



ANALYTICAL REPORT

PREPARED FOR

Attn: Roger Brewer
Hawaii Department of Health
919 Ala Moana Blvd
Room 206
Honolulu, Hawaii 96814

Generated 11/27/2023 1:36:27 PM

JOB DESCRIPTION

Kahalui Fire Training Pit Study

JOB NUMBER

320-104763-2

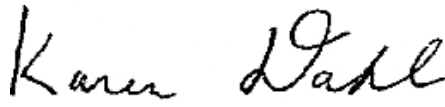
Eurofins Sacramento

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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Authorized for release by
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(916)374-4384

November 17, 2023

Hawaii Department of Health
919 Ala Moana Blvd
Room 206
Honolulu, HI 96814

Attn: Roger Brewer

RE: PFAS by NTA Results for Eurofins Job 320-104763

Dear Mr. Brewer,

Enclosed are the Non-Target Analysis (NTA) results for potential PFAS parameters in the five aqueous samples submitted to Eurofins in Job 320-104763-1. Client and laboratory sample IDs are as follows: KHFTA-MW2 (320-104763-2), KHFTA-MW3 (320-104763-3), KHFTA-MW4 (320-104763-4), KHFTA-MW7 (320-104763-6), and KHFTA-M11 (320-104763-9). Analysis was requested via LC-QTOF MS (liquid chromatography quadrupole time-of-flight mass spectrometry) for identification of potential PFAS analytes not determined in the routine targeted analyses that are typically applied to aqueous samples. The NTA determination inherently incurs an increased level of uncertainty and certified reference standards are not used to confirm reported results.

There were several non-target analytes that were identified as potential PFAS parameters in these samples; **Perfluorobutanesulfonamide (FBSA)**, **Perfluorohexanesulfonamide (FHxSA)** and **Perfluoropropanesulfonic acid (PFPrS)** were present in greatest apparent abundance. **Perfluoropropanoic acid (PFPrA)** was potentially present in several samples but has relatively poor response under the conditions of the NTA acquisition and its identification is less reliable.

Note that NTA of sample KHFTA-M11 (320-104763-9) did not yield any positive results, and that no additional analytes were observed in the positive SWATH analysis of any sample, as described below. Thus, all reported results reflect the negative SWATH acquisition.

Sample Preparation

A 10 ml aliquot of each sample was subsampled and the pH of the filtered aliquot was measured. The sample aliquot was neutralized if required. For samples KHFTA-MW4 (320-104763-4), KHFTA-MW7 (320-104763-6), and KHFTA-M11 (320-104763-9), 2.5 ml of the neutralized sample was diluted to 5 ml at final composition of 50:50 MeOH/Water and a 300 µl aliquot of the 1:1 diluted sample was filtered into an LC/MS injection vial for analysis by LC-QTOF MS. For samples KHFTA-MW2 (320-104763-2) and KHFTA-MW3 (320-104763-3), 1 ml of the neutralized sample was diluted to 5 ml at final composition of 50:50 MeOH/Water and a

300 ul aliquot of the 1:5 diluted sample was filtered into an LC/MS injection vial for analysis by LC-QTOF MS.

Sample Analysis

The sample extracts were introduced into the LC system utilizing an optimized gradient to enhance the identification of early eluting compounds. The gradient ramps slowly over a period of 20 minutes where the compounds are separated on a 3x50mm Phenomenex Gemini C18 analytical column using 20mM ammonium acetate in water and methanol as mobile phases. The SCIEX X500r quadrupole time-of-flight mass spectrometer (QTOF MS) was set to run in sequential Electrospray Ionization (ESI) techniques in both positive and negative polarities utilizing the same gradient and mobile phases.

Results

Data were processed with SCIEX MarkerView deconvolution software. This software extracts the raw chromatograms across a defined mass range from 0-1500 amu and examines peaks of interest utilizing exact mass and MS/MS fragmentation. The peaks are compared to comprehensive fluorinated compound libraries where the software algorithm assigns possible matches to each peak, or feature. The observed features were then evaluated by a Eurofins analyst to confirm ample signal-to-noise as well as confirming the compound fit to the library match. The reported results include only peaks with a signal-to-noise greater than 10:1 and an absolute intensity greater than 1000 counts.

One limitation the software cannot account for are multiple isomers of the same compound. While the skeletal backbone and molecular formula will be the same, the match might represent a structural isomer of the identified compound.

Please find the results for the negative SWATH analyses in the attached Tables.

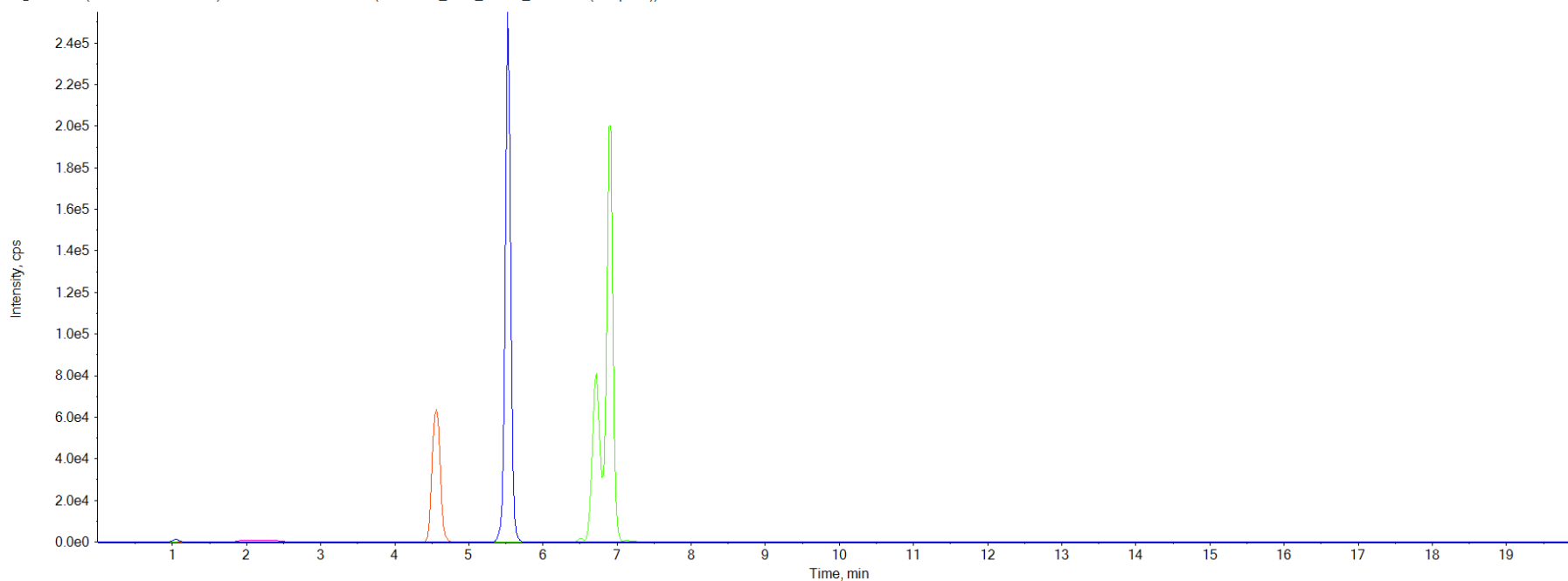
Please do not hesitate to let us know if there are any questions.

2023.11.8_NTA_SNEG_009.wiff2 - 320-104763-A-2-C

Data File	2023.11.8_NTA_SNEG_009.wiff2	Result Table	2023.11.10_NEG_SWATH
Acquisition Date	11/8/2023 10:29:26 AM	Algorithm Used	MQ4
Acquisition Method	N/A	Instrument Name	X500 QTOF
Project	PFAS_A11	Processing Method	SWATH_PFAS_Neg_1659_List.qmethod

Extracted Ion Chromatogram

- perfluorobutane sulfonamide (297.9490 - 297.9690) from 320-104763-A-2-C (2023.11.8_NTA_SNEG_009.wiff2 (sample 1))
- PFPrA (162.9724 - 162.9924) from 320-104763-A-2-C (2023.11.8_NTA_SNEG_009.wiff2 (sample 1))
- PFPrS (248.9362 - 248.9562) from 320-104763-A-2-C (2023.11.8_NTA_SNEG_009.wiff2 (sample 1))
- FHxSA (397.9426 - 397.9626) from 320-104763-A-2-C (2023.11.8_NTA_SNEG_009.wiff2 (sample 1))



