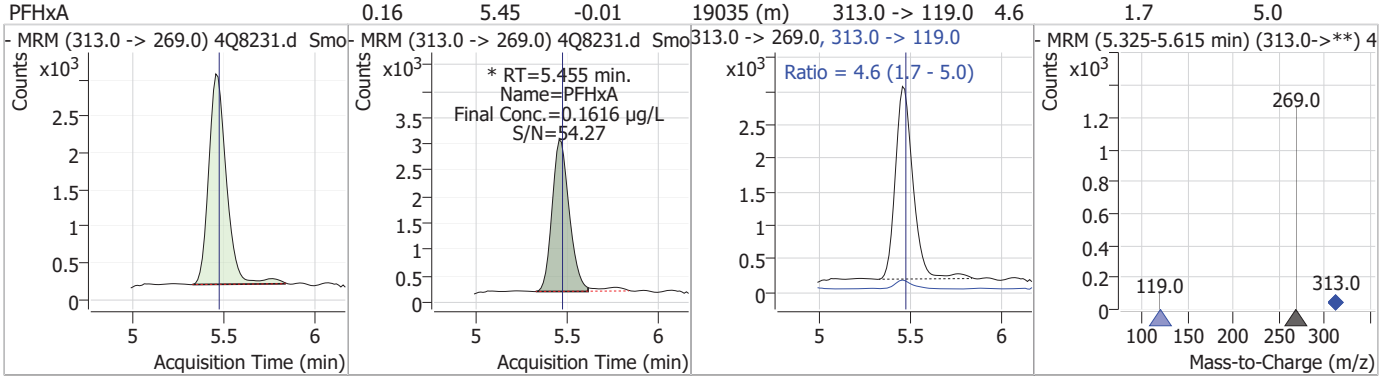
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.14	5.34	-0.02	4166 (m)	299.0 -> 99.0	43.4	20.5	61.5



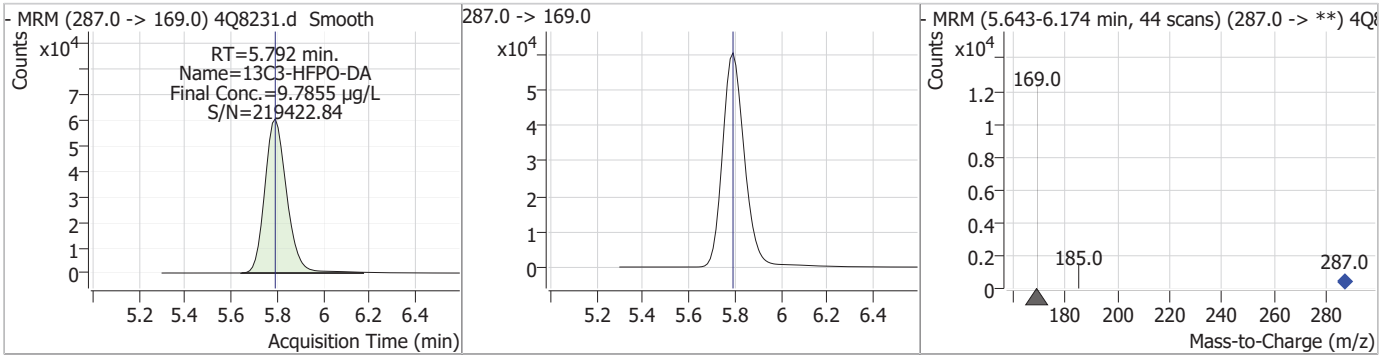
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.54	5.45	-0.01	290650				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.16	5.45	-0.01	19035 (m)	313.0 -> 119.0	4.6	1.7	5.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.79	5.79	0.00	399663				



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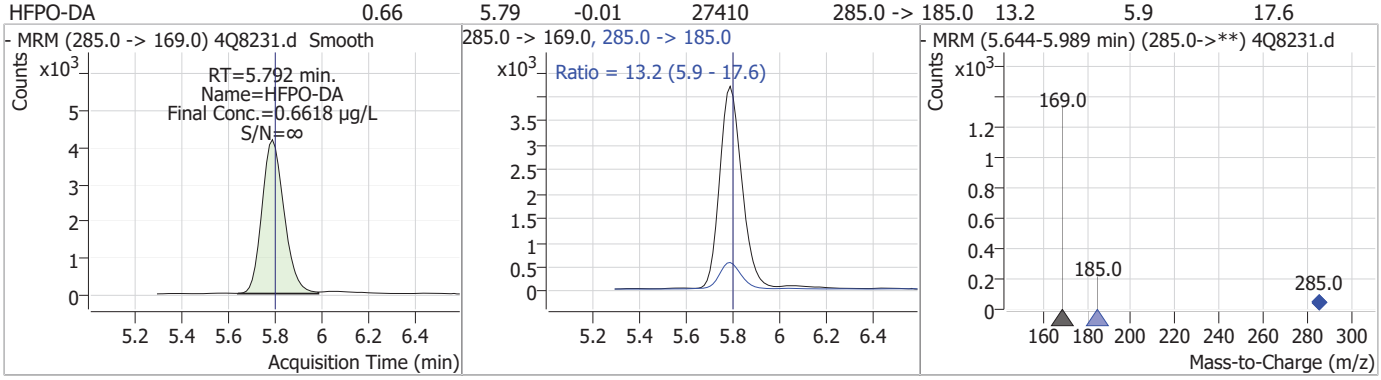
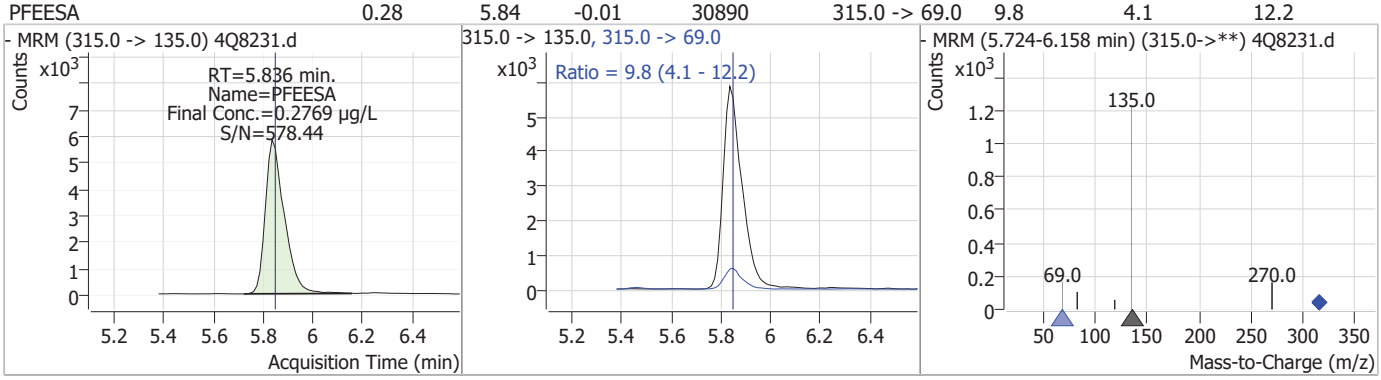
Perfluorinated Compounds by LC/MS/MS

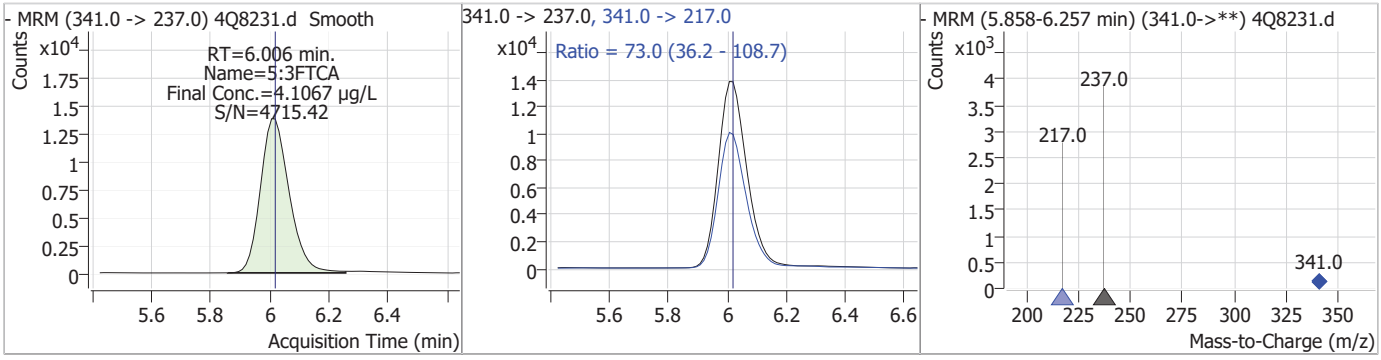
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	0.66	5.79	-0.01	27410	285.0 -> 185.0	13.2	5.9	17.6



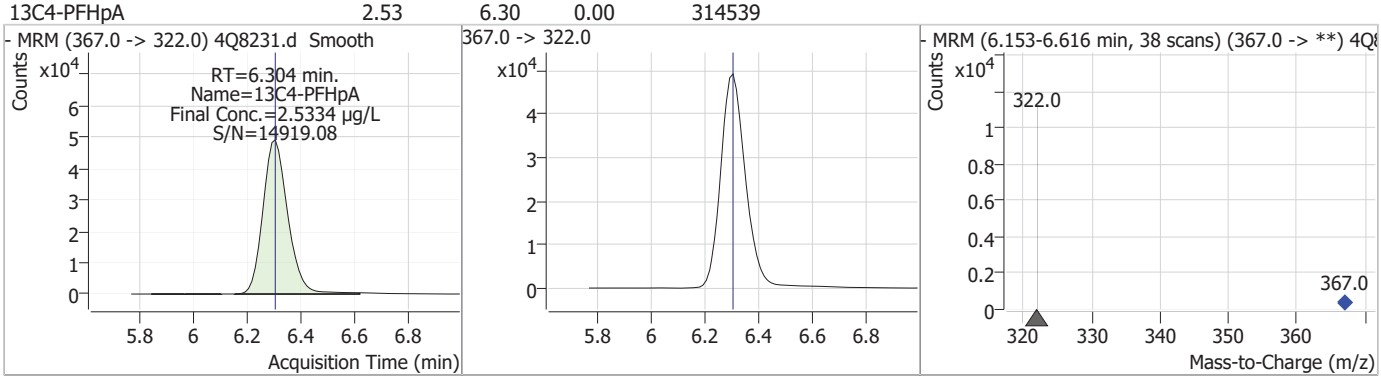
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.28	5.84	-0.01	30890	315.0 -> 69.0	9.8	4.1	12.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	4.11	6.01	-0.01	93502	341.0 -> 217.0	73.0	36.2	108.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.53	6.30	0.00	314539				



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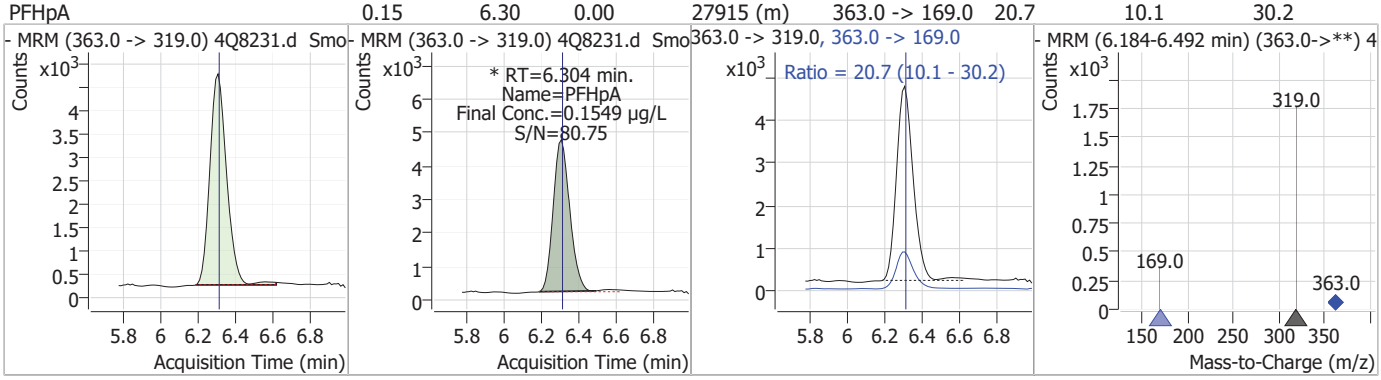
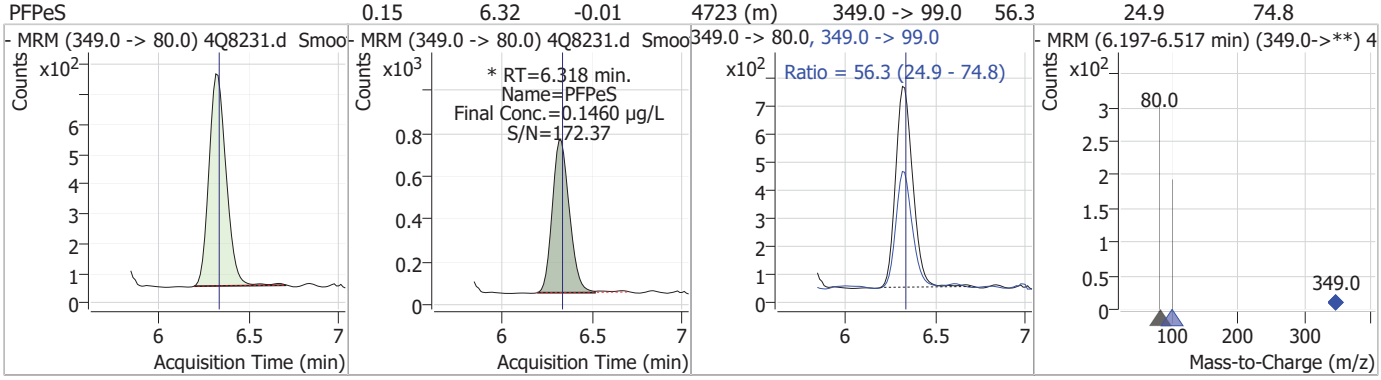
Perfluorinated Compounds by LC/MS/MS

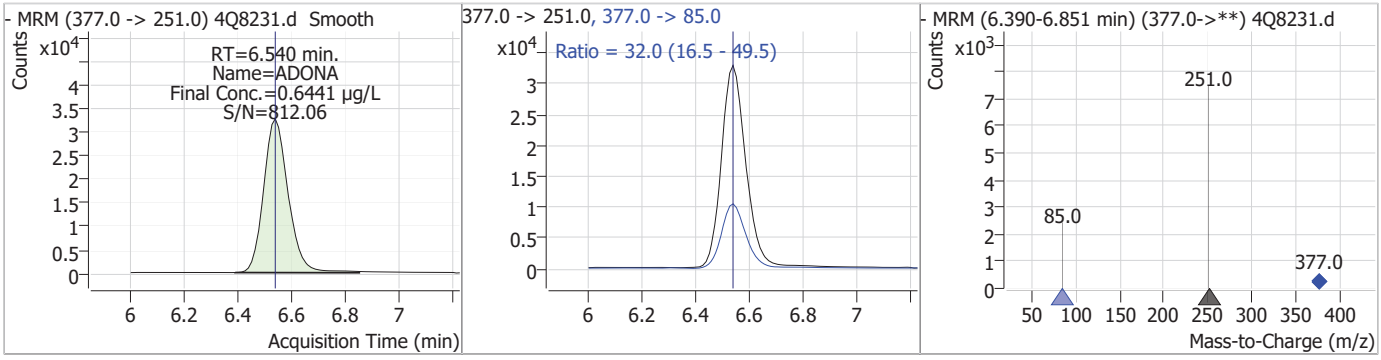
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.15	6.30	0.00	27915 (m)	363.0 -> 169.0	20.7	10.1	30.2



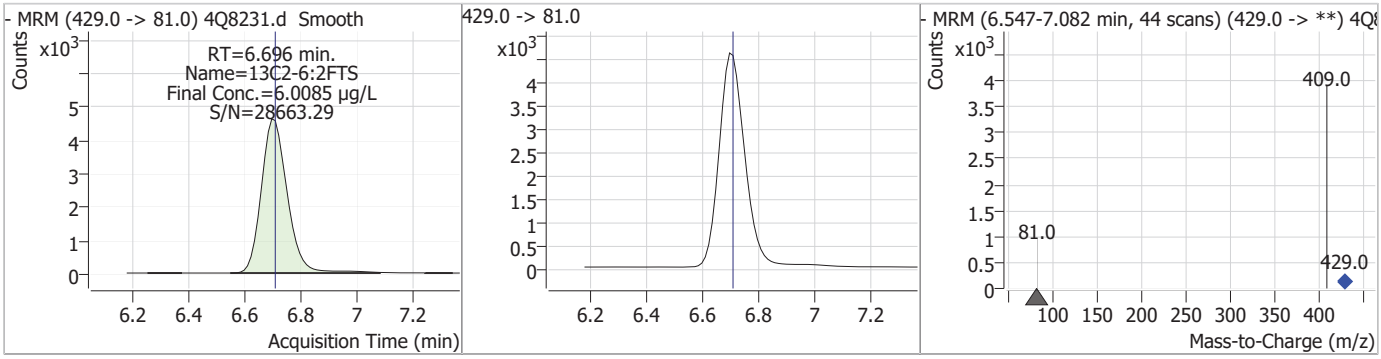
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.15	6.32	-0.01	4723 (m)	349.0 -> 99.0	56.3	24.9	74.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	0.64	6.54	0.00	208025	377.0 -> 85.0	32.0	16.5	49.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	6.01	6.70	-0.01	29663				



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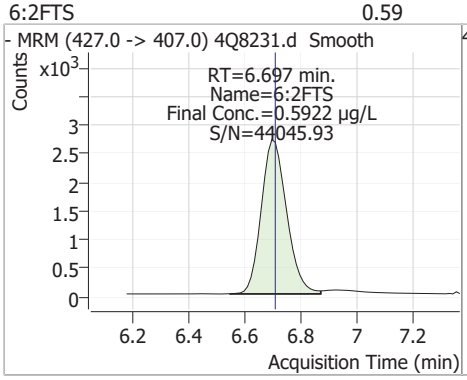
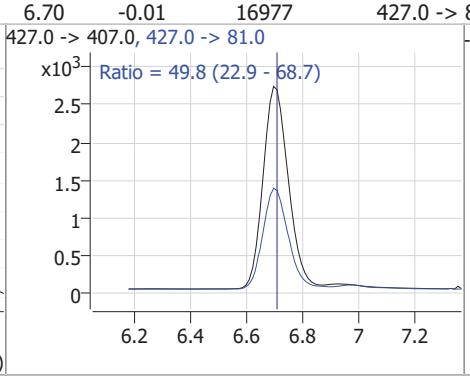
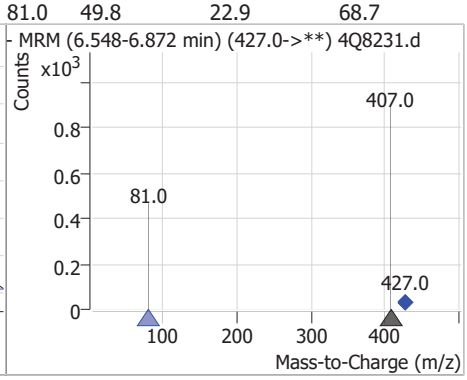
Perfluorinated Compounds by LC/MS/MS

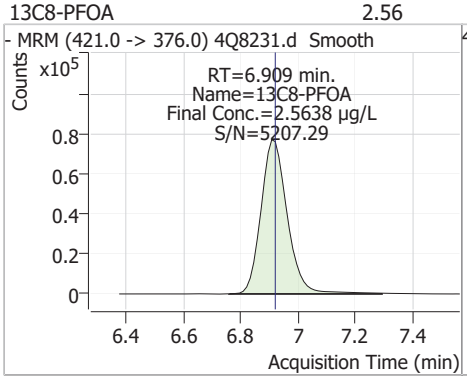
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.59	6.70	-0.01	16977	427.0 -> 81.0	49.8	22.9	68.7

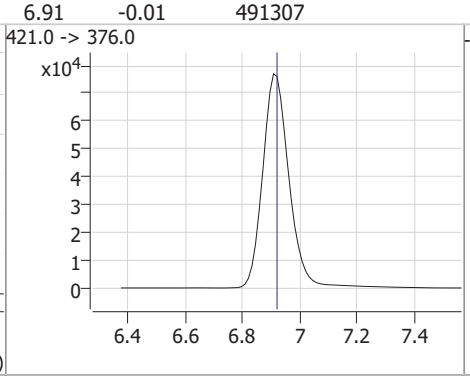


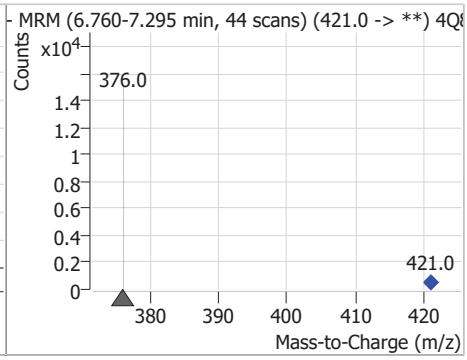




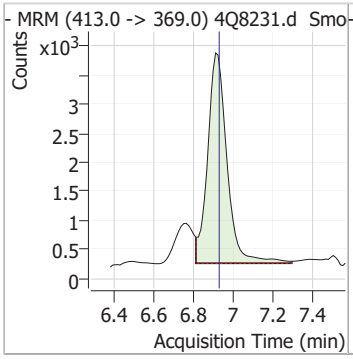
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.56	6.91	-0.01	491307				

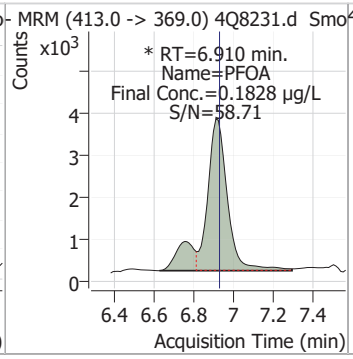


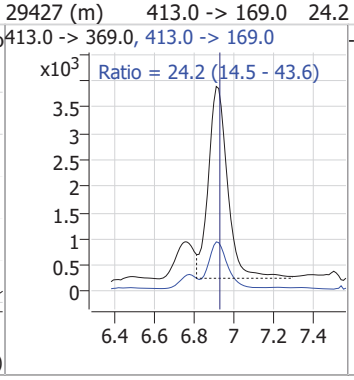


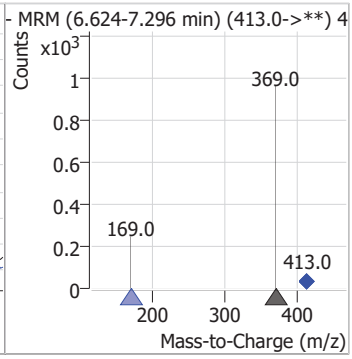


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.18	6.91	-0.01	29427 (m)	413.0 -> 169.0	24.2	14.5	43.6

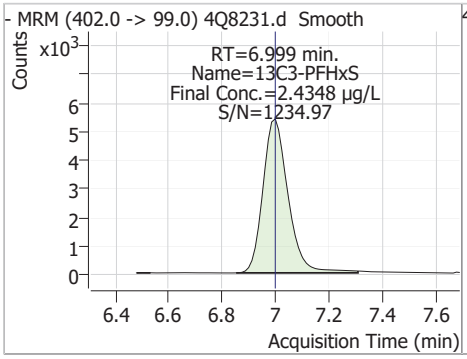


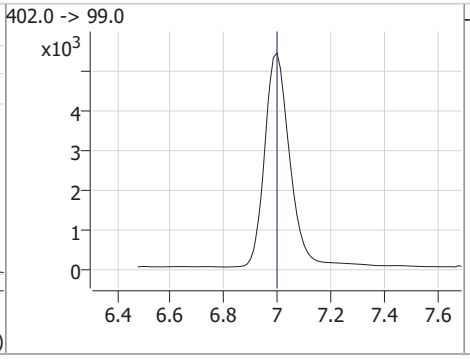


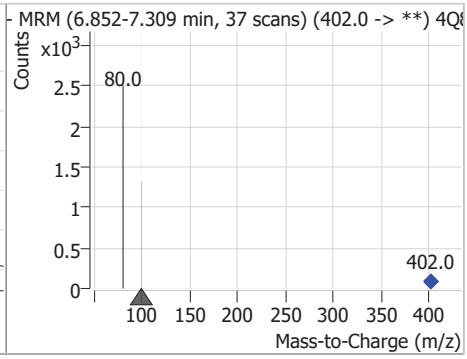




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.43	7.00	0.00	35284				







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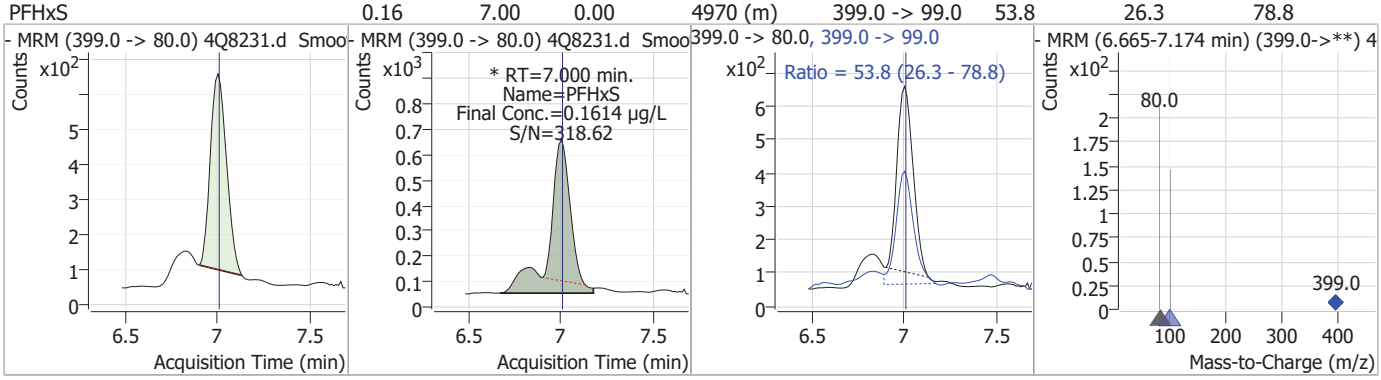
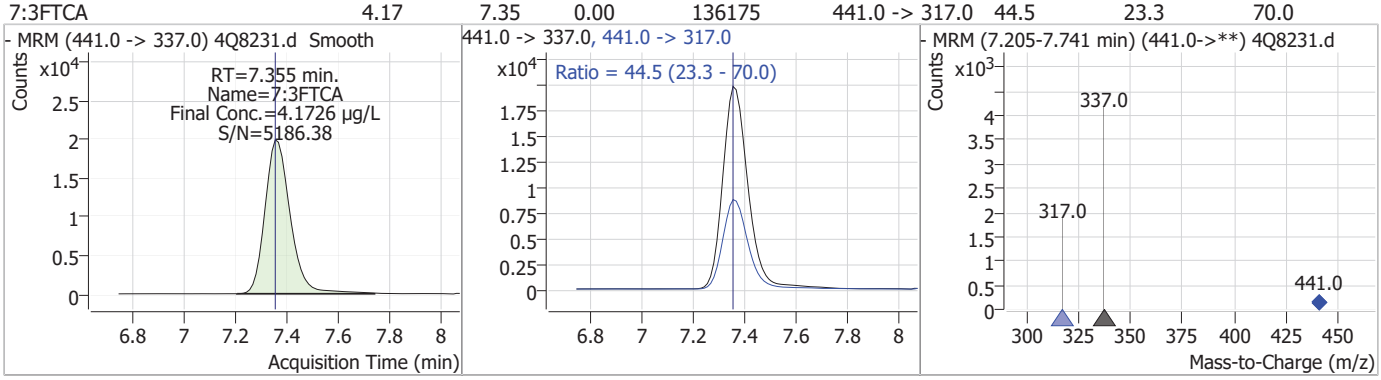
Perfluorinated Compounds by LC/MS/MS

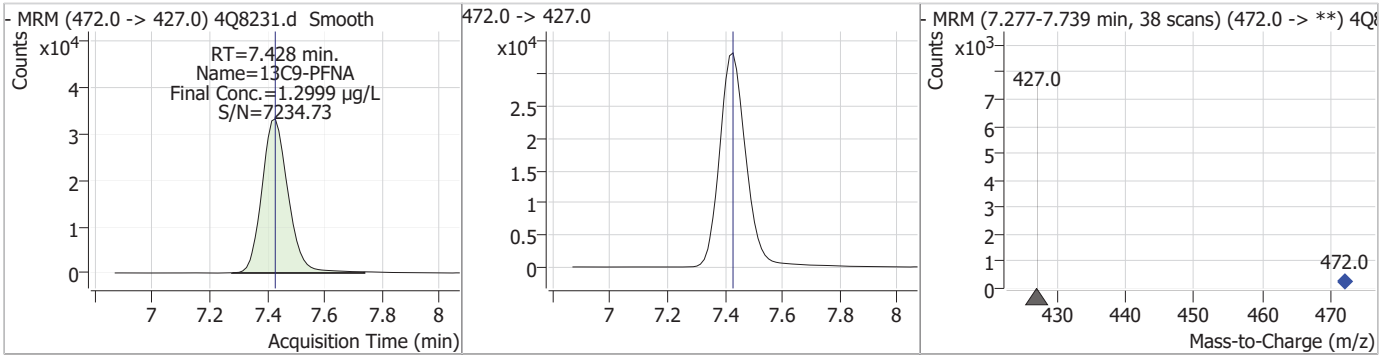
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.16	7.00	0.00	4970 (m)	399.0 -> 99.0	53.8	26.3	78.8



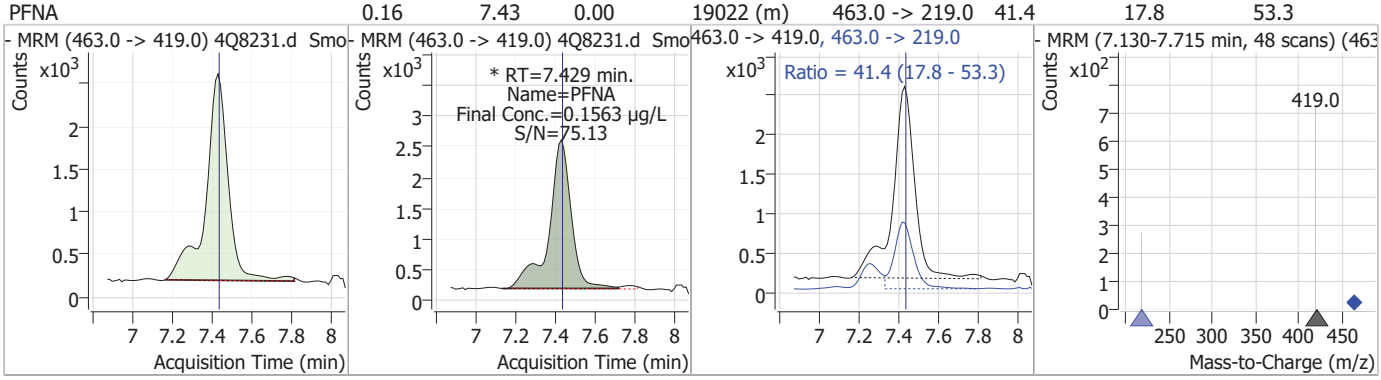
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	4.17	7.35	0.00	136175	441.0 -> 317.0	44.5	23.3	70.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.30	7.43	0.00	210996				

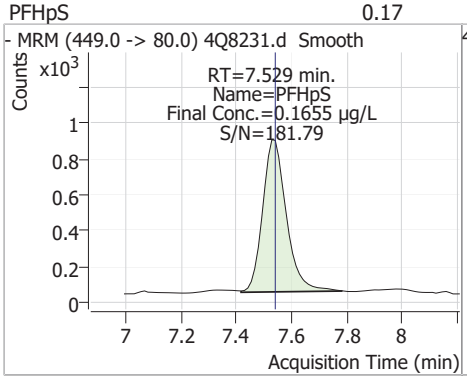


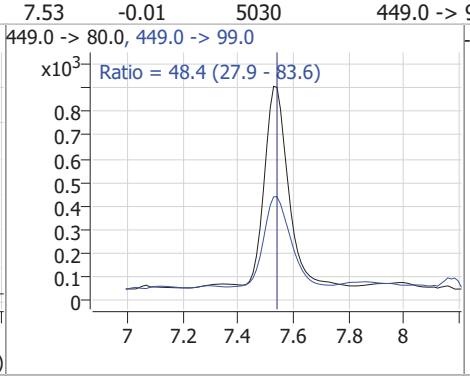
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.16	7.43	0.00	19022 (m)	463.0 -> 219.0	41.4	17.8	53.3

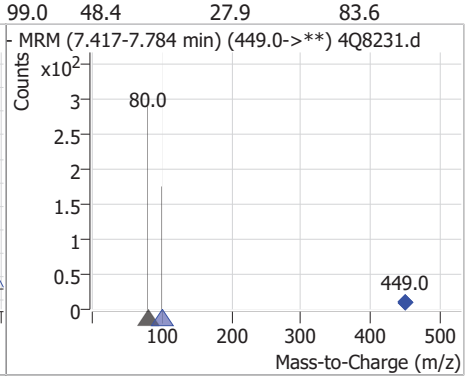


Perfluorinated Compounds by LC/MS/MS

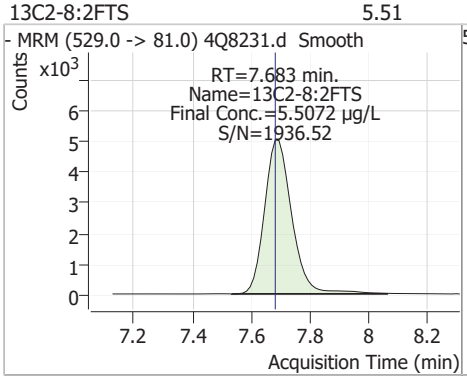
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.17	7.53	-0.01	5030	449.0 -> 99.0	48.4	27.9	83.6

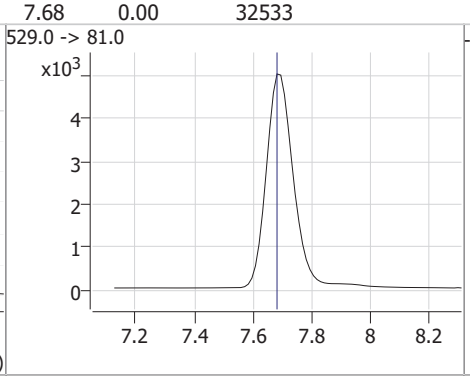


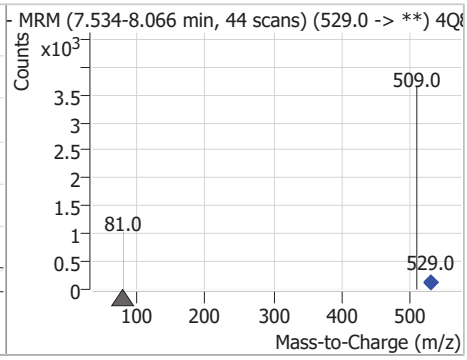




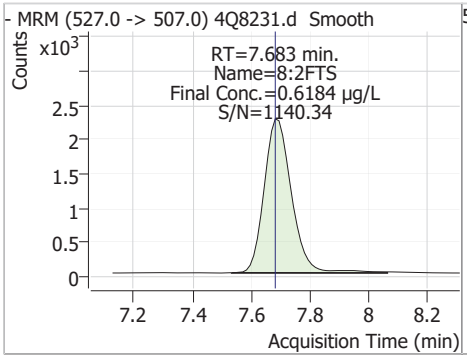
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.51	7.68	0.00	32533				

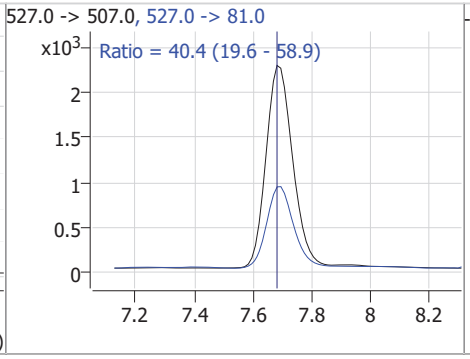


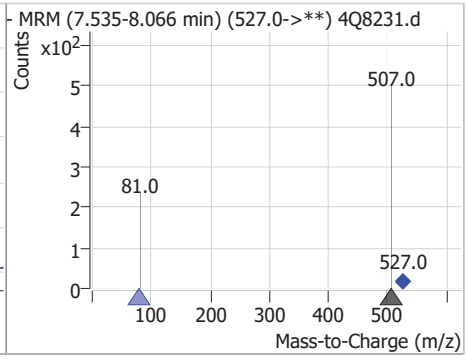




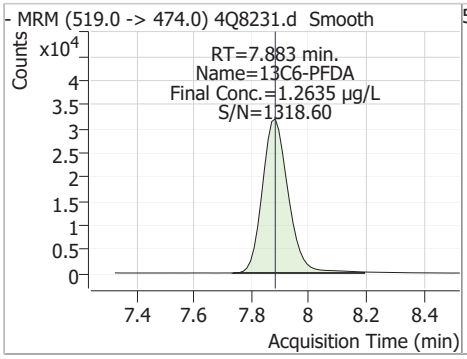
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.62	7.68	0.00	14663	527.0 -> 81.0	40.4	19.6	58.9

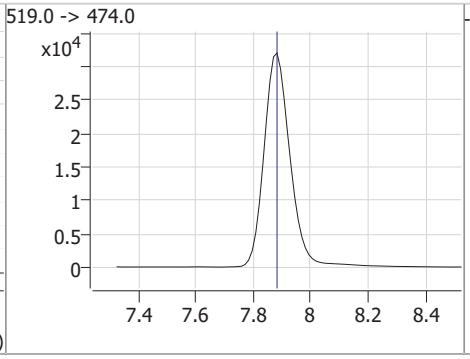


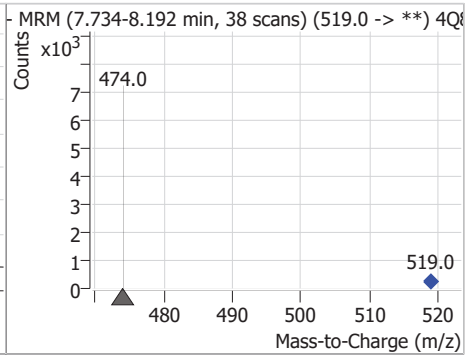




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.26	7.88	0.00	200229				

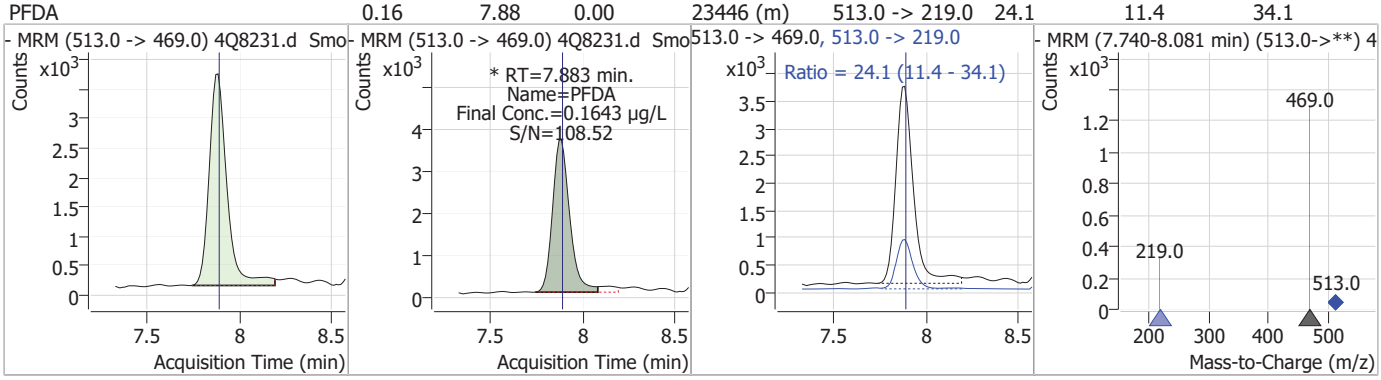




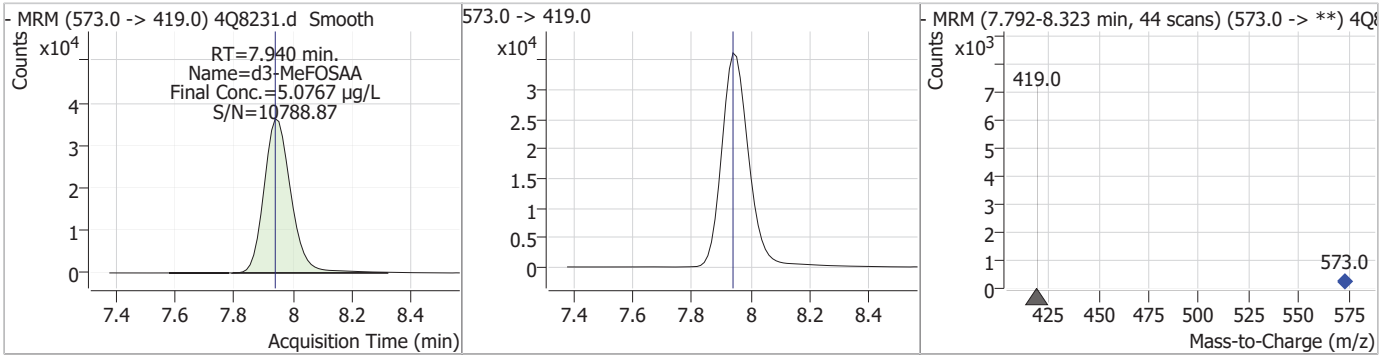


Perfluorinated Compounds by LC/MS/MS

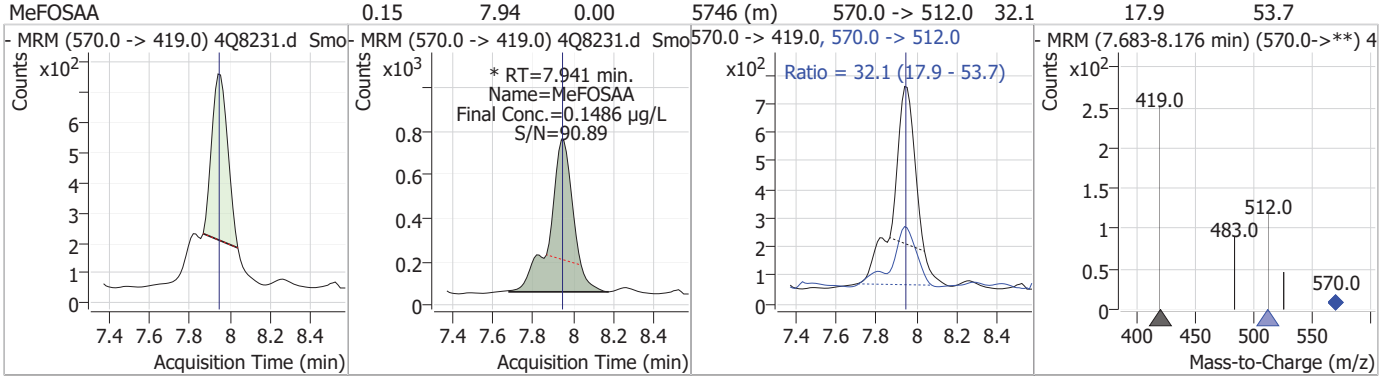
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.16	7.88	0.00	23446 (m)	513.0 -> 219.0	24.1	11.4	34.1



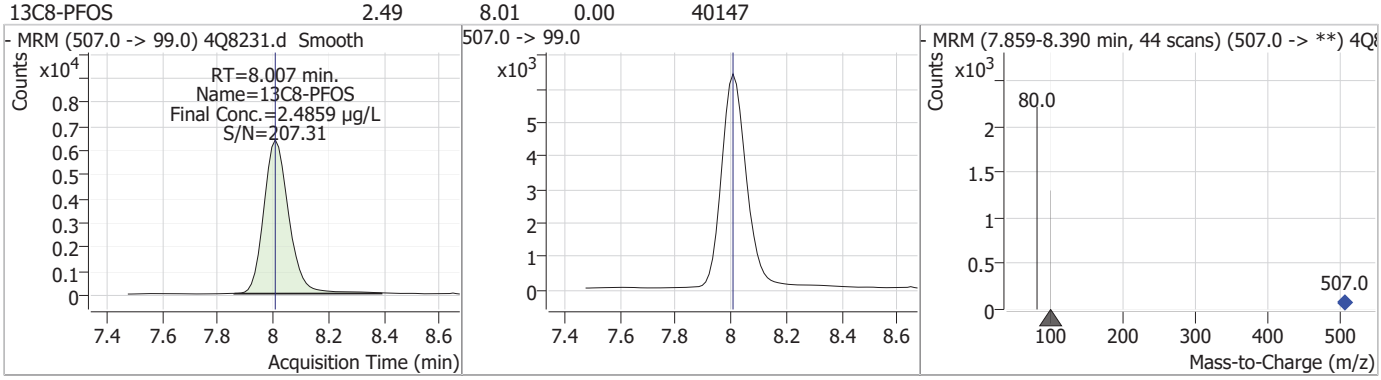
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.08	7.94	0.00	232076				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.15	7.94	0.00	5746 (m)	570.0 -> 512.0	32.1	17.9	53.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.49	8.01	0.00	40147				



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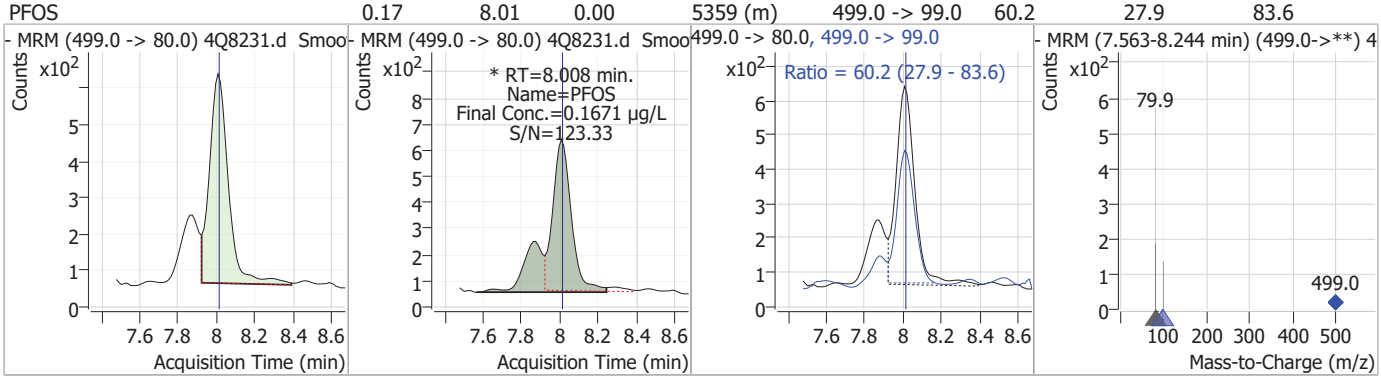
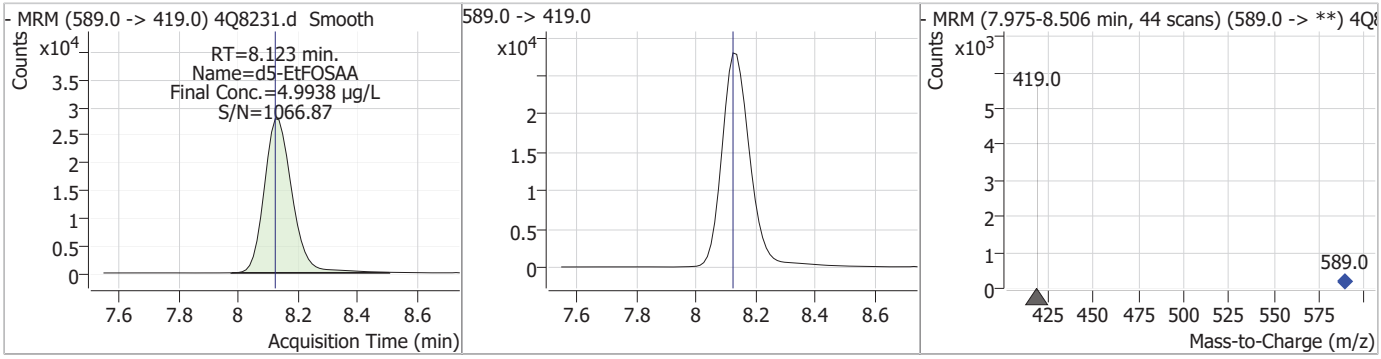
Perfluorinated Compounds by LC/MS/MS

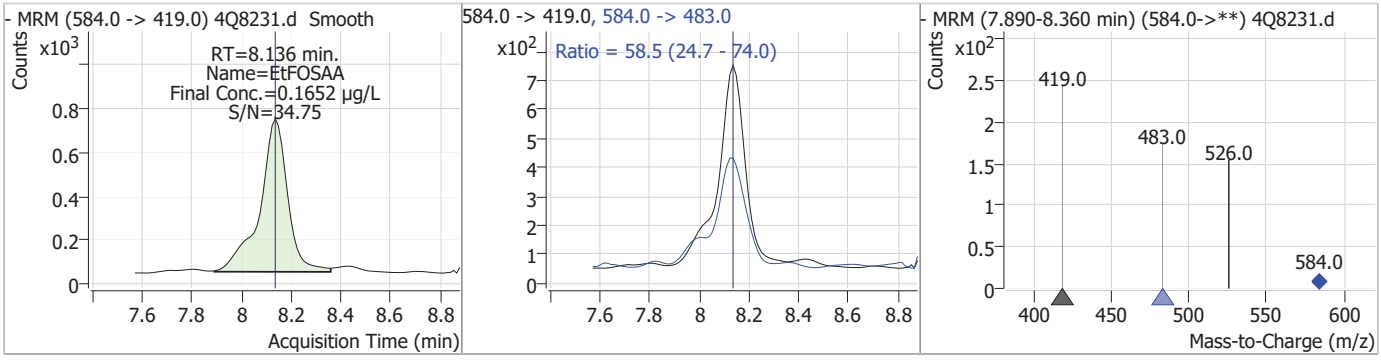
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.17	8.01	0.00	5359 (m)	499.0 -> 99.0	60.2	27.9	83.6



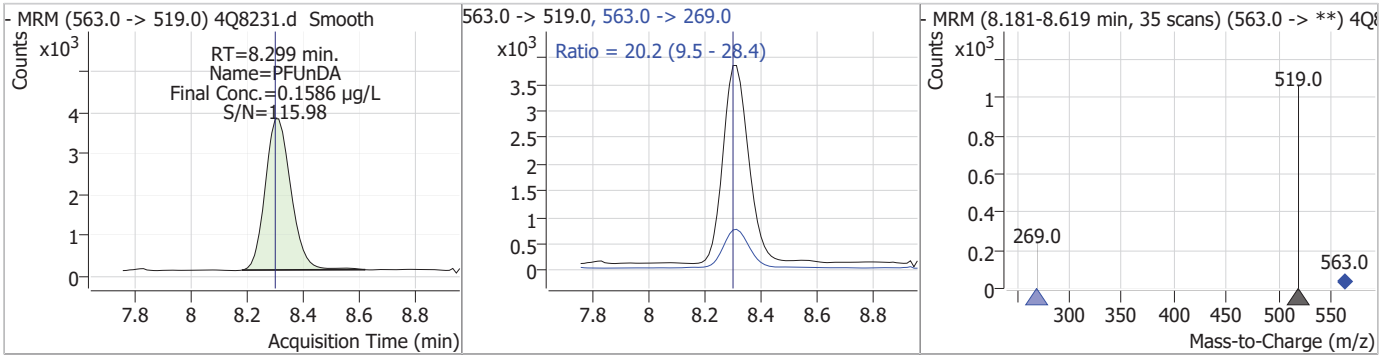
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.99	8.12	0.00	182272				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.17	8.14	0.00	5443	584.0 -> 483.0	58.5	24.7	74.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.16	8.30	0.00	23600	563.0 -> 269.0	20.2	9.5	28.4



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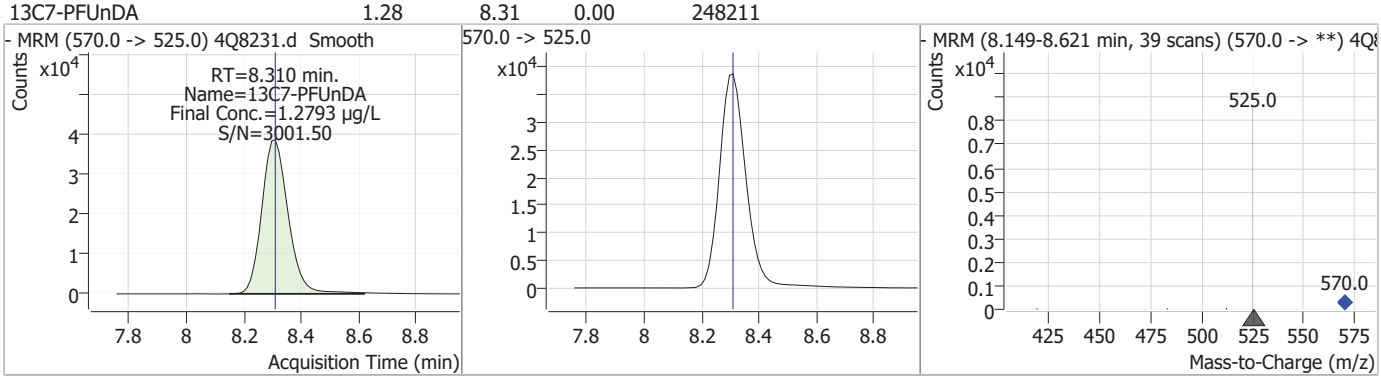
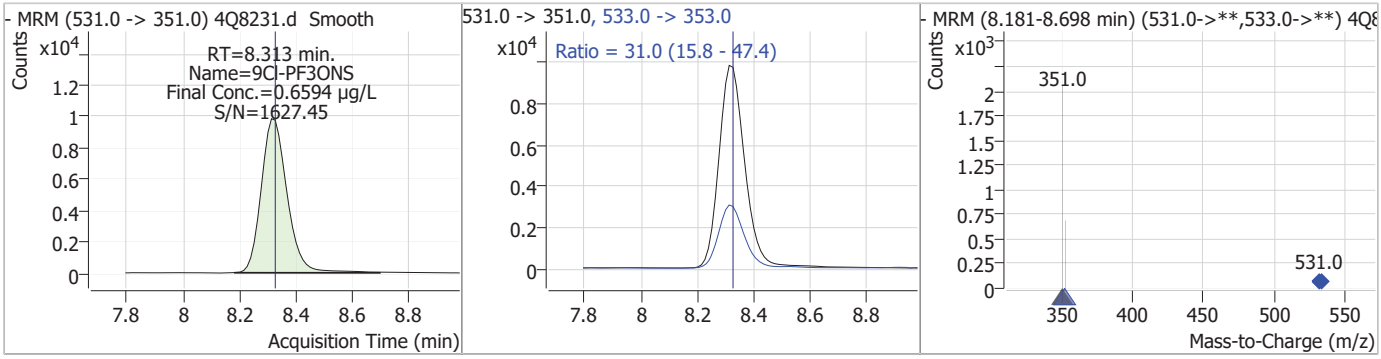
Perfluorinated Compounds by LC/MS/MS

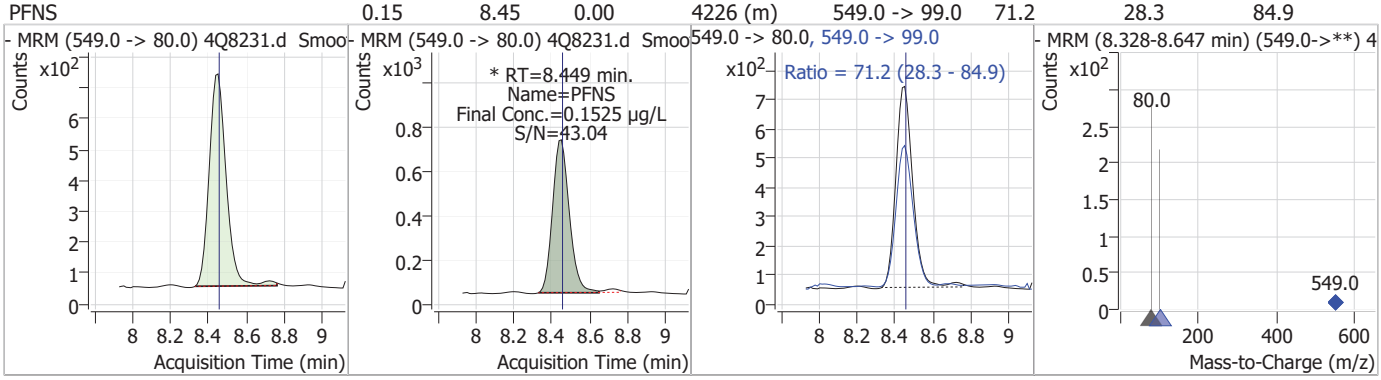
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.28	8.31	0.00	248211				



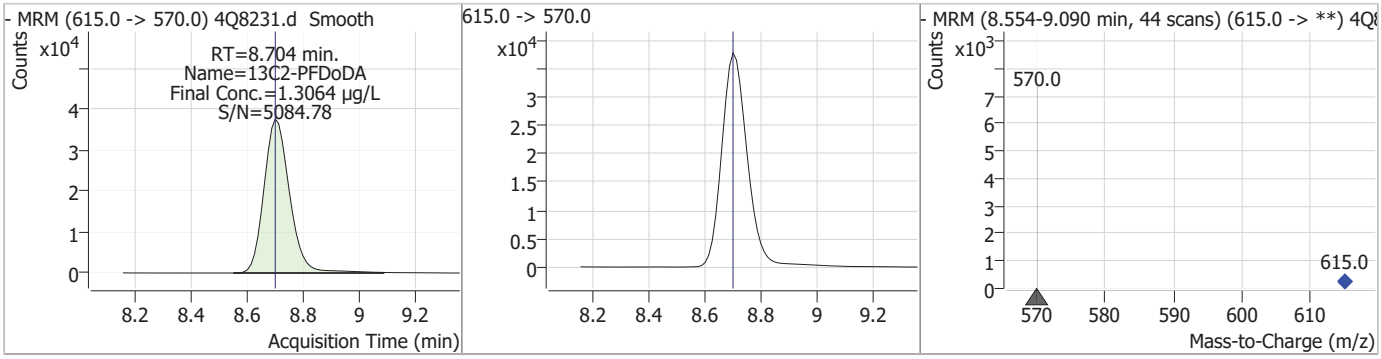
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	0.66	8.31	-0.01	62540	533.0 -> 353.0	31.0	15.8	47.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.15	8.45	0.00	4226 (m)	549.0 -> 99.0	71.2	28.3	84.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.31	8.70	0.00	239163				



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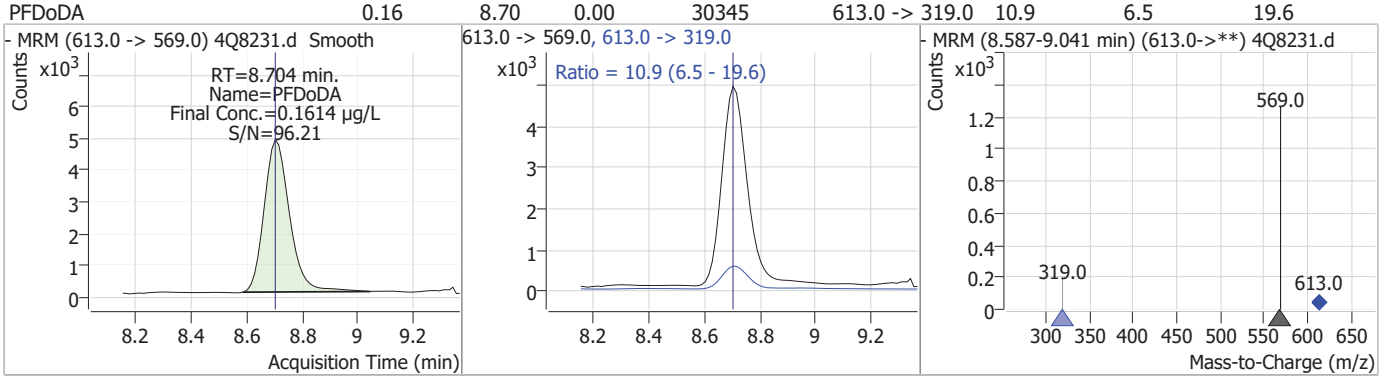
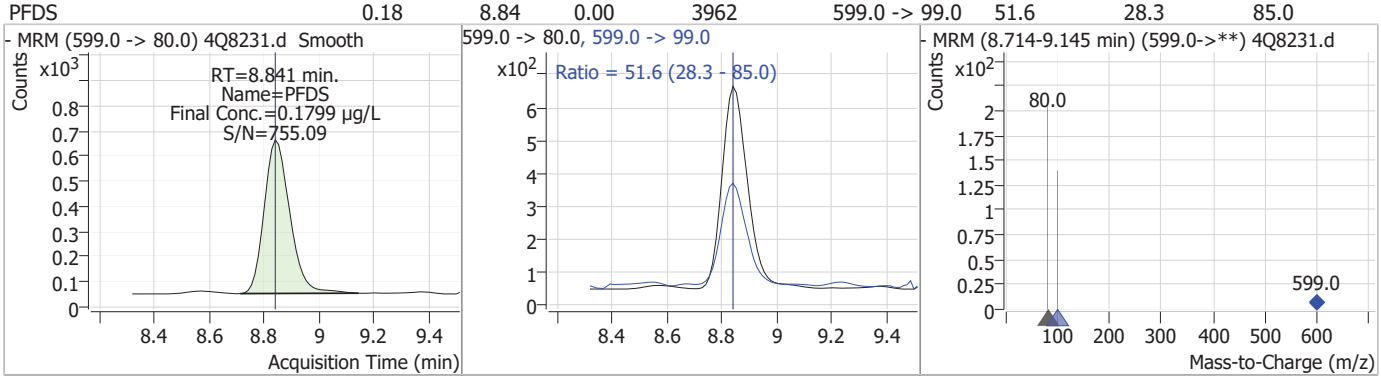
Perfluorinated Compounds by LC/MS/MS

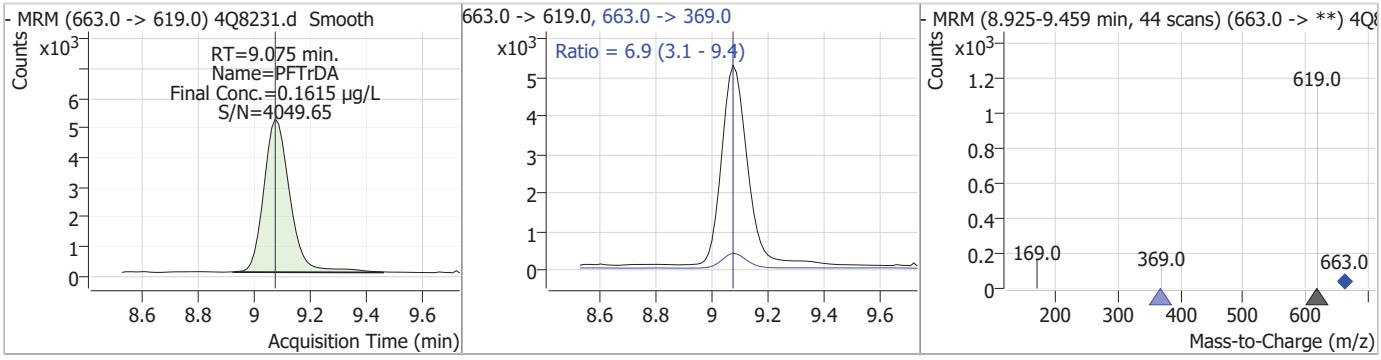
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.16	8.70	0.00	30345	613.0 -> 319.0	10.9	6.5	19.6



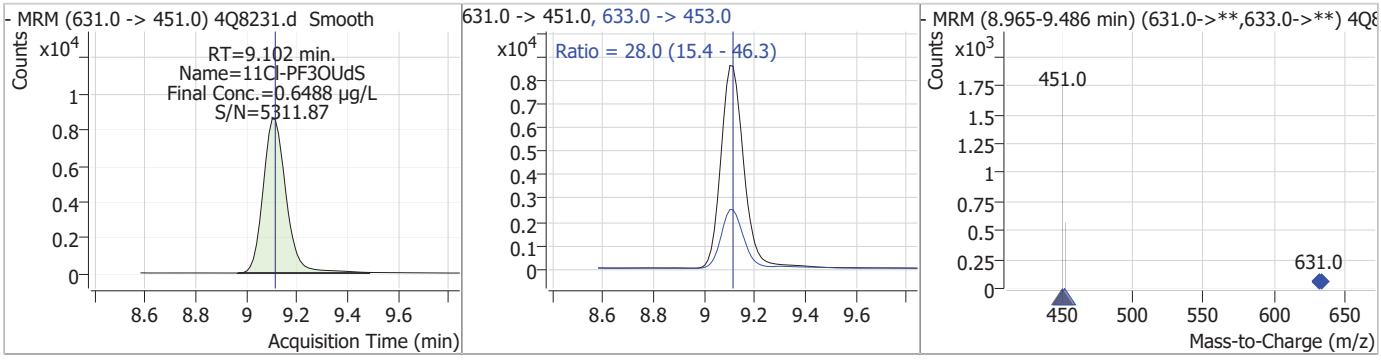
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.18	8.84	0.00	3962	599.0 -> 99.0	51.6	28.3	85.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.16	9.07	0.00	33458	663.0 -> 369.0	6.9	3.1	9.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	0.65	9.10	-0.01	54432	633.0 -> 453.0	28.0	15.4	46.3



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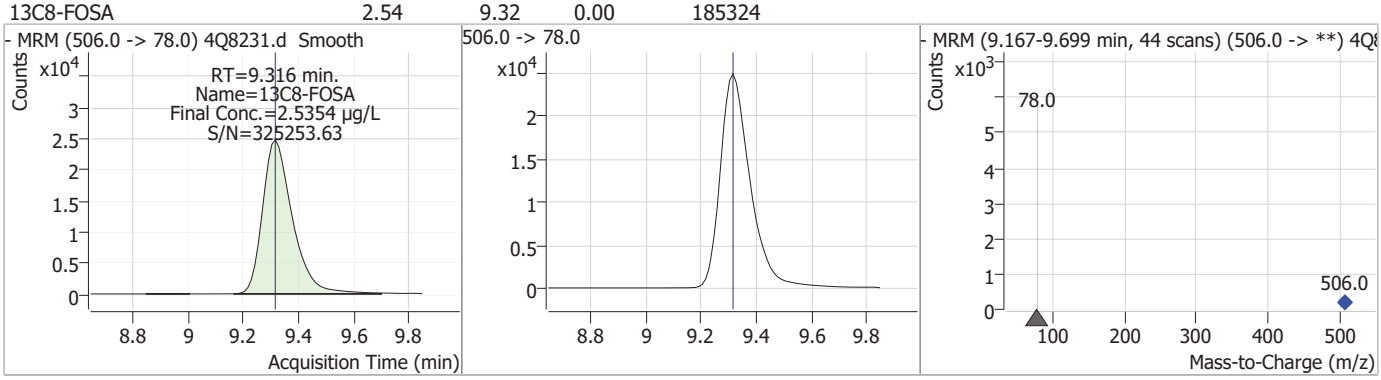
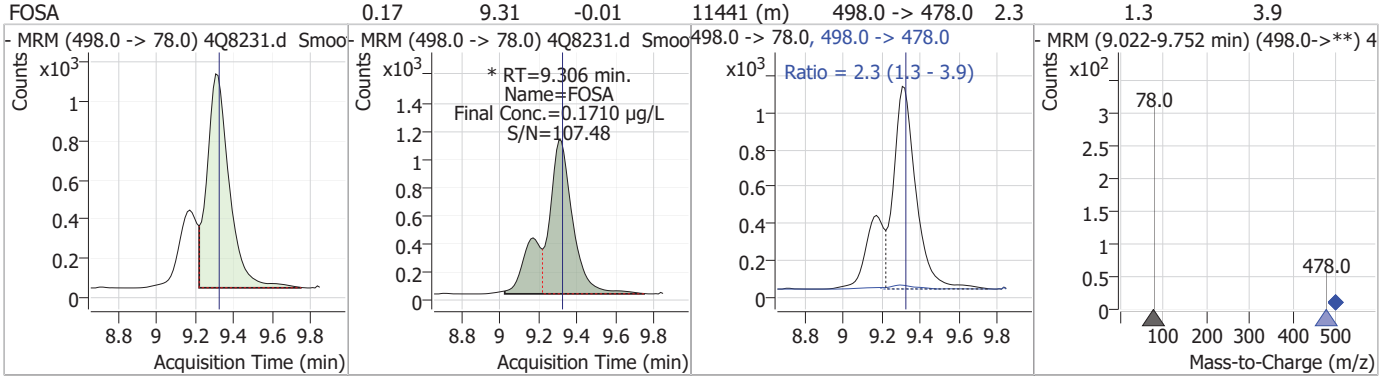
Perfluorinated Compounds by LC/MS/MS

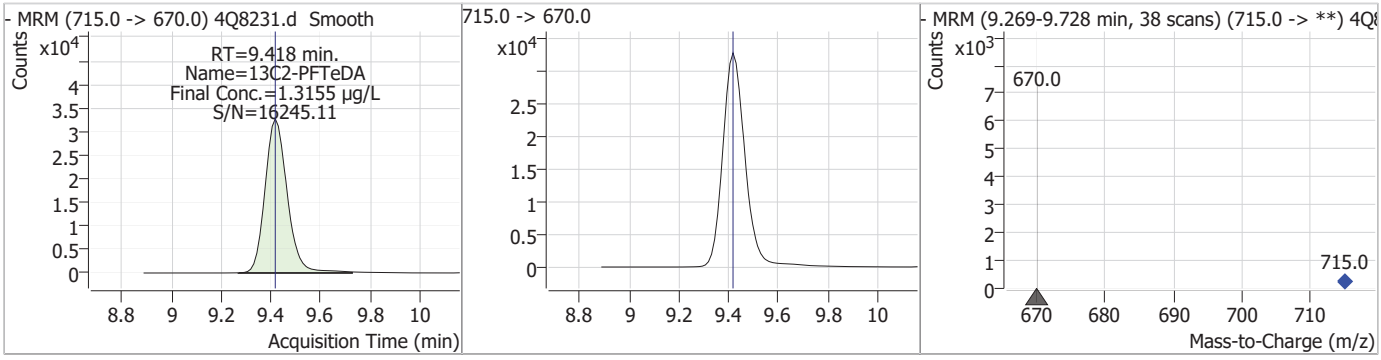
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.54	9.32	0.00	185324				



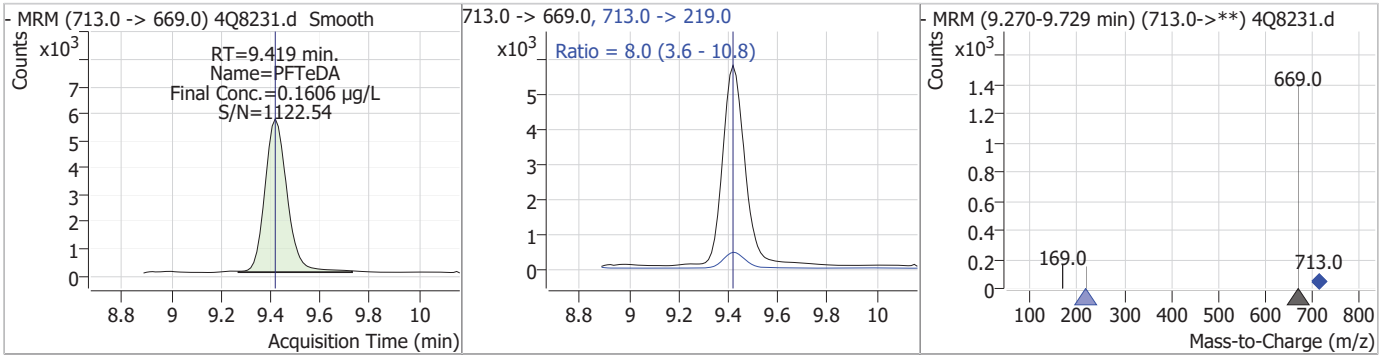
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.17	9.31	-0.01	11441 (m)	498.0 -> 478.0	2.3	1.3	3.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.32	9.42	0.00	203500				

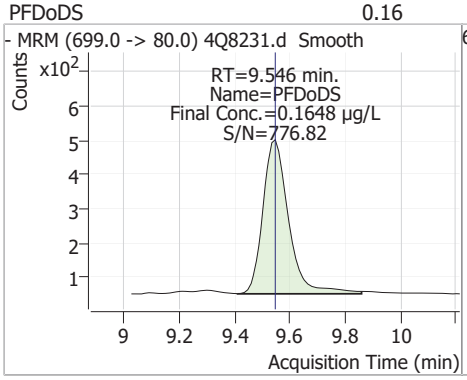


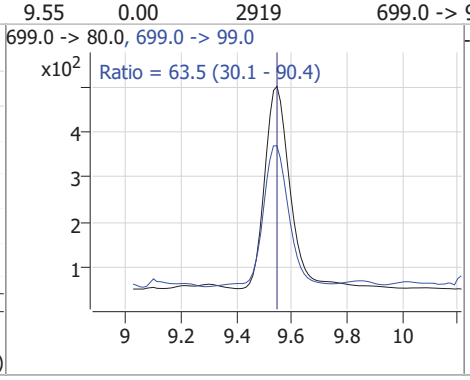
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.16	9.42	0.00	35501	713.0 -> 219.0	8.0	3.6	10.8

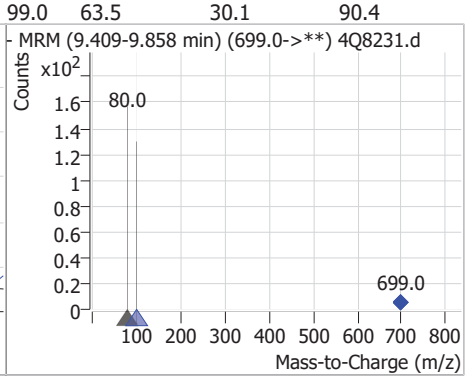


Perfluorinated Compounds by LC/MS/MS

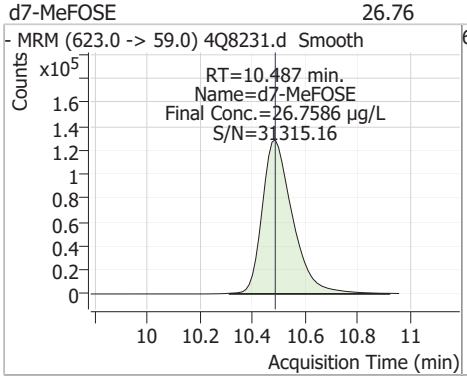
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.16	9.55	0.00	2919	699.0 -> 99.0	63.5	30.1	90.4

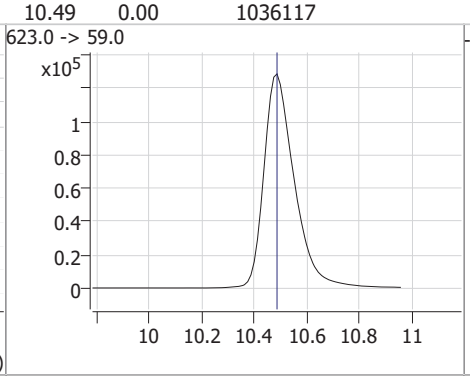


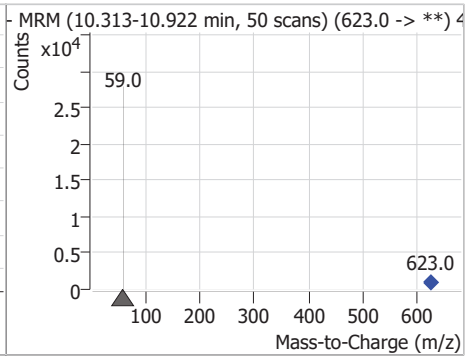




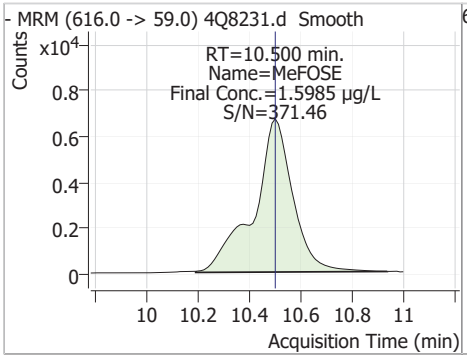
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	26.76	10.49	0.00	1036117				

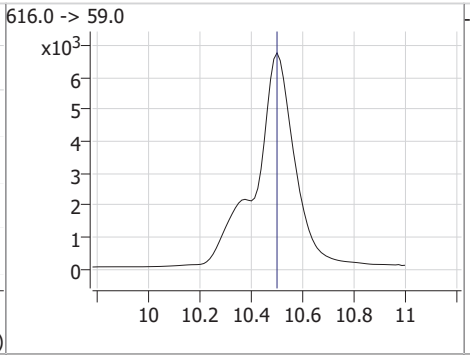


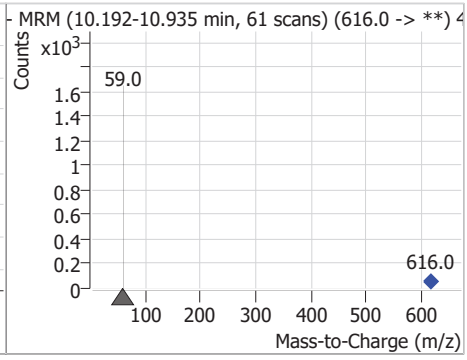




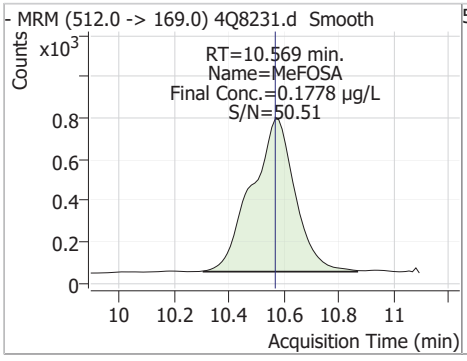
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	1.60	10.50	0.00	70567				

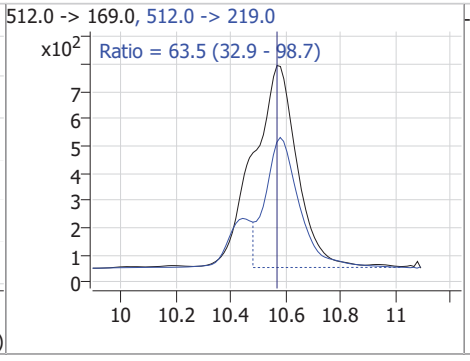


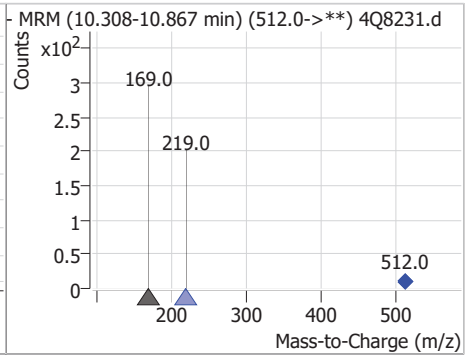




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.18	10.57	0.00	8166	512.0 -> 219.0	63.5	32.9	98.7







7.6.62

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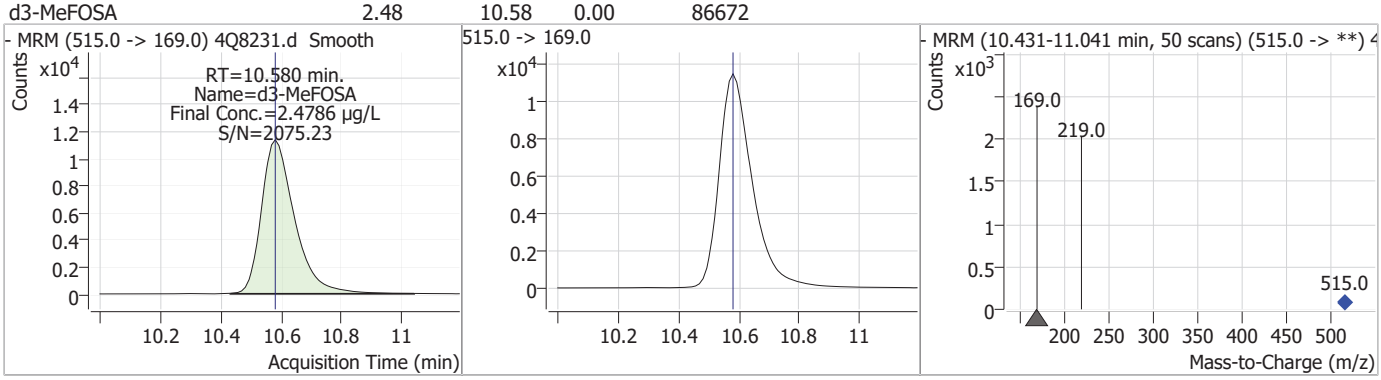
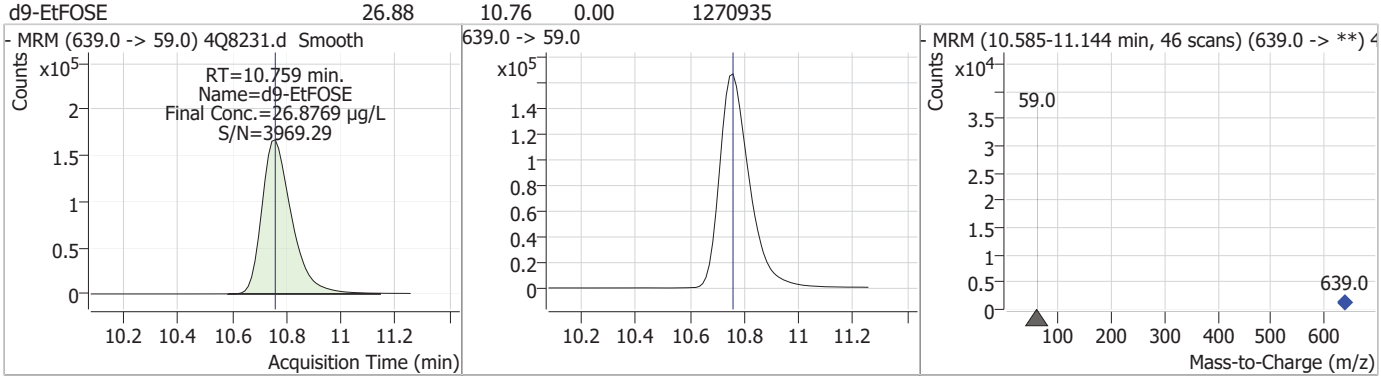
Perfluorinated Compounds by LC/MS/MS

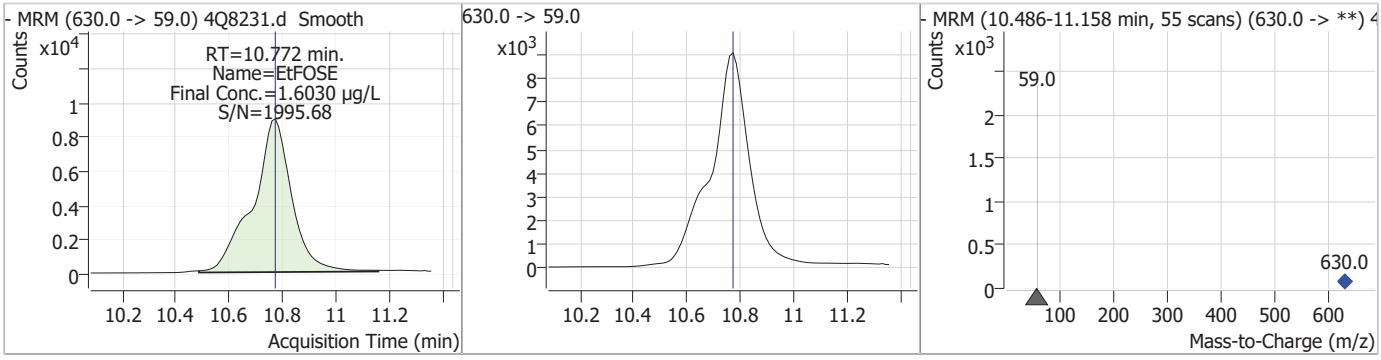
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.48	10.58	0.00	86672				



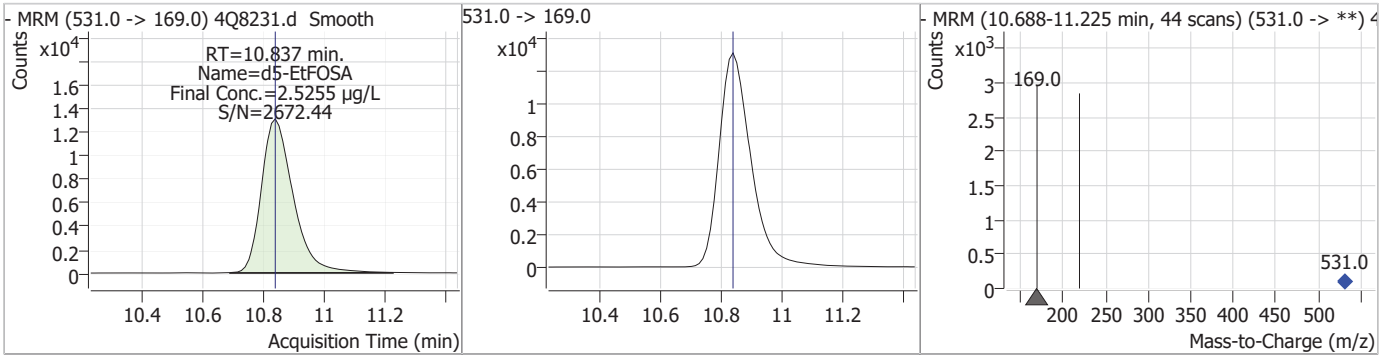
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	26.88	10.76	0.00	1270935				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	1.60	10.77	0.00	90836				

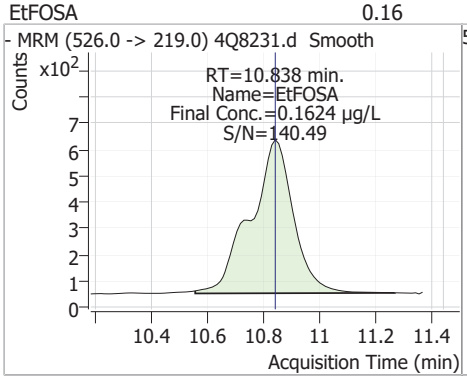


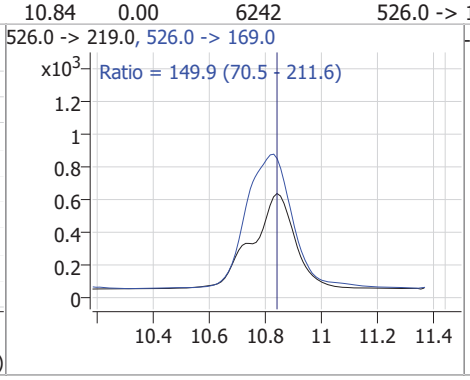
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.53	10.84	0.00	95178				

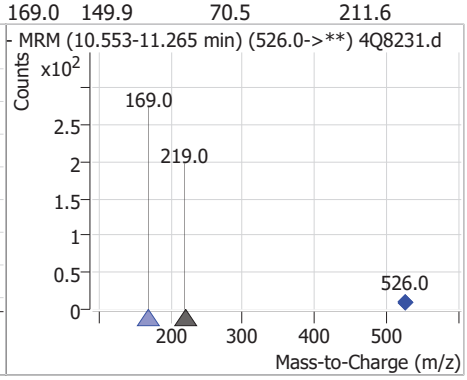


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.16	10.84	0.00	6242	526.0 -> 169.0	149.9	70.5	211.6







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7

Manual Integration Approval Summary

Sample Number: T4Q140-IC140
Lab FileID: 4Q8231.D
Injection Time: 05/02/25 14:00
Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
3:3 Fluorotelomer carboxylate	356-02-5		3.77	Poorly defined baseline
Perfluorobutanesulfonic acid	375-73-5		5.34	Poorly defined baseline
Perfluorohexanoic acid	307-24-4		5.46	Poorly defined baseline
Perfluoroheptanoic acid	375-85-9		6.30	Poorly defined baseline
Perfluoropentanesulfonic acid	2706-91-4		6.32	Poorly defined baseline
Perfluorooctanoic acid	335-67-1		6.91	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.43	Split peak
Perfluorodecanoic acid	335-76-2		7.88	Poorly defined baseline
MeFOSAA	2355-31-9		7.94	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.01	Split peak
Perfluorononanesulfonic acid	68259-12-1		8.45	Poorly defined baseline
PFOSA	754-91-6		9.31	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8232.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 2:13:45 PM
Sample Name : IC140-2
Vial : P1-A3
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.883	217.0 -> 172.0	829907	10.00	µg/L	0.000
M5-PFPeA	4.319	268.0 -> 223.0	438460	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	300443	2.50	µg/L	0.000
M4-PFHpA	6.304	367.0 -> 322.0	332626	2.50	µg/L	0.000
M8-PFOA	6.909	421.0 -> 376.0	502765	2.50	µg/L	-0.012
M9-PFNA	7.428	472.0 -> 427.0	210180	1.25	µg/L	0.000
M6-PFDA	7.883	519.0 -> 474.0	208183	1.25	µg/L	0.000
M7-PFUnDA	8.298	570.0 -> 525.0	261796	1.25	µg/L	-0.012
M2-PFDoDA	8.704	615.0 -> 570.0	237274	1.25	µg/L	0.000
M2-PFTeDA	9.418	715.0 -> 670.0	202957	1.25	µg/L	0.000
M8-FOSA	9.316	506.0 -> 78.0	189825	2.50	µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	27574	2.50	µg/L	-0.012
		302.0 -> 80.0	67444			
M3-PFHxS	6.999	402.0 -> 99.0	39063	2.50	µg/L	0.000
M8-PFOS	8.007	507.0 -> 99.0	41259	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	13098	5.00	µg/L	0.000
M2-6:2FTS	6.708	429.0 -> 81.0	28277	5.00	µg/L	0.000
M2-8:2FTS	7.683	529.0 -> 81.0	32387	5.00	µg/L	0.000
M3-MeFOSAA	7.940	573.0 -> 419.0	236381	5.00	µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	423587	10.00	µg/L	0.000
M5-EtFOSAA	8.123	589.0 -> 419.0	187158	5.00	µg/L	0.000
M7-MeFOSE	10.487	623.0 -> 59.0	1039325	25.00	µg/L	0.000
M9-EtFOSE	10.759	639.0 -> 59.0	1280232	25.00	µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	97726	2.50	µg/L	0.000
M3-MeFOSA	10.580	515.0 -> 169.0	89084	2.50	µg/L	0.000
13C4-PFOS	8.008	503.0 -> 80.0	67678	2.50	µg/L	0.000
13C3-PFBA	2.886	216.0 -> 172.0	337818	5.00	µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	41114	2.50	µg/L	0.000
13C4-PFOA	6.922	417.0 -> 372.0	470897	2.50	µg/L	0.000
13C2-PFDA	7.883	515.0 -> 470.0	161838	1.25	µg/L	0.000
13C5-PFNA	7.428	468.0 -> 423.0	186491	1.25	µg/L	0.000
13C2-PFHxA	5.465	315.0 -> 270.0	262111	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	13098	5.73	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 114.6%		
13C2-6:2FTS	6.708	429.0 -> 81.0	28277	5.72	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 114.3%		
13C2-8:2FTS	7.683	529.0 -> 81.0	32387	5.47	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 109.4%		
13C2-PFDoDA	8.704	615.0 -> 570.0	237274	1.31	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.0%		
13C2-PFTeDA	9.418	715.0 -> 670.0	202957	1.33	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.3%		
13C3-PFBS	5.355	302.0 -> 99.0	27574	2.73	µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 109.1%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	39063	2.69	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.6%			
13C4-PFBA	2.883	217.0 -> 172.0	829907	10.41	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 104.1%			
13C4-PFHpA	6.304	367.0 -> 322.0	332626	2.67	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.6%			
13C5-PFHxA	5.464	318.0 -> 273.0	300443	2.61	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.3%			
13C5-PFPeA	4.319	268.0 -> 223.0	438460	5.21	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.3%			
13C6-PFDA	7.883	519.0 -> 474.0	208183	1.33	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 106.4%			
13C7-PFUnDA	8.298	570.0 -> 525.0	261796	1.37	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 109.3%			
13C8-FOSA	9.316	506.0 -> 78.0	189825	2.61	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.4%			
13C8-PFOA	6.909	421.0 -> 376.0	502765	2.59	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.7%			
13C8-PFOS	8.007	507.0 -> 99.0	41259	2.57	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.7%			
13C9-PFNA	7.428	472.0 -> 427.0	210180	1.30	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.9%			
d3-MeFOSAA	7.940	573.0 -> 419.0	236381	5.20	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.9%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	423587	10.32	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 103.2%			
d3-MeFOSA	10.580	515.0 -> 169.0	89084	2.56	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.4%			
d5-EtFOSAA	8.123	589.0 -> 419.0	187158	5.15	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.0%			
d7-MeFOSE	10.487	623.0 -> 59.0	1039325	26.97	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 107.9%			
d9-EtFOSE	10.759	639.0 -> 59.0	1280232	27.20	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 108.8%			
d5-EtFOSA	10.837	531.0 -> 169.0	97726	2.61	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.2%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	30383	1.36	µg/L		97
		327.0 -> 81.0	14074				
6:2FTS	6.697	427.0 -> 407.0	37332	1.37	µg/L		98
		427.0 -> 81.0	17526				
8:2FTS	7.696	527.0 -> 507.0	31504	1.33	µg/L		94
		527.0 -> 81.0	13620				
EtFOSAA	8.136	584.0 -> 419.0	11547	0.34	µg/L	m	87
		584.0 -> 483.0	6735				
FOSA	9.306	498.0 -> 78.0	23920	0.35	µg/L	m	99
		498.0 -> 478.0	530				
MeFOSAA	7.941	570.0 -> 419.0	14311	0.36	µg/L	m	88
		570.0 -> 512.0	4150				
PFBA	2.889	213.0 -> 169.0	37678	1.39	µg/L		100
PFBS	5.357	299.0 -> 80.0	9095	0.29	µg/L		98
		299.0 -> 99.0	3608				
PFDA	7.883	513.0 -> 469.0	49103	0.33	µg/L		99
		513.0 -> 219.0	11413				
PFDoDA	8.704	613.0 -> 569.0	65566	0.35	µg/L		99
		613.0 -> 319.0	8967				

Perfluorinated Compounds by LC/MS/MS

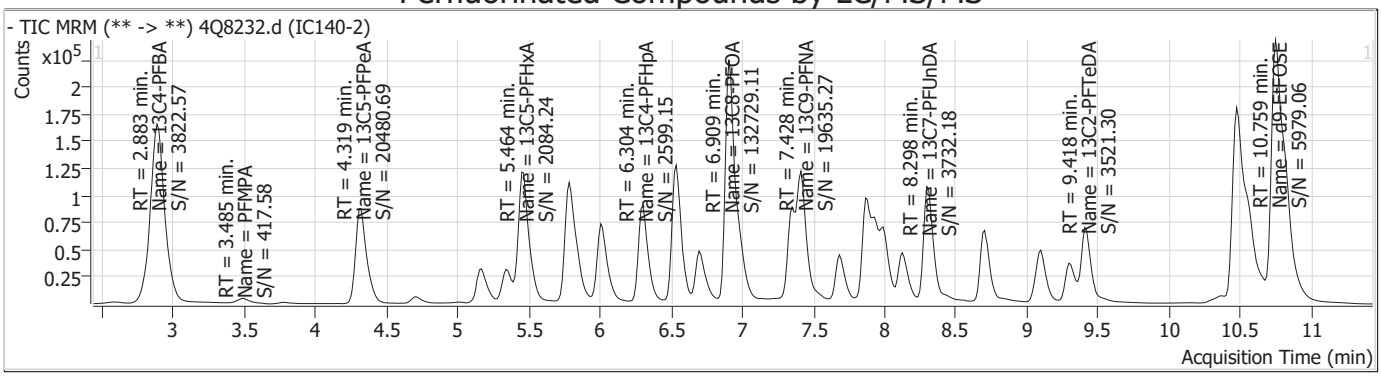
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.841	599.0 -> 80.0	6998	0.30	µg/L		96
		599.0 -> 99.0	4193				
PFHpA	6.304	363.0 -> 319.0	64834	0.34	µg/L		99
		363.0 -> 169.0	13297				
PFHpS	7.541	449.0 -> 80.0	10906	0.32	µg/L		99
		449.0 -> 99.0	5993				
PFHxA	5.467	313.0 -> 269.0	43124	0.35	µg/L		99
		313.0 -> 119.0	1671				
PFHxS	7.000	399.0 -> 80.0	10571	0.31	µg/L	m	96
		399.0 -> 99.0	5856				
PFNA	7.429	463.0 -> 419.0	42927	0.35	µg/L	m	96
		463.0 -> 219.0	16191				
PFNS	8.437	549.0 -> 80.0	9882	0.35	µg/L		92
		549.0 -> 99.0	6175				
PFOA	6.910	413.0 -> 369.0	55359	0.34	µg/L	m	96
		413.0 -> 169.0	15025				
PFOS	8.008	499.0 -> 80.0	10794	0.33	µg/L	m	94
		499.0 -> 99.0	6470				
PFPeA	4.321	263.0 -> 219.0	46998	0.69	µg/L		100
PFPeS	6.331	349.0 -> 80.0	10729	0.31	µg/L		97
		349.0 -> 99.0	5152				
PFTeDA	9.419	713.0 -> 669.0	77690	0.35	µg/L		100
		713.0 -> 219.0	5718				
PFTrDA	9.075	663.0 -> 619.0	72717	0.35	µg/L		99
		663.0 -> 369.0	4708				
PFUnDA	8.299	563.0 -> 519.0	53834	0.34	µg/L		99
		563.0 -> 269.0	10311				
11Cl-PF3OUdS	9.102	631.0 -> 451.0	122310	1.38	µg/L		99
		633.0 -> 453.0	37166				
9Cl-PF3ONS	8.313	531.0 -> 351.0	142358	1.42	µg/L		97
		533.0 -> 353.0	42492				
ADONA	6.540	377.0 -> 251.0	446161	1.30	µg/L		100
		377.0 -> 85.0	147395				
HFPO-DA	5.792	285.0 -> 169.0	61426	1.40	µg/L		99
		285.0 -> 185.0	7421				
3:3FTCA	3.781	241.0 -> 177.0	7152	1.72	µg/L		93
		241.0 -> 117.0	863				
5:3FTCA	6.019	341.0 -> 237.0	207058	8.80	µg/L		100
		341.0 -> 217.0	150314				
7:3FTCA	7.355	441.0 -> 337.0	299449	8.88	µg/L		99
		441.0 -> 317.0	137234				
EtFOSA	10.838	526.0 -> 219.0	13395	0.34	µg/L		91
		526.0 -> 169.0	20320				
EtFOSE	10.772	630.0 -> 59.0	199536	3.50	µg/L		100
MeFOSA	10.582	512.0 -> 169.0	16141	0.34	µg/L		96
		512.0 -> 219.0	11083				
MeFOSE	10.500	616.0 -> 59.0	158348	3.58	µg/L	m	100
PFDoDS	9.545	699.0 -> 80.0	6542	0.36	µg/L		95
		699.0 -> 99.0	4185				
NFDHA	5.345	295.0 -> 201.0	8958	0.66	µg/L		93
		201.0 -> 85.0	46296				
		295.0 -> 85.0	2686				
PFMBA	4.710	279.0 -> 85.0	31730	0.69	µg/L		100
PFMPA	3.485	229.0 -> 85.0	27275	0.69	µg/L		100
PFEESA	5.849	315.0 -> 135.0	72715	0.63	µg/L		100
		315.0 -> 69.0	5835				

Perfluorinated Compounds by LC/MS/MS

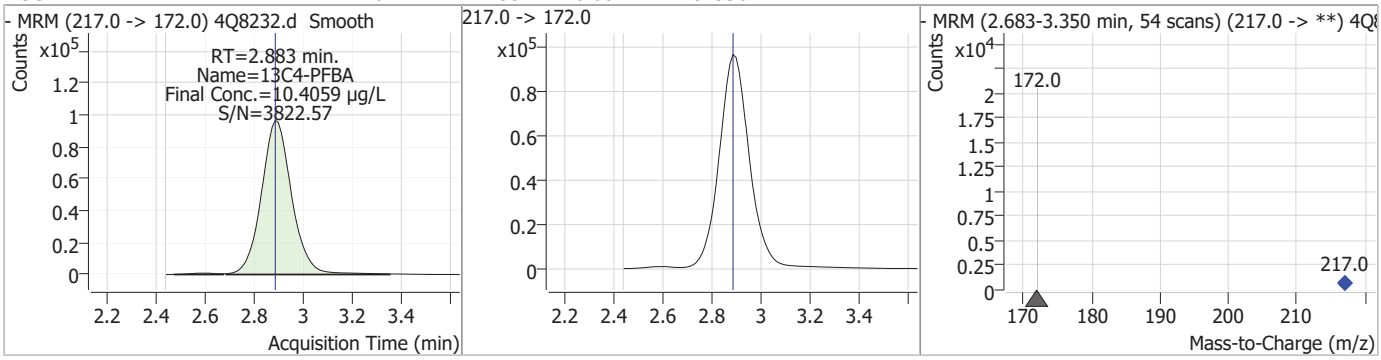
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

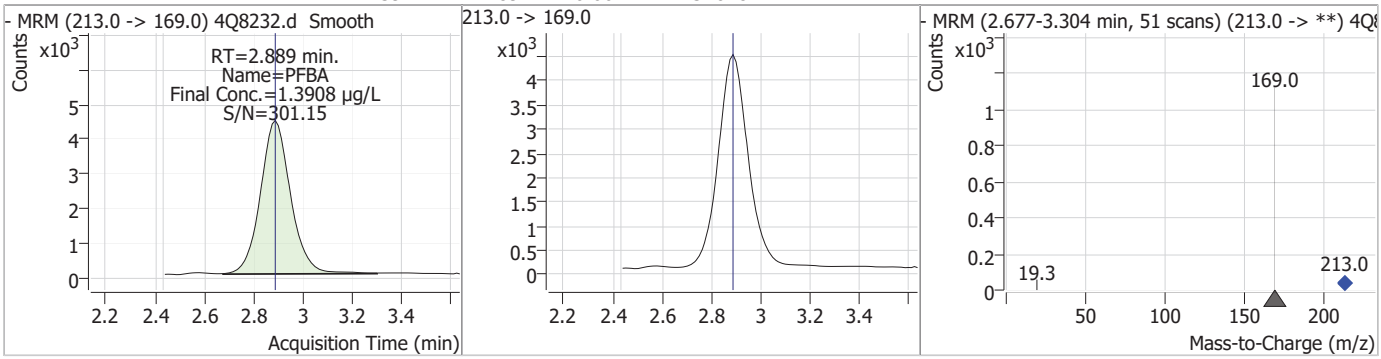
Perfluorinated Compounds by LC/MS/MS



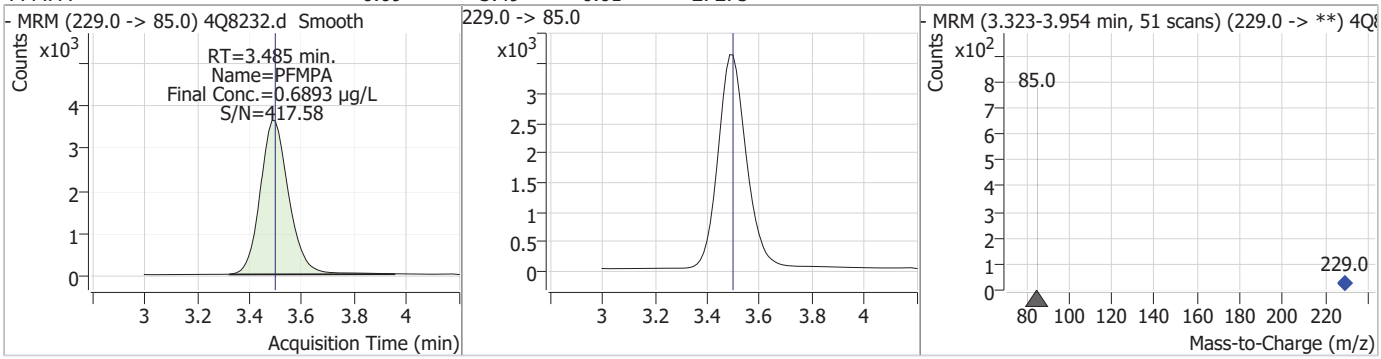
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.41	2.88	0.00	829907				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	1.39	2.89	0.00	37678				

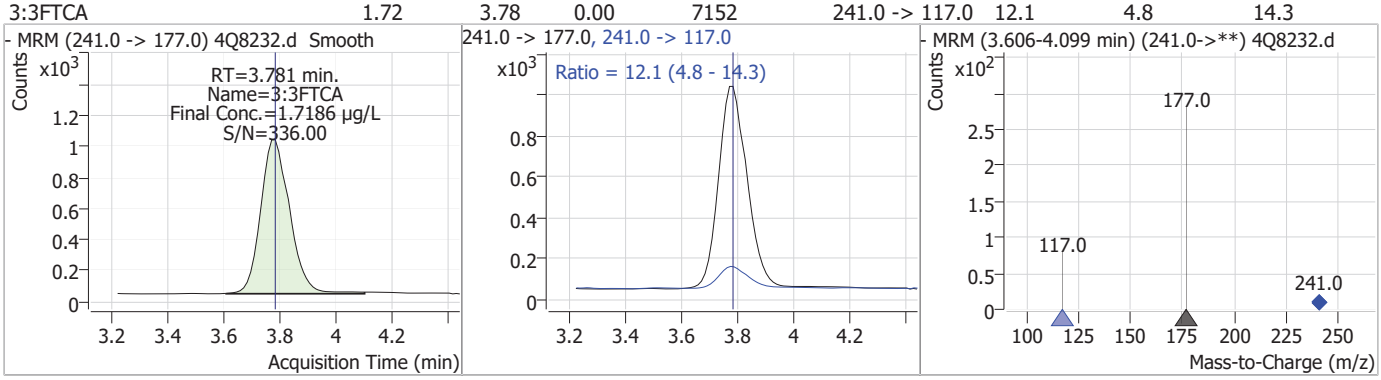


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.69	3.49	-0.01	27275				

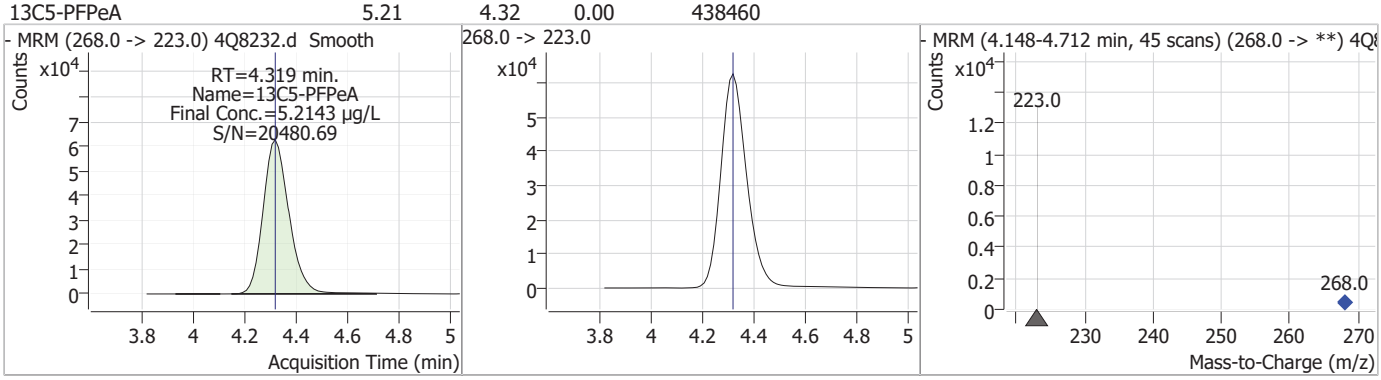


Perfluorinated Compounds by LC/MS/MS

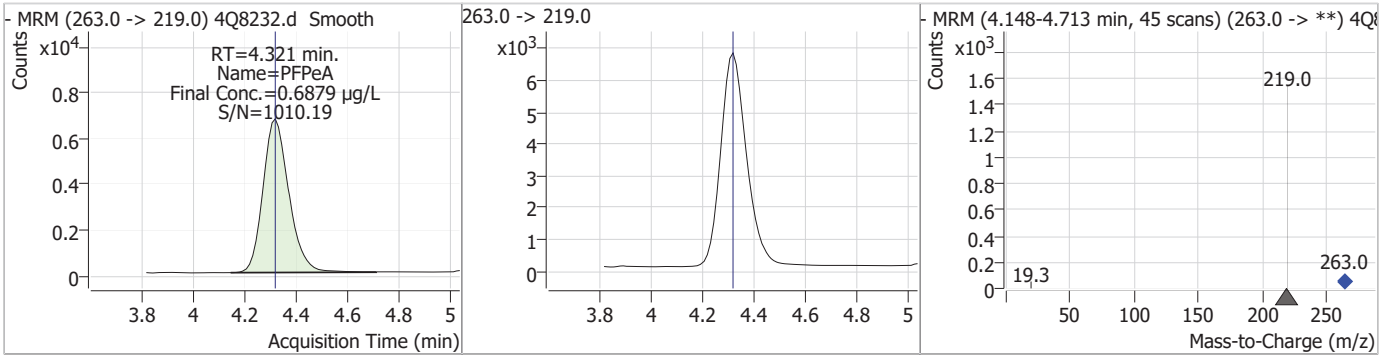
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	1.72	3.78	0.00	7152	241.0 -> 117.0	12.1	4.8	14.3



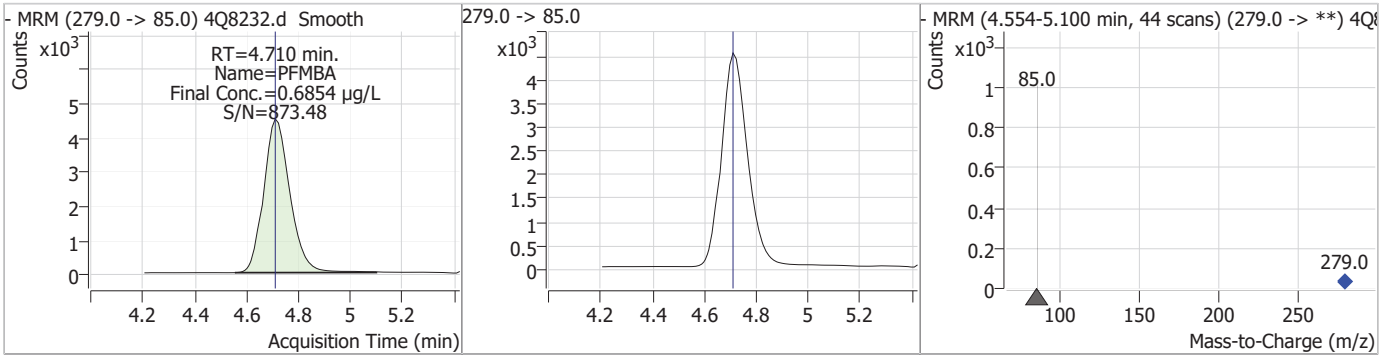
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.21	4.32	0.00	438460				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.69	4.32	0.00	46998				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.69	4.71	0.00	31730				



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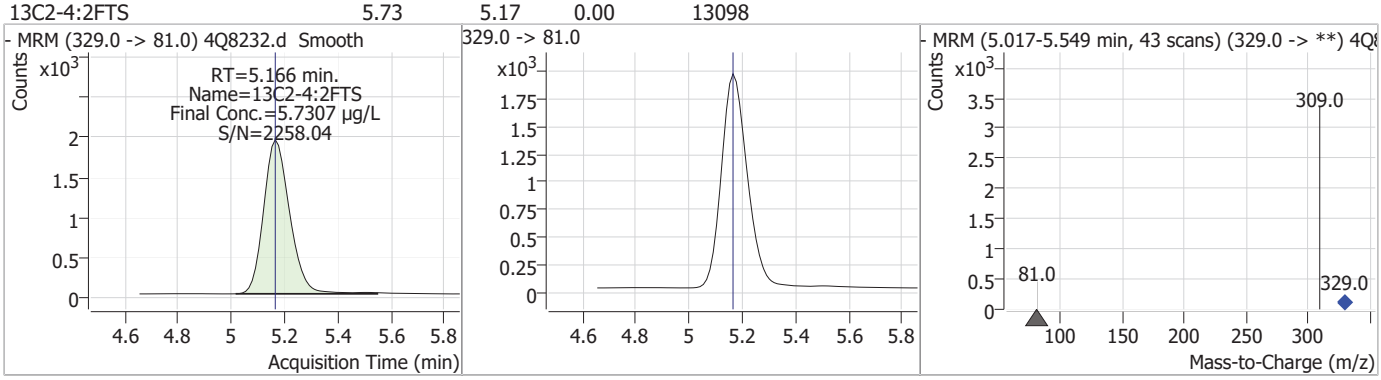
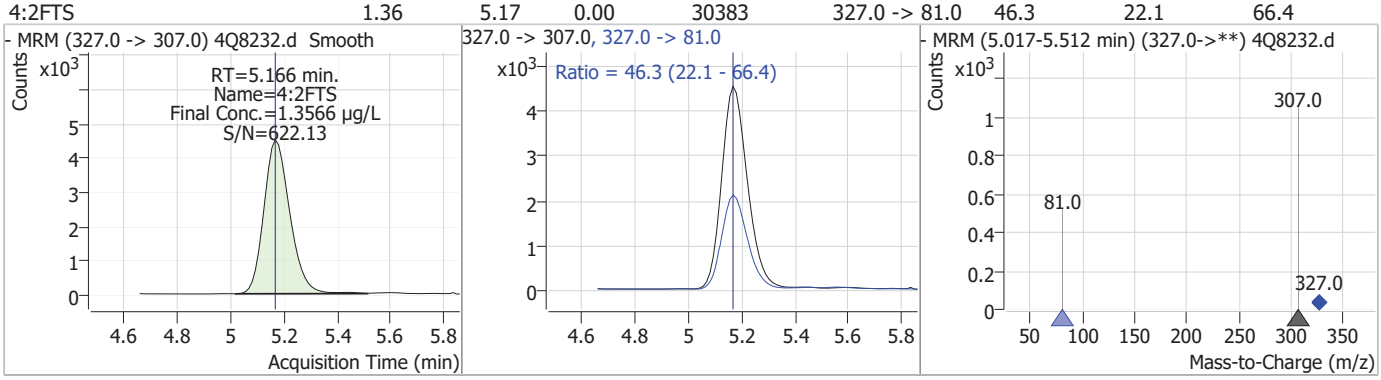
Perfluorinated Compounds by LC/MS/MS

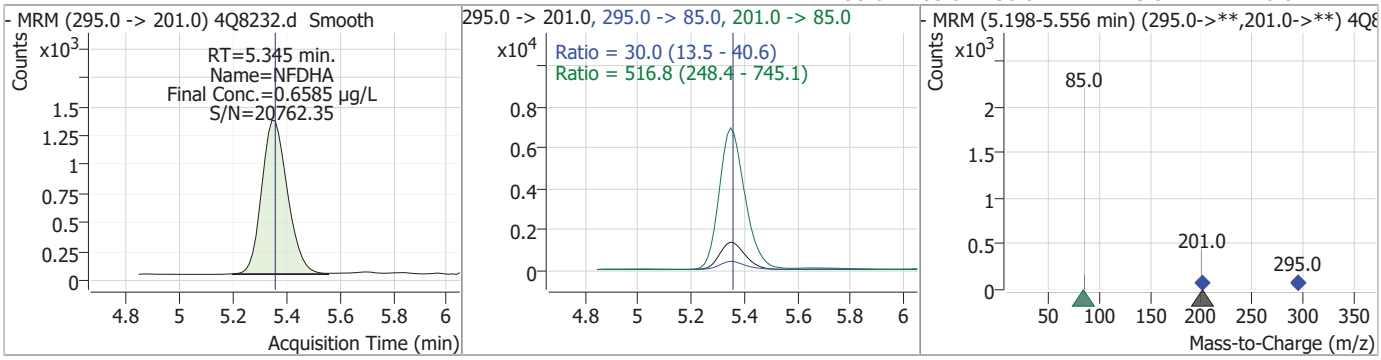
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.73	5.17	0.00	13098				



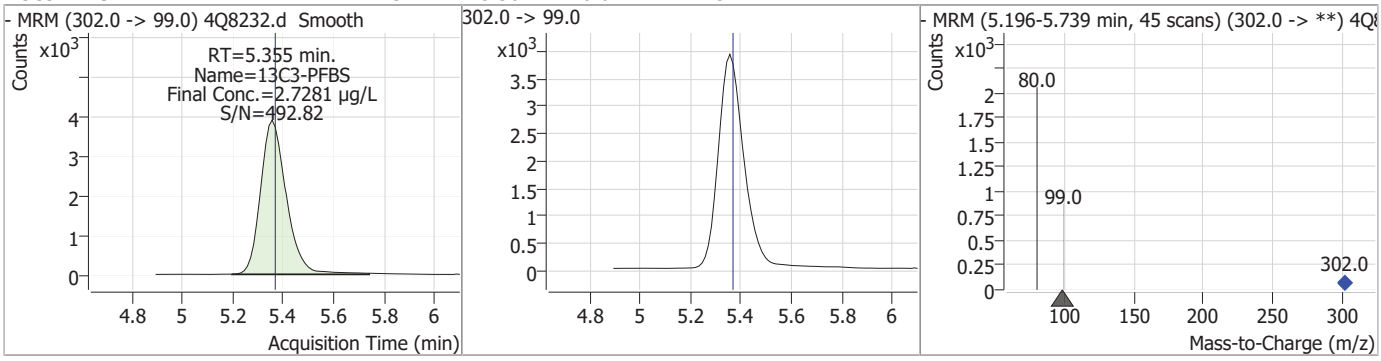
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	1.36	5.17	0.00	30383	327.0 -> 81.0	46.3	22.1	66.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.66	5.35	-0.01	8958	201.0 -> 85.0	516.8	248.4	745.1
					295.0 -> 85.0	30.0	13.5	40.6

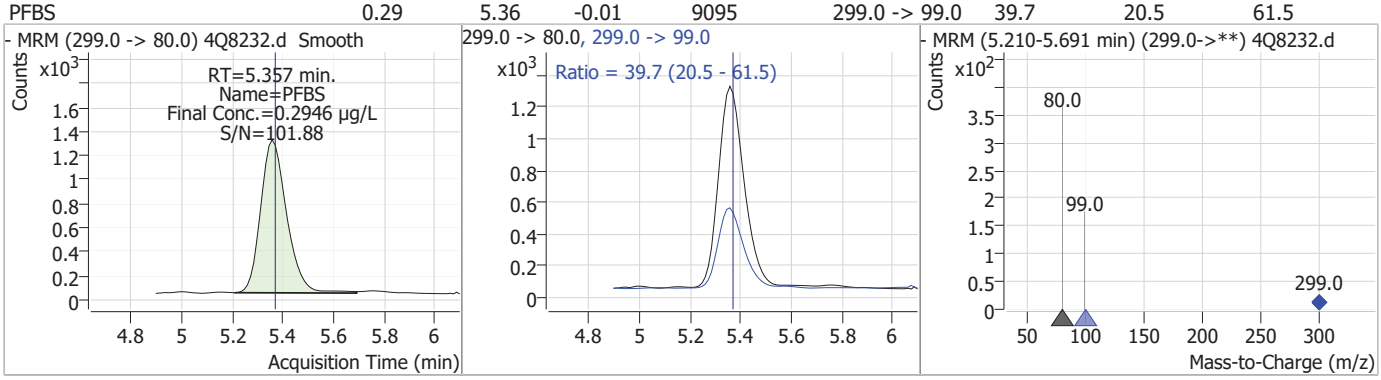


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.73	5.36	-0.01	27574				

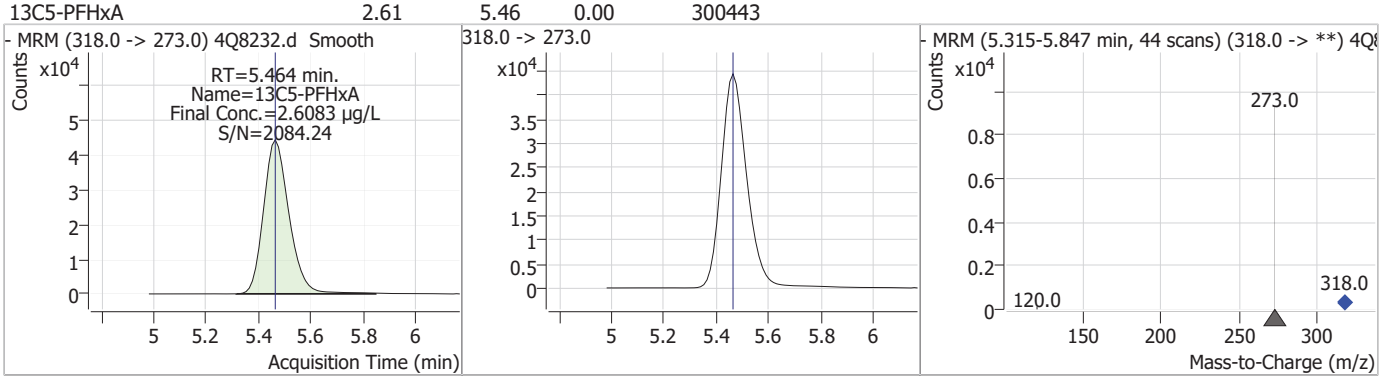


Perfluorinated Compounds by LC/MS/MS

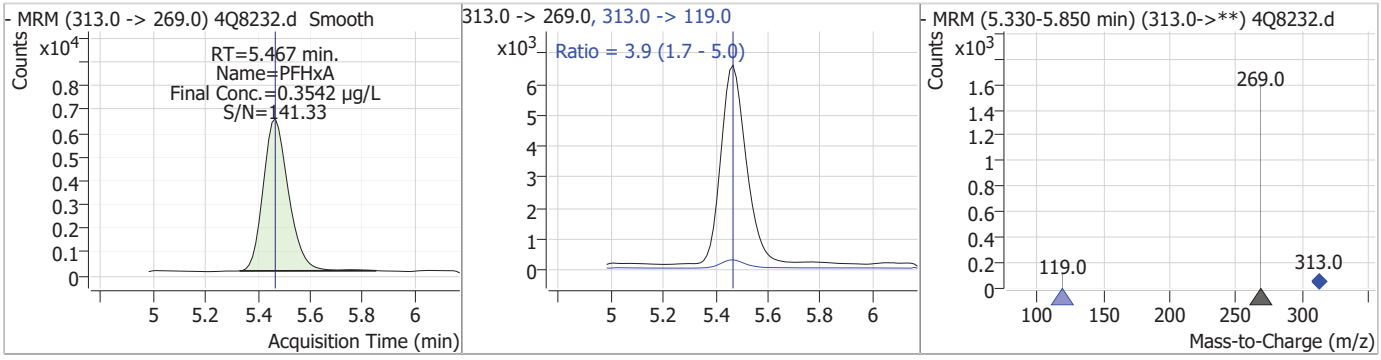
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.29	5.36	-0.01	9095	299.0 -> 99.0	39.7	20.5	61.5



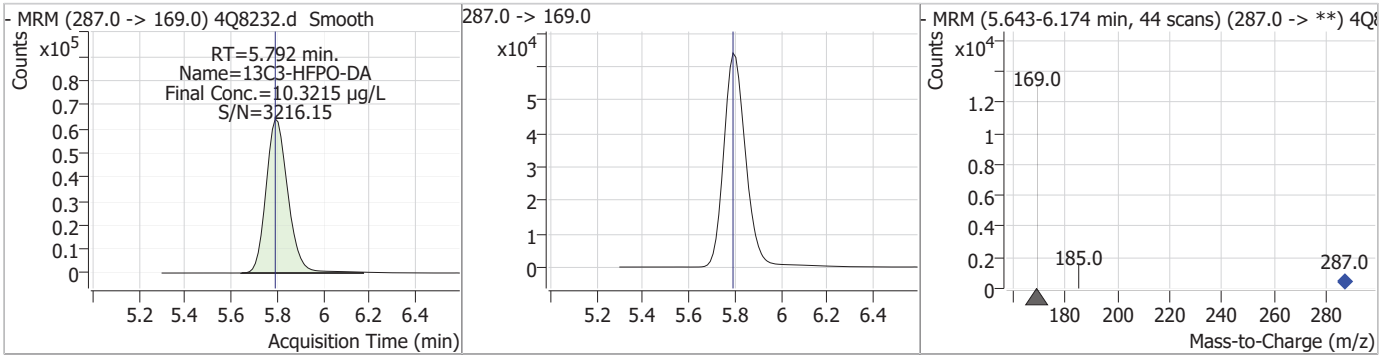
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.61	5.46	0.00	300443				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.35	5.47	0.00	43124	313.0 -> 119.0	3.9	1.7	5.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.32	5.79	0.00	423587				



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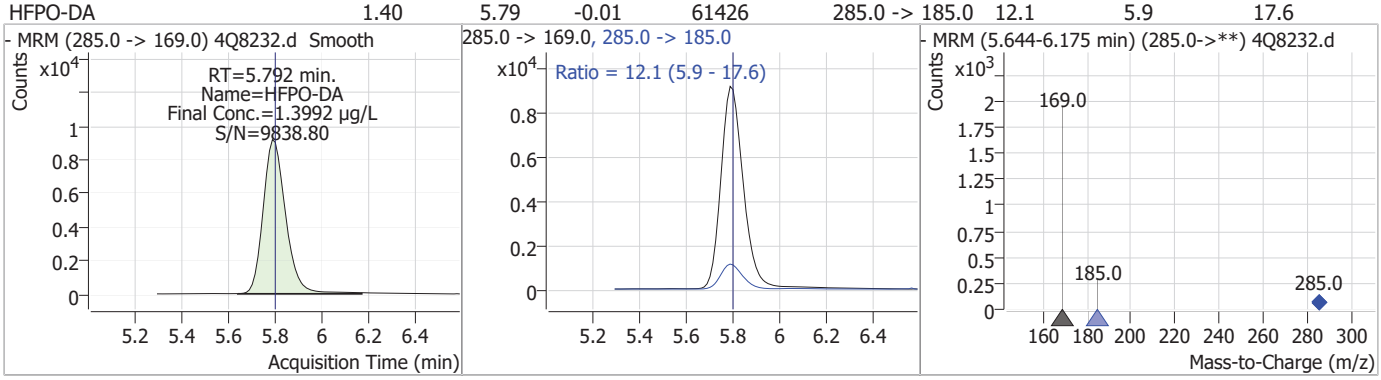
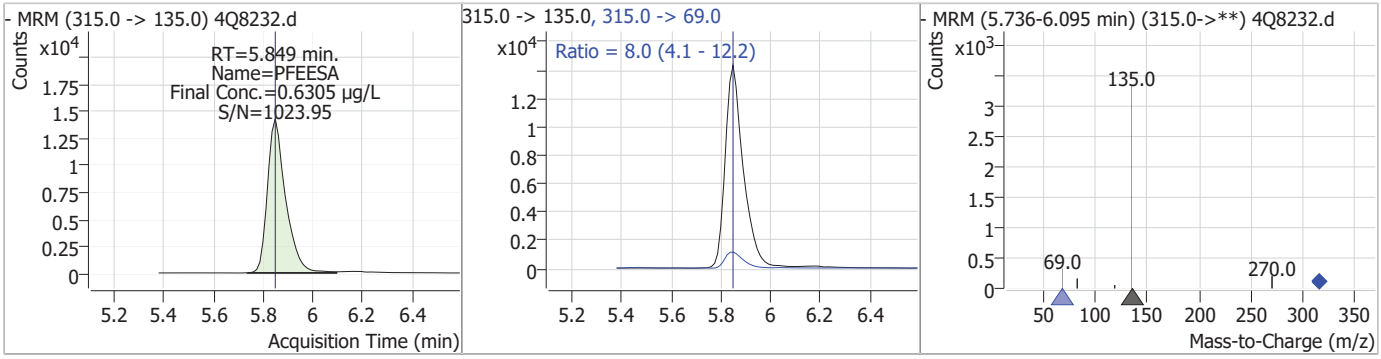
Perfluorinated Compounds by LC/MS/MS

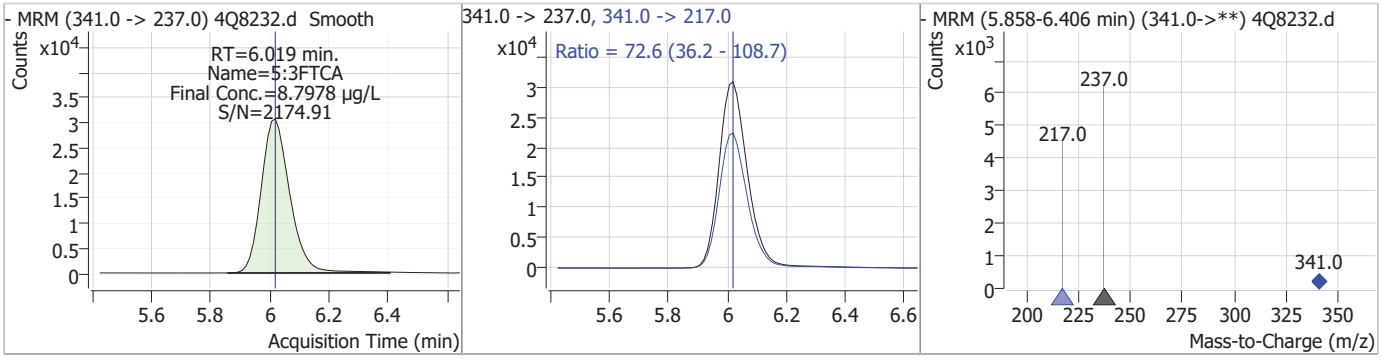
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	1.40	5.79	-0.01	61426	285.0 -> 185.0	12.1	5.9	17.6



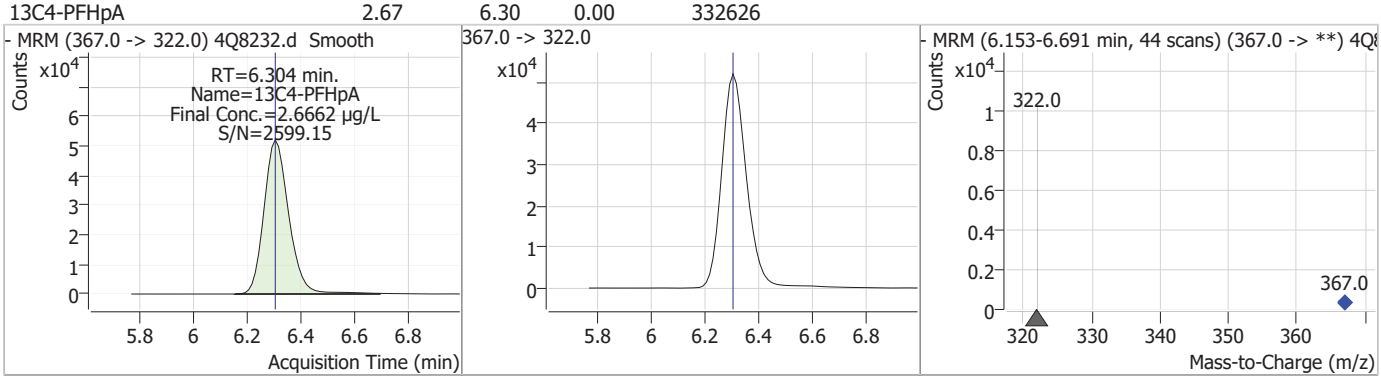
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.63	5.85	0.00	72715	315.0 -> 69.0	8.0	4.1	12.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	8.80	6.02	0.00	207058	341.0 -> 217.0	72.6	36.2	108.7

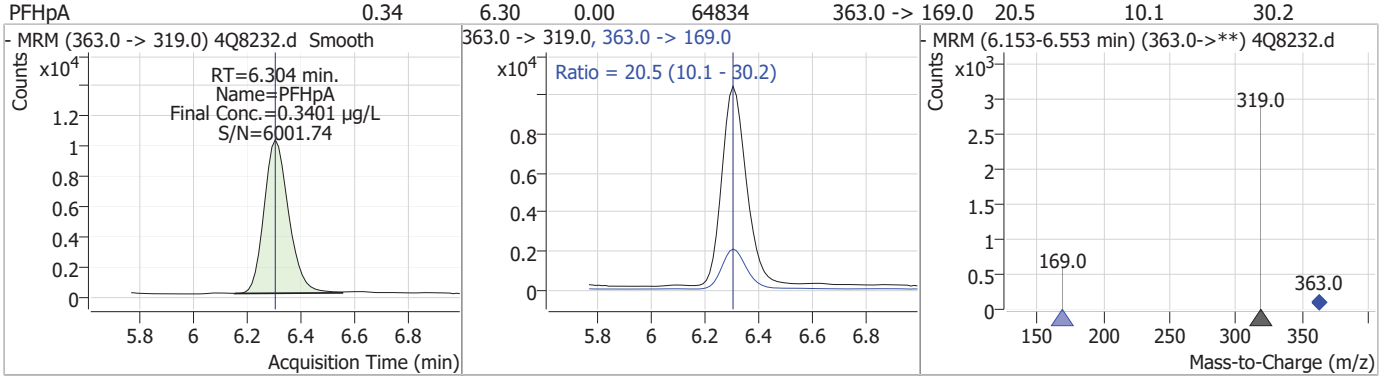


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.67	6.30	0.00	332626				

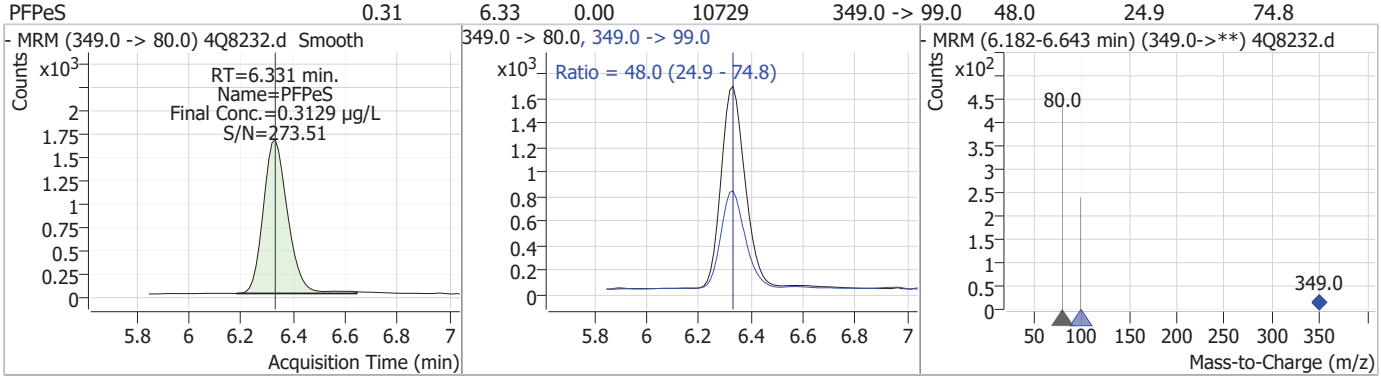


Perfluorinated Compounds by LC/MS/MS

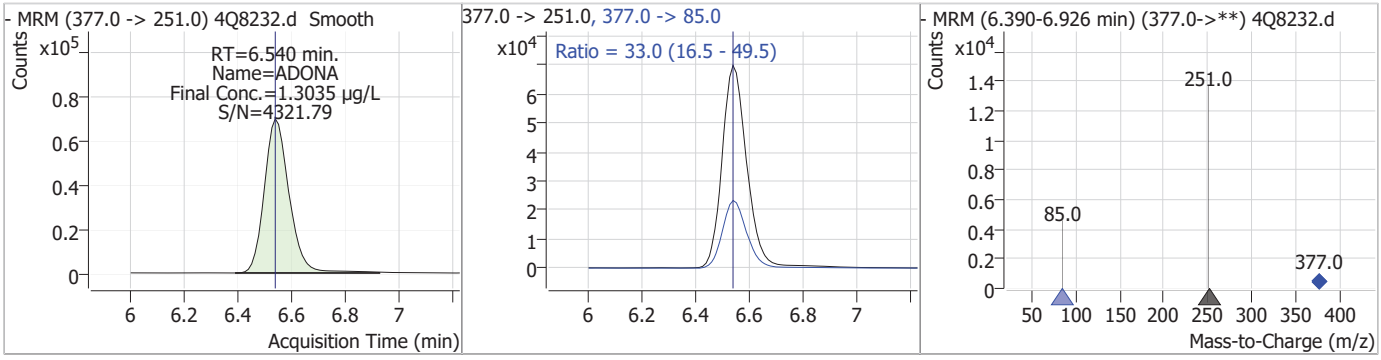
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.34	6.30	0.00	64834	363.0 -> 169.0	20.5	10.1	30.2



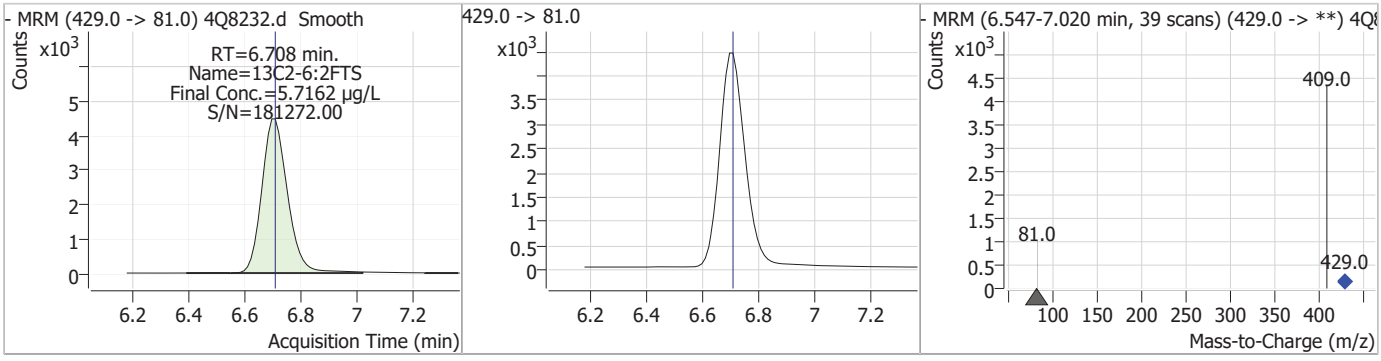
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.31	6.33	0.00	10729	349.0 -> 99.0	48.0	24.9	74.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	1.30	6.54	0.00	446161	377.0 -> 85.0	33.0	16.5	49.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.72	6.71	0.00	28277				



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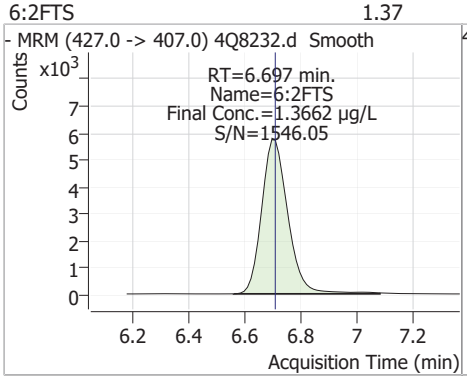
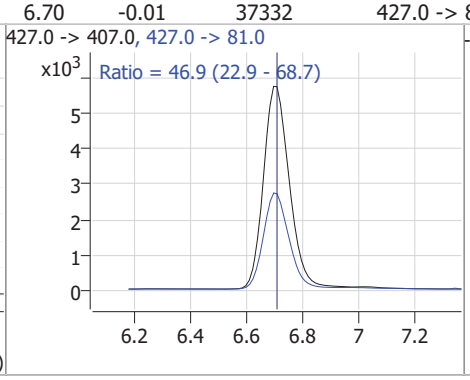
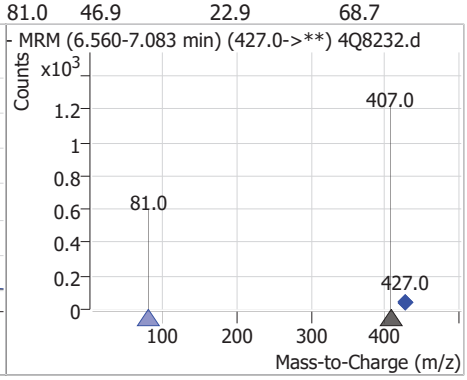
Perfluorinated Compounds by LC/MS/MS

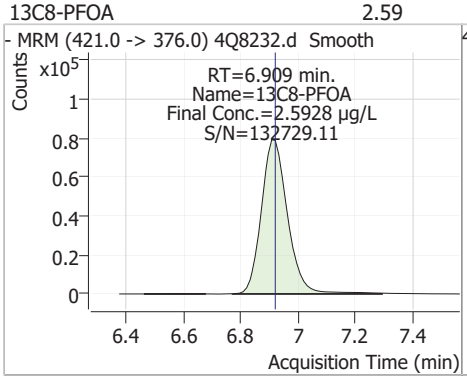
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	1.37	6.70	-0.01	37332	427.0 -> 81.0	46.9	22.9	68.7

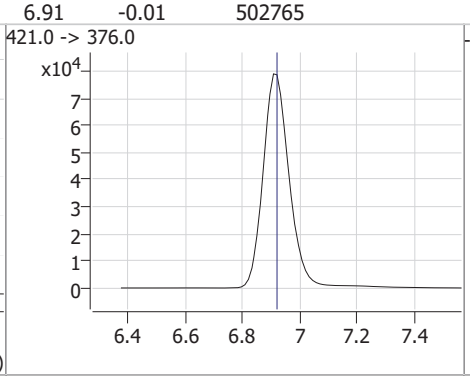


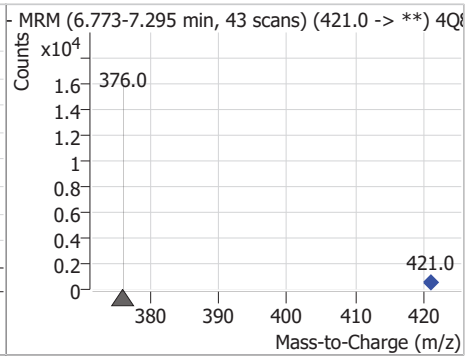




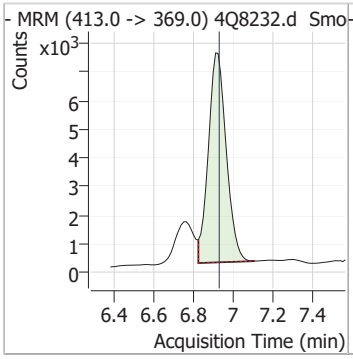
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.59	6.91	-0.01	502765				

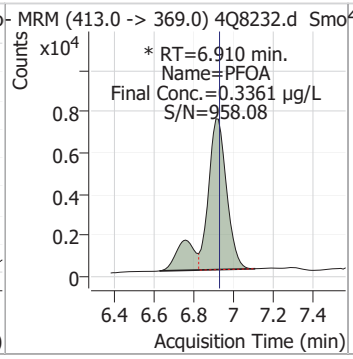


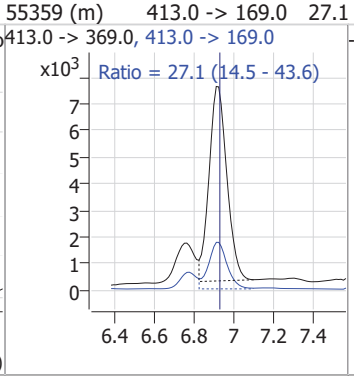


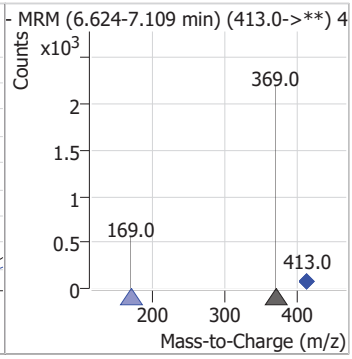


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.34	6.91	-0.01	55359 (m)	413.0 -> 169.0	27.1	14.5	43.6

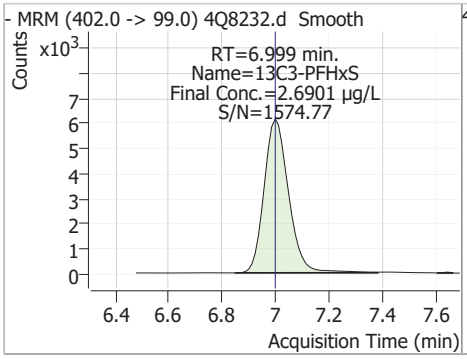


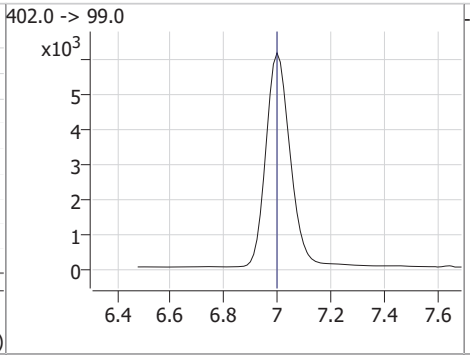


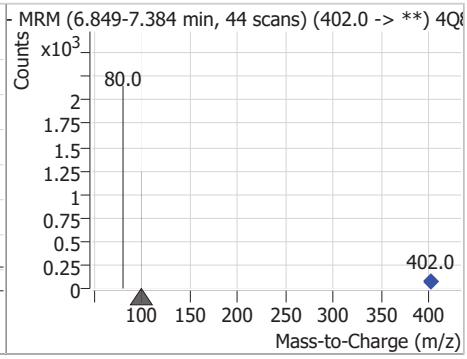




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.69	7.00	0.00	39063				

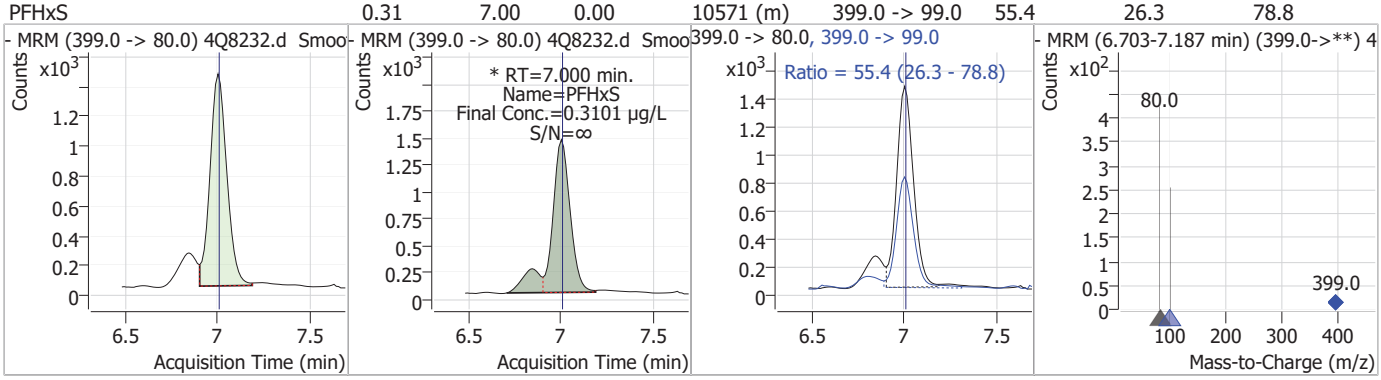




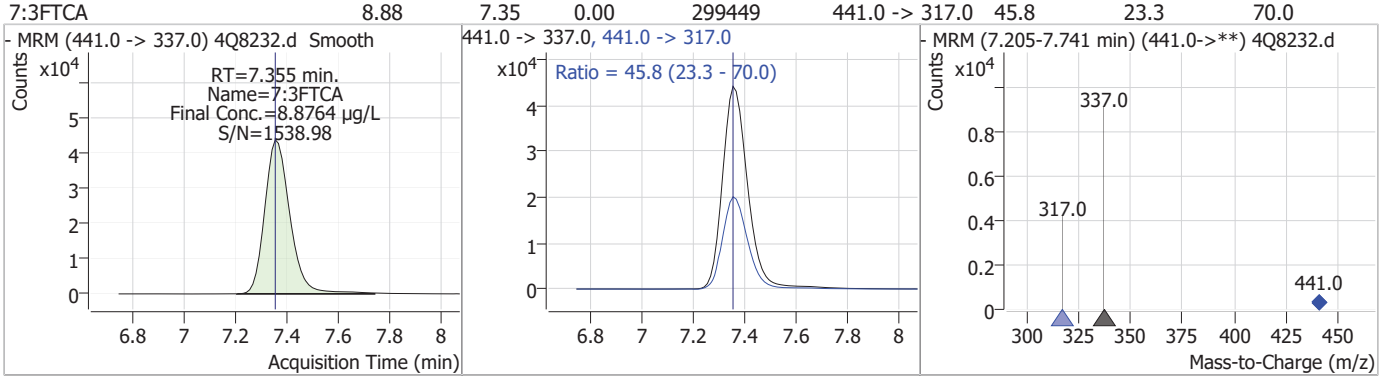


Perfluorinated Compounds by LC/MS/MS

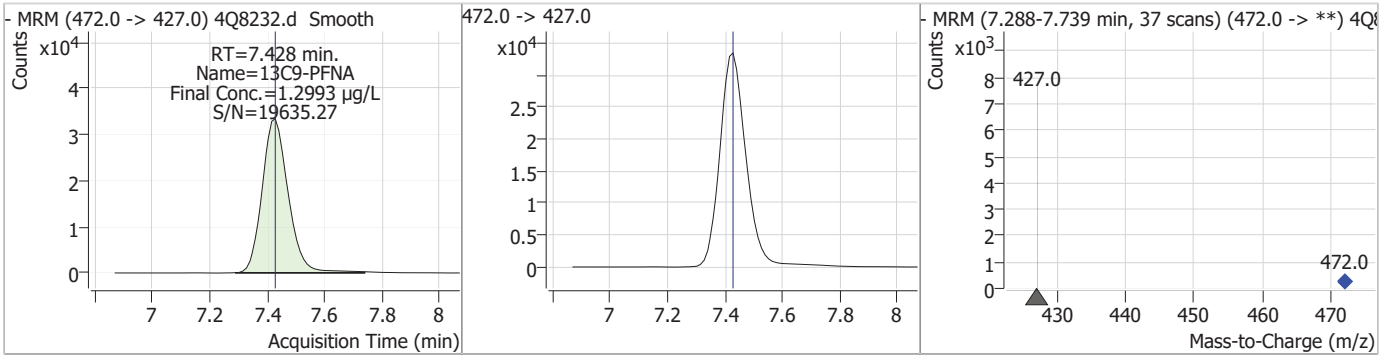
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.31	7.00	0.00	10571 (m)	399.0 -> 99.0	55.4	26.3	78.8



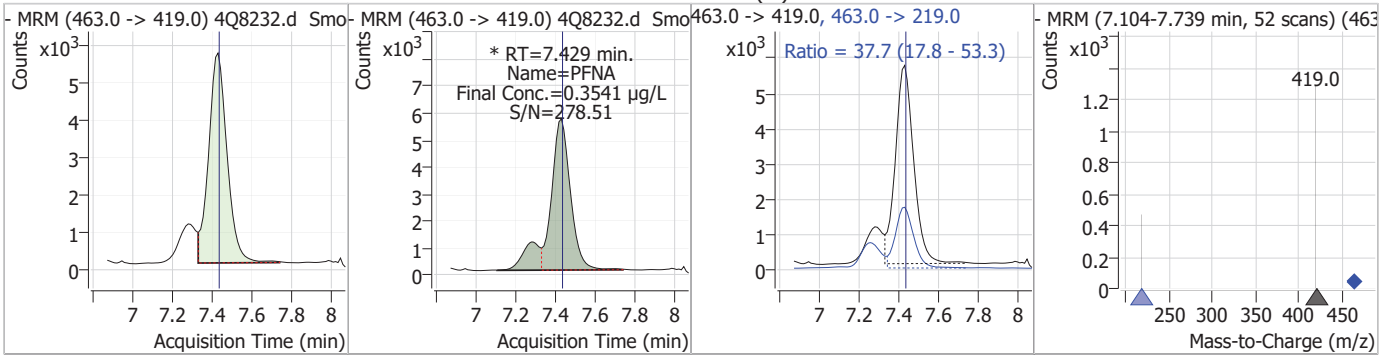
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	8.88	7.35	0.00	299449	441.0 -> 317.0	45.8	23.3	70.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.30	7.43	0.00	210180				

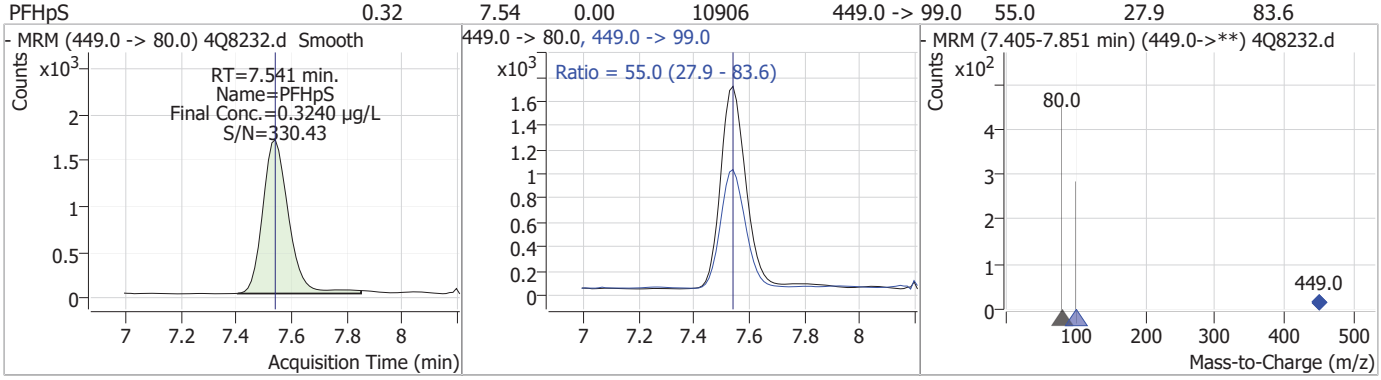


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.35	7.43	0.00	42927 (m)	463.0 -> 219.0	37.7	17.8	53.3

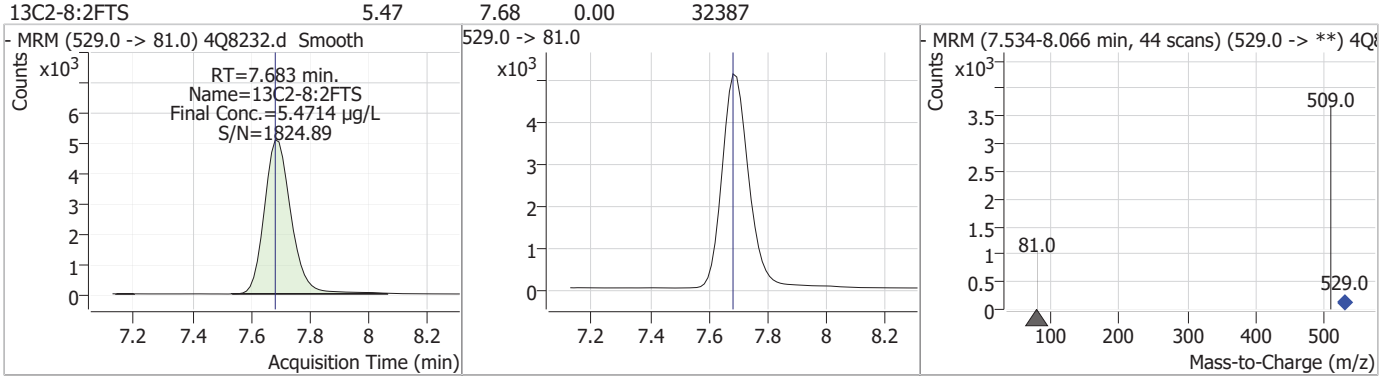


Perfluorinated Compounds by LC/MS/MS

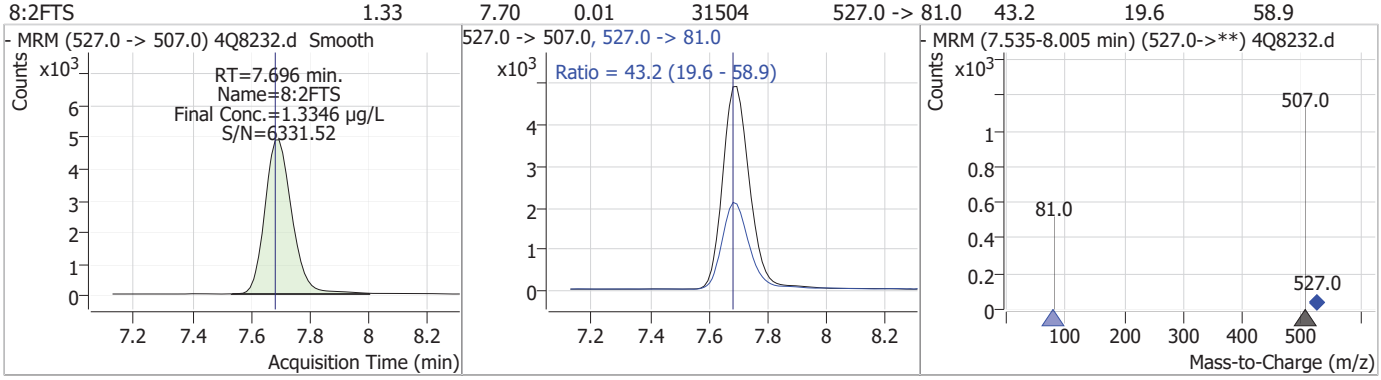
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.32	7.54	0.00	10906	449.0 -> 99.0	55.0	27.9	83.6



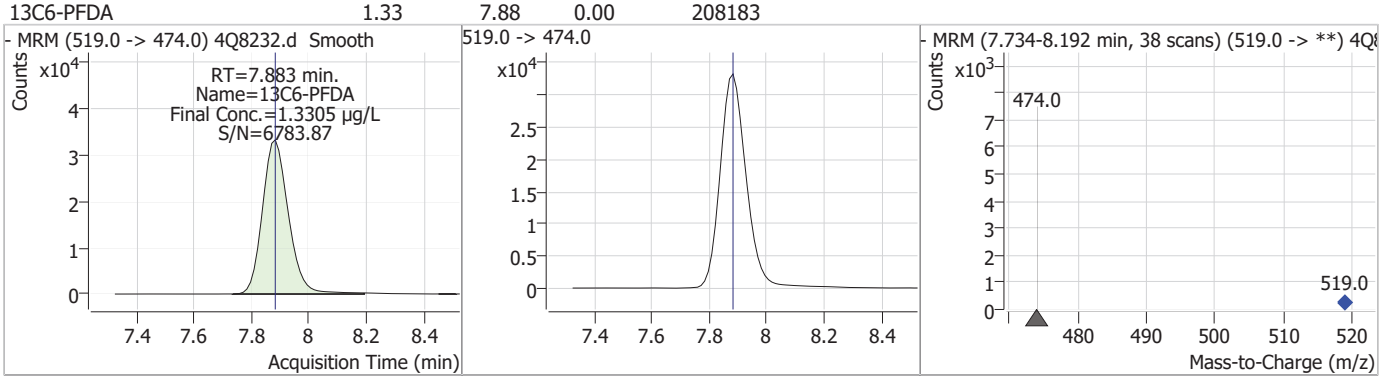
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.47	7.68	0.00	32387				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	1.33	7.70	0.01	31504	527.0 -> 81.0	43.2	19.6	58.9

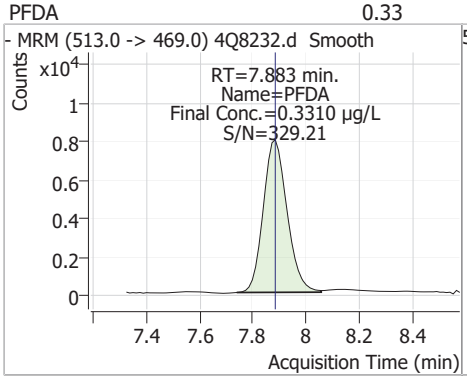


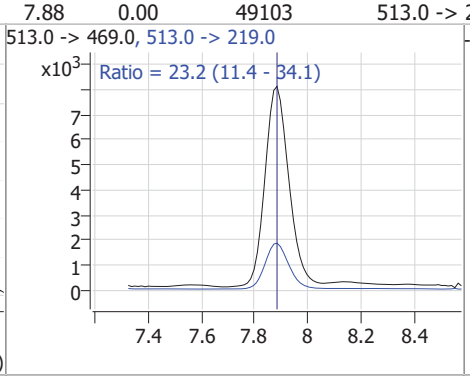
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.33	7.88	0.00	208183				

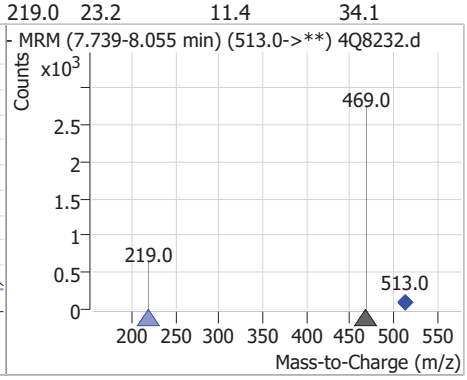


Perfluorinated Compounds by LC/MS/MS

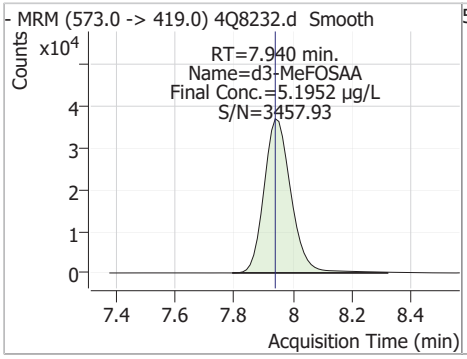
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.33	7.88	0.00	49103	513.0 -> 219.0	23.2	11.4	34.1

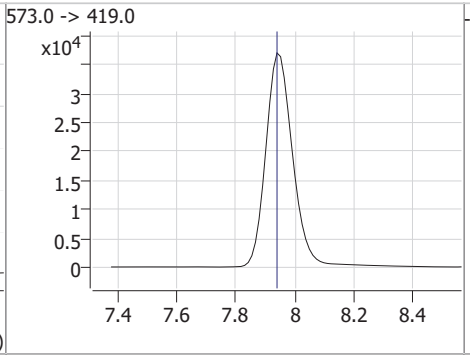


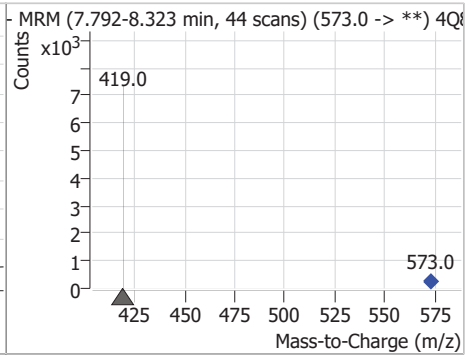




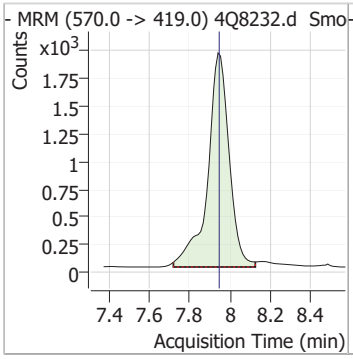
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.20	7.94	0.00	236381				

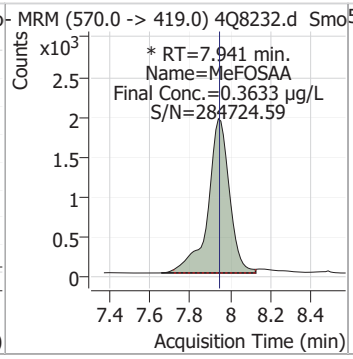


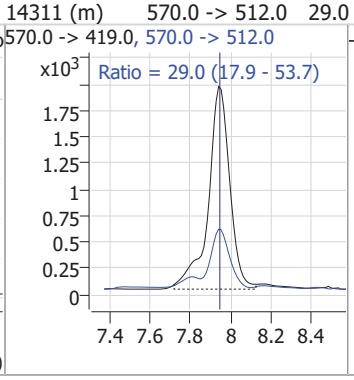


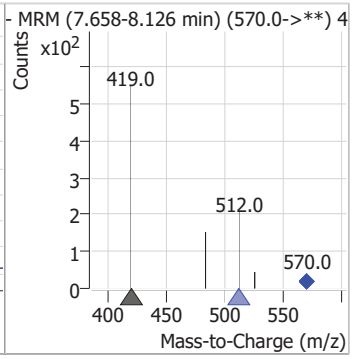


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.36	7.94	0.00	14311 (m)	570.0 -> 512.0	29.0	17.9	53.7

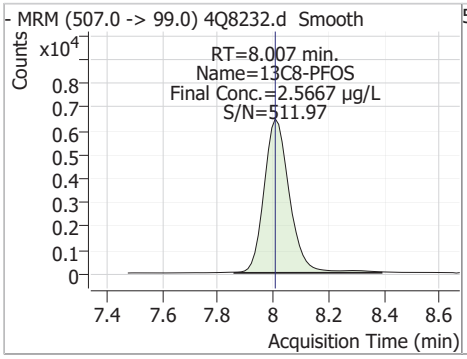


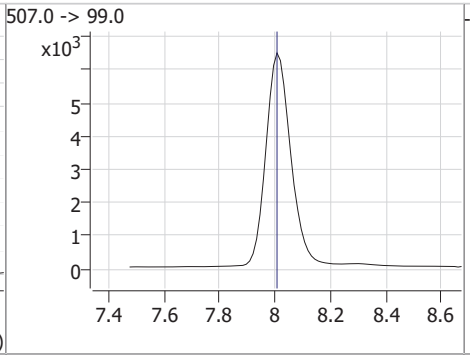


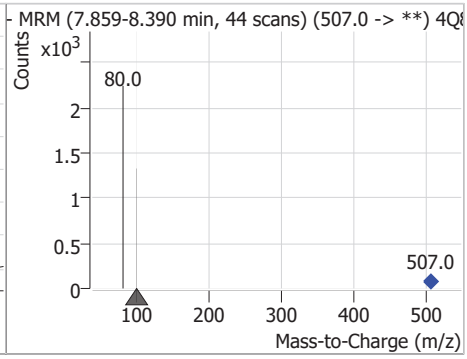




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.57	8.01	0.00	41259				

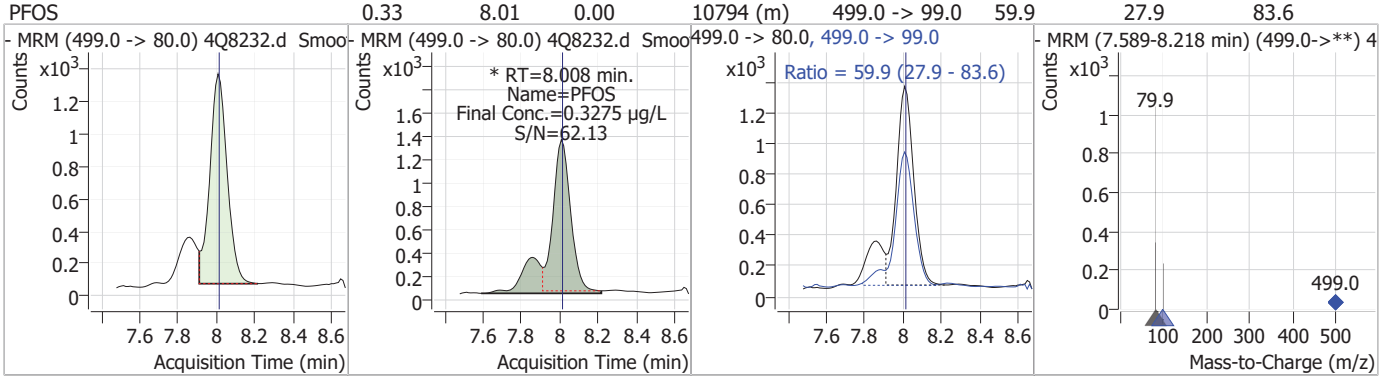




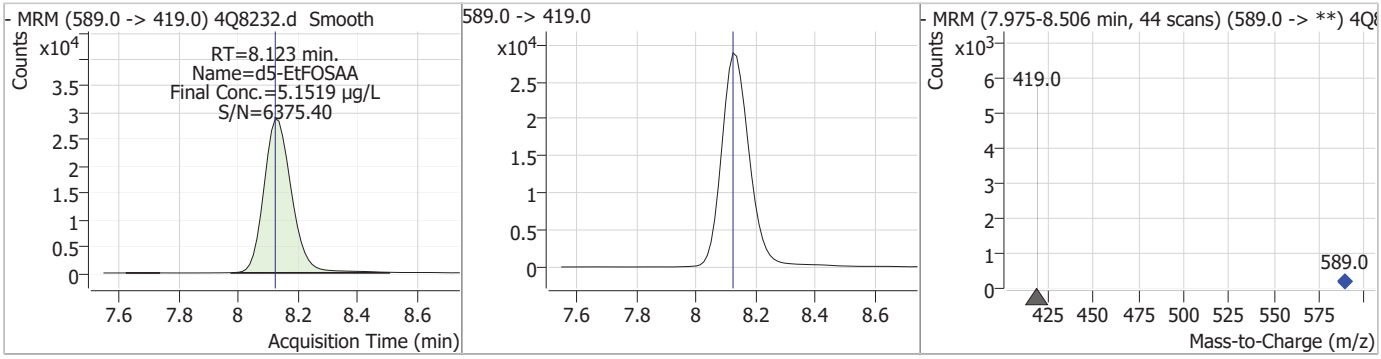


Perfluorinated Compounds by LC/MS/MS

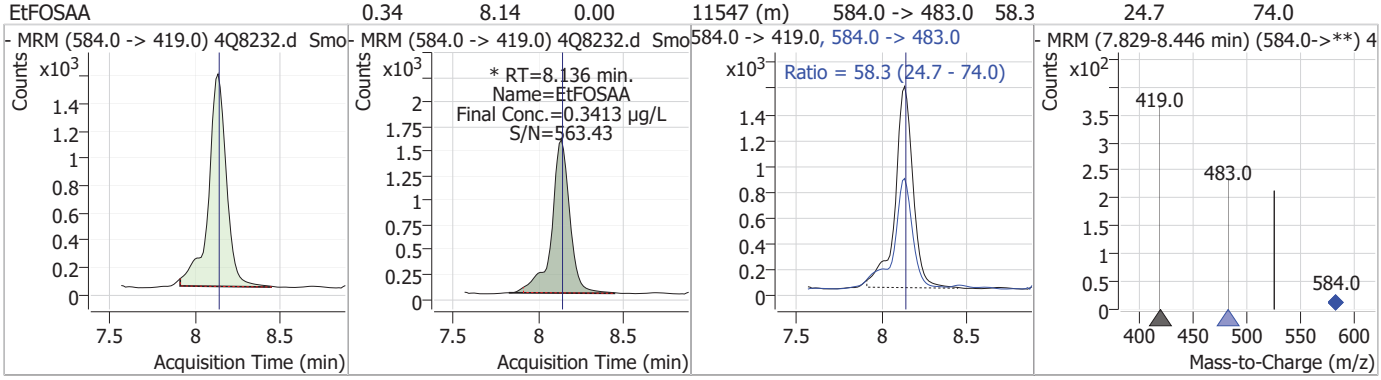
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.33	8.01	0.00	10794 (m)	499.0 -> 99.0	59.9	27.9	83.6



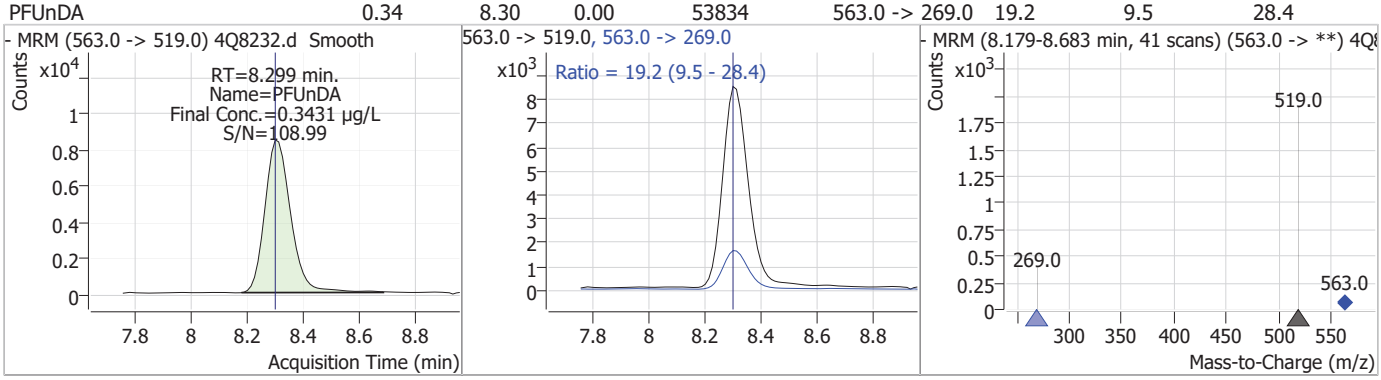
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.15	8.12	0.00	187158				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.34	8.14	0.00	11547 (m)	584.0 -> 483.0	58.3	24.7	74.0

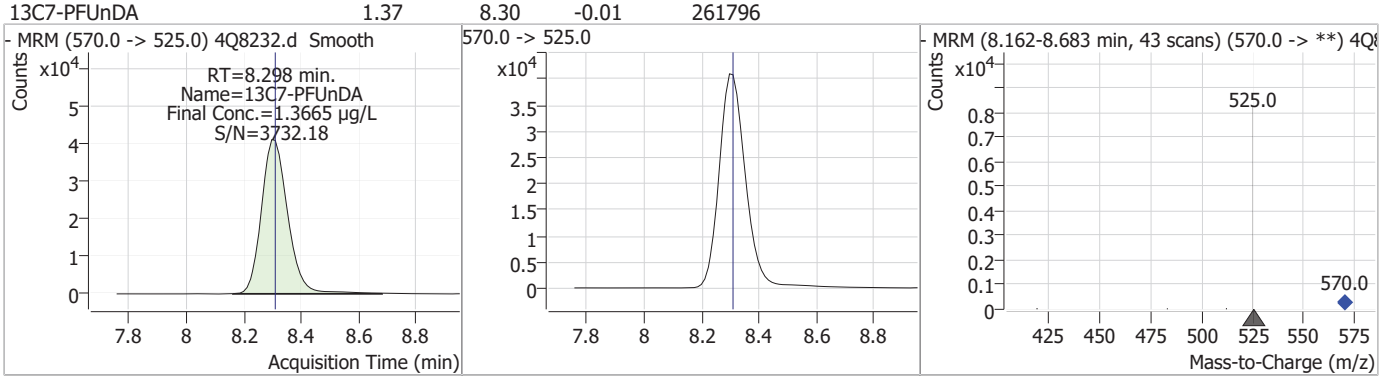


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.34	8.30	0.00	53834	563.0 -> 269.0	19.2	9.5	28.4

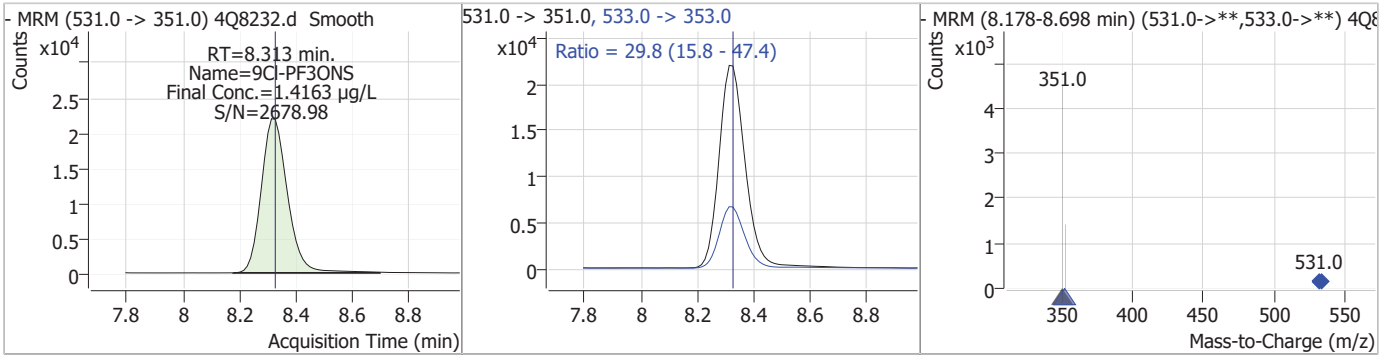


Perfluorinated Compounds by LC/MS/MS

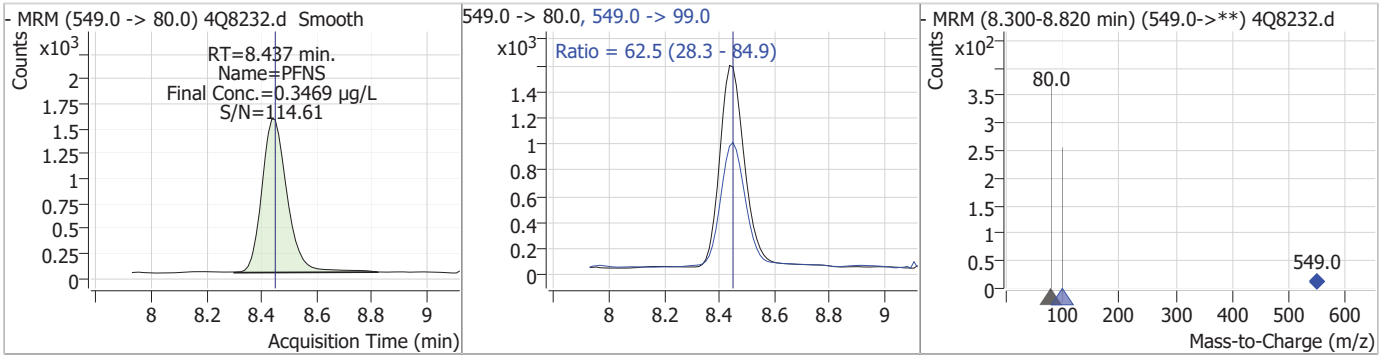
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.37	8.30	-0.01	261796				



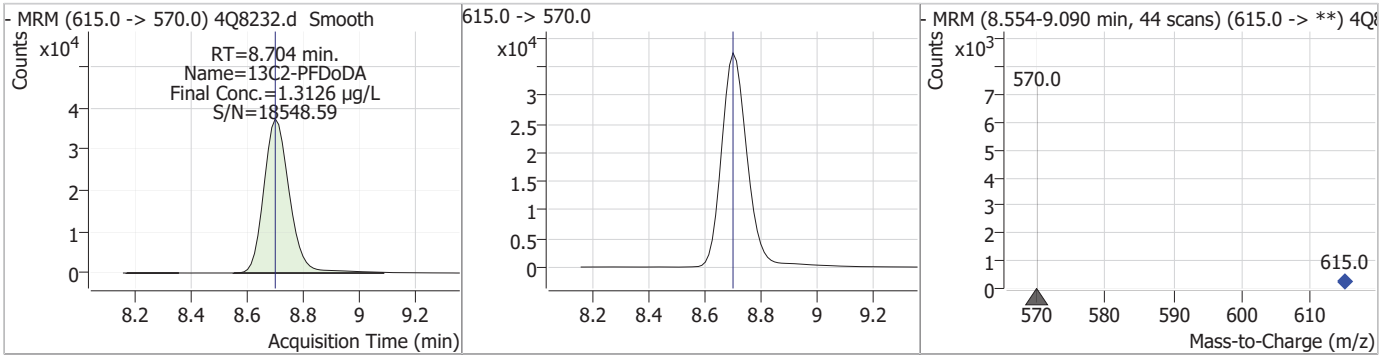
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	1.42	8.31	-0.01	142358	533.0 -> 353.0	29.8	15.8	47.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.35	8.44	-0.01	9882	549.0 -> 99.0	62.5	28.3	84.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.31	8.70	0.00	237274				



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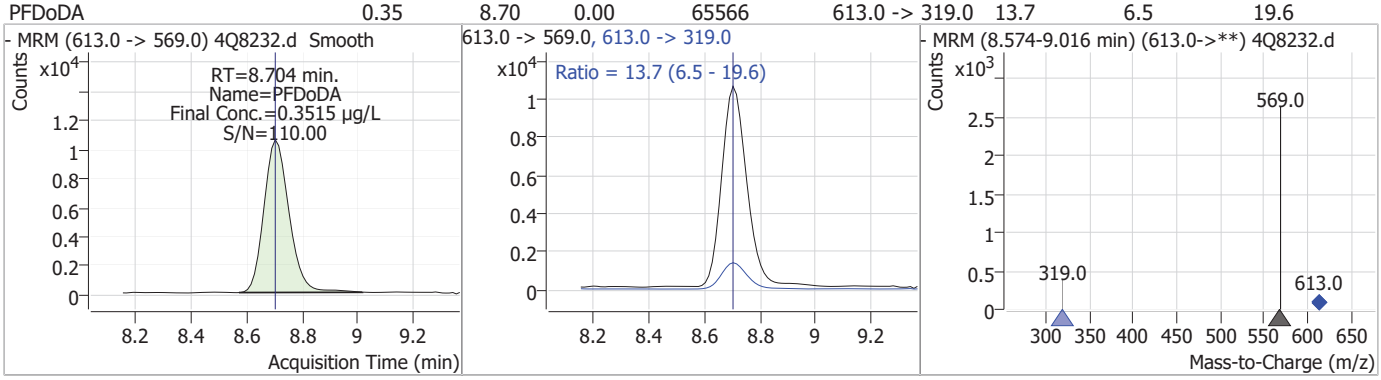
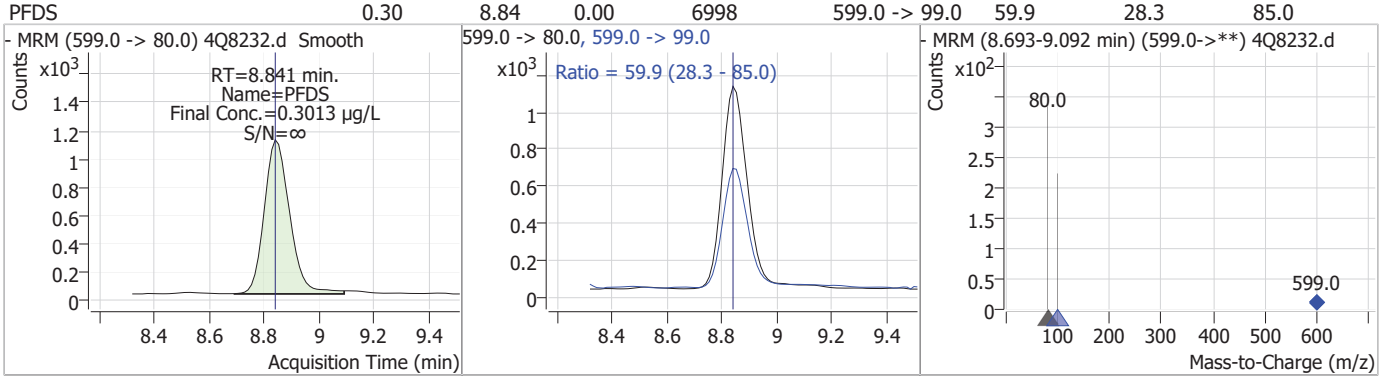
Perfluorinated Compounds by LC/MS/MS

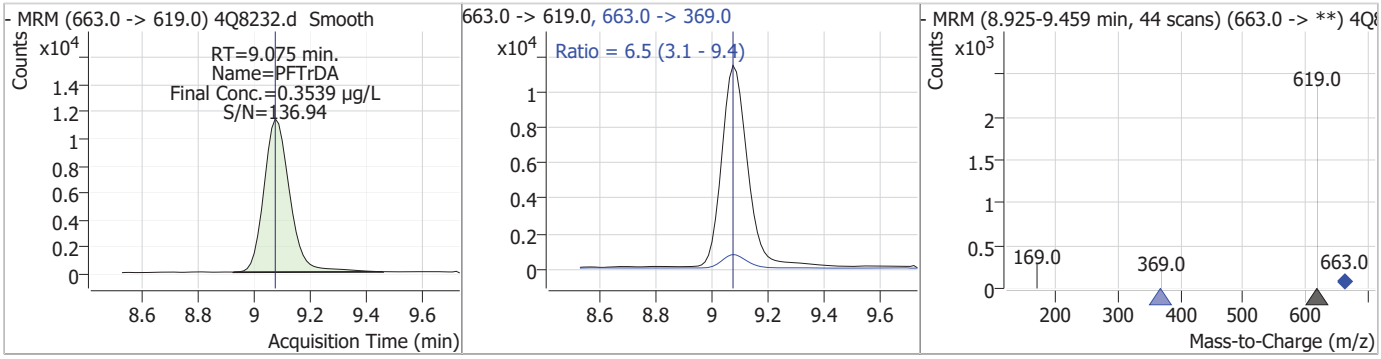
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.35	8.70	0.00	65566	613.0 -> 319.0	13.7	6.5	19.6



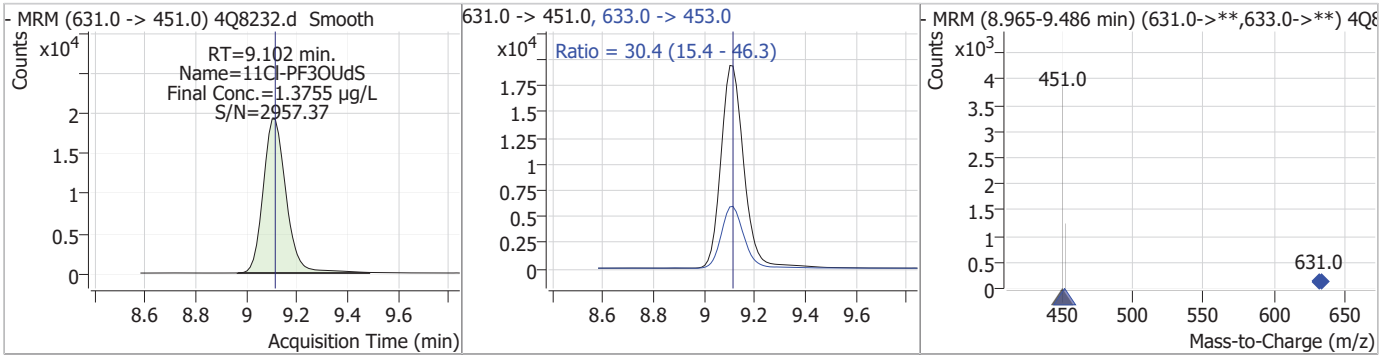
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.30	8.84	0.00	6998	599.0 -> 99.0	59.9	28.3	85.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.35	9.07	0.00	72717	663.0 -> 369.0	6.5	3.1	9.4

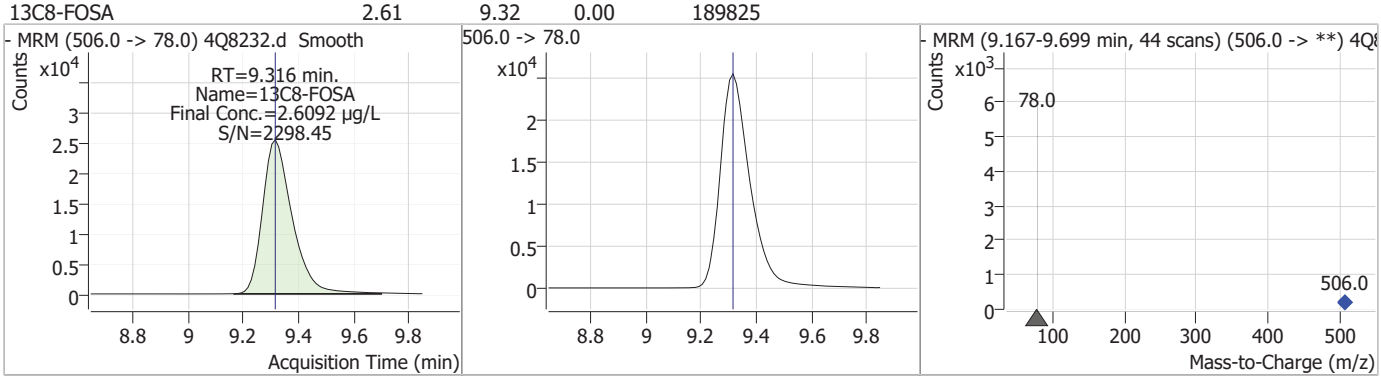


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	1.38	9.10	-0.01	122310	633.0 -> 453.0	30.4	15.4	46.3

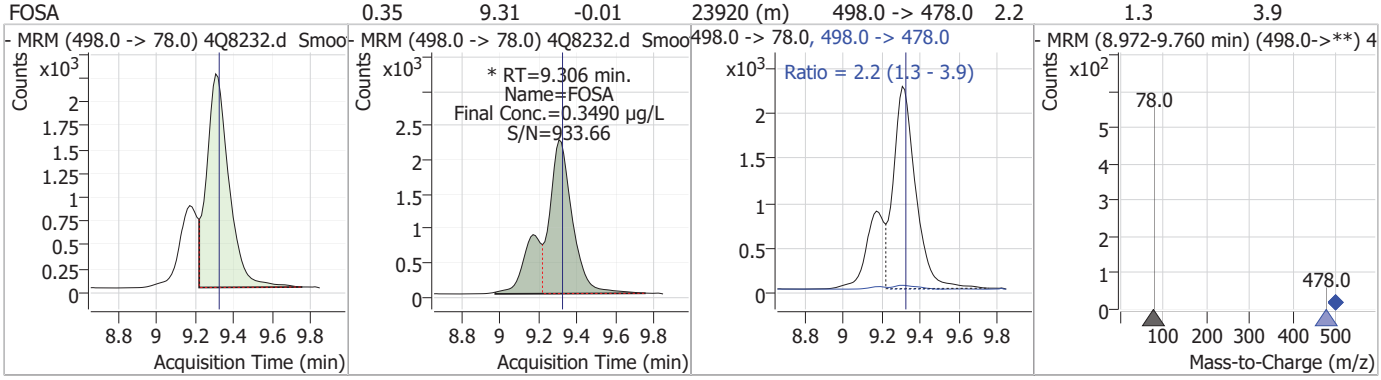


Perfluorinated Compounds by LC/MS/MS

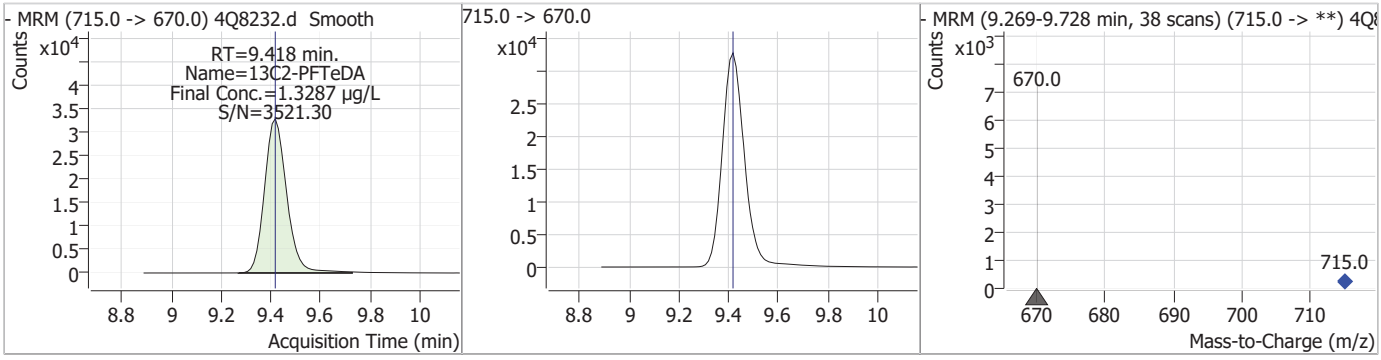
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.61	9.32	0.00	189825				



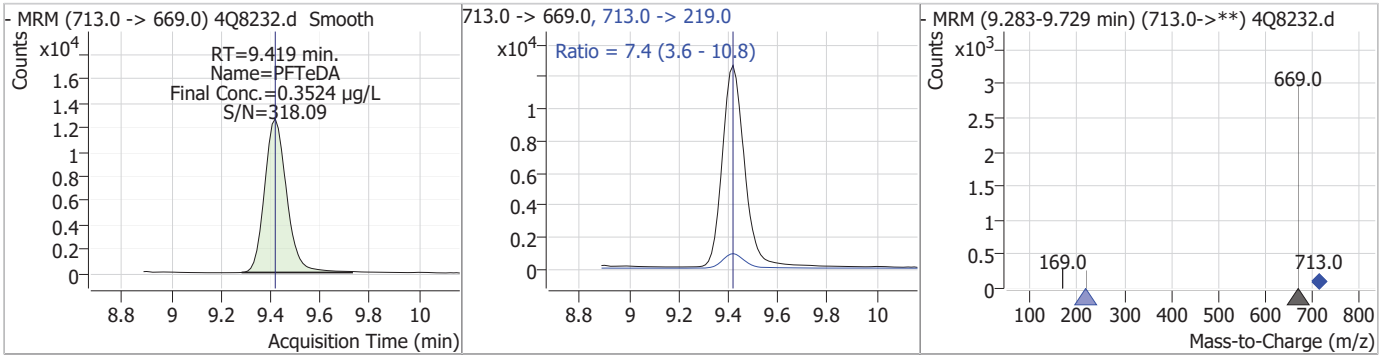
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.35	9.31	-0.01	23920 (m)	498.0 -> 478.0	2.2	1.3	3.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.33	9.42	0.00	202957				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.35	9.42	0.00	77690	713.0 -> 219.0	7.4	3.6	10.8



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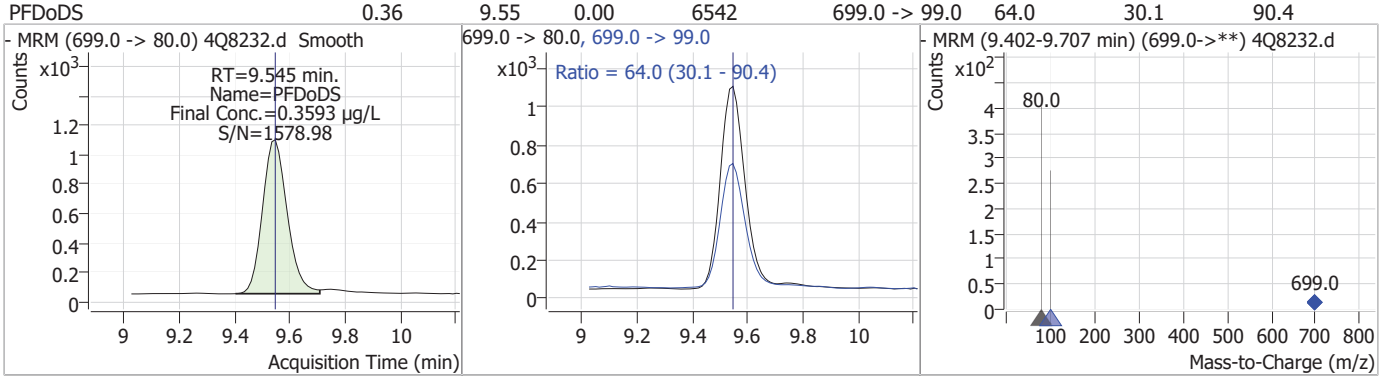
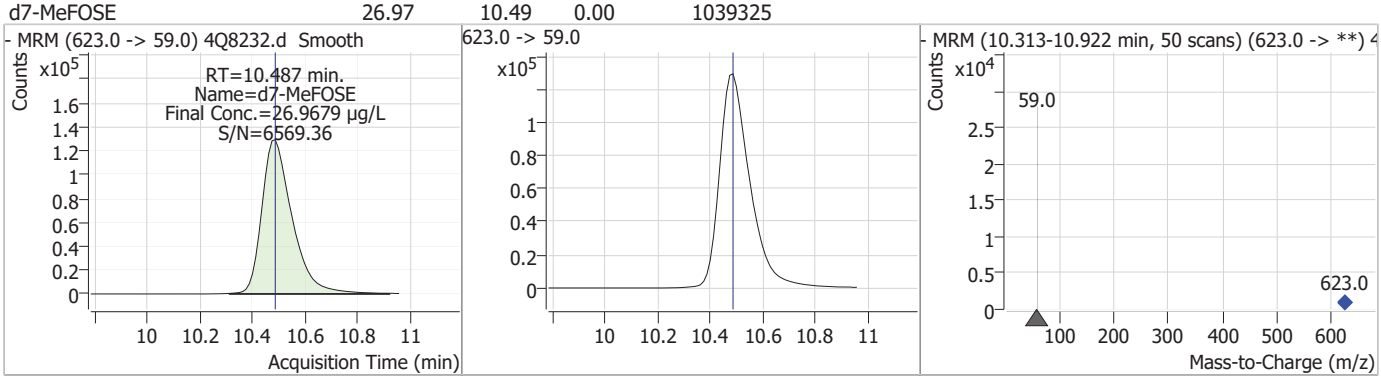
Perfluorinated Compounds by LC/MS/MS

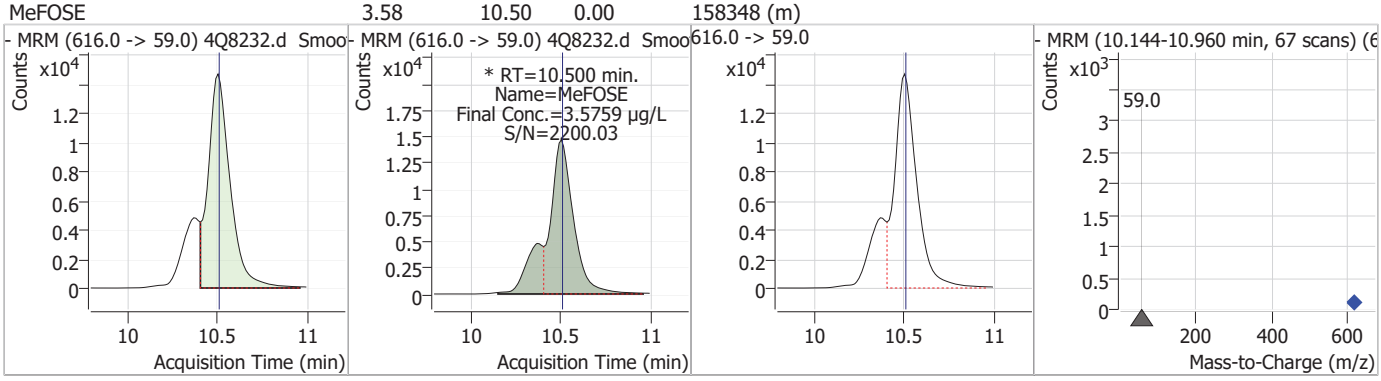
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.36	9.55	0.00	6542	699.0 -> 99.0	64.0	30.1	90.4



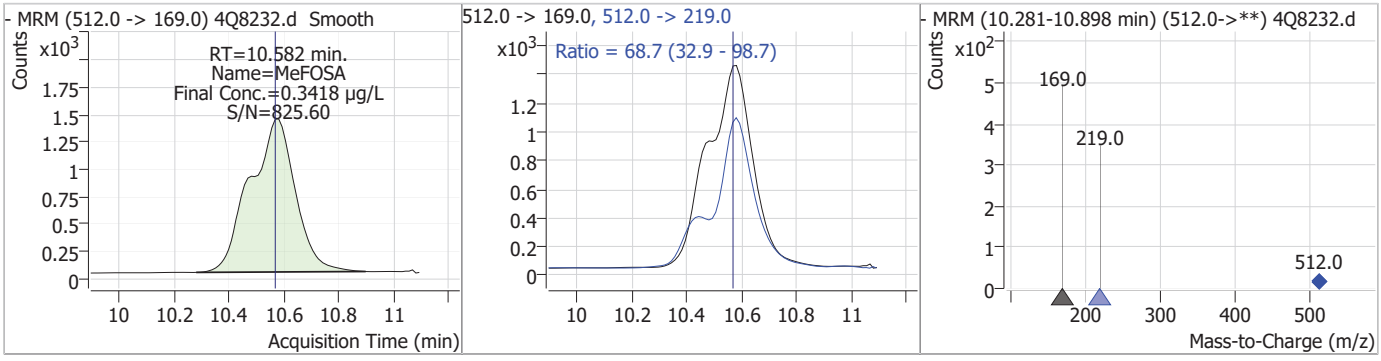
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	26.97	10.49	0.00	1039325				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	3.58	10.50	0.00	158348 (m)				

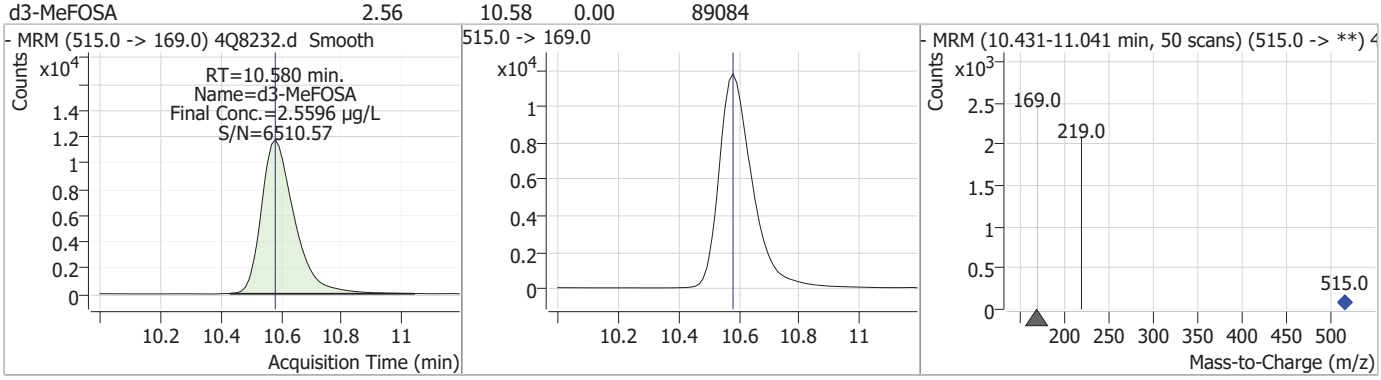


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.34	10.58	0.01	16141	512.0 -> 219.0	68.7	32.9	98.7