Summary

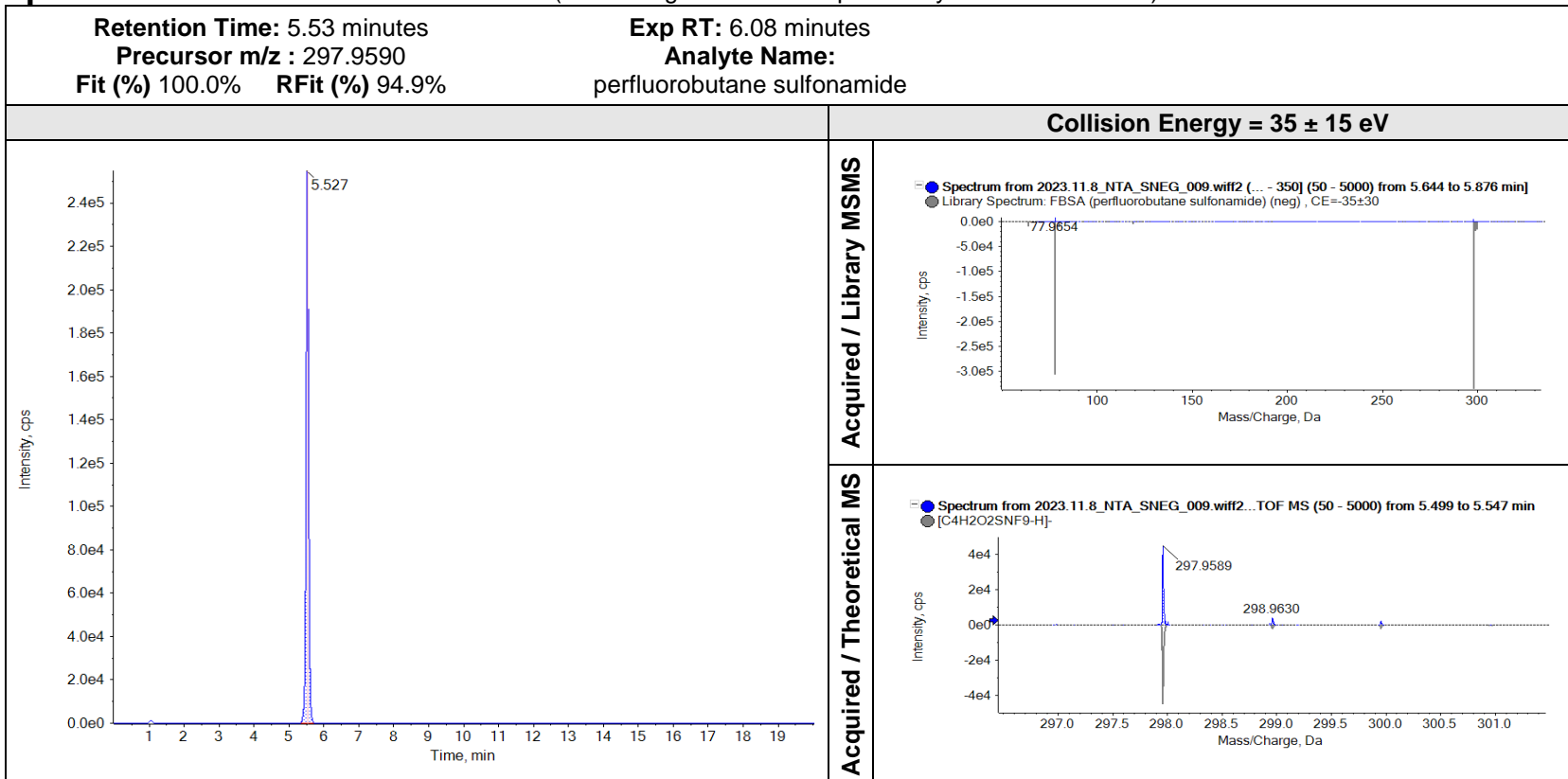
#	Analyte Peak Name	Mass Error Confidence	Fragment Mass Error Confidence	RT Confidence	Isotope Confidence	Library Confidence	Formula Confidence	Ion Ratio Confidence	Sample Name
354	perfluorobutane sulfonamide	✓	●	●	✓	✓	●	●	320-104763-A-2-C
1663	PFPrA	▲	●	●	✓	✓	●	●	320-104763-A-2-C
1670	PFPrS	✓	●	●	✓	✓	●	●	320-104763-A-2-C
1701	FHxSA	✓	●	●	▲	✓	●	●	320-104763-A-2-C

#	Analyte Peak Name	Sample Type	Component Name	Area	Calculated Concentration	Formula	Precursor Mass	Found At Mass	Mass Error (ppm)	Library Hit
354	perfluorobutane sulfonamide	Unknown	perfluorobutane sulfonamide	1.296e+06	<2 points	C4H2O2SNF9	297.959	297.9589	-0.3	FBSA (perfluorobutane sulfonamide) (neg) Smart Confirmation
1663	PFPrA	Unknown	PFPrA	3.105e+04	<2 points	C3HF5O2	162.982	162.9835	6.8	PFPrA (perfluoro-n-propanoic acid) (neg)
1670	PFPrS	Unknown	PFPrS	4.934e+05	<2 points	C3HF7O3S	248.946	248.9462	0.1	PFPrS (perfluoropropane sulfonate) (neg)
1701	FHxSA	Unknown	FHxSA	9.517e+05	<2 points	C6H2F13NO2S	397.953	397.9529	0.7	FHxSA (perfluorohexane sulfonamide) (neg)

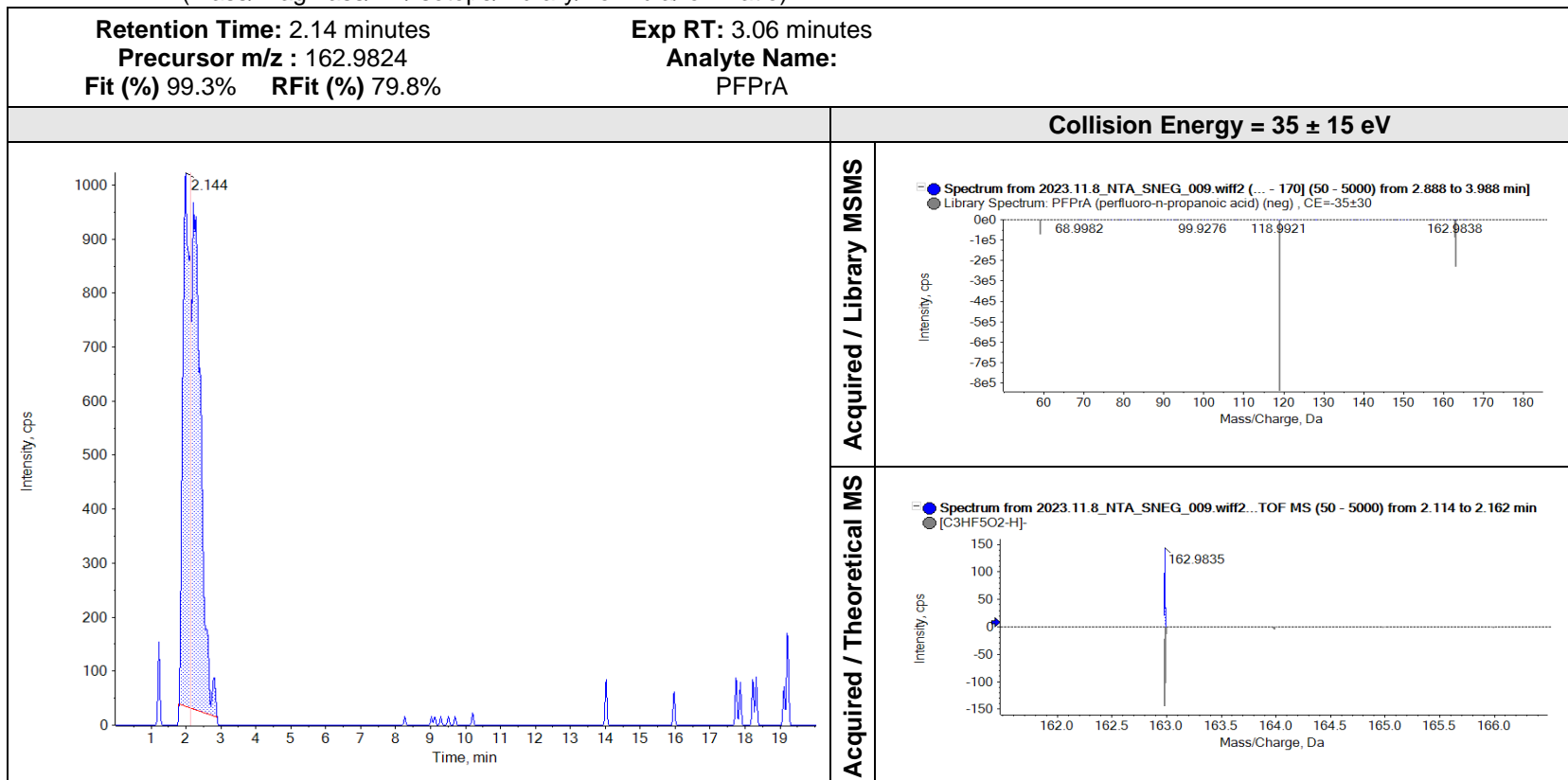
#	Analyte Peak Name	Library Score	Isotope Ratio Difference
354	perfluorobutane sulfonamide	100.0	3.5
1663	PFPrA	99.3	3.3
1670	PFPrS	100.0	3.1
1701	FHxSA	100.0	6.1

End of Table

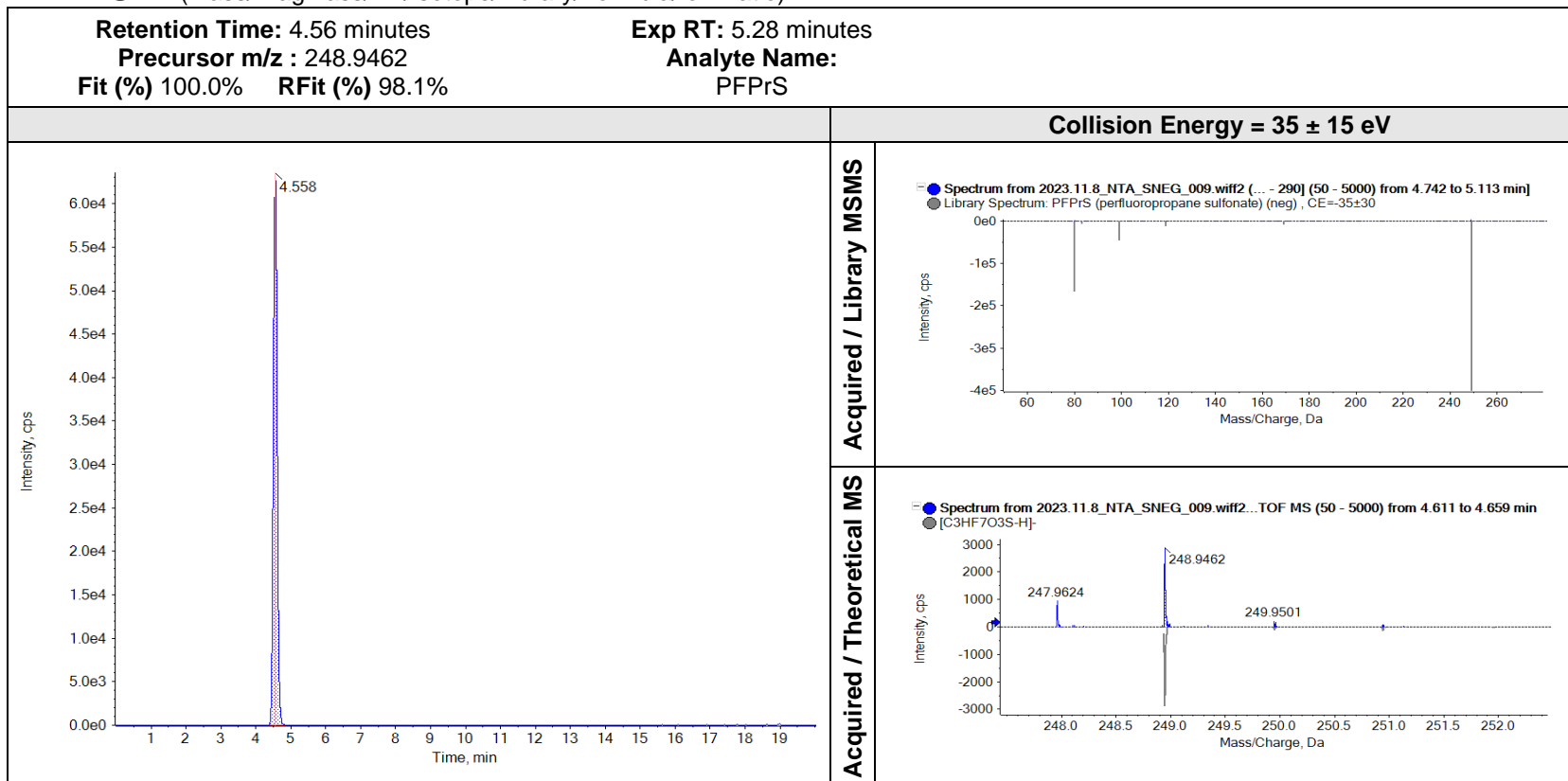
perfluorobutane sulfonamide (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio) ✓ ● ● ✓ ✓ ● ●



PFPrA (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio)

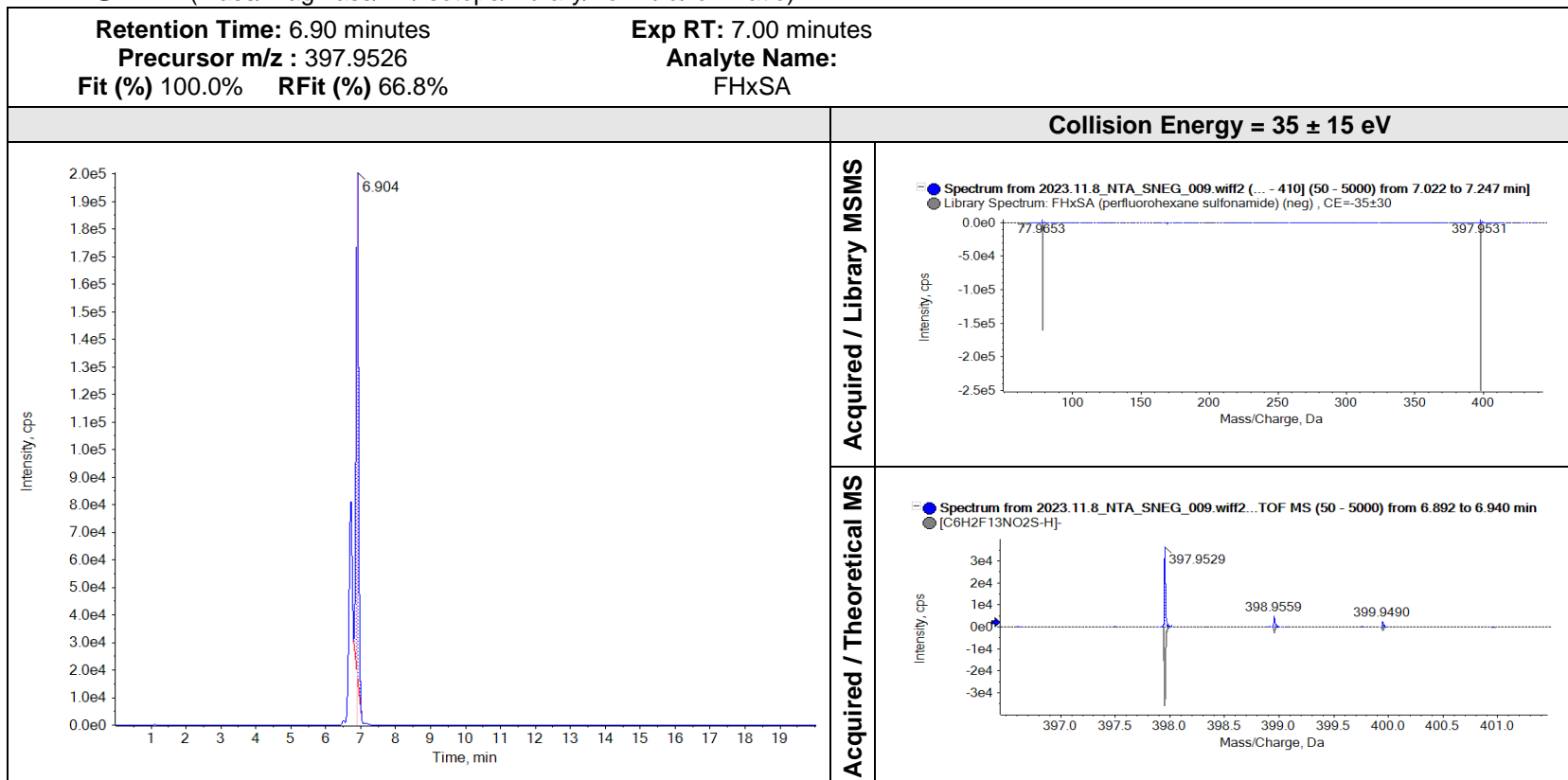


PFPPrS (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio)





FHxSA (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio)

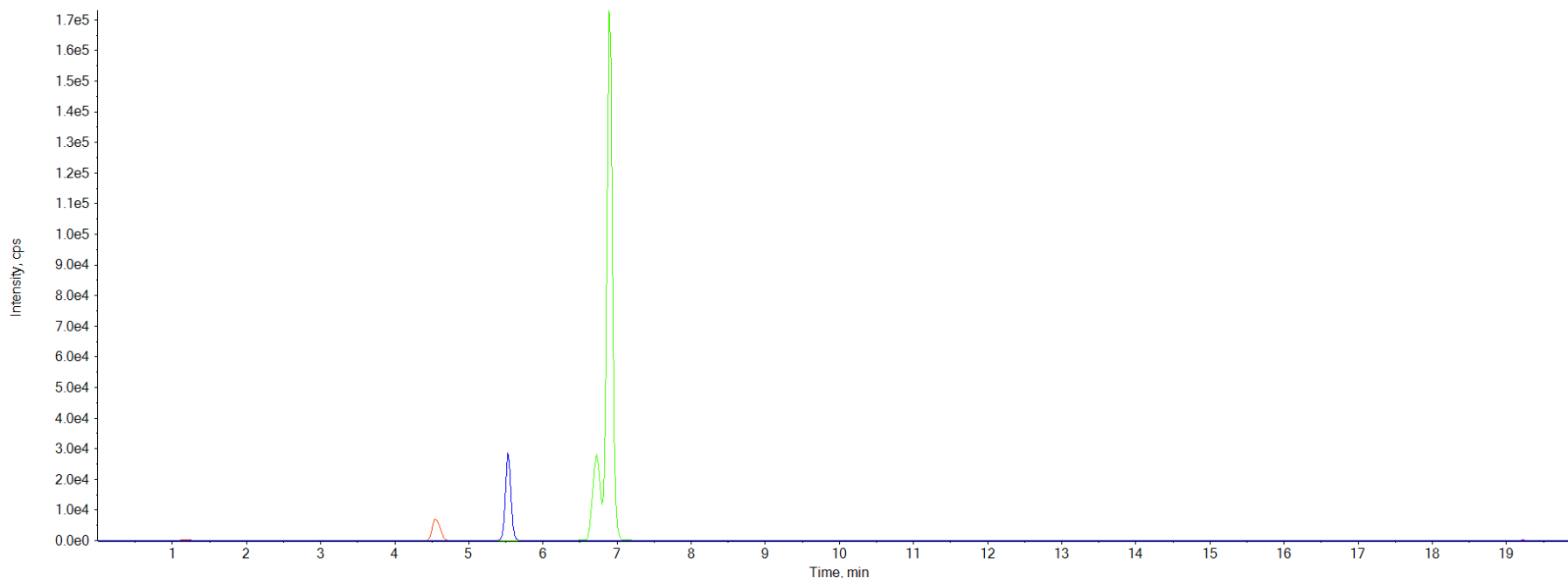


2023.11.8_NTA_SNEG_010.wiff2 - 320-104763-A-3-B

Data File	2023.11.8_NTA_SNEG_010.wiff2	Result Table	2023.11.10_NEG_SWATH
Acquisition Date	11/8/2023 10:50:14 AM	Algorithm Used	MQ4
Acquisition Method	N/A	Instrument Name	X500 QTOF
Project	PFAS_A11	Processing Method	SWATH_PFAS_Neg_1659_List.qmethod

Extracted Ion Chromatogram

- perfluorobutane sulfonamide (297.9490 - 297.9690) from 320-104763-A-3-B (2023.11.8_NTA_SNEG_010.wiff2 (sample 1))
- PFPrA (162.9724 - 162.9924) from 320-104763-A-3-B (2023.11.8_NTA_SNEG_010.wiff2 (sample 1))
- PFPrS (248.9362 - 248.9562) from 320-104763-A-3-B (2023.11.8_NTA_SNEG_010.wiff2 (sample 1))
- FHxSA (397.9426 - 397.9626) from 320-104763-A-3-B (2023.11.8_NTA_SNEG_010.wiff2 (sample 1))