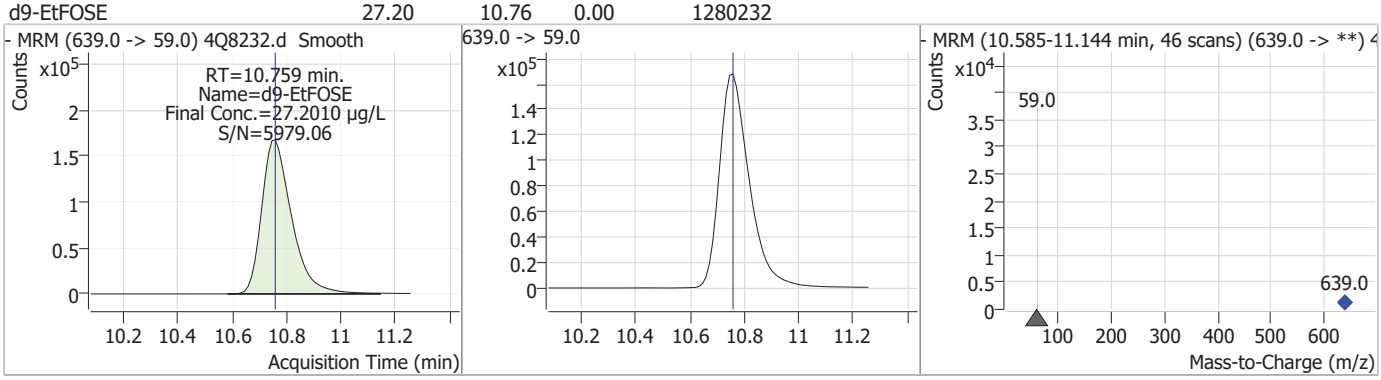


Perfluorinated Compounds by LC/MS/MS

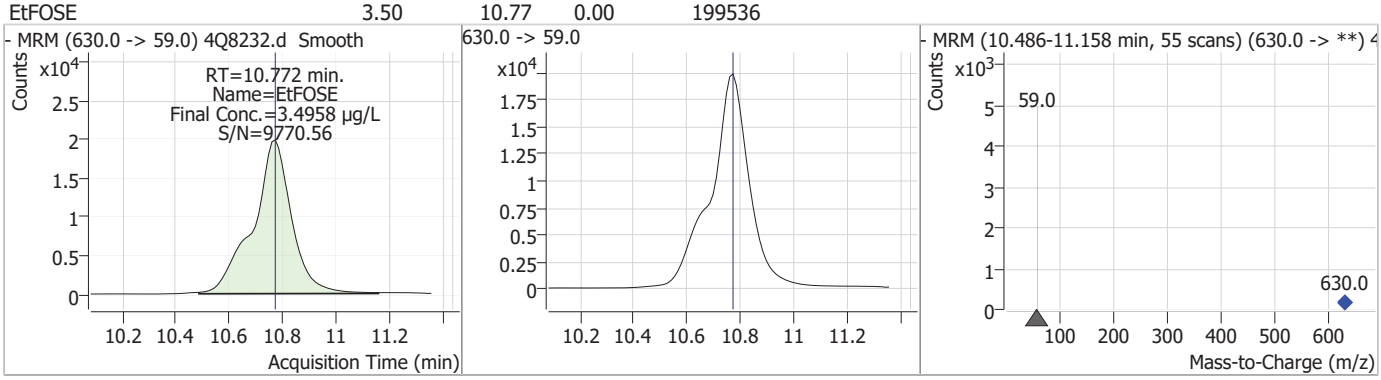
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.56	10.58	0.00	89084				



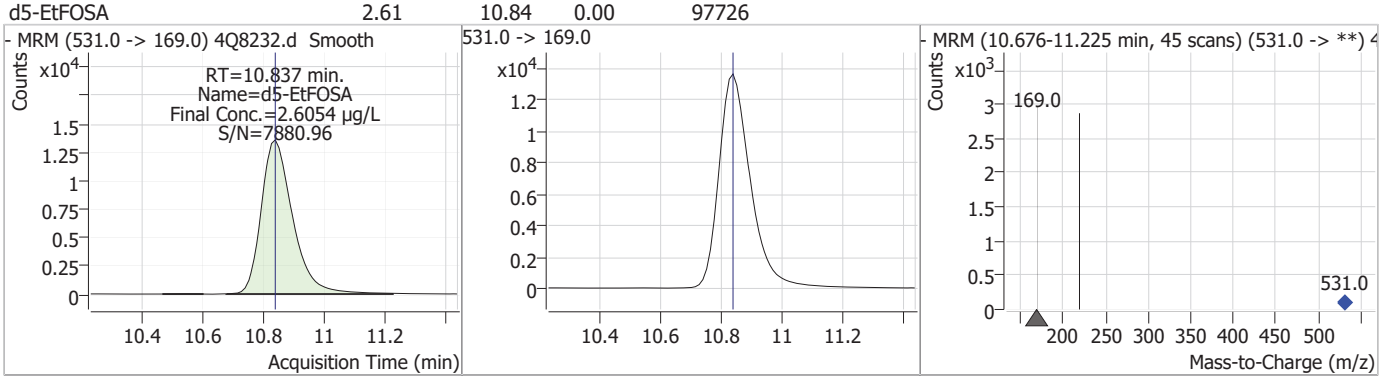
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	27.20	10.76	0.00	1280232				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	3.50	10.77	0.00	199536				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.61	10.84	0.00	97726				



7.6.63

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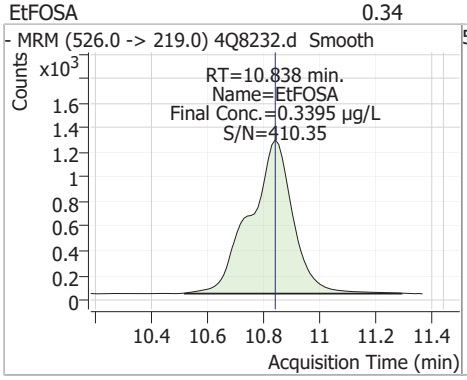
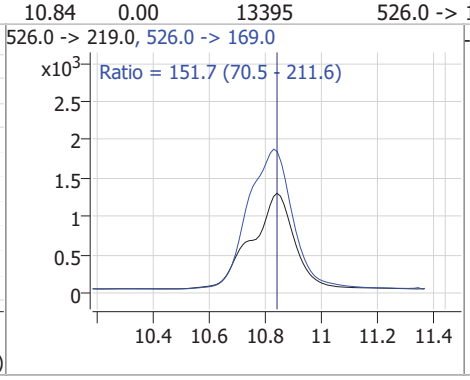
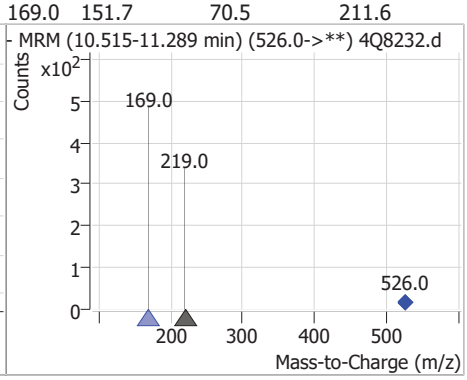
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.34	10.84	0.00	13395	526.0 -> 169.0	151.7	70.5	211.6







7.6.63

7

Manual Integration Approval Summary

Sample Number: T4Q140-IC140
Lab FileID: 4Q8232.D
Injection Time: 05/02/25 14:13

Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.91	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.43	Split peak
MeFOSAA	2355-31-9		7.94	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.01	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.31	Split peak
MeFOSE	24448-09-7		10.50	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8233.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 2:27:20 PM
Sample Name : IC140-3
Vial : P1-A4
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.896	217.0 -> 172.0	773197	10.00 µg/L	0.012
M5-PFPeA	4.319	268.0 -> 223.0	408161	5.00 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	274866	2.50 µg/L	0.000
M4-PFHpA	6.304	367.0 -> 322.0	304666	2.50 µg/L	0.000
M8-PFOA	6.922	421.0 -> 376.0	466215	2.50 µg/L	0.000
M9-PFNA	7.428	472.0 -> 427.0	195427	1.25 µg/L	0.000
M6-PFDA	7.883	519.0 -> 474.0	197421	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	242169	1.25 µg/L	0.000
M2-PFDoDA	8.704	615.0 -> 570.0	221584	1.25 µg/L	0.000
M2-PFTeDA	9.418	715.0 -> 670.0	189479	1.25 µg/L	0.000
M8-FOSA	9.316	506.0 -> 78.0	174961	2.50 µg/L	0.000
M3-PFBS	5.355	302.0 -> 99.0	24701	2.50 µg/L	-0.012
		302.0 -> 80.0	60095		
M3-PFHxS	6.999	402.0 -> 99.0	35037	2.50 µg/L	0.000
M8-PFOS	8.007	507.0 -> 99.0	38243	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	12003	5.00 µg/L	0.000
M2-6:2FTS	6.708	429.0 -> 81.0	26427	5.00 µg/L	0.000
M2-8:2FTS	7.696	529.0 -> 81.0	32299	5.00 µg/L	0.013
M3-MeFOSAA	7.940	573.0 -> 419.0	219627	5.00 µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	400726	10.00 µg/L	0.000
M5-EtFOSAA	8.123	589.0 -> 419.0	173495	5.00 µg/L	0.000
M7-MeFOSE	10.487	623.0 -> 59.0	958324	25.00 µg/L	0.000
M9-EtFOSE	10.759	639.0 -> 59.0	1185530	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	92126	2.50 µg/L	0.000
M3-MeFOSA	10.580	515.0 -> 169.0	83297	2.50 µg/L	0.000
13C4-PFOS	8.008	503.0 -> 80.0	66739	2.50 µg/L	0.000
13C3-PFBA	2.886	216.0 -> 172.0	330928	5.00 µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	41648	2.50 µg/L	0.000
13C4-PFOA	6.922	417.0 -> 372.0	465627	2.50 µg/L	0.000
13C2-PFDA	7.883	515.0 -> 470.0	156127	1.25 µg/L	0.000
13C5-PFNA	7.428	468.0 -> 423.0	180253	1.25 µg/L	0.000
13C2-PFHxA	5.465	315.0 -> 270.0	257042	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	12003	5.18 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.7%	
13C2-6:2FTS	6.708	429.0 -> 81.0	26427	5.27 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.5%	
13C2-8:2FTS	7.696	529.0 -> 81.0	32299	5.39 µg/L	0.013
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.7%	
13C2-PFDoDA	8.704	615.0 -> 570.0	221584	1.27 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.6%	
13C2-PFTeDA	9.418	715.0 -> 670.0	189479	1.29 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.9%	
13C3-PFBS	5.355	302.0 -> 99.0	24701	2.41 µg/L	-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.5%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	35037	2.38	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.3%			
13C4-PFBA	2.896	217.0 -> 172.0	773197	9.90	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.0%			
13C4-PFHpA	6.304	367.0 -> 322.0	304666	2.49	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.6%			
13C5-PFHxA	5.464	318.0 -> 273.0	274866	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.3%			
13C5-PFPeA	4.319	268.0 -> 223.0	408161	4.95	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 99.0%			
13C6-PFDA	7.883	519.0 -> 474.0	197421	1.31	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.6%			
13C7-PFUnDA	8.310	570.0 -> 525.0	242169	1.31	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.8%			
13C8-FOSA	9.316	506.0 -> 78.0	174961	2.44	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.6%			
13C8-PFOA	6.922	421.0 -> 376.0	466215	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.3%			
13C8-PFOS	8.007	507.0 -> 99.0	38243	2.41	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.5%			
13C9-PFNA	7.428	472.0 -> 427.0	195427	1.25	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.0%			
d3-MeFOSAA	7.940	573.0 -> 419.0	219627	4.89	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.9%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	400726	9.96	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.6%			
d3-MeFOSA	10.580	515.0 -> 169.0	83297	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.1%			
d5-EtFOSAA	8.123	589.0 -> 419.0	173495	4.84	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.9%			
d7-MeFOSE	10.487	623.0 -> 59.0	958324	25.22	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.9%			
d9-EtFOSE	10.759	639.0 -> 59.0	1185530	25.54	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 102.2%			
d5-EtFOSA	10.837	531.0 -> 169.0	92126	2.49	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.6%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	98490	4.80	µg/L		100
		327.0 -> 81.0	43384				
6:2FTS	6.709	427.0 -> 407.0	118981	4.66	µg/L		98
		427.0 -> 81.0	55959				
8:2FTS	7.683	527.0 -> 507.0	106086	4.51	µg/L		95
		527.0 -> 81.0	44619				
EtFOSAA	8.136	584.0 -> 419.0	36917	1.18	µg/L	m	96
		584.0 -> 483.0	19254				
FOSA	9.318	498.0 -> 78.0	75868	1.20	µg/L	m	99
		498.0 -> 478.0	2146				
MeFOSAA	7.941	570.0 -> 419.0	44594	1.22	µg/L	m	98
		570.0 -> 512.0	15331				
PFBA	2.889	213.0 -> 169.0	124126	4.92	µg/L		100
PFBS	5.357	299.0 -> 80.0	29214	1.06	µg/L		98
		299.0 -> 99.0	12264				
PFDA	7.883	513.0 -> 469.0	166601	1.18	µg/L		100
		513.0 -> 219.0	38033				
PFDoDA	8.704	613.0 -> 569.0	215698	1.24	µg/L		100
		613.0 -> 319.0	28090				

Perfluorinated Compounds by LC/MS/MS

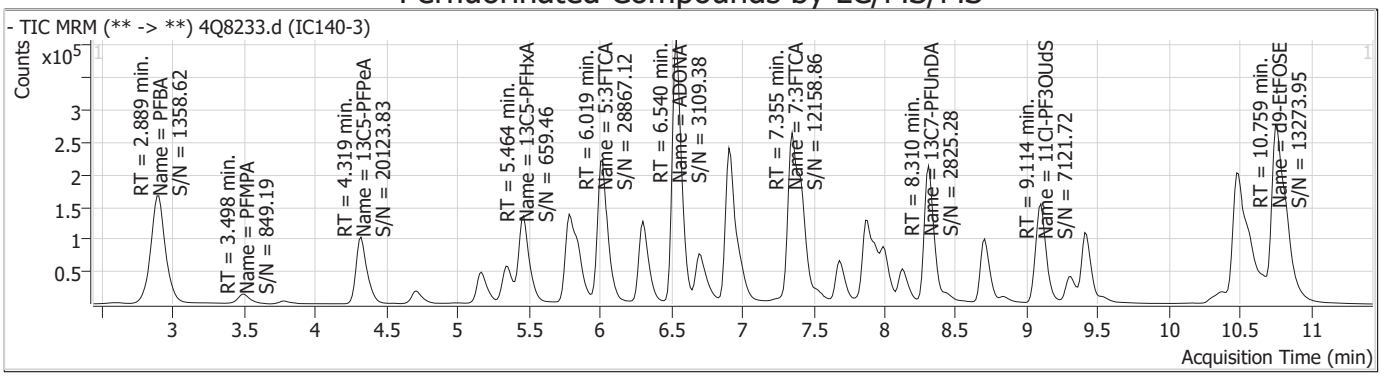
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.841	599.0 -> 80.0	24572	1.14	µg/L		93
		599.0 -> 99.0	12598				
PFHpA	6.304	363.0 -> 319.0	214336	1.23	µg/L		97
		363.0 -> 169.0	40707				
PFHpS	7.541	449.0 -> 80.0	34808	1.15	µg/L		95
		449.0 -> 99.0	20649				
PFHxA	5.467	313.0 -> 269.0	131059	1.18	µg/L		99
		313.0 -> 119.0	4893				
PFHxS	7.000	399.0 -> 80.0	33057	1.08	µg/L	m	99
		399.0 -> 99.0	17214				
PFNA	7.429	463.0 -> 419.0	132992	1.18	µg/L	m	99
		463.0 -> 219.0	48352				
PFNS	8.449	549.0 -> 80.0	30066	1.14	µg/L		93
		549.0 -> 99.0	18478				
PFOA	6.923	413.0 -> 369.0	182122	1.19	µg/L	m	96
		413.0 -> 169.0	49090				
PFOS	8.008	499.0 -> 80.0	35051	1.15	µg/L	m	97
		499.0 -> 99.0	20416				
PFPeA	4.321	263.0 -> 219.0	154460	2.43	µg/L		100
PFPeS	6.331	349.0 -> 80.0	34392	1.12	µg/L		98
		349.0 -> 99.0	16581				
PFTeDA	9.419	713.0 -> 669.0	248181	1.21	µg/L		99
		713.0 -> 219.0	17271				
PFTrDA	9.075	663.0 -> 619.0	245427	1.28	µg/L		99
		663.0 -> 369.0	14584				
PFUnDA	8.312	563.0 -> 519.0	177225	1.22	µg/L		98
		563.0 -> 269.0	31695				
11Cl-PF3OUdS	9.114	631.0 -> 451.0	395580	4.70	µg/L		99
		633.0 -> 453.0	119669				
9Cl-PF3ONS	8.327	531.0 -> 351.0	437576	4.60	µg/L		98
		533.0 -> 353.0	133916				
ADONA	6.540	377.0 -> 251.0	1440262	4.45	µg/L		100
		377.0 -> 85.0	477829				
HFPO-DA	5.792	285.0 -> 169.0	196552	4.73	µg/L		100
		285.0 -> 185.0	22800				
3:3FTCA	3.781	241.0 -> 177.0	22594	5.83	µg/L		99
		241.0 -> 117.0	2258				
5:3FTCA	6.019	341.0 -> 237.0	646157	30.01	µg/L		97
		341.0 -> 217.0	483996				
7:3FTCA	7.355	441.0 -> 337.0	931028	30.17	µg/L		98
		441.0 -> 317.0	424165				
EtFOSA	10.838	526.0 -> 219.0	42816	1.15	µg/L		96
		526.0 -> 169.0	62280				
EtFOSE	10.772	630.0 -> 59.0	630574	11.93	µg/L		100
MeFOSA	10.582	512.0 -> 169.0	53027	1.20	µg/L		97
		512.0 -> 219.0	36305				
MeFOSE	10.500	616.0 -> 59.0	489356	11.98	µg/L	m	100
PFDoDS	9.546	699.0 -> 80.0	20178	1.20	µg/L		97
		699.0 -> 99.0	12670				
NFDHA	5.357	295.0 -> 201.0	30357	2.44	µg/L		99
		201.0 -> 85.0	149722				
		295.0 -> 85.0	7790				
PFMBA	4.710	279.0 -> 85.0	104259	2.42	µg/L		100
PFMPA	3.498	229.0 -> 85.0	88915	2.41	µg/L		100
PFEESA	5.849	315.0 -> 135.0	239476	2.27	µg/L		100
		315.0 -> 69.0	19691				

Perfluorinated Compounds by LC/MS/MS

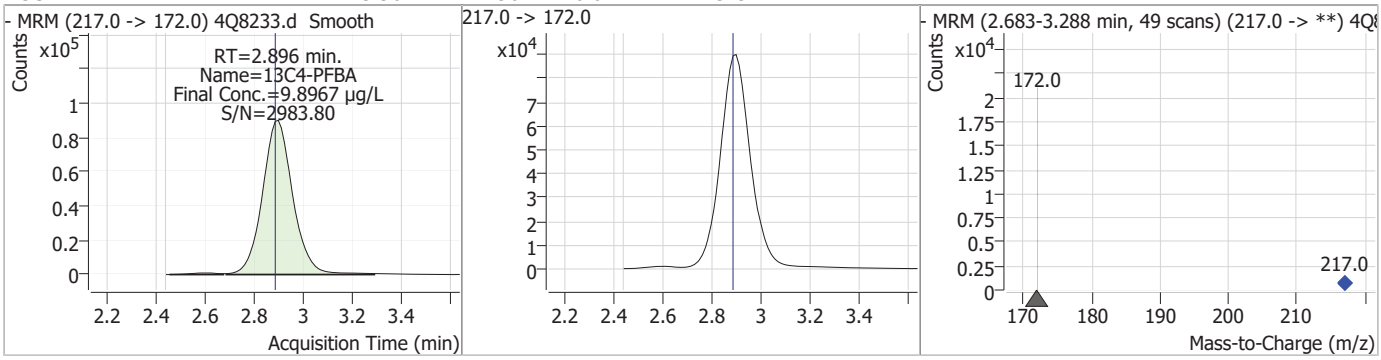
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

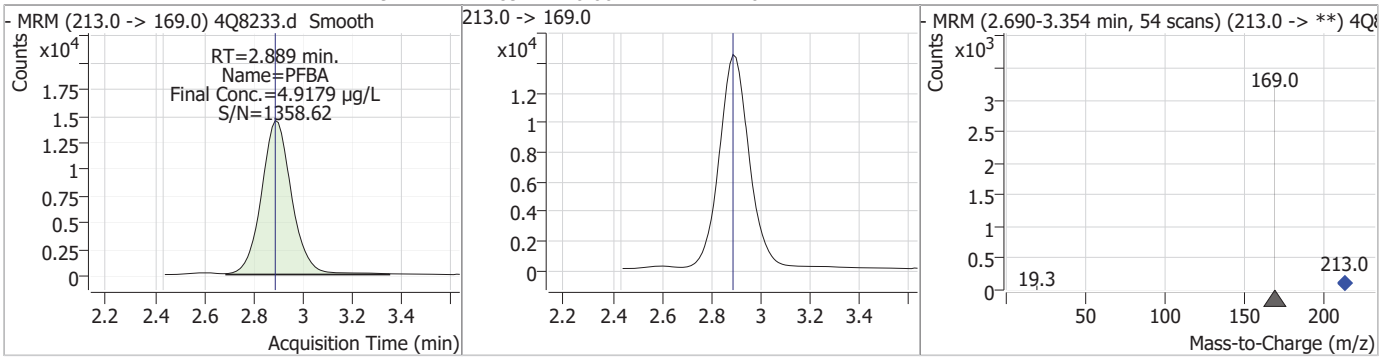
Perfluorinated Compounds by LC/MS/MS



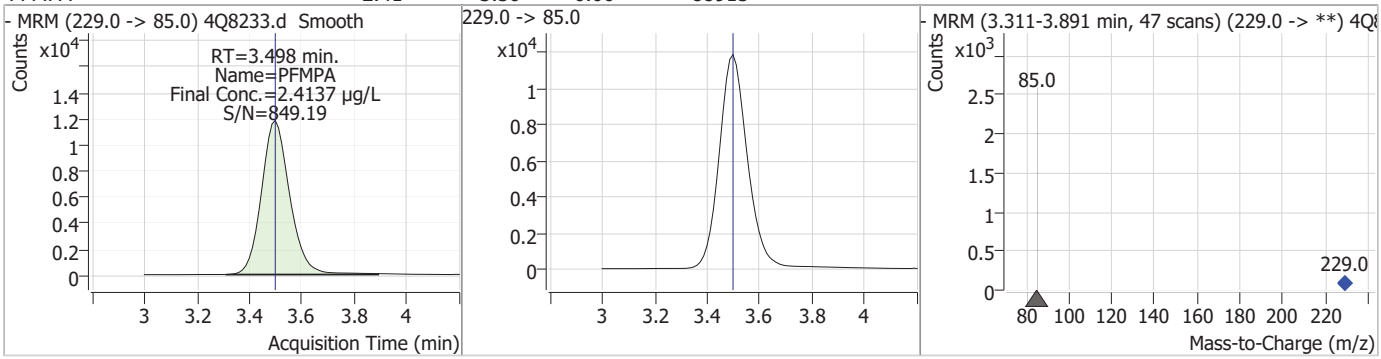
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.90	2.90	0.01	773197				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	4.92	2.89	0.00	124126				

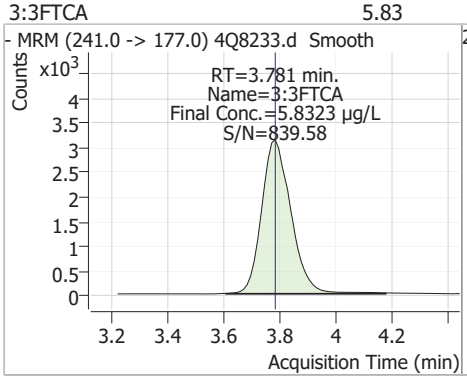


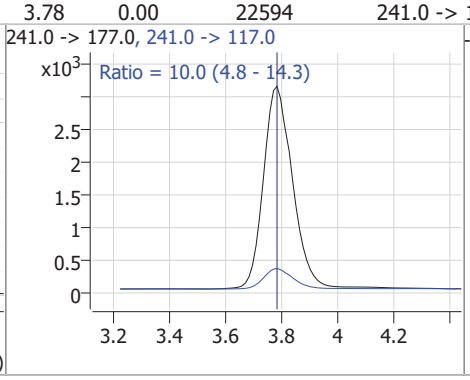
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	2.41	3.50	0.00	88915				

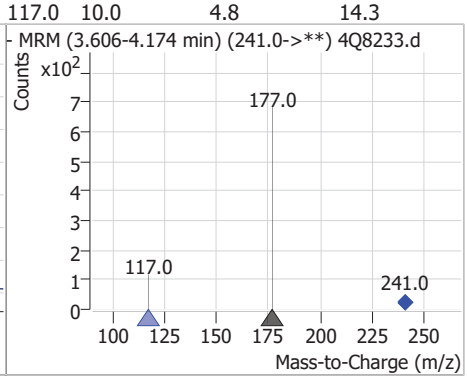


Perfluorinated Compounds by LC/MS/MS

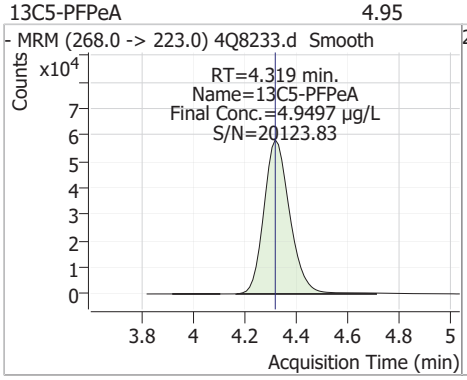
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	5.83	3.78	0.00	22594	241.0 -> 117.0	10.0	4.8	14.3

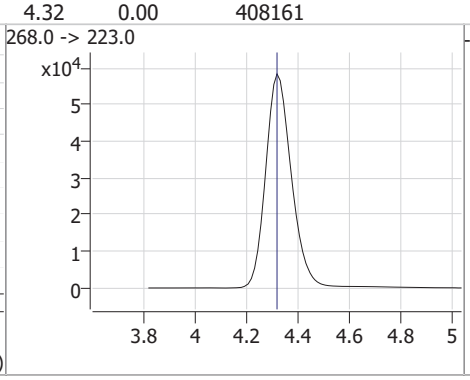


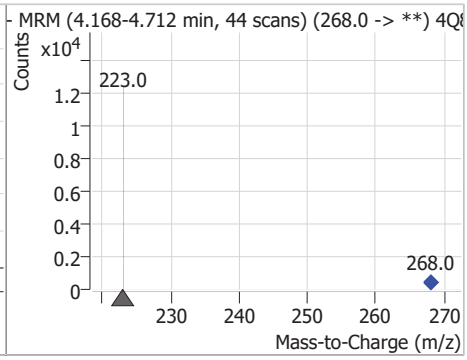




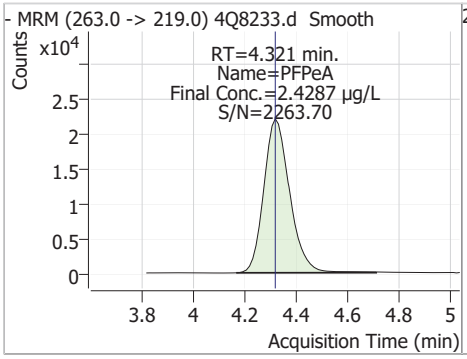
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.95	4.32	0.00	408161				

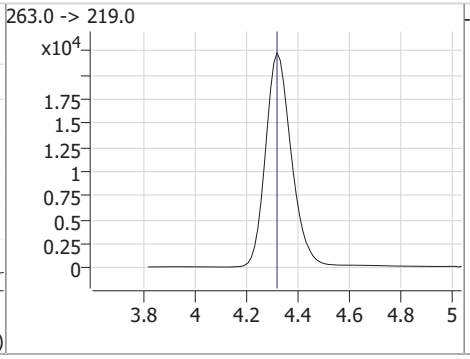


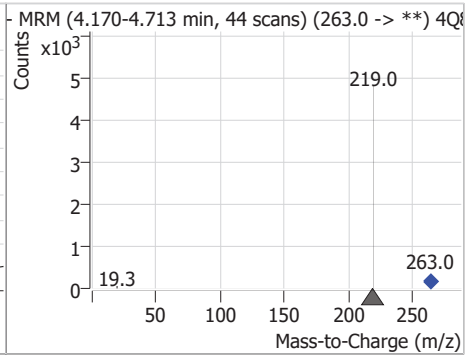




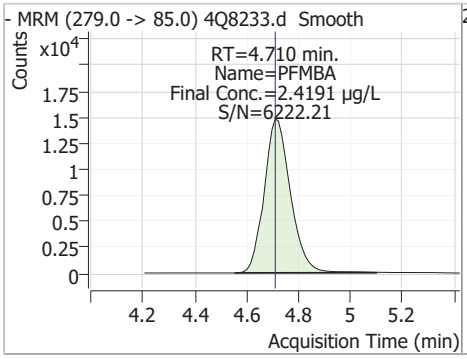
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	2.43	4.32	0.00	154460				

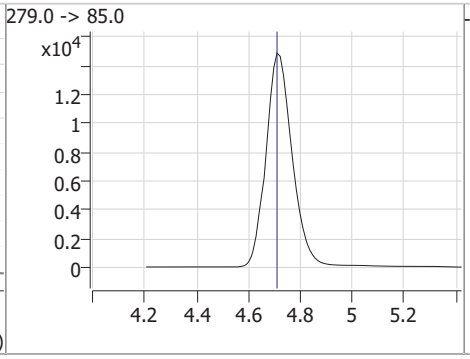


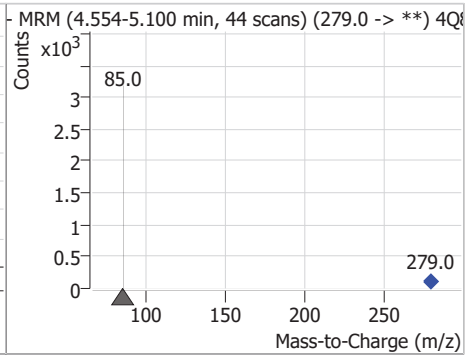




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	2.42	4.71	0.00	104259				







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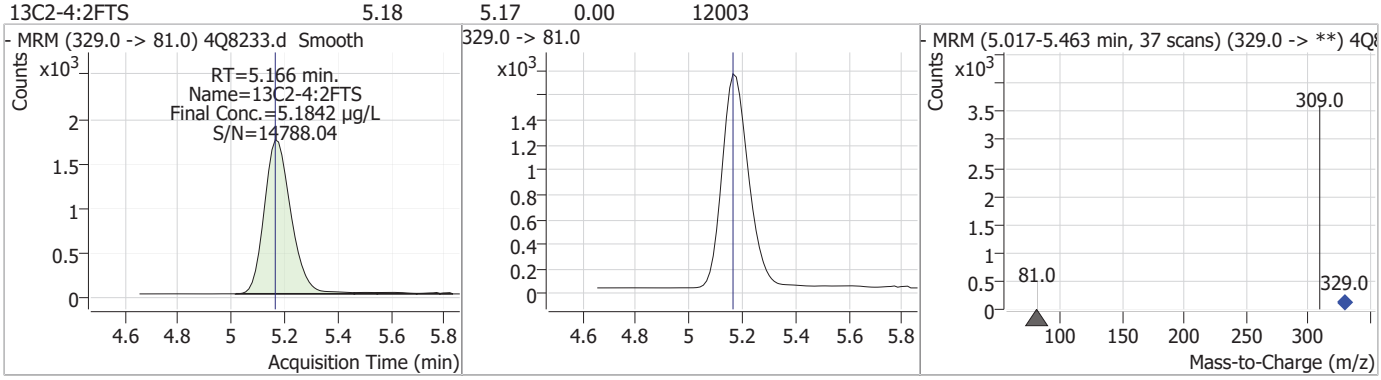
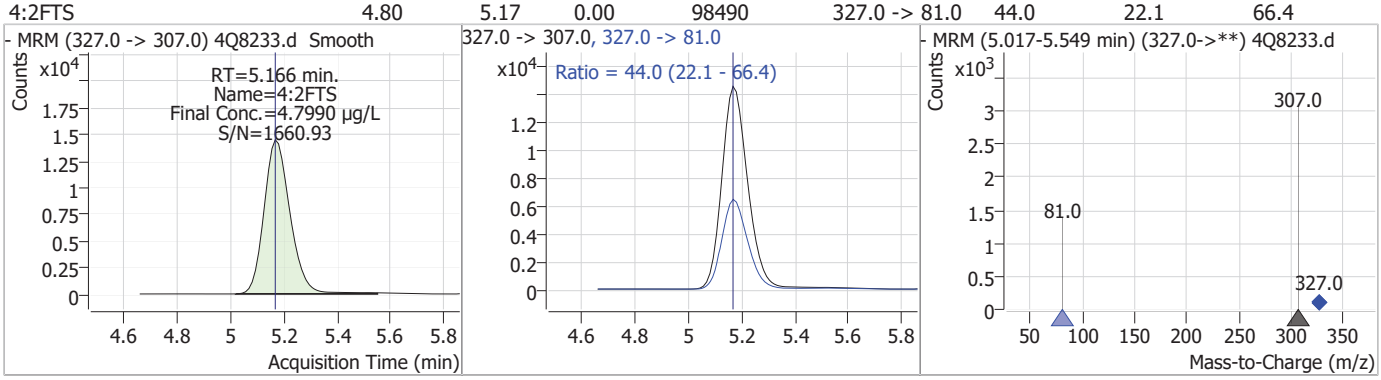
Perfluorinated Compounds by LC/MS/MS

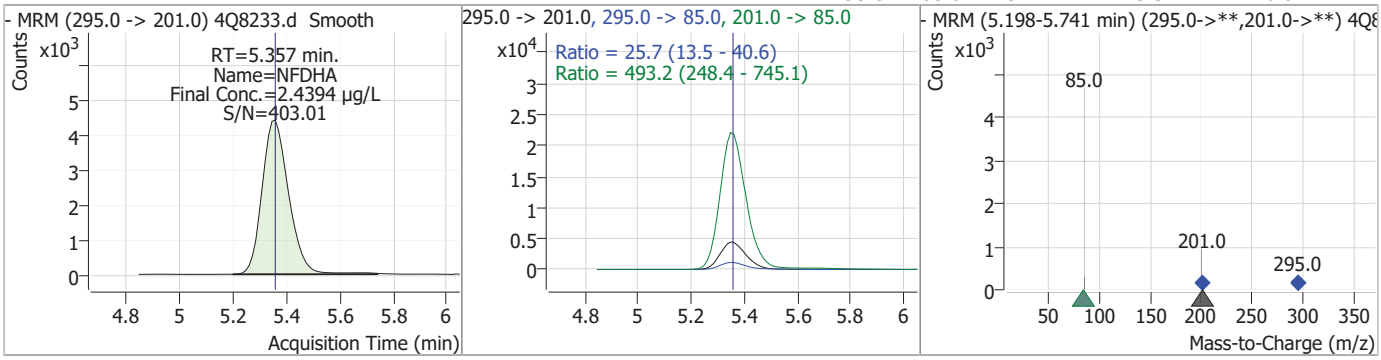
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.18	5.17	0.00	12003				



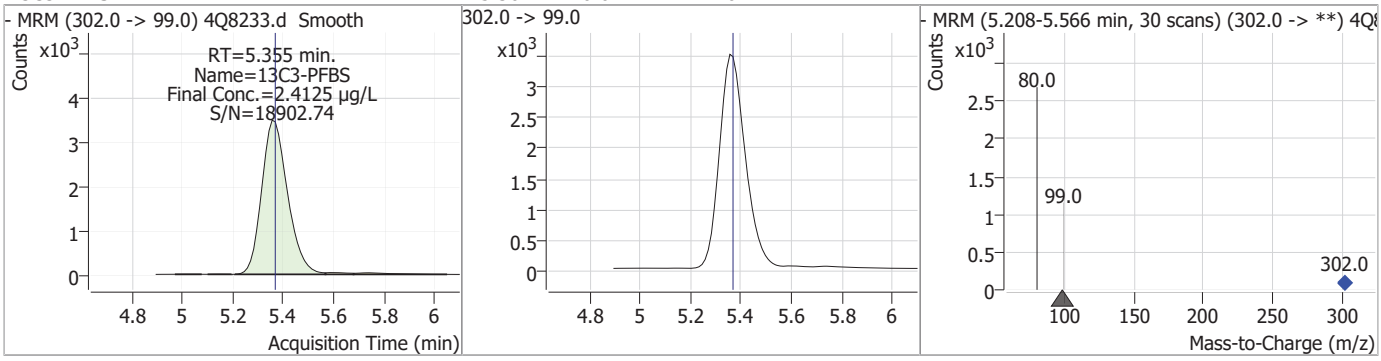
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	4.80	5.17	0.00	98490	327.0 -> 81.0	44.0	22.1	66.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	2.44	5.36	0.00	30357	201.0 -> 85.0	493.2	248.4	745.1
					295.0 -> 85.0	25.7	13.5	40.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.41	5.36	-0.01	24701				



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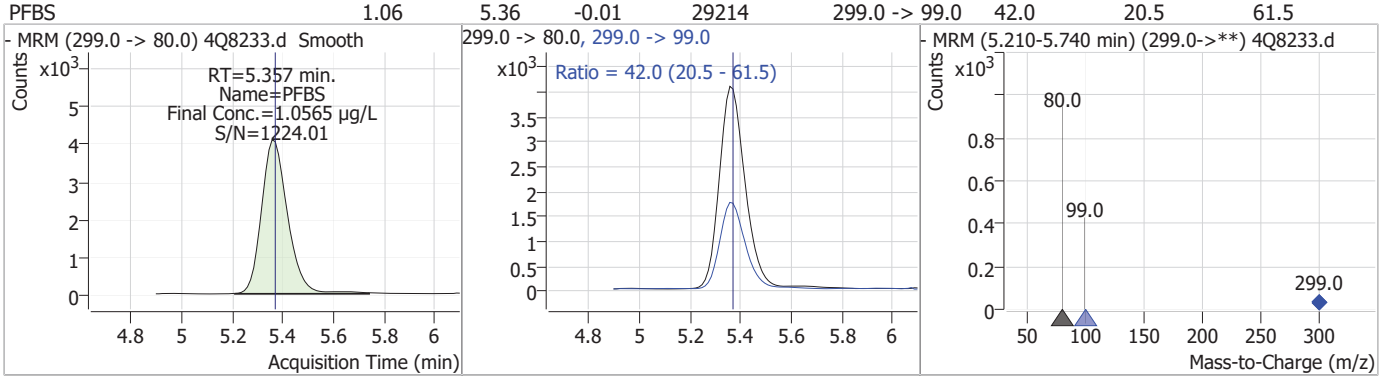
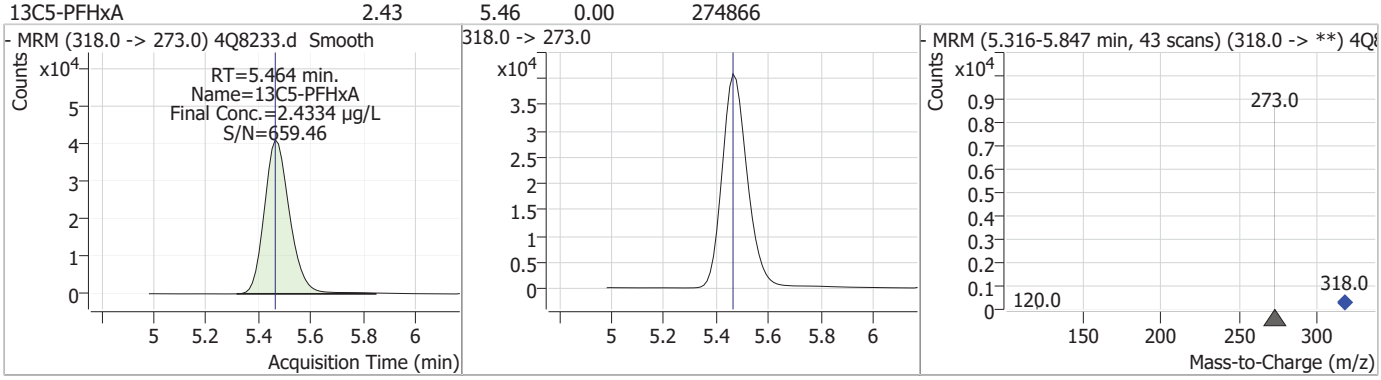
Perfluorinated Compounds by LC/MS/MS

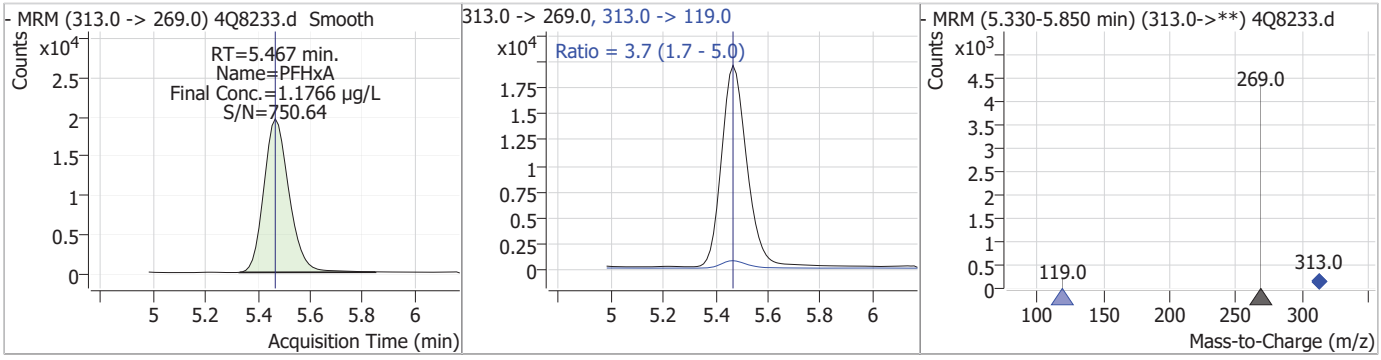
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	1.06	5.36	-0.01	29214	299.0 -> 99.0	42.0	20.5	61.5



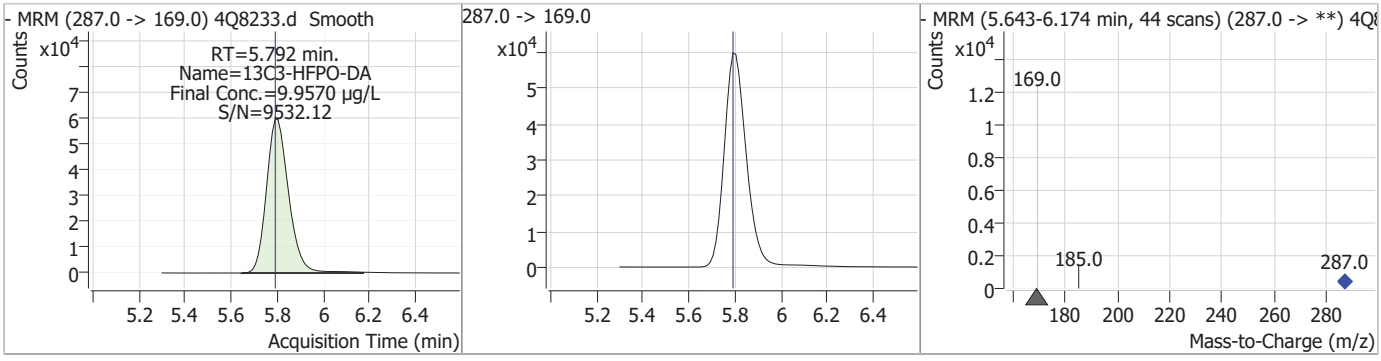
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.43	5.46	0.00	274866				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	1.18	5.47	0.00	131059	313.0 -> 119.0	3.7	1.7	5.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.96	5.79	0.00	400726				



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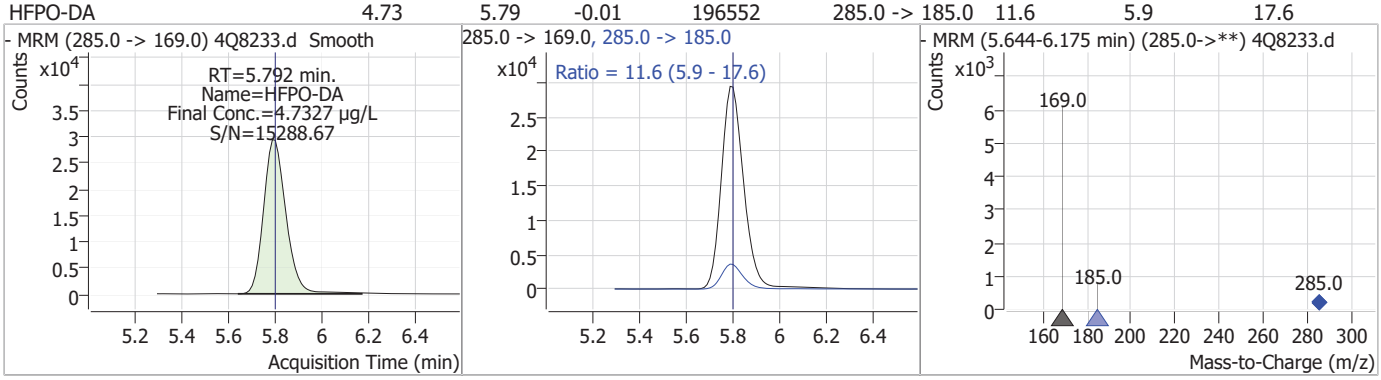
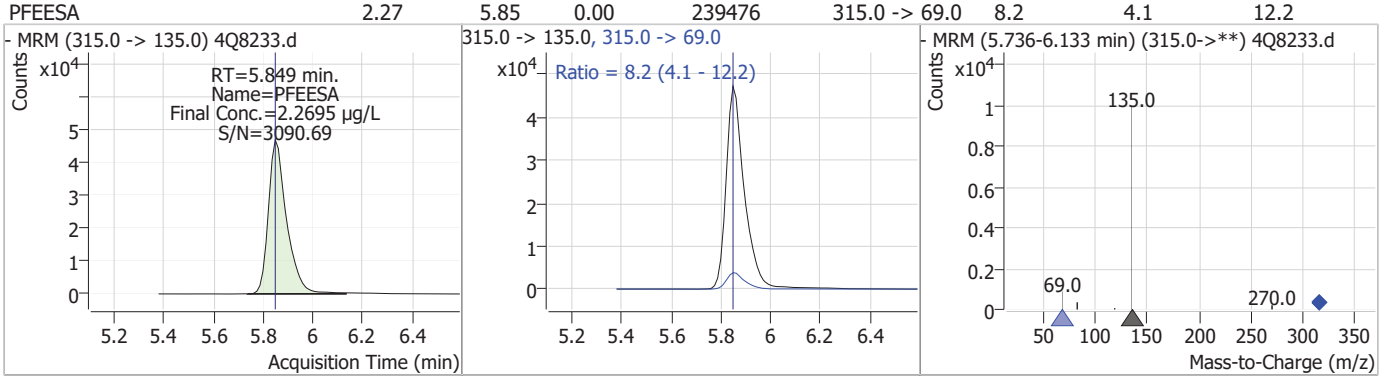
Perfluorinated Compounds by LC/MS/MS

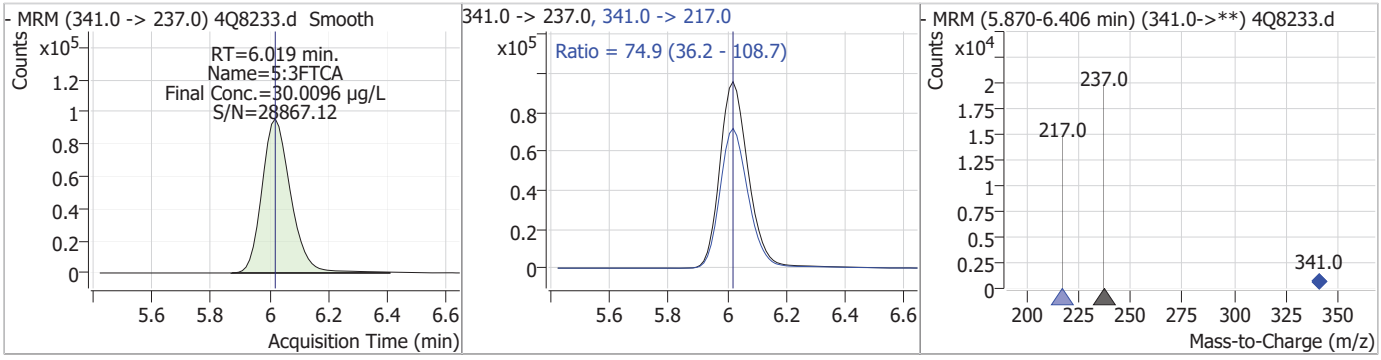
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	4.73	5.79	-0.01	196552	285.0 -> 185.0	11.6	5.9	17.6



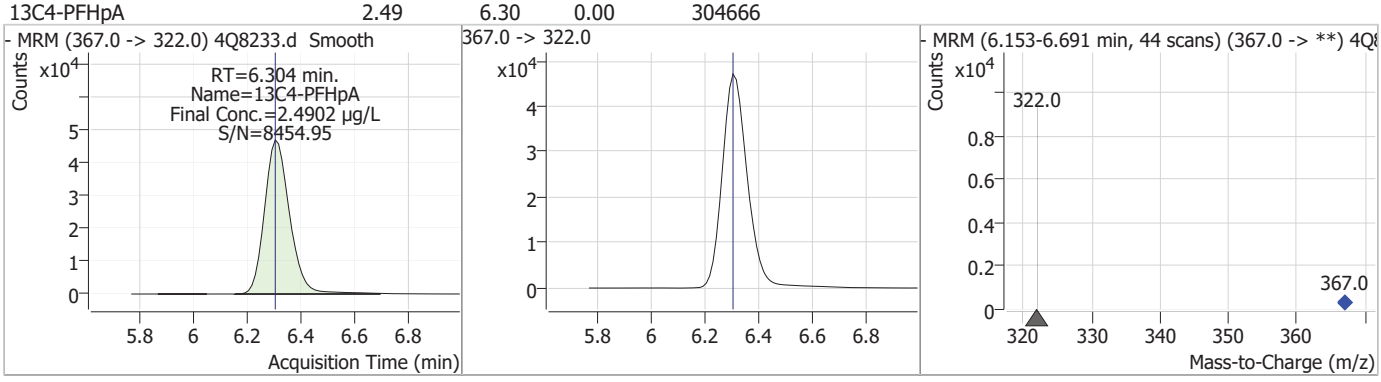
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	2.27	5.85	0.00	239476	315.0 -> 69.0	8.2	4.1	12.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	30.01	6.02	0.00	646157	341.0 -> 217.0	74.9	36.2	108.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.49	6.30	0.00	304666				



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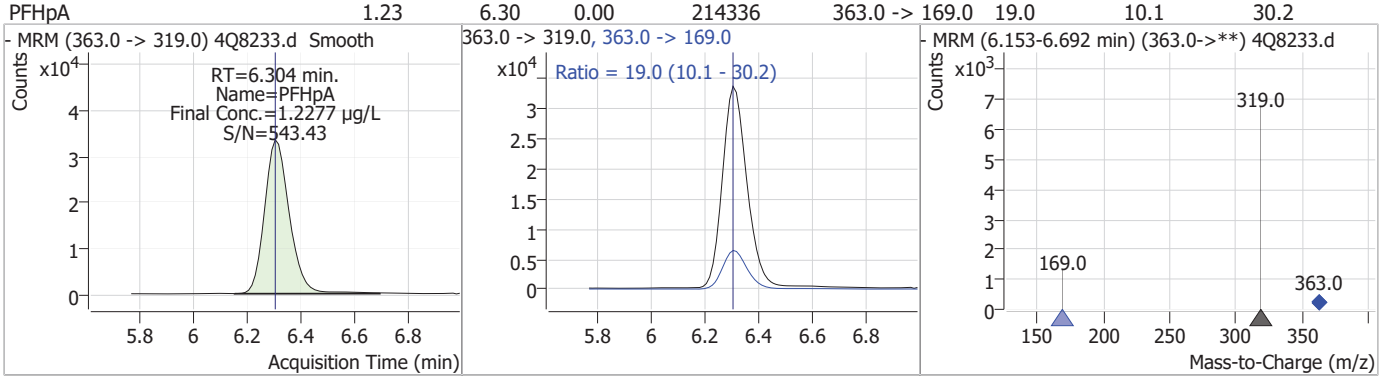
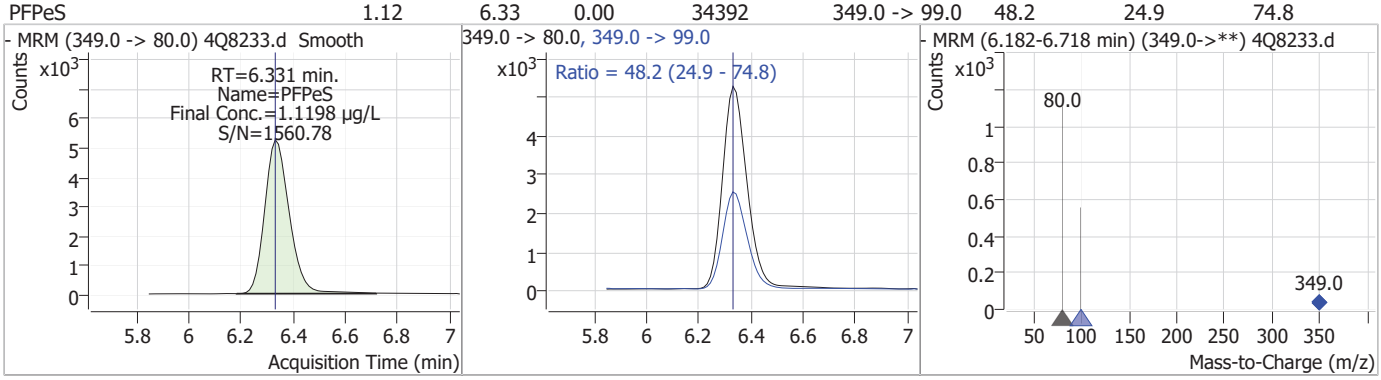
Perfluorinated Compounds by LC/MS/MS

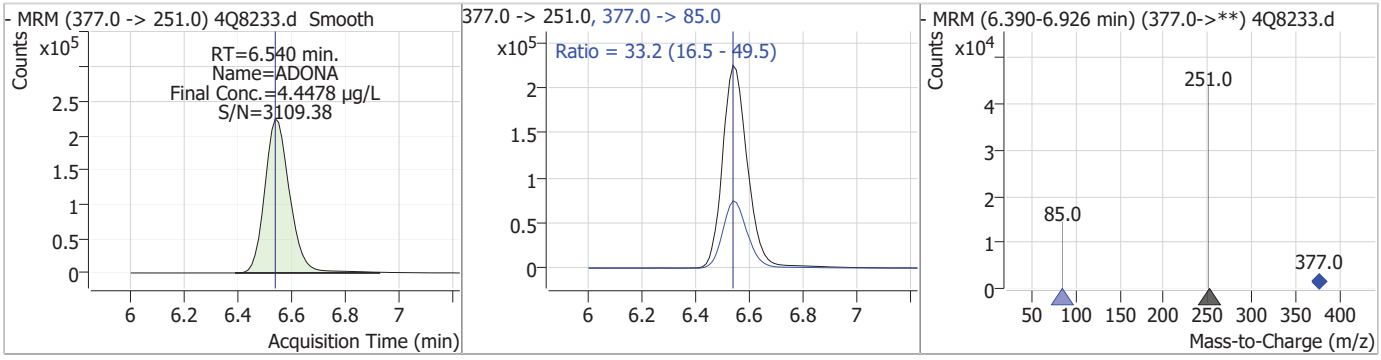
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	1.23	6.30	0.00	214336	363.0 -> 169.0	19.0	10.1	30.2



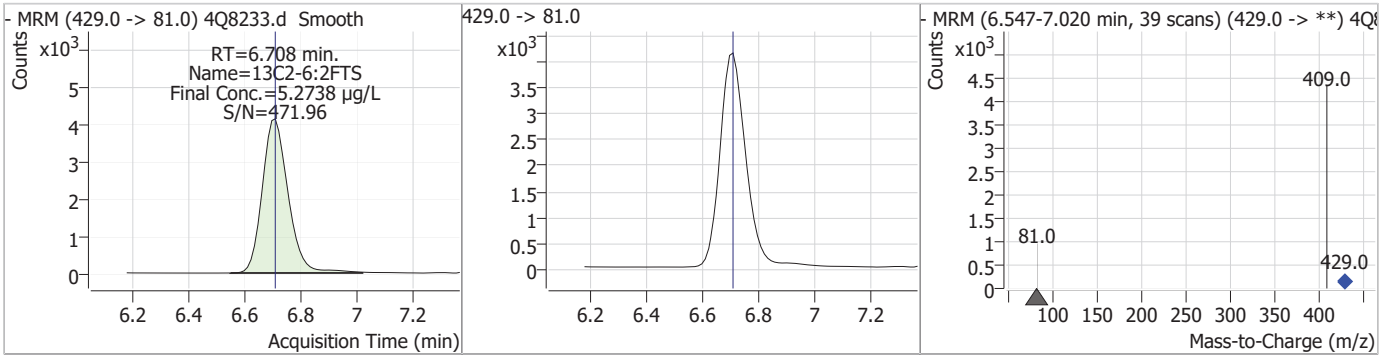
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	1.12	6.33	0.00	34392	349.0 -> 99.0	48.2	24.9	74.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	4.45	6.54	0.00	1440262	377.0 -> 85.0	33.2	16.5	49.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.27	6.71	0.00	26427				



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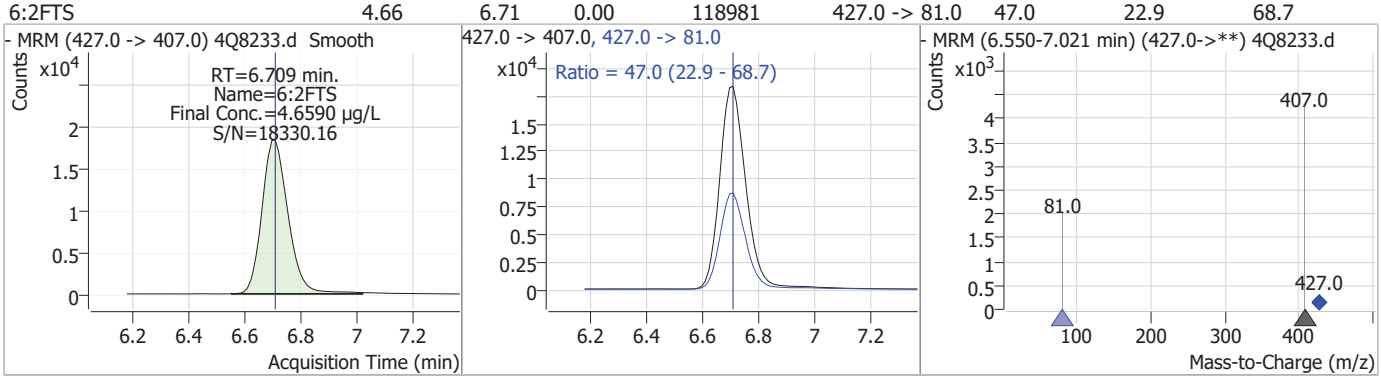
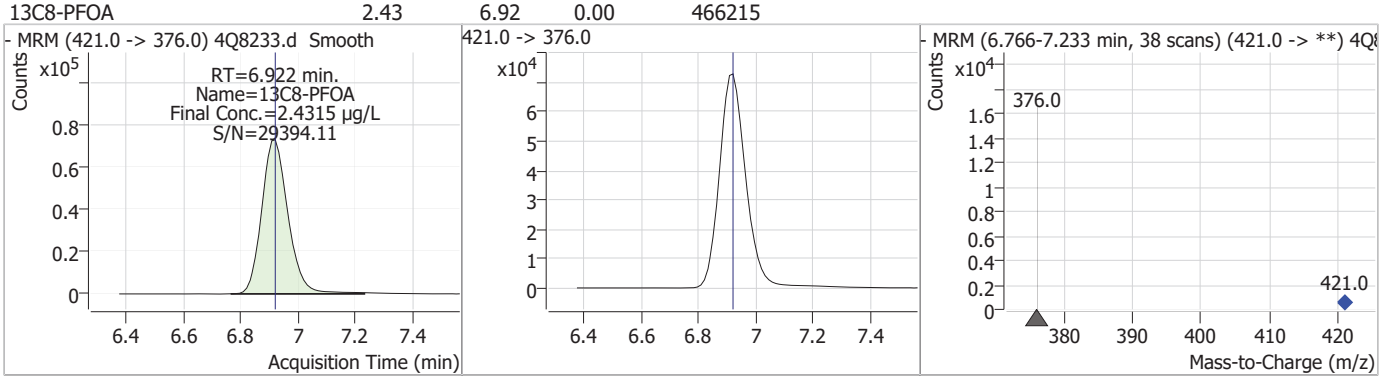
Perfluorinated Compounds by LC/MS/MS

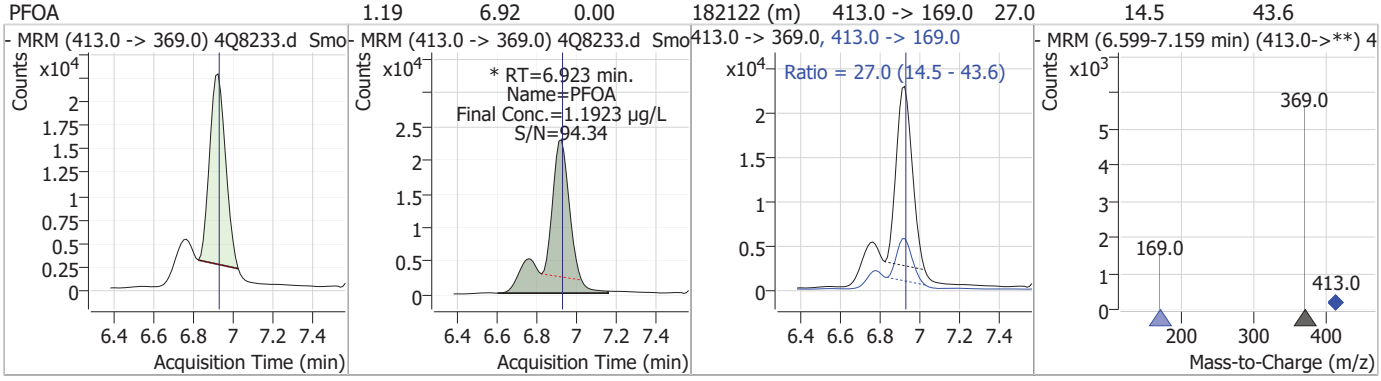
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	4.66	6.71	0.00	118981	427.0 -> 81.0	47.0	22.9	68.7



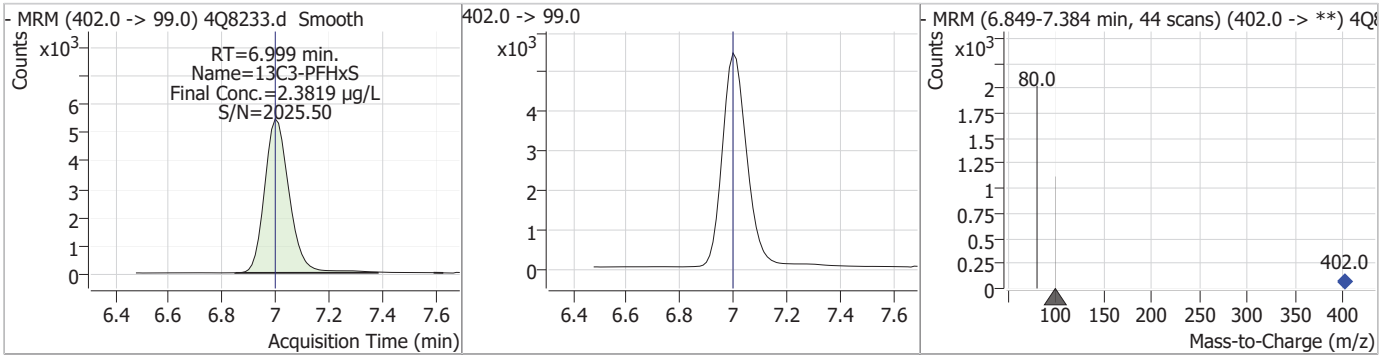
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.43	6.92	0.00	466215				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	1.19	6.92	0.00	182122 (m)	413.0 -> 169.0	27.0	14.5	43.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.38	7.00	0.00	35037				



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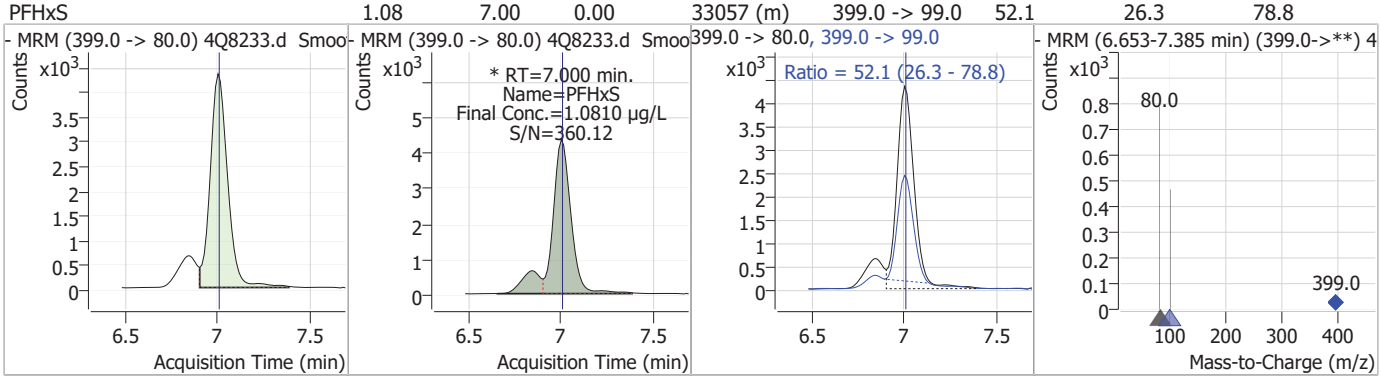
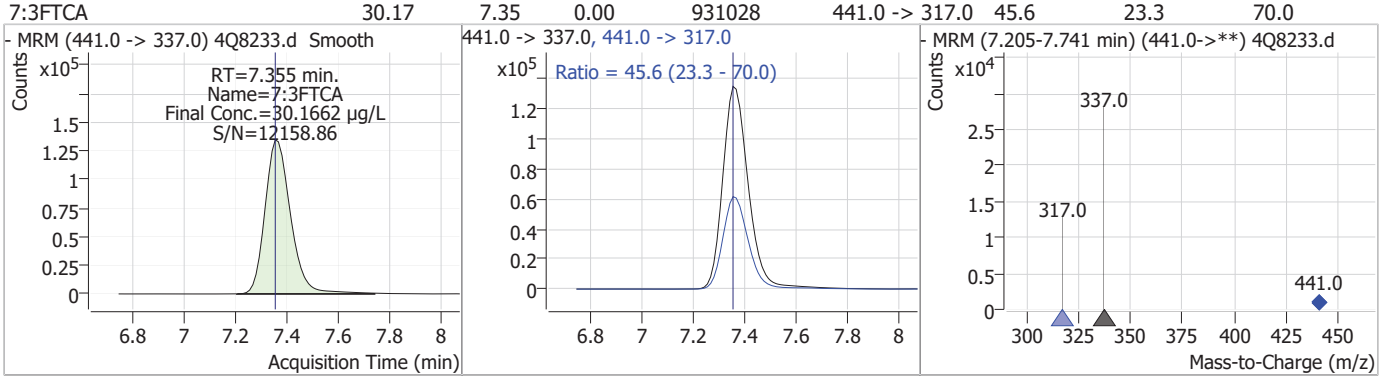
Perfluorinated Compounds by LC/MS/MS

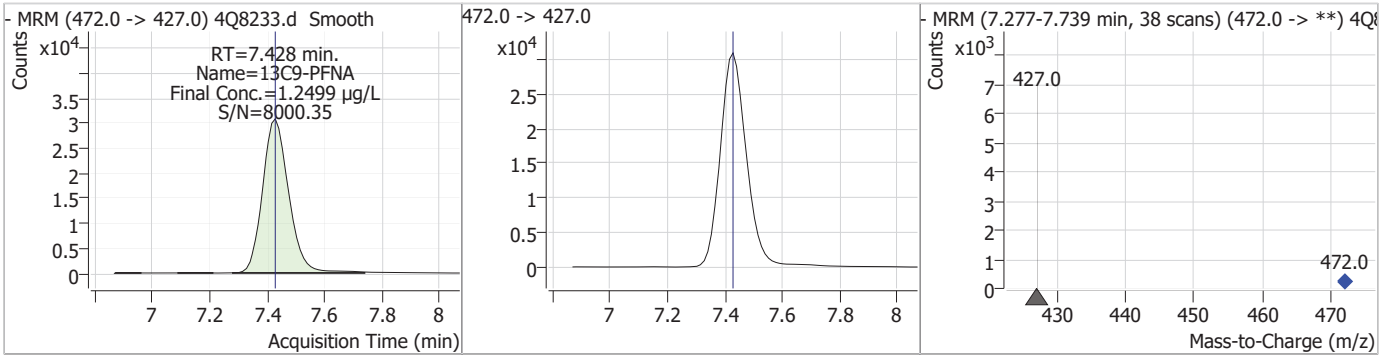
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	1.08	7.00	0.00	33057 (m)	399.0 -> 99.0	52.1	26.3	78.8



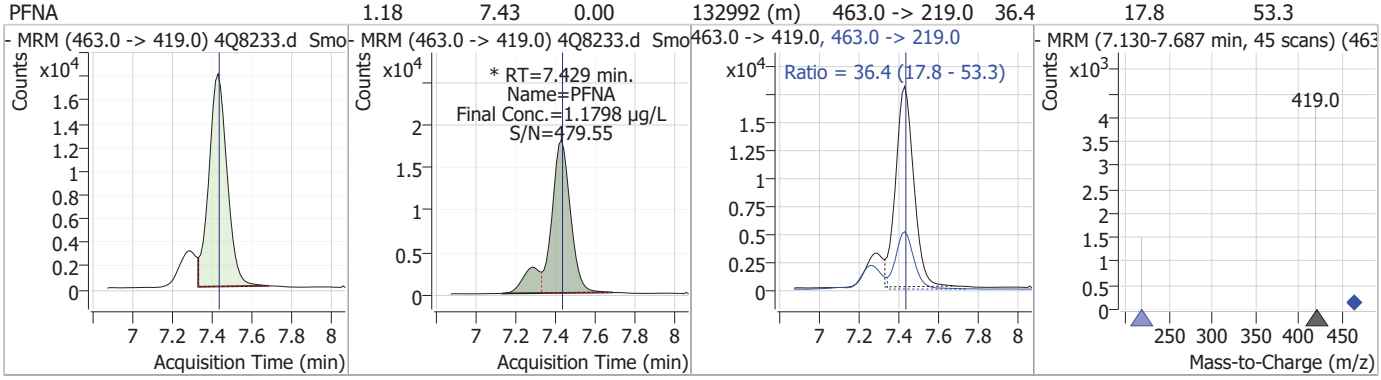
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	30.17	7.35	0.00	931028	441.0 -> 317.0	45.6	23.3	70.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.25	7.43	0.00	195427				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	1.18	7.43	0.00	132992 (m)	463.0 -> 219.0	36.4	17.8	53.3



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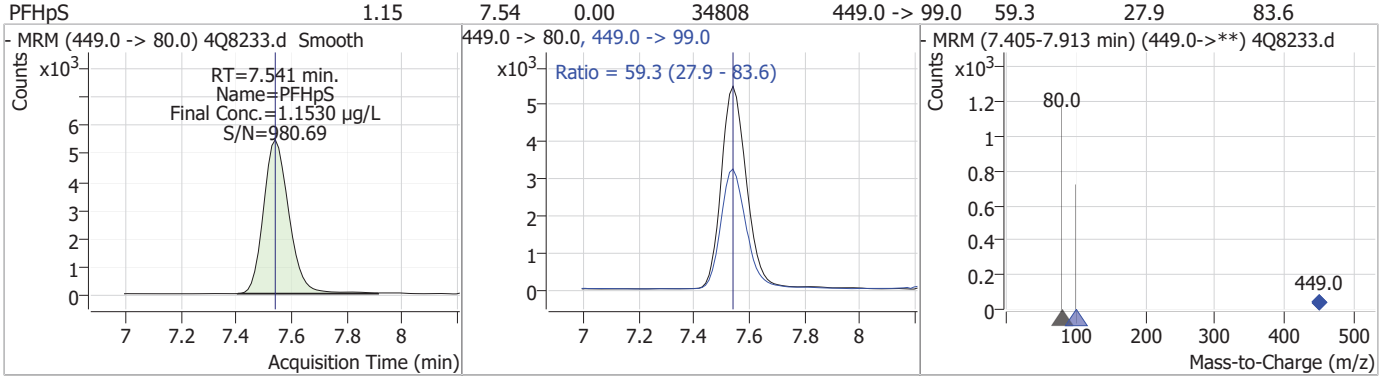
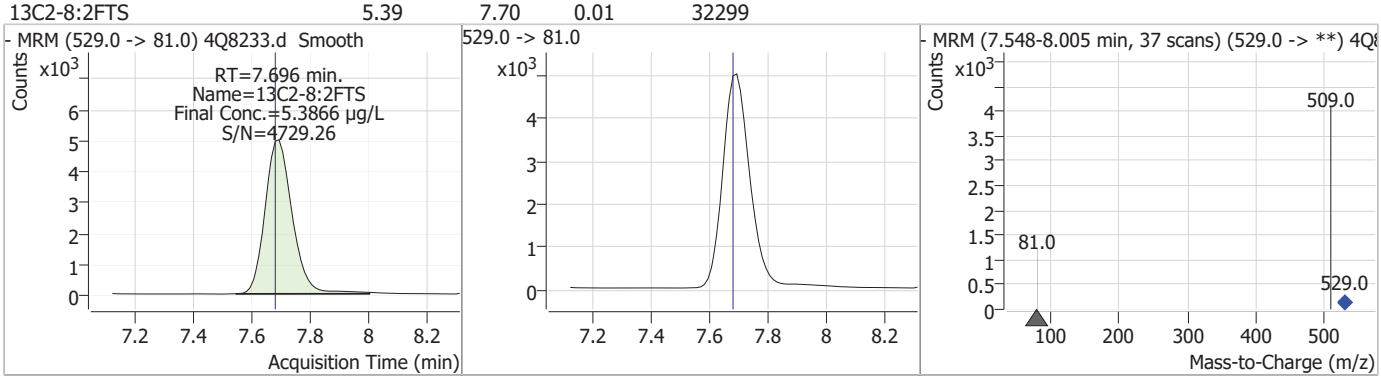
Perfluorinated Compounds by LC/MS/MS

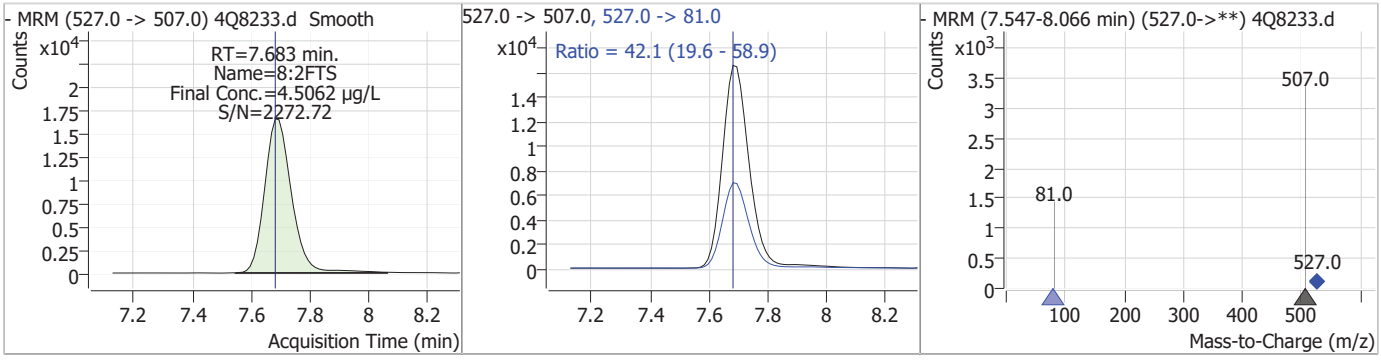
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	1.15	7.54	0.00	34808	449.0 -> 99.0	59.3	27.9	83.6



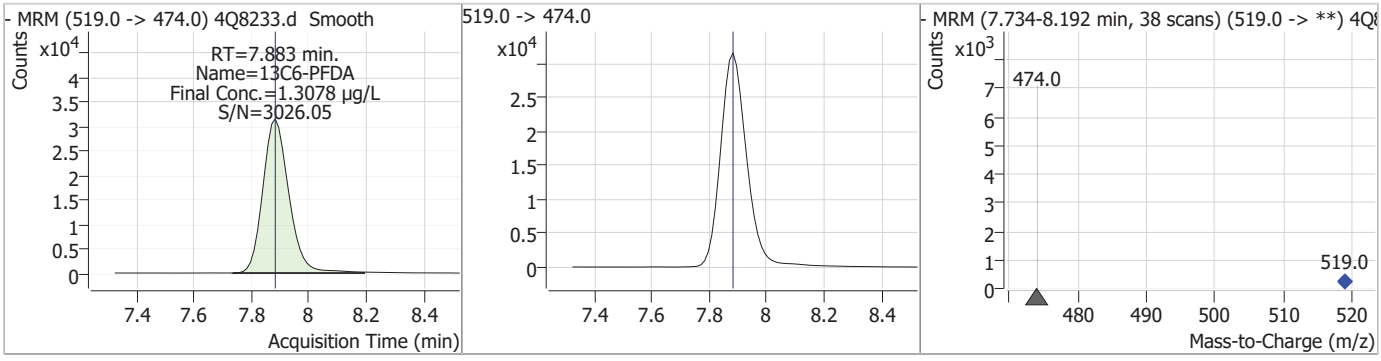
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.39	7.70	0.01	32299				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	4.51	7.68	0.00	106086	527.0 -> 81.0	42.1	19.6	58.9

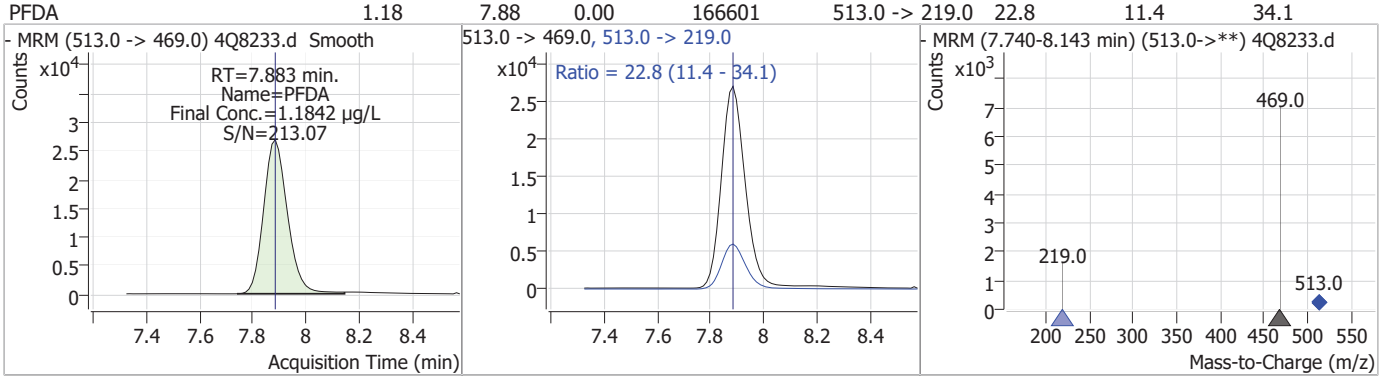


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.31	7.88	0.00	197421				

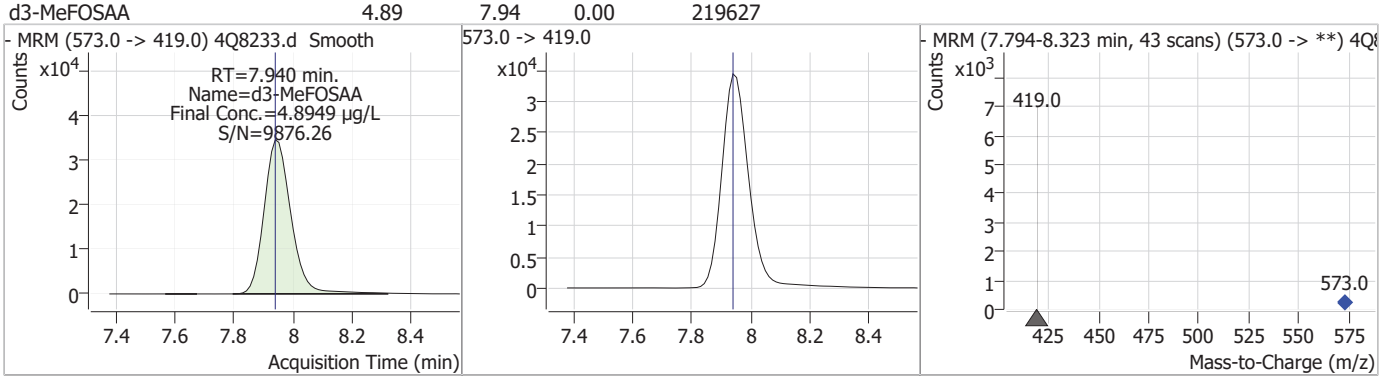


Perfluorinated Compounds by LC/MS/MS

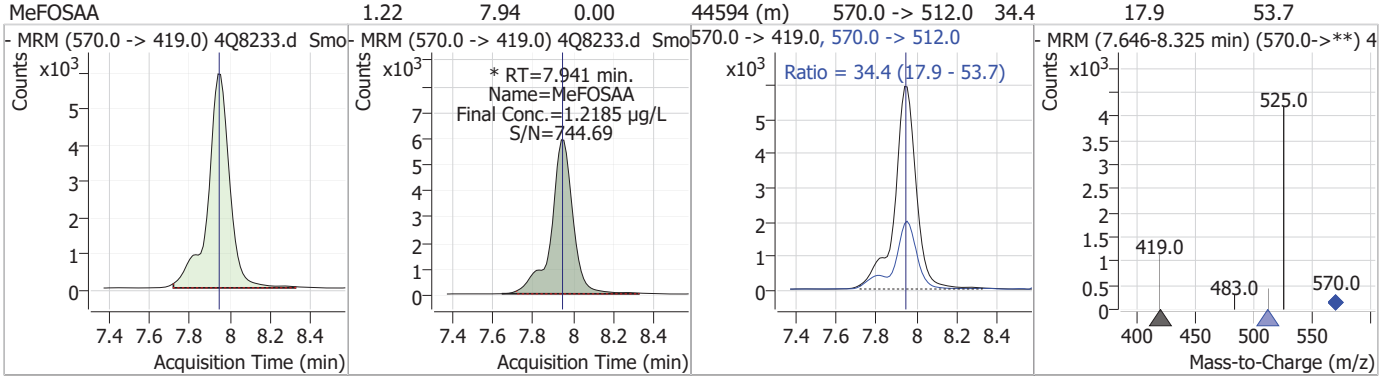
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	1.18	7.88	0.00	166601	513.0 -> 219.0	22.8	11.4	34.1



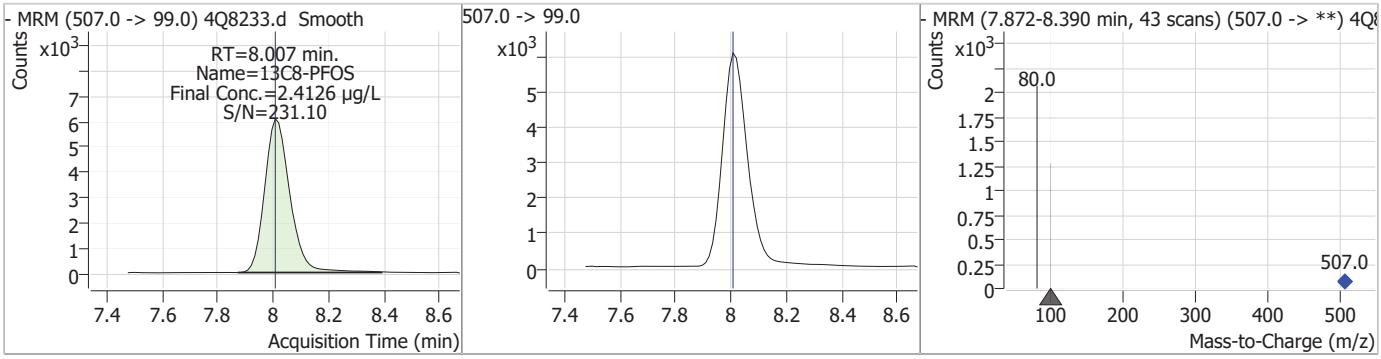
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.89	7.94	0.00	219627				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	1.22	7.94	0.00	44594 (m)	570.0 -> 512.0	34.4	17.9	53.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.41	8.01	0.00	38243				



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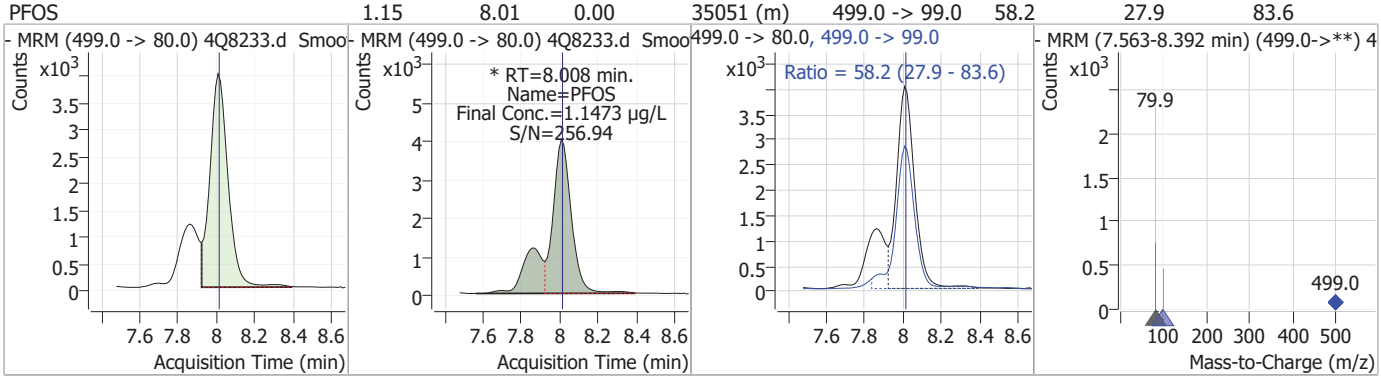
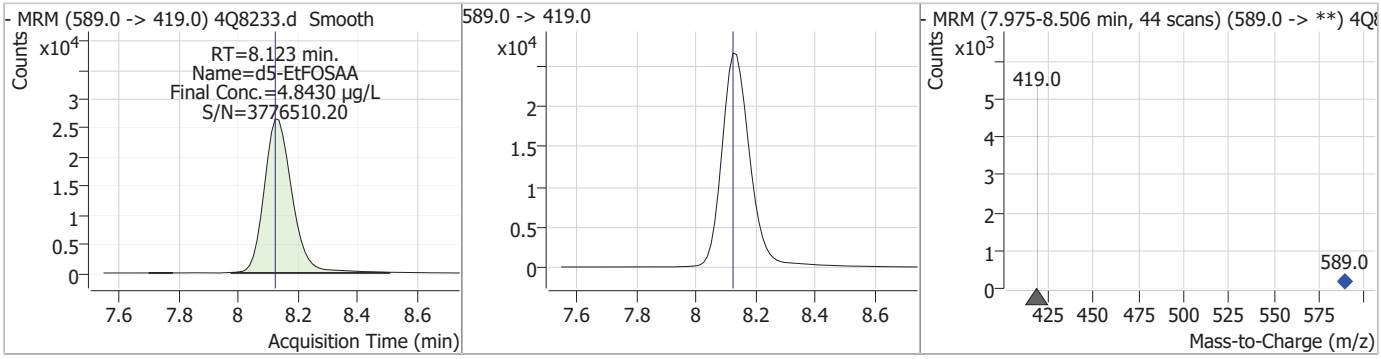
Perfluorinated Compounds by LC/MS/MS

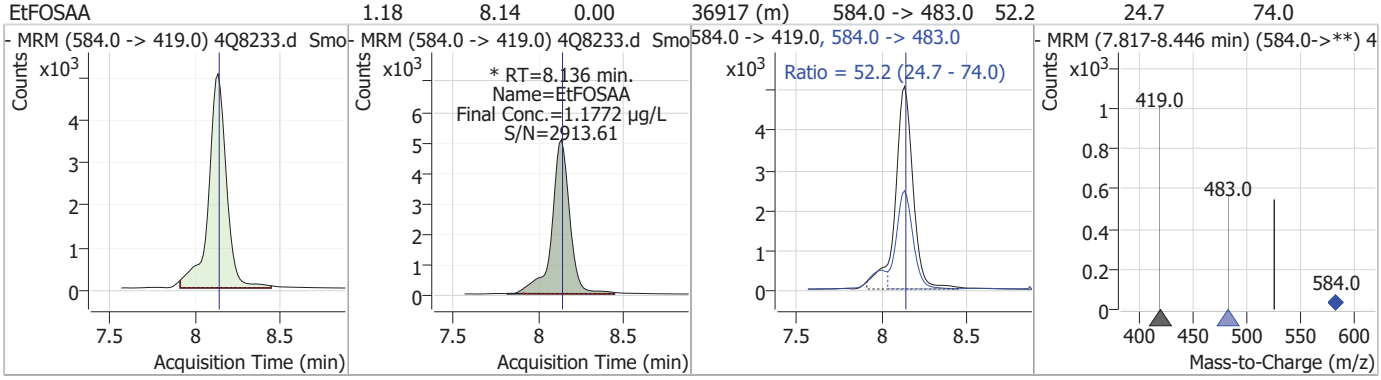
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	1.15	8.01	0.00	35051 (m)	499.0 -> 99.0	58.2	27.9	83.6



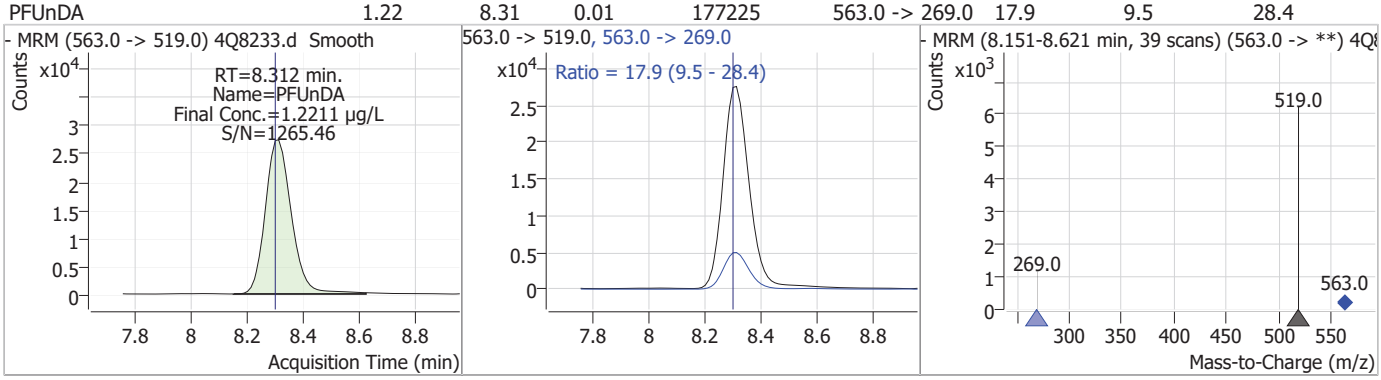
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.84	8.12	0.00	173495				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	1.18	8.14	0.00	36917 (m)	584.0 -> 483.0	52.2	24.7	74.0

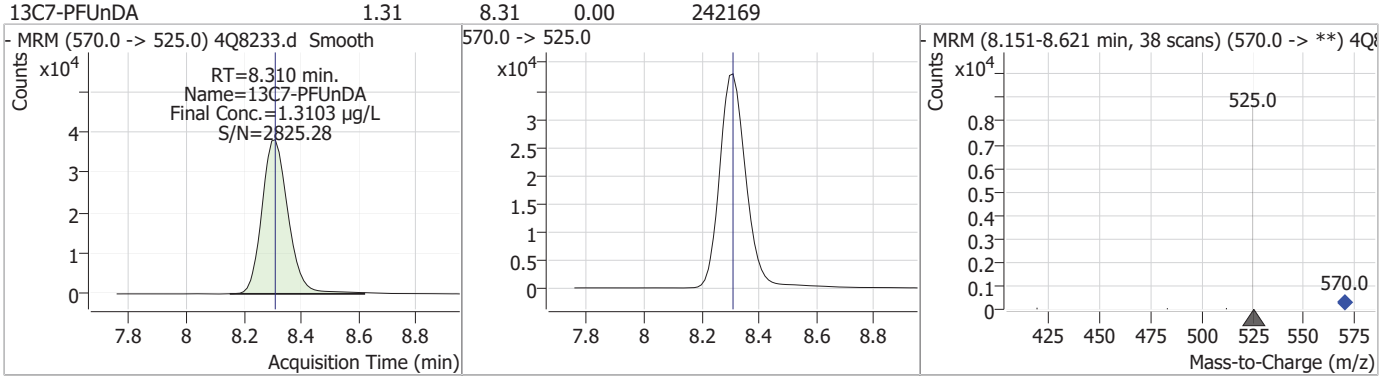


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	1.22	8.31	0.01	177225	563.0 -> 269.0	17.9	9.5	28.4

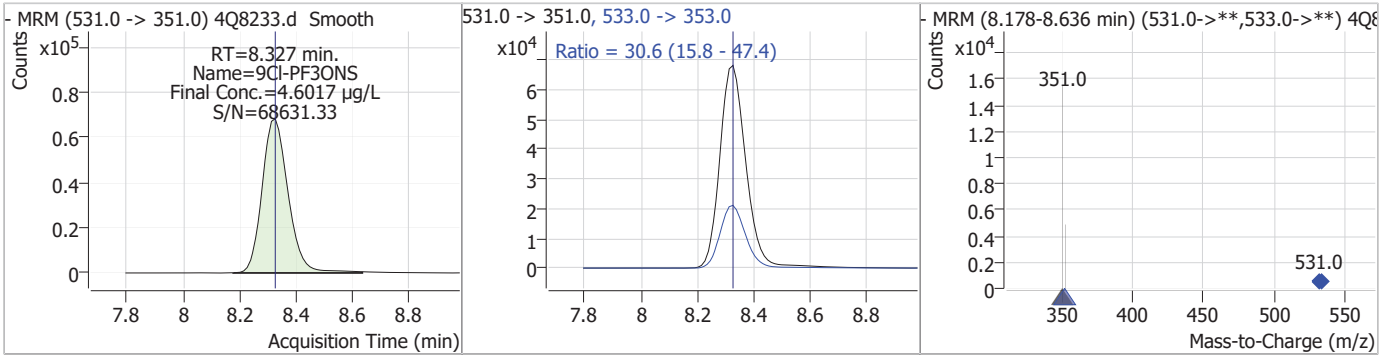


Perfluorinated Compounds by LC/MS/MS

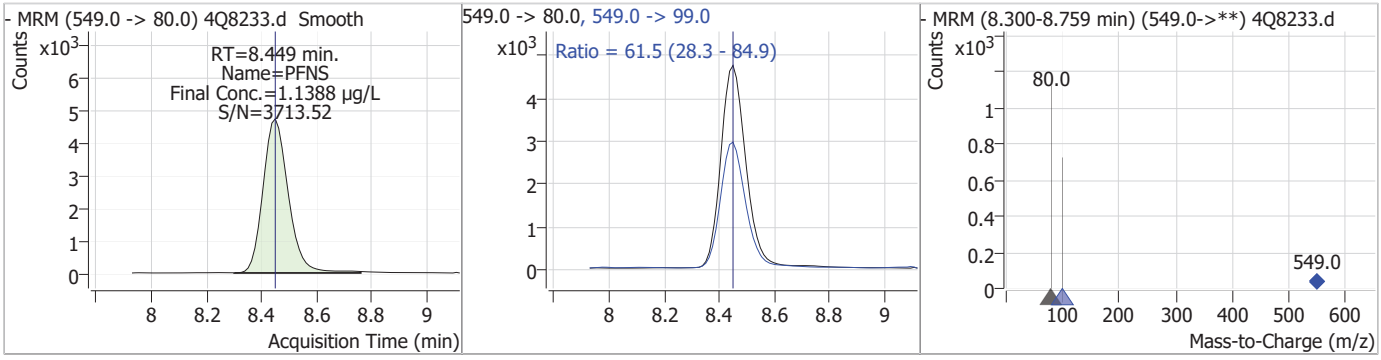
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.31	8.31	0.00	242169				



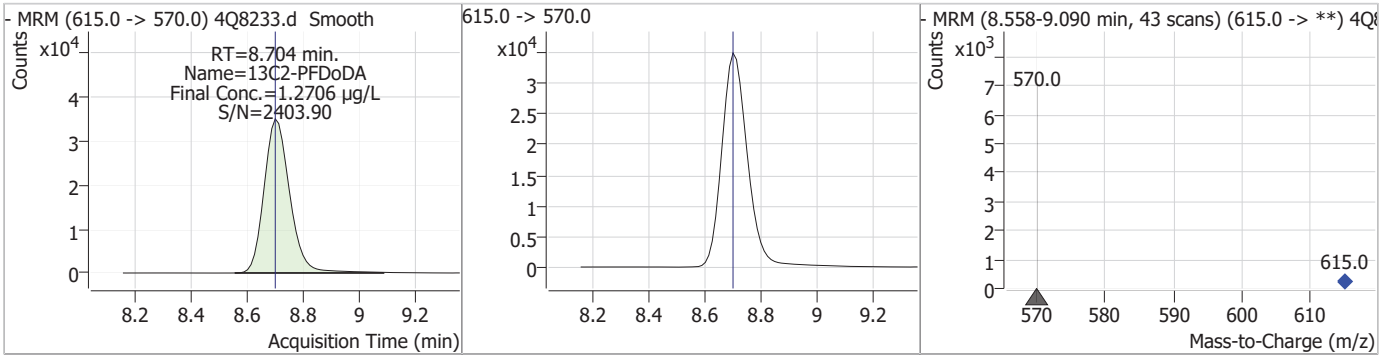
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	4.60	8.33	0.00	437576	533.0 -> 353.0	30.6	15.8	47.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	1.14	8.45	0.00	30066	549.0 -> 99.0	61.5	28.3	84.9

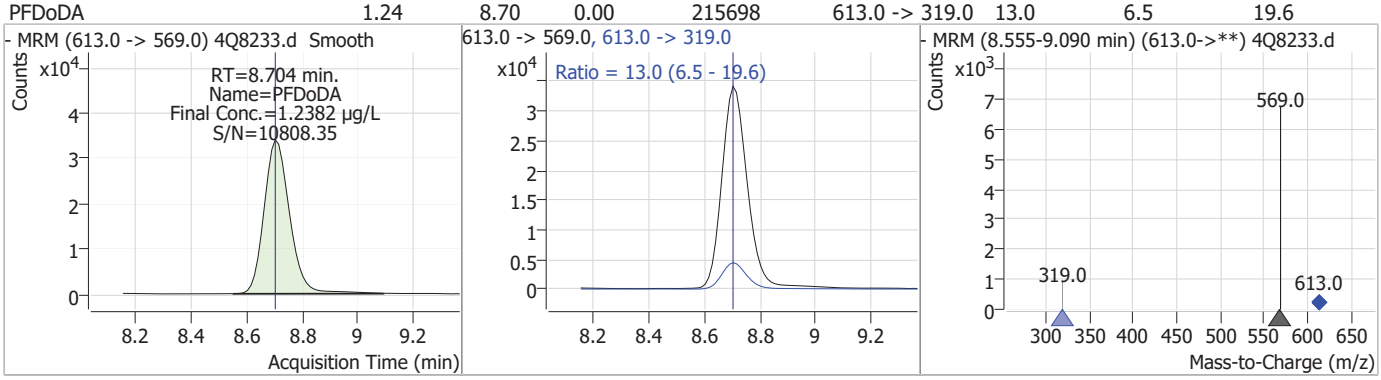


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.27	8.70	0.00	221584				

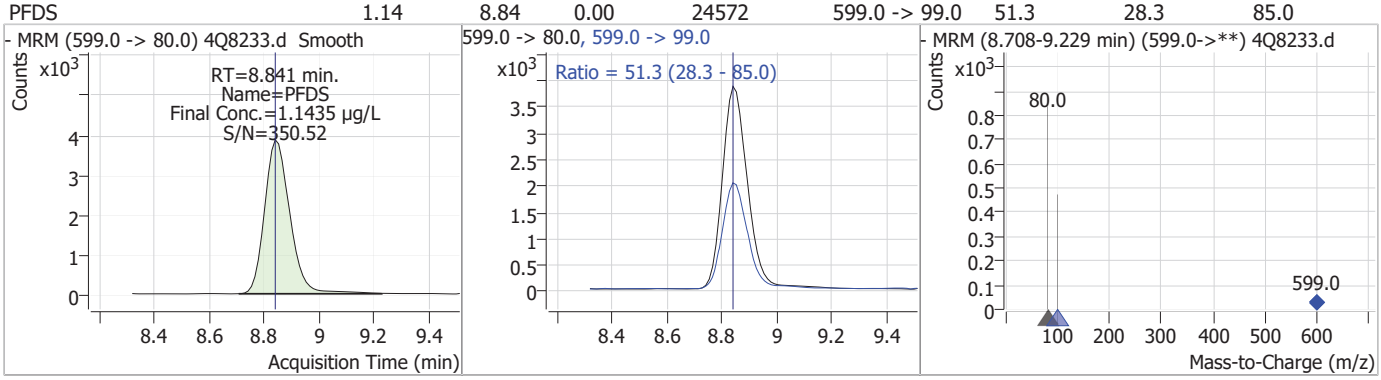


Perfluorinated Compounds by LC/MS/MS

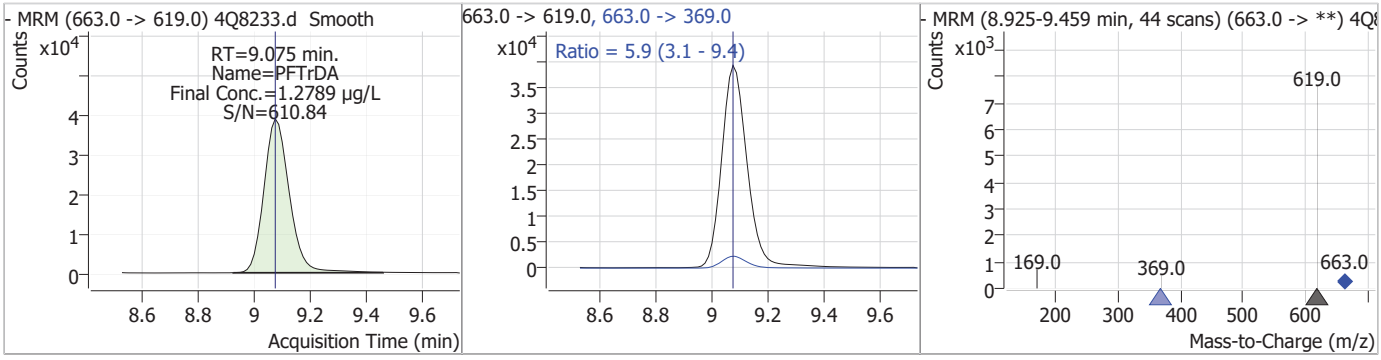
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	1.24	8.70	0.00	215698	613.0 -> 319.0	13.0	6.5	19.6



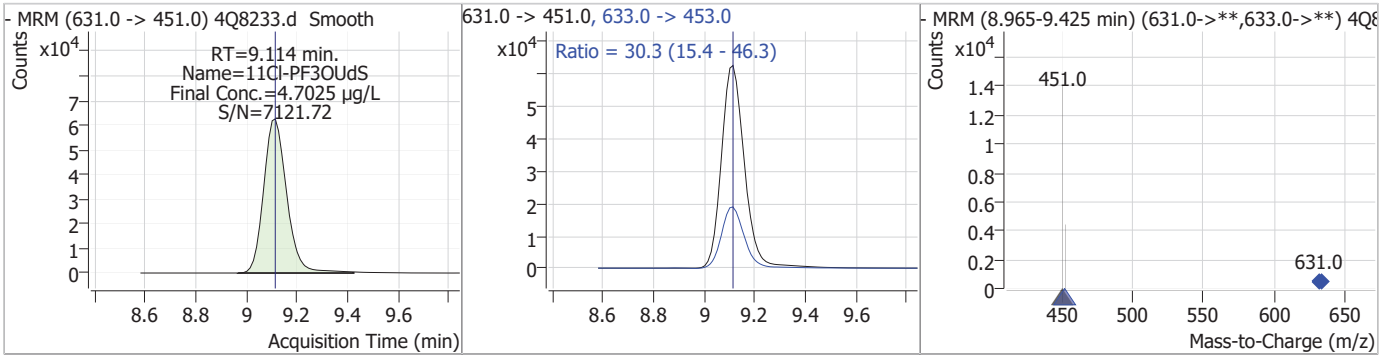
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	1.14	8.84	0.00	24572	599.0 -> 99.0	51.3	28.3	85.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	1.28	9.07	0.00	245427	663.0 -> 369.0	5.9	3.1	9.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	4.70	9.11	0.00	395580	633.0 -> 453.0	30.3	15.4	46.3



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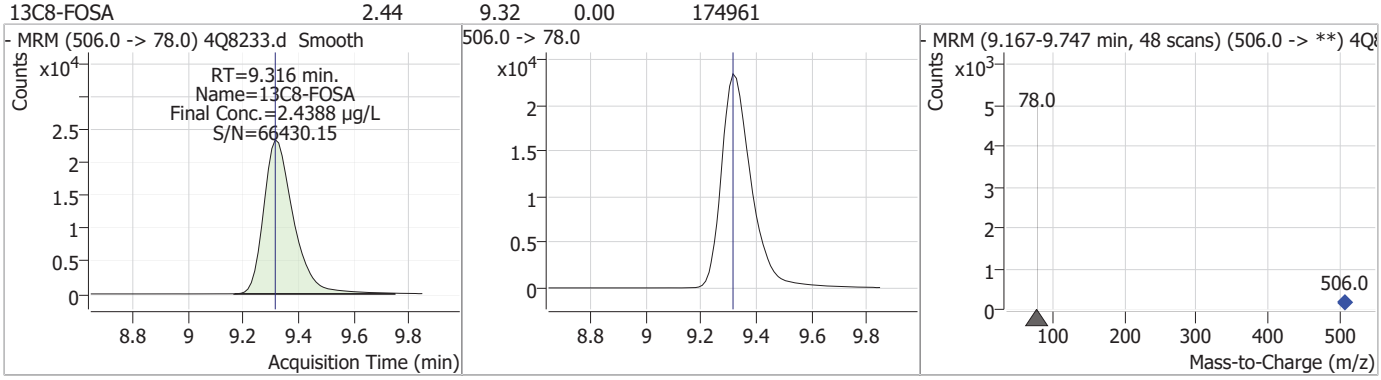
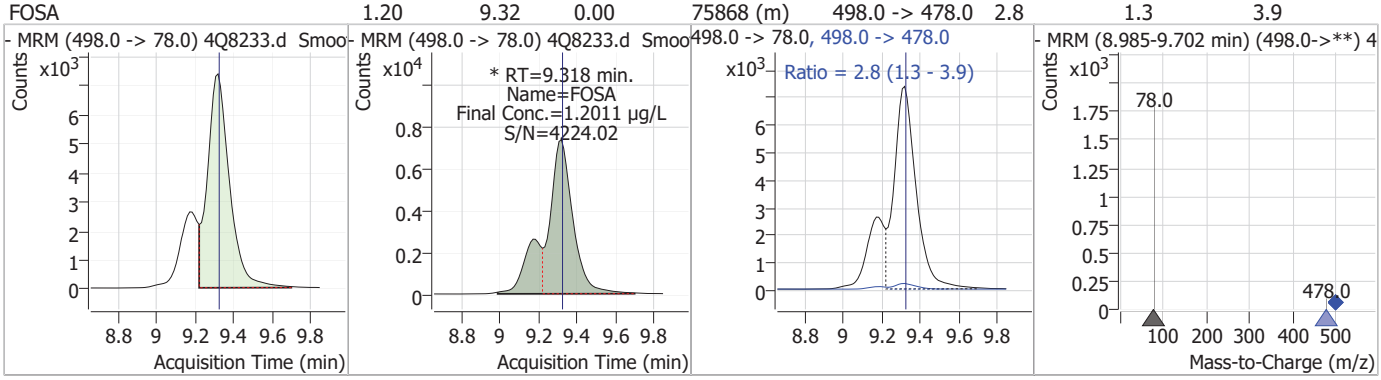
Perfluorinated Compounds by LC/MS/MS

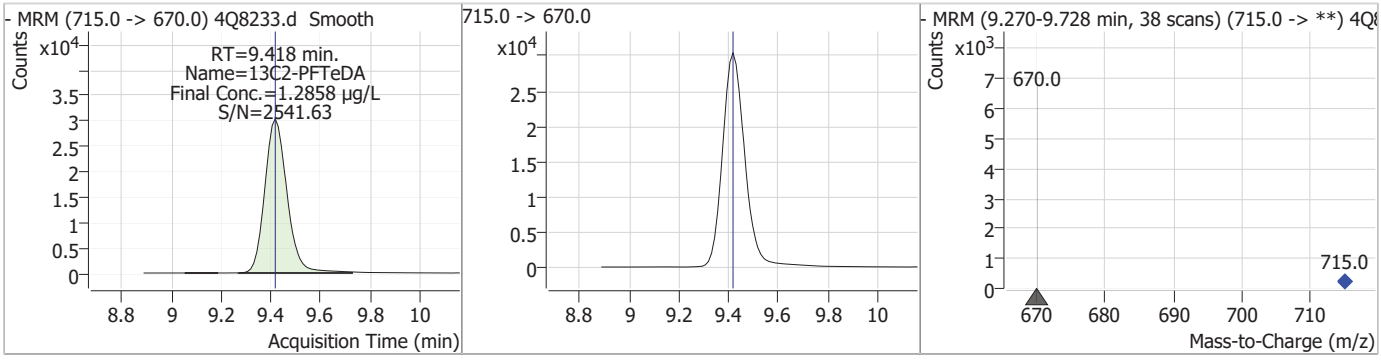
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.44	9.32	0.00	174961				



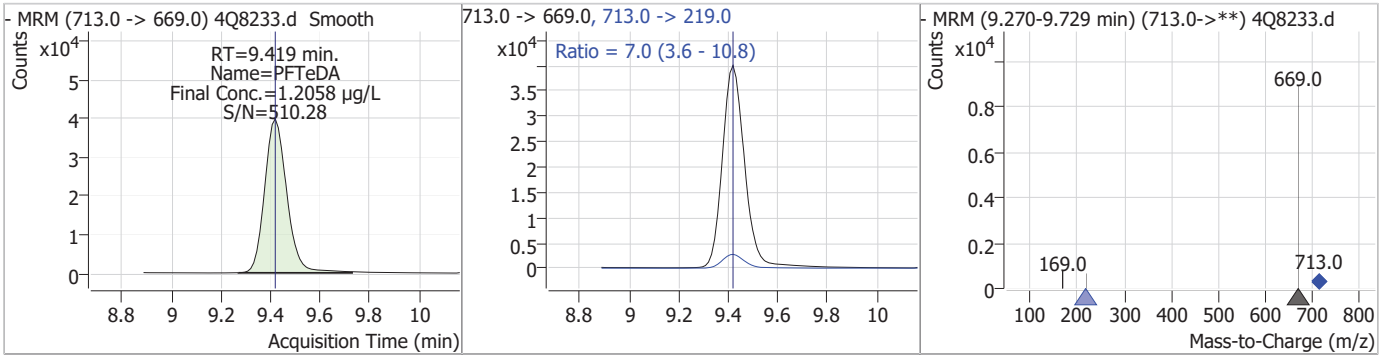
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	1.20	9.32	0.00	75868 (m)	498.0 -> 478.0	2.8	1.3	3.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.29	9.42	0.00	189479				

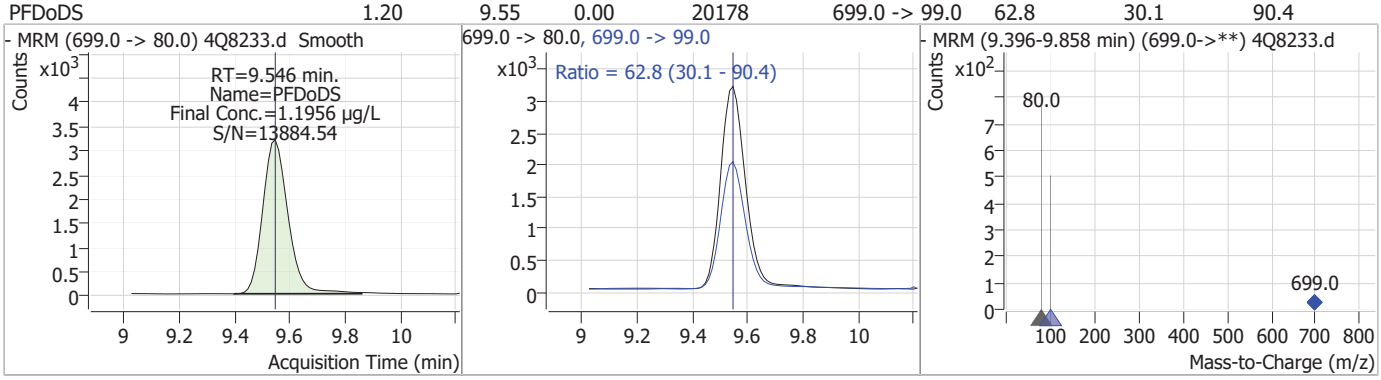


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	1.21	9.42	0.00	248181	713.0 -> 219.0	7.0	3.6	10.8

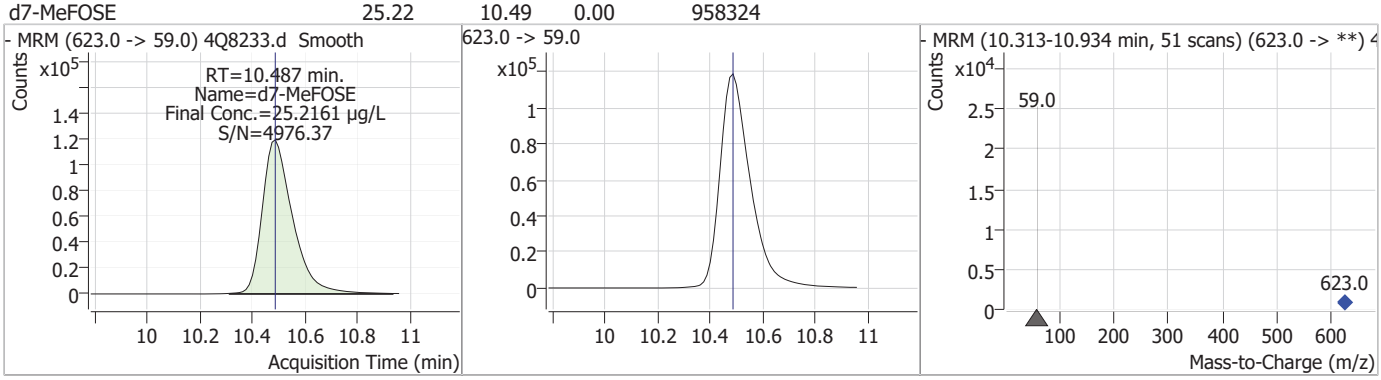


Perfluorinated Compounds by LC/MS/MS

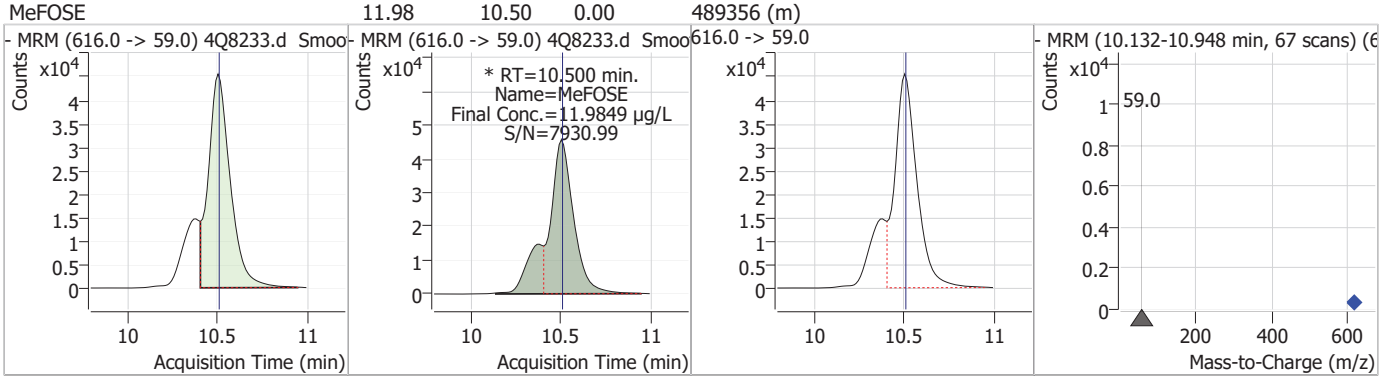
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	1.20	9.55	0.00	20178	699.0 -> 99.0	62.8	30.1	90.4



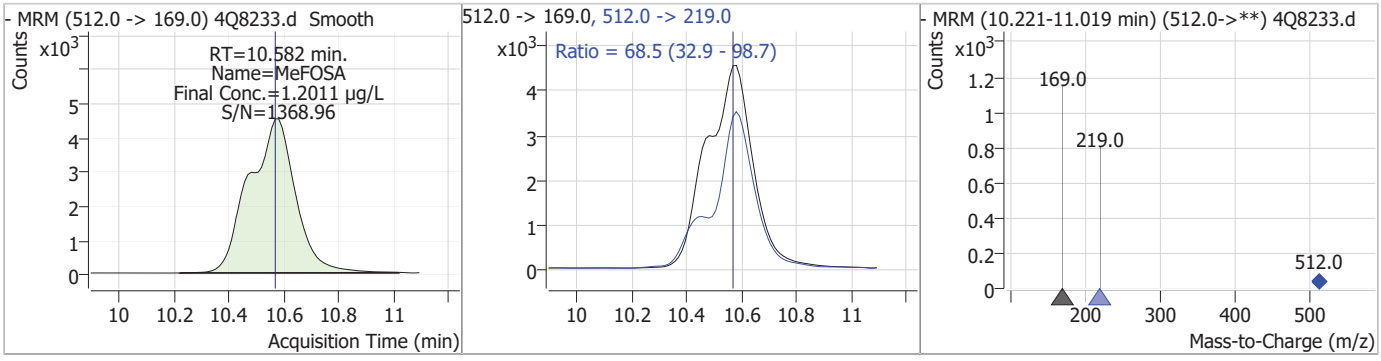
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.22	10.49	0.00	958324				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	11.98	10.50	0.00	489356 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	1.20	10.58	0.01	53027	512.0 -> 219.0	68.5	32.9	98.7



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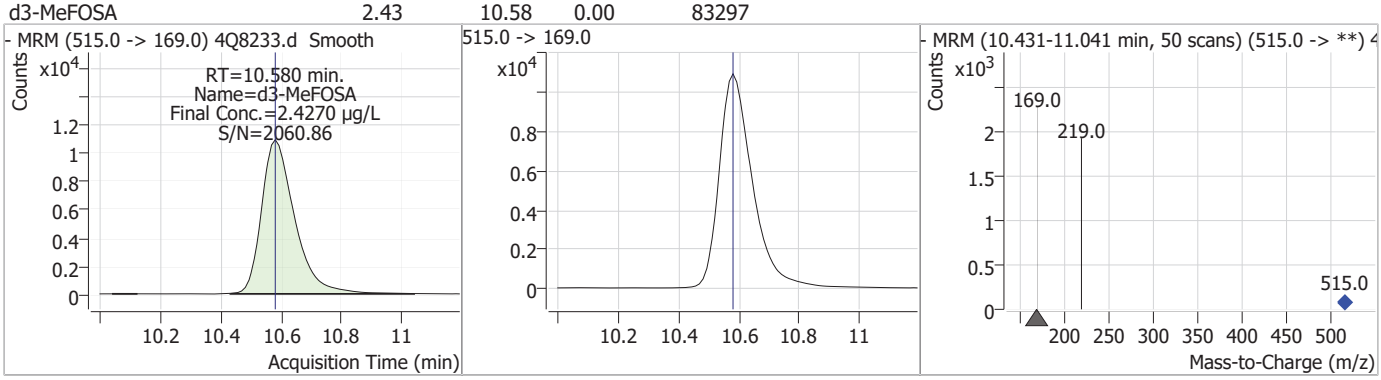
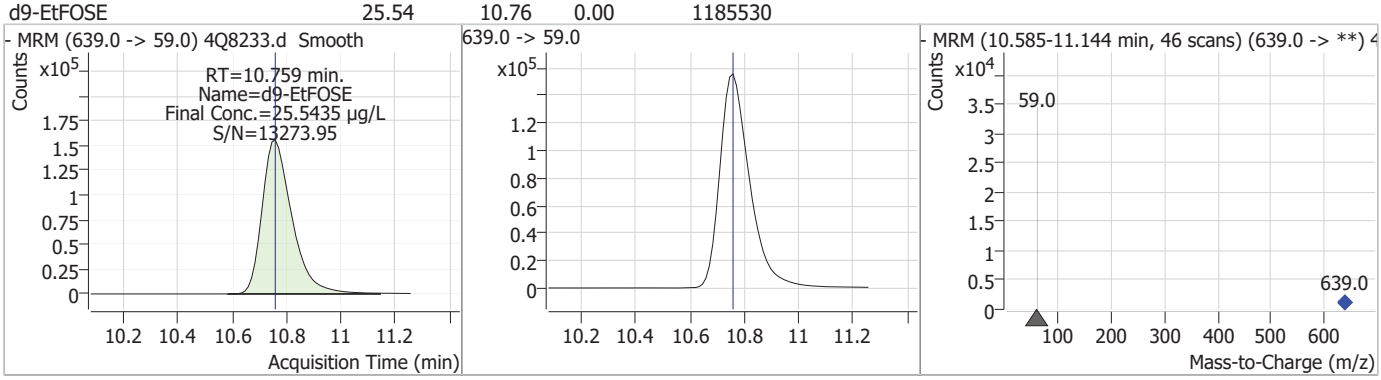
Perfluorinated Compounds by LC/MS/MS

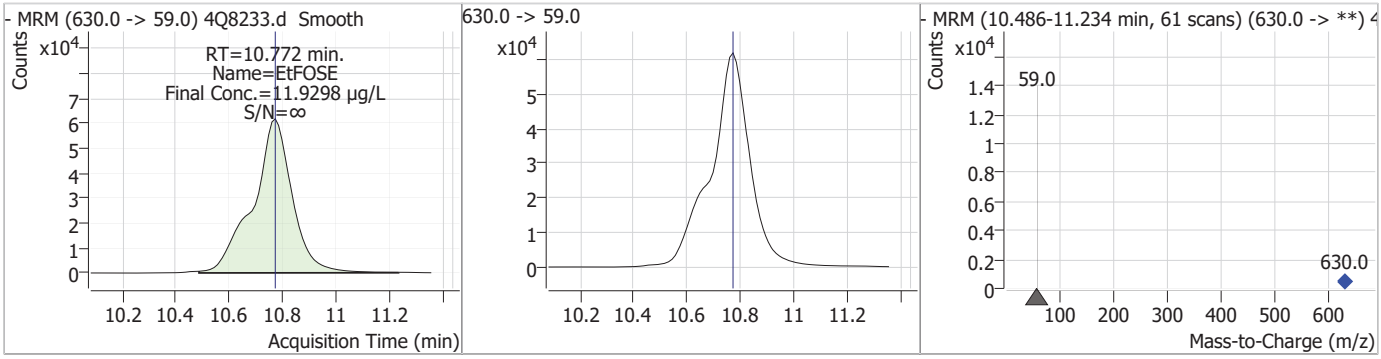
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.43	10.58	0.00	83297				



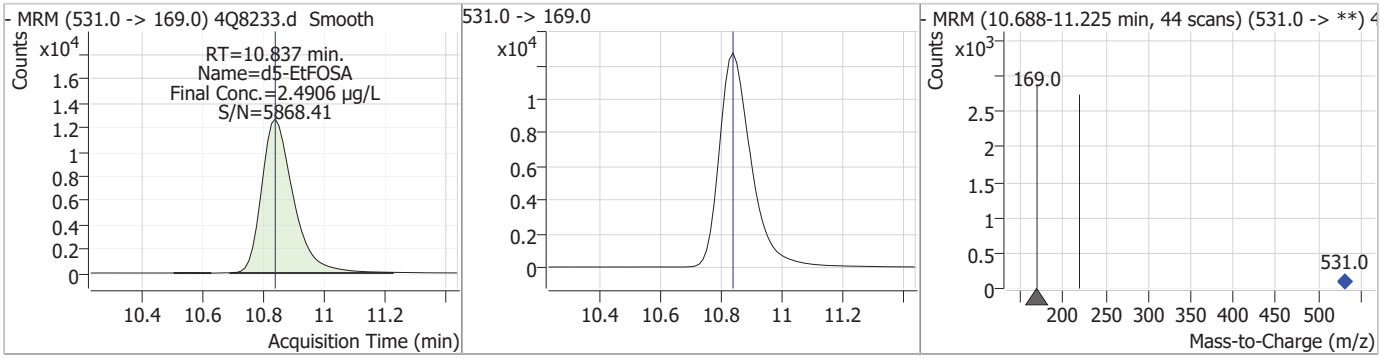
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.54	10.76	0.00	1185530				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	11.93	10.77	0.00	630574				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.49	10.84	0.00	92126				



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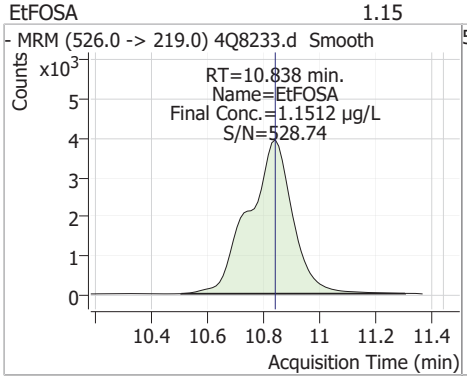
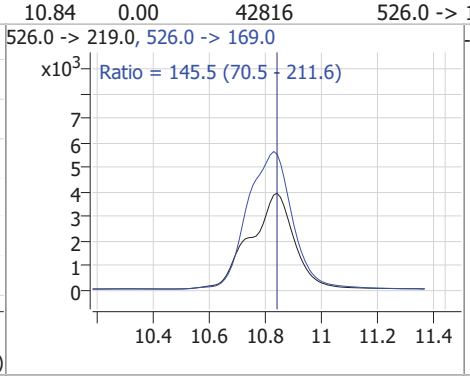
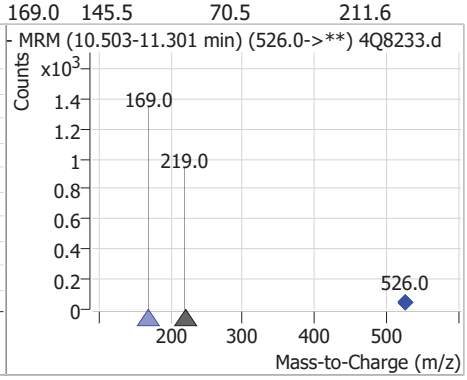
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	1.15	10.84	0.00	42816	526.0 -> 169.0	145.5	70.5	211.6







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7

Manual Integration Approval Summary

Sample Number: T4Q140-IC140
Lab FileID: 4Q8233.D
Injection Time: 05/02/25 14:27

Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.92	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.43	Split peak
MeFOSAA	2355-31-9		7.94	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.01	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.32	Split peak
MeFOSE	24448-09-7		10.50	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8234.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 2:40:52 PM
Sample Name : ICC140-4
Vial : P1-A5
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.883	217.0 -> 172.0	839348	10.00 µg/L	0.000
M5-PFPeA	4.319	268.0 -> 223.0	435454	5.00 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	299906	2.50 µg/L	0.000
M4-PFHpA	6.304	367.0 -> 322.0	330395	2.50 µg/L	0.000
M8-PFOA	6.922	421.0 -> 376.0	497831	2.50 µg/L	0.000
M9-PFNA	7.428	472.0 -> 427.0	204588	1.25 µg/L	0.000
M6-PFDA	7.883	519.0 -> 474.0	204578	1.25 µg/L	0.000
M7-PFUnDA	8.310	570.0 -> 525.0	254888	1.25 µg/L	0.000
M2-PFDoDA	8.704	615.0 -> 570.0	230293	1.25 µg/L	0.000
M2-PFTeDA	9.418	715.0 -> 670.0	196228	1.25 µg/L	0.000
M8-FOSA	9.316	506.0 -> 78.0	186352	2.50 µg/L	0.000
M3-PFBS	5.368	302.0 -> 99.0	26004	2.50 µg/L	0.000
		302.0 -> 80.0	65233		
M3-PFHxS	6.999	402.0 -> 99.0	37537	2.50 µg/L	0.000
M8-PFOS	8.007	507.0 -> 99.0	41463	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	13032	5.00 µg/L	0.000
M2-6:2FTS	6.708	429.0 -> 81.0	26895	5.00 µg/L	0.000
M2-8:2FTS	7.683	529.0 -> 81.0	29204	5.00 µg/L	0.000
M3-MeFOSAA	7.940	573.0 -> 419.0	235648	5.00 µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	416596	10.00 µg/L	0.000
M5-EtFOSAA	8.123	589.0 -> 419.0	190054	5.00 µg/L	0.000
M7-MeFOSE	10.487	623.0 -> 59.0	992923	25.00 µg/L	0.000
M9-EtFOSE	10.759	639.0 -> 59.0	1220824	25.00 µg/L	0.000
M5-EtFOSA	10.837	531.0 -> 169.0	97080	2.50 µg/L	0.000
M3-MeFOSA	10.580	515.0 -> 169.0	86671	2.50 µg/L	0.000
13C4-PFOS	8.008	503.0 -> 80.0	72245	2.50 µg/L	0.000
13C3-PFBA	2.886	216.0 -> 172.0	371246	5.00 µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	44341	2.50 µg/L	0.000
13C4-PFOA	6.922	417.0 -> 372.0	500855	2.50 µg/L	0.000
13C2-PFDA	7.883	515.0 -> 470.0	171301	1.25 µg/L	0.000
13C5-PFNA	7.428	468.0 -> 423.0	199653	1.25 µg/L	0.000
13C2-PFHxA	5.465	315.0 -> 270.0	286216	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	13032	5.29 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.7%	
13C2-6:2FTS	6.708	429.0 -> 81.0	26895	5.04 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.8%	
13C2-8:2FTS	7.683	529.0 -> 81.0	29204	4.57 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 91.5%	
13C2-PFDoDA	8.704	615.0 -> 570.0	230293	1.20 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.3%	
13C2-PFTeDA	9.418	715.0 -> 670.0	196228	1.21 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.1%	
13C3-PFBS	5.368	302.0 -> 99.0	26004	2.39 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.4%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	37537	2.40	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.9%			
13C4-PFBA	2.883	217.0 -> 172.0	839348	9.58	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.8%			
13C4-PFHpA	6.304	367.0 -> 322.0	330395	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.0%			
13C5-PFHxA	5.464	318.0 -> 273.0	299906	2.38	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.4%			
13C5-PFPeA	4.319	268.0 -> 223.0	435454	4.74	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 94.8%			
13C6-PFDA	7.883	519.0 -> 474.0	204578	1.24	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 98.8%			
13C7-PFUnDA	8.310	570.0 -> 525.0	254888	1.26	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.6%			
13C8-FOSA	9.316	506.0 -> 78.0	186352	2.40	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.0%			
13C8-PFOA	6.922	421.0 -> 376.0	497831	2.41	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.6%			
13C8-PFOS	8.007	507.0 -> 99.0	41463	2.42	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.7%			
13C9-PFNA	7.428	472.0 -> 427.0	204588	1.18	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.5%			
d3-MeFOSAA	7.940	573.0 -> 419.0	235648	4.85	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.0%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	416596	9.30	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 93.0%			
d3-MeFOSA	10.580	515.0 -> 169.0	86671	2.33	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.3%			
d5-EtFOSAA	8.123	589.0 -> 419.0	190054	4.90	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 98.0%			
d7-MeFOSE	10.487	623.0 -> 59.0	992923	24.14	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 96.5%			
d9-EtFOSE	10.759	639.0 -> 59.0	1220824	24.30	µg/L		0.000
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.2%			
d5-EtFOSA	10.837	531.0 -> 169.0	97080	2.42	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.0%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	205965	9.24	µg/L		100
		327.0 -> 81.0	91240				
6:2FTS	6.709	427.0 -> 407.0	247275	9.51	µg/L		100
		427.0 -> 81.0	113217				
8:2FTS	7.683	527.0 -> 507.0	231889	10.89	µg/L		100
		527.0 -> 81.0	91073				
EtFOSAA	8.136	584.0 -> 419.0	81950	2.39	µg/L	m	100
		584.0 -> 483.0	40446				
FOSA	9.318	498.0 -> 78.0	165022	2.45	µg/L	m	100
		498.0 -> 478.0	4254				
MeFOSAA	7.941	570.0 -> 419.0	92970	2.37	µg/L	m	100
		570.0 -> 512.0	33295				
PFBA	2.889	213.0 -> 169.0	271644	9.91	µg/L		100
PFBS	5.369	299.0 -> 80.0	62562	2.15	µg/L		100
		299.0 -> 99.0	25640				
PFDA	7.883	513.0 -> 469.0	355661	2.44	µg/L		100
		513.0 -> 219.0	80886				
PFDoDA	8.704	613.0 -> 569.0	451119	2.49	µg/L		100
		613.0 -> 319.0	59094				

Perfluorinated Compounds by LC/MS/MS

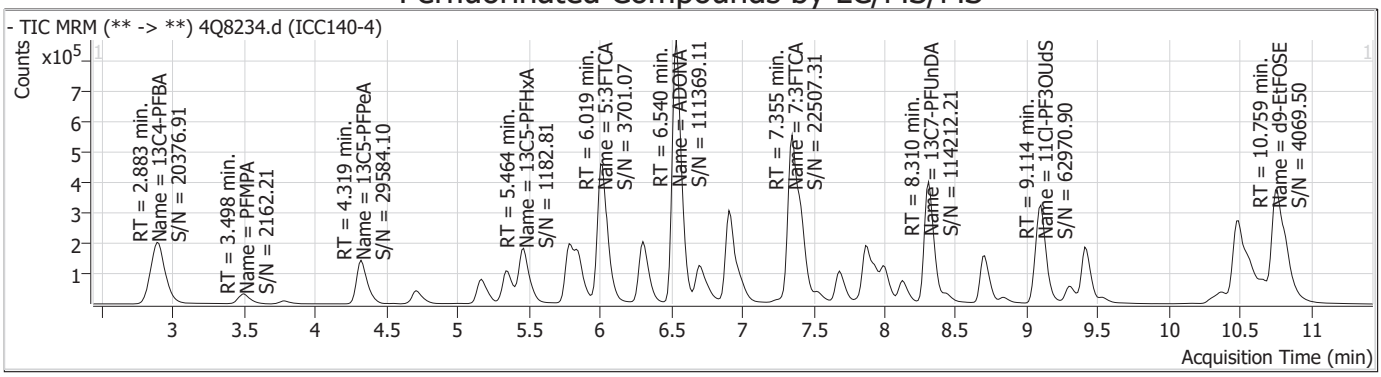
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.841	599.0 -> 80.0	51215	2.26	µg/L		100
		599.0 -> 99.0	29036				
PFHpA	6.304	363.0 -> 319.0	456062	2.41	µg/L		100
		363.0 -> 169.0	91905				
PFHpS	7.541	449.0 -> 80.0	73582	2.27	µg/L		100
		449.0 -> 99.0	40991				
PFHxA	5.467	313.0 -> 269.0	297124	2.44	µg/L		100
		313.0 -> 119.0	9962				
PFHxS	7.000	399.0 -> 80.0	73799	2.25	µg/L	m	100
		399.0 -> 99.0	38758				
PFNA	7.429	463.0 -> 419.0	290991	2.47	µg/L	m	100
		463.0 -> 219.0	103327				
PFNS	8.449	549.0 -> 80.0	70034	2.45	µg/L		100
		549.0 -> 99.0	39639				
PFOA	6.923	413.0 -> 369.0	388607	2.38	µg/L	m	100
		413.0 -> 169.0	113052				
PFOS	8.008	499.0 -> 80.0	71372	2.15	µg/L	m	100
		499.0 -> 99.0	39770				
PFPeA	4.321	263.0 -> 219.0	336297	4.96	µg/L		100
PFPeS	6.331	349.0 -> 80.0	74060	2.29	µg/L		100
		349.0 -> 99.0	36952				
PFTeDA	9.419	713.0 -> 669.0	529809	2.49	µg/L		100
		713.0 -> 219.0	38239				
PFTrDA	9.075	663.0 -> 619.0	508685	2.55	µg/L		100
		663.0 -> 369.0	31738				
PFUnDA	8.299	563.0 -> 519.0	378495	2.48	µg/L		100
		563.0 -> 269.0	71616				
11Cl-PF3OUdS	9.114	631.0 -> 451.0	841100	9.62	µg/L		100
		633.0 -> 453.0	259608				
9Cl-PF3ONS	8.327	531.0 -> 351.0	935859	9.47	µg/L		100
		533.0 -> 353.0	295558				
ADONA	6.540	377.0 -> 251.0	3064310	9.10	µg/L		100
		377.0 -> 85.0	1011370				
HFPO-DA	5.805	285.0 -> 169.0	443399	10.27	µg/L		100
		285.0 -> 185.0	51955				
3:3FTCA	3.781	241.0 -> 177.0	49045	11.87	µg/L		100
		241.0 -> 117.0	4680				
5:3FTCA	6.019	341.0 -> 237.0	1373918	58.48	µg/L		100
		341.0 -> 217.0	996044				
7:3FTCA	7.355	441.0 -> 337.0	1939825	57.60	µg/L		100
		441.0 -> 317.0	904687				
EtFOSA	10.838	526.0 -> 219.0	93884	2.40	µg/L		100
		526.0 -> 169.0	132412				
EtFOSE	10.772	630.0 -> 59.0	1330864	24.45	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	113861	2.48	µg/L		100
		512.0 -> 219.0	74946				
MeFOSE	10.500	616.0 -> 59.0	1037068	24.51	µg/L	m	100
PFDoDS	9.546	699.0 -> 80.0	42983	2.35	µg/L		100
		699.0 -> 99.0	25900				
NFDHA	5.357	295.0 -> 201.0	64817	4.77	µg/L		100
		201.0 -> 85.0	321951				
		295.0 -> 85.0	17564				
PFMBA	4.710	279.0 -> 85.0	230086	5.00	µg/L		100
PFMPA	3.498	229.0 -> 85.0	192134	4.89	µg/L		100
PFEESA	5.849	315.0 -> 135.0	512987	4.46	µg/L		100
		315.0 -> 69.0	41876				

Perfluorinated Compounds by LC/MS/MS

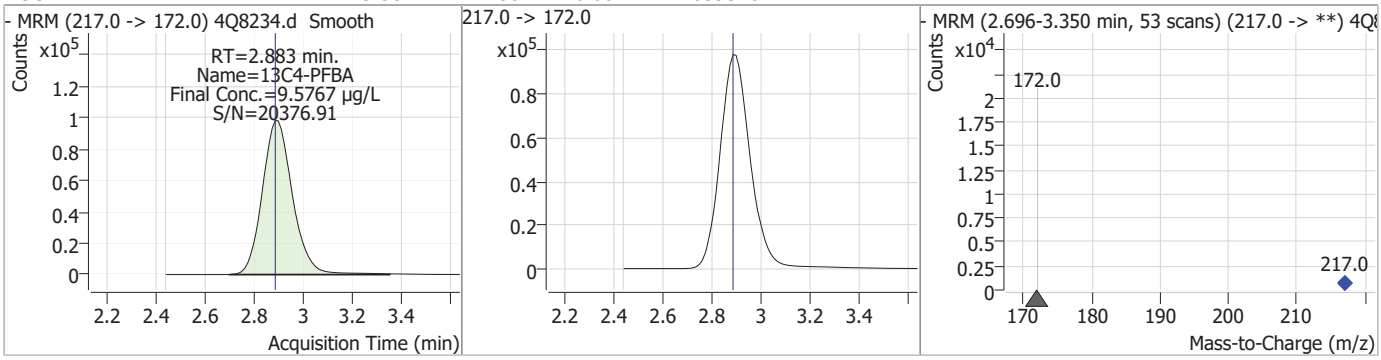
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

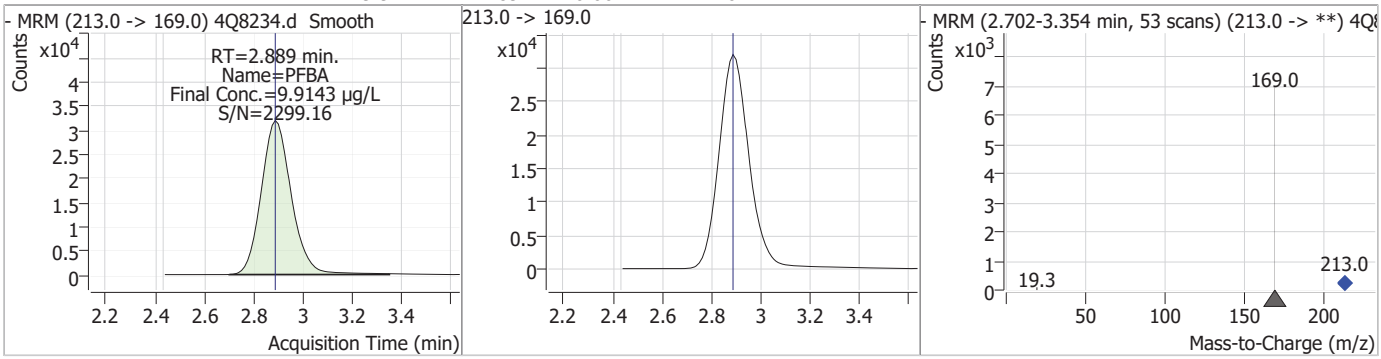
Perfluorinated Compounds by LC/MS/MS



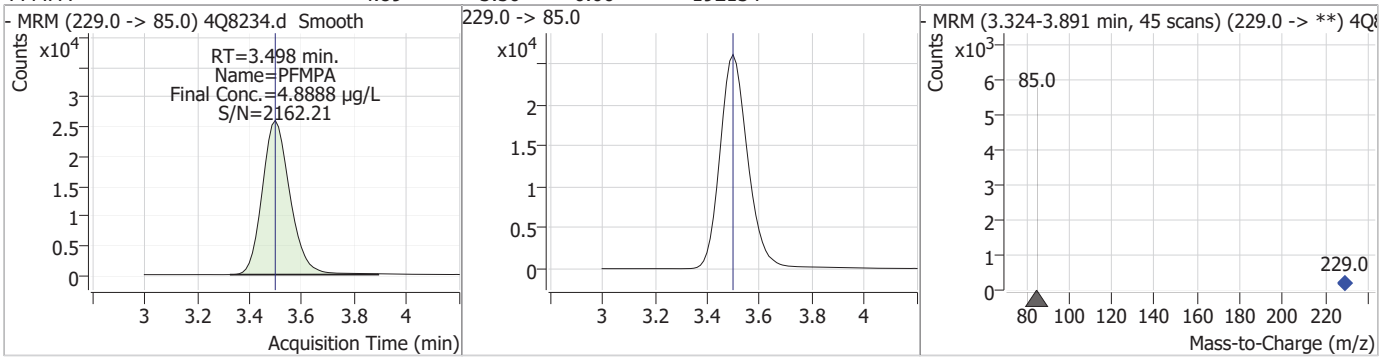
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.58	2.88	0.00	839348				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.91	2.89	0.00	271644				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	4.89	3.50	0.00	192134				



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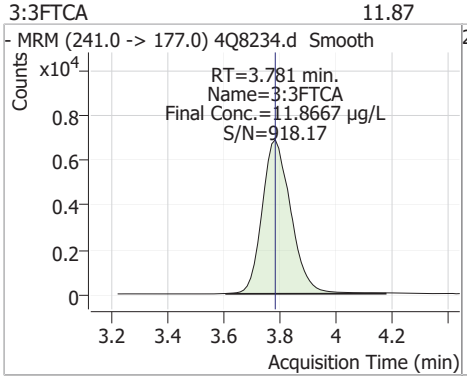
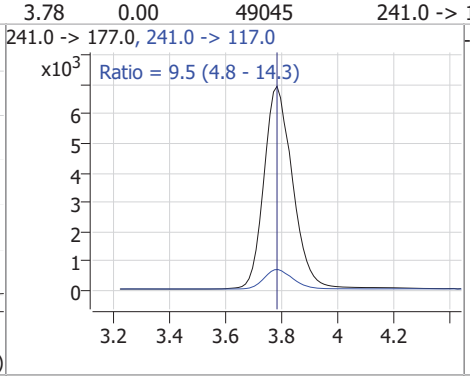
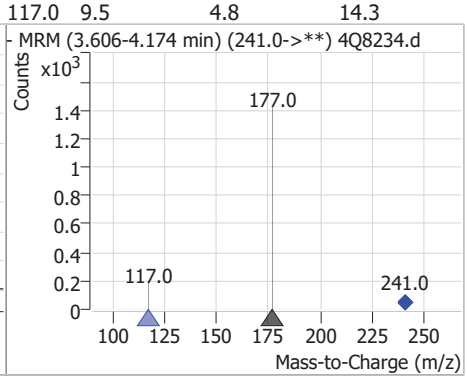
Perfluorinated Compounds by LC/MS/MS

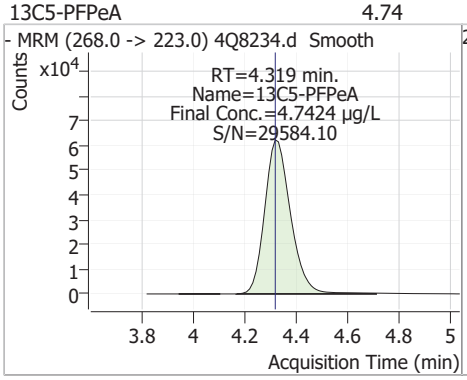
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	11.87	3.78	0.00	49045	241.0 -> 117.0	9.5	4.8	14.3

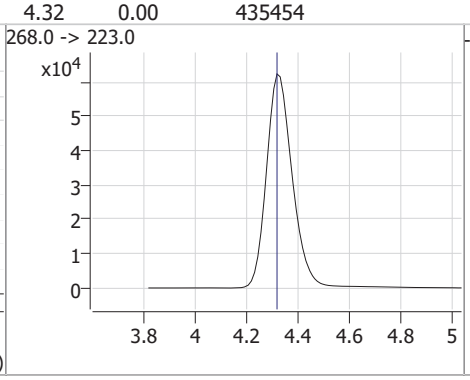


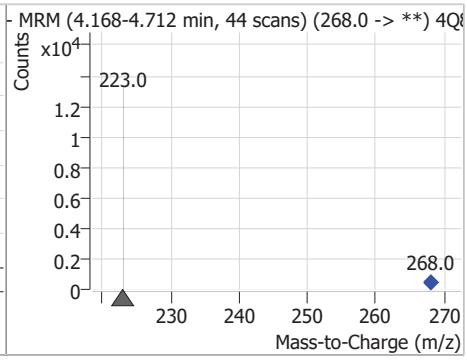




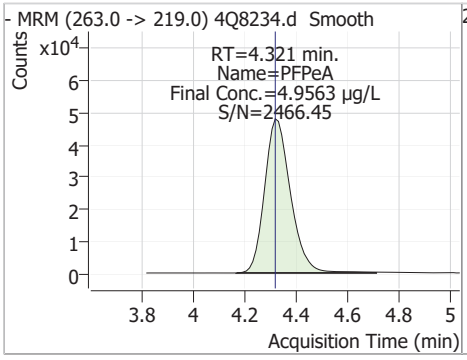
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.74	4.32	0.00	435454				

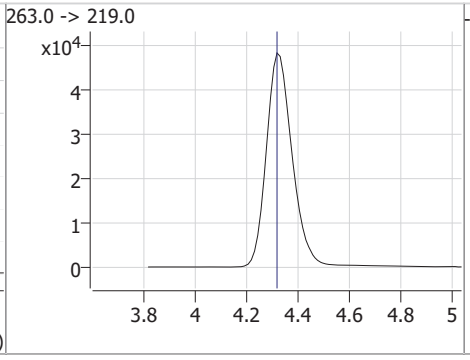


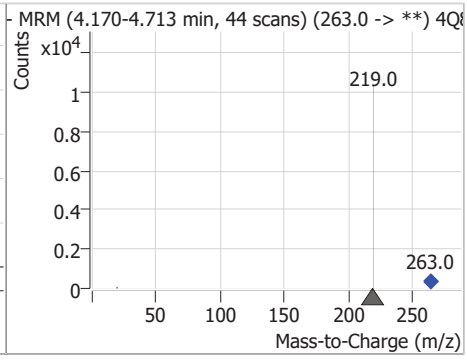




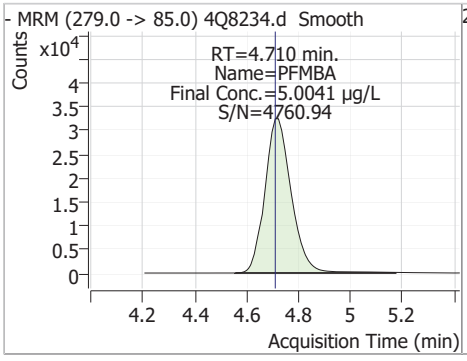
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	4.96	4.32	0.00	336297				

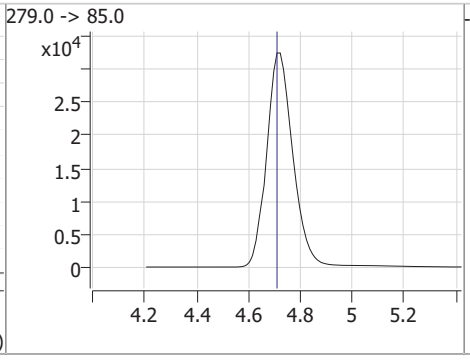


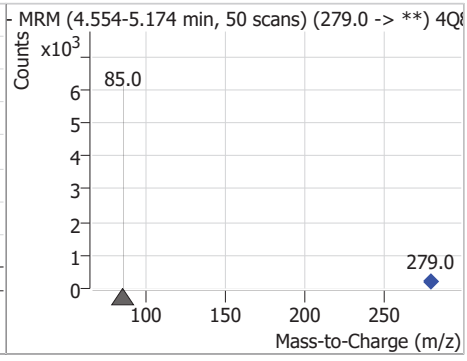




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	5.00	4.71	0.00	230086				







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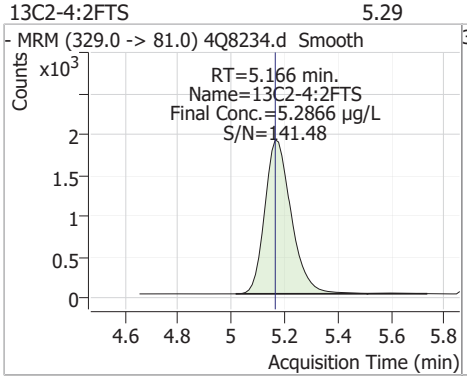
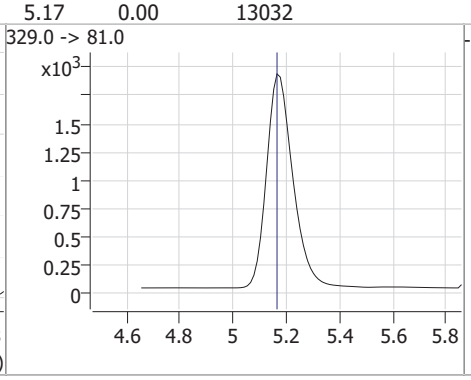
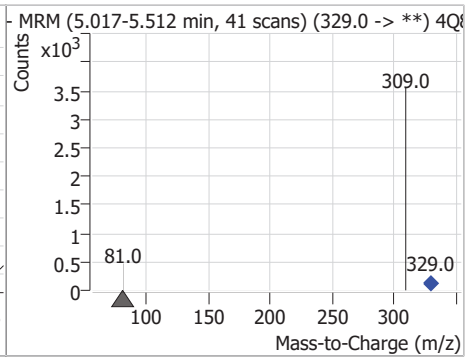
Perfluorinated Compounds by LC/MS/MS

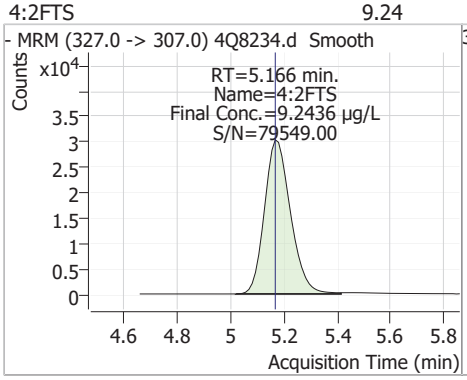
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.29	5.17	0.00	13032				

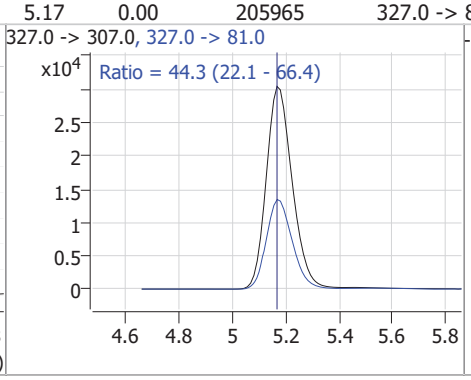


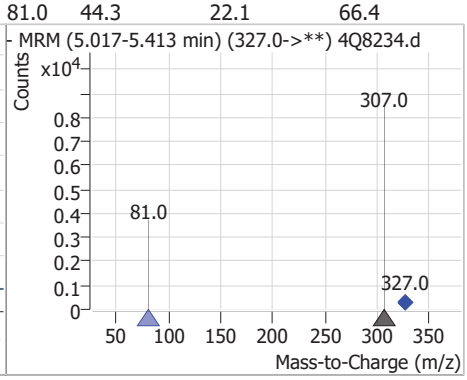




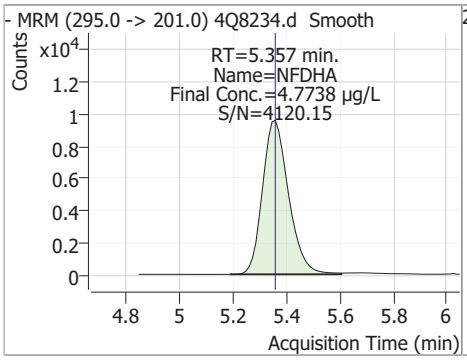
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.24	5.17	0.00	205965	327.0 -> 81.0	44.3	22.1	66.4

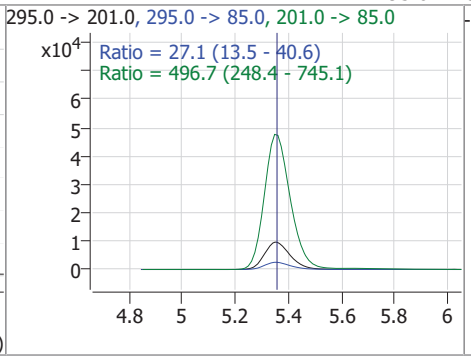


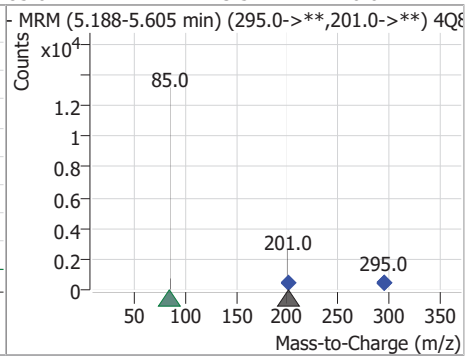




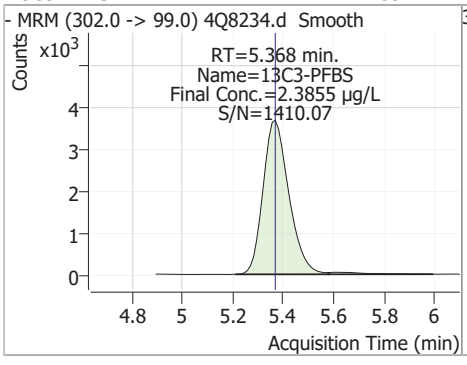
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	4.77	5.36	0.00	64817	201.0 -> 85.0	496.7	248.4	745.1
					295.0 -> 85.0	27.1	13.5	40.6

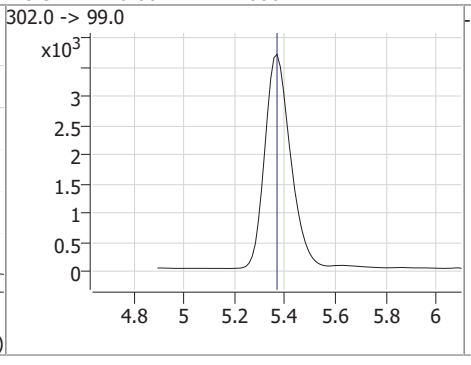


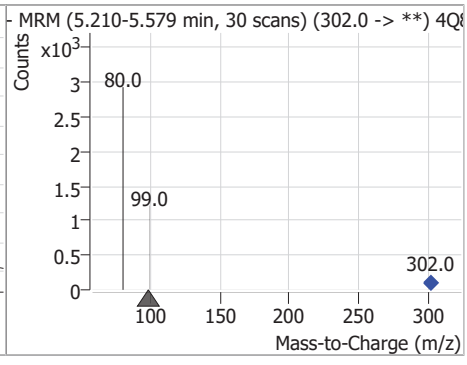




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.39	5.37	0.00	26004				







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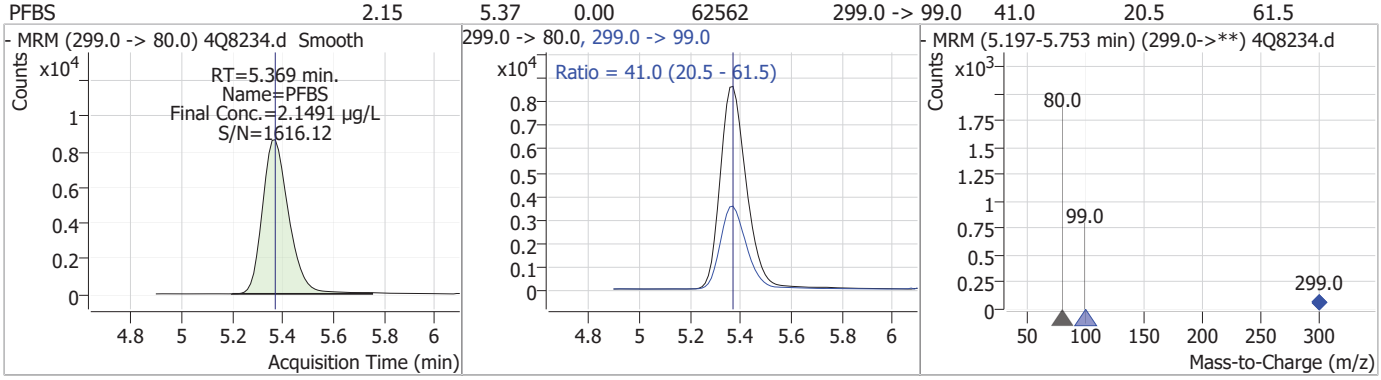
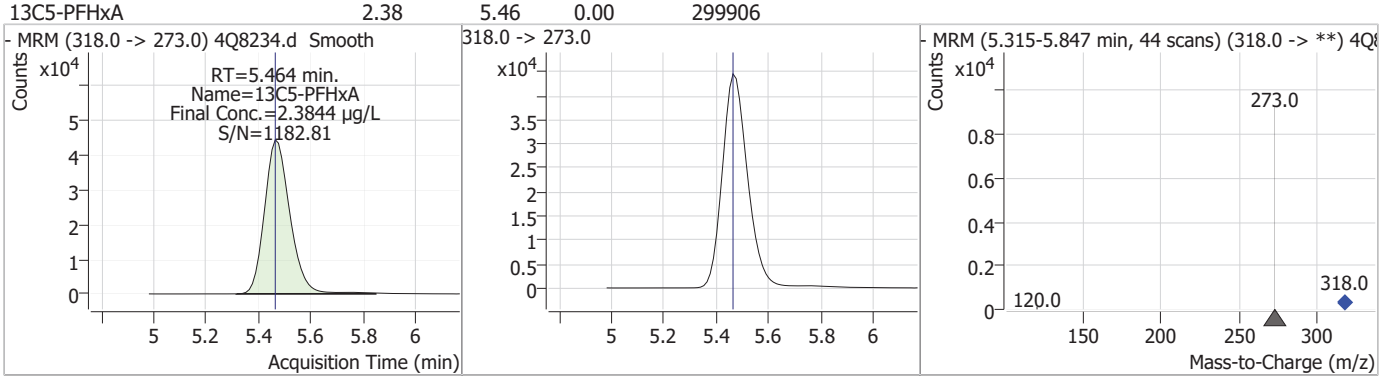
Perfluorinated Compounds by LC/MS/MS

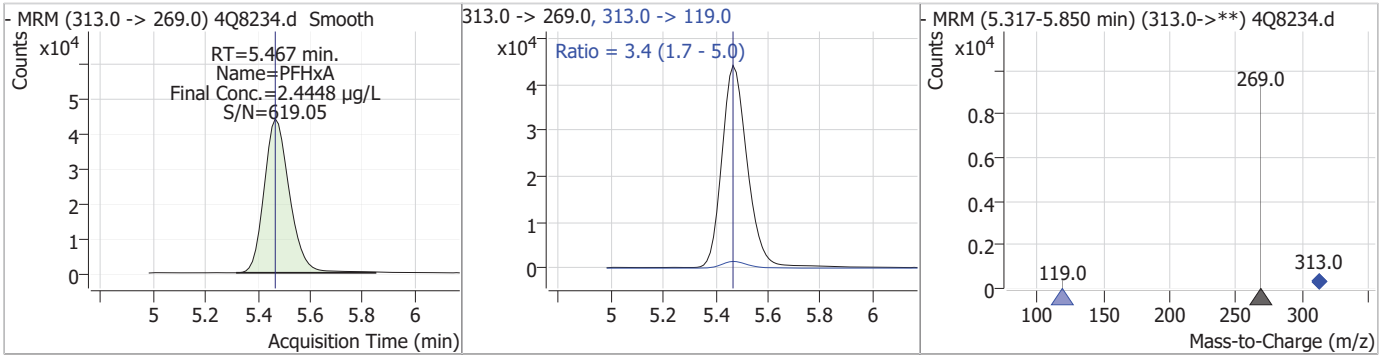
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.15	5.37	0.00	62562	299.0 -> 99.0	41.0	20.5	61.5



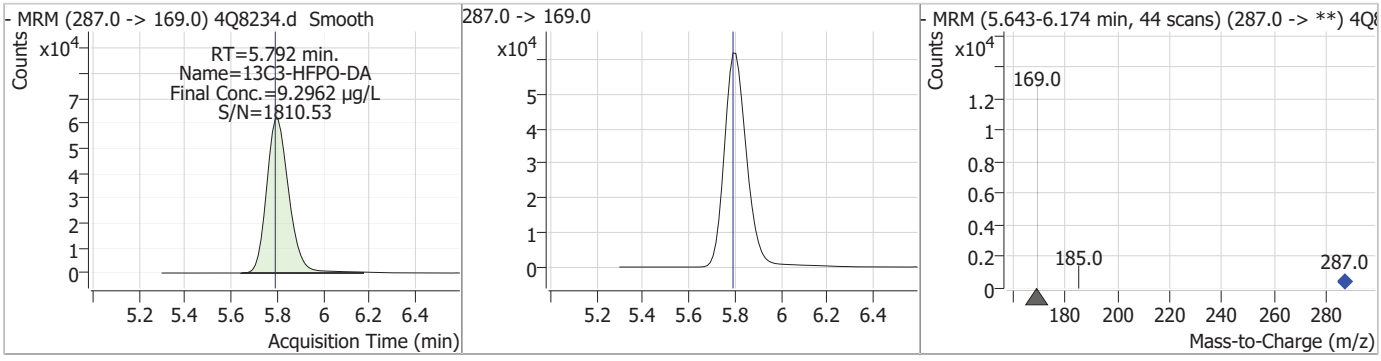
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.38	5.46	0.00	299906				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.44	5.47	0.00	297124	313.0 -> 119.0	3.4	1.7	5.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.30	5.79	0.00	416596				



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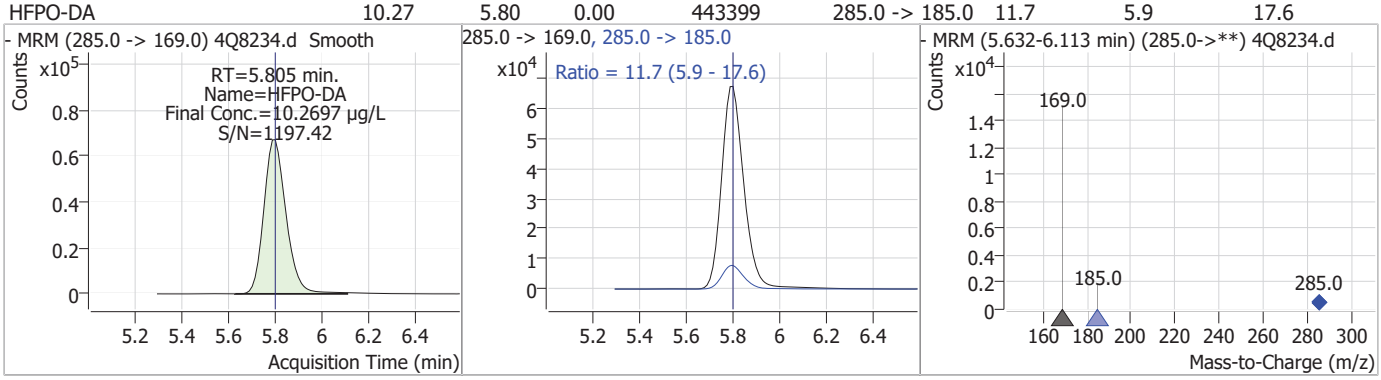
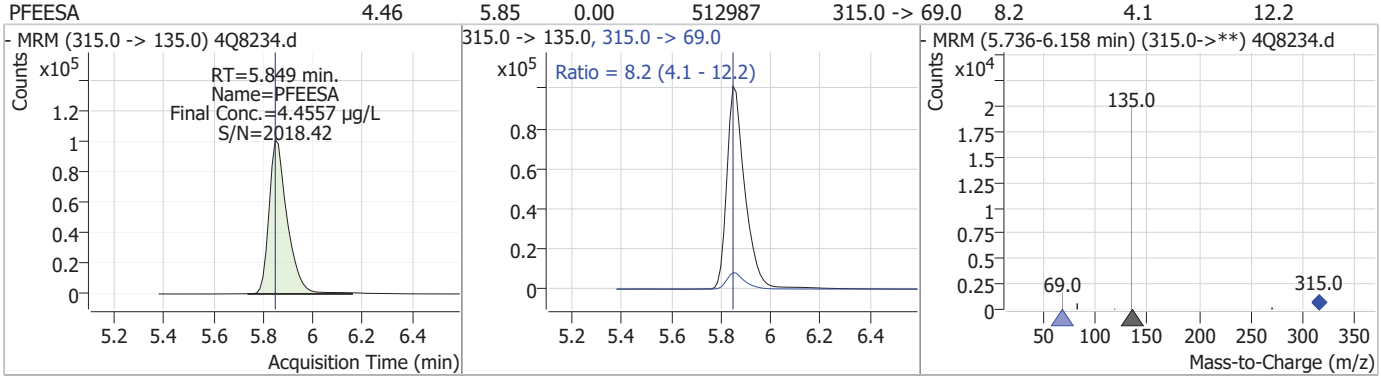
Perfluorinated Compounds by LC/MS/MS

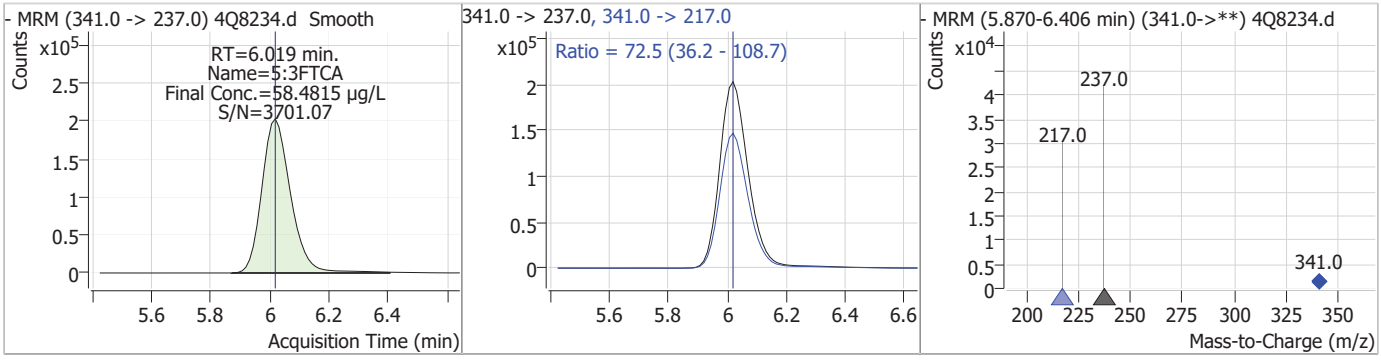
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.27	5.80	0.00	443399	285.0 -> 185.0	11.7	5.9	17.6



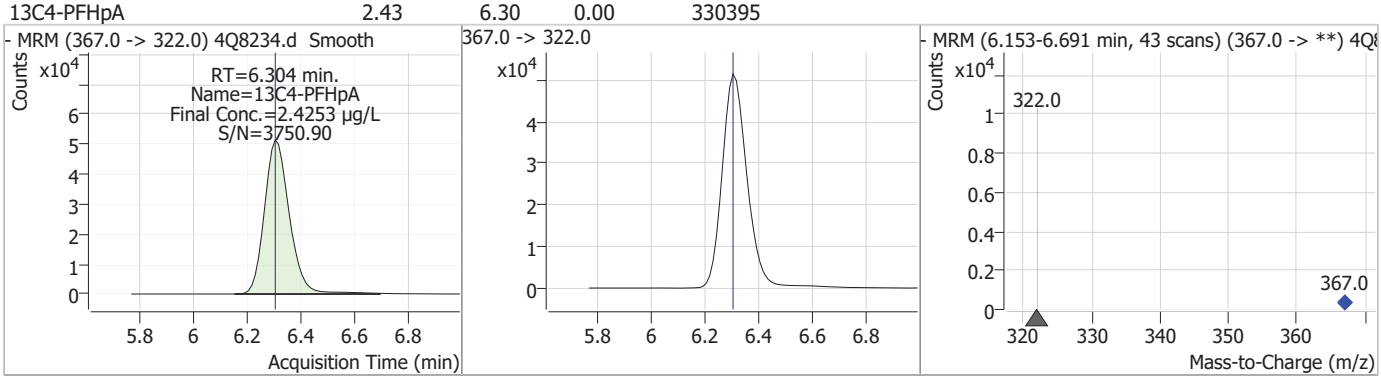
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.46	5.85	0.00	512987	315.0 -> 69.0	8.2	4.1	12.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	58.48	6.02	0.00	1373918	341.0 -> 217.0	72.5	36.2	108.7

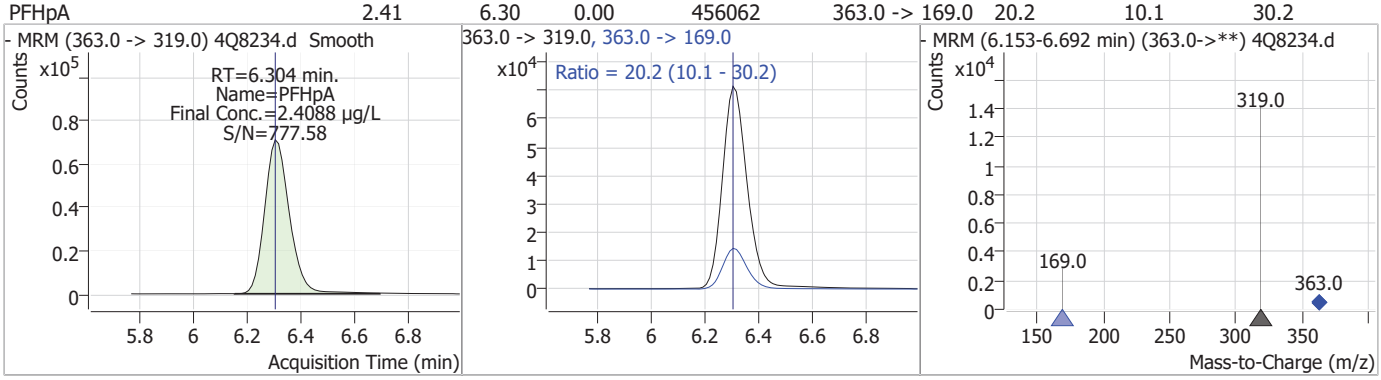


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.43	6.30	0.00	330395				

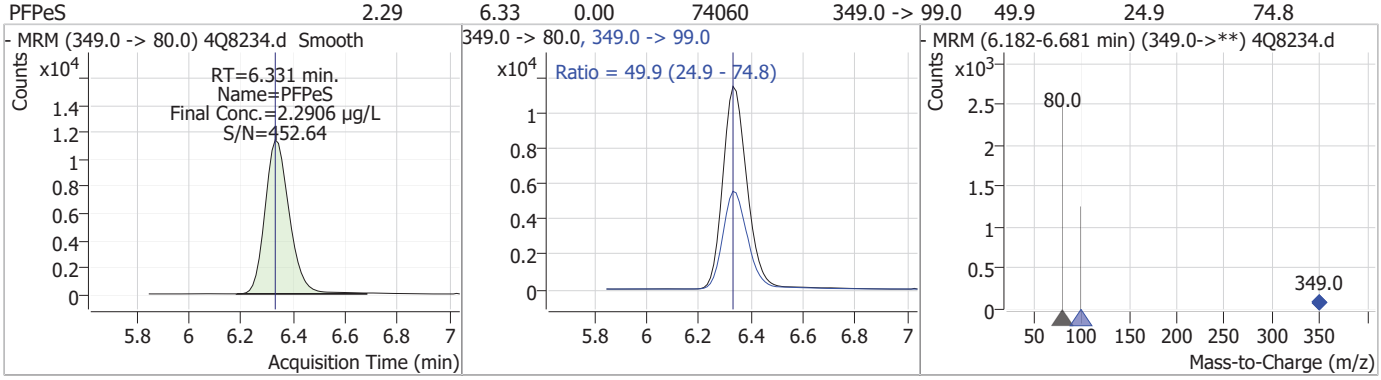


Perfluorinated Compounds by LC/MS/MS

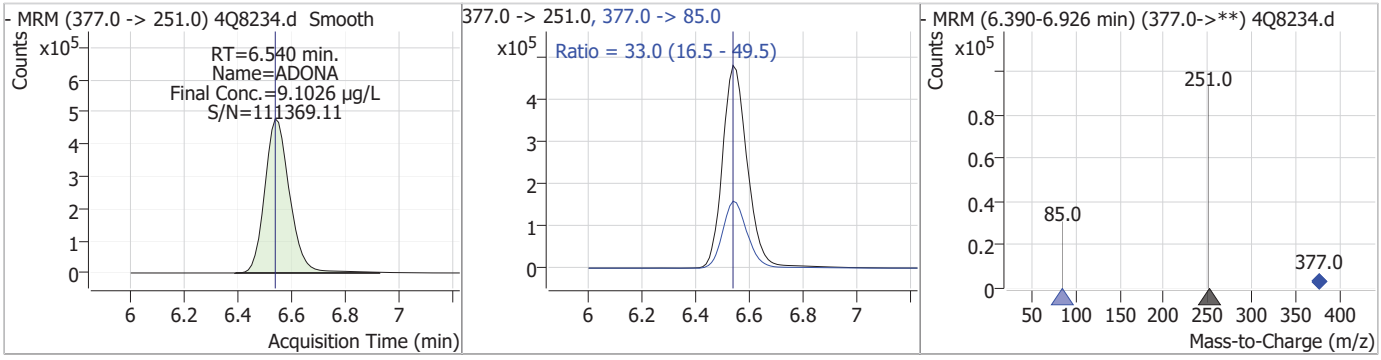
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.41	6.30	0.00	456062	363.0 -> 169.0	20.2	10.1	30.2



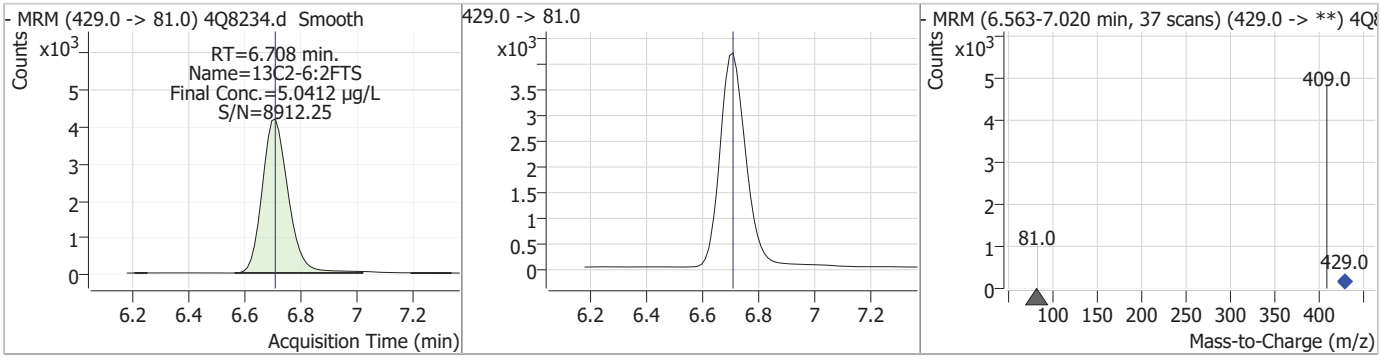
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.29	6.33	0.00	74060	349.0 -> 99.0	49.9	24.9	74.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	9.10	6.54	0.00	3064310	377.0 -> 85.0	33.0	16.5	49.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.04	6.71	0.00	26895				



7.6.65

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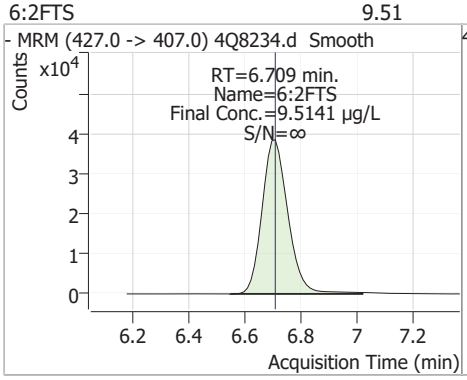
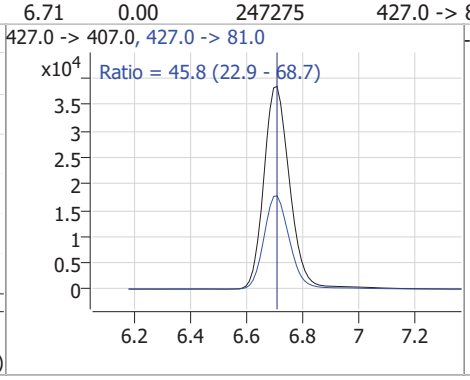
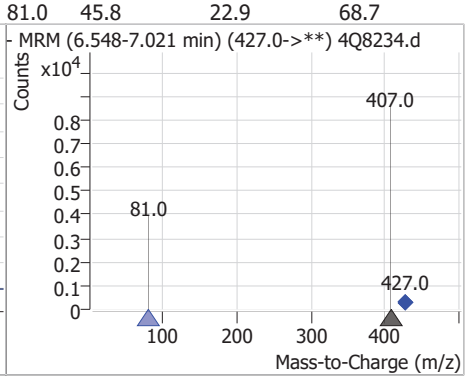
Perfluorinated Compounds by LC/MS/MS

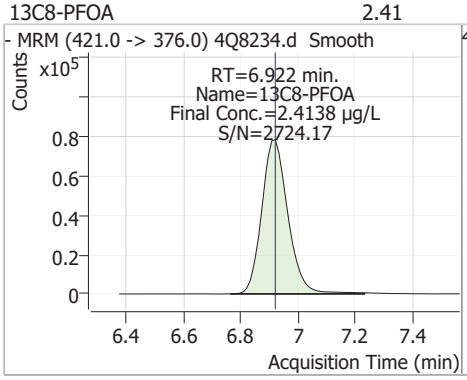
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.51	6.71	0.00	247275	427.0 -> 81.0	45.8	22.9	68.7

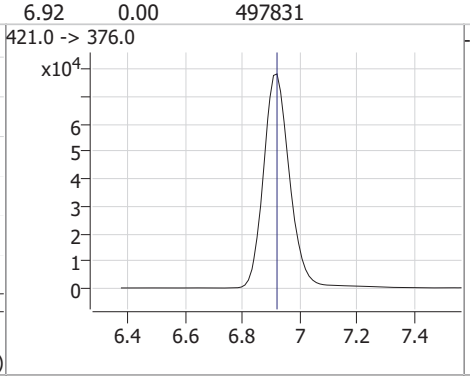


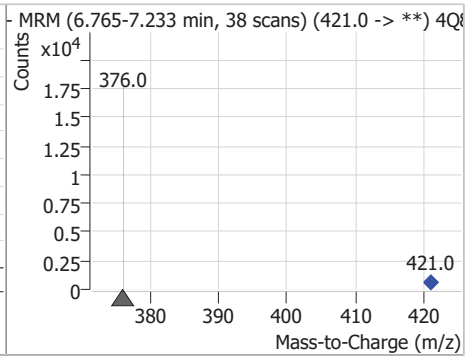




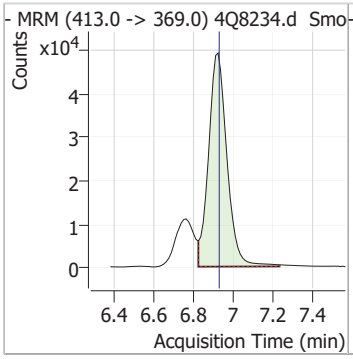
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.41	6.92	0.00	497831				

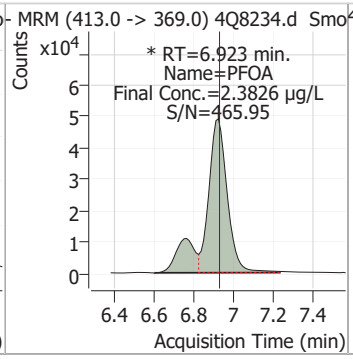


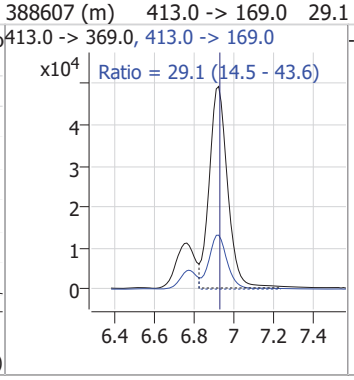


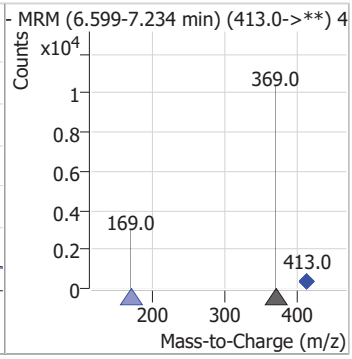


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.38	6.92	0.00	388607 (m)	413.0 -> 169.0	29.1	14.5	43.6

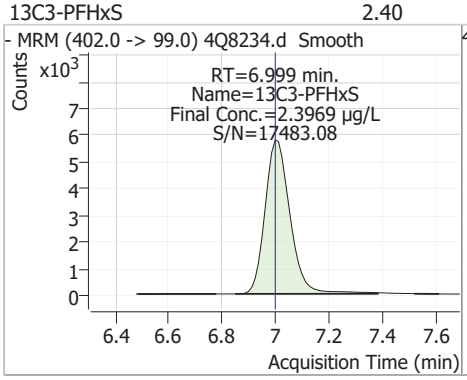


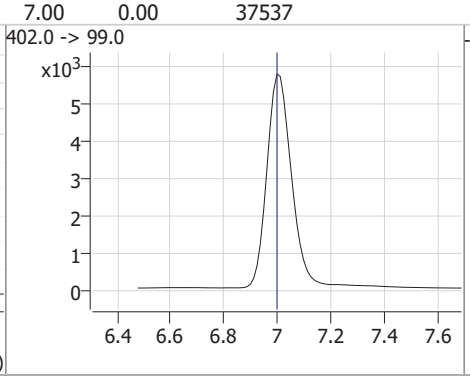


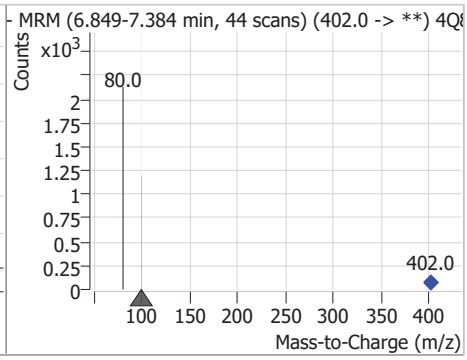




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.40	7.00	0.00	37537				

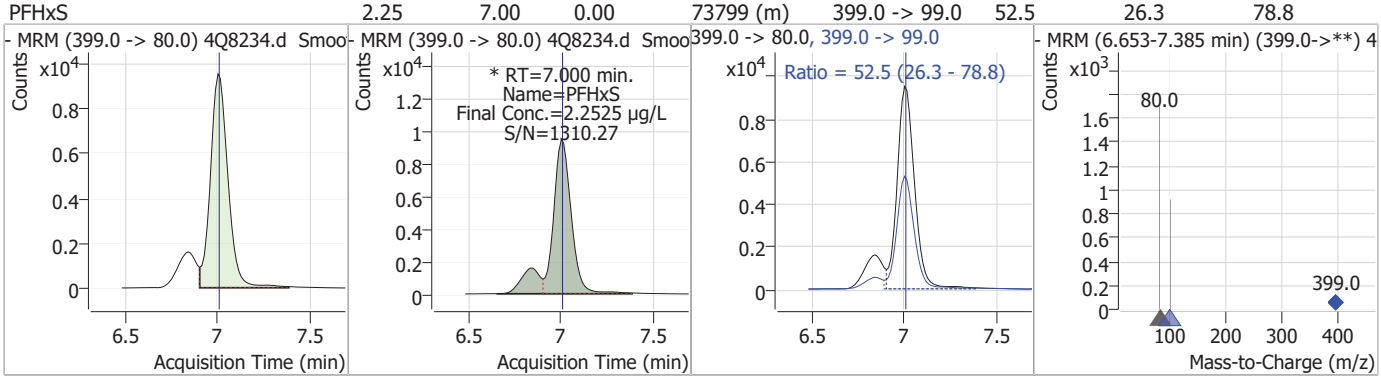




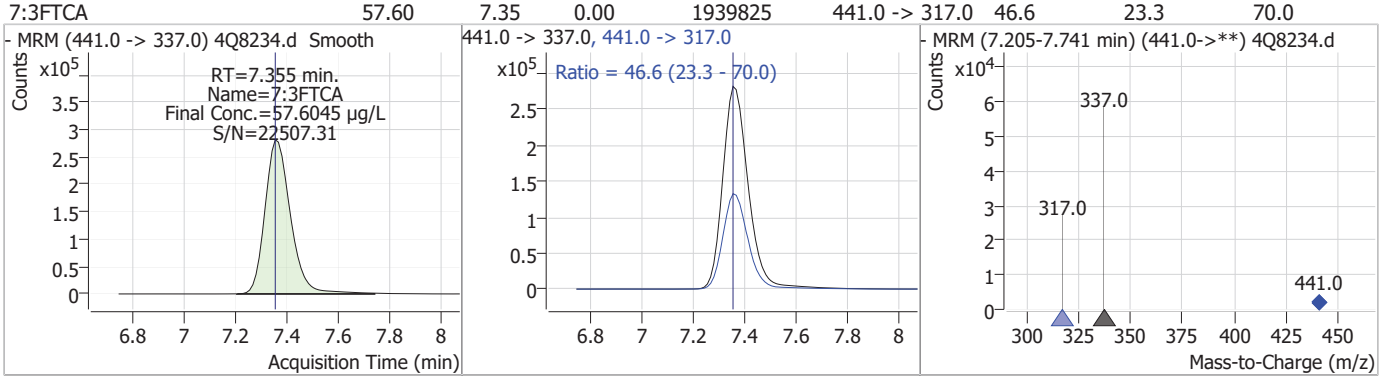


Perfluorinated Compounds by LC/MS/MS

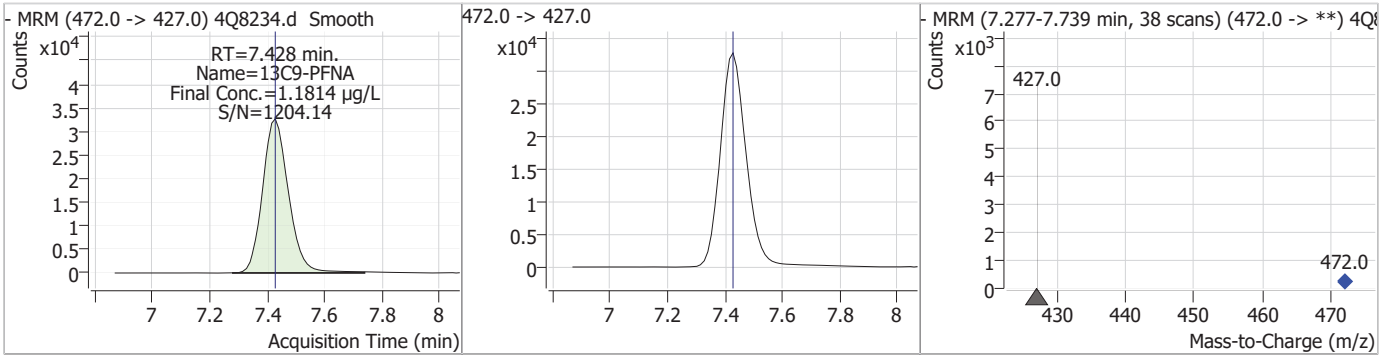
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.25	7.00	0.00	73799 (m)	399.0 -> 99.0	52.5	26.3	78.8



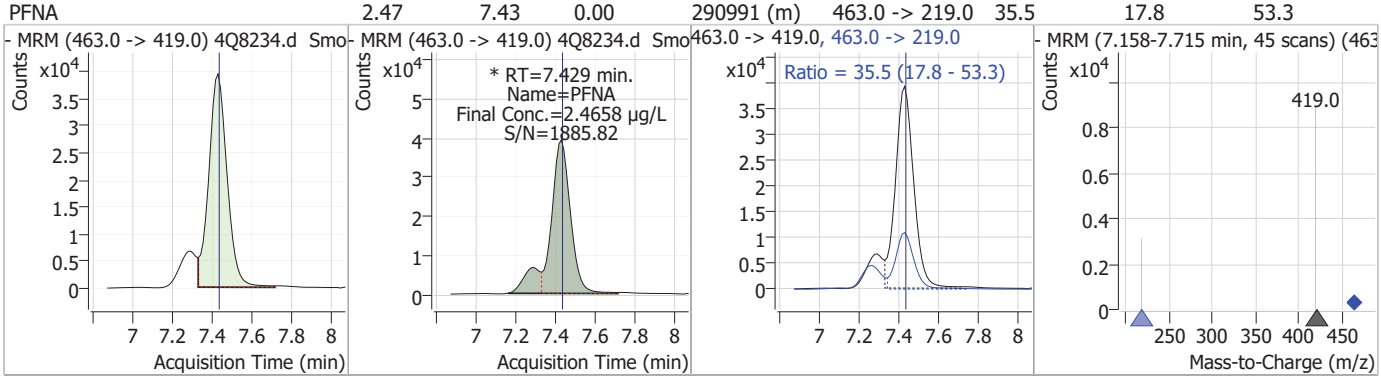
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	57.60	7.35	0.00	1939825	441.0 -> 317.0	46.6	23.3	70.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.18	7.43	0.00	204588				

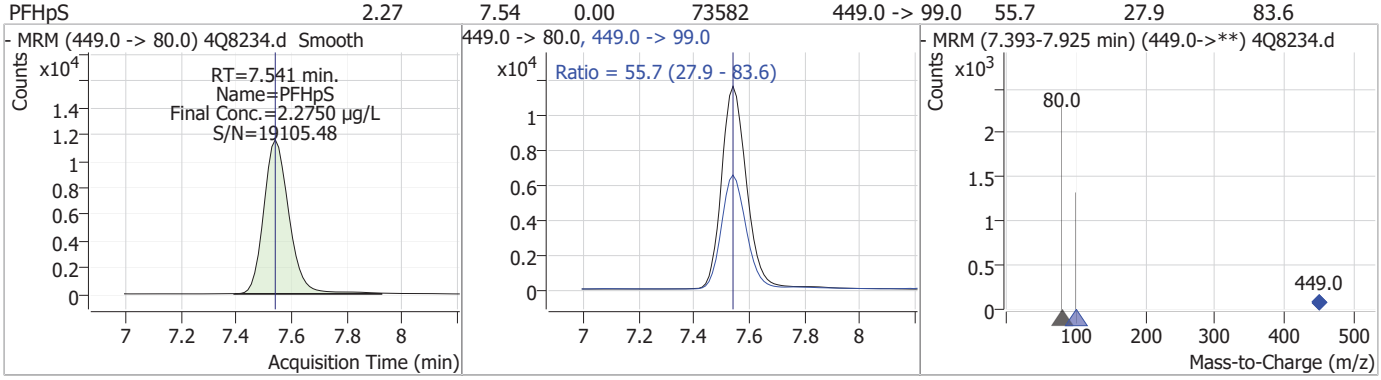


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.47	7.43	0.00	290991 (m)	463.0 -> 219.0	35.5	17.8	53.3

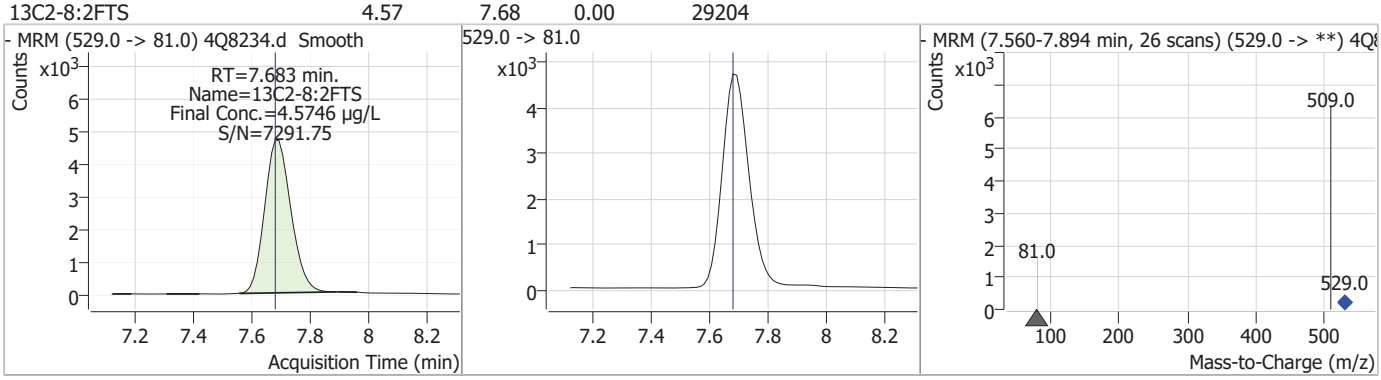


Perfluorinated Compounds by LC/MS/MS

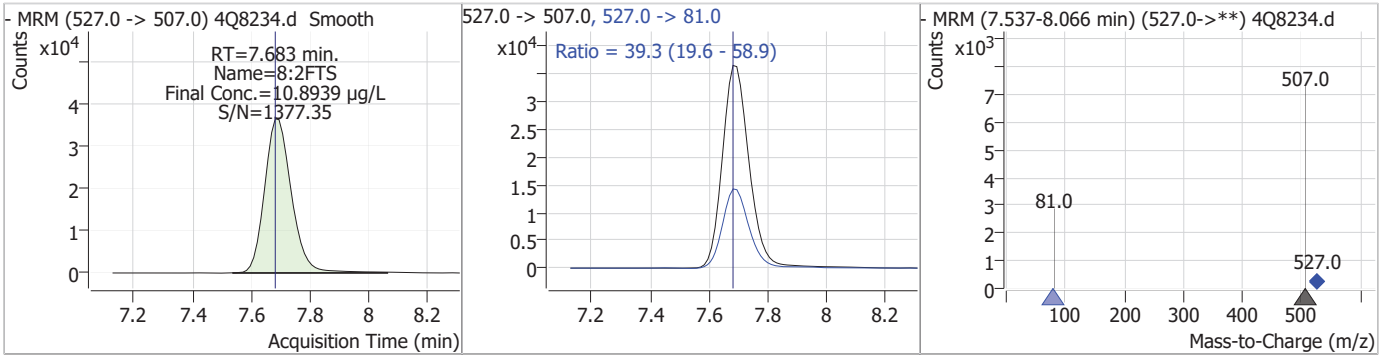
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.27	7.54	0.00	73582	449.0 -> 99.0	55.7	27.9	83.6



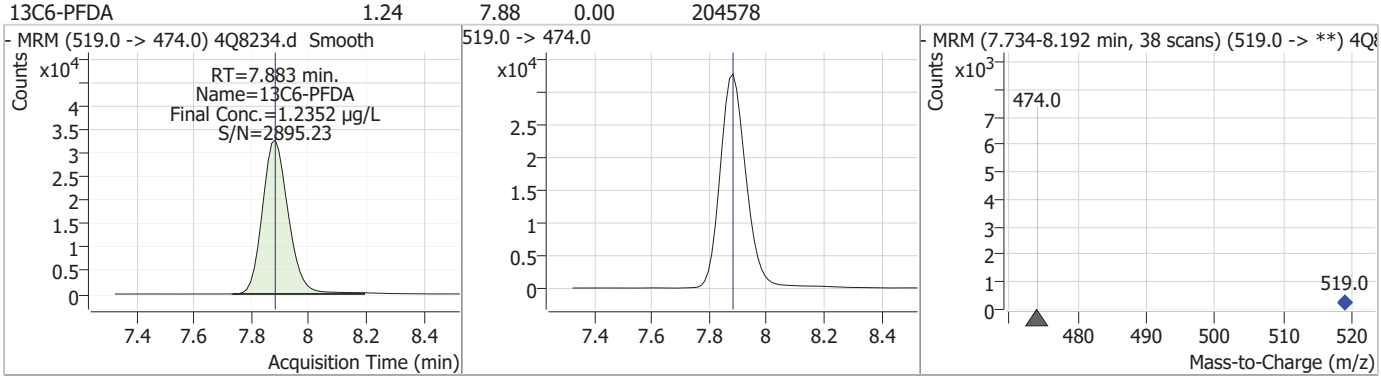
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.57	7.68	0.00	29204				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.89	7.68	0.00	231889	527.0 -> 81.0	39.3	19.6	58.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.24	7.88	0.00	204578				



7.6.65

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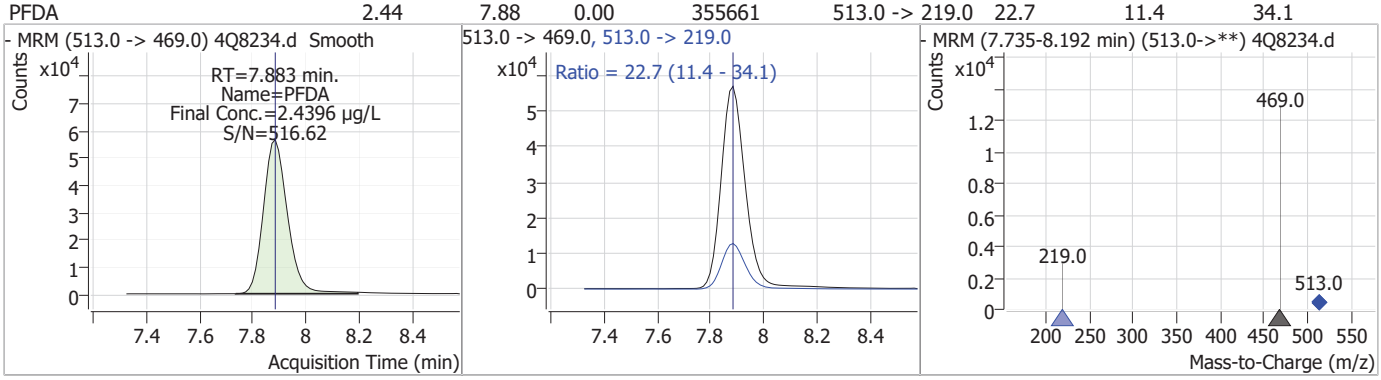
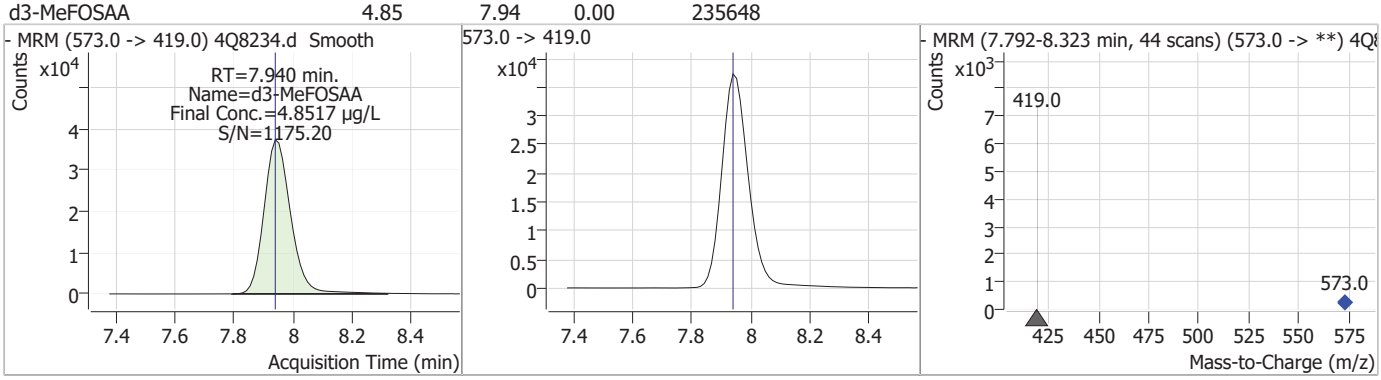
Perfluorinated Compounds by LC/MS/MS