Summary

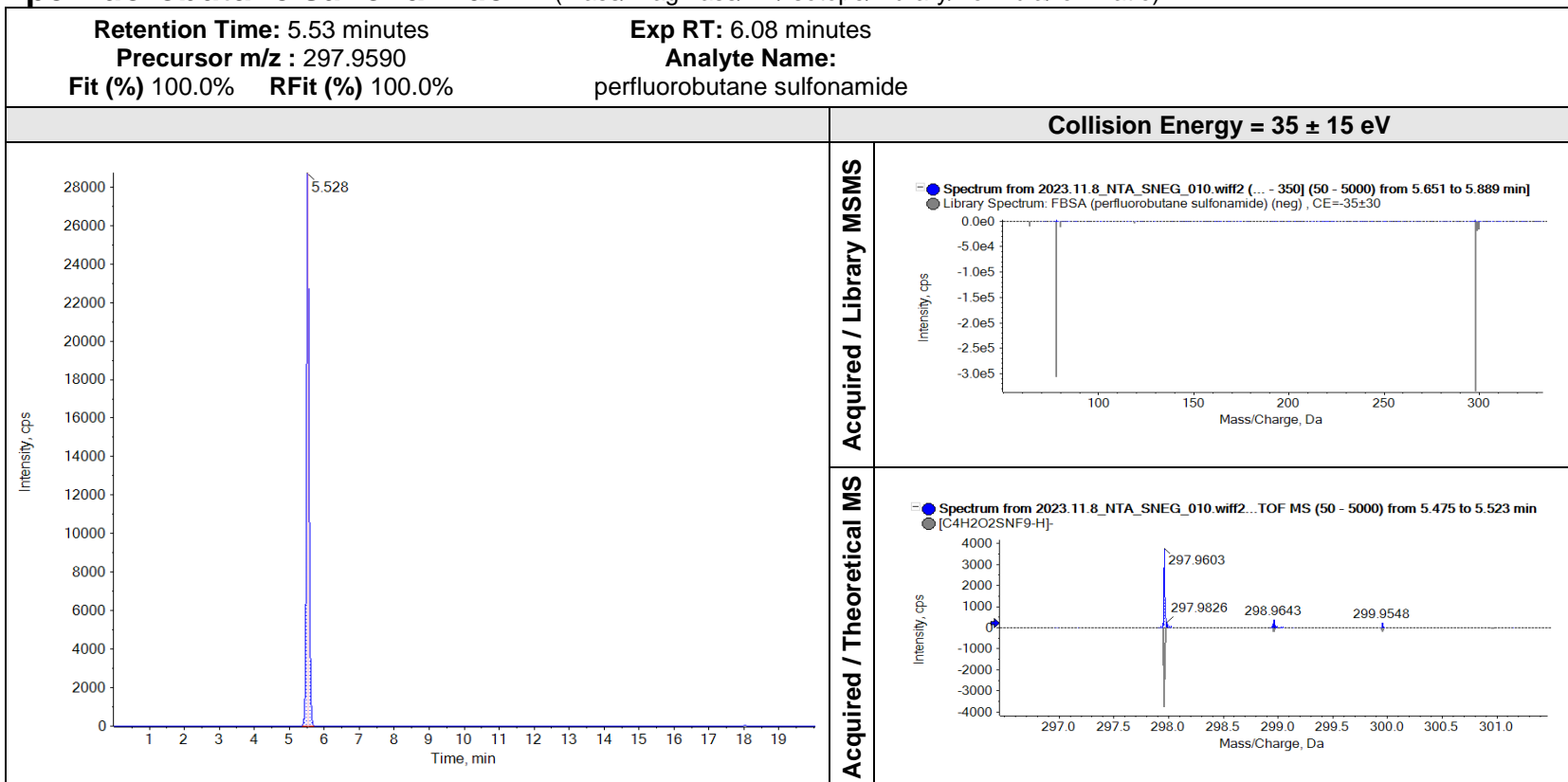
#	Analyte Peak Name	Mass Error Confidence	Fragment Mass Error Confidence	RT Confidence	Isotope Confidence	Library Confidence	Formula Confidence	Ion Ratio Confidence	Sample Name
354	perfluorobutane sulfonamide	✓	●	●	✓	✓	●	●	320-104763-A-3-B
1663	PFPrA	✓	●	●	✓	●	●	●	320-104763-A-3-B
1670	PFPrS	✓	●	●	✓	✓	●	●	320-104763-A-3-B
1701	FHxSA	✓	●	●	▲	✓	●	●	320-104763-A-3-B

#	Analyte Peak Name	Sample Type	Component Name	Area	Calculated Concentration	Formula	Precursor Mass	Found At Mass	Mass Error (ppm)	Library Hit
354	perfluorobutane sulfonamide	Unknown	perfluorobutane sulfonamide	1.485e+05	<2 points	C4H2O2SNF9	297.959	297.9603	4.5	FBSA (perfluorobutane sulfonamide) (neg) Smart Confirmation
1663	PFPrA	Unknown	PFPrA	1.712e+03	<2 points	C3HF5O2	162.982	162.9825	0.5	No Match
1670	PFPrS	Unknown	PFPrS	5.273e+04	<2 points	C3HF7O3S	248.946	248.9467	2.3	PFPrS (perfluoropropane sulfonate) (neg)
1701	FHxSA	Unknown	FHxSA	8.217e+05	<2 points	C6H2F13NO2S	397.953	397.9530	1.0	FHxSA (perfluorohexane sulfonamide) (neg)

#	Analyte Peak Name	Library Score	Isotope Ratio Difference
354	perfluorobutane sulfonamide	100.0	4.4
1663	PFPrA	0.0	3.3
1670	PFPrS	98.7	4.3
1701	FHxSA	100.0	15.8

End of Table

perfluorobutane sulfonamide (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio) ✓ ● ● ✓ ✓ ● ●

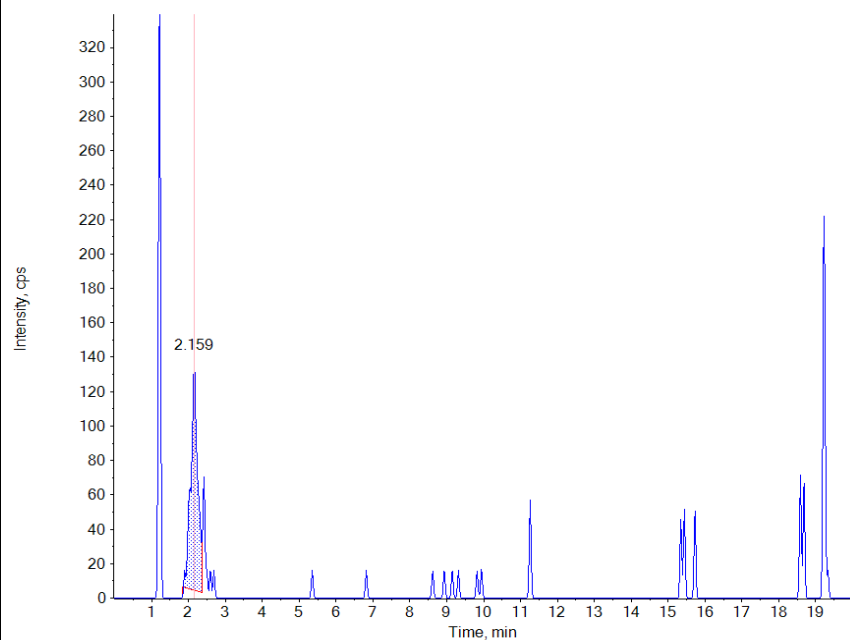


PFPPrA (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio) ✓ ● ● ✓ ● ●

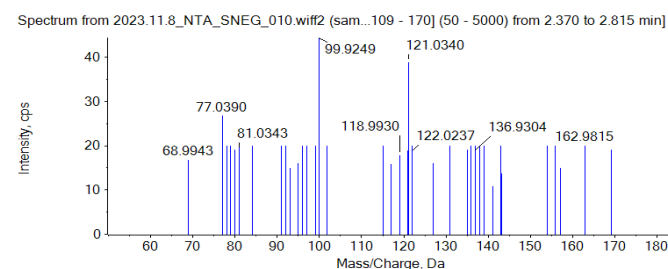
Retention Time: 2.16 minutes
Precursor m/z : 162.9824
Fit (%) N/A **RFit (%)** N/A