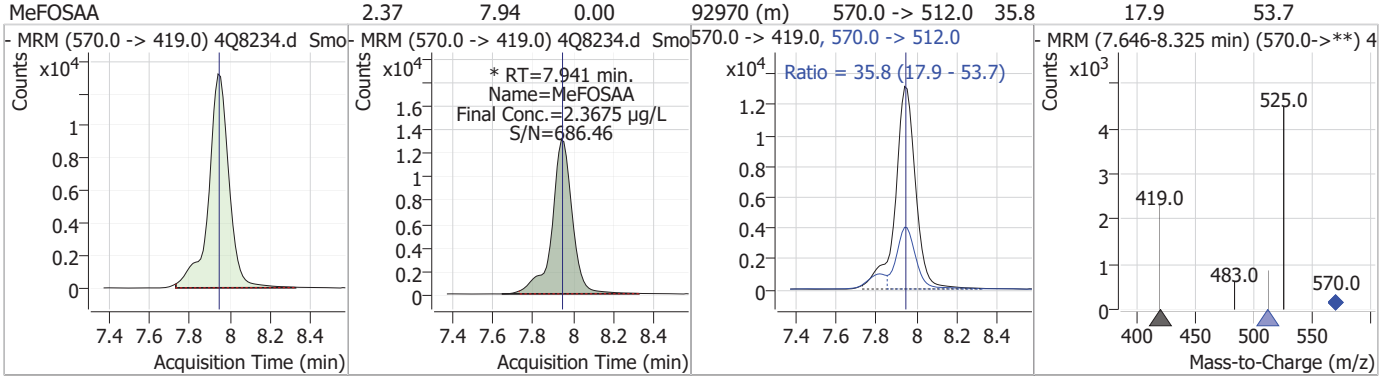
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.44	7.88	0.00	355661	513.0 -> 219.0	22.7	11.4	34.1



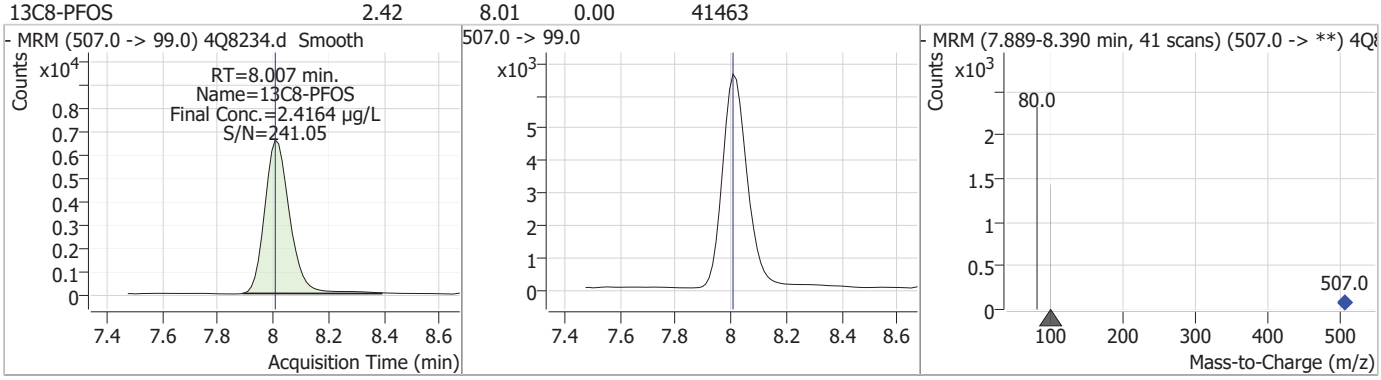
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.85	7.94	0.00	235648				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.37	7.94	0.00	92970 (m)	570.0 -> 512.0	35.8	17.9	53.7

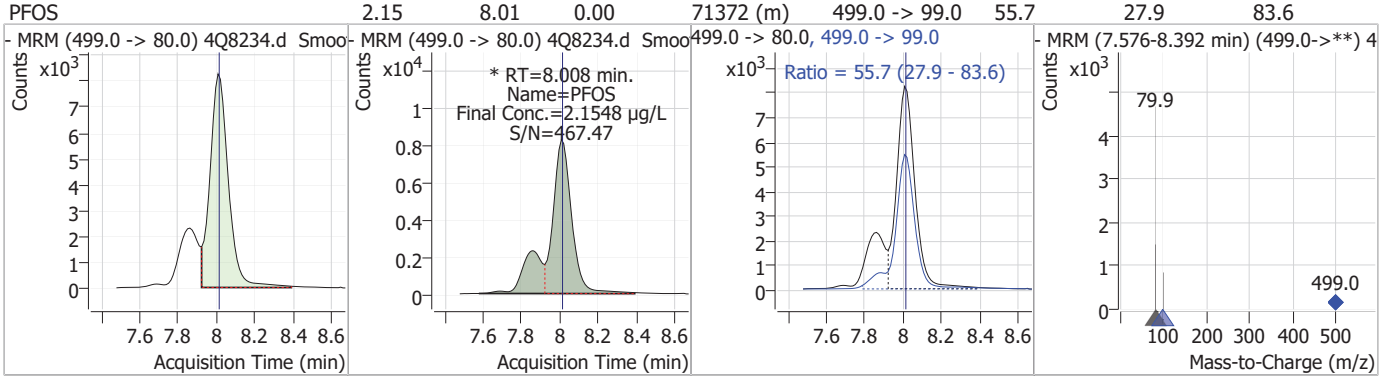


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.42	8.01	0.00	41463				

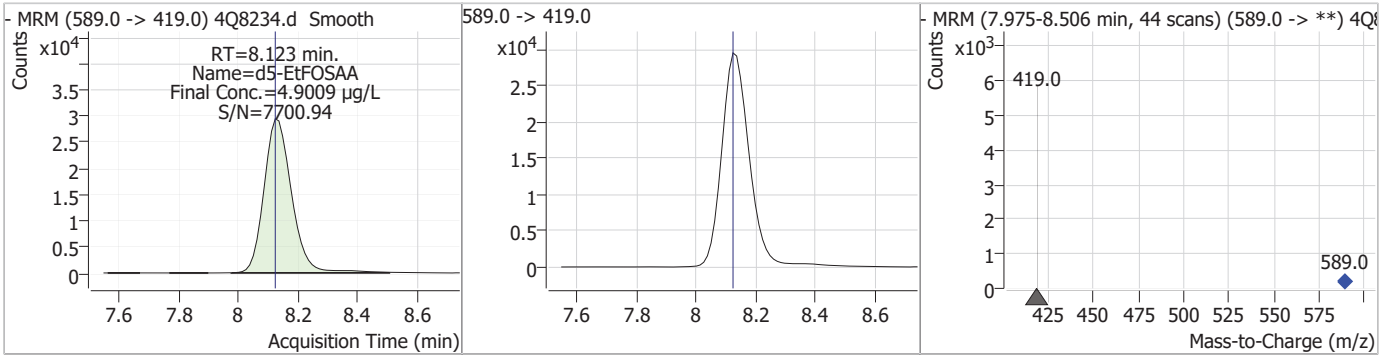


Perfluorinated Compounds by LC/MS/MS

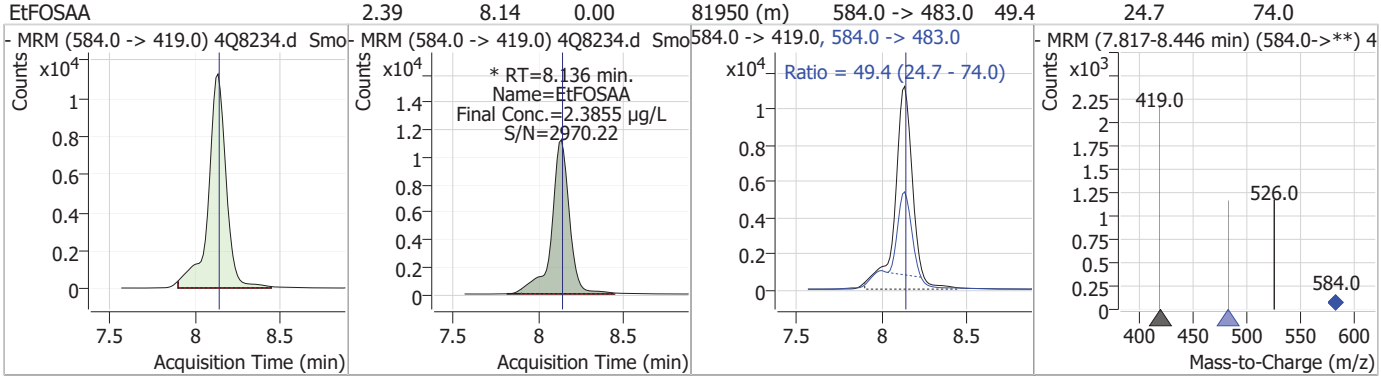
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.15	8.01	0.00	71372 (m)	499.0 -> 99.0	55.7	27.9	83.6



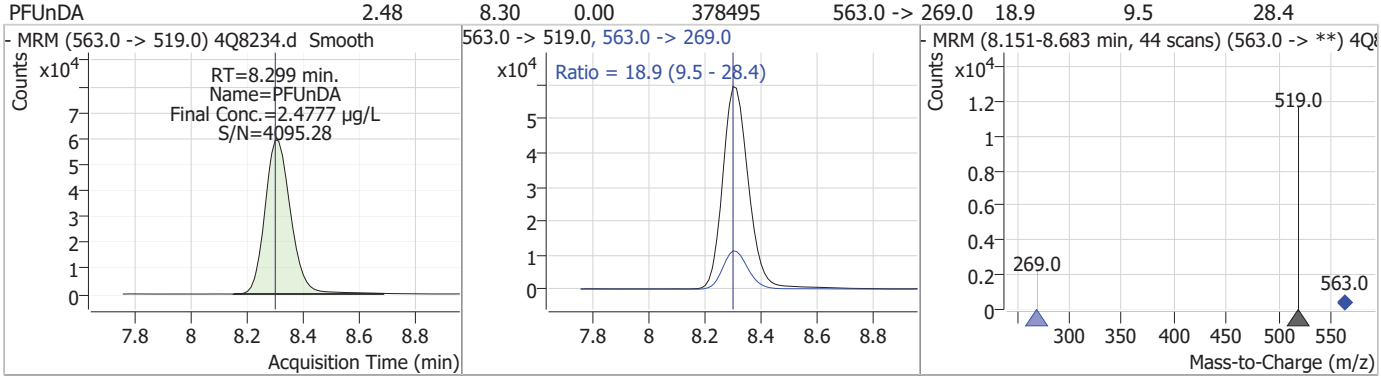
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.90	8.12	0.00	190054				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.39	8.14	0.00	81950 (m)	584.0 -> 483.0	49.4	24.7	74.0

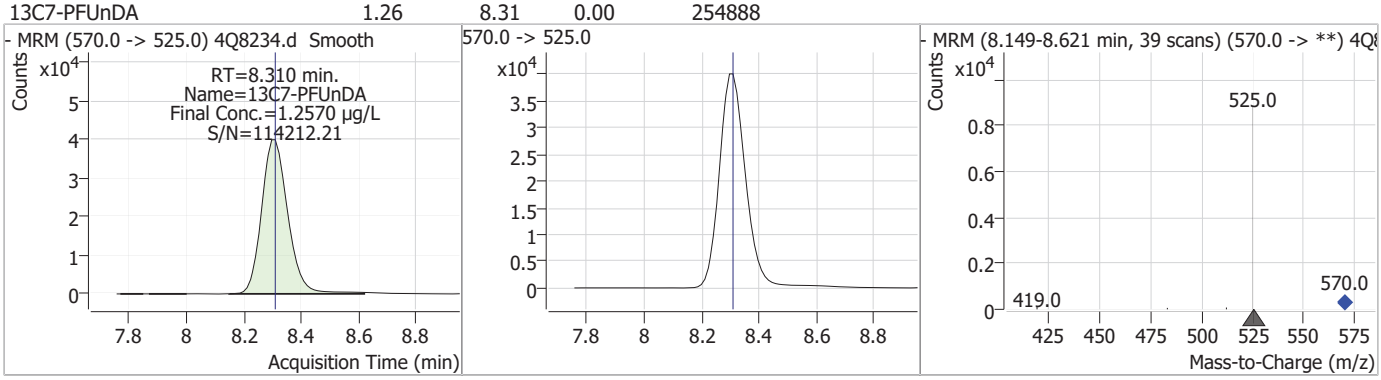


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.48	8.30	0.00	378495	563.0 -> 269.0	18.9	9.5	28.4

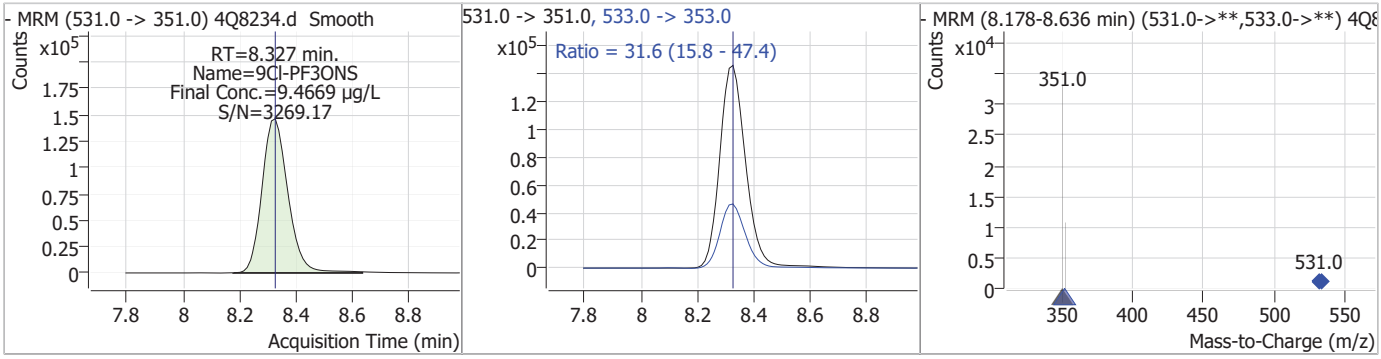


Perfluorinated Compounds by LC/MS/MS

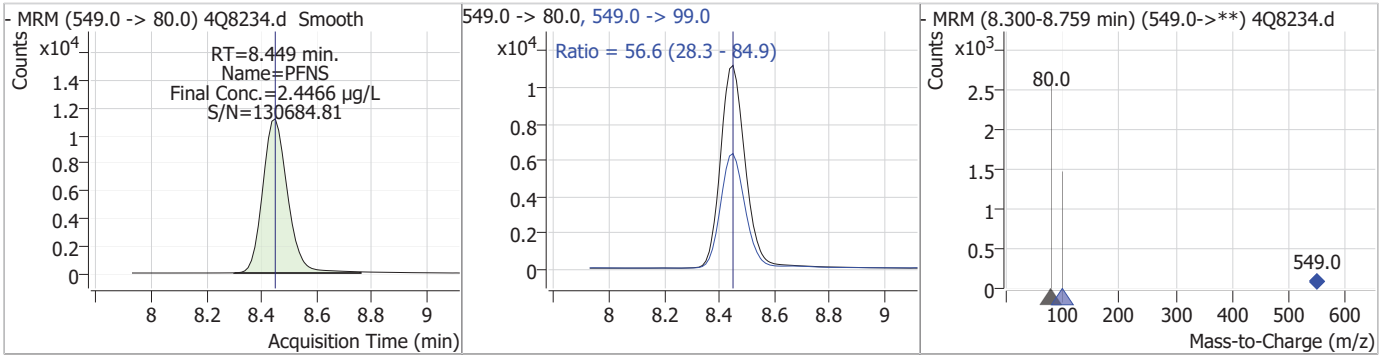
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.26	8.31	0.00	254888				



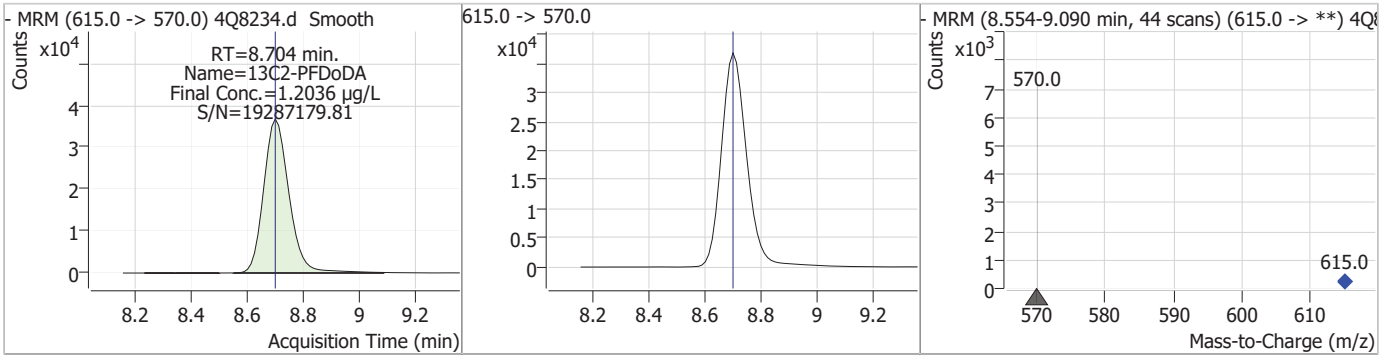
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	9.47	8.33	0.00	935859	533.0 -> 353.0	31.6	15.8	47.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.45	8.45	0.00	70034	549.0 -> 99.0	56.6	28.3	84.9

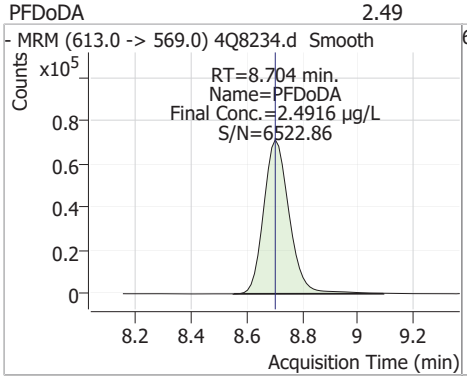


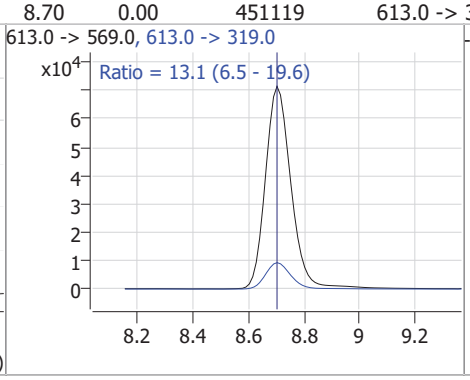
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.20	8.70	0.00	230293				

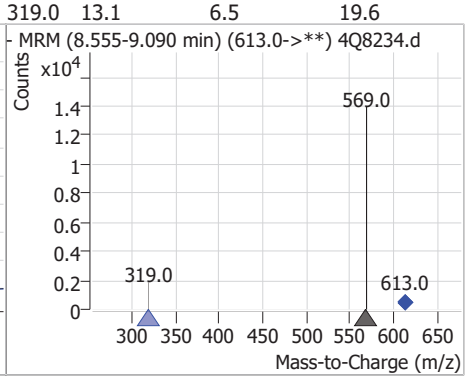


Perfluorinated Compounds by LC/MS/MS

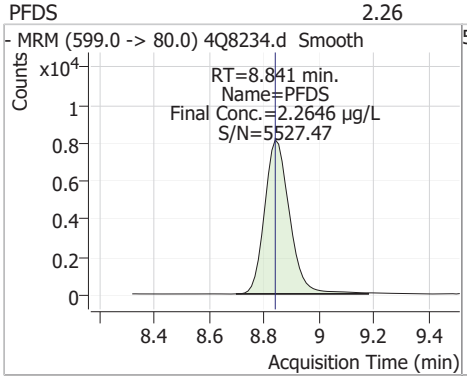
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.49	8.70	0.00	451119	613.0 -> 319.0	13.1	6.5	19.6

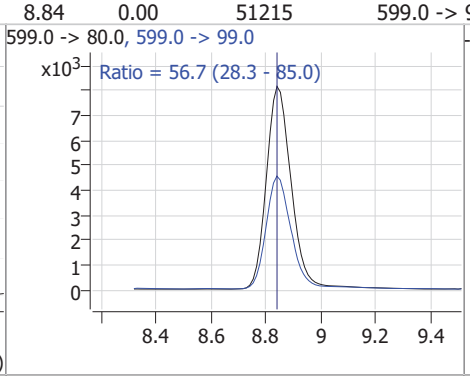


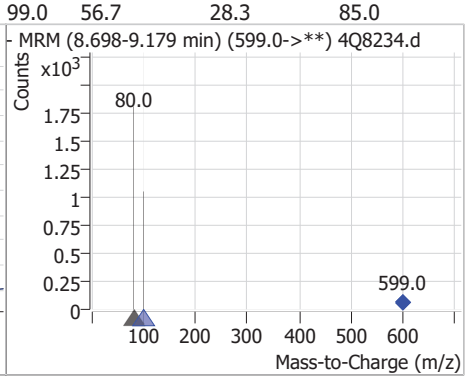




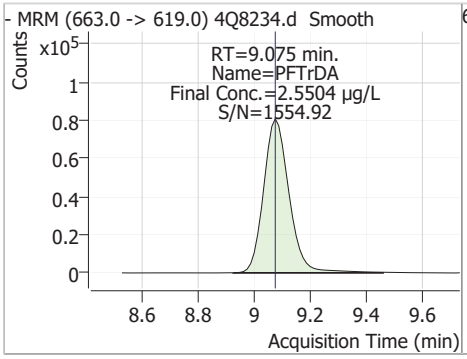
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.26	8.84	0.00	51215	599.0 -> 99.0	56.7	28.3	85.0

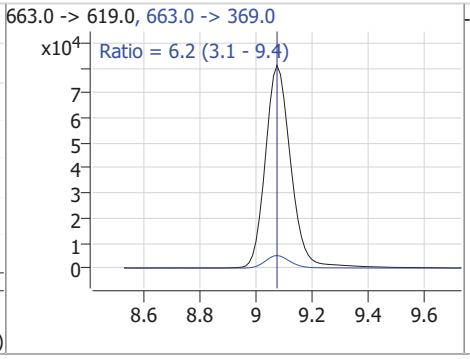


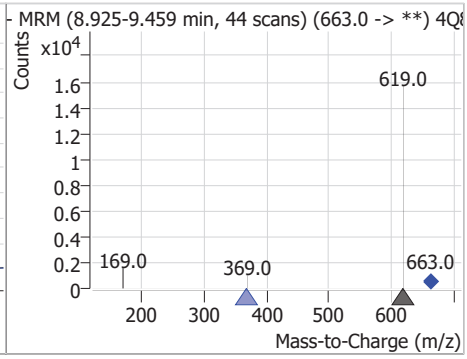




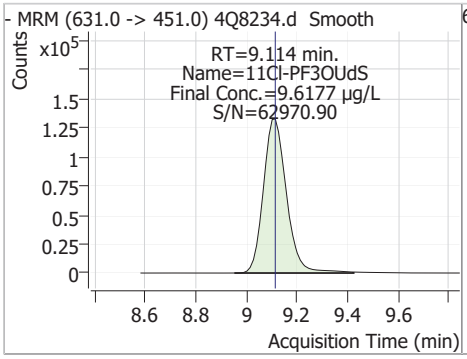
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.55	9.07	0.00	508685	663.0 -> 369.0	6.2	3.1	9.4

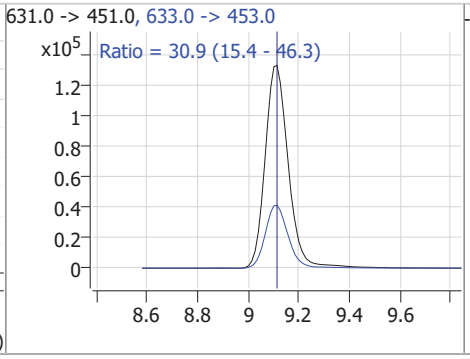


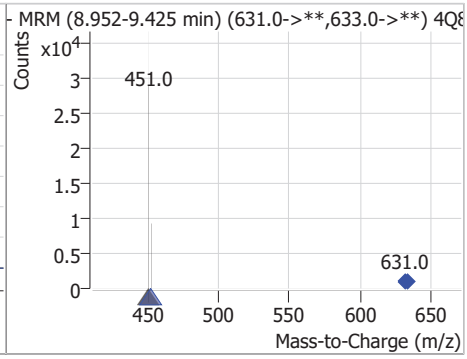




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	9.62	9.11	0.00	841100	633.0 -> 453.0	30.9	15.4	46.3







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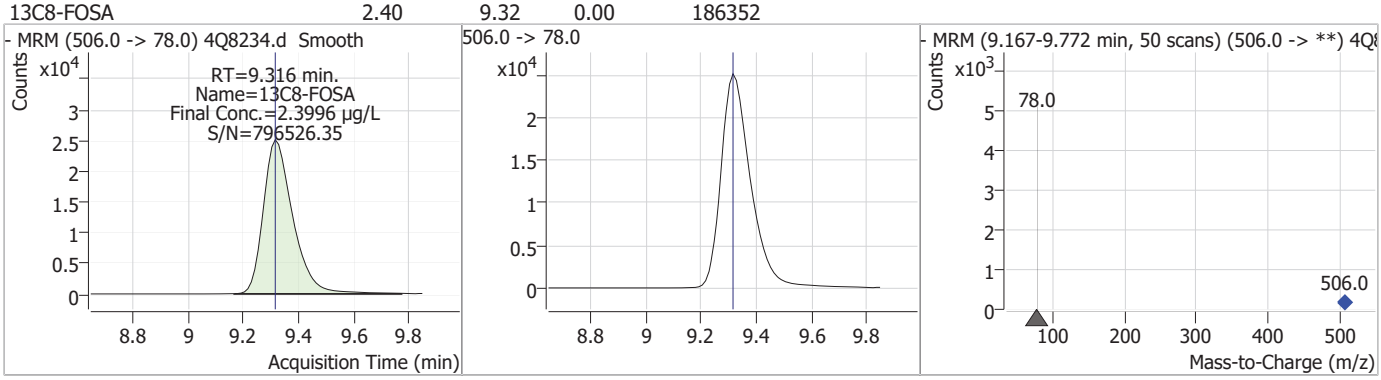
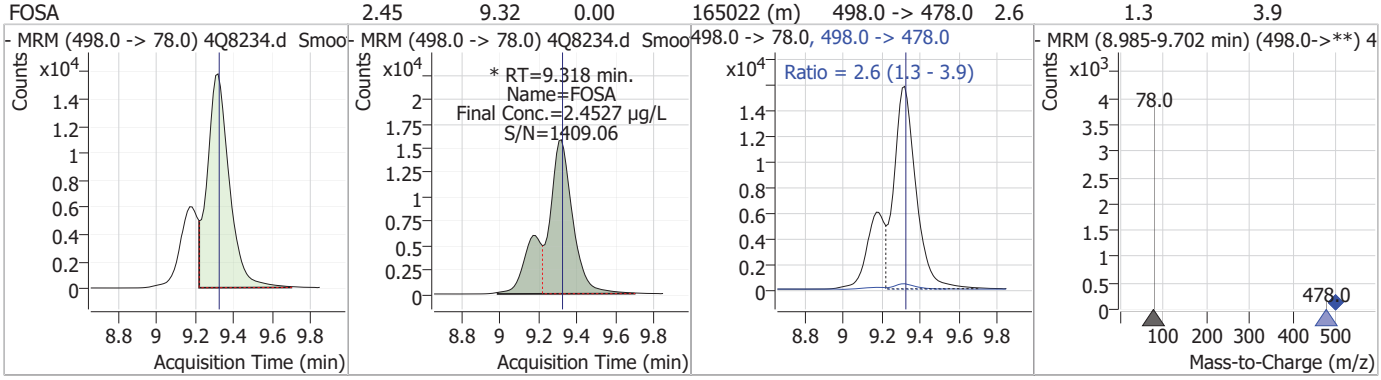
Perfluorinated Compounds by LC/MS/MS

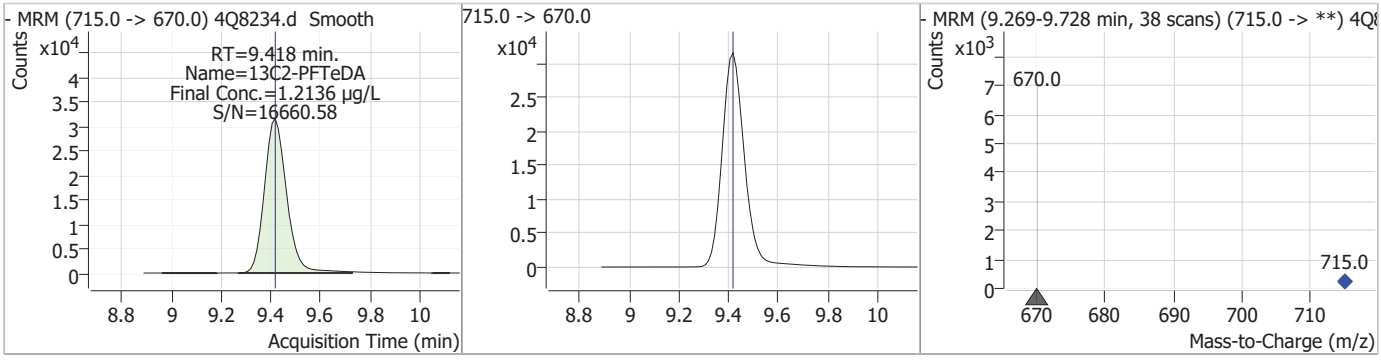
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.40	9.32	0.00	186352				



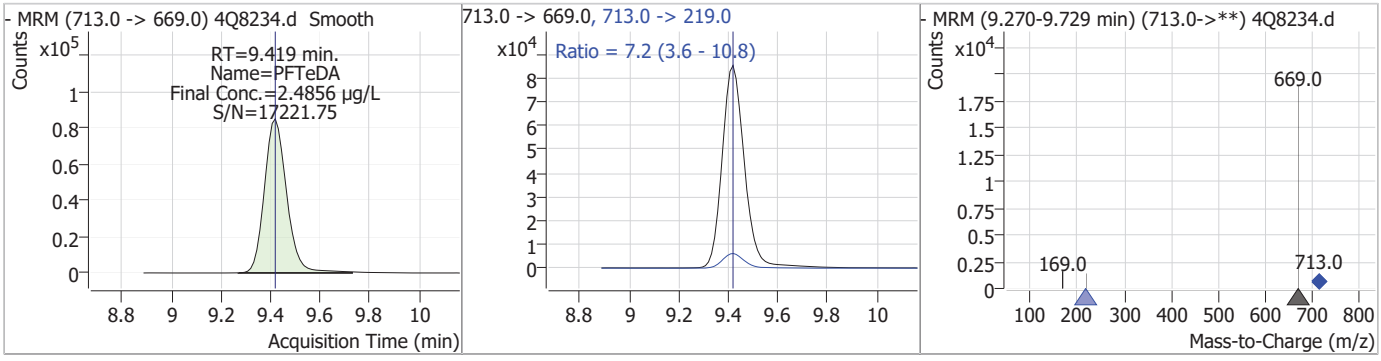
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.45	9.32	0.00	165022 (m)	498.0 -> 478.0	2.6	1.3	3.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.21	9.42	0.00	196228				

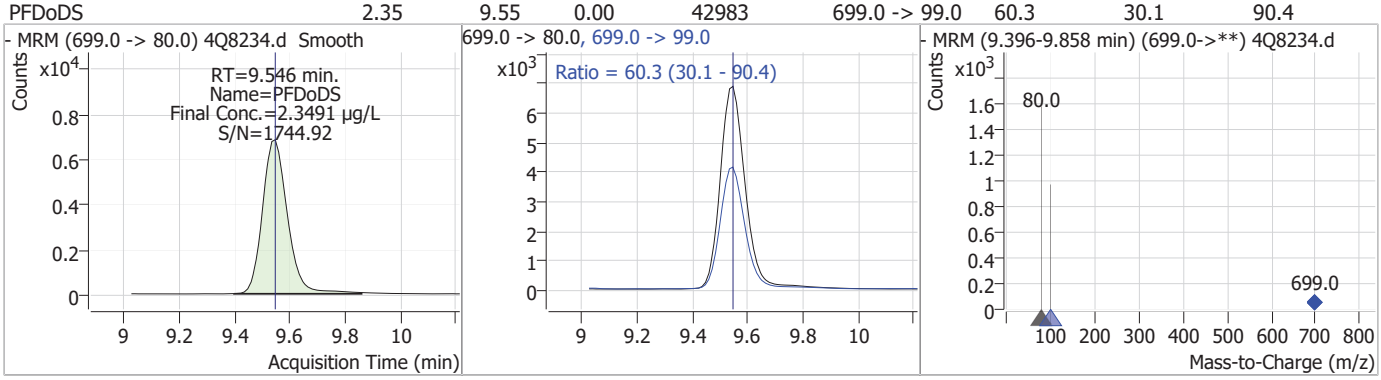


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.49	9.42	0.00	529809	713.0 -> 219.0	7.2	3.6	10.8

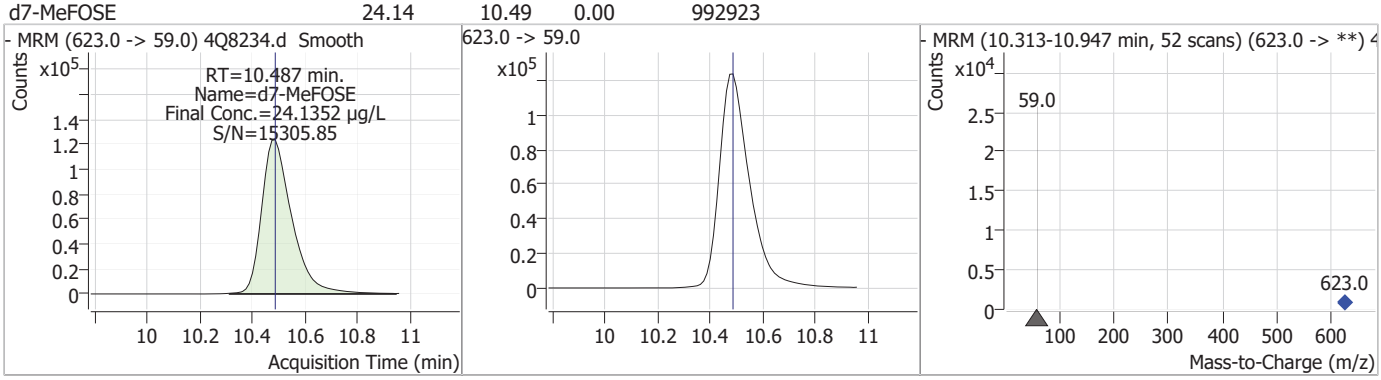


Perfluorinated Compounds by LC/MS/MS

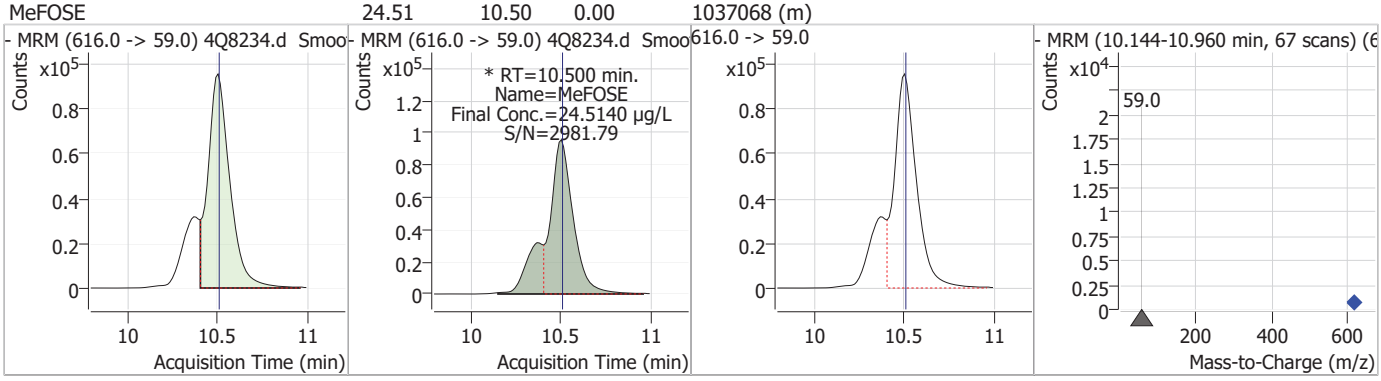
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.35	9.55	0.00	42983	699.0 -> 99.0	60.3	30.1	90.4



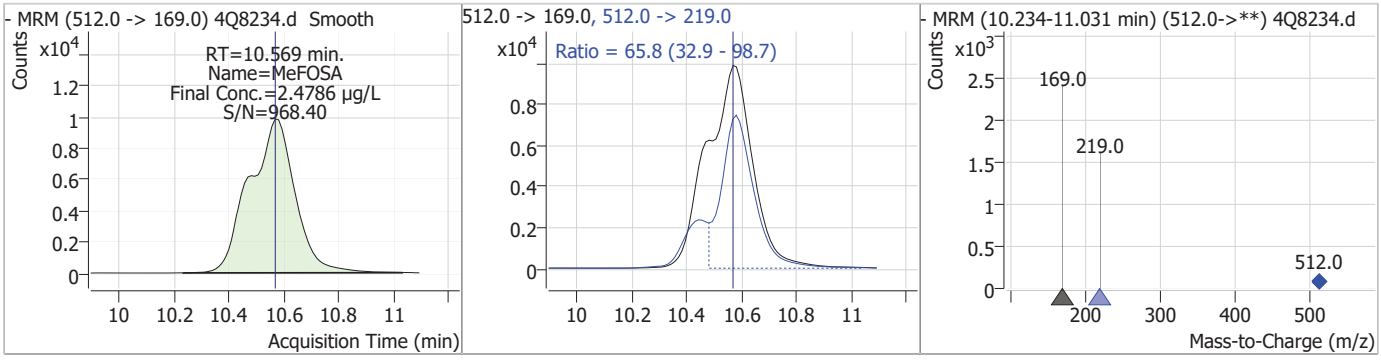
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.14	10.49	0.00	992923				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	24.51	10.50	0.00	1037068 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.48	10.57	0.00	113861	512.0 -> 219.0	65.8	32.9	98.7



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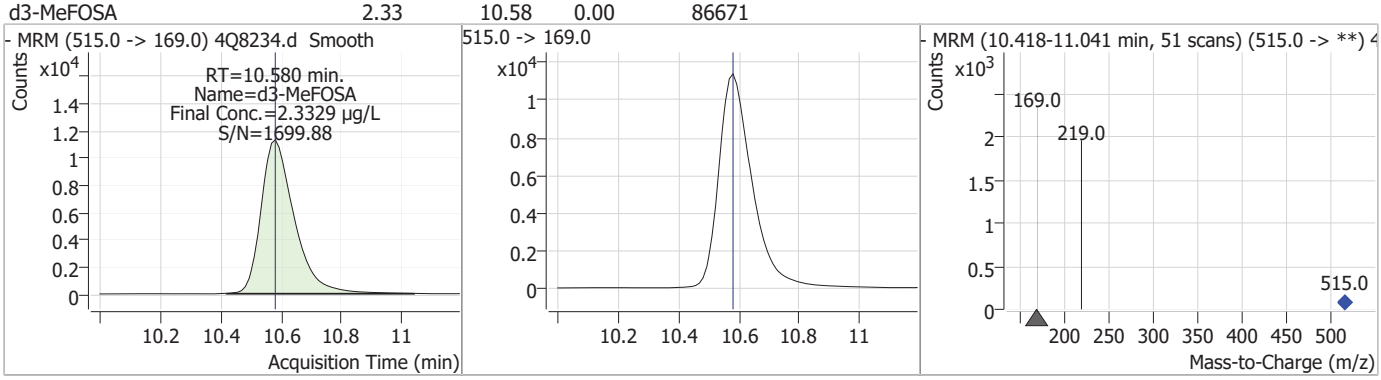
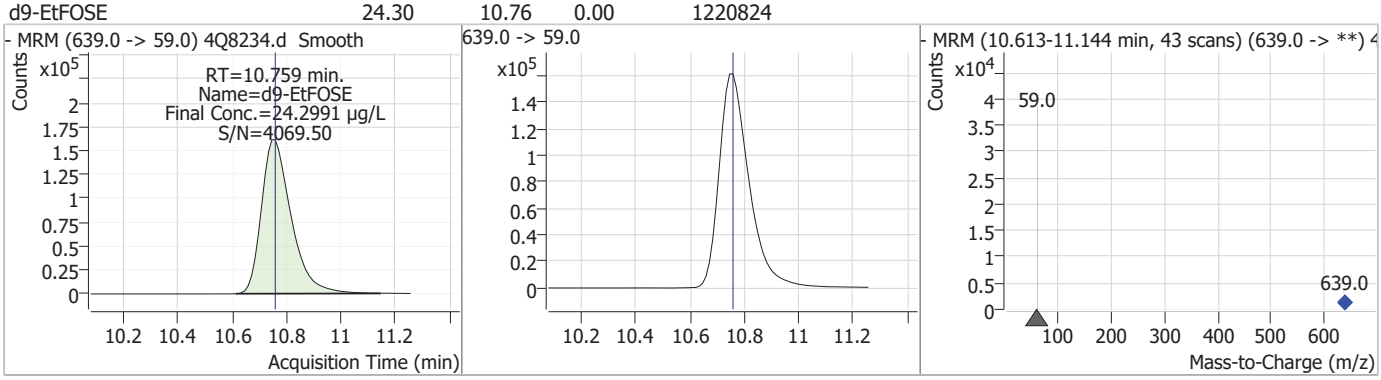
Perfluorinated Compounds by LC/MS/MS

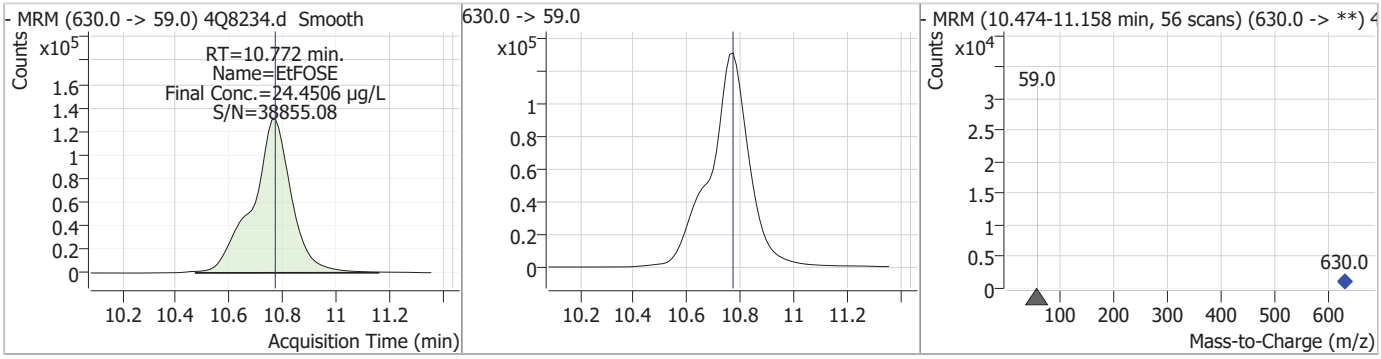
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.33	10.58	0.00	86671				



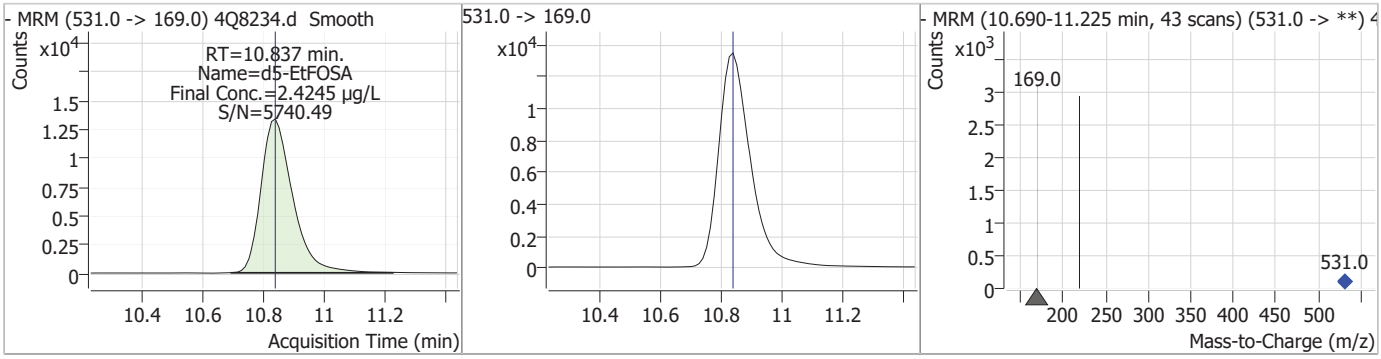
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.30	10.76	0.00	1220824				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	24.45	10.77	0.00	1330864				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.42	10.84	0.00	97080				



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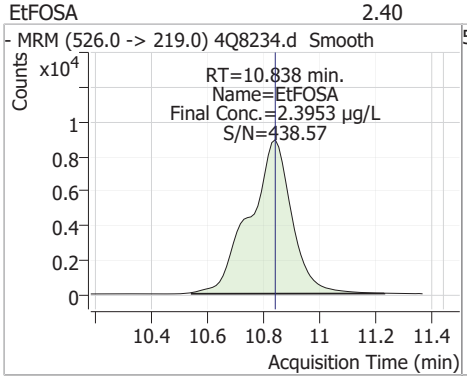
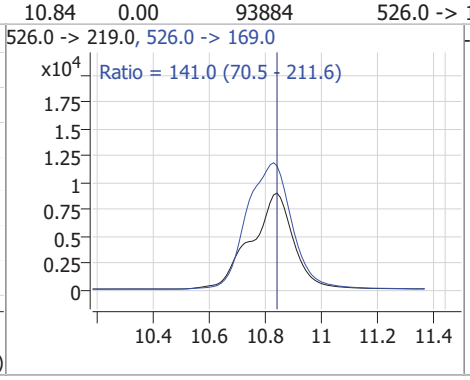
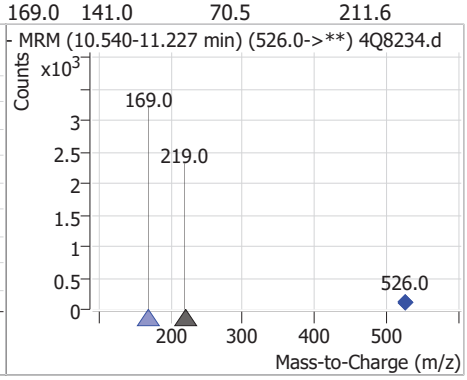
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.40	10.84	0.00	93884	526.0 -> 169.0	141.0	70.5	211.6







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Manual Integration Approval Summary

Sample Number: T4Q140-ICC140
Lab FileID: 4Q8234.D
Injection Time: 05/02/25 14:40
Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.92	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.43	Split peak
MeFOSAA	2355-31-9		7.94	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.01	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.32	Split peak
MeFOSE	24448-09-7		10.50	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8235.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 2:54:26 PM
Sample Name : IC140-5
Vial : P1-A6
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.883	217.0 -> 172.0	833749	10.00	µg/L	0.000
M5-PFPeA	4.319	268.0 -> 223.0	453590	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	310342	2.50	µg/L	0.000
M4-PFHpA	6.304	367.0 -> 322.0	331570	2.50	µg/L	0.000
M8-PFOA	6.922	421.0 -> 376.0	506476	2.50	µg/L	0.000
M9-PFNA	7.428	472.0 -> 427.0	212560	1.25	µg/L	0.000
M6-PFDA	7.883	519.0 -> 474.0	209565	1.25	µg/L	0.000
M7-PFUnDA	8.298	570.0 -> 525.0	259383	1.25	µg/L	-0.012
M2-PFDoDA	8.704	615.0 -> 570.0	241235	1.25	µg/L	0.000
M2-PFTeDA	9.406	715.0 -> 670.0	199139	1.25	µg/L	-0.012
M8-FOSA	9.316	506.0 -> 78.0	189352	2.50	µg/L	0.000
M3-PFBS	5.368	302.0 -> 99.0	25562	2.50	µg/L	0.000
		302.0 -> 80.0	65252			
M3-PFHxS	6.999	402.0 -> 99.0	38220	2.50	µg/L	0.000
M8-PFOS	8.007	507.0 -> 99.0	42273	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	12900	5.00	µg/L	0.000
M2-6:2FTS	6.708	429.0 -> 81.0	24640	5.00	µg/L	0.000
M2-8:2FTS	7.683	529.0 -> 81.0	32551	5.00	µg/L	0.000
M3-MeFOSAA	7.940	573.0 -> 419.0	240216	5.00	µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	436271	10.00	µg/L	0.000
M5-EtFOSAA	8.123	589.0 -> 419.0	192144	5.00	µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	999737	25.00	µg/L	-0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1251334	25.00	µg/L	-0.012
M5-EtFOSA	10.837	531.0 -> 169.0	96887	2.50	µg/L	0.000
M3-MeFOSA	10.580	515.0 -> 169.0	88738	2.50	µg/L	0.000
13C4-PFOS	8.008	503.0 -> 80.0	70290	2.50	µg/L	0.000
13C3-PFBA	2.886	216.0 -> 172.0	349781	5.00	µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	40907	2.50	µg/L	0.000
13C4-PFOA	6.910	417.0 -> 372.0	486110	2.50	µg/L	-0.012
13C2-PFDA	7.883	515.0 -> 470.0	169615	1.25	µg/L	0.000
13C5-PFNA	7.428	468.0 -> 423.0	194097	1.25	µg/L	0.000
13C2-PFHxA	5.465	315.0 -> 270.0	272452	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	12900	5.67	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 113.5%		
13C2-6:2FTS	6.708	429.0 -> 81.0	24640	5.01	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.1%		
13C2-8:2FTS	7.683	529.0 -> 81.0	32551	5.53	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 110.5%		
13C2-PFDoDA	8.704	615.0 -> 570.0	241235	1.27	µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.9%		
13C2-PFTeDA	9.406	715.0 -> 670.0	199139	1.24	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.5%		
13C3-PFBS	5.368	302.0 -> 99.0	25562	2.54	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.7%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	38220	2.65	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.8%			
13C4-PFBA	2.883	217.0 -> 172.0	833749	10.10	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 101.0%			
13C4-PFHpA	6.304	367.0 -> 322.0	331570	2.56	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.3%			
13C5-PFHxA	5.464	318.0 -> 273.0	310342	2.59	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.7%			
13C5-PFPeA	4.319	268.0 -> 223.0	453590	5.19	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.8%			
13C6-PFDA	7.883	519.0 -> 474.0	209565	1.28	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.2%			
13C7-PFUnDA	8.298	570.0 -> 525.0	259383	1.29	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.3%			
13C8-FOSA	9.316	506.0 -> 78.0	189352	2.51	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.2%			
13C8-PFOA	6.922	421.0 -> 376.0	506476	2.53	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.2%			
13C8-PFOS	8.007	507.0 -> 99.0	42273	2.53	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.3%			
13C9-PFNA	7.428	472.0 -> 427.0	212560	1.26	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.0%			
d3-MeFOSAA	7.940	573.0 -> 419.0	240216	5.08	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.7%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	436271	10.23	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 102.3%			
d3-MeFOSA	10.580	515.0 -> 169.0	88738	2.45	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 98.2%			
d5-EtFOSAA	8.123	589.0 -> 419.0	192144	5.09	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.9%			
d7-MeFOSE	10.475	623.0 -> 59.0	999737	24.98	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 99.9%			
d9-EtFOSE	10.746	639.0 -> 59.0	1251334	25.60	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 102.4%			
d5-EtFOSA	10.837	531.0 -> 169.0	96887	2.49	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.5%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	405069	18.36	µg/L		100
		327.0 -> 81.0	179639				
6:2FTS	6.709	427.0 -> 407.0	492035	20.66	µg/L		100
		427.0 -> 81.0	224424				
8:2FTS	7.683	527.0 -> 507.0	454277	19.15	µg/L		98
		527.0 -> 81.0	174351				
EtFOSAA	8.136	584.0 -> 419.0	169402	4.88	µg/L	m	93
		584.0 -> 483.0	92377				
FOSA	9.306	498.0 -> 78.0	322502	4.72	µg/L	m	99
		498.0 -> 478.0	9125				
MeFOSAA	7.941	570.0 -> 419.0	197798	4.94	µg/L	m	99
		570.0 -> 512.0	71456				
PFBA	2.889	213.0 -> 169.0	552112	20.29	µg/L		100
PFBS	5.369	299.0 -> 80.0	129851	4.54	µg/L		99
		299.0 -> 99.0	53653				
PFDA	7.883	513.0 -> 469.0	724675	4.85	µg/L		100
		513.0 -> 219.0	165967				
PFDoDA	8.704	613.0 -> 569.0	923911	4.87	µg/L		98
		613.0 -> 319.0	126604				

Perfluorinated Compounds by LC/MS/MS

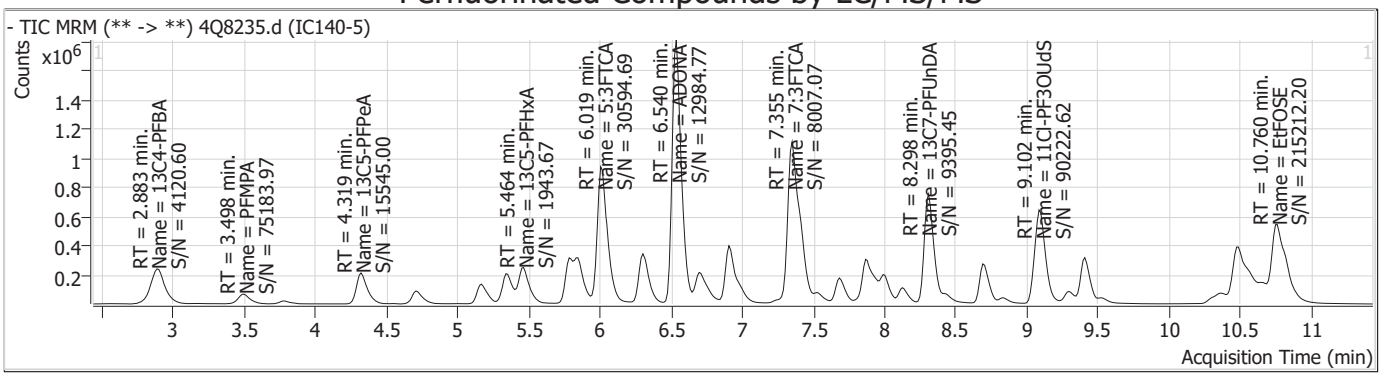
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.841	599.0 -> 80.0	106007	4.61	µg/L		100
		599.0 -> 99.0	60294				
PFHpA	6.304	363.0 -> 319.0	927913	4.88	µg/L		98
		363.0 -> 169.0	193908				
PFHpS	7.541	449.0 -> 80.0	157105	4.77	µg/L		98
		449.0 -> 99.0	84880				
PFHxA	5.467	313.0 -> 269.0	613074	4.87	µg/L		100
		313.0 -> 119.0	20709				
PFHxS	7.000	399.0 -> 80.0	152782	4.58	µg/L	m	96
		399.0 -> 99.0	76026				
PFNA	7.429	463.0 -> 419.0	615304	5.02	µg/L	m	100
		463.0 -> 219.0	219747				
PFNS	8.449	549.0 -> 80.0	142122	4.87	µg/L		97
		549.0 -> 99.0	83053				
PFOA	6.923	413.0 -> 369.0	804814	4.85	µg/L	m	100
		413.0 -> 169.0	232446				
PFOS	8.008	499.0 -> 80.0	151453	4.48	µg/L	m	96
		499.0 -> 99.0	79480				
PFPeA	4.321	263.0 -> 219.0	691922	9.79	µg/L		100
PFPeS	6.331	349.0 -> 80.0	154347	4.86	µg/L		99
		349.0 -> 99.0	76407				
PFTeDA	9.406	713.0 -> 669.0	1058410	4.89	µg/L		99
		713.0 -> 219.0	78516				
PFTrDA	9.075	663.0 -> 619.0	1044376	5.00	µg/L		99
		663.0 -> 369.0	67031				
PFUnDA	8.299	563.0 -> 519.0	775407	4.99	µg/L		99
		563.0 -> 269.0	151713				
11Cl-PF3OUdS	9.102	631.0 -> 451.0	1714496	18.72	µg/L		100
		633.0 -> 453.0	529952				
9Cl-PF3ONS	8.327	531.0 -> 351.0	1903051	18.38	µg/L		98
		533.0 -> 353.0	582021				
ADONA	6.540	377.0 -> 251.0	6402962	18.16	µg/L		99
		377.0 -> 85.0	2077221				
HFPO-DA	5.805	285.0 -> 169.0	901633	19.94	µg/L		100
		285.0 -> 185.0	107198				
3:3FTCA	3.781	241.0 -> 177.0	102250	23.75	µg/L		99
		241.0 -> 117.0	9416				
5:3FTCA	6.019	341.0 -> 237.0	2781701	114.42	µg/L		99
		341.0 -> 217.0	2035133				
7:3FTCA	7.355	441.0 -> 337.0	3953998	113.47	µg/L		100
		441.0 -> 317.0	1830842				
EtFOSA	10.838	526.0 -> 219.0	194182	4.96	µg/L		100
		526.0 -> 169.0	273480				
EtFOSE	10.760	630.0 -> 59.0	2672098	47.89	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	233991	4.97	µg/L		99
		512.0 -> 219.0	156715				
MeFOSE	10.500	616.0 -> 59.0	2088903	49.04	µg/L	m	100
PFDoDS	9.533	699.0 -> 80.0	88025	4.72	µg/L		97
		699.0 -> 99.0	54825				
NFDHA	5.357	295.0 -> 201.0	136289	9.70	µg/L		97
		201.0 -> 85.0	666507				
		295.0 -> 85.0	37791				
PFMBA	4.723	279.0 -> 85.0	476297	9.94	µg/L		100
PFMPA	3.498	229.0 -> 85.0	404983	9.89	µg/L		100
PFEESA	5.849	315.0 -> 135.0	1018814	8.55	µg/L		100
		315.0 -> 69.0	84419				

Perfluorinated Compounds by LC/MS/MS

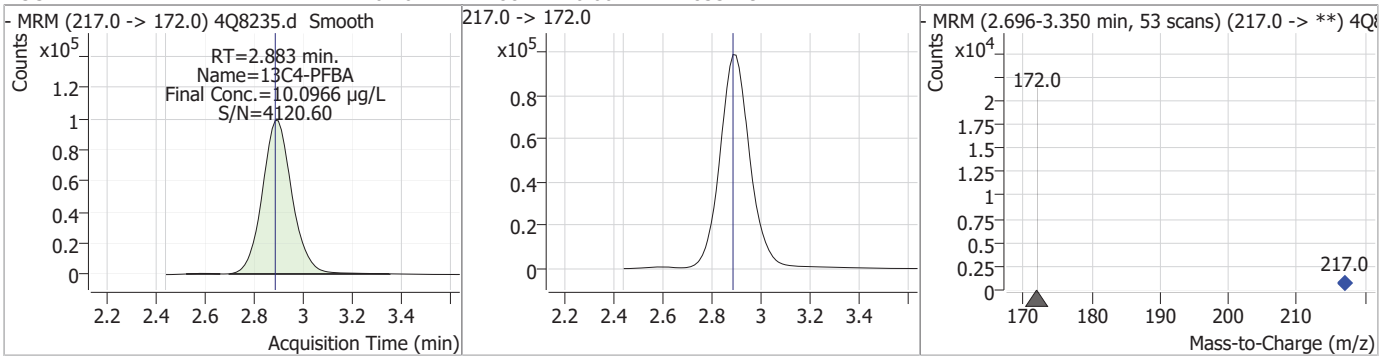
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

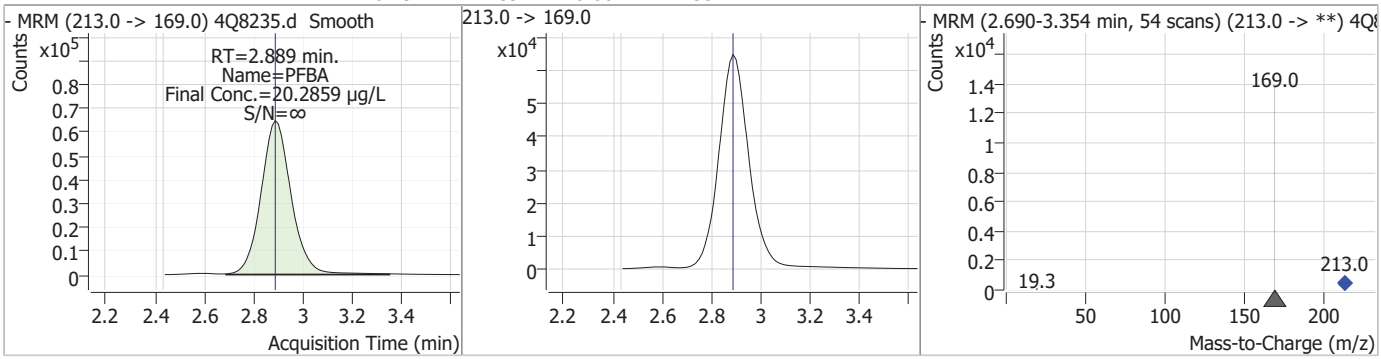
Perfluorinated Compounds by LC/MS/MS



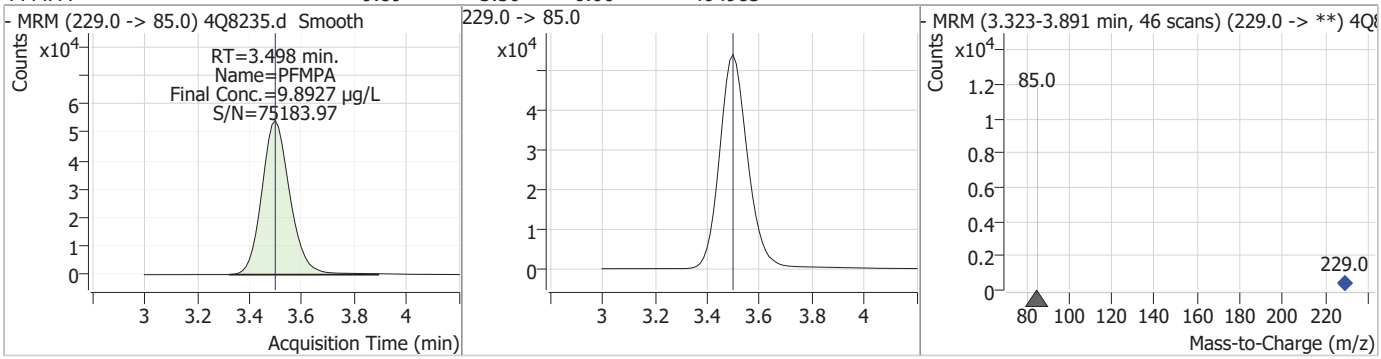
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.10	2.88	0.00	833749				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	20.29	2.89	0.00	552112				

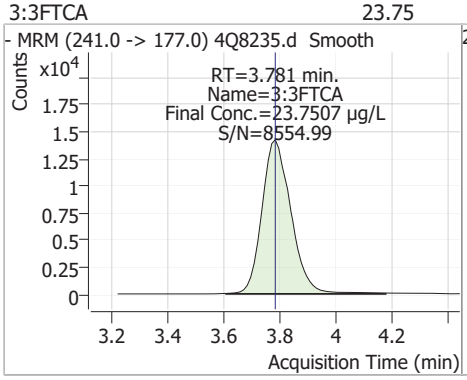


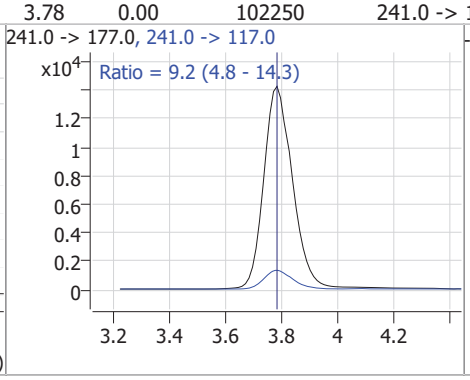
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	9.89	3.50	0.00	404983				

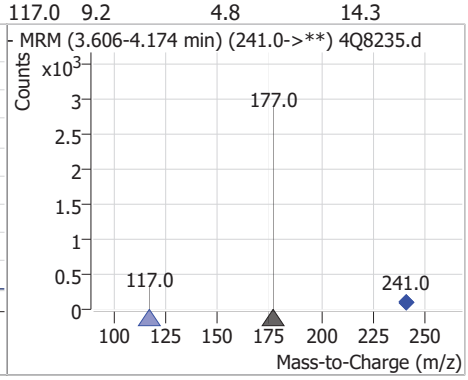


Perfluorinated Compounds by LC/MS/MS

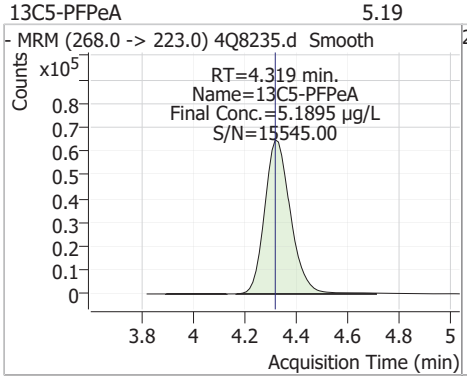
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	23.75	3.78	0.00	102250	241.0 -> 117.0	9.2	4.8	14.3

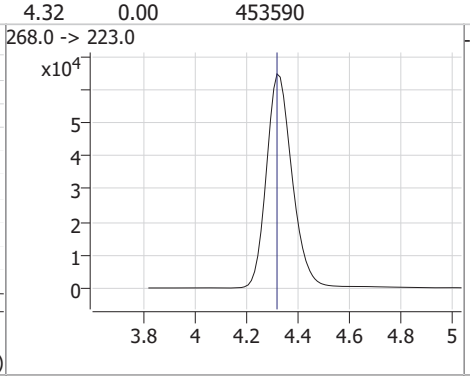


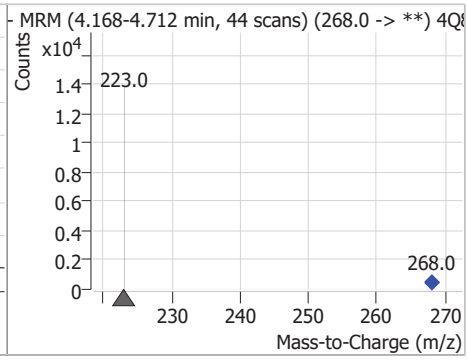




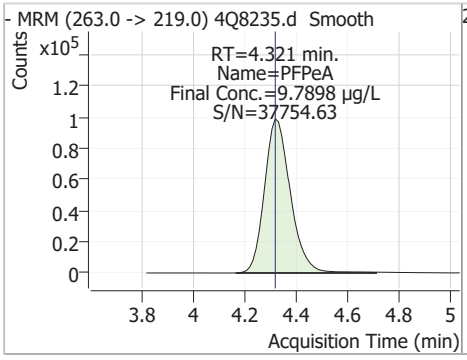
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.19	4.32	0.00	453590				

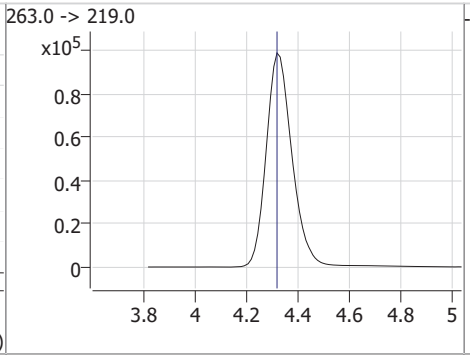


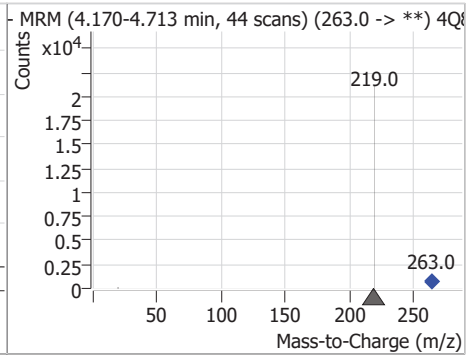




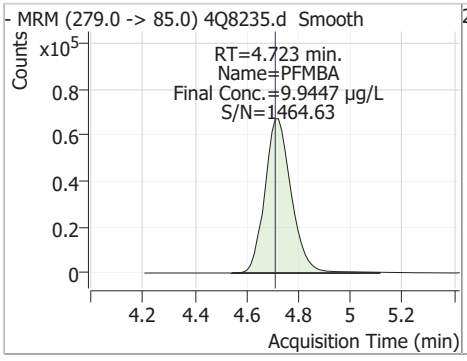
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	9.79	4.32	0.00	691922				

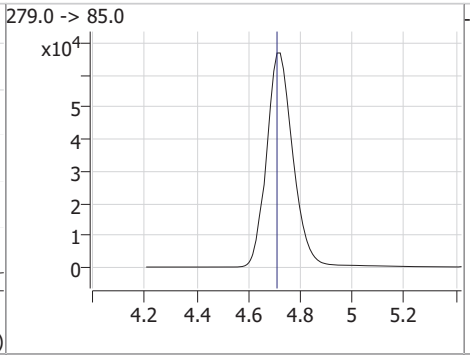


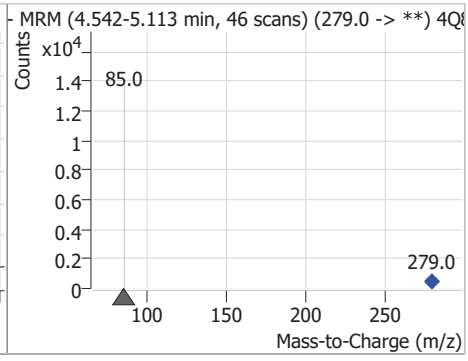




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	9.94	4.72	0.01	476297				







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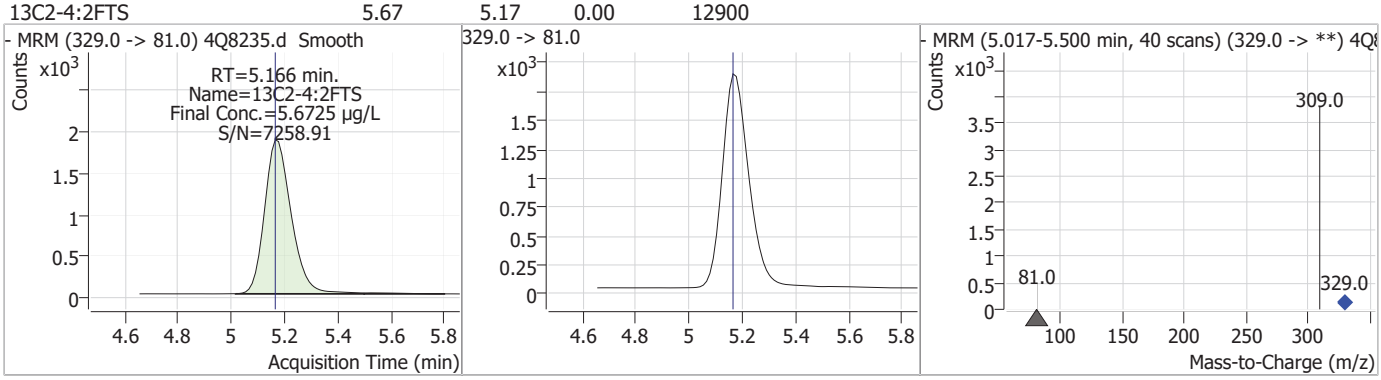
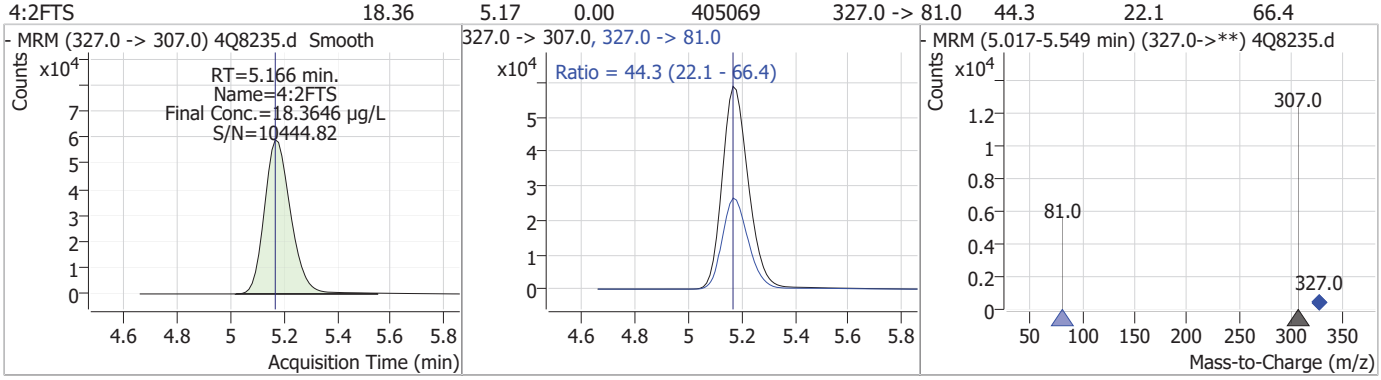
Perfluorinated Compounds by LC/MS/MS

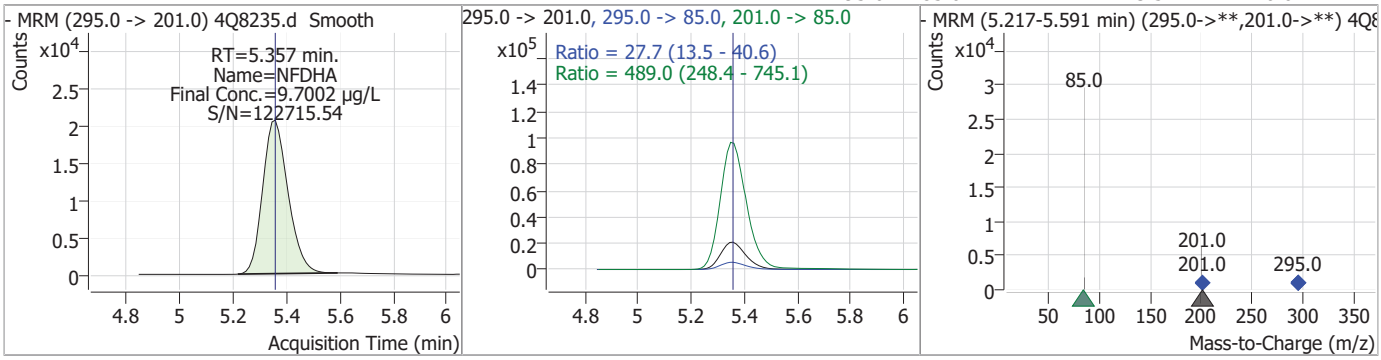
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.67	5.17	0.00	12900				



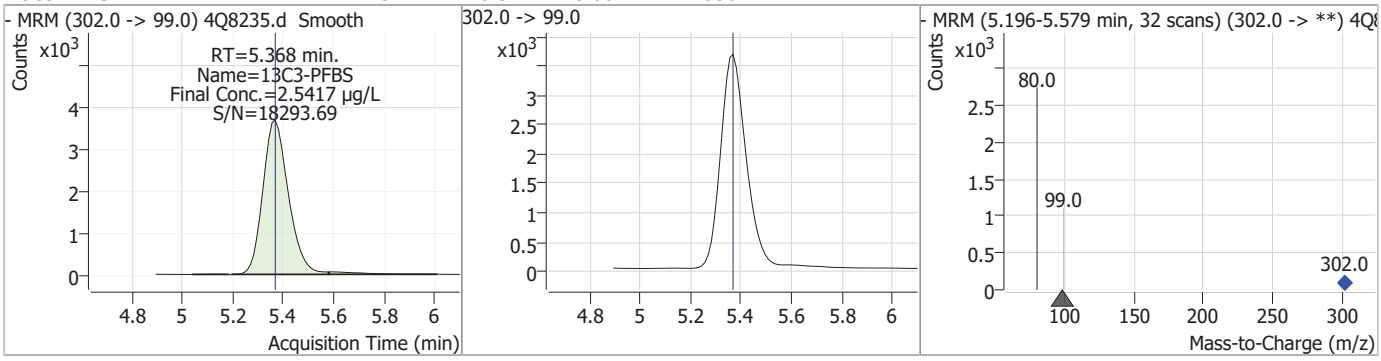
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	18.36	5.17	0.00	405069	327.0 -> 81.0	44.3	22.1	66.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	9.70	5.36	0.00	136289	201.0 -> 85.0	489.0	248.4	745.1
					295.0 -> 85.0	27.7	13.5	40.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.54	5.37	0.00	25562				



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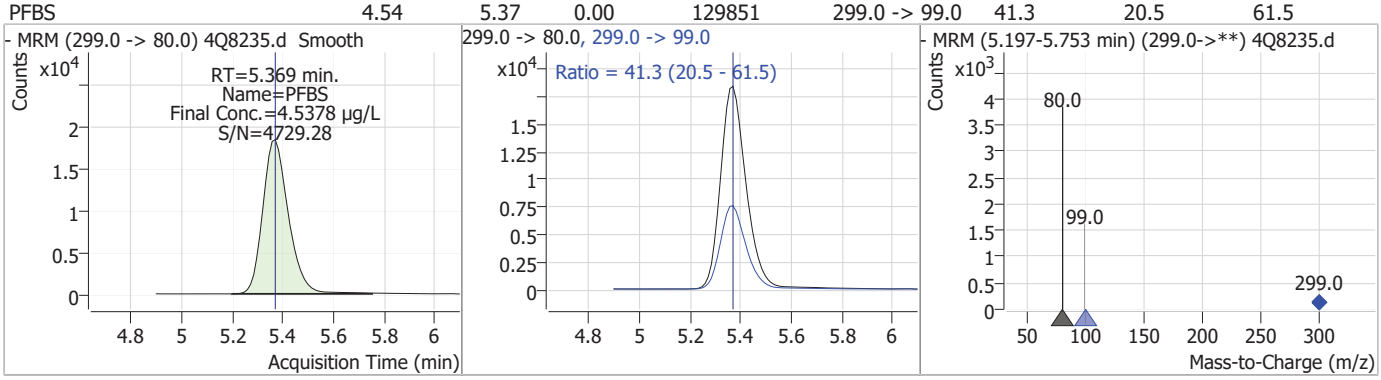
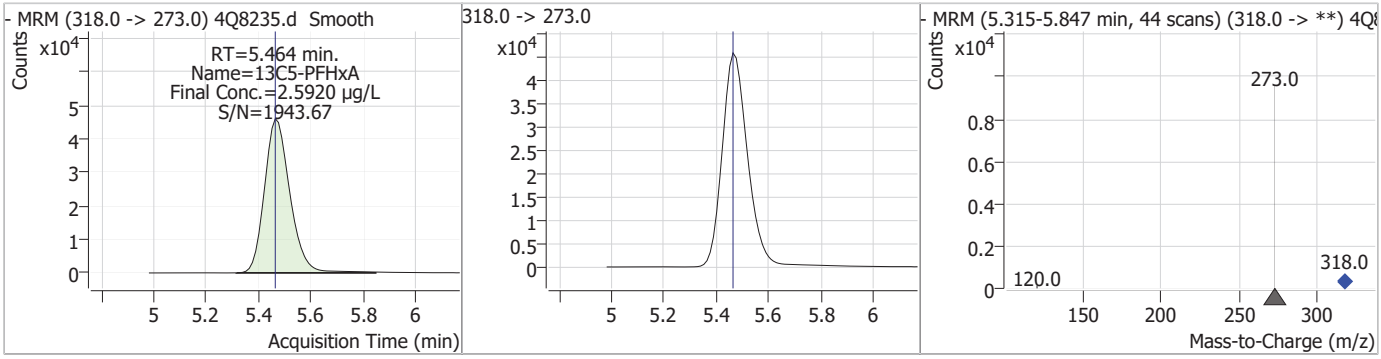
Perfluorinated Compounds by LC/MS/MS

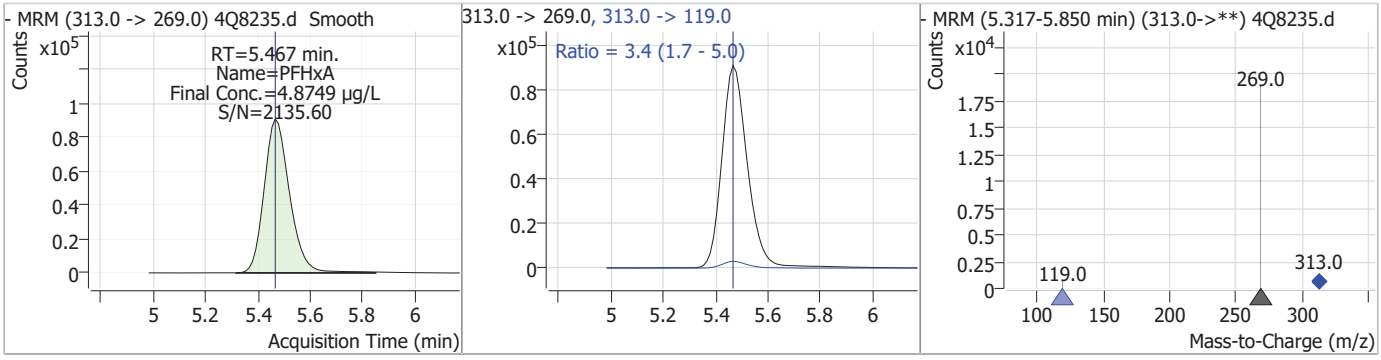
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	4.54	5.37	0.00	129851	299.0 -> 99.0	41.3	20.5	61.5



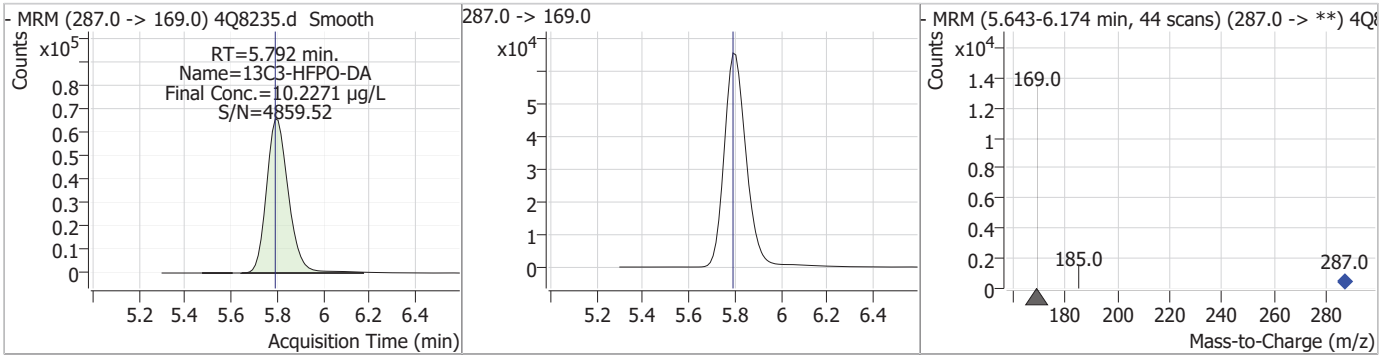
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.59	5.46	0.00	310342				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	4.87	5.47	0.00	613074	313.0 -> 119.0	3.4	1.7	5.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.23	5.79	0.00	436271				



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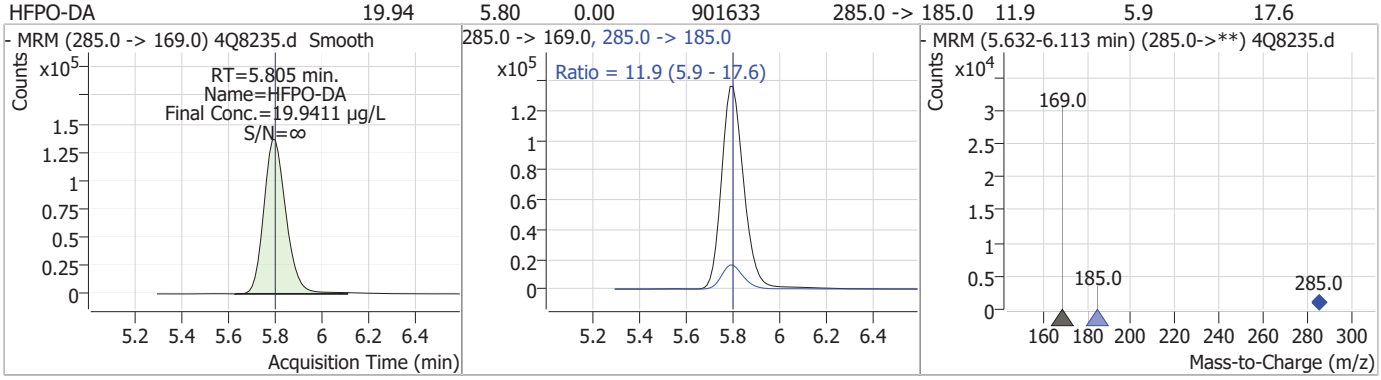
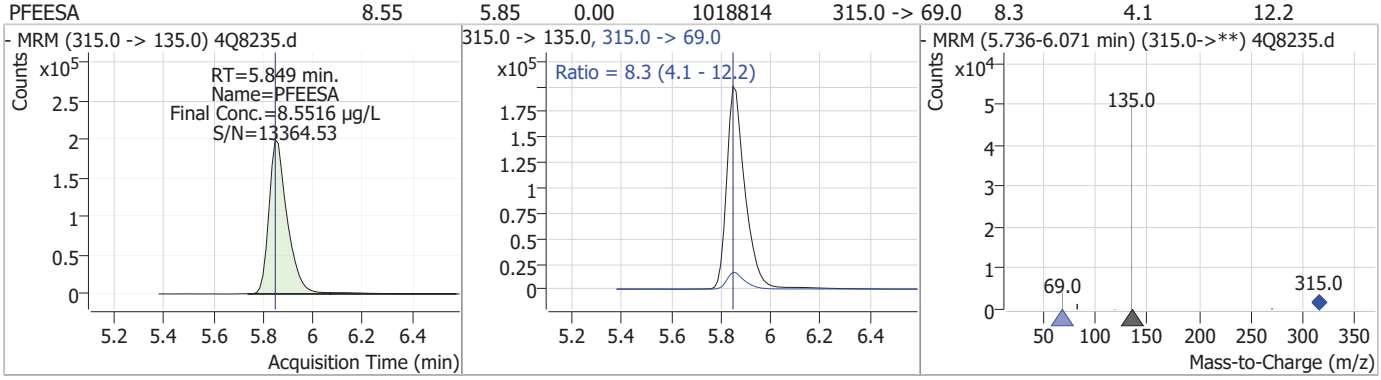
Perfluorinated Compounds by LC/MS/MS

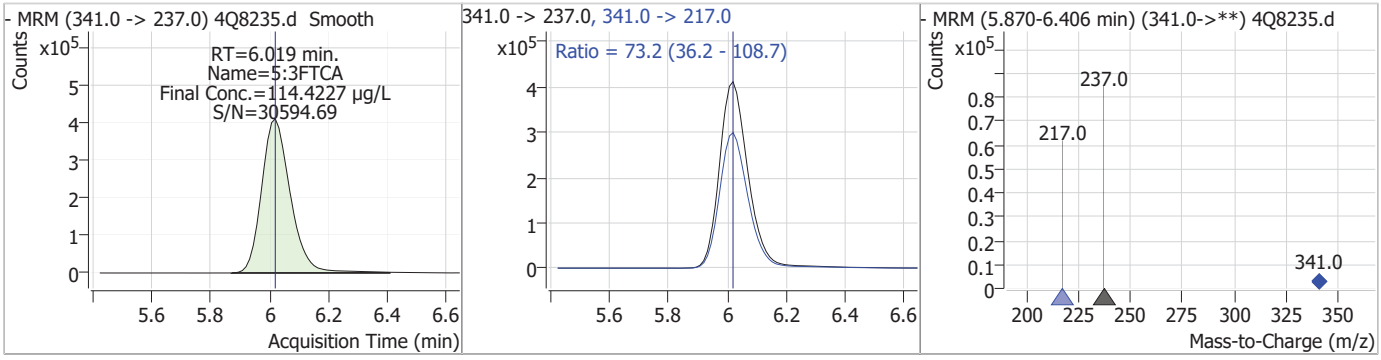
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	19.94	5.80	0.00	901633	285.0 -> 185.0	11.9	5.9	17.6



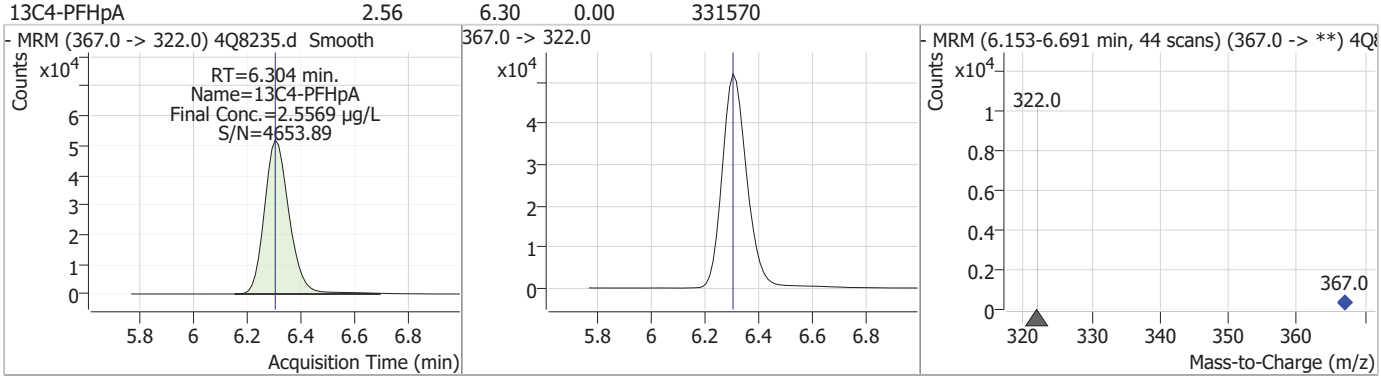
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	8.55	5.85	0.00	1018814	315.0 -> 69.0	8.3	4.1	12.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	114.42	6.02	0.00	2781701	341.0 -> 217.0	73.2	36.2	108.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.56	6.30	0.00	331570				



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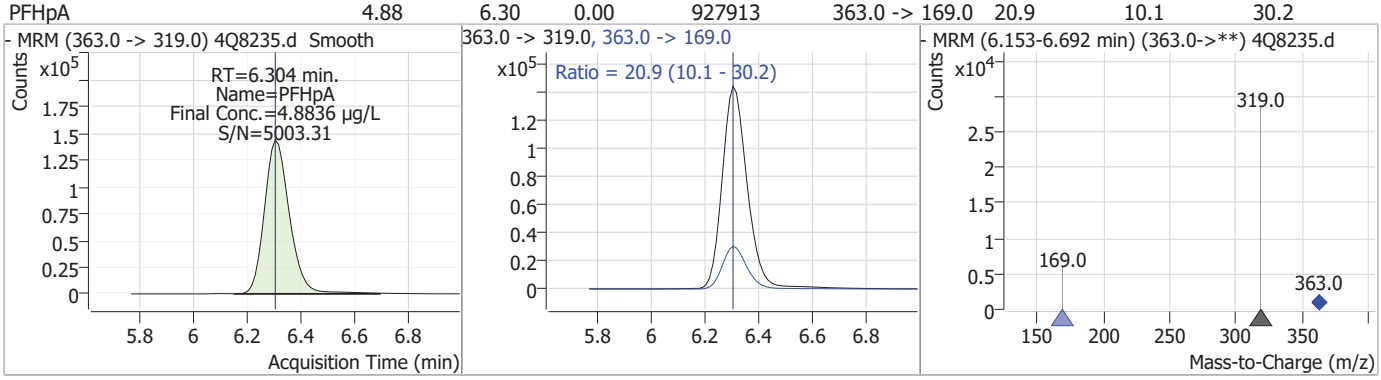
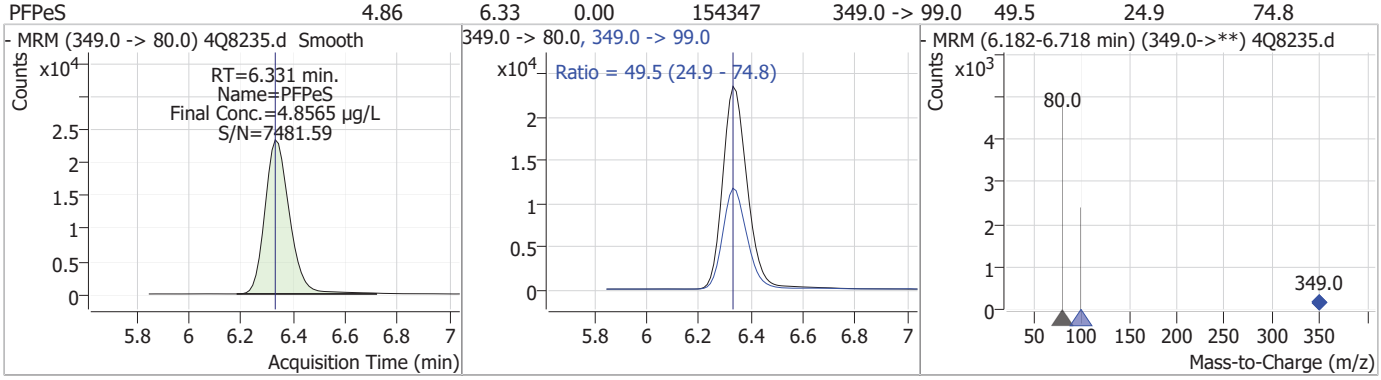
Perfluorinated Compounds by LC/MS/MS

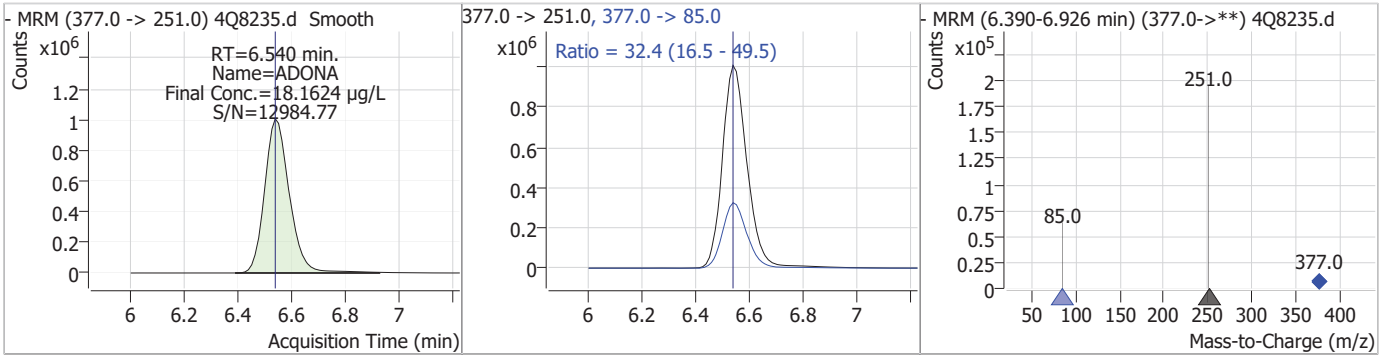
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	4.88	6.30	0.00	927913	363.0 -> 169.0	20.9	10.1	30.2



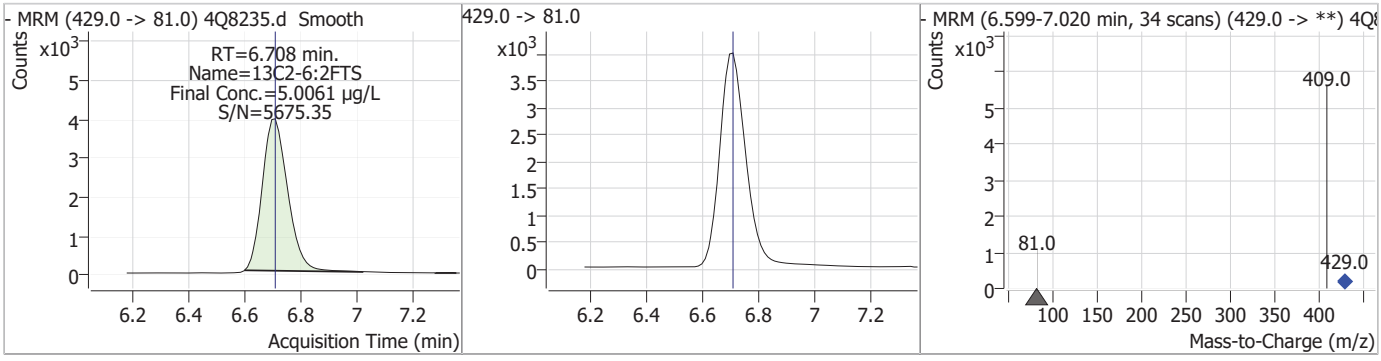
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	4.86	6.33	0.00	154347	349.0 -> 99.0	49.5	24.9	74.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	18.16	6.54	0.00	6402962	377.0 -> 85.0	32.4	16.5	49.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.01	6.71	0.00	24640				



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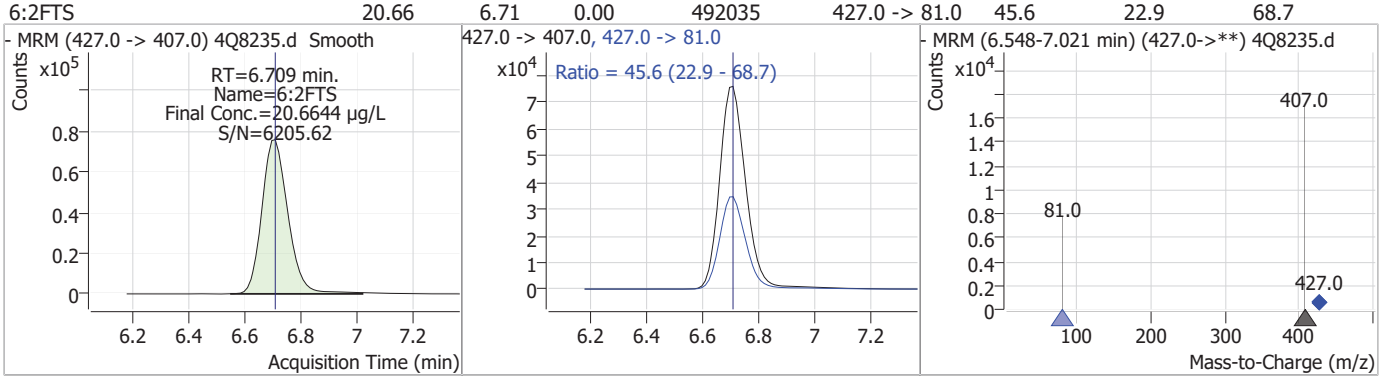
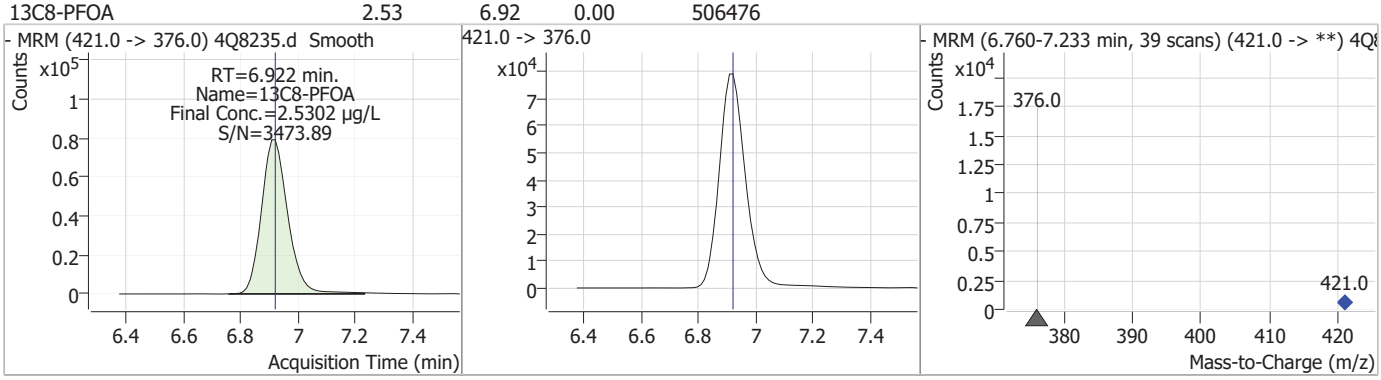
Perfluorinated Compounds by LC/MS/MS

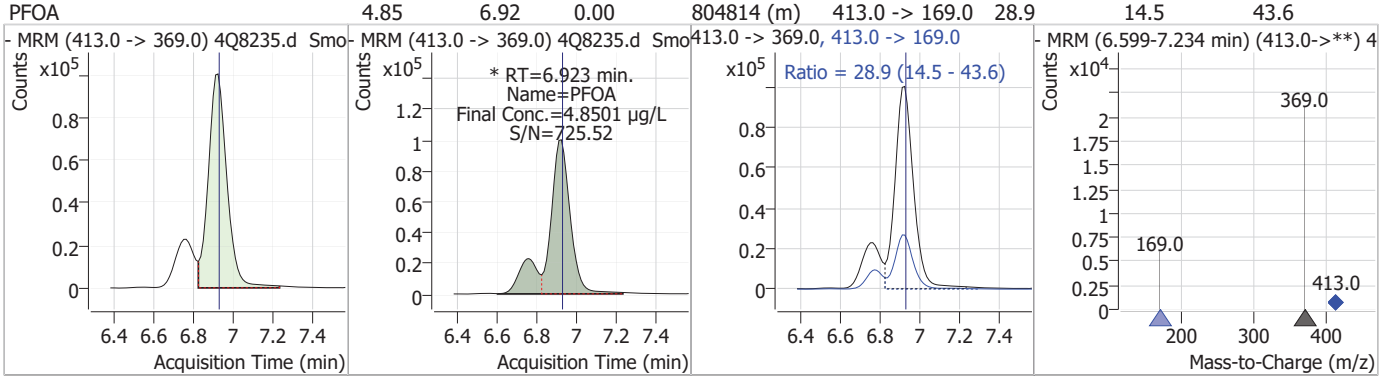
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	20.66	6.71	0.00	492035	427.0 -> 81.0	45.6	22.9	68.7



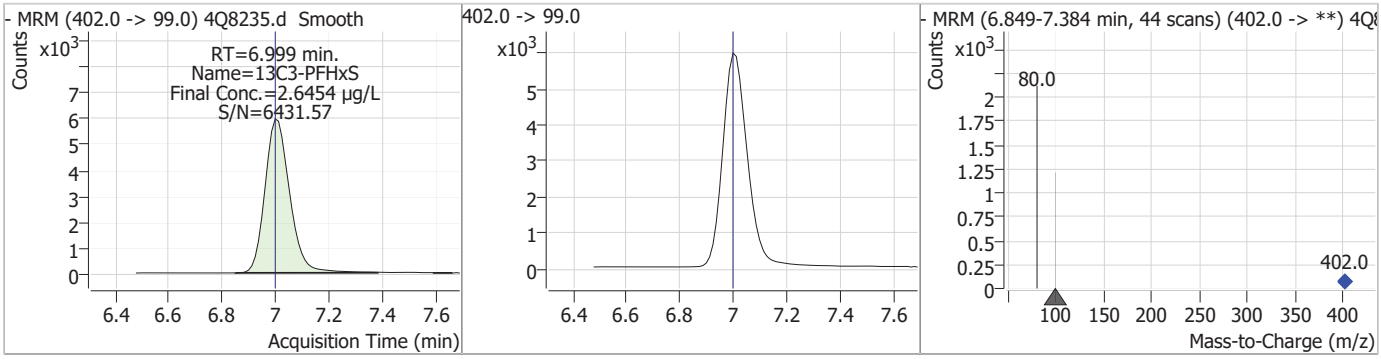
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.53	6.92	0.00	506476				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	4.85	6.92	0.00	804814 (m)	413.0 -> 169.0	28.9	14.5	43.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.65	7.00	0.00	38220				



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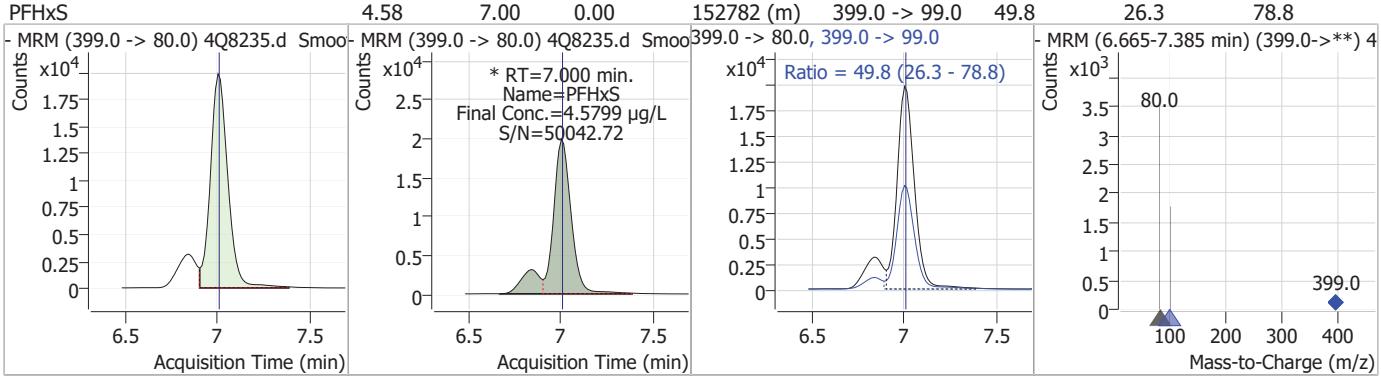
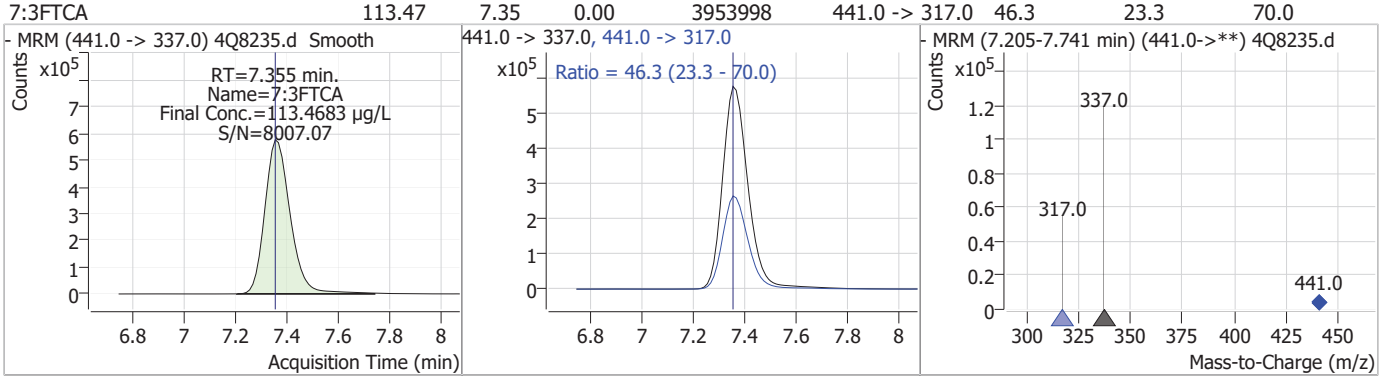
Perfluorinated Compounds by LC/MS/MS

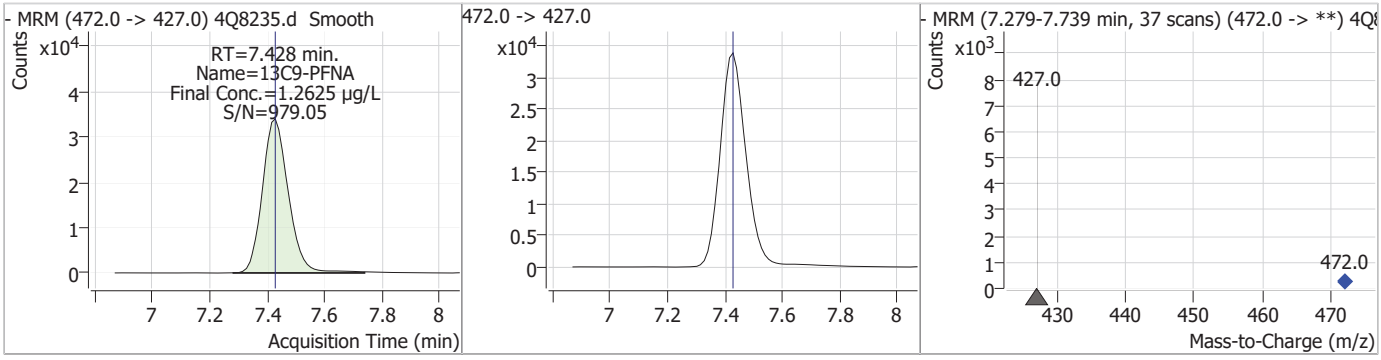
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	4.58	7.00	0.00	152782 (m)	399.0 -> 99.0	49.8	26.3	78.8



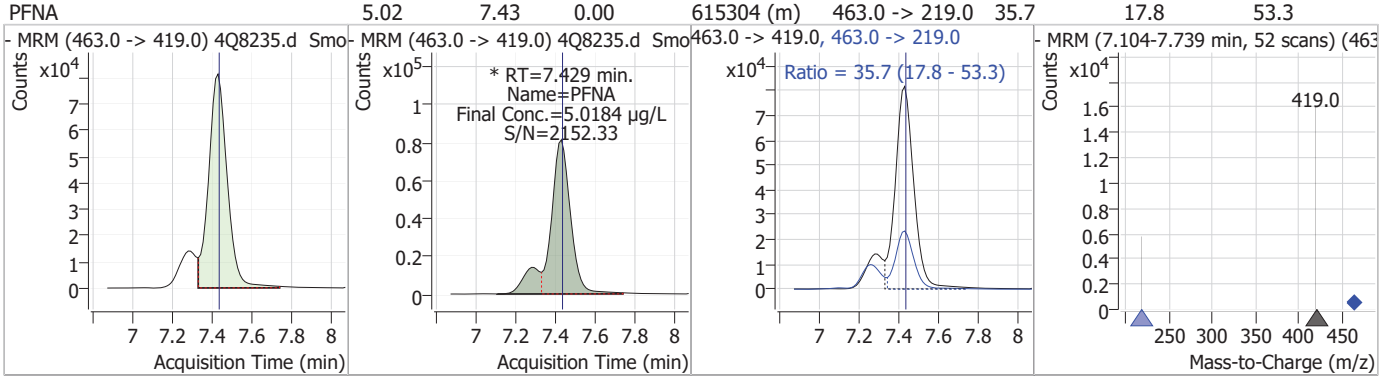
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	113.47	7.35	0.00	3953998	441.0 -> 317.0	46.3	23.3	70.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.26	7.43	0.00	212560				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	5.02	7.43	0.00	615304 (m)	463.0 -> 219.0	35.7	17.8	53.3



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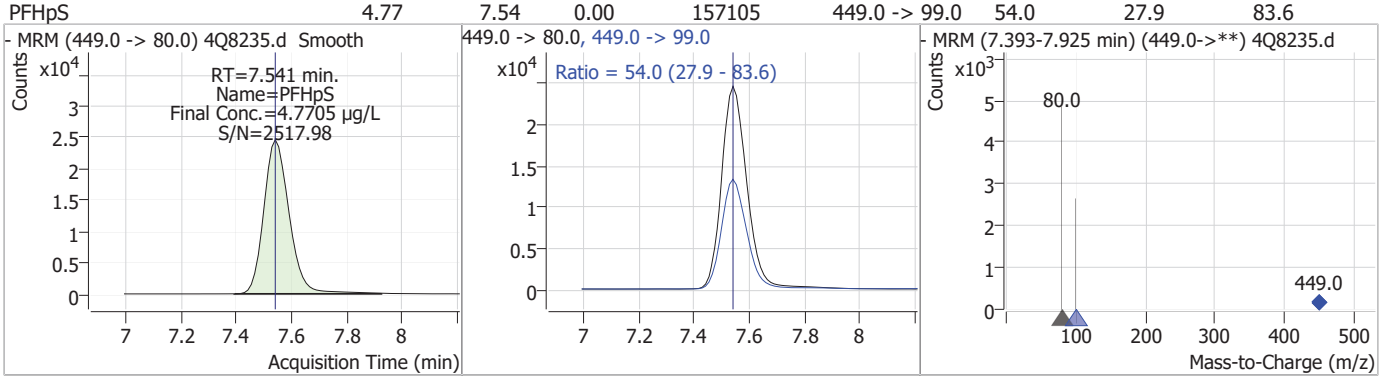
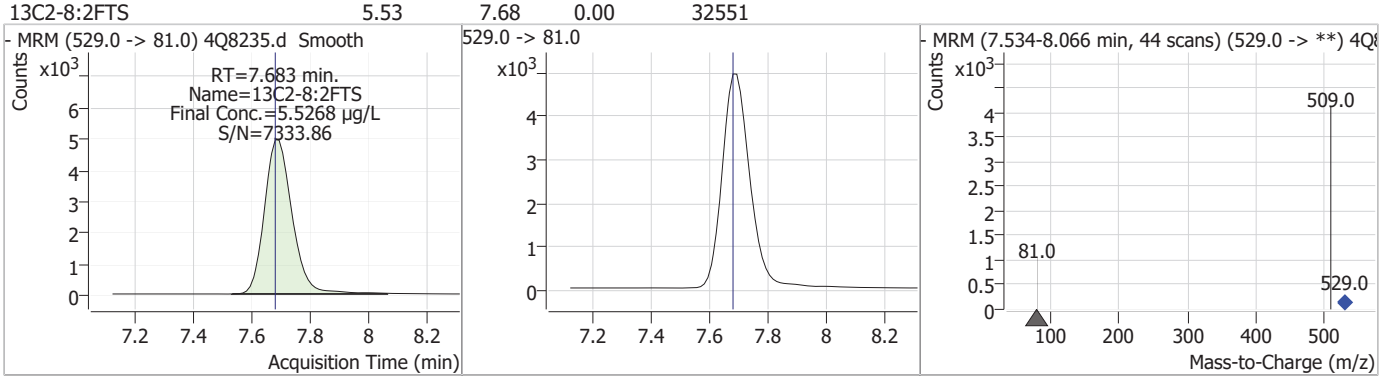
Perfluorinated Compounds by LC/MS/MS

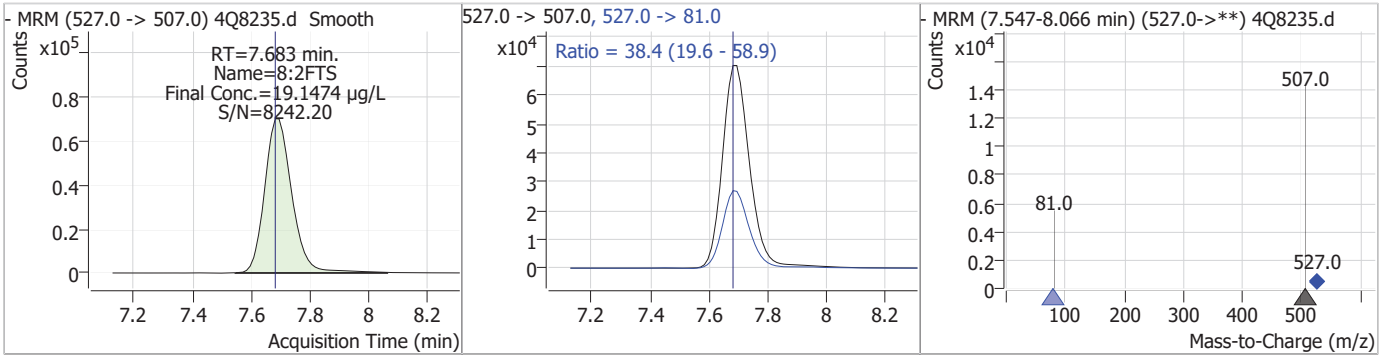
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	4.77	7.54	0.00	157105	449.0 -> 99.0	54.0	27.9	83.6



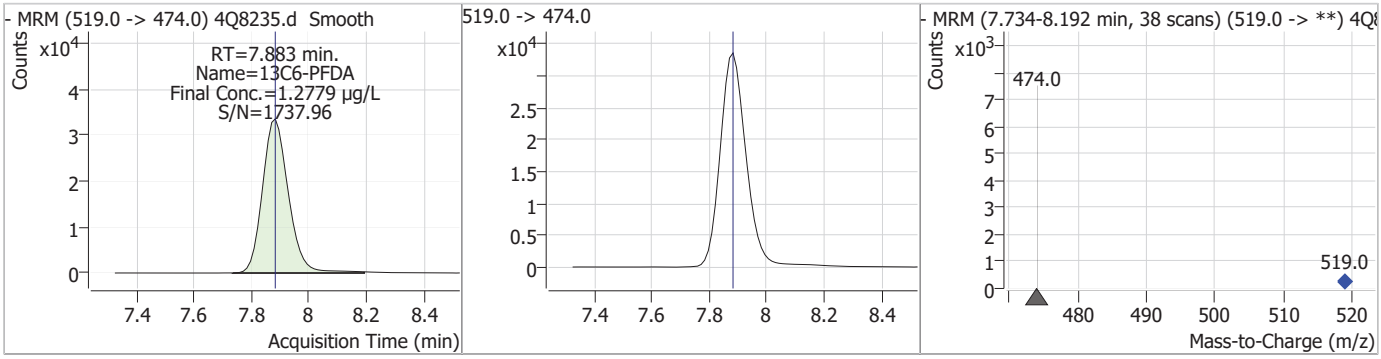
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.53	7.68	0.00	32551				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	19.15	7.68	0.00	454277	527.0 -> 81.0	38.4	19.6	58.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.28	7.88	0.00	209565				



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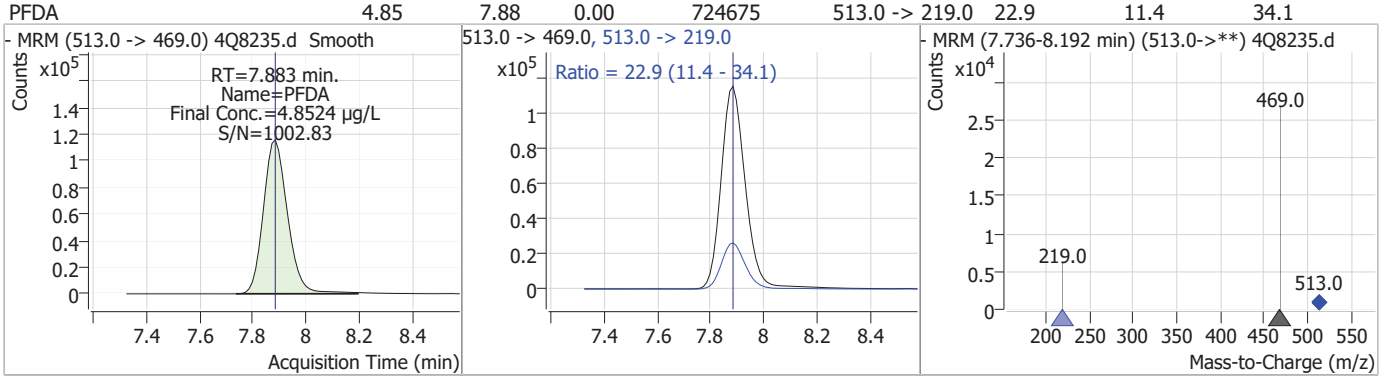
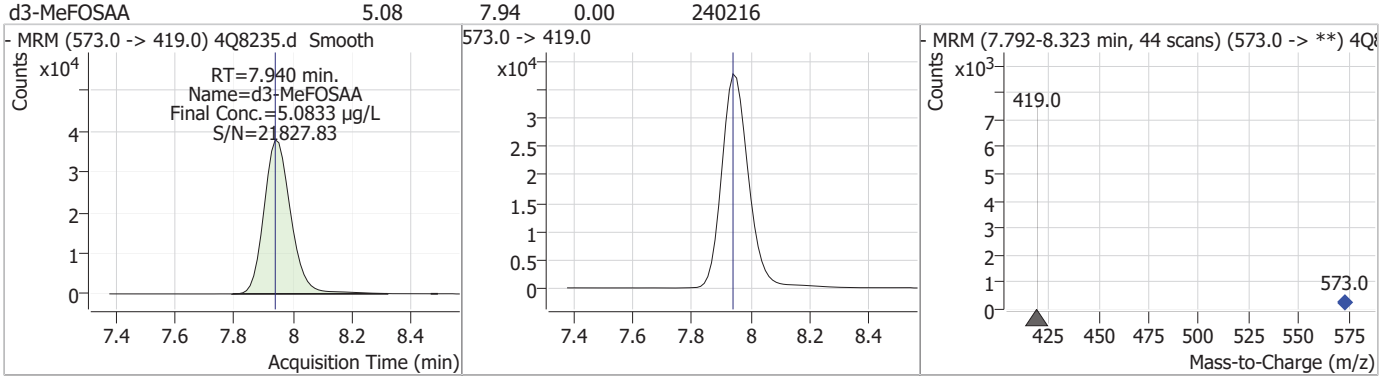
Perfluorinated Compounds by LC/MS/MS

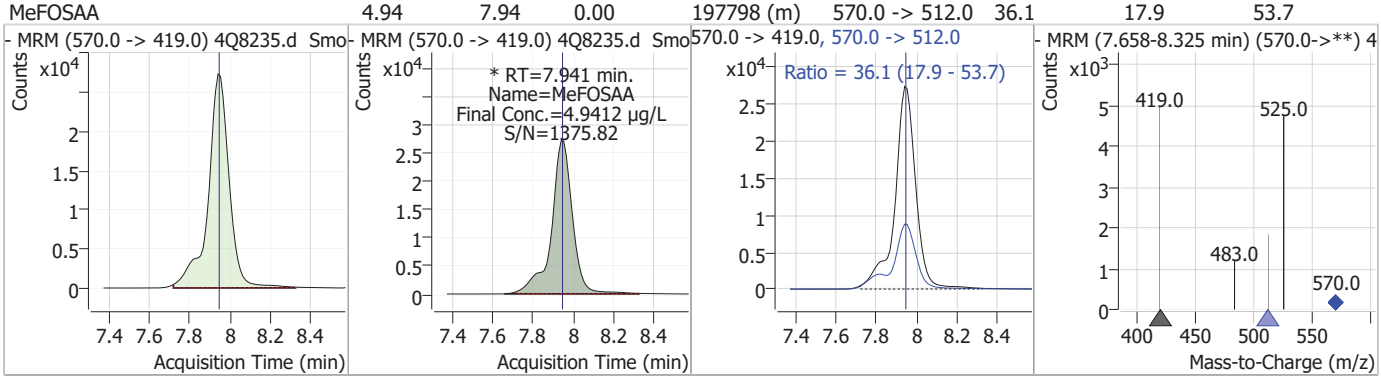
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	4.85	7.88	0.00	724675	513.0 -> 219.0	22.9	11.4	34.1



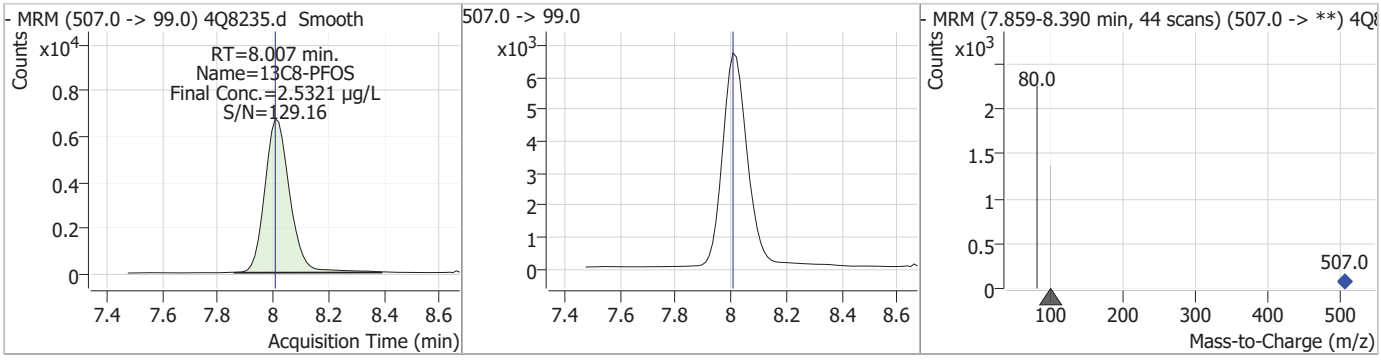
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.08	7.94	0.00	240216				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	4.94	7.94	0.00	197798 (m)	570.0 -> 512.0	36.1	17.9	53.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.53	8.01	0.00	42273				



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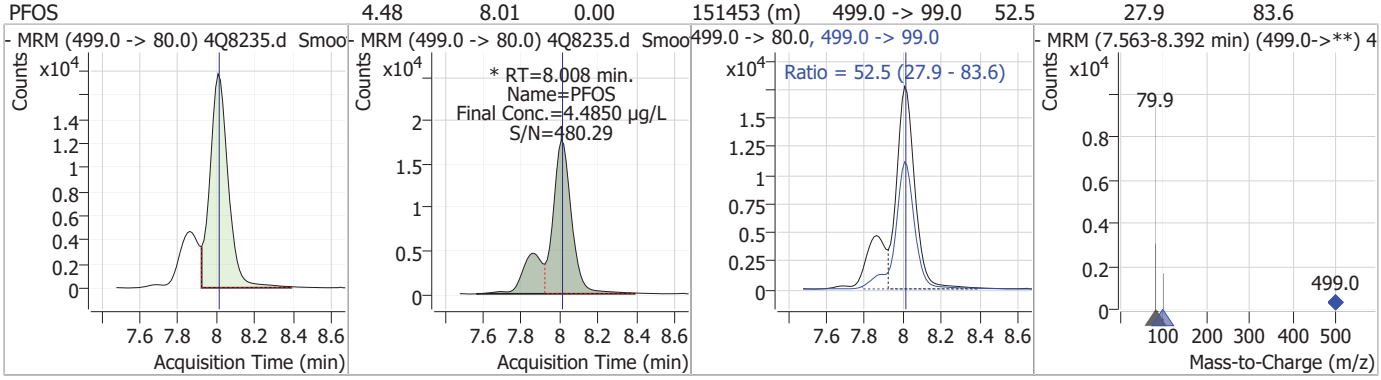
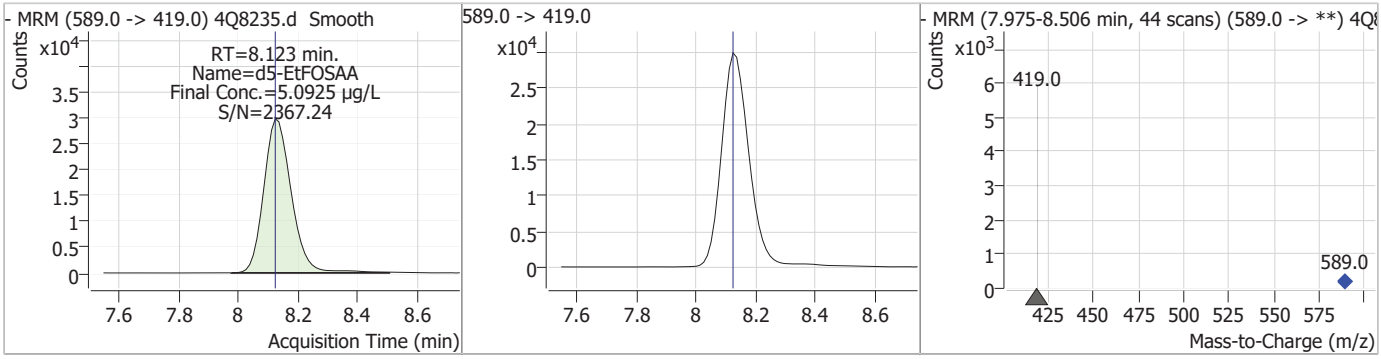
Perfluorinated Compounds by LC/MS/MS

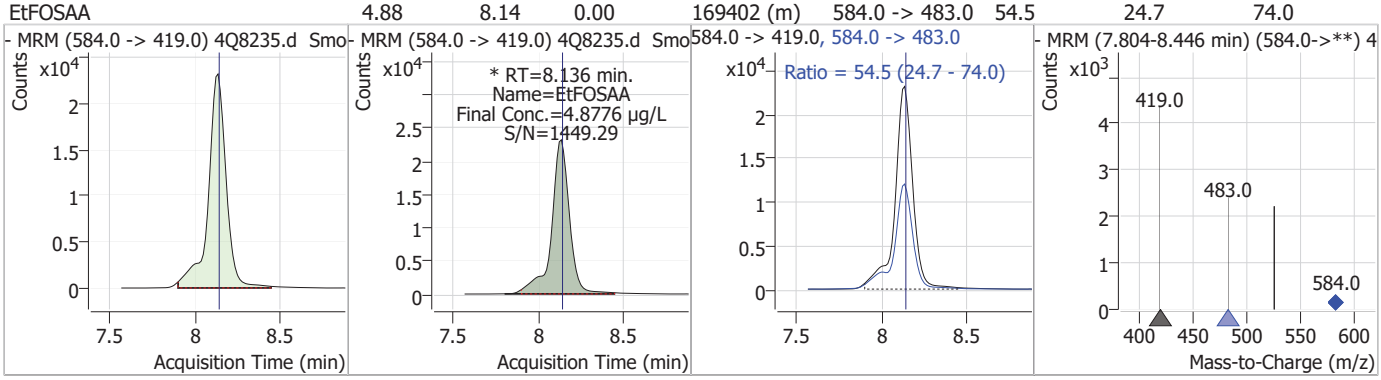
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	4.48	8.01	0.00	151453 (m)	499.0 -> 99.0	52.5	27.9	83.6



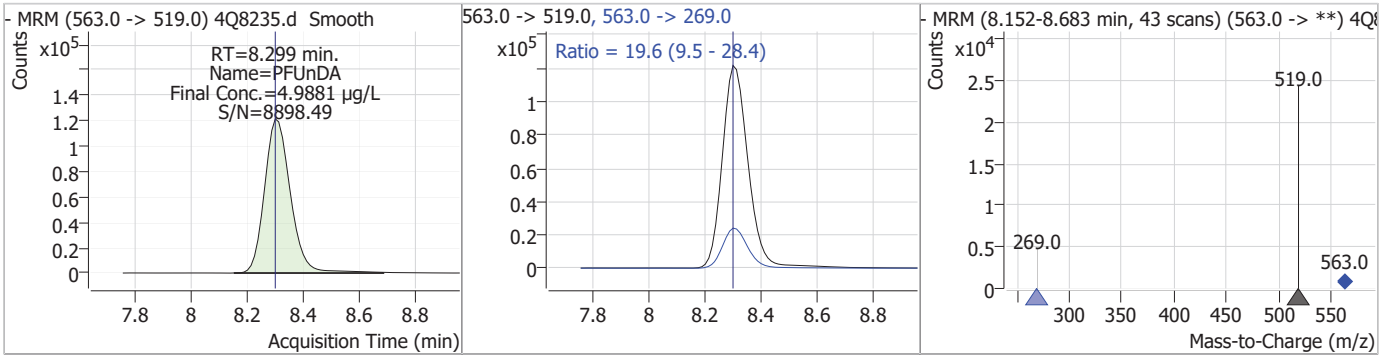
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.09	8.12	0.00	192144				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	4.88	8.14	0.00	169402 (m)	584.0 -> 483.0	54.5	24.7	74.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	4.99	8.30	0.00	775407	563.0 -> 269.0	19.6	9.5	28.4



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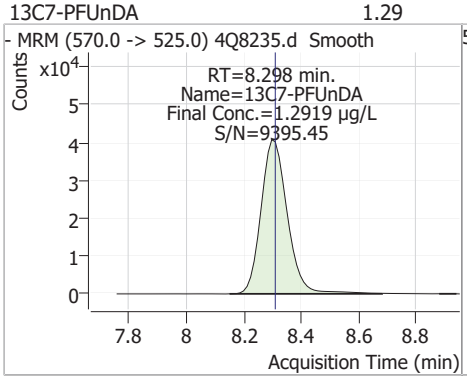
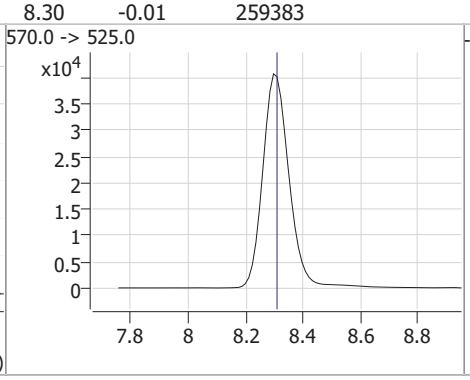
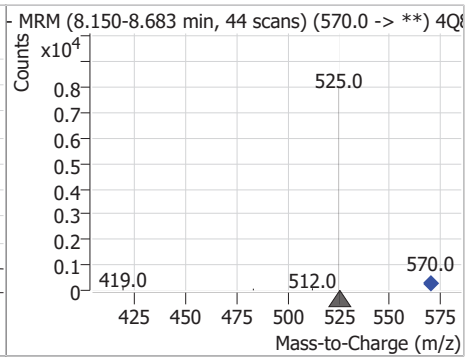
Perfluorinated Compounds by LC/MS/MS

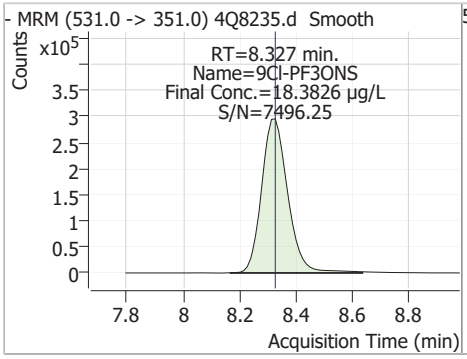
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.29	8.30	-0.01	259383				

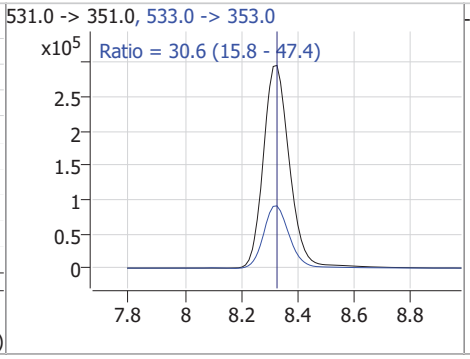


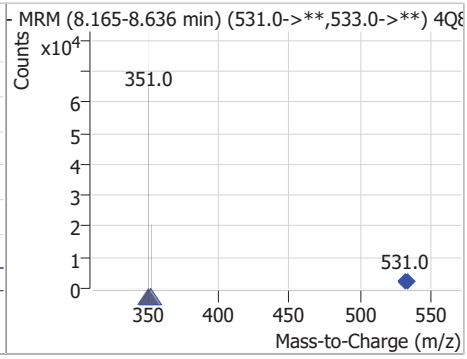




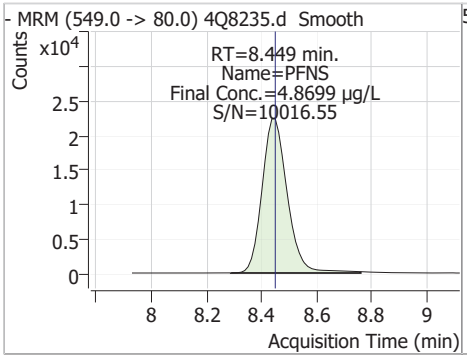
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	18.38	8.33	0.00	1903051	533.0 -> 353.0	30.6	15.8	47.4

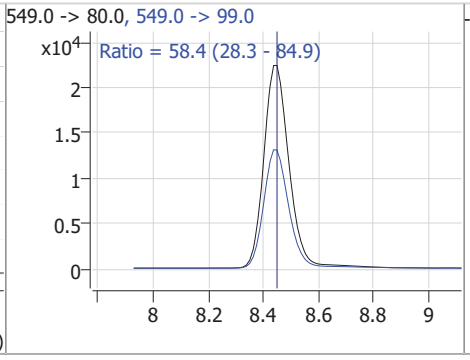


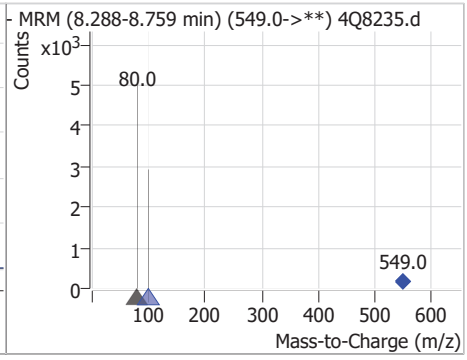




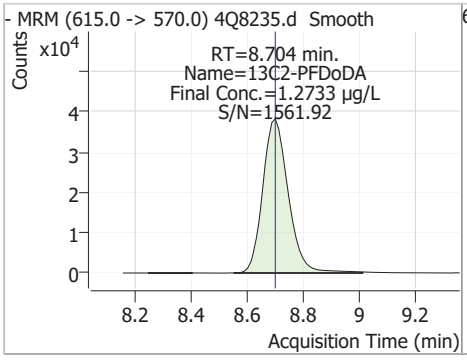
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	4.87	8.45	0.00	142122	549.0 -> 99.0	58.4	28.3	84.9

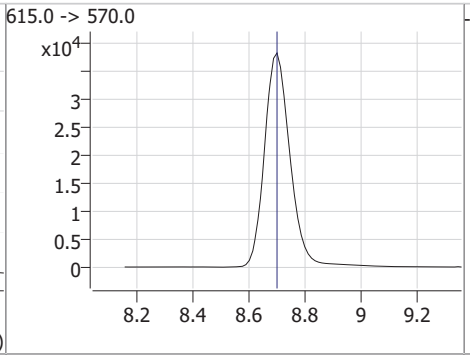


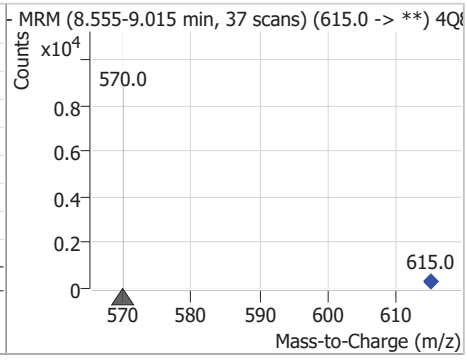




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.27	8.70	0.00	241235				







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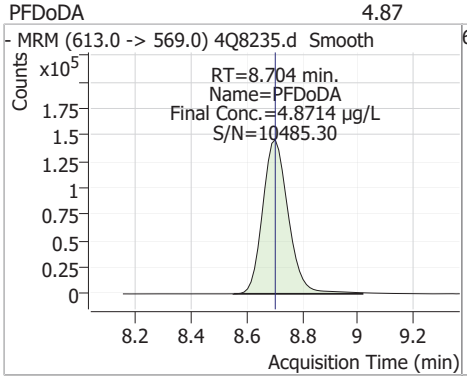
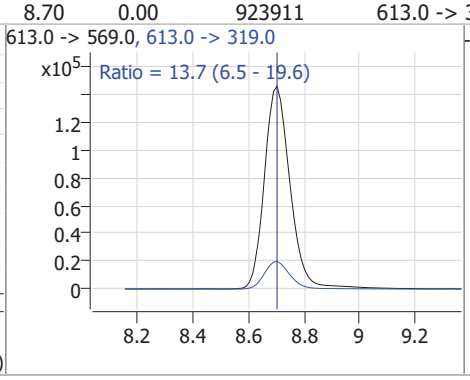
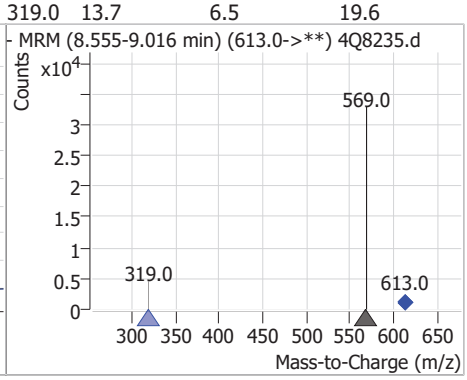
Perfluorinated Compounds by LC/MS/MS

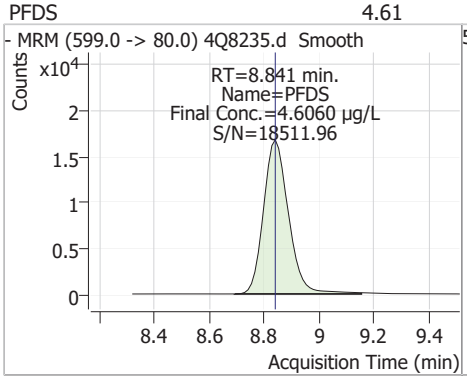
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	4.87	8.70	0.00	923911	613.0 -> 319.0	13.7	6.5	19.6

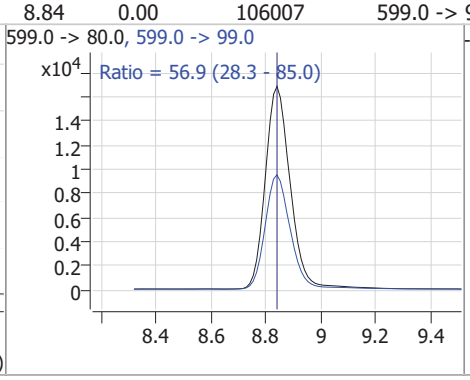


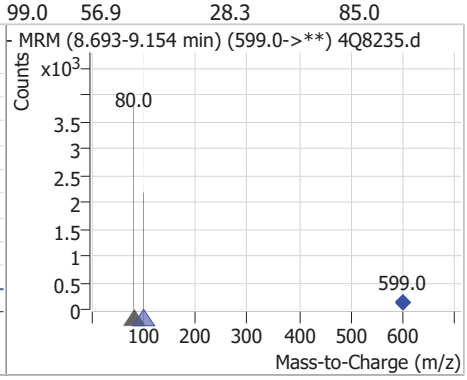




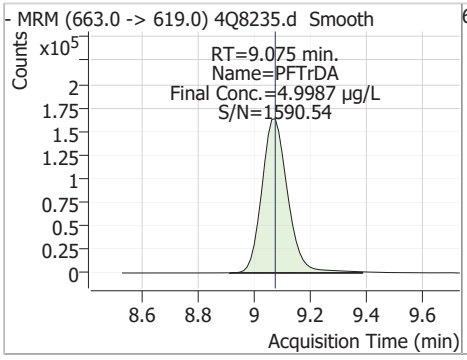
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	4.61	8.84	0.00	106007	599.0 -> 99.0	56.9	28.3	85.0

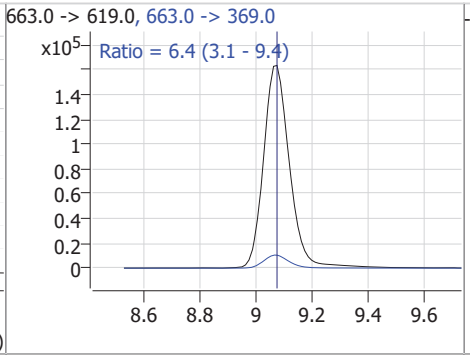


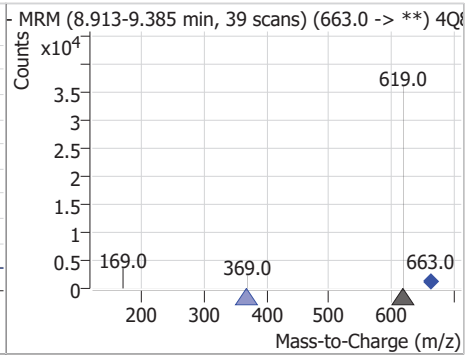




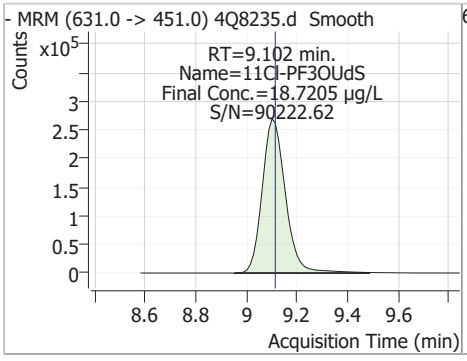
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	5.00	9.07	0.00	1044376	663.0 -> 369.0	6.4	3.1	9.4

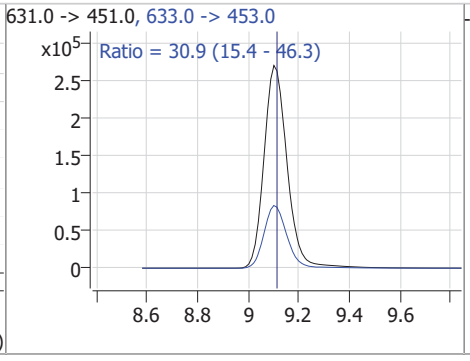


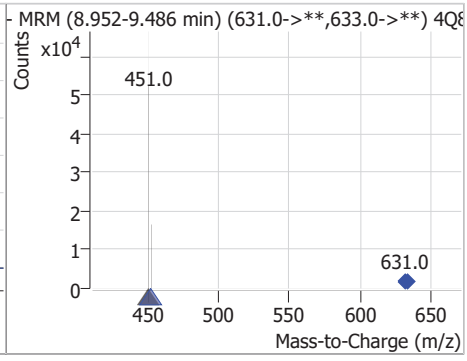




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	18.72	9.10	-0.01	1714496	633.0 -> 453.0	30.9	15.4	46.3

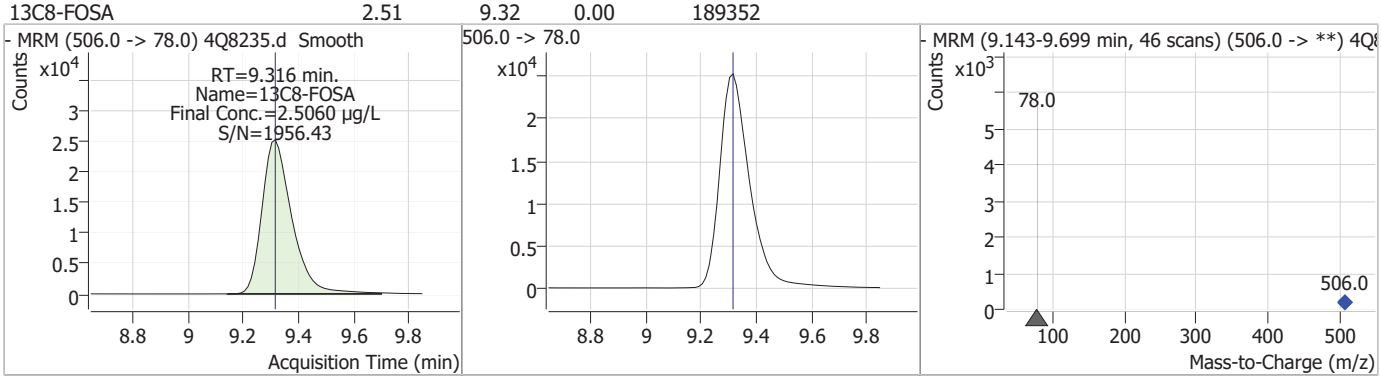




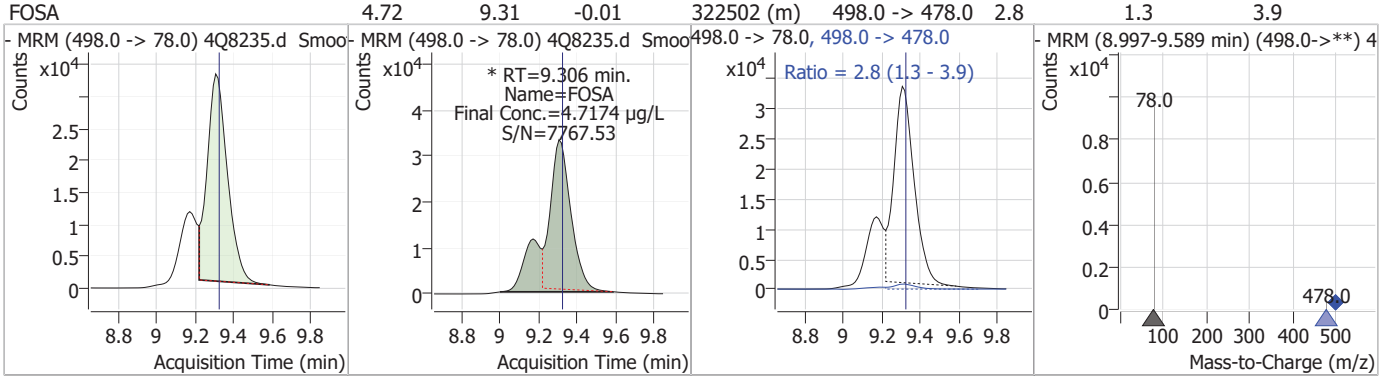


Perfluorinated Compounds by LC/MS/MS

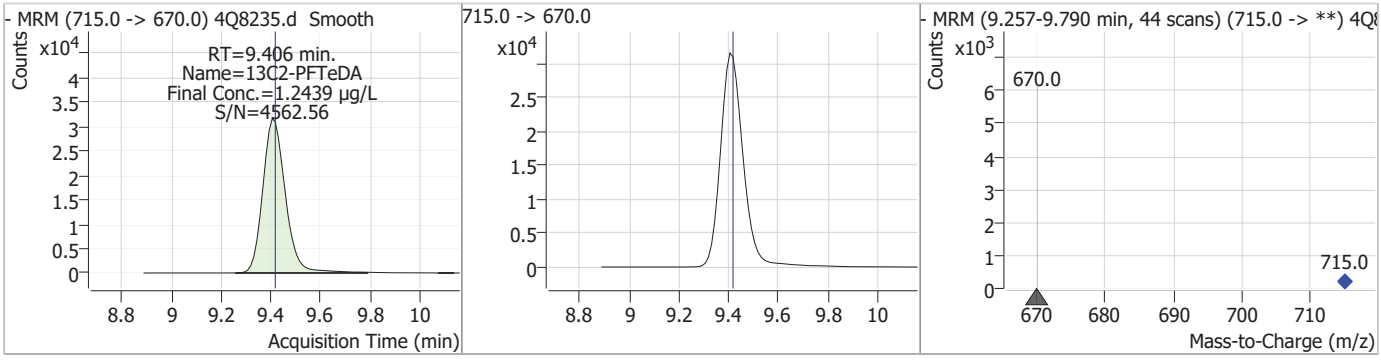
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.51	9.32	0.00	189352				



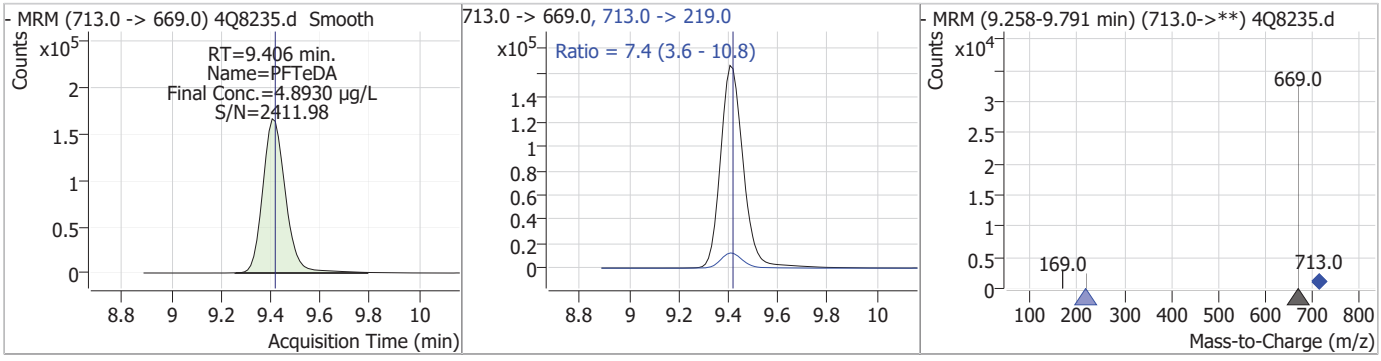
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	4.72	9.31	-0.01	322502 (m)	498.0 -> 478.0	2.8	1.3	3.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.24	9.41	-0.01	199139				

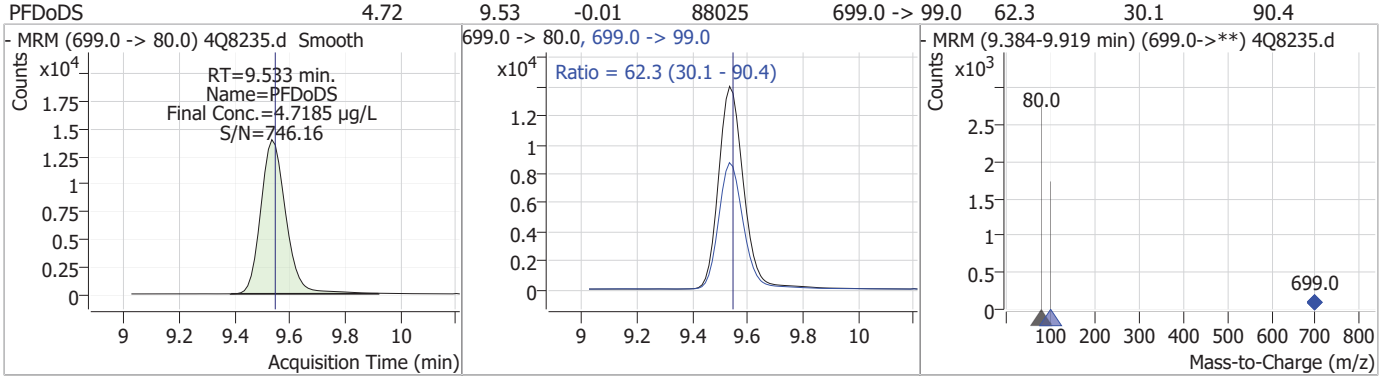


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	4.89	9.41	-0.01	1058410	713.0 -> 219.0	7.4	3.6	10.8

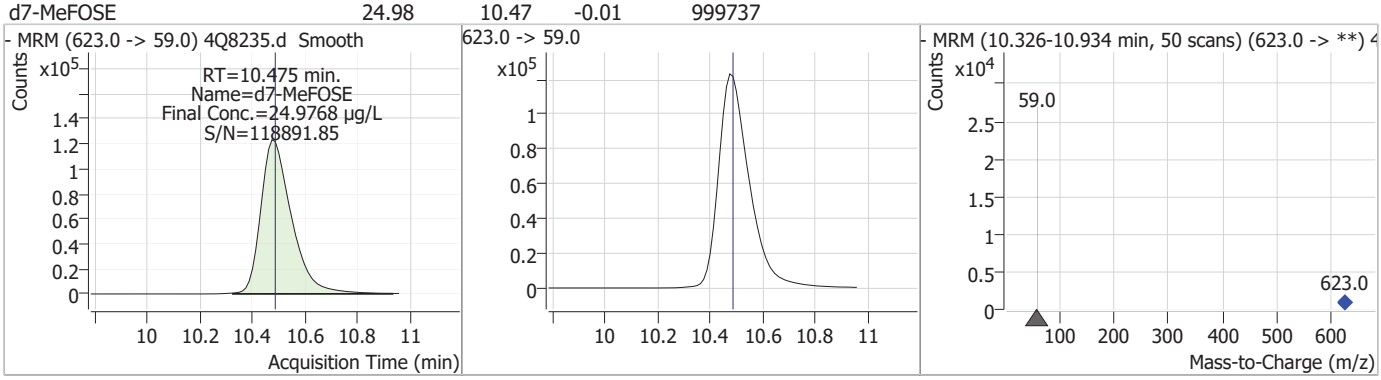


Perfluorinated Compounds by LC/MS/MS

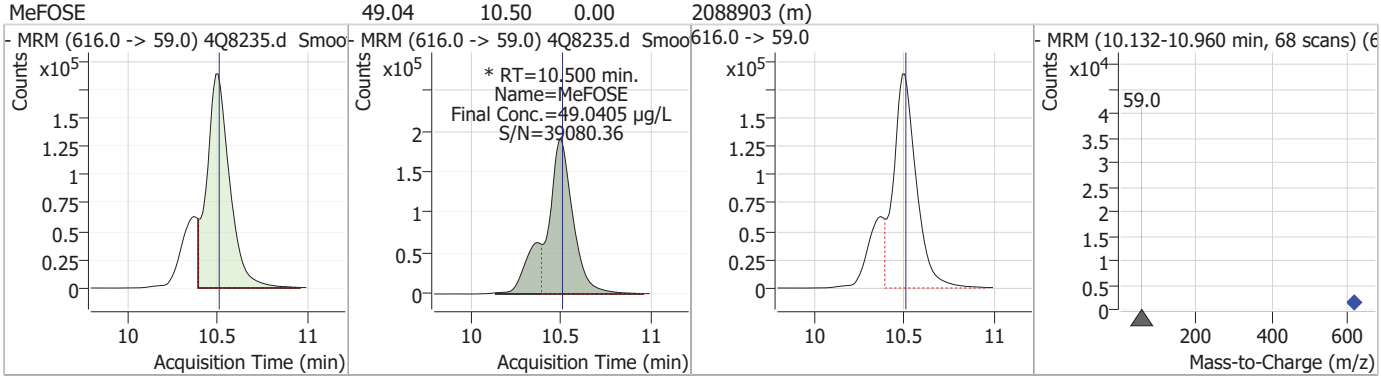
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	4.72	9.53	-0.01	88025	699.0 -> 99.0	62.3	30.1	90.4



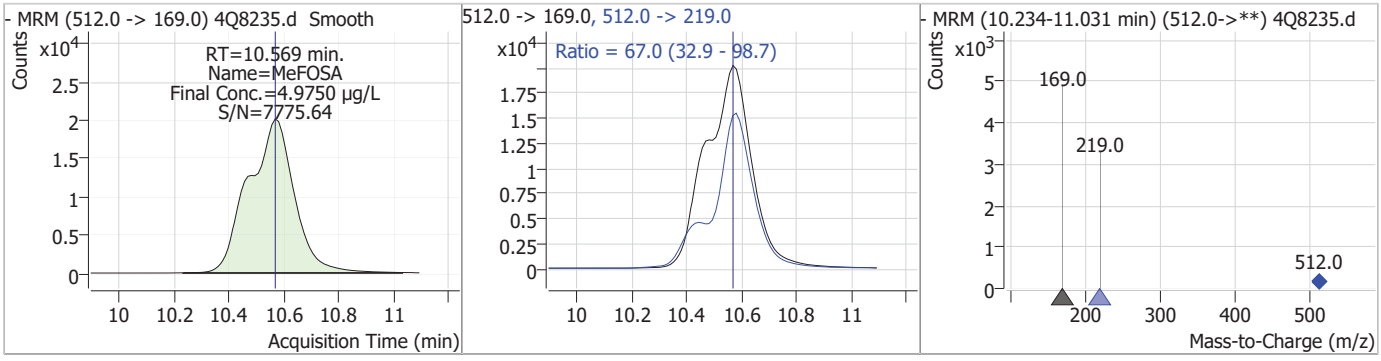
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.98	10.47	-0.01	999737				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	49.04	10.50	0.00	2088903 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	4.97	10.57	0.00	233991	512.0 -> 219.0	67.0	32.9	98.7



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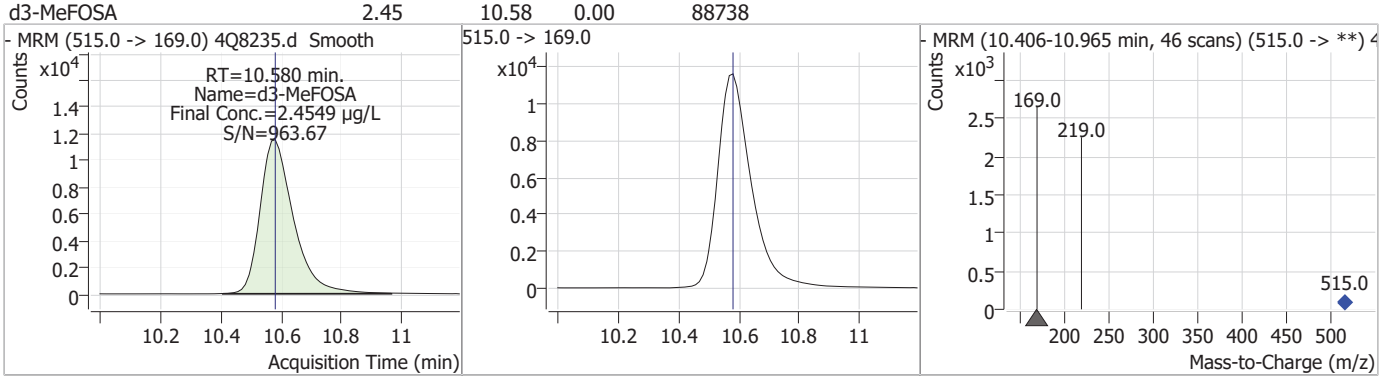
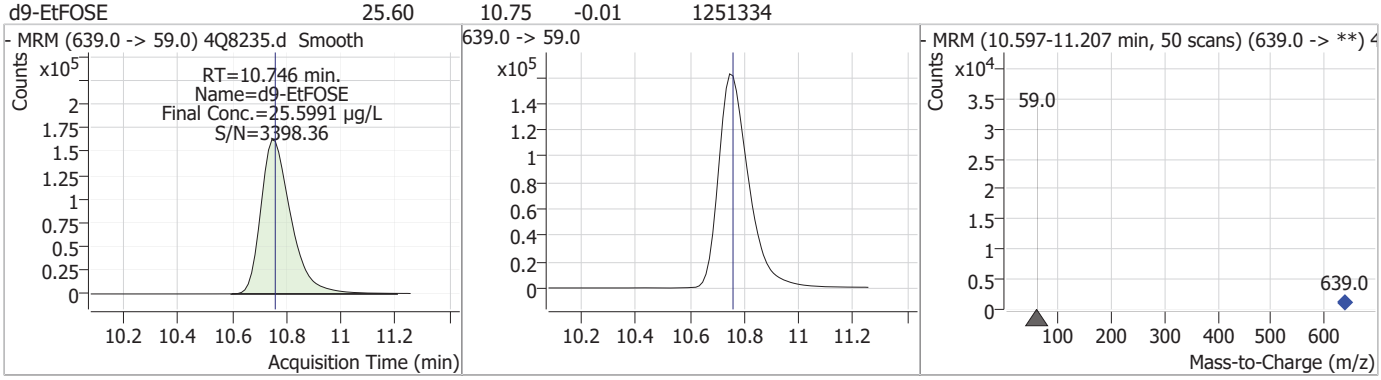
Perfluorinated Compounds by LC/MS/MS

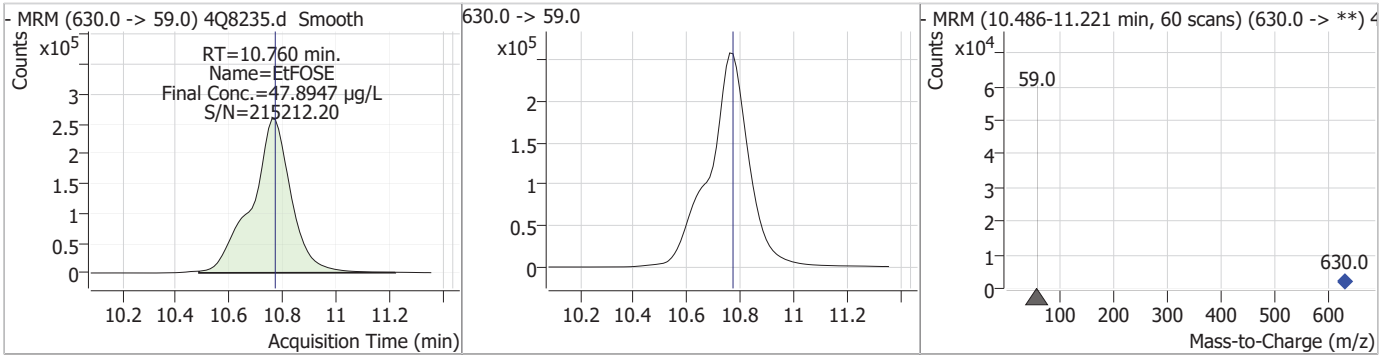
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.45	10.58	0.00	88738				



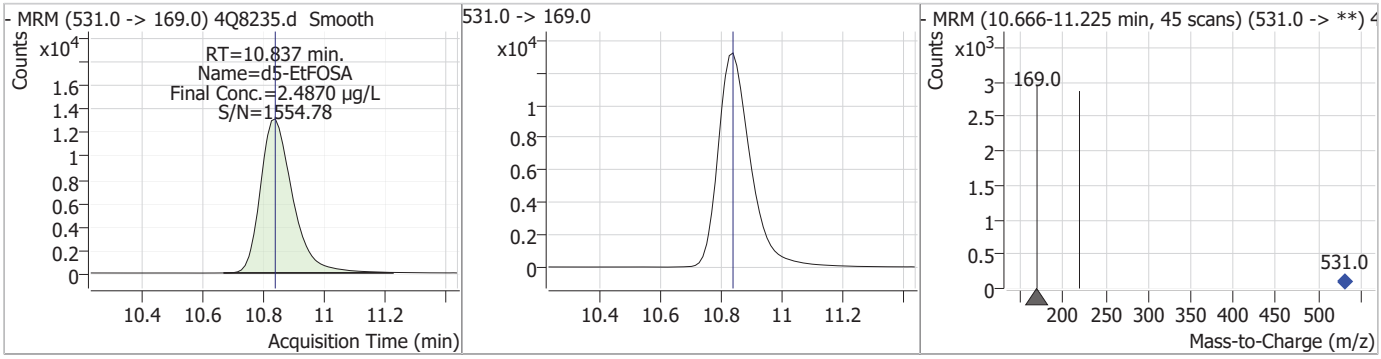
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.60	10.75	-0.01	1251334				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	47.89	10.76	-0.01	2672098				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.49	10.84	0.00	96887				



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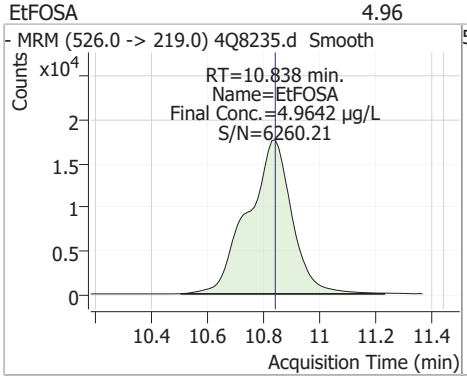
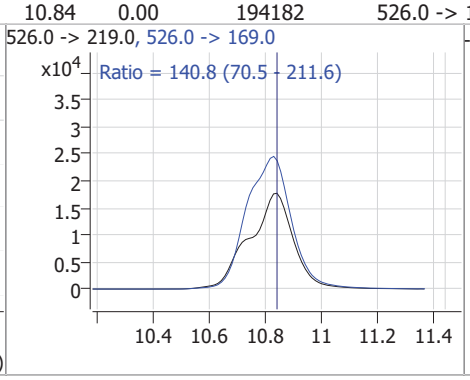
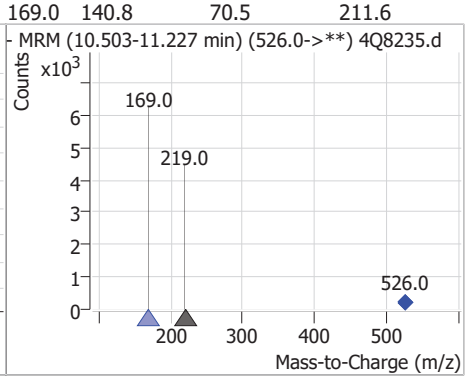
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	4.96	10.84	0.00	194182	526.0 -> 169.0	140.8	70.5	211.6







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7

Manual Integration Approval Summary

Sample Number: T4Q140-IC140
Lab FileID: 4Q8235.D
Injection Time: 05/02/25 14:54

Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.92	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.43	Split peak
MeFOSAA	2355-31-9		7.94	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.01	Split peak
EtFOSAA	2991-50-6		8.14	Split peak
PFOSA	754-91-6		9.31	Split peak
MeFOSE	24448-09-7		10.50	Split peak

4Q8236.D

Manual Integrations APPROVED (compounds with "m" flag)

Althea Mae Medina 05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8236.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 3:07:59 PM
Sample Name : IC140-6
Vial : P1-A7
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.883	217.0 -> 172.0	739299	10.00 µg/L	0.000
M5-PFPeA	4.319	268.0 -> 223.0	404116	5.00 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	276328	2.50 µg/L	0.000
M4-PFHpA	6.304	367.0 -> 322.0	293085	2.50 µg/L	0.000
M8-PFOA	6.910	421.0 -> 376.0	446874	2.50 µg/L	-0.012
M9-PFNA	7.428	472.0 -> 427.0	187526	1.25 µg/L	0.000
M6-PFDA	7.883	519.0 -> 474.0	179795	1.25 µg/L	0.000
M7-PFUnDA	8.298	570.0 -> 525.0	225703	1.25 µg/L	-0.012
M2-PFDoDA	8.704	615.0 -> 570.0	208259	1.25 µg/L	0.000
M2-PFTeDA	9.406	715.0 -> 670.0	178843	1.25 µg/L	-0.012
M8-FOSA	9.316	506.0 -> 78.0	168932	2.50 µg/L	0.000
M3-PFBS	5.368	302.0 -> 99.0	24166	2.50 µg/L	0.000
		302.0 -> 80.0	59178		
M3-PFHxS	6.999	402.0 -> 99.0	33824	2.50 µg/L	0.000
M8-PFOS	8.007	507.0 -> 99.0	38808	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	10126	5.00 µg/L	0.000
M2-6:2FTS	6.696	429.0 -> 81.0	21785	5.00 µg/L	-0.012
M2-8:2FTS	7.683	529.0 -> 81.0	26088	5.00 µg/L	0.000
M3-MeFOSAA	7.940	573.0 -> 419.0	214218	5.00 µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	395443	10.00 µg/L	0.000
M5-EtFOSAA	8.123	589.0 -> 419.0	171431	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	875794	25.00 µg/L	-0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1085238	25.00 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	87386	2.50 µg/L	-0.012
M3-MeFOSA	10.567	515.0 -> 169.0	79179	2.50 µg/L	-0.012
13C4-PFOS	8.008	503.0 -> 80.0	65860	2.50 µg/L	0.000
13C3-PFBA	2.886	216.0 -> 172.0	328659	5.00 µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	40803	2.50 µg/L	0.000
13C4-PFOA	6.910	417.0 -> 372.0	453199	2.50 µg/L	-0.012
13C2-PFDA	7.883	515.0 -> 470.0	161105	1.25 µg/L	0.000
13C5-PFNA	7.428	468.0 -> 423.0	184689	1.25 µg/L	0.000
13C2-PFHxA	5.465	315.0 -> 270.0	258491	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	10126	4.46 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 89.3%	
13C2-6:2FTS	6.696	429.0 -> 81.0	21785	4.44 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 88.7%	
13C2-8:2FTS	7.683	529.0 -> 81.0	26088	4.44 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 88.8%	
13C2-PFDoDA	8.704	615.0 -> 570.0	208259	1.16 µg/L	0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.6%	
13C2-PFTeDA	9.406	715.0 -> 670.0	178843	1.18 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.1%	
13C3-PFBS	5.368	302.0 -> 99.0	24166	2.41 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.4%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	33824	2.35	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.9%			
13C4-PFBA	2.883	217.0 -> 172.0	739299	9.53	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.3%			
13C4-PFHpA	6.304	367.0 -> 322.0	293085	2.38	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.3%			
13C5-PFHxA	5.464	318.0 -> 273.0	276328	2.43	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.3%			
13C5-PFPeA	4.319	268.0 -> 223.0	404116	4.87	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.5%			
13C6-PFDA	7.883	519.0 -> 474.0	179795	1.15	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.3%			
13C7-PFUnDA	8.298	570.0 -> 525.0	225703	1.18	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.7%			
13C8-FOSA	9.316	506.0 -> 78.0	168932	2.39	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.4%			
13C8-PFOA	6.910	421.0 -> 376.0	446874	2.39	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.8%			
13C8-PFOS	8.007	507.0 -> 99.0	38808	2.48	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.2%			
13C9-PFNA	7.428	472.0 -> 427.0	187526	1.17	µg/L		0.000
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.6%			
d3-MeFOSAA	7.940	573.0 -> 419.0	214218	4.84	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.8%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	395443	9.77	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 97.7%			
d3-MeFOSA	10.567	515.0 -> 169.0	79179	2.34	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.5%			
d5-EtFOSAA	8.123	589.0 -> 419.0	171431	4.85	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 97.0%			
d7-MeFOSE	10.475	623.0 -> 59.0	875794	23.35	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 93.4%			
d9-EtFOSE	10.746	639.0 -> 59.0	1085238	23.69	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 94.8%			
d5-EtFOSA	10.825	531.0 -> 169.0	87386	2.39	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.8%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	896165	51.76	µg/L		98
		327.0 -> 81.0	408955				
6:2FTS	6.697	427.0 -> 407.0	1100303	52.27	µg/L		100
		427.0 -> 81.0	504046				
8:2FTS	7.683	527.0 -> 507.0	1023918	53.85	µg/L		100
		527.0 -> 81.0	401418				
EtFOSAA	8.124	584.0 -> 419.0	422237	13.63	µg/L	m	95
		584.0 -> 483.0	222789				
FOSA	9.306	498.0 -> 78.0	827937	13.57	µg/L	m	100
		498.0 -> 478.0	22283				
MeFOSAA	7.941	570.0 -> 419.0	492122	13.79	µg/L	m	98
		570.0 -> 512.0	170334				
PFBA	2.889	213.0 -> 169.0	1238130	51.30	µg/L		100
PFBS	5.369	299.0 -> 80.0	320430	11.84	µg/L		100
		299.0 -> 99.0	130658				
PFDA	7.883	513.0 -> 469.0	1780136	13.89	µg/L		100
		513.0 -> 219.0	407200				
PFDoDA	8.704	613.0 -> 569.0	2209474	13.49	µg/L		97
		613.0 -> 319.0	313265				

Perfluorinated Compounds by LC/MS/MS

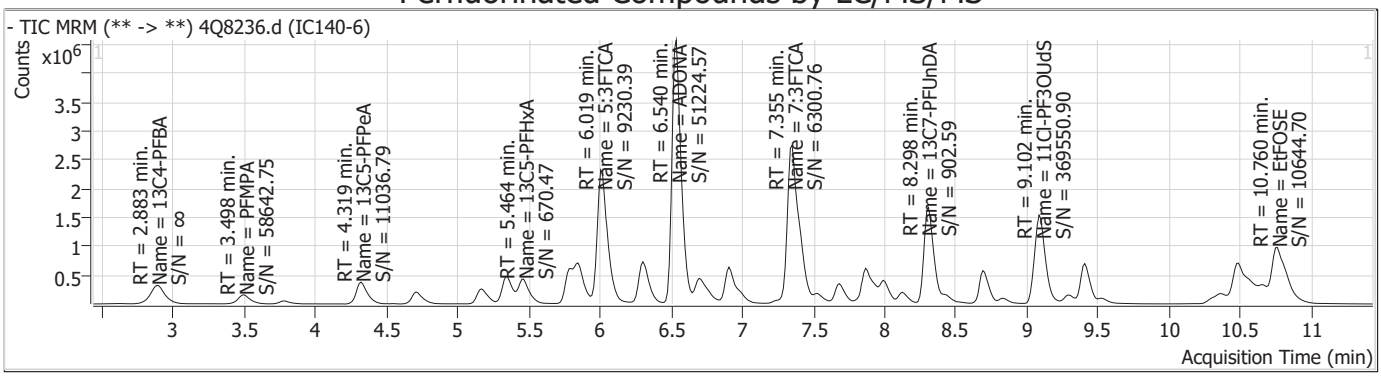
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.841	599.0 -> 80.0	259915	12.98	µg/L		98
		599.0 -> 99.0	143104				
PFHpA	6.304	363.0 -> 319.0	2271758	13.53	µg/L		99
		363.0 -> 169.0	470447				
PFHpS	7.541	449.0 -> 80.0	376645	12.92	µg/L		100
		449.0 -> 99.0	209622				
PFHxA	5.467	313.0 -> 269.0	1506834	13.46	µg/L		100
		313.0 -> 119.0	51839				
PFHxS	7.000	399.0 -> 80.0	358778	12.15	µg/L	m	97
		399.0 -> 99.0	195412				
PFNA	7.429	463.0 -> 419.0	1487067	13.75	µg/L	m	100
		463.0 -> 219.0	529927				
PFNS	8.437	549.0 -> 80.0	336925	12.58	µg/L		94
		549.0 -> 99.0	204875				
PFOA	6.910	413.0 -> 369.0	1966381	13.43	µg/L	m	99
		413.0 -> 169.0	563111				
PFOS	8.008	499.0 -> 80.0	379866	12.25	µg/L	m	97
		499.0 -> 99.0	204352				
PFPeA	4.321	263.0 -> 219.0	1686044	26.78	µg/L		100
PFPeS	6.331	349.0 -> 80.0	372642	12.40	µg/L		98
		349.0 -> 99.0	191550				
PFTeDA	9.406	713.0 -> 669.0	2587108	13.32	µg/L		99
		713.0 -> 219.0	193378				
PFTrDA	9.063	663.0 -> 619.0	2459055	13.63	µg/L		99
		663.0 -> 369.0	160122				
PFUnDA	8.299	563.0 -> 519.0	1822490	13.47	µg/L		98
		563.0 -> 269.0	363374				
11Cl-PF3OUdS	9.102	631.0 -> 451.0	4104390	49.44	µg/L		100
		633.0 -> 453.0	1261528				
9Cl-PF3ONS	8.313	531.0 -> 351.0	4537358	48.35	µg/L		98
		533.0 -> 353.0	1388036				
ADONA	6.540	377.0 -> 251.0	16377528	51.25	µg/L		95
		377.0 -> 85.0	4985805				
HFPO-DA	5.792	285.0 -> 169.0	2205114	53.81	µg/L		99
		285.0 -> 185.0	266170				
3:3FTCA	3.781	241.0 -> 177.0	260333	67.87	µg/L		98
		241.0 -> 117.0	23118				
5:3FTCA	6.019	341.0 -> 237.0	6916226	319.51	µg/L		100
		341.0 -> 217.0	5033751				
7:3FTCA	7.355	441.0 -> 337.0	9848150	317.40	µg/L		98
		441.0 -> 317.0	4472204				
EtFOSA	10.826	526.0 -> 219.0	481335	13.64	µg/L		100
		526.0 -> 169.0	676066				
EtFOSE	10.760	630.0 -> 59.0	6383266	131.92	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	573472	13.66	µg/L		98
		512.0 -> 219.0	385242				
MeFOSE	10.488	616.0 -> 59.0	4954657	132.78	µg/L	m	100
PFDoDS	9.533	699.0 -> 80.0	215560	12.59	µg/L		97
		699.0 -> 99.0	134856				
NFDHA	5.357	295.0 -> 201.0	353474	28.25	µg/L		87
		201.0 -> 85.0	1623208				
		295.0 -> 85.0	92185				
PFMBA	4.710	279.0 -> 85.0	1136405	26.63	µg/L		100
PFMPA	3.498	229.0 -> 85.0	972447	26.66	µg/L		100
PFEESA	5.849	315.0 -> 135.0	2533557	23.88	µg/L		100
		315.0 -> 69.0	209672				

Perfluorinated Compounds by LC/MS/MS

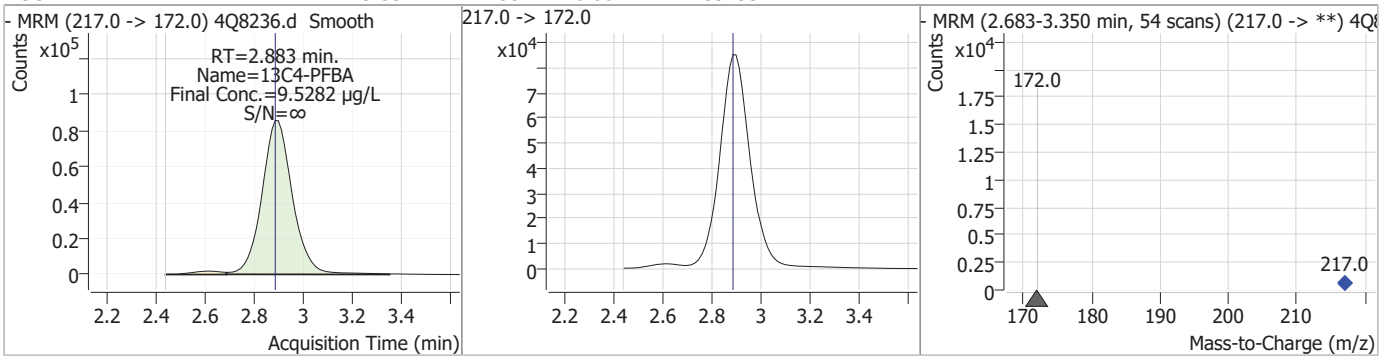
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

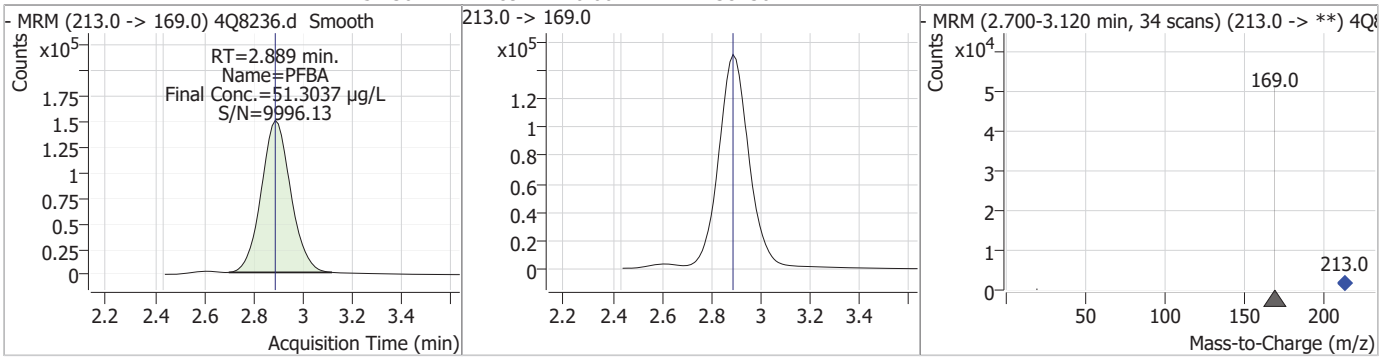
Perfluorinated Compounds by LC/MS/MS



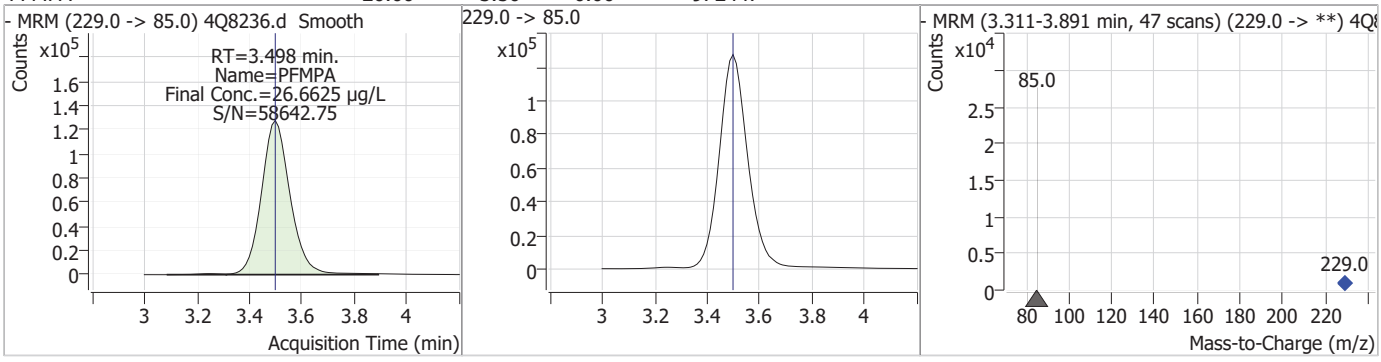
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.53	2.88	0.00	739299				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	51.30	2.89	0.00	1238130				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	26.66	3.50	0.00	972447				



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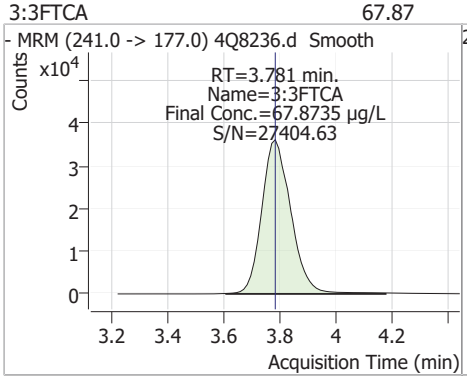
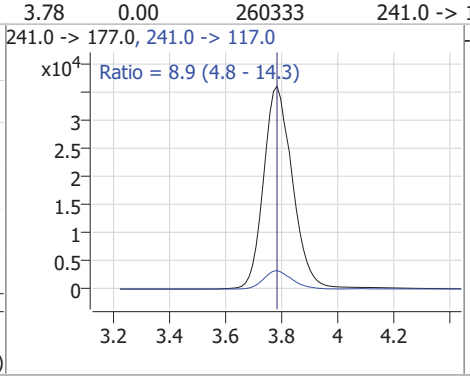
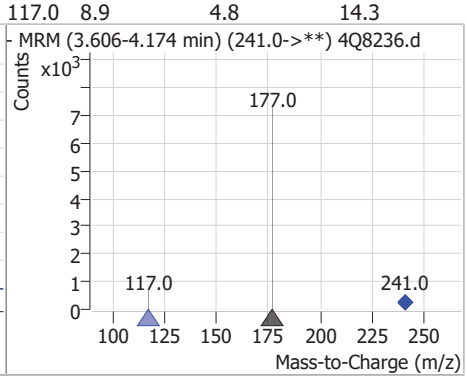
Perfluorinated Compounds by LC/MS/MS

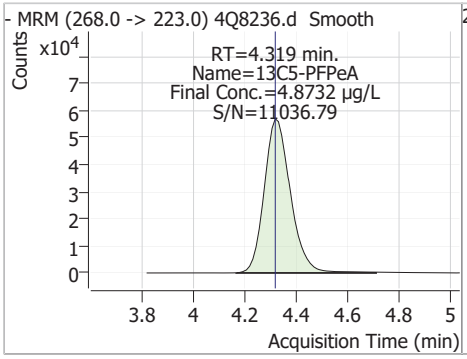
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	67.87	3.78	0.00	260333	241.0 -> 117.0	8.9	4.8	14.3

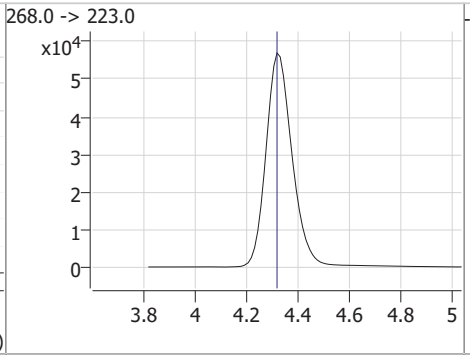


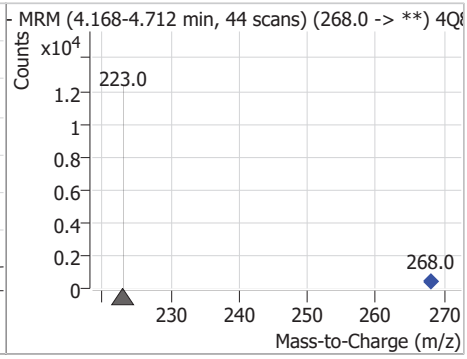




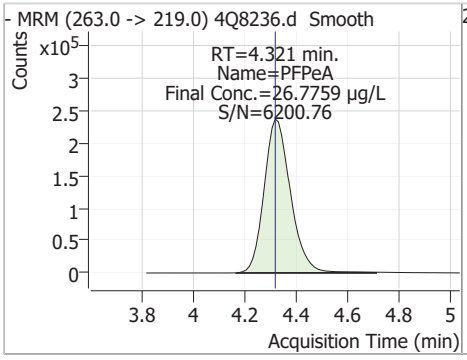
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.87	4.32	0.00	404116				

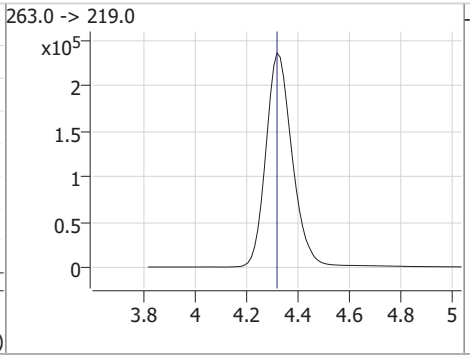


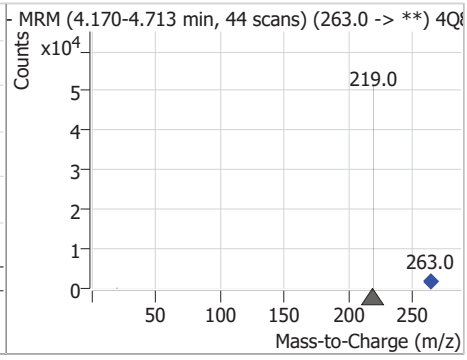




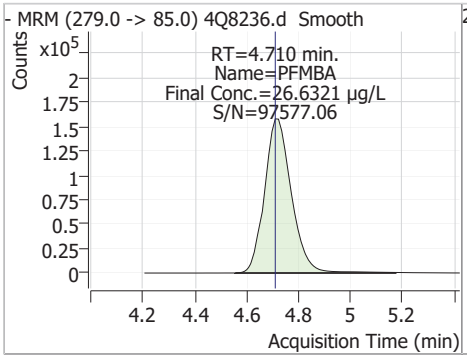
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	26.78	4.32	0.00	1686044				

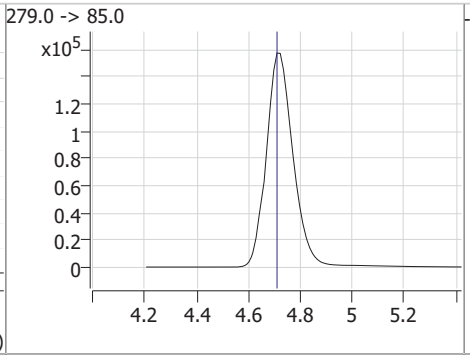


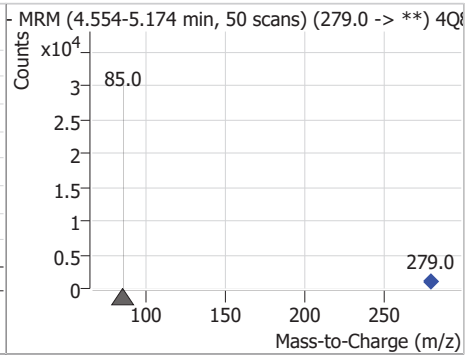




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	26.63	4.71	0.00	1136405				







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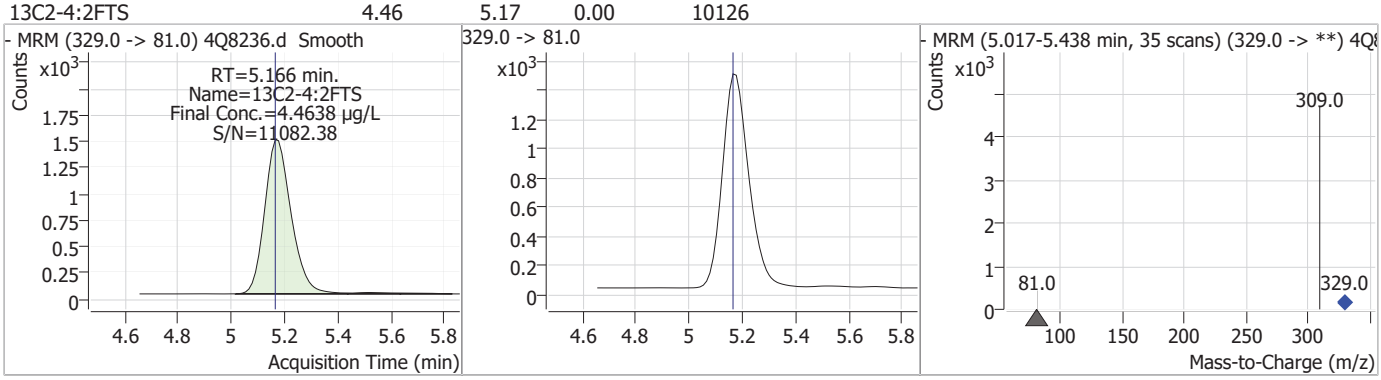
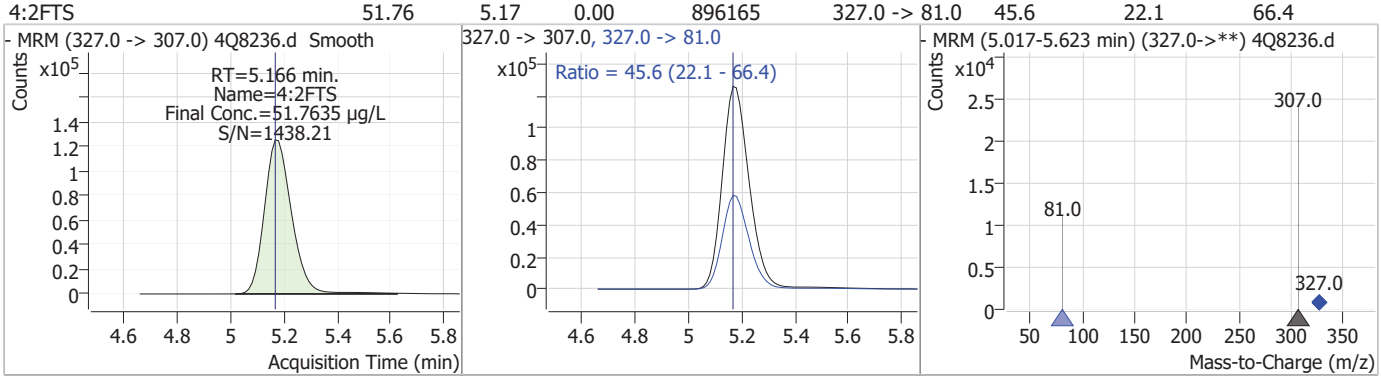
Perfluorinated Compounds by LC/MS/MS

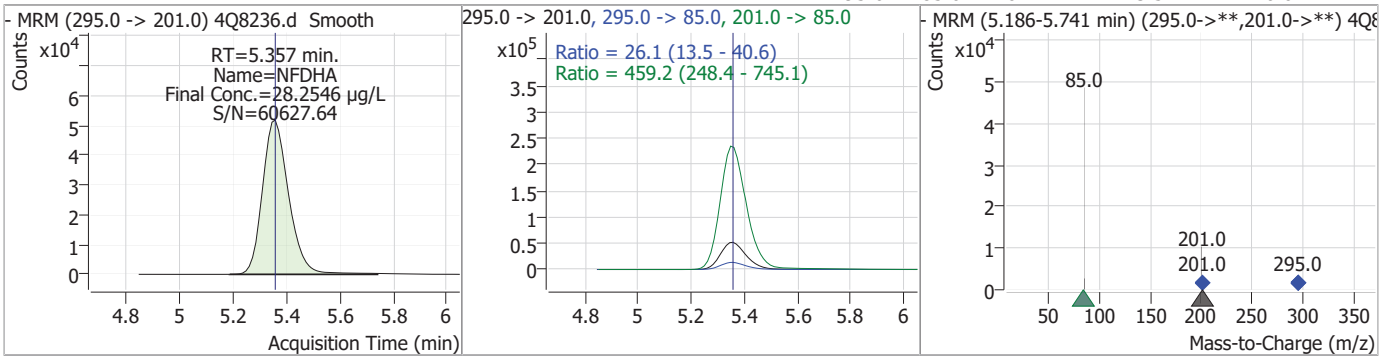
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.46	5.17	0.00	10126				



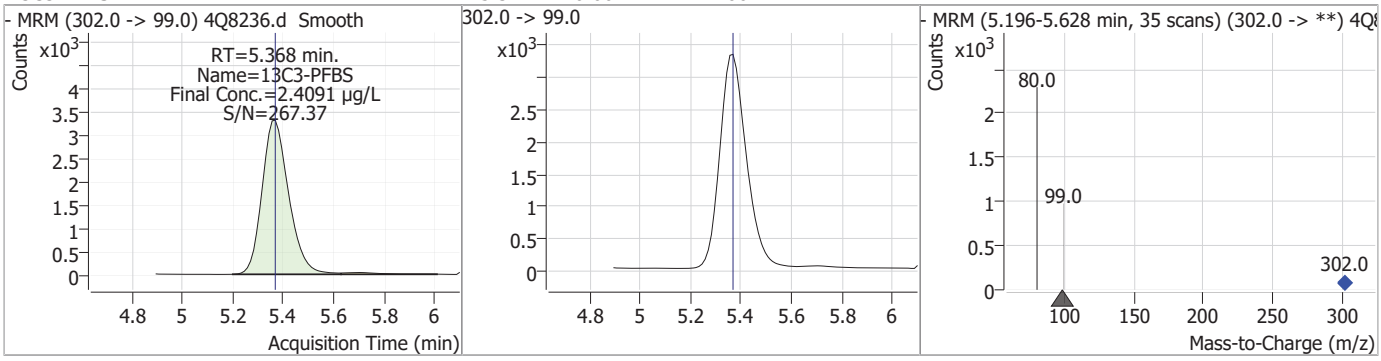
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	51.76	5.17	0.00	896165	327.0 -> 81.0	45.6	22.1	66.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	28.25	5.36	0.00	353474	201.0 -> 85.0	459.2	248.4	745.1
					295.0 -> 85.0	26.1	13.5	40.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.41	5.37	0.00	24166				



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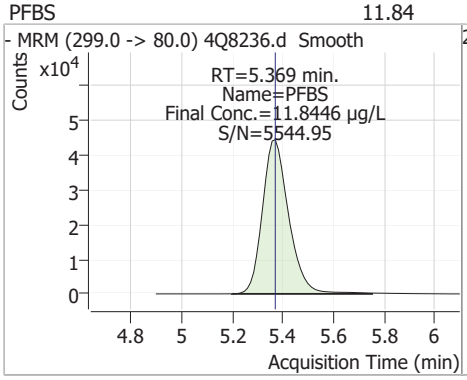
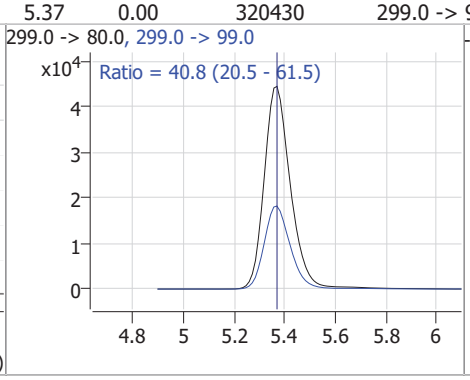
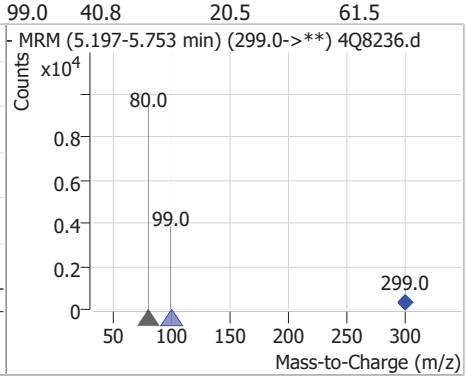
Perfluorinated Compounds by LC/MS/MS

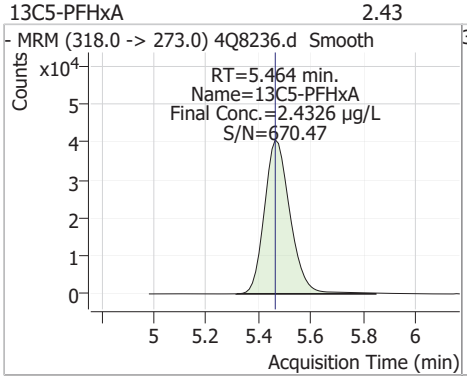
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	11.84	5.37	0.00	320430	299.0 -> 99.0	40.8	20.5	61.5

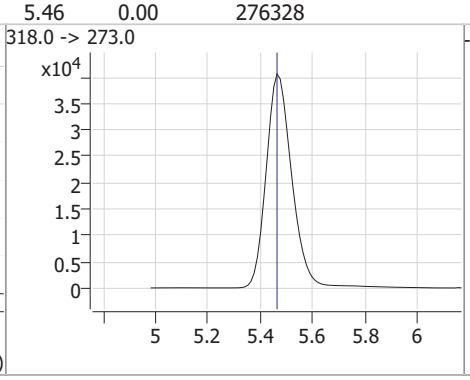


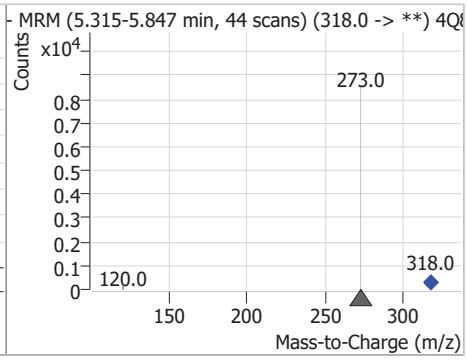




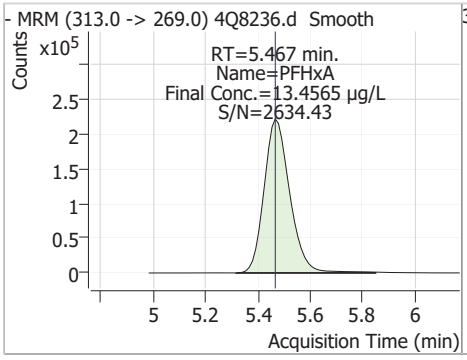
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.43	5.46	0.00	276328				