Exp RT: 1.21 minutes
Analyte Name:
PFPPrA

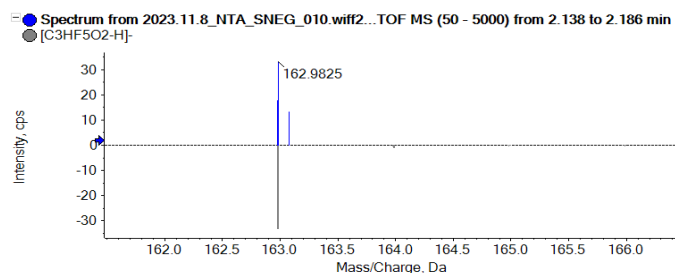
Collision Energy = 35 ± 15 eV



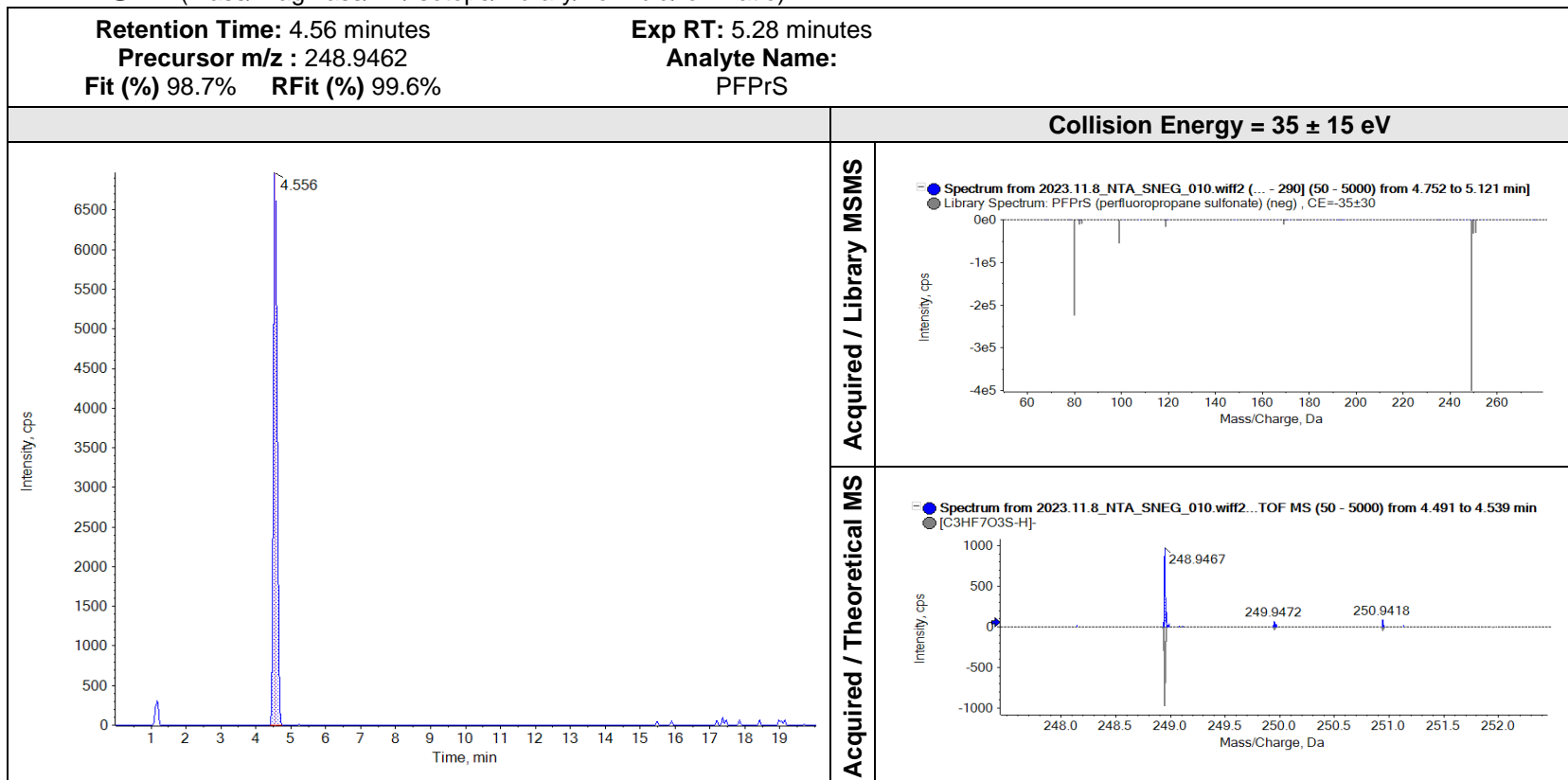
Acquired / Library MSMS



Acquired / Theoretical MS



PFPrS (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio)





FHxSA (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio)

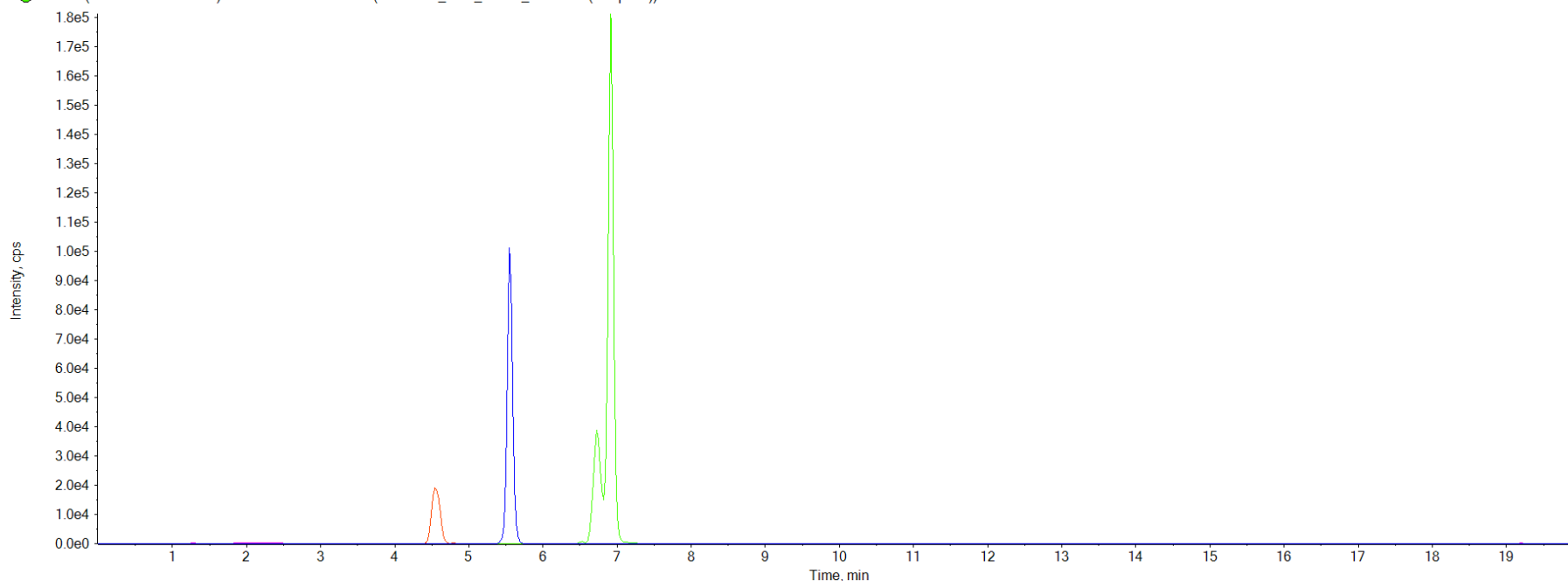
Retention Time: 6.90 minutes Precursor m/z : 397.9526 Fit (%) 100.0% RFit (%) 86.0%		Exp RT: 7.00 minutes Analyte Name: FHxSA	
		Collision Energy = 35 ± 15 eV	
		Acquired / Library MSMS 	
		Acquired / Theoretical MS 	

2023.11.8_NTA_SNEG_011.wiff2 - 320-104763-A-4-B

Data File	2023.11.8_NTA_SNEG_011.wiff2	Result Table	2023.11.10_NEG_SWATH
Acquisition Date	11/8/2023 11:12:32 AM	Algorithm Used	MQ4
Acquisition Method	N/A	Instrument Name	X500 QTOF
Project	PFAS_A11	Processing Method	SWATH_PFAS_Neg_1659_List.qmethod

Extracted Ion Chromatogram

- perfluorobutane sulfonamide (297.9490 - 297.9690) from 320-104763-A-4-B (2023.11.8_NTA_SNEG_011.wiff2 (sample 1))
- PFPrA (162.9724 - 162.9924) from 320-104763-A-4-B (2023.11.8_NTA_SNEG_011.wiff2 (sample 1))
- PFPrS (248.9362 - 248.9562) from 320-104763-A-4-B (2023.11.8_NTA_SNEG_011.wiff2 (sample 1))
- FHxSA (397.9426 - 397.9626) from 320-104763-A-4-B (2023.11.8_NTA_SNEG_011.wiff2 (sample 1))



Summary

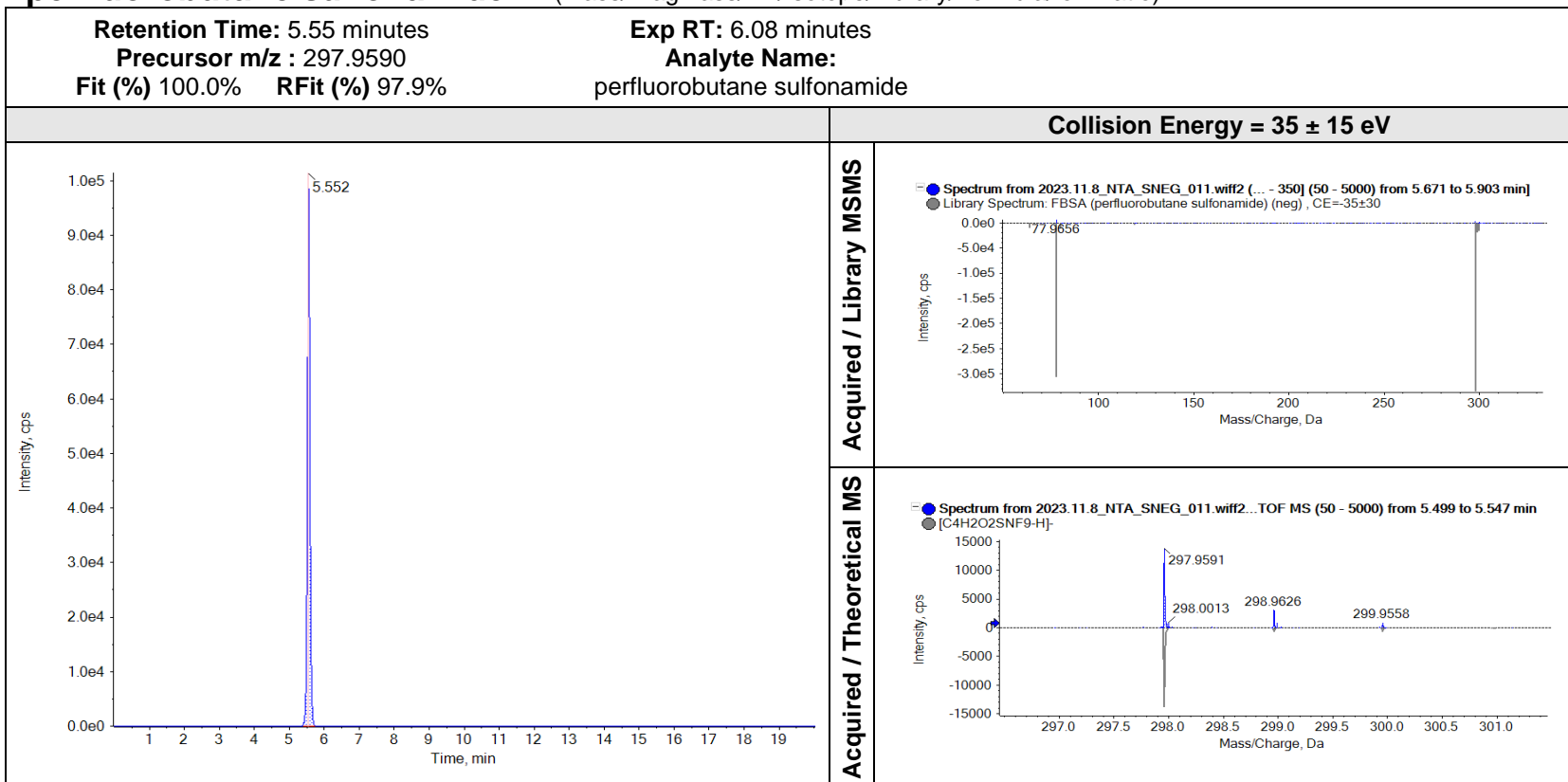
#	Analyte Peak Name	Mass Error Confidence	Fragment Mass Error Confidence	RT Confidence	Isotope Confidence	Library Confidence	Formula Confidence	Ion Ratio Confidence	Sample Name
354	perfluorobutane sulfonamide	✓	●	●	▲	✓	●	●	320-104763-A-4-B
1663	PFPrA	✓	●	●	✓	●	●	●	320-104763-A-4-B
1670	PFPrS	✓	●	●	✓	✓	●	●	320-104763-A-4-B
1701	FHxSA	✓	●	●	✓	✓	●	●	320-104763-A-4-B