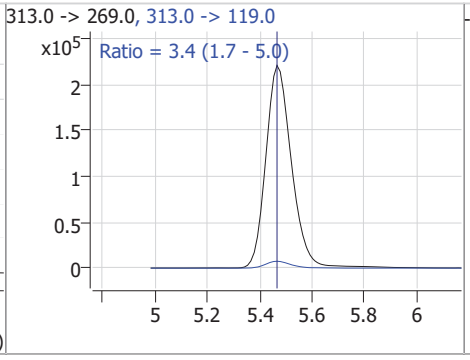


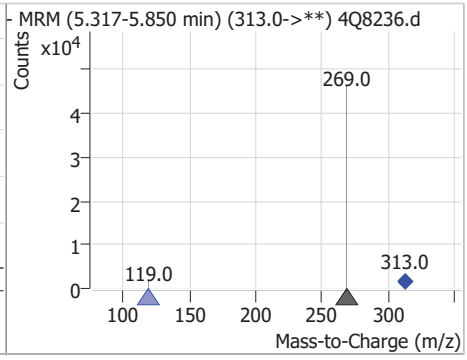




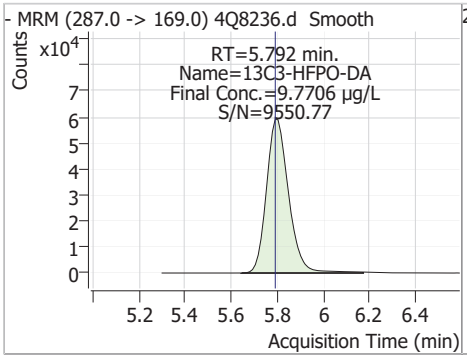
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	13.46	5.47	0.00	1506834	313.0 -> 119.0	3.4	1.7	5.0

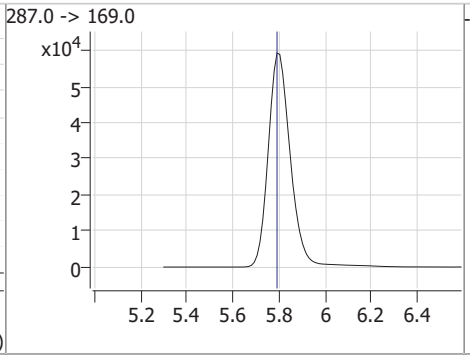


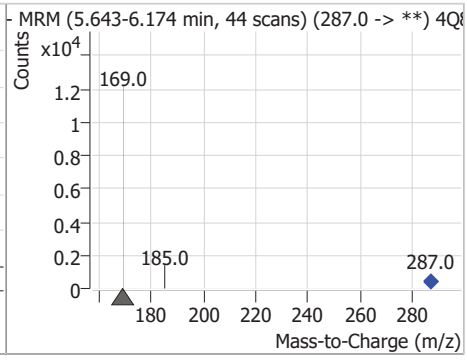




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.77	5.79	0.00	395443				







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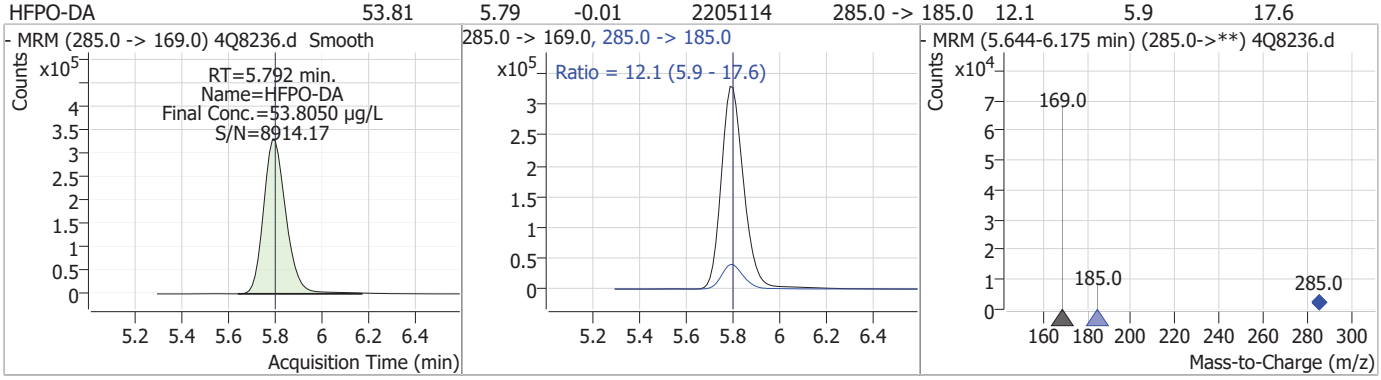
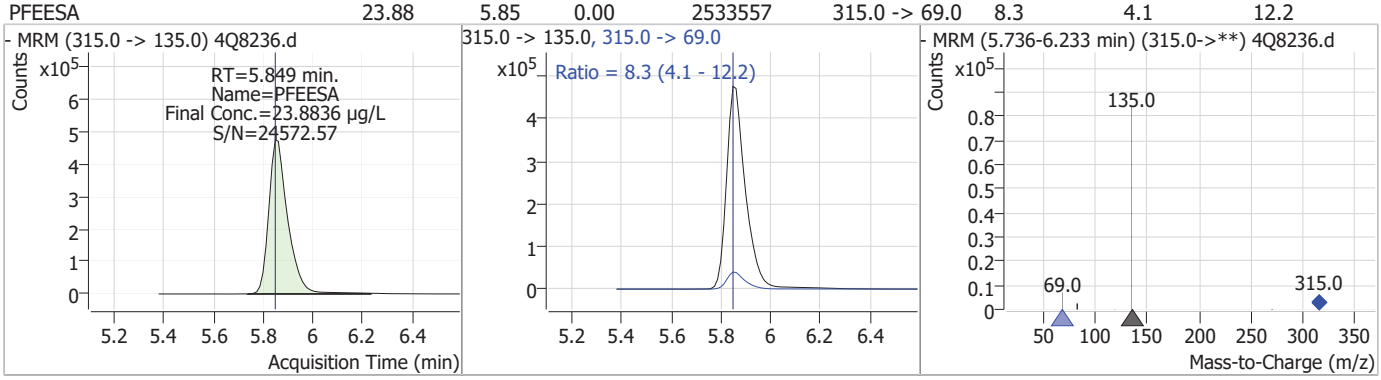
Perfluorinated Compounds by LC/MS/MS

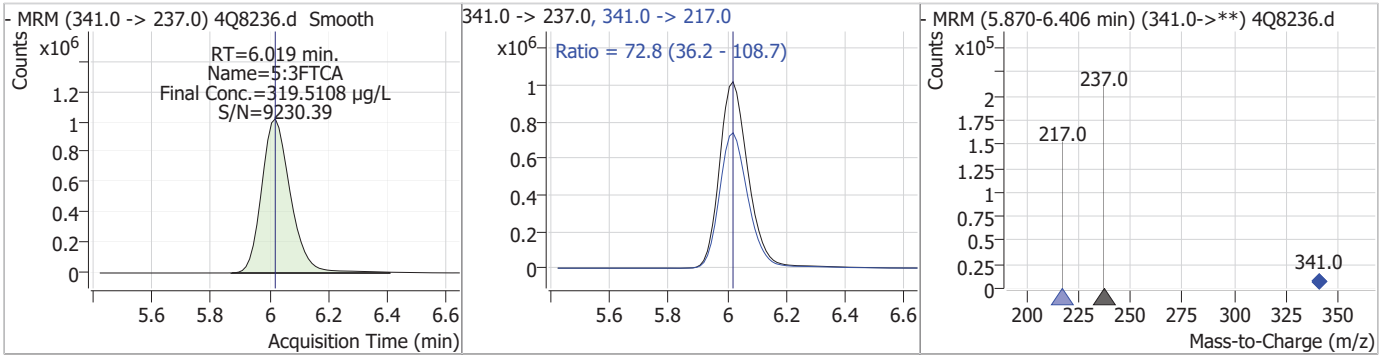
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	53.81	5.79	-0.01	2205114	285.0 -> 185.0	12.1	5.9	17.6



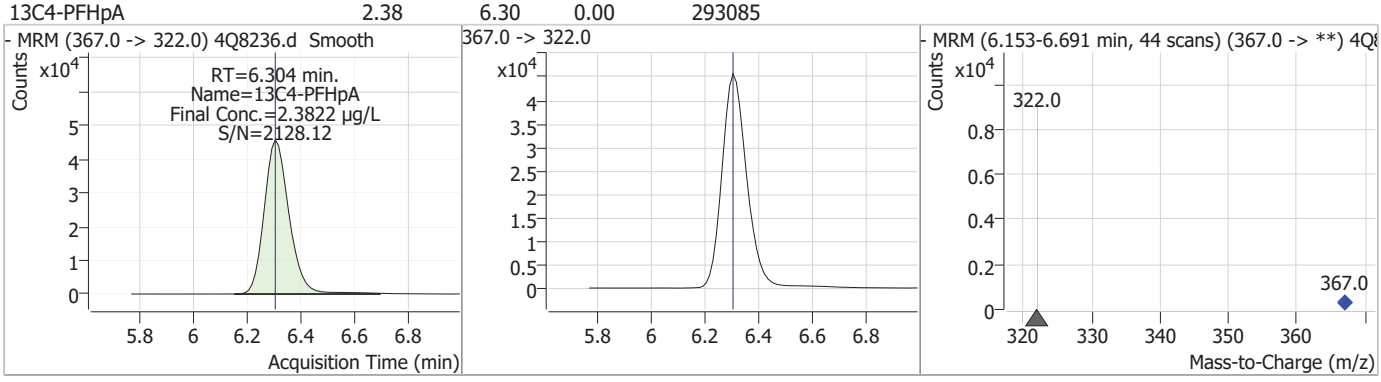
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	23.88	5.85	0.00	2533557	315.0 -> 69.0	8.3	4.1	12.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	319.51	6.02	0.00	6916226	341.0 -> 217.0	72.8	36.2	108.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.38	6.30	0.00	293085				



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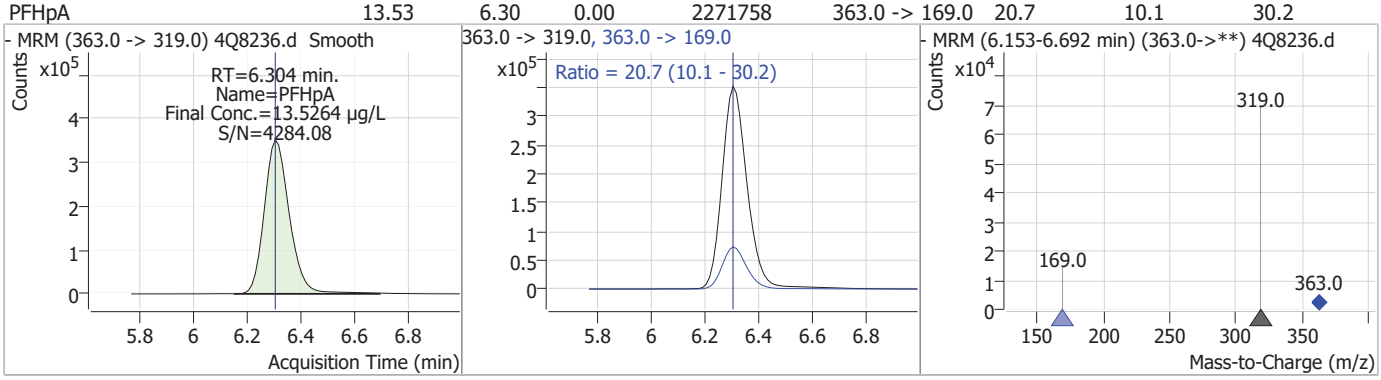
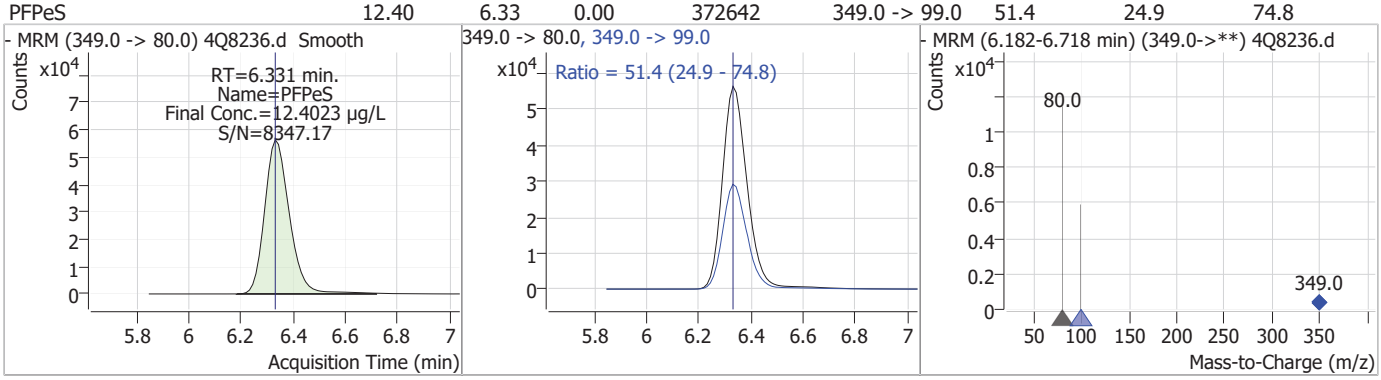
Perfluorinated Compounds by LC/MS/MS

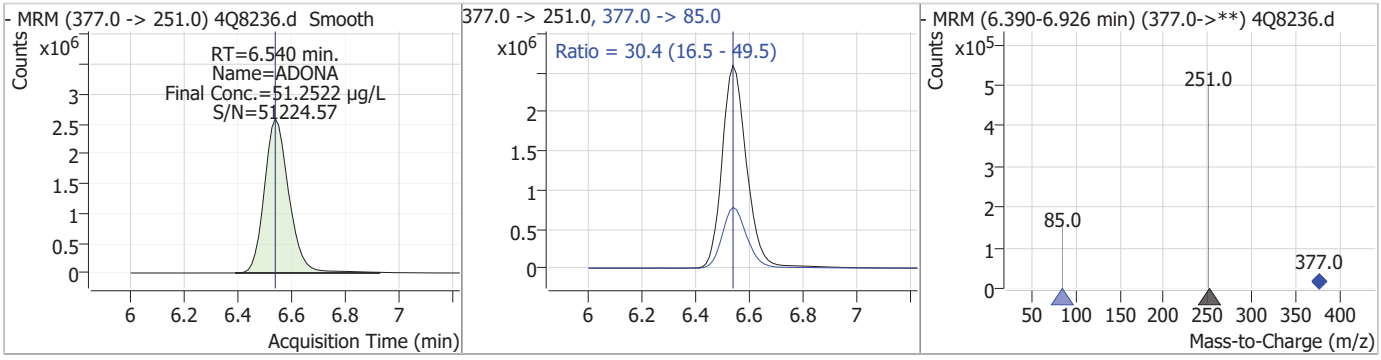
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	13.53	6.30	0.00	2271758	363.0 -> 169.0	20.7	10.1	30.2



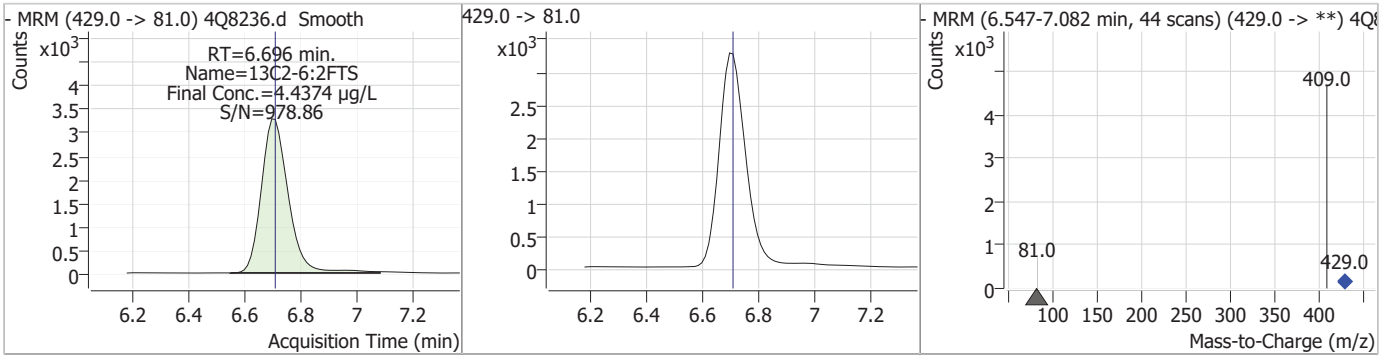
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	12.40	6.33	0.00	372642	349.0 -> 99.0	51.4	24.9	74.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	51.25	6.54	0.00	16377528	377.0 -> 85.0	30.4	16.5	49.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.44	6.70	-0.01	21785				



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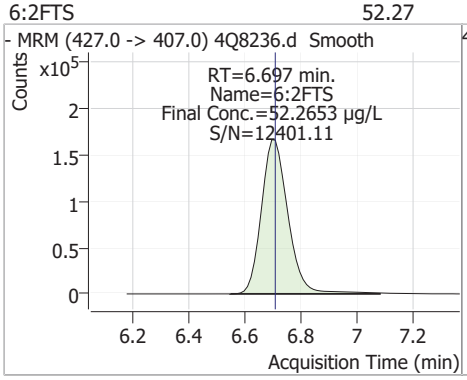
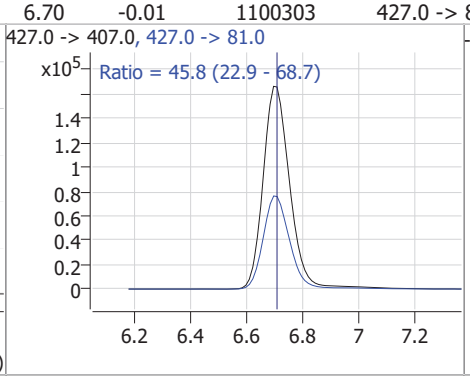
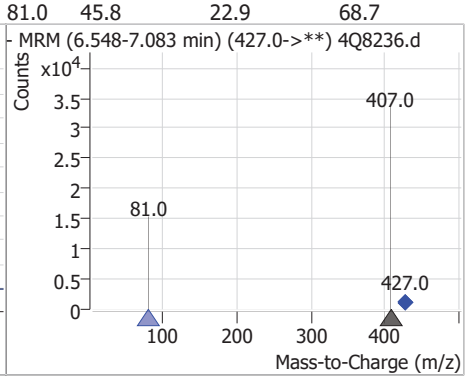
Perfluorinated Compounds by LC/MS/MS

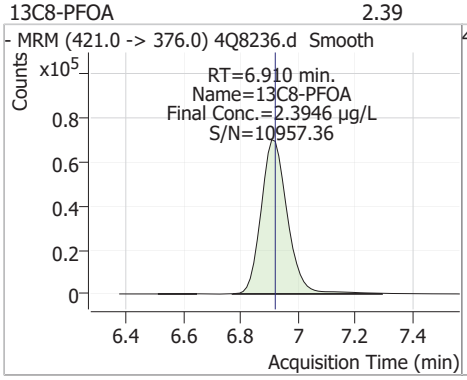
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	52.27	6.70	-0.01	1100303	427.0 -> 81.0	45.8	22.9	68.7

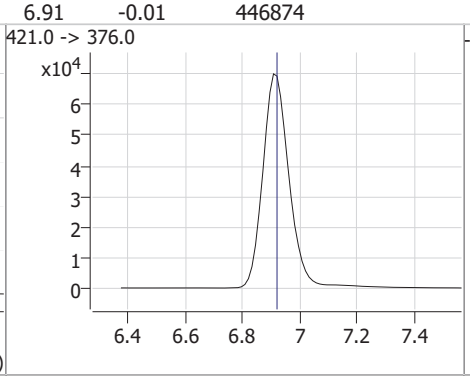


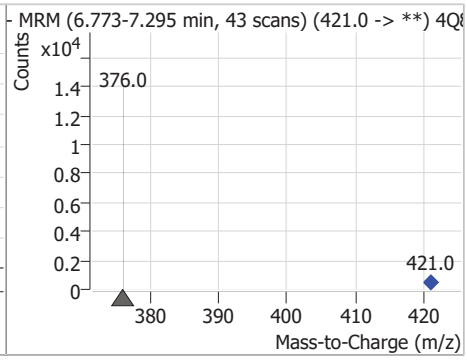




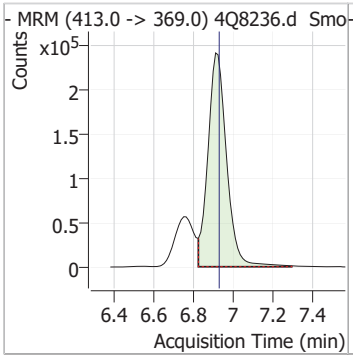
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.39	6.91	-0.01	446874				

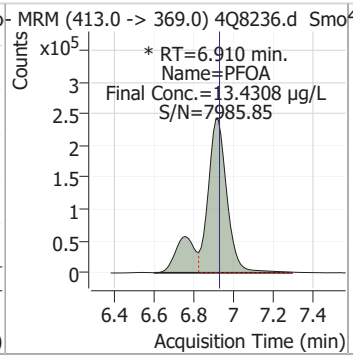


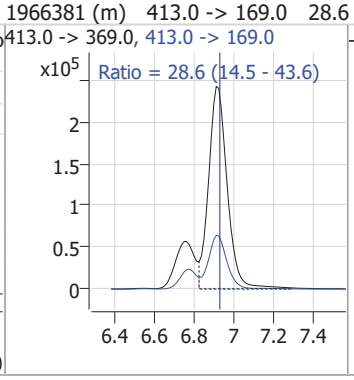


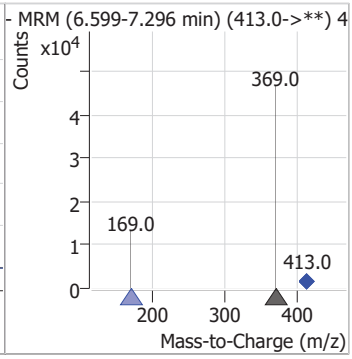


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	13.43	6.91	-0.01	1966381 (m)	413.0 -> 169.0	28.6	14.5	43.6

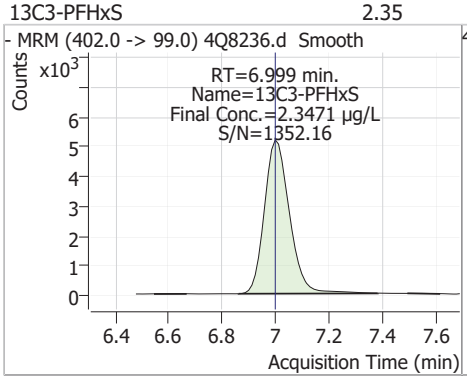


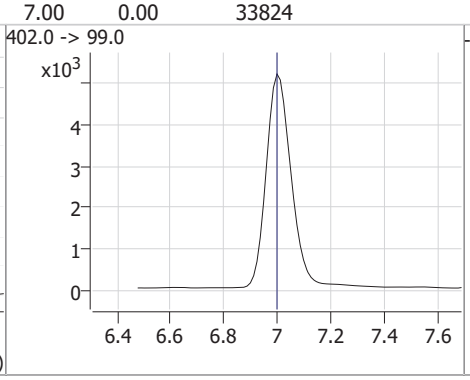


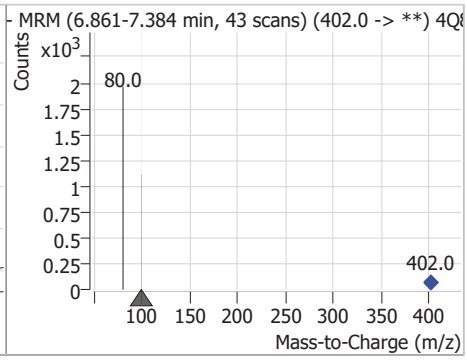




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.35	7.00	0.00	33824				

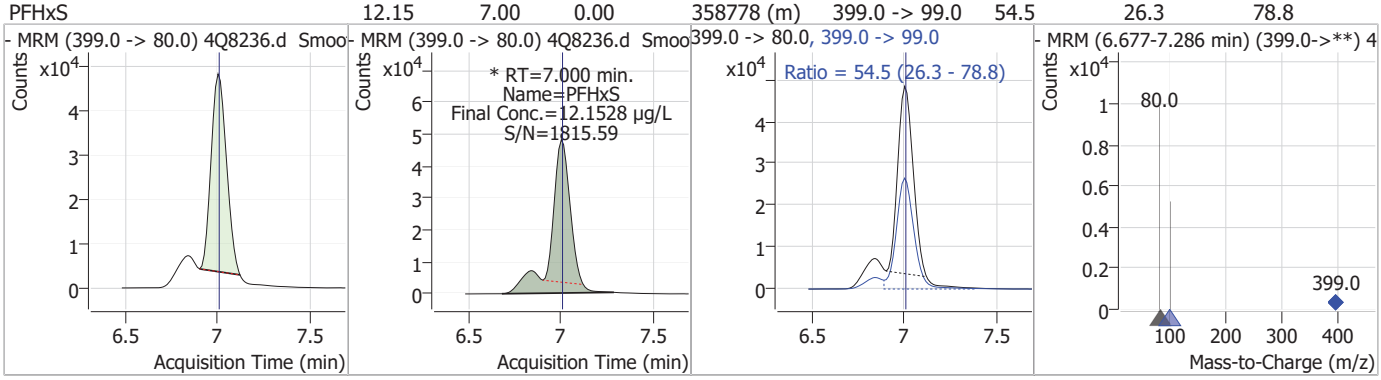




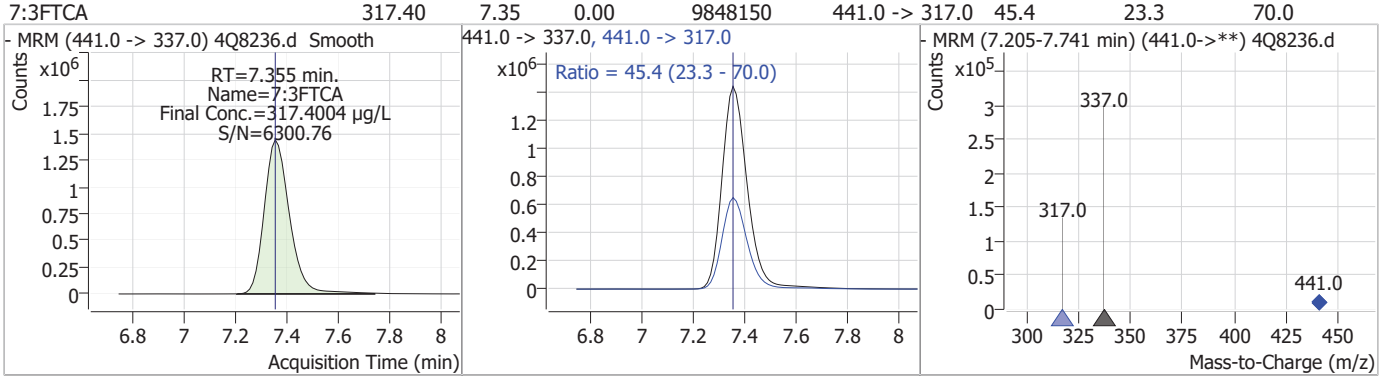


Perfluorinated Compounds by LC/MS/MS

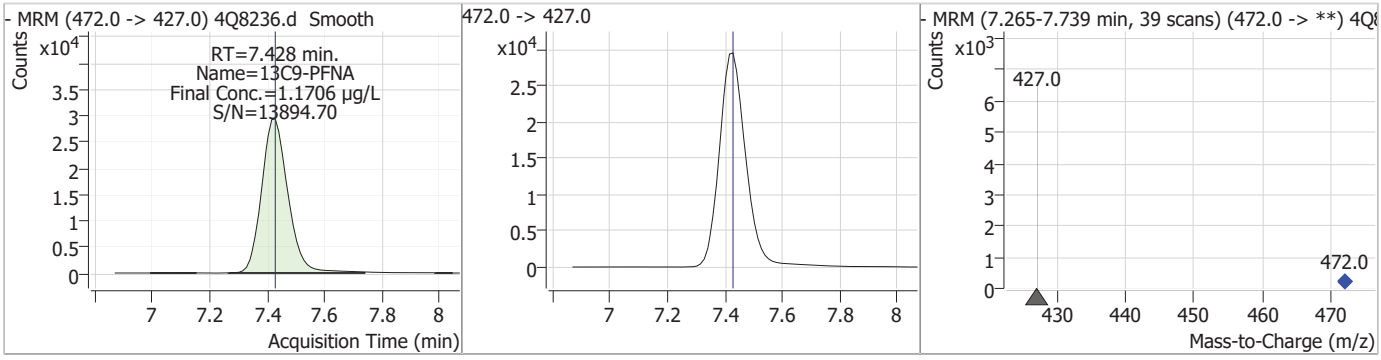
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	12.15	7.00	0.00	358778 (m)	399.0 -> 99.0	54.5	26.3	78.8



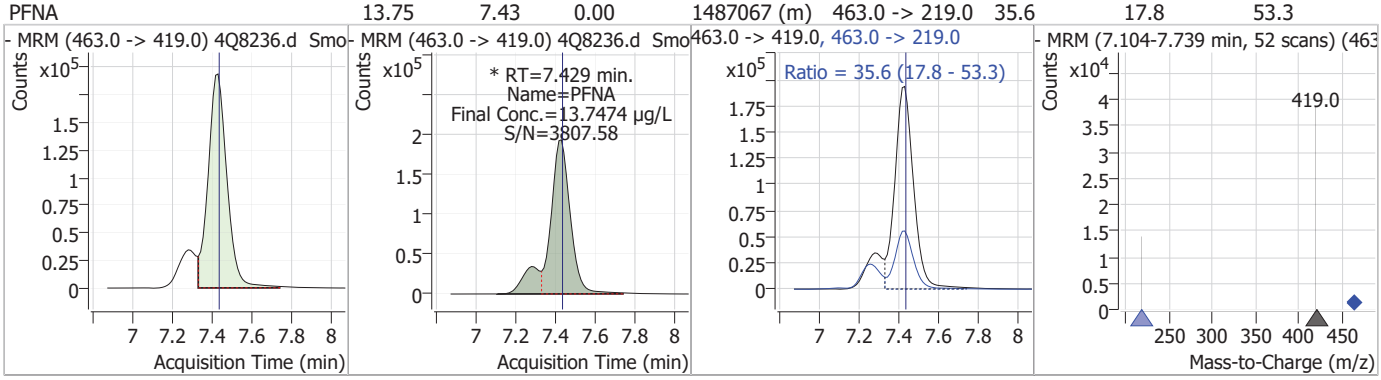
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	317.40	7.35	0.00	9848150	441.0 -> 317.0	45.4	23.3	70.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.17	7.43	0.00	187526				

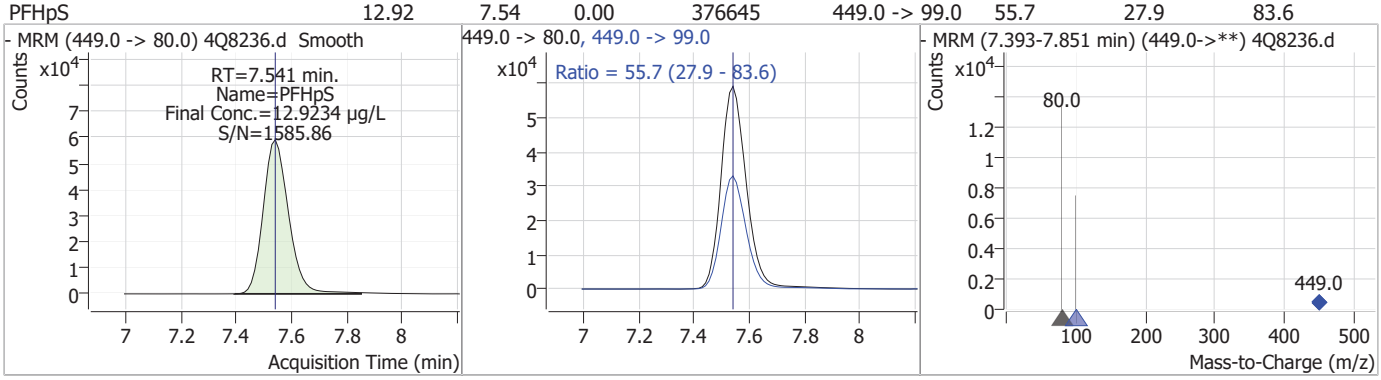


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	13.75	7.43	0.00	1487067 (m)	463.0 -> 219.0	35.6	17.8	53.3

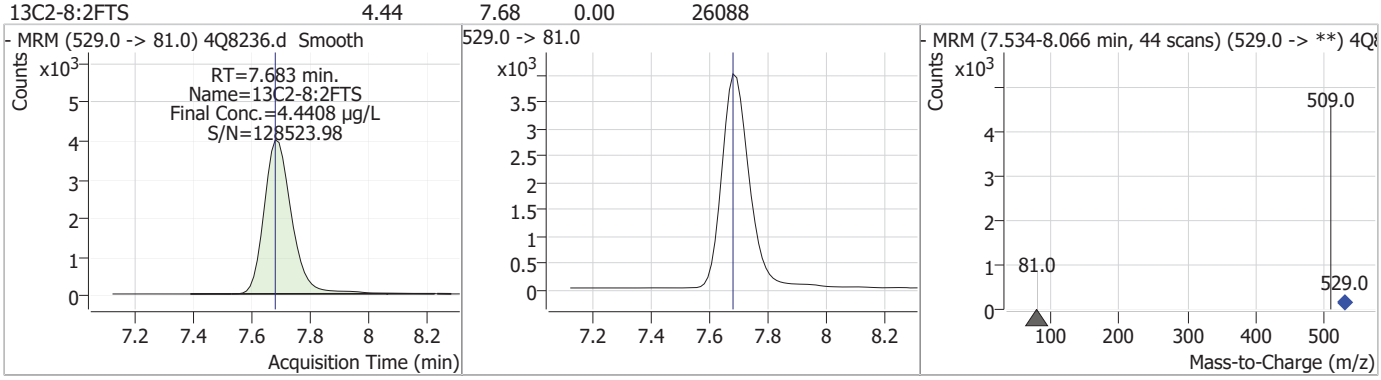


Perfluorinated Compounds by LC/MS/MS

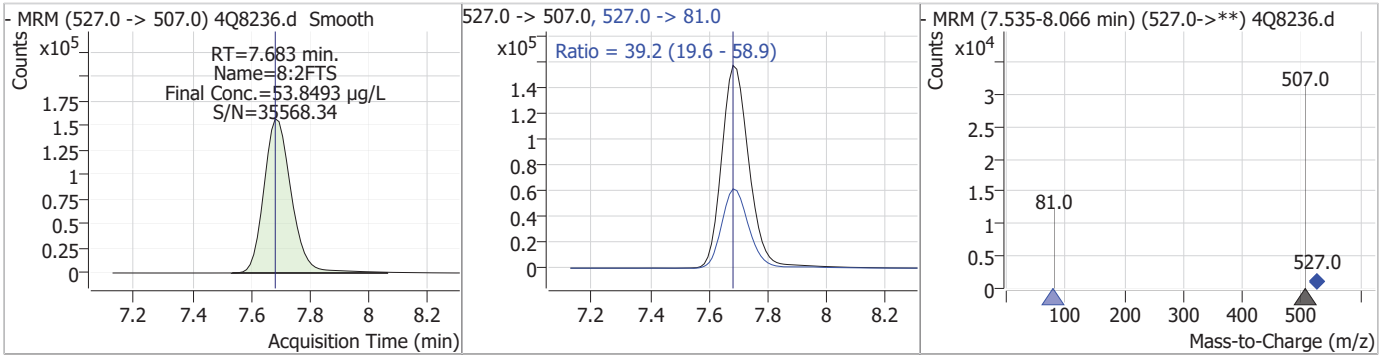
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	12.92	7.54	0.00	376645	449.0 -> 99.0	55.7	27.9	83.6



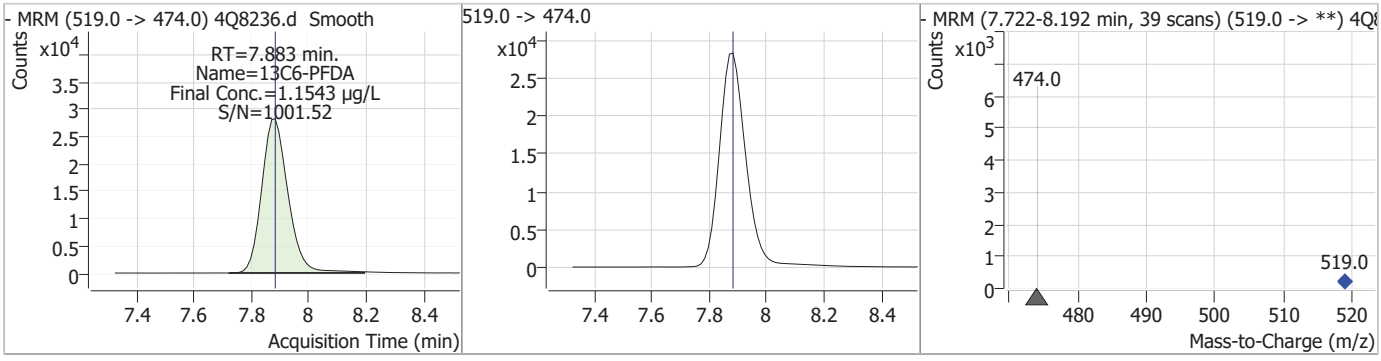
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.44	7.68	0.00	26088				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	53.85	7.68	0.00	1023918	527.0 -> 81.0	39.2	19.6	58.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.15	7.88	0.00	179795				



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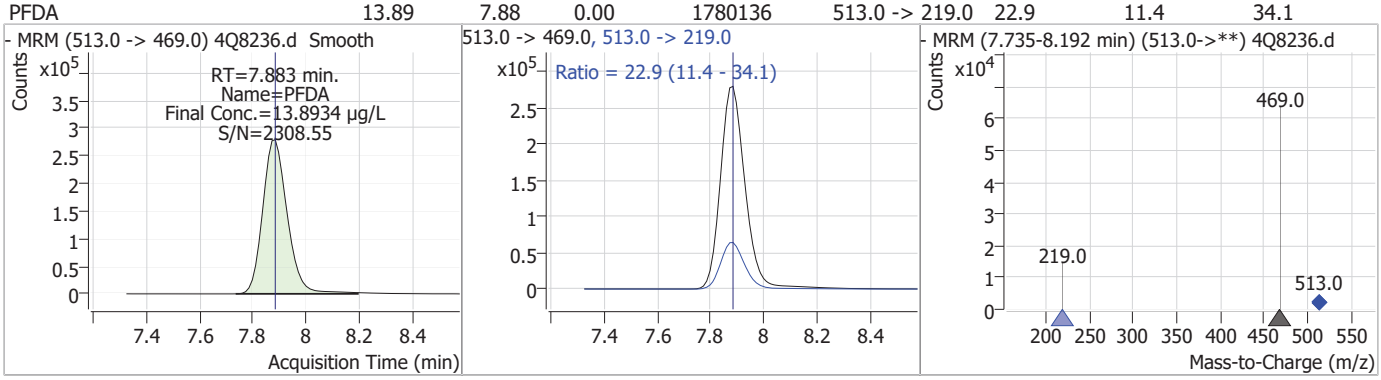
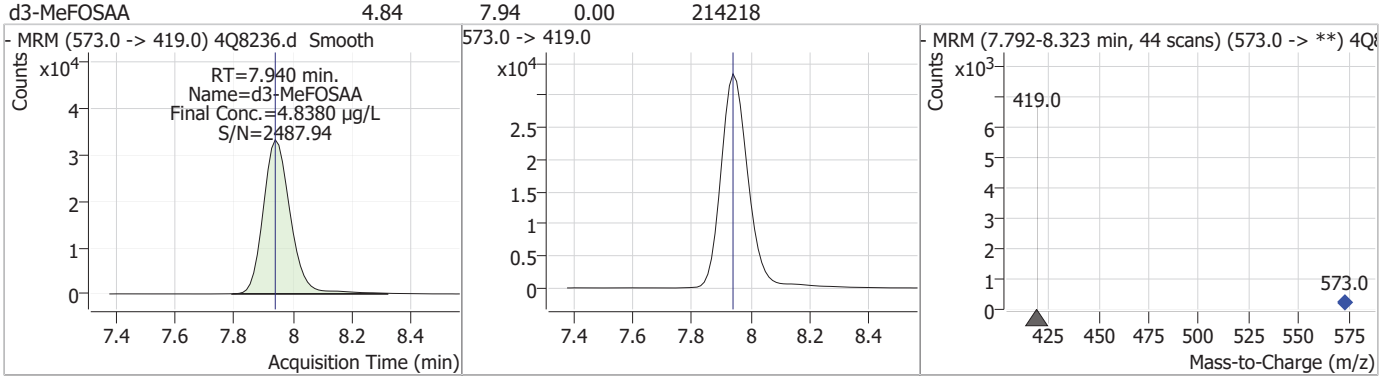
Perfluorinated Compounds by LC/MS/MS

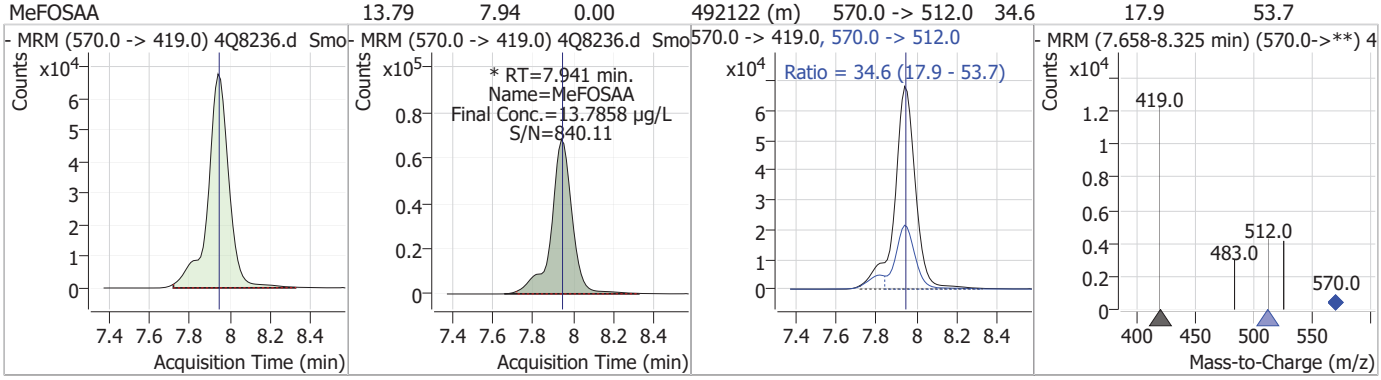
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	13.89	7.88	0.00	1780136	513.0 -> 219.0	22.9	11.4	34.1



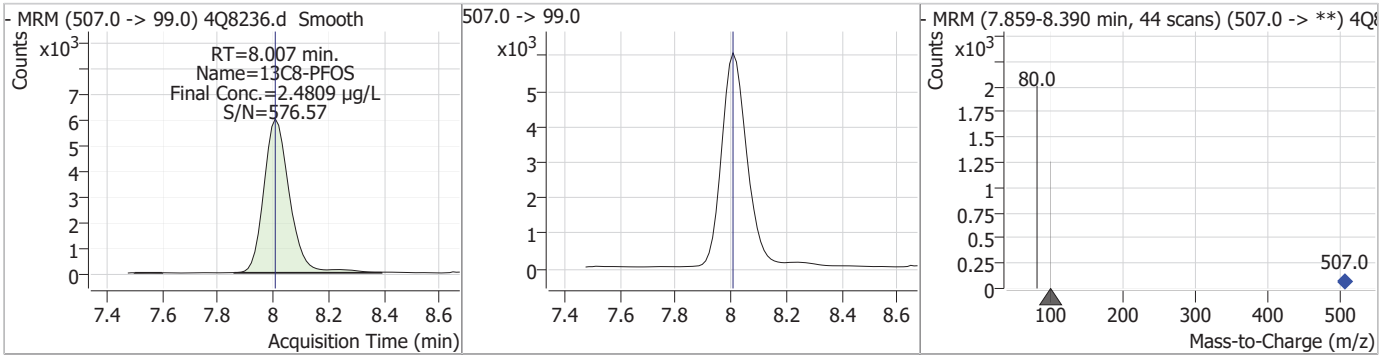
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.84	7.94	0.00	214218				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	13.79	7.94	0.00	492122 (m)	570.0 -> 512.0	34.6	17.9	53.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.48	8.01	0.00	38808				



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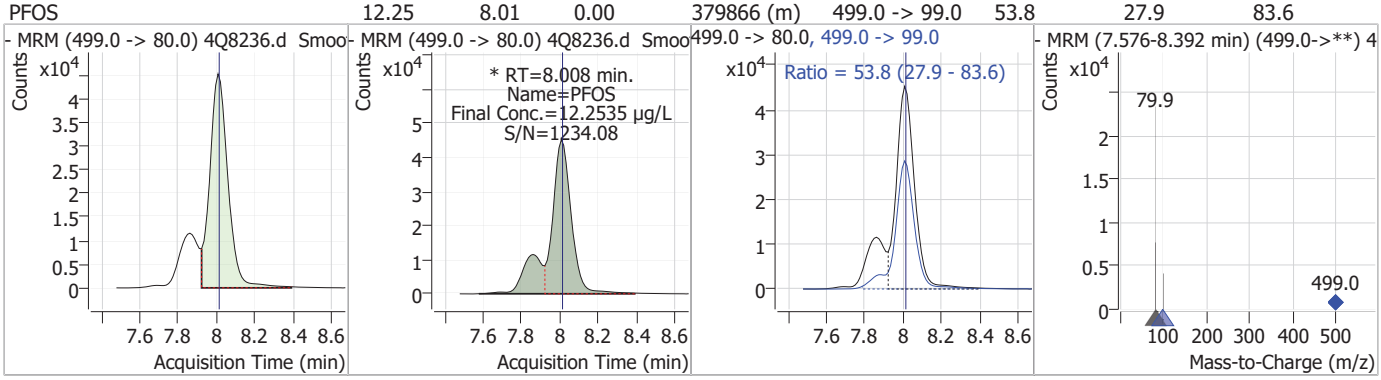
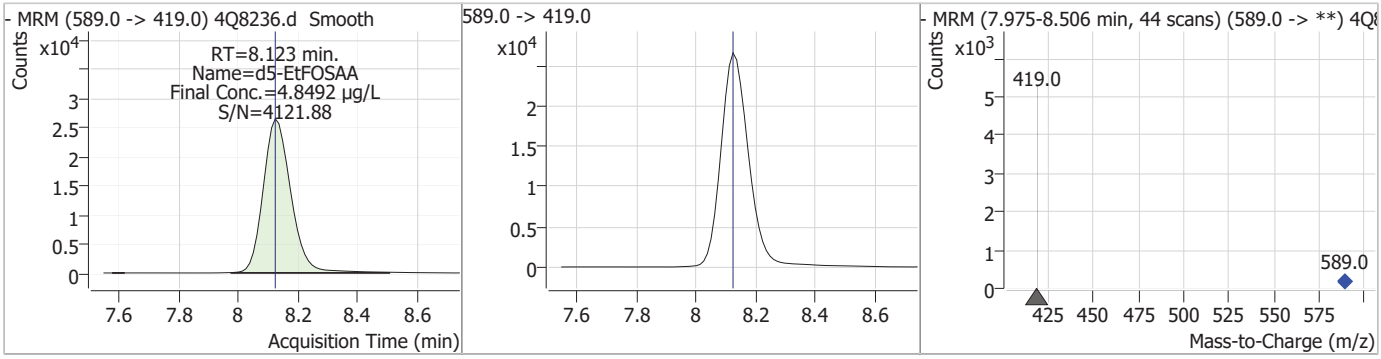
Perfluorinated Compounds by LC/MS/MS

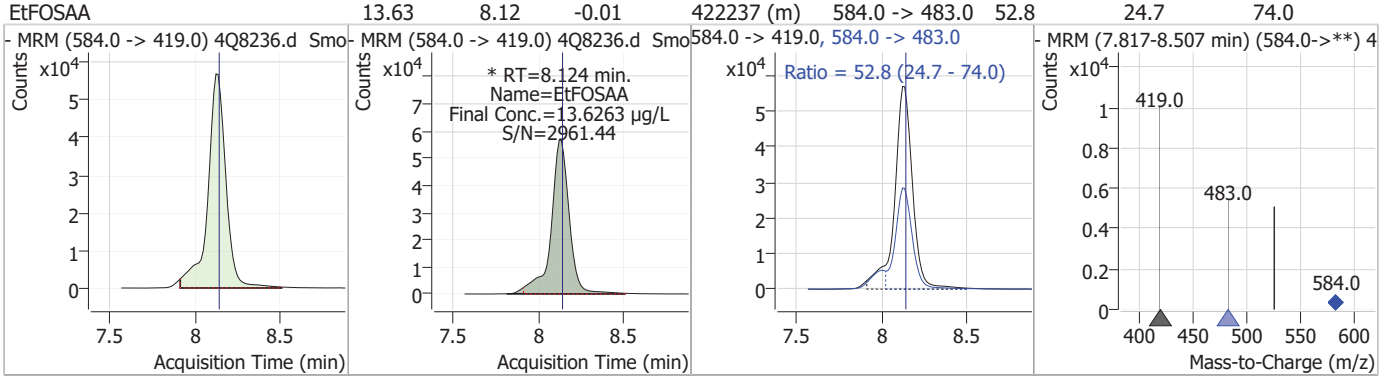
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	12.25	8.01	0.00	379866 (m)	499.0 -> 99.0	53.8	27.9	83.6



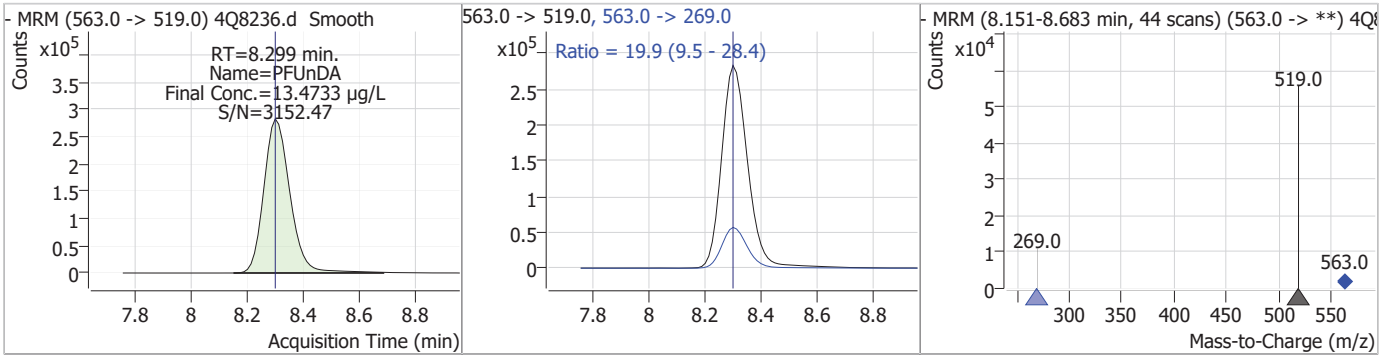
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.85	8.12	0.00	171431				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	13.63	8.12	-0.01	422237 (m)	584.0 -> 483.0	52.8	24.7	74.0

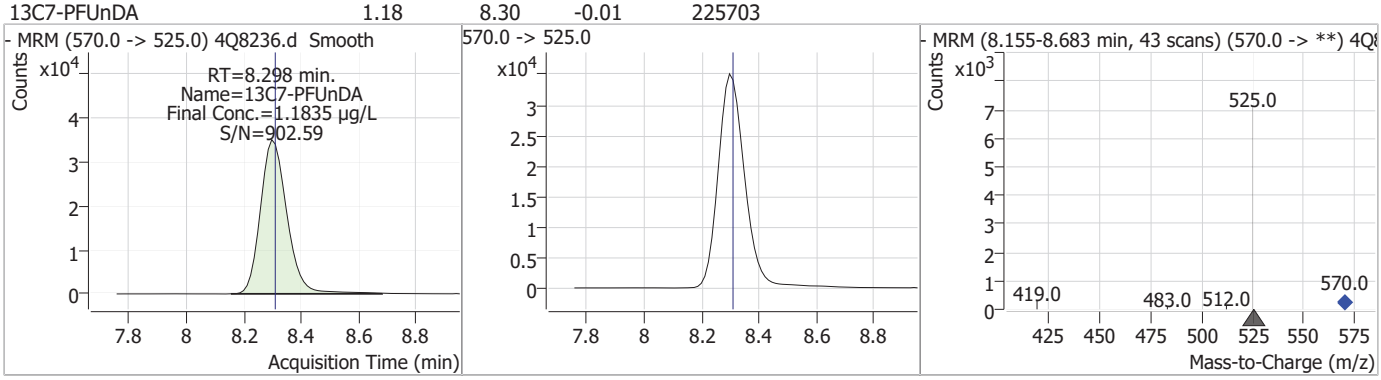


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	13.47	8.30	0.00	1822490	563.0 -> 269.0	19.9	9.5	28.4

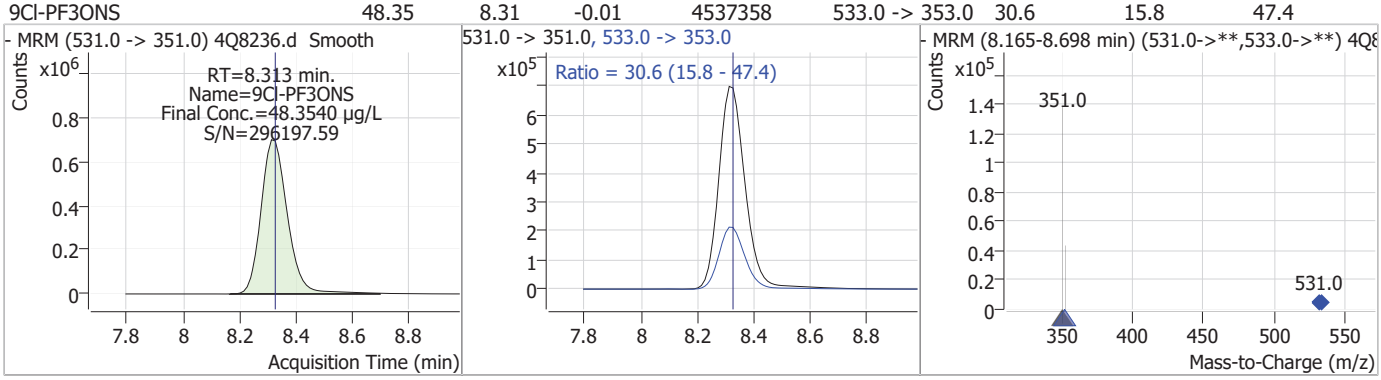


Perfluorinated Compounds by LC/MS/MS

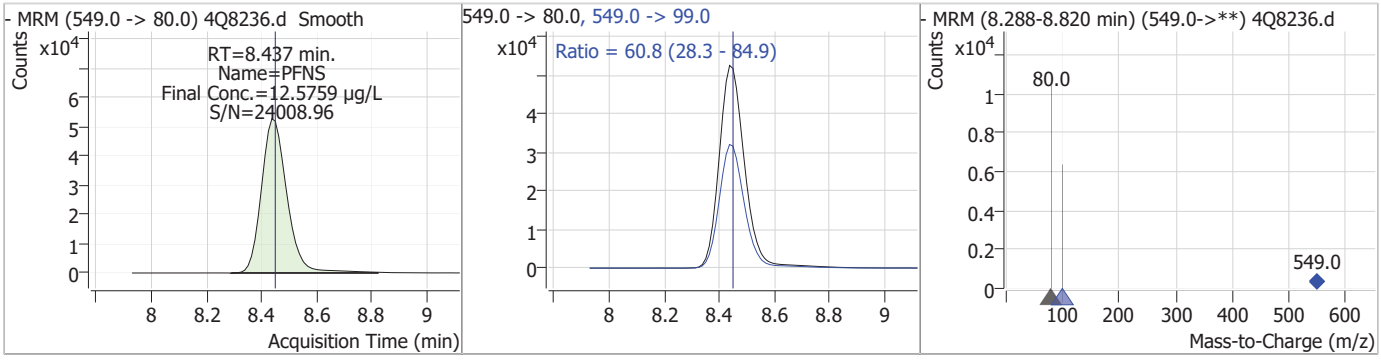
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.18	8.30	-0.01	225703				



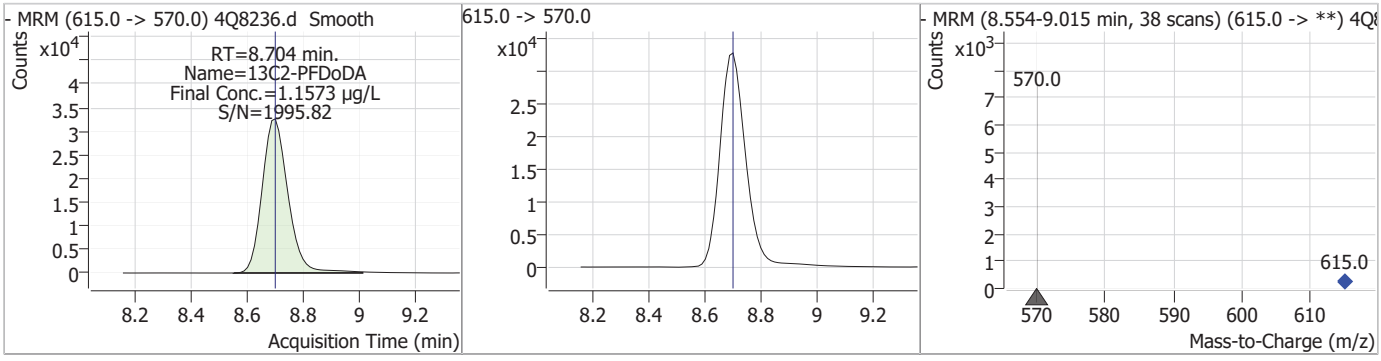
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	48.35	8.31	-0.01	4537358	533.0 -> 353.0	30.6	15.8	47.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	12.58	8.44	-0.01	336925	549.0 -> 99.0	60.8	28.3	84.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.16	8.70	0.00	208259				



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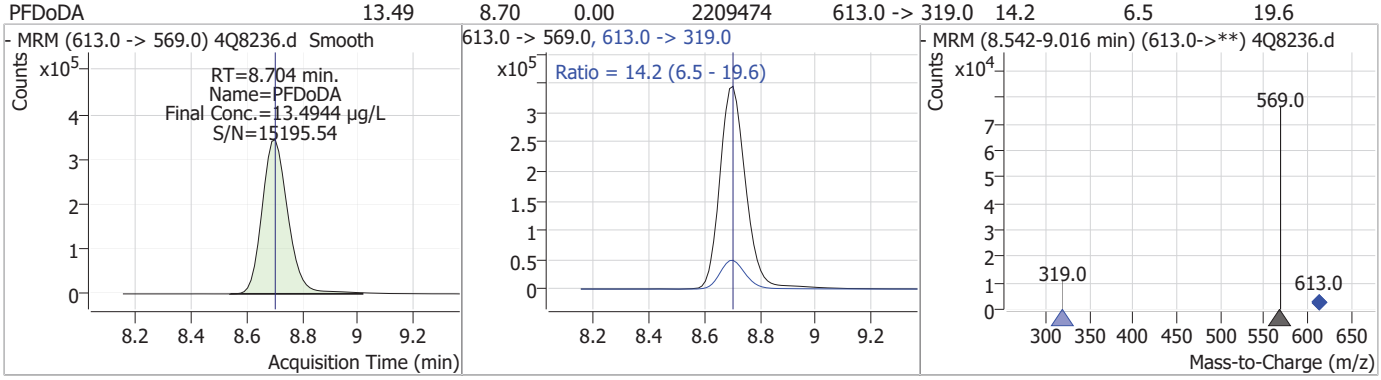
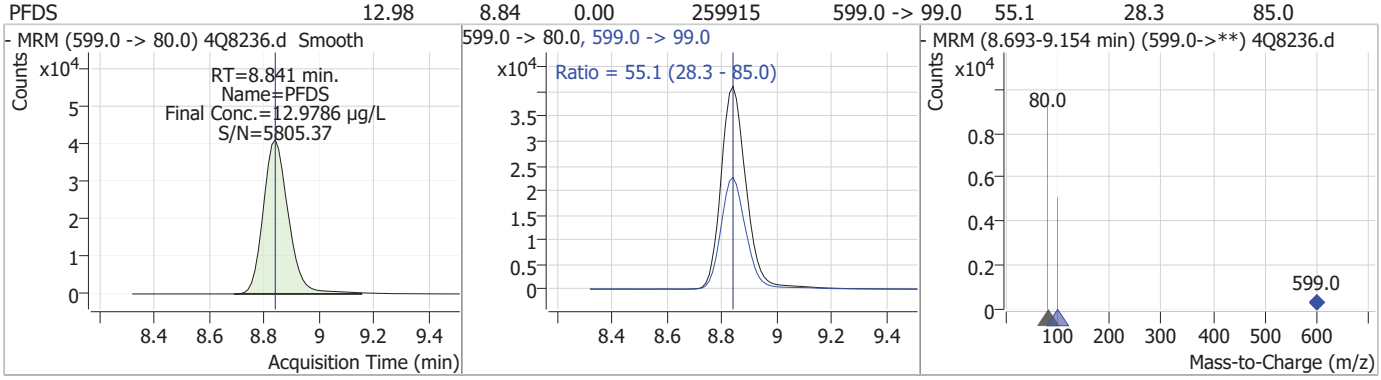
Perfluorinated Compounds by LC/MS/MS

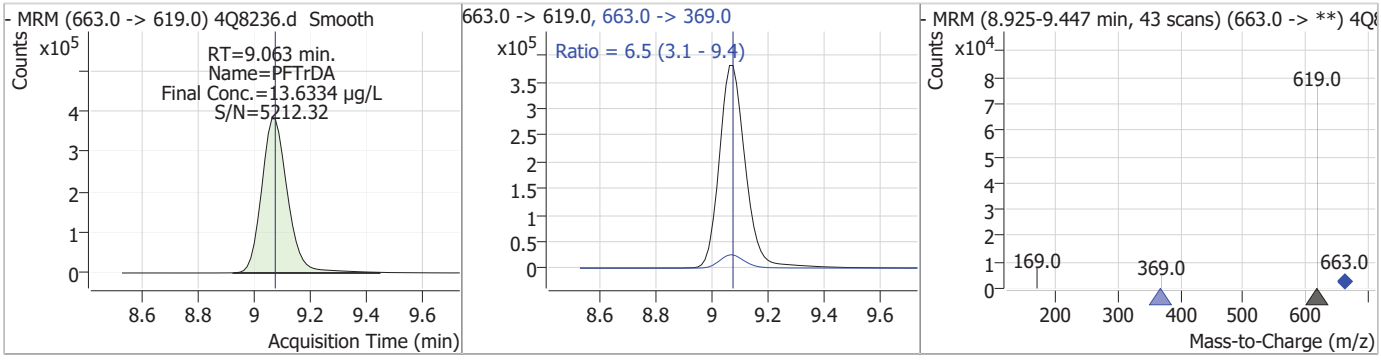
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	13.49	8.70	0.00	2209474	613.0 -> 319.0	14.2	6.5	19.6



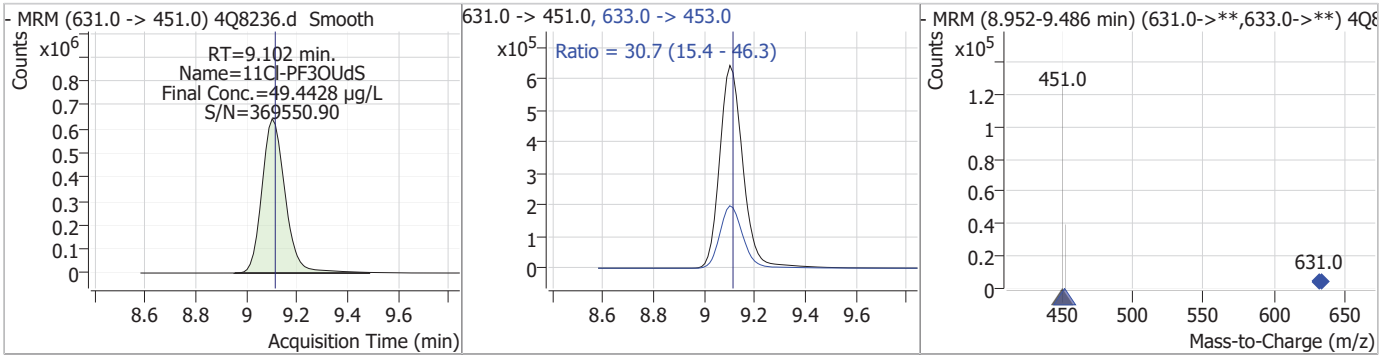
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	12.98	8.84	0.00	259915	599.0 -> 99.0	55.1	28.3	85.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	13.63	9.06	-0.01	2459055	663.0 -> 369.0	6.5	3.1	9.4

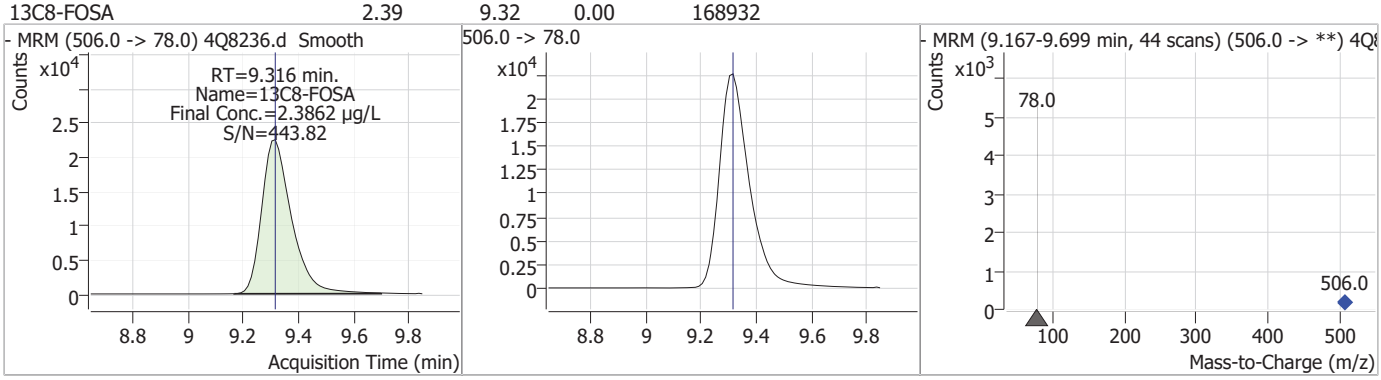


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	49.44	9.10	-0.01	4104390	633.0 -> 453.0	30.7	15.4	46.3

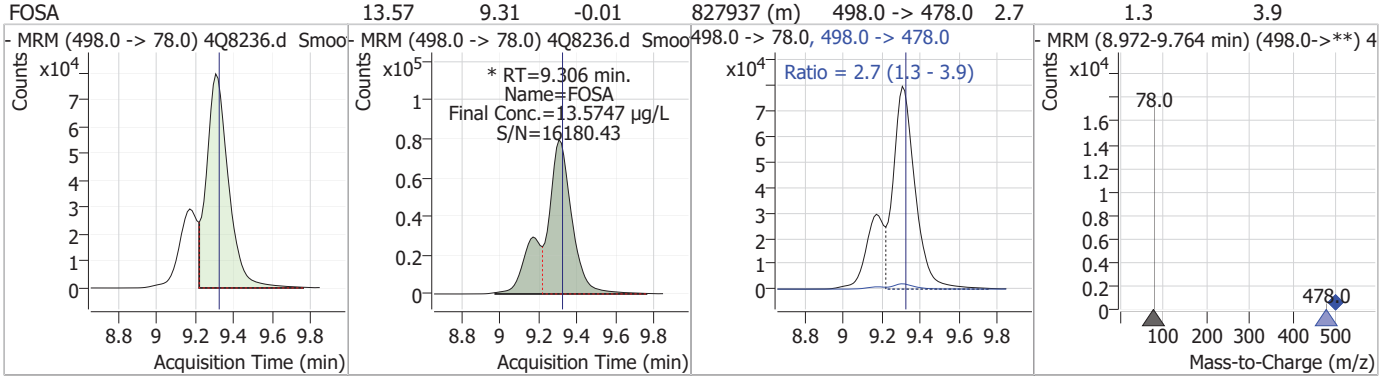


Perfluorinated Compounds by LC/MS/MS

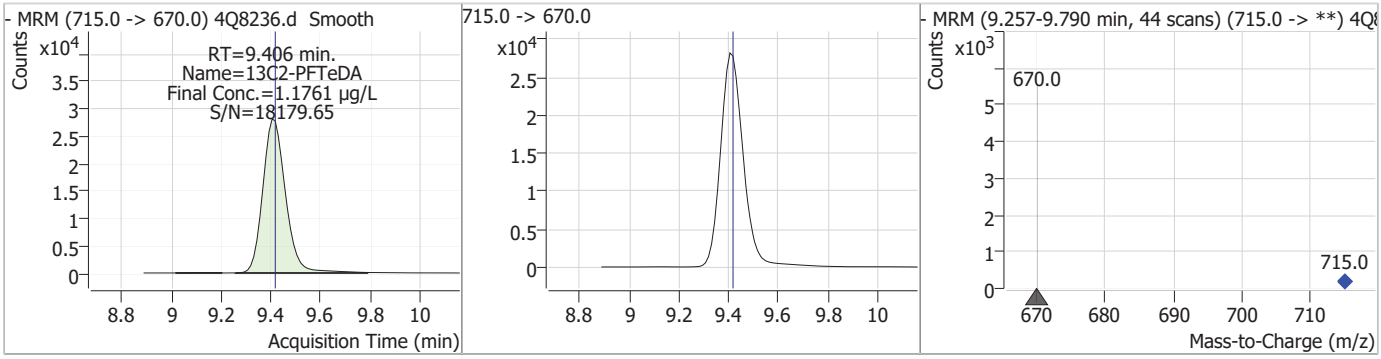
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.39	9.32	0.00	168932				



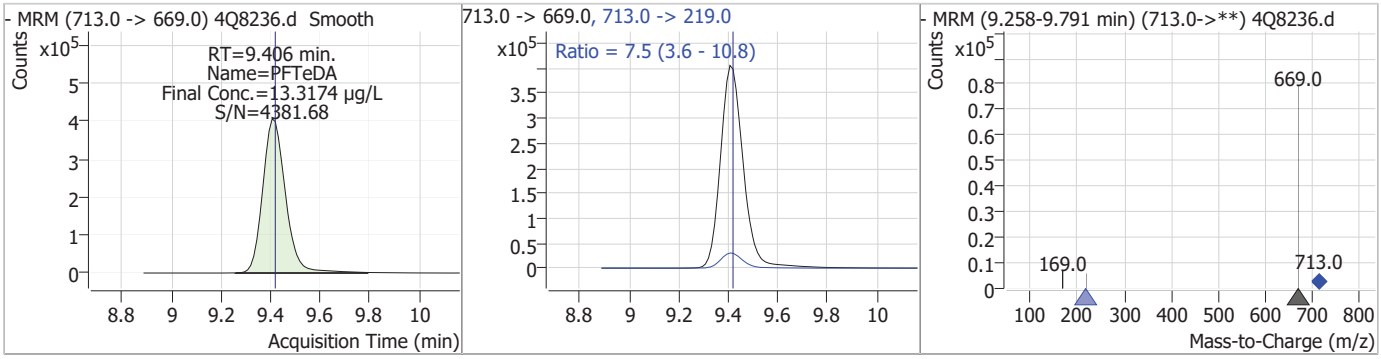
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	13.57	9.31	-0.01	827937 (m)	498.0 -> 478.0	2.7	1.3	3.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.18	9.41	-0.01	178843				

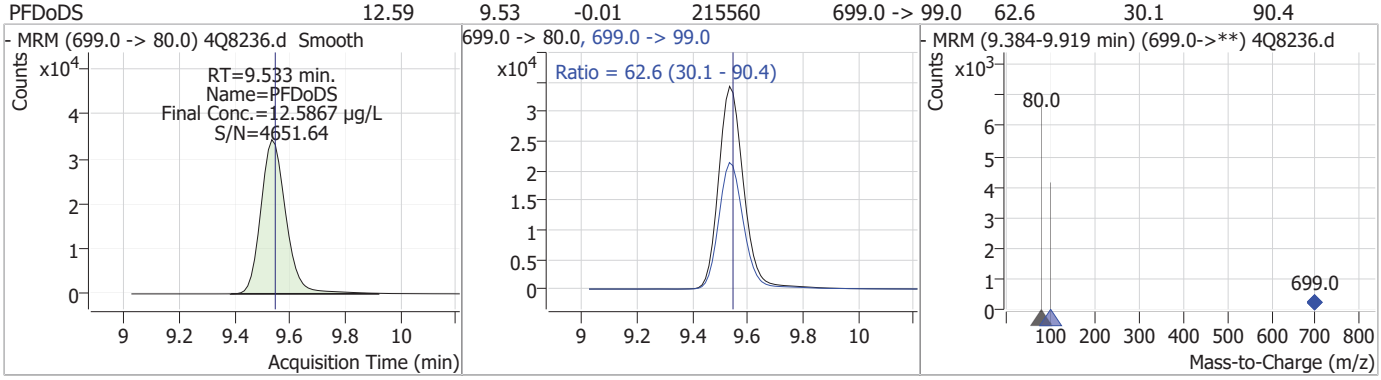


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	13.32	9.41	-0.01	2587108	713.0 -> 219.0	7.5	3.6	10.8

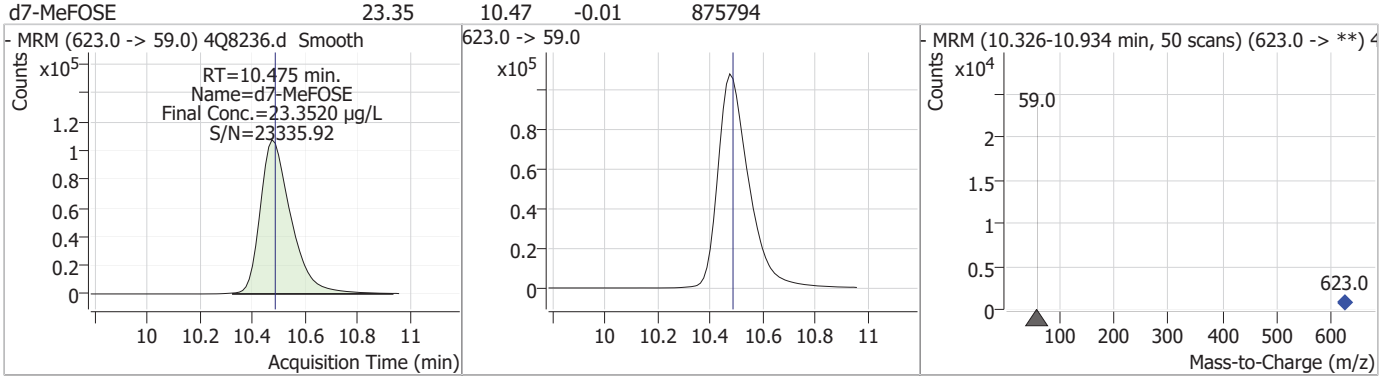


Perfluorinated Compounds by LC/MS/MS

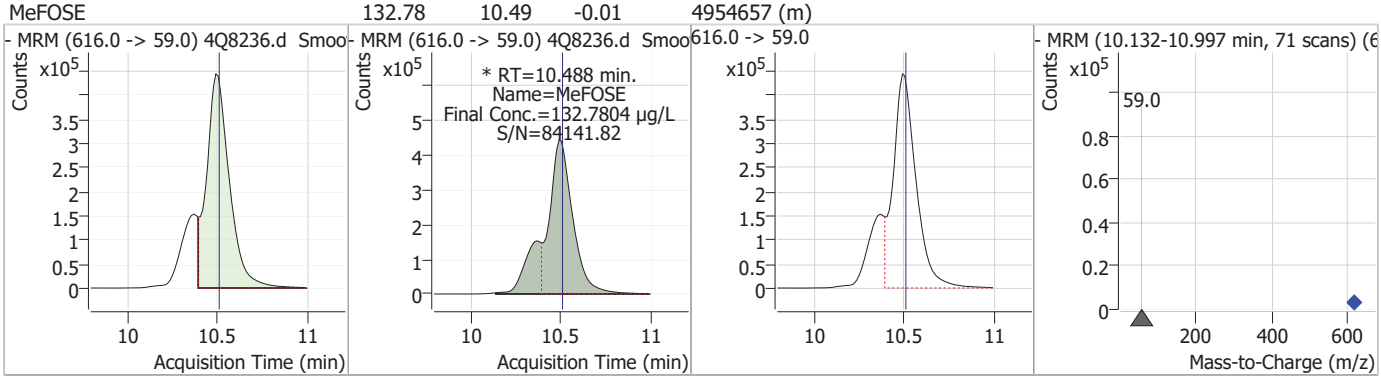
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	12.59	9.53	-0.01	215560	699.0 -> 99.0	62.6	30.1	90.4



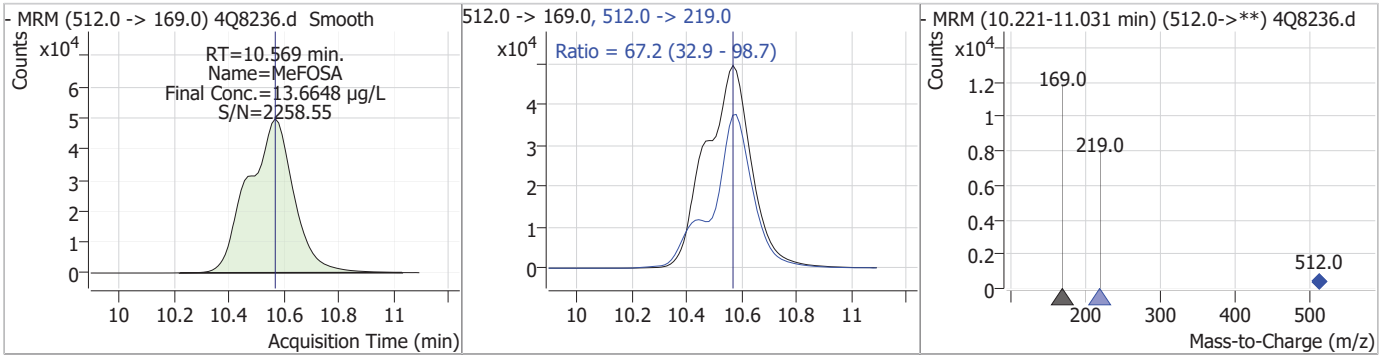
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.35	10.47	-0.01	875794				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	132.78	10.49	-0.01	4954657 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	13.66	10.57	0.00	573472	512.0 -> 219.0	67.2	32.9	98.7



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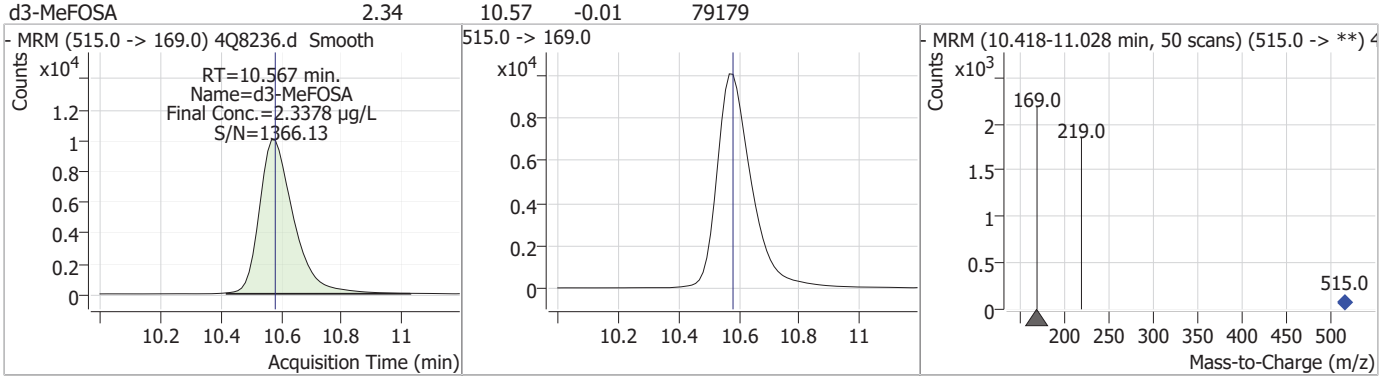
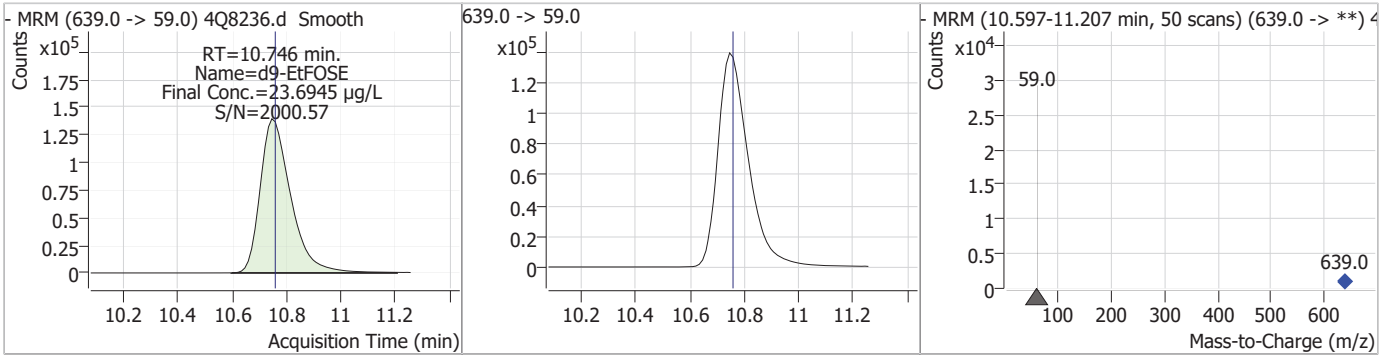
Perfluorinated Compounds by LC/MS/MS

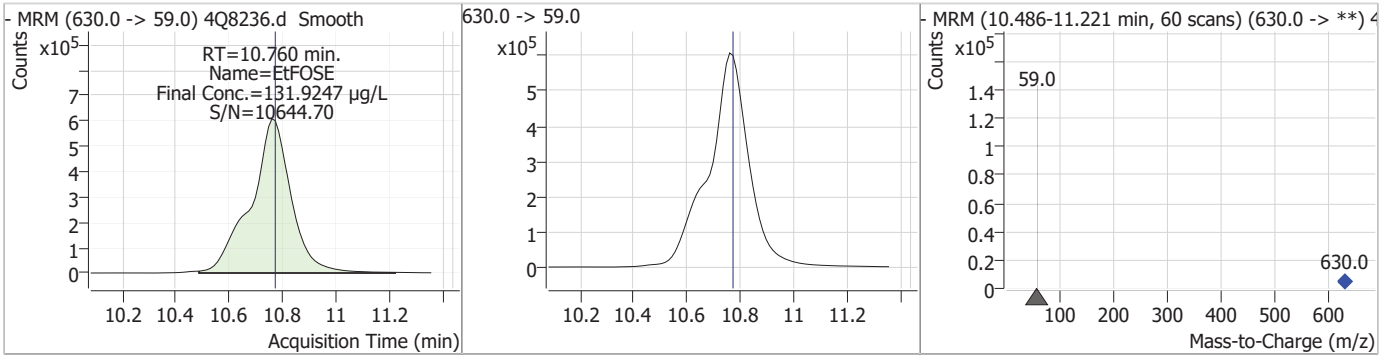
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.34	10.57	-0.01	79179				



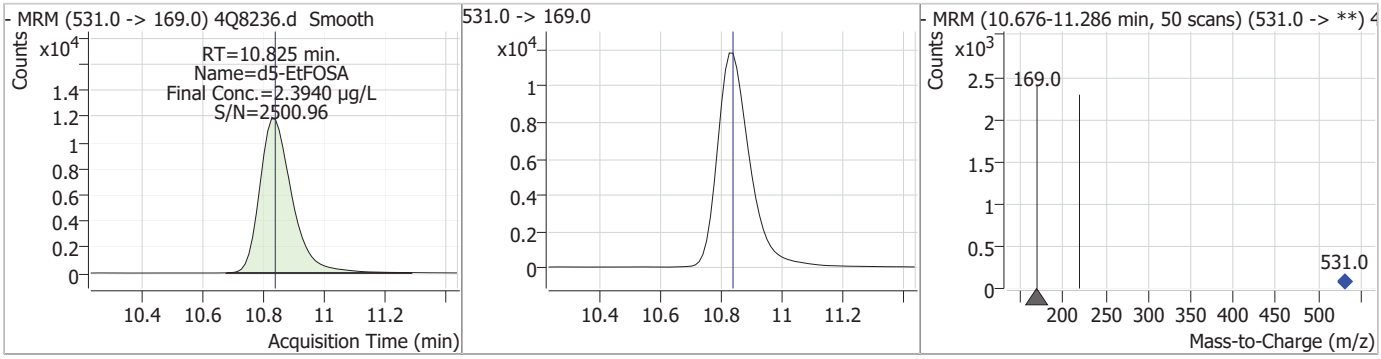
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.69	10.75	-0.01	1085238				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	131.92	10.76	-0.01	6383266				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.39	10.82	-0.01	87386				



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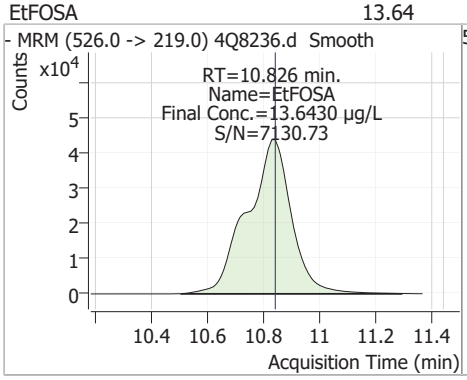
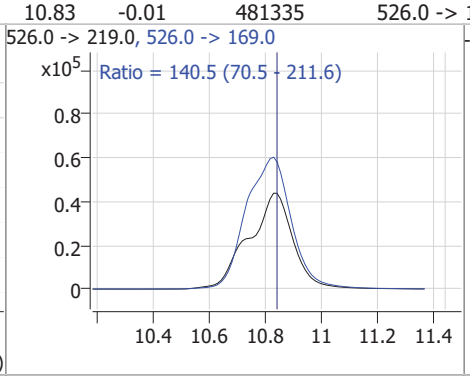
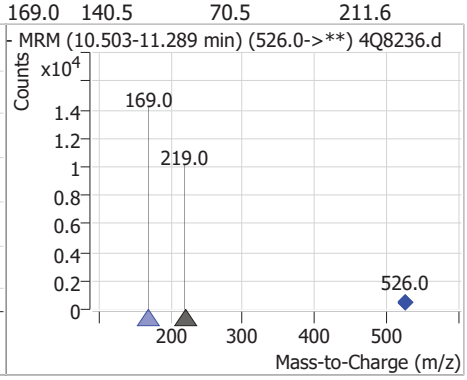
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	13.64	10.83	-0.01	481335	526.0 -> 169.0	140.5	70.5	211.6







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7

Manual Integration Approval Summary

Sample Number: T4Q140-IC140
Lab FileID: 4Q8236.D
Injection Time: 05/02/25 15:07

Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.91	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.43	Split peak
MeFOSAA	2355-31-9		7.94	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.01	Split peak
EtFOSAA	2991-50-6		8.12	Split peak
PFOSA	754-91-6		9.31	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina 05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8237.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 3:21:33 PM
Sample Name : IC140-7
Vial : P1-A8
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.883	217.0 -> 172.0	758714	10.00	µg/L	0.000
M5-PFPeA	4.319	268.0 -> 223.0	405115	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	276298	2.50	µg/L	0.000
M4-PFHpA	6.304	367.0 -> 322.0	296103	2.50	µg/L	0.000
M8-PFOA	6.910	421.0 -> 376.0	452980	2.50	µg/L	-0.012
M9-PFNA	7.416	472.0 -> 427.0	194551	1.25	µg/L	-0.012
M6-PFDA	7.870	519.0 -> 474.0	179447	1.25	µg/L	-0.012
M7-PFUnDA	8.298	570.0 -> 525.0	223275	1.25	µg/L	-0.012
M2-PFDoDA	8.691	615.0 -> 570.0	211549	1.25	µg/L	-0.012
M2-PFTeDA	9.406	715.0 -> 670.0	179114	1.25	µg/L	-0.012
M8-FOSA	9.303	506.0 -> 78.0	167554	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	23309	2.50	µg/L	0.000
		302.0 -> 80.0	57195			
M3-PFHxS	6.999	402.0 -> 99.0	34184	2.50	µg/L	0.000
M8-PFOS	8.007	507.0 -> 99.0	36598	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	9735	5.00	µg/L	0.000
M2-6:2FTS	6.696	429.0 -> 81.0	20674	5.00	µg/L	-0.012
M2-8:2FTS	7.683	529.0 -> 81.0	25413	5.00	µg/L	0.000
M3-MeFOSAA	7.940	573.0 -> 419.0	210818	5.00	µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	408035	10.00	µg/L	0.000
M5-EtFOSAA	8.110	589.0 -> 419.0	170816	5.00	µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	868827	25.00	µg/L	-0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1042210	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	86060	2.50	µg/L	-0.012
M3-MeFOSA	10.567	515.0 -> 169.0	82962	2.50	µg/L	-0.012
13C4-PFOS	8.008	503.0 -> 80.0	66850	2.50	µg/L	0.000
13C3-PFBA	2.886	216.0 -> 172.0	339718	5.00	µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	41338	2.50	µg/L	0.000
13C4-PFOA	6.910	417.0 -> 372.0	467776	2.50	µg/L	-0.012
13C2-PFDA	7.871	515.0 -> 470.0	167263	1.25	µg/L	-0.012
13C5-PFNA	7.416	468.0 -> 423.0	189964	1.25	µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	269428	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	9735	4.24	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 84.7%		
13C2-6:2FTS	6.696	429.0 -> 81.0	20674	4.16	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 83.1%		
13C2-8:2FTS	7.683	529.0 -> 81.0	25413	4.27	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 85.4%		
13C2-PFDoDA	8.691	615.0 -> 570.0	211549	1.13	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.6%		
13C2-PFTeDA	9.406	715.0 -> 670.0	179114	1.13	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.8%		
13C3-PFBS	5.368	302.0 -> 99.0	23309	2.29	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.7%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	34184	2.34	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.7%			
13C4-PFBA	2.883	217.0 -> 172.0	758714	9.46	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.6%			
13C4-PFHpA	6.304	367.0 -> 322.0	296103	2.31	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.4%			
13C5-PFHxA	5.464	318.0 -> 273.0	276298	2.33	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.3%			
13C5-PFPeA	4.319	268.0 -> 223.0	405115	4.69	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.7%			
13C6-PFDA	7.870	519.0 -> 474.0	179447	1.11	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.8%			
13C7-PFUnDA	8.298	570.0 -> 525.0	223275	1.13	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.2%			
13C8-FOSA	9.303	506.0 -> 78.0	167554	2.33	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.3%			
13C8-PFOA	6.910	421.0 -> 376.0	452980	2.35	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.1%			
13C8-PFOS	8.007	507.0 -> 99.0	36598	2.30	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.2%			
13C9-PFNA	7.416	472.0 -> 427.0	194551	1.18	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.5%			
d3-MeFOSAA	7.940	573.0 -> 419.0	210818	4.69	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 93.8%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	408035	9.67	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 96.7%			
d3-MeFOSA	10.567	515.0 -> 169.0	82962	2.41	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.5%			
d5-EtFOSAA	8.110	589.0 -> 419.0	170816	4.76	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.2%			
d7-MeFOSE	10.475	623.0 -> 59.0	868827	22.82	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 91.3%			
d9-EtFOSE	10.746	639.0 -> 59.0	1042210	22.42	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 89.7%			
d5-EtFOSA	10.825	531.0 -> 169.0	86060	2.32	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 92.9%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	1718332	103.24	µg/L		97
		327.0 -> 81.0	790156				
6:2FTS	6.697	427.0 -> 407.0	2176128	108.93	µg/L		100
		427.0 -> 81.0	998108				
8:2FTS	7.684	527.0 -> 507.0	2067483	111.62	µg/L		99
		527.0 -> 81.0	798260				
EtFOSAA	8.124	584.0 -> 419.0	933251	30.23	µg/L	m	94
		584.0 -> 483.0	501358				
FOSA	9.306	498.0 -> 78.0	1804584	29.83	µg/L	m	100
		498.0 -> 478.0	47583				
MeFOSAA	7.941	570.0 -> 419.0	1062862	30.25	µg/L	m	100
		570.0 -> 512.0	378655				
PFBA	2.889	213.0 -> 169.0	2881053	116.33	µg/L		100
PFBS	5.369	299.0 -> 80.0	705382	27.03	µg/L		99
		299.0 -> 99.0	294113				
PFDA	7.871	513.0 -> 469.0	3883861	30.37	µg/L		100
		513.0 -> 219.0	888248				
PFDoDA	8.692	613.0 -> 569.0	4906697	29.50	µg/L		98
		613.0 -> 319.0	677643				

Perfluorinated Compounds by LC/MS/MS

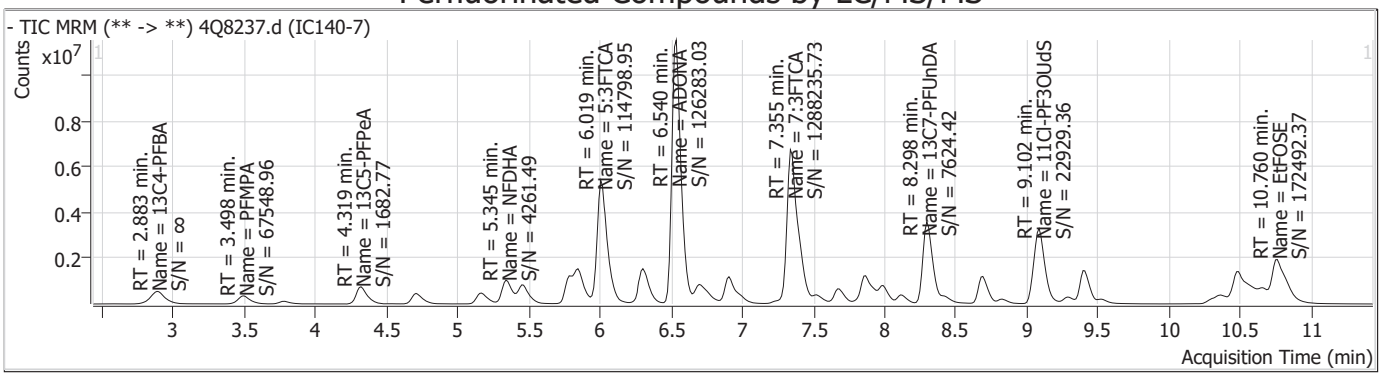
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.829	599.0 -> 80.0	570713	28.81	µg/L		100
		599.0 -> 99.0	324873				
PFHpA	6.304	363.0 -> 319.0	5081905	29.95	µg/L		99
		363.0 -> 169.0	1038918				
PFHpS	7.541	449.0 -> 80.0	834803	28.34	µg/L		100
		449.0 -> 99.0	466379				
PFHxA	5.467	313.0 -> 269.0	3342343	29.85	µg/L		100
		313.0 -> 119.0	117598				
PFHxS	7.000	399.0 -> 80.0	814319	27.29	µg/L	m	99
		399.0 -> 99.0	424012				
PFNA	7.416	463.0 -> 419.0	3257196	29.02	µg/L	m	98
		463.0 -> 219.0	1201480				
PFNS	8.437	549.0 -> 80.0	738172	29.22	µg/L		95
		549.0 -> 99.0	443216				
PFOA	6.910	413.0 -> 369.0	4435001	29.88	µg/L	m	98
		413.0 -> 169.0	1251965				
PFOS	7.996	499.0 -> 80.0	806493	27.59	µg/L	m	98
		499.0 -> 99.0	436619				
PFPeA	4.321	263.0 -> 219.0	3726648	59.04	µg/L		100
PFPeS	6.331	349.0 -> 80.0	840719	29.01	µg/L		100
		349.0 -> 99.0	420393				
PFTeDA	9.406	713.0 -> 669.0	5699664	29.30	µg/L		99
		713.0 -> 219.0	425572				
PFTrDA	9.063	663.0 -> 619.0	5243594	28.62	µg/L		99
		663.0 -> 369.0	350397				
PFUnDA	8.287	563.0 -> 519.0	3907748	29.20	µg/L		97
		563.0 -> 269.0	788237				
11Cl-PF3OUdS	9.102	631.0 -> 451.0	9038933	105.53	µg/L		98
		633.0 -> 453.0	2690525				
9Cl-PF3ONS	8.313	531.0 -> 351.0	10010422	103.39	µg/L		96
		533.0 -> 353.0	2959887				
ADONA	6.540	377.0 -> 251.0	41710881	126.50	µg/L		90
		377.0 -> 85.0	11518255				
HFPO-DA	5.792	285.0 -> 169.0	4857201	114.86	µg/L		99
		285.0 -> 185.0	588729				
3:3FTCA	3.781	241.0 -> 177.0	581064	151.12	µg/L		98
		241.0 -> 117.0	51099				
5:3FTCA	6.019	341.0 -> 237.0	15897120	734.48	µg/L		99
		341.0 -> 217.0	11386037				
7:3FTCA	7.355	441.0 -> 337.0	23724137	764.70	µg/L		95
		441.0 -> 317.0	10187480				
EtFOSA	10.826	526.0 -> 219.0	1066958	30.71	µg/L		98
		526.0 -> 169.0	1480250				
EtFOSE	10.760	630.0 -> 59.0	13711773	295.08	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	1288546	29.30	µg/L		99
		512.0 -> 219.0	857640				
MeFOSE	10.488	616.0 -> 59.0	10791304	291.52	µg/L	m	100
PFDoDS	9.533	699.0 -> 80.0	467283	28.93	µg/L		97
		699.0 -> 99.0	292179				
NFDHA	5.345	295.0 -> 201.0	780021	62.36	µg/L		86
		201.0 -> 85.0	3562348				
		295.0 -> 85.0	211488				
PFMBA	4.710	279.0 -> 85.0	2526443	59.06	µg/L		100
PFMPA	3.498	229.0 -> 85.0	2158758	59.04	µg/L		100
PFEESA	5.849	315.0 -> 135.0	5535404	52.19	µg/L		99
		315.0 -> 69.0	464958				

Perfluorinated Compounds by LC/MS/MS

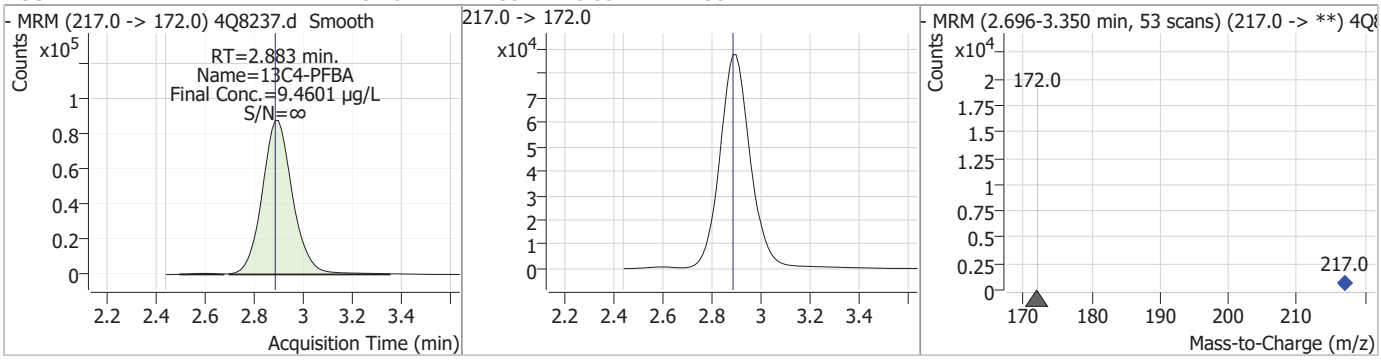
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

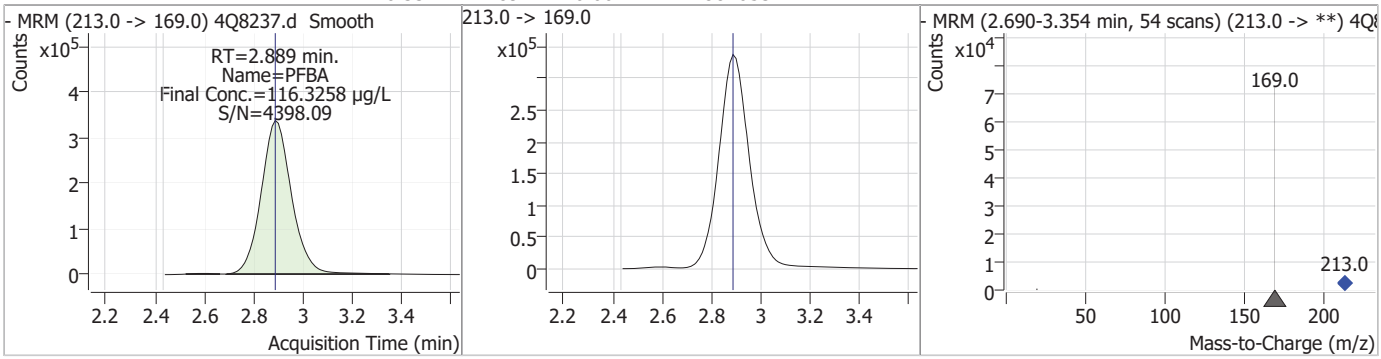
Perfluorinated Compounds by LC/MS/MS



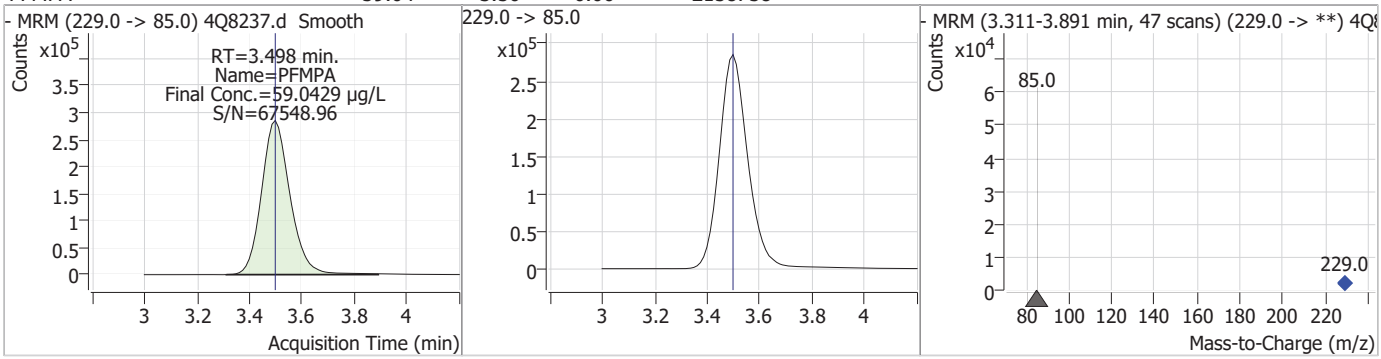
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.46	2.88	0.00	758714				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	116.33	2.89	0.00	2881053				

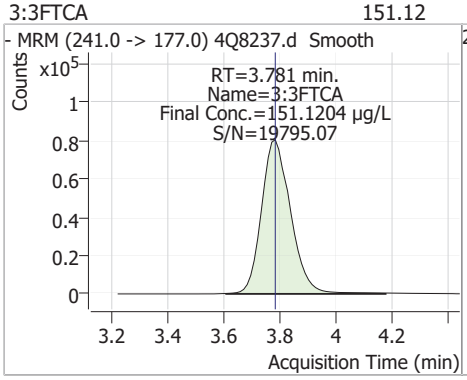


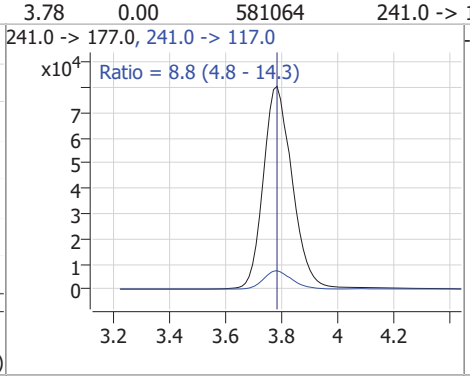
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	59.04	3.50	0.00	2158758				

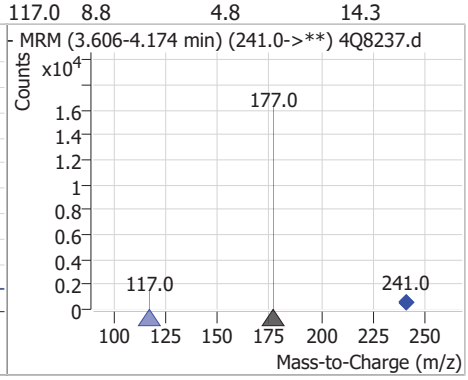


Perfluorinated Compounds by LC/MS/MS

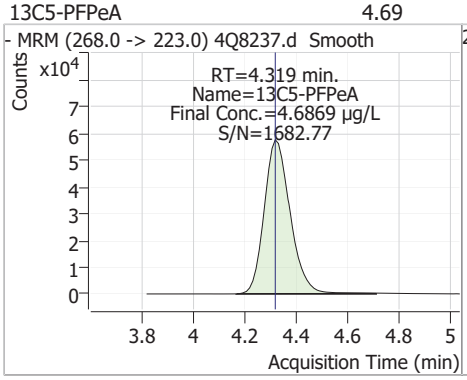
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	151.12	3.78	0.00	581064	241.0 -> 117.0	8.8	4.8	14.3

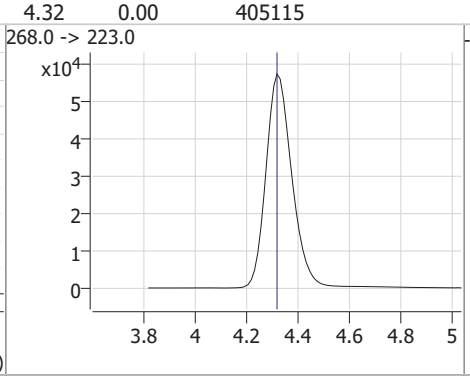


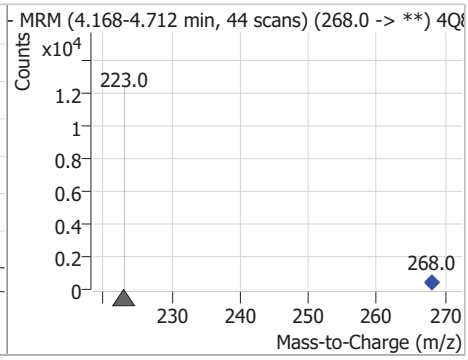




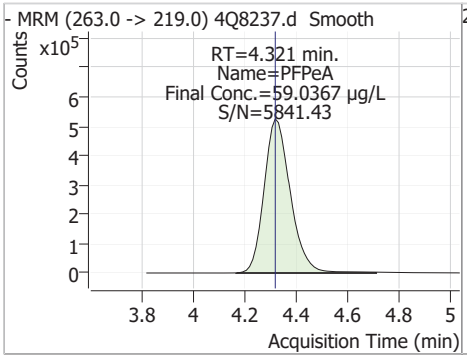
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.69	4.32	0.00	405115				

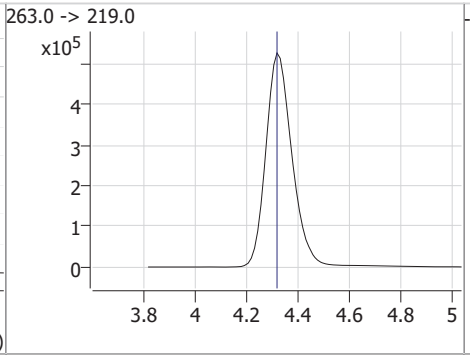


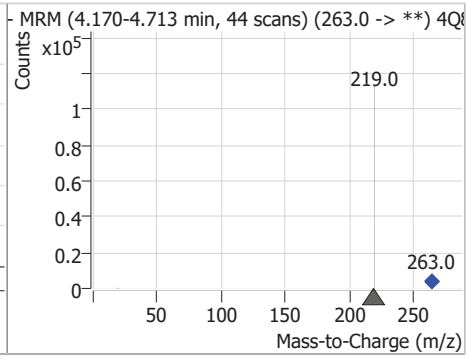




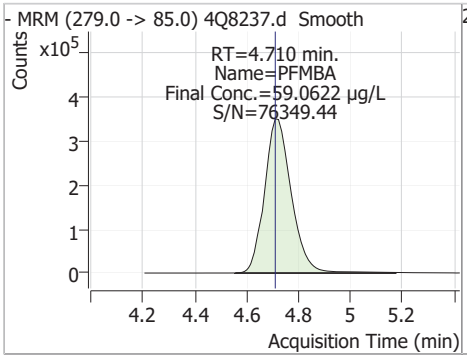
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	59.04	4.32	0.00	3726648				

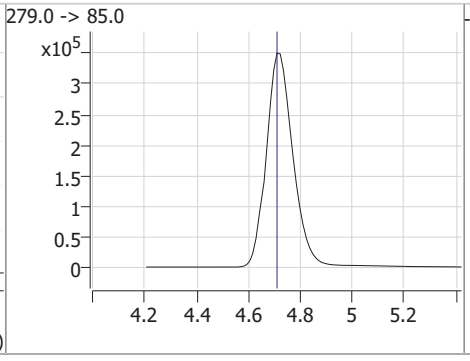


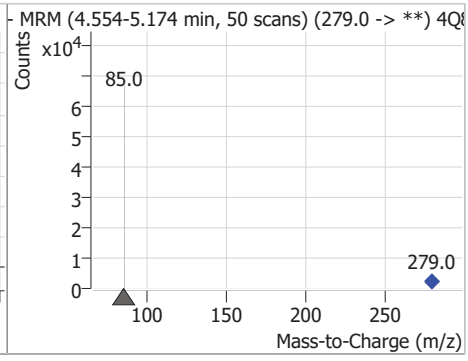




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	59.06	4.71	0.00	2526443				







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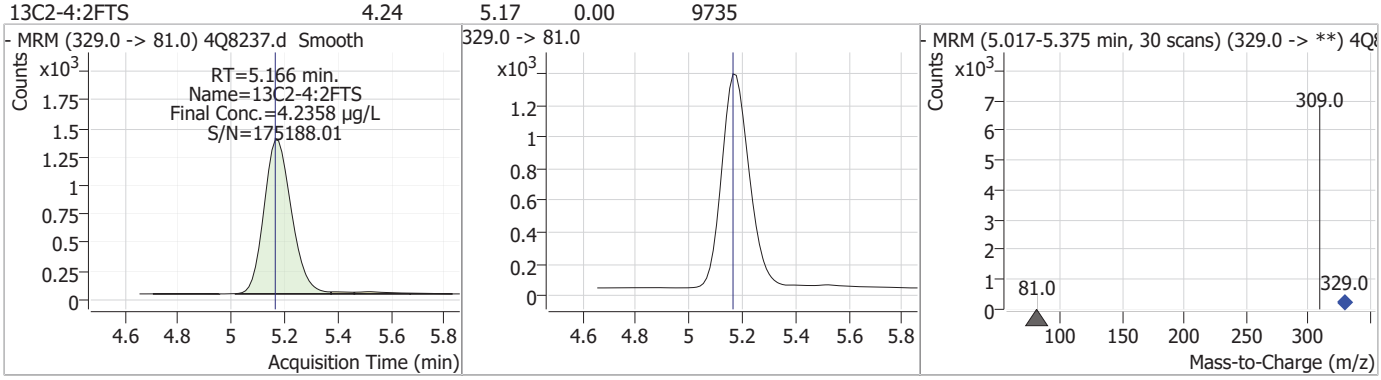
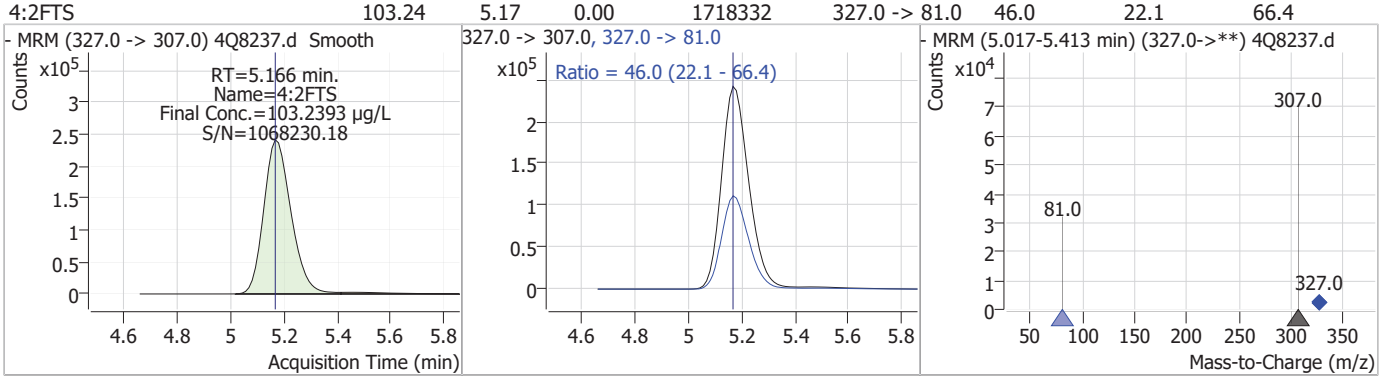
Perfluorinated Compounds by LC/MS/MS

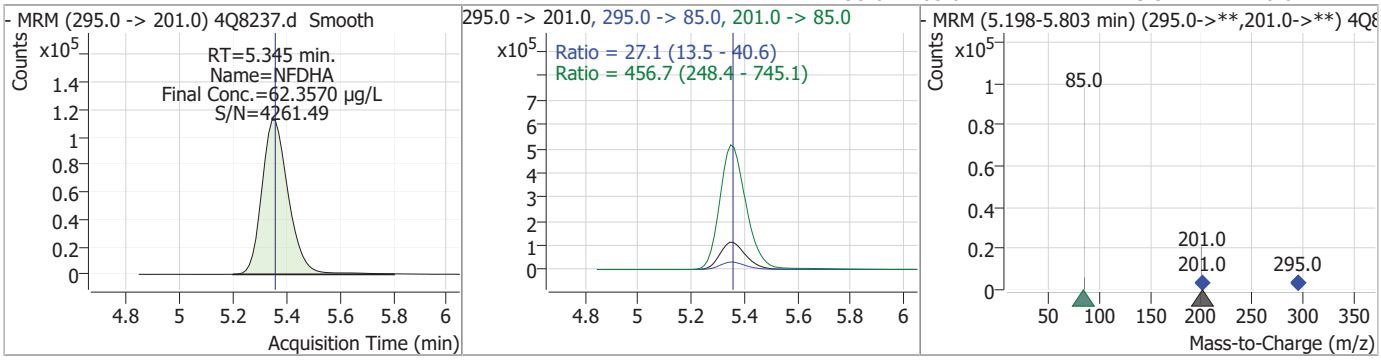
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.24	5.17	0.00	9735				



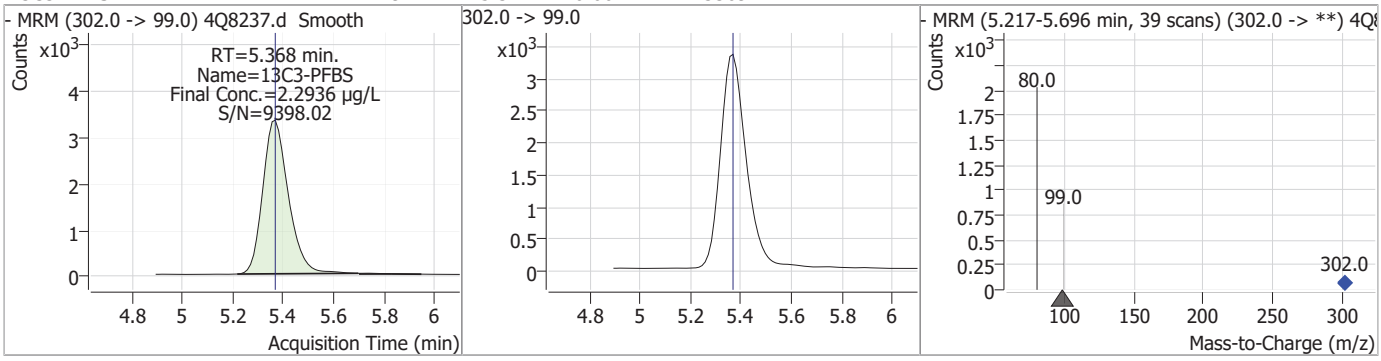
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	103.24	5.17	0.00	1718332	327.0 -> 81.0	46.0	22.1	66.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	62.36	5.35	-0.01	780021	201.0 -> 85.0	456.7	248.4	745.1
					295.0 -> 85.0	27.1	13.5	40.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.29	5.37	0.00	23309				



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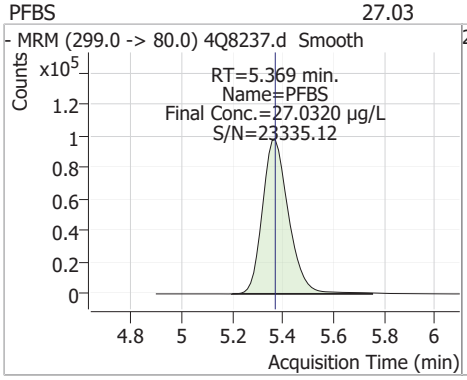
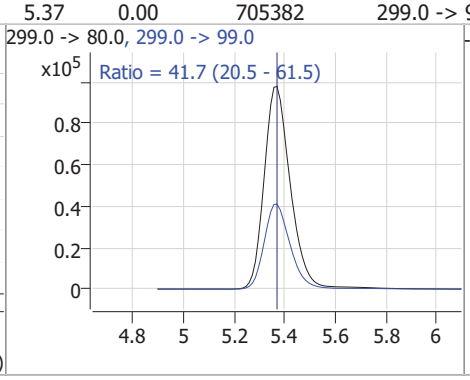
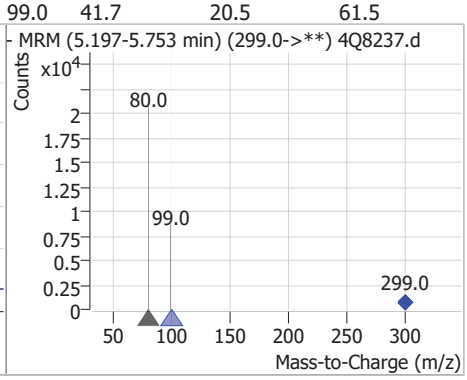
Perfluorinated Compounds by LC/MS/MS

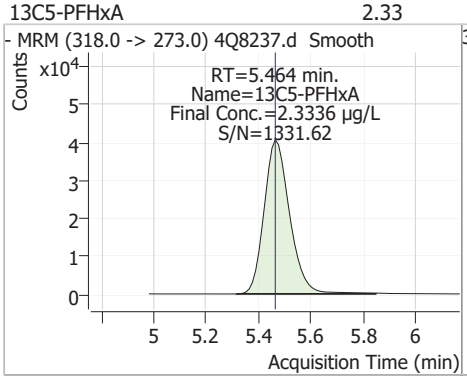
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	27.03	5.37	0.00	705382	299.0 -> 99.0	41.7	20.5	61.5

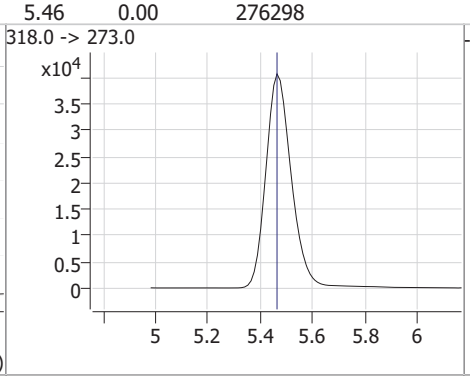


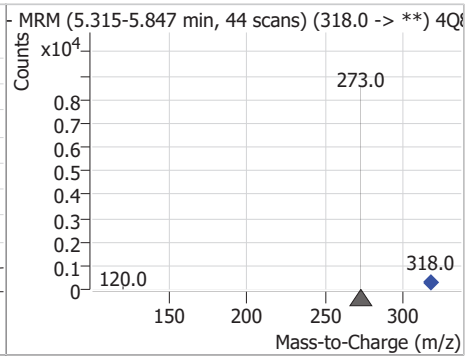




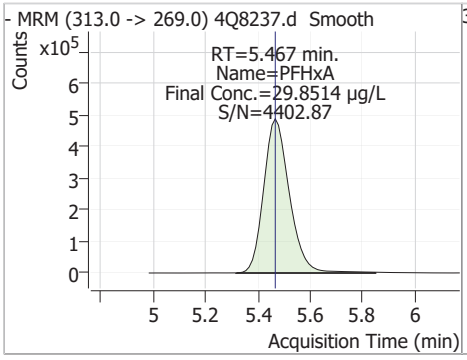
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.33	5.46	0.00	276298				

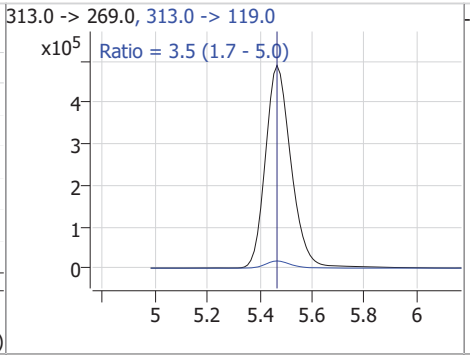


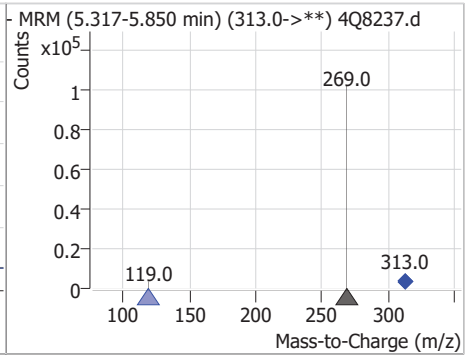




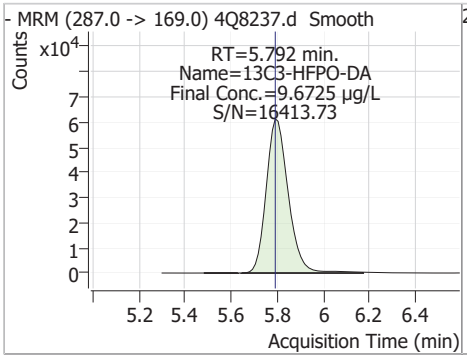
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	29.85	5.47	0.00	3342343	313.0 -> 119.0	3.5	1.7	5.0

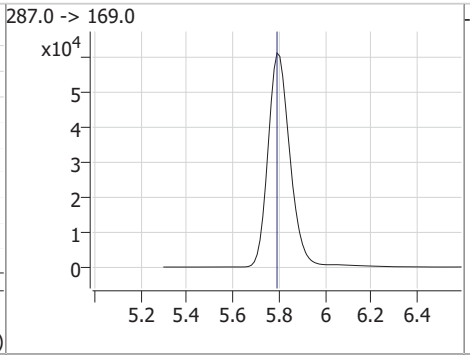


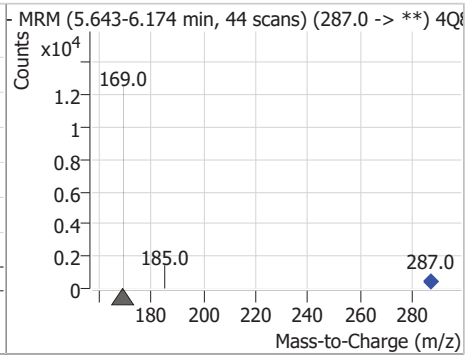




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.67	5.79	0.00	408035				







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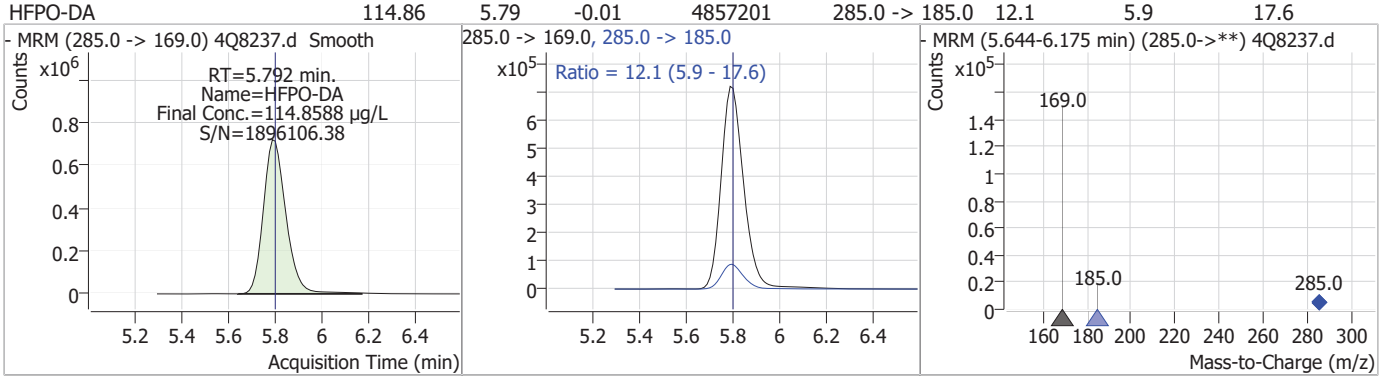
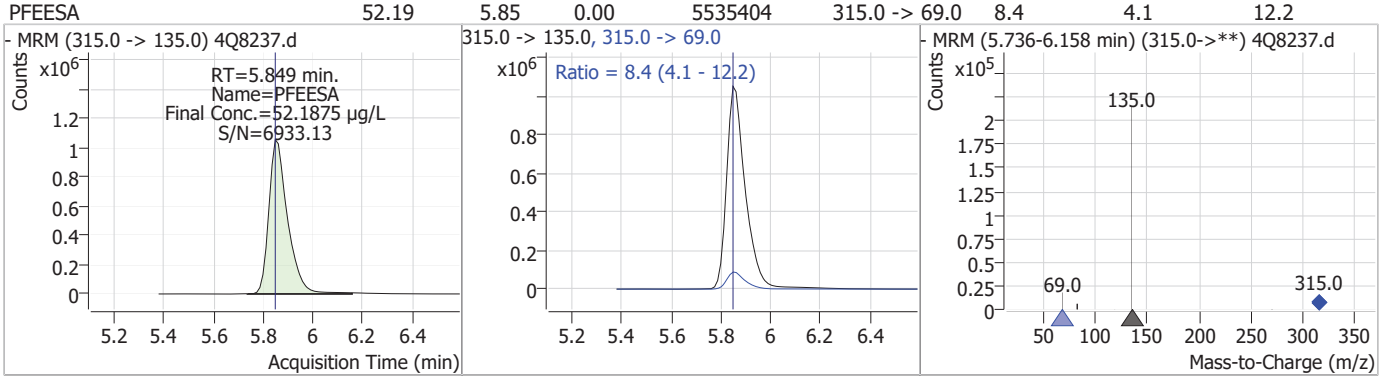
Perfluorinated Compounds by LC/MS/MS

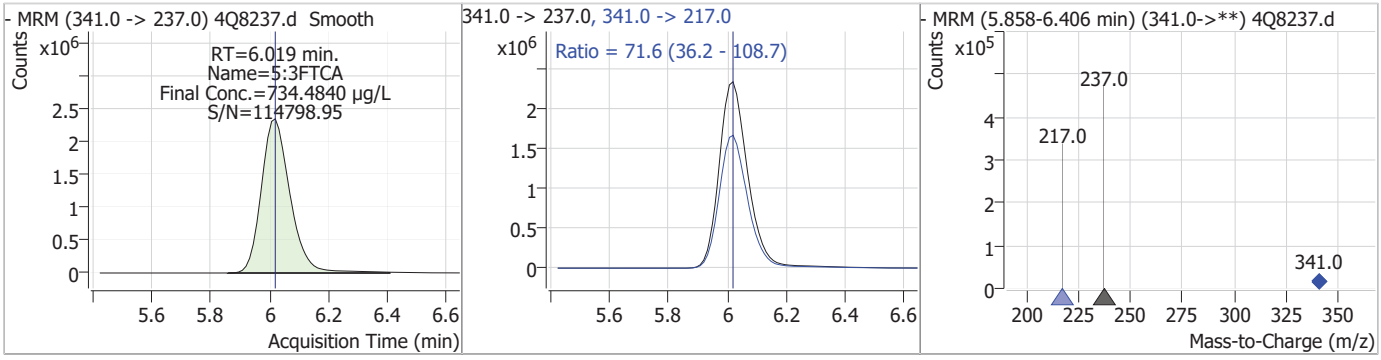
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	114.86	5.79	-0.01	4857201	285.0 -> 185.0	12.1	5.9	17.6



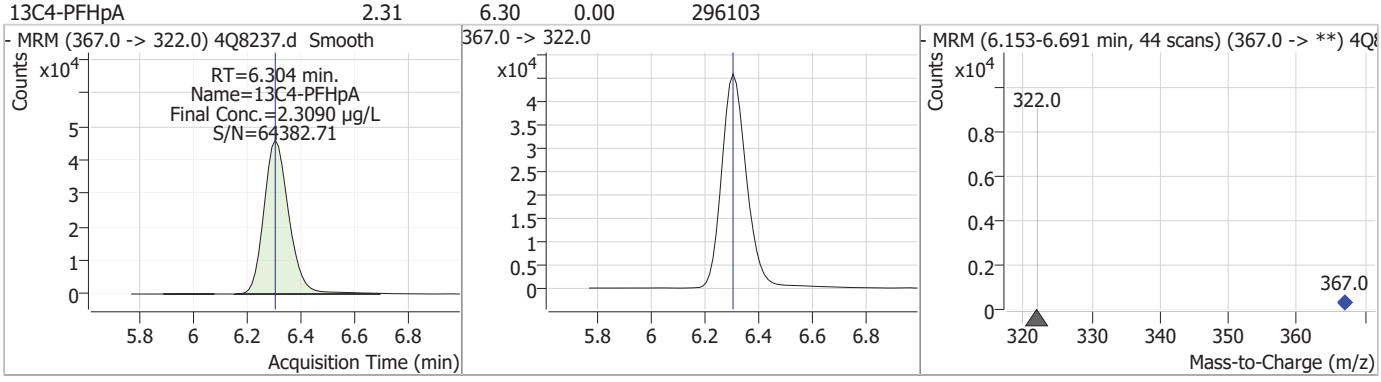
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	52.19	5.85	0.00	5535404	315.0 -> 69.0	8.4	4.1	12.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	734.48	6.02	0.00	15897120	341.0 -> 217.0	71.6	36.2	108.7

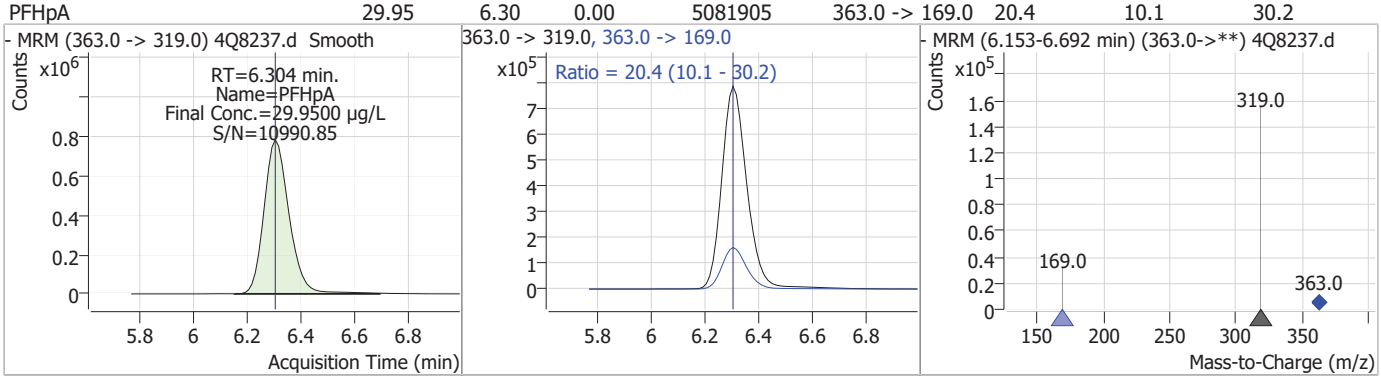


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.31	6.30	0.00	296103				

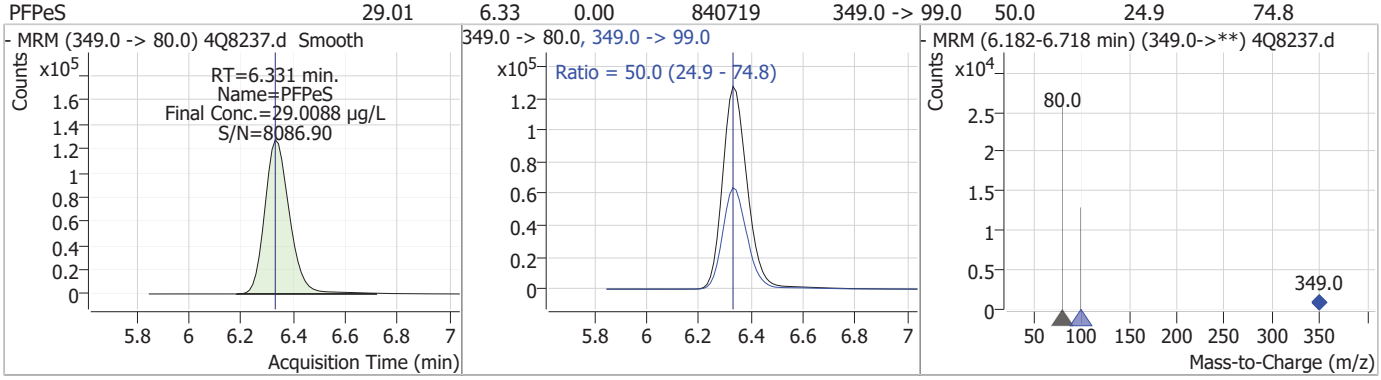


Perfluorinated Compounds by LC/MS/MS

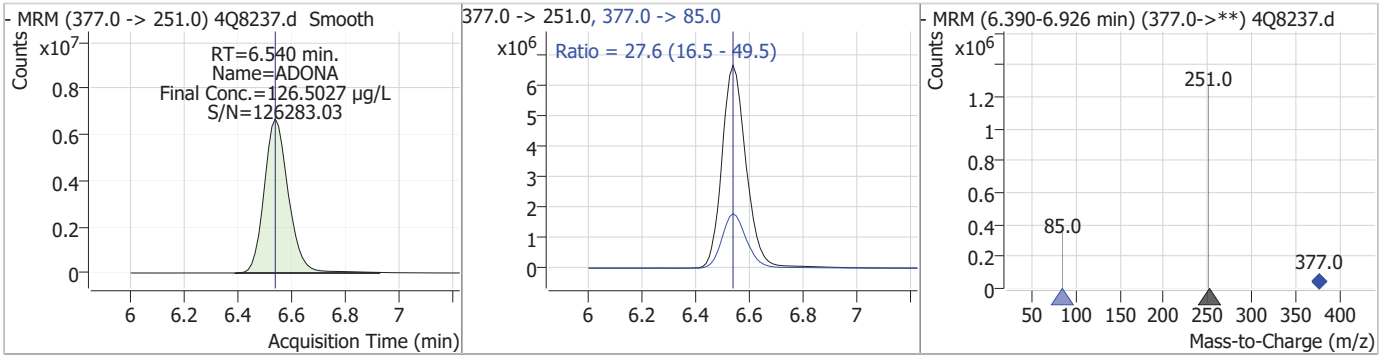
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	29.95	6.30	0.00	5081905	363.0 -> 169.0	20.4	10.1	30.2



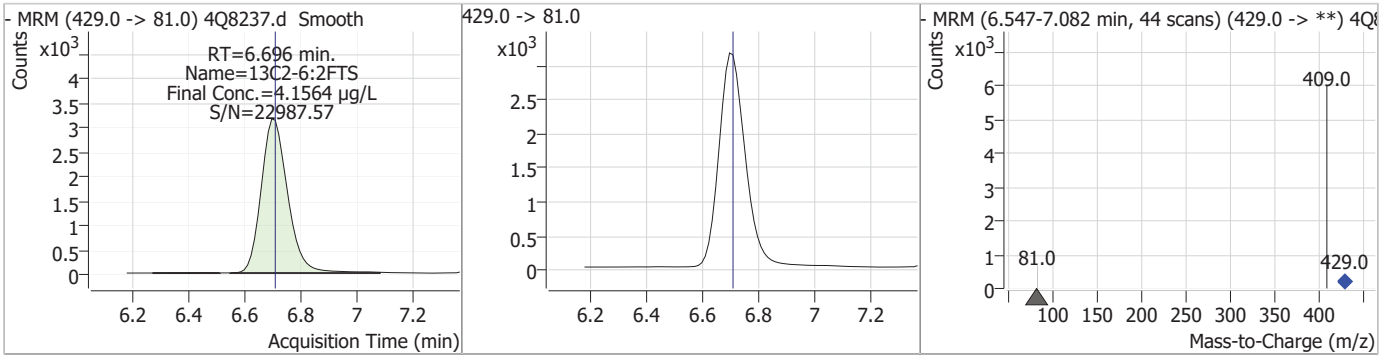
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	29.01	6.33	0.00	840719	349.0 -> 99.0	50.0	24.9	74.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	126.50	6.54	0.00	41710881	377.0 -> 85.0	27.6	16.5	49.5

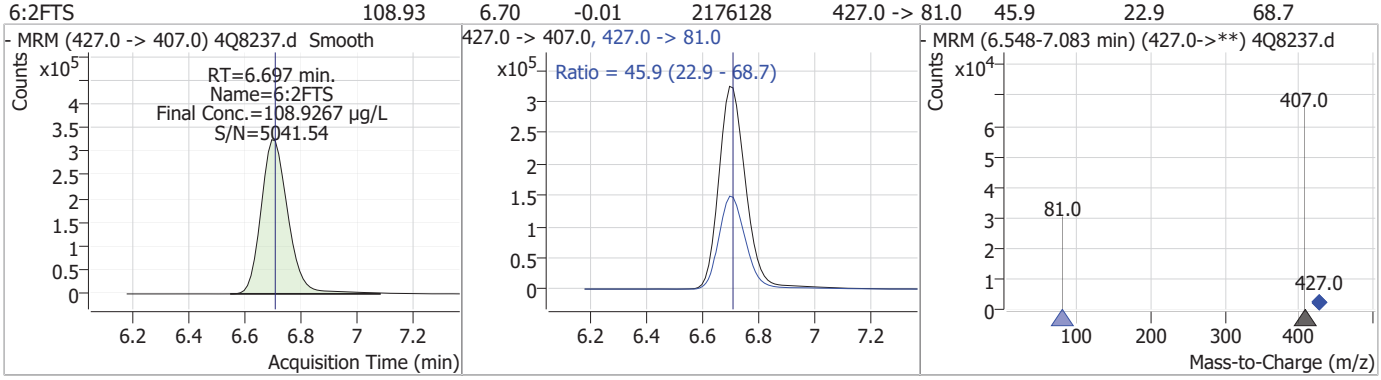


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.16	6.70	-0.01	20674				

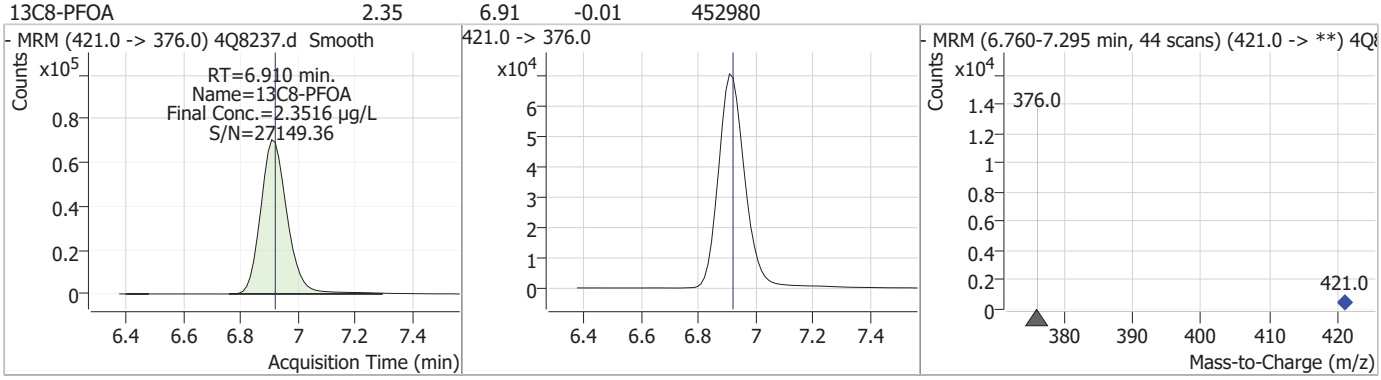


Perfluorinated Compounds by LC/MS/MS

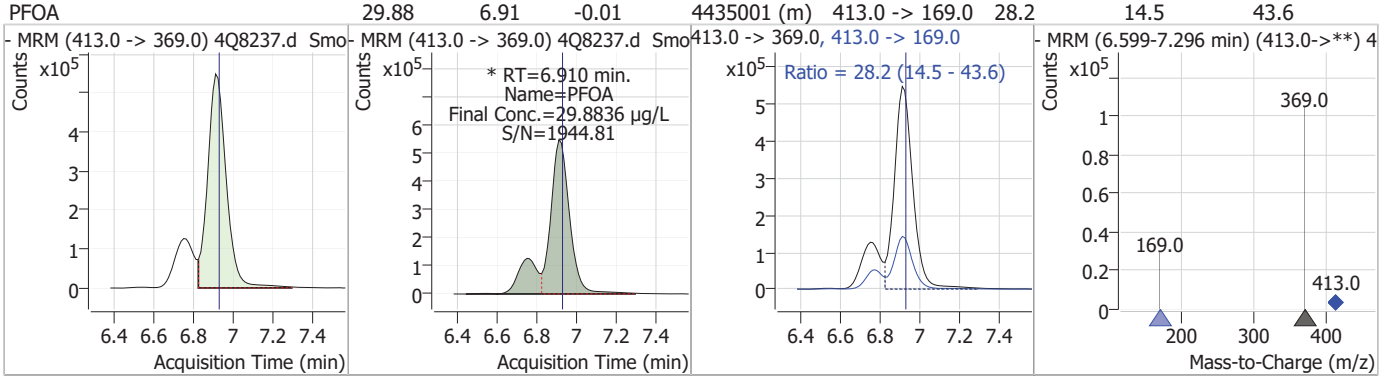
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	108.93	6.70	-0.01	2176128	427.0 -> 81.0	45.9	22.9	68.7



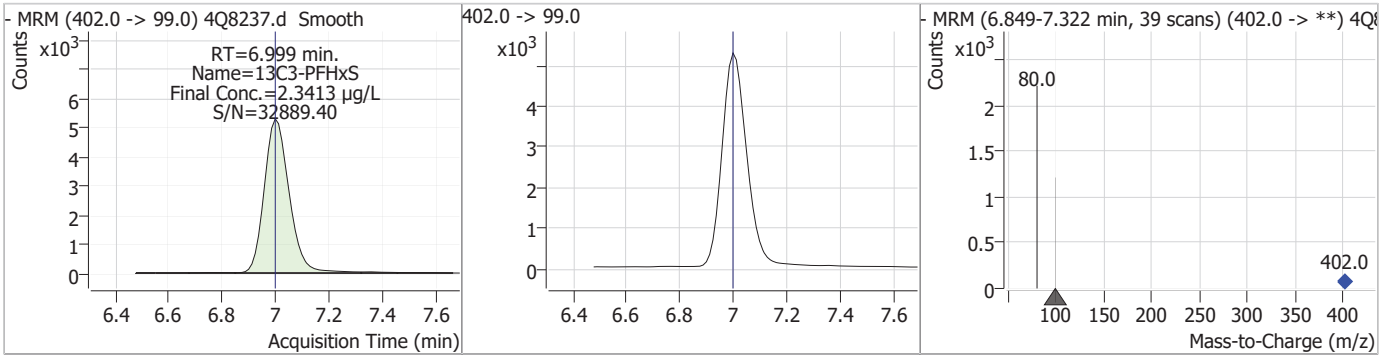
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.35	6.91	-0.01	452980				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	29.88	6.91	-0.01	4435001 (m)	413.0 -> 169.0	28.2	14.5	43.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.34	7.00	0.00	34184				



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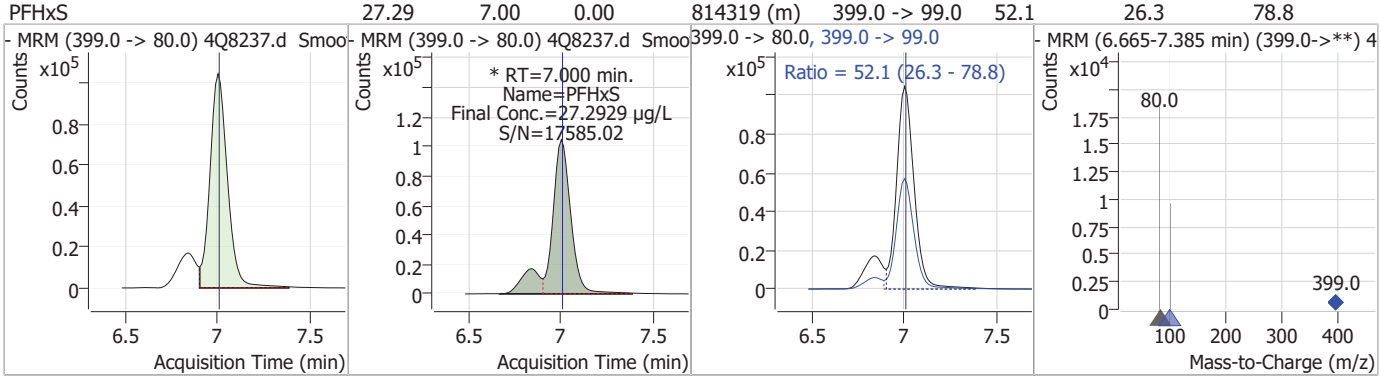
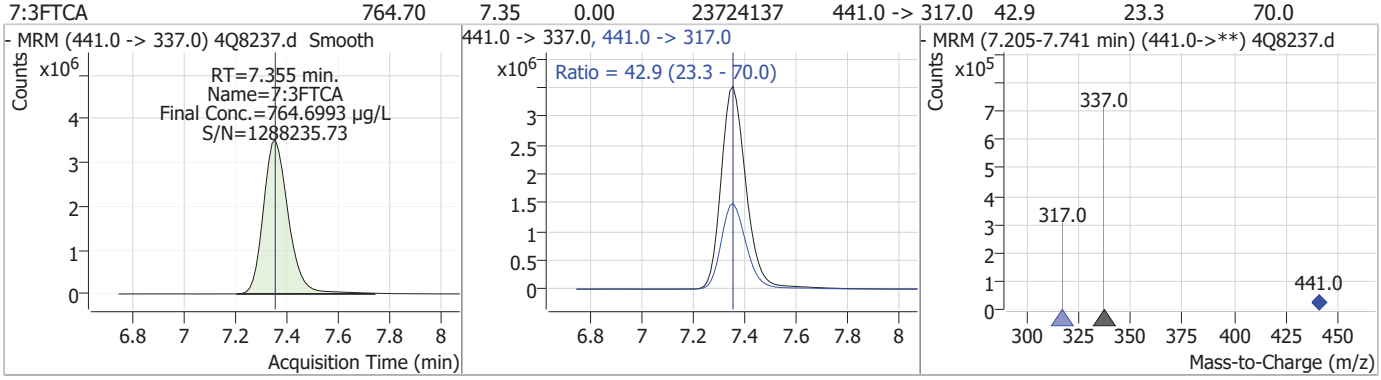
Perfluorinated Compounds by LC/MS/MS

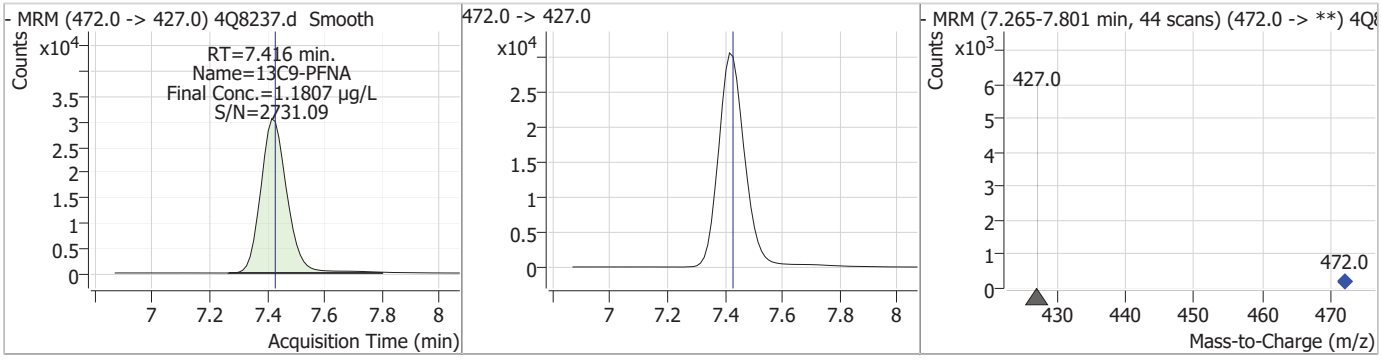
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	27.29	7.00	0.00	814319 (m)	399.0 -> 99.0	52.1	26.3	78.8



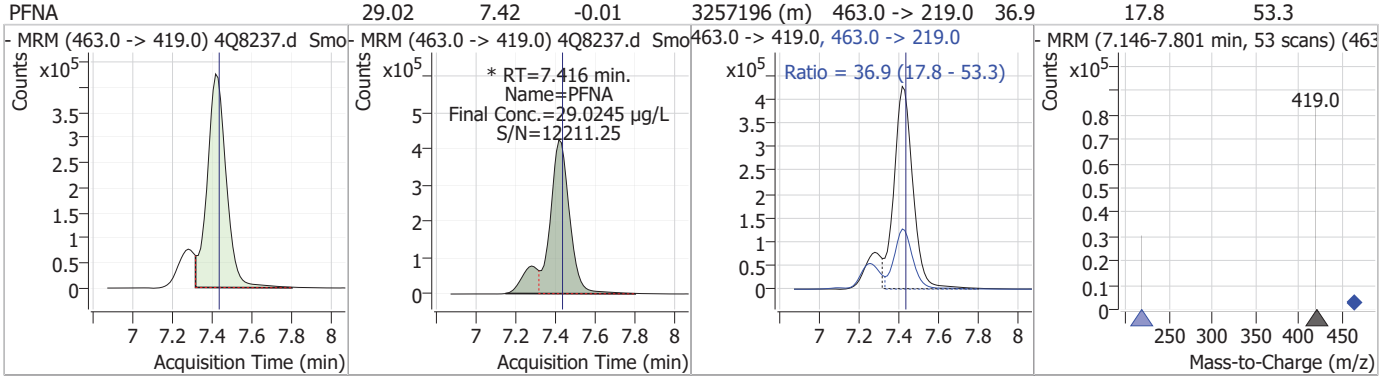
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	764.70	7.35	0.00	23724137	441.0 -> 317.0	42.9	23.3	70.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.18	7.42	-0.01	194551				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	29.02	7.42	-0.01	3257196 (m)	463.0 -> 219.0	36.9	17.8	53.3



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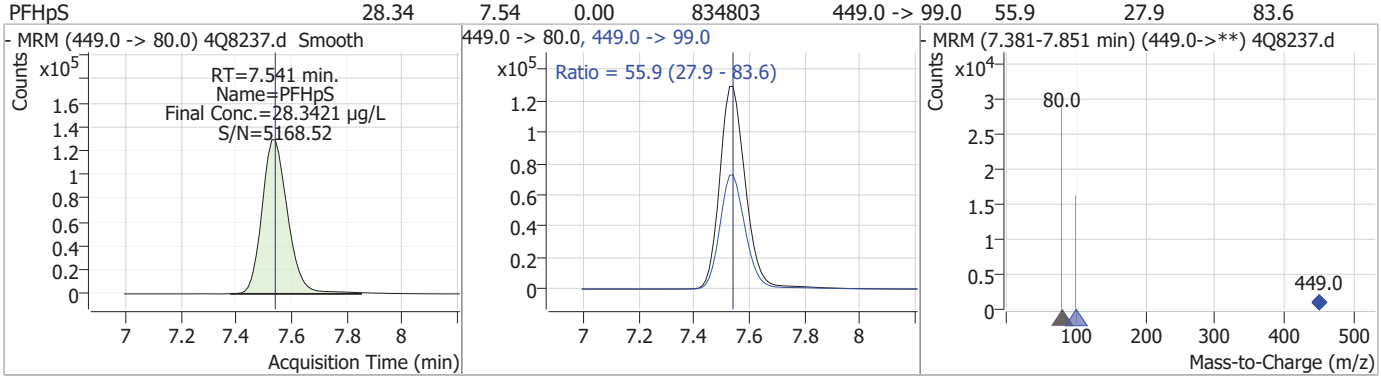
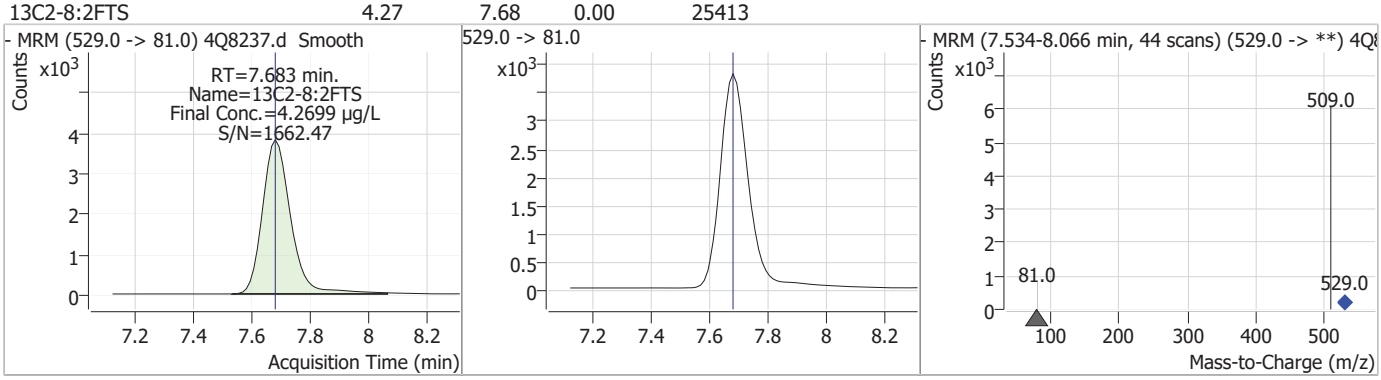
Perfluorinated Compounds by LC/MS/MS

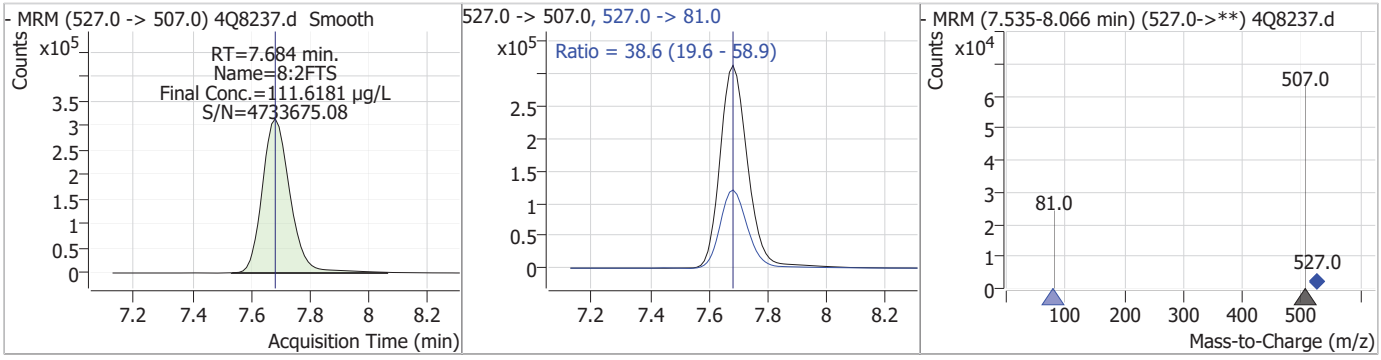
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	28.34	7.54	0.00	834803	449.0 -> 99.0	55.9	27.9	83.6



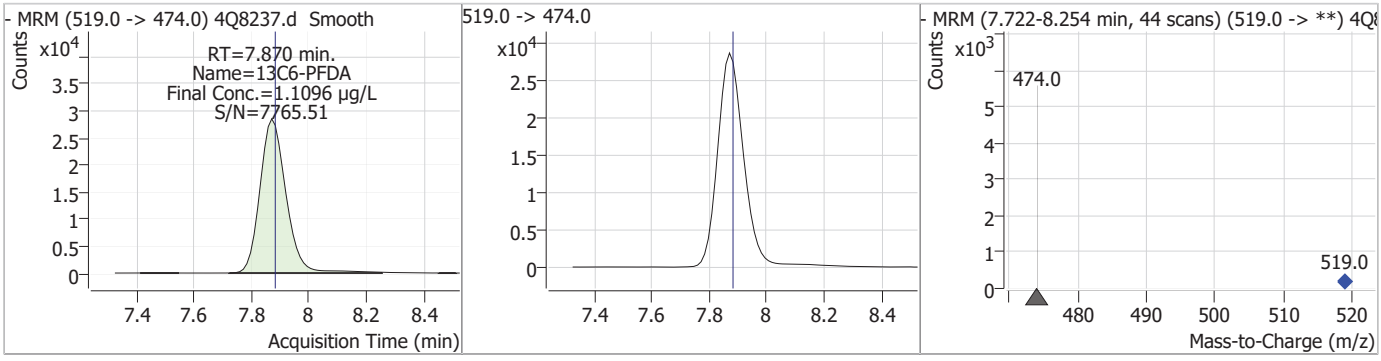
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.27	7.68	0.00	25413				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	111.62	7.68	0.00	2067483	527.0 -> 81.0	38.6	19.6	58.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.11	7.87	-0.01	179447				



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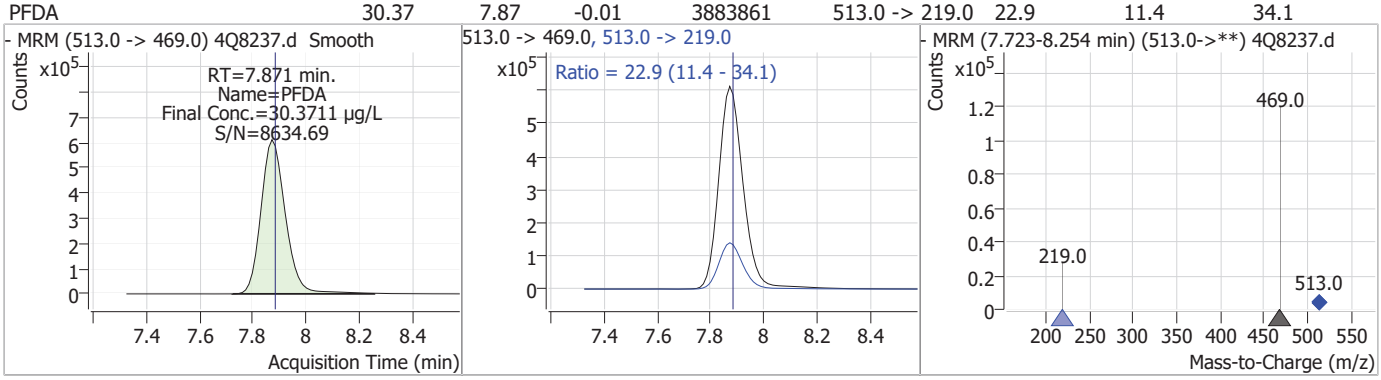
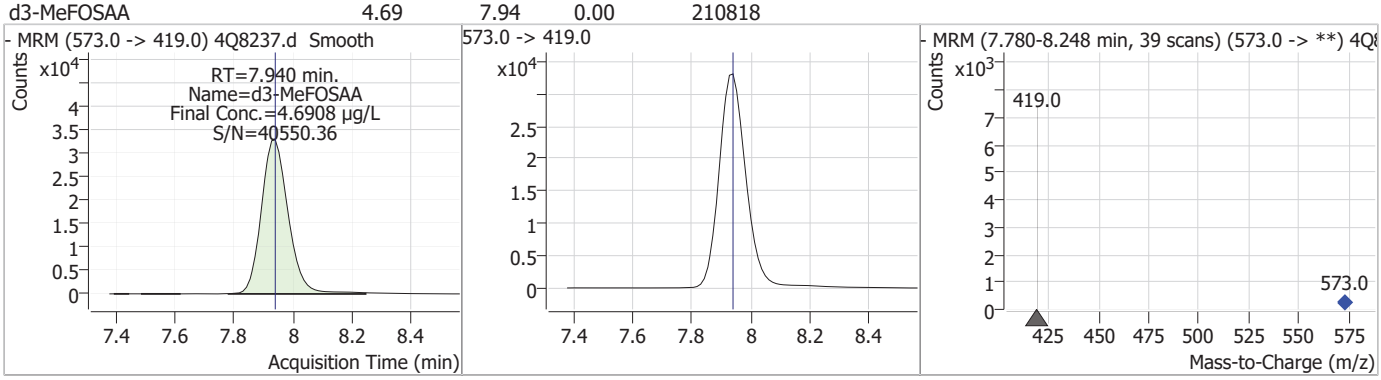
Perfluorinated Compounds by LC/MS/MS

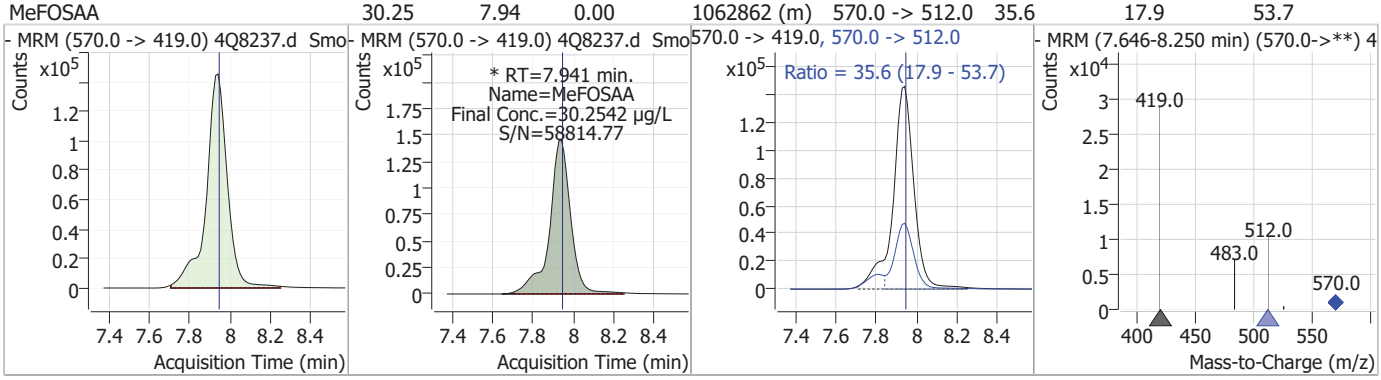
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	30.37	7.87	-0.01	3883861	513.0 -> 219.0	22.9	11.4	34.1



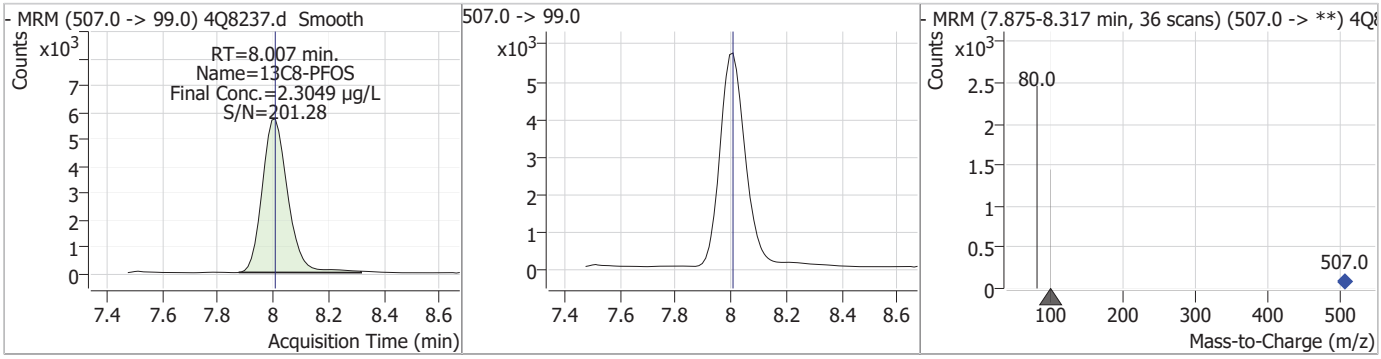
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.69	7.94	0.00	210818				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	30.25	7.94	0.00	1062862 (m)	570.0 -> 512.0	35.6	17.9	53.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.30	8.01	0.00	36598				



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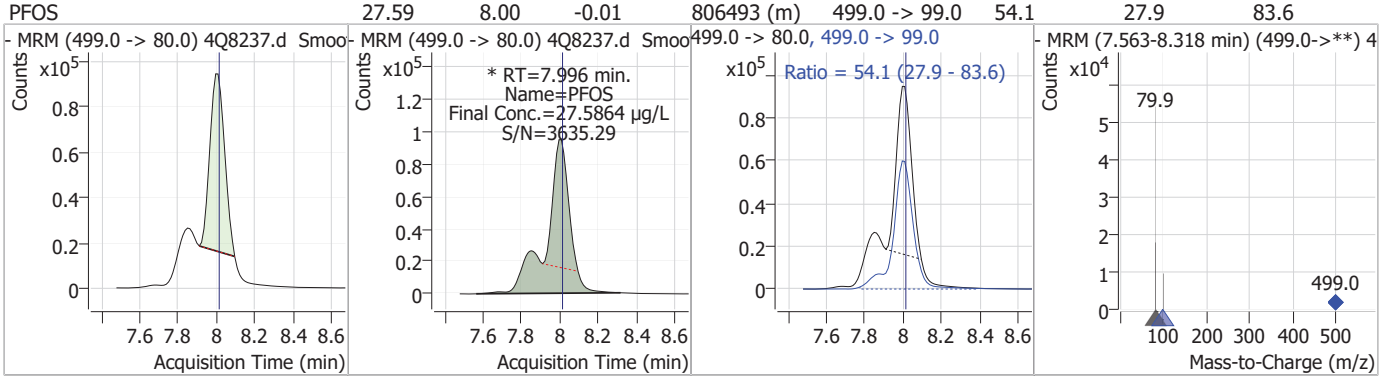
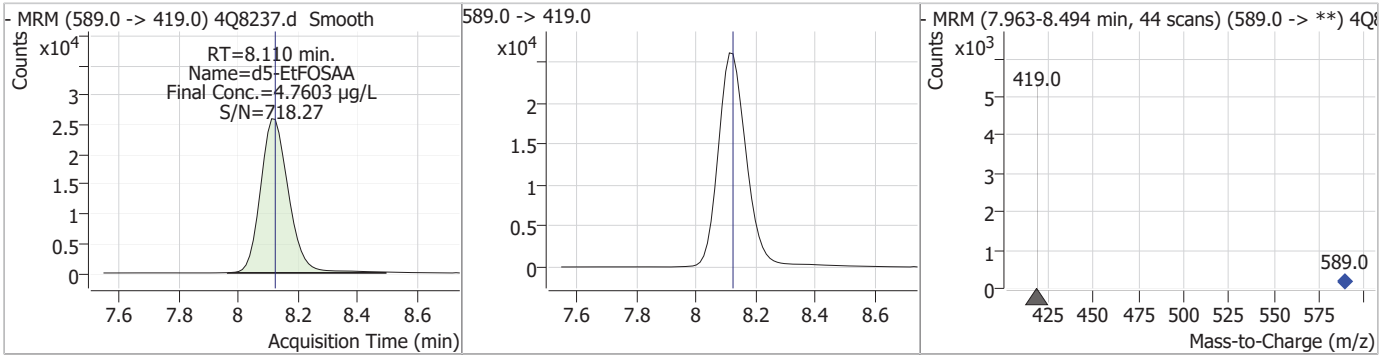
Perfluorinated Compounds by LC/MS/MS

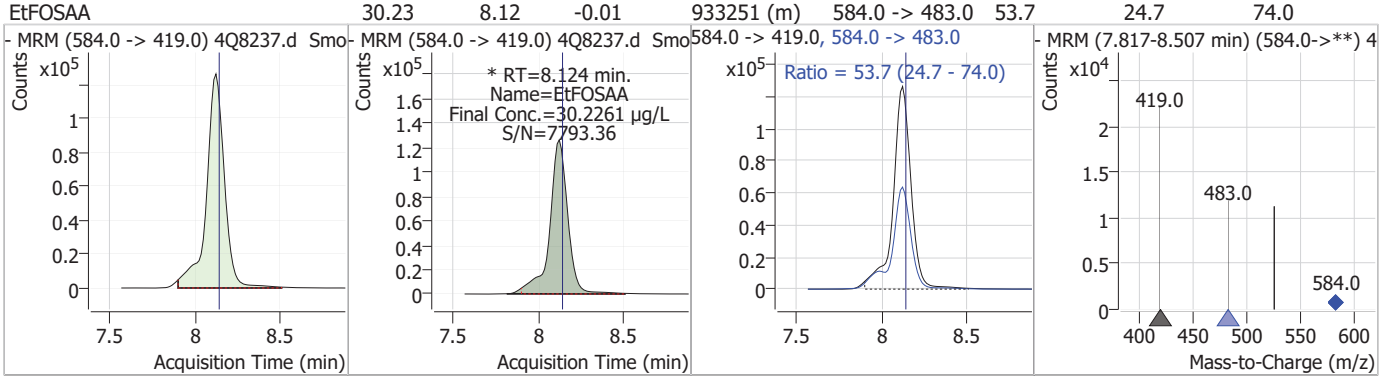
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	27.59	8.00	-0.01	806493 (m)	499.0 -> 99.0	54.1	27.9	83.6



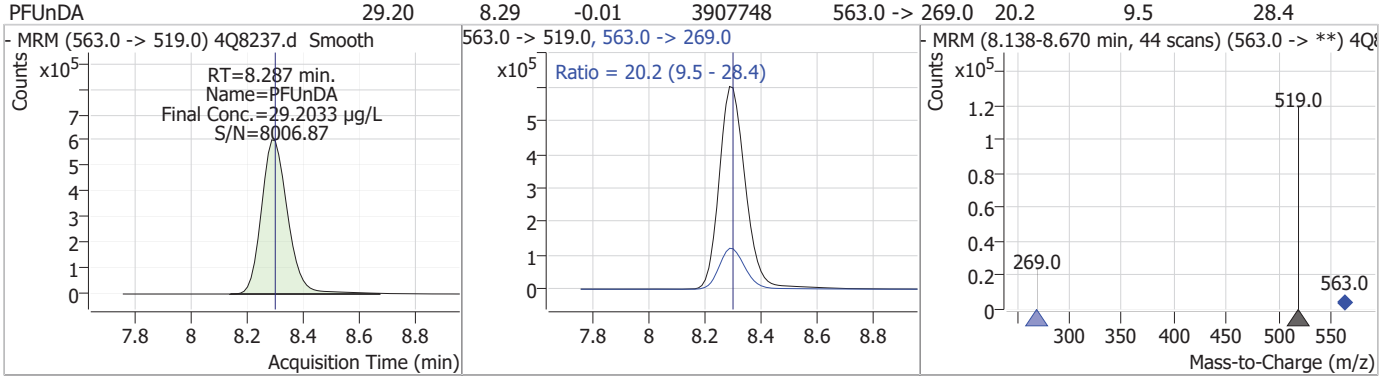
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.76	8.11	-0.01	170816				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	30.23	8.12	-0.01	933251 (m)	584.0 -> 483.0	53.7	24.7	74.0

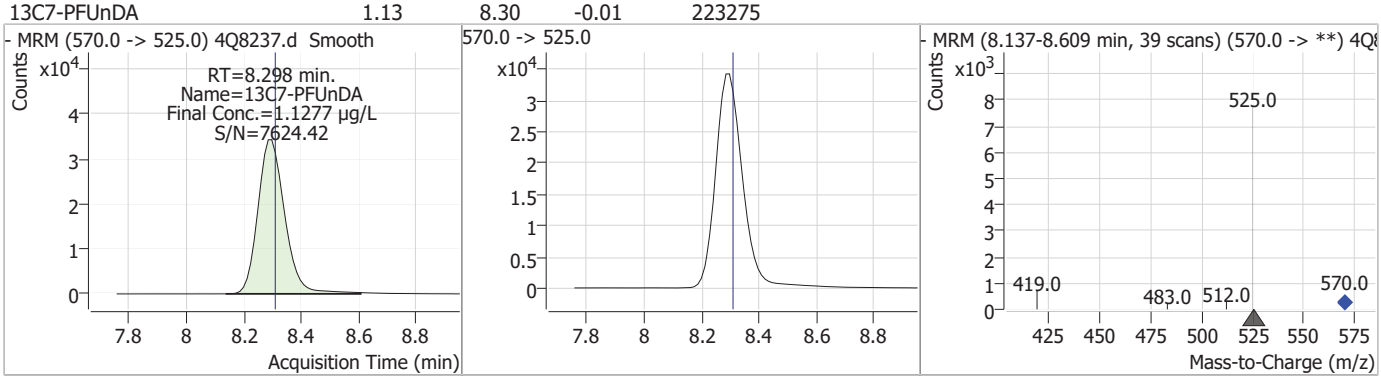


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	29.20	8.29	-0.01	3907748	563.0 -> 269.0	20.2	9.5	28.4

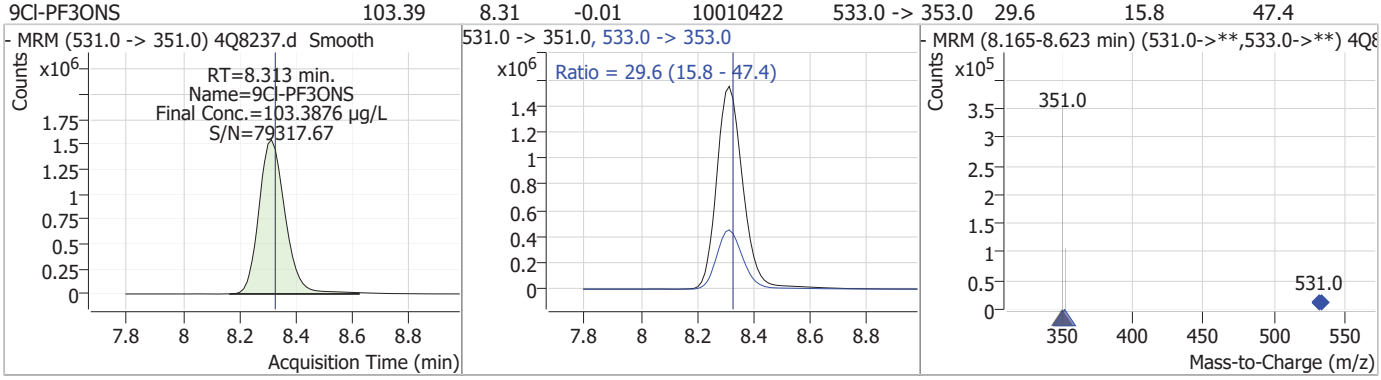


Perfluorinated Compounds by LC/MS/MS

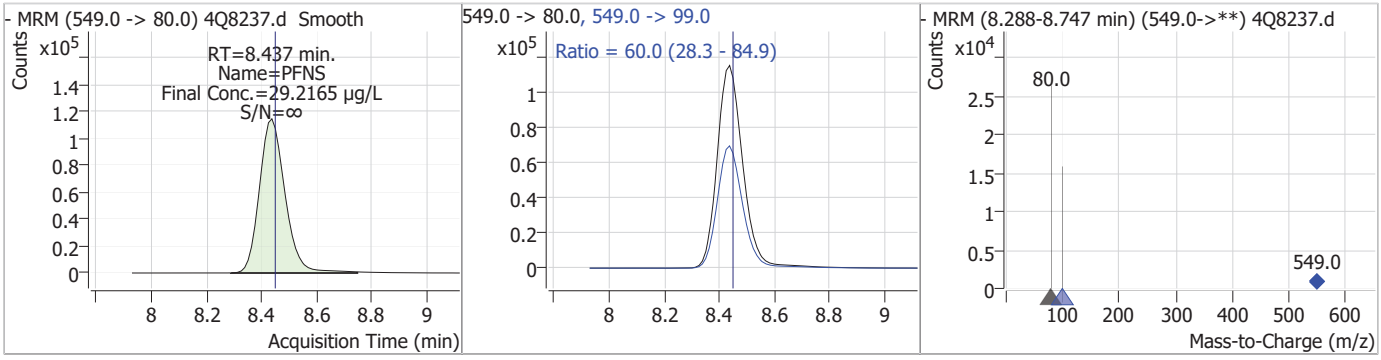
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.13	8.30	-0.01	223275				



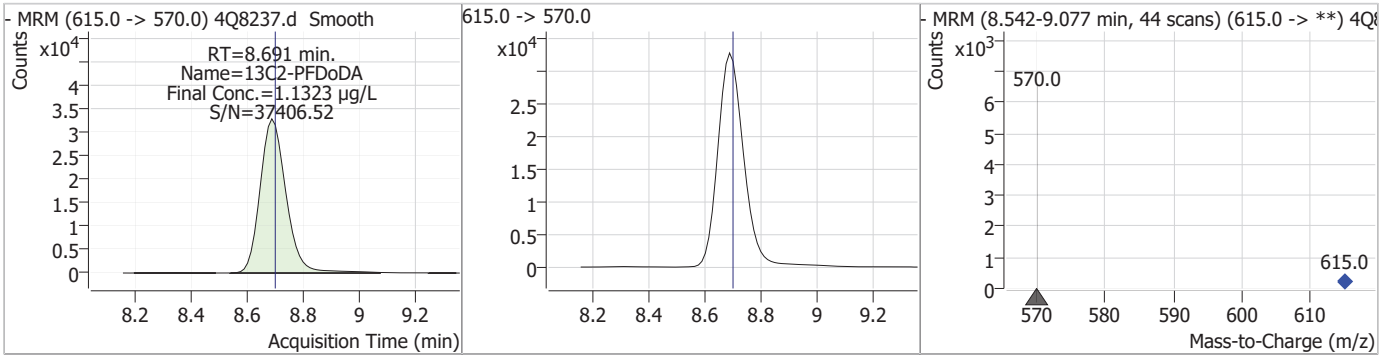
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	103.39	8.31	-0.01	10010422	533.0 -> 353.0	29.6	15.8	47.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	29.22	8.44	-0.01	738172	549.0 -> 99.0	60.0	28.3	84.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.13	8.69	-0.01	211549				



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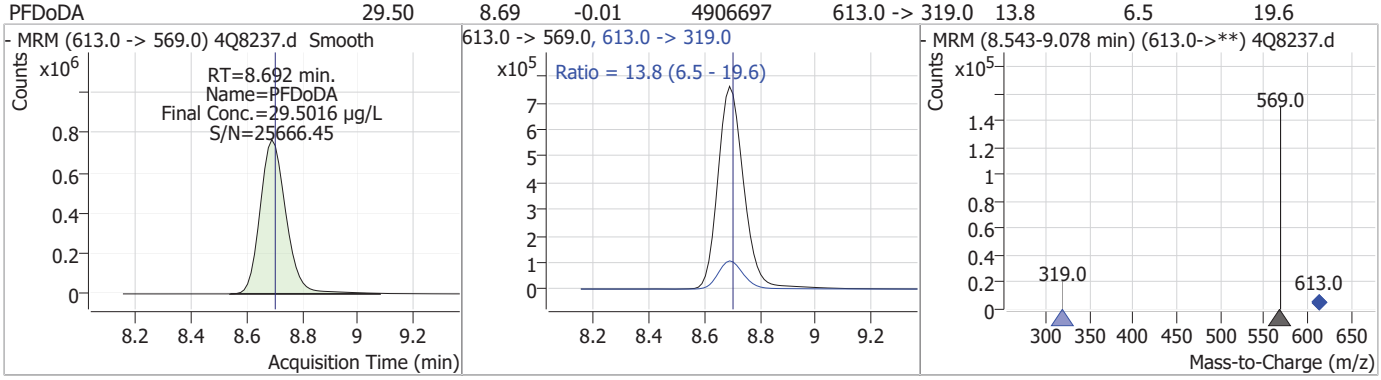
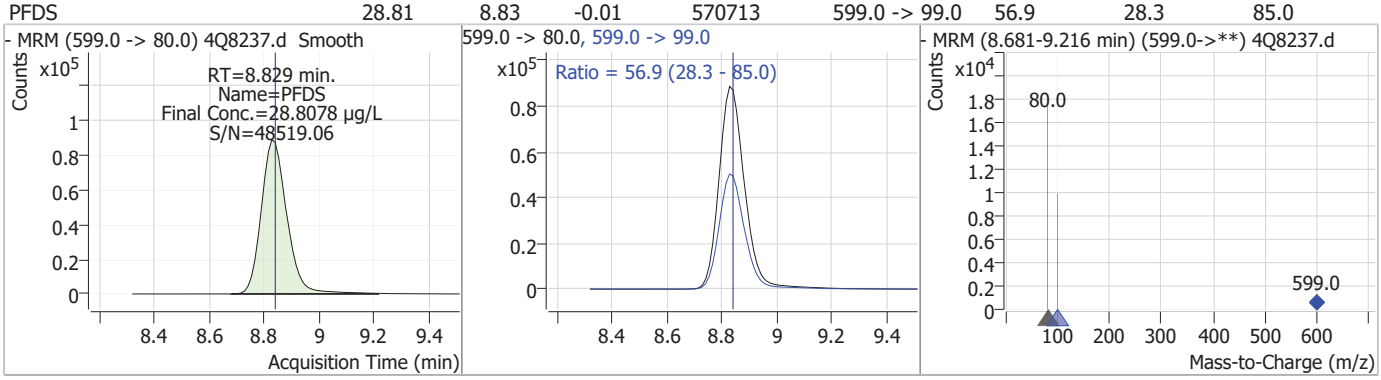
Perfluorinated Compounds by LC/MS/MS

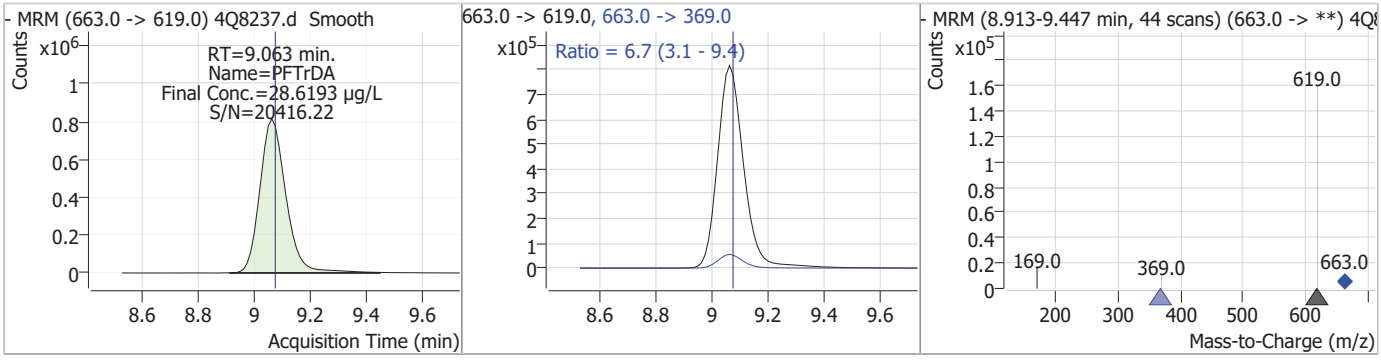
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	29.50	8.69	-0.01	4906697	613.0 -> 319.0	13.8	6.5	19.6



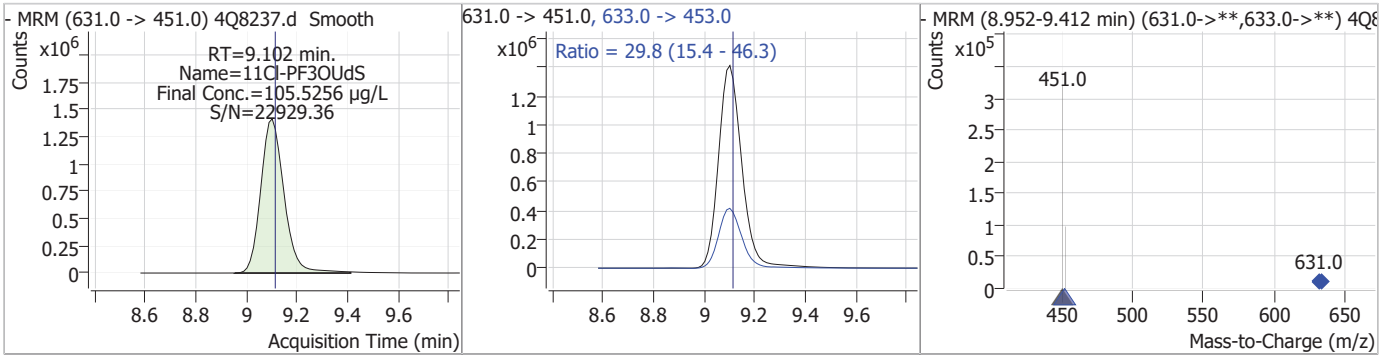
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	28.81	8.83	-0.01	570713	599.0 -> 99.0	56.9	28.3	85.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	28.62	9.06	-0.01	5243594	663.0 -> 369.0	6.7	3.1	9.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	105.53	9.10	-0.01	9038933	633.0 -> 453.0	29.8	15.4	46.3



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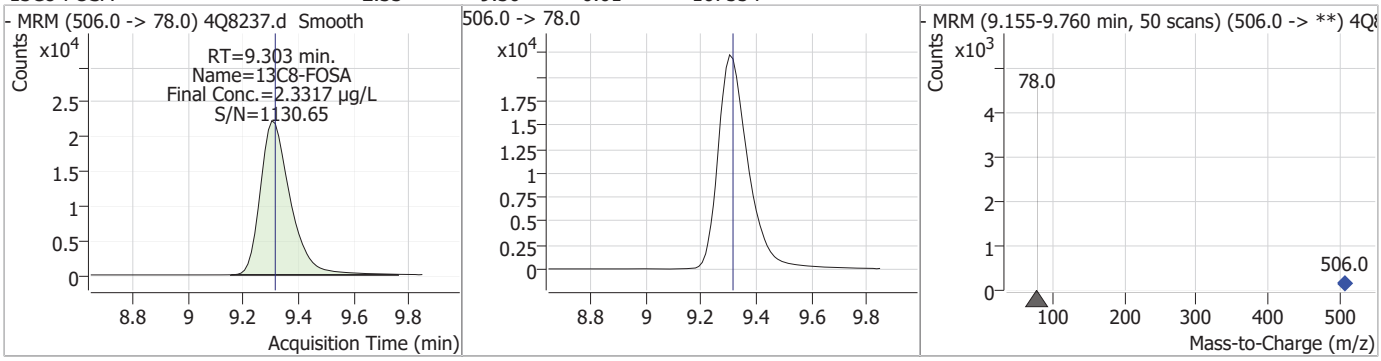
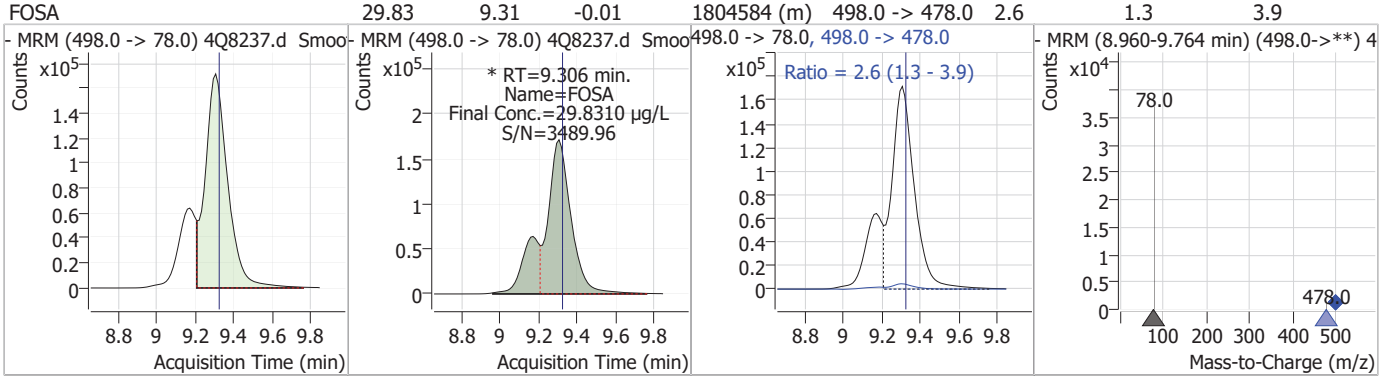
Perfluorinated Compounds by LC/MS/MS

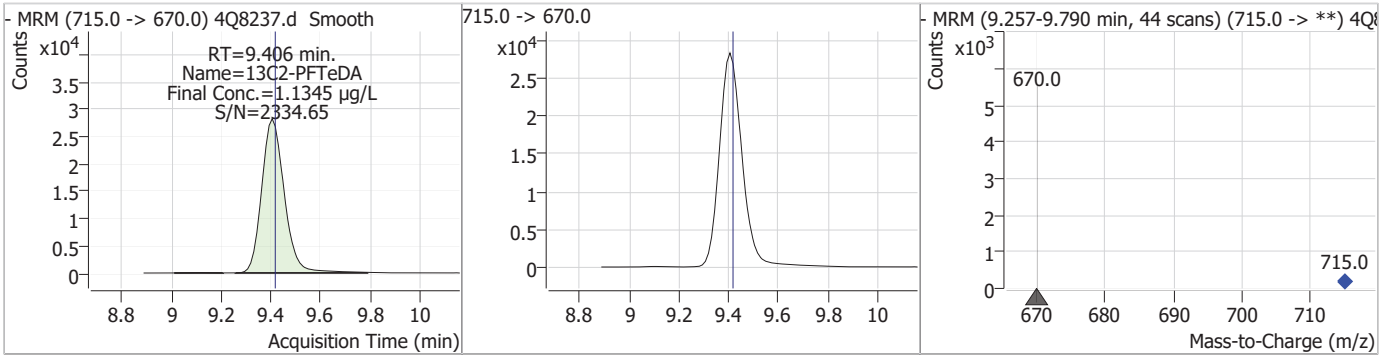
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.33	9.30	-0.01	167554				



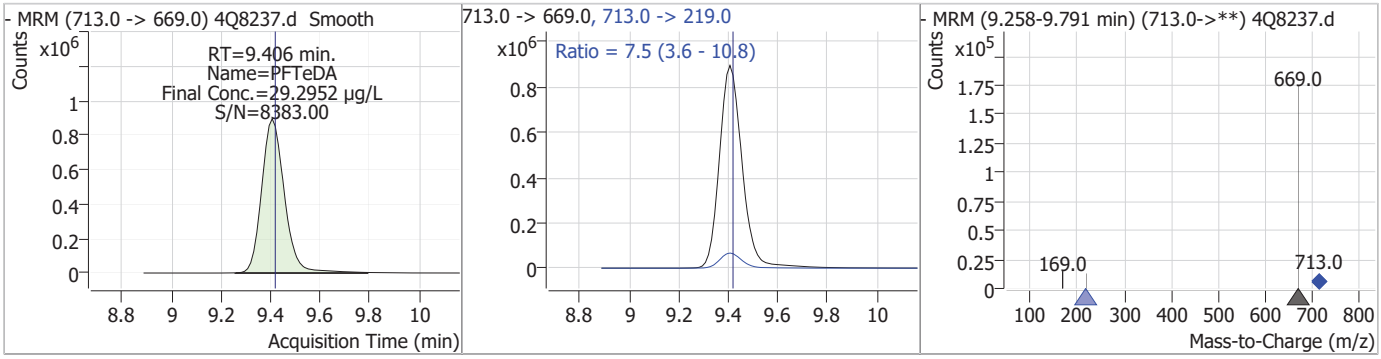
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	29.83	9.31	-0.01	1804584 (m)	498.0 -> 478.0	2.6	1.3	3.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.13	9.41	-0.01	179114				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	29.30	9.41	-0.01	5699664	713.0 -> 219.0	7.5	3.6	10.8



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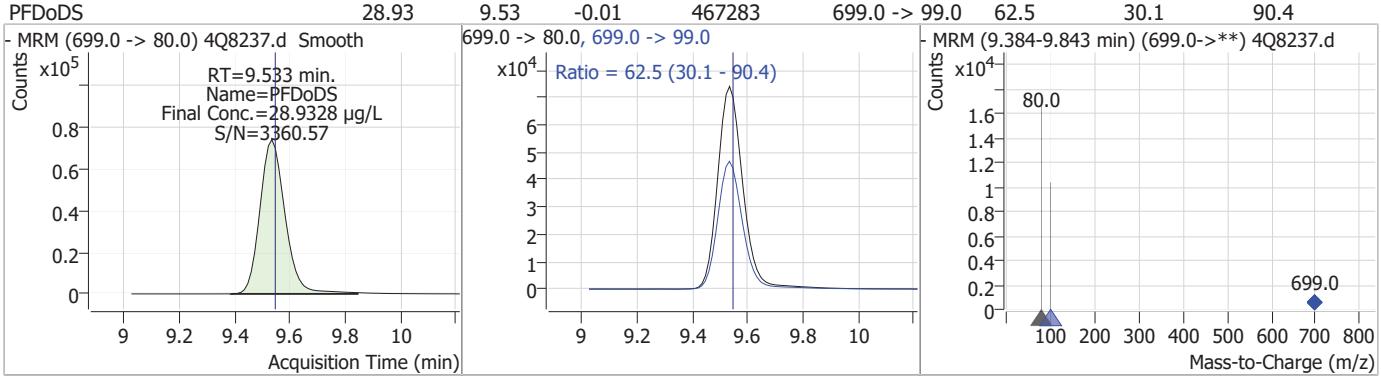
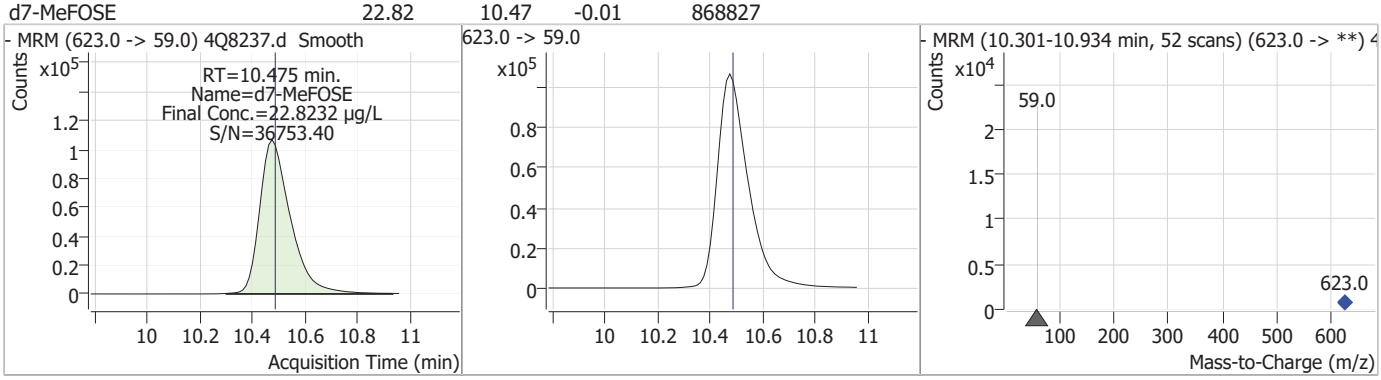
Perfluorinated Compounds by LC/MS/MS

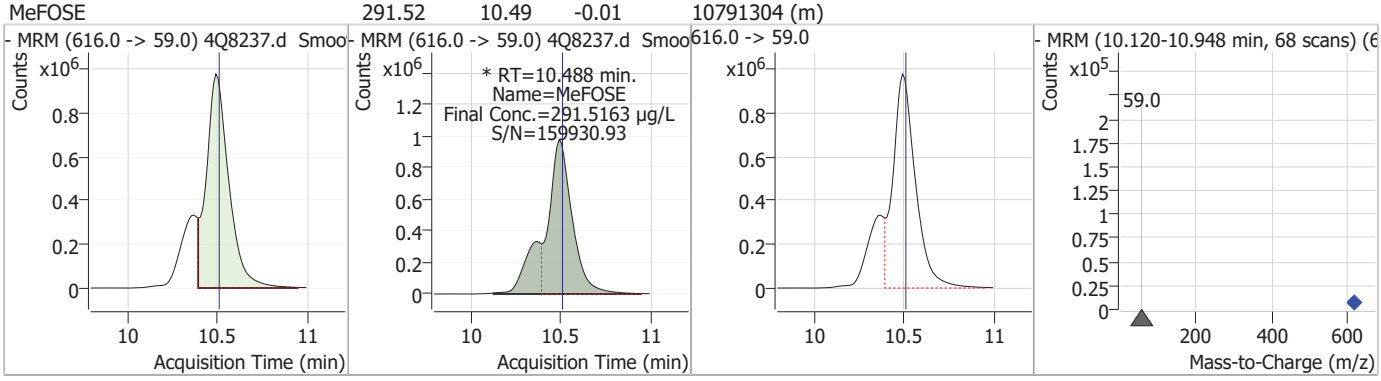
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	28.93	9.53	-0.01	467283	699.0 -> 99.0	62.5	30.1	90.4



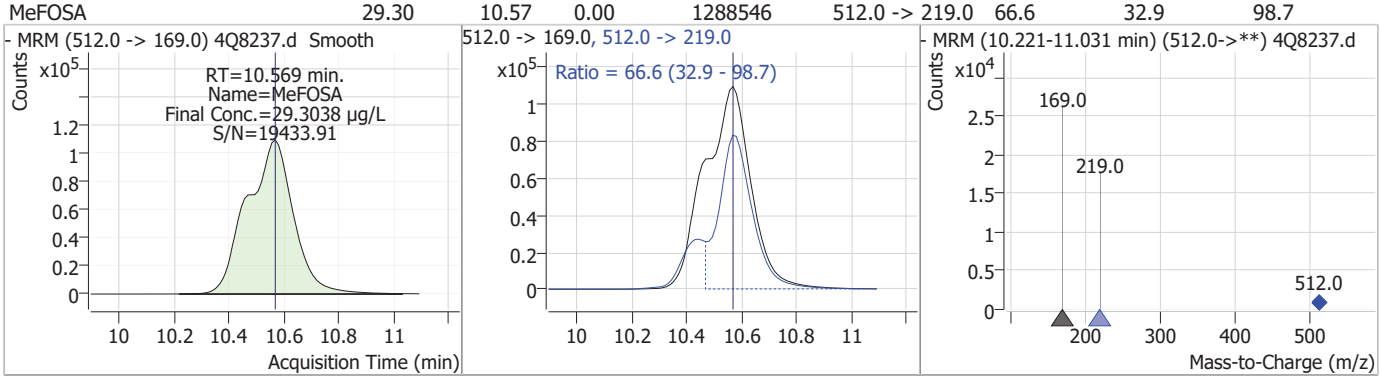
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.82	10.47	-0.01	868827				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	291.52	10.49	-0.01	10791304 (m)				

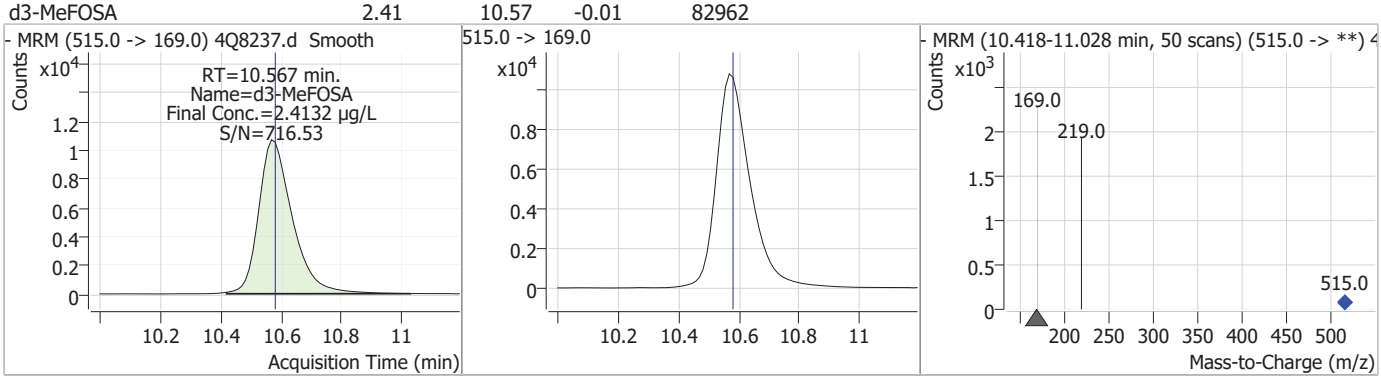


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	29.30	10.57	0.00	1288546	512.0 -> 219.0	66.6	32.9	98.7

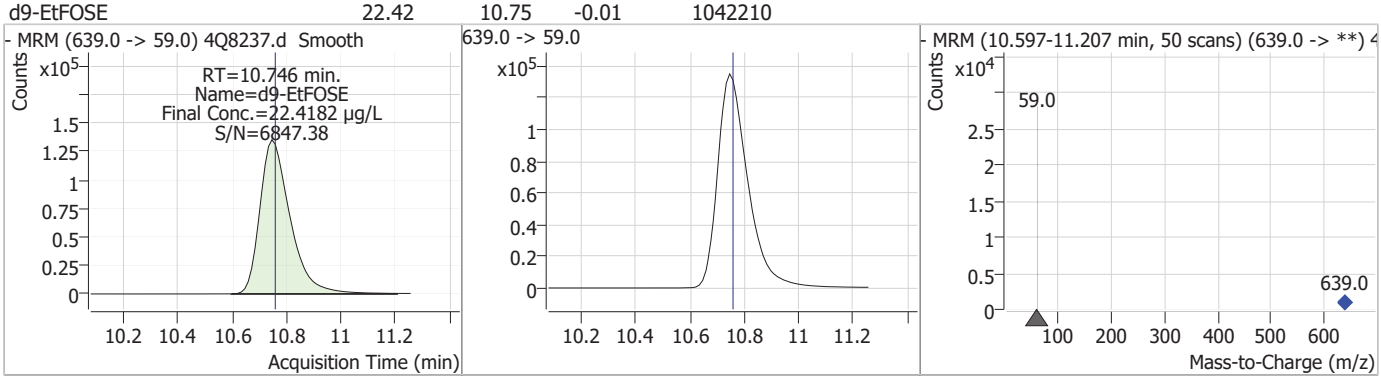


Perfluorinated Compounds by LC/MS/MS

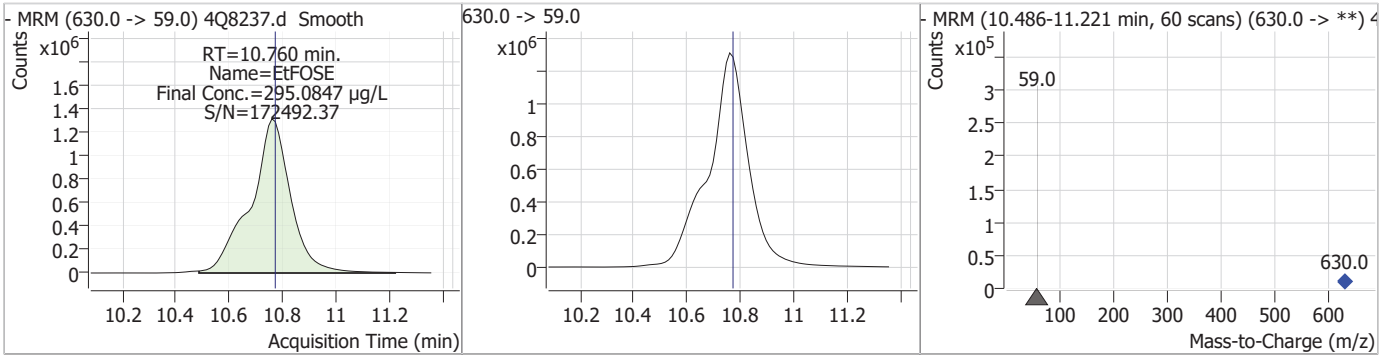
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.41	10.57	-0.01	82962				