#	Analyte Peak Name	Sample Type	Component Name	Area	Calculated Concentration	Formula	Precursor Mass	Found At Mass	Mass Error (ppm)	Library Hit
354	perfluorobutane sulfonamide	Unknown	perfluorobutane sulfonamide	5.176e+05	<2 points	C4H2O2SNF9	297.959	297.9591	0.3	FBSA (perfluorobutane sulfonamide) (neg) Smart Confirmation
1663	PFPrA	Unknown	PFPrA	1.145e+04	<2 points	C3HF5O2	162.982	162.9820	-2.7	No Match
1670	PFPrS	Unknown	PFPrS	1.540e+05	<2 points	C3HF7O3S	248.946	248.9462	0.1	PFPrS (perfluoropropane sulfonate) (neg)
1701	FHxSA	Unknown	FHxSA	8.050e+05	<2 points	C6H2F13NO2S	397.953	397.9520	-1.6	FHxSA (perfluorohexane sulfonamide) (neg)

#	Analyte Peak Name	Library Score	Isotope Ratio Difference
354	perfluorobutane sulfonamide	100.0	16.7
1663	PFPrA	0.0	3.3
1670	PFPrS	98.8	0.2
1701	FHxSA	100.0	1.2

End of Table

perfluorobutane sulfonamide (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio)

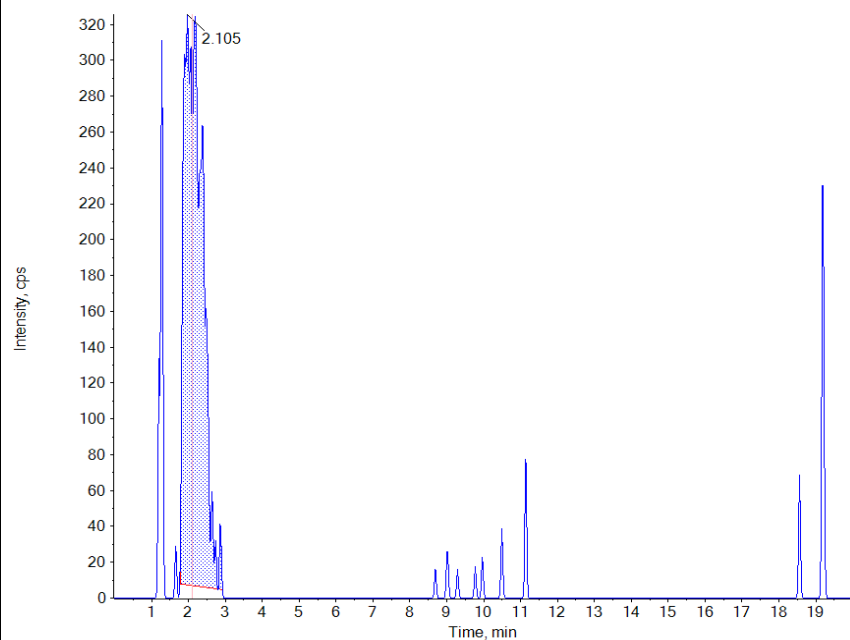


PFPPrA (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio) ✓ ● ● ✓ ● ●

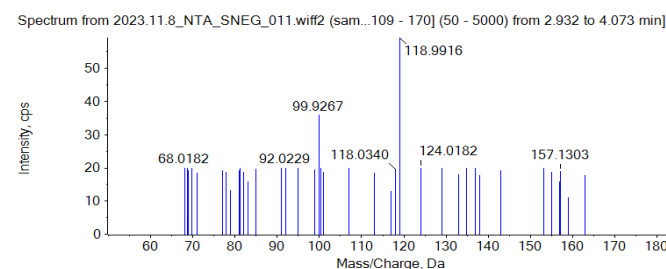
Retention Time: 2.11 minutes
Precursor m/z : 162.9824
Fit (%) N/A **RFit (%)** N/A

Exp RT: 3.06 minutes
Analyte Name:
PFPPrA

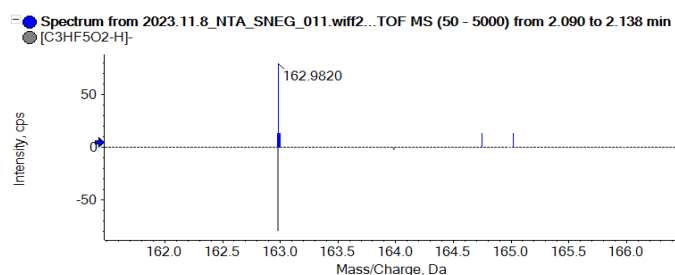
Collision Energy = 35 ± 15 eV



Acquired / Library MSMS



Acquired / Theoretical MS



PFPrS (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio)



Retention Time: 4.55 minutes Precursor m/z : 248.9462 Fit (%) 98.8% RFit (%) 100.0%		Exp RT: 5.28 minutes Analyte Name: PFPrS	
		Collision Energy = 35 ± 15 eV	
	Acquired / Library MSMS		

✓ ● ● ✓ ✓ ● ●

FHxSA (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio)

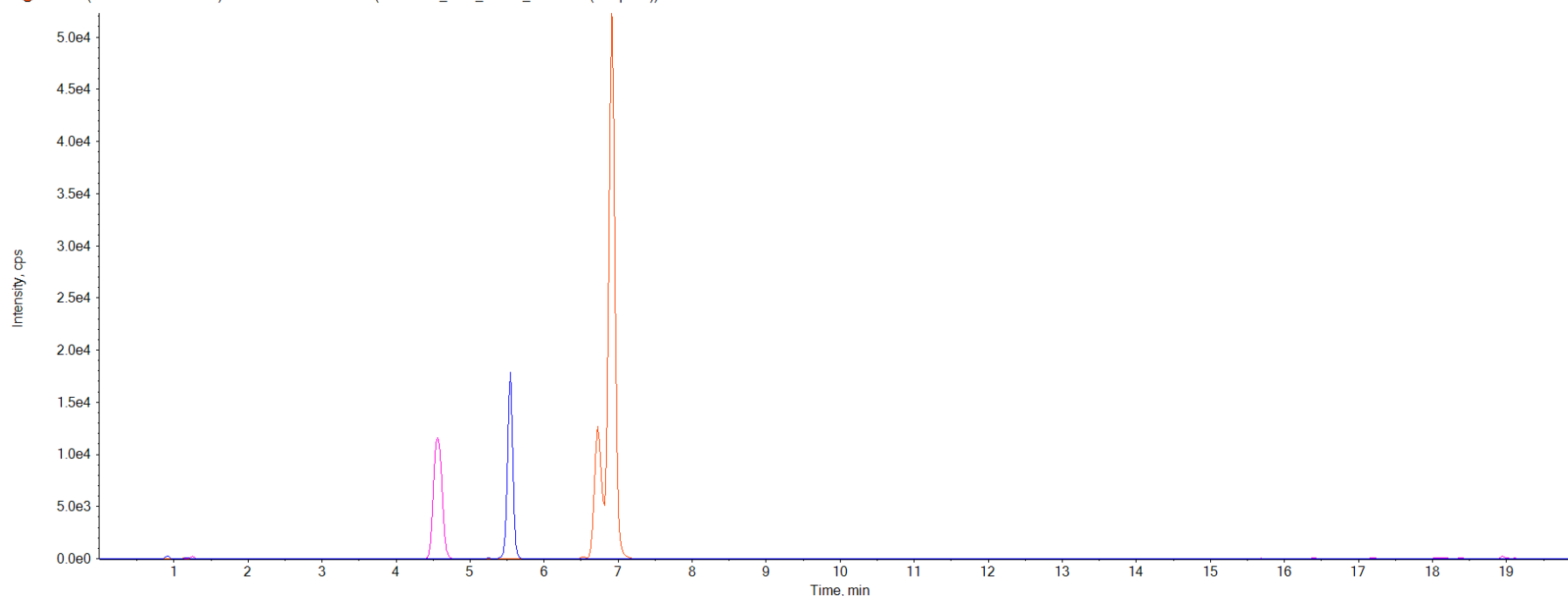
<p>Retention Time: 6.92 minutes</p> <p>Precursor m/z : 397.9526</p> <p>Fit (%) 100.0% RFit (%) 86.2%</p>		<p>Exp RT: 7.00 minutes</p> <p>Analyte Name: FHxSA</p>	
		Collision Energy = 35 ± 15 eV	
	Acquired / Library MSMS	<p>● Spectrum from 2023.11.8_NTA_SNEG_011.wiff2 (... - 410) (50 - 5000) from 7.026 to 7.232 min]</p> <p>● Library Spectrum: FHxSA (perfluorohexane sulfonamide) (neg) , CE=-35±30</p>	
		<p>● Spectrum from 2023.11.8_NTA_SNEG_011.wiff2...TOF MS (50 - 5000) from 6.916 to 6.964 min</p> <p>● [C6H2F13NO2S-H]⁻</p>	