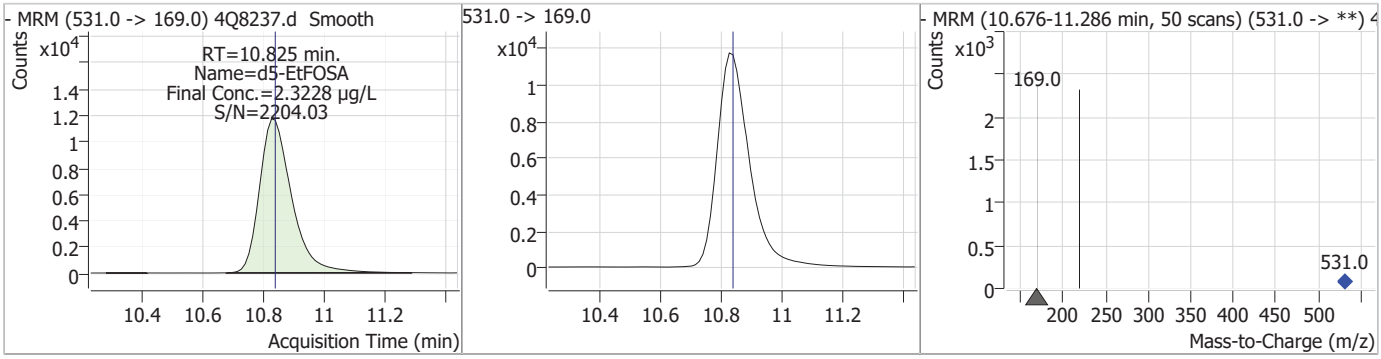
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.42	10.75	-0.01	1042210				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	295.08	10.76	-0.01	13711773				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.32	10.82	-0.01	86060				



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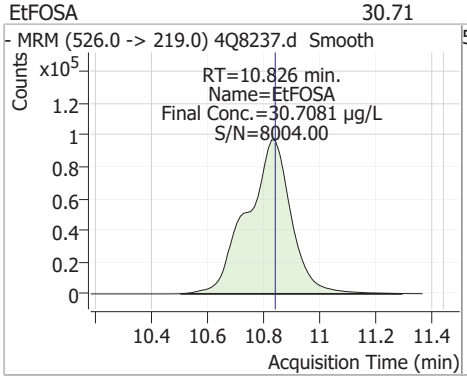
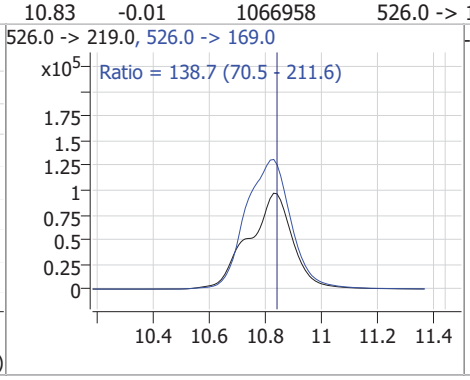
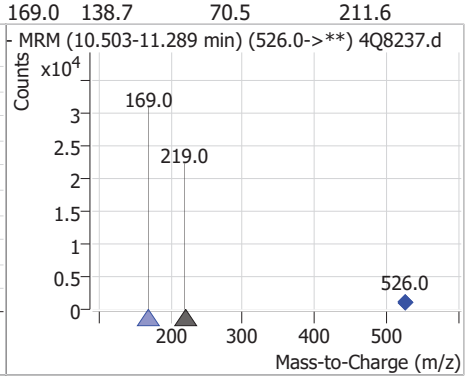
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	30.71	10.83	-0.01	1066958	526.0 -> 169.0	138.7	70.5	211.6







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Manual Integration Approval Summary

Sample Number: T4Q140-IC140
Lab FileID: 4Q8237.D
Injection Time: 05/02/25 15:21
Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.91	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.42	Split peak
MeFOSAA	2355-31-9		7.94	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.12	Split peak
PFOSA	754-91-6		9.31	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8238.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 3:35:08 PM
Sample Name : IC140-8
Vial : P1-A9
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.896	217.0 -> 172.0	772764	10.00 µg/L	0.012
M5-PFPeA	4.319	268.0 -> 223.0	416917	5.00 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	293927	2.50 µg/L	0.000
M4-PFHpA	6.304	367.0 -> 322.0	313203	2.50 µg/L	0.000
M8-PFOA	6.910	421.0 -> 376.0	481653	2.50 µg/L	-0.012
M9-PFNA	7.416	472.0 -> 427.0	201724	1.25 µg/L	-0.012
M6-PFDA	7.870	519.0 -> 474.0	195812	1.25 µg/L	-0.012
M7-PFUnDA	8.298	570.0 -> 525.0	214822	1.25 µg/L	-0.012
M2-PFDoDA	8.691	615.0 -> 570.0	230120	1.25 µg/L	-0.012
M2-PFTeDA	9.406	715.0 -> 670.0	188367	1.25 µg/L	-0.012
M8-FOSA	9.303	506.0 -> 78.0	178614	2.50 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	24002	2.50 µg/L	0.000
		302.0 -> 80.0	59399		
M3-PFHxS	6.999	402.0 -> 99.0	35945	2.50 µg/L	0.000
M8-PFOS	8.007	507.0 -> 99.0	39571	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	8200	5.00 µg/L	0.000
M2-6:2FTS	6.696	429.0 -> 81.0	19328	5.00 µg/L	-0.012
M2-8:2FTS	7.683	529.0 -> 81.0	25580	5.00 µg/L	0.000
M3-MeFOSAA	7.940	573.0 -> 419.0	214748	5.00 µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	428623	10.00 µg/L	0.000
M5-EtFOSAA	8.123	589.0 -> 419.0	172706	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	872988	25.00 µg/L	-0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1008105	25.00 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	90673	2.50 µg/L	-0.012
M3-MeFOSA	10.567	515.0 -> 169.0	91649	2.50 µg/L	-0.012
13C4-PFOS	8.008	503.0 -> 80.0	59488	2.50 µg/L	0.000
13C3-PFBA	2.886	216.0 -> 172.0	300838	5.00 µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	36840	2.50 µg/L	0.000
13C4-PFOA	6.910	417.0 -> 372.0	429737	2.50 µg/L	-0.012
13C2-PFDA	7.871	515.0 -> 470.0	153294	1.25 µg/L	-0.012
13C5-PFNA	7.416	468.0 -> 423.0	171551	1.25 µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	249552	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	8200	4.00 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 80.1%	
13C2-6:2FTS	6.696	429.0 -> 81.0	19328	4.36 µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 87.2%	
13C2-8:2FTS	7.683	529.0 -> 81.0	25580	4.82 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.5%	
13C2-PFDoDA	8.691	615.0 -> 570.0	230120	1.34 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 107.5%	
13C2-PFTeDA	9.406	715.0 -> 670.0	188367	1.30 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 104.2%	
13C3-PFBS	5.368	302.0 -> 99.0	24002	2.65 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.0%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	35945	2.76	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 110.5%			
13C4-PFBA	2.896	217.0 -> 172.0	772764	10.88	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 108.8%			
13C4-PFHpA	6.304	367.0 -> 322.0	313203	2.64	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.5%			
13C5-PFHxA	5.464	318.0 -> 273.0	293927	2.68	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.2%			
13C5-PFPeA	4.319	268.0 -> 223.0	416917	5.21	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.2%			
13C6-PFDA	7.870	519.0 -> 474.0	195812	1.32	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.7%			
13C7-PFUnDA	8.298	570.0 -> 525.0	214822	1.18	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.7%			
13C8-FOSA	9.303	506.0 -> 78.0	178614	2.79	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 111.7%			
13C8-PFOA	6.910	421.0 -> 376.0	481653	2.72	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 108.9%			
13C8-PFOS	8.007	507.0 -> 99.0	39571	2.80	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 112.0%			
13C9-PFNA	7.416	472.0 -> 427.0	201724	1.36	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 108.5%			
d3-MeFOSAA	7.940	573.0 -> 419.0	214748	5.37	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 107.4%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	428623	10.97	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 109.7%			
d3-MeFOSA	10.567	515.0 -> 169.0	91649	3.00	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 119.8%			
d5-EtFOSAA	8.123	589.0 -> 419.0	172706	5.41	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.2%			
d7-MeFOSE	10.475	623.0 -> 59.0	872988	25.77	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 103.1%			
d9-EtFOSE	10.746	639.0 -> 59.0	1008105	24.37	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 97.5%			
d5-EtFOSA	10.825	531.0 -> 169.0	90673	2.75	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 110.0%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	3509554	250.31	µg/L		96
		327.0 -> 81.0	1648425				
6:2FTS	6.697	427.0 -> 407.0	4458503	238.71	µg/L		99
		427.0 -> 81.0	2022927				
8:2FTS	7.684	527.0 -> 507.0	4342980	232.94	µg/L		98
		527.0 -> 81.0	1663580				
EtFOSAA	8.124	584.0 -> 419.0	2243872	71.88	µg/L	m	93
		584.0 -> 483.0	1210323				
FOSA	9.306	498.0 -> 78.0	4464872	69.24	µg/L	m	100
		498.0 -> 478.0	117751				
MeFOSAA	7.941	570.0 -> 419.0	2517994	70.36	µg/L	m	100
		570.0 -> 512.0	900209				
PFBA	2.889	213.0 -> 169.0	7009822	277.88	µg/L		100
PFBS	5.369	299.0 -> 80.0	1678936	62.49	µg/L		99
		299.0 -> 99.0	701274				
PFDA	7.871	513.0 -> 469.0	9863977	70.69	µg/L		99
		513.0 -> 219.0	2196390				
PFDoDA	8.692	613.0 -> 569.0	12362931	68.33	µg/L		99
		613.0 -> 319.0	1665124				

Perfluorinated Compounds by LC/MS/MS

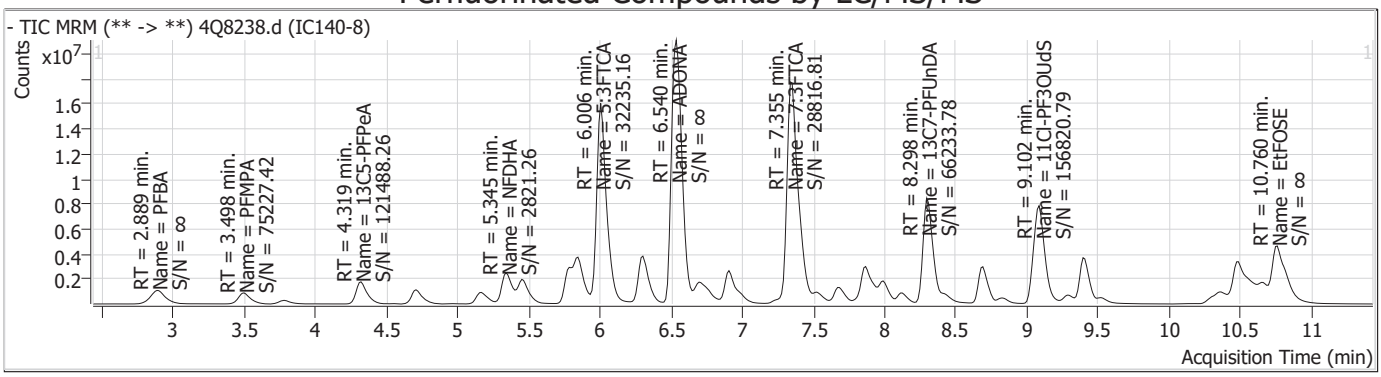
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.829	599.0 -> 80.0	1351813	70.92	µg/L		99
		599.0 -> 99.0	757251				
PFHpA	6.304	363.0 -> 319.0	13155519	73.30	µg/L		99
		363.0 -> 169.0	2591802				
PFHpS	7.541	449.0 -> 80.0	2005028	64.74	µg/L		99
		449.0 -> 99.0	1128935				
PFHxA	5.467	313.0 -> 269.0	8498878	71.35	µg/L		100
		313.0 -> 119.0	294484				
PFHxS	7.000	399.0 -> 80.0	1934153	61.65	µg/L	m	99
		399.0 -> 99.0	1027841				
PFNA	7.416	463.0 -> 419.0	8281722	71.17	µg/L	m	99
		463.0 -> 219.0	3003682				
PFNS	8.437	549.0 -> 80.0	1749906	64.06	µg/L		94
		549.0 -> 99.0	1061658				
PFOA	6.910	413.0 -> 369.0	10839339	68.69	µg/L	m	99
		413.0 -> 169.0	3102413				
PFOS	8.008	499.0 -> 80.0	2001053	63.30	µg/L	m	95
		499.0 -> 99.0	1047813				
PFPeA	4.321	263.0 -> 219.0	9279509	142.84	µg/L		100
PFPeS	6.331	349.0 -> 80.0	2010300	67.36	µg/L		99
		349.0 -> 99.0	1016495				
PFTeDA	9.406	713.0 -> 669.0	14594905	71.33	µg/L		99
		713.0 -> 219.0	1025230				
PFTrDA	9.063	663.0 -> 619.0	12821240	64.33	µg/L		100
		663.0 -> 369.0	809303				
PFUnDA	8.287	563.0 -> 519.0	9152039	71.09	µg/L		98
		563.0 -> 269.0	1797915				
11Cl-PF3OUdS	9.102	631.0 -> 451.0	22650921	251.74	µg/L		94
		633.0 -> 453.0	6193355				
9Cl-PF3ONS	8.313	531.0 -> 351.0	25005028	245.85	µg/L		91
		533.0 -> 353.0	6681242				
ADONA	6.540	377.0 -> 251.0	81583215	235.54	µg/L		90
		377.0 -> 85.0	31496957				
HFPO-DA	5.792	285.0 -> 169.0	12249977	275.76	µg/L		100
		285.0 -> 185.0	1437919				
3:3FTCA	3.781	241.0 -> 177.0	1478197	373.56	µg/L		99
		241.0 -> 117.0	134099				
5:3FTCA	6.006	341.0 -> 237.0	46405332	2015.44	µg/L		96
		341.0 -> 217.0	32115247				
7:3FTCA	7.355	441.0 -> 337.0	64145457	1943.59	µg/L		96
		441.0 -> 317.0	28142595				
EtFOSA	10.826	526.0 -> 219.0	2625169	71.71	µg/L		99
		526.0 -> 169.0	3657584				
EtFOSE	10.760	630.0 -> 59.0	33668088	749.07	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	3169565	65.25	µg/L		99
		512.0 -> 219.0	2119618				
MeFOSE	10.488	616.0 -> 59.0	26926895	723.94	µg/L	m	100
PFDoDS	9.533	699.0 -> 80.0	1128909	64.65	µg/L		96
		699.0 -> 99.0	717223				
NFDHA	5.345	295.0 -> 201.0	1903188	143.02	µg/L		90
		201.0 -> 85.0	8893461				
		295.0 -> 85.0	509047				
PFMBA	4.710	279.0 -> 85.0	6239143	141.73	µg/L		100
PFMPA	3.498	229.0 -> 85.0	5357481	142.38	µg/L		100
PFEESA	5.849	315.0 -> 135.0	13915158	123.32	µg/L		99
		315.0 -> 69.0	1114659				

Perfluorinated Compounds by LC/MS/MS

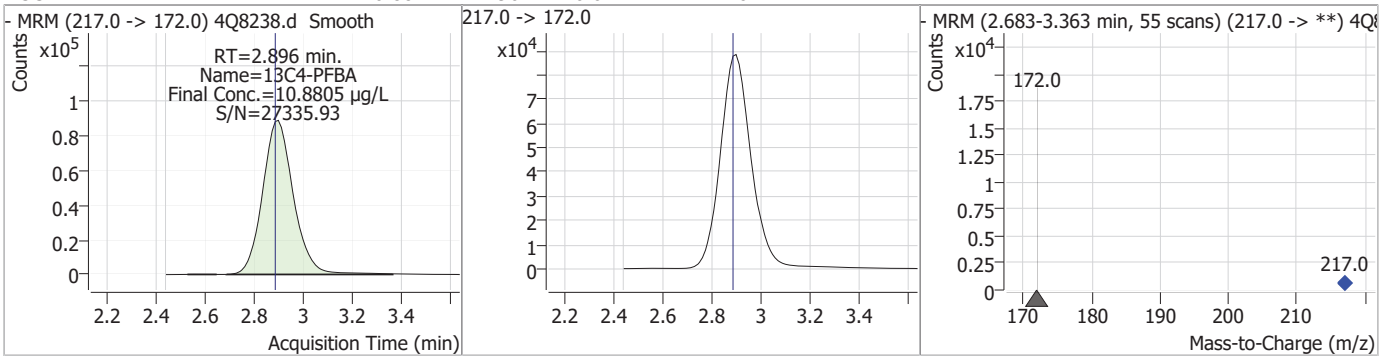
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

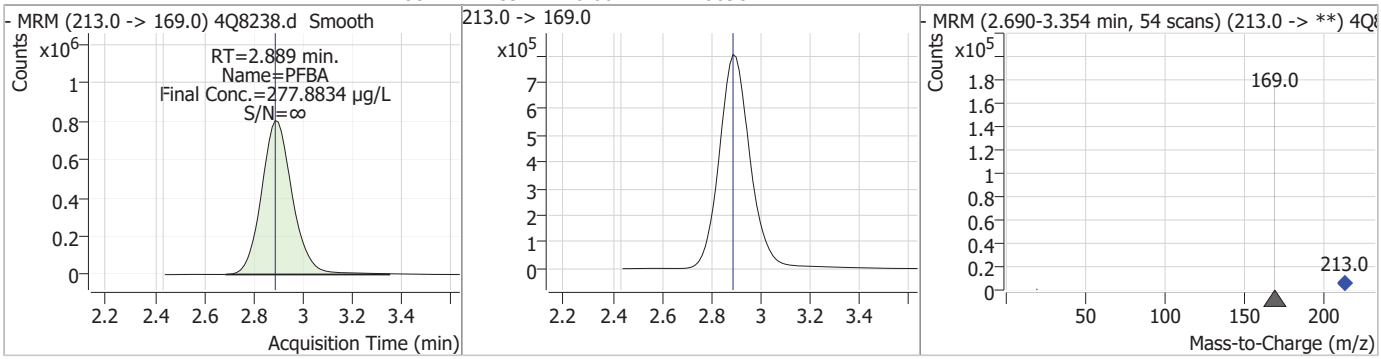
Perfluorinated Compounds by LC/MS/MS



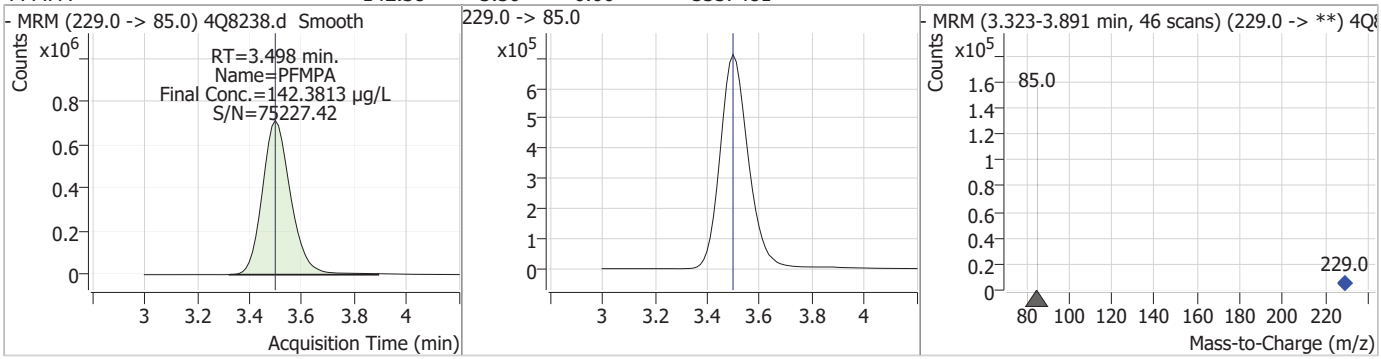
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.88	2.90	0.01	772764				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	277.88	2.89	0.00	7009822				

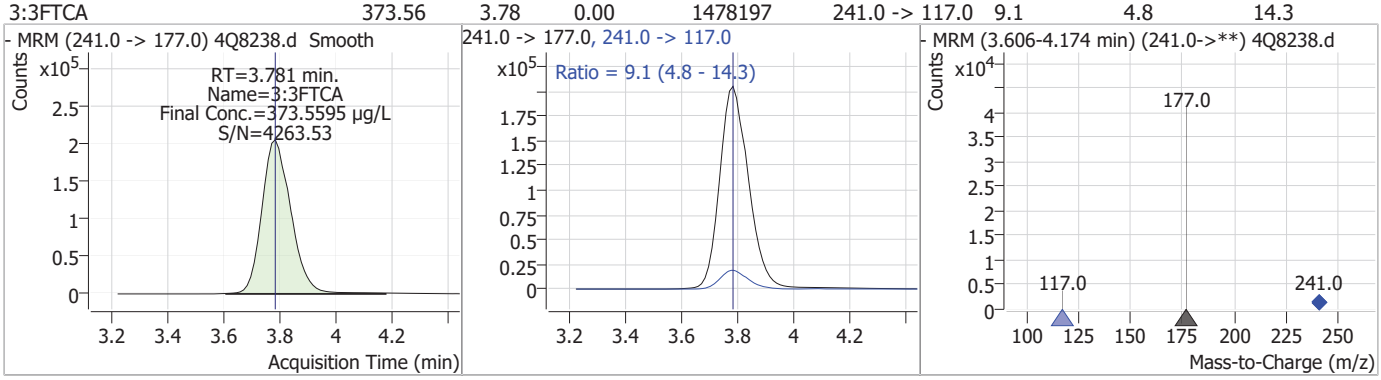


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	142.38	3.50	0.00	5357481				

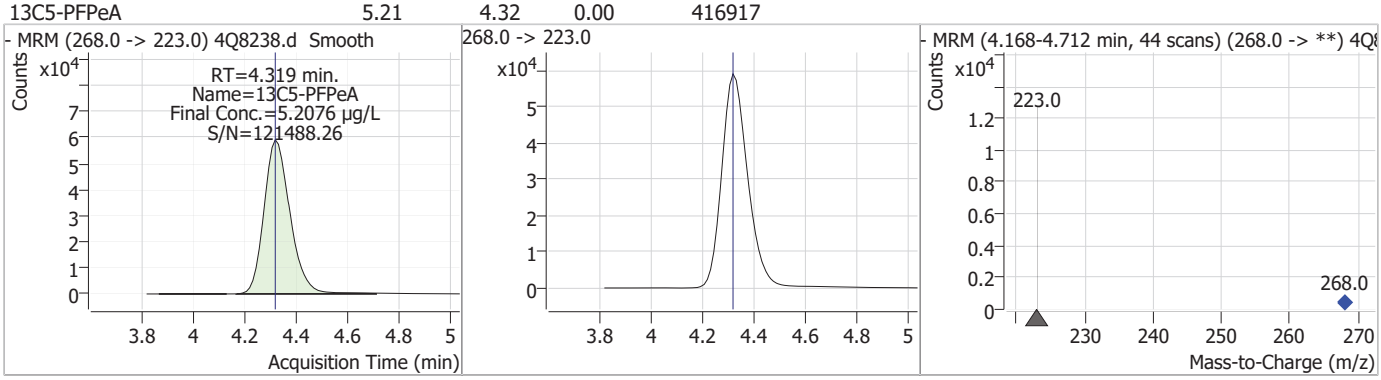


Perfluorinated Compounds by LC/MS/MS

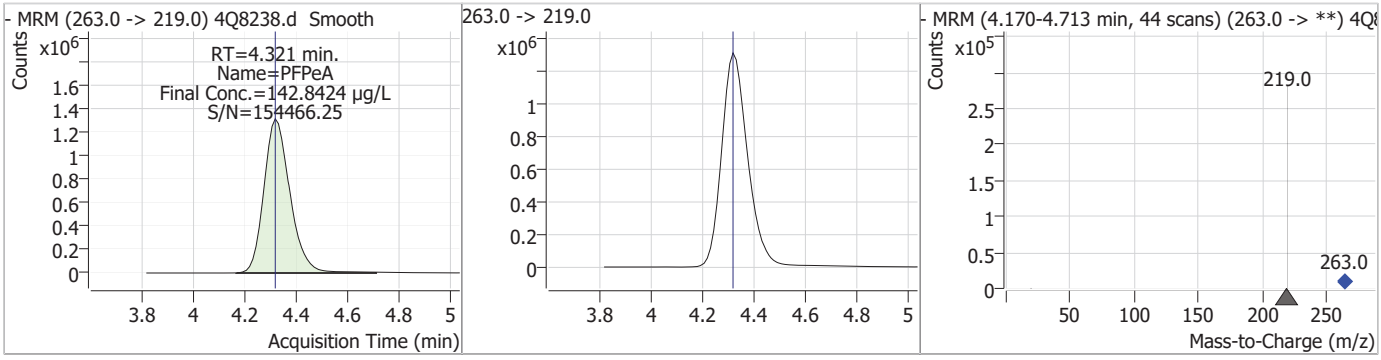
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	373.56	3.78	0.00	1478197	241.0 -> 117.0	9.1	4.8	14.3



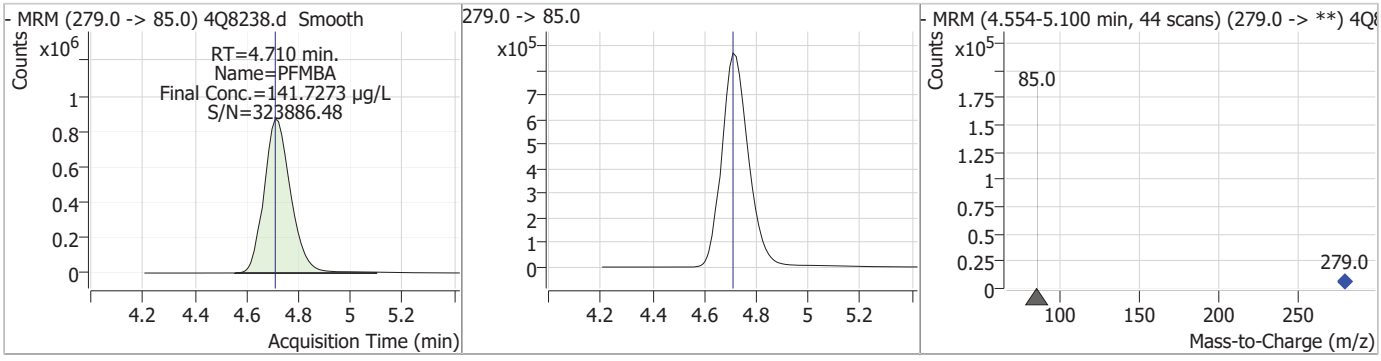
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.21	4.32	0.00	416917				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	142.84	4.32	0.00	9279509				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	141.73	4.71	0.00	6239143				



7.6.69

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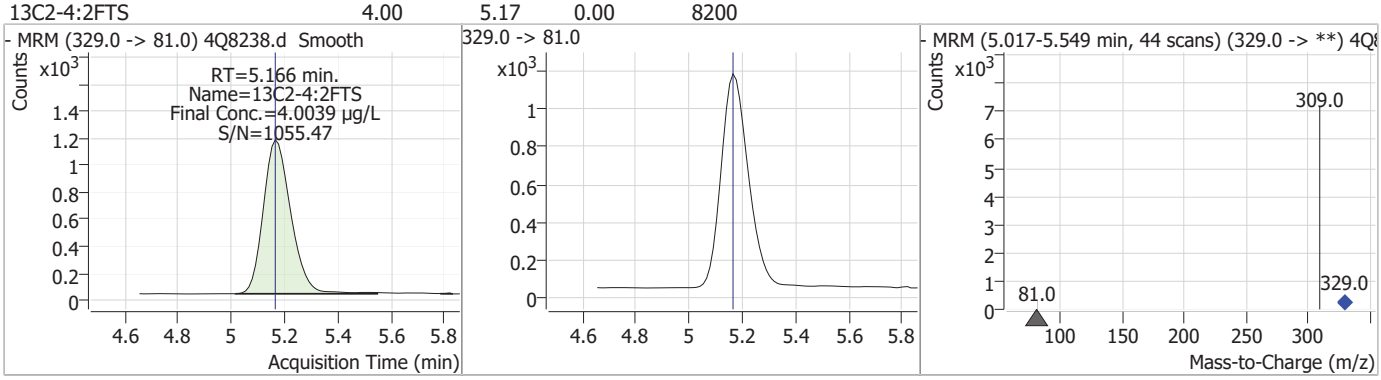
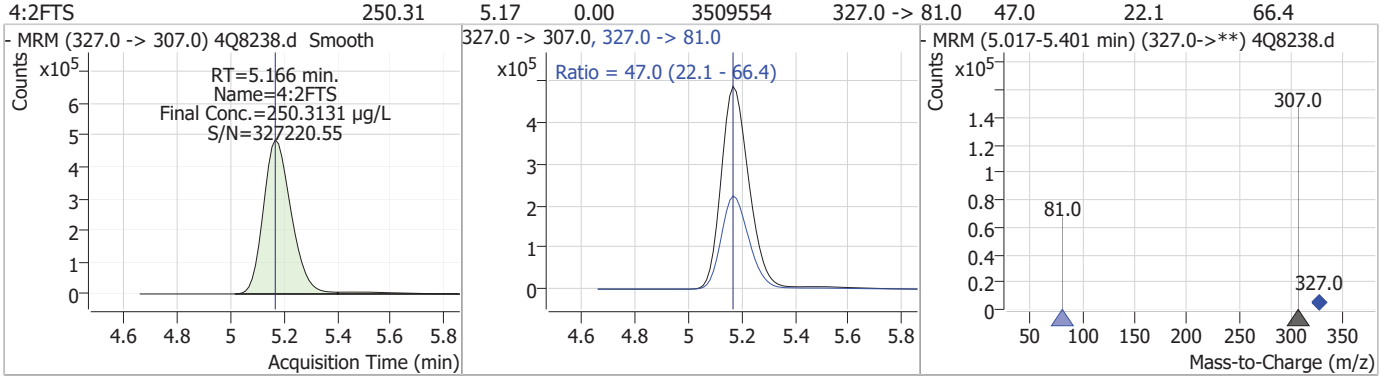
Perfluorinated Compounds by LC/MS/MS

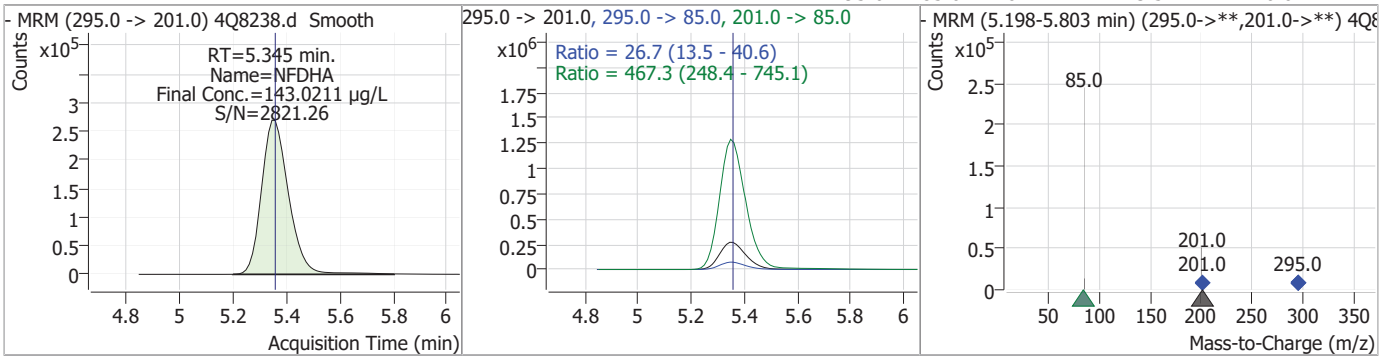
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.00	5.17	0.00	8200				



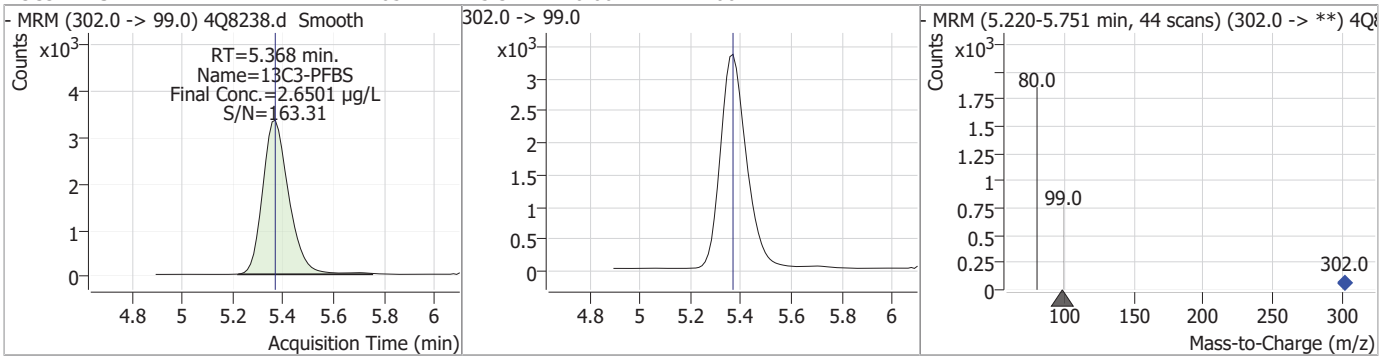
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	250.31	5.17	0.00	3509554	327.0 -> 81.0	47.0	22.1	66.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	143.02	5.35	-0.01	1903188	201.0 -> 85.0	467.3	248.4	745.1
					295.0 -> 85.0	26.7	13.5	40.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.65	5.37	0.00	24002				



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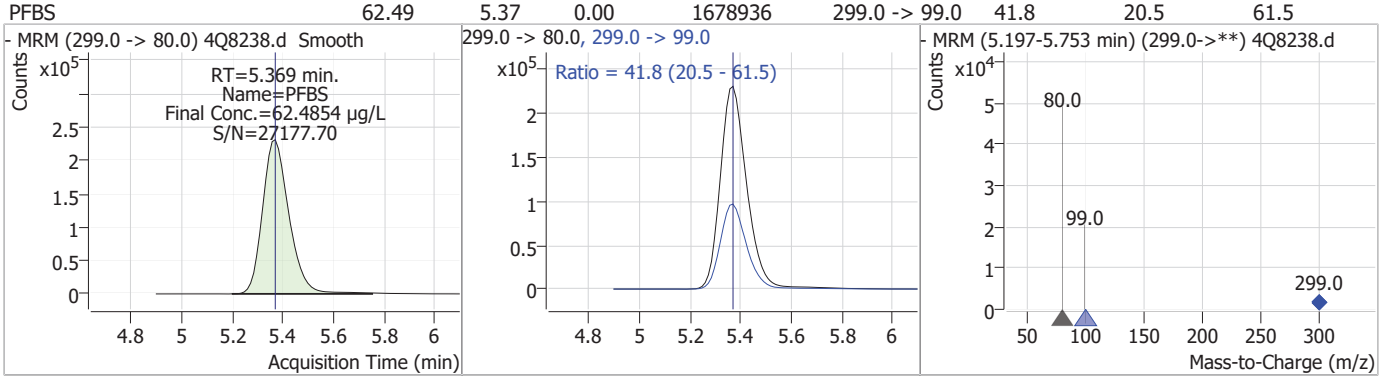
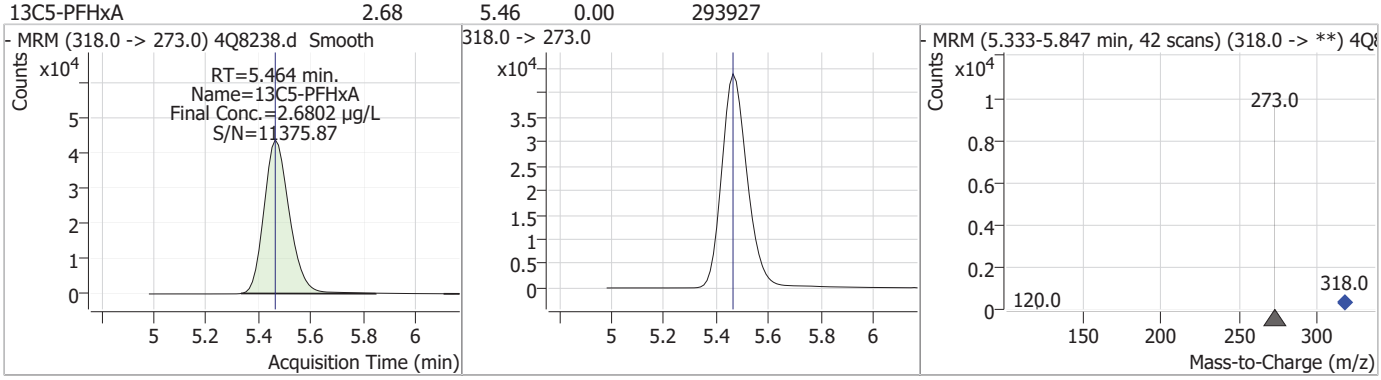
Perfluorinated Compounds by LC/MS/MS

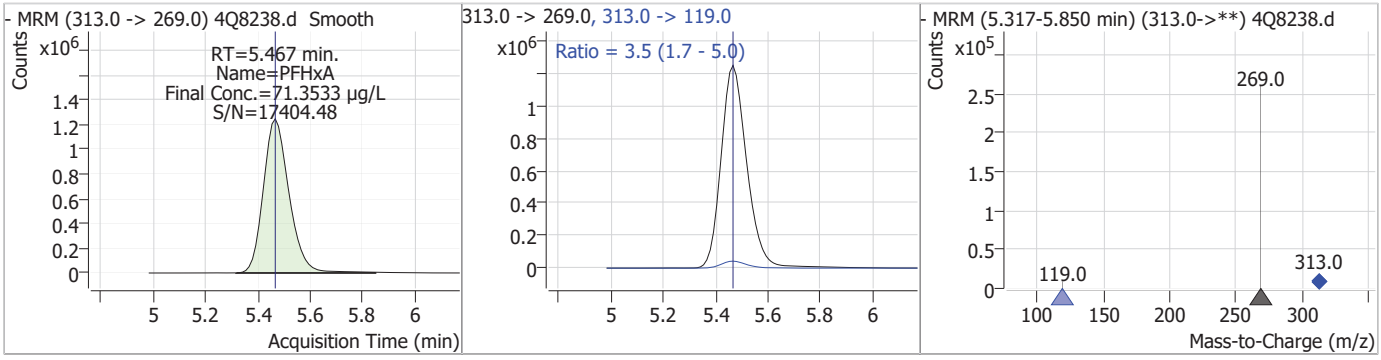
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	62.49	5.37	0.00	1678936	299.0 -> 99.0	41.8	20.5	61.5



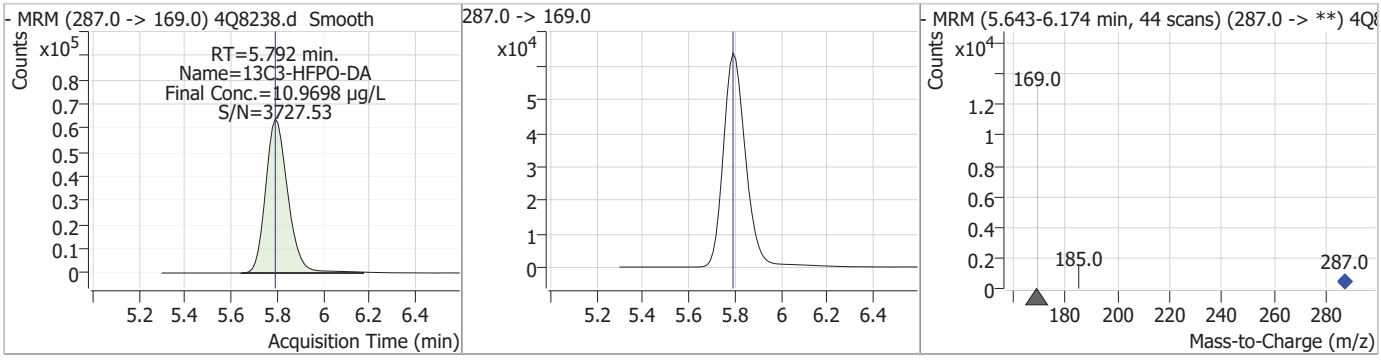
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.68	5.46	0.00	293927				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	71.35	5.47	0.00	8498878	313.0 -> 119.0	3.5	1.7	5.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.97	5.79	0.00	428623				



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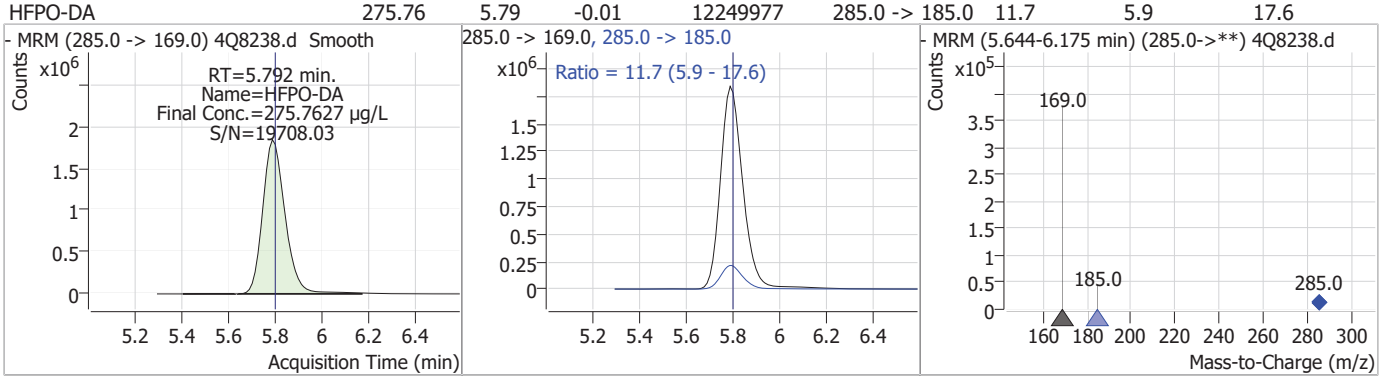
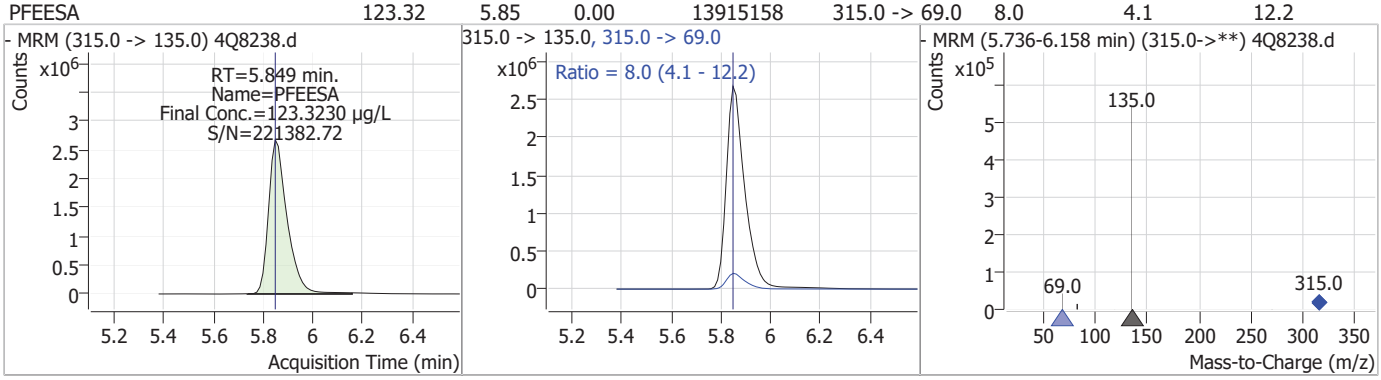
Perfluorinated Compounds by LC/MS/MS

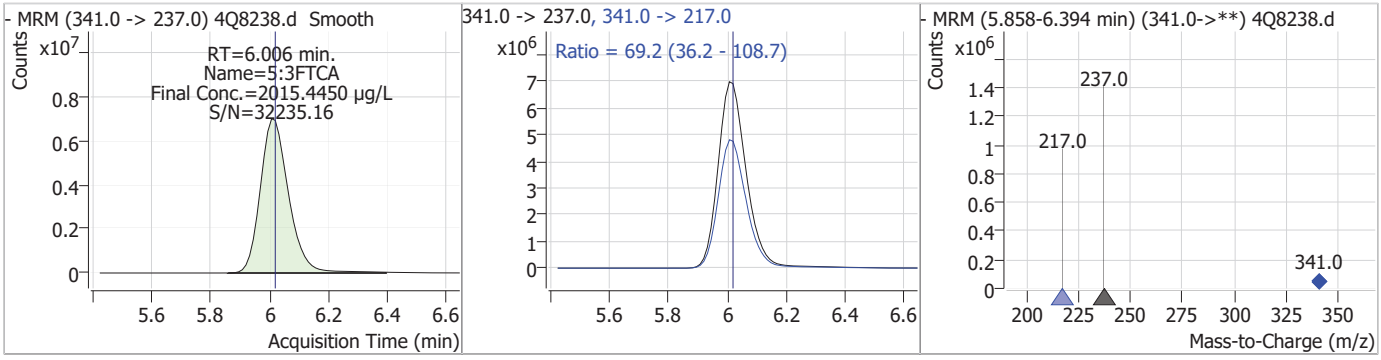
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	275.76	5.79	-0.01	12249977	285.0 -> 185.0	11.7	5.9	17.6



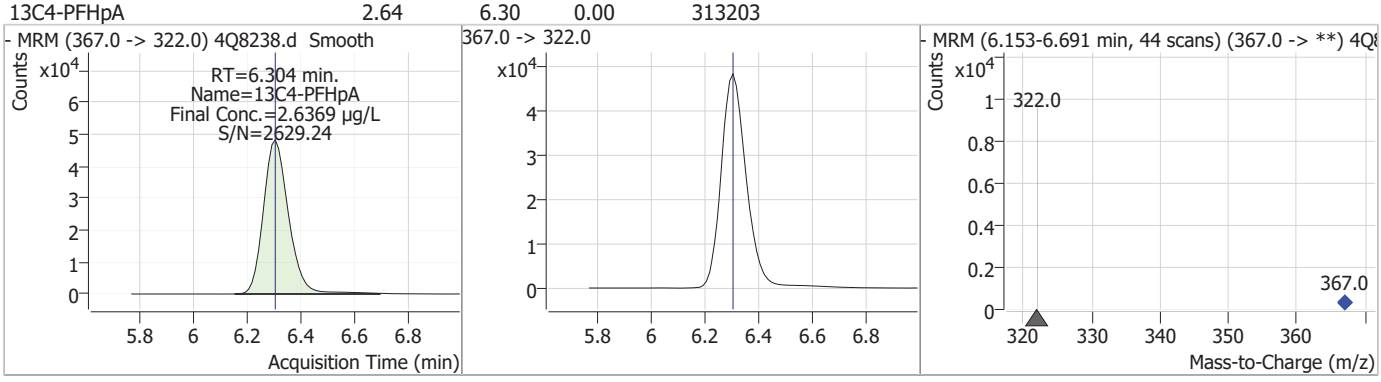
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	123.32	5.85	0.00	13915158	315.0 -> 69.0	8.0	4.1	12.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	2015.44	6.01	-0.01	46405332	341.0 -> 217.0	69.2	36.2	108.7

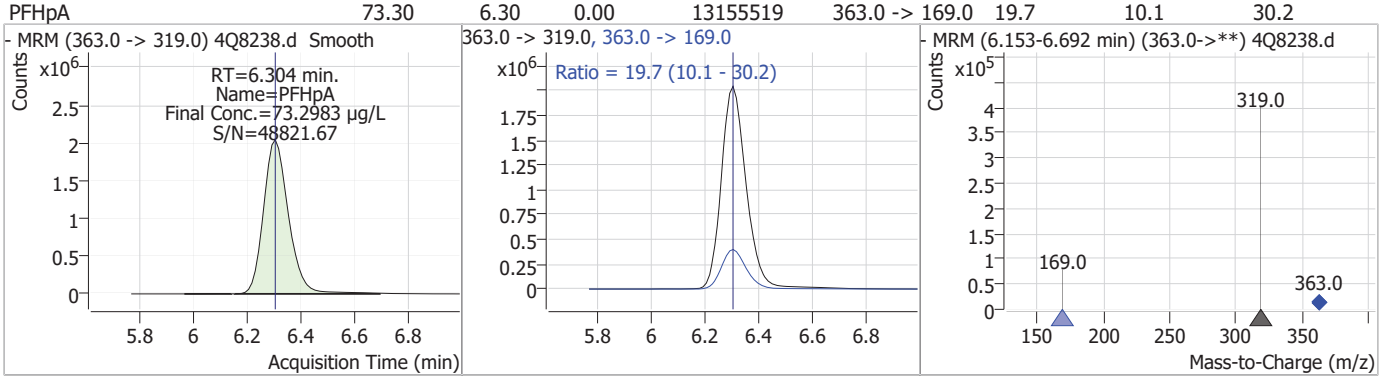


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.64	6.30	0.00	313203				

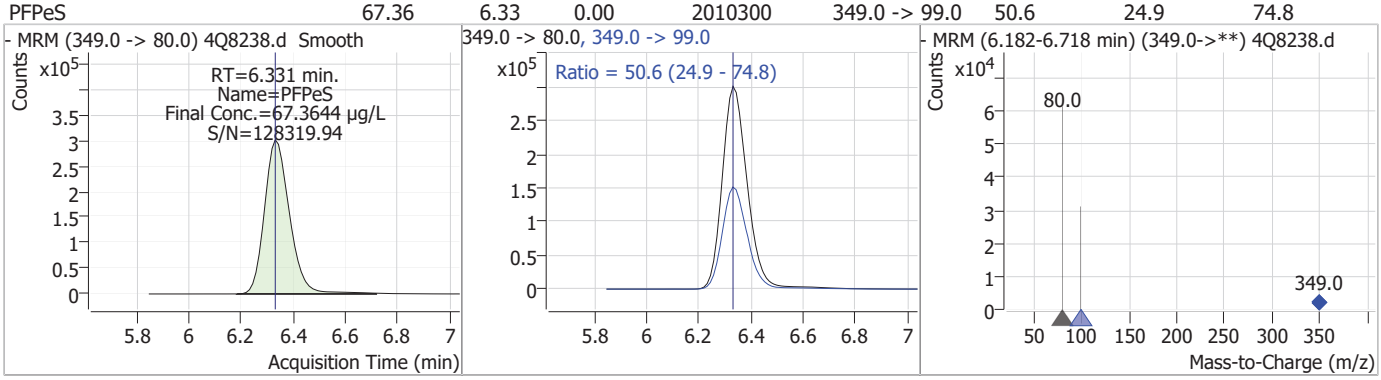


Perfluorinated Compounds by LC/MS/MS

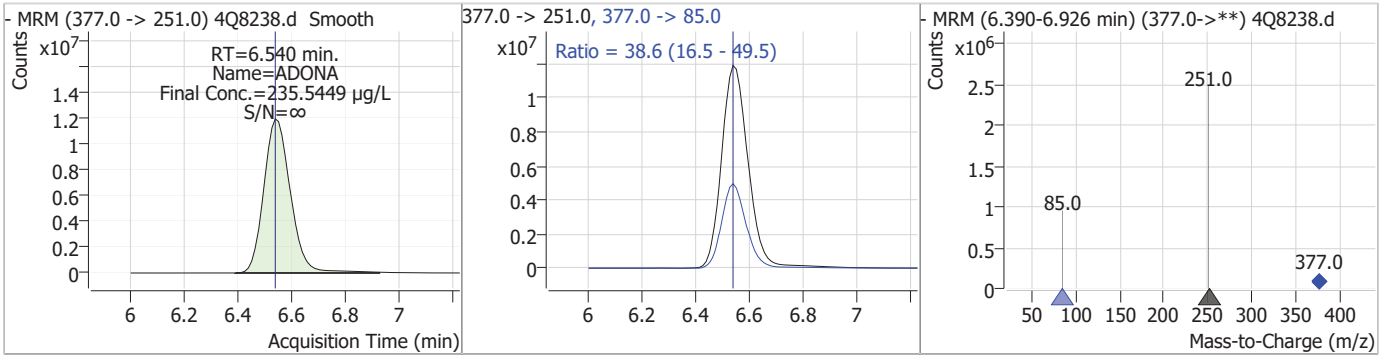
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	73.30	6.30	0.00	13155519	363.0 -> 169.0	19.7	10.1	30.2



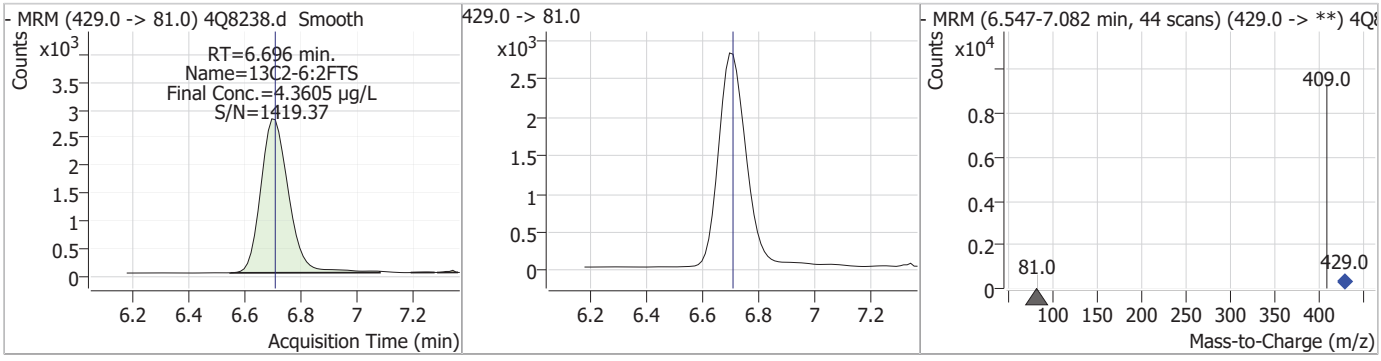
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	67.36	6.33	0.00	2010300	349.0 -> 99.0	50.6	24.9	74.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	235.54	6.54	0.00	81583215	377.0 -> 85.0	38.6	16.5	49.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	4.36	6.70	-0.01	19328				



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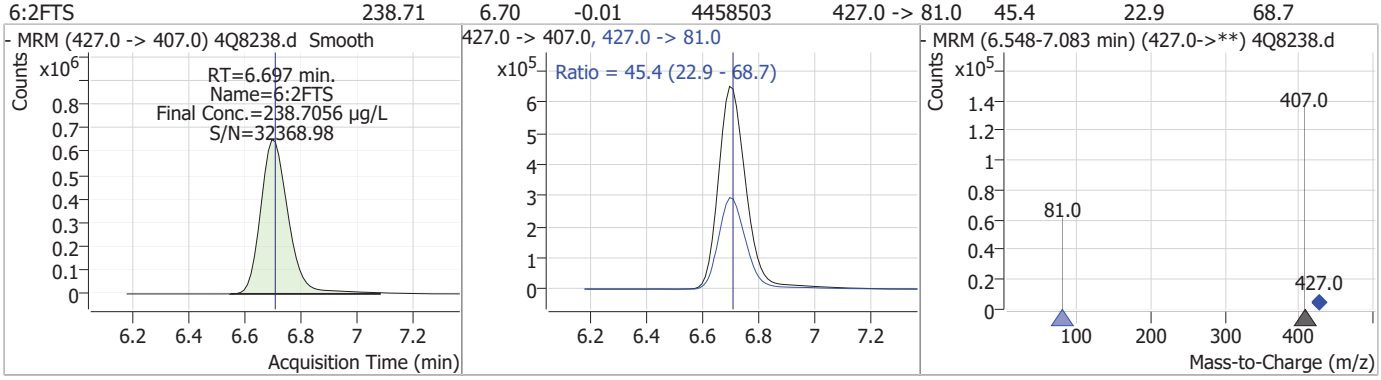
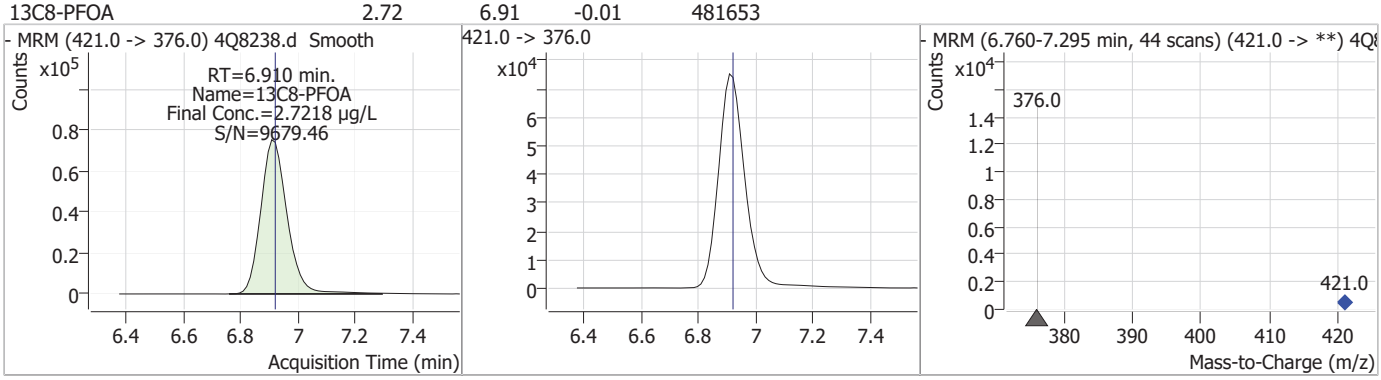
Perfluorinated Compounds by LC/MS/MS

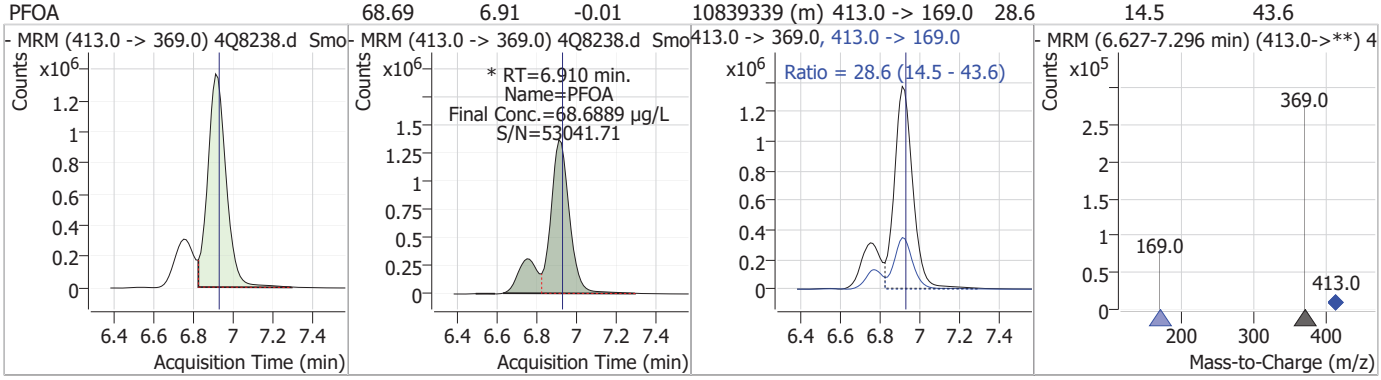
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	238.71	6.70	-0.01	4458503	427.0 -> 81.0	45.4	22.9	68.7



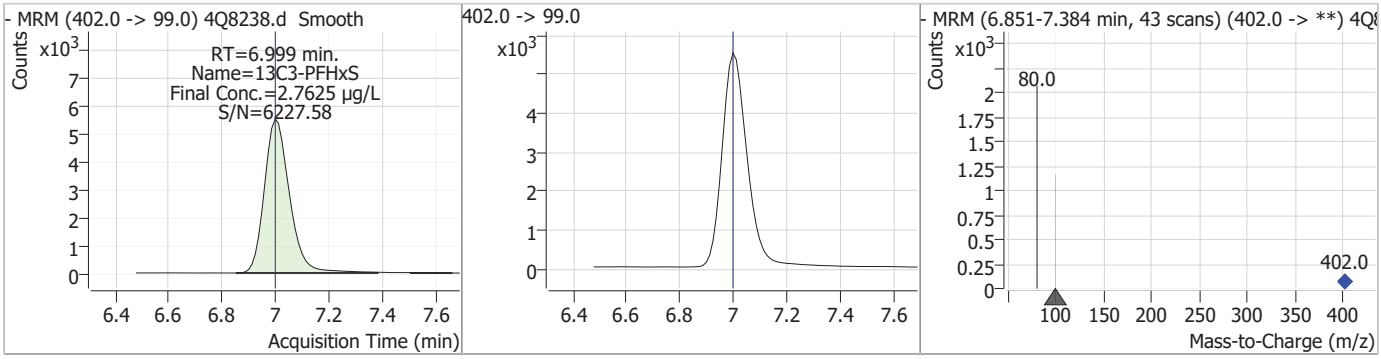
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.72	6.91	-0.01	481653				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	68.69	6.91	-0.01	10839339 (m)	413.0 -> 169.0	28.6	14.5	43.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.76	7.00	0.00	35945				



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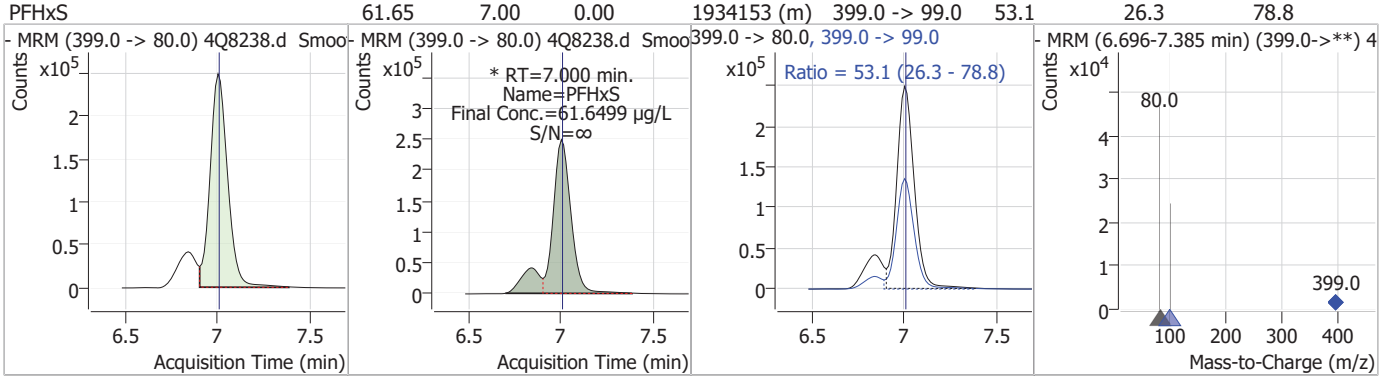
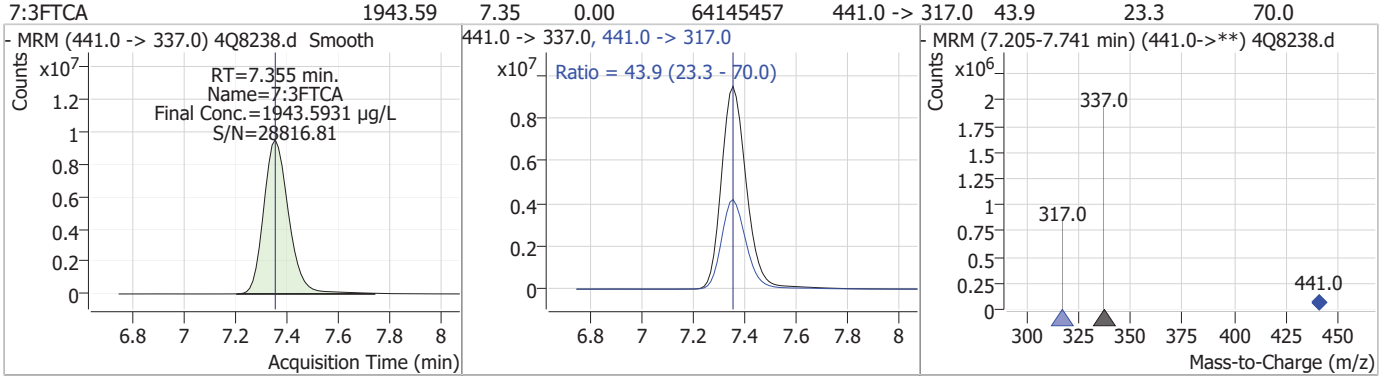
Perfluorinated Compounds by LC/MS/MS

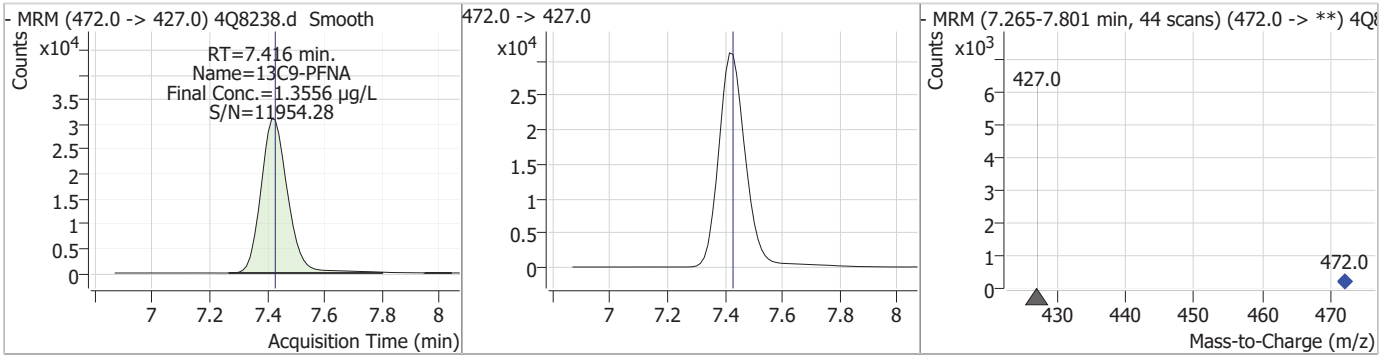
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	61.65	7.00	0.00	1934153 (m)	399.0 -> 99.0	53.1	26.3	78.8



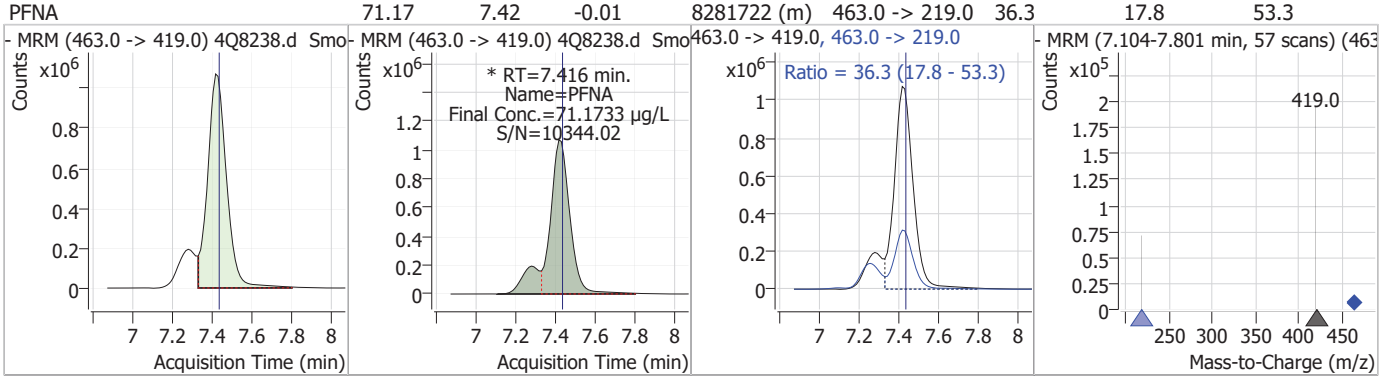
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	1943.59	7.35	0.00	64145457	441.0 -> 317.0	43.9	23.3	70.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.36	7.42	-0.01	201724				

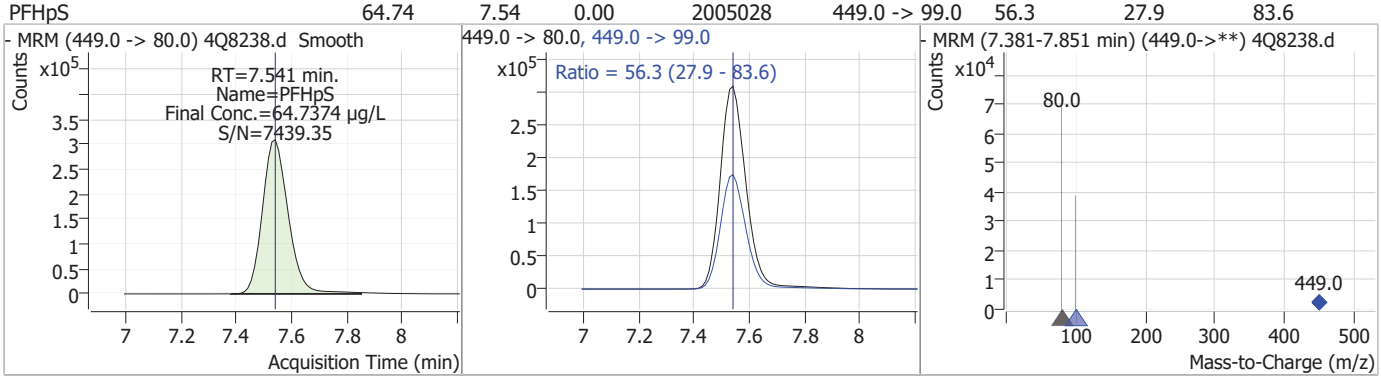


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	71.17	7.42	-0.01	8281722 (m)	463.0 -> 219.0	36.3	17.8	53.3

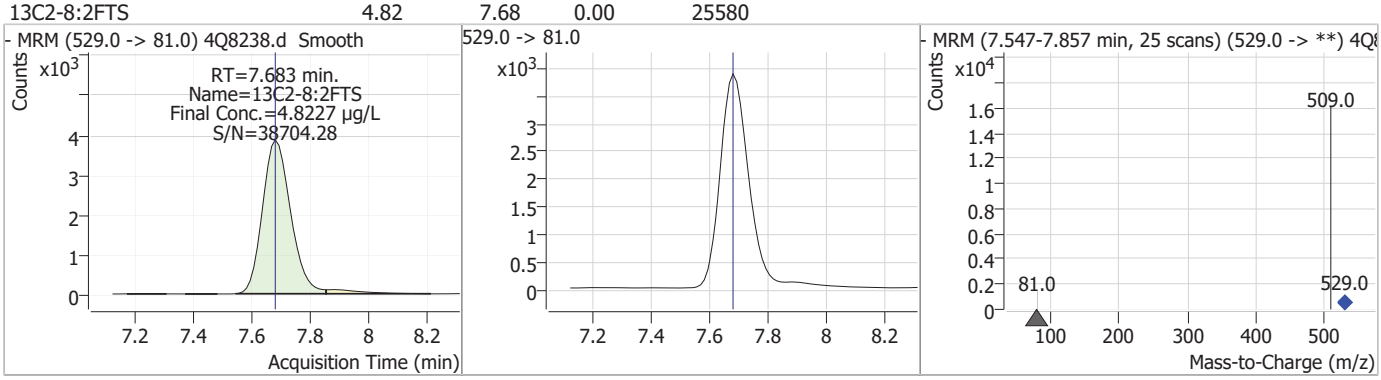


Perfluorinated Compounds by LC/MS/MS

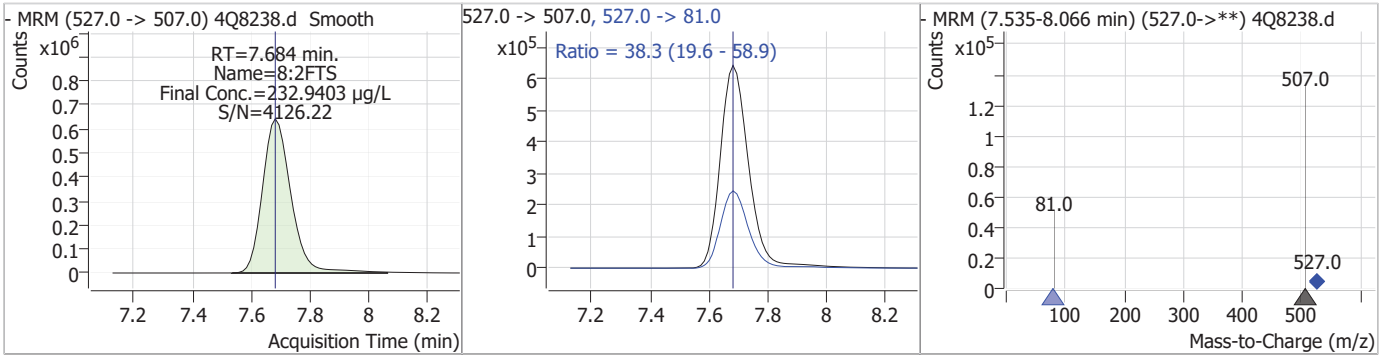
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	64.74	7.54	0.00	2005028	449.0 -> 99.0	56.3	27.9	83.6



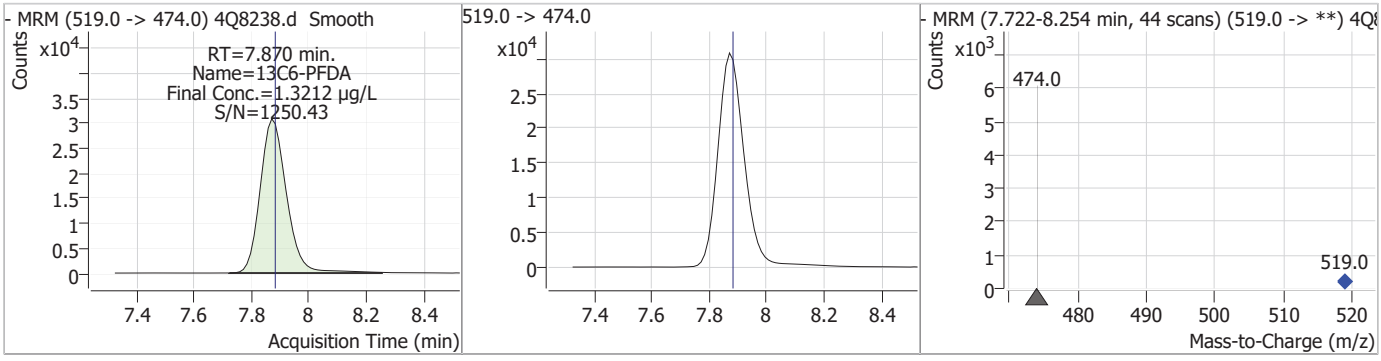
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.82	7.68	0.00	25580				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	232.94	7.68	0.00	4342980	527.0 -> 81.0	38.3	19.6	58.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.32	7.87	-0.01	195812				



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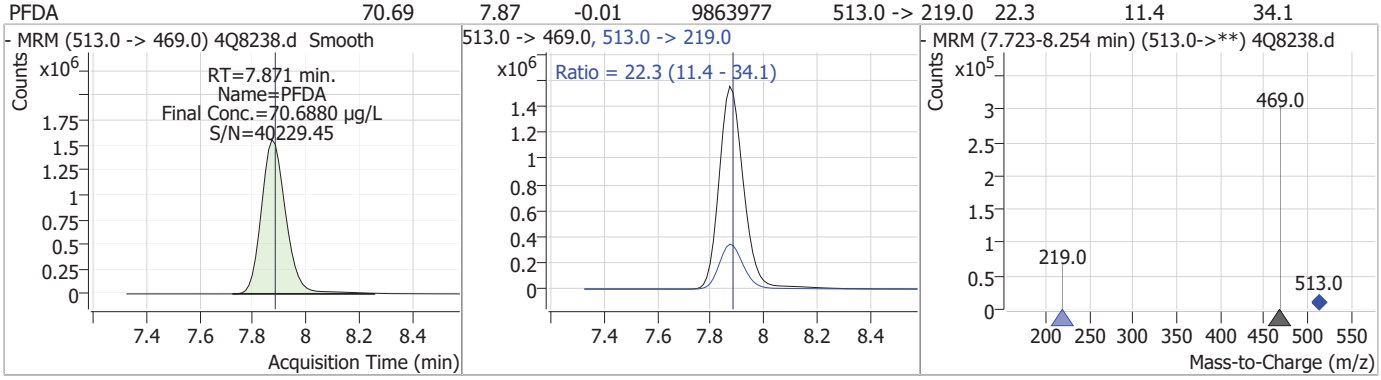
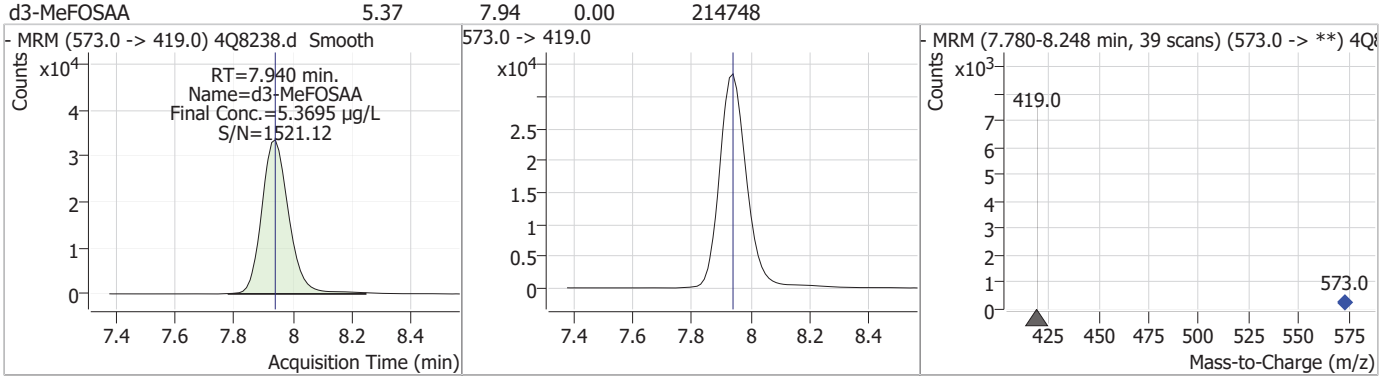
Perfluorinated Compounds by LC/MS/MS

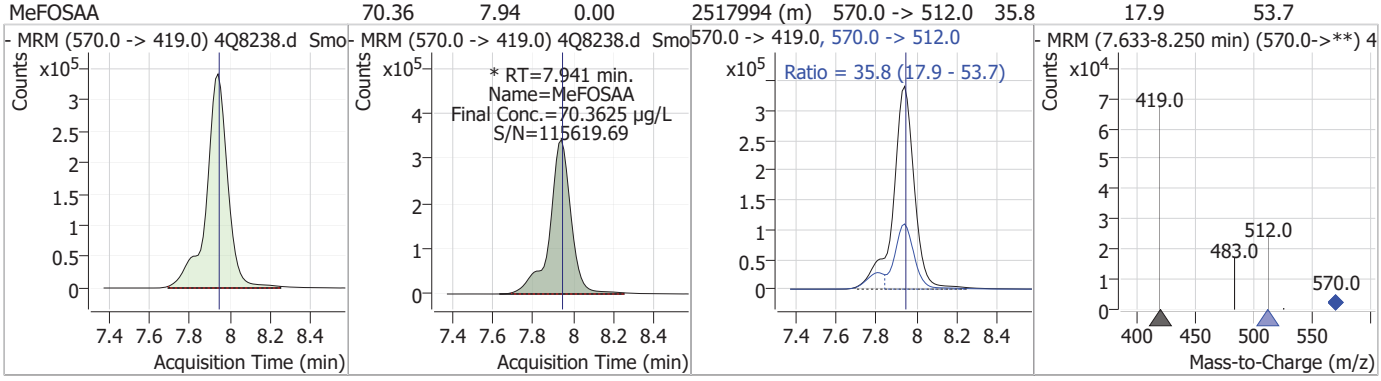
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	70.69	7.87	-0.01	9863977	513.0 -> 219.0	22.3	11.4	34.1



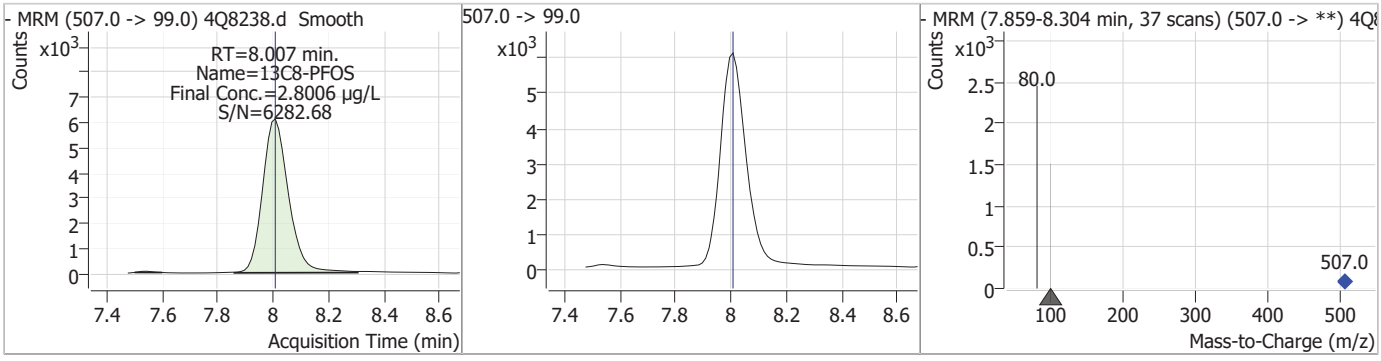
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.37	7.94	0.00	214748				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	70.36	7.94	0.00	2517994 (m)	570.0 -> 512.0	35.8	17.9	53.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.80	8.01	0.00	39571				



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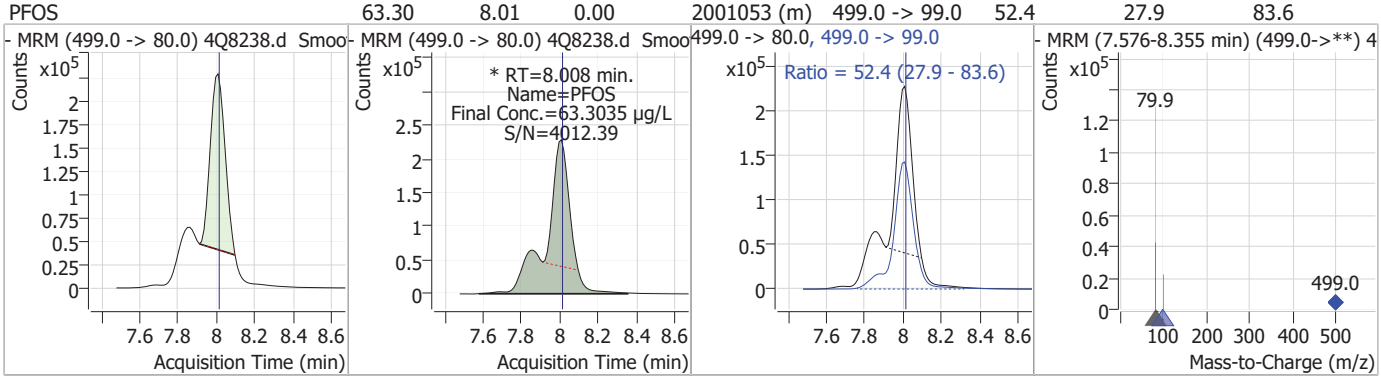
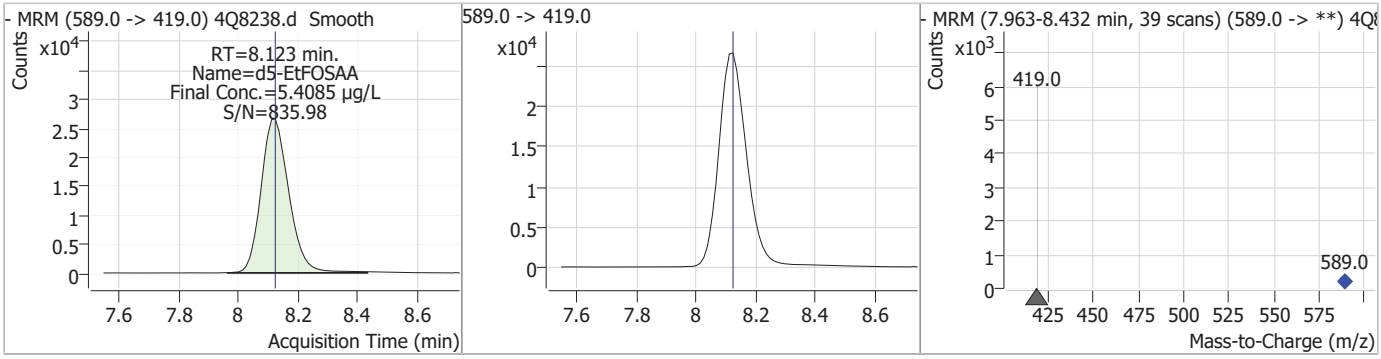
Perfluorinated Compounds by LC/MS/MS

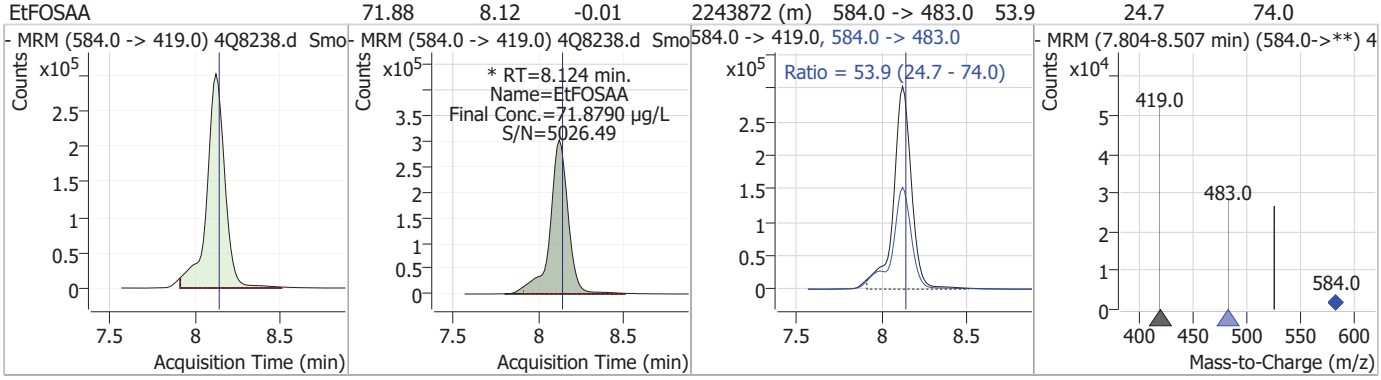
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	63.30	8.01	0.00	2001053 (m)	499.0 -> 99.0	52.4	27.9	83.6



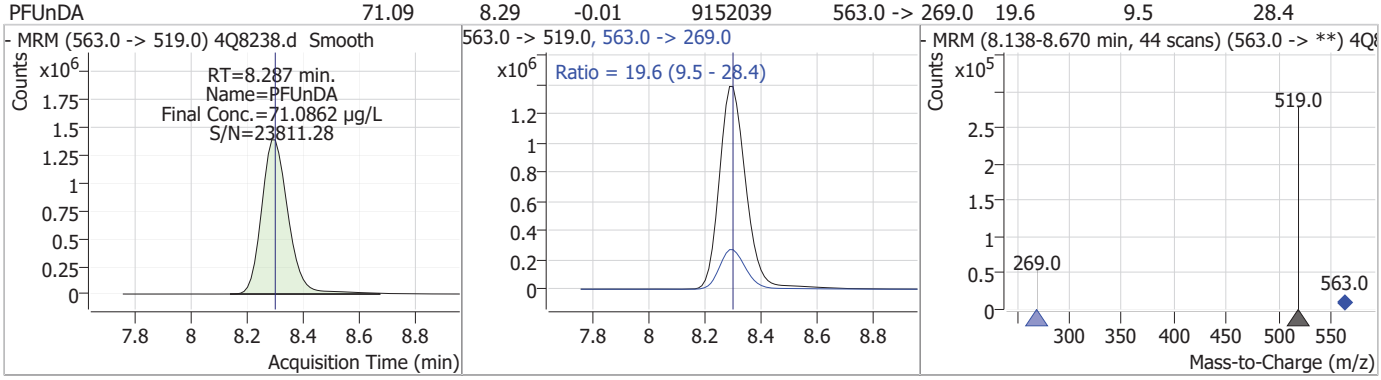
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.41	8.12	0.00	172706				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	71.88	8.12	-0.01	2243872 (m)	584.0 -> 483.0	53.9	24.7	74.0

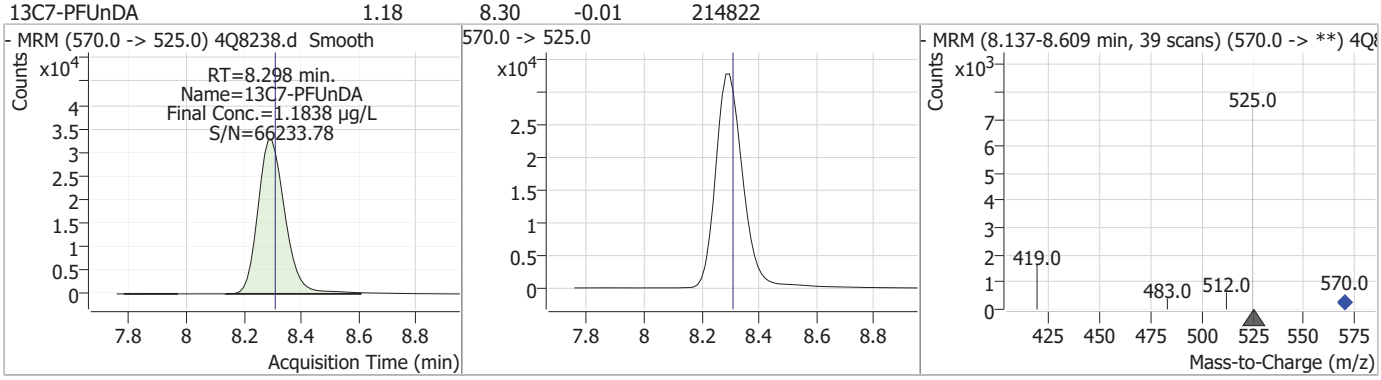


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	71.09	8.29	-0.01	9152039	563.0 -> 269.0	19.6	9.5	28.4

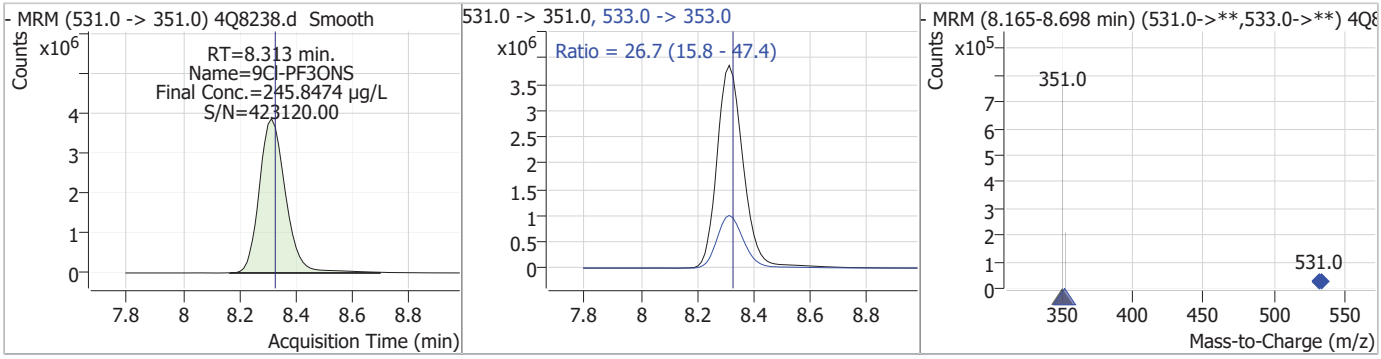


Perfluorinated Compounds by LC/MS/MS

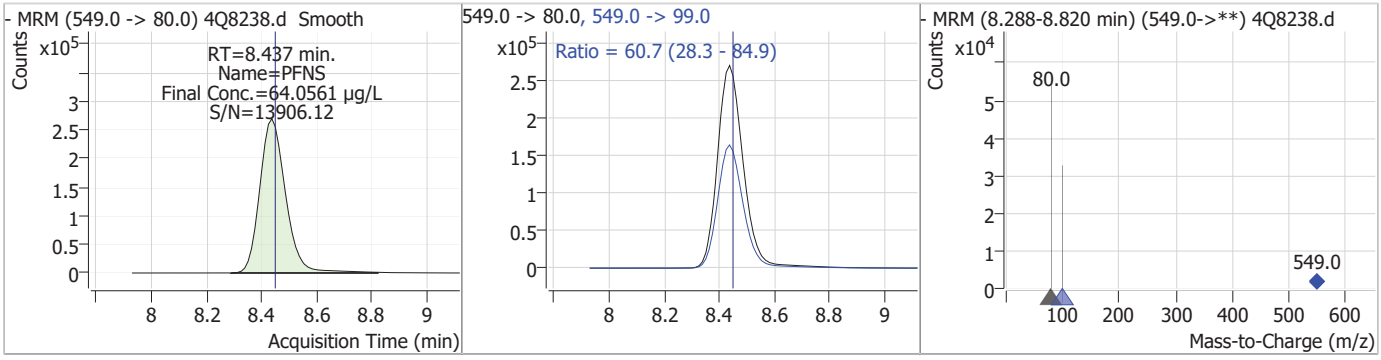
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.18	8.30	-0.01	214822				



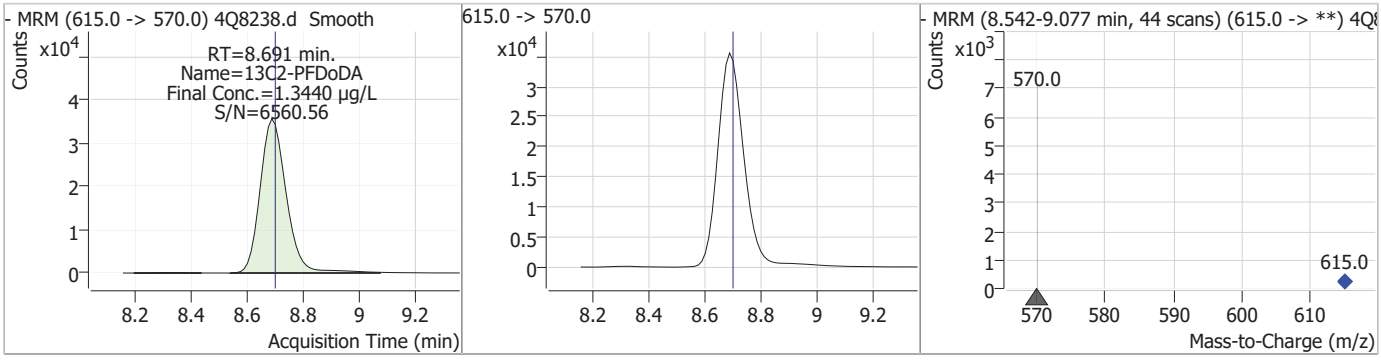
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	245.85	8.31	-0.01	25005028	533.0 -> 353.0	26.7	15.8	47.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	64.06	8.44	-0.01	1749906	549.0 -> 99.0	60.7	28.3	84.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.34	8.69	-0.01	230120				



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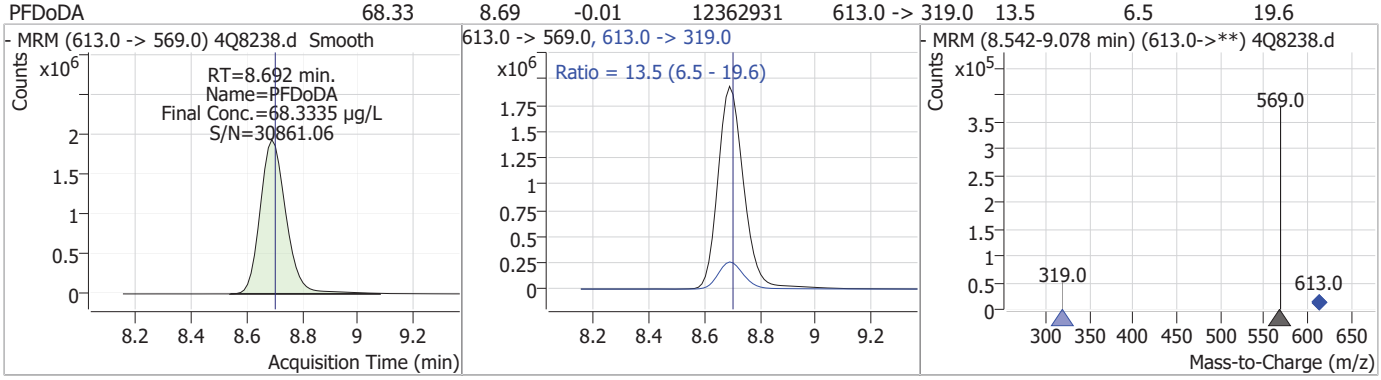
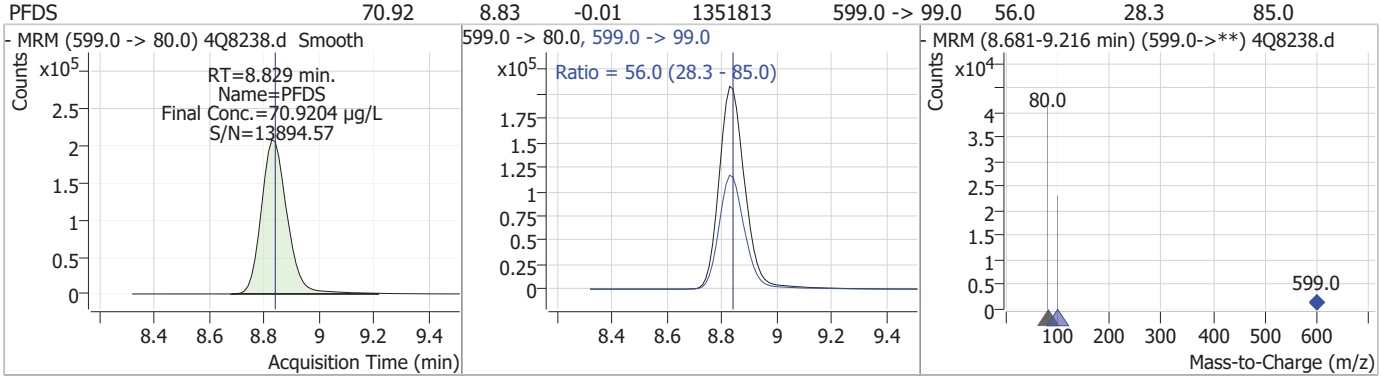
Perfluorinated Compounds by LC/MS/MS

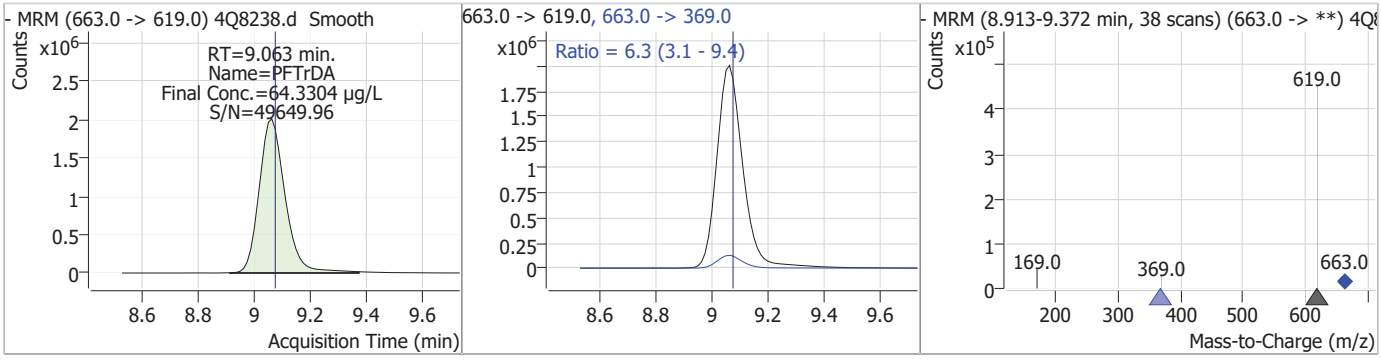
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	68.33	8.69	-0.01	12362931	613.0 -> 319.0	13.5	6.5	19.6



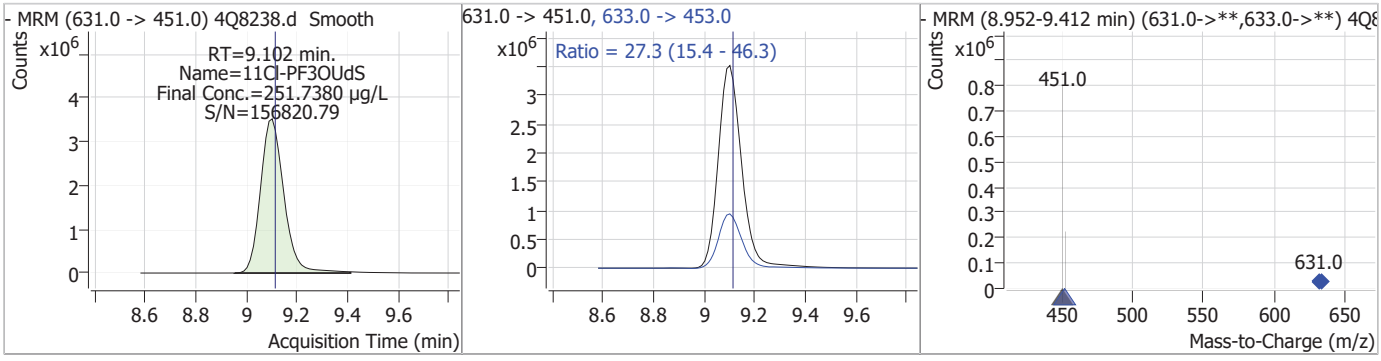
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	70.92	8.83	-0.01	1351813	599.0 -> 99.0	56.0	28.3	85.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	64.33	9.06	-0.01	12821240	663.0 -> 369.0	6.3	3.1	9.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	251.74	9.10	-0.01	22650921	633.0 -> 453.0	27.3	15.4	46.3



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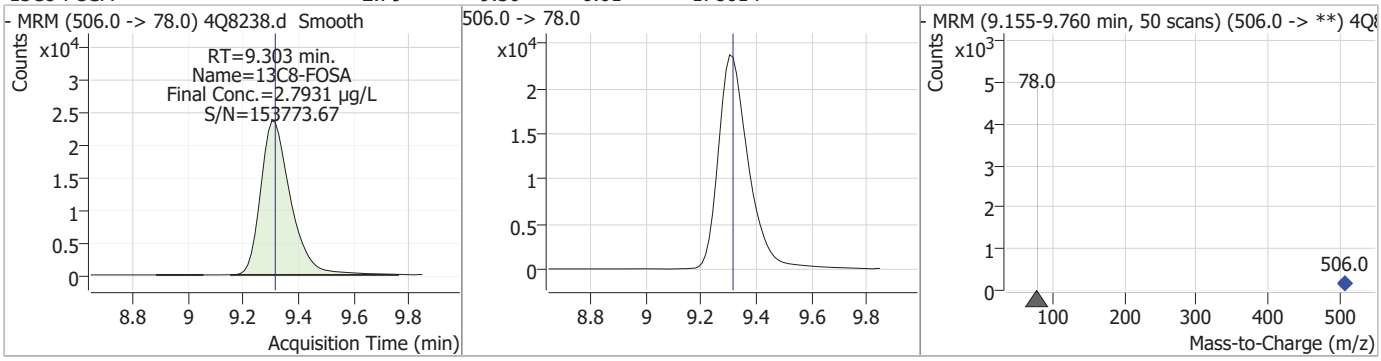
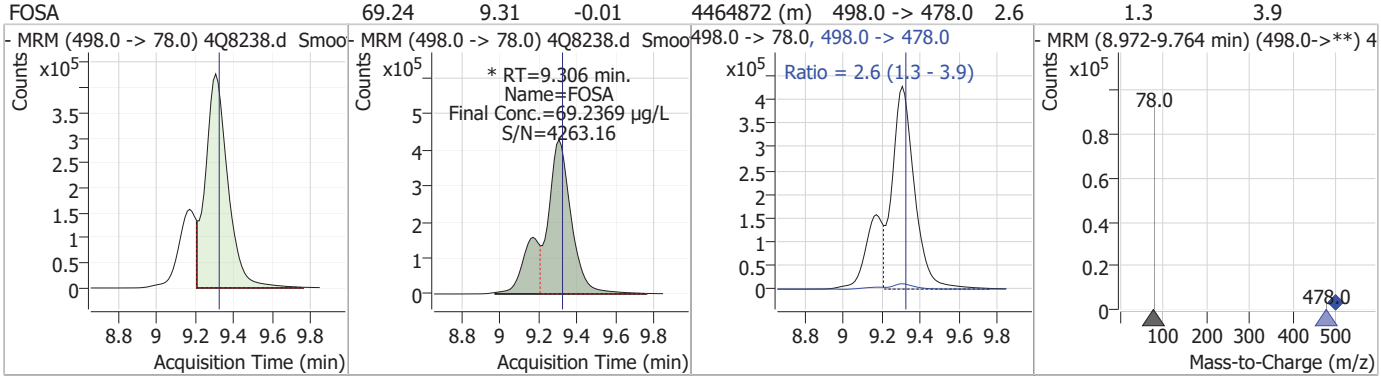
Perfluorinated Compounds by LC/MS/MS

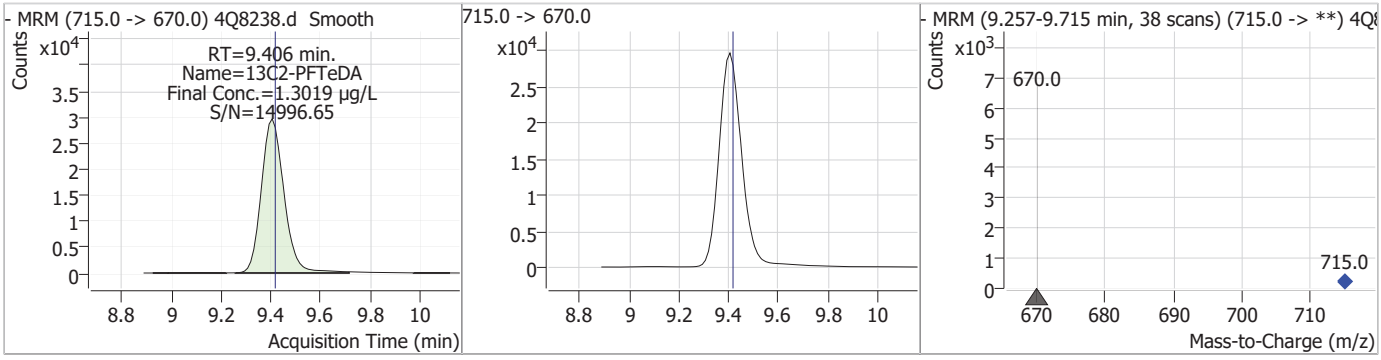
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.79	9.30	-0.01	178614				



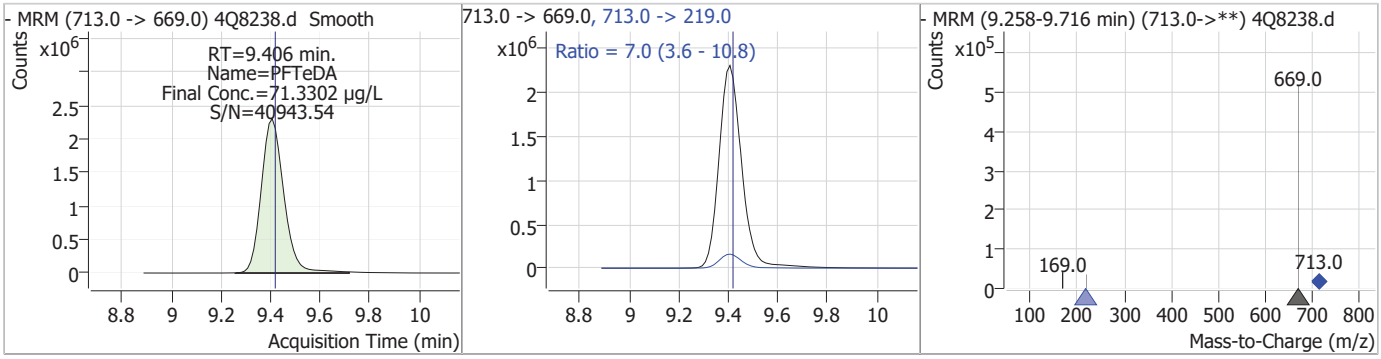
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	69.24	9.31	-0.01	4464872 (m)	498.0 -> 478.0	2.6	1.3	3.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.30	9.41	-0.01	188367				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	71.33	9.41	-0.01	14594905	713.0 -> 219.0	7.0	3.6	10.8



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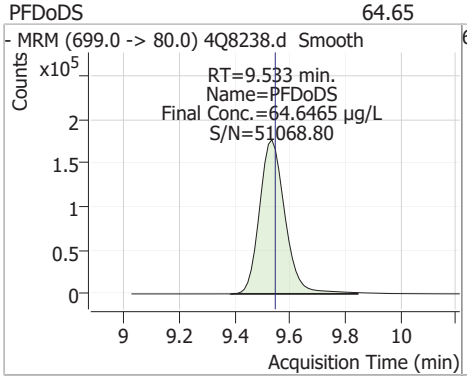
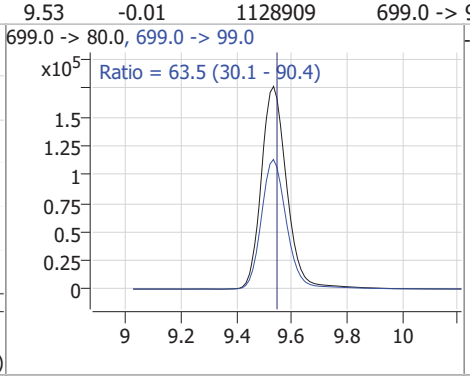
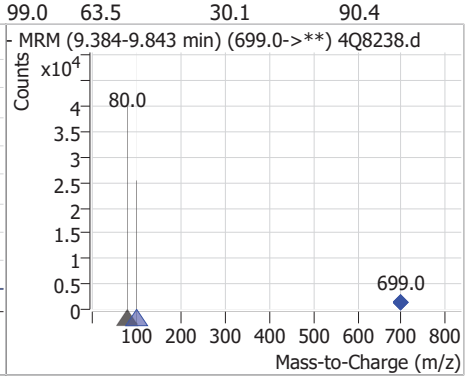
Perfluorinated Compounds by LC/MS/MS

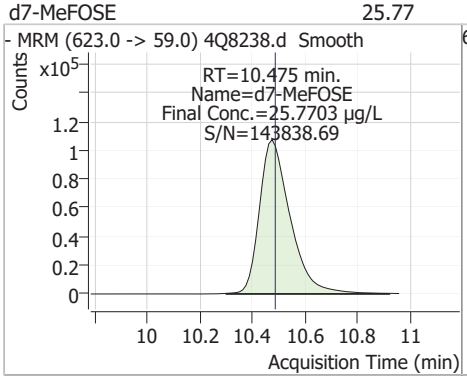
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	64.65	9.53	-0.01	1128909	699.0 -> 99.0	63.5	30.1	90.4

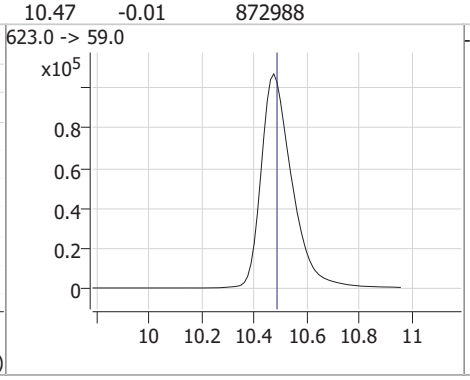


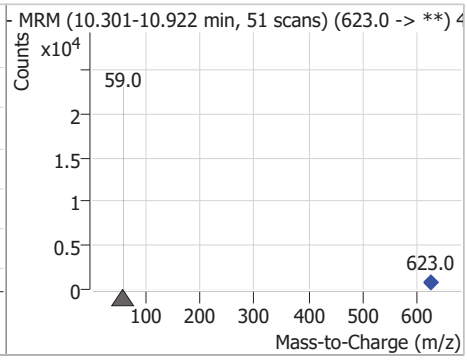




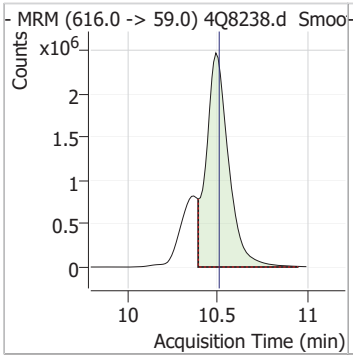
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.77	10.47	-0.01	872988				

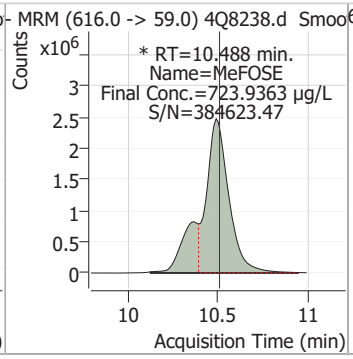


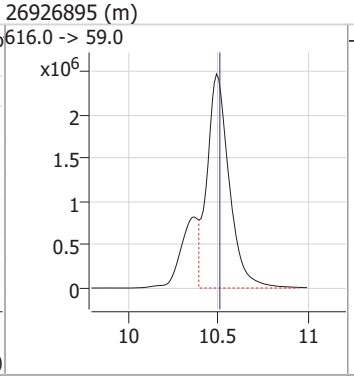


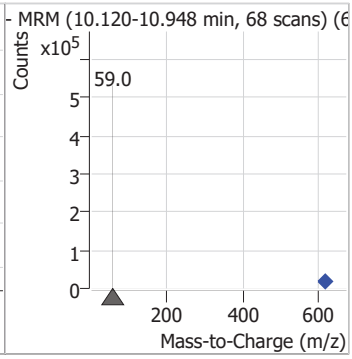


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	723.94	10.49	-0.01	26926895 (m)				

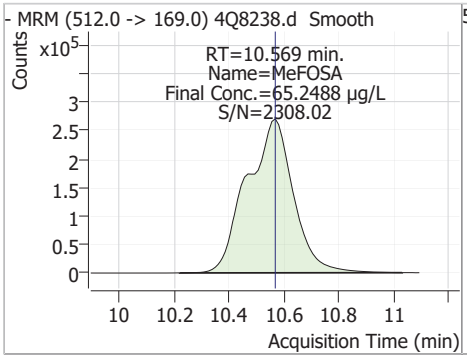


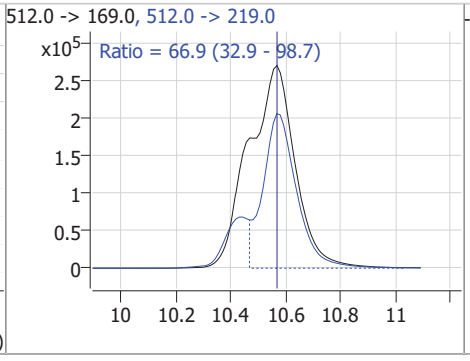


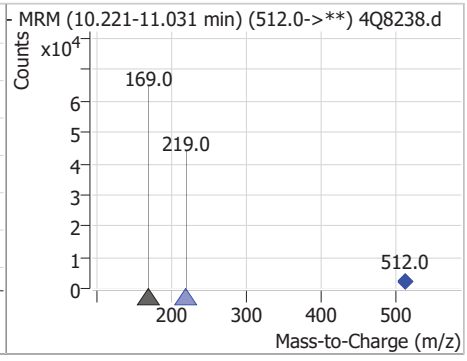




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	65.25	10.57	0.00	3169565	512.0 -> 219.0	66.9	32.9	98.7







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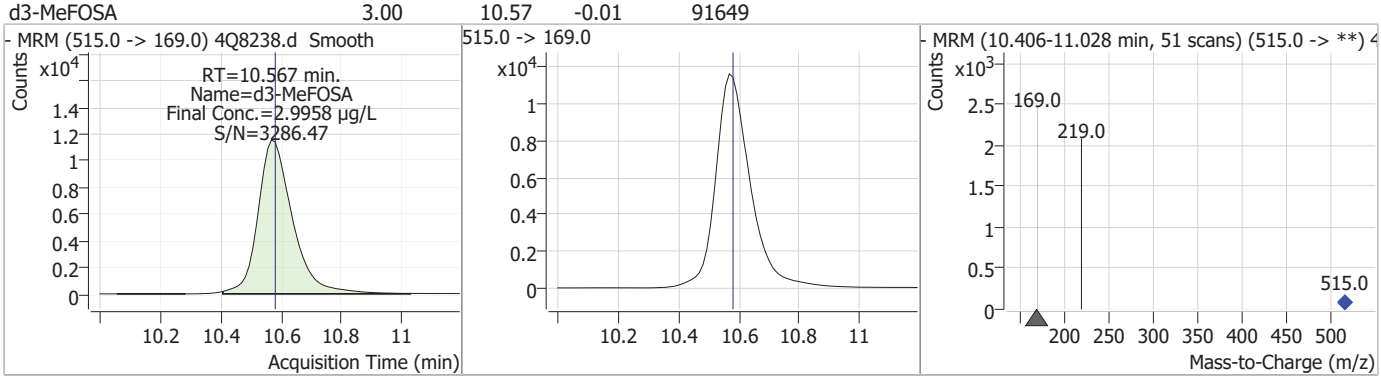
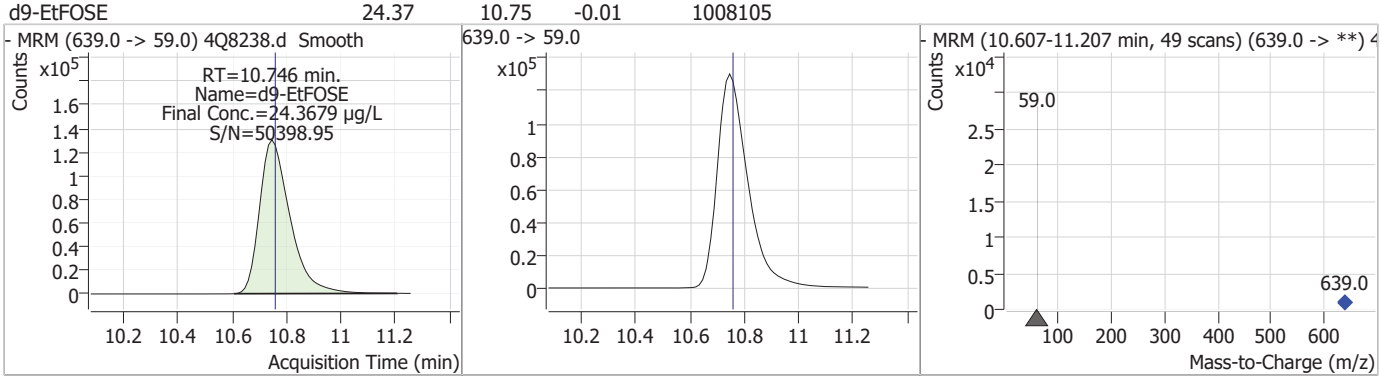
Perfluorinated Compounds by LC/MS/MS

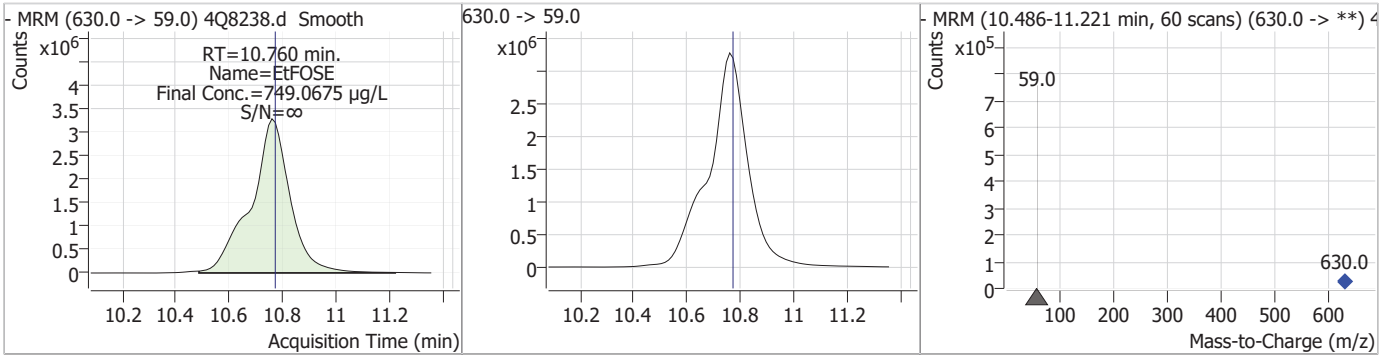
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	3.00	10.57	-0.01	91649				



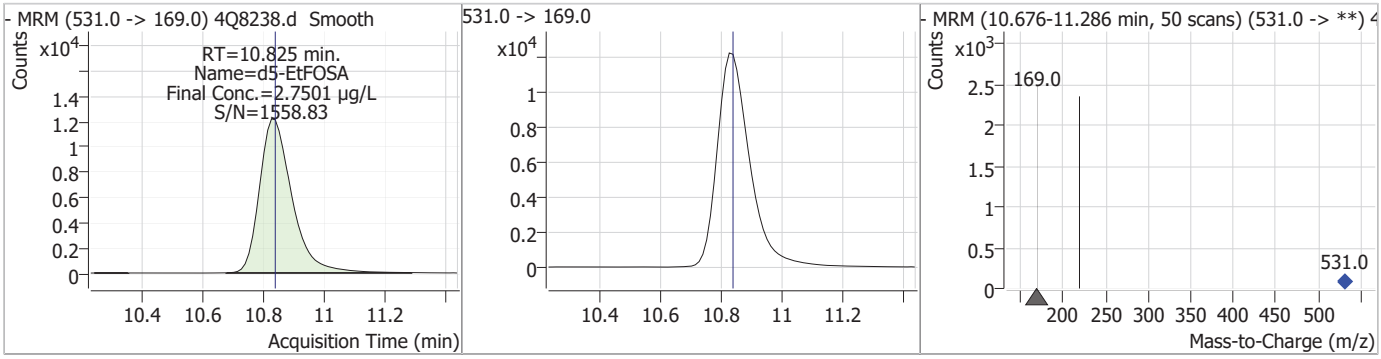
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	24.37	10.75	-0.01	1008105				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	749.07	10.76	-0.01	33668088				

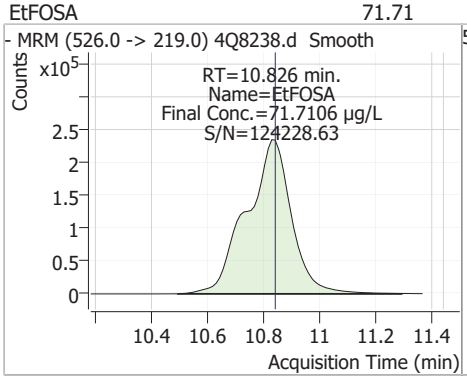


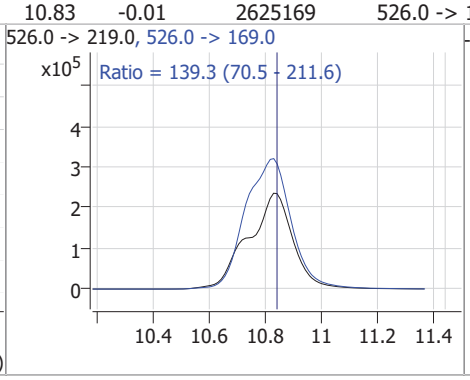
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.75	10.82	-0.01	90673				

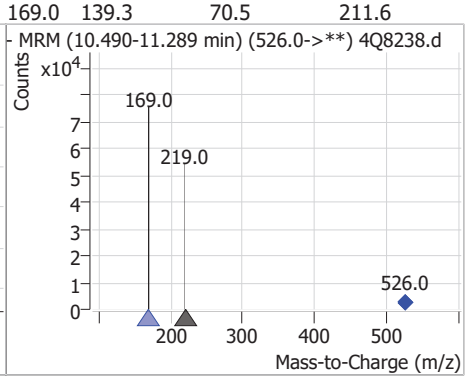


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	71.71	10.83	-0.01	2625169	526.0 -> 169.0	139.3	70.5	211.6







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7

Manual Integration Approval Summary

Sample Number: T4Q140-IC140
Lab FileID: 4Q8238.D
Injection Time: 05/02/25 15:35
Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.91	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.42	Split peak
MeFOSAA	2355-31-9		7.94	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.01	Split peak
EtFOSAA	2991-50-6		8.12	Split peak
PFOSA	754-91-6		9.31	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8240.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 4:02:20 PM
Sample Name : ICV140-4
Vial : P1-B2
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.896	217.0 -> 172.0	818791	10.00 µg/L	0.012
M5-PFPeA	4.319	268.0 -> 223.0	442927	5.00 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	297817	2.50 µg/L	0.000
M4-PFHpA	6.304	367.0 -> 322.0	317840	2.50 µg/L	0.000
M8-PFOA	6.910	421.0 -> 376.0	484114	2.50 µg/L	-0.012
M9-PFNA	7.416	472.0 -> 427.0	200675	1.25 µg/L	-0.012
M6-PFDA	7.870	519.0 -> 474.0	195194	1.25 µg/L	-0.012
M7-PFUnDA	8.298	570.0 -> 525.0	234770	1.25 µg/L	-0.012
M2-PFDoDA	8.691	615.0 -> 570.0	224250	1.25 µg/L	-0.012
M2-PFTeDA	9.406	715.0 -> 670.0	177853	1.25 µg/L	-0.012
M8-FOSA	9.303	506.0 -> 78.0	176576	2.50 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	25729	2.50 µg/L	0.000
		302.0 -> 80.0	66962		
M3-PFHxS	6.999	402.0 -> 99.0	35818	2.50 µg/L	0.000
M8-PFOS	8.007	507.0 -> 99.0	41662	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	11735	5.00 µg/L	0.000
M2-6:2FTS	6.708	429.0 -> 81.0	25743	5.00 µg/L	0.000
M2-8:2FTS	7.683	529.0 -> 81.0	30371	5.00 µg/L	0.000
M3-MeFOSAA	7.940	573.0 -> 419.0	229090	5.00 µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	433308	10.00 µg/L	0.000
M5-EtFOSAA	8.123	589.0 -> 419.0	179463	5.00 µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	920871	25.00 µg/L	-0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1136696	25.00 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	93827	2.50 µg/L	-0.012
M3-MeFOSA	10.567	515.0 -> 169.0	84485	2.50 µg/L	-0.012
13C4-PFOS	8.008	503.0 -> 80.0	65205	2.50 µg/L	0.000
13C3-PFBA	2.899	216.0 -> 172.0	338542	5.00 µg/L	0.013
18O2-PFHxS	6.999	403.0 -> 84.0	40426	2.50 µg/L	0.000
13C4-PFOA	6.910	417.0 -> 372.0	463335	2.50 µg/L	-0.012
13C2-PFDA	7.871	515.0 -> 470.0	156111	1.25 µg/L	-0.012
13C5-PFNA	7.416	468.0 -> 423.0	176048	1.25 µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	266405	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	11735	5.22 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.4%	
13C2-6:2FTS	6.708	429.0 -> 81.0	25743	5.29 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 105.9%	
13C2-8:2FTS	7.683	529.0 -> 81.0	30371	5.22 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.4%	
13C2-PFDoDA	8.691	615.0 -> 570.0	224250	1.29 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 102.9%	
13C2-PFTeDA	9.406	715.0 -> 670.0	177853	1.21 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.6%	
13C3-PFBS	5.368	302.0 -> 99.0	25729	2.59 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.6%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	35818	2.51	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.3%			
13C4-PFBA	2.896	217.0 -> 172.0	818791	10.24	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 102.4%			
13C4-PFHpA	6.304	367.0 -> 322.0	317840	2.51	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.3%			
13C5-PFHxA	5.464	318.0 -> 273.0	297817	2.54	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.8%			
13C5-PFPeA	4.319	268.0 -> 223.0	442927	5.18	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.7%			
13C6-PFDA	7.870	519.0 -> 474.0	195194	1.29	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.5%			
13C7-PFUnDA	8.298	570.0 -> 525.0	234770	1.27	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 101.6%			
13C8-FOSA	9.303	506.0 -> 78.0	176576	2.52	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.8%			
13C8-PFOA	6.910	421.0 -> 376.0	484114	2.54	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.5%			
13C8-PFOS	8.007	507.0 -> 99.0	41662	2.69	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 107.6%			
13C9-PFNA	7.416	472.0 -> 427.0	200675	1.31	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 105.1%			
d3-MeFOSAA	7.940	573.0 -> 419.0	229090	5.23	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.5%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	433308	10.39	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 103.9%			
d3-MeFOSA	10.567	515.0 -> 169.0	84485	2.52	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.8%			
d5-EtFOSAA	8.123	589.0 -> 419.0	179463	5.13	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.5%			
d7-MeFOSE	10.475	623.0 -> 59.0	920871	24.80	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 99.2%			
d9-EtFOSE	10.746	639.0 -> 59.0	1136696	25.07	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.3%			
d5-EtFOSA	10.825	531.0 -> 169.0	93827	2.60	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 103.9%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	184820	9.21	µg/L		100
		327.0 -> 81.0	82168				
6:2FTS	6.697	427.0 -> 407.0	229051	9.21	µg/L		100
		427.0 -> 81.0	104423				
8:2FTS	7.684	527.0 -> 507.0	218156	9.85	µg/L		98
		527.0 -> 81.0	83191				
EtFOSAA	8.124	584.0 -> 419.0	74349	2.29	µg/L	m	93
		584.0 -> 483.0	40248				
FOSA	9.306	498.0 -> 78.0	149142	2.34	µg/L	m	99
		498.0 -> 478.0	4142				
MeFOSAA	7.941	570.0 -> 419.0	94275	2.47	µg/L	m	95
		570.0 -> 512.0	30955				
PFBA	2.889	213.0 -> 169.0	245808	9.20	µg/L		100
PFBS	5.369	299.0 -> 80.0	58008	2.01	µg/L		99
		299.0 -> 99.0	24214				
PFDA	7.871	513.0 -> 469.0	325890	2.34	µg/L		99
		513.0 -> 219.0	73190				
PFDoDA	8.692	613.0 -> 569.0	401550	2.28	µg/L		99
		613.0 -> 319.0	54786				

Perfluorinated Compounds by LC/MS/MS

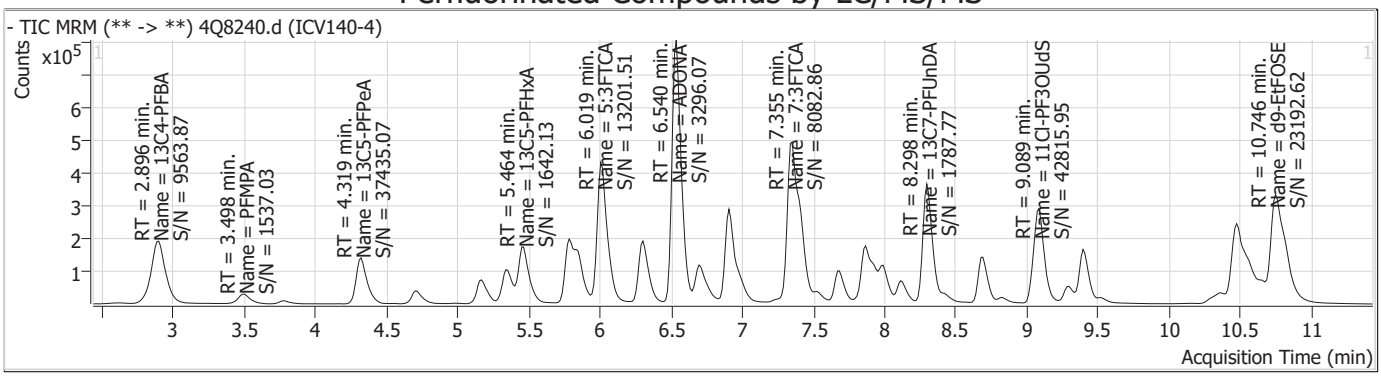
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.829	599.0 -> 80.0	47287	2.27	µg/L		98
		599.0 -> 99.0	26246				
PFHpA	6.304	363.0 -> 319.0	431386	2.37	µg/L		100
		363.0 -> 169.0	86909				
PFHpS	7.541	449.0 -> 80.0	69377	2.25	µg/L		99
		449.0 -> 99.0	38284				
PFHxA	5.467	313.0 -> 269.0	278962	2.31	µg/L		100
		313.0 -> 119.0	9572				
PFHxS	7.000	399.0 -> 80.0	67786	2.17	µg/L	m	97
		399.0 -> 99.0	34236				
PFNA	7.416	463.0 -> 419.0	261103	2.26	µg/L	m	97
		463.0 -> 219.0	97522				
PFNS	8.437	549.0 -> 80.0	60715	2.11	µg/L		96
		549.0 -> 99.0	35930				
PFOA	6.910	413.0 -> 369.0	365316	2.30	µg/L	m	99
		413.0 -> 169.0	104021				
PFOS	8.008	499.0 -> 80.0	66556	2.00	µg/L	m	100
		499.0 -> 99.0	37196				
PFPeA	4.321	263.0 -> 219.0	322479	4.67	µg/L		100
PFPeS	6.331	349.0 -> 80.0	66895	2.09	µg/L		97
		349.0 -> 99.0	34867				
PFTeDA	9.406	713.0 -> 669.0	472212	2.44	µg/L		100
		713.0 -> 219.0	33756				
PFTrDA	9.063	663.0 -> 619.0	454386	2.34	µg/L		100
		663.0 -> 369.0	28874				
PFUnDA	8.287	563.0 -> 519.0	340742	2.42	µg/L		98
		563.0 -> 269.0	67479				
11Cl-PF3OUdS	9.089	631.0 -> 451.0	776956	8.54	µg/L		100
		633.0 -> 453.0	238025				
9Cl-PF3ONS	8.313	531.0 -> 351.0	860216	8.37	µg/L		98
		533.0 -> 353.0	263158				
ADONA	6.540	377.0 -> 251.0	2853377	8.15	µg/L		100
		377.0 -> 85.0	942933				
HFPO-DA	5.792	285.0 -> 169.0	424841	9.46	µg/L		100
		285.0 -> 185.0	49144				
3:3FTCA	3.781	241.0 -> 177.0	47345	11.26	µg/L		99
		241.0 -> 117.0	4344				
5:3FTCA	6.019	341.0 -> 237.0	1266804	54.30	µg/L		100
		341.0 -> 217.0	920709				
7:3FTCA	7.355	441.0 -> 337.0	1755383	52.49	µg/L		100
		441.0 -> 317.0	816736				
EtFOSA	10.826	526.0 -> 219.0	88532	2.34	µg/L		98
		526.0 -> 169.0	122262				
EtFOSE	10.760	630.0 -> 59.0	1178714	23.26	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	106610	2.38	µg/L		99
		512.0 -> 219.0	69271				
MeFOSE	10.488	616.0 -> 59.0	916347	23.36	µg/L		100
PFDoDS	9.533	699.0 -> 80.0	38807	2.11	µg/L		99
		699.0 -> 99.0	23172				
NFDHA	5.357	295.0 -> 201.0	65206	4.84	µg/L		95
		201.0 -> 85.0	313544				
		295.0 -> 85.0	17522				
PFMBA	4.710	279.0 -> 85.0	213430	4.56	µg/L		100
PFMPA	3.498	229.0 -> 85.0	183347	4.59	µg/L		100
PFEESA	5.849	315.0 -> 135.0	475564	4.16	µg/L		99
		315.0 -> 69.0	37841				

Perfluorinated Compounds by LC/MS/MS

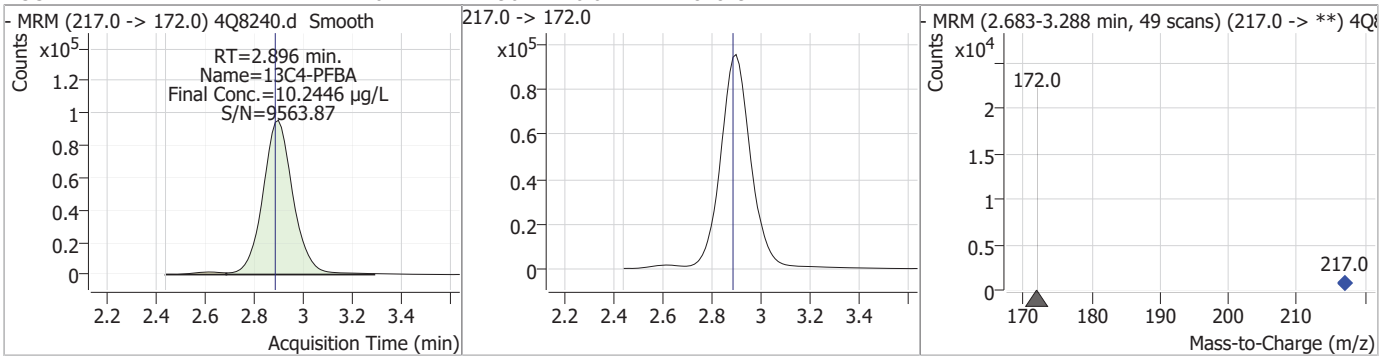
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

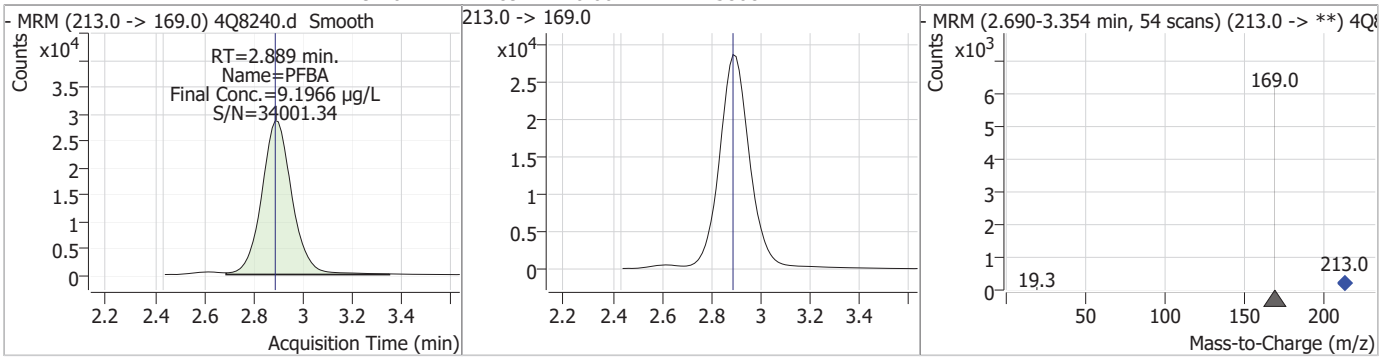
Perfluorinated Compounds by LC/MS/MS



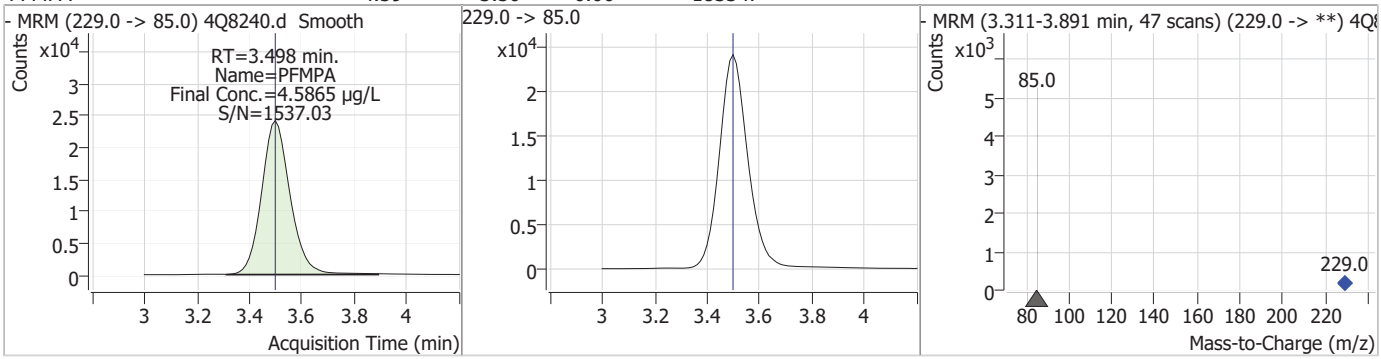
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.24	2.90	0.01	818791				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.20	2.89	0.00	245808				

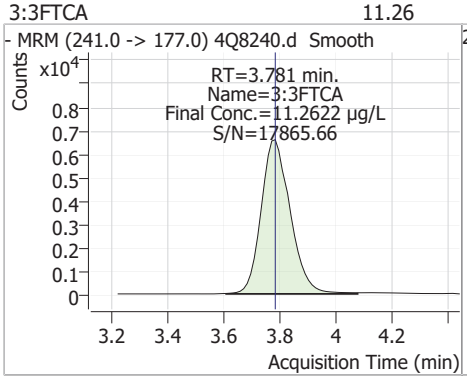


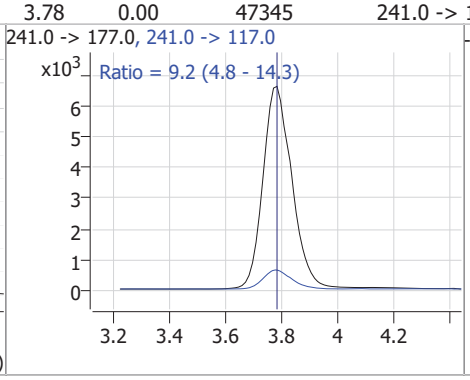
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	4.59	3.50	0.00	183347				

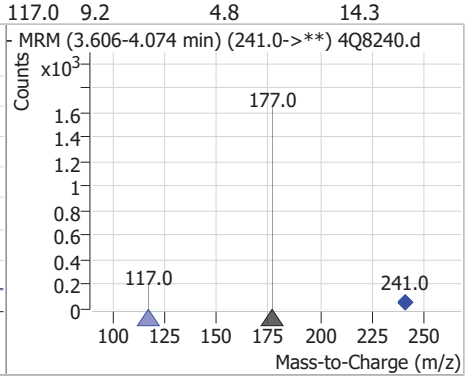


Perfluorinated Compounds by LC/MS/MS

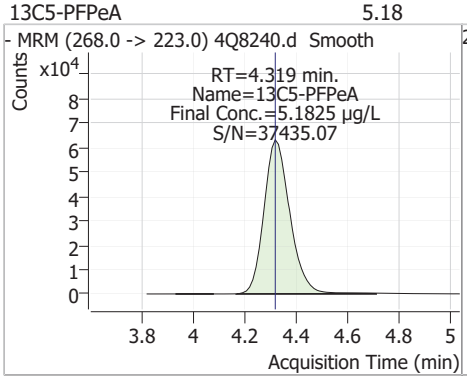
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	11.26	3.78	0.00	47345	241.0 -> 117.0	9.2	4.8	14.3

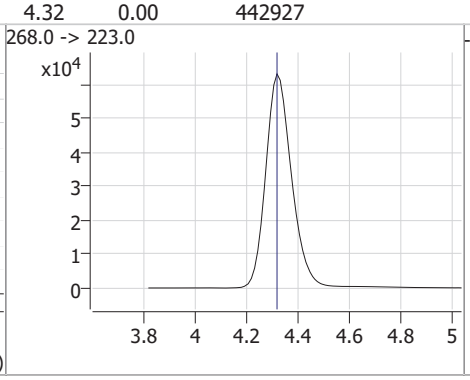


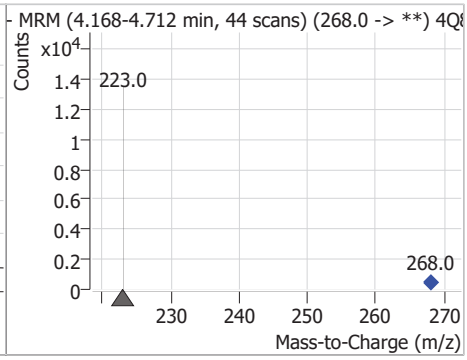




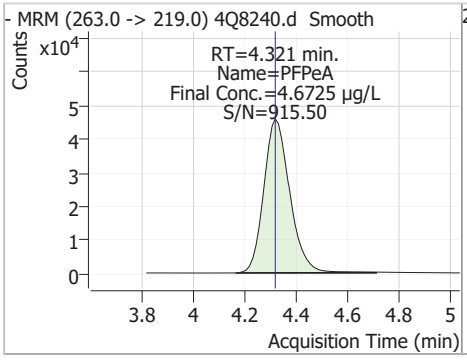
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.18	4.32	0.00	442927				

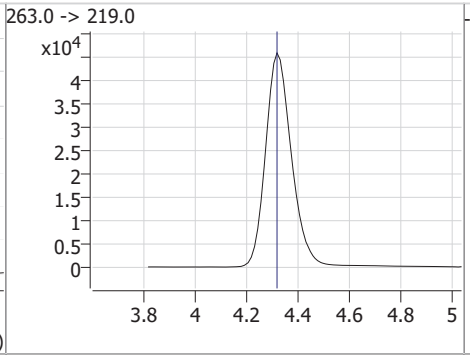


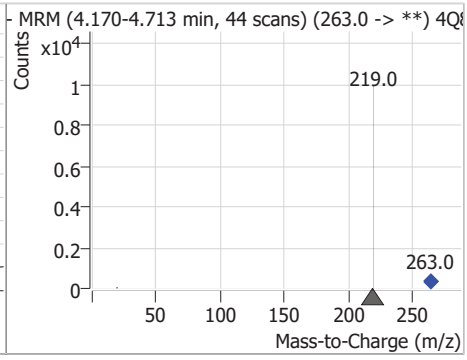




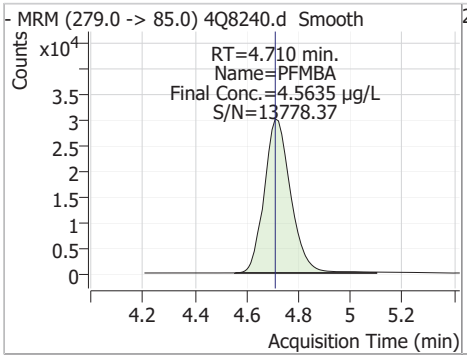
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	4.67	4.32	0.00	322479				

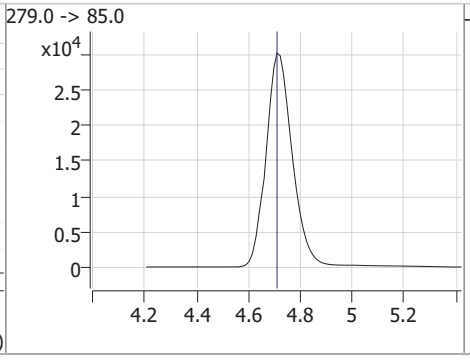


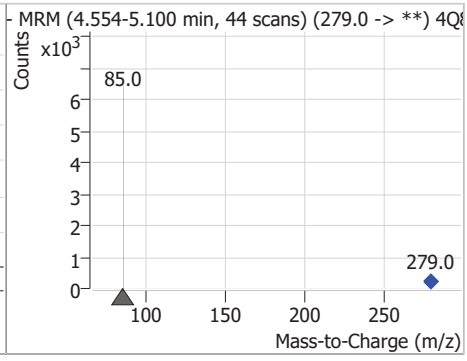




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.56	4.71	0.00	213430				







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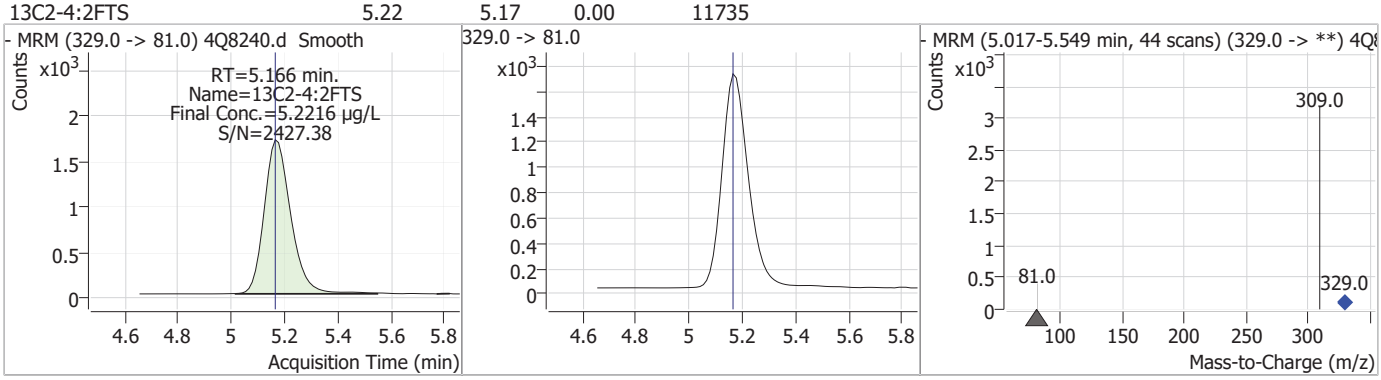
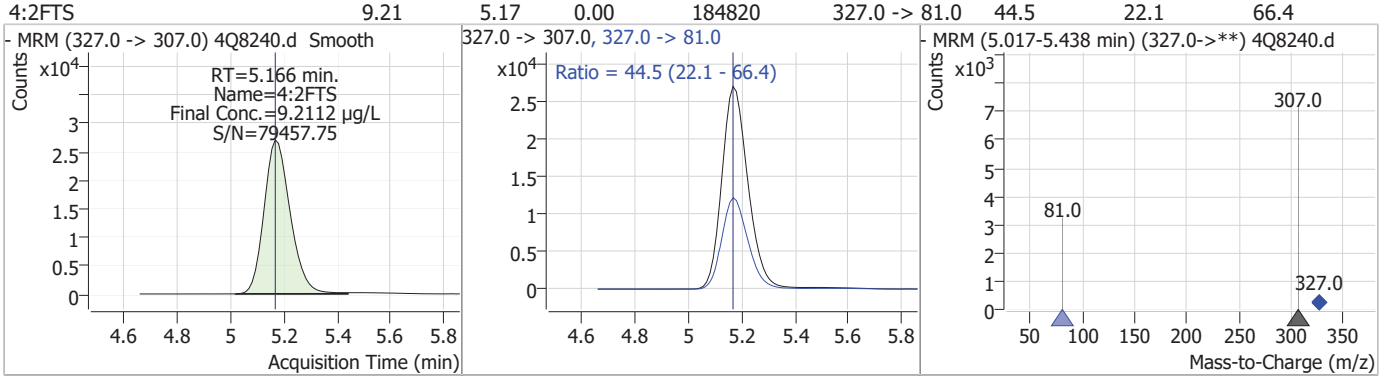
Perfluorinated Compounds by LC/MS/MS

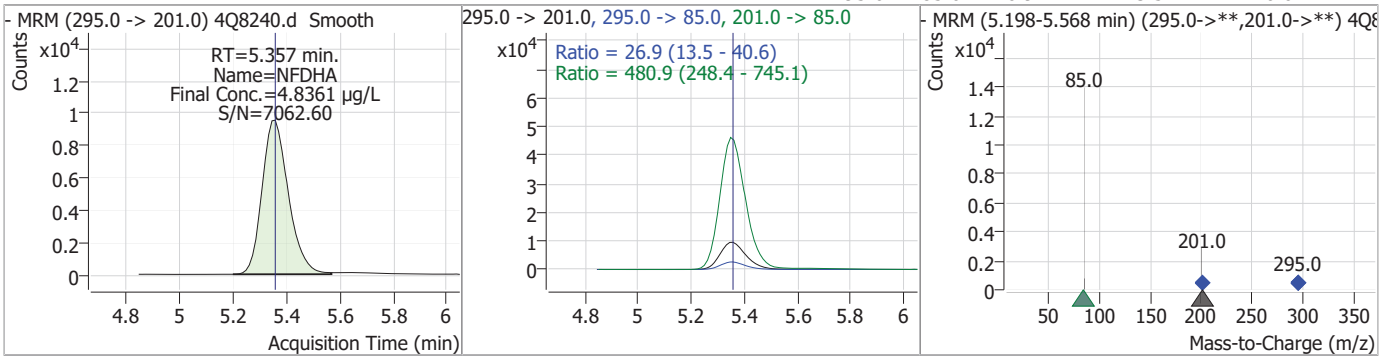
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.22	5.17	0.00	11735				



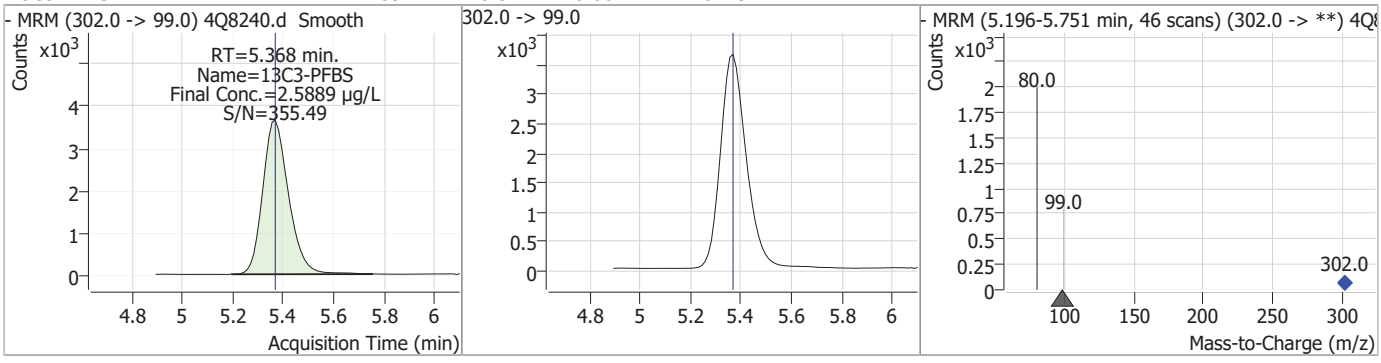
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.21	5.17	0.00	184820	327.0 -> 81.0	44.5	22.1	66.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	4.84	5.36	0.00	65206	201.0 -> 85.0	480.9	248.4	745.1
					295.0 -> 85.0	26.9	13.5	40.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.59	5.37	0.00	25729				



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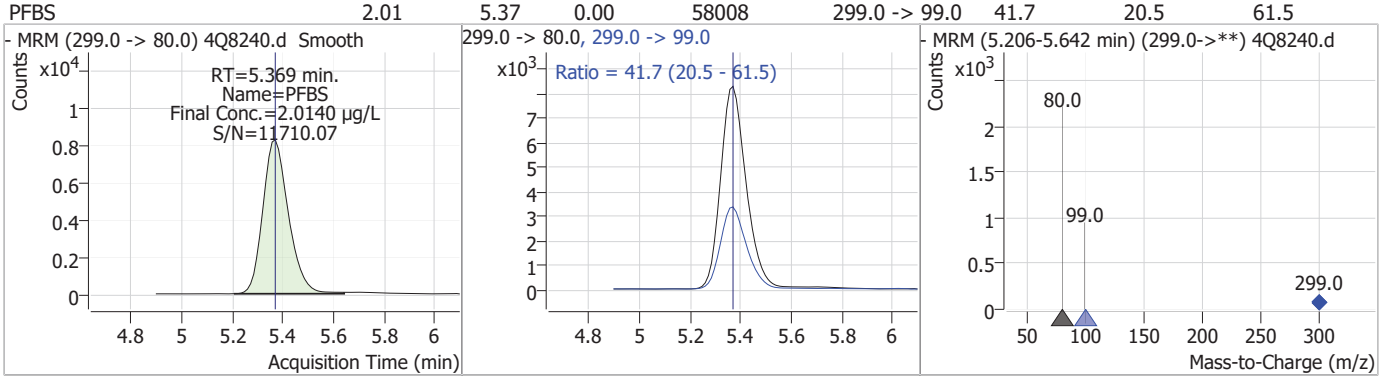
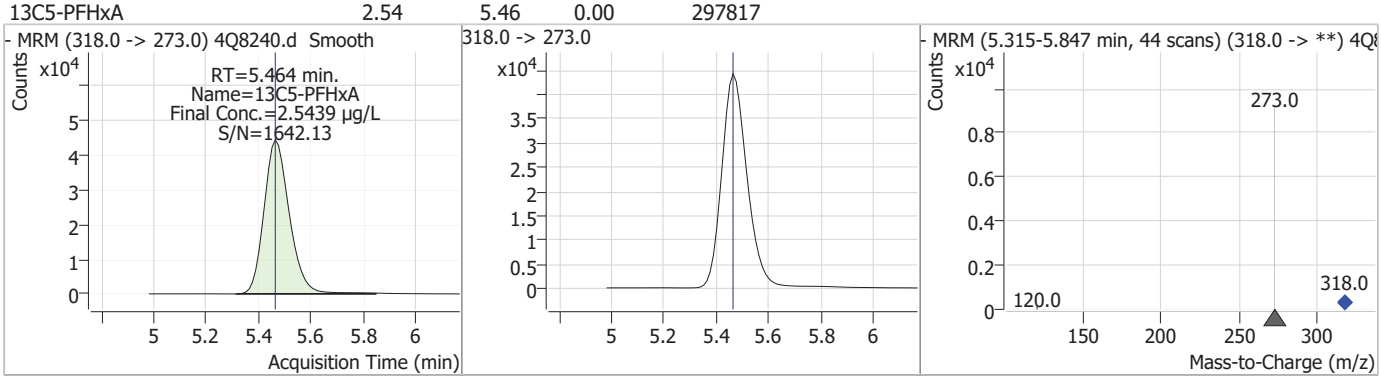
Perfluorinated Compounds by LC/MS/MS

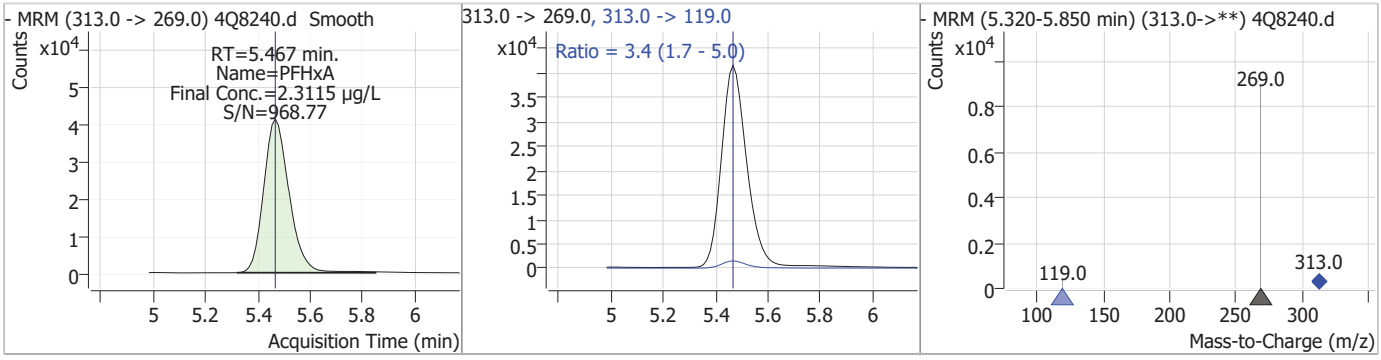
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.01	5.37	0.00	58008	299.0 -> 99.0	41.7	20.5	61.5



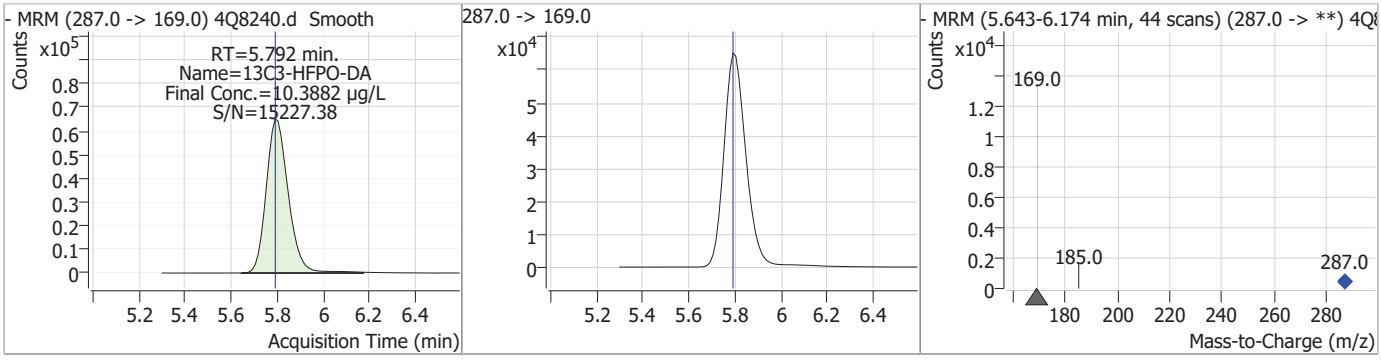
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.54	5.46	0.00	297817				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.31	5.47	0.00	278962	313.0 -> 119.0	3.4	1.7	5.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.39	5.79	0.00	433308				



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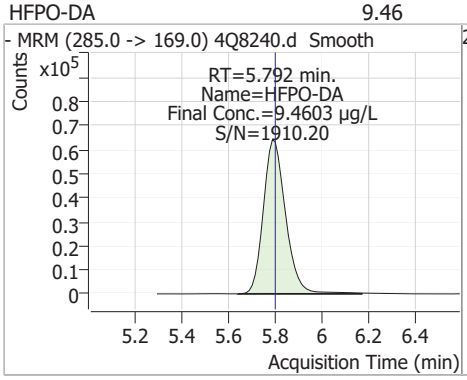
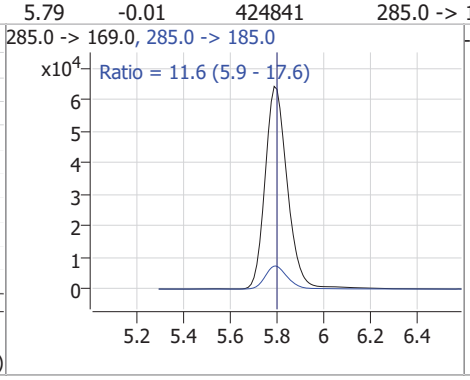
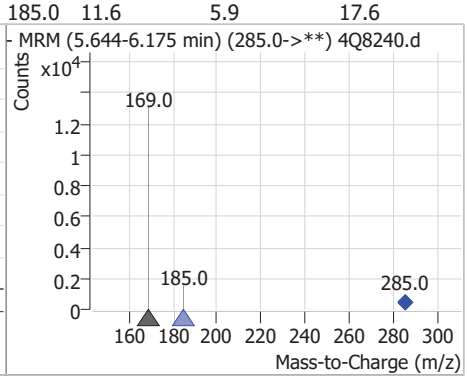
Perfluorinated Compounds by LC/MS/MS

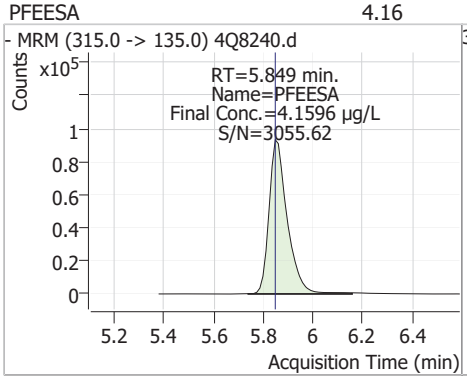
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	9.46	5.79	-0.01	424841	285.0 -> 185.0	11.6	5.9	17.6

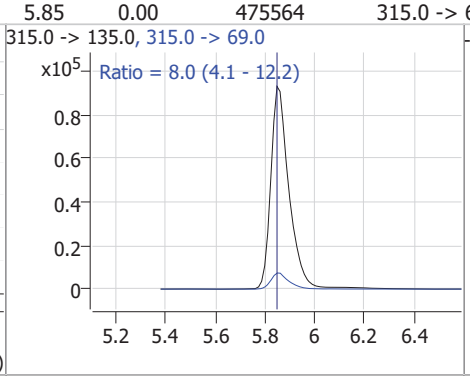


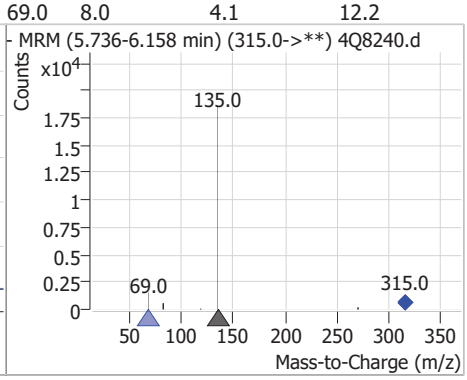




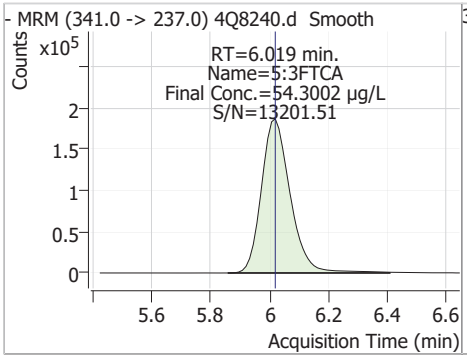
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.16	5.85	0.00	475564	315.0 -> 69.0	8.0	4.1	12.2

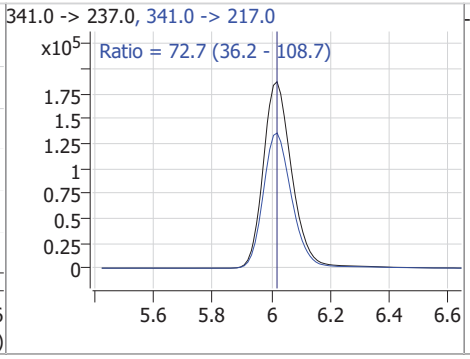


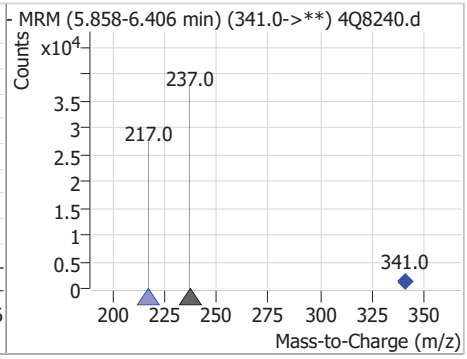




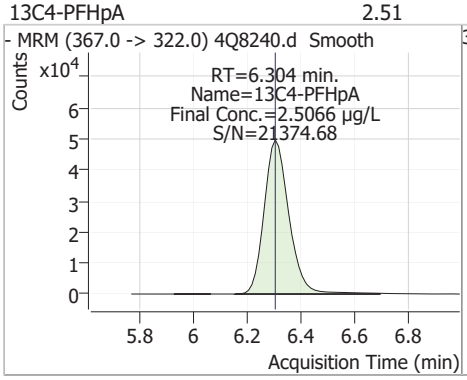
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	54.30	6.02	0.00	1266804	341.0 -> 217.0	72.7	36.2	108.7

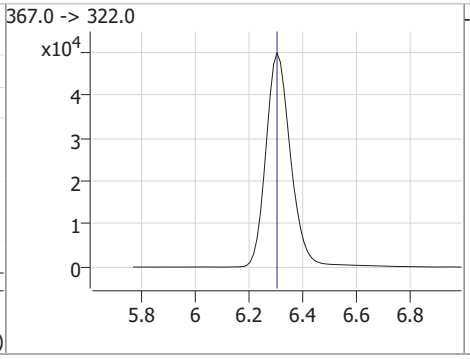


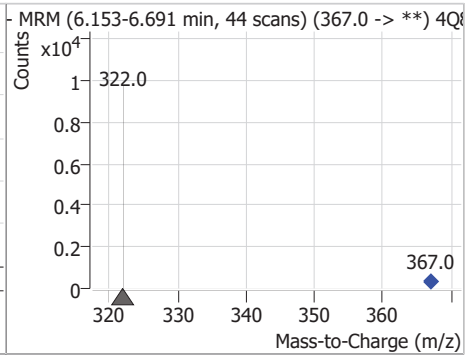




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.51	6.30	0.00	317840				

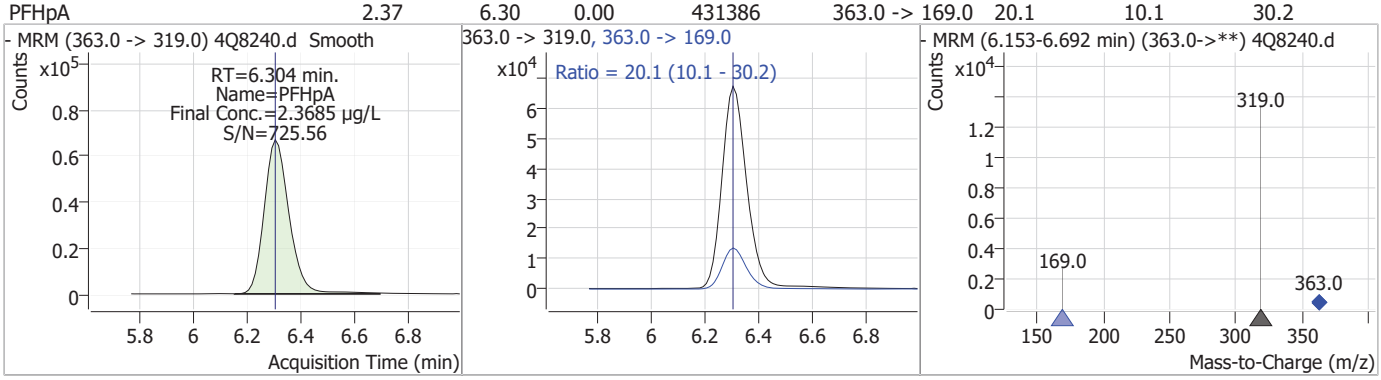




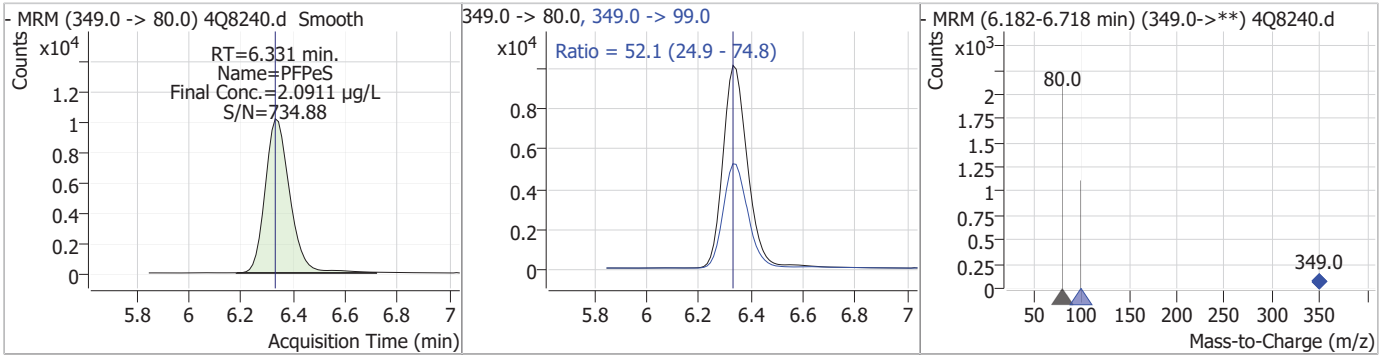


Perfluorinated Compounds by LC/MS/MS

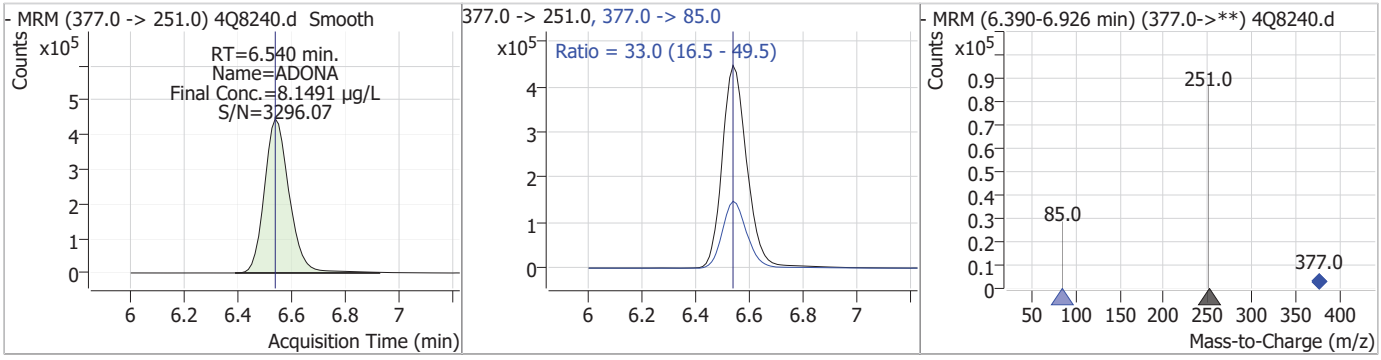
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.37	6.30	0.00	431386	363.0 -> 169.0	20.1	10.1	30.2



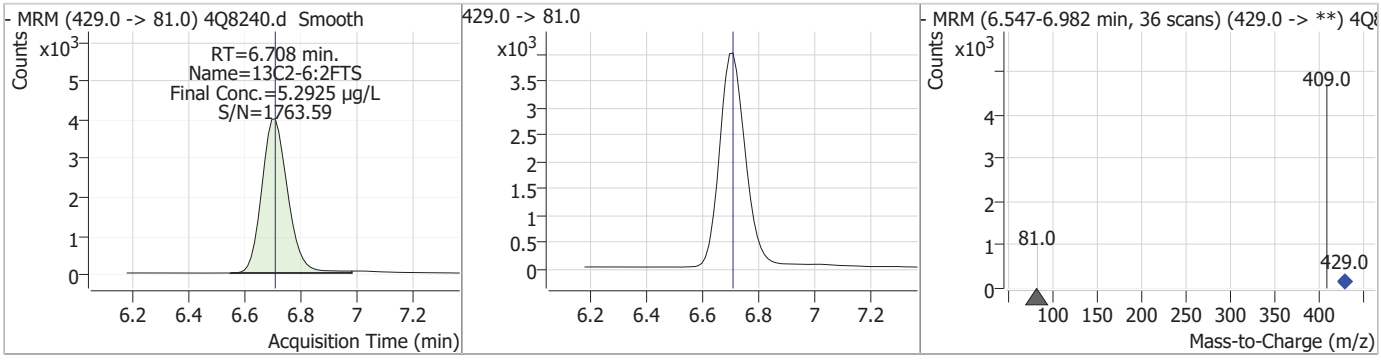
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.09	6.33	0.00	66895	349.0 -> 99.0	52.1	24.9	74.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.15	6.54	0.00	2853377	377.0 -> 85.0	33.0	16.5	49.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.29	6.71	0.00	25743				



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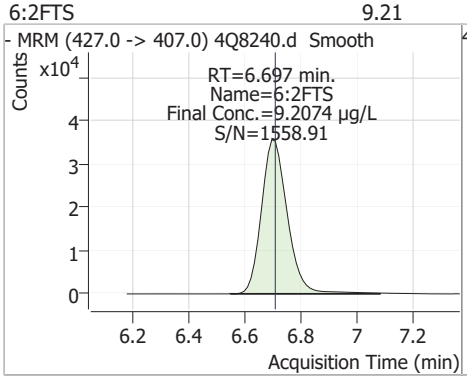
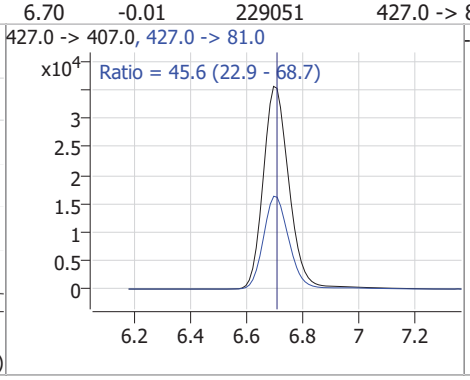
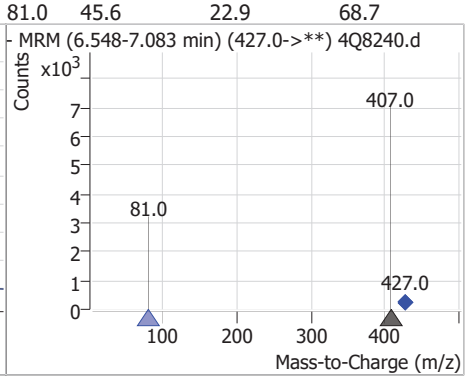
Perfluorinated Compounds by LC/MS/MS

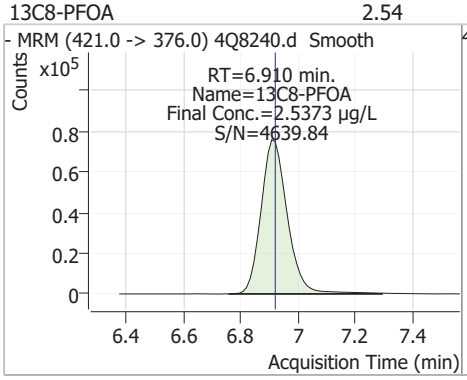
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.21	6.70	-0.01	229051	427.0 -> 81.0	45.6	22.9	68.7

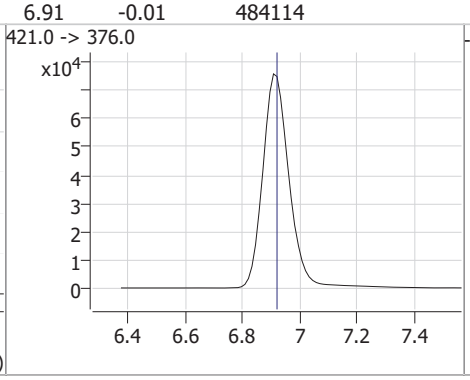


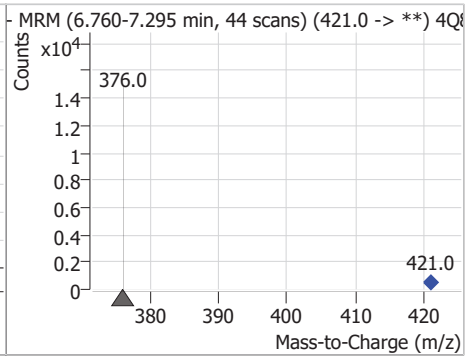




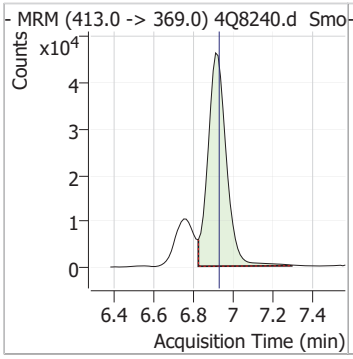
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.54	6.91	-0.01	484114				

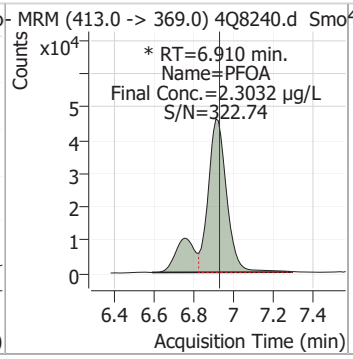


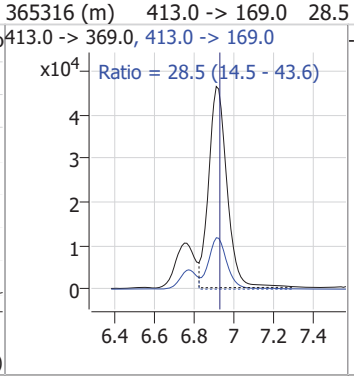


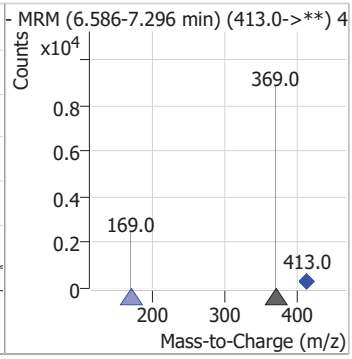


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.30	6.91	-0.01	365316 (m)	413.0 -> 169.0	28.5	14.5	43.6

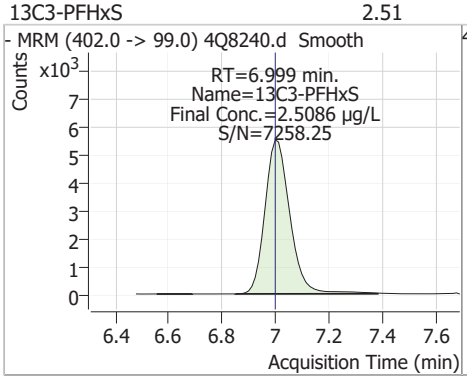


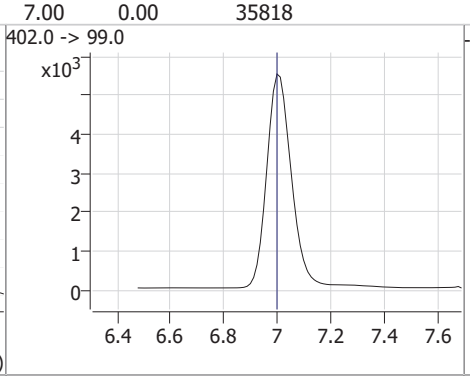


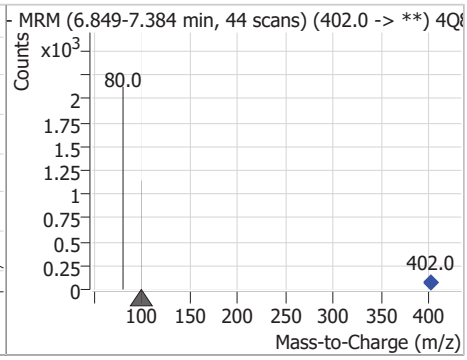




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.51	7.00	0.00	35818				







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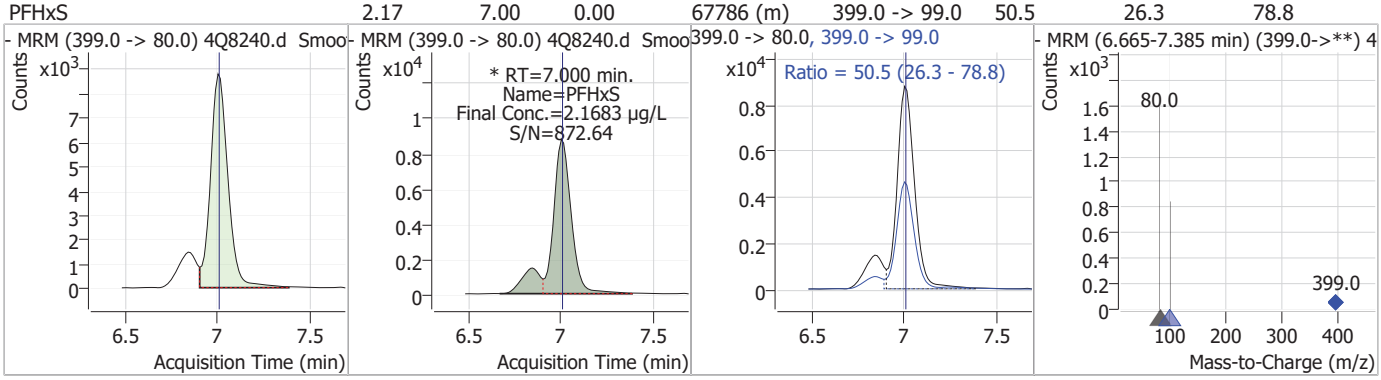
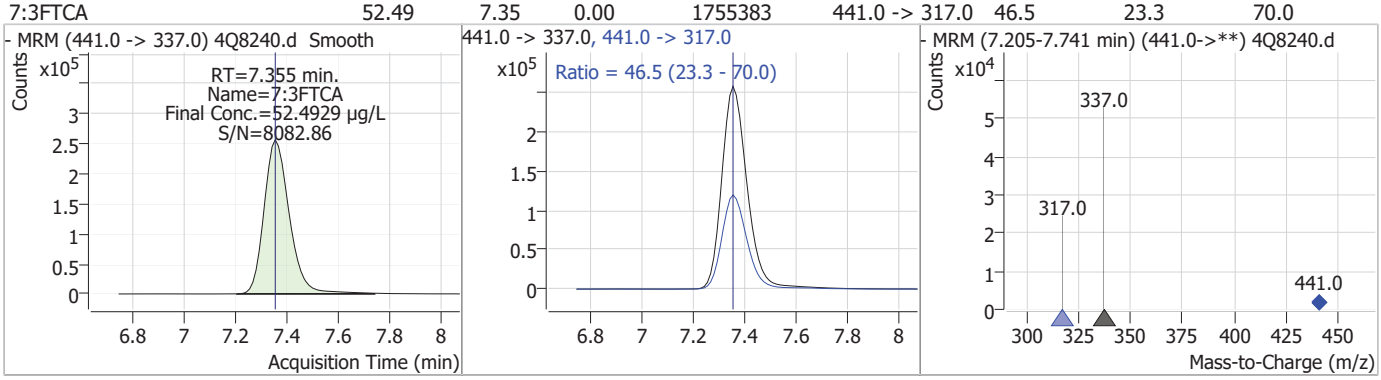
Perfluorinated Compounds by LC/MS/MS

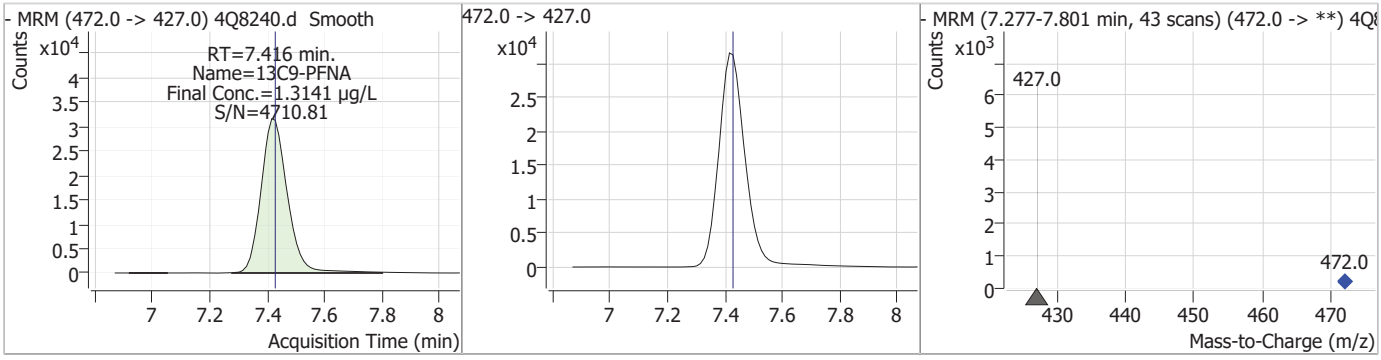
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.17	7.00	0.00	67786 (m)	399.0 -> 99.0	50.5	26.3	78.8



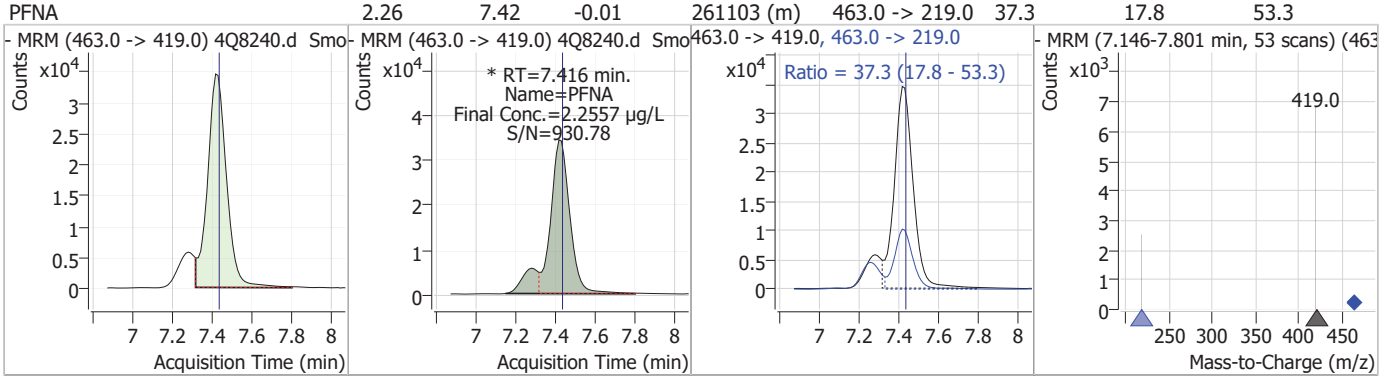
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	52.49	7.35	0.00	1755383	441.0 -> 317.0	46.5	23.3	70.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.31	7.42	-0.01	200675				

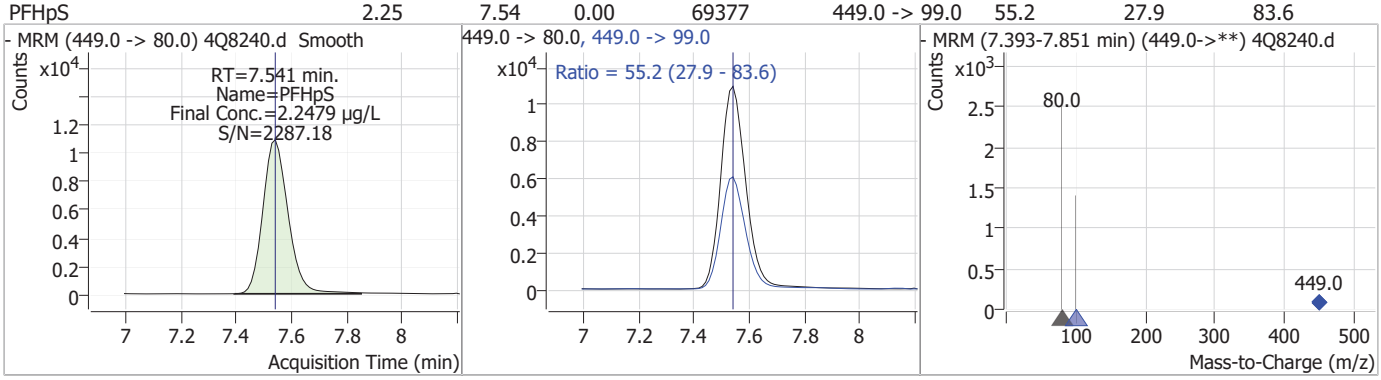


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.26	7.42	-0.01	261103 (m)	463.0 -> 219.0	37.3	17.8	53.3

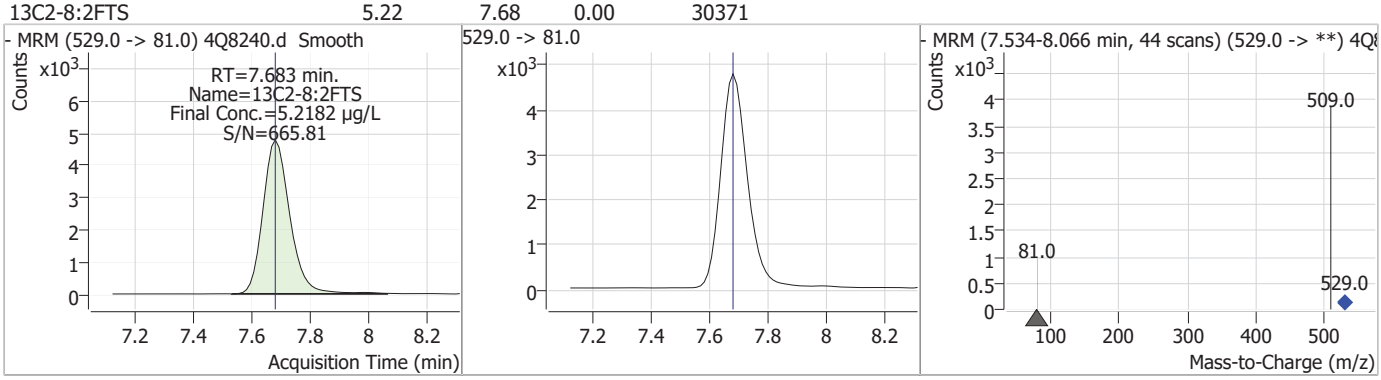


Perfluorinated Compounds by LC/MS/MS

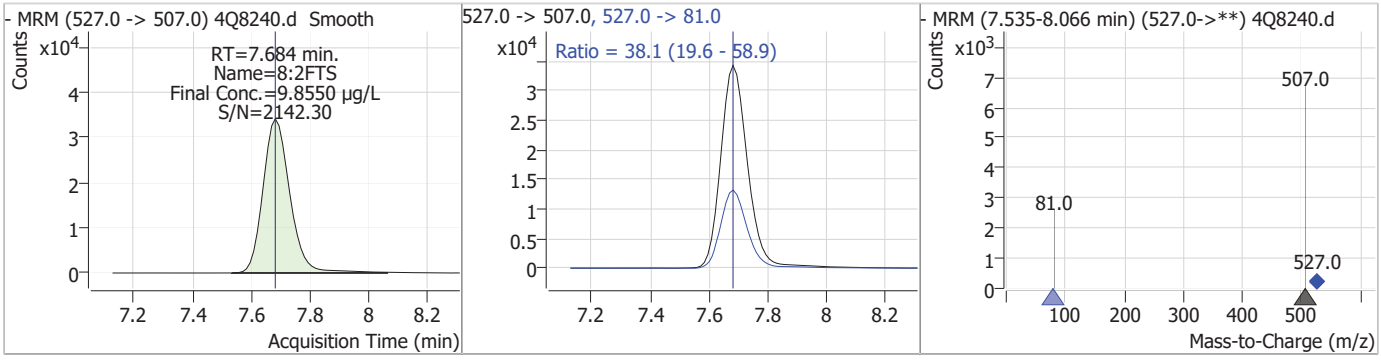
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.25	7.54	0.00	69377	449.0 -> 99.0	55.2	27.9	83.6



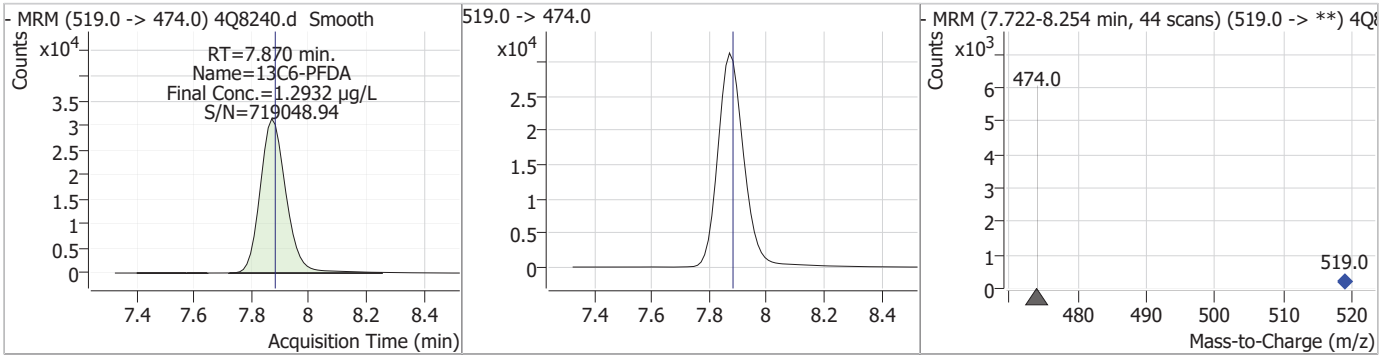
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.22	7.68	0.00	30371				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	9.85	7.68	0.00	218156	527.0 -> 81.0	38.1	19.6	58.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.29	7.87	-0.01	195194				



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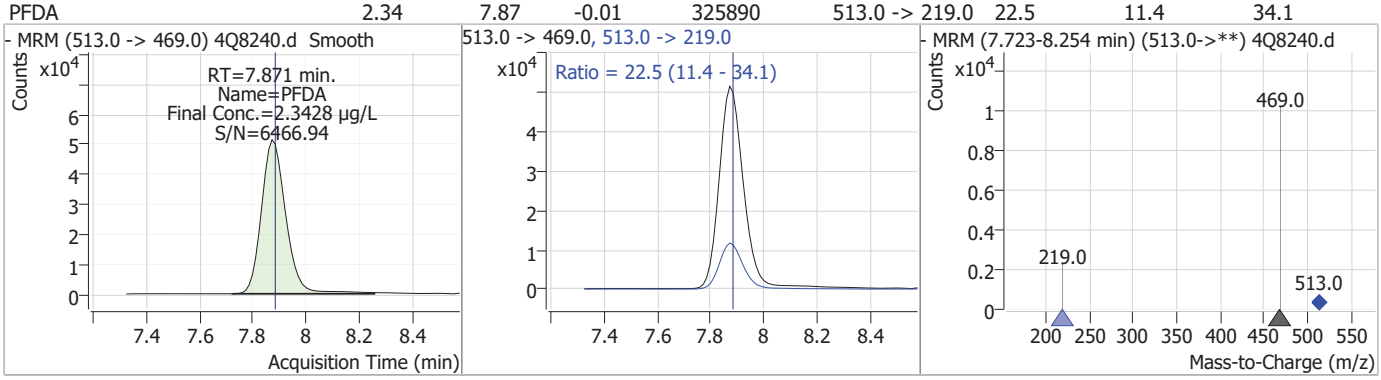
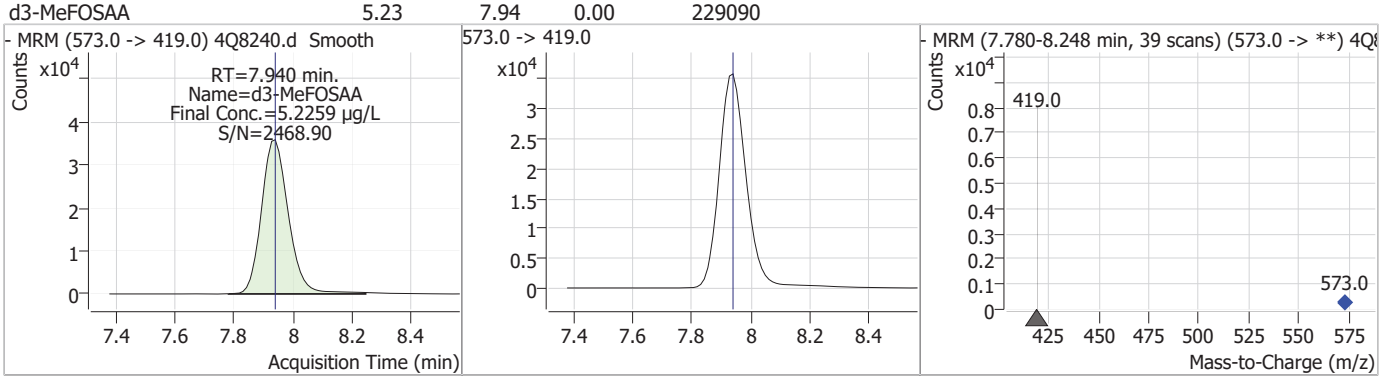
Perfluorinated Compounds by LC/MS/MS

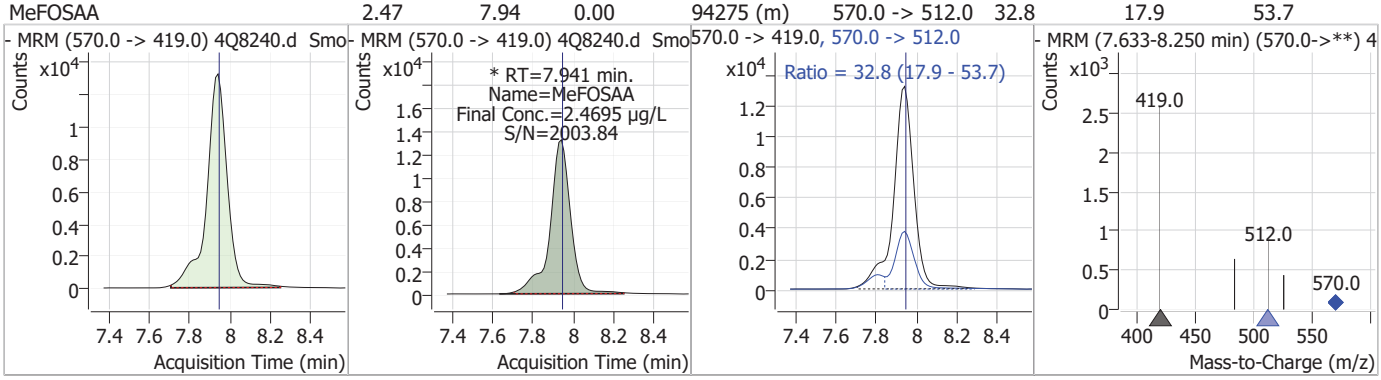
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.34	7.87	-0.01	325890	513.0 -> 219.0	22.5	11.4	34.1



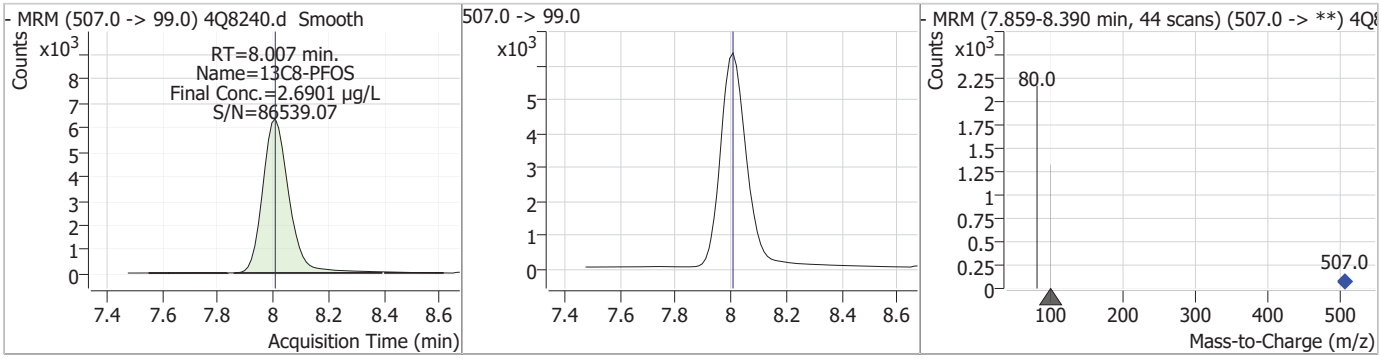
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.23	7.94	0.00	229090				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.47	7.94	0.00	94275 (m)	570.0 -> 512.0	32.8	17.9	53.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.69	8.01	0.00	41662				



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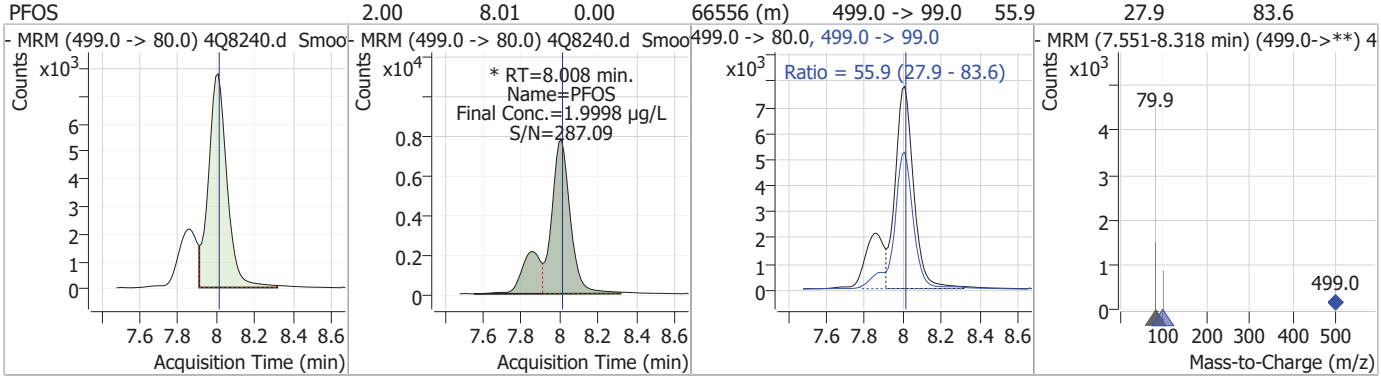
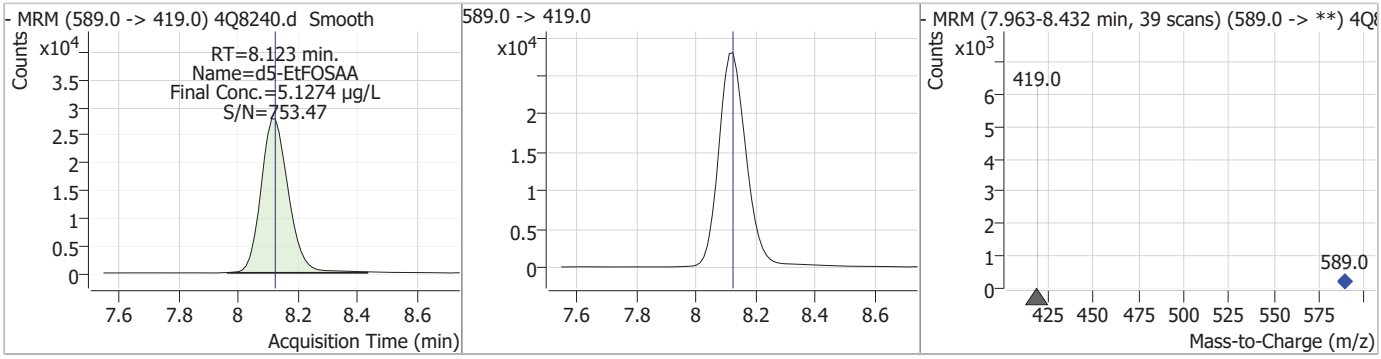
Perfluorinated Compounds by LC/MS/MS

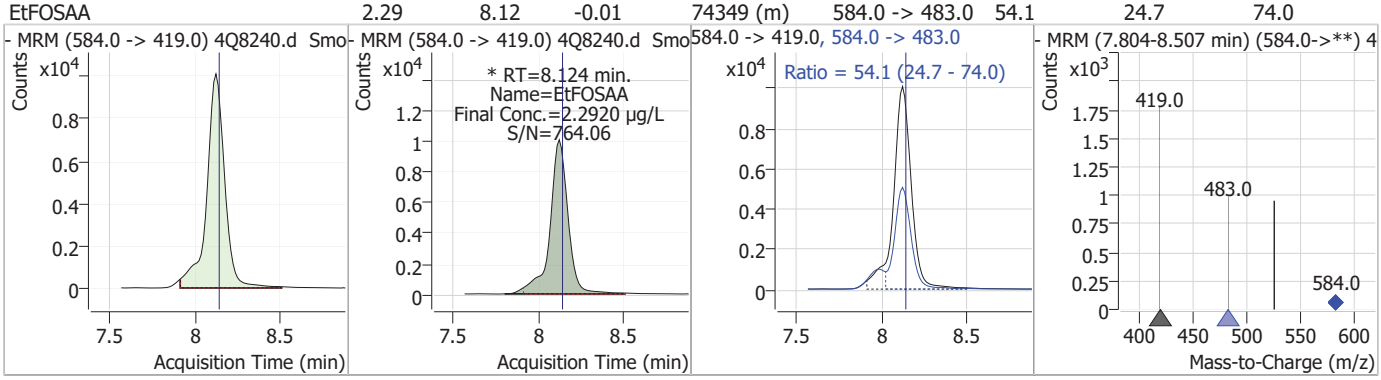
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.00	8.01	0.00	66556 (m)	499.0 -> 99.0	55.9	27.9	83.6



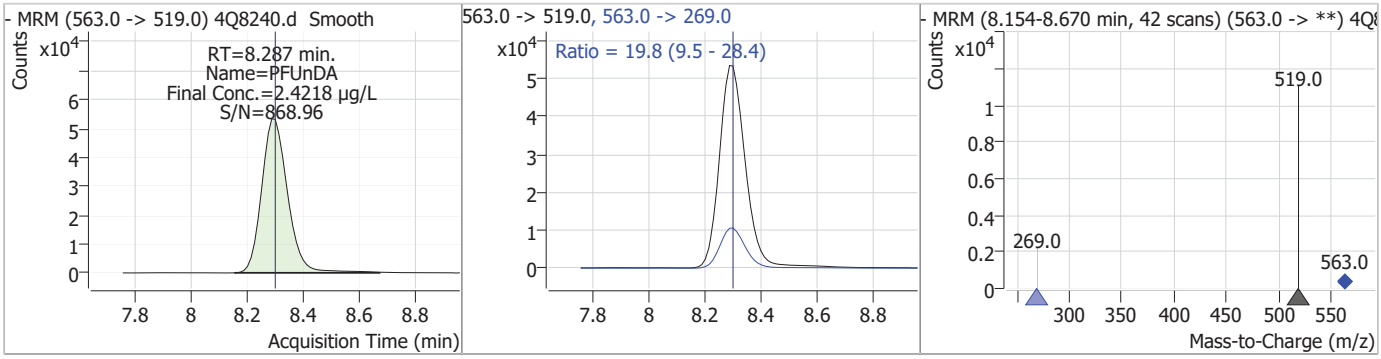
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.13	8.12	0.00	179463				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.29	8.12	-0.01	74349 (m)	584.0 -> 483.0	54.1	24.7	74.0

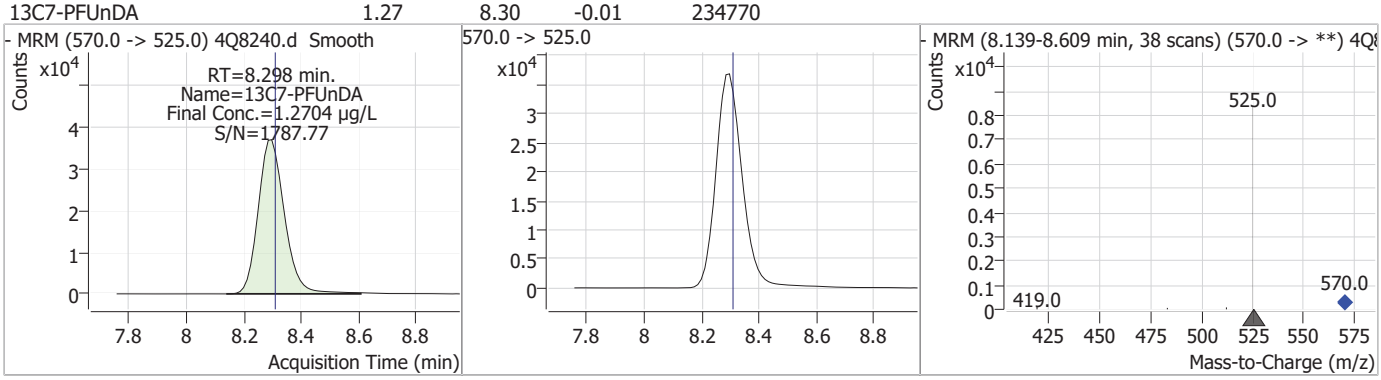


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.42	8.29	-0.01	340742	563.0 -> 269.0	19.8	9.5	28.4

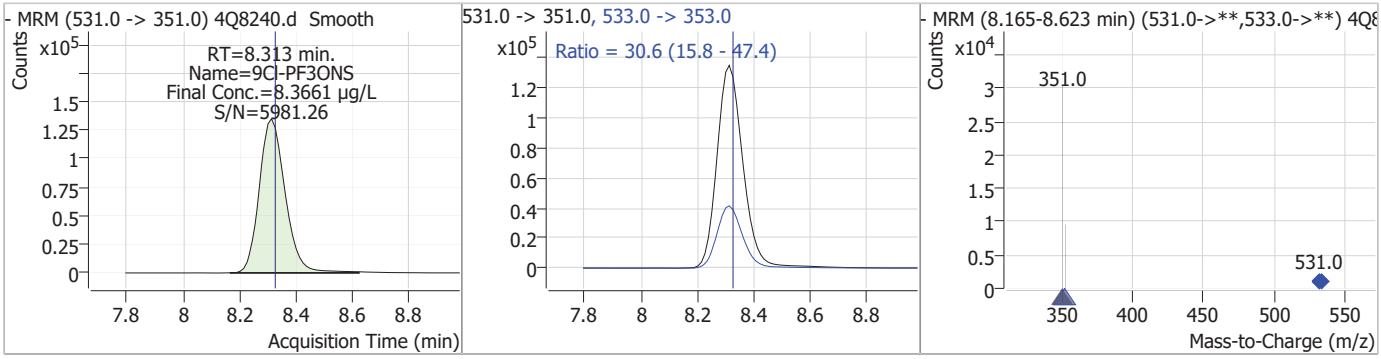


Perfluorinated Compounds by LC/MS/MS

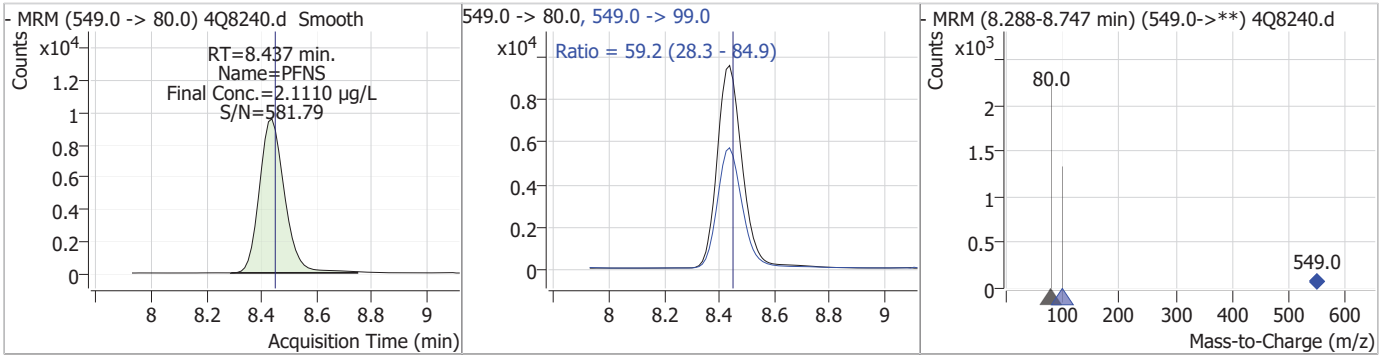
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.27	8.30	-0.01	234770				



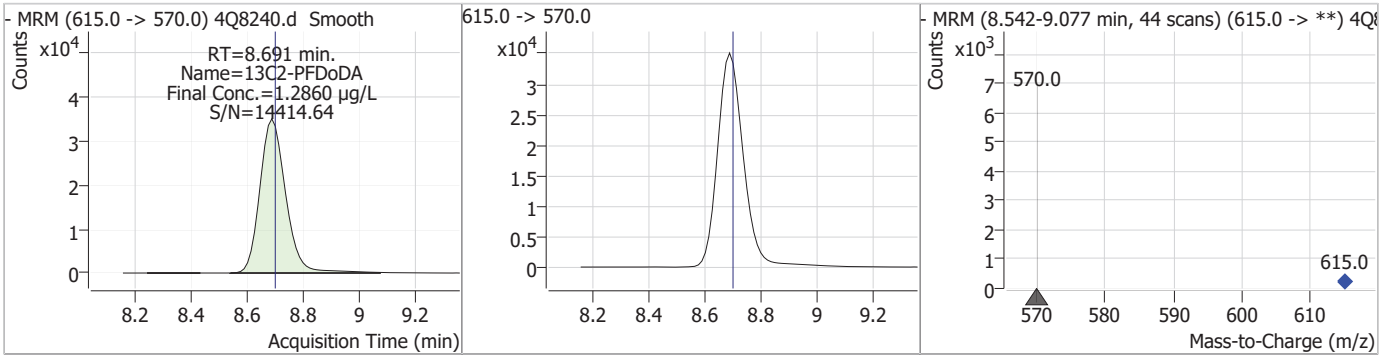
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	8.37	8.31	-0.01	860216	533.0 -> 353.0	30.6	15.8	47.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.11	8.44	-0.01	60715	549.0 -> 99.0	59.2	28.3	84.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.29	8.69	-0.01	224250				



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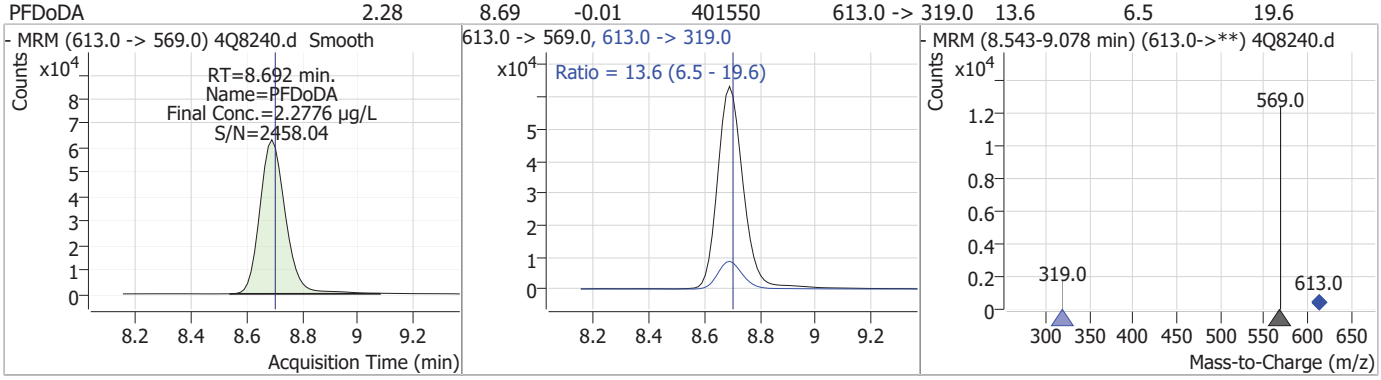
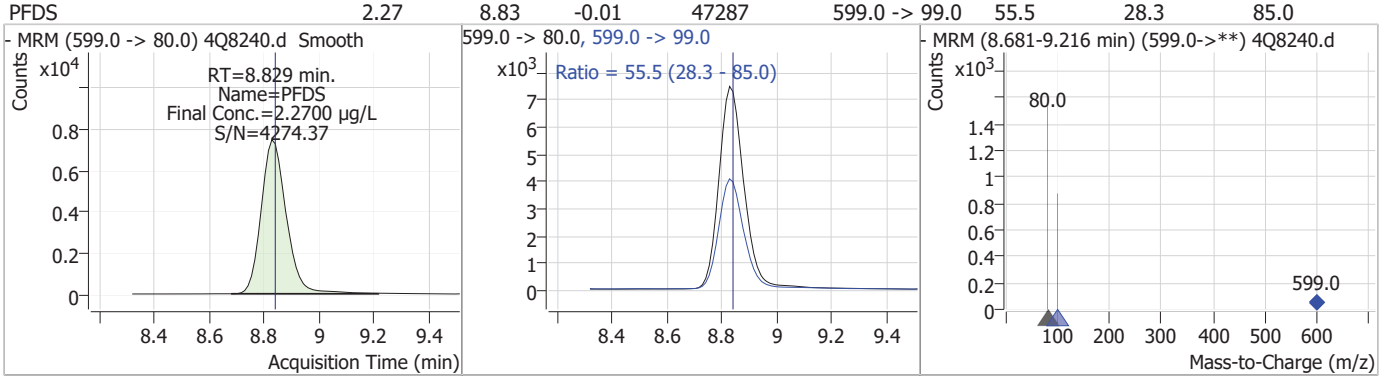
Perfluorinated Compounds by LC/MS/MS

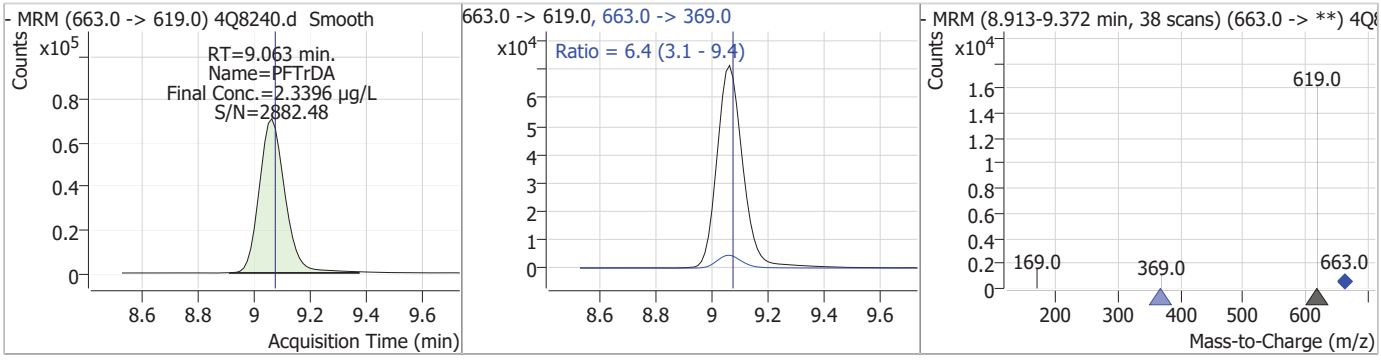
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.28	8.69	-0.01	401550	613.0 -> 319.0	13.6	6.5	19.6



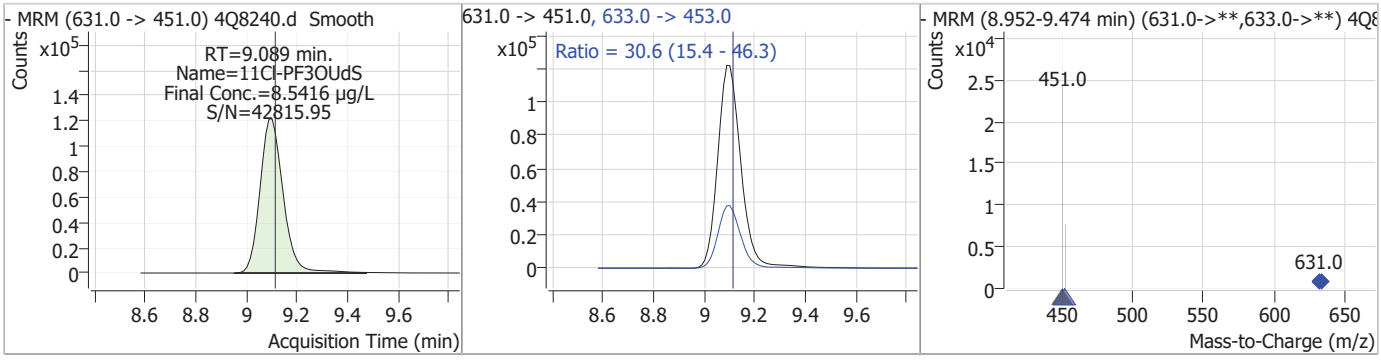
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.27	8.83	-0.01	47287	599.0 -> 99.0	55.5	28.3	85.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.34	9.06	-0.01	454386	663.0 -> 369.0	6.4	3.1	9.4

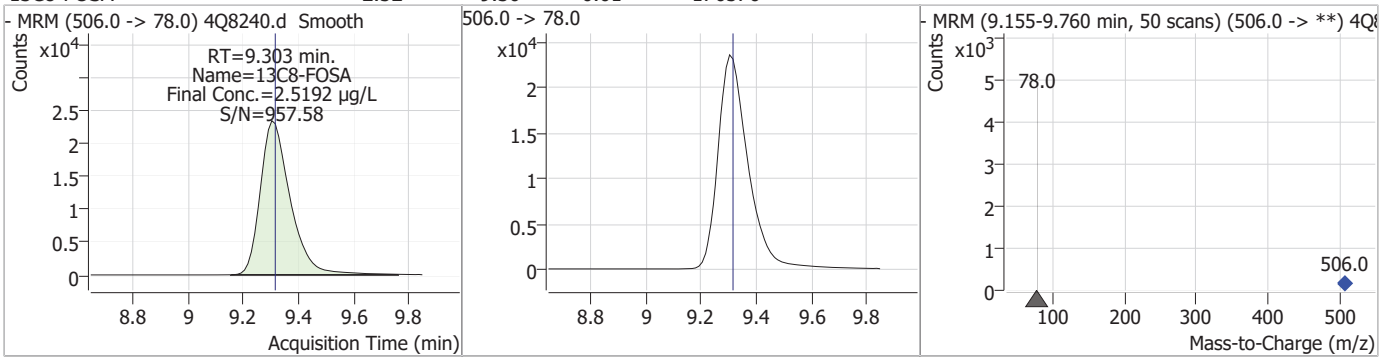


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	8.54	9.09	-0.02	776956	633.0 -> 453.0	30.6	15.4	46.3

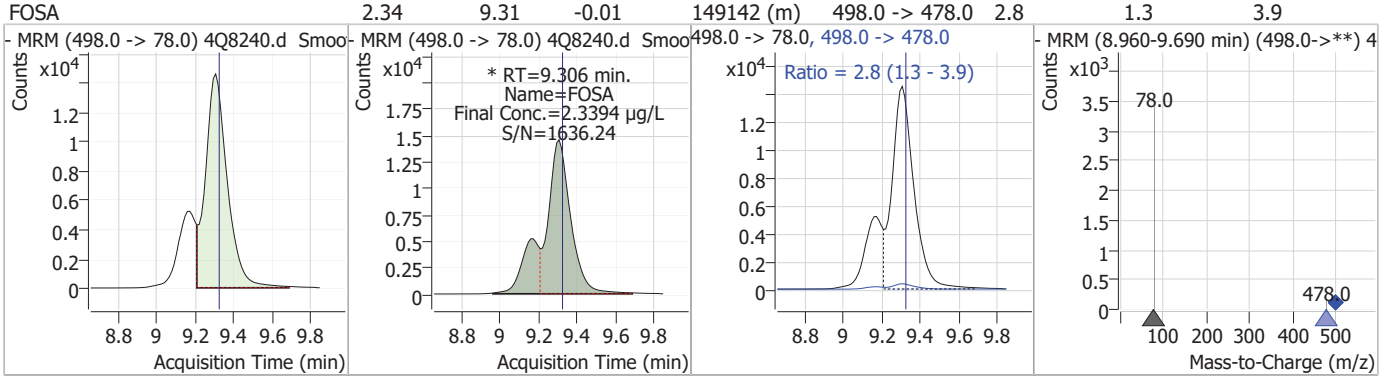


Perfluorinated Compounds by LC/MS/MS

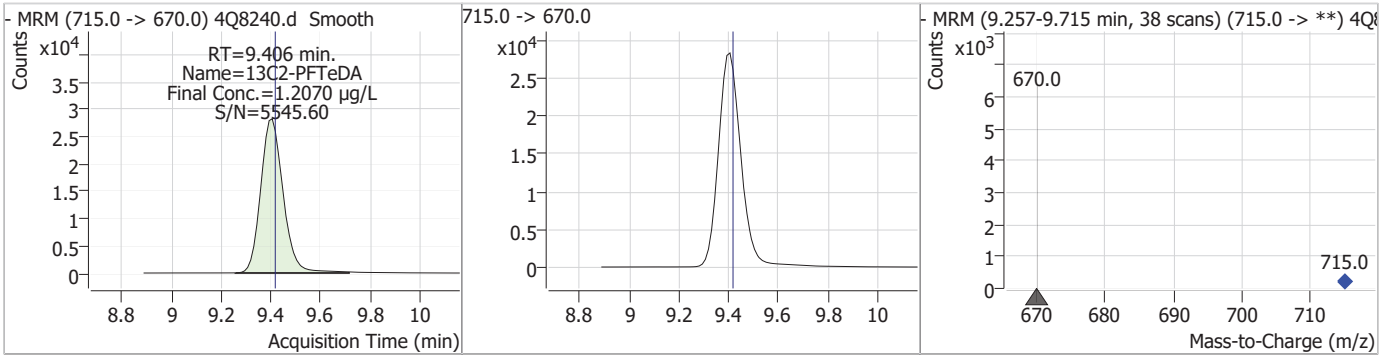
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.52	9.30	-0.01	176576				



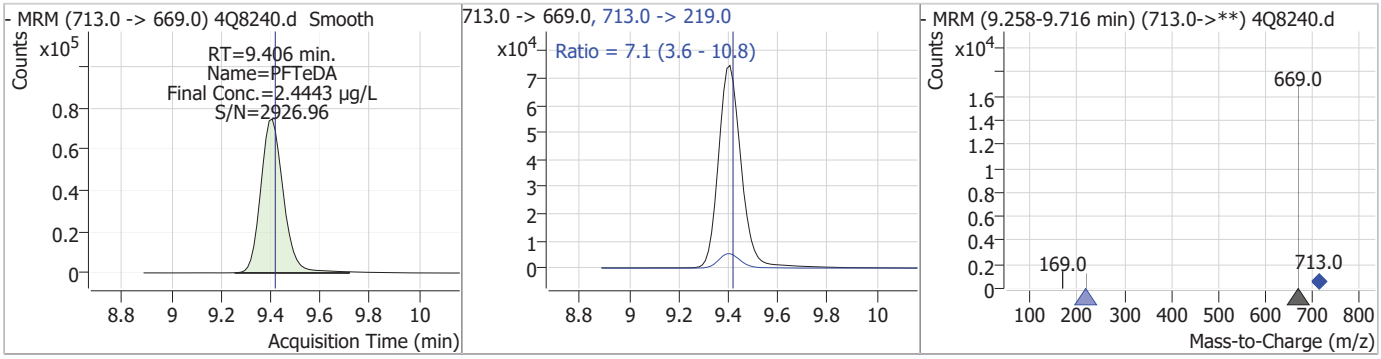
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.34	9.31	-0.01	149142 (m)	498.0 -> 478.0	2.8	1.3	3.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.21	9.41	-0.01	177853				

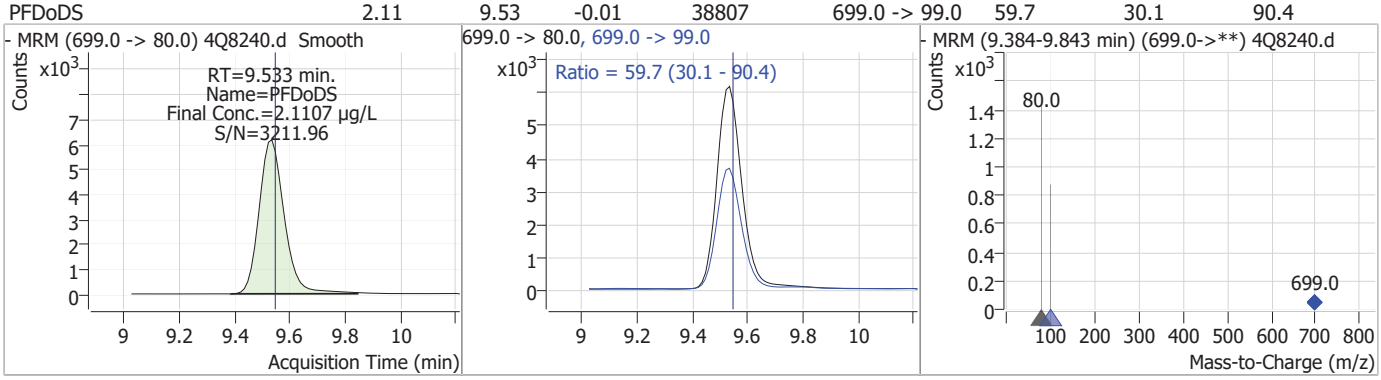


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.44	9.41	-0.01	472212	713.0 -> 219.0	7.1	3.6	10.8

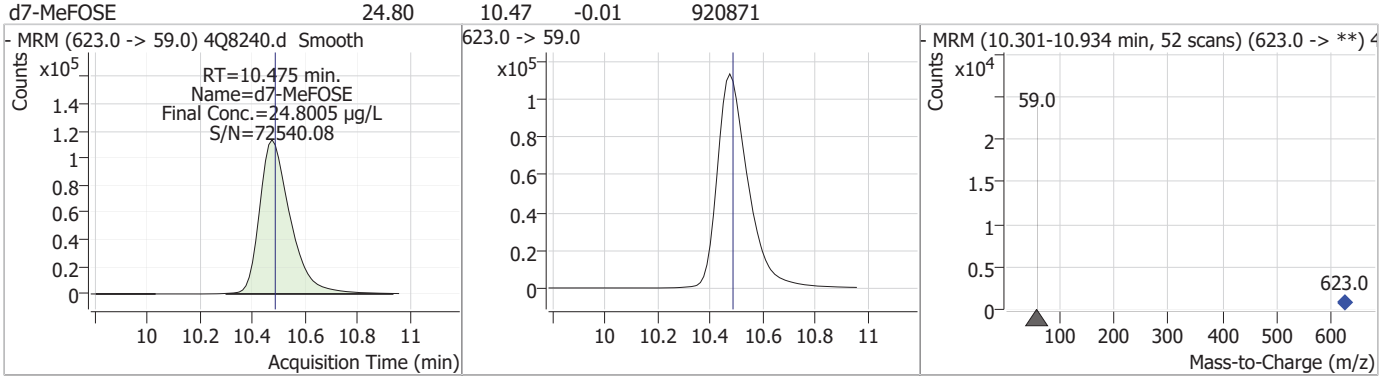


Perfluorinated Compounds by LC/MS/MS

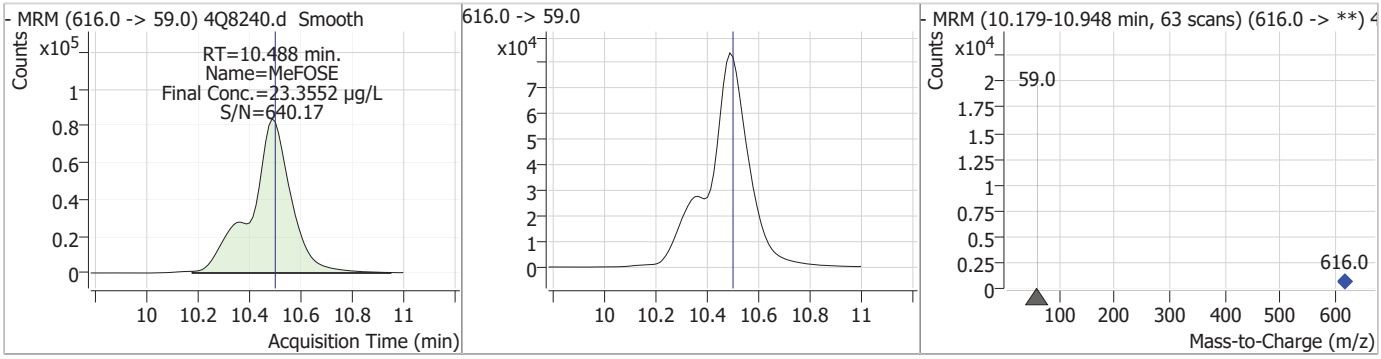
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.11	9.53	-0.01	38807	699.0 -> 99.0	59.7	30.1	90.4



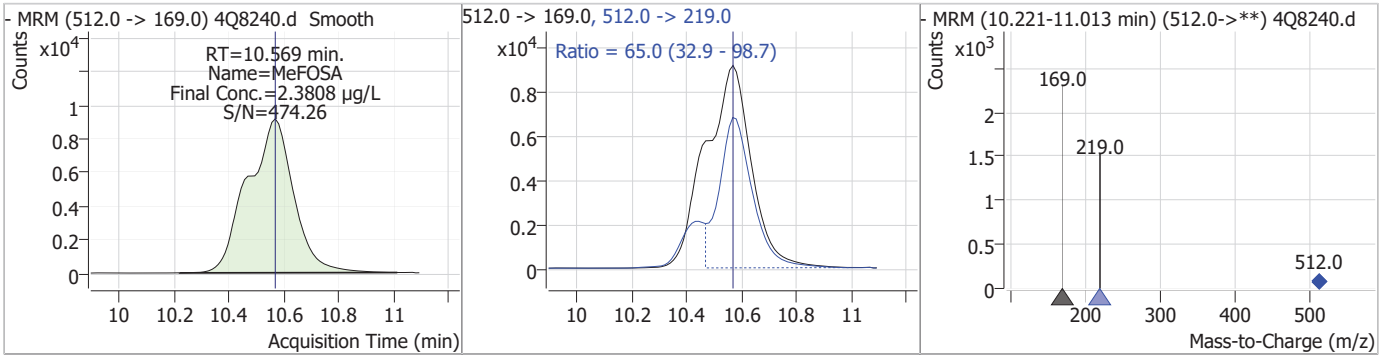
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	24.80	10.47	-0.01	920871				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	23.36	10.49	-0.01	916347				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.38	10.57	0.00	106610	512.0 -> 219.0	65.0	32.9	98.7



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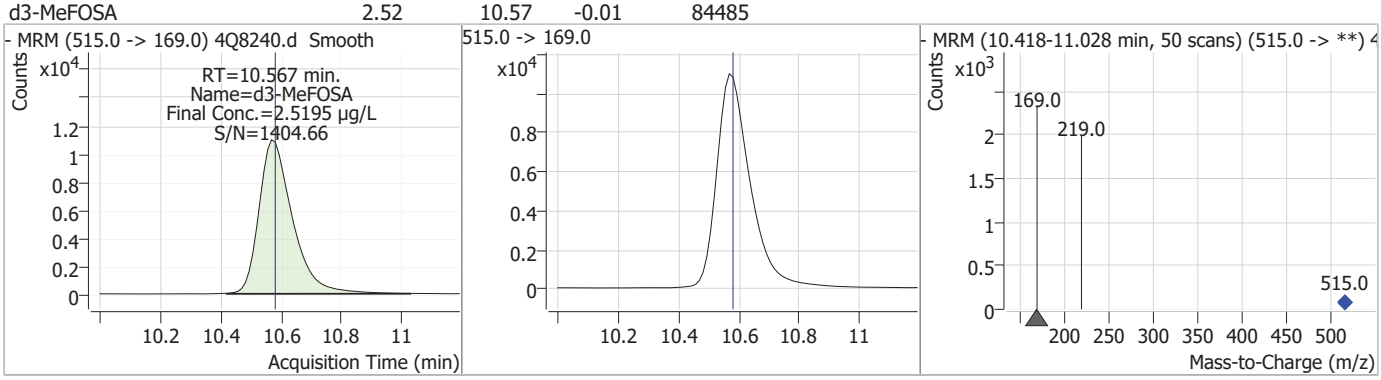
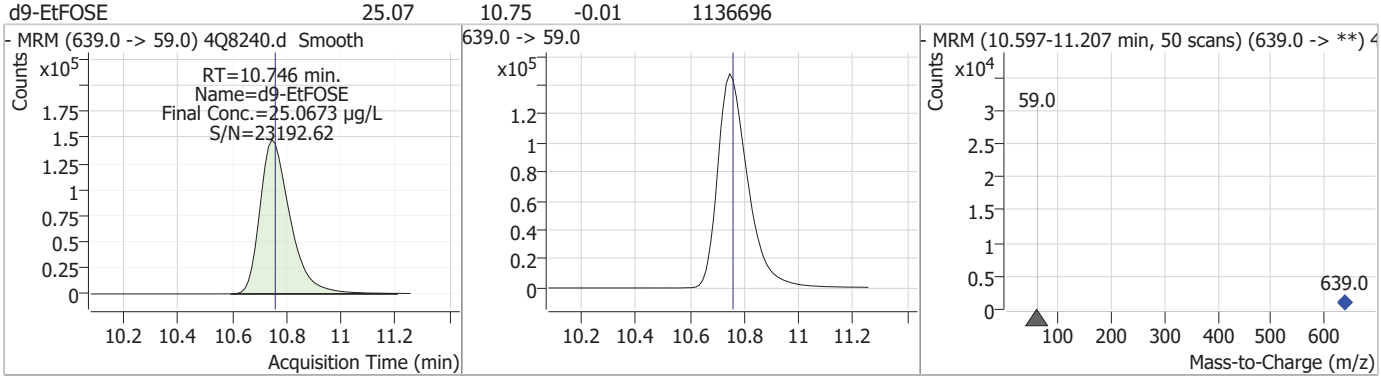
Perfluorinated Compounds by LC/MS/MS

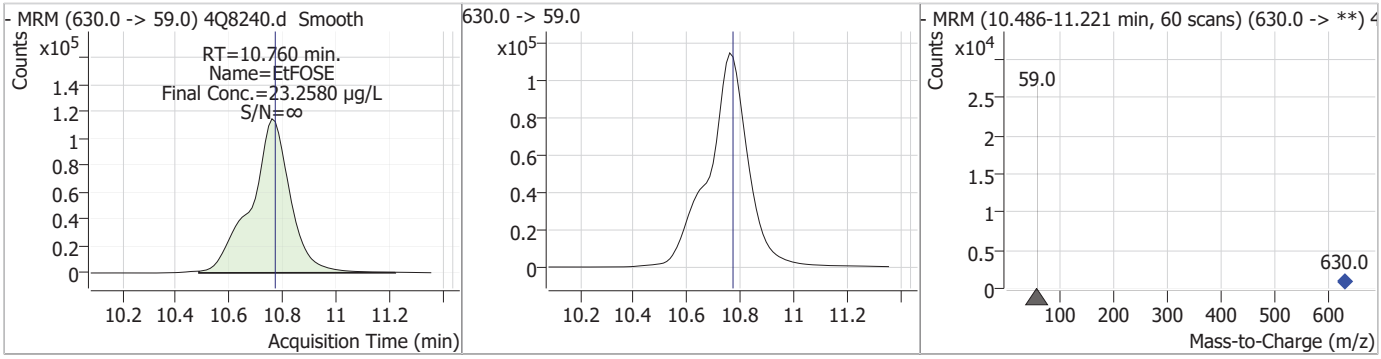
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.52	10.57	-0.01	84485				



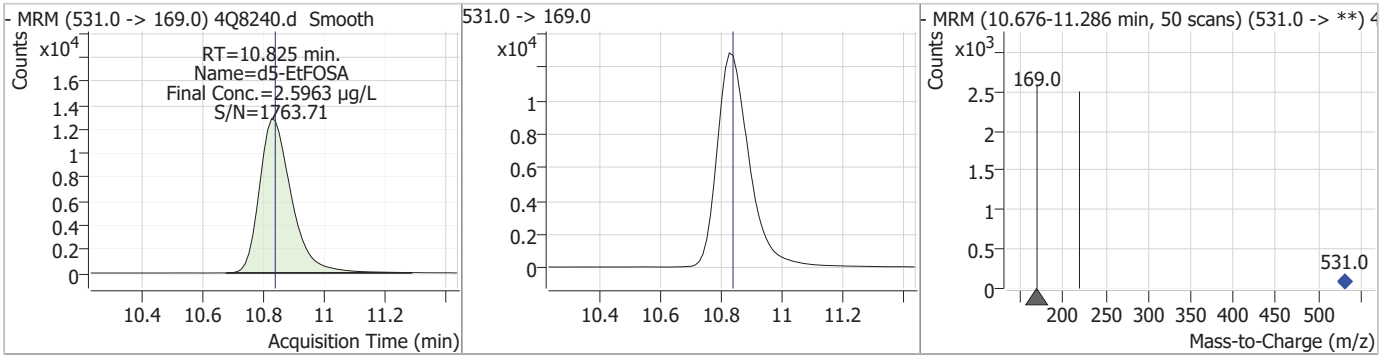
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.07	10.75	-0.01	1136696				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	23.26	10.76	-0.01	1178714				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.60	10.82	-0.01	93827				

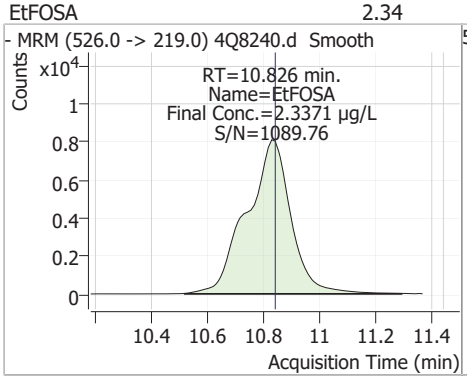


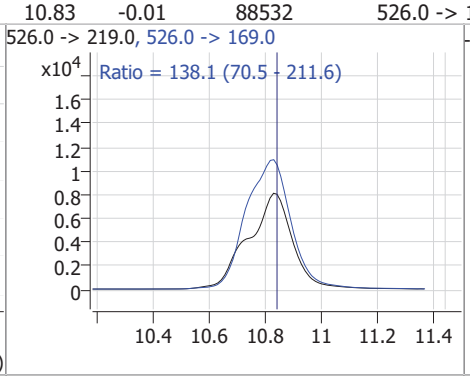
7.6.70

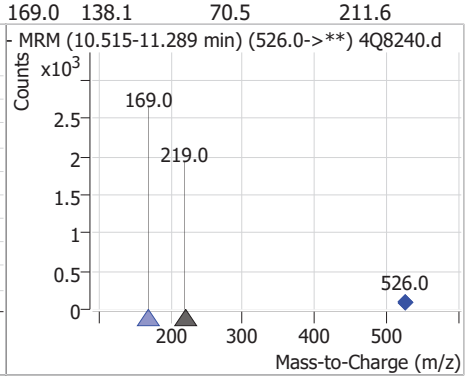
7

Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.34	10.83	-0.01	88532	526.0 -> 169.0	138.1	70.5	211.6







7.6.70

7

Manual Integration Approval Summary

Sample Number: T4Q140-ICV140
Lab FileID: 4Q8240.D
Injection Time: 05/02/25 16:02
Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.91	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.42	Split peak
MeFOSAA	2355-31-9		7.94	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.01	Split peak
EtFOSAA	2991-50-6		8.12	Split peak
PFOSA	754-91-6		9.31	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8241.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 4:15:52 PM
Sample Name : CC140-4
Vial : P1-A5
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc. Units	Dev(Min)
Internal Standards					
M4-PFBA	2.896	217.0 -> 172.0	817084	10.00 µg/L	0.012
M5-PFPeA	4.319	268.0 -> 223.0	429385	5.00 µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	293240	2.50 µg/L	0.000
M4-PFHpA	6.304	367.0 -> 322.0	317971	2.50 µg/L	0.000
M8-PFOA	6.910	421.0 -> 376.0	488286	2.50 µg/L	-0.012
M9-PFNA	7.416	472.0 -> 427.0	197641	1.25 µg/L	-0.012
M6-PFDA	7.870	519.0 -> 474.0	191716	1.25 µg/L	-0.012
M7-PFUnDA	8.298	570.0 -> 525.0	237586	1.25 µg/L	-0.012
M2-PFDoDA	8.691	615.0 -> 570.0	221359	1.25 µg/L	-0.012
M2-PFTeDA	9.406	715.0 -> 670.0	174893	1.25 µg/L	-0.012
M8-FOSA	9.303	506.0 -> 78.0	173356	2.50 µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	25929	2.50 µg/L	0.000
		302.0 -> 80.0	61579		
M3-PFHxS	6.999	402.0 -> 99.0	36435	2.50 µg/L	0.000
M8-PFOS	8.007	507.0 -> 99.0	40414	2.50 µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	11637	5.00 µg/L	0.000
M2-6:2FTS	6.708	429.0 -> 81.0	25975	5.00 µg/L	0.000
M2-8:2FTS	7.683	529.0 -> 81.0	30438	5.00 µg/L	0.000
M3-MeFOSAA	7.940	573.0 -> 419.0	229728	5.00 µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	430666	10.00 µg/L	0.000
M5-EtFOSAA	8.110	589.0 -> 419.0	176074	5.00 µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	901301	25.00 µg/L	-0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1120804	25.00 µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	92768	2.50 µg/L	-0.012
M3-MeFOSA	10.567	515.0 -> 169.0	83615	2.50 µg/L	-0.012
13C4-PFOS	8.008	503.0 -> 80.0	71296	2.50 µg/L	0.000
13C3-PFBA	2.886	216.0 -> 172.0	362735	5.00 µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	41638	2.50 µg/L	0.000
13C4-PFOA	6.910	417.0 -> 372.0	496253	2.50 µg/L	-0.012
13C2-PFDA	7.871	515.0 -> 470.0	164698	1.25 µg/L	-0.012
13C5-PFNA	7.416	468.0 -> 423.0	192712	1.25 µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	281223	2.50 µg/L	0.000
System Monitoring Compounds					
13C2-4:2FTS	5.166	329.0 -> 81.0	11637	5.03 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 100.5%	
13C2-6:2FTS	6.708	429.0 -> 81.0	25975	5.18 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 103.7%	
13C2-8:2FTS	7.683	529.0 -> 81.0	30438	5.08 µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.5%	
13C2-PFDoDA	8.691	615.0 -> 570.0	221359	1.20 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.3%	
13C2-PFTeDA	9.406	715.0 -> 670.0	174893	1.13 µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 90.0%	
13C3-PFBS	5.368	302.0 -> 99.0	25929	2.53 µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.3%	

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	36435	2.48	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 99.1%			
13C4-PFBA	2.896	217.0 -> 172.0	817084	9.54	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 95.4%			
13C4-PFHpA	6.304	367.0 -> 322.0	317971	2.38	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.0%			
13C5-PFHxA	5.464	318.0 -> 273.0	293240	2.37	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.9%			
13C5-PFPeA	4.319	268.0 -> 223.0	429385	4.76	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.2%			
13C6-PFDA	7.870	519.0 -> 474.0	191716	1.20	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.3%			
13C7-PFUnDA	8.298	570.0 -> 525.0	237586	1.22	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 97.5%			
13C8-FOSA	9.303	506.0 -> 78.0	173356	2.26	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 90.5%			
13C8-PFOA	6.910	421.0 -> 376.0	488286	2.39	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.6%			
13C8-PFOS	8.007	507.0 -> 99.0	40414	2.39	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.5%			
13C9-PFNA	7.416	472.0 -> 427.0	197641	1.18	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.6%			
d3-MeFOSAA	7.940	573.0 -> 419.0	229728	4.79	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.9%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	430666	9.78	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 97.8%			
d3-MeFOSA	10.567	515.0 -> 169.0	83615	2.28	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 91.2%			
d5-EtFOSAA	8.110	589.0 -> 419.0	176074	4.60	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 92.0%			
d7-MeFOSE	10.475	623.0 -> 59.0	901301	22.20	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 88.8%			
d9-EtFOSE	10.746	639.0 -> 59.0	1120804	22.61	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 90.4%			
d5-EtFOSA	10.825	531.0 -> 169.0	92768	2.35	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 93.9%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	193161	9.71	µg/L		97
		327.0 -> 81.0	89224				
6:2FTS	6.697	427.0 -> 407.0	237433	9.46	µg/L		98
		427.0 -> 81.0	111677				
8:2FTS	7.683	527.0 -> 507.0	226924	10.23	µg/L		97
		527.0 -> 81.0	85520				
EtFOSAA	8.124	584.0 -> 419.0	81938	2.57	µg/L	m	94
		584.0 -> 483.0	44056				
FOSA	9.306	498.0 -> 78.0	154068	2.46	µg/L	m	100
		498.0 -> 478.0	4117				
MeFOSAA	7.941	570.0 -> 419.0	92867	2.43	µg/L	m	99
		570.0 -> 512.0	33548				
PFBA	2.889	213.0 -> 169.0	256241	9.61	µg/L		100
PFBS	5.369	299.0 -> 80.0	61120	2.11	µg/L		99
		299.0 -> 99.0	25413				
PFDA	7.871	513.0 -> 469.0	341115	2.50	µg/L		99
		513.0 -> 219.0	78316				
PFDoDA	8.692	613.0 -> 569.0	430747	2.48	µg/L		100
		613.0 -> 319.0	56689				

Perfluorinated Compounds by LC/MS/MS

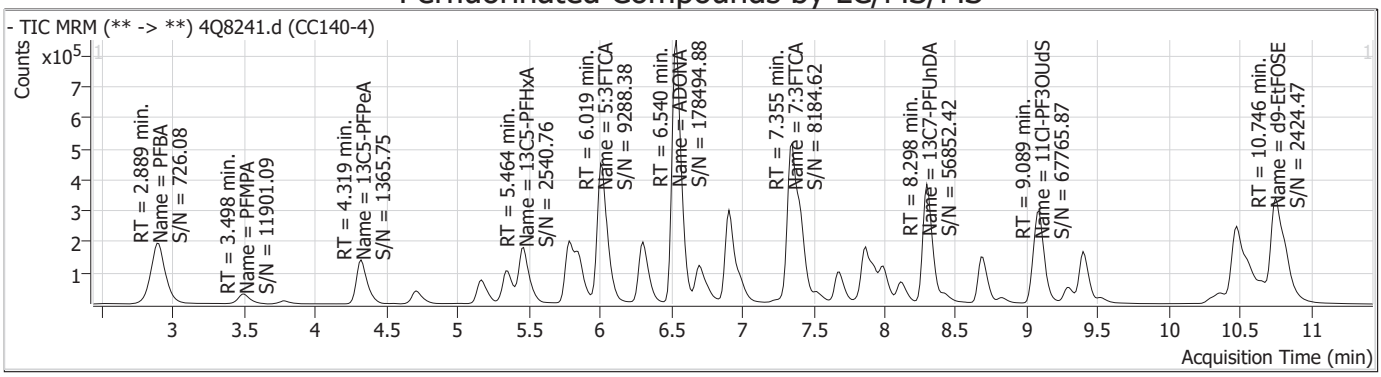
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.829	599.0 -> 80.0	49931	2.37	µg/L		98
		599.0 -> 99.0	27409				
PFHpA	6.304	363.0 -> 319.0	450570	2.47	µg/L		99
		363.0 -> 169.0	89767				
PFHpS	7.541	449.0 -> 80.0	75085	2.39	µg/L		98
		449.0 -> 99.0	40618				
PFHxA	5.467	313.0 -> 269.0	295605	2.49	µg/L		100
		313.0 -> 119.0	10534				
PFHxS	7.000	399.0 -> 80.0	73311	2.31	µg/L	m	99
		399.0 -> 99.0	37974				
PFNA	7.416	463.0 -> 419.0	290174	2.55	µg/L	m	99
		463.0 -> 219.0	101761				
PFNS	8.437	549.0 -> 80.0	68792	2.47	µg/L		100
		549.0 -> 99.0	38913				
PFOA	6.910	413.0 -> 369.0	387449	2.42	µg/L	m	97
		413.0 -> 169.0	107409				
PFOS	8.008	499.0 -> 80.0	71087	2.20	µg/L	m	90
		499.0 -> 99.0	34331				
PFPeA	4.321	263.0 -> 219.0	335298	5.01	µg/L		100
PFPeS	6.331	349.0 -> 80.0	71745	2.23	µg/L		100
		349.0 -> 99.0	35954				
PFTeDA	9.406	713.0 -> 669.0	489678	2.58	µg/L		100
		713.0 -> 219.0	35654				
PFTrDA	9.063	663.0 -> 619.0	480317	2.51	µg/L		100
		663.0 -> 369.0	29924				
PFUnDA	8.287	563.0 -> 519.0	360647	2.53	µg/L		99
		563.0 -> 269.0	70086				
11Cl-PF3OUdS	9.089	631.0 -> 451.0	803325	8.89	µg/L		100
		633.0 -> 453.0	249170				
9Cl-PF3ONS	8.313	531.0 -> 351.0	914071	8.94	µg/L		98
		533.0 -> 353.0	279797				
ADONA	6.540	377.0 -> 251.0	3026234	8.70	µg/L		100
		377.0 -> 85.0	992031				
HFPO-DA	5.792	285.0 -> 169.0	440480	9.87	µg/L		99
		285.0 -> 185.0	50554				
3:3FTCA	3.781	241.0 -> 177.0	49596	12.17	µg/L		99
		241.0 -> 117.0	4530				
5:3FTCA	6.019	341.0 -> 237.0	1341194	58.39	µg/L		99
		341.0 -> 217.0	966330				
7:3FTCA	7.355	441.0 -> 337.0	1838006	55.82	µg/L		99
		441.0 -> 317.0	844478				
EtFOSA	10.826	526.0 -> 219.0	90980	2.43	µg/L		100
		526.0 -> 169.0	128044				
EtFOSE	10.760	630.0 -> 59.0	1229002	24.59	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	109514	2.47	µg/L		99
		512.0 -> 219.0	73200				
MeFOSE	10.488	616.0 -> 59.0	949124	24.72	µg/L	m	100
PFDoDS	9.533	699.0 -> 80.0	40267	2.26	µg/L		97
		699.0 -> 99.0	25340				
NFDHA	5.357	295.0 -> 201.0	68781	5.18	µg/L		89
		201.0 -> 85.0	319036				
		295.0 -> 85.0	17871				
PFMBA	4.710	279.0 -> 85.0	224004	4.94	µg/L		100
PFMPA	3.498	229.0 -> 85.0	190086	4.91	µg/L		100
PFEESA	5.861	315.0 -> 135.0	510867	4.54	µg/L		99
		315.0 -> 69.0	40801				

Perfluorinated Compounds by LC/MS/MS

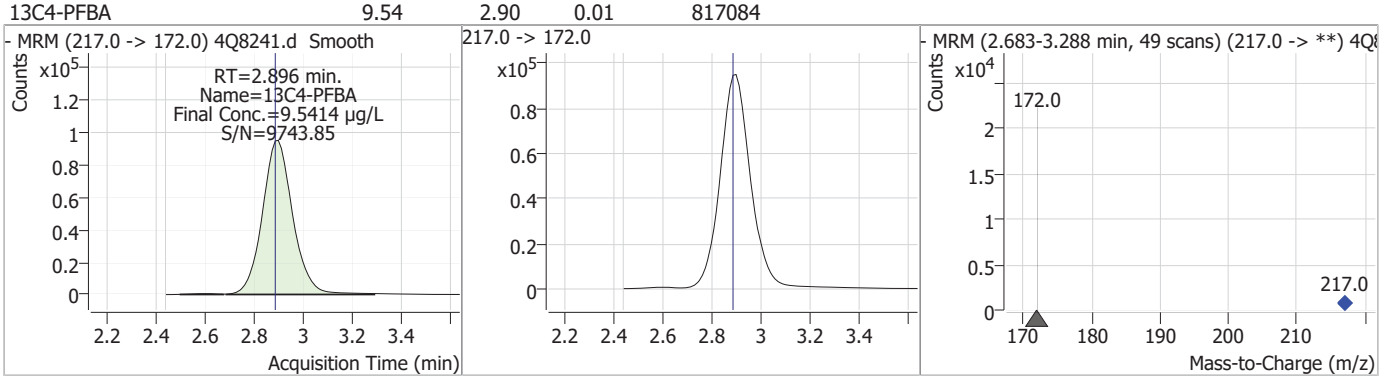
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

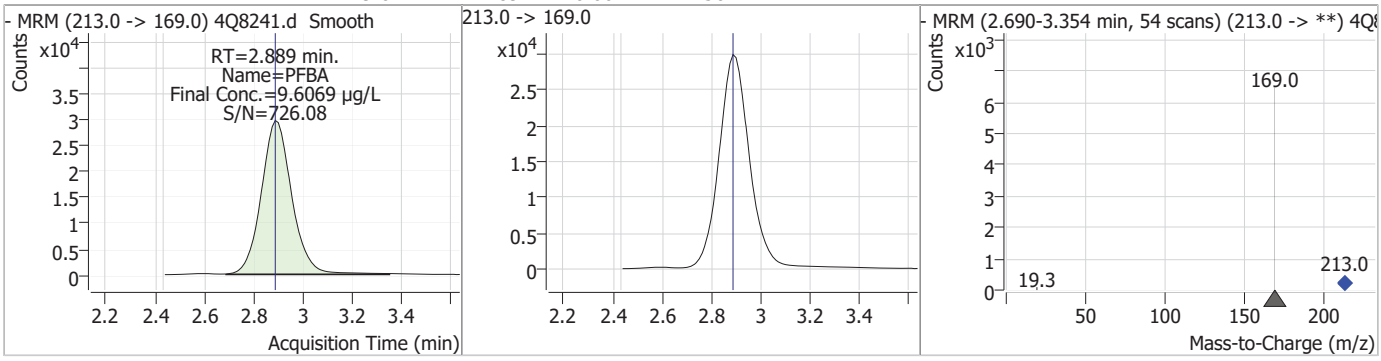
Perfluorinated Compounds by LC/MS/MS



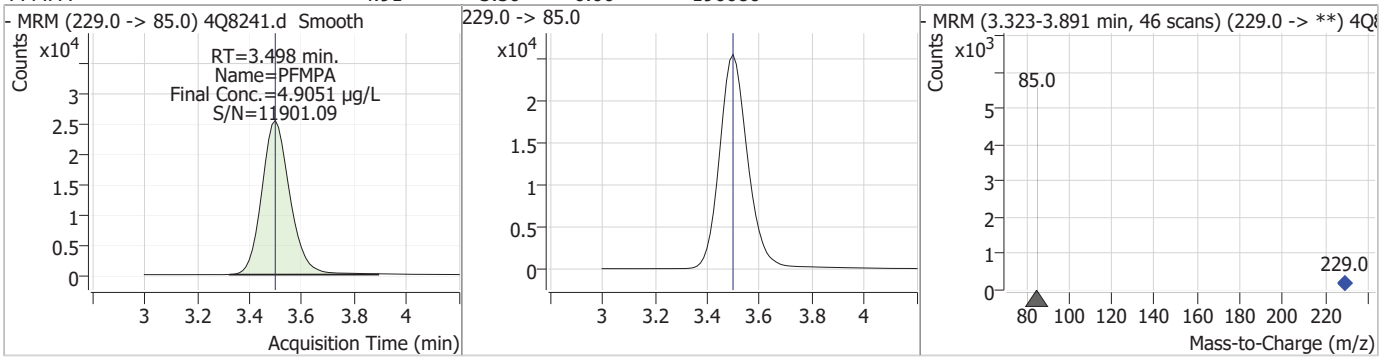
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.54	2.90	0.01	817084				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.61	2.89	0.00	256241				

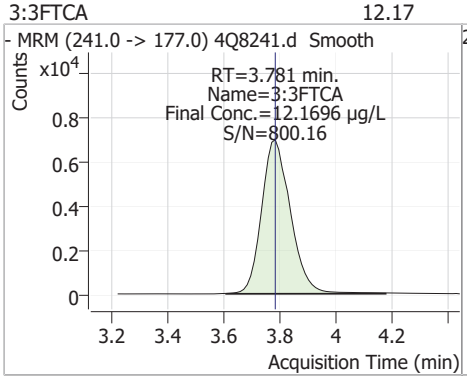


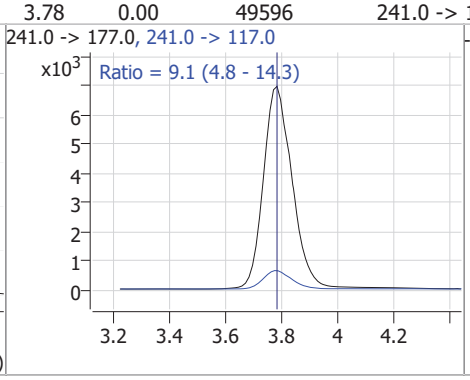
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	4.91	3.50	0.00	190086				

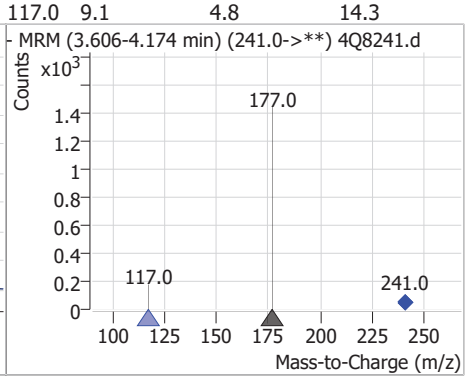


Perfluorinated Compounds by LC/MS/MS

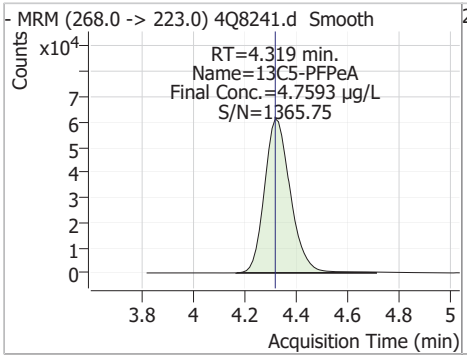
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.17	3.78	0.00	49596	241.0 -> 117.0	9.1	4.8	14.3

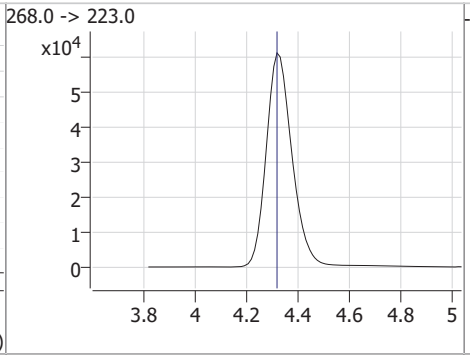


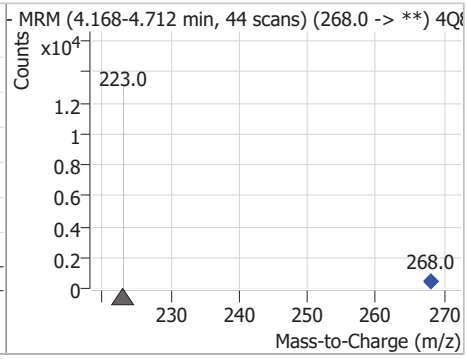




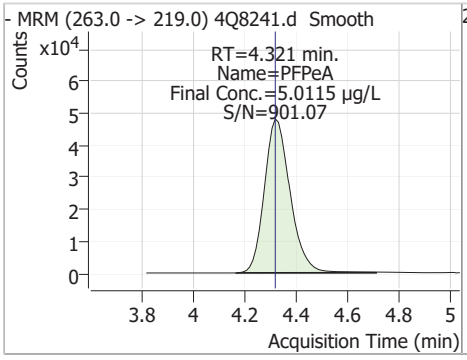
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.76	4.32	0.00	429385				

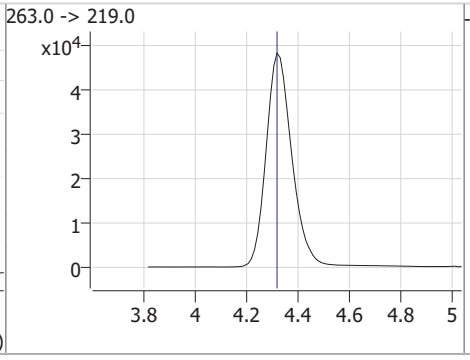


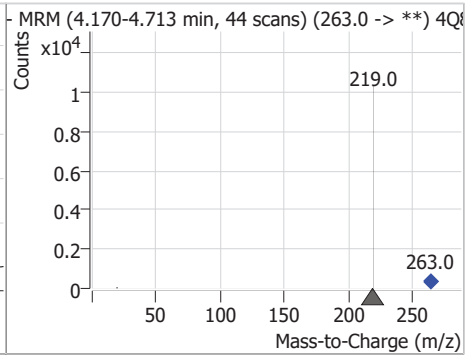




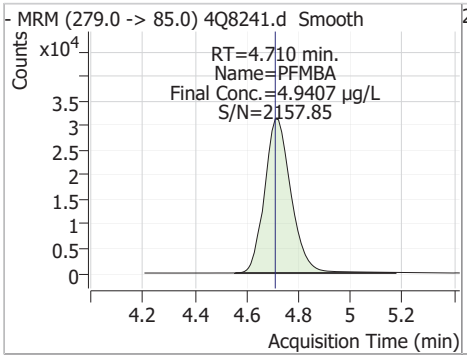
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.01	4.32	0.00	335298				

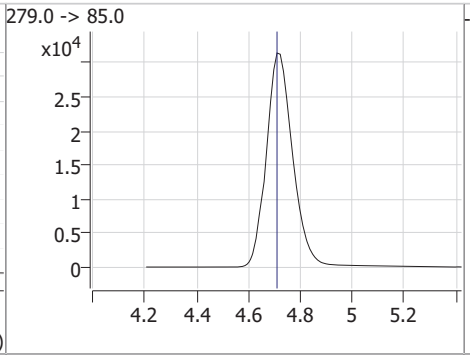


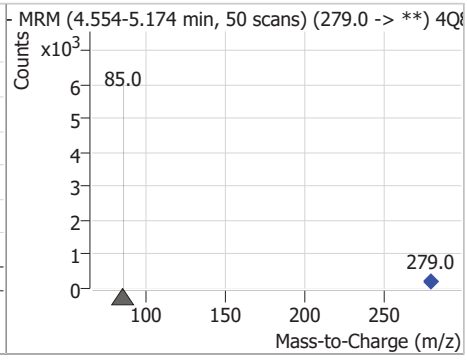




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.94	4.71	0.00	224004				







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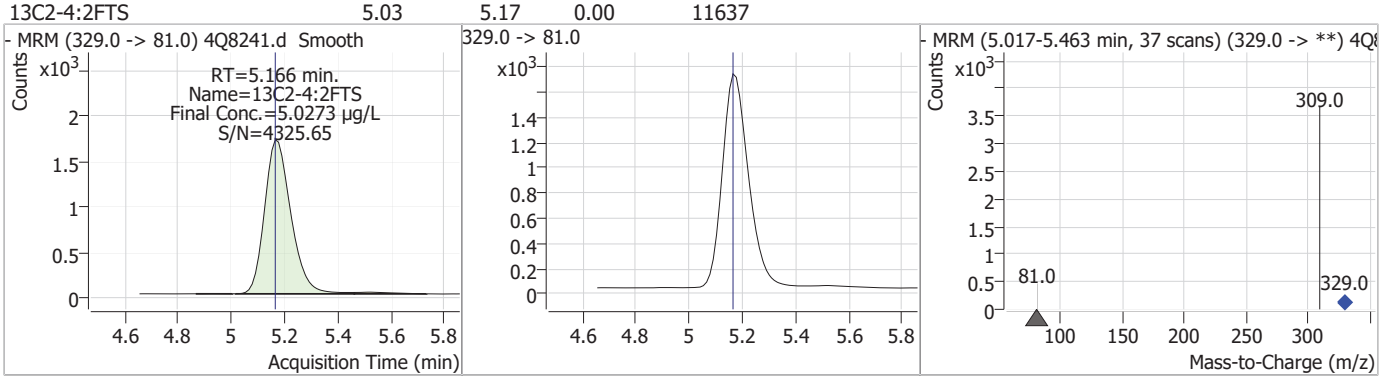
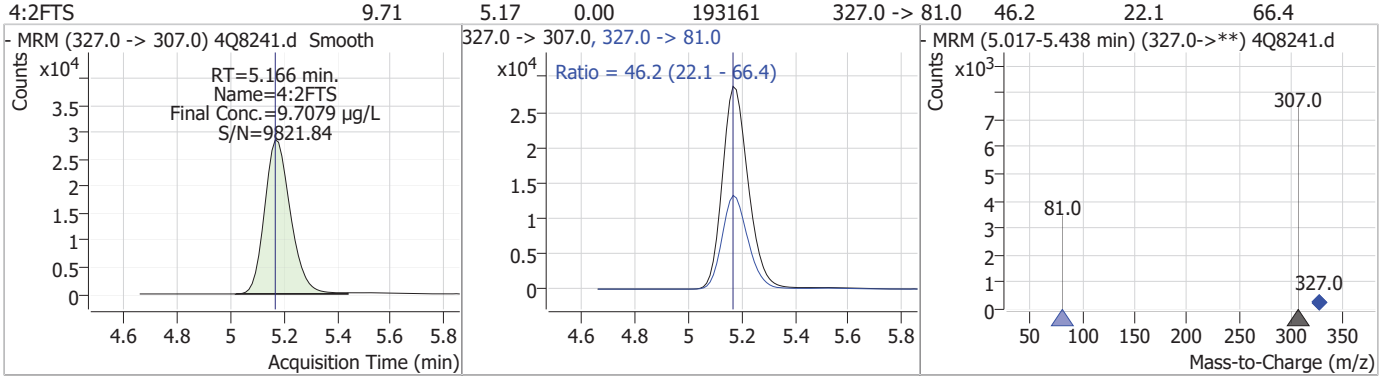
Perfluorinated Compounds by LC/MS/MS

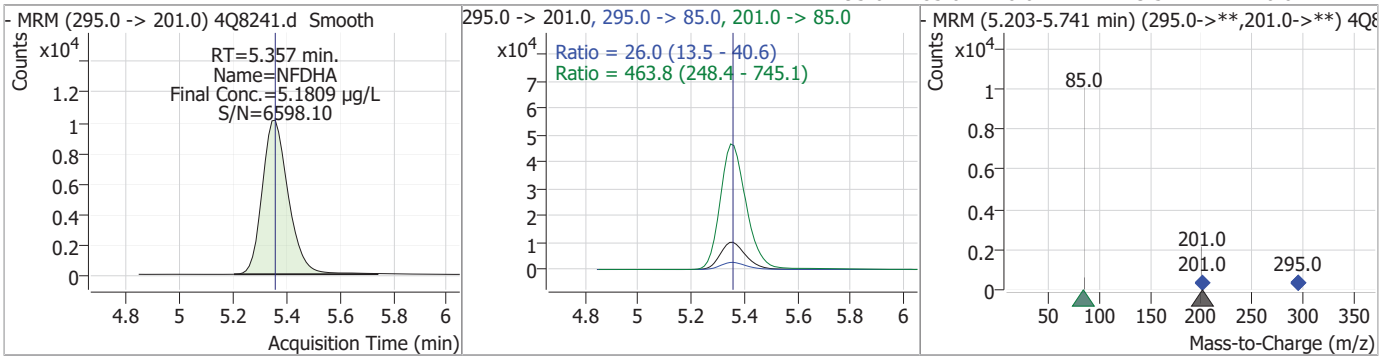
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.03	5.17	0.00	11637				



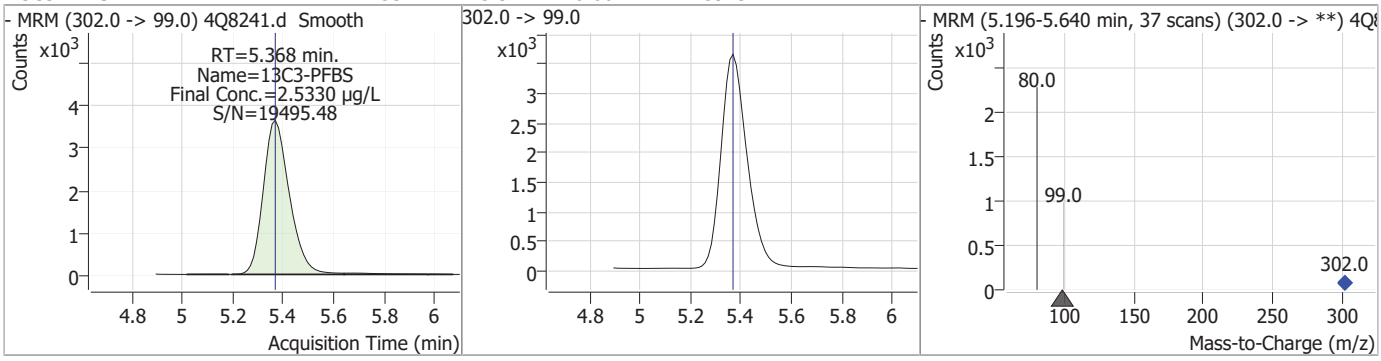
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	9.71	5.17	0.00	193161	327.0 -> 81.0	46.2	22.1	66.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.18	5.36	0.00	68781	201.0 -> 85.0	463.8	248.4	745.1
					295.0 -> 85.0	26.0	13.5	40.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.53	5.37	0.00	25929				



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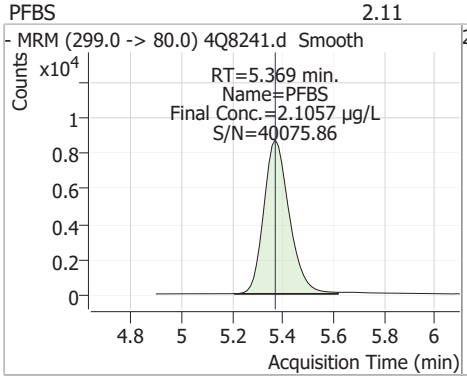
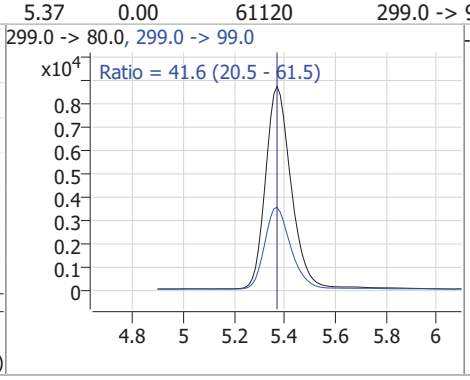
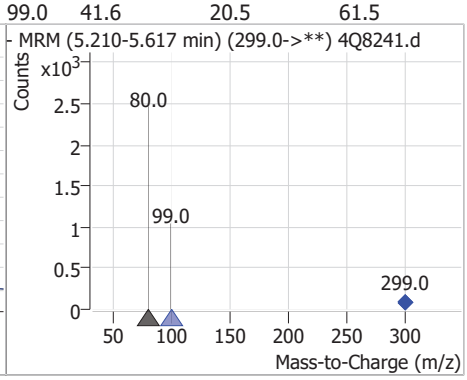
Perfluorinated Compounds by LC/MS/MS

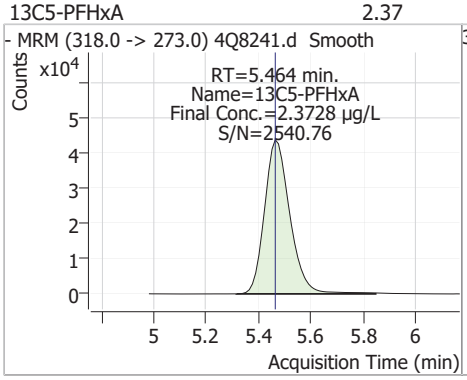
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.11	5.37	0.00	61120	299.0 -> 99.0	41.6	20.5	61.5

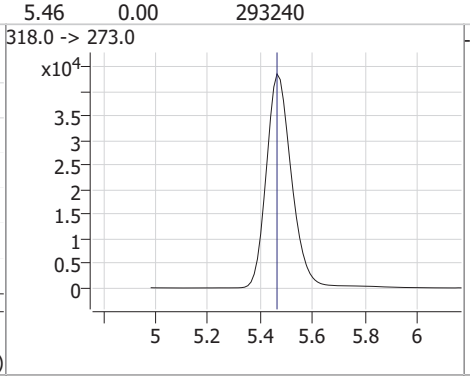


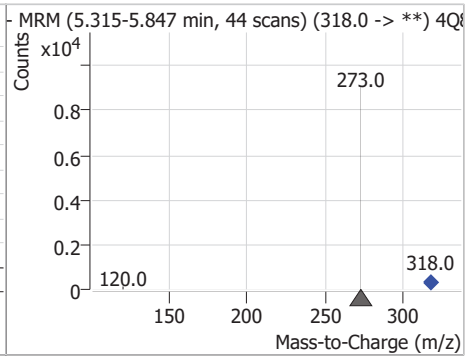




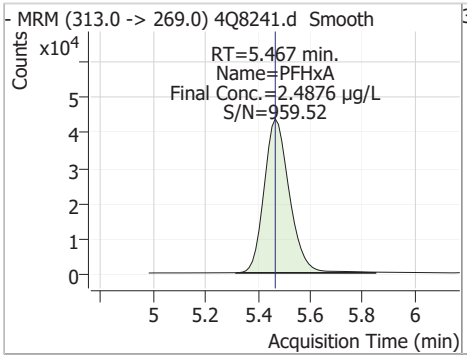
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.37	5.46	0.00	293240				

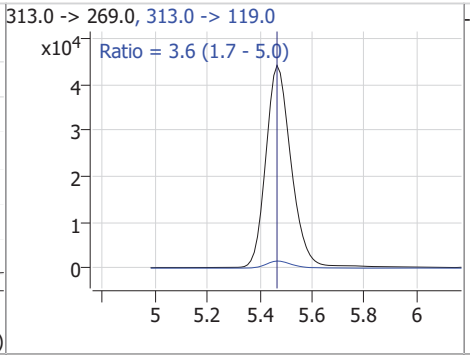


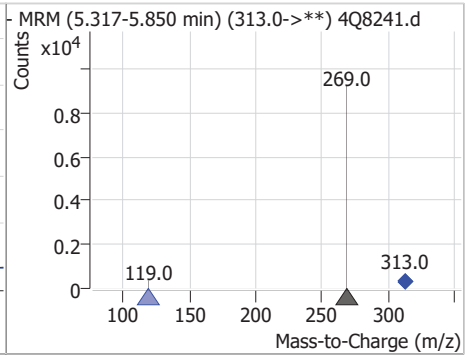




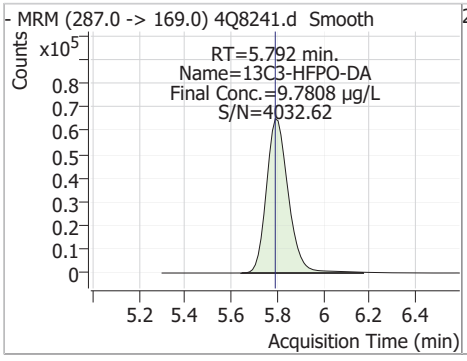
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.49	5.47	0.00	295605	313.0 -> 119.0	3.6	1.7	5.0

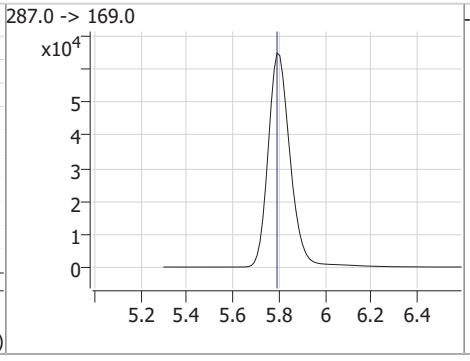


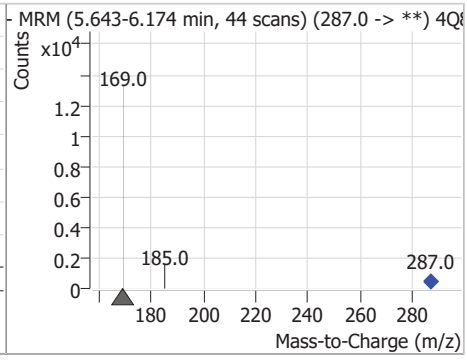




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.78	5.79	0.00	430666				

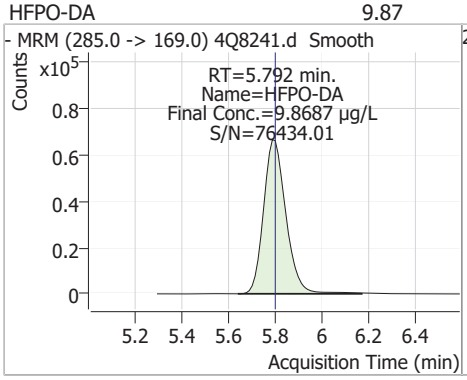


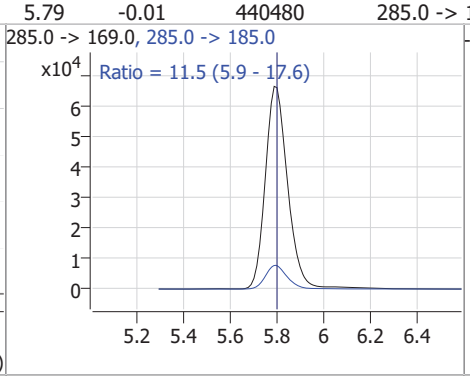


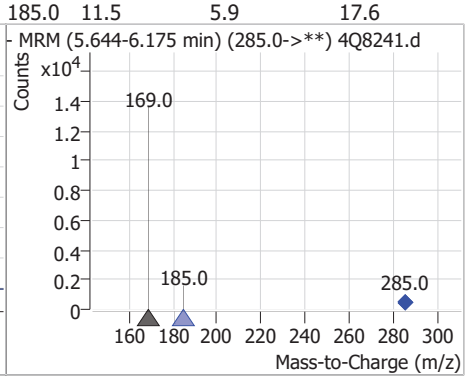


Perfluorinated Compounds by LC/MS/MS

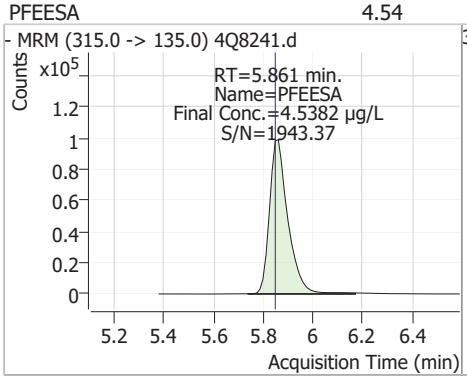
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	9.87	5.79	-0.01	440480	285.0 -> 185.0	11.5	5.9	17.6

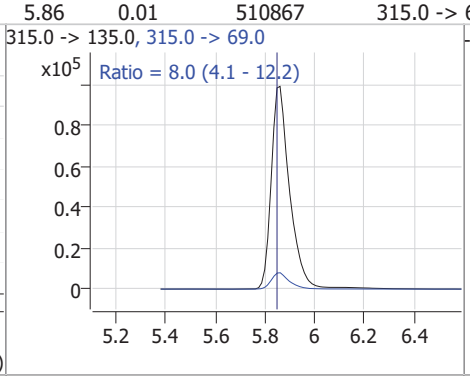


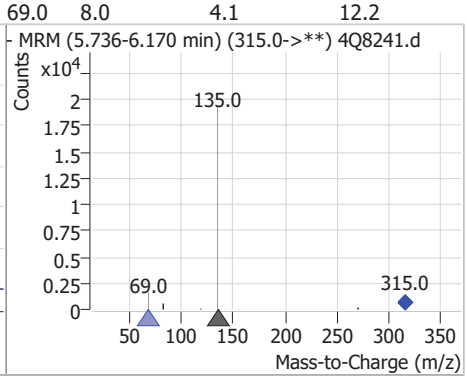




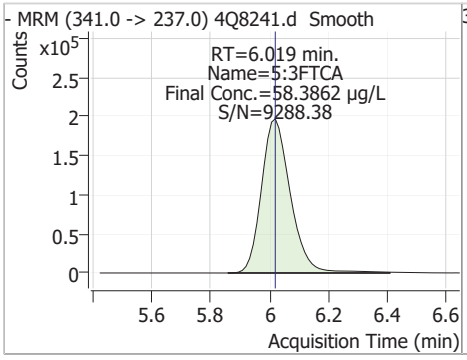
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.54	5.86	0.01	510867	315.0 -> 69.0	8.0	4.1	12.2

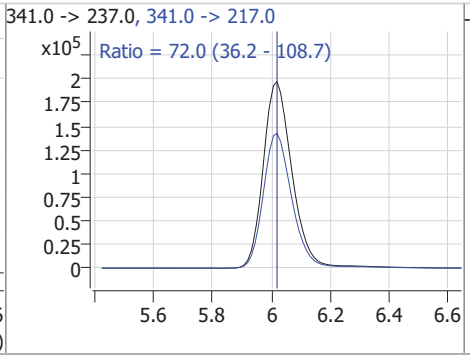


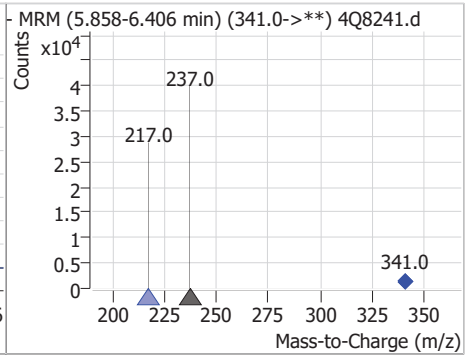




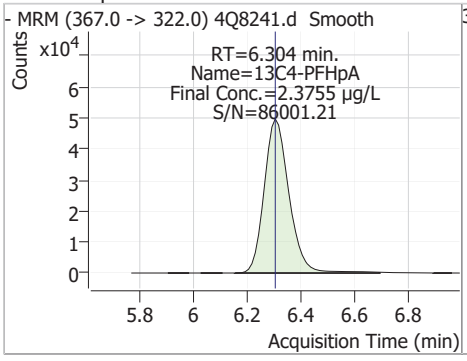
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	58.39	6.02	0.00	1341194	341.0 -> 217.0	72.0	36.2	108.7

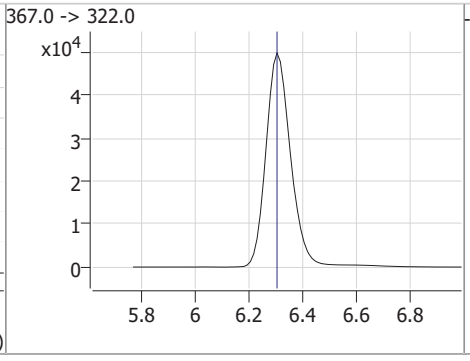


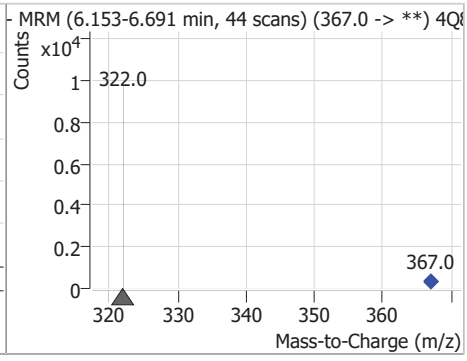




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.38	6.30	0.00	317971				







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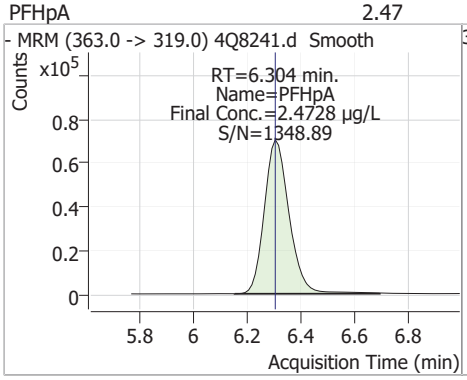
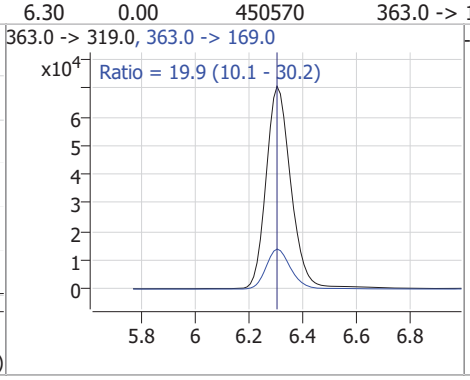
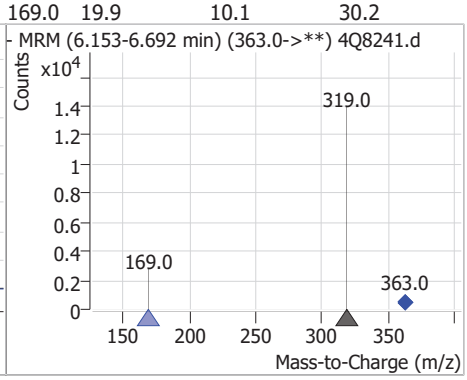
Perfluorinated Compounds by LC/MS/MS

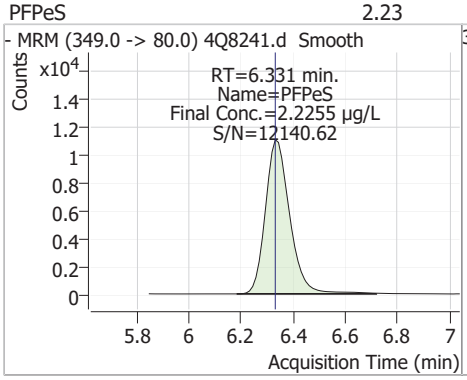
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.47	6.30	0.00	450570	363.0 -> 169.0	19.9	10.1	30.2

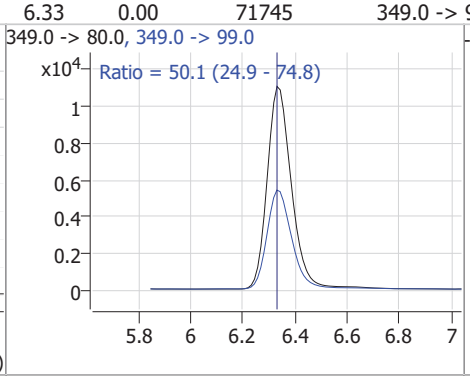


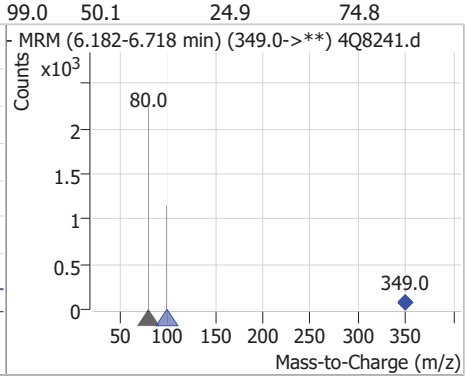




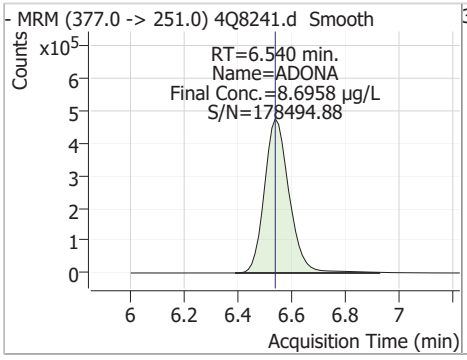
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.23	6.33	0.00	71745	349.0 -> 99.0	50.1	24.9	74.8

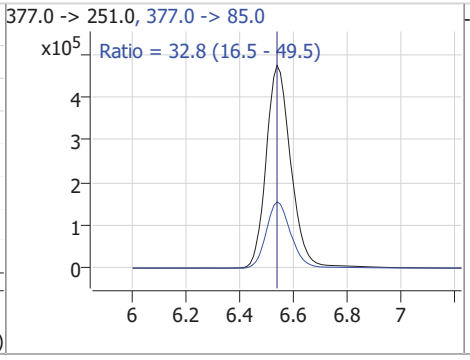


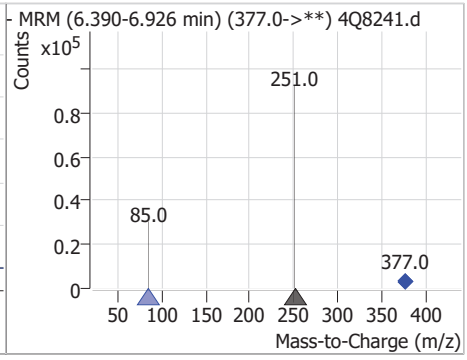




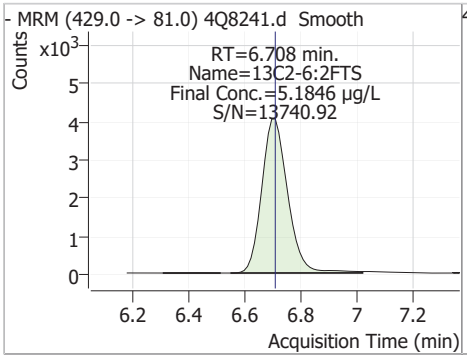
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.70	6.54	0.00	3026234	377.0 -> 85.0	32.8	16.5	49.5

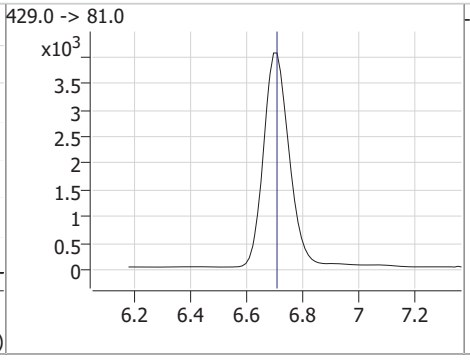


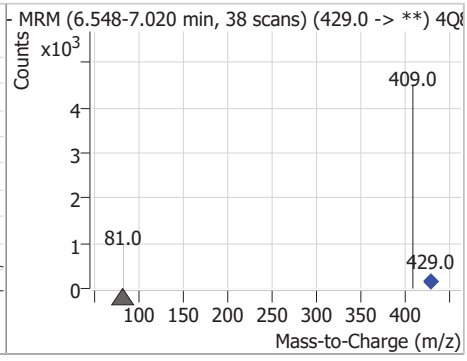




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.18	6.71	0.00	25975				







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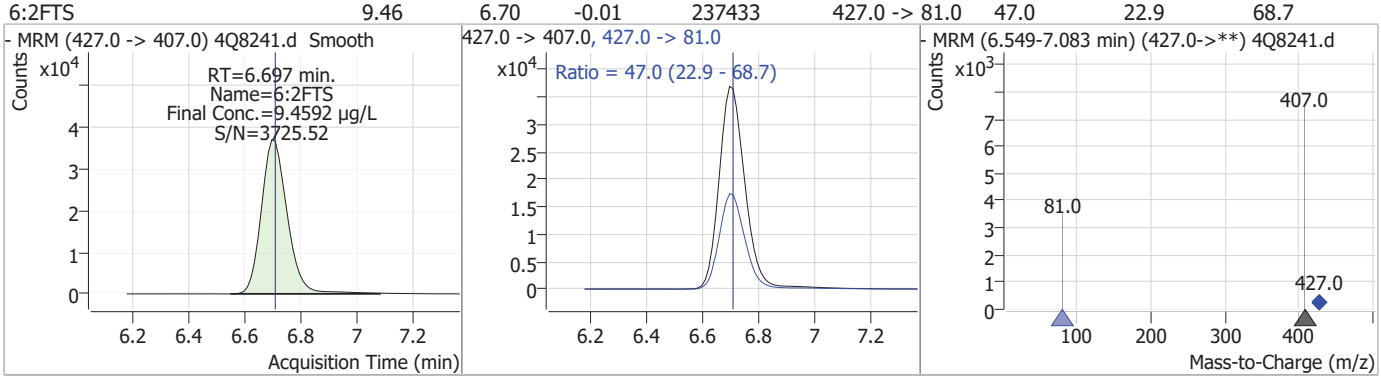
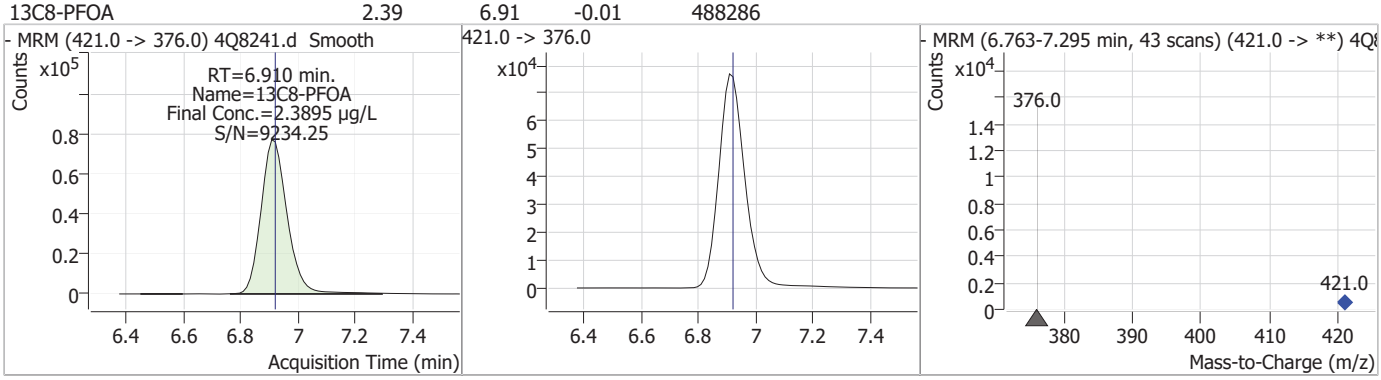
Perfluorinated Compounds by LC/MS/MS

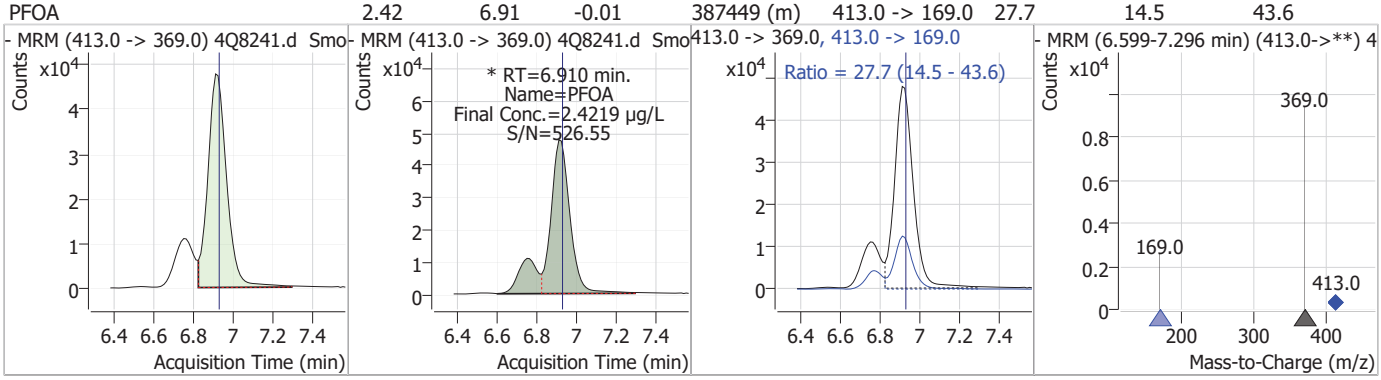
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.46	6.70	-0.01	237433	427.0 -> 81.0	47.0	22.9	68.7



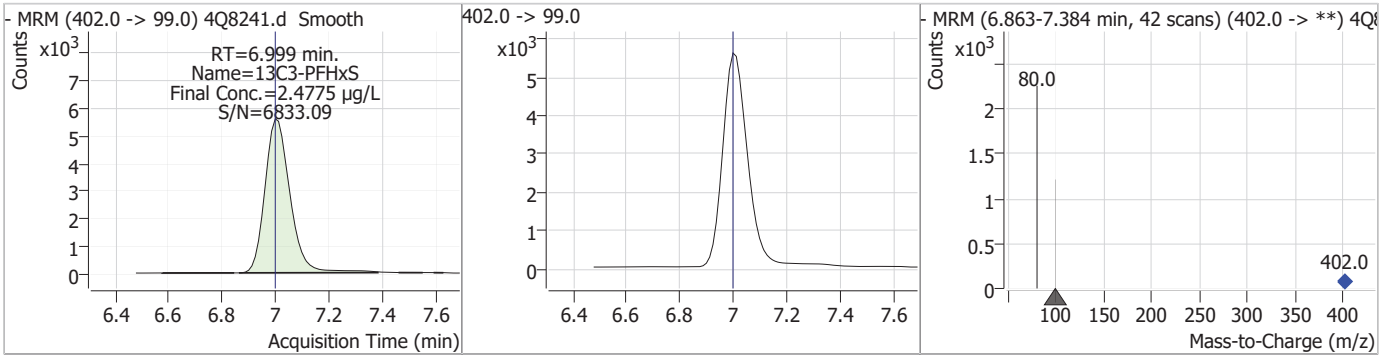
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.39	6.91	-0.01	488286				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.42	6.91	-0.01	387449 (m)	413.0 -> 169.0	27.7	14.5	43.6

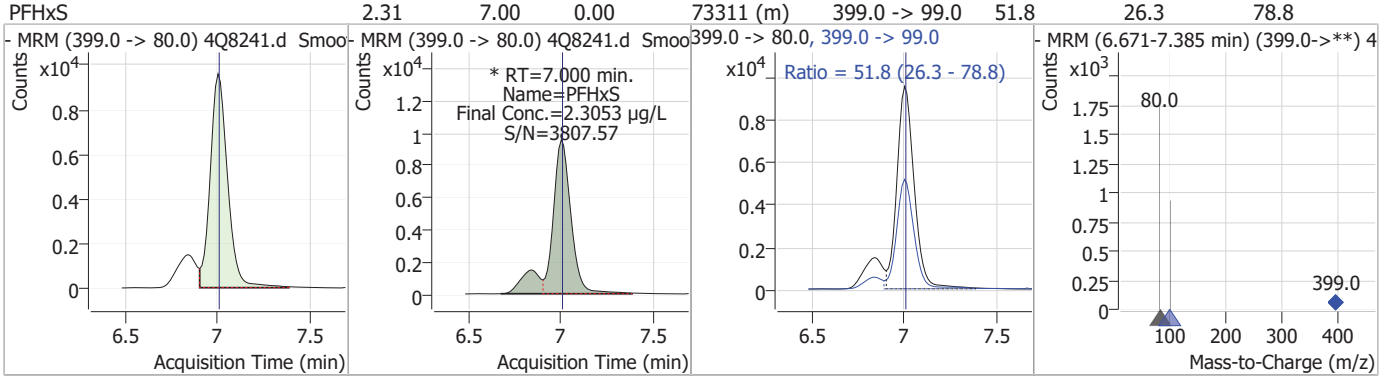


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.48	7.00	0.00	36435				

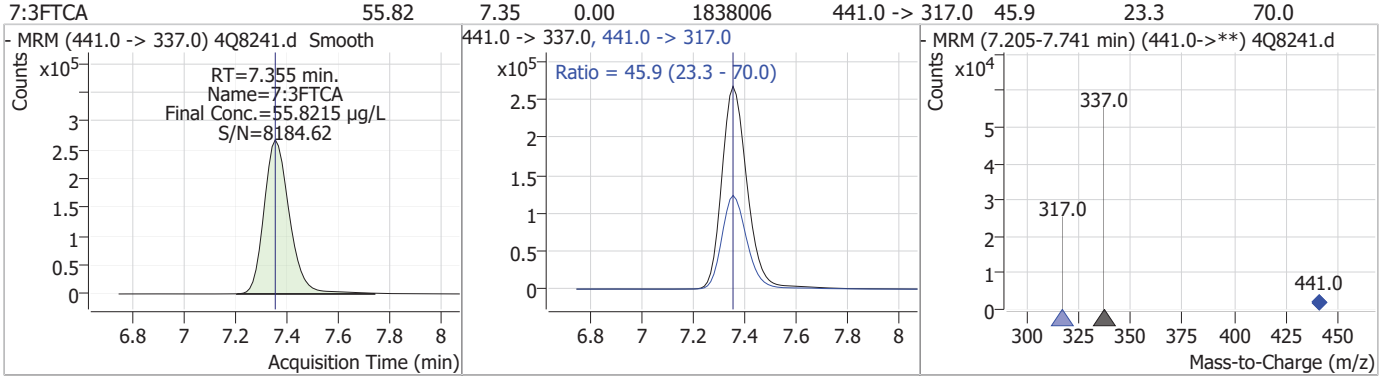


Perfluorinated Compounds by LC/MS/MS

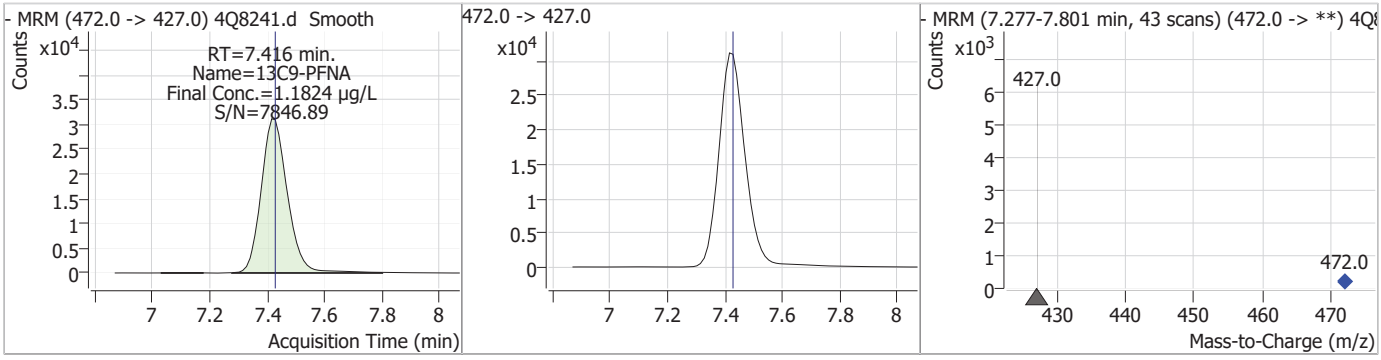
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.31	7.00	0.00	73311 (m)	399.0 -> 99.0	51.8	26.3	78.8



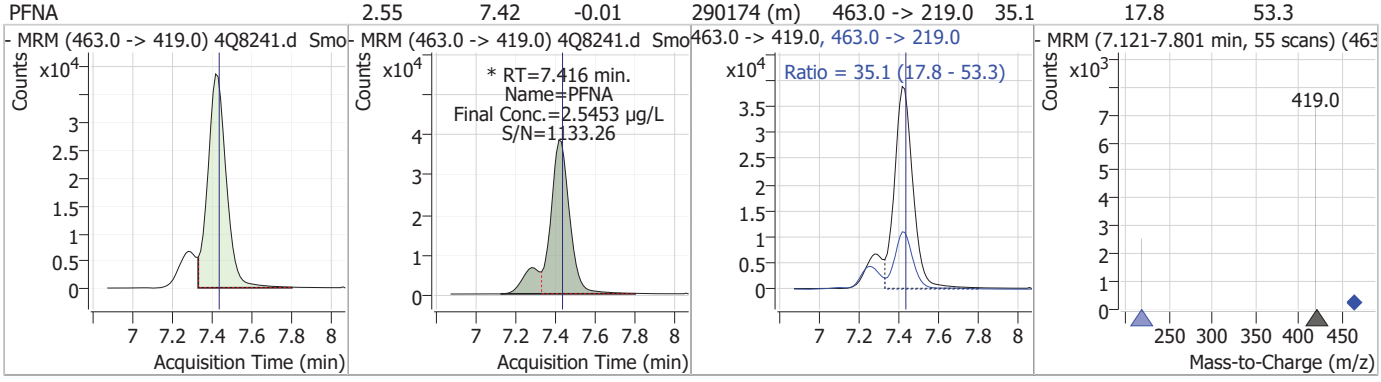
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	55.82	7.35	0.00	1838006	441.0 -> 317.0	45.9	23.3	70.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.18	7.42	-0.01	197641				

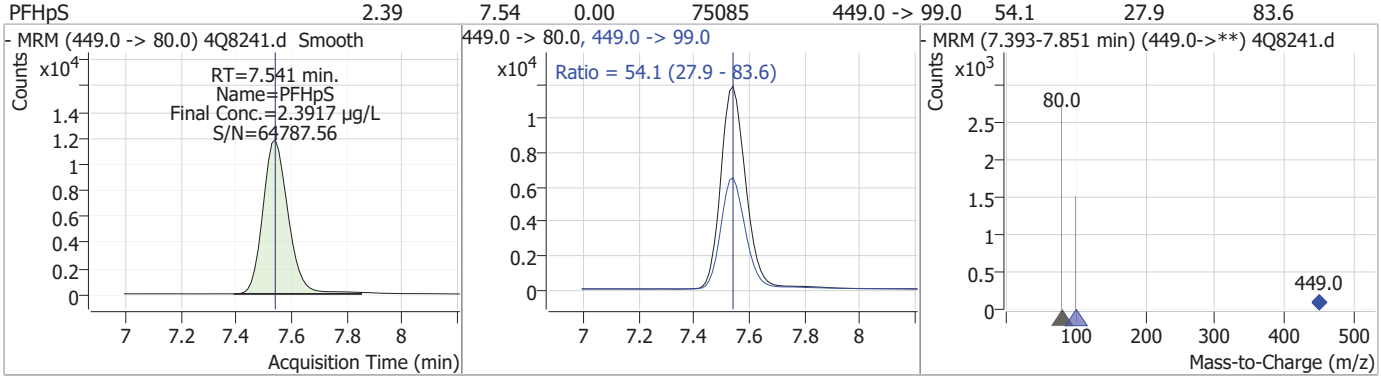


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.55	7.42	-0.01	290174 (m)	463.0 -> 219.0	35.1	17.8	53.3

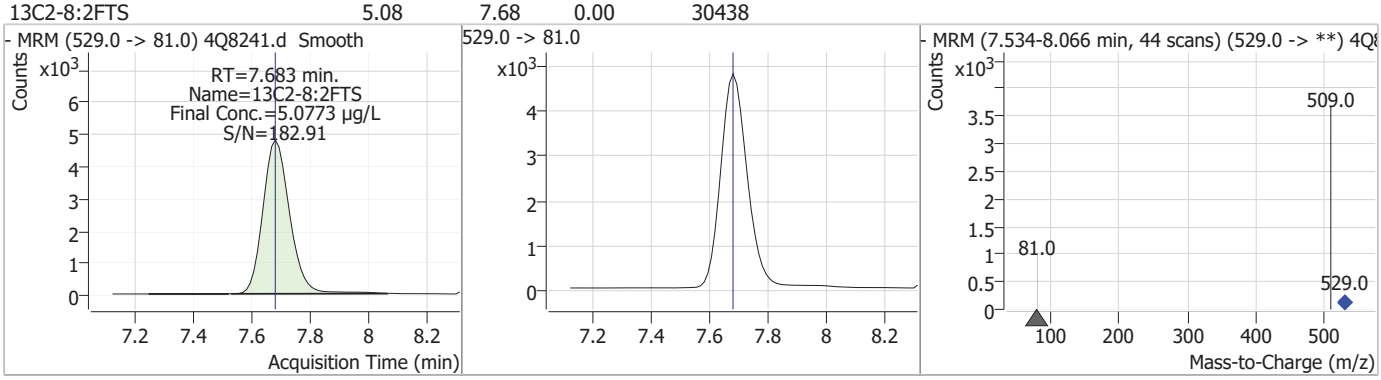


Perfluorinated Compounds by LC/MS/MS

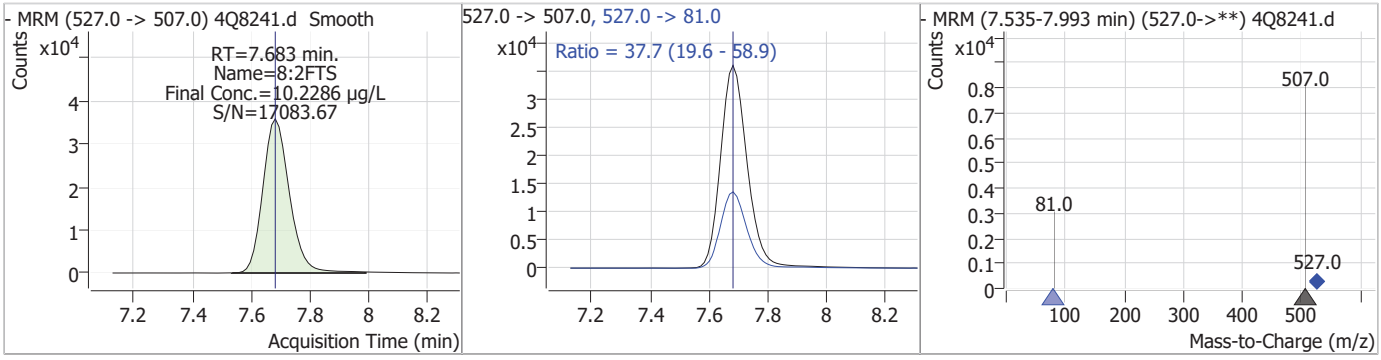
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.39	7.54	0.00	75085	449.0 -> 99.0	54.1	27.9	83.6



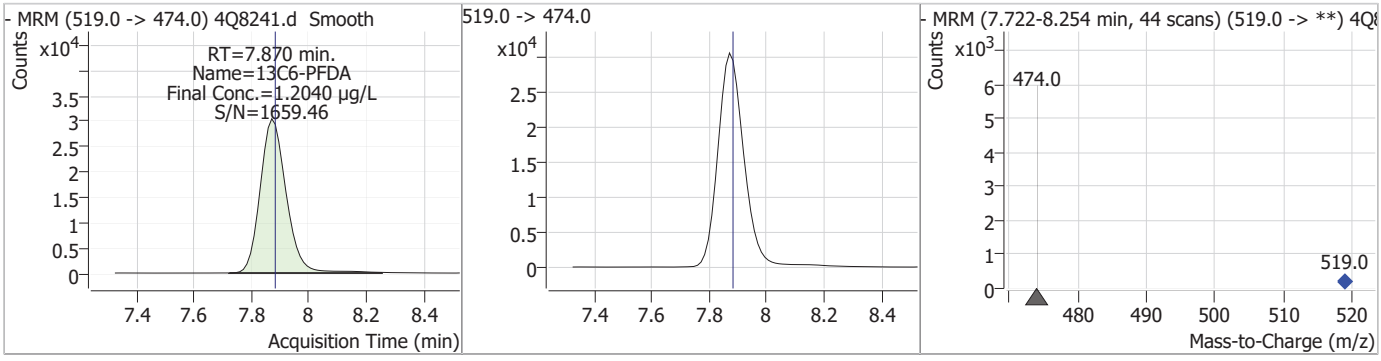
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.08	7.68	0.00	30438				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.23	7.68	0.00	226924	527.0 -> 81.0	37.7	19.6	58.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.20	7.87	-0.01	191716				



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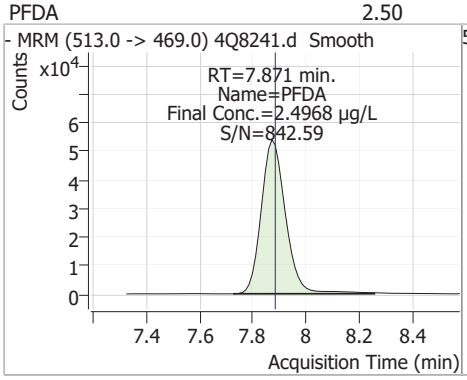
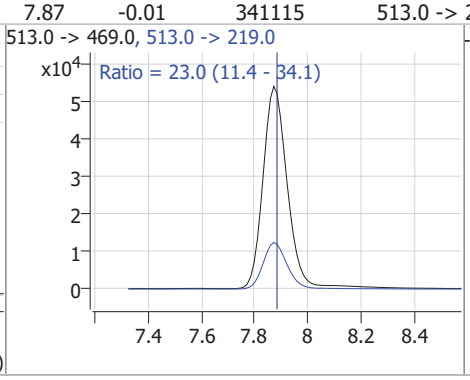
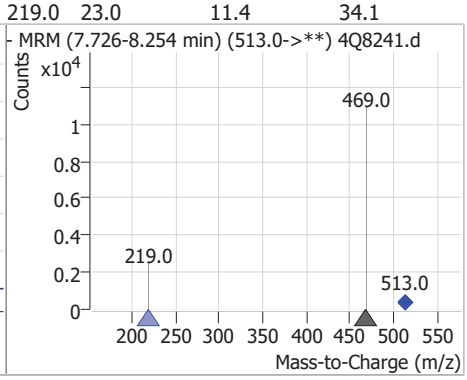
Perfluorinated Compounds by LC/MS/MS

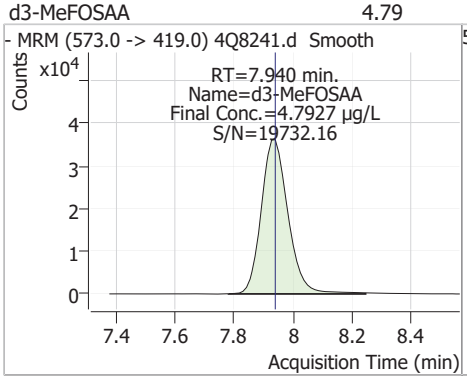
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.50	7.87	-0.01	341115	513.0 -> 219.0	23.0	11.4	34.1

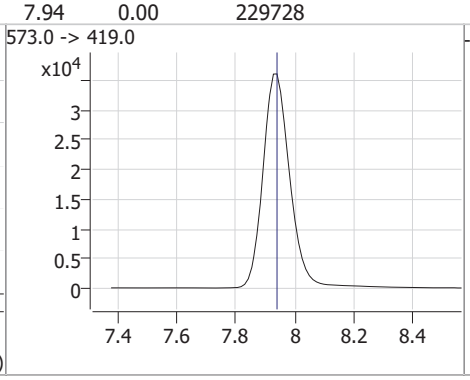


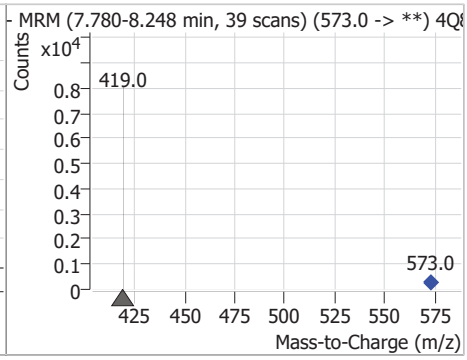




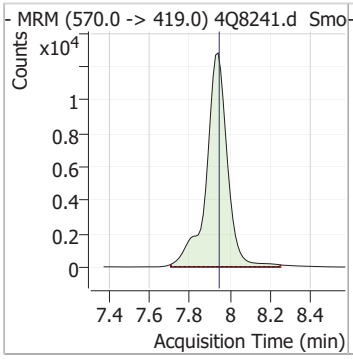
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	4.79	7.94	0.00	229728				

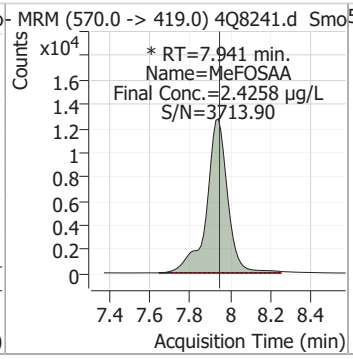


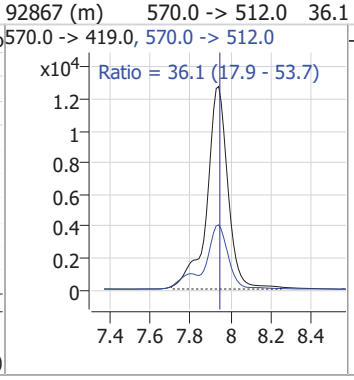


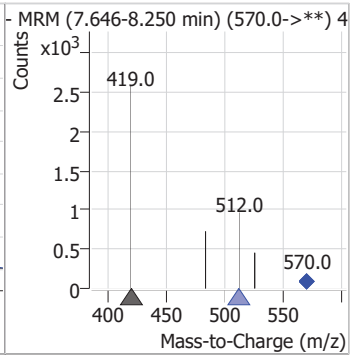


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.43	7.94	0.00	92867 (m)	570.0 -> 512.0	36.1	17.9	53.7

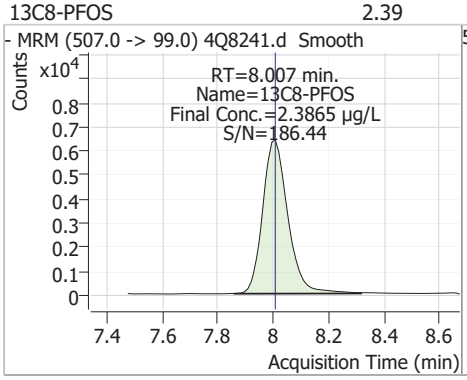


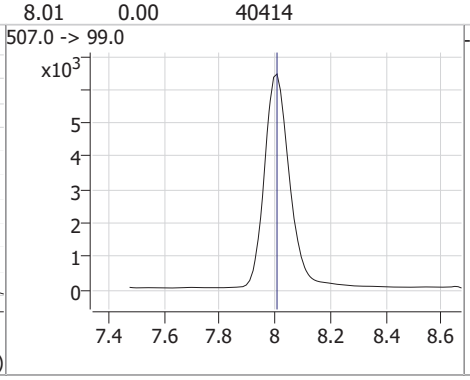


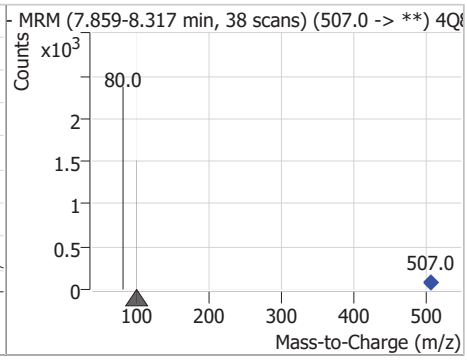




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.39	8.01	0.00	40414				

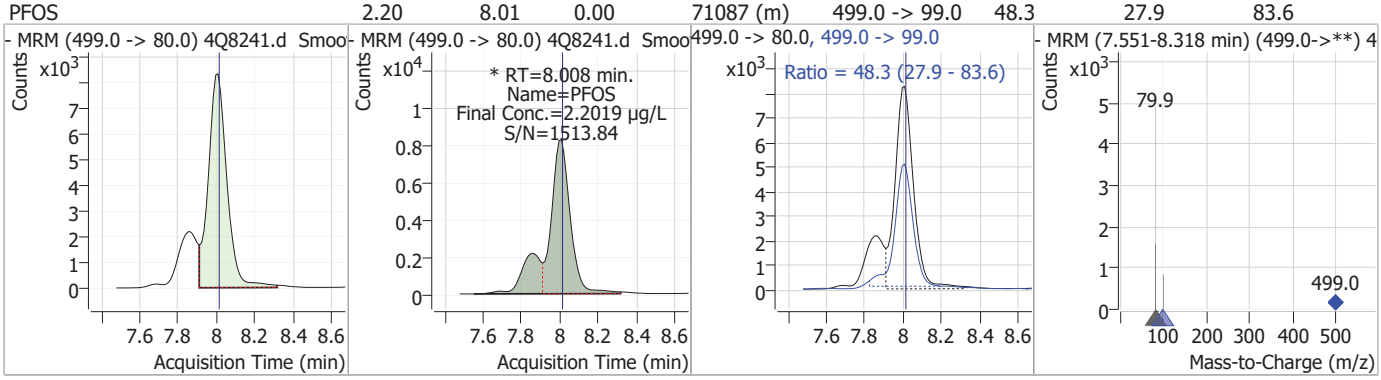




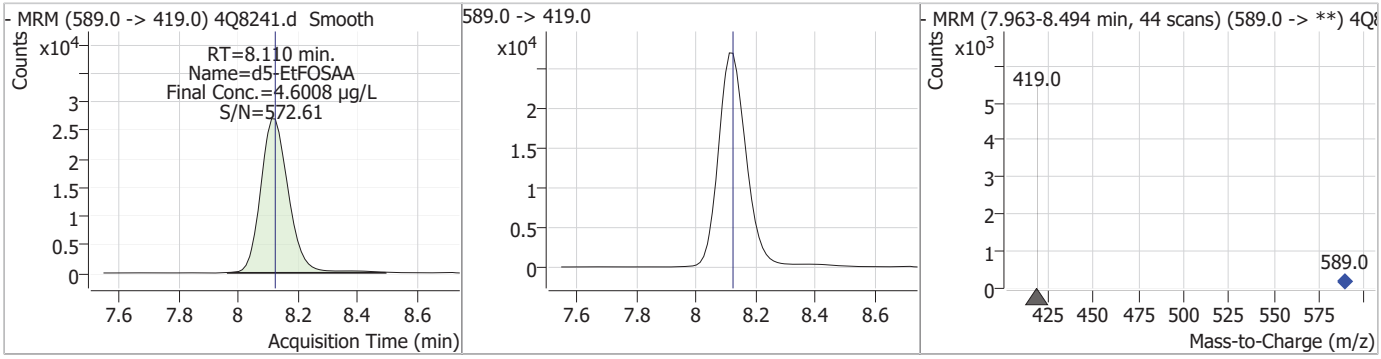


Perfluorinated Compounds by LC/MS/MS

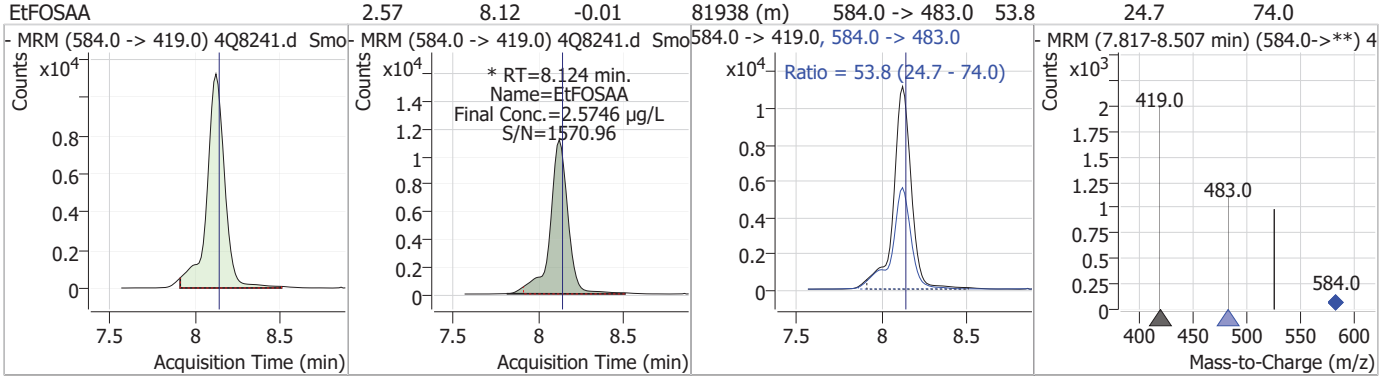
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.20	8.01	0.00	71087 (m)	499.0 -> 99.0	48.3	27.9	83.6



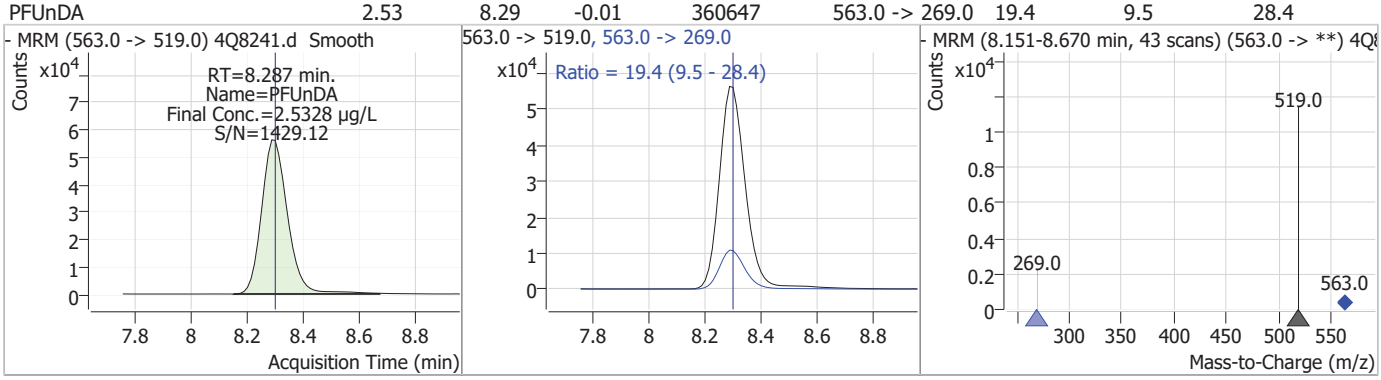
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	4.60	8.11	-0.01	176074				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.57	8.12	-0.01	81938 (m)	584.0 -> 483.0	53.8	24.7	74.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.53	8.29	-0.01	360647	563.0 -> 269.0	19.4	9.5	28.4



7.6.71

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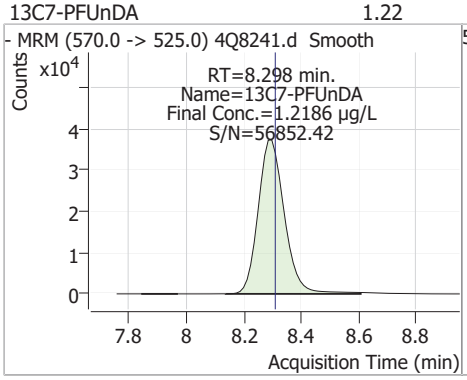
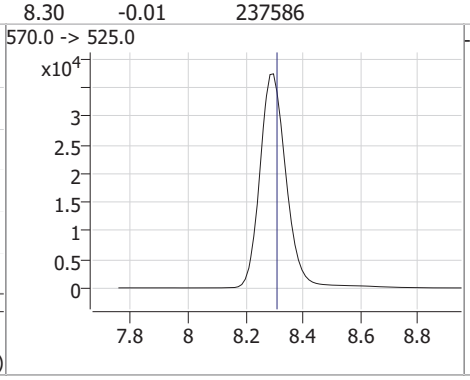
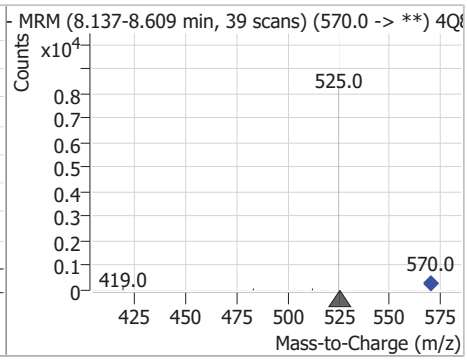
Perfluorinated Compounds by LC/MS/MS

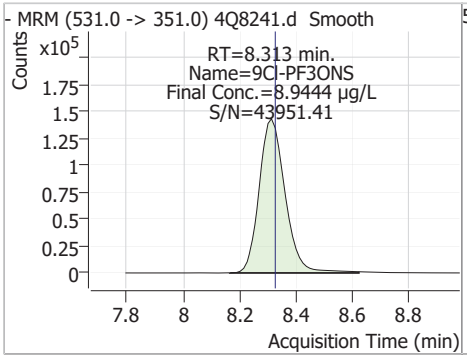
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.22	8.30	-0.01	237586				

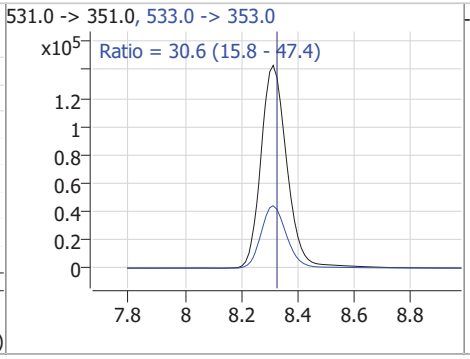


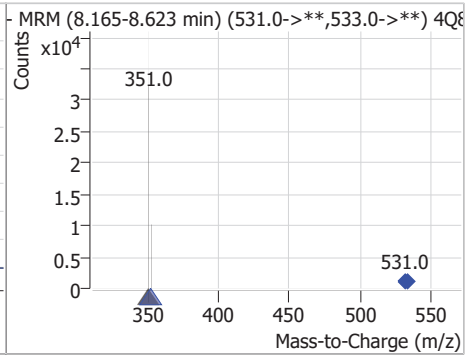




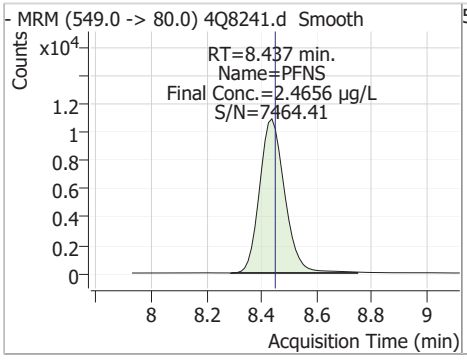
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	8.94	8.31	-0.01	914071	533.0 -> 353.0	30.6	15.8	47.4

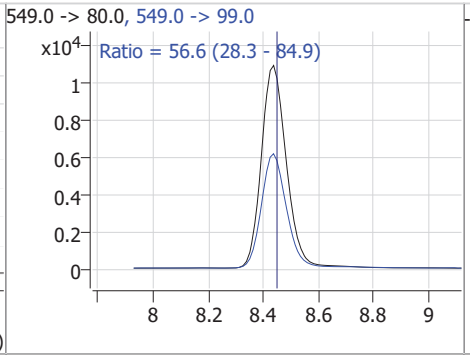


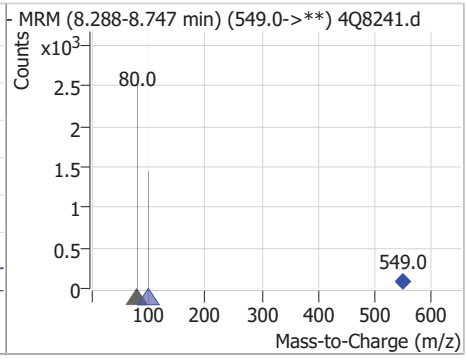




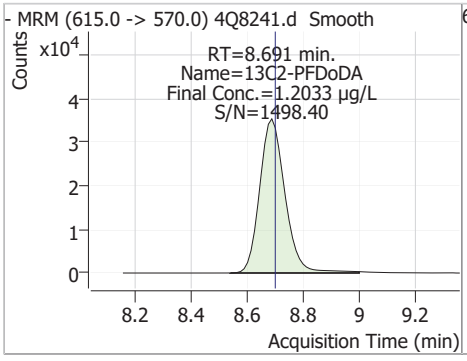
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.47	8.44	-0.01	68792	549.0 -> 99.0	56.6	28.3	84.9

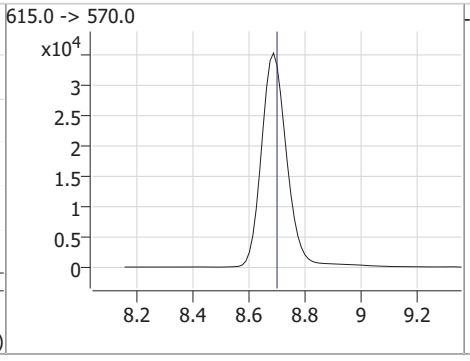


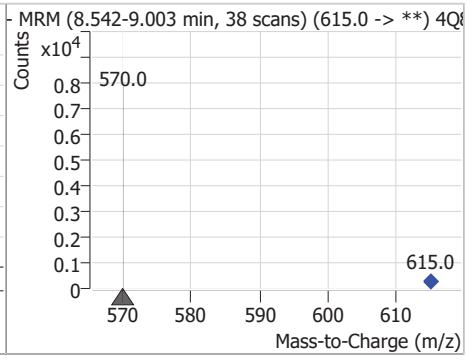




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.20	8.69	-0.01	221359				

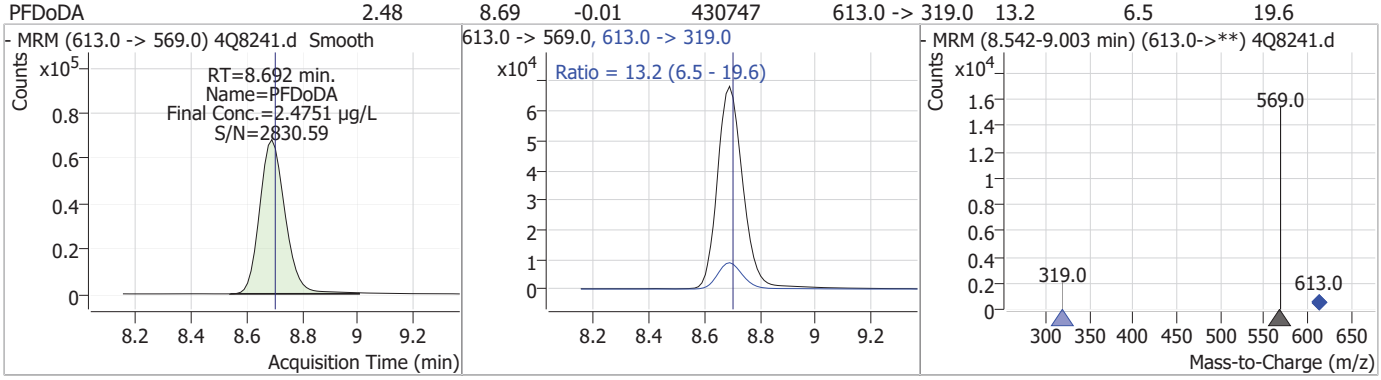




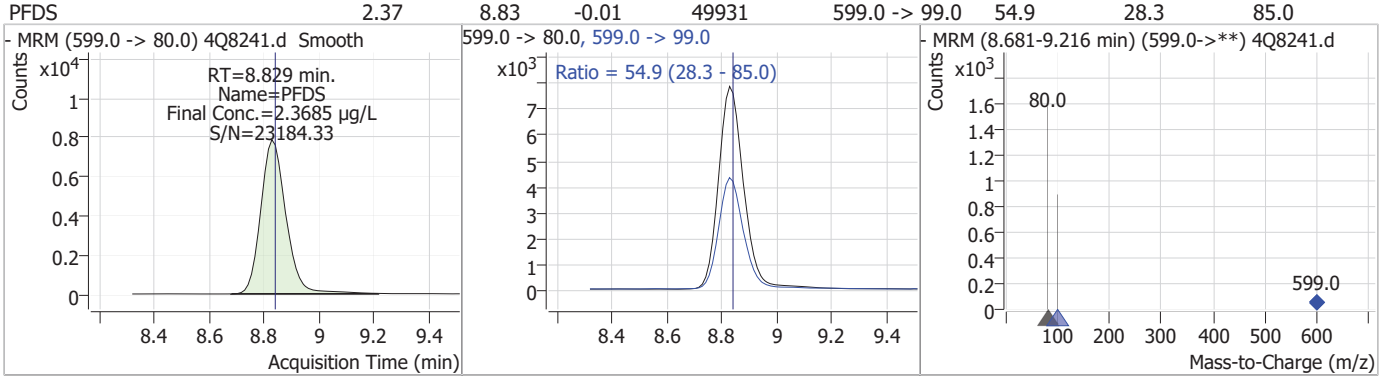


Perfluorinated Compounds by LC/MS/MS

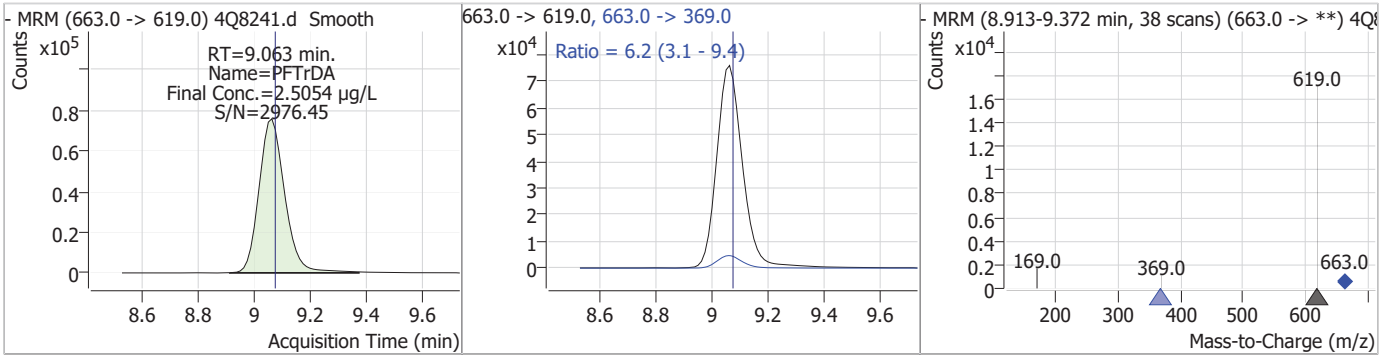
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.48	8.69	-0.01	430747	613.0 -> 319.0	13.2	6.5	19.6



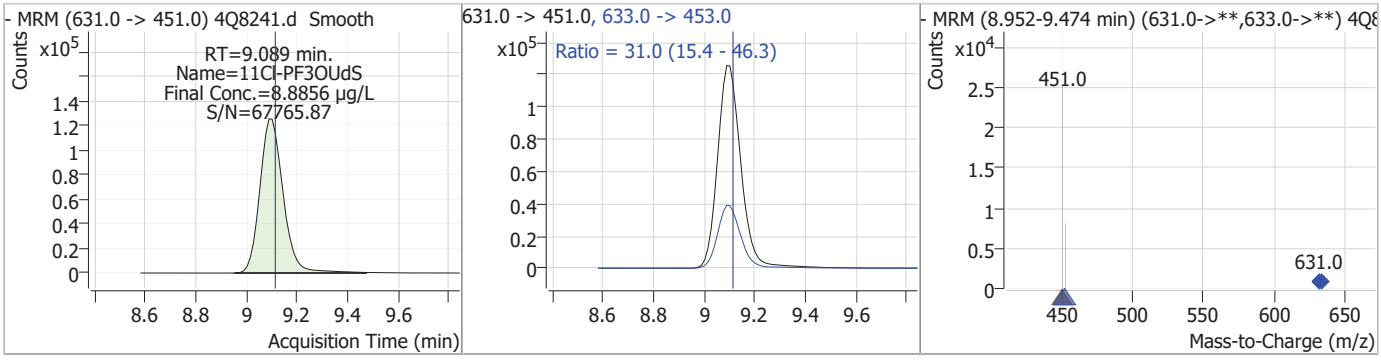
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.37	8.83	-0.01	49931	599.0 -> 99.0	54.9	28.3	85.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.51	9.06	-0.01	480317	663.0 -> 369.0	6.2	3.1	9.4

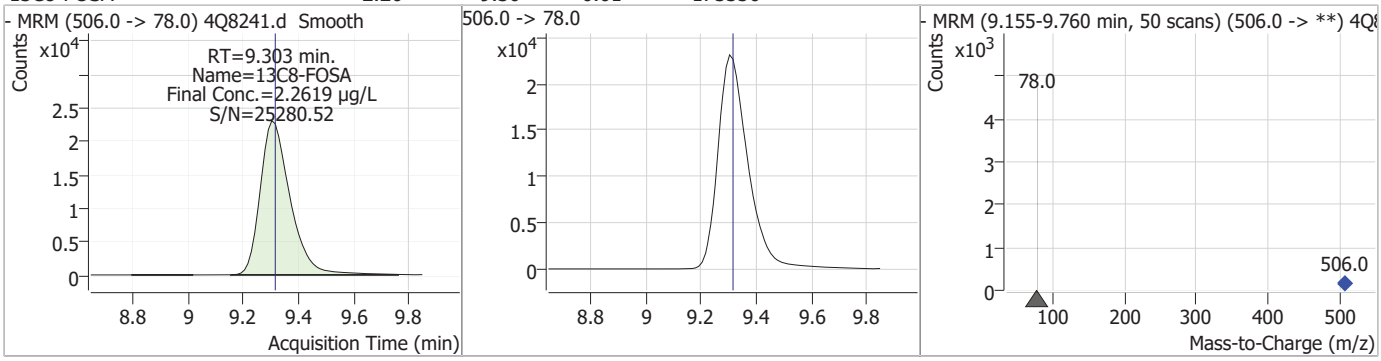


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	8.89	9.09	-0.02	803325	633.0 -> 453.0	31.0	15.4	46.3

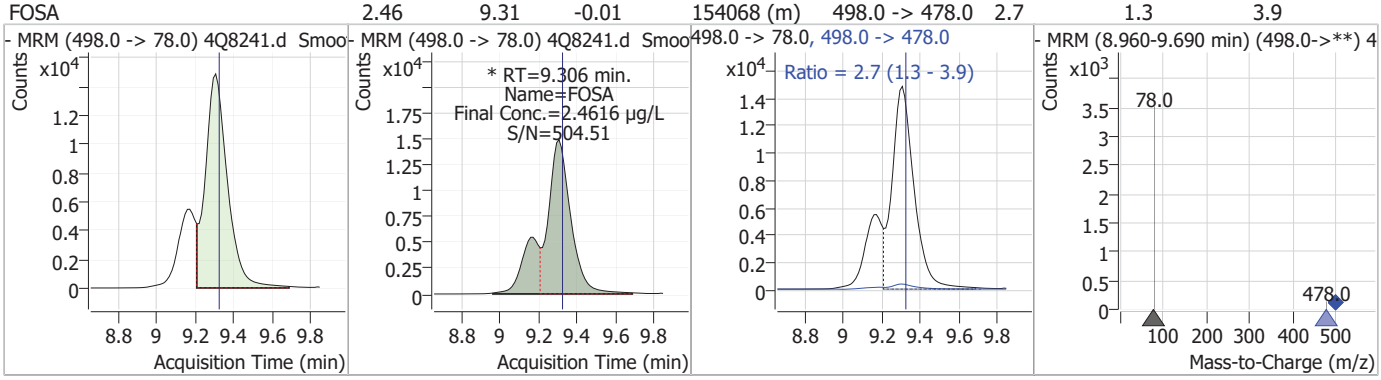


Perfluorinated Compounds by LC/MS/MS

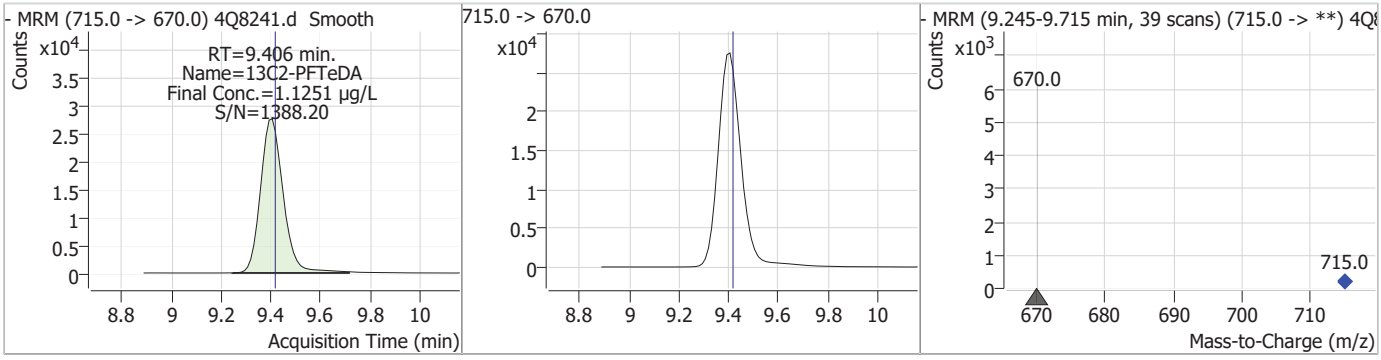
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.26	9.30	-0.01	173356				



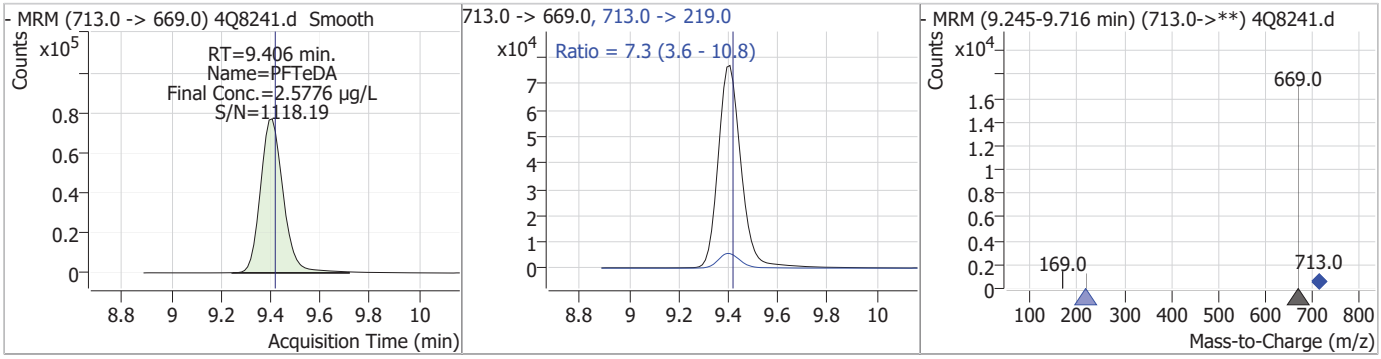
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.46	9.31	-0.01	154068 (m)	498.0 -> 478.0	2.7	1.3	3.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.13	9.41	-0.01	174893				

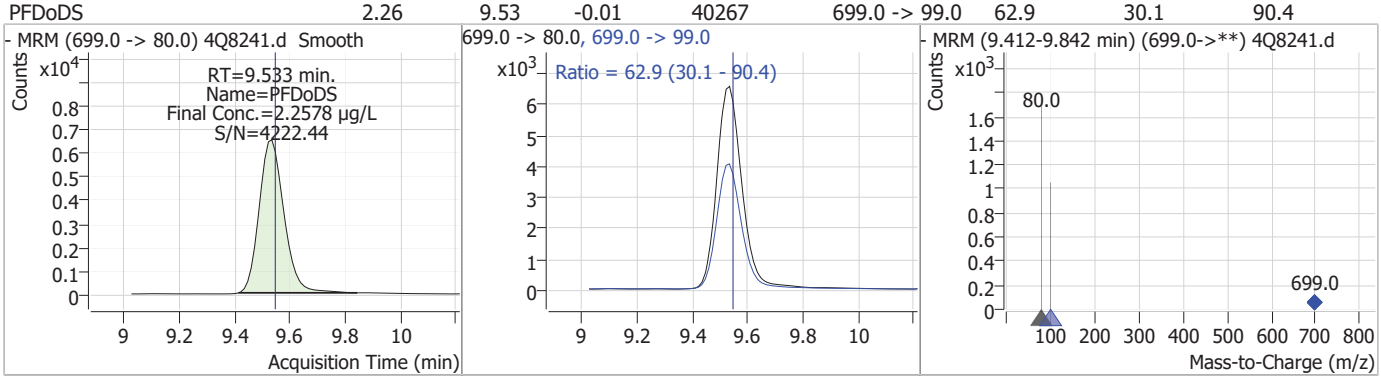


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.58	9.41	-0.01	489678	713.0 -> 219.0	7.3	3.6	10.8

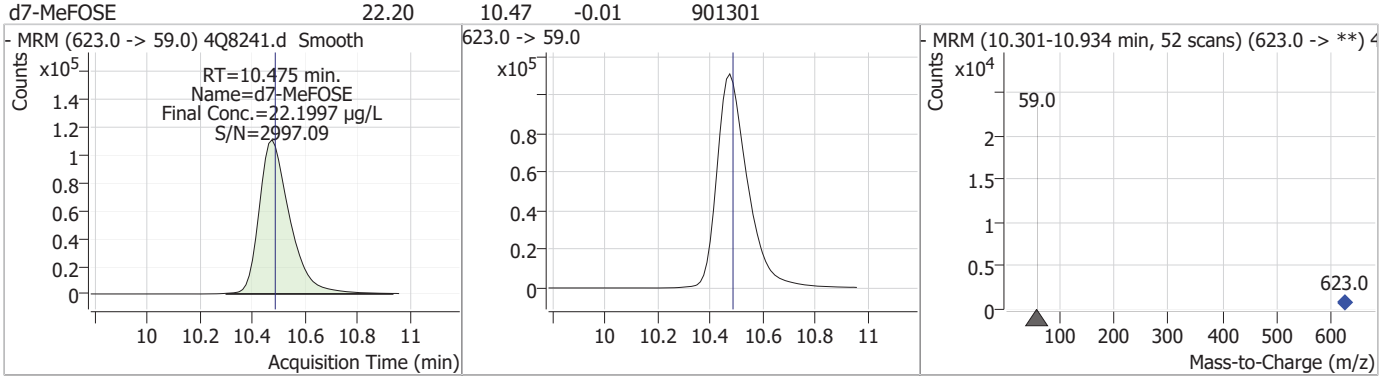


Perfluorinated Compounds by LC/MS/MS

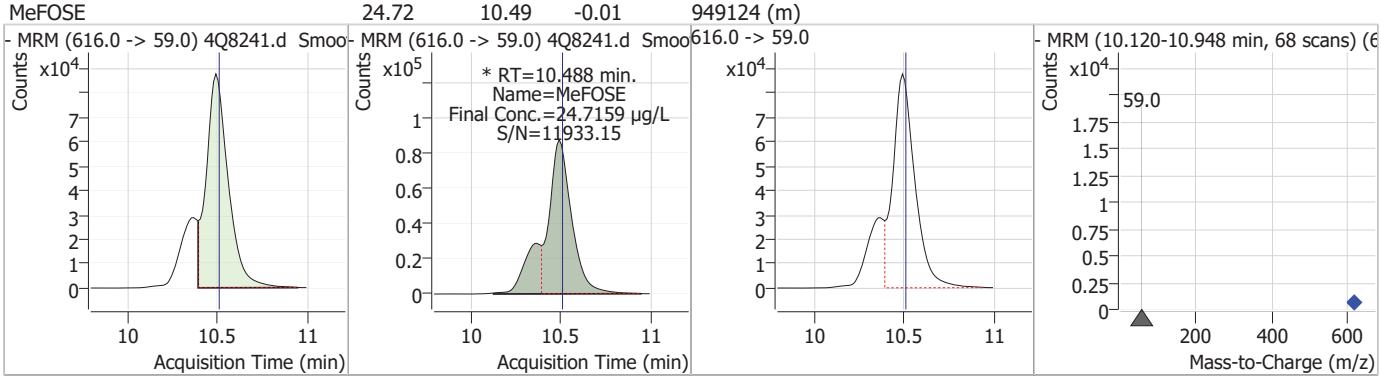
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.26	9.53	-0.01	40267	699.0 -> 99.0	62.9	30.1	90.4



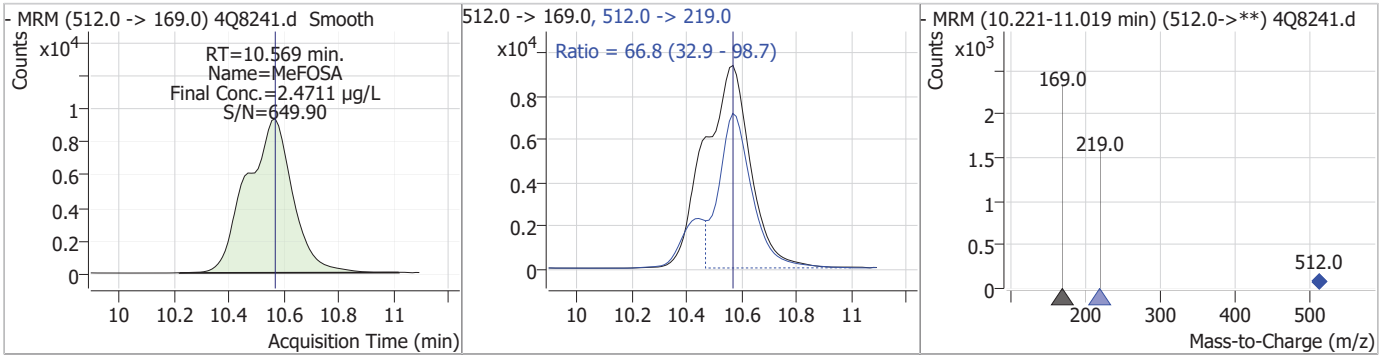
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	22.20	10.47	-0.01	901301				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	24.72	10.49	-0.01	949124 (m)				

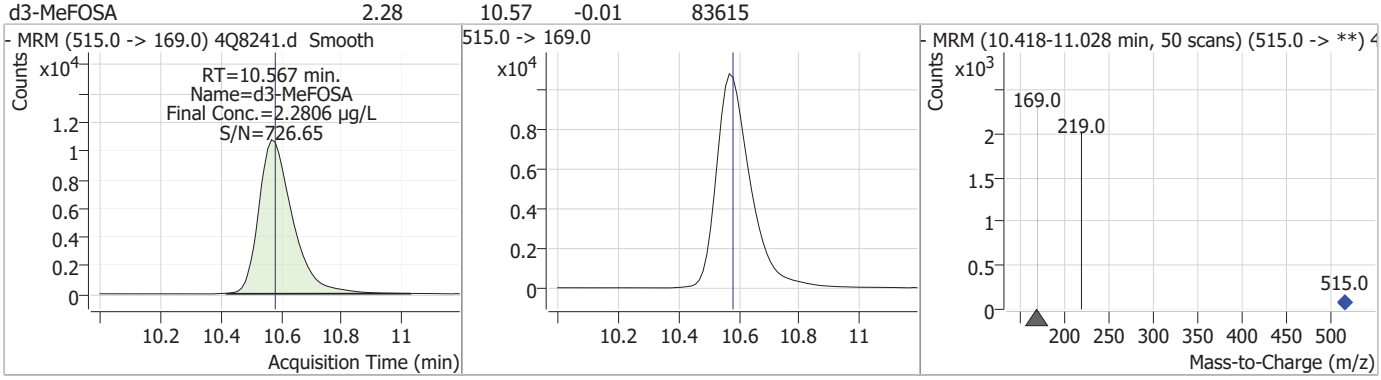


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.47	10.57	0.00	109514	512.0 -> 219.0	66.8	32.9	98.7

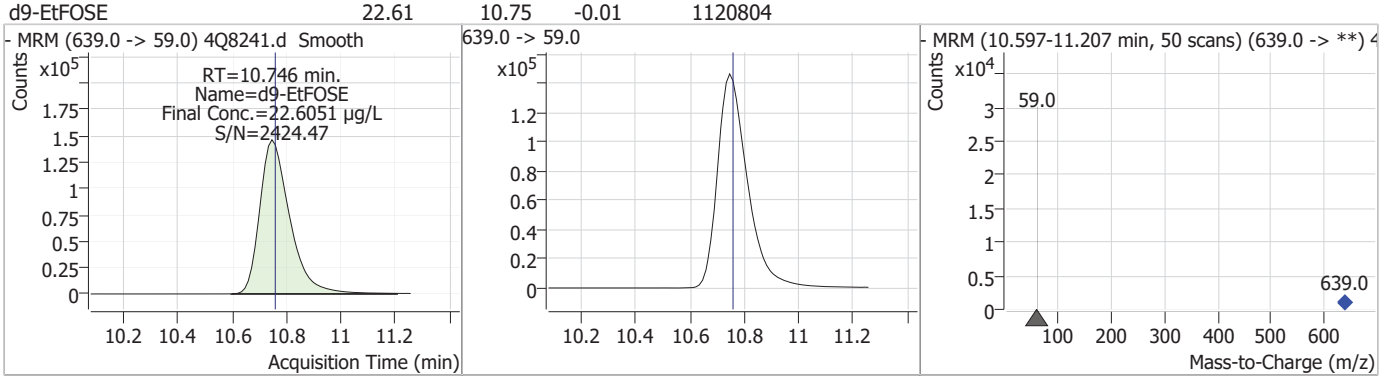


Perfluorinated Compounds by LC/MS/MS

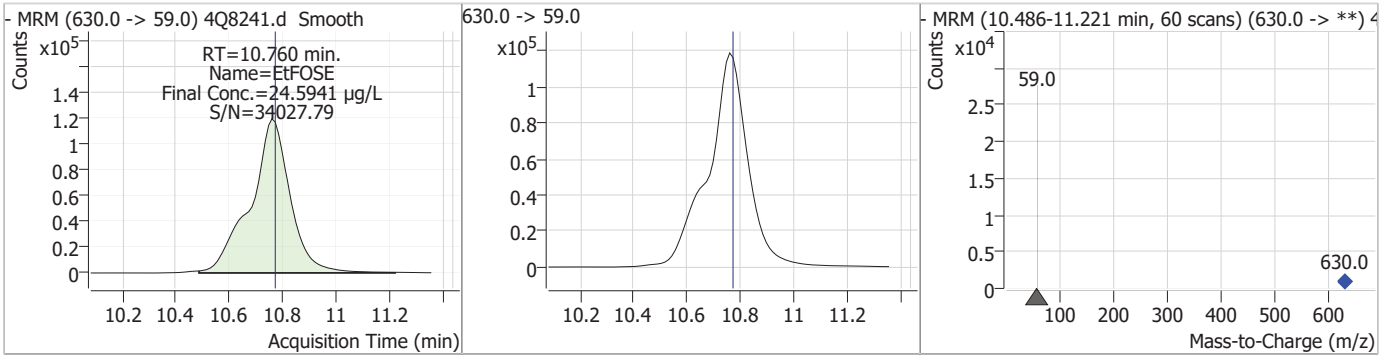
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.28	10.57	-0.01	83615				



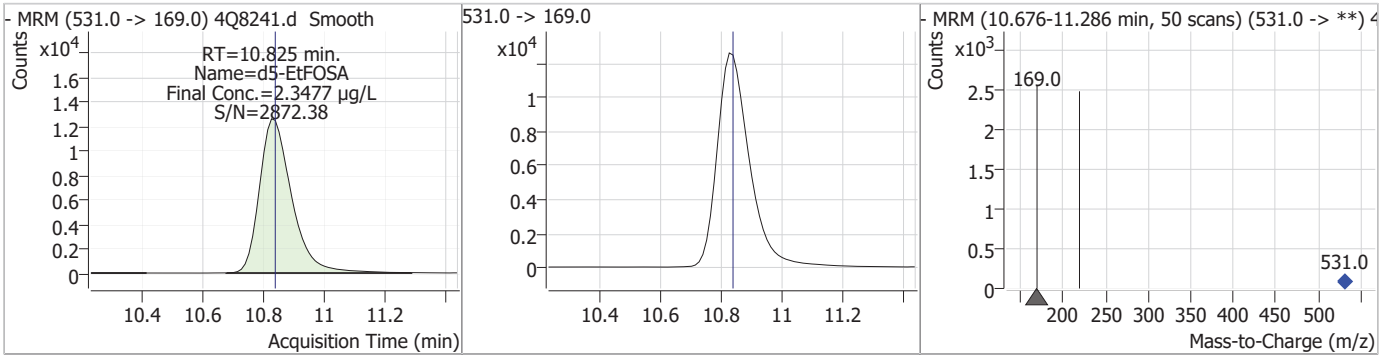
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	22.61	10.75	-0.01	1120804				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	24.59	10.76	-0.01	1229002				

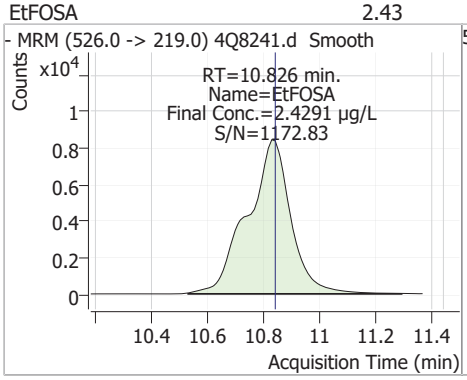


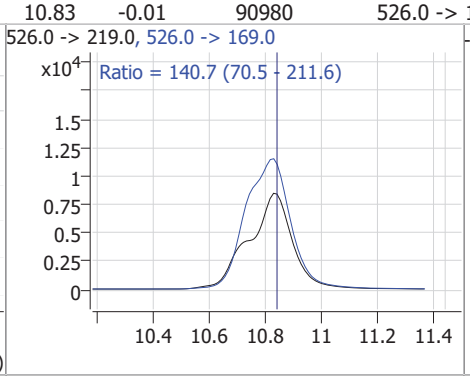
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.35	10.82	-0.01	92768				

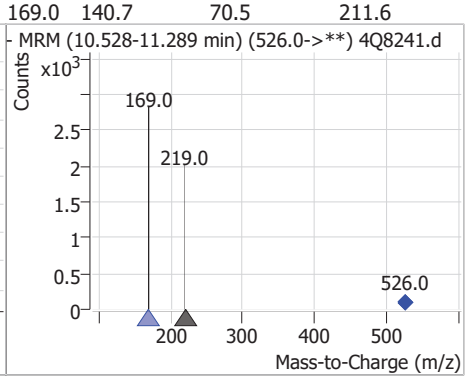


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.43	10.83	-0.01	90980	526.0 -> 169.0	140.7	70.5	211.6







7.6.71

7

Manual Integration Approval Summary

Sample Number: T4Q140-CC140
Lab FileID: 4Q8241.D
Injection Time: 05/02/25 16:15
Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.91	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.42	Split peak
MeFOSAA	2355-31-9		7.94	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.01	Split peak
EtFOSAA	2991-50-6		8.12	Split peak
PFOSA	754-91-6		9.31	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8242.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 4:29:25 PM
Sample Name : CC140-1.0LL
Vial : P1-A2
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63077,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.896	217.0 -> 172.0	813804	10.00	µg/L	0.012
M5-PFPeA	4.319	268.0 -> 223.0	433482	5.00	µg/L	0.000
M5-PFHxA	5.464	318.0 -> 273.0	284395	2.50	µg/L	0.000
M4-PFHpA	6.304	367.0 -> 322.0	312701	2.50	µg/L	0.000
M8-PFOA	6.910	421.0 -> 376.0	472993	2.50	µg/L	-0.012
M9-PFNA	7.416	472.0 -> 427.0	191750	1.25	µg/L	-0.012
M6-PFDA	7.870	519.0 -> 474.0	191182	1.25	µg/L	-0.012
M7-PFUnDA	8.298	570.0 -> 525.0	241739	1.25	µg/L	-0.012
M2-PFDoDA	8.691	615.0 -> 570.0	209815	1.25	µg/L	-0.012
M2-PFTeDA	9.406	715.0 -> 670.0	171521	1.25	µg/L	-0.012
M8-FOSA	9.303	506.0 -> 78.0	172134	2.50	µg/L	-0.012
M3-PFBS	5.368	302.0 -> 99.0	26486	2.50	µg/L	0.000
		302.0 -> 80.0	62360			
M3-PFHxS	6.999	402.0 -> 99.0	35583	2.50	µg/L	0.000
M8-PFOS	8.007	507.0 -> 99.0	38645	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	12638	5.00	µg/L	0.000
M2-6:2FTS	6.696	429.0 -> 81.0	25999	5.00	µg/L	-0.012
M2-8:2FTS	7.683	529.0 -> 81.0	30359	5.00	µg/L	0.000
M3-MeFOSAA	7.940	573.0 -> 419.0	226822	5.00	µg/L	0.000
M3-HFPO-DA	5.792	287.0 -> 169.0	421935	10.00	µg/L	0.000
M5-EtFOSAA	8.123	589.0 -> 419.0	177525	5.00	µg/L	0.000
M7-MeFOSE	10.475	623.0 -> 59.0	879537	25.00	µg/L	-0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1091412	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	90624	2.50	µg/L	-0.012
M3-MeFOSA	10.567	515.0 -> 169.0	82066	2.50	µg/L	-0.012
13C4-PFOS	8.008	503.0 -> 80.0	61220	2.50	µg/L	0.000
13C3-PFBA	2.886	216.0 -> 172.0	343542	5.00	µg/L	0.000
18O2-PFHxS	6.999	403.0 -> 84.0	38293	2.50	µg/L	0.000
13C4-PFOA	6.910	417.0 -> 372.0	454934	2.50	µg/L	-0.012
13C2-PFDA	7.871	515.0 -> 470.0	157326	1.25	µg/L	-0.012
13C5-PFNA	7.416	468.0 -> 423.0	175545	1.25	µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	258245	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	12638	5.94	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 118.7%		
13C2-6:2FTS	6.696	429.0 -> 81.0	25999	5.64	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 112.9%		
13C2-8:2FTS	7.683	529.0 -> 81.0	30359	5.51	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 110.1%		
13C2-PFDoDA	8.691	615.0 -> 570.0	209815	1.19	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 95.5%		
13C2-PFTeDA	9.406	715.0 -> 670.0	171521	1.16	µg/L	-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 92.4%		
13C3-PFBS	5.368	302.0 -> 99.0	26486	2.81	µg/L	0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 112.5%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	6.999	402.0 -> 99.0	35583	2.63	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.2%			
13C4-PFBA	2.896	217.0 -> 172.0	813804	10.03	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 100.3%			
13C4-PFHpA	6.304	367.0 -> 322.0	312701	2.54	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.8%			
13C5-PFHxA	5.464	318.0 -> 273.0	284395	2.51	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 100.2%			
13C5-PFPeA	4.319	268.0 -> 223.0	433482	5.23	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 104.6%			
13C6-PFDA	7.870	519.0 -> 474.0	191182	1.26	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.5%			
13C7-PFUnDA	8.298	570.0 -> 525.0	241739	1.30	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 103.8%			
13C8-FOSA	9.303	506.0 -> 78.0	172134	2.62	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.6%			
13C8-PFOA	6.910	421.0 -> 376.0	472993	2.52	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 101.0%			
13C8-PFOS	8.007	507.0 -> 99.0	38645	2.66	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.3%			
13C9-PFNA	7.416	472.0 -> 427.0	191750	1.26	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 100.7%			
d3-MeFOSAA	7.940	573.0 -> 419.0	226822	5.51	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 110.2%			
13C3-HFPO-DA	5.792	287.0 -> 169.0	421935	10.44	µg/L		0.000
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 104.4%			
d3-MeFOSA	10.567	515.0 -> 169.0	82066	2.61	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 104.3%			
d5-EtFOSAA	8.123	589.0 -> 419.0	177525	5.40	µg/L		0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 108.0%			
d7-MeFOSE	10.475	623.0 -> 59.0	879537	25.23	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 100.9%			
d9-EtFOSE	10.746	639.0 -> 59.0	1091412	25.64	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 102.5%			
d5-EtFOSA	10.825	531.0 -> 169.0	90624	2.67	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 106.8%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	12627	0.58	µg/L		93
		327.0 -> 81.0	6180				
6:2FTS	6.697	427.0 -> 407.0	15540	0.62	µg/L		94
		427.0 -> 81.0	7690				
8:2FTS	7.683	527.0 -> 507.0	14147	0.64	µg/L		97
		527.0 -> 81.0	5337				
EtFOSAA	8.124	584.0 -> 419.0	5630	0.18	µg/L	m	99
		584.0 -> 483.0	2803				
FOSA	9.306	498.0 -> 78.0	10745	0.17	µg/L	m	99
		498.0 -> 478.0	228				
MeFOSAA	7.941	570.0 -> 419.0	6495	0.17	µg/L		98
		570.0 -> 512.0	2264				
PFBA	2.889	213.0 -> 169.0	17953	0.68	µg/L		100
PFBS	5.369	299.0 -> 80.0	4090	0.14	µg/L		98
		299.0 -> 99.0	1735				
PFDA	7.871	513.0 -> 469.0	22676	0.17	µg/L		97
		513.0 -> 219.0	4790				
PFDoDA	8.692	613.0 -> 569.0	26995	0.16	µg/L		98
		613.0 -> 319.0	3801				

Perfluorinated Compounds by LC/MS/MS

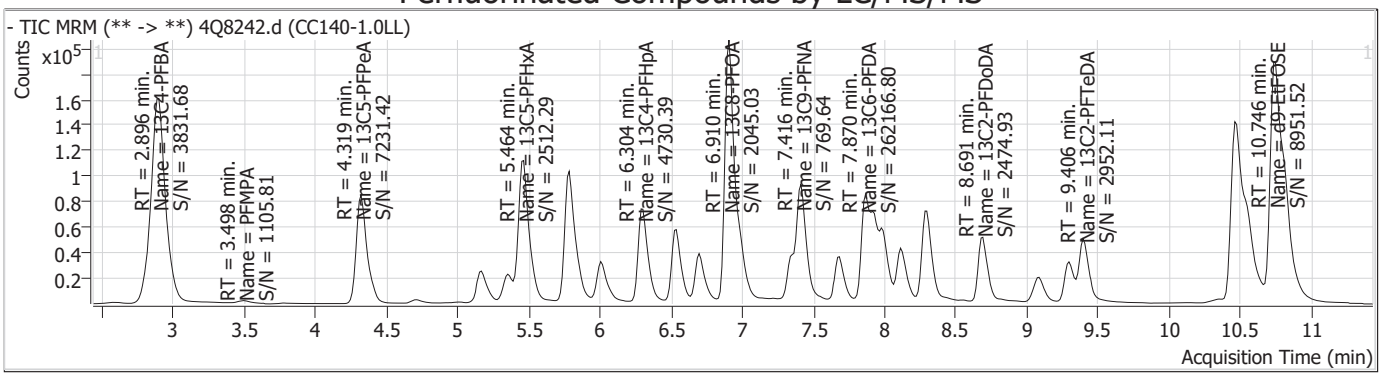
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.829	599.0 -> 80.0	3237	0.15	µg/L		94
		599.0 -> 99.0	1695				
PFHpA	6.304	363.0 -> 319.0	30008	0.17	µg/L		99
		363.0 -> 169.0	6140				
PFHpS	7.541	449.0 -> 80.0	4533	0.15	µg/L		93
		449.0 -> 99.0	2746				
PFHxA	5.467	313.0 -> 269.0	20499	0.18	µg/L		98
		313.0 -> 119.0	802				
PFHxS	7.000	399.0 -> 80.0	4513	0.15	µg/L	m	90
		399.0 -> 99.0	2696				
PFNA	7.416	463.0 -> 419.0	18654	0.17	µg/L	m	95
		463.0 -> 219.0	7189				
PFNS	8.437	549.0 -> 80.0	3917	0.15	µg/L		83
		549.0 -> 99.0	2715				
PFOA	6.910	413.0 -> 369.0	27935	0.18	µg/L	m	93
		413.0 -> 169.0	7136				
PFOS	7.996	499.0 -> 80.0	4318	0.14	µg/L	m	89
		499.0 -> 99.0	2758				
PFPeA	4.321	263.0 -> 219.0	21695	0.32	µg/L		100
PFPeS	6.331	349.0 -> 80.0	4791	0.15	µg/L		91
		349.0 -> 99.0	2702				
PFTeDA	9.406	713.0 -> 669.0	31173	0.17	µg/L		98
		713.0 -> 219.0	2456				
PFTrDA	9.063	663.0 -> 619.0	31238	0.17	µg/L		100
		663.0 -> 369.0	1989				
PFUnDA	8.299	563.0 -> 519.0	23209	0.16	µg/L		96
		563.0 -> 269.0	4805				
11Cl-PF3OUdS	9.102	631.0 -> 451.0	51046	0.58	µg/L		100
		633.0 -> 453.0	15793				
9Cl-PF3ONS	8.313	531.0 -> 351.0	58955	0.59	µg/L		95
		533.0 -> 353.0	16972				
ADONA	6.540	377.0 -> 251.0	198643	0.58	µg/L		100
		377.0 -> 85.0	65280				
HFPO-DA	5.792	285.0 -> 169.0	29071	0.66	µg/L		100
		285.0 -> 185.0	3414				
3:3FTCA	3.781	241.0 -> 177.0	3323	0.81	µg/L		96
		241.0 -> 117.0	359				
5:3FTCA	6.019	341.0 -> 237.0	89220	4.00	µg/L		96
		341.0 -> 217.0	61717				
7:3FTCA	7.355	441.0 -> 337.0	121992	3.82	µg/L		97
		441.0 -> 317.0	54174				
EtFOSA	10.826	526.0 -> 219.0	6134	0.17	µg/L		93
		526.0 -> 169.0	9141				
EtFOSE	10.760	630.0 -> 59.0	78108	1.61	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	7374	0.17	µg/L		99
		512.0 -> 219.0	4816				
MeFOSE	10.488	616.0 -> 59.0	62621	1.67	µg/L	m	100
PFDoDS	9.533	699.0 -> 80.0	2604	0.15	µg/L		92
		699.0 -> 99.0	1738				
NFDHA	5.345	295.0 -> 201.0	5120	0.40	µg/L		71
		201.0 -> 85.0	21157				
		295.0 -> 85.0	1416				
PFMBA	4.710	279.0 -> 85.0	14788	0.32	µg/L		100
PFMPA	3.498	229.0 -> 85.0	12252	0.31	µg/L		100
PFEESA	5.849	315.0 -> 135.0	32935	0.30	µg/L		100
		315.0 -> 69.0	2741				

Perfluorinated Compounds by LC/MS/MS

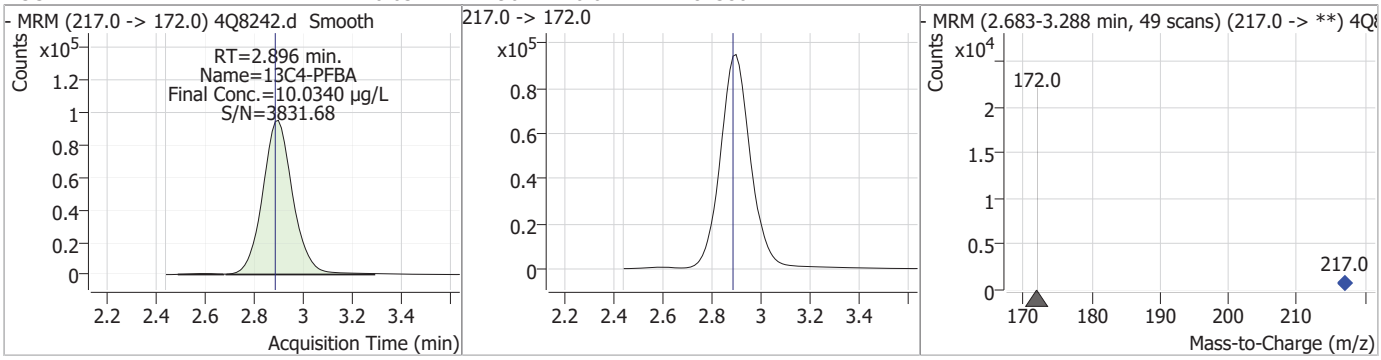
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

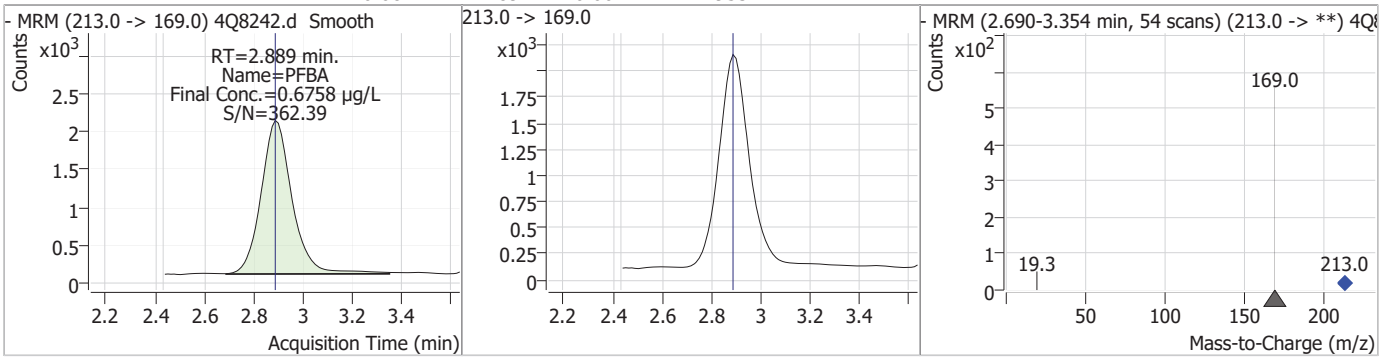
Perfluorinated Compounds by LC/MS/MS



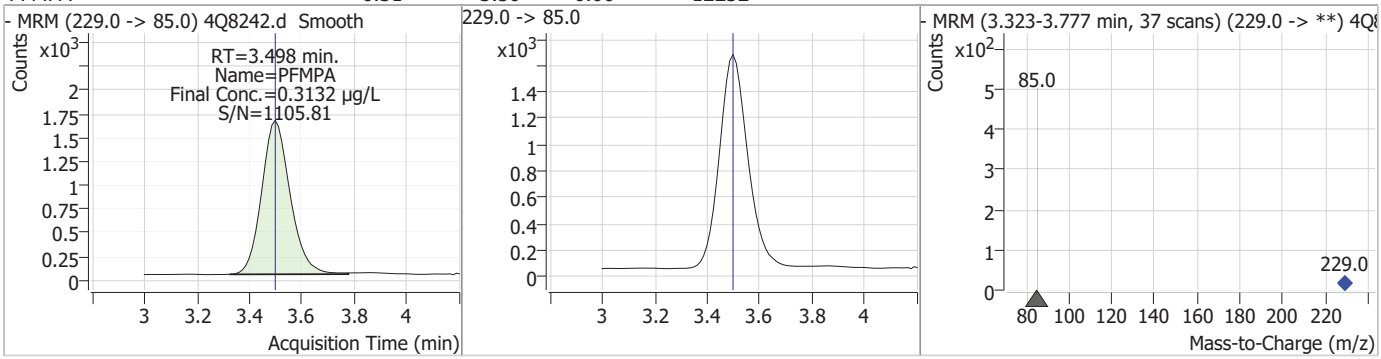
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	10.03	2.90	0.01	813804				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	0.68	2.89	0.00	17953				

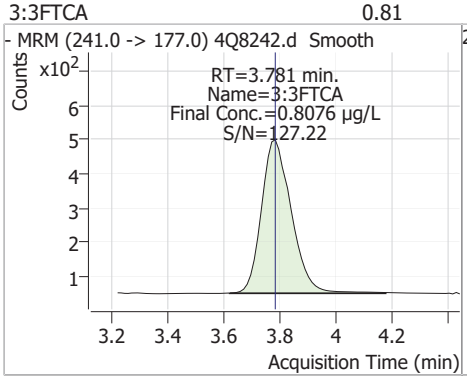


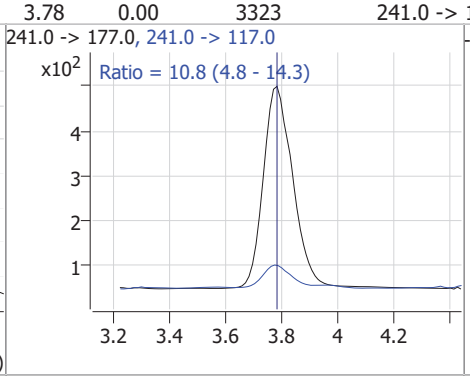
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	0.31	3.50	0.00	12252				

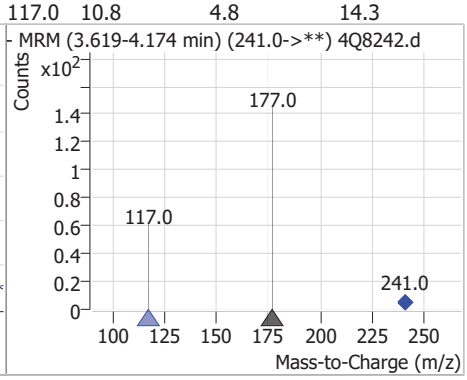


Perfluorinated Compounds by LC/MS/MS

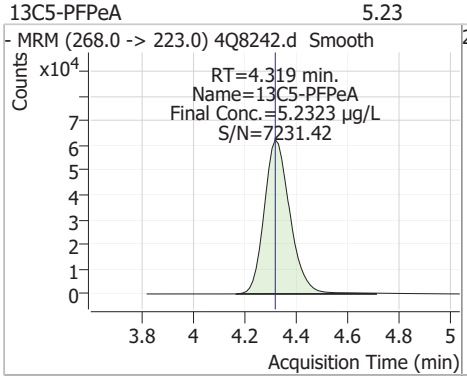
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	0.81	3.78	0.00	3323	241.0 -> 117.0	10.8	4.8	14.3

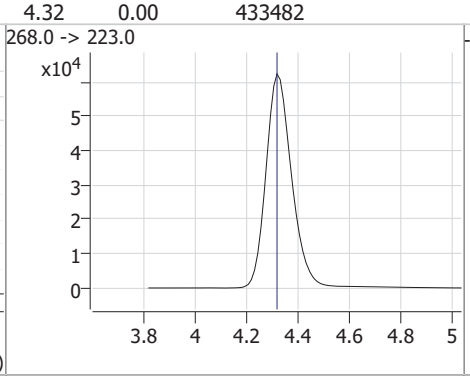


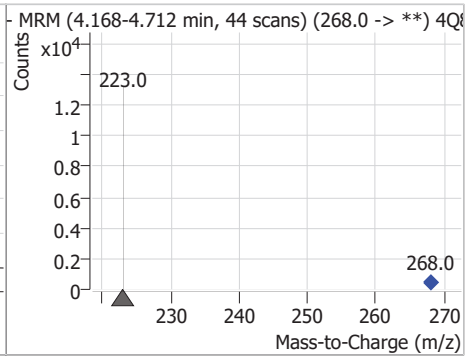




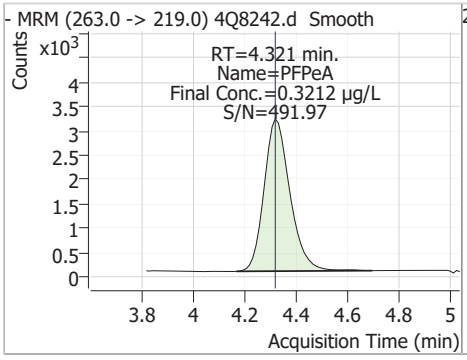
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	5.23	4.32	0.00	433482				

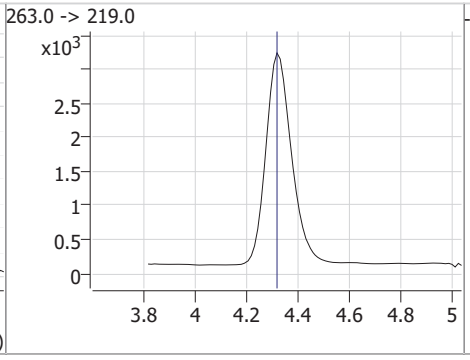


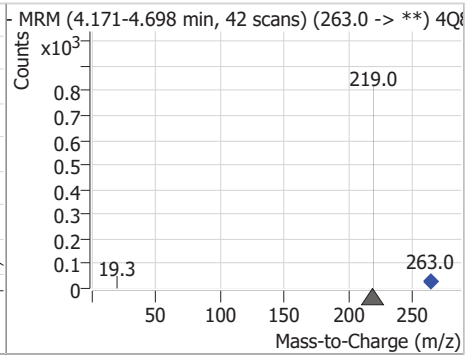




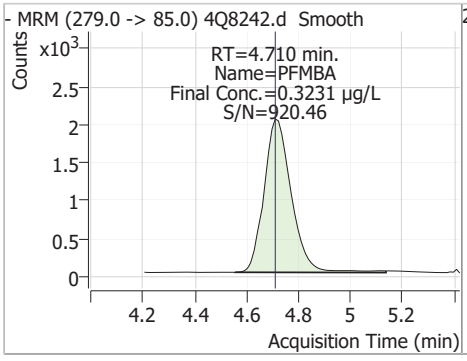
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	0.32	4.32	0.00	21695				

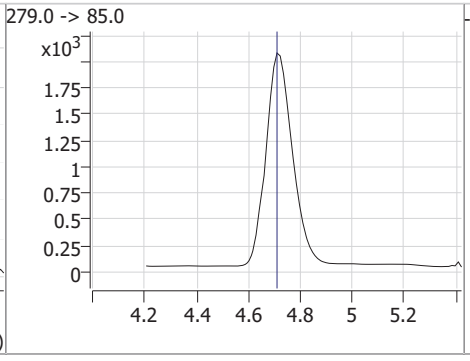


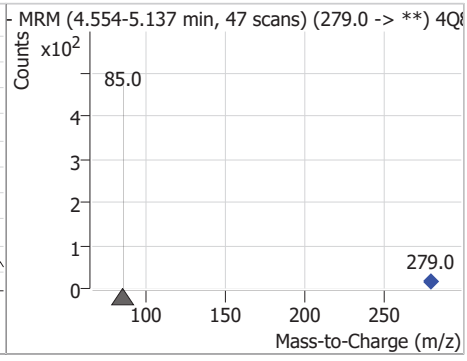




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	0.32	4.71	0.00	14788				

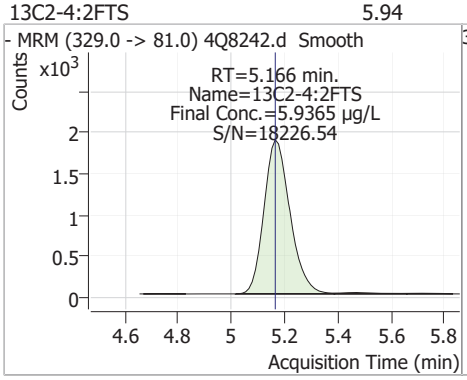


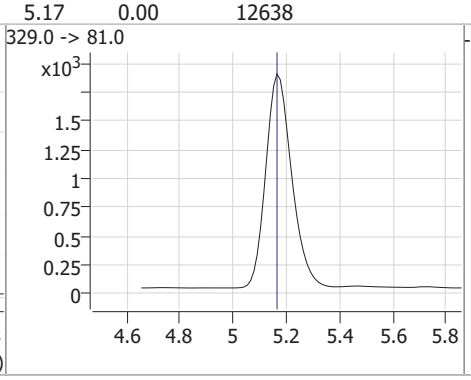


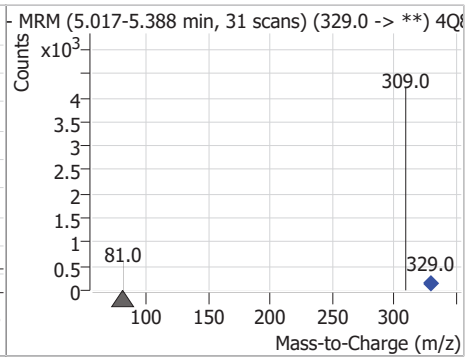


Perfluorinated Compounds by LC/MS/MS

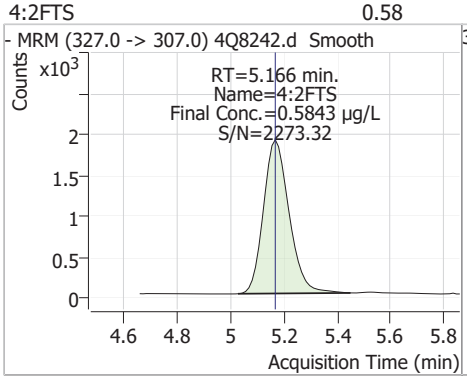
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	5.94	5.17	0.00	12638				

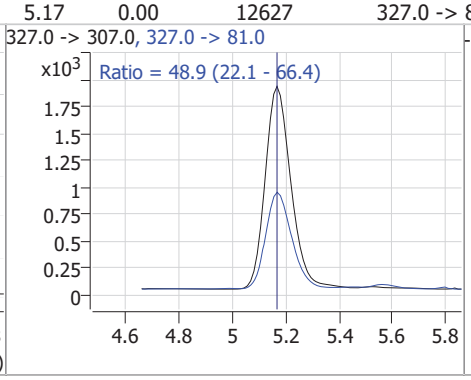


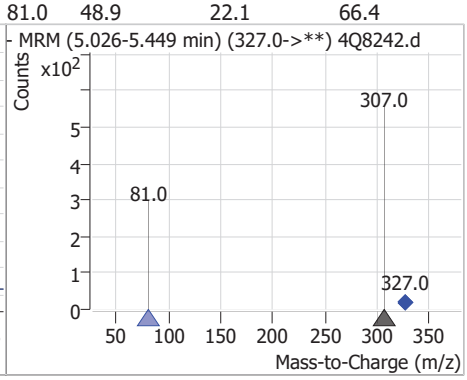




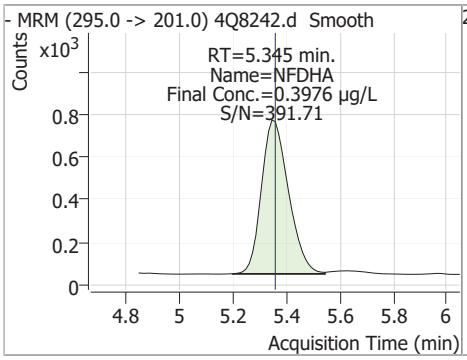
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	0.58	5.17	0.00	12627	327.0 -> 81.0	48.9	22.1	66.4

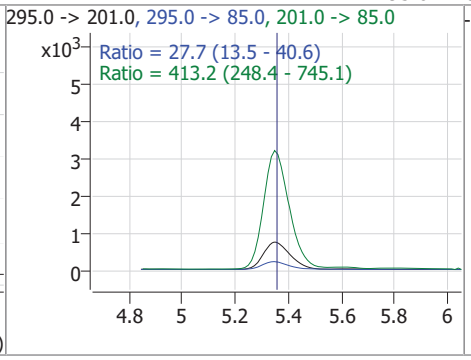


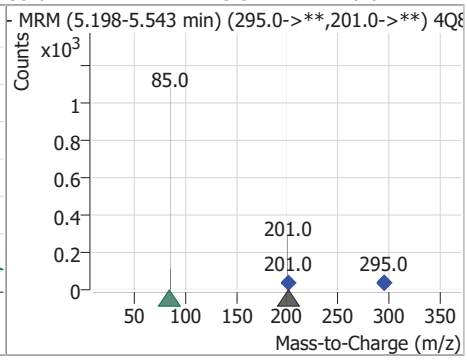




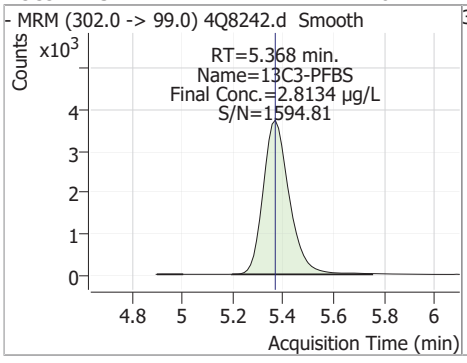
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	0.40	5.35	-0.01	5120	201.0 -> 85.0	413.2	248.4	745.1
					295.0 -> 85.0	27.7	13.5	40.6

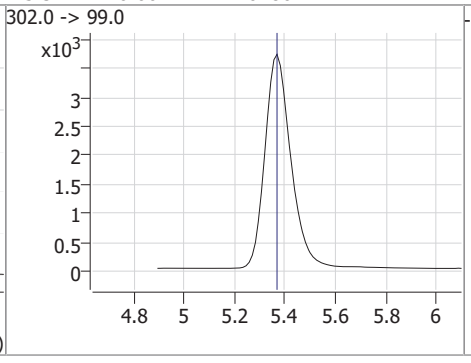


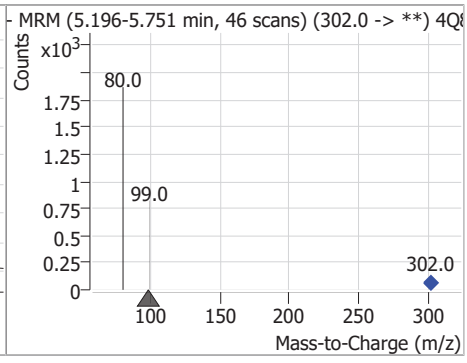




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.81	5.37	0.00	26486				

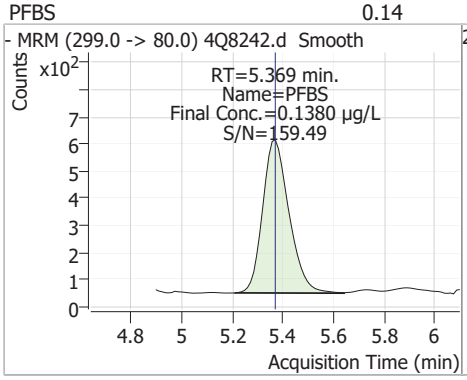


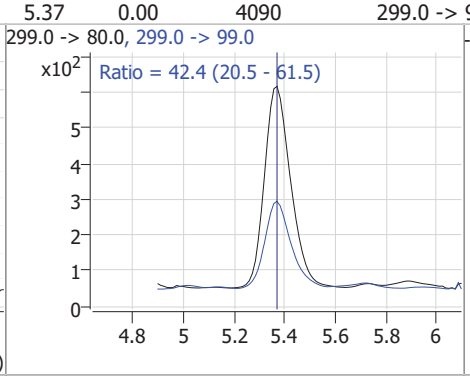


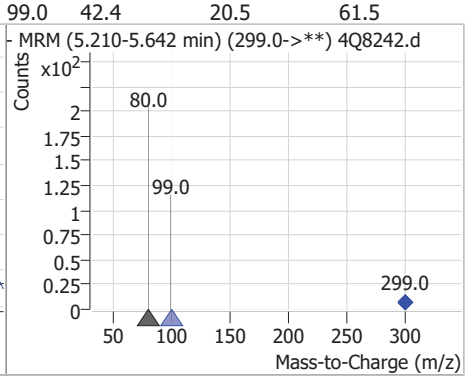


Perfluorinated Compounds by LC/MS/MS

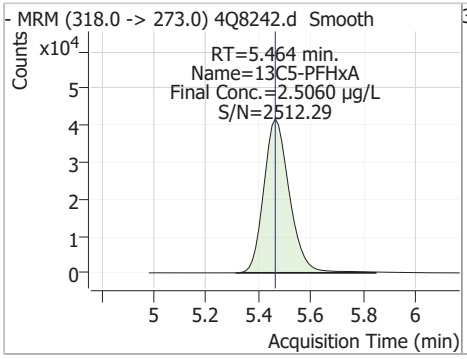
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	0.14	5.37	0.00	4090	299.0 -> 99.0	42.4	20.5	61.5

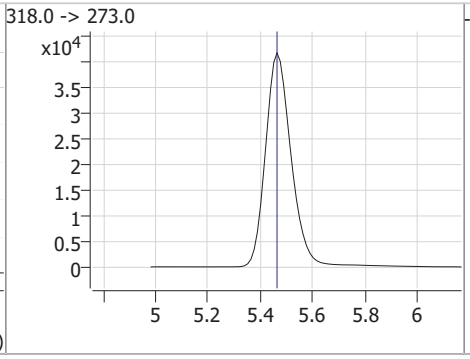


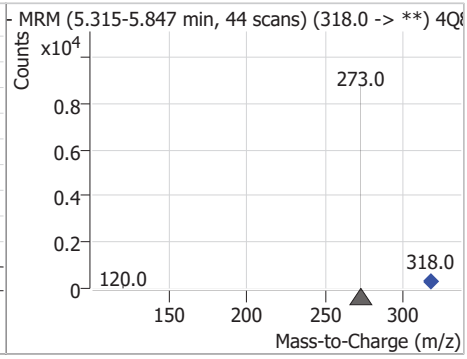




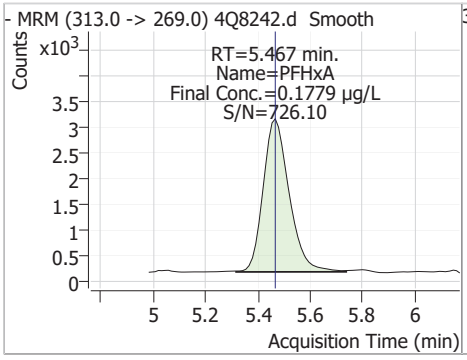
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.51	5.46	0.00	284395				

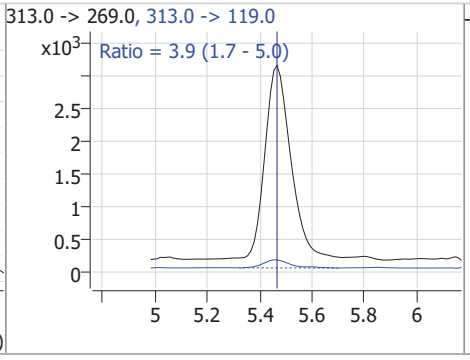


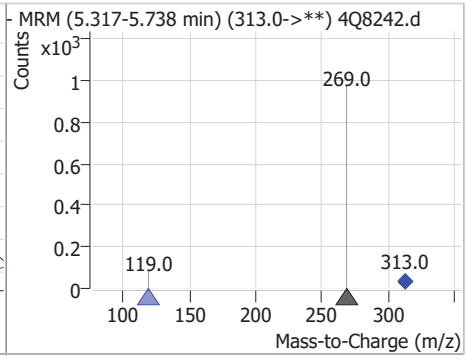




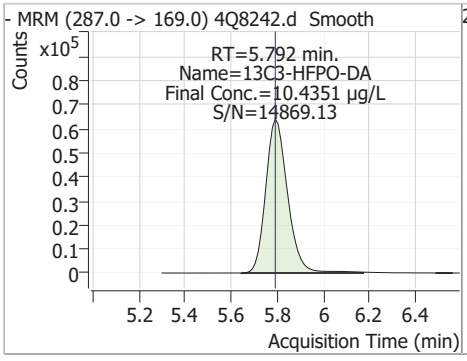
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	0.18	5.47	0.00	20499	313.0 -> 119.0	3.9	1.7	5.0