2023.11.8_NTA_SNEG_012.wiff2 - 320-104763-A-6-B

Data File	2023.11.8_NTA_SNEG_012.wiff2	Result Table	2023.11.10_NEG_SWATH
Acquisition Date	11/8/2023 11:33:20 AM	Algorithm Used	MQ4
Acquisition Method	N/A	Instrument Name	X500 QTOF
Project	PFAS_A11	Processing Method	SWATH_PFAS_Neg_1659_List.qmethod

Extracted Ion Chromatogram

- perfluorobutane sulfonamide (297.9490 - 297.9690) from 320-104763-A-6-B (2023.11.8_NTA_SNEG_012.wiff2 (sample 1))
- PFPrS (248.9362 - 248.9562) from 320-104763-A-6-B (2023.11.8_NTA_SNEG_012.wiff2 (sample 1))
- FHxSA (397.9426 - 397.9626) from 320-104763-A-6-B (2023.11.8_NTA_SNEG_012.wiff2 (sample 1))



Summary

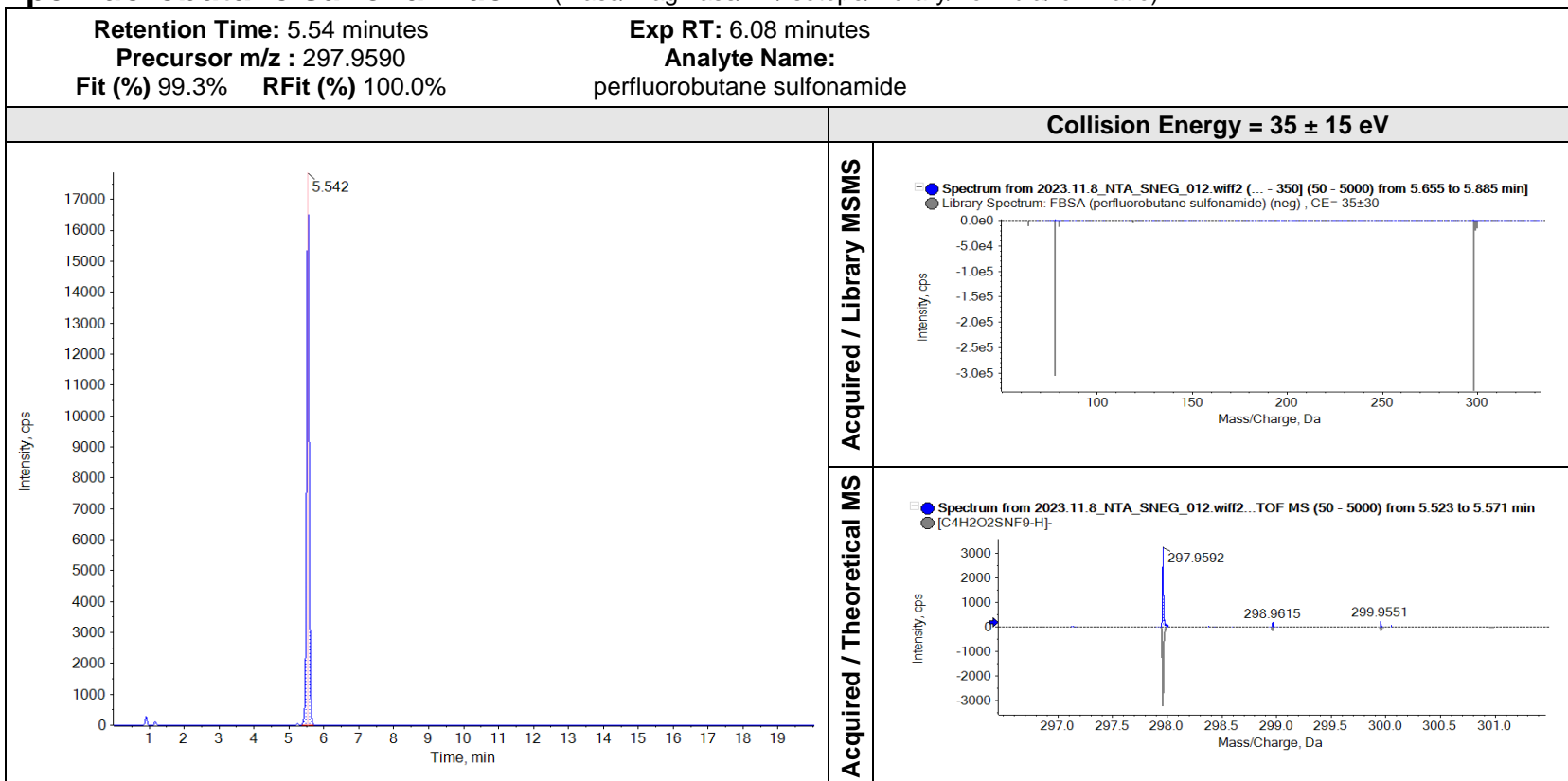
#	Analyte Peak Name	Mass Error Confidence	Fragment Mass Error Confidence	RT Confidence	Isotope Confidence	Library Confidence	Formula Confidence	Ion Ratio Confidence	Sample Name
354	perfluorobutane sulfonamide	✓	●	●	✓	✓	●	●	320-104763-A-6-B
1670	PFPrS	✓	●	●	✓	✓	●	●	320-104763-A-6-B
1701	FHxSA	✓	●	●	▲	✓	●	●	320-104763-A-6-B

#	Analyte Peak Name	Sample Type	Component Name	Area	Calculated Concentration	Formula	Precursor Mass	Found At Mass	Mass Error (ppm)	Library Hit
354	perfluorobutane sulfonamide	Unknown	perfluorobutane sulfonamide	8.919e+04	<2 points	C4H2O2SNF9	297.959	297.9592	0.8	FBSA (perfluorobutane sulfonamide) (neg) Smart Confirmation
1670	PFPrS	Unknown	PFPrS	9.442e+04	<2 points	C3HF7O3S	248.946	248.9465	1.1	PFPrS (perfluoropropane sulfonate) (neg)
1701	FHxSA	Unknown	FHxSA	2.635e+05	<2 points	C6H2F13NO2S	397.953	397.9525	-0.2	FHxSA (perfluorohexane sulfonamide) (neg)

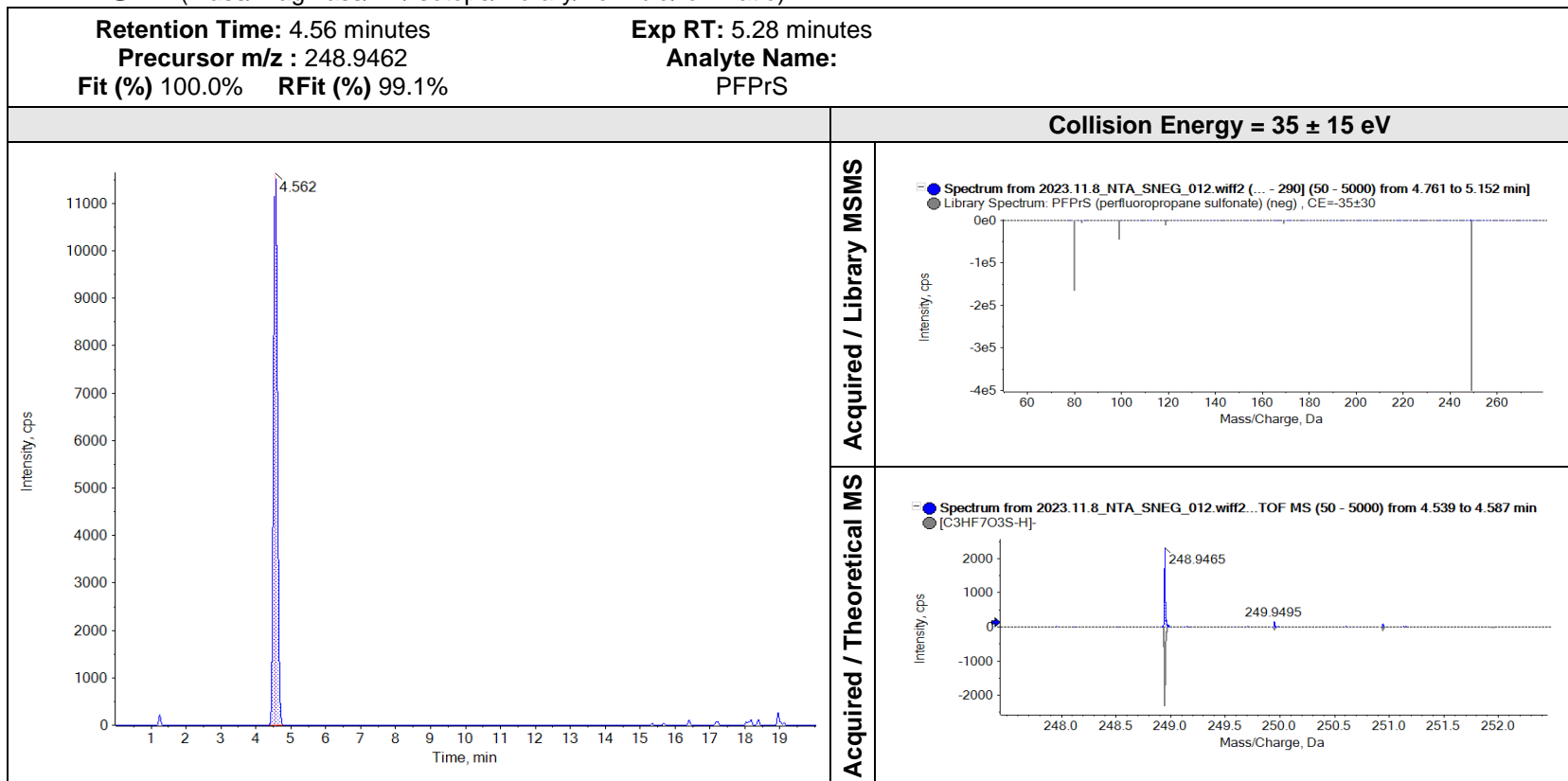
#	Analyte Peak Name	Library Score	Isotope Ratio Difference
354	perfluorobutane sulfonamide	99.3	1.9
1670	PFPrS	100.0	3.3
1701	FHxSA	100.0	6.8

End of Table

perfluorobutane sulfonamide (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio) ✓ ● ● ✓ ✓ ● ●

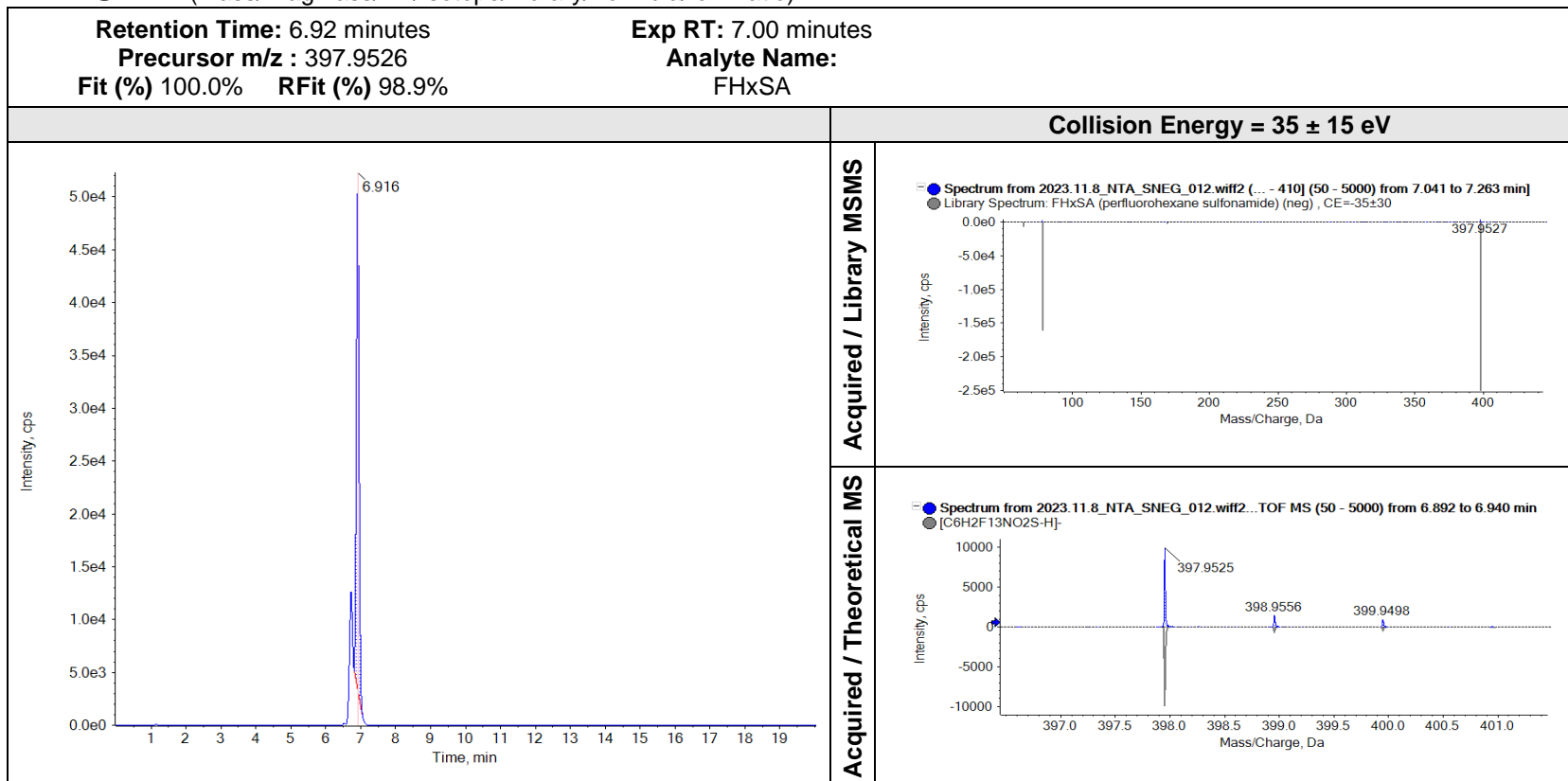


PFPPrS (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio)





FHxSA (Mass/FragMass/RT/Isotope/Library/Formula/Ion Ratio)



Report To: roger.brewer@doh.hawaii.gov

Invoice To:

Address: Tetra Tech

737 Bishop St Ste 2340

Honolulu, HI 96813

Contact: Eric Jensen

808-225-7084

eric.jensen@tetratech.com

Chain of Custody Record

703588



Environment Testing
America

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact		Project Manager: Roger Brewer		Site Contact: Karen Dahl		Date: _____		COC No: _____	
Company Name: Hawaii Dept of Health		Tel/Email: see above		Lab Contact: Karen Dahl		Carrier: _____		of _____ COCs	
Address: 2385 Waimanalo Home Rd #100		City/State/Zip: Pearl City, HI 96872		Phone: 808-586-4249		Fax: _____		Sampler: _____	
Project Name: Kahului Fire Training Area		Site: Maui		PO # _____		Analysis Turnaround Time		For Lab Use Only:	
		Sample Identification		Sample Date		Sample Time		Walk-in Client:	
		Sample Date		Sample Time		Sample Type (C-Comp, G-Grab)		Lab Sampling:	
		Sample Matrix		# of Cont.		Filtered Sample (Y/N)		Job / SDG No.:	
		Sample Matrix		# of Cont.		Perform MS / MSD (Y/N)		Sample Specific Notes:	
KHFTA - mw1 (#1)		9/4/23	12:45pm	G	H ₂ O	6	Y	320-104763 Chain of Custody	
KHFTA - mw2		"	13:00	G	"	6	Y		
KHFTA - mw3		"	11:53am	G	"	6	Y		
KHFTA - mw4		"	12:22pm	G	"	6	Y		
KHFTA - mw5		"	12:35	G	"	6	Y		
KHFTA - mw7		"	14:15	G	"	6	Y		
KHFTA - mw8		"	13:15	G	"	6	Y		
KHFTA - mw9		"	10:15am	G	"	6	Y		
KHFTA - mw10		"	10:40am	G	"	5	Y		
KHFTA - EB #1		"	12:32pm	G	"	5	Y		
KHFTA - EB #2		"		G	"	5	Y		

Preservation: 1=Ice, 2= 3=H₂SO₄, 4=HNO₃, 5=NaOH, 6=Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Special Instructions/QC Requirements & Comments: NTA - mw2, mw4, mw7 * Samples from AFFE impacted site * Filter samples before testing (0.45um) mw11, mw3

Custody Seal No.: 2100378

Relinquished by: [Signature] Date/Time: 9/11/23 9:00am

Relinquished by: [Signature] Date/Time: 9/12/23 04:30

Relinquished by: [Signature] Date/Time: 9/12/23 04:30

Environment Testing

Sacramento
Sample Receiving Notes

Tracking # 9836 2136 7351

Job _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSL / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal Cooler Custody Seal Temperature & corrected Temperature & other observations.
File in the job folder with the COC

Therm ID <u>W2</u>	Corr Factor (+/-) _____ °C	
Ice <input checked="" type="checkbox"/>	Wet <input checked="" type="checkbox"/>	Gel _____ Other _____
Cooler Custody Seal <u>2100598</u>		
Cooler ID _____		
Temp Observed <u>4.8</u> °C	Corrected <u>4.8</u> °C	
From Temp Blank <input type="checkbox"/> Sample <input checked="" type="checkbox"/>		

Opening/Processing The Shipment

	<u>Yes</u>	<u>No</u>	<u>NA</u>
Cooler compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cooler Temperature is acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frozen samples show signs of thaw?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Initials <u>M</u>	Date <u>9/12/23</u>		

Unpacking/Labeling The Samples

	<u>Yes</u>	<u>No</u>	<u>NA</u>
Containers are not broken or leaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC is complete w/o discrepancies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample custody seal?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample containers have legible labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample date/times are provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate containers are used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample bottles are completely filled?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample preservatives verified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the Field Sampler's name on COC?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Samples w/o discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zero headspace?*	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Alkalinity has no headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Perchlorate has headspace? (Methods 314, 331 6850)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Multiphasic samples are not present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials [Signature] Date 9.12.23

Login Sample Receipt Checklist

Client: Hawaii Department of Health

Job Number: 320-104763-2

Login Number: 104763

List Source: Eurofins Sacramento

List Number: 1

Creator: Medeiros, Ryan M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	N/A	
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	N/A	
Samples are received within Holding Time (excluding tests with immediate HTs)	N/A	
Sample containers have legible labels.	N/A	
Containers are not broken or leaking.	N/A	
Sample collection date/times are provided.	N/A	
Appropriate sample containers are used.	N/A	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	