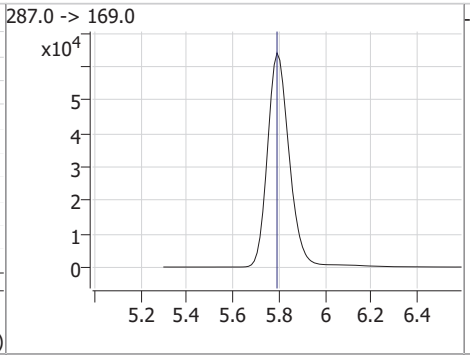


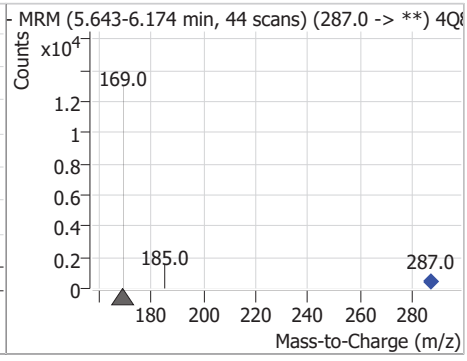




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	10.44	5.79	0.00	421935				





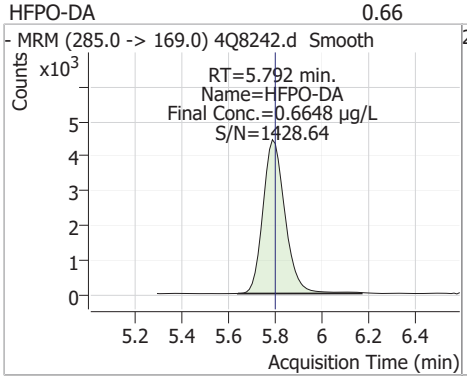


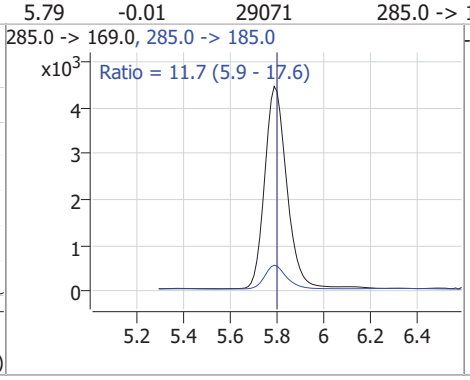
7.6.72

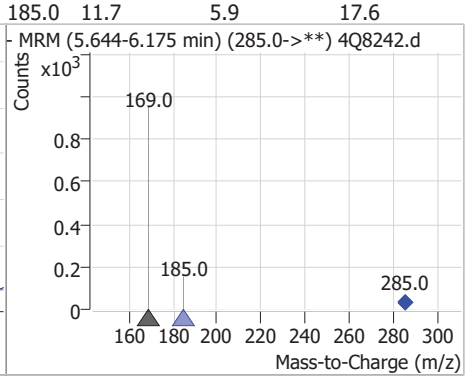
7

Perfluorinated Compounds by LC/MS/MS

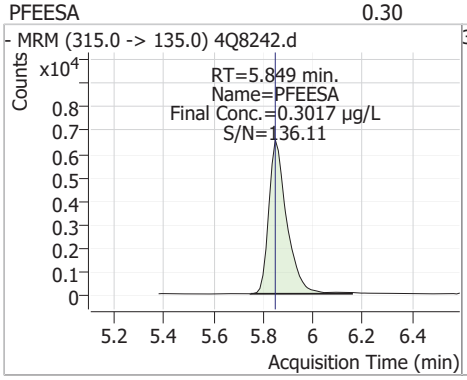
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	0.66	5.79	-0.01	29071	285.0 -> 185.0	11.7	5.9	17.6

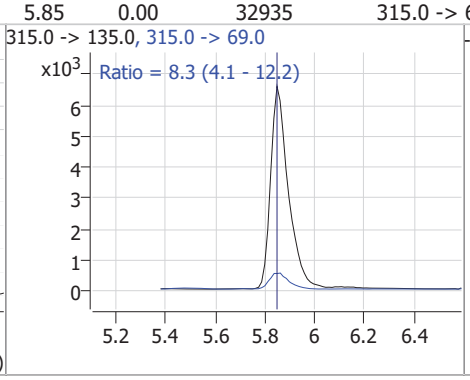


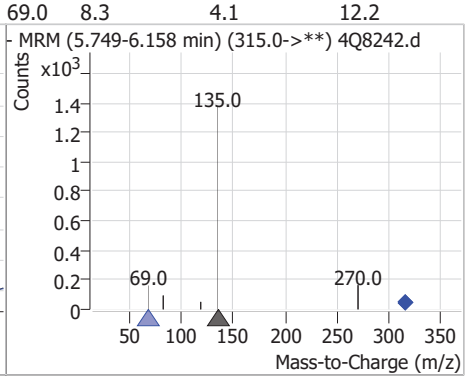




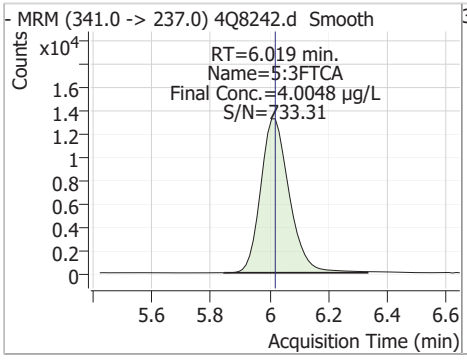
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	0.30	5.85	0.00	32935	315.0 -> 69.0	8.3	4.1	12.2

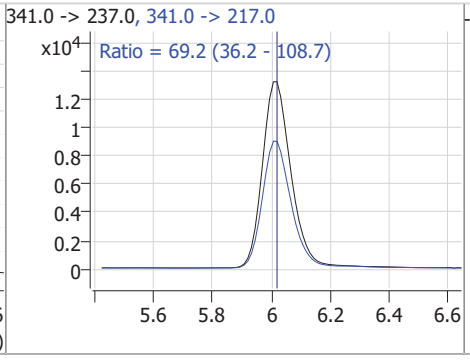


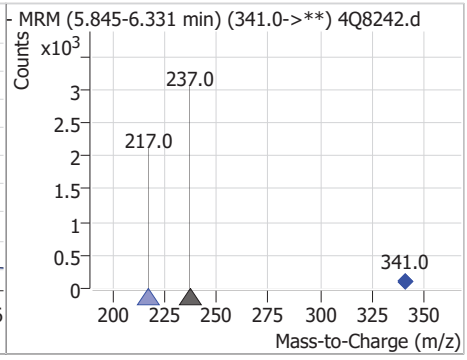




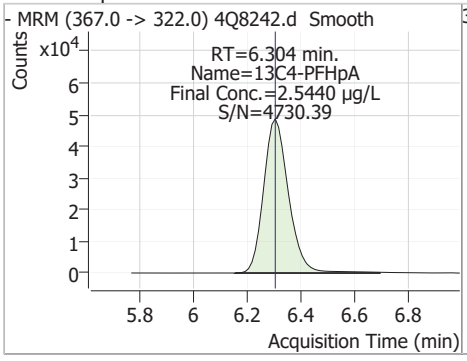
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	4.00	6.02	0.00	89220	341.0 -> 217.0	69.2	36.2	108.7

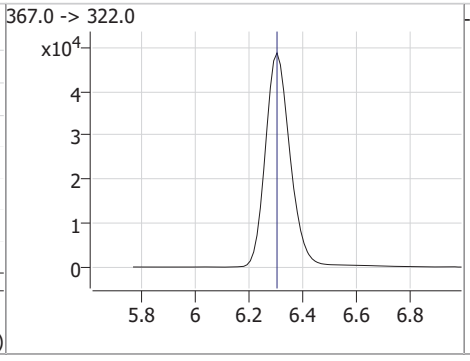


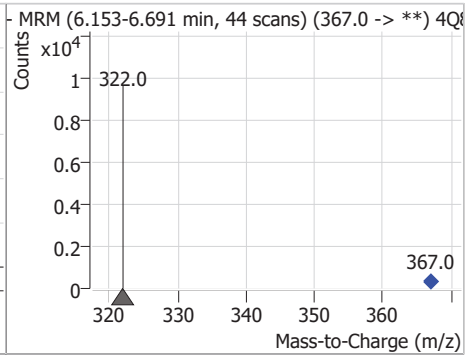




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.54	6.30	0.00	312701				







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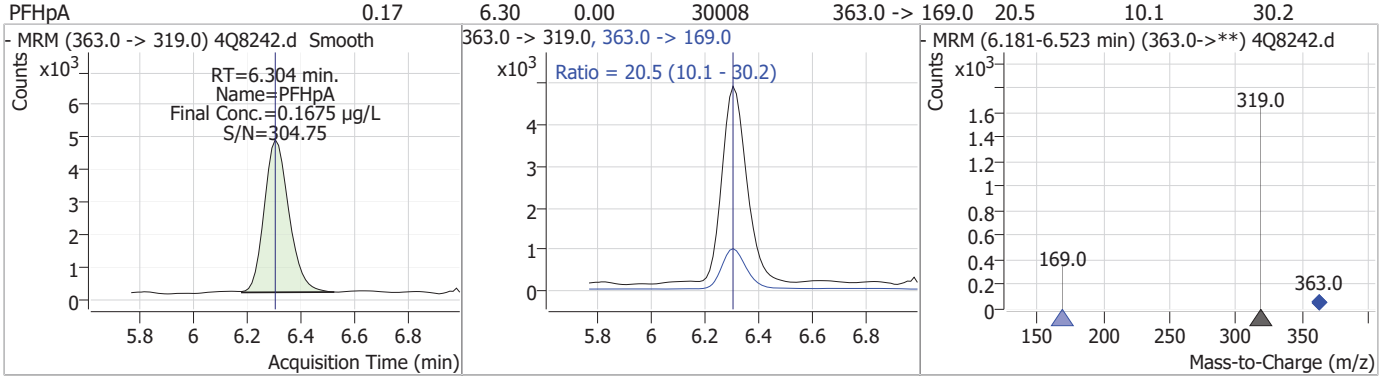
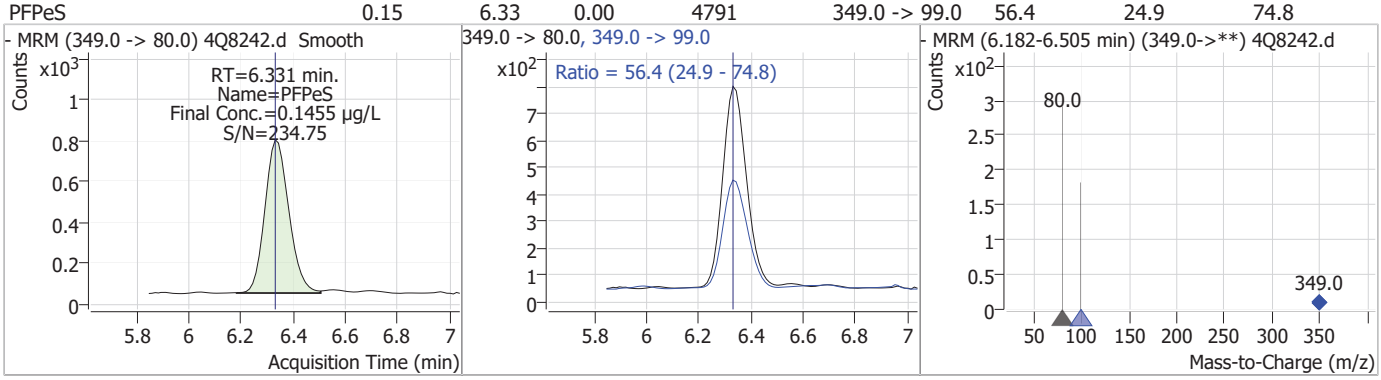
Perfluorinated Compounds by LC/MS/MS

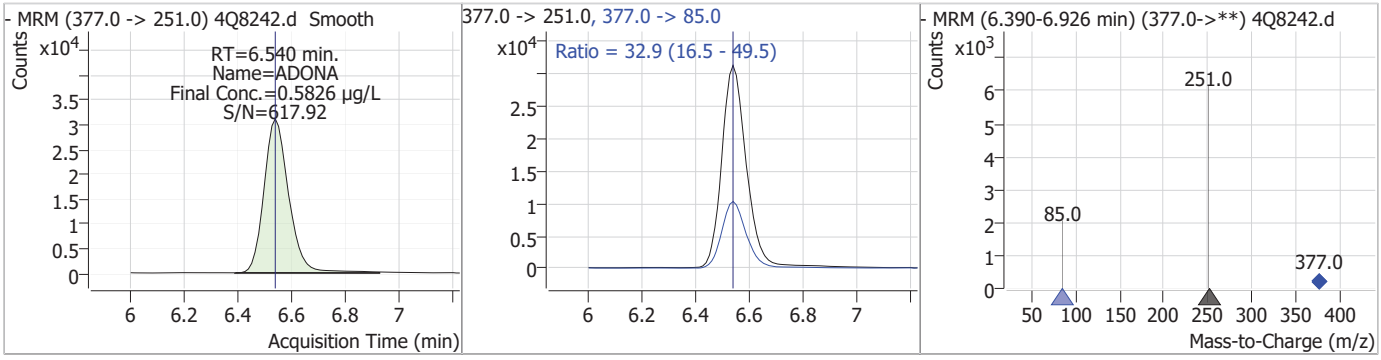
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	0.17	6.30	0.00	30008	363.0 -> 169.0	20.5	10.1	30.2



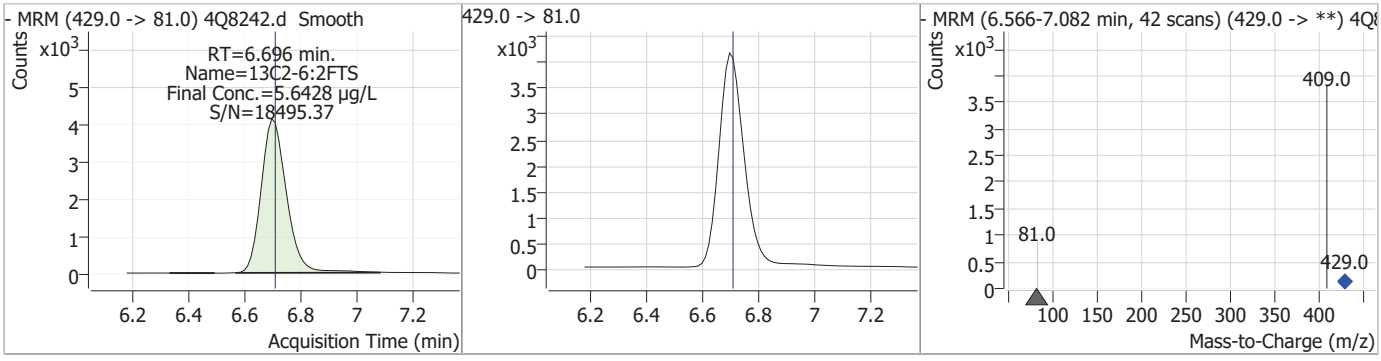
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	0.15	6.33	0.00	4791	349.0 -> 99.0	56.4	24.9	74.8



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	0.58	6.54	0.00	198643	377.0 -> 85.0	32.9	16.5	49.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.64	6.70	-0.01	25999				



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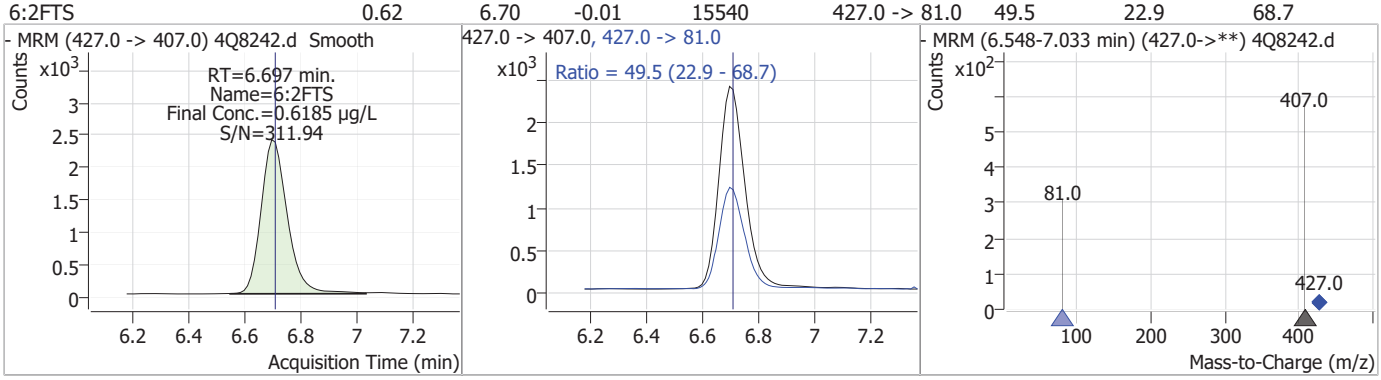
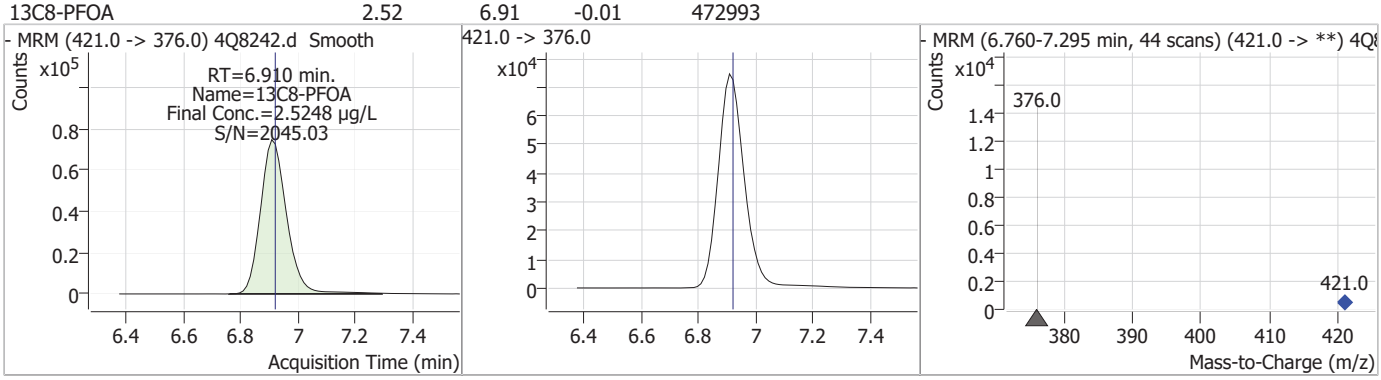
Perfluorinated Compounds by LC/MS/MS

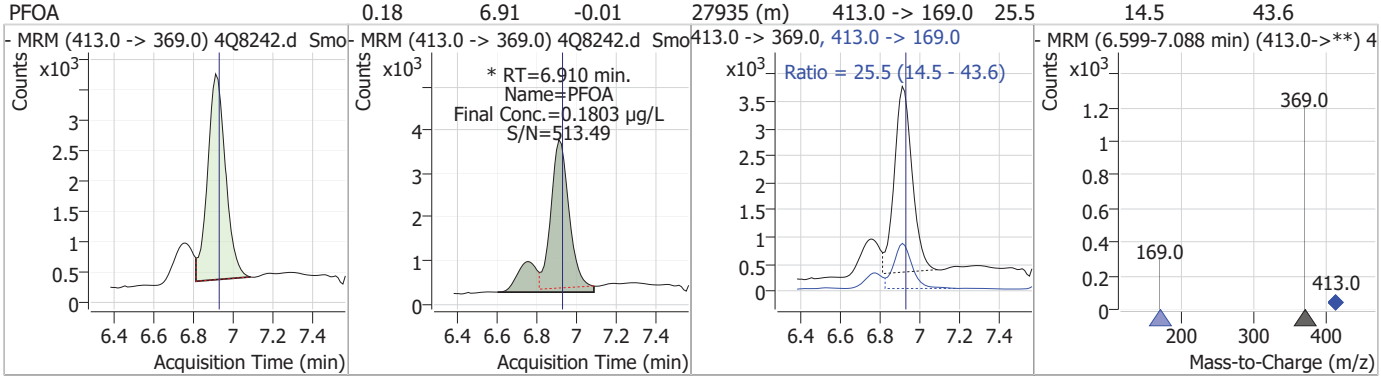
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	0.62	6.70	-0.01	15540	427.0 -> 81.0	49.5	22.9	68.7



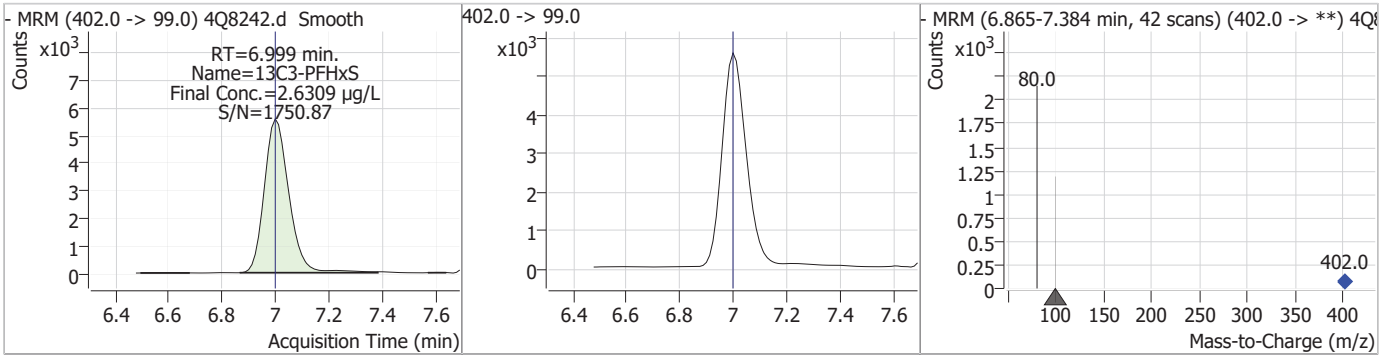
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.52	6.91	-0.01	472993				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	0.18	6.91	-0.01	27935 (m)	413.0 -> 169.0	25.5	14.5	43.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.63	7.00	0.00	35583				



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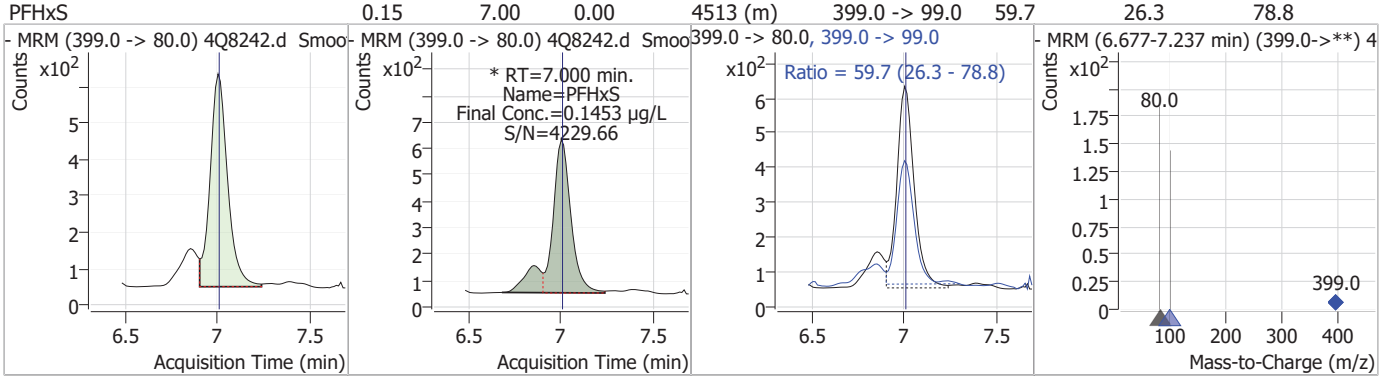
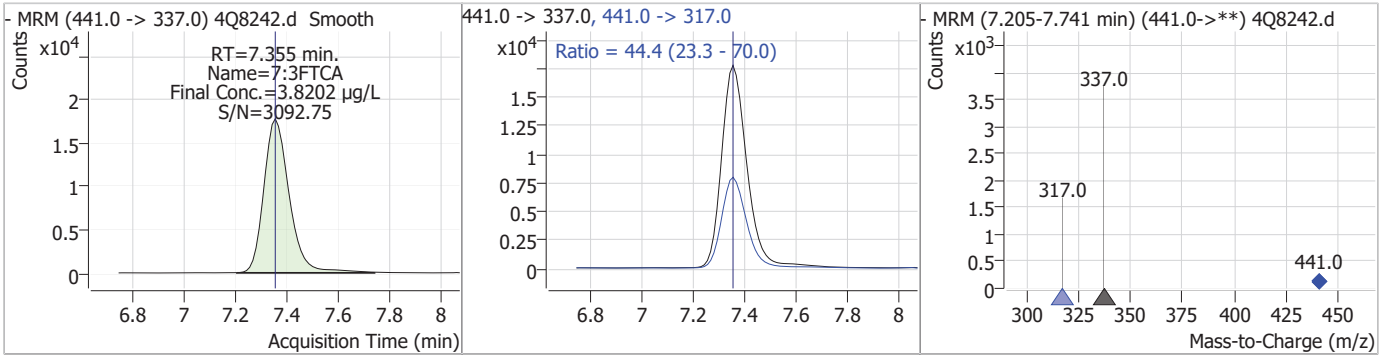
Perfluorinated Compounds by LC/MS/MS

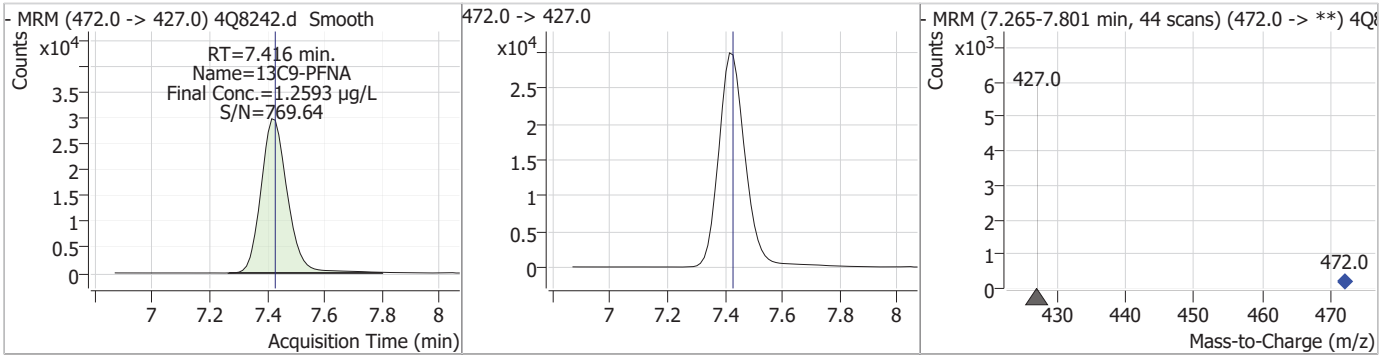
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	0.15	7.00	0.00	4513 (m)	399.0 -> 99.0	59.7	26.3	78.8



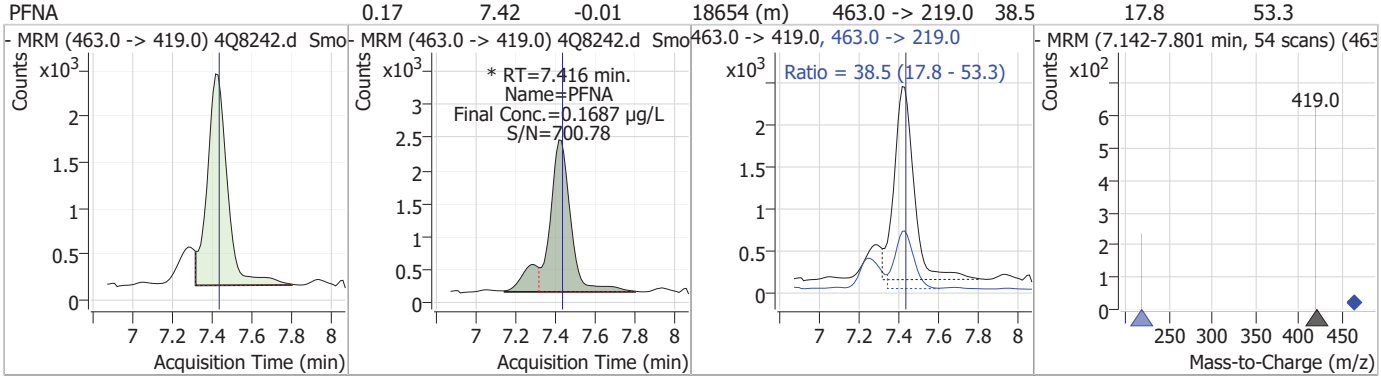
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	3.82	7.35	0.00	121992	441.0 -> 317.0	44.4	23.3	70.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.26	7.42	-0.01	191750				

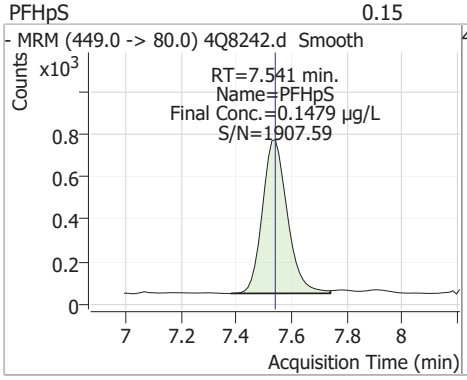


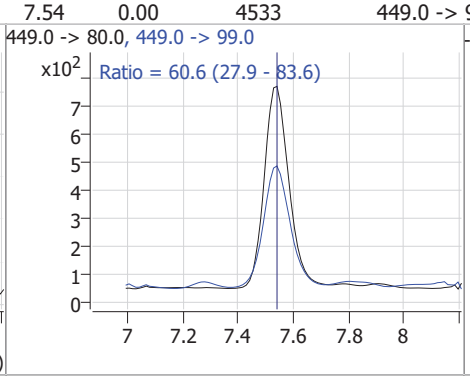
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	0.17	7.42	-0.01	18654 (m)	463.0 -> 219.0	38.5	17.8	53.3

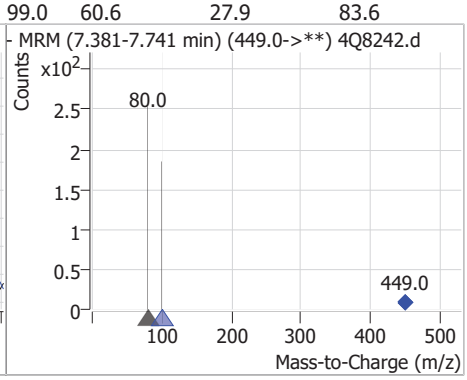


Perfluorinated Compounds by LC/MS/MS

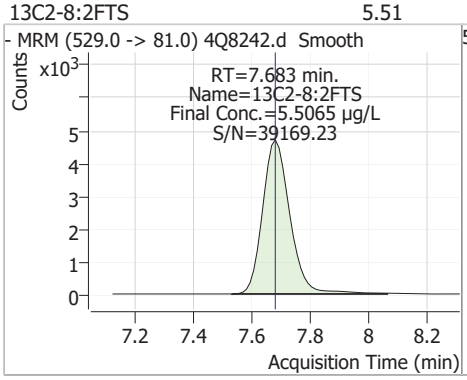
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	0.15	7.54	0.00	4533	449.0 -> 99.0	60.6	27.9	83.6

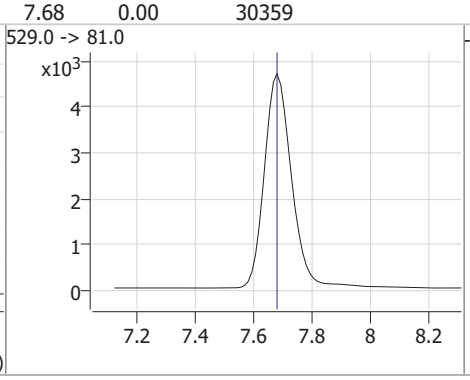


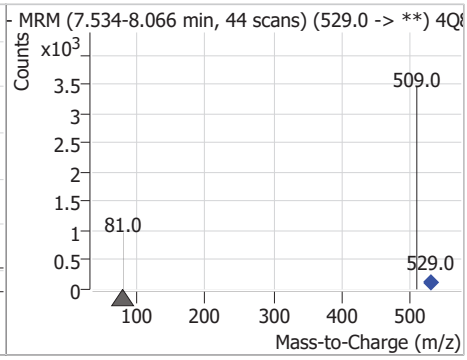




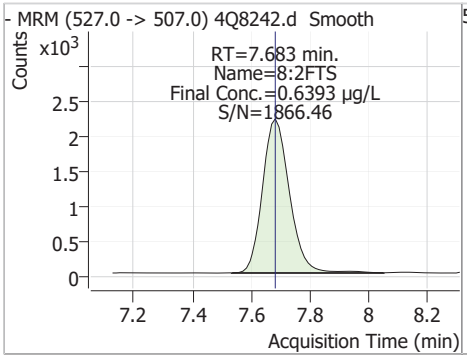
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	5.51	7.68	0.00	30359				

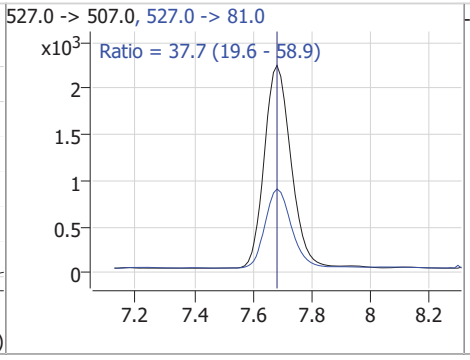


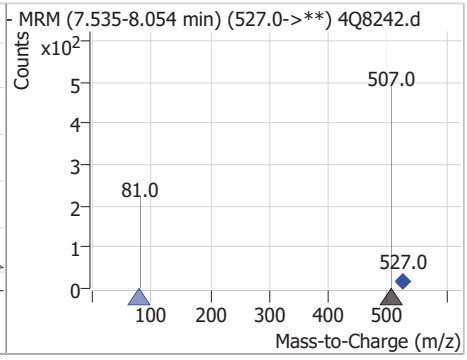




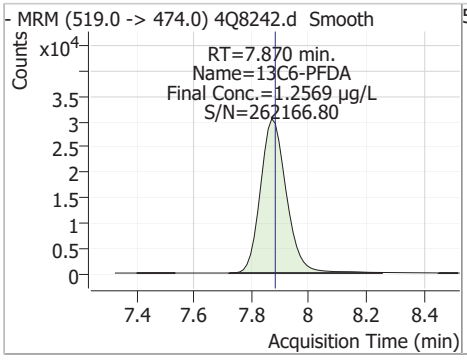
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	0.64	7.68	0.00	14147	527.0 -> 81.0	37.7	19.6	58.9

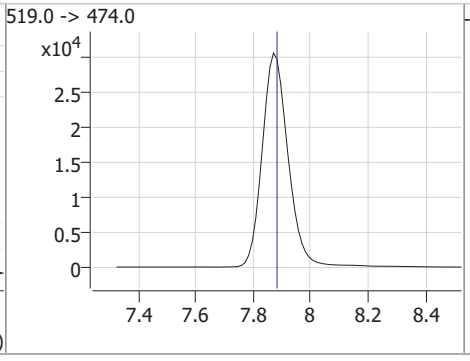


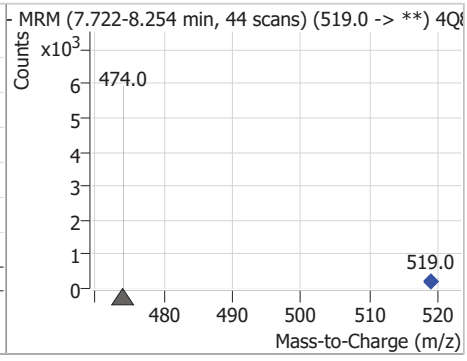




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.26	7.87	-0.01	191182				







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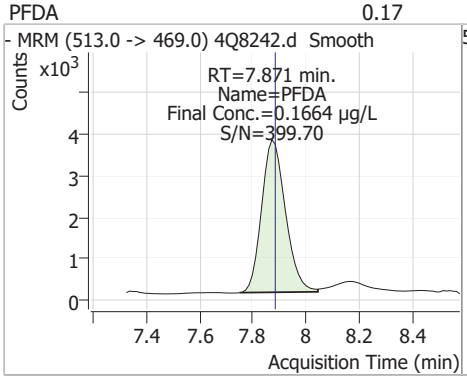
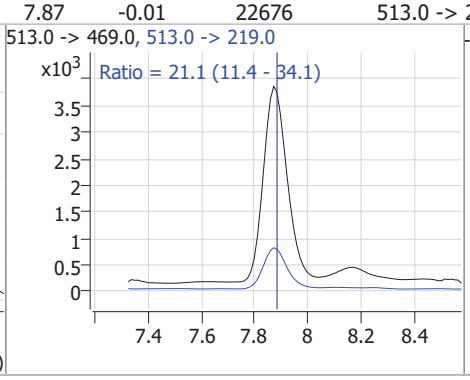
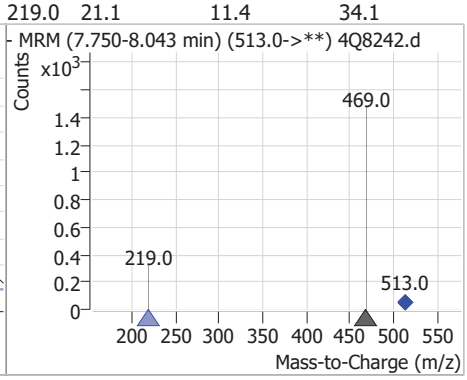
Perfluorinated Compounds by LC/MS/MS

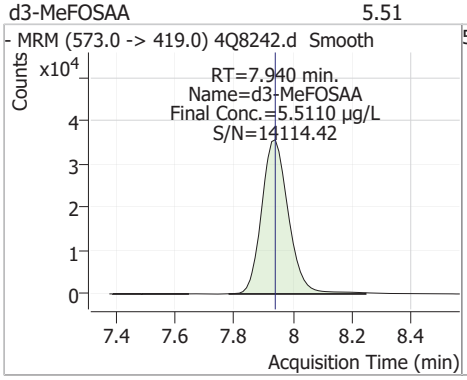
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	0.17	7.87	-0.01	22676	513.0 -> 219.0	21.1	11.4	34.1

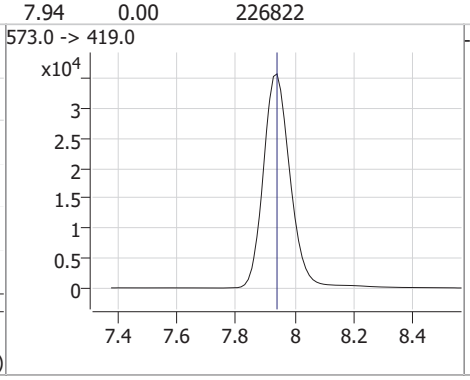


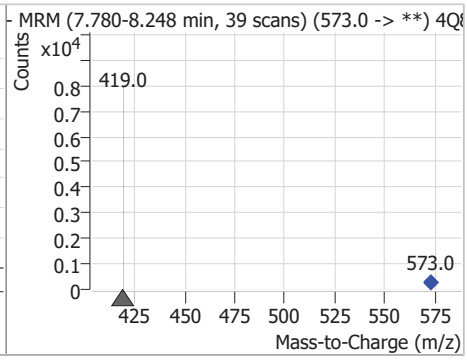




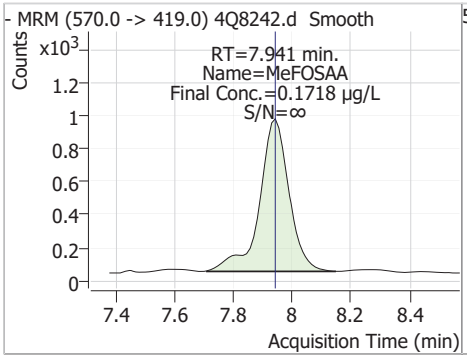
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.51	7.94	0.00	226822				

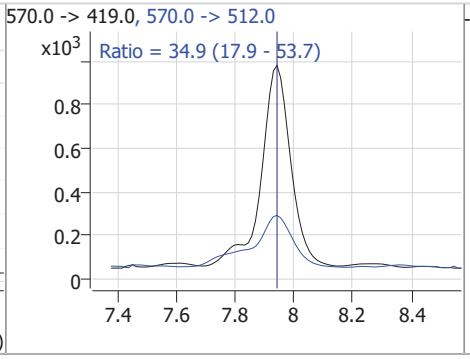


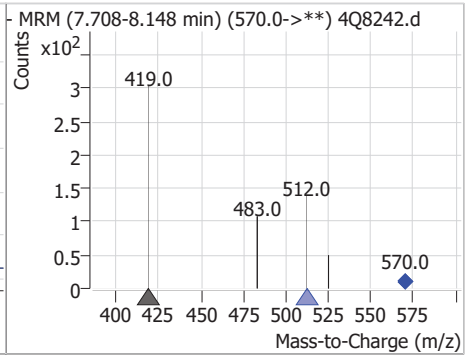




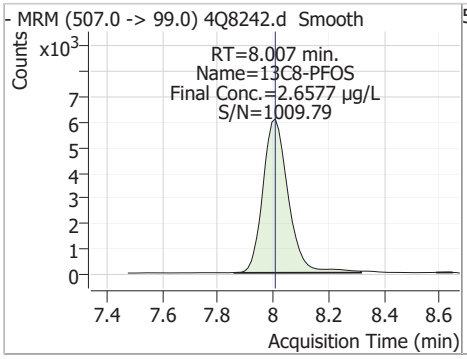
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	0.17	7.94	0.00	6495	570.0 -> 512.0	34.9	17.9	53.7

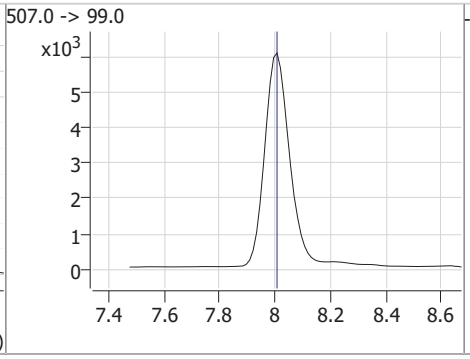


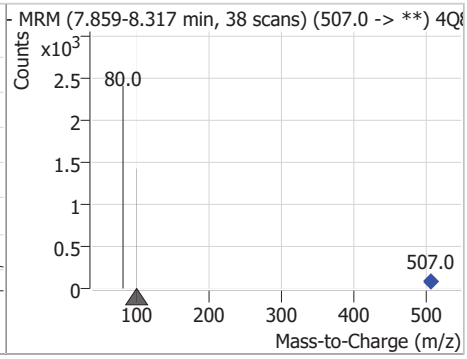




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.66	8.01	0.00	38645				







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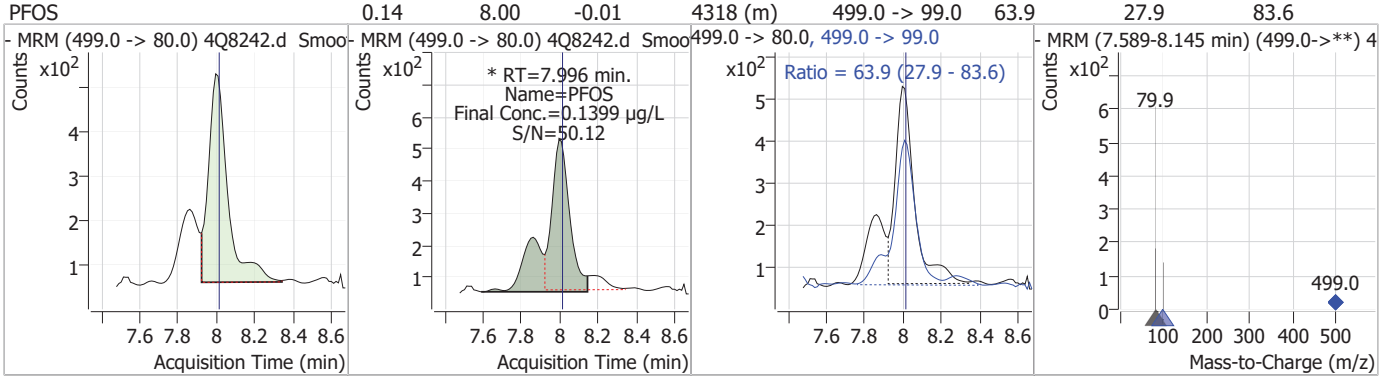
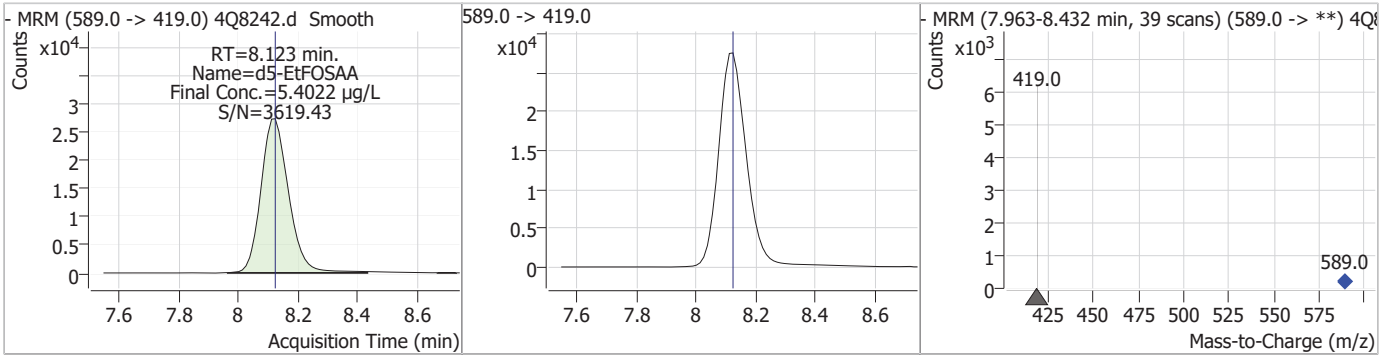
Perfluorinated Compounds by LC/MS/MS

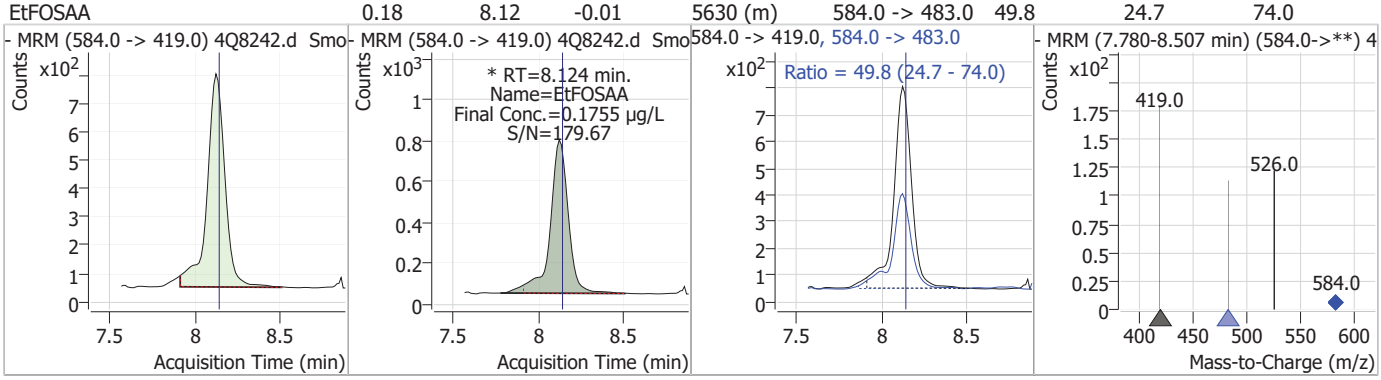
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	0.14	8.00	-0.01	4318 (m)	499.0 -> 99.0	63.9	27.9	83.6



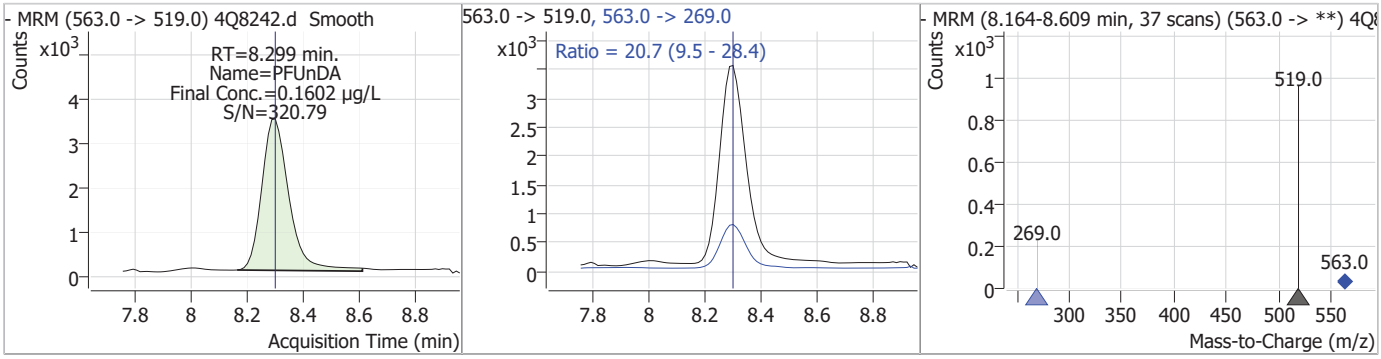
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.40	8.12	0.00	177525				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	0.18	8.12	-0.01	5630 (m)	584.0 -> 483.0	49.8	24.7	74.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	0.16	8.30	0.00	23209	563.0 -> 269.0	20.7	9.5	28.4



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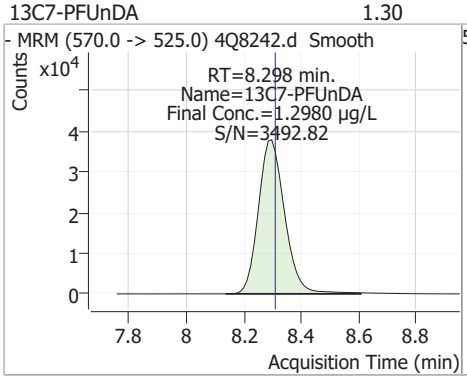
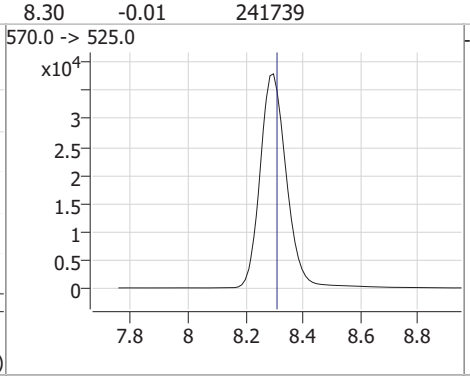
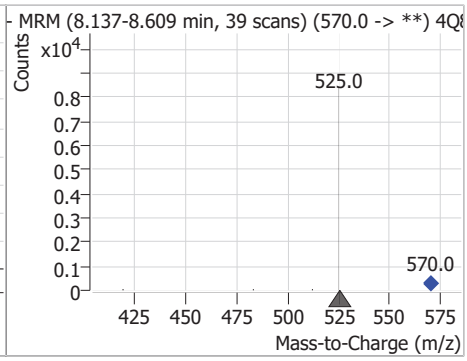
Perfluorinated Compounds by LC/MS/MS

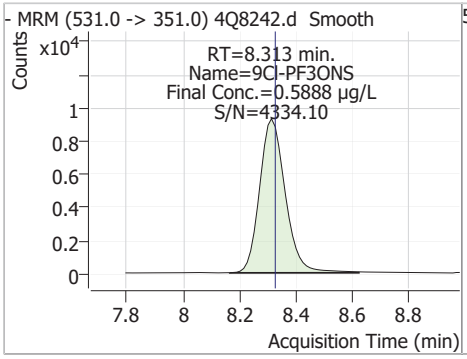
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.30	8.30	-0.01	241739				

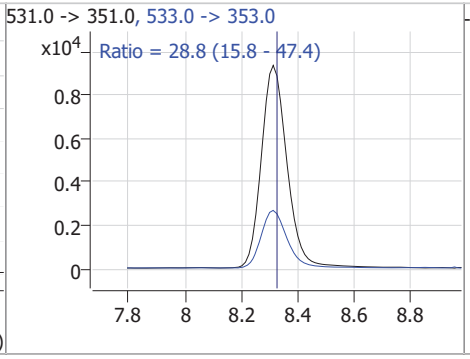


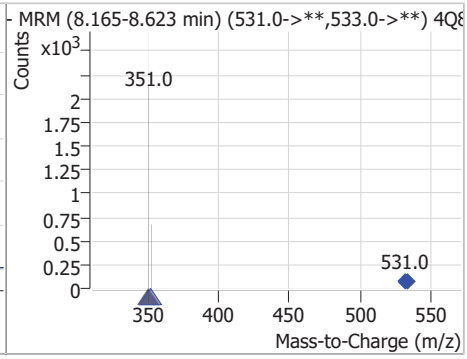




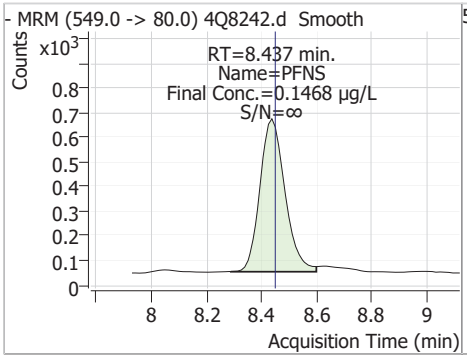
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	0.59	8.31	-0.01	58955	533.0 -> 353.0	28.8	15.8	47.4

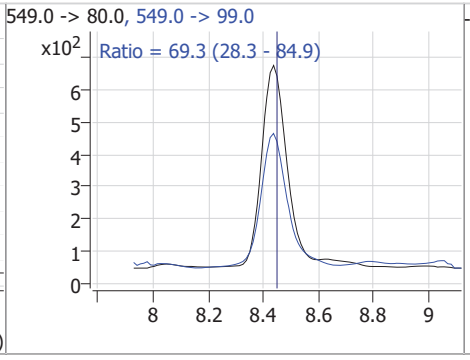


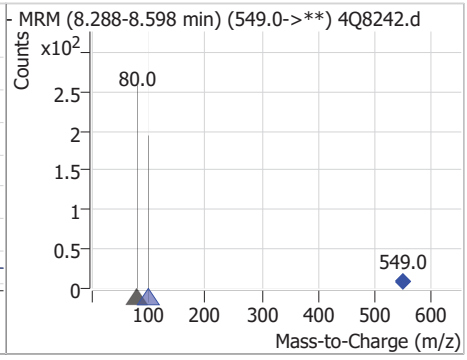




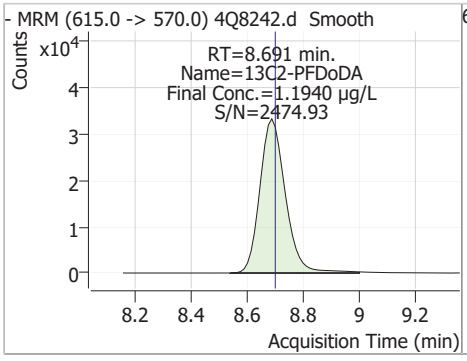
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	0.15	8.44	-0.01	3917	549.0 -> 99.0	69.3	28.3	84.9

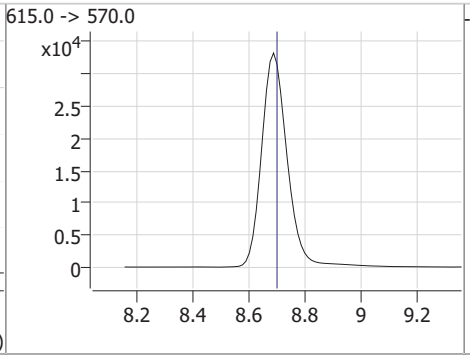


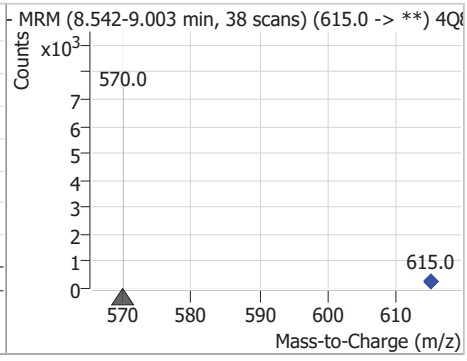




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.19	8.69	-0.01	209815				

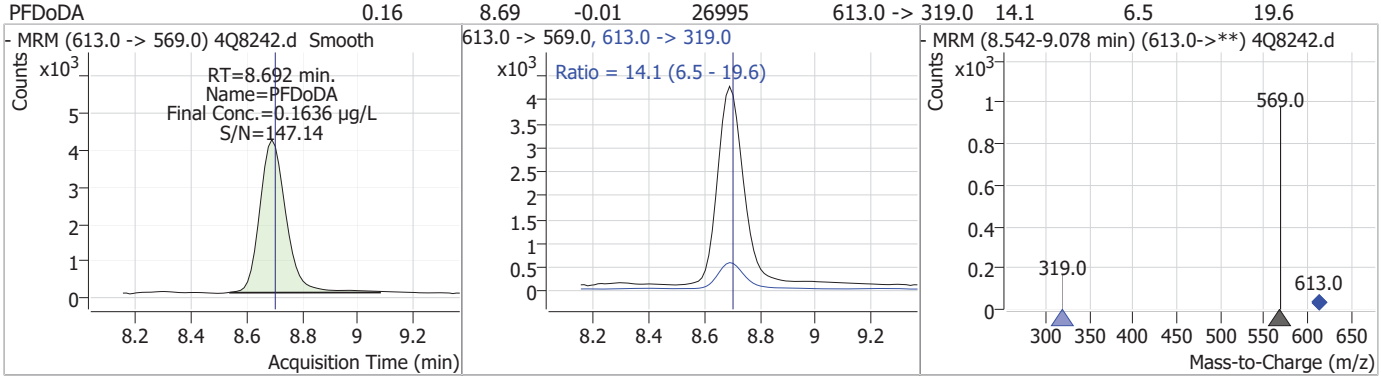




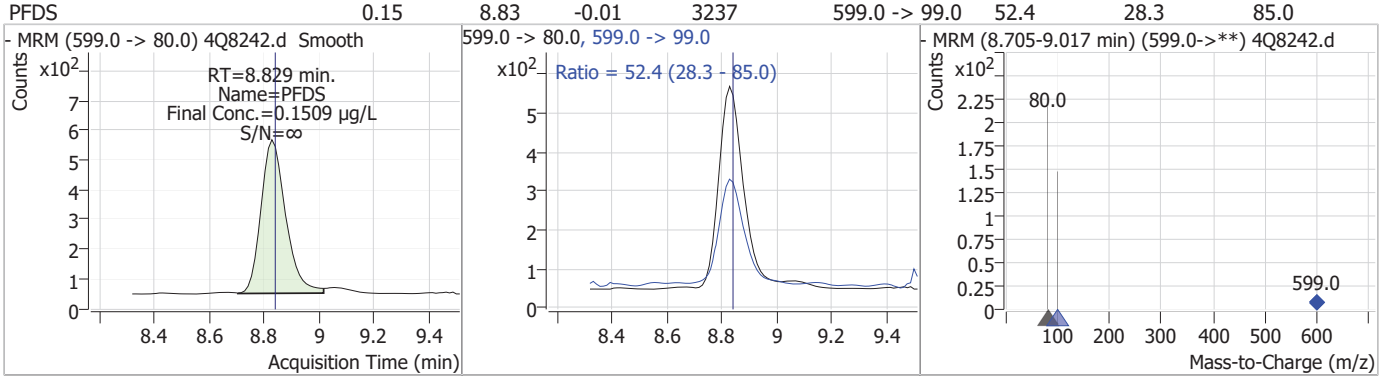


Perfluorinated Compounds by LC/MS/MS

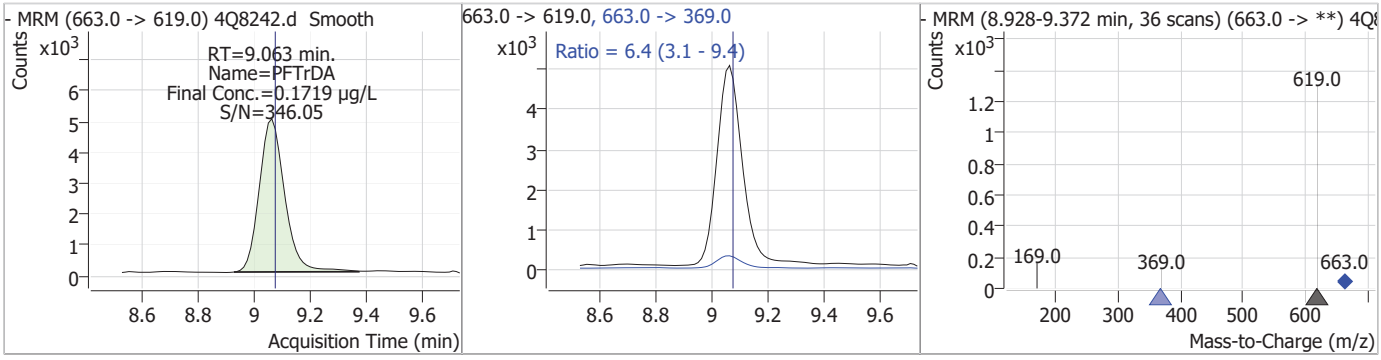
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	0.16	8.69	-0.01	26995	613.0 -> 319.0	14.1	6.5	19.6



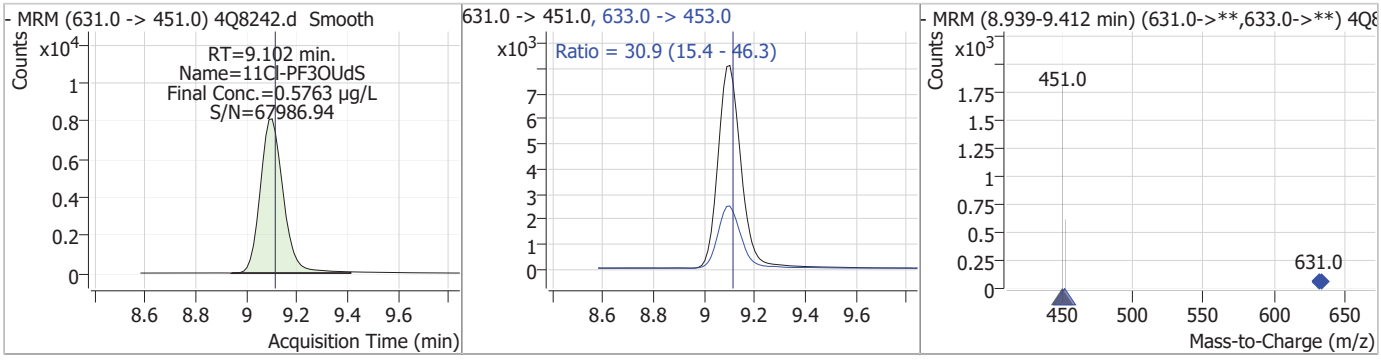
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	0.15	8.83	-0.01	3237	599.0 -> 99.0	52.4	28.3	85.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	0.17	9.06	-0.01	31238	663.0 -> 369.0	6.4	3.1	9.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	0.58	9.10	-0.01	51046	633.0 -> 453.0	30.9	15.4	46.3



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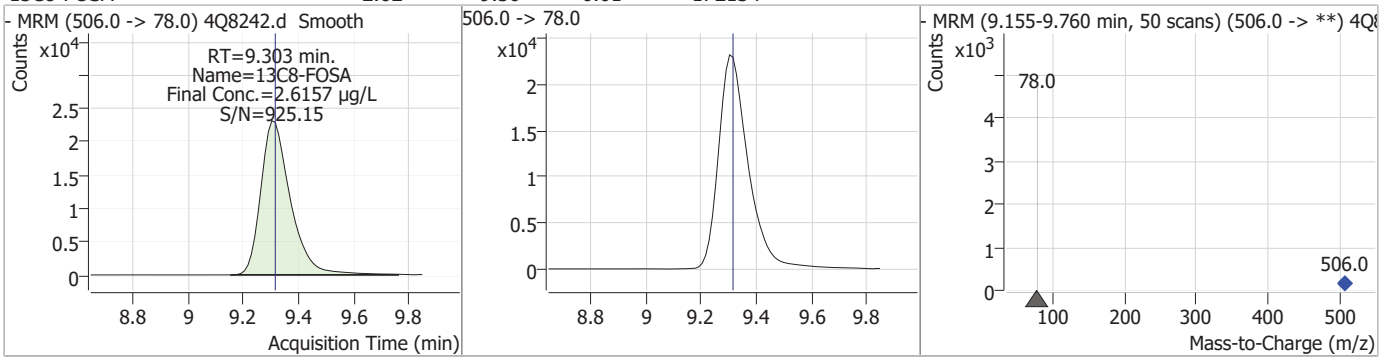
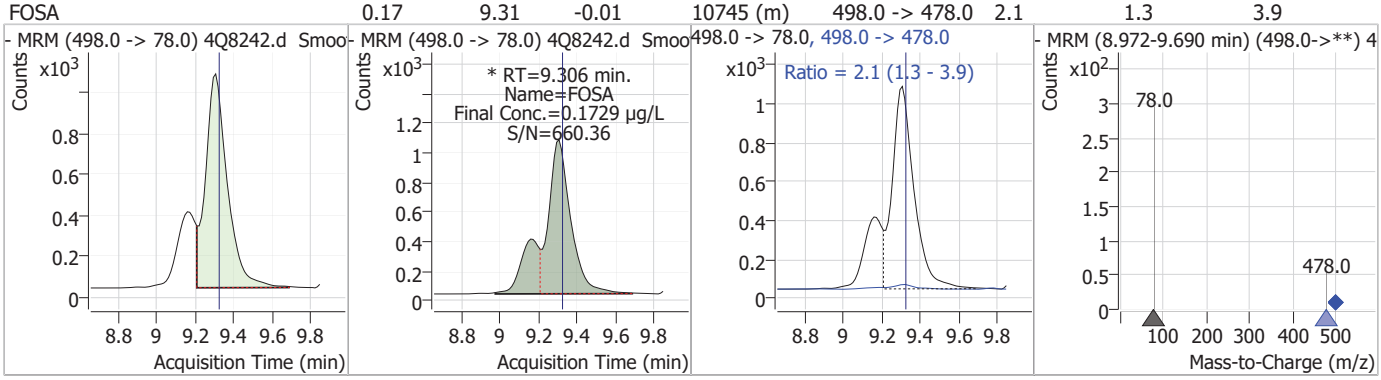
Perfluorinated Compounds by LC/MS/MS

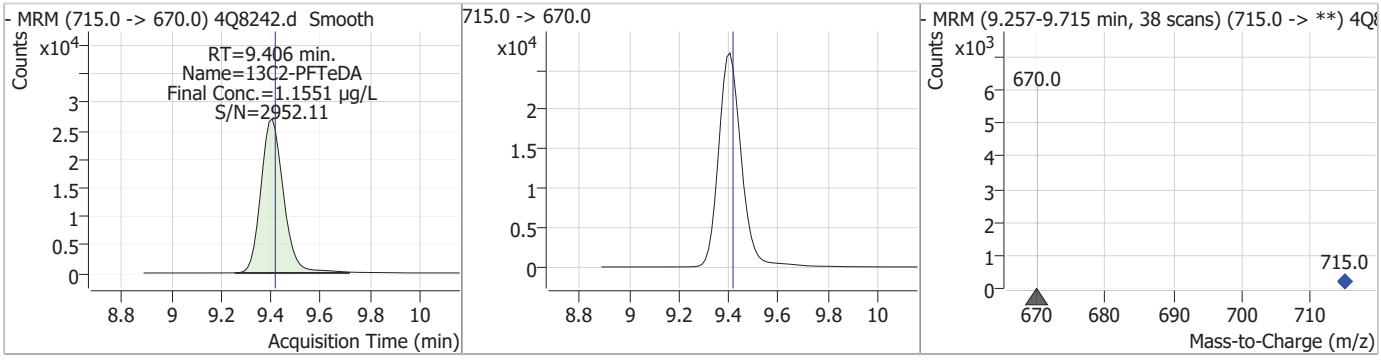
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.62	9.30	-0.01	172134				



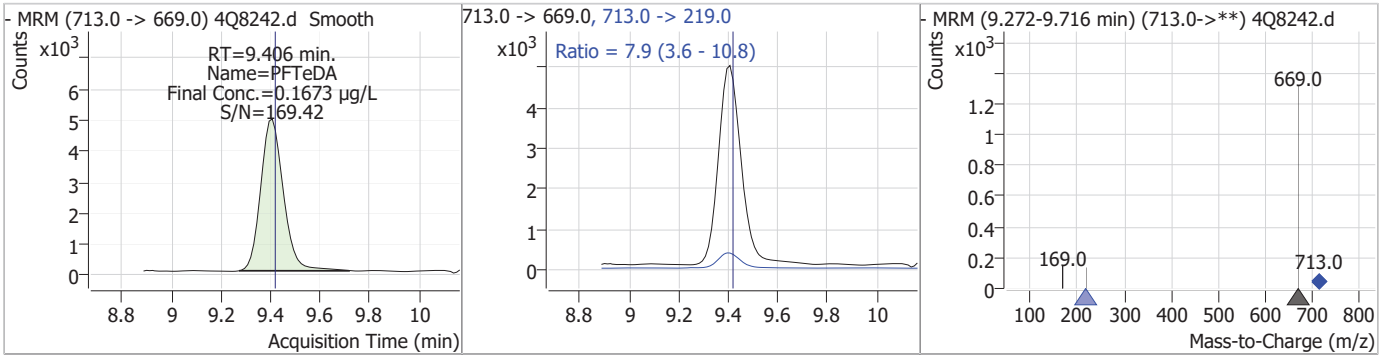
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	0.17	9.31	-0.01	10745 (m)	498.0 -> 478.0	2.1	1.3	3.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.16	9.41	-0.01	171521				

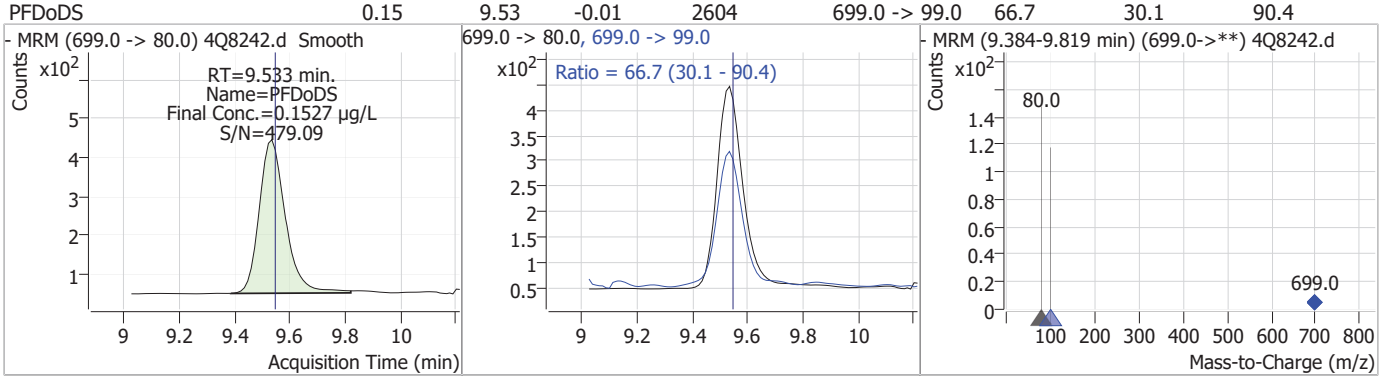


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	0.17	9.41	-0.01	31173	713.0 -> 219.0	7.9	3.6	10.8

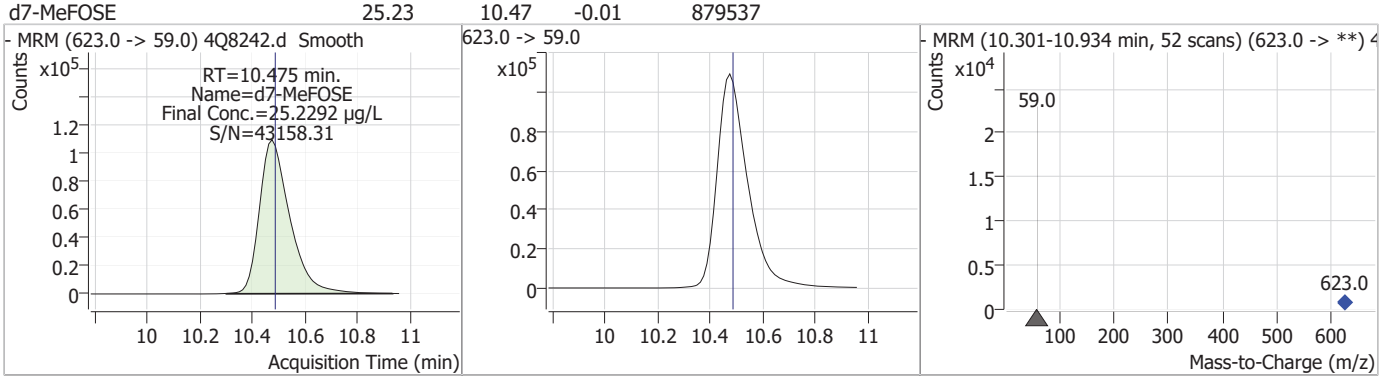


Perfluorinated Compounds by LC/MS/MS

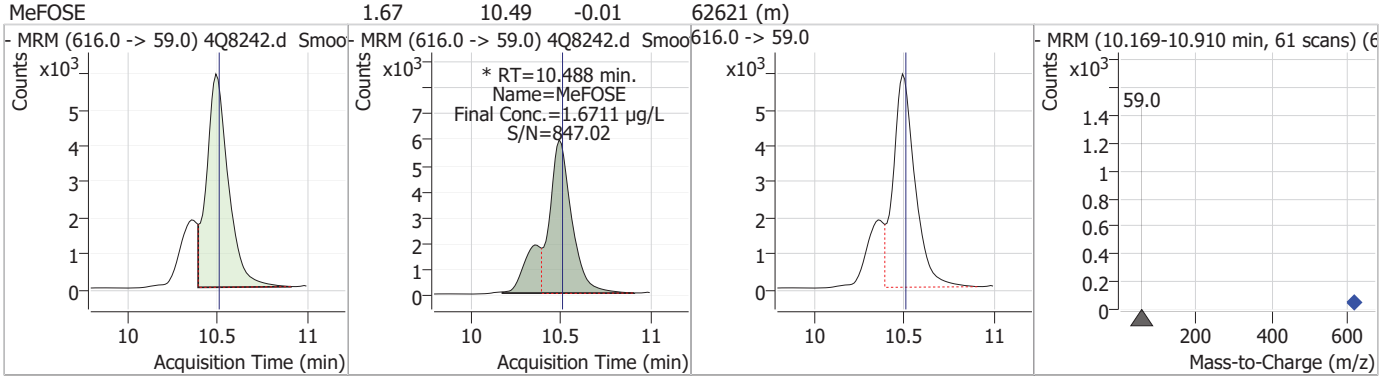
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	0.15	9.53	-0.01	2604	699.0 -> 99.0	66.7	30.1	90.4



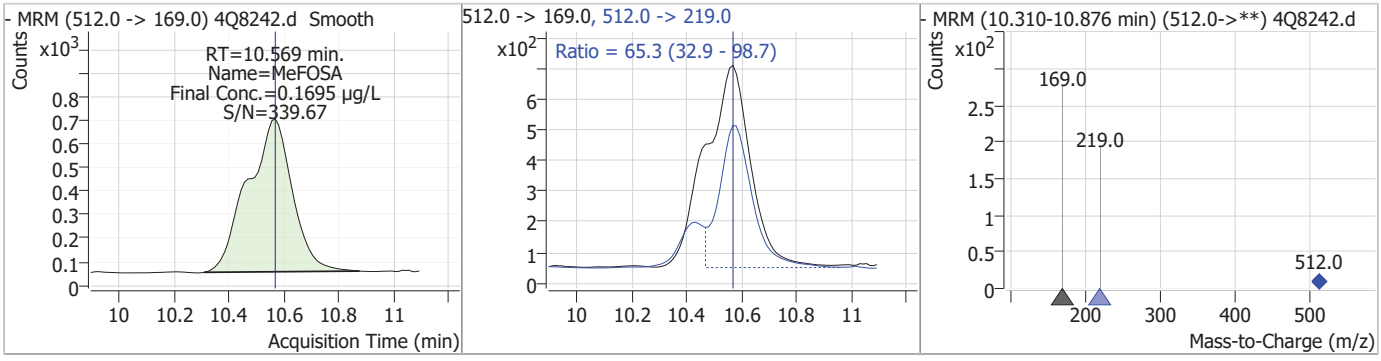
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	25.23	10.47	-0.01	879537				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	1.67	10.49	-0.01	62621 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	0.17	10.57	0.00	7374	512.0 -> 219.0	65.3	32.9	98.7



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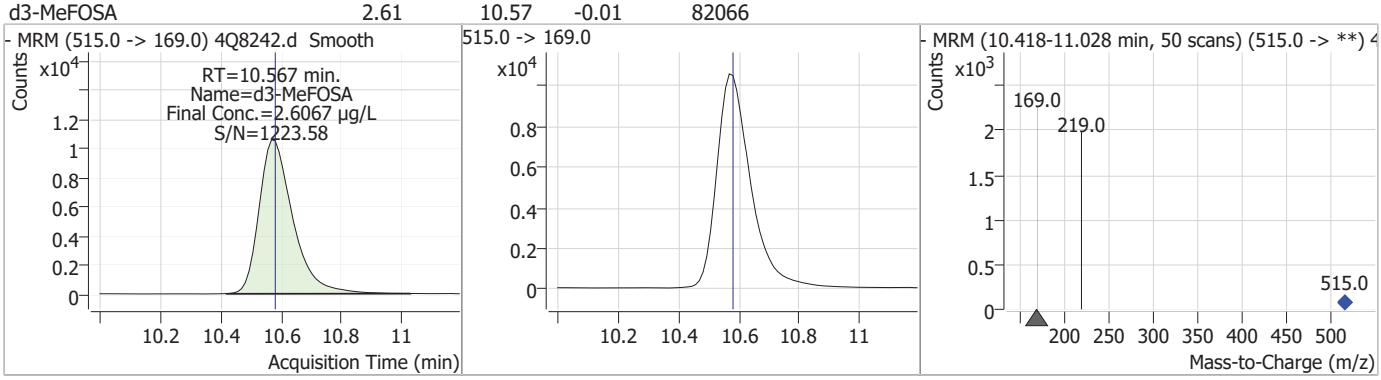
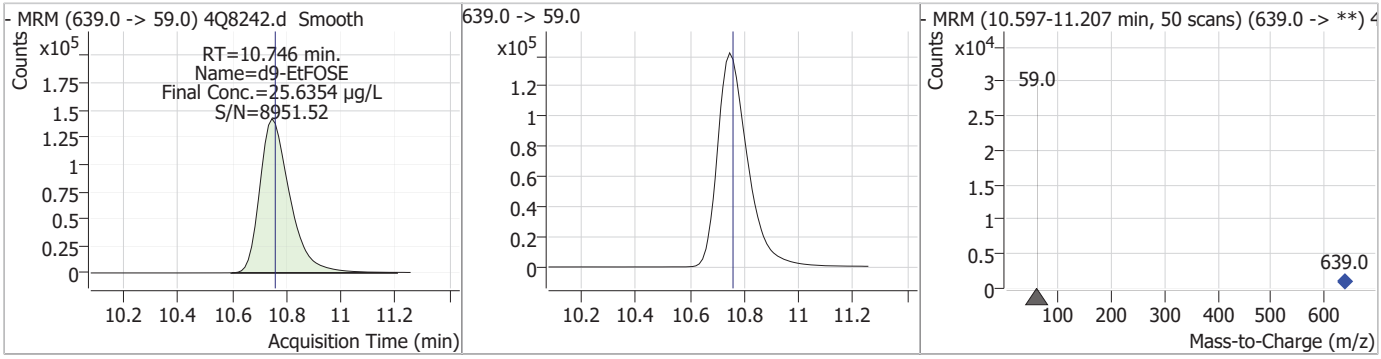
Perfluorinated Compounds by LC/MS/MS

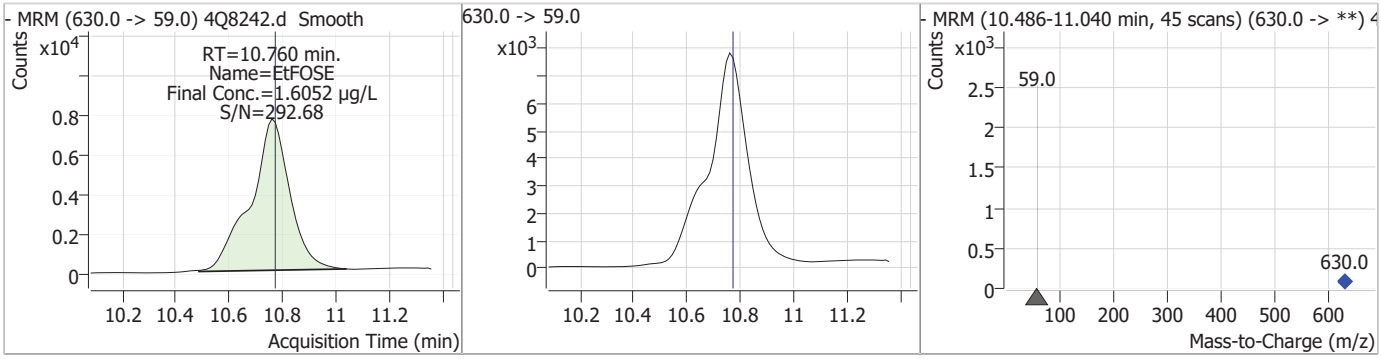
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.61	10.57	-0.01	82066				



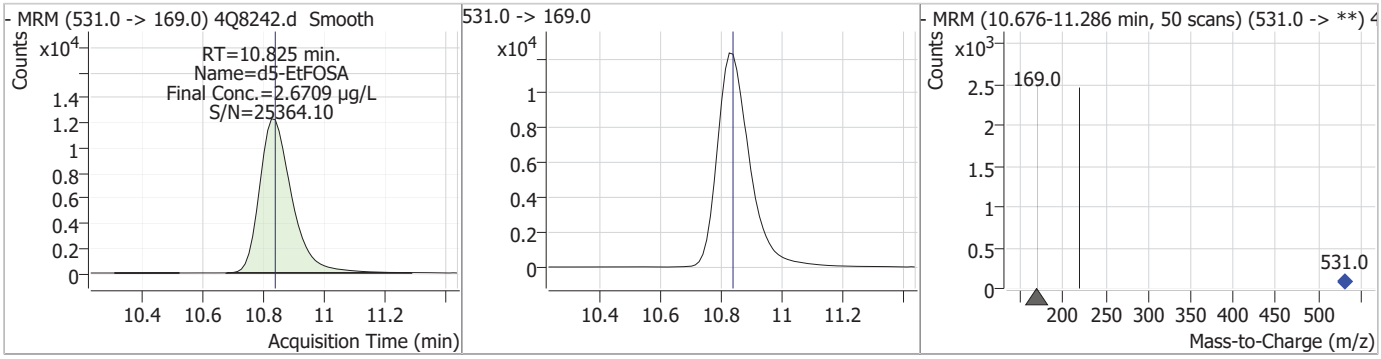
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	25.64	10.75	-0.01	1091412				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	1.61	10.76	-0.01	78108				

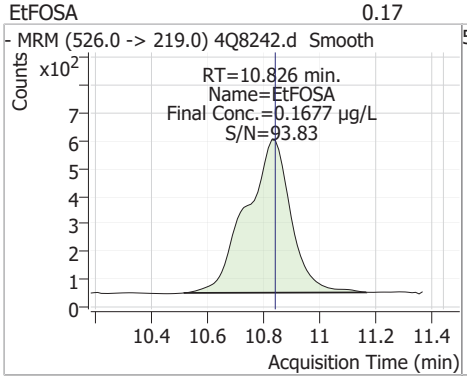


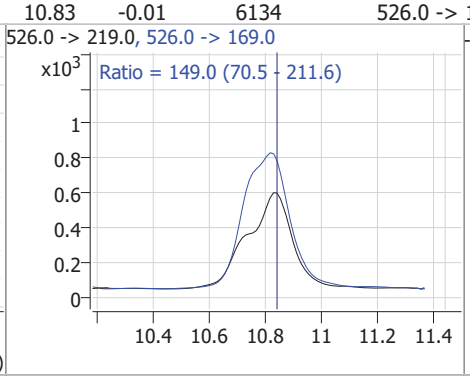
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.67	10.82	-0.01	90624				

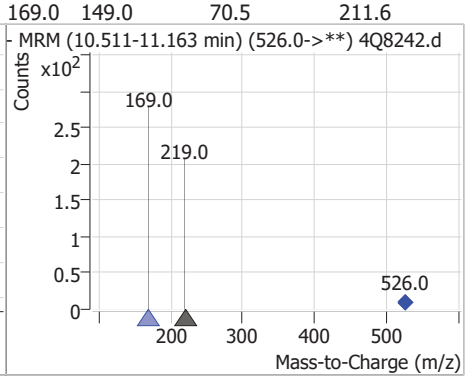


Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	0.17	10.83	-0.01	6134	526.0 -> 169.0	149.0	70.5	211.6







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Manual Integration Approval Summary

Sample Number: T4Q140-CC140
Lab FileID: 4Q8242.D
Injection Time: 05/02/25 16:29
Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.91	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.42	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.00	Split peak
EtFOSAA	2991-50-6		8.12	Split peak
PFOSA	754-91-6		9.31	Split peak
MeFOSE	24448-09-7		10.49	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Althea Mae Medina
05/05/25 07:11

Perfluorinated Compounds by LC/MS/MS

Data File : 4Q8258.d
Operator : maksudh
Acq. Method : 1633.m
Acq. Date-Time : 5/2/2025 8:06:37 PM
Sample Name : CC140-4
Vial : P1-A5
DA Method File : 050225_1633_T4Q140.quantmethod.xml
Batch Name : T4Q140.batch.bin
Sample Information : OP63161,T4Q140,500,,,5,1,WATER

Compound	RT	Transition	Response	Conc.	Units	Dev(Min)
Internal Standards						
M4-PFBA	2.896	217.0 -> 172.0	795387	10.00	µg/L	0.012
M5-PFPeA	4.332	268.0 -> 223.0	427830	5.00	µg/L	0.012
M5-PFHxA	5.464	318.0 -> 273.0	293457	2.50	µg/L	0.000
M4-PFHpA	6.304	367.0 -> 322.0	321949	2.50	µg/L	0.000
M8-PFOA	6.910	421.0 -> 376.0	472751	2.50	µg/L	-0.012
M9-PFNA	7.416	472.0 -> 427.0	191401	1.25	µg/L	-0.012
M6-PFDA	7.870	519.0 -> 474.0	181952	1.25	µg/L	-0.012
M7-PFUnDA	8.285	570.0 -> 525.0	237757	1.25	µg/L	-0.025
M2-PFDoDA	8.679	615.0 -> 570.0	216991	1.25	µg/L	-0.025
M2-PFTeDA	9.393	715.0 -> 670.0	168569	1.25	µg/L	-0.025
M8-FOSA	9.303	506.0 -> 78.0	169021	2.50	µg/L	-0.012
M3-PFBS	5.381	302.0 -> 99.0	26714	2.50	µg/L	0.013
		302.0 -> 80.0	63870			
M3-PFHxS	7.011	402.0 -> 99.0	37309	2.50	µg/L	0.012
M8-PFOS	8.007	507.0 -> 99.0	37303	2.50	µg/L	0.000
M2-4:2FTS	5.166	329.0 -> 81.0	10953	5.00	µg/L	0.000
M2-6:2FTS	6.696	429.0 -> 81.0	25280	5.00	µg/L	-0.012
M2-8:2FTS	7.683	529.0 -> 81.0	28351	5.00	µg/L	0.000
M3-MeFOSAA	7.927	573.0 -> 419.0	225033	5.00	µg/L	-0.012
M3-HFPO-DA	5.804	287.0 -> 169.0	431459	10.00	µg/L	0.012
M5-EtFOSAA	8.110	589.0 -> 419.0	178892	5.00	µg/L	-0.012
M7-MeFOSE	10.475	623.0 -> 59.0	859818	25.00	µg/L	-0.012
M9-EtFOSE	10.746	639.0 -> 59.0	1056562	25.00	µg/L	-0.012
M5-EtFOSA	10.825	531.0 -> 169.0	85433	2.50	µg/L	-0.012
M3-MeFOSA	10.567	515.0 -> 169.0	81697	2.50	µg/L	-0.012
13C4-PFOS	8.008	503.0 -> 80.0	65481	2.50	µg/L	0.000
13C3-PFBA	2.899	216.0 -> 172.0	356863	5.00	µg/L	0.012
18O2-PFHxS	7.011	403.0 -> 84.0	41270	2.50	µg/L	0.012
13C4-PFOA	6.910	417.0 -> 372.0	485964	2.50	µg/L	-0.012
13C2-PFDA	7.871	515.0 -> 470.0	161127	1.25	µg/L	-0.012
13C5-PFNA	7.416	468.0 -> 423.0	187088	1.25	µg/L	-0.012
13C2-PFHxA	5.465	315.0 -> 270.0	276798	2.50	µg/L	0.000
System Monitoring Compounds						
13C2-4:2FTS	5.166	329.0 -> 81.0	10953	4.77	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.5%		
13C2-6:2FTS	6.696	429.0 -> 81.0	25280	5.09	µg/L	-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.8%		
13C2-8:2FTS	7.683	529.0 -> 81.0	28351	4.77	µg/L	0.000
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 95.4%		
13C2-PFDoDA	8.679	615.0 -> 570.0	216991	1.21	µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 96.5%		
13C2-PFTeDA	9.393	715.0 -> 670.0	168569	1.11	µg/L	-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 88.7%		
13C3-PFBS	5.381	302.0 -> 99.0	26714	2.63	µg/L	0.013
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 105.3%		

Perfluorinated Compounds by LC/MS/MS

Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
13C3-PFHxS	7.011	402.0 -> 99.0	37309	2.56	µg/L		0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 102.4%			
13C4-PFBA	2.896	217.0 -> 172.0	795387	9.44	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 94.4%			
13C4-PFHpA	6.304	367.0 -> 322.0	321949	2.44	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.7%			
13C5-PFHxA	5.464	318.0 -> 273.0	293457	2.41	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.5%			
13C5-PFPeA	4.332	268.0 -> 223.0	427830	4.82	µg/L		0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 96.4%			
13C6-PFDA	7.870	519.0 -> 474.0	181952	1.17	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 93.4%			
13C7-PFUnDA	8.285	570.0 -> 525.0	237757	1.25	µg/L		-0.025
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 99.7%			
13C8-FOSA	9.303	506.0 -> 78.0	169021	2.40	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 96.0%			
13C8-PFOA	6.910	421.0 -> 376.0	472751	2.36	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.5%			
13C8-PFOS	8.007	507.0 -> 99.0	37303	2.40	µg/L		0.000
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 95.9%			
13C9-PFNA	7.416	472.0 -> 427.0	191401	1.18	µg/L		-0.012
Spiked Amount: 1.25	Range: 70.0 - 130.0%			Recovery = 94.4%			
d3-MeFOSAA	7.927	573.0 -> 419.0	225033	5.11	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 102.2%			
13C3-HFPO-DA	5.804	287.0 -> 169.0	431459	9.96	µg/L		0.012
Spiked Amount: 10.00	Range: 70.0 - 130.0%			Recovery = 99.6%			
d3-MeFOSA	10.567	515.0 -> 169.0	81697	2.43	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 97.0%			
d5-EtFOSAA	8.110	589.0 -> 419.0	178892	5.09	µg/L		-0.012
Spiked Amount: 5.00	Range: 70.0 - 130.0%			Recovery = 101.8%			
d7-MeFOSE	10.475	623.0 -> 59.0	859818	23.06	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 92.2%			
d9-EtFOSE	10.746	639.0 -> 59.0	1056562	23.20	µg/L		-0.012
Spiked Amount: 25.00	Range: 70.0 - 130.0%			Recovery = 92.8%			
d5-EtFOSA	10.825	531.0 -> 169.0	85433	2.35	µg/L		-0.012
Spiked Amount: 2.50	Range: 70.0 - 130.0%			Recovery = 94.2%			
Target Compounds							QValue
4:2FTS	5.166	327.0 -> 307.0	194789	10.40	µg/L		99
		327.0 -> 81.0	87409				
6:2FTS	6.697	427.0 -> 407.0	232457	9.52	µg/L		99
		427.0 -> 81.0	108027				
8:2FTS	7.684	527.0 -> 507.0	225903	10.93	µg/L		96
		527.0 -> 81.0	82968				
EtFOSAA	8.124	584.0 -> 419.0	78280	2.42	µg/L	m	94
		584.0 -> 483.0	41656				
FOSA	9.294	498.0 -> 78.0	149407	2.45	µg/L	m	100
		498.0 -> 478.0	3868				
MeFOSAA	7.941	570.0 -> 419.0	94264	2.51	µg/L	m	98
		570.0 -> 512.0	32729				
PFBA	2.889	213.0 -> 169.0	242615	9.34	µg/L		100
PFBS	5.369	299.0 -> 80.0	61230	2.05	µg/L		100
		299.0 -> 99.0	24935				
PFDA	7.871	513.0 -> 469.0	329515	2.54	µg/L		99
		513.0 -> 219.0	73996				
PFDoDA	8.679	613.0 -> 569.0	401110	2.35	µg/L		99
		613.0 -> 319.0	53920				

Perfluorinated Compounds by LC/MS/MS

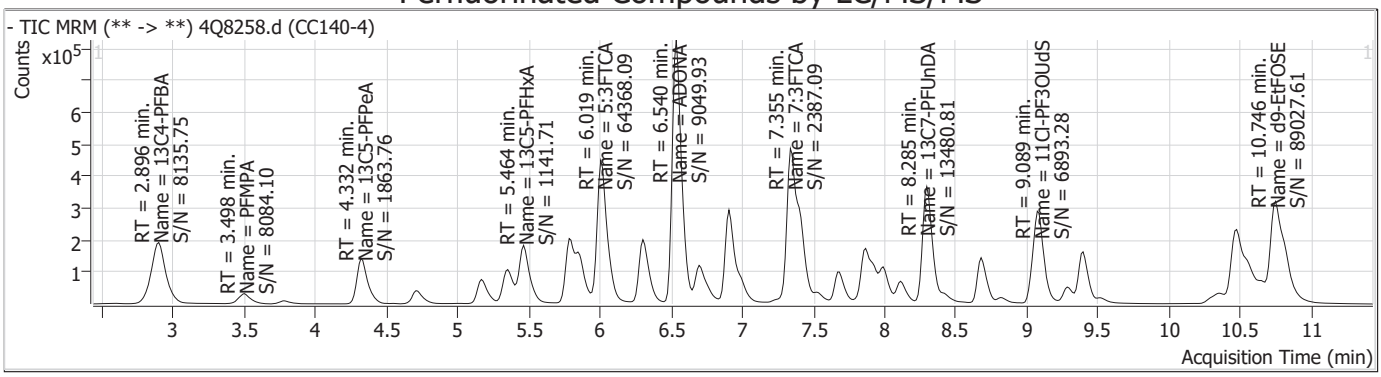
Compound	RT	Transition	Response	Conc.	Units		Dev(Min)
PFDS	8.829	599.0 -> 80.0	47665	2.26	µg/L		100
		599.0 -> 99.0	26971				
PFHpA	6.304	363.0 -> 319.0	455458	2.47	µg/L		100
		363.0 -> 169.0	92768				
PFHpS	7.541	449.0 -> 80.0	68908	2.14	µg/L		98
		449.0 -> 99.0	37464				
PFHxA	5.467	313.0 -> 269.0	297201	2.50	µg/L		99
		313.0 -> 119.0	11033				
PFHxS	7.000	399.0 -> 80.0	72239	2.22	µg/L	m	99
		399.0 -> 99.0	38669				
PFNA	7.416	463.0 -> 419.0	285580	2.59	µg/L	m	97
		463.0 -> 219.0	97047				
PFNS	8.437	549.0 -> 80.0	63776	2.48	µg/L		100
		549.0 -> 99.0	36196				
PFOA	6.910	413.0 -> 369.0	381230	2.46	µg/L	m	98
		413.0 -> 169.0	106048				
PFOS	8.008	499.0 -> 80.0	67703	2.27	µg/L	m	95
		499.0 -> 99.0	35455				
PFPeA	4.334	263.0 -> 219.0	338390	5.08	µg/L		100
PFPeS	6.343	349.0 -> 80.0	71515	2.15	µg/L		98
		349.0 -> 99.0	36446				
PFTeDA	9.394	713.0 -> 669.0	483889	2.64	µg/L		100
		713.0 -> 219.0	34053				
PFTrDA	9.050	663.0 -> 619.0	462608	2.46	µg/L		100
		663.0 -> 369.0	28742				
PFUnDA	8.287	563.0 -> 519.0	351055	2.46	µg/L		98
		563.0 -> 269.0	69060				
11Cl-PF3OUdS	9.089	631.0 -> 451.0	797196	8.80	µg/L		99
		633.0 -> 453.0	242154				
9Cl-PF3ONS	8.313	531.0 -> 351.0	895369	8.75	µg/L		96
		533.0 -> 353.0	264584				
ADONA	6.540	377.0 -> 251.0	2928022	8.40	µg/L		100
		377.0 -> 85.0	973864				
HFPO-DA	5.805	285.0 -> 169.0	448550	10.03	µg/L		99
		285.0 -> 185.0	50842				
3:3FTCA	3.781	241.0 -> 177.0	49529	12.20	µg/L		97
		241.0 -> 117.0	4194				
5:3FTCA	6.019	341.0 -> 237.0	1317450	57.31	µg/L		98
		341.0 -> 217.0	937181				
7:3FTCA	7.355	441.0 -> 337.0	1721026	52.23	µg/L		98
		441.0 -> 317.0	776979				
EtFOSA	10.826	526.0 -> 219.0	85340	2.47	µg/L		100
		526.0 -> 169.0	119939				
EtFOSE	10.760	630.0 -> 59.0	1175304	24.95	µg/L		100
MeFOSA	10.569	512.0 -> 169.0	106532	2.46	µg/L		99
		512.0 -> 219.0	70578				
MeFOSE	10.488	616.0 -> 59.0	903903	24.67	µg/L		100
PFDoDS	9.521	699.0 -> 80.0	39351	2.39	µg/L		97
		699.0 -> 99.0	24532				
NFDHA	5.357	295.0 -> 201.0	73548	5.54	µg/L		81
		201.0 -> 85.0	324049				
		295.0 -> 85.0	19181				
PFMBA	4.723	279.0 -> 85.0	220868	4.89	µg/L		100
PFMPA	3.498	229.0 -> 85.0	190532	4.93	µg/L		100
PFEESA	5.861	315.0 -> 135.0	497267	4.41	µg/L		100
		315.0 -> 69.0	40102				

Perfluorinated Compounds by LC/MS/MS

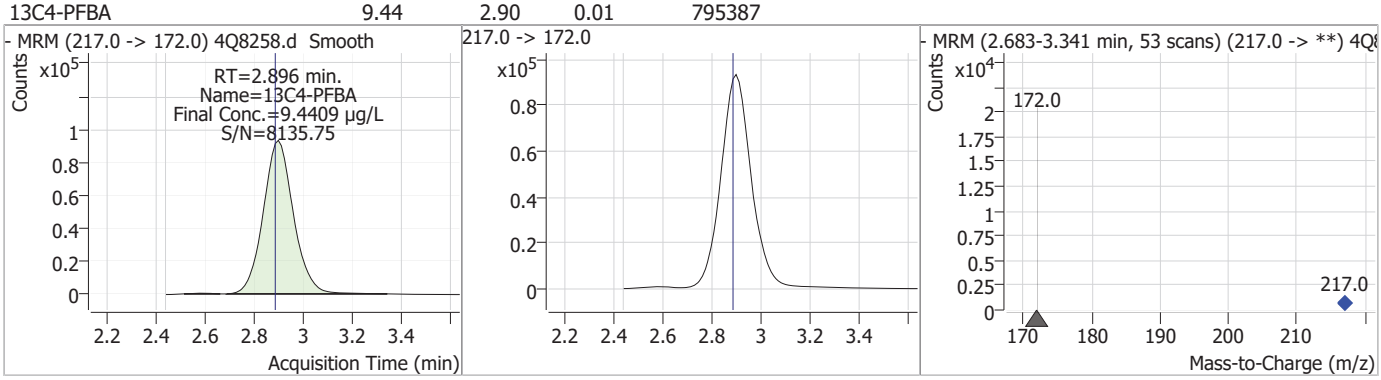
Compound	RT	Transition	Response	Conc.	Units	Dev(Min)

= Qualifier out of range, m = manually integrated, + = Area summed

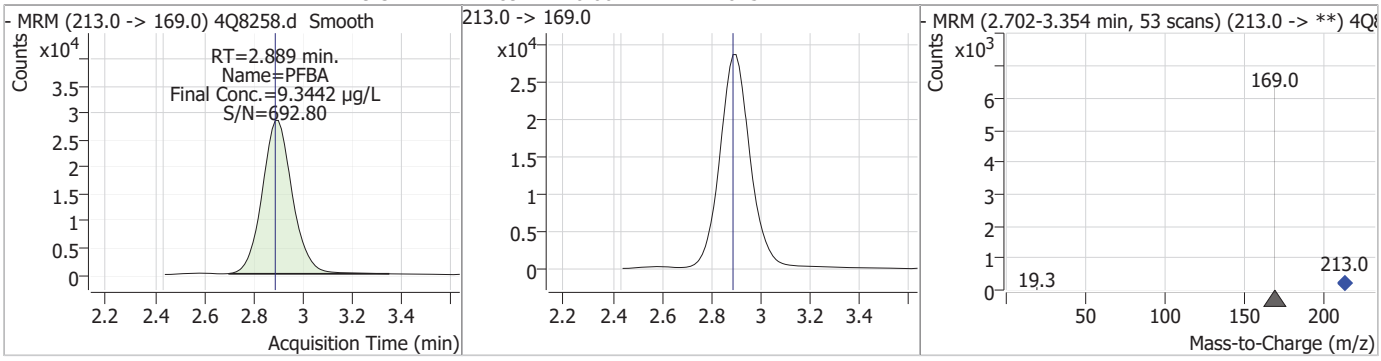
Perfluorinated Compounds by LC/MS/MS



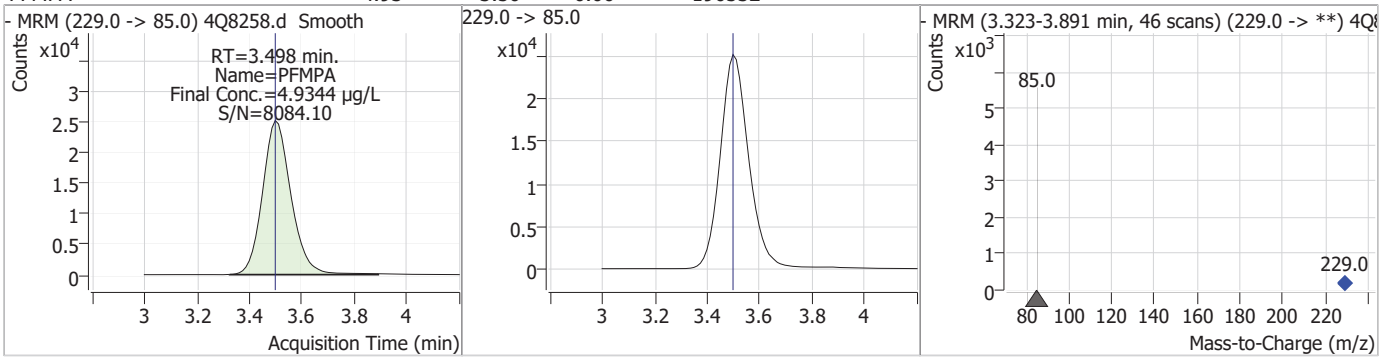
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFBA	9.44	2.90	0.01	795387				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBA	9.34	2.89	0.00	242615				

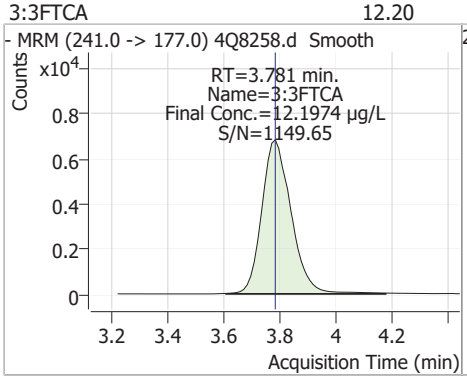


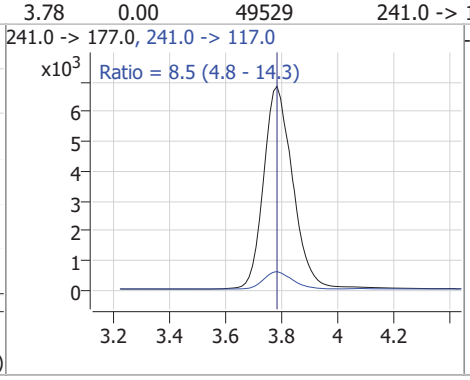
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMPA	4.93	3.50	0.00	190532				

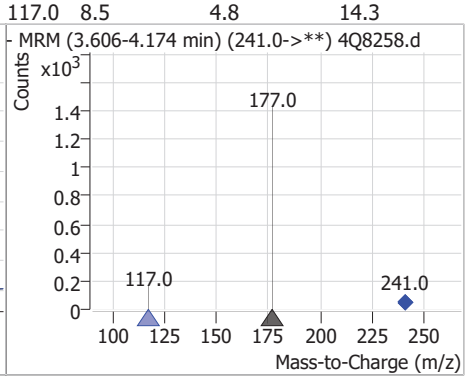


Perfluorinated Compounds by LC/MS/MS

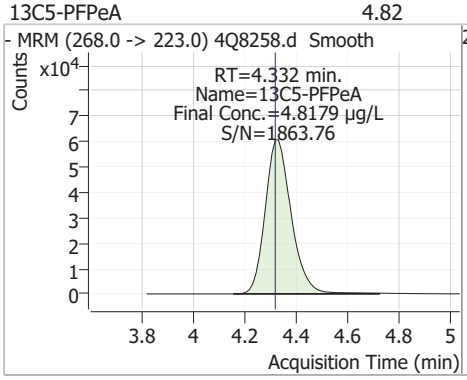
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
3:3FTCA	12.20	3.78	0.00	49529	241.0 -> 117.0	8.5	4.8	14.3

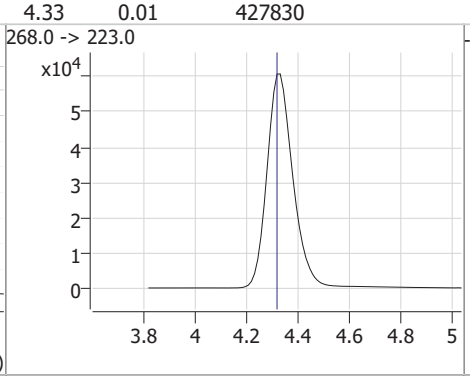


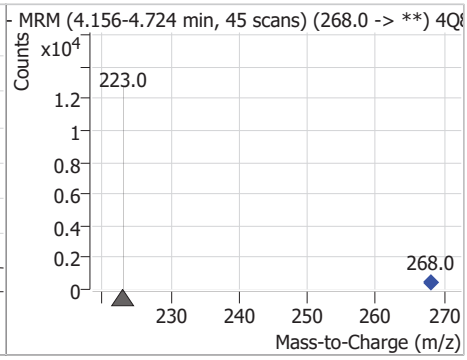




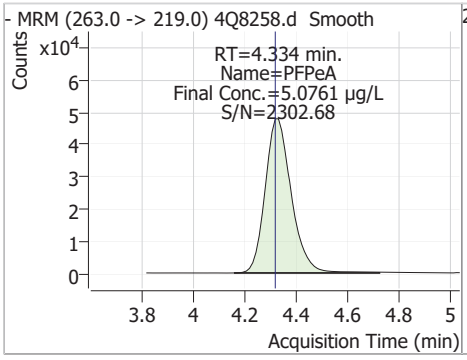
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFPeA	4.82	4.33	0.01	427830				

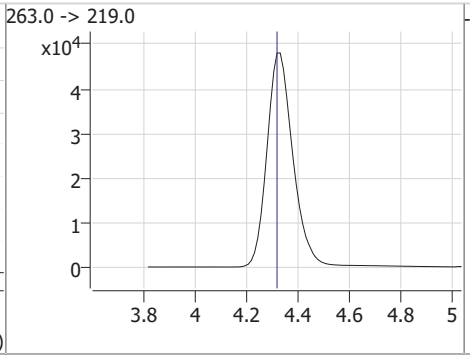


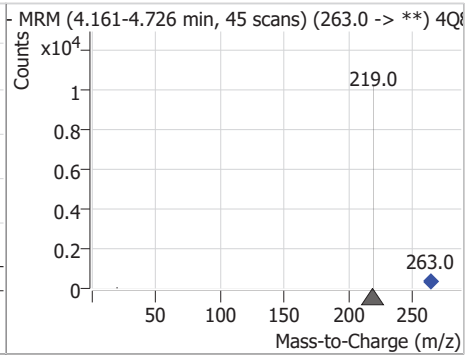




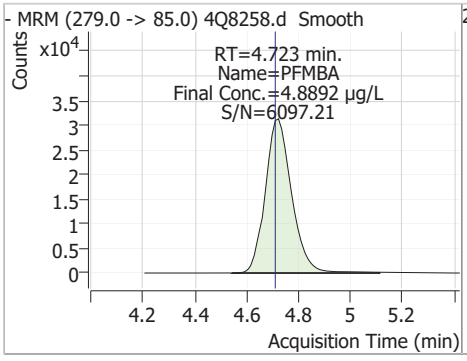
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeA	5.08	4.33	0.01	338390				

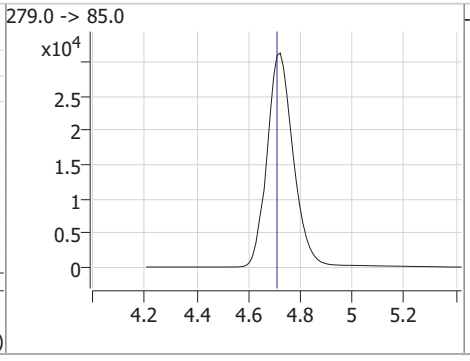


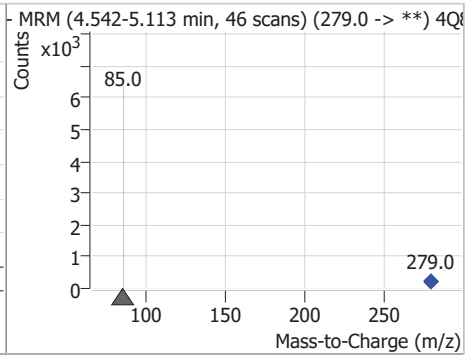




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFMBA	4.89	4.72	0.01	220868				

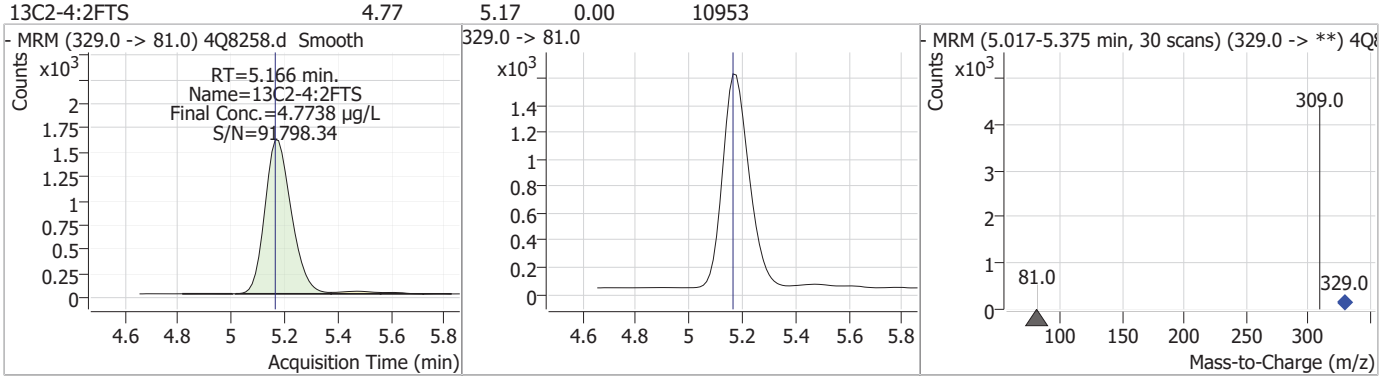




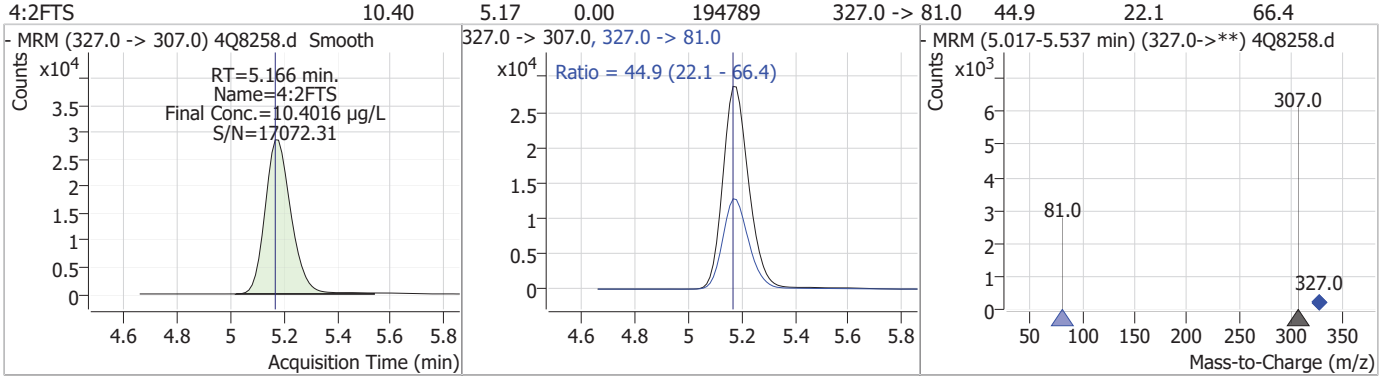


Perfluorinated Compounds by LC/MS/MS

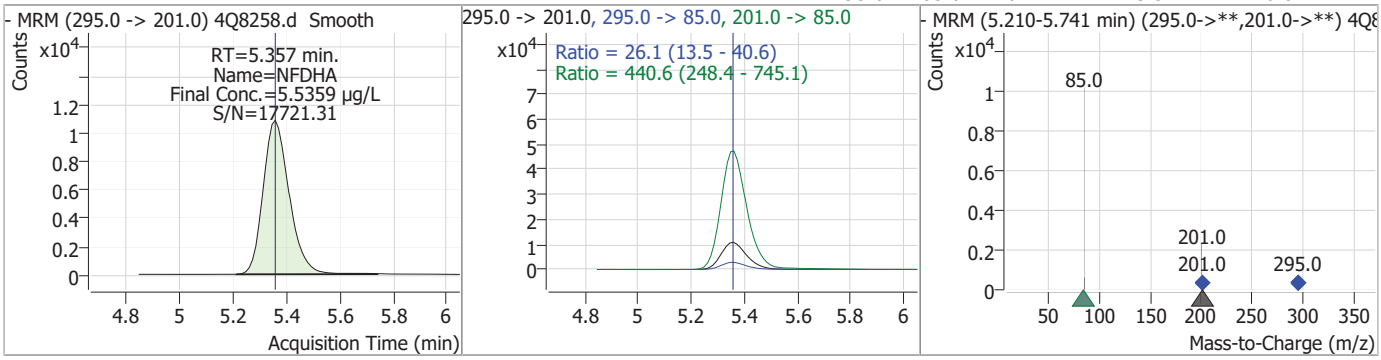
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-4:2FTS	4.77	5.17	0.00	10953				



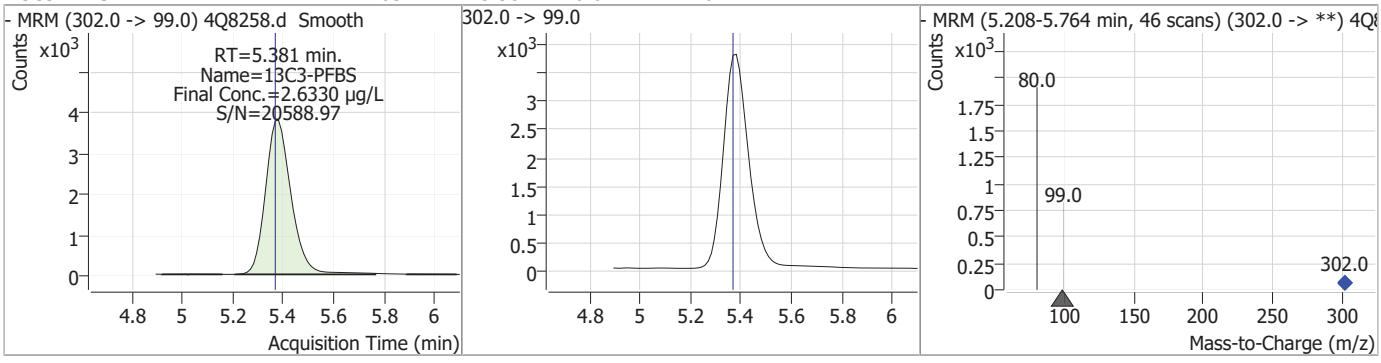
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
4:2FTS	10.40	5.17	0.00	194789	327.0 -> 81.0	44.9	22.1	66.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
NFDHA	5.54	5.36	0.00	73548	201.0 -> 85.0	440.6	248.4	745.1
					295.0 -> 85.0	26.1	13.5	40.6

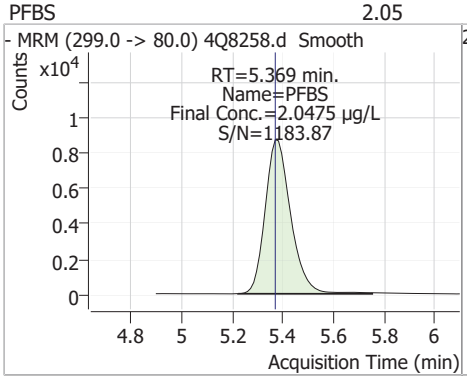


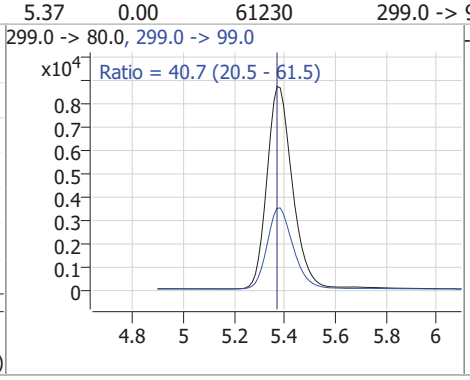
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFBS	2.63	5.38	0.01	26714				

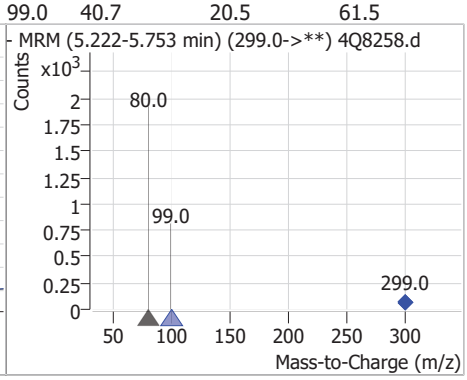


Perfluorinated Compounds by LC/MS/MS

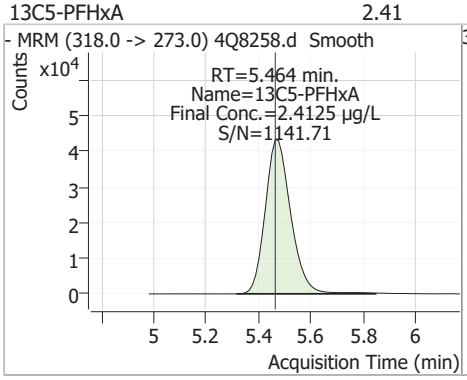
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFBS	2.05	5.37	0.00	61230	299.0 -> 99.0	40.7	20.5	61.5

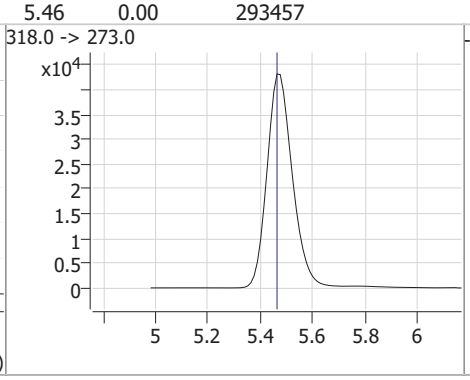


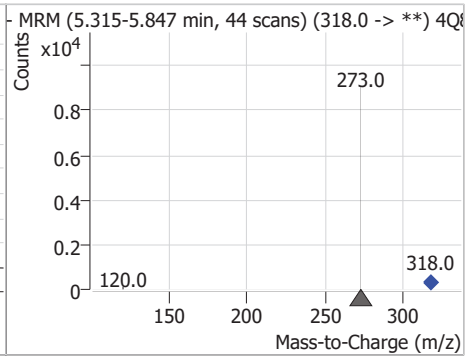




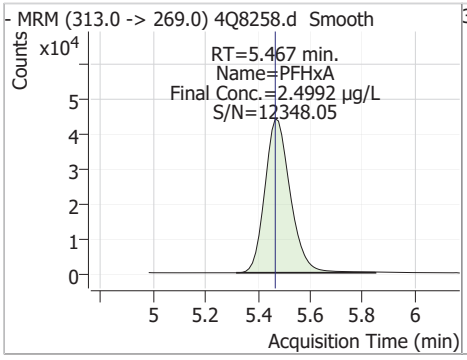
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C5-PFHxA	2.41	5.46	0.00	293457				

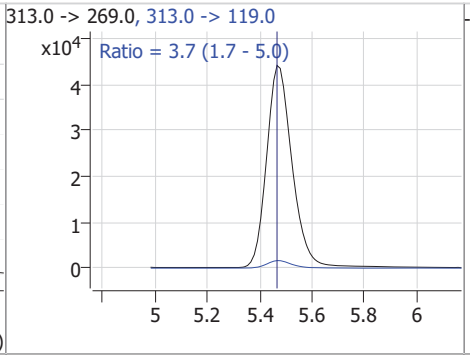


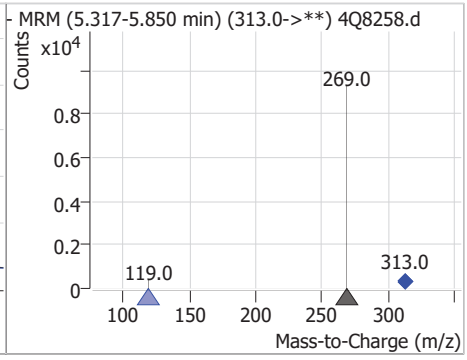




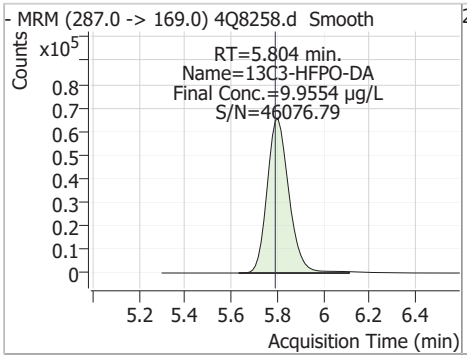
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxA	2.50	5.47	0.00	297201	313.0 -> 119.0	3.7	1.7	5.0

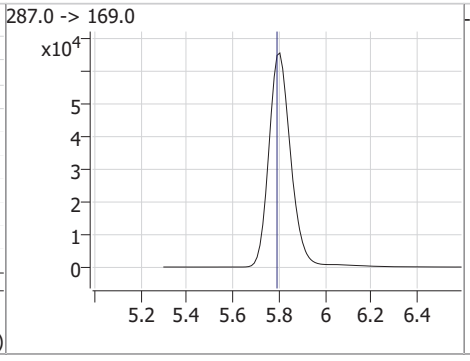


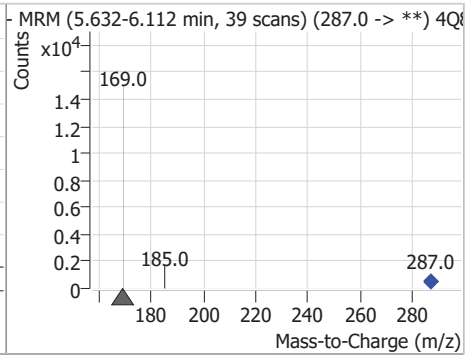




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-HFPO-DA	9.96	5.80	0.01	431459				







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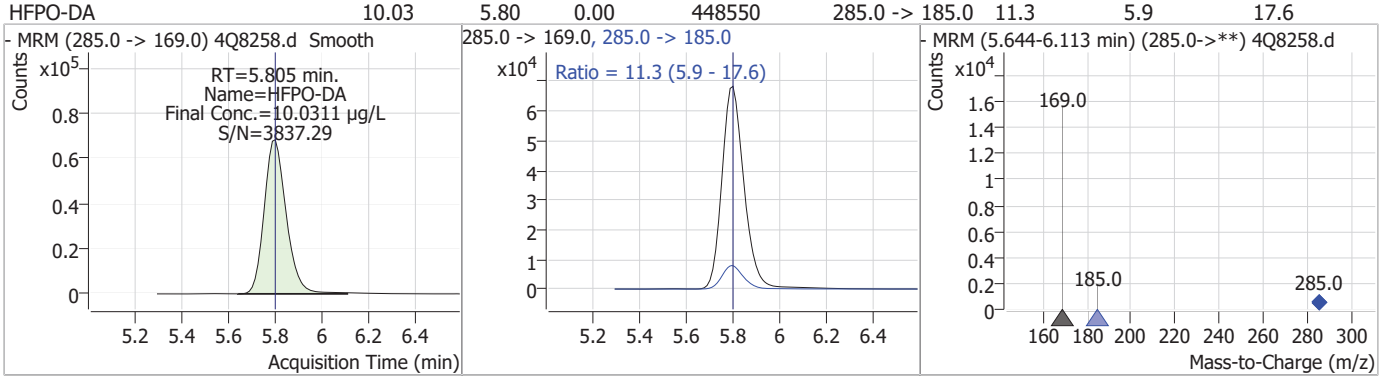
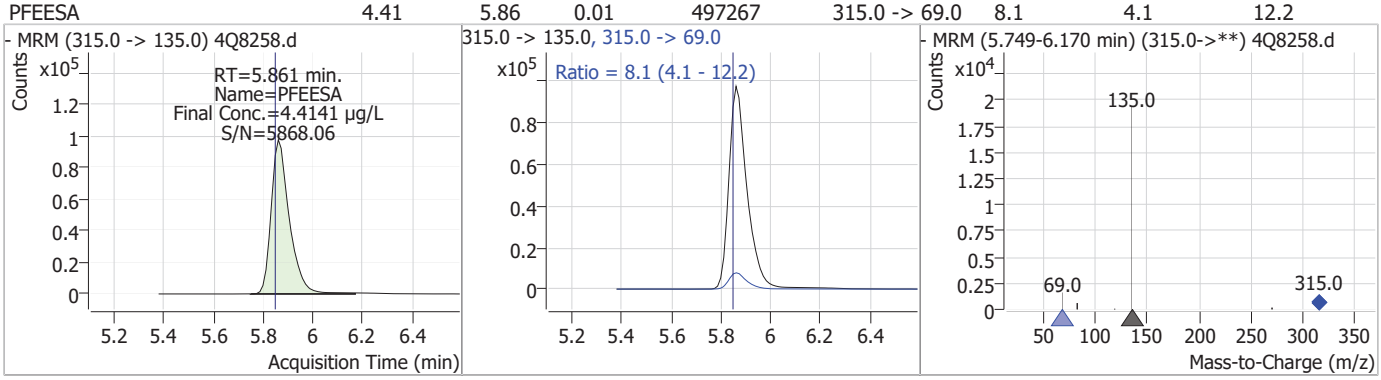
Perfluorinated Compounds by LC/MS/MS

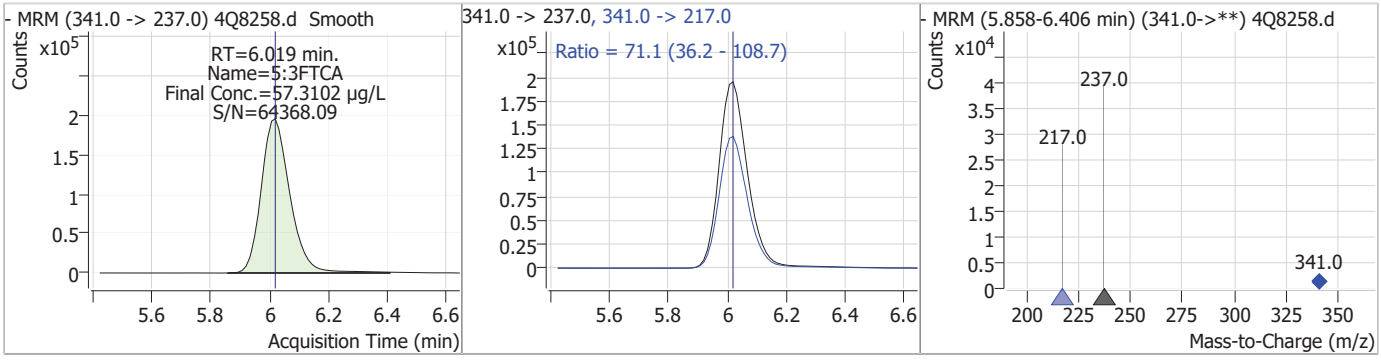
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
HFPO-DA	10.03	5.80	0.00	448550	285.0 -> 185.0	11.3	5.9	17.6



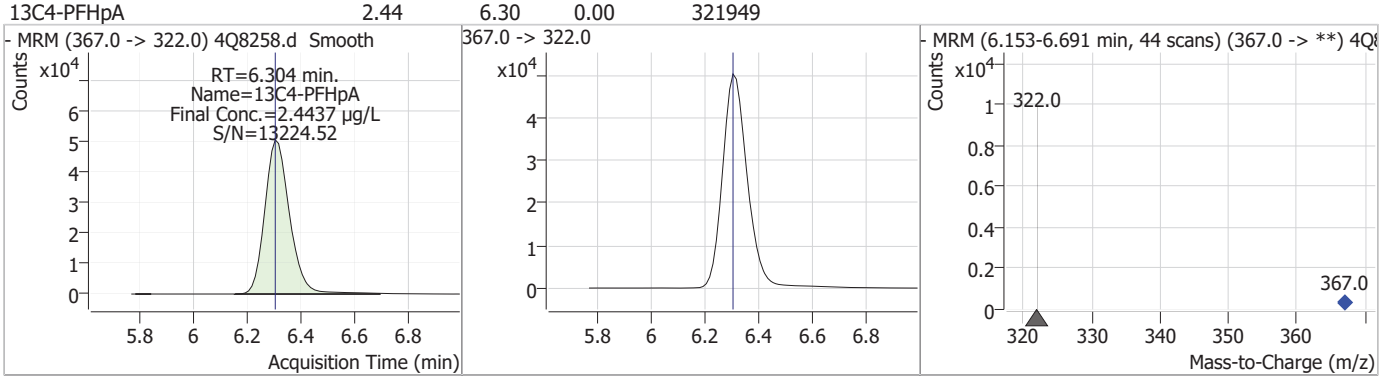
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFEESA	4.41	5.86	0.01	497267	315.0 -> 69.0	8.1	4.1	12.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
5:3FTCA	57.31	6.02	0.00	1317450	341.0 -> 217.0	71.1	36.2	108.7

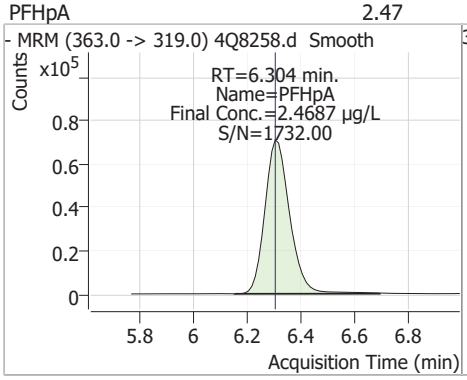


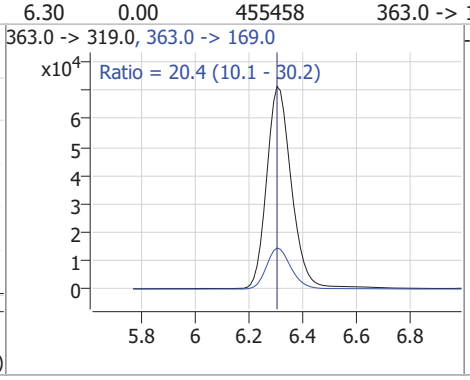
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C4-PFHpA	2.44	6.30	0.00	321949				

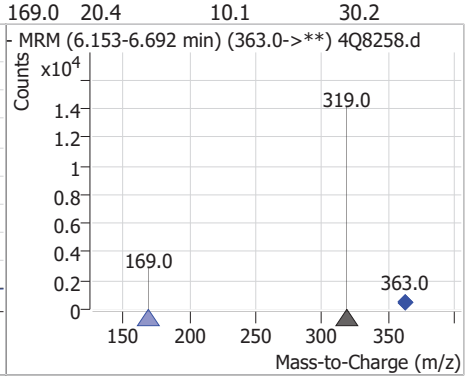


Perfluorinated Compounds by LC/MS/MS

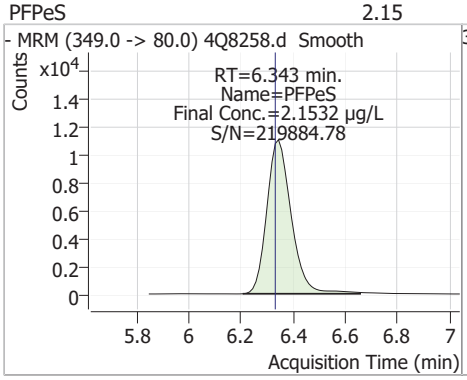
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpA	2.47	6.30	0.00	455458	363.0 -> 169.0	20.4	10.1	30.2

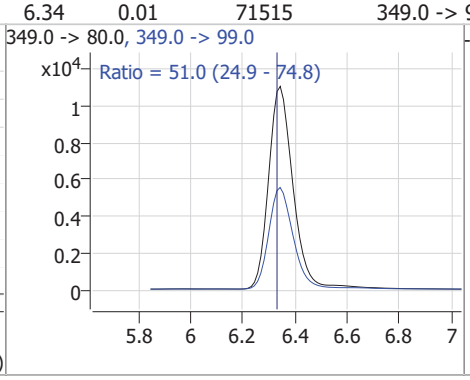


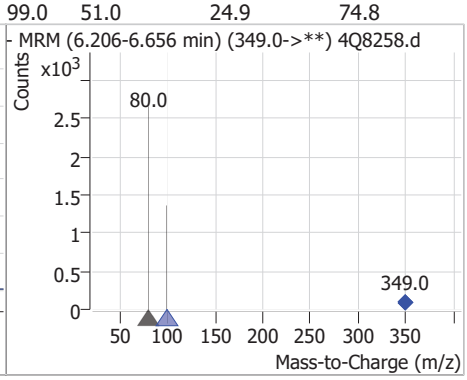




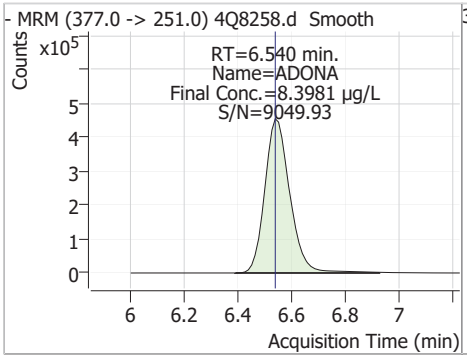
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFPeS	2.15	6.34	0.01	71515	349.0 -> 99.0	51.0	24.9	74.8

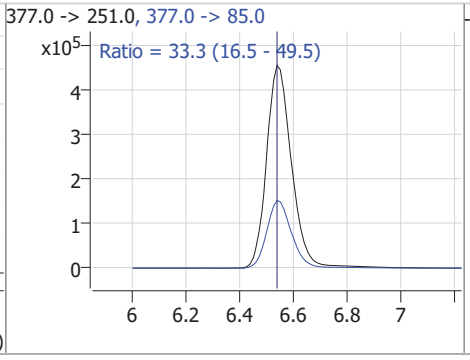


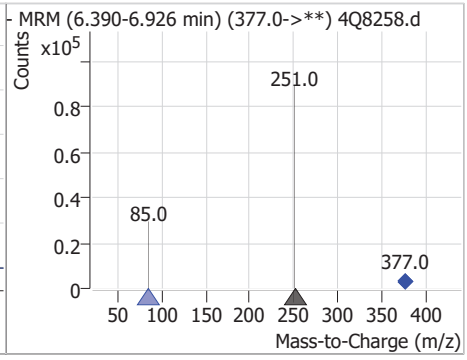




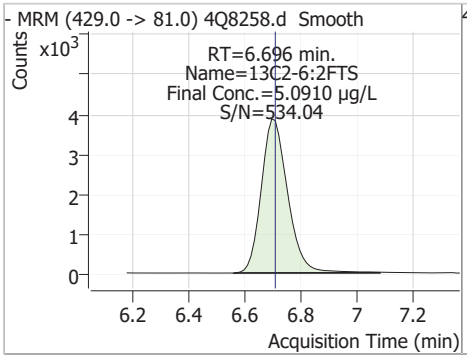
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
ADONA	8.40	6.54	0.00	2928022	377.0 -> 85.0	33.3	16.5	49.5

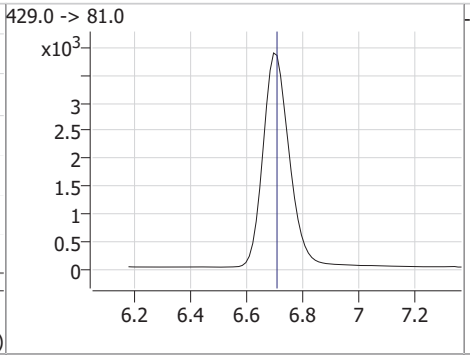


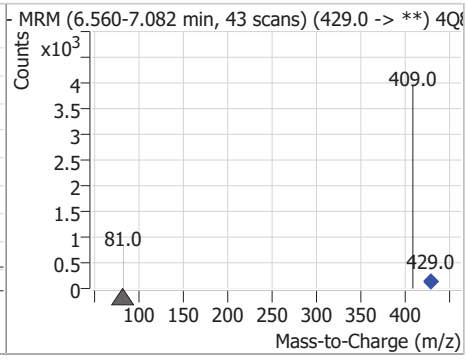




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-6:2FTS	5.09	6.70	-0.01	25280				

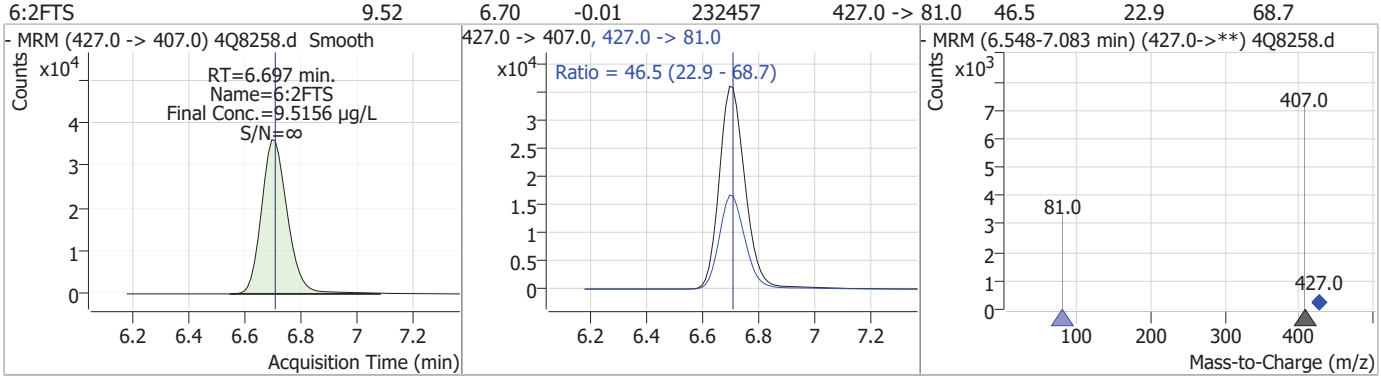




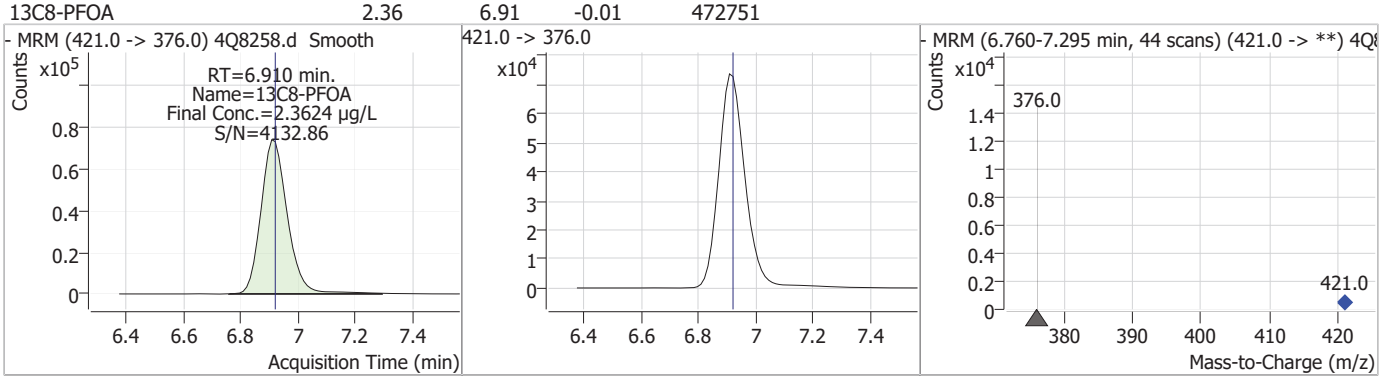


Perfluorinated Compounds by LC/MS/MS

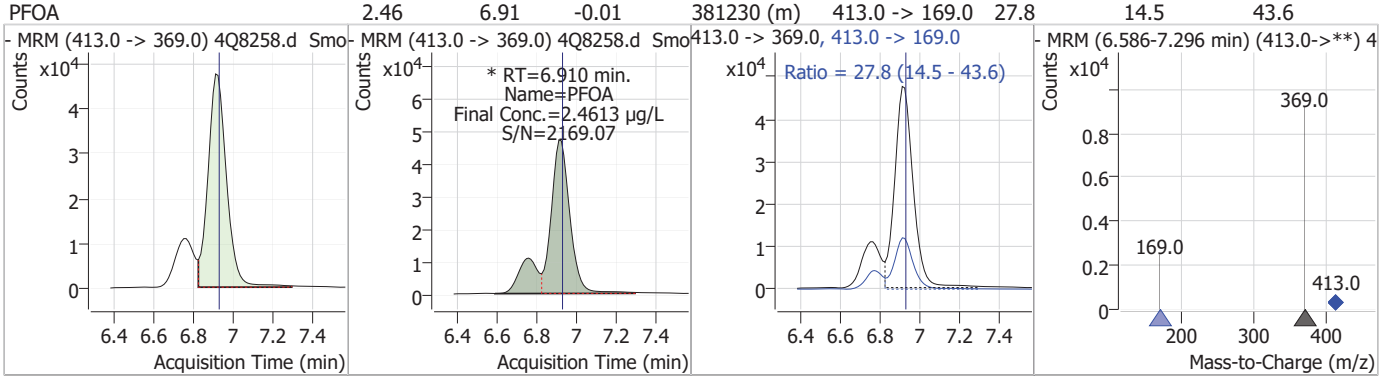
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
6:2FTS	9.52	6.70	-0.01	232457	427.0 -> 81.0	46.5	22.9	68.7



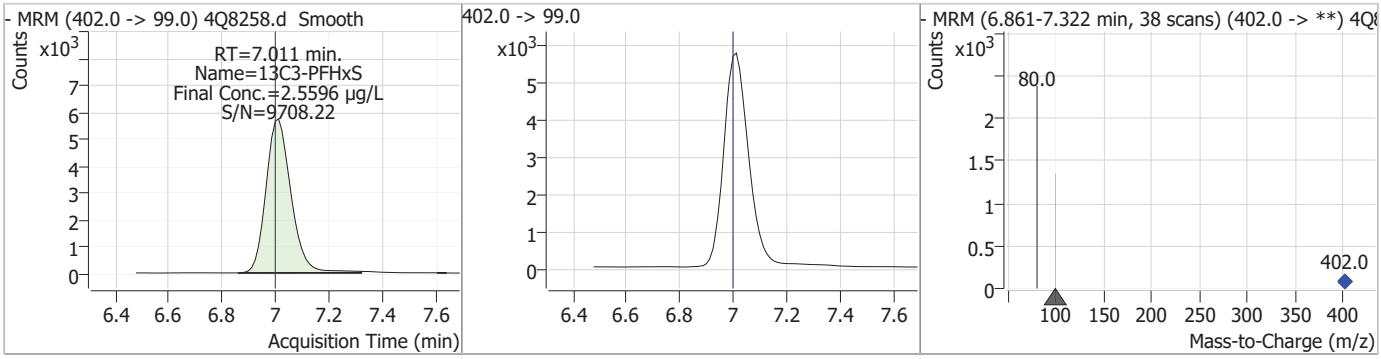
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOA	2.36	6.91	-0.01	472751				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOA	2.46	6.91	-0.01	381230 (m)	413.0 -> 169.0	27.8	14.5	43.6

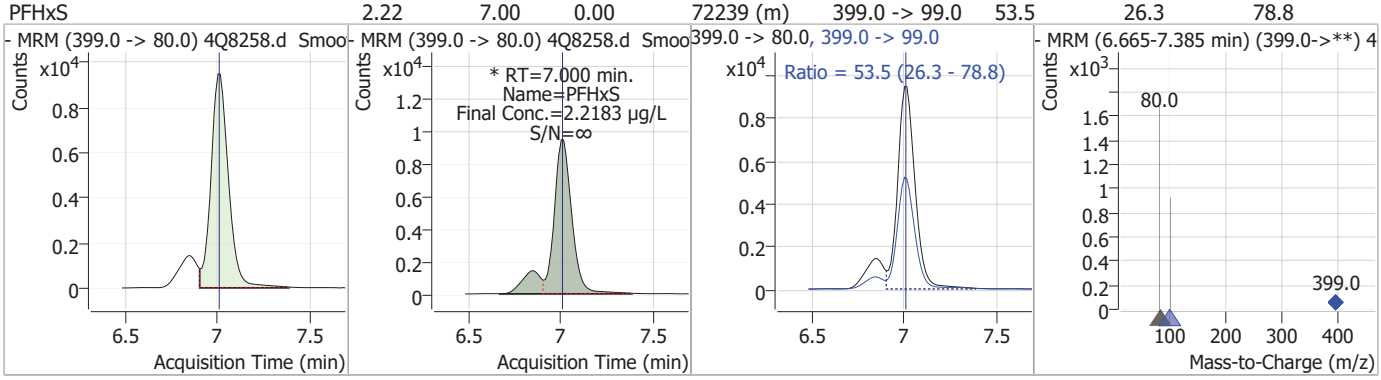


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C3-PFHxS	2.56	7.01	0.01	37309				

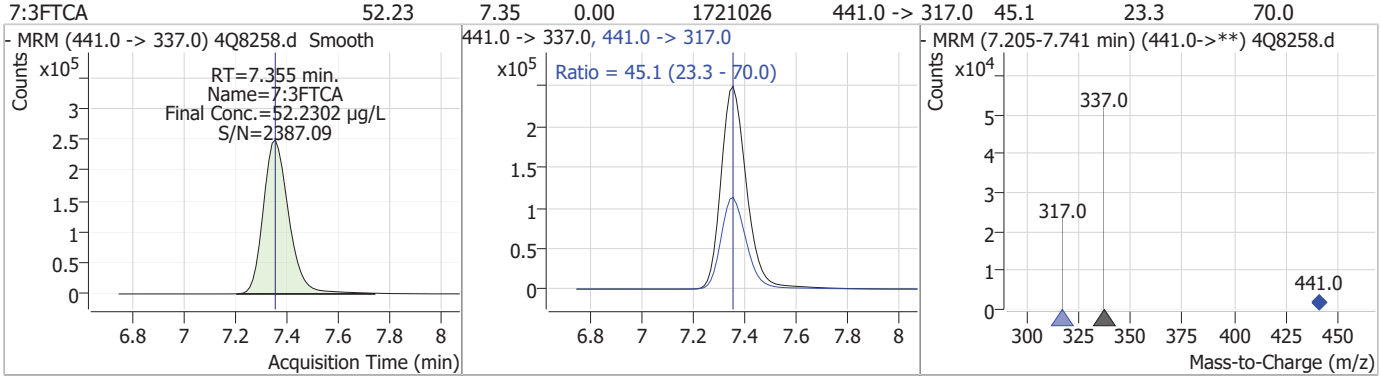


Perfluorinated Compounds by LC/MS/MS

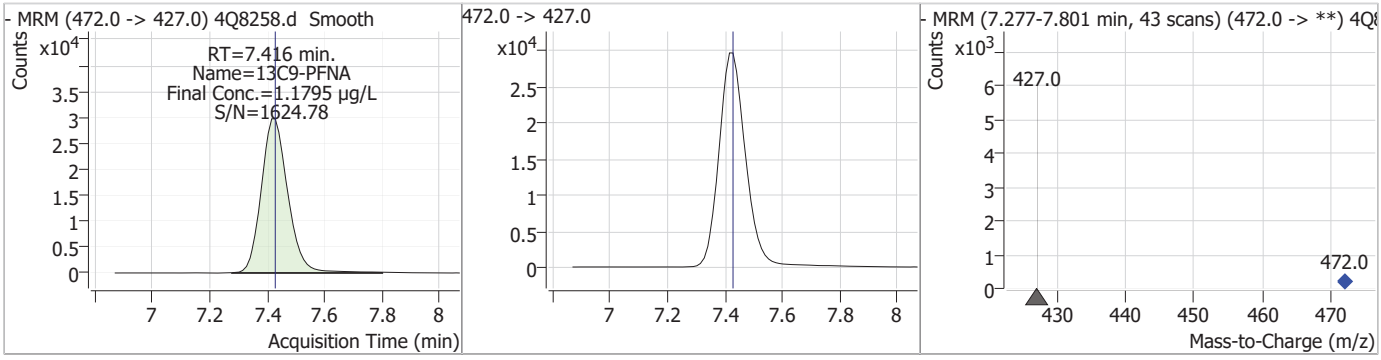
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHxS	2.22	7.00	0.00	72239 (m)	399.0 -> 99.0	53.5	26.3	78.8



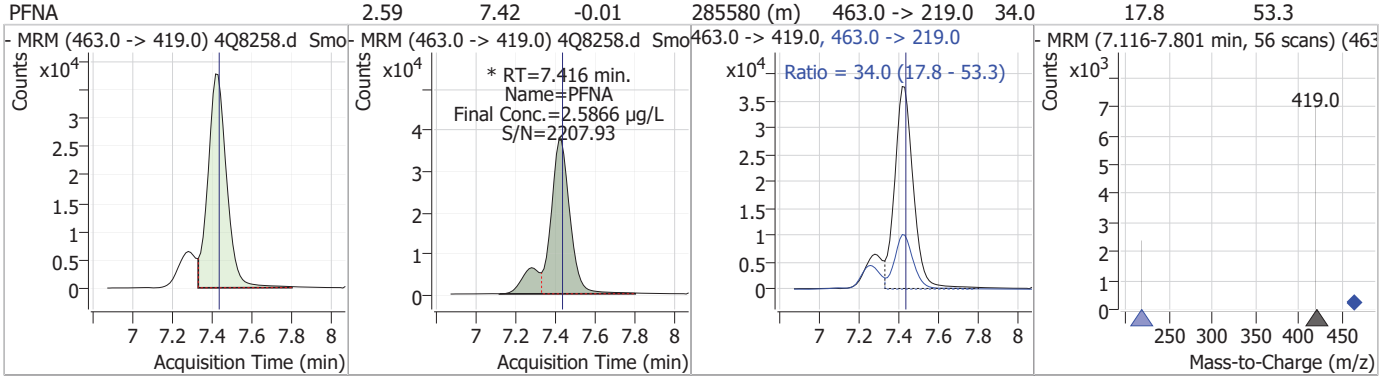
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
7:3FTCA	52.23	7.35	0.00	1721026	441.0 -> 317.0	45.1	23.3	70.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C9-PFNA	1.18	7.42	-0.01	191401				

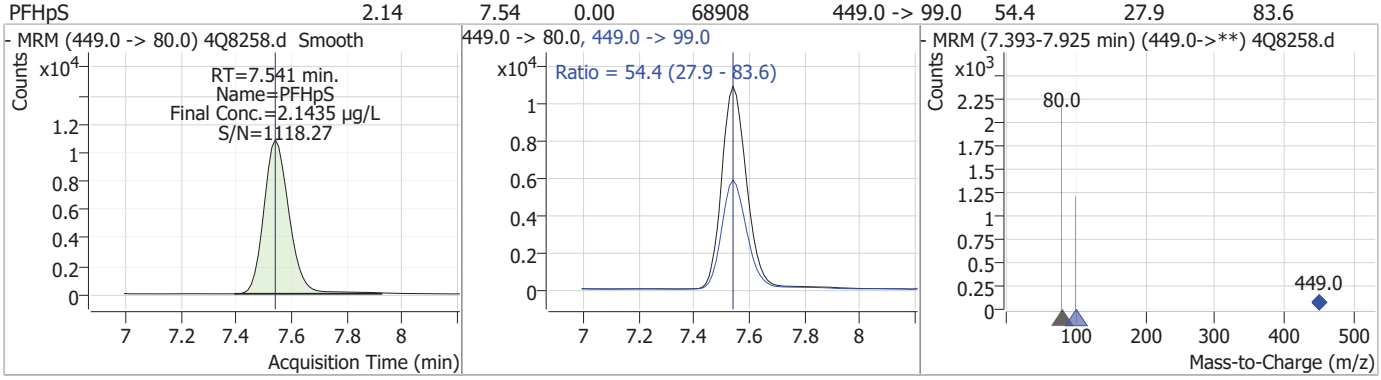


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNA	2.59	7.42	-0.01	285580 (m)	463.0 -> 219.0	34.0	17.8	53.3

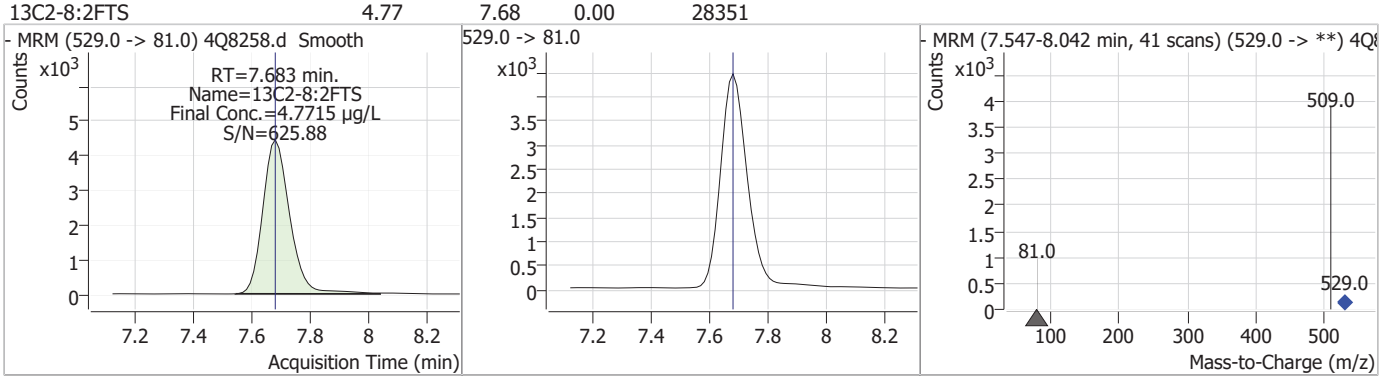


Perfluorinated Compounds by LC/MS/MS

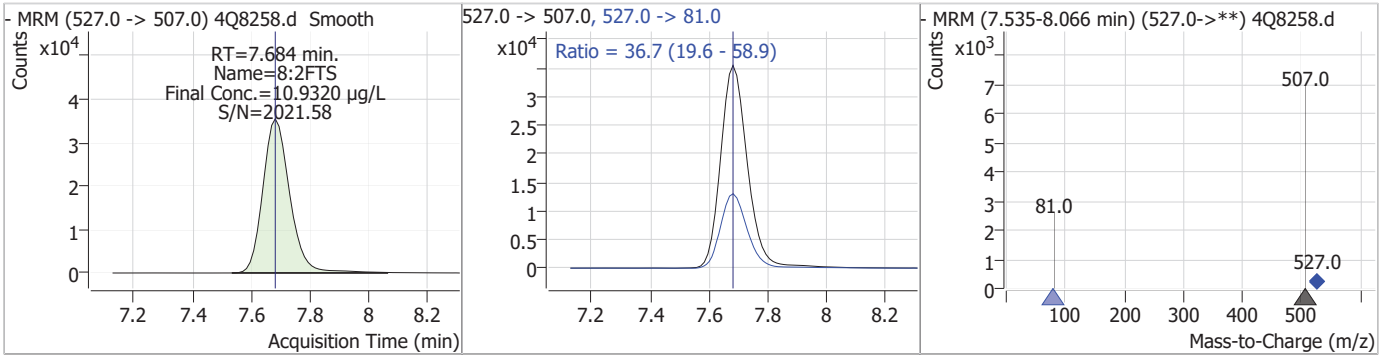
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFHpS	2.14	7.54	0.00	68908	449.0 -> 99.0	54.4	27.9	83.6



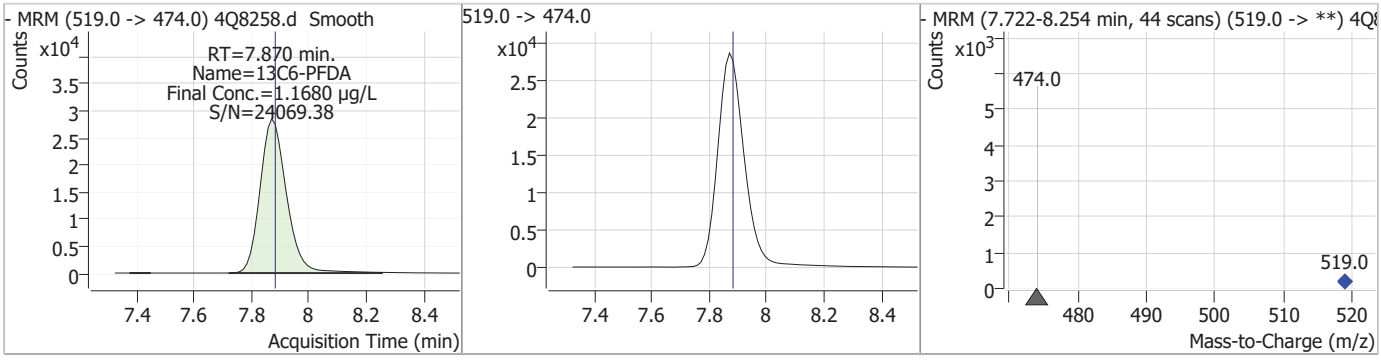
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-8:2FTS	4.77	7.68	0.00	28351				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
8:2FTS	10.93	7.68	0.00	225903	527.0 -> 81.0	36.7	19.6	58.9

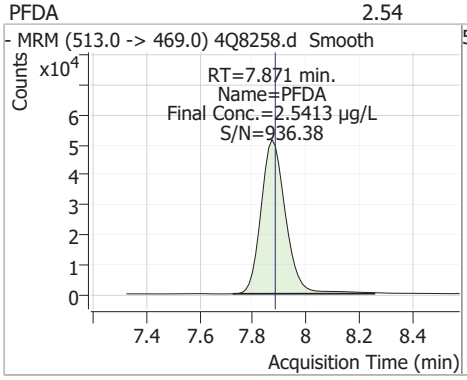


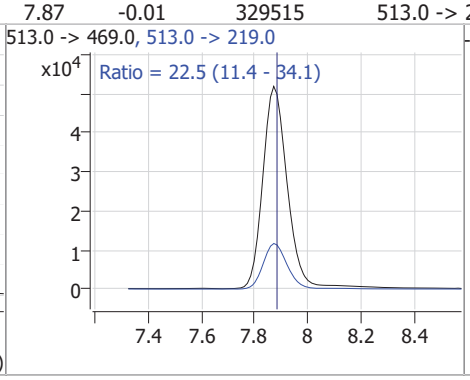
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C6-PFDA	1.17	7.87	-0.01	181952				

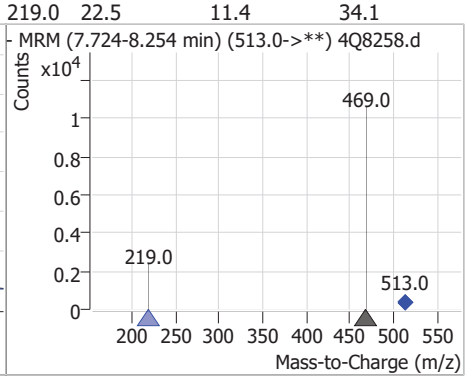


Perfluorinated Compounds by LC/MS/MS

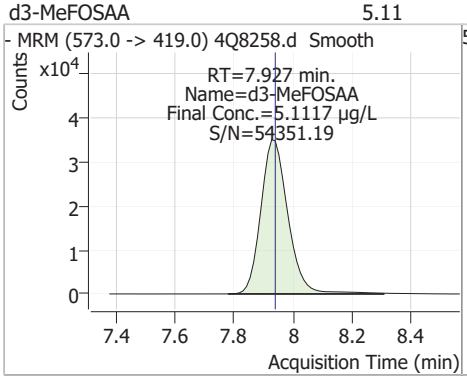
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDA	2.54	7.87	-0.01	329515	513.0 -> 219.0	22.5	11.4	34.1

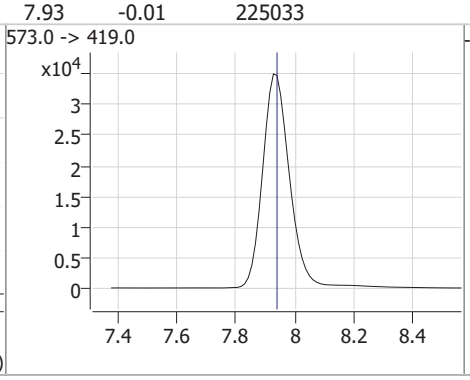


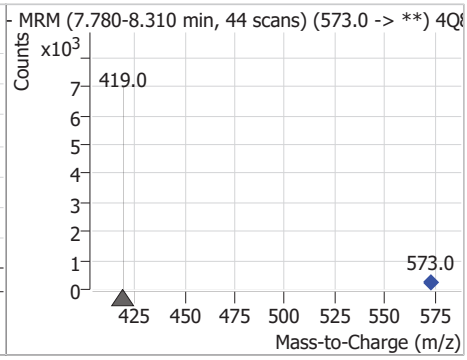




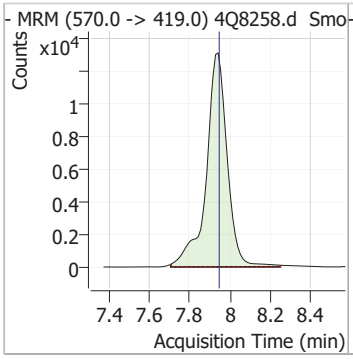
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSAA	5.11	7.93	-0.01	225033				

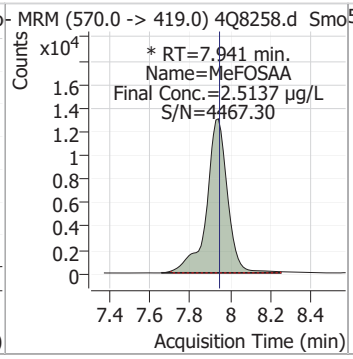


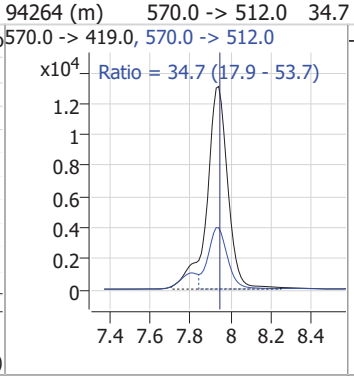


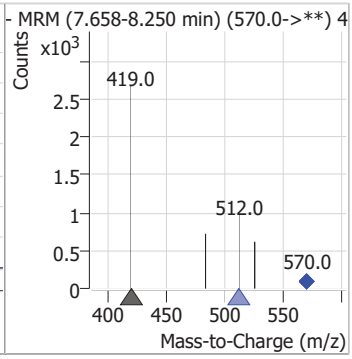


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSAA	2.51	7.94	0.00	94264 (m)	570.0 -> 512.0	34.7	17.9	53.7

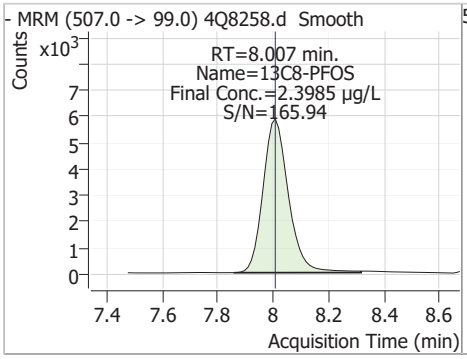


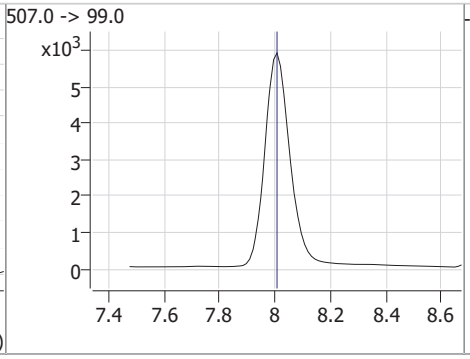


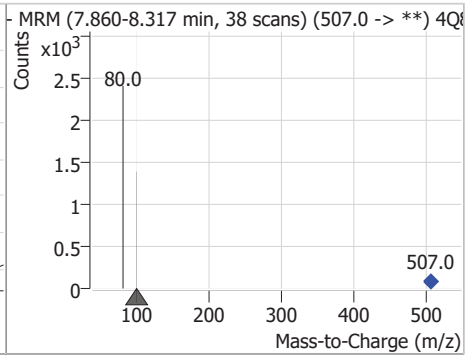




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-PFOS	2.40	8.01	0.00	37303				

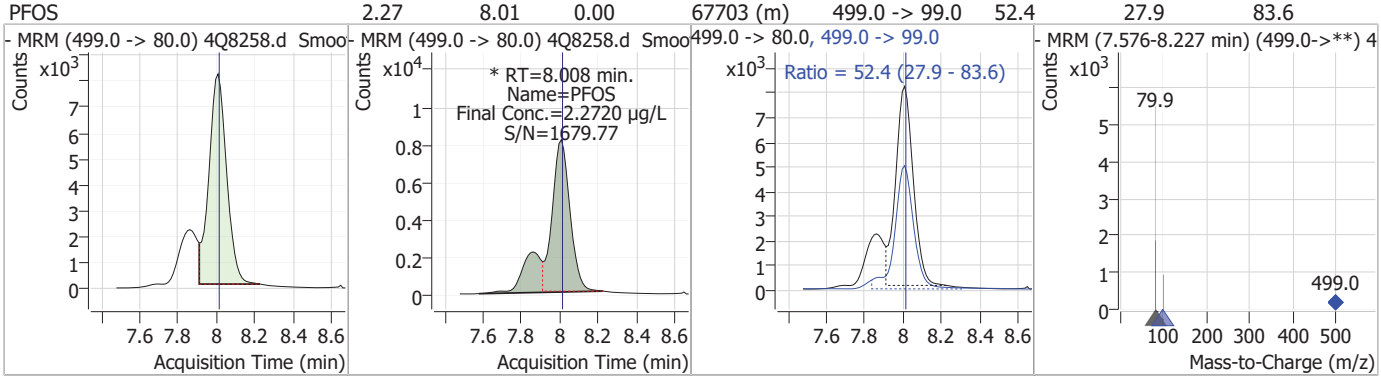




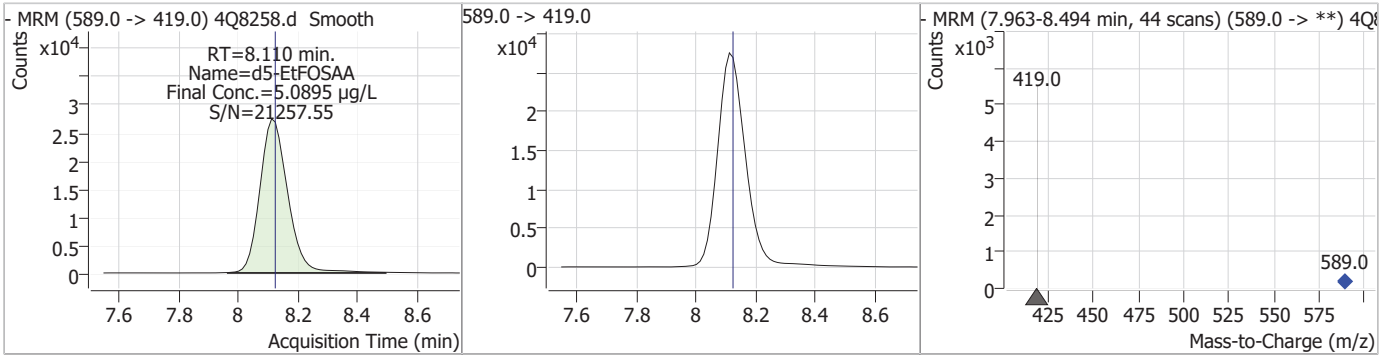


Perfluorinated Compounds by LC/MS/MS

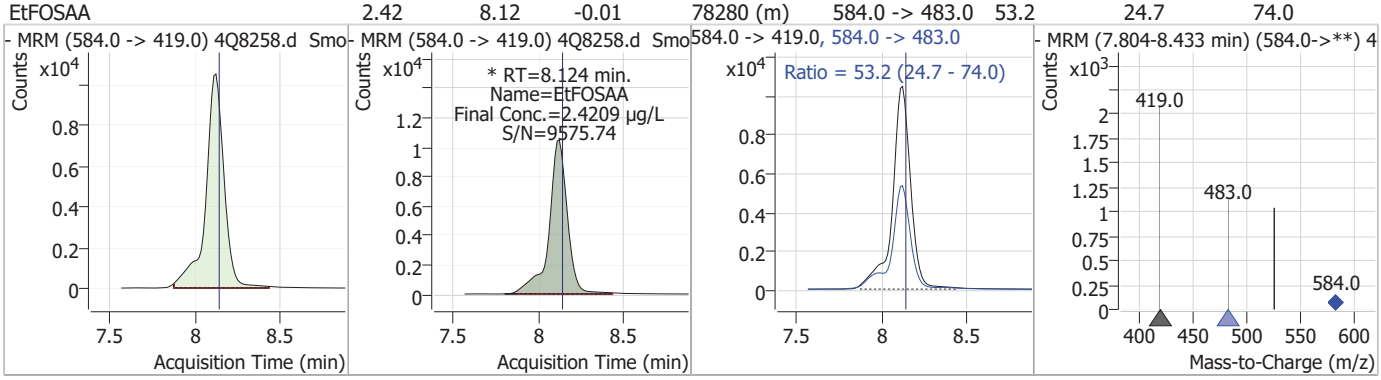
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFOS	2.27	8.01	0.00	67703 (m)	499.0 -> 99.0	52.4	27.9	83.6



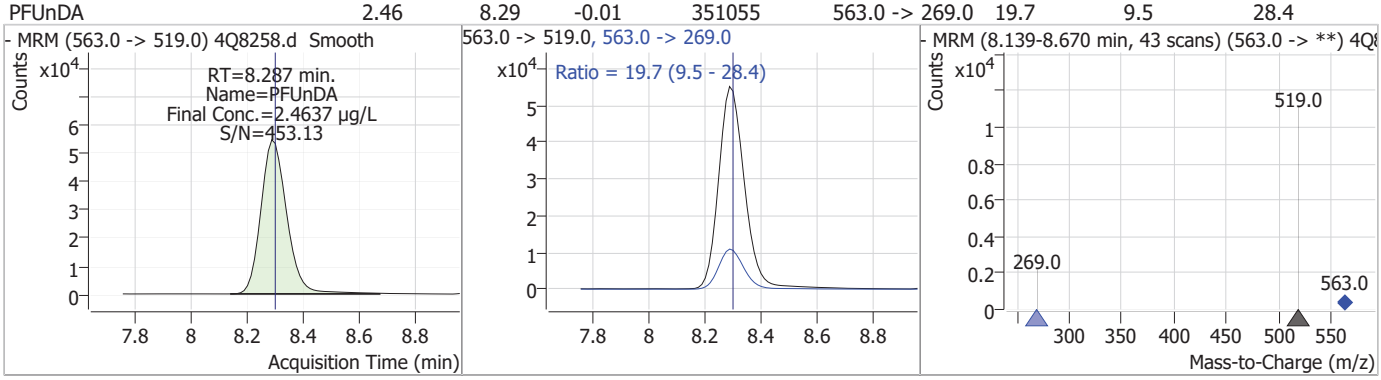
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSAA	5.09	8.11	-0.01	178892				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSAA	2.42	8.12	-0.01	78280 (m)	584.0 -> 483.0	53.2	24.7	74.0

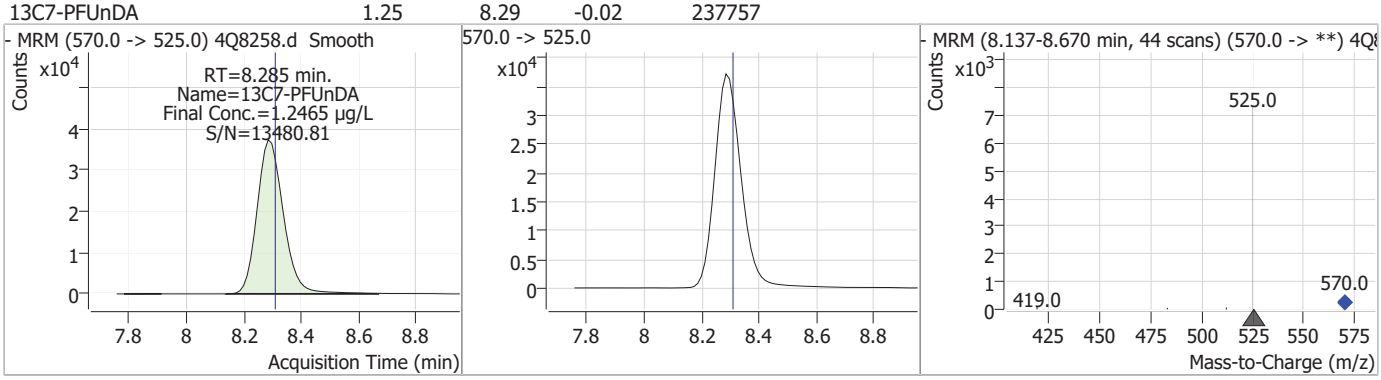


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFUnDA	2.46	8.29	-0.01	351055	563.0 -> 269.0	19.7	9.5	28.4

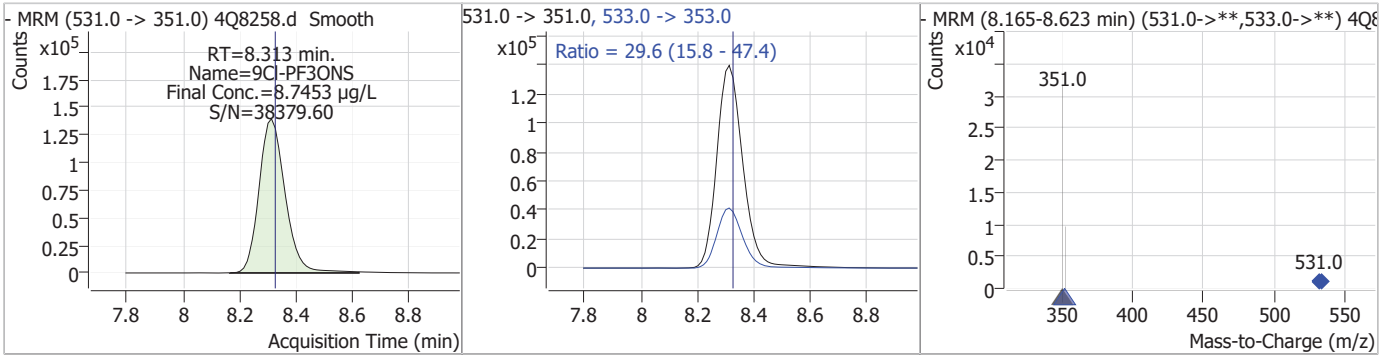


Perfluorinated Compounds by LC/MS/MS

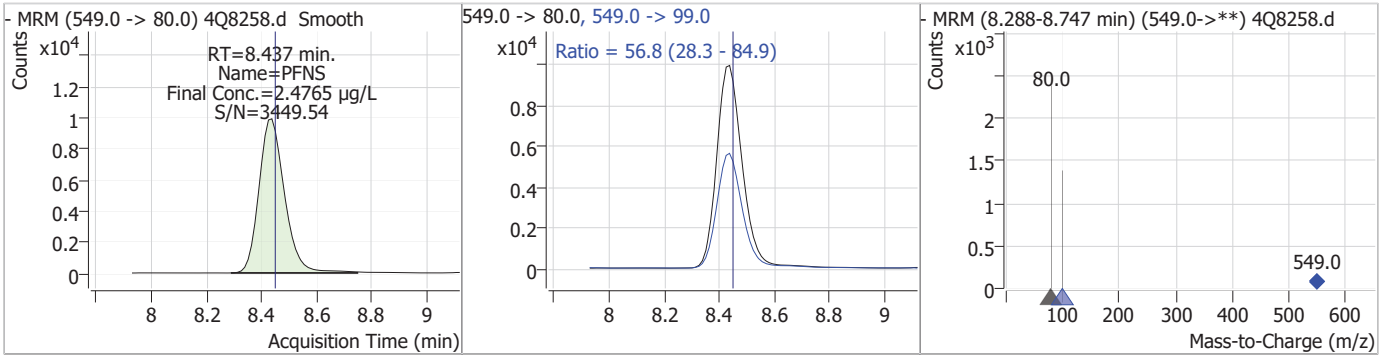
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C7-PFUnDA	1.25	8.29	-0.02	237757				



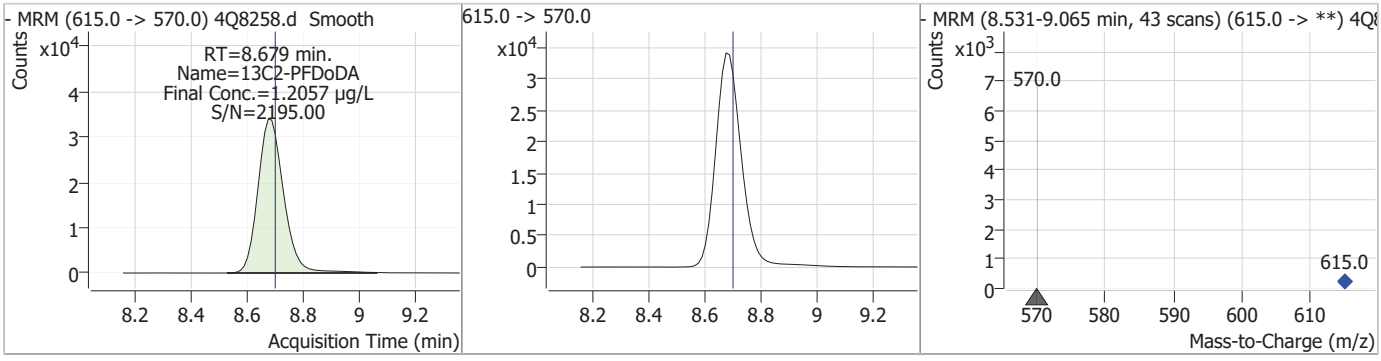
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
9Cl-PF3ONS	8.75	8.31	-0.01	895369	533.0 -> 353.0	29.6	15.8	47.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFNS	2.48	8.44	-0.01	63776	549.0 -> 99.0	56.8	28.3	84.9

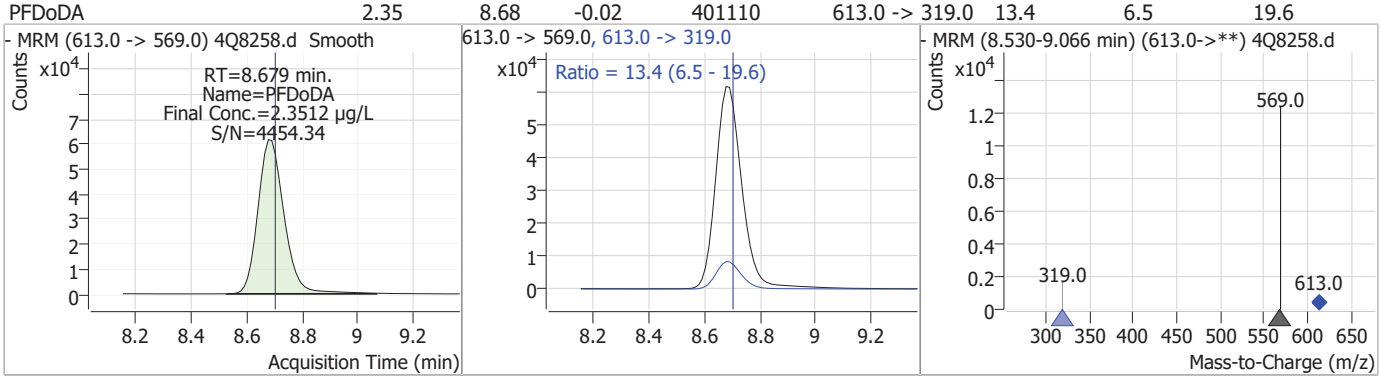


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFDoDA	1.21	8.68	-0.02	216991				

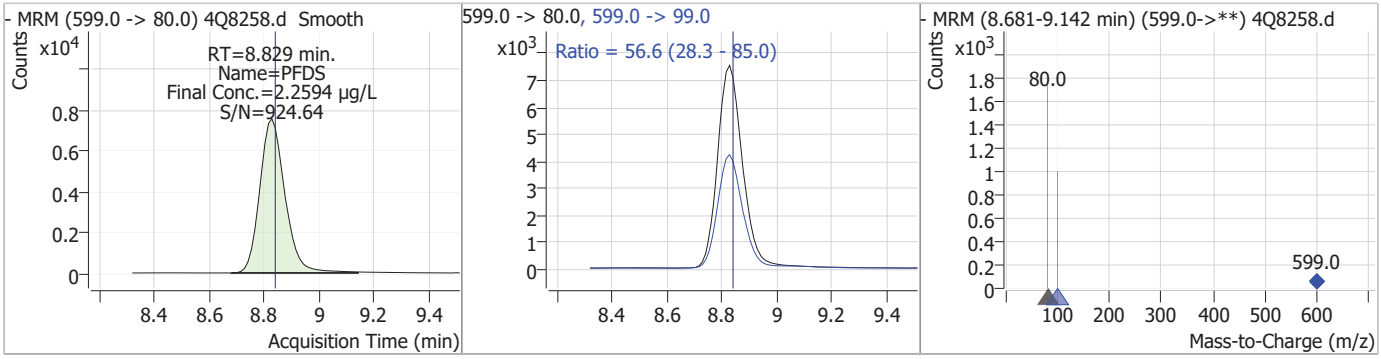


Perfluorinated Compounds by LC/MS/MS

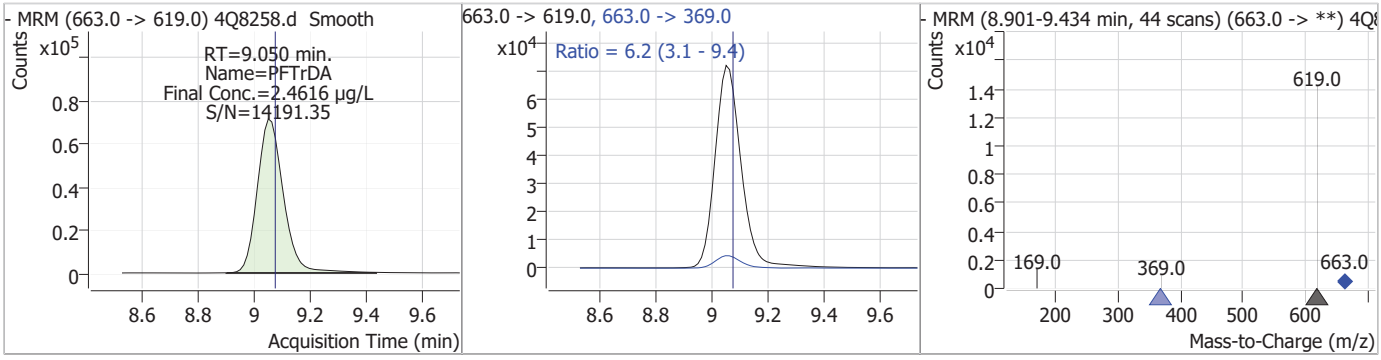
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDA	2.35	8.68	-0.02	401110	613.0 -> 319.0	13.4	6.5	19.6



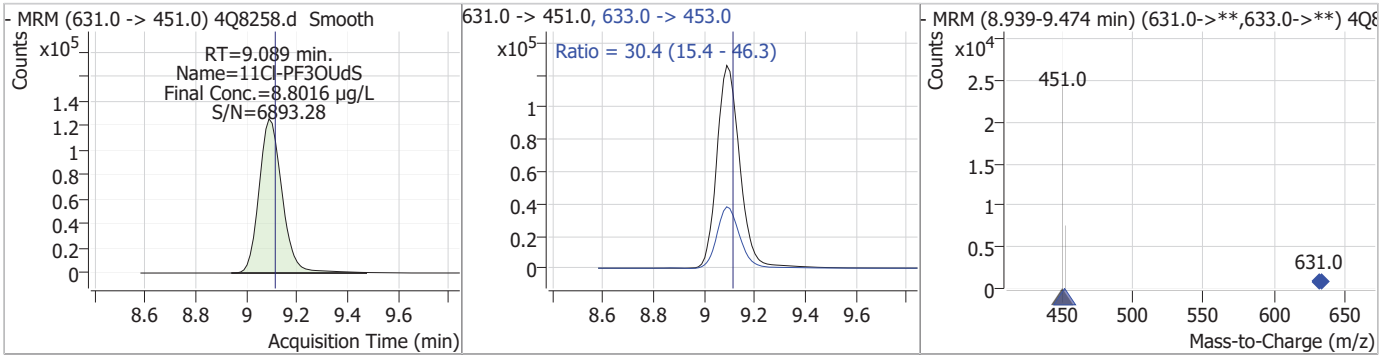
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDS	2.26	8.83	-0.01	47665	599.0 -> 99.0	56.6	28.3	85.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTrDA	2.46	9.05	-0.02	462608	663.0 -> 369.0	6.2	3.1	9.4

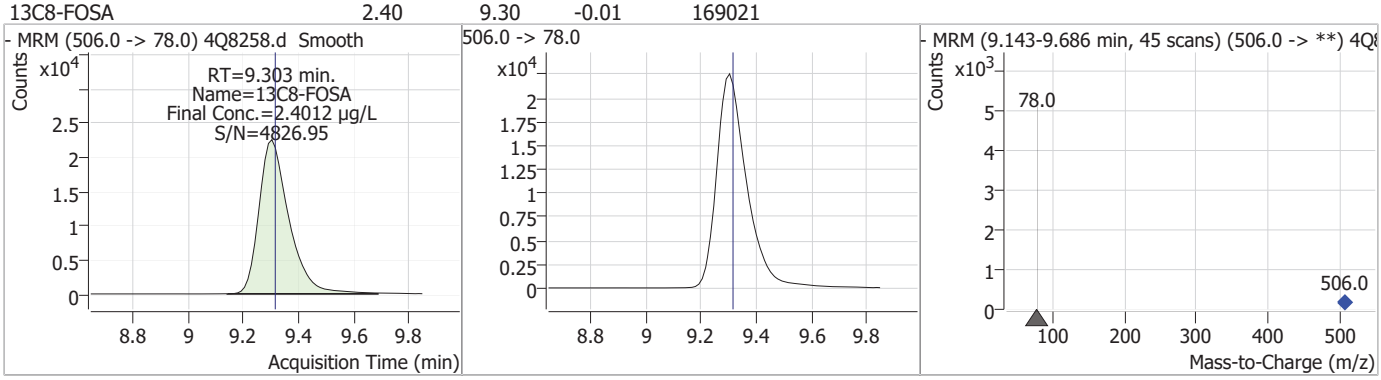


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
11Cl-PF3OUdS	8.80	9.09	-0.02	797196	633.0 -> 453.0	30.4	15.4	46.3

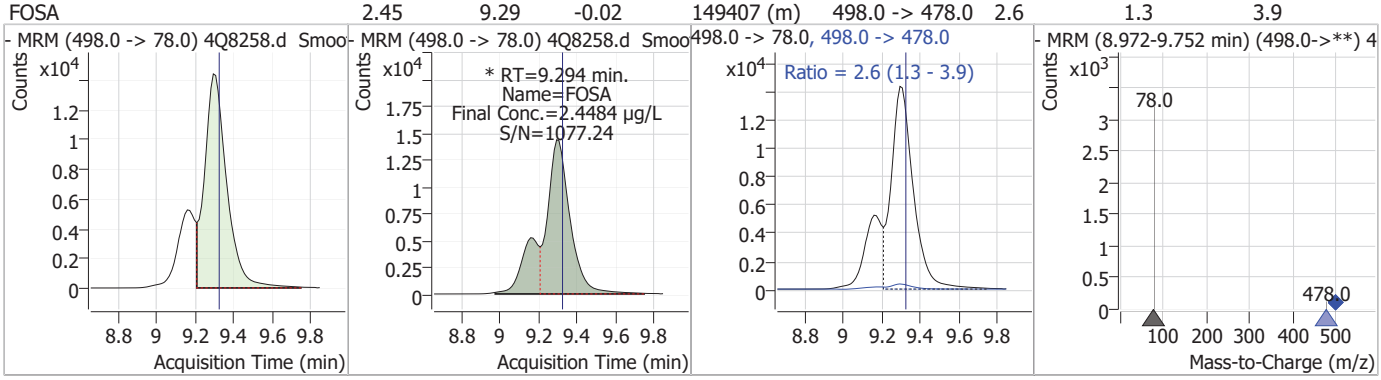


Perfluorinated Compounds by LC/MS/MS

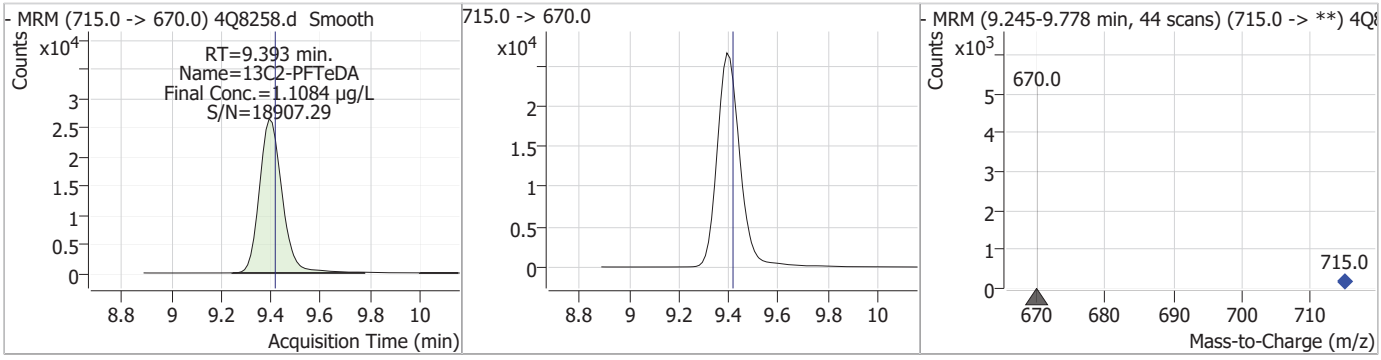
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C8-FOSA	2.40	9.30	-0.01	169021				



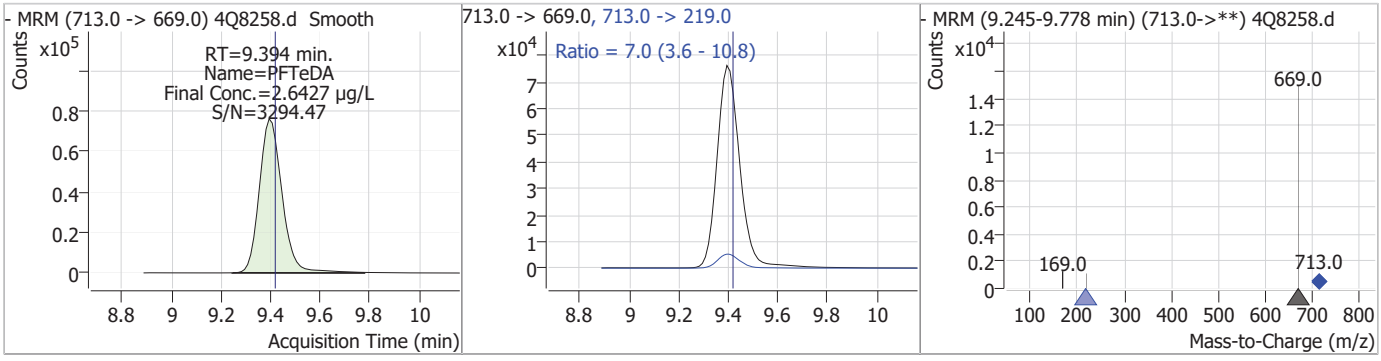
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
FOSA	2.45	9.29	-0.02	149407 (m)	498.0 -> 478.0	2.6	1.3	3.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
13C2-PFTeDA	1.11	9.39	-0.02	168569				

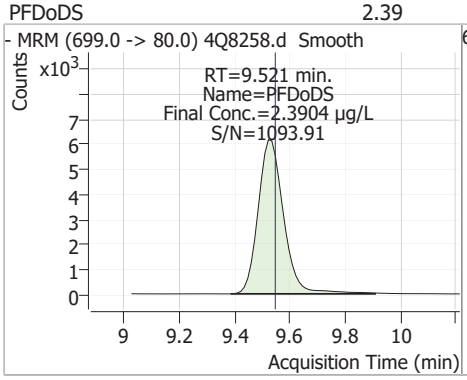


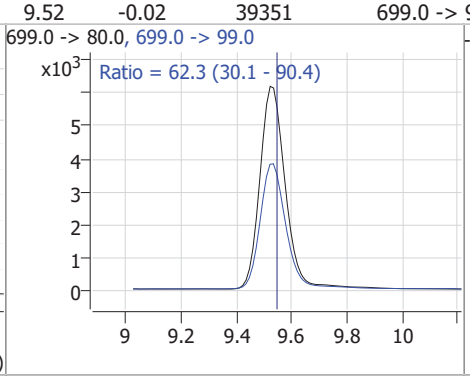
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFTeDA	2.64	9.39	-0.02	483889	713.0 -> 219.0	7.0	3.6	10.8

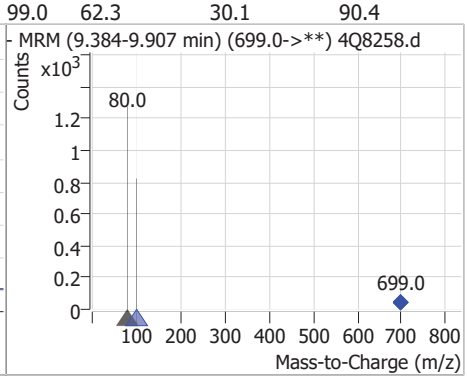


Perfluorinated Compounds by LC/MS/MS

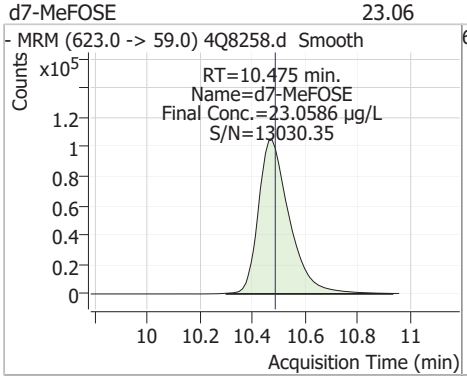
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
PFDoDS	2.39	9.52	-0.02	39351	699.0 -> 99.0	62.3	30.1	90.4

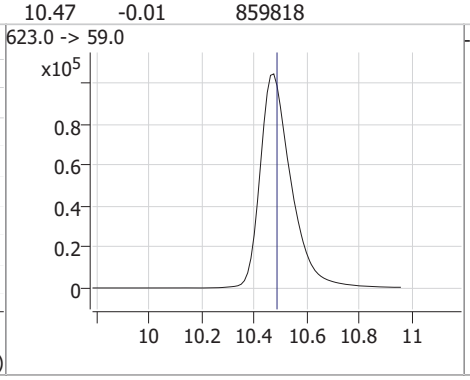


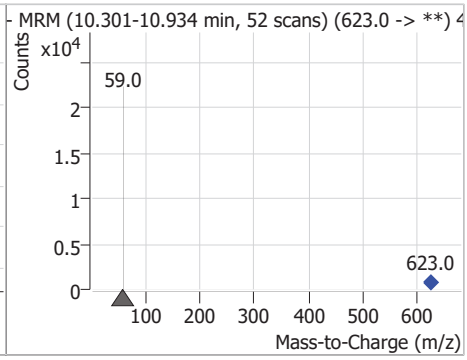




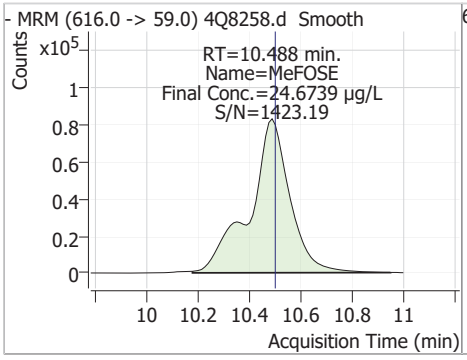
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d7-MeFOSE	23.06	10.47	-0.01	859818				

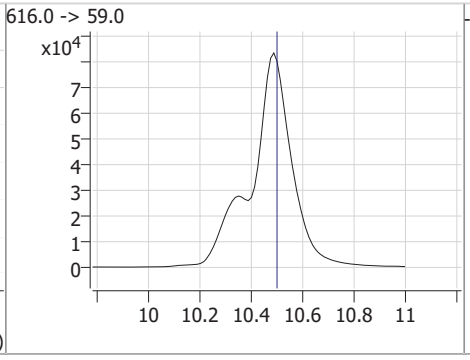


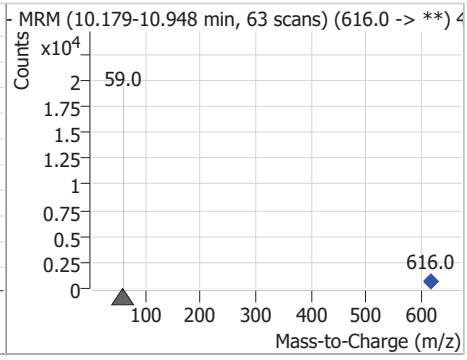




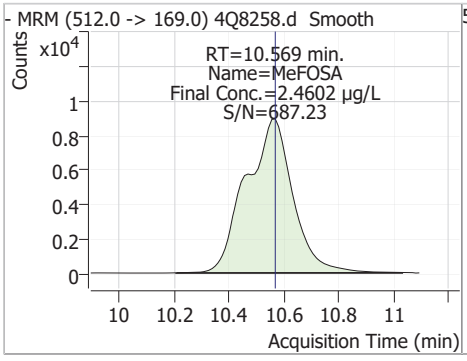
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSE	24.67	10.49	-0.01	903903				

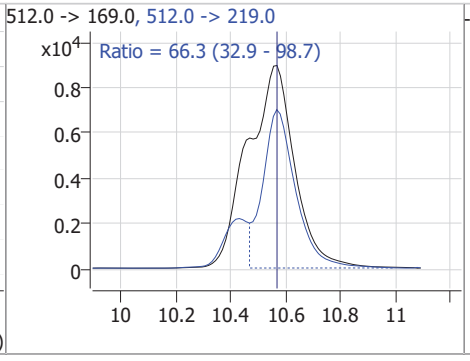


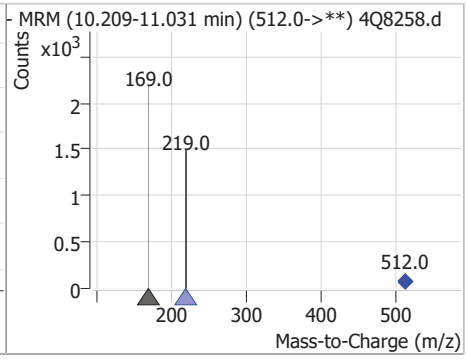




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
MeFOSA	2.46	10.57	0.00	106532	512.0 -> 219.0	66.3	32.9	98.7

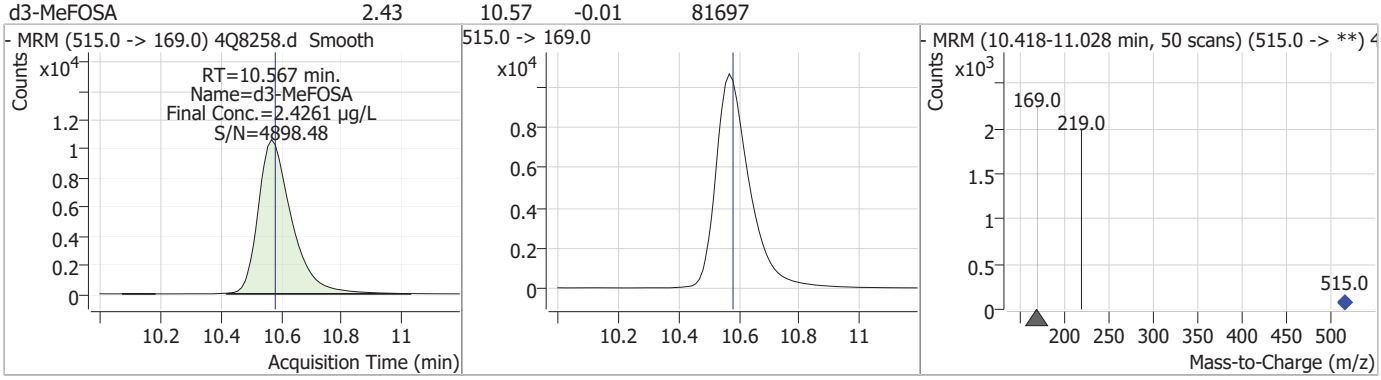




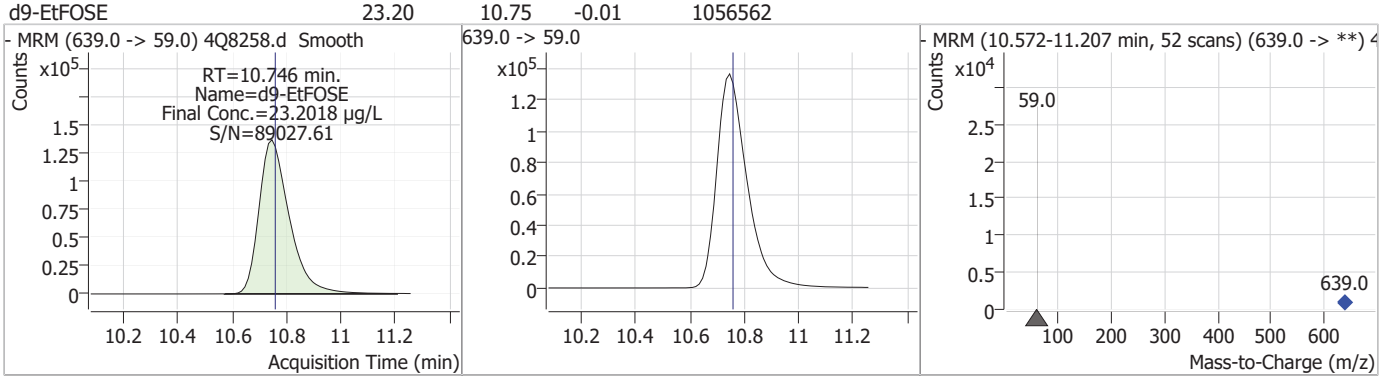


Perfluorinated Compounds by LC/MS/MS

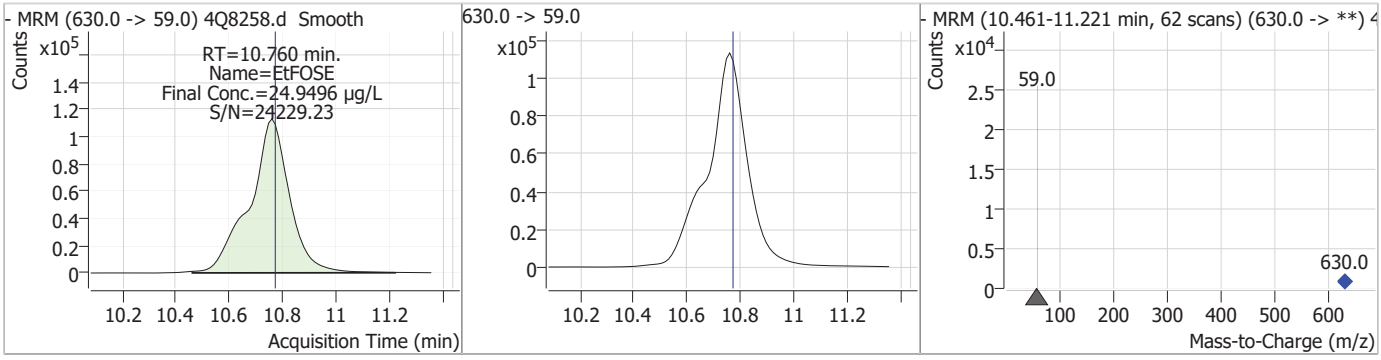
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d3-MeFOSA	2.43	10.57	-0.01	81697				



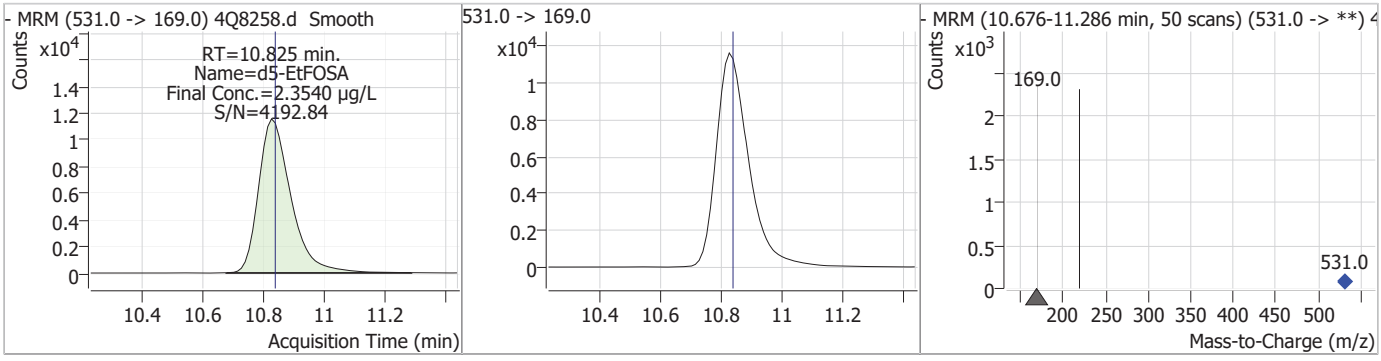
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d9-EtFOSE	23.20	10.75	-0.01	1056562				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSE	24.95	10.76	-0.01	1175304				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
d5-EtFOSA	2.35	10.82	-0.01	85433				



7.6.73

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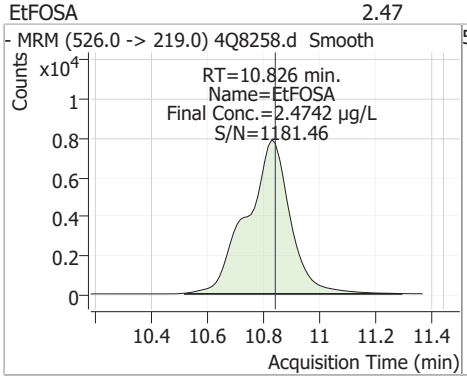
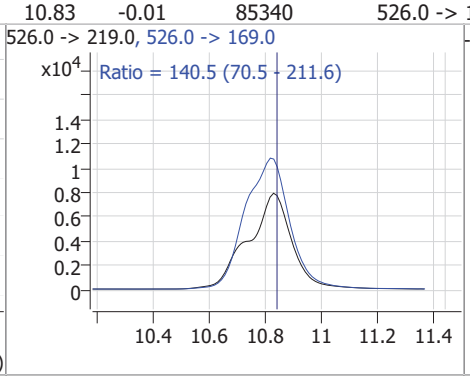
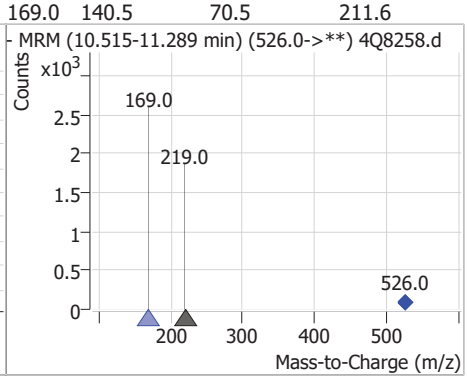
Perfluorinated Compounds by LC/MS/MS

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
EtFOSA	2.47	10.83	-0.01	85340	526.0 -> 169.0	140.5	70.5	211.6







7.6.73

7

Manual Integration Approval Summary

Sample Number: T4Q140-CC140
Lab FileID: 4Q8258.D
Injection Time: 05/02/25 20:06
Method: EPA 1633
Analyst approved: 05/05/25 03:14 Rensel John Romano
Supervisor approved: 05/05/25 07:11 Althea Mae Medina

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanoic acid	335-67-1		6.91	Split peak
Perfluorohexanesulfonic acid	355-46-4		7.00	Split peak
Perfluorononanoic acid	375-95-1		7.42	Split peak
MeFOSAA	2355-31-9		7.94	Split peak
Perfluorooctanesulfonic acid	1763-23-1		8.01	Split peak
EtFOSAA	2991-50-6		8.12	Split peak
PFOSA	754-91-6		9.29	Split peak

SGS NJ

DATE:	05/14/25
COLUMN TYPE:	POROSHELL EC18 SN-USCGC22645
AMOUNT INJ:	4.0ul
INSTRUMENT:	LCMS2-T1Q

ANALYSIS LOG

METHODS: 1633	1633
PROC. METH:	051425_1633_T1Q361
CAL DATE:	05/14/25
ANALYST:	AM RR(GBS)
RUN BATCH:	T1Q361

ELUENT A LOT #:	LC25-15-17
ELUENT B LOT #:	FISHER #242982
IC/CC STD LOT #:	1633_STK-PRO
ICV STD LOT #:	LC24-13-3
ISTD STD LOT #:	ISO723/ESO424

	Data File	Sample	Sample Name	Method	Sample Type	Level	Misc. Info	Comments
1	1q26023.d	P1-A9	CONDITIONING	1633.m	Sample		OP63461,T1Q361,500,,,5,1,WATER	-
2	1q26024.d	P1-A9	CONDITIONING	1633.m	Sample		OP63461,T1Q361,500,,,5,1,WATER	-
3	1q26025.d	P1-A8	CONDITIONING	1633.m	Sample		OP63461,T1Q361,500,,,5,1,WATER	-
4	1q26026.d	P1-B1	RT TDCA	1633.m	Sample		OP63461,T1Q361,500,,,5,1,WATER	✓
5	1q26027.d	P1-A6	RT	1633.m	Sample		OP63461,T1Q361,500,,,5,1,WATER	✓
6	1q26028.d	P1-A1	IC361-0	1633.m	Sample		OP63461,T1Q361,500,,,5,1,WATER	✓
7	1q26029.d	P1-A2	IC361-1	1633.m	Calibration	1	OP63461,T1Q361,500,,,5,1,WATER	✓
8	1q26030.d	P1-A3	IC361-2	1633.m	Calibration	2	OP63461,T1Q361,500,,,5,1,WATER	✓
9	1q26031.d	P1-A4	IC361-3	1633.m	Calibration	3	OP63461,T1Q361,500,,,5,1,WATER	✓
10	1q26032.d	P1-A5	ICC361-4	1633.m	Calibration	4	OP63461,T1Q361,500,,,5,1,WATER	✓
11	1q26033.d	P1-A6	IC361-5	1633.m	Calibration	5	OP63461,T1Q361,500,,,5,1,WATER	✓
12	1q26034.d	P1-A7	IC361-6	1633.m	Calibration	6	OP63461,T1Q361,500,,,5,1,WATER	✓
13	1q26035.d	P1-A8	IC361-7	1633.m	Calibration	7	OP63461,T1Q361,500,,,5,1,WATER	✓
14	1q26036.d	P1-A9	IC361-8	1633.m	Calibration	8	OP63461,T1Q361,500,,,5,1,WATER	✓
15	1q26037.d	P1-A1	IBLK	1633.m	Sample		OP63461,T1Q361,500,,,5,1,WATER	✓
16	1q26038.d	P1-B2	ICV361-4	1633.m	QC	4	OP63461,T1Q361,500,,,5,1,WATER	✓
17	1q26039.d	P1-A5	CC361-4	1633.m	QC	4	OP63461,T1Q361,500,,,5,1,WATER	✓
18	1q26040.d	P1-A2	CC361-1.0LL	1633.m	QC	1	OP63461,T1Q361,500,,,5,1,WATER	✓
19	1q26041.d	P1-B4	OP63461-MB	1633.m	Sample		OP63461,T1Q361,500,,,5,1,WATER	✓
20	1q26042.d	P1-B5	OP63461-LLBS:2	1633.m	Sample		OP63461,T1Q361,500,,,5,1,WATER	✓
21	1q26043.d	P1-B6	OP63461-BS	1633.m	Sample		OP63461,T1Q361,500,,,5,1,WATER	✓
22	1q26044.d	P1-B7	JE10864-1	1633.m	Sample		OP63461,T1Q361,453,,,5,1,WATER	✓
23	1q26045.d	P1-B8	JE10864-2	1633.m	Sample		OP63461,T1Q361,486,,,5,1,WATER	✓
24	1q26046.d	P1-B9	JE10864-3	1633.m	Sample		OP63461,T1Q361,491,,,5,1,WATER	✓
25	1q26047.d	P1-C1	JE10864-4	1633.m	Sample		OP63461,T1Q361,474,,,5,1,WATER	FOSA q out
26	1q26048.d	P1-C2	JE10864-5	1633.m	Sample		OP63461,T1Q361,466,,,5,1,WATER	✓
27	1q26049.d	P1-C3	JE10864-6	1633.m	Sample		OP63461,T1Q361,447,,,5,1,WATER	✓
28	1q26050.d	P1-C4	LB14800-10	1633.m	Sample		OP63461,T1Q361,460,,,5,1,WATER	✓
29	1q26051.d	P1-C5	RINSE	1633.m	Sample		OP63461,T1Q361,500,,,5,1,WATER	✓
30	1q26052.d	P1-C6	JE10417-10	1633.m	Sample		OP63461,T1Q361,56,,,5,1,WATER	✓
31	1q26053.d	P1-C7	RINSE	1633.m	Sample		OP63461,T1Q361,500,,,5,1,WATER	✓
32	1q26054.d	P1-A5	ECC361-4	1633.m	QC	4	OP63461,T1Q361,500,,,5,1,WATER	✓
33	1q26055.d	P1-A1	ICCB	1633.m	Sample		OP63461,T1Q361,500,,,5,1,WATER	✓

SGS NJ

DATE:	05/15/25
COLUMN TYPE:	POROSHELL EC18 SN-USCGC22645
AMOUNT INJ:	4.0ul
INSTRUMENT:	LCMS2-T1Q

ANALYSIS LOG

METHODS: 1633	1633
PROC. METH:	051425_1633_T1Q361
CAL DATE:	05/14/25
ANALYST:	AM AB(GBS)
RUN BATCH:	T1Q362

ELUENT A LOT #:	LC25-15-19
ELUENT B LOT #:	FISHER #242982
IC/CC STD LOT #:	1633_STK-PRO
ICV STD LOT #:	LC24-13-3
ISTD STD LOT #:	ISO723/ESO424

	Data File	Sample	Sample Name	Method	Sample Type	Level	Misc. Info	Comments
1	1q26056.d	P1-A9	CONDITIONING	1633.m	Sample		OP63379,T1Q362,500,,,5,20,WATER	-
2	1q26057.d	P1-A9	CONDITIONING	1633.m	Sample		OP63379,T1Q362,500,,,5,20,WATER	-
3	1q26058.d	P1-A8	CONDITIONING	1633.m	Sample		OP63379,T1Q362,500,,,5,20,WATER	-
4	1q26059.d	P1-B1	RT TDCA	1633.m	Sample		OP63379,T1Q362,500,,,5,20,WATER	✓
5	1q26060.d	P1-A6	RT	1633.m	Sample		OP63379,T1Q362,500,,,5,20,WATER	✓
6	1q26061.d	P1-A9	HIGH STD	1633.m	Sample		OP63379,T1Q362,500,,,5,20,WATER	✓
7	1q26062.d	P1-A1	IBLK	1633.m	Sample		OP63379,T1Q362,500,,,5,20,WATER	✓
8	1q26063.d	P1-A5	CC361-4	1633.m	QC	4	OP63379,T1Q362,500,,,5,20,WATER	✓
9	1q26064.d	P1-A2	CC361-1.0LL	1633.m	QC	1	OP63379,T1Q362,500,,,5,20,WATER	PFNS high
10	1q26065.d	P1-C7	je9871-4	1633.m	Sample		OP63379,T1Q362,61,,,5,20,WATER	
11	1q26066.d	P1-C8	je9871-5	1633.m	Sample		OP63379,T1Q362,63,,,5,20,WATER	MeFOSA EIS high
12	1q26067.d	P1-C9	rinse	1633.m	Sample		OP63379,T1Q362,500,,,5,1,WATER	-
13	1q26068.d	P1-D1	rinse	1633.m	Sample		OP63379,T1Q362,500,,,5,1,WATER	-
14	1q26069.d	P1-D2	op63534-mb	1633.m	Sample		OP63534,T1Q362,500,,,5,1,WATER	✓
15	1q26070.d	P1-D3	op63534-llbs:2	1633.m	Sample		OP63534,T1Q362,500,,,5,1,WATER	✓
16	1q26071.d	P1-D4	op63534-bs	1633.m	Sample		OP63534,T1Q362,500,,,5,1,WATER	✓
17	1q26072.d	P1-D5	je10205-2	1633.m	Sample		OP63534,T1Q362,62,,,5,1,WATER	rr5x PFOS e-val
18	1q26073.d	P1-D6	je10205-5	1633.m	Sample		OP63534,T1Q362,65,,,5,1,WATER	rr5x PFOS e-val
19	1q26074.d	P1-D7	je10205-2	1633.m	Sample		OP63534,T1Q362,62,,,5,5,WATER	
20	1q26075.d	P1-D8	je10205-2	1633.m	Sample		OP63534,T1Q362,62,,,5,10,WATER	not used
21	1q26076.d	P1-D9	je10205-5	1633.m	Sample		OP63534,T1Q362,65,,,5,5,WATER	
22	1q26077.d	P1-E1	je10205-5	1633.m	Sample		OP63534,T1Q362,65,,,5,10,WATER	not used
23	1q26078.d	P1-D1	rinse	1633.m	Sample		OP63534,T1Q362,500,,,5,1,WATER	-
24	1q26079.d	P1-E2	op63465-mb	1633.m	Sample		OP63465,T1Q362,500,,,5,1,WATER	✓
25	1q26080.d	P1-E3	op63465-llbs:2	1633.m	Sample		OP63465,T1Q362,500,,,5,1,WATER	✓
26	1q26081.d	P1-E4	op63465-lb	1633.m	Sample		OP63465,T1Q362,505,,,5,1,WATER	✓
27	1q26082.d	P1-E5	op63465-bs	1633.m	Sample		OP63465,T1Q362,500,,,5,1,WATER	✓
28	1q26083.d	P1-E6	je9645-1R	1633.m	Sample		OP63465,T1Q362,499,,,5,1,WATER	
29	1q26084.d	P1-E7	je9645-2R	1633.m	Sample		OP63465,T1Q362,487,,,5,1,WATER	
30	1q26085.d	P1-A5	cc361-4	1633.m	QC	4	OP63465,T1Q362,500,,,5,1,WATER	9Cl-PF3ONS high
31	1q26086.d	P1-A1	iccb	1633.m	Sample		OP63465,T1Q362,500,,,5,1,WATER	nd
32	1q26087.d	P1-E8	je9645-3R	1633.m	Sample		OP63465,T1Q362,471,,,5,1,WATER	

SGS NJ ANALYSIS LOG

33	1q26088.d	P1-E9	op63578-mb	1633.m	Sample		OP63578,T1Q362,500,,,5,1,WATER	✓
34	1q26089.d	P1-F1	op63578-llbs:2	1633.m	Sample		OP63578,T1Q362,500,,,5,1,WATER	
35	1q26090.d	P1-F2	op63578-bs	1633.m	Sample		OP63578,T1Q362,500,,,5,1,WATER	✓
36	1q26091.d	P1-F3	je11246-1	1633.m	Sample		OP63578,T1Q362,486,,,5,1,WATER	✓
37	1q26092.d	P1-F4	je11246-2	1633.m	Sample		OP63578,T1Q362,557,,,5,1,WATER	✓
38	1q26093.d	P1-F5	je11246-3	1633.m	Sample		OP63578,T1Q362,536,,,5,1,WATER	✓
39	1q26094.d	P1-F6	je11246-4	1633.m	Sample		OP63578,T1Q362,525,,,5,1,WATER	✓
40	1q26095.d	P1-A5	Ecc361-4	1633.m	QC	4	OP63578,T1Q362,500,,,5,1,WATER	pass
41	1q26096.d	P1-A1	iccb	1633.m	Sample		OP63578,T1Q362,500,,,5,1,WATER	nd

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ANALYSIS LOG

DATE:	05/09/25
COLUMN	POROSHELL EC18
AMOUNT INJ:	4.0ul
INSTRUMENT:	LCMS2-T2Q

METHODS: 1633	1633
PROC. METH:	050925_1633_T2Q344
CAL DATE:	05/09/25
ANALYST:	VL JG(GBS) AB(GBS)
RUN BATCH:	T2Q344

ELUENT A LOT #:	LC25-15-11
ELUENT B LOT #:	FISHER #242982
IC/CC STD LOT #:	1633_STK-PRO
ICV STD LOT #:	LC24-13-3
ISTD STD LOT #:	ISO723/ESO424

	Data file	Sample	Sample Name	Method	Sample	Level	Misc. Info	Comments
1	2q33645.d	P1-A8	CONDITIONING	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	-
2	2q33646.d	P1-A8	CONDITIONING	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	-
3	2q33647.d	P1-A9	CONDITIONING	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	-
4	2q33648.d	P1-B1	RT TDCA	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	-
5	2q33649.d	P1-A6	RT	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	-
6	2q33650.d	P1-A9	HIGH STD	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	-
7	2q33651.d	P1-B1	IBLK	1633.m	QC	4	OP62666,T2Q344,500,,,5,1,WATER	-
8	2q33652.d	P1-A5	CC343-4	1633.m	QC	4	OP62666,T2Q344,500,,,5,1,WATER	-
9	2q33653.d	P1-A2	CC343-1.0LL	1633.m	QC	1	OP62666,T2Q344,500,,,5,1,WATER	-
10	2q33654.d	P1-B5	TEST	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	-
11	2q33655.d	P1-A5	CC343-4	1633.m	QC	4	OP62666,T2Q344,500,,,5,1,WATER	-
12	2q33656.d	P1-A2	CC343-1.0LL	1633.m	QC	1	OP62666,T2Q344,500,,,5,1,WATER	-
13	2q33657.d	P1-A8	CONDITIONING	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	-
14	2q33658.d	P1-A8	CONDITIONING	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	-
15	2q33659.d	P1-A9	RT RTDCA	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	✓
16	2q33660.d	P1-A6	RT	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	✓
17	2q33661.d	P1-A1	IC344-0	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	✓
18	2q33662.d	P1-A2	IC344-1	1633.m	Calibration	1	OP62666,T2Q344,500,,,5,1,WATER	✓
19	2q33663.d	P1-A3	IC344-2	1633.m	Calibration	2	OP62666,T2Q344,500,,,5,1,WATER	✓
20	2q33664.d	P1-A4	IC344-3	1633.m	Calibration	3	OP62666,T2Q344,500,,,5,1,WATER	✓
21	2q33665.d	P1-A5	ICC344-4	1633.m	Calibration	4	OP62666,T2Q344,500,,,5,1,WATER	✓
22	2q33666.d	P1-A6	IC344-5	1633.m	Calibration	5	OP62666,T2Q344,500,,,5,1,WATER	✓
23	2q33667.d	P1-A7	IC344-6	1633.m	Calibration	6	OP62666,T2Q344,500,,,5,1,WATER	✓
24	2q33668.d	P1-A8	IC344-7	1633.m	Calibration	7	OP62666,T2Q344,500,,,5,1,WATER	✓
25	2q33669.d	P1-A9	IC344-8	1633.m	Calibration	8	OP62666,T2Q344,500,,,5,1,WATER	✓
26	2q33670.d	P1-A1	IBLK	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	✓
27	2q33671.d	P1-B2	ICV344-4	1633.m	QC	4	OP62666,T2Q344,500,,,5,1,WATER	passed
28	2q33672.d	P1-A5	CC344-4	1633.m	QC	4	OP62666,T2Q344,500,,,5,1,WATER	passed
29	2q33673.d	P1-A2	CC344-1.0LL	1633.m	QC	1	OP62666,T2Q344,500,,,5,1,WATER	passed
30	2q33674.d	P1-B4	RINSE	1633.m	Sample		OP62666,T2Q344,500,,,5,1,WATER	-
31	2q33675.d	P1-B5	JE10467-3	1633.m	Sample		OP63307,T2Q344,426,,,5,1,WATER	✓
32	2q33676.d	P1-B6	OP63459-MB	1633.m	Sample		OP63459,T2Q344,5.0,,,5,1,SOIL	✓
33	2q33677.d	P1-B7	OP63459-LLBS:2	1633.m	Sample		OP63459,T2Q344,5.0,,,5,1,SOIL	✓
34	2q33678.d	P1-B8	OP63459-BS	1633.m	Sample		OP63459,T2Q344,5.0,,,5,1,SOIL	✓

SGS NJ ANALYSIS LOG

35	2q33679.d	P1-B9	OP63459-MS	1633.m	Sample		OP63459,T2Q344,5.06,,,5,1,SOIL	✓
36	2q33680.d	P1-C1	OP63459-MSD	1633.m	Sample		OP63459,T2Q344,5.10,,,5,1,SOIL	✓
37	2q33681.d	P1-C2	JE10913-10B	1633.m	Sample		OP63459,T2Q344,5.22,,,5,1,SOIL	pfhxa-qual out
38	2q33682.d	P1-C3	JE10913-11B	1633.m	Sample		OP63459,T2Q344,5.15,,,5,1,SOIL	✓
39	2q33683.d	P1-C4	JE10913-12B	1633.m	Sample		OP63459,T2Q344,5.13,,,5,1,SOIL	✓
40	2q33684.d	P1-C5	JE10914-10B	1633.m	Sample		OP63459,T2Q344,5.19,,,5,1,SOIL	✓
41	2q33685.d	P1-C6	JE10914-11B	1633.m	Sample		OP63459,T2Q344,5.21,,,5,1,SOIL	✓
42	2q33686.d	P1-C7	JE10914-12B	1633.m	Sample		OP63459,T2Q344,5.19,,,5,1,SOIL	✓
43	2q33687.d	P1-C8	JE10921-9B	1633.m	Sample		OP63459,T2Q344,5.15,,,5,1,SOIL	pfunda-qual out
44	2q33688.d	P1-C9	JE10921-10B	1633.m	Sample		OP63459,T2Q344,5.07,,,5,1,SOIL	pfteda,fosa-qual out
45	2q33689.d	P1-D1	JE10921-11B	1633.m	Sample		OP63459,T2Q344,5.08,,,5,1,SOIL	✓
46	2q33690.d	P1-A5	CC344-4	1633.m	QC	4	OP63459,T2Q344,5.0,,,5,1,SOIL	✓
47	2q33691.d	P1-A1	ICCB	1633.m	Sample		OP63459,T2Q344,5.0,,,5,1,SOIL	-
48	2q33692.d	P1-D2	JE10921-12B	1633.m	Sample		OP63459,T2Q344,5.15,,,5,1,SOIL	✓
49	2q33693.d	P1-D3	JE10921-13B	1633.m	Sample		OP63459,T2Q344,5.07,,,5,1,SOIL	✓
50	2q33694.d	P1-D4	JE10921-14B	1633.m	Sample		OP63459,T2Q344,5.14,,,5,1,SOIL	pfteda-qual out
51	2q33695.d	P1-D5	JE10921-15B	1633.m	Sample		OP63459,T2Q344,5.1,,,5,1,SOIL	✓
52	2q33696.d	P1-D6	JE10923-8B	1633.m	Sample		OP63459,T2Q344,5.11,,,5,1,SOIL	✓
53	2q33697.d	P1-D7	JE10923-9B	1633.m	Sample		OP63459,T2Q344,5.1,,,5,1,SOIL	✓
54	2q33698.d	P1-D8	OP63380-MB	1633.m	Sample		OP63380,T2Q344,500,,,5,1,WATER	✓
55	2q33699.d	P1-D9	OP63380-LLBS:2	1633.m	Sample		OP63380,T2Q344,500,,,5,1,WATER	gen x-qual out
56	2q33700.d	P1-E1	OP63380-BS	1633.m	Sample		OP63380,T2Q344,500,,,5,1,WATER	✓
57	2q33701.d	P1-E2	JE10645-1	1633.m	Sample		OP63380,T2Q344,30,,,5,1,WATER	rr 16x? e-val eis fail pfna,pfda-qual out
58	2q33702.d	P1-E3	JE10645-2	1633.m	Sample		OP63380,T2Q344,30,,,5,1,WATER	rr 5x e-val pfna-qual out
59	2q33703.d	P1-E4	JE10645-3	1633.m	Sample		OP63380,T2Q344,20,,,5,1,WATER	rr 16x? e-val eis fail
60	2q33704.d	P1-E5	JE10645-4	1633.m	Sample		OP63380,T2Q344,30,,,5,1,WATER	pfoa-qual out✓
61	2q33705.d	P1-A5	CC344-4	1633.m	QC	4	OP63380,T2Q344,500,,,5,1,WATER	✓
62	2q33706.d	P1-A1	ICCB	1633.m	Sample		OP63380,T2Q344,500,,,5,1,WATER	-
63	2q33707.d	P1-E6	JE10766-1	1633.m	Sample		OP63380,T2Q344,498,,,5,1,WATER	✓
64	2q33708.d	P1-E7	JE10766-2	1633.m	Sample		OP63380,T2Q344,496,,,5,1,WATER	rr 5x? 4:2FTS, 6:2FTS EIS high pfhxa-qual out
65	2q33709.d	P1-E8	JE10766-3	1633.m	Sample		OP63380,T2Q344,471,,,5,1,WATER	rr 5x? 6:2FTS EIS high pfhxs-qual out
66	2q33710.d	P1-E9	JE10766-4	1633.m	Sample		OP63380,T2Q344,501,,,5,1,WATER	rr 5x? PFPeA EIS low; EtFOSAA EIS high; 6:2fts-qual out

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67	2q33711.d	P1-F1	JE10766-5	1633.m	Sample		OP63380,T2Q344,488,,,5,1,WATER	rr 5x? 4:2FTS, 6:2FTS EIS high pfpes-qual out
68	2q33712.d	P1-F2	JE10766-6	1633.m	Sample		OP63380,T2Q344,485,,,5,1,WATER	✓
69	2q33713.d	P1-F3	LB14800-18	1633.m	Sample		OP63380,T2Q344,504,,,5,1,WATER	pfhxa-qual out✓
70	2q33714.d	P1-F4	LB14800-19	1633.m	Sample		OP63380,T2Q344,502,,,5,1,WATER	✓
71	2q33715.d	P1-F5	LB14800-20	1633.m	Sample		OP63380,T2Q344,512,,,5,1,WATER	pfbs-qual out✓
72	2q33716.d	P1-F6	LB14800-21	1633.m	Sample		OP63380,T2Q344,508,,,5,1,WATER	pfna-qual out✓
73	2q33717.d	P1-A5	CC344-4	1633.m	QC	4	OP63380,T2Q344,500,,,5,1,WATER	✓
74	2q33718.d	P1-A1	ICCB	1633.m	Sample		OP63380,T2Q344,500,,,5,1,WATER	mefose> 1/2 RL
75	2q33719.d	P1-F7	LB14800-22	1633.m	Sample		OP63380,T2Q344,485,,,5,1,WATER	PFHxS qual out
76	2q33720.d	P1-F8	LB14800-23	1633.m	Sample		OP63380,T2Q344,504,,,5,1,WATER	PFNA qual out
77	2q33721.d	P1-F9	LB14800-25	1633.m	Sample		OP63380,T2Q344,503,,,5,1,WATER	PFHxA qual out
78	2q33722.d	P2-A1	JE10639-2	1633.m	Sample		OP63347,T2Q344,483,,,5,1,WATER	EtFOSAA qual out; 4:2FTS, 6:2FTS EIS high
79	2q33723.d	P2-A2	JE10639-2	1633.m	Sample		OP63347,T2Q344,483,,,5,2,WATER	
80	2q33724.d	P2-A3	JE10639-3	1633.m	Sample		OP63347,T2Q344,482,,,5,5,WATER	rr10x? PFBS EIS high
81	2q33725.d	P2-A4	JE10639-4	1633.m	Sample		OP63347,T2Q344,496,,,5,5,WATER	rr10x? 6:2FTS EIS high
82	2q33726.d	P2-A5	JE10639-5	1633.m	Sample		OP63347,T2Q344,491,,,5,5,WATER	PFNA qual out; rr10x? PFOS, 4:2FTS EIS high
83	2q33727.d	P2-A6	JE10639-6	1633.m	Sample		OP63347,T2Q344,489,,,5,5,WATER	
84	2q33728.d	P2-A7	JE10639-7	1633.m	Sample		OP63347,T2Q344,501,,,5,5,WATER	
85	2q33729.d	P1-A5	CC344-4	1633.m	QC	4	OP63347,T2Q344,500,,,5,1,WATER	✓
86	2q33730.d	P1-A1	ICCB	1633.m	Sample		OP63347,T2Q344,500,,,5,1,WATER	nd
87	2q33731.d	P1-A8	JE10639-8	1633.m	Sample		OP63347,T2Q344,504,,,5,2,WATER	multiple NIS high
88	2q33733.d	P1-A5	ECC344-4	1633.m	QC	4	OP63347,T2Q344,500,,,5,1,WATER	✓
89	2q33734.d	P1-A1	ICCB	1633.m	Sample		OP63347,T2Q344,500,,,5,1,WATER	nd

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ANALYSIS LOG

DATE:	05/12/25
COLUMN	POROSHELL EC18
AMOUNT INJ:	4.0ul
INSTRUMENT:	LCMS2-T2Q

METHODS: 1633	1633
PROC. METH:	050925_1633_T2Q344
CAL DATE:	05/09/25
ANALYST:	VL CA(GBS)
RUN BATCH:	T2Q345

ELUENT A LOT #:	LC25-15-11
ELUENT B LOT #:	FISHER #242982
IC/CC STD LOT #:	1633_STK-PRO
ICV STD LOT #:	LC24-13-3
ISTD STD LOT #:	ISO723/ESO424

	Data file	Sample	Sample Name	Method	Sample	Level	Misc. Info	Comments
1	2q33735.d	P1-A8	CONDITIONING	1633.m	Sample		OP62666,T2Q345,500,,,5,1,WATER	-
2	2q33736.d	P1-A8	CONDITIONING	1633.m	Sample		OP62666,T2Q345,500,,,5,1,WATER	-
3	2q33737.d	P1-A9	CONDITIONING	1633.m	Sample		OP62666,T2Q345,500,,,5,1,WATER	-
4	2q33738.d	P1-B1	RT TDCA	1633.m	Sample		OP62666,T2Q345,500,,,5,1,WATER	✓
5	2q33739.d	P1-A6	RT	1633.m	Sample		OP62666,T2Q345,500,,,5,1,WATER	✓
6	2q33740.d	P1-A9	HIGH STD	1633.m	Sample		OP62666,T2Q345,500,,,5,1,WATER	✓
7	2q33741.d	P1-B1	IBLK	1633.m	QC	4	OP62666,T2Q345,500,,,5,1,WATER	✓
8	2q33742.d	P1-A5	CC344-4	1633.m	QC	4	OP62666,T2Q345,500,,,5,1,WATER	not used
9	2q33743.d	P1-A2	CC344-1.0LL	1633.m	QC	1	OP62666,T2Q345,500,,,5,1,WATER	not used
10	2q33744.d	P1-A1	IBLK	1633.m	Sample		OP62666,T2Q345,500,,,5,1,WATER	✓
11	2q33745.d	P1-A5	CC344-4	1633.m	QC	4	OP62666,T2Q345,500,,,5,1,WATER	fosa, etfosa target high
12	2q33746.d	P1-A2	CC344-1.0LL	1633.m	QC	1	OP62666,T2Q345,500,,,5,1,WATER	mefosa target high
13	2q33747.d	P1-B5	OP63419-MB	1633.m	Sample		OP63419,T2Q345,500,,,5,1,WATER	✓
14	2q33748.d	P1-B6	OP63419-LLBS:2	1633.m	Sample		OP63419,T2Q345,500,,,5,1,WATER	etfosa rec high
15	2q33749.d	P1-B7	OP63419-BS	1633.m	Sample		OP63419,T2Q345,500,,,5,1,WATER	✓
16	2q33750.d	P1-B8	JE9942-3	1633.m	Sample		OP63419,T2Q345,471,,,5,1,WATER	rr due to llbs, multiple eis high/low; pfhxa qual out, pfpes qual out
17	2q33751.d	P1-B9	JE9986-1A	1633.m	Sample		OP63419,T2Q345,481,,,5,1,WATER	rr due to ccv; pfpes qual out
18	2q33752.d	P1-C1	JE10140-1	1633.m	Sample		OP63419,T2Q345,72,,,5,1,WATER	rr due to ccv
19	2q33753.d	P1-C2	JE10140-2	1633.m	Sample		OP63419,T2Q345,70,,,5,1,WATER	rr due to ccv
20	2q33754.d	P1-C3	JE10140-3	1633.m	Sample		OP63419,T2Q345,71,,,5,1,WATER	rr due to ccv; pfhxa qual out
21	2q33755.d	P1-C4	JE10140-4	1633.m	Sample		OP63419,T2Q345,69,,,5,1,WATER	✓
22	2q33756.d	P1-C5	JE10179-1A	1633.m	Sample		OP63419,T2Q345,70,,,5,1,WATER	rr due to ccv
23	2q33757.d	P1-C6	JE10205-20	1633.m	Sample		OP63419,T2Q345,70,,,5,1,WATER	rr due to ccv
24	2q33758.d	P1-C7	JE10417-1	1633.m	Sample		OP63419,T2Q345,488,,,5,1,WATER	✓
25	2q33759.d	P1-C8	JE10417-2	1633.m	Sample		OP63419,T2Q345,470,,,5,1,WATER	rr due to ccv, 13c2-4:fts, 13c2-6:2fts eis high; pfna qual out, pfns qual out
26	2q33760.d	P1-A5	CC344-4	1633.m	QC	4	OP63419,T2Q345,500,,,5,1,WATER	fosa, pfos, etfosa, mefosa target high
27	2q33761.d	P1-A1	ICCB	1633.m	Sample		OP63419,T2Q345,500,,,5,1,WATER	✓
28	2q33762.d	P1-C9	JE10417-3	1633.m	Sample		OP63419,T2Q345,70,,,5,1,WATER	rr due to ccv; pfos qual out

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29	2q33763.d	P1-D1	JE10417-4	1633.m	Sample		OP63419,T2Q345,472,,,5,1,WATER	rr due to ccv; fosa qual out
30	2q33764.d	P1-D2	JE10417-5	1633.m	Sample		OP63419,T2Q345,464,,,5,1,WATER	rr due to ccv, 13c2-4:fts, 13c2-6:2fts eis high
31	2q33765.d	P1-D3	JE10614-1	1633.m	Sample		OP63419,T2Q345,65,,,5,1,WATER	✓
32	2q33766.d	P1-D4	JE10819-1	1633.m	Sample		OP63419,T2Q345,468,,,5,1,WATER	rr due to ccv, 13c2-4:fts, 13c2-6:2fts eis high; fosa qual out, pfos qual out
33	2q33767.d	P1-D5	JE10819-2	1633.m	Sample		OP63419,T2Q345,474,,,5,1,WATER	redo? Due to ccv, 13c2-pfda, 13c4-pfos nis low, multiple eis fail; pfhxa qual out
34	2q33768.d	P1-D6	JE10766-2	1633.m	Sample		OP63380,T2Q345,496,,,5,10,WATER	rr due to ccv; pfhxa qual out; had 10X
35	2q33769.d	P1-D7	JE10766-3	1633.m	Sample		OP63380,T2Q345,471,,,5,10,WATER	rr due to ccv; had 10X
36	2q33770.d	P1-D8	JE10766-4	1633.m	Sample		OP63380,T2Q345,501,,,5,10,WATER	redo? Due to ccv 13c5-pfpea, 13c8-pfos eis high/ low; had 10X
37	2q33771.d	P1-D9	JE10766-5	1633.m	Sample		OP63380,T2Q345,488,,,5,10,WATER	rr due to ccv; had 10X
38	2q33772.d	P1-A5	CC344-4	1633.m	QC	4	OP63419,T2Q345,500,,,5,1,WATER	etfosa target high
39	2q33773.d	P1-A1	ICCB	1633.m	Sample		OP63419,T2Q345,500,,,5,1,WATER	✓
40	2q33774.d	P1-E1	JE10639-2	1633.m	Sample		OP63347,T2Q345,483,,,5,10,WATER	redo? Due to ccv, 13c3-pfbs eis high; pfbs qual out, pfhxa qual out, pfos qual out pfpes qual out; had 10X
41	2q33775.d	P1-E2	JE10639-3	1633.m	Sample		OP63347,T2Q345,482,,,5,10,WATER	redo? Due to ccv, 13c3-pfhxs eis high; pfna qual out; had 10X
42	2q33776.d	P1-E3	JE10639-4	1633.m	Sample		OP63347,T2Q345,496,,,5,10,WATER	rr due to ccv, pfhxa qual out, pfna qual out; had 10X
43	2q33777.d	P1-E4	JE10639-5	1633.m	Sample		OP63347,T2Q345,491,,,5,10,WATER	rr due to ccv, pfna qual out; had 10X
44	2q33778.d	P1-E5	JE9871-5	1633.m	Sample		OP63379,T2Q345,63,,,5,10,WATER	had 10X
45	2q33779.d	P1-E6	JE10645-4	1633.m	Sample		OP63380,T2Q345,30,,,5,1,WATER	had RR
46	2q33780.d	P1-E7	LB14800-13	1633.m	Sample		OP63379,T2Q345,506,,,5,1,WATER	rr due to ccv; pfba qual out; had RR
47	2q33781.d	P1-E8	LB14800-14	1633.m	Sample		OP63379,T2Q345,506,,,5,1,WATER	rr due to ccv: had RR
48	2q33782.d	P1-E9	LB14800-15	1633.m	Sample		OP63379,T2Q345,521,,,5,1,WATER	rr due to ccv, pfna qual out; had RR
49	2q33783.d	P1-F1	LB14800-16	1633.m	Sample		OP63379,T2Q345,515,,,5,1,WATER	rr due to ccv, pfna qual out; had RR
50	2q33784.d	P1-A5	CC344-4	1633.m	QC	4	OP63379,T2Q345,500,,,5,1,WATER	fosa, pfos, etfosa target high
51	2q33785.d	P1-A1	ICCB	1633.m	Sample		OP63379,T2Q345,500,,,5,1,WATER	✓
52	2q33786.d	P1-F2	OP63379-MB	1633.m	Sample		OP63379,T2Q345,500,,,5,1,WATER	had RR

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53	2q33787.d	P1-F3	JE9871-4	1633.m	Sample		OP63379,T2Q345,61,,,5,1,WATER	rr due to ccv, pfda qual out, pfunda qual out; had RR
54	2q33788.d	P1-F4	JE9871-5	1633.m	Sample		OP63379,T2Q345,63,,,5,1,WATER	rr due to ccv, pfns qual out; had RR
55	2q33789.d	P1-F5	JE10205-2	1633.m	Sample		OP63161,T2Q345,487,,,5,20,WATER	had 20X
56	2q33790.d	P1-F6	JE10205-10	1633.m	Sample		OP63161,T2Q345,461,,,5,5,WATER	rr due to ccv; had 5X
57	2q33791.d	P2-A1	JE10073-1	1633.m	Sample		OP63267,T2Q345,482,,,5,1,WATER	had RR
58	2q33792.d	P1-F7	JE10645-1	1633.m	Sample		OP63380,T2Q345,30,,,5,20,WATER	rr due to ccv, pfna qual out; had 20X
59	2q33793.d	P1-B4	RINSE	1633.m	Sample		OP63380,T2Q345,500,,,5,1,WATER	✓
60	2q33794.d	P1-F8	JE10645-2	1633.m	Sample		OP63380,T2Q345,30,,,5,20,WATER	rr due to ccv, pfhxa qual out; had 20X
61	2q33795.d	P1-B4	RINSE	1633.m	Sample		OP63380,T2Q345,500,,,5,1,WATER	✓
62	2q33796.d	P1-F9	JE10645-3	1633.m	Sample		OP63380,T2Q345,20,,,5,20,WATER	rr due to ccv, 13c2-pfhxa nis fail, multiple eis high/low, had 20X
63	2q33797.d	P1-B4	RINSE	1633.m	Sample		OP63380,T2Q345,500,,,5,1,WATER	✓
64	2q33798.d	P1-A5	ECC344-4	1633.m	QC	4	OP63380,T2Q345,500,,,5,1,WATER	fosa, etfosa target high
65	2q33799.d	P1-A1	ICCB	1633.m	Sample		OP63380,T2Q345,500,,,5,1,WATER	✓

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ANALYSIS LOG

DATE:	04/29/25
COLUMN TYPE:	POROSHELL EC18
AMOUNT INJ:	4.0ul
INSTRUMENT:	LCMS2-T4Q

METHODS: 1633	1633
PROC. METH:	042925_1633_T4Q137.quant method.xml
CAL DATE:	04/23/25
ANALYST:	MH RR(GBS)
RUN BATCH:	T4Q137

ELUENT A LOT #:	LC25-15-11
ELUENT B LOT #:	FISHER #242982
IC/CC STD LOT #:	LC24-13-30/LC24-12-29
ICV STD LOT #:	LC24-13-3
ISTD STD LOT #:	ISO723/ESO424

1	4Q8075.d	P1-A9	conditioning	1633.m	Sample		OP63077,T4Q137,500,,,5,1,WATER	-
2	4Q8076.d	P1-A9	conditioning	1633.m	Sample		OP63077,T4Q137,500,,,5,1,WATER	-
3	4Q8077.d	P1-A8	conditioning	1633.m	Sample		OP63077,T4Q137,500,,,5,1,WATER	-
4	4Q8078.d	P1-B1	RT TDCA	1633.m	Sample		OP63077,T4Q137,500,,,5,1,WATER	✓
5	4Q8079.d	P1-A6	RT	1633.m	Sample		OP63077,T4Q137,500,,,5,1,WATER	✓
6	4Q8080.d	P1-A1	IC137-0	1633.m	Sample		OP63077,T4Q137,500,,,5,1,WATER	✓
7	4Q8081.d	P1-A2	IC137-1	1633.m	Calibration	1	OP63077,T4Q137,500,,,5,1,WATER	✓
8	4Q8082.d	P1-A3	IC137-2	1633.m	Calibration	2	OP63077,T4Q137,500,,,5,1,WATER	✓
9	4Q8083.d	P1-A4	IC137-3	1633.m	Calibration	3	OP63077,T4Q137,500,,,5,1,WATER	✓
10	4Q8084.d	P1-A5	ICC137-4	1633.m	Calibration	4	OP63077,T4Q137,500,,,5,1,WATER	✓
11	4Q8085.d	P1-A6	IC137-5	1633.m	Calibration	5	OP63077,T4Q137,500,,,5,1,WATER	✓
12	4Q8086.d	P1-A7	IC137-6	1633.m	Calibration	6	OP63077,T4Q137,500,,,5,1,WATER	✓
13	4Q8087.d	P1-A8	IC137-7	1633.m	Calibration	7	OP63077,T4Q137,500,,,5,1,WATER	✓
14	4Q8088.d	P1-A9	IC137-8	1633.m	Calibration	8	OP63077,T4Q137,500,,,5,1,WATER	✓
15	4Q8089.d	P1-A1	IBLK	1633.m	Sample		OP63077,T4Q137,500,,,5,1,WATER	✓
16	4Q8090.d	P1-B2	ICV137-4	1633.m	QC	4	OP63077,T4Q137,500,,,5,1,WATER	✓
17	4Q8091.d	P1-A5	CC137-4	1633.m	QC	4	OP63077,T4Q137,500,,,5,1,WATER	✓
18	4Q8092.d	P1-A2	CC137-1.0 LL	1633.m	QC	1	OP63077,T4Q137,500,,,5,1,WATER	✓
19	4Q8093.d	P1-B3	OP63077-MB	1633.m	Sample		OP63077,T4Q137,500,,,5,1,WATER	✓
20	4Q8094.d	P1-B4	OP63077-LLBS:2	1633.m	Sample		OP63077,T4Q137,500,,,5,1,WATER	✓
21	4Q8095.d	P1-B5	OP63077-BS	1633.m	Sample		OP63077,T4Q137,500,,,5,1,WATER	✓
22	4Q8096.d	P1-B6	OP63077-MS	1633.m	Sample		OP63077,T4Q137,502,,,5,1,WATER	✓
23	4Q8097.d	P1-B7	OP63077-MSD	1633.m	Sample		OP63077,T4Q137,505,,,5,1,WATER	✓
24	4Q8098.d	P1-B8	JE99319-9	1633.m	Sample		OP63077,T4Q137,467,,,5,1,WATER	✓
25	4Q8099.d	P1-B9	JE9931-10	1633.m	Sample		OP63077,T4Q137,506,,,5,1,WATER	✓
26	4Q8100.d	P1-C1	JE9931-11	1633.m	Sample		OP63077,T4Q137,511,,,5,1,WATER	✓
27	4Q8101.d	P1-C2	JE9931-12	1633.m	Sample		OP63077,T4Q137,510,,,5,1,WATER	✓
28	4Q8102.d	P1-C3	JE9931-13	1633.m	Sample		OP63077,T4Q137,510,,,5,1,WATER	✓
29	4Q8103.d	P1-C4	JE9931-14	1633.m	Sample		OP63077,T4Q137,494,,,5,1,WATER	PFDS q out
30	4Q8104.d	P1-C5	JE9951-1A	1633.m	Sample		OP63077,T4Q137,507,,,5,1,WATER	PFPeS q out
31	4Q8105.d	P1-C6	JE9951-2A	1633.m	Sample		OP63077,T4Q137,513,,,5,1,WATER	✓
32	4Q8106.d	P1-C7	JE9951-3A	1633.m	Sample		OP63077,T4Q137,506,,,5,1,WATER	✓
33	4Q8107.d	P1-C8	JE9951-4A	1633.m	Sample		OP63077,T4Q137,510,,,5,1,WATER	✓
34	4Q8108.d	P1-A5	CC137-4	1633.m	QC	4	OP63077,T4Q137,500,,,5,1,WATER	✓

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35	4Q8109.d	P1-A1	ICCB	1633.m	Sample		OP63077,T4Q137,500,,,5,1,WATER	✓
36	4Q8110.d	P1-C9	JE9951-5A	1633.m	Sample		OP63077,T4Q137,505,,,5,1,WATER	✓
37	4Q8111.d	P1-D1	JE9984-3A	1633.m	Sample		OP63077,T4Q137,496,,,5,1,WATER	✓
38	4Q8112.d	P1-A5	ECC137-4	1633.m	QC	4	OP63077,T4Q137,500,,,5,1,WATER	✓
39	4Q8113.d	P1-A1	ICCB	1633.m	Sample		OP63077,T4Q137,500,,,5,1,WATER	✓

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ANALYSIS LOG

DATE:	04/30/25
COLUMN TYPE:	POROSHELL EC18
AMOUNT INJ:	4.0ul
INSTRUMENT:	LCMS2-T4Q

METHODS: 1633	1633
PROC. METH:	043025_1633_T4Q138.quant method.xml
CAL DATE:	04/30/25
ANALYST:	MH AB(GBS)
RUN BATCH:	T4Q138

ELUENT A LOT #:	LC25-15-15
ELUENT B LOT #:	FISHER #242982
IC/CC STD LOT #:	LC24-13-30/LC24-12-29
ICV STD LOT #:	LC24-13-3
ISTD STD LOT #:	ISO723/ESO424

	Data File	Sample	Sample Name	Method	Sample Type	Level	Misc. Info	Comments
1	4Q8114.d	P1-A9	conditioning	1633.m	Sample		OP63077,T4Q138,500,,,5,1,WATER	-
2	4Q8115.d	P1-A8	conditioning	1633.m	Sample		OP63077,T4Q138,500,,,5,1,WATER	-
3	4Q8116.d	P1-A8	conditioning	1633.m	Sample		OP63077,T4Q138,500,,,5,1,WATER	-
4	4Q8117.d	P1-B1	RT TDCA	1633.m	Sample		OP63077,T4Q138,500,,,5,1,WATER	-
5	4Q8118.d	P1-A6	RT	1633.m	Sample		OP63077,T4Q138,500,,,5,1,WATER	-
6	4Q8119.d	P1-A9	HIGH STD	1633.m	Sample		OP63077,T4Q138,500,,,5,1,WATER	-
7	4Q8120.d	P1-A1	IBLK	1633.m	Sample		OP63077,T4Q138,500,,,5,1,WATER	-
8	4Q8121.d	P1-A5	CC137-4	1633.m	QC	4	OP63077,T4Q138,500,,,5,1,WATER	-
9	4Q8122.d	P1-A2	CC137-1.0 LL	1633.m	QC	1	OP63077,T4Q138,500,,,5,1,WATER	NOT USED
10	4Q8123.d	P1-A2	CC137-1.0 LL	1633.m	QC	1	OP63077,T4Q138,500,,,5,1,WATER	NOT USED
11	4Q8124.d	P1-A9	conditioning	1633.m	Sample		OP63077,T4Q138,500,,,5,1,WATER	-
12	4Q8125.d	P1-B1	RT TDCA	1633.m	Sample		OP63077,T4Q138,500,,,5,1,WATER	✓
13	4Q8126.d	P1-A6	RT	1633.m	Sample		OP63077,T4Q138,500,,,5,1,WATER	✓
14	4Q8127.d	P1-A1	IC138-0	1633.m	Sample		OP63077,T4Q138,500,,,5,1,WATER	✓
15	4Q8128.d	P1-A2	IC138-1	1633.m	Calibration	1	OP63077,T4Q138,500,,,5,1,WATER	✓
16	4Q8129.d	P1-A3	IC138-2	1633.m	Calibration	2	OP63077,T4Q138,500,,,5,1,WATER	✓
17	4Q8130.d	P1-A4	IC138-3	1633.m	Calibration	3	OP63077,T4Q138,500,,,5,1,WATER	✓
18	4Q8131.d	P1-A5	ICC138-4	1633.m	Calibration	4	OP63077,T4Q138,500,,,5,1,WATER	✓
19	4Q8132.d	P1-A6	IC138-5	1633.m	Calibration	5	OP63077,T4Q138,500,,,5,1,WATER	✓
20	4Q8133.d	P1-A7	IC138-6	1633.m	Calibration	6	OP63077,T4Q138,500,,,5,1,WATER	✓
21	4Q8134.d	P1-A8	IC138-7	1633.m	Calibration	7	OP63077,T4Q138,500,,,5,1,WATER	✓
22	4Q8135.d	P1-A9	IC138-8	1633.m	Calibration	8	OP63077,T4Q138,500,,,5,1,WATER	✓
23	4Q8136.d	P1-A1	IBLK	1633.m	Sample		OP63077,T4Q138,500,,,5,1,WATER	✓
24	4Q8137.d	P1-B2	ICV138-4	1633.m	QC	4	OP63077,T4Q138,500,,,5,1,WATER	✓
25	4Q8138.d	P1-A5	CC138-4	1633.m	QC	4	OP63077,T4Q138,500,,,5,1,WATER	✓
26	4Q8139.d	P1-A2	CC138-1.0 LL	1633.m	QC	1	OP63077,T4Q138,500,,,5,1,WATER	✓
27	4Q8140.d	P1-B3	OP63163-MB	1633.m	Sample		OP63163,T4Q138,500,,,5,1,WATER	✓
28	4Q8141.d	P1-B4	OP63163-LLBS:2	1633.m	Sample		OP63163,T4Q138,500,,,5,1,WATER	✓
29	4Q8142.d	P1-B5	OP63163-BS	1633.m	Sample		OP63163,T4Q138,500,,,5,1,WATER	✓
30	4Q8143.d	P1-B6	JE10205-11	1633.m	Sample		OP63163,T4Q138,501,,,5,1,WATER	✓
31	4Q8144.d	P1-B7	JE10205-12	1633.m	Sample		OP63163,T4Q138,520,,,5,1,WATER	✓
32	4Q8145.d	P1-B8	JE10205-13	1633.m	Sample		OP63163,T4Q138,506,,,5,1,WATER	rr10x ; PFHxS, PFOS e-val; FOSA qual out

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33	4Q8146.d	P1-B9	JE10205-14	1633.m	Sample		OP63163,T4Q138,515,,,5,1,WATER	✓
34	4Q8147.d	P1-C1	JE10205-15	1633.m	Sample		OP63163,T4Q138,503,,,5,1,WATER	rr20x ; multiple e-val; FOSA, PFNS qual out
35	4Q8148.d	P1-C2	JE10205-16	1633.m	Sample		OP63163,T4Q138,502,,,5,1,WATER	rr 1x ; C/O
36	4Q8149.d	P1-C3	JE10205-17	1633.m	Sample		OP63163,T4Q138,489,,,5,1,WATER	✓
37	4Q8150.d	P1-C4	JE10205-18	1633.m	Sample		OP63163,T4Q138,511,,,5,1,WATER	✓
38	4Q8151.d	P1-C5	JE10205-19	1633.m	Sample		OP63163,T4Q138,495,,,5,1,WATER	✓
39	4Q8152.d	P1-C6	JE10205-20	1633.m	Sample		OP63163,T4Q138,520,,,5,1,WATER	multiple EIS low; NEED RX
40	4Q8153.d	P1-A5	CC138-4	1633.m	QC	4	OP63163,T4Q138,500,,,5,1,WATER	✓
41	4Q8154.d	P1-A1	ICCB	1633.m	Sample		OP63163,T4Q138,500,,,5,1,WATER	✓
42	4Q8155.d	P1-C7	JE10205-21	1633.m	Sample		OP63163,T4Q138,508,,,5,1,WATER	✓
43	4Q8156.d	P1-C8	OP63161-MB	1633.m	Sample		OP63161,T4Q138,500,,,5,1,WATER	✓
44	4Q8157.d	P1-C9	OP63161-LLBS:2	1633.m	Sample		OP63161,T4Q138,500,,,5,1,WATER	✓
45	4Q8158.d	P1-D1	OP63161-BS	1633.m	Sample		OP63161,T4Q138,500,,,5,1,WATER	✓
46	4Q8159.d	P1-D2	OP63161-MS	1633.m	Sample		OP63161,T4Q138,488,,,5,1,WATER	rr10x multiple e-val
47	4Q8160.d	P1-D3	OP63161-MSD	1633.m	Sample		OP63161,T4Q138,488,,,5,1,WATER	rr10x multiple e-val
48	4Q8161.d	P1-D4	JE10205-1	1633.m	Sample		OP63161,T4Q138,487,,,5,1,WATER	rr10x multiple e-val; PFDS, PFNS qual out
49	4Q8162.d	P1-D5	JE10205-2	1633.m	Sample		OP63161,T4Q138,487,,,5,1,WATER	Multiple e-val; NEED RX 60ML multiuple EIS high
50	4Q8163.d	P1-D6	JE10205-3	1633.m	Sample		OP63161,T4Q138,481,,,5,1,WATER	rr10x PFHxS, PFOS e-val; PFDS qual out
51	4Q8164.d	P1-D7	JE10205-4	1633.m	Sample		OP63161,T4Q138,483,,,5,1,WATER	✓
52	4Q8165.d	P1-D8	JE10205-5	1633.m	Sample		OP63161,T4Q138,481,,,5,1,WATER	Multiple e-val; NEED 60ML; FOSA EIS high FOSA, PFDS qual out
53	4Q8166.d	P1-D9	JE10205-6	1633.m	Sample		OP63161,T4Q138,477,,,5,1,WATER	✓
54	4Q8167.d	P1-E1	JE10205-7	1633.m	Sample		OP63161,T4Q138,494,,,5,1,WATER	✓
55	4Q8168.d	P1-E2	JE10205-8	1633.m	Sample		OP63161,T4Q138,493,,,5,1,WATER	✓
56	4Q8169.d	P1-E3	JE10205-9	1633.m	Sample		OP63161,T4Q138,466,,,5,1,WATER	8:2 FTS e value; RR 10X
57	4Q8170.d	P1-A5	CC138-4	1633.m	QC	4	OP63161,T4Q138,500,,,5,1,WATER	✓
58	4Q8171.d	P1-A1	ICCB	1633.m	Sample		OP63161,T4Q138,500,,,5,1,WATER	✓
59	4Q8172.d	P1-E4	JE10205-10	1633.m	Sample		OP63161,T4Q138,461,,,5,1,WATER	PFOS e value; rr 5x
60	4Q8173.d	P1-A5	ECC138-4	1633.m	QC	4	OP63161,T4Q138,500,,,5,1,WATER	✓
61	4Q8174.d	P1-A1	ICCB	1633.m	Sample		OP63161,T4Q138,500,,,5,1,WATER	✓

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ANALYSIS LOG

DATE:	05/01/25
COLUMN TYPE:	POROSHELL EC18
AMOUNT INJ:	4.0ul
INSTRUMENT:	LCMS2-T4Q

METHODS: 1633	1633
PROC. METH:	043025_1633_T4Q138.quant method.xml
CAL DATE:	04/30/25
ANALYST:	MH JG(GBS)
RUN BATCH:	T4Q139

ELUENT A LOT #:	LC25-15-15
ELUENT B LOT #:	FISHER #242982
IC/CC STD LOT #:	LC24-13-30/LC24-12-29
ICV STD LOT #:	LC24-13-3
ISTD STD LOT #:	ISO723/ESO424

	Data File	Sample	Sample Name	Method	Sample Type	Level	Misc. Info	Comments
1	4Q8175.d	P1-A9	conditioning	1633.m	Sample		OP63077,T4Q139,500,,,5,1,WATER	-
2	4Q8176.d	P1-A9	conditioning	1633.m	Sample		OP63077,T4Q139,500,,,5,1,WATER	-
3	4Q8177.d	P1-A8	conditioning	1633.m	Sample		OP63077,T4Q139,500,,,5,1,WATER	-
4	4Q8178.d	P1-B1	RT TDCA	1633.m	Sample		OP63077,T4Q139,500,,,5,1,WATER	✓
5	4Q8179.d	P1-A6	RT	1633.m	Sample		OP63077,T4Q139,500,,,5,1,WATER	✓
6	4Q8180.d	P1-A9	HIGH STD	1633.m	Sample		OP63077,T4Q139,500,,,5,1,WATER	✓
7	4Q8181.d	P1-A1	IBLK	1633.m	Sample		OP63077,T4Q139,500,,,5,1,WATER	✓
8	4Q8182.d	P1-A5	CC137-4	1633.m	QC	4	OP63077,T4Q139,500,,,5,1,WATER	NOT USED
9	4Q8183.d	P1-A2	CC137-1.0 LL	1633.m	QC	1	OP63077,T4Q139,500,,,5,1,WATER	✓
10	4Q8184.d	P1-A5	CC137-4	1633.m	QC	4	OP63077,T4Q139,500,,,5,1,WATER	FOSA HIGH
11	4Q8185.d	P2-A1	JE10205-16	1633.m	Sample		OP63163,T4Q139,502,,,5,1,WATER	✓
12	4Q8186.d	P2-A2	JE10205-4	1633.m	Sample		OP63161,T4Q139,483,,,5,1,WATER	✓
13	4Q8187.d	P2-A3	JE10205-1	1633.m	Sample		OP63161,T4Q139,487,,,5,10,WATER	rr 10X &16x? Due to ccv e-val pfos
14	4Q8188.d	P2-A4	JE10205-3	1633.m	Sample		OP63161,T4Q139,481,,,5,20,WATER	✓
15	4Q8189.d	P2-A5	JE10205-5	1633.m	Sample		OP63161,T4Q139,481,,,5,20,WATER	for rx e-flag pfos
16	4Q8190.d	P2-A6	JE10205-9	1633.m	Sample		OP63161,T4Q139,466,,,5,10,WATER	rr due to ccv
17	4Q8191.d	P2-A7	JE10205-10	1633.m	Sample		OP63161,T4Q139,461,,,5,5,WATER	rr due to ccv fosa-qual out
18	4Q8192.d	P2-A8	JE10205-13	1633.m	Sample		OP63163,T4Q139,506,,,5,10,WATER	✓
19	4Q8193.d	P2-A9	JE10205-15	1633.m	Sample		OP63163,T4Q139,503,,,5,20,WATER	✓
20	4Q8196.d	P1-E5	OP63229-MB	1633.m	Sample		OP63229,T4Q139,500,,,5,1,WATER	✓
21	4Q8197.d	P1-E6	OP63229-LLBS:2	1633.m	Sample		OP63229,T4Q139,500,,,5,1,WATER	✓
22	4Q8198.d	P1-E7	OP63229-BS	1633.m	Sample		OP63229,T4Q139,500,,,5,1,WATER	Fosa high rec
23	4Q8199.d	P1-E8	JE10366-2	1633.m	Sample		OP63229,T4Q139,510,,,5,1,WATER	✓
24	4Q8200.d	P1-A5	CC137-4	1633.m	QC	4	OP63229,T4Q139,500,,,5,1,WATER	FOSA HIGH
25	4Q8201.d	P1-A1	ICCB	1633.m	Sample		OP63229,T4Q139,500,,,5,1,WATER	✓
26	4Q8202.d	P1-E9	JE10366-9	1633.m	Sample		OP63229,T4Q139,468,,,5,1,WATER	✓
27	4Q8203.d	P1-F1	JE10366-10	1633.m	Sample		OP63229,T4Q139,491,,,5,1,WATER	NIS Failed pfhxs-qual out
28	4Q8204.d	P1-F2	OP63227-MB	1633.m	Sample		OP63227,T4Q139,5.0,,,5,1,SOIL	✓
29	4Q8205.d	P1-F3	OP63227-LLBS:2	1633.m	Sample		OP63227,T4Q139,5.0,,,5,1,SOIL	✓
30	4Q8206.d	P1-F4	OP63227-BS	1633.m	Sample		OP63227,T4Q139,5.0,,,5,1,SOIL	Fosa high rec
31	4Q8207.d	P1-F5	OP63227-MS	1633.m	Sample		OP63227,T4Q139,5.01,,,5,1,SOIL	✓

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32	4Q8208.d	P1-F6	OP63227-MSD	1633.m	Sample		OP63227,T4Q139,5.01,,,5,1,SOIL	✓
33	4Q8209.d	P1-F7	JE10368-10B	1633.m	Sample		OP63227,T4Q139,5.07,,,5,1,SOIL	pfbs-qual out
34	4Q8210.d	P1-F8	JE10368-11B	1633.m	Sample		OP63227,T4Q139,5.04,,,5,1,SOIL	✓
35	4Q8211.d	P1-F9	JE10368-12B	1633.m	Sample		OP63227,T4Q139,5.07,,,5,1,SOIL	✓
36	4Q8212.d	P2-B1	JE10369-7B	1633.m	Sample		OP63227,T4Q139,5.01,,,5,1,SOIL	✓
37	4Q8213.d	P2-B2	JE10369-8B	1633.m	Sample		OP63227,T4Q139,5.15,,,5,1,SOIL	✓
38	4Q8214.d	P2-B3	JE10370-7B	1633.m	Sample		OP63227,T4Q139,5.08,,,5,1,SOIL	pfbs-qual out
39	4Q8215.d	P2-B4	JE10370-8B	1633.m	Sample		OP63227,T4Q139,5.02,,,5,1,SOIL	pfunda,pfbs-qual out
40	4Q8216.d	P2-B5	JE10371-8B	1633.m	Sample		OP63227,T4Q139,5.0,,,5,1,SOIL	pfhxs-qual out
41	4Q8217.d	P1-A5	CC137-4	1633.m	QC	4	OP63227,T4Q139,5.0,,,5,1,SOIL	FOSA HIGH
42	4Q8218.d	P1-A1	ICCB	1633.m	Sample		OP63227,T4Q139,5.0,,,5,1,SOIL	✓
43	4Q8219.d	P2-B6	JE10371-9B	1633.m	Sample		OP63227,T4Q139,5.15,,,5,1,SOIL	rr due to ecc
44	4Q8220.d	P1-A5	ECC137-4	1633.m	QC	4	OP63227,T4Q139,5.0,,,5,1,SOIL	✓
45	4Q8221.d	P1-A1	ICCB	1633.m	Sample		OP63227,T4Q139,5.0,,,5,1,SOIL	PFOS, FOSA HIGH

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ANALYSIS LOG

DATE:	05/04/25
COLUMN TYPE:	POROSHELL EC18
AMOUNT INJ:	4.0ul
INSTRUMENT:	LCMS2-T4Q

METHODS: 1633	1633
PROC. METH:	050425_1633_T4Q140.quant method.xml
CAL DATE:	04/30/25
ANALYST:	MH RR(GBS)
RUN BATCH:	T4Q140

ELUENT A LOT #:	LC25-15-15
ELUENT B LOT #:	FISHER #242982
IC/CC STD LOT #:	LC24-13-30/LC24-12-29
ICV STD LOT #:	LC24-13-3
ISTD STD LOT #:	ISO723/ESO424

	Data File	Sample	Sample Name	Method	Sample Type	Level	Misc. Info	Comments
1	4Q8225.d	P1-A9	conditioning	1633.m	Sample		OP63077,T4Q140,500,,,5,1,WATER	-
2	4Q8226.d	P1-A9	conditioning	1633.m	Sample		OP63077,T4Q140,500,,,5,1,WATER	-
3	4Q8227.d	P1-A8	conditioning	1633.m	Sample		OP63077,T4Q140,500,,,5,1,WATER	-
4	4Q8228.d	P1-B1	RT TDCA	1633.m	Sample		OP63077,T4Q140,500,,,5,1,WATER	✓
5	4Q8229.d	P1-A6	RT	1633.m	Sample		OP63077,T4Q140,500,,,5,1,WATER	✓
6	4Q8230.d	P1-A1	IC140-0	1633.m	Sample		OP63077,T4Q140,500,,,5,1,WATER	✓
7	4Q8231.d	P1-A2	IC140-1	1633.m	Calibration	1	OP63077,T4Q140,500,,,5,1,WATER	✓
8	4Q8232.d	P1-A3	IC140-2	1633.m	Calibration	2	OP63077,T4Q140,500,,,5,1,WATER	✓
9	4Q8233.d	P1-A4	IC140-3	1633.m	Calibration	3	OP63077,T4Q140,500,,,5,1,WATER	✓
10	4Q8234.d	P1-A5	ICC140-4	1633.m	Calibration	4	OP63077,T4Q140,500,,,5,1,WATER	✓
11	4Q8235.d	P1-A6	IC140-5	1633.m	Calibration	5	OP63077,T4Q140,500,,,5,1,WATER	✓
12	4Q8236.d	P1-A7	IC140-6	1633.m	Calibration	6	OP63077,T4Q140,500,,,5,1,WATER	✓
13	4Q8237.d	P1-A8	IC140-7	1633.m	Calibration	7	OP63077,T4Q140,500,,,5,1,WATER	✓
14	4Q8238.d	P1-A9	IC140-8	1633.m	Calibration	8	OP63077,T4Q140,500,,,5,1,WATER	✓
15	4Q8239.d	P1-A1	IBLK	1633.m	Sample		OP63077,T4Q140,500,,,5,1,WATER	✓
16	4Q8240.d	P1-B2	ICV140-4	1633.m	QC	4	OP63077,T4Q140,500,,,5,1,WATER	✓
17	4Q8241.d	P1-A5	CC140-4	1633.m	QC	4	OP63077,T4Q140,500,,,5,1,WATER	✓
18	4Q8242.d	P1-A2	CC140-1.0LL	1633.m	QC	1	OP63077,T4Q140,500,,,5,1,WATER	✓
19	4Q8243.d	P1-B3	OP63199-MB	1633.m	Sample		OP63199,T4Q140,5.0,,,5,1,SOIL	rr
20	4Q8244.d	P1-B4	OP63199-LLBS:2	1633.m	Sample		OP63199,T4Q140,5.0,,,5,1,SOIL	rr
21	4Q8245.d	P1-B5	OP63199-BS	1633.m	Sample		OP63199,T4Q140,5.0,,,5,1,SOIL	rr
22	4Q8246.d	P1-B6	OP63199-MS	1633.m	Sample		OP63199,T4Q140,5.16,,,5,1,SOIL	JE10279-7B ; rr
23	4Q8247.d	P1-B7	OP63199-MSD	1633.m	Sample		OP63199,T4Q140,5.07,,,5,1,SOIL	JE10279-7B ; rr
24	4Q8248.d	P1-B8	JE10236-1	1633.m	Sample		OP63199,T4Q140,5.17,,,5,1,SOIL	rr
25	4Q8249.d	P1-B9	JE10278-10B	1633.m	Sample		OP63199,T4Q140,5.09,,,5,1,SOIL	rr
26	4Q8250.d	P1-C1	JE10278-11B	1633.m	Sample		OP63199,T4Q140,5.05,,,5,1,SOIL	rr
27	4Q8251.d	P1-C2	JE10278-12B	1633.m	Sample		OP63199,T4Q140,5.17,,,5,1,SOIL	rr; PFBS q out
28	4Q8252.d	P1-C3	JE10279-7B	1633.m	Sample		OP63199,T4Q140,5.2,,,5,1,SOIL	rr
29	4Q8253.d	P1-C4	JE10279-8B	1633.m	Sample		OP63199,T4Q140,5.07,,,5,1,SOIL	rr
30	4Q8254.d	P1-C5	JE10205-1	1633.m	Sample		OP63161,T4Q140,487,,,5,1,WATER	RR; PFDS q out; e-val
31	4Q8255.d	P1-C6	JE10205-1	1633.m	Sample		OP63161,T4Q140,487,,,5,20,WATER	20x
32	4Q8256.d	P1-C7	JE10205-10	1633.m	Sample		OP63161,T4Q140,461,,,5,5,WATER	5x ; rr; multiple NIS low
33	4Q8257.d	P1-C8	JE10205-9	1633.m	Sample		OP63161,T4Q140,466,,,5,1,WATER	RR

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34	4Q8258.d	P1-A5	CC140-4	1633.m	QC	4	OP63161,T4Q140,500,,,5,1,WATER	✓
35	4Q8259.d	P1-A1	ICCB	1633.m	Sample		OP63161,T4Q140,500,,,5,1,WATER	✓
36	4Q8260.d	P1-C9	OP63162-MB	1633.m	Sample		OP63162,T4Q140,5.0,,,5,1,SOIL	rr
37	4Q8261.d	P1-D1	OP63162-LLBS:2	1633.m	Sample		OP63162,T4Q140,5.0,,,5,1,SOIL	rr
38	4Q8262.d	P1-D2	OP63162-BS	1633.m	Sample		OP63162,T4Q140,5.0,,,5,1,SOIL	rr
39	4Q8263.d	P1-D3	OP63162-MS	1633.m	Sample		OP63162,T4Q140,5.18,,,5,1,SOIL	rr
40	4Q8264.d	P1-D4	OP63162-MSD	1633.m	Sample		OP63162,T4Q140,5.12,,,5,1,SOIL	rr
41	4Q8265.d	P1-D5	JE10073-3A	1633.m	Sample		OP63162,T4Q140,5.12,,,5,1,SOIL	rr
42	4Q8266.d	P1-D6	JE10073-5A	1633.m	Sample		OP63162,T4Q140,5.2,,,5,1,SOIL	rr
43	4Q8267.d	P1-D7	JE10073-6A	1633.m	Sample		OP63162,T4Q140,5.14,,,5,1,SOIL	rr
44	4Q8268.d	P1-D8	JE10061-1A	1633.m	Sample		OP63162,T4Q140,5.05,,,5,1,SOIL	rr; PFDS, PFHpS q out
45	4Q8269.d	P1-D9	OP63082-LLBS:2	1633.m	Sample		OP63082,T4Q140,500,,,5,1,WATER	rr
46	4Q8270.d	P1-E1	JE9942-2	1633.m	Sample		OP63076,T4Q140,482,,,5,1,WATER	rr;13c2-6:2fts high
47	4Q8271.d	P1-E2	JE9942-2A	1633.m	Sample		OP63076,T4Q140,473,,,5,1,WATER	rr; possible wrong sample id
48	4Q8272.d	P1-E3	JE9942-3	1633.m	Sample		OP63076,T4Q140,482,,,5,1,WATER	rr;13c5-pfpea low, 13c2-6:2fts high
49	4Q8273.d	P1-E4	JE9942-3	1633.m	Sample		OP63076,T4Q140,482,,,5,5,WATER	5x; FOSA q out; 13c5-pfpea low
50	4Q8274.d	P1-E5	JE9870-8	1633.m	Sample		OP63050,T4Q140,507,,,5,1,WATER	rr; 13c2-4:2fts high
51	4Q8275.d	P1-E6	JE10371-9B	1633.m	Sample		OP63227,T4Q140,5.15,,,5,1,SOIL	rr; PFUnDA q out
52	4Q8276.d	P1-A5	CC140-4	1633.m	QC	4	OP63161,T4Q140,500,,,5,1,WATER	✓
53	4Q8277.d	P1-A1	ICCB	1633.m	Sample		OP63161,T4Q140,500,,,5,1,WATER	✓
54	4Q8278.d	P1-E7	JE9868-2	1633.m	Sample		OP63022,T4Q140,499,,,5,1,WATER	RR; PFNS q out
55	4Q8279.d	P1-E8	JE9868-2	1633.m	Sample		OP63022,T4Q140,499,,,5,5,WATER	5X
56	4Q8280.d	P1-E9	JE9663-1A	1633.m	Sample		OP62940,T4Q140,5.02,,,5,10,SOIL	10X; d3-mefosa, d5-etfosa low
57	4Q8281.d	P2-A1	OP63266-MB	1633.m	Sample		OP63266,T4Q140,5.0,,,5,1,SOIL	✓
58	4Q8282.d	P2-A2	OP63266-LLBS:2	1633.m	Sample		OP63266,T4Q140,5.0,,,5,1,SOIL	✓
59	4Q8283.d	P2-A3	OP63266-BS	1633.m	Sample		OP63266,T4Q140,5.0,,,5,1,SOIL	✓
60	4Q8284.d	P2-A4	OP63266-MS	1633.m	Sample		OP63266,T4Q140,5.17,,,5,1,SOIL	✓
61	4Q8285.d	P2-A5	OP63266-MSD	1633.m	Sample		OP63266,T4Q140,5.09,,,5,1,SOIL	✓
62	4Q8286.d	P2-A6	JE10442-10B	1633.m	Sample		OP63266,T4Q140,5.09,,,5,1,SOIL	✓
63	4Q8287.d	P2-A7	JE10442-11B	1633.m	Sample		OP63266,T4Q140,5.08,,,5,1,SOIL	✓
64	4Q8288.d	P2-A8	JE10442-12B	1633.m	Sample		OP63266,T4Q140,5.13,,,5,1,SOIL	✓
65	4Q8289.d	P2-A9	JE10443-4B	1633.m	Sample		OP63266,T4Q140,5.17,,,5,1,SOIL	✓
66	4Q8290.d	P2-B1	JE10444-7B	1633.m	Sample		OP63266,T4Q140,5.07,,,5,1,SOIL	✓
67	4Q8291.d	P2-B2	JE10444-8B	1633.m	Sample		OP63266,T4Q140,5.09,,,5,1,SOIL	✓
68	4Q8292.d	P1-A5	ECC140-4	1633.m	QC	4	OP63266,T4Q140,5.0,,,5,1,SOIL	✓
69	4Q8293.d	P1-A1	ICCB	1633.m	Sample		OP63266,T4Q140,5.0,,,5,1,SOIL	✓

PFAS Extraction Logbook

Date Started: 29-Apr-2025 Time Started: 8:00 AM
Date Finished: 29-Apr-2025 Time Finished: 4:00 PM

Extract Method (CHECK OFF "X" /DO NOT CIRCLE):
EPA 1633 X
533 537.1 ASTM D7968

Pipette ID: NA Balance ID: B 96 water X Soil SPLP (SW846-3512)

BATCH # LCMSMS	OP63161	RACK#
Set-up by:	MK	
Reviewed by:	BE	Date: 29Apr25

Sample #	Bottle #	Sample Vol (mL)	initial pH	adjusted pH	Surrogate amount (ul)	Spike amount (ul)	Final Extraction vol (mL)	NIS amount (ul)	Weight of Bottle Before(g)	Weight of Bottle After (g)	Observations
MB		500	7	na	50	na	5	50			
LLBS		500	7	na	50	64	5	50			
BS		500	7	na	50	400	5	50			
MS	JE10205-1	488	6	na	50	400	5	50	532	44	
MSD	JE10205-1	486	6	na	50	400	5	50	532	44	
JE10205-1		487	6	na	50	na	5	50	531	44	
JE10205-2		487	7	na	50	na	5	50	531	44	
JE10205-3		481	7	na	50	na	5	50	525	44	
JE10205-4		483	6	na	50	na	5	50	527	44	
JE10205-5		481	6	na	50	na	5	50	525	44	
JE10205-6		477	7	na	50	na	5	50	522	45	
JE10205-7		494	6	na	50	na	5	50	538	44	
JE10205-8		493	6	na	50	na	5	50	537	44	
JE10205-9		468	6	na	50	na	5	50	510	44	
JE10205-10		461	6	na	50	na	5	50	505	44	sediment

Materials	LOT #	expiration date	source
0.3% Ammonium Hydroxide MEOH	na	na	na
1% Ammonium Hydroxide MEOH	LC25-22-29	14-Jul-25	inhouse
0.1M Formic 1:1 MEOH	LC25-22-48	23-Jul-25	inhouse
3% Ammonium Hydroxide in water	na	na	na
3% Formic Acid in water	LC25-22-15	27-Jun-25	inhouse
Nylon Syringe Filters	211570103	na	AGLIENT
pH strips	204524	1-Feb-27	HYDRION
SPE Cartridge	6828917-01	NA	AGLIENT
Glass Wool	A0435106	NA	THERMOSCIENTFIC
Ammonium Hydroxide	234241	20-Mar-27	FISHER
Acetic Acid	241944	8-Oct-26	FISHER
Formic Acid	236174A	30-Aug-26	FISHER
Methanol	242693	21-Apr-27	FISHER
Carbon	182840	1-Aug-29	SIGMA-ALDRICH
NIS	LC25-25-17	29-Jul-25	inhouse
EIS	LC25-25-14	28-Jul-25	inhouse
Filters	na	na	na
Ottawa Sand	na	na	na
0.1M Phosphate	na	na	na
1g/L Ammonium Acetate in water	na	na	na
80% Methanol in water	na	na	na
Target Spike Sol	LC25-25-13	25-Jul-25	inhouse
96% Methanol in water	na	na	na

Syringe ID #1
Syringe ID #2
Syringe ID #3

LCMS002-02
Rev. Date: 3/17/25

Intc: 60
EIS: 60
NTS: 60

SGS Dayton, NJ

WORK GROUP PRODUCT SUMMARY (wk02p)

Apr 29 2025, 08:38 am

Work Group: OP63161 for Department: 2 Organics Prep

Created: 29-APR-25 Due: Operator: MAXWELLK Desc: 1633 Prep Method: EPA 1633 (PFAS in NPW and soil)

Samplenum	PREM	Acctnum	ST	Matx	Deliv	Program	Location	%Sol	TAT	Workdate H	Collected	ANDueDate	StatDate	Products			
JE10205-1	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	22-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	531	6	44
		ClientID: MW-004															
JE10205-2	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	22-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	531	7	44
		ClientID: MW-008															
JE10205-3	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	22-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	525	7	44
		ClientID: MW-009S															
JE10205-4	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	22-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	527	6	44
		ClientID: MW-009D															
JE10205-5	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	22-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	525	6	44
		ClientID: DUP001															
JE10205-6	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	22-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	522	7	45
		ClientID: MW003															
JE10205-7	P	PWGNYB	NY	WFB		NYASPB	M51,M46 T4		13	29-APR-25	22-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	538	6	44
		ClientID: FIELD BLANK															
JE10205-8	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	22-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	537	6	44
		ClientID: MW002															
JE10205-9	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	23-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	510	6	44
		ClientID: MW010															
JE10205-10	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	23-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	505	6	44 sediment
		ClientID: MW012S															
JE10205-1D	P	PWGNYB	NY	WDP		NYASPB	M51,M46 T4		13	29-APR-25	22-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	532	6	44
		ClientID: MW-004/MSD															
JE10205-1S	P	PWGNYB	NY	WMS		NYASPB	M51,M46 T4		13	29-APR-25	22-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	532	6	44
		ClientID: MW-004/MS															
OP63161-BS		NONE								29-APR-25		08-MAY-25	29-APR-25	LCID1633LIST40			
OP63161-MB		NONE								29-APR-25		08-MAY-25	29-APR-25	LCID1633LIST40			
OP63161-MS		NONE								29-APR-25		08-MAY-25	29-APR-25	LCID1633LIST40	532	6	44
											COMMENTS:	JE10205-1					

Requested By: _____ Date/Time: ___/___/___ ___:___ The Following samples have been depleted or broken: _____

Relinquished By (Sample Mgt.): _____ Received By (Lab): _____ Date/Time: ___/___/___ ___:___

Relinquished By (Lab): _____ Received By (Sample Mgt.): _____ Date/Time: ___/___/___ ___:___

SGS Dayton, NJ

WORK GROUP PRODUCT SUMMARY (wk02p)

Apr 29 2025, 08:38 am

Work Group: OP63161 for Department: 2 Organics Prep

Created: 29-APR-25 Due: Operator: MAXWELLK Desc: 1633 Prep Method: EPA 1633 (PFAS in NPW and soil)

Samplenum	PREM	Acctnum	ST	Matx	Deliv	Program	Location	%Sol	TAT	Workdate	H	Collected	ANDueDate	StatDate	Products
OP63161-MSD	NONE									29-APR-25			08-MAY-25	29-APR-25	LCID1633LIST40
										COMMENTS:			JE10205-1		
OP63161-LLBS	NONE									29-APR-25			08-MAY-25	29-APR-25	LCID1633LIST40

6 532 44

Requested By: _____ Date/Time: ___/___/___ ___:___ The Following samples have been depleted or broken: _____

Relinquished By (Sample Mgt.): _____ Received By (Lab): _____ Date/Time: ___/___/___ ___:___

Relinquished By (Lab): _____ Received By (Sample Mgt.): _____ Date/Time: ___/___/___ ___:___

PFAS Extraction Logbook

Date Started: 29-Apr-2025 Time Started: 9:00 AM
Date Finished: 29-Apr-2025 Time Finished: 5:00 PM

Extract Method (CHECK OFF "X" /DO NOT CIRCLE):
EPA 1633 X 533 537.1 ASTM D7968

Pipette ID: NA Balance ID: B 96 water X Soil SPLP (SW846-3512)

BATCH # LCMSMS	OP63163		RACK#
Set-up by:	AA		
Reviewed by:	BE	Date:	29Apr25

Sample #	Bottle #	Sample Vol (mL)	initial pH	adjusted pH	Surrogate amount (ul)	Spike amount (ul)	Final Extraction vol (mL)	NIS amount (ul)	Weight of Bottle Before(g)	Weight of Bottle After (g)	Observations
MB		500	7	na	50	na	5	50			
LLBS		500	7	na	50	84	5	50			
BS		500	7	na	50	400	5	50			
JE10205-11		501	7	na	50	na	5	50	545	44	
JE10205-12		520	7	na	50	na	5	50	564	44	
JE10205-13		506	7	na	50	na	5	50	550	44	
JE10205-14		515	7	na	50	na	5	50	560	45	
JE10205-15		503	7	na	50	na	5	50	547	44	
JE10205-16		502	7	na	50	na	5	50	546	44	
JE10205-17		489	7	na	50	na	5	50	533	44	
JE10205-18		511	6	na	50	na	5	50	555	44	
JE10205-19		495	6	na	50	na	5	50	540	45	
JE10205-20		520	7	na	50	na	5	50	564	44	sediment, 2 SPEs
JE10205-21		508	7	na	50	na	5	50	552	44	

*Not enough sample bottles to extract MS QC

Materials	LOT #	expiration date	source
0.3% Ammonium Hydroxide MEOH	na	na	na
1% Ammonium Hydroxide MEOH	LC25-22-53	24-Jul-25	inhouse
0.1M Formic 1:1 MEOH	LC25-22-48	23-Jul-25	inhouse
3% Ammonium Hydroxide in water	na	na	na
3% Formic Acid in water	LC25-22-54	25-Jul-25	inhouse
Nylon Syringe Filters	211570103	na	AGLIENT
pH strips	204524	1-Feb-27	HYDRION
SPE Cartridge	6828917-01	NA	AGLIENT
Glass Wool	A0435106	NA	THERMOSCIENTFIC
Ammonium Hydroxide	234241	23-Apr-27	FISHER
Acetic Acid	241944	6-Oct-26	FISHER
Formic Acid	243606	31-Mar-27	FISHER
Methanol	242693	22-Apr-27	FISHER
Carbon	182840	1-Aug-29	SIGMA-ALDRICH
NIS	LC25-25-17	29-Jul-25	inhouse
EIS	LC25-25-14	28-Jul-25	inhouse
Filters	na	na	na
Ottawa Sand	na	na	na
0.1M Phosphate	na	na	na
1g/L Ammonium Acetate in water	na	na	na
80% Methanol in water	na	na	na
Target Spike Sol	LC25-25-13	25-Jul-25	inhouse
96% Methanol in water	na	na	na

Syringe ID #1
Syringe ID #2
Syringe ID #3

LC MS001-02
Rev Date 3/27/25

EIS: GO
MH.C: GO
NIS: GO

SGS Dayton, NJ

WORK GROUP PRODUCT SUMMARY (wk02p)

Apr 29 2025, 08:15 am

Work Group: OP63163 for Department: 2 Organics Prep

Created: 29-APR-25 Due: Operator: AYSEGULA Desc: 1633 Prep Method: EPA 1633 (PFAS in NPW and soil)

Samplenum	PREM	Acctnum	ST	Matx	Deliv	Program	Location	%Sol	TAT	Workdate H	Collected	ANDueDate	StatDate	Products				
JE10205-11	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	23-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	545	44	7	
		ClientID: MW012D																
JE10205-12	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	23-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	564	44	7	
		ClientID: MW011																
JE10205-13	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	23-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	550	44	7	
		ClientID: MW005S																
JE10205-14	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	23-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	560	45	7	
		ClientID: MW005D																
JE10205-15	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	23-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	547	44	7	
		ClientID: MW006S																
JE10205-16	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	23-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	546	44	7	
		ClientID: MW006D																
JE10205-17	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	24-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	533	44	7	
		ClientID: MW007																
JE10205-18	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	24-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	555	44	6	
		ClientID: MW013																
JE10205-19	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	24-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	540	45	6	
		ClientID: MW014S																
JE10205-20	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	24-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	564	44	7	sediment 2SPES
		ClientID: MW014D																
JE10205-21	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25	24-APR-25	05-MAY-25	29-APR-25	LCID1633LIST40	552	44	7	
		ClientID: MW017																
OP63163-BS		NONE								29-APR-25		08-MAY-25	29-APR-25	LCID1633LIST40				
OP63163-MB		NONE								29-APR-25		08-MAY-25	29-APR-25	LCID1633LIST40				
OP63163-LLBS		NONE								29-APR-25		08-MAY-25	29-APR-25	LCID1633LIST40				

Requested By: _____ Date/Time: ___/___/___ ___:___ The Following samples have been depleted or broken: _____

Relinquished By (Sample Mgt.): _____ Received By (Lab): _____ Date/Time: ___/___/___ ___:___

Relinquished By (Lab): _____ Received By (Sample Mgt.): _____ Date/Time: ___/___/___ ___:___

PFAS Extraction Logbook

Date Started: 8-May-2025 Time Started: 8:00 AM
Date Finished: 8-May-2025 Time Finished: 5:00 PM

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
EPA 1633 X 533 _____ 537.1 _____ ASTM D7968 _____

Pipette ID: NA Balance ID: B 96 water X Soil _____ SPLP (SW846-3512) _____

BATCH # LCMSMS	OP63419	RACK#
Set-up by:	MK	
Reviewed by: GO	Date:	8May25

Sample #	Bottle #	Sample Vol (mL)	initial pH	adjusted pH	Surrogate amount (ul)	Spike amount (ul)	Final Extraction vol (mL)	NIS amount (ul)	Weight of Bottle Before(g)	Weight of Bottle After (g)	Observations
MB		500	7	na	50	na	5	50			
LLBS		500	7	na	50	64	5	50			
BS		500	7	na	50	400	5	50			
JE9942-3		471	7	na	50	na	5	50	516	45	
JE9988-1A		481	7	na	50	na	5	50	526	45	
JE10140-1		72	6	na	50	na	5	50	88	16	500ml depleted used 60ml
JE10140-2		70	6	na	50	na	5	50	86	16	500ml depleted used 60ml
JE10140-3		71	6	na	50	na	5	50	87	16	500ml depleted used 60ml
JE10140-4		69	6	na	50	na	5	50	85	16	500ml depleted used 60ml
JE10179-1A		70	7	na	50	na	5	50	86	16	500ml depleted used 60ml
JE10205-20		70	6	na	50	na	5	50	86	16	500ml depleted used 60ml
JE10417-1		488	6	na	50	na	5	50	533	45	
JE10417-2		470	6	na	50	na	5	50	516	46	
JE10417-3		70	7	na	50	na	5	50	86	16	500ml depleted used 60ml
JE10417-4		472	7	na	50	na	5	50	517	45	
JE10417-5		464	7	na	50	na	5	50	508	44	
JE10614-1		65	7	na	50	na	5	50	81	16	500ml depleted used 60ml
JE10819-1		468	7	na	50	na	5	50	512	44	
JE10819-2		474	7	na	50	na	5	50	514	40	white cap

Materials	LOT #	expiration date	source
0.3% Ammonium Hydroxide MEOH	na	na	na
1% Ammonium Hydroxide MEOH	LC25-22-66	30-Jul-25	inhouse
0.1M Formic 1:1 MEOH	LC25-22-36	17-Jul-25	inhouse
3% Ammonium Hydroxide in water	na	na	na
0.3M Formic Acid in water	LC25-22-11	24-Jun-25	inhouse
Nylon Syringe Filters	na	na	na
pH strips	204524	1-Feb-27	HYDRION
SPE Cartridge	6828917-01	NA	AGILENT
Glass Wool	11203	NA	THERMOSCIENTFIC
Ammonium Hydroxide	234241	23-Apr-27	FISHER
Acetic Acid	241944	8-Oct-26	FISHER
Formic Acid	243606	31-Mar-27	FISHER
Methanol	246639	6-May-27	FISHER
Carbon	182840	1-Aug-29	SIGMA-ALDRICH
NIS	LC25-25-23	8-Aug-25	WELLINGTON
EIS	LC25-25-22	6-Aug-27	WELLINGTON
Filters	na	na	na
Ottawa Sand	na	na	na
0.1M Phosphate	na	na	na
1g/L Ammonium Acetate in water	na	na	na
80% Methanol in water	na	na	na
Target Spike Sol	LC25-25-24	6-Aug-25	inhouse
96% Methanol in water	na	na	na

Syringe ID #1
Syringe ID #2
Syringe ID #3

LCMS002.02
Rev.Date 3/17/25

Int C: BE
EBS: BE
NDS: GD

SGS Dayton, NJ

WORK GROUP PRODUCT SUMMARY (wk02p)

May 08 2025, 08:35 am

Work Group: OP63419 for Department: 2 Organics Prep

Created: 08-MAY-25 Due: Operator: MAXWELLK Desc: 1633 Prep Method: EPA 1633 (PFAS in NPW and soil)

Samplenum	PREM	Acctnum	ST	Matx	Deliv	Program	Location	%Sol	TAT	Workdate H	Collected	ANDueDate	StatDate	Products			
JE9942-3	P	RAVIV	NJ	GW	REDT2		PF 1,M46 T2		13	27-APR-25	23-APR-25	03-MAY-25	08-MAY-25	LCID1633LIST40	516	7	45
		ClientID: MW-12_LF9.0(B)								21-MAY-25H 11:35	COMMENTS: PN:Additional MS/MSD volume received. Please confirm.						
JE9986-1A		ECSPAE	WV	GW	FULT1		E11,PF 1,M46 T3, V312,S		14	28-APR-25	22-APR-25	04-MAY-25	08-MAY-25	LCID1633LIST40	526	7	45
		ClientID: MW-1															
JE10140-1		LUCENNJH	NJ	GW	REDT2		PF 1,M46 T3		14	29-APR-25	25-APR-25	05-MAY-25	08-MAY-25	LCID1633PFOA_S			
0.01		Previous: JE10209-6 MW-52R(14.5)-2Q25								23-MAY-25H 10:18	COMMENTS: MDL reporting required for all analyses. All RLs must meet NJDEP GQS & Interim GQS.			500ml depleted 88		6	16
JE10140-2		LUCENNJH	NJ	GW	REDT2		PF 1,M46 T3		14	29-APR-25	25-APR-25	05-MAY-25	08-MAY-25	LCID1633NJ3			
0.01		ClientID: MW-62-VA-2Q25								23-MAY-25H 12:17	COMMENTS: MDL reporting required for all analyses. All RLs must meet NJDEP GQS & Interim GQS.			500ml depleted 86		6	16
JE10140-3		LUCENNJH	NJ	GW	REDT2		PF 1,M46 T3		14	29-APR-25	25-APR-25	05-MAY-25	08-MAY-25	LCID1633NJ3			
0.01		ClientID: D042525								23-MAY-25H 12:19	COMMENTS: MDL reporting required for all analyses. All RLs must meet NJDEP GQS & Interim GQS.			500ml depleted 87		6	16
JE10140-4		LUCENNJH	NJ	WFB	REDT2		PF 1,M46 T3		14	29-APR-25	25-APR-25	05-MAY-25	08-MAY-25	LCID1633NJ3			
0.01		ClientID: FB042525								23-MAY-25H 09:16	COMMENTS: MDL reporting required for all analyses. All RLs must meet NJDEP GQS & Interim GQS.			500ml depleted 85		6	16
0.01	JE10179-1A		GTTNJR	PA	EF	COMMB	L46,A12,C22,M42,M46 T2		14	29-APR-25	24-APR-25	05-MAY-25	08-MAY-25	LCID1633PFOA_S			
		ClientID: EFFLUENT												500ml depleted 86		7	16
0.01	JE10205-20	P	PWGNYB	NY	GW	NYASPB	M51,M46 T4		13	29-APR-25	24-APR-25	05-MAY-25	08-MAY-25	LCID1633LIST40			
		ClientID: MW014D												500ml depleted 86		6	16
JE10417-1	P	TTPAL	PA	WFB	REDT2		M51,M46 T4		13	04-MAY-25	28-APR-25	10-MAY-25	08-MAY-25	LCID1633LIST40	533	6	45
		ClientID: FB-20250428															
JE10417-2	P	TTPAL	PA	GW	REDT2		M51,M46 T4		13	04-MAY-25	28-APR-25	10-MAY-25	08-MAY-25	LCID1633LIST40	516	6	46
		Previous: JE10413-1F HOFF MW-A															
0.01	JE10417-3	P	TTPAL	PA	GW	REDT2		M51,M46 T4		13	04-MAY-25	28-APR-25	10-MAY-25	08-MAY-25	LCID1633LIST40	500ml depleted 86	7	16

Requested By: _____ Date/Time: ___/___/___ ___:___ The Following samples have been depleted or broken: _____

Relinquished By (Sample Mgt.): _____ Received By (Lab): _____ Date/Time: ___/___/___ ___:___

Relinquished By (Lab): _____ Received By (Sample Mgt.): _____ Date/Time: ___/___/___ ___:___

SGS Dayton, NJ

WORK GROUP PRODUCT SUMMARY (wk02p)

May 08 2025, 08:35 am

Work Group: OP63419 for Department: 2 Organics Prep

Created: 08-MAY-25 Due: Operator: MAXWELLK Desc: 1633 Prep Method: EPA 1633 (PFAS in NPW and soil)

Samplenum	PREM	Acctnum	ST	Matx	Deliv	Program	Location	%Sol	TAT	Workdate	H	Collected	ANDueDate	StatDate	Products				
		Previous: JE10786-5F HOFF MW-B																	
JE10417-4	P	TTPAL	PA	GW		REDT2	M51,M46 T4	13	04-MAY-25	28-APR-25		10-MAY-25	08-MAY-25	LCID1633LIST40		517	7	45
		Previous: JE10413-3 HOFF MW-10																	
JE10417-5	P	TTPAL	PA	GW		REDT2	M51,M46 T4	13	04-MAY-25	29-APR-25		10-MAY-25	08-MAY-25	LCID1633LIST40		508	7	44
		Previous: JE10413-4 HOFF MW-8DU																	
JE10614-1		USGSCOD	CT	WW		FULT1	M40,M54 T2	28	10-MAY-25	22-APR-25		20-MAY-25	08-MAY-25	LCID1633LIST40	500ml depleted	81	7	16
		Previous: JE10634-1 415558072012501																	
JE10819-1		HRSDVANN	VA	WW		COMMB	PF 4,M38 T2	21	13-MAY-25	05-MAY-25		22-MAY-25	08-MAY-25	LCID1633LIST40		512	7	44
		ClientID: 500134317/USGN001 1223																	
JE10819-2		HRSDVANN	VA	WW		COMMB	PF 4,M38 T2	21	13-MAY-25	05-MAY-25		22-MAY-25	08-MAY-25	LCID1633LIST40	White cap	514	7	40
		ClientID: 500134325/NHSP001 #1																	
OP63419-BS		NONE								08-MAY-25		06-MAY-25	08-MAY-25	LCID1633LIST40, LCID1633NJ3, LCID1633PFOA_S				
OP63419-MB		NONE								08-MAY-25		06-MAY-25	08-MAY-25	LCID1633LIST40, LCID1633NJ3, LCID1633PFOA_S				
OP63419-LLBS		NONE								08-MAY-25		06-MAY-25	08-MAY-25	LCID1633LIST40, LCID1633NJ3, LCID1633PFOA_S				

NOTE: SPECIAL LISTS FOLLOW on page 3

Requested By: _____ Date/Time: ___/___/___ ___:___ The Following samples have been depleted or broken: _____

Relinquished By (Sample Mgt.): _____ Received By (Lab): _____ Date/Time: ___/___/___ ___:___

Relinquished By (Lab): _____ Received By (Sample Mgt.): _____ Date/Time: ___/___/___ ___:___

SGS Dayton, NJ

WORK GROUP PRODUCT SUMMARY (wk02p)

May 08 2025, 08:35 am

Work Group: OP63419 for Department: 2 Organics Prep

Created: 08-MAY-25 Due: Operator: MAXWELLK Desc: 1633 Prep Method: EPA 1633 (PFAS in NPW and soil)

Samplenum	PREM	Acctnum	ST	Matx	Deliv	Program	Location	%Sol	TAT	Workdate	H	Collected	ANDueDate	StatDate	Products

SPECIAL LIST LCID1633NJ3 LJ66398 LUCENNJH29095 Alcatel-Lucent USA Inc, 101 Crawfords Corner Road, Holmdel, NJ

for SAMPLES JE10140-2, JE10140-3, JE10140-4

50	Perfluorooctanoic acid	335-67-1	REG
60	Perfluorononanoic acid	375-95-1	REG
250	Perfluorooctanesulfonic acid	1763-23-1	REG
2020	13C8-PFOA		SURR
2025	13C9-PFNA		SURR
2120	13C8-PFOS		SURR

Requested By: _____ Date/Time: ___/___/___ ___:___ The Following samples have been depleted or broken: _____

Relinquished By (Sample Mgt.): _____ Received By (Lab): _____ Date/Time: ___/___/___ ___:___

Relinquished By (Lab): _____ Received By (Sample Mgt.): _____ Date/Time: ___/___/___ ___:___

PFAS Extraction Logbook

Date Started:__13-May-2025___ Time Started:__8:00 AM___
Date Finished: _13-May-2025___ Time Finished:__5:00 PM_____

Extract Method (CHECK OFF "\" /DO NOT CIRCLE):
EPA 1633___X_____
533_____ 537.1 _____ ASTM D7968 _____

Pipette ID:_____NA_____ Balance ID:___B 96___ water__X___ Soil_____ SPLP (SW846-3512)_____

BATCH # LCMSMS	OP63534		RACK#
Set-up by:	BE		
Reviewed by:	AA	Date:	13 May25

Sample #	Bottle #	Sample Vol (mL)	Initial pH	adjusted pH	Surrogate amount (ul)	Spike amount (ul)	Final Extraction vol (mL)	NIS amount (ul)	Weight of Bottle Before(g)	Weight of Bottle After (g)	Observations
MB		500	7	na	50	na	5	50			
LLBS		500	7	na	50	64	5	50			
BS		500	7	na	50	400	5	50			
JE10205-2		62	6	na	50	na	5	50	78	16	500 depleted
JE10205-5		65	6	na	50	na	5	50	81	16	500 depleted

Materials	LOT #	expiration date	source
0.3% Ammonium Hydroxide MEOH	na	na	na
1% Ammonium Hydroxide MEOH	LC25-22-66	30-Jul-25	inhouse
0.1M Formic 1.1 MEOH	LC25-22-52	24-Jul-25	inhouse
3% Ammonium Hydroxide in water	na	na	na
0.3M Formic Acid in water	LC25-22-47	23-Jul-25	inhouse
Nylon Syringe Filters	na	na	na
pH strips	204524	1-Feb-27	HYDRION
SPE Cartridge	6828917-01	NA	AGILENT
Glass Wool	11Z03	NA	THERMOSCIENTFIC
Ammonium Hydroxide	234241	23-Apr-27	FISHER
Acetic Acid	241944	8-Oct-26	FISHER
Formic Acid	243606	31-Mar-27	FISHER
Methanol	246639	6-May-27	FISHER
Carbon	182840	1-Aug-29	SIGMA-ALDRICH
NIS	LC25-25-29	13-Aug-25	WELLINGTON
EIS	LC25-25-25	9-Aug-27	WELLINGTON
Filters	na	na	na
Ottawa Sand	na	na	na
0.1M Phosphate	na	na	na
1g/L Ammonium Acetate in water	na	na	na
80% Methanol in water	na	na	na
Target Spike Sol	LC25-25-26	9-Aug-25	inhouse
96% Methanol in water	na	na	na

Syringe ID #1
Syringe ID #2
Syringe ID #3

FnTC: MK
EIS: MK
NIS: MK

SGS Dayton, NJ

WORK GROUP PRODUCT SUMMARY (wk02p)

May 13 2025, 07:53 am

Work Group: OP63534 for Department: 2 Organics Prep

Created: 13-MAY-25 Due: Operator: BENE Desc: 1633 Prep Method: EPA 1633 (PFAS in NPW and soil)

Samplenum	PREM	Acctnum	ST	Matx	Deliv	Program	Location	%Sol	TAT	Workdate	H	Collected	ANDueDate	StatDate	Products			
JE10205-2	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25		22-APR-25	05-MAY-25	13-MAY-25	LCID1633LIST40	78	16	6
60mL		ClientID: MW008										COMMENTS: ID revised 4/29 MM			500 depleted			
JE10205-5	P	PWGNYB	NY	GW		NYASPB	M51,M46 T4		13	29-APR-25		22-APR-25	05-MAY-25	13-MAY-25	LCID1633LIST40	81	16	6
60mL		ClientID: DUP001													500 depleted			
OP63534-BS		NONE								13-MAY-25			08-MAY-25	13-MAY-25	LCID1633LIST40			
OP63534-MB		NONE								13-MAY-25			08-MAY-25	13-MAY-25	LCID1633LIST40			
OP63534-LLBS		NONE								13-MAY-25			08-MAY-25	13-MAY-25	LCID1633LIST40			

Requested By: _____ Date/Time: ___/___/___ ___:___ The Following samples have been depleted or broken: _____

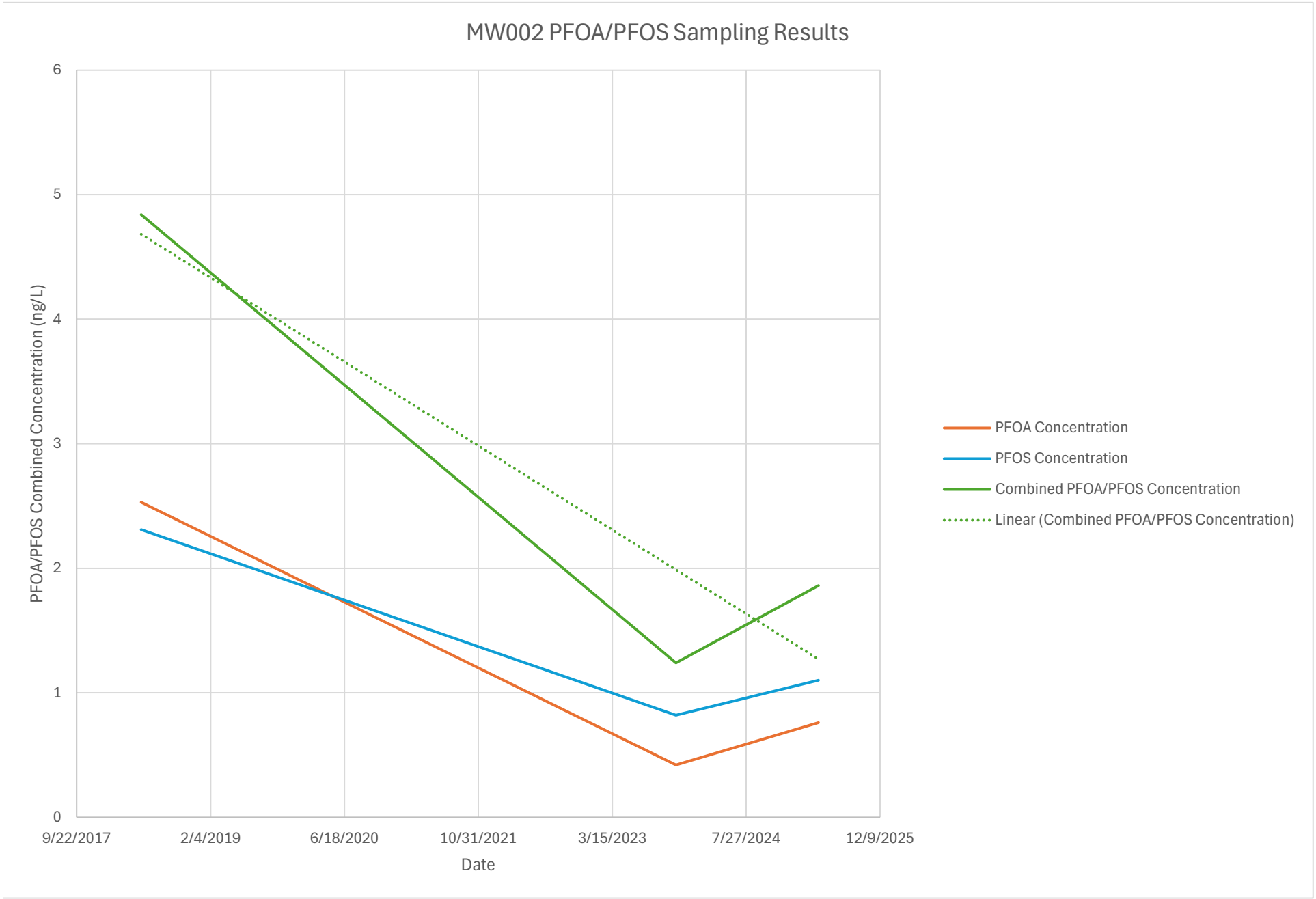
Relinquished By (Sample Mgt.): _____ Received By (Lab): _____ Date/Time: ___/___/___ ___:___

Relinquished By (Lab): _____ Received By (Sample Mgt.): _____ Date/Time: ___/___/___ ___:___

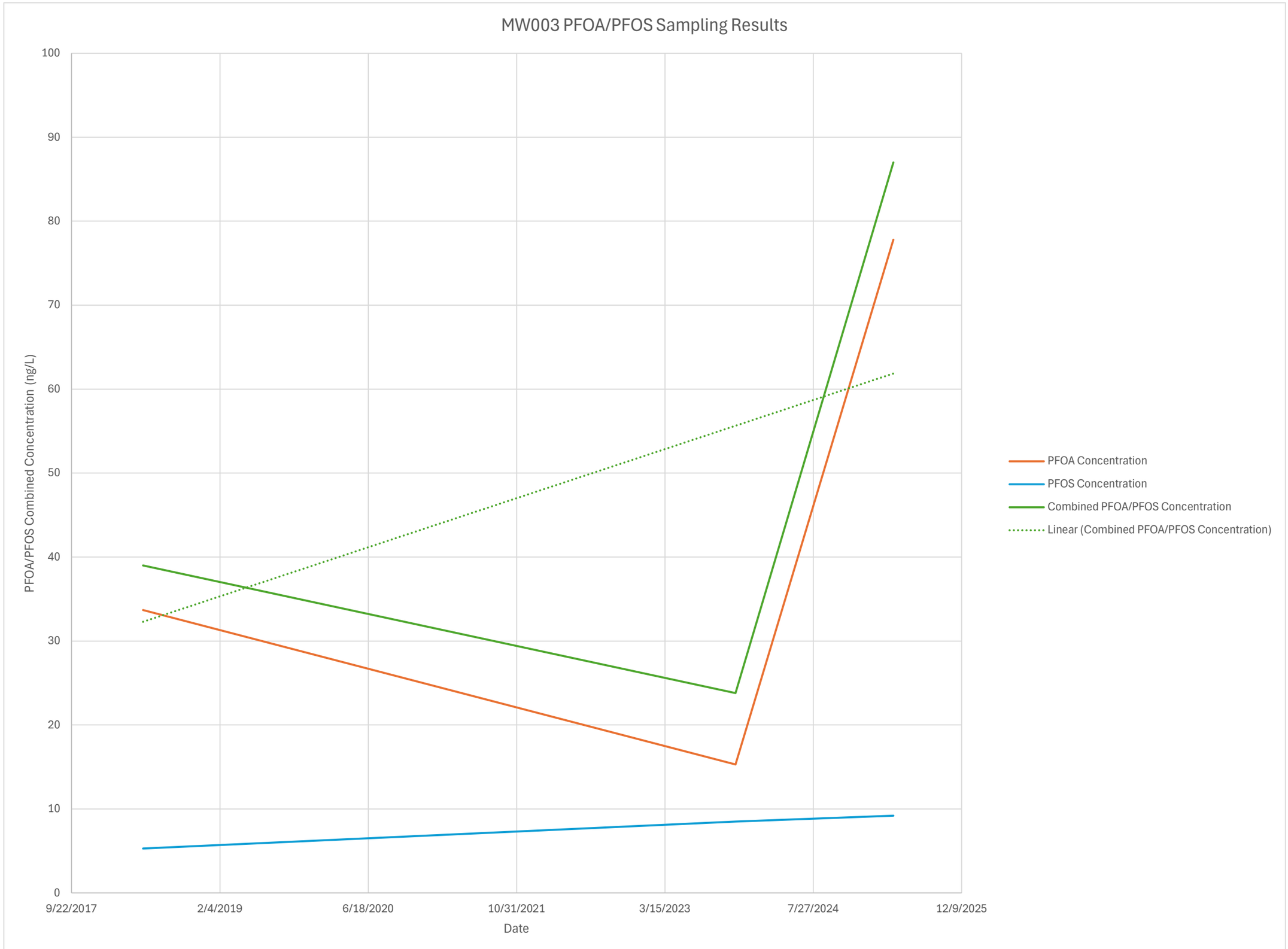
APPENDIX C

Graph 1

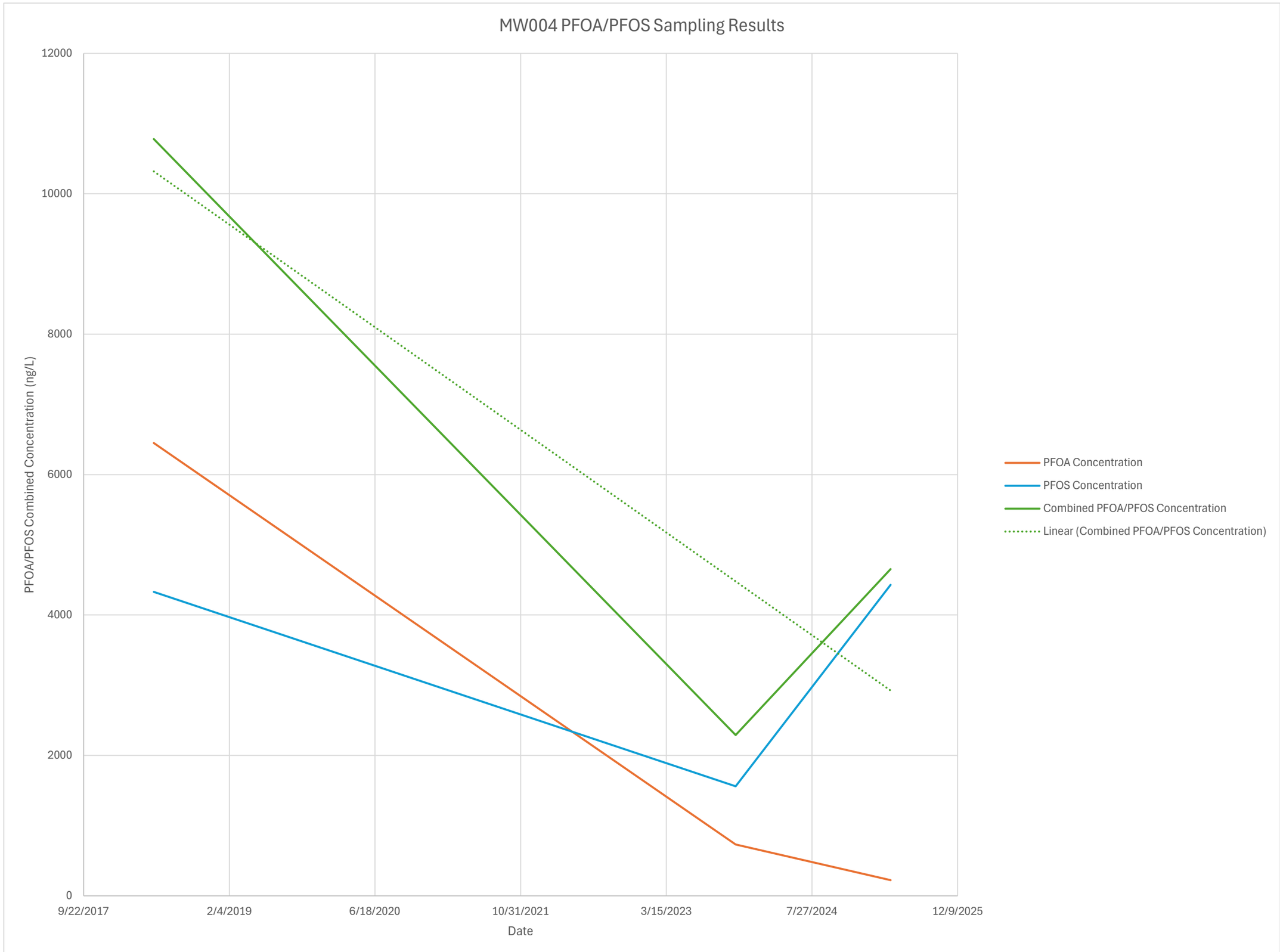
MW002 Monitoring Well Sample Results



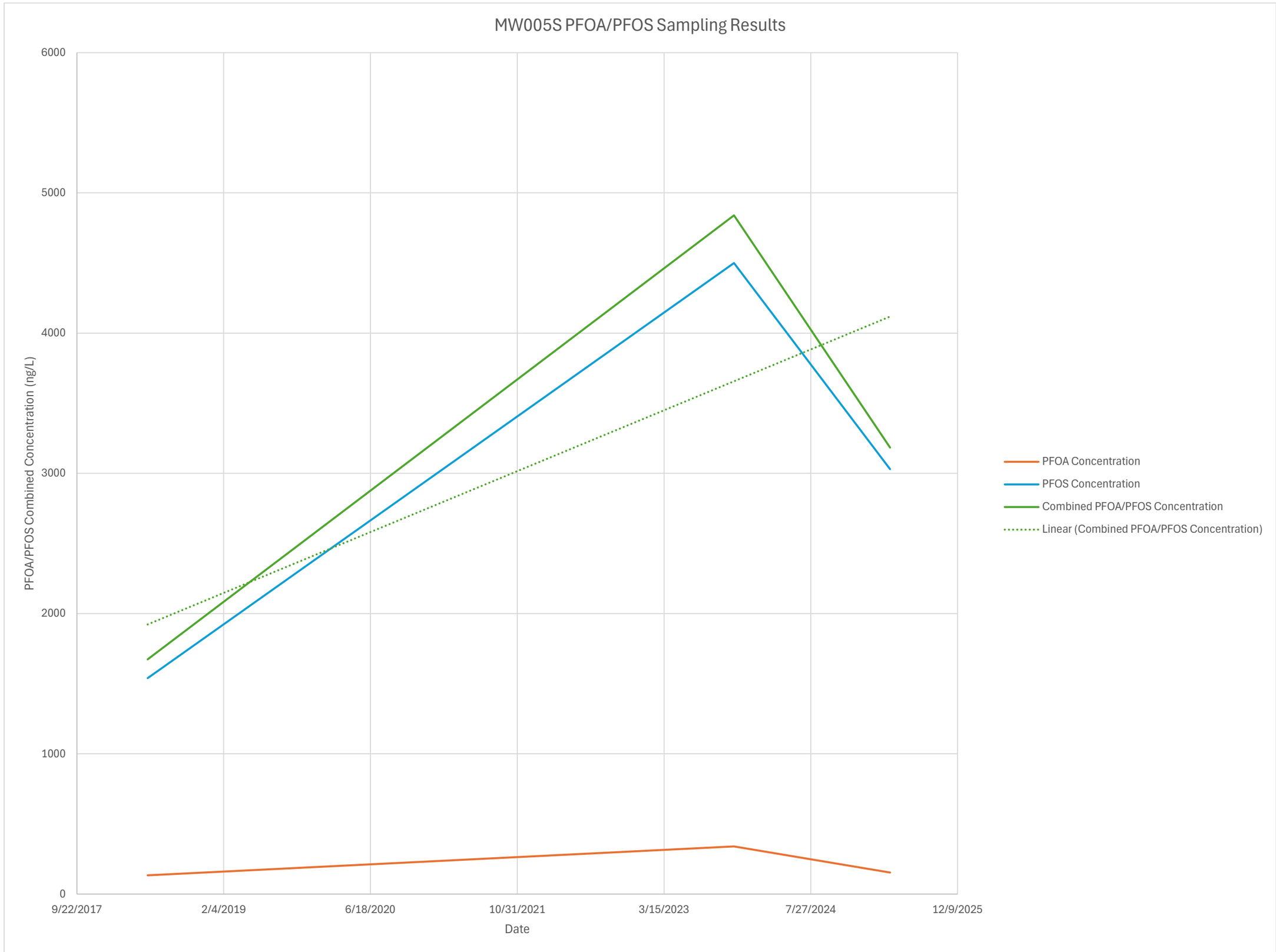
Graph 2
MW003 Monitoring Well Sample Results



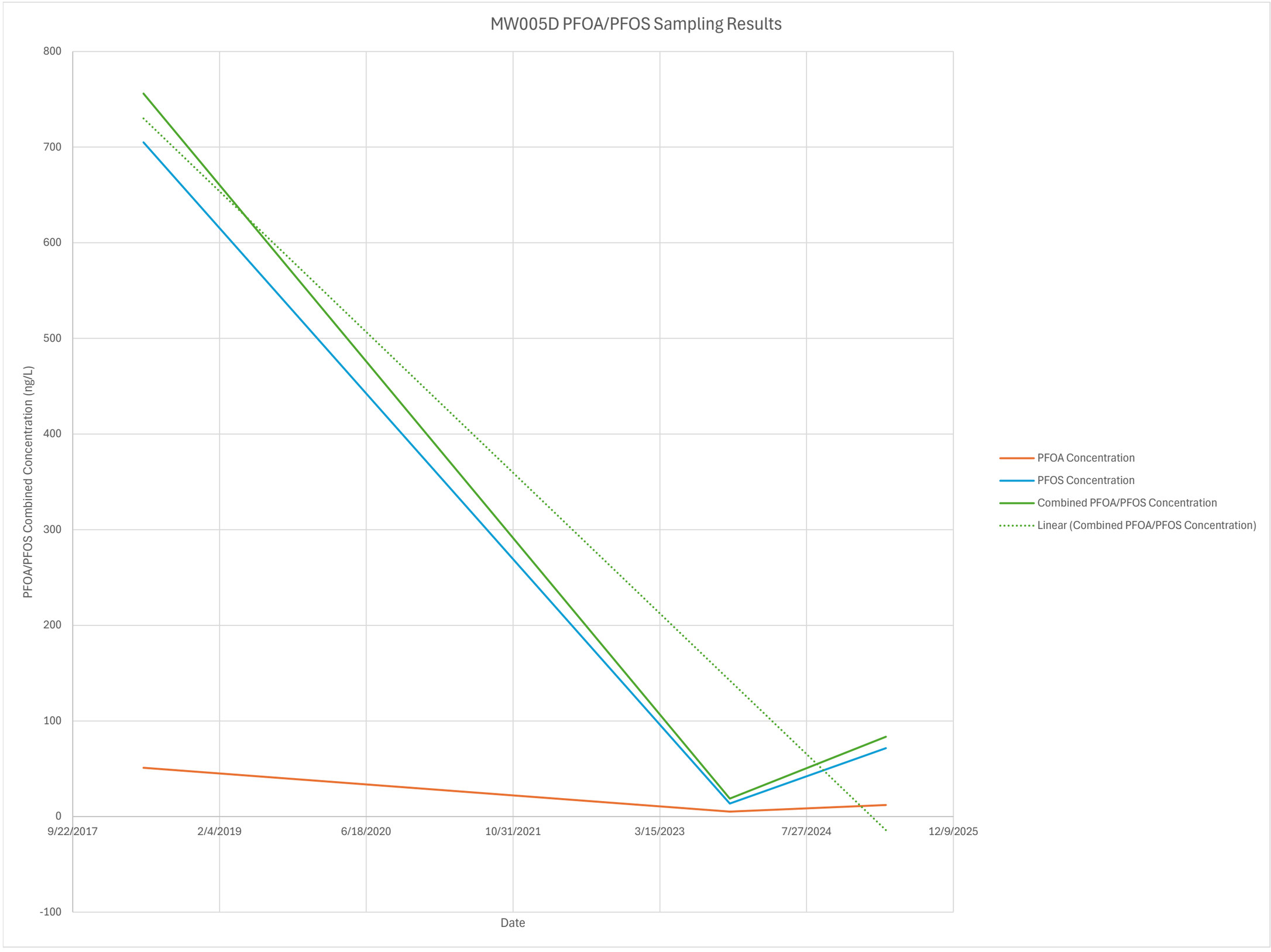
Graph 3
MW004 Monitoring Well Sample Results



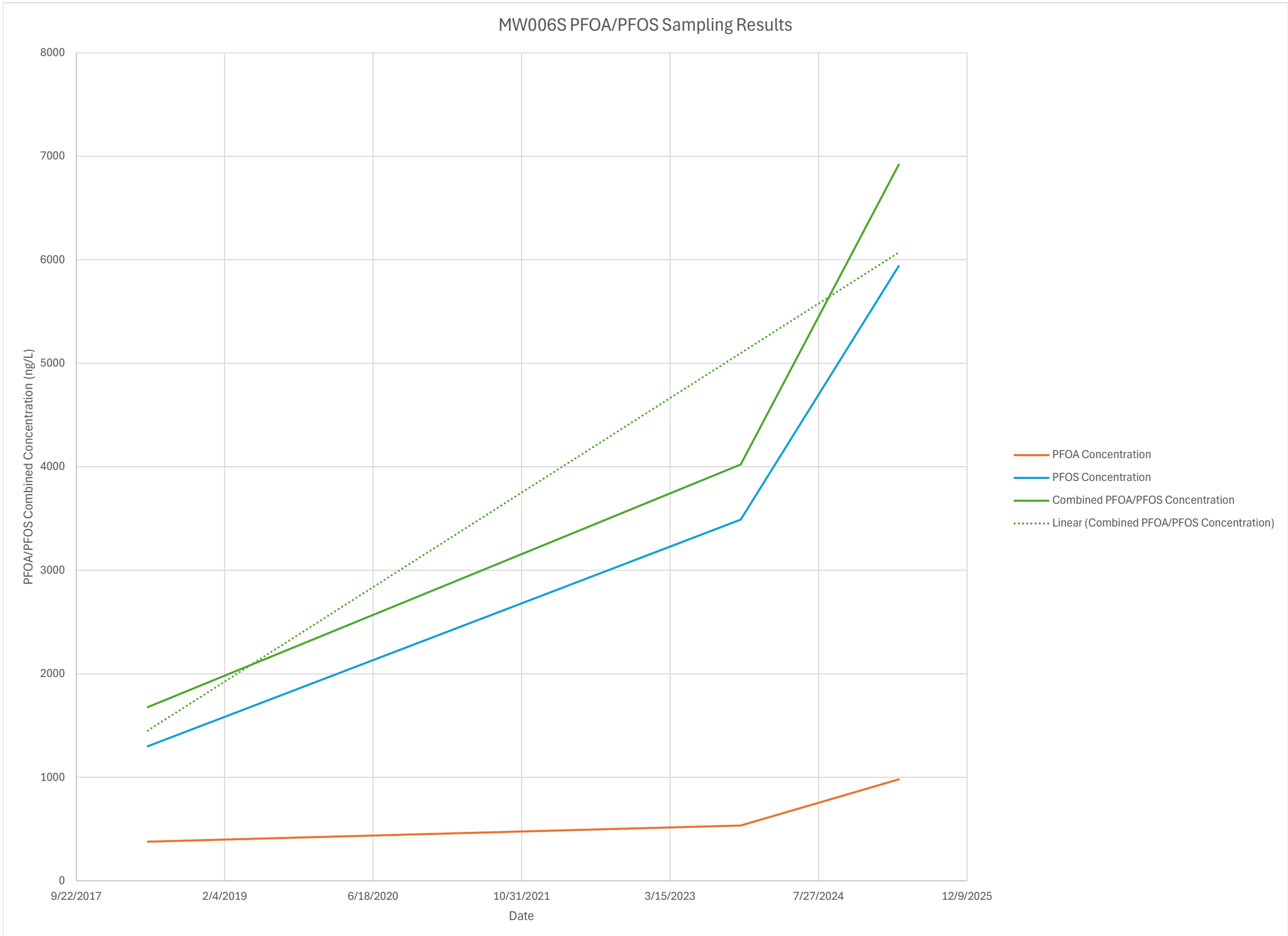
Graph 4
MW005S Monitoring Well Sample Results



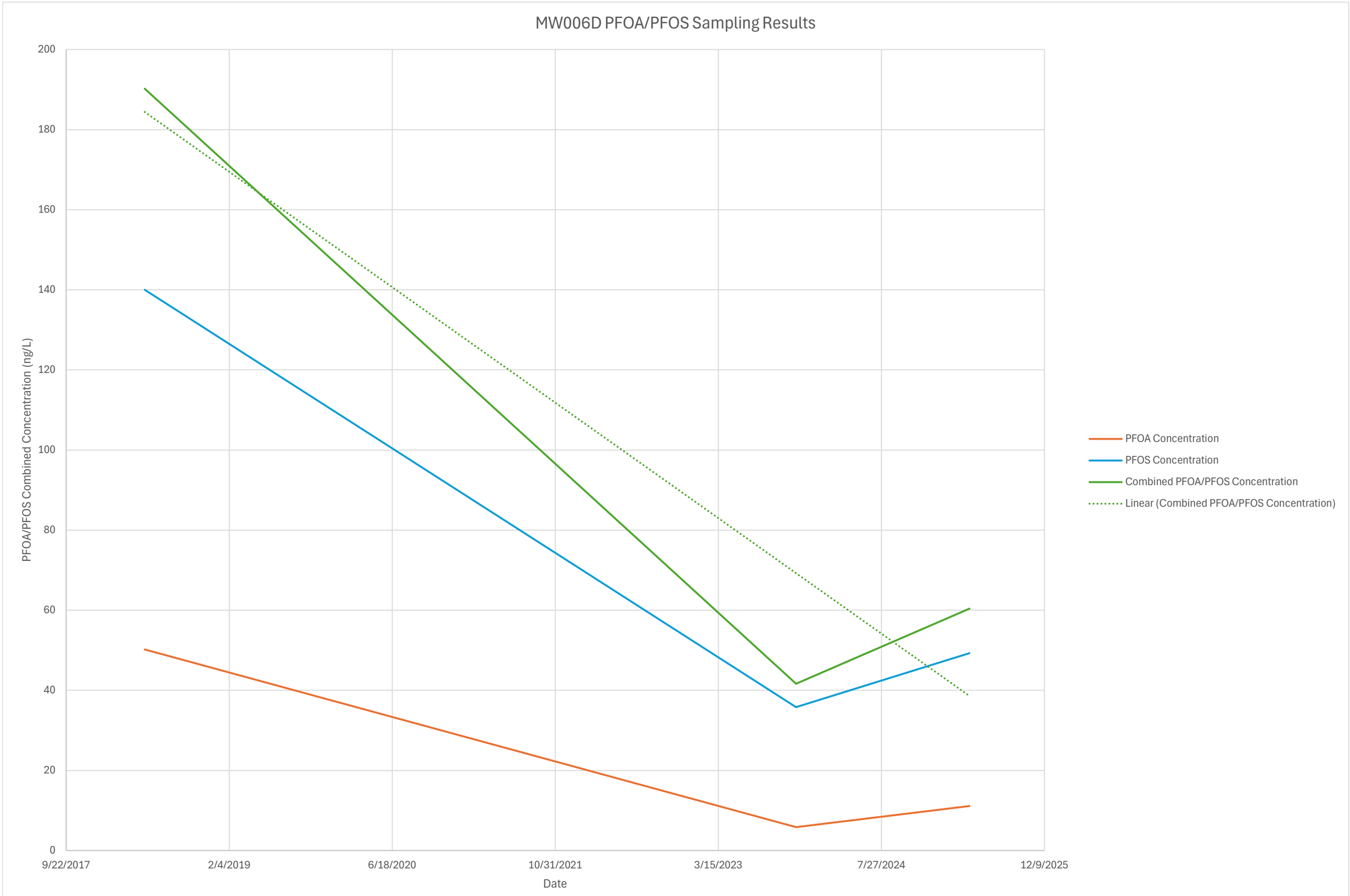
Graph 5
MW005D Monitoring Well Sample Results



Graph 6
MW006S Monitoring Well Sample Results

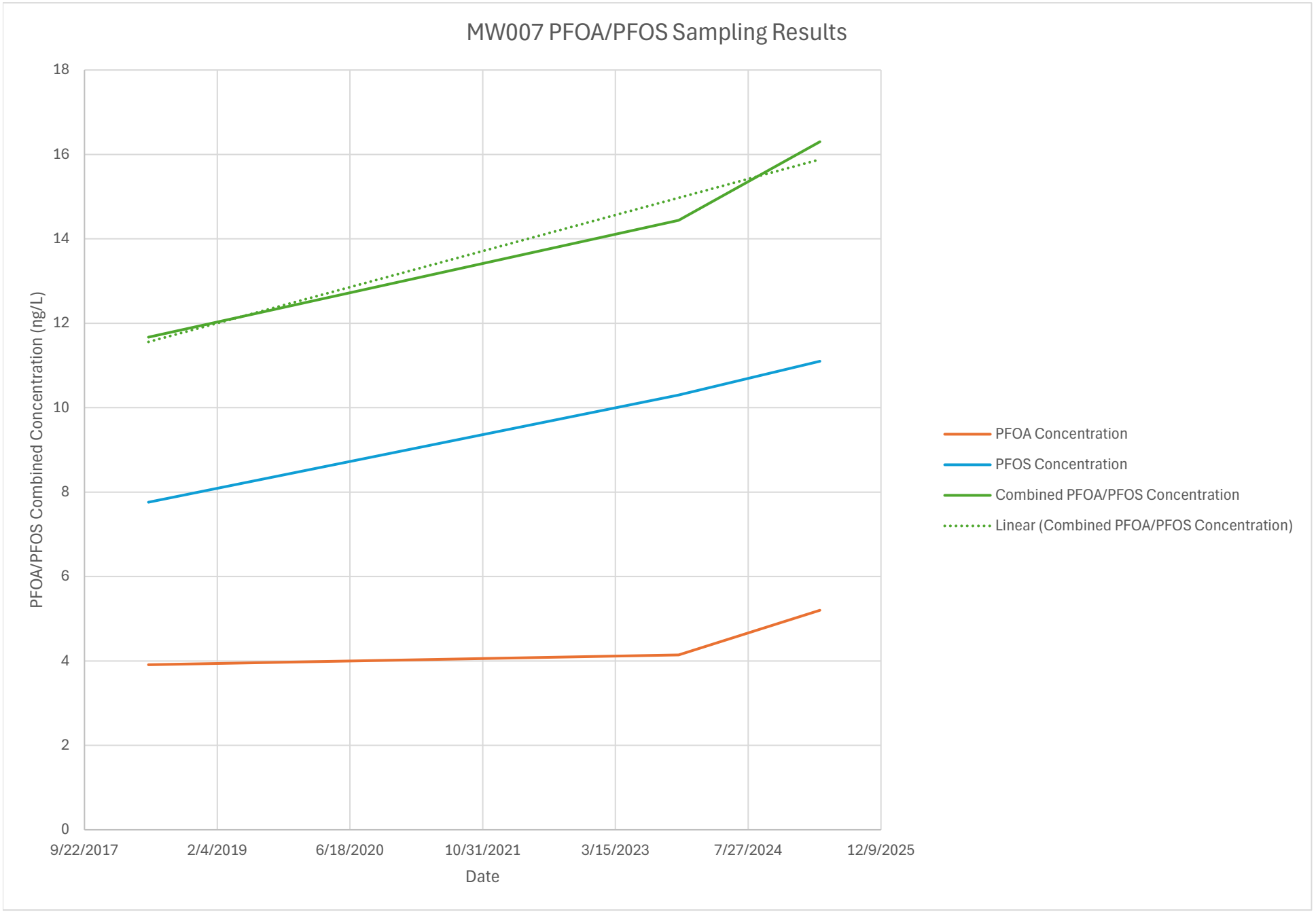


Graph 7
MW006D Monitoring Well Sample Results



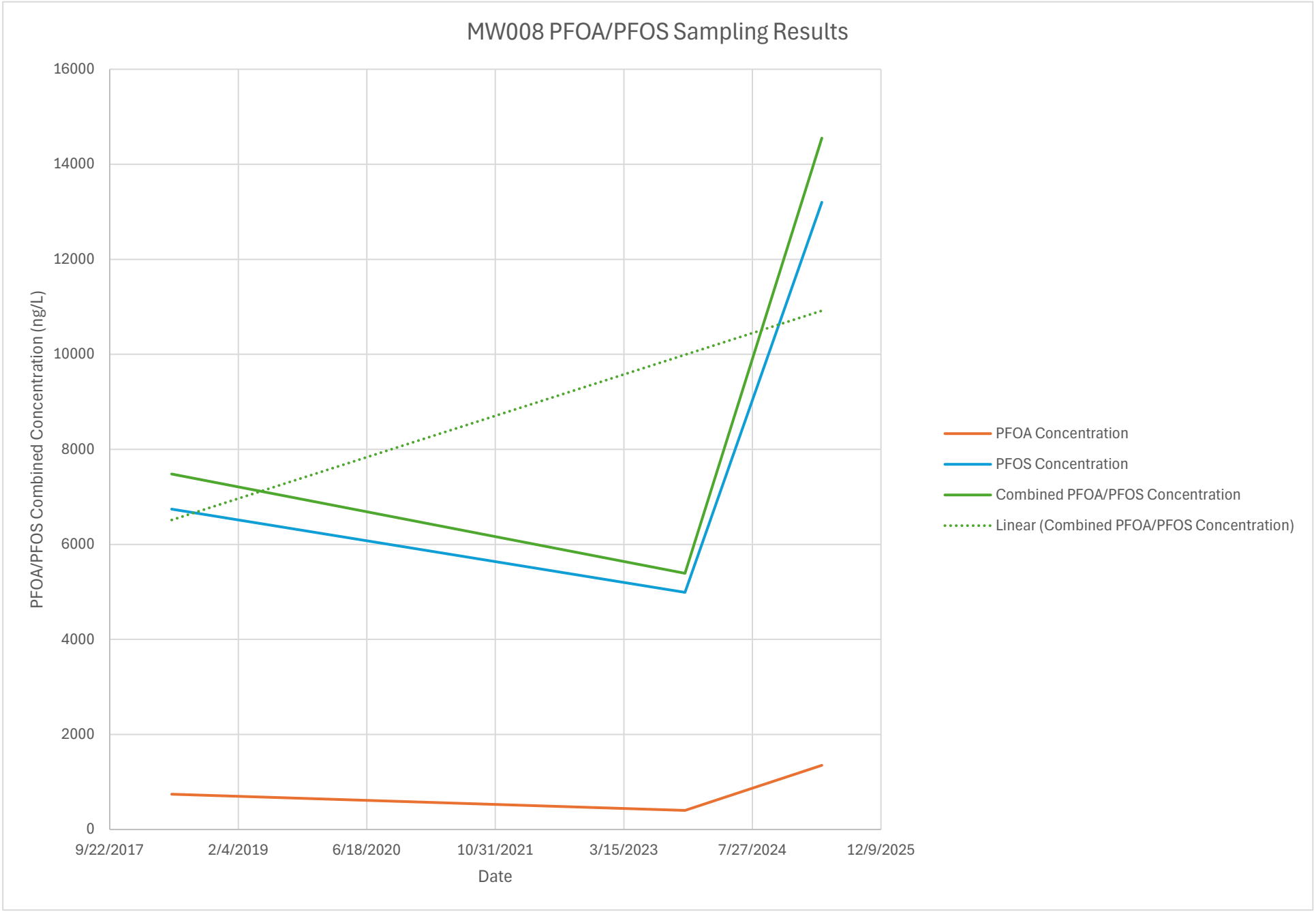
Graph 8

MW007 Monitoring Well Sample Results



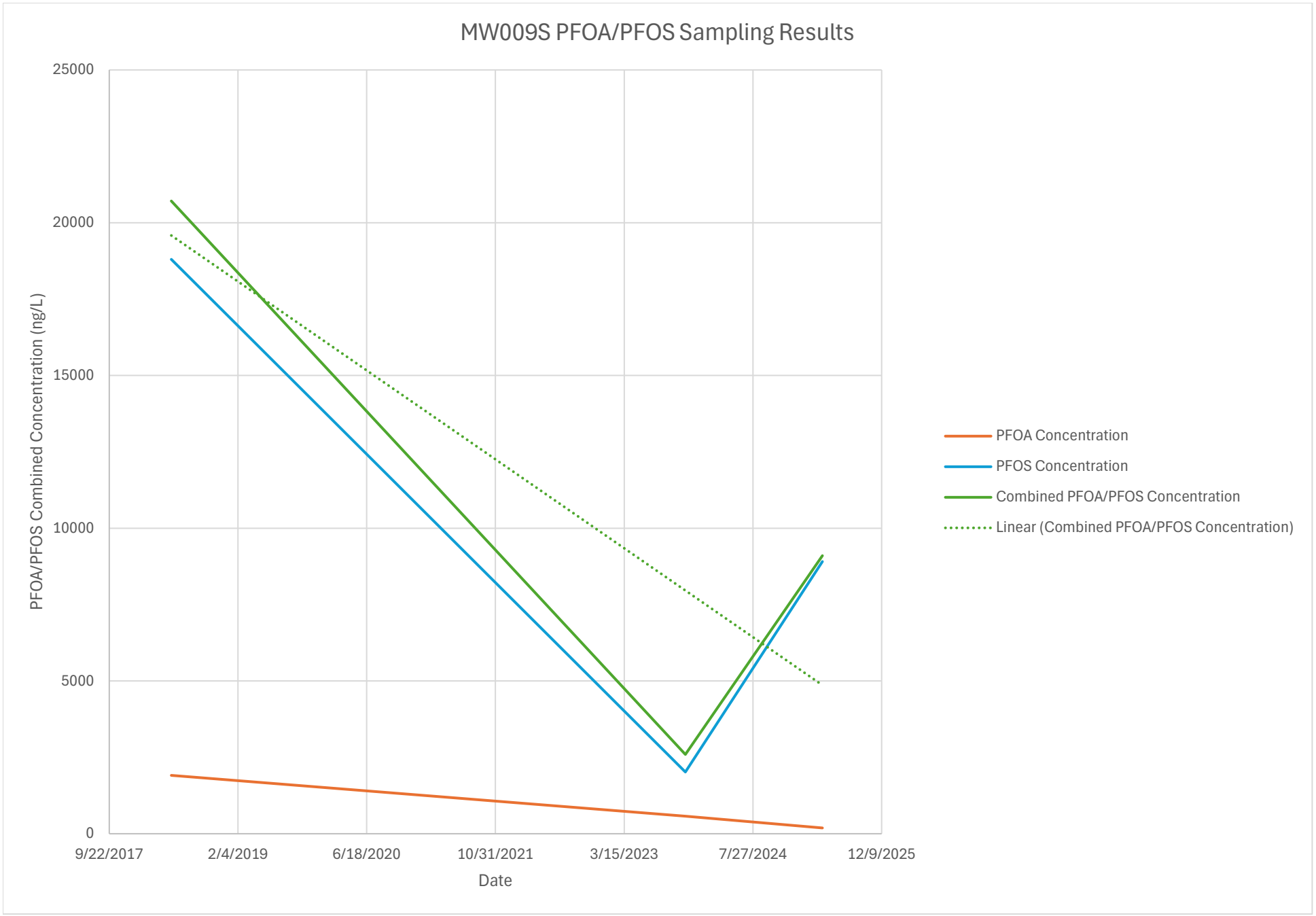
Graph 9

MW008 Monitoring Well Sample Results



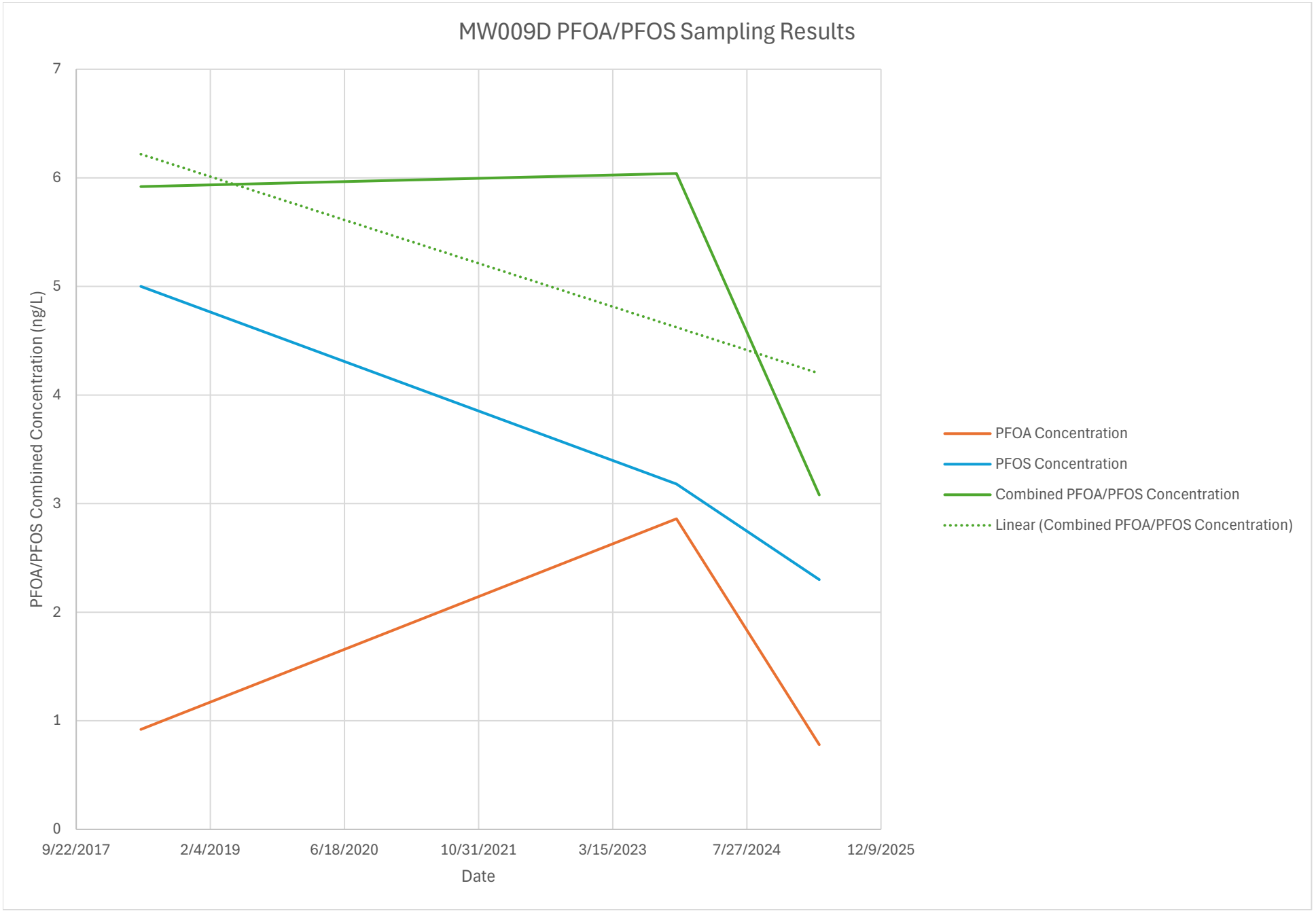
Graph 10

MW009S Monitoring Well Sample Results



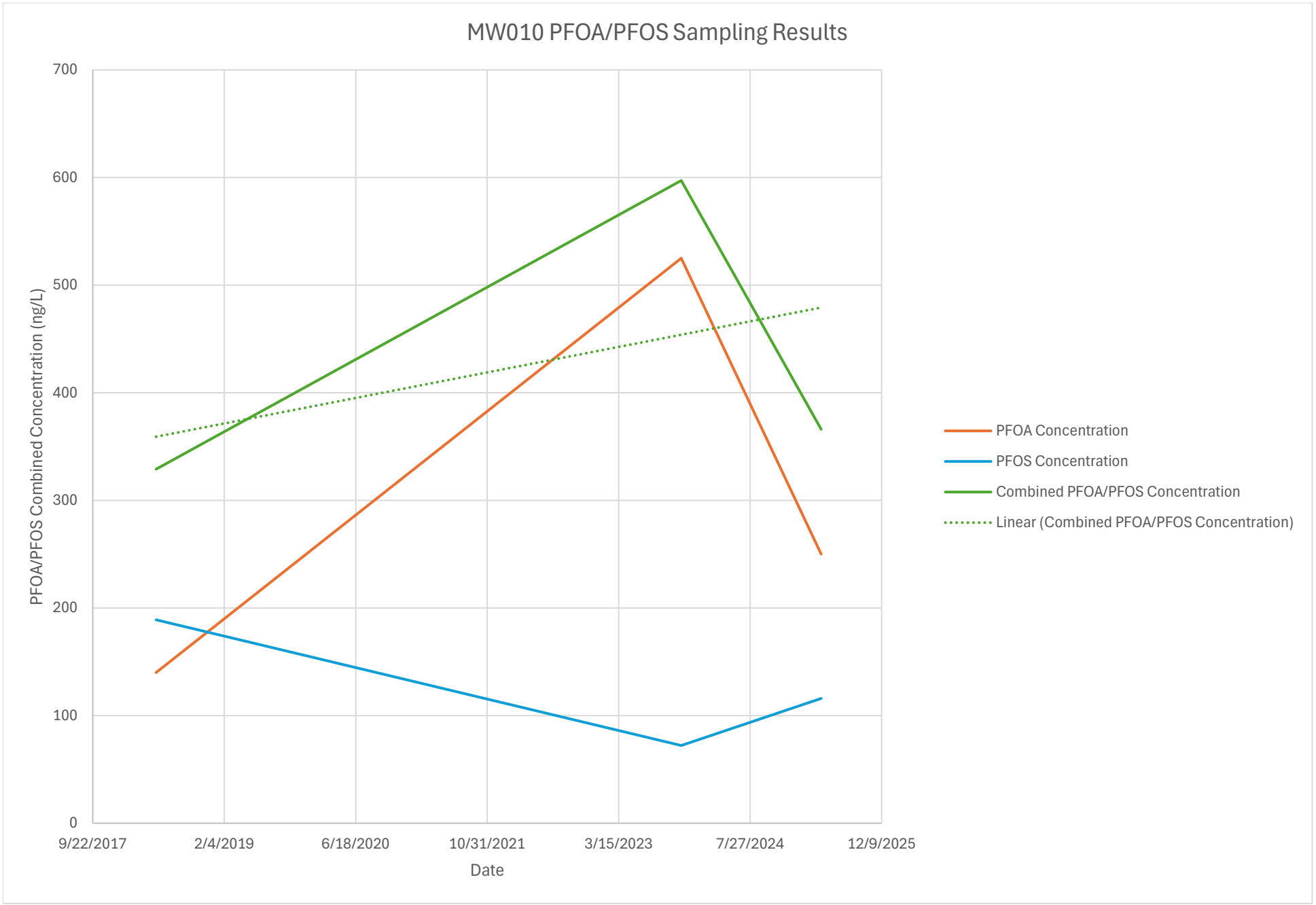
Graph 11

MW009D Monitoring Well Sample Results



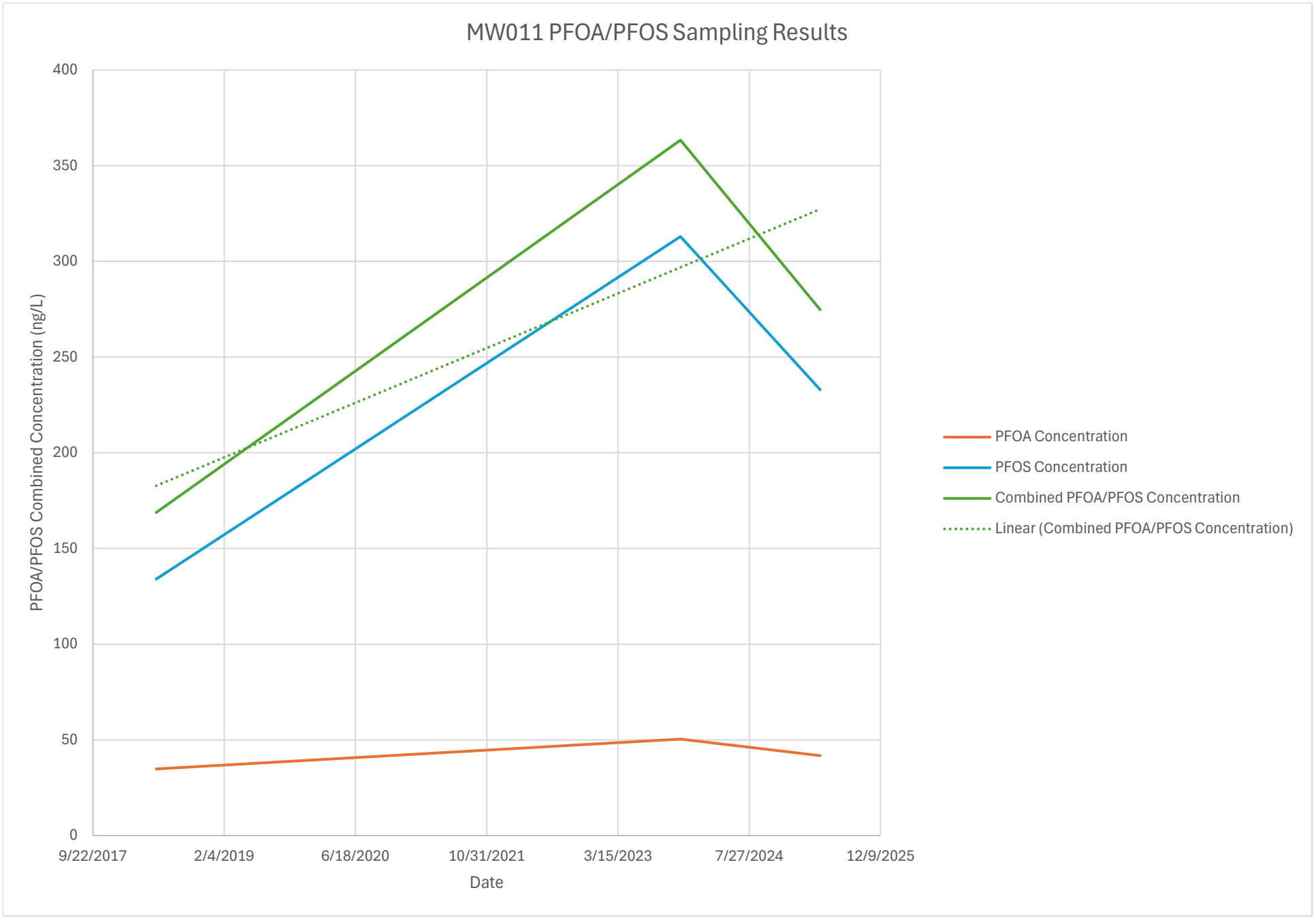
Graph 12

MW010 Monitoring Well Sample Results



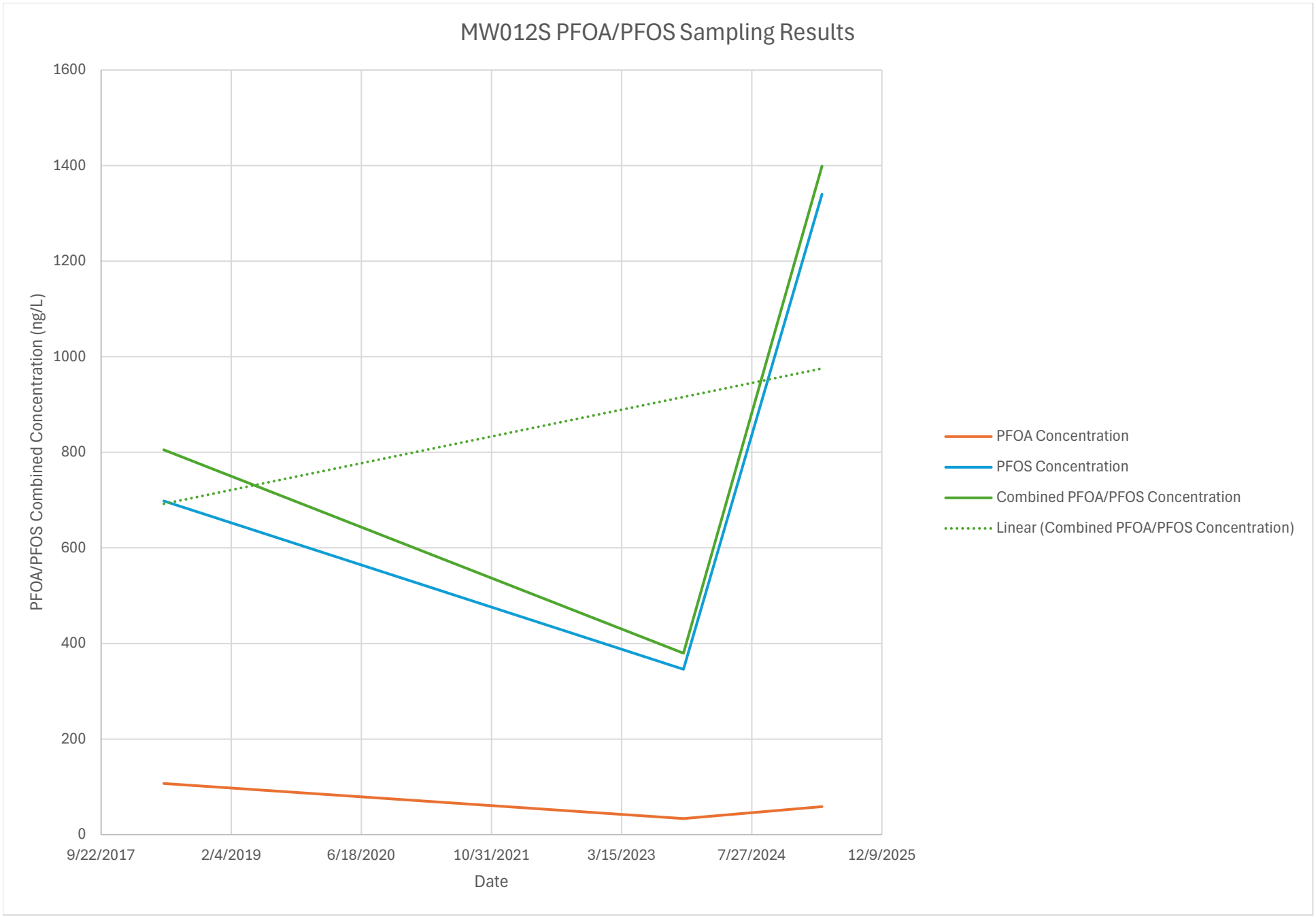
Graph 13

MW011 Monitoring Well Sample Results



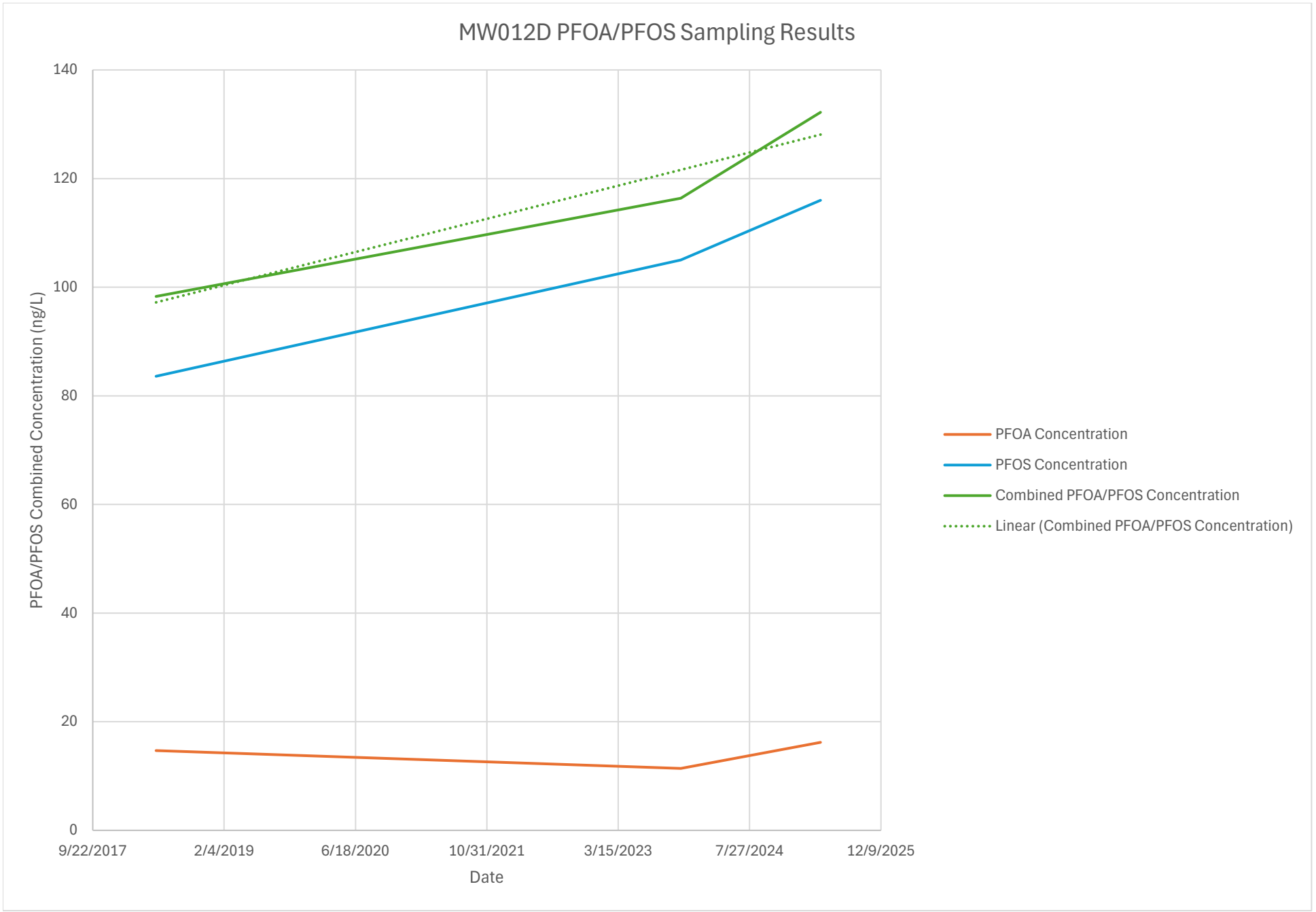
Graph 14

MW012S Monitoring Well Sample Results



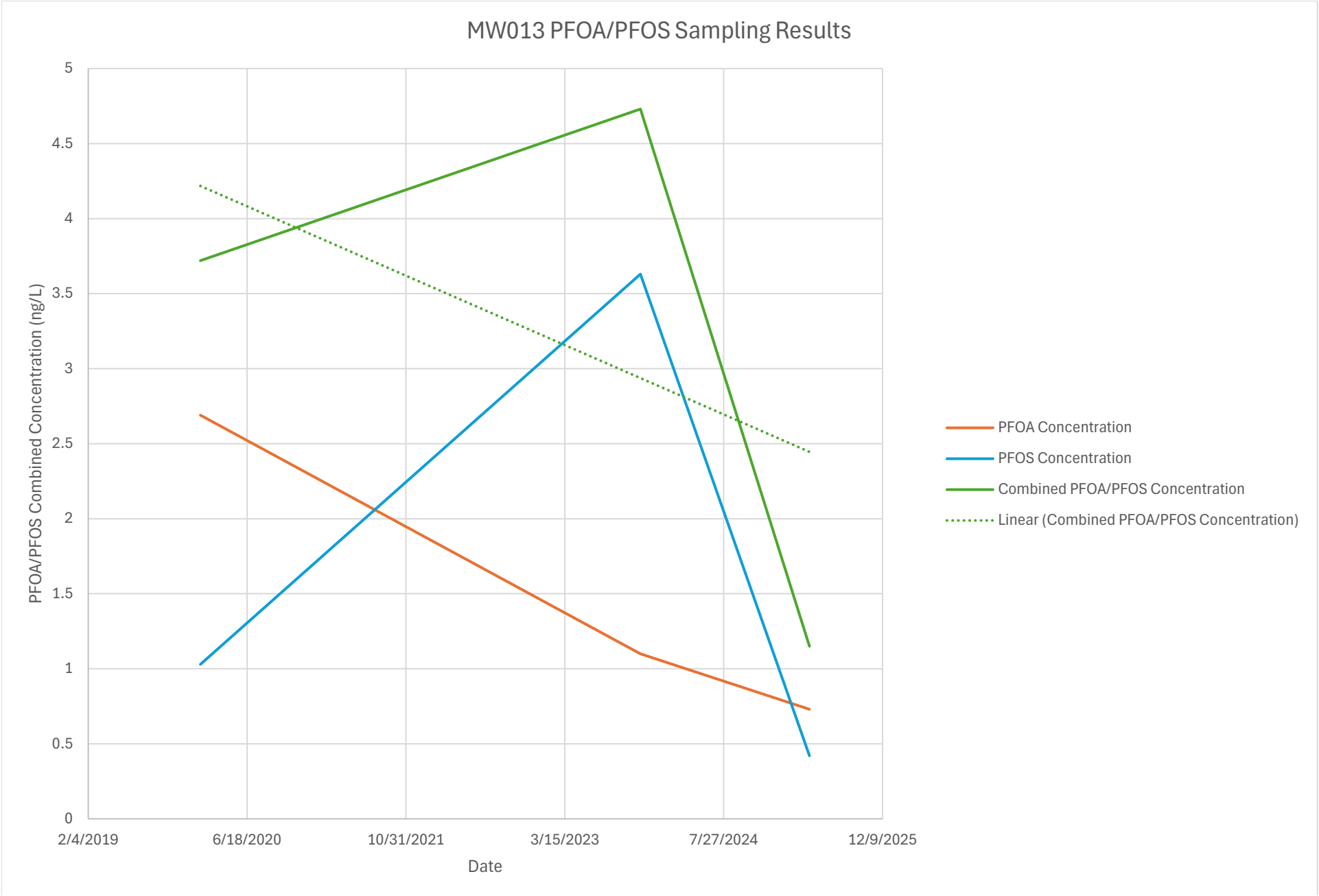
Graph 15

MW012D Monitoring Well Sample Results



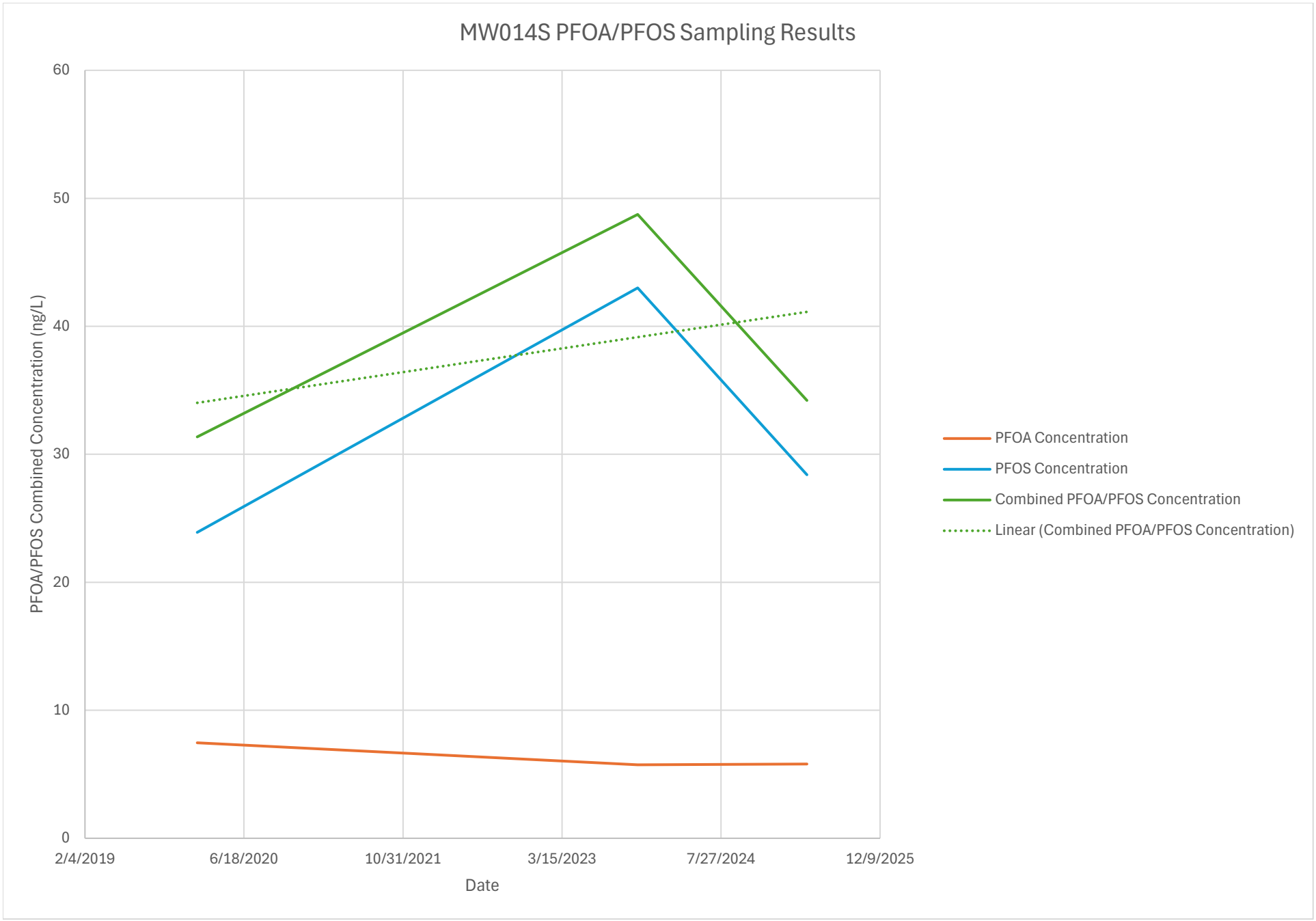
Graph 16

MW013 Monitoring Well Sample Results



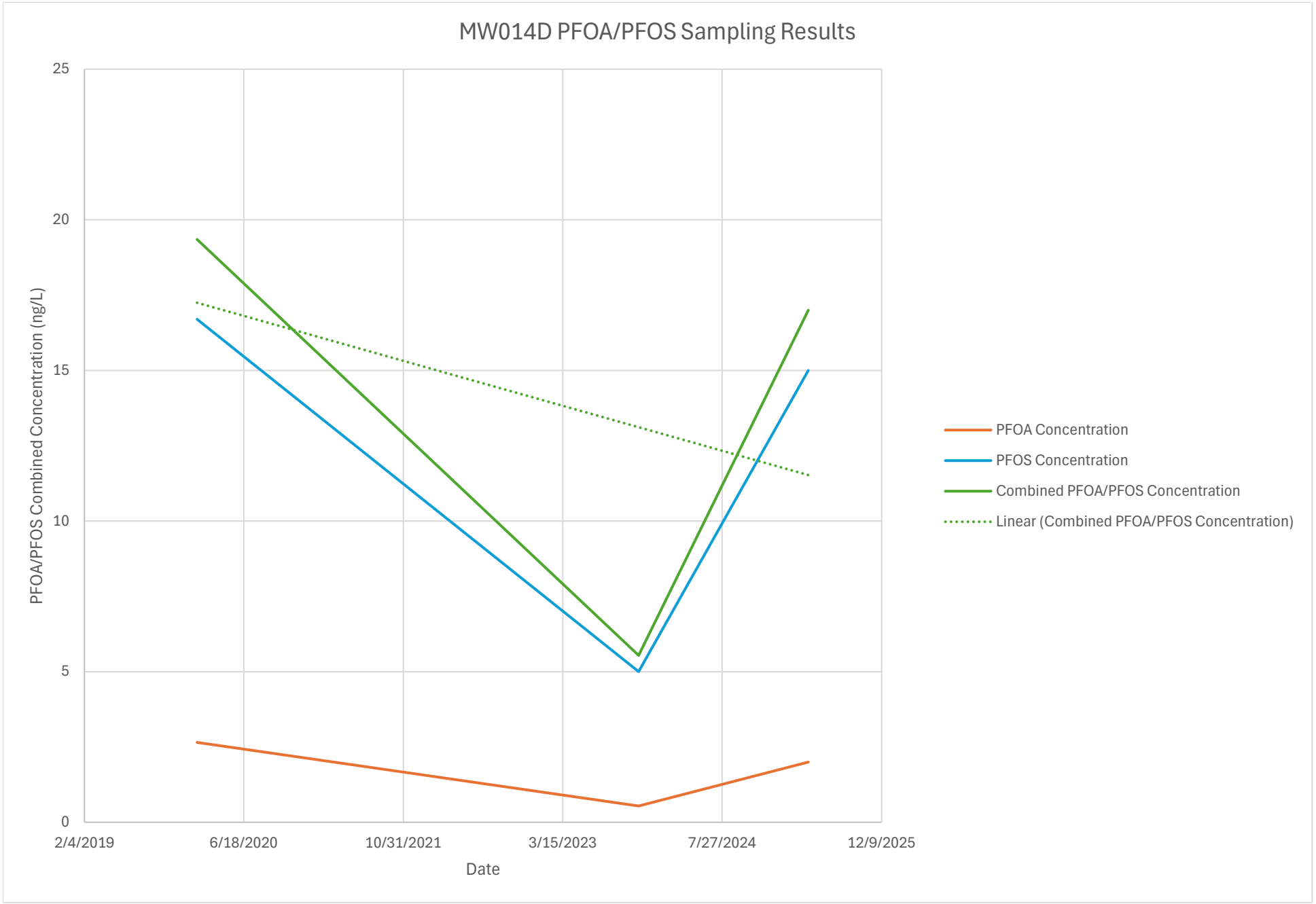
Graph 17

MW014S Monitoring Well Sample Results



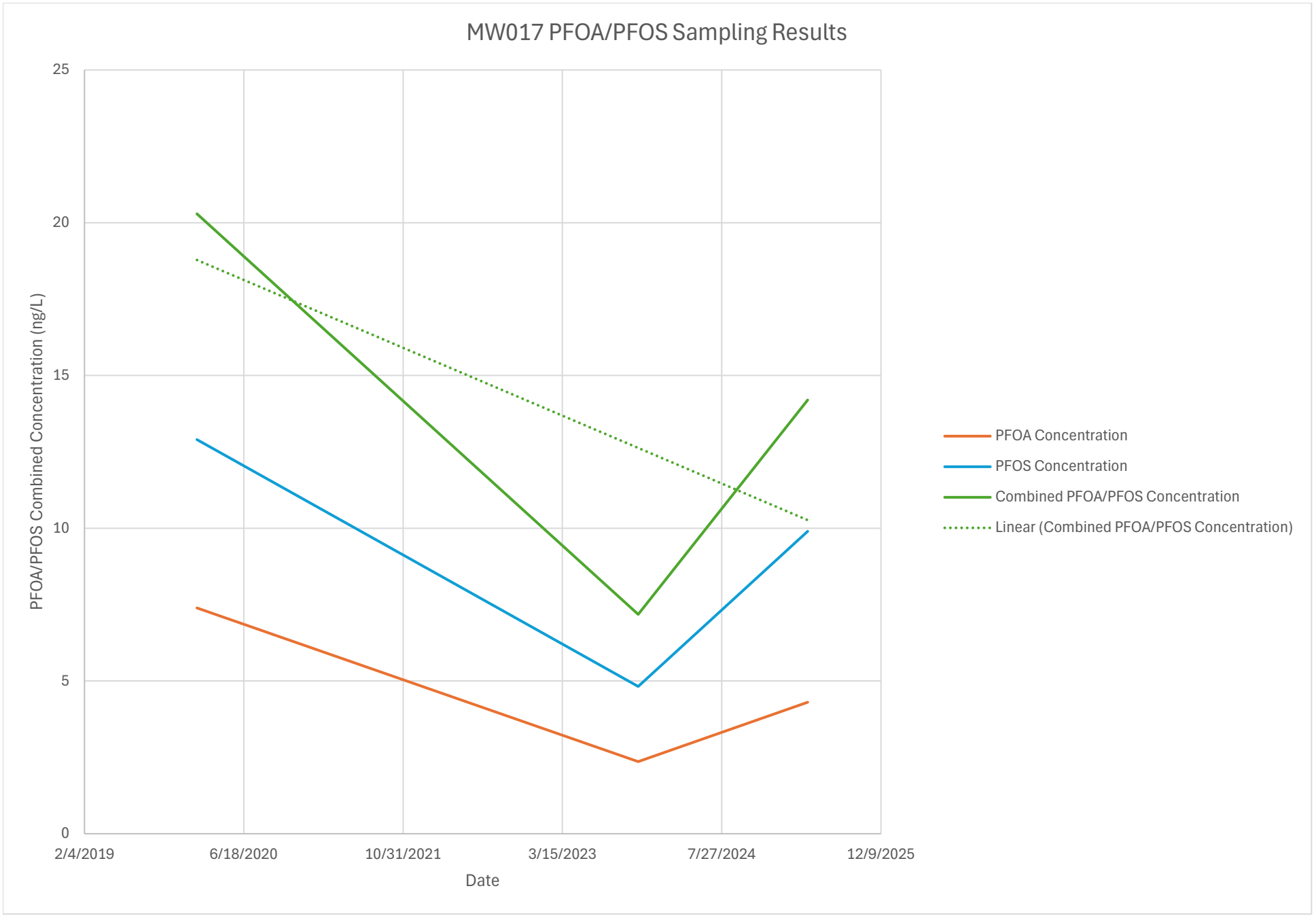
Graph 18

MW014D Monitoring Well Sample Results



Graph 19

MW017 Monitoring Well Sample Results



APPENDIX D

P.W. GROSSER CONSULTING, INC • P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, PC
631.589.6353 • WWW.PWGROSSER.COM • PWGC.INFO@PWGROSSER.COM
BOHEMIA • MANHATTAN • SARATOGA SPRINGS • MONTICELLO, NY • SYRACUSE • SHELTON, CT

June 3, 2025

Ms. Kylie Benz
P.W. Grosser Consulting
630 Johnson Avenue, Suite 7
Bohemia NY, 11716

Re: Data Usability Summary Report – SGS North America, Inc. – JE10205

Dear Ms. Benz:

The evaluation of analytical data by SGS North America for PW Grosser project SHD2503 which was reported in a single data package under Job No. JE10205 has been completed. The following samples were reported:

MW004	**MW008**	MW009S
MW009D	**DUP001**	MW003
FIELD BLANK	MW002	MW010
MW012S	MW012D	**MW011**
MW005S	MW005D	MW006S
MW006D	MW007	MW013
MW014S	MW014D	MW017

Validation was performed on 10% of the samples. The samples bolded above identify the samples that were validated.

Analyses were performed in accordance with USEPA Method 1633 [Per- and Polyfluoroalkyl Substances (PFAS)]. The review was performed to the extent possible, in accordance with the analytical method, "Sampling, Analysis, and Assessment of Per-And Polyfluoroalkyl Substances (PFAS) under NYSDEC's Part 375 Remedial Programs", April 2023 and "DER-10/ Technical Guidance for Site Investigation and Remediation". Professional judgment is applied as necessary and appropriate. Qualifiers consistent with those defined by EPA Region 2 are applied as necessary and appropriate.

Below is the Data Usability Summary Report (DUSR) associated with these samples.

Data Usability Summary Report	
1. Is the data package complete as defined under the requirements for the most current DEC ASP Category B or USEPA CLP data deliverables?	Yes
2. Have all holding times been met?	Yes

3. Do all the QC data; blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?	No- see following sections
4. Have all of the data been generated using established and agreed upon analytical protocols?	Yes
5. Does an evaluation of the raw data confirm the results provided in the data summary sheet and the quality control verification forms?	Yes
6. Have the correct data qualifiers been used and are they consistent with the most current DEC ASP?	Yes
7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheet from the data package been attached to the DUSR?	Yes

Overall Evaluation

Based on the data review effort, results are usable, with the following qualifications.

- The result for PFOSA in MW008 and DUP001 are qualified as estimated (J+) and may be biased high due to high recovery in the labeled analog.

Qualifier definitions are provided in Attachment A. A copy of the chain of custody record is provided in Attachment B. Select pages from the data package showing quality control excursions are provided in Attachment C. Annotated Data Summary Forms showing qualifiers applied as a result of the validation effort are provided in Attachment D

The following components were reviewed, where applicable:

- Chain of Custody
- Receiving conditions
- Holding times
- Preservation
- Analyte lists
- Reporting limits
- Requested methods
- Units, and
- Sample related quality control data:
    - Method and instrument blanks
    - Field blanks
    - Labeled analog recoveries
    - OPR and LL OPR recoveries
    - MS/MSD recoveries
    - Extracted internal standards (EIS) and non-extracted internal standards (NIS)
    - Duplicates
    - Analyte Identification

- Instrument related quality control data:
    - Instrument tunes
    - Calibration summaries

Documentation: A completeness review of the data package was performed, and the data package was determined to be a complete Category B data package.

Holding Times, Preservation, Sample Integrity:

A copy of the applicable chain of custody (COC) record was included in the data package, documenting sample collection dates of April 22, 23 and 24, 2025. The samples were received at the laboratory on April 25, 2025. The validator presumes the samples were properly stored from the time of sample collection to time of shipping. All samples were received intact and analyzed within method holding time.

Labeled Analogs / Isotope Dilution Standards

The recovery of all labeled analogs are within method specified control limits with the exceptions noted below. Where the labeled analog recovery is high and the associated target analyte is not detected, no qualification of sample results is warranted. These are not detailed below.

Sample	Labeled Analog	%R	Control Limit %R	Associated Target Analyte
DUP001	13C8-FOSA	135	40-130	PFOSA
MW008	13C8-FOSA	146	40-130	PFOSA

The result for PFOSA in MW008 and DUP001 are qualified as estimated (J+) due to high recovery in the labeled analog.

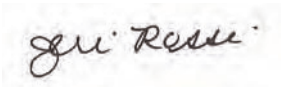
Field Duplicates

DUP001 was submitted as a field duplicate of MW008. Precision is acceptable (RPD$\leq$30) as presented below.

Analyte	MW008 (µg/L)	DUP001 (µg/L)	RPD
Perfluorobutanoic acid	0.131	0.125	4.7
Perfluoropentanoic acid	0.409	0.392	4.2
Perfluorohexanoic acid	0.602	0.566	6.2
Perfluoroheptanoic acid	0.411	0.380	7.8
Perfluorooctanoic acid	1.35	1.30	3.8
Perfluorononanoic acid	2.47	2.46	0.4
Perfluorodecanoic acid	0.0222	0.0213	4.1

Perfluoroundecanoic acid	0.0484	0.0493	1.8
Perfluorobutanesulfonic acid	0.0471	0.0441	6.6
Perfluoropentanesulfonic acid	0.0938	0.0884	5.9
Perfluorohexanesulfonic acid	4.05	3.85	5.1
Perfluoroheptanesulfonic acid	0.198	0.176	12
Perfluorooctanesulfonic acid	13.2	13.9	5.2
6:2 Fluorotelomer sulfonate	0.326	0.323	0.9
8:2 Fluorotelomer sulfonate	0.299	0.287	4.1
PFOSA	0.0048	0.0048	0

Please feel free to contact me at (908) 370-3431 or richjerirossi513@gmail.com if you have any questions regarding this data package review report or need further information.
Sincerely,



Jeri L Rossi, CEAC

Environmental Consulting Chemist

ATTACHMENT A

Qualifier Definitions

EPA Qualifier Definitions

U The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

J+ The result is an estimated quantity, but the result may be biased high.

J- The result is an estimated quantity, but the result may be biased low.

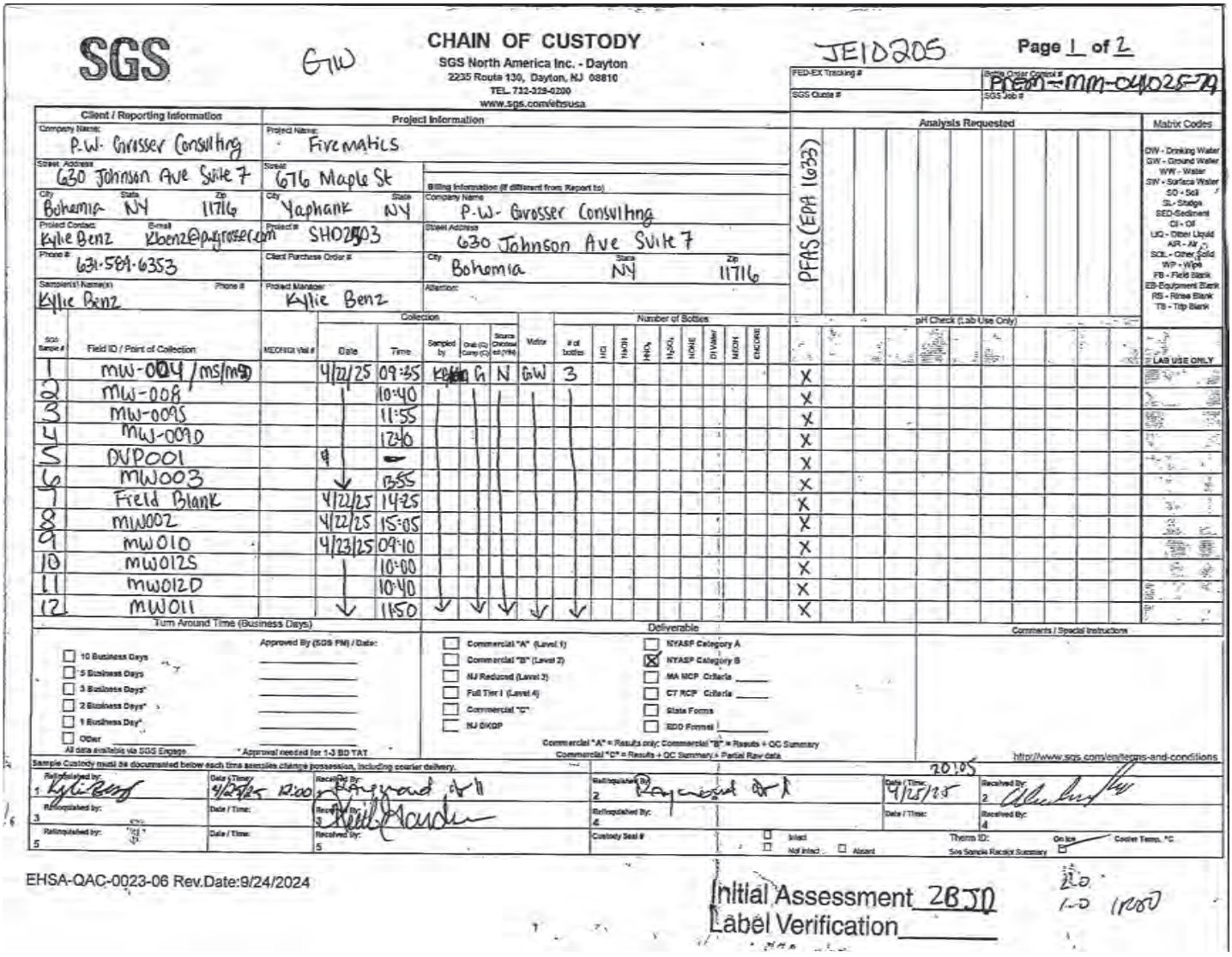
NJ The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.

UJ The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

ATTACHMENT B

CHAIN OF CUSTODY (COC)



SGS

GW

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200
www.sgs.com/ehsusa

JE10205

Page 1 of 2

FED-EX Tracking #:
SGS Quote #:
Purchase Order Control #: PREM-MM-04025-24
SGS Job #:

Client / Reporting Information

Company Name: P.W. Grosser Consulting
Street Address: 630 Johnson Ave Suite 7
City: Bohemia State: NY Zip: 11716
Project Contact: Kylie Benz E-mail: kbenz@pwgrosser.com
Phone #: 631-589-6353
Sampler(s) Name(s): Kylie Benz Phone #:

Project Information

Project Name: Firematics
Street: 676 Maple St
City: Yaphank State: NY
Project #: SH02503
Client Purchase Order #:
Project Manager: Kylie Benz

Billing Information (if different from Report to)

Company Name: P.W. Grosser Consulting
Street Address: 630 Johnson Ave Suite 7
City: Bohemia State: NY Zip: 11716
Attention:

Analysis Requested

PFAS (EPA 1633)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RS - Rinse Blank
TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	# of Grab (G) Comp (C)	Source Code (Potable/NPW/SW/SO/WW/OW/WP/AIR/OIL)	Matrix	Number of Bottles: # of bottles	HCl	HNO3	NaOH	H2SO4	NONE	DI Water	MEOH	ENCORE	pH Check (Lab Use Only)	LAB USE ONLY
1	MW-004 /MS/MSD		4/22/25	09:35	KB/GH	G	N	GW	3									X	
2	MW-008			10:40														X	
3	MW-009S			11:55														X	
4	MW-009D			12:40														X	
5	DUP001			-														X	
6	MW003			13:55														X	
7	Field Blank		4/22/25	14:25														X	
8	MW002		4/22/25	15:05														X	
9	MW010		4/23/25	09:10														X	
10	MW012S			10:00														X	
11	MW012D			10:40														X	
12	MW011			11:50														X	

Turn Around Time (Business Days)

Approved By (SGS PM) / Date:

- 10 Business Days
- 5 Business Days
- 3 Business Days*
- 2 Business Days*
- 1 Business Day*
- Other

All data available via SGS Engage. * Approval needed for 1-3 BD TAT

Deliverable

- Commercial "A" (Level 1)
- Commercial "B" (Level 2)
- NJ Reduced (Level 2)
- Full Tier I (Level 4)
- Commercial "C"
- NJ DKQP
- NYASP Category A
- NYASP Category B
- MA MCP Criteria
- CT RCP Criteria
- State Forms
- EDD Format

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

http://www.sgs.com/en/terms-and-conditions

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

	Relinquished by:	Date / Time:	Received By:
1	Kylie Benz	4/23/25 12:00	Raymond Ort II
2	Raymond Ort II	4/23/25 20:05	
3			Kelli Maurer
4			
5			

Custody Seal #: Intact / Not Intact / Absent

Therm ID: SGS Sample Receipt Summary

On Ice / Cooler Temp. °C

EHSA-QAC-0023-06 Rev.Date:9/24/2024

Initial Assessment ZBJD
Label Verification

CHAIN OF CUSTODY

JE10205 Page 2 of 2

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #:

Client / Reporting Information

Company Name: P.W. Grosser Consulting
Street Address: 630 Johnson Ave Suite 7
City: Bohemia State: NY Zip: 11716
Project Contact: Kylie Benz E-mail: kbenz@pwgrosser.com
Phone #: 631-589-6353
Sampler(s) Name(s): Kylie Benz Phone #:

Project Information

Project Name: Firematics
Street: 676 Maple Street
City: Yaphank State: NY
Project #: SHO2503
Client Purchase Order #:
Project Manager: Kylie Benz

Billing Information (if different from Report to)

Company Name: P.W. Grosser Consulting
Street Address: 630 Johnson Ave Suite 7
City: Bohemia State: NY Zip: 11716
Attention:

Requested Analysis

PFAS (EPA 1633)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED - Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB - Equipment Blank
RB - Rinse Blank
TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NaHSO4	DI Water	MEOH	ENCORE	PFAS (EPA 1633)	LAB USE ONLY
13	MW005S		4/23/25	13:05	KB	G	GW	3									X	
14	MW005D			13:40													X	
15	MW006S			15:10													X	
16	MW006D			14:25													X	
17	MW007		4/24/25	08:10													X	
18	MW013			09:20													X	
19	MW014S			10:20													X	
20	MW014D			11:30													X	
21	MW017			12:45													X	

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [ ] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [ ] EDD Format
- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

http://www.sgs.com/en/terms-and-conditions

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

	Relinquished by:	Date / Time:	Received By:
1	Kylie Benz	4/24/25 12:00	Raymond BK 11
2	Raymond BK 11	4/25/25	Mahyar
3			Keith Kunde
4			
5			
6			

Custody Seal # | Intact / Not Intact | Preserved where applicable / Absent | Therm. ID: | Cooler Temp. °C: 20°C mean

FHSA-DAC-0023-02-PCRM-Firefront - Standard DOC

JE10205: Chain of Custody
Page 2 of 5

ATTACHMENT C

SELECTED PAGES FROM DATA PACKAGE –
QC EXCEEDANCES AND VALIDATION ISSUES

Report of Analysis

Client Sample ID:	MW008		
Lab Sample ID:	JE10205-2	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%	92%	40-130%
	13C8-FOSA	146% [c]	99%	40-130%
	d3-MeFOSA	132% [c]	83%	10-130%
	d5-EtFOSA	136% [c]	78%	10-130%
	d3-MeFOSAA	128%	91%	40-170%
	d5-EtFOSAA	138% [c]	100%	25-135%
	d7-MeFOSE	138% [c]	91%	10-130%
	d9-EtFOSE	137% [c]	91%	10-130%
	13C2-4:2FTS	139%	117%	40-200%
	13C2-6:2FTS	108%	113%	40-200%
	13C2-8:2FTS	99%	97%	40-300%
	13C3-HFPO-DA	85%	83%	40-130%

(a) Result is from Run# 2
(b) Associated EIS outside control limits.
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP001		
Lab Sample ID:	JE10205-5	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%	83%	40-130%
	13C8-FOSA	135% [c]	88%	40-130%
	d3-MeFOSA	124%	90%	10-130%
	d5-EtFOSA	120%	89%	10-130%
	d3-MeFOSAA	115%	91%	40-170%
	d5-EtFOSAA	123%	98%	25-135%
	d7-MeFOSE	122%	90%	10-130%
	d9-EtFOSE	122%	86%	10-130%
	13C2-4:2FTS	156%	119%	40-200%
	13C2-6:2FTS	115%	104%	40-200%
	13C2-8:2FTS	112%	97%	40-300%
	13C3-HFPO-DA	88%	83%	40-130%

(a) Result is from Run# 2
(b) Associated EIS outside control limits.
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Attachment D

Annotated

Summary Forms

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW008		
Lab Sample ID:	JE10205-2	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8162.D	1	04/30/25 22:10	MH	04/29/25 17:00	OP63161	T4Q138
Run #2	1Q26074.D	5	05/15/25 14:40	MH	05/13/25 11:00	OP63534	T1Q362

	Initial Volume	Final Volume
Run #1	487 ml	5.0 ml
Run #2	62.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.131	0.0082	0.00095	ug/l	
2706-90-3	Perfluoropentanoic acid	0.409	0.0041	0.00075	ug/l	
307-24-4	Perfluorohexanoic acid	0.602	0.0021	0.00030	ug/l	
375-85-9	Perfluoroheptanoic acid	0.411	0.0021	0.00051	ug/l	
335-67-1	Perfluorooctanoic acid	1.35 [a]	0.081	0.030	ug/l	
375-95-1	Perfluorononanoic acid	2.47 [a]	0.081	0.016	ug/l	
335-76-2	Perfluorodecanoic acid	0.0222	0.0021	0.00064	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0484	0.0021	0.00056	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0021	0.00079	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0021	0.00081	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0021	0.00078	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0471	0.0021	0.00068	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0938	0.0021	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	4.05 [a]	0.081	0.045	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.198	0.0021	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	13.2 [a]	0.081	0.017	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0021	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0021	0.00041	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0082	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.326	0.0082	0.00093	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.299	0.0082	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA [b]	0.0048	0.0021	0.00071	ug/l	J+
31506-32-8	MeFOSA [b]	ND	0.0021	0.00066	ug/l	
4151-50-2	EtFOSA [b]	ND	0.0021	0.00054	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW008		
Lab Sample ID:	JE10205-2	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0021	0.00052	ug/l	
2991-50-6	EtFOSAA [b]	ND	0.0021	0.00093	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE [b]	ND	0.021	0.0029	ug/l	
1691-99-2	EtFOSE [b]	ND	0.021	0.0039	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0082	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0082	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0041	0.00031	ug/l	
863090-89-5	PFMBA	ND	0.0041	0.00057	ug/l	
151772-58-6	NFDHA	ND	0.0041	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0082	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0082	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0041	0.00028	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0025	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.051	0.0073	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.051	0.0063	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	91%	97%	5-130%
	13C5-PFPeA	76%	100%	40-130%
	13C5-PFHxA	89%	93%	40-130%
	13C4-PFHpA	83%	97%	40-130%
	13C8-PFOA	92%	103%	40-130%
	13C9-PFNA	91%	93%	40-130%
	13C6-PFDA	88%	108%	40-130%
	13C7-PFUnDA	97%	104%	30-130%
	13C2-PFDoDA	91%	100%	10-130%
	13C2-PFTeDA	87%	106%	10-130%
	13C3-PFBS	106%	94%	40-135%
	13C3-PFHxS	83%	86%	40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW008		
Lab Sample ID:	JE10205-2	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%	92%	40-130%
	13C8-FOSA	146% [c]	99%	40-130%
	d3-MeFOSA	132% [c]	83%	10-130%
	d5-EtFOSA	136% [c]	78%	10-130%
	d3-MeFOSAA	128%	91%	40-170%
	d5-EtFOSAA	138% [c]	100%	25-135%
	d7-MeFOSE	138% [c]	91%	10-130%
	d9-EtFOSE	137% [c]	91%	10-130%
	13C2-4:2FTS	139%	117%	40-200%
	13C2-6:2FTS	108%	113%	40-200%
	13C2-8:2FTS	99%	97%	40-300%
	13C3-HFPO-DA	85%	83%	40-130%

(a) Result is from Run# 2
(b) Associated EIS outside control limits.
(c) Outside control limits.

JR 5/30/2025

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DUP001		
Lab Sample ID:	JE10205-5	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8165.D	1	04/30/25 22:51	MH	04/29/25 17:00	OP63161	T4Q138
Run #2	1Q26076.D	5	05/15/25 15:09	MH	05/13/25 11:00	OP63534	T1Q362

	Initial Volume	Final Volume
Run #1	481 ml	5.0 ml
Run #2	65.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.125	0.0083	0.00097	ug/l	
2706-90-3	Perfluoropentanoic acid	0.392	0.0042	0.00076	ug/l	
307-24-4	Perfluorohexanoic acid	0.566	0.0021	0.00030	ug/l	
375-85-9	Perfluoroheptanoic acid	0.380	0.0021	0.00052	ug/l	
335-67-1	Perfluorooctanoic acid	1.30 [a]	0.077	0.029	ug/l	
375-95-1	Perfluorononanoic acid	2.46 [a]	0.077	0.015	ug/l	
335-76-2	Perfluorodecanoic acid	0.0213	0.0021	0.00064	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0493	0.0021	0.00057	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0021	0.00080	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0021	0.00082	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0021	0.00079	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0441	0.0021	0.00069	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0884	0.0021	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	3.85 [a]	0.077	0.043	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.176	0.0021	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	13.9 [a]	0.077	0.017	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0021	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0021	0.00042	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0083	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.323	0.0083	0.00095	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.287	0.0083	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA [b]	0.0048	0.0021	0.00072	ug/l	J+
31506-32-8	MeFOSA	ND	0.0021	0.00067	ug/l	
4151-50-2	EtFOSA	ND	0.0021	0.00055	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP001		
Lab Sample ID:	JE10205-5	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0021	0.00053	ug/l	
2991-50-6	EtFOSAA	ND	0.0021	0.00095	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.021	0.0029	ug/l	
1691-99-2	EtFOSE	ND	0.021	0.0039	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0083	0.0019	ug/l	
919005-14-4	ADONA	ND	0.0083	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0042	0.00031	ug/l	
863090-89-5	PFMBA	ND	0.0042	0.00058	ug/l	
151772-58-6	NFDHA	ND	0.0042	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0083	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0083	0.0019	ug/l	
113507-82-7	PFEESA	ND	0.0042	0.00028	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0025	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.052	0.0074	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.052	0.0064	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	93%	95%	5-130%
	13C5-PFPeA	78%	103%	40-130%
	13C5-PFHxA	91%	100%	40-130%
	13C4-PFHpA	87%	99%	40-130%
	13C8-PFOA	94%	98%	40-130%
	13C9-PFNA	92%	87%	40-130%
	13C6-PFDA	92%	95%	40-130%
	13C7-PFUnDA	98%	81%	30-130%
	13C2-PFDoDA	93%	84%	10-130%
	13C2-PFTeDA	87%	88%	10-130%
	13C3-PFBS	110%	94%	40-135%
	13C3-PFHxS	91%	86%	40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP001		
Lab Sample ID:	JE10205-5	**Date Sampled:**	04/22/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%	83%	40-130%
	13C8-FOSA	135% [c]	88%	40-130%
	d3-MeFOSA	124%	90%	10-130%
	d5-EtFOSA	120%	89%	10-130%
	d3-MeFOSAA	115%	91%	40-170%
	d5-EtFOSAA	123%	98%	25-135%
	d7-MeFOSE	122%	90%	10-130%
	d9-EtFOSE	122%	86%	10-130%
	13C2-4:2FTS	156%	119%	40-200%
	13C2-6:2FTS	115%	104%	40-200%
	13C2-8:2FTS	112%	97%	40-300%
	13C3-HFPO-DA	88%	83%	40-130%

(a) Result is from Run# 2
(b) Associated EIS outside control limits.
(c) Outside control limits.

JR 5/30/2025

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	MW011		
Lab Sample ID:	JE10205-12	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q8144.D	1	04/30/25 18:06	MH	04/29/25 16:00	OP63163	T4Q138
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0242	0.0077	0.00089	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0658	0.0038	0.00070	ug/l	
307-24-4	Perfluorohexanoic acid	0.0478	0.0019	0.00028	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0349	0.0019	0.00048	ug/l	
335-67-1	Perfluorooctanoic acid	0.0418	0.0019	0.00072	ug/l	
375-95-1	Perfluorononanoic acid	0.0245	0.0019	0.00038	ug/l	
335-76-2	Perfluorodecanoic acid	0.0015	0.0019	0.00060	ug/l	J
2058-94-8	Perfluoroundecanoic acid	0.0078	0.0019	0.00053	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00074	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00076	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00073	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0040	0.0019	0.00063	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0039	0.0019	0.00097	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0784	0.0019	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.0017	0.0019	0.00094	ug/l	J
1763-23-1	Perfluorooctanesulfonic acid	0.233	0.0019	0.00041	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00038	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0077	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0049	0.0077	0.00087	ug/l	J
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0077	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.0066	0.0019	0.00066	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00062	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00051	ug/l	

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Report of Analysis

Client Sample ID:	MW011		
Lab Sample ID:	JE10205-12	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00049	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00087	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0036	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0077	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0077	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0038	0.00029	ug/l	
863090-89-5	PFMBA	ND	0.0038	0.00054	ug/l	
151772-58-6	NFDHA	ND	0.0038	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0077	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0077	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0038	0.00026	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0096	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.048	0.0068	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.048	0.0059	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	92%		5-130%
	13C5-PFPeA	78%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	88%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	82%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	97%		40-130%

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Report of Analysis

Client Sample ID:	MW011		
Lab Sample ID:	JE10205-12	**Date Sampled:**	04/23/25
Matrix:	AQ - Ground Water	**Date Received:**	04/25/25
Method:	EPA 1633 EPA 1633	**Percent Solids:**	n/a
Project:	Firematics, 676 Maple St, Yaphank, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	84%		40-170%
	d5-EtFOSAA	81%		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	81%		10-130%
	13C2-4:2FTS	158%		40-200%
	13C2-6:2FTS	125%		40-200%
	13C2-8:2FTS	106%		40-300%
	13C3-HFPO-DA	84%		40-130%

JR 5/30/2025

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